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NWS EARLE
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Groundwater Monitoring Study

Sampling Results

Round 4

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

Contract Number N62472-86-C-1487

Project No. 5

September 1989

Gannett Fleming Environmental Engineers, Inc.

Harrisburg, PA

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Harrisburg, PA

Ground Water Monitoring Study

Naval Weapons Station Earle

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Sampling Results

The fourth 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 forms are also found in Attachment A. The Ground Water Analysis Forms (Nos. VWX-15, VWX-16, and VWX-17) are presented in Attachment B. 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 concentrations in all samples were below the limitation levels. The TOC concentrations measured were less than 9 mg/L. The pH of the samples from wells C-14B, C-14C and C-29A was measured to be slightly less than the lower limit of 5. No base/neutral extractable compounds or volatile organics were found in amounts exceeding the detection limit.

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	12.00	16.50 ft.	13.40 ft.	14.80 ft.	-	-
Depth to Water Table from ground level	12.00	14.67 ft.	11.23 ft.	11.30 ft.	-	-
Lead and Compounds	<0.003 mg/L	<0.003 mg/L	<0.003 mg/L	<0.003 mg/L	<0.003 mg/L	<0.003 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	5.32	4.40	4.02	4.35	5.45	5.33
Total Dissolved Solids (TDS)	140 mg/L	60 mg/L	58 mg/L	120 mg/L	<2 mg/L	<2 mg/L
Total Organic Carbon	5.5 mg/L	2.2 mg/L	8.8 mg/L	3.9 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)

PARAMETER Volatile Organics	WELL NO. C-14A Results UG/L	Comments	C-14B Results UG/L	Comments	C-14C Results UG/L	Comments	C-29A Results UG/L	Comments	Field Blank Results UG/L	Comments	Trip Blank Results UG/L	Comments
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	8	-B	9	-B	8	-B	11	-B	8	-B	8	-B
Acetone	6	-BJ	8	-BJ	7	-BJ	9	-BJ	8	-BJ	9	-BJ
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	100	-U	100	-U	100	-U	100	-U	100	-U	100	-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	50	-U	50	-U	50	-U	50	-U	50	-U	50	-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	50	-U	50	-U	50	-U	50	-U	50	-U	50	-U
2-Hexanone	50	-U	50	-U	50	-U	50	-U	50	-U	50	-U
Tetrachloroethene	5	-U	5	-U	5	-U	5	-U	5		5	-U
1, 1, 2, 2-Tetrachloroethane	5	-U	5	-U	5	-U	5	-U	10	-U	5	-U
Toluene	5	-U	5	-U	5	-U	1	-J	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	5	-U	5	-U	5	-U	5	-U	5	-U	5	-U
Total Xylenes	5	-U	5	-U	5	-U	5	-U	5	-U	5	-U

COMMENTS:

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

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	NM		NM		NM		NM		NM		NM	
4-Chlorophenylphenyl Ether	10	U	10	U	10	U	10	U	10	U	10	U
Fluorene	50	U	50	U	50	U	50	U	50	U	50	U
Azobenzene	NM		NM		NM		NM		NM		NM	
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)

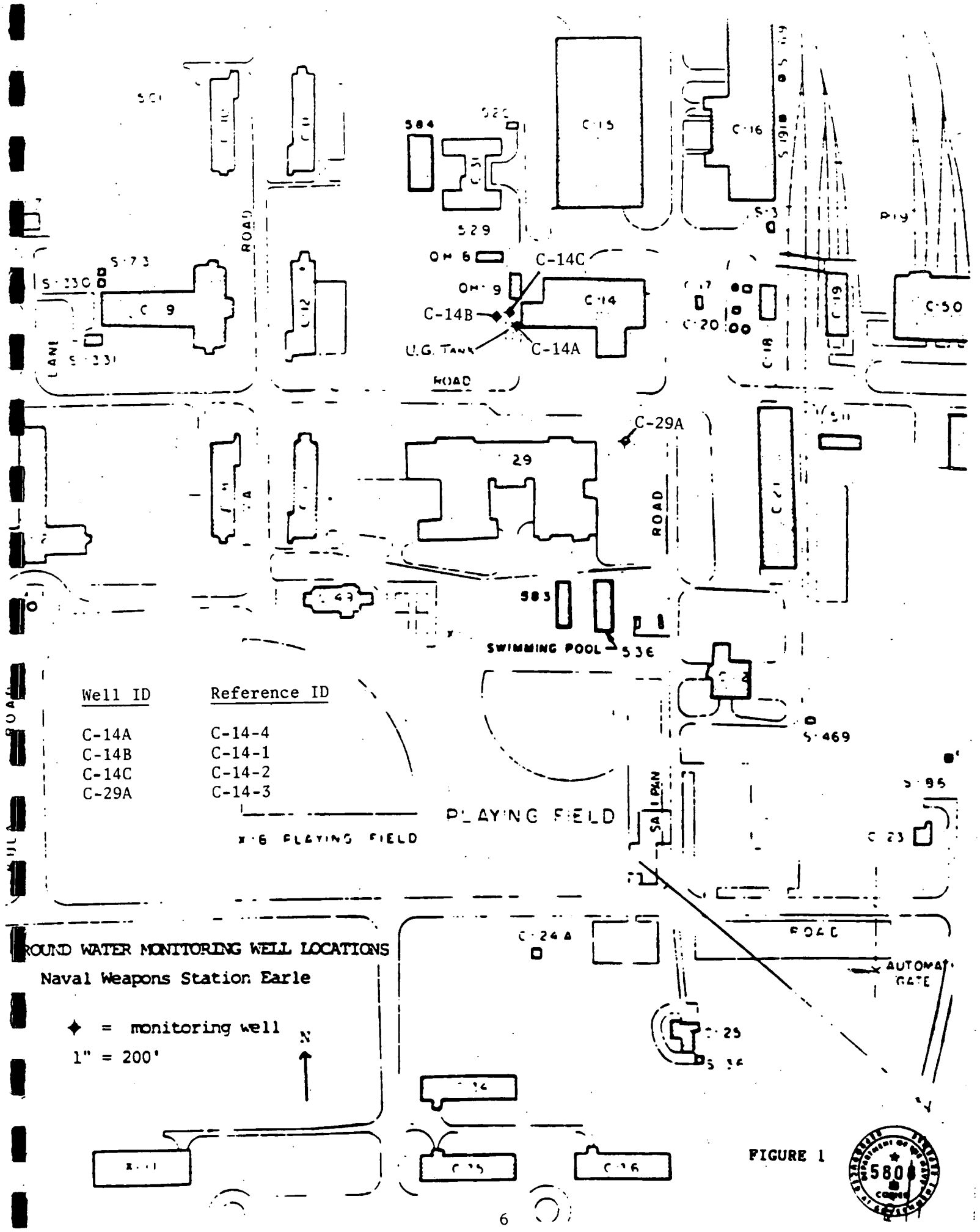
PARAMETER
Base Neutral Extractables
by GC/MS

WELL NO.

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	NM		NM		NM		NM		NM		NM	
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	20	U	20	U	20	U	20	U	20	U	20	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	10	U	10	U	10	U	10	U	10	U	10	U
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
NM = Not Measured



ROUND WATER MONITORING WELL LOCATIONS
Naval Weapons Station Earle

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
FOR
GANNET FLEMING

Part 1 of 3

Case Name	Field Sample ID	Laboratory Sample ID	Date of Collection
	C-29A MW	883612	08/15/89
	C-14A MW	883613	"
	C-14B MW	883614	"
	C-14C MW	883615	"
	FIELD BLANK	883616	"
	TRIP BLANK	883617	"

Laboratory Name	QC Inc.
Certification No.	PADER No. 09-131 NJDEP No. 77166
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-MW)	17
	(C-14A-MW)	34
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	(C-14C-MW)	60
	(FIELD BLANK)	73
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Chain of Custody Without Shuttle

QC Inc
1205 Industrial Highway
P.O. Box 514 • Southampton, Pennsylvania 18966-0514
(215) 355-3900

I.D. NUMBER 000001
001962

NAME OF UNIT AND ADDRESS
GANNETT FLEMING
P.O. BOX 1963
HARRISBURG, PA. 17105
(717) 763-7211

SAMPLE NO.	NO. OF CONT.	DESCRIPTION OF SAMPLES
C-29A	6	QUART GLASS UNPRESERVED, 2-GREEN TAG VIALS, 1 PT. SULFURIC PLASTIC, QUART SULFURIC GLASS, ½ GALLON UNPRES - MONITORING WELL
C-14C	6	SAME BOTTLES AS ABOVE - MONITORING WELL
C-14B	6	SAME BOTTLES AS ABOVE - MONITORING WELL
C-14A	6	SAME BOTTLES AS ABOVE - MONITORING WELL
FB	6	SAME BOTTLES AS ABOVE - FIELD BLANK
TB	6	SAME BOTTLES AS ABOVE - TRIP BLANK
		* TIER I PACKAGE *

PERSON ASSUMING RESPONSIBILITY FOR SAMPLE
QC INC.

SAMPLE NUMBER	RELINQUISHED BY	RECEIVED BY	TIME	DATE	REASON FOR CHANGE OF CUSTODY
	Nancy Stacer	J Hodge 8/15/89	1:00 pm	8/19/89	SAMPLE BOTTLE DELIVERY
		J Matosky	8:00 am	8/16/89	receipt in Lab
		Base, VOC624, PHC, TOC, PH, TDS, Pb			ANALYSIS PER NANCY STACER. TO BE DONE ON THE TB & FB too! 8-15-89 CR

LAB COPY

Chain of Custody Without Shuttle

QC Inc
1205 Industrial Highway
P.O. Box 514 • Southampton, Pennsylvania 18966-0514
(215) 355-3900

I.D. NUMBER 883612-883617

NAME OF UNIT AND ADDRESS 10031-10036

Barrett Fleming

SAMPLE NO.	NO. OF CONT.	DESCRIPTION OF SAMPLES
883612	7	1/2 gal pl cu pow, 1 pt H2SO4, 1 pt HNO3, qt g. H2SO4, qt g. NaOH, C-14A, C-14B, C-14C, FB, TB
883613	7	
883614	7	
883615	7	
883616	7	
883617	7	

PERSON ASSUMING RESPONSIBILITY FOR SAMPLE Roadarmel

SAMPLE NUMBER	RELINQUISHED BY	RECEIVED BY	TIME	DATE	REASON FOR CHANGE OF CUSTODY
		Roadarmel	8am	8/16/88	Log in
10031-10036 883612-883617	Roadarmel	D. Colone	4pm	8/16/88	Lab Chem
	Roadarmel	D. William	4:45	8/16	Metals
	~~Roadarmel~~	~~Lowell~~	~~4pm~~	~~8/16~~	~~GC Lab~~
	Roadarmel	L Mabe	1615	8/16	GC/MS

LAB COPY

QC Inc

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

LABORATORY CHRONICLE

Laboratory Sample ID: 883612, 883613, 883614, 883615, 883616, 883617

	I	Date	II
Receipt/Refrigeration	08/15/89		
Organic Extraction			
1. Base/Neutral Extractables			
2. Acid Extractables			
3. PCBs			
4. Dioxin			
Analyses			
1. Volatiles	08/23/89		
2. Base/Neutral Extractables			
3. Acid Extractables			
4. PCBs			
5. Dioxin			
Inorganics			
1. Metals			
2. Cyanides			
3. Phenols			
Other Analytes			
1.			
2.			
3.			

SECTION SUPERVISOR REVIEW & APPROVAL
(Signature)
(Printed Name) Howard Whaley
(Date) 9-11-89

Q.A. DIRECTOR REVIEW & APPROVAL
(Signature) Patricia M Zaworski
(Printed Name) Patricia M Zaworski
(Date) 9-11-89

QC Inc

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

LABORATORY CHRONICLE

Laboratory Sample ID: 883612, 883613, 883614, 883615, 883616, 883617

	I	Date	II
Receipt/Refrigeration	08/15/89		
Organic Extraction			
1. Base/Neutral Extractables	08/20/89		
2. Acid Extractables			
3. PCBs			
4. Dioxin			
Analyses			
1. Volatiles			
2. Base/Neutral Extractables	08/25,28/89		
3. Acid Extractables			
4. PCBs			
5. Dioxin			
Inorganics			
1. Metals			
2. Cyanides			
3. Phenols			
Other Analytes			
1.			
2.			
3.			

SECTION SUPERVISOR REVIEW & APPROVAL
(Signature) [signature]
(Printed Name) Howard Whaley
(Date) 9-11-89

Q.A. DIRECTOR REVIEW & APPROVAL
(Signature) Patricia M Zaworski
(Printed Name) Patricia M. Zaworski
(Date) 9-11-89

QC Inc

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

LABORATORY CHRONICLE

Laboratory Sample ID: 883612, 883613, 883614, 883615, 883616, 883617

	I	Date	II
Receipt/Refrigeration	08/15/89		
Organic Extraction			
1. Base/Neutral Extractables			
2. Acid Extractables			
3. PCBs			
4. Dioxin			
Analyses			
1. Volatiles			
2. Base/Neutral Extractables			
3. Acid Extractables			
4. PCBs			
5. Dioxin			
Inorganics			
1. Metals	08/29/89		
2. Cyanides			
3. Phenols			
Other Analytes			
1.			
2.			
3.			

SECTION SUPERVISOR REVIEW & APPROVAL
(Signature) Timothy Sabo
(Printed Name) Timothy Sabo
(Date) 9/11/89

Q.A. DIRECTOR REVIEW & APPROVAL
(Signature) Patricia M. Zaworski
(Printed Name) Patricia M. Zaworski
(Date) 9-11-89

QC Inc

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

LABORATORY CHRONICLE

Laboratory Sample ID: 883612, 883613, 883614, 883615, 883616, 883617

	I	Date	II
Receipt/Refrigeration	08/15/89		
Organic Extraction			
1. Base/Neutral Extractables			
2. Acid Extractables			
3. PCBs			
4. Dioxin			
Analyses			
1. Volatiles			
2. Base/Neutral Extractables			
3. Acid Extractables			
4. PCBs			
5. Dioxin			
Inorganics			
1. Metals			
2. Cyanides			
3. Phenols			
Other Analytes			
1. Petroleum Hydrocarbons	08/16/89		
2. Total Organic Carbon	08/17/89		08/18/89
3. Total Dissolved Solids	08/16/89		08/24/89
4. pH	08/16/89		

SECTION SUPERVISOR REVIEW & APPROVAL
(Signature) [signature]
(Printed Name) Raphael Fratti
(Date)

Q.A. DIRECTOR REVIEW & APPROVAL
(Signature) Patricia M Zaworski
(Printed Name) Patricia M. Zaworski
(Date) 9-11-89

QC Inc

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

CASE NARRATIVE

VOLATILE ORGANICS

Holding Times

Required sample holding time criteria were met.

GC/MS Tuning and Performance

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

Initial Calibration

Required SPCC and CCC criteria were met.

Continuing Calibration

Required SPCC and CCC criteria were met.

Blanks

Required method blank frequency, matrix, and contamination criteria were met.

Surrogates

Required BLANK and SAMPLE surrogate recovery criteria were met.

Matrix Spike/Matrix Spike Duplicate

Advisory limits for MS percent recoveries and MSD relative percent difference were met with the following exception:

Sample ID	MS/MSD Performance
C29A-MW MSD	1 out of 5 duplicate RPD's outside QC limits.

Compound Identification

All standards and spectra for positively identified compounds are present.

Internal Standards Summary

Internal standards met area criteria.

QC Inc

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

CASE NARRATIVE

SEMIVOLATILE ORGANICS

Holding Times

Required holding time criteria for extraction of Semivolatile Organics samples were met.

GC/MS Tuning and Performance

Required tune performance check frequency and DFTPP ion abundance criteria were met.

Initial Calibration

Required SPCC and CCC criteria were met.

Continuing Calibration

Required SPCC and CCC criteria were met.

Blanks

Required method blank frequency, matrix, and contamination criteria were met.

Surrogates

Required BLANK surrogate recovery criteria were met.

Required SAMPLE surrogate recovery criteria were met with the following exceptions:

Sample ID	Surrogate	%Rec.	QC Limits
C-14A MW *	Nitrobenzene-d5	31	35-114
	2-Fluorobiphenyl	39	43-116
C-29A MW	2-Fluorobiphenyl	38	43-116

* As per IFB-CLP re-analysis of sample could not be run due to insufficient sample.

QC Inc

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

CASE NARRATIVE (Cont'd)

SEMIVOLATILE ORGANICS

Matrix Spike/Matrix Spike Duplicate

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

Compound Identification

All standards and spectra for positively identified compounds are present.

Internal Standards Summary

Internal standards met area criteria.

Other Procedural Criteria

Due to insufficient amount of sample C-14B MW, 950 ml volumes were extracted rather than 1,000 ml as required by the USEPA CLP SOW and 40 CFR Part 136, USEPA Method 625.

