N60478.AR.000040
NWS EARLE
5090.3a

Groundwater Monitoring Study

Sampling Results

Round 2

Waste Oil Storage Tank
Building C-14
Naval Weapons Station Earle
Colts Neck, New Jersey

Contract Number N62472-86-C-1487

Project No. 5

April 1989

Gannett Fleming Environmental Engineers, Inc.

Harrisburg, PA

NO.

116897873

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FROM: JOHN LATSHA

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GANNETT FLEMING

Groundwater Monitoring Study

Sampling Results

Round 2

Waste Oil Storage Tank
Building C-14
Naval Weapons Station Earle
Colts Neck, New Jersey

Contract Number N62472-86-C-1487

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April 1989

Gannett Fleming Environmental Engineers, Inc.

Harrisburg, PA

Ground Water Monitoring Study

Naval Weapons Station Earle

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Sampling Results

The second round of sampling for the Building C-14 waste oil storage tank area has been completed. A summary of the sampling results is presented in Table 1. The laboratory analysis report from QC, Inc., a New Jersey Certified Laboratory, can be found in Attachment A. The Chain of Custody and Sample Submission Forms are included in Attachment B. The Ground Water Analysis Submission Forms are included in Attachment B. The Ground Water Analysis Forms (Nos. VWX-015, VWX-16, and VWX-17) are presented in Attachment C. The location of the monitoring wells is shown in Figure 1.

For this sampling round, the following parameters were measured: base/neutral compounds, lead and compounds, petroleum hydrocarbons, total dissolved solids (TDS), total organic carbon (TOC), total volatile organics and pH. The limitations set for these parameters (as found in Table 1 of contract number N62472-86-C-1487, Amendment 7) are:

Parameter	Limitation
Base/Neutral Compounds	---
Lead and Compounds	0.05 ppm
Petroleum Hydrocarbons	10 ppm
TDS	500 ppm
TOC	---
pH	5-9
Total Volatile Organics	---

Petroleum hydrocarbons and lead were undetected in samples from all four wells. The TDS and TOC concentrations in all samples were below the limitation levels. The pH of the samples was measured to be slightly less than the lower limit of 5.

No base/neutral extractable compounds were found in amounts exceeding the detection limit. The volatile organic compound acetone was detected. Since acetone is commonly used in laboratories in cleaning glassware and equipment, its presence may have been introduced in the laboratory.

Feb 89

TABLE 1

Groundwater Monitoring Study
Naval Weapons Station Earle
Summary of Results*

Parameter	Well No. C-14A	C-14B	C-14C	C-29A	Trip Blank	Field Blank
Elevation of top of monitor well casing above ground level	0	1.83 ft.	2.17 ft.	3.50 ft.	-	-
Depth to Water Table from top of casing	9.92	14.00 ft.	11.75 ft.	11.25 ft.	-	-
Depth to Water Table from ground level	9.92	12.17 ft.	9.58 ft.	7.92 ft.	-	-
Lead and Compounds	<0.05 mg/L	<0.05 mg/L	<0.05 mg/L	<0.05 mg/L	<0.05 mg/L	<0.05 mg/L
Petroleum Hydrocarbons	<0.5 mg/L	<0.5 mg/L	<0.5 mg/L	<0.5 mg/L	<0.5 mg/L	<0.5 mg/L
pH	4.70	4.53	3.80	4.70	5.15	5.55
Total Dissolved Solids (TDS)	63 mg/L	82 mg/L	110 mg/L	130 mg/L	6 mg/L	16 mg/L
Total Organic Carbon	1.6 mg/L	3.7 mg/L	8.6 mg/L	1.7 mg/L	<1.0 mg/L	<1.0 mg/L

*Results given with a less than symbol were undetected and the value given is the detection limit.

SUMMARY OF RESULTS
(Continued)
WELL NO.

PARAMETER Volatile Organics	C-14A Results Comments UG/L	C-14B Results Comments UG/L	C-14C Results Comments UG/L	C-29A Results Comments UG/L	Field Blank Results Comments UG/L	Trip Blank Results Comment UG/L
Chloromethane	10 -U	10 -U	10 -U	10 -U	10 -U	10 -U
Bromomethane	10 -U	10 -U	10 -U	10 -U	10 -U	10 -U
Vinyl Chloride	10 -U	10 -U	10 -U	10 -U	10 -U	10 -U
Chloroethane	10 -U	10 -U	10 -U	10 -U	10 -U	10 -U
Methylene Chloride	5 -U	3 -J	4 -J	4 -J	2 -J	5 -U
Acetone	10 -U	5 -J	34 -	41 -	10 -U	10 -U
Carbon Disulfide	5 -U	5 -U	5 -U	5 -U	5 -U	5 -U
1, 1-Dichloroethene	5 -U	5 -U	5 -U	5 -U	5 -U	5 -U
1, 1-Dichloroethane	5 -U	5 -U	5 -U	5 -U	5 -U	5 -U
1, 2-Dichloroethene (total)	5 -U	5 -U	5 -U	5 -U	5 -U	5 -U
Chloroform	5 -U	5 -U	5 -U	1 -J	5 -U	5 -U
1, 2-Dichloroethane	5 -U	5 -U	5 -U	5 -U	5 -U	5 -U
2-Butanone	10 -U	10 -U	10 -U	10 -U	10 -U	10 -U
1, 1, 1-Trichloroethane	5 -U	5 -U	5 -U	5 -U	5 -U	5 -U
Carbon Tetrachloride	5 -U	5 -U	5 -U	5 -U	5 -U	5 -U
Vinyl Acetate	10 -U	10 -U	10 -U	10 -U	10 -U	10 -U
Bromodichloromethane	5 -U	5 -U	5 -U	5 -U	5 -U	5 -U
1, 2-Dichloropropane	5 -U	5 -U	5 -U	5 -U	5 -U	5 -U
cis-1, 3-Dichloropropene	5 -U	5 -U	5 -U	5 -U	5 -U	5 -U
Trichloroethene	5 -U	5 -U	5 -U	5 -U	5 -U	5 -U
Dibromochloromethane	5 -U	5 -U	5 -U	5 -U	5 -U	5 -U
1, 1, 2-Trichloroethane	5 -U	5 -U	5 -U	5 -U	5 -U	5 -U
Benzene	5 -U	5 -U	5 -U	5 -U	5 -U	5 -U
Trans-1, 3-Dichloropropene	5 -U	5 -U	5 -U	5 -U	5 -U	5 -U
Bromoform	5 -U	5 -U	5 -U	5 -U	5 -U	5 -U
4-Methyl-2-Pentanone	10 -U	10 -U	10 -U	10 -U	10 -U	10 -U
2-Hexanone	10 -U	10 -U	10 -U	10 -U	3 -J	10 -U
Tetrachloroethene	5 -U	5 -U	5 -U	5 -U	5 -U	5 -U
1, 1, 2, 2-Tetrachloroethane	10 -U	10 -U	10 -U	10 -U	10 -U	10 -U
Toluene	5 -U	5 -U	5 -U	5 -U	5 -U	5 -U
Chlorobenzene	5 -U	5 -U	5 -U	5 -U	5 -U	5 -U
Ethylbenzene	5 -U	5 -U	5 -U	5 -U	5 -U	5 -U
Styrene	1 -J	1 -J	1 -J	1 -J	1 -J	1 -J
Total Xylenes	5 -U	5 -U	5 -U	5 -U	5 -U	5 -U

SUMMARY OF RESULTS
(Continued)
WELL NO.

PARAMETER
Base Neutral Extractables
by GC/MS

NAME	C-14A RESULTS PPB	C-14A COMMENTS	C-14B RESULTS PPB	C-14B COMMENTS	C-14C RESULTS PPB	C-14C COMMENTS	C-29A RESULTS PPB	C-29A COMMENTS	Field Blank RESULTS PPB	Field Blank COMMENTS	Trip Blank RESULTS PPB	Trip Blank COMMENTS
Bis (2-chloroethyl) Ether	10	U	10	U	10	U	10	U	10	U	10	U
1, 2-Dichlorobenzene	10	U	10	U	10	U	10	U	10	U	10	U
1, 4-Dichlorobenzene	10	U	10	U	10	U	10	U	10	U	10	U
1, 3-Dichlorobenzene	10	U	10	U	10	U	10	U	10	U	10	U
Bis (2-chloroisopropyl) Ether	10	U	10	U	10	U	10	U	10	U	10	U
N-Nitrosodipropyl Amine	10	U	10	U	10	U	10	U	10	U	10	U
Hexachloroethane	10	U	10	U	10	U	10	U	10	U	10	U
Nitrobenzene	10	U	10	U	10	U	10	U	10	U	10	U
Isophorone	10	U	10	U	10	U	10	U	10	U	10	U
Bis (2-chloroethoxy) Methane	10	U	10	U	10	U	10	U	10	U	10	U
1, 2, 4-Trichlorobenzene	10	U	10	U	10	U	10	U	10	U	10	U
Naphthalene	10	U	10	U	10	U	10	U	10	U	10	U
Hexachlorobutadiene	10	U	10	U	10	U	10	U	10	U	10	U
Hexachlorocyclopentadiene	10	U	10	U	10	U	10	U	10	U	10	U
2-Chloronaphthalene	10	U	10	U	10	U	10	U	10	U	10	U
Dimethyl Phthalate	10	U	10	U	10	U	10	U	10	U	10	U
2, 6-Dinitroluene	10	U	10	U	10	U	10	U	10	U	10	U
Acenaphthylene	10	U	10	U	10	U	10	U	10	U	10	U
Acenaphthene	10	U	10	U	10	U	10	U	10	U	10	U
2, 4-Dinitrotoluene	10	U	10	U	10	U	10	U	10	U	10	U
Diethyl Phthalate	10	U	10	U	10	U	10	U	10	U	10	U
N-Nitrosodimethyl Amine	10	U	10	U	10	U	10	U	10	U	10	U
4-Chlorophenylphenyl Ether	10	U	10	U	10	U	10	U	10	U	10	U
Fluorene	10	U	10	U	10	U	10	U	10	U	10	U
Azobenzene	10	U	10	U	10	U	10	U	10	U	10	U
N-Nitrosodiphenyl Amine	10	U	10	U	10	U	10	U	10	U	10	U
4-Bromophenylphenyl Ether	10	U	10	U	10	U	10	U	10	U	10	U
Hexachlorobenzene	10	U	10	U	10	U	10	U	10	U	10	U
Phenanthrene	10	U	10	U	10	U	10	U	10	U	10	U
Anthracene	10	U	10	U	10	U	10	U	10	U	10	U
Dibutyl Phthalate	10	U	10	U	10	U	10	U	10	U	10	U
Fluoranthene	10	U	10	U	10	U	10	U	10	U	10	U

SUMMARY OF RESULTS
(Continued)
WELL NO.

PARAMETER
Base Neutral Extractables
by GC/MS

NAME	C-14A RESULTS PPB	C-14A COMMENTS	C-14B RESULTS PPB	C-14B COMMENTS	C-14C RESULTS PPB	C-14C COMMENTS	C-29A RESULTS PPB	C-29A COMMENTS	Field Blank RESULTS PPB	Field Blank COMMENTS	Trip Blank RESULTS PPB	Trip Blank COMMENTS
Benzidine	50	U	50	U	50	U	50	U	50	U	50	U
Pyrene	10	U	10	U	10	U	10	U	10	U	10	U
Butylbenzyl Phthalate	10	U	10	U	10	U	10	U	10	U	10	U
3, 3-Dichlorobenzidine	10	U	10	U	10	U	10	U	10	U	10	U
Benzo (A) Anthracene	10	U	10	U	10	U	10	U	10	U	10	U
Chrysene	10	U	10	U	10	U	10	U	10	U	10	U
Bis (2-ethylhexyl) Phthalate	1	BJ	1	BJ	2	BJ	3	BJ	2	BJ	11	BJ
Dioctyl-Phthalate	10	U	10	U	10	U	10	U	10	U	10	U
Benzo (K) Fluoranthene	10	U	10	U	10	U	10	U	10	U	10	U
Benzo (B) Fluoranthene	10	U	10	U	10	U	10	U	10	U	10	U
Benzo (A) Pyrene	10	U	10	U	10	U	10	U	10	U	10	U
Indeno (1, 2, 3-CD) Pyrene	10	U	10	U	10	U	10	U	10	U	10	U
Dibenzo (A, H) Anthracene	10	U	10	U	10	U	10	U	10	U	10	U
Benzo (GHI) Perylene	10	U	10	U	10	U	10	U	10	U	10	U

COMMENTS:

U = Not Detected
J = Detected but below Method Detection Limit
B = Compound found in Blank

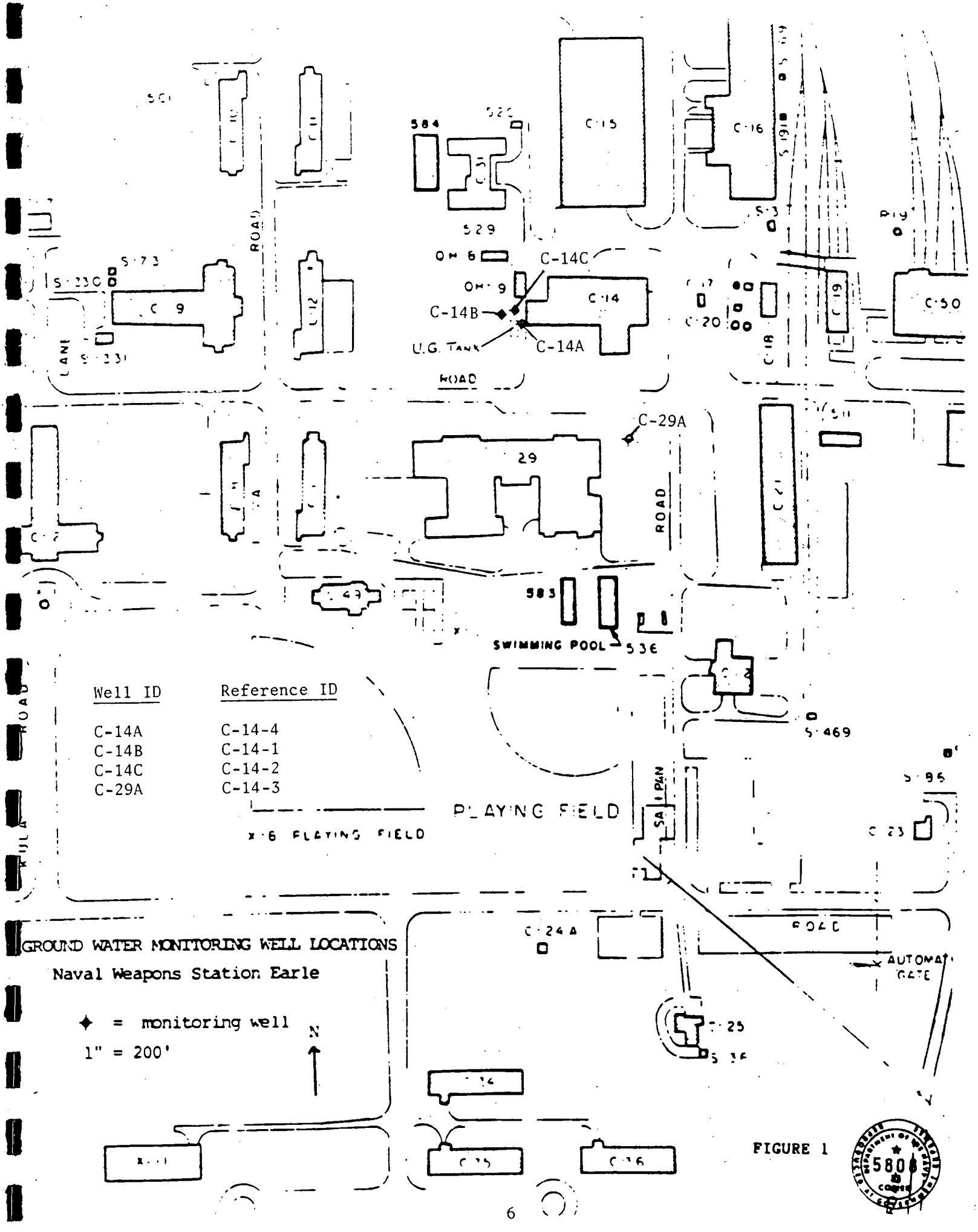
C-14C
C-14B
C-14A
U.G. TANK
C-29A
ROAD
SWIMMING POOL
PLAYING FIELD
AUTOMATIC GATE
Well ID
Reference ID
C-14A C-14-4
C-14B C-14-1
C-14C C-14-2
C-29A C-14-3
GROUND WATER MONITORING WELL LOCATIONS
Naval Weapons Station Earle
✦ = monitoring well
1" = 200'
N

FIGURE 1

ATTACHMENT A

Laboratory Analysis

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

ANALYTICAL DATA REPORT PACKAGE
FOR
GANNETT FLEMING ENGINEERS INC.

Part 1 of 7

Case Name	Field Sample ID	Laboratory Sample ID	Date of Collection
USN Earl Depot	C-14A	789651,789603,789657, 789629,789635,789643	02/16/89
	C-14B	789652,789604,789658, 789630,789636,789644	"
	C-14C	789653,789605,789659, 789631,789637,789645	"
	C-29A	789654,789606,789660, 789632,789638.789646	"
	FIELD BLANK	789655,789607,789662, 789633,789639,789647	"
	TRIP BLANK	789656,789608,789661, 789634,789640,789648	"

Laboratory Name QC Inc.

Certification No. PADER No. 09-131
NJDEP No. 77166/77648

Supervisor/Manager Signature

Printed Name Thomas J. Hines

Form QC G-1

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

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	C-29A (789654)	49
	FIELD BLANK (789655)	61
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QC Inc

PICK SHEET - 1

TIER I

CUSTOMER: Gannett & Fleming

CUST. NO.
ROUTE NO.
$ COLLECTION
P.O. NO

PHONE
ROUTE
SAMPLED BY:

BOX TEMP. °F

TEMP. CONTROL: °F

	COLLECTED	RECEIVER	TESTED	COMPLETED
DATE		2/17/89		
TIME		800		
BY		CR		
TEMP.	°F	40 F	°F	APP.

C-14A TDS & PH
C-14B TDS & PH
C-14C TDS & PH
C-29A TDS & PH
FB TDS & PH
TB TDS & PH

000001

COMMENTS:

QC Inc

CUSTOMER Gannett & Fleming

PICK SHEET 1

TIER I

CUST. NO.
ROUTE NO.
$ COLLECTION
P.O. NO.

PHONE
ROUTE
SAMPLED BY:

BOX TEMP. °F

TEMP. CONTROL: °F

	COLLECTED	RECEIVED	TESTED	COMPLETED
DATE		2/17/89		
TIME		800		
BY		CR		
TEMP.	°F	40 F	°F	APP

C-14A BASE SCAN W0668-UGL

C-14B

C-14C

C-29A

FB

TB

000002

COMMENTS:

AUTHORIZED BY

QC Inc

CUSTOMER Gannett & Fleming

CUST. NO.
ROUTE NO.
$ COLLECTION
P.O. NO.

PICK SHEET

TIER I

	COLLECTED	RECEIVED	TESTED	COMPLETED
DATE		2/17/89		
TIME		8:00 A		
BY		CR		
TEMP.	°F	40 °F	°F	APP.

PHONE
ROUTE
SAMPLED BY:

BOX TEMP. °F

TEMP. CONTROL: °F

C-14 A

C-14 B

C-14 C

C-29 A

FB

TB T89634

TOC

W0143-MGL

COMMENTS:

000003

AUTHORIZED BY

ac lab

CUSTOMER Gannett & Fleming

CUST. NO.
ROUTE NO.
S COLLECTION
P.O. NO.

PICK SHEET #1

TIER I

	COLLECTED	RECEIVED	TESTED	COMPLETED
DATE		2/17		
TIME		800		
BY		CR		
TEMP.	°F	40 °F	°F	APP.

PHONE
ROUTE
SAMPLED BY:

BOX TEMP. °F

TEMP. CONTROL: °F

C-14A 789635	PHC	W0150 - MGL
C-14B	PHC	
C-14C	PHC	
C-29A	PHC	
FB	PHC	
TB	PHC	

000004

COMMENTS:

AUTHORIZED BY

QC Inc

CUSTOMER Gannett & Fleming

CUST. NO.
ROUTE NO.
$ COLLECTION
P.O. NO.

PICK SHEET - 1

TIER I

	COLLECTED	RECEIVED	TESTED	COMPLETED
DATE		2/17		
TIME		8:00		
BY		CR		
TEMP.	°F	40 °F	°F	APP.

PHONE
ROUTE
SAMPLED BY:

BOX TEMP. °F

TEMP. CONTROL: °F

C-14A (VO 624 + LIB Search (+10))
C-14B
C-14C
C-29A
FB
TB

TIER I

COMMENTS:

000005

QC Inc

PICK SHEET - 1

CUSTOMER: GANNETT & FLEMING
P.O. BOX 1963
HARRISBURG PA 17105

CUST. NO.
ROUTE NO.
$ COLLECTION
P.O. NO.

PHONE
ROUTE
SAMPLED BY:

BOX TEMP. °F

TEMP. CONTROL. °F

TIER I

	COLLECTED	RECEIVED	TESTER	COMPLETED
DATE		2/17/89		
TIME		800		
BY		CR		
TEMP.	°F	40 °F	°F	APP.

C-14A Pb only W0214-MGL
C-14B
C-14C
C-29A
TB
FB

COMMENTS:

000005

AUTHORIZED BY

QC Inc

000007

CHAIN OF CUSTODY WITHOUT SHUTTLE

I.D. # 789603-608; 789643-648; 789629-634; 789635-640; 789651-656

NAME OF UNIT AND ADDRESS: 789657-662

Gannett Fleming

SAMPLE NUMBER	Number of Containers	DESCRIPTION OF SAMPLES
		C-14A C-14B C-14C C-29A FB TB } for chemical analysis

PERSON ASSUMING RESPONSIBILITY FOR SAMPLE: | TIME | DATE

SAMPLE NUMBER	RELINQUISHED BY:	RECEIVED BY:	TIME	DATE	REASON FOR CHANGE OF CUSTODY
789603-		[signature]	0815	2/17	Sample login
789608		[signature]	0910	2/17	GC/MS analysis
789629-		[signature]	0900	2/17	Limited chemistry
789640	[signature]	[signature]	0900	2/17	Metals analysis
789643-					
789648					
789651-					
789662					

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

LABORATORY CHRONICLE

Lab Sample ID No.: C-14A, C-14B, C-14C, C-29A, FB, TB

	I	DATE	II
Receipt/Refrigeration	02/16/89		
Organics Extraction			
1. Base/Neutral Extractables	02/24/89		
2. Acid Extractables	02/24/89		
3. Pesticides/PCB's			
4. Dioxin			
Analyses			
1. Volatiles	02/22/89		
2. Base/Neutral Extractables	03/25/89		
3. Acid Extractables	03/25/89		
4. Pesticides/PCB's			
5. Dioxin			
Inorganics			
1. Metals	03/07/89		
2. Cyanides			
3. Phenols			
Other Analytes			
1. Total Organic Carbon	02/28/89		
2. Petroleum Hydrocarbons	02/28/89		
3. Total Dissolved Solids	02/28/89		
4. pH	02/28/89		

SECTION SUPERVISOR REVIEW & APPROVAL
(Signature) Thomas J. Hines
(Printed Name) Thomas J. Hines
(Date) 4/3/89

QC SUPERVISOR REVIEW & APPROVAL
(Signature) Robert R. Hirst
(Printed Name) Robert R. Hirst
(Date) 4/3/89

Form QC G-5

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

METHODOLOGY SUMMARY

Purgeable Organics	USEPA Contract Laboratory Program 7/88 Statement of Work + EPA/NIH/NBS Forward Library Search
Base/Neutral Extractables Acid Extractables	USEPA Contract Laboratory Program 7/88 Statement of Work
Metals	40 CFR Part 136, USEPA Method 239.2 (Graphite Furnace/Atomic Absorption)
Other	40 CFR Part 136:
Total Organic Carbon	USEPA Method 415.1
Petroleum Hydrocarbons	USEPA Method 418.1
Total Dissolved Solids	USEPA Method 160.1
pH	USEPA Method 150.1

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

CASE NARRATIVE

VOLATILE ORGANICS

Holding Times

Required sample preservative and holding time criteria were met.

GC/MS Tuning and Mass Calibration

Required GC/MS tune frequency and BFB ion abundance criteria were met.

Initial Calibration

Required SPCC and CCC criteria were met. All compound average response factors were greater than zero. The following compound average response factors were < 0.05:

Compound	$\overline{RF}$
2-Butanone	0.024

The following compound relative standard deviations (RSDs) were > 30%:

Compound	RSD
Acetone	44.7 %

Continuing Calibration

Continuing calibration was performed within 12 hours prior to sample analysis.

Required SPCC and CCC criteria were met. All compound average response factors were greater than zero. The following compound average response factors were < 0.05:

Compound	$\overline{RF}$
2-Butanone	0.024

QC Inc

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CASE NARRATIVE

The following compound relative standard deviations (RSDs) were > 25%:

Compound	RSD
Acetone	35.2 %
Bromomethane	29.9 %

Blanks

Method blank required frequency and contamination criteria were met. The following method blank was contaminated:

Blank ID	Contaminant	Concentration
BLK0221C	Methylene Chloride	4. (J) ug/l
	Acetone	13. ug/l

Surrogates

BLANK and SAMPLE surrogate recoveries met required recovery criteria.

Matrix Spike/Matrix Spike Duplicate

Advisory QC limits for MS percent recovery and MSD relative percent difference were met with the following exceptions:

MS/MSD ID	MS/MSD Performance
C-14A	1 out of 5 duplicate RPDs outside QC limits.

Internal Standards Summary

Internal standards met area criteria with the following exceptions:

Internal Std.	Sample ID	Area	Area Limits
1,4-Difluorobenzene	C-14A MSD	340,000	348,000-1,394,000

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

CASE NARRATIVE

SEMIVOLATILE ORGANICS

Holding Times

Required sample holding time criteria were met.

GC/MS Tuning and Mass Calibration

Required GC/MS tune frequency and BFB ion abundance criteria were met.

Initial Calibration

Required SPCC and CCC criteria were met. All compound average response factors were greater than zero.

The following compound relative standard deviations (RSDs) were > 30%:

Compound	RSD
Benzyl Alcohol	41.7
Naphthalene	33.3
4-Chloroaniline	34.7
2-Methynaphthalene	37.3
2-Nitroaniline	45.1
3-Nitroaniline	40.3
4-Nitroaniline	48.6
Indeno(1,2,3-cd)Pyrene	30.7
Dibenz(a,h)Anthracene	33.0
Benzo(g,h,i)Perylene	30.7

Continuing Calibration

Required SPCC and CCC criteria were met. All compound average response factors were greater than zero.

The following compound relative standard deviations (RSDs) were > 25%:

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

CASE NARRATIVE

Compound	RSD
Benzyl Alcohol	53.9
2-Nitroaniline	96.1
3-Nitroaniline	66.2
2,4-Dinitrotoluene	27.0
4-Nitroaniline	34.1
3,3'-Dichlorobenzidene	45.3
Indeno(1,2,3-cd)Pyrene	36.3
Dibenz(a,h)Anthracene	36.7
Benzo(g,h,i)Perylene	37.3

Blanks

Method blank required frequency and contamination criteria were met. The following method blank was contaminated:

Blank ID	Contaminant	Concentration
BLKW0224	Dibutyl phthalate	2. ug/l
	Bis(2-ethylhexyl) Phthalate	1. ug/l

Surrogates

BLANK and SAMPLE surrogate recoveries met required recovery criteria.

Matrix Spike/Matrix Spike Duplicate

Advisory QC limits for MS percent recovery and MSD relative percent difference were met.

Internal Standards Summary

Internal standards met area criteria with the following exceptions:

QC Inc
1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

CASE NARRATIVE

Internal Std.	Sample ID	Area	Area Limits
HSB5000327			
1,4-Dichlorobenzene-d4	C-14A MS	287000	308500-1234000
Naphthalene-d8	C-14A MS	726000	925000-3700000
	C-14A MSD	776000	925000-3700000
Phenanthrene-d10	C-14A MS	401000	495000-1980000
	C-14A MSD	477000	495000-1980000
Chrysene-d12	TRIP BLK	213000	340500-1362000
	C-14A MS	228000	340500-1362000
	C-14A MSD	290000	340500-1362000
Perylene-d12	C-14A MS	34000	80500-322000
	C-14A MSD	37700	80500-322000
HSD5000325			
1,4-Dichlorobenzene-d4	C-14A	155000	192000-768000
Naphthalene-d10	C-14A	512000	530000-2120000
Acenaphthene-d10	C-14A	263000	314500-1258000
Phenanthrene-d10	C-14A	347000	414000-1656000
Chrysene-d12	C-14A	180000	314000-1256000
	C-14B	237000	314000-1256000
	C-14C	269000	314000-1256000
	C-29A	269000	314000-1256000
Perylene-d12	C-14A	19400	89000-356000
	C-14B	26200	89000-356000
	C-14C	25800	89000-356000
	C-29A	26600	89000-356000
	FIELD BLK	37400	89000-356000
	AQ BLANK	88800	89000-356000

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: Q C INC. Contract: GAN-FLEMING

Lab Code: NONE Case No.: GAN-FL SAS No.: NONE SDG No.: NONE

	EPA SAMPLE NO.	S1 (TOL)#	S2 (BFB)#	S3 (DCE)#	OTHER	TOT OUT
01	C-14A	90	100	90		0
02	C-14B	95	99	98		0
03	C-14C	96	97	110		0
04	C-29A	94	98	101		0
05	FIELDBLANK	101	95	100		0
06	TRIPBLANK	98	95	102		0
07	C-14AMS	97	100	97		0
08	C-14AMSD	90	111	99		0
09	VBLK0222C	97	94	92		0

	QC LIMITS
S1 (TOL) = Toluene-d8	(88-110)
S2 (BFB) = Bromofluorobenzene	(86-115)
S3 (DCE) = 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Q C INC. Contract: GAN-FLEMING

Lab Code: NONE Case No.: GAN-FL SAS No.: NONE SDG No.: NONE

Matrix Spike - EPA Sample No.: C-14A

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	100	0	104	104	61-145
Trichloroethene	100	0	99.2	99	71-120
Benzene	100	0	103	103	76-127
Toluene	100	0	101	101	76-125
Chlorobenzene	100	0	99.8	100	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	100	73.3	73	35 *	14	61-145
Trichloroethene	100	106	106	-7	14	71-120
Benzene	100	111	111	-7	11	76-127
Toluene	100	98.1	98	3	13	76-125
Chlorobenzene	100	108	108	-8	13	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 1 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS: C-14A
5MLS PURGED

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: Q C INC. Contract: GAN-FLEMING

Lab Code: NONE Case No.: GAN-FL SAS No.: NONE SDG No.: NONE

Lab File ID: BLK0222C Lab Sample ID: BLK0222C

Date Analyzed: 02/22/89 Time Analyzed: 1541

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: FINN

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	C-14A	789651	789651V	1912
02	C-14B	789652	789652V	2147
03	C-14C	789653	789653V	2240
04	C-29A	789654	789654V	2333
05	FIELDBLANK	789655	789655V	1727
06	TRIPBLANK	789656	789656V	1820
07	C-14AMS	789651MS	789651VS	2001
08	C-14AMSD	789651MSD	789651VSD	2054

COMMENTS: WATER BLANK
5MLS PURGED

5A
VOLATILE ORGANIC GC/MS TUNING AND MASS
CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: Q C INC. Contract: GAN-FLEMING

Lab Code: NONE Case No.: GAN-FL SAS No.: NONE SDG No.: NONE

Lab File ID: BFB0221C BFB Injection Date: 02/21/89

Instrument ID: D BFB Injection Time: 0802

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	27.5
75	30.0 - 60.0% of mass 95	53.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.4
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	67.3
175	5.0 - 9.0% of mass 174	5.9 (8.7)1
176	Greater than 95.0%, but less than 101.0% of mass 174	65.1 (96.7)1
177	5.0 - 9.0% of mass 176	4.5 (6.9)2

1-Value is % mass 174 2-Value is % mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0200221C	VS0200221C	VS0200221C	02/21/89	0908
02	VSTD0500221C	VS0500221C	VS0500221C	02/21/89	1001
03	VSTD100	VS1000221C2	VS1000221C2	02/21/89	1055
04	VSTD150	VS1500221C	VS1500221C	02/21/89	1149
05	VSTD200	VS2000221C	VS2000221C	02/21/89	1238

5A
VOLATILE ORGANIC GC/MS TUNING AND MASS
CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: Q C INC. Contract: GAN-FLEMING

Lab Code: NONE Case No.: GAN-FL SAS No.: NONE SDG No.: NONE

Lab File ID: BFB0222C BFB Injection Date: 02/22/89

Instrument ID: D BFB Injection Time: 1527

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	25.5
75	30.0 - 60.0% of mass 95	50.8
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.4
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	70.7
175	5.0 - 9.0% of mass 174	5.8 (8.2)1
176	Greater than 95.0%, but less than 101.0% of mass 174	69.8 (98.7)1
177	5.0 - 9.0% of mass 176	4.5 (6.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VBLK0222C	BLK0222C	BLK0222C	02/22/89	1541
02	VSTD100	VS1000222C	VS1000222C	02/22/89	1633
03	FIELDBLANK	789655	789655V	02/22/89	1727
04	TRIPBLANK	789656	789656V	02/22/89	1820
05	C-14A	789651	789651V	02/22/89	1912
06	C-14AMS	789651MS	789651VS	02/22/89	2001
07	C-14AMSD	789651MSD	789651VSD	02/22/89	2054
08	C-14B	789652	789652V	02/22/89	2147
09	C-14C	789653	789653V	02/22/89	2240
10	C-29A	789654	789654V	02/22/89	2333

8A
VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Q C INC. Contract: GAN-FLEMING

Lab Code: NONE Case No.: GAN-FL SAS No.: NONE SDG No.: NONE

Lab File ID (Standard): VS1000222C Date Analyzed: 02/22/89

Instrument ID: FINN Time Analyzed: 1633

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	86500	9.94	697000	20.77	696000	25.61
	UPPER LIMIT	173000		1394000		1392000	
	LOWER LIMIT	43250		348500		348000	
	EPA SAMPLE NO.						
01	C-14A	90200	9.94	633000	20.74	687000	25.57
02	C-14B	72800	9.97	508000	20.77	524000	25.61
03	C-14C	80500	9.94	671000	20.77	678000	25.61
04	C-29A	75000	9.97	515000	20.77	544000	25.61
05	FIELDBLANK	86300	9.94	724000	20.77	686000	25.61
06	TRIPBLANK	80100	9.94	661000	20.77	652000	25.61
07	C-14AMS	83900	9.90	629000	20.74	635000	25.57
08	C-14AMSD	56700	9.94	340000 *	20.77	416000	25.61
09	VBLK0222C	95200	9.97	862000	20.77	834000	25.61

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C-14A

Lab Name: Q C INC. Contract: GAN-FLEMING

Lab Code: NONE Case No.: GAN-FL SAS No.: NONE SDG No.: NONE

Matrix: (soil/water) WATER Lab Sample ID: 789651

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 789651V

Level: (low/med) LOW Date Received: 02/16/89

% Moisture: not dec. ____ Date Analyzed: 02/22/89

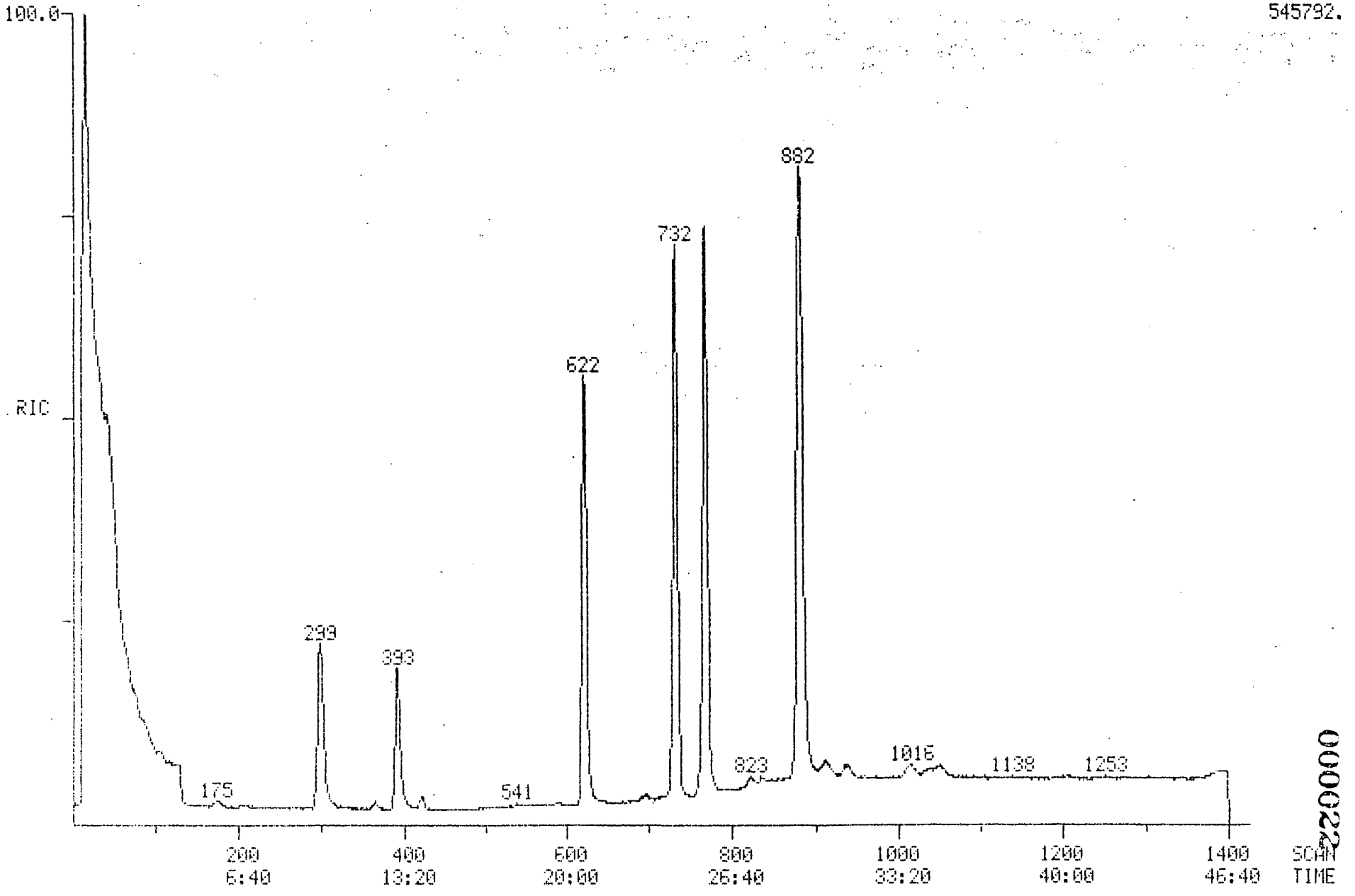
Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	1	J
----------	Total Xylenes	5	U

RIC
02/22/89 19:12:00
SAMPLE: C-14A
CONDS.: 5MLS PURGED
RANGE: G 1,1425 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789651V #1
CALI: CALTAB #3

SCANS 1 TO 1425

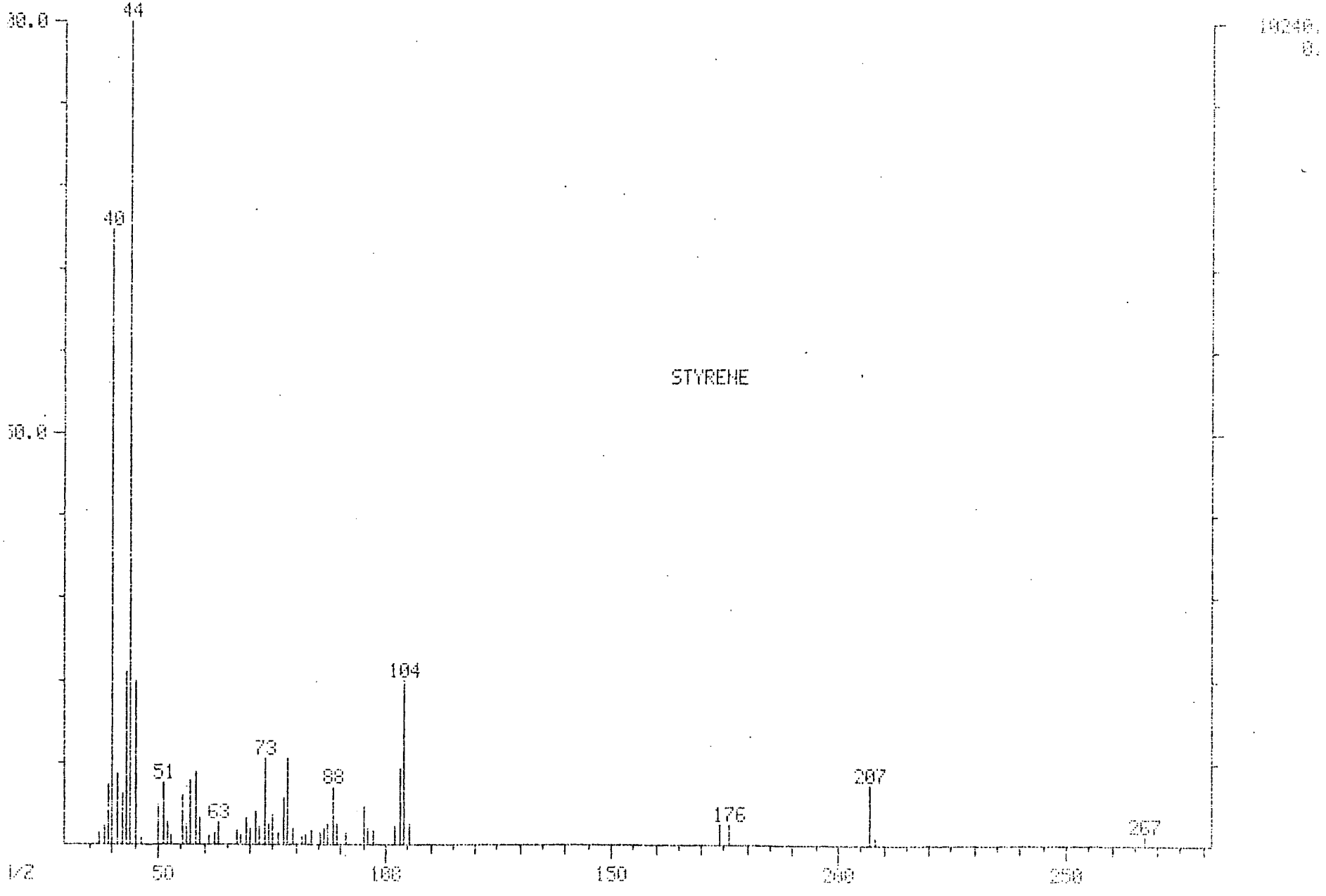


000022

MASS SPECTRUM
02/22/89 19:12:00 + 30:26
SAMPLE: C-14A
CONDS.: 5MLS PURGED
TEMP: 225 DEG. C

DATA: 789651V #913
CALI: 789651V #3

BASE M/Z: 44
RIC: 42816.

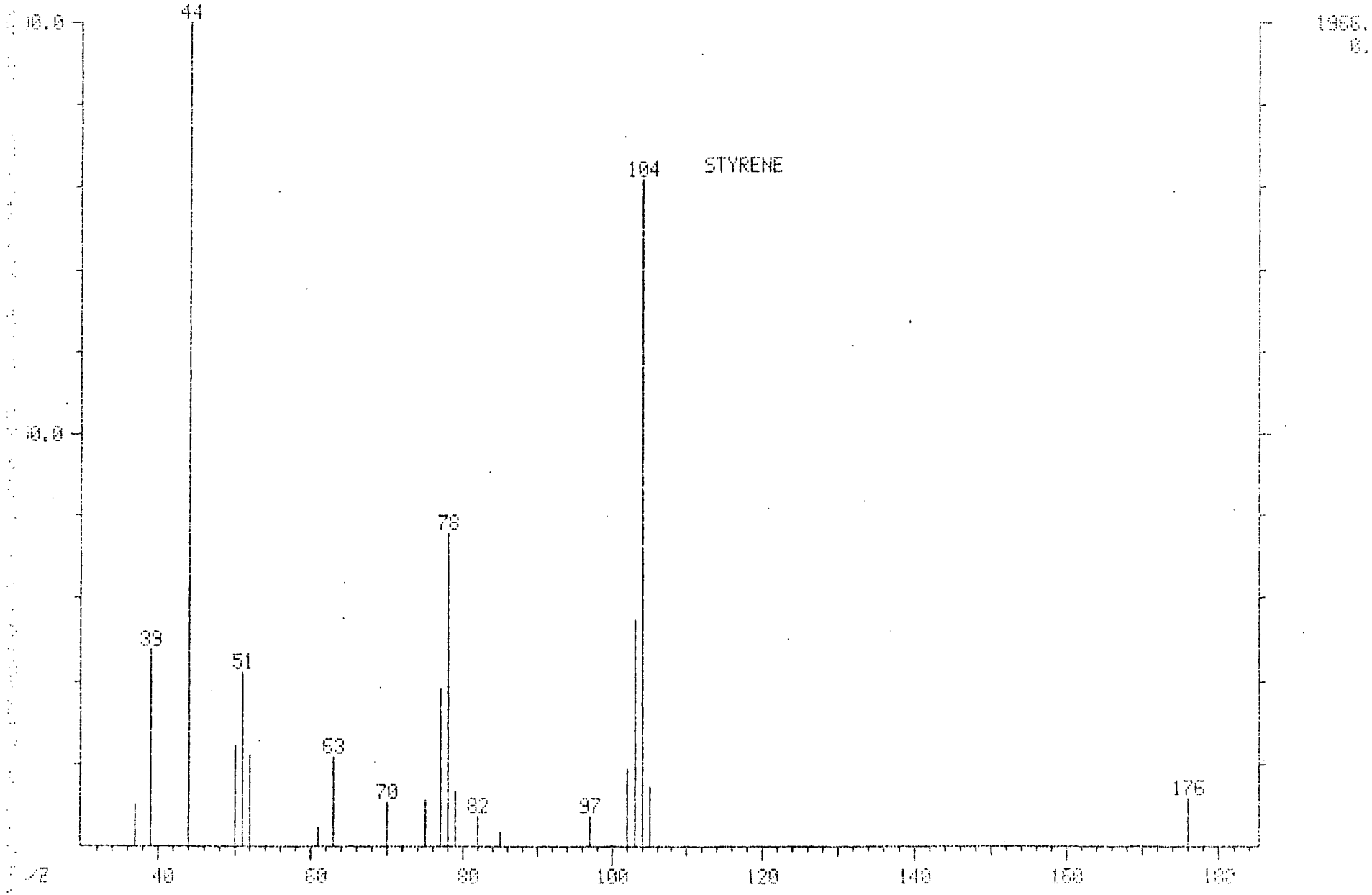


000023

MASS SPECTRUM
02/22/89 19:12:00 + 30:26
SAMPLE: C-14A
CONDS.: 5MLS PURGED
TEMP: 225 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 789651V #913
CALI: 789651V #3

BASE M/Z: 44
RIC: 7884.



000024

000025

EPA SAMPLE NO.

C-14A

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Q C INC. Contract: GAN-FLEMING

Lab Code: NONE Case No.: GAN-FL SAS No.: NONE SDG No.: NONE

Matrix: (soil/water) WATER Lab Sample ID: 789651

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 789651V

Level: (low/med) LOW Date Received: 02/16/89

% Moisture: not dec. ____ Date Analyzed: 02/22/89

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Guantitation Report File: 789651V

000026

Data: 789651V.TI
02/22/89 19:12:00
Sample: C-14A
Conds.: 5MLS PURGED
Formula: Instrument: FINN Weight: 0.000
Submitted by: GANNET Analyst: DMW Acct. No.: 789651

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	C010	CHLOROMETHANE	
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8		ACROLEIN	
9	C035	ACETONE	
10		ACRYLONITRILE	
11	C040	CARBON DISULFIDE	
12	C045	1,1-DICHLOROETHENE	
13	C050	1,1-DICHLOROETHANE	
14	C053	1,2-DICHLOROETHENE (TOTAL)	
15	C060	CHLOROFORM	
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	CS15	D4-1,4-DICHLOROETHANE	*SURROGATE*
19	CI10	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
20	C110	2-BUTANONE (MEK)	
21	C115	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C172	TRANS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C155	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C143	CIS-1,3-DICHLOROPROPENE	
32	C175	2-CHLOROETHYLVINYLETHER	
33	C180	BROMOFORM	
34	CI20	DS-CHLOROBENZENE	*INTERNAL STANDARD*
35	C205	4-METHYL-2-PENTANONE (MIBK)	
36	C210	2-HEXANONE	
37	C220	TETRACHLOROETHENE	
38	C225	1,1,2,2-TETRACHLOROETHANE	
39	C230	TOLUENE	
40	C235	CHLOROBENZENE	
41	C240	ETHYL BENZENE	
42	C245	STYRENE	
43	C250	TOTAL XYLENES (CALCULATED OFF M-XYLENE)	
44	C350	1,2-DICHLOROBENZENE	
45	C335	1,3-DICHLOROBENZENE	
46	C340	1,4-DICHLOROBENZENE	
47	CS05	D8-TOLUENE	*SURROGATE*

No	Name
48	CS10 BROMOFLUOROBENZENE *SURROGATE*

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	298	9:56	1	1.000	A BB	90194.	50.000 UG/L	15.95
2	NOT FOUND								
3	NOT FOUND								
4	85	74	2:28	1	0.248	A BB	6340.	2.441 UG/L	0.78
5	NOT FOUND								
6	NOT FOUND								
7	84	174	5:48	1	0.584	A BB	7201.	2.514 UG/L	0.80
8	NOT FOUND								
9	43	216	7:12	1	0.725	A BB	3054.	2.589 UG/L	0.83
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	83	371	12:22	1	1.245	A BB	717.	0.115 UG/L	0.04
16	NOT FOUND								
17	NOT FOUND								
18	65	392	13:04	1	1.315	A BB	233130.	44.786 UG/L	14.29
19	114	622	20:44	19	1.000	A BB	632743.	50.000 UG/L	15.95
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	43	451	15:02	19	0.725	A VB	4460.	0.400 UG/L	0.13
24	NOT FOUND								
25	NOT FOUND								
26	75	515	17:10	19	0.828	A BB	269.	0.033 UG/L	0.01
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	78	546	18:12	19	0.878	A BB	1228.	0.119 UG/L	0.04
31	NOT FOUND								
32	NOT FOUND								
33	173	625	20:50	19	1.005	A BB	369.	0.083 UG/L	0.03
34	117	767	25:34	34	1.000	A BB	686840.	50.000 UG/L	15.95
35	43	639	21:18	34	0.833	A*VV	11099.	1.336 UG/L	0.43
36	43	698	23:16	34	0.910	A*BV	24449.	5.123 UG/L	1.63
37	164	697	23:14	34	0.909	A BB	2140.	0.394 UG/L	0.13
38	83	693	23:06	34	0.904	A BB	5856.	0.741 UG/L	0.24
39	92	738	24:36	34	0.962	A VB	6000.	0.607 UG/L	0.19
40	112	768	25:36	34	1.001	A BB	11740.	0.874 UG/L	0.28
41	106	822	27:24	34	1.072	A BB	5083.	0.832 UG/L	0.27
42	104	913	30:26	34	1.190	A BB	19018.	1.082 UG/L	0.35
43	106	938	31:16	34	1.223	A BB	11388.	1.029 UG/L	0.33
44	146	1039	34:38	34	1.355	A BV	7914.	1.007 UG/L	0.32
45	146	1014	33:48	34	1.322	A BB	7213.	0.935 UG/L	0.30
46	146	1049	34:58	34	1.368	A VB	18115.	1.390 UG/L	0.44
47	98	732	24:24	34	0.954	A BB	722992.	45.130 UG/L	14.40
48	95	882	29:24	34	1.150	A BB	665167.	49.937 UG/L	15.93

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:56	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:20		0.134						
3	2:04		0.208						
4	2:28	1.00	0.248	1.00	2.44	100.00	0.035	1.440	0.02
5	2:34		0.258						
6	3:24		0.342						
7	5:48	1.00	0.584	1.00	2.51	100.00	0.040	1.588	0.03
8	7:02		0.708						
9	6:58	1.03	0.701	1.03	2.59	100.00	0.017	0.654	0.03
10	7:52		0.792						
11	7:52		0.792						
12	9:26		0.950						
13	10:52		1.094						
14	11:46		1.185						
15	12:20	1.00	1.242	1.00	0.11	100.00	0.004	3.460	0.00
16	8:32		0.859						
17	13:12		1.329						
18	13:04	1.00	1.315	1.00	44.79	50.00	2.585	2.886	0.90
19	20:46	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
20	13:20		0.642						
21	14:26		0.695						
22	14:48		0.713						
23	15:10	0.99	0.730	0.99	0.40	100.00	0.004	0.882	0.00
24	15:24		0.742						
25	16:48		0.809						
26	17:06	1.00	0.823	1.01	0.03	100.00	0.000	0.644	0.00
27	17:38		0.849						
28	18:14		0.878						
29	18:22		0.884						
30	18:10	1.00	0.875	1.00	0.12	100.00	0.001	0.818	0.00
31	18:24		0.886						
32	19:32		0.941						
33	20:56	1.00	1.008	1.00	0.08	100.00	0.000	0.353	0.00
34	25:36	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
35	21:34	0.99	0.842	0.99	1.34	100.00	0.008	0.605	0.01
36	23:10	1.00	0.905	1.01	5.12	100.00	0.018	0.347	0.05
37	23:16	1.00	0.909	1.00	0.39	100.00	0.002	0.395	0.00
38	23:14	0.99	0.908	1.00	0.74	100.00	0.004	0.575	0.01
39	24:36	1.00	0.961	1.00	0.61	100.00	0.004	0.720	0.01
40	25:44	0.99	1.005	1.00	0.87	100.00	0.009	0.978	0.01
41	27:32	1.00	1.076	1.00	0.83	100.00	0.004	0.445	0.01
42	30:32	1.00	1.193	1.00	1.08	100.00	0.014	1.280	0.01
43	31:24	1.00	1.227	1.00	1.03	100.00	0.008	0.806	0.01
44	34:42	1.00	1.355	1.00	1.01	100.00	0.006	0.572	0.01
45	33:58	1.00	1.327	1.00	0.94	100.00	0.005	0.561	0.01
46	35:06	1.00	1.371	1.00	1.39	100.00	0.013	0.949	0.01
47	24:26	1.00	0.954	1.00	45.13	50.00	1.053	1.166	0.90
48	29:28	1.00	1.151	1.00	49.94	50.00	0.968	0.970	1.00

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C-14B

Lab Name: Q C INC. Contract: GAN-FLEMING

Lab Code: NONE Case No.: GAN-FL SAS No.: NONE SDG No.: NONE

Matrix: (soil/water) WATER Lab Sample ID: 789652

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 789652V

Level: (low/med) LOW Date Received: 02/16/89

% Moisture: not dec. ____ Date Analyzed: 02/22/89

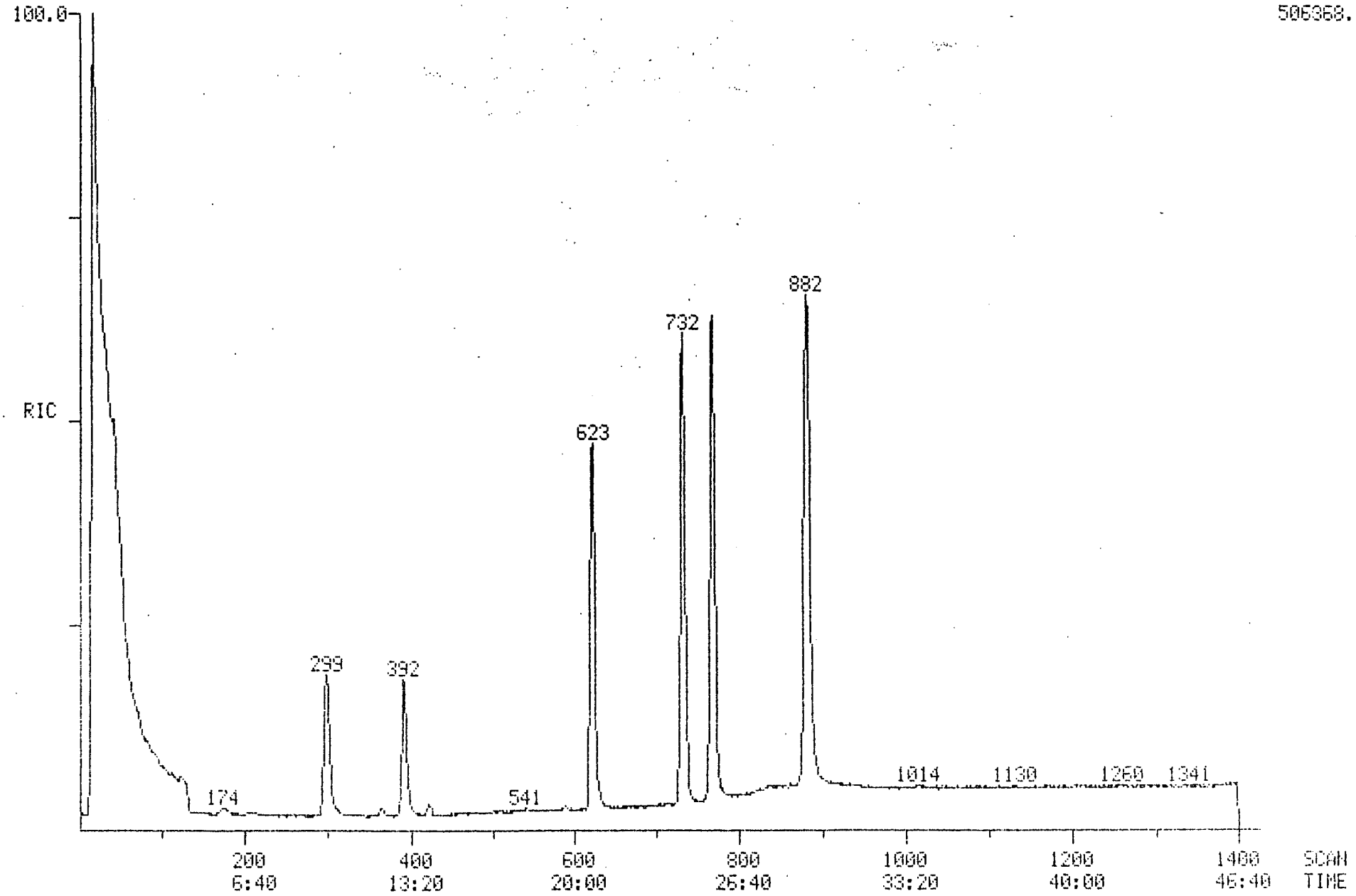
Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	3	J
67-64-1	Acetone	5	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
	Total Xylenes	5	U

RIC
02/22/89 21:47:00
SAMPLE: C-14B
CONDS.: 5MLS PURGED
RANGE: G 1,1425 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789652V #1
CALI: CALTAB #3

SCANS 1 TO 1425

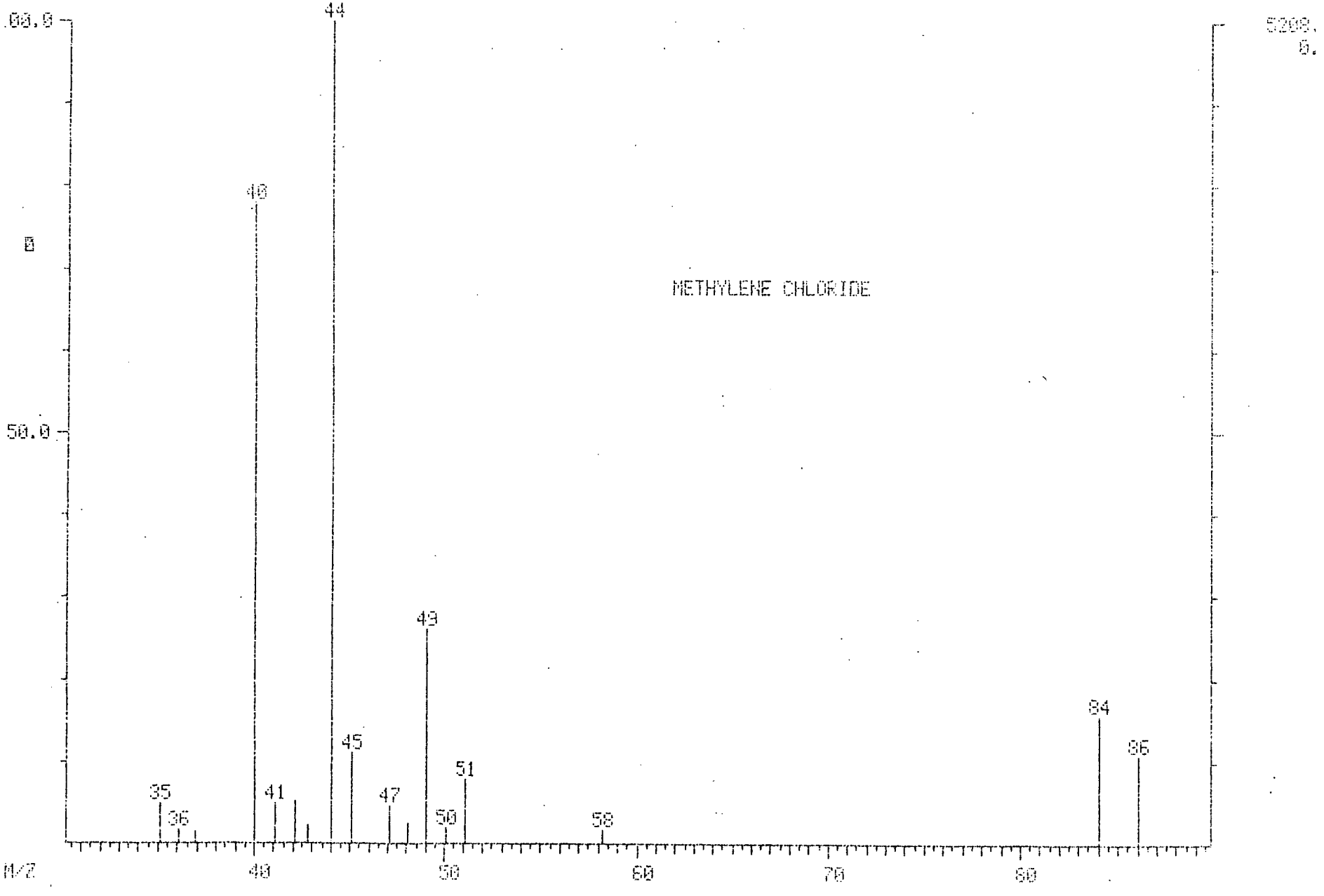


000030

MASS SPECTRUM
02/22/89 21:47:00 + 5:48
SAMPLE: C-14B
CONDS.: 5MLS PURGED
TEMP: 50 DEG. C

DATA: 789652V #174
CALI: 789652V #3

BASE M/Z: 44
RIC: 14592.



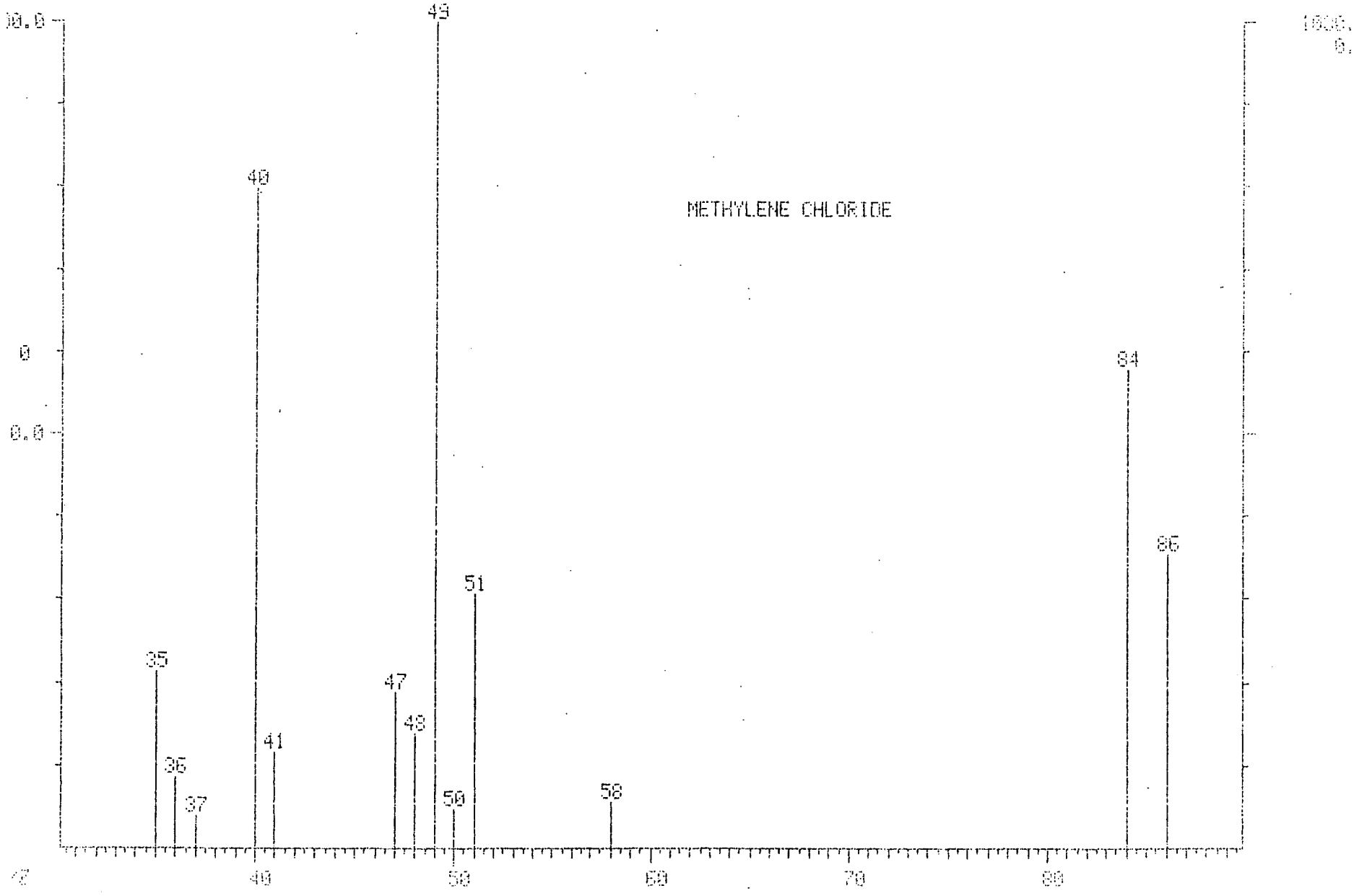
000031

MASS SPECTRUM
02/22/89 21:47:00 + 5:48
SAMPLE: C-14B
CONDS.: 5MLS PURGED
TEMP: 50 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 789652V #174
CALI: 789652V #3

BASE M/Z: 49
RIC: 4036.

METHYLENE CHLORIDE

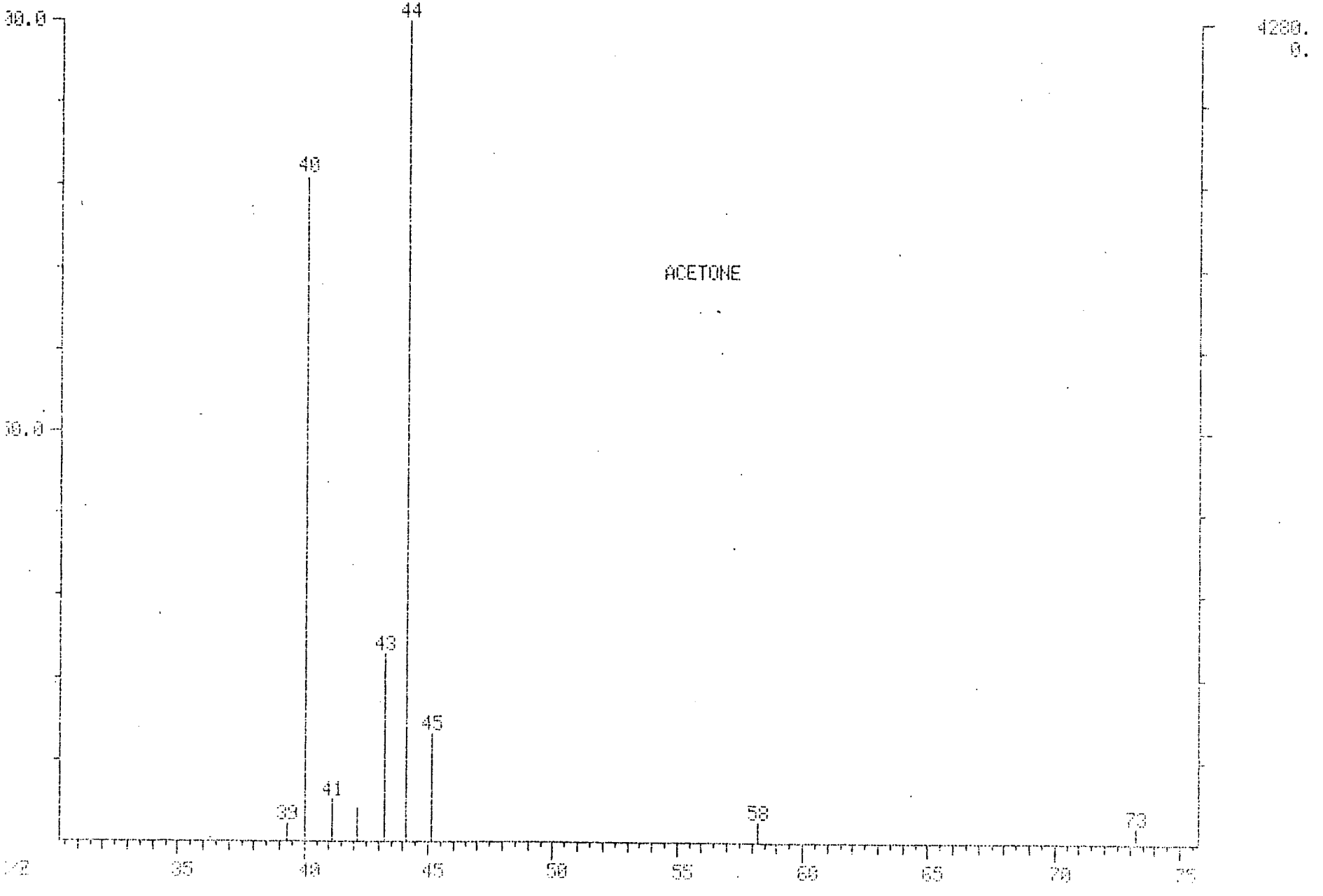


000032

MASS SPECTRUM
02/22/89 21:47:00 + 7:15
SAMPLE: C-14B
CONDS.: 5MLS PURGED
TEMP: 63 DEG. C

DATA: 789652V #218
CALI: 789652V #3

BASE M/Z: 44
RIC: 9984.

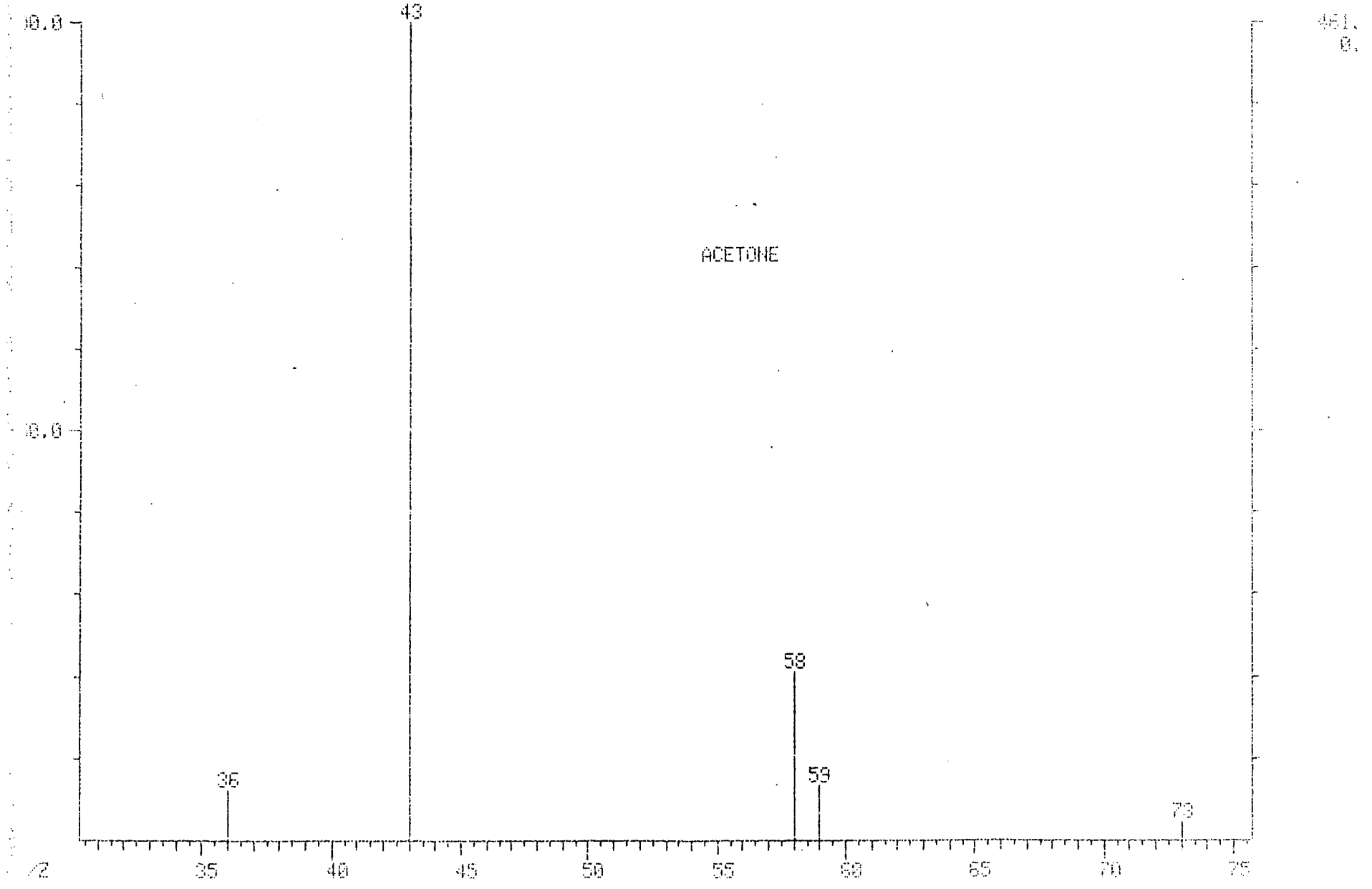


000033

MASS SPECTRUM
02/22/89 21:47:00 + 7:16
SAMPLE: C-14B
CONDS.: 5MLS PURGED
TEMP: 63 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 789652V #218
CALI: 789652V #3

BASE M/Z: 43
RIC: 623.



000034

000035
EPA SAMPLE NO.

C-14B

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Q C INC. Contract: GAN-FLEMING

Lab Code: NONE Case No.: GAN-FL SAS No.: NONE SDG No.: NONE

Matrix: (soil/water) WATER Lab Sample ID: 789652

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 789652V

Level: (low/med) LOW Date Received: 02/16/89

% Moisture: not dec. ____ Date Analyzed: 02/22/89

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Quantitation Report File: 789652V

Data: 789652V.TI
02/22/89 21:47:00
Sample: C-14B
Conds.: 5MLS PURGED
Formula: Instrument: FINN Weight: 0.000
Submitted by: GANNET Analyst: DMW Acct. No.: 789652

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	C010	CHLOROMETHANE	
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8		ACROLEIN	
9	C035	ACETONE	
10		ACRYLONITRILE	
11	C040	CARBON DISULFIDE	
12	C045	1,1-DICHLOROETHENE	
13	C050	1,1-DICHLOROETHANE	
14	C053	1,2-DICHLOROETHENE (TOTAL)	
15	C060	CHLOROFORM	
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	CS15	D4-1,4-DICHLOROETHANE	*SURROGATE*
19	CI10	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
20	C110	2-BUTANONE (MEK)	
21	C115	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C172	TRANS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C155	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C143	CIS-1,3-DICHLOROPROPENE	
32	C175	2-CHLOROETHYLVINYLETHER	
33	C180	BROMOFORM	
34	CI20	D5-CHLOROBENZENE	*INTERNAL STANDARD*
35	C205	4-METHYL-2-PENTANONE (MIBK)	
36	C210	2-HEXANONE	
37	C220	TETRACHLOROETHENE	
38	C225	1,1,2,2-TETRACHLOROETHANE	
39	C230	TOLUENE	
40	C235	CHLOROBENZENE	
41	C240	ETHYL BENZENE	
42	C245	STYRENE	
43	C250	TOTAL XYLENES (CALCULATED OFF M-XYLENE)	
44	C350	1,2-DICHLOROBENZENE	
45	C335	1,3-DICHLOROBENZENE	
46	C340	1,4-DICHLOROBENZENE	
47	CS05	D8-TOLUENE	*SURROGATE*

No	Name
48	CS10 BROMOFLUOROBENZENE *SURROGATE*

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	299	9:58	1	1.000	A BB	72845.	50.000 UG/L	16.09
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	84	174	5:48	1	0.582	A BB	7537.	3.258 UG/L	1.05
8	NOT FOUND								
9	43	218	7:16	1	0.729	A*VV	5118.	5.371 UG/L	1.73
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	101	253	8:26	1	0.846	A BB	159.	0.018 UG/L	0.01
17	NOT FOUND								
18	65	393	13:06	1	1.314	A BB	206199.	49.047 UG/L	15.78
19	114	623	20:46	19	1.000	A BB	507801.	50.000 UG/L	16.09
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	43	454	15:08	19	0.729	A*BV	5812.	0.649 UG/L	0.21
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	130	530	17:40	19	0.851	A BB	528.	0.144 UG/L	0.05
28	NOT FOUND								
29	NOT FOUND								
30	78	545	18:10	19	0.875	A BB	2412.	0.290 UG/L	0.09
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	117	768	25:36	34	1.000	A BB	523880.	50.000 UG/L	16.09
35	43	647	21:34	34	0.842	A*BV	6102.	0.963 UG/L	0.31
36	43	696	23:12	34	0.906	A*BV	7540.	2.071 UG/L	0.67
37	NOT FOUND								
38	NOT FOUND								
39	92	737	24:34	34	0.960	A BB	5844.	0.775 UG/L	0.25
40	112	771	25:42	34	1.004	A BB	8517.	0.831 UG/L	0.27
41	NOT FOUND								
42	104	916	30:32	34	1.193	A BB	749.	0.056 UG/L	0.02
43	NOT FOUND								
44	146	1043	34:46	34	1.358	A BB	291.	0.049 UG/L	0.02
45	NOT FOUND								
46	146	1054	35:08	34	1.372	A BB	1028.	0.103 UG/L	0.03
47	98	732	24:24	34	0.953	A BB	583164.	47.725 UG/L	15.36
48	95	882	29:24	34	1.148	A BB	502094.	49.419 UG/L	15.90

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:56	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:20		0.134						
3	2:04		0.208						
4	2:28		0.248						
5	2:34		0.258						
6	3:24		0.342						
7	5:48	1.00	0.584	1.00	3:26	100.00	0.052	1.588	0.03
8	7:02		0.708						
9	6:58	1.04	0.701	1.04	5.37	100.00	0.035	0.654	0.05
10	7:52		0.792						
11	7:52		0.792						
12	9:26		0.950						
13	10:52		1.094						
14	11:46		1.185						
15	12:20		1.242						
16	8:32	0.99	0.859	0.98	0.02	100.00	0.001	6.232	0.00
17	13:12		1.329						
18	13:04	1.00	1.315	1.00	49.05	50.00	2.831	2.886	0.98
19	20:46	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
20	13:20		0.642						
21	14:26		0.695						
22	14:48		0.713						
23	15:10	1.00	0.730	1.00	0.65	100.00	0.006	0.882	0.01
24	15:24		0.742						
25	16:48		0.809						
26	17:06		0.823						
27	17:38	1.00	0.849	1.00	0.14	100.00	0.001	0.361	0.00
28	18:14		0.878						
29	18:22		0.884						
30	18:10	1.00	0.875	1.00	0.29	100.00	0.002	0.818	0.00
31	18:24		0.886						
32	19:32		0.941						
33	20:56		1.008						
34	25:36	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
35	21:34	1.00	0.842	1.00	0.96	100.00	0.006	0.605	0.01
36	23:10	1.00	0.905	1.00	2.07	100.00	0.007	0.347	0.02
37	23:16		0.909						
38	23:14		0.908						
39	24:36	1.00	0.961	1.00	0.77	100.00	0.006	0.720	0.01
40	25:44	1.00	1.005	1.00	0.83	100.00	0.008	0.978	0.01
41	27:32		1.076						
42	30:32	1.00	1.193	1.00	0.06	100.00	0.001	1.280	0.00
43	31:24		1.227						
44	34:42	1.00	1.355	1.00	0.05	100.00	0.000	0.572	0.00
45	33:58		1.327						
46	35:06	1.00	1.371	1.00	0.10	100.00	0.001	0.949	0.00
47	24:26	1.00	0.954	1.00	47.72	50.00	1.113	1.166	0.95
48	29:28	1.00	1.151	1.00	49.42	50.00	0.958	0.970	0.99

000039
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

C-14C

Lab Name: Q C INC. Contract: GAN-FLEMING

Lab Code: NONE Case No.: GAN-FL SAS No.: NONE SDG No.: NONE

Matrix: (soil/water) WATER Lab Sample ID: 789653

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 789653V

Level: (low/med) LOW Date Received: 02/16/89

% Moisture: not dec. ____ Date Analyzed: 02/22/89

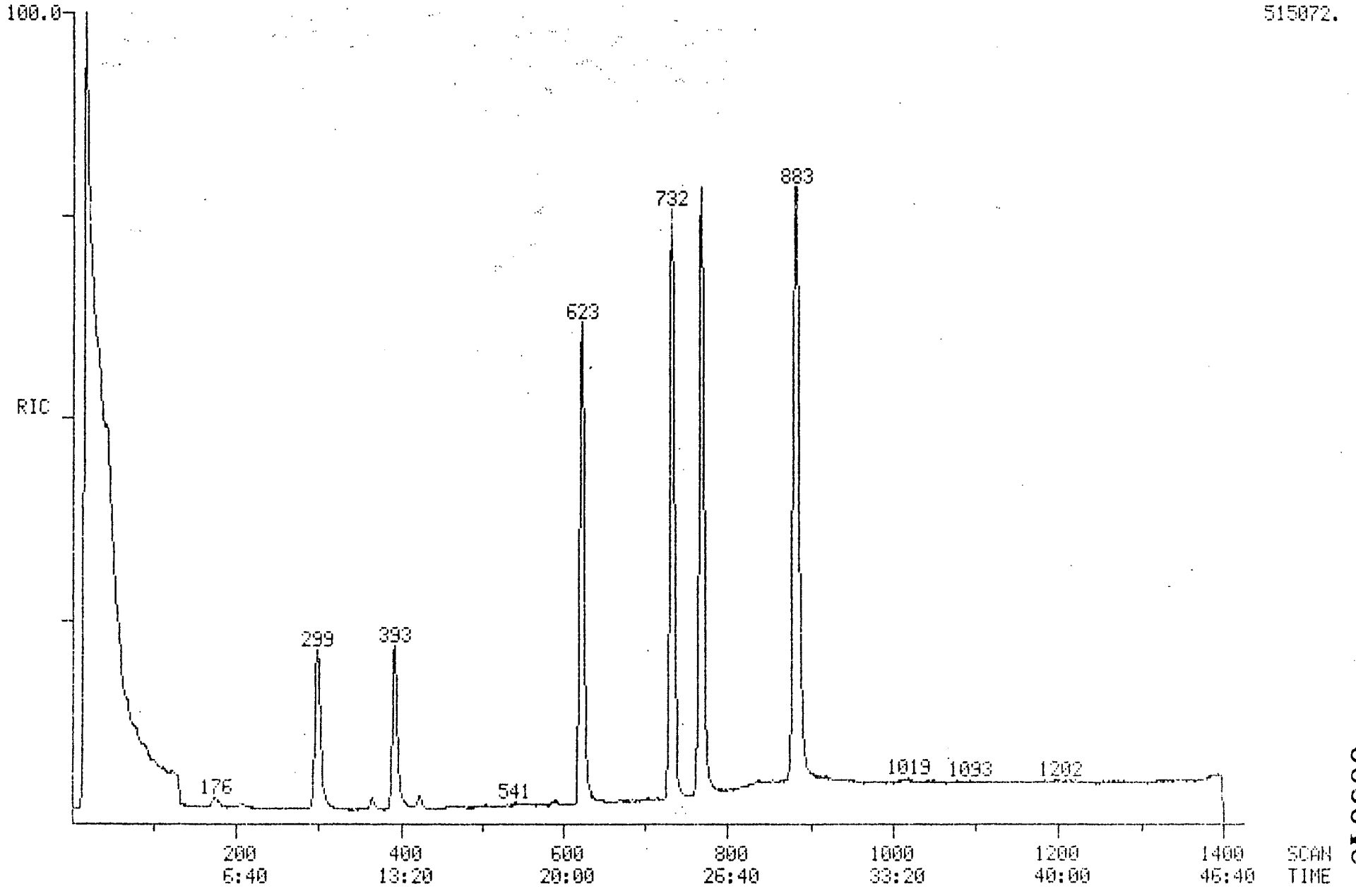
Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	4	J
67-64-1	Acetone	34	
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
	Total Xylenes	5	U

RIC
02/22/89 22:40:00
SAMPLE: C-14C
CONDS.: 5MLS PURGED
RANGE: G 1,1425 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789653V #1
CALI: CALTAB #3

SCANS 1 TO 1425

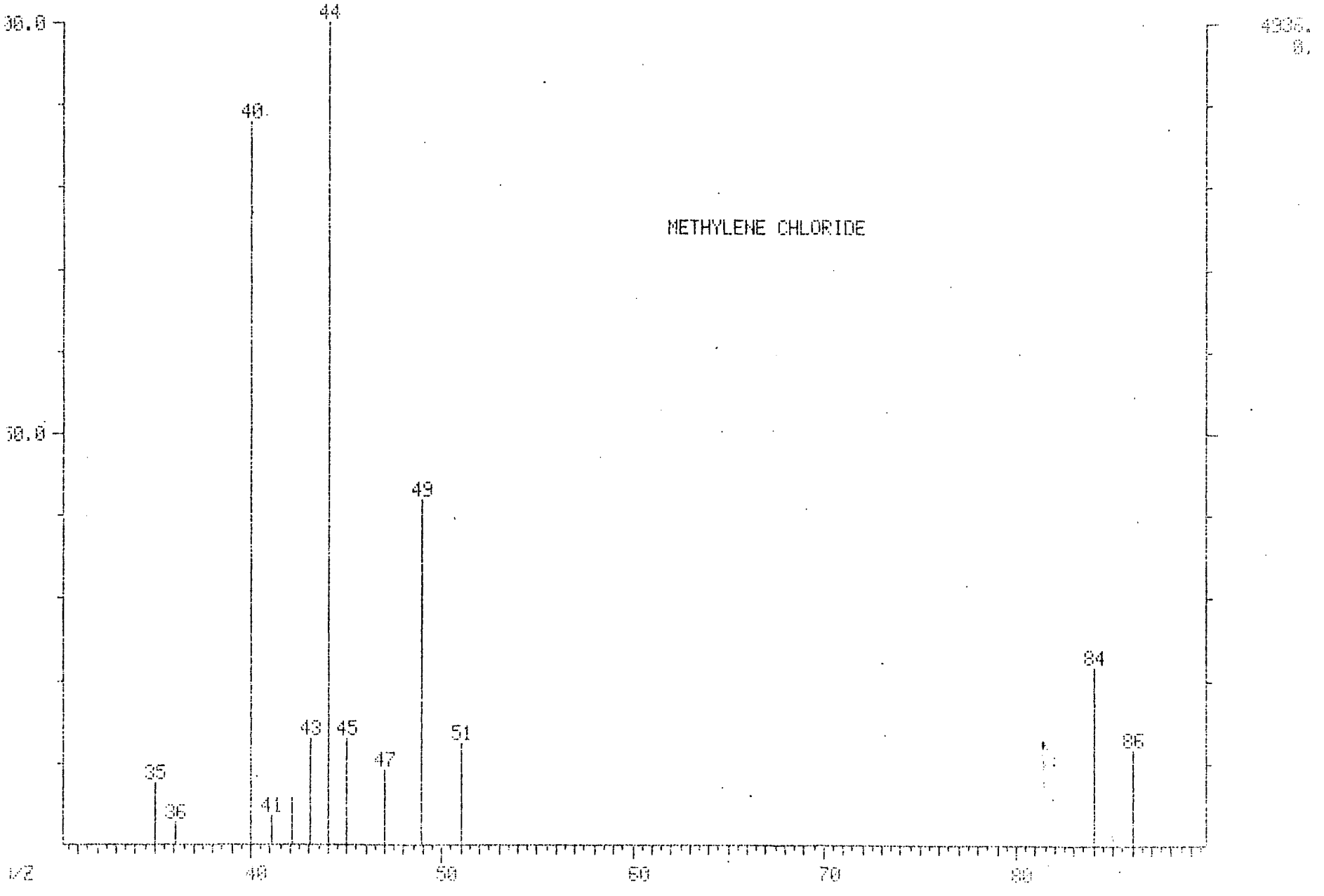


000040

MASS SPECTRUM
02/22/89 22:40:00 + 5:54
SAMPLE: C-14C
CONDS.: 5MLS PURGED
TEMP: 51 DEG. C

DATA: 789653V #177
CALI: 789653V #3

BASE M/Z: 44
RIC: 16272.

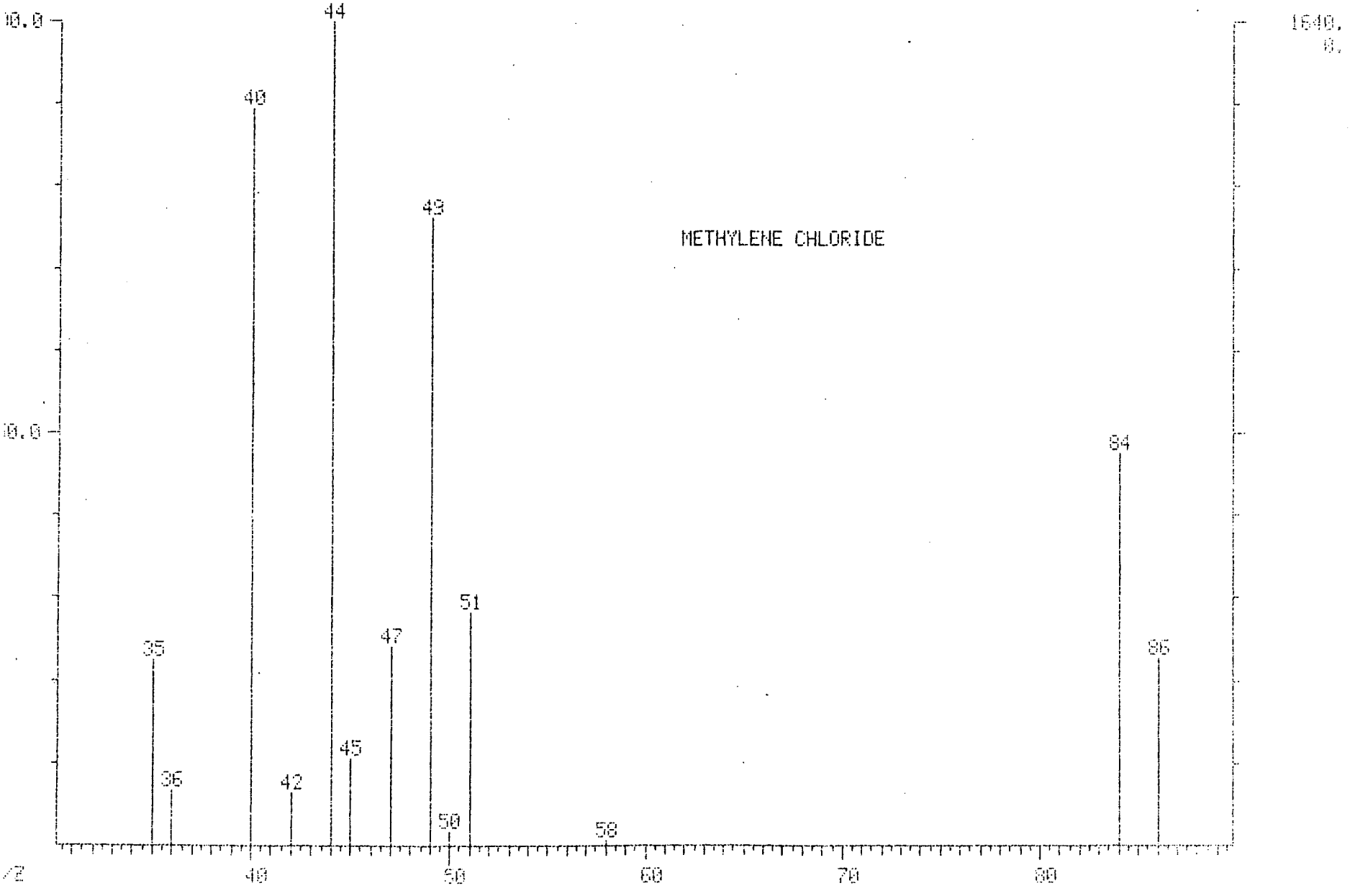


000041

MASS SPECTRUM
02/22/89 22:40:00 + 5:54
SAMPLE: C-14C
CONDS.: 5MLS PURGED
TEMP: 51 DEG. C
ENHANCED (5 15B 2N 0T)

DATA: 789653V #177
CALI: 789653V #3

BASE M/Z: 44
RIC: 7152.

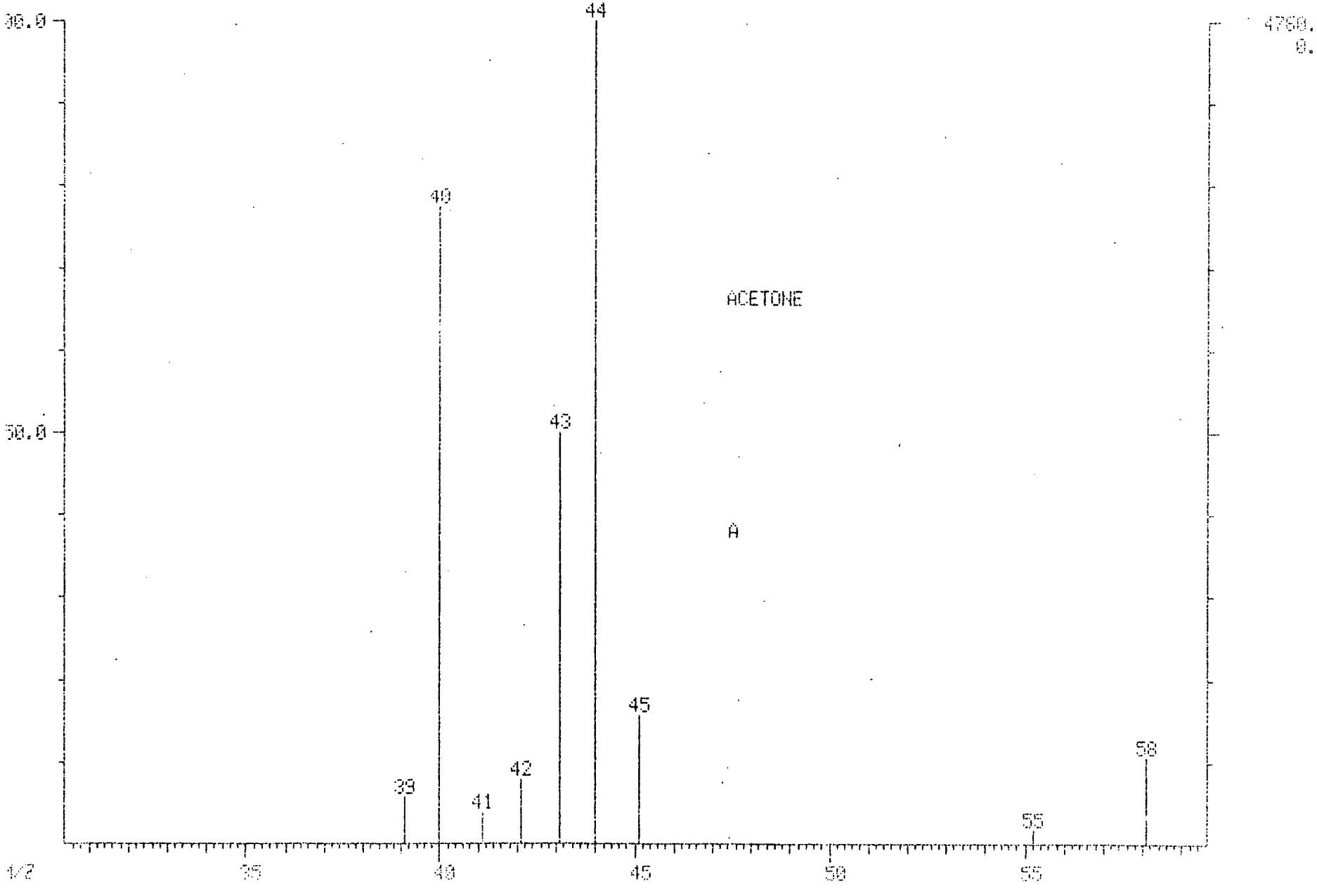


000042

MASS SPECTRUM
02/22/89 22:40:00 + 6:56
SAMPLE: C-14C
CONDS.: 5MLS PURGED
TEMP: 60 DEG. C

DATA: 789653U #208
CALI: 789653U #3

BASE M/Z: 44
RIC: 12576.

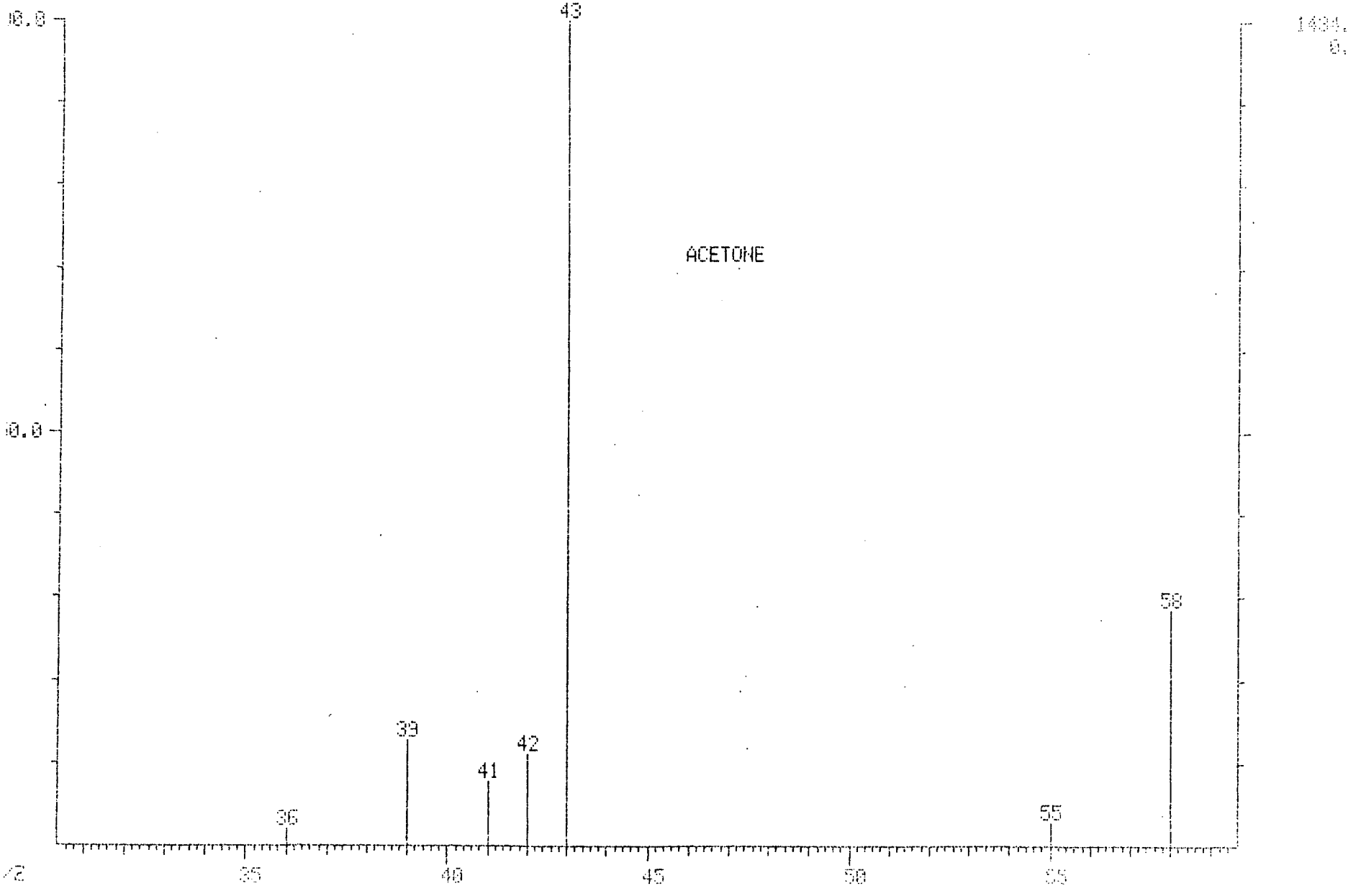


000043

MASS SPECTRUM
02/22/89 22:40:00 + 6:56
SAMPLE: C-14C
CONDS.: 5MLS PURGED
TEMP: 60 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 789653V #208
CALI: 789653V #3

BASE M/Z: 43
RIC: 2360.



000044

EPA SAMPLE NO.

C-14C

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Q C INC. Contract: GAN-FLEMING

Lab Code: NONE Case No.: GAN-FL SAS No.: NONE SDG No.: NONE

Matrix: (soil/water) WATER Lab Sample ID: 789653

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 789653V

Level: (low/med) LOW Date Received: 02/16/89

% Moisture: not dec. ____ Date Analyzed: 02/22/89

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Quantitation Report File: 789653V

000046

Data: 789653V.TI
02/22/89 22:40:00
Sample: C-14C
Conds.: 5MLS PURGED
Formula: Instrument: FINN Weight: 0.000
Submitted by: GANNET Analyst: DMW Acct. No.: 789653

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	C010	CHLOROMETHANE	
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8		ACROLEIN	
9	C035	ACETONE	
10		ACRYLONITRILE	
11	C040	CARBON DISULFIDE	
12	C045	1,1-DICHLOROETHENE	
13	C050	1,1-DICHLOROETHANE	
14	C053	1,2-DICHLOROETHENE (TOTAL)	
15	C060	CHLOROFORM	
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	CS15	D4-1,4-DICHLOROETHANE	*SURROGATE*
19	CI10	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
20	C110	2-BUTANONE (MEK)	
21	C115	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C172	TRANS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C155	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C143	CIS-1,3-DICHLOROPROPENE	
32	C175	2-CHLOROETHYLVINYLETHER	
33	C180	BROMOFORM	
34	CI20	D5-CHLOROBENZENE	*INTERNAL STANDARD*
35	C205	4-METHYL-2-PENTANONE (MIBK)	
36	C210	2-HEXANONE	
37	C220	TETRACHLOROETHENE	
38	C225	1,1,2,2-TETRACHLOROETHANE	
39	C230	TOLUENE	
40	C235	CHLOROBENZENE	
41	C240	ETHYL BENZENE	
42	C245	STYRENE	
43	C250	TOTAL XYLENES (CALCULATED OFF M-XYLENE)	
44	C350	1,2-DICHLOROBENZENE	
45	C335	1,3-DICHLOROBENZENE	
46	C340	1,4-DICHLOROBENZENE	
47	CS05	D8-TOLUENE	*SURROGATE*

No	Name
48	CS10 BROMOFLUOROBENZENE *SURROGATE*

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	298	9:56	1	1.000	A BB	80547.	50.000 UG/L	14.52
2	NOT FOUND								
3	NOT FOUND								
4	85	76	2:32	1	0.255	A BB	5630.	2.428 UG/L	0.70
5	NOT FOUND								
6	NOT FOUND								
7	84	177	5:54	1	0.594	A BB	10250.	4.007 UG/L	1.16
8	NOT FOUND								
9	43	208	6:56	1	0.698	A BB	35780.	33.961 UG/L	9.86
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	83	372	12:24	1	1.248	A BB	1403.	0.252 UG/L	0.07
16	NOT FOUND								
17	NOT FOUND								
18	65	393	13:06	1	1.319	A BB	255520.	54.967 UG/L	15.96
19	114	623	20:46	19	1.000	A BB	671316.	50.000 UG/L	14.52
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	43	450	15:00	19	0.722	A BB	6656.	0.562 UG/L	0.16
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	78	545	18:10	19	0.875	A BB	2491.	0.227 UG/L	0.07
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	117	768	25:36	34	1.000	A BB	677732.	50.000 UG/L	14.52
35	43	647	21:34	34	0.842	A*VB	8135.	0.992 UG/L	0.29
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	92	739	24:38	34	0.962	A BB	4116.	0.422 UG/L	0.12
40	112	771	25:42	34	1.004	A BB	4340.	0.327 UG/L	0.10
41	NOT FOUND								
42	104	916	30:32	34	1.193	A*BB	680.	0.039 UG/L	0.01
43	NOT FOUND								
44	146	1041	34:42	34	1.355	A BB	471.	0.061 UG/L	0.02
45	NOT FOUND								
46	NOT FOUND								
47	98	732	24:24	34	0.953	A BB	757379.	47.912 UG/L	13.91
48	95	882	29:24	34	1.148	A BB	635191.	48.327 UG/L	14.03

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:56	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:20		0.134						
3	2:04		0.208						
4	2:28	1.03	0.248	1.03	2.43	100.00	0.035	1.440	0.02
5	2:34		0.258						
6	3:24		0.342						
7	5:48	1.02	0.584	1.02	4.01	100.00	0.064	1.588	0.04
8	7:02		0.708						
9	6:58	1.00	0.701	1.00	33.96	100.00	0.222	0.654	0.34
10	7:52		0.792						
11	7:52		0.792						
12	9:26		0.950						
13	10:52		1.094						
14	11:46		1.185						
15	12:20	1.01	1.242	1.01	0.25	100.00	0.009	3.460	0.00
16	8:32		0.859						
17	13:12		1.329						
18	13:04	1.00	1.315	1.00	54.97	50.00	3.172	2.886	1.10
19	20:46	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
20	13:20		0.642						
21	14:26		0.695						
22	14:48		0.713						
23	15:10	0.99	0.730	0.99	0.56	100.00	0.005	0.882	0.01
24	15:24		0.742						
25	16:48		0.809						
26	17:06		0.823						
27	17:38		0.849						
28	18:14		0.878						
29	18:22		0.884						
30	18:10	1.00	0.875	1.00	0.23	100.00	0.002	0.818	0.00
31	18:24		0.886						
32	19:32		0.941						
33	20:56		1.008						
34	25:36	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
35	21:34	1.00	0.842	1.00	0.99	100.00	0.006	0.605	0.01
36	23:10		0.905						
37	23:16		0.909						
38	23:14		0.908						
39	24:36	1.00	0.961	1.00	0.42	100.00	0.003	0.720	0.00
40	25:44	1.00	1.005	1.00	0.33	100.00	0.003	0.978	0.00
41	27:32		1.076						
42	30:32	1.00	1.193	1.00	0.04	100.00	0.001	1.280	0.00
43	31:24		1.227						
44	34:42	1.00	1.355	1.00	0.06	100.00	0.000	0.572	0.00
45	33:58		1.327						
46	35:06		1.371						
47	24:26	1.00	0.954	1.00	47.91	50.00	1.118	1.166	0.96
48	29:28	1.00	1.151	1.00	48.33	50.00	0.937	0.970	0.97

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C-29A

Lab Name: Q C INC. Contract: GAN-FLEMING

Lab Code: NONE Case No.: GAN-FL SAS No.: NONE SDG No.: NONE

Matrix: (soil/water) WATER Lab Sample ID: 789654

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 789654V

Level: (low/med) LOW Date Received: 02/16/89

% Moisture: not dec. ____ Date Analyzed: 02/22/89

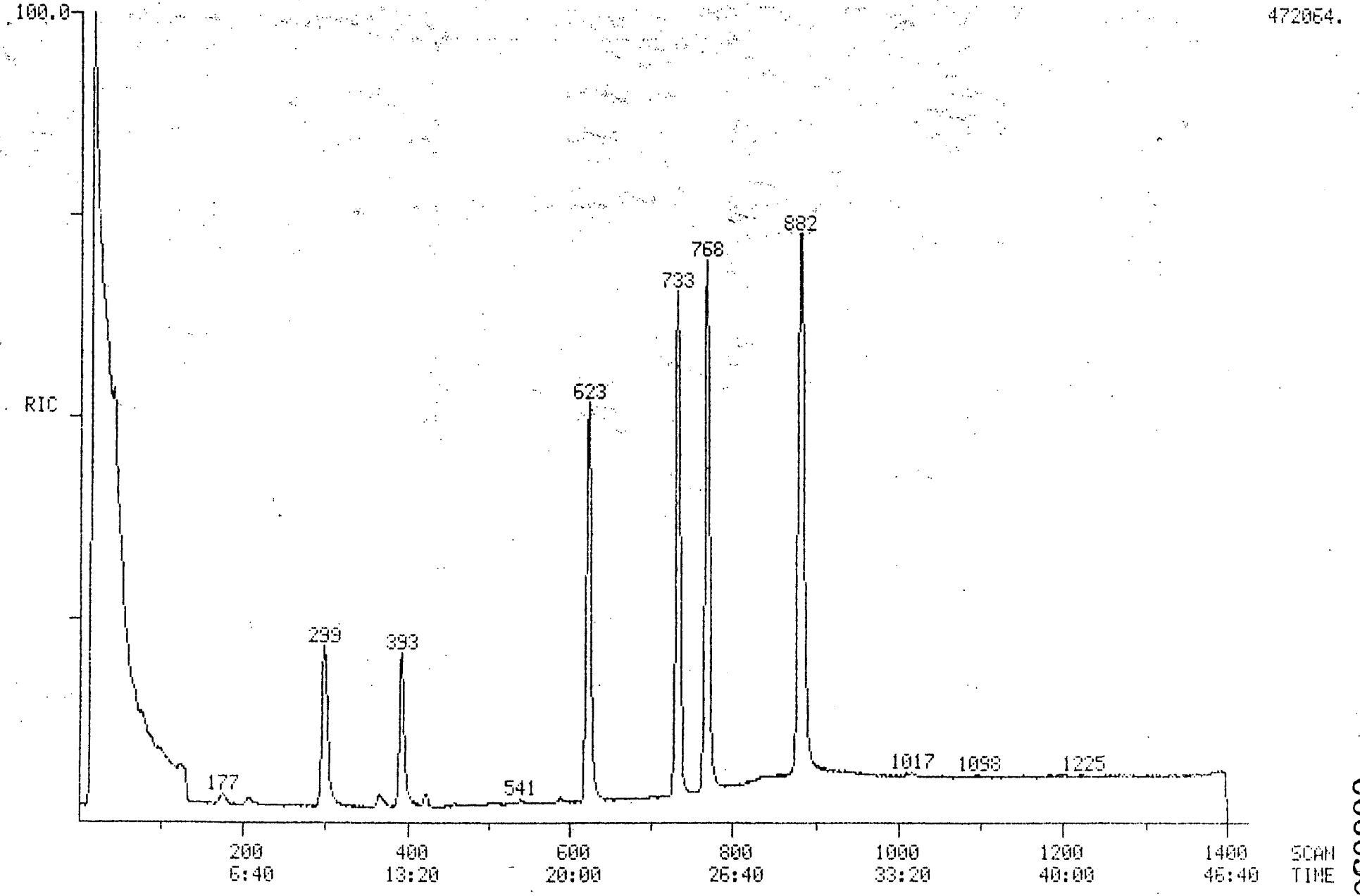
Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	4	J
67-64-1	Acetone	41	
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	1	J
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
	Total Xylenes	5	U

RIC
02/22/89 23:33:00
SAMPLE: C-29A
CONDS.: 5MLS PURGED
RANGE: G 1,1425 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789654V #1
CALI: CALTAB #3

SCANS 1 TO 1425

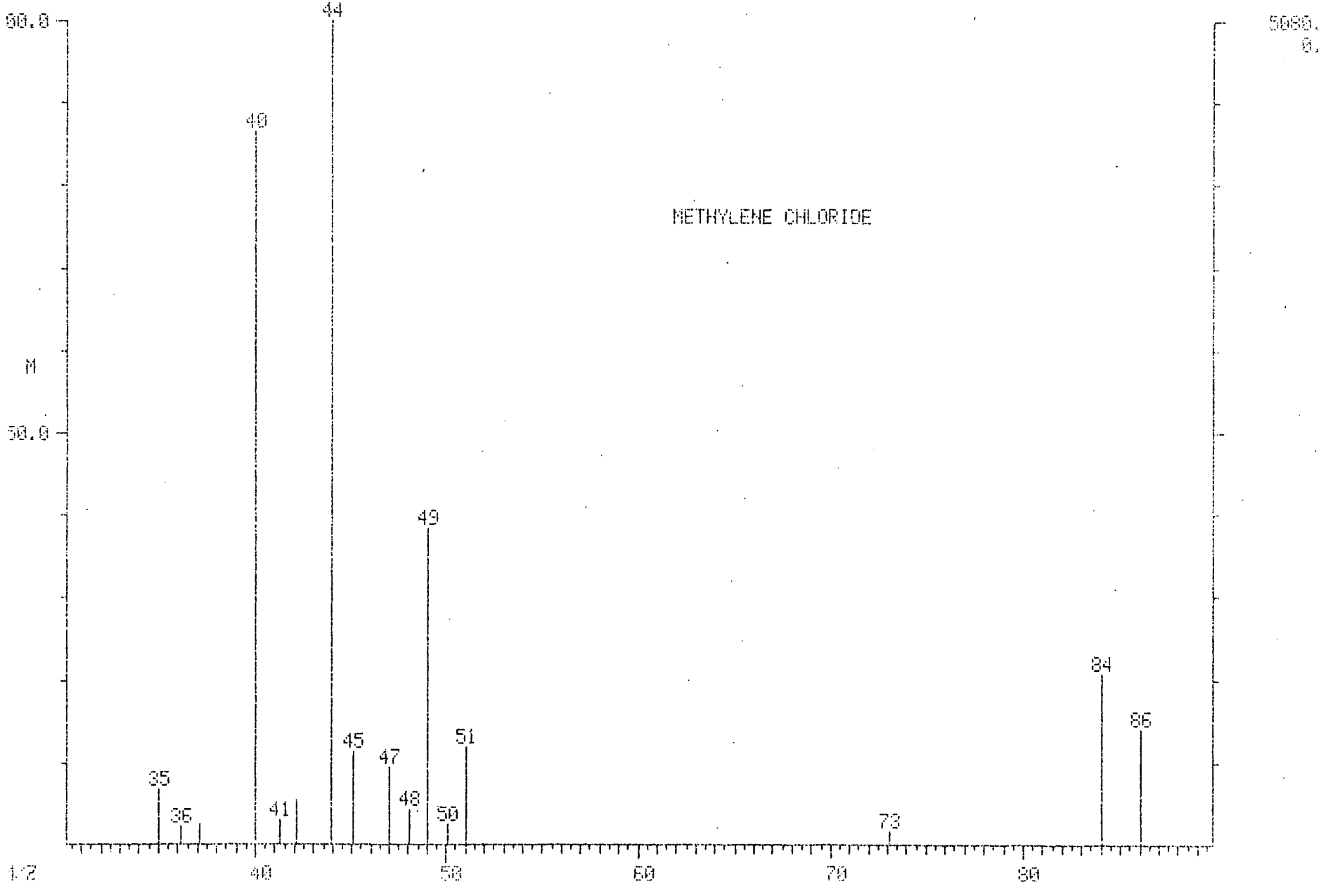


000050

MASS SPECTRUM
02/22/89 23:33:00 + 5:52
SAMPLE: C-29A
CONDS.: 5MLS PURGED
TEMP: 51 DEG. C

DATA: 789654V #176
CALI: 789654V #3

BASE M/Z: 44
RIC: 16240.

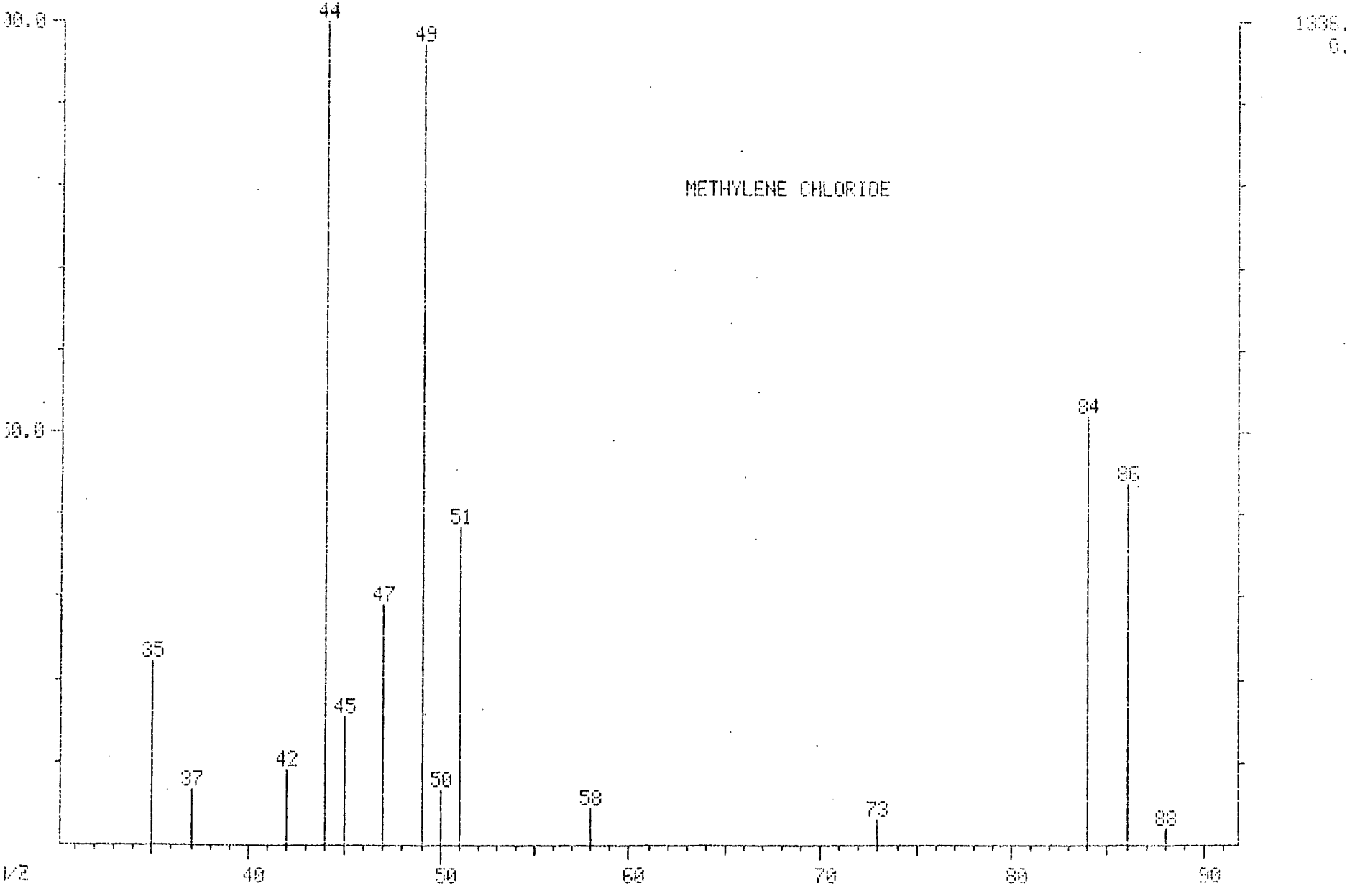


000051

MASS SPECTRUM
02/22/89 23:33:00 + 5:52
SAMPLE: C-29A
CONDS.: 5MLS PURGED
TEMP: 51 DEG. C
ENHANCED (S 158 2N 0T)

DATA: 789654V #176
CALI: 789654V #3

BASE M/Z: 44
RIC: 5736.

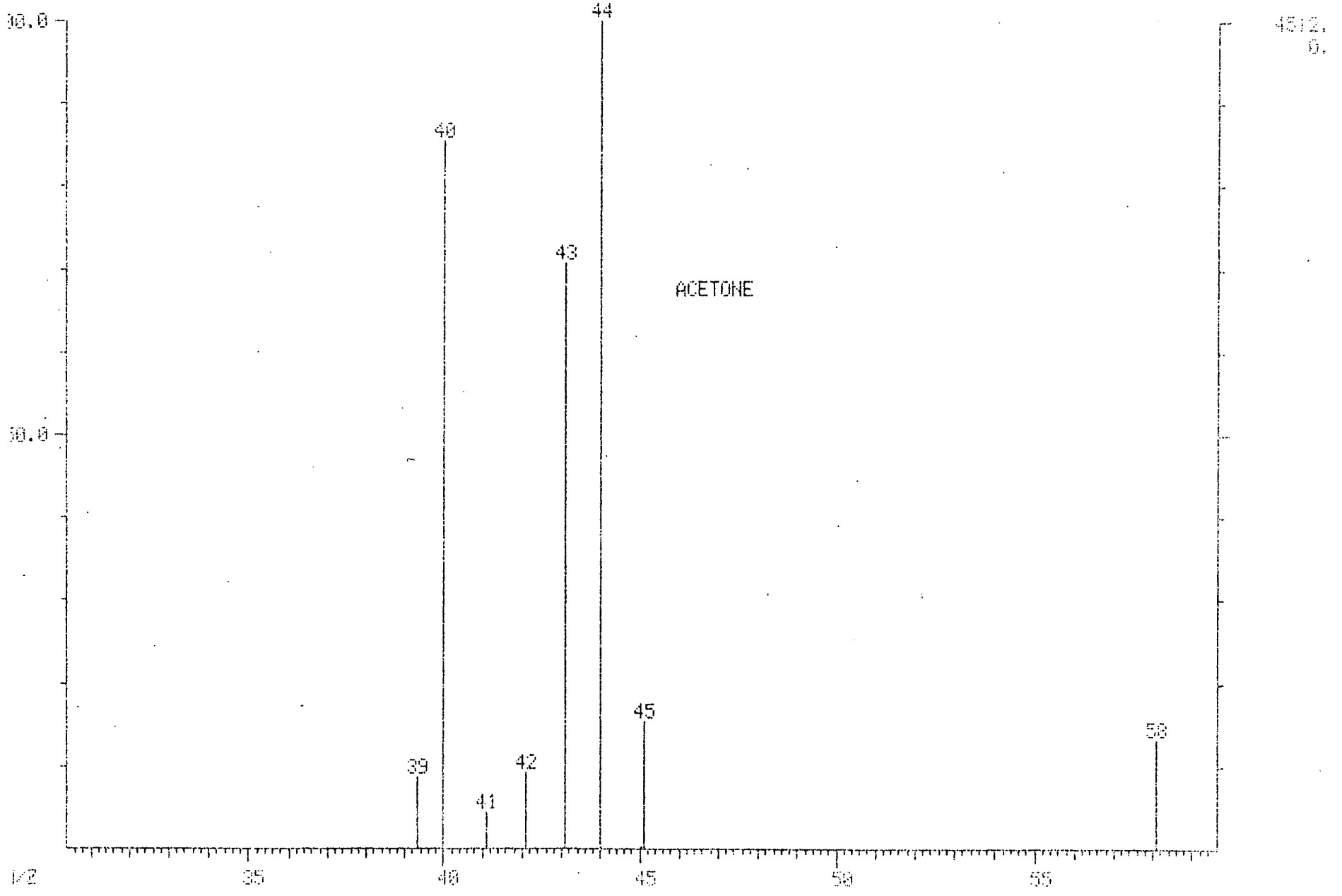


000052

MASS SPECTRUM
02/22/89 23:33:00 + 5:56
SAMPLE: C-29A
CONDS.: 5MLS PURGED
TEMP: 50 DEG. C

DATA: 789654V #208
CALI: 789654V #3

BASE M/Z: 44
RIC: 13872.

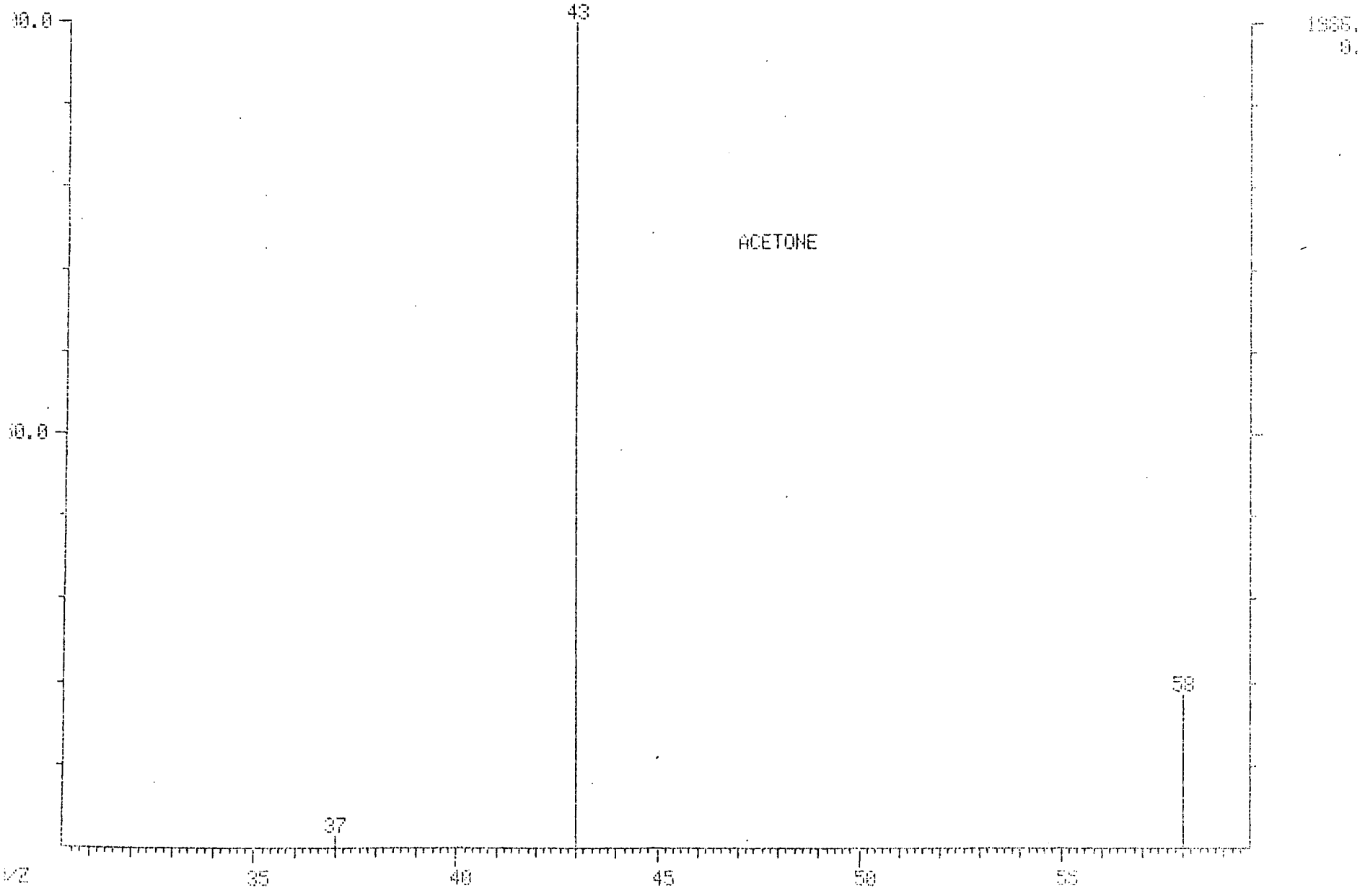


000053

MASS SPECTRUM
02/22/89 23:33:00 + 6:56
SAMPLE: C-23A
CONDS.: 5MLS PURGED
TEMP: 60 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 789654V #208
CALI: 789654V #3

BASE M/Z: 43
RIC: 2380.

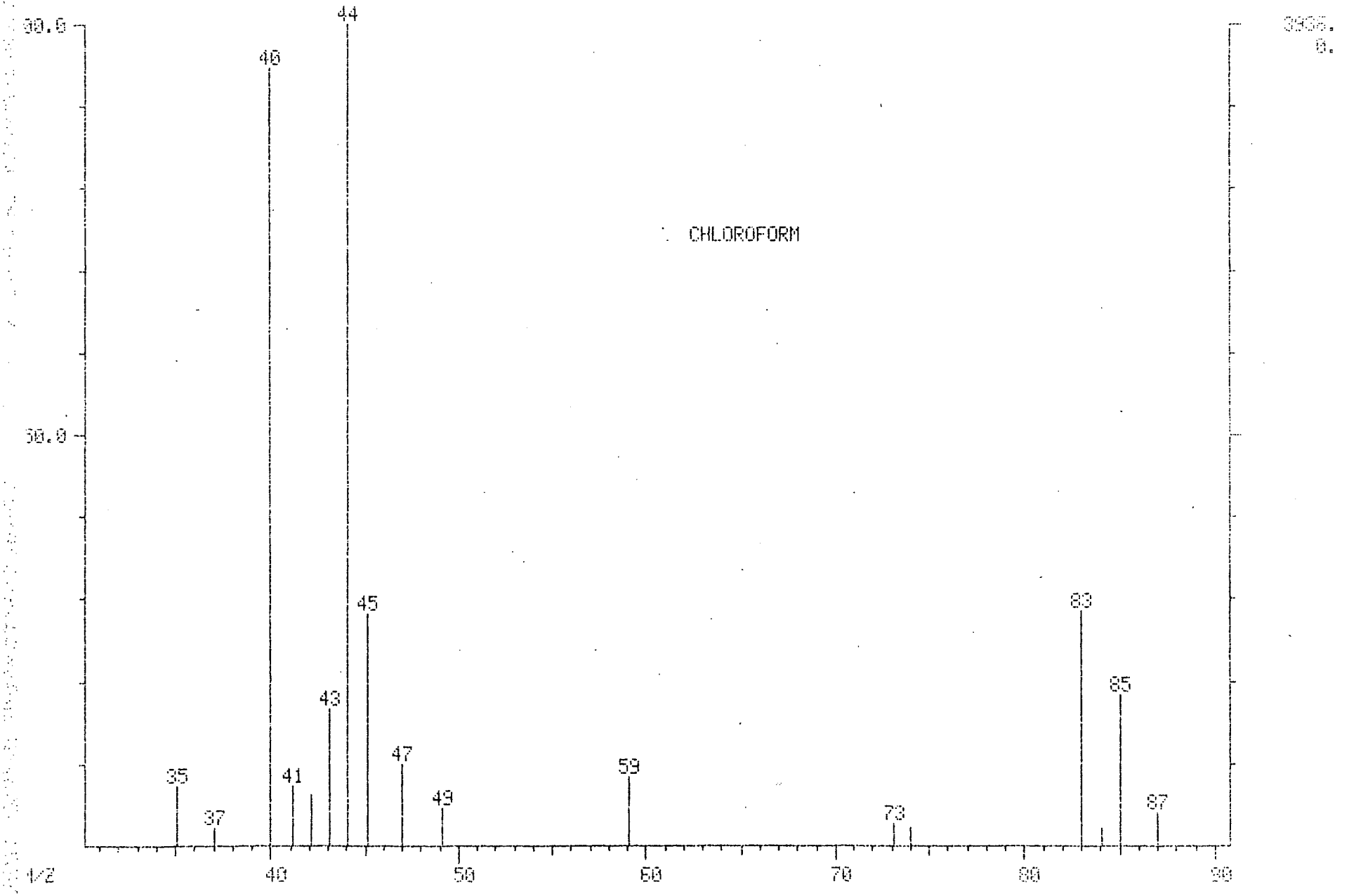


000054

MASS SPECTRUM
02/22/89 23:33:00 + 12:22
SAMPLE: C-29A
CONDS.: 5MLS PURGED
TEMP: 103 DEG. C

DATA: 789654V #371
CALI: 789654V #3

BASE M/Z: 44
RIC: 13488.

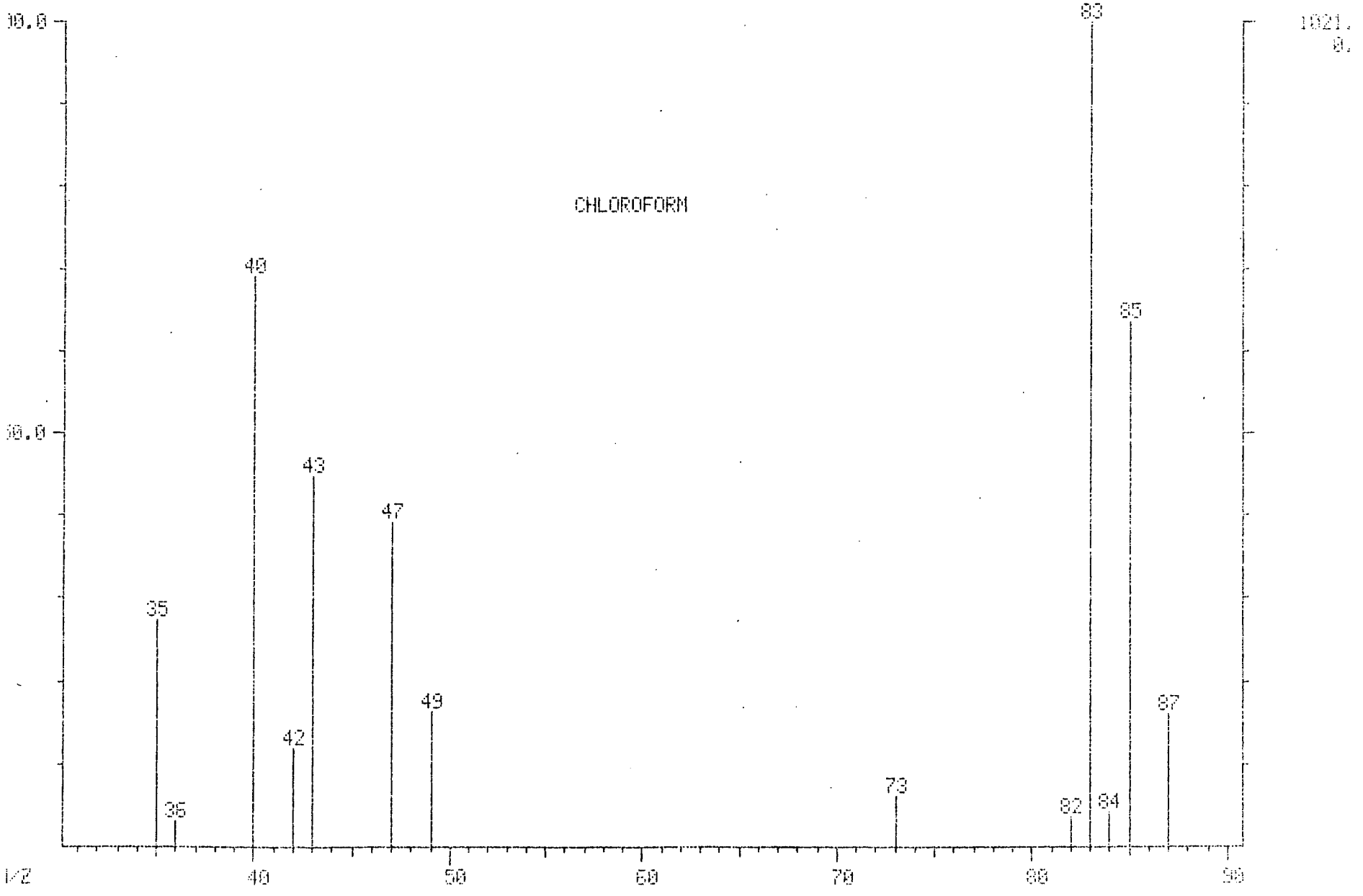


000055

MASS SPECTRUM
02/22/89 23:33:00 + 12:22
SAMPLE: C-29A
CONDS.: 5MLS PURGED
TEMP: 103 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 789654V #371
CALI: 789654V #3

BASE M/Z: 83
RIC: 4128.



000056

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
C-29A

Lab Name: Q C INC. Contract: GAN-FLEMING

Lab Code: NONE Case No.: GAN-FL SAS No.: NONE SDG No.: NONE

Matrix: (soil/water) WATER Lab Sample ID: 789654

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 789654V

Level: (low/med) LOW Date Received: 02/16/89

% Moisture: not dec. ____ Date Analyzed: 02/22/89

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Quantitation Report File: 789654V

000058

Data: 789654V.TI
02/22/89 23:33:00
Sample: C-29A
Conds.: 5MLS PURGED
Formula: Instrument: FINN Weight: 0.000
Submitted by: GANNET Analyst: DMW Acct. No.: 789654

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	C010	CHLOROMETHANE	
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8		ACROLEIN	
9	C035	ACETONE	
10		ACRYLONITRILE	
11	C040	CARBON DISULFIDE	
12	C045	1,1-DICHLOROETHENE	
13	C050	1,1-DICHLOROETHANE	
14	C053	1,2-DICHLOROETHENE (TOTAL)	
15	C060	CHLOROFORM	
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	CS15	D4-1,4-DICHLOROETHANE	*SURROGATE*
19	CI10	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
20	C110	2-BUTANONE (MEK)	
21	C115	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C172	TRANS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C155	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C143	CIS-1,3-DICHLOROPROPENE	
32	C175	2-CHLOROETHYLVINYLETHER	
33	C180	BROMOFORM	
34	CI20	D5-CHLOROBENZENE	*INTERNAL STANDARD*
35	C205	4-METHYL-2-PENTANONE (MIBK)	
36	C210	2-HEXANONE	
37	C220	TETRACHLOROETHENE	
38	C225	1,1,2,2-TETRACHLOROETHANE	
39	C230	TOLUENE	
40	C235	CHLOROBENZENE	
41	C240	ETHYL BENZENE	
42	C245	STYRENE	
43	C250	TOTAL XYLENES (CALCULATED OFF M-XYLENE)	
44	C350	1,2-DICHLOROBENZENE	
45	C325	1,3-DICHLOROBENZENE	
46	C340	1,4-DICHLOROBENZENE	
47	CS05	D8-TOLUENE	*SURROGATE*

No	Name
48	CS10 BROMOFLUOROBENZENE *SURROGATE*

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	299	9:58	1	1.000	A BB	75017.	50.000 UG/L	14.33
2	NOT FOUND								
3	NOT FOUND								
4	85	76	2:32	1	0.254	A BB	6141.	2.843 UG/L	0.81
5	NOT FOUND								
6	NOT FOUND								
7	84	176	5:52	1	0.589	A BB	9630.	4.042 UG/L	1.16
8	NOT FOUND								
9	43	208	6:56	1	0.696	A BV	40390.	41.163 UG/L	11.79
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	83	371	12:22	1	1.241	A BB	7170.	1.381 UG/L	0.40
16	101	256	8:32	1	0.856	A BB	248.	0.027 UG/L	0.01
17	NOT FOUND								
18	65	393	13:06	1	1.314	A BB	217703.	50.283 UG/L	14.41
19	114	623	20:46	19	1.000	A BB	514767.	50.000 UG/L	14.33
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	43	458	15:16	19	0.735	A*BV	3412.	0.376 UG/L	0.11
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	78	547	18:14	19	0.878	A BB	846.	0.100 UG/L	0.03
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	117	768	25:36	34	1.000	A BB	544406.	50.000 UG/L	14.33
35	43	637	21:14	34	0.829	A*BB	6305.	0.957 UG/L	0.27
36	43	698	23:16	34	0.909	A BB	3909.	1.033 UG/L	0.30
37	NOT FOUND								
38	NOT FOUND								
39	92	738	24:36	34	0.961	A BB	3175.	0.405 UG/L	0.12
40	112	772	25:44	34	1.005	A BB	3049.	0.286 UG/L	0.08
41	NOT FOUND								
42	104	917	30:34	34	1.194	A BB	239.	0.017 UG/L	0.00
43	106	947	31:34	34	1.233	A BB	179.	0.020 UG/L	0.01
44	146	1043	34:46	34	1.358	A*BB	390.	0.063 UG/L	0.02
45	NOT FOUND								
46	146	1054	35:08	34	1.372	A*BB	384.	0.037 UG/L	0.01
47	98	732	24:24	34	0.953	A BB	595425.	46.891 UG/L	13.43
48	95	882	29:24	34	1.148	A BB	518730.	49.132 UG/L	14.08

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:56	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:20		0.134						
3	2:04		0.208						
4	2:28	1.03	0.248	1.02	2.84	100.00	0.041	1.440	0.03
5	2:34		0.258						
6	3:24		0.342						
7	5:48	1.01	0.584	1.01	4.04	100.00	0.064	1.588	0.04
8	7:02		0.708						
9	6:58	1.00	0.701	0.99	41.16	100.00	0.269	0.654	0.41
10	7:52		0.792						
11	7:52		0.792						
12	9:26		0.950						
13	10:52		1.094						
14	11:46		1.185						
15	12:20	1.00	1.242	1.00	1.38	100.00	0.048	3.460	0.01
16	8:32	1.00	0.859	1.00	0.03	100.00	0.002	6.232	0.00
17	13:12		1.329						
18	13:04	1.00	1.315	1.00	50.28	50.00	2.902	2.886	1.01
19	20:46	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
20	13:20		0.642						
21	14:26		0.695						
22	14:48		0.713						
23	15:10	1.01	0.730	1.01	0.38	100.00	0.003	0.882	0.00
24	15:24		0.742						
25	16:48		0.809						
26	17:06		0.823						
27	17:38		0.849						
28	18:14		0.878						
29	18:22		0.884						
30	18:10	1.00	0.875	1.00	0.10	100.00	0.001	0.818	0.00
31	18:24		0.886						
32	19:32		0.941						
33	20:56		1.008						
34	25:36	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
35	21:34	0.98	0.842	0.98	0.96	100.00	0.006	0.605	0.01
36	23:10	1.00	0.905	1.00	1.03	100.00	0.004	0.347	0.01
37	23:16		0.909						
38	23:14		0.908						
39	24:36	1.00	0.961	1.00	0.40	100.00	0.003	0.720	0.00
40	25:44	1.00	1.005	1.00	0.29	100.00	0.003	0.978	0.00
41	27:32		1.076						
42	30:32	1.00	1.193	1.00	0.02	100.00	0.000	1.280	0.00
43	31:24	1.01	1.227	1.01	0.02	100.00	0.000	0.806	0.00
44	34:42	1.00	1.355	1.00	0.06	100.00	0.000	0.572	0.00
45	33:58		1.327						
46	35:06	1.00	1.371	1.00	0.04	100.00	0.000	0.949	0.00
47	24:26	1.00	0.954	1.00	46.89	50.00	1.094	1.166	0.94
48	29:28	1.00	1.151	1.00	49.13	50.00	0.953	0.970	0.98

000061
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELDBLANK

Lab Name: Q C INC. Contract: GAN-FLEMING

Lab Code: NONE Case No.: GAN-FL SAS No.: NONE SDG No.: NONE

Matrix: (soil/water) WATER Lab Sample ID: 789655

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 789655V

Level: (low/med) LOW Date Received: 02/16/89

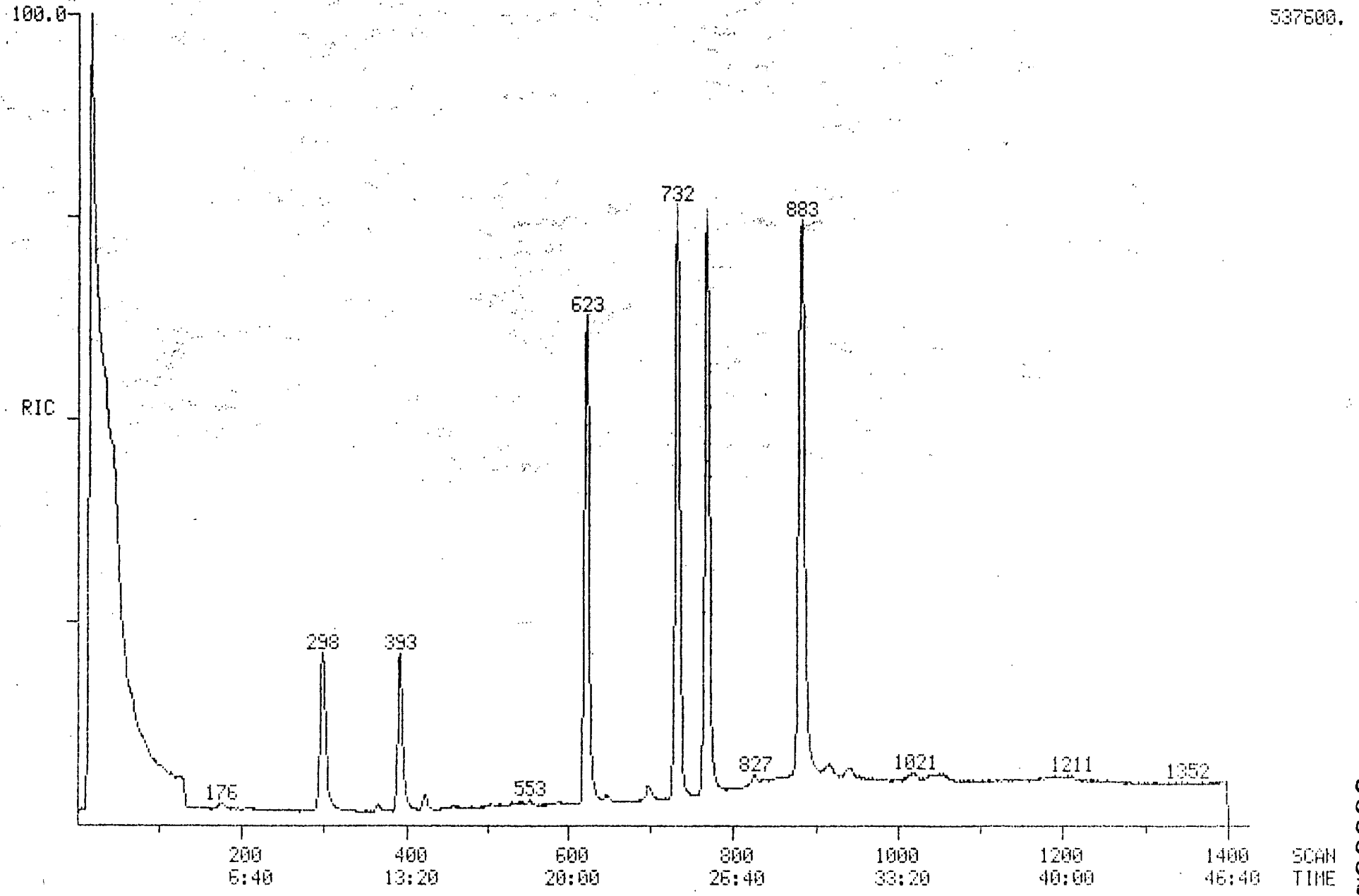
% Moisture: not dec. ____ Date Analyzed: 02/22/89

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	2	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	3	J
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
	Total Xylenes	5	U

RIC
02/22/89 17:27:00
SAMPLE: FIELD BLANK
CONDS.: 5MLS PURGED
RANGE: G 1,1425 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789655V #1 SCANS 1 TO 1425
CALI: CALTAB #3

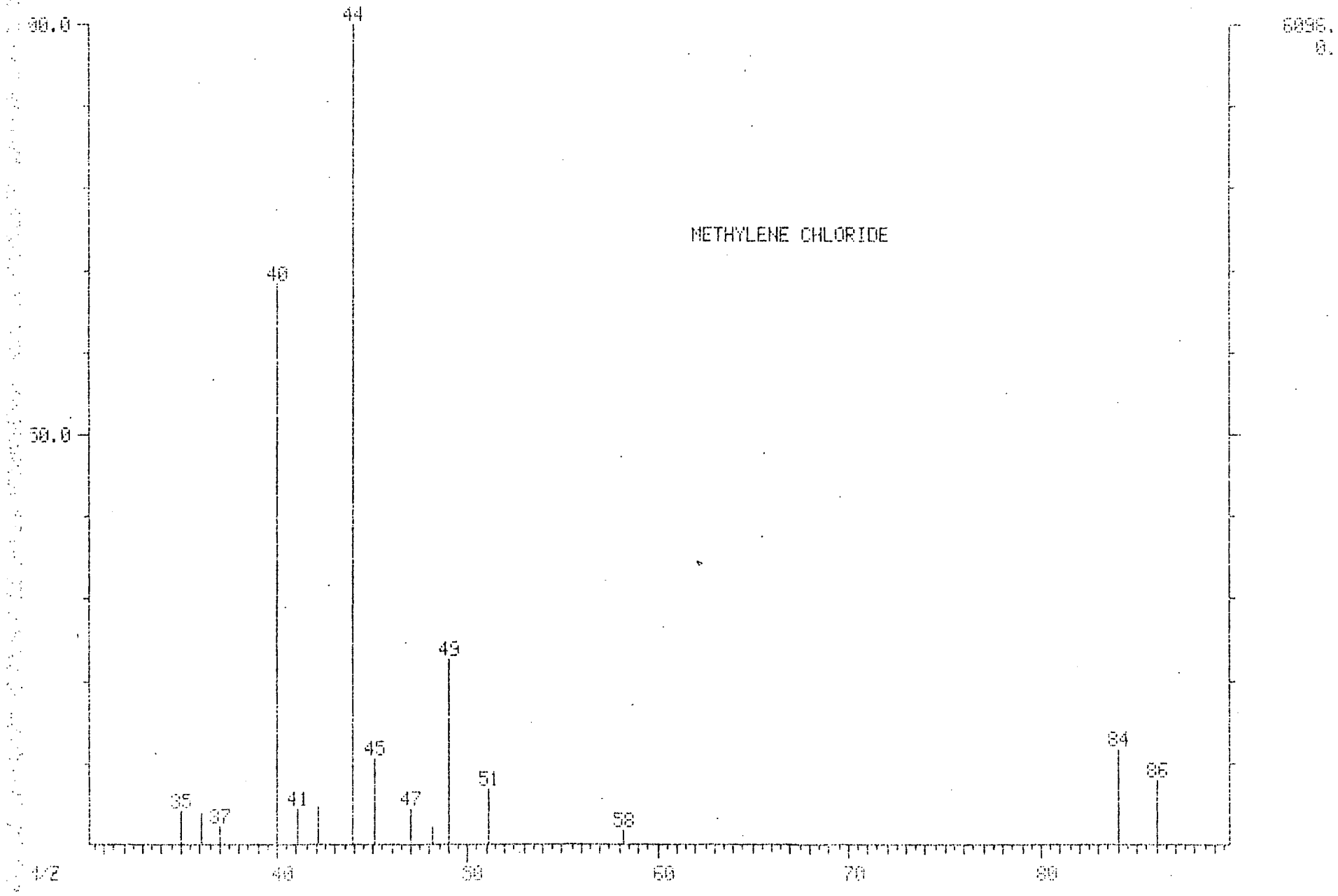


000062

MASS SPECTRUM
02/22/89 17:27:00 + 5:52
SAMPLE: FIELD BLANK
CONDS.: 5MLS PURGED
TEMP: 51 DEG. C

DATA: 789655V #175
CALI: 789655V #3

BASE M/Z: 44
RIC: 15520.

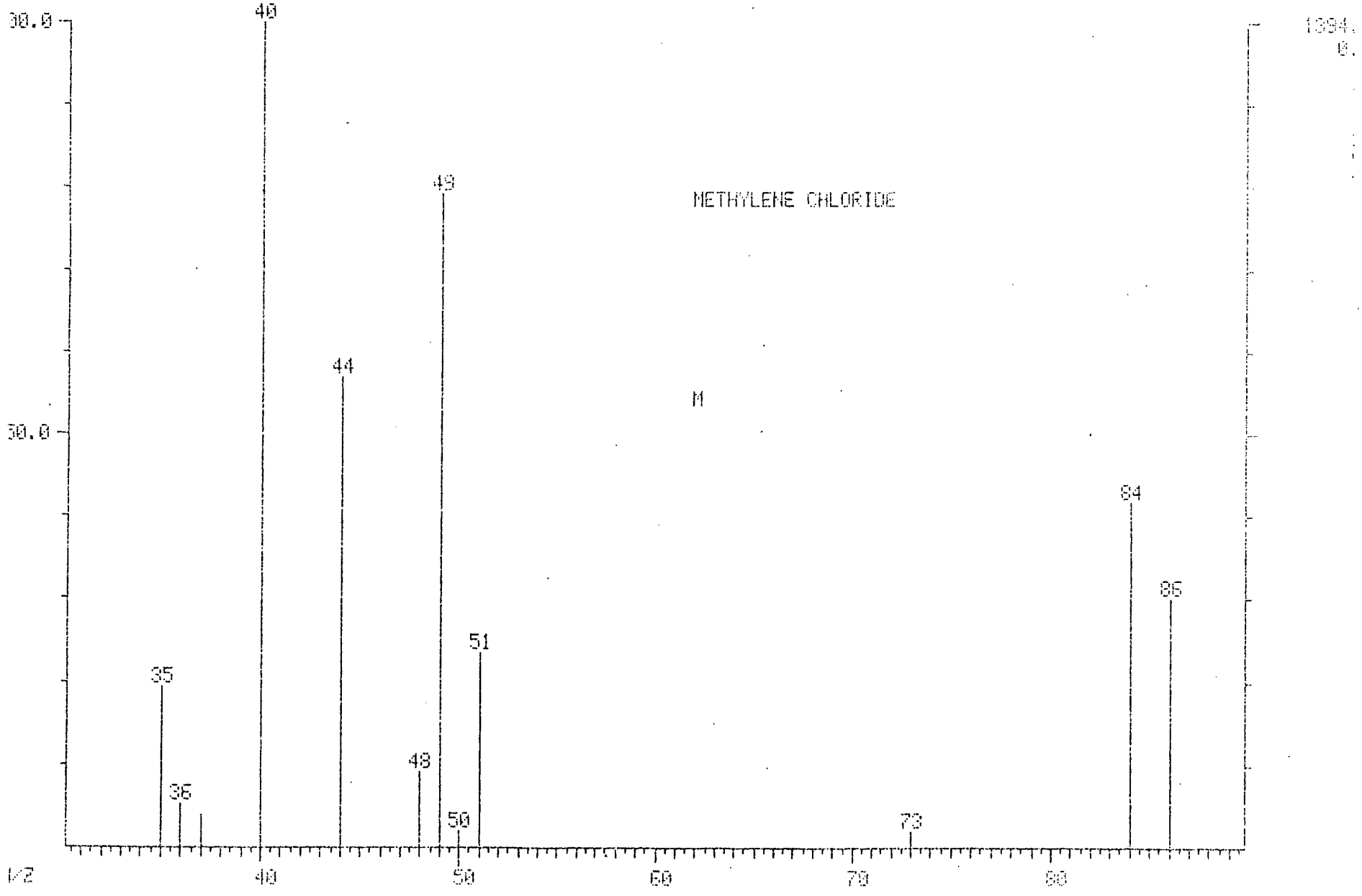


000063

MASS SPECTRUM
02/22/89 17:27:00 + 5:52
SAMPLE: FIELD BLANK
CONDS.: 5MLS PURGED
TEMP: 51 DEG. C
ENHANCED (S 150 2N 0T)

DATA: 789655V #176
CALI: 789655V #3

BASE M/Z: 40
RIC: 5200.

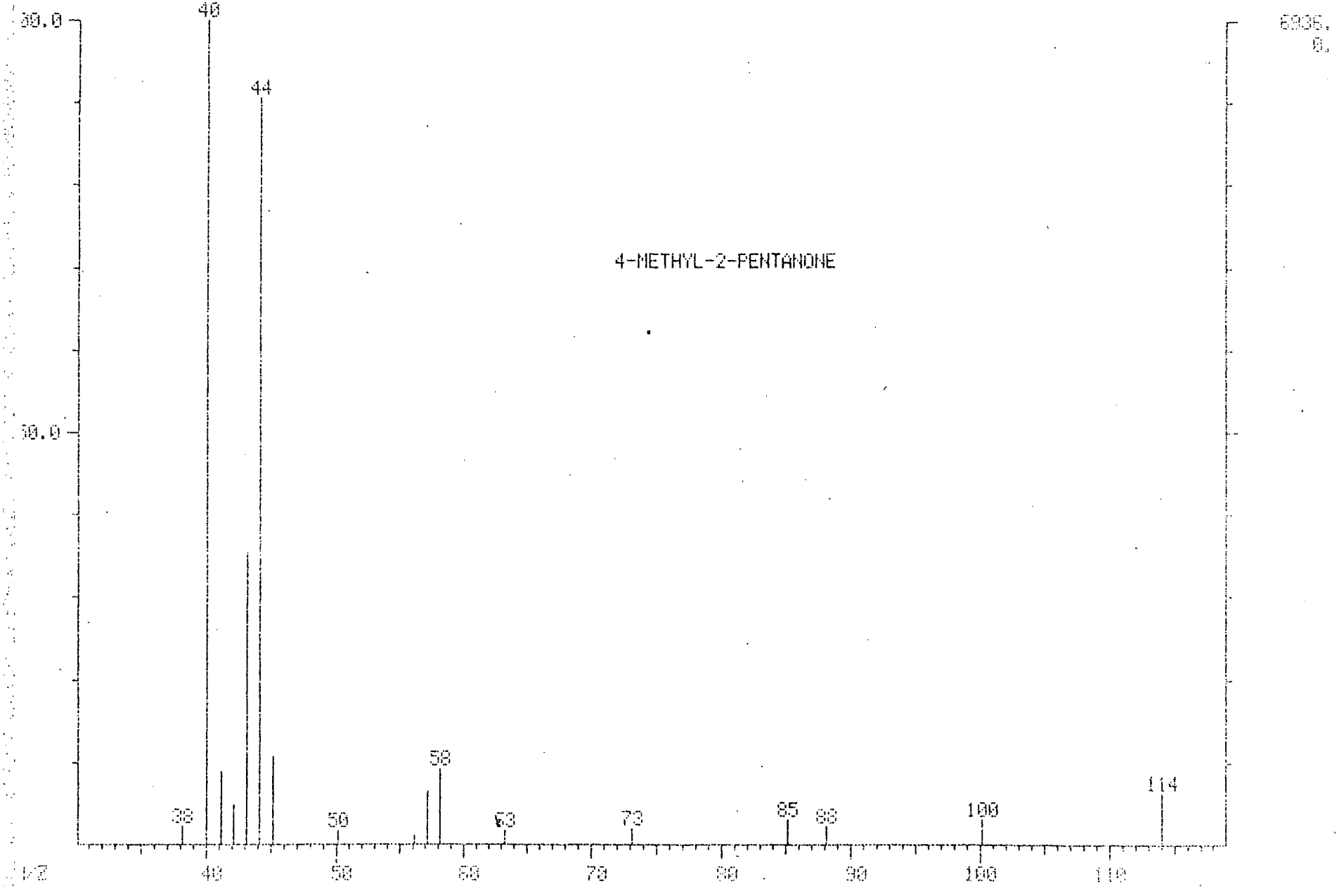


000064

MASS SPECTRUM
02/22/89 17:27:00 + 21:36
SAMPLE: FIELD BLANK
CONDS.: 5MLS PURGED
TEMP: 177 DEG. C

DATA: 789655V #648
CALI: 789655V #3

BASE M/Z: 40
RIC: 20000.

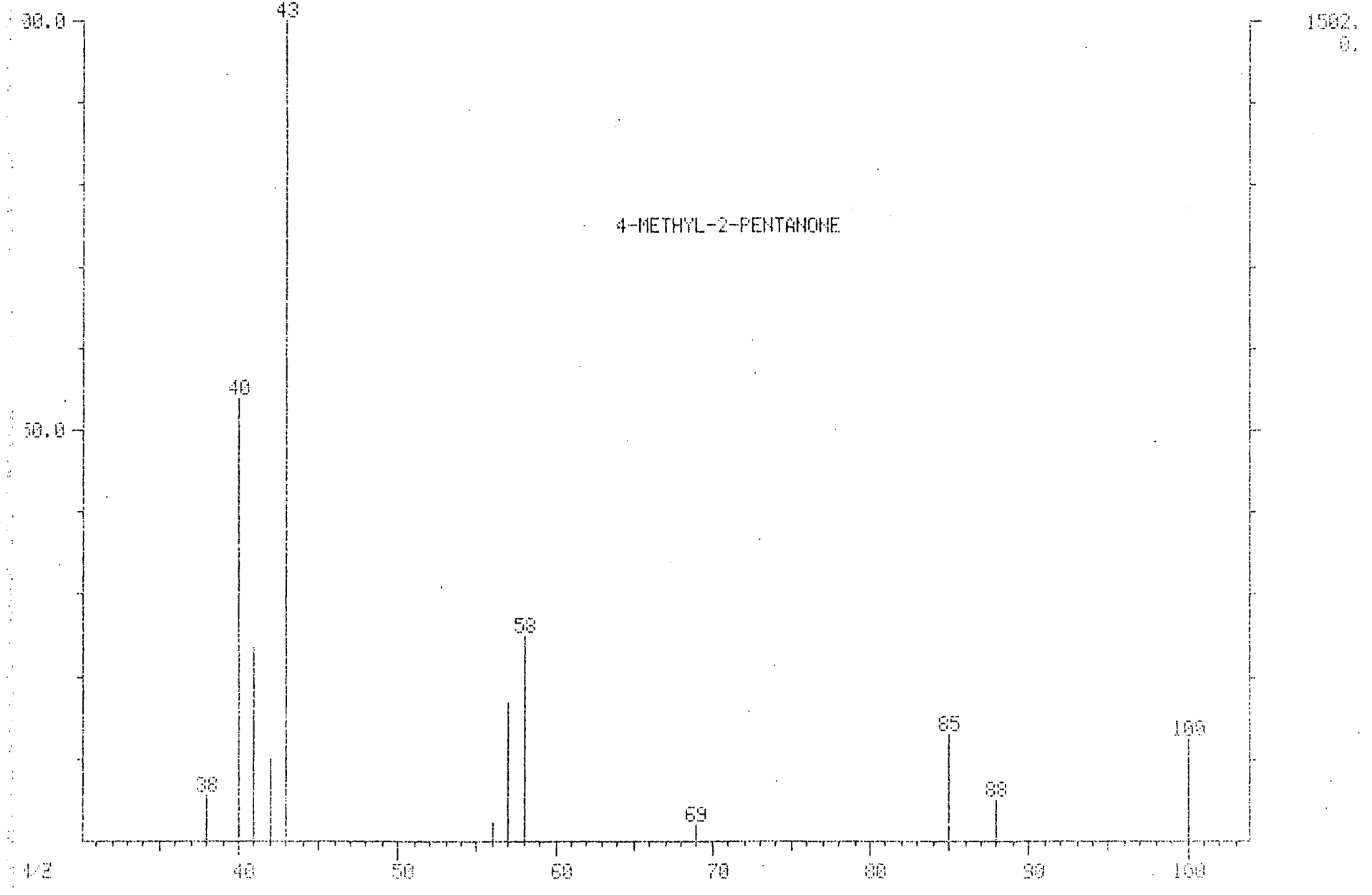


000065

MASS SPECTRUM
02/22/89 17:27:00 + 21:36
SAMPLE: FIELD BLANK
CONDS.: 5MLS PURGED
TEMP: 177 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 789655V #648
CALI: 789655V #3

BASE M/Z: 43
RIC: 4056.



000066

EPA SAMPLE NO.

FIELDBLANK

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Q C INC. Contract: GAN-FLEMING

Lab Code: NONE Case No.: GAN-FL SAS No.: NONE SDG No.: NONE

Matrix: (soil/water) WATER Lab Sample ID: 789655

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 789655V

Level: (low/med) LOW Date Received: 02/16/89

% Moisture: not dec. ____ Date Analyzed: 02/22/89

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Quantitation Report File: 789655V

Data: 789655V.TI
02/22/89 17:27:00
Sample: FIELD BLANK
Conds.: 5MLS PURGED
Formula: Instrument: FINN Weight: 0.000
Submitted by: GANNET Analyst: DMW Acct. No.: 789655

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	C010	CHLOROMETHANE	
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8		ACROLEIN	
9	C035	ACETONE	
10		ACRYLONITRILE	
11	C040	CARBON DISULFIDE	
12	C045	1,1-DICHLOROETHENE	
13	C050	1,1-DICHLOROETHANE	
14	C053	1,2-DICHLOROETHENE (TOTAL)	
15	C060	CHLOROFORM	
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	CS15	D4-1,4-DICHLOROETHANE	*SURROGATE*
19	CI10	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
20	C110	2-BUTANONE (MEK)	
21	C115	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C172	TRANS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C155	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C143	CIS-1,3-DICHLOROPROPENE	
32	C175	2-CHLOROETHYLVINYLETHER	
33	C180	BROMOFORM	
34	CI20	D5-CHLOROBENZENE	*INTERNAL STANDARD*
35	C205	4-METHYL-2-PENTANONE (MIBK)	
36	C210	2-HEXANONE	
37	C220	TETRACHLOROETHENE	
38	C225	1,1,2,2-TETRACHLOROETHANE	
39	C230	TOLUENE	
40	C235	CHLOROBENZENE	
41	C240	ETHYL BENZENE	
42	C245	STYRENE	
43	C250	TOTAL XYLENES (CALCULATED OFF M-XYLENE)	
44	C350	1,2-DICHLOROBENZENE	
45	C335	1,3-DICHLOROBENZENE	
46	C340	1,4-DICHLOROBENZENE	
47	CS05	D8-TOLUENE	*SURROGATE*

No	Name
48	CS10 BROMOFLUOROBENZENE *SURROGATE*

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	298	9:56	1	1.000	A BB	86320.	50.000 UG/L	15.32
2	NOT FOUND								
3	NOT FOUND								
4	85	77	2:34	1	0.258	A BB	4280.	1.722 UG/L	0.53
5	NOT FOUND								
6	NOT FOUND								
7	84	176	5:52	1	0.591	A BB	6524.	2.380 UG/L	0.73
8	NOT FOUND								
9	43	227	7:34	1	0.762	A BB	1918.	1.699 UG/L	0.52
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	83	372	12:24	1	1.248	A BB	899.	0.150 UG/L	0.05
16	101	257	8:34	1	0.862	A BB	361.	0.034 UG/L	0.01
17	62	395	13:10	1	1.326	A*BB	642.	0.126 UG/L	0.04
18	65	393	13:06	1	1.319	A BB	249360.	50.054 UG/L	15.34
19	114	623	20:46	19	1.000	A BB	724306.	50.000 UG/L	15.32
20	72	400	13:20	19	0.642	A BB	476.	1.391 UG/L	0.43
21	97	434	14:28	19	0.697	A BB	636.	0.097 UG/L	0.03
22	NOT FOUND								
23	43	457	15:14	19	0.734	A VB	10033.	0.786 UG/L	0.24
24	83	466	15:32	19	0.748	A BB	769.	0.092 UG/L	0.03
25	63	506	16:52	19	0.812	A BB	1051.	0.200 UG/L	0.06
26	75	516	17:12	19	0.828	A BB	4145.	0.445 UG/L	0.14
27	130	534	17:48	19	0.857	A BB	1885.	0.361 UG/L	0.11
28	129	550	18:20	19	0.883	A BB	2349.	0.339 UG/L	0.10
29	97	552	18:24	19	0.886	A BB	2726.	0.676 UG/L	0.21
30	78	545	18:10	19	0.875	A BB	2946.	0.249 UG/L	0.08
31	75	556	18:32	19	0.892	A BB	2274.	0.507 UG/L	0.16
32	63	586	19:32	19	0.941	A BB	179.	0.106 UG/L	0.03
33	173	631	21:02	19	1.013	A BB	2019.	0.395 UG/L	0.12
34	117	768	25:36	34	1.000	A BB	686030.	50.000 UG/L	15.32
35	43	648	21:36	34	0.844	A BB	27961.	3.369 UG/L	1.03
36	43	697	23:14	34	0.908	A BB	26023.	5.459 UG/L	1.67
37	164	699	23:18	34	0.910	A BB	2843.	0.524 UG/L	0.16
38	83	697	23:14	34	0.908	A BV	7526.	0.954 UG/L	0.29
39	92	739	24:38	34	0.962	A BB	8055.	0.815 UG/L	0.25
40	112	772	25:44	34	1.005	A BB	10146.	0.756 UG/L	0.23
41	106	825	27:30	34	1.074	A BB	4400.	0.721 UG/L	0.22
42	104	915	30:30	34	1.191	A BV	16215.	0.923 UG/L	0.28
43	106	941	31:22	34	1.225	A BB	8027.	0.726 UG/L	0.22
44	146	1042	34:44	34	1.357	A BV	4314.	0.550 UG/L	0.17
45	146	1019	33:58	34	1.327	A BB	6012.	0.781 UG/L	0.24
46	146	1052	35:04	34	1.370	A*VB	12700.	0.976 UG/L	0.30
47	98	732	24:24	34	0.953	A BB	807190.	50.445 UG/L	15.46
48	95	883	29:26	34	1.150	A BB	632237.	47.521 UG/L	14.56

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:56	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:20		0.134						
3	2:04		0.208						
4	2:28	1.04	0.248	1.04	1.72	100.00	0.025	1.440	0.02
5	2:34		0.258						
6	3:24		0.342						
7	5:48	1.01	0.584	1.01	2.38	100.00	0.038	1.588	0.02
8	7:02		0.708						
9	6:58	1.09	0.701	1.09	1.70	100.00	0.011	0.654	0.02
10	7:52		0.792						
11	7:52		0.792						
12	9:26		0.950						
13	10:52		1.094						
14	11:46		1.185						
15	12:20	1.01	1.242	1.01	0.15	100.00	0.005	3.460	0.00
16	8:32	1.00	0.859	1.00	0.03	100.00	0.002	6.232	0.00
17	13:12	1.00	1.329	1.00	0.13	100.00	0.004	2.961	0.00
18	13:04	1.00	1.315	1.00	50.05	50.00	2.889	2.886	1.00
19	20:46	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
20	13:20	1.00	0.642	1.00	1.39	100.00	0.000	0.024	0.01
21	14:26	1.00	0.695	1.00	0.10	100.00	0.000	0.453	0.00
22	14:48		0.713						
23	15:10	1.00	0.730	1.00	0.79	100.00	0.007	0.882	0.01
24	15:24	1.01	0.742	1.01	0.09	100.00	0.001	0.578	0.00
25	16:48	1.00	0.809	1.00	0.20	100.00	0.001	0.363	0.00
26	17:06	1.01	0.823	1.01	0.44	100.00	0.003	0.644	0.00
27	17:38	1.01	0.849	1.01	0.36	100.00	0.001	0.361	0.00
28	18:14	1.01	0.878	1.01	0.34	100.00	0.002	0.479	0.00
29	18:22	1.00	0.884	1.00	0.68	100.00	0.002	0.278	0.01
30	18:10	1.00	0.875	1.00	0.25	100.00	0.002	0.818	0.00
31	18:24	1.01	0.886	1.01	0.51	100.00	0.002	0.309	0.01
32	19:32	1.00	0.941	1.00	0.11	100.00	0.000	0.117	0.00
33	20:56	1.00	1.008	1.00	0.40	100.00	0.001	0.353	0.00
34	25:36	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
35	21:34	1.00	0.842	1.00	3.37	100.00	0.020	0.605	0.03
36	23:10	1.00	0.905	1.00	5.46	100.00	0.019	0.347	0.05
37	23:16	1.00	0.909	1.00	0.52	100.00	0.002	0.395	0.01
38	23:14	1.00	0.908	1.00	0.95	100.00	0.005	0.575	0.01
39	24:36	1.00	0.961	1.00	0.82	100.00	0.006	0.720	0.01
40	25:44	1.00	1.005	1.00	0.76	100.00	0.007	0.978	0.01
41	27:32	1.00	1.076	1.00	0.72	100.00	0.003	0.445	0.01
42	30:32	1.00	1.193	1.00	0.92	100.00	0.012	1.280	0.01
43	31:24	1.00	1.227	1.00	0.73	100.00	0.006	0.806	0.01
44	34:42	1.00	1.355	1.00	0.55	100.00	0.003	0.572	0.01
45	33:58	1.00	1.327	1.00	0.78	100.00	0.004	0.561	0.01
46	35:06	1.00	1.371	1.00	0.98	100.00	0.009	0.949	0.01
47	24:26	1.00	0.954	1.00	50.45	50.00	1.177	1.166	1.01
48	29:28	1.00	1.151	1.00	47.52	50.00	0.922	0.970	0.95

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIPBLANK

Lab Name: Q C INC. Contract: GAN-FLEMING

Lab Code: NONE Case No.: GAN-FL SAS No.: NONE SDG No.: NONE

Matrix: (soil/water) WATER Lab Sample ID: 789656

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 789656V

Level: (low/med) LOW Date Received: 02/16/89

% Moisture: not dec. ____ Date Analyzed: 02/22/89

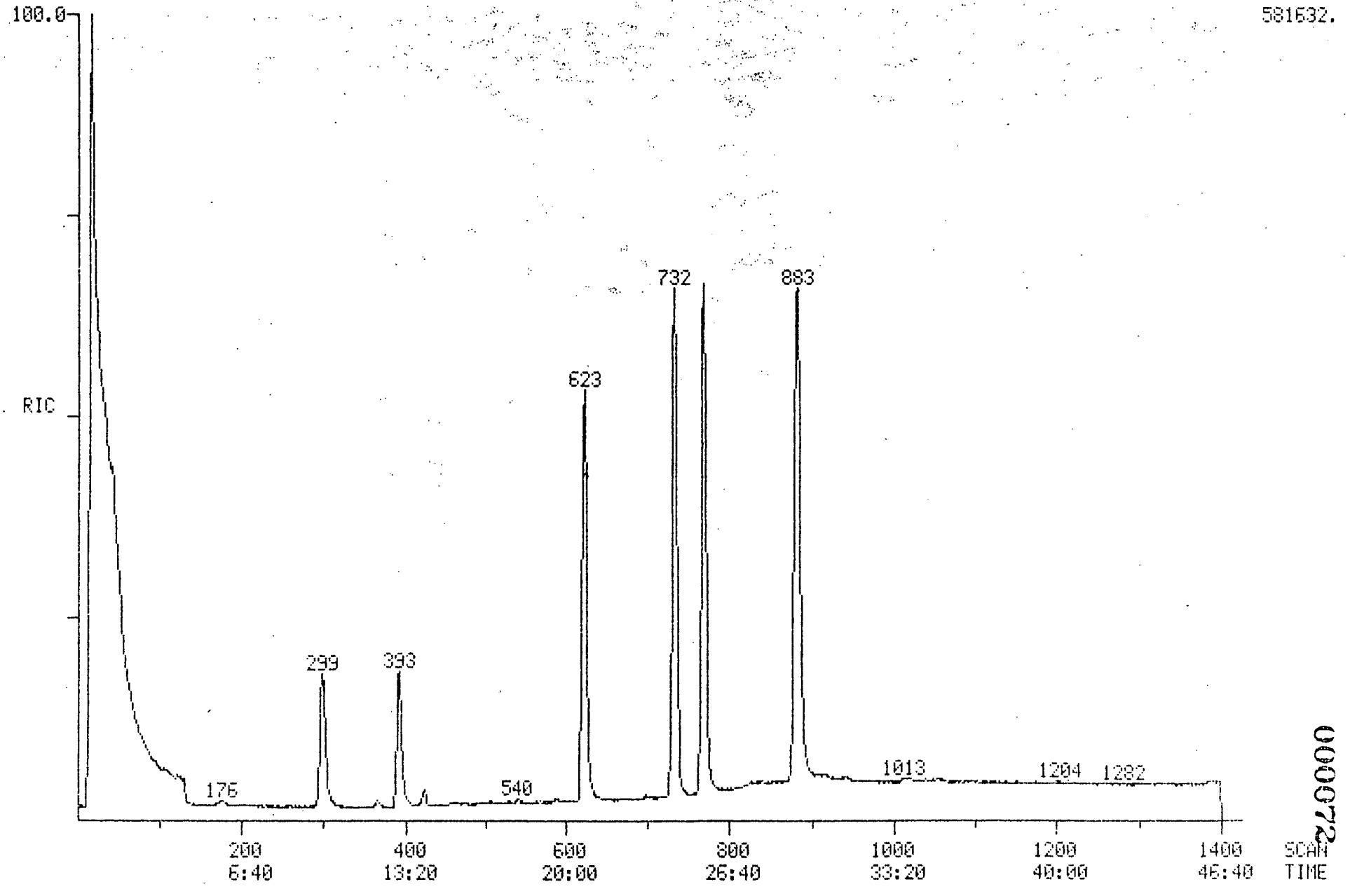
Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
----------	Total Xylenes	5	U

RIC
02/22/89 18:20:00
SAMPLE: TRIP BLANK
CONDS.: 5MLS PURGED
RANGE: G 1,1425 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789656V #1
CALI: CALTAB #3

SCANS 1 TO 1425



000072

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TRIPBLANK

Lab Name: Q C INC. Contract: GAN-FLEMING

Lab Code: NONE Case No.: GAN-FL SAS No.: NONE SDG No.: NONE

Matrix: (soil/water) WATER Lab Sample ID: 789656

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 789656V

Level: (low/med) LOW Date Received: 02/16/89

% Moisture: not dec. ____ Date Analyzed: 02/22/89

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Quantitation Report File: 789656V

Data: 789656V.TI
02/22/89 18:20:00
Sample: TRIP BLANK
Conds.: 5MLS PURGED
Formula: Instrument: FINN Weight: 0.000
Submitted by: GANNET Analyst: DMW Acct. No.: 789656

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	C010	CHLOROMETHANE	
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8		ACROLEIN	
9	C035	ACETONE	
10		ACRYLONITRILE	
11	C040	CARBON DISULFIDE	
12	C045	1,1-DICHLOROETHENE	
13	C050	1,1-DICHLOROETHANE	
14	C053	1,2-DICHLOROETHENE (TOTAL)	
15	C060	CHLOROFORM	
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	CS15	D4-1,4-DICHLOROETHANE	*SURROGATE*
19	CI10	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
20	C110	2-BUTANONE (MEK)	
21	C115	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C172	TRANS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C155	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C143	CIS-1,3-DICHLOROPROPENE	
32	C175	2-CHLOROETHYLVINYLETHER	
33	C180	BROMOFORM	
34	CI20	D5-CHLOROBENZENE	*INTERNAL STANDARD*
35	C205	4-METHYL-2-PENTANONE (MIBK)	
36	C210	2-HEXANONE	
37	C220	TETRACHLOROETHENE	
38	C225	1,1,2,2-TETRACHLOROETHANE	
39	C230	TOLUENE	
40	C235	CHLOROBENZENE	
41	C240	ETHYL BENZENE	
42	C245	STYRENE	
43	C250	TOTAL XYLENES (CALCULATED OFF M-XYLENE)	
44	C350	1,2-DICHLOROBENZENE	
45	C335	1,3-DICHLOROBENZENE	
46	C340	1,4-DICHLOROBENZENE	
47	CS05	D8-TOLUENE	*SURROGATE*

No	Name
48	CS10 BROMOFLUOROBENZENE *SURROGATE*

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	298	9:56	1	1.000	A BB	80121.	50.000 UG/L	15.80
2	NOT FOUND								
3	NOT FOUND								
4	85	75	2:30	1	0.252	A BB	5282.	2.290 UG/L	0.72
5	NOT FOUND								
6	NOT FOUND								
7	84	175	5:50	1	0.587	A BB	5059.	1.988 UG/L	0.63
8	NOT FOUND								
9	43	220	7:20	1	0.738	A*VV	6518.	6.219 UG/L	1.96
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	83	372	12:24	1	1.248	A BB	181.	0.033 UG/L	0.01
16	NOT FOUND								
17	NOT FOUND								
18	65	392	13:04	1	1.315	A BB	235128.	50.848 UG/L	16.06
19	114	623	20:46	19	1.000	A BB	660872.	50.000 UG/L	15.80
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	43	450	15:00	19	0.722	A BB	4430.	0.380 UG/L	0.12
24	NOT FOUND								
25	NOT FOUND								
26	75	514	17:08	19	0.825	A BB	193.	0.023 UG/L	0.01
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	78	547	18:14	19	0.878	A BB	1115.	0.103 UG/L	0.03
31	75	555	18:30	19	0.891	A BB	185.	0.045 UG/L	0.01
32	NOT FOUND								
33	NOT FOUND								
34	117	768	25:36	34	1.000	A BB	652443.	50.000 UG/L	15.80
35	43	646	21:32	34	0.841	A*BB	7650.	0.969 UG/L	0.31
36	43	700	23:20	34	0.911	A VV	16982.	3.746 UG/L	1.18
37	164	698	23:16	34	0.909	A BB	490.	0.095 UG/L	0.03
38	83	697	23:14	34	0.908	A BB	1311.	0.175 UG/L	0.06
39	92	738	24:36	34	0.961	A BB	6509.	0.693 UG/L	0.22
40	112	772	25:44	34	1.005	A BB	3127.	0.245 UG/L	0.08
41	106	826	27:32	34	1.076	A BB	1603.	0.276 UG/L	0.09
42	104	917	30:34	34	1.194	A BB	5094.	0.305 UG/L	0.10
43	NOT FOUND								
44	146	1040	34:40	34	1.354	A*BV	3555.	0.476 UG/L	0.15
45	146	1019	33:58	34	1.327	A BB	2697.	0.368 UG/L	0.12
46	146	1053	35:06	34	1.371	A*BB	5536.	0.447 UG/L	0.14
47	98	732	24:24	34	0.953	A BB	747509.	49.120 UG/L	15.52
48	95	883	29:26	34	1.150	A BB	603497.	47.695 UG/L	15.07

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:56	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:20		0.134						
3	2:04		0.208						
4	2:28	1.01	0.248	1.01	2.29	100.00	0.033	1.440	0.02
5	2:34		0.258						
6	3:24		0.342						
7	5:48	1.01	0.584	1.01	1.99	100.00	0.032	1.588	0.02
8	7:02		0.708						
9	6:58	1.05	0.701	1.05	6.22	100.00	0.041	0.654	0.06
10	7:52		0.792						
11	7:52		0.792						
12	9:26		0.950						
13	10:52		1.094						
14	11:46		1.185						
15	12:20	1.01	1.242	1.01	0.03	100.00	0.001	3.460	0.00
16	8:32		0.859						
17	13:12		1.329						
18	13:04	1.00	1.315	1.00	50.85	50.00	2.935	2.886	1.02
19	20:46	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
20	13:20		0.642						
21	14:26		0.695						
22	14:48		0.713						
23	15:10	0.99	0.730	0.99	0.38	100.00	0.003	0.882	0.00
24	15:24		0.742						
25	16:48		0.809						
26	17:06	1.00	0.823	1.00	0.02	100.00	0.000	0.644	0.00
27	17:38		0.849						
28	18:14		0.878						
29	18:22		0.884						
30	18:10	1.00	0.875	1.00	0.10	100.00	0.001	0.818	0.00
31	18:24	1.01	0.886	1.01	0.05	100.00	0.000	0.309	0.00
32	19:32		0.941						
33	20:56		1.008						
34	25:36	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
35	21:34	1.00	0.842	1.00	0.97	100.00	0.006	0.605	0.01
36	23:10	1.01	0.905	1.01	3.75	100.00	0.013	0.347	0.04
37	23:16	1.00	0.909	1.00	0.10	100.00	0.000	0.395	0.00
38	23:14	1.00	0.908	1.00	0.17	100.00	0.001	0.575	0.00
39	24:36	1.00	0.961	1.00	0.69	100.00	0.005	0.720	0.01
40	25:44	1.00	1.005	1.00	0.24	100.00	0.002	0.978	0.00
41	27:32	1.00	1.076	1.00	0.28	100.00	0.001	0.445	0.00
42	30:32	1.00	1.193	1.00	0.31	100.00	0.004	1.280	0.00
43	31:24		1.227						
44	34:42	1.00	1.355	1.00	0.48	100.00	0.003	0.572	0.00
45	33:58	1.00	1.327	1.00	0.37	100.00	0.002	0.561	0.00
46	35:06	1.00	1.371	1.00	0.45	100.00	0.004	0.949	0.00
47	24:26	1.00	0.954	1.00	49.12	50.00	1.146	1.166	0.98
48	29:28	1.00	1.151	1.00	47.70	50.00	0.925	0.970	0.95

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

ANALYTICAL DATA REPORT PACKAGE
FOR
GANNETT FLEMING ENGINEERS INC.

Part 2 of 7

Case Name	Field Sample ID	Laboratory Sample ID	Date of Collection
USN Earl Depot	C-14A	789651,789603,789657, 789629,789635,789643	02/16/89
	C-14B	789652,789604,789658, 789630,789636,789644	"
	C-14C	789653,789605,789659, 789631,789637,789645	"
	C-29A	789654,789606,789660, 789632,789638.789646	"
	FIELD BLANK	789655,789607,789662, 789633,789639,789647	"
	TRIP BLANK	789656,789608,789661, 789634,789640,789648	"

Laboratory Name QC Inc.