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 Organics Statement of Work
Acid/Base Neutral Extractables	USEPA Contract Laboratory Program 7/88 Organics Statement of Work
Metals	USEPA SW-846, 3rd Edition Water Digestion: Method 3020 Analysis: Method 7421 (AA)
Petroleum Hydrocarbons	USEPA Method 418.1
Total Organic Carbon	USEPA Method 415.1
pH	USEPA Method 150.1
Total Dissolved Solids	USEPA Method 160.2

2

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: Q C INC. Contract: GANNET-FLEM

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

	EPA SAMPLE NO.	S1 (TOL)#	S2 (BFB)#	S3 (DCE)#	OTHER	TOT OUT
01	C-14A_MW	99	93	98		0
02	C-14B_MW	93	98	96		0
03	C-14C_MW	88	106	99		0
04	FIELD_BLANK	98	101	98		0
05	MW_C29A	95	100	96		0
06	TRIP_BLANK	95	101	92		0
07	C29A_MWMS	92	101	97		0
08	C29A_MWMSD	98	91	96		0
09	WATER_BLANK	102	95	97		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

B 3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Q C INC. Contract: GANNET-FLEM

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

Matrix Spike - EPA Sample No.: MW_C29A

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.0	0	46.5	93	61-145
Trichloroethene	50.0	0	46.0	92	71-120
Benzene	50.0	0	46.1	92	76-127
Toluene	50.0	1.22	55.4	108	76-125
Chlorobenzene	50.0	0	60.7	121	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50.0	61.4	123	-28 *	14	61-145
Trichloroethene	50.0	47.5	95	-3	14	71-120
Benzene	50.0	48.4	97	-5	11	76-127
Toluene	50.0	60.2	118	-9	13	76-125
Chlorobenzene	50.0	62.3	125	-3	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: MW C29A
5MLS

B

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: Q C INC. Contract: GANNET-FLEM

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

Lab File ID: BLK0823A Lab Sample ID: BLK0823A

Date Analyzed: 08/23/89 Time Analyzed: 0902

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

Instrument ID: 1050

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_MW	883613	10032V	1521
02	C-14B_MW	883614	10033V	1625
03	C-14C_MW	883615	10034V	1730
04	FIELD_BLANK	883616	10035V	1101
05	MW_C29A	883612	10031V	1206
06	TRIP_BLANK	883617	10036V	0957
07	C29A_MWMS	883612	10031VS	1310
08	C29A_MWMSD	883612	10031VSD	1416

COMMENTS: STANDARD
50NG PURGED

B

5A

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

Lab Name: Q C INC. Contract: GANNET-FLEM

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

Lab File ID: BFB0822A BFB Injection Date: 08/22/89

Instrument ID: A 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	20.6
75	30.0 - 60.0% of mass 95	57.5
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	63.6
175	5.0 - 9.0% of mass 174	4.2 (6.6)1
176	Greater than 95.0%, but less than 101.0% of mass 174	63.6 (100.0)1
177	5.0 - 9.0% of mass 176	4.1 (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	20NG_STD	VS0200822A	VS0200822A	08/22/89	0827
02	50NG_STD	VS0500822A	VS0500822A	08/22/89	0931
03	100NG_STD	VS1000822A	VS1000822A	08/22/89	1037
04	150NG_STD	VS1500822A	VS1500822A	08/22/89	1142
05	200NG_STD	VS2000822A	VS2000822A	08/22/89	1247

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

Lab Name: Q C INC. Contract: GANNET-FLEM

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

Lab File ID: BFB0823A BFB Injection Date: 08/23/89

Instrument ID: A BFB Injection Time: 0745

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	21.9
75	30.0 - 60.0% of mass 95	56.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	5.6
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	60.4
175	5.0 - 9.0% of mass 174	5.0 (8.3)1
176	Greater than 95.0%, but less than 101.0% of mass 174	60.1 (99.5)1
177	5.0 - 9.0% of mass 176	3.6 (6.0)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	50NG_STD	VS050A0823	VS050A0823	08/23/89	0801
02	WATER_BLANK	BLK0823A	BLK0823A	08/23/89	0902
03	TRIP_BLANK	883617	10036V	08/23/89	0957
04	FIELD_BLANK	883616	10035V	08/23/89	1101
05	MW_C29A	883612	10031V	08/23/89	1206
06	C29A_MWMS	883612	10031VS	08/23/89	1310
07	C29A_MWMSD	883612	10031VSD	08/23/89	1416
08	C-14A_MW	883613	10032V	08/23/89	1521
09	C-14B_MW	883614	10033V	08/23/89	1625
10	C-14C_MW	883615	10034V	08/23/89	1730

B

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Q C INC. Contract: GANNET-FLEM

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

Lab File ID (Standard): VS050A0823 Date Analyzed: 08/23/89

Instrument ID: 1050 Time Analyzed: 0801

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	138000	12.17	602000	23.62	545000	28.97
	UPPER LIMIT	276000		1204000		1090000	
	LOWER LIMIT	69000		301000		272500	
	EPA SAMPLE NO.						
01	C-14A_MW	139000	12.00	570000	23.47	532000	28.87
02	C-14B_MW	122000	12.00	483000	23.50	470000	28.84
03	C-14C_MW	98100	12.00	329000	23.47	347000	28.87
04	FIELD_BLANK	134000	12.04	561000	23.54	515000	28.91
05	MW_C29A	119000	12.04	482000	23.50	454000	28.91
06	TRIP_BLANK	102000	12.07	420000	23.54	411000	28.94
07	C29A_MWMS	125000	12.04	469000	23.50	472000	28.91
08	C29A_MWMSD	146000	12.00	602000	23.50	555000	28.87
09	WATER_BLANK	135000	12.17	594000	23.62	537000	29.01

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.

MW_C29A

Lab Name: Q C INC. Contract: GANNET-FLEM

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

Matrix: (soil/water) WATER Lab Sample ID: 883612

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 10031V

Level: (low/med) LOW Date Received: 08/15/89

% Moisture: not dec. Date Analyzed: 08/23/89

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

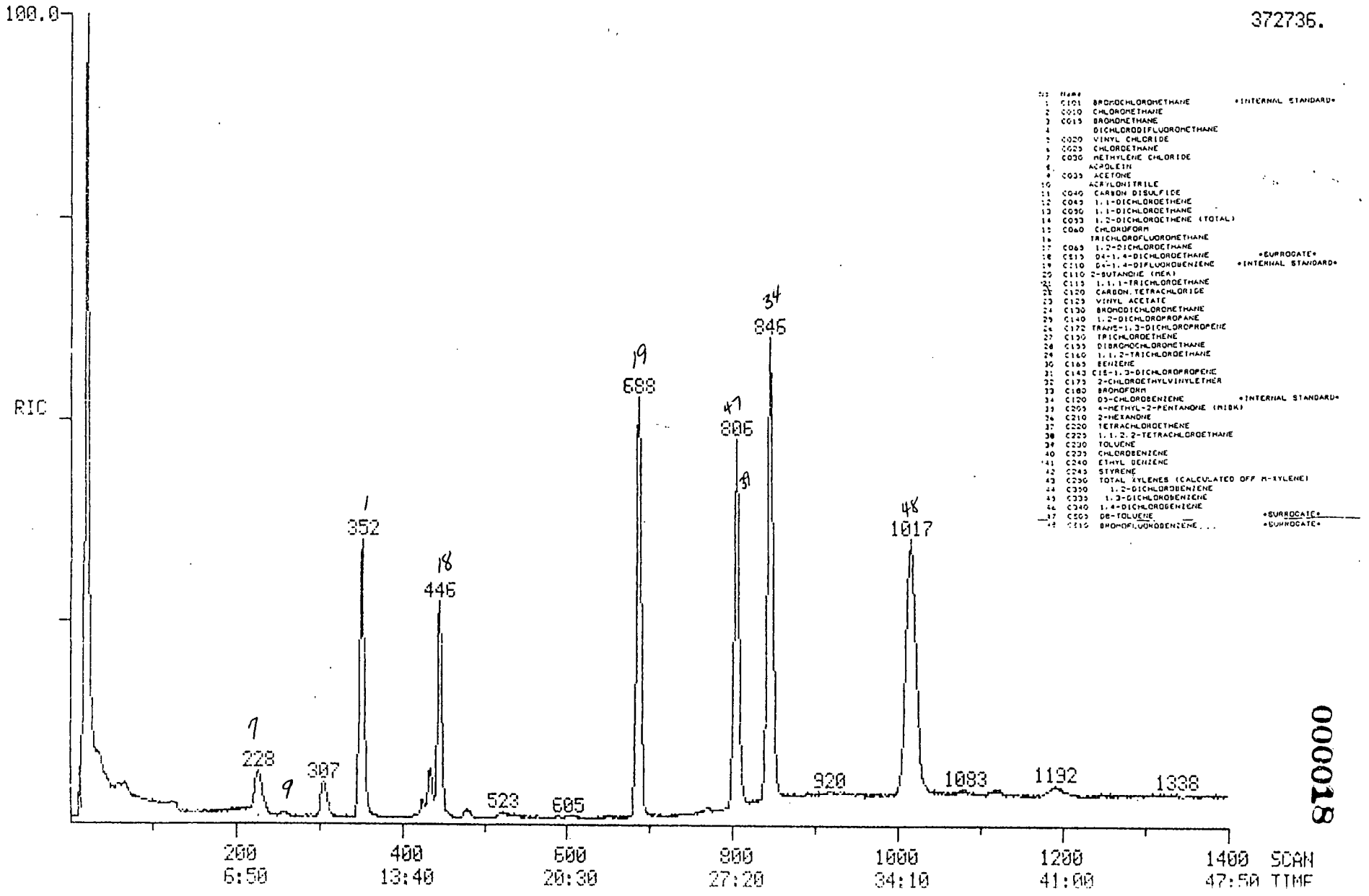
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	11	B
67-64-1	Acetone	9	BJ
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	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	100	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	50	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	50	U
591-78-6	2-Hexanone	50	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	1	J
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
	Total Xylenes	5	U

RIC
08/23/89 12:06:00
SAMPLE: MW C29A
CONDS.: 5MLS
RANGE: G 1,1400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 10031V #1
CALI: 10031V #2

SCANS 1 TO 1400

372736.



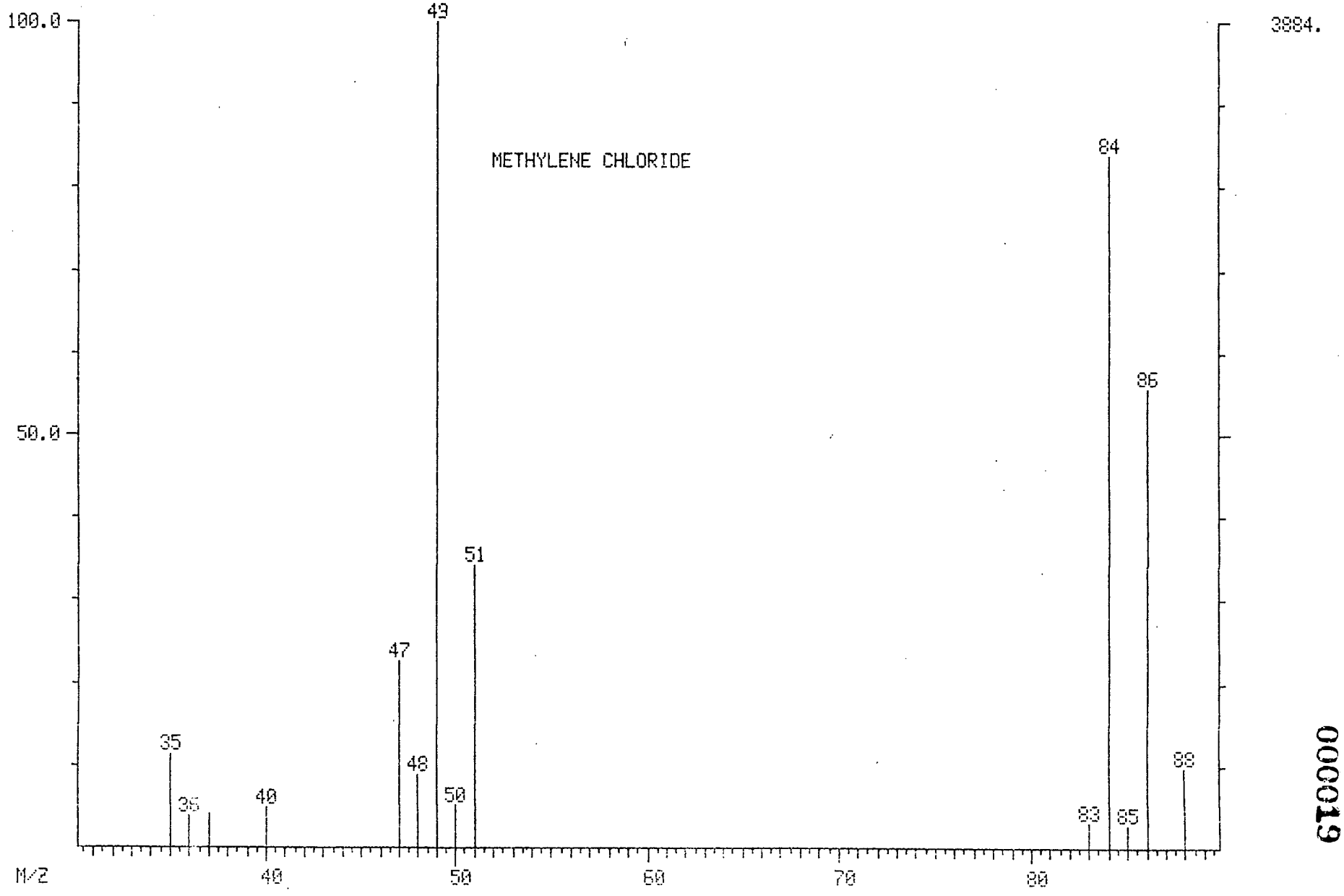
No	Name		
1	C101	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	C010	CHLOROMETHANE	
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8		ACROLEIN	
9	C035	ACETONE	
10		ACRYLONITRILE	
11	C040	CARBON DISULFIDE	
12	C045	1,1-DICHLOROETHENE	
13	C050	1,1-DICHLOROETHANE	
14	C055	1,2-DICHLOROETHENE (TOTAL)	
15	C060	CHLOROFORM	
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	C515	D4-1,4-DICHLOROETHANE	*SURROGATE*
19	C110	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	C190	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	C505	D8-TOLUENE	*SURROGATE*
48	C515	BROMOFLUOROBENZENE...	*SURROGATE*

000018

MASS SPECTRUM
03/23/89 12:06:00 + 7:47
SAMPLE: MW C29A
CONDS.: 5MLS
ENHANCED (S 15B 2N 0T)

DATA: 10031V #228
CALI: 10031V #2

BASE M/Z: 49
RIC: 13600.

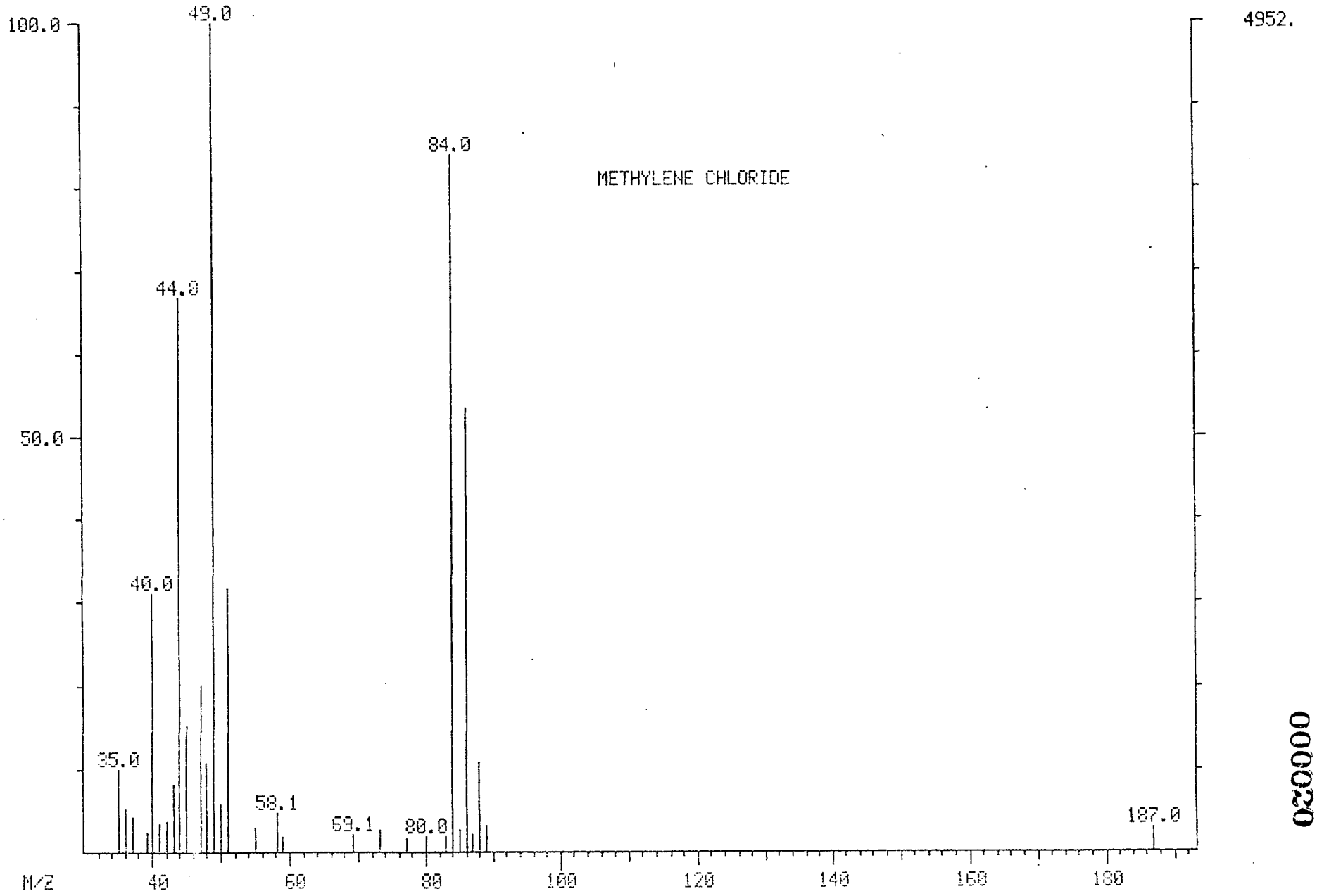


000019

MASS SPECTRUM
03/23/89 12:06:00 + 7:47
SAMPLE: MW C29A
CONDS.: 5ML5

DATA: 10031V #228
CALI: 10031V #2

BASE M/Z: 49
RIC: 24540.

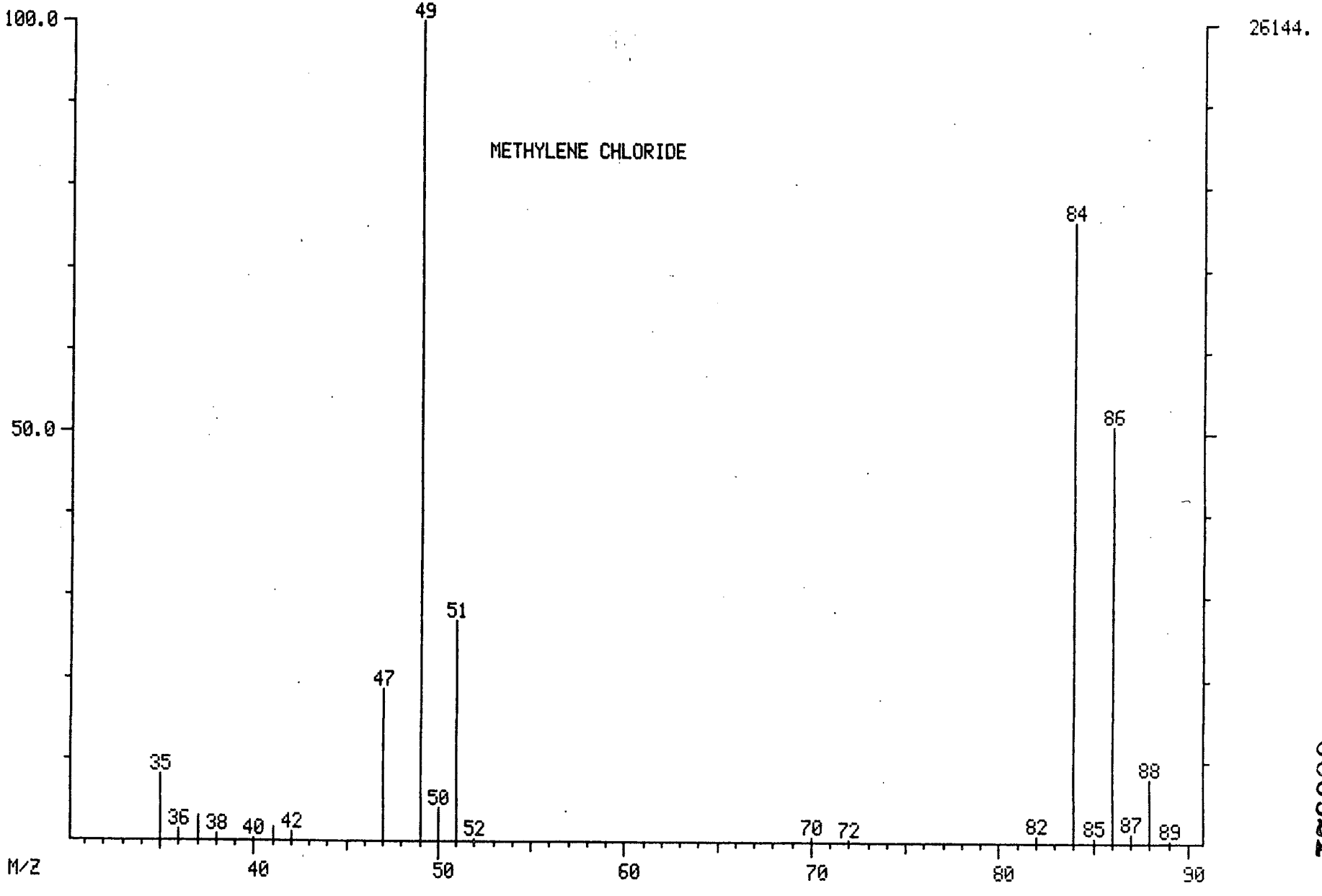


000020

MASS SPECTRUM
08/23/89 8:01:00 + 7:56
SAMPLE: STANDARD
CONDS.: 50NG PURGED
ENHANCED (S 15B 2N 0T)

DATA: VS050A0823 #232
CALI: VS050A0823 #2

BASE M/Z: 49
RIC: 79616.

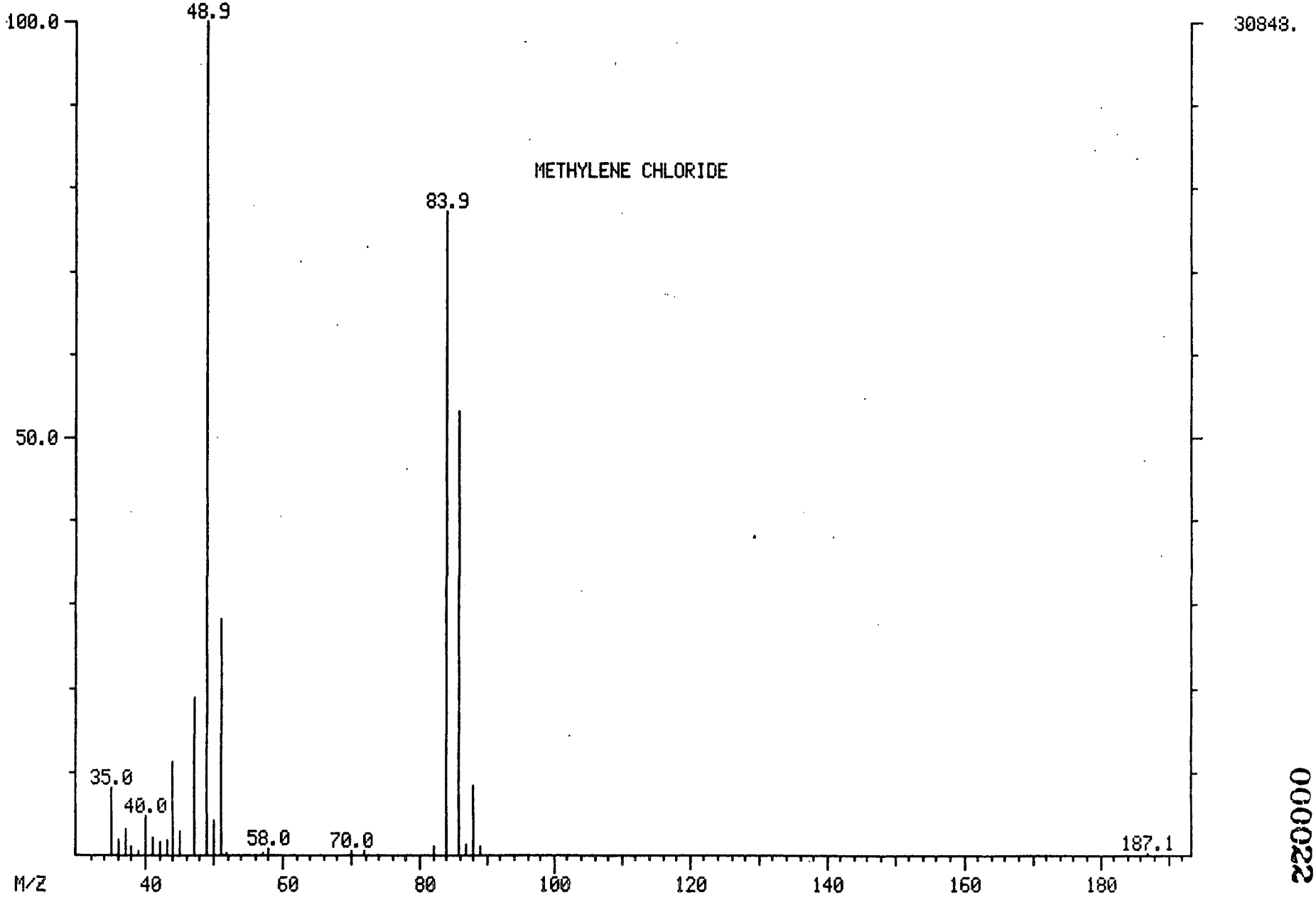


000021

MASS SPECTRUM
08/23/89 8:01:00 + 7:56
SAMPLE: STANDARD
CONDS.: 50NG PURGED

DATA: VS050A0823 #232
CALI: VS050A0823 #2

BASE M/Z: 49
RIC: 103168.

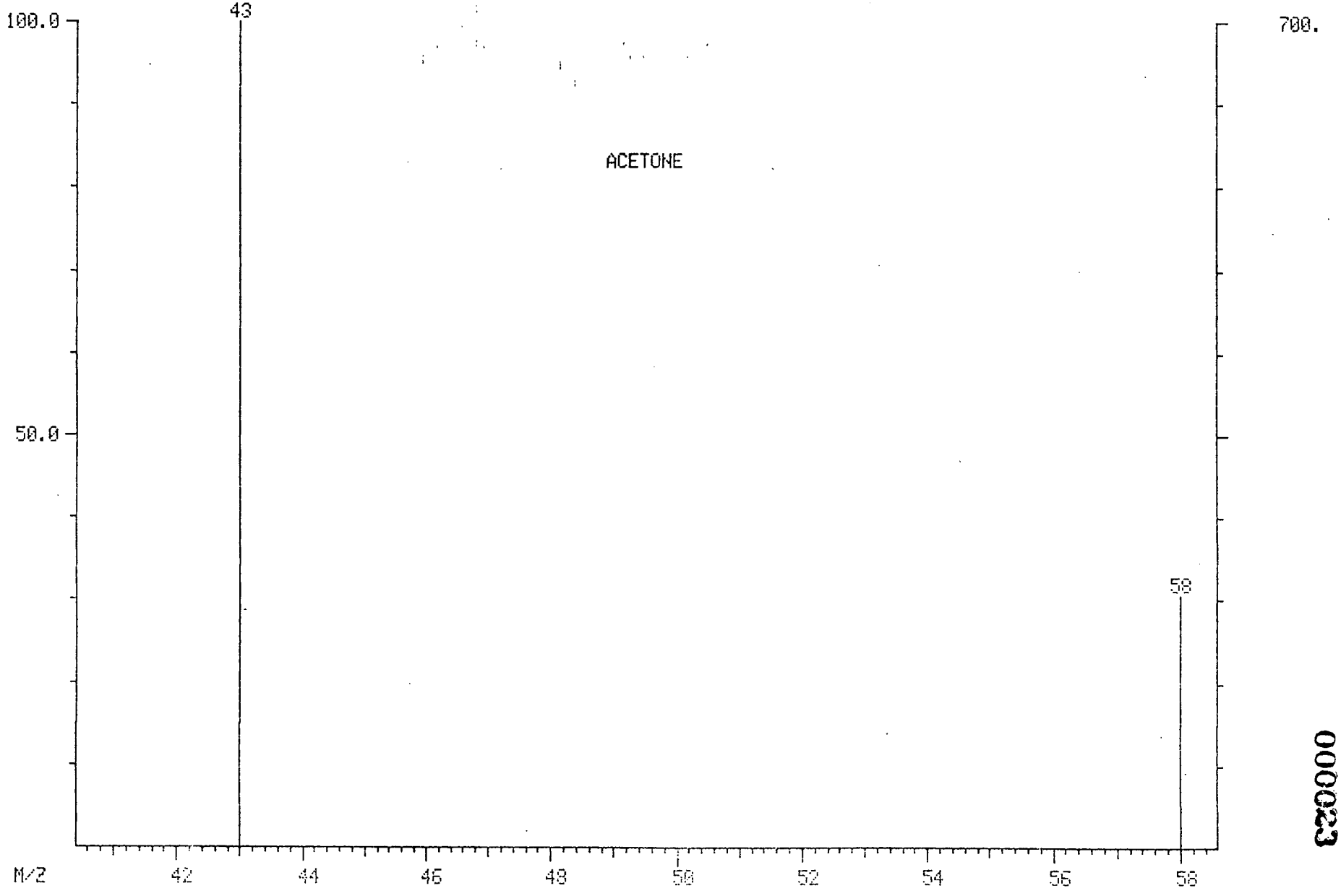


000022

MASS SPECTRUM
08/23/89 12:06:00 + 8:47
SAMPLE: MW C29A
CONDS.: 5ML5
ENHANCED (S 15B 2N 0T)

DATA: 10031V #257
CALI: 10031V #2

BASE M/Z: 43
RIC: 915.

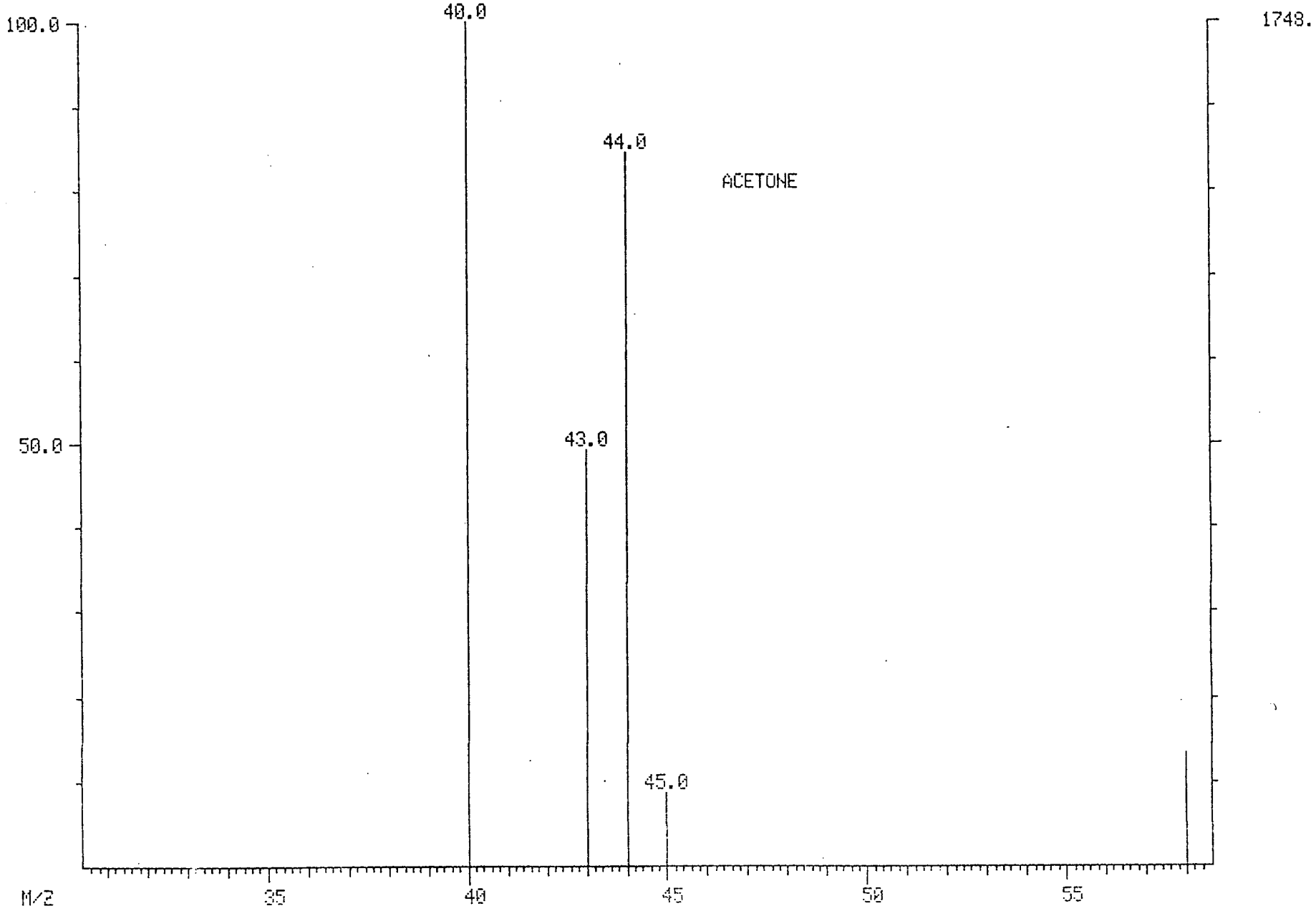


000023

MASS SPECTRUM
03/23/89 12:06:00 + 8:47
SAMPLE: MW C29A
CONDS.: 5MLS

DATA: 10031V #257
CALI: 10031V #2

BASE M/Z: 40
RIC: 4472.

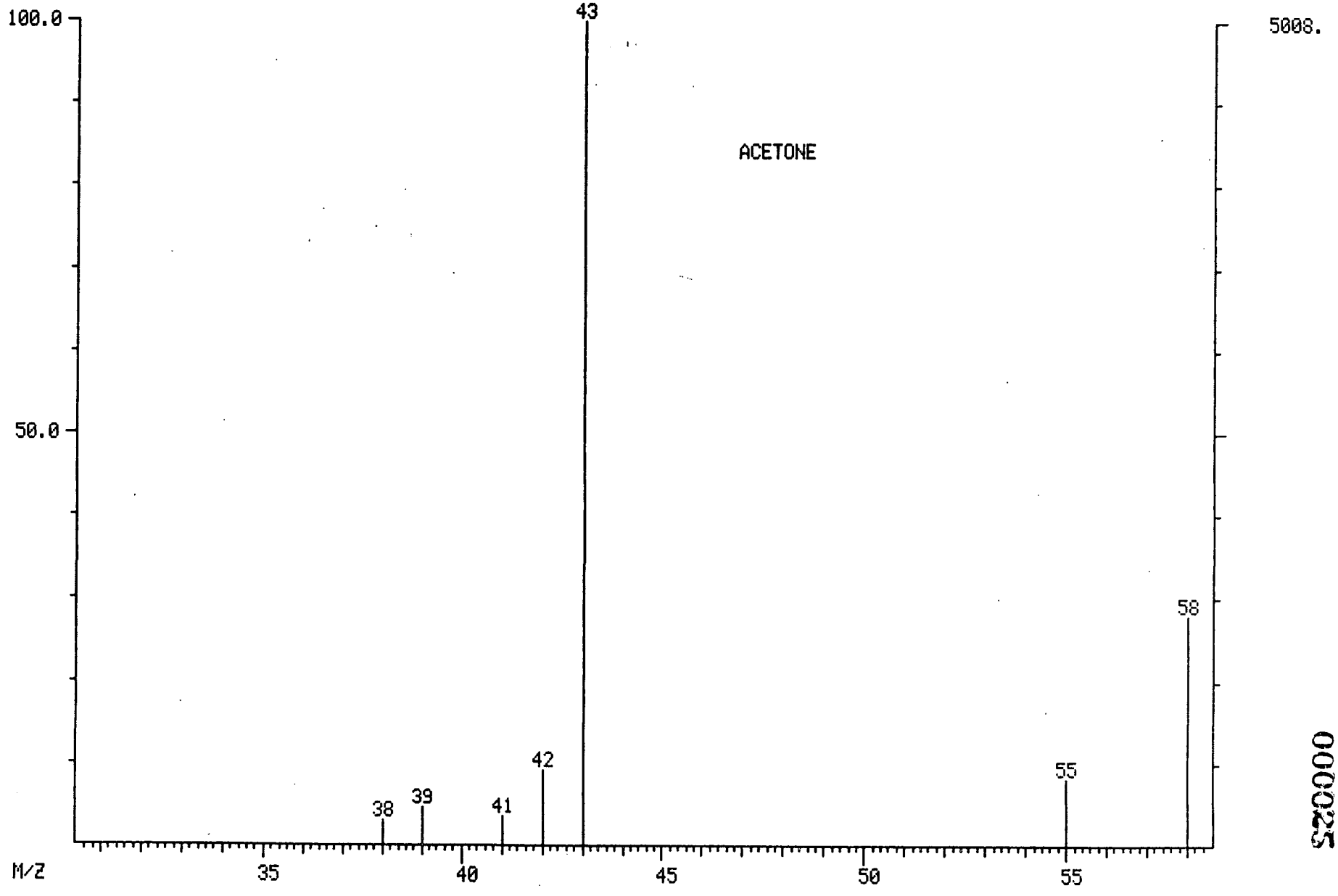


000024

MASS SPECTRUM
08/23/89 8:01:00 + 9:01
SAMPLE: STANDARD
CONDS.: 50NG PURGED
ENHANCED (S 15B 2N 0T)

DATA: VS050A0823 #264
CALI: VS050A0823 #2

BASE M/Z: 43
RIC: 7824.