C rtification No. PADER No. 09-131
NJDEP No. 77166/77648

Supervisor/Manager Signature

Printed Name Thomas J. Hines

Form QC G-1

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

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6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Q C INC. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: NONE

Instrument ID: FINN Calibration Date(s): 02/21/89 02/21/89

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

Min $\overline{RRF}$ for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = VS0200221C RRF50 = VS0500221C
RRF100= VS1000221C2 RRF150= VS1500221C RRF200= VS2000221C

COMPOUND	RRF20	RRF50	RRF100	RRF150	RRF200	$\overline{RRF}$	% RSD
Chloromethane #	2.424	1.979	2.386	2.062	1.970	2.164	10.3#
Bromomethane	1.685	1.344	1.107	1.677	1.237	1.410	18.5
Vinyl Chloride *	2.026	1.631	2.101	2.181	1.537	1.895	15.4*
Chloroethane	1.253	1.041	1.442	1.459	1.030	1.245	16.7
Methylene Chloride	1.858	1.643	1.846	1.652	1.383	1.676	11.5
Acetone	1.793	0.973	0.727	0.845	0.707	1.009	44.7
Carbon Disulfide	4.026	3.655	4.582	4.505	3.873	4.128	9.7
1,1-Dichloroethene *	1.396	1.193	1.363	1.366	1.217	1.307	7.2*
1,1-Dichloroethane #	3.327	2.959	3.188	3.256	2.959	3.138	5.4#
1,2-Dichloroethene (total)	1.526	1.311	1.432	1.450	1.301	1.404	6.9
Chloroform *	3.933	3.579	3.661	3.713	3.549	3.687	4.1*
1,2-Dichloroethane	2.919	3.055	2.741	3.012	2.814	2.908	4.5
2-Butanone	0.021	0.030	0.022	0.025	0.024	0.024	14.6
1,1,1-Trichloroethane	0.474	0.559	0.501	0.515	0.471	0.504	7.1
Carbon Tetrachloride	0.434	0.563	0.511	0.531	0.503	0.508	9.4
Vinyl Acetate	0.673	1.018	0.734	0.821	0.819	0.813	16.0
Bromodichloromethane	0.495	0.685	0.548	0.583	0.600	0.582	12.1
1,2-Dichloropropane *	0.337	0.399	0.323	0.305	0.360	0.345	10.5*
cis-1,3-Dichloropropene	0.278	0.320	0.303	0.293	0.320	0.303	6.0
Trichloroethene	0.360	0.412	0.365	0.348	0.366	0.370	6.6
Dibromochloromethane	0.442	0.552	0.466	0.456	0.508	0.485	9.3
1,1,2-Trichloroethane	0.266	0.310	0.253	0.250	0.271	0.270	8.9
Benzene	0.878	0.927	0.813	0.767	0.754	0.828	8.9
Trans-1,3-Dichloropropene	0.543	0.687	0.597	0.575	0.663	0.613	9.8
Bromoform #	0.311	0.379	0.367	0.379	0.407	0.369	9.6#
4-Methyl-2-Pentanone	0.577	0.613	0.542	0.628	0.646	0.601	6.9
2-Hexanone	0.380	0.397	0.304	0.399	0.413	0.379	11.4
Tetrachloroethene	0.427	0.396	0.433	0.422	0.395	0.415	4.3
1,1,2,2-Tetrachloroethane #	0.556	0.604	0.548	0.620	0.638	0.593	6.7#
Toluene *	0.756	0.720	0.741	0.720	0.671	0.722	4.4*
Chlorobenzene #	0.993	0.988	0.993	0.970	0.885	0.966	4.8#
Ethylbenzene *	0.456	0.456	0.460	0.459	0.428	0.452	3.0*
Styrene	1.238	1.308	1.362	1.320	1.177	1.281	5.7
Total Xylenes	0.834	0.842	0.879	0.857	0.792	0.841	3.8
Toluene-d8	1.162	1.156	1.146	1.164	1.154	1.156	0.6
BFB	0.944	0.968	0.999	1.041	1.010	0.992	3.8
1,2-Dichloroethane-d4	2.674	2.926	2.654	3.013	2.947	2.843	5.9

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Q C INC. Contract: GAN-FLEMING

Lab Code: NONE Case No.: GAN-FL SAS No.: NONE SDG No.: NONE

Instrument ID: FINN Calibration date: 02/22/89 Time: 1633

Lab File ID: VS1000222C Init. Calib. Date(s): 02/21/89 02/21/89

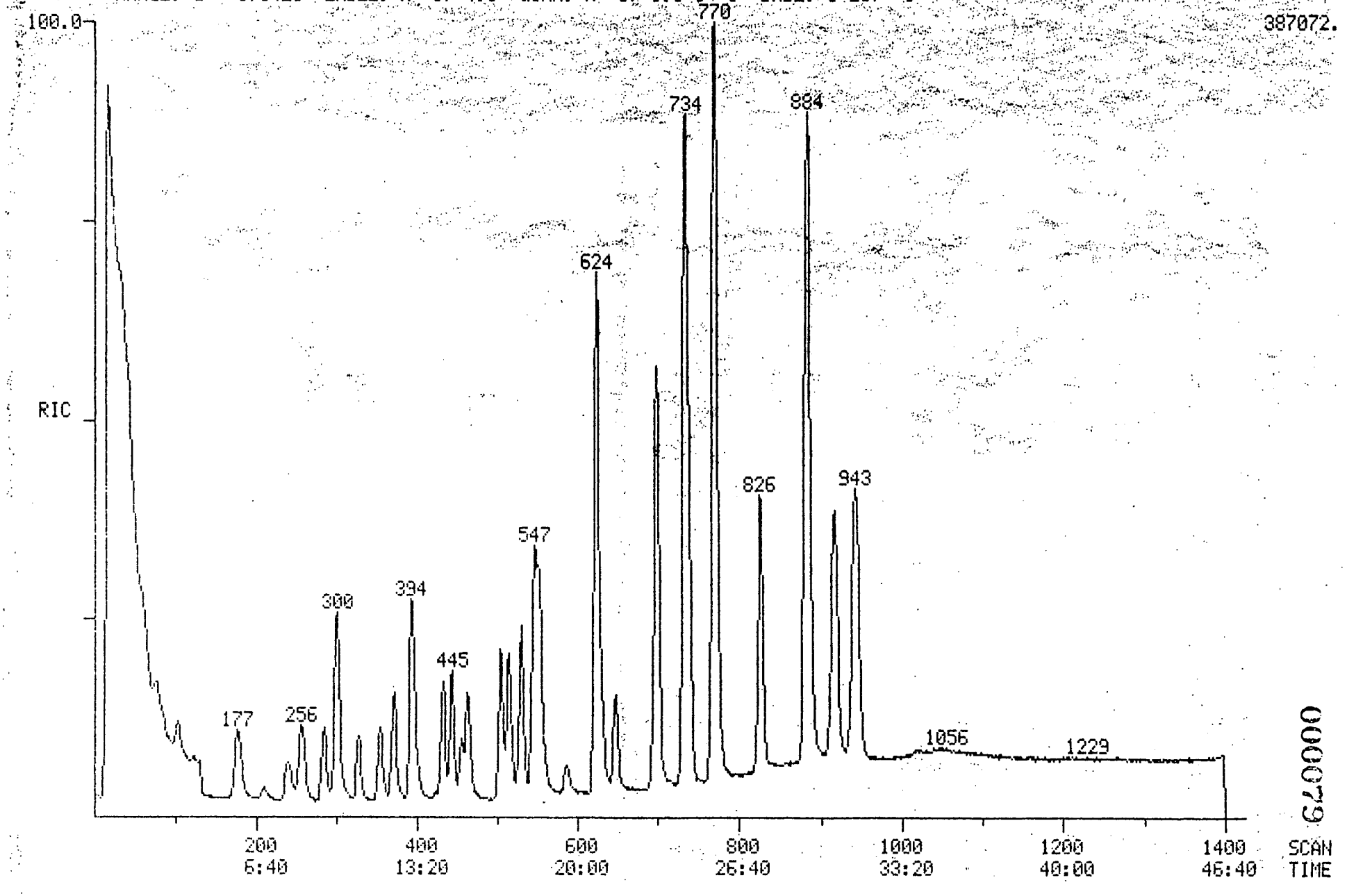
Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND		RRF	RRF50	%D	
Chloromethane	#	2.164	1.998	7.7	#
Bromomethane		1.410	0.989	29.9	
Vinyl Chloride	*	1.895	1.730	8.7	*
Chloroethane		1.245	1.168	6.2	
Methylene Chloride		1.676	1.588	5.3	
Acetone		1.009	0.654	35.2	
Carbon Disulfide		4.128	3.949	4.3	
1,1-Dichloroethene	*	1.307	1.232	5.7	*
1,1-Dichloroethane	#	3.138	3.051	2.8	#
1,2-Dichloroethene (total)		1.404	1.313	6.5	
Chloroform	*	3.687	3.460	6.2	*
1,2-Dichloroethane		2.908	2.961	-1.8	
2-Butanone		0.024	0.024	0.0	
1,1,1-Trichloroethane		0.504	0.453	10.1	
Carbon Tetrachloride		0.508	0.447	12.0	
Vinyl Acetate		0.813	0.882	-8.5	
Bromodichloromethane		0.582	0.578	0.7	
1,2-Dichloropropane	*	0.345	0.363	-5.2	*
cis-1,3-Dichloropropene		0.303	0.309	-2.0	
Trichloroethene		0.370	0.361	2.4	
Dibromochloromethane		0.485	0.479	1.2	
1,1,2-Trichloroethane		0.270	0.278	-3.0	
Benzene		0.828	0.818	1.2	
Trans-1,3-Dichloropropene		0.613	0.644	-5.1	
Bromoform	#	0.369	0.353	4.3	#
4-Methyl-2-Pentanone		0.601	0.605	-0.7	
2-Hexanone		0.379	0.347	8.4	
Tetrachloroethene		0.415	0.395	4.8	
1,1,2,2-Tetrachloroethane	#	0.593	0.575	3.0	#
Toluene	*	0.722	0.720	0.3	*
Chlorobenzene	#	0.966	0.978	-1.2	#
Ethylbenzene	*	0.452	0.445	1.5	*
Styrene		1.281	1.280	0.1	
Total Xylenes		0.841	0.806	4.2	
Toluene-d8		1.156	1.166	-0.9	
BFB		0.992	0.970	2.2	
1,2-Dichloroethane-d4		2.843	2.886	-1.5	

RIC
02/21/89 9:08:00
SAMPLE: 20NG STD
CONDS.: 20NG PURGED
RANGE: G 1,1425 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: VS0200221C #1 SCANS 1 TO 1425
CALI: CALTAB #3



000079

Quantitation Report File: VS0200221C

Data: VS0200221C.TI
02/21/89 9:08:00
Sample: 20NG STD
Conds.: 20NG PURGED
Formula: Instrument: FINN Weight: 0.000
Submitted by: QC INC Analyst: DMW Acct. No.: VS020

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	C010	CHLOROMETHANE	
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8		ACROLEIN	
9	C035	ACETONE	
10		ACRYLONITRILE	
11	C040	CARBON DISULFIDE	
12	C045	1,1-DICHLOROETHENE	
13	C050	1,1-DICHLOROETHANE	
14	C053	1,2-DICHLOROETHENE (TOTAL)	
15	C060	CHLOROFORM	
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	CS15	D4-1,4-DICHLOROETHANE	*SURROGATE*
19	CI10	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
20	C110	2-BUTANONE (MEK)	
21	C115	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C172	TRANS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C155	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C143	CIS-1,3-DICHLOROPROPENE	
32	C175	2-CHLOROETHYLVINYLETHER	
33	C180	BROMOFORM	
34	C120	D5-CHLOROBENZENE	*INTERNAL STANDARD*
35	C205	4-METHYL-2-PENTANONE (MIBK)	
36	C210	2-HEXANONE	
37	C220	TETRACHLOROETHENE	
38	C225	1,1,2,2-TETRACHLOROETHANE	
39	C230	TOLUENE	
40	C235	CHLOROBENZENE	
41	C240	ETHYL BENZENE	
42	C245	STYRENE	
43	C250	TOTAL XYLENES (CALCULATED OFF M-XYLENE)	
44	C350	1,2-DICHLOROBENZENE	
45	C335	1,3-DICHLOROBENZENE	
46	C340	1,4-DICHLOROBENZENE	
47	CS05	D8-TOLUENE	*SURROGATE*

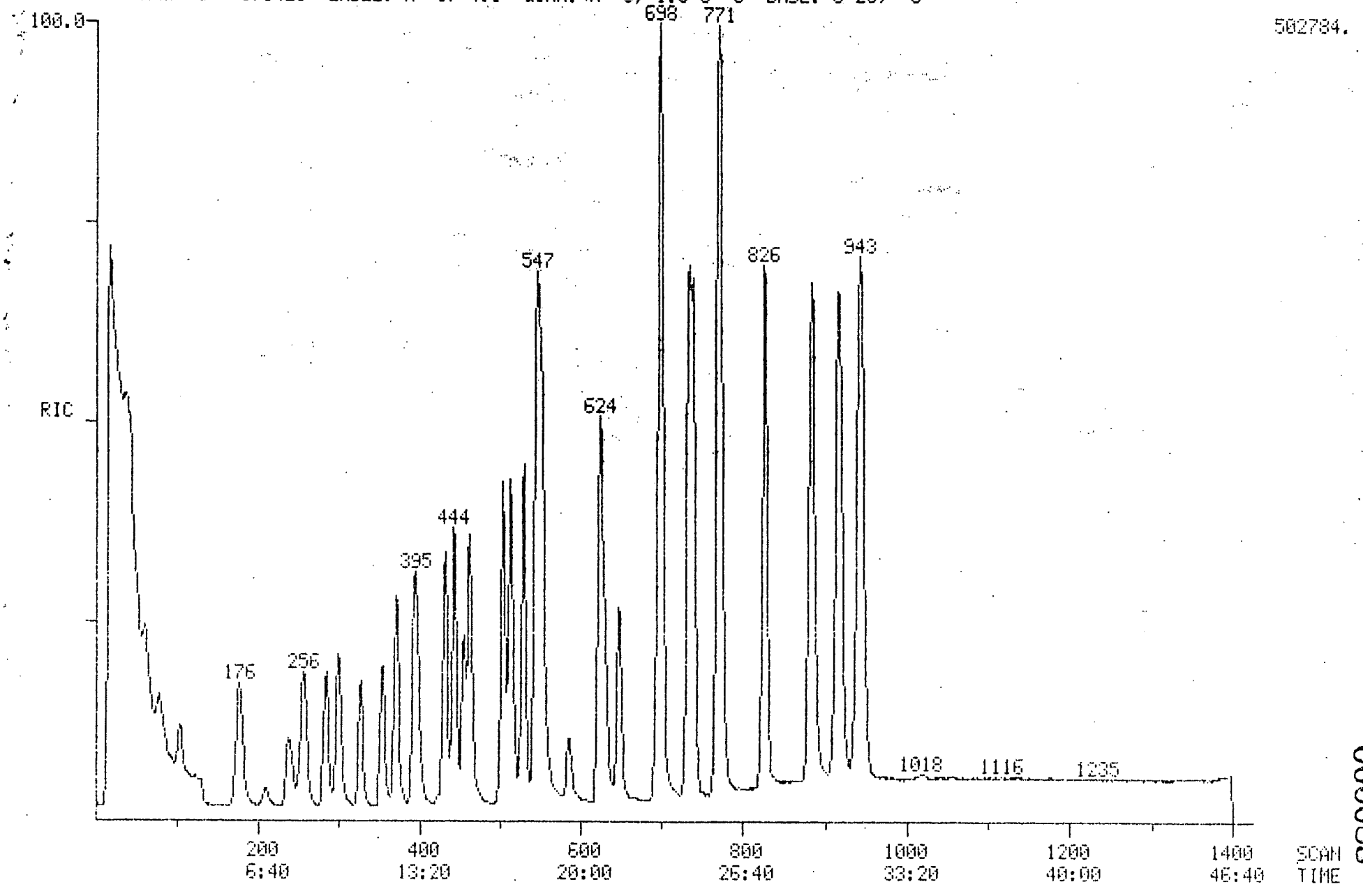
No	Name
48	CS10 BROMOFLUOROBENZENE *SURROGATE*

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	300	10:00	1	1.000	A BB	73501.	50.000 UG/L	4.55
2	50	40	1:20	1	0.133	A BB	71268.	20.000 UG/L	1.82
3	94	62	2:04	1	0.207	A BB	49541.	20.000 UG/L	1.82
4	85	77	2:34	1	0.257	A BB	3045.	20.000 UG/L	1.82
5	62	78	2:36	1	0.260	A BB	59573.	20.000 UG/L	1.82
6	64	104	3:28	1	0.347	A BB	36835.	20.000 UG/L	1.82
7	84	177	5:54	1	0.590	A BB	54623.	20.000 UG/L	1.82
8	NOT	FOUND							
9	43	208	6:56	1	0.693	A BB	52715.	20.000 UG/L	1.82
10	NOT	FOUND							
11	76	239	7:58	1	0.797	A BB	118357.	20.000 UG/L	1.82
12	96	285	9:30	1	0.950	A BB	41049.	20.000 UG/L	1.82
13	63	327	10:54	1	1.090	A BB	97811.	20.000 UG/L	1.82
14	96	354	11:48	1	1.180	A BB	44870.	20.000 UG/L	1.82
15	83	372	12:24	1	1.240	A BB	115646.	20.000 UG/L	1.82
16	101	256	8:32	1	0.853	A BB	121188.	20.000 UG/L	1.82
17	62	397	13:14	1	1.323	A BB	85826.	20.000 UG/L	1.82
18	65	394	13:08	1	1.313	A BB	196514.	50.000 UG/L	4.55
19	114	624	20:48	19	1.000	A BB	545113.	50.000 UG/L	4.55
20	72	402	13:24	19	0.644	A BB	4545.	20.000 UG/L	1.82
21	97	433	14:26	19	0.694	A BB	103278.	20.000 UG/L	1.82
22	117	444	14:48	19	0.712	A VB	94585.	20.000 UG/L	1.82
23	43	457	15:14	19	0.732	A VB	146852.	20.000 UG/L	1.82
24	83	464	15:28	19	0.744	A BB	107930.	20.000 UG/L	1.82
25	63	505	16:50	19	0.809	A BB	73571.	20.000 UG/L	1.82
26	75	515	17:10	19	0.825	A VB	118413.	20.000 UG/L	1.82
27	130	530	17:40	19	0.849	A BB	78546.	20.000 UG/L	1.82
28	129	548	18:16	19	0.878	A BB	96408.	20.000 UG/L	1.82
29	97	552	18:24	19	0.885	A BB	57944.	20.000 UG/L	1.82
30	78	546	18:12	19	0.875	A BB	191490.	20.000 UG/L	1.82
31	75	554	18:28	19	0.888	A BB	60671.	20.000 UG/L	1.82
32	63	587	19:34	19	0.941	A BB	18243.	20.000 UG/L	1.82
33	173	629	20:58	19	1.008	A BB	67735.	20.000 UG/L	1.82
34	117	769	25:38	34	1.000	A BB	547538.	50.000 UG/L	4.55
35	43	648	21:36	34	0.843	A VB	126265.	20.000 UG/L	1.82
36	43	696	23:12	34	0.905	A BB	83251.	20.000 UG/L	1.82
37	164	699	23:18	34	0.909	A BB	93530.	20.000 UG/L	1.82
38	83	698	23:16	34	0.908	A BB	121678.	20.000 UG/L	1.82
39	92	739	24:38	34	0.961	A BB	165599.	20.000 UG/L	1.82
40	112	773	25:46	34	1.005	A BB	217427.	20.000 UG/L	1.82
41	106	826	27:32	34	1.074	A BB	99905.	20.000 UG/L	1.82
42	104	917	30:34	34	1.192	A BB	271076.	20.000 UG/L	1.82
43	106	942	31:24	34	1.225	A BB	182706.	20.000 UG/L	1.82
44	146	1041	34:42	34	1.354	A BB	930.	20.000 UG/L	1.82
45	146	1020	34:00	34	1.326	A BB	1049.	20.000 UG/L	1.82
46	146	1057	35:14	34	1.375	A*VB	3209.	20.000 UG/L	1.82
47	98	733	24:26	34	0.953	A BB	636158.	50.000 UG/L	4.55
48	95	884	29:28	34	1.150	A BB	516894.	50.000 UG/L	4.55

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	10:00	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:20	1.00	0.133	1.00	20.00	20.00	2.424	2.424	1.00
3	2:04	1.00	0.207	1.00	20.00	20.00	1.685	1.685	1.00
4	2:34	1.00	0.257	1.00	20.00	20.00	0.104	0.104	1.00
5	2:36	1.00	0.260	1.00	20.00	20.00	2.026	2.026	1.00
6	3:28	1.00	0.347	1.00	20.00	20.00	1.253	1.253	1.00
7	5:54	1.00	0.590	1.00	20.00	20.00	1.858	1.858	1.00
8	7:00		0.705						
9	6:56	1.00	0.693	1.00	20.00	20.00	1.793	1.793	1.00
10	7:48		0.785						
11	7:58	1.00	0.797	1.00	20.00	20.00	4.026	4.026	1.00
12	9:30	1.00	0.950	1.00	20.00	20.00	1.396	1.396	1.00
13	10:54	1.00	1.090	1.00	20.00	20.00	3.327	3.327	1.00
14	11:48	1.00	1.180	1.00	20.00	20.00	1.526	1.526	1.00
15	12:24	1.00	1.240	1.00	20.00	20.00	3.933	3.933	1.00
16	8:32	1.00	0.853	1.00	20.00	20.00	4.122	4.122	1.00
17	13:14	1.00	1.323	1.00	20.00	20.00	2.919	2.919	1.00
18	13:08	1.00	1.313	1.00	50.00	50.00	2.674	2.674	1.00
19	20:48	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
20	13:24	1.00	0.644	1.00	20.00	20.00	0.021	0.021	1.00
21	14:26	1.00	0.694	1.00	20.00	20.00	0.474	0.474	1.00
22	14:48	1.00	0.712	1.00	20.00	20.00	0.434	0.434	1.00
23	15:14	1.00	0.732	1.00	20.00	20.00	0.673	0.673	1.00
24	15:28	1.00	0.744	1.00	20.00	20.00	0.495	0.495	1.00
25	16:50	1.00	0.809	1.00	20.00	20.00	0.337	0.337	1.00
26	17:10	1.00	0.825	1.00	20.00	20.00	0.543	0.543	1.00
27	17:40	1.00	0.849	1.00	20.00	20.00	0.360	0.360	1.00
28	18:16	1.00	0.878	1.00	20.00	20.00	0.442	0.442	1.00
29	18:24	1.00	0.885	1.00	20.00	20.00	0.266	0.266	1.00
30	18:12	1.00	0.875	1.00	20.00	20.00	0.878	0.878	1.00
31	18:28	1.00	0.888	1.00	20.00	20.00	0.278	0.278	1.00
32	19:34	1.00	0.941	1.00	20.00	20.00	0.084	0.084	1.00
33	20:58	1.00	1.008	1.00	20.00	20.00	0.311	0.311	1.00
34	25:38	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
35	21:36	1.00	0.843	1.00	20.00	20.00	0.577	0.577	1.00
36	23:12	1.00	0.905	1.00	20.00	20.00	0.380	0.380	1.00
37	23:18	1.00	0.909	1.00	20.00	20.00	0.427	0.427	1.00
38	23:16	1.00	0.908	1.00	20.00	20.00	0.556	0.556	1.00
39	24:38	1.00	0.961	1.00	20.00	20.00	0.756	0.756	1.00
40	25:46	1.00	1.005	1.00	20.00	20.00	0.993	0.993	1.00
41	27:32	1.00	1.074	1.00	20.00	20.00	0.456	0.456	1.00
42	30:34	1.00	1.192	1.00	20.00	20.00	1.238	1.238	1.00
43	31:24	1.00	1.225	1.00	20.00	20.00	0.834	0.834	1.00
44	34:42	1.00	1.354	1.00	20.00	20.00	0.004	0.004	1.00
45	34:00	1.00	1.326	1.00	20.00	20.00	0.005	0.005	1.00
46	35:14	1.00	1.375	1.00	20.00	20.00	0.015	0.015	1.00
47	24:26	1.00	0.953	1.00	50.00	50.00	1.162	1.162	1.00
48	29:28	1.00	1.150	1.00	50.00	50.00	0.944	0.944	1.00

RIC
02/21/89 10:01:00
SAMPLE: 50NG STD
CONDS.: 50NG PURGED
RANGE: G 1,1425 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: V50500221C #1 SCANS 1 TO 1425
CALI: CALTAB #3



000083

Quantitation Report File: VS0500221C

Data: VS0500221C.TI
02/21/89 10:01:00
Sample: 50NG STD
Conds.: 50NG PURGED
Formula: Instrument: FINN Weight: 0.000
Submitted by: QC INC Analyst: DMW Acct. No.: VS050

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	C010	CHLOROMETHANE	
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8		ACROLEIN	
9	C035	ACETONE	
10		ACRYLONITRILE	
11	C040	CARBON DISULFIDE	
12	C045	1,1-DICHLOROETHENE	
13	C050	1,1-DICHLOROETHANE	
14	C053	1,2-DICHLOROETHENE (TOTAL)	
15	C060	CHLOROFORM	
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	CS15	D4-1,4-DICHLOROETHANE	*SURROGATE*
19	CI10	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
20	C110	2-BUTANONE (MEK)	
21	C115	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C172	TRANS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C155	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C143	CIS-1,3-DICHLOROPROPENE	
32	C175	2-CHLOROETHYLVINYLETHER	
33	C180	BROMOFORM	
34	CI20	D5-CHLOROBENZENE	*INTERNAL STANDARD*
35	C205	4-METHYL-2-PENTANONE (MIBK)	
36	C210	2-HEXANONE	
37	C220	TETRACHLOROETHENE	
38	C225	1,1,2,2-TETRACHLOROETHANE	
39	C230	TOLUENE	
40	C235	CHLOROBENZENE	
41	C240	ETHYL BENZENE	
42	C245	STYRENE	
43	C250	TOTAL XYLENES (CALCULATED OFF M-XYLENE)	
44	C350	1,2-DICHLOROBENZENE	
45	C335	1,3-DICHLOROBENZENE	
46	C340	1,4-DICHLOROBENZENE	
47	CS05	D8-TOLUENE	*SURROGATE*

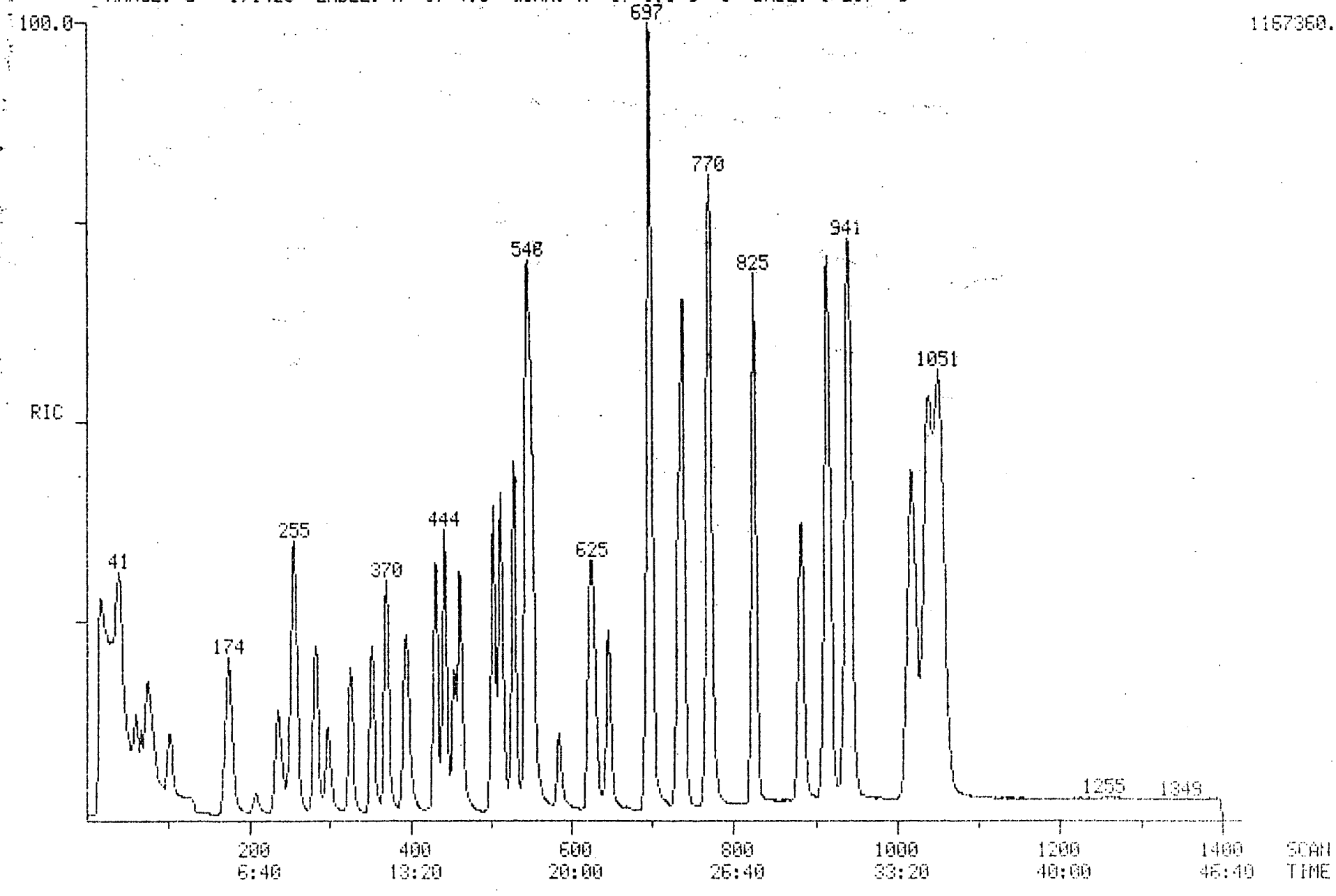
No	Name
48	CS10 BROMOFLUOROBENZENE *SURROGATE*

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	299	9:58	1	1.000	A BB	78861.	50.000 UG/L	2.17
2	50	40	1:20	1	0.134	A BB	156099.	50.000 UG/L	2.17
3	94	63	2:06	1	0.211	A BB	106005.	50.000 UG/L	2.17
4	85	75	2:30	1	0.251	A BB	3486.	50.000 UG/L	2.17
5	62	78	2:36	1	0.261	A BB	128620.	50.000 UG/L	2.17
6	64	104	3:28	1	0.348	A BB	82108.	50.000 UG/L	2.17
7	84	176	5:52	1	0.589	A BB	129593.	50.000 UG/L	2.17
8	NOT FOUND								
9	43	209	6:58	1	0.699	A BB	76721.	50.000 UG/L	2.17
10	NOT FOUND								
11	76	238	7:56	1	0.796	A BB	288234.	50.000 UG/L	2.17
12	96	284	9:28	1	0.950	A BB	94051.	50.000 UG/L	2.17
13	63	327	10:54	1	1.094	A BB	233386.	50.000 UG/L	2.17
14	96	354	11:48	1	1.184	A BB	103389.	50.000 UG/L	2.17
15	83	371	12:22	1	1.241	A BB	282269.	50.000 UG/L	2.17
16	101	256	8:32	1	0.856	A BB	288310.	50.000 UG/L	2.17
17	62	396	13:12	1	1.324	A BB	240931.	50.000 UG/L	2.17
18	65	392	13:04	1	1.311	A BB	230745.	50.000 UG/L	2.17
19	114	624	20:48	19	1.000	A BB	488053.	50.000 UG/L	2.17
20	72	401	13:22	19	0.643	A BB	14713.	50.000 UG/L	2.17
21	97	433	14:26	19	0.694	A BB	272935.	50.000 UG/L	2.17
22	117	444	14:48	19	0.712	A VB	274914.	50.000 UG/L	2.17
23	43	456	15:12	19	0.731	A BB	496993.	50.000 UG/L	2.17
24	83	463	15:26	19	0.742	A BB	334117.	50.000 UG/L	2.17
25	63	505	16:50	19	0.809	A BB	194559.	50.000 UG/L	2.17
26	75	514	17:08	19	0.824	A BB	335099.	50.000 UG/L	2.17
27	130	530	17:40	19	0.849	A BV	201112.	50.000 UG/L	2.17
28	129	547	18:14	19	0.877	A BB	269575.	50.000 UG/L	2.17
29	97	551	18:22	19	0.883	A BB	151264.	50.000 UG/L	2.17
30	78	545	18:10	19	0.873	A BB	452230.	50.000 UG/L	2.17
31	75	554	18:28	19	0.888	A BB	156201.	50.000 UG/L	2.17
32	63	586	19:32	19	0.939	A BB	51791.	50.000 UG/L	2.17
33	173	629	20:58	19	1.008	A BB	185173.	50.000 UG/L	2.17
34	117	769	25:38	34	1.000	A BB	528041.	50.000 UG/L	2.17
35	43	647	21:34	34	0.841	A BB	323771.	50.000 UG/L	2.17
36	43	695	23:10	34	0.904	A BB	209451.	50.000 UG/L	2.17
37	164	699	23:18	34	0.909	A BB	209260.	50.000 UG/L	2.17
38	83	697	23:14	34	0.906	A BB	319055.	50.000 UG/L	2.17
39	92	739	24:38	34	0.961	A BB	380344.	50.000 UG/L	2.17
40	112	772	25:44	34	1.004	A BB	521839.	50.000 UG/L	2.17
41	106	826	27:32	34	1.074	A BB	240944.	50.000 UG/L	2.17
42	104	916	30:32	34	1.191	A BB	690867.	50.000 UG/L	2.17
43	106	943	31:26	34	1.226	A BB	444374.	50.000 UG/L	2.17
44	146	1040	34:40	34	1.352	A BB	985.	50.000 UG/L	2.17
45	146	1018	33:56	34	1.324	A*BB	908.	50.000 UG/L	2.17
46	146	1055	35:10	34	1.372	A VB	2432.	50.000 UG/L	2.17
47	98	733	24:26	34	0.953	A BB	610534.	50.000 UG/L	2.17
48	95	884	29:28	34	1.150	A BB	511309.	50.000 UG/L	2.17

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:58	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:20	1.00	0.134	1.00	50.00	50.00	1.979	1.979	1.00
3	2:06	1.00	0.211	1.00	50.00	50.00	1.344	1.344	1.00
4	2:30	1.00	0.251	1.00	50.00	50.00	0.044	0.044	1.00
5	2:36	1.00	0.261	1.00	50.00	50.00	1.631	1.631	1.00
6	3:28	1.00	0.348	1.00	50.00	50.00	1.041	1.041	1.00
7	5:52	1.00	0.589	1.00	50.00	50.00	1.643	1.643	1.00
8	7:00		0.705						
9	6:58	1.00	0.699	1.00	50.00	50.00	0.973	0.973	1.00
10	7:48		0.785						
11	7:56	1.00	0.796	1.00	50.00	50.00	3.655	3.655	1.00
12	9:28	1.00	0.950	1.00	50.00	50.00	1.193	1.193	1.00
13	10:54	1.00	1.094	1.00	50.00	50.00	2.959	2.959	1.00
14	11:48	1.00	1.184	1.00	50.00	50.00	1.311	1.311	1.00
15	12:22	1.00	1.241	1.00	50.00	50.00	3.579	3.579	1.00
16	8:32	1.00	0.856	1.00	50.00	50.00	3.656	3.656	1.00
17	13:12	1.00	1.324	1.00	50.00	50.00	3.055	3.055	1.00
18	13:04	1.00	1.311	1.00	50.00	50.00	2.926	2.926	1.00
19	20:48	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
20	13:22	1.00	0.643	1.00	50.00	50.00	0.030	0.030	1.00
21	14:26	1.00	0.694	1.00	50.00	50.00	0.559	0.559	1.00
22	14:48	1.00	0.712	1.00	50.00	50.00	0.563	0.563	1.00
23	15:12	1.00	0.731	1.00	50.00	50.00	1.018	1.018	1.00
24	15:26	1.00	0.742	1.00	50.00	50.00	0.685	0.685	1.00
25	16:50	1.00	0.809	1.00	50.00	50.00	0.399	0.399	1.00
26	17:08	1.00	0.824	1.00	50.00	50.00	0.687	0.687	1.00
27	17:40	1.00	0.849	1.00	50.00	50.00	0.412	0.412	1.00
28	18:14	1.00	0.877	1.00	50.00	50.00	0.552	0.552	1.00
29	18:22	1.00	0.883	1.00	50.00	50.00	0.310	0.310	1.00
30	18:10	1.00	0.873	1.00	50.00	50.00	0.927	0.927	1.00
31	18:28	1.00	0.888	1.00	50.00	50.00	0.320	0.320	1.00
32	19:32	1.00	0.939	1.00	50.00	50.00	0.106	0.106	1.00
33	20:58	1.00	1.008	1.00	50.00	50.00	0.379	0.379	1.00
34	25:38	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
35	21:34	1.00	0.841	1.00	50.00	50.00	0.613	0.613	1.00
36	23:10	1.00	0.904	1.00	50.00	50.00	0.397	0.397	1.00
37	23:18	1.00	0.909	1.00	50.00	50.00	0.396	0.396	1.00
38	23:14	1.00	0.906	1.00	50.00	50.00	0.604	0.604	1.00
39	24:38	1.00	0.961	1.00	50.00	50.00	0.720	0.720	1.00
40	25:44	1.00	1.004	1.00	50.00	50.00	0.988	0.988	1.00
41	27:32	1.00	1.074	1.00	50.00	50.00	0.456	0.456	1.00
42	30:32	1.00	1.191	1.00	50.00	50.00	1.308	1.308	1.00
43	31:26	1.00	1.226	1.00	50.00	50.00	0.842	0.842	1.00
44	34:40	1.00	1.352	1.00	50.00	50.00	0.002	0.002	1.00
45	33:56	1.00	1.324	1.00	50.00	50.00	0.002	0.002	1.00
46	35:10	1.00	1.372	1.00	50.00	50.00	0.005	0.005	1.00
47	24:26	1.00	0.953	1.00	50.00	50.00	1.156	1.156	1.00
48	29:28	1.00	1.150	1.00	50.00	50.00	0.968	0.968	1.00

RIC
02/21/89 10:55:00
SAMPLE: 100NG STD
CONDS.: 100NG PURGED
RANGE: G 1,1425 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: VS1000221C2 #1 SCANS 1 TO 1425
CALI: CALTAB #3



000087

Quantitation Report File: VS1000221C2

Data: VS1000221C2.TI
02/21/89 10:55:00
Sample: 100NG STD
Conds.: 100NG PURGED
Formula: Instrument: FINN Weight: 0.000
Submitted by: QC INC Analyst: DMW Acct. No.: VS100

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	C010	CHLOROMETHANE	
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8		ACROLEIN	
9	C035	ACETONE	
10		ACRYLONITRILE	
11	C040	CARBON DISULFIDE	
12	C045	1,1-DICHLOROETHENE	
13	C050	1,1-DICHLOROETHANE	
14	C053	1,2-DICHLOROETHENE (TOTAL)	
15	C060	CHLOROFORM	
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	CS15	D4-1,4-DICHLOROETHANE	*SURROGATE*
19	CI10	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
20	C110	2-BUTANONE (MEK)	
21	C115	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C172	TRANS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C155	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C143	CIS-1,3-DICHLOROPROPENE	
32	C175	2-CHLOROETHYLVINYLETHER	
33	C180	BROMOFORM	
34	CI20	D5-CHLOROBENZENE	*INTERNAL STANDARD*
35	C205	4-METHYL-2-PENTANONE (MIBK)	
36	C210	2-HEXANONE	
37	C220	TETRACHLOROETHENE	
38	C225	1,1,2,2-TETRACHLOROETHANE	
39	C230	TOLUENE	
40	C235	CHLOROBENZENE	
41	C240	ETHYL BENZENE	
42	C245	STYRENE	
43	C250	TOTAL XYLENES (CALCULATED OFF M-XYLENE)	
44	C330	1,2-DICHLOROBENZENE	
45	C335	1,3-DICHLOROBENZENE	
46	C340	1,4-DICHLOROBENZENE	
47	CS05	D8-TOLUENE	*SURROGATE*

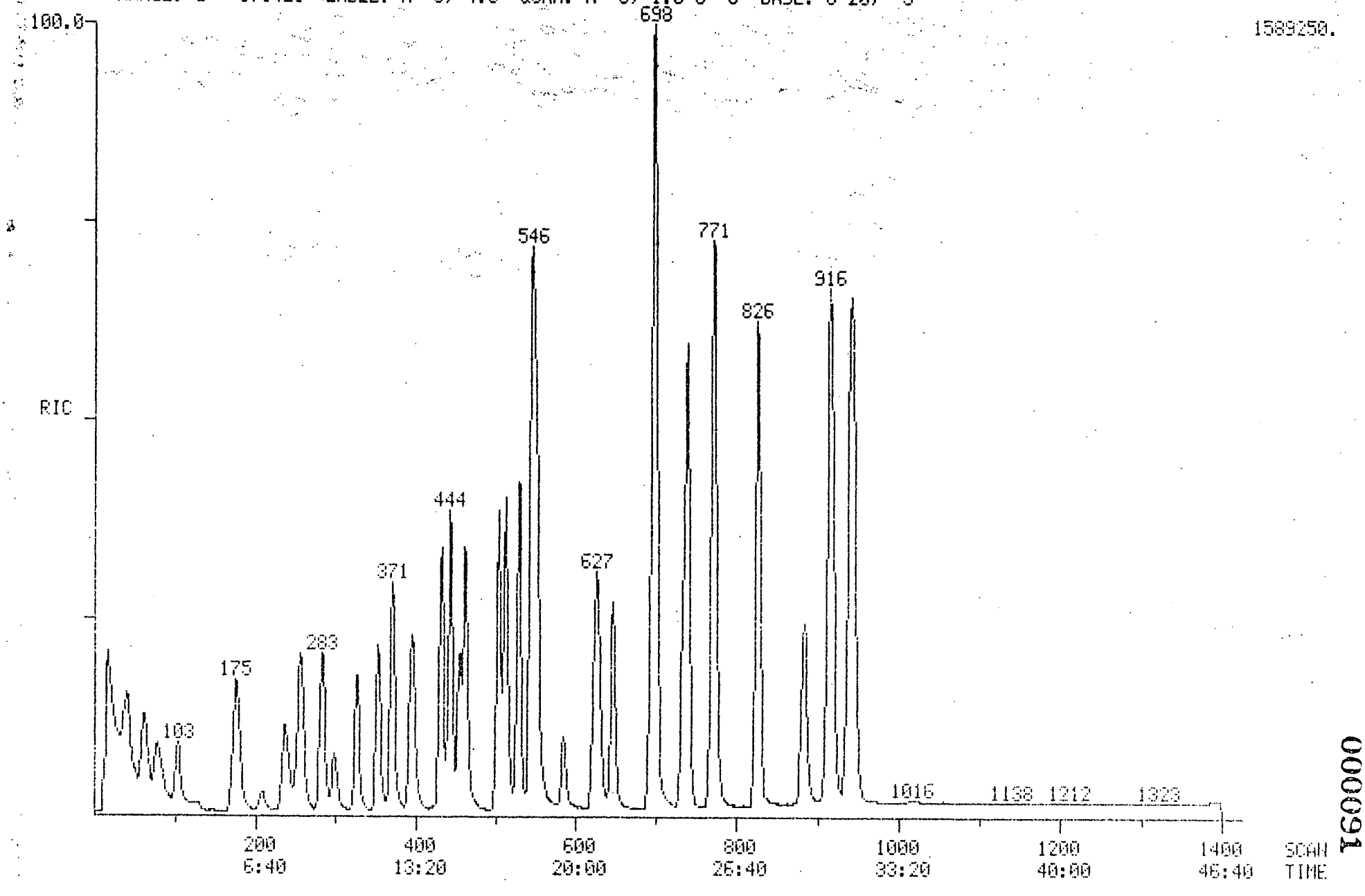
No	Name									
48	CS10	BROMOFLUOROBENZENE						*SURROGATE*		

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	298	9:56	1	1.000	A BB	99022.	50.000	UG/L	1.11
2	50	40	1:20	1	0.134	A BB	472619.	100.000	UG/L	2.22
3	94	62	2:04	1	0.208	A BB	219309.	100.000	UG/L	2.22
4	85	74	2:28	1	0.248	A BB	320231.	100.000	UG/L	2.22
5	62	77	2:34	1	0.258	A BB	415991.	100.000	UG/L	2.22
6	64	103	3:26	1	0.346	A BB	285537.	100.000	UG/L	2.22
7	84	174	5:48	1	0.584	A BB	365633.	100.000	UG/L	2.22
8	56	210	7:00	1	0.705	A BB	15803.	100.000	UG/L	2.22
9	43	207	6:54	1	0.695	A BB	144064.	100.000	UG/L	2.22
10	53	234	7:48	1	0.785	A BB	47783.	100.000	UG/L	2.22
11	76	235	7:50	1	0.789	A BB	907335.	100.000	UG/L	2.22
12	96	282	9:24	1	0.946	A BB	270008.	100.000	UG/L	2.22
13	63	326	10:52	1	1.094	A BB	631308.	100.000	UG/L	2.22
14	96	352	11:44	1	1.181	A BB	283542.	100.000	UG/L	2.22
15	83	370	12:20	1	1.242	A BB	724975.	100.000	UG/L	2.22
16	101	255	8:30	1	0.856	A BB	1371960.	100.000	UG/L	2.22
17	62	396	13:12	1	1.329	A BB	542892.	100.000	UG/L	2.22
18	65	392	13:04	1	1.315	A BB	262796.	50.000	UG/L	1.11
19	114	623	20:46	19	1.000	A BB	636689.	50.000	UG/L	1.11
20	72	400	13:20	19	0.642	A BB	27403.	100.000	UG/L	2.22
21	97	432	14:24	19	0.693	A BB	637423.	100.000	UG/L	2.22
22	117	443	14:46	19	0.711	A VB	651226.	100.000	UG/L	2.22
23	43	455	15:10	19	0.730	A BB	934986.	100.000	UG/L	2.22
24	83	462	15:24	19	0.742	A BB	697307.	100.000	UG/L	2.22
25	63	503	16:46	19	0.807	A BB	411460.	100.000	UG/L	2.22
26	75	513	17:06	19	0.823	A VB	759972.	100.000	UG/L	2.22
27	130	529	17:38	19	0.849	A BV	465075.	100.000	UG/L	2.22
28	129	546	18:12	19	0.876	A BB	593450.	100.000	UG/L	2.22
29	97	550	18:20	19	0.883	A BB	322063.	100.000	UG/L	2.22
30	78	544	18:08	19	0.873	A BB	1035350.	100.000	UG/L	2.22
31	75	552	18:24	19	0.886	A BB	385652.	100.000	UG/L	2.22
32	63	585	19:30	19	0.939	A BB	130420.	100.000	UG/L	2.22
33	173	628	20:56	19	1.008	A BB	467197.	100.000	UG/L	2.22
34	117	768	25:36	34	1.000	A BB	646726.	50.000	UG/L	1.11
35	43	646	21:32	34	0.841	A BB	701131.	100.000	UG/L	2.22
36	43	694	23:08	34	0.904	A BB	392570.	100.000	UG/L	2.22
37	164	698	23:16	34	0.909	A BB	560165.	100.000	UG/L	2.22
38	83	696	23:12	34	0.906	A BB	708512.	100.000	UG/L	2.22
39	92	738	24:36	34	0.961	A BB	958608.	100.000	UG/L	2.22
40	112	771	25:42	34	1.004	A BB	1284050.	100.000	UG/L	2.22
41	106	825	27:30	34	1.074	A BB	595606.	100.000	UG/L	2.22
42	104	915	30:30	34	1.191	A BB	1761890.	100.000	UG/L	2.22
43	106	941	31:22	34	1.225	A BB	1136340.	100.000	UG/L	2.22
44	146	1038	34:36	34	1.352	A BV	791808.	100.000	UG/L	2.22
45	146	1018	33:56	34	1.326	A BB	839655.	100.000	UG/L	2.22
46	146	1052	35:04	34	1.370	A VB	1329630.	100.000	UG/L	2.22
47	98	732	24:24	34	0.953	A BB	741161.	50.000	UG/L	1.11
48	95	882	29:24	34	1.148	A BB	646050.	50.000	UG/L	1.11

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:56	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:20	1.00	0.134	1.00	100.00	100.00	2.386	2.386	1.00
3	2:04	1.00	0.208	1.00	100.00	100.00	1.107	1.107	1.00
4	2:28	1.00	0.248	1.00	100.00	100.00	1.617	1.617	1.00
5	2:34	1.00	0.258	1.00	100.00	100.00	2.101	2.101	1.00
6	3:26	1.00	0.346	1.00	100.00	100.00	1.442	1.442	1.00
7	5:48	1.00	0.584	1.00	100.00	100.00	1.846	1.846	1.00
8	7:00	1.00	0.705	1.00	100.00	100.00	0.080	0.080	1.00
9	6:54	1.00	0.695	1.00	100.00	100.00	0.727	0.727	1.00
10	7:48	1.00	0.785	1.00	100.00	100.00	0.241	0.241	1.00
11	7:50	1.00	0.789	1.00	100.00	100.00	4.582	4.582	1.00
12	9:24	1.00	0.946	1.00	100.00	100.00	1.363	1.363	1.00
13	10:52	1.00	1.094	1.00	100.00	100.00	3.188	3.188	1.00
14	11:44	1.00	1.181	1.00	100.00	100.00	1.432	1.432	1.00
15	12:20	1.00	1.242	1.00	100.00	100.00	3.661	3.661	1.00
16	8:30	1.00	0.856	1.00	100.00	100.00	6.928	6.928	1.00
17	13:12	1.00	1.329	1.00	100.00	100.00	2.741	2.741	1.00
18	13:04	1.00	1.315	1.00	50.00	50.00	2.654	2.654	1.00
19	20:46	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
20	13:20	1.00	0.642	1.00	100.00	100.00	0.022	0.022	1.00
21	14:24	1.00	0.693	1.00	100.00	100.00	0.501	0.501	1.00
22	14:46	1.00	0.711	1.00	100.00	100.00	0.511	0.511	1.00
23	15:10	1.00	0.730	1.00	100.00	100.00	0.734	0.734	1.00
24	15:24	1.00	0.742	1.00	100.00	100.00	0.548	0.548	1.00
25	16:46	1.00	0.807	1.00	100.00	100.00	0.323	0.323	1.00
26	17:06	1.00	0.823	1.00	100.00	100.00	0.597	0.597	1.00
27	17:38	1.00	0.849	1.00	100.00	100.00	0.365	0.365	1.00
28	18:12	1.00	0.876	1.00	100.00	100.00	0.466	0.466	1.00
29	18:20	1.00	0.883	1.00	100.00	100.00	0.253	0.253	1.00
30	18:08	1.00	0.873	1.00	100.00	100.00	0.813	0.813	1.00
31	18:24	1.00	0.886	1.00	100.00	100.00	0.303	0.303	1.00
32	19:30	1.00	0.939	1.00	100.00	100.00	0.102	0.102	1.00
33	20:56	1.00	1.008	1.00	100.00	100.00	0.367	0.367	1.00
34	25:36	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
35	21:32	1.00	0.841	1.00	100.00	100.00	0.542	0.542	1.00
36	23:08	1.00	0.904	1.00	100.00	100.00	0.304	0.304	1.00
37	23:16	1.00	0.909	1.00	100.00	100.00	0.433	0.433	1.00
38	23:12	1.00	0.906	1.00	100.00	100.00	0.548	0.548	1.00
39	24:36	1.00	0.961	1.00	100.00	100.00	0.741	0.741	1.00
40	25:42	1.00	1.004	1.00	100.00	100.00	0.993	0.993	1.00
41	27:30	1.00	1.074	1.00	100.00	100.00	0.460	0.460	1.00
42	30:30	1.00	1.191	1.00	100.00	100.00	1.362	1.362	1.00
43	31:22	1.00	1.225	1.00	100.00	100.00	0.879	0.879	1.00
44	34:36	1.00	1.352	1.00	100.00	100.00	0.612	0.612	1.00
45	33:56	1.00	1.326	1.00	100.00	100.00	0.649	0.649	1.00
46	35:04	1.00	1.370	1.00	100.00	100.00	1.028	1.028	1.00
47	24:24	1.00	0.953	1.00	50.00	50.00	1.146	1.146	1.00
48	29:24	1.00	1.148	1.00	50.00	50.00	0.999	0.999	1.00

RIC
02/21/89 11:49:00
SAMPLE: 150NG STD
CONDS.: 150NG PURGED
RANGE: G 1,1425 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: VS150221C #1 SCANS 1 TO 1425
CALI: CALTAB #3



000091

Quantitation Report File: VS1500221C

Data: VS1500221C.TI
02/21/89 11:49:00
Sample: 150NG STD
Conds.: 150NG PURGED
Formula: Instrument: FINN Weight: 0.000
Submitted by: QC INC Analyst: DMW Acct. No.: VS150

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	C010	CHLOROMETHANE	
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8		ACROLEIN	
9	C035	ACETONE	
10		ACRYLONITRILE	
11	C040	CARBON DISULFIDE	
12	C045	1,1-DICHLOROETHENE	
13	C050	1,1-DICHLOROETHANE	
14	C053	1,2-DICHLOROETHENE (TOTAL)	
15	C060	CHLOROFORM	
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	CS15	D4-1,4-DICHLOROETHANE	*SURROGATE*
19	CI10	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
20	C110	2-BUTANONE (MEK)	
21	C115	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C172	TRANS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C155	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C143	CIS-1,3-DICHLOROPROPENE	
32	C175	2-CHLOROETHYLVINYLETHER	
33	C180	BROMOFORM	
34	CI20	D5-CHLOROBENZENE	*INTERNAL STANDARD*
35	C205	4-METHYL-2-PENTANONE (MIBK)	
36	C210	2-HEXANONE	
37	C220	TETRACHLOROETHENE	
38	C225	1,1,2,2-TETRACHLOROETHANE	
39	C230	TOLUENE	
40	C235	CHLOROBENZENE	
41	C240	ETHYL BENZENE	
42	C245	STYRENE	
43	C250	TOTAL XYLENES (CALCULATED OFF M-XYLENE)	
44	C330	1,2-DICHLOROBENZENE	
45	C335	1,3-DICHLOROBENZENE	
46	C340	1,4-DICHLOROBENZENE	
47	CS05	D8-TOLUENE	*SURROGATE*

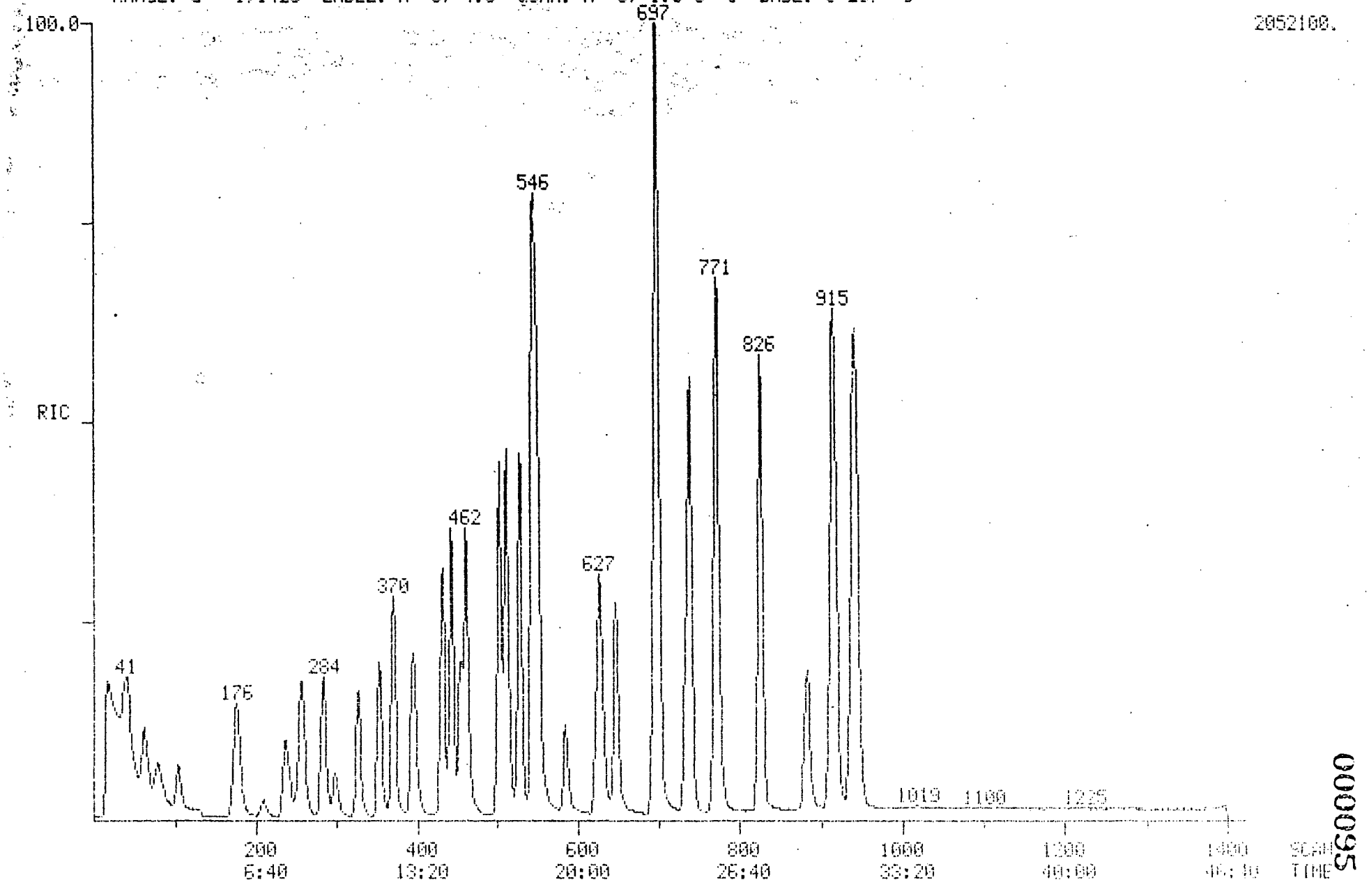
No	Name								
48	CS10	BROMOFLUOROBENZENE					*SURROGATE*		

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	299	9:58	1	1.000	A BB	85577.	50.000 UG/L	0.78
2	50	40	1:20	1	0.134	A BB	529467.	150.000 UG/L	2.33
3	94	63	2:06	1	0.211	A BB	430654.	150.000 UG/L	2.33
4	85	77	2:34	1	0.258	A BB	4363.	150.000 UG/L	2.33
5	62	79	2:38	1	0.264	A BB	559970.	150.000 UG/L	2.33
6	64	104	3:28	1	0.348	A BB	374494.	150.000 UG/L	2.33
7	84	175	5:50	1	0.585	A BB	424164.	150.000 UG/L	2.33
8	56	216	7:12	1	0.722	A BB	342.	150.000 UG/L	2.33
9	43	208	6:56	1	0.696	A BB	216926.	150.000 UG/L	2.33
10	NOT	FOUND							
11	76	236	7:52	1	0.789	A BB	1156500.	150.000 UG/L	2.33
12	96	284	9:28	1	0.950	A BB	350578.	150.000 UG/L	2.33
13	63	326	10:52	1	1.090	A BB	835918.	150.000 UG/L	2.33
14	96	353	11:46	1	1.181	A BB	372225.	150.000 UG/L	2.33
15	83	371	12:22	1	1.241	A BB	953204.	150.000 UG/L	2.33
16	101	256	8:32	1	0.856	A BB	1095650.	150.000 UG/L	2.33
17	62	396	13:12	1	1.324	A BB	773295.	150.000 UG/L	2.33
18	65	393	13:06	1	1.314	A BB	257855.	50.000 UG/L	0.78
19	114	623	20:46	19	1.000	A BB	583143.	50.000 UG/L	0.78
20	72	400	13:20	19	0.642	A BB	43520.	150.000 UG/L	2.33
21	97	433	14:26	19	0.695	A BB	901818.	150.000 UG/L	2.33
22	117	444	14:48	19	0.713	A VB	929623.	150.000 UG/L	2.33
23	43	455	15:10	19	0.730	A BB	1437130.	150.000 UG/L	2.33
24	83	463	15:26	19	0.743	A BB	1019680.	150.000 UG/L	2.33
25	63	504	16:48	19	0.809	A BB	532774.	150.000 UG/L	2.33
26	75	513	17:06	19	0.823	A BB	1005660.	150.000 UG/L	2.33
27	130	529	17:38	19	0.849	A BV	608024.	150.000 UG/L	2.33
28	129	546	18:12	19	0.876	A BB	798371.	150.000 UG/L	2.33
29	97	550	18:20	19	0.883	A BB	436669.	150.000 UG/L	2.33
30	78	545	18:10	19	0.875	A BB	1342390.	150.000 UG/L	2.33
31	75	552	18:24	19	0.886	A BB	512779.	150.000 UG/L	2.33
32	63	586	19:32	19	0.941	A BB	178283.	150.000 UG/L	2.33
33	173	627	20:54	19	1.006	A BB	662350.	150.000 UG/L	2.33
34	117	768	25:36	34	1.000	A BB	573962.	50.000 UG/L	0.78
35	43	646	21:32	34	0.841	A BB	1080560.	150.000 UG/L	2.33
36	43	694	23:08	34	0.904	A BB	686506.	150.000 UG/L	2.33
37	164	698	23:16	34	0.909	A BB	726151.	150.000 UG/L	2.33
38	83	696	23:12	34	0.906	A BB	1068300.	150.000 UG/L	2.33
39	92	738	24:36	34	0.961	A BB	1240320.	150.000 UG/L	2.33
40	112	772	25:44	34	1.005	A BB	1670040.	150.000 UG/L	2.33
41	106	826	27:32	34	1.076	A BB	790939.	150.000 UG/L	2.33
42	104	916	30:32	34	1.193	A BB	2272730.	150.000 UG/L	2.33
43	106	942	31:24	34	1.227	A BB	1475250.	150.000 UG/L	2.33
44	146	1038	34:36	34	1.352	A BB	1764.	150.000 UG/L	2.33
45	146	1020	34:00	34	1.328	A BV	2600.	150.000 UG/L	2.33
46	146	1055	35:10	34	1.374	A VB	5049.	150.000 UG/L	2.33
47	98	733	24:26	34	0.954	A BB	667867.	50.000 UG/L	0.78
48	95	883	29:26	34	1.150	A BB	597674.	50.000 UG/L	0.78

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:58	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:20	1.00	0.134	1.00	150.00	150.00	2.062	2.062	1.00
3	2:06	1.00	0.211	1.00	150.00	150.00	1.677	1.677	1.00
4	2:34	1.00	0.258	1.00	150.00	150.00	0.017	0.017	1.00
5	2:38	1.00	0.264	1.00	150.00	150.00	2.181	2.181	1.00
6	3:28	1.00	0.348	1.00	150.00	150.00	1.459	1.459	1.00
7	5:50	1.00	0.585	1.00	150.00	150.00	1.652	1.652	1.00
8	7:12	1.00	0.722	1.00	150.00	150.00	0.001	0.001	1.00
9	6:56	1.00	0.696	1.00	150.00	150.00	0.845	0.845	1.00
10	7:52		0.792						
11	7:52	1.00	0.789	1.00	150.00	150.00	4.505	4.505	1.00
12	9:28	1.00	0.950	1.00	150.00	150.00	1.366	1.366	1.00
13	10:52	1.00	1.090	1.00	150.00	150.00	3.256	3.256	1.00
14	11:46	1.00	1.181	1.00	150.00	150.00	1.450	1.450	1.00
15	12:22	1.00	1.241	1.00	150.00	150.00	3.713	3.713	1.00
16	8:32	1.00	0.856	1.00	150.00	150.00	4.268	4.268	1.00
17	13:12	1.00	1.324	1.00	150.00	150.00	3.012	3.012	1.00
18	13:06	1.00	1.314	1.00	50.00	50.00	3.013	3.013	1.00
19	20:46	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
20	13:20	1.00	0.642	1.00	150.00	150.00	0.025	0.025	1.00
21	14:26	1.00	0.695	1.00	150.00	150.00	0.515	0.515	1.00
22	14:48	1.00	0.713	1.00	150.00	150.00	0.531	0.531	1.00
23	15:10	1.00	0.730	1.00	150.00	150.00	0.821	0.821	1.00
24	15:26	1.00	0.743	1.00	150.00	150.00	0.583	0.583	1.00
25	16:48	1.00	0.809	1.00	150.00	150.00	0.305	0.305	1.00
26	17:06	1.00	0.823	1.00	150.00	150.00	0.575	0.575	1.00
27	17:38	1.00	0.849	1.00	150.00	150.00	0.348	0.348	1.00
28	18:12	1.00	0.876	1.00	150.00	150.00	0.456	0.456	1.00
29	18:20	1.00	0.883	1.00	150.00	150.00	0.250	0.250	1.00
30	18:10	1.00	0.875	1.00	150.00	150.00	0.767	0.767	1.00
31	18:24	1.00	0.886	1.00	150.00	150.00	0.293	0.293	1.00
32	19:32	1.00	0.941	1.00	150.00	150.00	0.102	0.102	1.00
33	20:54	1.00	1.006	1.00	150.00	150.00	0.379	0.379	1.00
34	25:36	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
35	21:32	1.00	0.841	1.00	150.00	150.00	0.628	0.628	1.00
36	23:08	1.00	0.904	1.00	150.00	150.00	0.399	0.399	1.00
37	23:16	1.00	0.909	1.00	150.00	150.00	0.422	0.422	1.00
38	23:12	1.00	0.906	1.00	150.00	150.00	0.620	0.620	1.00
39	24:36	1.00	0.961	1.00	150.00	150.00	0.720	0.720	1.00
40	25:44	1.00	1.005	1.00	150.00	150.00	0.970	0.970	1.00
41	27:32	1.00	1.076	1.00	150.00	150.00	0.459	0.459	1.00
42	30:32	1.00	1.193	1.00	150.00	150.00	1.320	1.320	1.00
43	31:24	1.00	1.227	1.00	150.00	150.00	0.857	0.857	1.00
44	34:36	1.00	1.352	1.00	150.00	150.00	0.001	0.001	1.00
45	34:00	1.00	1.328	1.00	150.00	150.00	0.002	0.002	1.00
46	35:10	1.00	1.374	1.00	150.00	150.00	0.003	0.003	1.00
47	24:26	1.00	0.954	1.00	50.00	50.00	1.164	1.164	1.00
48	29:26	1.00	1.150	1.00	50.00	50.00	1.041	1.041	1.00

RIC
02/21/89 12:38:00
SAMPLE: 200NG STD
CONDS.: 200NG PURGED
RANGE: G 1,1425 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: VS2000221C #1 SCANS 1 TO 1425
CALI: CALTAB #3



000095

Quantitation Report File: VS2000221C

Data: VS2000221C.TI
02/21/89 12:38:00
Sample: 200NG STD
Conds.: 200NG PURGED
Formula: Instrument: FINN Weight: 0.000
Submitted by: QC INC Analyst: DMW Acct. No.: VS200

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	C010	CHLOROMETHANE	
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8		ACROLEIN	
9	C035	ACETONE	
10		ACRYLONITRILE	
11	C040	CARBON DISULFIDE	
12	C045	1,1-DICHLOROETHENE	
13	C050	1,1-DICHLOROETHANE	
14	C053	1,2-DICHLOROETHENE (TOTAL)	
15	C060	CHLOROFORM	
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	CS15	D4-1,4-DICHLOROETHANE	*SURROGATE*
19	CI10	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
20	C110	2-BUTANONE (MEK)	
21	C115	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C172	TRANS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C155	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C143	CIS-1,3-DICHLOROPROPENE	
32	C175	2-CHLOROETHYLVINYLETHER	
33	C180	BROMOFORM	
34	CI20	D5-CHLOROBENZENE	*INTERNAL STANDARD*
35	C205	4-METHYL-2-PENTANONE (MIBK)	
36	C210	2-HEXANONE	
37	C220	TETRACHLOROETHENE	
38	C225	1,1,2,2-TETRACHLOROETHANE	
39	C230	TOLUENE	
40	C235	CHLOROBENZENE	
41	C240	ETHYL BENZENE	
42	C245	STYRENE	
43	C250	TOTAL XYLENES (CALCULATED OFF M-XYLENE)	
44	C350	1,2-DICHLOROBENZENE	
45	C335	1,3-DICHLOROBENZENE	
46	C340	1,4-DICHLOROBENZENE	
47	CS05	D8-TOLUENE	*SURROGATE*

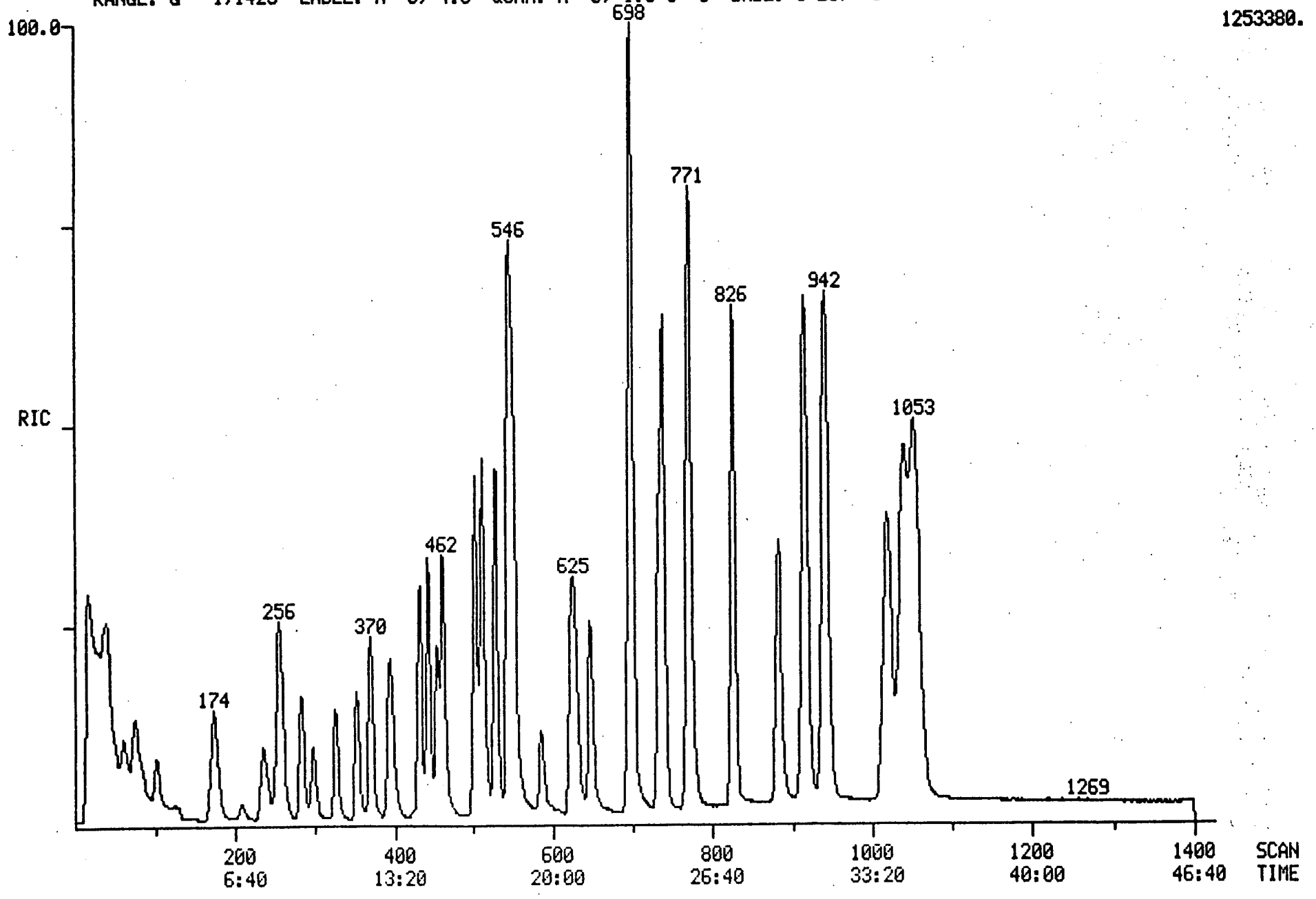
No	Name									
48	CS10	BROMOFLUOROBENZENE					*SURROGATE*			

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	298	9:56	1	1.000	A BB	84512.	50.000	UG/L	0.62
2	50	41	1:22	1	0.138	A BB	665894.	200.000	UG/L	2.47
3	94	63	2:06	1	0.211	A BB	418127.	200.000	UG/L	2.47
4	85	77	2:34	1	0.258	A BB	3373.	200.000	UG/L	2.47
5	62	80	2:40	1	0.268	A BB	519486.	200.000	UG/L	2.47
6	64	104	3:28	1	0.349	A BB	348333.	200.000	UG/L	2.47
7	84	176	5:52	1	0.591	A BB	467593.	200.000	UG/L	2.47
8	NOT	FOUND								
9	43	209	6:58	1	0.701	A BB	238954.	200.000	UG/L	2.47
10	NOT	FOUND								
11	76	236	7:52	1	0.792	A BB	1309110.	200.000	UG/L	2.47
12	96	284	9:28	1	0.953	A BB	411500.	200.000	UG/L	2.47
13	63	327	10:54	1	1.097	A BB	1000160.	200.000	UG/L	2.47
14	96	353	11:46	1	1.185	A BB	439806.	200.000	UG/L	2.47
15	83	370	12:20	1	1.242	A BB	1199880.	200.000	UG/L	2.47
16	101	257	8:34	1	0.862	A BB	1201660.	200.000	UG/L	2.47
17	62	396	13:12	1	1.329	A BB	951171.	200.000	UG/L	2.47
18	65	392	13:04	1	1.315	A BB	249050.	50.000	UG/L	0.62
19	114	623	20:46	19	1.000	A BB	579108.	50.000	UG/L	0.62
20	72	400	13:20	19	0.642	A BB	55117.	200.000	UG/L	2.47
21	97	433	14:26	19	0.695	A BB	1090020.	200.000	UG/L	2.47
22	117	444	14:48	19	0.713	A VB	1166100.	200.000	UG/L	2.47
23	43	455	15:10	19	0.730	A BB	1897400.	200.000	UG/L	2.47
24	83	462	15:24	19	0.742	A BB	1389070.	200.000	UG/L	2.47
25	63	504	16:48	19	0.809	A BB	834098.	200.000	UG/L	2.47
26	75	512	17:04	19	0.822	A BB	1534880.	200.000	UG/L	2.47
27	130	529	17:38	19	0.849	A BB	847540.	200.000	UG/L	2.47
28	129	546	18:12	19	0.876	A BB	1176670.	200.000	UG/L	2.47
29	97	550	18:20	19	0.883	A BB	627348.	200.000	UG/L	2.47
30	78	544	18:08	19	0.873	A BB	1747480.	200.000	UG/L	2.47
31	75	551	18:22	19	0.884	A BB	740613.	200.000	UG/L	2.47
32	63	585	19:30	19	0.939	A BB	281230.	200.000	UG/L	2.47
33	173	627	20:54	19	1.006	A BB	942150.	200.000	UG/L	2.47
34	117	768	25:36	34	1.000	A BB	573435.	50.000	UG/L	0.62
35	43	646	21:32	34	0.841	A BB	1482410.	200.000	UG/L	2.47
36	43	694	23:08	34	0.904	A BB	947488.	200.000	UG/L	2.47
37	164	698	23:16	34	0.909	A BB	907087.	200.000	UG/L	2.47
38	83	696	23:12	34	0.906	A BB	1462580.	200.000	UG/L	2.47
39	92	738	24:36	34	0.961	A BB	1538740.	200.000	UG/L	2.47
40	112	772	25:44	34	1.005	A BB	2030500.	200.000	UG/L	2.47
41	106	826	27:32	34	1.076	A BB	981122.	200.000	UG/L	2.47
42	104	916	30:32	34	1.193	A BB	2698730.	200.000	UG/L	2.47
43	106	942	31:24	34	1.227	A BB	1816800.	200.000	UG/L	2.47
44	146	1051	35:02	34	1.368	A*VV	1379.	200.000	UG/L	2.47
45	NOT	FOUND								
46	146	1055	35:10	34	1.374	A*VB	2230.	200.000	UG/L	2.47
47	98	733	24:26	34	0.954	A BB	661490.	50.000	UG/L	0.62
48	95	883	29:26	34	1.150	A BB	579422.	50.000	UG/L	0.62

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:56	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:22	1.00	0.138	1.00	200.00	200.00	1.970	1.970	1.00
3	2:06	1.00	0.211	1.00	200.00	200.00	1.237	1.237	1.00
4	2:34	1.00	0.258	1.00	200.00	200.00	0.010	0.010	1.00
5	2:40	1.00	0.268	1.00	200.00	200.00	1.537	1.537	1.00
6	3:28	1.00	0.349	1.00	200.00	200.00	1.030	1.030	1.00
7	5:52	1.00	0.591	1.00	200.00	200.00	1.383	1.383	1.00
8	7:02		0.708						
9	6:58	1.00	0.701	1.00	200.00	200.00	0.707	0.707	1.00
10	7:52		0.792						
11	7:52	1.00	0.792	1.00	200.00	200.00	3.873	3.873	1.00
12	9:28	1.00	0.953	1.00	200.00	200.00	1.217	1.217	1.00
13	10:54	1.00	1.097	1.00	200.00	200.00	2.959	2.959	1.00
14	11:46	1.00	1.185	1.00	200.00	200.00	1.301	1.301	1.00
15	12:20	1.00	1.242	1.00	200.00	200.00	3.549	3.549	1.00
16	8:34	1.00	0.862	1.00	200.00	200.00	3.555	3.555	1.00
17	13:12	1.00	1.329	1.00	200.00	200.00	2.814	2.814	1.00
18	13:04	1.00	1.315	1.00	50.00	50.00	2.947	2.947	1.00
19	20:46	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
20	13:20	1.00	0.642	1.00	200.00	200.00	0.024	0.024	1.00
21	14:26	1.00	0.695	1.00	200.00	200.00	0.471	0.471	1.00
22	14:48	1.00	0.713	1.00	200.00	200.00	0.503	0.503	1.00
23	15:10	1.00	0.730	1.00	200.00	200.00	0.819	0.819	1.00
24	15:24	1.00	0.742	1.00	200.00	200.00	0.600	0.600	1.00
25	16:48	1.00	0.809	1.00	200.00	200.00	0.360	0.360	1.00
26	17:04	1.00	0.822	1.00	200.00	200.00	0.663	0.663	1.00
27	17:38	1.00	0.849	1.00	200.00	200.00	0.366	0.366	1.00
28	18:12	1.00	0.876	1.00	200.00	200.00	0.508	0.508	1.00
29	18:20	1.00	0.883	1.00	200.00	200.00	0.271	0.271	1.00
30	18:08	1.00	0.873	1.00	200.00	200.00	0.754	0.754	1.00
31	18:22	1.00	0.884	1.00	200.00	200.00	0.320	0.320	1.00
32	19:30	1.00	0.939	1.00	200.00	200.00	0.121	0.121	1.00
33	20:54	1.00	1.006	1.00	200.00	200.00	0.407	0.407	1.00
34	25:36	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
35	21:32	1.00	0.841	1.00	200.00	200.00	0.646	0.646	1.00
36	23:08	1.00	0.904	1.00	200.00	200.00	0.413	0.413	1.00
37	23:16	1.00	0.909	1.00	200.00	200.00	0.395	0.395	1.00
38	23:12	1.00	0.906	1.00	200.00	200.00	0.638	0.638	1.00
39	24:36	1.00	0.961	1.00	200.00	200.00	0.671	0.671	1.00
40	25:44	1.00	1.005	1.00	200.00	200.00	0.885	0.885	1.00
41	27:32	1.00	1.076	1.00	200.00	200.00	0.428	0.428	1.00
42	30:32	1.00	1.193	1.00	200.00	200.00	1.177	1.177	1.00
43	31:24	1.00	1.227	1.00	200.00	200.00	0.792	0.792	1.00
44	35:02	1.00	1.368	1.00	200.00	200.00	0.001	0.001	1.00
45	33:58		1.327						
46	35:10	1.00	1.374	1.00	200.00	200.00	0.001	0.001	1.00
47	24:26	1.00	0.954	1.00	50.00	50.00	1.154	1.154	1.00
48	29:26	1.00	1.150	1.00	50.00	50.00	1.010	1.010	1.00

RIC
02/22/89 16:33:00
SAMPLE: STANDARD
CONDS.: 100NG PURGED
RANGE: G 1,1425 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: VS1000222C #1 SCANS 1 TO 1425
CALI: VS1000222C #3



000099

Quantitation Report File: VS1000222C

000100

Data: VS1000222C.TI
02/22/89 16:33:00
Sample: STANDARD
Conds.: 100NG PURGED
Formula: Instrument: FINN Weight: 0.000
Submitted by: QC Analyst: HFW Acct. No.: VS100

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	C010	CHLOROMETHANE	
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8		ACROLEIN	
9	C035	ACETONE	
10		ACRYLONITRILE	
11	C040	CARBON DISULFIDE	
12	C045	1,1-DICHLOROETHENE	
13	C050	1,1-DICHLOROETHANE	
14	C053	1,2-DICHLOROETHENE (TOTAL)	
15	C060	CHLOROFORM	
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	CS15	D4-1,4-DICHLOROETHANE	*SURROGATE*
19	CI10	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
20	C110	2-BUTANONE (MEK)	
21	C115	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C172	TRANS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C155	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C143	CIS-1,3-DICHLOROPROPENE	
32	C175	2-CHLOROETHYLVINYLETHER	
33	C180	BROMOFORM	
34	CI20	D5-CHLOROBENZENE	*INTERNAL STANDARD*
35	C205	4-METHYL-2-PENTANONE (MIBK)	
36	C210	2-HEXANONE	
37	C220	TETRACHLOROETHENE	
38	C225	1,1,2,2-TETRACHLOROETHANE	
39	C230	TOLUENE	
40	C235	CHLOROBENZENE	
41	C240	ETHYL BENZENE	
42	C245	STYRENE	
43	C250	TOTAL XYLENES (CALCULATED OFF M-XYLENE)	
44	C350	1,2-DICHLOROBENZENE	
45	C335	1,3-DICHLOROBENZENE	
46	C340	1,4-DICHLOROBENZENE	
47	CS05	D8-TOLUENE	*SURROGATE*

No	Name								
48	CS10	BROMOFLUOROBENZENE					*SURROGATE*		

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	298	9:56	1	1.000	A BB	86515.	50.000 UG/L	1.11
2	50	40	1:20	1	0.134	A BB	345679.	100.000 UG/L	2.22
3	94	62	2:04	1	0.208	A BB	171196.	100.000 UG/L	2.22
4	85	74	2:28	1	0.248	A BB	249088.	100.000 UG/L	2.22
5	62	77	2:34	1	0.258	A BB	299354.	100.000 UG/L	2.22
6	64	102	3:24	1	0.342	A BB	202113.	100.000 UG/L	2.22
7	84	174	5:48	1	0.584	A BB	274778.	100.000 UG/L	2.22
8	56	211	7:02	1	0.708	A BB	12818.	100.000 UG/L	2.22
9	43	209	6:58	1	0.701	A BB	113162.	100.000 UG/L	2.22
10	53	236	7:52	1	0.792	A BB	40345.	100.000 UG/L	2.22
11	76	236	7:52	1	0.792	A BB	683323.	100.000 UG/L	2.22
12	96	283	9:26	1	0.950	A BB	213247.	100.000 UG/L	2.22
13	63	326	10:52	1	1.094	A BB	527913.	100.000 UG/L	2.22
14	96	353	11:46	1	1.185	A BB	227172.	100.000 UG/L	2.22
15	83	370	12:20	1	1.242	A BB	598726.	100.000 UG/L	2.22
16	101	256	8:32	1	0.859	A BB	1078350.	100.000 UG/L	2.22
17	62	396	13:12	1	1.329	A BB	512296.	100.000 UG/L	2.22
18	65	392	13:04	1	1.315	A BB	249653.	50.000 UG/L	1.11
19	114	623	20:46	19	1.000	A BB	696758.	50.000 UG/L	1.11
20	72	400	13:20	19	0.642	A BB	32912.	100.000 UG/L	2.22
21	97	433	14:26	19	0.695	A BB	631820.	100.000 UG/L	2.22
22	117	444	14:48	19	0.713	A VB	623076.	100.000 UG/L	2.22
23	43	455	15:10	19	0.730	A BB	1228610.	100.000 UG/L	2.22
24	83	462	15:24	19	0.742	A BB	805777.	100.000 UG/L	2.22
25	63	504	16:48	19	0.809	A BB	505892.	100.000 UG/L	2.22
26	75	513	17:06	19	0.823	A BB	896818.	100.000 UG/L	2.22
27	130	529	17:38	19	0.849	A BB	502478.	100.000 UG/L	2.22
28	129	547	18:14	19	0.878	A BB	667410.	100.000 UG/L	2.22
29	97	551	18:22	19	0.884	A BB	388064.	100.000 UG/L	2.22
30	78	545	18:10	19	0.875	A BB	1140040.	100.000 UG/L	2.22
31	75	552	18:24	19	0.886	A BB	431223.	100.000 UG/L	2.22
32	63	586	19:32	19	0.941	A BB	162453.	100.000 UG/L	2.22
33	173	628	20:56	19	1.008	A BB	491349.	100.000 UG/L	2.22
34	117	768	25:36	34	1.000	A BB	695905.	50.000 UG/L	1.11
35	43	647	21:34	34	0.842	A BB	841949.	100.000 UG/L	2.22
36	43	695	23:10	34	0.905	A BB	483538.	100.000 UG/L	2.22
37	164	698	23:16	34	0.909	A BB	550119.	100.000 UG/L	2.22
38	83	697	23:14	34	0.908	A BB	800635.	100.000 UG/L	2.22
39	92	738	24:36	34	0.961	A BB	1002130.	100.000 UG/L	2.22
40	112	772	25:44	34	1.005	A BB	1361630.	100.000 UG/L	2.22
41	106	826	27:32	34	1.076	A BB	618734.	100.000 UG/L	2.22
42	104	916	30:32	34	1.193	A BB	1781390.	100.000 UG/L	2.22
43	106	942	31:24	34	1.227	A BB	1121760.	100.000 UG/L	2.22
44	146	1041	34:42	34	1.355	A BV	795904.	100.000 UG/L	2.22
45	146	1019	33:58	34	1.327	A BB	781287.	100.000 UG/L	2.22
46	146	1053	35:06	34	1.371	A VB	1320220.	100.000 UG/L	2.22
47	98	733	24:26	34	0.954	A BB	811584.	50.000 UG/L	1.11
48	95	884	29:28	34	1.151	A BB	674802.	50.000 UG/L	1.11

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:56	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:20	1.00	0.134	1.00	100.00	100.00	1.998	1.998	1.00
3	2:04	1.00	0.208	1.00	100.00	100.00	0.989	0.989	1.00
4	2:28	1.00	0.248	1.00	100.00	100.00	1.440	1.440	1.00
5	2:34	1.00	0.258	1.00	100.00	100.00	1.730	1.730	1.00
6	3:24	1.00	0.342	1.00	100.00	100.00	1.168	1.168	1.00
7	5:48	1.00	0.584	1.00	100.00	100.00	1.588	1.588	1.00
8	7:02	1.00	0.708	1.00	100.00	100.00	0.074	0.074	1.00
9	6:58	1.00	0.701	1.00	100.00	100.00	0.654	0.654	1.00
10	7:52	1.00	0.792	1.00	100.00	100.00	0.233	0.233	1.00
11	7:52	1.00	0.792	1.00	100.00	100.00	3.949	3.949	1.00
12	9:26	1.00	0.950	1.00	100.00	100.00	1.232	1.232	1.00
13	10:52	1.00	1.094	1.00	100.00	100.00	3.051	3.051	1.00
14	11:46	1.00	1.185	1.00	100.00	100.00	1.313	1.313	1.00
15	12:20	1.00	1.242	1.00	100.00	100.00	3.460	3.460	1.00
16	8:32	1.00	0.859	1.00	100.00	100.00	6.232	6.232	1.00
17	13:12	1.00	1.329	1.00	100.00	100.00	2.961	2.961	1.00
18	13:04	1.00	1.315	1.00	50.00	50.00	2.886	2.886	1.00
19	20:46	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
20	13:20	1.00	0.642	1.00	100.00	100.00	0.024	0.024	1.00
21	14:26	1.00	0.695	1.00	100.00	100.00	0.453	0.453	1.00
22	14:48	1.00	0.713	1.00	100.00	100.00	0.447	0.447	1.00
23	15:10	1.00	0.730	1.00	100.00	100.00	0.882	0.882	1.00
24	15:24	1.00	0.742	1.00	100.00	100.00	0.578	0.578	1.00
25	16:48	1.00	0.809	1.00	100.00	100.00	0.363	0.363	1.00
26	17:06	1.00	0.823	1.00	100.00	100.00	0.644	0.644	1.00
27	17:38	1.00	0.849	1.00	100.00	100.00	0.361	0.361	1.00
28	18:14	1.00	0.878	1.00	100.00	100.00	0.479	0.479	1.00
29	18:22	1.00	0.884	1.00	100.00	100.00	0.278	0.278	1.00
30	18:10	1.00	0.875	1.00	100.00	100.00	0.818	0.818	1.00
31	18:24	1.00	0.886	1.00	100.00	100.00	0.309	0.309	1.00
32	19:32	1.00	0.941	1.00	100.00	100.00	0.117	0.117	1.00
33	20:56	1.00	1.008	1.00	100.00	100.00	0.353	0.353	1.00
34	25:36	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
35	21:34	1.00	0.842	1.00	100.00	100.00	0.605	0.605	1.00
36	23:10	1.00	0.905	1.00	100.00	100.00	0.347	0.347	1.00
37	23:16	1.00	0.909	1.00	100.00	100.00	0.395	0.395	1.00
38	23:14	1.00	0.908	1.00	100.00	100.00	0.575	0.575	1.00
39	24:36	1.00	0.961	1.00	100.00	100.00	0.720	0.720	1.00
40	25:44	1.00	1.005	1.00	100.00	100.00	0.978	0.978	1.00
41	27:32	1.00	1.076	1.00	100.00	100.00	0.445	0.445	1.00
42	30:32	1.00	1.193	1.00	100.00	100.00	1.280	1.280	1.00
43	31:24	1.00	1.227	1.00	100.00	100.00	0.806	0.806	1.00
44	34:42	1.00	1.355	1.00	100.00	100.00	0.572	0.572	1.00
45	33:58	1.00	1.327	1.00	100.00	100.00	0.561	0.561	1.00
46	35:06	1.00	1.371	1.00	100.00	100.00	0.949	0.949	1.00
47	24:26	1.00	0.954	1.00	50.00	50.00	1.166	1.166	1.00
48	29:28	1.00	1.151	1.00	50.00	50.00	0.970	0.970	1.00

BROMOFLUOROBENZENE

Tuning Report
02/21/89 8:02:00 + 5:58
Instrument: FINN
Case Number:

Data: BFB0221C # 179
Cali: CALTAB # 3
Analyst: DMW
Laboratory:

Base m/z: 95
RIC: 105856.
Acct. No.: BFB0221C
Contract:

Ion Abundance Criteria

m/z	Intensity	% RA	Min %	Max %	Mass	Actual	Status
50	4344.	27.5	15.0	40.0	95	27.5	PASS
75	8432.	53.3	30.0	60.0	95	53.3	PASS
95	15808.	100.0	100.0	---	---	100.0	PASS
96	1172.	7.4	5.0	9.0	95	7.4	PASS
173	0.	0.0	---	2.0	174	0.0	PASS
174	10640.	67.3	50.0	---	95	67.3	PASS
175	931.	5.9	5.0	9.0	174	8.7	PASS
176	10288.	65.1	95.0	101.0	174	96.7	PASS
177	711.	4.5	5.0	9.0	176	6.9	PASS

Mass List
02/21/89 8:02:00 + 5:58
Sample: BFB TUNE
Conds.: 50NG INJECTED

Data: BFB0221C # 179
Cali: CALTAB # 3

Base m/z: 95
RIC: 105856.

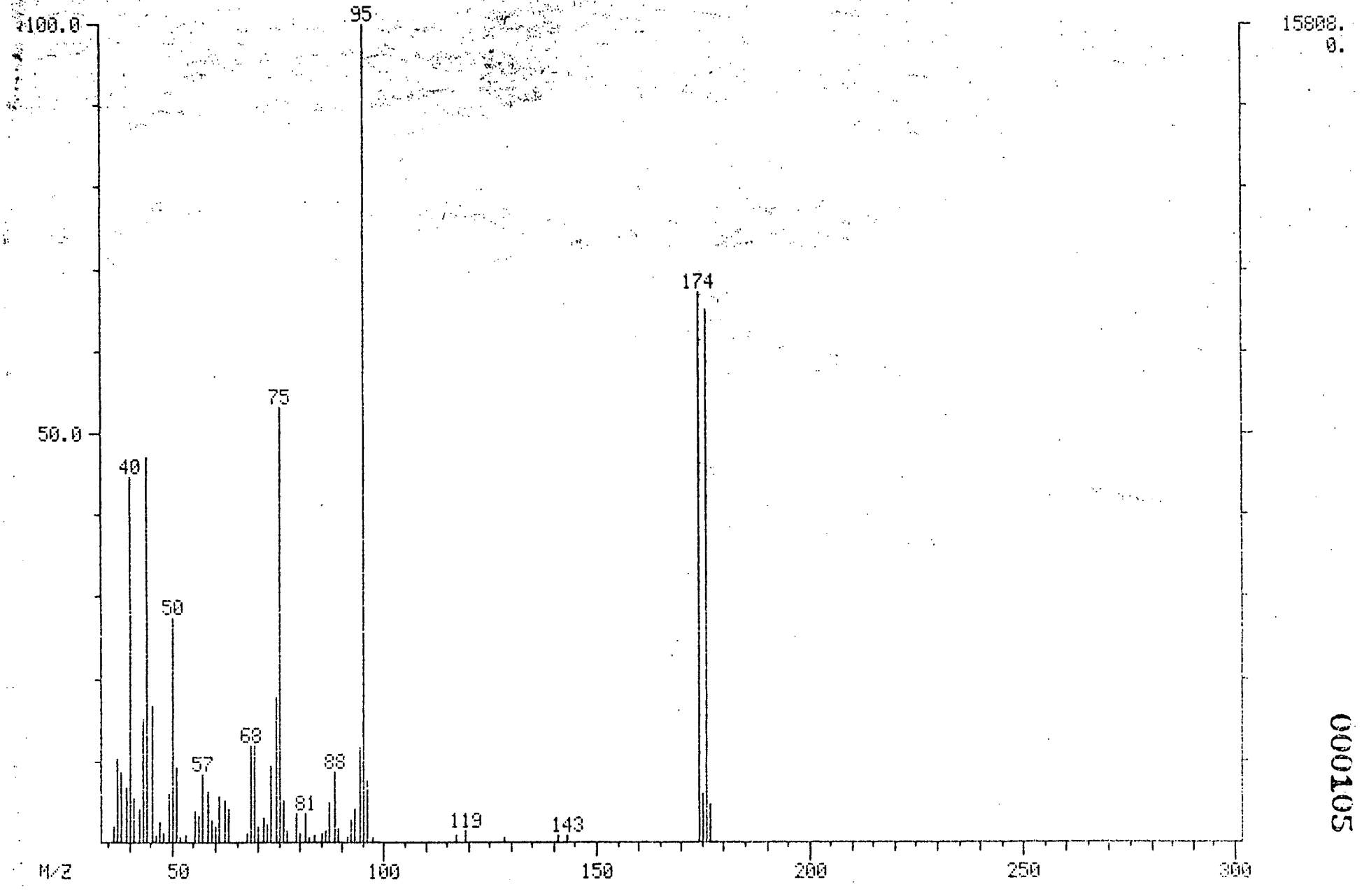
36 0.00 0. Minima Min Inten: 0.
177 Maxima # 0

Mass	% RA	Inten.	Mass	% RA	Inten.
36	1.99	315.	94	11.44	1808.
37	10.11	1598.	95	100.00	15808.
38	8.57	1354.	96	7.41	1172.
39	6.83	1080.	97	0.57	90.
40	44.74	7072.	117	0.68	108.
41	5.35	846.	119	1.37	217.
42	3.97	628.	128	0.66	104.
43	15.16	2396.	141	0.70	111.
44	47.01	7432.	143	0.75	119.
45	16.78	2652.	174	67.31	10640.
46	0.70	111.	175	5.89	931.
47	2.38	376.	176	65.08	10288.
48	1.12	177.	177	4.50	711.
49	5.83	922.			
50	27.48	4344.			
51	9.01	1424.			
52	0.54	86.			
53	0.75	119.			
55	3.66	579.			
56	3.10	490.			
57	8.41	1330.			
58	6.20	980.			
59	2.63	415.			
60	1.93	305.			
61	5.72	904.			
62	5.08	803.			
63	3.92	619.			
67	1.05	166.			
68	11.93	1886.			
69	11.79	1864.			
70	1.82	287.			
71	3.02	477.			
72	2.11	333.			
73	9.44	1492.			
74	17.84	2820.			
75	53.34	8432.			
76	5.08	803.			
77	1.27	200.			
79	3.43	542.			
80	1.08	171.			
81	3.47	549.			
82	0.66	104.			
83	0.91	144.			
85	1.16	183.			
86	1.42	224.			
87	4.87	770.			
88	8.57	1354.			
89	1.70	268.			
91	0.51	80.			
92	2.78	439.			
93	4.09	646.			

MASS SPECTRUM
02/21/89 8:02:00 + 5:58
SAMPLE: BFB TUNE
CONDS.: 50NG INJECTED
TEMP: 225 DEG. C

DATA: BFB0221C #173
CALI: CALTAB #3

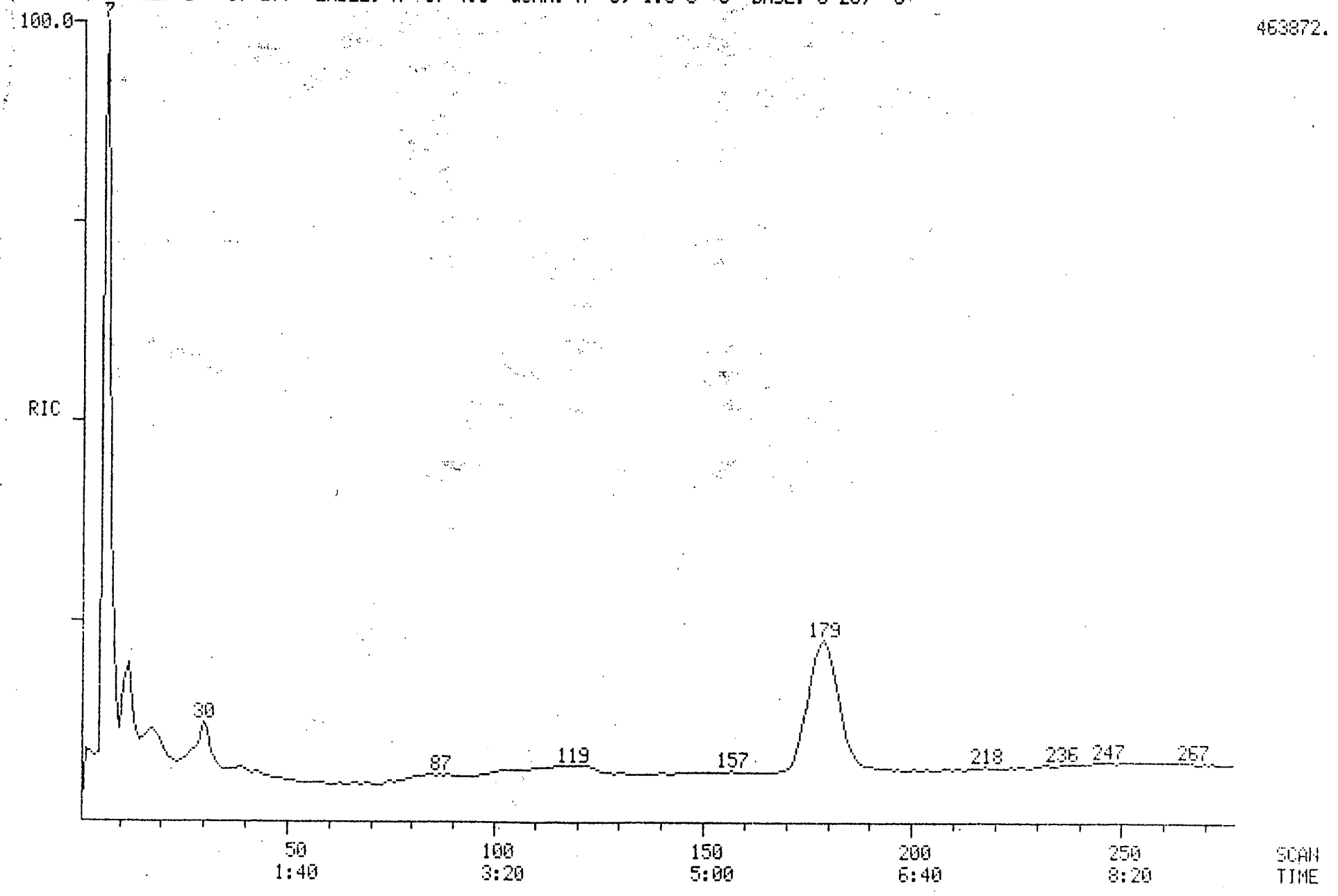
BASE M/Z: 95
RIC: 105856.



000105

RIC
02/21/89 8:02:00
SAMPLE: BFB TUNE
CONDS.: 50NG INJECTED
RANGE: G 1, 277 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BFB0221C #1 SCANS 1 TO 277
CALI: CALTAB #3



000106

BROMOFLUOROBENZENE

000107

Tuning Report
02/22/89 15:27:00 + 6:04
Instrument: FINN
Case Number:

Data: BFB0222C # 182
Cali: CALTAB # 3
Analyst: DMW
Laboratory:

Base m/z: 95
RIC: 116096.
Acct. No.: BFB
Contract:

m/z	Intensity	% RA	Ion Abundance Criteria Min %	Max %	Mass	Actual	Status
50	4344.	25.5	15.0	40.0	95	25.5	PASS
75	8656.	50.8	30.0	60.0	95	50.8	PASS
95	17024.	100.0	100.0	---	---	100.0	PASS
96	1266.	7.4	5.0	9.0	95	7.4	PASS
173	0.	0.0	---	2.0	174	0.0	PASS
174	12032.	70.7	50.0	---	95	70.7	PASS
175	987.	5.8	5.0	9.0	174	8.2	PASS
176	11872.	69.7	95.0	101.0	174	98.7	PASS
177	774.	4.5	5.0	9.0	176	6.5	PASS

Mass List Data: BFB0222C # 182 Base m/z: 95
02/22/89 15:27:00 + 6:04 Cali: CALTAB # 3 RIC: 116096
Sample: BFB TUNE
Conds.: 50NG INJECTED

000108

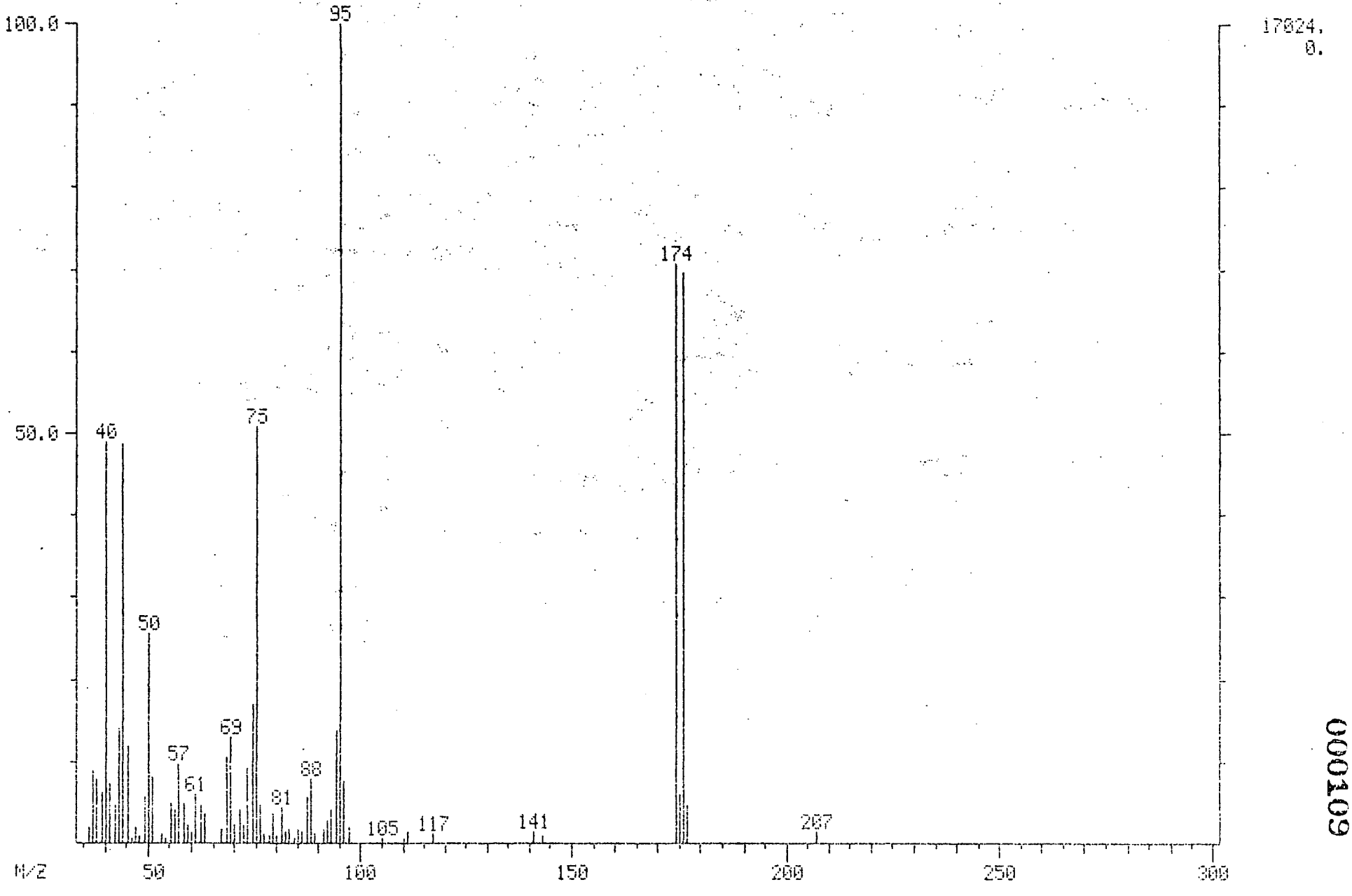
36 0.00 Minima Min Inten: 0.
207 Maxima # 0

Mass	% RA	Mass	% RA
36	1.80	92	2.65
37	8.78	93	4.14
38	7.78	94	13.63
39	6.14	95	100.00
40	48.87	96	7.44
41	7.37	97	1.79
42	4.44	105	0.50
43	13.96	110	0.44
44	48.78	111	1.24
45	11.94	117	1.00
46	0.56	141	1.33
47	1.93	143	0.88
48	0.81	174	70.68
49	5.69	175	5.80
50	25.52	176	69.74
51	8.04	177	4.55
53	1.00	207	1.35
54	0.59		
55	4.89		
56	4.06		
57	9.73		
58	4.74		
59	2.21		
60	1.46		
61	6.00		
62	4.69		
63	3.54		
67	1.64		
68	10.42		
69	12.88		
70	2.11		
71	4.12		
72	2.03		
73	9.06		
74	17.06		
75	50.85		
76	4.52		
77	1.02		
78	0.85		
79	3.39		
80	0.75		
81	4.28		
82	1.47		
83	1.72		
84	0.53		
85	1.59		
86	1.36		
87	5.53		
88	7.71		
89	1.17		
91	1.59		

MASS SPECTRUM
02/22/89 15:27:00 + 6:04
SAMPLE: BFB TUNE
CONDS.: 50NG INJECTED
TEMP: 225 DEG. C

DATA: BFB0222C #182
CALI: CALTAB #3

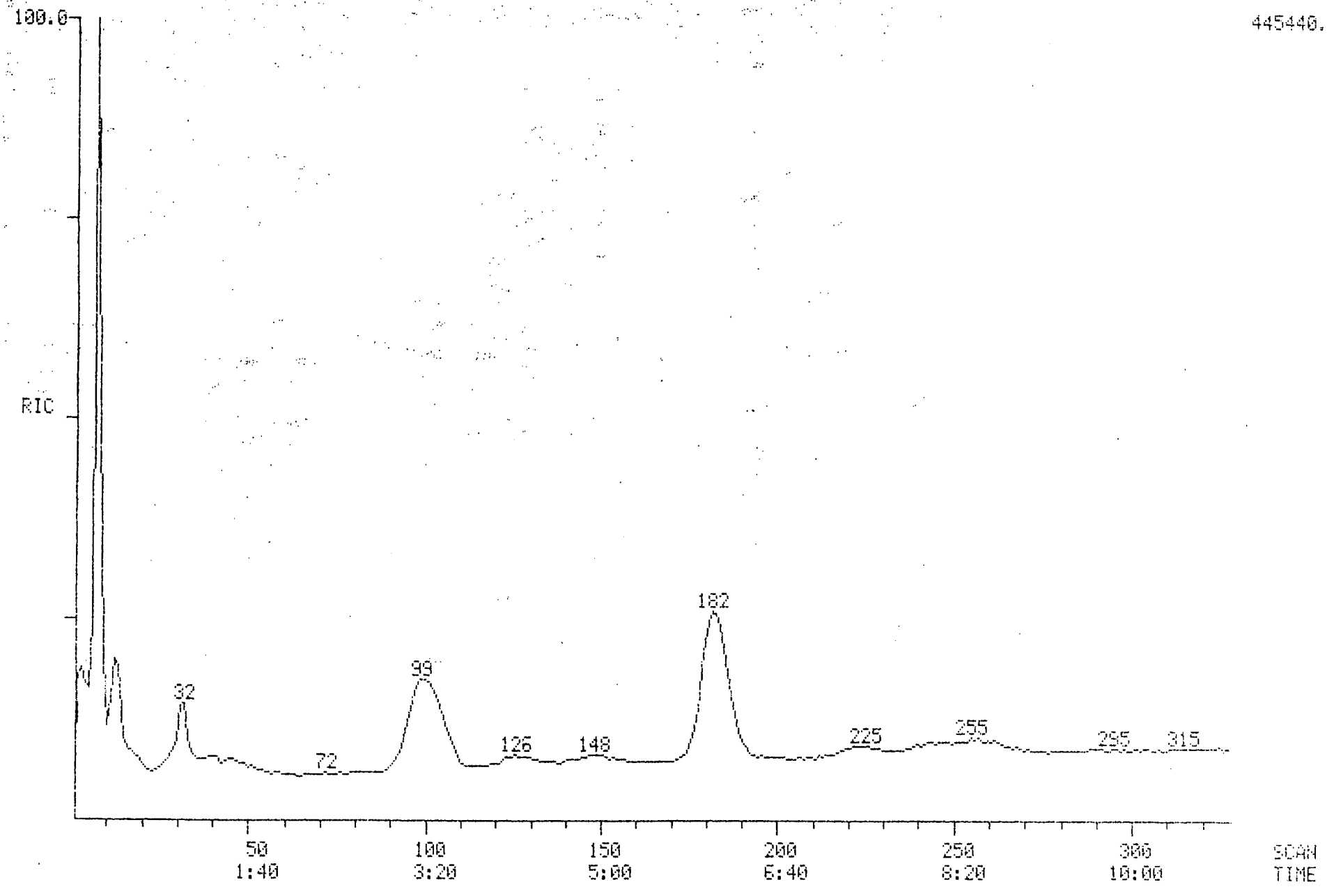
BASE M/Z: 95
RIC: 116096.



000109

RIC
02/22/89 15:27:00
SAMPLE: BFB TUNE
CONDS.: 50NG INJECTED
RANGE: G 1, 328 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BFB0222C #182 SCANS 1 TO 328
CALI: CALTAB #3



000110

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK0221C

Lab Name: Q C INC. Contract: GAN-FLEMING

Lab Code: NONE Case No.: GAN-FL SAS No.: NONE SDG No.: NONE

Matrix: (soil/water) WATER Lab Sample ID: BLK0221C

Sample wt/vol: _____ (g/mL) ML Lab File ID: BLK0221C

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 02/21/89

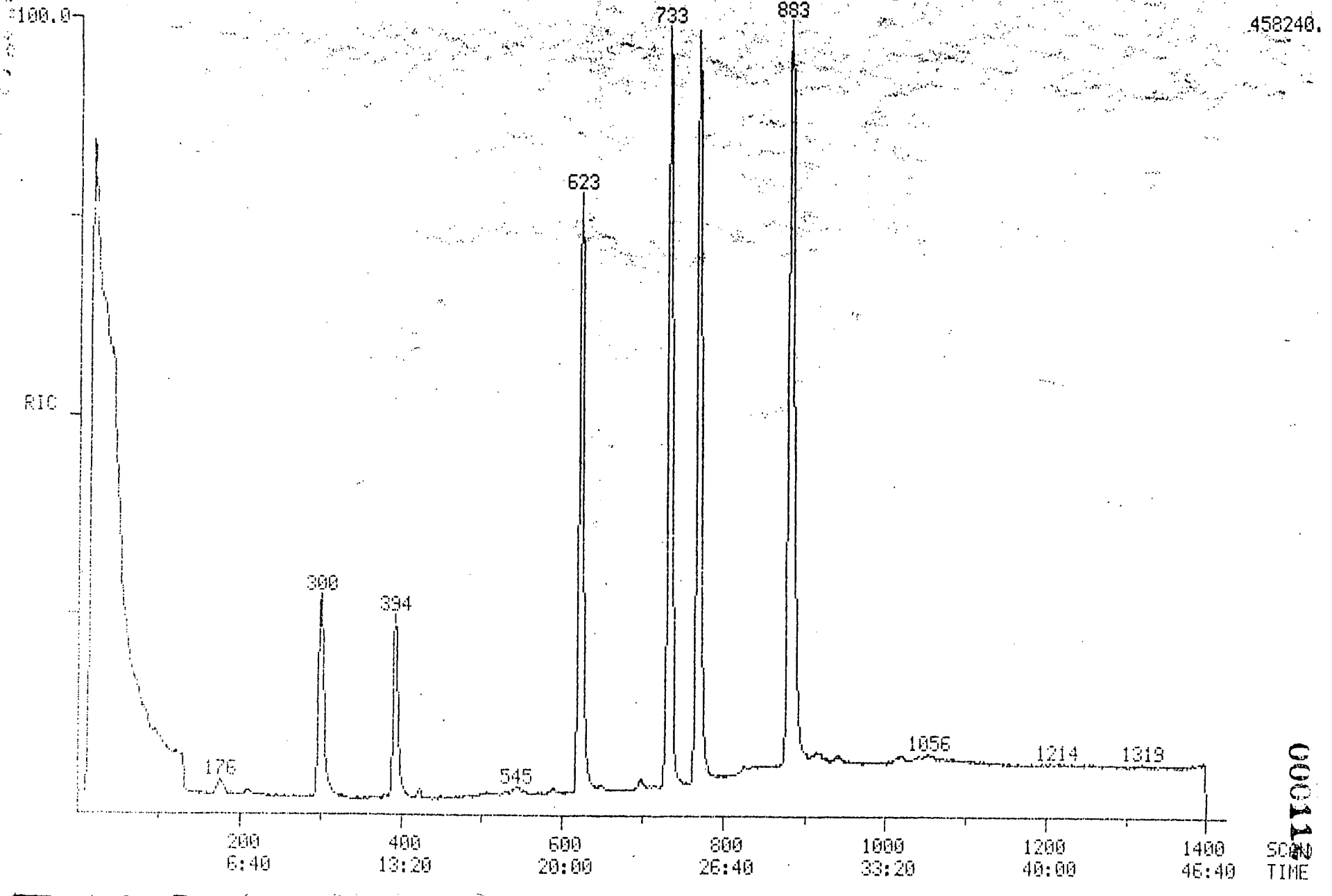
Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	4	J
67-64-1	Acetone	13	
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
	Total Xylenes	5	U

RIC
02/21/89 8:15:00
SAMPLE: WATER BLANK
CONDS.: 5ML PURGED
RANGE: G 1,1425 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BLK0221C #1
CALI: BLK0221C #3

SCANS 1 TO 1425

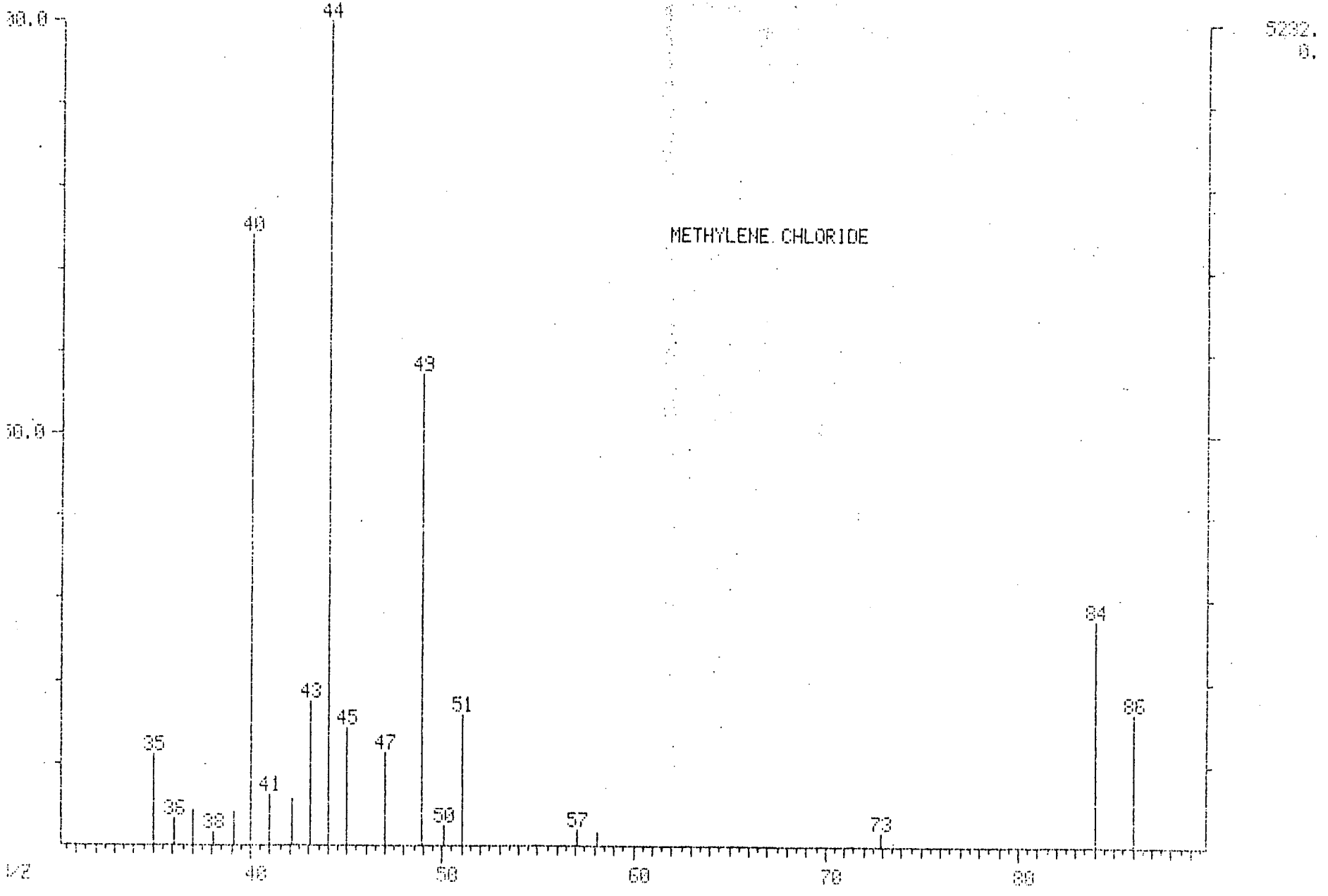


MASS SPECTRUM
02/21/89 8:15:00 + 5:52
SAMPLE: WATER BLANK
CONDS.: 5ML PURGED
TEMP: 51 DEG. C

DATA: BLK0221C #176
CALI: BLK0221C #3

BASE M/Z: 44
RIC: 19776.

METHYLENE CHLORIDE



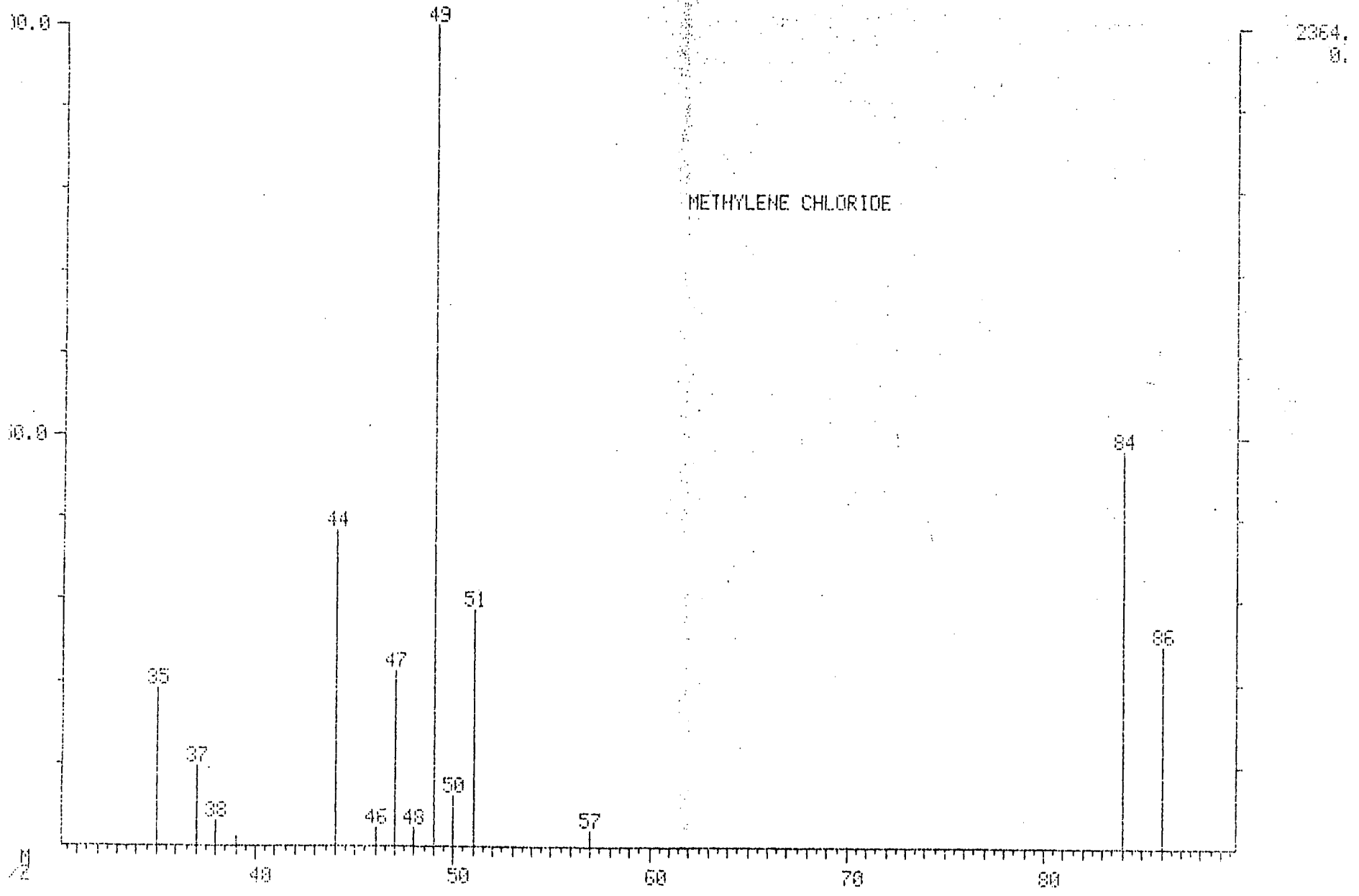
000113

MASS SPECTRUM
02/21/89 8:15:00 + 5:52
SAMPLE: WATER BLANK
CONDS.: 5ML PURGED
TEMP: 51 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: BLK0221C #176
CALI: BLK0221C #3

BASE M/Z: 49
RIC: 7248.

METHYLENE CHLORIDE

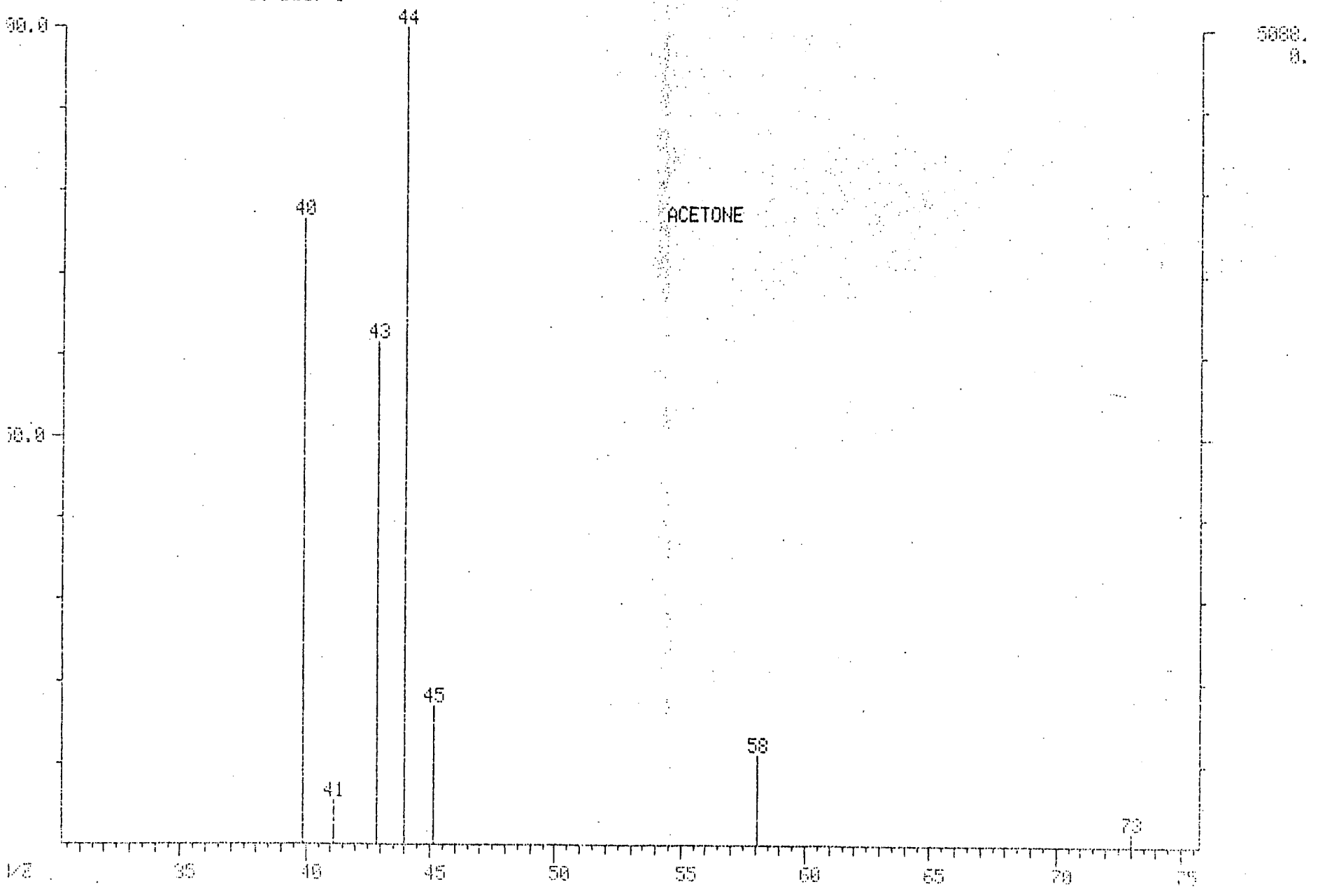


000114

MASS SPECTRUM
02/21/89 8:15:00 + 7:00
SAMPLE: WATER BLANK
CONDS.: 5ML PURGED
TEMP: 60 DEG. C

DATA: BLK0221C #210
CALI: BLK0221C #3

BASE M/Z: 44
RIC: 13904.

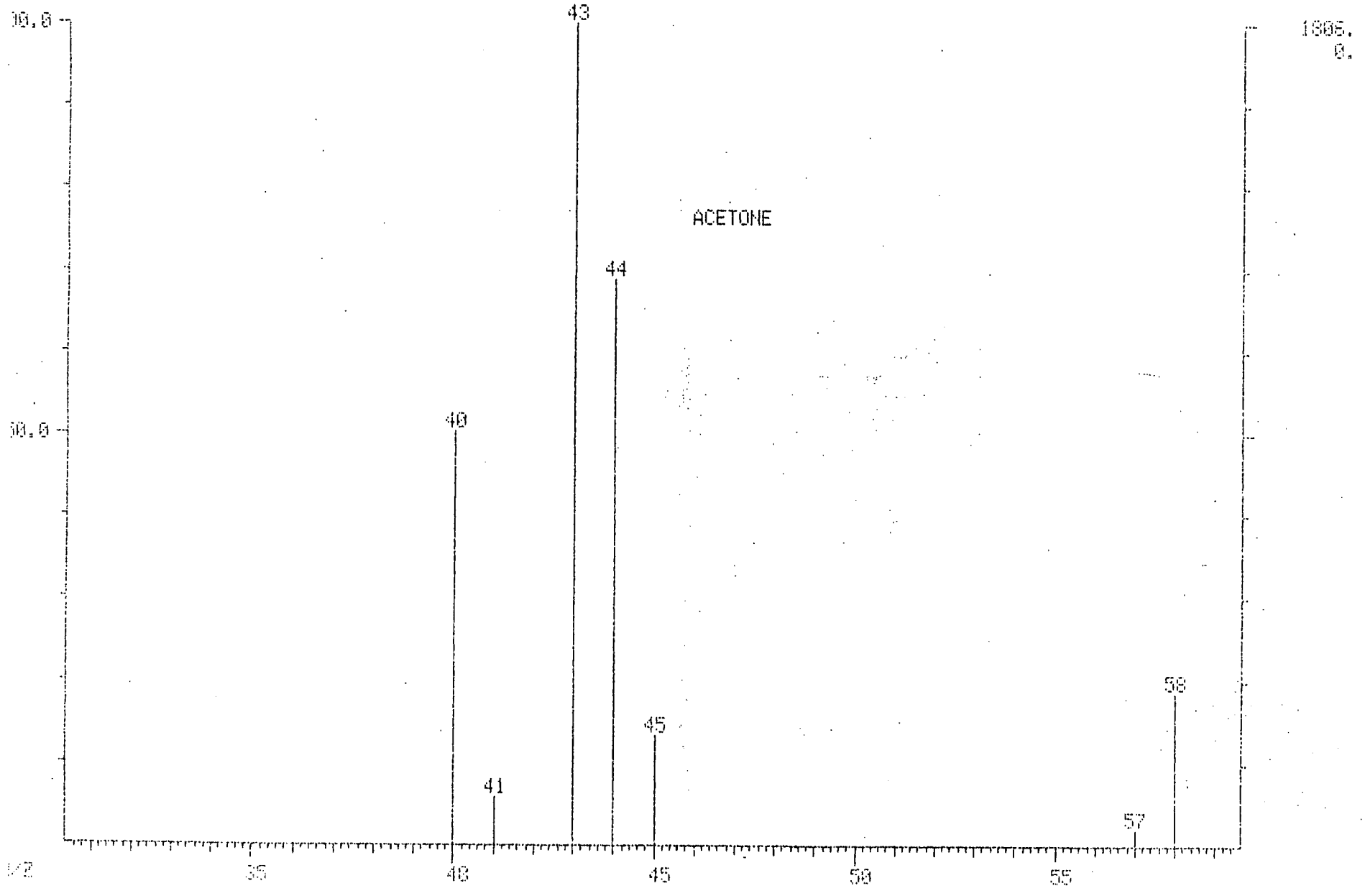


000115

MASS SPECTRUM
02/21/89 8:15:00 + 7:00
SAMPLE: WATER BLANK
CONDS.: 5ML PURGED
TEMP: 60 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: BLK0221C #210
CALI: BLK0221C #3

BASE M/Z: 43
RIC: 4672.



000116

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK0221C

Lab Name: Q C INC. Contract: GAN-FLEMING

Lab Code: NONE Case No.: GAN-FL SAS No.: NONE SDG No.: NONE

Matrix: (soil/water) WATER Lab Sample ID: BLK0221C

Sample wt/vol: _____ (g/mL) ML Lab File ID: BLK0221C

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 02/21/89

Column (pack/cap) PACK Dilution Factor: 1

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Quantitation Report File: BLK0221C

000118

Data: BLK0221C.TI
02/21/89 8:15:00
Sample: WATER BLANK
Conds.: 5ML PURGED
Formula: Instrument: FINN Weight: 0.000
Submitted by: QC INC Analyst: DMW Acct. No.: BLK0221C

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	C010	CHLOROMETHANE	
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8		ACROLEIN	
9	C035	ACETONE	
10		ACRYLONITRILE	
11	C040	CARBON DISULFIDE	
12	C045	1,1-DICHLOROETHENE	
13	C050	1,1-DICHLOROETHANE	
14	C053	1,2-DICHLOROETHENE (TOTAL)	
15	C060	CHLOROFORM	
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	CS15	D4-1,4-DICHLOROETHANE	*SURROGATE*
19	CI10	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
20	C110	2-BUTANONE (MEK)	
21	C115	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C172	TRANS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C155	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C143	CIS-1,3-DICHLOROPROPENE	
32	C175	2-CHLOROETHYLVINYLETHER	
33	C180	BROMOFORM	
34	CI20	D5-CHLOROBENZENE	*INTERNAL STANDARD*
35	C205	4-METHYL-2-PENTANONE (MIBK)	
36	C210	2-HEXANONE	
37	C220	TETRACHLOROETHENE	
38	C225	1,1,2,2-TETRACHLOROETHANE	
39	C230	TOLUENE	
40	C235	CHLOROBENZENE	
41	C240	ETHYL BENZENE	
42	C245	STYRENE	
43	C250	TOTAL XYLENES (CALCULATED OFF M-XYLENE)	
44	C350	1,2-DICHLOROBENZENE	
45	C335	1,3-DICHLOROBENZENE	
46	C340	1,4-DICHLOROBENZENE	
47	CS05	D8-TOLUENE	*SURROGATE*

No	Name
48	CS10 BROMOFLUOROBENZENE *SURROGATE*

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	300	10:00	1	1.000	A BB	92997.	50.000 UG/L	15.22
2	50	43	1:26	1	0.143	A BB	195.	0.044 UG/L	0.01
3	NOT FOUND								
4	85	76	2:32	1	0.253	A BB	3544.	1.178 UG/L	0.36
5	NOT FOUND								
6	NOT FOUND								
7	84	176	5:52	1	0.587	A BB	12916.	3.761 UG/L	1.15
8	NOT FOUND								
9	43	210	7:00	1	0.700	A BB	17950.	13.267 UG/L	4.04
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	83	371	12:22	1	1.237	A BB	687.	0.101 UG/L	0.03
16	NOT FOUND								
17	NOT FOUND								
18	65	394	13:08	1	1.313	A BB	250699.	50.789 UG/L	15.46
19	114	623	20:46	19	1.000	A BB	766890.	50.000 UG/L	15.22
20	72	402	13:24	19	0.645	A BB	345.	1.045 UG/L	0.32
21	97	434	14:28	19	0.697	A BB	274.	0.036 UG/L	0.01
22	NOT FOUND								
23	43	455	15:10	19	0.730	A VB	5953.	0.529 UG/L	0.16
24	83	467	15:34	19	0.750	A BB	290.	0.035 UG/L	0.01
25	63	506	16:52	19	0.812	A BB	346.	0.070 UG/L	0.02
26	75	516	17:12	19	0.828	A BB	1359.	0.148 UG/L	0.05
27	130	532	17:44	19	0.854	A BB	1452.	0.259 UG/L	0.08
28	129	550	18:20	19	0.883	A*BB	968.	0.135 UG/L	0.04
29	97	554	18:28	19	0.889	A BB	1399.	0.361 UG/L	0.11
30	78	547	18:14	19	0.878	A BB	10088.	0.809 UG/L	0.25
31	75	557	18:34	19	0.894	A BB	682.	0.147 UG/L	0.04
32	NOT FOUND								
33	173	629	20:58	19	1.010	A BB	769.	0.137 UG/L	0.04
34	117	769	25:38	34	1.000	A BB	759388.	50.000 UG/L	15.22
35	43	648	21:36	34	0.843	A VB	10624.	1.290 UG/L	0.39
36	43	698	23:16	34	0.908	A BB	22619.	4.907 UG/L	1.49
37	164	699	23:18	34	0.909	A BB	1342.	0.204 UG/L	0.06
38	83	698	23:16	34	0.908	A BB	2947.	0.354 UG/L	0.11
39	92	738	24:36	34	0.960	A BB	4067.	0.361 UG/L	0.11
40	112	772	25:44	34	1.004	A BB	5823.	0.386 UG/L	0.12
41	106	826	27:32	34	1.074	A BB	2070.	0.296 UG/L	0.09
42	104	917	30:34	34	1.192	A BB	8560.	0.414 UG/L	0.13
43	NOT FOUND								
44	146	1045	34:50	34	1.359	A VV	871.	0.094 UG/L	0.03
45	146	1021	34:02	34	1.328	A BB	4032.	0.409 UG/L	0.12
46	146	1054	35:08	34	1.371	A VB	7821.	0.501 UG/L	0.15
47	98	733	24:26	34	0.953	A BB	862284.	49.541 UG/L	15.08
48	95	883	29:26	34	1.148	A BB	711009.	46.864 UG/L	14.27

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:56	1.01	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:20	1.07	0.134	1.07	0.04	100.00	0.001	2.386	0.00
3	2:04		0.208						
4	2:28	1.03	0.248	1.02	1.18	100.00	0.019	1.617	0.01
5	2:34		0.258						
6	3:26		0.346						
7	5:48	1.01	0.584	1.00	3.76	100.00	0.069	1.846	0.04
8	7:00		0.705						
9	6:54	1.01	0.695	1.01	13.27	100.00	0.097	0.727	0.13
10	7:48		0.785						
11	7:50		0.789						
12	9:24		0.946						
13	10:52		1.094						
14	11:44		1.181						
15	12:20	1.00	1.242	1.00	0.10	100.00	0.004	3.661	0.00
16	8:30		0.856						
17	13:12		1.329						
18	13:04	1.01	1.315	1.00	50.79	50.00	2.696	2.654	1.02
19	20:46	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
20	13:20	1.00	0.642	1.00	1.05	100.00	0.000	0.022	0.01
21	14:24	1.00	0.693	1.00	0.04	100.00	0.000	0.501	0.00
22	14:46		0.711						
23	15:10	1.00	0.730	1.00	0.53	100.00	0.004	0.734	0.01
24	15:24	1.01	0.742	1.01	0.03	100.00	0.000	0.548	0.00
25	16:46	1.01	0.807	1.01	0.07	100.00	0.000	0.323	0.00
26	17:06	1.01	0.823	1.01	0.15	100.00	0.001	0.597	0.00
27	17:38	1.01	0.849	1.01	0.26	100.00	0.001	0.365	0.00
28	18:12	1.01	0.876	1.01	0.14	100.00	0.001	0.466	0.00
29	18:20	1.01	0.883	1.01	0.36	100.00	0.001	0.253	0.00
30	18:08	1.01	0.873	1.01	0.81	100.00	0.007	0.813	0.01
31	18:24	1.01	0.886	1.01	0.15	100.00	0.000	0.303	0.00
32	19:30		0.939						
33	20:56	1.00	1.008	1.00	0.14	100.00	0.001	0.367	0.00
34	25:36	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
35	21:32	1.00	0.841	1.00	1.29	100.00	0.007	0.542	0.01
36	23:08	1.01	0.904	1.00	4.91	100.00	0.015	0.304	0.05
37	23:16	1.00	0.909	1.00	0.20	100.00	0.001	0.433	0.00
38	23:12	1.00	0.906	1.00	0.35	100.00	0.002	0.548	0.00
39	24:36	1.00	0.961	1.00	0.36	100.00	0.003	0.741	0.00
40	25:42	1.00	1.004	1.00	0.39	100.00	0.004	0.993	0.00
41	27:30	1.00	1.074	1.00	0.30	100.00	0.001	0.460	0.00
42	30:30	1.00	1.191	1.00	0.41	100.00	0.006	1.362	0.00
43	31:22		1.225						
44	34:36	1.01	1.352	1.01	0.09	100.00	0.001	0.612	0.00
45	33:56	1.00	1.326	1.00	0.41	100.00	0.003	0.649	0.00
46	35:04	1.00	1.370	1.00	0.50	100.00	0.005	1.028	0.01
47	24:24	1.00	0.953	1.00	49.54	50.00	1.135	1.146	0.99
48	29:24	1.00	1.148	1.00	46.86	50.00	0.936	0.999	0.94

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK0222C

Lab Name: Q C INC. Contract: GAN-FLEMING

Lab Code: NONE Case No.: GAN-FL SAS No.: NONE SDG No.: NONE

Matrix: (soil/water) WATER Lab Sample ID: BLK0222C

Sample wt/vol: _____ (g/mL) ML Lab File ID: BLK0222C

Level: (low/med) LOW Date Received: _____

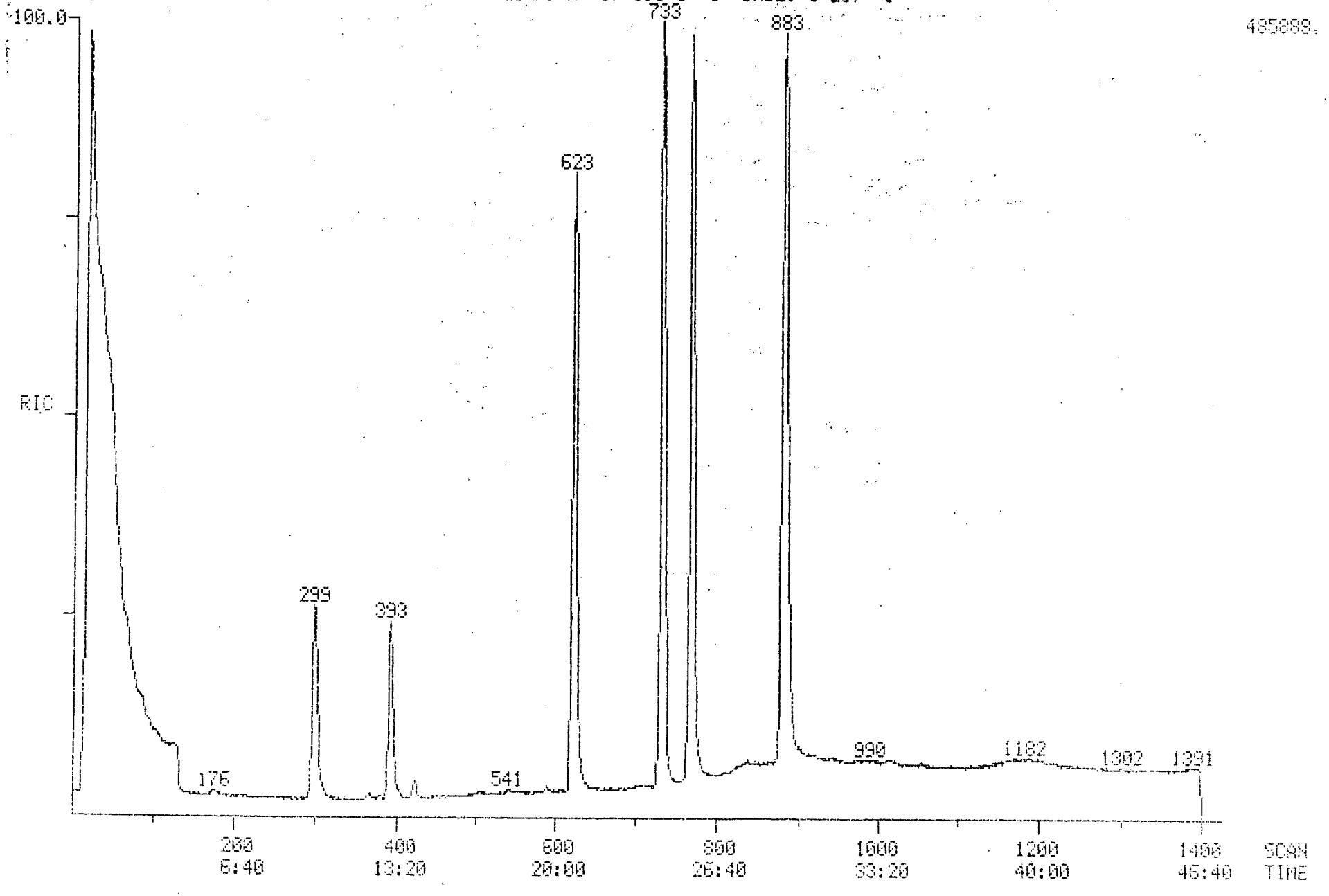
% Moisture: not dec. _____ Date Analyzed: 02/22/89

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
----------	Total Xylenes	5	U

RIC
02/22/89 15:41:00
SAMPLE: WATER BLANK
CONDS.: 5MLS PURGED
RANGE: G 1,1425 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BLK0222C #1 SCANS 1 TO 1425
CALI: BLK0222C #3



000122

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
VBLK0222C

Lab Name: Q C INC. Contract: GAN-FLEMING

Lab Code: NONE Case No.: GAN-FL SAS No.: NONE SDG No.: NONE

Matrix: (soil/water) WATER Lab Sample ID: BLK0222C

Sample wt/vol: _____ (g/mL) ML Lab File ID: BLK0222C

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 02/22/89

Column (pack/cap) PACK Dilution Factor: 1

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Quantitation Report `File: 789607AB

Data: 789607AB.TI
03/25/89 21:35:00
Sample: FIELD BLANK
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789607AB

000247

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI60 PHENANTHRENE D10	INTERNAL STANDARD
2	C610 4,6-DINITRO-2-METHYL PHENOL	
3	C615 N-NITROSODIPHENYLAMINE	
4	AZOBENZENE	
5	C625 4-BROMOPHENYL PHENYL ETHER	
6	C630 HEXACHLOROBENZENE	
7	C635 PENTACHLOROPHENOL	
8	C640 PHENANTHRENE	
9	C645 ANTHRACENE	
10	C650 DI-N-BUTYL PHTHALATE	
11	C655 FLUORANTHENE	

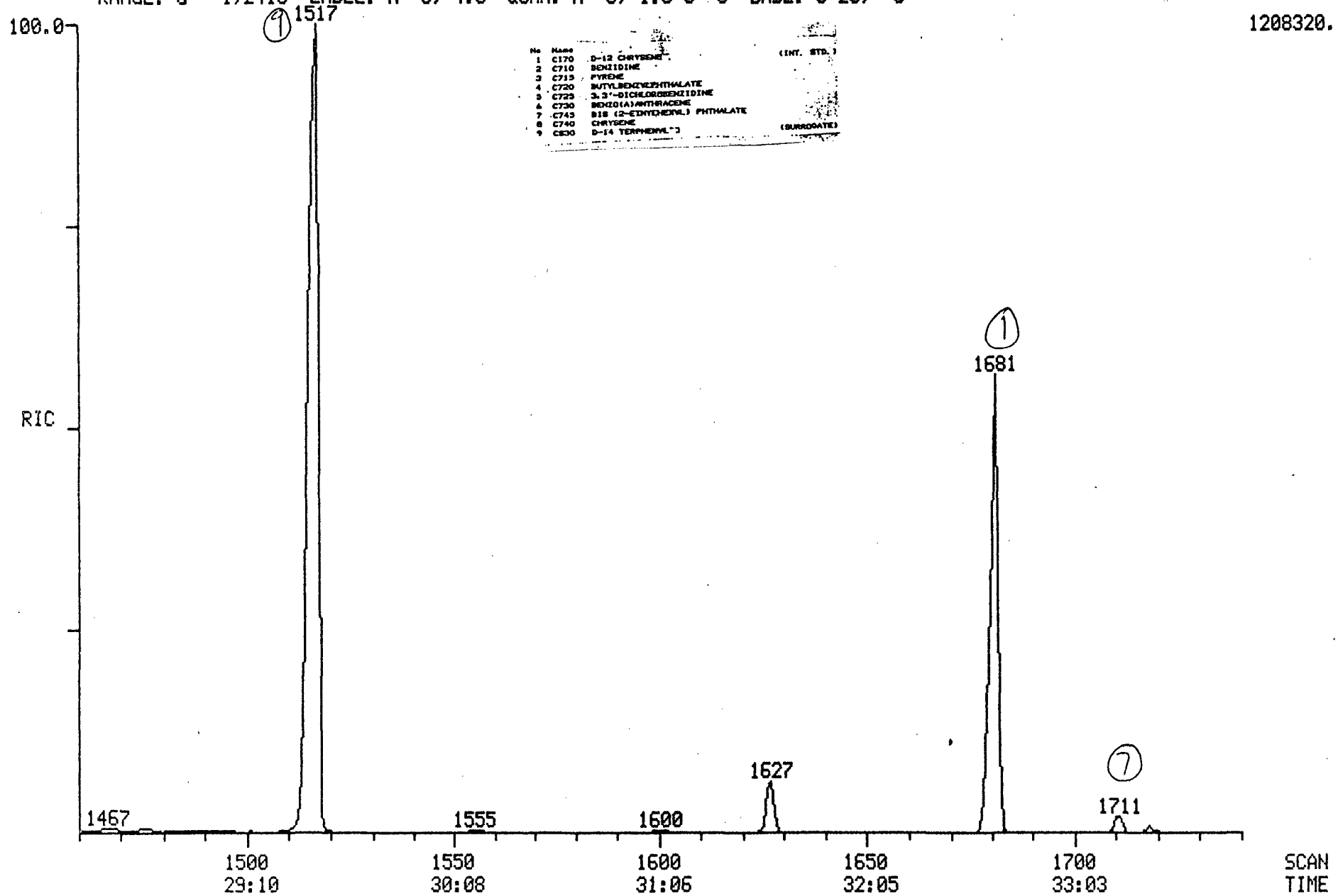
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	188	1246	24:13	1	1.000	A BV	551594.	40.000 UG/ML	98.34
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	178	1248	24:16	1	1.002	A BB	~~1131.~~	~~0.088 UG/ML~~	~~0.22~~ NO WSS
9	178	1255	24:24	1	1.007	A BB	~~272.~~	~~0.024 UG/ML~~	~~0.06~~ NO WSS
10	149	1365	26:32	1	1.096	A BB	~~6521.~~	~~0.531 UG/ML~~	~~1.30~~ NO WSS
11	202	1443	28:03	1	1.158	A BB	~~417.~~	~~0.035 UG/ML~~	~~0.09~~ NO WSS

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	24:13	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	21:45		0.898						
3	21:51		0.902						
4	21:53		0.904						
5	22:54		0.945						
6	23:16		0.961						
7	23:57		0.989						
8	24:18	1.00	1.003	1.00	0.09	50.00	0.002	0.937	0.00
9	24:26	1.00	1.009	1.00	0.02	50.00	0.000	0.808	0.00
10	26:32	1.00	1.096	1.00	0.53	50.00	0.009	0.891	0.01
11	28:03	1.00	1.158	1.00	0.04	50.00	0.001	0.853	0.00

RIC
03/25/89 21:35:00
SAMPLE: FIELD BLANK
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789607AB #1
CALI: 789607AB #3

SCANS 1460 TO 1740



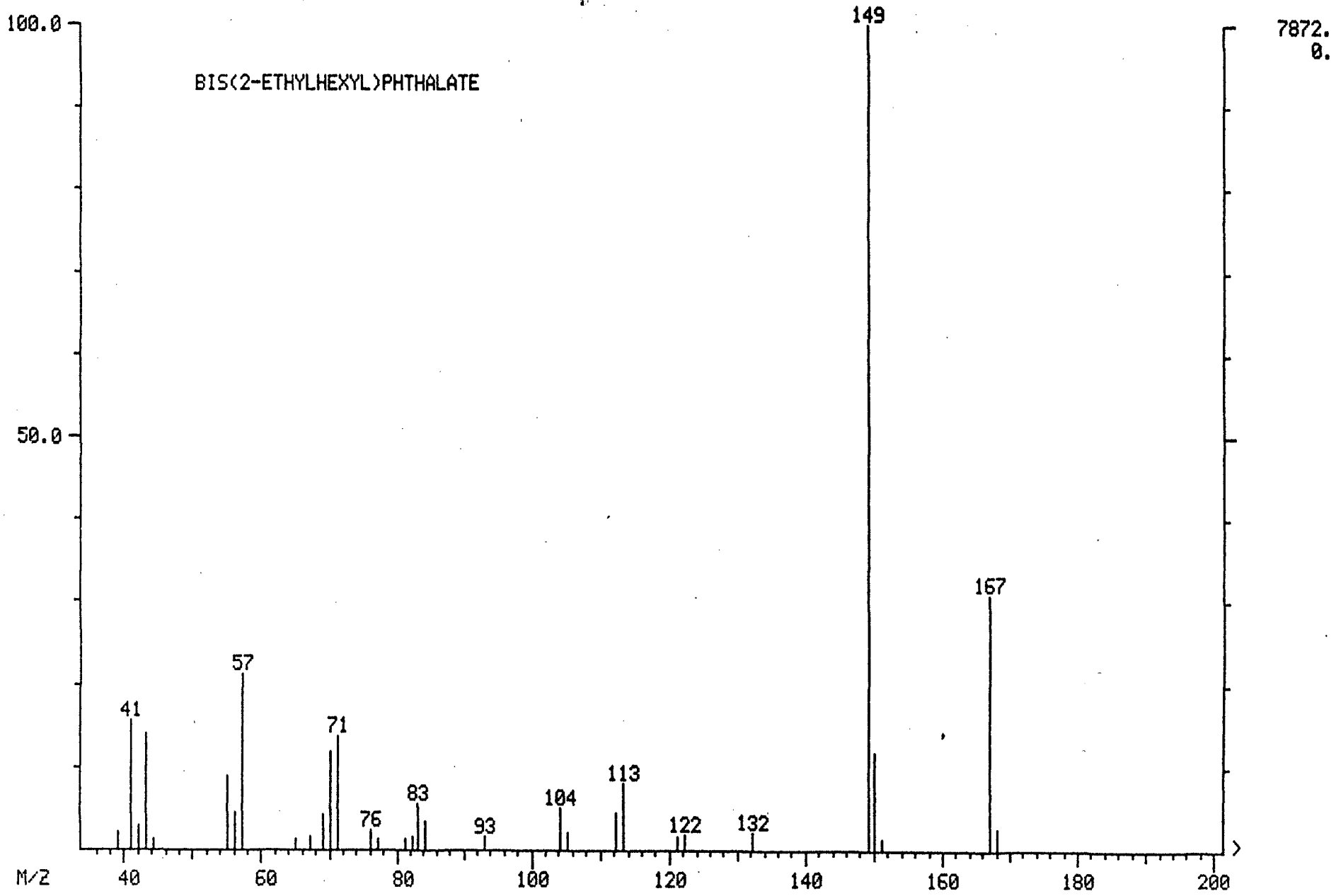
No	Name	
1	C170 D-12 CHRYSENE	(INT. STD.)
2	C710 BENZIDINE	
3	C715 PYRENE	
4	C720 BUTYLBENZYLPHTHALATE	
5	C725 3,3'-DICHLOROBENZIDINE	
6	C730 BENZO(A)ANTHRACENE	
7	C745 BIS (2-ETHYLHEXYL) PHTHALATE	
8	C740 CHRYSENE	(SURROGATE)
9	C830 D-14 TERPHENYL"2	

000248

MASS SPECTRUM
03/25/89 21:35:00 + 33:15
SAMPLE: FIELD BLANK
CONDS.: 1000 MLS/1.0 ML
TEMP: 275 DEG. C

DATA: 789607AB #1710
CALI: 789607AB #3

BASE M/Z: 149
RIC: 23456.

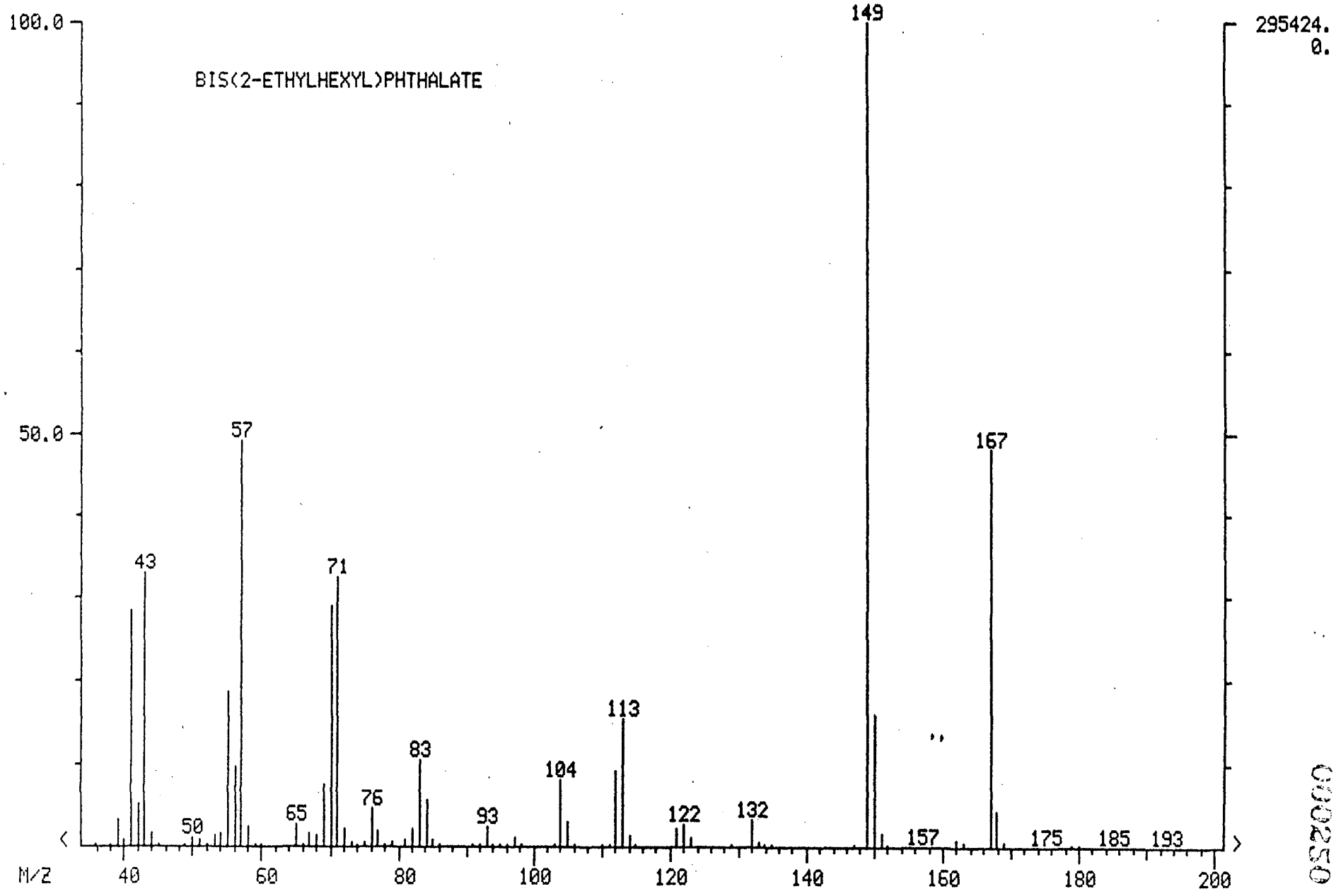


000249

MASS SPECTRUM
03/25/89 12:28:00 + 33:15
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 50 NG INJECTION
TEMP: 275 DEG. C

DATA: HSD500325 #1710
CALI: HSD500325 #3

BASE M/Z: 149
RIC: 1486850.



000250

Quantitation Report File: BLK0222C

000124

Data: BLK0222C.TI
02/22/89 15:41:00
Sample: WATER BLANK
Conds.: 5MLS PURGED
Formula: Instrument: FINN Weight: 0.000
Submitted by: QC Analyst: HFW Acct. No.: BLK0221C

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	C010	CHLOROMETHANE	
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8		ACROLEIN	
9	C035	ACETONE	
10		ACRYLONITRILE	
11	C040	CARBON DISULFIDE	
12	C045	1,1-DICHLOROETHENE	
13	C050	1,1-DICHLOROETHANE	
14	C053	1,2-DICHLOROETHENE (TOTAL)	
15	C060	CHLOROFORM	
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	CS15	D4-1,4-DICHLOROETHANE	*SURROGATE*
19	CI10	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
20	C110	2-BUTANONE (MEK)	
21	C115	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C172	TRANS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C155	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C143	CIS-1,3-DICHLOROPROPENE	
32	C175	2-CHLOROETHYLVINYLETHER	
33	C180	BROMOFORM	
34	CI20	D5-CHLOROBENZENE	*INTERNAL STANDARD*
35	C205	4-METHYL-2-PENTANONE (MIBK)	
36	C210	2-HEXANONE	
37	C220	TETRACHLOROETHENE	
38	C225	1,1,2,2-TETRACHLOROETHANE	
39	C230	TOLUENE	
40	C235	CHLOROBENZENE	
41	C240	ETHYL BENZENE	
42	C245	STYRENE	
43	C250	TOTAL XYLENES (CALCULATED OFF M-XYLENE)	
44	C350	1,2-DICHLOROBENZENE	
45	C335	1,3-DICHLOROBENZENE	
46	C340	1,4-DICHLOROBENZENE	
47	CS05	D8-TOLUENE	*SURROGATE*

No	Name
48	CS10 BROMOFLUOROBENZENE *SURROGATE*

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	299	9:58	1	1.000	A BB	95217.	50.000 UG/L	16.52
2	50	41	1:22	1	0.137	A BB	1496.	0.393 UG/L	0.13
3	NOT FOUND								
4	85	77	2:34	1	0.258	A BB	6248.	2.279 UG/L	0.75
5	NOT FOUND								
6	NOT FOUND								
7	84	177	5:54	1	0.592	A BB	4990.	1.650 UG/L	0.55
8	NOT FOUND								
9	43	225	7:30	1	0.753	A VB	4705.	3.778 UG/L	1.25
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	65	393	13:06	1	1.314	A BB	253914.	46.206 UG/L	15.27
19	114	623	20:46	19	1.000	A BB	862252.	50.000 UG/L	16.52
20	NOT FOUND								
21	97	434	14:28	19	0.697	A BB	962.	0.123 UG/L	0.04
22	NOT FOUND								
23	43	462	15:24	19	0.742	A*BV	4216.	0.277 UG/L	0.09
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	130	531	17:42	19	0.852	A BB	344.	0.055 UG/L	0.02
28	NOT FOUND								
29	NOT FOUND								
30	78	547	18:14	19	0.878	A BB	2255.	0.160 UG/L	0.05
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	117	768	25:36	34	1.000	A BB	834353.	50.000 UG/L	16.52
35	43	641	21:22	34	0.835	A*BV	6004.	0.595 UG/L	0.20
36	43	703	23:26	34	0.915	A*BB	8481.	1.463 UG/L	0.48
37	NOT FOUND								
38	NOT FOUND								
39	92	739	24:38	34	0.962	A BB	3060.	0.255 UG/L	0.08
40	112	772	25:44	34	1.005	A BB	421.	0.026 UG/L	0.01
41	NOT FOUND								
42	104	915	30:30	34	1.191	A BB	670.	0.031 UG/L	0.01
43	106	943	31:26	34	1.228	A BB	635.	0.047 UG/L	0.02
44	NOT FOUND								
45	NOT FOUND								
46	146	1051	35:02	34	1.368	A BB	174.	0.011 UG/L	0.00
47	98	733	24:26	34	0.954	A BB	942826.	46.447 UG/L	16.01
48	95	883	29:26	34	1.150	A BB	757242.	46.798 UG/L	15.47

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:56	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:20	1.02	0.134	1.02	0.39	100.00	0.008	1.998	0.00
3	2:04		0.208						
4	2:28	1.04	0.248	1.04	2.28	100.00	0.033	1.440	0.02
5	2:34		0.258						
6	3:24		0.342						
7	5:48	1.02	0.584	1.01	1.65	100.00	0.026	1.588	0.02
8	7:02		0.708						
9	6:58	1.08	0.701	1.07	3.78	100.00	0.025	0.654	0.04
10	7:52		0.792						
11	7:52		0.792						
12	9:26		0.950						
13	10:52		1.094						
14	11:46		1.185						
15	12:20		1.242						
16	8:32		0.859						
17	13:12		1.329						
18	13:04	1.00	1.315	1.00	46.21	50.00	2.667	2.886	0.92
19	20:46	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
20	13:20		0.642						
21	14:26	1.00	0.695	1.00	0.12	100.00	0.001	0.453	0.00
22	14:48		0.713						
23	15:10	1.02	0.730	1.02	0.28	100.00	0.002	0.882	0.00
24	15:24		0.742						
25	16:48		0.809						
26	17:06		0.823						
27	17:38	1.00	0.849	1.00	0.06	100.00	0.000	0.361	0.00
28	18:14		0.878						
29	18:22		0.884						
30	18:10	1.00	0.875	1.00	0.16	100.00	0.001	0.818	0.00
31	18:24		0.886						
32	19:32		0.941						
33	20:56		1.008						
34	25:36	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
35	21:34	0.99	0.842	0.99	0.59	100.00	0.004	0.605	0.01
36	23:10	1.01	0.905	1.01	1.46	100.00	0.005	0.347	0.01
37	23:16		0.909						
38	23:14		0.908						
39	24:36	1.00	0.961	1.00	0.25	100.00	0.002	0.720	0.00
40	25:44	1.00	1.005	1.00	0.03	100.00	0.000	0.978	0.00
41	27:32		1.076						
42	30:32	1.00	1.193	1.00	0.03	100.00	0.000	1.280	0.00
43	31:24	1.00	1.227	1.00	0.05	100.00	0.000	0.806	0.00
44	34:42		1.355						
45	33:58		1.327						
46	35:06	1.00	1.371	1.00	0.01	100.00	0.000	0.949	0.00
47	24:26	1.00	0.954	1.00	48.45	50.00	1.130	1.166	0.97
48	29:28	1.00	1.151	1.00	46.80	50.00	0.908	0.970	0.94

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C-14AMS

Lab Name: Q C INC. Contract: GAN-FLEMING

Lab Code: NONE Case No.: GAN-FL SAS No.: NONE SDG No.: NONE

Matrix: (soil/water) WATER Lab Sample ID: 789651MS

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 789651VS

Level: (low/med) LOW Date Received: 02/16/89

% Moisture: not dec. ____ Date Analyzed: 02/22/89

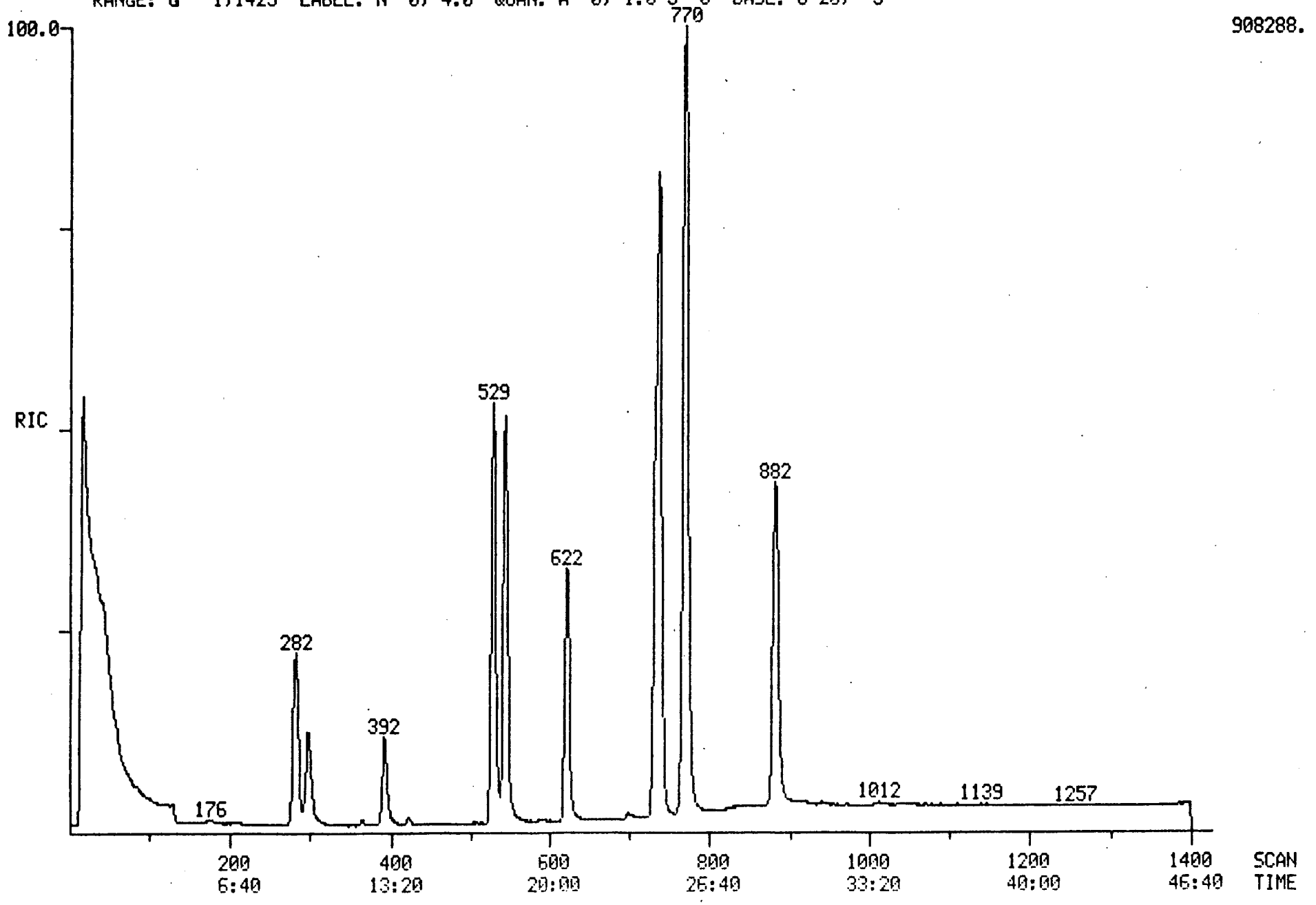
Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
----------	Total Xylenes	5	U

RIC
02/22/89 20:01:00
SAMPLE: MATRIX SPIKE
CONDS.: 5MLS + 100NG STD
RANGE: G 1,1425 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789651VS #1
CALI: 789651VS #3

SCANS 1 TO 1425



000128

Quantitation Report File: 789651VS

Data: 789651VS.TI
02/22/89 20:01:00
Sample: MATRIX SPIKE
Conds.: 5MLS + 100NG STD
Formula: Instrument: FINN Weight: 0.000
Submitted by: GANNET Analyst: DMW Acct. No.: 789651

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	C010	CHLOROMETHANE	
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8		ACROLEIN	
9	C035	ACETONE	
10		ACRYLONITRILE	
11	C040	CARBON DISULFIDE	
12	C045	1,1-DICHLOROETHENE	
13	C050	1,1-DICHLOROETHANE	
14	C053	1,2-DICHLOROETHENE (TOTAL)	
15	C060	CHLOROFORM	
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	CS15	D4-1,4-DICHLOROETHANE	*SURROGATE*
19	CI10	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
20	C110	2-BUTANONE (MEK)	
21	C115	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C172	TRANS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C155	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C143	CIS-1,3-DICHLOROPROPENE	
32	C175	2-CHLOROETHYLVINYLETHER	
33	C180	BROMOFORM	
34	CI20	D5-CHLOROBENZENE	*INTERNAL STANDARD*
35	C205	4-METHYL-2-PENTANONE (MIBK)	
36	C210	2-HEXANONE	
37	C220	TETRACHLOROETHENE	
38	C225	1,1,2,2-TETRACHLOROETHANE	
39	C230	TOLUENE	
40	C235	CHLOROBENZENE	
41	C240	ETHYL BENZENE	
42	C245	STYRENE	
43	C250	TOTAL XYLENES (CALCULATED OFF M-XYLENE)	
44	C350	1,2-DICHLOROBENZENE	
45	C335	1,3-DICHLOROBENZENE	
46	C340	1,4-DICHLOROBENZENE	
47	CS05	D8-TOLUENE	*SURROGATE*

No	Name
48	CS10 BROMOFLUOROBENZENE *SURROGATE*

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	297	9:54	1	1.000	A BB	83895.	50.000 UG/L	6.07
2	50	42	1:24	1	0.141	A BB	157.	0.047 UG/L	0.01
3	NOT FOUND								
4	85	75	2:30	1	0.253	A BB	16302.	6.749 UG/L	0.82
5	NOT FOUND								
6	NOT FOUND								
7	84	175	5:50	1	0.589	A BB	6250.	2.346 UG/L	0.28
8	NOT FOUND								
9	43	223	7:26	1	0.751	A VB	5720.	5.212 UG/L	0.63
10	NOT FOUND								
11	NOT FOUND								
12	96	282	9:24	1	0.949	A BB	214882.	103.913 UG/L	12.62
13	NOT FOUND								
14	NOT FOUND								
15	83	371	12:22	1	1.249	A BB	983.	0.169 UG/L	0.02
16	NOT FOUND								
17	NOT FOUND								
18	65	392	13:04	1	1.320	A BB	234947.	48.524 UG/L	5.89
19	114	622	20:44	19	1.000	A BB	628712.	50.000 UG/L	6.07
20	NOT FOUND								
21	97	432	14:24	19	0.695	A BB	248.	0.043 UG/L	0.01
22	NOT FOUND								
23	43	450	15:00	19	0.723	A*BB	5352.	0.483 UG/L	0.06
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	130	529	17:38	19	0.850	A BB	449901.	99.227 UG/L	12.05
28	NOT FOUND								
29	NOT FOUND								
30	78	544	18:08	19	0.875	A BB	1063250.	103.358 UG/L	12.56
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	117	767	25:34	34	1.000	A BB	635004.	50.000 UG/L	6.07
35	43	649	21:38	34	0.846	A*BB	5695.	0.741 UG/L	0.09
36	43	702	23:24	34	0.915	A VB	9028.	2.046 UG/L	0.25
37	164	698	23:16	34	0.910	A BB	1391.	0.277 UG/L	0.03
38	83	698	23:16	34	0.910	A BB	576.	0.079 UG/L	0.01
39	92	737	24:34	34	0.961	A BB	920648.	100.680 UG/L	12.23
40	112	771	25:42	34	1.005	A BB	1240520.	99.843 UG/L	12.13
41	106	825	27:30	34	1.076	A BB	730.	0.129 UG/L	0.02
42	104	916	30:32	34	1.194	A BB	2773.	0.171 UG/L	0.02
43	NOT FOUND								
44	146	1038	34:36	34	1.353	A*BV	1779.	0.245 UG/L	0.03
45	146	1019	33:58	34	1.329	A BB	2236.	0.314 UG/L	0.04
46	146	1055	35:10	34	1.375	A*VB	2848.	0.236 UG/L	0.03
47	98	732	24:24	34	0.954	A BB	720402.	48.639 UG/L	5.91
48	95	882	29:24	34	1.150	A BB	613072.	49.783 UG/L	6.05

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:56	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:20	1.05	0.134	1.05	0.05	100.00	0.001	1.998	0.00
3	2:04		0.208						
4	2:28	1.01	0.248	1.02	6.75	100.00	0.097	1.440	0.07
5	2:34		0.258						
6	3:24		0.342						
7	5:48	1.01	0.584	1.01	2.35	100.00	0.037	1.588	0.02
8	7:02		0.708						
9	6:58	1.07	0.701	1.07	5.21	100.00	0.034	0.654	0.05
10	7:52		0.792						
11	7:52		0.792						
12	9:26	1.00	0.950	1.00	103.91	100.00	1.281	1.232	1.04
13	10:52		1.094						
14	11:46		1.185						
15	12:20	1.00	1.242	1.01	0.17	100.00	0.006	3.460	0.00
16	8:32		0.859						
17	13:12		1.329						
18	13:04	1.00	1.315	1.00	48.52	50.00	2.800	2.886	0.97
19	20:46	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
20	13:20		0.642						
21	14:26	1.00	0.695	1.00	0.04	100.00	0.000	0.453	0.00
22	14:48		0.713						
23	15:10	0.99	0.730	0.99	0.48	100.00	0.004	0.882	0.00
24	15:24		0.742						
25	16:48		0.809						
26	17:06		0.823						
27	17:38	1.00	0.849	1.00	99.23	100.00	0.358	0.361	0.99
28	18:14		0.878						
29	18:22		0.884						
30	18:10	1.00	0.875	1.00	103.36	100.00	0.846	0.818	1.03
31	18:24		0.886						
32	19:32		0.941						
33	20:56		1.008						
34	25:36	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
35	21:34	1.00	0.842	1.00	0.74	100.00	0.004	0.605	0.01
36	23:10	1.01	0.905	1.01	2.05	100.00	0.007	0.347	0.02
37	23:16	1.00	0.909	1.00	0.28	100.00	0.001	0.395	0.00
38	23:14	1.00	0.908	1.00	0.08	100.00	0.000	0.575	0.00
39	24:36	1.00	0.961	1.00	100.68	100.00	0.725	0.720	1.01
40	25:44	1.00	1.005	1.00	99.84	100.00	0.977	0.978	1.00
41	27:32	1.00	1.076	1.00	0.13	100.00	0.001	0.445	0.00
42	30:32	1.00	1.193	1.00	0.17	100.00	0.002	1.280	0.00
43	31:24		1.227						
44	34:42	1.00	1.355	1.00	0.24	100.00	0.001	0.572	0.00
45	33:58	1.00	1.327	1.00	0.31	100.00	0.002	0.561	0.00
46	35:06	1.00	1.371	1.00	0.24	100.00	0.002	0.949	0.00
47	24:26	1.00	0.954	1.00	48.64	50.00	1.134	1.166	0.97
48	29:28	1.00	1.151	1.00	49.78	50.00	0.965	0.970	1.00

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C-14AMSD

Lab Name: Q C INC. Contract: GAN-FLEMING

Lab Code: NONE Case No.: GAN-FL SAS No.: NONE SDG No.: NONE

Matrix: (soil/water) WATER Lab Sample ID: 789651MSD

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 789651VSD

Level: (low/med) LOW Date Received: 02/16/89

% Moisture: not dec. ____ Date Analyzed: 02/22/89

Column: (pack/cap) PACK Dilution Factor: 1.0

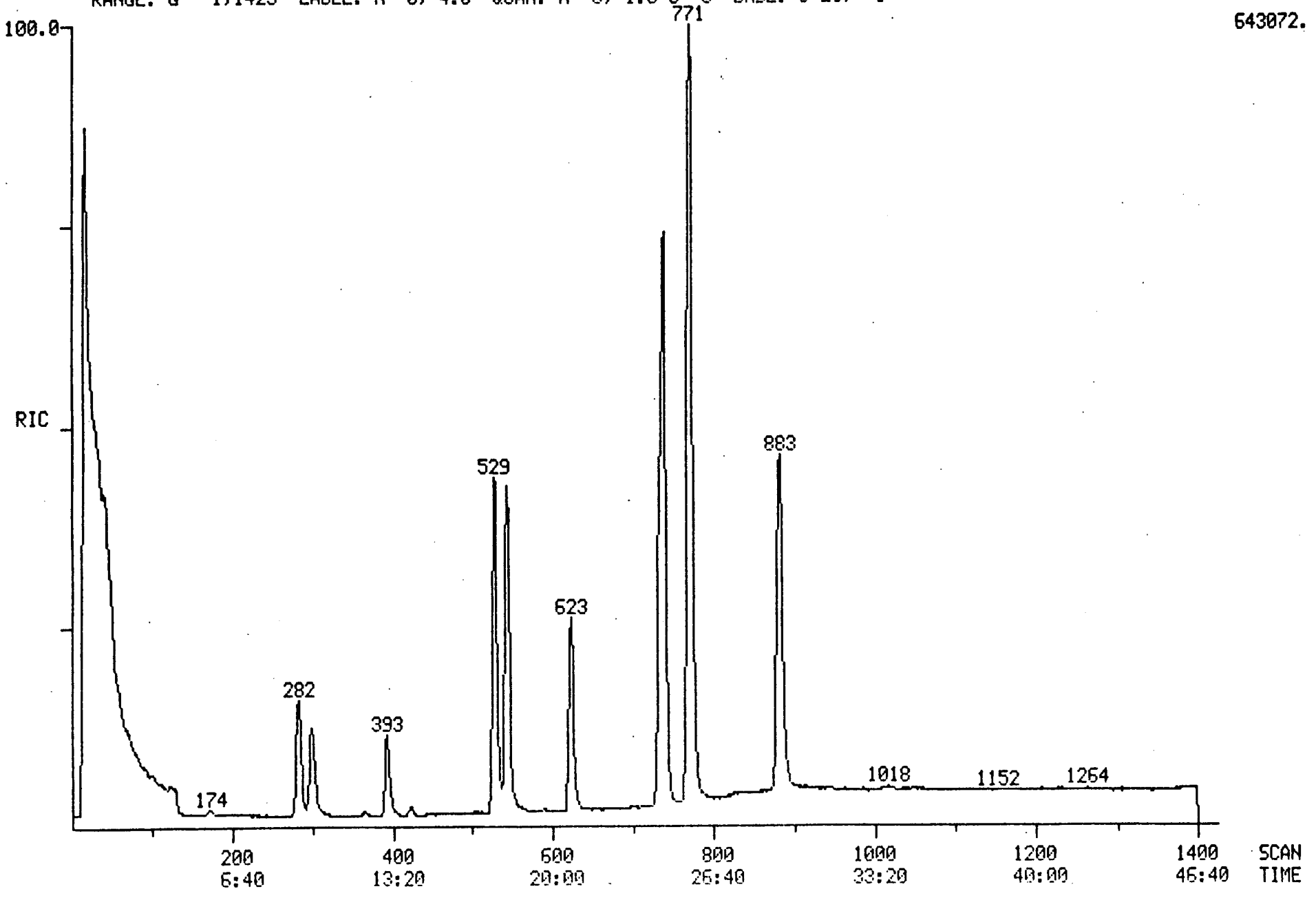
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	4	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
	Total Xylenes	5	U

RIC
02/22/89 20:54:00
SAMPLE: SPIKE DUPLICATE
CONDS.: 5MLS + 100NG STD
RANGE: G 1,1425 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789651VSD #1
CALI: 789651VSD #3

SCANS 1 TO 1425



000133

Quantitation Report File: 789651VSD

000134

Data: 789651VSD.TI
02/22/89 20:54:00
Sample: SPIKE DUPLICATE
Conds.: 5MLS + 100NG STD
Formula: Instrument: FINN Weight: 0.000
Submitted by: GANNET Analyst: DMW Acct. No.: 789651

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	C010	CHLOROMETHANE	
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8		ACROLEIN	
9	C035	ACETONE	
10		ACRYLONITRILE	
11	C040	CARBON DISULFIDE	
12	C045	1,1-DICHLOROETHENE	
13	C050	1,1-DICHLOROETHANE	
14	C053	1,2-DICHLOROETHENE (TOTAL)	
15	C060	CHLOROFORM	
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	CS15	D4-1,4-DICHLOROETHANE	*SURROGATE*
19	CI10	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
20	C110	2-BUTANONE (MEK)	
21	C115	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C172	TRANS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C155	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C143	CIS-1,3-DICHLOROPROPENE	
32	C175	2-CHLOROETHYLVINYLETHER	
33	C180	BROMOFORM	
34	C120	D5-CHLOROBENZENE	*INTERNAL STANDARD*
35	C205	4-METHYL-2-PENTANONE (MIBK)	
36	C210	2-HEXANONE	
37	C220	TETRACHLOROETHENE	
38	C225	1,1,2,2-TETRACHLOROETHANE	
39	C230	TOLUENE	
40	C235	CHLOROBENZENE	
41	C240	ETHYL BENZENE	
42	C245	STYRENE	
43	C250	TOTAL XYLENES (CALCULATED OFF M-XYLENE)	
44	C350	1,2-DICHLOROBENZENE	
45	C355	1,3-DICHLOROBENZENE	
46	C340	1,4-DICHLOROBENZENE	
47	CS05	D8-TOLUENE	*SURROGATE*

No	Name
48	CS10 BROMOFLUOROBENZENE *SURROGATE*

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	298	9:56	1	1.000	A BB	56672.	50.000 UG/L	6.14
2	NOT FOUND								
3	NOT FOUND								
4	85	74	2:28	1	0.248	A BB	9927.	6.084 UG/L	0.75
5	NOT FOUND								
6	NOT FOUND								
7	84	174	5:48	1	0.584	A BB	6488.	3.605 UG/L	0.44
8	NOT FOUND								
9	43	221	7:22	1	0.742	A BB	2252.	3.038 UG/L	0.37
10	NOT FOUND								
11	NOT FOUND								
12	96	281	9:22	1	0.943	A BB	102340.	73.263 UG/L	8.99
13	NOT FOUND								
14	NOT FOUND								
15	83	371	12:22	1	1.245	A BB	643.	0.164 UG/L	0.02
16	NOT FOUND								
17	NOT FOUND								
18	65	393	13:06	1	1.319	A BB	161872.	49.491 UG/L	6.07
19	114	623	20:46	19	1.000	A BB	339923.	50.000 UG/L	6.14
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	43	458	15:16	19	0.735	A*BB	6587.	1.099 UG/L	0.13
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	130	529	17:38	19	0.849	A BB	259039.	105.669 UG/L	12.97
28	NOT FOUND								
29	NOT FOUND								
30	78	545	18:10	19	0.875	A BB	616061.	110.765 UG/L	13.60
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	117	768	25:36	34	1.000	A BB	416366.	50.000 UG/L	6.14
35	43	649	21:38	34	0.845	A*BB	4426.	0.879 UG/L	0.11
36	43	700	23:20	34	0.911	A*VB	8207.	2.837 UG/L	0.35
37	164	698	23:16	34	0.909	A BB	707.	0.215 UG/L	0.03
38	83	697	23:14	34	0.908	A BB	574.	0.120 UG/L	0.01
39	92	738	24:36	34	0.961	A BB	588000.	98.068 UG/L	12.04
40	112	771	25:42	34	1.004	A BB	880340.	108.060 UG/L	13.26
41	106	826	27:32	34	1.076	A BB	345.	0.093 UG/L	0.01
42	104	916	30:32	34	1.193	A BB	1943.	0.182 UG/L	0.02
43	NOT FOUND								
44	146	1040	34:40	34	1.354	A*BB	2181.	0.458 UG/L	0.06
45	146	1021	34:02	34	1.329	A BB	1588.	0.340 UG/L	0.04
46	146	1052	35:04	34	1.370	A*BB	2072.	0.262 UG/L	0.03
47	98	732	24:24	34	0.953	A BB	435059.	44.798 UG/L	5.50
48	98	883	29:26	34	1.150	A BB	446246.	55.264 UG/L	6.78

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:56	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:20		0.134						
3	2:04		0.208						
4	2:28	1.00	0.248	1.00	6.08	100.00	0.088	1.440	0.06
5	2:34		0.258						
6	3:24		0.342						
7	5:48	1.00	0.584	1.00	3.60	100.00	0.057	1.588	0.04
8	7:02		0.708						
9	6:58	1.06	0.701	1.06	3.04	100.00	0.020	0.654	0.03
10	7:52		0.792						
11	7:52		0.792						
12	9:26	0.99	0.950	0.99	73.26	100.00	0.903	1.232	0.73
13	10:52		1.094						
14	11:46		1.185						
15	12:20	1.00	1.242	1.00	0.16	100.00	0.006	3.460	0.00
16	8:32		0.859						
17	13:12		1.329						
18	13:04	1.00	1.315	1.00	49.49	50.00	2.856	2.886	0.99
19	20:46	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
20	13:20		0.642						
21	14:26		0.695						
22	14:48		0.713						
23	15:10	1.01	0.730	1.01	1.10	100.00	0.010	0.882	0.01
24	15:24		0.742						
25	16:48		0.809						
26	17:06		0.823						
27	17:38	1.00	0.849	1.00	105.67	100.00	0.381	0.361	1.06
28	18:14		0.878						
29	18:22		0.884						
30	18:10	1.00	0.875	1.00	110.77	100.00	0.906	0.818	1.11
31	18:24		0.886						
32	19:32		0.941						
33	20:56		1.008						
34	25:36	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
35	21:34	1.00	0.842	1.00	0.88	100.00	0.005	0.605	0.01
36	23:10	1.01	0.905	1.01	2.84	100.00	0.010	0.347	0.03
37	23:16	1.00	0.909	1.00	0.21	100.00	0.001	0.395	0.00
38	23:14	1.00	0.908	1.00	0.12	100.00	0.001	0.575	0.00
39	24:36	1.00	0.961	1.00	98.07	100.00	0.706	0.720	0.98
40	25:44	1.00	1.005	1.00	108.06	100.00	1.057	0.978	1.08
41	27:32	1.00	1.076	1.00	0.09	100.00	0.000	0.445	0.00
42	30:32	1.00	1.193	1.00	0.18	100.00	0.002	1.280	0.00
43	31:24		1.227						
44	34:42	1.00	1.355	1.00	0.46	100.00	0.003	0.572	0.00
45	33:58	1.00	1.327	1.00	0.34	100.00	0.002	0.561	0.00
46	35:06	1.00	1.371	1.00	0.26	100.00	0.002	0.949	0.00
47	24:26	1.00	0.954	1.00	44.80	50.00	1.045	1.166	0.90
48	29:28	1.00	1.151	1.00	55.26	50.00	1.072	0.970	1.11

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

ANALYTICAL DATA REPORT PACKAGE
FOR
GANNETT FLEMING ENGINEERS INC.

Part 3 of 7

Cas Name	Field Sample ID	Laboratory Sample ID	Date of Collection
USN Earl Depot	C-14A	789651,789603,789657, 789629,789635,789643	02/16/89
	C-14B	789652,789604,789658, 789630,789636,789644	"
	C-14C	789653,789605,789659, 789631,789637,789645	"
	C-29A	789654,789606,789660, 789632,789638.789646	"
	FIELD BLANK	789655,789607,789662, 789633,789639,789647	"
	TRIP BLANK	789656,789608,789661, 789634,789640,789648	"

Laboratory Name QC Inc.

Certification No. PADER No. 09-131
NJDEP No. 77166/77848

Supervisor/Manager Signature

Printed Name Thomas J. Hines

Form QC G-1

QC Inc

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I SV	SEMIVOLATILE ORGANICS ANALYSIS RESULTS, CHROMATOGRAMS, MASS SPECRTA, TIC SUMMARIES, QUANTITATION REPORTS:	
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	C-14C (789605)	190
	C-29A (789606)	212

2C

WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: Q C INC. Contract: FLEMING

Lab Code: EPA Case No.: FLEMIN SAS No.: NONE SDG No.: NONE

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	OTHER	TOT OUT
01	C-14A	67	81	133	*	*	*		3
02	C-14B	39	44	69	*	*	*		3
03	C-14C	44	52	76	*	*	*		3
04	C-29A	58	61	90	*	*	*		3
05	FIELD_BLANK	59	53	87	*	*	*		3
06	TRIP_BLANK	36	64	133	*	*	*		3
07	C-14A_SPK	92	70	94	*	*	*		3
08	C-14A_SPK_DU	86	72	83	*	*	*		3
09	AQ_BLANK	65	65	97	*	*	*		3

		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(35-114)
S2 (FBP)	= 2-Fluorobiphenyl	(43-116)
S3 (TPH)	= Terphenyl	(33-141)
S4 (PHL)	= Phenol-d5	(10-94)
S5 (2FP)	= 2-Fluorophenol	(21-100)
S6 (TBP)	= 2,4,6-Tribromophenol	(10-123)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Q C INC. Contract: FLEMING

Lab Code: EPA Case No.: FLEMIN SAS No.: NONE SDG No.: NONE

Matrix Spike - EPA Sample No.: C-14A

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
Phenol	200	0	0	0 *	12- 86
2-Chlorophenol	200	0	0	0 *	27-123
1,4-Dichlorobenzene	100	0	67.1	67	36 97
N-Nitroso-di-n-prop.(1)	100	0	66.2	66	41 116
1,2,4-Trichlorobenzene	100	0	59.4	59	39 98
4-Chloro-3-methylphenol	200	0	0	0 *	23 97
Acenaphthene	100	0	52.5	53	46-118
4-Nitrophenol	200	0	0	0 *	10- 80
2,4-Dinitrotoluene	100	0	39.7	40	24- 96
Pentachlorophenol	200	0	0	0 *	9-103
Pyrene	100	0	70.4	70	26-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	200	0	0 *	0	42	12- 86
2-Chlorophenol	200	0	0 *	0	40	27-123
1,4-Dichlorobenzene	100	65.5	66	2	28	36 97
N-Nitroso-di-n-prop.(1)	100	62.0	62	6	38	41 116
1,2,4-Trichlorobenzene	100	63.7	64	-8	28	39 98
4-Chloro-3-methylphenol	200	0	0 *	0	42	23 97
Acenaphthene	100	55.3	55	-4	31	46-118
4-Nitrophenol	200	0	0 *	0	50	10- 80
2,4-Dinitrotoluene	100	38.8	39	3	38	24- 96
Pentachlorophenol	200	0	0 *	0	50	9-103
Pyrene	100	61.9	62	12	31	26-127

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 11 outside limits
Spike Recovery: 10 out of 22 outside limits

COMMENTS: C-14A
1000 MLS/1.0 ML

4B

SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: Q C INC. Contract: FLEMING

Lab Code: EPA Case No.: FLEMIN SAS No.: NONE SDG No.: NONE

Lab File ID: BLKW0224 Lab Sample ID: BLKW0224

Date Extracted: 02/24/89 Extraction:(SepF/Cont/Sonc) SEPF

Date Analyzed: 03/25/89 Time Analyzed: 1711

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: FINN

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	C-14A	789603	789603AB	03/25/89
02	C-14B	789604	789604AB	03/25/89
03	C-14C	789605	789605AB	03/25/89
04	C-29A	789606	789606AB	03/25/89
05	FIELD_BLANK	789607	789607AB	03/25/89
06	TRIP_BLANK	789608	789608AB	03/27/89
07	C-14A_SPK	789603_SPK	789603ABS	03/27/89
08	C-14A_SPK_DU	789603SPK_DUP	789603ABSD	03/27/89

COMMENTS: AQUEOUS BLANK
1000 MLS/1.0 ML

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

000140

Lab Name: Q C INC. Contract: FLEMING

Lab Code: EPA Case No.: FLEMIN SAS No.: NONE SDG No.: NONE

Lab File ID: DFTPPD0325 DFTPP Injection Date: 03/25/89

Instrument ID: 5100 DFTPP Injection Time: 1201

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	44.3
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	45.6
70	Less than 2.0% of mass 69	0.5 (1.2)1
127	40.0 - 60.0% of mass 198	46.4
197	Less than 1.0% of mass 198	0.0
198	Base peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.5
275	10.0 - 30.0% of mass 198	17.1
365	Greater than 1.00% of mass 198	1.60
441	Present, but less than mass 443	5.7
442	Greater than 40.0% of mass 198	42.6
443	17.0 - 23.0% of mass 442	8.0 (18.7)2

1-Value is % mass 69 2-Value is % mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	50NG_CALI	50NG_CALI	HSD500325	03/25/89	1228
02	80NG_CALI	80NG_CALI	HSD800325	03/25/89	1325
03	120NG_CALI	120NG_CALI	HSD1200325	03/25/89	1423
04	160NG_CALI	160NG_CALI	HSD1600325	03/25/89	1512
05	20NG_CALI	20NG_CALI	HSD200325	03/25/89	1610
06	AQ_BLANK	BLKW0224	BLKW0224	03/25/89	1711
07	C-14A	789603	789603AB	03/25/89	1801
08	C-14B	789604	789604AB	03/25/89	1854
09	C-14C	789605	789605AB	03/25/89	1948
10	C-29A	789606	789606AB	03/25/89	2042
11	FIELD_BLANK	789607	789607AB	03/25/89	2135

5B

000141

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Q C INC. Contract: FLEMING

Lab Code: EPA Case No.: FLEMIN SAS No.: NONE SDG No.: NONE

Lab File ID: DFTPPD0327 DFTPP Injection Date: 03/27/89

Instrument ID: 5100 DFTPP Injection Time: 1021

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	36.1
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	35.0
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	43.6
197	Less than 1.0% of mass 198	0.0
198	Base peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.2
275	10.0 - 30.0% of mass 198	18.2
365	Greater than 1.00% of mass 198	2.10
441	Present, but less than mass 443	9.6
442	Greater than 40.0% of mass 198	68.3
443	17.0 - 23.0% of mass 442	12.5 (18.3)2

1-Value is % mass 69 2-Value is % mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	50NG_CALI	50NG_CALI	HSB500327	03/27/89	1043
02	TRIP_BLANK	789608	789608AB	03/27/89	1201
03	C-14A_SPK	789603_SPK	789603ABS	03/27/89	1310
04	C-14A_SPK_DU	789603SPK_DUP	789603ABSD	03/27/89	1408

8B

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Q C INC. Contract: FLEMING

Lab Code: EPA Case No.: FLEMIN SAS No.: NONE SDG No.: NONE

Lab File ID (Standard): HSB500327 Date Analyzed: 03/27/89

Instrument ID: FINN Time Analyzed: 1043

		IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
	12 HOUR STD	617000	9.92	1850000	13.99	827000	19.59
	UPPER LIMIT	1234000		3700000		1654000	
	LOWER LIMIT	308500		925000		413500	
	EPA SAMPLE NO.						
01	TRIP_BLANK	390000	9.90	967000	13.95	584000	19.59
02	C-14A_SPK	287000 *	9.85	726000 *	13.92	414000	19.54
03	C-14A_SPK_DU	311000	9.90	776000 *	13.95	455000	19.55

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

B

8C

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

000143

Lab Name: Q C INC. Contract: FLEMING

Lab Code: EPA Case No.: FLEMIN SAS No.: NONE SDG No.: NONE

Lab File ID (Standard): HSB500327 Date Analyzed: 03/27/89

Instrument ID: FINN Time Analyzed: 1043

		IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
	12 HOUR STD	990000	24.20	681000	32.64	161000	37.19
	UPPER LIMIT	1980000		1362000		322000	
	LOWER LIMIT	495000		340500		80500	
	EPA SAMPLE NO.						
01	TRIP_BLANK	660000	24.19	213000 *	32.64	114000	37.21
02	C-14A_SPK	401000 *	24.15	228000 *	32.61	34000 *	37.17
03	C-14A_SPK_DU	477000 *	24.17	290000 *	32.62	37700 *	37.19

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

FORM VIII SV-2

1/87 Rev.

8B

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Q C INC. Contract: FLEMING

Lab Code: EPA Case No.: FLEMIN SAS No.: NONE SDG No.: NONE

Lab File ID (Standard): HSD500325 Date Analyzed: 03/25/89

Instrument ID: FINN Time Analyzed: 1228

		IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
	12 HOUR STD	384000	9.84	1060000	13.99	629000	19.60
	UPPER LIMIT	768000		2120000		1258000	
	LOWER LIMIT	192000		530000		314500	
	EPA SAMPLE NO.						
01	C-14A	155000 *	9.90	512000 *	13.94	263000 *	19.55
02	C-14B	197000	9.89	591000	13.94	320000	19.54
03	C-14C	217000	9.90	666000	13.95	365000	19.55
04	C-29A	213000	9.94	637000	14.00	348000	19.60
05	FIELD_BLANK	244000	9.94	689000	14.00	398000	19.60
06	AQ_BLANK	284000	9.90	778000	13.95	471000	19.55

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

8C

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Q C INC. Contract: FLEMING

Lab Code: EPA Case No.: FLEMIN SAS No.: NONE SDG No.: NONE

Lab File ID (Standard): HSD500325 Date Analyzed: 03/25/89

Instrument ID: FINN Time Analyzed: 1228

		IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
	12 HOUR STD	828000	24.22	628000	32.69	178000	37.26
	UPPER LIMIT	1656000		1256000		356000	
	LOWER LIMIT	414000		314000		89000	
	EPA SAMPLE NO.						
01	C-14A	347000 *	24.17	180000 *	32.62	19400 *	37.19
02	C-14B	450000	24.15	237000 *	32.62	26200 *	37.17
03	C-14C	500000	24.19	269000 *	32.64	25800 *	37.21
04	C-29A	473000	24.20	269000 *	32.67	26600 *	37.24
05	FIELD_BLANK	552000	24.22	330000	32.69	37400 *	37.24
06	AQ_BLANK	639000	24.19	326000	32.67	88800 *	37.21

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

EPA METHOD 625 BASE/NEUTRAL EXTRACTABLES BY GC/MS

Lab ID : 789603
Sample ID : C-14A
Date Analyzed : 03/25/89
Date Extracted: 02/24/89

Client : Gannett&Fleming
Prep Factor : 1000 mls/1.0 ml
Comments :
Date Received: 02/17/89

NO.	NAME	RESULTS PPB	COMMENTS
1	Bis(2-chloroethyl)Ether	10	U
2	1,2-Dichlorobenzene	10	U
3	1,4-Dichlorobenzene	10	U
4	1,3-Dichlorobenzene	10	U
5	Bis(2-chloroisopropyl)Ether	10	U
6	N-Nitrosodipropyl Amine	10	U
7	Hexachloroethane	10	U
8	Nitrobenzene	10	U
9	Isophorone	10	U
10	Bis(2-chloroethoxy)Methane	10	U
11	1,2,4-Trichlorobenzene	10	U
12	Naphthalene	10	U
13	Hexachlorobutadiene	10	U
14	Hexachlorocyclopentadiene	10	U
15	2-Chloronaphthalene	10	U
16	Dimethyl Phthalate	10	U
17	2,6-Dinitrotoluene	10	U
18	Acenaphthylene	10	U
19	Acenaphthene	10	U
20	2,4-Dinitrotoluene	10	U
21	Diethyl Phthalate	10	U
22	N-Nitrosodimethyl Amine	10	U
23	4-Chlorophenylphenyl Ether	10	U
24	Fluorene	10	U
25	Azobenzene	10	U
26	N-Nitrosodiphenyl Amine	10	U
27	4-Bromophenylphenyl Ether	10	U
28	Hexachlorobenzene	10	U
29	Phenanthrene	10	U
30	Anthracene	10	U
31	Dibutyl Phthalate	10	U
32	Fluoranthene	10	U

Comments:
U= Not detected
J= Detected but below Method Detection limit
B= Compound found in Blank

Signature

Name/Title: Howard Whaley
GC/MS Project Leader

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

EPA Method 625 Base/Neutral Extractables by GC/MS

Lab ID : 789603
Sample ID : C-14A
Date Analyzed : 03/25/89
Date Extracted: 02/24/89

Client : Gannett&Fleming
Prep Factor: 1000 mls/1.0 ml
Comments :
Date Recieved: 02/17/89

NO.	NAME	RESULTS PPB	COMMENTS
33	Benzidine	50	U
34	Pyrene	10	U
35	Butylbenzyl Phthalate	10	U
36	3,3-Dichlorobenzidine	10	U
37	Benzo(A)Anthracene	10	U
38	Chrysene	10	U
39	Bis(2-ethylhexyl) Phthalate	3	BJ
40	Dioctyl-Phthalate	10	U
41	Benzo(K)Fluoranthene	10	U
42	Benzo(B)Fluoranthene	10	U
43	Benzo(A)Pyrene	10	U
44	Indeno(1,2,3-CD)Pyrene	10	U
45	Dibenzo(A,H)Anthracene	10	U
46	Benzo(GHI)Perylene	10	U

Comments:
U= Not Detected
J= Detected but below Method Detection Limit
B= Compound found in Blank

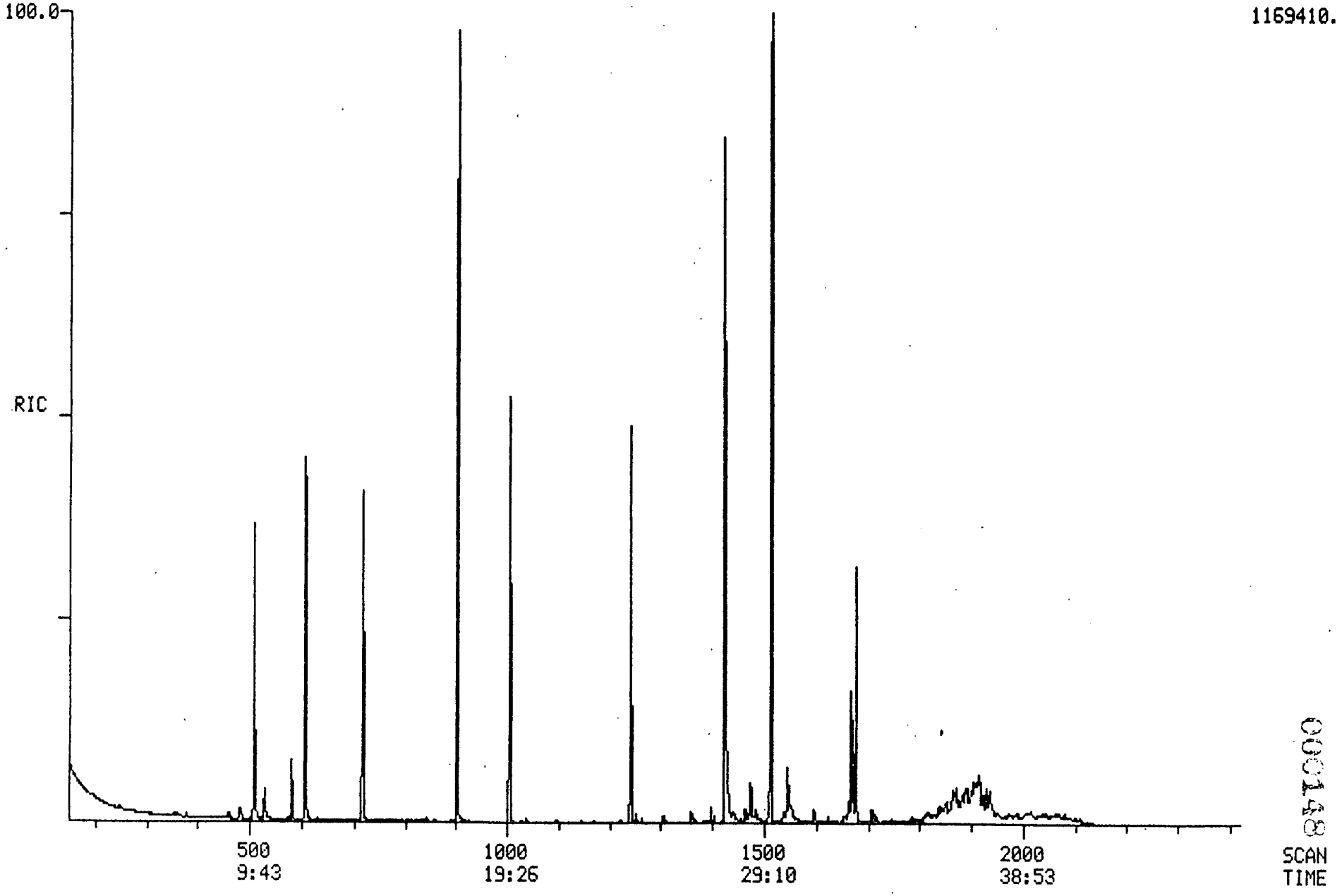
Signature

Name/Title: Howard Whaley
GC/MS Project Leader

RIC
03/25/89 18:01:00
SAMPLE: C-14A
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789603AB #1
CALI: CALTAB #3

SCANS 150 TO 2418

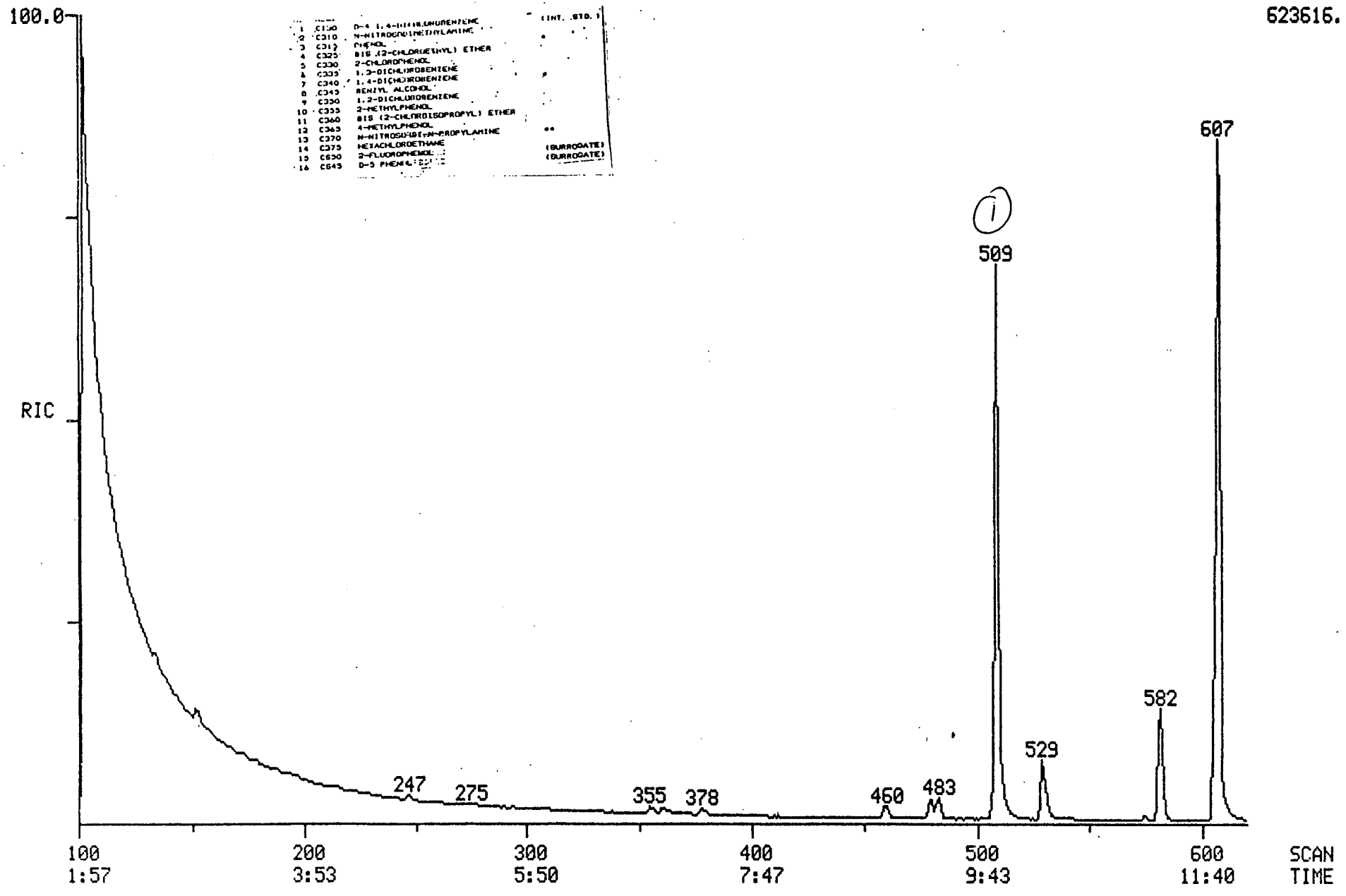


0001488

RIC
03/25/89 18:01:00
SAMPLE: C-14A
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789603AB #1
CALI: 789603AB #3

SCANS 100 TO 620



0001459

Quantitation Report File: 789603AB

000150

Data: 789603AB.TI
03/25/89 18:01:00
Sample: C-14A
Conds.: 1000 MLS/1.0 ML
Formula: Instrum nt: FINN Weight: 0.000
Submitt d by: FLEMING Analyst: WSS Acct. No.: 789603AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI30 1,4-DICHLOROBENZENE D4	INTERNAL STANDARD
2	N-NITROSODIMETHYLAMINE	
3	C315 PHENOL	
4	C325 BIS(2-CHLOROETHYL) ETHER	
5	C330 2-CHLOROPHENOL	
6	C335 1,3-DICHLOROBENZENE	
7	C340 1,4-DICHLOROBENZENE	
8	C345 BENZYL ALCOHOL	
9	C350 1,2-DICHLOROBENZENE	
10	C355 2-METHYLPHENOL	
11	C360 BIS(2-CHLOROISOPROPYL)ETHER	
12	C365 4-METHYLPHENOL	
13	C370 N-NITROSO-DI-PROPYLAMINE	
14	C375 HEXACHLOROETHANE	
15	CS50 2-FLUOROPHENOL	SURROGATE
16	CS45 PHENOL D5	SURROGATE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	509	9:54	1	1.000	A BB	154933.	40.000 UG/ML	99.86
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	108	607	11:48	1	1.193	A BB	~~307.~~	~~0.060 UG/ML~~	~~0.15~~ NO WSS
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								

No	R t(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:50	1.01	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	2:35		0.263						
3	9:25		0.957						
4	9:19		0.947						
5	9:23		0.955						
6	9:42		0.986						
7	9:54		1.006						

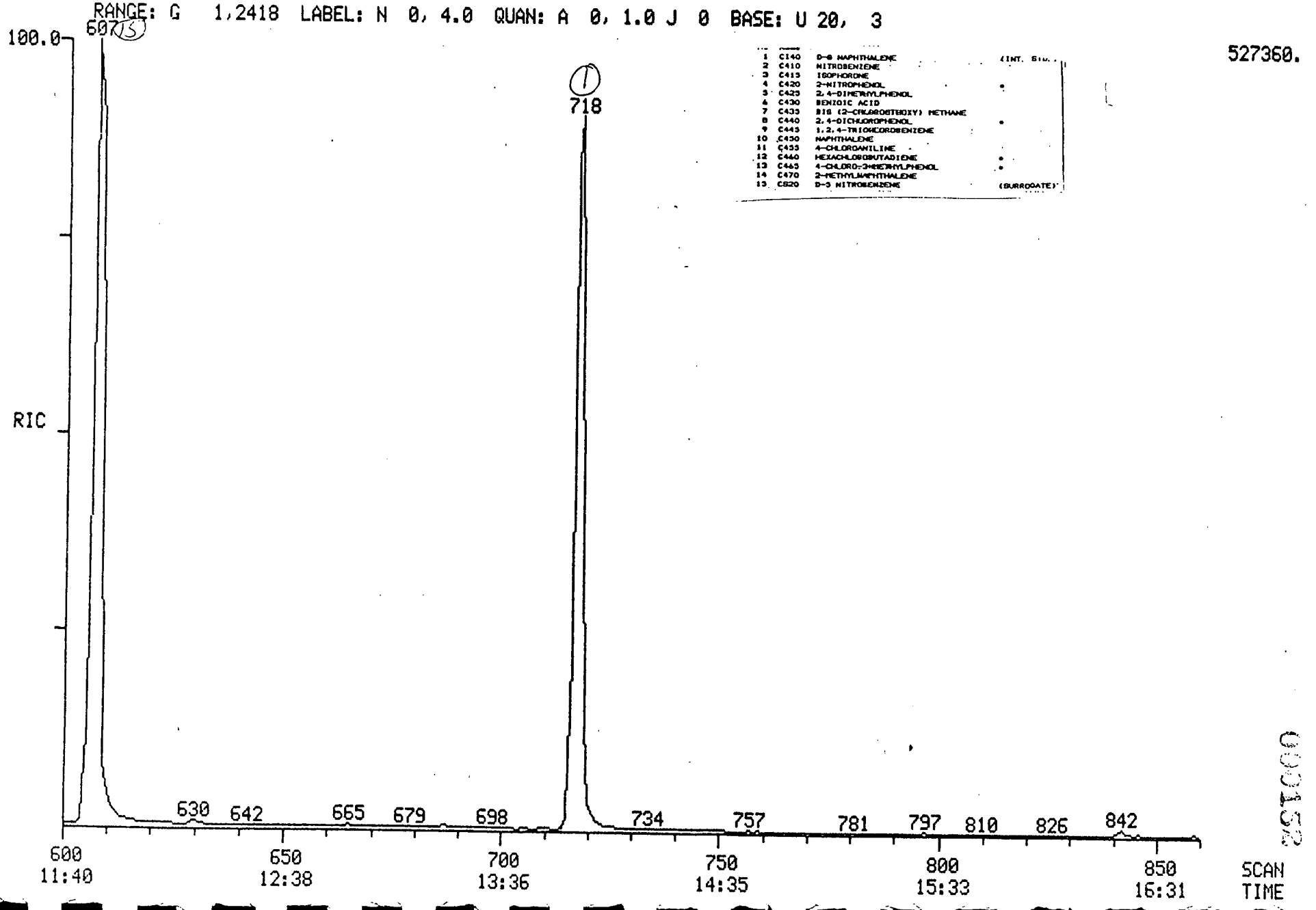
000151

No	Ret(L)	Ratio	RRT(L)	Rati	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
8	10:40		1.085						
9	10:29		1.065						
10	11:15		1.144						
11	11:05		1.126						
12	11:48	1.00	1.200	0.99	0.06	50.00	0.002	1.317	0.00
13	11:36		1.180						
14	11:27		1.164						
15	5:55		0.601						
16	9:22		0.953						

RIC
03/25/89 18:01:00
SAMPLE: C-14A
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789603AB #1
CALI: 789603AB #3

SCANS 600 TO 860



1	C140	D-8 NAPHTHALENE	(INT. STD.)
2	C410	NITROBENZENE	
3	C415	ISOPHORONE	
4	C420	2-NITROPHENOL	•
5	C425	2,4-DIMETHYLPHENOL	
6	C430	BENZOIC ACID	
7	C435	BIS (2-CHLOROETHOXY) METHANE	
8	C440	2,4-DICHLOROPHENOL	•
9	C445	1,2,4-TRICHLOROBENZENE	
10	C450	NAPHTHALENE	
11	C455	4-CHLOROANILINE	
12	C460	HEXACHLOROBUTADIENE	•
13	C465	4-CHLORO-3-METHYLPHENOL	•
14	C470	2-METHYLNAPHTHALENE	
15	C820	D-5 NITROBENZENE	(SURROGATE)

527360.

000152

Quantitation R port File: 789603AB

000153

Data: 789603AB.TI
03/25/89 18:01:00
Sample: C-14A
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789603AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI40 NAPHTHALENE D8	INTERNAL STANDARD
2	C410 NITROBENZENE	
3	C415 ISOPHORONE	
4	C420 2-NITROPHENOL	
5	C425 2,4-DIMETHYLPHENOL	
6	C430 BENZOIC ACID	
7	C435 BIS(2-CHLOROETHOXY)METHANE	
8	C440 2,4-DICHLOROPHENOL	
9	C445 1,2,4-TRICHLOROBENZENE	
10	C450 NAPHTHALENE	
11	C455 4-CHLOROANILINE	
12	C460 HEXACHLOROBUTADIENE	
13	C465 4-CHLORO-3-METHYLPHENOL	
14	C470 2-METHYLNAPHTHALENE	
15	CS20 NITROBENZENE D5	SURROGATE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot	
1	136	717	13:56	1	1.000	A BB	511613.	40.000 UG/ML	37.35	
2	NOT FOUND									
3	NOT FOUND									
4	NOT FOUND									
5	NOT FOUND									
6	NOT FOUND									
7	NOT FOUND									
8	NOT FOUND									
9	NOT FOUND									
10	128	720	14:00	1	1.004	A BB	~~599.~~	~~0.058 UG/ML~~	~~0.05~~	NO WSS
11	NOT FOUND									
12	NOT FOUND									
13	NOT FOUND									
14	142	835	16:14	1	1.165	A BB	~~217.~~	~~0.015 UG/ML~~	~~0.01~~	NO WSS
15	82	607	11:48	1	0.847	A BB	456699.	67.028 UG/ML	62.59	Yes WSS

N	R t(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	13:59	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	11:53		0.850						
3	12:42		0.908						
4	12:53		0.922						
5	13:21		0.955						
6	14:16		1.021						
7	13:32		0.968						
8	13:48		0.987						
9	13:53		0.993						

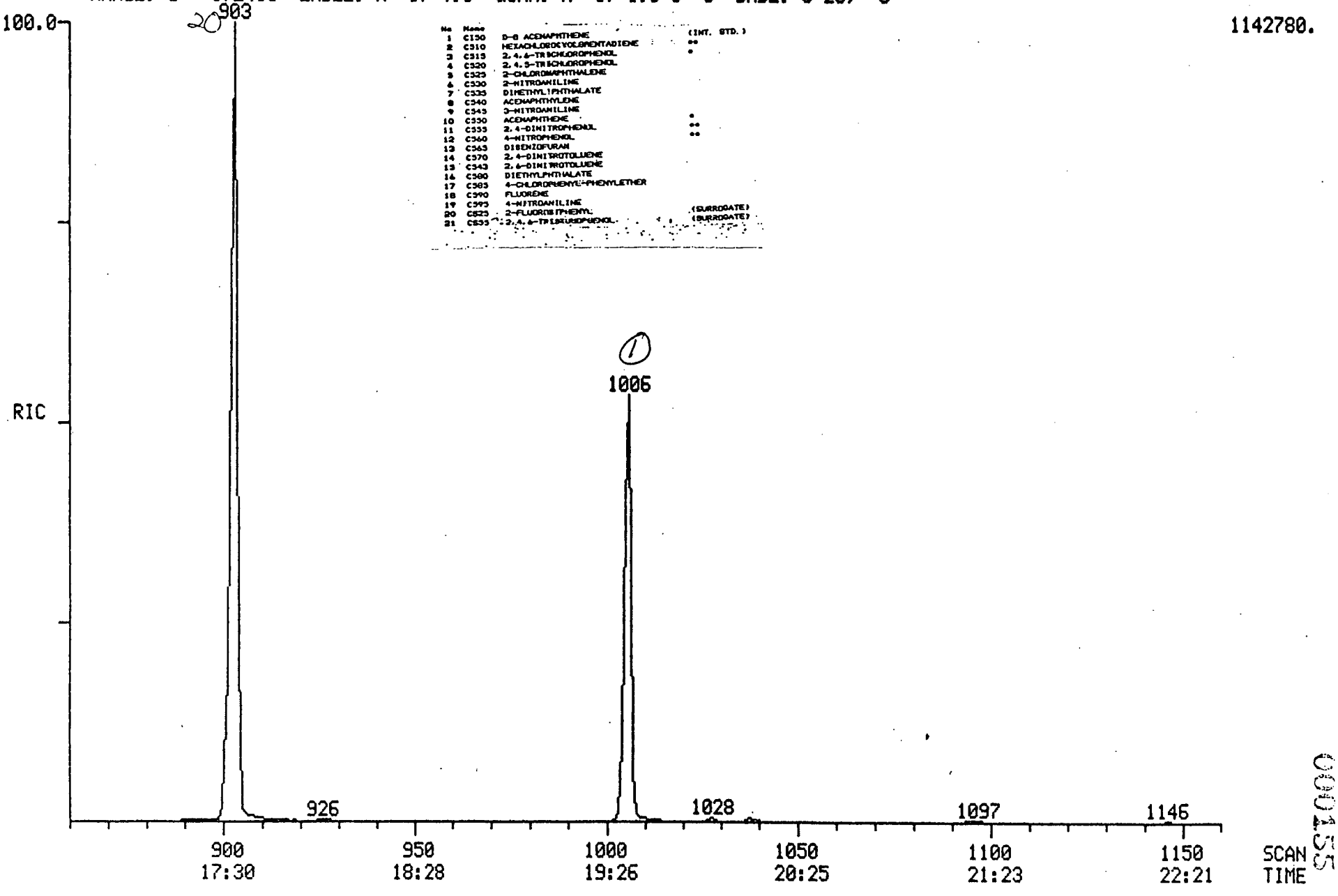
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
10	14:02	1.00	1.004	1.00	0.06	50.00	0.001	0.812	0.00
11	14:28		1.035						
12	14:42		1.051						
13	16:16		1.164						
14	16:16	1.00	1.164	1.00	0.01	50.00	0.000	1.146	0.00
15	11:48	1.00	0.844	1.00	67.03	50.00	0.714	0.533	1.34

000154

RIC
03/25/89 18:01:00
SAMPLE: C-14A
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789603AB #1
CALI: 789603AB #3

SCANS 860 TO 1160



No	Name		
1	C150	D-8 ACENAPHTHENE	(INT. STD.)
2	C310	HEXACHLOROCYCLOPENTADIENE	**
3	C315	2,4,6-TRICHLOROPHENOL	*
4	C320	2,4,5-TRICHLOROPHENOL	
5	C325	2-CHLORONAPHTHALENE	
6	C330	2-NITROANILINE	
7	C335	DIMETHYLPHTHALATE	
8	C340	ACENAPHTHYLENE	
9	C345	3-NITROANILINE	
10	C350	ACENAPHTHENE	*
11	C355	2,4-DINITROPHENOL	**
12	C360	4-NITROPHENOL	**
13	C365	DIBENZOFURAN	
14	C370	2,4-DINITROTOLUENE	
15	C375	2,6-DINITROTOLUENE	
16	C380	DIETHYLPHTHALATE	
17	C385	4-CHLOROPHENYL-PHENYLETHER	
18	C390	FLUORENE	
19	C395	4-NITROANILINE	
20	C825	2-FLUOROBIPHENYL	(SURROGATE)
21	C835	2,4,6-TRIBROMOPHENOL	(SURROGATE)

000455

Quantitation Report File: 789603AB

000156

Data: 789603AB.TI
03/25/89 18:01:00
Sample: C-14A
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitt d by: FLEMING Analyst: WSS Acct. No.: 789603AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI50 ACENAPHTHENE D8	INTERNAL STANDARD
2	C510 HEXACHLOROCYCLOPENTADIENE	
3	C515 2,4,6-TRICHLOROPHENOL	
4	C520 2,4,5-TRICHLOROPHENOL	
5	C525 2-CHLORONAPHTHALENE	
6	C530 2-NITROANILINE	
7	C535 DIMETHYL PHTHALATE	
8	C540 ACENAPHTHYLENE	
9	C545 3-NITROANILINE	
10	C550 ACENAPHTHENE	
11	C555 2,4-DINITROPHENOL	
12	C560 4-NITROPHENOL	
13	C565 DIBENZOFURAN	
14	C570 2,4-DINITROTOLUENE	
15	C543 2,6-DINITROTOLUENE	
16	C580 DIETHYL PHTHALATE	
17	C585 4-CHLOROPHENYL PHENYL ETHER	
18	C590 FLUORENE	
19	C595 4-NITROANILINE	
20	CS25 2-FLUOROBIPHENYL	SURROGATE
21	CS55 2,4,6-TRIBROMOPHENOL	SURROGATE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot	
1	164	1006	19:33	1	1.000	A BV	263495.	40.000 UG/ML	32.91	
2	NOT FOUND									
3	NOT FOUND									
4	NOT FOUND									
5	NOT FOUND									
6	NOT FOUND									
7	163	981	19:04	1	0.975	A BB	~~265.~~	~~0.035 UG/ML~~	~~0.03~~ NO	WSS
8	152	980	19:03	1	0.974	A BB	~~281.~~	~~0.032 UG/ML~~	~~0.03~~ NO	WSS
9	NOT FOUND									
10	NOT FOUND									
11	NOT FOUND									
12	NOT FOUND									
13	168	1037	20:10	1	1.031	A BB	~~836.~~	~~0.061 UG/ML~~	~~0.05~~ NO	WSS
14	NOT FOUND									
15	NOT FOUND									
16	149	1096	21:18	1	1.089	A BB	~~2899.~~	~~0.382 UG/ML~~	~~0.31~~ NO	WSS
17	NOT FOUND									
18	166	1093	21:15	1	1.086	A BB	~~209.~~	~~0.031 UG/ML~~	~~0.03~~ NO	WSS
19	NOT FOUND									
20	172	903	17:33	1	0.898	A BB	603239.	80.993 UG/ML	66.65	Yes WSS
21	NOT FOUND									

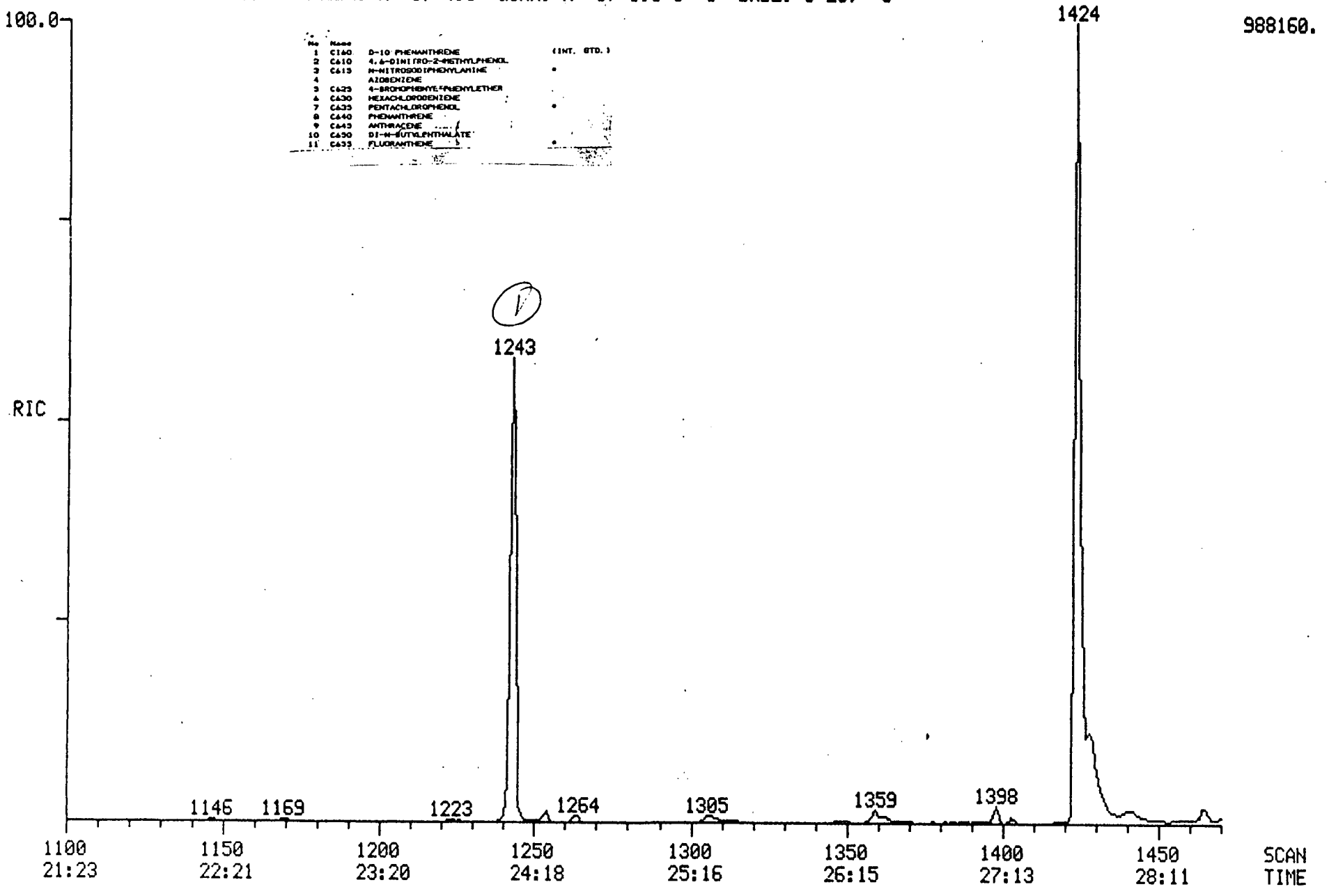
No	Ret(L)	Rati	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	19:36	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	16:59		0.867						
3	17:23		0.887						
4	17:36		0.898						
5	17:46		0.907						
6	18:25		0.939						
7	19:08	1.00	0.976	1.00	0.03	50.00	0.001	1.150	0.00
8	19:05	1.00	0.974	1.00	0.03	50.00	0.001	1.353	0.00
9	19:46		1.009						
10	19:42		1.005						
11	20:03		1.023						
12	20:42		1.057						
13	20:13	1.00	1.032	1.00	0.06	50.00	0.003	2.072	0.00
14	20:29		1.046						
15	19:18		0.985						
16	21:23	1.00	1.091	1.00	0.38	50.00	0.009	1.153	0.01
17	21:23		1.091						
18	21:17	1.00	1.086	1.00	0.03	50.00	0.001	1.021	0.00
19	21:46		1.111						
20	17:34	1.00	0.897	1.00	80.99	50.00	1.831	1.131	1.62
21	22:09		1.130						

000157

RIC
03/25/89 18:01:00
SAMPLE: C-14A
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789603AB #1
CALI: 789603AB #3

SCANS 1100 TO 1470



No	Name		
1	C160	D-10 PHENANTHRENE	(INT. STD.)
2	C610	4,6-DINITRO-2-METHYLPHENOL	
3	C615	N-NITROSODIPHENYLAMINE	
4		AZOBENZENE	
5	C625	4-BROMOPHENYL-PHENYLETHER	
6	C630	HEXACHLOROBENZENE	
7	C635	PENTACHLOROPHENOL	
8	C640	PHENANTHRENE	
9	C645	ANTHRACENE	
10	C650	DI-N-BUTYLPHTHALATE	
11	C655	FLUORANTHENE	

0001158

Quantitation Report File: 789603AB

000159

Data: 789603AB.TI
03/25/89 18:01:00
Sample: C-14A
Conds.: 1000 MLS/1.0 ML
Formula: Instrum nt: FINN Weight: 0.000
Submitt d by: FLEMING Analyst: WSS Acct. No.: 789603AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI60 PHENANTHRENE D10	INTERNAL STANDARD
2	C610 4,6-DINITRO-2-METHYL PHENOL	
3	C615 N-NITROSODIPHENYLAMINE	
4	AZOBENZENE	
5	C625 4-BROMOPHENYL PHENYL ETHER	
6	C630 HEXACHLOROBENZENE	
7	C635 PENTACHLOROPHENOL	
8	C640 PHENANTHRENE	
9	C645 ANTHRACENE	
10	C650 DI-N-BUTYL PHTHALATE	
11	C655 FLUORANTHENE	

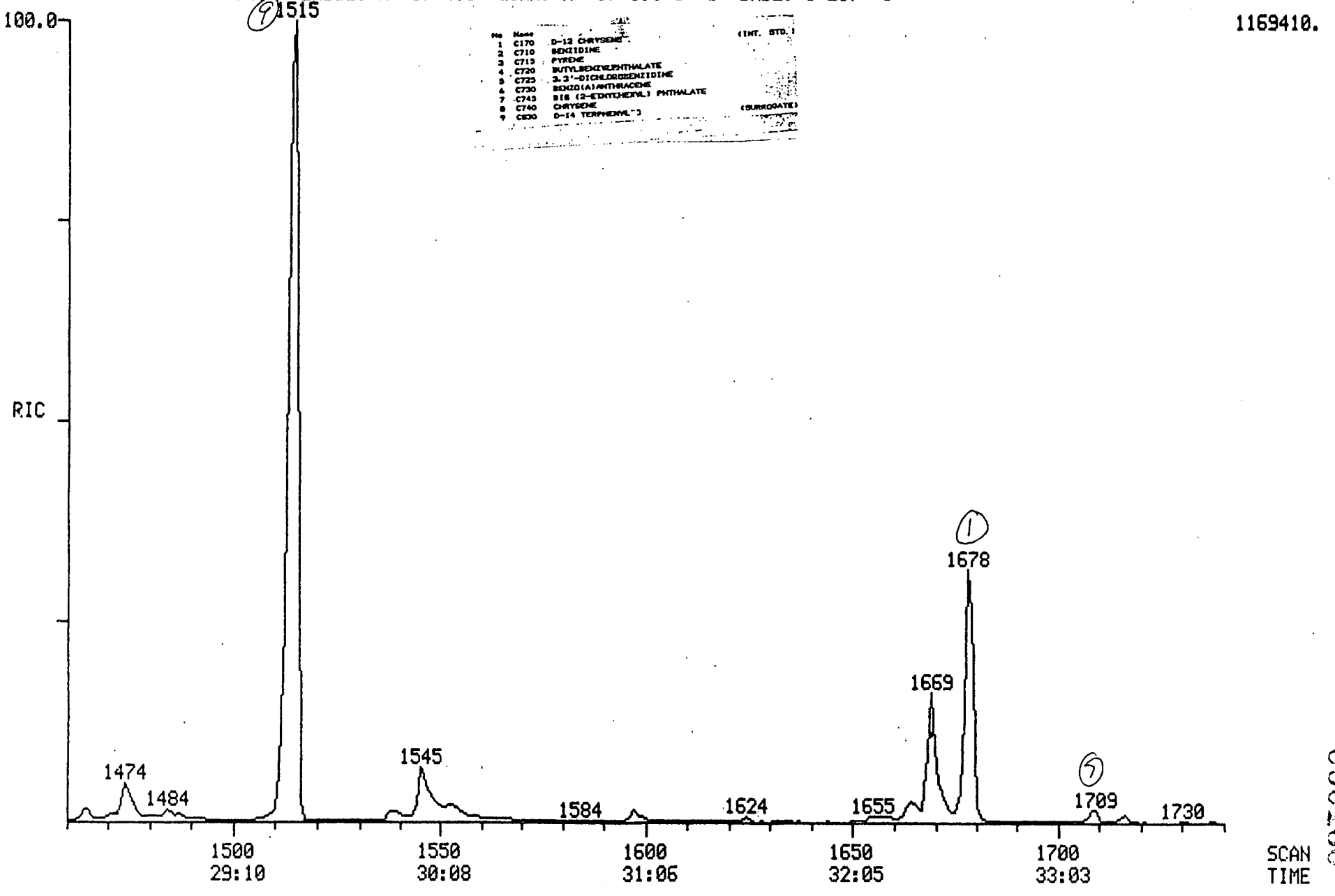
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	188	1243	24:10	1	1.000	A BV	346746.	40.000 UG/ML	97.40
2	NOT FOUND								
3	NOT FOUND								
4	77	1123	21:50	1	0.903	A BB	~~215.~~	~~0.022 UG/ML~~	~~0.05~~ NO WSS
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	178	1246	24:13	1	1.002	A BB	~~774.~~	~~0.095 UG/ML~~	~~0.23~~ NO WSS
9	178	1253	24:21	1	1.008	A BB	~~456.~~	~~0.065 UG/ML~~	~~0.16~~ NO WSS
10	149	1363	26:30	1	1.097	A BB	~~6460.~~	~~0.836 UG/ML~~	~~2.04~~ NO WSS
11	202	1441	28:01	1	1.159	A BB	~~378.~~	~~0.051 UG/ML~~	~~0.12~~ NO WSS

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	24:13	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	21:45		0.898						
3	21:51		0.902						
4	21:53	1.00	0.904	1.00	0.02	50.00	0.000	1.132	0.00
5	22:54		0.945						
6	23:16		0.961						
7	23:57		0.989						
8	24:18	1.00	1.003	1.00	0.10	50.00	0.002	0.937	0.00
9	24:26	1.00	1.009	1.00	0.07	50.00	0.001	0.808	0.00
10	26:32	1.00	1.096	1.00	0.84	50.00	0.015	0.891	0.02
11	28:03	1.00	1.158	1.00	0.05	50.00	0.001	0.853	0.00

RIC
03/25/89 18:01:00
SAMPLE: C-14A
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789603AB #1
CALI: 789603AB #3

SCANS 1460 TO 1740



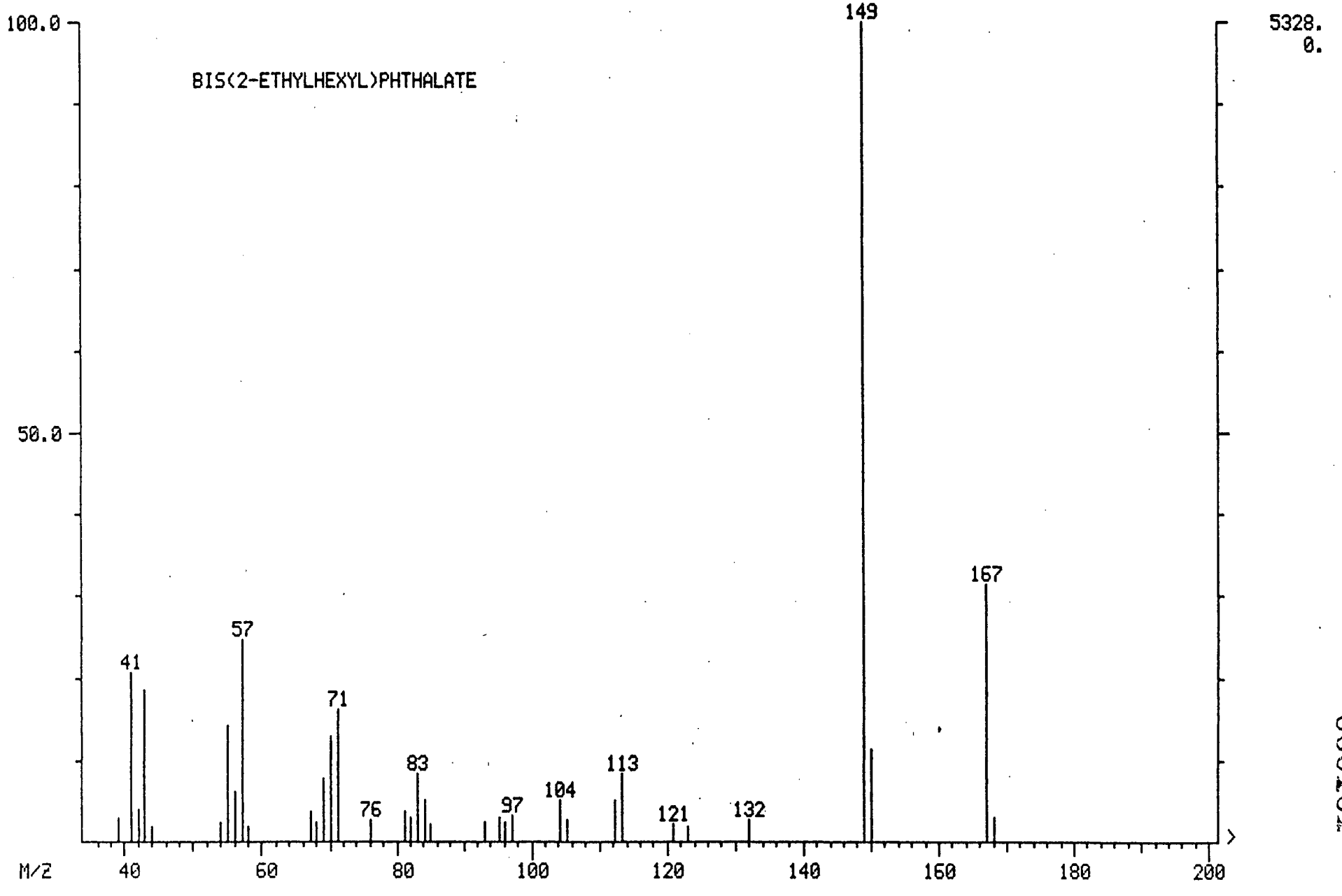
No	Name	
1	C170	D-12 CHRYSENE (INT. STD.)
2	C710	BENZIDINE
3	C715	PYRENE
4	C720	BUTYLBENZYLPHTHALATE
5	C725	3,3'-DICHLOROBENZIDINE
6	C730	BENZO(A)ANTHRACENE
7	C745	BIS (2-ETHYLHEXYL) PHTHALATE
8	C740	CHRYSENE
9	C830	D-14 TERPHENYL (SURROGATE)

000160

MASS SPECTRUM
03/25/89 18:01:00 + 33:12
SAMPLE: C-14A
CONDS.: 1000 MLS/1.0 ML
TEMP: 275 DEG. C

DATA: 789603AB #1708
CALI: 789603AB #3

BASE M/Z: 149
RIC: 18944.

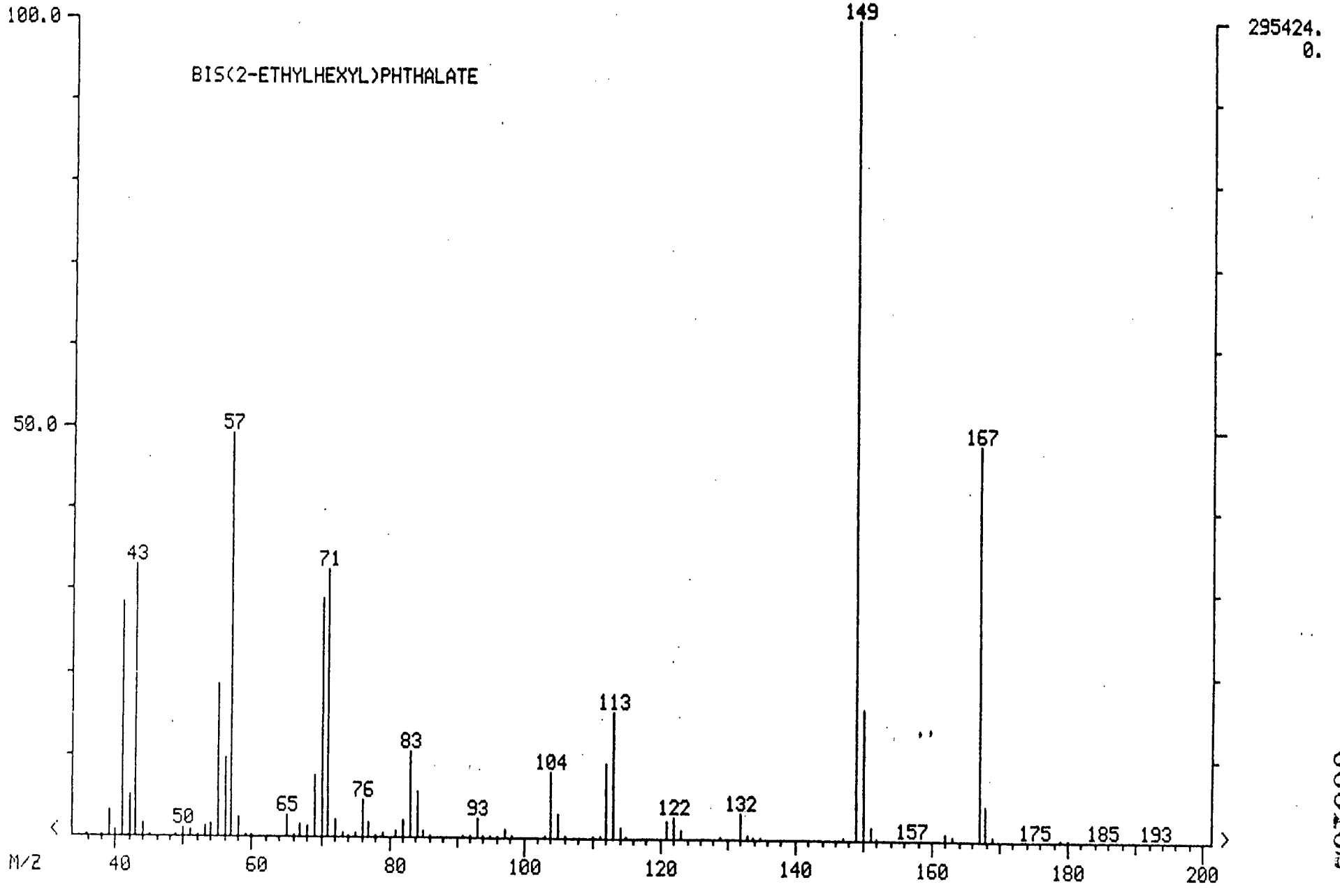


000161

MASS SPECTRUM
03/25/89 12:28:00 + 33:15
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 50 NG INJECTION
TEMP: 275 DEG. C

DATA: HSD500325 #1710
CALI: HSD500325 #3

BASE M/Z: 149
RIC: 1486850.

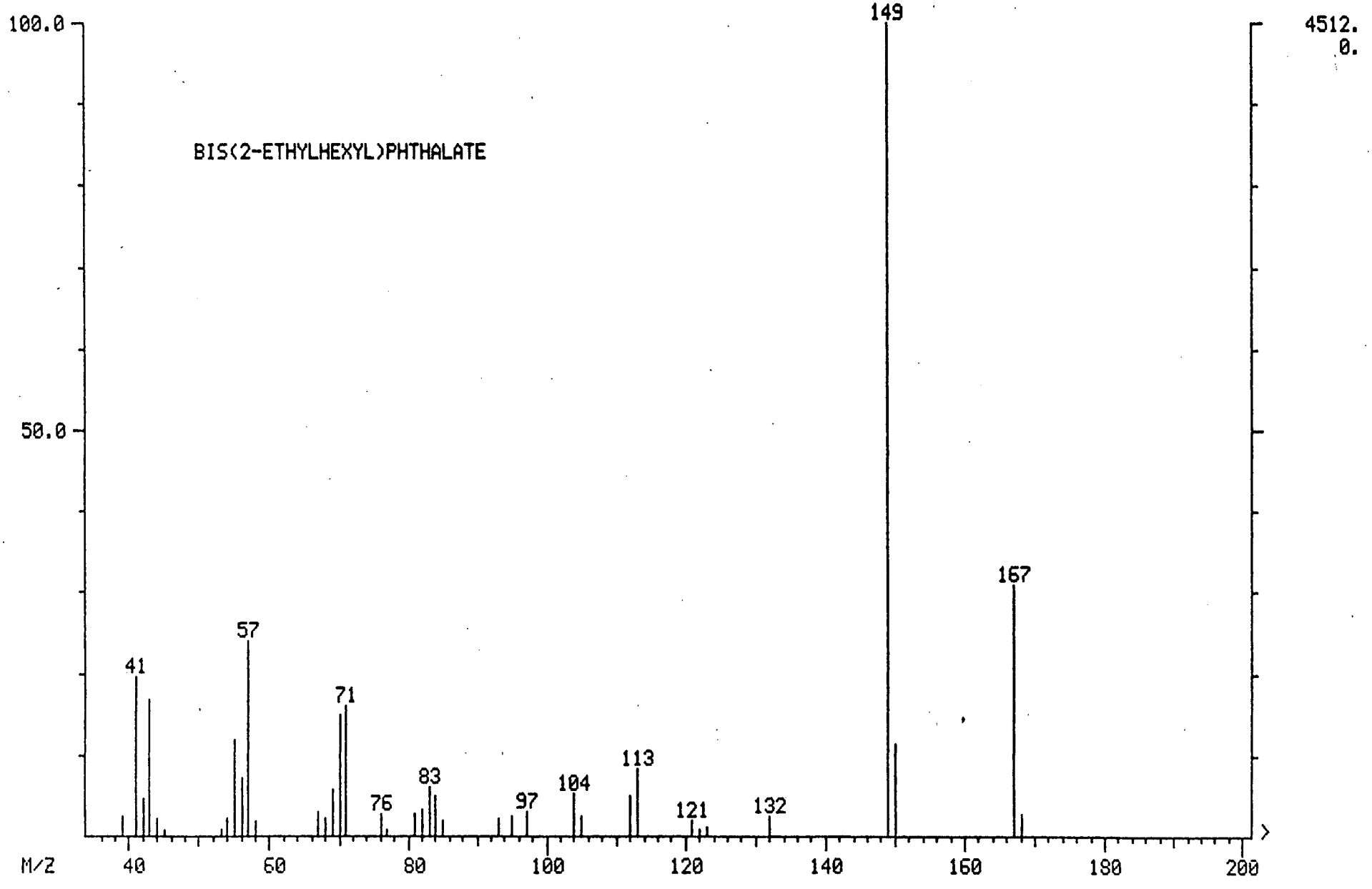


000162

MASS SPECTRUM
03/25/89 18:01:00 + 33:12
SAMPLE: C-14A
CONDS.: 1000 MLS/1.0 ML
TEMP: 275 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 789603AB #1708
CALI: 789603AB #3

BASE M/Z: 149
RIC: 15504.

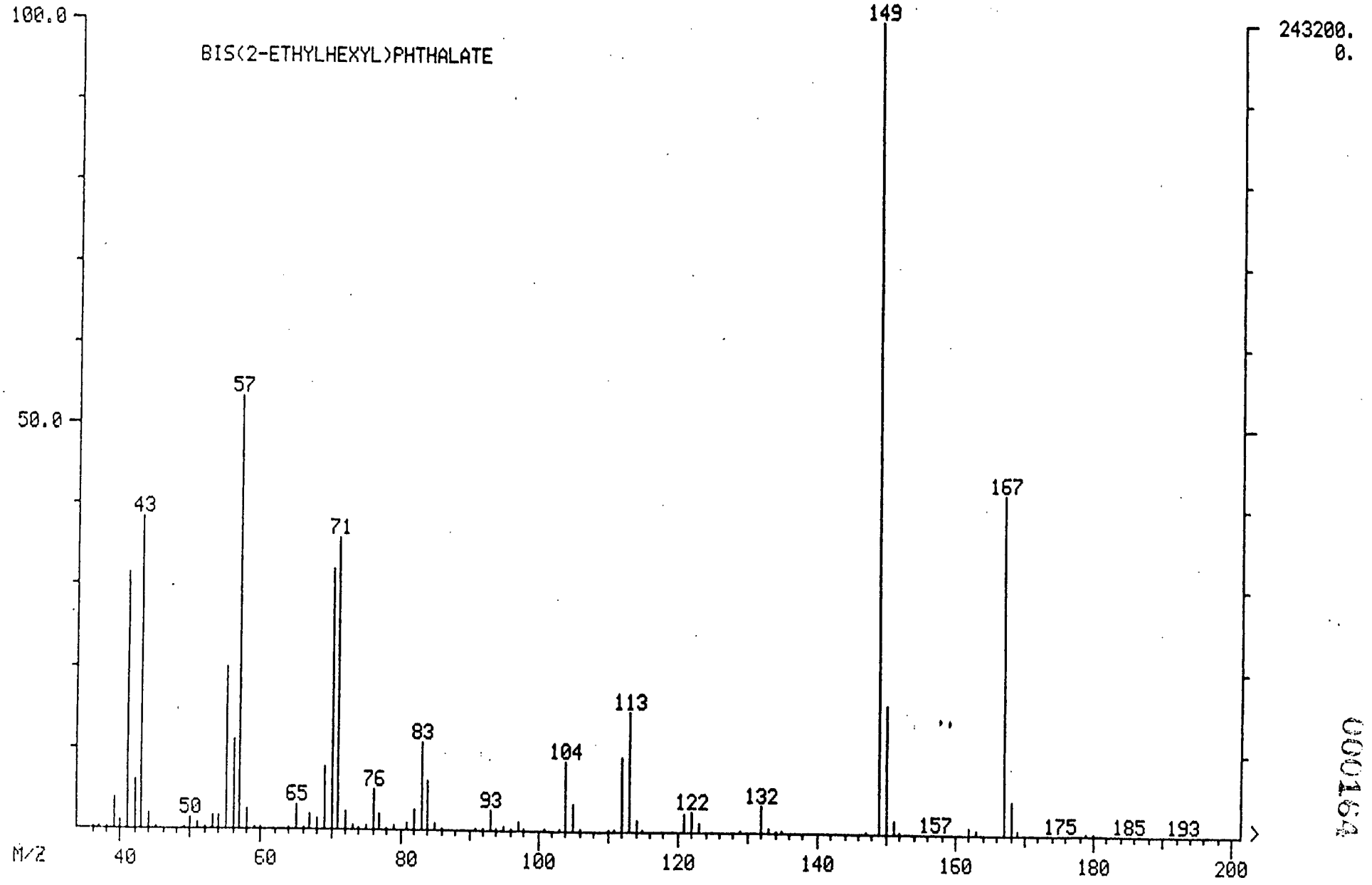


000163

MASS SPECTRUM
03/25/89 12:28:00 + 33:15
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 50 NG INJECTION
TEMP: 275 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: HSD500325 #1710
CALI: HSD500325 #3

BASE M/Z: 149
RIC: 1277950.



0001164

Quantitation Report File: 789603AB

000165

Data: 789603AB.TI
03/25/89 18:01:00
Sample: C-14A
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789603AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI70 CHRYSENE D12	INTERNAL STANDARD
2	C710 BENZIDINE	
3	C715 PYRENE	
4	C720 BUTYLBENZYLPHTHALATE	
5	C725 3,3'-DICHLOROBENZIDINE	
6	C730 BENZO(A)ANTHRACENE	
7	C745 BIS(2-ETHYLHEXYL)PHTHALATE	
8	C740 CHRYSENE	
9	CS30 TERPHENYL D14	SURROGATE

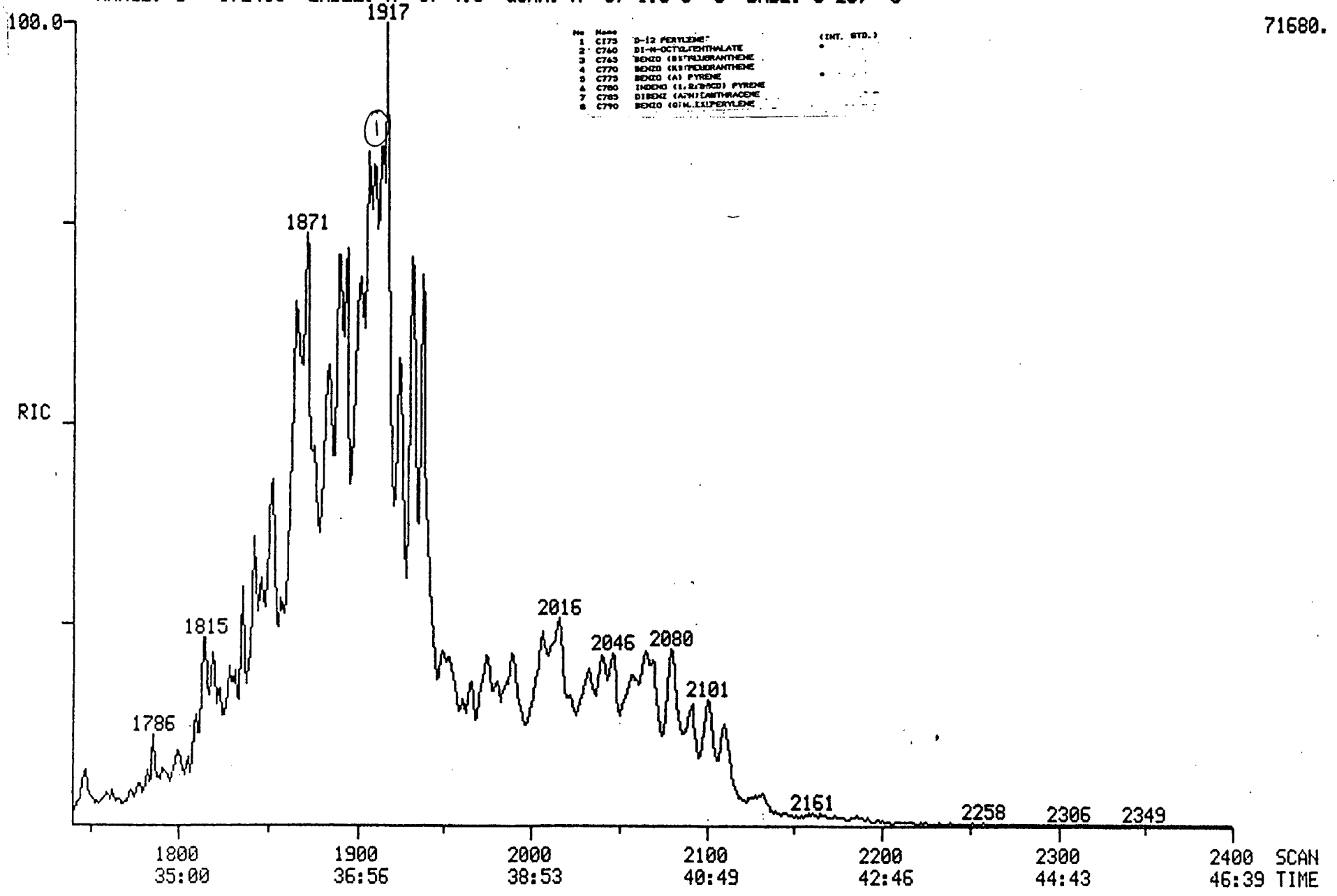
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	240	1678	32:37	1	1.000	A BB	180459.	40.000 UG/ML	22.73
2	NOT FOUND								
3	202	1476	28:42	1	0.880	A BB	~~663.~~	~~0.131 UG/ML~~	~~0.07~~ NO WSS
4	149	1605	31:12	1	0.956	A BB	~~610.~~	~~0.187 UG/ML~~	~~0.11~~ NO WSS
5	NOT FOUND								
6	228	1678	32:37	1	1.000	A BB	~~507.~~	~~0.105 UG/ML~~	~~0.06~~ NO WSS
7	149	1708	33:12	1	1.018	A BB	12411.	2.961 UG/ML	1.68 Yes WSS
8	NOT FOUND								
9	244	1514	29:26	1	0.902	A BB	666752.	132.612 UG/ML	75.36 Yes WSS

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	32:41	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	28:43		0.879						
3	28:44	1.00	0.879	1.00	0.13	50.00	0.003	1.124	0.00
4	31:16	1.00	0.957	1.00	0.19	50.00	0.003	0.725	0.00
5	32:43		1.001						
6	32:37	1.00	0.998	1.00	0.11	50.00	0.002	1.066	0.00
7	33:15	1.00	1.017	1.00	2.96	50.00	0.055	0.929	0.06
8	32:45		1.002						
9	29:27	1.00	0.901	1.00	132.61	50.00	2.956	1.114	2.65

RIC
03/25/89 18:01:00
SAMPLE: C-14A
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789603AB #1
CALI: 789603AB #3

SCANS 1740 TO 2400



No	Name		(INT. STD.)
1	C175	D-12 PERYLENE	*
2	C760	DI-N-OCTYLPENTHALATE	
3	C765	BENZO (B)FLUORANTHENE	
4	C770	BENZO (K)FLUORANTHENE	*
5	C775	BENZO (A) PYRENE	
6	C780	INDENO (1,2,3-CD) PYRENE	
7	C785	DIBENZ (A,H)ANTHRACENE	
8	C790	BENZO (G,H,I)PERYLENE	

Quantitation Report File: 789603AB

000167

Data: 789603AB.TI
03/25/89 18:01:00
Sample: C-14A
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789603AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI75 PERYLENE D12	INTERNAL STANDARD
2	C760 DI-N-OCTYLPHTHALATE	
3	C765 BENZO(B)FLUORANTHENE	
4	C770 BENZO(K)FLUORANTHENE	
5	C775 BENZO(A)PYRENE	
6	C780 INDENO(1,2,3-CD)PYRENE	
7	C785 DIBENZO(A,H)ANTHRACENE	
8	C790 BENZO(G,H,I)PERYLENE	

N	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	264	1913	37:11	1	1.000	A BB	19421.	40.000 UG/ML	*100.
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								

N	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	37:15	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	35:09		0.944						
3	35:58		0.966						
4	36:04		0.968						
5	37:03		0.995						
6	42:01		1.128						
7	42:12		1.133						
8	43:23		1.165						

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

EPA METHOD 625 BASE/NEUTRAL EXTRACTABLES BY GC/MS

Lab ID : 789604
Sample ID : C-14B
Date Analyzed : 03/25/89
Date Extracted: 02/24/89

Client : Gannett&Fleming
Prep Factor : 1000 mls/1.0 ml
Comments :
Date Received: 02/17/89

NO.	NAME	RESULTS PPB	COMMENTS
1	Bis(2-chloroethyl)Ether	10	U
2	1,2-Dichlorobenzene	10	U
3	1,4-Dichlorobenzene	10	U
4	1,3-Dichlorobenzene	10	U
5	Bis(2-chloroisopropyl)Ether	10	U
6	N-Nitrosodipropyl Amine	10	U
7	Hexachloroethane	10	U
8	Nitrobenzene	10	U
9	Isophorone	10	U
10	Bis(2-chloroethoxy)Methane	10	U
11	1,2,4-Trichlorobenzene	10	U
12	Naphthalene	10	U
13	Hexachlorobutadiene	10	U
14	Hexachlorocyclopentadiene	10	U
15	2-Chloronaphthalene	10	U
16	Dimethyl Phthalate	10	U
17	2,6-Dinitrotoluene	10	U
18	Acenaphthylene	10	U
19	Acenaphthene	10	U
20	2,4-Dinitrotoluene	10	U
21	Diethyl Phthalate	10	U
22	N-Nitrosodimethyl Amine	10	U
23	4-Chlorophenylphenyl Ether	10	U
24	Fluorene	10	U
25	Azobenzene	10	U
26	N-Nitrosodiphenyl Amine	10	U
27	4-Bromophenylphenyl Ether	10	U
28	Hexachlorobenzene	10	U
29	Phenanthrene	10	U
30	Anthracene	10	U
31	Dibutyl Phthalate	10	U
32	Fluoranthene	10	U

Comments:
U= Not detected
J= Detected but below Method Detection Limit
B= Compound found in Blank

Signature

Name/Title: Howard Whaley
GC/MS Project Leader

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

EPA Method 625 Base/Neutral Extractables by GC/MS

Lab ID : 789604
Sample ID : C-14B
Date Analyzed : 03/25/89
Date Extracted: 02/24/89

Client : Gannett&Fleming
Prep Factor: 1000 mls/1.0 ml
Comments :
Date Recieved: 02/17/89

NO.	NAME	RESULTS PPB	COMMENTS
33	Benzidine	50	U
34	Pyrene	10	U
35	Butylbenzyl Phthalate	10	U
36	3,3-Dichlorobenzidine	10	U
37	Benzo(A)Anthracene	10	U
38	Chrysene	10	U
39	Bis(2-ethylhexyl) Phthalate	1	BJ
40	Dioctyl-Phthalate	10	U
41	Benzo(K)Fluoranthene	10	U
42	Benzo(B)Fluoranthene	10	U
43	Benzo(A)Pyrene	10	U
44	Indeno(1,2,3-CD)Pyrene	10	U
45	Dibenzo(A,H)Anthracene	10	U
46	Benzo(GHI)Perylene	10	U

Comments:
U= Not Detected
J= Detected but below Method Detection Limit
B= Compound found in Blank

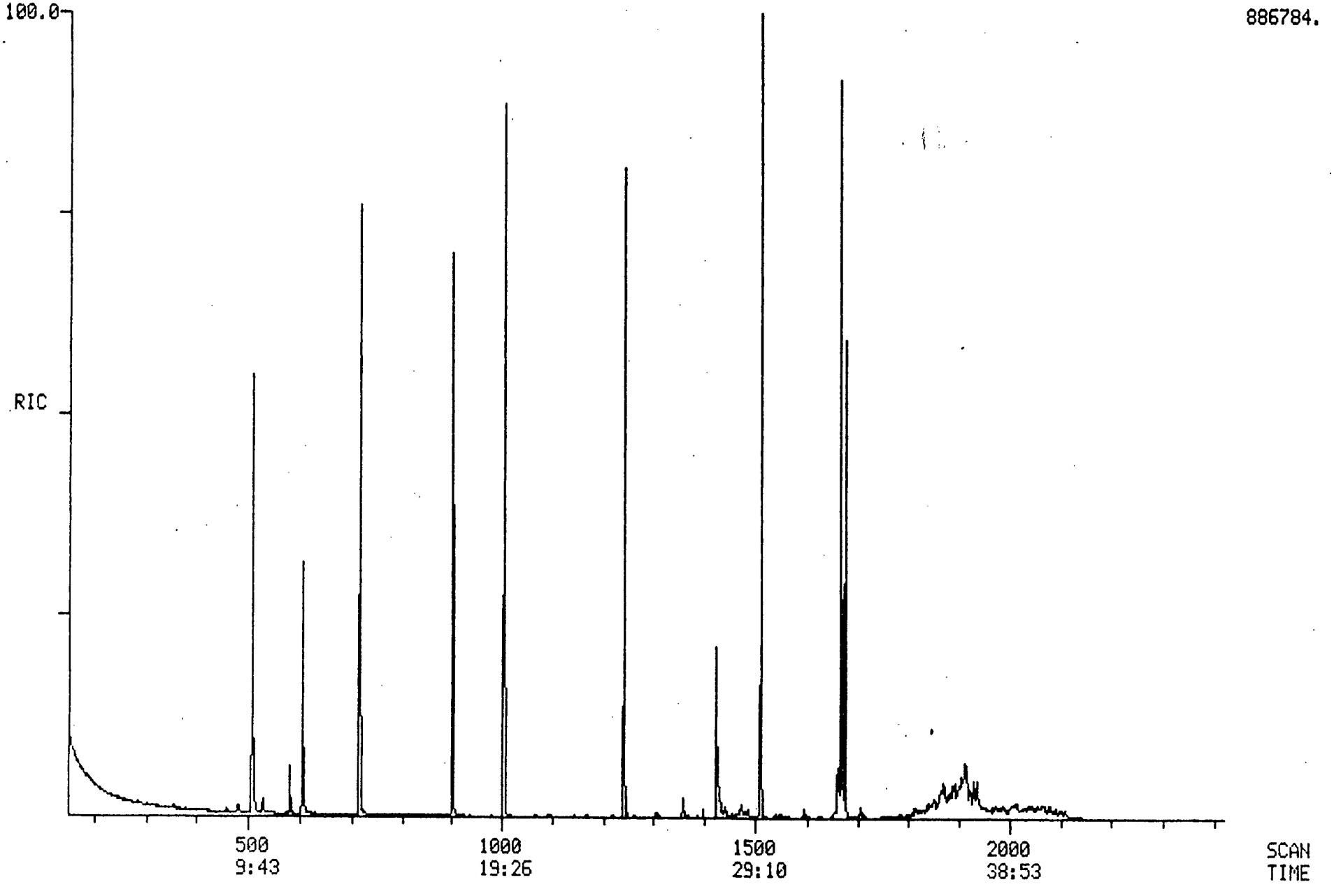
Signature

Name/Title: Howard Whaley
GC/MS Project Leader

RIC
03/25/89 18:54:00
SAMPLE: C-14B
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789604AB #1
CALI: CALTAB #3

SCANS 150 TO 2418

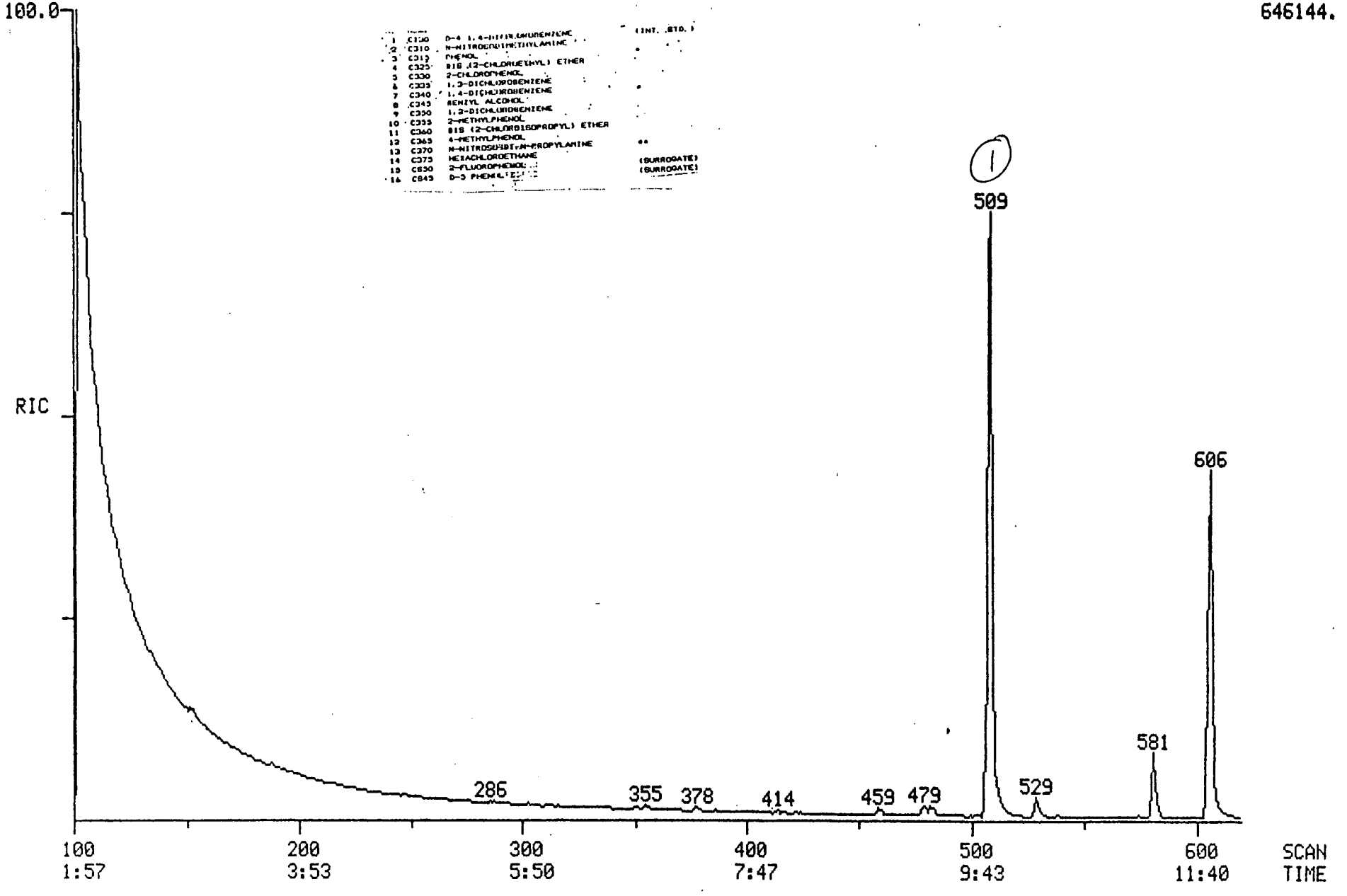


0001170

RIC
03/25/89 18:54:00
SAMPLE: C-14B
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789604AB #1
CALI: 789604AB #3

SCANS 100 TO 620



1	C300	D-4 1,4-DICHLOROBENZENE	(INT. STD.)
2	C310	N-NITROSODIMETHYLAMINE	
3	C313	PHENOL	
4	C325	BIS (2-CHLOROETHYL) ETHER	
5	C330	2-CHLOROPHENOL	
6	C333	1,3-DICHLOROBENZENE	
7	C340	1,4-DICHLOROBENZENE	
8	C343	BENZYL ALCOHOL	
9	C350	1,2-DICHLOROBENZENE	
10	C353	2-METHYLPHENOL	
11	C360	BIS (2-CHLOROISOPROPYL) ETHER	
12	C363	4-METHYLPHENOL	
13	C370	N-NITROSODI-N-PROPYLAMINE	
14	C373	HEXACHLOROETHANE	(SURROGATE)
15	C830	2-FLUOROPHENOL	(SURROGATE)
16	C843	D-5 PHENOL	

0001713

Quantitation Report File: 789604AB

000172

Data: 789604AB.TI
03/25/89 18:54:00
Sample: C-14B
Conds.: 1000 MLS/1.0 ML
Formula: Instrum nt: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789604AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI30	1,4-DICHLOROBENZENE D4	INTERNAL STANDARD
2		N-NITROSODIMETHYLAMINE	
3	C315	PHENOL	
4	C325	BIS(2-CHLOROETHYL) ETHER	
5	C330	2-CHLOROPHENOL	
6	C335	1,3-DICHLOROBENZENE	
7	C340	1,4-DICHLOROBENZENE	
8	C345	BENZYL ALCOHOL	
9	C350	1,2-DICHLOROBENZENE	
10	C355	2-METHYLPHENOL	
11	C360	BIS(2-CHLOROISOPROPYL)ETHER	
12	C365	4-METHYLPHENOL	
13	C370	N-NITROSO-DI-PROPYLAMINE	
14	C375	HEXACHLOROETHANE	
15	CS50	2-FLUOROPHENOL	SURROGATE
16	CS45	PHENOL D5	SURROGATE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	508	9:53	1	1.000	A BB	197049.	40.000 UG/ML	*100.
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								

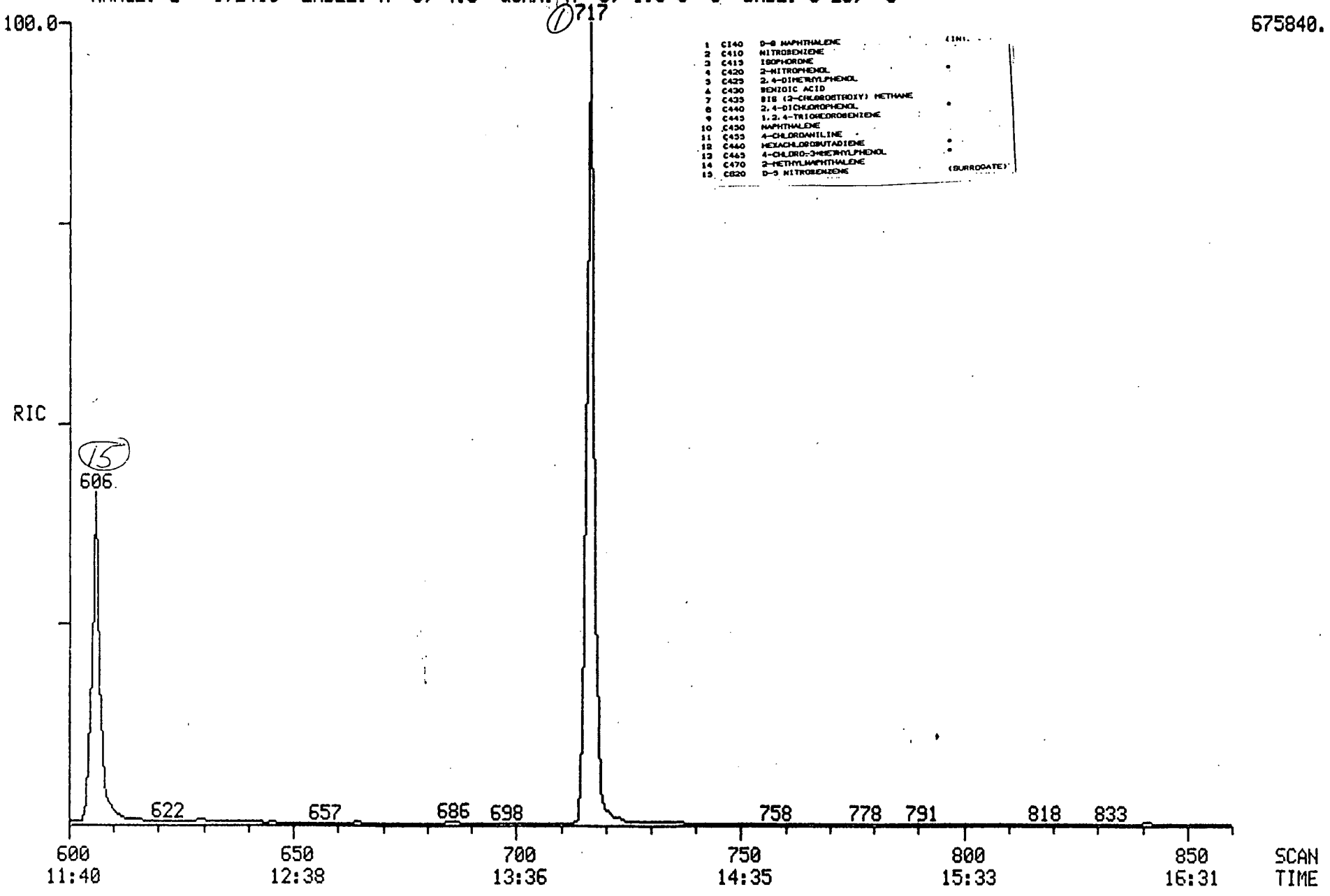
No	R t(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:50	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	2:35		0.263						
3	9:25		0.957						
4	9:19		0.947						
5	9:23		0.955						
6	9:42		0.986						
7	9:54		1.006						

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
8	10:40		1.085						
9	10:29		1.065						
10	11:15		1.144						
11	11:05		1.126						
12	11:48		1.200						
13	11:36		1.180						
14	11:27		1.164						
15	5:55		0.601						
16	9:22		0.953						

RIC
03/25/89 18:54:00
SAMPLE: C-14B
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789604AB #1
CALI: 789604AB #3

SCANS 600 TO 860



000174

Quantitation Report File: 789604AB

000175

Data: 789604AB.TI
03/25/89 18:54:00
Sample: C-14B
Conds.: 1000 MLS/1.0 ML
Formula: Instrum nt: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789604AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI40 NAPHTHALENE D8	INTERNAL STANDARD
2	C410 NITROBENZENE	
3	C415 ISOPHORONE	
4	C420 2-NITROPHENOL	
5	C425 2,4-DIMETHYLPHENOL	
6	C430 BENZOIC ACID	
7	C435 BIS(2-CHLOROETHOXY)METHANE	
8	C440 2,4-DICHLOROPHENOL	
9	C445 1,2,4-TRICHLOROBENZENE	
10	C450 NAPHTHALENE	
11	C455 4-CHLOROANILINE	
12	C460 HEXACHLOROBUTADIENE	
13	C465 4-CHLORO-3-METHYLPHENOL	
14	C470 2-METHYLNAPHTHALENE	
15	CS20 NITROBENZENE D5	SURROGATE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	136	717	13:56	1	1.000	A BB	591422.	40.000 UG/ML	50.37
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	128	719	13:59	1	1.003	A BB	~~306.~~	~~0.025 UG/ML~~	~~0.03~~ NO WSS
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	82	606	11:47	1	0.845	A*BB	310212.	39.385 UG/ML	49.60 YES WSS

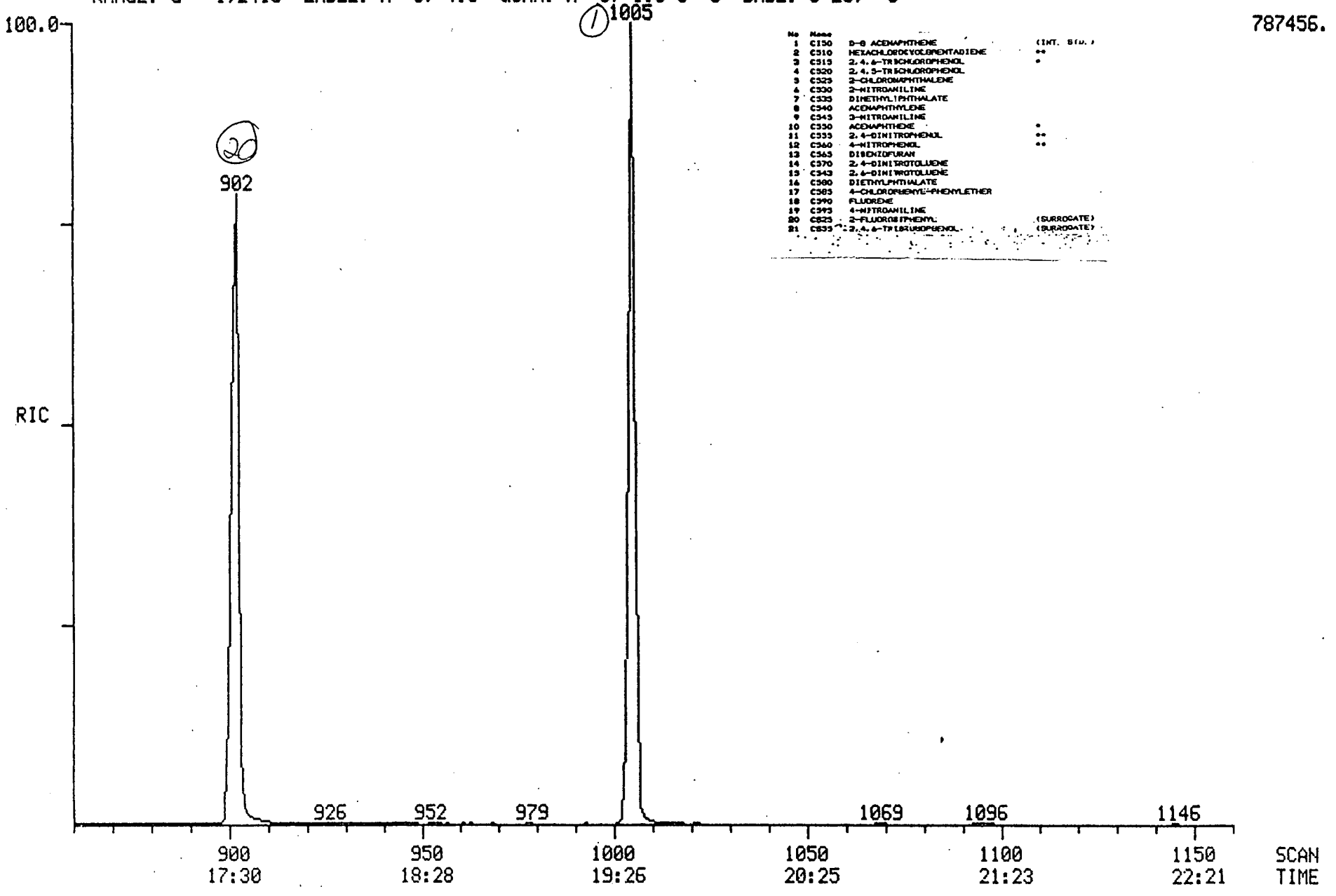
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	13:59	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	11:53		0.850						
3	12:42		0.908						
4	12:53		0.922						
5	13:21		0.955						
6	14:16		1.021						
7	13:32		0.968						
8	13:48		0.987						
9	13:53		0.993						

N	R t(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Rati
10	14:02	1.00	1.004	1.00	0.03	50.00	0.000	0.812	0.000176
11	14:28		1.035						
12	14:42		1.051						
13	16:16		1.164						
14	16:16		1.164						
15	11:48	1.00	0.844	1.00	39.39	50.00	0.420	0.533	0.79

RIC
03/25/89 18:54:00
SAMPLE: C-14B
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789604AB #1
CALI: 789604AB #3

SCANS 860 TO 1160



No	Name		
1	C150	D-8 ACENAPHTHENE	(INT. STD.)
2	C310	HEXACHLOROCYCLOPENTADIENE	**
3	C315	2,4,6-TRICHLOROPHENOL	*
4	C320	2,4,5-TRICHLOROPHENOL	
5	C325	2-CHLORONAPHTHALENE	
6	C330	2-NITROANILINE	
7	C335	DIMETHYLPHTHALATE	
8	C340	ACENAPHTHYLENE	
9	C345	3-NITROANILINE	
10	C350	ACENAPHTHENE	*
11	C355	2,4-DINITROPHENOL	**
12	C360	4-NITROPHENOL	**
13	C365	DIBENZOFURAN	
14	C370	2,4-DINITROTOLUENE	
15	C375	2,6-DINITROTOLUENE	
16	C380	DIETHYLPHTHALATE	
17	C385	4-CHLOROPHENYL-PHENYLETHER	
18	C390	FLUORENE	
19	C395	4-NITROANILINE	
20	C825	2-FLUOROBIPHENYL	(SURROGATE)
21	C835	2,4,6-TRIBROMOPHENOL	(SURROGATE)

0000177

Quantitation Rep rt File: 789604AB

000178

Data: 789604AB.TI
03/25/89 18:54:00
Sample: C-14B
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789604AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI50 ACENAPHTHENE D8	INTERNAL STANDARD
2	C510 HEXACHLOROCYCLOPENTADIENE	
3	C515 2,4,6-TRICHLOROPHENOL	
4	C520 2,4,5-TRICHLOROPHENOL	
5	C525 2-CHLORONAPHTHALENE	
6	C530 2-NITROANILINE	
7	C535 DIMETHYL PHTHALATE	
8	C540 ACENAPHTHYLENE	
9	C545 3-NITROANILINE	
10	C550 ACENAPHTHENE	
11	C555 2,4-DINITROPHENOL	
12	C560 4-NITROPHENOL	
13	C565 DIBENZOFURAN	
14	C570 2,4-DINITROTOLUENE	
15	C543 2,6-DINITROTOLUENE	
16	C580 DIETHYL PHTHALATE	
17	C585 4-CHLOROPHENYL PHENYL ETHER	
18	C590 FLUORENE	
19	C595 4-NITROANILINE	
20	CS25 2-FLUOROBIPHENYL	SURROGATE
21	CS55 2,4,6-TRIBROMOPHENOL	SURROGATE

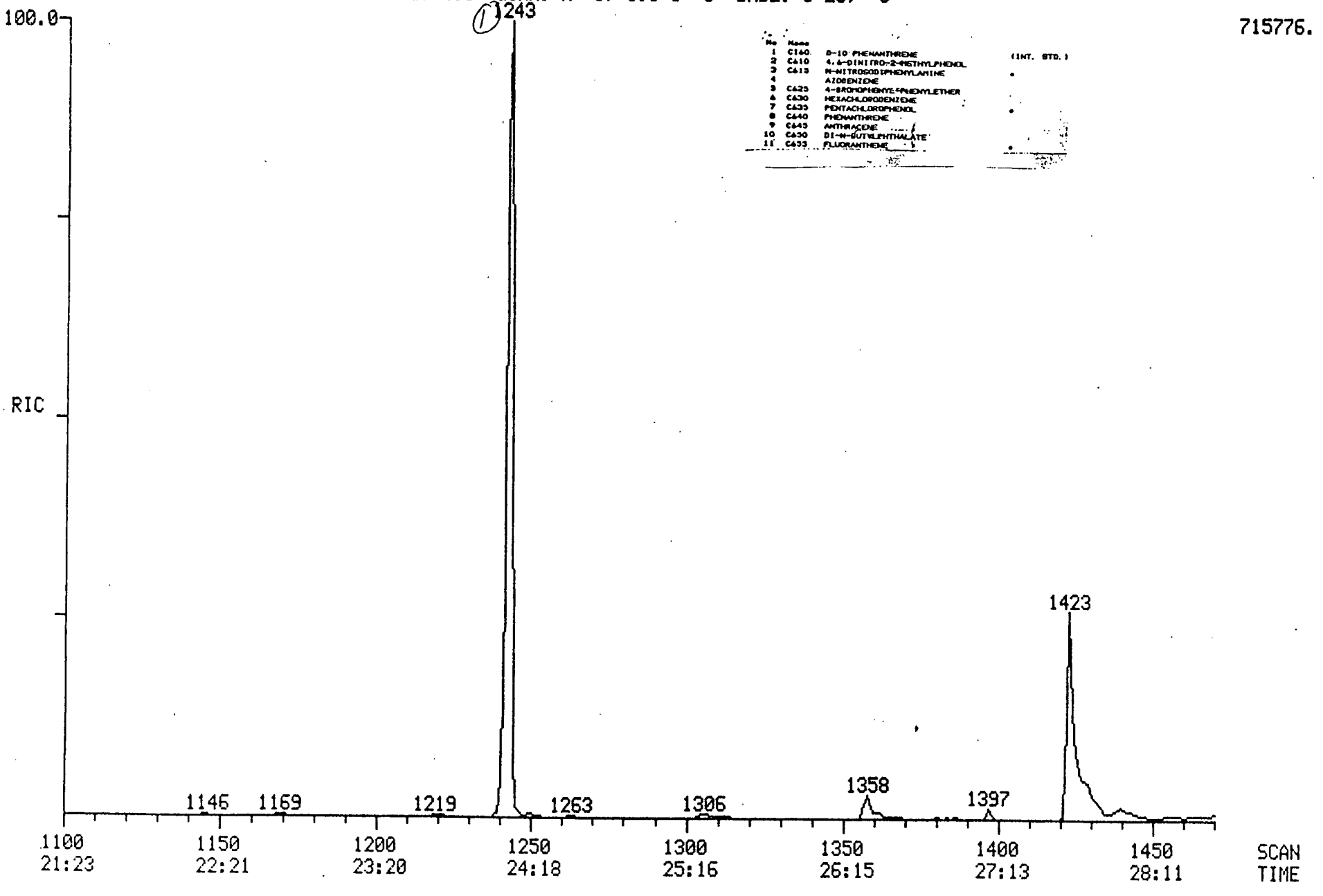
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot	
1	164	1005	19:32	1	1.000	A BB	319711.	40.000 UG/ML	47.77	
2	NOT FOUND									
3	NOT FOUND									
4	NOT FOUND									
5	NOT FOUND									
6	NOT FOUND									
7	NOT FOUND									
8	152	979	19:02	1	0.974	A BB	~~361.~~	~~0.033 UG/ML~~	~~0.04~~	NO WSS
9	NOT FOUND									
10	NOT FOUND									
11	NOT FOUND									
12	NOT FOUND									
13	168	1037	20:10	1	1.032	A BB	~~459.~~	~~0.028 UG/ML~~	~~0.03~~	NO WSS
14	NOT FOUND									
15	NOT FOUND									
16	149	1095	21:17	1	1.090	A BB	~~1535.~~	~~0.167 UG/ML~~	~~0.20~~	NO WSS
17	NOT FOUND									
18	NOT FOUND									
19	NOT FOUND									
20	172	902	17:32	1	0.898	A BB	393226.	43.513 UG/ML	51.97	YES WSS
21	NOT FOUND									

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	19:36	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	16:59		0.867						
3	17:23		0.887						
4	17:36		0.898						
5	17:46		0.907						
6	18:25		0.939						
7	19:08		0.976						
8	19:05	1.00	0.974	1.00	0.03	50.00	0.001	1.353	0.00
9	19:46		1.009						
10	19:42		1.005						
11	20:03		1.023						
12	20:42		1.057						
13	20:13	1.00	1.032	1.00	0.03	50.00	0.001	2.072	0.00
14	20:29		1.046						
15	19:18		0.985						
16	21:23	1.00	1.091	1.00	0.17	50.00	0.004	1.153	0.00
17	21:23		1.091						
18	21:17		1.086						
19	21:46		1.111						
20	17:34	1.00	0.897	1.00	43.51	50.00	0.984	1.131	0.87
21	22:09		1.130						

RIC
03/25/89 18:54:00
SAMPLE: C-14B
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789604AB #1
CALI: 789604AB #3

SCANS 1100 TO 1470



No	Name		(INT. STD.)
1	C140	D-10 PHENANTHRENE	
2	C610	4,6-DINITRO-2-METHYLPHENOL	
3	C615	N-NITROSODIPHENYLAMINE	•
4		AZOBENZENE	
5	C625	4-BROMOPHENYL-PHENYLETHER	
6	C630	HEXACHLOROBENZENE	
7	C635	PENTACHLOROPHENOL	•
8	C640	PHENANTHRENE	
9	C645	ANTHRACENE	
10	C650	DI-N-BUTYLPHTHALATE	
11	C655	FLUORANTHENE	•

0001190

Quantitati n Report File: 789604AB

000181

Data: 789604AB.TI
03/25/89 18:54:00
Sample: C-14B
Conds.: 1000 MLS/1.0 ML
F rmula: Instrument: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789604AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
R sp. fac. from Library Entry

No	Name	
1	CI60 PHENANTHRENE D10	INTERNAL STANDARD
2	C610 4,6-DINITRO-2-METHYL PHENOL	
3	C615 N-NITROSODIPHENYLAMINE	
4	AZOBENZENE	
5	C625 4-BROMOPHENYL PHENYL ETHER	
6	C630 HEXACHLOROBENZENE	
7	C635 PENTACHLOROPHENOL	
8	C640 PHENANTHRENE	
9	C645 ANTHRACENE	
10	C650 DI-N-BUTYL PHTHALATE	
11	C655 FLUORANTHENE	

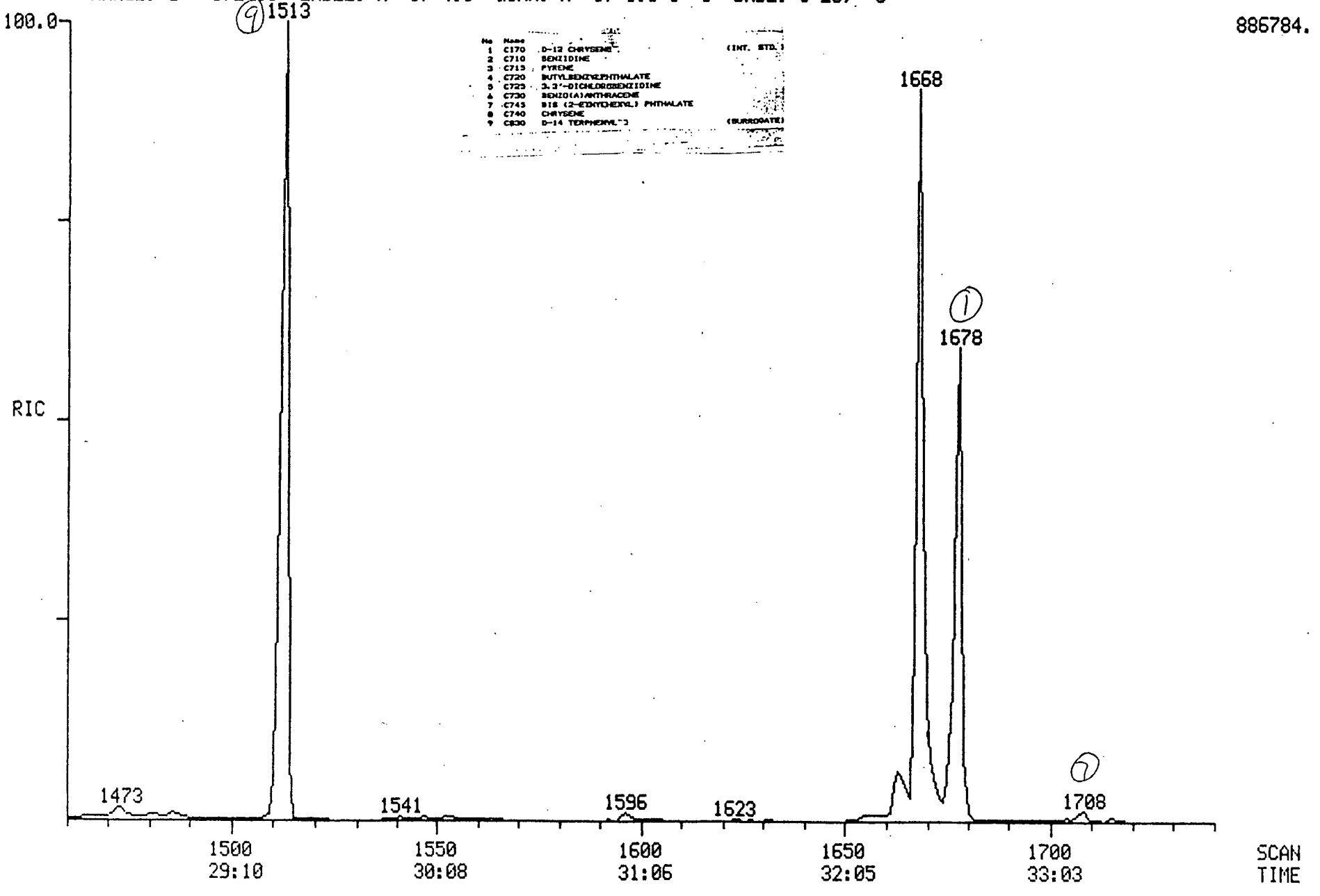
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	188	1242	24:09	1	1.000	A BB	450093.	40.000 UG/ML	98.48
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	178	1245	24:12	1	1.002	A BB	~~1057.~~	~~0.100 UG/ML~~	~~0.25~~ NO WSS
9	178	1253	24:21	1	1.009	A BB	~~323.~~	~~0.036 UG/ML~~	~~0.09~~ NO WSS
10	149	1362	26:29	1	1.097	A BB	~~4506.~~	~~0.449 UG/ML~~	~~1.11~~ NO WSS
11	202	1440	28:00	1	1.159	A BB	~~313.~~	~~0.033 UG/ML~~	~~0.08~~ NO WSS

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	24:13	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	21:45		0.898						
3	21:51		0.902						
4	21:53		0.904						
5	22:54		0.945						
6	23:16		0.961						
7	23:57		0.989						
8	24:18	1.00	1.003	1.00	0.10	50.00	0.002	0.937	0.00
9	24:26	1.00	1.009	1.00	0.04	50.00	0.001	0.808	0.00
10	26:32	1.00	1.096	1.00	0.45	50.00	0.008	0.891	0.01
11	28:03	1.00	1.158	1.00	0.03	50.00	0.001	0.853	0.00

RIC
03/25/89 18:54:00
SAMPLE: C-14B
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789604AB #1
CALI: 789604AB #3

SCANS 1460 TO 1740

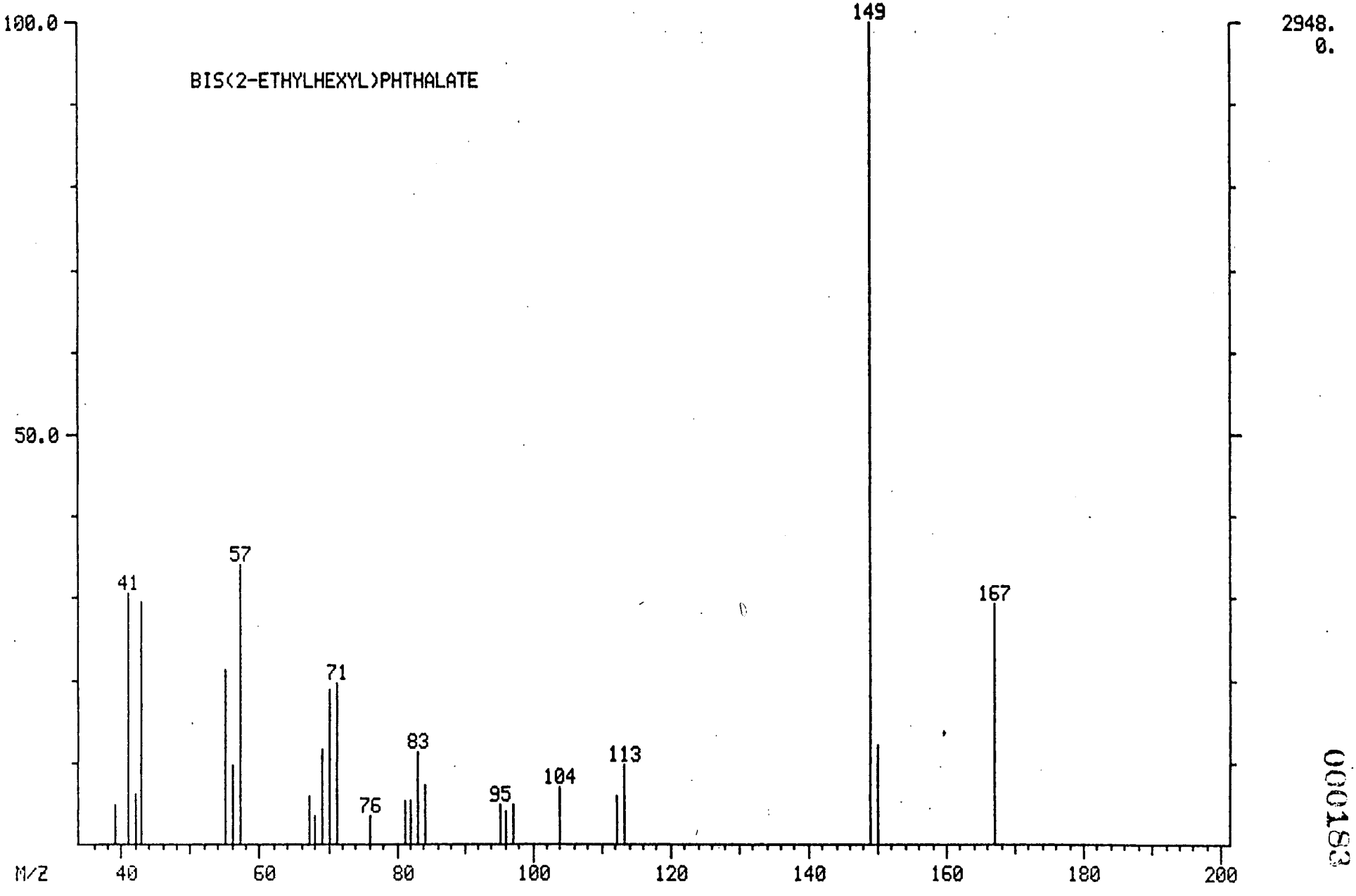


No	Name		
1	C170	D-12 CHRYSENE	(INT. STD.)
2	C710	BENZIDINE	
3	C715	PYRENE	
4	C720	BUTYLBENZYLPHTHALATE	
5	C725	3,3'-DICHLOROBENZIDINE	
6	C730	BENZO(A)ANTHRACENE	
7	C745	BIS (2-ETHYLHEXYL) PHTHALATE	
8	C740	CHRYSENE	
9	C830	D-14 TERPHENYL	(SURROGATE)

MASS SPECTRUM
03/25/89 18:54:00 + 33:12
SAMPLE: C-14B
CONDS.: 1000 MLS/1.0 ML
TEMP: 275 DEG. C

DATA: 789604AB #1708
CALI: 789604AB #3

BASE M/Z: 149
RIC: 11968.

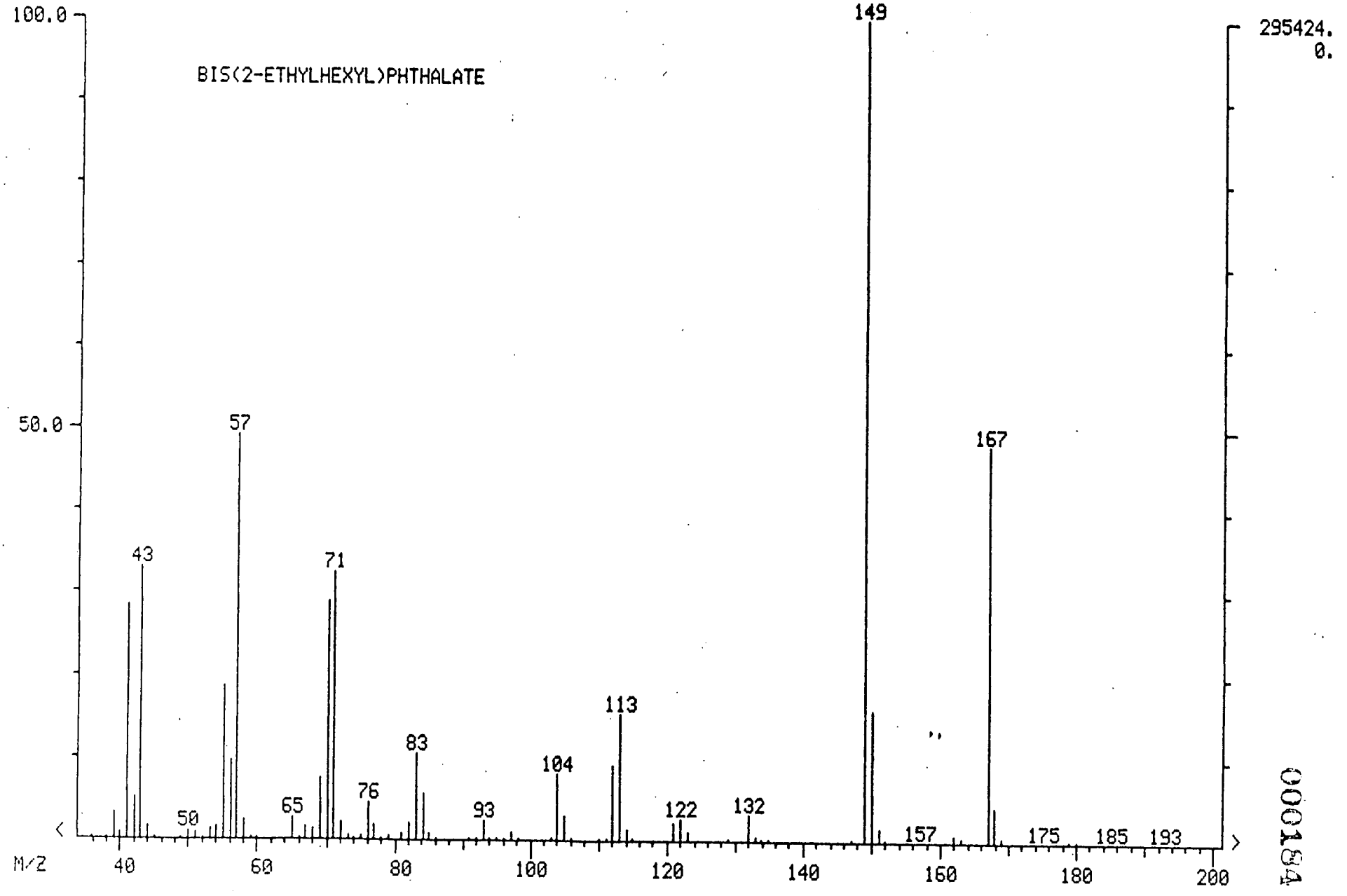


000183

MASS SPECTRUM
03/25/89 12:28:00 + 33:15
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 50 NG INJECTION
TEMP: 275 DEG. C

DATA: HSD500325 #1710
CALI: HSD500325 #3

BASE M/Z: 149
RIC: 1486850.

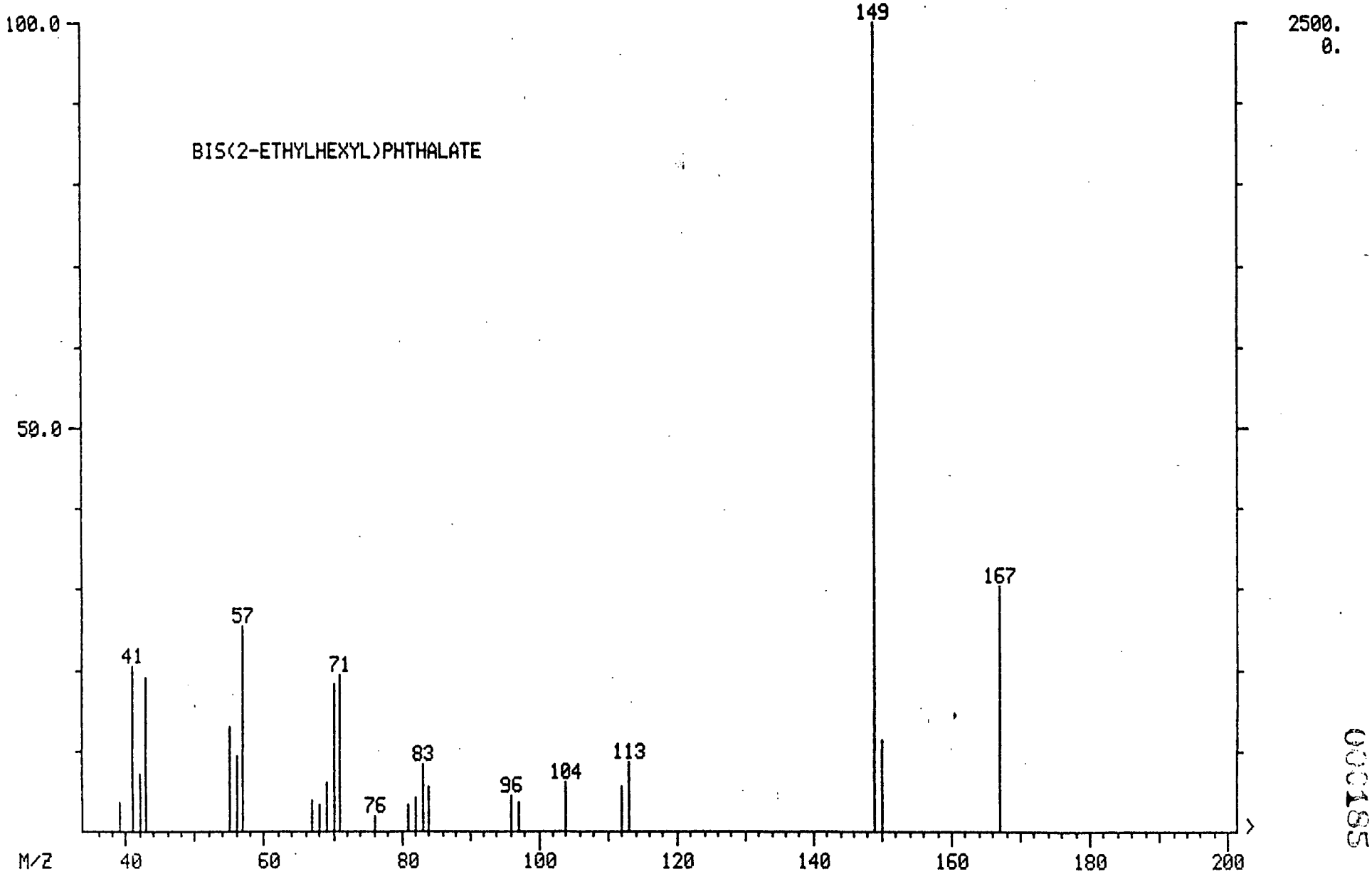


0001184

MASS SPECTRUM
03/25/89 18:54:00 + 33:12
SAMPLE: C-14B
CONDS.: 1000 MLS/1.0 ML
TEMP: 275 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 789604AB #1708
CALI: 789604AB #3

BASE M/Z: 149
RIC: 8624.

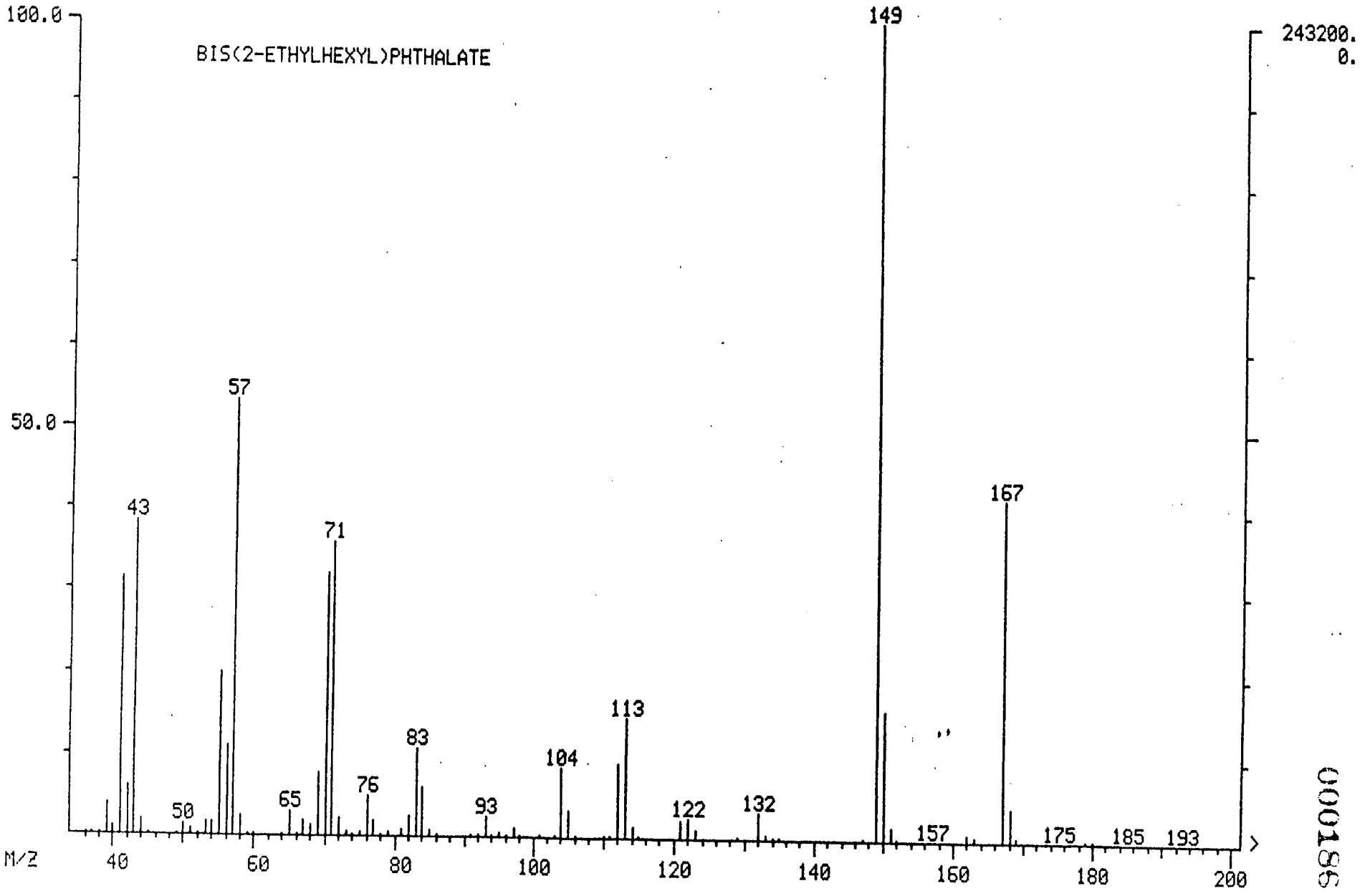


000185

MASS SPECTRUM
03/25/89 12:28:00 + 33:15
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 50 NG INJECTION
TEMP: 275 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: HSD500325 #1710
CALI: HSD500325 #3

BASE M/Z: 149
RIC: 1277950.



000186

Quantitation Report File: 789604AB

000187

Data: 789604AB.TI
03/25/89 18:54:00
Sample: C-14B
Conds.: 1000 MLS/1.0 ML
F rmula: Instrument: FINN Weight: 0.000
Submitt d by: FLEMING Analyst: WSS Acct. No.: 789604AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI70 CHRYSENE D12	INTERNAL STANDARD
2	C710 BENZIDINE	
3	C715 PYRENE	
4	C720 BUTYLBENZYLPHTHALATE	
5	C725 3,3'-DICHLOROBENZIDINE	
6	C730 BENZO(A)ANTHRACENE	
7	C745 BIS(2-ETHYLHEXYL)PHTHALATE	
8	C740 CHRYSENE	
9	CS30 TERPHENYL D14	SURROGATE

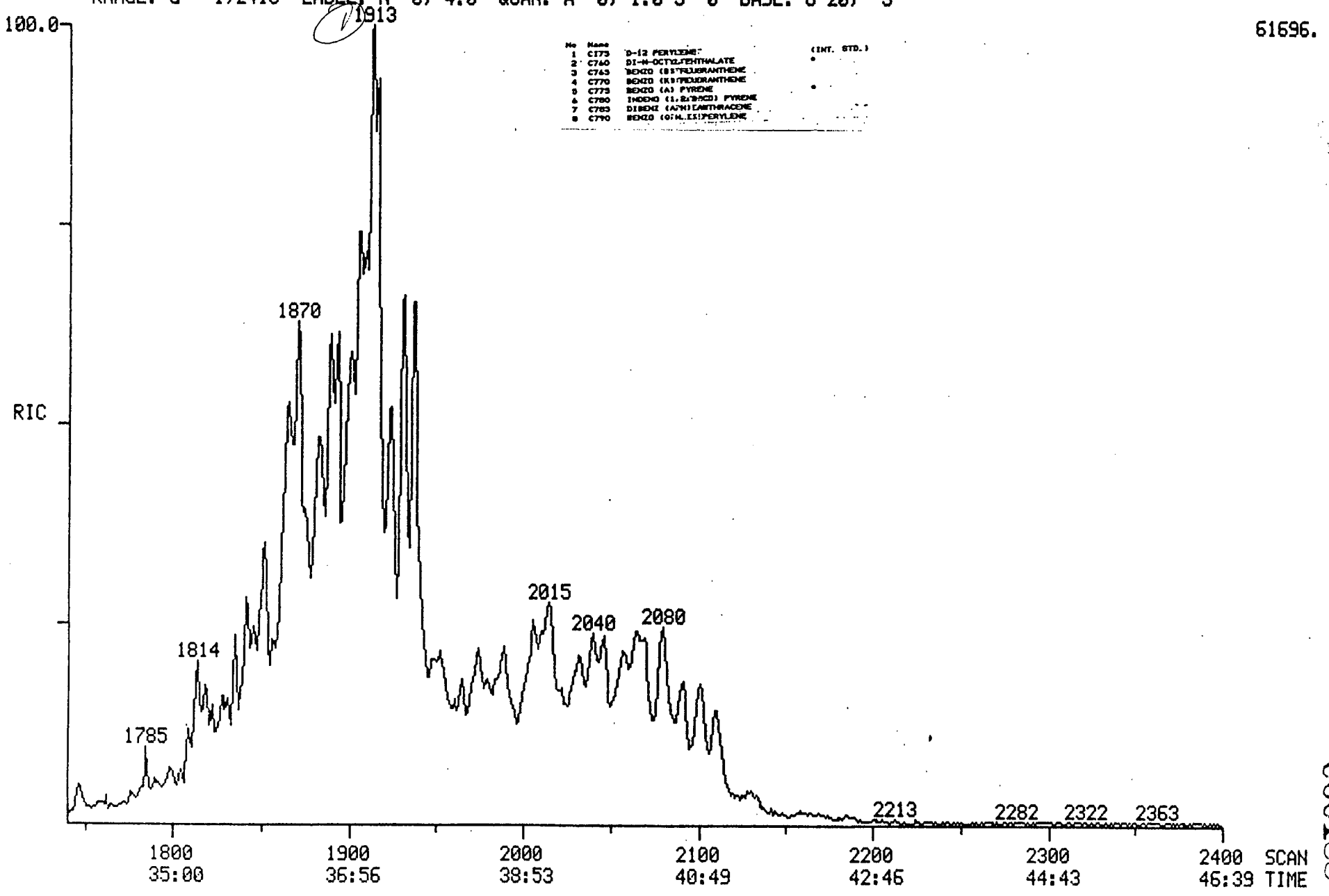
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	240	1678	32:37	1	1.000	A BB	236897.	40.000 UG/ML	36.20
2	NOT FOUND								
3	NOT FOUND								
4	149	1604	31:11	1	0.956	A BB	~~437.~~	~~0.102 UG/ML~~	~~0.09~~ NO WGS
5	NOT FOUND								
6	NOT FOUND								
7	149	1708	33:12	1	1.018	A BB	6745.	1.226 UG/ML	1.11 YES WSS
8	NOT FOUND								
9	244	1513	29:25	1	0.902	A BB	456621.	69.182 UG/ML	62.62 YES WSS

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	32:41	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	28:43		0.879						
3	28:44		0.879						
4	31:16	1.00	0.957	1.00	0.10	50.00	0.001	0.725	0.00
5	32:43		1.001						
6	32:37		0.998						
7	33:15	1.00	1.017	1.00	1.23	50.00	0.023	0.929	0.02
8	32:45		1.002						
9	29:27	1.00	0.901	1.00	69.18	50.00	1.542	1.114	1.3

RIC
03/25/89 18:54:00
SAMPLE: C-14B
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789604AB #1
CALI: 789604AB #3

SCANS 1740 TO 2400



No	Name		(INT. STD.)
1	C773	D-12 PERYLENE	*
2	C760	DI-N-OCTYLPHTHALATE	
3	C765	BENZO (B)FLUORANTHENE	
4	C770	BENZO (K)FLUORANTHENE	
5	C775	BENZO (A) PYRENE	*
6	C780	INDENO (1,2,3-CD) PYRENE	
7	C785	DIBENZ (A,H)ANTHRACENE	
8	C790	BENZO (G,H,I)PERYLENE	

000188

Quantitation Report File: 789604AB

000189

Data: 789604AB.TI
03/25/89 18:54:00
Sampl : C-14B
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789604AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI75 PERYLENE D12	INTERNAL STANDARD
2	C760 DI-N-OCTYLPHTHALATE	
3	C765 BENZO(B)FLUORANTHENE	
4	C770 BENZO(K)FLUORANTHENE	
5	C775 BENZO(A)PYRENE	
6	C780 INDENO(1,2,3-CD)PYRENE	
7	C785 DIBENZO(A,H)ANTHRACENE	
8	C790 BENZO(G,H,I)PERYLENE	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	264	1912	37:10	1	1.000	A BB	26209.	40.000 UG/ML	*100.
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	37:15	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	35:09		0.944						
3	35:58		0.966						
4	36:04		0.968						
5	37:03		0.995						
6	42:01		1.128						
7	42:12		1.133						
8	43:23		1.165						

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

EPA METHOD 625 BASE/NEUTRAL EXTRACTABLES BY GC/MS

Lab ID : 789605
Sample ID : C-14C
Date Analyzed : 03/25/89
Date Extracted: 02/24/89

Client : Gannett&Fleming
Prep Factor : 1000 mls/1.0 ml
Comments :
Date Received: 02/17/89

NO.	NAME	RESULTS PPB	COMMENTS
1	Bis(2-chloroethyl)Ether	10	U
2	1,2-Dichlorobenzene	10	U
3	1,4-Dichlorobenzene	10	U
4	1,3-Dichlorobenzene	10	U
5	Bis(2-chloroisopropyl)Ether	10	U
6	N-Nitrosodipropyl Amine	10	U
7	Hexachloroethane	10	U
8	Nitrobenzene	10	U
9	Isophorone	10	U
10	Bis(2-chloroethoxy)Methane	10	U
11	1,2,4-Trichlorobenzene	10	U
12	Naphthalene	10	U
13	Hexachlorobutadiene	10	U
14	Hexachlorocyclopentadiene	10	U
15	2-Chloronaphthalene	10	U
16	Dimethyl Phthalate	10	U
17	2,6-Dinitrotoluene	10	U
18	Acenaphthylene	10	U
19	Acenaphthene	10	U
20	2,4-Dinitrotoluene	10	U
21	Diethyl Phthalate	10	U
22	N-Nitrosodimethyl Amine	10	U
23	4-Chlorophenylphenyl Ether	10	U
24	Fluorene	10	U
25	Azobenzene	10	U
26	N-Nitrosodiphenyl Amine	10	U
27	4-Bromophenylphenyl Ether	10	U
28	Hexachlorobenzene	10	U
29	Phenanthrene	10	U
30	Anthracene	10	U
31	Dibutyl Phthalate	10	U
32	Fluoranthene	10	U

Comments:
U= Not detected
J= Detected but below Method Detection limit
B= Compound found in Blank

Signature

Name/Title: Howard Whaley
GC/MS Project Leader

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

EPA Method 625 Base/Neutral Extractables by GC/MS

Lab ID : 789605
Sample ID : C-14C
Date Analyzed : 03/25/89
Date Extracted: 02/24/89

Client : Gannett&Fleming
Prep Factor: 1000 mls/1.0 ml
Comments :
Date Recieved: 02/17/89

NO.	NAME	RESULTS PPB	COMMENTS
33	Benzidine	50	U
34	Pyrene	10	U
35	Butylbenzyl Phthalate	10	U
36	3,3-Dichlorobenzidine	10	U
37	Benzo(A)Anthracene	10	U
38	Chrysene	10	U
39	Bis(2-ethylhexyl) Phthalate	2	BJ
40	Dioctyl-Phthalate	10	U
41	Benzo(K)Fluoranthene	10	U
42	Benzo(B)Fluoranthene	10	U
43	Benzo(A)Pyrene	10	U
44	Indeno(1,2,3-CD)Pyrene	10	U
45	Dibenzo(A,H)Anthracene	10	U
46	Benzo(GHI)Perylene	10	U

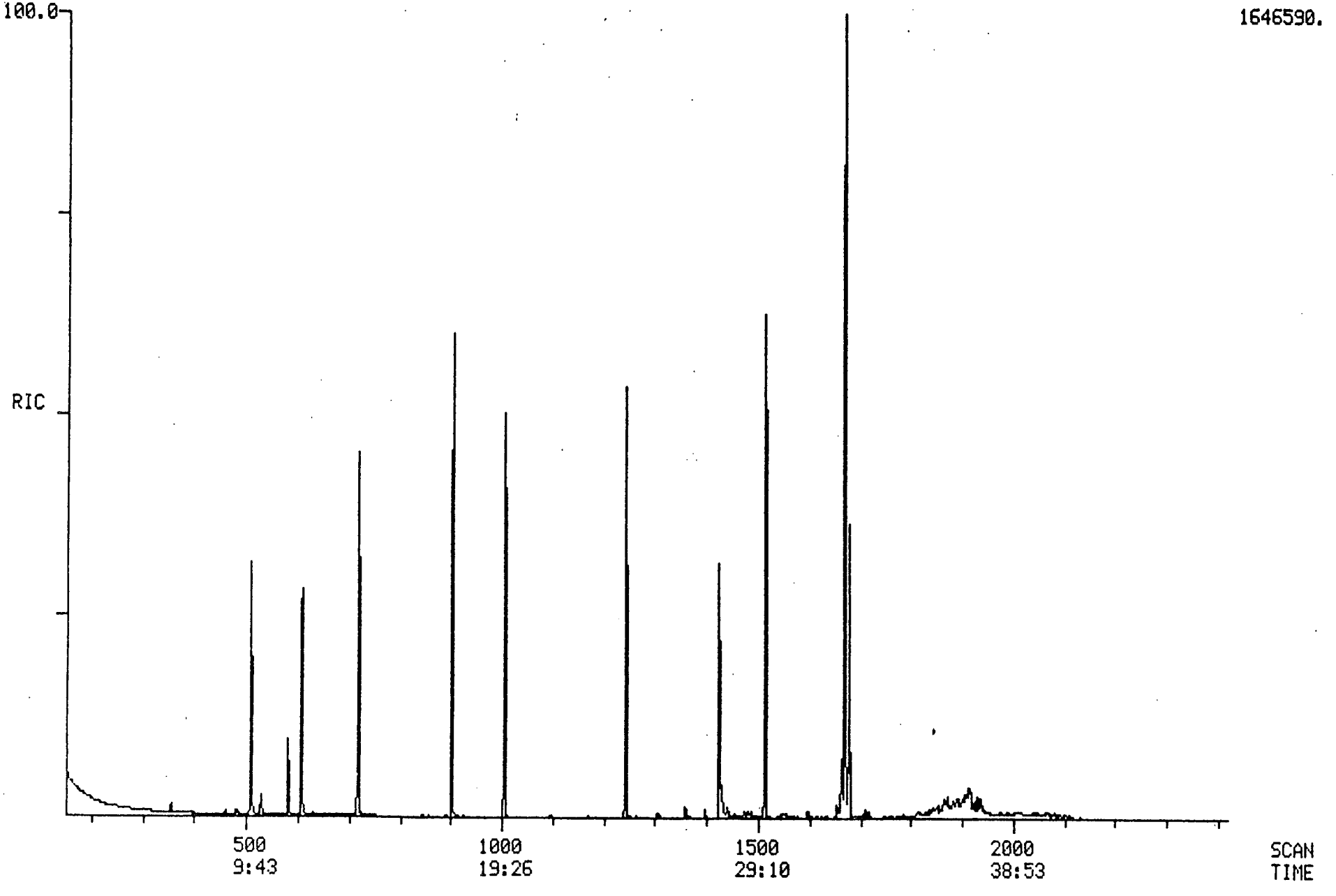
Comments:
U= Not Detected
J= Detected but below Method Detection Limit
B= Compound found in Blank

Signature

Name/Title: Howard Whaley
GC/MS Project Leader

RIC
03/25/89 19:48:00
SAMPLE: C-14C
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789605AB #1 SCANS 150 TO 2418
CALI: CALTAB #3

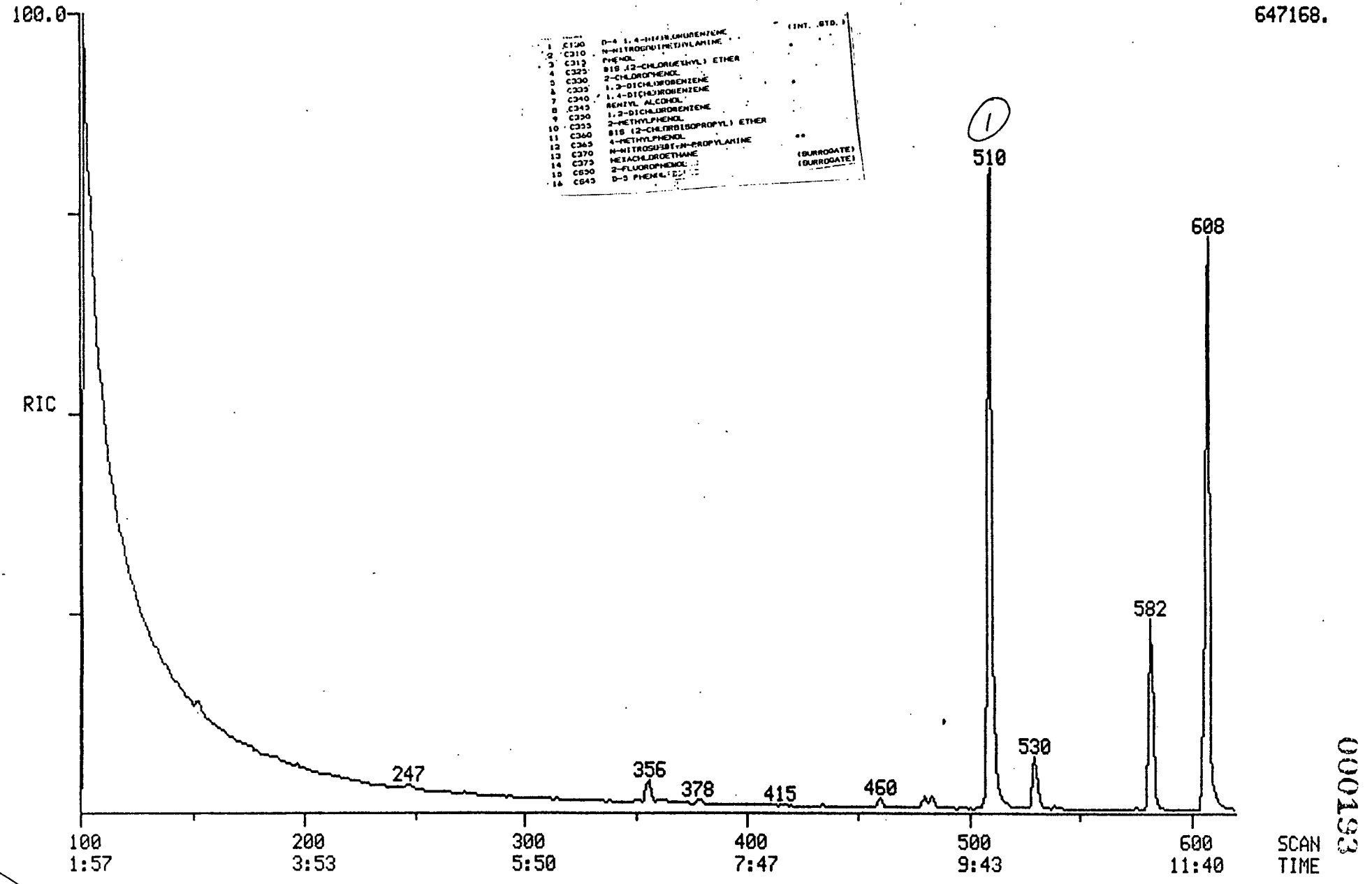


000192

RIC
03/25/89 19:48:00
SAMPLE: C-14C
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789605AB #1
CALI: 789605AB #3

SCANS 100 TO 620



0001193

Quantitation Report File: 789605AB

000194

Data: 789605AB.TI
03/25/89 19:48:00
Sample: C-14C
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789605AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
R sp. fac. from Library Entry

No	Name	
1	CI30 1,4-DICHLOROBENZENE D4	INTERNAL STANDARD
2	N-NITROSODIMETHYLAMINE	
3	C315 PHENOL	
4	C325 BIS(2-CHLOROETHYL) ETHER	
5	C330 2-CHLOROPHENOL	
6	C335 1,3-DICHLOROBENZENE	
7	C340 1,4-DICHLOROBENZENE	
8	C345 BENZYL ALCOHOL	
9	C350 1,2-DICHLOROBENZENE	
10	C355 2-METHYLPHENOL	
11	C360 BIS(2-CHLOROISOPROPYL)ETHER	
12	C365 4-METHYLPHENOL	
13	C370 N-NITROSO-DI-PROPYLAMINE	
14	C375 HEXACHLOROETHANE	
15	CS50 2-FLUOROPHENOL	SURROGATE
16	CS45 PHENOL D5	SURROGATE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	509	9:54	1	1.000	A BB	217084.	40.000 UG/ML	99.85
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	146	510	9:55	1	1.002	A BB	~~218.~~	~~0.027 UG/ML~~	~~0.07~~ NO WSS
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	108	608	11:49	1	1.194	A BB	~~249.~~	~~0.035 UG/ML~~	~~0.09~~ NO WSS
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								

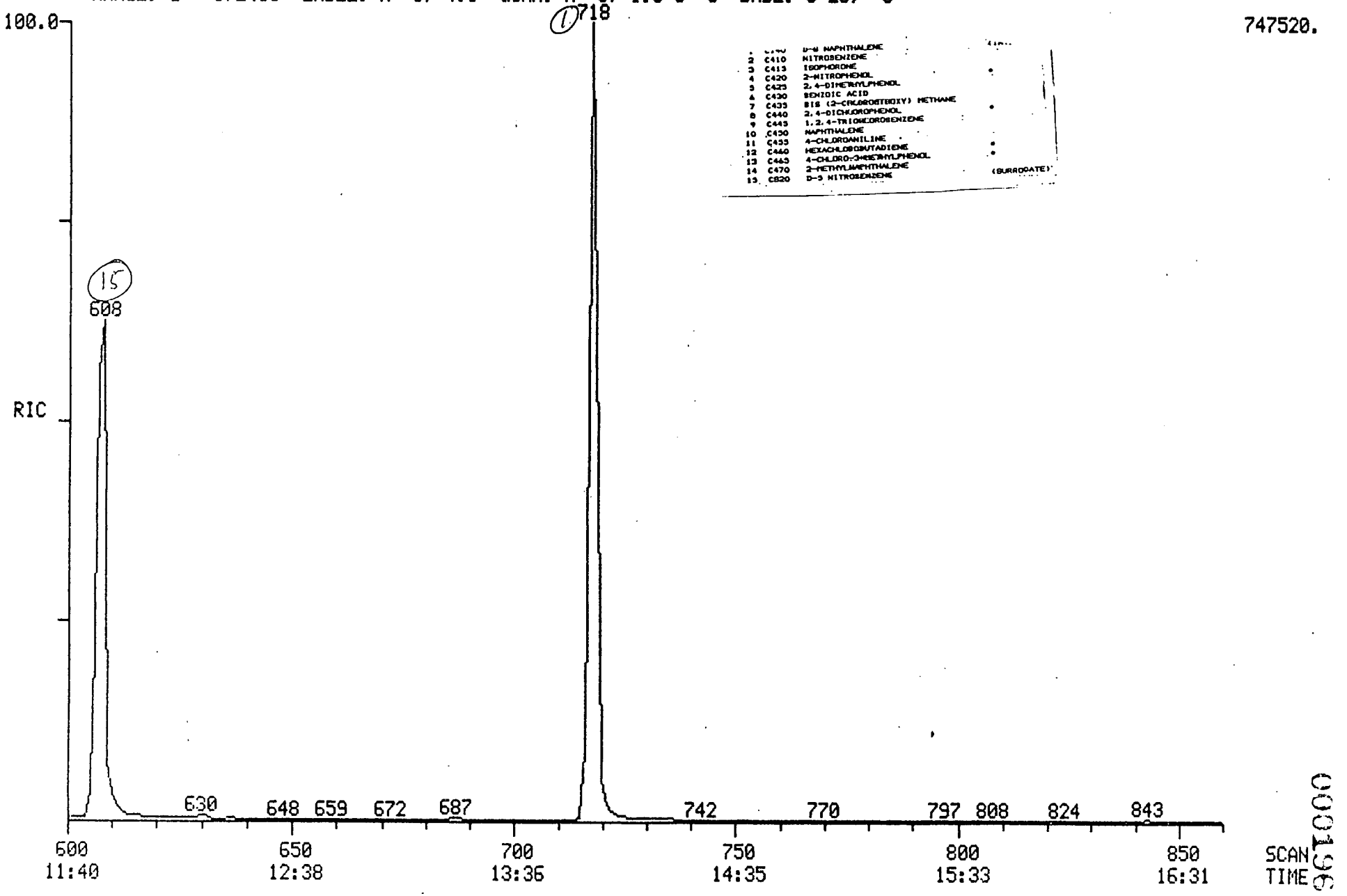
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:50	1.01	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	2:35		0.263						
3	9:25		0.957						
4	9:19		0.947						
5	9:23		0.955						
6	9:42		0.986						
7	9:54	1.00	1.006	1.00	0.03	50.00	0.001	1.476	0.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
8	10:40		1.085						
9	10:29		1.065						
10	11:15		1.144						
11	11:05		1.126						
12	11:48	1.00	1.200	1.00	0.03	50.00	0.001	1.317	0.00
13	11:36		1.180						
14	11:27		1.164						
15	5:55		0.601						
16	9:22		0.953						

RIC
03/25/89 19:48:00
SAMPLE: C-14C
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789605AB #1
CALI: 789605AB #3

SCANS 600 TO 860



000196

Quantitation Report File: 789605AB

Data: 789605AB.TI
03/25/89 19:48:00
Sample: C-14C
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitt d by: FLEMING Analyst: WSS Acct. No.: 789605AB

000197

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
R sp. fac. from Library Entry

No	Name	
1	CI40 NAPHTHALENE D8	INTERNAL STANDARD
2	C410 NITROBENZENE	
3	C415 ISOPHORONE	
4	C420 2-NITROPHENOL	
5	C425 2,4-DIMETHYLPHENOL	
6	C430 BENZOIC ACID	
7	C435 BIS(2-CHLOROETHOXY)METHANE	
8	C440 2,4-DICHLOROPHENOL	
9	C445 1,2,4-TRICHLOROBENZENE	
10	C450 NAPHTHALENE	
11	C455 4-CHLOROANILINE	
12	C460 HEXACHLOROBUTADIENE	
13	C465 4-CHLORO-3-METHYLPHENOL	
14	C470 2-METHYLNAPHTHALENE	
15	CS20 NITROBENZENE D5	SURROGATE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot	
1	136	718	13:57	1	1.000	A BB	665644.	40.000 UG/ML	47.78	
2	77	608	11:49	1	0.847	A BB	~~1034.~~	~~0.089 UG/ML~~	~~0.11~~	NO WSS
3	82	652	12:40	1	0.908	A BB	~~1053.~~	~~0.077 UG/ML~~	~~0.09~~	NO WSS
4	NOT FOUND									
5	NOT FOUND									
6	NOT FOUND									
7	NOT FOUND									
8	NOT FOUND									
9	NOT FOUND									
10	128	721	14:01	1	1.004	A BB	~~459.~~	~~0.034 UG/ML~~	~~0.04~~	NO WSS
11	NOT FOUND									
12	NOT FOUND									
13	NOT FOUND									
14	NOT FOUND									
15	82	608	11:49	1	0.847	A BB	385767.	43.516 UG/ML	51.98	Yes WSS

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	13:59	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	11:53	1.00	0.850	1.00	0.09	50.00	0.001	0.702	0.00
3	12:42	1.00	0.908	1.00	0.08	50.00	0.001	0.824	0.00
4	12:53		0.922						
5	13:21		0.955						
6	14:16		1.021						
7	13:32		0.968						
8	13:48		0.987						
9	13:53		0.993						

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
10	14:02	1.00	1.004	1.00	0.03	50.00	0.001	0.812	0.00
11	14:28		1.035						
12	14:42		1.051						
13	16:16		1.164						
14	16:16		1.164						
15	11:48	1.00	0.844	1.00	43.52	50.00	0.464	0.533	0.87

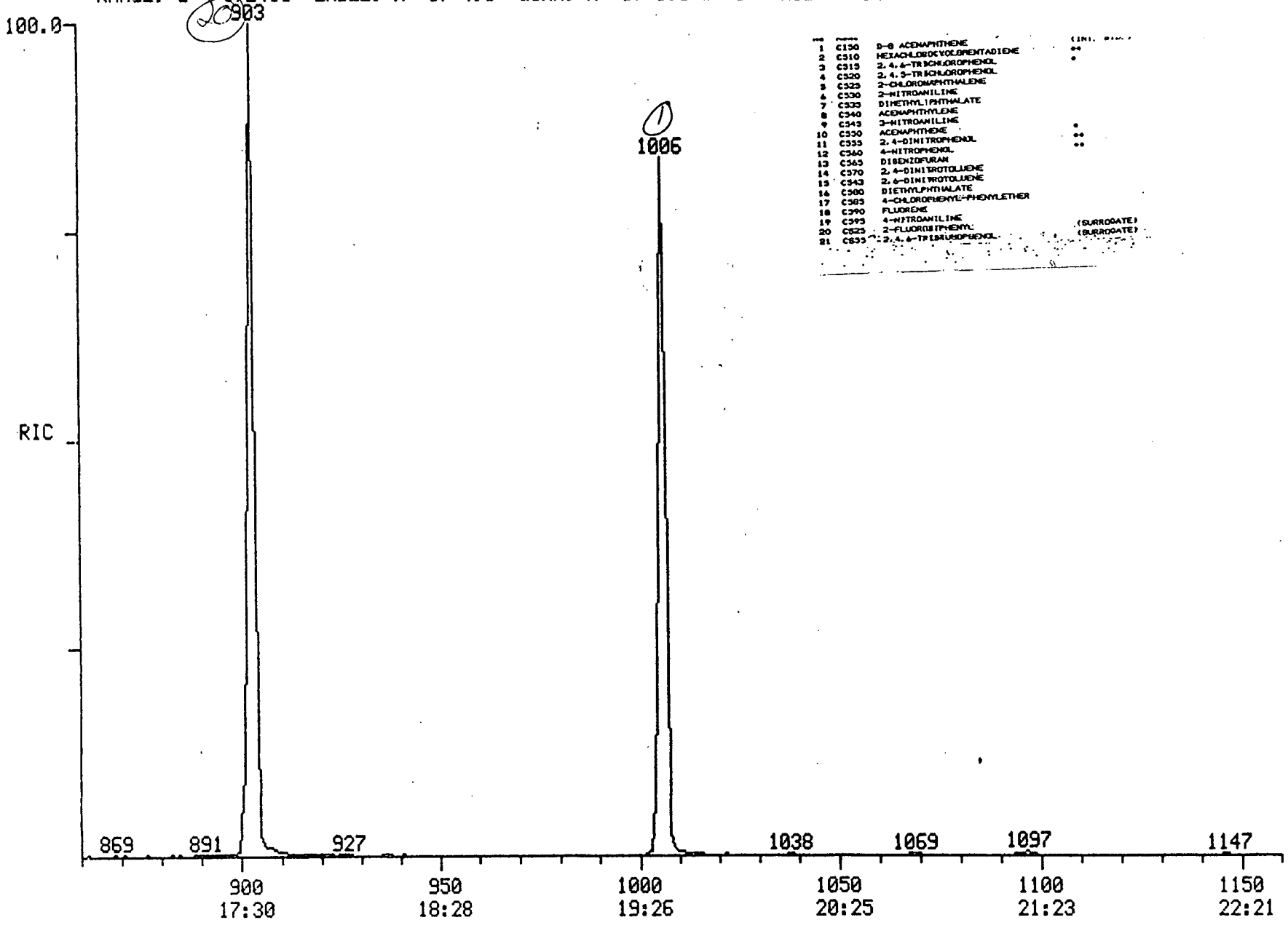
000198

RIC
03/25/89 19:48:00
SAMPLE: C-14C
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1.2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789605AB #1
CALI: 789605AB #3

SCANS 860 TO 1160

991232.



1	C350	D-8 ACENAPHTHENE	
2	C510	HEXACHLOROCYCLOPENTADIENE	**
3	C515	2,4,6-TRICHLOROPHENOL	*
4	C520	2,4,5-TRICHLOROPHENOL	
5	C525	2-CHLORONAPHTHALENE	
6	C530	2-NITROANILINE	
7	C535	DIMETHYLPHTHALATE	
8	C540	ACENAPHTHYLENE	
9	C545	3-NITROANILINE	*
10	C550	ACENAPHTHENE	**
11	C555	2,4-DINITROPHENOL	**
12	C560	4-NITROPHENOL	
13	C565	DIBENZOFURAN	
14	C570	2,4-DINITROTOLUENE	
15	C575	2,6-DINITROTOLUENE	
16	C580	DIETHYLPHTHALATE	
17	C585	4-CHLOROPHENYL-PHENYLETHER	
18	C590	FLUORENE	
19	C595	4-NITROANILINE	
20	C625	2-FLUOROBIPHENYL	(SURROGATE)
21	C635	2,4,6-TRIBROMOPHENOL	(SURROGATE)

000195

Quantitation Report Fil : 789605AB

000200

Data: 789605AB.TI
03/25/89 19:48:00
Sample: C-14C
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789605AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Nam		
1	CI50	ACENAPHTHENE D8	INTERNAL STANDARD
2	C510	HEXACHLOROCYCLOPENTADIENE	
3	C515	2,4,6-TRICHLOROPHENOL	
4	C520	2,4,5-TRICHLOROPHENOL	
5	C525	2-CHLORONAPHTHALENE	
6	C530	2-NITROANILINE	
7	C535	DIMETHYL PHTHALATE	
8	C540	ACENAPHTHYLENE	
9	C545	3-NITROANILINE	
10	C550	ACENAPHTHENE	
11	C555	2,4-DINITROPHENOL	
12	C560	4-NITROPHENOL	
13	C565	DIBENZOFURAN	
14	C570	2,4-DINITROTOLUENE	
15	C543	2,6-DINITROTOLUENE	
16	C580	DIETHYL PHTHALATE	
17	C585	4-CHLOROPHENYL PHENYL ETHER	
18	C590	FLUORENE	
19	C595	4-NITROANILINE	
20	CS25	2-FLUOROBIPHENYL	SURROGATE
21	CS55	2,4,6-TRIBROMOPHENOL	SURROGATE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot	
1	164	1006	19:33	1	1.000	A BV	365400.	40.000 UG/ML	43.56	
2	NOT FOUND									
3	NOT FOUND									
4	NOT FOUND									
5	NOT FOUND									
6	NOT FOUND									
7	NOT FOUND									
8	152	980	19:03	1	0.974	A BB	~~538.~~	~~0.044 UG/ML~~	~~0.05~~	NO WSS
9	NOT FOUND									
10	NOT FOUND									
11	NOT FOUND									
12	NOT FOUND									
13	168	1038	20:11	1	1.032	A BB	~~468.~~	~~0.025 UG/ML~~	~~0.03~~	NO WSS
14	NOT FOUND									
15	NOT FOUND									
16	149	1097	21:20	1	1.090	A BB	~~2684.~~	~~0.255 UG/ML~~	~~0.28~~	NO WSS
17	NOT FOUND									
18	NOT FOUND									
19	NOT FOUND									
20	172	903	17:33	1	0.898	A BB	531981.	51.506 UG/ML	56.09	YES WSS
21	NOT FOUND									

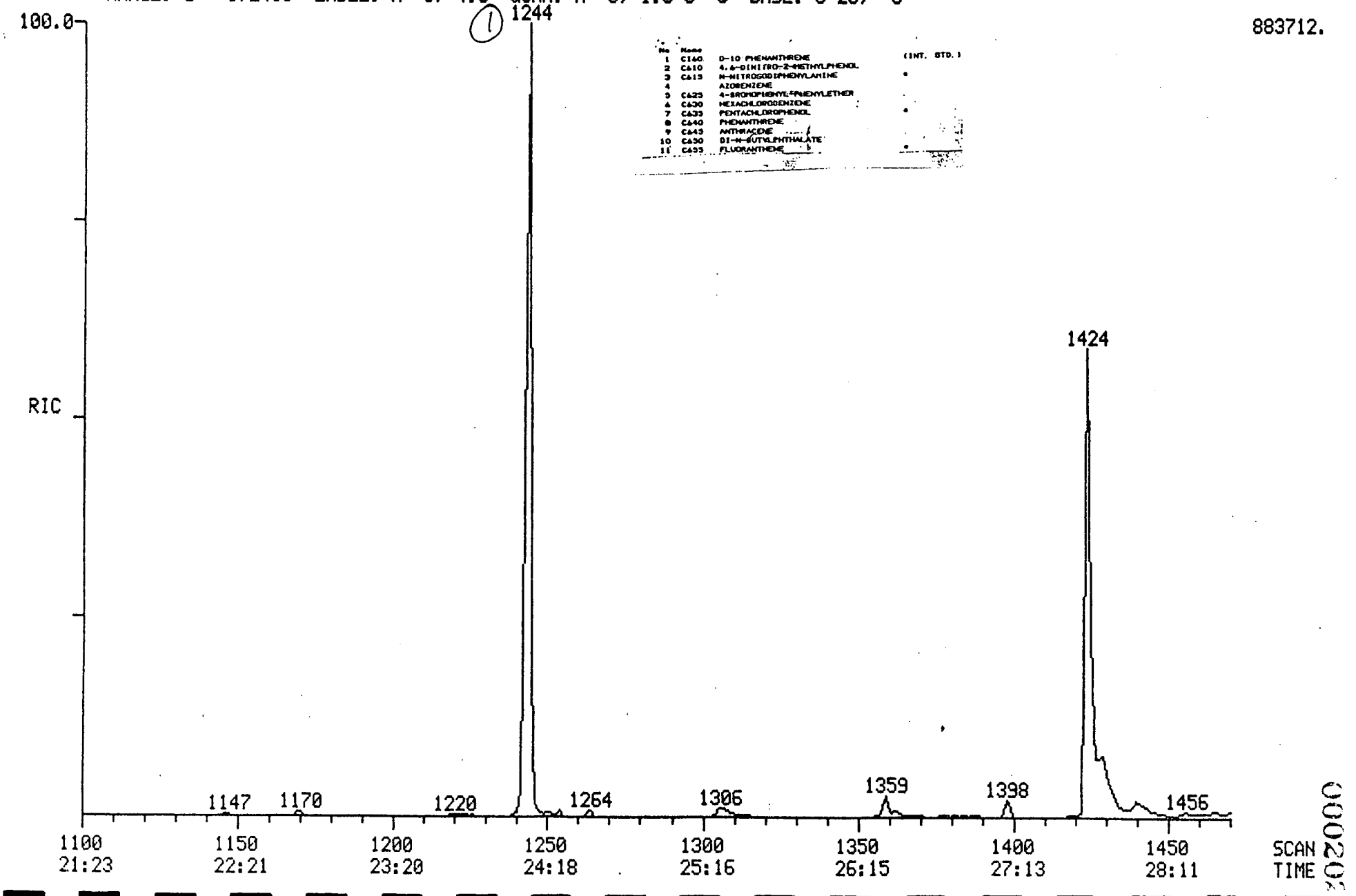
000201

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	19:36	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	16:59		0.867						
3	17:23		0.887						
4	17:36		0.898						
5	17:46		0.907						
6	18:25		0.939						
7	19:08		0.976						
8	19:05	1.00	0.974	1.00	0.04	50.00	0.001	1.353	0.00
9	19:46		1.009						
10	19:42		1.005						
11	20:03		1.023						
12	20:42		1.057						
13	20:13	1.00	1.032	1.00	0.02	50.00	0.001	2.072	0.00
14	20:29		1.046						
15	19:18		0.985						
16	21:23	1.00	1.091	1.00	0.25	50.00	0.006	1.153	0.01
17	21:23		1.091						
18	21:17		1.086						
19	21:46		1.111						
20	17:34	1.00	0.897	1.00	51.51	50.00	1.165	1.131	1.03
21	22:09		1.130						

RIC
03/25/89 19:48:00
SAMPLE: C-14C
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789605AB #1
CALI: 789605AB #3

SCANS 1100 TO 1470



No	Name		
1	C140	D-10 PHENANTHRENE	(INT. STD.)
2	C610	4,6-DINITRO-2-METHYLPHENOL	
3	C615	N-NITROSODIPHENYLAMINE	
4		AZOBENZENE	
5	C625	4-BROMOPHENYL-PHENYLETHER	
6	C630	HEXACHLOROBENZENE	
7	C635	PENTACHLOROPHENOL	
8	C640	PHENANTHRENE	
9	C645	ANTHRACENE	
10	C650	DI-N-BUTYLPHTHALATE	
11	C655	FLUORANTHENE	

Quantitation Report File: 789605AB

Data: 789605AB.TI
03/25/89 19:48:00
Sample: C-14C
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN W ight: 0.000
Submitt d by: FLEMING Analyst: WSS Acct. No.: 789605AB

000203

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
R sp. fac. from Library Entry

No	Name	
1	CI60 PHENANTHRENE D10	INTERNAL STANDARD
2	C610 4,6-DINITRO-2-METHYL PHENOL	
3	C615 N-NITROSODIPHENYLAMINE	
4	AZOBENZENE	
5	C625 4-BROMOPHENYL PHENYL ETHER	
6	C630 HEXACHLOROBENZENE	
7	C635 PENTACHLOROPHENOL	
8	C640 PHENANTHRENE	
9	C645 ANTHRACENE	
10	C650 DI-N-BUTYL PHTHALATE	
11	C655 FLUORANTHENE	

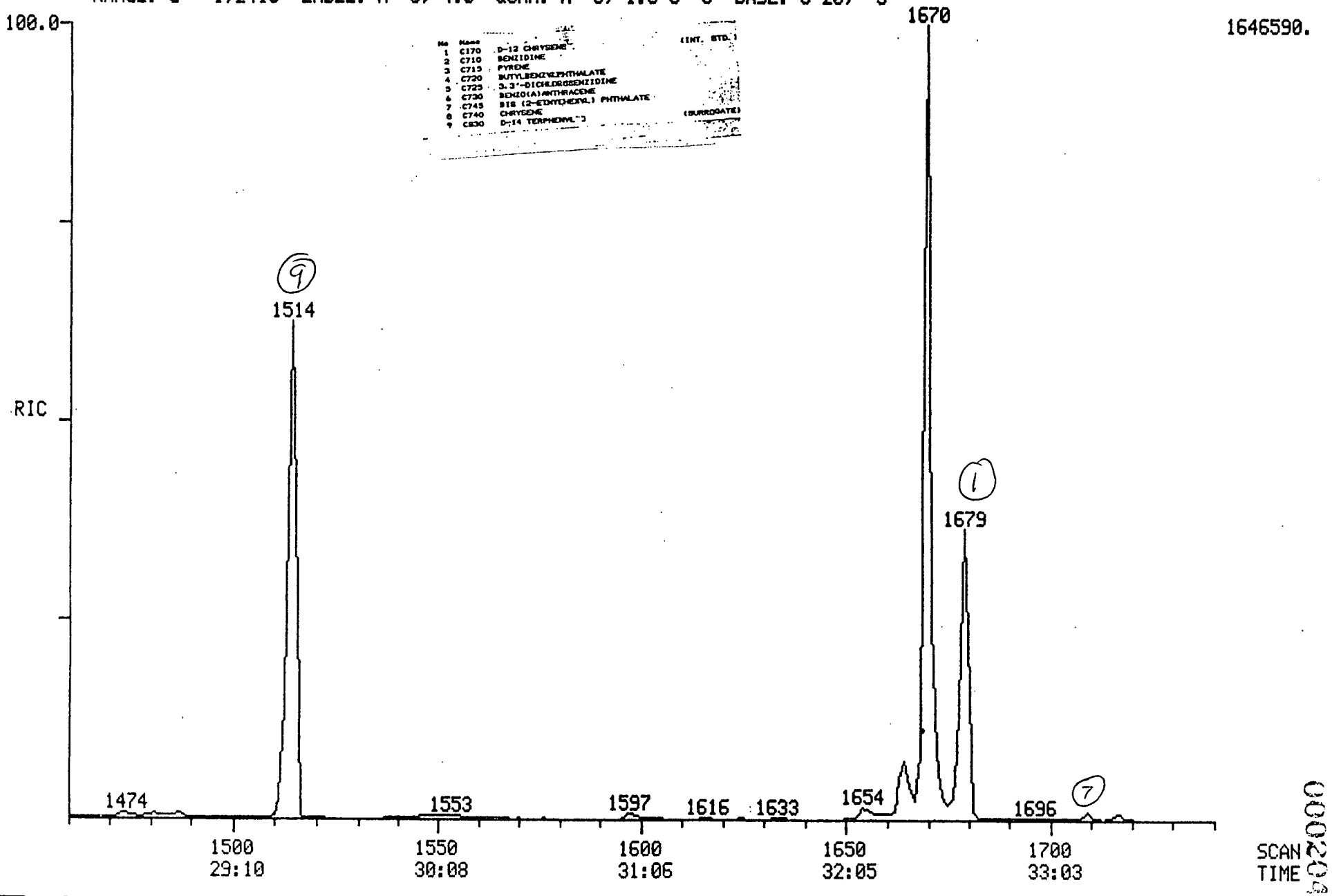
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot	
1	188	1244	24:11	1	1.000	A BB	499609.	40.000 UG/ML	98.17	
2	NOT FOUND									
3	NOT FOUND									
4	NOT FOUND									
5	NOT FOUND									
6	NOT FOUND									
7	NOT FOUND									
8	178	1246	24:13	1	1.002	A BB	~~1516.~~	~~0.130 UG/ML~~	~~0.32~~ NO	WSS
9	178	1253	24:21	1	1.007	A BB	~~445.~~	~~0.044 UG/ML~~	~~0.11~~ NO	WSS
10	149	1363	26:30	1	1.096	A BB	~~5714.~~	~~0.513 UG/ML~~	~~1.26~~ NO	WSS
11	202	1441	28:01	1	1.158	A BB	~~637.~~	~~0.060 UG/ML~~	~~0.15~~ NO	WSS

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	24:13	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	21:45		0.898						
3	21:51		0.902						
4	21:53		0.904						
5	22:54		0.945						
6	23:16		0.961						
7	23:57		0.989						
8	24:18	1.00	1.003	1.00	0.13	50.00	0.002	0.937	0.00
9	24:26	1.00	1.009	1.00	0.04	50.00	0.001	0.808	0.00
10	26:32	1.00	1.096	1.00	0.51	50.00	0.009	0.891	0.01
11	28:03	1.00	1.158	1.00	0.06	50.00	0.001	0.853	0.00

RIC
03/25/89 19:48:00
SAMPLE: C-14C
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789605AB #1
CALI: 789605AB #3

SCANS 1460 TO 1740



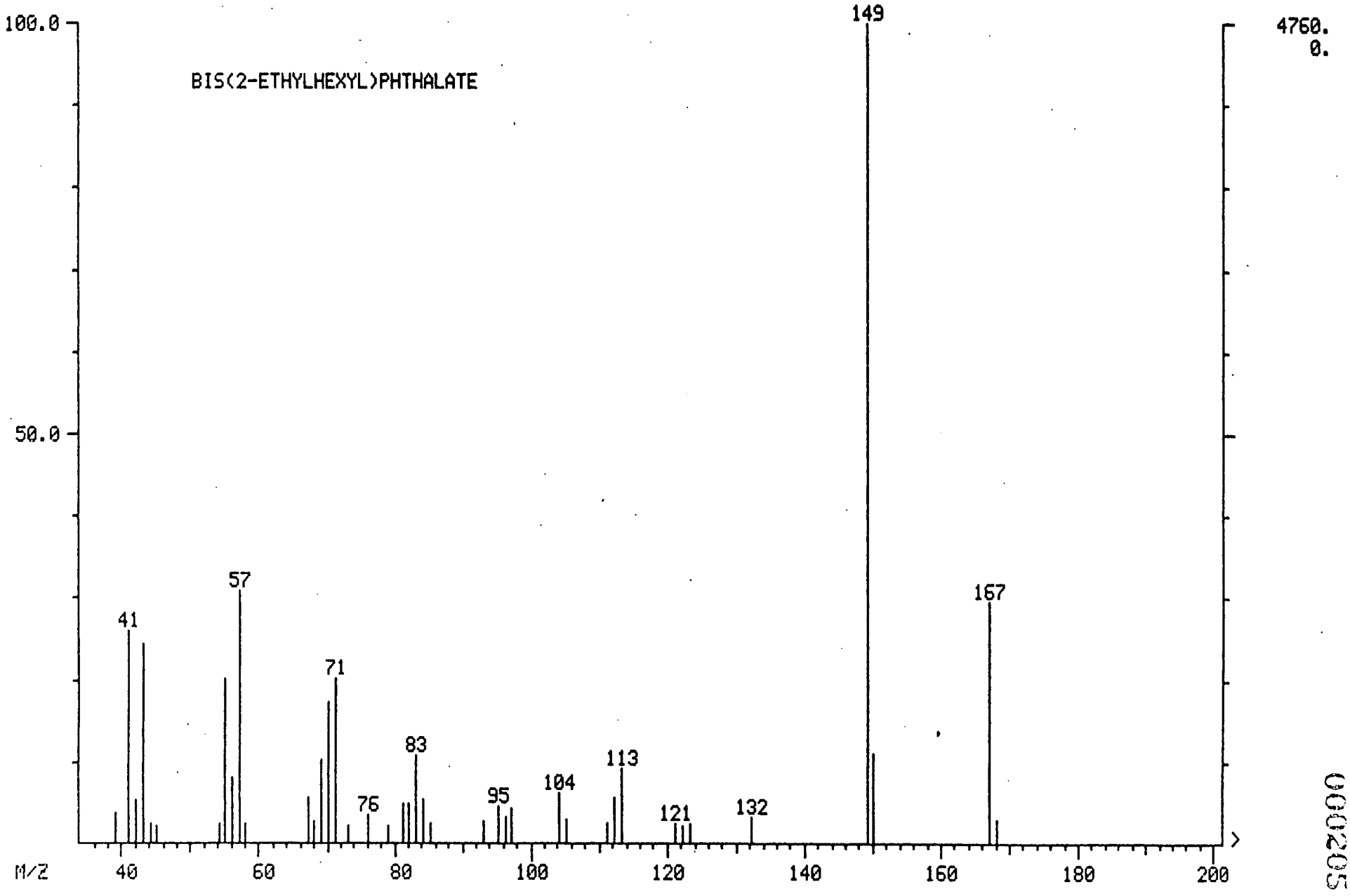
No	Name	
1	C170	D-12 CHRYSENE (INT. STD.)
2	C710	BENZIDINE
3	C715	PYRENE
4	C720	BUTYLBENZYLPHTHALATE
5	C725	3,3'-DICHLOROBENZIDINE
6	C730	BENZO(A)ANTHRACENE
7	C745	BIS (2-ETHYLHEXYL) PHTHALATE
8	C740	CHRYSENE
9	C830	D-14 TERPHENYL (SURROGATE)

000209

MASS SPECTRUM
03/25/89 19:48:00 + 33:13
SAMPLE: C-14C
CONDS.: 1000 MLS/1.0 ML
TEMP: 275 DEG. C

DATA: 789605AB #1709
CALI: 789605AB #3

BASE M/Z: 149
RIC: 19936.

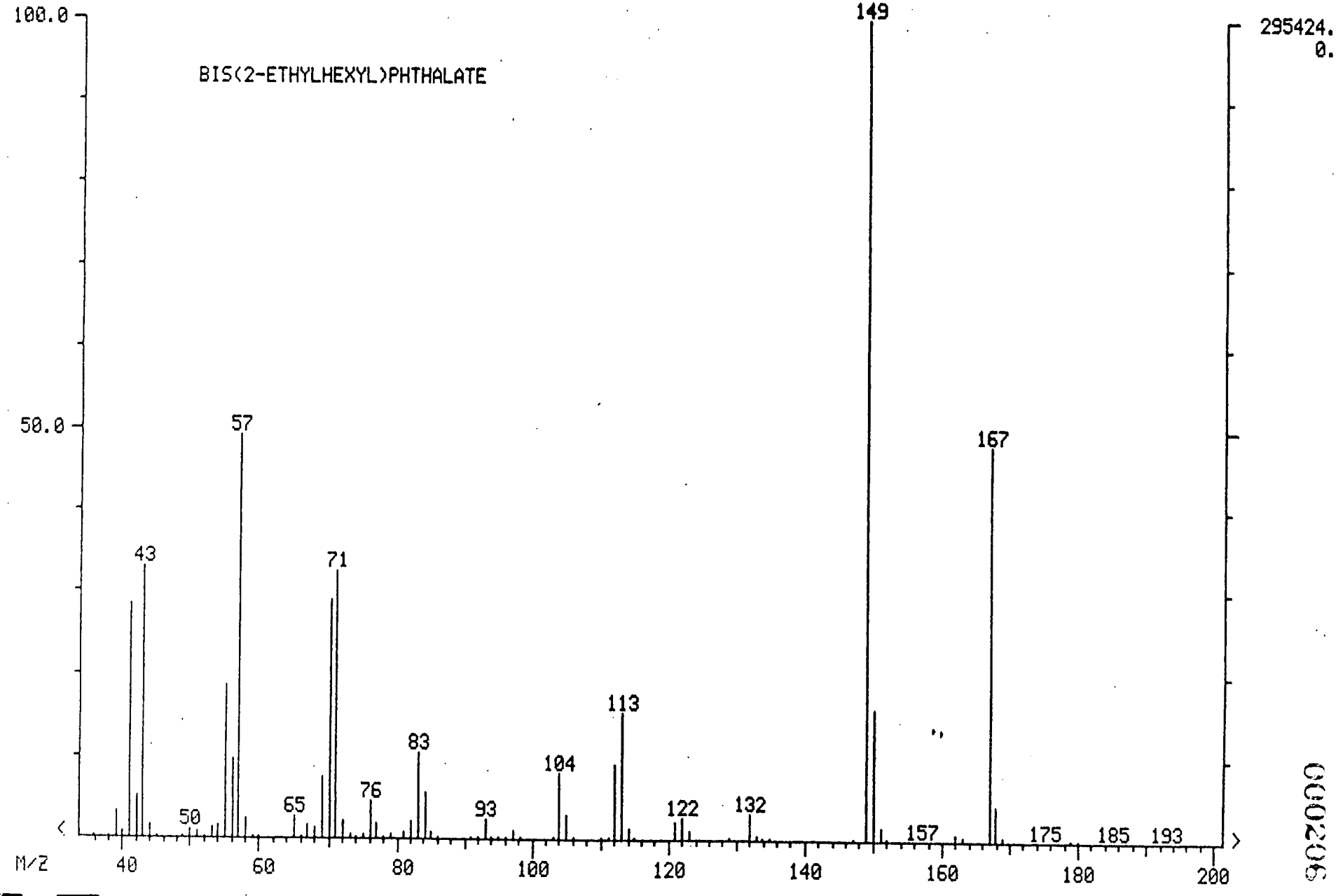


000205

MASS SPECTRUM
03/25/89 12:28:00 + 33:15
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 50 NG INJECTION
TEMP: 275 DEG. C

DATA: HSD500325 #1710
CALI: HSD500325 #3

BASE M/Z: 149
RIC: 1486850.

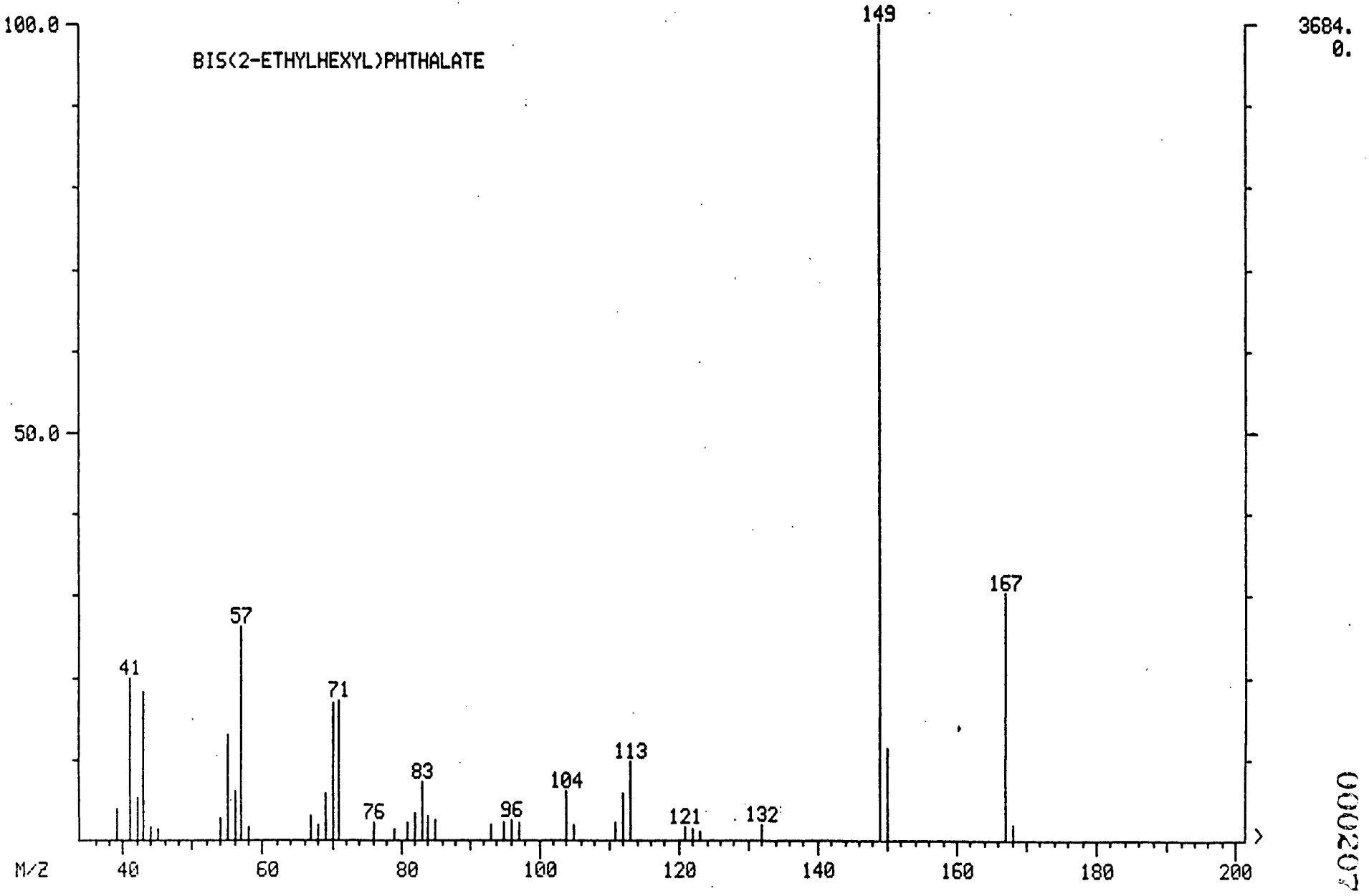


000206

MASS SPECTRUM
03/25/89 19:48:00 + 33:13
SAMPLE: C-14C
CONDS.: 1000 MLS/1.0 ML
TEMP: 275 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 789605AB #1709
CALI: 789605AB #3

BASE M/Z: 149
RIC: 13056.

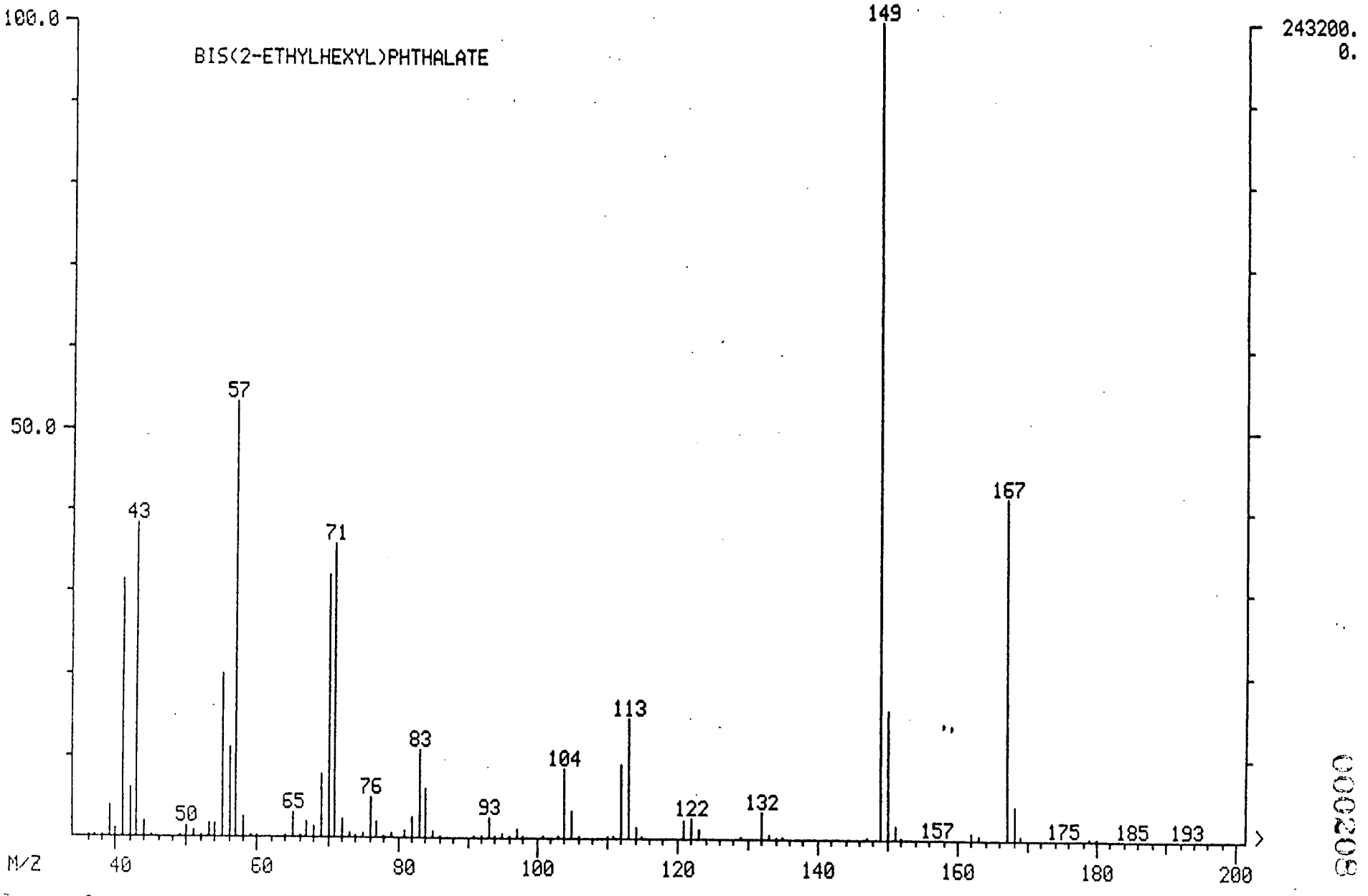


000207

MASS SPECTRUM
03/25/89 12:28:00 + 33:15
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 50 NG INJECTION
TEMP: 275 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: HSD500325 #1710
CALI: HSD500325 #3

BASE M/Z: 149
RIC: 1277950.