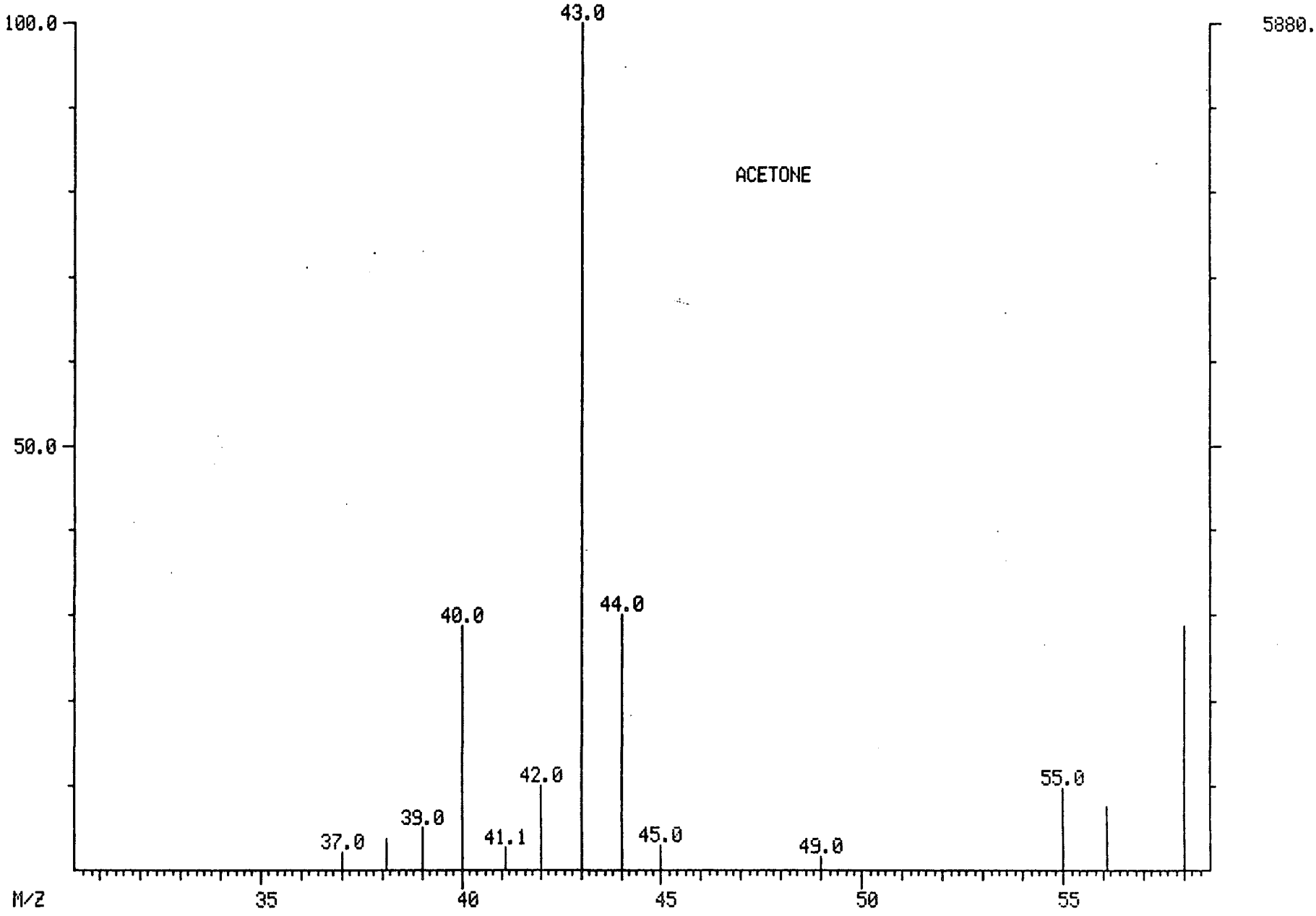


000025

MASS SPECTRUM
08/23/89 8:01:00 + 9:01
SAMPLE: STANDARD
CONDS.: 50NG PURGED

DATA: VS050A0823 #264
CALI: VS050A0823 #2

BASE M/Z: 43
RIC: 13664.

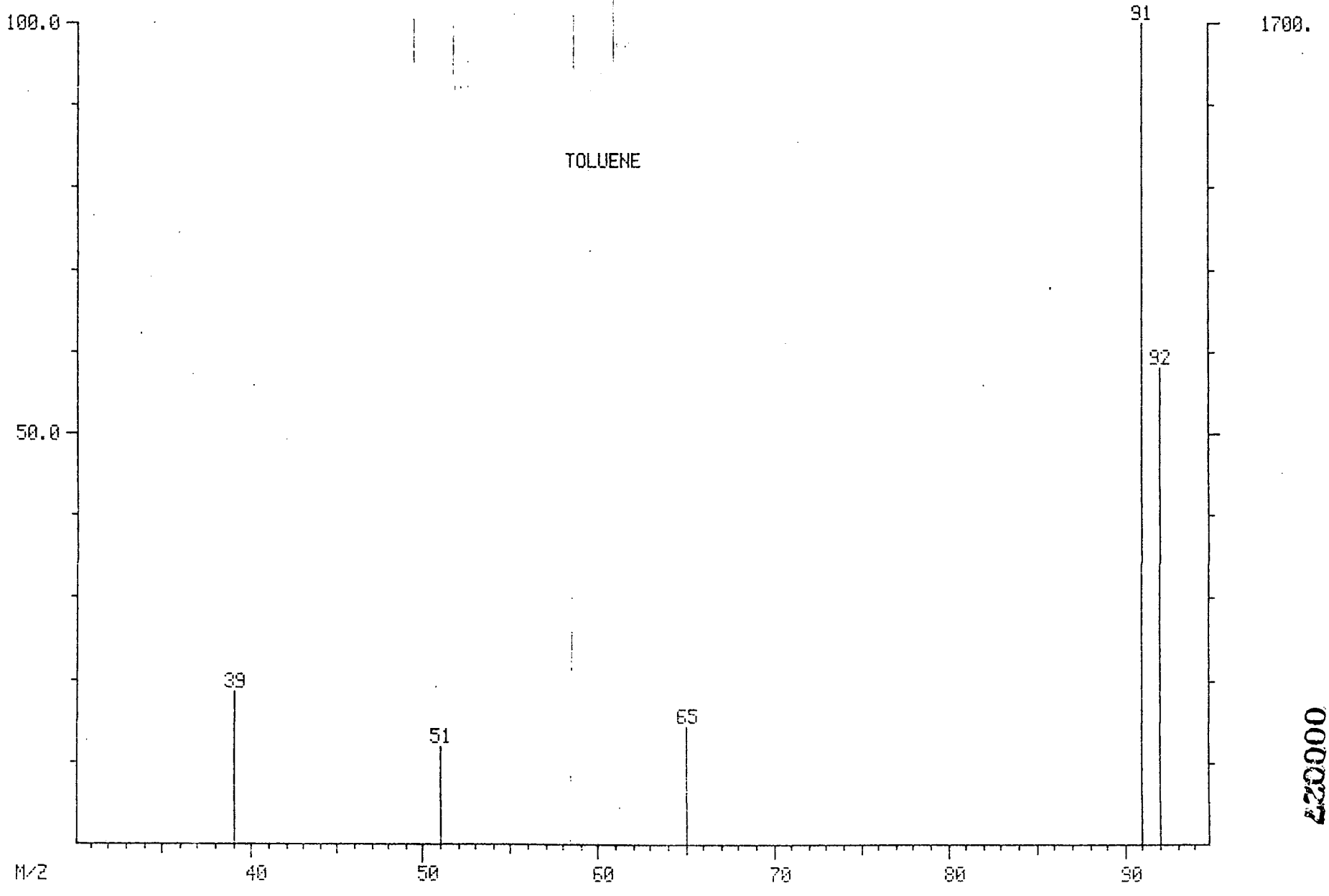


000026

MASS SPECTRUM
08/23/89 12:06:00 + 27:47
SAMPLE: MW C29A
CONDS.: 5MLS
ENHANCED (S 15B 2N 0T)

DATA: 10031V #813
CALI: 10031V #2

BASE M/Z: 91
RIC: 3448.

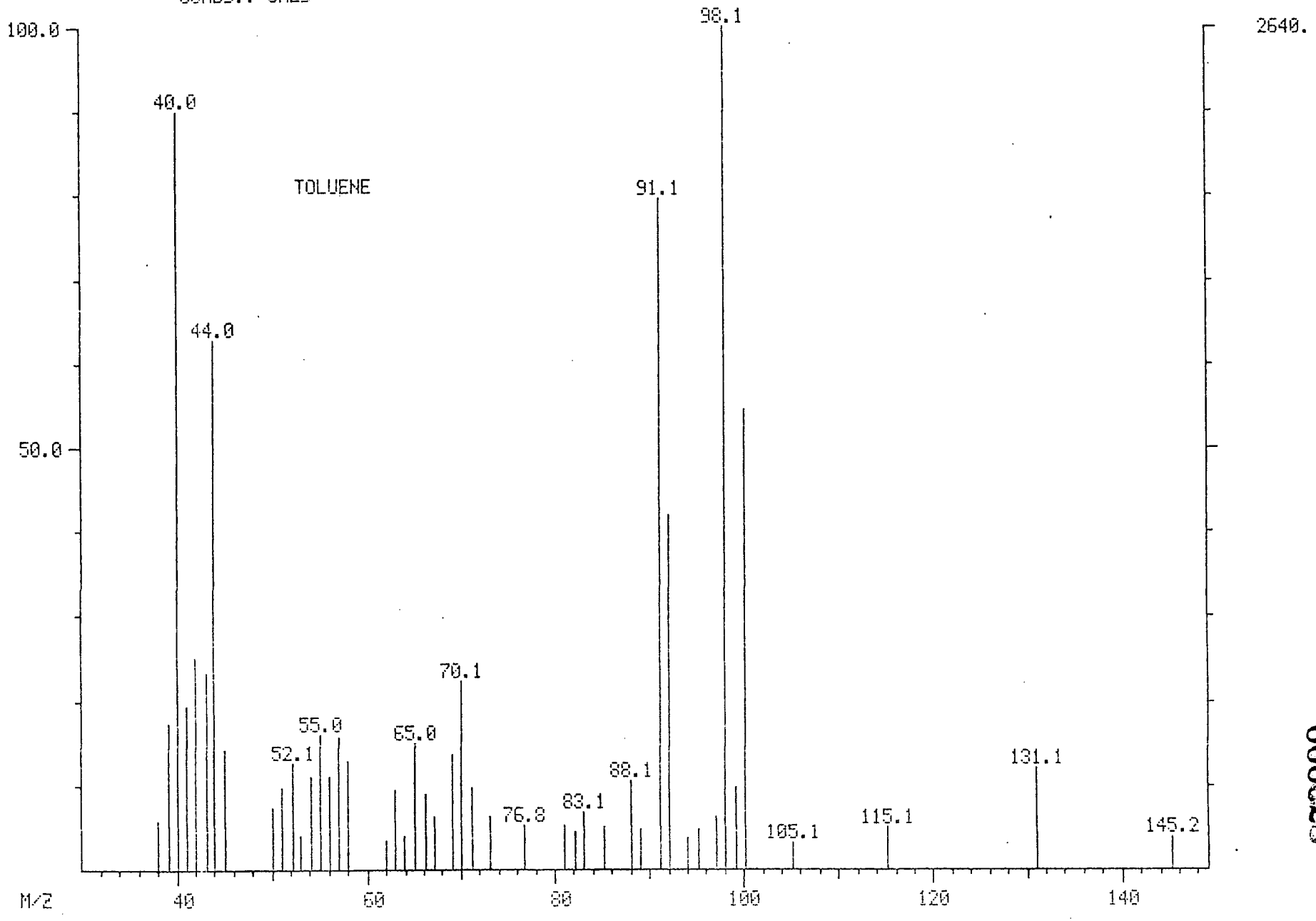


000027

MASS SPECTRUM
08/23/89 12:06:00 + 27:47
SAMPLE: MW C29A
CONDS.: 5MLS

DATA: 10031V #813
CALI: 10031V #2

BASE M/Z: 98
RIC: 21760.

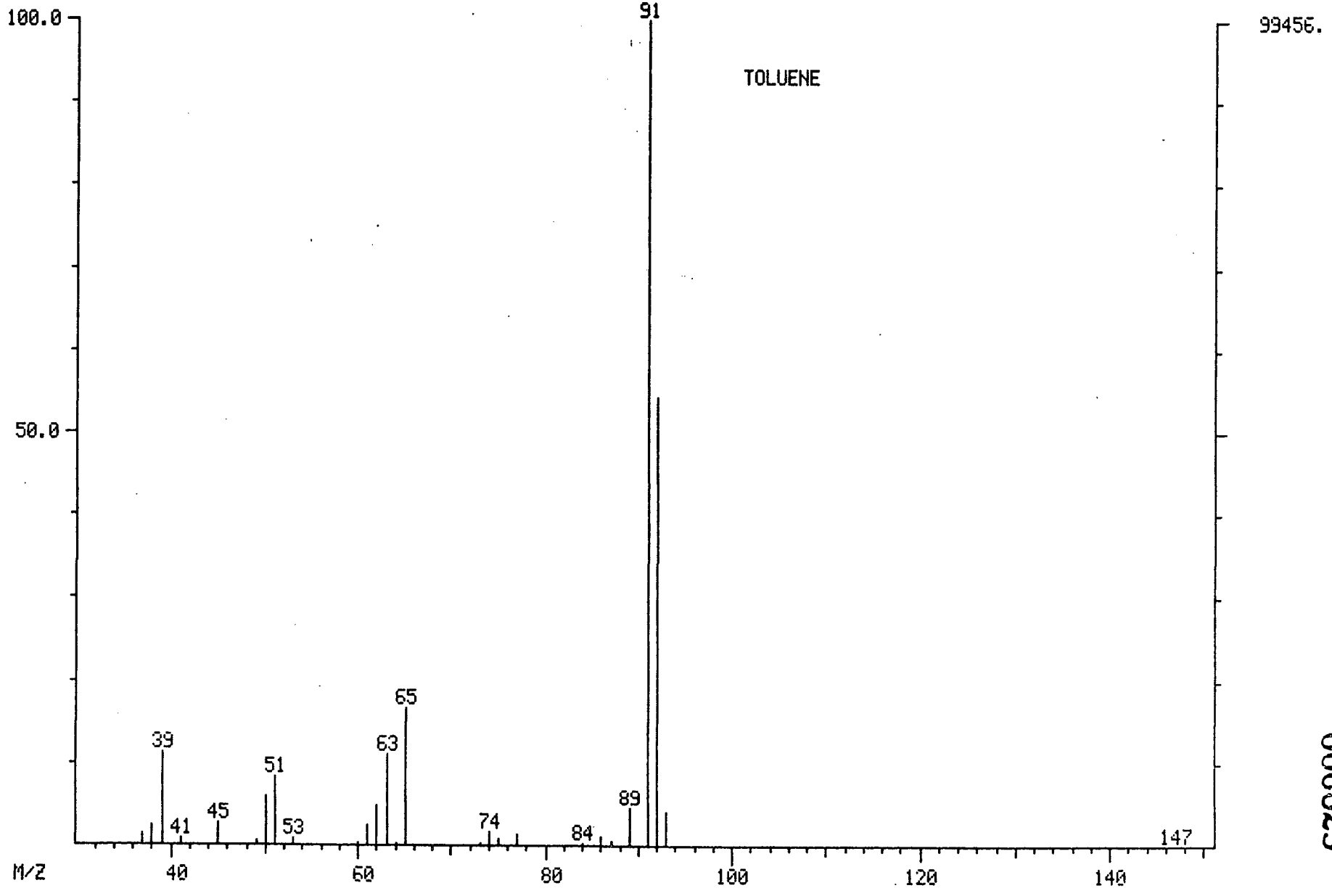


000028

MASS SPECTRUM
08/23/89 8:01:00 + 27:49
SAMPLE: STANDARD
CONDS.: 50NG PURGED
ENHANCED (S 15B 2N 0T)

DATA: VS050A0823 #814
CALI: VS050A0823 #2

BASE M/Z: 91
RIC: 236800.

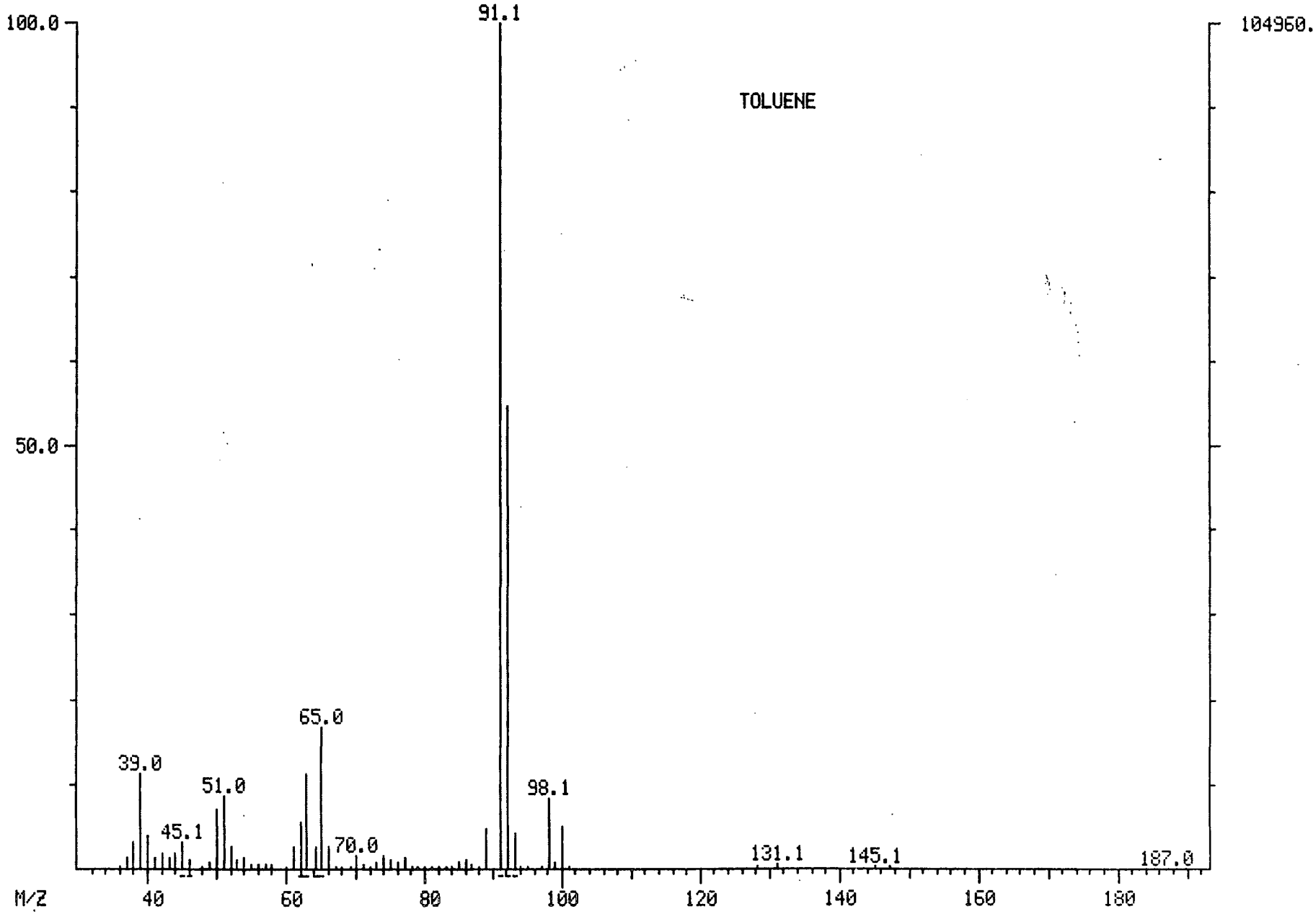


000029

MASS SPECTRUM
08/23/89 8:01:00 + 27:49
SAMPLE: STANDARD
CONDS.: 50NG PURGED

DATA: VS050A0823 #814
CALI: VS050A0823 #2

BASE M/Z: 91
RIC: 301056.