000208

Quantitation Report File: 789605AB

000209

Data: 789605AB.TI
03/25/89 19:48:00
Sample: C-14C
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789605AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI70 CHRYSENE D12	INTERNAL STANDARD
2	C710 BENZIDINE	
3	C715 PYRENE	
4	C720 BUTYLBENZYLPHTHALATE	
5	C725 3,3'-DICHLOROBENZIDINE	
6	C730 BENZO(A)ANTHRACENE	
7	C745 BIS(2-ETHYLHEXYL)PHTHALATE	
8	C740 CHRYSENE	
9	CS30 TERPHENYL D14	SURROGATE

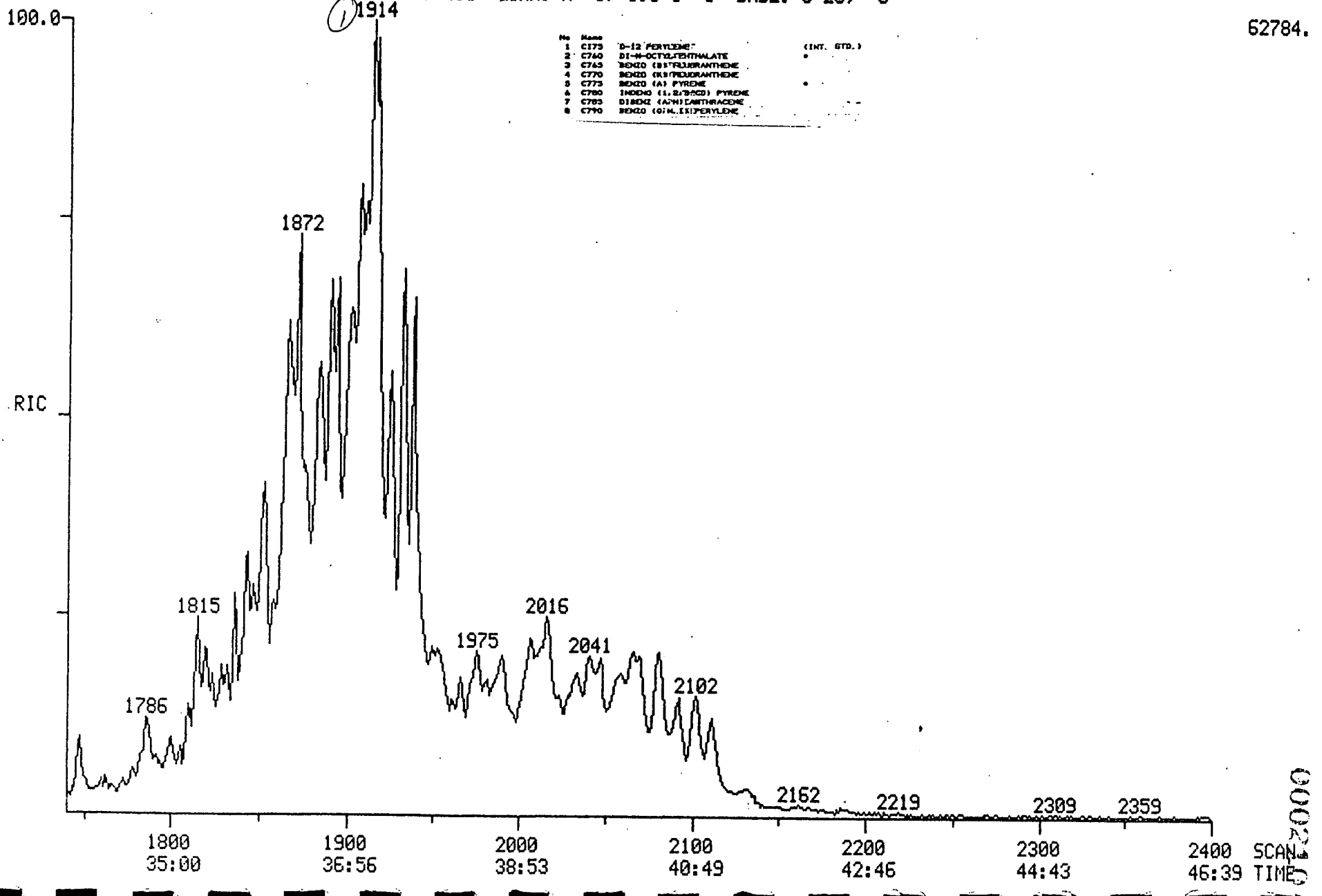
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	240	1679	32:38	1	1.000	A BB	268905.	40.000 UG/ML	33.85
2	NOT FOUND								
3	202	1476	28:42	1	0.879	A BB	~~957.~~	~~0.127 UG/ML~~	~~0.11~~ NO WSS
4	149	1605	31:12	1	0.956	A BB	~~646.~~	~~0.133 UG/ML~~	~~0.11~~ NO WSS
5	NOT FOUND								
6	228	1679	32:38	1	1.000	A BB	~~771.~~	~~0.108 UG/ML~~	~~0.09~~ NO WSS
7	149	1709	33:13	1	1.018	A BB	9582.	1.534 UG/ML	1.30 Yes WSS
8	NOT FOUND								
9	244	1514	29:26	1	0.902	A BB	571475.	76.277 UG/ML	64.56 Yes WSS

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	32:41	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	28:43		0.879						
3	28:44	1.00	0.879	1.00	0.13	50.00	0.003	1.124	0.00
4	31:16	1.00	0.957	1.00	0.13	50.00	0.002	0.725	0.00
5	32:43		1.001						
6	32:37	1.00	0.998	1.00	0.11	50.00	0.002	1.066	0.00
7	33:15	1.00	1.017	1.00	1.53	50.00	0.029	0.929	0.03
8	32:45		1.002						
9	29:27	1.00	0.901	1.00	76.28	50.00	1.700	1.114	1.53

RIC
03/25/89 19:48:00
SAMPLE: C-14C
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789605AB #1
CALI: 789605AB #3

SCANS 1740 TO 2400



No	Name		
1	C175	D-12 PERYLENE	(INT. STD.)
2	C760	DI-N-OCTYLPHTHALATE	•
3	C765	BENZO (B)FLUORANTHENE	
4	C770	BENZO (K)FLUORANTHENE	
5	C775	BENZO (A) PYRENE	•
6	C780	INDENO (1,2,3-CD) PYRENE	
7	C785	DIBENZ (A,H)ANTHRACENE	
8	C790	BENZO (G,H,I)PERYLENE	

000224

Quantitation R port File: 789605AB

000211

Data: 789605AB.TI
03/25/89 19:48:00
Sample: C-14C
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789605AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI75 PERYLENE D12	INTERNAL STANDARD
2	C760 DI-N-OCTYLPHTHALATE	
3	C765 BENZO(B)FLUORANTHENE	
4	C770 BENZO(K)FLUORANTHENE	
5	C775 BENZO(A)PYRENE	
6	C780 INDENO(1,2,3-CD)PYRENE	
7	C785 DIBENZO(A,H)ANTHRACENE	
8	C790 BENZO(G,H,I)PERYLENE	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	264	1914	37:12	1	1.000	A BB	25844.	40.000 UG/ML	*100.
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	37:15	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	35:09		0.944						
3	35:58		0.966						
4	36:04		0.968						
5	37:03		0.995						
6	42:01		1.128						
7	42:12		1.133						
8	43:23		1.165						

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

EPA METHOD 625 BASE/NEUTRAL EXTRACTABLES BY GC/MS

Lab ID : 789606
Sample ID : C-29A
Date Analyzed : 03/25/89
Date Extracted: 02/24/89

Client : Gannett&Fleming
Prep Factor : 1000 mls/1.0 ml
Comments :
Date Received: 02/17/89

NO.	NAME	RESULTS PPB	COMMENTS
1	Bis(2-chloroethyl)Ether	10	U
2	1,2-Dichlorobenzene	10	U
3	1,4-Dichlorobenzene	10	U
4	1,3-Dichlorobenzene	10	U
5	Bis(2-chloroisopropyl)Ether	10	U
6	N-Nitrosodipropyl Amine	10	U
7	Hexachloroethane	10	U
8	Nitrobenzene	10	U
9	Isophorone	10	U
10	Bis(2-chloroethoxy)Methane	10	U
11	1,2,4-Trichlorobenzene	10	U
12	Naphthalene	10	U
13	Hexachlorobutadiene	10	U
14	Hexachlorocyclopentadiene	10	U
15	2-Chloronaphthalene	10	U
16	Dimethyl Phthalate	10	U
17	2,6-Dinitrotoluene	10	U
18	Acenaphthylene	10	U
19	Acenaphthene	10	U
20	2,4-Dinitrotoluene	10	U
21	Diethyl Phthalate	10	U
22	N-Nitrosodimethyl Amine	10	U
23	4-Chlorophenylphenyl Ether	10	U
24	Fluorene	10	U
25	Azobenzene	10	U
26	N-Nitrosodiphenyl Amine	10	U
27	4-Bromophenylphenyl Ether	10	U
28	Hexachlorobenzene	10	U
29	Phenanthrene	10	U
30	Anthracene	10	U
31	Dibutyl Phthalate	10	U
32	Fluoranthene	10	U

Comments:
U= Not detected
J= Detected but below Method Detection limit
B= Compound found in Blank

Signature

Name/Title: Howard Whaley
GC/MS Project Leader

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

EPA Method 625 Base/Neutral Extractables by GC/MS

Lab ID : 789606
Sample ID : C-29A
Date Analyzed : 03/25/89
Date Extracted: 02/24/89

Client : Gannett&Fleming
Prep Factor: 1000 mls/1.0 ml
Comments :
Date Recieved: 02/17/89

NO.	NAME	RESULTS PPB	COMMENTS
33	Benzidine	50	U
34	Pyrene	10	U
35	Butylbenzyl Phthalate	10	U
36	3,3-Dichlorobenzidine	10	U
37	Benzo(A)Anthracene	10	U
38	Chrysene	10	U
39	Bis(2-ethylhexyl) Phthalate	3	BJ
40	Dioctyl-Phthalate	10	U
41	Benzo(K)Fluoranthene	10	U
42	Benzo(B)Fluoranthene	10	U
43	Benzo(A)Pyrene	10	U
44	Indeno(1,2,3-CD)Pyrene	10	U
45	Dibenzo(A,H)Anthracene	10	U
46	Benzo(GHI)Perylene	10	U

Comments:
U= Not Detected
J= Detected but below Method Detection Limit
B= Compound found in Blank

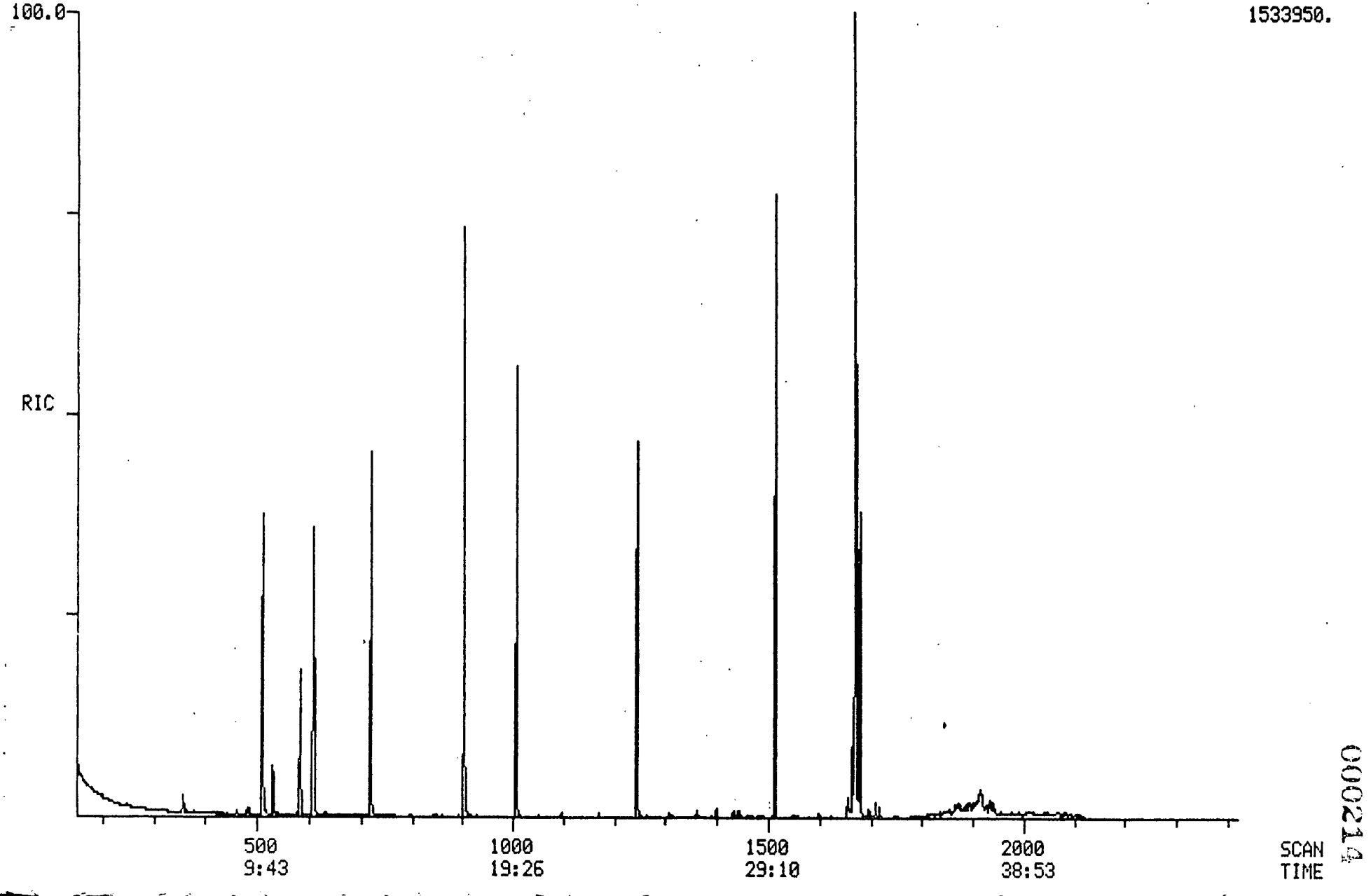
Signature

Name/Title: Howard Whaley
GC/MS Project Leader

RIC
03/25/89 20:42:00
SAMPLE: C29A
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789606AB #1
CALI: CALTAB #3

SCANS 150 TO 2418

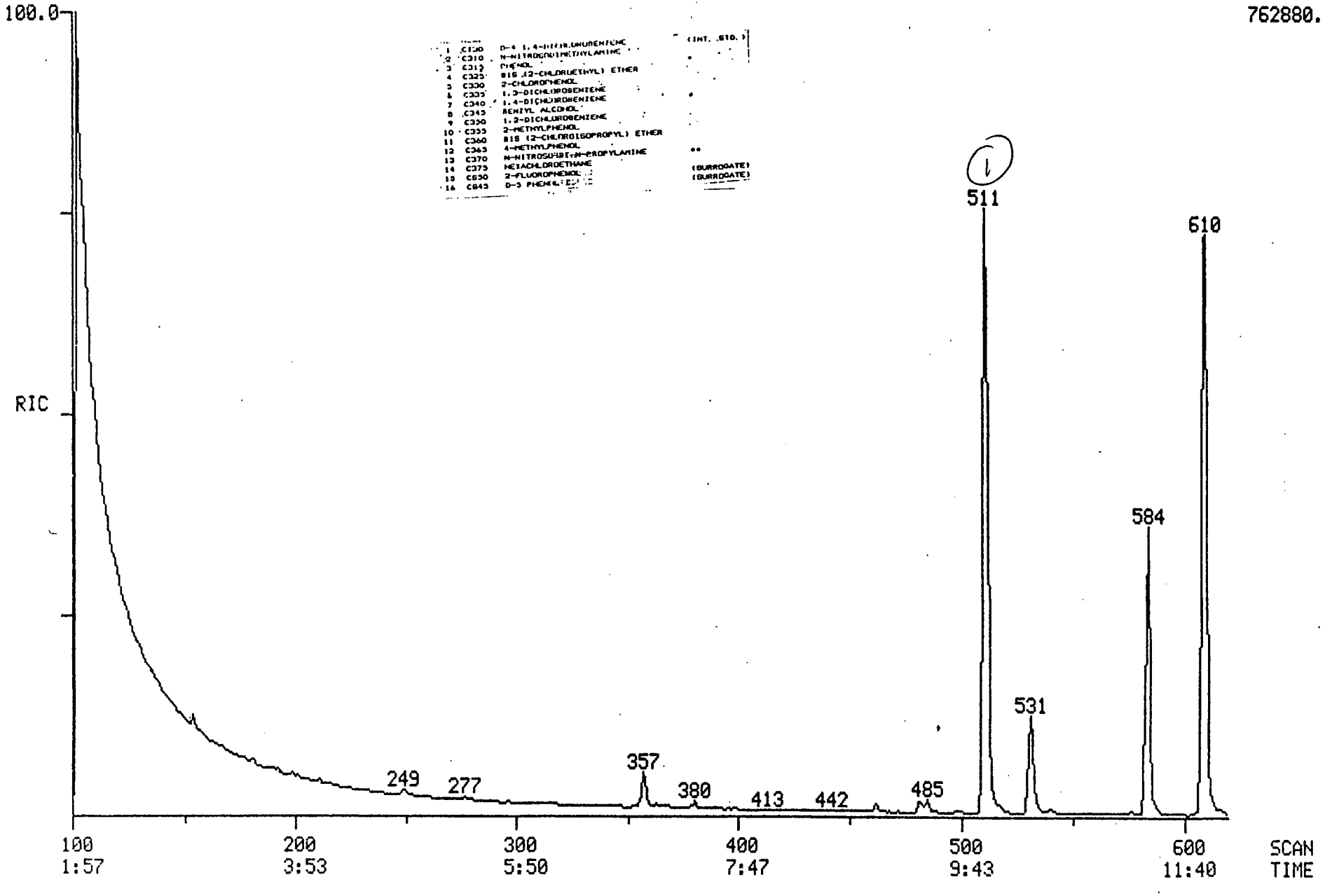


000214

RIC
03/25/89 20:42:00
SAMPLE: C29A
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789606AB #1
CALI: 789606AB #3

SCANS 100 TO 620



000215

Quantitation Report File: 789606AB

00021

Data: 789606AB.TI
03/25/89 20:42:00
Sample: C29A
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN W ight: 0.000
Submitt d by: FLEMING Analyst: WSS Acct. No.: 789606AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Nam		
1	CI30	1,4-DICHLOROBENZENE D4	INTERNAL STANDARD
2		N-NITROSODIMETHYLAMINE	
3	C315	PHENOL	
4	C325	BIS(2-CHLOROETHYL) ETHER	
5	C330	2-CHLOROPHENOL	
6	C335	1,3-DICHLOROBENZENE	
7	C340	1,4-DICHLOROBENZENE	
8	C345	BENZYL ALCOHOL	
9	C350	1,2-DICHLOROBENZENE	
10	C355	2-METHYLPHENOL	
11	C360	BIS(2-CHLOROISOPROPYL)ETHER	
12	C365	4-METHYLPHENOL	
13	C370	N-NITROSO-DI-PROPYLAMINE	
14	C375	HEXACHLOROETHANE	
15	CS50	2-FLUOROPHENOL	SURROGATE
16	CS45	PHENOL D5	SURROGATE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	511	9:56	1	1.000	A BB	212863.	40.000 UG/ML	99.90
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	108	610	11:52	1	1.194	A BB	~~283.~~	~~0.040 UG/ML~~	~~0.10~~ no WSD
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:50	1.01	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	2:35		0.263						
3	9:25		0.957						
4	9:19		0.947						
5	9:23		0.955						
6	9:42		0.986						
7	9:54		1.006						

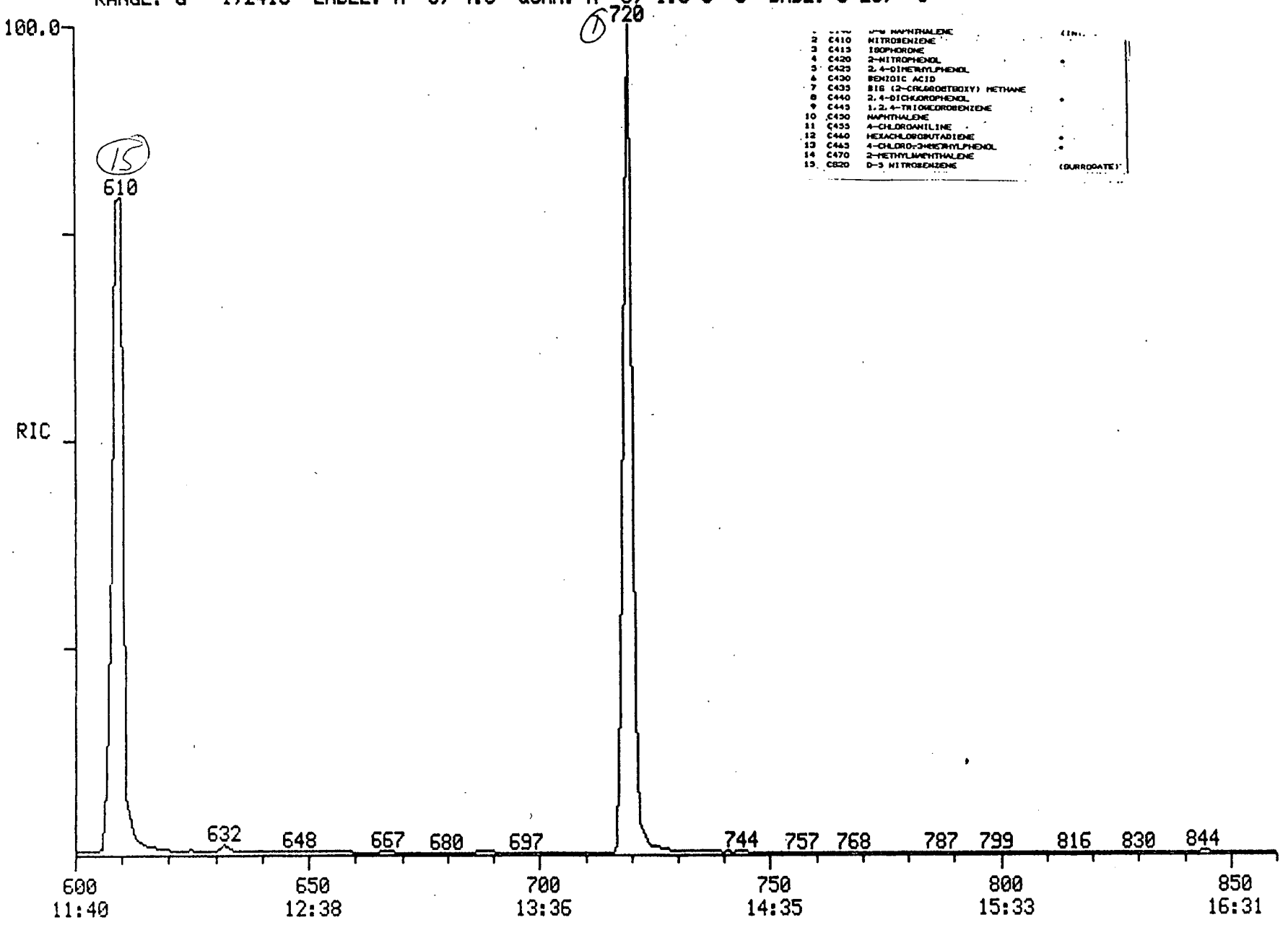
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
8	10:40		1.085						
9	10:29		1.065						
10	11:15		1.144						
11	11:05		1.126						
12	11:48	1.00	1.200	1.00	0.04	50.00	0.001	1.317	0.00
13	11:36		1.180						
14	11:27		1.164						
15	5:55		0.601						
16	9:22		0.953						

RIC
03/25/89 20:42:00
SAMPLE: C29A
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789606AB #1
CALI: 789606AB #3

SCANS 600 TO 860

697344.



2	C410	NITROBENZENE	
3	C415	ISOPHORONE	
4	C420	2-NITROPHENOL	*
5	C425	2,4-DIMETHYLPHENOL	
6	C430	BENZOIC ACID	
7	C435	BIS (2-CHLOROETHOXY) METHANE	
8	C440	2,4-DICHLOROPHENOL	*
9	C445	1,2,4-TRICHLOROBENZENE	
10	C450	NAPHTHALENE	
11	C455	4-CHLOROANILINE	
12	C460	HEXACHLOROBUTADIENE	*
13	C465	4-CHLORO-3METHYLPHENOL	*
14	C470	2-METHYLNAPHTHALENE	
15	C820	D-5 NITROBENZENE	(SURROGATE)

000218

Quantitation R port File: 789606AB

000219

Data: 789606AB.TI
03/25/89 20:42:00
Sampl : C29A
C nds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789606AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI40 NAPHTHALENE D8	INTERNAL STANDARD
2	C410 NITROBENZENE	
3	C415 ISOPHORONE	
4	C420 2-NITROPHENOL	
5	C425 2,4-DIMETHYLPHENOL	
6	C430 BENZOIC ACID	
7	C435 BIS(2-CHLOROETHOXY)METHANE	
8	C440 2,4-DICHLOROPHENOL	
9	C445 1,2,4-TRICHLOROBENZENE	
10	C450 NAPHTHALENE	
11	C455 4-CHLOROANILINE	
12	C460 HEXACHLOROBUTADIENE	
13	C465 4-CHLORO-3-METHYLPHENOL	
14	C470 2-METHYLNAPHTHALENE	
15	CS20 NITROBENZENE D5	SURROGATE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	136	720	14:00	1	1.000	A BB	637344.	40.000 UG/ML	40.60
2	77	610	11:52	1	0.847	A BB	~~1301.~~	~~0.116 UG/ML~~	~~0.12~~ NO WSS
3	82	656	12:45	1	0.911	A BB	~~1031.~~	~~0.079 UG/ML~~	~~0.08~~ NO WSS
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	128	722	14:02	1	1.003	A BB	~~504.~~	~~0.039 UG/ML~~	~~0.04~~ NO WSS
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	82	609	11:50	1	0.846	A BB	494700.	58.282 UG/ML	59.16 Yes WSS

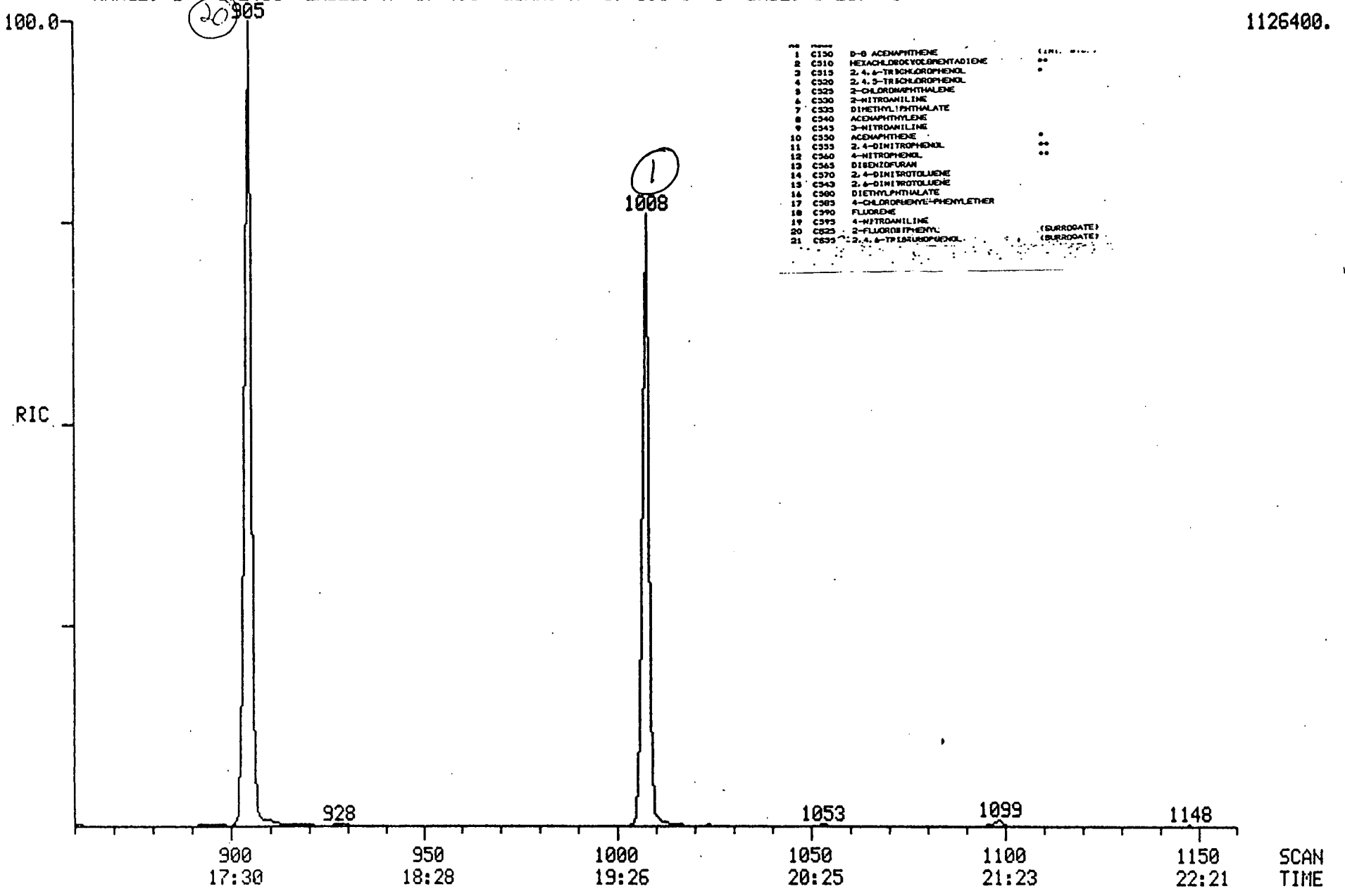
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	13:59	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	11:53	1.00	0.850	1.00	0.12	50.00	0.002	0.702	0.00
3	12:42	1.00	0.908	1.00	0.08	50.00	0.001	0.824	0.00
4	12:53		0.922						
5	13:21		0.955						
6	14:16		1.021						
7	13:32		0.968						
8	13:48		0.987						
9	13:53		0.993						

No	R t(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
10	14:02	1.00	1.004	1.00	0.04	50.00	0.001	0.812	0.00
11	14:28		1.035						
12	14:42		1.051						
13	16:16		1.164						
14	16:16		1.164						
15	11:48	1.00	0.844	1.00	58.28	50.00	0.621	0.533	1.17

RIC
03/25/89 20:42:00
SAMPLE: C29A
CONDS.: 1000 MLS/1.0 ML
RANGE: G 12418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789606AB #1
CALI: 789606AB #3

SCANS 860 TO 1160



1	C330	D-8 ACENAPHTHENE	(INT. STD.)
2	C310	HEXACHLOROCYCLOPENTADIENE	**
3	C315	2,4,6-TRICHLOROPHENOL	*
4	C320	2,4,5-TRICHLOROPHENOL	
5	C325	2-CHLORONAPHTHALENE	
6	C330	2-NITROANILINE	
7	C335	DIMETHYLPHTHALATE	
8	C340	ACENAPHTHYLENE	
9	C345	3-NITROANILINE	
10	C350	ACENAPHTHENE	*
11	C355	2,4-DINITROPHENOL	**
12	C360	4-NITROPHENOL	**
13	C365	DIBENZOFURAN	
14	C370	2,4-DINITROTOLUENE	
15	C375	2,6-DINITROTOLUENE	
16	C380	DIETHYLPHTHALATE	
17	C385	4-CHLOROPHENYL-PHENYLETHER	
18	C390	FLUORENE	
19	C395	4-NITROANILINE	
20	C825	2-FLUOROBIPHENYL	(SURROGATE)
21	C830	2,4,6-TRIBROMOPHENOL	(SURROGATE)

000221

Quantitation Report File: 789606AB

000222

Data: 789606AB.TI
03/25/89 20:42:00
Sample: C29A
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789606AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI50 ACENAPHTHENE D8	INTERNAL STANDARD
2	C510 HEXACHLOROCYCLOPENTADIENE	
3	C515 2,4,6-TRICHLOROPHENOL	
4	C520 2,4,5-TRICHLOROPHENOL	
5	C525 2-CHLORONAPHTHALENE	
6	C530 2-NITROANILINE	
7	C535 DIMETHYL PHTHALATE	
8	C540 ACENAPHTHYLENE	
9	C545 3-NITROANILINE	
10	C550 ACENAPHTHENE	
11	C555 2,4-DINITROPHENOL	
12	C560 4-NITROPHENOL	
13	C565 DIBENZOFURAN	
14	C570 2,4-DINITROTOLUENE	
15	C543 2,6-DINITROTOLUENE	
16	C580 DIETHYL PHTHALATE	
17	C585 4-CHLOROPHENYL PHENYL ETHER	
18	C590 FLUORENE	
19	C595 4-NITROANILINE	
20	CS25 2-FLUOROBIPHENYL	SURROGATE
21	CS55 2,4,6-TRIBROMOPHENOL	SURROGATE

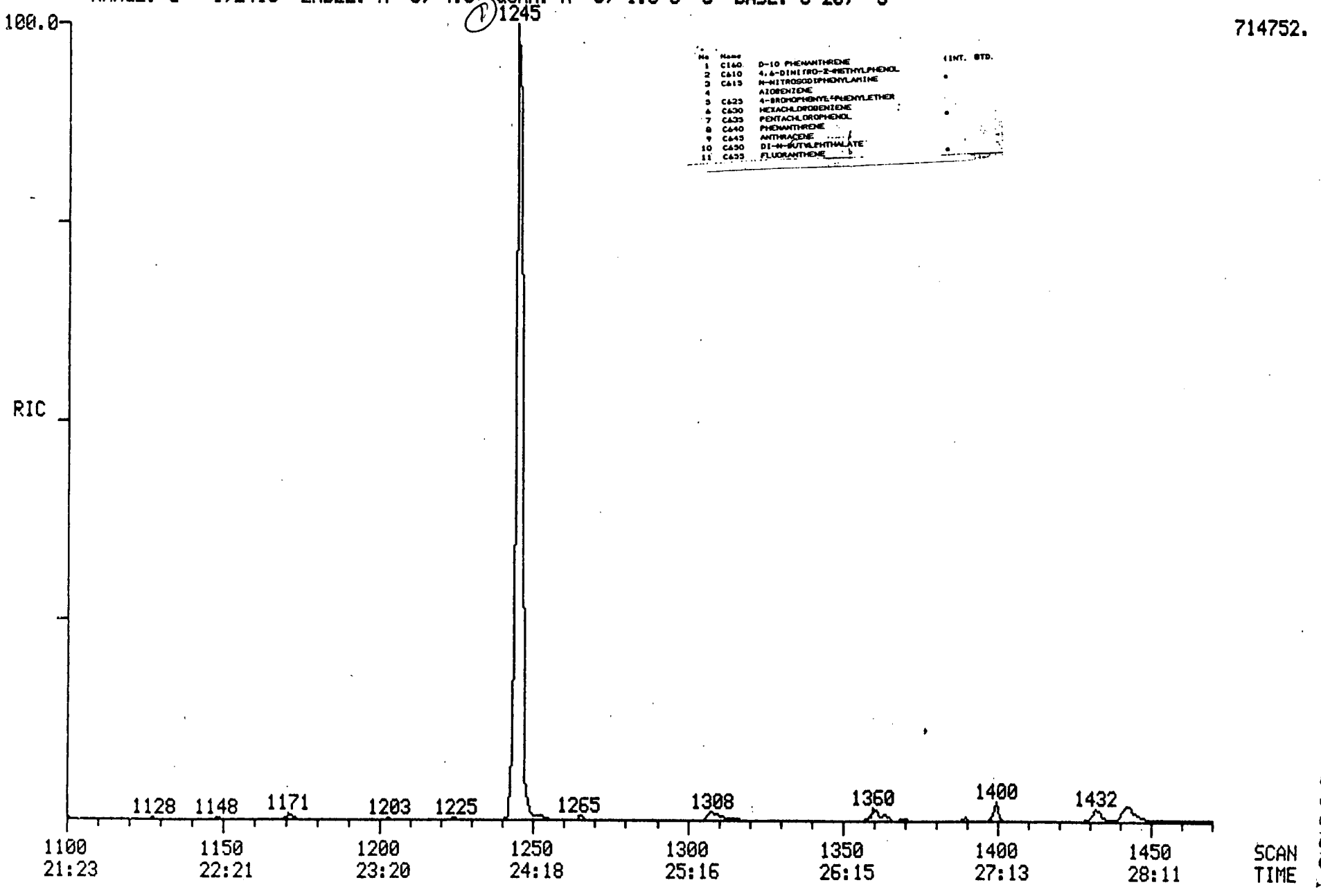
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	164	1008	19:36	1	1.000	A BB	348474.	40.000 UG/ML	39.39
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	152	982	19:05	1	0.974	A BB	~~270.~~	~~0.023 UG/ML~~	~~0.02~~ No WSS
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	168	1040	20:13	1	1.032	A BB	~~484.~~	~~0.027 UG/ML~~	~~0.03~~ No WSS
14	NOT FOUND								
15	NOT FOUND								
16	149	1098	21:21	1	1.089	A BB	~~2376.~~	~~0.237 UG/ML~~	~~0.23~~ No WSS
17	NOT FOUND								
18	166	1095	21:17	1	1.086	A BB	~~450.~~	~~0.051 UG/ML~~	~~0.05~~ No WSS
19	NOT FOUND								
20	172	905	17:36	1	0.898	A BB	602886.	61.206 UG/ML	60.28 Yes WSS
21	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	19:36	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	16:59		0.867						
3	17:23		0.887						
4	17:36		0.898						
5	17:46		0.907						
6	18:25		0.939						
7	19:08		0.976						
8	19:05	1.00	0.974	1.00	0.02	50.00	0.001	1.353	0.00
9	19:46		1.009						
10	19:42		1.005						
11	20:03		1.023						
12	20:42		1.057						
13	20:13	1.00	1.032	1.00	0.03	50.00	0.001	2.072	0.00
14	20:29		1.046						
15	19:18		0.985						
16	21:23	1.00	1.091	1.00	0.24	50.00	0.005	1.153	0.00
17	21:23		1.091						
18	21:17	1.00	1.086	1.00	0.05	50.00	0.001	1.021	0.00
19	21:46		1.111						
20	17:34	1.00	0.897	1.00	61.21	50.00	1.384	1.131	1.22
21	22:09		1.130						

RIC
03/25/89 20:42:00
SAMPLE: C29A
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789606AB #1
CALI: 789606AB #3

SCANS 1100 TO 1470



No	Name		(INT. STD.
1	C160	D-10 PHENANTHRENE	
2	C610	4,6-DINITRO-2-METHYLPHENOL	•
3	C615	N-NITROSODIPHENYLAMINE	
4		AIOBENZENE	
5	C625	4-BROMOPHENYL-PHENYLETHER	
6	C630	HEXACHLOROBENZENE	•
7	C635	PENTACHLOROPHENOL	
8	C640	PHENANTHRENE	
9	C645	ANTHRACENE	
10	C650	DI-N-BUTYLPHTHALATE	•
11	C655	FLUORANTHENE	

000224

Quantitation Report File: 789606AB

000225

Data: 789606AB.TI
03/25/89 20:42:00
Sample: C29A
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN W ight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789606AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI60 PHENANTHRENE D10	INTERNAL STANDARD
2	C610 4,6-DINITRO-2-METHYL PHENOL	
3	C615 N-NITROSODIPHENYLAMINE	
4	AZOBENZENE	
5	C625 4-BROMOPHENYL PHENYL ETHER	
6	C630 HEXACHLOROBENZENE	
7	C635 PENTACHLOROPHENOL	
8	C640 PHENANTHRENE	
9	C645 ANTHRACENE	
10	C650 DI-N-BUTYL PHTHALATE	
11	C655 FLUORANTHENE	

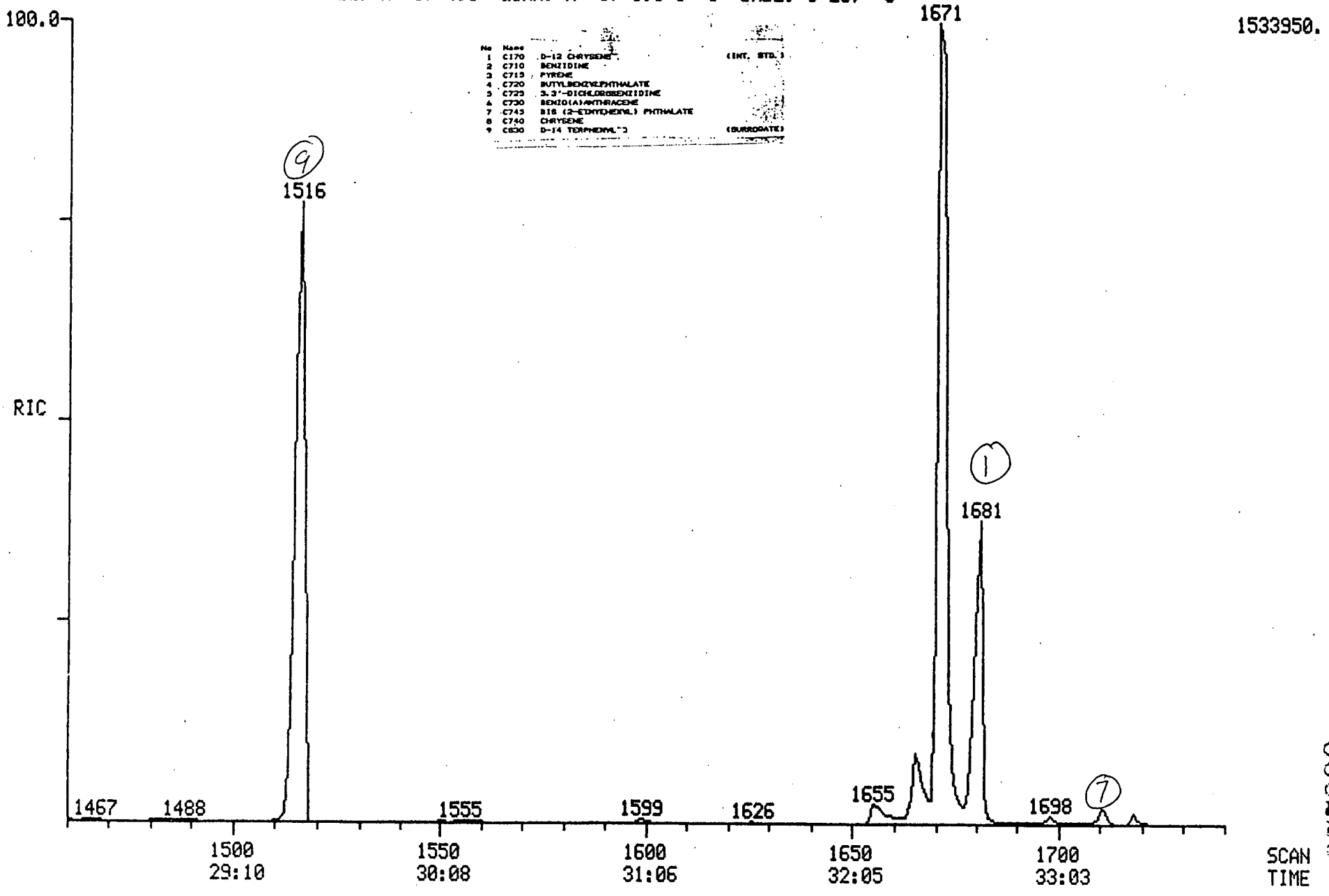
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	188	1245	24:12	1	1.000	A BV	473037.	40.000 UG/ML	97.03
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	178	1248	24:16	1	1.002	A BB	~~5082.~~	~~0.459 UG/ML~~	~~1.11~~ NO WSS
9	178	1255	24:24	1	1.008	A BB	~~394.~~	~~0.041 UG/ML~~	~~0.10~~ NO WSS
10	149	1364	26:31	1	1.096	A BB	~~4980.~~	~~0.473 UG/ML~~	~~1.15~~ NO WSS
11	202	1443	28:03	1	1.159	A BB	~~2556.~~	~~0.253 UG/ML~~	~~0.61~~ NO WSS

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	24:13	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	21:45		0.898						
3	21:51		0.902						
4	21:53		0.904						
5	22:54		0.945						
6	23:16		0.961						
7	23:57		0.989						
8	24:18	1.00	1.003	1.00	0.46	50.00	0.009	0.937	0.01
9	24:26	1.00	1.009	1.00	0.04	50.00	0.001	0.808	0.00
10	26:32	1.00	1.096	1.00	0.47	50.00	0.008	0.891	0.01
11	28:03	1.00	1.158	1.00	0.25	50.00	0.004	0.853	0.01

RIC
03/25/89 20:42:00
SAMPLE: C29A
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789606AB #1
CALI: 789606AB #3

SCANS 1460 TO 1740



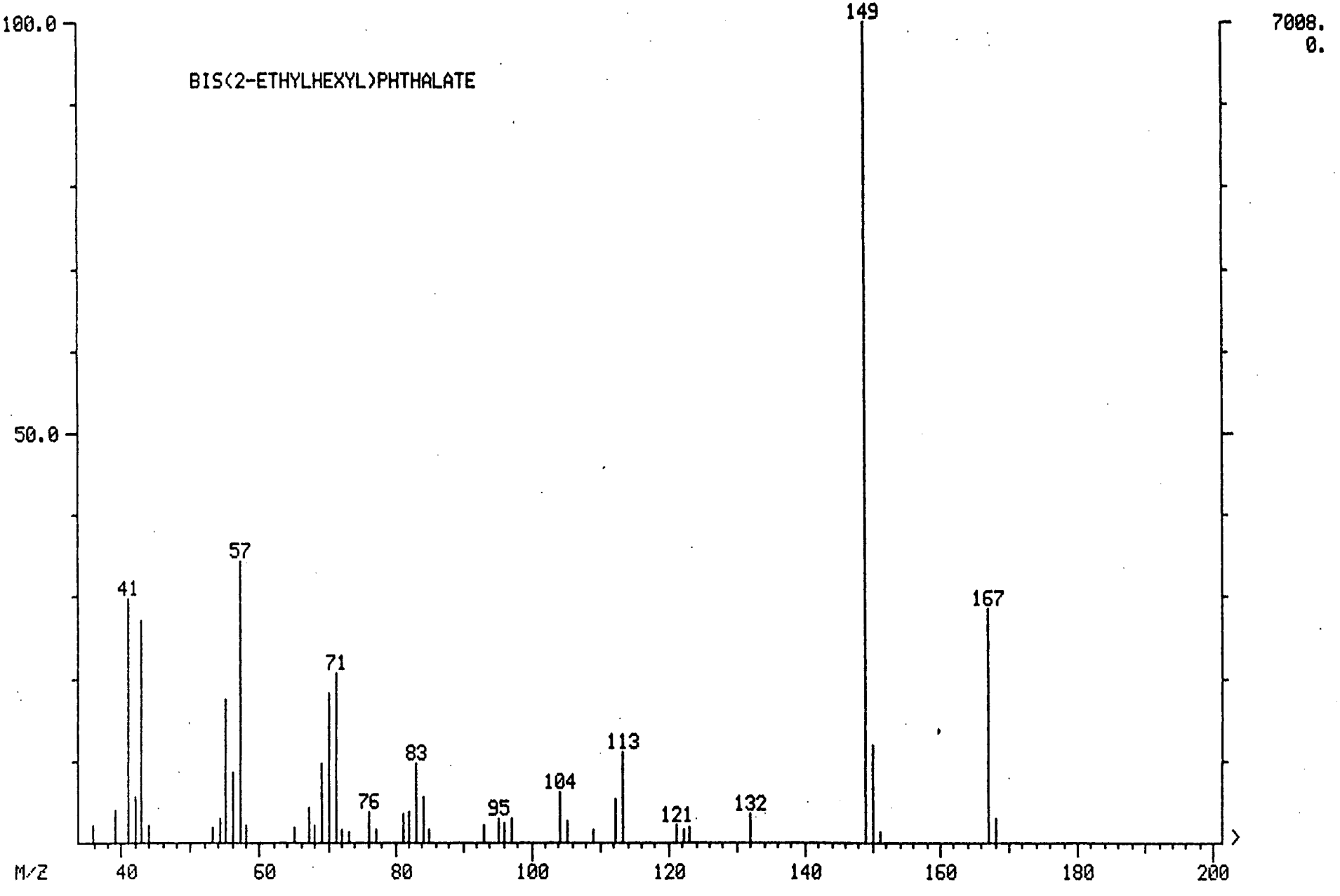
No	Name		
1	C170	D-12 CHRYSENE	(INT. STD.)
2	C710	BENZIDINE	
3	C715	PYRENE	
4	C720	BUTYLBENZYLPHTHALATE	
5	C725	3,3'-DICHLOROBENZIDINE	
6	C730	BENZO(A)ANTHRACENE	
7	C745	BIS (2-ETHYLHEXYL) PHTHALATE	
8	C760	CHRYSENE	
9	C830	D-14 TERPHENYL	(SURROGATE)

000226

MASS SPECTRUM
03/25/89 20:42:00 + 33:16
SAMPLE: C29A
CONDS.: 1000 MLS/1.0 ML
TEMP: 275 DEG. C

DATA: 789606AB #1711
CALI: 789606AB #3

BASE M/Z: 149
RIC: 29664.

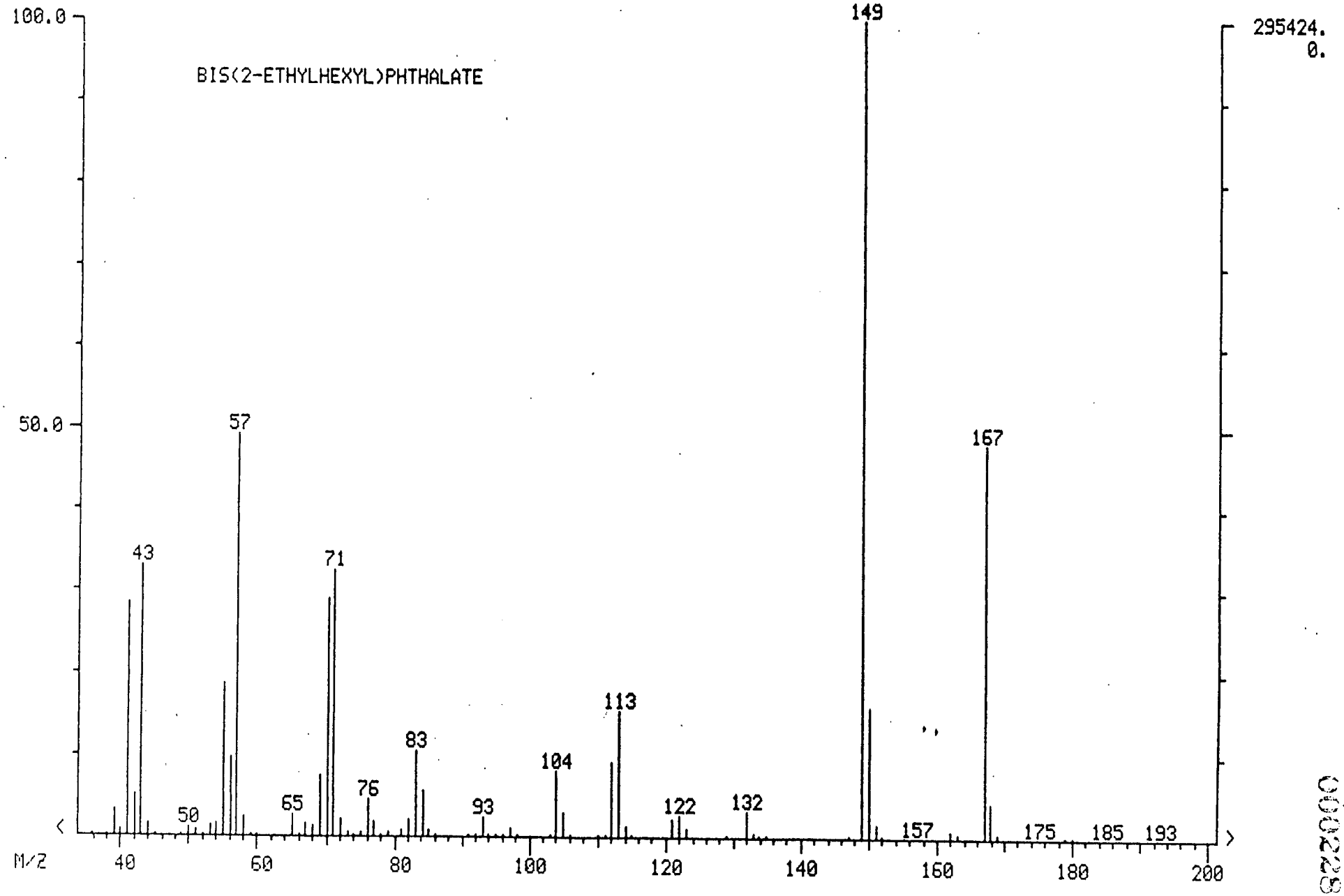


000227

MASS SPECTRUM
03/25/89 12:28:00 + 33:15
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 50 NG INJECTION
TEMP: 275 DEG. C

DATA: HSD500325 #1710
CALI: HSD500325 #3

BASE M/Z: 149
RIC: 1486850.

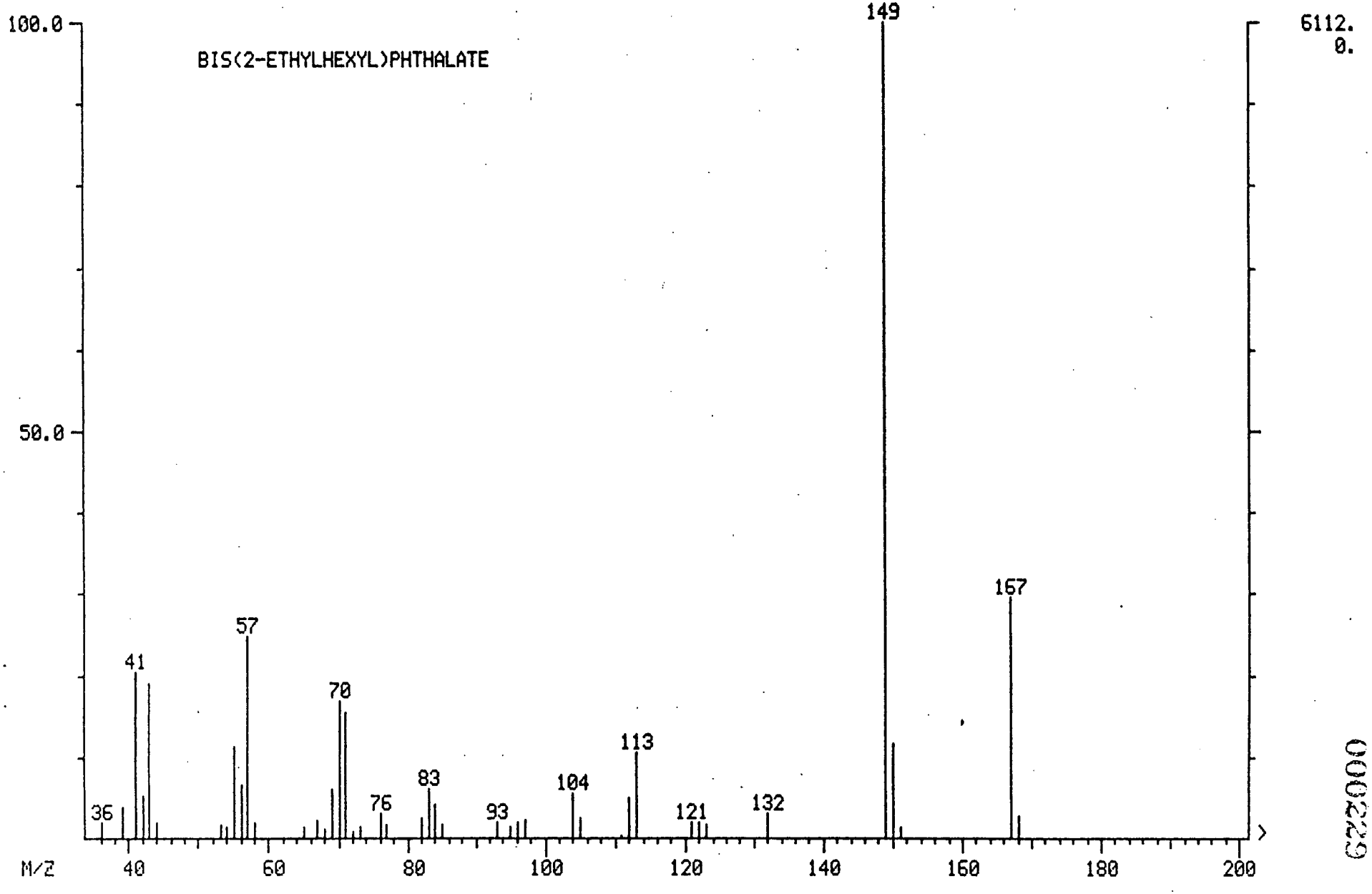


000228

MASS SPECTRUM
03/25/89 20:42:00 + 33:16
SAMPLE: C29A
CONDS.: 1000 MLS/1.0 ML
TEMP: 275 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 789606AB #1711
CALI: 789606AB #3

BASE M/Z: 149
RIC: 21568.

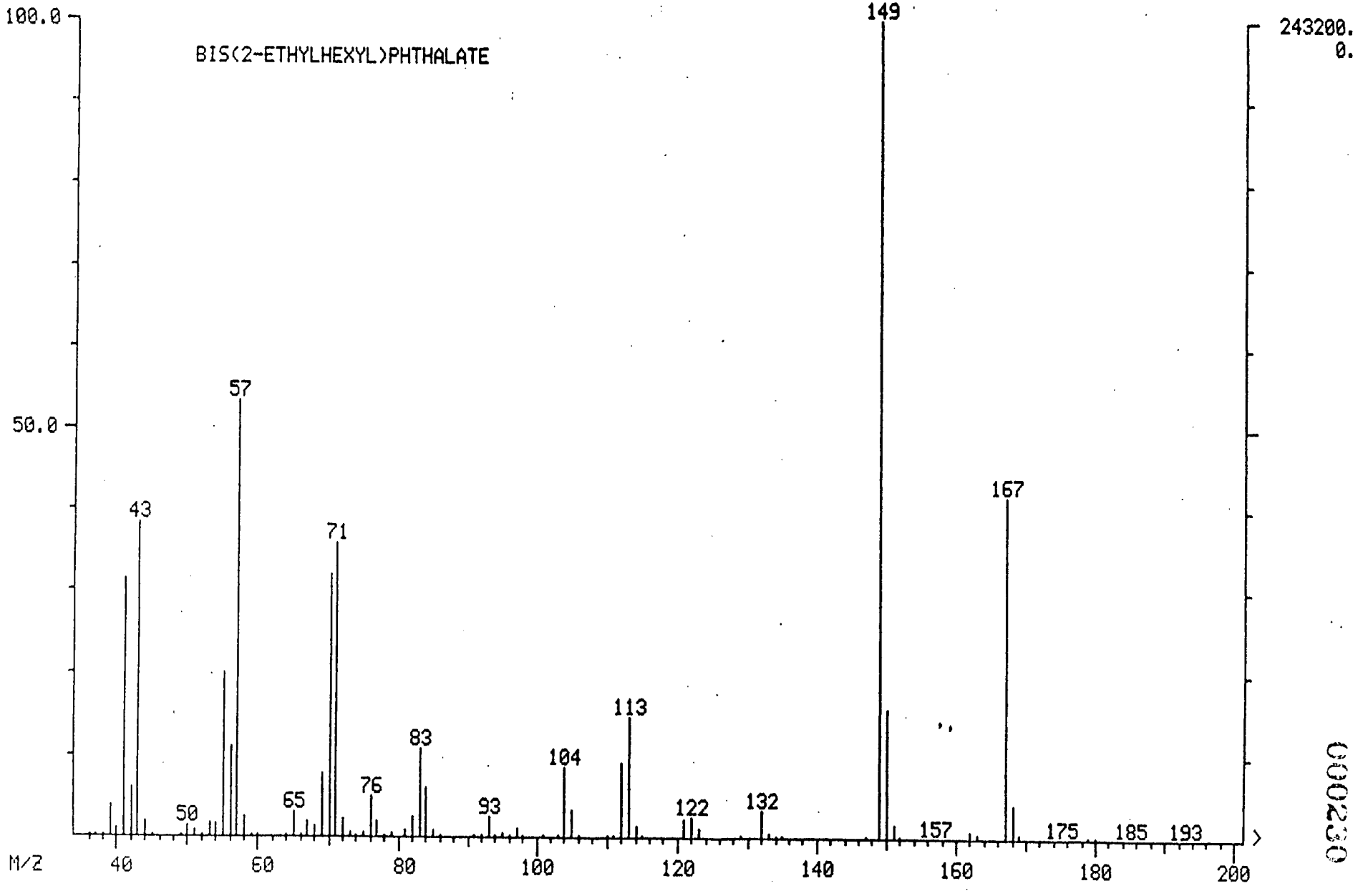


000229

MASS SPECTRUM
03/25/89 12:28:00 + 33:15
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 50 NG INJECTION
TEMP: 275 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: HSD500325 #1710
CALI: HSD500325 #3

BASE M/Z: 149
RIC: 1277950.



000230

Quantitation Report File: 789606AB

Data: 789606AB.TI
03/25/89 20:42:00
Sample: C29A
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitt d by: FLEMING Analyst: WSS Acct. No.: 789606AB

000231

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI70 CHRYSENE D12	INTERNAL STANDARD
2	C710 BENZIDINE	
3	C715 PYRENE	
4	C720 BUTYLBENZYLPHTHALATE	
5	C725 3,3'-DICHLOROBENZIDINE	
6	C730 BENZO(A)ANTHRACENE	
7	C745 BIS(2-ETHYLHEXYL)PHTHALATE	
8	C740 CHRYSENE	
9	CS30 TERPHENYL D14	SURROGATE

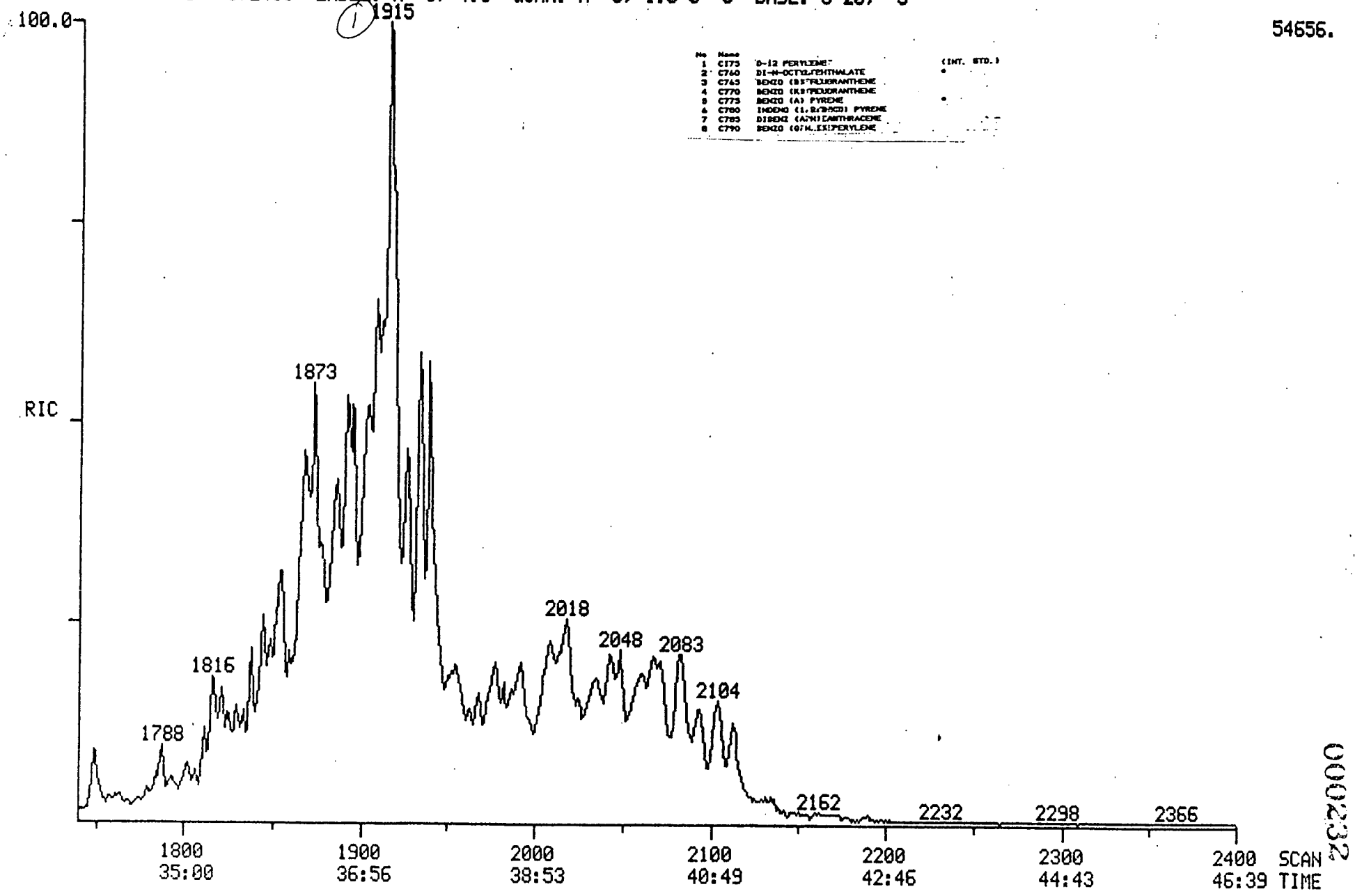
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot	
1	240	1680	32:40	1	1.000	A BB	269026.	40.000 UG/ML	30.14	
2	NOT FOUND									
3	202	1478	28:44	1	0.880	A BB	~~571.~~	~~0.076 UG/ML~~	~~0.06~~	NO WSS
4	149	1607	31:14	1	0.957	A BB	~~762.~~	~~0.156 UG/ML~~	~~0.12~~	NO WSS
5	NOT FOUND									
6	228	1681	32:41	1	1.001	A BB	~~1286.~~	~~0.179 UG/ML~~	~~0.14~~	NO WSS
7	149	1711	33:16	1	1.018	A BB	17081.	2.733 UG/ML	2.06	Yes WSS
8	NOT FOUND									
9	244	1516	29:28	1	0.902	A BB	671512.	89.589 UG/ML	67.51	Yes WSS

N	R t(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Rati
1	32:41	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	28:43		0.879						
3	28:44	1.00	0.879	1.00	0.08	50.00	0.002	1.124	0.00
4	31:16	1.00	0.957	1.00	0.16	50.00	0.002	0.725	0.00
5	32:43		1.001						
6	32:37	1.00	0.998	1.00	0.18	50.00	0.004	1.066	0.00
7	33:15	1.00	1.017	1.00	2.73	50.00	0.051	0.929	0.05
8	32:45		1.002						
9	29:27	1.00	0.901	1.00	89.59	50.00	1.997	1.114	1.79

RIC
03/25/89 20:42:00
SAMPLE: C29A
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789606AB #1
CALI: 789606AB #3

SCANS 1740 TO 2400



No	Name		
1	C775	D-12 PERYLENE	(INT. STD.)
2	C760	DI-N-OCTYL/EHTHALATE	•
3	C765	BENZO (B)FLUORANTHENE	
4	C770	BENZO (K)FLUORANTHENE	
5	C775	BENZO (A) PYRENE	•
6	C780	INDENO (1,2,3-CD) PYRENE	
7	C785	DIBENZ (A,H)ANTHRACENE	
8	C790	BENZO (G,H,I)PERYLENE	

0002232

Quantitation Report File: 789606AB

000233

Data: 789606AB.TI
03/25/89 20:42:00
Sample: C29A
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789606AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI75 PERYLENE D12	INTERNAL STANDARD
2	C760 DI-N-OCTYLPHTHALATE	
3	C765 BENZO(B)FLUORANTHENE	
4	C770 BENZO(K)FLUORANTHENE	
5	C775 BENZO(A)PYRENE	
6	C780 INDENO(1,2,3-CD)PYRENE	
7	C785 DIBENZO(A,H)ANTHRACENE	
8	C790 BENZO(G,H,I)PERYLENE	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%T t
1	264	1915	37:14	1	1.000	A BB	26566.	40.000 UG/ML	*100.
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	37:15	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	35:09		0.944						
3	35:58		0.966						
4	36:04		0.968						
5	37:03		0.995						
6	42:01		1.128						
7	42:12		1.133						
8	43:23		1.165						

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

ANALYTICAL DATA REPORT PACKAGE
FOR
GANNETT FLEMING ENGINEERS INC.

Part 4 of 7

Case Name	Field Sample ID	Laboratory Sample ID	Date of Collection
USN Earl Depot	C-14A	789651,789603,789657, 789629,789635,789643	02/16/89
	C-14B	789652,789604,789658, 789630,789636,789644	"
	C-14C	789653,789605,789659, 789631,789637,789645	"
	C-29A	789654,789606,789660, 789632,789638.789646	"
	FIELD BLANK	789655,789607,789662, 789633,789639,789647	"
	TRIP BLANK	789656,789608,789661, 789634,789640,789648	"

Laboratory Name QC Inc.

Certification No. PADER No. 09-131
NJDEP No. 77168/77648

Supervisor/Manager Signature

Printed Name Thomas J. Hines

Form QC G-1

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

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	FIELD BLANK (789607)	234
	TRIP BLANK (789608)	256
VI SV-1,-2	Semivolatile Organics Initial Calibration	286
VII SV-1,-2	Semivolatile Continuing Calibration Check	288

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

EPA METHOD 625 BASE/NEUTRAL EXTRACTABLES BY GC/MS

Lab ID : 789607
Sample ID : Field Blank
Date Analyzed : 03/25/89
Date Extracted: 02/24/89

Client : Gannett&Fleming
Prep Factor : 1000 mls/1.0 ml
Comments :
Date Received: 02/17/89

NO.	NAME	RESULTS PPB	COMMENTS
1	Bis(2-chloroethyl)Ether	10	U
2	1,2-Dichlorobenzene	10	U
3	1,4-Dichlorobenzene	10	U
4	1,3-Dichlorobenzene	10	U
5	Bis(2-chloroisopropyl)Ether	10	U
6	N-Nitrosodipropyl Amine	10	U
7	Hexachloroethane	10	U
8	Nitrobenzene	10	U
9	Isophorone	10	U
10	Bis(2-chloroethoxy)Methane	10	U
11	1,2,4-Trichlorobenzene	10	U
12	Naphthalene	10	U
13	Hexachlorobutadiene	10	U
14	Hexachlorocyclopentadiene	10	U
15	2-Chloronaphthalene	10	U
16	Dimethyl Phthalate	10	U
17	2,6-Dinitrotoluene	10	U
18	Acenaphthylene	10	U
19	Acenaphthene	10	U
20	2,4-Dinitrotoluene	10	U
21	Diethyl Phthalate	10	U
22	N-Nitrosodimethyl Amine	10	U
23	4-Chlorophenylphenyl Ether	10	U
24	Fluorene	10	U
25	Azobenzene	10	U
26	N-Nitrosodiphenyl Amine	10	U
27	4-Bromophenylphenyl Ether	10	U
28	Hexachlorobenzene	10	U
29	Phenanthrene	10	U
30	Anthracene	10	U
31	Dibutyl Phthalate	10	U
32	Fluoranthene	10	U

Comments:
U= Not detected
J= Detected but below Method Detection limit
B= Compound found in Blank

Signature

Name/Title: Howard Whaley
GC/MS Project Leader

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

EPA Method 625 Base/Neutral Extractables by GC/MS

Lab ID : 789607
Sample ID : Field Blank
Date Analyzed : 03/25/89
Date Extracted: 02/24/89

Client : Gannett&Fleming
Prep Factor: 1000 mls/1.0 ml
Comments :
Date Recieved: 02/17/89

NO.	NAME	RESULTS PPB	COMMENTS
33	Benzidine	50	U
34	Pyrene	10	U
35	Butylbenzyl Phthalate	10	U
36	3,3-Dichlorobenzidine	10	U
37	Benzo(A)Anthracene	10	U
38	Chrysene	10	U
39	Bis(2-ethylhexyl) Phthalate	2	BJ
40	Dioctyl-Phthalate	10	U
41	Benzo(K)Fluoranthene	10	U
42	Benzo(B)Fluoranthene	10	U
43	Benzo(A)Pyrene	10	U
44	Indeno(1,2,3-CD)Pyrene	10	U
45	Dibenzo(A,H)Anthracene	10	U
46	Benzo(GHI)Perylene	10	U

Comments:
U= Not Detected
J= Detected but below Method Detection Limit
B= Compound found in Blank

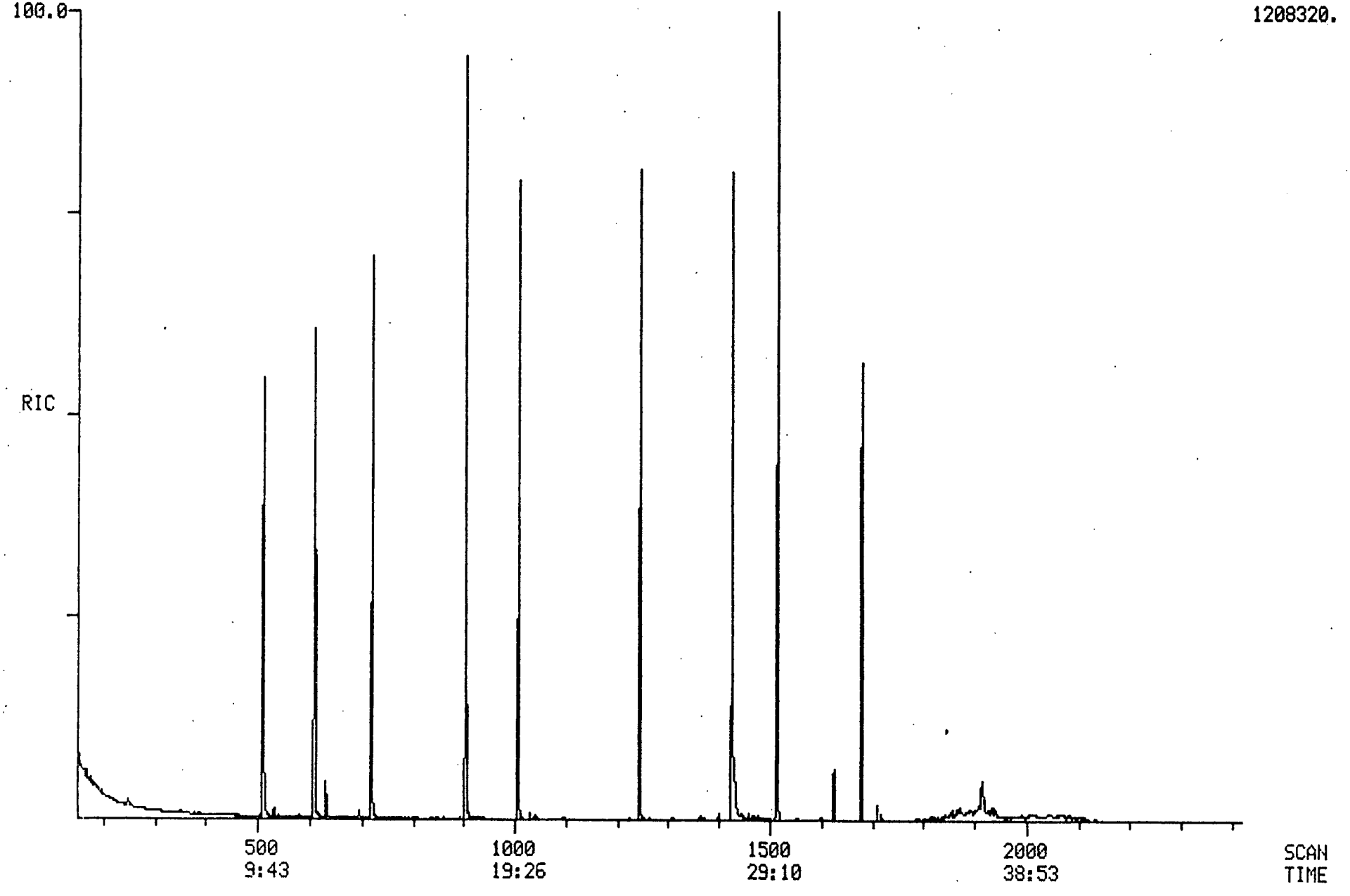
Signature

Name/Title: Howard Whaley
GC/MS Project Leader

RIC
03/25/89 21:35:00
SAMPLE: FIELD BLANK
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789607AB #1
CALI: CALTAB #3

SCANS 150 TO 2418

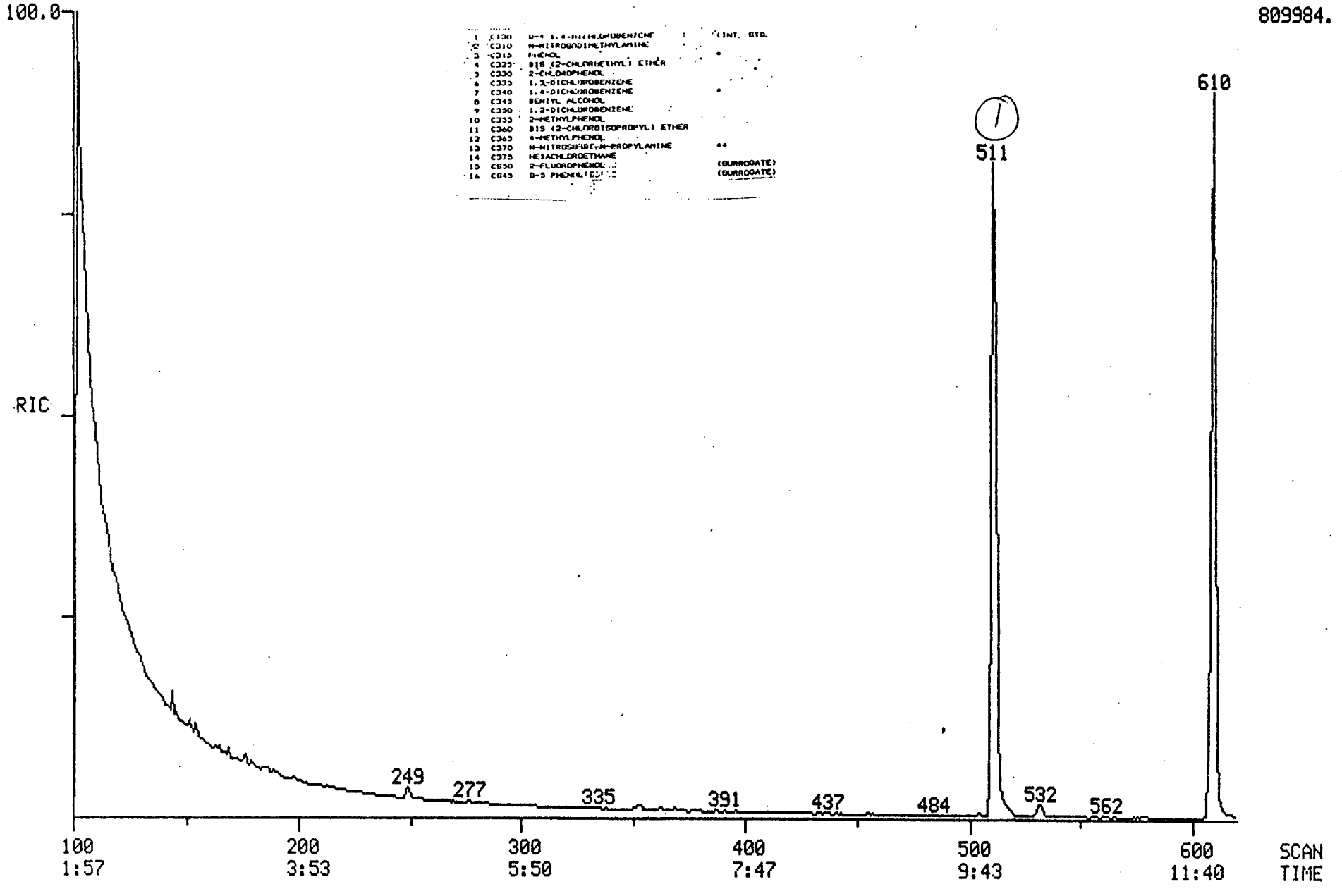


000231

RIC
03/25/89 21:35:00
SAMPLE: FIELD BLANK
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789607AB #1
CALI: 789607AB #3

SCANS 100 TO 620



000237

Quantitation Report Fil : 789607AB

000238

Data: 789607AB.TI
03/25/89 21:35:00
Sample: FIELD BLANK
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789607AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
R sp. fac. from Library Entry

No	Name	
1	CI30 1,4-DICHLOROBENZENE D4	INTERNAL STANDARD
2	N-NITROSODIMETHYLAMINE	
3	C315 PHENOL	
4	C325 BIS(2-CHLOROETHYL) ETHER	
5	C330 2-CHLOROPHENOL	
6	C335 1,3-DICHLOROBENZENE	
7	C340 1,4-DICHLOROBENZENE	
8	C345 BENZYL ALCOHOL	
9	C350 1,2-DICHLOROBENZENE	
10	C355 2-METHYLPHENOL	
11	C360 BIS(2-CHLOROISOPROPYL)ETHER	
12	C365 4-METHYLPHENOL	
13	C370 N-NITROSO-DI-PROPYLAMINE	
14	C375 HEXACHLOROETHANE	
15	CS50 2-FLUOROPHENOL	SURROGATE
16	CS45 PHENOL D5	SURROGATE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	511	9:56	1	1.000	A BB	244062.	40.000 UG/ML	99.81
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	146	511	9:56	1	1.000	A BB	~~322.~~	~~0.036 UG/ML~~	~~0.09~~ NO WSS
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	108	610	11:52	1	1.194	A BB	~~333.~~	~~0.041 UG/ML~~	~~0.10~~ NO WSS
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								

No	R t(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:50	1.01	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	2:35		0.263						
3	9:25		0.957						
4	9:19		0.947						
5	9:23		0.955						
6	9:42		0.986						
7	9:54	1.00	1.006	0.99	0.04	50.00	0.001	1.476	0.00

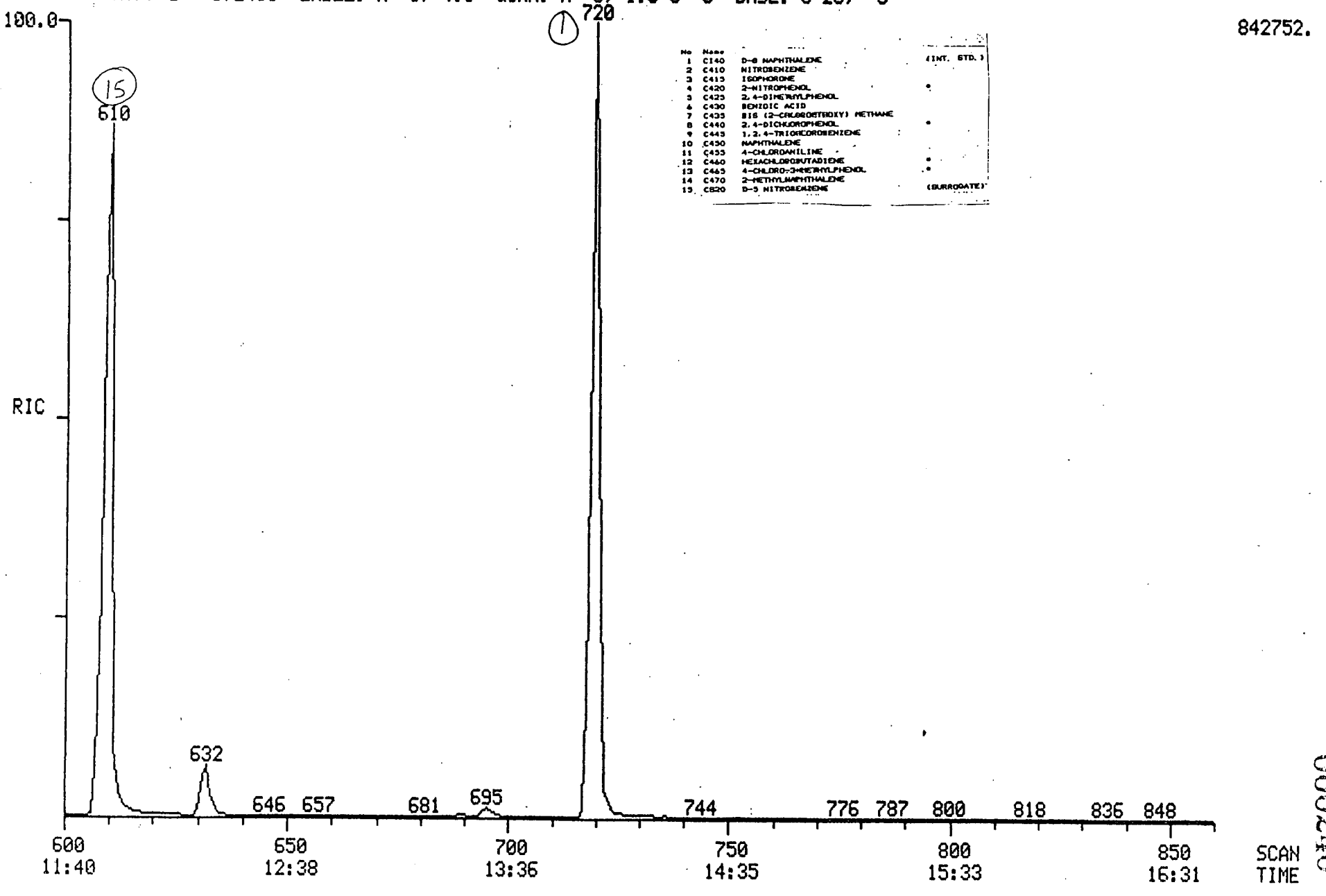
000239

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
8	10:40		1.085						
9	10:29		1.065						
10	11:15		1.144						
11	11:05		1.126						
12	11:48	1.00	1.200	1.00	0.04	50.00	0.001	1.317	0.00
13	11:36		1.180						
14	11:27		1.164						
15	5:55		0.601						
16	9:22		0.953						

RIC
03/25/89 21:35:00
SAMPLE: FIELD BLANK
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789607AB #1
CALI: 789607AB #3

SCANS 600 TO 860



No	Name		
1	C140	D-8 NAPHTHALENE	(INT. STD.)
2	C410	NITROBENZENE	
3	C415	ISOPHORONE	
4	C420	2-NITROPHENOL	*
5	C425	2,4-DIMETHYLPHENOL	
6	C430	BENZOIC ACID	
7	C435	BIS (2-CHLOROETHOXY) METHANE	
8	C440	2,4-DICHLOROPHENOL	*
9	C445	1,2,4-TRICHLOROBENZENE	
10	C450	NAPHTHALENE	
11	C455	4-CHLOROANILINE	
12	C460	HEXACHLOROBUTADIENE	*
13	C465	4-CHLORO-3METHYLPHENOL	*
14	C470	2-METHYLNAPHTHALENE	
15	C820	D-5 NITROBENZENE	(SURROGATE)

000240

Quantitation Report File: 789607AB

000241

Data: 789607AB.TI
03/25/89 21:35:00
Sample: FIELD BLANK
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN W ight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789607AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Nam	
1	CI40 NAPHTHALENE D8	INTERNAL STANDARD
2	C410 NITROBENZENE	
3	C415 ISOPHORONE	
4	C420 2-NITROPHENOL	
5	C425 2,4-DIMETHYLPHENOL	
6	C430 BENZOIC ACID	
7	C435 BIS(2-CHLOROETHOXY)METHANE	
8	C440 2,4-DICHLOROPHENOL	
9	C445 1,2,4-TRICHLOROBENZENE	
10	C450 NAPHTHALENE	
11	C455 4-CHLOROANILINE	
12	C460 HEXACHLOROBUTADIENE	
13	C465 4-CHLORO-3-METHYLPHENOL	
14	C470 2-METHYLNAPHTHALENE	
15	CS20 NITROBENZENE D5	SURROGATE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot	
1	136	720	14:00	1	1.000	A BB	689486.	40.000 UG/ML	40.36	
2	77	610	11:52	1	0.847	A BB	~~1500.~~	~~0.124 UG/ML~~	~~0.13~~	NO WSS
3	NOT FOUND									
4	NOT FOUND									
5	NOT FOUND									
6	NOT FOUND									
7	NOT FOUND									
8	NOT FOUND									
9	NOT FOUND									
10	NOT FOUND									
11	NOT FOUND									
12	NOT FOUND									
13	NOT FOUND									
14	NOT FOUND									
15	82	610	11:52	1	0.847	A BB	541555.	58.978 UG/ML	59.51	Yes WSS

No	R t(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	13:59	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	11:53	1.00	0.850	1.00	0.12	50.00	0.002	0.702	0.00
3	12:42		0.908						
4	12:53		0.922						
5	13:21		0.955						
6	14:16		1.021						
7	13:32		0.968						
8	13:48		0.987						
9	13:53		0.993						

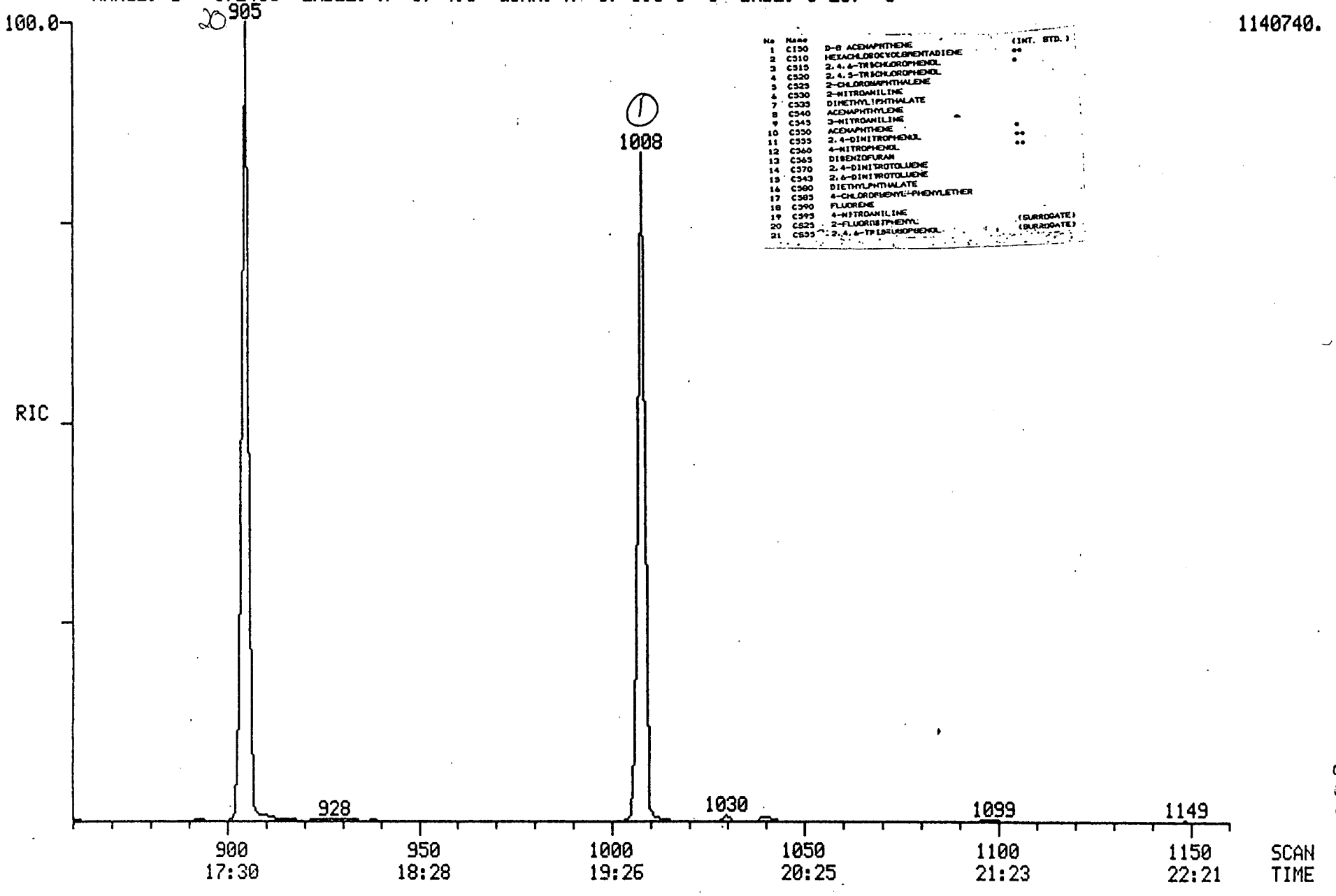
000242

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
10	14:02		1.004						
11	14:28		1.035						
12	14:42		1.051						
13	16:16		1.164						
14	16:16		1.164						
15	11:48	1.00	0.844	1.00	58.98	50.00	0.628	0.533	1.18

RIC
03/25/89 21:35:00
SAMPLE: FIELD BLANK
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789607AB #1
CALI: 789607AB #3

SCANS 860 TO 1160



No	Name		
1	C150	D-8 ACENAPHTHENE	(INT. STD.)
2	C510	HEXACHLOROCYCLOPENTADIENE	**
3	C515	2,4,6-TRICHLOROPHENOL	*
4	C520	2,4,5-TRICHLOROPHENOL	
5	C525	2-CHLORONAPHTHALENE	
6	C530	2-NITROANILINE	
7	C535	DIMETHYLPHTHALATE	
8	C540	ACENAPHTHYLENE	
9	C545	3-NITROANILINE	*
10	C550	ACENAPHTHENE	**
11	C555	2,4-DINITROPHENOL	**
12	C560	4-NITROPHENOL	
13	C565	DIBENZOFURAN	
14	C570	2,4-DINITROTOLUENE	
15	C575	2,6-DINITROTOLUENE	
16	C580	DIETHYLPHTHALATE	
17	C585	4-CHLOROPHENYL-PHENYLETHER	
18	C590	FLUORENE	
19	C595	4-NITROANILINE	(SURROGATE)
20	C625	2-FLUOROBIPHENYL	(SURROGATE)
21	C635	2,4,6-TRIBROMOPHENOL	

000243

Quantitation Report File: 789607AB

Data: 789607AB.TI
03/25/89 21:35:00
Sample: FIELD BLANK
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789607AB

000244

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI50 ACENAPHTHENE D8	INTERNAL STANDARD
2	C510 HEXACHLOROCYCLOPENTADIENE	
3	C515 2,4,6-TRICHLOROPHENOL	
4	C520 2,4,5-TRICHLOROPHENOL	
5	C525 2-CHLORONAPHTHALENE	
6	C530 2-NITROANILINE	
7	C535 DIMETHYL PHTHALATE	
8	C540 ACENAPHTHYLENE	
9	C545 3-NITROANILINE	
10	C550 ACENAPHTHENE	
11	C555 2,4-DINITROPHENOL	
12	C560 4-NITROPHENOL	
13	C565 DIBENZOFURAN	
14	C570 2,4-DINITROTOLUENE	
15	C543 2,6-DINITROTOLUENE	
16	C580 DIETHYL PHTHALATE	
17	C585 4-CHLOROPHENYL PHENYL ETHER	
18	C590 FLUORENE	
19	C595 4-NITROANILINE	
20	CS25 2-FLUOROBIPHENYL	SURROGATE
21	CS55 2,4,6-TRIBROMOPHENOL	SURROGATE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot	
1	164	1008	19:36	1	1.000	A BV	398195.	40.000 UG/ML	42.89	
2	NOT FOUND									
3	NOT FOUND									
4	NOT FOUND									
5	NOT FOUND									
6	NOT FOUND									
7	NOT FOUND									
8	NOT FOUND									
9	NOT FOUND									
10	NOT FOUND									
11	NOT FOUND									
12	NOT FOUND									
13	168	1040	20:13	1	1.032	A BB	~~502.~~	~~0.024 UG/ML~~	~~0.03~~ NO	WSS
14	NOT FOUND									
15	NOT FOUND									
16	149	1098	21:21	1	1.089	A BB	~~2193.~~	~~0.191 UG/ML~~	0.20 NO	WSS
17	NOT FOUND									
18	NOT FOUND									
19	NOT FOUND									
20	172	905	17:36	1	0.898	A BV	597062.	53.046 UG/ML	56.88 Yes	WSS
21	NOT FOUND									

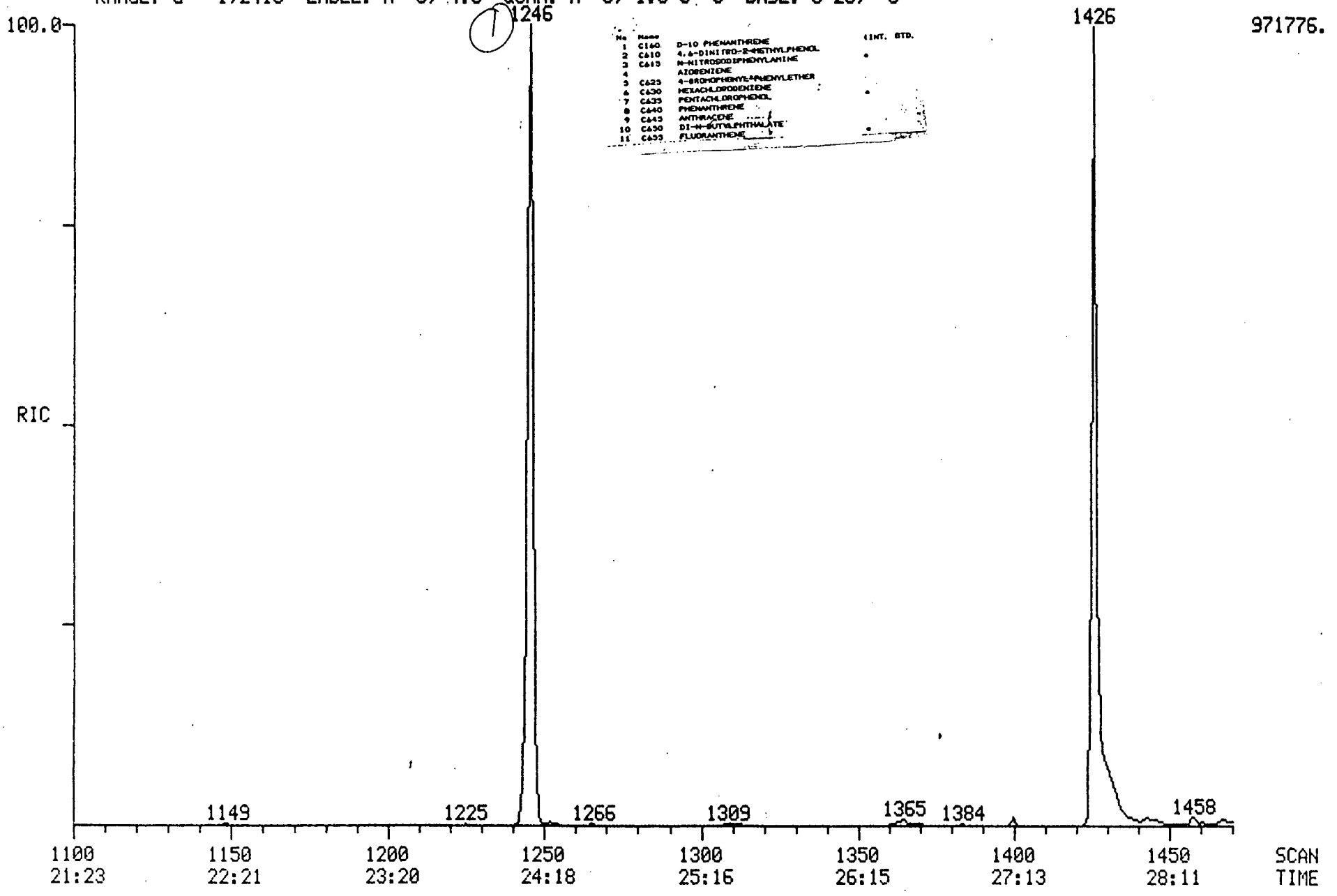
000245

No	Ret(L)	Rati	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	19:36	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	16:59		0.867						
3	17:23		0.887						
4	17:36		0.898						
5	17:46		0.907						
6	18:25		0.939						
7	19:08		0.976						
8	19:05		0.974						
9	19:46		1.009						
10	19:42		1.005						
11	20:03		1.023						
12	20:42		1.057						
13	20:13	1.00	1.032	1.00	0.02	50.00	0.001	2.072	0.00
14	20:29		1.046						
15	19:18		0.985						
16	21:23	1.00	1.091	1.00	0.19	50.00	0.004	1.153	0.00
17	21:23		1.091						
18	21:17		1.086						
19	21:46		1.111						
20	17:34	1.00	0.897	1.00	53.05	50.00	1.200	1.131	1.06
21	22:09		1.130						

RIC
03/25/89 21:35:00
SAMPLE: FIELD BLANK
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789607AB #1
CALI: 789607AB #3

SCANS 1100 TO 1470



No	Name		(INT. STD.
1	C160	D-10 PHENANTHRENE	
2	C610	4,6-DINITRO-2-METHYLPHENOL	•
3	C615	N-NITROSODIPHENYLAMINE	
4		AZOBENZENE	
5	C625	4-BROMOPHENYL-PHENYLETHER	
6	C630	HEXACHLOROBENZENE	•
7	C635	PENTACHLOROPHENOL	
8	C640	PHENANTHRENE	
9	C645	ANTHRACENE	
10	C650	DI-N-BUTYLPHTHALATE	•
11	C655	FLUORANTHENE	

000245

Quantitation Report `File: 789607AB

Data: 789607AB.TI
03/25/89 21:35:00
Sample: FIELD BLANK
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789607AB

000247

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI60 PHENANTHRENE D10	INTERNAL STANDARD
2	C610 4,6-DINITRO-2-METHYL PHENOL	
3	C615 N-NITROSODIPHENYLAMINE	
4	AZOBENZENE	
5	C625 4-BROMOPHENYL PHENYL ETHER	
6	C630 HEXACHLOROBENZENE	
7	C635 PENTACHLOROPHENOL	
8	C640 PHENANTHRENE	
9	C645 ANTHRACENE	
10	C650 DI-N-BUTYL PHTHALATE	
11	C655 FLUORANTHENE	

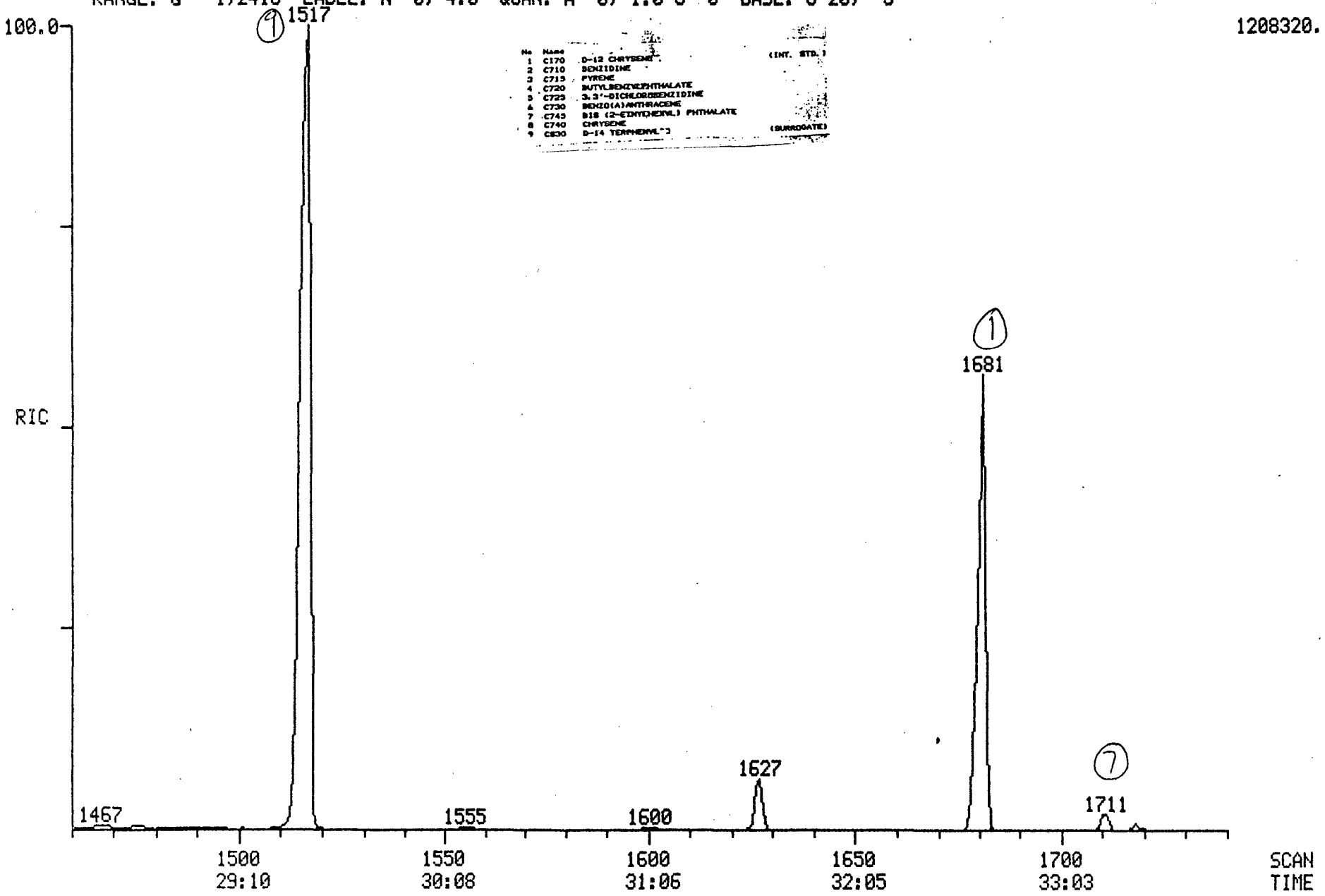
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	188	1246	24:13	1	1.000	A BV	551594.	40.000 UG/ML	98.34
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	178	1248	24:16	1	1.002	A BB	~~1131.~~	~~0.088 UG/ML~~	~~0.22~~ NO WSS
9	178	1255	24:24	1	1.007	A BB	~~272.~~	~~0.024 UG/ML~~	~~0.06~~ NO WSS
10	149	1365	26:32	1	1.096	A BB	~~6521.~~	~~0.531 UG/ML~~	~~1.30~~ NO WSS
11	202	1443	28:03	1	1.158	A BB	~~417.~~	~~0.035 UG/ML~~	~~0.09~~ NO WSS

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	24:13	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	21:45		0.898						
3	21:51		0.902						
4	21:53		0.904						
5	22:54		0.945						
6	23:16		0.961						
7	23:57		0.989						
8	24:18	1.00	1.003	1.00	0.09	50.00	0.002	0.937	0.00
9	24:26	1.00	1.009	1.00	0.02	50.00	0.000	0.808	0.00
10	26:32	1.00	1.096	1.00	0.53	50.00	0.009	0.891	0.01
11	28:03	1.00	1.158	1.00	0.04	50.00	0.001	0.853	0.00

RIC
03/25/89 21:35:00
SAMPLE: FIELD BLANK
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789607AB #1
CALI: 789607AB #3

SCANS 1460 TO 1740



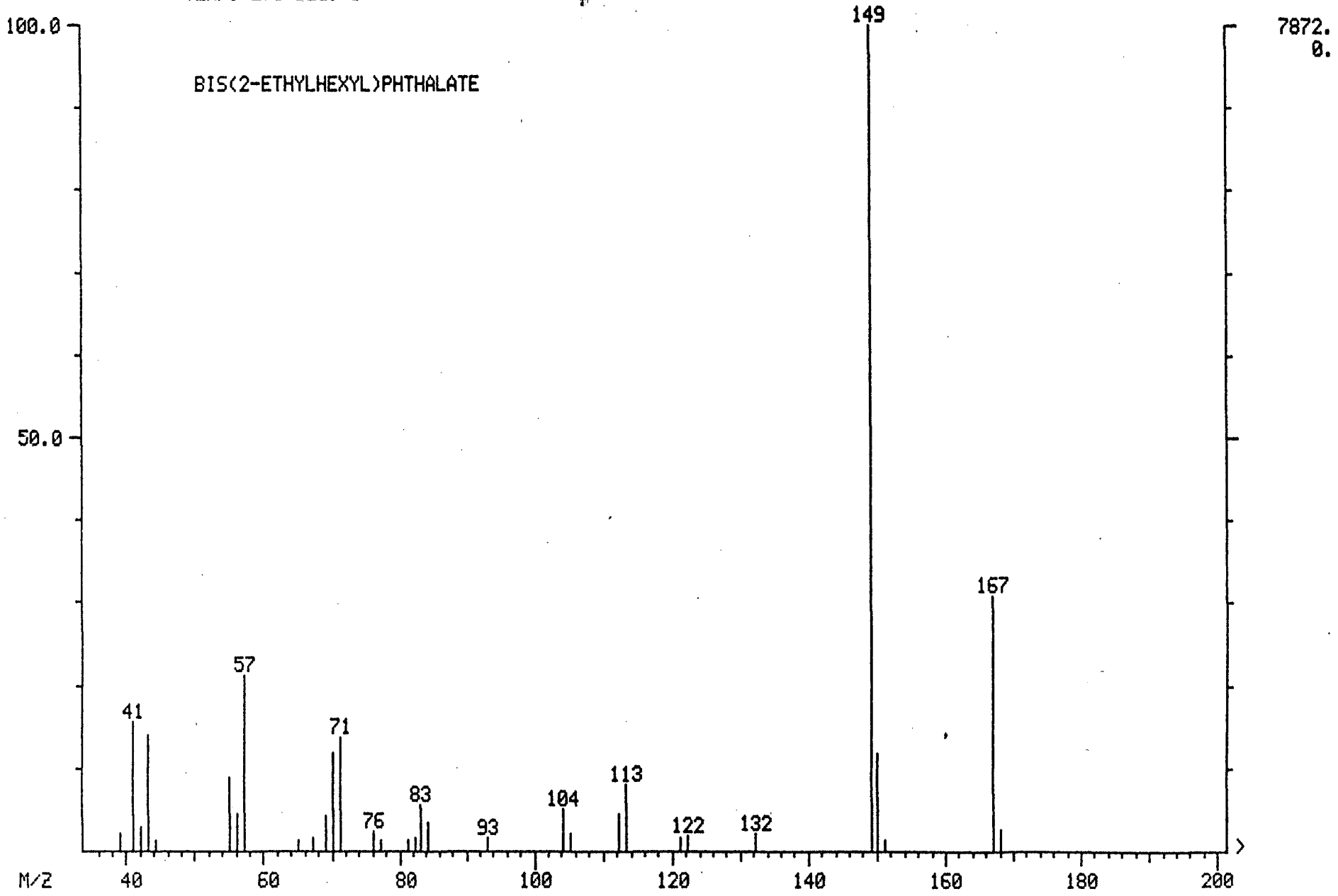
No	Name	
1	C170 D-12 CHRYSENE	(INT. STD.)
2	C710 BENZIDINE	
3	C715 PYRENE	
4	C720 BUTYLBENZYLPHTHALATE	
5	C725 3,3'-DICHLOROBENZIDINE	
6	C730 BENZO(A)ANTHRACENE	
7	C745 BIS (2-ETHYLHEXYL) PHTHALATE	
8	C740 CHRYSENE	
9	C830 D-14 TERPHENYL"2	(SURROGATE)

000248

MASS SPECTRUM
03/25/89 21:35:00 + 33:15
SAMPLE: FIELD BLANK
CONDS.: 1000 MLS/1.0 ML
TEMP: 275 DEG. C

DATA: 789607AB #1710
CALI: 789607AB #3

BASE M/Z: 149
RIC: 23456.

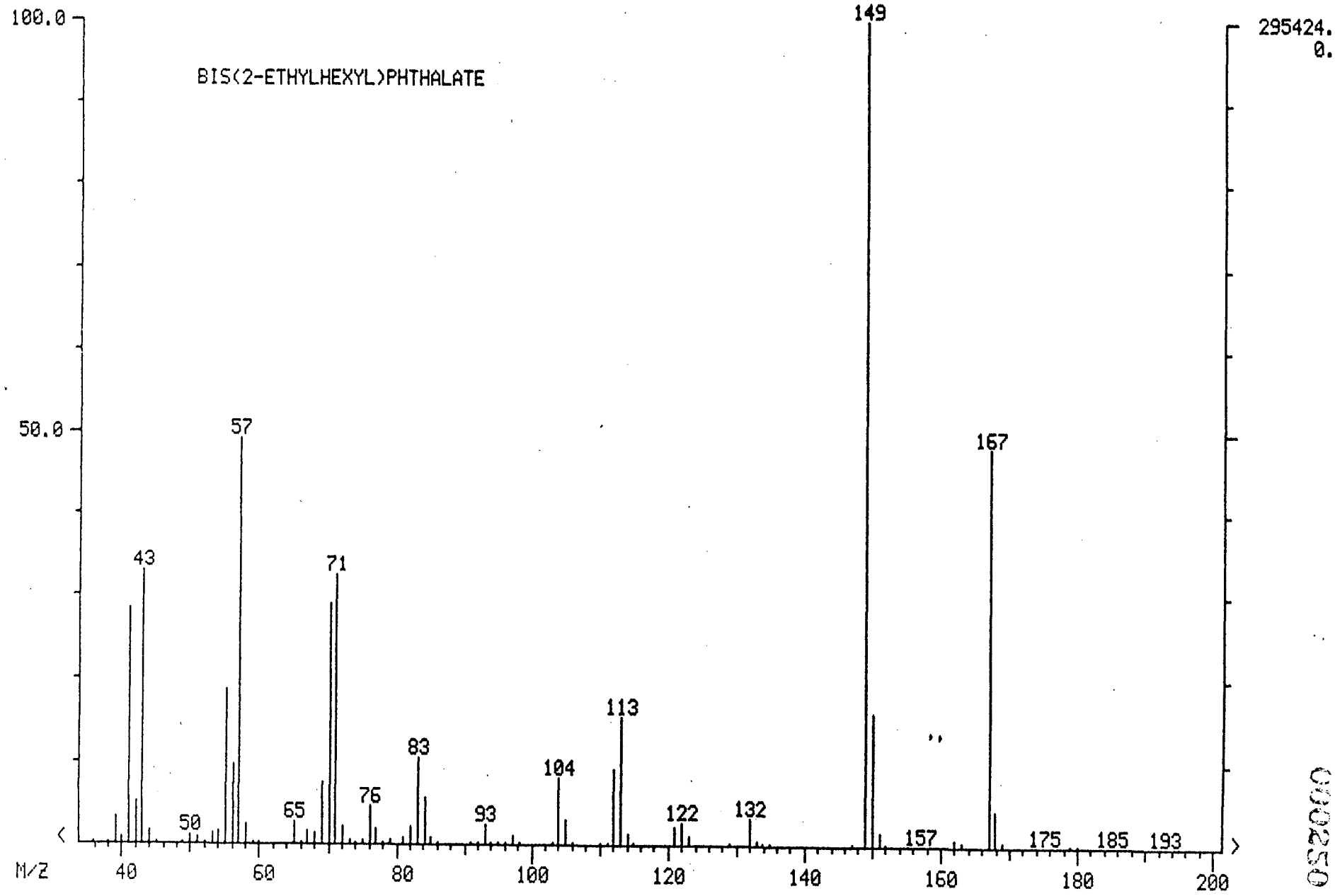


000249

MASS SPECTRUM
03/25/89 12:28:00 + 33:15
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 50 NG INJECTION
TEMP: 275 DEG. C

DATA: HSD500325 #1710
CALI: HSD500325 #3

BASE M/Z: 149
RIC: 1486850.

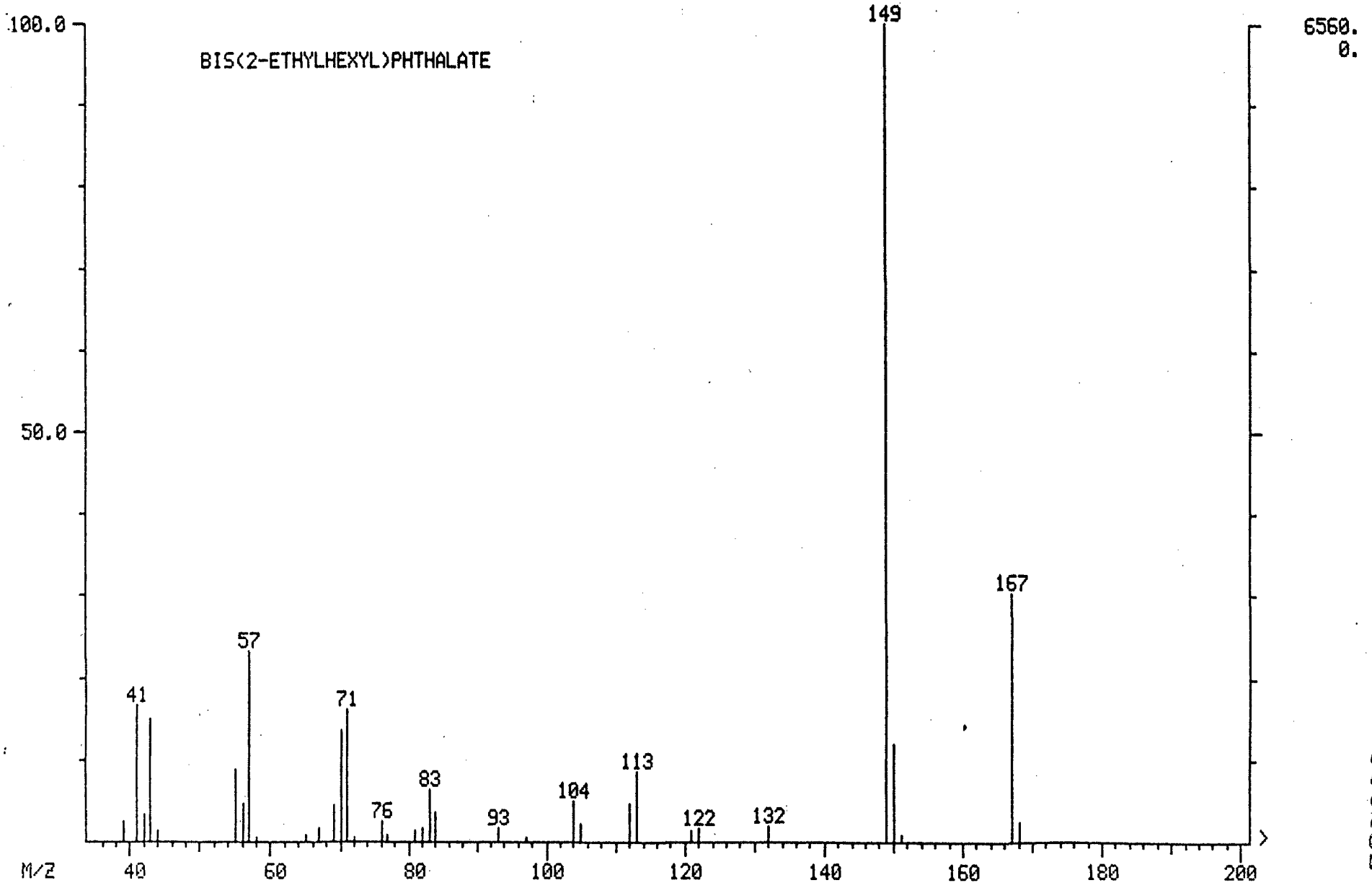


000250

MASS SPECTRUM
03/25/89 21:35:00 + 33:15
SAMPLE: FIELD BLANK
CONDS.: 1000 MLS/1.0 ML
TEMP: 275 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 789607AB #1710
CALI: 789607AB #3

BASE M/Z: 149
RIC: 20192.

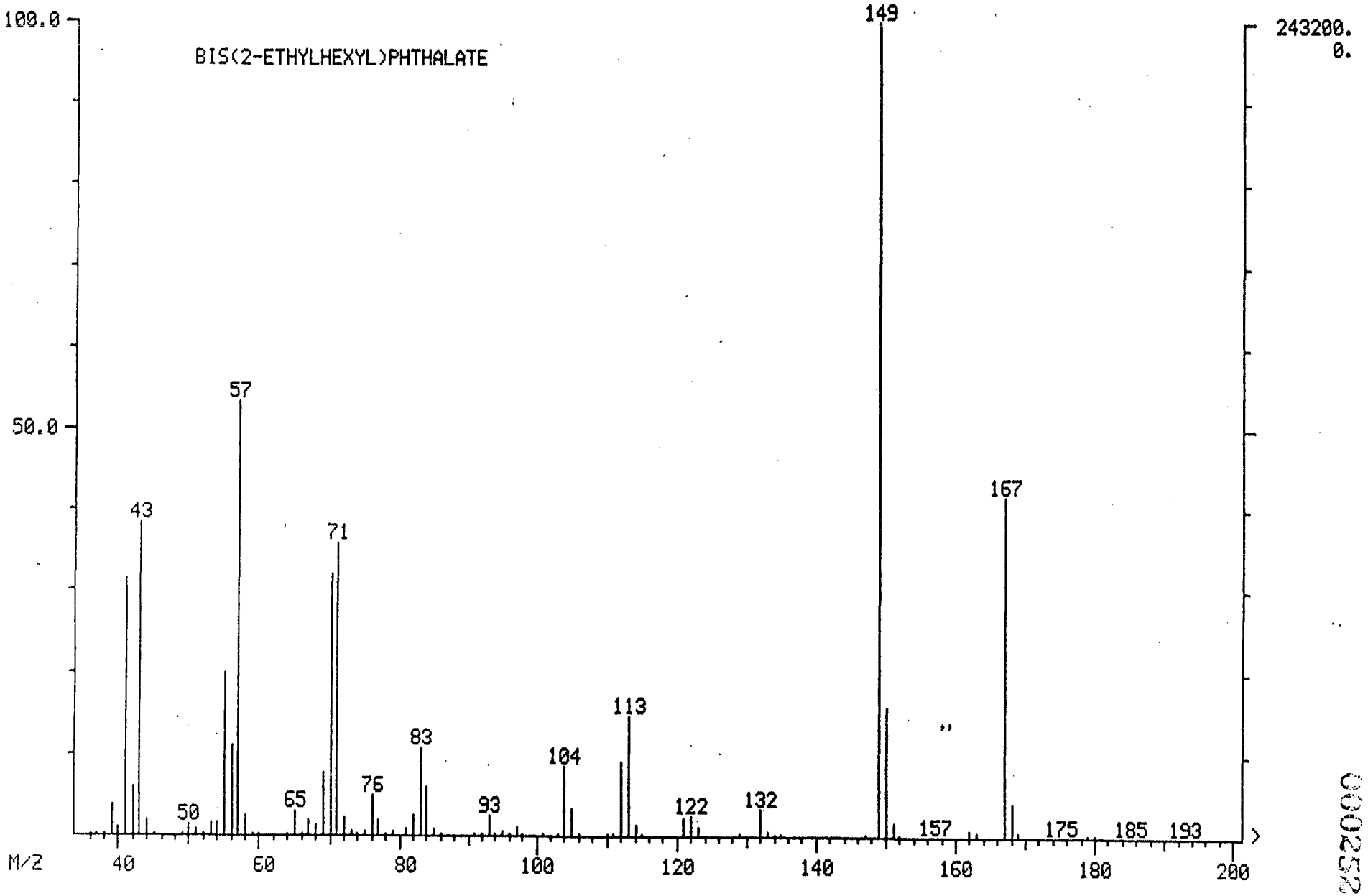


000251

MASS SPECTRUM
03/25/89 12:28:00 + 33:15
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 50 NG INJECTION
TEMP: 275 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: HSD500325 #1710
CALI: HSD500325 #3

BASE M/Z: 149
RIC: 1277950.



0002552

Quantitation Report File: 789607AB

000253

Data: 789607AB.TI
03/25/89 21:35:00
Sample: FIELD BLANK
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789607AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI70 CHRYSENE D12	INTERNAL STANDARD
2	C710 BENZIDINE	
3	C715 PYRENE	
4	C720 BUTYLBENZYLPHTHALATE	
5	C725 3,3'-DICHLOROBENZIDINE	
6	C730 BENZO(A)ANTHRACENE	
7	C745 BIS(2-ETHYLHEXYL)PHTHALATE	
8	C740 CHRYSENE	
9	CS30 TERPHENYL D14	SURROGATE

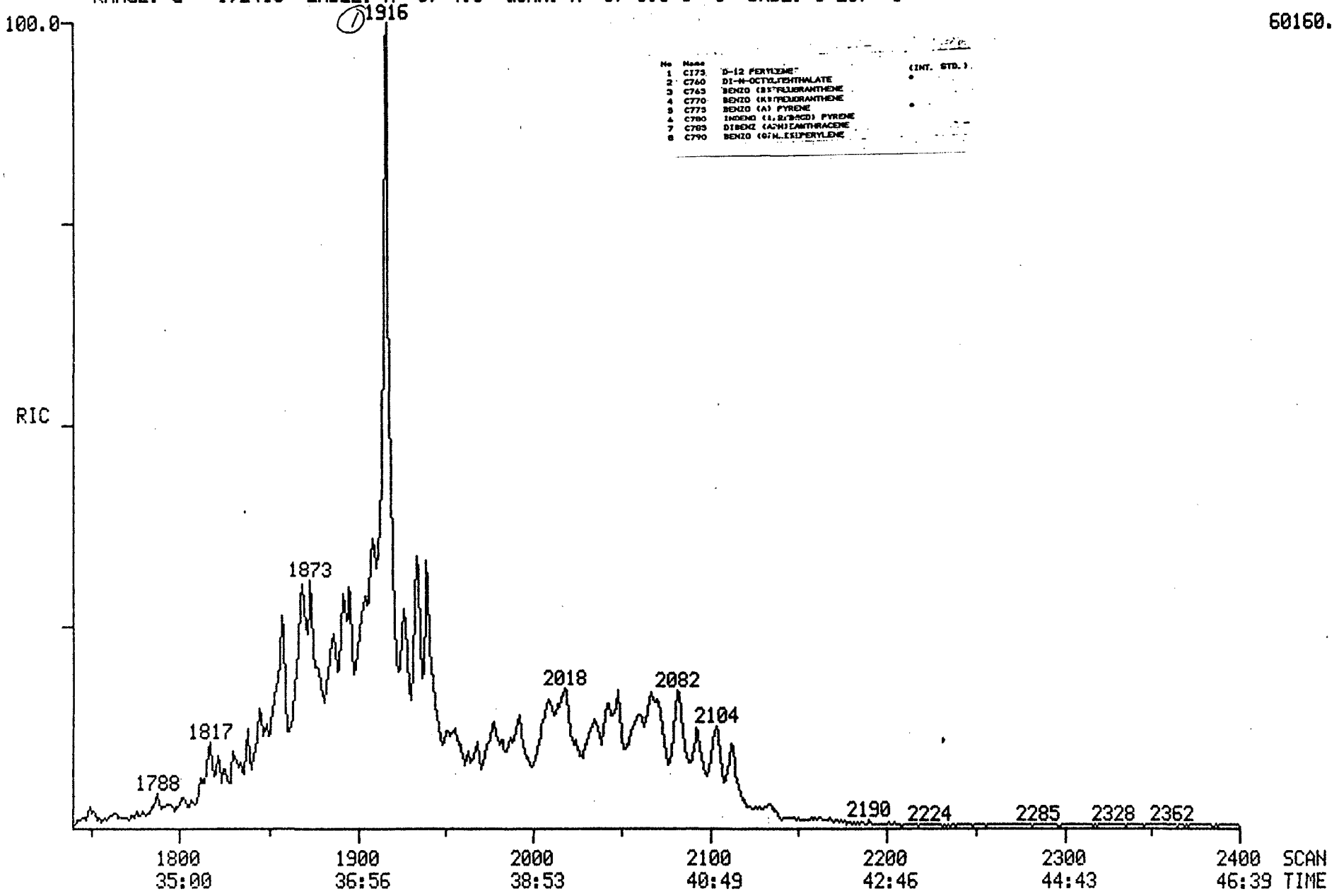
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot	
1	240	1681	32:41	1	1.000	A BB	330014.	40.000 UG/ML	30.90	
2	NOT FOUND									
3	202	1478	28:44	1	0.879	A BB	~~680.~~	~~0.073 UG/ML~~	~~0.06~~	No WSS
4	149	1607	31:14	1	0.956	A BB	~~845.~~	~~0.141 UG/ML~~	~~0.11~~	No WSS
5	NOT FOUND									
6	NOT FOUND									
7	149	1710	33:15	1	1.017	A BB	17712.	2.311 UG/ML	1.78	Yes WSS
8	NOT FOUND									
9	244	1516	29:28	1	0.902	A BB	799385.	86.940 UG/ML	67.16	Yes WSS

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	32:41	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	28:43		0.879						
3	28:44	1.00	0.879	1.00	0.07	50.00	0.002	1.124	0.00
4	31:16	1.00	0.957	1.00	0.14	50.00	0.002	0.725	0.00
5	32:43		1.001						
6	32:37		0.998						
7	33:15	1.00	1.017	1.00	2.31	50.00	0.043	0.929	0.05
8	32:45		1.002						
9	29:27	1.00	0.901	1.00	86.94	50.00	1.938	1.114	1.74

RIC
03/25/89 21:35:00
SAMPLE: FIELD BLANK
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789607AB #1
CALI: 789607AB #3

SCANS 1740 TO 2400



No	Name	
1	C775	D-12 PERYLENE (INT. STD.)
2	C760	DI-N-OCTYLPHTHALATE
3	C765	BENZO (B)FLUORANTHENE
4	C770	BENZO (K)FLUORANTHENE
5	C775	BENZO (A) PYRENE
6	C780	INDENO (1,2,3-CD) PYRENE
7	C785	DIBENZ (A,H)ANTHRACENE
8	C790	BENZO (G,H,I)PERYLENE

000254

Quantitati n Report File: 789607AB

Data: 789607AB.TI
03/25/89 21:35:00
Sample: FIELD BLANK
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789607AB

000255

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
R sp. fac. from Library Entry

No	Name	
1	CI75 PERYLENE D12	INTERNAL STANDARD
2	C760 DI-N-OCTYLPHTHALATE	
3	C765 BENZO(B)FLUORANTHENE	
4	C770 BENZO(K)FLUORANTHENE	
5	C775 BENZO(A)PYRENE	
6	C780 INDENO(1,2,3-CD)PYRENE	
7	C785 DIBENZO(A,H)ANTHRACENE	
8	C790 BENZO(G,H,I)PERYLENE	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	264	1915	37:14	1	1.000	A BB	37419.	40.000 UG/ML	99.78
2	149	1808	35:09	1	0.944	A BB	~~355.~~	~~0.096 UG/ML~~	~~0.24~~ NO WSS
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	37:15	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	35:09	1.00	0.944	1.00	0.10	50.00	0.008	3.946	0.00
3	35:58		0.966						
4	36:04		0.968						
5	37:03		0.995						
6	42:01		1.128						
7	42:12		1.133						
8	43:23		1.165						

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

EPA METHOD 625 BASE/NEUTRAL EXTRACTABLES BY GC/MS

Lab ID : 789608
Sample ID : Trip Blank
Date Analyzed : 03/25/89
Date Extracted: 02/24/89

Client : Gannett&Fleming
Prep Factor : 1000 mls/1.0 ml
Comments :
Date Received: 02/17/89

NO.	NAME	RESULTS PPB	COMMENTS
1	Bis(2-chloroethyl)Ether	10	U
2	1,2-Dichlorobenzene	10	U
3	1,4-Dichlorobenzene	10	U
4	1,3-Dichlorobenzene	10	U
5	Bis(2-chloroisopropyl)Ether	10	U
6	N-Nitrosodipropyl Amine	10	U
7	Hexachloroethane	10	U
8	Nitrobenzene	10	U
9	Isophorone	10	U
10	Bis(2-chloroethoxy)Methane	10	U
11	1,2,4-Trichlorobenzene	10	U
12	Naphthalene	10	U
13	Hexachlorobutadiene	10	U
14	Hexachlorocyclopentadiene	10	U
15	2-Chloronaphthalene	10	U
16	Dimethyl Phthalate	10	U
17	2,6-Dinitrotoluene	10	U
18	Acenaphthylene	10	U
19	Acenaphthene	10	U
20	2,4-Dinitrotoluene	10	U
21	Diethyl Phthalate	10	U
22	N-Nitrosodimethyl Amine	10	U
23	4-Chlorophenylphenyl Ether	10	U
24	Fluorene	10	U
25	Azobenzene	10	U
26	N-Nitrosodiphenyl Amine	10	U
27	4-Bromophenylphenyl Ether	10	U
28	Hexachlorobenzene	10	U
29	Phenanthrene	10	U
30	Anthracene	10	U
31	Dibutyl Phthalate	2	BJ
32	Fluoranthene	10	U

Comments:
U= Not detected
J= Detected but below Method Detection limit
B= Compound found in Blank

Signature

Name/Title: Howard Whaley
GC/MS Project Leader

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

EPA Method 625 Base/Neutral Extractables by GC/MS

Lab ID : 789608
Sample ID : Trip Blank
Date Analyzed : 03/25/89
Date Extracted: 02/24/89

Client : Gannett&Fleming
Prep Factor: 1000 mls/1.0 ml
Comments :
Date Recieved: 02/17/89

NO.	NAME	RESULTS PPB	COMMENTS
33	Benzidine	50	U
34	Pyrene	10	U
35	Butylbenzyl Phthalate	10	U
36	3,3-Dichlorobenzidine	10	U
37	Benzo(A)Anthracene	10	U
38	Chrysene	10	U
39	Bis(2-ethylhexyl) Phthalate	11	J
40	Dioctyl-Phthalate	10	U
41	Benzo(K)Fluoranthene	10	U
42	Benzo(B)Fluoranthene	10	U
43	Benzo(A)Pyrene	10	U
44	Indeno(1,2,3-CD)Pyrene	10	U
45	Dibenzo(A,H)Anthracene	10	U
46	Benzo(GHI)Perylene	10	U

Comments:
U= Not Detected
J= Detected but below Method Detection Limit
B= Compound found in Blank

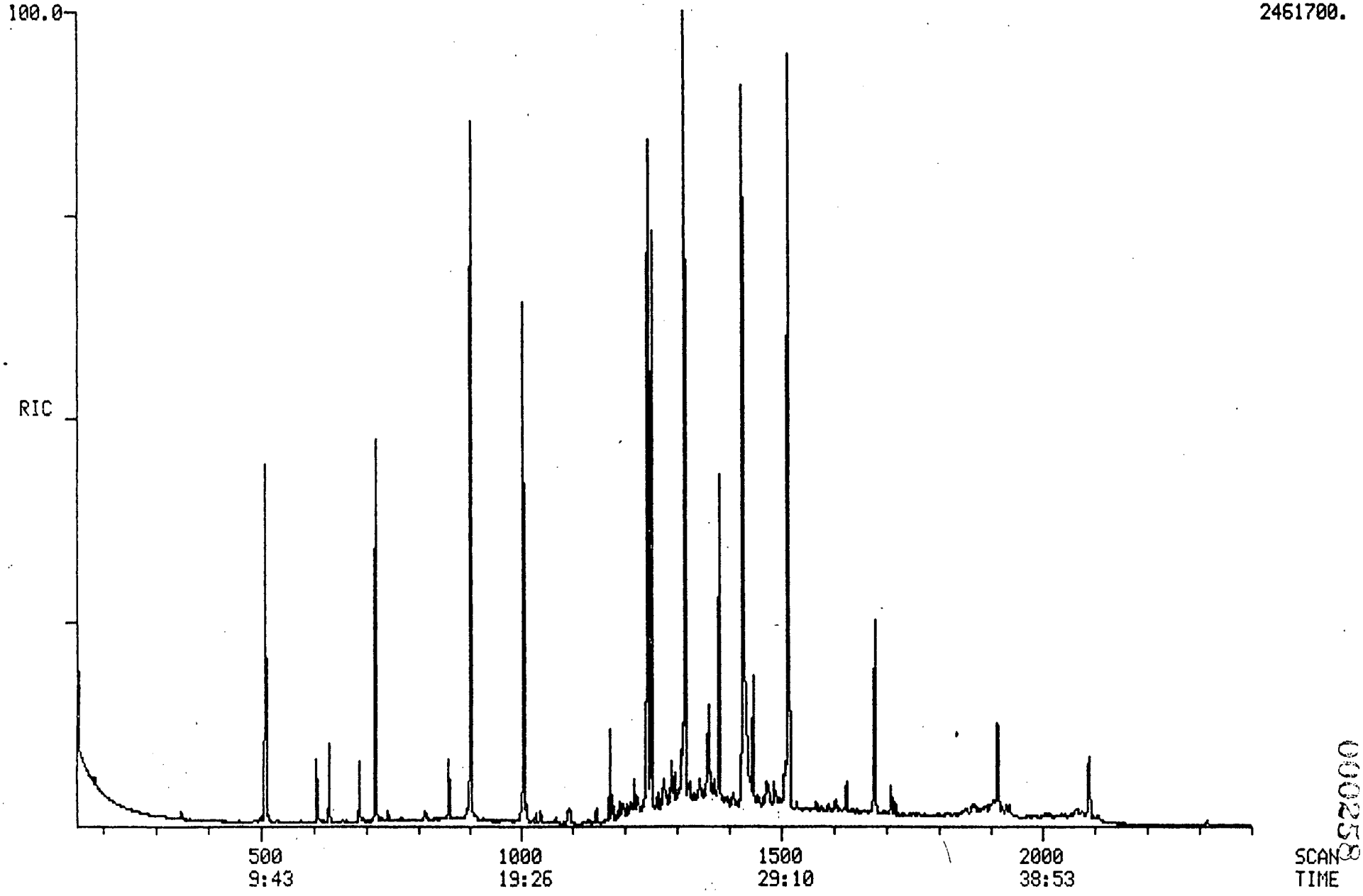
Signature

Name/Title: Howard Whaley
GC/MS Project Leader

RIC
03/27/89 12:01:00
SAMPLE: TRIP BLANK
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789608AB #1
CALI: CALTAB #3

SCANS 150 TO 2400

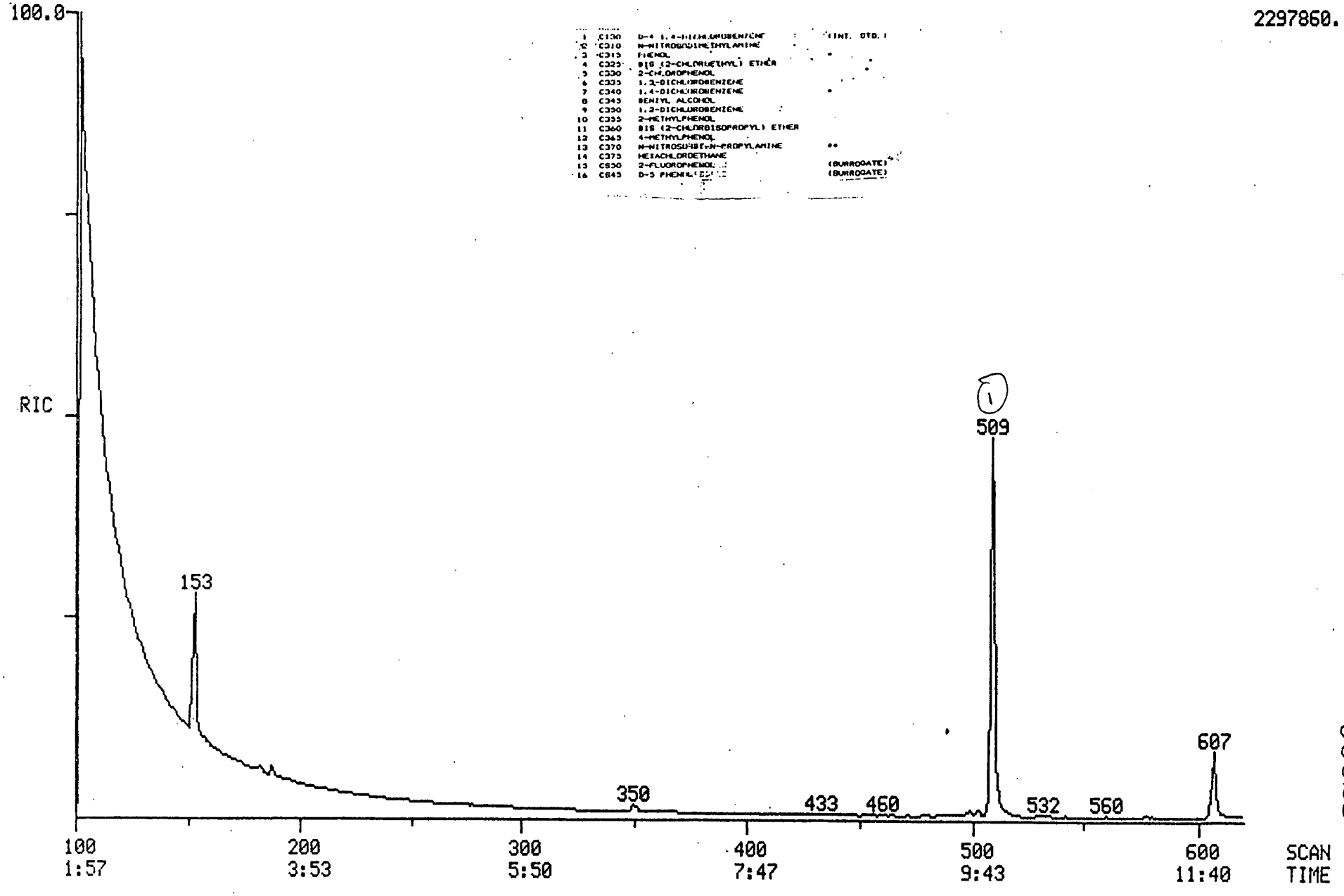


000258

RIC
03/27/89 12:01:00
SAMPLE: TRIP BLANK
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789608AB #1
CALI: 789608AB #3

SCANS 100 TO 620



1	C330	D-4 1,4-DICHLOROBENZENE	(INT. STD.)
2	C310	N-NITROSODIMETHYLAMINE	
3	C315	PHENOL	
4	C325	BIS (2-CHLOROETHYL) ETHER	
5	C330	2-CHLOROPHENOL	
6	C335	1,3-DICHLOROBENZENE	
7	C340	1,4-DICHLOROBENZENE	
8	C345	BENZYL ALCOHOL	
9	C350	1,2-DICHLOROBENZENE	
10	C355	2-METHYLPHENOL	
11	C360	BIS (2-CHLOROISOPROPYL) ETHER	
12	C365	4-METHYLPHENOL	
13	C370	N-NITROSODI(N-PROPYL)AMINE	**
14	C375	HEXACHLOROETHANE	
15	C530	2-FLUOROPHENOL	(SURROGATE)
16	C645	D-5 PHENOL	(SURROGATE)

000259

Quantitation Report Fil : 789608AB

000260

Data: 789608AB.TI
03/27/89 12:01:00
Sample: TRIP BLANK
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitt d by: FLEMING Analyst: WSS Acct. No.: 789608AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI30 1,4-DICHLOROBENZENE D4	INTERNAL STANDARD
2	N-NITROSODIMETHYLAMINE	
3	C315 PHENOL	
4	C325 BIS(2-CHLOROETHYL) ETHER	
5	C330 2-CHLOROPHENOL	
6	C335 1,3-DICHLOROBENZENE	
7	C340 1,4-DICHLOROBENZENE	
8	C345 BENZYL ALCOHOL	
9	C350 1,2-DICHLOROBENZENE	
10	C355 2-METHYLPHENOL	
11	C360 BIS(2-CHLOROISOPROPYL)ETHER	
12	C365 4-METHYLPHENOL	
13	C370 N-NITROSO-DI-PROPYLAMINE	
14	C375 HEXACHLOROETHANE	
15	CS50 2-FLUOROPHENOL	SURROGATE
16	CS45 PHENOL D5	SURROGATE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot	
1	152	509	9:54	1	1.000	A BB	389798.	40.000 UG/ML	98.13	
2	74	153	2:58	1	0.301	A BB	~~3580.~~	~~0.367 UG/ML~~	~~0.90~~ NO	WSS
3	NOT FOUND									
4	NOT FOUND									
5	128	484	9:25	1	0.951	A BB	~~321.~~	~~0.028 UG/ML~~	~~0.07~~ NO	WSS
6	146	502	9:46	1	0.986	A BB	~~775.~~	~~0.065 UG/ML~~	~~0.16~~ NO	WSS
7	146	511	9:56	1	1.004	A BB	~~1644.~~	~~0.138 UG/ML~~	~~0.34~~ NO	WSS
8	108	550	10:42	1	1.081	A BB	~~203.~~	~~0.014 UG/ML~~	~~0.03~~ NO	WSS
9	146	541	10:31	1	1.063	A BB	~~669.~~	~~0.059 UG/ML~~	~~0.15~~ NO	WSS
10	NOT FOUND									
11	45	572	11:07	1	1.124	A BB	~~569.~~	~~0.032 UG/ML~~	~~0.08~~ NO	WSS
12	NOT FOUND									
13	NOT FOUND									
14	117	591	11:29	1	1.161	A BB	~~412.~~	~~0.060 UG/ML~~	~~0.15~~ NO	WSS
15	NOT FOUND									
16	NOT FOUND									

N	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:55	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	2:55	1.02	0.294	1.02	0.37	50.00	0.007	1.002	0.01
3	9:27		0.953						
4	9:22		0.945						
5	9:27	1.00	0.953	1.00	0.03	50.00	0.001	1.176	0.00
6	9:47	1.00	0.986	1.00	0.06	50.00	0.002	1.226	0.00
7	9:57	1.00	1.004	1.00	0.14	50.00	0.003	1.226	0.00

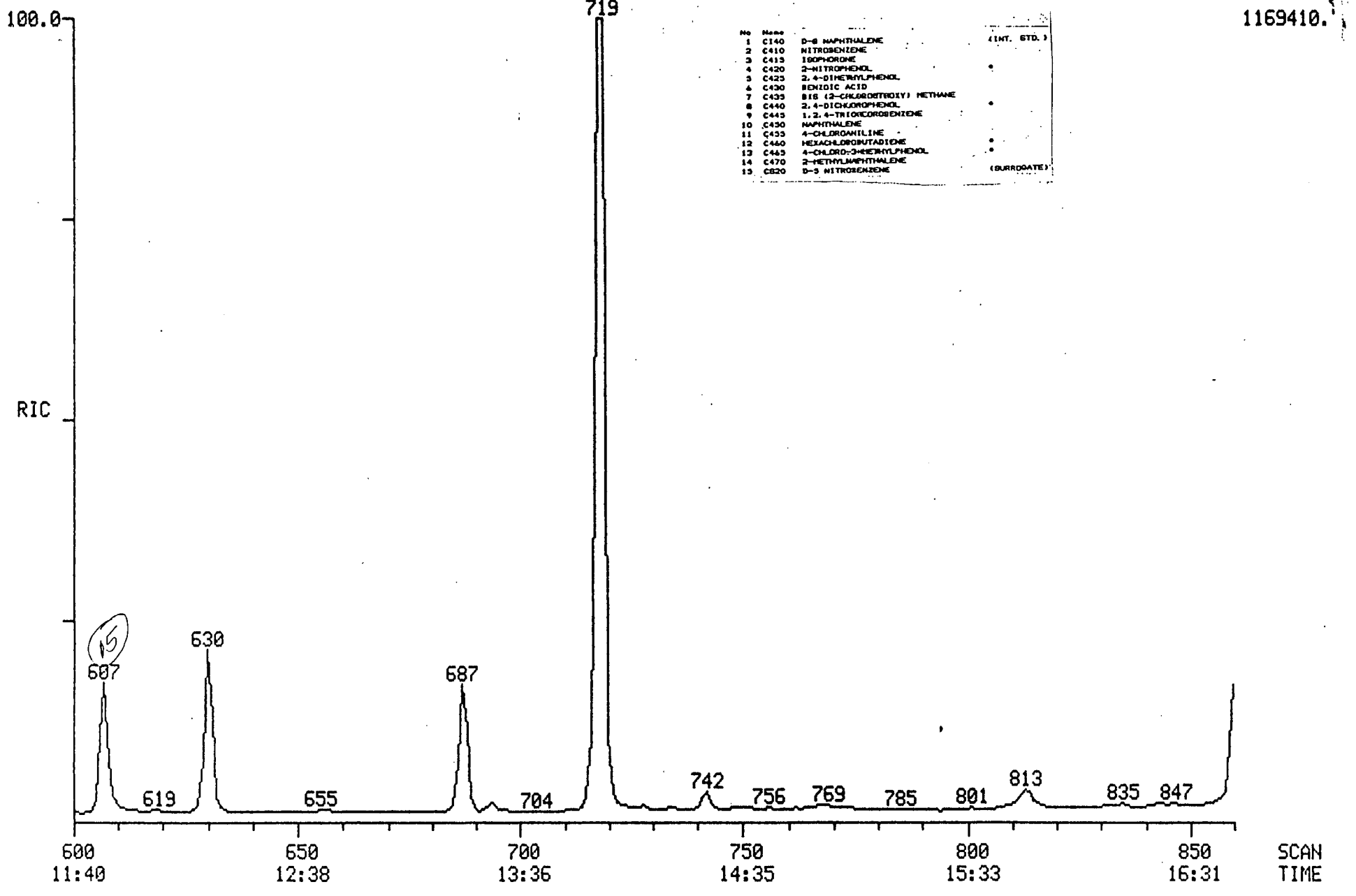
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
8	10:43	1.00	1.080	1.00	0.01	50.00	0.000	1.508	0.00
9	10:32	1.00	1.063	1.00	0.06	50.00	0.001	1.161	0.00
10	11:17		1.137						
11	11:07	1.00	1.122	1.00	0.03	50.00	0.001	1.808	0.00
12	11:46		1.186						
13	11:38		1.173						
14	11:28	1.00	1.157	1.00	0.06	50.00	0.001	0.708	0.00
15	6:07		0.618						
16	9:25		0.949						

000261

RIC
03/27/89 12:01:00
SAMPLE: TRIP BLANK
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 1 0, 1.0 J 0 BASE: U 20, 3

DATA: 789608AB #1
CALI: 789608AB #3

SCANS 600 TO 860



No	Name		
1	C140	D-8 NAPHTHALENE	(INT. STD.)
2	C410	NITROBENZENE	
3	C415	ISOPHORONE	
4	C420	2-NITROPHENOL	•
5	C425	2,4-DIMETHYLPHENOL	
6	C430	BENZOIC ACID	
7	C435	BIS (2-CHLOROETHOXY) METHANE	
8	C440	2,4-DICHLOROPHENOL	•
9	C445	1,2,4-TRICHLOROBENZENE	
10	C450	NAPHTHALENE	
11	C455	4-CHLOROANILINE	
12	C460	HEXACHLOROBUTADIENE	•
13	C465	4-CHLORO-3-METHYLPHENOL	•
14	C470	2-METHYLNAPHTHALENE	
15	C820	D-5 NITROBENZENE	(SURROGATE)

Quantitati n Report File: 789608AB

000263

Data: 789608AB.TI
03/27/89 12:01:00
Sample: TRIP BLANK
Conds.: 1000 MLS/1.0 ML
Formula: Instrum nt: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789608AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI40 NAPHTHALENE D8	INTERNAL STANDARD
2	C410 NITROBENZENE	
3	C415 ISOPHORONE	
4	C420 2-NITROPHENOL	
5	C425 2,4-DIMETHYLPHENOL	
6	C430 BENZOIC ACID	
7	C435 BIS(2-CHLOROETHOXY)METHANE	
8	C440 2,4-DICHLOROPHENOL	
9	C445 1,2,4-TRICHLOROBENZENE	
10	C450 NAPHTHALENE	
11	C455 4-CHLOROANILINE	
12	C460 HEXACHLOROBUTADIENE	
13	C465 4-CHLORO-3-METHYLPHENOL	
14	C470 2-METHYLNAPHTHALENE	
15	CS20 NITROBENZENE D5	SURROGATE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot.
1	136	718	13:57	1	1.000	A BB	967313.	40.000 UG/ML	51.99
2	NOT FOUND								
3	82	651	12:39	1	0.907	A BB	~~645.~~	~~0.044 UG/ML~~	~~0.06~~ NO WSS
4	139	663	12:53	1	0.923	A BB	~~383.~~	~~0.065 UG/ML~~	~~0.08~~ NO WSS
5	122	688	13:22	1	0.958	A BB	~~1744.~~	~~0.238 UG/ML~~	~~0.31~~ NO WSS
6	NOT FOUND								
7	93	695	13:31	1	0.968	A VB	~~2035.~~	~~0.183 UG/ML~~	~~0.24~~ NO WSS
8	NOT FOUND								
9	180	713	13:52	1	0.993	A BB	~~581~~	~~0.066 UG/ML~~	~~0.09~~ NO WSS
10	128	721	14:01	1	1.004	A BB	~~3651.~~	~~0.254 UG/ML~~	~~0.33~~ NO WSS
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	142	835	16:14	1	1.163	A BB	~~2207.~~	~~0.113 UG/ML~~	~~0.15~~ NO WSS
15	82	607	11:48	1	0.845	A*BB	417079.	35.974 UG/ML	46.76 YES WSS

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	13:59	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	11:54		0.851						
3	12:43	1.00	0.910	1.00	0.04	50.00	0.001	0.602	0.00
4	12:53	1.00	0.922	1.00	0.06	50.00	0.000	0.245	0.00
5	13:21	1.00	0.955	1.00	0.24	50.00	0.001	0.302	0.00
6	14:16		1.021						
7	13:32	1.00	0.968	1.00	0.18	50.00	0.002	0.459	0.00
8	13:47		0.986						
9	13:53	1.00	0.993	1.00	0.07	50.00	0.000	0.362	0.00

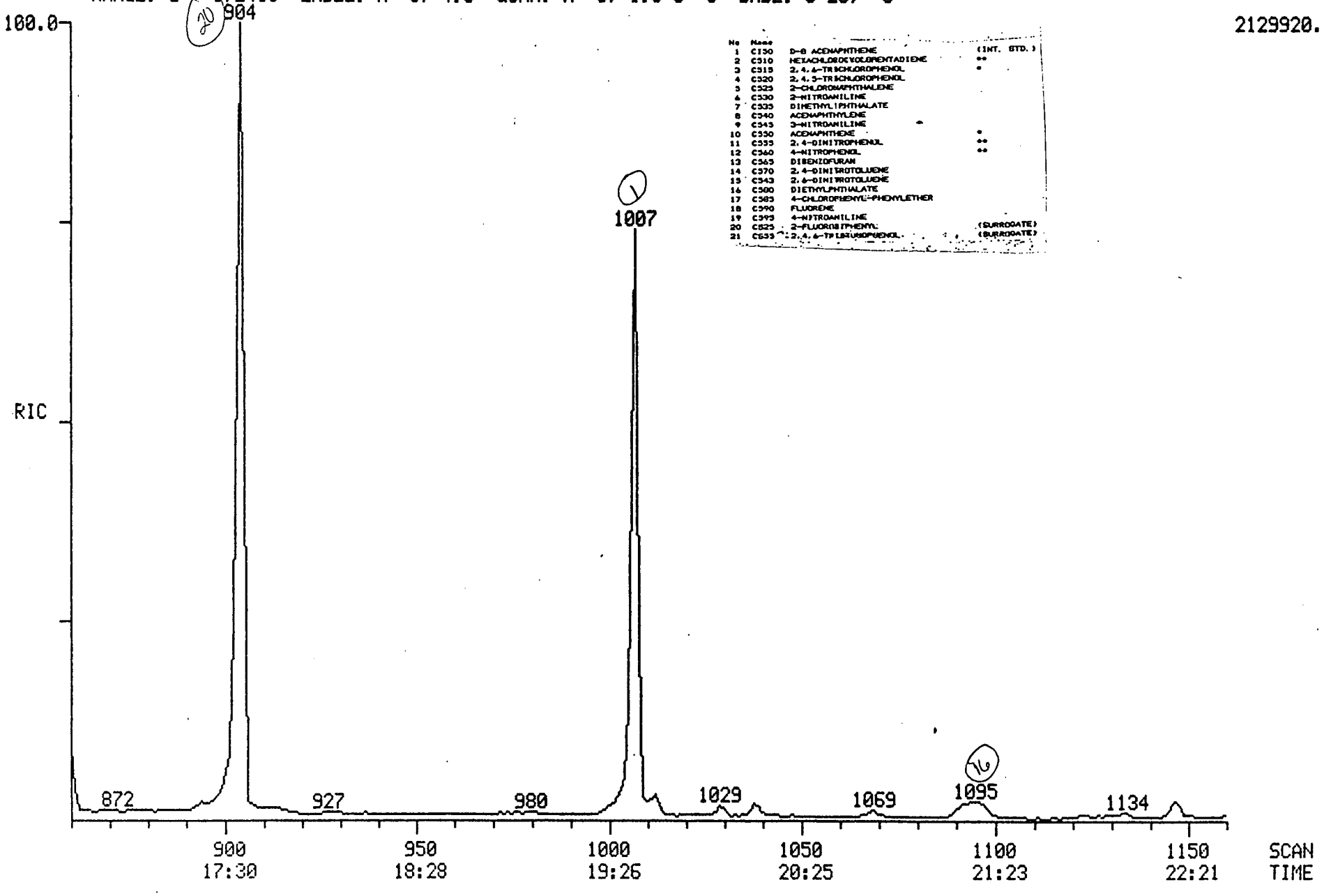
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
10	14:02	1.00	1.004	1.00	0.25	50.00	0.003	0.595	0.01
11	14:28		1.035						
12	14:41		1.050						
13	16:15		1.163						
14	16:15	1.00	1.163	1.00	0.11	50.00	0.002	0.811	0.00
15	11:49	1.00	0.846	1.00	35.97	50.00	0.345	0.479	0.72

000264

RIC
03/27/89 12:01:00
SAMPLE: TRIP BLANK
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789608AB #1
CALI: 789608AB #3

SCANS 860 TO 1160



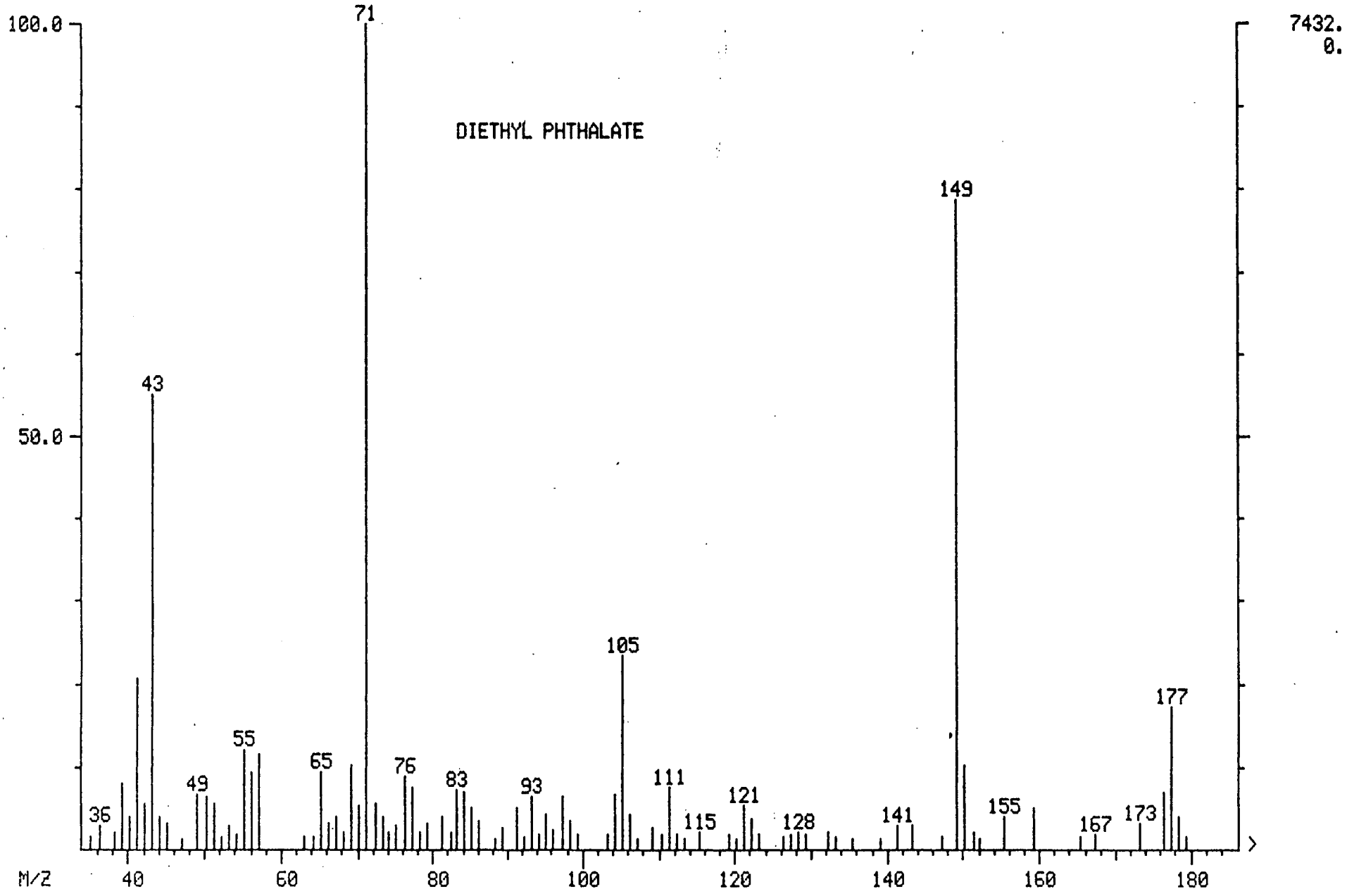
No	Name		
1	C150	D-8 ACENAPHTHENE	(INT. STD.)
2	C310	HEXACHLOROCYCLOPENTADIENE	**
3	C315	2,4,6-TRICHLOROPHENOL	*
4	C320	2,4,5-TRICHLOROPHENOL	
5	C325	2-CHLORONAPHTHALENE	
6	C330	2-NITROANILINE	
7	C335	DIMETHYLPHTHALATE	
8	C340	ACENAPHTHYLENE	
9	C345	3-NITROANILINE	
10	C350	ACENAPHTHENE	*
11	C355	2,4-DINITROPHENOL	**
12	C360	4-NITROPHENOL	**
13	C365	DIBENZOFURAN	
14	C370	2,4-DINITROTOLUENE	
15	C375	2,6-DINITROTOLUENE	
16	C380	DIETHYLPHTHALATE	
17	C385	4-CHLOROPHENYL-PHENYLETHER	
18	C390	FLUORENE	
19	C395	4-NITROANILINE	
20	C825	2-FLUOROBIPHENYL	(SURROGATE)
21	C835	2,4,6-TRIBROMOPHENOL	(SURROGATE)

000265

MASS SPECTRUM
03/27/89 12:01:00 + 21:20
SAMPLE: TRIP BLANK
CONDS.: 1000 MLS/1.0 ML
TEMP: 179 DEG. C

DATA: 789608AB #1097
CALI: 789608AB #3

BASE M/Z: 71
RIC: 48064.

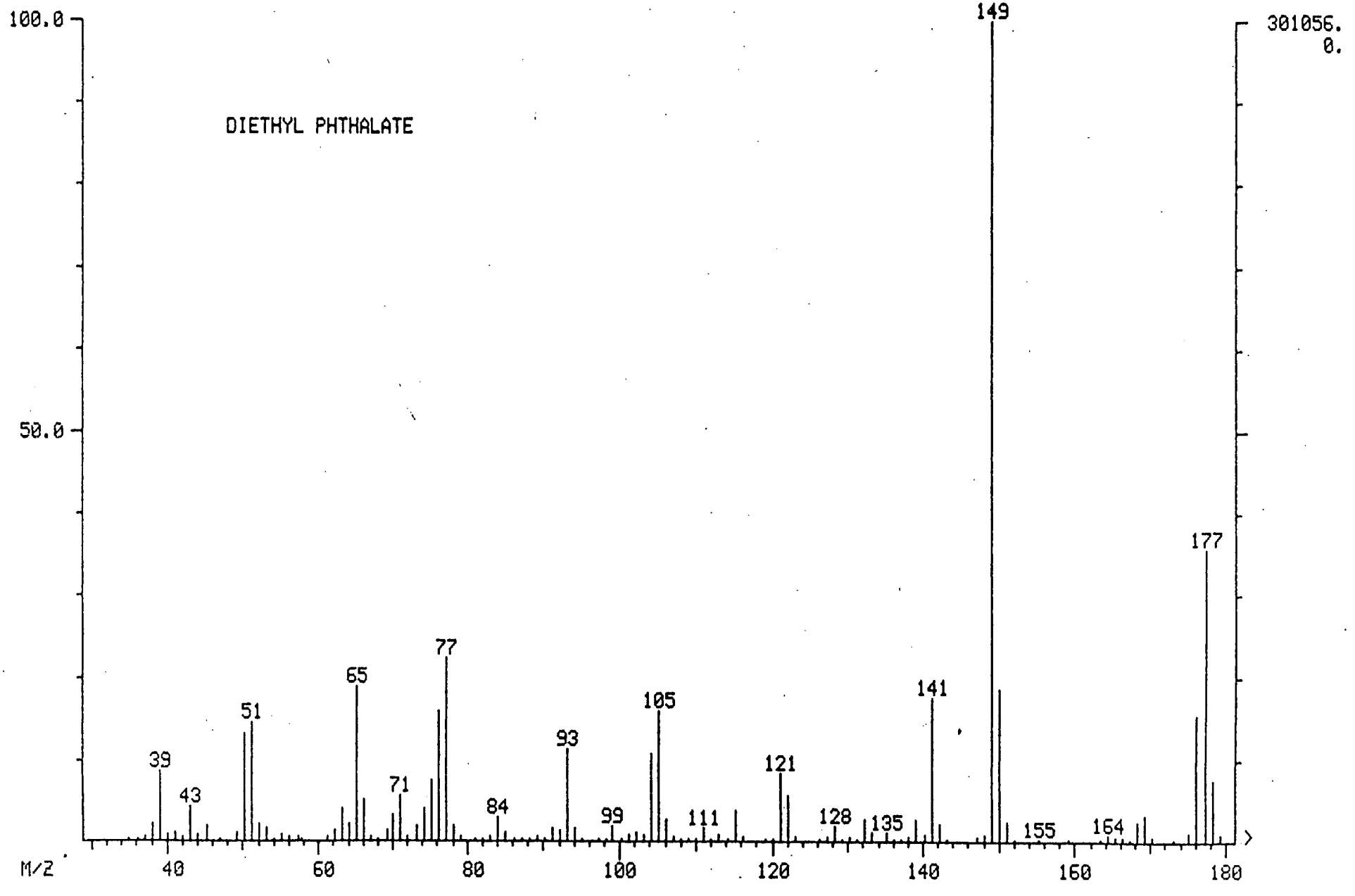


000266

MASS SPECTRUM
03/27/89 10:43:00 + 21:21
SAMPLE: HSL-D STANDARD \3/27/89
CONDS.: 50 NG INJECTION
TEMP: 180 DEG. C

DATA: HSB500327 #1098
CALI: HSB500327 #3

BASE M/Z: 149
RIC: 1558530.

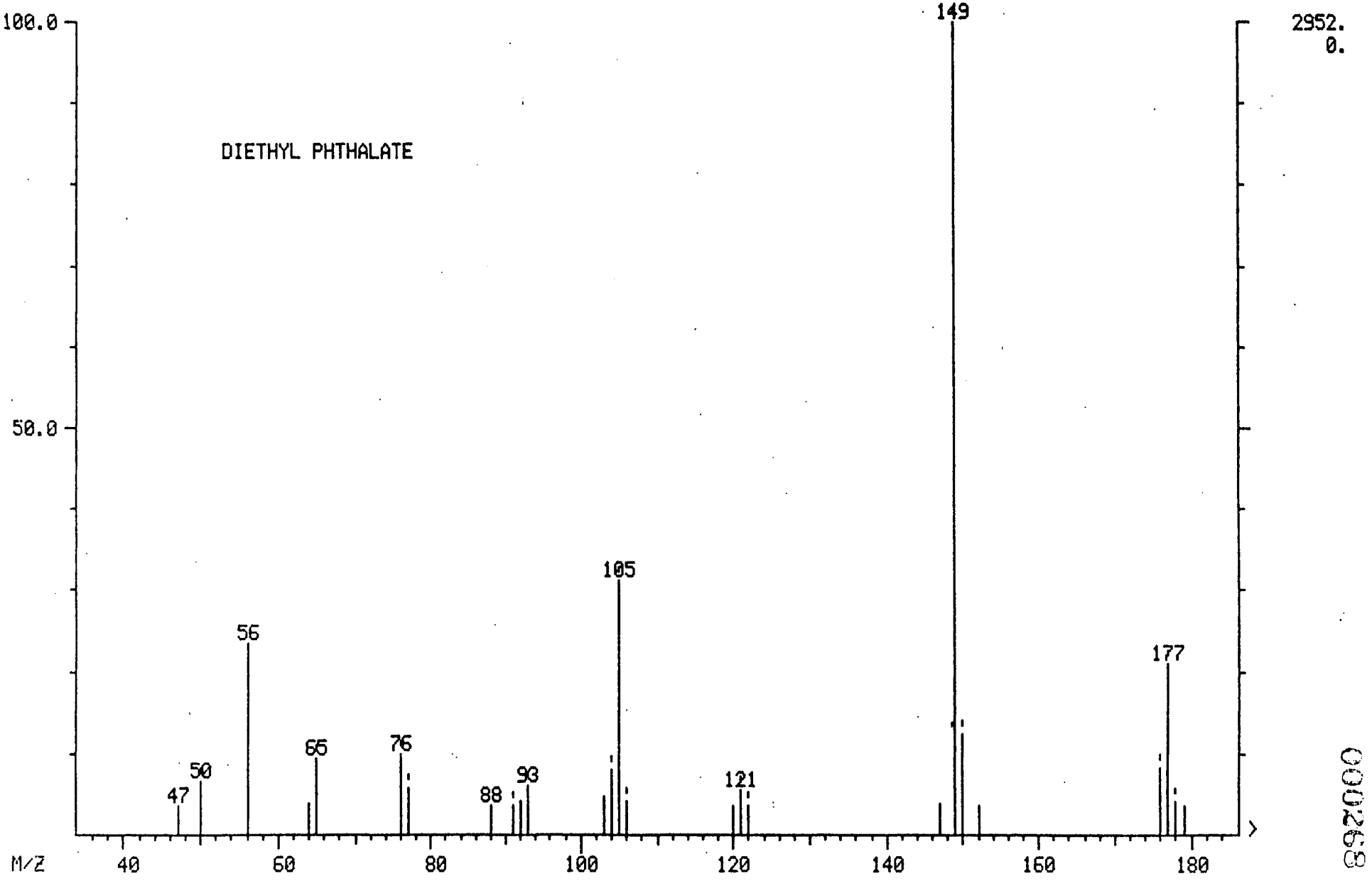


00026

MASS SPECTRUM
03/27/89 12:01:00 + 21:20
SAMPLE: TRIP BLANK
CONDS.: 1000 MLS/1.0 ML
TEMP: 179 DEG. C
#1097 - #1092

DATA: 789608AB #1097
CALI: 789608AB #3

BASE M/Z: 149
RIC: 8960.

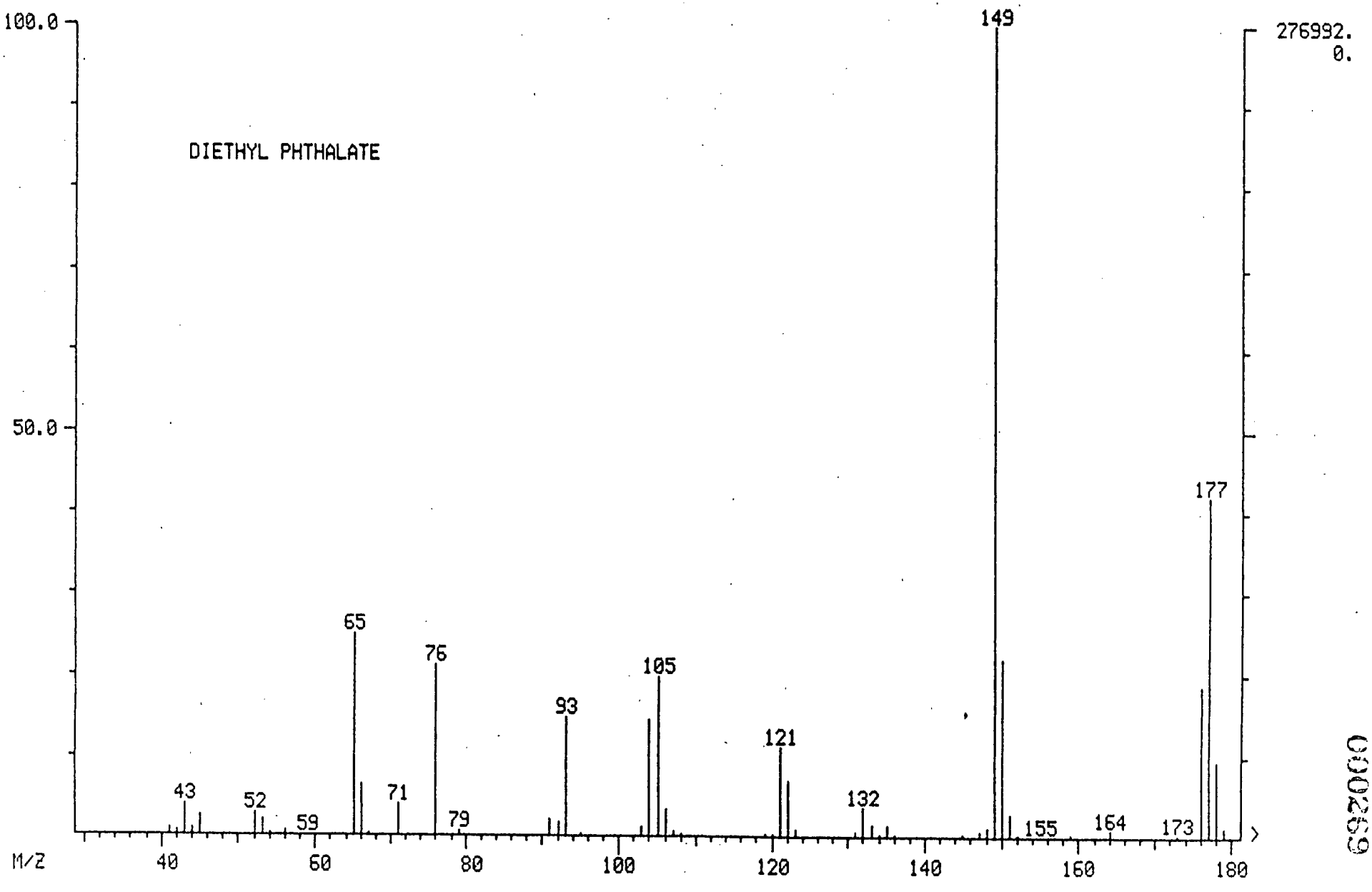


000268

MASS SPECTRUM
03/27/89 10:43:00 + 21:21
SAMPLE: HSL-D STANDARD \3/27/89
CONDS.: 50 NG INJECTION
TEMP: 180 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: HSB500327 #1098
CALI: HSB500327 #3

BASE M/Z: 149
RIC: 995328.



000269

Quantitation Report File: 789608AB

000270

Data: 789608AB.TI
03/27/89 12:01:00
Sample: TRIP BLANK
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789608AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI50 ACENAPHTHENE D8	INTERNAL STANDARD
2	C510 HEXACHLOROCYCLOPENTADIENE	
3	C515 2,4,6-TRICHLOROPHENOL	
4	C520 2,4,5-TRICHLOROPHENOL	
5	C525 2-CHLORONAPHTHALENE	
6	C530 2-NITROANILINE	
7	C535 DIMETHYL PHTHALATE	
8	C540 ACENAPHTHYLENE	
9	C545 3-NITROANILINE	
10	C550 ACENAPHTHENE	
11	C555 2,4-DINITROPHENOL	
12	C560 4-NITROPHENOL	
13	C565 DIBENZOFURAN	
14	C570 2,4-DINITROTOLUENE	
15	C543 2,6-DINITROTOLUENE	
16	C580 DIETHYL PHTHALATE	
17	C585 4-CHLOROPHENYL PHENYL ETHER	
18	C590 FLUORENE	
19	C595 4-NITROANILINE	
20	CS25 2-FLUOROBIPHENYL	SURROGATE
21	CS55 2,4,6-TRIBROMOPHENOL	SURROGATE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	164	1007	19:35	1	1.000	A BB	584017.	40.000 UG/ML	37.14
2	NOT FOUND								
3	196	895	17:24	1	0.889	A BB	~~717.~~	~~0.114 UG/ML~~	~~0.11~~ NO WSS
4	196	904	17:34	1	0.898	A BB	~~501.~~	~~0.070 UG/ML~~	~~0.07~~ NO WSS
5	162	913	17:45	1	0.907	A VB	~~1962.~~	~~0.129 UG/ML~~	~~0.12~~ NO WSS
6	65	947	18:25	1	0.940	A BB	~~625.~~	~~0.047 UG/ML~~	~~0.04~~ NO WSS
7	163	981	19:04	1	0.974	A BB	~~4855.~~	~~0.293 UG/ML~~	~~0.27~~ NO WSS
8	152	980	19:03	1	0.973	A BB	~~1471.~~	~~0.079 UG/ML~~	~~0.07~~ NO WSS
9	NOT FOUND								
10	154	1011	19:39	1	1.004	A VB	~~1079.~~	~~0.074 UG/ML~~	~~0.07~~ NO WSS
11	NOT FOUND								
12	NOT FOUND								
13	168	1038	20:11	1	1.031	A BB	~~7350.~~	~~0.287 UG/ML~~	~~0.27~~ NO WSS
14	165	1053	20:28	1	1.046	A BB	~~993.~~	~~0.166 UG/ML~~	~~0.15~~ NO WSS
15	NOT FOUND								
16	149	1097	21:20	1	1.089	A BB	32849.	2.016 UG/ML	1.87 Yes WSS
17	204	1096	21:18	1	1.088	A BB	~~2454.~~	~~0.261 UG/ML~~	~~0.24~~ NO WSS
18	166	1093	21:15	1	1.085	A BB	~~4852.~~	~~0.338 UG/ML~~	~~0.31~~ NO WSS
19	NOT FOUND								
20	172	904	17:34	1	0.898	A BV	1001710.	63.821 UG/ML	59.26 Yes WSS
21	NOT FOUND								

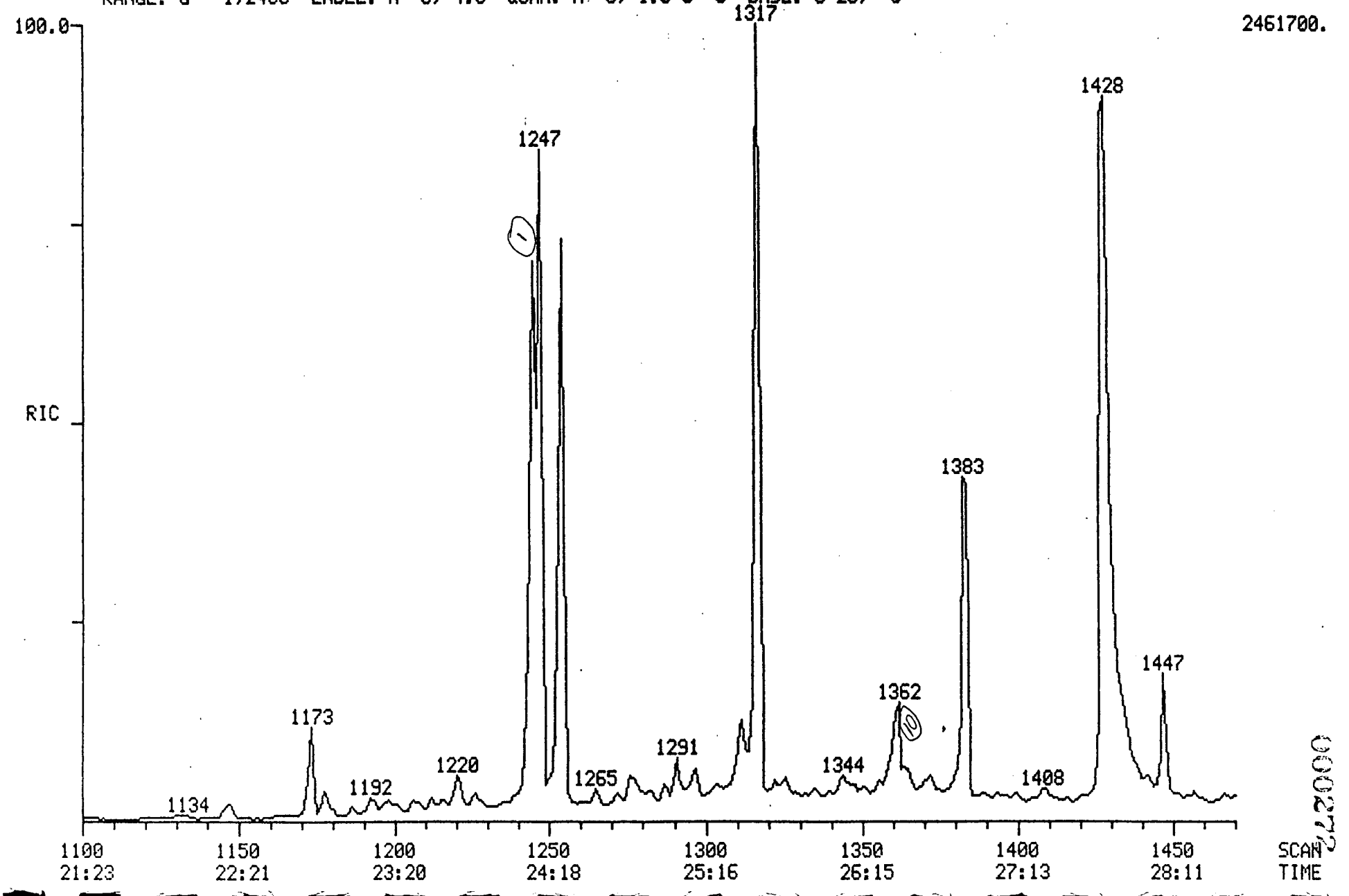
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	19:35	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	16:58		0.867						
3	17:22	1.00	0.887	1.00	0.11	50.00	0.001	0.432	0.00
4	17:33	1.00	0.897	1.00	0.07	50.00	0.001	0.489	0.00
5	17:46	1.00	0.908	1.00	0.13	50.00	0.003	1.043	0.00
6	18:23	1.00	0.939	1.00	0.05	50.00	0.001	0.906	0.00
7	19:07	1.00	0.976	1.00	0.29	50.00	0.007	1.134	0.01
8	19:04	1.00	0.974	1.00	0.08	50.00	0.002	1.277	0.00
9	19:45		1.009						
10	19:40	1.00	1.005	1.00	0.07	50.00	0.001	0.993	0.00
11	20:01		1.023						
12	20:39		1.055						
13	20:13	1.00	1.033	1.00	0.29	50.00	0.010	1.753	0.01
14	20:29	1.00	1.047	1.00	0.17	50.00	0.001	0.409	0.00
15	19:17		0.985						
16	21:22	1.00	1.091	1.00	2.02	50.00	0.045	1.116	0.04
17	21:23	1.00	1.092	1.00	0.26	50.00	0.003	0.644	0.01
18	21:16	1.00	1.086	1.00	0.34	50.00	0.007	0.985	0.01
19	21:44		1.110						
20	17:33	1.00	0.897	1.00	63.82	50.00	1.372	1.075	1.28
21	22:07		1.130						

RIC
03/27/89 12:01:00
SAMPLE: TRIP BLANK
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789608AB #1
CALI: 789608AB #3

SCANS 1100 TO 1470

No	Name		INT. STD.
1	C160	D-10 PHENANTHRENE	•
2	C610	4,6-DINITRO-2-METHYLPHENOL	
3	C615	N-NITROSODIPHENYLAMINE	
4		AZOBENZENE	
5	C625	4-BROMOPHENYL-PHENYLETHER	•
6	C630	HEXACHLOROBENZENE	
7	C635	PENTACHLOROPHENOL	
8	C640	PHENANTHRENE	
9	C645	ANTHRACENE	
10	C650	DI-N-BUTYLPHTHALATE	•
11	C655	FLUORANTHENE	

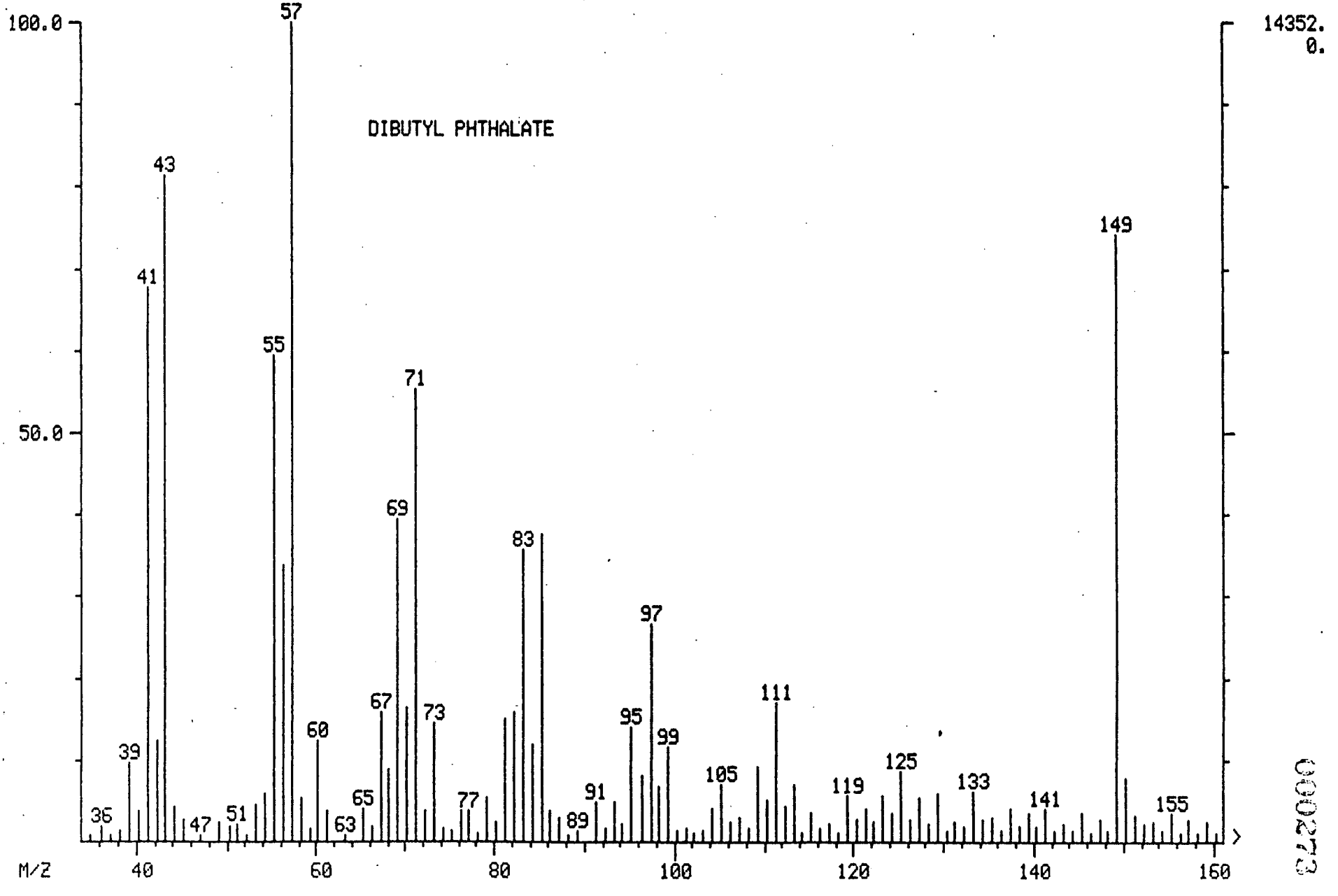


000272

MASS SPECTRUM
03/27/89 12:01:00 + 26:31
SAMPLE: TRIP BLANK
CONDS.: 1000 MLS/1.0 ML
TEMP: 221 DEG. C

DATA: 789608AB #1364
CALI: 789608AB #3

BASE M/Z: 57
RIC: 166400.

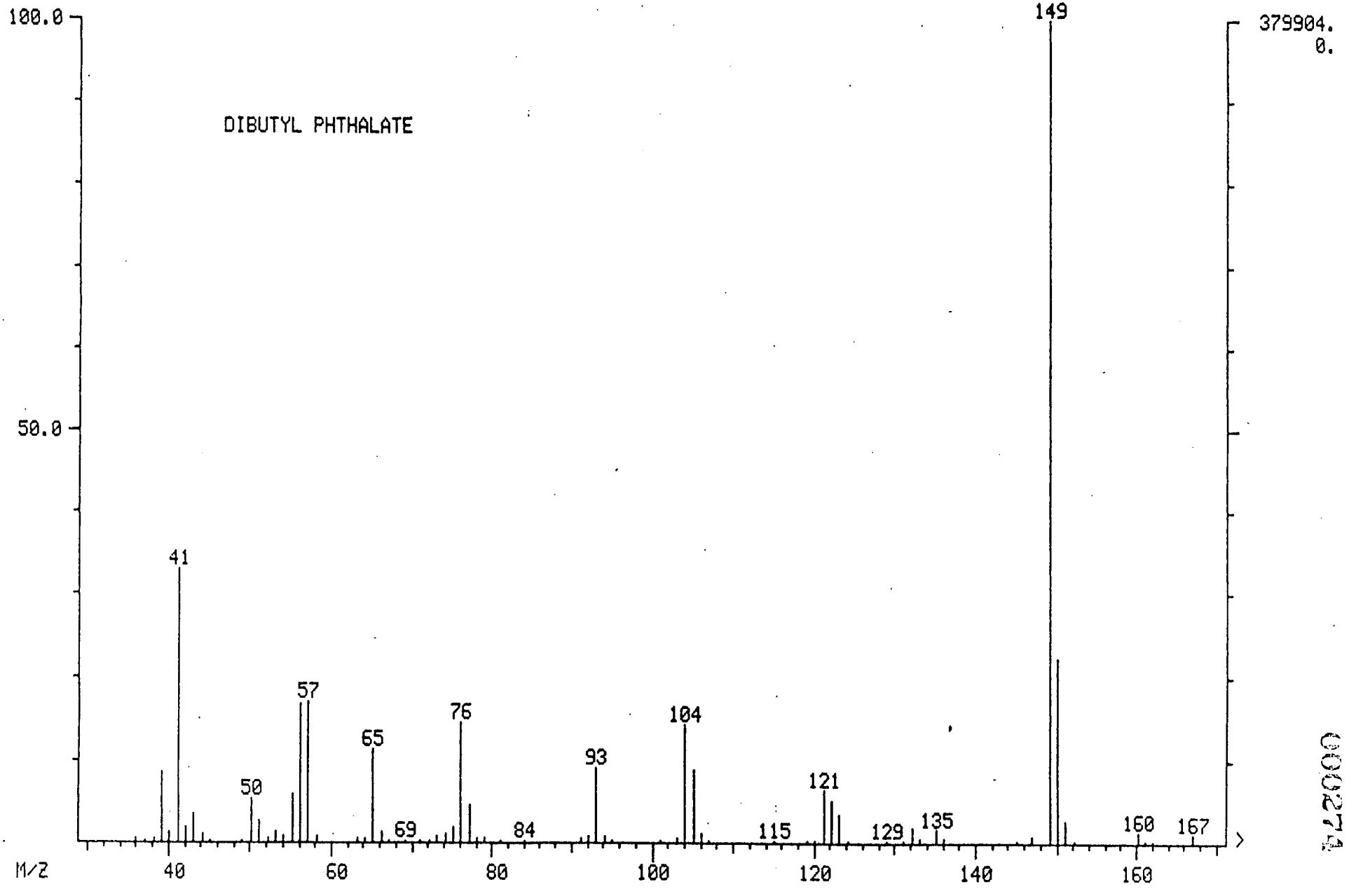


000273

MASS SPECTRUM
03/27/89 10:43:00 + 26:31
SAMPLE: HSL-D STANDARD \3/27/89
CONDS.: 50 NG INJECTION
TEMP: 221 DEG. C

DATA: HSB500327 #1364
CALI: HSB500327 #3

BASE M/Z: 149
RIC: 1337340.

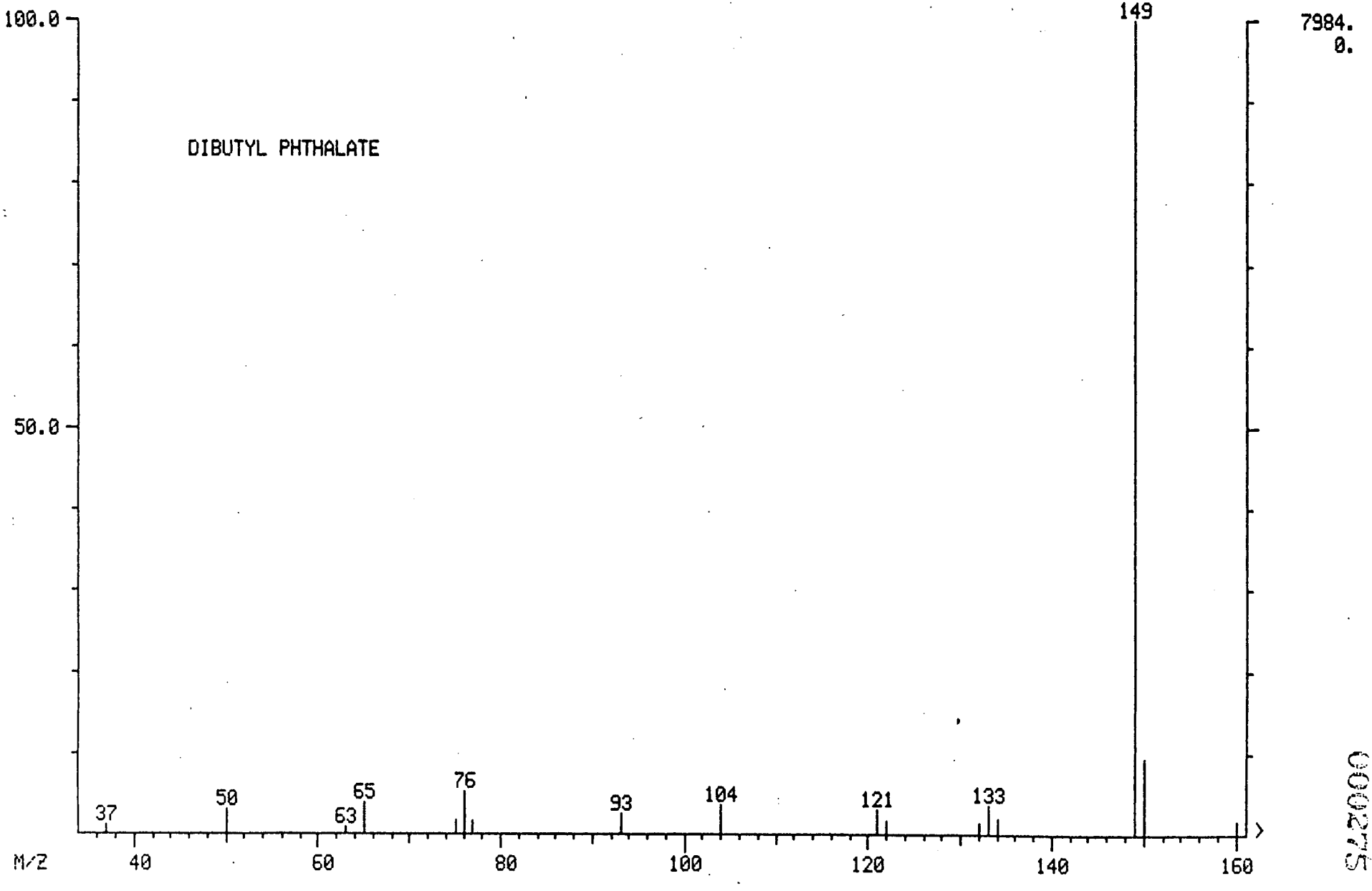


000274

MASS SPECTRUM
03/27/89 12:01:00 + 26:31
SAMPLE: TRIP BLANK
CONDS.: 1000 MLS/1.0 ML
TEMP: 221 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 789608AB #1364
CALI: 789608AB #3

BASE M/Z: 149
RIC: 14176.

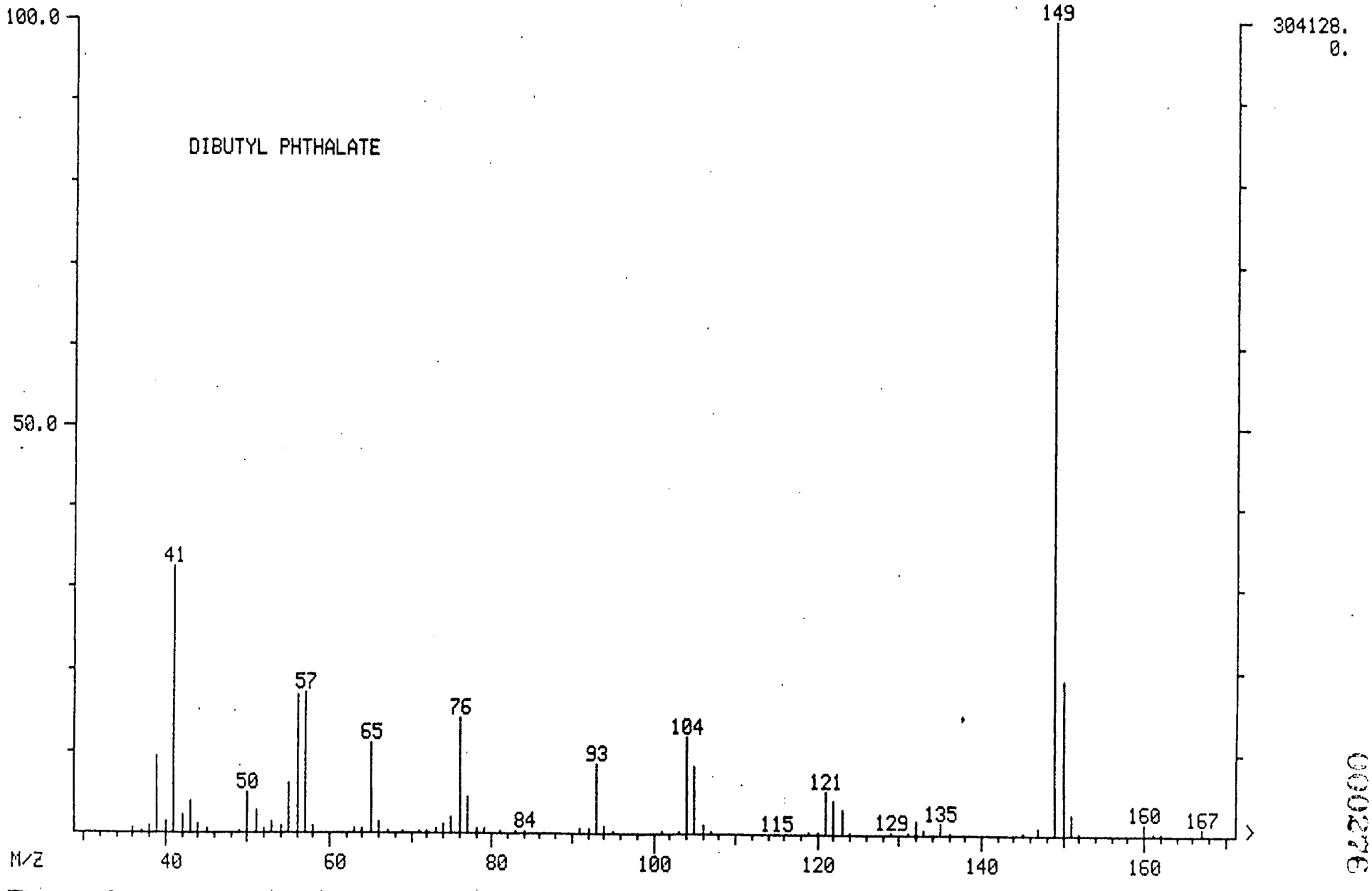


000275

MASS SPECTRUM
03/27/89 10:43:00 + 26:31
SAMPLE: HSL-D STANDARD \3/27/89
CONDS.: 50 NG INJECTION
TEMP: 221 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: HSB500327 #1364
CALI: HSB500327 #3

BASE M/Z: 149
RIC: 1027070.



000276

Quantitation Report File: 789608AB

Data: 789608AB.TI
03/27/89 12:01:00
Sample: TRIP BLANK
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789608AB

000277

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI60 PHENANTHRENE D10	INTERNAL STANDARD
2	C610 4,6-DINITRO-2-METHYL PHENOL	
3	C615 N-NITROSODIPHENYLAMINE	
4	AZOBENZENE	
5	C625 4-BROMOPHENYL PHENYL ETHER	
6	C630 HEXACHLOROBENZENE	
7	C635 PENTACHLOROPHENOL	
8	C640 PHENANTHRENE	
9	C645 ANTHRACENE	
10	C650 DI-N-BUTYL PHTHALATE	
11	C655 FLUORANTHENE	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%T t
1	188	1244	24:11	1	1.000	A BV	659781.	40.000 UG/ML	88.79
2	NOT FOUND								
3	NOT FOUND								
4	77	1123	21:50	1	0.903	A BB	~~4751.~~	~~0.224 UG/ML~~	~~0.50~~ NO WSS
5	NOT FOUND								
6	NOT FOUND								
7	266	1233	23:58	1	0.991	A BB	~~334.~~	~~0.165 UG/ML~~	~~0.37~~ NO WSS
8	178	1247	24:14	1	1.002	A BV	~~14799.~~	~~0.992 UG/ML~~	~~2.20~~ NO WSS
9	178	1254	24:23	1	1.008	A VV	~~7427.~~	~~0.573 UG/ML~~	~~1.27~~ NO WSS
10	149	1364	26:31	1	1.096	A BV	23050.	1.552 UG/ML	3.44 Yes WSS
11	202	1442	28:02	1	1.159	A VB	~~18941.~~	~~1.547 UG/ML~~	~~3.43~~ NO WSS

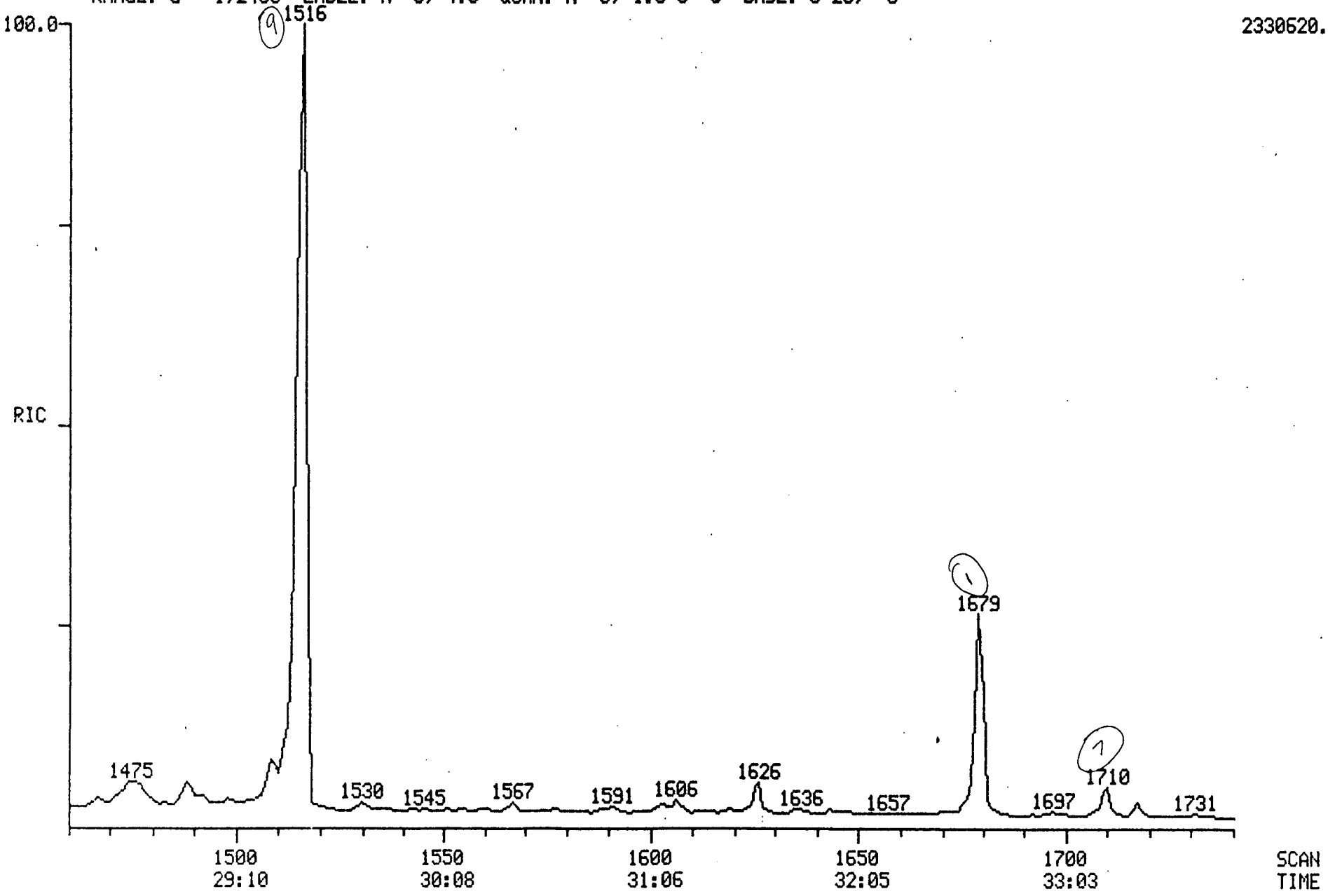
No	R t(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	24:12	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	21:44		0.898						
3	21:50		0.902						
4	21:52	1.00	0.904	1.00	0.22	50.00	0.006	1.286	0.00
5	22:53		0.945						
6	23:15		0.961						
7	23:56	1.00	0.989	1.00	0.16	50.00	0.000	0.123	0.00
8	24:17	1.00	1.003	1.00	0.99	50.00	0.018	0.905	0.02
9	24:25	1.00	1.009	1.00	0.57	50.00	0.009	0.785	0.01
10	26:31	1.00	1.096	1.00	1.55	50.00	0.028	0.901	0.03
11	28:02	1.00	1.158	1.00	1.55	50.00	0.023	0.742	0.03

RIC
03/27/89 12:01:00
SAMPLE: TRIP BLANK
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789608AB #1
CALI: 789608AB #3

SCANS 1460 TO 1740

No	Name		
1	C170	D-12 CHRYSENE	(INT. STD.)
2	C710	BENZIDINE	
3	C715	PYRENE	
4	C720	BUTYLBENZYLPHTHALATE	
5	C725	3,3'-DICHLOROBENZIDINE	
6	C730	BENZO(A)ANTHRACENE	
7	C745	BIS (2-ETHYLHEXYL) PHTHALATE	
8	C740	CHRYSENE	
9	C830	D-14 TERPHENYL	(SURROGATE)

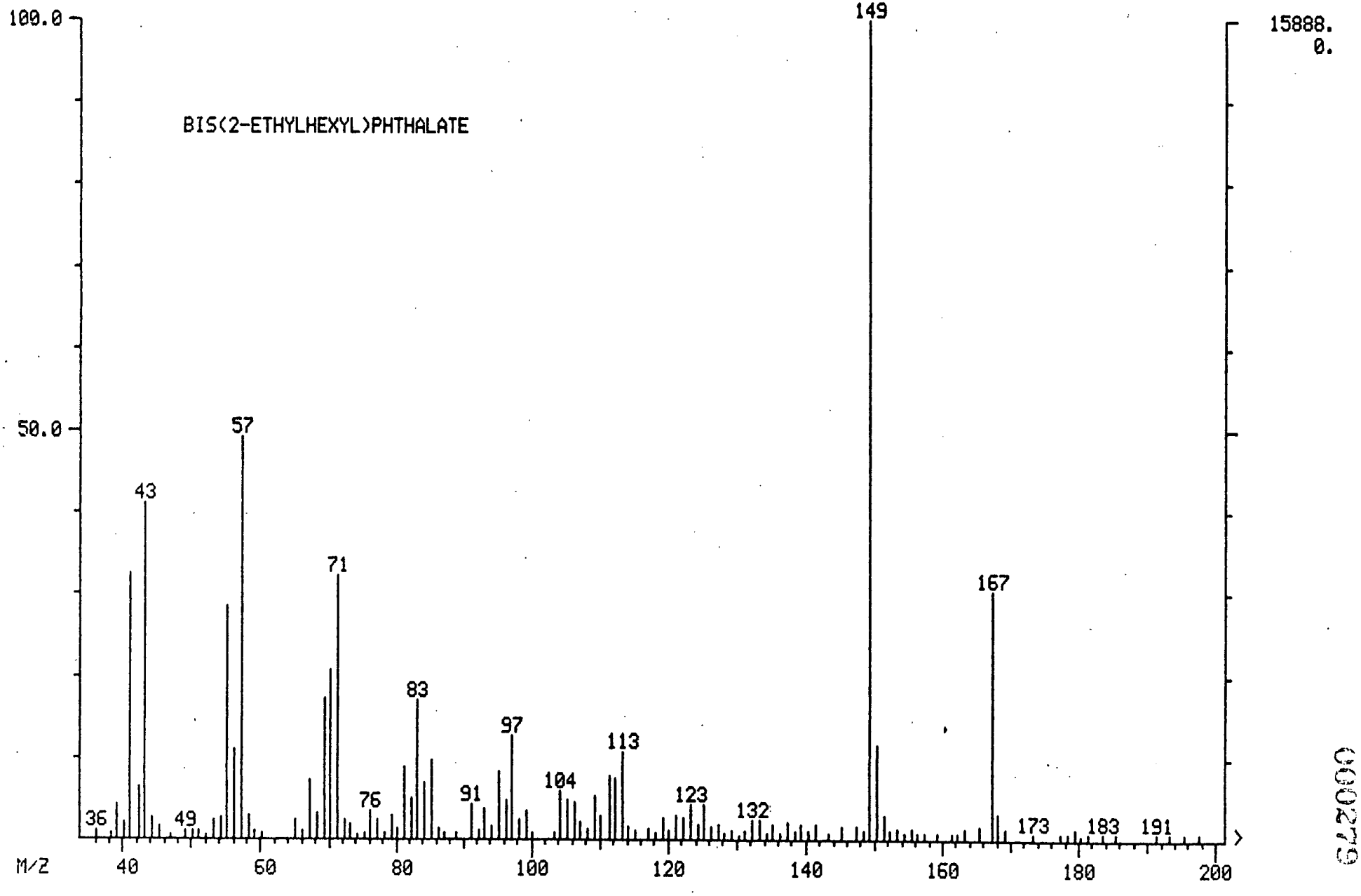


000278

MASS SPECTRUM
03/27/89 12:01:00 + 33:13
SAMPLE: TRIP BLANK
CONDS.: 1000 MLS/1.0 ML
TEMP: 275 DEG. C

DATA: 789608AB #1709
CALI: 789608AB #3

BASE M/Z: 149
RIC: 108032.

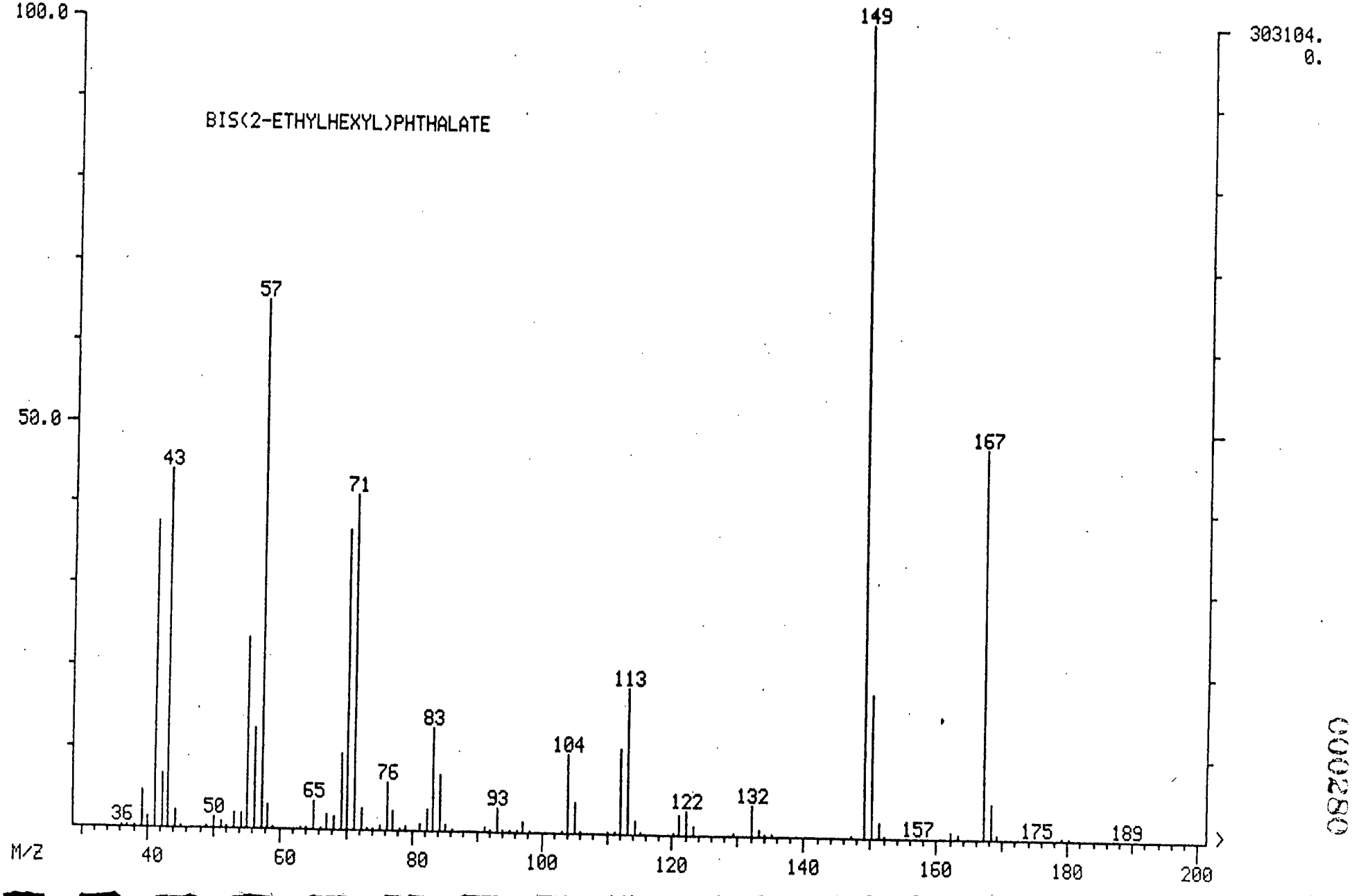


000279

MASS SPECTRUM
03/27/89 10:43:00 + 33:13
SAMPLE: HSL-D STANDARD \3/27/89
CONDS.: 50 NG INJECTION
TEMP: 275 DEG. C

DATA: HSB500327 #1709
CALI: HSB500327 #3

BASE M/Z: 149
RIC: 1765380.

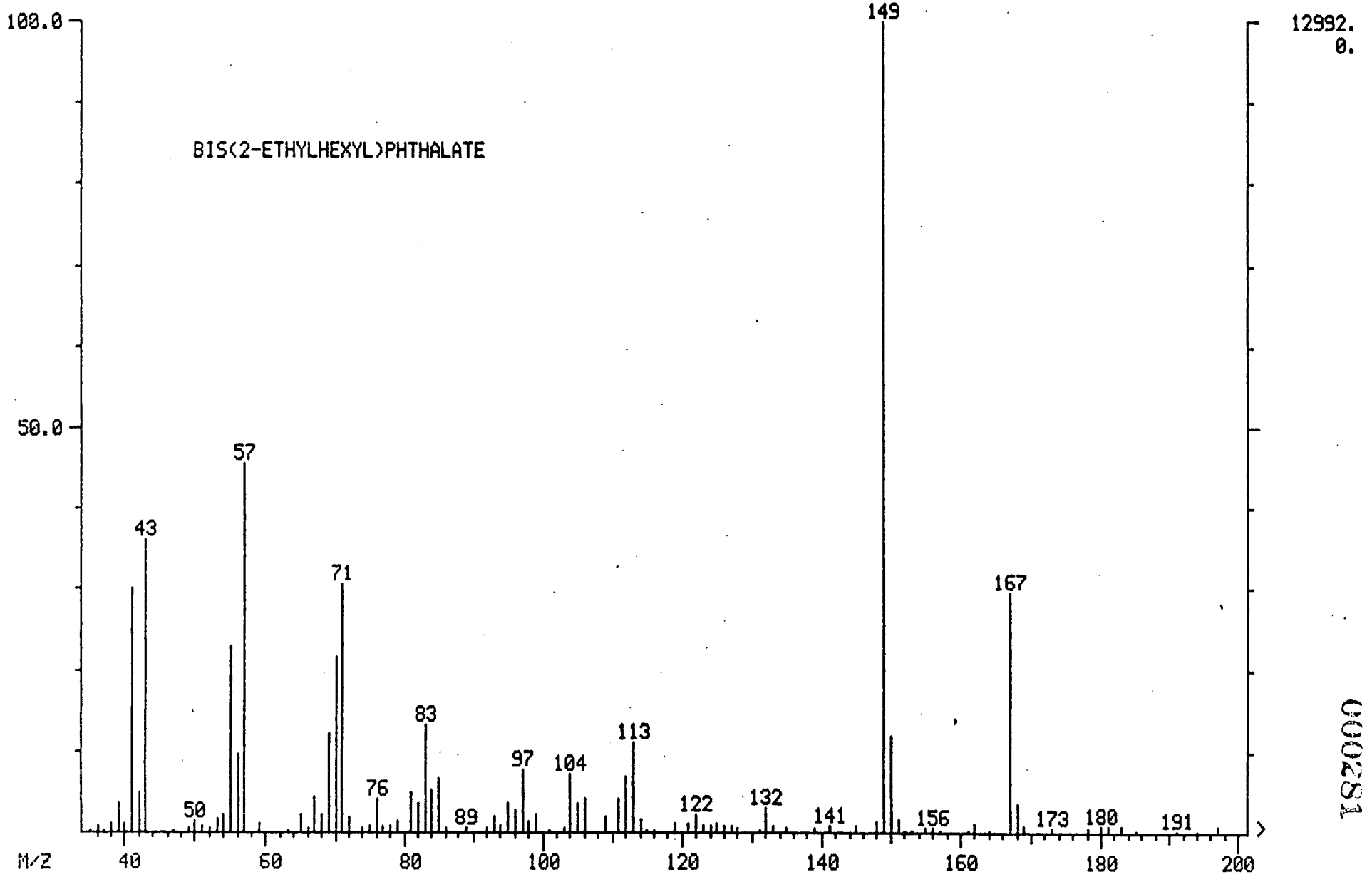


000280

MASS SPECTRUM
03/27/89 12:01:00 + 33:13
SAMPLE: TRIP BLANK
CONDS.: 1000 MLS/1.0 ML
TEMP: 275 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 789608AB #1709
CALI: 789608AB #3

BASE M/Z: 149
RIC: 68864.

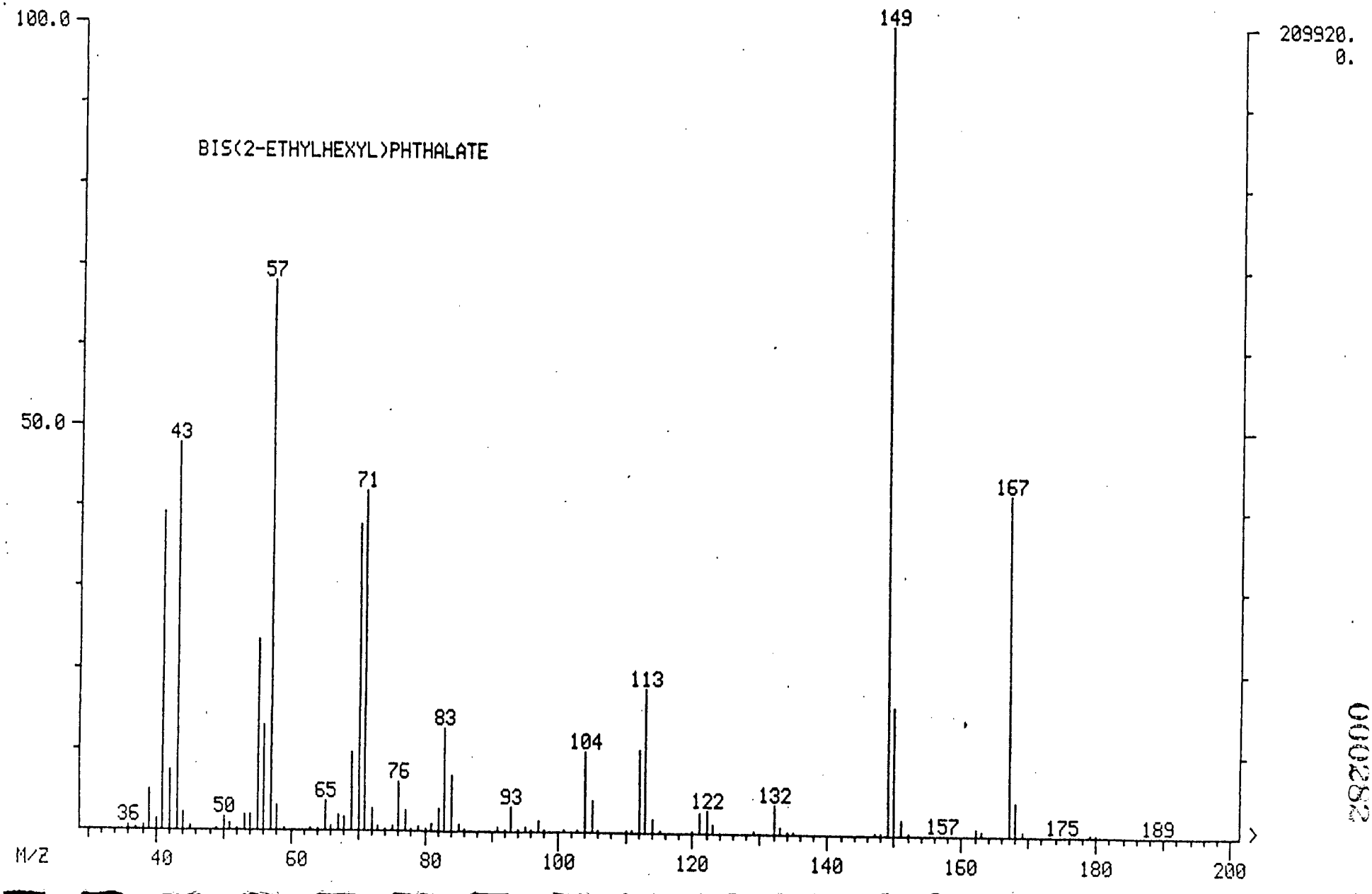


000281

MASS SPECTRUM
03/27/89 10:43:00 + 33:13
SAMPLE: HSL-D STANDARD \3/27/89
CONDS.: 50 NG INJECTION
TEMP: 275 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: HSB500327 #1709
CALI: HSB500327 #3

BASE M/Z: 149
RIC: 1239040.



000282

Quantitation Report File: 789608AB

000283

Data: 789608AB.TI
03/27/89 12:01:00
Sampl : TRIP BLANK
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitt d by: FLEMING Analyst: WSS Acct. No.: 789608AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI70 CHRYSENE D12	INTERNAL STANDARD
2	C710 BENZIDINE	
3	C715 PYRENE	
4	C720 BUTYLBENZYLPHTHALATE	
5	C725 3,3'-DICHLOROBENZIDINE	
6	C730 BENZO(A)ANTHRACENE	
7	C745 BIS(2-ETHYLHEXYL)PHTHALATE	
8	C740 CHRYSENE	
9	CS30 TERPHENYL D14	SURROGATE

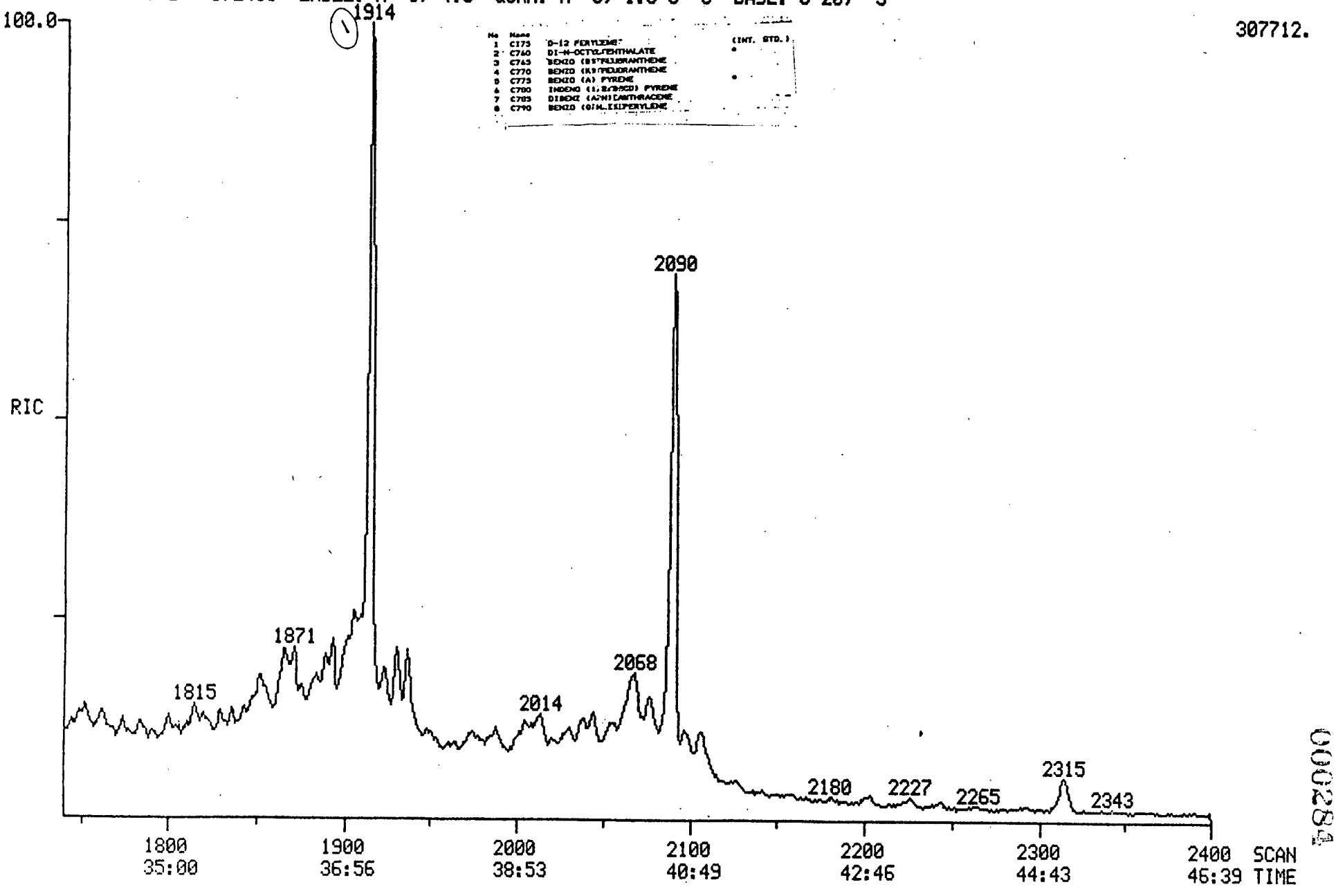
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	240	1679	32:38	1	1.000	A BB	213289.	40.000 UG/ML	20.74
2	NOT FOUND								
3	202	1477	28:43	1	0.880	A BV	~~20086.~~	~~3.386 UG/ML~~	~~1.76~~ NO WSS
4	149	1606	31:13	1	0.957	A VB	~~9072.~~	~~2.706 UG/ML~~	~~1.40~~ NO WSS
5	NOT FOUND								
6	228	1676	32:35	1	0.998	A BV	~~7731.~~	~~1.743 UG/ML~~	~~0.90~~ NO WSS
7	149	1709	33:13	1	1.018	A BB	42987.	10.772 UG/ML	5.58 yes WSS
8	228	1682	32:42	1	1.002	A VB	~~4822.~~	~~1.076 UG/ML~~	~~0.56~~ NO WSS
9	244	1516	29:28	1	0.903	A BB	792960.	133.275 UG/ML	69.09 yes WSS

N	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	32:38	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	28:45		0.882						
3	28:43	1.00	0.880	1.00	3.39	50.00	0.075	1.112	0.07
4	31:13	1.00	0.957	1.00	2.71	50.00	0.034	0.629	0.05
5	32:42		1.002						
6	32:35	1.00	0.998	1.00	1.74	50.00	0.029	0.832	0.03
7	33:13	1.00	1.018	1.00	10.77	50.00	0.161	0.748	0.22
8	32:43	1.00	1.002	1.00	1.08	50.00	0.017	0.805	0.02
9	29:26	1.00	0.902	1.00	133.28	50.00	2.974	1.116	2.67

RIC
03/27/89 12:01:00
SAMPLE: TRIP BLANK
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789608AB #1
CALI: 789608AB #3

SCANS 1740 TO 2400



307712.

000284

Quantitation Report File: 789608AB

000285

Data: 789608AB.TI
03/27/89 12:01:00
Sample: TRIP BLANK
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789608AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI75 PERYLENE D12	INTERNAL STANDARD
2	C760 DI-N-OCTYLPHTHALATE	
3	C765 BENZO(B)FLUORANTHENE	
4	C770 BENZO(K)FLUORANTHENE	
5	C775 BENZO(A)PYRENE	
6	C780 INDENO(1,2,3-CD)PYRENE	
7	C785 DIBENZO(A,H)ANTHRACENE	
8	C790 BENZO(G,H,I)PERYLENE	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%T t
1	264	1914	37:12	1	1.000	A BB	114139.	40.000 UG/ML	96.13
2	NOT FOUND								
3	252	1847	35:54	1	0.965	A BV	~~3171.~~	~~0.488 UG/ML~~	~~1.17~~ NO WSS
4	252	1847	35:54	1	0.965	A BV	~~3171.~~	~~0.646 UG/ML~~	~~1.55~~ NO WSS
5	252	1902	36:58	1	0.994	A BB	~~2206.~~	~~0.477 UG/ML~~	~~1.15~~ NO WSS
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Rati
1	37:11	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	35:07		0.944						
3	35:56	1.00	0.966	1.00	0.49	50.00	0.022	2.278	0.01
4	36:00	1.00	0.968	1.00	0.65	50.00	0.022	1.721	0.01
5	37:00	1.00	0.995	1.00	0.48	50.00	0.015	1.622	0.01
6	41:55		1.127						
7	42:06		1.132						
8	43:18		1.164						

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

000286

Lab Name: Q C INC. Contract: QC_INC

Lab Code: Case No.: QCINC SAS No.: NONE SDG No.: NONE

Instrument ID: FINN Calibration Date(s): 03/25/89 03/25/89

Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = HSD200325 RRF50 = HSD500325
RRF80 = HSD800325 RRF120= HSD1200325 RRF160= HSD1600325

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD
Phenol *	1.556	1.692	1.609	1.469	1.413	1.548	7.1*
bis(2-Chloroethyl)Ether	1.324	1.462	1.237	1.236	1.352	1.322	7.1
2-Chlorophenol	1.294	1.327	1.270	1.097	1.107	1.219	8.9
1,3-Dichlorobenzene	1.436	1.444	1.367	1.167	1.141	1.311	11.2
1,4-Dichlorobenzene *	1.474	1.476	1.291	1.169	1.172	1.316	11.6*
Benzyl Alcohol	0.684	1.352	0.652	0.717	1.495	0.980	41.7
1,2-Dichlorobenzene	1.410	1.419	1.318	1.149	1.128	1.285	10.9
2-Methylphenol	1.026	1.161	1.138	1.119	1.099	1.109	4.6
bis(2-Chloroisopropyl)Ether	1.686	1.953	1.882	1.656	1.660	1.767	7.9
4-Methylphenol	1.111	1.317	1.315	1.165	1.133	1.208	8.3
N-Nitroso-Di-n-Propylamine #	0.901	1.046	1.036	0.698	0.742	0.885	18.3#
Hexachloroethane	0.564	0.684	0.722	0.666	0.666	0.660	8.9
Nitrobenzene	0.595	0.702	0.612	0.539	0.325	0.555	25.4
Isophorone	0.885	0.824	0.715	0.618	0.578	0.724	18.1
2-Nitrophenol *	0.261	0.266	0.259	0.227	0.223	0.247	8.3*
2,4-Dimethylphenol	0.376	0.359	0.328	0.302	0.277	0.328	12.3
Benzoic Acid		0.143	0.110	0.106	0.080	0.110	23.5
bis(2-Chloroethoxy)Methane	0.570	0.557	0.497	0.446	0.419	0.498	13.3
2,4-Dichlorophenol *	0.375	0.417	0.381	0.319	0.290	0.356	14.3*
1,2,4-Trichlorobenzene	0.447	0.440	0.410	0.357	0.327	0.396	13.3
Naphthalene	1.211	0.812	0.721	0.600	0.561	0.781	33.3
4-Chloroaniline	0.443	0.741	0.355	0.330	0.555	0.485	34.7
Hexachlorobutadiene *	0.208	0.220	0.218	0.193	0.178	0.203	8.8*
4-Chloro-3-Methylphenol *	0.281	0.364	0.310	0.293	0.256	0.301	13.4*
2-Methylnaphthalene	1.327	1.146	0.699	0.559	0.703	0.887	37.3
Hexachlorocyclopentadiene #	0.156	0.246	0.266	0.262	0.244	0.235	19.2#
2,4,6-Trichlorophenol *	0.347	0.404	0.410	0.403	0.415	0.396	7.0*
2,4,5-Trichlorophenol		0.417	0.411	0.405	0.409	0.411	1.2
2-Chloronaphthalene	1.202	1.155	1.102	0.979	1.086	1.105	7.6
2-Nitroaniline		0.768	0.321	0.341	0.419	0.462	45.1
Dimethyl Phthalate	1.196	1.150	1.086	0.997	1.070	1.100	7.0
Acenaphthylene	1.751	1.353	1.295	1.239	1.312	1.390	14.8
2,6-Dinitrotoluene	0.241	0.320	0.288	0.323	0.302	0.295	11.3
3-Nitroaniline		0.716	0.329	0.333	0.429	0.452	40.3
Acenaphthene *	1.062	0.957	0.903	0.894	0.942	0.952	7.0*
2,4-Dinitrophenol #		0.092	0.096	0.111	0.121	0.105	12.8#
4-Nitrophenol #		0.137	0.134	0.165	0.180	0.154	14.5#

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Q C INC. Contract: QC_INC

Lab Code: Case No.: QCINC SAS No.: NONE SDG No.: NONE

Instrument ID: FINN Calibration Date(s): 03/25/89 03/25/89

Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = HSD200325 RRF50 = HSD500325
RRF80 = HSD800325 RRF120= HSD1200325 RRF160= HSD1600325

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD
Dibenzofuran	1.929	2.072	1.219	1.098	1.826	1.629	27.0
2,4-Dinitrotoluene	0.290	0.368	0.318	0.317	0.317	0.322	8.8
Diethylphthalate	1.083	1.153	1.071	1.003	1.097	1.081	5.0
4-Chlorophenyl-phenylether	0.493	0.648	0.618	0.613	0.620	0.598	10.1
Fluorene	1.132	1.021	0.932	0.898	0.958	0.988	9.3
4-Nitroaniline		0.548	0.231	0.278	0.665	0.431	48.6
4,6-Dinitro-2-Methylphenol		0.125	0.123	0.140	0.159	0.137	12.2
N-Nitrosodiphenylamine (1) *	0.551	0.577	0.565	0.531	0.576	0.560	3.4*
4-Bromophenyl-phenylether	0.185	0.253	0.231	0.250	0.235	0.231	11.8
Hexachlorobenzene	0.202	0.286	0.123	0.274	0.269	0.231	29.7
Pentachlorophenol *		0.110	0.119	0.172	0.178	0.145	24.3*
Phenanthrene	1.024	0.937	0.937	0.833	0.866	0.919	8.0
Anthracene	0.954	0.808	0.755	0.611	0.669	0.759	17.5
Di-n-Butylphthalate	1.004	0.891	0.907	0.769	0.847	0.884	9.7
Fluoranthene *	0.778	0.853	0.782	0.665	0.791	0.774	8.8*
Pyrene	1.339	1.124	0.954	0.772	0.817	1.001	23.3
Butylbenzylphthalate	0.494	0.725	0.587	0.481	0.519	0.561	17.9
3,3'-Dichlorobenzidine	0.213	0.369	0.419	0.399	0.364	0.353	23.0
Benzo(a)Anthracene	0.874	1.066	0.939	0.798	0.805	0.896	12.4
Chrysene	0.938	1.024	0.858	0.725	0.691	0.847	16.6
bis(2-Ethylhexyl)Phthalate	0.631	0.929	0.799	0.632	0.652	0.729	18.1
Di-n-Octyl Phthalate *	2.720	3.946	2.379	2.224	3.916	3.037	27.5*
Benzo(b)Fluoranthene	1.476	2.821	2.204	2.680	2.945	2.425	24.8
Benzo(k)Fluoranthene	1.345	2.266	1.504	1.620	1.800	1.707	20.7
Benzo(a)Pyrene *	1.166	2.045	1.596	1.807	1.185	1.560	24.7*
Indeno(1,2,3-cd)Pyrene	0.343	0.584	0.515	0.383	0.269	0.419	30.7
Dibenz(a,h)Anthracene	0.310	0.592	0.525	0.407	0.266	0.420	33.0
Benzo(g,h,i)Perylene	0.256	0.459	0.385	0.264	0.233	0.319	30.7
Nitrobenzene-d5	0.529	0.533	0.489	0.448	0.408	0.481	11.1
2-Fluorobiphenyl	1.344	1.131	1.119	1.027	1.130	1.150	10.2
Terphenyl-d14	1.149	1.114	0.942	0.791	0.830	0.965	16.8
Phenol-d5	1.261	1.468	1.450	1.365	1.353	1.379	6.0
2-Fluorophenyl	1.058	1.181	1.183	1.074	1.067	1.113	5.7
2,4,6-Tribromophenol	0.105	0.170	0.158	0.175	0.165	0.155	18.3

(1) Cannot be separated from Diphenylamine

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

000288

Lab Name: Q C INC. Contract: FLEMING

Lab Code: EPA Case No.: FLEMIN SAS No.: NONE SDG No.: NONE

Instrument ID: FINN Calibration date: 03/27/89 Time: 1043

Lab File ID: HSB500327 Init. Calib. Date(s): 03/25/89 03/25/89

Min RRF50 for SPCC(#) = 0.050 Max %D for CCC(*) = 25.0%

COMPOUND		RRF	RRF50	%D	
Phenol	*	1.548	1.648	-6.5	*
bis(2-Chloroethyl)Ether		1.322	1.395	-5.5	
2-Chlorophenol		1.219	1.176	3.5	
1,3-Dichlorobenzene		1.311	1.226	6.5	
1,4-Dichlorobenzene	*	1.316	1.226	6.8	*
Benzyl Alcohol		0.980	1.508	-53.9	
1,2-Dichlorobenzene		1.285	1.161	9.7	
2-Methylphenol		1.109	1.135	-2.3	
bis(2-Chloroisopropyl)Ether		1.767	1.808	-2.3	
4-Methylphenol		1.208	1.394	-15.4	
N-Nitroso-Di-n-Propylamine	#	0.885	1.066	-20.5	#
Hexachloroethane		0.660	0.708	-7.3	
Nitrobenzene		0.555	0.597	-7.6	
Isophorone		0.724	0.602	16.9	
2-Nitrophenol	*	0.247	0.245	0.8	*
2,4-Dimethylphenol		0.328	0.302	7.9	
Benzoic Acid		0.110	0.136	-23.6	
bis(2-Chloroethoxy)Methane		0.498	0.459	7.8	
2,4-Dichlorophenol	*	0.356	0.356	0.0	*
1,2,4-Trichlorobenzene		0.396	0.362	8.6	
Naphthalene		0.781	0.595	23.8	
4-Chloroaniline		0.485	0.554	-14.2	
Hexachlorobutadiene	*	0.203	0.182	10.3	*
4-Chloro-3-Methylphenol	*	0.301	0.368	-22.3	*
2-Methylnaphthalene		0.887	0.811	8.6	
Hexachlorocyclopentadiene	#	0.235	0.254	-8.1	#
2,4,6-Trichlorophenol	*	0.396	0.432	-9.1	*
2,4,5-Trichlorophenol		0.411	0.489	-19.0	
2-Chloronaphthalene		1.105	1.043	5.6	
2-Nitroaniline		0.462	0.906	-96.1	
Dimethyl Phthalate		1.100	1.134	-3.1	
Acenaphthylene		1.390	1.277	8.1	
2,6-Dinitrotoluene		0.295	0.334	-13.2	
3-Nitroaniline		0.452	0.751	-66.2	
Acenaphthene	*	0.952	0.993	-4.3	*
2,4-Dinitrophenol	#	0.105	0.128	-21.9	#
4-Nitrophenol	#	0.154	0.126	18.2	#

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Q C INC. Contract: FLEMING 000289

Lab Code: EPA Case No.: FLEMIN SAS No.: NONE SDG No.: NONE

Instrument ID: FINN Calibration date: 03/27/89 Time: 1043

Lab File ID: HSB500327 Init. Calib. Date(s): 03/25/89 03/25/89

Min RRF50 for SPCC(#) = 0.050 Max %D for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Dibenzofuran	1.629	1.753	-7.6
2,4-Dinitrotoluene	0.322	0.409	-27.0
Diethylphthalate	1.081	1.116	-3.2
4-Chlorophenyl-phenylether	0.598	0.644	-7.7
Fluorene	0.988	0.985	0.3
4-Nitroaniline	0.431	0.578	-34.1
4,6-Dinitro-2-Methylphenol	0.137	0.165	-20.4
N-Nitrosodiphenylamine (1) *	0.560	0.659	-17.7 *
4-Bromophenyl-phenylether	0.231	0.251	-8.7
Hexachlorobenzene	0.231	0.274	-18.6
Pentachlorophenol *	0.145	0.123	15.2 *
Phenanthrene	0.919	0.905	1.5
Anthracene	0.759	0.785	-3.4
Di-n-Butylphthalate	0.884	0.901	-1.9
Fluoranthene *	0.774	0.742	4.1 *
Pyrene	1.001	1.112	-11.1
Butylbenzylphthalate	0.561	0.629	-12.1
3,3'-Dichlorobenzidine	0.353	0.193	45.3
Benzo(a)Anthracene	0.896	0.832	7.1
Chrysene	0.847	0.805	5.0
bis(2-Ethylhexyl)Phthalate	0.729	0.748	-2.6
Di-n-Octyl Phthalate *	3.037	3.735	-23.0 *
Benzo(b)Fluoranthene	2.425	2.278	6.1
Benzo(k)Fluoranthene	1.707	1.721	-0.8
Benzo(a)Pyrene *	1.560	1.622	-4.0 *
Indeno(1,2,3-cd)Pyrene	0.419	0.571	-36.3
Dibenz(a,h)Anthracene	0.420	0.574	-36.7
Benzo(g,h,i)Perylene	0.319	0.438	-37.3
Nitrobenzene-d5	0.481	0.479	0.4
2-Fluorobiphenyl	1.150	1.075	6.5
Terphenyl-d14	0.965	1.116	-15.7
Phenol-d5	1.379	1.507	-9.3
2-Fluorophenyl	1.113	1.212	-8.9
2,4,6-Tribromophenol	0.155	0.127	18.1

(1) Cannot be separated from Diphenylamine

QC Inc

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ANALYTICAL DATA REPORT PACKAGE
FOR
GANNETT FLEMING ENGINEERS INC.

Part 5 of 7

Cas Name	Field Sample ID	Laboratory Sample ID	Date of Collection
USN Earl Depot	C-14A	789651,789603,789657, 789629,789635,789643	02/16/89
	C-14B	789652,789604,789658, 789630,789636,789644	"
	C-14C	789653,789605,789659, 789631,789637,789645	"
	C-29A	789654,789606,789660, 789632,789638.789646	"
	FIELD BLANK	789655,789607,789662, 789633,789639,789647	"
	TRIP BLANK	789656,789608,789661, 789634,789640,789648	"

Laboratory Name QC Inc.

C rtification No. PADER No. 09-131
NJDEP No. 77166/77648

Supervisor/Manager Signature

Printed Name Thomas J. Hines

Form QC G-1

QC Inc
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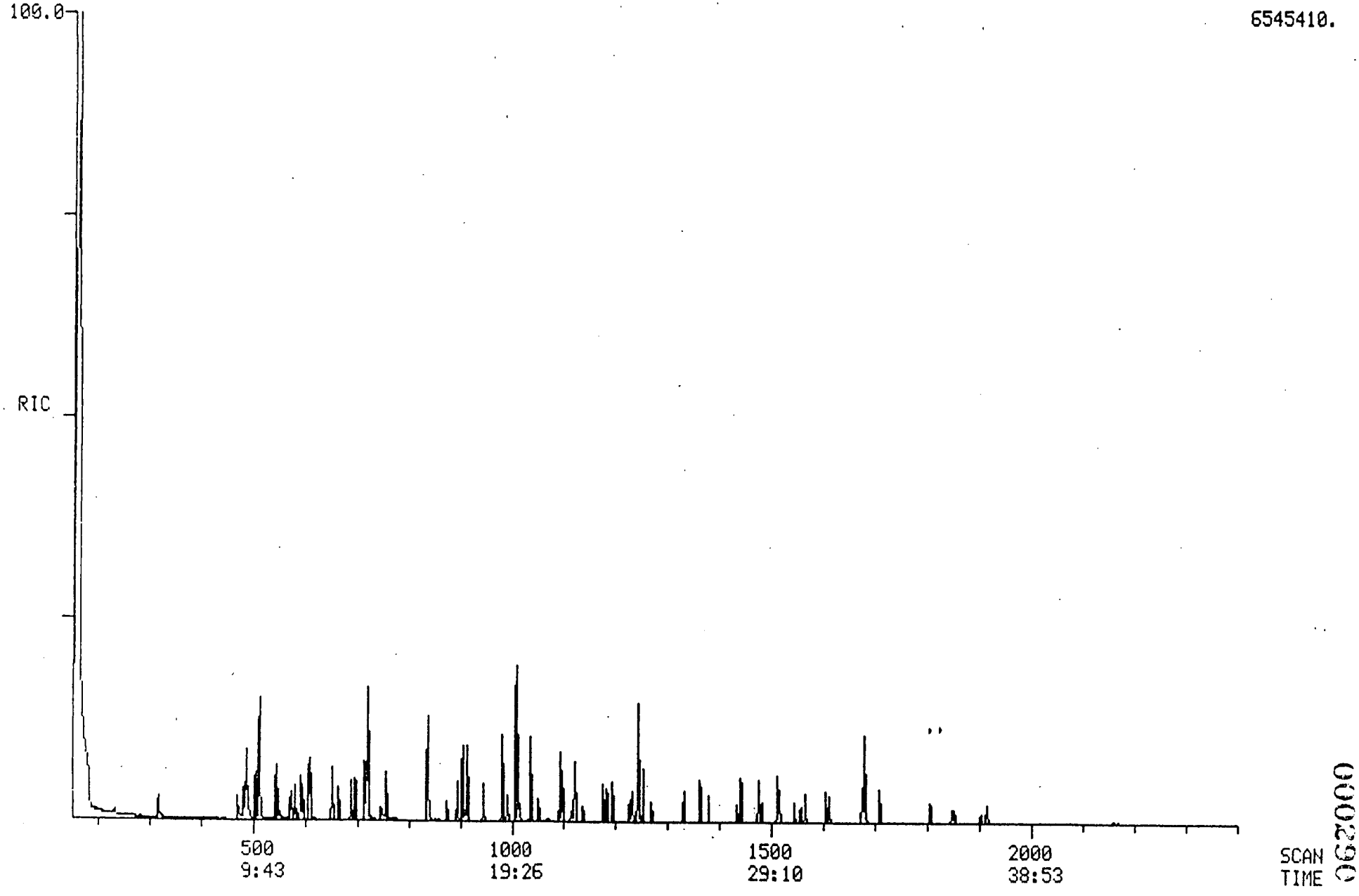
Form No.	Form Name/Content	Page
	Initial Calibration Raw Data	290
	Continuing Calibration Raw Data	370

RIC
03/25/89 16:10:00
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 20 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

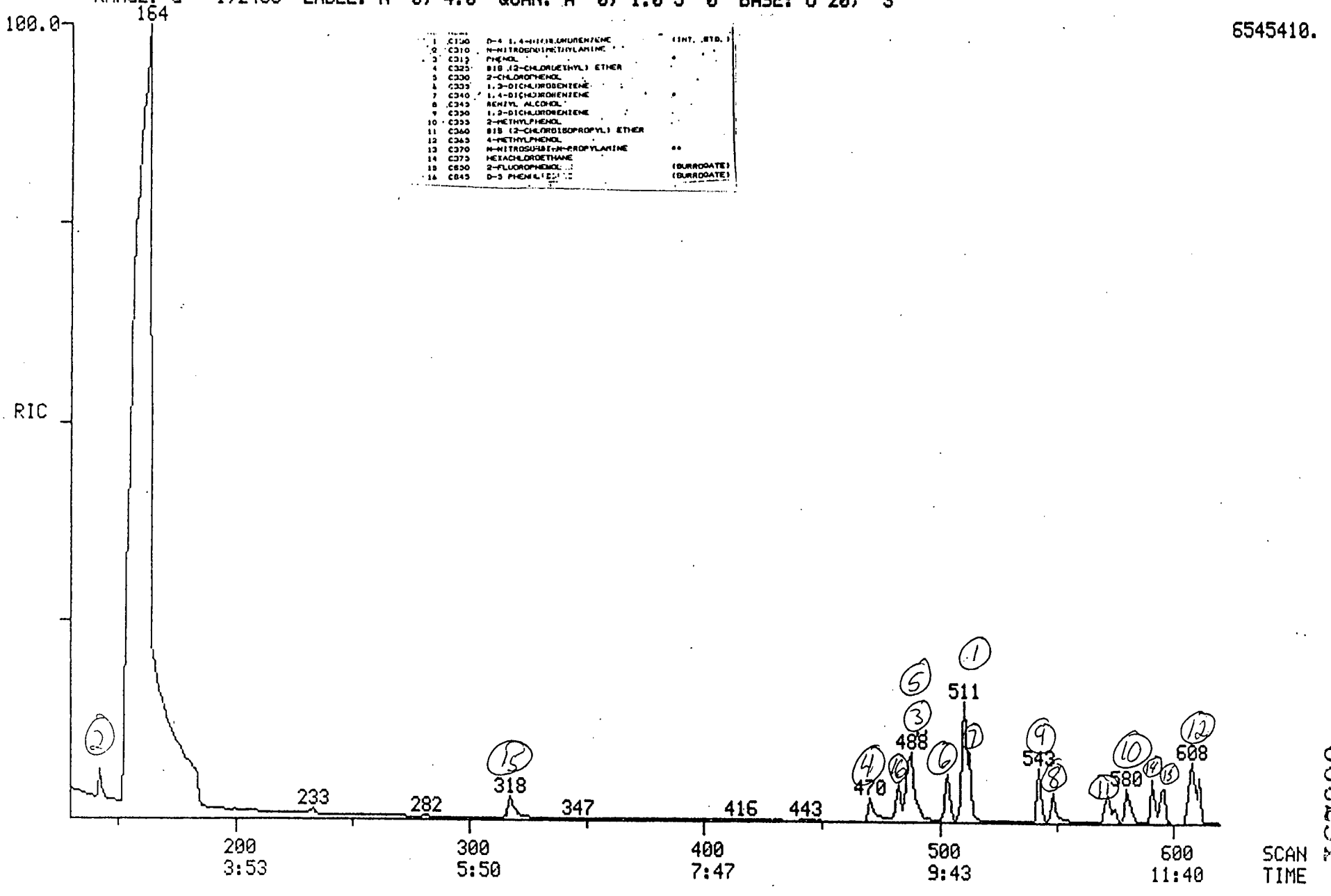
DATA: HSD200325 #1 SCANS 150 TO 2400
CALI: 785694AB #3



000290

RIC
03/25/89 16:10:00
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 20 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSD200325 #1 SCANS 130 TO 620
CALI: HSD200325 #3



1	C300	D-4 1,4-DICHLOROBENZENE	(INT. STD.)
2	C310	N-NITROSODIMETHYLAMINE	
3	C313	PHENOL	
4	C325	BIS (2-CHLOROETHYL) ETHER	
5	C330	2-CHLOROPHENOL	
6	C335	1,3-DICHLOROBENZENE	
7	C340	1,4-DICHLOROBENZENE	
8	C343	BENZYL ALCOHOL	
9	C350	1,2-DICHLOROBENZENE	
10	C355	2-METHYLPHENOL	
11	C360	BIS (2-CHLOROISOPROPYL) ETHER	
12	C365	4-METHYLPHENOL	
13	C370	N-NITROSODI-N-PROPYLAMINE	**
14	C375	HEXACHLOROETHANE	
15	C830	2-FLUOROPHENOL	(SURROGATE)
16	C845	D-5 PHENOL[illegible]	(SURROGATE)

6545410.

000291

Quantitation R p rt File: HSD200325

000292

Data: HSD200325.TI
03/25/89 16:10:00
Sampl : HSL-D STANDARD 3/25/89
Conds.: 20 NG INJECTION
Formula: Instrument: FINN W ight: 0.000
Submitted by: QC INC Analyst: WSS Acct. No.: HSD20032

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI30 1,4-DICHLOROBENZENE D4	INTERNAL STANDARD
2	N-NITROSODIMETHYLAMINE	
3	C315 PHENOL	
4	C325 BIS(2-CHLOROETHYL) ETHER	
5	C330 2-CHLOROPHENOL	
6	C335 1,3-DICHLOROBENZENE	
7	C340 1,4-DICHLOROBENZENE	
8	C345 BENZYL ALCOHOL	
9	C350 1,2-DICHLOROBENZENE	
10	C355 2-METHYLPHENOL	
11	C360 BIS(2-CHLOROISOPROPYL)ETHER	
12	C365 4-METHYLPHENOL	
13	C370 N-NITROSO-DI-PROPYLAMINE	
14	C375 HEXACHLOROETHANE	
15	CS50 2-FLUOROPHENOL	SURROGATE
16	CS45 PHENOL D5	SURROGATE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	511	9:56	1	1.000	A BB	363873.	40.000 UG/ML	11.76
2	74	143	2:47	1	0.280	A BB	152503.	20.000 UG/ML	5.88
3	94	487	9:28	1	0.953	A VB	283063.	20.000 UG/ML	5.88
4	93	470	9:08	1	0.920	A BV	240848.	20.000 UG/ML	5.88
5	128	488	9:29	1	0.955	A BB	235462.	20.000 UG/ML	5.88
6	146	503	9:47	1	0.984	A BV	261326.	20.000 UG/ML	5.88
7	146	513	9:58	1	1.004	A VB	268120.	20.000 UG/ML	5.88
8	108	549	10:40	1	1.074	A BB	124367.	20.000 UG/ML	5.88
9	146	543	10:33	1	1.063	A BB	256611.	20.000 UG/ML	5.88
10	108	580	11:17	1	1.135	A BB	186598.	20.000 UG/ML	5.88
11	45	572	11:07	1	1.119	A BB	306796.	20.000 UG/ML	5.88
12	108	607	11:48	1	1.188	A BB	202192.	20.000 UG/ML	5.88
13	70	596	11:35	1	1.166	A BV	163928.	20.000 UG/ML	5.88
14	117	591	11:29	1	1.157	A BB	102556.	20.000 UG/ML	5.88
15	112	318	6:11	1	0.622	A BB	192494.	20.000 UG/L	5.88
16	99	485	9:26	1	0.949	A BV	229388.	20.000 UG/ML	5.88

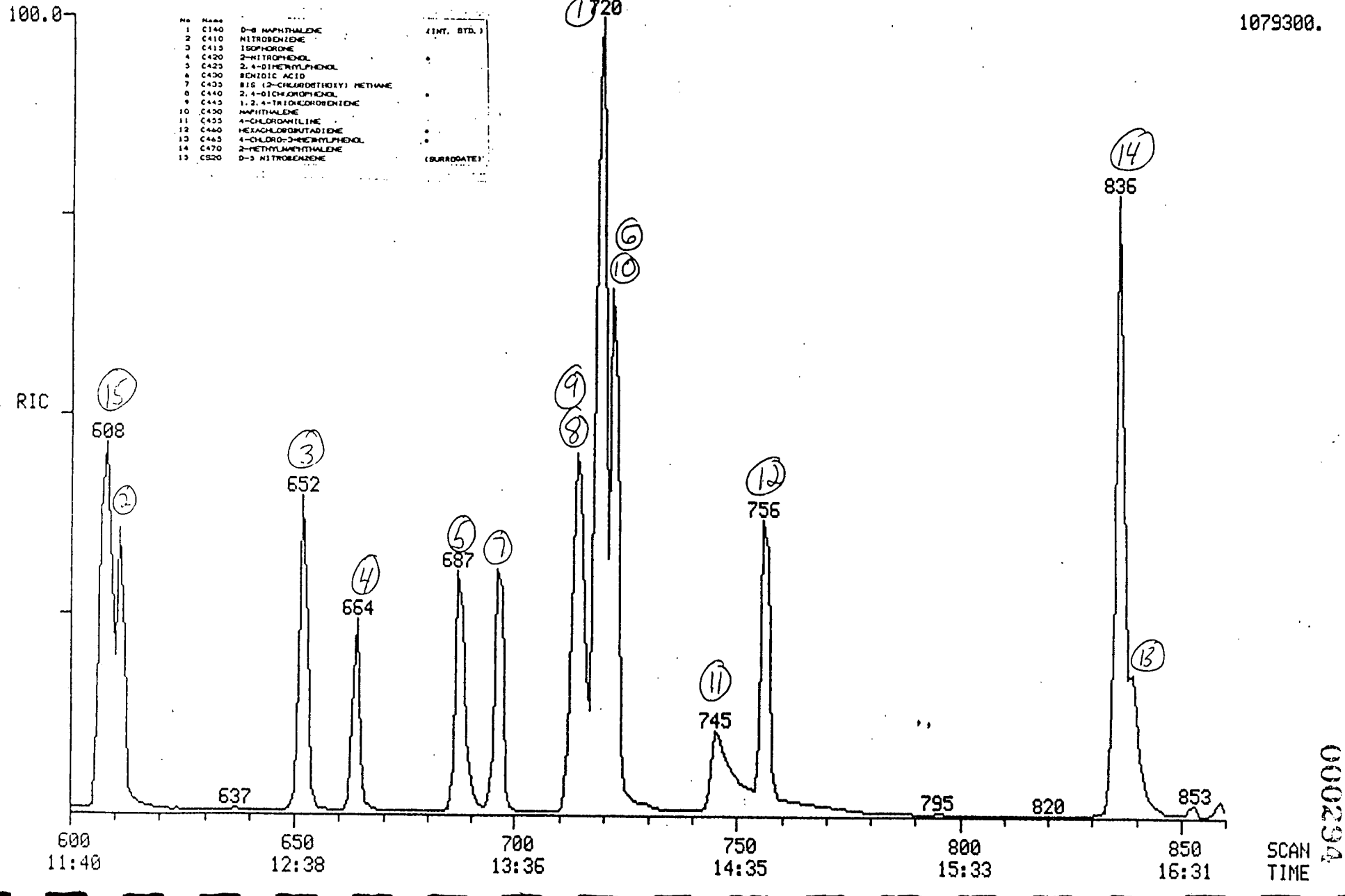
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:56	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	2:47	1.00	0.280	1.00	20.00	20.00	0.838	0.838	1.00
3	9:28	1.00	0.953	1.00	20.00	20.00	1.556	1.556	1.00
4	9:08	1.00	0.920	1.00	20.00	20.00	1.324	1.324	1.00
5	9:29	1.00	0.955	1.00	20.00	20.00	1.294	1.294	1.00
6	9:47	1.00	0.984	1.00	20.00	20.00	1.436	1.436	1.00
7	9:58	1.00	1.004	1.00	20.00	20.00	1.474	1.474	1.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
8	10:40	1.00	1.074	1.00	20.00	20.00	0.684	0.684	1.00
9	10:33	1.00	1.063	1.00	20.00	20.00	1.410	1.410	1.00
10	11:17	1.00	1.135	1.00	20.00	20.00	1.026	1.026	1.00
11	11:07	1.00	1.119	1.00	20.00	20.00	1.686	1.686	1.00
12	11:48	1.00	1.188	1.00	20.00	20.00	1.111	1.111	1.00
13	11:35	1.00	1.166	1.00	20.00	20.00	0.901	0.901	1.00
14	11:29	1.00	1.157	1.00	20.00	20.00	0.564	0.564	1.00
15	6:11	1.00	0.622	1.00	20.00	20.00	1.058	1.058	1.00
16	9:26	1.00	0.949	1.00	20.00	20.00	1.261	1.261	1.00

000293

RIC
03/25/89 16:10:00
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 20 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSD200325 #1 SCANS 600 TO 860
CALI: HSD200325 #3



000234

Quantitation R p rt File: HSD200325

000295

Data: HSD200325.TI
03/25/89 16:10:00
Sample: HSL-D STANDARD 3/25/89
Conds.: 20 NG INJECTION
Formula: Instrum nt: FINN Weight: 0.000
Submitt d by: GC INC Analyst: WSS Acct. No.: HSD20032

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI40 NAPHTHALENE D8	INTERNAL STANDARD
2	C410 NITROBENZENE	
3	C415 ISOPHORONE	
4	C420 2-NITROPHENOL	
5	C425 2,4-DIMETHYLPHENOL	
6	C430 BENZOIC ACID	
7	C435 BIS(2-CHLOROETHOXY)METHANE	
8	C440 2,4-DICHLOROPHENOL	
9	C445 1,2,4-TRICHLOROBENZENE	
10	C450 NAPHTHALENE	
11	C455 4-CHLOROANILINE	
12	C460 HEXACHLOROBUTADIENE	
13	C465 4-CHLORO-3-METHYLPHENOL	
14	C470 2-METHYLNAPHTHALENE	
15	CS20 NITROBENZENE D5	SURROGATE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	136	719	13:59	1	1.000	A BB	927323.	40.000 UG/ML	12.50
2	77	611	11:53	1	0.850	A BB	275965.	20.000 UG/ML	6.25
3	82	652	12:40	1	0.907	A BV	410347.	20.000 UG/ML	6.25
4	139	664	12:54	1	0.924	A BB	120899.	20.000 UG/ML	6.25
5	122	687	13:21	1	0.955	A BB	174347.	20.000 UG/ML	6.25
6	122	723	14:03	1	1.006	A BB	72331.	20.000 UG/ML	6.25
7	93	696	13:32	1	0.968	A VB	264273.	20.000 UG/ML	6.25
8	162	713	13:52	1	0.992	A BB	173781.	20.000 UG/ML	6.25
9	180	714	13:53	1	0.993	A BB	207254.	20.000 UG/ML	6.25
10	128	722	14:02	1	1.004	A VB	561664.	20.000 UG/ML	6.25
11	127	745	14:29	1	1.036	A BB	205352.	20.000 UG/ML	6.25
12	225	756	14:42	1	1.051	A BB	96286.	20.000 UG/ML	6.25
13	107	839	16:19	1	1.167	A BB	130303.	20.000 UG/ML	6.25
14	142	836	16:15	1	1.163	A BV	615226.	20.000 UG/ML	6.25
15	82	608	11:49	1	0.846	A BB	245207.	20.000 UG/ML	6.25

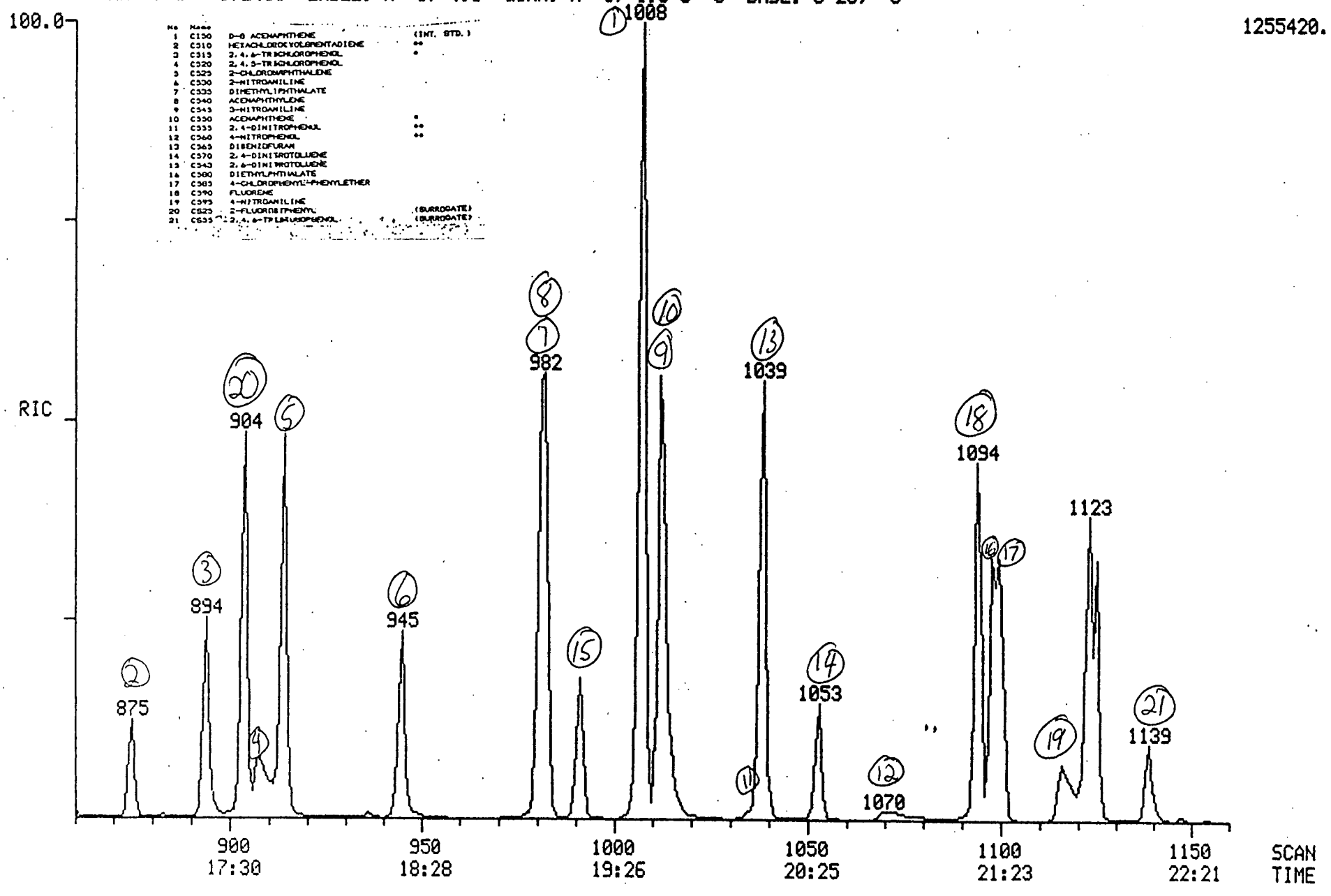
N	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	13:59	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	11:53	1.00	0.850	1.00	20.00	20.00	0.595	0.595	1.00
3	12:40	1.00	0.907	1.00	20.00	20.00	0.885	0.885	1.00
4	12:54	1.00	0.924	1.00	20.00	20.00	0.261	0.261	1.00
5	13:21	1.00	0.955	1.00	20.00	20.00	0.376	0.376	1.00
6	14:03	1.00	1.006	1.00	20.00	20.00	0.156	0.156	1.00
7	13:32	1.00	0.968	1.00	20.00	20.00	0.570	0.570	1.00
8	13:52	1.00	0.992	1.00	20.00	20.00	0.375	0.375	1.00
9	13:53	1.00	0.993	1.00	20.00	20.00	0.447	0.447	1.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Rati
10	14:02	1.00	1.004	1.00	20.00	20.00	1.211	1.211	1.00
11	14:29	1.00	1.036	1.00	20.00	20.00	0.443	0.443	1.00
12	14:42	1.00	1.051	1.00	20.00	20.00	0.208	0.208	1.00
13	16:19	1.00	1.167	1.00	20.00	20.00	0.281	0.281	1.00
14	16:15	1.00	1.163	1.00	20.00	20.00	1.327	1.327	1.00
15	11:49	1.00	0.846	1.00	20.00	20.00	0.529	0.529	1.00

000029

RIC
03/25/89 16:10:00
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 20 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSD200325 #1 SCANS 860 TO 1160
CALI: HSD200325 #3



No	Mass		
1	C150	D-8 ACENAPHTHENE	(INT. STD.)
2	C510	HEXACHLOROCYCLOPENTADIENE	**
3	C515	2,4,6-TRICHLOROPHENOL	*
4	C520	2,4,5-TRICHLOROPHENOL	
5	C525	2-CHLORONAPHTHALENE	
6	C530	2-NITROANILINE	
7	C535	DIMETHYLPHTHALATE	
8	C540	ACENAPHTHYLENE	
9	C545	3-NITROANILINE	
10	C550	ACENAPHTHENE	*
11	C555	2,4-DINITROPHENOL	**
12	C560	4-NITROPHENOL	**
13	C565	DIBENZOFURAN	
14	C570	2,4-DINITROTOLUENE	
15	C575	2,6-DINITROTOLUENE	
16	C580	DIETHYLPHTHALATE	
17	C585	4-CHLOROPHENYL-PHENYLETHER	
18	C590	FLUORENE	
19	C595	4-NITROANILINE	
20	C625	2-FLUOROBIPHENYL	(SURROGATE)
21	C635	2,4,6-TRIBROMOPHENOL	(SURROGATE)

000297

Quantitation Report File: HSD200325

000298

Data: HSD200325.TI
03/25/89 16:10:00
Sampl : HSL-D STANDARD 3/25/89
Conds.: 20 NG INJECTION
F rmula: Instrument: FINN W ight: 0.000
Submitted by: QC INC Analyst: WSS Acct. No.: HSD20032

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	C150 ACENAPHTHENE D8	INTERNAL STANDARD
2	C510 HEXACHLOROCYCLOPENTADIENE	
3	C515 2,4,6-TRICHLOROPHENOL	
4	C520 2,4,5-TRICHLOROPHENOL	
5	C525 2-CHLORONAPHTHALENE	
6	C530 2-NITROANILINE	
7	C535 DIMETHYL PHTHALATE	
8	C540 ACENAPHTHYLENE	
9	C545 3-NITROANILINE	
10	C550 ACENAPHTHENE	
11	C555 2,4-DINITROPHENOL	
12	C560 4-NITROPHENOL	
13	C565 DIBENZOFURAN	
14	C570 2,4-DINITROTOLUENE	
15	C543 2,6-DINITROTOLUENE	
16	C580 DIETHYL PHTHALATE	
17	C585 4-CHLOROPHENYL PHENYL ETHER	
18	C590 FLUORENE	
19	C595 4-NITROANILINE	
20	CS25 2-FLUOROBIPHENYL	SURROGATE
21	CS55 2,4,6-TRIBROMOPHENOL	SURROGATE

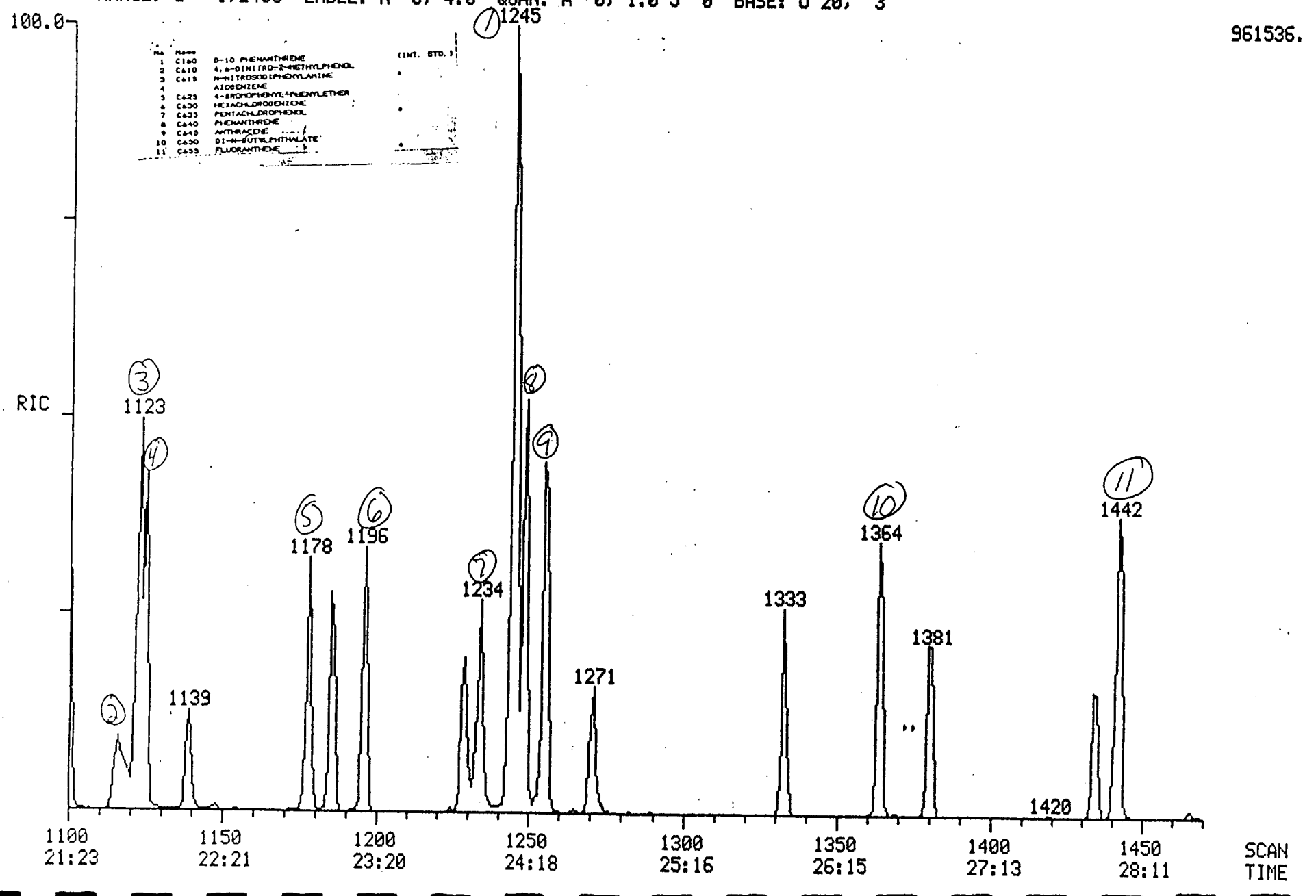
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	164	1008	19:36	1	1.000	A BB	578858.	40.000 UG/ML	9.09
2	237	875	17:01	1	0.868	A BB	45186.	20.000 UG/ML	4.55
3	196	894	17:23	1	0.887	A BB	100343.	20.000 UG/ML	4.55
4	196	908	17:39	1	0.901	A VB	86229.	20.000 UG/ML	4.55
5	162	914	17:46	1	0.907	A BB	347841.	20.000 UG/ML	4.55
6	65	945	18:22	1	0.937	A BB	109239.	20.000 UG/ML	4.55
7	163	982	19:05	1	0.974	A BB	346287.	20.000 UG/ML	4.55
8	152	981	19:04	1	0.973	A BV	506848.	20.000 UG/ML	4.55
9	138	1014	19:43	1	1.006	A BB	103234.	20.000 UG/ML	4.55
10	154	1012	19:40	1	1.004	A BB	307503.	20.000 UG/ML	4.55
11	184	1035	20:07	1	1.027	A*BB	11492.	20.000 UG/ML	4.55
12	139	1071	20:49	1	1.062	A BB	25562.	20.000 UG/ML	4.55
13	168	1039	20:12	1	1.031	A BB	558171.	20.000 UG/ML	4.55
14	165	1053	20:28	1	1.045	A BB	84009.	20.000 UG/ML	4.55
15	165	991	19:16	1	0.983	A VB	69793.	20.000 UG/ML	4.55
16	149	1098	21:21	1	1.089	A BB	313484.	20.000 UG/ML	4.55
17	204	1100	21:23	1	1.091	A BB	142766.	20.000 UG/ML	4.55
18	166	1094	21:16	1	1.085	A BB	327764.	20.000 UG/ML	4.55
19	138	1116	21:42	1	1.107	A BB	76028.	20.000 UG/ML	4.55
20	172	904	17:34	1	0.897	A BV	389063.	20.000 UG/ML	4.55
21	330	1138	22:07	1	1.129	A BB	30494.	20.000 UG/ML	4.55

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	19:36	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	17:01	1.00	0.868	1.00	20.00	20.00	0.156	0.156	1.00
3	17:23	1.00	0.887	1.00	20.00	20.00	0.347	0.347	1.00
4	17:39	1.00	0.901	1.00	20.00	20.00	0.298	0.298	1.00
5	17:46	1.00	0.907	1.00	20.00	20.00	1.202	1.202	1.00
6	18:22	1.00	0.937	1.00	20.00	20.00	0.377	0.377	1.00
7	19:05	1.00	0.974	1.00	20.00	20.00	1.196	1.196	1.00
8	19:04	1.00	0.973	1.00	20.00	20.00	1.751	1.751	1.00
9	19:43	1.00	1.006	1.00	20.00	20.00	0.357	0.357	1.00
10	19:40	1.00	1.004	1.00	20.00	20.00	1.062	1.062	1.00
11	20:07	1.00	1.027	1.00	20.00	20.00	0.040	0.040	1.00
12	20:49	1.00	1.062	1.00	20.00	20.00	0.088	0.088	1.00
13	20:12	1.00	1.031	1.00	20.00	20.00	1.929	1.929	1.00
14	20:28	1.00	1.045	1.00	20.00	20.00	0.290	0.290	1.00
15	19:16	1.00	0.983	1.00	20.00	20.00	0.241	0.241	1.00
16	21:21	1.00	1.089	1.00	20.00	20.00	1.083	1.083	1.00
17	21:23	1.00	1.091	1.00	20.00	20.00	0.493	0.493	1.00
18	21:16	1.00	1.085	1.00	20.00	20.00	1.132	1.132	1.00
19	21:42	1.00	1.107	1.00	20.00	20.00	0.263	0.263	1.00
20	17:34	1.00	0.897	1.00	20.00	20.00	1.344	1.344	1.00
21	22:07	1.00	1.129	1.00	20.00	20.00	0.105	0.105	1.00

RIC
03/25/89 16:10:00
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 20 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSD200325 #1
CALI: HSD200325 #3

SCANS 1100 TO 1470



No	Name	
1	C160	D-10 PHENANTHRENE (INT. STD.)
2	C610	4,6-DINITRO-2-METHYLPHENOL
3	C615	N-NITROSODIPHENYLAMINE
4		AIDBENZENE
5	C625	4-BROMOPHENYL-PHENYLETHER
6	C630	HEXACHLOROBENZENE
7	C635	PENTACHLOROPHENOL
8	C640	PHENANTHRENE
9	C645	ANTHRACENE
10	C650	DI-N-BUTYLPHTHALATE
11	C655	FLUORANTHENE

000300

Quantitation Report File: HSD200325

00030

Data: HSD200325.TI
03/25/89 16:10:00
Sample: HSL-D STANDARD 3/25/89
C nds.: 20 NG INJECTION
Formula: Instrument: FINN Weight: 0.000
Submitt d by: QC INC Analyst: WSS Acct. No.: HSD20032

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI60 PHENANTHRENE D10	INTERNAL STANDARD
2	C610 4,6-DINITRO-2-METHYL PHENOL	
3	C615 N-NITROSODIPHENYLAMINE	
4	AZOBENZENE	
5	C625 4-BROMOPHENYL PHENYL ETHER	
6	C630 HEXACHLOROBENZENE	
7	C635 PENTACHLOROPHENOL	
8	C640 PHENANTHRENE	
9	C645 ANTHRACENE	
10	C650 DI-N-BUTYL PHTHALATE	
11	C655 FLUORANTHENE	

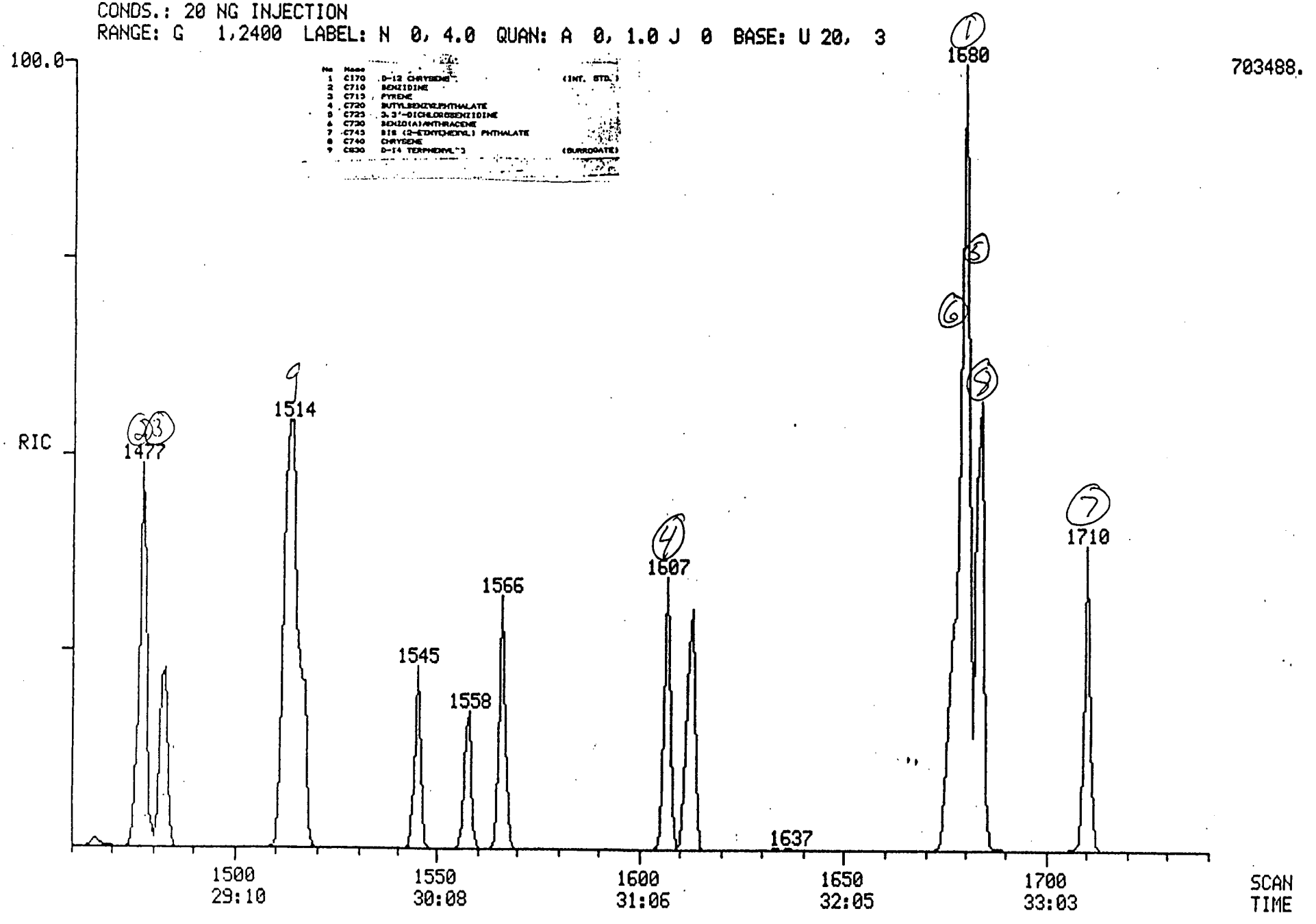
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	188	1245	24:12	1	1.000	A BV	785325.	40.000 UG/ML	16.67
2	198	1118	21:44	1	0.898	A BB	23458.	20.000 UG/ML	8.33
3	169	1123	21:50	1	0.902	A BB	216433.	20.000 UG/ML	8.33
4	77	1125	21:52	1	0.904	A BB	331470.	20.000 UG/ML	8.33
5	248	1178	22:54	1	0.946	A BB	72513.	20.000 UG/ML	8.33
6	284	1196	23:15	1	0.961	A BB	79418.	20.000 UG/ML	8.33
7	266	1232	23:57	1	0.990	A*BB	15360.	20.000 UG/ML	8.33
8	178	1248	24:16	1	1.002	A BV	402204.	20.000 UG/ML	8.33
9	178	1255	24:24	1	1.008	A VB	374712.	20.000 UG/ML	8.33
10	149	1364	26:31	1	1.096	A BB	394283.	20.000 UG/ML	8.33
11	202	1442	28:02	1	1.158	A BB	305297.	20.000 UG/ML	8.33

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	24:12	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	21:44	1.00	0.898	1.00	20.00	20.00	0.060	0.060	1.00
3	21:50	1.00	0.902	1.00	20.00	20.00	0.551	0.551	1.00
4	21:52	1.00	0.904	1.00	20.00	20.00	0.844	0.844	1.00
5	22:54	1.00	0.946	1.00	20.00	20.00	0.185	0.185	1.00
6	23:15	1.00	0.961	1.00	20.00	20.00	0.202	0.202	1.00
7	23:57	1.00	0.990	1.00	20.00	20.00	0.039	0.039	1.00
8	24:16	1.00	1.002	1.00	20.00	20.00	1.024	1.024	1.00
9	24:24	1.00	1.008	1.00	20.00	20.00	0.954	0.954	1.00
10	26:31	1.00	1.096	1.00	20.00	20.00	1.004	1.004	1.00
11	28:02	1.00	1.158	1.00	20.00	20.00	0.778	0.778	1.00

RIC
03/25/89 16:10:00
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 20 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSD200325 #1
CALI: HSD200325 #3

SCANS 1460 TO 1740



No	Name		
1	C170	D-12 CHRYSENE	(INT. STD.)
2	C710	BENZIDINE	
3	C715	PYRENE	
4	C720	BUTYLBENZYLPHTHALATE	
5	C725	3,3'-DICHLOROBENZIDINE	
6	C730	BENZO(A)ANTHRACENE	
7	C745	BIS (2-ETHYLHEXYL) PHTHALATE	
8	C740	CHRYSENE	
9	C830	D-14 TERPHENYL"3	(SURROGATE)

000302

Quantitation Rep rt File: HSD200325

Data: HSD200325.TI
03/25/89 16:10:00
Sample: HSL-D STANDARD 3/25/89
Conds.: 20 NG INJECTION
Formula: Instrum nt: FINN Weight: 0.000
Submitt d by: QC INC Analyst: WSS Acct. No.: HSD20032

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI70 CHRYSENE D12	INTERNAL STANDARD
2	C710 BENZIDINE	
3	C715 PYRENE	
4	C720 BUTYLBENZYLPHTHALATE	
5	C725 3,3'-DICHLOROBENZIDINE	
6	C730 BENZO(A)ANTHRACENE	
7	C745 BIS(2-ETHYLHEXYL)PHTHALATE	
8	C740 CHRYSENE	
9	CS30 TERPHENYL D14	SURROGATE

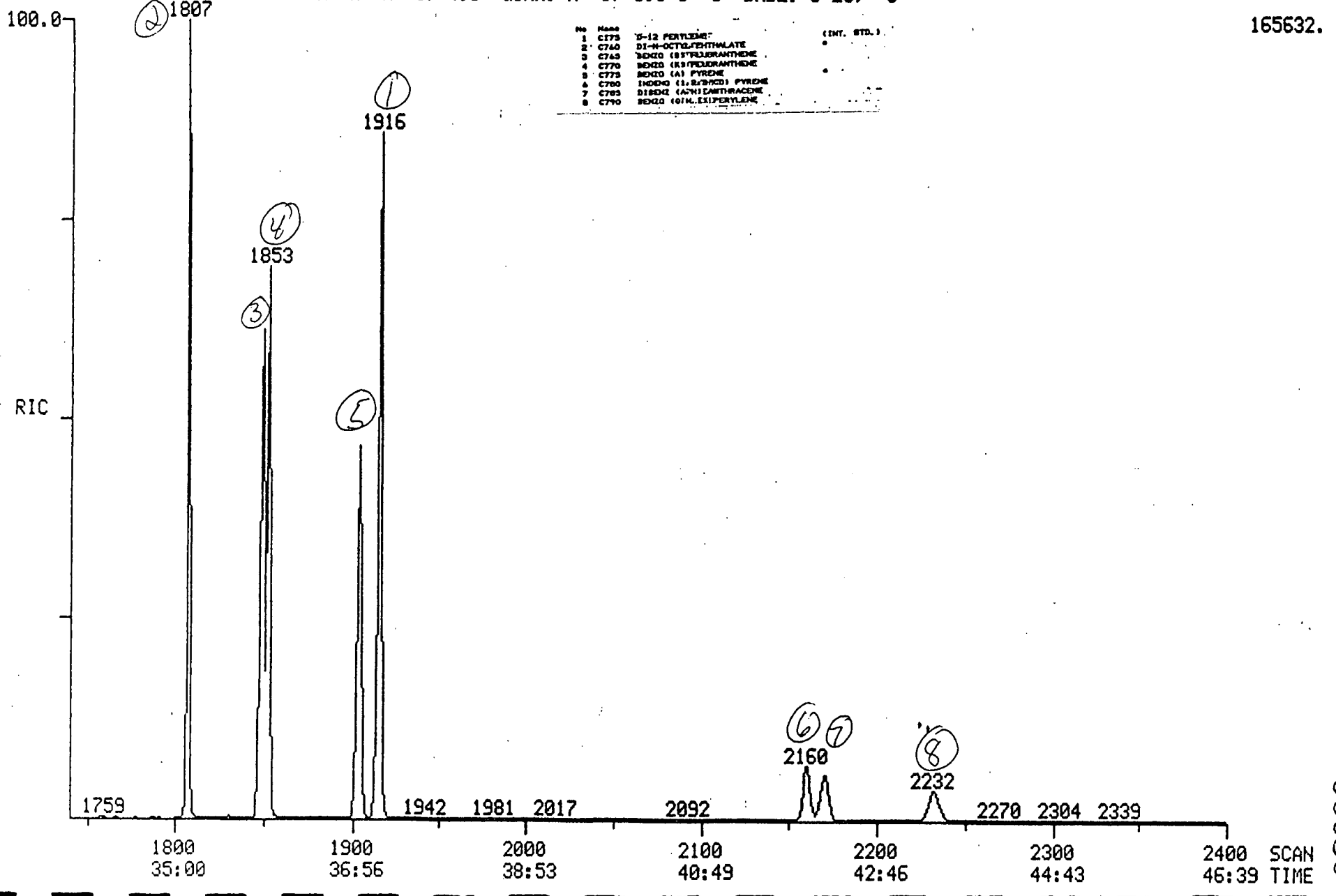
N	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%T t
1	240	1680	32:40	1	1.000	A BB	435449.	40.000 UG/ML	20.00
2	184	1477	28:43	1	0.879	A BB	10632.	20.000 UG/ML	10.00
3	202	1477	28:43	1	0.879	A BB	291464.	20.000 UG/ML	10.00
4	149	1607	31:14	1	0.957	A BV	107448.	20.000 UG/ML	10.00
5	252	1683	32:43	1	1.002	A BB	46439.	20.000 UG/ML	10.00
6	228	1677	32:36	1	0.998	A BV	190192.	20.000 UG/ML	10.00
7	149	1710	33:15	1	1.018	A BB	137356.	20.000 UG/ML	10.00
8	228	1684	32:44	1	1.002	A VB	204120.	20.000 UG/ML	10.00
9	244	1514	29:26	1	0.901	A BB	250189.	20.000 UG/ML	10.00

N	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Rati
1	32:40	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	28:43	1.00	0.879	1.00	20.00	20.00	0.049	0.049	1.00
3	28:43	1.00	0.879	1.00	20.00	20.00	1.339	1.339	1.00
4	31:14	1.00	0.957	1.00	20.00	20.00	0.494	0.494	1.00
5	32:43	1.00	1.002	1.00	20.00	20.00	0.213	0.213	1.00
6	32:36	1.00	0.998	1.00	20.00	20.00	0.874	0.874	1.00
7	33:15	1.00	1.018	1.00	20.00	20.00	0.631	0.631	1.00
8	32:44	1.00	1.002	1.00	20.00	20.00	0.938	0.938	1.00
9	29:26	1.00	0.901	1.00	20.00	20.00	1.149	1.149	1.00

RIC
03/25/89 16:10:00
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 20 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSD200325 #1
CALI: HSD200325 #3

SCANS 1740 TO 2400



No	Name		
1	C175	D-12 PERYLENE	(INT. STD.)
2	C760	DI-N-OCTYLPHTHALATE	
3	C765	BENZO (B)FLUORANTHENE	
4	C770	BENZO (K)FLUORANTHENE	
5	C775	BENZO (A) PYRENE	
6	C780	INDENO (1,2,3-CD) PYRENE	
7	C785	DIBENZ (A,H)ANTHRACENE	
8	C790	BENZO (GHI)PERYLENE	

000307

Quantitation Report File: HSD200325

000305

Data: HSD200325.TI
03/25/89 16:10:00
Sample: HSL-D STANDARD 3/25/89
Conds.: 20 NG INJECTION
Formula: Instrument: FINN W ight: 0.000
Submitted by: QC INC Analyst: WSS Acct. No.: HSD20032

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

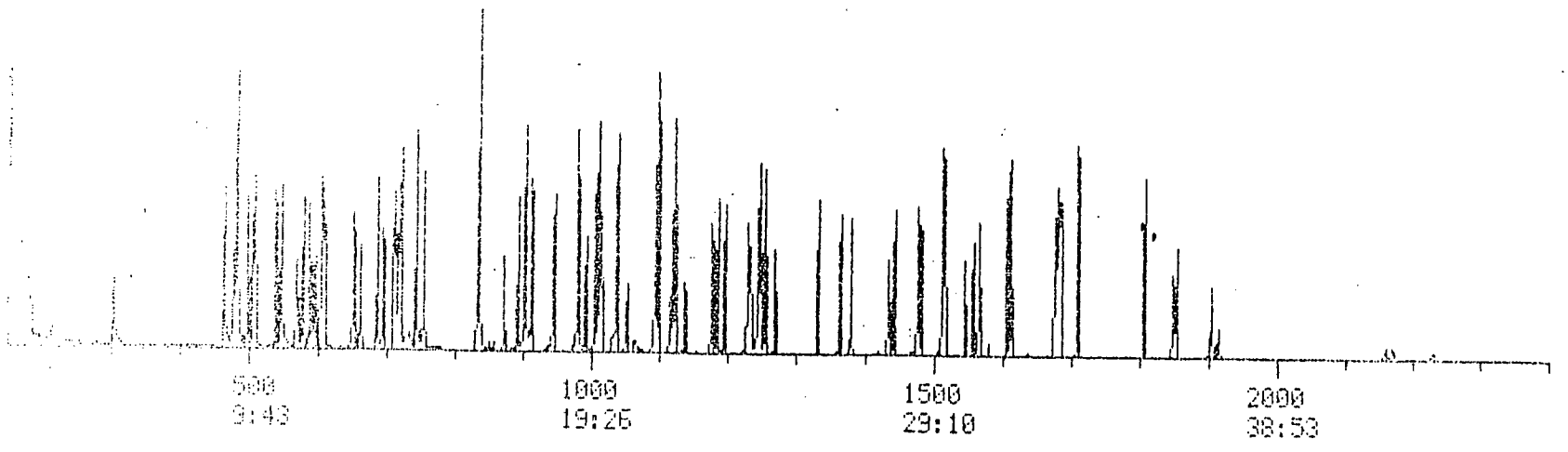
No	Name	
1	CI75 PERYLENE D12	INTERNAL STANDARD
2	C760 DI-N-OCTYLPHTHALATE	
3	C765 BENZO(B)FLUORANTHENE	
4	C770 BENZO(K)FLUORANTHENE	
5	C775 BENZO(A)PYRENE	
6	C780 INDENO(1,2,3-CD)PYRENE	
7	C785 DIBENZO(A,H)ANTHRACENE	
8	C790 BENZO(G,H,I)PERYLENE	

N	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%T t
1	264	1916	37:15	1	1.000	A BB	128672.	40.000 UG/ML	22.22
2	149	1807	35:08	1	0.943	A BB	175008.	20.000 UG/ML	11.11
3	252	1849	35:57	1	0.965	A BV	94960.	20.000 UG/ML	11.11
4	252	1853	36:01	1	0.967	A VB	86522.	20.000 UG/ML	11.11
5	252	1904	37:01	1	0.994	A BB	74996.	20.000 UG/NL	11.11
6	276	2160	41:59	1	1.127	A BV	22056.	20.000 UG/ML	11.11
7	278	2171	42:12	1	1.133	A BB	19926.	20.000 UG/ML	11.11
8	276	2232	43:23	1	1.165	A BB	16465.	20.000 UG/ML	11.11

N	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	37:15	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	35:08	1.00	0.943	1.00	20.00	20.00	2.720	2.720	1.00
3	35:57	1.00	0.965	1.00	20.00	20.00	1.476	1.476	1.00
4	36:01	1.00	0.967	1.00	20.00	20.00	1.345	1.345	1.00
5	37:01	1.00	0.994	1.00	20.00	20.00	1.166	1.166	1.00
6	41:59	1.00	1.127	1.00	20.00	20.00	0.343	0.343	1.00
7	42:12	1.00	1.133	1.00	20.00	20.00	0.310	0.310	1.00
8	43:23	1.00	1.165	1.00	20.00	20.00	0.256	0.256	1.00

FILE:
SEPT 30 12:28:00
SAMPLE: HSL-D STANDARD 3/25/89
COMMS.: 50 NG INJECTION
RANGE: C 1.2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

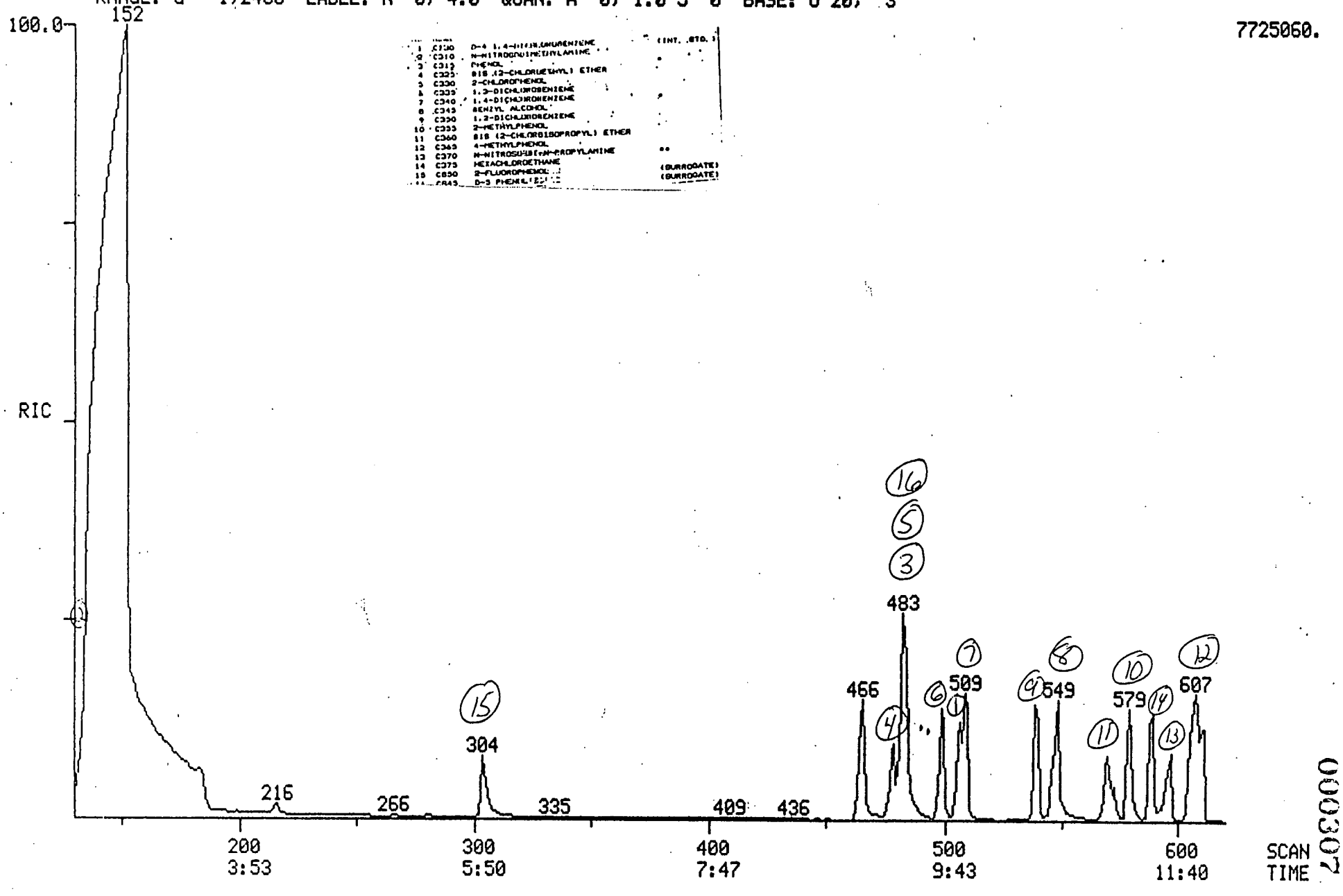
DATA: HSD500325 #1 SCANS 150 TO 2400
CALI: CALTAB #3



000306

RIC
03/25/89 12:28:00
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 50 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSD500325 #1 SCANS 130 TO 620
CALI: HSD500325 #3



000307

Quantitation Report File: HSD500325

000308

Data: HSD500325.TI
03/25/89 12:28:00
Sample: HSL-D STANDARD 3/25/89
Conds.: 50 NG INJECTION
Formula: Instrument: FINN Weight: 0.000
Submitted by: GC INC Analyst: WSS Acct. No.: HSD50032

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	C130 1,4-DICHLOROBENZENE D4	INTERNAL STANDARD
2	N-NITROSODIMETHYLAMINE	
3	C315 PHENOL	
4	C325 BIS(2-CHLOROETHYL) ETHER	
5	C330 2-CHLOROPHENOL	
6	C335 1,3-DICHLOROBENZENE	
7	C340 1,4-DICHLOROBENZENE	
8	C345 BENZYL ALCOHOL	
9	C350 1,2-DICHLOROBENZENE	
10	C355 2-METHYLPHENOL	
11	C360 BIS(2-CHLOROISOPROPYL)ETHER	
12	C365 4-METHYLPHENOL	
13	C370 N-NITROSO-DI-PROPYLAMINE	
14	C375 HEXACHLOROETHANE	
15	C550 2-FLUOROPHENOL	SURROGATE
16	C545 PHENOL D5	SURROGATE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	152	306	9:50	1	1.000	A BB	384112.	40.000	UG/ML	5.06
2	74	133	2:35	1	0.263	A BV	444736.	50.000	UG/ML	6.33
3	94	484	9:25	1	0.957	A VB	812504.	50.000	UG/ML	6.33
4	93	479	9:19	1	0.947	A BB	702040.	50.000	UG/ML	6.33
5	128	483	9:23	1	0.955	A BB	637101.	50.000	UG/ML	6.33
6	146	499	9:42	1	0.986	A BV	693416.	50.000	UG/ML	6.33
7	146	509	9:54	1	1.006	A VB	708721.	50.000	UG/ML	6.33
8	108	549	10:40	1	1.085	A BB	649049.	50.000	UG/ML	6.33
9	146	539	10:29	1	1.065	A BB	681156.	50.000	UG/ML	6.33
10	108	579	11:15	1	1.144	A BB	557307.	50.000	UG/ML	6.33
11	45	570	11:05	1	1.126	A BB	937824.	50.000	UG/ML	6.33
12	108	607	11:48	1	1.200	A BB	632354.	50.000	UG/ML	6.33
13	70	597	11:36	1	1.180	A BV	502451.	50.000	UG/ML	6.33
14	117	589	11:27	1	1.164	A BB	328630.	50.000	UG/ML	6.33
15	112	304	9:59	1	0.601	A BB	567258.	50.000	UG/L	6.33
16	99	482	9:27	1	0.953	A BB	704911.	50.000	UG/ML	6.33

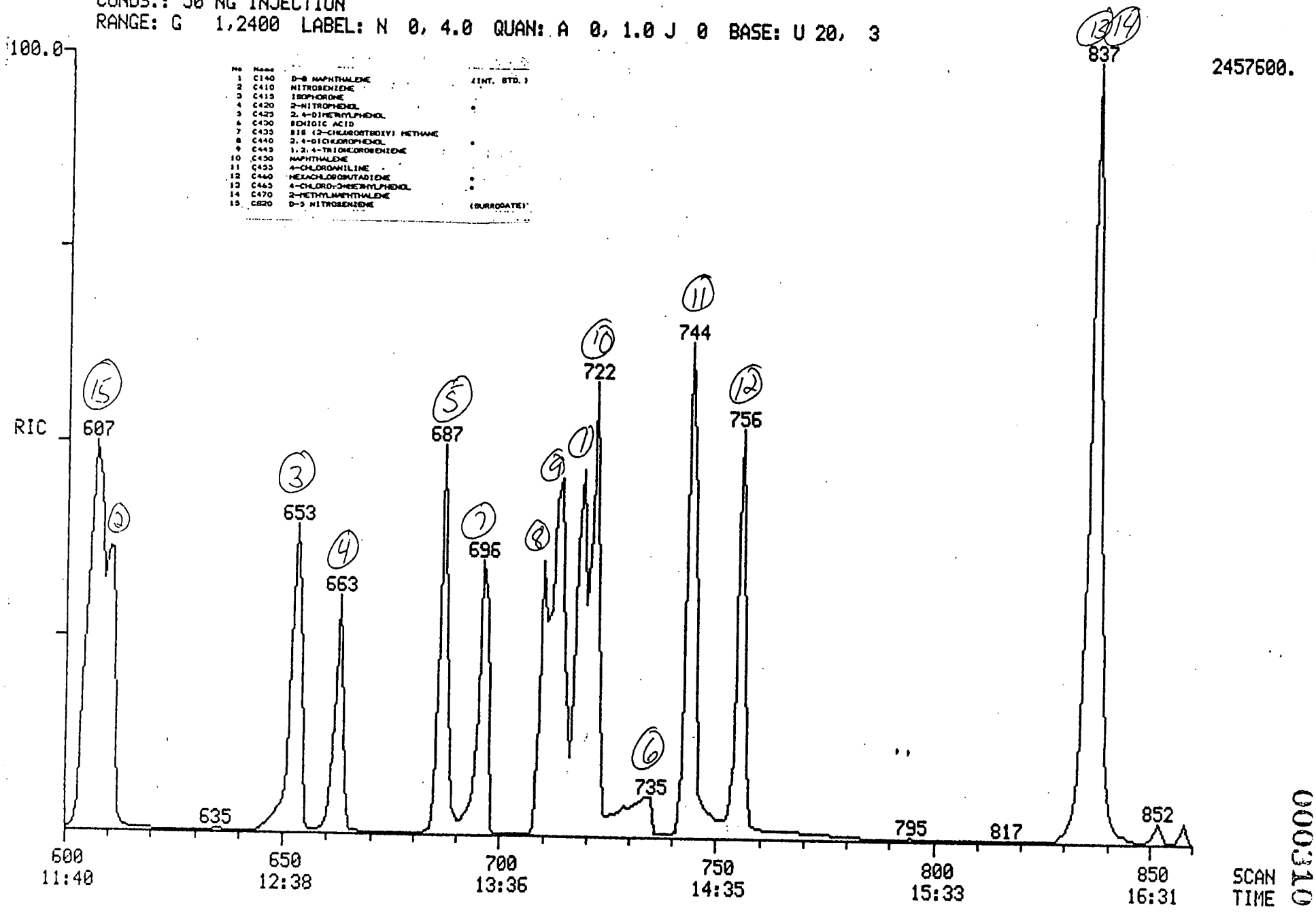
No	Resp(L)	Ratio	Ratio(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	[illegible]	[illegible]	[illegible]	1.00	40.00	40.00	1.000	1.000	1.00
2	[illegible]	[illegible]	[illegible]	1.00	50.00	50.00	0.926	0.926	1.00
3	[illegible]	[illegible]	[illegible]	1.00	50.00	50.00	1.692	1.692	1.00
4	[illegible]	[illegible]	[illegible]	1.00	50.00	50.00	1.462	1.462	1.00
[illegible]	[illegible]	[illegible]	[illegible]	1.00	50.00	50.00	1.327	1.327	1.00
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	50.00	50.00	1.444	1.444	1.00
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	50.00	50.00	1.476	1.476	1.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
8	10:40	1.00	1.085	1.00	50.00	50.00	1.352	1.352	1.00
9	10:29	1.00	1.065	1.00	50.00	50.00	1.419	1.419	1.00
10	11:15	1.00	1.144	1.00	50.00	50.00	1.161	1.161	1.00
11	11:05	1.00	1.126	1.00	50.00	50.00	1.953	1.953	1.00
12	11:48	1.00	1.200	1.00	50.00	50.00	1.317	1.317	1.00
13	11:36	1.00	1.180	1.00	50.00	50.00	1.046	1.046	1.00
14	11:27	1.00	1.164	1.00	50.00	50.00	0.684	0.684	1.00
15	5:55	1.00	0.601	1.00	50.00	50.00	1.181	1.181	1.00
16	9:22	1.00	0.953	1.00	50.00	50.00	1.468	1.468	1.00

RIC
03/25/89 12:28:00
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 50 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSD500325 #1
CALI: HSD500325 #3

SCANS 600 TO 860



No	Mass		
1	C140	D-8 NAPHTHALENE	(INT. STD.)
2	C410	NITROBENZENE	
3	C415	ISOPHORONE	
4	C420	2-NITROPHENOL	
5	C425	2,4-DIMETHYLPHENOL	
6	C430	BENZOIC ACID	
7	C435	BIS (2-CHLOROETHOXY) METHANE	
8	C440	2,4-DICHLOROPHENOL	
9	C445	1,2,4-TRICHLOROBENZENE	
10	C450	NAPHTHALENE	
11	C455	4-CHLOROANILINE	
12	C460	HEXACHLOROBUTADIENE	
13	C465	4-CHLORO-3-METHYLPHENOL	
14	C470	2-METHYLNAPHTHALENE	
15	C820	D-5 NITROBENZENE	(SURROGATE)

000310

Quantitation Report File: HSD500325

000311

Data: HSD500325.TI
03/25/89 12:28:00
Sample: HSL-D STANDARD 3/25/89
Conds.: 50 NG INJECTION
Formula: Instrument: FINN Weight: 0.000
Submitted by: QC INC Analyst: WSS Acct. No.: HSD50032

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	C140 NAPHTHALENE D8	INTERNAL STANDARD
2	C410 NITROBENZENE	
3	C415 ISOPHORONE	
4	C420 2-NITROPHENOL	
5	C425 2,4-DIMETHYLPHENOL	
6	C430 BENZOIC ACID	
7	C435 BIS(2-CHLOROETHOXY)METHANE	
8	C440 2,4-DICHLOROPHENOL	
9	C445 1,2,4-TRICHLOROBENZENE	
10	C450 NAPHTHALENE	
11	C455 4-CHLOROANILINE	
12	C460 HEXACHLOROBUTADIENE	
13	C465 4-CHLORO-3-METHYLPHENOL	
14	C470 2-METHYLNAPHTHALENE	
15	CS20 NITROBENZENE D5	SURROGATE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	136	719	13:59	1	1.000	A BB	1056430.	40.000 UG/ML	5.41
2	77	611	11:53	1	0.850	A BB	926937.	50.000 UG/ML	6.76
3	82	653	12:42	1	0.908	A BV	1088130.	50.000 UG/ML	6.76
4	139	663	12:53	1	0.922	A VB	351452.	50.000 UG/ML	6.76
5	122	687	13:21	1	0.955	A BB	473586.	50.000 UG/ML	6.76
6	122	734	14:16	1	1.021	A VB	188418.	50.000 UG/ML	6.76
7	93	696	13:32	1	0.968	A VB	736160.	50.000 UG/ML	6.76
8	162	710	13:48	1	0.987	A BB	550615.	50.000 UG/ML	6.76
9	180	714	13:53	1	0.993	A BB	580768.	50.000 UG/ML	6.76
10	128	722	14:02	1	1.004	A VB	1071930.	50.000 UG/ML	6.76
11	127	744	14:28	1	1.035	A BV	978172.	50.000 UG/ML	6.76
12	225	756	14:42	1	1.051	A BB	290734.	50.000 UG/ML	6.76
13	107	837	16:16	1	1.164	A BB	481160.	50.000 UG/ML	6.76
14	142	837	16:16	1	1.164	A BV	1513540.	50.000 UG/ML	6.76
15	82	607	11:48	1	0.844	A BB	703462.	50.000 UG/ML	6.76

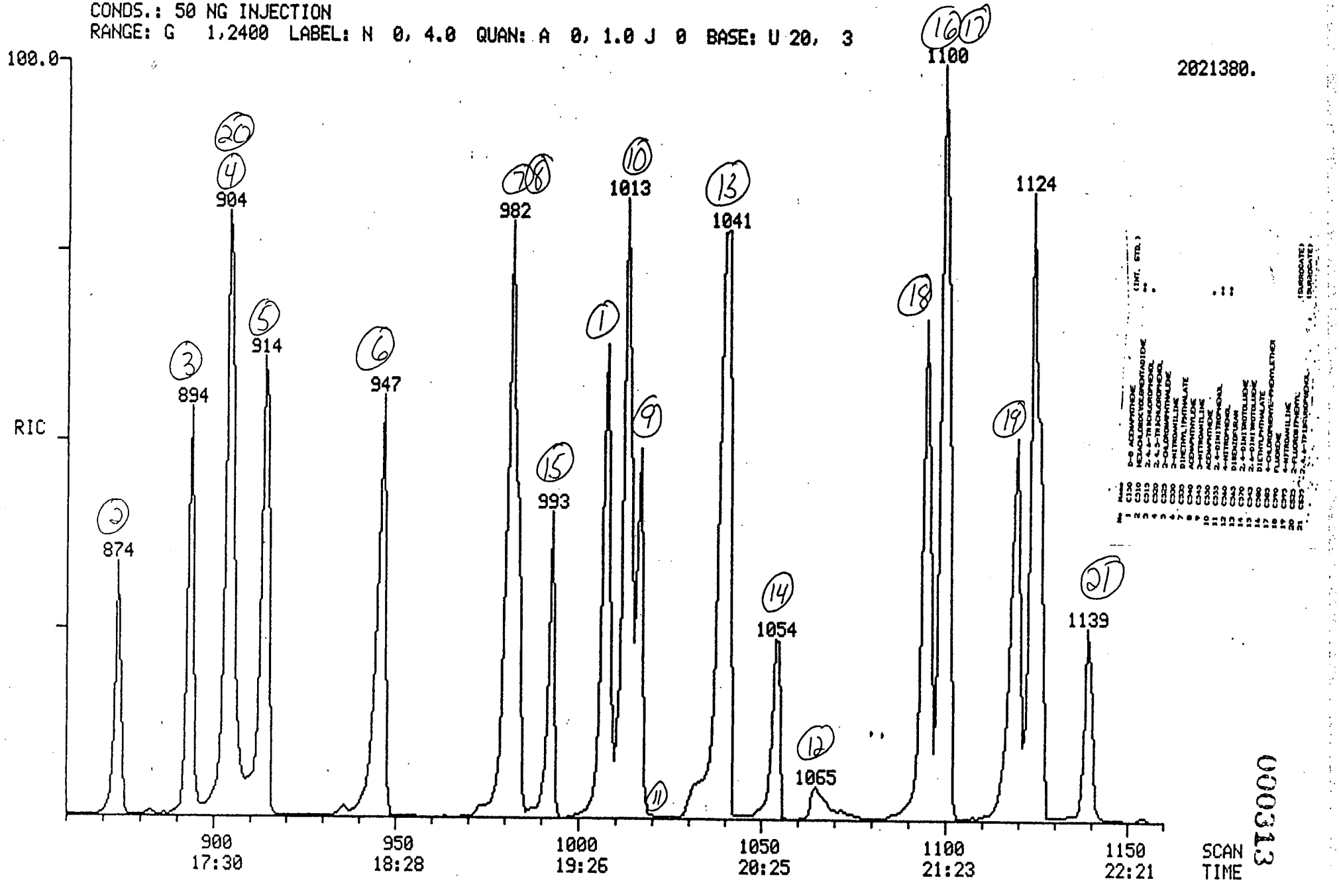
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	13:59	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	11:53	1.00	0.850	1.00	50.00	50.00	0.702	0.702	1.00
3	12:42	1.00	0.908	1.00	50.00	50.00	0.824	0.824	1.00
4	12:53	1.00	0.922	1.00	50.00	50.00	0.266	0.266	1.00
5	13:21	1.00	0.955	1.00	50.00	50.00	0.359	0.359	1.00
6	14:16	1.00	1.021	1.00	50.00	50.00	0.143	0.143	1.00
7	13:32	1.00	0.968	1.00	50.00	50.00	0.557	0.557	1.00
8	13:48	1.00	0.987	1.00	50.00	50.00	0.417	0.417	1.00
9	13:53	1.00	0.993	1.00	50.00	50.00	0.440	0.440	1.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
10	14:02	1.00	1.004	1.00	50.00	50.00	0.812	0.812	1.00
11	14:28	1.00	1.035	1.00	50.00	50.00	0.741	0.741	1.00
12	14:42	1.00	1.051	1.00	50.00	50.00	0.220	0.220	1.00
13	16:16	1.00	1.164	1.00	50.00	50.00	0.364	0.364	1.00
14	16:16	1.00	1.164	1.00	50.00	50.00	1.146	1.146	1.00
15	11:48	1.00	0.844	1.00	50.00	50.00	0.533	0.533	1.00

RIC
03/25/89 12:28:00
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 50 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSD500325 #1
CALI: HSD500325 #3

SCANS 860 TO 1160



000313

Quantitation Report File: HSD500325

Data. HSD500325.TI
03/25/89 12:28:00

000314

Sample: HSL-D STANDARD 3/25/89
Conds.: 50 NG INJECTION
Formula: Instrument: FINN Weight: 0.000
Submitted by: QC INC Analyst: WSS Acct. No.: HSD50032

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	C150 ACENAPHTHENE D8	INTERNAL STANDARD
2	C510 HEXACHLOROCYCLOPENTADIENE	
3	C515 2,4,6-TRICHLOROPHENOL	
4	C520 2,4,5-TRICHLOROPHENOL	
5	C525 2-CHLORONAPHTHALENE	
6	C530 2-NITROANILINE	
7	C535 DIMETHYL PHTHALATE	
8	C540 ACENAPHTHYLENE	
9	C545 3-NITROANILINE	
10	C550 ACENAPHTHENE	
11	C555 2,4-DINITROPHENOL	
12	C560 4-NITROPHENOL	
13	C565 DIBENZOFURAN	
14	C570 2,4-DINITROTOLUENE	
15	C543 2,6-DINITROTOLUENE	
16	C580 DIETHYL PHTHALATE	
17	C585 4-CHLOROPHENYL PHENYL ETHER	
18	C590 FLUORENE	
19	C595 4-NITROANILINE	
20	CS25 2-FLUOROBIPHENYL	SURROGATE
21	CS55 2,4,6-TRIBROMOPHENOL	SURROGATE

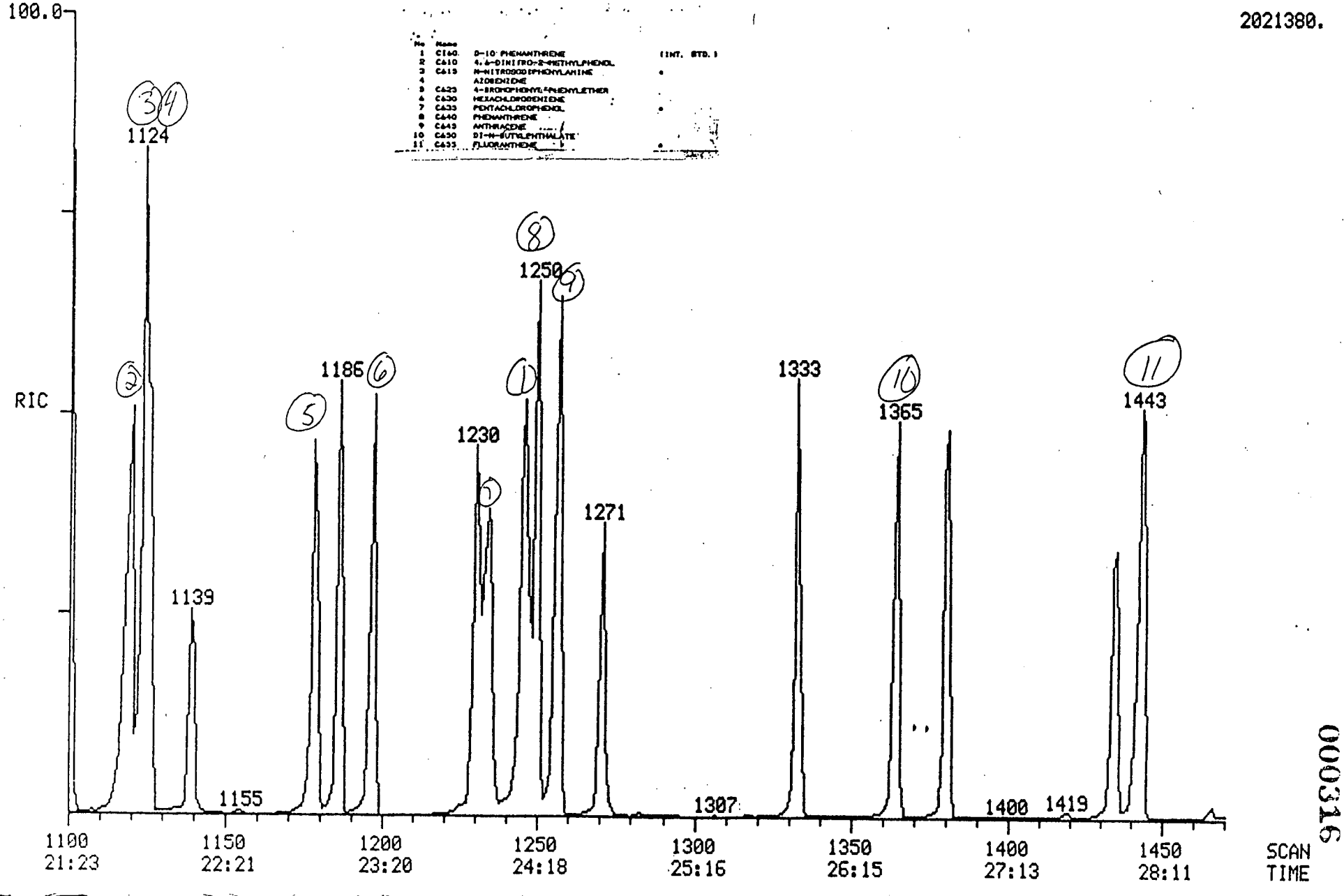
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	164	1008	19:36	1	1.000	A BB	628881.	40.000 UG/ML	3.85
2	237	874	16:59	1	0.867	A BB	193718.	50.000 UG/ML	4.81
3	196	894	17:23	1	0.887	A BB	317796.	50.000 UG/ML	4.81
4	196	905	17:36	1	0.898	A VB	327520.	50.000 UG/ML	4.81
5	162	914	17:46	1	0.907	A BB	907726.	50.000 UG/ML	4.81
6	65	947	18:25	1	0.939	A BB	603934.	50.000 UG/ML	4.81
7	163	984	19:08	1	0.976	A BB	904295.	50.000 UG/ML	4.81
8	152	982	19:05	1	0.974	A BV	1063590.	50.000 UG/ML	4.81
9	138	1017	19:46	1	1.009	A BB	563196.	50.000 UG/ML	4.81
10	154	1013	19:42	1	1.005	A BB	752322.	50.000 UG/ML	4.81
11	184	1031	20:03	1	1.023	A BB	71932.	50.000 UG/ML	4.81
12	139	1065	20:42	1	1.057	A BB	107956.	50.000 UG/ML	4.81
13	168	1040	20:13	1	1.032	A BB	1628670.	50.000 UG/ML	4.81
14	165	1054	20:29	1	1.046	A BB	288937	50.000 UG/ML	4.81
15	165	993	19:18	1	0.985	A VB	251433	50.000 UG/ML	4.81
16	149	1100	21:38	1	1.091	A BB	906170	50.000 UG/ML	4.81
17	204	1100	21:38	1	1.091	A BB	509200	50.000 UG/ML	4.81
18	[illegible]	1090	21:17	1	1.081	A BB	802267	50.000 UG/ML	4.81
19	[illegible]	1120	21:44	1	1.111	A BV	430488	50.000 UG/ML	4.81
[illegible]	[illegible]	904	17:34	1	0.897	A BV	888804.	50.000 UG/ML	4.81
[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	A BB	130482	50.000 UG/ML	4.81

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	19:36	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	16:59	1.00	0.867	1.00	50.00	50.00	0.246	0.246	1.00
3	17:23	1.00	0.887	1.00	50.00	50.00	0.404	0.404	1.00
4	17:36	1.00	0.898	1.00	50.00	50.00	0.417	0.417	1.00
5	17:46	1.00	0.907	1.00	50.00	50.00	1.155	1.155	1.00
6	18:25	1.00	0.939	1.00	50.00	50.00	0.768	0.768	1.00
7	19:08	1.00	0.976	1.00	50.00	50.00	1.150	1.150	1.00
8	19:05	1.00	0.974	1.00	50.00	50.00	1.353	1.353	1.00
9	19:46	1.00	1.009	1.00	50.00	50.00	0.716	0.716	1.00
10	19:42	1.00	1.005	1.00	50.00	50.00	0.957	0.957	1.00
11	20:03	1.00	1.023	1.00	50.00	50.00	0.092	0.092	1.00
12	20:42	1.00	1.057	1.00	50.00	50.00	0.137	0.137	1.00
13	20:13	1.00	1.032	1.00	50.00	50.00	2.072	2.072	1.00
14	20:29	1.00	1.046	1.00	50.00	50.00	0.368	0.368	1.00
15	19:18	1.00	0.985	1.00	50.00	50.00	0.320	0.320	1.00
16	21:23	1.00	1.091	1.00	50.00	50.00	1.153	1.153	1.00
17	21:23	1.00	1.091	1.00	50.00	50.00	0.648	0.648	1.00
18	21:17	1.00	1.086	1.00	50.00	50.00	1.021	1.021	1.00
19	21:46	1.00	1.111	1.00	50.00	50.00	0.548	0.548	1.00
20	17:34	1.00	0.897	1.00	50.00	50.00	1.131	1.131	1.00
21	22:09	1.00	1.130	1.00	50.00	50.00	0.170	0.170	1.00

RIC
03/25/89 12:28:00
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 50 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSD500325 #1
CALI: HSD500325 #3

SCANS 1100 TO 1470



000316

Quantitation R p rt Fil : HSD500325

000317

Data: HSD500325.TI
03/25/89 12:28:00
Sample: HSL-D STANDARD 3/25/89
Conds.: 50 NG INJECTION
Formula: Instrument: FINN W ight: 0.000
Submitted by: QC INC Analyst: WSS Acct. No.: HSD50032

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI60 PHENANTHRENE D10	INTERNAL STANDARD
2	C610 4,6-DINITRO-2-METHYL PHENOL	
3	C615 N-NITROSODIPHENYLAMINE	
4	AZOBENZENE	
5	C625 4-BROMOPHENYL PHENYL ETHER	
6	C630 HEXACHLOROBENZENE	
7	C635 PENTACHLOROPHENOL	
8	C640 PHENANTHRENE	
9	C645 ANTHRACENE	
10	C650 DI-N-BUTYL PHTHALATE	
11	C655 FLUORANTHENE	

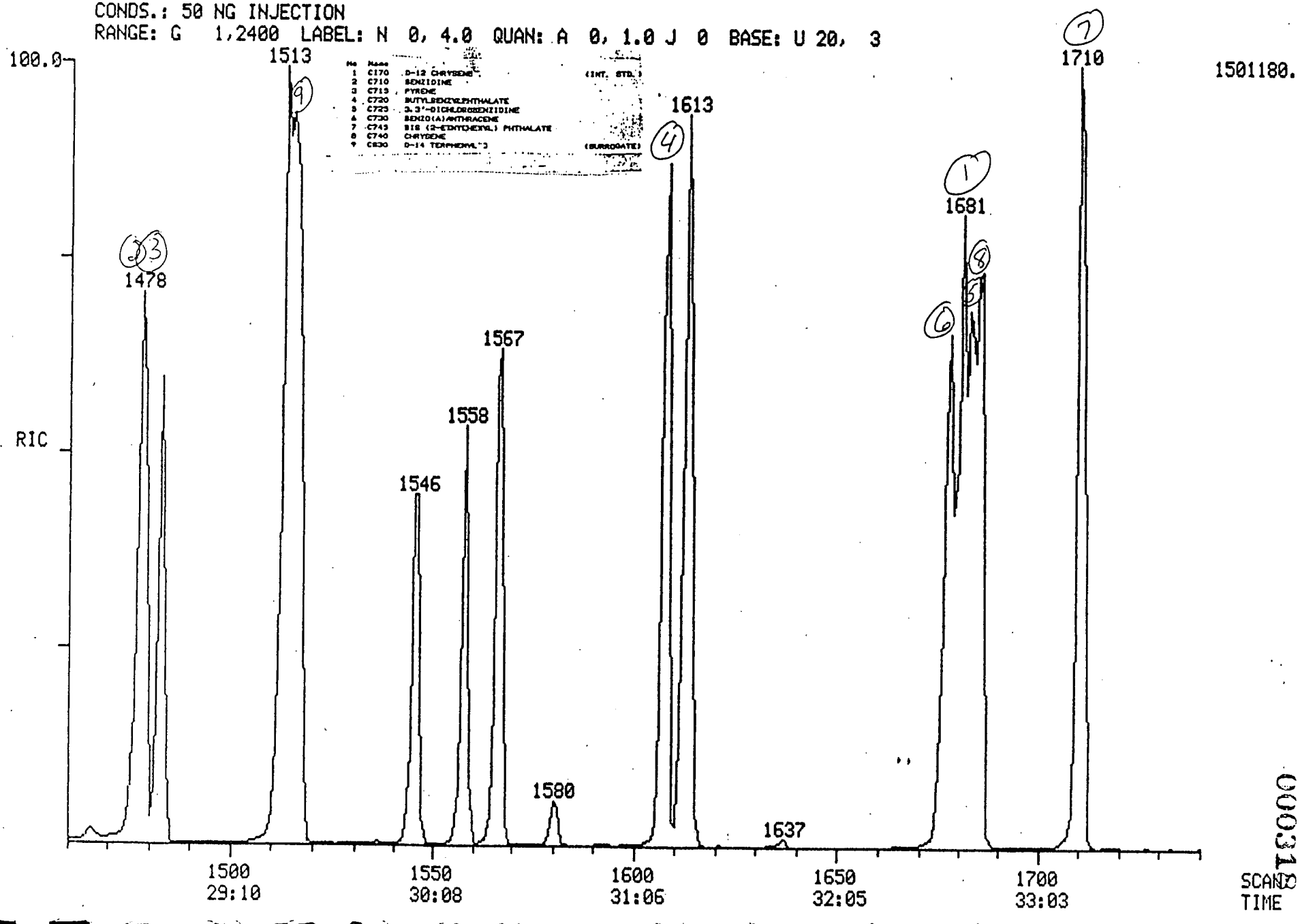
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	188	1246	24:13	1	1.000	A BV	827697.	40.000 UG/ML	7.41
2	198	1119	21:45	1	0.898	A BB	129774.	50.000 UG/ML	9.26
3	169	1124	21:51	1	0.902	A BB	597318.	50.000 UG/ML	9.26
4	77	1126	21:53	1	0.904	A BB	1171400.	50.000 UG/ML	9.26
5	248	1178	22:54	1	0.945	A BB	261378.	50.000 UG/ML	9.26
6	284	1197	23:16	1	0.961	A BB	296299.	50.000 UG/ML	9.26
7	266	1232	23:57	1	0.989	A BB	113752.	50.000 UG/ML	9.26
8	178	1250	24:18	1	1.003	A BV	969300.	50.000 UG/ML	9.26
9	178	1257	24:26	1	1.009	A VB	835646.	50.000 UG/ML	9.26
10	149	1365	26:32	1	1.096	A BB	921809.	50.000 UG/ML	9.26
11	202	1443	28:03	1	1.158	A BB	882393.	50.000 UG/ML	9.26

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	24:13	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	21:45	1.00	0.898	1.00	50.00	50.00	0.125	0.125	1.00
3	21:51	1.00	0.902	1.00	50.00	50.00	0.577	0.577	1.00
4	21:53	1.00	0.904	1.00	50.00	50.00	1.132	1.132	1.00
5	22:54	1.00	0.945	1.00	50.00	50.00	0.253	0.253	1.00
6	23:16	1.00	0.961	1.00	50.00	50.00	0.286	0.286	1.00
7	23:57	1.00	0.989	1.00	50.00	50.00	0.110	0.110	1.00
8	24:18	1.00	1.003	1.00	50.00	50.00	0.937	0.937	1.00
9	24:26	1.00	1.009	1.00	50.00	50.00	0.808	0.808	1.00
10	26:32	1.00	1.096	1.00	50.00	50.00	0.891	0.891	1.00
11	28:03	1.00	1.158	1.00	50.00	50.00	0.853	0.853	1.00

RIC
03/25/89 12:28:00
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 50 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSD500325 #1
CALI: HSD500325 #3

SCANS 1460 TO 1740



No	Name	
1	C170 D-12 CHRYSENE	(INT. STD.)
2	C710 BENZIDINE	
3	C715 PYRENE	
4	C720 BUTYLBENZYLPHTHALATE	
5	C725 3,3'-DICHLOROBENZIDINE	
6	C730 BENZO(A)ANTHRACENE	
7	C745 BIS (2-ETHYLHEXYL) PHTHALATE	
8	C740 CHRYSENE	
9	C830 D-14 TERPHENYL"3	(SURROGATE)

Quantitation Report File: HSD500325

Data: HSD500325.TI
03/25/89 12:28:00
Sample: HSL-D STANDARD 3/25/89
Conds.: 50 NG INJECTION
Formula: Instrument: FINN Weight: 0.000
Submitted by: QC INC Analyst: WSS Acct. No.: HSD50032

000319

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI70 CHRYSENE D12	INTERNAL STANDARD
2	C710 BENZIDINE	
3	C715 PYRENE	
4	C720 BUTYLBENZYLPHTHALATE	
5	C725 3,3'-DICHLOROBENZIDINE	
6	C730 BENZO(A)ANTHRACENE	
7	C745 BIS(2-ETHYLHEXYL)PHTHALATE	
8	C740 CHRYSENE	
9	CS30 TERPHENYL D14	SURROGATE

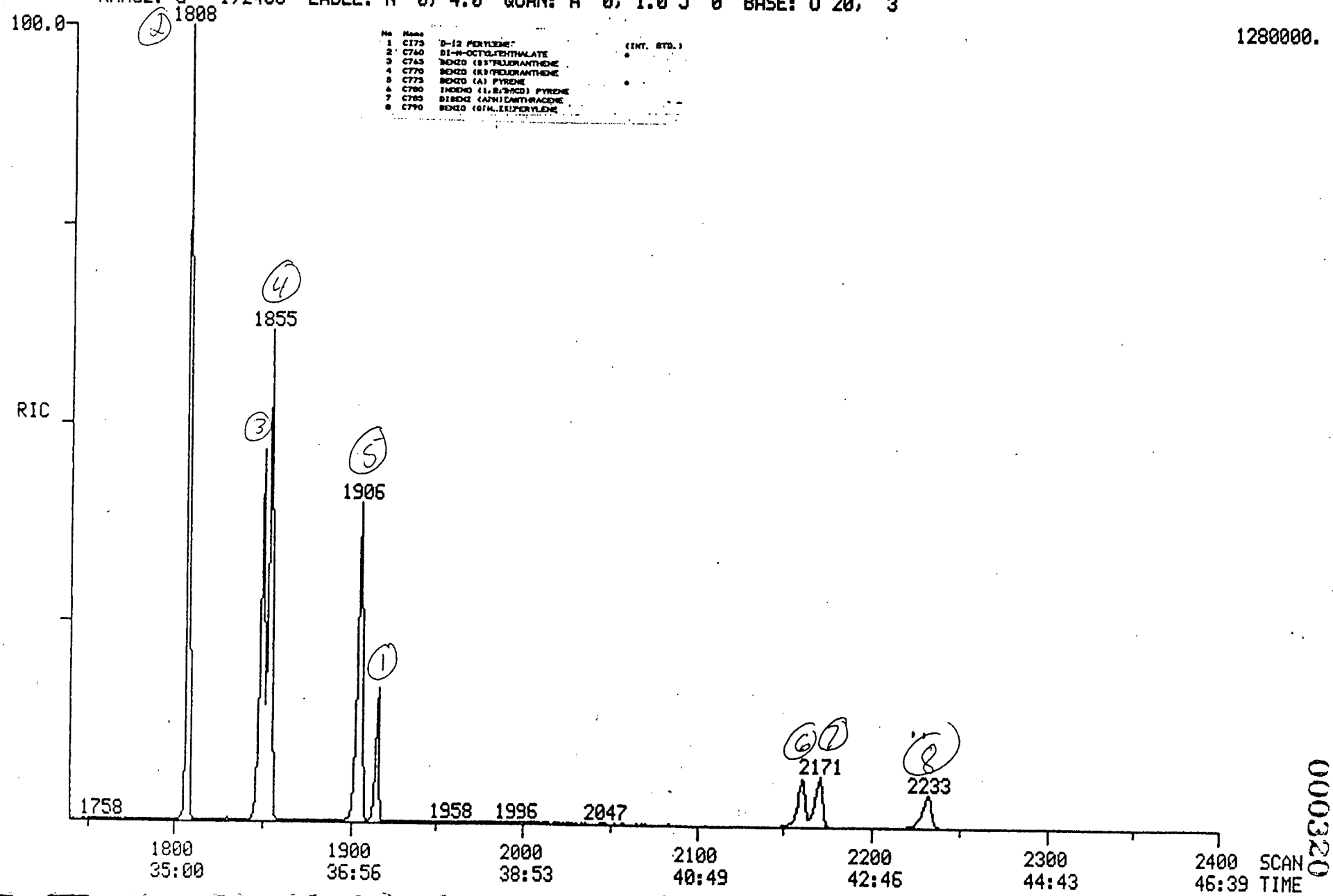
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	240	1681	32:41	1	1.000	A BB	628203.	40.000 UG/ML	9.09
2	184	1477	28:43	1	0.879	A BV	5499.	50.000 UG/ML	11.36
3	202	1478	28:44	1	0.879	A BB	882427.	50.000 UG/ML	11.36
4	149	1608	31:16	1	0.957	A BV	569268.	50.000 UG/ML	11.36
5	252	1683	32:43	1	1.001	A BB	289541.	50.000 UG/ML	11.36
6	228	1678	32:37	1	0.998	A BV	837035.	50.000 UG/ML	11.36
7	149	1710	33:15	1	1.017	A BV	729590.	50.000 UG/ML	11.36
8	228	1685	32:45	1	1.002	A VB	804133.	50.000 UG/ML	11.36
9	244	1515	29:27	1	0.901	A BB	875131.	50.000 UG/ML	11.36

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	32:41	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	28:43	1.00	0.879	1.00	50.00	50.00	0.007	0.007	1.00
3	28:44	1.00	0.879	1.00	50.00	50.00	1.124	1.124	1.00
4	31:16	1.00	0.957	1.00	50.00	50.00	0.725	0.725	1.00
5	32:43	1.00	1.001	1.00	50.00	50.00	0.369	0.369	1.00
6	32:37	1.00	0.998	1.00	50.00	50.00	1.066	1.066	1.00
7	33:15	1.00	1.017	1.00	50.00	50.00	0.929	0.929	1.00
8	32:45	1.00	1.002	1.00	50.00	50.00	1.024	1.024	1.00
9	29:27	1.00	0.901	1.00	50.00	50.00	1.114	1.114	1.00

RIC
03/25/89 12:28:00
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 50 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSD500325 #1
CALI: HSD500325 #3

SCANS 1740 TO 2400



No	Name		
1	C175	D-12 PERYLENE	(INT. STD.)
2	C740	DI-N-OCTYLPHTHALATE	
3	C765	BENZO (B)FLUORANTHENE	
4	C770	BENZO (K)FLUORANTHENE	
5	C775	BENZO (A) PYRENE	
6	C780	INDENO (1,2,3-CD) PYRENE	
7	C785	DIBENZ (A,H)ANTHRACENE	
8	C790	BENZO (G,H,I)PERYLENE	

000320

Quantitation Report File: HSD500325

Data: HSD500325.TI
03/25/89 12:28:00
Sample: HSL-D STANDARD 3/25/89
Conds.: 50 NG INJECTION
Formula: Instrument: FINN Weight: 0.000
Submitted by: QC INC Analyst: WSS Acct. No.: HSD50032

000321

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

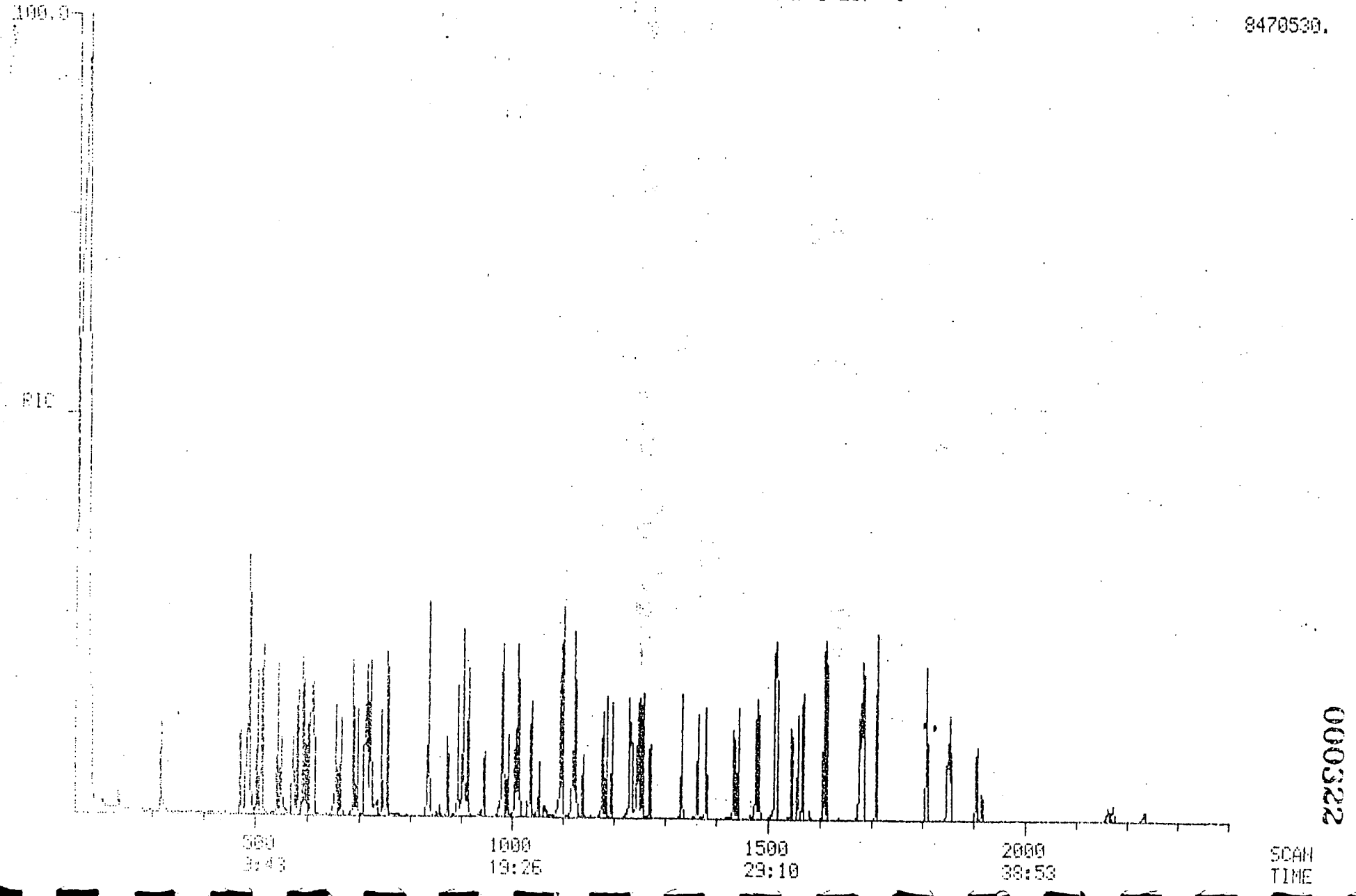
No	Name	
1	C175 PERYLENE D12	INTERNAL STANDARD
2	C760 DI-N-OCTYLPHTHALATE	
3	C765 BENZO(B)FLUORANTHENE	
4	C770 BENZO(K)FLUORANTHENE	
5	C775 BENZO(A)PYRENE	
6	C780 INDENO(1,2,3-CD)PYRENE	
7	C785 DIBENZO(A,H)ANTHRACENE	
8	C790 BENZO(G,H,I)PERYLENE	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	264	1916	37:15	1	1.000	A BB	178368.	40.000 UG/ML	10.26
2	149	1808	35:09	1	0.944	A BB	879840.	50.000 UG/ML	12.82
3	252	1850	35:58	1	0.966	A BV	629068.	50.000 UG/ML	12.82
4	252	1855	36:04	1	0.968	A VB	505119.	50.000 UG/ML	12.82
5	252	1906	37:03	1	0.995	A BV	455938.	50.000 UG/NL	12.82
6	276	2161	42:01	1	1.128	A BV	130148.	50.000 UG/ML	12.82
7	278	2171	42:12	1	1.133	A BB	131882.	50.000 UG/ML	12.82
8	276	2232	43:23	1	1.165	A BB	102239.	50.000 UG/ML	12.82

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	37:15	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	35:09	1.00	0.944	1.00	50.00	50.00	3.946	3.946	1.00
3	35:58	1.00	0.966	1.00	50.00	50.00	2.821	2.821	1.00
4	36:04	1.00	0.968	1.00	50.00	50.00	2.266	2.266	1.00
5	37:03	1.00	0.995	1.00	50.00	50.00	2.045	2.045	1.00
6	42:01	1.00	1.128	1.00	50.00	50.00	0.584	0.584	1.00
7	42:12	1.00	1.133	1.00	50.00	50.00	0.592	0.592	1.00
8	43:23	1.00	1.165	1.00	50.00	50.00	0.459	0.459	1.00

RIC
03/25/88 13:25:00
SAMPLE: HSL-D STANDARD
CONDS.: 80 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

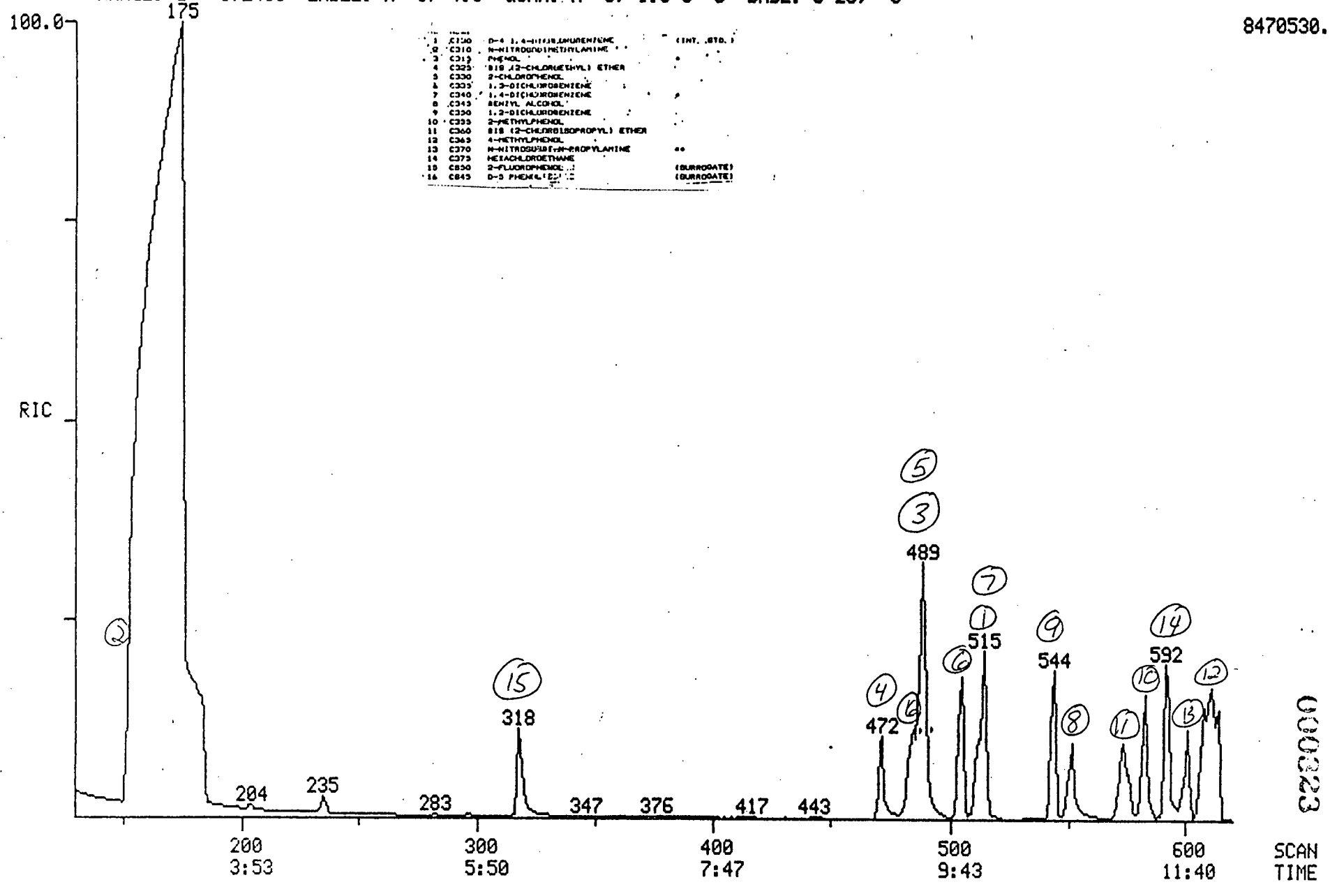
DATA: HSD800325 #1 SCANS 150 TO 2400
CALI: CALTAB #3



000322

RIC
03/25/89 13:25:00
SAMPLE: HSL-D STANDARD
CONDS.: 80 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSD800325 #1 SCANS 130 TO 620
CALI: HSD800325 #3



1	C320	D-4 1,4-DICHLOROBENZENE	(INT. STD.)
2	C310	N-NITROSODIMETHYLAMINE	
3	C315	PHENOL	
4	C325	BIS (2-CHLOROETHYL) ETHER	
5	C330	2-CHLOROPHENOL	
6	C335	1,3-DICHLOROBENZENE	
7	C340	1,4-DICHLOROBENZENE	
8	C345	BENZYL ALCOHOL	
9	C350	1,2-DICHLOROBENZENE	
10	C355	2-METHYLPHENOL	
11	C360	BIS (2-CHLOROISOPROPYL) ETHER	
12	C365	4-METHYLPHENOL	
13	C370	N-NITROSODI-N-PROPYLAMINE	**
14	C375	HEXACHLOROETHANE	
15	C850	2-FLUOROPHENOL	(SURROGATE)
16	C845	D-5 PHENOL-[illegible]	(SURROGATE)

000323

Quantitation Report File: HSD800325

Data: HSD800325.TI
03/25/89 13:25:00
Sample: HSL-D STANDARD
Conds.: 80 NG INJECTION
Formula: Instrument: FINN Weight: 0.000
Submitted by: QC INC Analyst: WSS Acct. No.: HSD80032

000324

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI30 1,4-DICHLOROBENZENE D4	INTERNAL STANDARD
2	N-NITROSODIMETHYLAMINE	
3	C315 PHENOL	
4	C325 BIS(2-CHLOROETHYL) ETHER	
5	C330 2-CHLOROPHENOL	
6	C335 1,3-DICHLOROBENZENE	
7	C340 1,4-DICHLOROBENZENE	
8	C345 BENZYL ALCOHOL	
9	C350 1,2-DICHLOROBENZENE	
10	C355 2-METHYLPHENOL	
11	C360 BIS(2-CHLOROISOPROPYL)ETHER	
12	C365 4-METHYLPHENOL	
13	C370 N-NITROSO-DI-PROPYLAMINE	
14	C375 HEXACHLOROETHANE	
15	CS50 2-FLUOROPHENOL	SURROGATE
16	CS45 PHENOL D5	SURROGATE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	512	9:57	1	1.000	A BB	336997.	40.000 UG/ML	3.23
2	74	156	3:02	1	0.305	A BB	572064.	80.000 UG/ML	6.45
3	94	489	9:30	1	0.955	A BB	1084770.	80.000 UG/ML	6.45
4	93	471	9:09	1	0.920	A BV	833440.	80.000 UG/ML	6.45
5	128	489	9:30	1	0.955	A BB	855692.	80.000 UG/ML	6.45
6	146	505	9:49	1	0.986	A BV	921032.	80.000 UG/ML	6.45
7	146	515	10:01	1	1.006	A VB	870002.	80.000 UG/ML	6.45
8	108	552	10:44	1	1.078	A BB	439430.	80.000 UG/ML	6.45
9	146	544	10:35	1	1.062	A BB	888455.	80.000 UG/ML	6.45
10	108	583	11:20	1	1.139	A BB	766737.	80.000 UG/ML	6.45
11	45	574	11:10	1	1.121	A BB	1268690.	80.000 UG/ML	6.45
12	108	608	11:49	1	1.187	A BB	886581.	80.000 UG/ML	6.45
13	70	601	11:41	1	1.174	A BV	698171.	80.000 UG/ML	6.45
14	117	592	11:31	1	1.156	A BB	486402.	80.000 UG/ML	6.45
15	112	318	6:11	1	0.621	A BB	797268.	80.000 UG/L	6.45
16	99	487	9:28	1	0.951	A BV	977443.	80.000 UG/ML	6.45

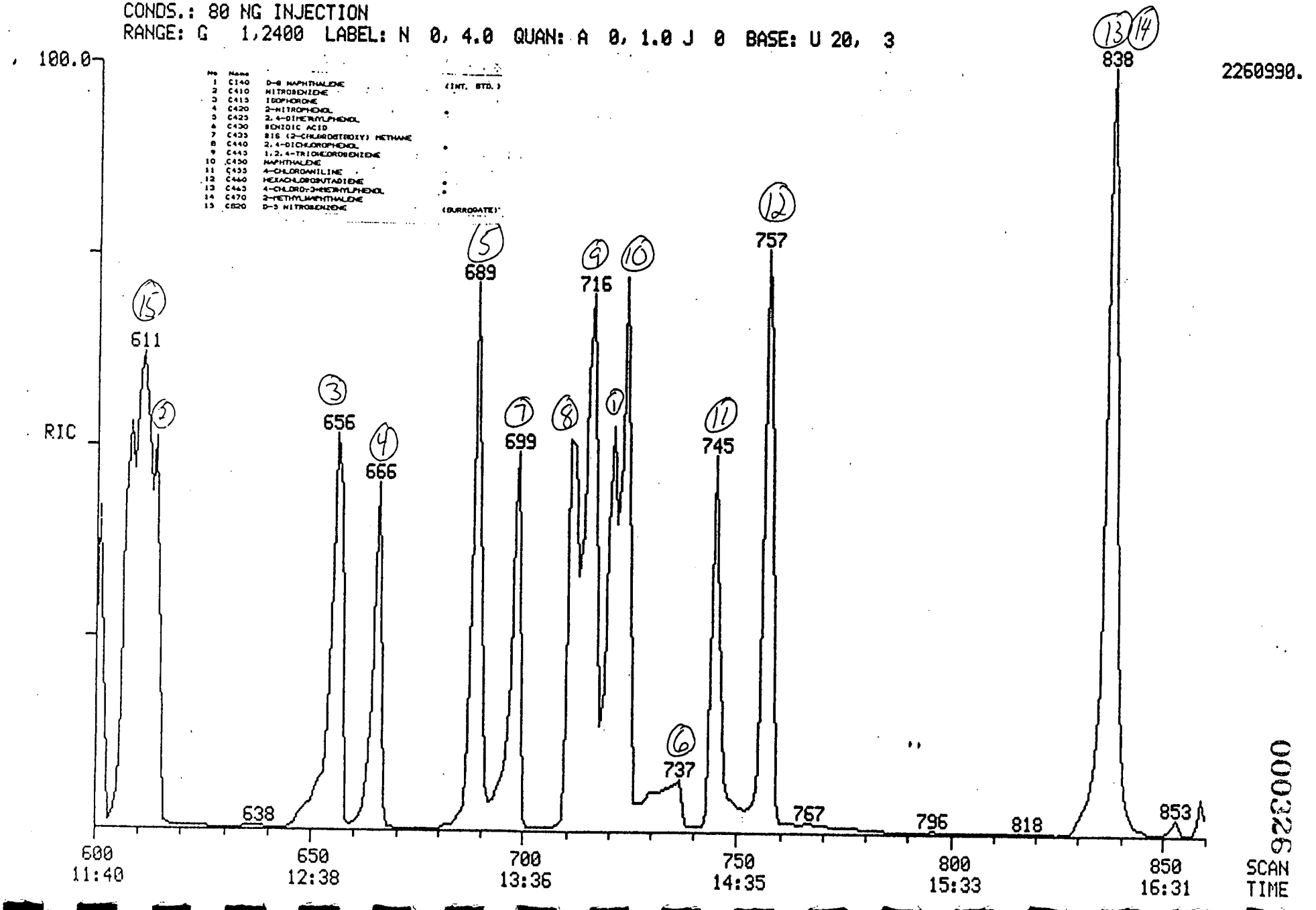
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:57	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	3:03	1.00	0.305	1.00	80.00	80.00	0.849	0.849	1.00
3	9:30	1.00	0.955	1.00	80.00	80.00	1.609	1.609	1.00
4	9:09	1.00	0.920	1.00	80.00	80.00	1.237	1.237	1.00
5	9:30	1.00	0.955	1.00	80.00	80.00	1.270	1.270	1.00
6	9:49	1.00	0.986	1.00	80.00	80.00	1.367	1.367	1.00
7	10:01	1.00	1.006	1.00	80.00	80.00	1.291	1.291	1.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
8	10:44	1.00	1.078	1.00	80.00	80.00	0.652	0.652	1.00
9	10:35	1.00	1.062	1.00	80.00	80.00	1.318	1.318	1.00
10	11:20	1.00	1.139	1.00	80.00	80.00	1.138	1.138	1.00
11	11:10	1.00	1.121	1.00	80.00	80.00	1.882	1.882	1.00
12	11:49	1.00	1.187	1.00	80.00	80.00	1.315	1.315	1.00
13	11:41	1.00	1.174	1.00	80.00	80.00	1.036	1.036	1.00
14	11:31	1.00	1.156	1.00	80.00	80.00	0.722	0.722	1.00
15	6:11	1.00	0.621	1.00	80.00	80.00	1.183	1.183	1.00
16	9:28	1.00	0.951	1.00	80.00	80.00	1.450	1.450	1.00

RIC
03/25/89 13:25:00
SAMPLE: HSL-D STANDARD
CONDS.: 80 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSD800325 #1
CALI: HSD800325 #3

SCANS 600 TO 860



000326

Quantitation Report File: HSD800325

Data: HSD800325.TI
03/25/89 13:25:00
Sample: HSL-D STANDARD
Conds.: 80 NG INJECTION
Formula: Instrument: FINN Weight: 0.000
Submitted by: GC INC Analyst: WSS Acct. No.: HSD80032

000327

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	C140 NAPHTHALENE D8	INTERNAL STANDARD
2	C410 NITROBENZENE	
3	C415 ISOPHORONE	
4	C420 2-NITROPHENOL	
5	C425 2,4-DIMETHYLPHENOL	
6	C430 BENZOIC ACID	
7	C435 BIS(2-CHLOROETHOXY)METHANE	
8	C440 2,4-DICHLOROPHENOL	
9	C445 1,2,4-TRICHLOROBENZENE	
10	C450 NAPHTHALENE	
11	C455 4-CHLOROANILINE	
12	C460 HEXACHLOROBUTADIENE	
13	C465 4-CHLORO-3-METHYLPHENOL	
14	C470 2-METHYLNAPHTHALENE	
15	CS20 NITROBENZENE D5	SURROGATE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	136	721	14:01	1	1.000	A BB	1025040.	40.000 UG/ML	3.45
2	77	614	11:56	1	0.852	A BV	1253960.	80.000 UG/ML	6.90
3	82	656	12:45	1	0.910	A BV	1465460.	80.000 UG/ML	6.90
4	139	666	12:57	1	0.924	A VB	530077.	80.000 UG/ML	6.90
5	122	689	13:24	1	0.956	A BV	671980.	80.000 UG/ML	6.90
6	122	737	14:20	1	1.022	A VB	225256.	80.000 UG/ML	6.90
7	93	699	13:35	1	0.969	A BB	1018360.	80.000 UG/ML	6.90
8	162	711	13:49	1	0.986	A BB	781372.	80.000 UG/ML	6.90
9	180	716	13:55	1	0.993	A BB	841526.	80.000 UG/ML	6.90
10	128	724	14:04	1	1.004	A VB	1478520.	80.000 UG/ML	6.90
11	127	745	14:29	1	1.033	A BV	727190.	80.000 UG/ML	6.90
12	225	757	14:43	1	1.050	A BB	447241.	80.000 UG/ML	6.90
13	107	838	16:17	1	1.162	A BB	634720.	80.000 UG/ML	6.90
14	142	837	16:16	1	1.161	A BV	1432510.	80.000 UG/ML	6.90
15	82	611	11:53	1	0.847	A BB	1002810.	80.000 UG/ML	6.90

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	14:01	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	11:56	1.00	0.852	1.00	80.00	80.00	0.612	0.612	1.00
3	12:45	1.00	0.910	1.00	80.00	80.00	0.715	0.715	1.00
4	12:57	1.00	0.924	1.00	80.00	80.00	0.259	0.259	1.00
5	13:24	1.00	0.956	1.00	80.00	80.00	0.328	0.328	1.00
6	14:20	1.00	1.022	1.00	80.00	80.00	0.110	0.110	1.00
7	13:35	1.00	0.969	1.00	80.00	80.00	0.497	0.497	1.00
8	13:49	1.00	0.986	1.00	80.00	80.00	0.381	0.381	1.00
9	13:55	1.00	0.993	1.00	80.00	80.00	0.410	0.410	1.00

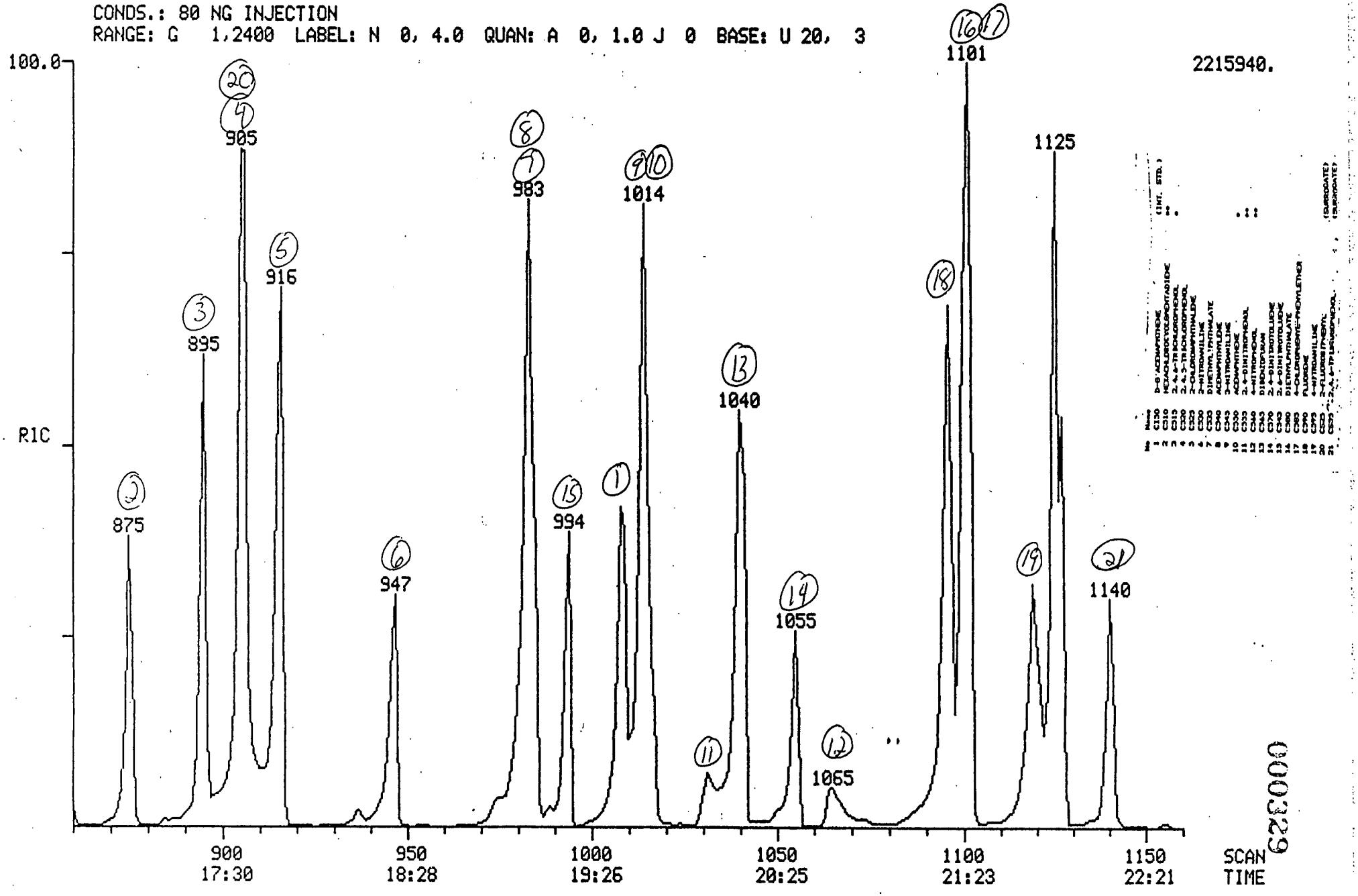
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
10	14:04	1.00	1.004	1.00	80.00	80.00	0.721	0.721	1.00
11	14:29	1.00	1.033	1.00	80.00	80.00	0.355	0.355	1.00
12	14:43	1.00	1.050	1.00	80.00	80.00	0.218	0.218	1.00
13	16:17	1.00	1.162	1.00	80.00	80.00	0.310	0.310	1.00
14	16:16	1.00	1.161	1.00	80.00	80.00	0.699	0.699	1.00
15	11:53	1.00	0.847	1.00	80.00	80.00	0.489	0.489	1.00

000328

RIC
03/25/89 13:25:00
SAMPLE: HSL-D STANDARD
CONDS.: 80 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSD800325 #1
CALI: HSD800325 #3

SCANS 860 TO 1160



0003329

Quantitation Report File: HSD800325

000330

Data: HSD800325.TI
03/25/89 13:25:00
Sample: HSL-D STANDARD
Conds.: 80 NG INJECTION
Formula: Instrument: FINN Weight: 0.000
Submitted by: QC INC Analyst: WSS Acct. No.: HSD80032

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	C150 ACENAPHTHENE D8	INTERNAL STANDARD
2	C510 HEXACHLOROCYCLOPENTADIENE	
3	C515 2,4,6-TRICHLOROPHENOL	
4	C520 2,4,5-TRICHLOROPHENOL	
5	C525 2-CHLORONAPHTHALENE	
6	C530 2-NITROANILINE	
7	C535 DIMETHYL PHTHALATE	
8	C540 ACENAPHTHYLENE	
9	C545 3-NITROANILINE	
10	C550 ACENAPHTHENE	
11	C555 2,4-DINITROPHENOL	
12	C560 4-NITROPHENOL	
13	C565 DIBENZOFURAN	
14	C570 2,4-DINITROTOLUENE	
15	C543 2,6-DINITROTOLUENE	
16	C580 DIETHYL PHTHALATE	
17	C585 4-CHLOROPHENYL PHENYL ETHER	
18	C590 FLUORENE	
19	C595 4-NITROANILINE	
20	CS25 2-FLUOROBIPHENYL	SURROGATE
21	CS55 2,4,6-TRIBROMOPHENOL	SURROGATE

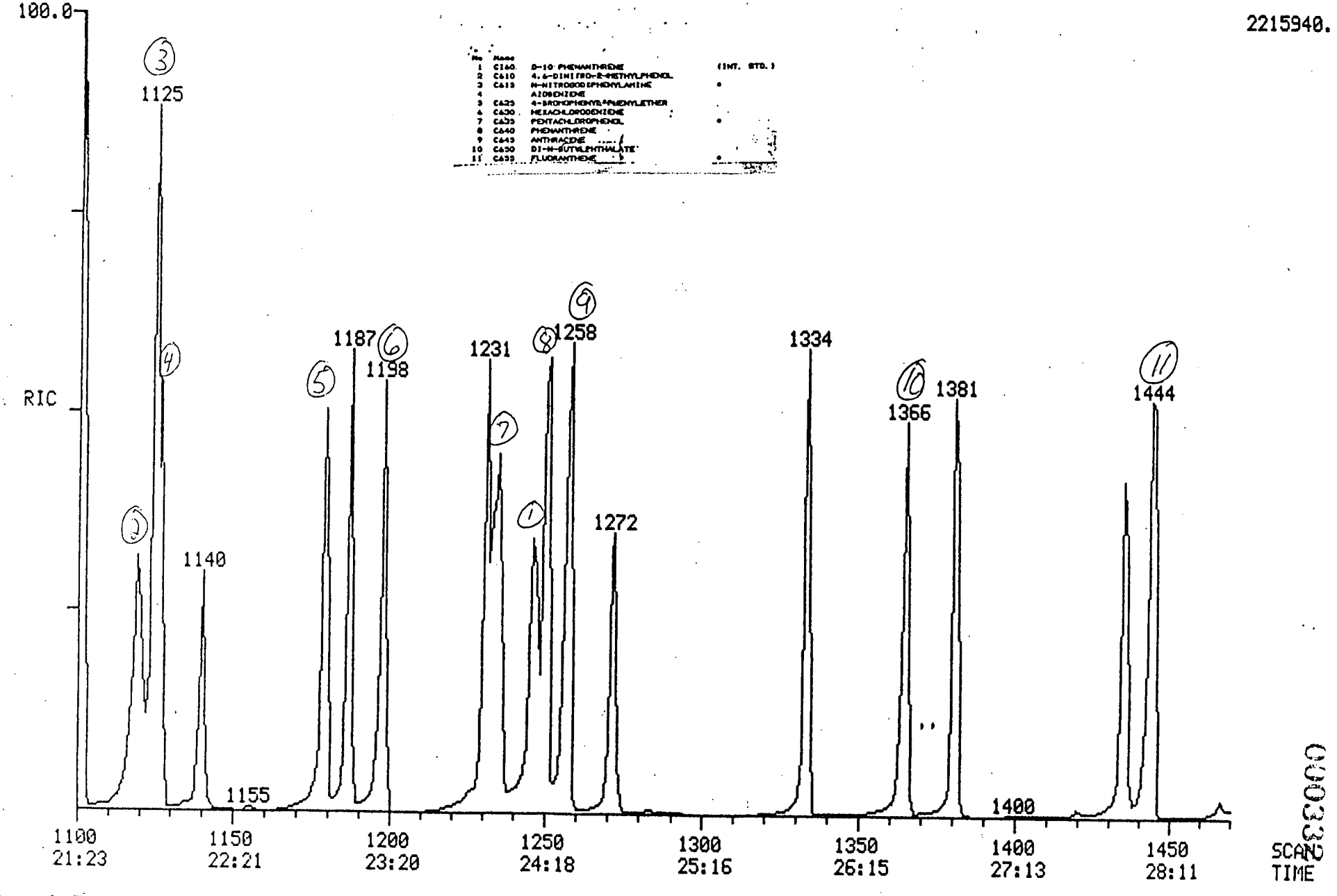
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	164	1008	19:36	1	1.000	A BB	518322.	40.000 UG/ML	2.44
2	237	875	17:01	1	0.868	A BB	275710.	80.000 UG/ML	4.88
3	196	895	17:24	1	0.888	A BV	425511.	80.000 UG/ML	4.88
4	196	905	17:36	1	0.898	A VB	425556.	80.000 UG/ML	4.88
5	162	916	17:48	1	0.909	A BB	1142290.	80.000 UG/ML	4.88
6	65	947	18:25	1	0.939	A VB	333199.	80.000 UG/ML	4.88
7	163	984	19:08	1	0.976	A BB	1125590.	80.000 UG/ML	4.88
8	152	983	19:07	1	0.975	A BV	1342560.	80.000 UG/ML	4.88
9	138	1016	19:45	1	1.008	A BB	341357.	80.000 UG/ML	4.88
10	154	1014	19:43	1	1.006	A BB	935990.	80.000 UG/ML	4.88
11	184	1031	20:03	1	1.023	A VB	99329.	80.000 UG/ML	4.88
12	139	1064	20:41	1	1.056	A BB	138570.	80.000 UG/ML	4.88
13	168	1040	20:13	1	1.032	A BB	1263940.	80.000 UG/ML	4.88
14	165	1059	20:31	1	1.047	A BB	329180.	80.000 UG/ML	4.88
15	165	994	19:19	1	0.986	A VB	299034.	80.000 UG/ML	4.88
16	149	1101	21:24	1	1.092	A BB	1110420.	80.000 UG/ML	4.88
17	204	1101	21:24	1	1.092	A BB	640445.	80.000 UG/ML	4.88
18	166	1096	21:18	1	1.087	A BB	966162	80.000 UG/ML	4.88
19	151	1119	[illegible]	1	1.110	A BV	208963	80.000 UG/ML	4.88
20	[illegible]	[illegible]	[illegible]	1	[illegible]	A BV	1139740	80.000 UG/ML	4.88
21	80	1142	[illegible]	1	1.131	A BB	160407.	80.000 UG/ML	4.88

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	19:36	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	17:01	1.00	0.868	1.00	80.00	80.00	0.266	0.266	1.00
3	17:24	1.00	0.888	1.00	80.00	80.00	0.410	0.410	1.00
4	17:36	1.00	0.898	1.00	80.00	80.00	0.411	0.411	1.00
5	17:48	1.00	0.909	1.00	80.00	80.00	1.102	1.102	1.00
6	18:25	1.00	0.939	1.00	80.00	80.00	0.321	0.321	1.00
7	19:08	1.00	0.976	1.00	80.00	80.00	1.086	1.086	1.00
8	19:07	1.00	0.975	1.00	80.00	80.00	1.295	1.295	1.00
9	19:45	1.00	1.008	1.00	80.00	80.00	0.329	0.329	1.00
10	19:43	1.00	1.006	1.00	80.00	80.00	0.903	0.903	1.00
11	20:03	1.00	1.023	1.00	80.00	80.00	0.096	0.096	1.00
12	20:41	1.00	1.056	1.00	80.00	80.00	0.134	0.134	1.00
13	20:13	1.00	1.032	1.00	80.00	80.00	1.219	1.219	1.00
14	20:31	1.00	1.047	1.00	80.00	80.00	0.318	0.318	1.00
15	19:19	1.00	0.986	1.00	80.00	80.00	0.288	0.288	1.00
16	21:24	1.00	1.092	1.00	80.00	80.00	1.071	1.071	1.00
17	21:24	1.00	1.092	1.00	80.00	80.00	0.618	0.618	1.00
18	21:18	1.00	1.087	1.00	80.00	80.00	0.932	0.932	1.00
19	21:45	1.00	1.110	1.00	80.00	80.00	0.231	0.231	1.00
20	17:36	1.00	0.898	1.00	80.00	80.00	1.119	1.119	1.00
21	22:10	1.00	1.131	1.00	80.00	80.00	0.158	0.158	1.00

RIC
03/25/89 13:25:00
SAMPLE: HSL-D STANDARD
CONDS.: 80 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSD800325 #1
CALI: HSD800325 #3

SCANS 1100 TO 1470



No	Name		
1	C160	D-10 PHENANTHRENE	(INT. STD.)
2	C610	4,6-DINITRO-2-METHYLPHENOL	
3	C613	N-NITROSODIPHENYLAMINE	
4		AZOBENZENE	
5	C625	4-BROMOPHENYL-PHENYLETHER	
6	C630	HEXACHLOROBENZENE	
7	C633	PENTACHLOROPHENOL	
8	C640	PHENANTHRENE	
9	C643	ANTHRACENE	
10	C650	DI-N-BUTYLPHTHALATE	
11	C655	FLUORANTHENE	

000033

Quantitation Report File: HSD800325

000333

Data: HSD800325.TI
03/25/89 13:25:00
Sample: HSL-D STANDARD
Conds.: 80 NG INJECTION
Formula: Instrument: FINN Weight: 0.000
Submitted by: QC INC Analyst: WSS Acct. No.: HSD80032

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	C160 PHENANTHRENE D10	INTERNAL STANDARD
2	C610 4,6-DINITRO-2-METHYL PHENOL	
3	C615 N-NITROSODIPHENYLAMINE	
4	AZOBENZENE	
5	C625 4-BROMOPHENYL PHENYL ETHER	
6	C630 HEXACHLOROBENZENE	
7	C635 PENTACHLOROPHENOL	
8	C640 PHENANTHRENE	
9	C645 ANTHRACENE	
10	C650 DI-N-BUTYL PHTHALATE	
11	C655 FLUORANTHENE	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	188	1246	24:13	1	1.000	A VV	646376.	40.000 UG/ML	4.76
2	198	1120	21:46	1	0.899	A BB	159275.	80.000 UG/ML	9.52
3	169	1125	21:52	1	0.903	A BB	729832.	80.000 UG/ML	9.52
4	77	1127	21:55	1	0.904	A BB	1367070.	80.000 UG/ML	9.52
5	248	1179	22:55	1	0.946	A BB	298859.	80.000 UG/ML	9.52
6	284	1197	23:16	1	0.961	A BB	159382.	80.000 UG/ML	9.52
7	266	1233	23:58	1	0.990	A VV	153373.	80.000 UG/ML	9.52
8	178	1250	24:18	1	1.003	A BV	1211140.	80.000 UG/ML	9.52
9	178	1258	24:27	1	1.010	A VB	975646.	80.000 UG/ML	9.52
10	149	1366	26:33	1	1.096	A BB	1172250.	80.000 UG/ML	9.52
11	202	1444	28:04	1	1.159	A VB	1010820.	80.000 UG/ML	9.52

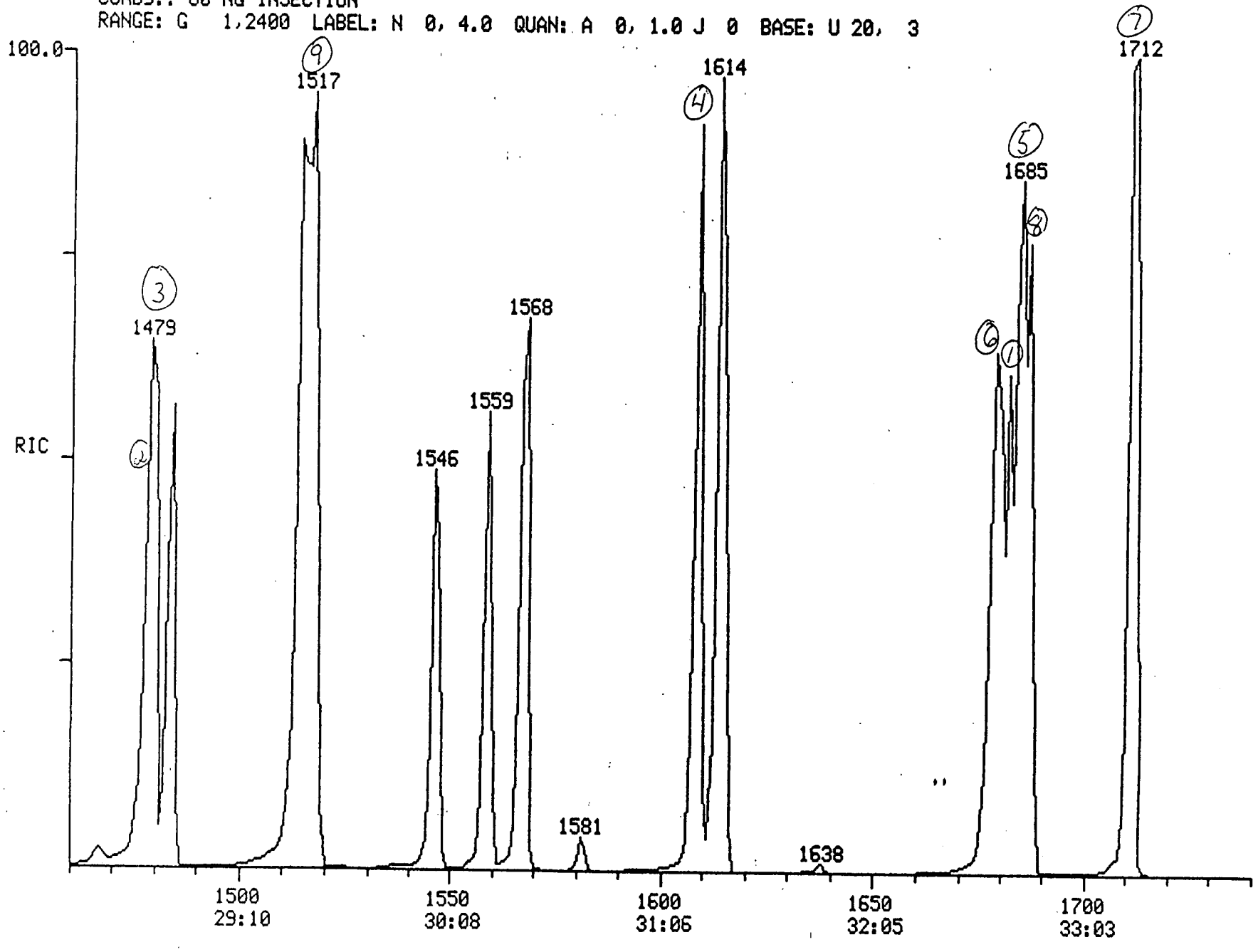
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	24:13	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	21:46	1.00	0.899	1.00	80.00	80.00	0.123	0.123	1.00
3	21:52	1.00	0.903	1.00	80.00	80.00	0.565	0.565	1.00
4	21:55	1.00	0.904	1.00	80.00	80.00	1.057	1.057	1.00
5	22:55	1.00	0.946	1.00	80.00	80.00	0.231	0.231	1.00
6	23:16	1.00	0.961	1.00	80.00	80.00	0.123	0.123	1.00
7	23:58	1.00	0.990	1.00	80.00	80.00	0.119	0.119	1.00
8	24:18	1.00	1.003	1.00	80.00	80.00	0.937	0.937	1.00
9	24:27	1.00	1.010	1.00	80.00	80.00	0.755	0.755	1.00
10	26:33	1.00	1.096	1.00	80.00	80.00	0.907	0.907	1.00
11	28:04	1.00	1.159	1.00	80.00	80.00	0.782	0.782	1.00

RIC
03/25/89 13:25:00
SAMPLE: HSL-D STANDARD
CONDS.: 80 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSD800325 #1
CALI: HSD800325 #3

SCANS 1460 TO 1740

No	Name		
1	C170	D-12 CHRYSENE	(INT. STD.)
2	C710	BENZIDINE	
3	C710	PYRENE	
4	C720	BUTYLBENZYLPHTHALATE	
5	C725	3,3'-DICHLOROBENZIDINE	
6	C730	BENZO(A)ANTHRACENE	
7	C745	BIS (2-ETHYLHEXYL) PHTHALATE	
8	C740	CHRYSENE	
9	C830	D-14 TERPHENYL	(SURROGATE)



000334

Quantitation Report File: HSD800325

000335

Data: HSD800325.TI
03/25/89 13:25:00
Sample: HSL-D STANDARD
Conds.: 80 NG INJECTION
Formula: Instrument: FINN Weight: 0.000
Submitted by: QC INC Analyst: WSS Acct. No.: HSD80032

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	C170 CHRYSENE D12	INTERNAL STANDARD
2	C710 BENZIDINE	
3	C715 PYRENE	
4	C720 BUTYLBENZYLPHTHALATE	
5	C725 3,3'-DICHLOROBENZIDINE	
6	C730 BENZO(A)ANTHRACENE	
7	C745 BIS(2-ETHYLHEXYL)PHTHALATE	
8	C740 CHRYSENE	
9	CS30 TERPHENYL D14	SURROGATE

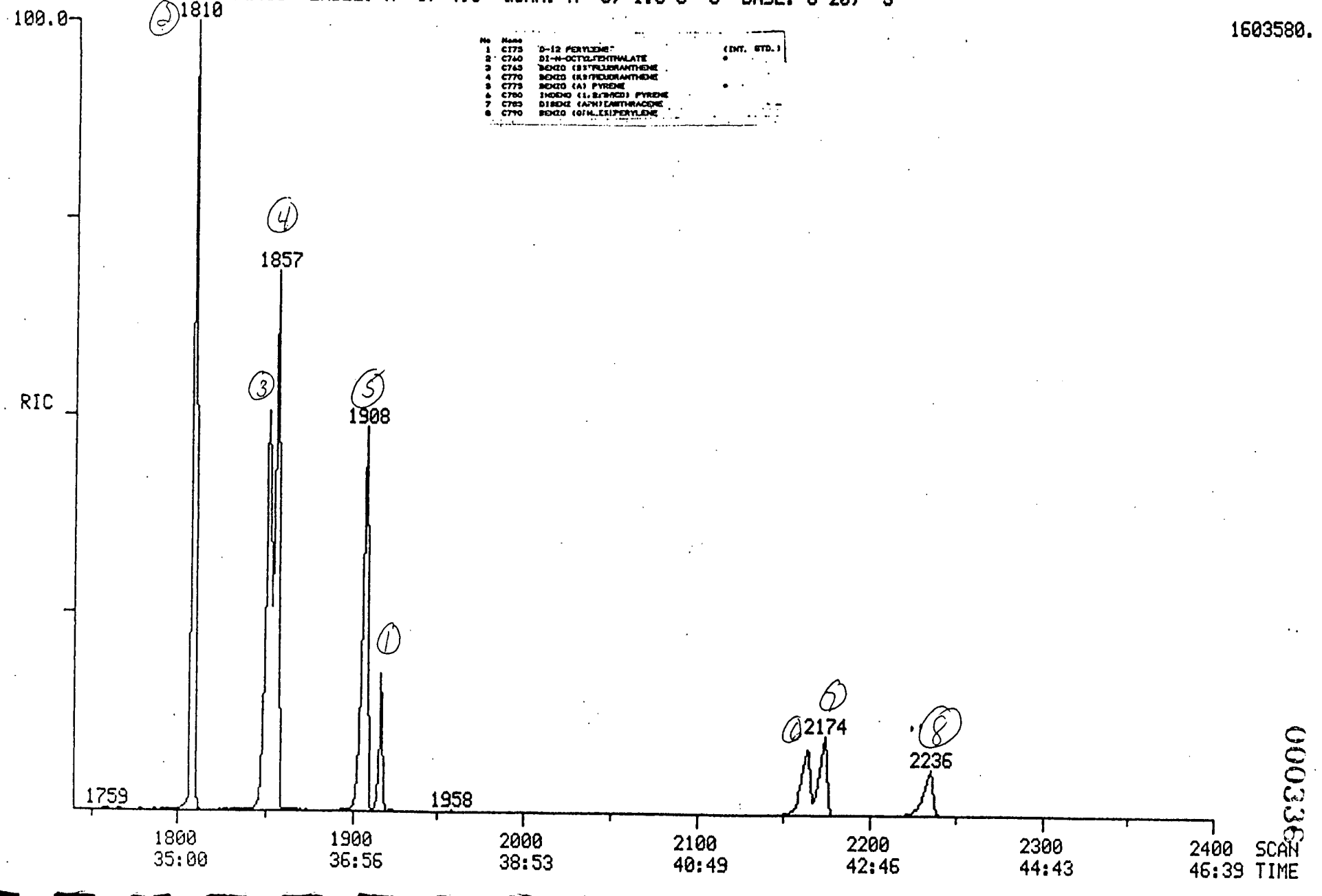
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	240	1682	32:42	1	1.000	A BB	593314.	40.000 UG/ML	5.88
2	184	1477	28:43	1	0.878	A VV	78052.	80.000 UG/ML	11.76
3	202	1479	28:45	1	0.879	A BB	1132030.	80.000 UG/ML	11.76
4	149	1609	31:17	1	0.957	A BV	696179.	80.000 UG/ML	11.76
5	252	1684	32:44	1	1.001	A BB	497059.	80.000 UG/ML	11.76
6	228	1679	32:38	1	0.998	A BV	1114320.	80.000 UG/ML	11.76
7	149	1711	33:16	1	1.017	A BB	948188.	80.000 UG/ML	11.76
8	228	1687	32:48	1	1.003	A VB	1018190.	80.000 UG/ML	11.76
9	244	1516	29:28	1	0.901	A BB	1117800.	80.000 UG/ML	11.76

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	32:42	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	28:43	1.00	0.878	1.00	80.00	80.00	0.066	0.066	1.00
3	28:45	1.00	0.879	1.00	80.00	80.00	0.954	0.954	1.00
4	31:17	1.00	0.957	1.00	80.00	80.00	0.587	0.587	1.00
5	32:44	1.00	1.001	1.00	80.00	80.00	0.419	0.419	1.00
6	32:38	1.00	0.998	1.00	80.00	80.00	0.939	0.939	1.00
7	33:16	1.00	1.017	1.00	80.00	80.00	0.799	0.799	1.00
8	32:48	1.00	1.003	1.00	80.00	80.00	0.858	0.858	1.00
9	29:28	1.00	0.901	1.00	80.00	80.00	0.942	0.942	1.00

RIC
03/25/89 13:25:00
SAMPLE: HSL-D STANDARD
CONDS.: 80 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSD800325 #1
CALI: HSD800325 #3

SCANS 1740 TO 2400



1603580.