000030

QUANTITATION REPORT FILE: 10031V

000031

DATA: 10031V.TI
08/23/89 12:06:00
SAMPLE: MW C29A
CONDS.: 5MLS
FORMULA:] INSTRUMENT: 1050 WEIGHT: 0.008
SUBMITTED BY: GANNETT ANALYST: DMW ACCT. NO.: 10031

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
RESP. FAC. FROM LIBRARY ENTRY

No	NAME		
1	CI01	BROMOCHLOROMETHANE	*** INTERNAL STANDARD #1 ***
2	C010	CHLOROMETHANE	**
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	*
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8	C035	2-PROPANONE (ACETONE)	
9		ACROLEIN	
10	C040	CARBON DISULFIDE	
11		ACRYLONITRILE	
12	C045	1,1-DICHLOROETHENE	*
13	C050	1,1-DICHLOROETHANE	**
14	C053	TRANS-1,2-DICHLOROETHENE	
15	C060	CHLOROFORM	*
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	CS15	1,2-DICHLOROETHANE-D4	*** SURROGATE #1 ***
19	CI10	1,4-DIFLUOROBENZENE	*** INTERNAL STANDARD #2 ***
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-CHLOROETHYL VINYL ETHER	
33	C180	BROMOFORM	**
34	CI20	CHLOROBENZENE-D5	*** INTERNAL STANDARD #3 ***
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	XYLENES	
44	C250	XYLENES	
45	C350	1,2-DICHLOROBENZENE	
46	C340	1,4-DICHLOROBENZENE	
47	C325	1,3-DICHLOROBENZENE	

No	Name			
48	CS05	TOLUENE-D8	*** SURROGATE #2 ***	
49	CS10	4-BROMOFLUOROBENZENE	*** SURROGATE #3 ***	

No	M/Z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	352	12:02	1	1.000	A BB	118593.	50.000 UG/L	15.25
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	84	228	7:47	1	0.648	A BB	37509.	10.665 UG/L	3.25
8	43	258	8:49	1	0.733	A BB	6749.	9.132 UG/L	2.79
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	~~63~~	~~353~~	~~12:04~~	~~1~~	~~1.003~~	~~A BB~~	~~372.~~	~~0.063 UG/L~~	~~0.02~~ Dnu 9/1/89
14	NOT FOUND								
15	NOT FOUND								
16	~~101~~	~~307~~	~~10:29~~	~~1~~	~~0.272~~	~~A BB~~	~~62857.~~	~~4.880 UG/L~~	~~1.49~~ Dnu 9/1/89
17	NOT FOUND								
18	65	446	15:14	1	1.267	A BB	266128.	48.028 UG/L	14.65
19	114	688	23:30	19	1.000	A BB	481901.	50.000 UG/L	15.25
20	~~43~~	~~449~~	~~15:20~~	~~19~~	~~0.653~~	~~A BB~~	~~3098.~~	~~2.540 UG/L~~	~~0.77~~ Dnu 9/1/89
21	~~97~~	~~489~~	~~16:42~~	~~19~~	~~0.711~~	~~A BB~~	~~344.~~	~~0.050 UG/L~~	~~0.02~~ Dnu 9/1/89
22	NOT FOUND								
23	NOT FOUND								
24	~~83~~	~~523~~	~~17:52~~	~~19~~	~~0.760~~	~~A BB~~	~~407.~~	~~0.056 UG/L~~	~~0.02~~ Dnu 9/1/89
25	NOT FOUND								
26	~~75~~	~~573~~	~~19:05~~	~~19~~	~~0.833~~	~~A BB~~	~~334.~~	~~0.046 UG/L~~	~~0.01~~ Dnu 9/1/89
27	~~130~~	~~591~~	~~20:12~~	~~19~~	~~0.859~~	~~A BB~~	~~606.~~	~~0.138 UG/L~~	~~0.04~~ Dnu 9/1/89
28	NOT FOUND								
29	NOT FOUND								
30	~~78~~	~~687~~	~~23:44~~	~~19~~	~~0.882~~	~~A BB~~	~~2973.~~	~~0.328 UG/L~~	~~0.10~~ Dnu 9/1/89
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	117	846	28:54	34	1.000	A BB	453648.	50.000 UG/L	15.25
35	~~43~~	~~717~~	~~24:23~~	~~34~~	~~0.848~~	~~A*BV~~	~~1006.~~	~~0.280 UG/L~~	~~0.09~~ Dnu 9/1/89
36	NOT FOUND								
37	~~164~~	~~771~~	~~26:21~~	~~34~~	~~0.911~~	~~A BB~~	~~199.~~	~~0.052 UG/L~~	~~0.02~~ Dnu 9/1/89
38	~~83~~	~~778~~	~~26:35~~	~~34~~	~~0.920~~	~~A*VB~~	~~987.~~	~~0.178 UG/L~~	~~0.05~~ Dnu 9/1/89
39	92	813	27:47	34	0.961	A BB	8031.	1.223 UG/L	0.37
40	~~112~~	~~852~~	~~29:07~~	~~34~~	~~1.007~~	~~A BB~~	~~2177.~~	~~0.258 UG/L~~	~~0.08~~ Dnu 9/1/89
41	~~106~~	~~920~~	~~31:26~~	~~34~~	~~1.087~~	~~A BB~~	~~1054.~~	~~0.250 UG/L~~	~~0.08~~ Dnu 9/1/89
42	~~104~~	~~1069~~	~~36:31~~	~~34~~	~~1.264~~	~~A BB~~	~~419.~~	~~0.062 UG/L~~	~~0.02~~ Dnu 9/1/89
43	~~106~~	~~1122~~	~~38:20~~	~~34~~	~~1.326~~	~~A BB~~	~~4142.~~	~~0.587 UG/L~~	~~0.20~~ Dnu 9/1/89
44	~~106~~	~~1122~~	~~38:20~~	~~34~~	~~1.326~~	~~A BB~~	~~4142.~~	~~0.987 UG/L~~	~~0.30~~ Dnu 9/1/89
45	~~146~~	~~1319~~	~~45:04~~	~~34~~	~~1.559~~	~~A BB~~	~~151.~~	~~0.040 UG/L~~	~~0.01~~ Dnu 9/1/89
46	~~146~~	~~1340~~	~~45:47~~	~~34~~	~~1.584~~	~~A*BB~~	~~204.~~	~~0.032 UG/L~~	~~0.01~~ Dnu 9/1/89
47	~~146~~	~~1274~~	~~43:32~~	~~34~~	~~1.506~~	~~A*BB~~	~~323.~~	~~0.087 UG/L~~	~~0.03~~ Dnu 9/1/89
48	98	806	27:32	34	0.953	A BB	419724.	47.729 UG/L	14.56
49	95	1017	34:45	34	1.202	A BB	344606.	50.221 UG/L	15.32

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	12:10	0.99	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:40		0.138						
3	2:40		0.219						
4	3:00		0.264						
5	3:27		0.284						
6	4:49		0.396						
7	7:56	0.98	0.652	0.99	10.66	50.00	0.316	1.483	0.21
8	9:01	0.98	0.743	0.99	9.13	50.00	0.057	0.312	0.18
9	9:05		0.747						
10	9:52		0.812						
11	9:54		0.815						
12	11:35		0.952						
13	13:05	0.92	1.076	0.93	0.06	50.00	0.003	2.615	0.00
14	14:00		1.152						
15	14:39		1.205						
16	10:38	0.99	0.874	1.00	4.88	50.00	0.530	5.430	0.10
17	15:29		1.272						
18	15:22	0.99	1.264	1.00	48.03	50.00	2.244	2.336	0.96
19	23:37	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
20	15:27	0.99	0.654	1.00	2.54	50.00	0.006	0.127	0.05
21	16:51	0.99	0.713	1.00	0.05	50.00	0.001	0.710	0.00
22	17:15		0.731						
23	17:32		0.742						
24	17:58	0.99	0.761	1.00	0.06	50.00	0.001	0.760	0.00
25	19:24		0.822						
26	19:43	0.99	0.835	1.00	0.05	50.00	0.001	0.751	0.00
27	20:18	0.99	0.860	1.00	0.14	50.00	0.001	0.455	0.00
28	21:03		0.891						
29	21:09		0.896						
30	20:50	1.00	0.880	1.00	0.33	50.00	0.006	0.941	0.01
31	21:09		0.896						
32	22:17		0.944						
33	23:59		1.016						
34	28:58	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
35	24:26	1.00	0.843	1.01	0.28	50.00	0.002	0.395	0.01
36	26:06		0.901						
37	26:27	1.00	0.913	1.00	0.05	50.00	0.000	0.418	0.00
38	26:29	1.00	0.914	1.01	0.18	50.00	0.002	0.612	0.00
39	27:47	1.00	0.960	1.00	1.22	50.00	0.018	0.724	0.02
40	29:09	1.00	1.006	1.00	0.26	50.00	0.005	0.929	0.01
41	31:34	1.00	1.090	1.00	0.25	50.00	0.002	0.465	0.00
42	36:50	0.99	1.271	0.99	0.06	50.00	0.001	0.746	0.00
43	38:28	1.00	1.328	1.00	0.99	50.00	0.009	0.463	0.02
44	38:28	1.00	1.328	1.00	0.99	50.00	0.009	0.463	0.02
45	45:06	1.00	1.557	1.00	0.04	50.00	0.000	0.420	0.00
46	45:53	1.00	1.584	1.00	0.03	50.00	0.000	0.704	0.00
47	43:40	1.00	1.507	1.00	0.09	50.00	0.001	0.411	0.00
48	27:36	1.00	0.953	1.00	47.73	50.00	0.925	0.969	0.95
49	34:55	1.00	1.205	1.00	50.22	50.00	0.760	0.756	1.00

B 1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C-14A_MW

Lab Name: Q C INC. Contract: GANNET-FLEM

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

Matrix: (soil/water) WATER Lab Sample ID: 883613

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 10032V

Level: (low/med) LOW Date Received: 08/15/89

% Moisture: not dec. Date Analyzed: 08/23/89

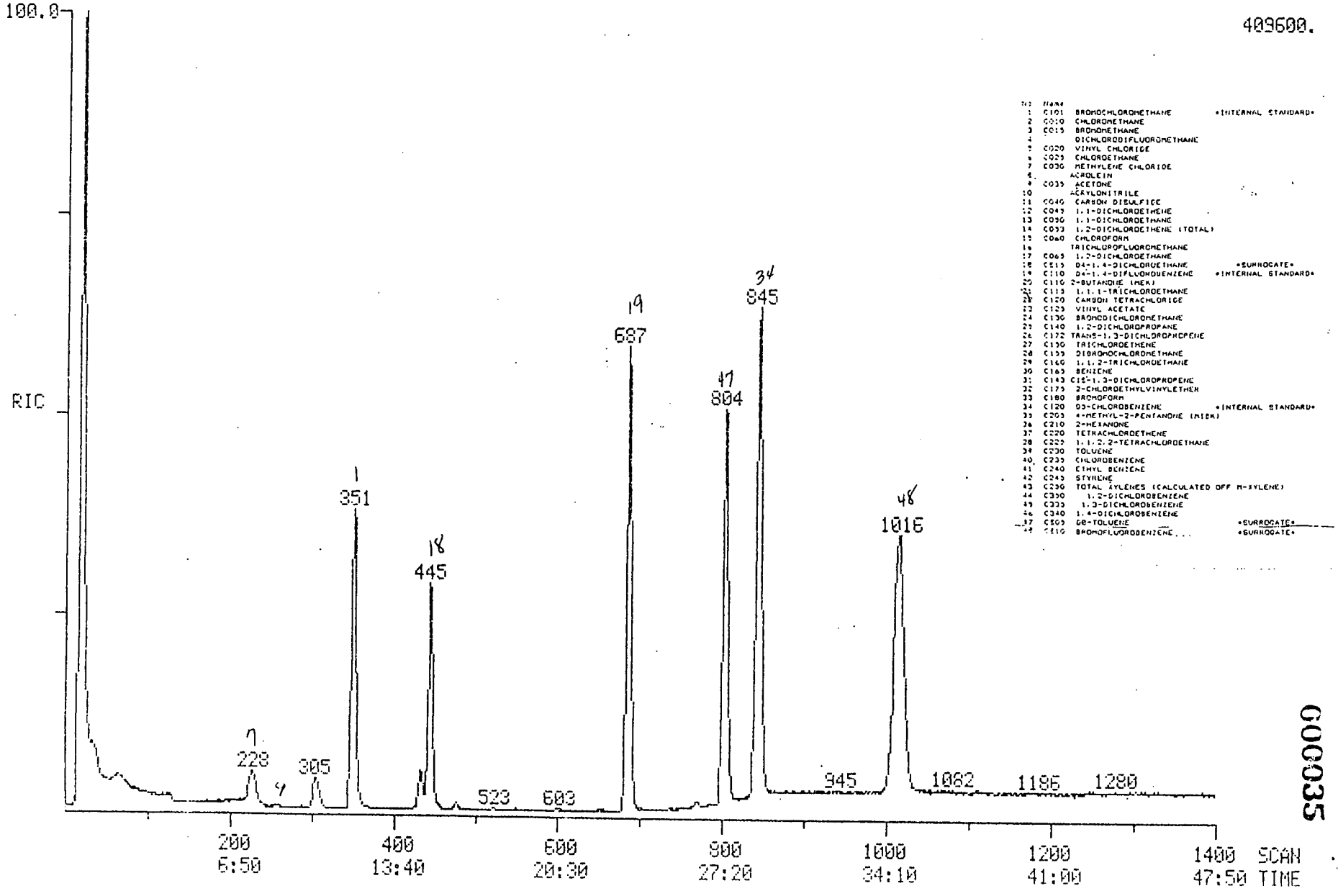
Column: (pack/cap) PACK Dilution Factor: 1.0

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	8	B
67-64-1	Acetone	6	BJ
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	100	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	50	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	50	U
591-78-6	2-Hexanone	50	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	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
09/23/89 15:21:00
SAMPLE: MW C14A
CONDS.: 5MLS
RANGE: G 1,1400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 10032V #1
CALI: 10032V #2

SCANS 1 TO 1400



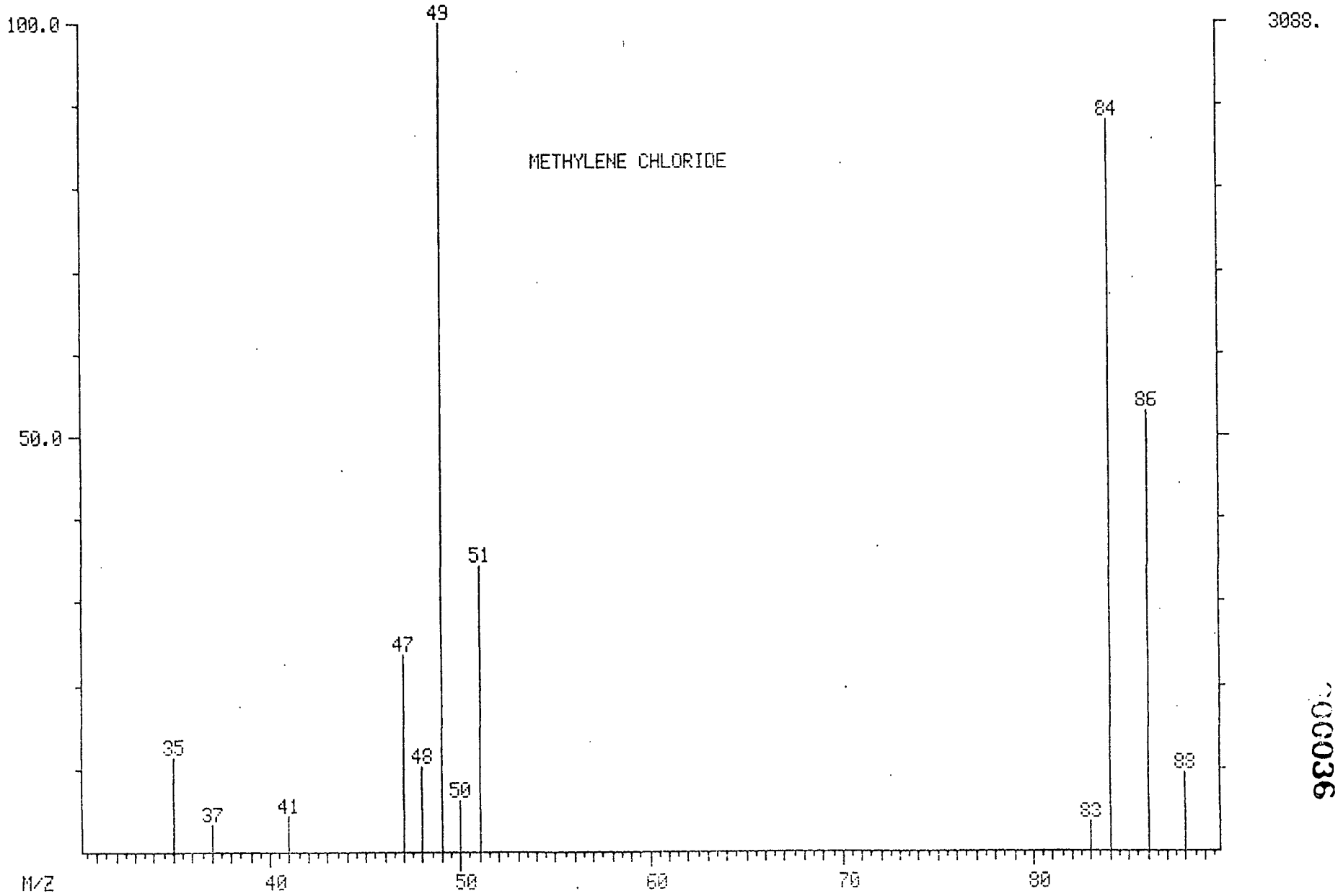
NO	Name		
1	C001	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	C010	CHLOROMETHANE	
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8		ACROLEIN	
9	C035	ACETONE	
10		ACRYLONITRILE	
11	C040	CARBON DISULFIDE	
12	C045	1,1-DICHLOROETHENE	
13	C050	1,1-DICHLOROETHANE	
14	C055	1,2-DICHLOROETHENE (TOTAL)	
15	C060	CHLOROFORM	
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	C115	D4-1,4-DICHLOROETHANE	*SURROGATE*
19	C110	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	C505	D8-TOLUENE	*SURROGATE*
48	C510	BROMOFLUOROBENZENE...	*SURROGATE*