000336

Quantitation Report File: HSD800325

Data: HSD800325.TI
03/25/89 13:25:00
Sample: HSL-D STANDARD
Conds.: 80 NG INJECTION
Formula: Instrument: FINN Weight: 0.000
Submitted by: QC INC Analyst: WSS Acct. No.: HSD80032

000337

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI75 PERYLENE D12	INTERNAL STANDARD
2	C760 DI-N-OCTYLPHTHALATE	
3	C765 BENZO(B)FLUORANTHENE	
4	C770 BENZO(K)FLUORANTHENE	
5	C775 BENZO(A)PYRENE	
6	C780 INDENO(1,2,3-CD)PYRENE	
7	C785 DIBENZO(A,H)ANTHRACENE	
8	C790 BENZO(G,H,I)PERYLENE	

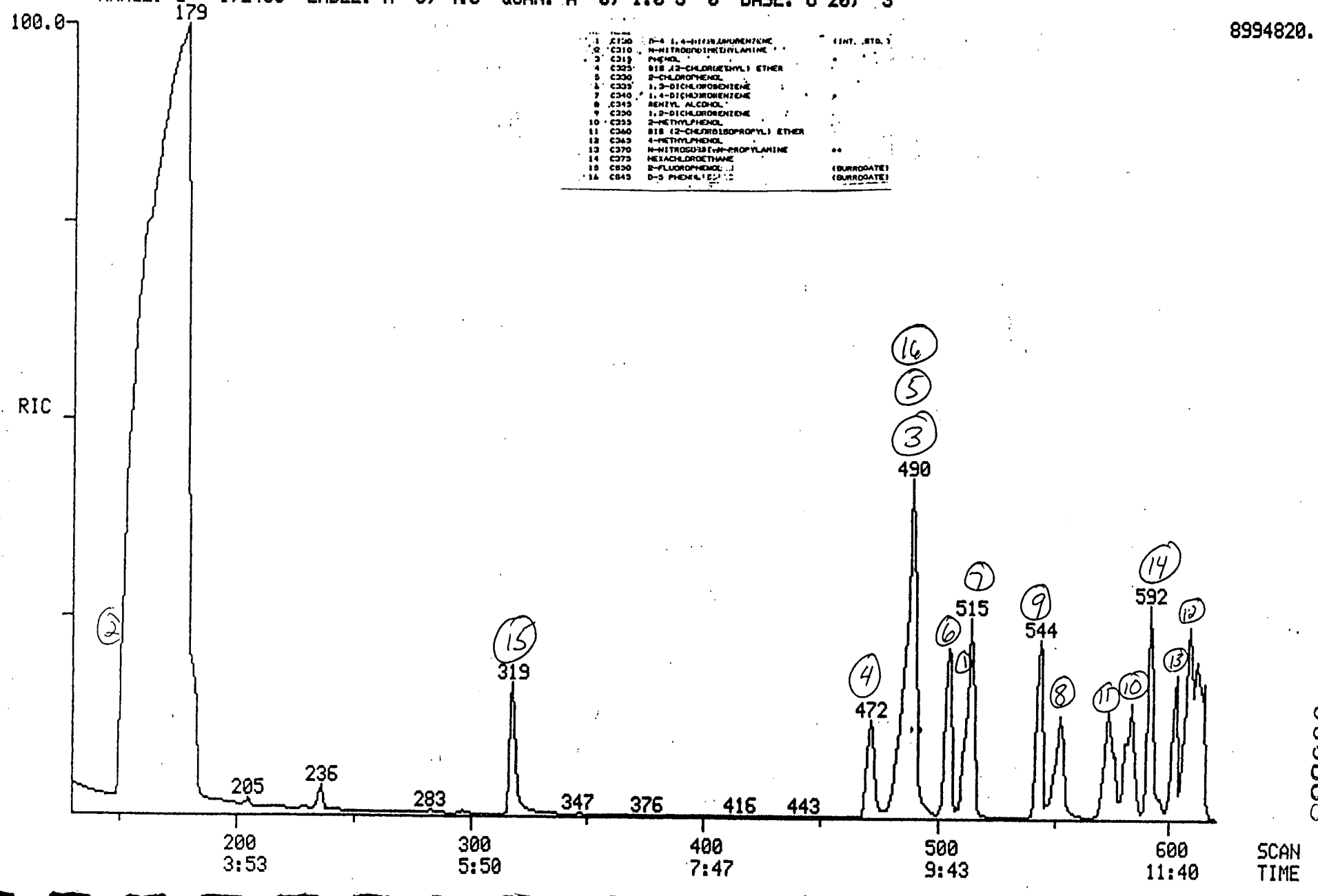
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	264	1917	37:16	1	1.000	A BB	241662.	40.000 UG/ML	6.67
2	149	1810	35:11	1	0.944	A VB	1149830.	80.000 UG/ML	13.33
3	252	1852	36:00	1	0.966	A BV	1065310.	80.000 UG/ML	13.33
4	252	1857	36:06	1	0.969	A VB	726877.	80.000 UG/ML	13.33
5	252	1908	37:05	1	0.995	A BV	771153.	80.000 UG/NL	13.33
6	276	2164	42:04	1	1.129	A BV	248793.	80.000 UG/ML	13.33
7	278	2174	42:16	1	1.134	A BB	253718.	80.000 UG/ML	13.33
8	276	2236	43:28	1	1.166	A BB	186245.	80.000 UG/ML	13.33

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	37:16	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	35:11	1.00	0.944	1.00	80.00	80.00	2.379	2.379	1.00
3	36:00	1.00	0.966	1.00	80.00	80.00	2.204	2.204	1.00
4	36:06	1.00	0.969	1.00	80.00	80.00	1.504	1.504	1.00
5	37:05	1.00	0.995	1.00	80.00	80.00	1.596	1.596	1.00
6	42:04	1.00	1.129	1.00	80.00	80.00	0.515	0.515	1.00
7	42:16	1.00	1.134	1.00	80.00	80.00	0.525	0.525	1.00
8	43:28	1.00	1.166	1.00	80.00	80.00	0.385	0.385	1.00

RIC
03/25/89 14:23:00
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 120 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSD1200325 #1 SCANS 130 TO 620
CALI: HSD1200325 #3

8994820.



1	C300	D-4 1,4-DIFLUOROBENZENE	(INT. STD.)
2	C310	N-NITROSODIMETHYLAMINE	
3	C315	PHENOL	
4	C325	BIS (2-CHLOROETHYL) ETHER	
5	C330	2-CHLOROPHENOL	
6	C335	1,3-DICHLOROBENZENE	
7	C340	1,4-DICHLOROBENZENE	
8	C345	BENZYL ALCOHOL	
9	C350	1,2-DICHLOROBENZENE	
10	C355	2-METHYLPHENOL	
11	C360	BIS (2-CHLOROISOPROPYL) ETHER	
12	C365	4-METHYLPHENOL	
13	C370	N-NITROSODI(N-PROPYL)AMINE	**
14	C375	HEXACHLOROETHANE	
15	C830	2-FLUOROPHENOL	(SURROGATE)
16	C845	D-5 PHENOL(D5)	(SURROGATE)

000338

Quantitation Report File: HSD1200325

000339

Data: HSD1200325.TI
03/25/89 14:23:00
Sample: HSL-D STANDARD 3/25/89
Conds.: 120 NG INJECTION
Formula: Instrument: FINN Weight: 0.000
Submitted by: QC INC Analyst: WSS Acct. No.: HSD12003

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI30 1,4-DICHLOROBENZENE D4	INTERNAL STANDARD
2	N-NITROSODIMETHYLAMINE	
3	C315 PHENOL	
4	C325 BIS(2-CHLOROETHYL) ETHER	
5	C330 2-CHLOROPHENOL	
6	C335 1,3-DICHLOROBENZENE	
7	C340 1,4-DICHLOROBENZENE	
8	C345 BENZYL ALCOHOL	
9	C350 1,2-DICHLOROBENZENE	
10	C355 2-METHYLPHENOL	
11	C360 BIS(2-CHLOROISOPROPYL)ETHER	
12	C365 4-METHYLPHENOL	
13	C370 N-NITROSO-DI-PROPYLAMINE	
14	C375 HEXACHLOROETHANE	
15	CS50 2-FLUOROPHENOL	SURROGATE
16	CS45 PHENOL D5	SURROGATE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	512	9:57	1	1.000	A BB	377847.	40.000 UG/ML	2.17
2	74	161	3:08	1	0.314	A BB	848336.	120.000 UG/ML	6.52
3	94	490	9:32	1	0.957	A VB	1664770.	120.000 UG/ML	6.52
4	93	472	9:11	1	0.922	A BV	1401340.	120.000 UG/ML	6.52
5	128	490	9:32	1	0.957	A BB	1243030.	120.000 UG/ML	6.52
6	146	505	9:49	1	0.986	A BV	1322510.	120.000 UG/ML	6.52
7	146	515	10:01	1	1.006	A VB	1324800.	120.000 UG/ML	6.52
8	108	553	10:45	1	1.080	A BB	812462.	120.000 UG/ML	6.52
9	146	544	10:35	1	1.062	A BB	1302490.	120.000 UG/ML	6.52
10	108	584	11:21	1	1.141	A BB	1268010.	120.000 UG/ML	6.52
11	45	574	11:10	1	1.121	A BB	1877330.	120.000 UG/ML	6.52
12	108	608	11:49	1	1.187	A BB	1320160.	120.000 UG/ML	6.52
13	70	603	11:43	1	1.178	A VV	790900.	120.000 UG/ML	6.52
14	117	592	11:31	1	1.156	A BB	754748.	120.000 UG/ML	6.52
15	112	319	6:12	1	0.623	A BB	1217260.	120.000 UG/L	6.52
16	99	488	9:29	1	0.953	A BB	1547650.	120.000 UG/ML	6.52

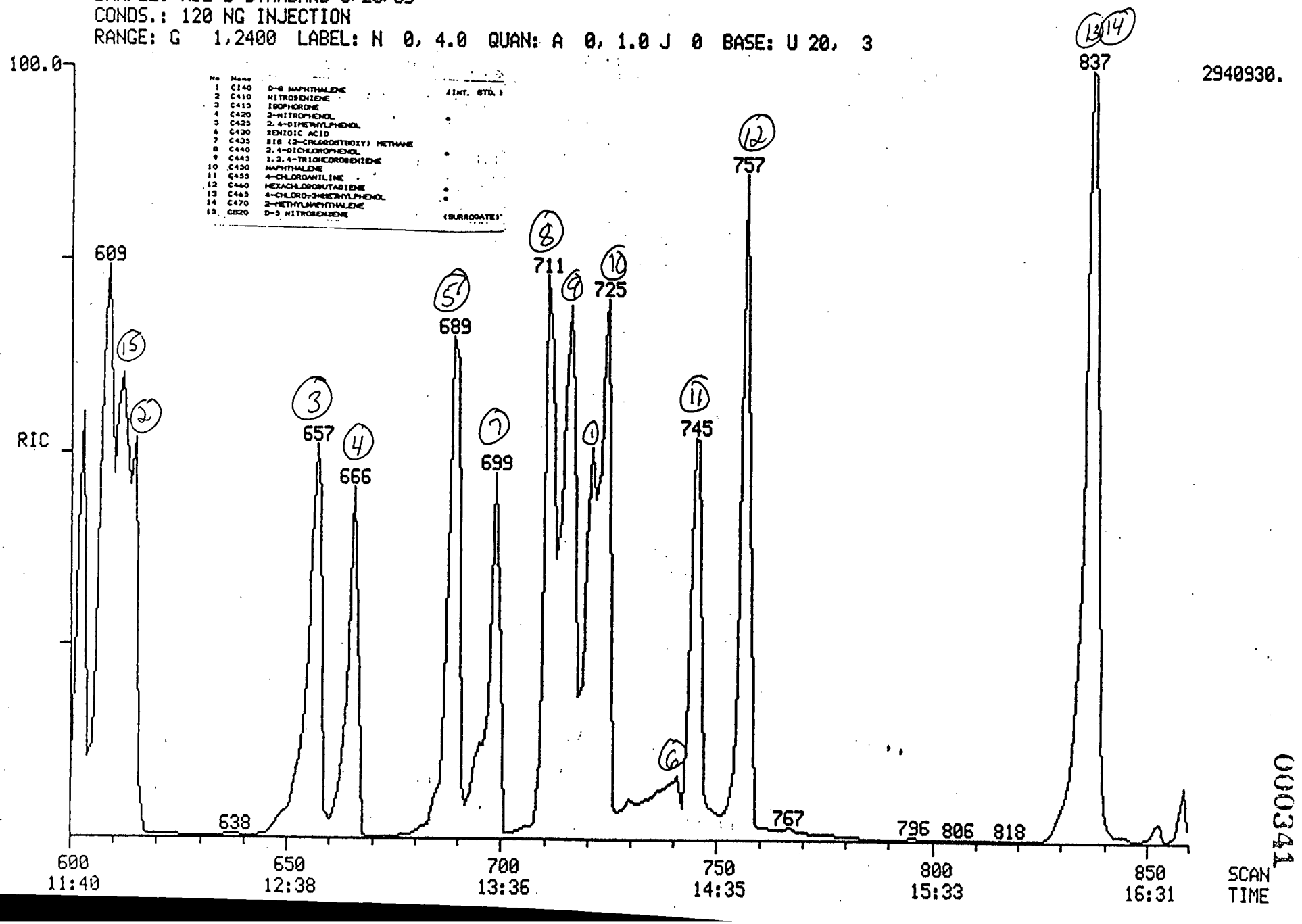
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:57	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	3:08	1.00	0.314	1.00	120.00	120.00	0.748	0.748	1.00
3	9:32	1.00	0.957	1.00	120.00	120.00	1.469	1.469	1.00
4	9:11	1.00	0.922	1.00	120.00	120.00	1.236	1.236	1.00
5	9:32	1.00	0.957	1.00	120.00	120.00	1.097	1.097	1.00
6	9:49	1.00	0.986	1.00	120.00	120.00	1.167	1.167	1.00
7	10:01	1.00	1.006	1.00	120.00	120.00	1.169	1.169	1.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
8	10:45	1.00	1.080	1.00	120.00	120.00	0.717	0.717	1.00
9	10:35	1.00	1.062	1.00	120.00	120.00	1.149	1.149	1.00
10	11:21	1.00	1.141	1.00	120.00	120.00	1.119	1.119	1.00
11	11:10	1.00	1.121	1.00	120.00	120.00	1.656	1.656	1.00
12	11:49	1.00	1.187	1.00	120.00	120.00	1.165	1.165	1.00
13	11:43	1.00	1.178	1.00	120.00	120.00	0.698	0.698	1.00
14	11:31	1.00	1.156	1.00	120.00	120.00	0.666	0.666	1.00
15	6:12	1.00	0.623	1.00	120.00	120.00	1.074	1.074	1.00
16	9:29	1.00	0.953	1.00	120.00	120.00	1.365	1.365	1.00

080340

RIC
03/25/89 14:23:00
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 120 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSD1200325 #1 SCANS 600 TO 860
CALI: HSD1200325 #3



No	Name		
1	C140	D-8 NAPHTHALENE	(INT. STD.)
2	C410	NITROBENZENE	
3	C415	ISOPHORONE	
4	C420	2-NITROPHENOL	
5	C425	2,4-DIMETHYLPHENOL	
6	C430	BENZOIC ACID	
7	C435	BIS (2-CHLOROETHOXY) METHANE	
8	C440	2,4-DICHLOROPHENOL	
9	C445	1,2,4-TRICHLOROBENZENE	
10	C450	NAPHTHALENE	
11	C455	4-CHLOROANILINE	
12	C460	HEXACHLOROBUTADIENE	
13	C465	4-CHLORO-3-METHYLPHENOL	
14	C470	2-METHYLNAPHTHALENE	
15	C820	D-5 NITROBENZENE	(SURROGATE)

000341

Quantitation Report File: HSD1200325

Data: HSD1200325.TI
03/25/89 14:23:00
Sample: HSL-D STANDARD 3/25/89
Conds.: 120 NG INJECTION
Formula: Instrument: FINN Weight: 0.000
Submitted by: GC INC Analyst: WSS Acct. No.: HSD12003

000342

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI40 NAPHTHALENE D8	INTERNAL STANDARD
2	C410 NITROBENZENE	
3	C415 ISOPHORONE	
4	C420 2-NITROPHENOL	
5	C425 2,4-DIMETHYLPHENOL	
6	C430 BENZOIC ACID	
7	C435 BIS(2-CHLOROETHOXY)METHANE	
8	C440 2,4-DICHLOROPHENOL	
9	C445 1,2,4-TRICHLOROBENZENE	
10	C450 NAPHTHALENE	
11	C455 4-CHLOROANILINE	
12	C460 HEXACHLOROBUTADIENE	
13	C465 4-CHLORO-3-METHYLPHENOL	
14	C470 2-METHYLNAPHTHALENE	
15	CS20 NITROBENZENE D5	SURROGATE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	136	721	14:01	1	1.000	A BB	1175420.	40.000	UG/ML	2.33
2	77	615	11:57	1	0.853	A BV	1901580.	120.000	UG/ML	6.98
3	82	657	12:46	1	0.911	A BV	2179150.	120.000	UG/ML	6.98
4	139	666	12:57	1	0.924	A VB	799008.	120.000	UG/ML	6.98
5	122	689	13:24	1	0.956	A BB	1064970.	120.000	UG/ML	6.98
6	122	741	14:24	1	1.028	A BB	374368.	120.000	UG/ML	6.98
7	93	699	13:35	1	0.969	A BB	1571810.	120.000	UG/ML	6.98
8	162	711	13:49	1	0.986	A BB	1126240.	120.000	UG/ML	6.98
9	180	716	13:55	1	0.993	A BB	1258600.	120.000	UG/ML	6.98
10	128	725	14:06	1	1.006	A VB	2116760.	120.000	UG/ML	6.98
11	127	745	14:29	1	1.033	A BV	1164240.	120.000	UG/ML	6.98
12	225	757	14:43	1	1.050	A BB	681539.	120.000	UG/ML	6.98
13	107	837	16:16	1	1.161	A BB	1034150.	120.000	UG/ML	6.98
14	142	837	16:16	1	1.161	A BV	1969910.	120.000	UG/ML	6.98
15	82	612	11:54	1	0.849	A BB	1578020.	120.000	UG/ML	6.98

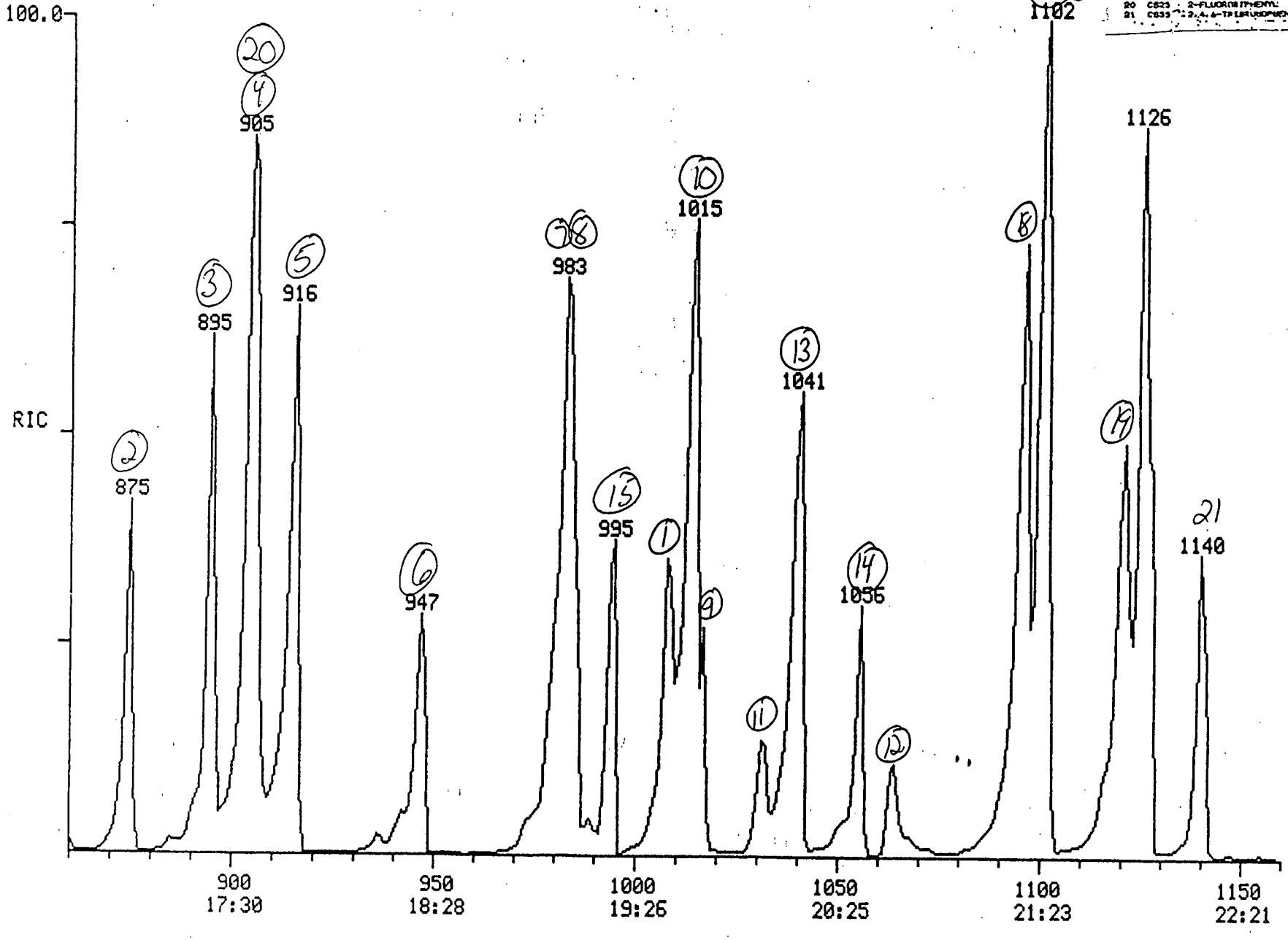
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	14:01	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	11:57	1.00	0.853	1.00	120.00	120.00	0.539	0.539	1.00
3	12:46	1.00	0.911	1.00	120.00	120.00	0.616	0.616	1.00
4	12:57	1.00	0.924	1.00	120.00	120.00	0.227	0.227	1.00
5	13:24	1.00	0.956	1.00	120.00	120.00	0.302	0.302	1.00
6	14:24	1.00	1.028	1.00	120.00	120.00	0.106	0.106	1.00
7	13:35	1.00	0.969	1.00	120.00	120.00	0.446	0.446	1.00
8	13:49	1.00	0.986	1.00	120.00	120.00	0.319	0.319	1.00
9	13:55	1.00	0.993	1.00	120.00	120.00	0.357	0.357	1.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
10	14:06	1.00	1.006	1.00	120.00	120.00	0.600	0.600	1.00
11	14:29	1.00	1.033	1.00	120.00	120.00	0.330	0.330	1.00
12	14:43	1.00	1.050	1.00	120.00	120.00	0.193	0.193	1.00
13	16:16	1.00	1.161	1.00	120.00	120.00	0.293	0.293	1.00
14	16:16	1.00	1.161	1.00	120.00	120.00	0.559	0.559	1.00
15	11:54	1.00	0.849	1.00	120.00	120.00	0.448	0.448	1.00

RIC
03/25/89 14:23:00
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 120 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSD1200325 #1 SCANS 860 TO 1160
CALI: HSD1200325 #3

No	Name		
1	C150	D-8 ACENAPHTHENE	(INT. STD.)
2	C310	HEXACHLOROCYCLOPENTADIENE	**
3	C315	2,4,6-TRICHLOROPHENOL	*
4	C320	2,4,5-TRICHLOROPHENOL	
5	C325	2-CHLORONAPHTHALENE	
6	C330	2-NITROANILINE	
7	C335	DIMETHYLPHTHALATE	
8	C340	ACENAPHTHYLENE	
9	C345	3-NITROANILINE	
10	C350	ACENAPHTHENE	*
11	C355	2,4-DINITROPHENOL	**
12	C360	4-NITROPHENOL	**
13	C365	DIBENZOFURAN	
14	C370	2,4-DINITROTOLUENE	
15	C375	2,6-DINITROTOLUENE	
16	C380	DIETHYLPHTHALATE	
17	C385	4-CHLOROPHENYL-PHENYLETHER	
18	C390	FLUORENE	
19	C395	4-NITROANILINE	
20	C825	2-FLUOROBIPHENYL	(SURROGATE)
21	C835	2,4,6-TRIBROMOPHENOL	(SURROGATE)



000344

Quantitation Report File: HSD1200325

000345

Data: HSD1200325.TI
03/25/89 14:23:00
Sample: HSL-D STANDARD 3/25/89
Conds.: 120 NG INJECTION
Formula: Instrument: FINN Weight: 0.000
Submitted by: GC INC Analyst: WSS Acct. No.: HSD12003

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	C150 ACENAPHTHENE D8	INTERNAL STANDARD
2	C510 HEXACHLOROCYCLOPENTADIENE	
3	C515 2,4,6-TRICHLOROPHENOL	
4	C520 2,4,5-TRICHLOROPHENOL	
5	C525 2-CHLORONAPHTHALENE	
6	C530 2-NITROANILINE	
7	C535 DIMETHYL PHTHALATE	
8	C540 ACENAPHTHYLENE	
9	C545 3-NITROANILINE	
10	C550 ACENAPHTHENE	
11	C555 2,4-DINITROPHENOL	
12	C560 4-NITROPHENOL	
13	C565 DIBENZOFURAN	
14	C570 2,4-DINITROTOLUENE	
15	C543 2,6-DINITROTOLUENE	
16	C580 DIETHYL PHTHALATE	
17	C585 4-CHLOROPHENYL PHENYL ETHER	
18	C590 FLUORENE	
19	C595 4-NITROANILINE	
20	CS25 2-FLUOROBIPHENYL	SURROGATE
21	CS55 2,4,6-TRIBROMOPHENOL	SURROGATE

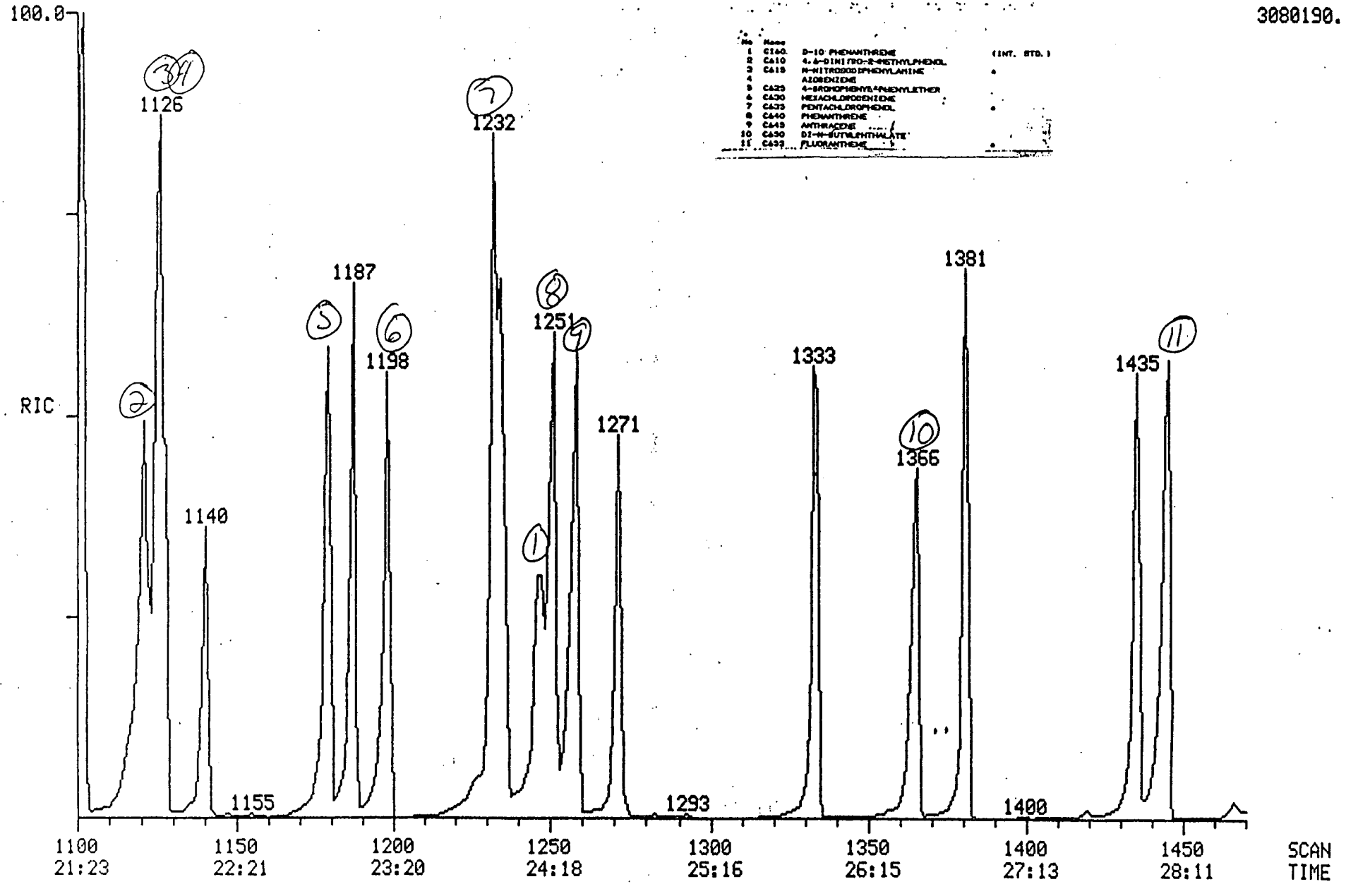
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	164	1008	19:36	1	1.000	A VB	580031.	40.000 UG/ML	1.64
2	237	875	17:01	1	0.868	A BB	455193.	120.000 UG/ML	4.92
3	196	895	17:24	1	0.888	A BV	701549.	120.000 UG/ML	4.92
4	196	905	17:36	1	0.898	A VB	704480.	120.000 UG/ML	4.92
5	162	916	17:48	1	0.909	A BB	1703160.	120.000 UG/ML	4.92
6	65	947	18:25	1	0.939	A BB	593984.	120.000 UG/ML	4.92
7	163	985	19:09	1	0.977	A BB	1734350.	120.000 UG/ML	4.92
8	152	983	19:07	1	0.975	A BB	2155920.	120.000 UG/ML	4.92
9	138	1017	19:46	1	1.009	A BB	580022.	120.000 UG/ML	4.92
10	154	1014	19:43	1	1.006	A BB	1555980.	120.000 UG/ML	4.92
11	184	1031	20:03	1	1.023	A VB	193807.	120.000 UG/ML	4.92
12	139	1063	20:40	1	1.055	A VB	286900.	120.000 UG/ML	4.92
13	168	1041	20:14	1	1.033	A BB	1910700.	120.000 UG/ML	4.92
14	165	1056	20:32	1	1.048	A BB	552064.	120.000 UG/ML	4.92
15	165	994	19:19	1	0.986	A BB	562461.	120.000 UG/ML	4.92
16	149	1101	21:24	1	1.092	A BB	1744670.	120.000 UG/ML	4.92
17	204	1102	21:25	1	1.093	A BB	1067460.	120.000 UG/ML	4.92
18	166	1096	21:18	1	1.087	A BB	1561760	120.000 UG/ML	4.92
19	138	1120	21:46	1	1.111	A BB	484456.	120.000 UG/ML	4.92
20	172	906	17:37	1	0.899	A BV	1787240	120.000 UG/ML	4.92
21	330	1140	22:14	1	1.131	A BB	303812.	120.000 UG/ML	4.92

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	19:36	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	17:01	1.00	0.868	1.00	120.00	120.00	0.262	0.262	1.00
3	17:24	1.00	0.888	1.00	120.00	120.00	0.403	0.403	1.00
4	17:36	1.00	0.898	1.00	120.00	120.00	0.405	0.405	1.00
5	17:48	1.00	0.909	1.00	120.00	120.00	0.979	0.979	1.00
6	18:25	1.00	0.939	1.00	120.00	120.00	0.341	0.341	1.00
7	19:09	1.00	0.977	1.00	120.00	120.00	0.997	0.997	1.00
8	19:07	1.00	0.975	1.00	120.00	120.00	1.239	1.239	1.00
9	19:46	1.00	1.009	1.00	120.00	120.00	0.333	0.333	1.00
10	19:43	1.00	1.006	1.00	120.00	120.00	0.894	0.894	1.00
11	20:03	1.00	1.023	1.00	120.00	120.00	0.111	0.111	1.00
12	20:40	1.00	1.055	1.00	120.00	120.00	0.165	0.165	1.00
13	20:14	1.00	1.033	1.00	120.00	120.00	1.098	1.098	1.00
14	20:32	1.00	1.048	1.00	120.00	120.00	0.317	0.317	1.00
15	19:19	1.00	0.986	1.00	120.00	120.00	0.323	0.323	1.00
16	21:24	1.00	1.092	1.00	120.00	120.00	1.003	1.003	1.00
17	21:25	1.00	1.093	1.00	120.00	120.00	0.613	0.613	1.00
18	21:18	1.00	1.087	1.00	120.00	120.00	0.898	0.898	1.00
19	21:46	1.00	1.111	1.00	120.00	120.00	0.278	0.278	1.00
20	17:37	1.00	0.899	1.00	120.00	120.00	1.027	1.027	1.00
21	22:10	1.00	1.131	1.00	120.00	120.00	0.175	0.175	1.00

RIC
03/25/89 14:23:00
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 120 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSD1200325 #1
CALI: HSD1200325 #3

SCANS 1100 TO 1470



No	Name	
1	C160 D-10 PHENANTHRENE	(INT. STD.)
2	C410 4,6-DINITRO-2-METHYLPHENOL	
3	C415 N-NITROSODIPHENYLAMINE	
4	AZOBENZENE	
5	C425 4-BROMOPHENYL-PHENYLETHER	
6	C430 HEXACHLOROBENZENE	
7	C435 PENTACHLOROPHENOL	
8	C440 PHENANTHRENE	
9	C445 ANTHRACENE	
10	C450 DI-N-BUTYLPHTHALATE	
11	C455 FLUORANTHENE	

0000347

Quantitation Report File: HSD1200325

000348

Data: HSD1200325.TI
03/25/89 14:23:00
Sample: HSL-D STANDARD 3/25/89
Conds.: 120 NG INJECTION
Formula: Instrument: FINN Weight: 0.000
Submitted by: QC INC Analyst: WSS Acct. No.: HSD12003

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI60 PHENANTHRENE D10	INTERNAL STANDARD
2	C610 4,6-DINITRO-2-METHYL PHENOL	
3	C615 N-NITROSODIPHENYLAMINE	
4	AZOBENZENE	
5	C625 4-BROMOPHENYL PHENYL ETHER	
6	C630 HEXACHLOROBENZENE	
7	C635 PENTACHLOROPHENOL	
8	C640 PHENANTHRENE	
9	C645 ANTHRACENE	
10	C650 DI-N-BUTYL PHTHALATE	
11	C655 FLUORANTHENE	

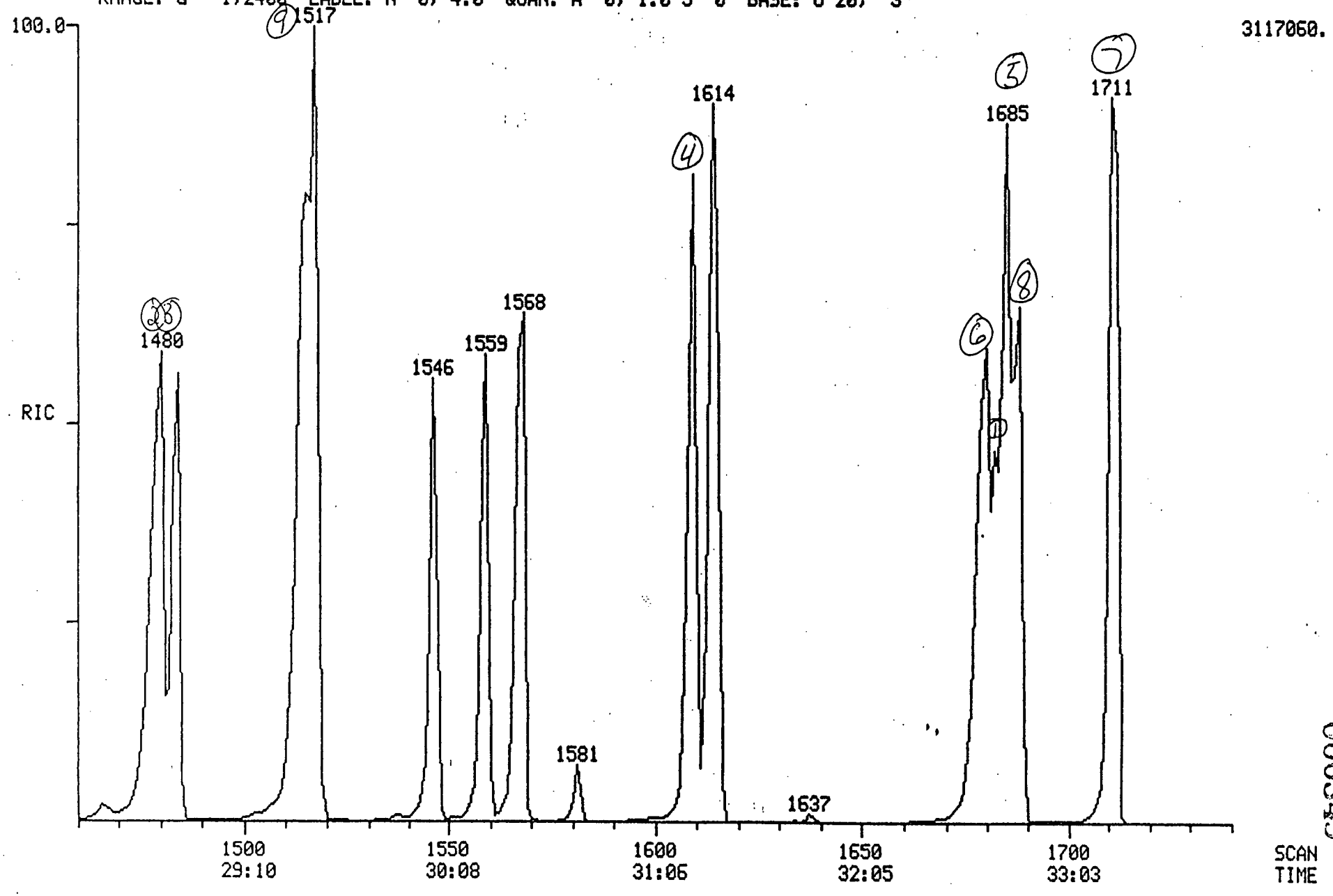
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	188	1246	24:13	1	1.000	A VV	725469.	40.000 UG/ML	3.23
2	198	1122	21:49	1	0.900	A BB	304956.	120.000 UG/ML	9.68
3	169	1125	21:52	1	0.903	A BB	1156200.	120.000 UG/ML	9.68
4	77	1128	21:56	1	0.905	A BB	2262290.	120.000 UG/ML	9.68
5	248	1179	22:55	1	0.946	A BB	543610.	120.000 UG/ML	9.68
6	284	1198	23:17	1	0.961	A VB	595954.	120.000 UG/ML	9.68
7	266	1233	23:58	1	0.990	A VV	374677.	120.000 UG/ML	9.68
8	178	1251	24:19	1	1.004	A BV	1812930.	120.000 UG/ML	9.68
9	178	1258	24:27	1	1.010	A VB	1330790.	120.000 UG/ML	9.68
10	149	1365	26:32	1	1.096	A BB	1673010.	120.000 UG/ML	9.68
11	202	1445	28:05	1	1.160	A VB	1447190.	120.000 UG/ML	9.68

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	24:13	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	21:49	1.00	0.900	1.00	120.00	120.00	0.140	0.140	1.00
3	21:52	1.00	0.903	1.00	120.00	120.00	0.531	0.531	1.00
4	21:56	1.00	0.905	1.00	120.00	120.00	1.039	1.039	1.00
5	22:55	1.00	0.946	1.00	120.00	120.00	0.250	0.250	1.00
6	23:17	1.00	0.961	1.00	120.00	120.00	0.274	0.274	1.00
7	23:58	1.00	0.990	1.00	120.00	120.00	0.172	0.172	1.00
8	24:19	1.00	1.004	1.00	120.00	120.00	0.833	0.833	1.00
9	24:27	1.00	1.010	1.00	120.00	120.00	0.611	0.611	1.00
10	26:32	1.00	1.096	1.00	120.00	120.00	0.769	0.769	1.00
11	28:05	1.00	1.160	1.00	120.00	120.00	0.665	0.665	1.00

RIC
03/25/89 14:23:00
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 120 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSD1200325 #1 SCANS 1460 TO 1740
CALI: HSD1200325 #3

No	Mass		
1	C170	D-12 CHRYSENE	(INT. STD.)
2	C710	BENZIDINE	
3	C715	PYRENE	
4	C720	BUTYLBENZYLPHTHALATE	
5	C725	3,3'-DICHLOROBENZIDINE	
6	C730	BENZO(A)ANTHRACENE	
7	C745	BIS (2-ETHYLHEXYL) PHTHALATE	
8	C740	CHRYSENE	
9	C830	D-14 TERPHENYL"3	(SURROGATE)



000349

Quantitation Report File: HSD1200325

000350

Data: HSD1200325.TI
03/25/89 14:23:00
Sample: HSL-D STANDARD 3/25/89
Conds.: 120 NG INJECTION
Formula: Instrument: FINN Weight: 0.000
Submitted by: QC INC Analyst: WSS Acct. No.: HSD12003

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI70 CHRYSENE D12	INTERNAL STANDARD
2	C710 BENZIDINE	
3	C715 PYRENE	
4	C720 BUTYLBENZYLPHTHALATE	
5	C725 3,3'-DICHLOROBENZIDINE	
6	C730 BENZO(A)ANTHRACENE	
7	C745 BIS(2-ETHYLHEXYL)PHTHALATE	
8	C740 CHRYSENE	
9	CS30 TERPHENYL D14	SURROGATE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	240	1682	32:42	1	1.000	A BB	720359.	40.000 UG/ML	4.00
2	184	1477	28:43	1	0.878	A VB	171911.	120.000 UG/ML	12.00
3	202	1480	28:46	1	0.880	A BB	1668470.	120.000 UG/ML	12.00
4	149	1609	31:17	1	0.957	A BV	1040360.	120.000 UG/ML	12.00
5	252	1685	32:45	1	1.002	A BB	861732.	120.000 UG/ML	12.00
6	228	1680	32:40	1	0.999	A BV	1724140.	120.000 UG/ML	12.00
7	149	1711	33:16	1	1.017	A BB	1366830.	120.000 UG/ML	12.00
8	228	1688	32:49	1	1.004	A VB	1567010.	120.000 UG/ML	12.00
9	244	1517	29:29	1	0.902	A BB	1710230.	120.000 UG/ML	12.00

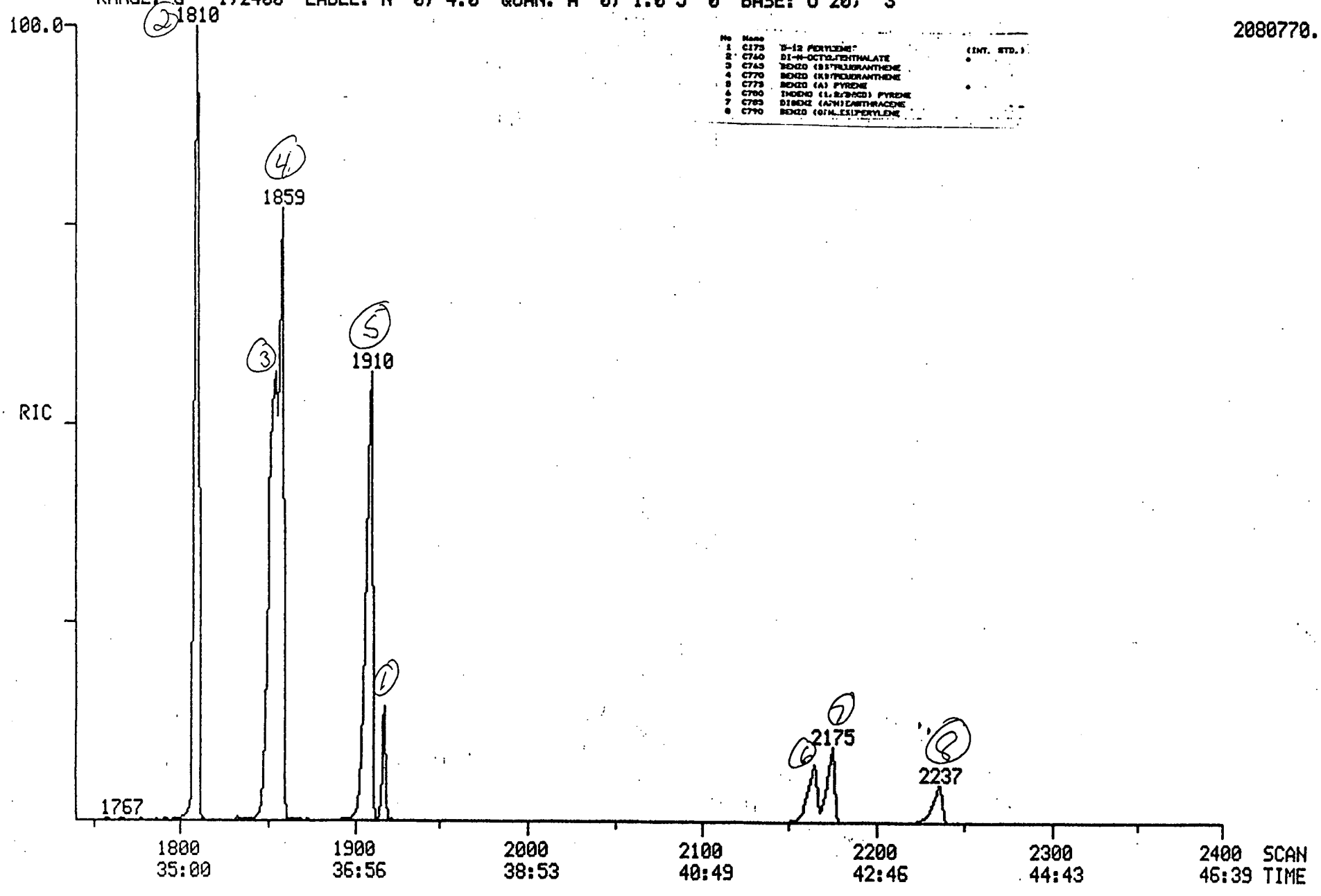
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	32:42	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	28:43	1.00	0.878	1.00	120.00	120.00	0.080	0.080	1.00
3	28:46	1.00	0.880	1.00	120.00	120.00	0.772	0.772	1.00
4	31:17	1.00	0.957	1.00	120.00	120.00	0.481	0.481	1.00
5	32:45	1.00	1.002	1.00	120.00	120.00	0.399	0.399	1.00
6	32:40	1.00	0.999	1.00	120.00	120.00	0.798	0.798	1.00
7	33:16	1.00	1.017	1.00	120.00	120.00	0.632	0.632	1.00
8	32:49	1.00	1.004	1.00	120.00	120.00	0.725	0.725	1.00
9	29:29	1.00	0.902	1.00	120.00	120.00	0.791	0.791	1.00

RIC
03/25/89 14:23:00
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 120 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSD1200325 #1
CALI: HSD1200325 #3

SCANS 1740 TO 2400

2080770.



No	Name		
1	C175	"B-12 PERYLENE"	(INT. STD.)
2	C740	DI-N-OCTYLPHTHALATE	
3	C763	BENZO (B)FLUORANTHENE	
4	C770	BENZO (K)FLUORANTHENE	
5	C773	BENZO (A) PYRENE	
6	C780	INDENO (1,2,3-CD) PYRENE	
7	C783	DIBENZ (A,H)ANTHRACENE	
8	C790	BENZO (G,H,I)PERYLENE	

0003351

Quantitation Report File: HSD1200325

000352

Data: HSD1200325.TI
03/25/89 14:23:00
Sample: HSL-D STANDARD 3/25/89
Conds.: 120 NG INJECTION
Formula: Instrument: FINN Weight: 0.000
Submitted by: QC INC Analyst: WSS Acct. No.: HSD12003

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

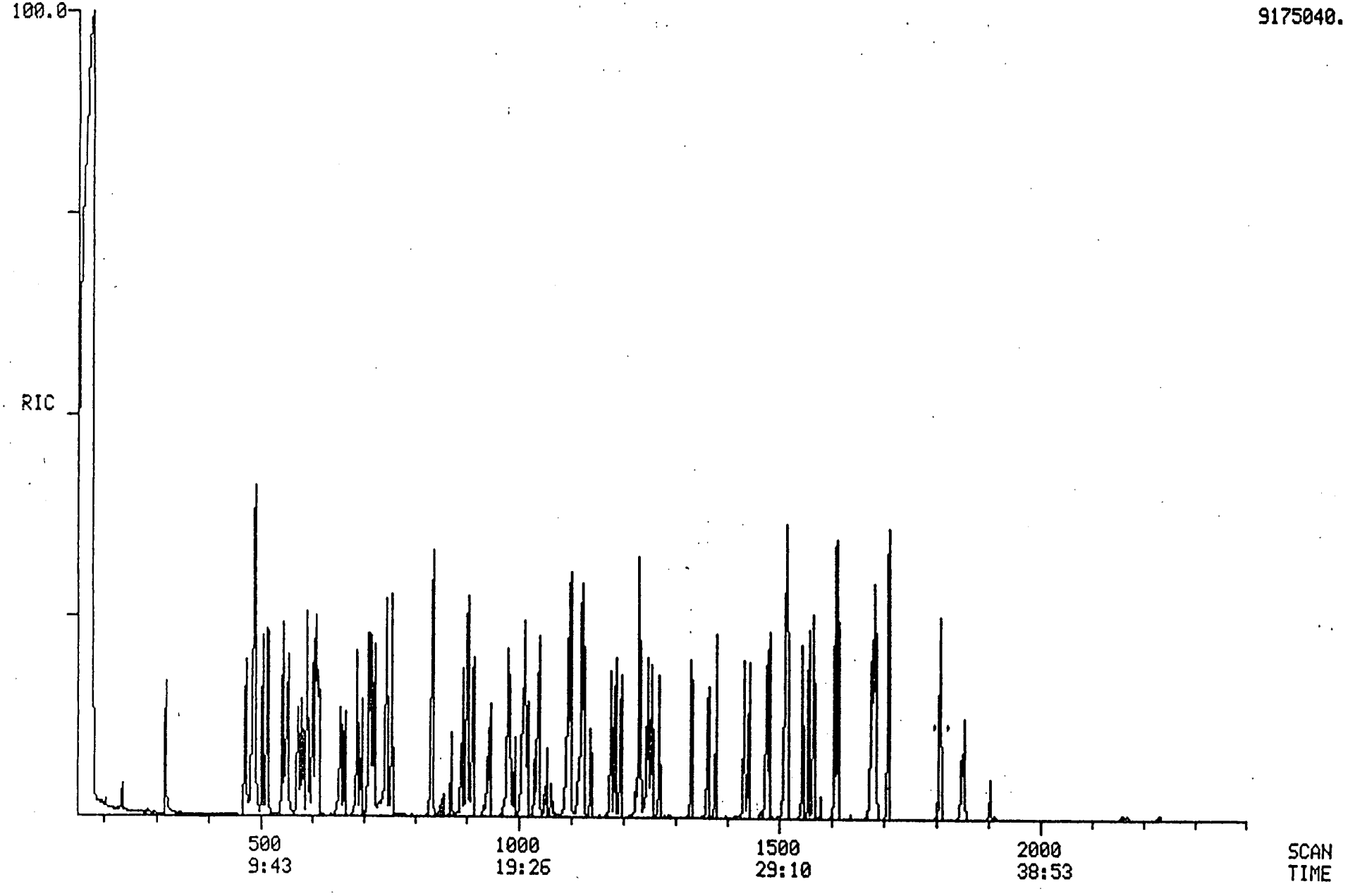
No	Name	
1	CI75 PERYLENE D12	INTERNAL STANDARD
2	C760 DI-N-OCTYLPHTHALATE	
3	C765 BENZO(B)FLUORANTHENE	
4	C770 BENZO(K)FLUORANTHENE	
5	C775 BENZO(A)PYRENE	
6	C780 INDENO(1,2,3-CD)PYRENE	
7	C785 DIBENZO(A,H)ANTHRACENE	
8	C790 BENZO(G,H,I)PERYLENE	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	264	1917	37:16	1	1.000	A BB	259471.	40.000	UG/ML	4.55
2	149	1810	35:11	1	0.944	A BB	1730910.	120.000	UG/ML	13.64
3	252	1855	36:04	1	0.968	M XX	2086150.	120.000	UG/ML	13.64
4	252	1859	36:08	1	0.970	M XX	1261110.	120.000	UG/ML	13.64
5	252	1910	37:08	1	0.996	A BV	1406470.	120.000	UG/NL	13.64
6	276	2165	42:05	1	1.129	A BV	298066.	120.000	UG/ML	13.64
7	278	2175	42:17	1	1.135	A BB	316612.	120.000	UG/ML	13.64
8	276	2236	43:28	1	1.166	A BB	205252.	120.000	UG/ML	13.64

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	37:16	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	35:11	1.00	0.944	1.00	120.00	120.00	2.224	2.224	1.00
3	36:04	1.00	0.968	1.00	120.00	120.00	2.680	2.680	1.00
4	36:08	1.00	0.970	1.00	120.00	120.00	1.620	1.620	1.00
5	37:08	1.00	0.996	1.00	120.00	120.00	1.807	1.807	1.00
6	42:05	1.00	1.129	1.00	120.00	120.00	0.383	0.383	1.00
7	42:17	1.00	1.135	1.00	120.00	120.00	0.407	0.407	1.00
8	43:28	1.00	1.166	1.00	120.00	120.00	0.264	0.264	1.00

RIC
03/25/89 15:12:00
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 160 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

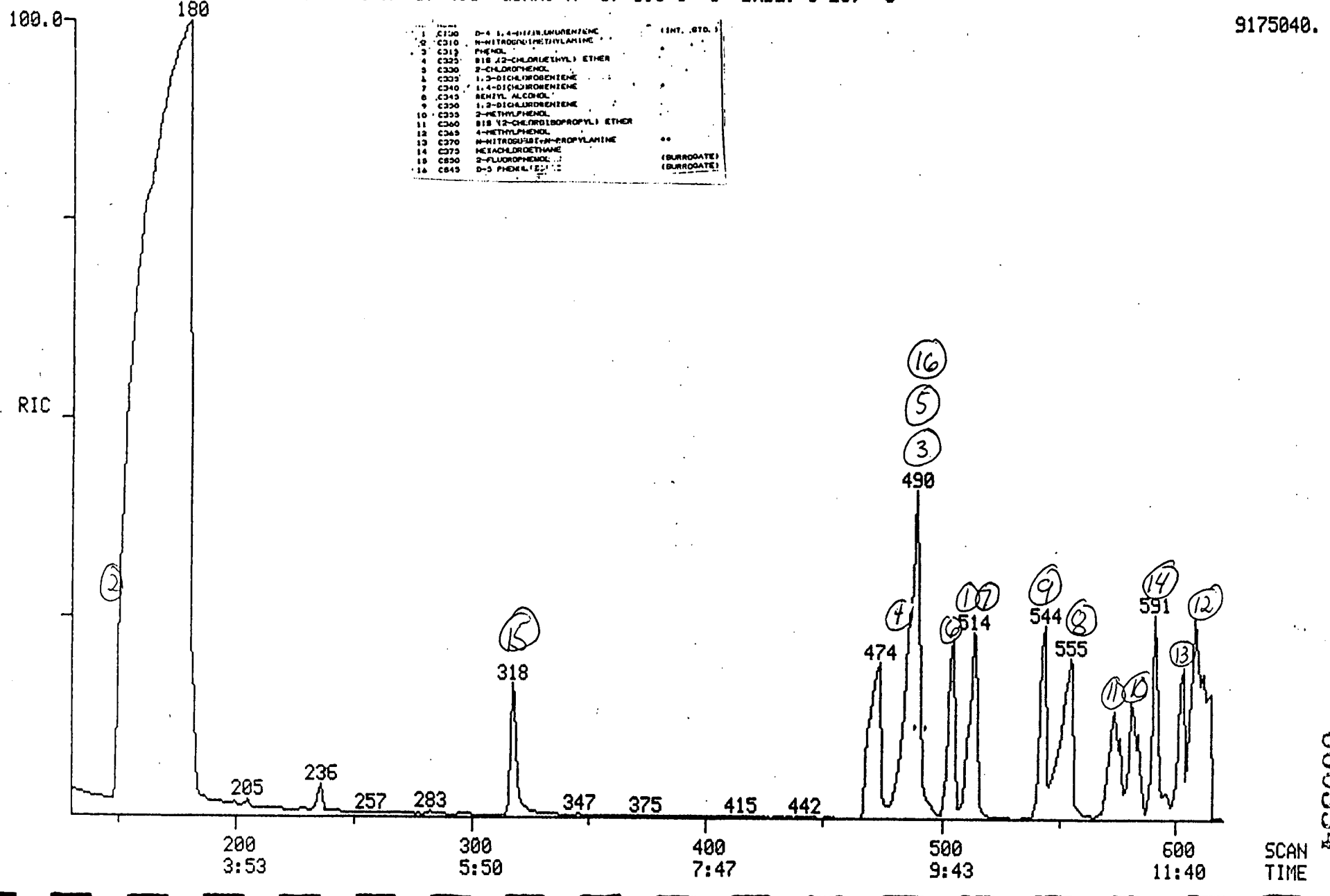
DATA: HSD1600325 #1 SCANS 150 TO 2400
CALI: CALTAB #3



0003353

RIC
03/25/89 15:12:00
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 160 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSD1600325 #1 SCANS 130 TO 620
CALI: HSD1600325 #3



1	C300	D-4 1,4-DIFLUOROBENZENE	(INT. STD.)
2	C310	N-NITROSODIMETHYLAMINE	
3	C312	PHENOL	
4	C325	BIS (2-CHLOROETHYL) ETHER	
5	C330	2-CHLOROPHENOL	
6	C335	1,3-DICHLOROBENZENE	
7	C340	1,4-DICHLOROBENZENE	
8	C345	BENZYL ALCOHOL	
9	C350	1,2-DICHLOROBENZENE	
10	C355	2-METHYLPHENOL	
11	C360	BIS (2-CHLOROISOPROPYL) ETHER	
12	C365	4-METHYLPHENOL	
13	C370	N-NITROSODI-N-PROPYLAMINE	**
14	C375	HEXACHLOROETHANE	
15	C650	2-FLUOROPHENOL	(SURROGATE)
16	C645	D-5 PHENOL (E)	(SURROGATE)

000354

Quantitation Report File: HSD1600325

Data: HSD1600325.TI
03/25/89 15:12:00
Sample: HSL-D STANDARD 3/25/89
Conds.: 160 NG INJECTION
Formula: Instrument: FINN Weight: 0.000
Submitted by: QC INC Analyst: WSS Acct. No.: HSD16003

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI30 1,4-DICHLOROBENZENE D4	INTERNAL STANDARD
2	N-NITROSODIMETHYLAMINE	
3	C315 PHENOL	
4	C325 BIS(2-CHLOROETHYL) ETHER	
5	C330 2-CHLOROPHENOL	
6	C335 1,3-DICHLOROBENZENE	
7	C340 1,4-DICHLOROBENZENE	
8	C345 BENZYL ALCOHOL	
9	C350 1,2-DICHLOROBENZENE	
10	C355 2-METHYLPHENOL	
11	C360 BIS(2-CHLOROISOPROPYL)ETHER	
12	C365 4-METHYLPHENOL	
13	C370 N-NITROSO-DI-PROPYLAMINE	
14	C375 HEXACHLOROETHANE	
15	CS50 2-FLUOROPHENOL	SURROGATE
16	CS45 PHENOL D5	SURROGATE

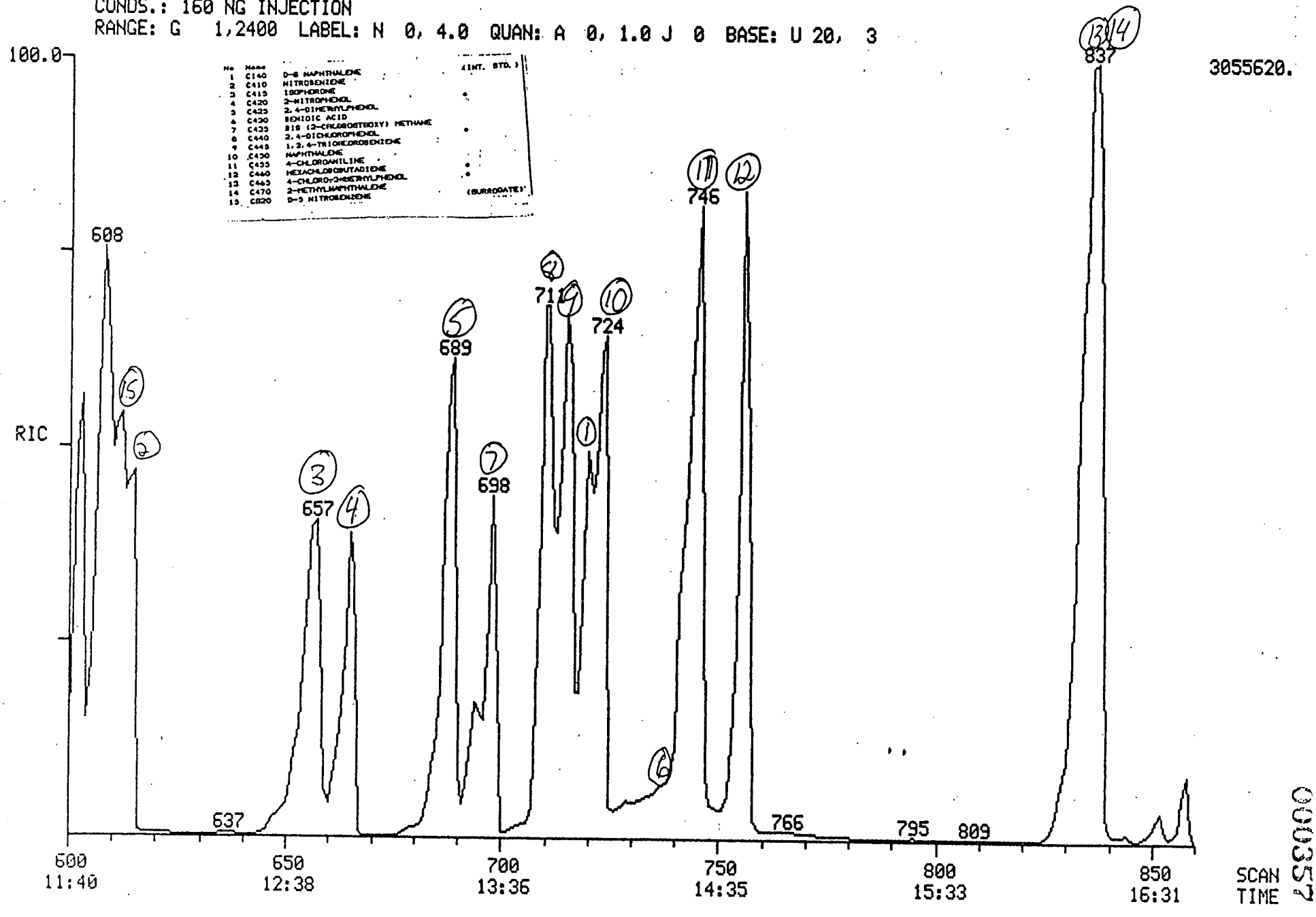
N	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%T t
1	152	511	9:56	1	1.000	A BB	307096.	40.000	UG/ML	1.64
2	74	162	3:09	1	0.317	A BV	1432540.	160.000	UG/ML	6.56
3	94	490	9:32	1	0.959	A BB	1736290.	160.000	UG/ML	6.56
4	93	485	9:26	1	0.949	A BB	1660940.	160.000	UG/ML	6.56
5	128	490	9:32	1	0.959	A BB	1359990.	160.000	UG/ML	6.56
6	146	505	9:49	1	0.988	A BV	1401160.	160.000	UG/ML	6.56
7	146	514	10:00	1	1.006	A VB	1439750.	160.000	UG/ML	6.56
8	108	555	10:47	1	1.086	A BB	1836290.	160.000	UG/ML	6.56
9	146	544	10:35	1	1.065	A BB	1385850.	160.000	UG/ML	6.56
10	108	581	11:18	1	1.137	A BB	1349620.	160.000	UG/ML	6.56
11	45	574	11:10	1	1.123	A BB	2039650.	160.000	UG/ML	6.56
12	108	608	11:49	1	1.190	A VB	1391930.	160.000	UG/ML	6.56
13	70	603	11:43	1	1.180	A VV	911592.	160.000	UG/ML	6.56
14	117	591	11:29	1	1.157	A BB	817786.	160.000	UG/ML	6.56
15	112	318	6:11	1	0.622	A BB	1311110.	160.000	UG/L	6.56
16	99	488	9:29	1	0.955	A BB	1661660.	160.000	UG/ML	6.56

No	R t(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:56	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	3:09	1.00	0.317	1.00	160.00	160.00	1.166	1.166	1.00
3	9:32	1.00	0.959	1.00	160.00	160.00	1.413	1.413	1.00
4	9:26	1.00	0.949	1.00	160.00	160.00	1.352	1.352	1.00
5	9:32	1.00	0.959	1.00	160.00	160.00	1.107	1.107	1.00
6	9:49	1.00	0.988	1.00	160.00	160.00	1.141	1.141	1.00
7	10:00	1.00	1.006	1.00	160.00	160.00	1.172	1.172	1.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
8	10:47	1.00	1.086	1.00	160.00	160.00	1.495	1.495	1.00
9	10:35	1.00	1.065	1.00	160.00	160.00	1.128	1.128	1.00
10	11:18	1.00	1.137	1.00	160.00	160.00	1.099	1.099	1.00
11	11:10	1.00	1.123	1.00	160.00	160.00	1.660	1.660	1.00
12	11:49	1.00	1.190	1.00	160.00	160.00	1.133	1.133	1.00
13	11:43	1.00	1.180	1.00	160.00	160.00	0.742	0.742	1.00
14	11:29	1.00	1.157	1.00	160.00	160.00	0.666	0.666	1.00
15	6:11	1.00	0.622	1.00	160.00	160.00	1.067	1.067	1.00
16	9:29	1.00	0.955	1.00	160.00	160.00	1.353	1.353	1.00

RIC
03/25/89 15:12:00
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 160 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSD1600325 #1 SCANS 600 TO 860
CALI: HSD1600325 #3



No	Name	
1	C140	D-8 NAPHTHALENE (INT. STD.)
2	C410	NITROBENZENE
3	C415	ISOPHORONE
4	C420	2-NITROPHENOL
5	C425	2,4-DIMETHYLPHENOL
6	C430	BENZOIC ACID
7	C435	BIS (2-CHLOROETHOXY) METHANE
8	C440	2,4-DICHLOROPHENOL
9	C445	1,2,4-TRICHLOROBENZENE
10	C450	NAPHTHALENE
11	C455	4-CHLOROANILINE
12	C460	HEXACHLOROBUTADIENE
13	C465	4-CHLORO-3-METHYLPHENOL
14	C470	2-METHYLNAPHTHALENE
15	C820	D-5 NITROBENZENE (SURROGATE)

Quantitation Report File : HSD1600325

Data: HSD1600325.TI
03/25/89 15:12:00
Sample: HSL-D STANDARD 3/25/89
Conds.: 160 NG INJECTION
Formula: Instrument: FINN Weight: 0.000
Submitted by: QC INC Analyst: WSS Acct. No.: HSD16003

000358

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Nam	
1	CI40 NAPHTHALENE D8	INTERNAL STANDARD
2	C410 NITROBENZENE	
3	C415 ISOPHORONE	
4	C420 2-NITROPHENOL	
5	C425 2,4-DIMETHYLPHENOL	
6	C430 BENZOIC ACID	
7	C435 BIS(2-CHLOROETHOXY)METHANE	
8	C440 2,4-DICHLOROPHENOL	
9	C445 1,2,4-TRICHLOROBENZENE	
10	C450 NAPHTHALENE	
11	C455 4-CHLOROANILINE	
12	C460 HEXACHLOROBUTADIENE	
13	C465 4-CHLORO-3-METHYLPHENOL	
14	C470 2-METHYLNAPHTHALENE	
15	CS20 NITROBENZENE D5	SURROGATE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%T t
1	136	720	14:00	1	1.000	A BB	1034300.	40.000	UG/ML	1.75
2	77	615	11:57	1	0.854	A VV	1342970.	160.000	UG/ML	7.02
3	82	657	12:46	1	0.912	A BV	2390930.	160.000	UG/ML	7.02
4	139	665	12:56	1	0.924	A BB	924587.	160.000	UG/ML	7.02
5	122	688	13:22	1	0.956	A BB	1147950.	160.000	UG/ML	7.02
6	122	739	14:22	1	1.026	A VB	331616.	160.000	UG/ML	7.02
7	93	698	13:34	1	0.969	A BB	1732110.	160.000	UG/ML	7.02
8	162	710	13:48	1	0.986	A BB	1201230.	160.000	UG/ML	7.02
9	180	715	13:54	1	0.993	A BB	1351980.	160.000	UG/ML	7.02
10	128	723	14:03	1	1.004	A VB	2321730.	160.000	UG/ML	7.02
11	127	746	14:30	1	1.036	A BB	2294230.	160.000	UG/ML	7.02
12	225	756	14:42	1	1.050	A BB	737083.	160.000	UG/ML	7.02
13	107	836	16:15	1	1.161	A BB	1058810.	160.000	UG/ML	7.02
14	142	837	16:16	1	1.162	A BV	2907580.	160.000	UG/ML	7.02
15	82	611	11:53	1	0.849	A BB	1686160.	160.000	UG/ML	7.02

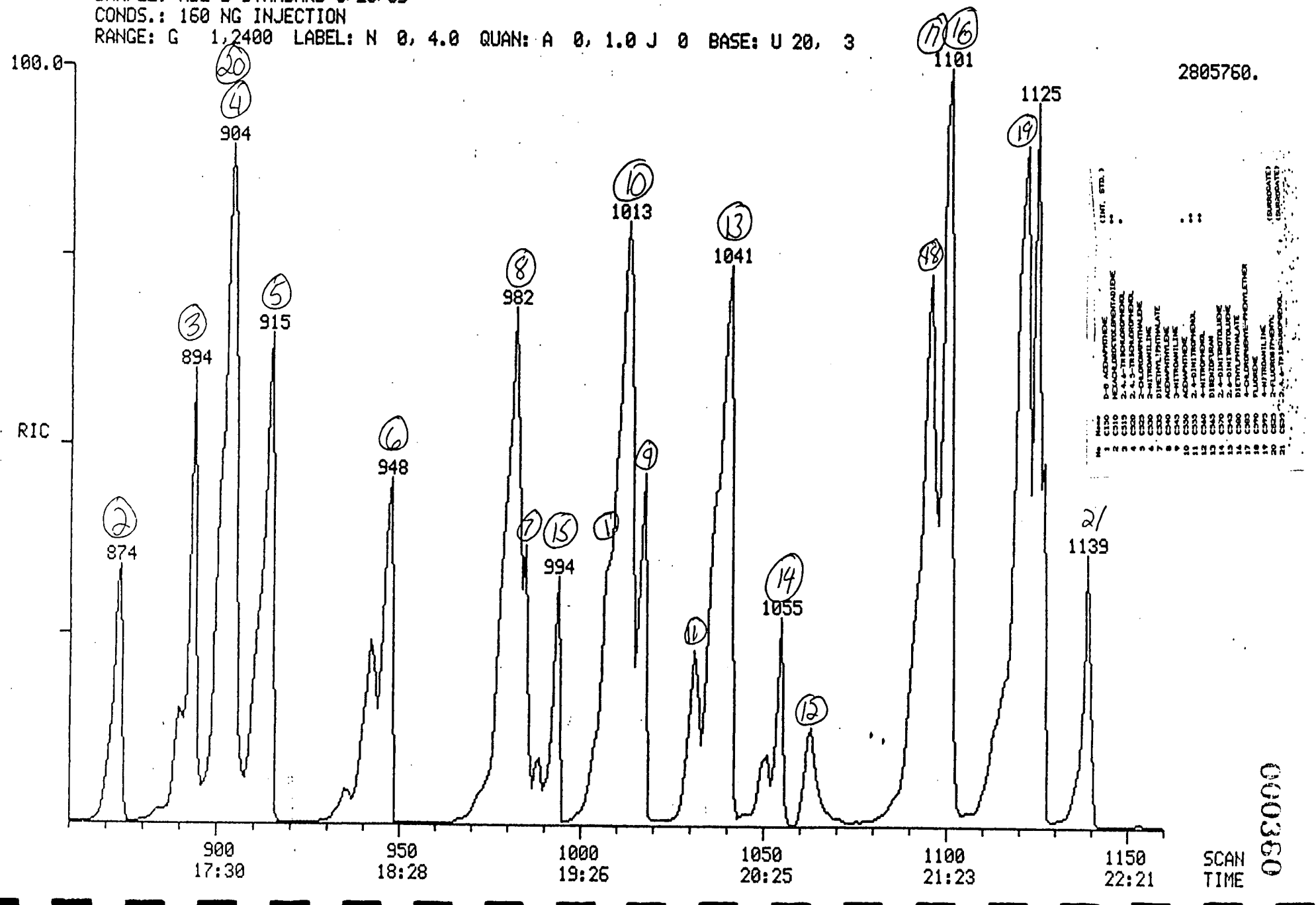
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	14:00	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	11:57	1.00	0.854	1.00	160.00	160.00	0.325	0.325	1.00
3	12:46	1.00	0.912	1.00	160.00	160.00	0.578	0.578	1.00
4	12:56	1.00	0.924	1.00	160.00	160.00	0.223	0.223	1.00
5	13:22	1.00	0.956	1.00	160.00	160.00	0.277	0.277	1.00
6	14:22	1.00	1.026	1.00	160.00	160.00	0.080	0.080	1.00
7	13:34	1.00	0.969	1.00	160.00	160.00	0.419	0.419	1.00
8	13:48	1.00	0.986	1.00	160.00	160.00	0.290	0.290	1.00
9	13:54	1.00	0.993	1.00	160.00	160.00	0.327	0.327	1.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
10	14:03	1.00	1.004	1.00	160.00	160.00	0.561	0.561	1.00
11	14:30	1.00	1.036	1.00	160.00	160.00	0.555	0.555	1.00
12	14:42	1.00	1.050	1.00	160.00	160.00	0.178	0.178	1.00
13	16:15	1.00	1.161	1.00	160.00	160.00	0.256	0.256	1.00
14	16:16	1.00	1.162	1.00	160.00	160.00	0.703	0.703	1.00
15	11:53	1.00	0.849	1.00	160.00	160.00	0.408	0.408	1.00

RIC
03/25/89 15:12:00
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 160 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSD1600325 #1
CALI: HSD1600325 #3

SCANS 860 TO 1160



000360

Quantitation Rep rt File: HSD1600325

000361

Data: HSD1600325.TI
03/25/89 15:12:00
Sample: HSL-D STANDARD 3/25/89
Conds.: 160 NG INJECTION
F rmula: Instrum nt: FINN W ight: 0.000
Submitted by: QC INC Analyst: WSS Acct. No.: HSD16003

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI50 ACENAPHTHENE D8	INTERNAL STANDARD
2	C510 HEXACHLOROCYCLOPENTADIENE	
3	C515 2,4,6-TRICHLOROPHENOL	
4	C520 2,4,5-TRICHLOROPHENOL	
5	C525 2-CHLORONAPHTHALENE	
6	C530 2-NITROANILINE	
7	C535 DIMETHYL PHTHALATE	
8	C540 ACENAPHTHYLENE	
9	C545 3-NITROANILINE	
10	C550 ACENAPHTHENE	
11	C555 2,4-DINITROPHENOL	
12	C560 4-NITROPHENOL	
13	C565 DIBENZOFURAN	
14	C570 2,4-DINITROTOLUENE	
15	C543 2,6-DINITROTOLUENE	
16	C580 DIETHYL PHTHALATE	
17	C585 4-CHLOROPHENYL PHENYL ETHER	
18	C590 FLUORENE	
19	C595 4-NITROANILINE	
20	CS25 2-FLUOROBIPHENYL	SURROGATE
21	CS55 2,4,6-TRIBROMOPHENOL	SURROGATE

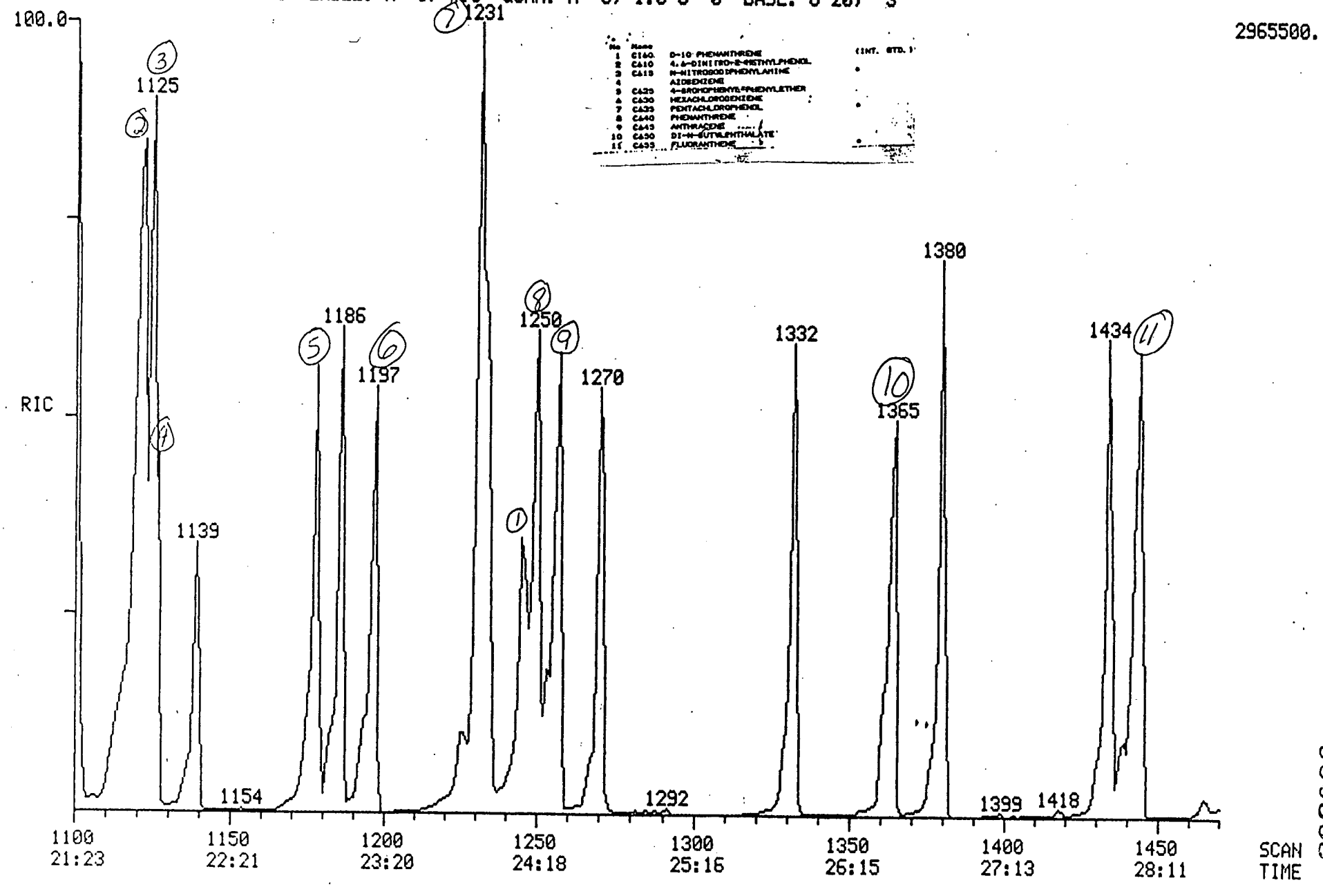
N	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%T t
1	164	1007	19:35	1	1.000	A VB	428286.	40.000 UG/ML	1.23
2	237	873	16:58	1	0.867	A BB	417440.	160.000 UG/ML	4.94
3	196	894	17:23	1	0.888	A BV	711563.	160.000 UG/ML	4.94
4	196	903	17:33	1	0.897	A VB	701052.	160.000 UG/ML	4.94
5	162	915	17:47	1	0.909	A BB	1860500.	160.000 UG/ML	4.94
6	65	948	18:26	1	0.941	A VB	717548.	160.000 UG/ML	4.94
7	163	985	19:09	1	0.978	A BB	1832220.	160.000 UG/ML	4.94
	152	982	19:05	1	0.975	A BB	2247450.	160.000 UG/ML	4.94
9	138	1018	19:47	1	1.011	A VB	734353.	160.000 UG/ML	4.94
10	154	1013	19:42	1	1.006	A BB	1613880.	160.000 UG/ML	4.94
11	184	1031	20:03	1	1.024	A VB	207924.	160.000 UG/ML	4.94
12	139	1063	20:40	1	1.056	A VB	308446.	160.000 UG/ML	4.94
13	168	1041	20:14	1	1.034	A BB	3127740.	160.000 UG/ML	4.94
14	165	1055	20:31	1	1.048	A BB	543206.	160.000 UG/ML	4.94
15	165	993	19:18	1	0.986	A*BB	516544.	160.000 UG/ML	4.94
16	149	1101	21:24	1	1.093	A BB	1879780.	160.000 UG/ML	4.94
17	204	1100	21:23	1	1.092	A BB	1061320.	160.000 UG/ML	4.94
18	166	1095	21:17	1	1.087	A BV	1641820.	160.000 UG/ML	4.94
19	138	1122	21:49	1	1.114	A BB	1138470.	160.000 UG/ML	4.94
20	172	904	17:34	1	0.898	A BV	1936010.	160.000 UG/ML	4.94
21	330	1139	22:09	1	1.131	A BB	283188.	160.000 UG/ML	4.94

No	Ret(L)	Ratio	RRT(L)	Rati	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	19:35	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	16:58	1.00	0.867	1.00	160.00	160.00	0.244	0.244	1.00
3	17:23	1.00	0.888	1.00	160.00	160.00	0.415	0.415	1.00
4	17:33	1.00	0.897	1.00	160.00	160.00	0.409	0.409	1.00
5	17:47	1.00	0.909	1.00	160.00	160.00	1.086	1.086	1.00
6	18:26	1.00	0.941	1.00	160.00	160.00	0.419	0.419	1.00
7	19:09	1.00	0.978	1.00	160.00	160.00	1.070	1.070	1.00
8	19:05	1.00	0.975	1.00	160.00	160.00	1.312	1.312	1.00
9	19:47	1.00	1.011	1.00	160.00	160.00	0.429	0.429	1.00
10	19:42	1.00	1.006	1.00	160.00	160.00	0.942	0.942	1.00
11	20:03	1.00	1.024	1.00	160.00	160.00	0.121	0.121	1.00
12	20:40	1.00	1.056	1.00	160.00	160.00	0.180	0.180	1.00
13	20:14	1.00	1.034	1.00	160.00	160.00	1.826	1.826	1.00
14	20:31	1.00	1.048	1.00	160.00	160.00	0.317	0.317	1.00
15	19:18	1.00	0.986	1.00	160.00	160.00	0.302	0.302	1.00
16	21:24	1.00	1.093	1.00	160.00	160.00	1.097	1.097	1.00
17	21:23	1.00	1.092	1.00	160.00	160.00	0.620	0.620	1.00
18	21:17	1.00	1.087	1.00	160.00	160.00	0.958	0.958	1.00
19	21:49	1.00	1.114	1.00	160.00	160.00	0.665	0.665	1.00
20	17:34	1.00	0.898	1.00	160.00	160.00	1.130	1.130	1.00
21	22:09	1.00	1.131	1.00	160.00	160.00	0.165	0.165	1.00

RIC
03/25/89 15:12:00
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 160 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSD1600325 #1
CALI: HSD1600325 #3

SCANS 1100 TO 1470



No	Name	
1	C140	D-10 PHENANTHRENE (INT. STD.)
2	C410	4,6-DINITRO-2-METHYLPHENOL
3	C415	N-NITROSODIPHENYLAMINE
4		AZOBENZENE
5	C425	4-BROMOPHENYL-PHENYLETHER
6	C430	HEXACHLOROBENZENE
7	C435	PENTACHLOROPHENOL
8	C440	PHENANTHRENE
9	C445	ANTHRACENE
10	C450	DI-N-BUTYLPHTHALATE
11	C455	FLUORANTHENE

0003363

Quantitation Report File: HSD1600325

000364

Data: HSD1600325.TI
03/25/89 15:12:00
Sample: HSL-D STANDARD 3/25/89
Conds.: 160 NG INJECTION
F rmula: Instrument: FINN Weight: 0.000
Submitted by: QC INC Analyst: WSS Acct. No.: HSD16003

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI60 PHENANTHRENE D10	INTERNAL STANDARD
2	C610 4,6-DINITRO-2-METHYL PHENOL	
3	C615 N-NITROSODIPHENYLAMINE	
4	AZOBENZENE	
5	C625 4-BROMOPHENYL PHENYL ETHER	
6	C630 HEXACHLOROBENZENE	
7	C635 PENTACHLOROPHENOL	
8	C640 PHENANTHRENE	
9	C645 ANTHRACENE	
10	C650 DI-N-BUTYL PHTHALATE	
11	C655 FLUORANTHENE	

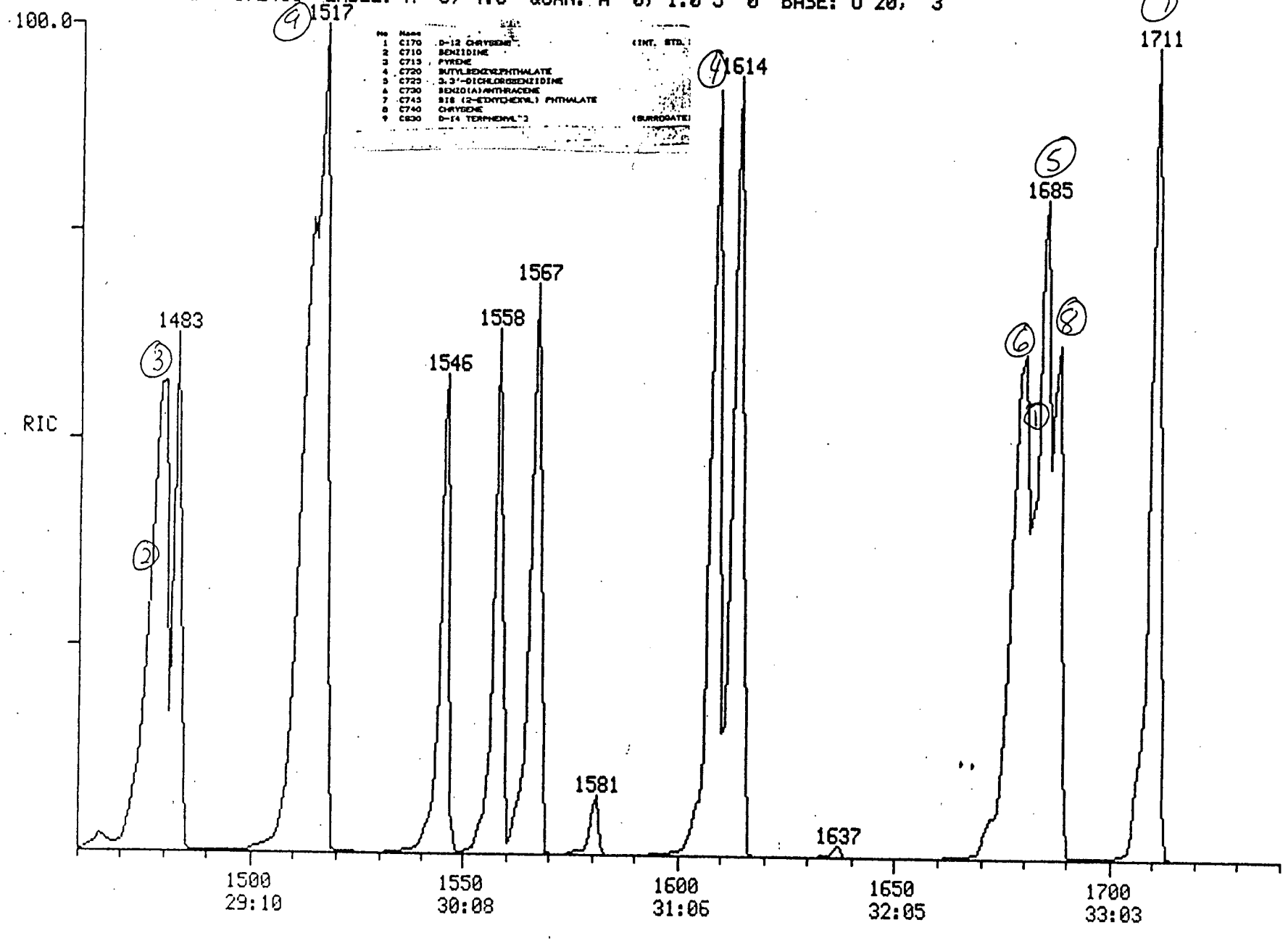
N	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%T t
1	188	1245	24:12	1	1.000	A VV	567797.	40.000	UG/ML	2.44
2	198	1121	21:48	1	0.900	A BB	360309.	160.000	UG/ML	9.76
3	169	1125	21:52	1	0.904	A BB	1308380.	160.000	UG/ML	9.76
4	77	1127	21:55	1	0.905	A BB	2438920.	160.000	UG/ML	9.76
5	248	1178	22:54	1	0.946	A BB	532808.	160.000	UG/ML	9.76
6	284	1197	23:16	1	0.961	A VB	610211.	160.000	UG/ML	9.76
7	266	1232	23:57	1	0.990	A BV	404308.	160.000	UG/ML	9.76
8	178	1250	24:18	1	1.004	A BV	1967040.	160.000	UG/ML	9.76
9	178	1257	24:26	1	1.010	A VB	1518530.	160.000	UG/ML	9.76
10	149	1365	26:32	1	1.096	A BB	1923530.	160.000	UG/ML	9.76
11	202	1444	28:04	1	1.160	A BB	1797120.	160.000	UG/ML	9.76

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	24:12	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	21:48	1.00	0.900	1.00	160.00	160.00	0.159	0.159	1.00
3	21:52	1.00	0.904	1.00	160.00	160.00	0.576	0.576	1.00
4	21:55	1.00	0.905	1.00	160.00	160.00	1.074	1.074	1.00
5	22:54	1.00	0.946	1.00	160.00	160.00	0.235	0.235	1.00
6	23:16	1.00	0.961	1.00	160.00	160.00	0.269	0.269	1.00
7	23:57	1.00	0.990	1.00	160.00	160.00	0.178	0.178	1.00
8	24:18	1.00	1.004	1.00	160.00	160.00	0.866	0.866	1.00
9	24:26	1.00	1.010	1.00	160.00	160.00	0.669	0.669	1.00
10	26:32	1.00	1.096	1.00	160.00	160.00	0.847	0.847	1.00
11	28:04	1.00	1.160	1.00	160.00	160.00	0.791	0.791	1.00

RIC
03/25/89 15:12:00
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 160 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSD1600325 #1
CALI: HSD1600325 #3

SCANS 1460 TO 1740



No	Name	
1	C170 D-12 CHRYSENE	(INT. STD.)
2	C710 BENZIDINE	
3	C713 PYRENE	
4	C720 BUTYLBENZYLPHTHALATE	
5	C723 3,3'-DICHLOROBENZIDINE	
6	C730 BENZO(A)ANTHRACENE	
7	C743 BIS (2-ETHYLHEXYL) PHTHALATE	
8	C740 CHRYSENE	
9	C830 D-14 TERPHENYL"2	(SURROGATE)

000365

Quantitation Rep rt Fil : HSD1600325

000366

Data: HSD1600325.TI
03/25/89 15:12:00
Sampl : HSL-D STANDARD 3/25/89
Conds.: 160 NG INJECTION
Formula: Instrument: FINN Weight: 0.000
Submitted by: QC INC Analyst: WSS Acct. No.: HSD16003

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
R sp. fac. from Library Entry

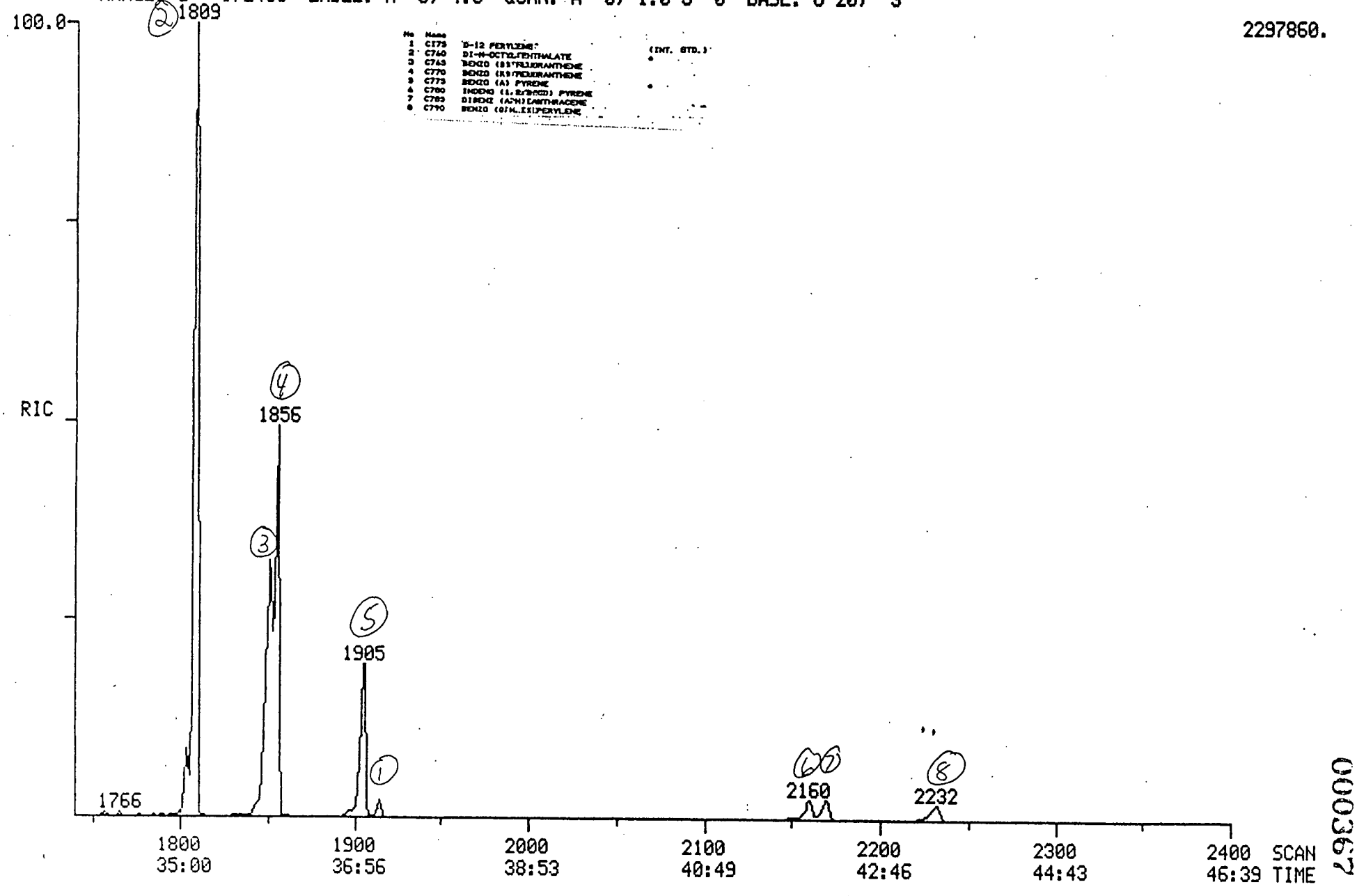
No	Name	
1	CI70 CHRYSENE D12	INTERNAL STANDARD
2	C710 BENZIDINE	
3	C715 PYRENE	
4	C720 BUTYLBENZYLPHTHALATE	
5	C725 3,3'-DICHLOROBENZIDINE	
6	C730 BENZO(A)ANTHRACENE	
7	C745 BIS(2-ETHYLHEXYL)PHTHALATE	
8	C740 CHRYSENE	
9	CS30 TERPHENYL D14	SURROGATE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	240	1681	32:41	1	1.000	A VB	631497.	40.000 UG/ML	3.03
2	184	1476	28:42	1	0.878	A BB	287962.	160.000 UG/ML	12.12
3	202	1479	28:45	1	0.880	A BB	2063530.	160.000 UG/ML	12.12
4	149	1609	31:17	1	0.957	A BV	1310910.	160.000 UG/ML	12.12
5	252	1684	32:44	1	1.002	A BB	920263.	160.000 UG/ML	12.12
6	228	1679	32:38	1	0.999	A BV	2033160.	160.000 UG/ML	12.12
7	149	1711	33:16	1	1.018	A BB	1647430.	160.000 UG/ML	12.12
8	228	1688	32:49	1	1.004	A VB	1745280.	160.000 UG/ML	12.12
9	244	1516	29:28	1	0.902	A BB	2095880.	160.000 UG/ML	12.12

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	32:41	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	28:42	1.00	0.878	1.00	160.00	160.00	0.114	0.114	1.00
3	28:45	1.00	0.880	1.00	160.00	160.00	0.817	0.817	1.00
4	31:17	1.00	0.957	1.00	160.00	160.00	0.519	0.519	1.00
5	32:44	1.00	1.002	1.00	160.00	160.00	0.364	0.364	1.00
6	32:38	1.00	0.999	1.00	160.00	160.00	0.805	0.805	1.00
7	33:16	1.00	1.018	1.00	160.00	160.00	0.652	0.652	1.00
8	32:49	1.00	1.004	1.00	160.00	160.00	0.691	0.691	1.00
9	29:28	1.00	0.902	1.00	160.00	160.00	0.830	0.830	1.00

RIC
03/25/89 15:12:00
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 160 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSD1600325 #1 SCANS 1740 TO 2400
CALI: HSD1600325 #3



000367

Quantitation Report File: HSD1600325

000368

Data: HSD1600325.TI
03/25/89 15:12:00
Sample: HSL-D STANDARD 3/25/89
Conds.: 160 NG INJECTION
Formula: Instrument: FINN Weight: 0.000
Submitted by: QC INC Analyst: WSS Acct. No.: HSD16003

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
R sp. fac. from Library Entry

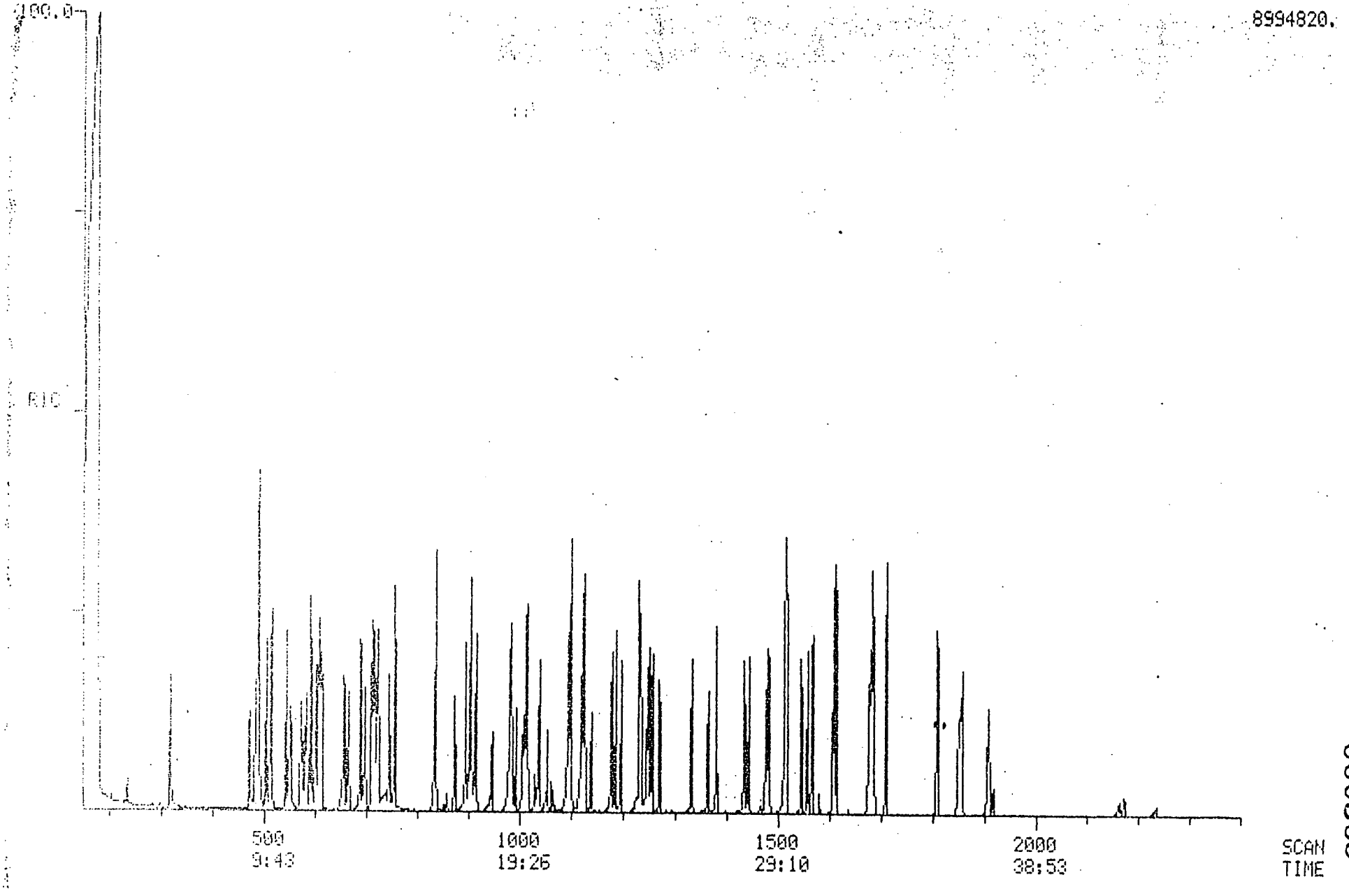
No	Nam	
1	CI75 PERYLENE D12	INTERNAL STANDARD
2	C760 DI-N-OCTYLPHTHALATE	
3	C765 BENZO(B)FLUORANTHENE	
4	C770 BENZO(K)FLUORANTHENE	
5	C775 BENZO(A)PYRENE	
6	C780 INDENO(1,2,3-CD)PYRENE	
7	C785 DIBENZO(A,H)ANTHRACENE	
8	C790 BENZO(G,H,I)PERYLENE	

N	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%T t
1	264	1914	37:12	1	1.000	A*BB	102200.	40.000	UG/ML	3.45
2	149	1809	35:10	1	0.945	A BB	1600770.	160.000	UG/ML	13.79
3	252	1851	35:59	1	0.967	A BV	1204050.	160.000	UG/ML	13.79
4	252	1856	36:05	1	0.970	A VB	735781.	160.000	UG/ML	13.79
5	252	1905	37:02	1	0.995	A BB	484376.	160.000	UG/NL	13.79
6	276	2160	41:59	1	1.129	A BV	110088.	160.000	UG/ML	13.79
7	278	2170	42:11	1	1.134	A BB	108539.	160.000	UG/ML	13.79
8	276	2232	43:23	1	1.166	A BB	95289.	160.000	UG/ML	13.79

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	37:12	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	35:10	1.00	0.945	1.00	160.00	160.00	3.916	3.916	1.00
3	35:59	1.00	0.967	1.00	160.00	160.00	2.945	2.945	1.00
4	36:05	1.00	0.970	1.00	160.00	160.00	1.800	1.800	1.00
5	37:02	1.00	0.995	1.00	160.00	160.00	1.185	1.185	1.00
6	41:59	1.00	1.129	1.00	160.00	160.00	0.269	0.269	1.00
7	42:11	1.00	1.134	1.00	160.00	160.00	0.266	0.266	1.00
8	43:23	1.00	1.166	1.00	160.00	160.00	0.233	0.233	1.00

RIC
03/25/89 14:23:00
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 120 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

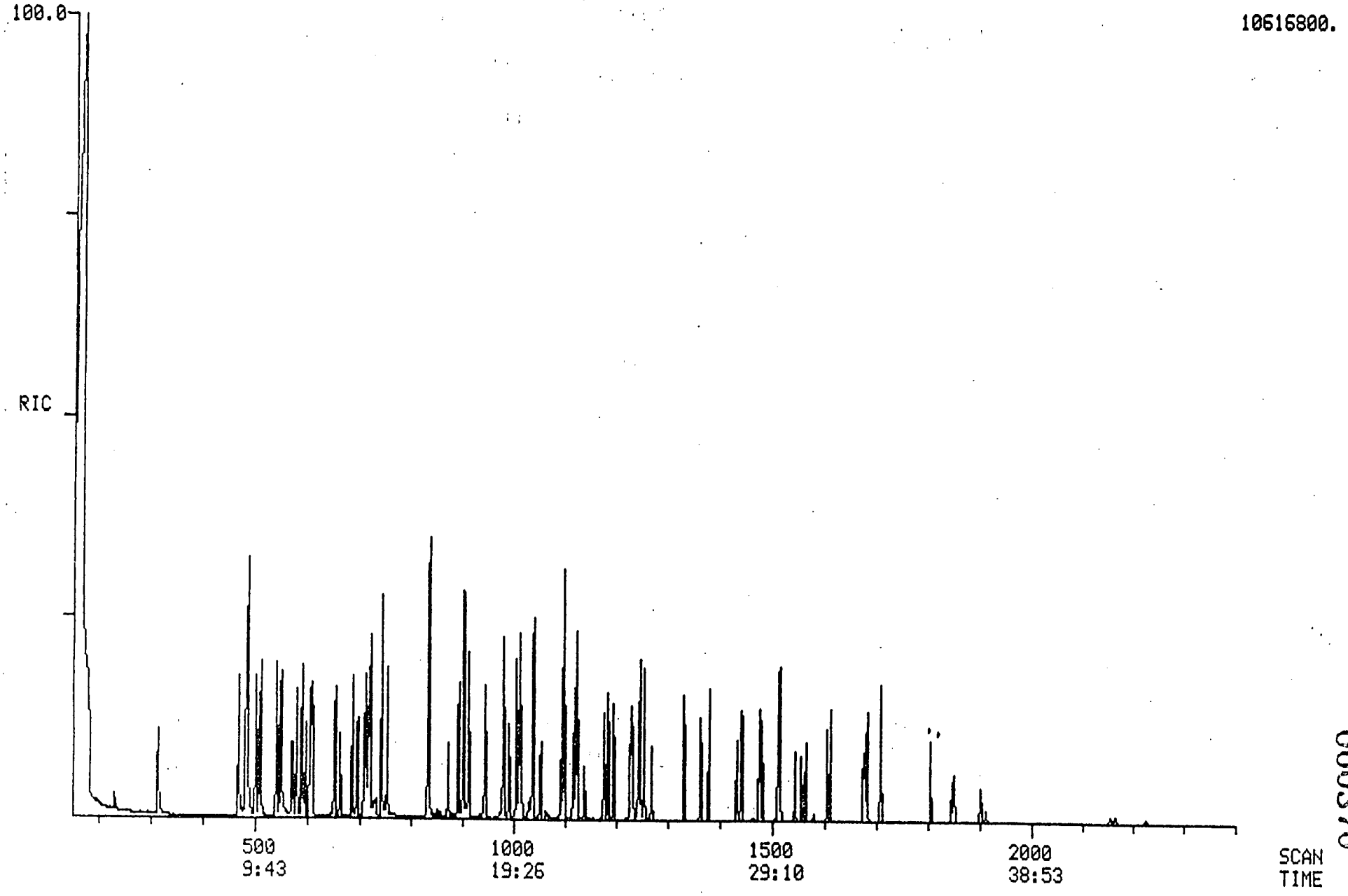
DATA: HSD1200325 #1 SCANS 150 TO 2400
CALI: CALTAB #3



000369

RIC
03/27/89 10:43:00
SAMPLE: HSL-D STANDARD \3/27/89
CONDS.: 50 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

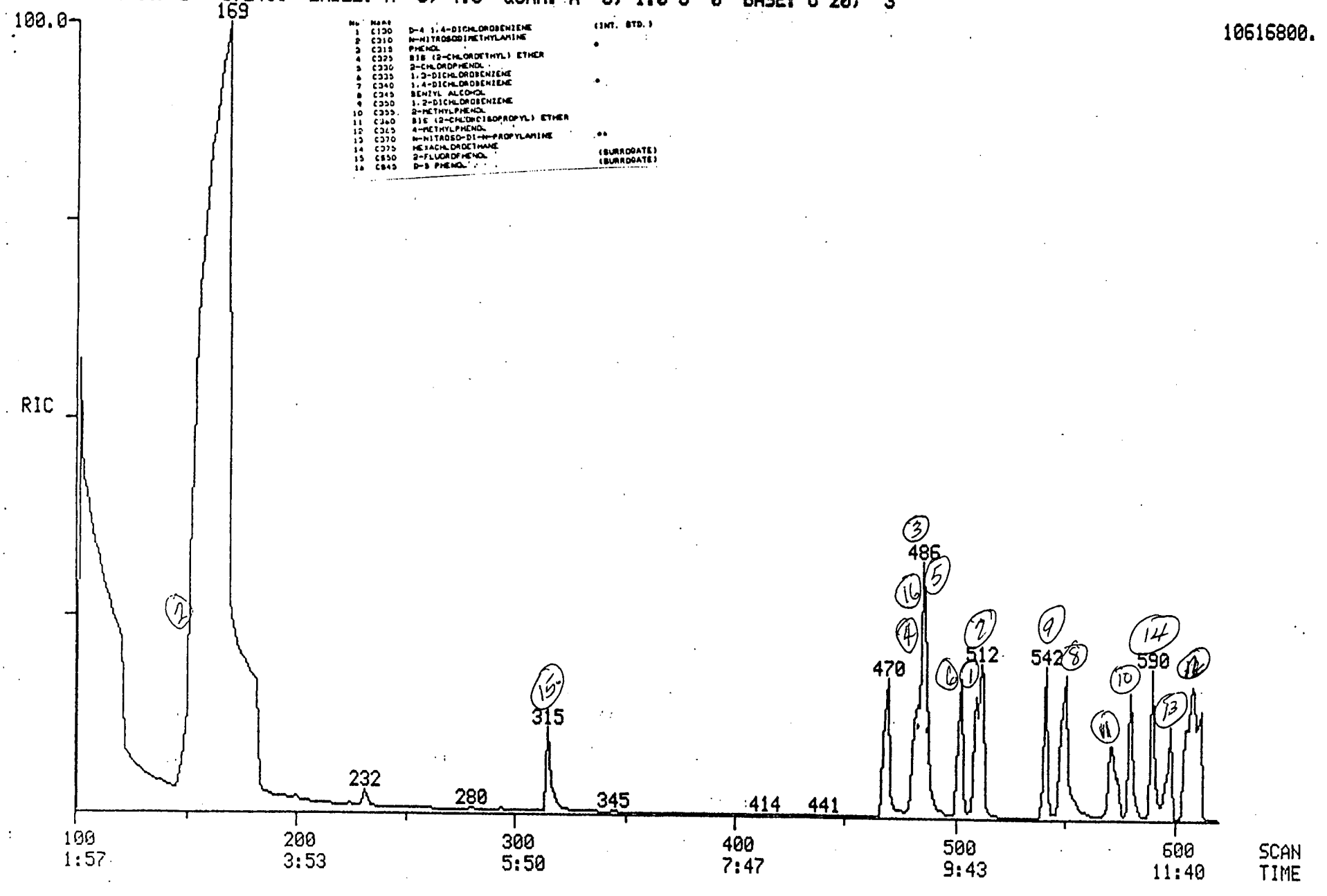
DATA: HSB500327 #1 SCANS 150 TO 2400
CALI: CALTAB #3



0003370

RIC
03/27/89 10:43:00
SAMPLE: HSL-D STANDARD \3/27/89
CONDS.: 50 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB500327 #1 SCANS 100 TO 620
CALI: HSB500327 #3



No.	Name		
1	C130	D-4 1,4-DICHLOROBENZENE	(INT. STD.)
2	C310	N-NITROSODIMETHYLAMINE	*
3	C315	PHENOL	
4	C325	BIS (2-CHLOROETHYL) ETHER	
5	C330	2-CHLOROPHENOL	
6	C335	1,3-DICHLOROBENZENE	*
7	C340	1,4-DICHLOROBENZENE	
8	C345	BENZYL ALCOHOL	
9	C350	1,2-DICHLOROBENZENE	
10	C355	2-METHYLPHENOL	
11	C360	BIS (2-CHLOROISOPROPYL) ETHER	
12	C365	4-METHYLPHENOL	
13	C370	N-NITROSO-DI-N-PROPYLAMINE	**
14	C375	HEXACHLOROETHANE	
15	C850	2-FLUOROPHENOL	(SURROGATE)
16	C845	D-5 PHENOL	(SURROGATE)

000371

Quantitation Report File: HSB500327

000372

Data: HSB500327.TI
03/27/89 10:43:00
Sample: HSL-D STANDARD \3/27/89
C nds.: 50 NG INJECTION
Formula: Instrument: FINN Weight: 0.000
Submitted by: QC INC Analyst: WSS Acct. No.: HSD50032

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI30 1,4-DICHLOROBENZENE D4	INTERNAL STANDARD
2	N-NITROSODIMETHYLAMINE	
3	C315 PHENOL	
4	C325 BIS(2-CHLOROETHYL) ETHER	
5	C330 2-CHLOROPHENOL	
6	C335 1,3-DICHLOROBENZENE	
7	C340 1,4-DICHLOROBENZENE	
8	C345 BENZYL ALCOHOL	
9	C350 1,2-DICHLOROBENZENE	
10	C355 2-METHYLPHENOL	
11	C360 BIS(2-CHLOROISOPROPYL)ETHER	
12	C365 4-METHYLPHENOL	
13	C370 N-NITROSO-DI-PROPYLAMINE	
14	C375 HEXACHLOROETHANE	
15	CS50 2-FLUOROPHENOL	SURROGATE
16	CS45 PHENOL D5	SURROGATE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	510	9:55	1	1.000	A BB	616503.	40.000 UG/ML	5.06
2	74	150	2:55	1	0.294	A BV	772096.	50.000 UG/ML	6.33
3	94	486	9:27	1	0.953	A VB	1270210.	50.000 UG/ML	6.33
4	93	482	9:22	1	0.945	A BB	1074850.	50.000 UG/ML	6.33
5	128	486	9:27	1	0.953	A BB	906199.	50.000 UG/ML	6.33
6	146	503	9:47	1	0.986	A BV	944426.	50.000 UG/ML	6.33
7	146	512	9:57	1	1.004	A VB	944722.	50.000 UG/ML	6.33
8	108	551	10:43	1	1.080	A BB	1162340.	50.000 UG/ML	6.33
9	146	542	10:32	1	1.063	A BB	894386.	50.000 UG/ML	6.33
10	108	580	11:17	1	1.137	A BB	874326.	50.000 UG/ML	6.33
11	45	572	11:07	1	1.122	A BB	1392940.	50.000 UG/ML	6.33
12	108	605	11:46	1	1.186	A BB	1073900.	50.000 UG/ML	6.33
13	70	598	11:38	1	1.173	A BV	821139.	50.000 UG/ML	6.33
14	117	590	11:28	1	1.157	A BB	545746.	50.000 UG/ML	6.33
15	112	315	6:07	1	0.618	A BB	933860.	50.000 UG/L	6.33
16	99	484	9:25	1	0.949	A BV	1161370.	50.000 UG/ML	6.33

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:55	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	2:55	1.00	0.294	1.00	50.00	50.00	1.002	1.002	1.00
3	9:27	1.00	0.953	1.00	50.00	50.00	1.648	1.648	1.00
4	9:22	1.00	0.945	1.00	50.00	50.00	1.395	1.395	1.00
5	9:27	1.00	0.953	1.00	50.00	50.00	1.176	1.176	1.00
6	9:47	1.00	0.986	1.00	50.00	50.00	1.226	1.226	1.00
7	9:57	1.00	1.004	1.00	50.00	50.00	1.226	1.226	1.00

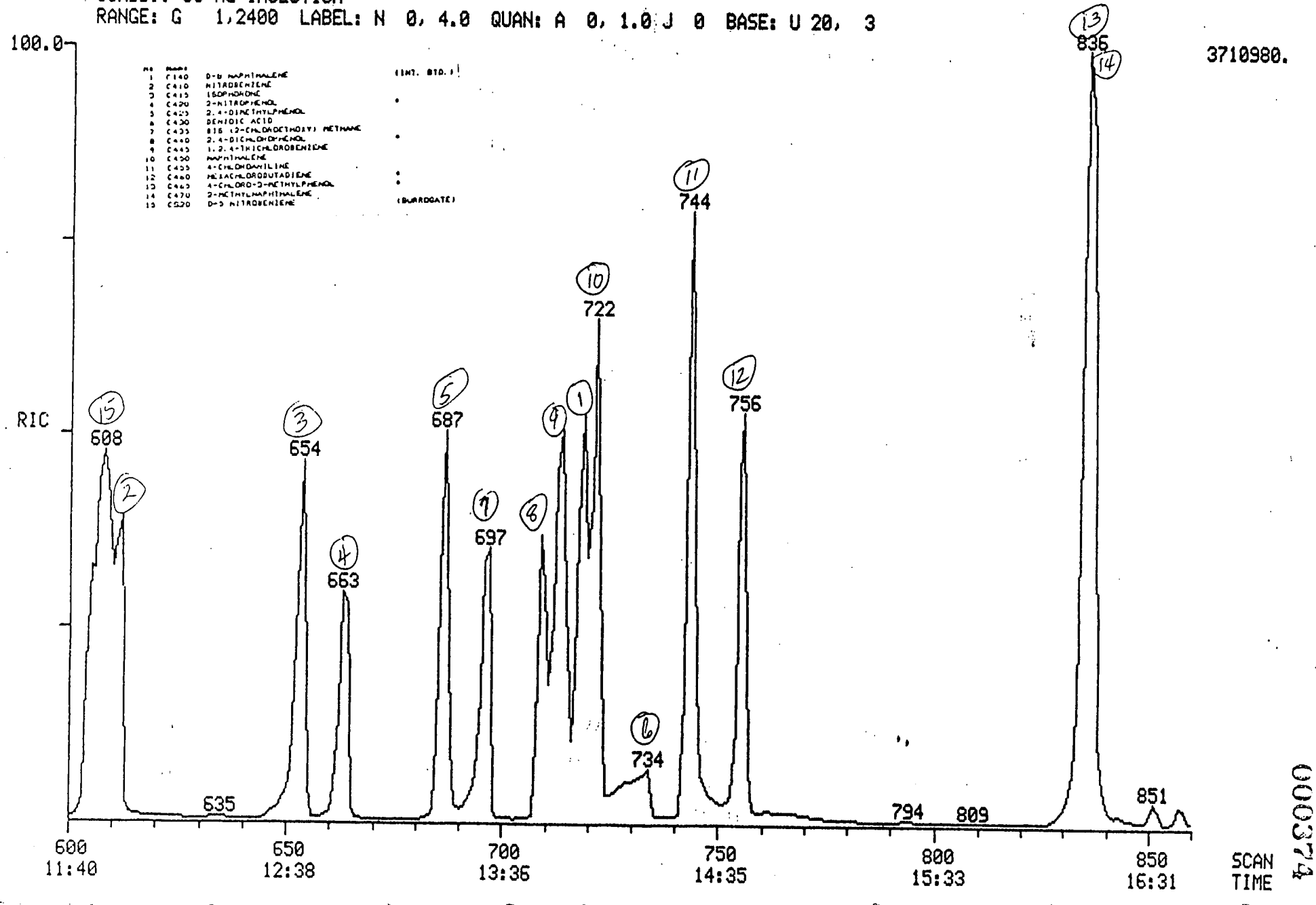
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
8	10:43	1.00	1.080	1.00	50.00	50.00	1.508	1.508	1.00
9	10:32	1.00	1.063	1.00	50.00	50.00	1.161	1.161	1.00
10	11:17	1.00	1.137	1.00	50.00	50.00	1.135	1.135	1.00
11	11:07	1.00	1.122	1.00	50.00	50.00	1.808	1.808	1.00
12	11:46	1.00	1.186	1.00	50.00	50.00	1.394	1.394	1.00
13	11:38	1.00	1.173	1.00	50.00	50.00	1.066	1.066	1.00
14	11:28	1.00	1.157	1.00	50.00	50.00	0.708	0.708	1.00
15	6:07	1.00	0.618	1.00	50.00	50.00	1.212	1.212	1.00
16	9:25	1.00	0.949	1.00	50.00	50.00	1.507	1.507	1.00

000373

RIC
03/27/89 10:43:00
SAMPLE: HSL-D STANDARD \3/27/89
CONDS.: 50 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB500327 #1
CALI: HSB500327 #3

SCANS 600 TO 860



NO	RANGE		
1	C140	D-8 NAPHTHALENE	(INT. STD.)
2	C410	NITROBENZENE	
3	C415	ISOPHORONE	
4	C420	2-NITROPHENOL	
5	C425	2,4-DIMETHYLPHENOL	
6	C430	BENZOIC ACID	
7	C435	BIS (2-CHLOROETHOXY) METHANE	
8	C440	2,4-DICHLOROPHENOL	
9	C445	1,2,4-TRICHLOROBENZENE	
10	C450	NAPHTHALENE	
11	C455	4-CHLOROANILINE	
12	C460	HEXACHLOROBUTADIENE	
13	C465	4-CHLORO-3-METHYLPHENOL	
14	C470	2-METHYLNAPHTHALENE	
15	C520	D-5 NITROBENZENE	(SURROGATE)

0003374

Quantitation Rep rt File: HSB500327

000375

Data: HSB500327.TI
03/27/89 10:43:00
Sample: HSL-D STANDARD \3/27/89
Conds.: 50 NG INJECTION
Formula: Instrum nt: FINN Weight: 0.000
Submitted by: QC INC Analyst: WSS Acct. No.: HSD50032

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI40 NAPHTHALENE D8	INTERNAL STANDARD
2	C410 NITROBENZENE	
3	C415 ISOPHORONE	
4	C420 2-NITROPHENOL	
5	C425 2,4-DIMETHYLPHENOL	
6	C430 BENZOIC ACID	
7	C435 BIS(2-CHLOROETHOXY)METHANE	
8	C440 2,4-DICHLOROPHENOL	
9	C445 1,2,4-TRICHLOROBENZENE	
10	C450 NAPHTHALENE	
11	C455 4-CHLOROANILINE	
12	C460 HEXACHLOROBUTADIENE	
13	C465 4-CHLORO-3-METHYLPHENOL	
14	C470 2-METHYLNAPHTHALENE	
15	CS20 NITROBENZENE D5	SURROGATE

N	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	136	719	13:59	1	1.000	A*BB	1847650.	40.000 UG/ML	5.41
2	77	612	11:54	1	0.851	A BV	1378990.	50.000 UG/ML	6.76
3	82	654	12:43	1	0.910	A BV	1390760.	50.000 UG/ML	6.76
4	139	663	12:53	1	0.922	A VB	565270.	50.000 UG/ML	6.76
5	122	687	13:21	1	0.955	A BB	698636.	50.000 UG/ML	6.76
6	122	734	14:16	1	1.021	A VB	313816.	50.000 UG/ML	6.76
7	93	696	13:32	1	0.968	A VB	1060610.	50.000 UG/ML	6.76
8	162	709	13:47	1	0.986	A BB	823218.	50.000 UG/ML	6.76
9	180	714	13:53	1	0.993	A BB	836756.	50.000 UG/ML	6.76
10	128	722	14:02	1	1.004	A VB	1374910.	50.000 UG/ML	6.76
11	127	744	14:28	1	1.035	A BV	1278980.	50.000 UG/ML	6.76
12	225	755	14:41	1	1.050	A BB	421481.	50.000 UG/ML	6.76
13	107	836	16:15	1	1.163	A BB	849316.	50.000 UG/ML	6.76
14	142	836	16:15	1	1.163	A BV	1873810.	50.000 UG/ML	6.76
15	82	608	11:49	1	0.846	A BB	1107280.	50.000 UG/ML	6.76

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	13:59	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	11:54	1.00	0.851	1.00	50.00	50.00	0.597	0.597	1.00
3	12:43	1.00	0.910	1.00	50.00	50.00	0.602	0.602	1.00
4	12:53	1.00	0.922	1.00	50.00	50.00	0.245	0.245	1.00
5	13:21	1.00	0.955	1.00	50.00	50.00	0.302	0.302	1.00
6	14:16	1.00	1.021	1.00	50.00	50.00	0.136	0.136	1.00
7	13:32	1.00	0.968	1.00	50.00	50.00	0.459	0.459	1.00
8	13:47	1.00	0.986	1.00	50.00	50.00	0.356	0.356	1.00
9	13:53	1.00	0.993	1.00	50.00	50.00	0.362	0.362	1.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
10	14:02	1.00	1.004	1.00	50.00	50.00	0.595	0.595	1.00
11	14:28	1.00	1.035	1.00	50.00	50.00	0.554	0.554	1.00
12	14:41	1.00	1.050	1.00	50.00	50.00	0.182	0.182	1.00
13	16:15	1.00	1.163	1.00	50.00	50.00	0.368	0.368	1.00
14	16:15	1.00	1.163	1.00	50.00	50.00	0.811	0.811	1.00
15	11:49	1.00	0.846	1.00	50.00	50.00	0.479	0.479	1.00

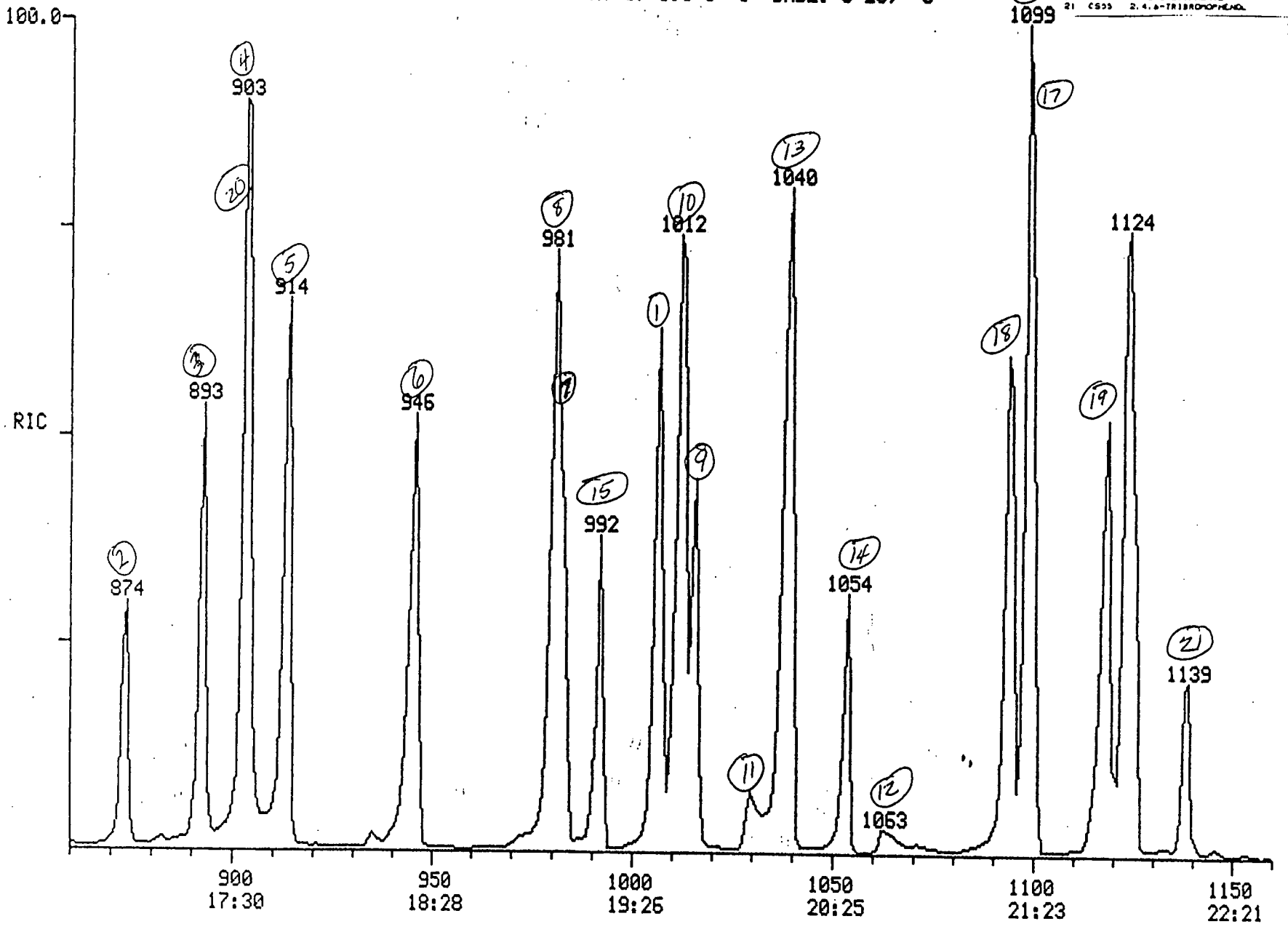
RIC
03/27/89 10:43:00
SAMPLE: HSL-D STANDARD \3/27/89
CONDS.: 50 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB500327 #1
CALI: HSB500327 #3

SCANS 860 TO 1160

No	Name		
1	C130	D-8 ACENAPHTHENE	(INT. STD.)
2	C310	HEXACHLOROCYCLOPENTADIENE	**
3	C315	2,4,6-TRICHLOROPHENOL	*
4	C320	2,4,5-TRICHLOROPHENOL	
5	C325	2-CHLORONAPHTHALENE	
6	C330	2-NITROANILINE	
7	C335	DIMETHYL PHTHALATE	
8	C340	ACENAPHTHYLENE	
9	C345	3-NITROANILINE	
10	C350	ACENAPHTHENE	*
11	C355	2,4-DINITROPHENOL	**
12	C360	4-NITROPHENOL	**
13	C365	DIBENZOFURAN	
14	C370	2,4-DINITROTOLUENE	
15	C375	2,6-DINITROTOLUENE	
16	C380	DIETHYLPHTHALATE	
17	C385	4-CHLOROPHENYL-PHENYLETHER	
18	C390	FLUORENE	
19	C395	4-NITROANILINE	
20	C325	2-FLUOROBIPHENYL	(SURROGATE)
21	C355	2,4,6-TRIBROMOPHENOL	(SURROGATE)

3305470.



0003772

Quantitation Report File: HSB500327

000378

Data: HSB500327.TI
03/27/89 10:43:00
Sample: HSL-D STANDARD \3/27/89
Conds.: 50 NG INJECTION
Formula: Instrument: FINN Weight: 0.000
Submitted by: QC INC Analyst: WSS Acct. No.: HSD50032

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI50 ACENAPHTHENE D8	INTERNAL STANDARD
2	C510 HEXACHLOROCYCLOPENTADIENE	
3	C515 2,4,6-TRICHLOROPHENOL	
4	C520 2,4,5-TRICHLOROPHENOL	
5	C525 2-CHLORONAPHTHALENE	
6	C530 2-NITROANILINE	
7	C535 DIMETHYL PHTHALATE	
8	C540 ACENAPHTHYLENE	
9	C545 3-NITROANILINE	
10	C550 ACENAPHTHENE	
11	C555 2,4-DINITROPHENOL	
12	C560 4-NITROPHENOL	
13	C565 DIBENZOFURAN	
14	C570 2,4-DINITROTOLUENE	
15	C543 2,6-DINITROTOLUENE	
16	C580 DIETHYL PHTHALATE	
17	C585 4-CHLOROPHENYL PHENYL ETHER	
18	C590 FLUORENE	
19	C595 4-NITROANILINE	
20	CS25 2-FLUOROBIPHENYL	SURROGATE
21	CS55 2,4,6-TRIBROMOPHENOL	SURROGATE

N	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	164	1007	19:35	1	1.000	A BB	827296.	40.000 UG/ML	3.85
2	237	873	16:58	1	0.867	A BB	263097.	50.000 UG/ML	4.81
3	196	893	17:22	1	0.887	A BB	446451.	50.000 UG/ML	4.81
4	196	903	17:33	1	0.897	A VB	505714.	50.000 UG/ML	4.81
5	162	914	17:46	1	0.908	A VB	1079070.	50.000 UG/ML	4.81
6	65	946	18:23	1	0.939	A BB	936799.	50.000 UG/ML	4.81
7	163	983	19:07	1	0.976	A BB	1172220.	50.000 UG/ML	4.81
8	152	981	19:04	1	0.974	A BV	1320470.	50.000 UG/ML	4.81
9	138	1016	19:45	1	1.009	A BB	776758.	50.000 UG/ML	4.81
10	154	1012	19:40	1	1.005	A BB	1026970.	50.000 UG/ML	4.81
11	184	1030	20:01	1	1.023	A BB	132725.	50.000 UG/ML	4.81
12	139	1062	20:39	1	1.055	A BB	130684.	50.000 UG/ML	4.81
13	168	1040	20:13	1	1.033	A BB	1812790.	50.000 UG/ML	4.81
14	165	1054	20:29	1	1.047	A VB	422703.	50.000 UG/ML	4.81
15	165	992	19:17	1	0.985	A VB	345706.	50.000 UG/ML	4.81
16	149	1099	21:22	1	1.091	A BB	1154150.	50.000 UG/ML	4.81
17	204	1100	21:23	1	1.092	A BB	665536.	50.000 UG/ML	4.81
18	166	1094	21:16	1	1.086	A BB	1018120.	50.000 UG/ML	4.81
19	138	1118	21:44	1	1.110	A BV	597925.	50.000 UG/ML	4.81
20	172	903	17:33	1	0.897	A BV	1111690.	50.000 UG/ML	4.81
21	330	1138	22:07	1	1.130	A BB	131732.	50.000 UG/ML	4.81

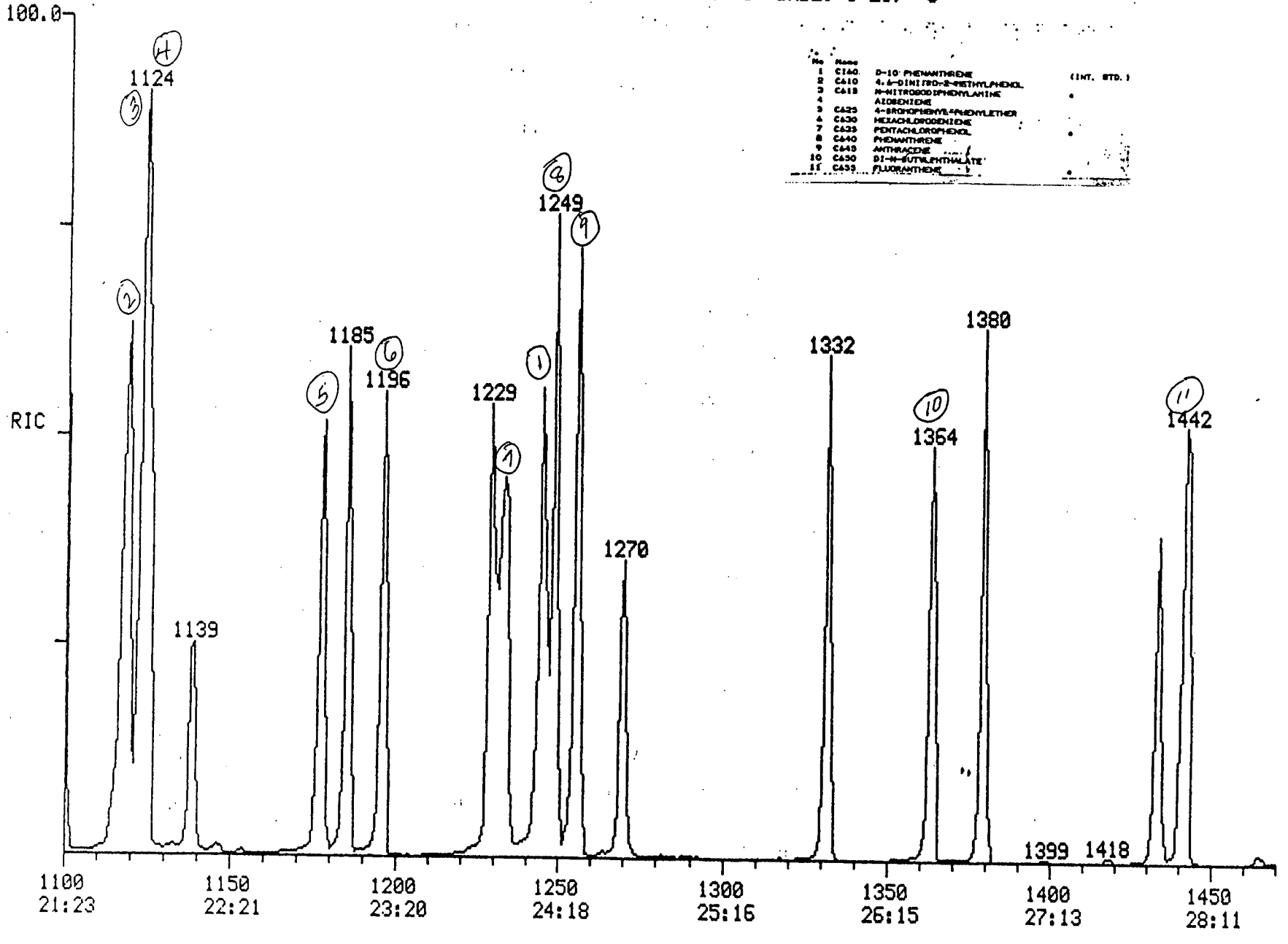
N	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	19:35	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	16:58	1.00	0.867	1.00	50.00	50.00	0.254	0.254	1.00
3	17:22	1.00	0.887	1.00	50.00	50.00	0.432	0.432	1.00
4	17:33	1.00	0.897	1.00	50.00	50.00	0.489	0.489	1.00
5	17:46	1.00	0.908	1.00	50.00	50.00	1.043	1.043	1.00
6	18:23	1.00	0.939	1.00	50.00	50.00	0.906	0.906	1.00
7	19:07	1.00	0.976	1.00	50.00	50.00	1.134	1.134	1.00
8	19:04	1.00	0.974	1.00	50.00	50.00	1.277	1.277	1.00
9	19:45	1.00	1.009	1.00	50.00	50.00	0.751	0.751	1.00
10	19:40	1.00	1.005	1.00	50.00	50.00	0.993	0.993	1.00
11	20:01	1.00	1.023	1.00	50.00	50.00	0.128	0.128	1.00
12	20:39	1.00	1.055	1.00	50.00	50.00	0.126	0.126	1.00
13	20:13	1.00	1.033	1.00	50.00	50.00	1.753	1.753	1.00
14	20:29	1.00	1.047	1.00	50.00	50.00	0.409	0.409	1.00
15	19:17	1.00	0.985	1.00	50.00	50.00	0.334	0.334	1.00
16	21:22	1.00	1.091	1.00	50.00	50.00	1.116	1.116	1.00
17	21:23	1.00	1.092	1.00	50.00	50.00	0.644	0.644	1.00
18	21:16	1.00	1.086	1.00	50.00	50.00	0.985	0.985	1.00
19	21:44	1.00	1.110	1.00	50.00	50.00	0.578	0.578	1.00
20	17:33	1.00	0.897	1.00	50.00	50.00	1.075	1.075	1.00
21	22:07	1.00	1.130	1.00	50.00	50.00	0.127	0.127	1.00

RIC
03/27/89 10:43:00
SAMPLE: HSL-D STANDARD \3/27/89
CONDS.: 50 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB500327 #1
CALI: HSB500327 #3

SCANS 1100 TO 1470

2727940.



No	Name		
1	C140	D-10 PHENANTHRENE	(INT. STD.)
2	C610	4,6-DINITRO-2-METHYLPHENOL	
3	C615	N-NITROSODIPHENYLAMINE	
4		AZOBENZENE	
5	C625	4-BROMOPHENYL-PHENYLETHER	
6	C630	HEXACHLOROBENZENE	
7	C635	PENTACHLOROPHENOL	
8	C640	PHENANTHRENE	
9	C645	ANTHRACENE	
10	C650	DI-N-BUTYLPHTHALATE	
11	C655	FLUORANTHENE	

000380

Quantitation Report File: HSB500327

000381

Data: HSB500327.TI
03/27/89 10:43:00
Sample: HSL-D STANDARD \3/27/ 9
Conds.: 50 NG INJECTION
Formula: Instrument: FINN W ight: 0.000
Submitted by: QC INC Analyst: WSS Acct. No.: HSD50032

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI60 PHENANTHRENE D10	INTERNAL STANDARD
2	C610 4,6-DINITRO-2-METHYL PHENOL	
3	C615 N-NITROSODIPHENYLAMINE	
4	AZOBENZENE	
5	C625 4-BROMOPHENYL PHENYL ETHER	
6	C630 HEXACHLOROBENZENE	
7	C635 PENTACHLOROPHENOL	
8	C640 PHENANTHRENE	
9	C645 ANTHRACENE	
10	C650 DI-N-BUTYL PHTHALATE	
11	C655 FLUORANTHENE	

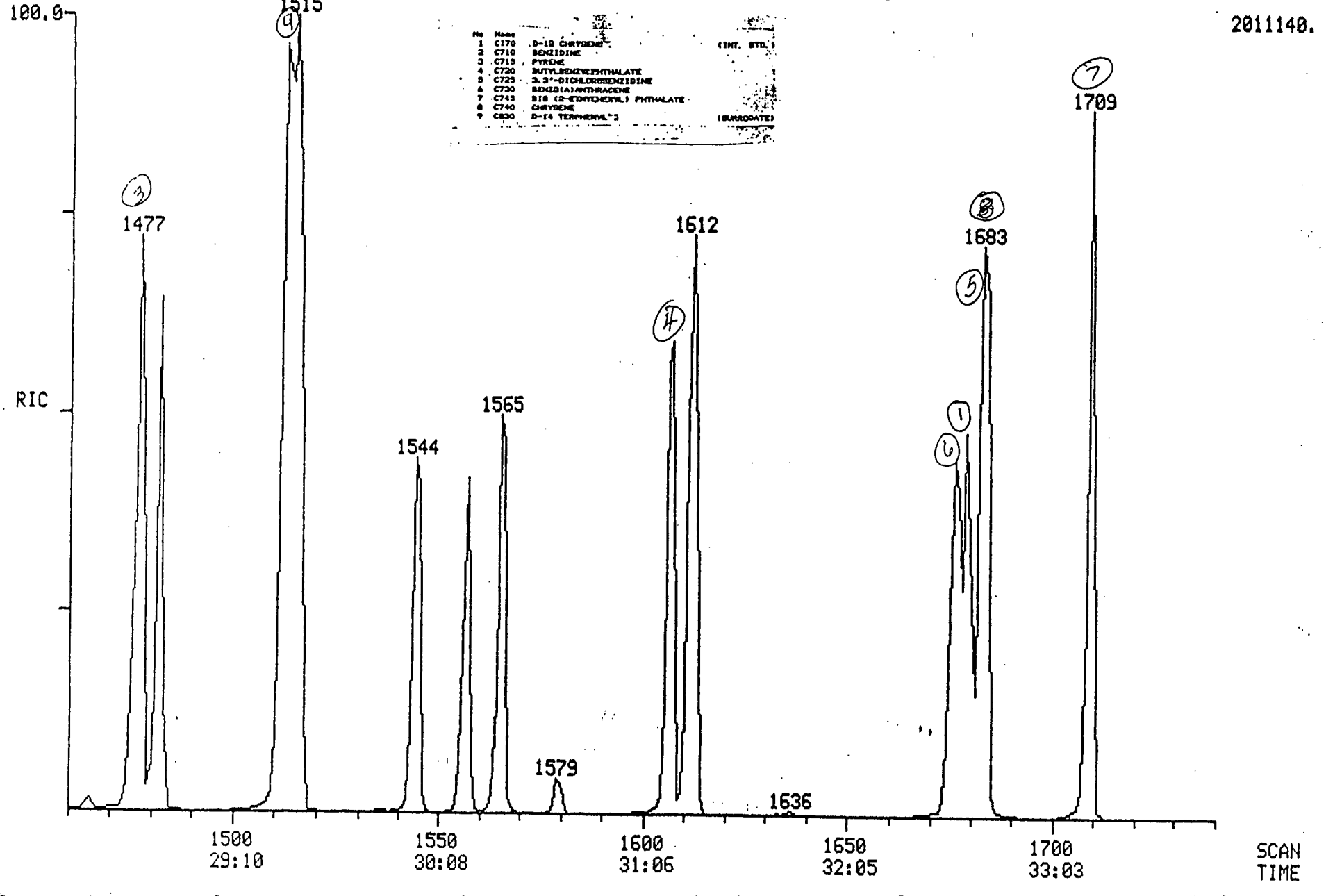
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	188	1245	24:12	1	1.000	A VV	989583.	40.000 UG/ML	7.41
2	198	1118	21:44	1	0.898	A BB	203553.	50.000 UG/ML	9.26
3	169	1123	21:50	1	0.902	A BB	814806.	50.000 UG/ML	9.26
4	77	1125	21:52	1	0.904	A BB	1591090.	50.000 UG/ML	9.26
5	248	1177	22:53	1	0.945	A BB	310513.	50.000 UG/ML	9.26
6	284	1196	23:15	1	0.961	A BB	339383.	50.000 UG/ML	9.26
7	266	1231	23:56	1	0.989	A BV	151815.	50.000 UG/ML	9.26
8	178	1249	24:17	1	1.003	A BV	1119240.	50.000 UG/ML	9.26
9	178	1256	24:25	1	1.009	A VB	971618.	50.000 UG/ML	9.26
10	149	1364	26:31	1	1.096	A BB	1114110.	50.000 UG/ML	9.26
11	202	1442	28:02	1	1.158	A VB	918455.	50.000 UG/ML	9.26

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	24:12	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	21:44	1.00	0.898	1.00	50.00	50.00	0.165	0.165	1.00
3	21:50	1.00	0.902	1.00	50.00	50.00	0.659	0.659	1.00
4	21:52	1.00	0.904	1.00	50.00	50.00	1.286	1.286	1.00
5	22:53	1.00	0.945	1.00	50.00	50.00	0.251	0.251	1.00
6	23:15	1.00	0.961	1.00	50.00	50.00	0.274	0.274	1.00
7	23:56	1.00	0.989	1.00	50.00	50.00	0.123	0.123	1.00
8	24:17	1.00	1.003	1.00	50.00	50.00	0.905	0.905	1.00
9	24:25	1.00	1.009	1.00	50.00	50.00	0.785	0.785	1.00
10	26:31	1.00	1.096	1.00	50.00	50.00	0.901	0.901	1.00
11	28:02	1.00	1.158	1.00	50.00	50.00	0.742	0.742	1.00

RIC
03/27/89 10:43:00
SAMPLE: HSL-D STANDARD \3/27/89
CONDS.: 50 NG INJECTION
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB500327 #1
CALI: HSB500327 #3

SCANS 1460 TO 1740



No	Name		
1	C170	D-12 CHRYSENE	(INT. STD.)
2	C710	BENZIDINE	
3	C715	PYRENE	
4	C720	BUTYLBENZYLPHTHALATE	
5	C725	3,3'-DICHLOROBENZIDINE	
6	C730	BENZO(A)ANTHRACENE	
7	C743	BIS (2-ETHYLHEXYL) PHTHALATE	
8	C740	CHRYSENE	
9	C830	D-I4 TERPHENYL"3	(SURROGATE)

000382

Quantitation Report File: HSB500327

000383

Data: HSB500327.TI
03/27/89 10:43:00
Sample: HSL-D STANDARD \3/27/89
Conds.: 50 NG INJECTION
F rmula: Instrument: FINN Weight: 0.000
Submitted by: QC INC Analyst: WSS Acct. No.: HSD50032

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI70 CHRYSENE D12	INTERNAL STANDARD
2	C710 BENZIDINE	
3	C715 PYRENE	
4	C720 BUTYLBENZYLPHTHALATE	
5	C725 3,3'-DICHLOROBENZIDINE	
6	C730 BENZO(A)ANTHRACENE	
7	C745 BIS(2-ETHYLHEXYL)PHTHALATE	
8	C740 CHRYSENE	
9	CS30 TERPHENYL D14	SURROGATE

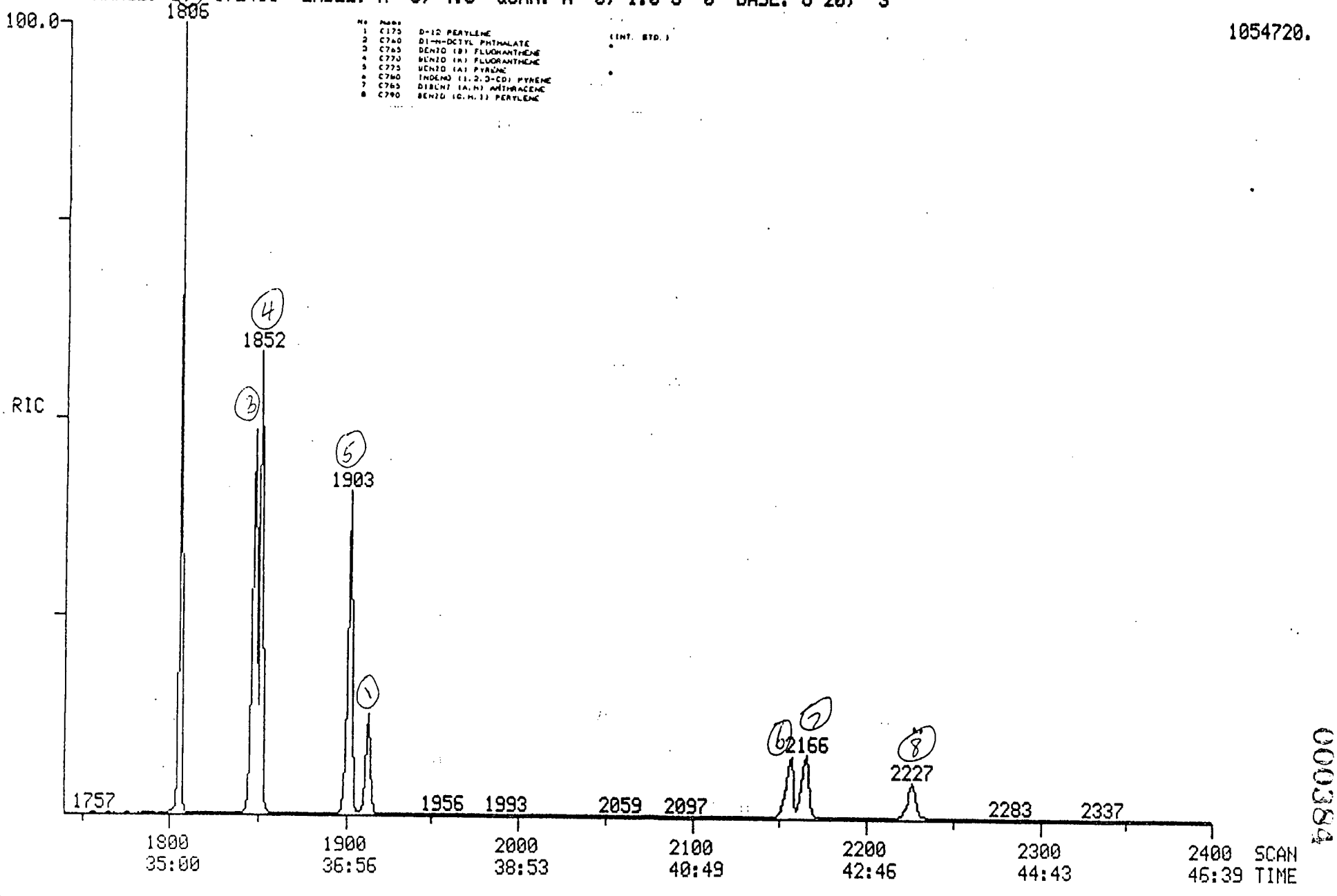
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	240	1679	32:38	1	1.000	A*BB	681017.	40.000 UG/ML	10.26
2	NOT FOUND								
3	202	1477	28:43	1	0.880	A BB	946938.	50.000 UG/ML	12.82
4	149	1606	31:13	1	0.957	A BV	535179.	50.000 UG/ML	12.82
5	252	1682	32:42	1	1.002	A VB	164042.	50.000 UG/ML	12.82
6	228	1676	32:35	1	0.998	A BV	708100.	50.000 UG/ML	12.82
7	149	1709	33:13	1	1.018	A BB	637108.	50.000 UG/ML	12.82
8	228	1683	32:43	1	1.002	A VB	685597.	50.000 UG/ML	12.82
9	244	1514	29:26	1	0.902	A BB	949866.	50.000 UG/ML	12.82

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Rati
1	32:38	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	28:45		0.882						
3	28:43	1.00	0.880	1.00	50.00	50.00	1.112	1.112	1.00
4	31:13	1.00	0.957	1.00	50.00	50.00	0.629	0.629	1.00
5	32:42	1.00	1.002	1.00	50.00	50.00	0.193	0.193	1.00
6	32:35	1.00	0.998	1.00	50.00	50.00	0.832	0.832	1.00
7	33:13	1.00	1.018	1.00	50.00	50.00	0.748	0.748	1.00
8	32:43	1.00	1.002	1.00	50.00	50.00	0.805	0.805	1.00
9	29:26	1.00	0.902	1.00	50.00	50.00	1.116	1.116	1.00

RIC
03/27/89 10:43:00
SAMPLE: HSL-D STANDARD \3/27/89
CONDS.: 50 NG INJECTION
RANGE: 0 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB500327 #1
CALI: HSB500327 #3

SCANS 1740 TO 2400



No	Mass	
1	C175	D-12 PERYLENE
2	C760	DI-N-OCTYL PHTHALATE
3	C765	BENZO (B) FLUORANTHENE
4	C770	BENZO (K) FLUORANTHENE
5	C775	BENZO (A) PYRENE
6	C760	INDENO (1,2,3-CD) PYRENE
7	C765	DIBENZ (A,H) ANTHRACENE
8	C790	BENZO (G,H,I) PERYLENE

000384

Quantitation Rep rt File: HSB500327

000385

Data: HSB500327.TI
03/27/89 10:43:00
Sampl : HSL-D STANDARD \3/27/89
Conds.: 50 NG INJECTION
Formula: Instrument: FINN Weight: 0.000
Submitted by: QC INC Analyst: WSS Acct. No.: HSD50032

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
R sp. fac. from Library Entry

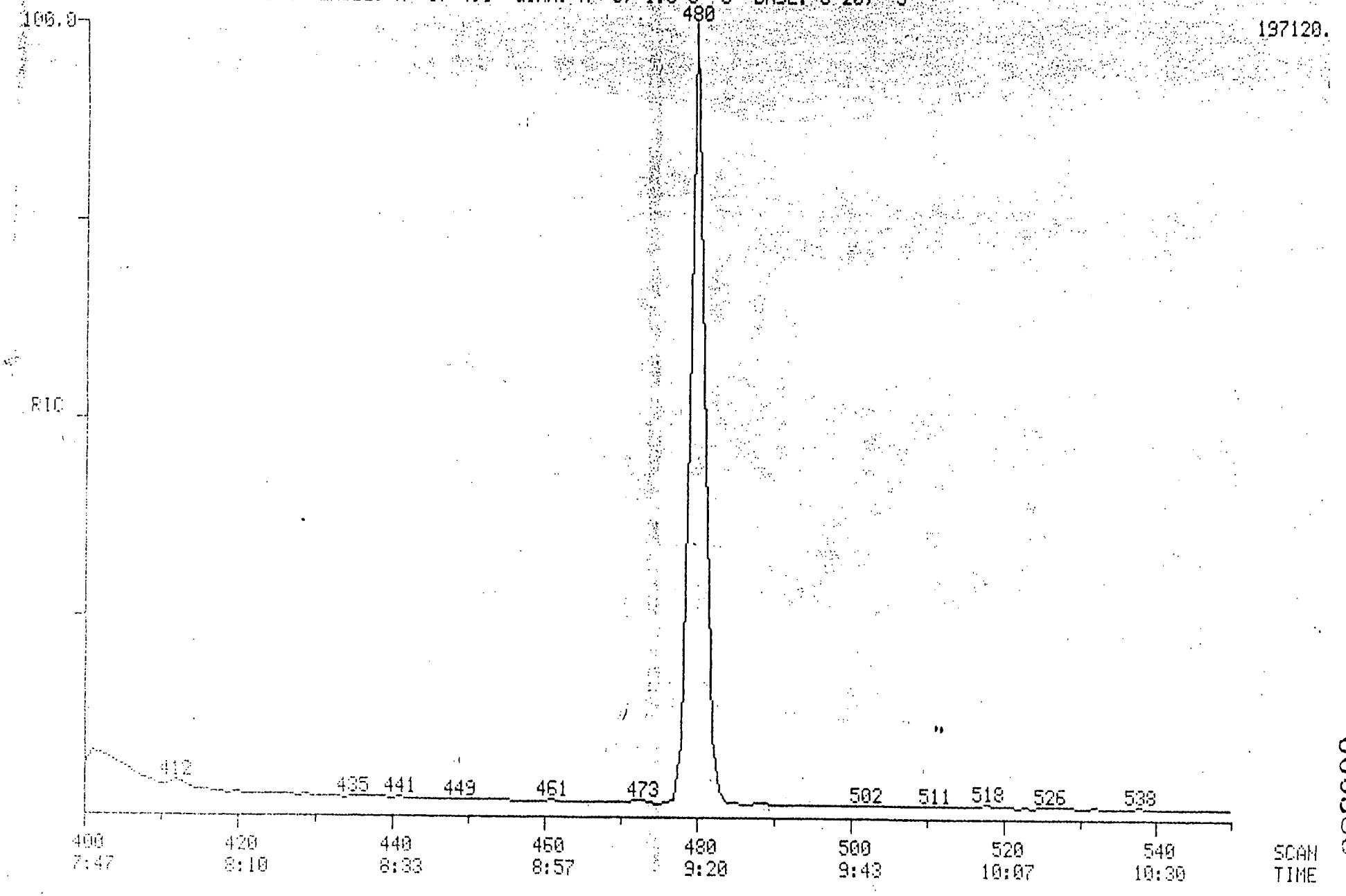
No	Name	
1	CI75 PERYLENE D12	INTERNAL STANDARD
2	C760 DI-N-OCTYLPHTHALATE	
3	C765 BENZO(B)FLUORANTHENE	
4	C770 BENZO(K)FLUORANTHENE	
5	C775 BENZO(A)PYRENE	
6	C780 INDENO(1,2,3-CD)PYRENE	
7	C785 DIBENZO(A,H)ANTHRACENE	
8	C790 BENZO(G,H,I)PERYLENE	

N	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	264	1913	37:11	1	1.000	A*BB	161135.	40.000 UG/ML	10.26
2	149	1806	35:07	1	0.944	A VB	752335.	50.000 UG/ML	12.82
3	252	1848	35:56	1	0.966	A BV	458822.	50.000 UG/ML	12.82
4	252	1852	36:00	1	0.968	A VB	346551.	50.000 UG/ML	12.82
5	252	1903	37:00	1	0.995	A BV	326656.	50.000 UG/NL	12.82
6	276	2156	41:55	1	1.127	A BV	115091.	50.000 UG/ML	12.82
7	278	2166	42:06	1	1.132	A BB	115586.	50.000 UG/ML	12.82
8	276	2227	43:18	1	1.164	A BB	88135.	50.000 UG/ML	12.82

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	37:11	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	35:07	1.00	0.944	1.00	50.00	50.00	3.735	3.735	1.00
3	35:56	1.00	0.966	1.00	50.00	50.00	2.278	2.278	1.00
4	36:00	1.00	0.968	1.00	50.00	50.00	1.721	1.721	1.00
5	37:00	1.00	0.995	1.00	50.00	50.00	1.622	1.622	1.00
6	41:55	1.00	1.127	1.00	50.00	50.00	0.571	0.571	1.00
7	42:06	1.00	1.132	1.00	50.00	50.00	0.574	0.574	1.00
8	43:18	1.00	1.164	1.00	50.00	50.00	0.438	0.438	1.00

RIC
03/25/89 12:01:00
SAMPLE: DFTPP-D TUNE 3/25/89
CONDS.: 50 NG INJECTION
RANGE: G 1, 844 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: DFTPPD0325 #480 SCANS 400 TO 550
CALI: CALTAB #3



000386

Mass List Data: DFTPPD0325 # 480 Base m/z: 198
03/25/89 12:01:00 + 9:20 Cali: CALTAB # 3 RIC: 197888.
Sample: DFTPP-D TUNE 3/25/89
Conds.: 50 NG INJECTION

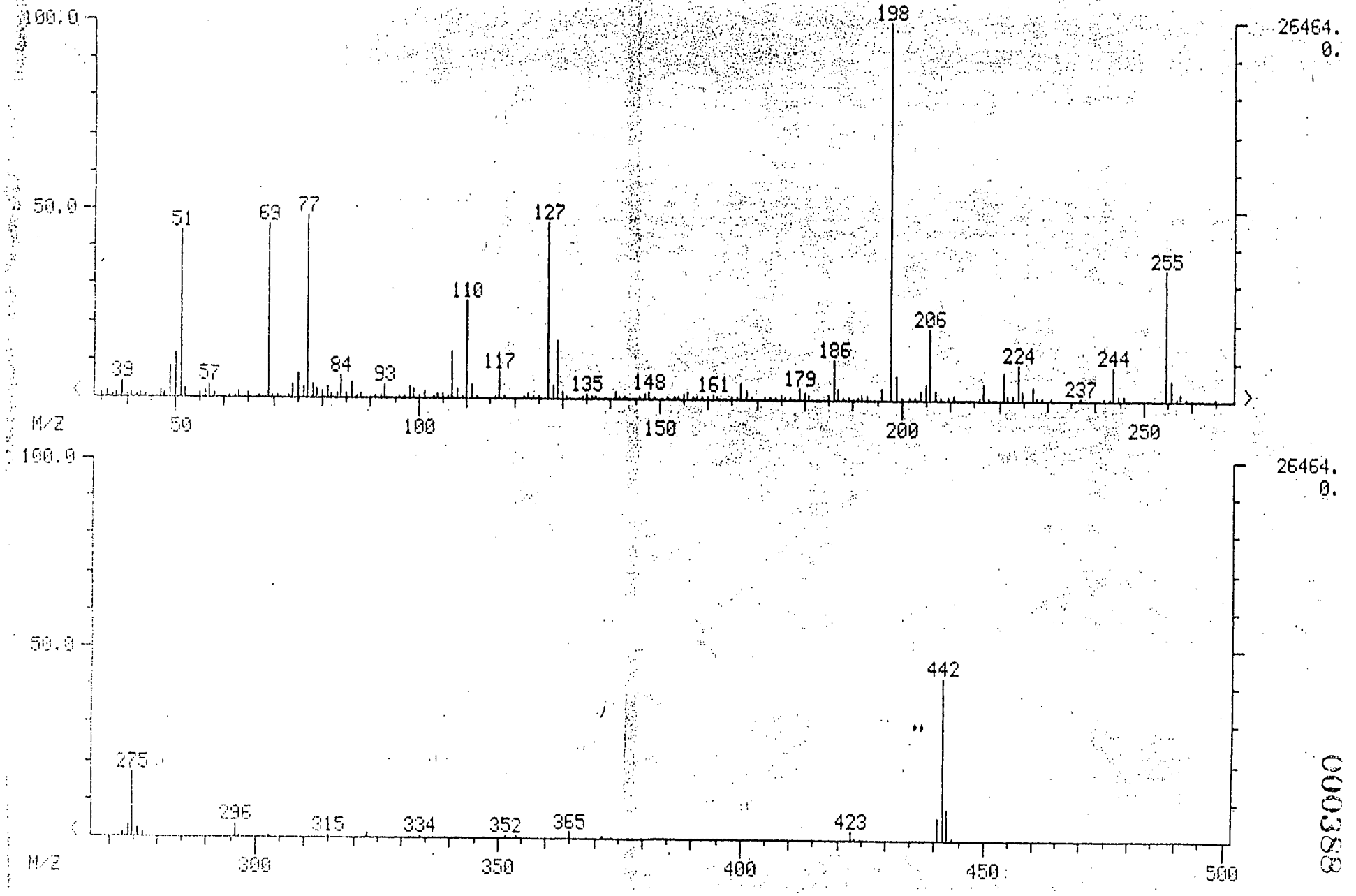
000387

35	0.00	0.	Minima	Min Inten:		224.
444			Maxima	#	0	
Mass	% RA	Inten.	Mass		% RA	Inten.
35?	1.25	332.	147 F		1.01	268.
36?	1.99	527.	148 F		1.97	522.
38?F	1.33	351.	155 F		1.14	301.
39?F	4.17	1104.	156		1.75	464.
41?	1.29	342.	161 F		1.02	271.
43?F	0.89	235.	167 F		4.01	1062.
47?	1.54	407.	168 F		2.47	654.
48?F	0.92	243.	174		0.85	226.
49?F	8.34	2208.	175		1.45	384.
50?F	11.67	3088.	179 F		2.71	716.
51?F	44.26	11712.	180 F		1.96	520.
52?F	2.30	608.	181		0.99	261.
55?F	0.88	232.	185 F		1.42	375.
56?F	1.51	399.	186 F		10.29	2724.
57?F	3.41	903.	187 F		2.83	748.
58?F	1.00	264.	192		0.94	249.
63?	1.53	405.	193		0.96	255.
65?F	0.92	243.	196 F		3.10	821.
69 F	45.65	12080.	198 F		100.00	26464.
74 F	3.73	988.	199 F		6.46	1710.
75 F	6.20	1642.	204 F		2.41	638.
76 F	2.76	731.	205 F		4.22	1118.
77 F	48.00	12704.	206 F		18.38	4864.
78 F	3.30	872.	207 F		2.48	655.
79 F	2.27	600.	211 F		1.27	336.
80	1.90	503.	217 F		4.24	1122.
81 F	3.03	803.	221 F		7.03	1860.
82 F	1.04	276.	222 F		1.37	362.
83 F	1.35	356.	223 F		1.07	283.
84 F	5.96	1578.	224 F		9.54	2524.
85 F	0.93	247.	225 F		2.49	658.
86 F	4.26	1128.	227		3.50	927.
88	0.92	244.	244 F		8.45	2236.
93	3.70	980.	245 F		1.20	317.
98	2.65	701.	246		1.20	317.
99	2.61	691.	255 F		34.58	9152.
101	1.76	466.	256 F		5.03	1332.
104	0.92	244.	258 F		1.69	447.
105	0.99	261.	273 F		1.11	294.
107 F	12.14	3212.	274 F		3.06	811.
108	2.12	561.	275 F		17.11	4528.
110 F	25.39	6720.	276 F		2.13	564.
111 F	3.68	973.	277 F		1.13	299.
117 F	6.79	1798.	296 F		3.37	893.
123 F	1.24	327.	323		1.33	351.
127 F	46.43	12288.	334		0.87	230.
128 F	3.51	929.	365 F		1.62	428.
129 F	15.37	4068.	433 F		2.21	586.
130 F	1.55	411.	441 F		5.73	1516.
139	1.35	356.	442 F		42.56	11264.
141 F	1.70	451.	443 F		7.97	2108.

MASS SPECTRUM
03/25/89 12:01:00 + 9:20
SAMPLE: DFTPP-D TUNE 3/25/89
CONDS.: 50 NG INJECTION
TEMP: 216 DEG. C

DATA: DFTPPD0325 #480
CALI: CALTAB #3

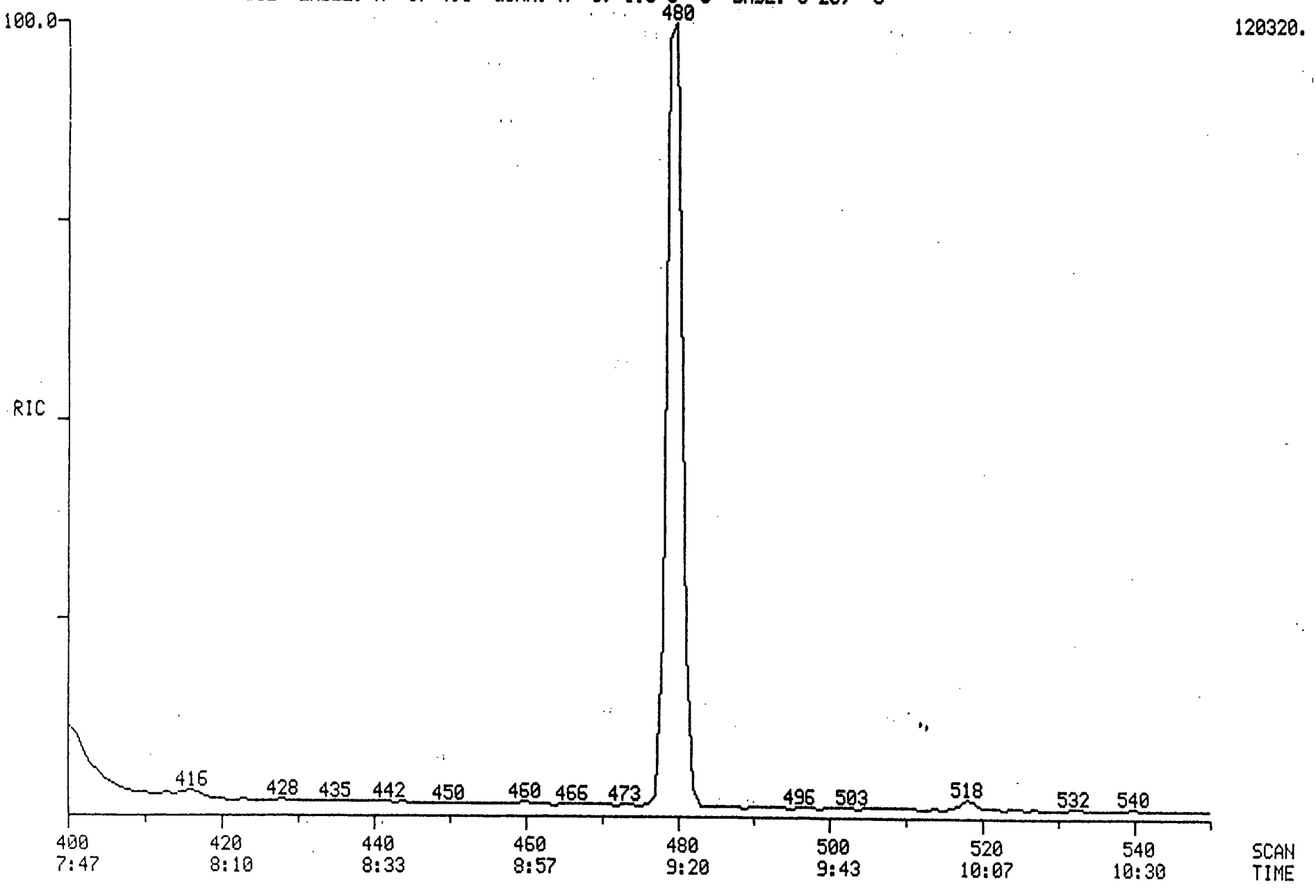
BASE M/Z: 198
RIC: 197888.



000388

RIC
03/27/89 10:21:00
SAMPLE: DFTPP-D TUNE 3/27/89
CONDS.: 50 NG INJECTION
RANGE: G 1, 602 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: DFTPPD0327 #479 SCANS 400 TO 550
CALI: CALTAB #3



0003389

Mass List
03/27/89 10:21:00 + 9:19
Sample: DFTPP-D TUNE 3/27/89
Conds.: 50 NG INJECTION

Data: DFTPPD0327 # 479
Cali: CALTAB # 3

Base m/z: 198
RIC: 118014

000390

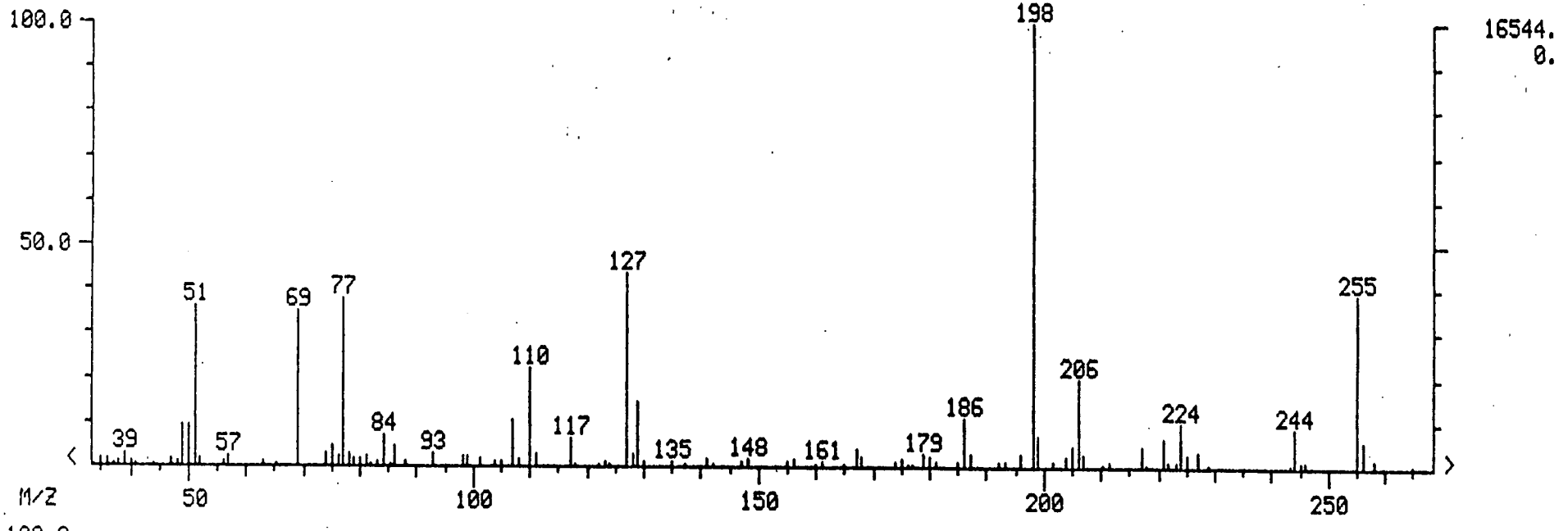
35 0.00 0. Minima Min Inten: 0.
444 Maxima # 0

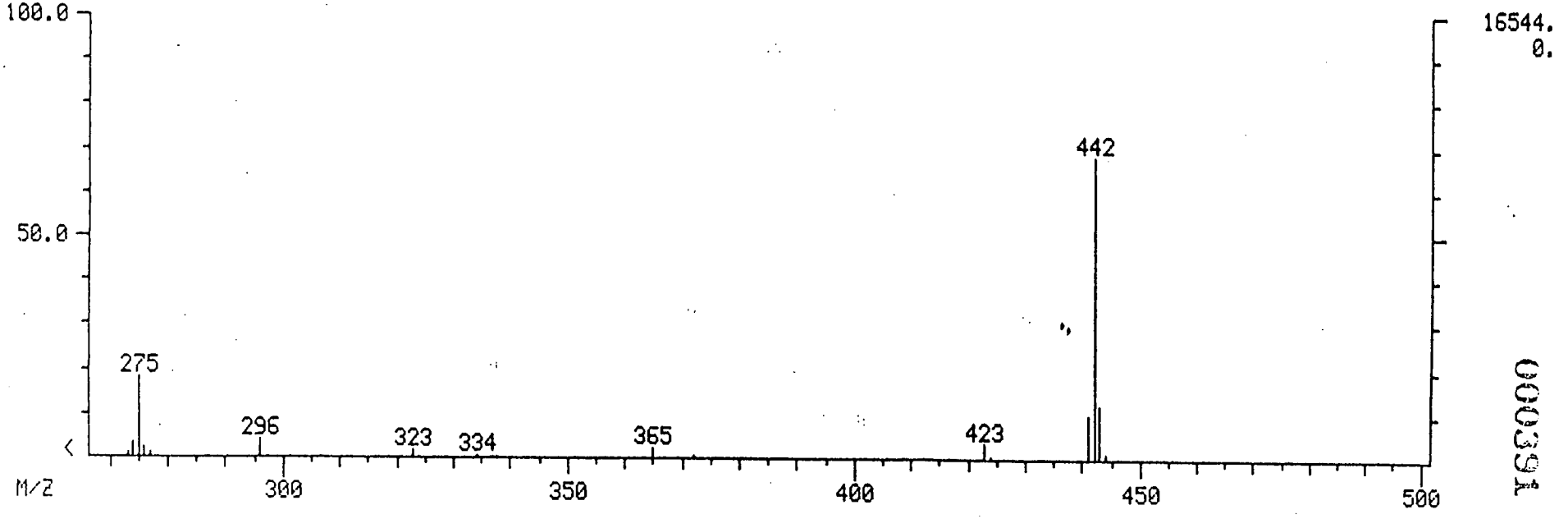
Mass	% RA	Inten.	Mass	% RA	Inten.	Mass	% RA	Inten.
35	1.61	266.	130	1.43	237.	258	1.81	300.
36	1.72	284.	135	1.28	212.	265	0.70	115.
37	0.64	106.	137	0.73	121.	273	1.35	223.
38	1.03	171.	141	1.61	267.	274	3.48	575.
39	2.94	486.	142	0.68	112.	275	18.16	3004.
40	1.27	210.	147	0.97	161.	276	2.47	409.
41	0.68	113.	148	1.83	303.	277	1.23	204.
44	0.65	108.	155	1.02	169.	296	4.23	700.
47	1.60	264.	156	1.55	257.	323	1.64	271.
48	1.00	165.	160	0.63	104.	334	0.85	140.
49	9.12	1508.	161	0.97	160.	365	2.09	346.
50	9.12	1508.	165	0.74	122.	372	0.87	144.
51	36.07	5968.	167	4.06	672.	423	3.38	559.
52	1.90	314.	168	2.47	408.	424	0.74	122.
56	1.29	213.	174	0.88	145.	441	9.65	1596.
57	2.31	382.	175	1.52	251.	442	68.28	11296.
63	1.32	219.	176	0.74	123.	443	12.48	2064.
65	0.68	112.	177	0.68	113.	444	1.14	189.
69	35.01	5792.	179	2.86	473.			
74	2.78	460.	180	2.17	359.			
75	4.93	815.	181	1.18	195.			
76	2.61	431.	185	1.31	216.			
77	38.01	6288.	186	10.93	1808.			
78	2.94	487.	187	3.08	509.			
79	1.67	276.	192	1.01	167.			
80	1.46	242.	193	0.92	152.			
81	2.46	407.	196	3.14	520.			
82	0.73	121.	198	100.00	16544.			
83	1.00	165.	199	7.19	1190.			
84	6.83	1130.	202	0.93	154.			
85	0.70	115.	204	2.53	419.			
86	4.91	812.	205	4.39	727.			
88	0.99	164.	206	19.49	3224.			
93	3.08	509.	207	2.78	460.			
98	2.09	345.	210	0.76	125.			
99	2.17	359.	211	1.20	198.			
101	1.47	243.	217	4.80	794.			
104	0.88	146.	218	0.76	125.			
105	0.88	146.	221	6.59	1090.			
107	10.29	1702.	222	1.45	240.			
108	1.62	268.	223	1.11	184.			
110	21.93	3628.	224	10.02	1658.			
111	3.19	527.	225	2.62	434.			
117	6.43	1064.	227	3.52	582.			
118	0.64	106.	229	0.86	143.			
122	0.63	105.	243	0.74	122.			
123	1.05	173.	244	8.92	1476.			
124	0.60	100.	245	1.20	198.			
127	43.62	7216.	246	1.12	185.			
128	3.19	528.	255	38.97	6448.			
129	14.80	2448.	256	5.93	981.			