000035

MASS SPECTRUM
08/23/89 15:21:00 + 7:43
SAMPLE: MW C14A
CONDS.: 5MLS
ENHANCED (S 15B 2N 0T)

DATA: 10032V #226
CALI: 10032V #2

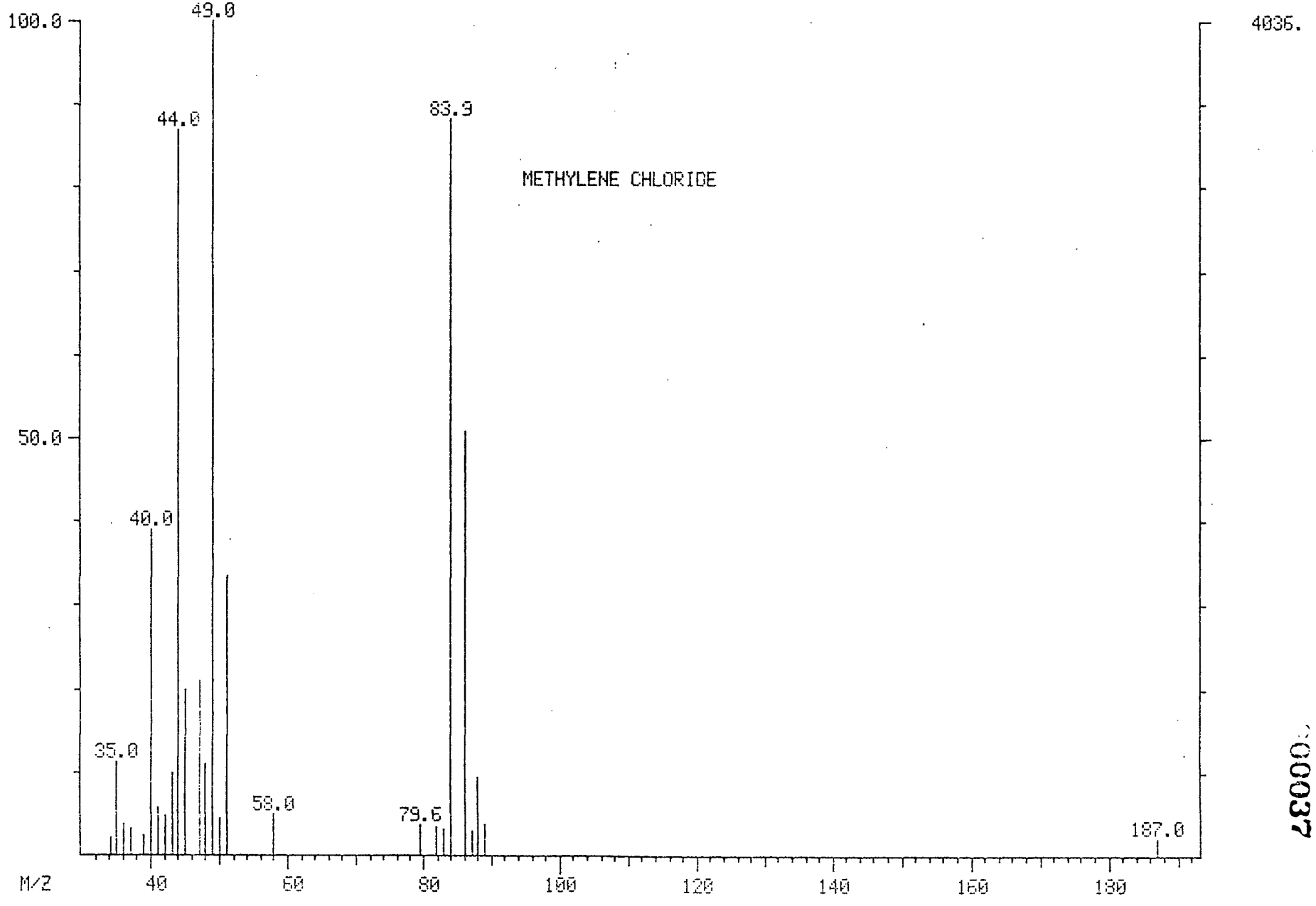
BASE M/Z: 49
RIC: 10720.



MASS SPECTRUM
08/23/89 15:21:00 + 7:43
SAMPLE: MW C14A
CONDS.: 5MLS

DATA: 10032V #226
CALI: 10032V #2

BASE M/Z: 49
RIC: 21504.

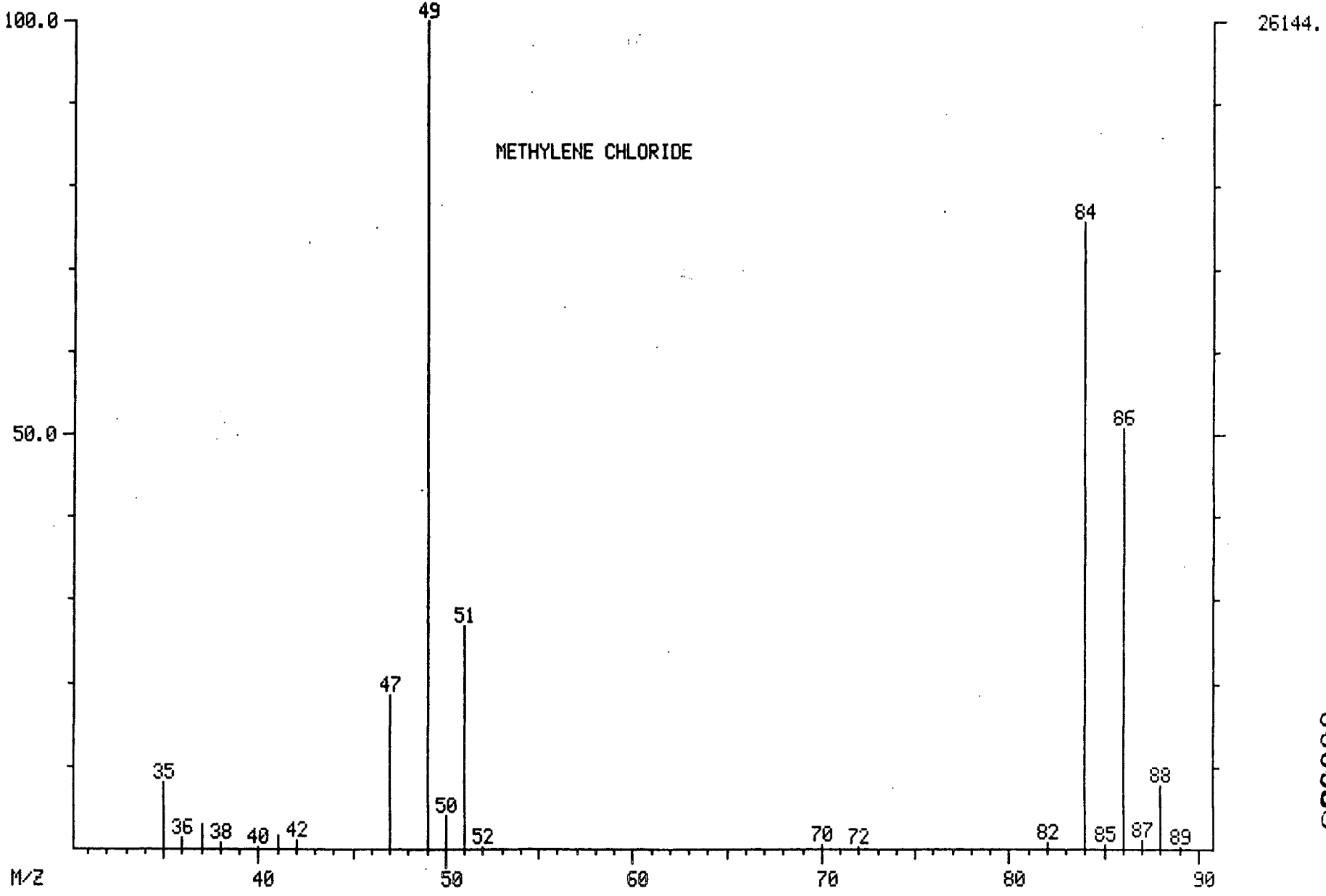


000037

MASS SPECTRUM
08/23/89 8:01:00 + 7:56
SAMPLE: STANDARD
CONDS.: 50NG PURGED
ENHANCED (S 15B 2N 0T)

DATA: VS050A0823 #232
CALI: VS050A0823 #2

BASE M/Z: 49
RIC: 79616.

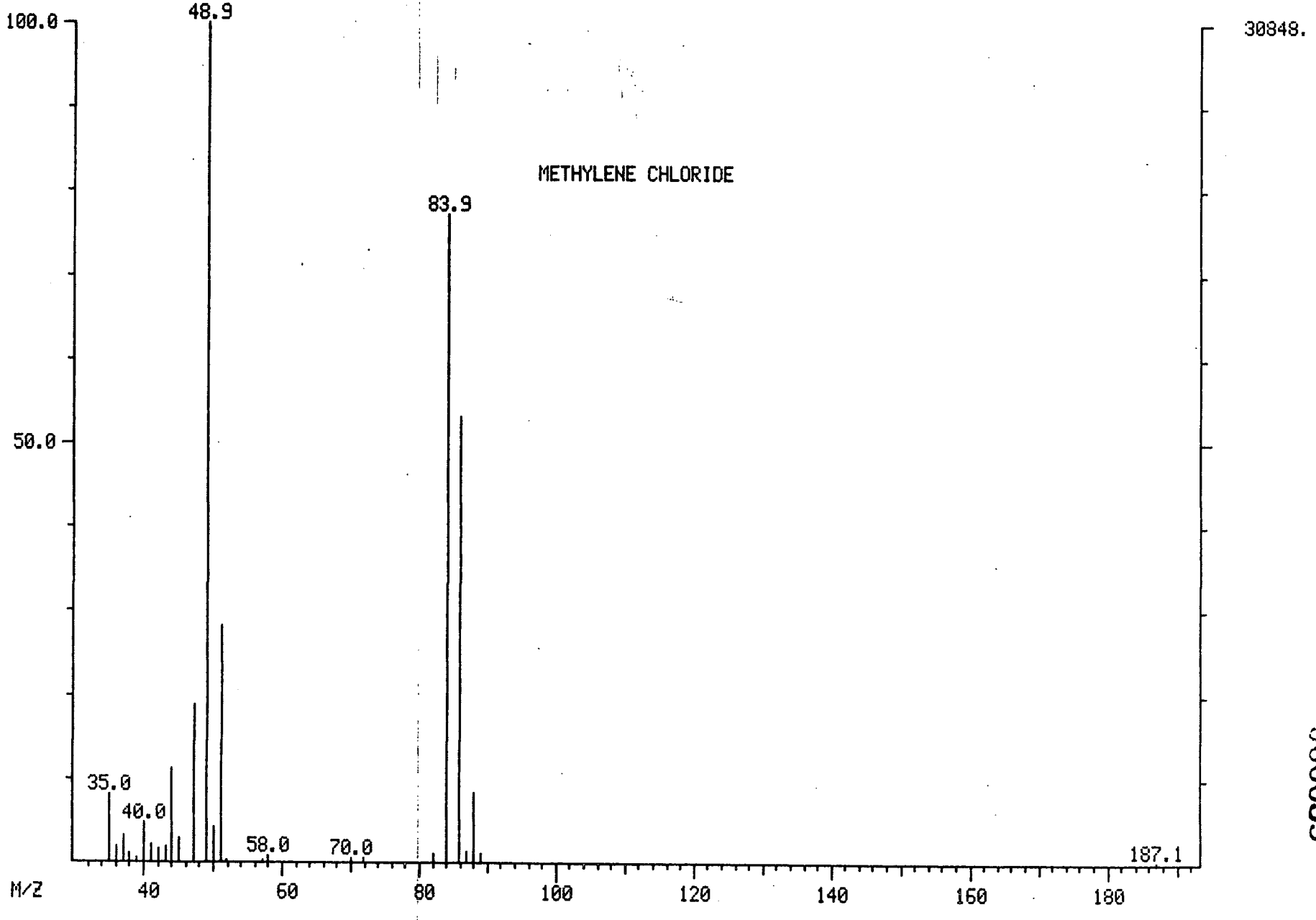


000038

MASS SPECTRUM
08/23/89 8:01:00 + 7:56
SAMPLE: STANDARD
CONDS.: 50NG PURGED

DATA: VS050A0823 #232
CALI: VS050A0823 #2

BASE M/Z: 49
RIC: 103168.

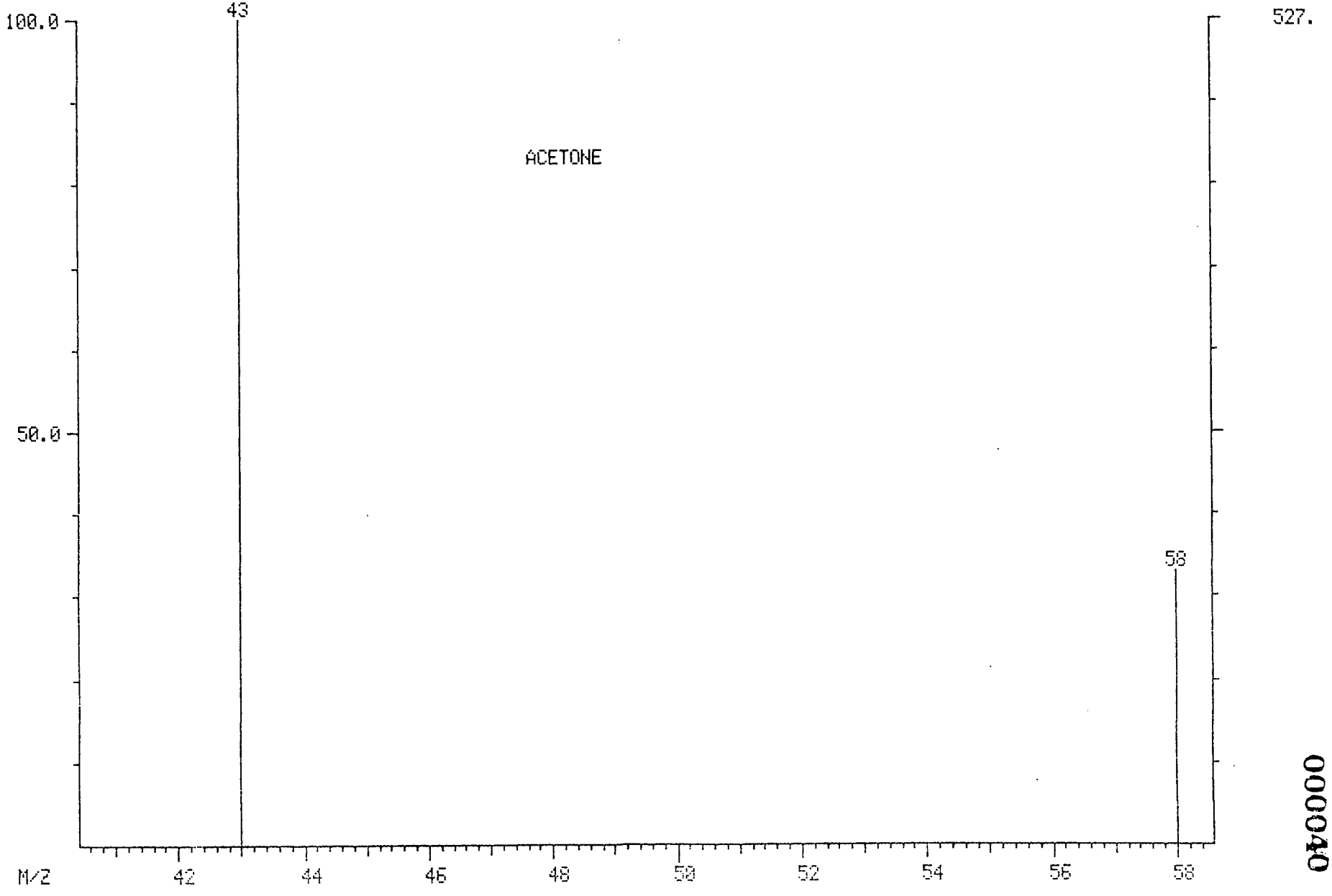


000039

MASS SPECTRUM
08/23/89 15:21:00 + 8:49
SAMPLE: MW C14A
CONDS.: 5MLS
ENHANCED (S 15B 2N 0T)

DATA: 10032V #258
CALI: 10032V #2

BASE M/Z: 43
RIC: 701.