MASS SPECTRUM
03/27/89 10:21:00 + 9:19
SAMPLE: DFTPP-D TUNE 3/27/89
CONDS.: 50 NG INJECTION
TEMP: 216 DEG. C

DATA: DFTPPD0327 #479
CALI: CALTAB #3

BASE M/Z: 198
RIC: 118016.





000391

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

ANALYTICAL DATA REPORT PACKAGE
FOR
GANNETT FLEMING ENGINEERS INC.

Part 6 of 7

Case Name	Field Sample ID	Laboratory Sample ID	Date of Collection
USN Earl Depot	C-14A	789651,789603,789657, 789629,789635,789643	02/16/89
	C-14B	789652,789604,789658, 789630,789636,789644	"
	C-14C	789653,789605,789659, 789631,789637,789645	"
	C-29A	789654,789606,789660, 789632,789638.789646	"
	FIELD BLANK	789655,789607,789662, 789633,789639,789647	"
	TRIP BLANK	789656,789608,789661, 789634,789640,789648	"

Laboratory Name QC Inc.

Certification No. PADER No. 09-131
NJDEP No. 77166/77648

Supervisor/Manager Signature

Printed Name Thomas J. Hines

Form QC G-1

QC Inc
1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

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	Water Semivolatile MS Data.....	418
	Water Semivolatile MSD Data.....	461

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

EPA METHOD 625 BASE/NEUTRAL EXTRACTABLES BY GC/MS

Lab ID : BLKW0224
Sample ID : Aqueous Blank
Date Analyzed : 03/25/89
Date Extracted: 02/24/89

Client : Gannett&Fleming
Prep Factor : 1000 mls/1.0 ml
Comments :
Date Received: 02/17/89

NO.	NAME	RESULTS PPB	COMMENTS
1	Bis(2-chloroethyl)Ether	10	U
2	1,2-Dichlorobenzene	10	U
3	1,4-Dichlorobenzene	10	U
4	1,3-Dichlorobenzene	10	U
5	Bis(2-chloroisopropyl)Ether	10	U
6	N-Nitrosodipropyl Amine	10	U
7	Hexachloroethane	10	U
8	Nitrobenzene	10	U
9	Isophorone	10	U
10	Bis(2-chloroethoxy)Methane	10	U
11	1,2,4-Trichlorobenzene	10	U
12	Naphthalene	10	U
13	Hexachlorobutadiene	10	U
14	Hexachlorocyclopentadiene	10	U
15	2-Chloronaphthalene	10	U
16	Dimethyl Phthalate	10	U
17	2,6-Dinitrotoluene	10	U
18	Acenaphthylene	10	U
19	Acenaphthene	10	U
20	2,4-Dinitrotoluene	10	U
21	Diethyl Phthalate	10	U
22	N-Nitrosodimethyl Amine	10	U
23	4-Chlorophenylphenyl Ether	10	U
24	Fluorene	10	U
25	Azobenzene	10	U
26	N-Nitrosodiphenyl Amine	10	U
27	4-Bromophenylphenyl Ether	10	U
28	Hexachlorobenzene	10	U
29	Phenanthrene	10	U
30	Anthracene	10	U
31	Dibutyl Phthalate	2	~~B~~
32	Fluoranthene	10	U

RRH 4/3/89

Comments:
U= Not detected
J= Detected but below Method Detection limit
B= Compound found in Blank

Signature

Name/Title: Howard Whaley
GC/MS Project Leader

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

EPA Method 625 Base/Neutral Extractables by GC/MS

Lab ID : BLKW0224
Sample ID : Aqueous Blank
Date Analyzed : 03/25/89
Date Extracted: 02/24/89

Client : Gannett&Fleming
Prep Factor: 1000 mls/1.0 ml
Comments :
Date Recieved: 02/17/89

NO.	NAME	RESULTS PPB	COMMENTS
33	Benzidine	50	U
34	Pyrene	10	U
35	Butylbenzyl Phthalate	10	U
36	3,3-Dichlorobenzidine	10	U
37	Benzo(A)Anthracene	10	U
38	Chrysene	10	U
39	Bis(2-ethylhexyl) Phthalate	1	~~B~~ RRH 4/3/89
40	Dioctyl-Phthalate	10	U
41	Benzo(K)Fluoranthene	10	U
42	Benzo(B)Fluoranthene	10	U
43	Benzo(A)Pyrene	10	U
44	Indeno(1,2,3-CD)Pyrene	10	U
45	Dibenzo(A,H)Anthracene	10	U
46	Benzo(GHI)Perylene	10	U

Comments:
U= Not Detected
J= Detected but below Method Detection Limit
B= Compound found in Blank

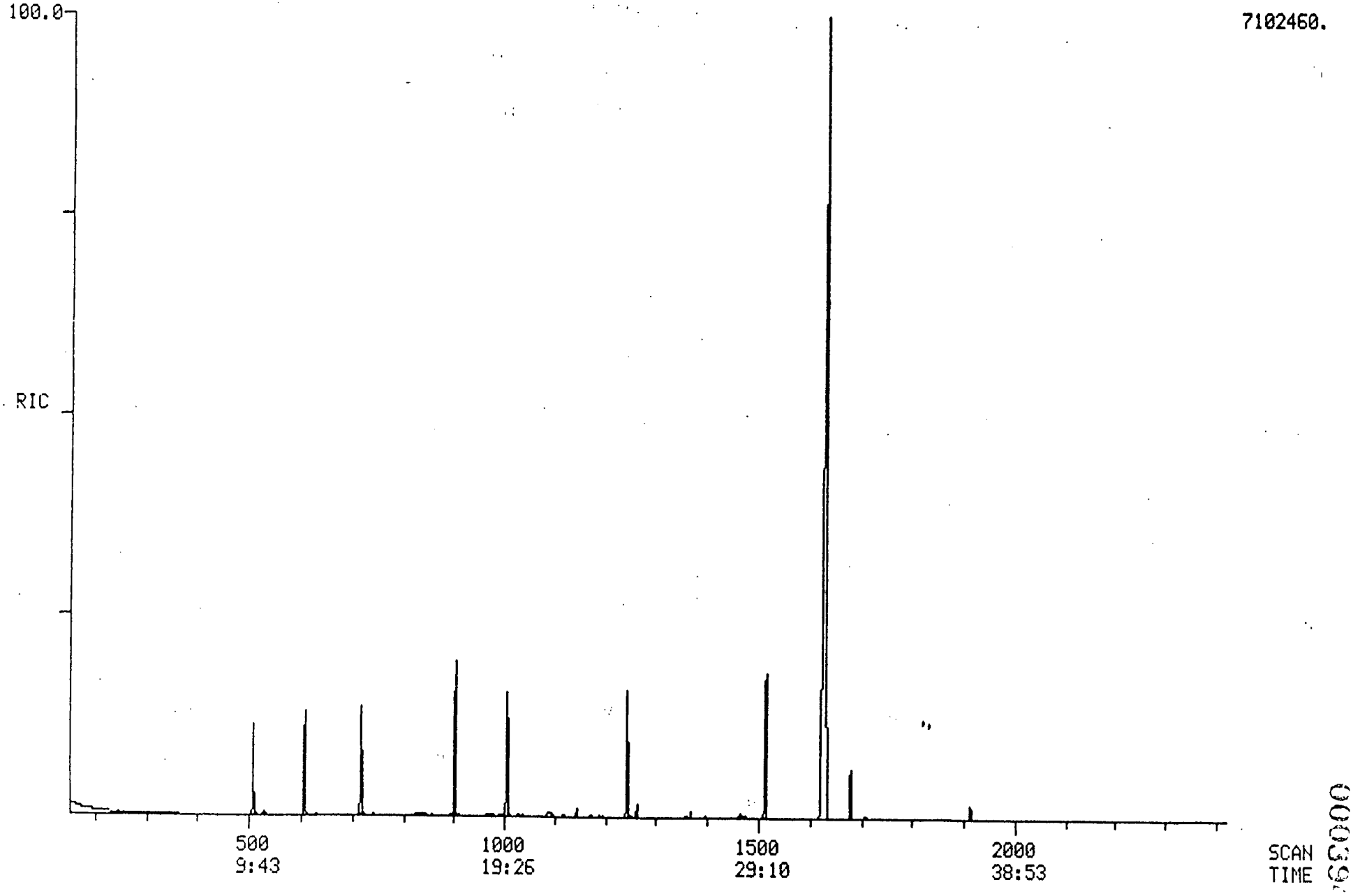
Signature

Name/Title: Howard Whaley
GC/MS Project Leader

RIC
03/25/89 17:11:00
SAMPLE: AQUEOUS BLANK
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BLKW0224 #1
CALI: CALTAB #3

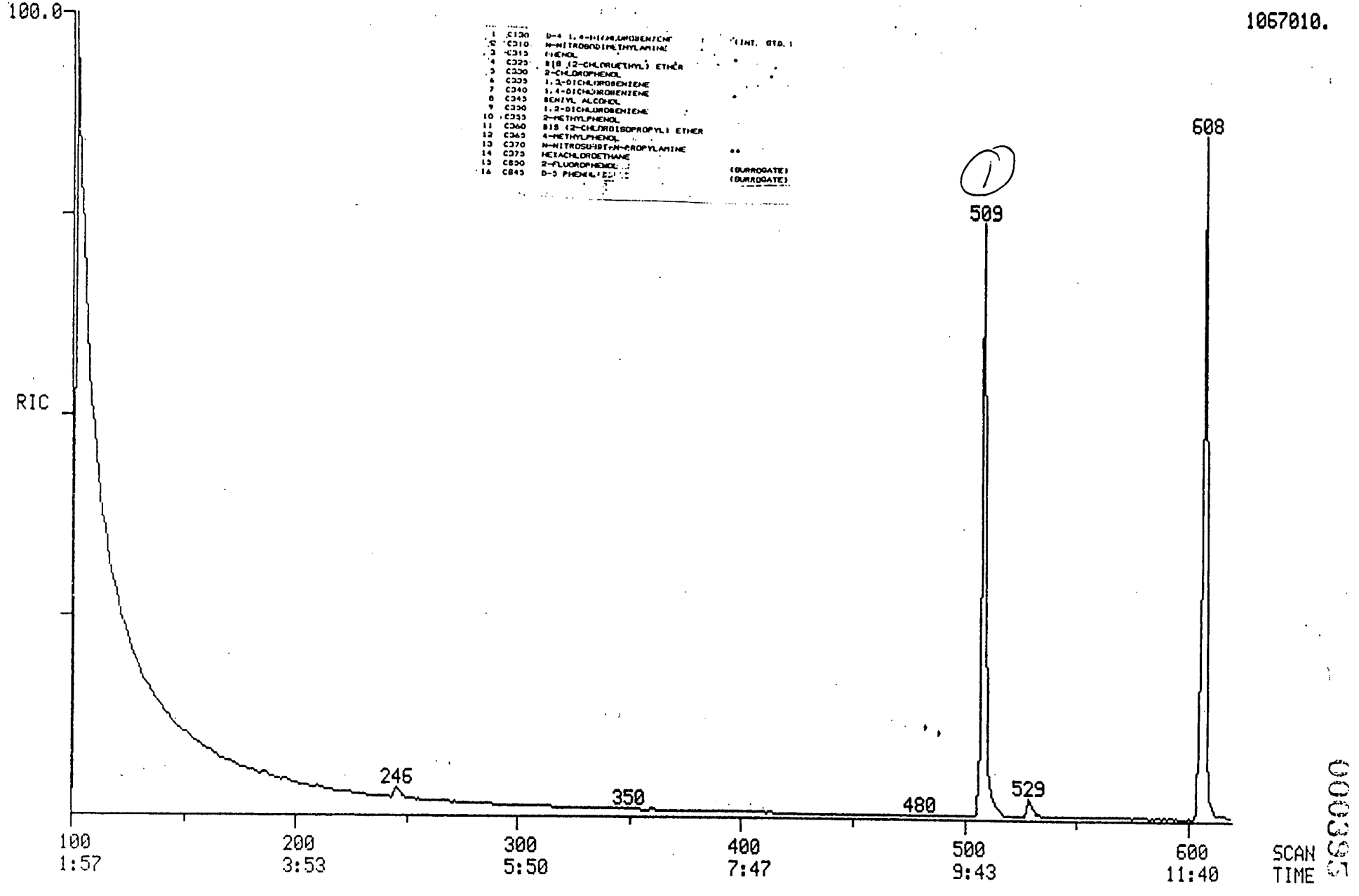
SCANS 150 TO 2418



RIC
03/25/89 17:11:00
SAMPLE: AQUEOUS BLANK
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BLKW0224 #1
CALI: BLKW0224 #3

SCANS 100 TO 620



000395

Quantitation Report File: BLKW0224

000396

Data: BLKW0224.TI
03/25/89 17:11:00
Sample: AQUEOUS BLANK
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: BLKW0224

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI30 1,4-DICHLOROBENZENE D4	INTERNAL STANDARD
2	N-NITROSODIMETHYLAMINE	
3	C315 PHENOL	
4	C325 BIS(2-CHLOROETHYL) ETHER	
5	C330 2-CHLOROPHENOL	
6	C335 1,3-DICHLOROBENZENE	
7	C340 1,4-DICHLOROBENZENE	
8	C345 BENZYL ALCOHOL	
9	C350 1,2-DICHLOROBENZENE	
10	C355 2-METHYLPHENOL	
11	C360 BIS(2-CHLOROISOPROPYL)ETHER	
12	C365 4-METHYLPHENOL	
13	C370 N-NITROSO-DI-PROPYLAMINE	
14	C375 HEXACHLOROETHANE	
15	CS50 2-FLUOROPHENOL	SURROGATE
16	CS45 PHENOL D5	SURROGATE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	509	9:54	1	1.000	A BB	284129.	40.000 UG/ML	99.74
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	146	509	9:54	1	1.000	A BB	~~347.~~	~~0.033 UG/ML~~	~~0.08~~ NO WSS
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	108	608	11:49	1	1.194	A BB	~~673.~~	~~0.072 UG/ML~~	~~0.18~~ NO WSS
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								

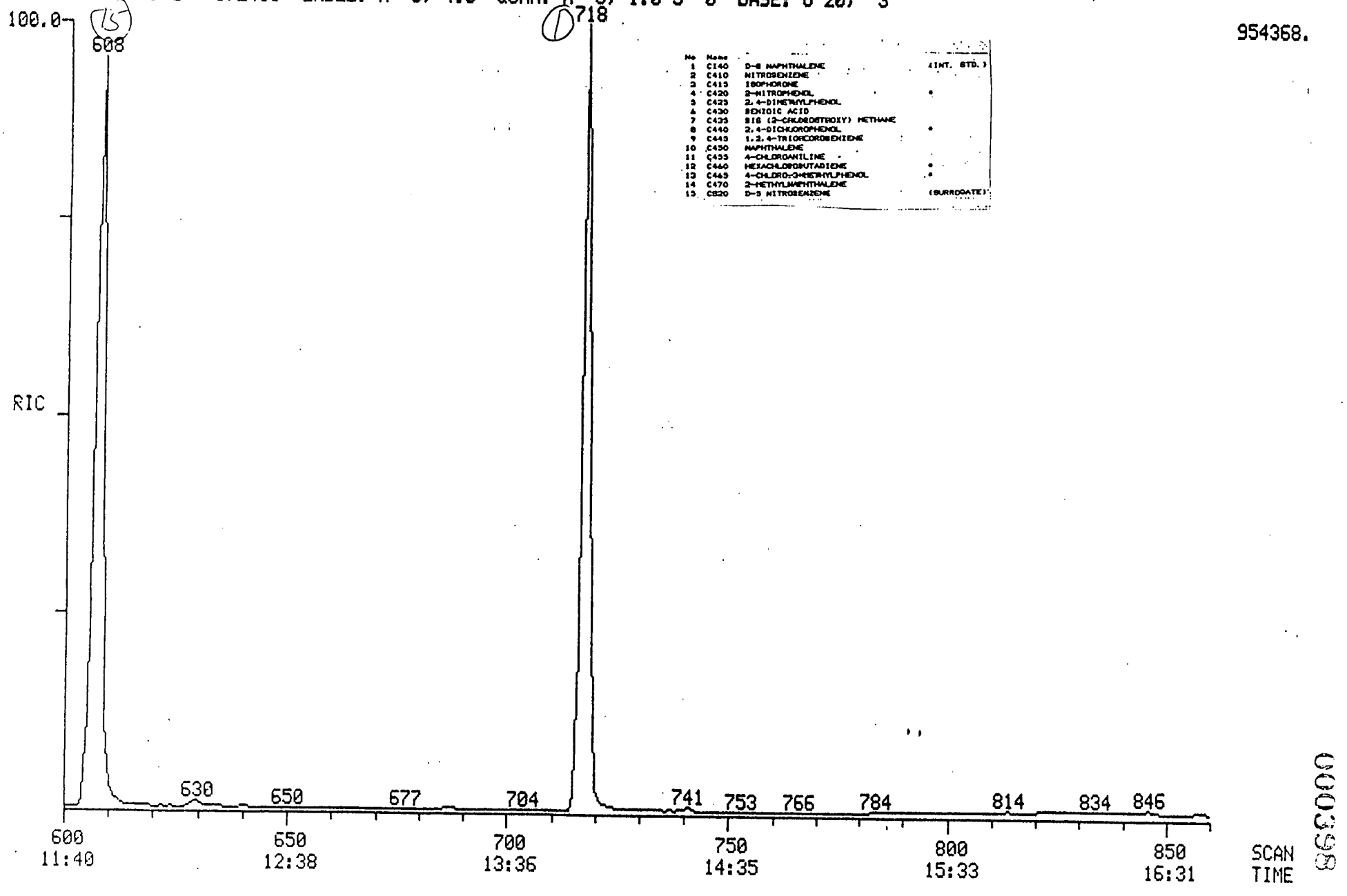
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:50	1.01	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	2:35		0.263						
3	9:25		0.957						
4	9:19		0.947						
5	9:23		0.955						
6	9:42		0.986						
7	9:54	1.00	1.006	0.99	0.03	50.00	0.001	1.476	0.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
8	10:40		1.085						
9	10:29		1.065						
10	11:15		1.144						
11	11:05		1.126						
12	11:48	1.00	1.200	1.00	0.07	50.00	0.002	1.317	0.00
13	11:36		1.180						
14	11:27		1.164						
15	5:55		0.601						
16	9:22		0.953						

RIC
03/25/89 17:11:00
SAMPLE: AQUEOUS BLANK
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BLKW0224 #1
CALI: BLKW0224 #3

SCANS 600 TO 860



No	Name		
1	C140	D-8 NAPHTHALENE	(INT. STD.)
2	C410	NITROBENZENE	
3	C415	ISOPHORONE	
4	C420	2-NITROPHENOL	*
5	C425	2,4-DIMETHYLPHENOL	
6	C430	BENZOIC ACID	
7	C435	BIS (2-CHLOROETHOXY) METHANE	
8	C440	2,4-DICHLOROPHENOL	*
9	C445	1,2,4-TRICHLOROBENZENE	
10	C450	NAPHTHALENE	
11	C455	4-CHLOROANILINE	
12	C460	HEXACHLOROBUTADIENE	*
13	C465	4-CHLORO-3METHYLPHENOL	*
14	C470	2-METHYLNAPHTHALENE	
15	C820	D-5 NITROBENZENE	(SURROGATE)

0003398

Quantitation Report File: BLKW0224

000399

Data: BLKW0224.TI
03/25/89 17:11:00
Sampl : AQUEOUS BLANK
Conds.: 1000 MLS/1.0 ML
Formula: Instrum nt: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: BLKW0224

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI40 NAPHTHALENE D8	INTERNAL STANDARD
2	C410 NITROBENZENE	
3	C415 ISOPHORONE	
4	C420 2-NITROPHENOL	
5	C425 2,4-DIMETHYLPHENOL	
6	C430 BENZOIC ACID	
7	C435 BIS(2-CHLOROETHOXY)METHANE	
8	C440 2,4-DICHLOROPHENOL	
9	C445 1,2,4-TRICHLOROBENZENE	
10	C450 NAPHTHALENE	
11	C455 4-CHLOROANILINE	
12	C460 HEXACHLOROBUTADIENE	
13	C465 4-CHLORO-3-METHYLPHENOL	
14	C470 2-METHYLNAPHTHALENE	
15	CS20 NITROBENZENE D5	SURROGATE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot	
1	136	718	13:57	1	1.000	A BB	778478.	40.000 UG/ML	37.88	
2	77	608	11:49	1	0.847	A BB	~~2422.~~	~~0.177 UG/ML~~	~~0.17~~	no WSS
3	82	652	12:40	1	0.908	A VV	~~178.~~	~~0.011 UG/ML~~	~~0.01~~	no WSS
4	NOT FOUND									
5	NOT FOUND									
6	NOT FOUND									
7	NOT FOUND									
8	NOT FOUND									
9	NOT FOUND									
10	128	720	14:00	1	1.003	A BB	~~1134.~~	~~0.072 UG/ML~~	~~0.07~~	no WSS
11	NOT FOUND									
12	NOT FOUND									
13	107	834	16:13	1	1.162	A BV	~~1025.~~	~~0.145 UG/ML~~	~~0.14~~	no WSS
14	142	834	16:13	1	1.162	A VV	~~1519.~~	~~0.068 UG/ML~~	~~0.06~~	no WSS
15	82	608	11:49	1	0.847	A BB	675303.	65.136 UG/ML	61.68	Yes WSS

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	13:59	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	11:53	1.00	0.850	1.00	0.18	50.00	0.002	0.702	0.00
3	12:42	1.00	0.908	1.00	0.01	50.00	0.000	0.824	0.00
4	12:53		0.922						
5	13:21		0.955						
6	14:16		1.021						
7	13:32		0.968						
8	13:48		0.987						
9	13:53		0.993						

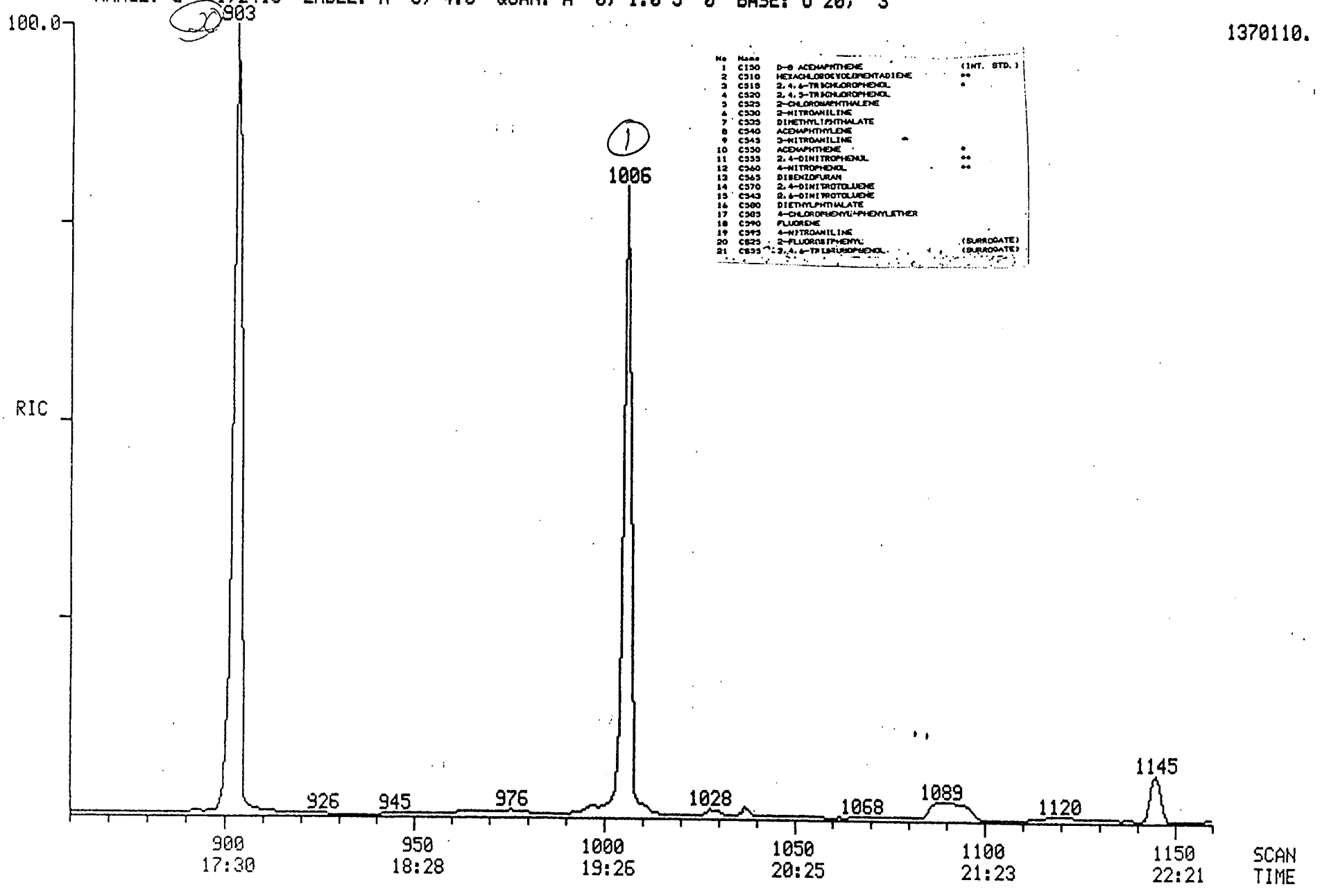
No	R t(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
10	14:02	1.00	1.004	1.00	0.07	50.00	0.001	0.812	0.00
11	14:28		1.035						
12	14:42		1.051						
13	16:16	1.00	1.164	1.00	0.14	50.00	0.001	0.364	0.00
14	16:16	1.00	1.164	1.00	0.07	50.00	0.002	1.146	0.00
15	11:48	1.00	0.844	1.00	65.14	50.00	0.694	0.533	1.30

000400

RIC
03/25/89 17:11:00
SAMPLE: AQUEOUS BLANK
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BLKW0224 #1
CALI: BLKW0224 #3

SCANS 860 TO 1160



1370110.

No	Name		
1	C150	D-8 ACENAPHTHENE	(INT. STD.)
2	C510	HEXACHLOROCYCLOPENTADIENE	**
3	C515	2,4,6-TRICHLOROPHENOL	*
4	C520	2,4,5-TRICHLOROPHENOL	
5	C525	2-CHLORONAPHTHALENE	
6	C530	2-NITROANILINE	
7	C535	DIMETHYLPHTHALATE	
8	C540	ACENAPHTHYLENE	
9	C545	3-NITROANILINE	
10	C550	ACENAPHTHENE	*
11	C555	2,4-DINITROPHENOL	**
12	C560	4-NITROPHENOL	**
13	C565	DIBENZOFURAN	
14	C570	2,4-DINITROTOLUENE	
15	C575	2,6-DINITROTOLUENE	
16	C580	DIETHYLPHTHALATE	
17	C585	4-CHLOROPHENYL-PHENYLETHER	
18	C590	FLUORENE	
19	C595	4-NITROANILINE	
20	C625	2-FLUOROBIPHENYL	(SURROGATE)
21	C635	2,4,6-TRIBROMOPHENOL	(SURROGATE)

000401

Quantitation Rep rt File: BLKW0224

000402

Data: BLKW0224.TI
03/25/89 17:11:00
Sample: AQUEOUS BLANK
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: BLKW0224

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI50 ACENAPHTHENE D8	INTERNAL STANDARD
2	C510 HEXACHLOROCYCLOPENTADIENE	
3	C515 2,4,6-TRICHLOROPHENOL	
4	C520 2,4,5-TRICHLOROPHENOL	
5	C525 2-CHLORONAPHTHALENE	
6	C530 2-NITROANILINE	
7	C535 DIMETHYL PHTHALATE	
8	C540 ACENAPHTHYLENE	
9	C545 3-NITROANILINE	
10	C550 ACENAPHTHENE	
11	C555 2,4-DINITROPHENOL	
12	C560 4-NITROPHENOL	
13	C565 DIBENZOFURAN	
14	C570 2,4-DINITROTOLUENE	
15	C543 2,6-DINITROTOLUENE	
16	C580 DIETHYL PHTHALATE	
17	C585 4-CHLOROPHENYL PHENYL ETHER	
18	C590 FLUORENE	
19	C595 4-NITROANILINE	
20	CS25 2-FLUOROBIPHENYL	SURROGATE
21	CS55 2,4,6-TRIBROMOPHENOL	SURROGATE

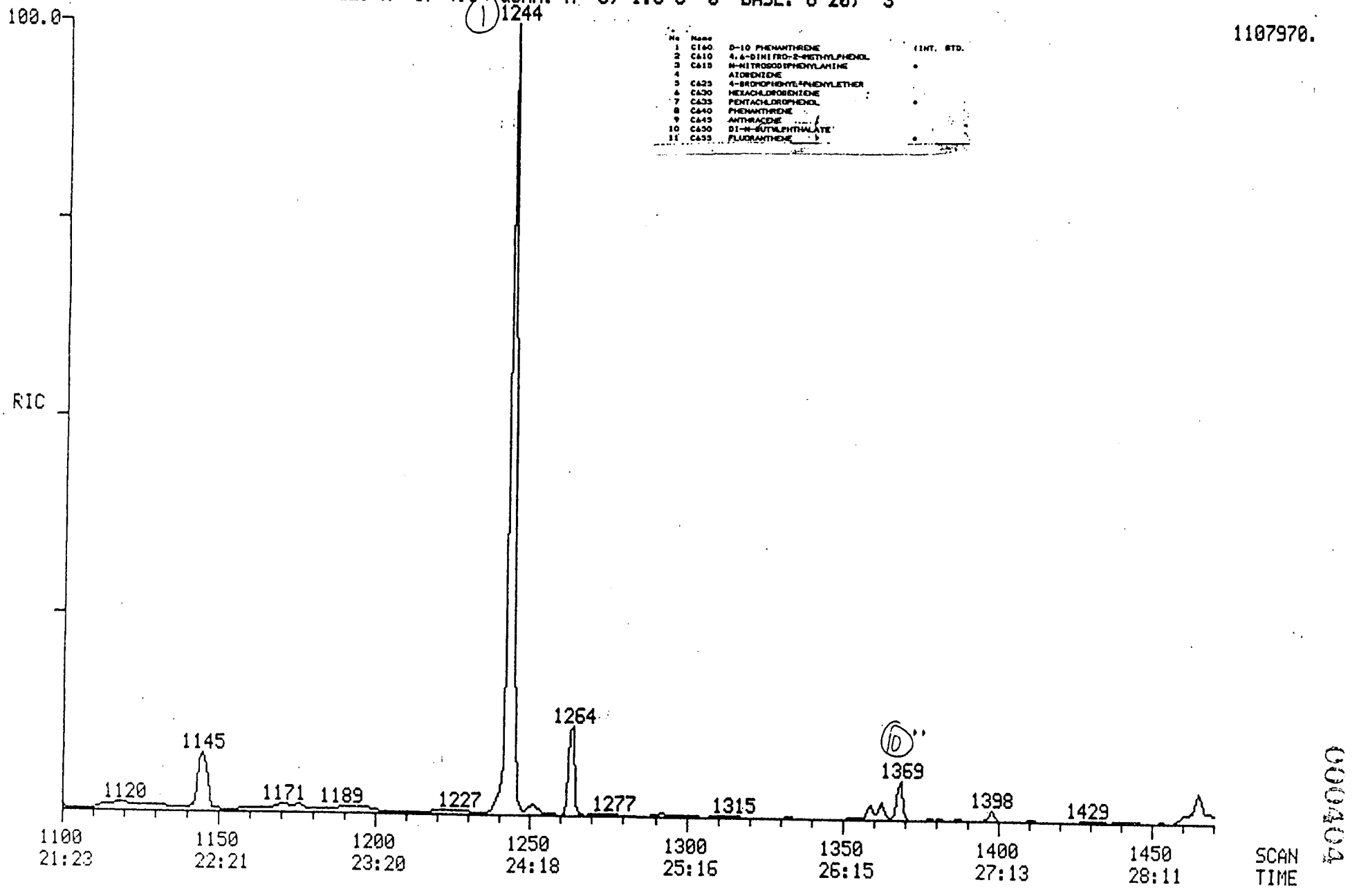
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot	
1	164	1006	19:33	1	1.000	A BB	471489.	40.000 UG/ML	37.10	
2	NOT FOUND									
3	196	894	17:23	1	0.889	A VB	~~361.~~	~~0.076 UG/ML~~	~~0.07~~ NO	WSS
4	196	903	17:33	1	0.898	A VV	~~691.~~	~~0.141 UG/ML~~	~~0.13~~ NO	WSS
5	162	912	17:44	1	0.907	A VB	~~1407.~~	~~0.103 UG/ML~~	~~0.10~~ NO	WSS
6	65	944	18:21	1	0.938	A VB	~~1601.~~	~~0.177 UG/ML~~	~~0.16~~ NO	WSS
7	NOT FOUND									
8	NOT FOUND									
9	138	1013	19:42	1	1.007	A VB	~~1809.~~	~~0.214 UG/ML~~	~~0.20~~ NO	WSS
10	NOT FOUND									
11	NOT FOUND									
12	NOT FOUND									
13	NOT FOUND									
14	165	1051	20:26	1	1.045	A VB	~~1054.~~	~~0.243 UG/ML~~	~~0.23~~ NO	WSS
15	NOT FOUND									
16	149	1095	21:17	1	1.088	A VB	~~14116.~~	~~1.039 UG/ML~~	~~0.96~~ NO	WSS
17	204	1096	21:18	1	1.089	A VB	~~3660.~~	~~0.479 UG/ML~~	~~0.44~~ NO	WSS
18	166	1090	21:11	1	1.083	A VB	~~6343.~~	~~0.527 UG/ML~~	~~0.49~~ NO	WSS
19	NOT FOUND									
20	172	903	17:33	1	0.898	A BV	863918.	64.823 UG/ML	60.12 Yes	WSS
21	NOT FOUND									

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	19:36	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	16:59		0.867						
3	17:23	1.00	0.887	1.00	0.08	50.00	0.001	0.404	0.00
4	17:36	1.00	0.898	1.00	0.14	50.00	0.001	0.417	0.00
5	17:46	1.00	0.907	1.00	0.10	50.00	0.002	1.155	0.00
6	18:25	1.00	0.939	1.00	0.18	50.00	0.003	0.768	0.00
7	19:08		0.976						
8	19:05		0.974						
9	19:46	1.00	1.009	1.00	0.21	50.00	0.003	0.716	0.00
10	19:42		1.005						
11	20:03		1.023						
12	20:42		1.057						
13	20:13		1.032						
14	20:29	1.00	1.046	1.00	0.24	50.00	0.002	0.368	0.00
15	19:18		0.985						
16	21:23	1.00	1.091	1.00	1.04	50.00	0.024	1.153	0.02
17	21:23	1.00	1.091	1.00	0.48	50.00	0.006	0.648	0.01
18	21:17	1.00	1.086	1.00	0.53	50.00	0.011	1.021	0.01
19	21:46		1.111						
20	17:34	1.00	0.897	1.00	64.82	50.00	1.466	1.131	1.30
21	22:09		1.130						

RIC
03/25/89 17:11:00
SAMPLE: AQUEOUS BLANK
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BLKW0224 #1
CALI: BLKW0224 #3

SCANS 1100 TO 1470



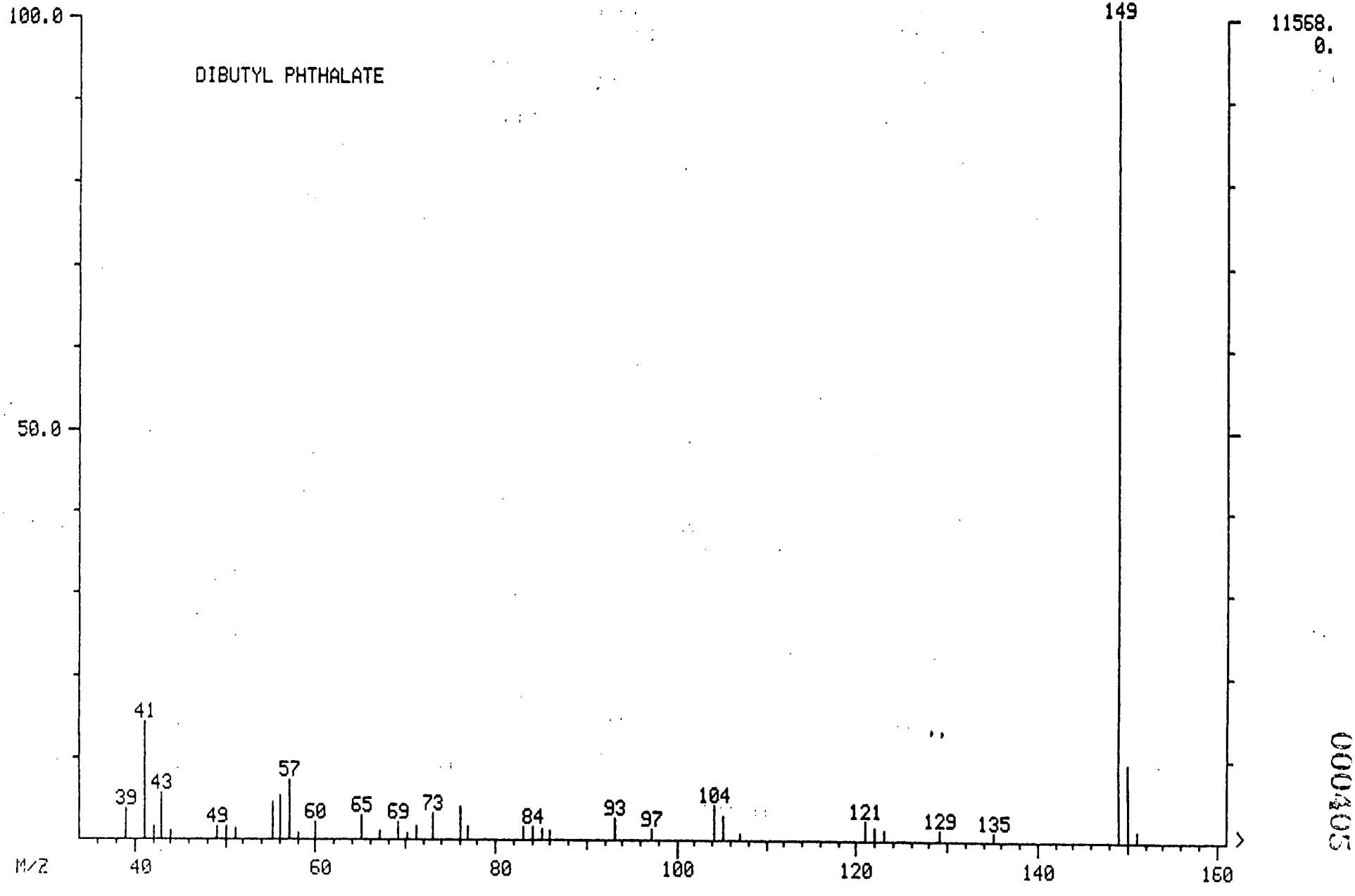
No	Name		(INT. STD.
1	C160	D-10 PHENANTHRENE	
2	C610	4,6-DINITRO-2-METHYLPHENOL	
3	C615	N-NITROSODIPHENYLAMINE	•
4		AZOBENZENE	
5	C625	4-BROMOPHENYL-PHENYLETHER	
6	C630	HEXACHLOROBENZENE	
7	C635	PENTACHLOROPHENOL	•
8	C640	PHENANTHRENE	
9	C645	ANTHRACENE	
10	C650	DI-N-BUTYLPHTHALATE	
11	C655	FLUORANTHENE	•

000404

MASS SPECTRUM
03/25/89 17:11:00 + 26:30
SAMPLE: AQUEOUS BLANK
CONDS.: 1000 MLS/1.0 ML
TEMP: 221 DEG. C

DATA: BLKW0224 #1363
CALI: BLKW0224 #3

BASE M/Z: 149
RIC: 24288.

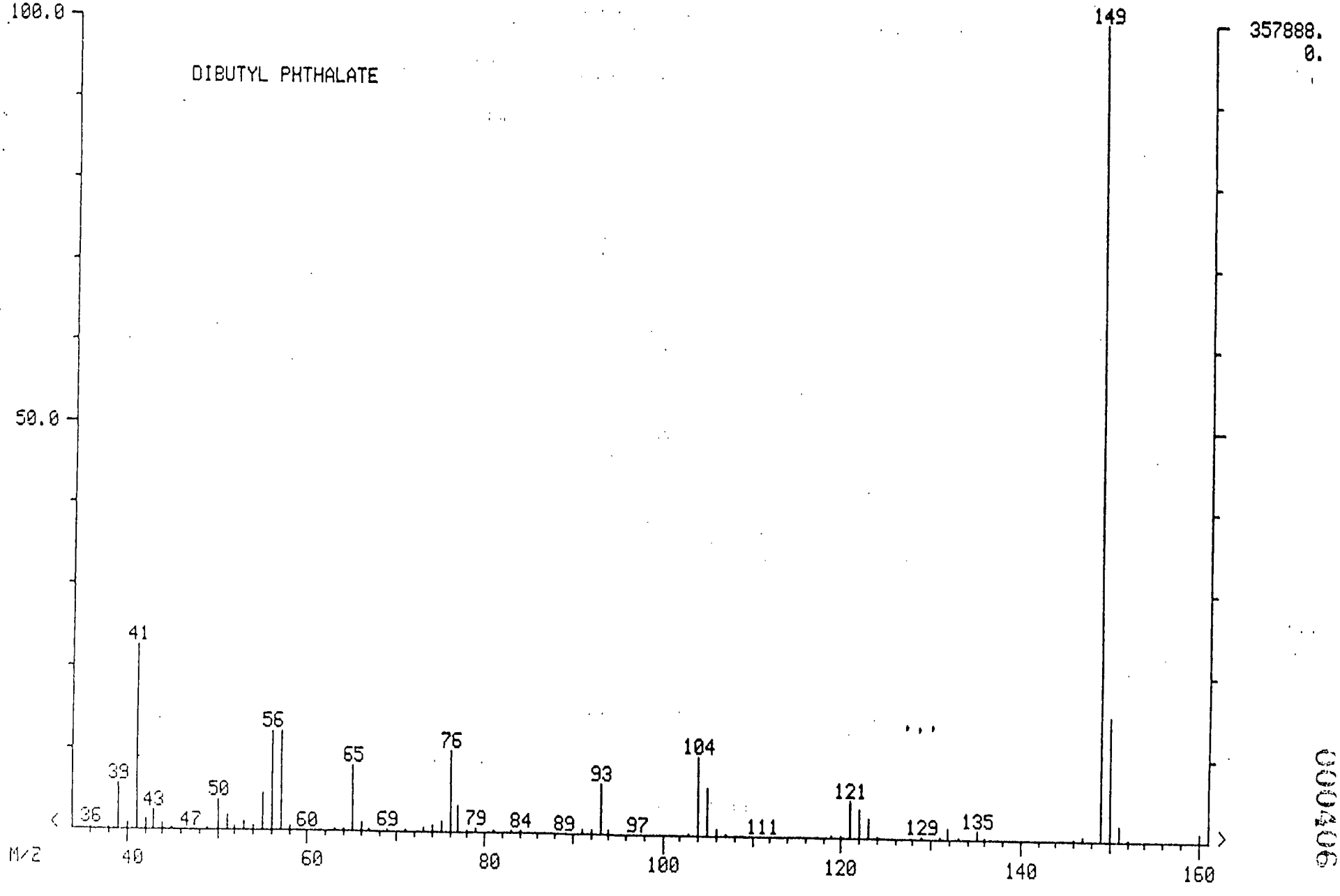


000305

MASS SPECTRUM
03/25/89 12:28:00 + 26:32
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 50 NG INJECTION
TEMP: 221 DEG. C

DATA: HSD500325 #1365
CALI: HSD500325 #3

BASE M/Z: 149
RIC: 991232.

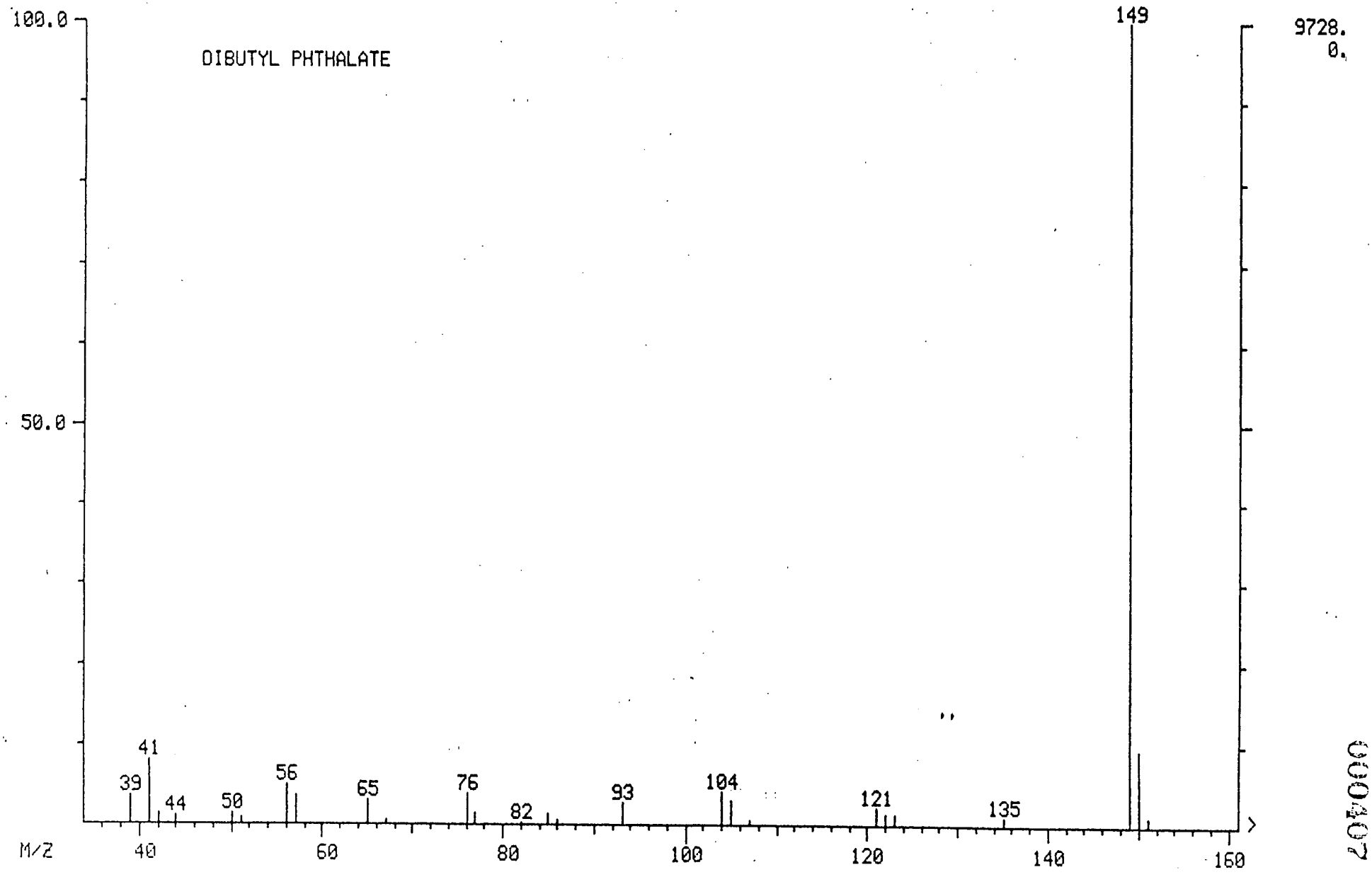


000406

MASS SPECTRUM
03/25/89 17:11:00 + 26:30
SAMPLE: AQUEOUS BLANK
CONDS.: 1000 MLS/1.0 ML
TEMP: 221 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: BLKW0224 #1363
CALI: BLKW0224 #3

BASE M/Z: 149
RIC: 16368.

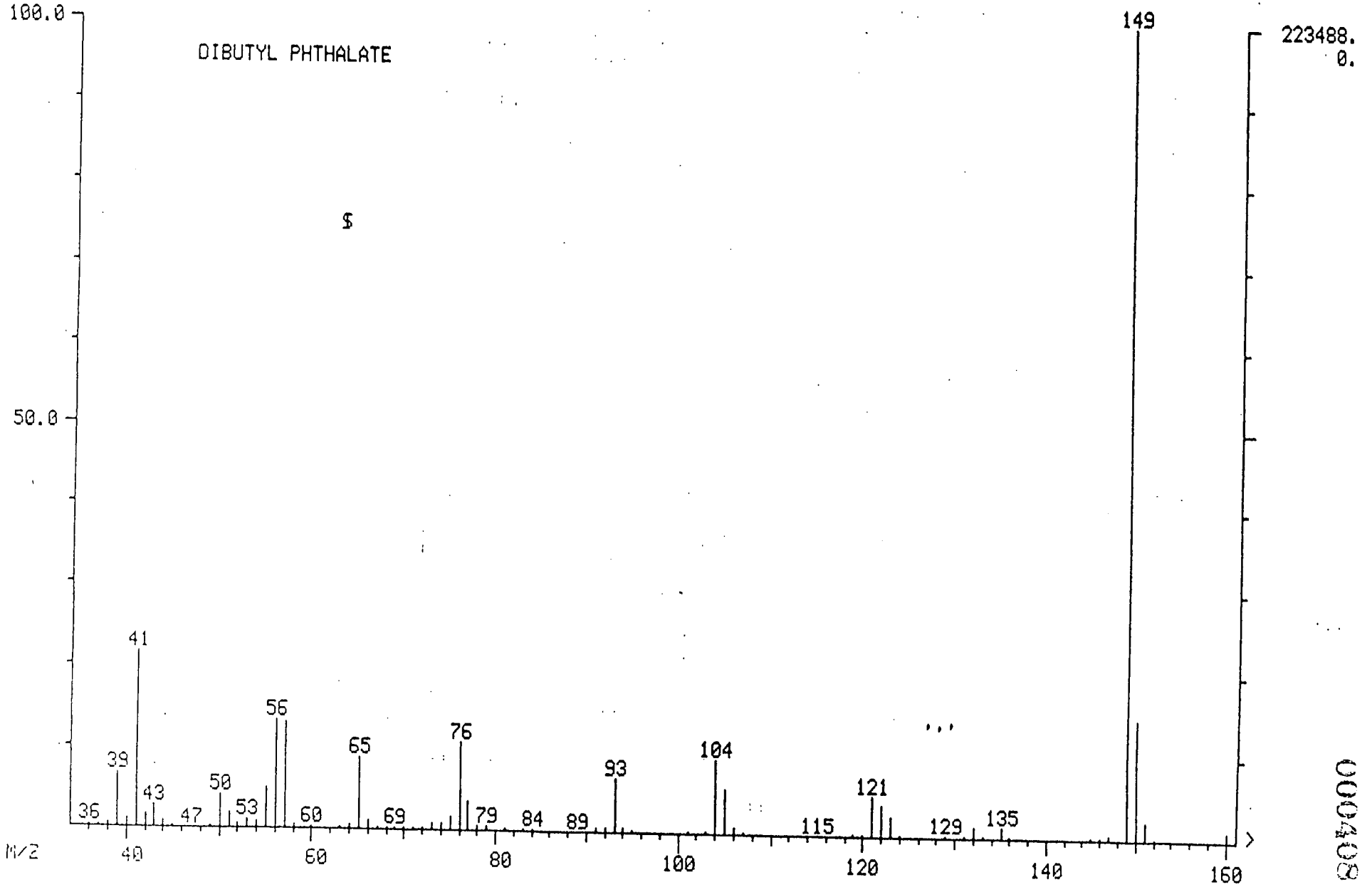


000407

MASS SPECTRUM
03/25/89 12:28:00 + 26:32
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 50 NG INJECTION
TEMP: 221 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: HSD500325 #1365
CALI: HSD500325 #3

BASE M/Z: 149
RIC: 638976.



0004108

Quantitation Report File: BLKW0224

000409

Data: BLKW0224.TI
03/25/89 17:11:00
Sample: AQUEOUS BLANK
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: BLKW0224

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI60 PHENANTHRENE D10	INTERNAL STANDARD
2	C610 4,6-DINITRO-2-METHYL PHENOL	
3	C615 N-NITROSODIPHENYLAMINE	
4	AZOBENZENE	
5	C625 4-BROMOPHENYL PHENYL ETHER	
6	C630 HEXACHLOROBENZENE	
7	C635 PENTACHLOROPHENOL	
8	C640 PHENANTHRENE	
9	C645 ANTHRACENE	
10	C650 DI-N-BUTYL PHTHALATE	
11	C655 FLUORANTHENE	

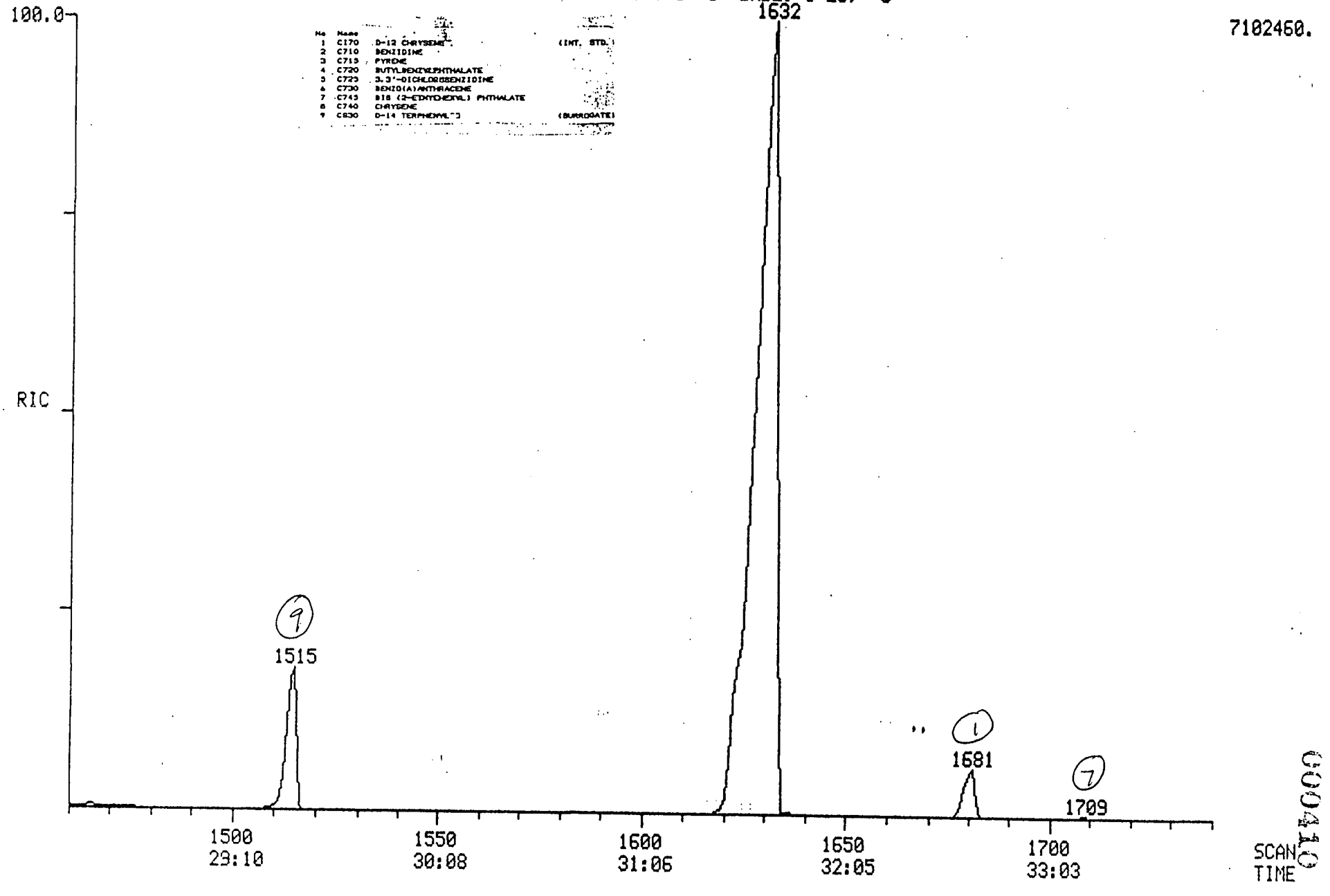
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	188	1244	24:11	1	1.000	A BV	638906.	40.000 UG/ML	85.91
2	NOT FOUND								
3	169	1119	21:45	1	0.900	A BB	~~10656.~~	~~1.156 UG/ML~~	~~2.48~~ NO WSS
4	77	1121	21:48	1	0.901	A BB	~~15830.~~	~~0.875 UG/ML~~	~~1.88~~ NO WSS
5	248	1173	22:48	1	0.943	A BB	~~3022.~~	~~0.749 UG/ML~~	~~1.61~~ NO WSS
6	284	1192	23:10	1	0.958	A BB	~~2878.~~	~~0.629 UG/ML~~	~~1.35~~ NO WSS
7	NOT FOUND								
8	NOT FOUND								
9	178	1252	24:20	1	1.006	A VB	~~12566.~~	~~0.974 UG/ML~~	~~2.09~~ NO WSS
10	149	1363	26:30	1	1.096	A BV	27617.	1.941 UG/ML	4.17 yes WSS
11	202	1440	28:00	1	1.158	A BB	~~3217.~~	~~0.236 UG/ML~~	~~0.51~~ NO WSS

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	24:13	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	21:45		0.898						
3	21:51	1.00	0.902	1.00	1.16	50.00	0.013	0.577	0.02
4	21:53	1.00	0.904	1.00	0.88	50.00	0.020	1.132	0.02
5	22:54	1.00	0.945	1.00	0.75	50.00	0.004	0.253	0.01
6	23:16	1.00	0.961	1.00	0.63	50.00	0.004	0.286	0.01
7	23:57		0.989						
8	24:18		1.003						
9	24:26	1.00	1.009	1.00	0.97	50.00	0.016	0.808	0.02
10	26:32	1.00	1.096	1.00	1.94	50.00	0.035	0.891	0.04
11	28:03	1.00	1.158	1.00	0.24	50.00	0.004	0.853	0.00

RIC
03/25/89 17:11:00
SAMPLE: AQUEOUS BLANK
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BLKW0224 #1
CALI: BLKW0224 #3

SCANS 1460 TO 1740



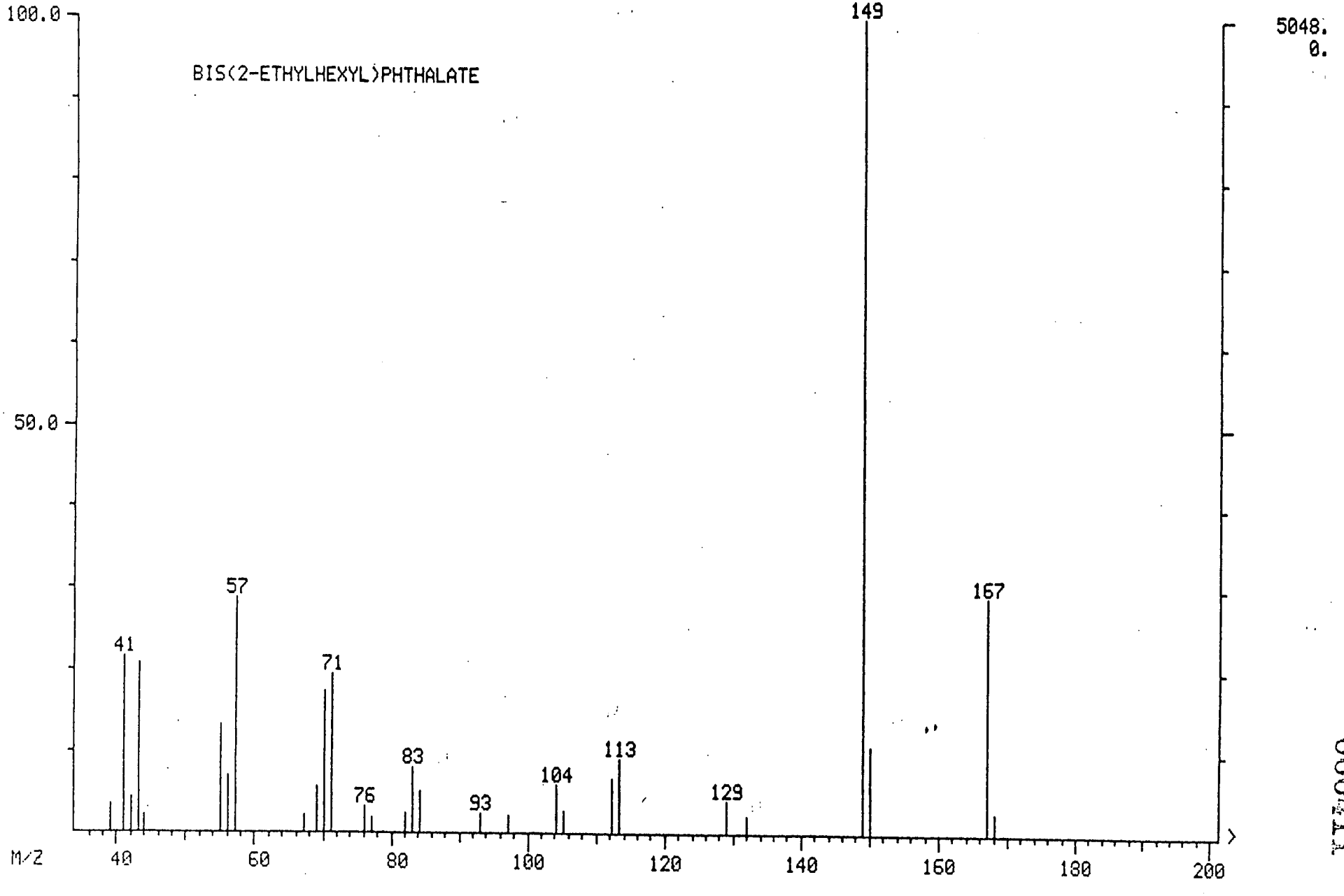
No	Name		
1	C170	D-12 CHRYSENE	(INT. STD.)
2	C710	BENZIDINE	
3	C715	PYRENE	
4	C720	BUTYLBENZYLPHTHALATE	
5	C725	3,3'-DICHLOROBENZIDINE	
6	C730	BENZO(A)ANTHRACENE	
7	C745	BIS (2-ETHYLHEXYL) PHTHALATE	
8	C740	CHRYSENE	
9	C830	D-14 TERPHENYL	(SURROGATE)

000410

MASS SPECTRUM
03/25/89 17:11:00 + 33:13
SAMPLE: AQUEOUS BLANK
CONDS.: 1000 MLS/1.0 ML
TEMP: 275 DEG. C

DATA: BLKW0224 #1709
CALI: BLKW0224 #3

BASE M/Z: 149
RIC: 17536.

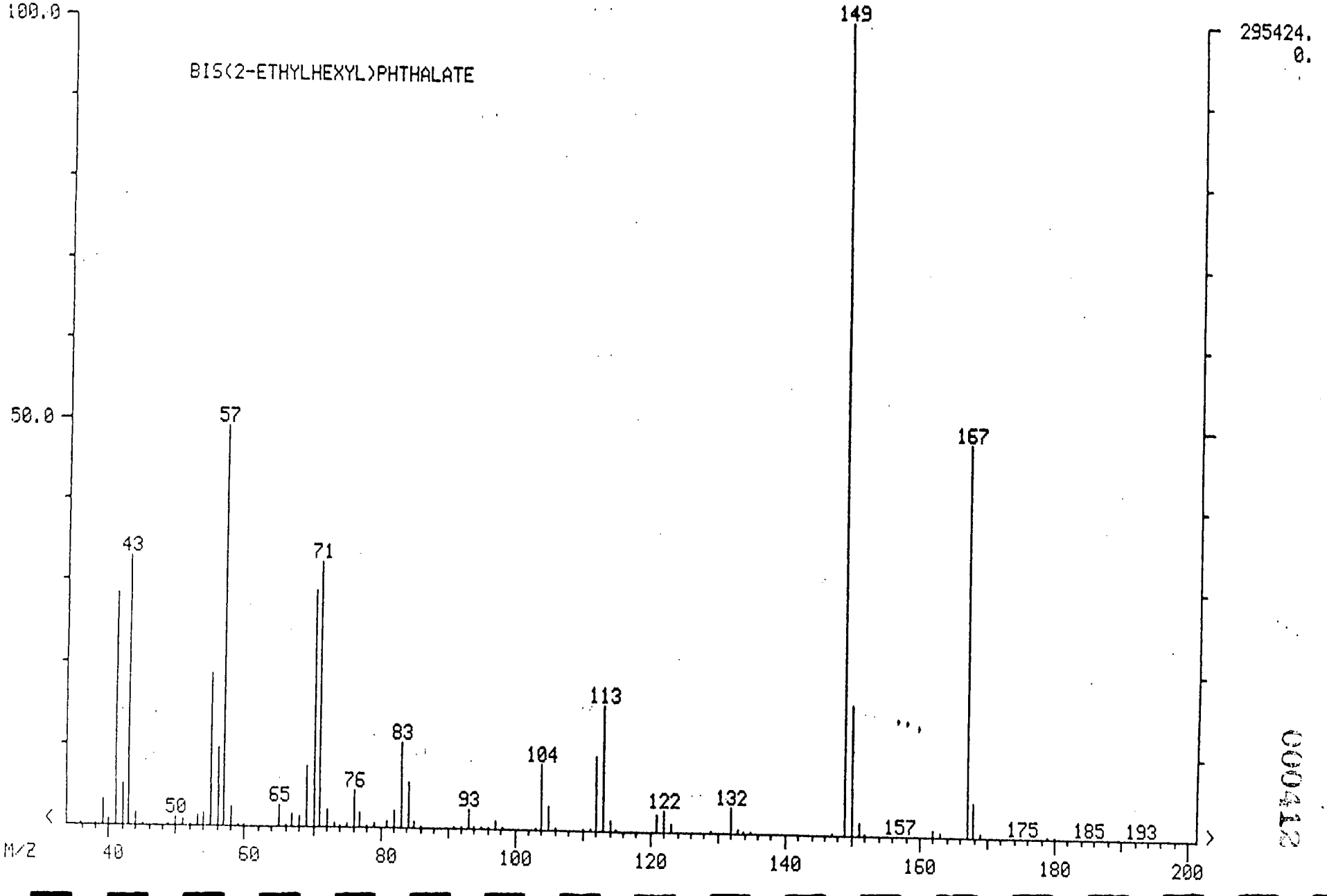


000411

MASS SPECTRUM
03/25/89 12:28:00 + 33:15
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 50 NG INJECTION
TEMP: 275 DEG. C

DATA: HSD500325 #1710
CALI: HSD500325 #3

BASE M/Z: 149
RIC: 1486850.

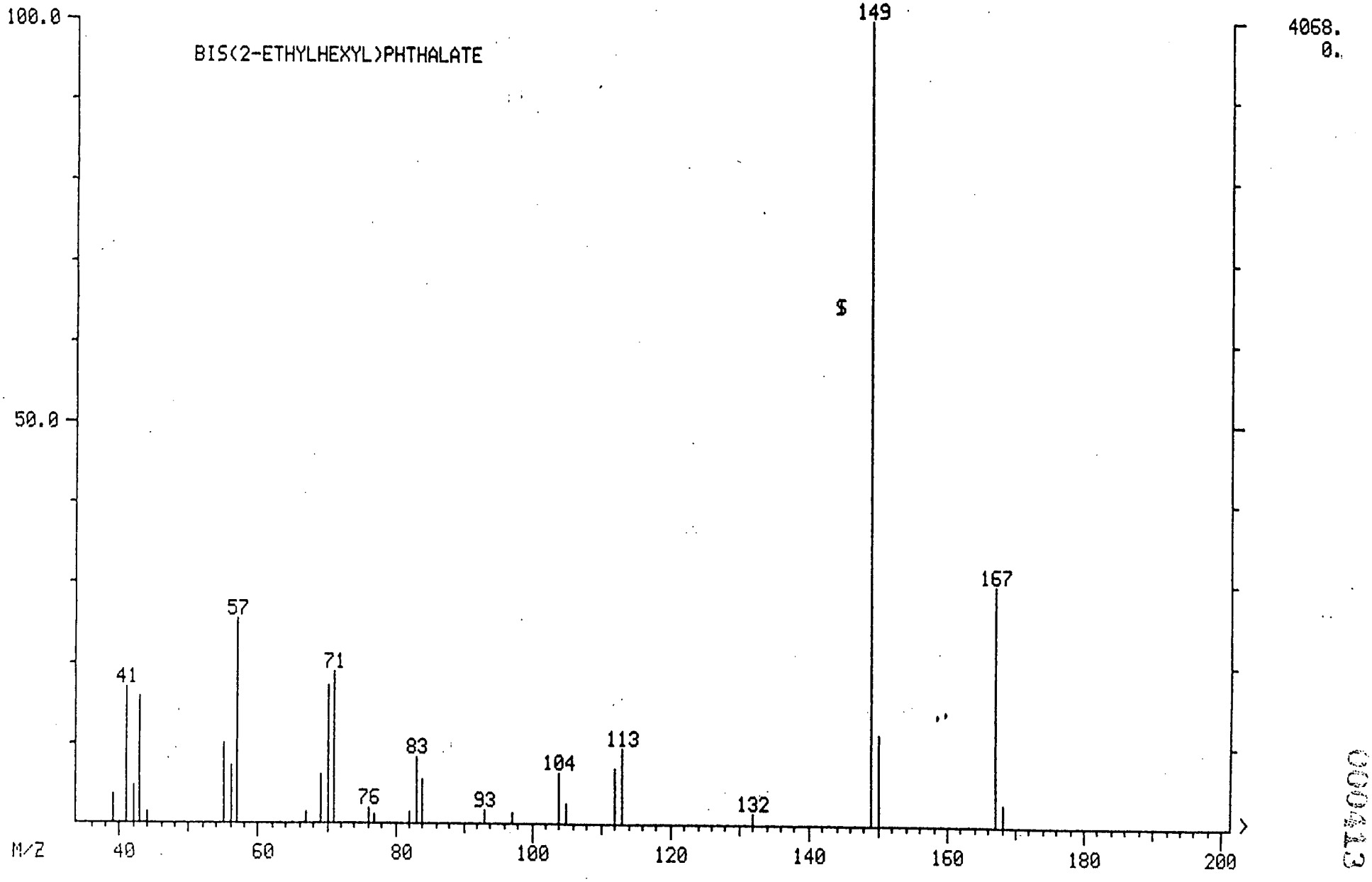


000412

MASS SPECTRUM
03/25/89 17:11:00 + 33:13
SAMPLE: AQUEOUS BLANK
CONDS.: 1000 MLS/1.0 ML
TEMP: 275 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: BLKW0224 #1709
CALI: BLKW0224 #3

BASE M/Z: 149
RIC: 13152.

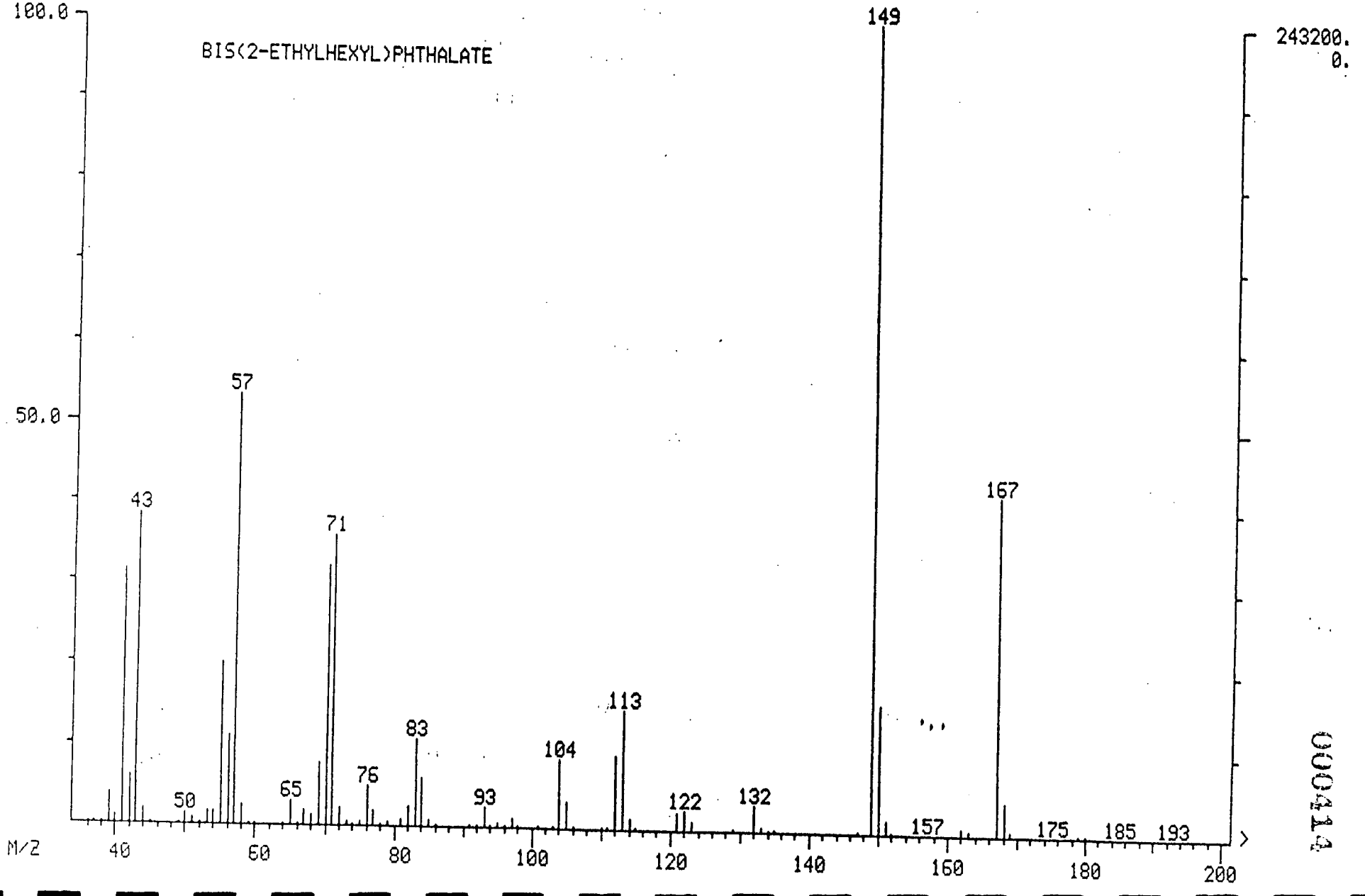


000413

MASS SPECTRUM
03/25/89 12:28:00 + 33:15
SAMPLE: HSL-D STANDARD 3/25/89
CONDS.: 50 NG INJECTION
TEMP: 275 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: HSD500325 #1710
CALI: HSD500325 #3

BASE M/Z: 149
RIC: 1277950.



000414

Quantitation Report File: BLKW0224

Data: BLKW0224.TI
03/25/89 17:11:00

000415

Sample: AQUEOUS BLANK
Conds.: 1000 MLS/1.0 ML
Formula: Instrum nt: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: BLKW0224

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
R sp. fac. from Library Entry

No	Name	
1	CI70 CHRYSENE D12	INTERNAL STANDARD
2	C710 BENZIDINE	
3	C715 PYRENE	
4	C720 BUTYLBENZYLPHTHALATE	
5	C725 3,3'-DICHLOROBENZIDINE	
6	C730 BENZO(A)ANTHRACENE	
7	C745 BIS(2-ETHYLHEXYL)PHTHALATE	
8	C740 CHRYSENE	
9	CS30 TERPHENYL D14	SURROGATE

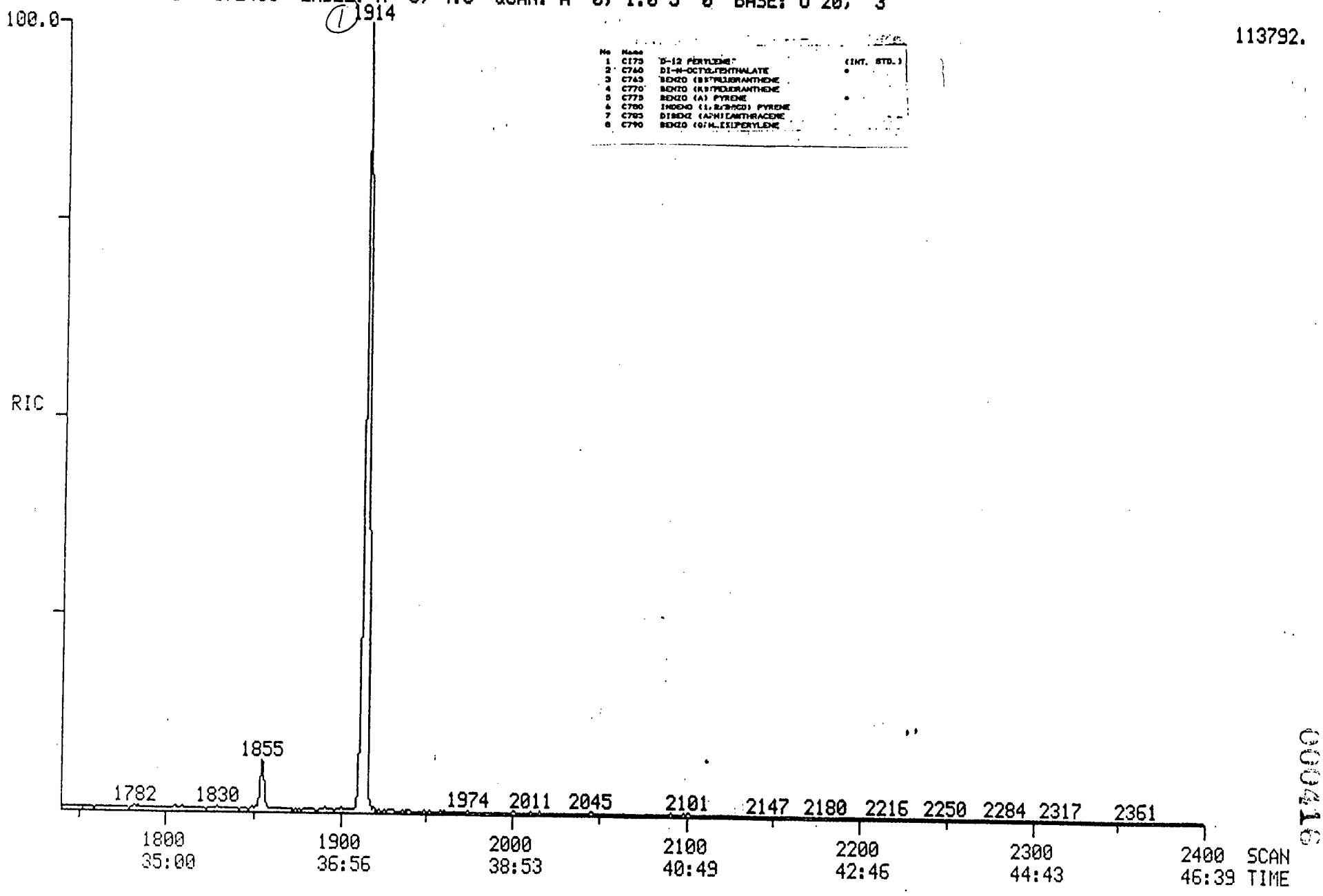
N	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot	
1	240	1680	32:40	1	1.000	A BB	325762.	40.000 UG/ML	28.71	
2	NOT FOUND									
3	202	1475	28:40	1	0.878	A BB	~~3397.~~	~~0.371 UG/ML~~	~~0.27~~ No	WSS
4	149	1605	31:12	1	0.955	A BB	~~612.~~	~~0.104 UG/ML~~	~~0.07~~ No	WSS
5	NOT FOUND									
6	NOT FOUND									
7	149	1709	33:13	1	1.017	A BB	11239.	1.485 UG/ML	1.07	Yes WSS
8	NOT FOUND									
9	244	1514	29:26	1	0.901	A BB	883752.	97.370 UG/ML	69.89	Yes WSS

No	R t(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	32:41	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	28:43		0.879						
3	28:44	1.00	0.879	1.00	0.37	50.00	0.008	1.124	0.01
4	31:16	1.00	0.957	1.00	0.10	50.00	0.002	0.725	0.00
5	32:43		1.001						
6	32:37		0.998						
7	33:15	1.00	1.017	1.00	1.49	50.00	0.028	0.929	0.03
8	32:45		1.002						
9	29:27	1.00	0.901	1.00	97.37	50.00	2.170	1.114	1.95

RIC
03/25/89 17:11:00
SAMPLE: AQUEOUS BLANK
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2418 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BLKW0224 #1
CALI: BLKW0224 #3

SCANS 1740 TO 2400



No	Name		
1	C175	D-12 PERYLENE	(INT. STD.)
2	C760	DI-N-OCTYLPENTHALATE	•
3	C765	BENZO (BB)FLUORANTHENE	
4	C770	BENZO (K)FLUORANTHENE	
5	C775	BENZO (A) PYRENE	•
6	C780	INDENO (1,2,3-CD) PYRENE	
7	C785	DIBENZ (A,H)ANTHRACENE	
8	C790	BENZO (G,H,I)PERYLENE	

113792.

000416

Quantitation Report File: BLKW0224

Data: BLKW0224.TI
03/25/89 17:11:00
Sampl : AQUEOUS BLANK
C nds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: BLKW0224

000417

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI75 PERYLENE D12	INTERNAL STANDARD
2	C760 DI-N-OCTYLPHTHALATE	
3	C765 BENZO(B)FLUORANTHENE	
4	C770 BENZO(K)FLUORANTHENE	
5	C775 BENZO(A)PYRENE	
6	C780 INDENO(1,2,3-CD)PYRENE	
7	C785 DIBENZO(A,H)ANTHRACENE	
8	C790 BENZO(G,H,I)PERYLENE	

N	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	264	1914	37:12	1	1.000	A BB	88774.	40.000 UG/ML	99.91
2	149	1806	35:07	1	0.944	A BB	~~333.~~	~~0.038 UG/ML~~	~~0.09~~ 100 WSS
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Rati
1	37:15	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	35:09	1.00	0.944	1.00	0.04	50.00	0.003	3.946	0.00
3	35:58		0.966						
4	36:04		0.968						
5	37:03		0.995						
6	42:01		1.128						
7	42:12		1.133						
8	43:23		1.165						

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

EPA METHOD 625 BASE/NEUTRAL EXTRACTABLES BY GC/MS

Lab ID : 789603 Spike
Sample ID : C-14A Spike
Date Analyzed : 03/25/89
Date Extracted: 02/24/89

Client : Gannett&Fleming
Prep Factor : 1000 mls/1.0 ml
Comments :
Date Received: 02/17/89

NO.	NAME	RESULTS PPB	COMMENTS
1	Bis(2-chloroethyl)Ether	10	U
2	1,2-Dichlorobenzene	10	U
3	1,4-Dichlorobenzene	10	U
4	1,3-Dichlorobenzene	10	U
5	Bis(2-chloroisopropyl)Ether	10	U
6	N-Nitrosodipropyl Amine	10	U
7	Hexachloroethane	10	U
8	Nitrobenzene	10	U
9	Isophorone	10	U
10	Bis(2-chloroethoxy)Methane	10	U
11	1,2,4-Trichlorobenzene	10	U
12	Naphthalene	10	U
13	Hexachlorobutadiene	10	U
14	Hexachlorocyclopentadiene	10	U
15	2-Chloronaphthalene	10	U
16	Dimethyl Phthalate	10	U
17	2,6-Dinitrotoluene	10	U
18	Acenaphthylene	10	U
19	Acenaphthene	10	U
20	2,4-Dinitrotoluene	10	U
21	Diethyl Phthalate	10	U
22	N-Nitrosodimethyl Amine	10	U
23	4-Chlorophenylphenyl Ether	10	U
24	Fluorene	10	U
25	Azobenzene	10	U
26	N-Nitrosodiphenyl Amine	10	U
27	4-Bromophenylphenyl Ether	10	U
28	Hexachlorobenzene	10	U
29	Phenanthrene	10	U
30	Anthracene	10	U
31	Dibutyl Phthalate	79	B
32	Fluoranthene	10	U

Comments:
U= Not detected
J= Detected but below Method Detection limit
B= Compound found in Blank

Signature

Name/Title: Howard Whaley
GC/MS Project Leader

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

EPA Method 625 Base/Neutral Extractables by GC/MS

Lab ID : 789603 Spike
Sample ID : C-14A Spike
Date Analyzed : 03/25/89
Date Extracted: 02/24/89

Client : Gannett&Fleming
Prep Factor: 1000 mls/1.0 ml
Comments :
Date Recieved: 02/17/89

NO.	NAME	RESULTS PPB	COMMENTS
33	Benzidine	50	U
34	Pyrene	10	U
35	Butylbenzyl Phthalate	10	U
36	3,3-Dichlorobenzidine	10	U
37	Benzo(A)Anthracene	10	U
38	Chrysene	10	U
39	Bis(2-ethylhexyl) Phthalate	2	BJ
40	Dioctyl-Phthalate	10	U
41	Benzo(K)Fluoranthene	10	U
42	Benzo(B)Fluoranthene	10	U
43	Benzo(A)Pyrene	10	U
44	Indeno(1,2,3-CD)Pyrene	10	U
45	Dibenzo(A,H)Anthracene	10	U
46	Benzo(GHI)Perylene	10	U

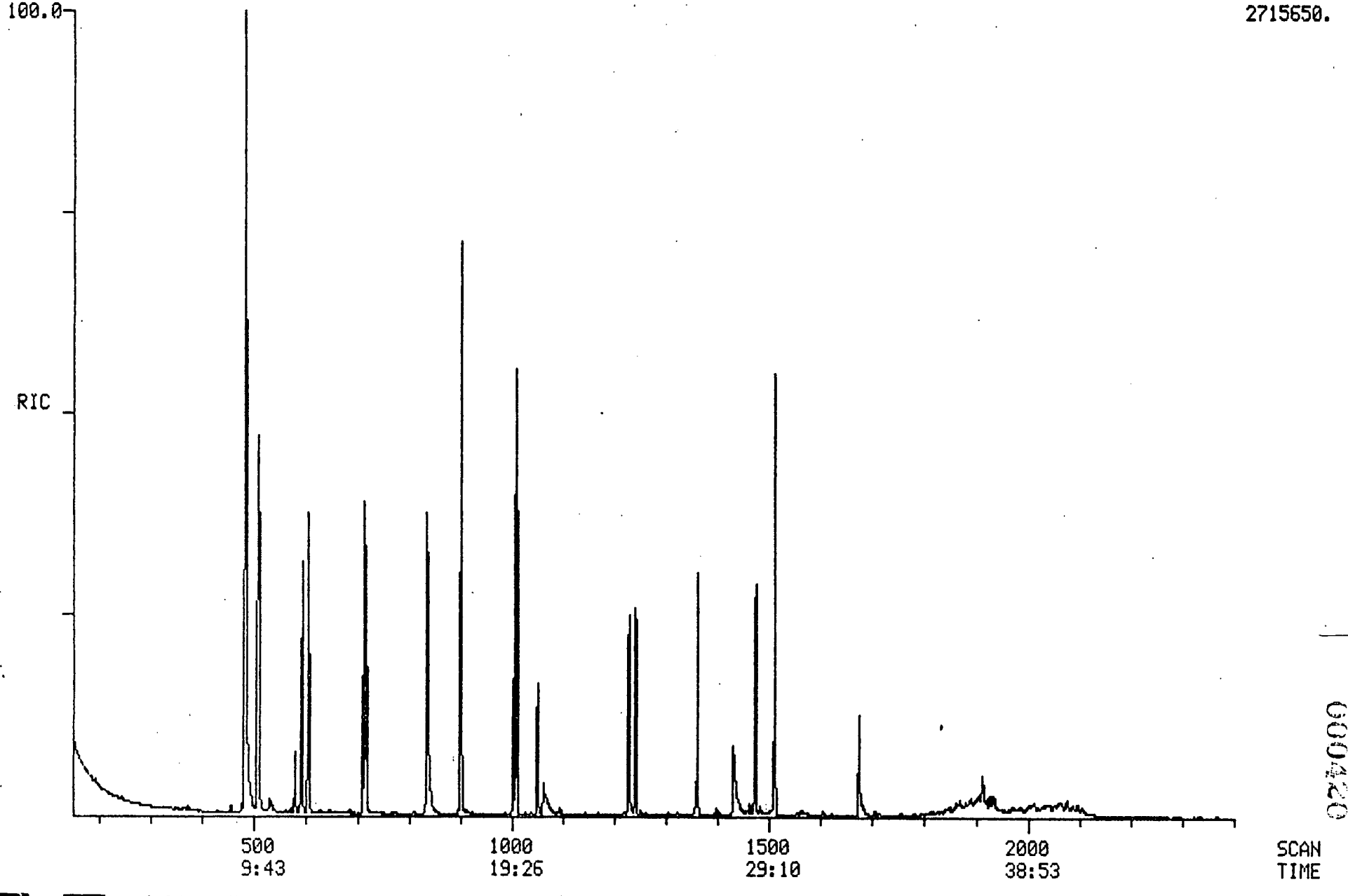
Comments:
U= Not Detected
J= Detected but below Method Detection Limit
B= Compound found in Blank

Signature

Name/Title: Howard Whaley
GC/MS Project Leader

RIC
03/27/89 13:10:00
SAMPLE: C-14A SPIKE
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

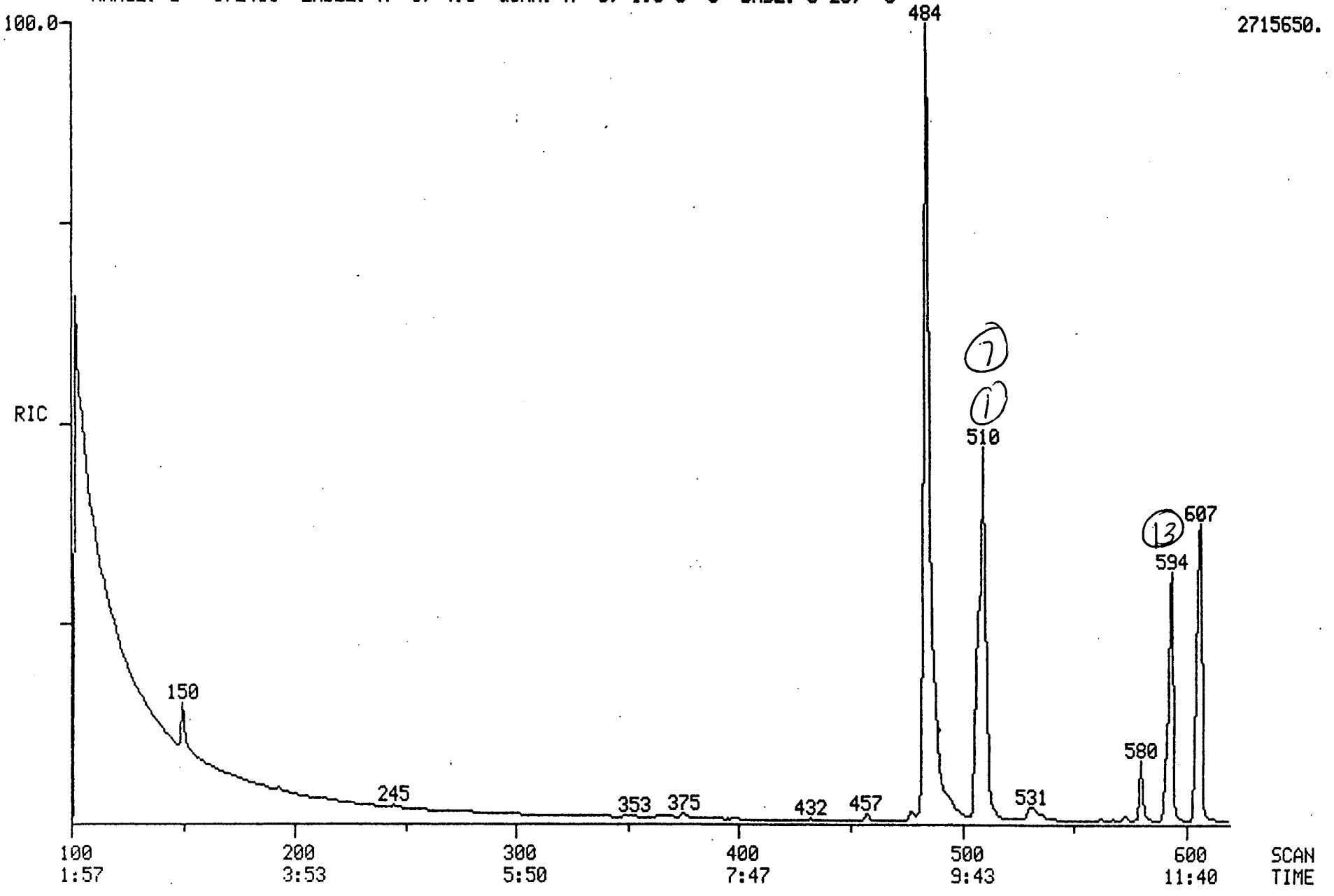
DATA: 789603ABS #1 SCANS 150 TO 2400
CALI: CALTAB #3



000420

RIC
03/27/89 13:10:00
SAMPLE: C-14A SPIKE
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789603ABS #1 SCANS 100 TO 620
CALI: 789603ABS #3



Quantitation Report File: 789603ABS

000422

Data: 789603ABS.TI
03/27/89 13:10:00
Sample: C-14A SPIKE
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789603AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI30 1,4-DICHLOROBENZENE D4	INTERNAL STANDARD
2	N-NITROSODIMETHYLAMINE	
3	C315 PHENOL	
4	C325 BIS(2-CHLOROETHYL) ETHER	
5	C330 2-CHLOROPHENOL	
6	C335 1,3-DICHLOROBENZENE	
7	C340 1,4-DICHLOROBENZENE	
8	C345 BENZYL ALCOHOL	
9	C350 1,2-DICHLOROBENZENE	
10	C355 2-METHYLPHENOL	
11	C360 BIS(2-CHLOROISOPROPYL)ETHER	
12	C365 4-METHYLPHENOL	
13	C370 N-NITROSO-DI-PROPYLAMINE	
14	C375 HEXACHLOROETHANE	
15	CS50 2-FLUOROPHENOL	SURROGATE
16	CS45 PHENOL D5	SURROGATE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot	
1	152	507	9:51	1	1.000	A BB	286566.	40.000 UG/ML	8.24	
2	74	150	2:55	1	0.296	A BB	~~2093.~~	~~0.292 UG/ML~~	~~0.06~~	NO WSS
3	94	484	9:25	1	0.955	A BB	~~1422740.~~	~~120.484 UG/ML~~	~~24.83~~	NO WSS
4	NOT FOUND									
5	128	484	9:25	1	0.955	A BB	~~1043410.~~	~~123.855 UG/ML~~	~~25.52~~	NO WSS
6	146	510	9:55	1	1.006	A BB	~~589647.~~	~~67.159 UG/ML~~	~~13.84~~	NO WSS
7	146	510	9:55	1	1.006	A BB	589647.	67.138 UG/ML	13.83	Yes WSS
8	NOT FOUND									
9	146	539	10:29	1	1.063	A BB	~~1360.~~	~~0.164 UG/ML~~	~~0.03~~	NO WSS
10	NOT FOUND									
11	NOT FOUND									
12	NOT FOUND									
13	70	594	11:33	1	1.172	A BV	505291.	66.192 UG/ML	13.64	Yes WSS
14	NOT FOUND									
15	112	315	6:07	1	0.621	A BB	~~385.~~	~~0.044 UG/L~~	~~0.01~~	NO WSS
16	NOT FOUND									

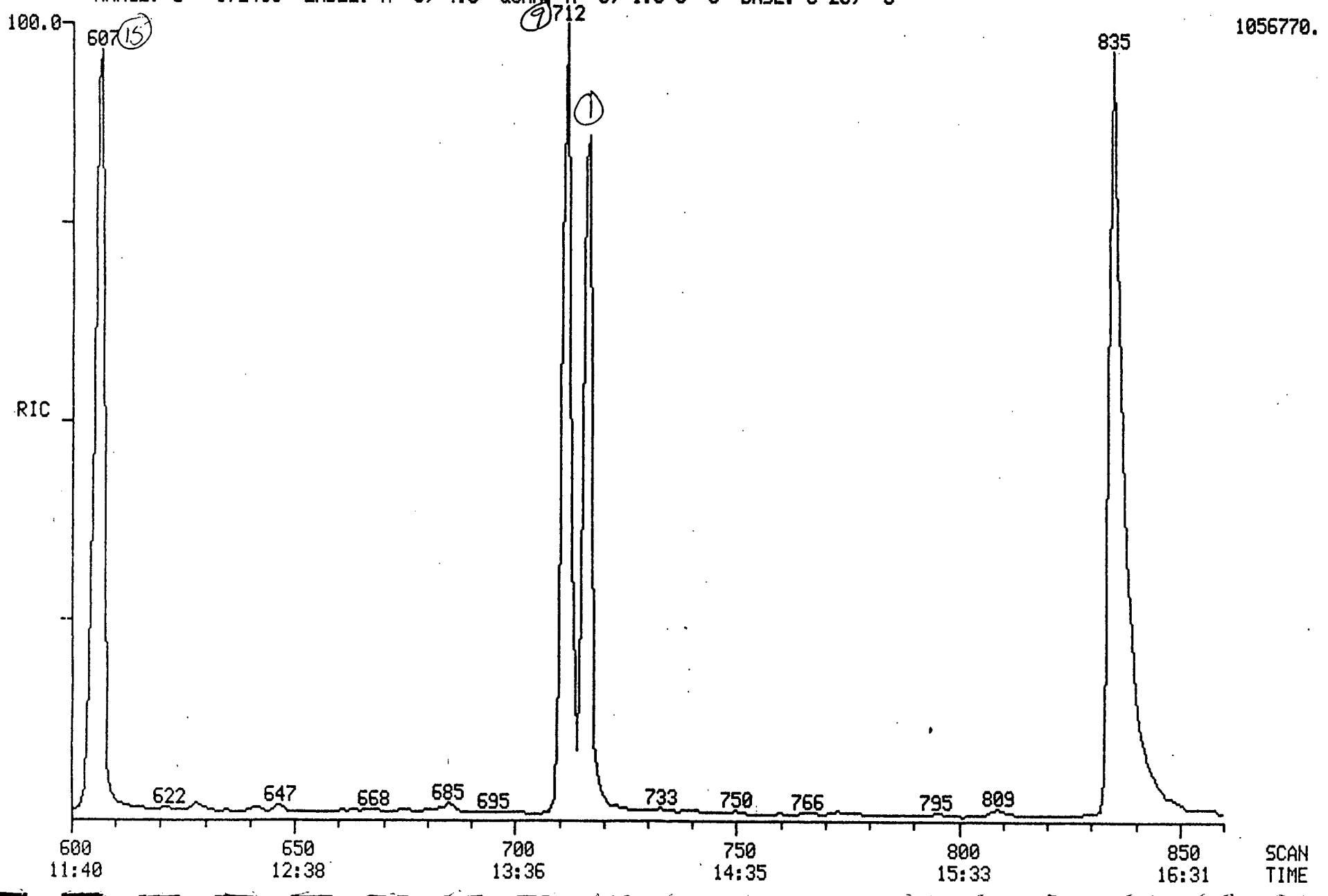
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:55	0.99	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	2:55	1.00	0.294	1.01	0.29	50.00	0.006	1.002	0.01
3	9:27	1.00	0.953	1.00	120.48	50.00	3.972	1.648	2.41
4	9:22		0.945						
5	9:27	1.00	0.953	1.00	123.85	50.00	2.913	1.176	2.48
6	9:47	1.01	0.986	1.02	67.16	50.00	1.646	1.226	1.34
7	9:57	1.00	1.004	1.00	67.14	50.00	1.646	1.226	1.34

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
8	10:43		1.080						
9	10:32	0.99	1.063	1.00	0.16	50.00	0.004	1.161	0.00
10	11:17		1.137						
11	11:07		1.122						
12	11:46		1.186						
13	11:38	0.99	1.173	1.00	66.19	50.00	1.411	1.066	1.32
14	11:28		1.157						
15	6:07	1.00	0.618	1.01	0.04	50.00	0.001	1.212	0.00
16	9:25		0.949						

000423

RIC
03/27/89 13:10:00
SAMPLE: C-14A SPIKE
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789603ABS #1 SCANS 600 TO 860
CALI: 789603ABS #3



0004224

Quantitation Report File: 789603ABS

000425

Data: 789603ABS.TI
03/27/89 13:10:00
Sampl : C-14A SPIKE
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitt d by: FLEMING Analyst: WSS Acct. No.: 789603AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI40 NAPHTHALENE D8	INTERNAL STANDARD
2	C410 NITROBENZENE	
3	C415 ISOPHORONE	
4	C420 2-NITROPHENOL	
5	C425 2,4-DIMETHYLPHENOL	
6	C430 BENZOIC ACID	
7	C435 BIS(2-CHLOROETHOXY)METHANE	
8	C440 2,4-DICHLOROPHENOL	
9	C445 1,2,4-TRICHLOROBENZENE	
10	C450 NAPHTHALENE	
11	C455 4-CHLOROANILINE	
12	C460 HEXACHLOROBUTADIENE	
13	C465 4-CHLORO-3-METHYLPHENOL	
14	C470 2-METHYLNAPHTHALENE	
15	CS20 NITROBENZENE D5	SURROGATE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot	
1	136	716	13:55	1	1.000	A BB	725999.	40.000 UG/ML	11.47	
2	NOT FOUND									
3	NOT FOUND									
4	139	661	12:51	1	0.923	A BB	~~541.~~	~~0.122 UG/ML~~	~~0.03~~ NO	WSS
5	NOT FOUND									
6	NOT FOUND									
7	93	694	13:29	1	0.969	A BB	~~379.~~	~~0.045 UG/ML~~	~~0.01~~ NO	WSS
8	NOT FOUND									
9	180	712	13:50	1	0.994	A BB	390804.	59.431 UG/ML	17.05	
10	128	719	13:59	1	1.004	A VB	~~13039.~~	~~1.207 UG/ML~~	~~0.35~~ NO	WSS
11	NOT FOUND									
12	NOT FOUND									
13	107	835	16:14	1	1.166	A BB	~~757644.~~	~~113.514 UG/ML~~	~~32.56~~ NO	WSS
14	142	835	16:14	1	1.166	A BB	~~630931.~~	~~42.846 UG/ML~~	~~12.29~~ NO	WSS
15	82	607	11:48	1	0.848	A BB	795947.	91.470 UG/ML	26.24 Yes	WSS

No	R t(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	13:59	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	11:54		0.851						
3	12:43		0.910						
4	12:53	1.00	0.922	1.00	0.12	50.00	0.001	0.245	0.00
5	13:21		0.955						
6	14:16		1.021						
7	13:32	1.00	0.968	1.00	0.05	50.00	0.000	0.459	0.00
8	13:47		0.986						
9	13:53	1.00	0.993	1.00	59.43	50.00	0.431	0.362	1.19

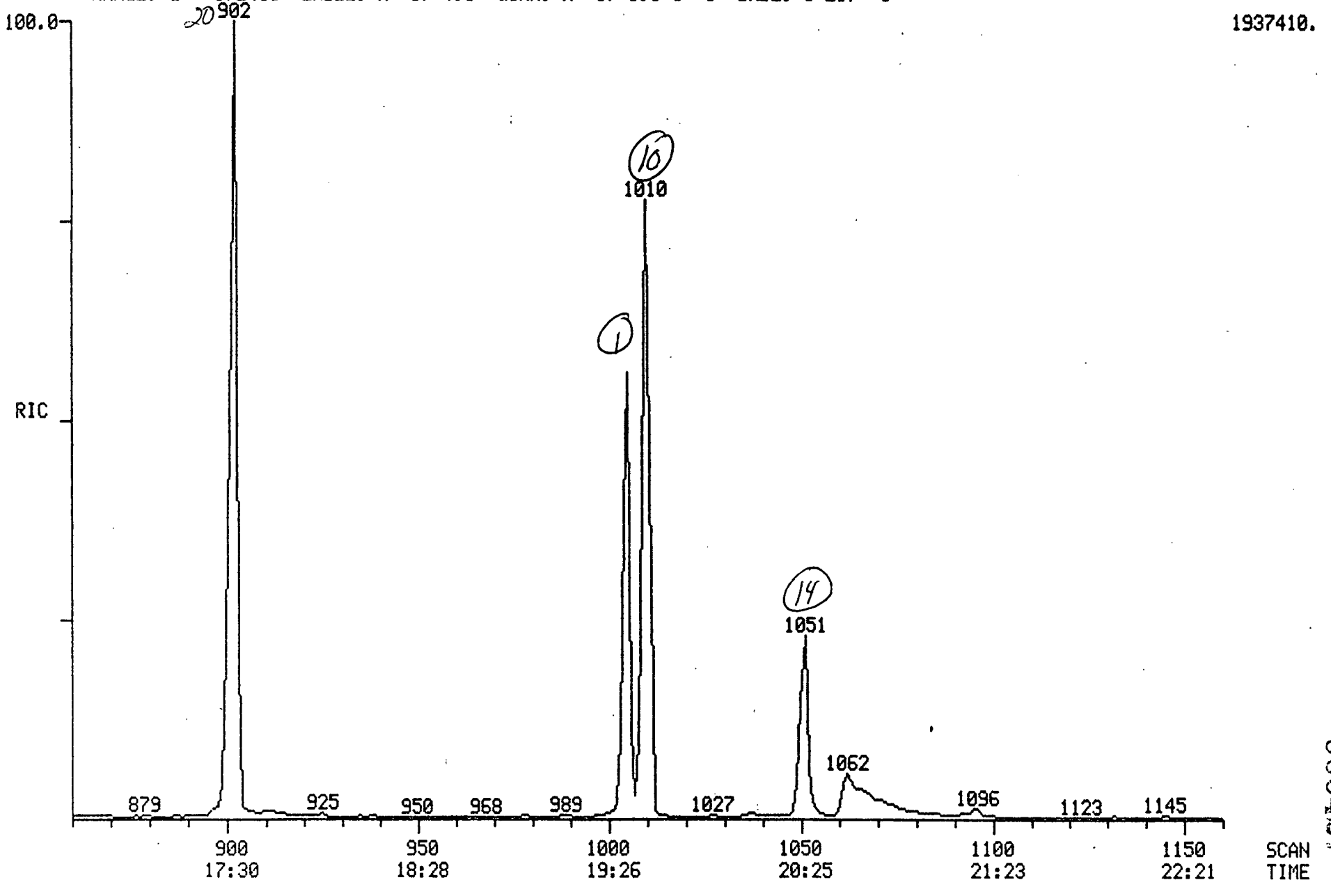
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
10	14:02	1.00	1.004	1.00	1.21	50.00	0.014	0.595	0.02
11	14:28		1.035						
12	14:41		1.050						
13	16:15	1.00	1.163	1.00	113.51	50.00	0.835	0.368	2.27
14	16:15	1.00	1.163	1.00	42.85	50.00	0.695	0.811	0.86
15	11:49	1.00	0.846	1.00	91.47	50.00	0.877	0.479	1.83

000426

RIC
03/27/89 13:10:00
SAMPLE: C-14A SPIKE
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789603ABS #1
CALI: 789603ABS #3

SCANS 860 TO 1160



000427

Quantitation R port File: 789603ABS

000428

Data: 789603ABS.TI
03/27/89 13:10:00
Sample: C-14A SPIKE
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789603AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI50 ACENAPHTHENE D8	INTERNAL STANDARD
2	C510 HEXACHLOROCYCLOPENTADIENE	
3	C515 2,4,6-TRICHLOROPHENOL	
4	C520 2,4,5-TRICHLOROPHENOL	
5	C525 2-CHLORONAPHTHALENE	
6	C530 2-NITROANILINE	
7	C535 DIMETHYL PHTHALATE	
8	C540 ACENAPHTHYLENE	
9	C545 3-NITROANILINE	
10	C550 ACENAPHTHENE	
11	C555 2,4-DINITROPHENOL	
12	C560 4-NITROPHENOL	
13	C565 DIBENZOFURAN	
14	C570 2,4-DINITROTOLUENE	
15	C543 2,6-DINITROTOLUENE	
16	C580 DIETHYL PHTHALATE	
17	C585 4-CHLOROPHENYL PHENYL ETHER	
18	C590 FLUORENE	
19	C595 4-NITROANILINE	
20	CS25 2-FLUOROBIPHENYL	SURROGATE
21	CS55 2,4,6-TRIBROMOPHENOL	SURROGATE

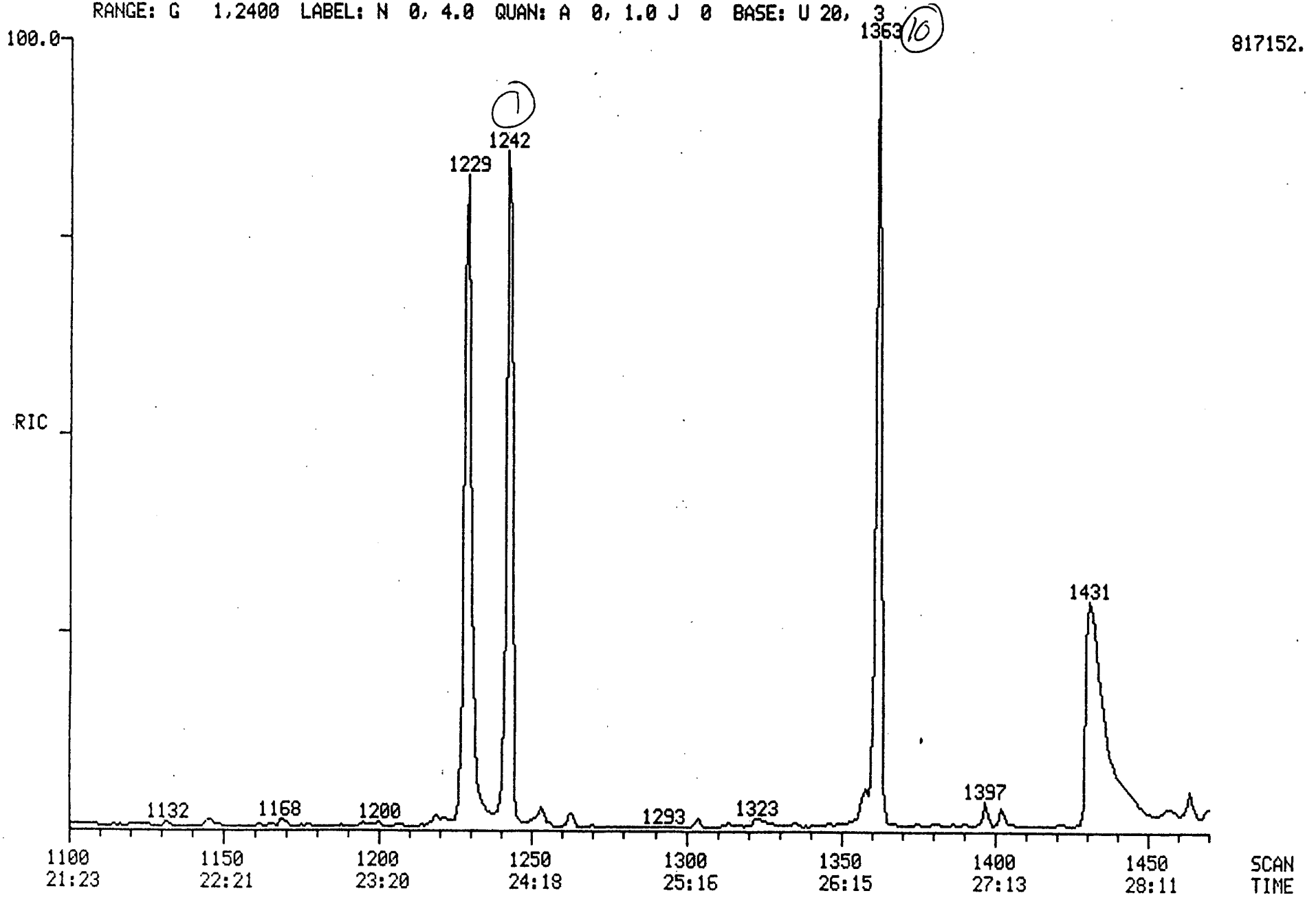
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot		
1	164	1005	19:32	1	1.000	A BB	414084.	40.000 UG/ML	13.05		
2	NOT FOUND										
3	196	891	17:19	1	0.887	A BB	~~267.~~	~~0.060 UG/ML~~	~~0.02~~	NO	WSS
4	NOT FOUND										
5	162	911	17:43	1	0.906	A BB	~~770.~~	~~0.071 UG/ML~~	~~0.02~~	NO	WSS
6	65	946	18:23	1	0.941	A BB	~~858.~~	~~0.091 UG/ML~~	~~0.03~~	NO	WSS
7	163	979	19:02	1	0.974	A BB	~~2509.~~	~~0.214 UG/ML~~	~~0.07~~	NO	WSS
8	152	978	19:01	1	0.973	A BB	~~2058.~~	~~0.156 UG/ML~~	~~0.05~~	NO	WSS
9	NOT FOUND										
10	154	1010	19:38	1	1.005	A BB	539773.	52.505 UG/ML	17.13	YES	WSS
11	NOT FOUND										
12	139	1062	20:39	1	1.057	A BB	~~133522.~~	~~102.064 UG/ML~~	~~33.30~~	NO	WSS
13	168	1036	20:08	1	1.031	A BB	~~5384.~~	~~0.297 UG/ML~~	~~0.10~~	NO	WSS
14	165	1051	20:26	1	1.046	A BB	167817.	39.659 UG/ML	12.94	YES	WSS
15	165	989	19:14	1	0.984	A BV	~~1410.~~	~~0.407 UG/ML~~	~~0.13~~	NO	WSS
16	149	1095	21:17	1	1.090	A BB	~~8664.~~	~~0.750 UG/ML~~	~~0.24~~	NO	WSS
17	204	1097	21:20	1	1.092	A BB	~~293.~~	~~0.044 UG/ML~~	~~0.01~~	NO	WSS
18	166	1091	21:13	1	1.086	A BB	~~892.~~	~~0.088 UG/ML~~	~~0.03~~	NO	WSS
19	NOT FOUND										
20	172	902	17:32	1	0.898	A BV	779941.	70.084 UG/ML	22.87	YES	WSS
21	NOT FOUND										

No	R t(L)	Ratio	RRT(L)	Rati	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	19:35	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	16:58		0.867						
3	17:22	1.00	0.887	1.00	0.06	50.00	0.001	0.432	0.00
4	17:33		0.897						
5	17:46	1.00	0.908	1.00	0.07	50.00	0.001	1.043	0.00
6	18:23	1.00	0.939	1.00	0.09	50.00	0.002	0.906	0.00
7	19:07	1.00	0.976	1.00	0.21	50.00	0.005	1.134	0.00
8	19:04	1.00	0.974	1.00	0.16	50.00	0.004	1.277	0.00
9	19:45		1.009						
10	19:40	1.00	1.005	1.00	52.50	50.00	1.043	0.993	1.05
11	20:01		1.023						
12	20:39	1.00	1.055	1.00	102.06	50.00	0.258	0.126	2.04
13	20:13	1.00	1.033	1.00	0.30	50.00	0.010	1.753	0.01
14	20:29	1.00	1.047	1.00	39.66	50.00	0.324	0.409	0.79
15	19:17	1.00	0.985	1.00	0.41	50.00	0.003	0.334	0.01
16	21:22	1.00	1.091	1.00	0.75	50.00	0.017	1.116	0.01
17	21:23	1.00	1.092	1.00	0.04	50.00	0.001	0.644	0.00
18	21:16	1.00	1.086	1.00	0.09	50.00	0.002	0.985	0.00
19	21:44		1.110						
20	17:33	1.00	0.897	1.00	70.08	50.00	1.507	1.075	1.40
21	22:07		1.130						

RIC
03/27/89 13:10:00
SAMPLE: C-14A SPIKE
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789603ABS #1
CALI: 789603ABS #3

SCANS 1100 TO 1470

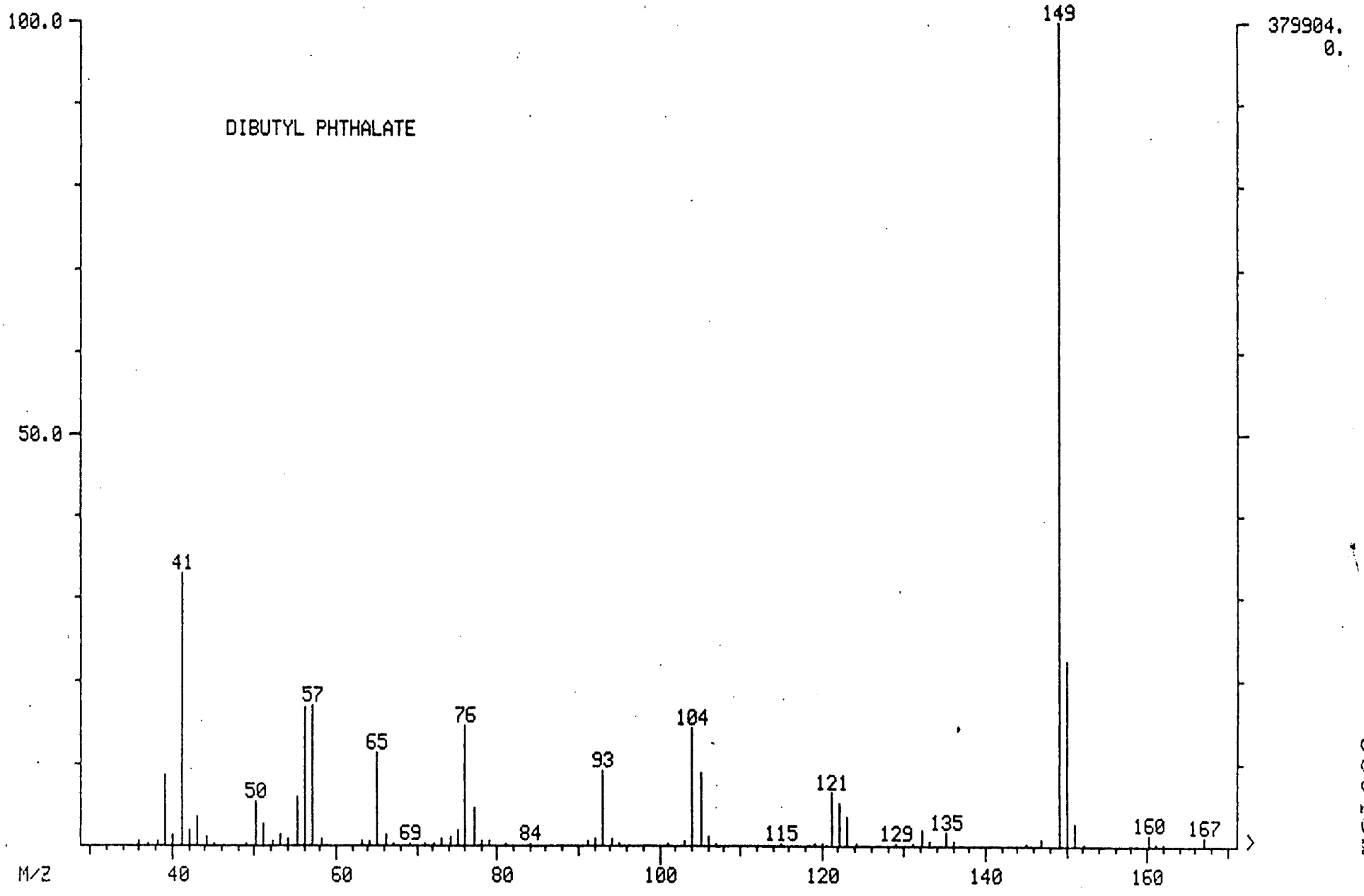


0004450

MASS SPECTRUM
03/27/89 10:43:00 + 26:31
SAMPLE: HSL-D STANDARD \3/27/89
CONDS.: 50 NG INJECTION
TEMP: 221 DEG. C

DATA: HSB500327 #1364
CALI: HSB500327 #3

BASE M/Z: 149
RIC: 1337340.

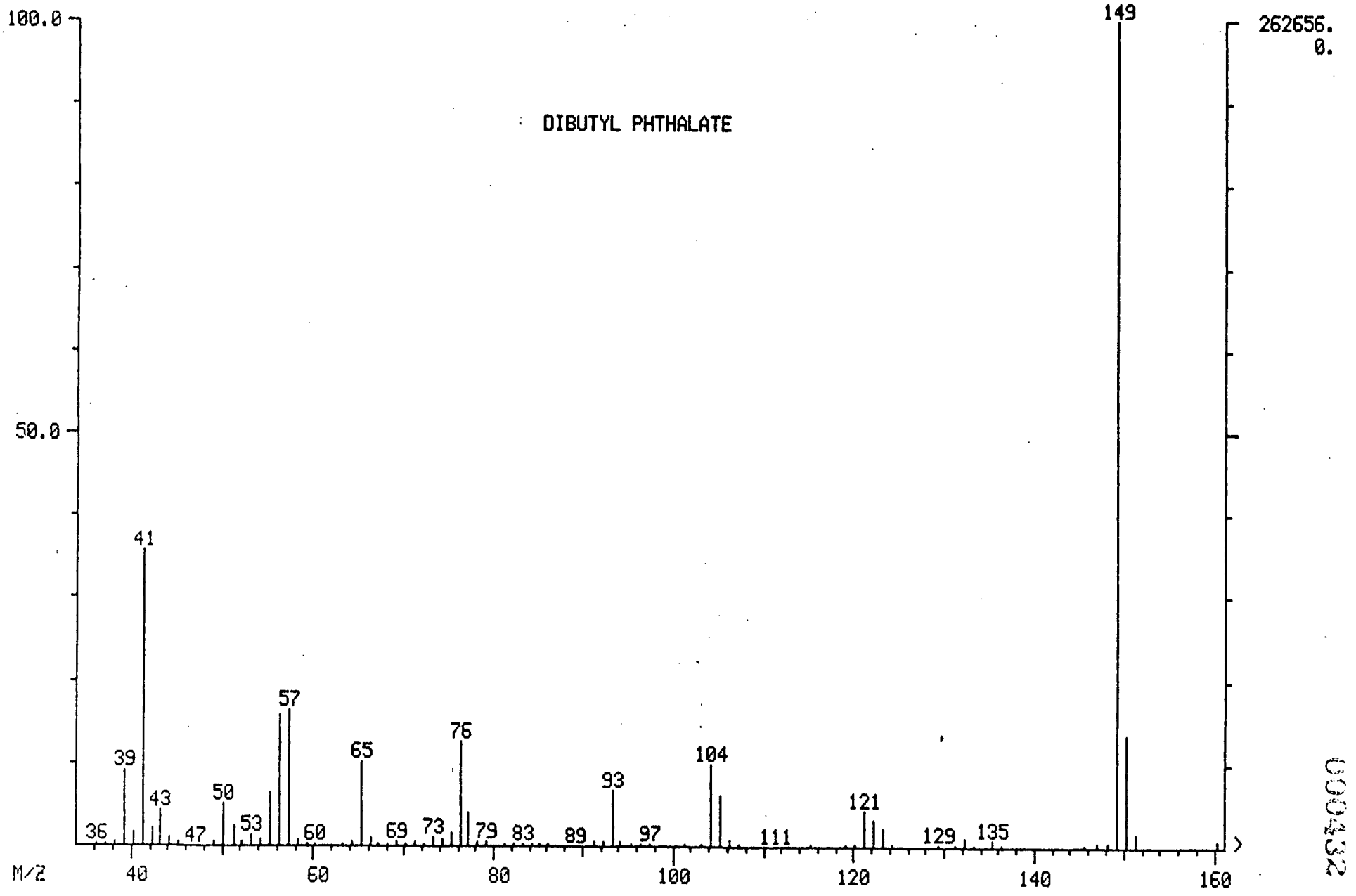


0004331

MASS SPECTRUM
03/27/89 13:10:00 + 26:30
SAMPLE: C-14A SPIKE
CONDS.: 1000 MLS/1.0 ML
TEMP: 221 DEG. C

DATA: 789603ABS #1363
CALI: 789603ABS #3

BASE M/Z: 149
RIC: 811008.

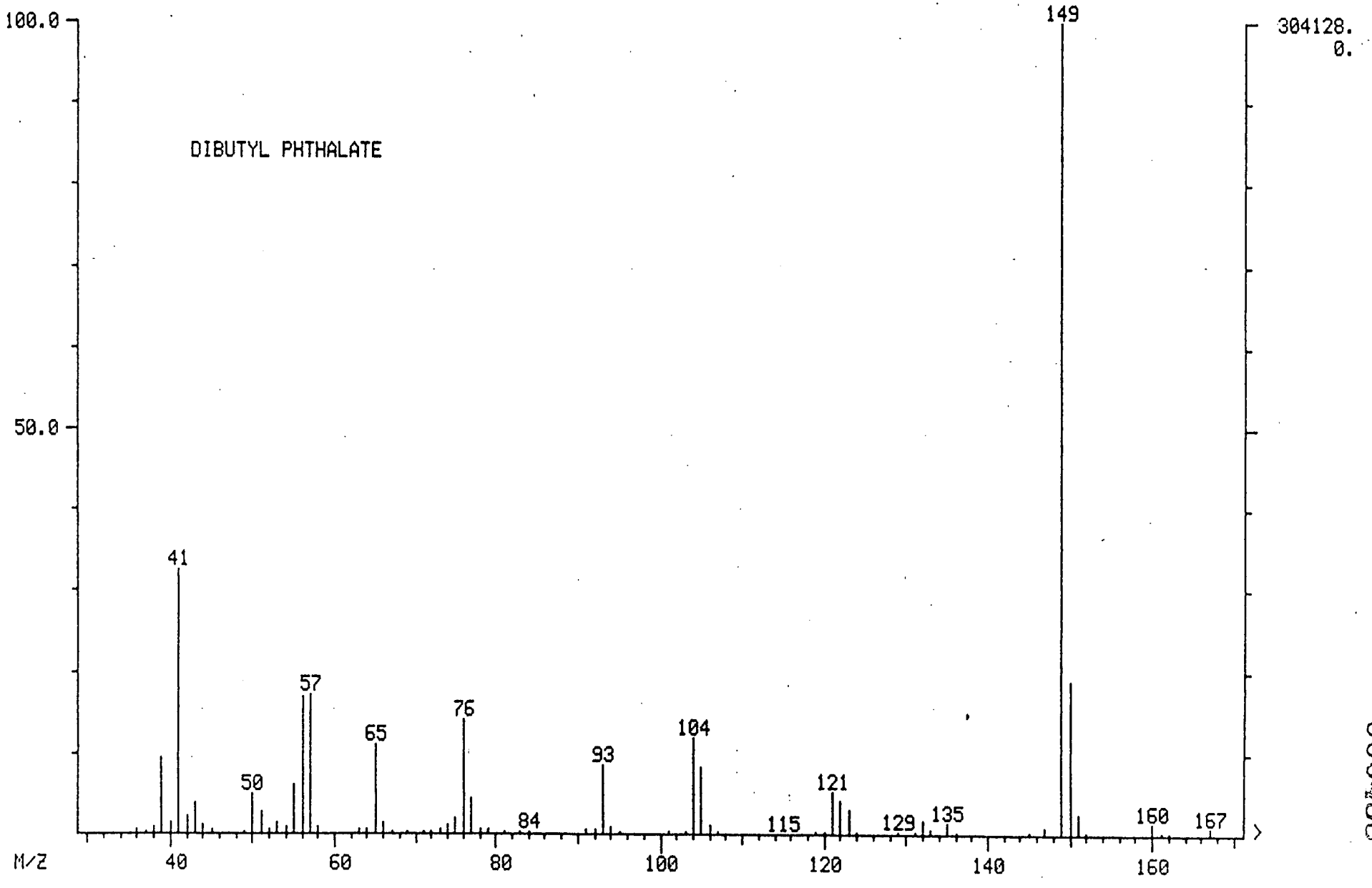


0004432

MASS SPECTRUM
03/27/89 10:43:00 + 26:31
SAMPLE: HSL-D STANDARD \3/27/89
CONDS.: 50 NG INJECTION
TEMP: 221 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: HSB500327 #1364
CALI: HSB500327 #3

BASE M/Z: 149
RIC: 1027070.

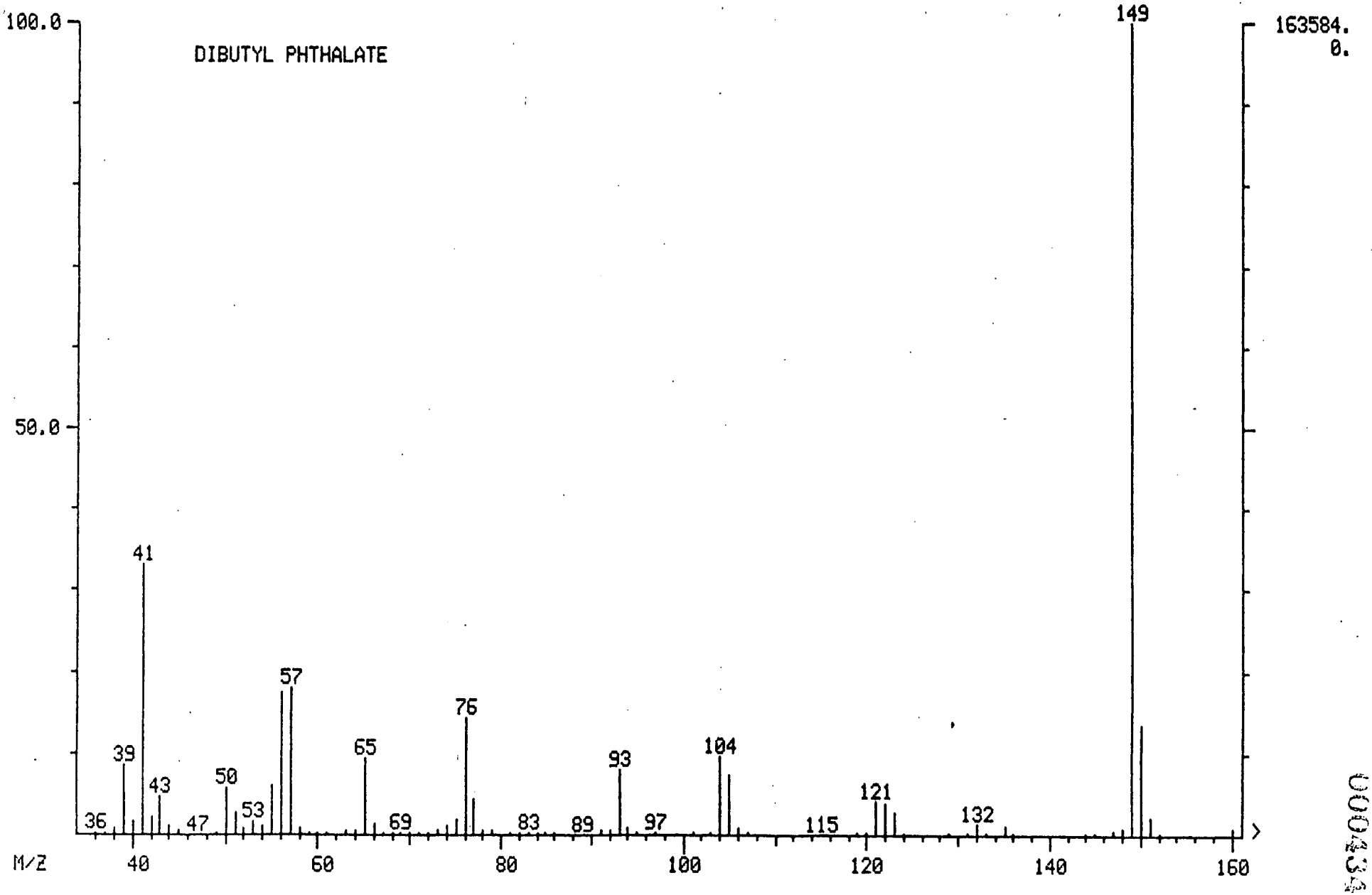


000433

MASS SPECTRUM
03/27/89 13:10:00 + 26:30
SAMPLE: C-14A SPIKE
CONDS.: 1000 MLS/1.0 ML
TEMP: 221 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 789603ABS #1363
CALI: 789603ABS #3

BASE M/Z: 149
RIC: 523776.



000434

Quantitation Report File: 789603ABS

000435

Data: 789603ABS.TI
03/27/89 13:10:00
Sample: C-14A SPIKE
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789603AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI60 PHENANTHRENE D10	INTERNAL STANDARD
2	C610 4,6-DINITRO-2-METHYL PHENOL	
3	C615 N-NITROSODIPHENYLAMINE	
4	AZOBENZENE	
5	C625 4-BROMOPHENYL PHENYL ETHER	
6	C630 HEXACHLOROBENZENE	
7	C635 PENTACHLOROPHENOL	
8	C640 PHENANTHRENE	
9	C645 ANTHRACENE	
10	C650 DI-N-BUTYL PHTHALATE	
11	C655 FLUORANTHENE	

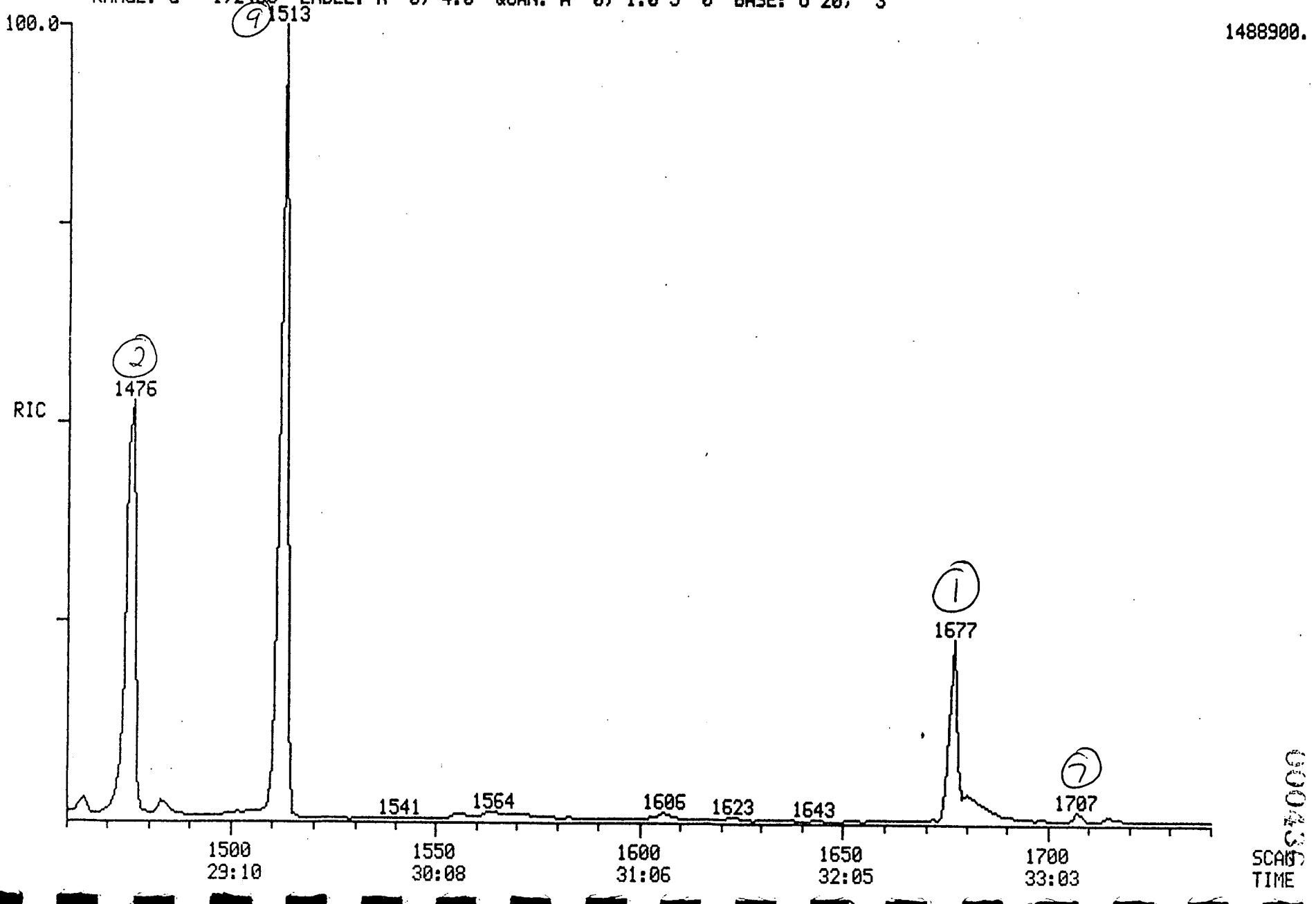
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot	
1	188	1242	24:09	1	1.000	A BV	400932.	40.000 UG/ML	19.37	
2	NOT FOUND									
3	NOT FOUND									
4	77	1127	21:55	1	0.907	A VB	~~528.~~	~~0.041 UG/ML~~	~~0.02~~	NO WSS
5	NOT FOUND									
6	NOT FOUND									
7	266	1228	23:52	1	0.989	A BV	~~106848.~~	~~86.857 UG/ML~~	~~42.06~~	NO WSS
8	178	1245	24:12	1	1.002	A BB	~~2393.~~	~~0.264 UG/ML~~	~~0.13~~	NO WSS
9	178	1252	24:20	1	1.008	A BB	~~1088.~~	~~0.138 UG/ML~~	~~0.07~~	NO WSS
10	149	1362	26:29	1	1.097	A BB	713552.	79.040 UG/ML	38.28	Yes WSS
11	202	1440	28:00	1	1.159	A BB	~~1150.~~	~~0.155 UG/ML~~	~~0.07~~	NO WSS

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	24:12	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	21:44		0.898						
3	21:50		0.902						
4	21:52	1.00	0.904	1.00	0.04	50.00	0.001	1.286	0.00
5	22:53		0.945						
6	23:15		0.961						
7	23:56	1.00	0.989	1.00	86.86	50.00	0.213	0.123	1.74
8	24:17	1.00	1.003	1.00	0.26	50.00	0.005	0.905	0.01
9	24:25	1.00	1.009	1.00	0.14	50.00	0.002	0.785	0.00
10	26:31	1.00	1.096	1.00	79.04	50.00	1.424	0.901	1.58
11	28:02	1.00	1.158	1.00	0.15	50.00	0.002	0.742	0.00

RIC
03/27/89 13:10:00
SAMPLE: C-14A SPIKE
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789603ABS #1
CALI: 789603ABS #3

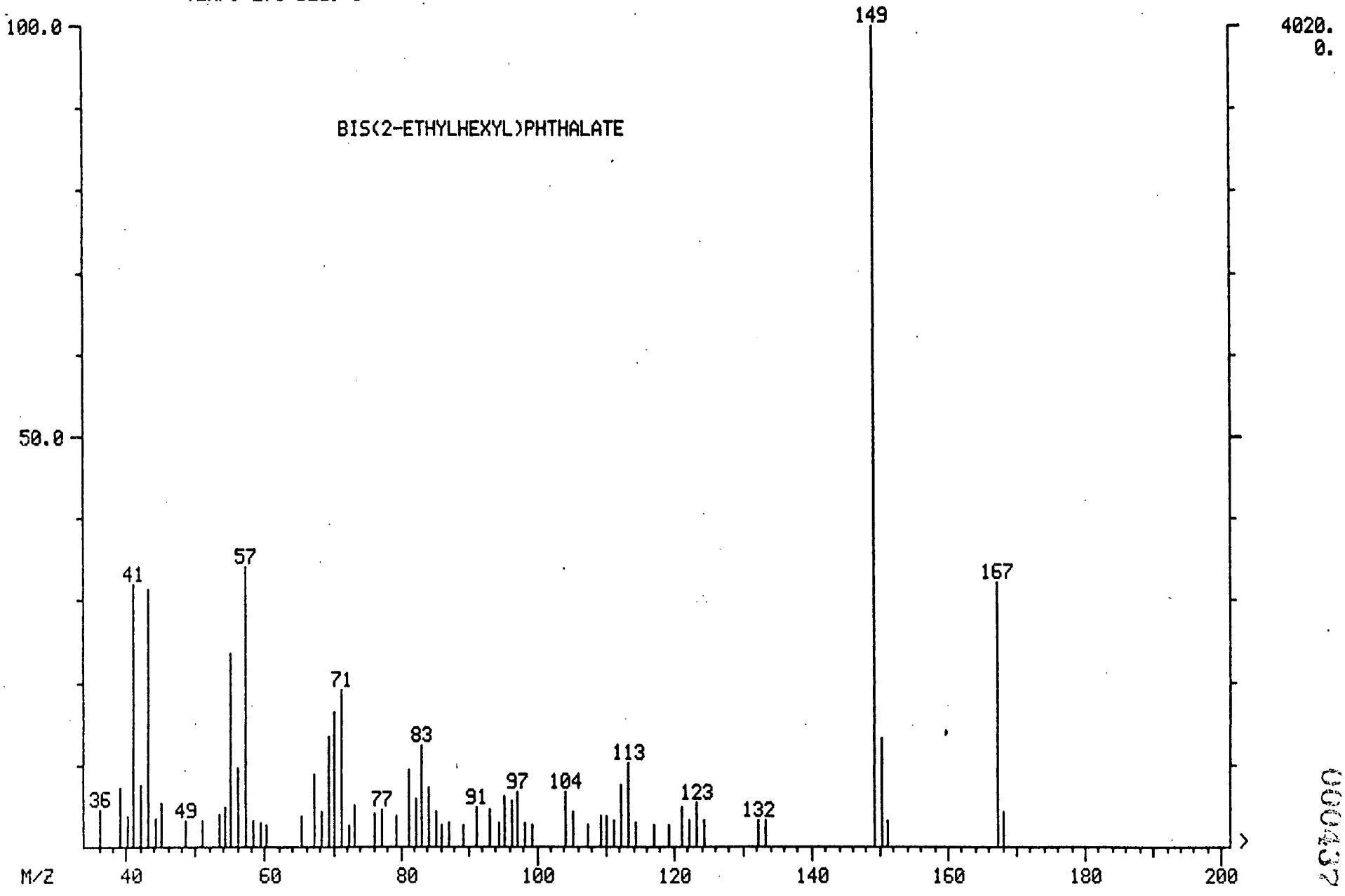
SCANS 1460 TO 1740



MASS SPECTRUM
03/27/89 13:10:00 + 33:11
SAMPLE: C-14A SPIKE
CONDS.: 1000 MLS/1.0 ML
TEMP: 275 DEG. C

DATA: 789603ABS #1707
CALI: 789603ABS #3

BASE M/Z: 149
RIC: 23872.

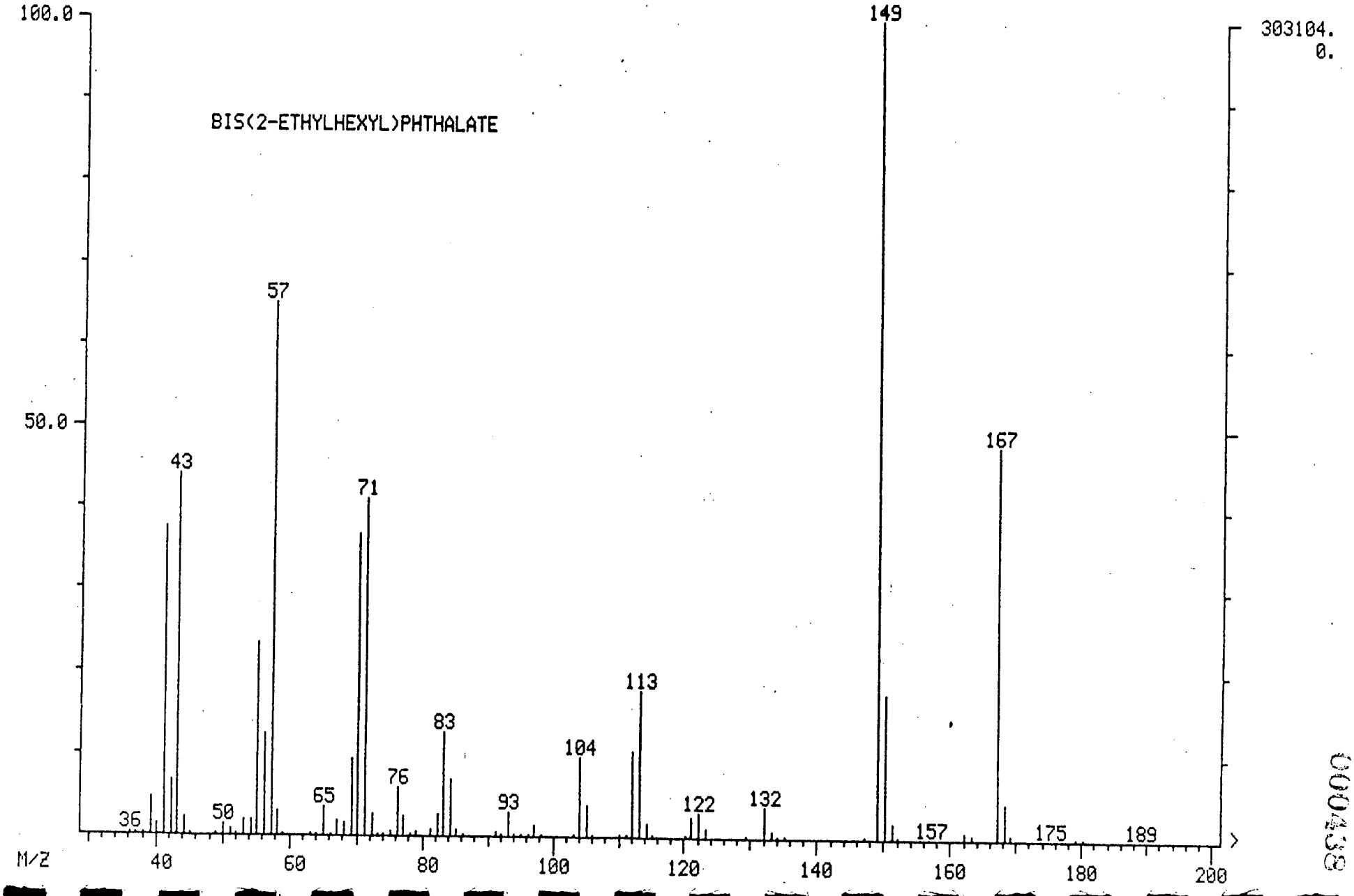


000437

MASS SPECTRUM
03/27/89 10:43:00 + 33:13
SAMPLE: HSL-D STANDARD \3/27/89
CONDS.: 50 NG INJECTION
TEMP: 275 DEG. C

DATA: HSB500327 #1709
CALI: HSB500327 #3

BASE M/Z: 149
RIC: 1765380.

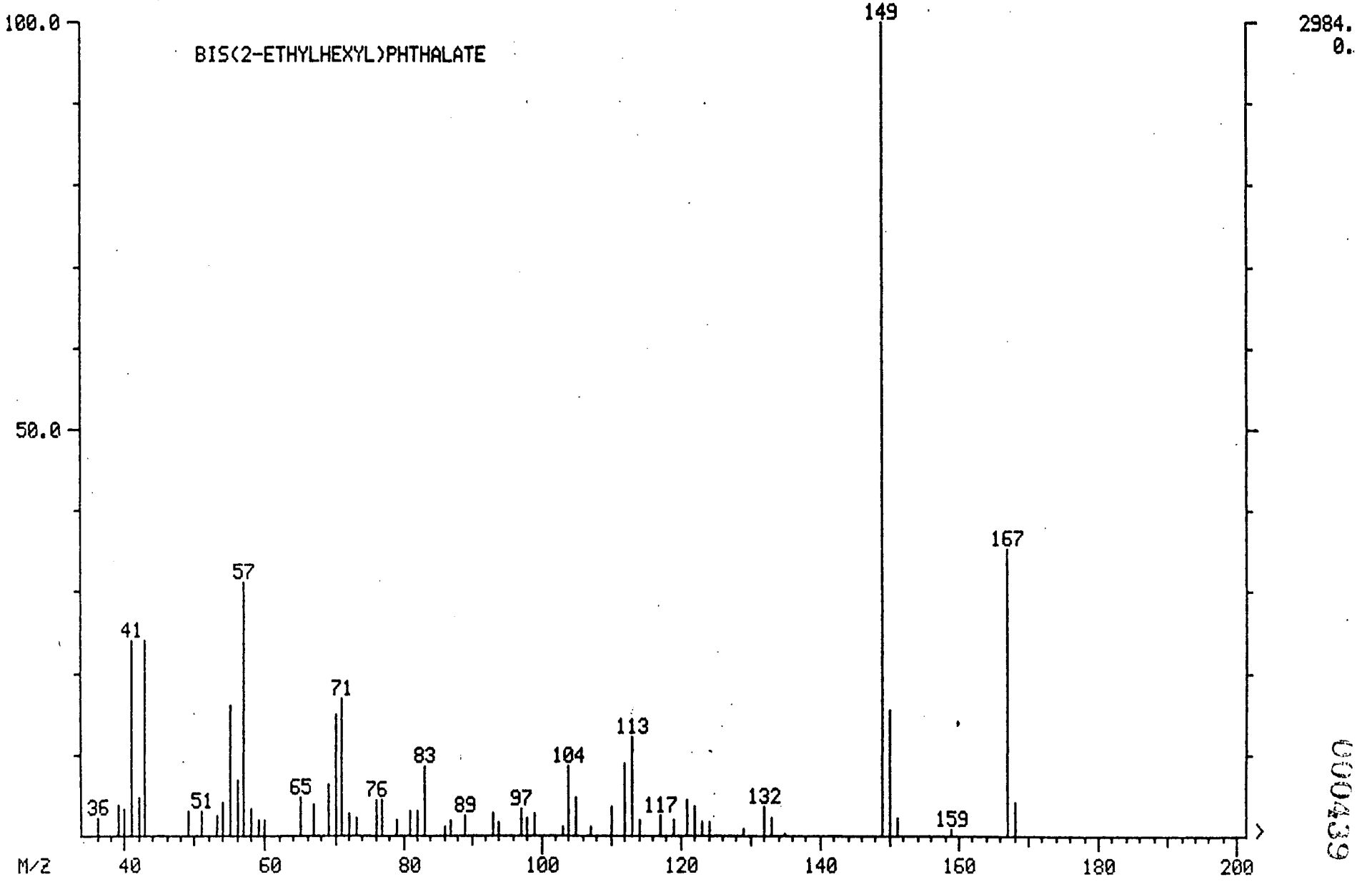


0004438

MASS SPECTRUM
03/27/89 13:10:00 + 33:11
SAMPLE: C-14A SPIKE
CONDS.: 1000 MLS/1.0 ML
TEMP: 275 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 789603ABS #1707
CALI: 789603ABS #3

BASE M/Z: 149
RIC: 13728.

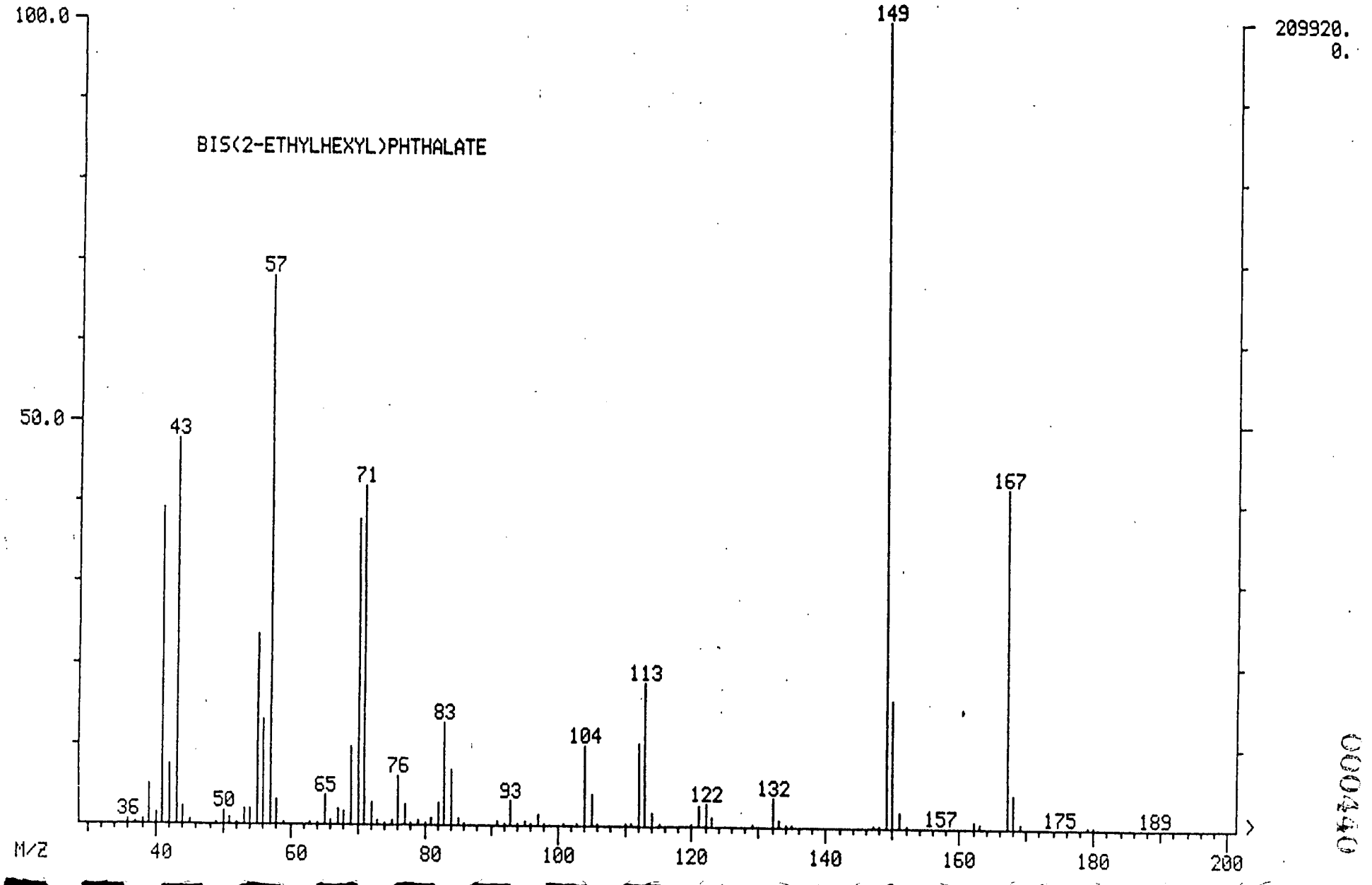


000439

MASS SPECTRUM
03/27/89 10:43:00 + 33:13
SAMPLE: HSL-D STANDARD \3/27/89
CONDS.: 50 NG INJECTION
TEMP: 275 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: HSB500327 #1709
CALI: HSB500327 #3

BASE M/Z: 149
RIC: 1239040.



0004440

Quantitation Report File: 789603ABS

000441

Data: 789603ABS.TI
03/27/89 13:10:00
Sample: C-14A SPIKE
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789603AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

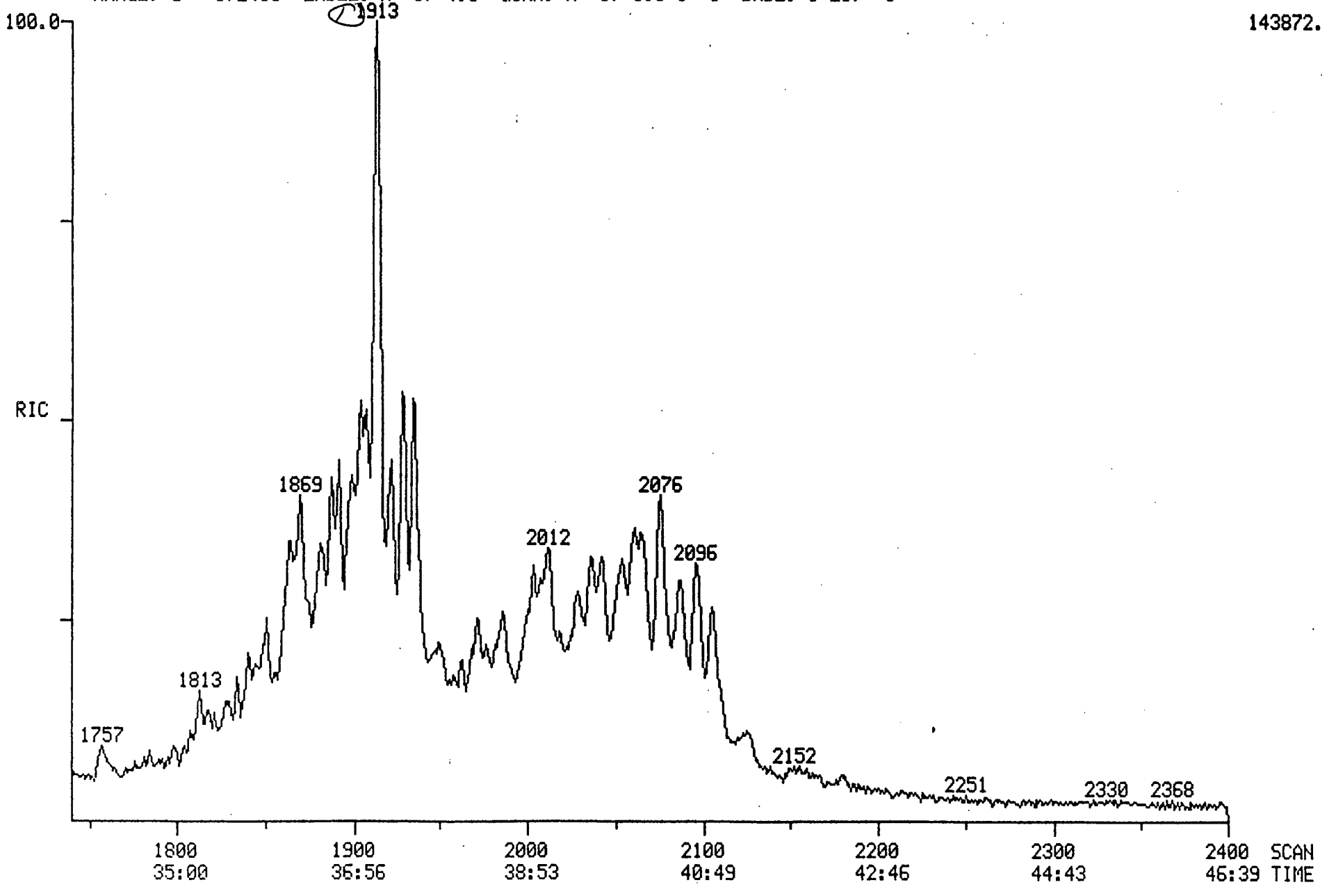
No	Name	
1	CI70 CHRYSENE D12	INTERNAL STANDARD
2	C710 BENZIDINE	
3	C715 PYRENE	
4	C720 BUTYLBENZYLPHTHALATE	
5	C725 3,3'-DICHLOROBENZIDINE	
6	C730 BENZO(A)ANTHRACENE	
7	C745 BIS(2-ETHYLHEXYL)PHTHALATE	
8	C740 CHRYSENE	
9	CS30 TERPHENYL D14	SURROGATE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot	
1	240	1677	32:36	1	1.000	A*BB	227818.	40.000 UG/ML	19.29	
2	NOT FOUND									
3	202	1475	28:40	1	0.880	A BB	445999.	70.397 UG/ML	33.95	yes WSS
4	149	1604	31:11	1	0.956	A BB	~~851.~~	~~0.238 UG/ML~~	~~0.11~~	no WSS
5	NOT FOUND									
6	NOT FOUND									
7	149	1707	33:11	1	1.018	A VB	10313.	2.419 UG/ML	1.17	yes WSS
8	NOT FOUND									
9	244	1513	29:25	1	0.902	A BB	599658.	94.359 UG/ML	45.50	yes WSS

N	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	32:38	1.00	1.000	1.00	40.00	40:00	1.000	1.000	1.00
2	28:45		0.882						
3	28:43	1.00	0.880	1.00	70.40	50.00	1.566	1.112	1.41
4	31:13	1.00	0.957	1.00	0.24	50.00	0.003	0.629	0.00
5	32:42		1.002						
6	32:35		0.998						
7	33:13	1.00	1.018	1.00	2.42	50.00	0.036	0.748	0.05
8	32:43		1.002						
9	29:26	1.00	0.902	1.00	94.36	50.00	2.106	1.116	1.89

RIC
03/27/89 13:10:00
SAMPLE: C-14A SPIKE
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789603ABS #1 SCANS 1740 TO 2400
CALI: 789603ABS #3



000442

Quantitation Report File: 789603ABS

Data: 789603ABS.TI
03/27/89 13:10:00
Sample: C-14A SPIKE
Conds.: 1000 MLS/1.0 ML
F rmula: Instrument: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789603AB

000443

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
R sp. fac. from Library Entry

No	Name	
1	CI75 PERYLENE D12	INTERNAL STANDARD
2	C760 DI-N-OCTYLPHTHALATE	
3	C765 BENZO(B)FLUORANTHENE	
4	C770 BENZO(K)FLUORANTHENE	
5	C775 BENZO(A)PYRENE	
6	C780 INDENO(1,2,3-CD)PYRENE	
7	C785 DIBENZO(A,H)ANTHRACENE	
8	C790 BENZO(G,H,I)PERYLENE	

N	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%T t
1	264	1912	37:10	1	1.000	A BB	34027.	40.000 UG/ML	99.46
2	149	1804	35:04	1	0.944	A BB	~~724.~~	~~0.228 UG/ML~~	~~0.57~~ NO WSS
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								

N	R t(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	37:11	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	35:07	1.00	0.944	1.00	0.23	50.00	0.017	3.735	0.00
3	35:56		0.966						
4	36:00		0.968						
5	37:00		0.995						
6	41:55		1.127						
7	42:06		1.132						
8	43:18		1.164						

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

EPA METHOD 625 BASE/NEUTRAL EXTRACTABLES BY GC/MS

Lab ID : 789603 Spike Duplicate
Sample ID : C-14A Spike Duplicate
Date Analyzed : 03/25/89
Date Extracted: 02/24/89

Client : Gannett&Fleming
Prep Factor : 1000 mls/1.0 ml
Comments :
Date Received: 02/17/89

NO.	NAME	RESULTS PPB	COMMENTS
1	Bis(2-chloroethyl)Ether	10	U
2	1,2-Dichlorobenzene	10	U
3	1,4-Dichlorobenzene	10	U
4	1,3-Dichlorobenzene	10	U
5	Bis(2-chloroisopropyl)Ether	10	U
6	N-Nitrosodipropyl Amine	10	U
7	Hexachloroethane	10	U
8	Nitrobenzene	10	U
9	Isophorone	10	U
10	Bis(2-chloroethoxy)Methane	10	U
11	1,2,4-Trichlorobenzene	10	U
12	Naphthalene	10	U
13	Hexachlorobutadiene	10	U
14	Hexachlorocyclopentadiene	10	U
15	2-Chloronaphthalene	10	U
16	Dimethyl Phthalate	10	U
17	2,6-Dinitrotoluene	10	U
18	Acenaphthylene	10	U
19	Acenaphthene	10	U
20	2,4-Dinitrotoluene	10	U
21	Diethyl Phthalate	10	U
22	N-Nitrosodimethyl Amine	10	U
23	4-Chlorophenylphenyl Ether	10	U
24	Fluorene	10	U
25	Azobenzene	10	U
26	N-Nitrosodiphenyl Amine	10	U
27	4-Bromophenylphenyl Ether	10	U
28	Hexachlorobenzene	10	U
29	Phenanthrene	10	U
30	Anthracene	10	U
31	Dibutyl Phthalate	71	B
32	Fluoranthene	10	U

Comments:
U= Not detected
J= Detected but below Method Detection limit
B= Compound found in Blank

Signature

Name/Title: Howard Whaley
GC/MS Project Leader

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

EPA Method 625 Base/Neutral Extractables by GC/MS

Lab ID : 789603 Spike Duplicate
Sample ID : C-14A Spike Duplicate
Date Analyzed : 03/25/89
Date Extracted: 02/24/89

Client : Gannett&Fleming
Prep Factor: 1000 mls/1.0 ml
Comments :
Date Recieved: 02/17/89

NO.	NAME	RESULTS PPB	COMMENTS
33	Benzidine	50	U
34	Pyrene	10	U
35	Butylbenzyl Phthalate	10	U
36	3,3-Dichlorobenzidine	10	U
37	Benzo(A)Anthracene	10	U
38	Chrysene	10	U
39	Bis(2-ethylhexyl) Phthalate	2	BJ
40	Dioctyl-Phthalate	10	U
41	Benzo(K)Fluoranthene	10	U
42	Benzo(B)Fluoranthene	10	U
43	Benzo(A)Pyrene	10	U
44	Indeno(1,2,3-CD)Pyrene	10	U
45	Dibenzo(A,H)Anthracene	10	U
46	Benzo(GHI)Perylene	10	U

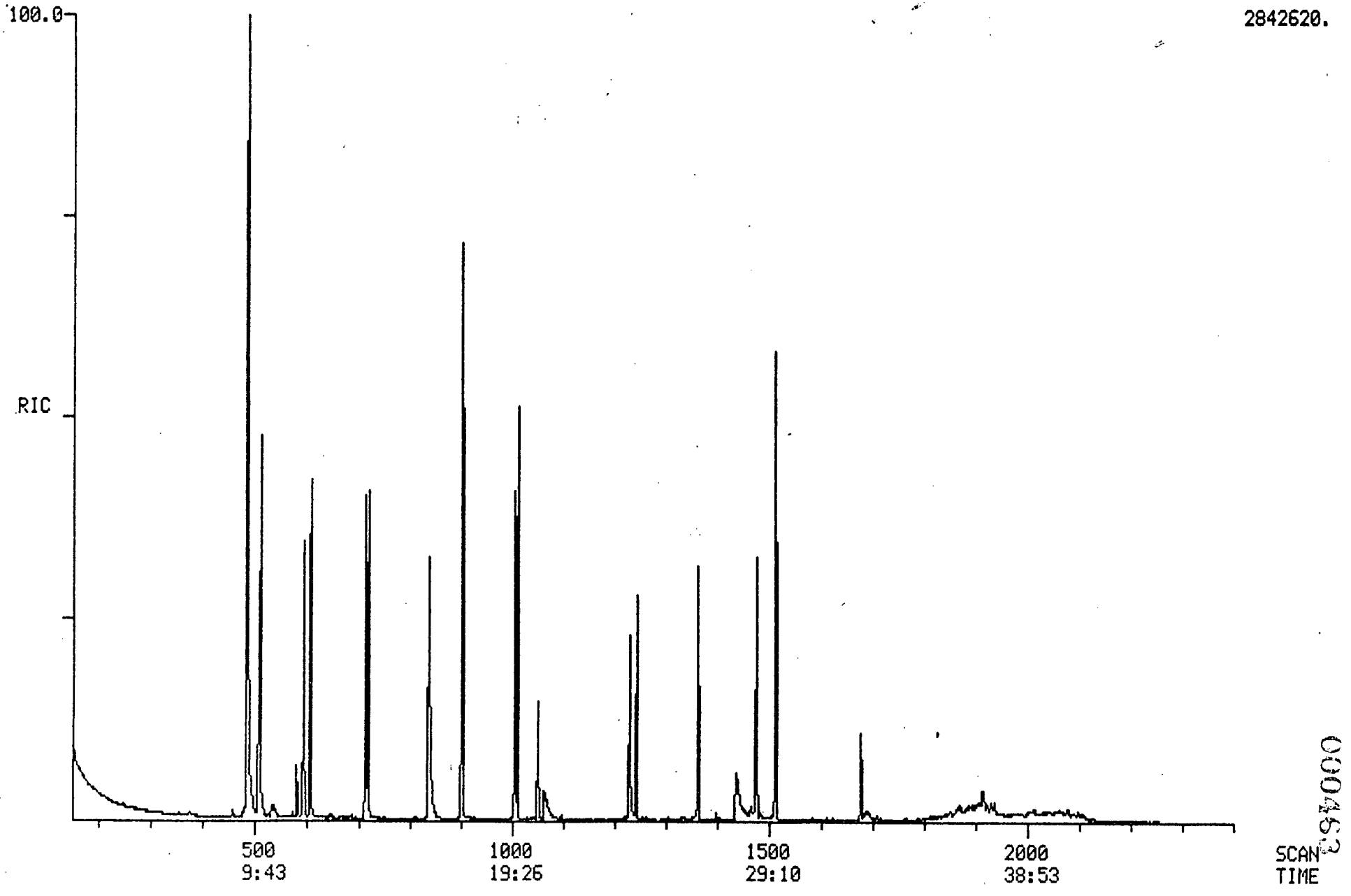
Comments:
U= Not Detected
J= Detected but below Method Detection Limit
B= Compound found in Blank

Signature

Name/Title: Howard Whaley
GC/MS Project Leader

RIC
03/27/89 14:08:00
SAMPLE: C-14A SPIKE DUPLICATE
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

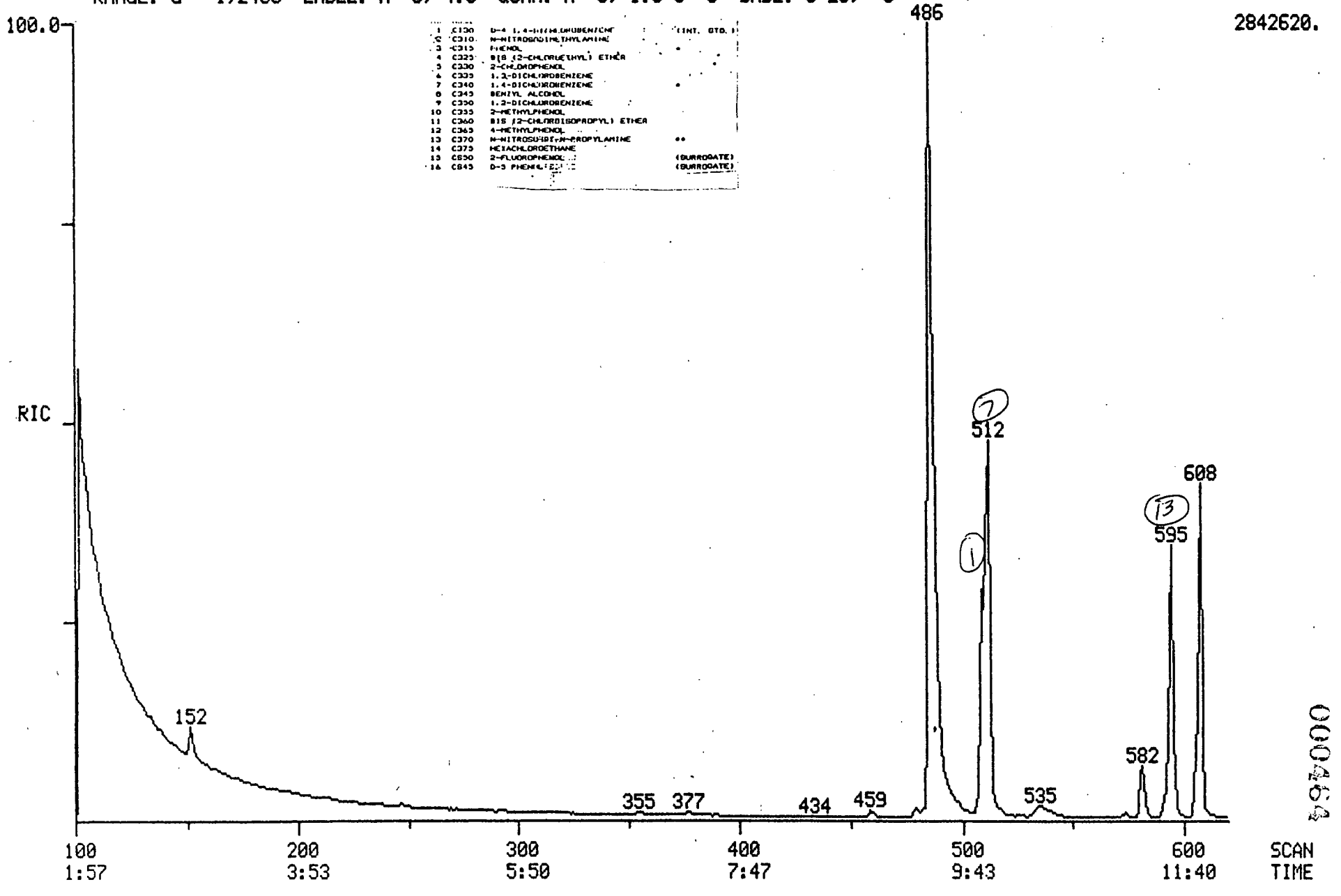
DATA: 789603ABSD #1 SCANS 150 TO 2400
CALI: 789603ABS #3



000452

RIC
03/27/89 14:08:00
SAMPLE: C-14A SPIKE DUPLICATE
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789603ABSD #1 SCANS 100 TO 620
CALI: 789603ABSD #3



1	C330	D-4 1,4-DICHLOROBENZENE	(INT. STD.)
2	C310	N-NITROSODIMETHYLAMINE	
3	C315	PHENOL	
4	C325	BIS (2-CHLOROETHYL) ETHER	
5	C330	2-CHLOROPHENOL	
6	C335	1,3-DICHLOROBENZENE	
7	C340	1,4-DICHLOROBENZENE	
8	C345	BENZYL ALCOHOL	
9	C350	1,2-DICHLOROBENZENE	
10	C355	2-METHYLPHENOL	
11	C360	BIS (2-CHLOROISOPROPYL) ETHER	
12	C365	4-METHYLPHENOL	
13	C370	N-NITROSODI-N-PROPYLAMINE	
14	C375	HEXACHLOROETHANE	
15	C650	2-FLUOROPHENOL	(SURROGATE)
16	C845	D-5 PHENOL	(SURROGATE)

000464

Quantitation Report File: 789603ABSD

Data: 789603ABSD.TI
03/27/89 14:08:00
Sample: C-14A SPIKE DUPLICATE
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitt d by: FLEMING Analyst: WSS Acct. No.: 789603AB

000465

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
R sp. fac. from Library Entry

No	Nam		
1	CI30	1,4-DICHLOROBENZENE D4	INTERNAL STANDARD
2		N-NITROSODIMETHYLAMINE	
3	C315	PHENOL	
4	C325	BIS(2-CHLOROETHYL) ETHER	
5	C330	2-CHLOROPHENOL	
6	C335	1,3-DICHLOROBENZENE	
7	C340	1,4-DICHLOROBENZENE	
8	C345	BENZYL ALCOHOL	
9	C350	1,2-DICHLOROBENZENE	
10	C355	2-METHYLPHENOL	
11	C360	BIS(2-CHLOROISOPROPYL)ETHER	
12	C365	4-METHYLPHENOL	
13	C370	N-NITROSO-DI-PROPYLAMINE	
14	C375	HEXACHLOROETHANE	
15	CS50	2-FLUOROPHENOL	SURROGATE
16	CS45	PHENOL D5	SURROGATE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot	
1	152	509	9:54	1	1.000	A BB	310583.	40.000 UG/ML	8.50	
2	74	152	2:57	1	0.299	A BB	~~1513.~~	~~0.194 UG/ML~~	~~0.04~~	NO WSS
3	94	486	9:27	1	0.955	A BB	~~1467790.~~	~~114.688 UG/ML~~	~~24.37~~	NO WSS
4	NOT FOUND									
5	128	486	9:27	1	0.955	A BB	~~1067720.~~	~~116.940 UG/ML~~	~~24.85~~	NO WSS
6	146	512	9:57	1	1.006	A BB	~~623080.~~	~~65.479 UG/ML~~	~~13.91~~	NO WSS
7	146	512	9:57	1	1.006	A BB	623080.	65.459 UG/ML	13.91	YES WSS
8	108	551	10:43	1	1.083	A*BB	~~792.~~	~~0.068 UG/ML~~	~~0.01~~	NO WSS
9	146	541	10:31	1	1.063	A BV	~~375.~~	~~0.042 UG/ML~~	~~0.01~~	NO WSS
10	108	575	11:11	1	1.130	A VV	~~508.~~	~~0.058 UG/ML~~	~~0.01~~	NO WSS
11	NOT FOUND									
12	NOT FOUND									
13	70	595	11:34	1	1.169	A BV	512893.	61.992 UG/ML	13.17	YES WSS
14	NOT FOUND									
15	NOT FOUND									
16	99	486	9:27	1	0.955	A BB	~~66912.~~	~~5.718 UG/ML~~	~~1.21~~	NO WSS

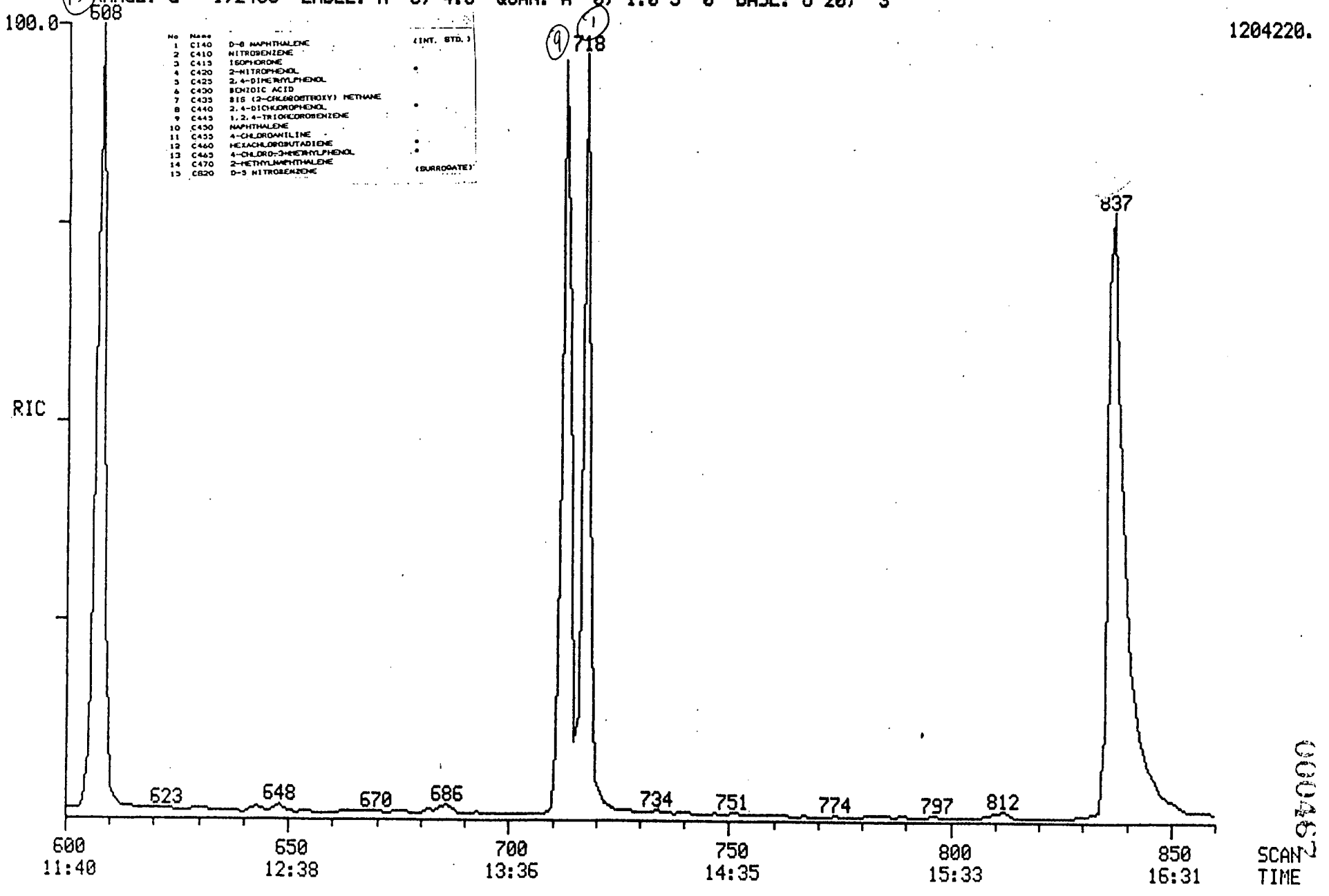
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:55	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	2:55	1.01	0.294	1.02	0.19	50.00	0.004	1.002	0.00
3	9:27	1.00	0.953	1.00	114.69	50.00	3.781	1.648	2.29
4	9:22		0.945						
5	9:27	1.00	0.953	1.00	116.94	50.00	2.750	1.176	2.34
6	9:47	1.02	0.986	1.02	65.48	50.00	1.605	1.226	1.31
7	9:57	1.00	1.004	1.00	65.46	50.00	1.605	1.226	1.31

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
8	10:43	1.00	1.080	1.00	0.07	50.00	0.002	1.508	0.00
9	10:32	1.00	1.063	1.00	0.04	50.00	0.001	1.161	0.00
10	11:17	0.99	1.137	0.99	0.06	50.00	0.001	1.135	0.00
11	11:07		1.122						
12	11:46		1.186						
13	11:38	0.99	1.173	1.00	61.99	50.00	1.321	1.066	1.24
14	11:28		1.157						
15	6:07		0.618						
16	9:25	1.00	0.949	1.01	5.72	50.00	0.172	1.507	0.11

000466

RIC
03/27/89 14:08:00
SAMPLE: C-14A SPIKE DUPLICATE
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789603ABSD #1 SCANS 600 TO 860
CALI: 789603ABSD #3



No	Name	
1	C140	D-8 NAPHTHALENE (INT. STD.)
2	C410	NITROBENZENE
3	C415	ISOPHORONE
4	C420	2-NITROPHENOL
5	C425	2,4-DIMETHYLPHENOL
6	C430	BENZOIC ACID
7	C435	BIS (2-CHLOROETHOXY) METHANE
8	C440	2,4-DICHLOROPHENOL
9	C445	1,2,4-TRICHLOROBENZENE
10	C450	NAPHTHALENE
11	C455	4-CHLOROANILINE
12	C460	HEXACHLOROBUTADIENE
13	C465	4-CHLORO-3-METHYLPHENOL
14	C470	2-METHYLNAPHTHALENE
15	CB20	D-5 NITROBENZENE (SURROGATE)

000462

Quantitation Report File: 789603ABSD

Data: 789603ABSD.TI
03/27/89 14:08:00

000468

Sample: C-14A SPIKE DUPLICATE
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789603AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
R sp. fac. from Library Entry

No	Name	
1	CI40 NAPHTHALENE D8	INTERNAL STANDARD
2	C410 NITROBENZENE	
3	C415 ISOPHORONE	
4	C420 2-NITROPHENOL	
5	C425 2,4-DIMETHYLPHENOL	
6	C430 BENZOIC ACID	
7	C435 BIS(2-CHLOROETHOXY)METHANE	
8	C440 2,4-DICHLOROPHENOL	
9	C445 1,2,4-TRICHLOROBENZENE	
10	C450 NAPHTHALENE	
11	C455 4-CHLOROANILINE	
12	C460 HEXACHLOROBUTADIENE	
13	C465 4-CHLORO-3-METHYLPHENOL	
14	C470 2-METHYLNAPHTHALENE	
15	CS20 NITROBENZENE D5	SURROGATE

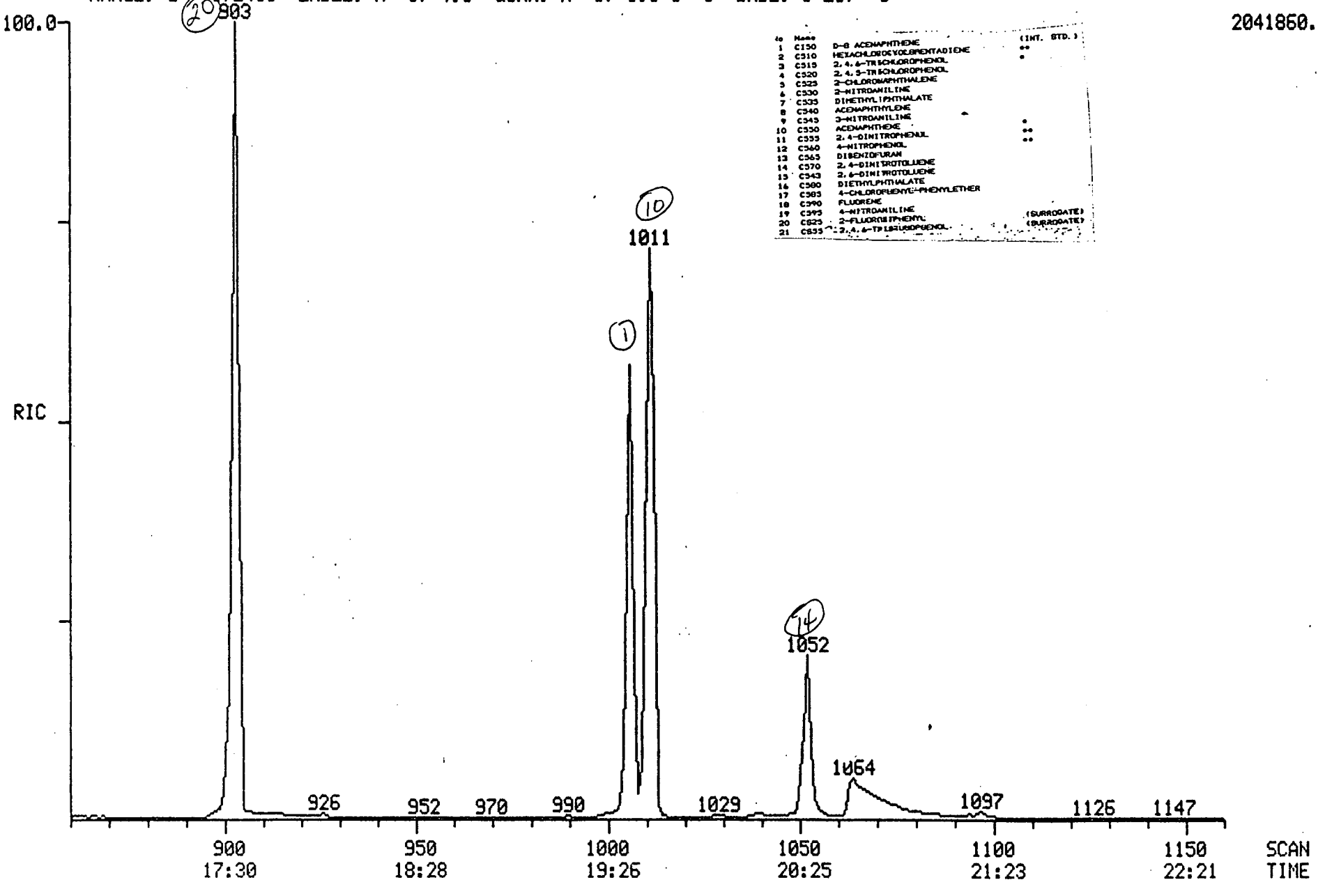
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot	
1	136	718	13:57	1	1.000	A BB	775763.	40.000 UG/ML	11.41	
2	NOT FOUND									
3	NOT FOUND									
4	139	663	12:53	1	0.923	A BB	~~490.~~	~~0.103 UG/ML~~	~~0.03~~	NO WSS
5	122	687	13:21	1	0.957	A BB	~~276.~~	~~0.047 UG/ML~~	~~0.01~~	NO WSS
6	122	732	14:14	1	1.019	A BB	~~299.~~	~~0.113 UG/ML~~	~~0.03~~	NO WSS
7	NOT FOUND									
8	NOT FOUND									
9	180	713	13:52	1	0.993	A BB	447816.	63.733 UG/ML	18.18	YES WSS
10	128	720	14:00	1	1.003	A BV	~~16116.~~	~~1.396 UG/ML~~	~~0.40~~	NO WSS
11	NOT FOUND									
12	NOT FOUND									
13	107	837	16:16	1	1.166	A BB	~~817094.~~	~~114.568 UG/ML~~	~~32.68~~	NO WSS
14	142	837	16:16	1	1.166	A BB	~~698919.~~	~~44.418 UG/ML~~	~~12.67~~	NO WSS
15	82	608	11:49	1	0.847	A BB	801712.	86.223 UG/ML	24.59	YES WSS

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	13:59	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	11:54		0.851						
3	12:43		0.910						
4	12:53	1.00	0.922	1.00	0.10	50.00	0.001	0.245	0.00
5	13:21	1.00	0.955	1.00	0.05	50.00	0.000	0.302	0.00
6	14:16	1.00	1.021	1.00	0.11	50.00	0.000	0.136	0.00
7	13:32		0.968						
8	13:47		0.986						
9	13:53	1.00	0.993	1.00	63.73	50.00	0.462	0.362	1.27

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
10	14:02	1.00	1.004	1.00	1.40	50.00	0.017	0.595	0.03
11	14:28		1.035						
12	14:41		1.050						
13	16:15	1.00	1.163	1.00	114.57	50.00	0.843	0.368	2.29
14	16:15	1.00	1.163	1.00	44.42	50.00	0.721	0.811	0.89
15	11:49	1.00	0.846	1.00	86.22	50.00	0.827	0.479	1.72

RIC
03/27/89 14:08:00
SAMPLE: C-14A SPIKE DUPLICATE
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789603ABSD #1 SCANS 860 TO 1160
CALI: 789603ABSD #3



No	Name		(INT. STD.)
1	C150	D-8 ACENAPHTHENE	**
2	C510	HEXACHLOROCYCLOPENTADIENE	*
3	C515	2,4,6-TRICHLOROPHENOL	
4	C520	2,4,5-TRICHLOROPHENOL	
5	C525	2-CHLORONAPHTHALENE	
6	C530	2-NITROANILINE	
7	C535	DIMETHYLPHTHALATE	
8	C540	ACENAPHTHYLENE	
9	C545	3-NITROANILINE	*
10	C550	ACENAPHTHENE	**
11	C555	2,4-DINITROPHENOL	**
12	C560	4-NITROPHENOL	
13	C565	DIBENZOFURAN	
14	C570	2,4-DINITROTOLUENE	
15	C575	2,6-DINITROTOLUENE	
16	C580	DIETHYLPHTHALATE	
17	C585	4-CHLOROPHENYL-PHENYLETHER	
18	C590	FLUORENE	
19	C595	4-NITROANILINE	(SURROGATE)
20	C625	2-FLUOROBIPHENYL	(SURROGATE)
21	C635	2,4,6-TRIBROMOPHENOL	

000470

Quantitation Report File: 789603ABSD

000445

Data: 789603ABSD.TI
03/27/89 14:08:00
Sample: C-14A SPIKE DUPLICATE
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789603AB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI50 ACENAPHTHENE D8	INTERNAL STANDARD
2	C510 HEXACHLOROCYCLOPENTADIENE	
3	C515 2,4,6-TRICHLOROPHENOL	
4	C520 2,4,5-TRICHLOROPHENOL	
5	C525 2-CHLORONAPHTHALENE	
6	C530 2-NITROANILINE	
7	C535 DIMETHYL PHTHALATE	
8	C540 ACENAPHTHYLENE	
9	C545 3-NITROANILINE	
10	C550 ACENAPHTHENE	
11	C555 2,4-DINITROPHENOL	
12	C560 4-NITROPHENOL	
13	C565 DIBENZOFURAN	
14	C570 2,4-DINITROTOLUENE	
15	C543 2,6-DINITROTOLUENE	
16	C580 DIETHYL PHTHALATE	
17	C585 4-CHLOROPHENYL PHENYL ETHER	
18	C590 FLUORENE	
19	C595 4-NITROANILINE	
20	CS25 2-FLUOROBIPHENYL	SURROGATE
21	CS55 2,4,6-TRIBROMOPHENOL	SURROGATE

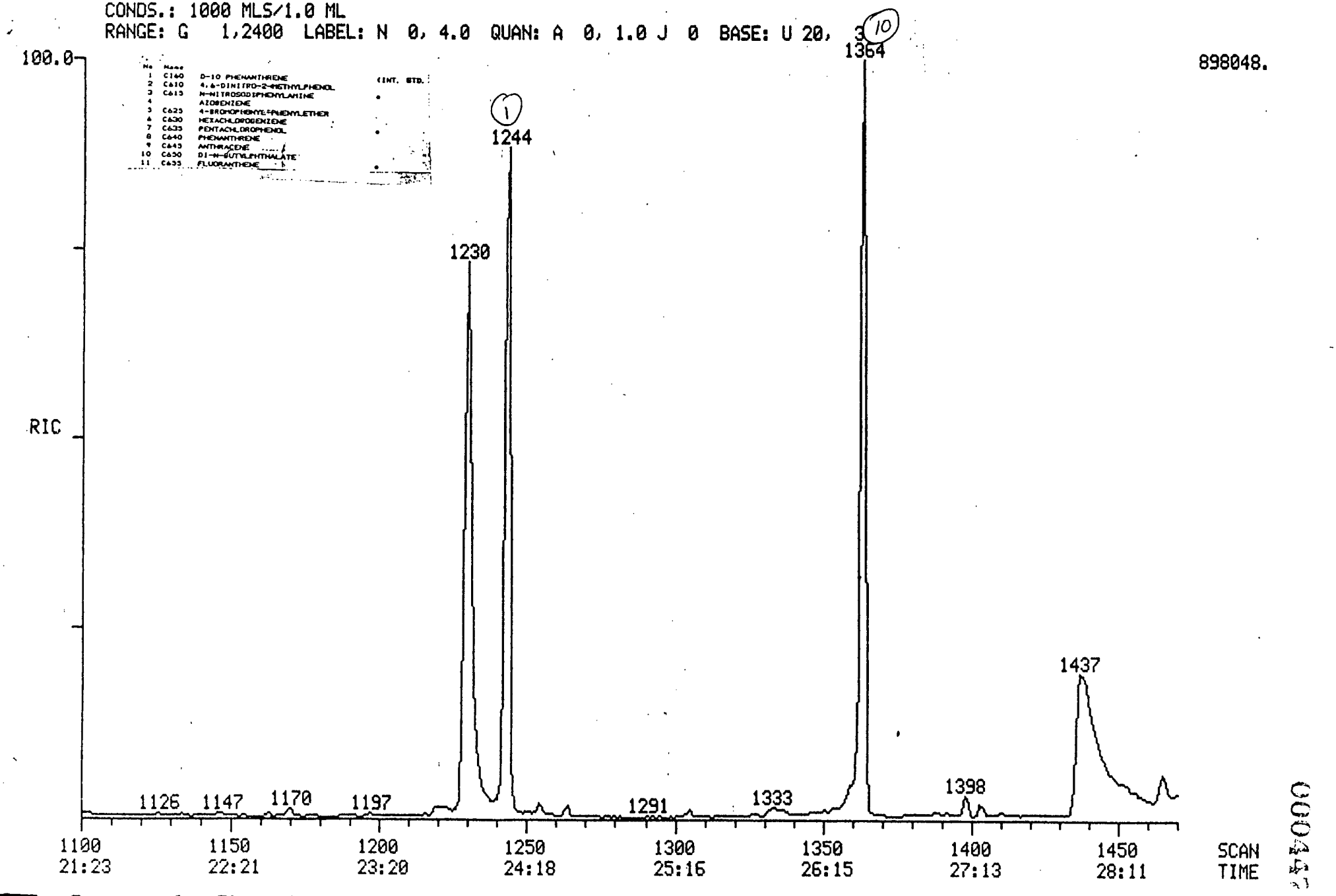
N	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%T	t		
1	164	1006	19:33	1	1.000	A BB	454993.	40.000 UG/ML	12.62			
2	NOT FOUND											
3	NOT FOUND											
4	NOT FOUND											
5	162	912	17:44	1	0.907	A BB	~~444.~~	~~0.037 UG/ML~~	~~0.01~~		NO	WSS
6	NOT FOUND											
7	163	981	19:04	1	0.975	A BB	~~1265.~~	~~0.098 UG/ML~~	~~0.03~~		NO	WSS
8	152	979	19:02	1	0.973	A BB	~~1138.~~	~~0.078 UG/ML~~	~~0.02~~		NO	WSS
9	NOT FOUND											
10	154	1011	19:39	1	1.005	A BB	625200.	55.346 UG/ML	17.46		YES	WSS
11	NOT FOUND											
12	139	1064	20:41	1	1.058	A BB	~~156988.~~	~~109.212 UG/ML~~	~~34.46~~		NO	WSS
13	168	1037	20:10	1	1.031	A BB	~~4594.~~	~~0.230 UG/ML~~	~~0.07~~		NO	WSS
14	165	1052	20:27	1	1.046	A VB	180541.	38.830 UG/ML	12.25		YES	WSS
15	165	990	19:15	1	0.984	A BB	~~1228.~~	~~0.323 UG/ML~~	~~0.10~~		NO	WSS
16	149	1097	21:20	1	1.090	A BB	~~6206.~~	~~0.489 UG/ML~~	~~0.15~~		NO	WSS
17	NOT FOUND											
18	166	1093	21:15	1	1.086	A BB	~~521.~~	~~0.047 UG/ML~~	~~0.01~~		NO	WSS
19	NOT FOUND											
20	172	903	17:33	1	0.898	A BV	883492.	72.251 UG/ML	22.80		YES	WSS
21	NOT FOUND											

No	R t(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	19:35	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	16:58		0.867						
3	17:22		0.887						
4	17:33		0.897						
5	17:46	1.00	0.908	1.00	0.04	50.00	0.001	1.043	0.00
6	18:23		0.939						
7	19:07	1.00	0.976	1.00	0.10	50.00	0.002	1.134	0.00
8	19:04	1.00	0.974	1.00	0.08	50.00	0.002	1.277	0.00
9	19:45		1.009						
10	19:40	1.00	1.005	1.00	55.35	50.00	1.099	0.993	1.11
11	20:01		1.023						
12	20:39	1.00	1.055	1.00	109.21	50.00	0.276	0.126	2.18
13	20:13	1.00	1.033	1.00	0.23	50.00	0.008	1.753	0.00
14	20:29	1.00	1.047	1.00	38.83	50.00	0.317	0.409	0.78
15	19:17	1.00	0.985	1.00	0.32	50.00	0.002	0.334	0.01
16	21:22	1.00	1.091	1.00	0.49	50.00	0.011	1.116	0.01
17	21:23		1.092						
18	21:16	1.00	1.086	1.00	0.05	50.00	0.001	0.985	0.00
19	21:44		1.110						
20	17:33	1.00	0.897	1.00	72.25	50.00	1.553	1.075	1.45
21	22:07		1.130						

RIC
03/27/89 14:08:00
SAMPLE: C-14A SPIKE DUPLICATE
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789603ABSD #1
CALI: 789603ABSD #3

SCANS 1100 TO 1470

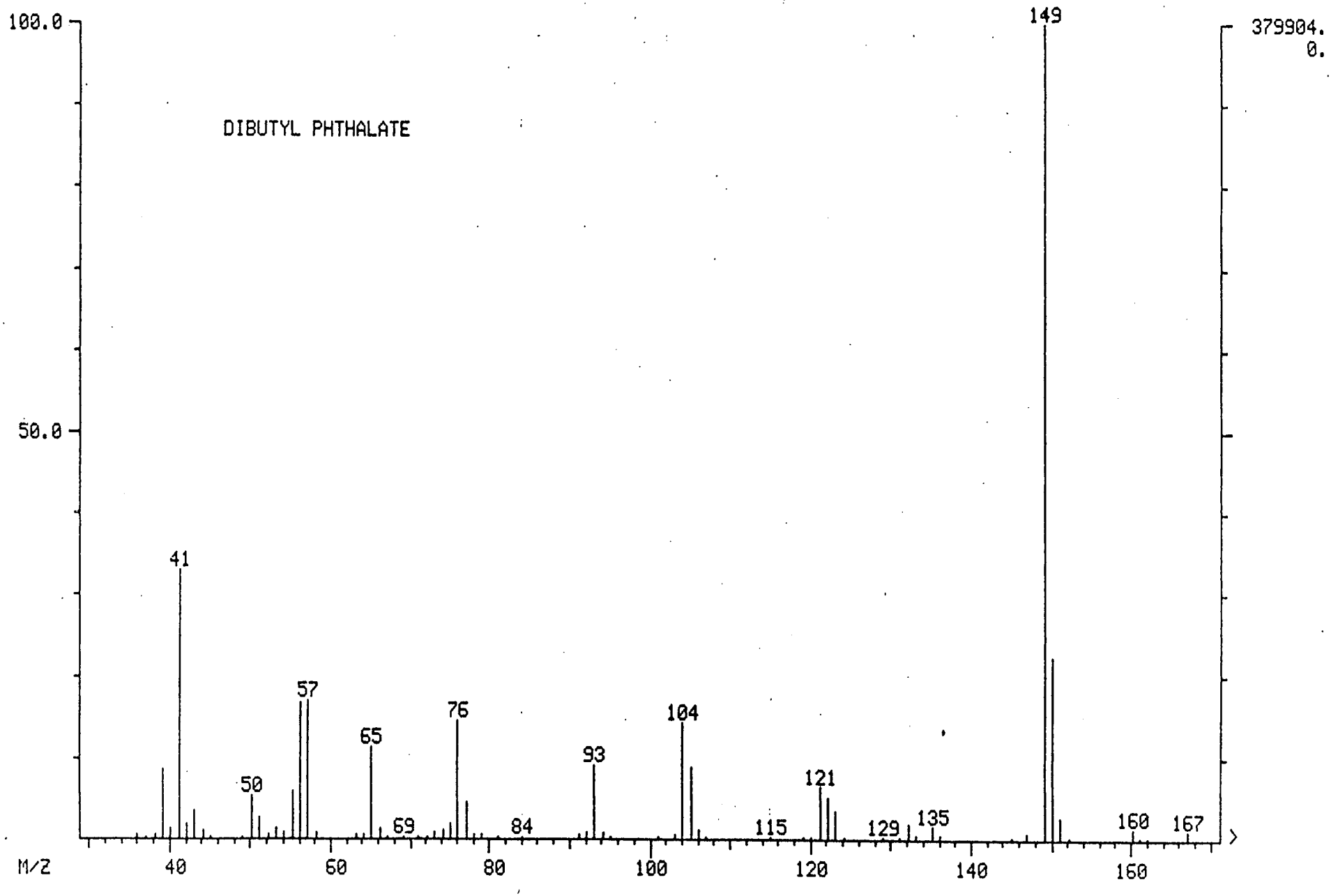


000445

MASS SPECTRUM
03/27/89 10:43:00 + 26:31
SAMPLE: HSL-D STANDARD \3/27/89
CONDS.: 50 NG INJECTION
TEMP: 221 DEG. C

DATA: HSB500327 #1364
CALI: HSB500327 #3

BASE M/Z: 149
RIC: 1337340.