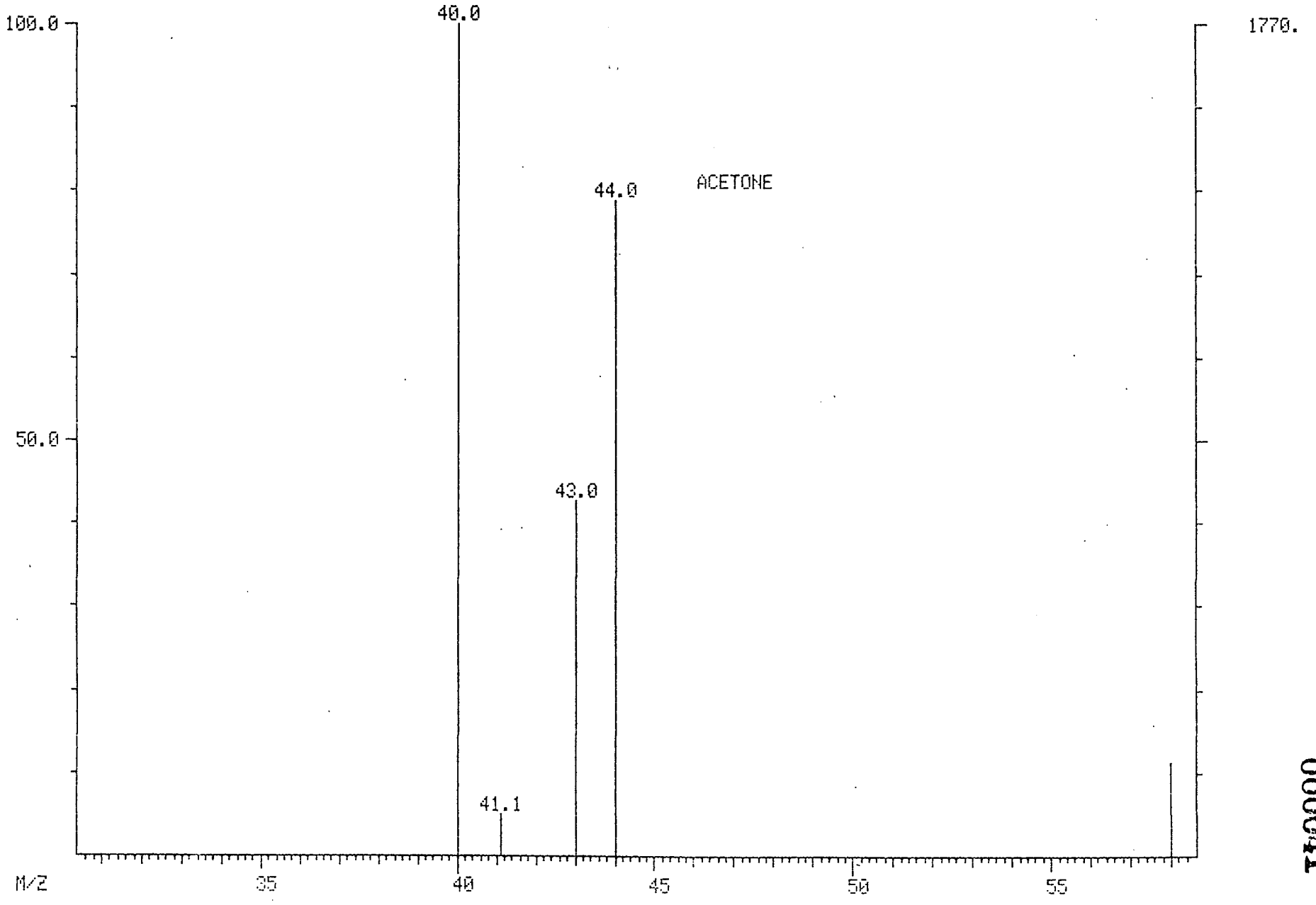


000040

MASS SPECTRUM
08/23/89 15:21:00 + 8:49
SAMPLE: MW C14A
CONDS.: 5MLS

DATA: 10032V #258
CALI: 10032V #2

BASE M/Z: 40
RIC: 4208.

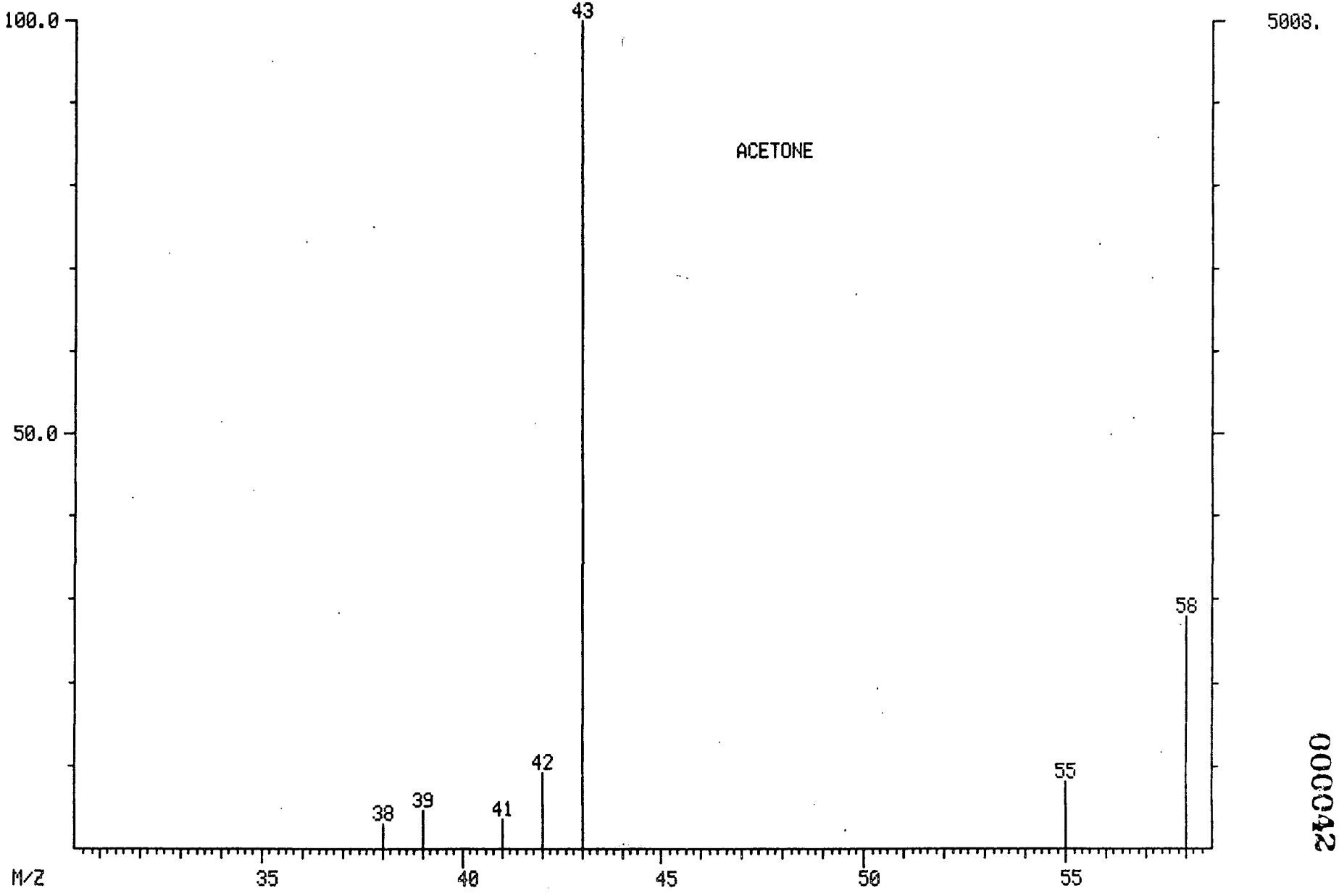


000041

MASS SPECTRUM
08/23/89 8:01:00 + 9:01
SAMPLE: STANDARD
CONDS.: 50NG PURGED
ENHANCED (S 15B 2N 0T)

DATA: VS050A0823 #264
CALI: VS050A0823 #2

BASE M/Z: 43
RIC: 7824.

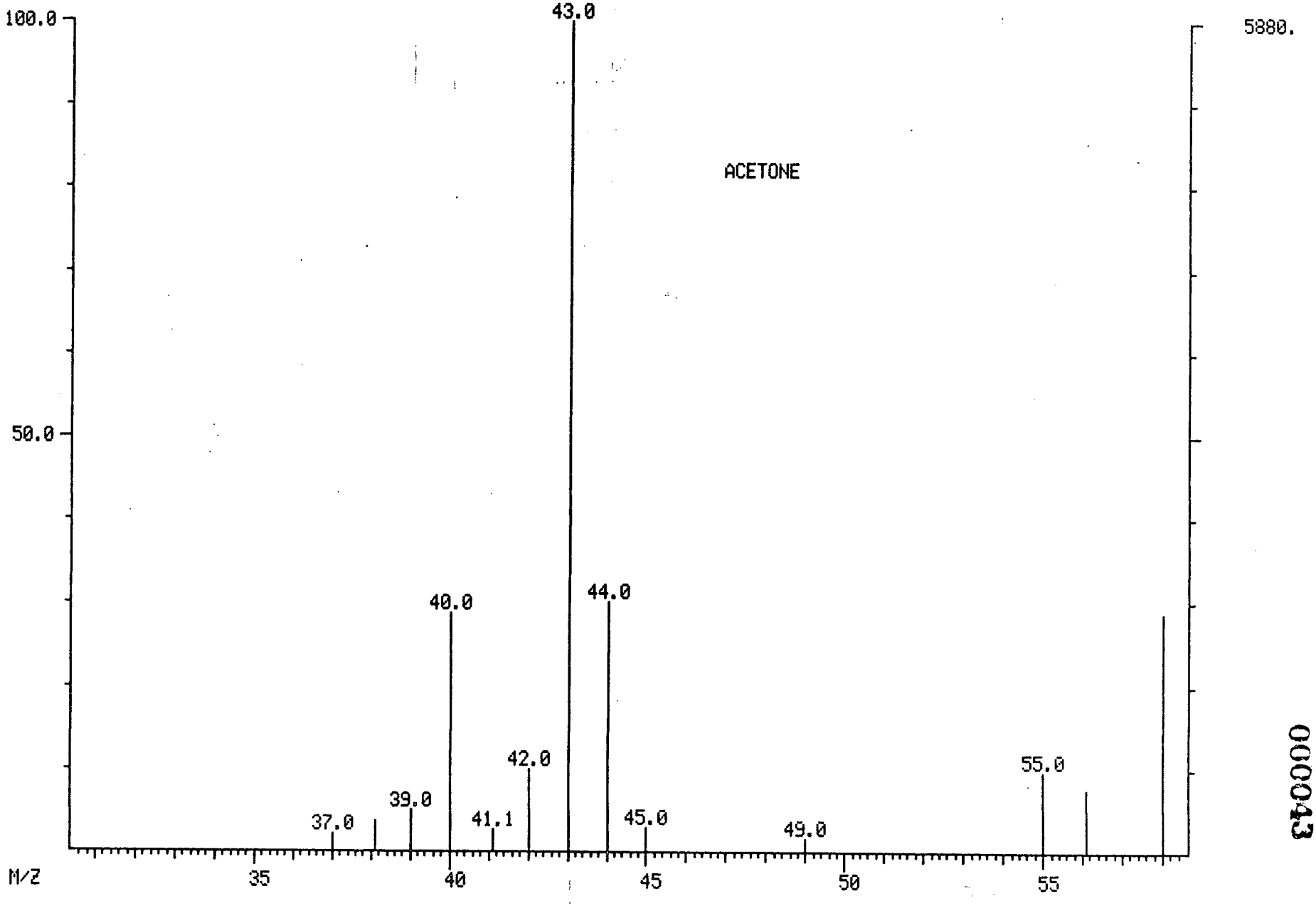


000042

MASS SPECTRUM
08/23/89 8:01:00 + 9:01
SAMPLE: STANDARD
CONDS.: 50NG PURGED

DATA: VS050A0823 #264
CALI: VS050A0823 #2

BASE M/Z: 43
RIC: 13664.



000043

QUANTITATION REPORT FILE: 10032V

000044

DATA: 10032V.TI
08/23/89 15:21:00
SAMPLE: MW C14A
CONDS.: 5MLS
FORMULA:
SUBMITTED BY: GANNETT

INSTRUMENT: 1050
ANALYST: DMW

WEIGHT: 0.007
ACCT. NO.: 10032

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
RESP. FAC. FROM LIBRARY ENTRY

No	Name		
1	CI01	BROMOCHLOROMETHANE	*** INTERNAL STANDARD #1 ***
2	C010	CHLOROMETHANE	**
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	*
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8	C035	2-PROPANONE (ACETONE)	
9		ACROLEIN	
10	C040	CARBON DISULFIDE	
11		ACRYLONITRILE	
12	C045	1,1-DICHLOROETHENE	*
13	C050	1,1-DICHLOROETHANE	**
14	C053	TRANS-1,2-DICHLOROETHENE	
15	C060	CHLOROFORM	*
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	CS15	1,2-DICHLOROETHANE-D4	*** SURROGATE #1 ***
19	CI10	1,4-DIFLUOROBENZENE	*** INTERNAL STANDARD #2 ***
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-CHLOROETHYL VINYL ETHER	
33	C180	BROMOFORM	**
34	CI20	CHLOROBENZENE-D5	*** INTERNAL STANDARD #3 ***
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	XYLENES	
44	C250	XYLENES	
45	C350	1,2-DICHLOROBENZENE	
46	C340	1,4-DICHLOROBENZENE	
47	C335	1,3-DICHLOROBENZENE	

No	Name								
48	CS05	TOLUENE-D8					*** SURROGATE #2 ***		
49	CS10	4-BROMOFLUOROBENZENE					*** SURROGATE #3 ***		

No	M/Z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	351	12:00	1	1.000	A BB	139163.	50.000 UG/L	15.76
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	84	226	7:43	1	0.644	A BB	34137.	8.271 UG/L	2.61
8	43	258	8:49	1	0.735	A BB	5088.	5.868 UG/L	1.85
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	~~63~~	~~351~~	~~12:00~~	~~1~~	~~1.000~~	~~A BB~~	~~1116.~~	~~0.153 UG/L~~	~~0.05~~ Dnw 9/1/89
14	NOT FOUND								
15	NOT FOUND								
16	~~101~~	~~305~~	~~19:25~~	~~1~~	~~0.869~~	~~A BB~~	~~62168.~~	~~4.113 UG/L~~	~~1.30~~ Dnw 9/1/89
17	NOT FOUND								
18	65	445	15:12	1	1.268	A BB	317876.	48.888 UG/L	15.41
19	114	687	23:28	19	1.000	A BB	570307.	50.000 UG/L	15.76
20	~~43~~	~~448~~	~~15:18~~	~~19~~	~~0.652~~	~~A BV~~	~~3690.~~	~~2.556 UG/L~~	~~0.81~~ Dnw 9/1/89
21	~~97~~	~~488~~	~~16:40~~	~~19~~	~~0.710~~	~~A BB~~	~~340.~~	~~0.042 UG/L~~	~~0.01~~ Dnw 9/1/89
22	NOT FOUND								
23	~~43~~	~~565~~	~~17:15~~	~~19~~	~~0.735~~	~~A*BB~~	~~331.~~	~~0.051 UG/L~~	~~0.02~~ Dnw 9/1/89
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	~~130~~	~~590~~	~~20:09~~	~~19~~	~~0.859~~	~~A BB~~	~~386.~~	~~0.074 UG/L~~	~~0.02~~ Dnw 9/1/89
28	NOT FOUND								
29	NOT FOUND								
30	~~78~~	~~606~~	~~20:42~~	~~19~~	~~0.882~~	~~A BB~~	~~1981.~~	~~0.185 UG/L~~	~~0.06~~ Dnw 9/1/89
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	117	845	28:52	34	1.000	A BB	531677.	50.000 UG/L	15.76
35	NOT FOUND								
36	NOT FOUND								
37	~~164~~	~~772~~	~~26:23~~	~~34~~	~~0.914~~	~~A BB~~	~~785.~~	~~0.177 UG/L~~	~~0.06~~ Dnw 9/1/89
38	~~63~~	~~773~~	~~26:25~~	~~34~~	~~0.915~~	~~A*VV~~	~~1270.~~	~~0.195 UG/L~~	~~0.06~~ Dnw 9/1/89
39	92	811	27:43	34	0.960	A BB	3850.	0.500 UG/L	0.16 Dnw 9/1/89
40	~~112~~	~~850~~	~~29:02~~	~~34~~	~~1.006~~	~~A BB~~	~~3329.~~	~~0.337 UG/L~~	~~0.11~~ Dnw 9/1/89
41	~~106~~	~~924~~	~~31:34~~	~~34~~	~~1.093~~	~~A BB~~	~~118.~~	~~0.024 UG/L~~	~~0.01~~ Dnw 9/1/89
42	NOT FOUND								
43	~~106~~	~~1118~~	~~38:12~~	~~34~~	~~1.323~~	~~A BB~~	~~222.~~	~~0.045 UG/L~~	~~0.01~~ Dnw 9/1/89
44	~~106~~	~~1118~~	~~38:12~~	~~34~~	~~1.323~~	~~A BB~~	~~222.~~	~~0.045 UG/L~~	~~0.01~~ Dnw 9/1/89
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	98	804	27:28	34	0.951	A BB	510949.	49.576 UG/L	15.62
49	95	1015	34:41	34	1.201	A BB	375294.	46.666 UG/L	14.71

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	12:10	0.99	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:40		0.138						
3	2:40		0.219						
4	3:00		0.264						
5	3:27		0.284						
6	4:49		0.396						
7	7:56	0.97	0.652	0.99	8.27	50.00	0.245	1.483	0.17
8	9:01	0.98	0.748	0.99	5.87	50.00	0.037	0.312	0.12
9	9:05		0.747						
10	9:52		0.812						
11	9:54		0.815						
12	11:35		0.952						
13	13:05	0.92	1.076	0.93	0.15	50.00	0.008	2.615	0.00
14	14:00		1.152						
15	14:39		1.205						
16	10:38	0.98	0.874	0.99	4.11	50.00	0.447	5.430	0.08
17	15:29		1.272						
18	15:22	0.99	1.264	1.00	48.89	50.00	2.284	2.336	0.98
19	23:37	0.99	1.000	1.00	50.00	50.00	1.000	1.000	1.00
20	15:27	0.99	0.654	1.00	2.56	50.00	0.006	0.127	0.05
21	16:51	0.99	0.713	1.00	0.04	50.00	0.001	0.710	0.00
22	17:15		0.731						
23	17:32	0.98	0.742	0.99	0.05	50.00	0.001	0.567	0.00
24	17:58		0.761						
25	19:24		0.822						
26	19:43		0.835						
27	20:18	0.99	0.860	1.00	0.07	50.00	0.001	0.455	0.00
28	21:03		0.891						
29	21:09		0.896						
30	20:50	0.99	0.883	1.00	0.18	50.00	0.003	0.941	0.00
31	21:09		0.896						
32	22:17		0.944						
33	23:59		1.016						
34	28:58	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
35	24:26		0.843						
36	26:06		0.901						
37	26:27	1.00	0.913	1.00	0.18	50.00	0.001	0.418	0.00
38	26:29	1.00	0.914	1.00	0.20	50.00	0.002	0.612	0.00
39	27:49	1.00	0.960	1.00	0.50	50.00	0.007	0.724	0.01
40	29:09	1.00	1.006	1.00	0.34	50.00	0.006	0.929	0.01
41	31:34	1.00	1.090	1.00	0.02	50.00	0.000	0.465	0.00
42	36:50		1.271						
43	38:28	0.99	1.328	1.00	0.05	50.00	0.000	0.463	0.00
44	38:28	0.99	1.328	1.00	0.05	50.00	0.000	0.463	0.00
45	45:06		1.557						
46	45:53		1.584						
47	43:40		1.507						
48	27:36	1.00	0.953	1.00	49.58	50.00	0.961	0.969	0.99
49	34:55	0.99	1.205	1.00	46.67	50.00	0.706	0.756	0.93