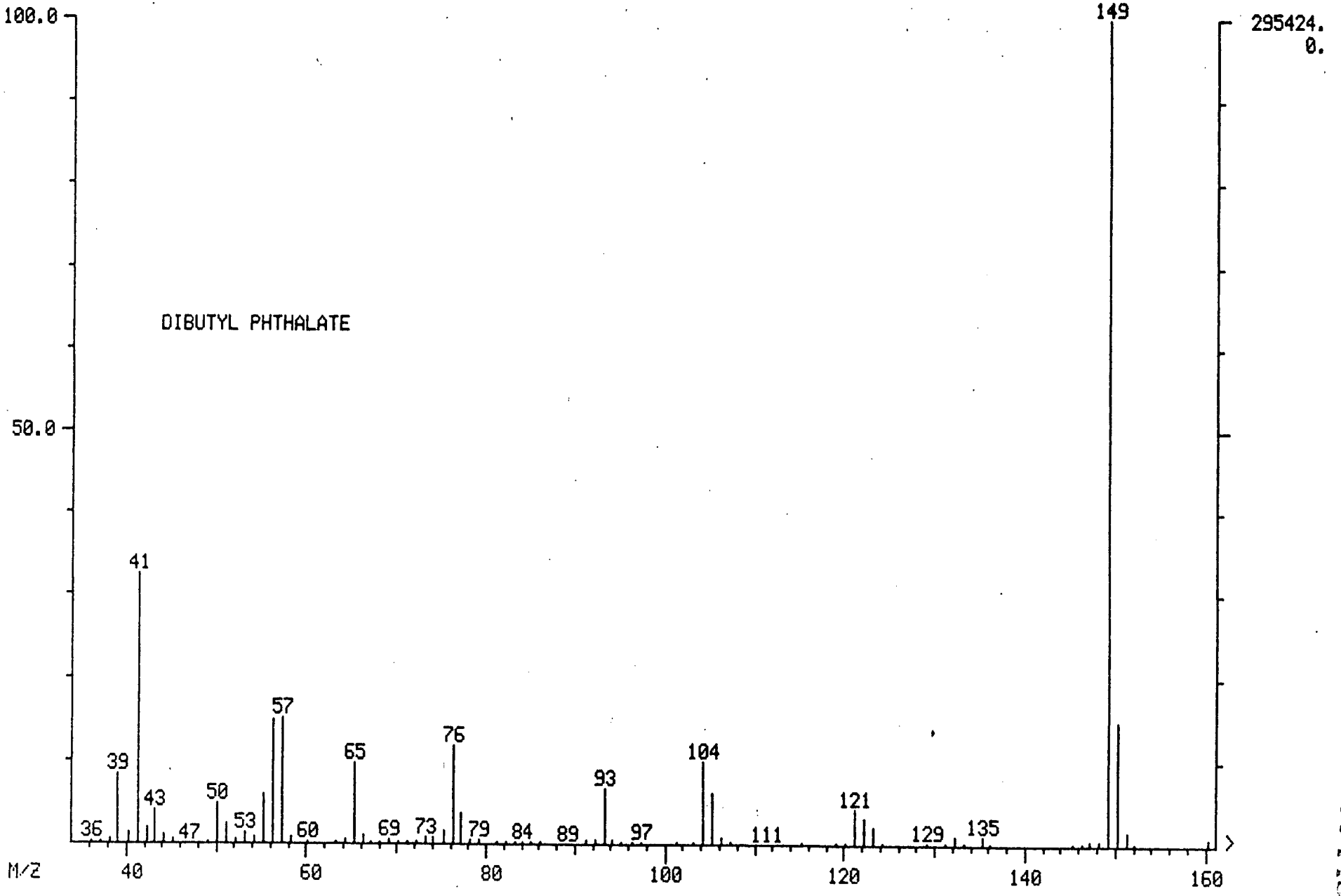


000448

MASS SPECTRUM
03/27/89 14:08:00 + 26:31
SAMPLE: C-14A SPIKE DUPLICATE
CONDS.: 1000 MLS/1.0 ML
TEMP: 221 DEG. C

DATA: 789603ABSD #1364
CALI: 789603ABSD #3

BASE M/Z: 149
RIC: 890880.

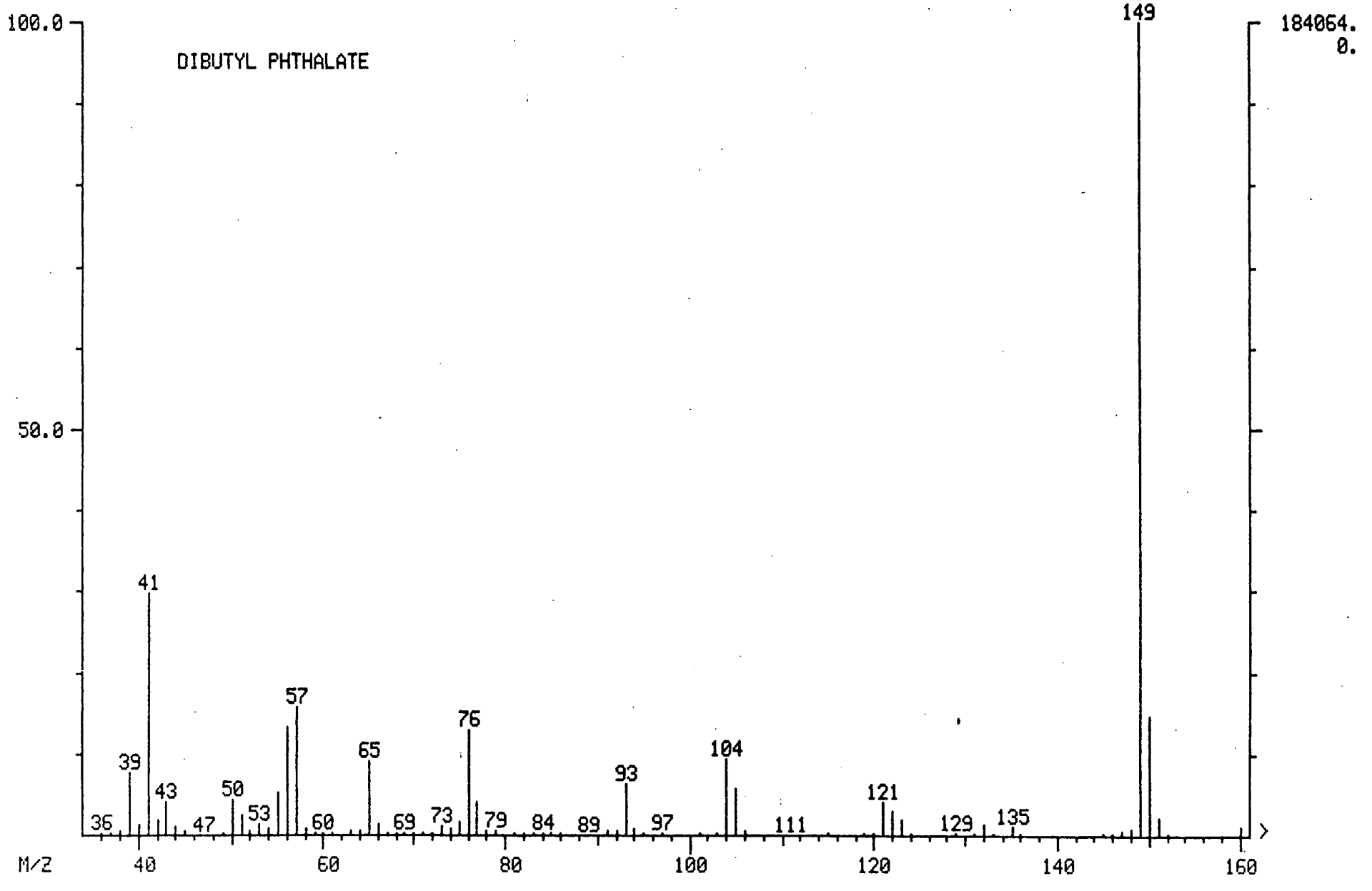


000449

MASS SPECTRUM
03/27/89 14:08:00 + 26:31
SAMPLE: C-14A SPIKE DUPLICATE
CONDS.: 1000 MLS/1.0 ML
TEMP: 221 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 789603ABSD #1364
CALI: 789603ABSD #3

BASE M/Z: 149
RIC: 547840.

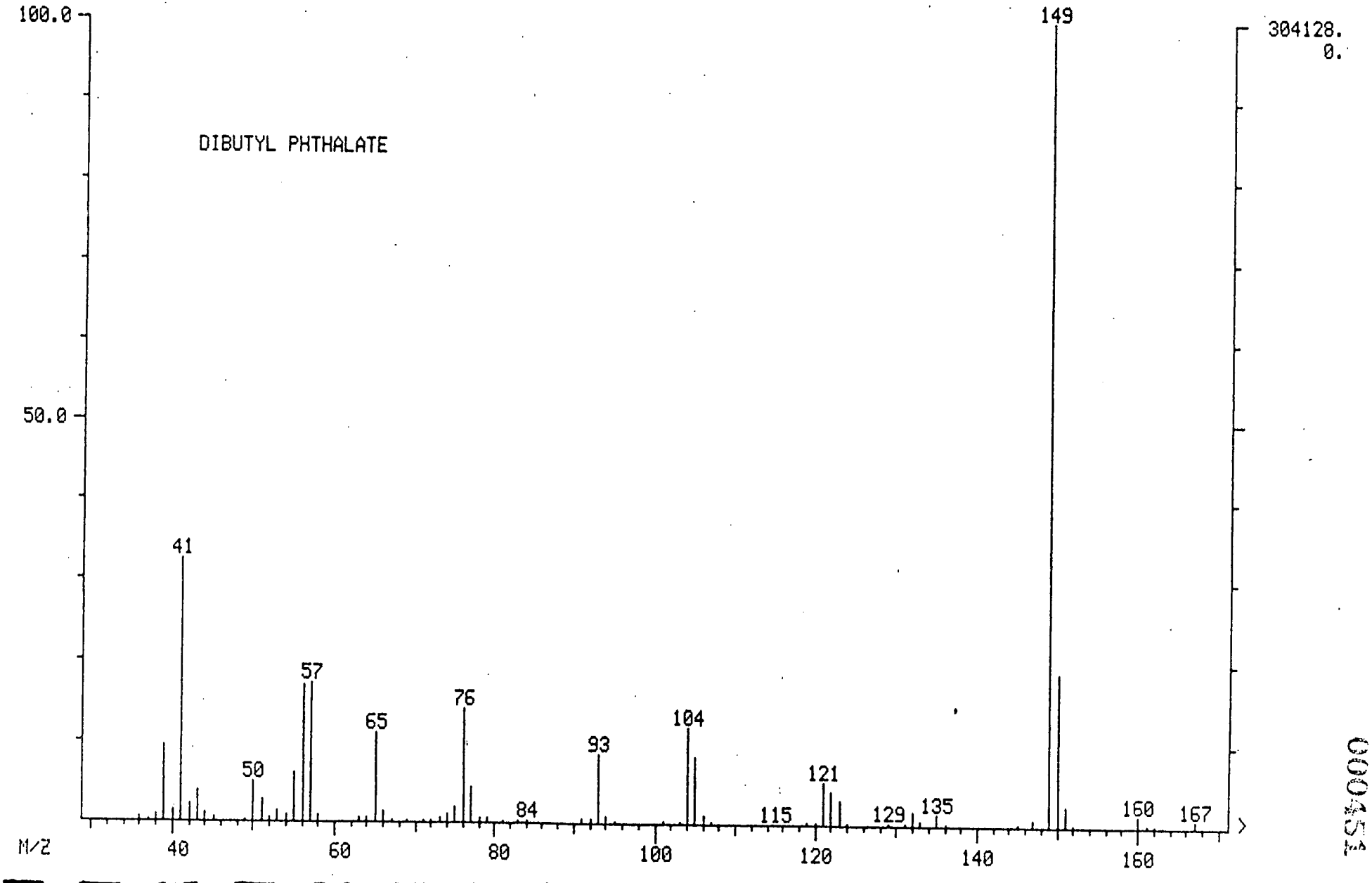


000450

MASS SPECTRUM
03/27/89 10:43:00 + 26:31
SAMPLE: HSL-D STANDARD \3/27/89
CONDS.: 50 NG INJECTION
TEMP: 221 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: HSB500327 #1364
CALI: HSB500327 #3

BASE M/Z: 149
RIC: 1027070.



000451

Quantitation Report File: 789603ABSD

Data: 789603ABSD.TI
03/27/89 14:08:00
Sample: C-14A SPIKE DUPLICATE
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitt d by: FLEMING Analyst: WSS Acct. No.: 789603AB

000452

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

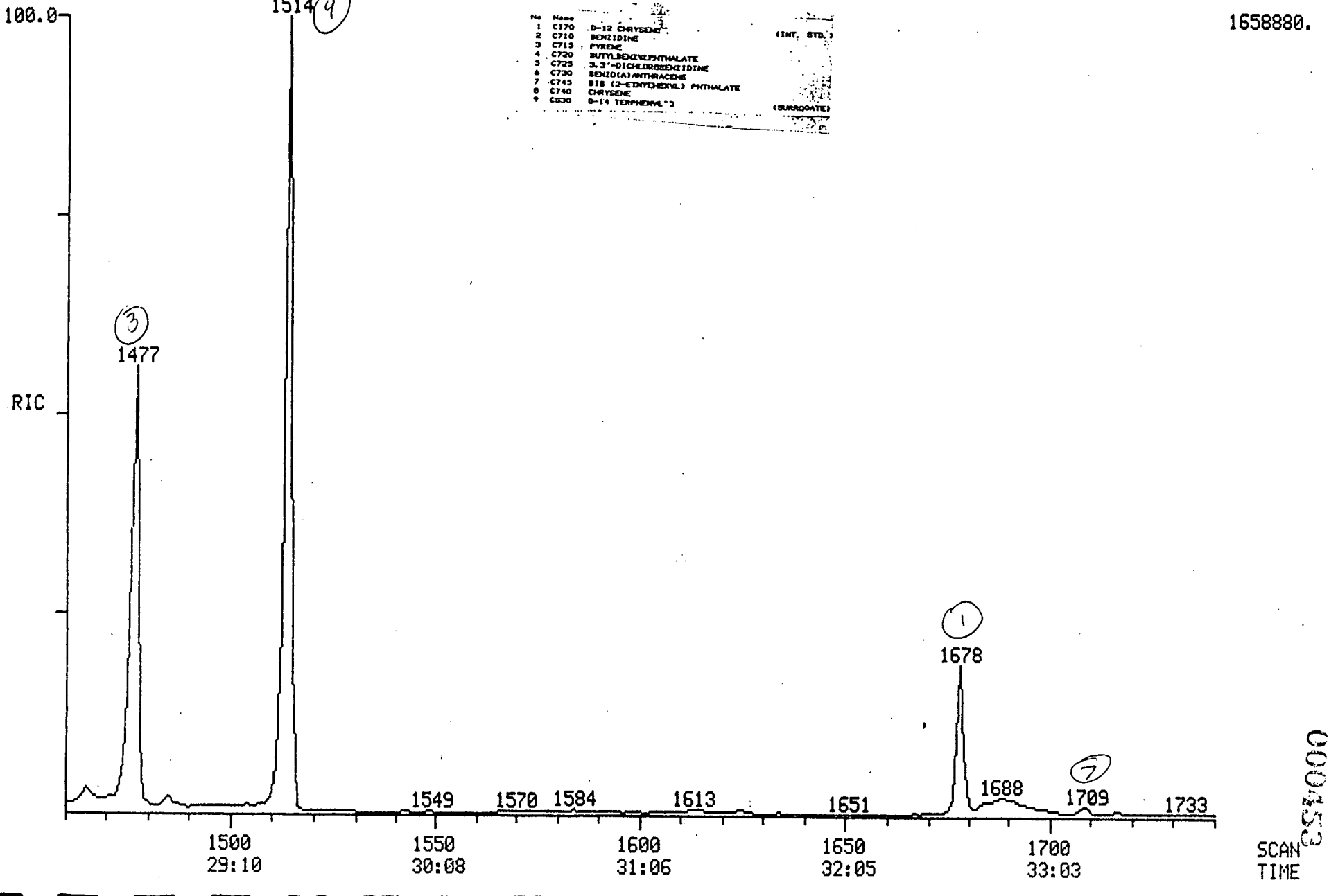
No	Name	
1	CI60 PHENANTHRENE D10	INTERNAL STANDARD
2	C610 4,6-DINITRO-2-METHYL PHENOL	
3	C615 N-NITROSODIPHENYLAMINE	
4	AZOBENZENE	
5	C625 4-BROMOPHENYL PHENYL ETHER	
6	C630 HEXACHLOROBENZENE	
7	C635 PENTACHLOROPHENOL	
8	C640 PHENANTHRENE	
9	C645 ANTHRACENE	
10	C650 DI-N-BUTYL PHTHALATE	
11	C655 FLUORANTHENE	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot	
1	188	1243	24:10	1	1.000	A BV	476657.	40.000 UG/ML	20.20	
2	NOT FOUND									
3	NOT FOUND									
4	77	1124	21:51	1	0.904	A BB	~~583.~~	~~0.038 UG/ML~~	~~0.02~~	NO WSS
5	NOT FOUND									
6	NOT FOUND									
7	266	1230	23:55	1	0.990	A VV	~~126438.~~	~~86.453 UG/ML~~	~~43.66~~	NO WSS
8	178	1246	24:13	1	1.002	A BB	~~2376.~~	~~0.220 UG/ML~~	~~0.11~~	NO WSS
9	178	1254	24:23	1	1.009	A BB	~~879.~~	~~0.094 UG/ML~~	~~0.05~~	NO WSS
10	149	1364	26:31	1	1.097	A BB	762879.	71.079 UG/ML	35.90	YES WSS
11	202	1441	28:01	1	1.159	A VB	~~1078.~~	~~0.122 UG/ML~~	~~0.06~~	NO WSS

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	24:12	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	21:44		0.898						
3	21:50		0.902						
4	21:52	1.00	0.904	1.00	0.04	50.00	0.001	1.286	0.00
5	22:53		0.945						
6	23:15		0.961						
7	23:56	1.00	0.989	1.00	86.45	50.00	0.212	0.123	1.73
8	24:17	1.00	1.003	1.00	0.22	50.00	0.004	0.905	0.00
9	24:25	1.00	1.009	1.00	0.09	50.00	0.001	0.785	0.00
10	26:31	1.00	1.096	1.00	71.08	50.00	1.280	0.901	1.42
11	28:02	1.00	1.158	1.00	0.12	50.00	0.002	0.742	0.00

RIC
03/27/89 14:08:00
SAMPLE: C-14A SPIKE DUPLICATE
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789603ABSD #1 SCANS 1460 TO 1740
CALI: 789603ABSD #3



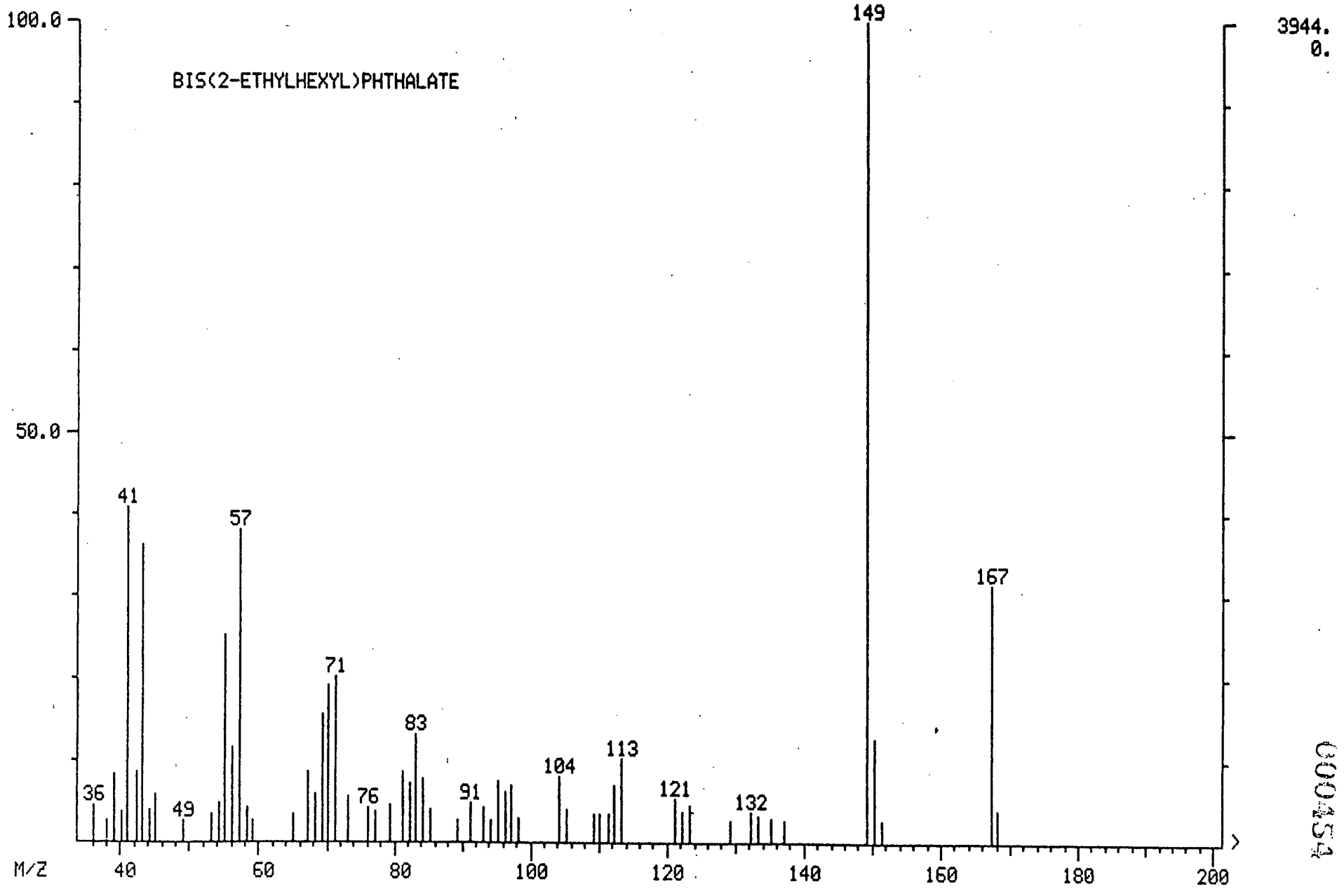
No	Name	
1	C170 D-12 CHRYSENE	(INT. STD.)
2	C710 BENZIDINE	
3	C715 PYRENE	
4	C720 BUTYLBENZYLPHTHALATE	
5	C725 3,3'-DICHLOROBENZIDINE	
6	C730 BENZO(A)ANTHRACENE	
7	C745 BIS (2-ETHYLHEXYL) PHTHALATE	
8	C740 CHRYSENE	
9	C830 D-14 TERPHENYL-"]	(SURROGATE)

000453

MASS SPECTRUM
03/27/89 14:08:00 + 33:13
SAMPLE: C-14A SPIKE DUPLICATE
CONDS.: 1000 MLS/1.0 ML
TEMP: 275 DEG. C

DATA: 789603ABSD #1709
CALI: 789603ABSD #3

BASE M/Z: 149
RIC: 24000.

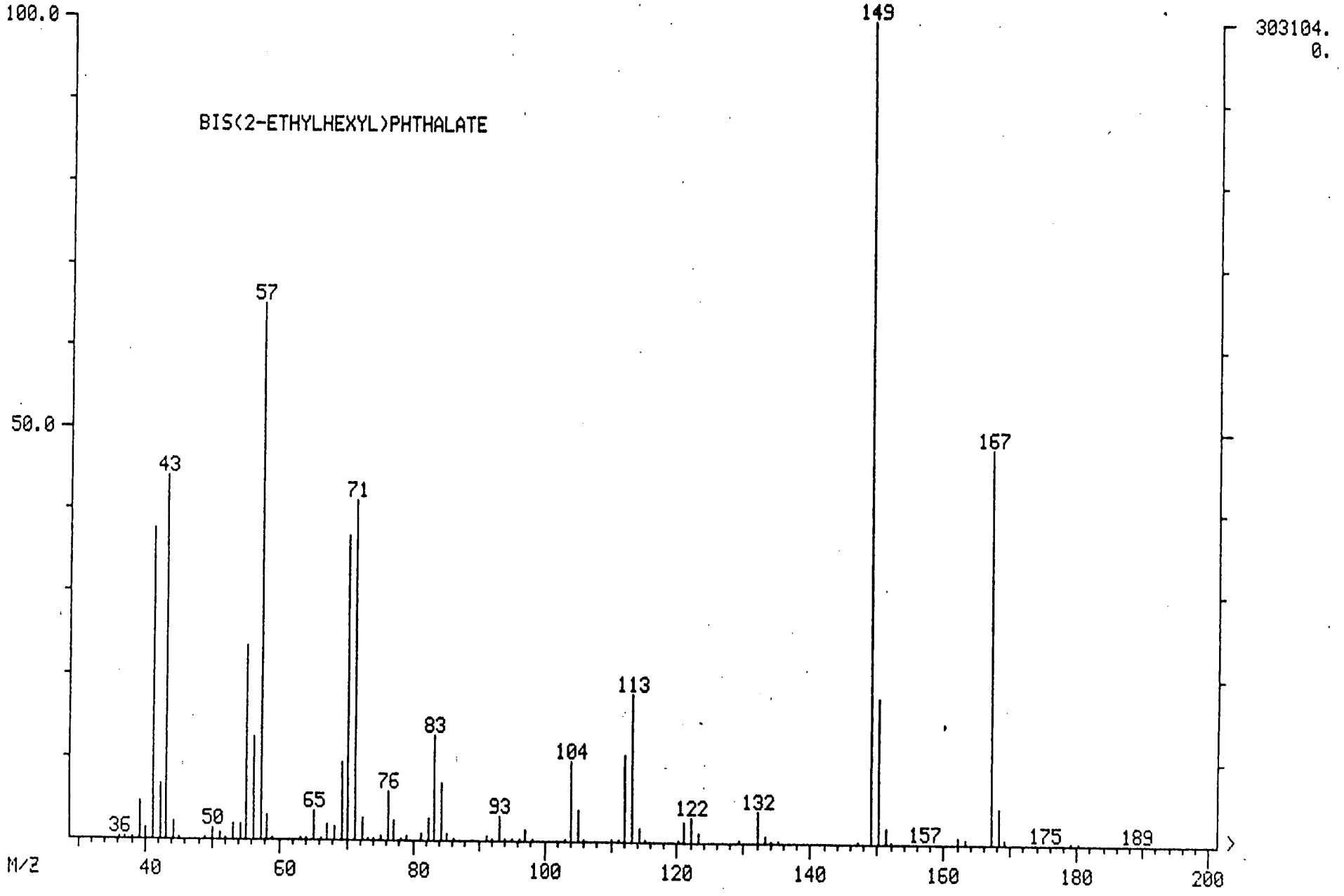


000454

MASS SPECTRUM
03/27/89 10:43:00 + 33:13
SAMPLE: HSL-D STANDARD \3/27/89
CONDS.: 50 NG INJECTION
TEMP: 275 DEG. C

DATA: HSB500327 #1709
CALI: HSB500327 #3

BASE M/Z: 149
RIC: 1765380.

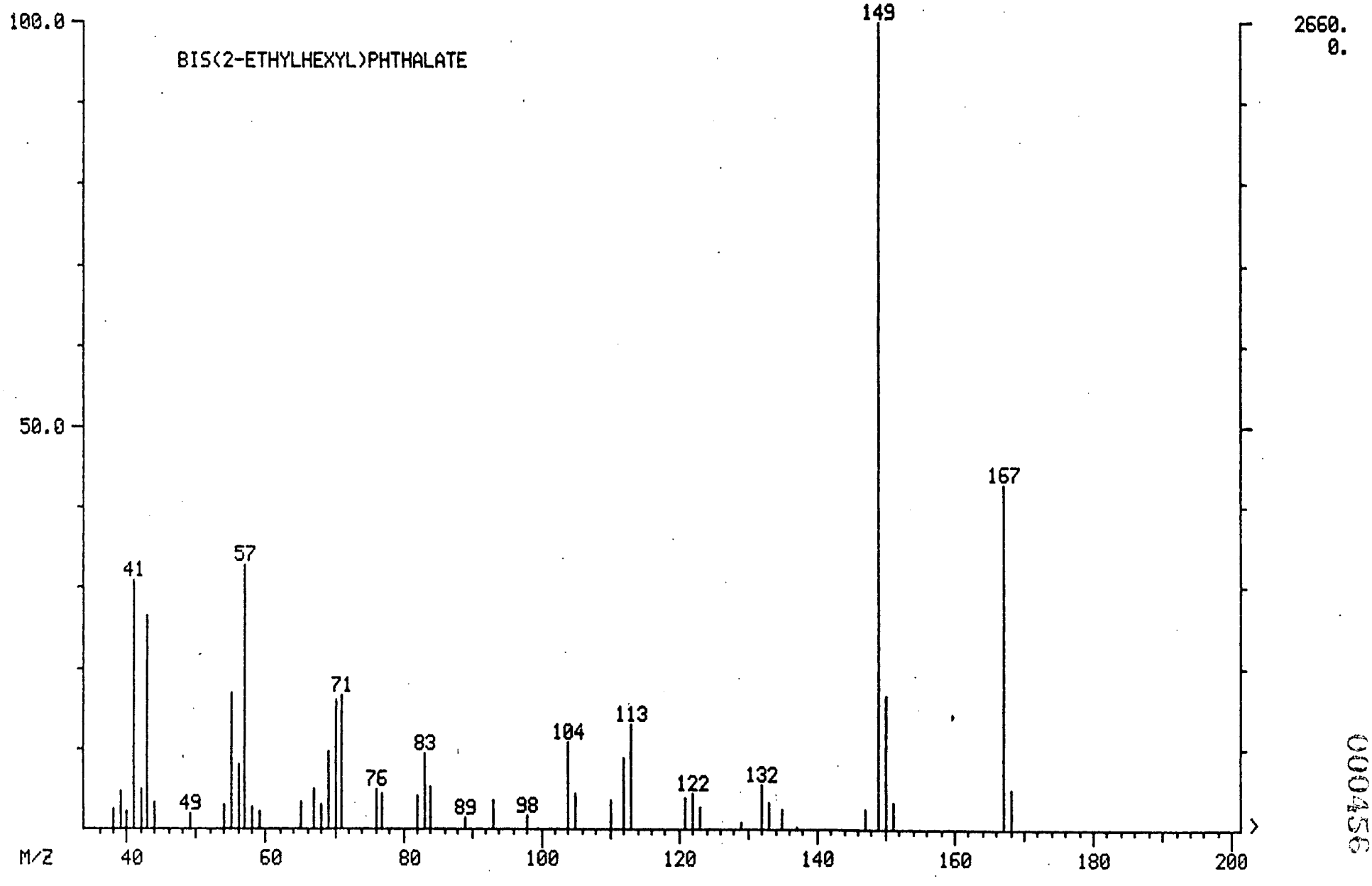


000455

MASS SPECTRUM
03/27/89 14:08:00 + 33:13
SAMPLE: C-14A SPIKE DUPLICATE
CONDS.: 1000 MLS/1.0 ML
TEMP: 275 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 789603ABSD #1709
CALI: 789603ABSD #3

BASE M/Z: 149
RIC: 12560.

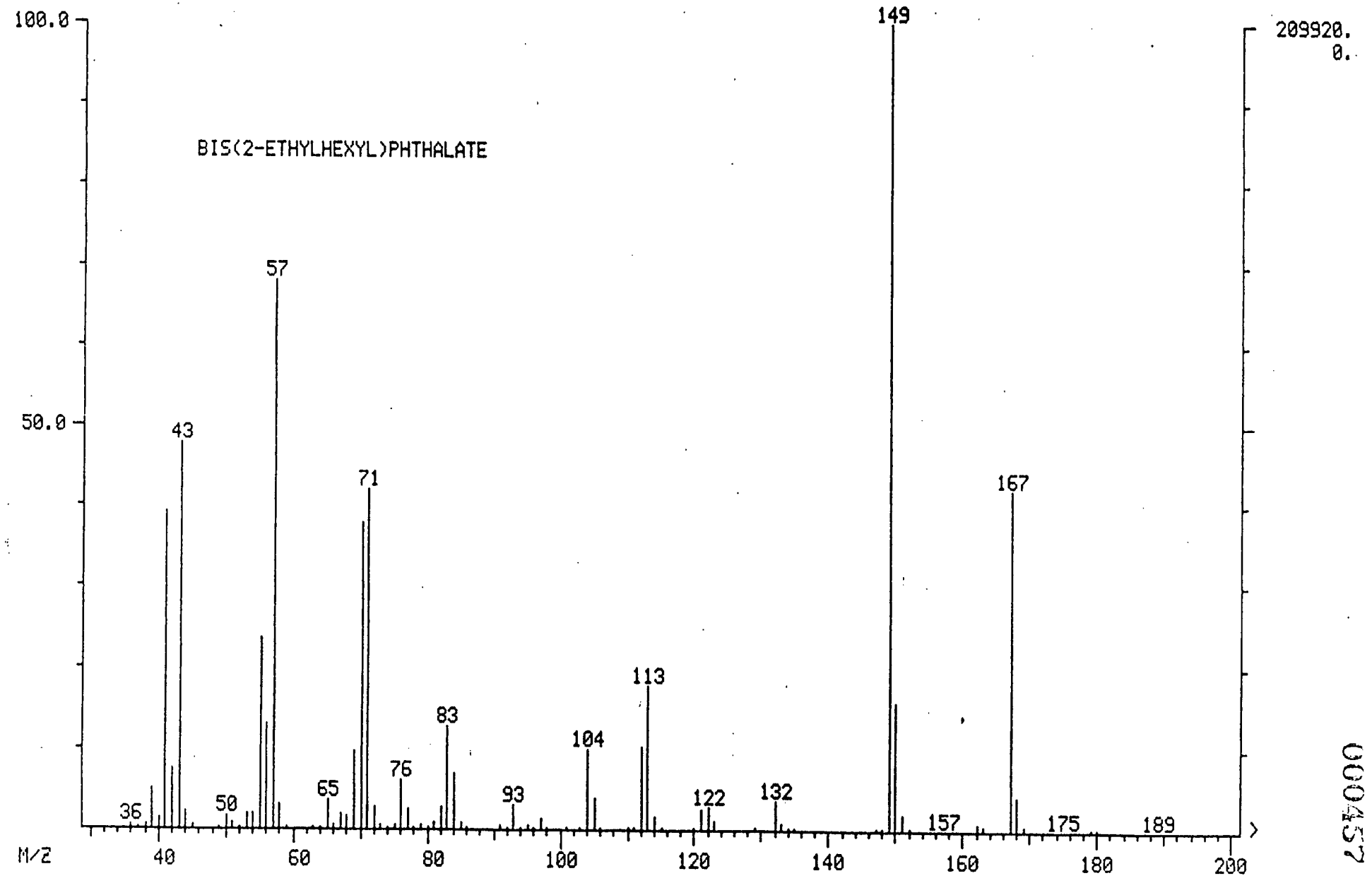


000456

MASS SPECTRUM
03/27/89 10:43:00 + 33:13
SAMPLE: HSL-D STANDARD \3/27/89
CONDS.: 50 NG INJECTION
TEMP: 275 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: HSB500327 #1709
CALI: HSB500327 #3

BASE M/Z: 149
RIC: 1239040.



000457

Quantitation Report File: 789603ABSD

Data: 789603ABSD.TI
03/27/89 14:08:00
Sample: C-14A SPIKE DUPLICATE
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789603AB

000458

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI70 CHRYSENE D12	INTERNAL STANDARD
2	C710 BENZIDINE	
3	C715 PYRENE	
4	C720 BUTYLBENZYLPHTHALATE	
5	C725 3,3'-DICHLOROBENZIDINE	
6	C730 BENZO(A)ANTHRACENE	
7	C745 BIS(2-ETHYLHEXYL)PHTHALATE	
8	C740 CHRYSENE	
9	CS30 TERPHENYL D14	SURROGATE

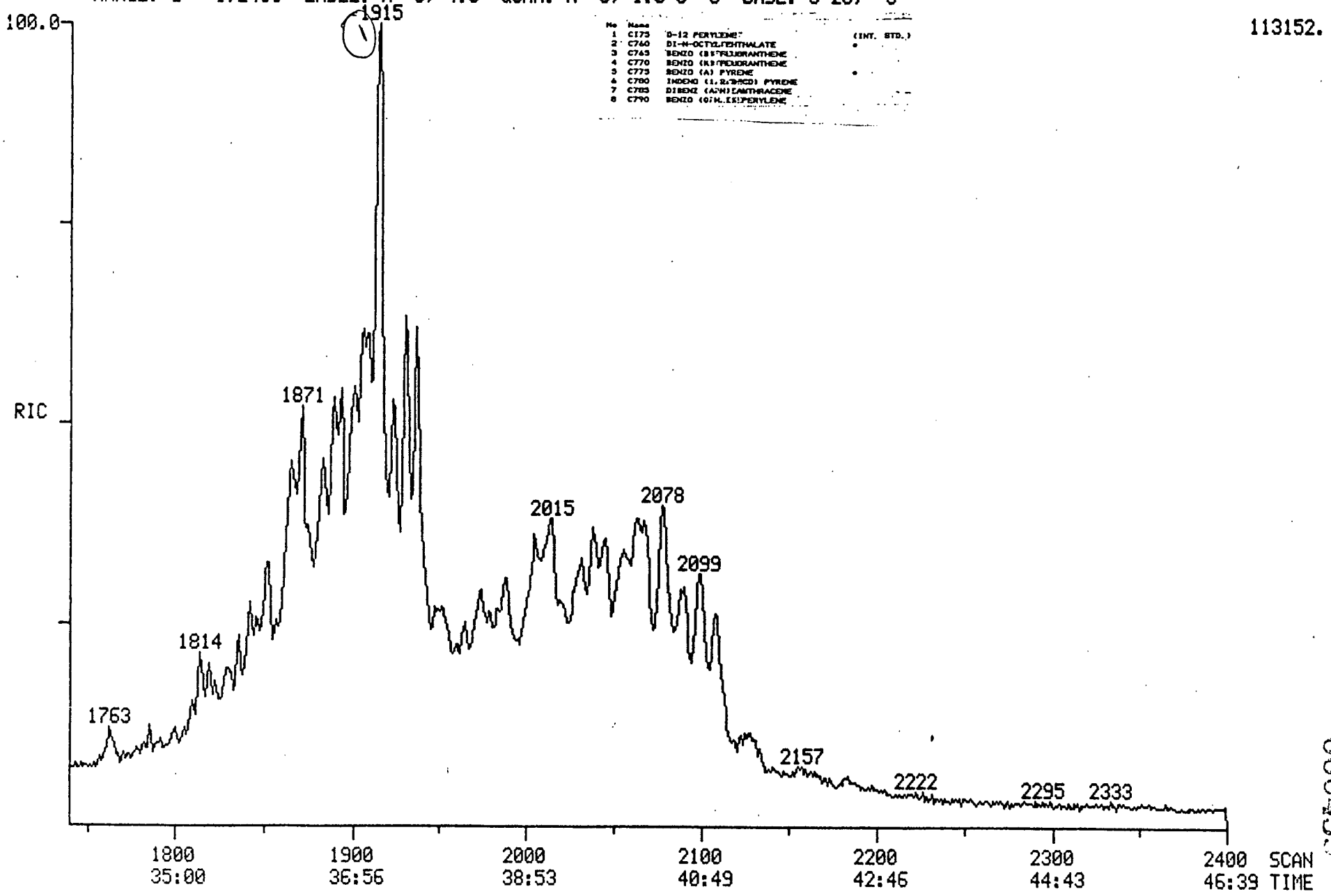
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%T	t	
1	240	1678	32:37	1	1.000	A*BB	290246.	40.000 UG/ML	21.39		
2	NOT FOUND										
3	202	1477	28:43	1	0.880	A VB	499549.	61.890 UG/ML	33.10		YES WSS
4	149	1605	31:12	1	0.956	A BB	~~724.~~	~~0.159 UG/ML~~	~~0.08~~		NO WSS
5	NOT FOUND										
6	228	1678	32:37	1	1.000	A BB	~~430.~~	~~0.071 UG/ML~~	~~0.04~~		NO WSS
7	149	1709	33:13	1	1.018	A BB	11218.	2.066 UG/ML	1.10		YES WSS
8	NOT FOUND										
9	244	1514	29:26	1	0.902	A BB	670832.	82.854 UG/ML	44.31		YES WSS

N	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	32:38	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	28:45		0.882						
3	28:43	1.00	0.880	1.00	61.89	50.00	1.377	1.112	1.24
4	31:13	1.00	0.957	1.00	0.16	50.00	0.002	0.629	0.00
5	32:42		1.002						
6	32:35	1.00	0.998	1.00	0.07	50.00	0.001	0.832	0.00
7	33:13	1.00	1.018	1.00	2.07	50.00	0.031	0.748	0.04
8	32:43		1.002						
9	29:26	1.00	0.902	1.00	82.85	50.00	1.849	1.116	1.66

RIC
03/27/89 14:08:00
SAMPLE: C-14A SPIKE DUPLICATE
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 789603ABSD #1 SCANS 1740 TO 2400
CALI: 789603ABSD #3

113152.



No	Name		
1	C175	D-12 PERYLENE?	(INT. STD.)
2	C760	DI-N-OCTYL PHTHALATE	•
3	C765	BENZO (B)FLUORANTHENE	
4	C770	BENZO (K)FLUORANTHENE	
5	C775	BENZO (A) PYRENE	•
6	C780	INDENO (1,2,3-CD) PYRENE	
7	C785	DIBENZ (A,H)ANTHRACENE	
8	C790	BENZO (G,H,I)PERYLENE	

000459

Quantitation Report File: 789603ABSD

Data: 789603ABSD.TI
03/27/89 14:08:00
Sample: C-14A SPIKE DUPLICATE
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: FINN Weight: 0.000
Submitted by: FLEMING Analyst: WSS Acct. No.: 789603AB

000460

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI75 PERYLENE D12	INTERNAL STANDARD
2	C760 DI-N-OCTYLPHTHALATE	
3	C765 BENZO(B)FLUORANTHENE	
4	C770 BENZO(K)FLUORANTHENE	
5	C775 BENZO(A)PYRENE	
6	C780 INDENO(1,2,3-CD)PYRENE	
7	C785 DIBENZO(A,H)ANTHRACENE	
8	C790 BENZO(G,H,I)PERYLENE	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	264	1913	37:11	1	1.000	A BV	37707.	40.000 UG/ML	99.68
2	149	1806	35:07	1	0.944	A BB	~~487.~~	~~0.138 UG/ML~~	~~0.34~~ NO WSS
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	37:11	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	35:07	1.00	0.944	1.00	0.14	50.00	0.010	3.735	0.00
3	35:56		0.966						
4	36:00		0.968						
5	37:00		0.995						
6	41:55		1.127						
7	42:06		1.132						
8	43:18		1.164						

QC Inc

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ANALYTICAL DATA REPORT PACKAGE
FOR
GANNETT FLEMING ENGINEERS INC.

Part 7 of 7

Case Name	Field Sample ID	Laboratory Sample ID	Date of Collection
USN Earl Depot	C-14A	789651,789603,789657, 789629,789635,789643	02/16/89
	C-14B	789652,789604,789658, 789630,789636,789644	"
	C-14C	789653,789605,789659, 789631,789637,789645	"
	C-29A	789654,789606,789660, 789632,789638.789646	"
	FIELD BLANK	789655,789607,789662, 789633,789639,789647	"
	TRIP BLANK	789656,789608,789661, 789634,789640,789648	"

Laboratory Name QC Inc.

Certification No. PADER No. 09-131
NJDEP No. 77166/77848

Supervisor/Manager Signature

Printed Name Thomas J. Hines

Form QC G-1

QC Inc

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METALS
ANALYTICAL RESULTS AND QUALITY ASSURANCE DATA

SAMPLE ID: 789657
SAMPLE LABEL: C-14A

Analyte	Concentration (mg/l)	MDL (mg/l)	MATRIX SPIKE RESULTS Sample ID	Unspiked Sample Results	Conc. Added (mg/l)	Percent Recovery	MATRIX SPIKE DUPLICATE RESULTS Sample ID	MSD 1 Result	MSD 2 Result	RPD	METHOD BLANK RESULTS 1	2
Aluminum												
Antimony												
Arsenic												
Barium												
Beryllium												
Boron												
Cadmium												
Calcium												
Chromium												
Cobalt												
Copper												
Iron												
Lead	ND	0.05	789657	ND	0.02	110.0	789657	0.022	0.022	0.0	ND	ND
Magnesium												
Manganese												
Molybdenum												
Mercury												
Nickel												
Potassium												
Selenium												
Silver												
Sodium												
Thallium												
Tin												
Vanadium												
Zinc												

(1) MDL = Method Detection Limit (2) RPD = Relative Percent Difference
(3) SCH = Sample concentration to high to accurately measure spike recovery
(4) IS = Insufficient Sample

Form QC M-1 Rev. 5 8/30/88

QC Inc
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METALS
ANALYTICAL RESULTS AND QUALITY ASSURANCE DATA

SAMPLE ID: 789658
SAMPLE LABEL: C-14B

Analyte	Concentration (mg/l)	MDL (mg/l)	MATRIX SPIKE RESULTS Sample ID	Unspiked Sample Results	Conc. Added (mg/l)	Percent Recovery	MATRIX SPIKE DUPLICATE RESULTS Sample ID	MSD 1 Result	MSD 2 Result	RPD	METHOD BLANK RESULTS 1	2
Aluminum												
Antimony												
Arsenic												
Barium												
Beryllium												
Boron												
Cadmium												
Calcium												
Chromium												
Cobalt												
Copper												
Iron												
Lead	ND	0.05	789657	ND	0.02	110.0	789657	0.022	0.022	0.0	ND	ND
Magnesium												
Manganese												
Molybdenum												
Mercury												
Nickel												
Potassium												
Selenium												
Silver												
Sodium												
Thallium												
Tin												
Vanadium												
Zinc												

(1) MDL = Method Detection Limit (2) RPD = Relative Percent Difference
(3) SCH = Sample concentration to high to accurately measure spike recovery
(4) IS = Insufficient Sample

Form QC M-1 Rev. 5 8/30/88

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METALS
ANALYTICAL RESULTS AND QUALITY ASSURANCE DATA

SAMPLE ID: 789659
SAMPLE LABEL: C-14C

Analyte	Concentration (mg/l)	MDL (mg/l)	MATRIX SPIKE RESULTS Sample ID	Unspiked Sample Results	Conc. Added (mg/l)	Percent Recovery	MATRIX SPIKE DUPLICATE RESULTS Sample ID	MSD 1 Result	MSD 2 Result	RPD	METHOD BLANK RESULTS 1	2
Aluminum												
Antimony												
Arsenic												
Barium												
Beryllium												
Boron												
Cadmium												
Calcium												
Chromium												
Cobalt												
Copper												
Iron												
Lead	ND	0.05	789657	ND	0.02	110.0	789657	0.022	0.022	0.0	ND	ND
Magnesium												
Manganese												
Molybdenum												
Mercury												
Nickel												
Potassium												
Selenium												
Silver												
Sodium												
Thallium												
Tin												
Vanadium												
Zinc												

(1) MDL = Method Detection Limit (2) RPD = Relative Percent Difference
(3) SCH = Sample concentration to high to accurately measure spike recovery
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Form QC M-1 Rev. 5 8/30/88

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METALS
ANALYTICAL RESULTS AND QUALITY ASSURANCE DATA

SAMPLE ID: 789660
SAMPLE LABEL: C-29A

Analyte	Concentration (mg/l)	MDL (mg/l)	MATRIX SPIKE RESULTS Sample ID	Unspiked Sample Results	Conc. Added (mg/l)	Percent Recovery	MATRIX SPIKE DUPLICATE RESULTS Sample ID	MSD 1 Result	MSD 2 Result	RPD	METHOD BLANK RESULTS 1	2
Aluminum												
Antimony												
Arsenic												
Barium												
Beryllium												
Boron												
Cadmium												
Calcium												
Chromium												
Cobalt												
Copper												
Iron												
Lead	ND	0.05	789657	ND	0.02	110.0	789657	0.022	0.022	0.0	ND	ND
Magnesium												
Manganese												
Molybdenum												
Mercury												
Nickel												
Potassium												
Selenium												
Silver												
Sodium												
Thallium												
Tin												
Vanadium												
Zinc												

(1) MDL = Method Detection Limit (2) RPD = Relative Percent Difference
(3) SCH = Sample concentration to high to accurately measure spike recovery
(4) IS = Insufficient Sample

Form QC M-1 Rev. 5 8/30/88

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METALS
ANALYTICAL RESULTS AND QUALITY ASSURANCE DATA

SAMPLE ID: 789661
SAMPLE LABEL: TB

Analyte	Concentration (mg/l)	MDL (mg/l)	MATRIX SPIKE RESULTS Sample ID	Unspiked Sample Results	Conc. Added (mg/l)	Percent Recovery	MATRIX SPIKE DUPLICATE RESULTS Sample ID	MSD 1 Result	MSD 2 Result	RPD	METHOD BLANK RESULTS 1	2
Aluminum												
Antimony												
Arsenic												
Barium												
Beryllium												
Boron												
Cadmium												
Calcium												
Chromium												
Cobalt												
Copper												
Iron												
Lead	ND	0.05	789657	ND	0.02	110.0	789657	0.022	0.022	0.0	ND	ND
Magnesium												
Manganese												
Molybdenum												
Mercury												
Nickel												
Potassium												
Selenium												
Silver												
Sodium												
Thallium												
Tin												
Vanadium												
Zinc												

(1) MDL = Method Detection Limit (2) RPD = Relative Percent Difference
(3) SCH = Sample concentration to high to accurately measure spike recovery
(4) IS = Insufficient Sample

Form QC M-1 Rev. 5 8/30/88

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METALS
ANALYTICAL RESULTS AND QUALITY ASSURANCE DATA

SAMPLE ID: 789662
SAMPLE LABEL: FB

Analyte	Concentration (mg/l)	MDL (mg/l)	MATRIX SPIKE RESULTS Sample ID	Unspiked Sample Results	Conc. Added (mg/l)	Percent Recovery	MATRIX SPIKE DUPLICATE RESULTS Sample ID	MSD 1 Result	MSD 2 Result	RPD	METHOD BLANK RESULTS 1	2
Aluminum												
Antimony												
Arsenic												
Barium												
Beryllium												
Boron												
Cadmium												
Calcium												
Chromium												
Cobalt												
Copper												
Iron												
Lead	ND	0.05	789657	ND	0.02	110.0	789657	0.022	0.022	0.0	ND	ND
Magnesium												
Manganese												
Molybdenum												
Mercury												
Nickel												
Potassium												
Selenium												
Silver												
Sodium												
Thallium												
Tin												
Vanadium												
Zinc												

(1) MDL = Method Detection Limit (2) RPD = Relative Percent Difference
(3) SCH = Sample concentration to high to accurately measure spike recovery
(4) IS = Insufficient Sample

Form QC M-1 Rev. 5 8/30/88

Tier I

Element File: PB2.GEL
Date: 03/07/89
Data Storage File:
Technique: HGA
Remark 1: 100 ppm Pd, 0.5% Hydroxylamine, 2% HCl
Remark 2: no platform

Element: Pb
Time: 11:43
ID/Weight File: SAMPLEID.A60
Calibration Type: Nonlinear

Sample ID: Blank Sequence No.: 00039 Sampler Position: 36

uL dispensed: 10 from 40, 20 from 36
Replicate 1
Peak Area (A-s): 0.008 Peak Height (A): 0.028
Background Pk Area (A-s): 0.009 Background Pk Height (A): 0.007
Blank Corrected Pk Height (A): 0.028

uL dispensed: 10 from 40, 20 from 36
Replicate 2
Peak Area (A-s): 0.006 Peak Height (A): 0.026
Background Pk Area (A-s): 0.008 Background Pk Height (A): 0.005
Blank Corrected Pk Height (A): 0.026

Mean Pk Height (A): 0.027 SD: 0.0017 RSD(%): 6.26

Auto-zero performed.

Sample ID: Standard 1 Sequence No.: 00040 Sampler Position: 0

uL dispensed: 15 from 36, 10 from 40, 5 from 0
Replicate 1
Peak Area (A-s): 0.032 Peak Height (A): 0.109
Background Pk Area (A-s): 0.016 Background Pk Height (A): 0.024
Blank Corrected Pk Height (A): 0.082

uL dispensed: 15 from 36, 10 from 40, 5 from 0
Replicate 2
Peak Area (A-s): 0.034 Peak Height (A): 0.103
Background Pk Area (A-s): 0.014 Background Pk Height (A): 0.022
Blank Corrected Pk Height (A): 0.076

Mean Pk Height (A): 0.079 SD: 0.0045 RSD(%): 5.76

Standard number 1 applied. [10.00]
Correlation coefficient: 1.00000 Slope: 0.008

Sample ID: Standard 2 Sequence No.: 00041 Sampler Position: 0

uL dispensed: 10 from 36, 10 from 40, 10 from 0
Replicate 1
Peak Area (A-s): 0.063 Peak Height (A): 0.201
Background Pk Area (A-s): 0.019 Background Pk Height (A): 0.042
Blank Corrected Pk Height (A): 0.174
Concentration (ug/L): 22.06

uL dispensed: 10 from 36, 10 from 40, 10 from 0

Replicate 2
Peak Area (A-s): 0.066 Peak Height (A): 0.213
Background Pk Area (A-s): 0.020 Background Pk Height (A): 0.043
Blank Corrected Pk Height (A): 0.185
Concentration (ug/L): 23.52

Mean Conc (ug/L): 22.79 SD: 1.035 RSD(%): 4.54

Standard number 2 applied. [20.00]
Correlation coefficient: 1.00000 Slope: 0.007

~~~~~~

Sample ID: Standard 3 Sequence No.: 00042 Sampler Position: 0

uL dispensed: 5 from 36, 10 from 40, 15 from 0
Replicate 1
Peak Area (A-s): 0.087 Peak Height (A): 0.301
Background Pk Area (A-s): 0.024 Background Pk Height (A): 0.064
Blank Corrected Pk Height (A): 0.274
Concentration (ug/L): 27.36

uL dispensed: 5 from 36, 10 from 40, 15 from 0
Replicate 2
Peak Area (A-s): 0.086 Peak Height (A): 0.280
Background Pk Area (A-s): 0.025 Background Pk Height (A): 0.059
Blank Corrected Pk Height (A): 0.253
Concentration (ug/L): 25.82

Mean Conc (ug/L): 26.60 SD: 1.088 RSD(%): 4.09

S-shaped calibration curve detected. 2-coef. equation used.
Standard number 3 applied. [30.00]
Correlation coefficient: 0.99649 Slope: 0.008

~~~~~~

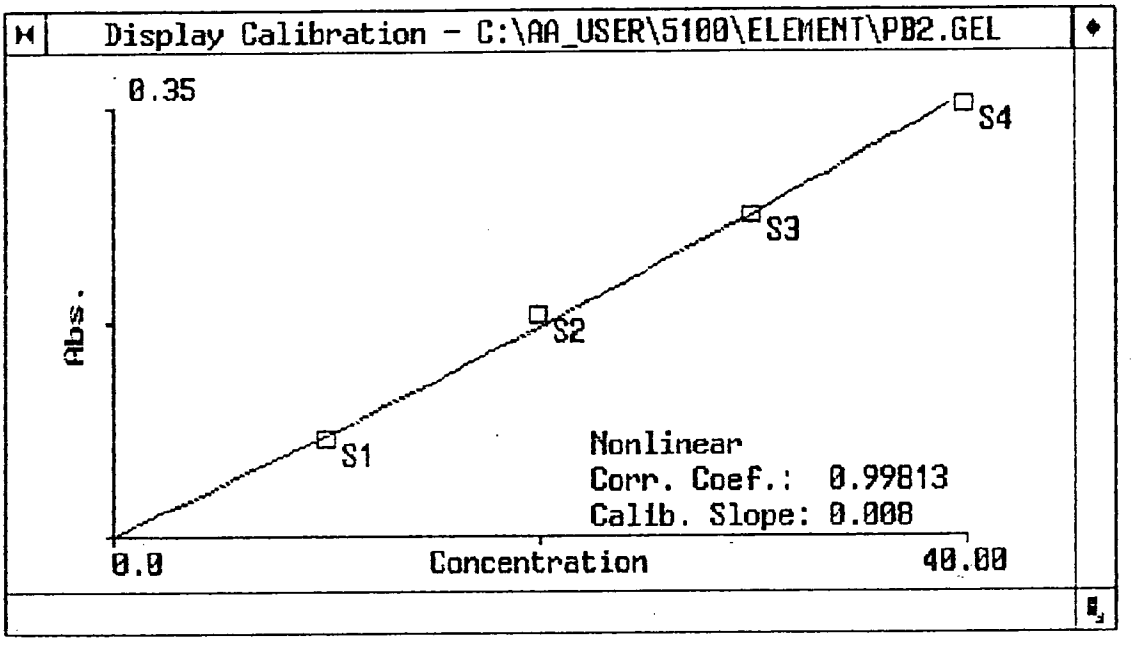
Sample ID: Standard 4 Sequence No.: 00043 Sampler Position: 0

uL dispensed: 10 from 40, 20 from 0
Replicate 1
Peak Area (A-s): 0.110 Peak Height (A): 0.381
Background Pk Area (A-s): 0.032 Background Pk Height (A): 0.084
Blank Corrected Pk Height (A): 0.353
Concentration (ug/L): 37.57

uL dispensed: 10 from 40, 20 from 0
Replicate 2
Peak Area (A-s): 0.110 Peak Height (A): 0.383
Background Pk Area (A-s): 0.032 Background Pk Height (A): 0.083
Blank Corrected Pk Height (A): 0.356
Concentration (ug/L): 37.76

Mean Conc (ug/L): 37.67 SD: 0.136 RSD(%): 0.36

S-shaped calibration curve detected. 2-coef. equation used.
Standard number 4 applied. [40.00]
Correlation coefficient: 0.99813 Slope: 0.008


Display Calibration - C:\AA_USER\5100\ELEMENT\PB2.GEL
0.35
Abs.
S1
S2
S3
S4
Nonlinear
Corr. Coef.: 0.99813
Calib. Slope: 0.008
0.0
Concentration
40.00

Sample ID: WS 378#5 Sequence No.: 00044 Sampler Position: 1

uL dispensed: 10 from 40, 20 from 1
Replicate 1
Peak Area (A-s): 0.111 Peak Height (A): 0.352
Background Pk Area (A-s): 0.030 Background Pk Height (A): 0.077
Blank Corrected Pk Height (A): 0.325
Concentration (ug/L): 36.37

uL dispensed: 10 from 40, 20 from 1
Replicate 2
Peak Area (A-s): 0.113 Peak Height (A): 0.344
Background Pk Area (A-s): 0.030 Background Pk Height (A): 0.075
Blank Corrected Pk Height (A): 0.317
Concentration (ug/L): 35.55

Mean Conc (ug/L): 35.96 SD: 0.577 RSD(%): 1.61

Sample ID: 4ug/l Sequence No.: 00045 Sampler Position: 3

uL dispensed: 10 from 40, 2 from 0, 18 from 3
Replicate 1
Peak Area (A-s): 0.013 Peak Height (A): 0.052
Background Pk Area (A-s): 0.008 Background Pk Height (A): 0.011
Blank Corrected Pk Height (A): 0.025
Concentration (ug/L): 3.09

uL dispensed: 10 from 40, 2 from 0, 18 from 3
Replicate 2
Peak Area (A-s): 0.013 Peak Height (A): 0.050
Background Pk Area (A-s): 0.009 Background Pk Height (A): 0.012
Blank Corrected Pk Height (A): 0.023
Concentration (ug/L): 2.87

uL dispensed: 10 from 40, 2 from 0, 18 from 3

Sample ID: 4ug/l Sequence No.: 00046 Sampler Position: 3

uL dispensed: 10 from 40, 2 from 0, 18 from 36, 2 from 3
Replicate 1
Peak Area (A-s): 0.016 Peak Height (A): 0.062
Background Pk Area (A-s): 0.008 Background Pk Height (A): 0.013
Blank Corrected Pk Height (A): 0.035
Concentration (ug/L): 4.27

uL dispensed: 10 from 40, 2 from 0, 18 from 36, 2 from 3
Replicate 2
Peak Area (A-s): 0.014 Peak Height (A): 0.069
Background Pk Area (A-s): 0.011 Background Pk Height (A): 0.016
Blank Corrected Pk Height (A): 0.041
Concentration (ug/L): 5.08

uL dispensed: 10 from 40, 2 from 0, 18 from 36, 2 from 3
Replicate 3
Peak Area (A-s): 0.016 Peak Height (A): 0.065
Background Pk Area (A-s): 0.010 Background Pk Height (A): 0.013

Blank Corrected Pk Height (A): 0.037
Concentration (ug/L): 4.60

uL dispensed: 10 from 40, 2 from 0, 18 from 36, 2 from 3
Replicate 4
Peak Area (A-s): 0.014 Peak Height (A): 0.061
Background Pk Area (A-s): 0.010 Background Pk Height (A): 0.014
Blank Corrected Pk Height (A): 0.034
Concentration (ug/L): 4.16

uL dispensed: 10 from 40, 2 from 0, 18 from 36, 2 from 3
Replicate 5
Peak Area (A-s): 0.014 Peak Height (A): 0.066
Background Pk Area (A-s): 0.010 Background Pk Height (A): 0.012
Blank Corrected Pk Height (A): 0.039
Concentration (ug/L): 4.77

uL dispensed: 10 from 40, 2 from 0, 18 from 36, 2 from 3
Replicate 6
Peak Area (A-s): 0.015 Peak Height (A): 0.063
Background Pk Area (A-s): 0.009 Background Pk Height (A): 0.013
Blank Corrected Pk Height (A): 0.035
Concentration (ug/L): 4.36

uL dispensed: 10 from 40, 2 from 0, 18 from 36, 2 from 3
Replicate 7
Peak Area (A-s): 0.016 Peak Height (A): 0.064
Background Pk Area (A-s): 0.009 Background Pk Height (A): 0.013
Blank Corrected Pk Height (A): 0.037
Concentration (ug/L): 4.58

uL dispensed: 10 from 40, 2 from 0, 18 from 36, 2 from 3
Replicate 8
Peak Area (A-s): 0.016 Peak Height (A): 0.064
Background Pk Area (A-s): 0.010 Background Pk Height (A): 0.013
Blank Corrected Pk Height (A): 0.037
Concentration (ug/L): 4.52

uL dispensed: 10 from 40, 2 from 0, 18 from 36, 2 from 3
Replicate 9
Peak Area (A-s): 0.016 Peak Height (A): 0.062
Background Pk Area (A-s): 0.009 Background Pk Height (A): 0.014
Blank Corrected Pk Height (A): 0.035
Concentration (ug/L): 4.30

uL dispensed: 10 from 40, 2 from 0, 18 from 36, 2 from 3
Replicate 10
Peak Area (A-s): 0.017 Peak Height (A): 0.071
Background Pk Area (A-s): 0.008 Background Pk Height (A): 0.013
Blank Corrected Pk Height (A): 0.043
Concentration (ug/L): 5.34

Mean Conc (ug/L): 4.60 SD: 0.375 RSD(%): 8.15

~~~~~~

Sample ID: BLANK Sequence No.: 00047 Sampler Position: 36

uL dispensed: 10 from 40, 2 from 0, 18 from 36
Replicate 1
~~~~~~

Peak Area (A-s): 0.016 Peak Height (A): 0.064
Background Pk Area (A-s): 0.009 Background Pk Height (A): 0.013
Blank Corrected Pk Height (A): 0.037
Concentration (ug/L): 4.57

uL dispensed: 10 from 40. 2 from 0. 18 from 36
Replicate 2
Peak Area (A-s): 0.018 Peak Height (A): 0.063
Background Pk Area (A-s): 0.008 Background Pk Height (A): 0.012
Blank Corrected Pk Height (A): 0.036
Concentration (ug/L): 4.43

uL dispensed: 10 from 40. 2 from 0. 18 from 36
Replicate 3
Peak Area (A-s): 0.017 Peak Height (A): 0.064
Background Pk Area (A-s): 0.009 Background Pk Height (A): 0.014
Blank Corrected Pk Height (A): 0.037
Concentration (ug/L): 4.57

uL dispensed: 10 from 40. 2 from 0. 18 from 36
Replicate 4
Peak Area (A-s): 0.016 Peak Height (A): 0.063
Background Pk Area (A-s): 0.009 Background Pk Height (A): 0.013
Blank Corrected Pk Height (A): 0.036
Concentration (ug/L): 4.44

uL dispensed: 10 from 40. 2 from 0. 18 from 36
Replicate 5
Peak Area (A-s): 0.017 Peak Height (A): 0.071
Background Pk Area (A-s): 0.009 Background Pk Height (A): 0.013
Blank Corrected Pk Height (A): 0.044
Concentration (ug/L): 5.35

uL dispensed: 10 from 40. 2 from 0. 18 from 36
Replicate 6
Peak Area (A-s): 0.015 Peak Height (A): 0.062
Background Pk Area (A-s): 0.008 Background Pk Height (A): 0.014
Blank Corrected Pk Height (A): 0.035
Concentration (ug/L): 4.34

uL dispensed: 10 from 40. 2 from 0. 18 from 36
Replicate 7
Peak Area (A-s): 0.019 Peak Height (A): 0.069
Background Pk Area (A-s): 0.007 Background Pk Height (A): 0.013
Blank Corrected Pk Height (A): 0.042
Concentration (ug/L): 5.14

uL dispensed: 10 from 40. 2 from 0. 18 from 36
Replicate 8
Peak Area (A-s): 0.015 Peak Height (A): 0.067
Background Pk Area (A-s): 0.008 Background Pk Height (A): 0.013
Blank Corrected Pk Height (A): 0.040
Concentration (ug/L): 4.89

uL dispensed: 10 from 40. 2 from 0. 18 from 36
Replicate 9
Peak Area (A-s): 0.017 Peak Height (A): 0.061
Background Pk Area (A-s): 0.007 Background Pk Height (A): 0.013
Blank Corrected Pk Height (A): 0.034

Concentration (ug/L): 4.16

uL dispensed: 10 from 40. 2 from 0. 18 from 36
Replicate 10
Peak Area (A-s): 0.015 Peak Height (A): 0.059
Background Pk Area (A-s): 0.007 Background Pk Height (A): 0.012
Blank Corrected Pk Height (A): 0.031
Concentration (ug/L): 3.88

Mean Conc (ug/L): 4.58 SD: 0.445 RSD(%): 9.73

Sample ID: 789657 Sequence No.: 00048 Sampler Position: 3

uL dispensed: 10 from 40. 20 from 3
Replicate 1
Peak Area (A-s): 0.007 Peak Height (A): 0.036
Background Pk Area (A-s): 0.008 Background Pk Height (A): 0.010
Blank Corrected Pk Height (A): 0.009
Concentration (ug/L): 1.07

uL dispensed: 10 from 40. 20 from 3
Replicate 2
Peak Area (A-s): 0.005 Peak Height (A): 0.036
Background Pk Area (A-s): 0.010 Background Pk Height (A): 0.009
Blank Corrected Pk Height (A): 0.009
Concentration (ug/L): 1.12

Mean Conc (ug/L): 1.10 SD: 0.035 RSD(%): 3.20

Sample ID: 789657+20 Sequence No.: 00049 Sampler Position: 4

uL dispensed: 10 from 40. 20 from 4
Replicate 1
Peak Area (A-s): 0.061 Peak Height (A): 0.219
Background Pk Area (A-s): 0.019 Background Pk Height (A): 0.044
Blank Corrected Pk Height (A): 0.192
Concentration (ug/L): 22.40

uL dispensed: 10 from 40. 20 from 4
Replicate 2
Peak Area (A-s): 0.062 Peak Height (A): 0.215
Background Pk Area (A-s): 0.019 Background Pk Height (A): 0.042
Blank Corrected Pk Height (A): 0.188
Concentration (ug/L): 22.00

Mean Conc (ug/L): 22.20 SD: 0.287 RSD(%): 1.29

Sample ID: 789657+20 Sequence No.: 00050 Sampler Position: 5

uL dispensed: 10 from 40. 20 from 5
Replicate 1
Peak Area (A-s): 0.062 Peak Height (A): 0.216
Background Pk Area (A-s): 0.019 Background Pk Height (A): 0.041
Blank Corrected Pk Height (A): 0.189
Concentration (ug/L): 22.13

uL dispensed: 10 from 40, 20 from 5
Replicate 2
Peak Area (A-s): 0.061 Peak Height (A): 0.212
Background Pk Area (A-s): 0.019 Background Pk Height (A): 0.044
Blank Corrected Pk Height (A): 0.185
Concentration (ug/L): 21.69

Mean Conc (ug/L): 21.91 SD: 0.311 RSD(%): 1.42

~~~~~~

Sample ID: 789658 Sequence No.: 00051 Sampler Position: 6

uL dispensed: 10 from 40, 20 from 6
Replicate 1
Peak Area (A-s): 0.002 Peak Height (A): 0.024
Background Pk Area (A-s): 0.014 Background Pk Height (A): 0.009
Blank Corrected Pk Height (A): -0.003
Concentration (ug/L): -0.41

uL dispensed: 10 from 40, 20 from 6
Replicate 2
Peak Area (A-s): 0.006 Peak Height (A): 0.022
Background Pk Area (A-s): 0.010 Background Pk Height (A): 0.010
Blank Corrected Pk Height (A): -0.005
Concentration (ug/L): -0.60

Mean Conc (ug/L): -0.51 SD: 0.133 RSD(%): 26.23

~~~~~~

Sample ID: 789658+20 Sequence No.: 00052 Sampler Position: 7

uL dispensed: 10 from 40, 20 from 7
Replicate 1
Peak Area (A-s): 0.061 Peak Height (A): 0.215
Background Pk Area (A-s): 0.019 Background Pk Height (A): 0.044
Blank Corrected Pk Height (A): 0.188
Concentration (ug/L): 21.99

uL dispensed: 10 from 40, 20 from 7
Replicate 2
Peak Area (A-s): 0.062 Peak Height (A): 0.212
Background Pk Area (A-s): 0.018 Background Pk Height (A): 0.042
Blank Corrected Pk Height (A): 0.185
Concentration (ug/L): 21.63

Mean Conc (ug/L): 21.81 SD: 0.249 RSD(%): 1.14

~~~~~~

Sample ID: 789658+20 Sequence No.: 00053 Sampler Position: 8

uL dispensed: 10 from 40, 20 from 8
Replicate 1
Peak Area (A-s): 0.061 Peak Height (A): 0.213
Background Pk Area (A-s): 0.018 Background Pk Height (A): 0.043
Blank Corrected Pk Height (A): 0.186
Concentration (ug/L): 21.80

uL dispensed: 10 from 40, 20 from 8
~~~~~~

Sample ID: 789658+20 Sequence No.: 00054 Sampler Position: 8

uL dispensed: 10 from 40. 20 from 8
Replicate 1
Peak Area (A-s): 0.062 Peak Height (A): 0.217
Background Pk Area (A-s): 0.019 Background Pk Height (A): 0.042
Blank Corrected Pk Height (A): 0.190
Concentration (ug/L): 22.22

uL dispensed: 10 from 40. 20 from 8
Replicate 2
Peak Area (A-s): 0.061 Peak Height (A): 0.214
Background Pk Area (A-s): 0.018 Background Pk Height (A): 0.045
Blank Corrected Pk Height (A): 0.187
Concentration (ug/L): 21.90

Mean Conc (ug/L): 22.06 SD: 0.225 RSD(%): 1.02

~~~~~~

Sample ID: 789659 Sequence No.: 00055 Sampler Position: 9

uL dispensed: 10 from 40. 20 from 9
Replicate 1
Peak Area (A-s): 0.013 Peak Height (A): 0.062
Background Pk Area (A-s): 0.014 Background Pk Height (A): 0.016
Blank Corrected Pk Height (A): 0.035
Concentration (ug/L): 4.30

uL dispensed: 10 from 40. 20 from 9
Replicate 2
Peak Area (A-s): 0.011 Peak Height (A): 0.060
Background Pk Area (A-s): 0.015 Background Pk Height (A): 0.016
Blank Corrected Pk Height (A): 0.033
Concentration (ug/L): 4.02

Mean Conc (ug/L): 4.16 SD: 0.199 RSD(%): 4.78

~~~~~~

Sample ID: 789659+20 Sequence No.: 00056 Sampler Position: 10

uL dispensed: 10 from 40. 20 from 10
Replicate 1
Peak Area (A-s): 0.066 Peak Height (A): 0.219
Background Pk Area (A-s): 0.016 Background Pk Height (A): 0.043
Blank Corrected Pk Height (A): 0.192
Concentration (ug/L): 22.37

uL dispensed: 10 from 40. 20 from 10
Replicate 2
Peak Area (A-s): 0.062 Peak Height (A): 0.219
Background Pk Area (A-s): 0.020 Background Pk Height (A): 0.044
Blank Corrected Pk Height (A): 0.191
Concentration (ug/L): 22.36

Mean Conc (ug/L): 22.37 SD: 0.008 RSD(%): 0.03

~~~~~~

Sample ID: 789659+20 Sequence No.: 00057 Sampler Position: 11
~~~~~~

uL dispensed: 10 from 40. 20 from 11
Replicate 1
Peak Area (A-s): 0.064 Peak Height (A): 0.220
Background Pk Area (A-s): 0.017 Background Pk Height (A): 0.042
Blank Corrected Pk Height (A): 0.193
Concentration (ug/L): 22.52

uL dispensed: 10 from 40. 20 from 11
Replicate 2
Peak Area (A-s): 0.062 Peak Height (A): 0.216
Background Pk Area (A-s): 0.019 Background Pk Height (A): 0.044
Blank Corrected Pk Height (A): 0.189
Concentration (ug/L): 22.12

Mean Conc (ug/L): 22.32 SD: 0.287 RSD(%): 1.29

~~~~~~

Sample ID: 789660 Sequence No.: 00058 Sampler Position: 12

uL dispensed: 10 from 40. 20 from 12
Replicate 1
Peak Area (A-s): 0.005 Peak Height (A): 0.036
Background Pk Area (A-s): 0.011 Background Pk Height (A): 0.012
Blank Corrected Pk Height (A): 0.009
Concentration (ug/L): 1.06

uL dispensed: 10 from 40. 20 from 12
Replicate 2
Peak Area (A-s): 0.004 Peak Height (A): 0.037
Background Pk Area (A-s): 0.013 Background Pk Height (A): 0.011
Blank Corrected Pk Height (A): 0.010
Concentration (ug/L): 1.25

Mean Conc (ug/L): 1.15 SD: 0.132 RSD(%): 11.43

~~~~~~

Sample ID: 789660+20 Sequence No.: 00059 Sampler Position: 13

uL dispensed: 10 from 40. 20 from 13
Replicate 1
Peak Area (A-s): 0.065 Peak Height (A): 0.213
Background Pk Area (A-s): 0.018 Background Pk Height (A): 0.042
Blank Corrected Pk Height (A): 0.185
Concentration (ug/L): 21.71

uL dispensed: 10 from 40. 20 from 13
Replicate 2
Peak Area (A-s): 0.067 Peak Height (A): 0.218
Background Pk Area (A-s): 0.018 Background Pk Height (A): 0.044
Blank Corrected Pk Height (A): 0.191
Concentration (ug/L): 22.35

Mean Conc (ug/L): 22.03 SD: 0.451 RSD(%): 2.05

~~~~~~

Sample ID: 789660+20 Sequence No.: 00060 Sampler Position: 14

uL dispensed: 10 from 40. 20 from 14
Replicate 1
~~~~~~

Peak Area (A-s): 0.064 | Peak Height (A): 0.214
Background Pk Area (A-s): 0.017 | Background Pk Height (A): 0.044
Blank Corrected Pk Height (A): 0.187
Concentration (ug/L): 21.90

uL dispensed: 10 from 40, 20 from 14
Replicate 2
Peak Area (A-s): 0.064 | Peak Height (A): 0.222
Background Pk Area (A-s): 0.018 | Background Pk Height (A): 0.045
Blank Corrected Pk Height (A): 0.194
Concentration (ug/L): 22.69

Mean Conc (ug/L): 22.29 SD: 0.559 RSD(%): 2.51

~~~~~~

Sample ID: 789661 Sequence No.: 00061 Sampler Position: 15

uL dispensed: 10 from 40, 20 from 15
Replicate 1
Peak Area (A-s): 0.001 | Peak Height (A): 0.021
Background Pk Area (A-s): 0.008 | Background Pk Height (A): 0.005
Blank Corrected Pk Height (A): -0.006
Concentration (ug/L): -0.73

uL dispensed: 10 from 40, 20 from 15
Replicate 2
Peak Area (A-s): 0.003 | Peak Height (A): 0.021
Background Pk Area (A-s): 0.008 | Background Pk Height (A): 0.005
Blank Corrected Pk Height (A): -0.006
Concentration (ug/L): -0.77

Mean Conc (ug/L): -0.75 SD: 0.027 RSD(%): 3.57

~~~~~~

Sample ID: 789661+20 Sequence No.: 00062 Sampler Position: 16

uL dispensed: 10 from 40, 20 from 16
Replicate 1
Peak Area (A-s): 0.064 | Peak Height (A): 0.216
Background Pk Area (A-s): 0.017 | Background Pk Height (A): 0.043
Blank Corrected Pk Height (A): 0.189
Concentration (ug/L): 22.09

uL dispensed: 10 from 40, 20 from 16
Replicate 2
Peak Area (A-s): 0.064 | Peak Height (A): 0.212
Background Pk Area (A-s): 0.017 | Background Pk Height (A): 0.043
Blank Corrected Pk Height (A): 0.185
Concentration (ug/L): 21.67

Mean Conc (ug/L): 21.88 SD: 0.296 RSD(%): 1.35

~~~~~~

Sample ID: 789661+20 Sequence No.: 00063 Sampler Position: 17

uL dispensed: 10 from 40, 20 from 17
Replicate 1
Peak Area (A-s): 0.069 | Peak Height (A): 0.233
Background Pk Area (A-s): 0.021 | Background Pk Height (A): 0.046
~~~~~~

Blank Corrected Pk Height (A): 0.206
Concentration (ug/L): 23.97

uL dispensed: 10 from 40. 20 from 17
Replicate 2
Peak Area (A-s): 0.068 Peak Height (A): 0.238
Background Pk Area (A-s): 0.020 Background Pk Height (A): 0.047
Blank Corrected Pk Height (A): 0.211
Concentration (ug/L): 24.47

Mean Conc (ug/L): 24.22 SD: 0.360 RSD(%): 1.49

~~~~~~

Sample ID: 789662 Sequence No.: 00064 Sampler Position: 18

uL dispensed: 10 from 40. 20 from 18
Replicate 1
Peak Area (A-s): 0.003 Peak Height (A): 0.025
Background Pk Area (A-s): 0.009 Background Pk Height (A): 0.008
Blank Corrected Pk Height (A): -0.002
Concentration (ug/L): -0.28

uL dispensed: 10 from 40. 20 from 18
Replicate 2
Peak Area (A-s): 0.003 Peak Height (A): 0.026
Background Pk Area (A-s): 0.007 Background Pk Height (A): 0.008
Blank Corrected Pk Height (A): -0.001
Concentration (ug/L): -0.11

Mean Conc (ug/L): -0.19 SD: 0.115 RSD(%): 59.33

~~~~~~

Sample ID: 789662+20 Sequence No.: 00065 Sampler Position: 19

uL dispensed: 10 from 40. 20 from 19
Replicate 1
Peak Area (A-s): 0.066 Peak Height (A): 0.212
Background Pk Area (A-s): 0.016 Background Pk Height (A): 0.041
Blank Corrected Pk Height (A): 0.185
Concentration (ug/L): 21.63

uL dispensed: 10 from 40. 20 from 19
Replicate 2
Peak Area (A-s): 0.065 Peak Height (A): 0.204
Background Pk Area (A-s): 0.020 Background Pk Height (A): 0.042
Blank Corrected Pk Height (A): 0.177
Concentration (ug/L): 20.80

Mean Conc (ug/L): 21.22 SD: 0.594 RSD(%): 2.80

~~~~~~

Sample ID: 789662+20 Sequence No.: 00066 Sampler Position: 20

uL dispensed: 10 from 40. 20 from 20
Replicate 1
Peak Area (A-s): 0.066 Peak Height (A): 0.217
Background Pk Area (A-s): 0.018 Background Pk Height (A): 0.044
Blank Corrected Pk Height (A): 0.189
Concentration (ug/L): 22.14
~~~~~~

uL dispensed: 10 from 40. 20 from 20
Replicate 2
Peak Area (A-s): 0.064
Background Pk Area (A-s): 0.017
Blank Corrected Pk Height (A): 0.189
Concentration (ug/L): 22.06

Peak Height (A): 0.216
Background Pk Height (A): 0.042

Mean Conc (ug/L): 22.10 SD: 0.054 RSD(%): 0.25

QC Inc

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GENERAL ANALYSIS DATA REPORT

SAMPLE NO.

C-14A

Lab Name: QC Inc.

Lab Code: 77166 Contract/P.O. No. Gannett Fleming

Matrix (Soil/Water): Water

Lab Sample ID: 789629

Sample Wt/Vol: _____(g/ml)_____

Date Received: 2/16/89

% Moisture: not dec.__X___ dec._____

Date Analyzed: 2/28/89

Dilution Factor:

RESULTS

Parameter	Sample Concentration Units	Method Blank Units
Total Organic Carbon	1.6 mg/l	<1 mg/l

Form QC GEN-1

QC Inc

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GENERAL ANALYSIS DATA REPORT

SAMPLE NO.

C-14B

Lab Name: QC Inc.

Lab Code: 77166 Contract/P.O. No. Gannett Fleming

Matrix (Soil/Water): Water

Lab Sample ID: 789630

Sample Wt/Vol: _____(g/ml)_____

Date Received: 2/16/89

% Moisture: not dec.__X___ dec._____

Date Analyzed: 2/28/89

Dilution Factor:

RESULTS

Parameter	Sample Concentration Units	Method Blank Units
Total Organic Carbon	3.7 mg/l	<1 mg/l

Form QC GEN-1

QC Inc

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GENERAL ANALYSIS DATA REPORT

SAMPLE NO.

C-14C

Lab Name: QC Inc.

Lab Code: 77166 Contract/P.O. No. Gannett Fleming

Matrix (Soil/Water): Water

Lab Sample ID: 789631

Sample Wt/Vol: _____(g/ml)_____

Date Received: 2/16/89

% Moisture: not dec.__X___ dec._____

Date Analyzed: 2/28/89

Dilution Factor:

RESULTS

Parameter	Sample Concentration Units	Method Blank Units
Total Organic Carbon	8.6 mg/l	<1 mg/l

Form QC GEN-1

QC Inc

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GENERAL ANALYSIS DATA REPORT

SAMPLE NO.

C-29A

Lab Name: QC Inc.

Lab Code: 77166 Contract/P.O. No. Gannett Fleming

Matrix (Soil/Water): Water

Lab Sample ID: 789632

Sample Wt/Vol: _____(g/ml)_____

Date Received: 2/16/89

% Moisture: not dec.__X___ dec._____

Date Analyzed: 2/28/89

Dilution Factor:

RESULTS

Parameter	Sample Concentration Units	Method Blank Units
Total Organic Carbon	1.7 mg/l	<1 mg/l

Form QC GEN-1

QC Inc

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GENERAL ANALYSIS DATA REPORT

SAMPLE NO.

FB

Lab Name: QC Inc.

Lab Code: 77166 Contract/P.O. No. Gannett Fleming

Matrix (Soil/Water): Water

Lab Sample ID: 789633

Sample Wt/Vol: _____(g/ml)_____

Date Received: 2/16/89

% Moisture: not dec.__X___ dec._____

Date Analyzed: 2/28/89

Dilution Factor:

RESULTS

Parameter	Sample Concentration Units	Method Blank Units
Total Organic Carbon	<1 mg/l	<1 mg/l

Form QC GEN-1

QC Inc

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GENERAL ANALYSIS DATA REPORT

SAMPLE NO.

TB

Lab Name: QC Inc.

Lab Code: 77166 Contract/P.O. No. Gannett Fleming

Matrix (Soil/Water): Water

Lab Sample ID: 789634

Sample Wt/Vol: _____(g/ml)_____

Date Received: 2/16/89

% Moisture: not dec.__X___ dec._____

Date Analyzed: 2/28/89

Dilution Factor:

RESULTS

Parameter	Sample Concentration Units	Method Blank Units
Total Organic Carbon	<1 mg/l	<1 mg/l

Form QC GEN-1

QC Inc

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GENERAL ANALYSIS DATA REPORT

SAMPLE NO.

C-14A

Lab Name: QC Inc.

Lab Code: 77166 Contract/P.O. No. Gannett Fleming

Matrix (Soil/Water): Water

Lab Sample ID: 789635

Sample Wt/Vol: _____(g/ml)_____

Date Received: 2/16/89

% Moisture: not dec.__X___ dec._____

Date Analyzed: 2/28/89

Dilution Factor:

RESULTS

Parameter	Sample Concentration Units	Method Blank Units
Petroleum Hydrocarbons	<0.5 mg/l	<0.5 mg/l

Form QC GEN-1

QC Inc

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GENERAL ANALYSIS DATA REPORT

SAMPLE NO.

C-14B

Lab Name: QC Inc.

Lab Code: 77166 Contract/P.O. No. Gannett Fleming

Matrix (Soil/Water): Water

Lab Sample ID: 789636

Sample Wt/Vol: _____(g/ml)_____

Date Received: 2/16/89

% Moisture: not dec.__X___ dec._____

Date Analyzed: 2/28/89

Dilution Factor:

RESULTS

Parameter	Sample Concentration Units	Method Blank Units
Petroleum Hydrocarbons	<0.5 mg/l	<0.5 mg/l

Form QC GEN-1

QC Inc

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GENERAL ANALYSIS DATA REPORT

SAMPLE NO.

C-14C

Lab Name: QC Inc.

Lab Code: 77166 Contract/P.O. No. Gannett Fleming

Matrix (Soil/Water): Water

Lab Sample ID: 789637

Sample Wt/Vol: _____(g/ml)_____

Date Received: 2/16/89

% Moisture: not dec.__X___ dec._____

Date Analyzed: 2/28/89

Dilution Factor:

RESULTS

Parameter	Sample Concentration Units	Method Blank Units
Petroleum Hydrocarbons	<0.5 mg/l	<0.5 mg/l

Form QC GEN-1

QC Inc

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GENERAL ANALYSIS DATA REPORT

SAMPLE NO.

C-29A

Lab Name: QC Inc.

Lab Code: 77166 Contract/P.O. No. Gannett Fleming

Matrix (Soil/Water): Water

Lab Sample ID: 789638

Sample Wt/Vol: _____(g/ml)_____

Date Received: 2/16/89

% Moisture: not dec.__X___ dec._____

Date Analyzed: 2/28/89

Dilution Factor:

RESULTS

Parameter	Sample Concentration Units	Method Blank Units
Petroleum Hydrocarbons	<0.5 mg/l	<0.5 mg/l

Form QC GEN-1

QC Inc

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GENERAL ANALYSIS DATA REPORT

SAMPLE NO.

FB

Lab Name: QC Inc.

Lab Code: 77166 Contract/P.O. No. Gannett Fleming

Matrix (Soil/Water): Water

Lab Sample ID: 789639

Sample Wt/Vol: _____(g/ml)_____

Date Received: 2/16/89

% Moisture: not dec.__X___ dec._____

Date Analyzed: 2/28/89

Dilution Factor:

RESULTS

Parameter	Sample Concentration Units	Method Blank Units
Petroleum Hydrocarbons	<0.5 mg/l	<0.5 mg/l

Form QC GEN-1

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

GENERAL ANALYSIS DATA REPORT

SAMPLE NO.

TB

Lab Name: QC Inc.

Lab Code: 77166 Contract/P.O. No. Gannett Fleming

Matrix (Soil/Water): Water

Lab Sample ID: 789640

Sample Wt/Vol: _____(g/ml)_____

Date Received: 2/16/89

% Moisture: not dec.__X___ dec._____

Date Analyzed: 2/28/89

Dilution Factor:

RESULTS

Parameter	Sample Concentration Units	Method Blank Units
Petroleum Hydrocarbons	<0.5 mg/l	<0.5 mg/l

Form QC GEN-1

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

GENERAL ANALYSIS DATA REPORT

SAMPLE NO.

C-14A

Lab Name: QC Inc.

Lab Code: 77166 Contract/P.O. No. Gannett Fleming

Matrix (Soil/Water): Water

Lab Sample ID: 789643

Sample Wt/Vol: _____(g/ml)_____

Date Received: 2/16/89

% Moisture: not dec.__X___ dec._____

Date Analyzed: 2/28/89

Dilution Factor:

RESULTS

Parameter	Sample Concentration Units	Method Blank Units
Total Dissolved Solids	63 mg/l	<2 mg/l
pH	4.70	N/A

Form QC GEN-1

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

GENERAL ANALYSIS DATA REPORT

SAMPLE NO.

C-14B

Lab Name: QC Inc.

Lab Code: 77166 Contract/P.O. No. Gannett Fleming

Matrix (Soil/Water): Water

Lab Sample ID: 789644

Sample Wt/Vol: _____(g/ml)_____

Date Received: 2/16/89

% Moisture: not dec.__X___ dec._____

Date Analyzed: 2/28/89

Dilution Factor:

RESULTS

Parameter	Sample Concentration Units	Method Blank Units
Total Dissolved Solids	82 mg/l	<2 mg/l
pH	4.53	N/A

Form QC GEN-1

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

GENERAL ANALYSIS DATA REPORT

SAMPLE NO.

C-14C

Lab Name: QC Inc.

Lab Code: 77166 Contract/P.O. No. Gannett Fleming

Matrix (Soil/Water): Water

Lab Sample ID: 789645

Sample Wt/Vol: _____(g/ml)_____

Date Received: 2/16/89

% Moisture: not dec.__X___ dec._____

Date Analyzed: 2/28/89

Dilution Factor:

RESULTS

Parameter	Sample Concentration Units	Method Blank Units
Total Dissolved Solids	110 mg/l	<2 mg/l
pH	3.80	N/A

Form QC GEN-1

000506

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

GENERAL ANALYSIS DATA REPORT

SAMPLE NO.

C-29A

Lab Name: QC Inc.

Lab Code: 77166 Contract/P.O. No. Gannett Fleming

Matrix (Soil/Water): Water

Lab Sample ID: 789646

Sample Wt/Vol: _____(g/ml)_____

Date Received: 2/16/89

% Moisture: not dec.__X___ dec._____

Date Analyzed: 2/28/89

Dilution Factor:

RESULTS

Parameter	Sample Concentration Units	Method Blank Units
Total Dissolved Solids	130 mg/l	<2 mg/l
pH	4.70	N/A

Form QC GEN-1

000507

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

GENERAL ANALYSIS DATA REPORT

SAMPLE NO.

FB

Lab Name: QC Inc.

Lab Code: 77166 Contract/P.O. No. Gannett Fleming

Matrix (Soil/Water): Water

Lab Sample ID: 789647

Sample Wt/Vol: _____(g/ml)_____

Date Received: 2/16/89

% Moisture: not dec.__X___ dec._____

Date Analyzed: 2/28/89

Dilution Factor:

RESULTS

Parameter	Sample Concentration Units	Method Blank Units
Total Dissolved Solids	16 mg/l	<2 mg/l
pH	5.55	N/A

Form QC GEN-1

000508

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

GENERAL ANALYSIS DATA REPORT

SAMPLE NO.

TB

Lab Name: QC Inc.

Lab Code: 77166 Contract/P.O. No. Gannett Fleming

Matrix (Soil/Water): Water

Lab Sample ID: 789648

Sample Wt/Vol: _____(g/ml)_____

Date Received: 2/16/89

% Moisture: not dec.__X___ dec._____

Date Analyzed: 2/28/89

Dilution Factor:

RESULTS

Parameter	Sample Concentration Units	Method Blank Units
Total Dissolved Solids	6 mg/l	<2 mg/l
pH	5.15	N/A

Form QC GEN-1

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

GENERAL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: QC Inc.

Lab Code: 77166 Contract/P.O. No.: Gannett Flemming

Matrix Spike Sample #: 789635 - PHC, 789632 - TOC, 789643 - TDS

Lab Sample ID #: 789629 thru 789634, 789636 thru 789640, 789643 thru 789648

COMPOUND	AMT ADDED (mg/l)	SAMPLE RESULT (mg/l)	CONC. MS (mg/l)	MS % REC #	QC LIMITS % REC	CONC. MSD (mg/l)	MS/MSD RPD #
Petr. Hydrocarbons	5.0	<0.5	5.3	106	80-120	5.3	0 %
Tot. Organic Carbon	10	1.7	11.5	98.0	80-120	11.4	0.9 %
Tot. Diss. Solids	103	64	175	107	80-120	178	1.7 %

COLUMN TO BE USED TO FLAG RECOVERY AND RPD VALUES

* VALUES OUTSIDE OF QC LIMITS

RPD: __0__ out of __3__ outside limits

Spike Recovery: __0__ out of __3__ outside limits

COMMENTS: _____

_____

_____

Form QC GEN-2

TPS

LABORATORY REPORT

Plant Hatboro Date 2-21-89

S.C 102.6 S.R 107.7% S.R 111.6% At 100°C

TEST No.	185-225 205.2 1	789643 2	789643 (Dup) 3	789643 (ms) 4	789643 (MSD) 5	789644 6
DISH + FAT	1.9270	1.9245	1.9300	1.9415	1.9490	1.9305
DISH	1.9165	1.9213	1.9269	1.9344	1.9417	1.9264
FAT	.0105	.0032	.0031	.0071	.0073	.0041
PIPETTES + SAMPLE						
PIPETTES						
SAMPLE	50ml.	50 ml.	50 ml.	50 ml.	50 ml.	50 ml.
% FAT	210	64	62	142	146	82

	789645 7	789646 8	789647 9	789648 10		
DISH + SOLIDS	1.9475	1.9290		1.9352		
DISH	1.9421	1.9226	1.9304	1.9349		
SOLIDS	.0054	.0064		.0003		
DISH or PIPETTE + SAMPLE						
DISH or PIPETTE	50 ml.	50 ml.		50 ml.		
SAMPLE	108	128		6		
% SOLIDS						

Operator

FORM NO. 87-10-2 LAB REPORT

Order New Pads from MEYER MOJONNIER

GANNETT FLEMING
TIER I

000511

QC Inc.

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

PETROLEUM HYDROCARBONS

DATE	I.D. #	amt.spl.	Final Vol.	Dil.	Peak Ht.	ppm FHC	Odor	Client
2-23-89	Blank	100 ml	100 ml	—	2	—	—	—
2-23-89	789635	500 ml	100 ml	X .2	1	<.5		
2-23-89	789634	500 ml	100 ml	X .2	2	<.5		
2-23-89	789637	500 ml	100 ml	X .2	0.8	<.5		
2-23-89	789638	500 ml	100 ml	X .2	0	<.5		
2-23-89	789639	500 ml	100 ml	X .2	2	<.5		
2-23-89	789640	500 ml	100 ml	X .2	0.8	<.5		
2-23-89	MS 789635	200 ml	100 ml	.2	24	5.3		
2-23-89	789635 MSD	200 ml	100 ml	.2	24	5.3		

Sx #	RESULT	MS	MSD	SPK CONC	SPK % REC	RPD
789635	<.5	5.3	5.3	5. PPM	94%	0%

Environmental Resources Management, Inc. West Chester, PA 19380 • (215) 696-9110

Project PHC CURVE

Subject

Sheet 000512

Date 2/23/89

Date

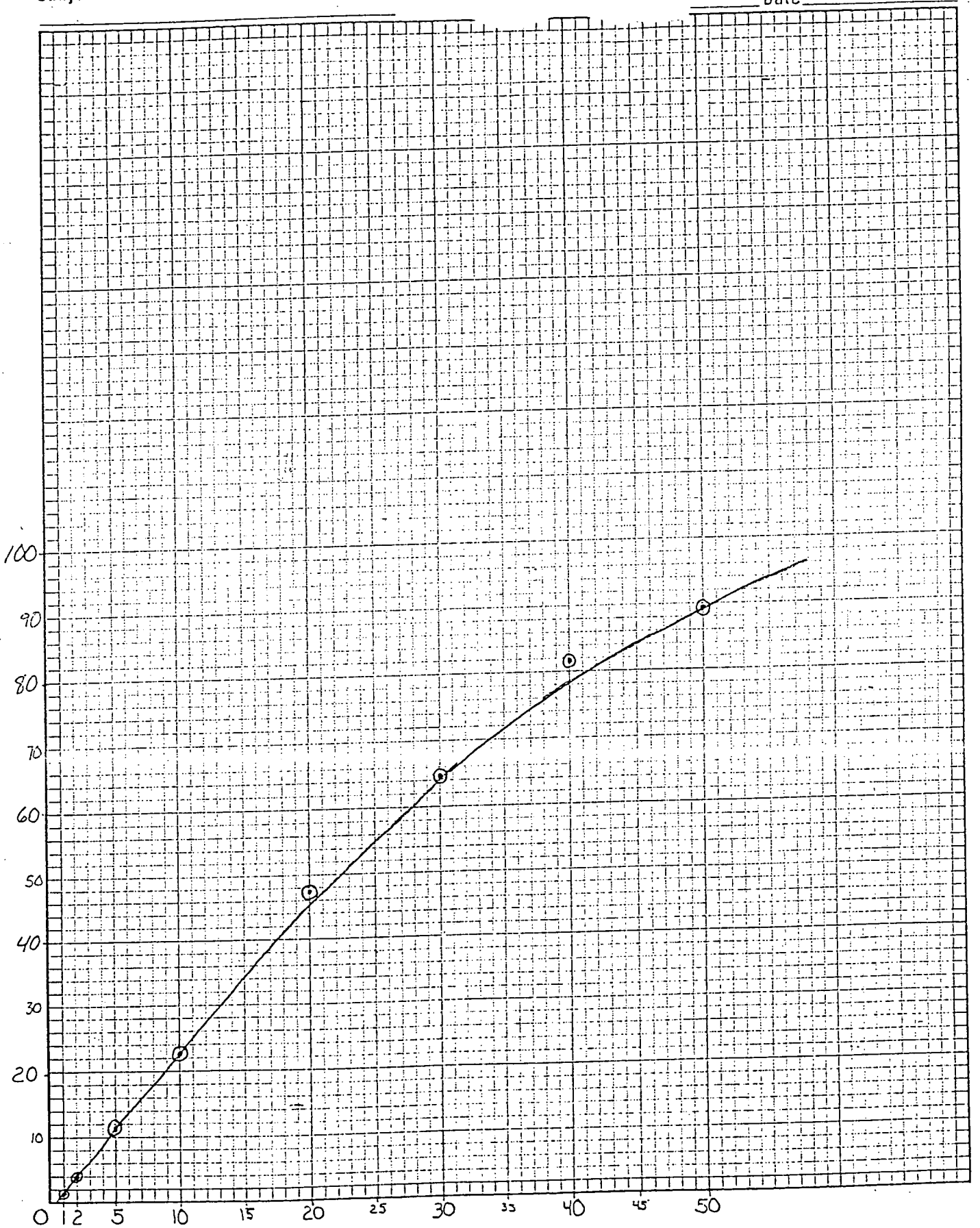


Chart No. WGPE-007-1493

WILMAD GLASS CO., INC. U.S. Route 40 and Oak Road BUENA, N. J. 08310 U.S.A. Printed in U.S.A. WP-5/87-150

000513

CONCENTRATION

THICKNESS

PHASE

REMARKS

SCAN MODE: ACCY. ☐ SURVEY ☐ HI ENERGY ☐ CAL. ☐ RESOLUTION ☐

OPERATOR dcn DATE 2-23-89

SPECTRUM NO.

SAMPLE

ORIGIN

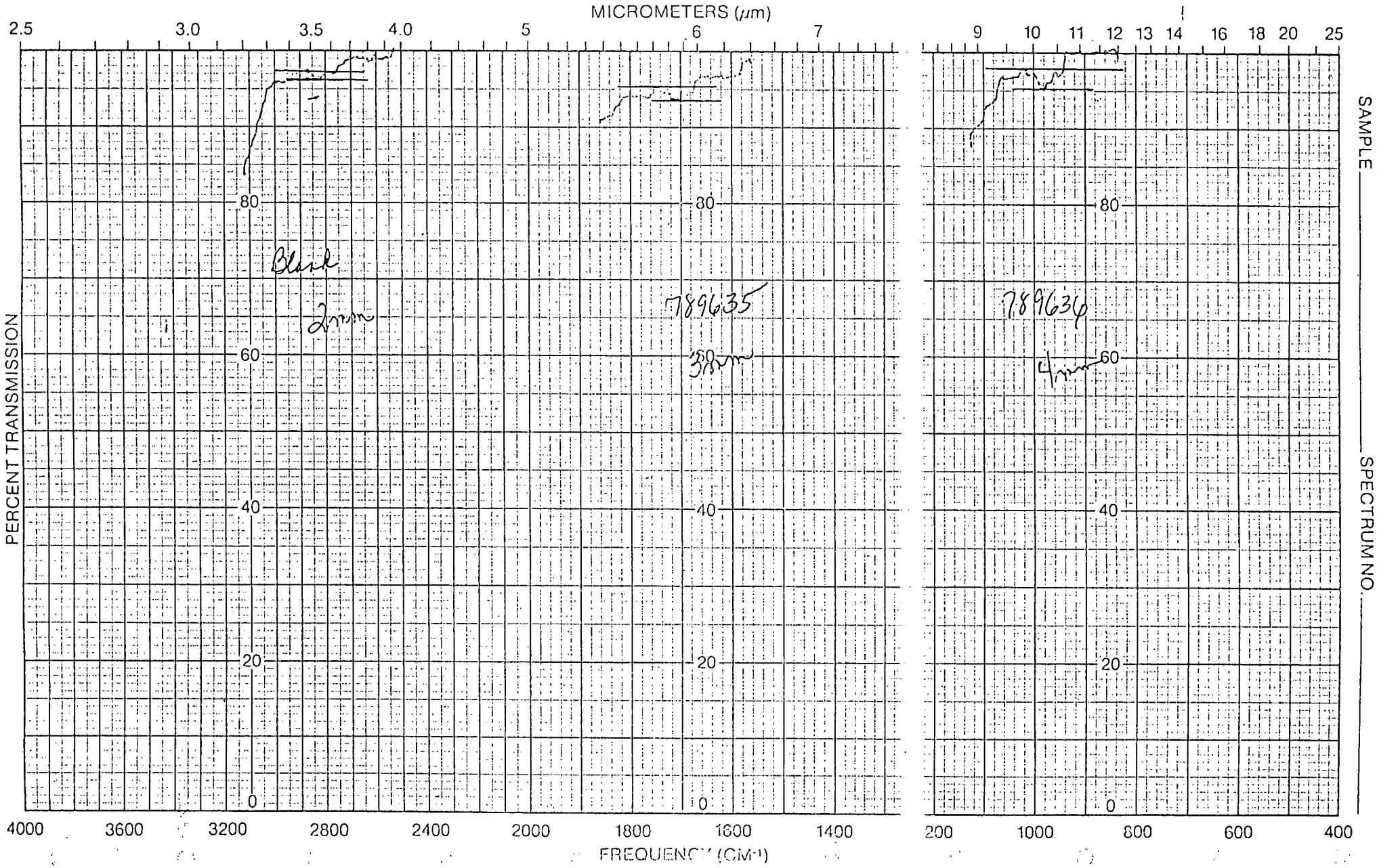


Chart No. WGPE-007-1493

CONCENTRATION
THICKNESS
PHASE
REMARKS

SCAN MODE: ACCY. ☐ SURVEY ☐ HI ENERGY ☐ CAL. ☐ RESOLUTION ☐

OPERATOR dcm DATE 2-23-89

PECTRUM NO.
AMPLE
RIGIN

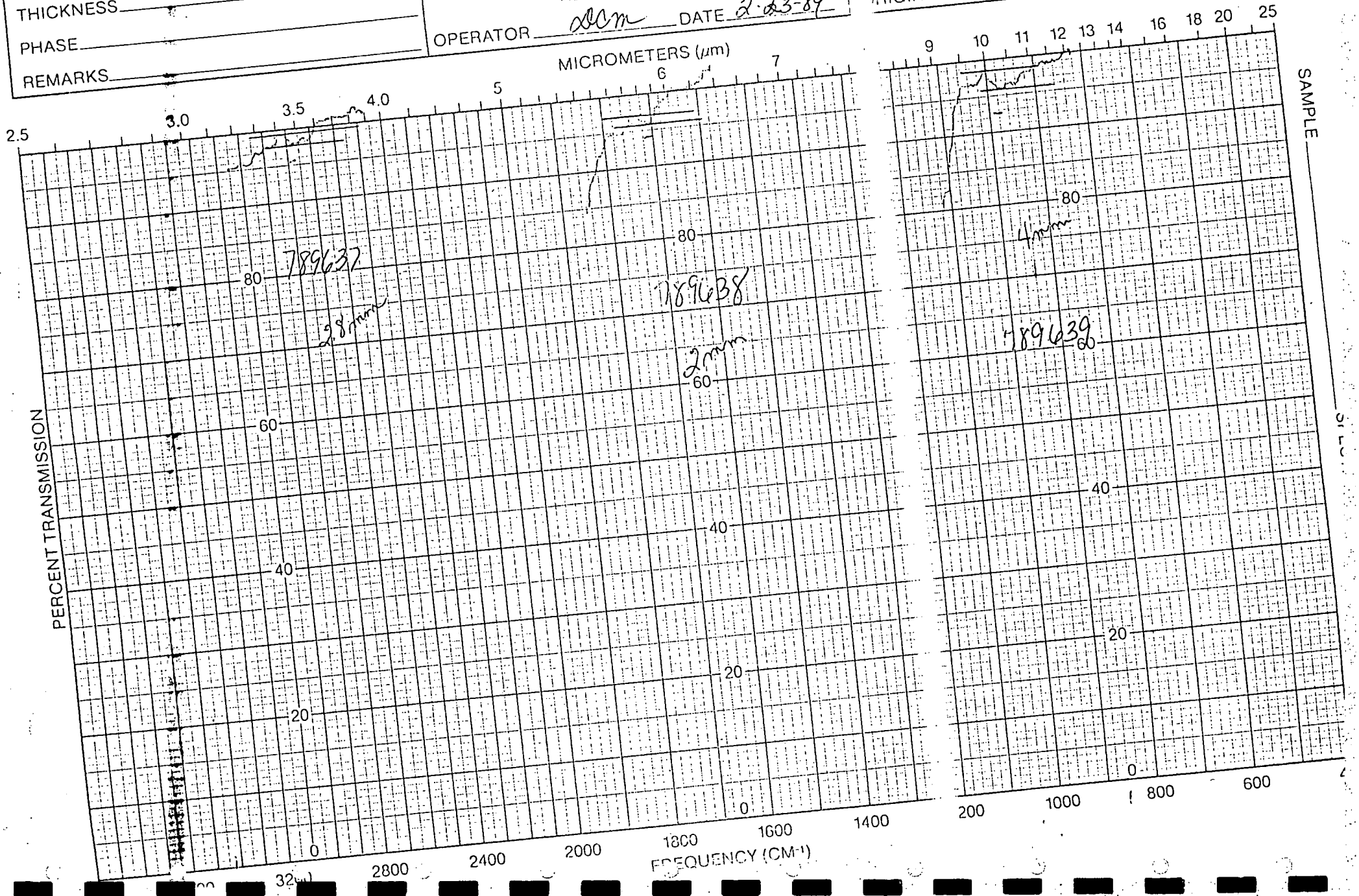


Chart No. WGPE-007-1493

WILMAD GLASS CO., INC. U.S. Route 40 and Oak Road BUENA, N. J. 08310 U.S.A. Printed in U.S.A. WP-5/87-150

0000315

CONCENTRATION _____

THICKNESS _____

PHASE _____

REMARKS _____

SCAN MODE: ACCY. ☐ SURVEY ☐ HI ENERGY ☐ CAL. ☐ RESOLUTION ☐

OPERATOR Don DATE 2-23-89

SPECTRUM NO. _____

SAMPLE _____

ORIGIN _____

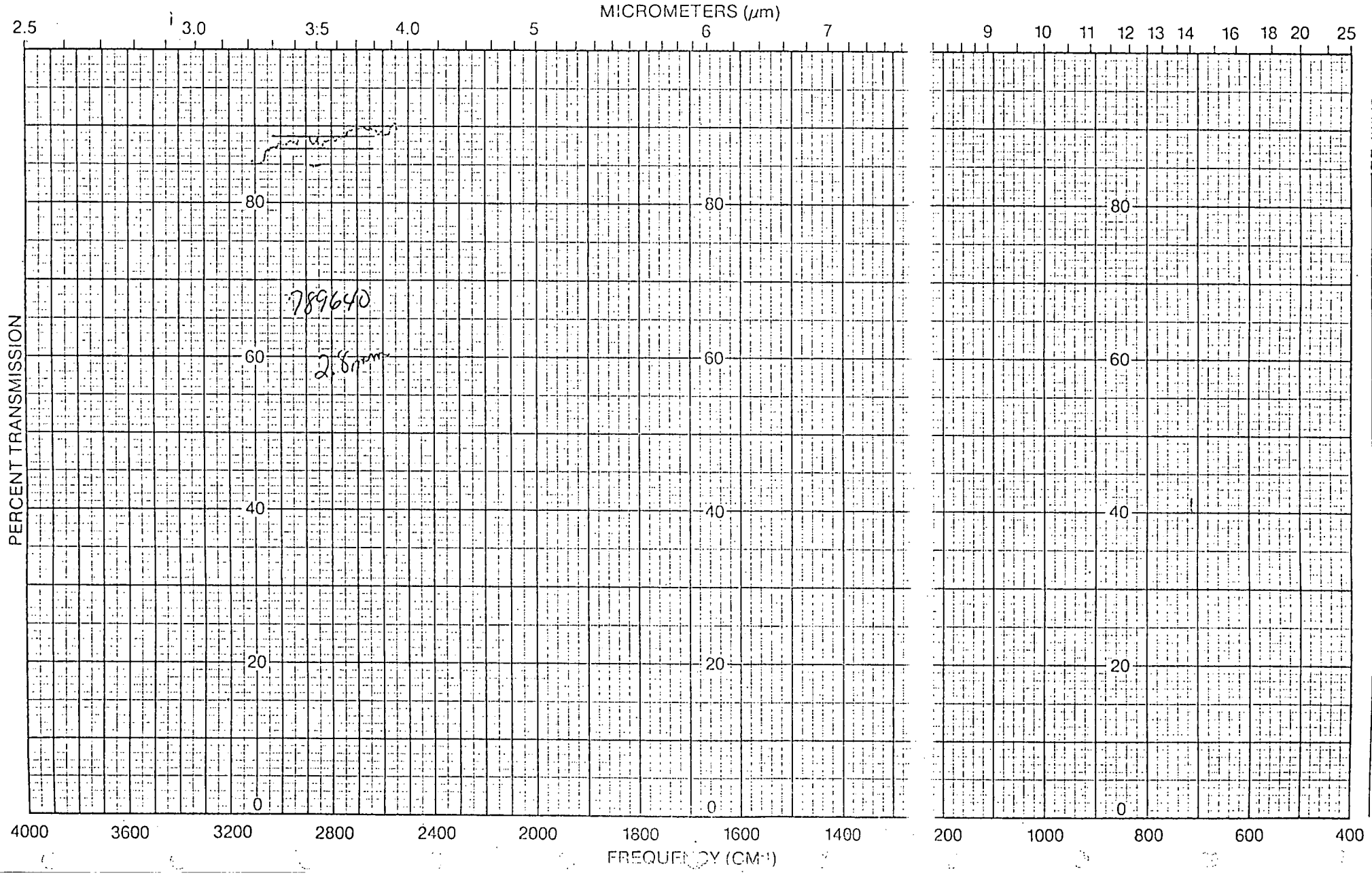


Chart No. WGPE-007-1493

WILMAD GLASS CO., INC.
U. S. Route 40 and Oak Road
BUENA, N. J. 08310 U.S.A. Printed in U.S.A.

SCAN MO

ACCY. ☐ SURVEY ☐
HI ENERGY ☐ CAL. ☐
RESOLUTION ☐

OPERATO dcm DATE 2-23-89

SPECTRUM NO.
SAMPLE
ORIGIN

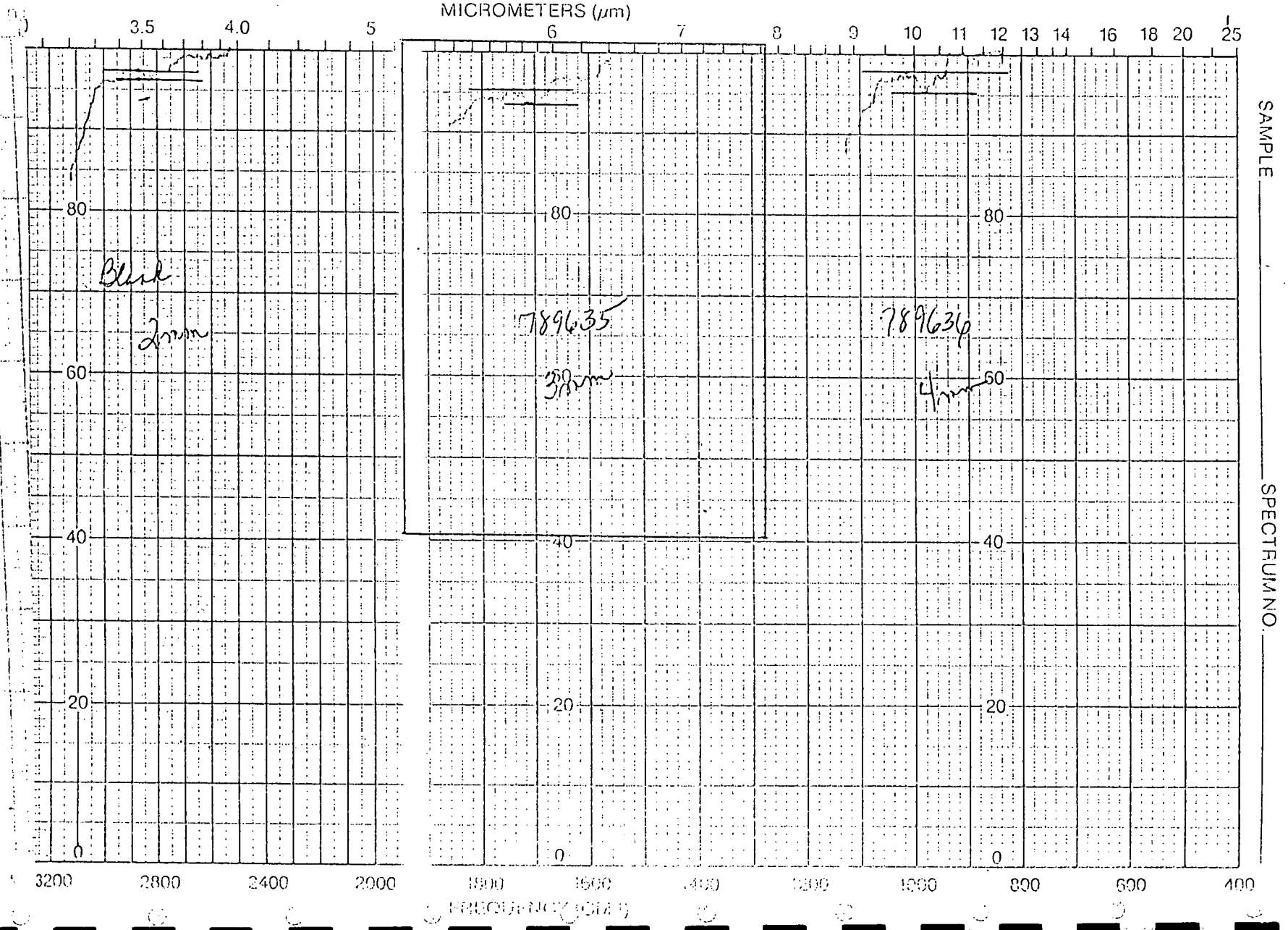


CHART NO. WGPE-0 493

U. S. Route 40 and Oak Road
BUENA, N. J. 08310 U.S.A. Printed in U.S.A.

WP-5/87-150

000517

CONCENTRATION

THICKNESS

PHASE

REMARKS

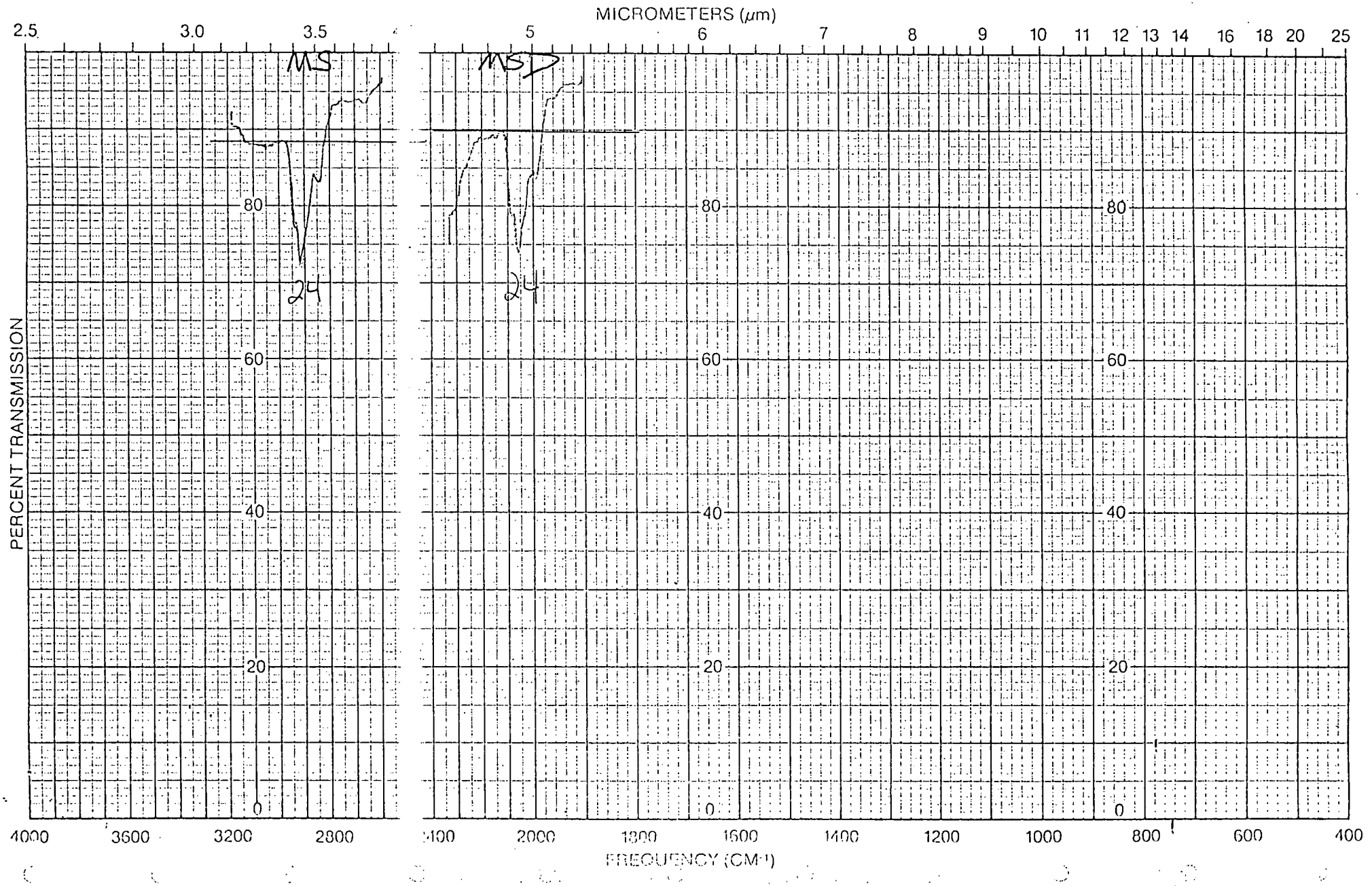
SCAN MODE ACCY. ☐ SURVEY ☐ HI ENERGY ☐ CAL. ☐ RESOLUTION ☐

OPERATOR DATE

SPECTRUM NO.

SAMPLE 789635 C-14A

ORIGIN



2-21-89

*** MODEL 700 TOC ANALYZER ***

CALIBRATION FACTORS:

IC BLANK= 3.59000 mV OC BLANK= 9.96000 mV POC BLANK= 000000 mV
STD. MASS= 9.54000 ug STD. AVG.= 182.000 mV SCALING FACTOR= 0.05241 ug/mV

VOLUMES:

SPL. VOL.= 0.31800 ml ACID VOL.= 00002 x100ul OXID. VOL.= 00008 x100ul

LOW/HIGH ALARM SETPOINTS (ppm C):

TIC LO= 2.00000 TIC HI= 000000 TOC LO= 3.28000 TOC HI= 22.0000

TIME PRESETS:

EXTD. REACTION TIME 00:00:00 EXTD. PURGE TIME 00:00:00

TEST ANALYSIS RESULTS:

SPL#	00016	00:01:22	TIC =	000000	mV	000000	ug C	000000 ppm
SPL#	00016	00:01:24	POC =	1.86988	mV	0.10299	ug C	0.32388 ppm
SPL#	00016	00:01:26	TOC =	000000	mV	000000	ug C	000000 ppm
SPL#	00001	00:06:16	TIC =	13.5074	mV	0.70802	ug C	2.22650 ppm
SPL#	00001	00:11:16	TOC =	10.7579	mV	0.56390	ug C	1.77329 ppm
SPL#	00001	00:14:21	TIC =	5.12403	mV	0.26858	ug C	0.84462 ppm
[illegible]	[illegible]	[illegible]	TOC =	6.07770	mV	0.36451	ug C	[illegible] ppm
SPL#	00001	00:22:26	TIC =	3.96238	mV	0.20769	ug C	0.65314 ppm
SPL#	00001	00:27:26	TOC =	5.20770	mV	0.27297	ug C	0.85841 ppm
SPL#	00001	00:30:31	TIC =	3.76433	mV	0.19731	ug C	0.62049 ppm
SPL#	00001	00:35:31	TOC =	4.03055	mV	0.21127	ug C	0.66437 ppm
SPL#	00001	00:38:36	TIC =	3.45327	mV	0.18101	ug C	0.56922 ppm
SPL#	00001	00:43:36	TOC =	3.48599	mV	0.18272	ug C	0.57461 ppm
SPL#	00001	00:46:41	TIC =	3.08592	mV	0.16175	ug C	0.50866 ppm
SPL#	00001	00:51:41	TOC =	2.82761	mV	0.14821	ug C	0.46608 ppm
SPL#	00001	00:54:46	TIC =	2.83176	mV	0.14843	ug C	0.46677 ppm
SPL#	00001	00:59:46	TOC =	2.34155	mV	0.12273	ug C	0.38596 ppm
SPL#	00001	01:02:51	TIC =	2.57773	mV	0.13511	ug C	0.42490 ppm
SPL#	00001	01:07:51	TOC =	2.39870	mV	0.12573	ug C	0.39539 ppm
SPL#	00001	01:10:56	TIC =	2.29564	mV	0.12033	ug C	0.37840 ppm
SPL#	00001	01:15:56	TOC =	1.14276	mV	0.05990	ug C	0.18836 ppm

PL# 00001	01:24:01	TOC =	0.57294 mV	0.03003 ug C	0.09444 ppm

000519

STD

PL# 00002	02:10:04	TIC =	12.3257 mV	0.64608 ug C	2.03170 ppm
PL# 00002	02:15:04	TOC =	173.748 mV	9.10745 ug C	28.6398 ppm
PL# 00002	02:18:09	TIC =	0.15717 mV	0.00823 ug C	0.02590 ppm
PL# 00002	02:23:09	TOC =	175.121 mV	9.17944 ug C	28.8662 ppm
PL# 00002	02:26:14	TIC =	0.24141 mV	0.01265 ug C	0.03979 ppm
PL# 00002	02:31:14	TOC =	175.083 mV	9.17744 ug C	28.8599 ppm
PL# 00002	02:34:19	TIC =	0.38182 mV	0.02001 ug C	0.06293 ppm
PL# 00002	02:39:19	TOC =	175.389 mV	9.19346 ug C	28.9102 ppm
PL# 00002	02:42:24	TIC =	0.43800 mV	0.02295 ug C	0.07219 ppm
PL# 00002	02:47:24	TOC =	176.383 mV	9.24556 ug C	29.0741 ppm

STD

PL# 00003	03:13:52	TIC =	2.88822 mV	0.15731 ug C	0.49471 ppm
PL# 00003	03:18:52	TOC =	175.656 mV	9.56785 ug C	30.0876 ppm
PL# 00003	03:21:57	TIC =	1.42222 mV	0.07746 ug C	0.24360 ppm
PL# 00003	03:26:57	TOC =	174.625 mV	9.51168 ug C	29.9110 ppm

30:100 Alpha Trol

PL# 00004	04:16:00	TIC =	10.4866 mV	0.57119 ug C	1.79621 ppm
PL# 00004	04:21:00	TOC =	238.857 mV	13.0103 ug C	40.9130 ppm
PL# 00004	04:24:05	TIC =	2.66239 mV	0.14501 ug C	0.45603 ppm
PL# 00004	04:29:05	TOC =	238.235 mV	12.9764 ug C	40.8064 ppm
PL# 00004	04:32:10	TIC =	2.94470 mV	0.16039 ug C	0.50438 ppm
PL# 00004	[illegible]	TOC =	[illegible]	[illegible]	[illegible] ppm

5:100 Alpha Trol

PL# 00005	05:01:09	TIC =	3.08592 mV	0.16808 ug C	0.52857 ppm
PL# 00005	05:06:09	TOC =	55.1990 mV	3.00664 ug C	9.45485 ppm
PL# 00005	05:09:14	TIC =	0.24141 mV	0.01314 ug C	0.04135 ppm
PL# 00005	05:14:14	TOC =	40.4708 mV	2.20441 ug C	6.93211 ppm
PL# 00005	05:17:19	TIC =	0.10103 mV	0.00550 ug C	0.01730 ppm
PL# 00005	05:22:19	TOC =	40.4708 mV	2.20441 ug C	6.93211 ppm

789629

SPL#	00006	05:28:34	TIC =	49.0928 mV	2.67405 ug C	8.40895 ppm
SPL#	00006	05:33:34	TOC =	14.5221 mV	0.79100 ug C	2.48744 ppm
SPL#	00006	05:36:39	TIC =	52.1310 mV	2.83953 ug C	8.92934 ppm
SPL#	00006	05:41:39	TOC =	9.16166 mV	0.49902 ug C	1.56927 ppm
SPL#	00006	05:44:44	TIC =	52.8776 mV	2.88020 ug C	9.05722 ppm
SPL#	00006	05:49:44	TOC =	8.90094 mV	0.48482 ug C	1.52461 ppm

789630

SPL#	00007	05:53:57	TIC =	86.1261 mV	4.69122 ug C	14.7523 ppm
SPL#	00007	05:58:57	TOC =	22.0463 mV	1.20085 ug C	3.77624 ppm
SPL#	00007	06:02:02	TIC =	86.8858 mV	4.73259 ug C	14.8824 ppm
SPL#	00007	06:07:02	TOC =	22.7305 mV	1.23811 ug C	3.89343 ppm
SPL#	00007	06:10:07	TIC =	87.7126 mV	4.77763 ug C	15.0240 ppm
SPL#	00007	06:15:07	TOC =	20.5919 mV	1.12162 ug C	3.52711 ppm

789631

SPL#	00008	06:20:37	TIC =	82.3426 mV	4.48513 ug C	14.1042 ppm
SPL#	00008	06:25:37	TOC =	47.0994 mV	2.56546 ug C	8.06749 ppm
SPL#	00008	06:28:42	TIC =	81.5233 mV	4.44051 ug C	13.9639 ppm
SPL#	00008	06:33:42	TOC =	50.2247 mV	2.73570 ug C	8.60282 ppm
SPL#	00008	06:36:47	TIC =	82.0148 mV	4.46728 ug C	14.0480 ppm
SPL#	00008	06:41:47	TOC =	50.2560 mV	2.73740 ug C	8.60819 ppm

109632

SPL#	00009	06:46:10	TIC =	52.0688 mV	2.83614 ug C	8.91869 ppm
SPL#	00009	06:51:10	TOC =	12.5052 mV	0.68114 ug C	2.14197 ppm
SPL#	00009	06:54:15	TIC =	50.1759 mV	2.73304 ug C	8.59447 ppm
SPL#	00009	06:59:15	TOC =	10.0317 mV	0.54642 ug C	1.71830 ppm
SPL#	00009	07:02:20	TIC =	49.7734 mV	2.71111 ug C	8.52552 ppm
SPL#	00009	07:07:20	TOC =	9.39353 mV	0.51165 ug C	1.60899 ppm

789632 spk

SPL# 00010	08:06:16	TIC =	40.5059 mV	2.20632 ug C	6.93810 ppm
SPL# 00010	08:11:16	TOC =	68.1843 mV	3.60500 ug C	11.3365 ppm
SPL# 00010	08:14:21	TIC =	33.4346 mV	1.82115 ug C	5.72690 ppm
SPL# 00010	08:19:21	TOC =	67.3786 mV	3.67006 ug C	11.5411 ppm
SPL# 00010	08:22:26	TIC =	32.7147 mV	1.78194 ug C	5.60359 ppm
SPL# 00010	08:27:26	TOC =	67.4433 mV	3.67358 ug C	11.5521 ppm

789632 dupspk

SPL# 00011	08:37:52	TIC =	30.6208 mV	1.66789 ug C	5.24493 ppm
SPL# 00011	08:42:52	TOC =	67.7018 mV	3.68766 ug C	11.5964 ppm
SPL# 00011	08:45:57	TIC =	30.2925 mV	1.65001 ug C	5.18870 ppm
SPL# 00011	08:50:57	TOC =	66.3456 mV	3.61379 ug C	11.3641 ppm
SPL# 00011	08:54:02	TIC =	29.5472 mV	1.60941 ug C	5.06103 ppm
SPL# 00011	08:59:02	TOC =	65.9264 mV	3.59096 ug C	11.2923 ppm

DI H_2O

SPL# 00012	09:12:26	TIC =	4.81209 mV	0.26211 ug C	0.82424 ppm
SPL# 00012	09:17:26	TOC =	5.49524 mV	0.29932 ug C	0.94126 ppm
SPL# 00012	09:20:31	TIC =	2.52130 mV	0.13733 ug C	0.43186 ppm
SPL# 00012	09:25:31	TOC =	-0.67829 mV	-0.03694 ug C	-0.11618 ppm

Known 30 ppm

SPL# 00013	09:30:04	TIC =	0.35374 mV	0.01926 ug C	0.06059 ppm
SPL# 00013	09:35:04	TOC =	152.792 mV	8.32243 ug C	26.1712 ppm
SPL# 00013	09:43:09	TOC =	171.731 mV	9.35402 ug C	29.4152 ppm
SPL# 00013	10:12:02	TIC =	3.87749 mV	0.21120 ug C	0.66416 ppm
SPL# 00013	10:17:02	TOC =	172.567 mV	9.39959 ug C	29.5585 ppm
~~SPL# 00014~~	~~10:48:41~~	~~TIC =~~	~~4.05386 mV~~	~~0.26983 ug C~~	~~0.84853 ppm~~
~~SPL# 00014~~	~~10:53:41~~	~~TOC =~~	~~14.6099 mV~~	~~0.79579 ug C~~	~~2.50249 ppm~~

789633

SPL# 00014	10:58:13	TIC =	0.66279 mV	0.03610 ug C	0.11352 ppm
SPL# 00014	11:03:13	TOC =	0.68685 mV	0.03741 ug C	0.11764 ppm
SPL# 00014	11:06:18	TIC =	0.71900 mV	0.03916 ug C	0.12315 ppm
SPL# 00014	11:11:18	TOC =	-0.59308 mV	-0.03230 ug C	-0.10158 ppm

Total Organic Carbon

Feb 21 1989

SX #	ppm
789632	1.66
789632 spk (10 ppm)	11.5
789632 dup Spk (10 ppm)	11.4
Known - 30 ppm	29.5
789633	41

Tier I T.O.C.

SX # 789632

spike = 11.5
dup spk = 11.4
sample result = 1.66
Spike conc. = 10ppm

MS % recovery = 98%
MSD % recovery = 97%

MS/MSD RPD = 1%

known = 29.5 ppm
(30ppm)

ATTACHMENT B

Field Chain of Custody Form

QC Inc

CHAIN OF CUSTODY RECORD

Customer Gannett Fleming #

Address PO Box 1963

Harrisburg State PA Zip 17105

PSID #

LAB ID#	# OF CONTAINERS	DESCRIPTION OF SAMPLES
	6 -- Pb samples 6 -- sets for VOC 6 - pest. Hyd. (36 TOTAL) 6 - TOC 6 sets B/N 6 - pH + TDS	Groundwater

PERSON ASSUMING RESPONSIBILITY FOR SAMPLE	TIME	DATE
[illegible]	[illegible] pm	8/16/90

	SAMPLE NUMBER	RELINQUISHED BY:	RECEIVED BY:	TIME	DATE	REASON FOR CHANGE OF CUSTODY

ATTACHMENT C

Ground Water Analysis Forms

DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: Naval Weapons Station Earle | SW ID NO.:

LAB NAME: QC Inc.

R	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
1	NJ 0023540 (2–8)	29-20668-5 (9–16)	890216 (17–22)	77166 (23–27)	

77648

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 1088 (MO. YR.) TO 1089 (MO. YR.)

Owners Well No. C-14A

(C-14-4)

SUBMIT WITH SIGNED T-VWX-014

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
	X			X			X			X		Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		104.41	
	X			X			X			X		Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		104.41	
	X			X			X			X		Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	9.92	
	X			X			X			X		Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	9.92	
												Arsenic, Dissolved	UG/L as As	01000		
												Barium, Dissolved	UG/L as Ba	01005		
												Biochemical Oxygen Demand - 5 Day	MG/L	00310		
												Cadmium, Dissolved	UG/L as Cd	01025		
												Chloride, Dissolved	UG/L as Cl	82295		
												Chromium, Dissolved	UG/L as Cr	01030		
												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220		
												Chemical Oxygen Demand (COD), Dissolved	MG/L	00341		
												Coliform Group	N/100 ML	74056		
												Color	Pt - Co	00080		
												Copper, Dissolved	UG/L as Cu	01040		
												Cyanide, Total	MG/L as CN	00720		
												Endrin, Total	UG/L	39390		
												Fluoride, Dissolved	MG/L as F	00950		
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
												Hardness, Total as $CaCO_3$	MG/L	00900		
												Iron, Dissolved	UG/L as Fe	01046		
	X						X					Lead, Dissolved	UG/L as Pb	01049	0.05	K
												Lindane, Total	UG/L	39782		
												Manganese, Dissolved	UG/L	01056		
												Mercury, Dissolved	UG/L	71890		

VALUE CODING RULES AND REMARK CODES ON REVERSE

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: Naval Weapons Station Earle | SW ID NO.

LAB NAME: QC Inc.

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
S	NJ 0 0 2 3 5 4 0	2 9 - 2 0 6 6 8 - 5	8 9 0 2 1 6	7 7 1 6 6	
1	2 – 8	9 – 16	17 – 22	23 – 27	28

77648

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 1 0 8 8 (MO. YR.) TO 1 0 8 9 (MO. YR.)

Owner's Well N . C-14A

(C-14-4)

SUBMIT WITH SIGNED T-VWX-014

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
												Methoxychlor, Total	UG/L	39480		
												Methylene Blue Active Substances	MG/L	38260		
												Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608		
												Nitrogen, Nitrate, Dissolved	MG/L as N	00618		
												Odor	T.O.N.	00085		
x			x				x			x		pH	Standard Units	00400	4.70	
												Phenols, Total Recoverable	UG/L	32730		
												Radium 226, Dissolved	Pc/L	09503		
												Radium 228, Dissolved	Pc/L	81366		
												Selenium, Dissolved	UG/L	01145		
												Silver, Dissolved	UG/L	01075		
												Sodium, Dissolved	MG/L	00930		
												Sulfate, Dissolved (as SO_4)	MG/L	00946		
x			x				x			x		Total Dissolved Solids (TDS)	PPM	70300	613	
x			x				x			x		Total Organic Carbon (TOC)	PPM	00680	1.6	
												Total Organic Halogen (TOX)	UG/L	70353		
												Toxaphene	UG/L	39400		
												Turbidity	NTU	00076		
												Zinc, Dissolved	UG/L	01090		
												2, 4–D, Total	UG/L	39370		
												2, 4, 5–TP, Total	UG/L	39045		
x			x				x			x		Petroleum Hydrocarbons	PPM	45501	0.5	K

29 42 55 68 | 33 34 46 47 59 60 72 73 | 40 41 53 54 66 67 79 80

VALUE CODING RULES AND REMARK CODES ON REVERSE

Form VWX-016
1/83

NEW JE Y DEPARTMENT F ENVIRONMENTAL PROTE N
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME	Naval Weapons Station Earle	SW ID NO.
LAB NAME	QC Inc.	

NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
T -NJ 0 0 2 3 5 4 0	2 9 - 2 0 6 6 8 - 5	8 9 0 2 1 6	7 7 1 6 6	

77648

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 1 0 8 8 (MO. YR.) TO 1 0 8 9 (MO. YR.)

OWNER'S WELL # C-14A

(C-14-4)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS												ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
	X						X					Acrylonitrile	UG/L	34215		
												Benzene	UG/L	34030	5	K
												Bromoform	UG/L	32104	5	K
												Carbon Tetrachloride	UG/L	32102	5	K
												Chlorobenzene	UG/L	34301	5	K
												Chlorodibromomethane	UG/L	34306	5	K
												Chloroform	UG/L	32106	5	K
												1, 1 - Dichloroethane	UG/L	34496	5	K
												1, 2 - Dichloroethane	UG/L	34531	5	K
												1, 1 - Dichloroethylene	UG/L	34501	5	K
												1, 2 - Dichloropropane	UG/L	34541	5	K
												Ethylbenzene	UG/L	34371	5	K
												Methylene Chloride	UG/L	34423	5	K
												1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	10	K
												Tetrachloroethylene	UG/L	34475	5	K
												Toluene	UG/L	34012	5	K
												1, 1, 1 - Trichloroethane	UG/L	34506	5	K
												1, 1, 2 - Trichloroethane	UG/L	34511	5	K
												Trichloroethylene	UG/L	39180	5	K
												Vinyl Chloride	UG/L	39175	10	K
												Acrolein	UG/L	34210		
												Chloroethane	UG/L	34311	10	K
												2 - Chloroethylvinyl Ether	UG/L	34576		
												Dichlorobromomethane	UG/L	32106	5	K
												1, 3 - Dichloropropylene	UG/L	34699	5	K
												Methyl Bromide	UG/L	34413	10	K
												Methyl Chloride	UG/L	34418	10	K
X							X					1, 2 - trans - Dichloroethylene	UG/L	34546	5	K
												1, 2 Dichlorobenzene	UG/L	34536		
												1, 3 Dichlorobenzene	UG/L	34566		
												1, 4 Dichlorobenzene	UG/L	34571		

VALUE CODING RULES AND
REMARK CODES ON REVERSE

Form VWX-017
4.80

P1

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT
ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: Naval Weapons Station Earle | SW ID NO.:

LAB NAME: QC Inc.

U | NJPDES NO. NJ 0 0 2 3 5 4 0 | WELL PERMIT NO. 2 9 - 2 0 6 6 8 - 5 | SAMPLE DATE YR. MO. DAY 8 9 0 2 1 6 | NJ LAB CERT. NO. 7 7 1 6 6 | WOM USE

77648

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 1 0 8 8 (MO. YR.) TO 1 0 8 9 (MO. YR.)

Owner's Well N . C-14A

SUBMIT WITH SIGNED T-VWX-014

(C-14-4)

SAMPLING MONTHS

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
												2-Chlorophenol	ug/1	34586		
												2,4-Dichlorophenol	ug/1	34601		
												2,4-Dimethylphenol	ug/1	34606		
												2,6-Dinitro-o-cresol	ug/1	77603		
												2,4-Dinitrophenol	ug/1	34616		
												2-Nitrophenol	ug/1	34591		
												4-Nitrophenol	ug/1	34649		
												p-Chloro-m-cresol	ug/1	34452		
												Pentachlorophenol	ug/1	39032		
												Phenol	ug/1	34695		
												2,4,6-Trichlorophenol	ug/1	34621		
	x						x					Acenaphthene	ug/1	34205	10	K
												Acenaphthylene	ug/1	34200	10	K
												Anthracene	ug/1	34220	10	K
												Benzidine	ug/1	39120	50	K
												Benzanthracene	ug/1	34526	10	K
												Benzopyrene	ug/1	34247	10	K
												3,4-Benzofluoranthene	ug/1	34230	10	K
												Benzoperylene	ug/1	34521	10	K
												Benzofluoranthene	ug/1	34242	10	K
												Bis(2-chloroethoxy)methane	ug/1	34278	10	K
												Bis(2-chloroethyl) Ether	ug/1	34273	10	K
												Bis(2-chlroisopropyl) Ether	ug/1	34283	10	K
												Bis(2-ethylhexyl) Phthalate	ug/1	39100	3	J
												4-Bromophenyl Ether	ug/1	34636	10	K
												Butylbenzyl Phthalate	ug/1	34292	10	K
												2-Chloronaphthalene	ug/1	34581	10	K
												4-Chlorophenyl Phenyl Ether	ug/1	34641	10	K

VALUE CODING RULES AND
REMARK CODES ON REVERSE

VWX.017

P2

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

USE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: Naval Weapons Station Earle | SW ID NO.

LAB NAME: QC Inc.

NJPDES NO.: U NJ 0 0 2 3 5 4 0

WELL PERMIT NO.: 2 9 - 2 0 6 6 8 - 5

SAMPLE DATE YR. MO. DAY: 8 9 0 2 1 6

NJ LAB CERT. NO.: 7 7 1 6 6

WQM USE

77648

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 1 0 8 8 (MO. YR.) TO 1 0 8 9 (MO. YR.)

Owner's Well No. C-14A

(C-14-4)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
	x						x					Chrysene	ug/l	34320	10	K
												Dibenzanthracene	ug/l	34556	10	K
												1,2-Dichlorobenzene	ug/l	34536	10	K
												1,3-Dichlorobenzene	ug/l	34566	10	K
												1,4-Dichlorobenzene	ug/l	34571	10	K
												3,3'-Dichlorobenzidine	ug/l	34631	10	K
												Diethyl Phthalate	ug/l	34336	10	K
												Dimethyl Phthalate	ug/l	34341	10	K
												Di-n-butyl Phthalate	ug/l	39110	10	K
												2,4-Dinitrotolulene	ug/l	34611	10	K
												2,6-Dinitrotolulene	ug/l	34626	10	K
												Di-n-octyl Phthalate	ug/l	34596	10	K
												1,2-Diphenylhydrazine	ug/l	34346	10	K
												Fluoranthene	ug/l	34376	10	K
												Fluorene	ug/l	34381	10	K
												Hexachlorobenzene	ug/l	39700	10	K
												Hexachlorobutadiene	ug/l	34391	10	K
												Hexachlorocyclopentadiene	ug/l	34386	10	K
												Hexachloroethane	ug/l	34396	10	K
												Indenopyrene	ug/l	34403	10	K
												Isophorone	ug/l	34408	10	K
												Naphthalene	ug/l	34696	10	K
												Nitrobenzene	ug/l	34447	10	K
												N-Nitrosodimentlyamine	ug/l	34428	10	K
												N-Nitrosodi-n-propylamine	ug/l	34428	10	K
												N-Nitrosodiphenylamine	ug/l	34433	10	K
												Phenanthrene	ug/l	34461	10	K
												Pyrene	ug/l	34469	10	K
	x						x					1,2,4-Trichl r benzene	ug/l	34551	10	K

VALUE CODING RULES AND REMARK CODES ON REVERSE

20 43 44 48 | 33 34 46 47 59 60 73 78 | 60 61 63 64 66 67 79 80

DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: Naval Weapons Station Earle | SW ID NO.:

LAB NAME: QC Inc.

NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
R NJ 0023540 (1, 2–8)	29-2066 6-9 (9–16)	890216 (17–22)	77166 (23–27)	

77648

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 10 88 (MO. YR.) TO 10 89 (MO. YR.)

Owners Well No. C-14B

(C-14-1)

SUBMIT WITH SIGNED T-VWX-014

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
	x			x			x			x		Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		110.71	
	x			x			x			x		Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		108.88	
	x			x			x			x		Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	14.00	
	x			x			x			x		Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	12.17	
												Arsenic, Dissolved	UG/L as As	01000		
												Barium, Dissolved	UG/L as Ba	01005		
												Biochemical Oxygen Demand - 5 Day	MG/L	00310		
												Cadmium, Dissolved	UG/L as Cd	01025		
												Chloride, Dissolved	UG/L as Cl	82295		
												Chromium, Dissolved	UG/L as Cr	01030		
												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220		
												Chemical Oxygen Demand (COD), Dissolved	MG/L	00341		
												Coliform Group	N/100 ML	74056		
												Color	Pt - Co	00080		
												Copper, Dissolved	UG/L as Cu	01040		
												Cyanide, Total	MG/L as CN	00720		
												Endrin, Total	UG/L	39390		
												Fluoride, Dissolved	MG/L as F	00950		
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
												Hardness, Total as $CaCO_3$	MG/L	00900		
												Iron, Dissolved	UG/L as Fe	01046		
	x						x					Lead, Dissolved	UG/L as Pb	01049	0.05	K
												Lindane, Total	UG/L	39782		
												Manganese, Dissolved	UG/L	01056		
												Mercury, Dissolved	UG/L	71890		

VALUE CODING RULES AND REMARK CODES ON REVERSE

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: Naval Weapons Station Earle | SW ID NO.

LAB NAME: QC Inc.

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
S	NJ 0023540	29-20666-9	890216	77166	

77648

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 10 88 (MO. YR.) TO 10 89 (MO. YR.)

Owner's Well No. C-14B (C-14-1)

SUBMIT WITH SIGNED T-VWX-014

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
												Methoxychlor, Total	UG/L	39460		
												Methylene Blue Active Substances	MG/L	38260		
												Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608		
												Nitrogen, Nitrate, Dissolved	MG/L as N	00618		
												Odor	T.O.N.	00085		
x			x				x				x	pH	Standard Units	00400	4.53	
												Phenols, Total Recoverable	UG/L	32730		
												Radium 226, Dissolved	Pc/L	09503		
												Radium 228, Dissolved	Pc/L	81366		
												Selenium, Dissolved	UG/L	01145		
												Silver, Dissolved	UG/L	01075		
												Sodium, Dissolved	MG/L	00930		
												Sulfate, Dissolved (as SO_4)	MG/L	00946		
x			x				x				x	Total Dissolved Solids (TDS)	PPM	70300	812	
x			x				x				x	Total Organic Carbon (TOC)	PPM	00680	3.7	
												Total Organic Halogen (TOX)	UG/L	70353		
												Toxaphene	UG/L	39400		
												Turbidity	NTU	00076		
												Zinc, Dissolved	UG/L	01090		
												2, 4–D, Total	UG/L	39370		
												2, 4, 5–TP, Total	UG/L	39045		
x			x				x				x	Petroleum Hydrocarbons	PPM	45501	0.5	K

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

VALUE CODING RULES AND REMARK CODES ON REVERSE

Form VWX-016
1/83

NEW JE . Y DEPARTMENT F ENVIRONMENTAL PROTE N
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: Naval Weapons Station Earle | SW ID NO.:

LAB NAME: QC Inc.

T -NJ 0 0 2 3 5 4 0 (NJPDES NO.)

WELL PERMIT NO. 2 9 - 2 0 6 6 6 - 9

SAMPLE DATE TR. MO. DAY: 8 9 0 2 1 6

NJ LAB CERT. NO. 7 7 1 6 6

WQM USE

77648

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 1 0 8 8 (MO. YR.) TO 1 0 8 9 (MO. YR.)

OWNER'S WELL # C-14B

(C-14-1)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ANALYSIS	UNITS	PARAMETER	VALUE	REMARK
	X						X					Acrylonitrile	UG/L	34215		
												Benzene	UG/L	34030	5	K
												Bromoform	UG/L	32104	5	K
												Carbon Tetrachloride	UG/L	32102	5	K
												Chlorobenzene	UG/L	34301	5	K
												Chlorodibromoethane	UG/L	34306	5	K
												Chloroform	UG/L	32106	5	K
												1, 1 - Dichloroethane	UG/L	34496	5	K
												1, 2 - Dichloroethane	UG/L	34531	5	K
												1, 1 - Dichloroethylene	UG/L	34501	5	K
												1, 2 - Dichloropropane	UG/L	34541	5	K
												Ethylbenzene	UG/L	34371	5	K
												Methylene Chloride	UG/L	34423	3	J
												1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	10	K
												Tetrachloroethylene	UG/L	34475	5	K
												Toluene	UG/L	34012	5	K
												1, 1, 1 - Trichloroethane	UG/L	34506	5	K
												1, 1, 2 - Trichloroethane	UG/L	34511	5	K
												Trichloroethylene	UG/L	39180	5	K
												Vinyl Chloride	UG/L	39175	10	K
												Acrolein	UG/L	34210		
												Chloroethane	UG/L	34311	10	K
												2 - Chloroethylvinyl Ether	UG/L	34576		
												Dichlorobromomethane	UG/L	32106	5	K
												1, 3 - Dichloropropylene	UG/L	34699	5	K
												Methyl Bromide	UG/L	34413	10	K
												Methyl Chloride	UG/L	34418	10	K
	X						X					1, 2 - trans - Dichloroethylene	UG/L	34546	5	K
												1, 2 Dichlorobenzene	UG/L	34536		
												1, 3 Dichlorobenzene	UG/L	34566		
												1, 4 Dichlorobenzene	UG/L	34571		

VALUE CODING RULES AND
REMARK CODES ON REVERSE

Form VWX-017
4.83

P1

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT
ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: Naval Weapons Station Earle | SW ID NO.:

LAB NAME: QC Inc.

NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U NJ 0023540	29-20666-9	890216	77166	

77648

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 1088 (MO. YR.) TO 1089 (MO. YR.)

Owner's Well No. C-14B

(C-14-1)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS: Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
												2-Chlorophenol	ug/l	34586		
												2,4-Dichlorophenol	ug/l	34601		
												2,4-Dimethylphenol	ug/l	34606		
												2,6-Dinitro-o-cresol	ug/l	77603		
												2,4-Dinitrophenol	ug/l	34616		
												2-Nitrophenol	ug/l	34591		
												4-Nitrophenol	ug/l	34649		
												p-Chloro-m-cresol	ug/l	34452		
												Pentachlorophenol	ug/l	39032		
												Phenol	ug/l	34695		
												2,4,6-Trichlorophenol	ug/l	34621		
	x					x						Acenaphthene	ug/l	34205	10	K
												Acenaphthylene	ug/l	34200	10	K
												Anthracene	ug/l	34220	10	K
												Benzidine	ug/l	39120	50	K
												Benzanthracene	ug/l	34526	10	K
												Benzopyrene	ug/l	34247	10	K
												3,4-Benzofluoranthene	ug/l	34230	10	K
												Benzoperylene	ug/l	34521	10	K
												Benzofluoranthene	ug/l	34242	10	K
												Bis(2-chloroethoxy)methane	ug/l	34278	10	K
												Bis(2-chloroethyl) Ether	ug/l	34273	10	K
												Bis(2-chloroisopropyl) Ether	ug/l	34283	10	K
												Bis(2-ethylhexyl) Phthalate	ug/l	39100	1	J
												4-Bromophenyl Ether	ug/l	34636	10	K
												Butylbenzyl Phthalate	ug/l	34292	10	K
												2-Chloronaphthalene	ug/l	34581	10	K
												4-Chlorophenyl Phenyl Ether	ug/l	34641	10	K

VALUE CODING RULES AND REMARK CODES ON REVERSE

29 33 34 40 41
43 46 47 53 54
50 59 60 66 67
65 72 73 79 80

VWX-017

P2

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

USE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: Naval Weapons Station Earle | SW ID NO.

LAB NAME: QC Inc.

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0 0 2 3 5 4 0	2 9 - 2 0 6 6 6 - 9	8 9 0 2 1 6	7 7 1 6 6	

77648

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 1 0 8 8 (MO. YR.) TO 1 0 8 9 (MO. YR.)

Owner's Well No. C-14B

(C-14-1)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
	x						x					Chrysene	ug/l	34320	10	K
												Dibenzanthracene	ug/l	34556	10	K
												1,2-Dichlorobenzene	ug/l	34536	10	K
												1,3-Dichlorobenzene	ug/l	34566	10	K
												1,4-Dichlorobenzene	ug/l	34571	10	K
												3,3'-Dichlorobenzidine	ug/l	34631	10	K
												Diethyl Phthalate	ug/l	34336	10	K
												Dimethyl Phthalate	ug/l	34341	10	K
												Di-n-butyl Phthalate	ug/l	39110	10	K
												2,4-Dinitrotolulene	ug/l	34611	10	K
												2,6-Dinitrotolulene	ug/l	34626	10	K
												Di-n-octyl Phthalate	ug/l	34596	10	K
												1,2-Diphenylhydrazine	ug/l	34346	10	K
												Fluoranthene	ug/l	34376	10	K
												Fluorene	ug/l	34381	10	K
												Hexachlorobenzene	ug/l	39700	10	K
												Hexachlorobutadiene	ug/l	34391	10	K
												Hexachlorocyclopentadiene	ug/l	34386	10	K
												Hexachloroethane	ug/l	34396	10	K
												Indenopyrene	ug/l	34403	10	K
												Isophorone	ug/l	34408	10	K
												Naphthalene	ug/l	34696	10	K
												Nitrobenzene	ug/l	34447	10	K
												N-Nitrosodimenthylamine	ug/l	34428	10	K
												N-Nitrosodi-n-propylamine	ug/l	34428	10	K
												N-Nitrosodiphenylamine	ug/l	34433	10	K
												Phenanthrene	ug/l	34461	10	K
												Pyrene	ug/l	34469	10	K
	x						x					1,2,4-Trichlorobenzene	ug/l	34551	10	K

VALUE CODING RULES AND REMARK CODES ON REVERSE

DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: Naval Weapons Station Earle | SW ID NO.:

LAB NAME: QC Inc.

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
R (1)	NJ 0023540 (2–8)	29-20669-3 (9–16)	890216 (17–22)	77166 (23–27)	(28)

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 10 88 (MO. YR.) TO 10 89 (MO. YR.)

77648

Owners Well No. C-14C

(C-14-2)

SUBMIT WITH SIGNED T-VWX-014

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
	x			x			x			x		Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		108.30	
	x			x			x			x		Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		106.13	
	x			x			x			x		Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	11.75	
	x			x			x			x		Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	9.58	
												Arsenic, Dissolved	UG/L as As	01000		
												Barium, Dissolved	UG/L as Ba	01005		
												Biochemical Oxygen Demand - 5 Day	MG/L	00310		
												Cadmium, Dissolved	UG/L as Cd	01025		
												Chloride, Dissolved	UG/L as Cl	82295		
												Chromium, Dissolved	UG/L as Cr	01030		
												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220		
												Chemical Oxygen Demand (COD), Dissolved	MG/L	00341		
												Coliform Group	N/100 ML	74056		
												Color	Pt - Co	00080		
												Copper, Dissolved	UG/L as Cu	01040		
												Cyanide, Total	MG/L as CN	00720		
												Endrin, Total	UG/L	39390		
												Fluoride, Dissolved	MG/L as F	00950		
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
												Hardness, Total as $CaCO_3$	MG/L	00900		
												Iron, Dissolved	UG/L as Fe	01046		
	x						x					Lead, Dissolved	UG/L as Pb	01049	0.05	K
												Lindane, Total	UG/L	39782		
												Manganese, Dissolved	UG/L	01056		
												Mercury, Dissolved	UG/L	71890		

VALUE CODING RULES AND REMARK CODES ON REVERSE

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: Naval Weapons Station Earle | SW ID NO.

LAB NAME: QC Inc.

NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
S NJ 0023540	29-20669-3	890216	77166	

77648

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 1088 (MO. YR.) TO 1089 (MO. YR.)

Owner's Well No. C-14C (C-14-2)

SUBMIT WITH SIGNED T-VWX-014

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
												Methoxychlor, Total	UG/L	39460		
												Methylene Blue Active Substances	MG/L	38260		
												Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608		
												Nitrogen, Nitrate Dissolved	MG/L as N	00618		
												Odor	T.O.N.	00085		
x			x				x			x		pH	Standard Units	00400	3.80	
												Phenols, Total Recoverable	UG/L	32730		
												Radium 226, Dissolved	Pc/L	09503		
												Radium 228, Dissolved	Pc/L	81366		
												Selenium, Dissolved	UG/L	01145		
												Silver, Dissolved	UG/L	01075		
												Sodium, Dissolved	MG/L	00930		
												Sulfate, Dissolved (as SO_4)	MG/L	00946		
x			x				x			x		Total Dissolved Solids (TDS)	PPM	70300	110	
x			x				x			x		Total Organic Carbon (TOC)	PPM	00680	8.6	
												Total Organic Halogen (TOX)	UG/L	70353		
												Toxaphene	UG/L	39400		
												Turbidity	NTU	00076		
												Zinc, Dissolved	UG/L	01090		
												2, 4–D, Total	UG/L	39370		
												2, 4, 5–TP, Total	UG/L	39045		
x			x				x			x		Petroleum Hydrocarbons	PPM	45501	0.5	K

VALUE CODING RULES AND REMARK CODES ON REVERSE

Form VWX-016
1/83

NEW JE Y DEPARTMENT OF ENVIRONMENTAL PROTE N
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: Naval Weapons Station Earle | SW ID NO.:

LAB NAME: QC Inc.

T -NJ 0 0 2 3 5 4 0 (NJPDES NO.)

WELL PERMIT NO. 2 9 - 2 0 6 6 9 - 3

SAMPLE DATE YR. MO. DAY: 8 9 0 2 1 6

NJ LAB CERT. NO. 7 7 1 6 6

WQM USE

77648

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 1 0 8 8 (MO. YR.) TO 1 0 8 9 (MO. YR.)

OWNER'S WELL # C-14C

SUBMIT WITH SIGNED T-VWX-014

(C-14-2)

SAMPLING MONTHS

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
	X						X					Acrylonitrile	UG/L	34215		
												Benzene	UG/L	34030	5	K
												Bromoform	UG/L	32104	5	K
												Carbon Tetrachloride	UG/L	32102	5	K
												Chlorobenzene	UG/L	34301	5	K
												Chlorodibromomethane	UG/L	34306	5	K
												Chloroform	UG/L	32106	5	K
												1, 1 - Dichloroethane	UG/L	34496	5	K
												1, 2 - Dichloroethane	UG/L	34531	5	K
												1, 1 - Dichloroethylene	UG/L	34501	5	K
												1, 2 - Dichloropropane	UG/L	34541	5	K
												Ethylbenzene	UG/L	34371	5	K
												Methylene Chloride	UG/L	34423	4	J
												1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	10	K
												Tetrachloroethylene	UG/L	34475	5	K
												Toluene	UG/L	34012	5	K
												1, 1, 1 - Trichloroethane	UG/L	34506	5	K
												1, 1, 2 - Trichloroethane	UG/L	34511	5	K
												Trichloroethylene	UG/L	39180	5	K
												Vinyl Chloride	UG/L	39175	10	K
												Acrolein	UG/L	34210		
												Chloroethane	UG/L	34311	10	K
												2 - Chloroethylvinyl Ether	UG/L	34576		
												Dichlorobromomethane	UG/L	32108	5	K
												1, 3 - Dichloropropylene	UG/L	34699	5	K
												Methyl Bromide	UG/L	34413	10	K
												Methyl Chloride	UG/L	34418	10	K
X							X					1, 2 - trans - Dichloroethylene	UG/L	34546	5	K
												1, 2 Dichlorobenzene	UG/L	34536		
												1, 3 Dichlorobenzene	UG/L	34566		
												1, 4 Dichlorobenzene	UG/L	34571		

VALUE CODING RULES AND
REMARK CODES ON REVERSE

Form VWX-017
4.80

P1

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: Naval Weapons Station Earle | SW ID NO.:

LAB NAME: QC Inc.

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0 0 2 3 5 4 0	2 9 - 2 0 6 6 9 - 3	8 9 0 2 1 6	7 7 1 6 6	

77648

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 1 0 8 8 (MO. YR.) TO 1 0 8 9 (MO. YR.)

Owner's Well No. C- 14C

(C-14-2)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
	2-Chlorophenol	ug/l	34586		
	2,4-Dichlorophenol	ug/l	34601		
	2,4-Dimethylphenol	ug/l	34606		
	2,6-Dinitro-o-cresol	ug/l	77603		
	2,4-Dinitrophenol	ug/l	34616		
	2-Nitrophenol	ug/l	34591		
	4-Nitrophenol	ug/l	34649		
	p-Chloro-m-cresol	ug/l	34452		
	Pentachlorophenol	ug/l	39032		
	Phenol	ug/l	34695		
	2,4,6-Trichlorophenol	ug/l	34621		
x x	Acenaphthene	ug/l	34205	10	K
	Acenaphthylene	ug/l	34200	10	K
	Anthracene	ug/l	34220	10	K
	Benzidine	ug/l	39120	50	K
	Benzanthracene	ug/l	34526	10	K
	Benzopyrene	ug/l	34247	10	K
	3,4-Benzofluoranthene	ug/l	34230	10	K
	Benzoperylene	ug/l	34521	10	K
	Benzofluoranthene	ug/l	34242	10	K
	Bis(2-chloroethoxy)methane	ug/l	34278	10	K
	Bis(2-chloroethyl) Ether	ug/l	34273	10	K
	Bis(2-chloroisopropyl) Ether	ug/l	34283	10	K
	Bis(2-ethylhexyl) Phthalate	ug/l	39100	2	J
	4-Bromophenyl Ether	ug/l	34636	10	K
	Butylbenzyl Phthalate	ug/l	34292	10	K
	2-Chloronaphthalene	ug/l	34581	10	K
	4-Chlorophenyl Phenyl Ether	ug/l	34641	10	K

VALUE CODING RULES AND REMARK CODES ON REVERSE

VWX-017

P2

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: Naval Weapons Station Earle | SW ID NO.

FIRM NAME: QC Inc.

U | NJPDES NO. NJ 0 0 2 3 5 4 0 | WELL PERMIT NO. 2 9 - 2 0 6 6 9 - 3 | SAMPLE DATE YR. MO. DAY 8 9 0 2 1 6 | NJ LAB CERT. NO. 7 7 1 6 6 | WQM USE

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 1 0 8 8 (MO. YR.) TO 1 0 8 9 (MO. YR.)

77648

Owner's Well N . C-14C

(C-14-2)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
	x						x					Chrysene	ug/1	34320	10	K
												Dibenzanthracene	ug/1	34556	10	K
												1,2-Dichlorobenzene	ug/1	34536	10	K
												1,3-Dichlorobenzene	ug/1	34566	10	K
												1,4-Dichlorobenzene	ug/1	34571	10	K
												3,3'-Dichlorobenzidine	ug/1	34631	10	K
												Diethyl Phthalate	ug/1	34336	10	K
												Dimethyl Phthalate	ug/1	34341	10	K
												Di-n-butyl Phthalate	ug/1	39110	10	K
												2,4-Dinitrotolulene	ug/1	34611	10	K
												2,6-Dinitrotolulene	ug/1	34626	10	K
												Di-n-octyl Phthalate	ug/1	34596	10	K
												1,2-Diphenylhydrazine	ug/1	34346	10	K
												Fluoranthene	ug/1	34376	10	K
												Fluorene	ug/1	34381	10	K
												Hexachlorobenzene	ug/1	39700	10	K
												Hexachlorobutadiene	ug/1	34391	10	K
												Hexachlorocyclopentadiene	ug/1	34386	10	K
												Hexachloroethane	ug/1	34396	10	K
												Indenopyrene	ug/1	34403	10	K
												Isophorone	ug/1	34408	10	K
												Naphthalene	ug/1	34696	10	K
												Nitrobenzene	ug/1	34467	10	K
												N-Nitrosodimenthylamine	ug/1	34438	10	K
												N-Nitrosodi-n-propylamine	ug/1	34428	10	K
												N-Nitrosodiphenylamine	ug/1	34433	10	K
												Phenanthrene	ug/1	34461	10	K
												Pyrene	ug/1	34469	10	K
	x						x					1,2,4-Trichlor benzene	ug/1	34551	10	K

VALUE CODING RULES AND REMARK CODES ON REVERSE

DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: Naval Weapons Station Earle

SW ID NO.:

LAB NAME: QC Inc.

R	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
1	NJ 0 0 2 3 5 4 0 (2–8)	2 9 - 2 0 6 6 7 - 7 (9–16)	8 9 0 2 1 6 (17–22)	7 7 1 6 6 (23–27)	

77648

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 1 0 8 8 (MO. YR.) TO 1 0 8 9 (MO. YR.)

Owners Well No. C-29A

SUBMIT WITH SIGNED T-VWX-014

(C-14-3)

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
	x			x			x			x		Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		108.23	
	x			x			x			x		Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		104.90	
	x			x			x			x		Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	11.25	
	x			x			x			x		Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	7.92	
												Arsenic, Dissolved	UG/L as As	01000		
												Barium, Dissolved	UG/L as Ba	01005		
												Biochemical Oxygen Demand - 5 Day	MG/L	00310		
												Cadmium, Dissolved	UG/L as Cd	01025		
												Chloride, Dissolved	UG/L as Cl	82295		
												Chromium, Dissolved	UG/L as Cr	01030		
												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220		
												Chemical Oxygen Demand (COD), Dissolved	MG/L	00341		
												Coliform Group	N/100 ML	74056		
												Color	Pt - Co	00080		
												Copper, Dissolved	UG/L as Cu	01040		
												Cyanide, Total	MG/L as CN	00720		
												Endrin, Total	UG/L	39390		
												Fluoride, Dissolved	MG/L as F	00950		
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
												Hardness, Total as $CaCO_3$	MG/L	00900		
												Iron, Dissolved	UG/L as Fe	01046		
	x						x					Lead, Dissolved	UG/L as Pb	01049	0.05	K
												Lindane, Total	UG/L	39782		
												Manganese, Dissolved	UG/L	01056		
												Mercury, Dissolved	UG/L	71890		

VALUE CODING RULES AND REMARK CODES ON REVERSE

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: Naval Weapons Station Earle | SW ID NO.:

LAB NAME: QC Inc.

NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
S NJ 0023540	29-20667-7	890216	77166	

77648

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 10 88 (MO. YR.) TO 10 89 (MO. YR.)

Owner's Well No. C-29A

SUBMIT WITH SIGNED T-VWX-014

(C-14-3)

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
												Methoxychlor, Total	UG/L	39480		
												Methylene Blue Active Substances	MG/L	38260		
												Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608		
												Nitrogen, Nitrate Dissolved	MG/L as N	00618		
												Odor	T.O.N.	00085		
x				x			x				x	pH	Standard Units	00400	4.70	
												Phenols, Total Recoverable	UG/L	32730		
												Radium 226, Dissolved	Pc/L	09503		
												Radium 228, Dissolved	Pc/L	81366		
												Selenium, Dissolved	UG/L	01145		
												Silver, Dissolved	UG/L	01075		
												Sodium, Dissolved	MG/L	00930		
												Sulfate, Dissolved (as SO_4)	MG/L	00946		
x				x			x				x	Total Dissolved Solids (TDS)	PPM	70300	130	
x				x			x				x	Total Organic Carbon (TOC)	PPM	00680	1.7	
												Total Organic Halogen (TOX)	UG/L	70353		
												Toxaphene	UG/L	39400		
												Turbidity	NTU	00076		
												Zinc, Dissolved	UG/L	01090		
												2, 4–D, Total	UG/L	39370		
												2, 4, 5–TP, Total	UG/L	39045		
x				x			x				x	Petroleum Hydrocarbons	PPM	45501	0.5	K

VALUE CODING RULES AND REMARK CODES ON REVERSE

Form VWX-016
1/83

NEW JE . Y DEPARTMENT OF ENVIRONMENTAL PROTE N
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: Naval Weapons Station Earle | SW ID NO.:

LAB NAME: QC Inc.

T -NJ 0 0 2 3 5 4 0 (NJPDES NO.)

WELL PERMIT NO. 29-20667-7

SAMPLE DATE YR. MO. DAY 89 02 16

NJ LAB CERT. NO. 77166

WQM USE

77648

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 10 88 (MO. YR.) TO 10 89 (MO. YR.)

OWNER'S WELL # C-29A

SUBMIT WITH SIGNED T-VWX-014

(C-14-3)

SAMPLING MONTHS: Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
	X						X					Acrylonitrile	UG/L	34215		
												Benzene	UG/L	34030	5	K
												Bromoform	UG/L	32104	5	K
												Carbon Tetrachloride	UG/L	32102	5	K
												Chlorobenzene	UG/L	34301	5	K
												Chlorodibromomethane	UG/L	34306	5	K
												Chloroform	UG/L	32106	1	J
												1, 1 - Dichloroethane	UG/L	34496	5	K
												1, 2 - Dichloroethane	UG/L	34531	5	K
												1, 1 - Dichloroethylene	UG/L	34501	5	K
												1, 2 - Dichloropropane	UG/L	34541	5	K
												Ethylbenzene	UG/L	34371	5	K
												Methylene Chloride	UG/L	34423	4	J
												1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	10	K
												Tetrachloroethylene	UG/L	34475	5	K
												Toluene	UG/L	34012	5	K
												1, 1, 1 - Trichloroethane	UG/L	34506	5	K
												1, 1, 2 - Trichloroethane	UG/L	34511	5	K
												Trichloroethylene	UG/L	39180	5	K
												Vinyl Chloride	UG/L	39176	10	K
												Acrolein	UG/L	34210		
												Chloroethane	UG/L	34311	10	K
												2 - Chloroethylvinyl Ether	UG/L	34576		
												Dichlorobromomethane	UG/L	32106	5	K
												1, 3 - Dichloropropylene	UG/L	34699	5	K
												Methyl Bromide	UG/L	34413	10	K
												Methyl Chloride	UG/L	34419	10	K
	X						X					1, 2 - trans - Dichloroethylene	UG/L	34546	5	K
												1, 2 Dichlorobenzene	UG/L	34536		
												1, 3 Dichlorobenzene	UG/L	34566		
												1, 4 Dichlorobenzene	UG/L	34571		

VALUE CODING RULES AND
REMARK CODES ON REVERSE

Form VWX-017
4.83

P1

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME	SW ID NO.
Naval Weapons Station Earle	
LAB NAME: QC Inc.	

U — NJPDES NO. NJ 0 0 2 3 5 4 0 — WELL PERMIT NO. 2 9 - 2 0 6 6 7 - 7 — SAMPLE DATE YR. MO. DAY 8 9 0 2 1 6 — NJ LAB CERT. NO. 7 7 1 6 6 — WQM USE

77648

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 1 0 8 8 (MO. YR.) TO 1 0 8 9 (MO. YR.)

Owner's Well N . C-29A

SUBMIT WITH SIGNED T-VWX-014

(C-14-3)

SAMPLING MONTHS	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
	2-Chlorophenol	ug/l	34586		
	2,4-Dichlorophenol	ug/l	34601		
	2,4-Dimethylphenol	ug/l	34606		
	2,6-Dinitro-o-cresol	ug/l	77603		
	2,4-Dinitrophenol	ug/l	34616		
	2-Nitrophenol	ug/l	34591		
	4-Nitrophenol	ug/l	34649		
	p-Chloro-m-cresol	ug/l	34452		
	Pentachlorophenol	ug/l	39032		
	Phenol	ug/l	34695		
	2,4,6-Trichlorophenol	ug/l	34621		
x x	Acenaphthene	ug/l	34205	10	K
	Acenaphthylene	ug/l	34200	10	K
	Anthracene	ug/l	34220	10	K
	Benzidine	ug/l	39120	50	K
	Benzanthracene	ug/l	34526	10	K
	Benzopyrene	ug/l	34247	10	K
	3,4-Benzofluoranthene	ug/l	34230	10	K
	Benzoperylene	ug/l	34521	10	K
	Benzofluoranthene	ug/l	34242	10	K
	Bis(2-chloroethoxy)methane	ug/l	34278	10	K
	Bis(2-chloroethyl) Ether	ug/l	34273	10	K
	Bis(2-chlroisopropyl) Ether	ug/l	34283	10	K
	Bis(2-ethylhexyl) Phthalate	ug/l	39100	3	J
	4-Bromophenyl Ether	ug/l	34636	10	K
	Butylbenzyl Phthalate	ug/l	34292	10	K
	2-Chloronaphthalene	ug/l	34581	10	K
	4-Chlorophenyl Phenyl Ether	ug/l	34641	10	K

VALUE CODING RULES AND
REMARK CODES ON REVERSE

VWX.017

P2

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: Naval Weapons Station Earle | SW ID NO.

LAB NAME: QC Inc.

U | NJPDES NO. NJ 0 0 2 3 5 4 0 | WELL PERMIT NO. 2 9 - 2 0 6 6 7 - 7 | SAMPLE DATE YR. MO. DAY 8 9 0 2 1 6 | NJ LAB CERT. NO. 7 7 1 6 6 | WQM USE

77648

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 1 0 8 8 (MO. YR.) TO 1 0 8 9 (MO. YR.)

Owner's Well No. C-29A

SUBMIT WITH SIGNED T-VWX-014

(C-14-3)

SAMPLING MONTHS: Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
	X						X					Chrysene	ug/l	34320	10	K
												Dibenzanthracene	ug/l	34556	10	K
												1,2-Dichlorobenzene	ug/l	34536	10	K
												1,3-Dichlorobenzene	ug/l	34566	10	K
												1,4-Dichlorobenzene	ug/l	34571	10	K
												3,3'-Dichlorobenzidine	ug/l	34631	10	K
												Diethyl Phthalate	ug/l	34336	10	K
												Dimethyl Phthalate	ug/l	34341	10	K
												Di-n-butyl Phthalate	ug/l	39110	10	K
												2,4-Dinitrotolulene	ug/l	34611	10	K
												2,6-Dinitrotolulene	ug/l	34626	10	K
												Di-n-octyl Phthalate	ug/l	34596	10	K
												1,2-Diphenylhydrazine	ug/l	34346	10	K
												Fluoranthene	ug/l	34376	10	K
												Fluorene	ug/l	34381	10	K
												Hexachlorobenzene	ug/l	39700	10	K
												Hexachlorobutadiene	ug/l	34391	10	K
												Hexachlorocyclopentadiene	ug/l	34386	10	K
												Hexachloroethane	ug/l	34396	10	K
												Indenopyrene	ug/l	34403	10	K
												Isophorone	ug/l	34408	10	K
												Naphthalene	ug/l	34696	10	K
												Nitrobenzene	ug/l	34447	10	K
												N-Nitrosodimentlyamine	ug/l	34438	10	K
												N-Nitrosodi-n-propylamine	ug/l	34428	10	K
												N-Nitrosodiphenylamine	ug/l	34433	10	K
												Phenanthrene	ug/l	34461	10	K
												Pyrene	ug/l	34469	10	K
	X						X					1,2,4-Trichlor benzene	ug/l	34551	10	K

VALUE CODING RULES AND REMARK CODES ON REVERSE