B 1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C-14B_MW

Lab Name: Q C INC. Contract: GANNET-FLEM

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

Matrix: (soil/water) WATER Lab Sample ID: 883614

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 10033V

Level: (low/med) LOW Date Received: 08/15/89

% Moisture: not dec. Date Analyzed: 08/23/89

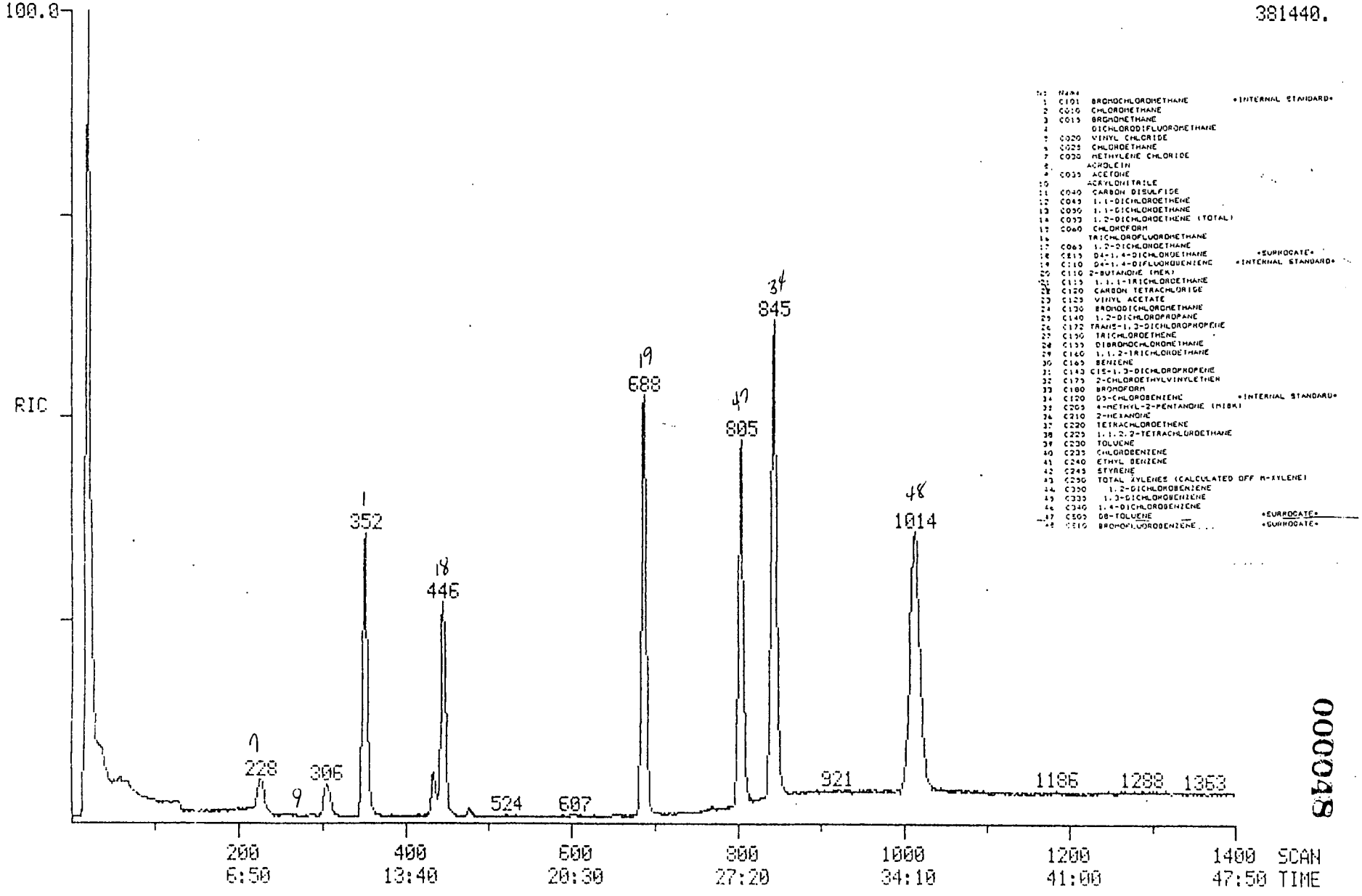
Column: (pack/cap) PACK Dilution Factor: 1.0

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	9	B
67-64-1	Acetone	8	BJ
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	100	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	50	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	50	U
591-78-6	2-Hexanone	50	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	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
08/23/89 15:25:00
SAMPLE: MW C14B
CONDS.: 5ML5
RANGE: G 1,1400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 10033V #1
CALI: 10033V #2

SCANS 1 TO 1400



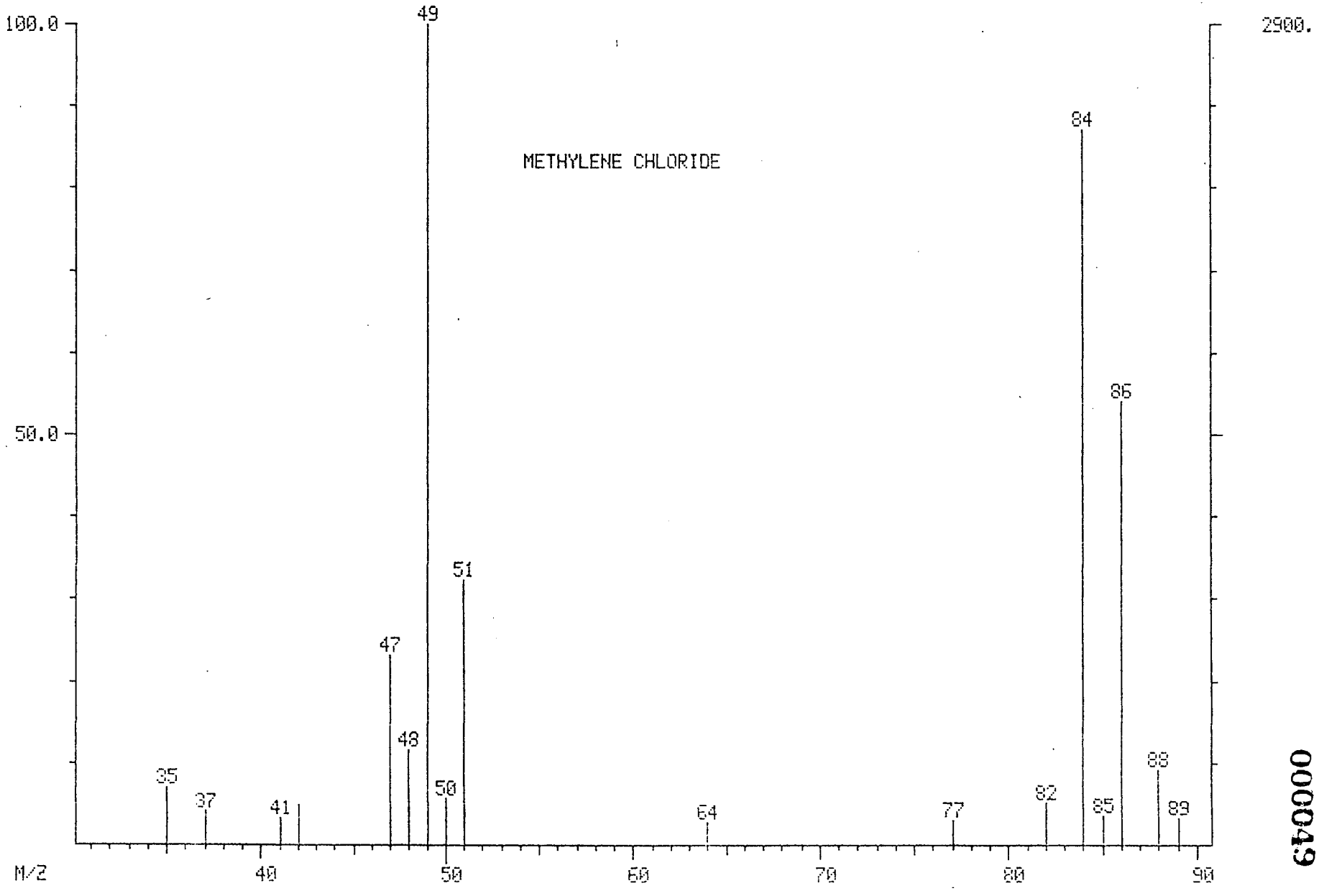
No	Name		
1	C101	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	C010	CHLOROMETHANE	
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8		ACROLEIN	
9	C035	ACETONE	
10		ACRYLONITRILE	
11	C040	CARBON DISULFIDE	
12	C045	1,1-DICHLOROETHENE	
13	C050	1,1-DICHLOROETHANE	
14	C055	1,2-DICHLOROETHENE (TOTAL)	
15	C060	CHLOROFORM	
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	*SURROGATE*
18	C815	D4-1,4-DICHLOROETHANE	*SURROGATE*
19	C110	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	C170	CIS-1,3-DICHLOROPROPENE	
32	C175	2-CHLOROETHYLVINYLETHER	
33	C180	BROMOFORM	
34	C190	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	C505	D8-TOLUENE	*SURROGATE*
48	C810	BROMOFLUOROBENZENE	*SURROGATE*

000048

MASS SPECTRUM
08/23/89 16:25:00 + 7:45
SAMPLE: MW C14B
CONDS.: 5MLS
ENHANCED (S 15B 2N 0T)

DATA: 10033V #227
CALI: 10033V #2

BASE M/Z: 49
RIC: 10464.

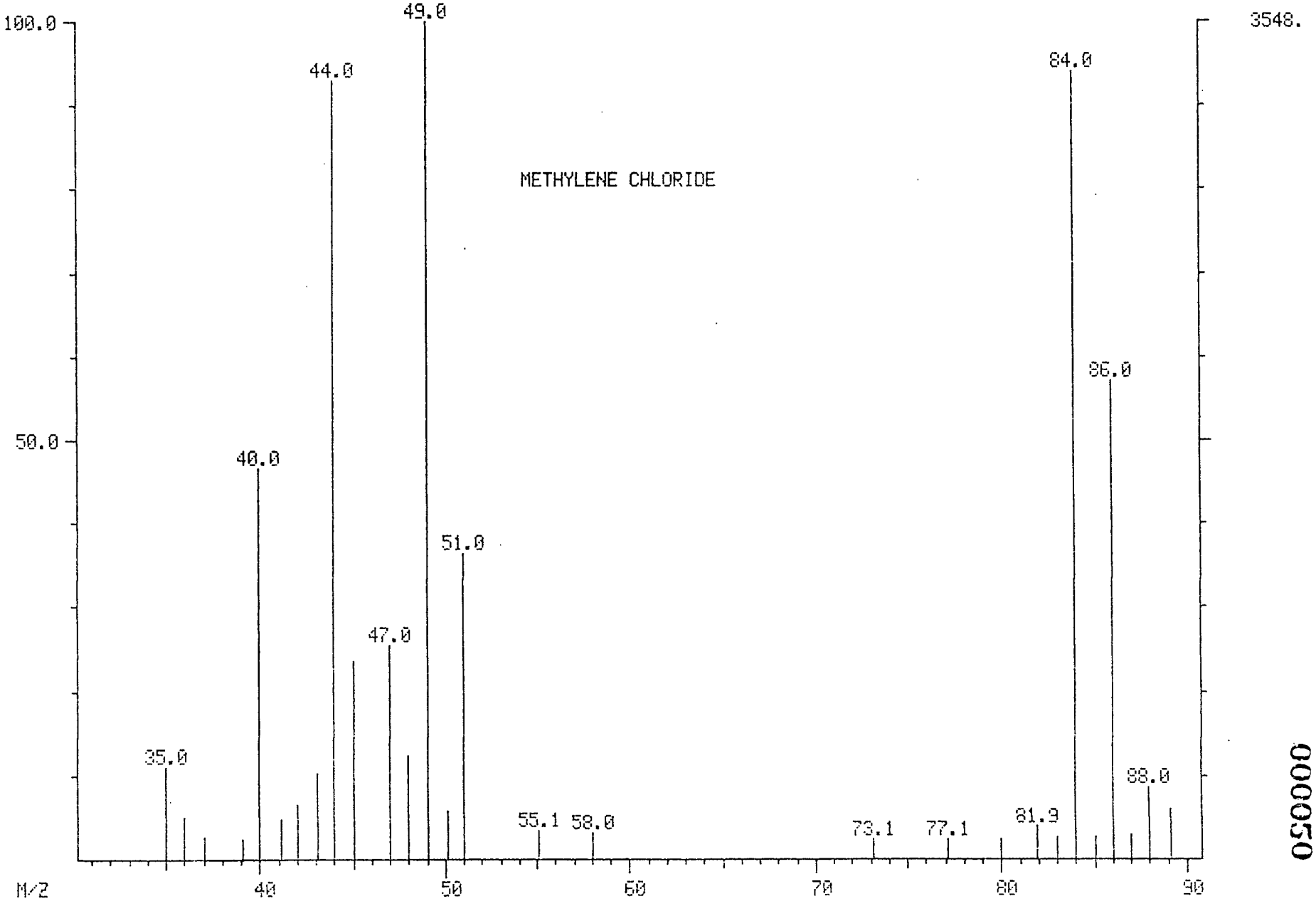


000049

MASS SPECTRUM
08/23/89 16:25:00 + 7:45
SAMPLE: MW C14B
CONDS.: 5MLS

DATA: 10033V #227
CALI: 10033V #2

BASE M/Z: 49
RIC: 20544.

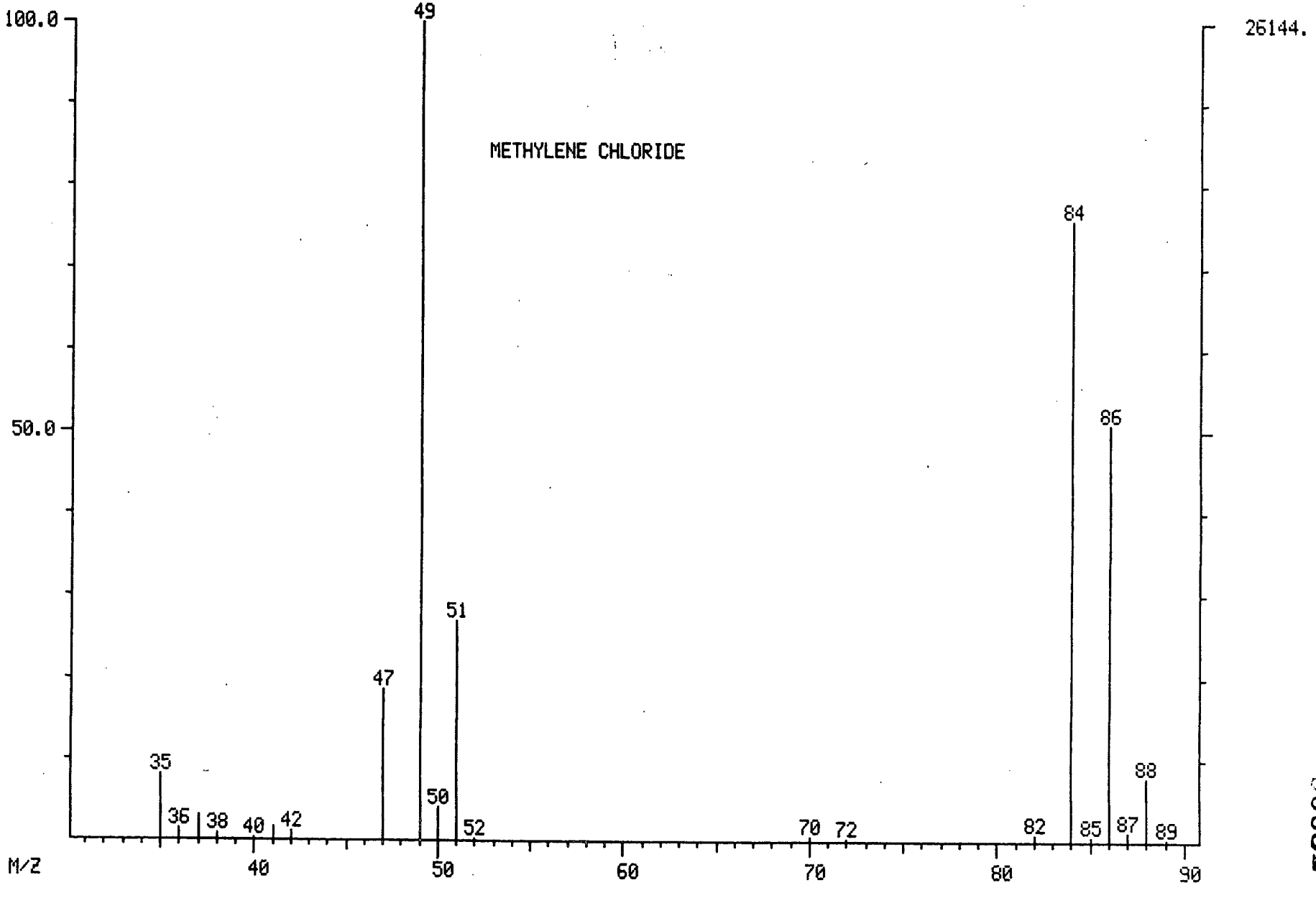


000050

MASS SPECTRUM
08/23/89 8:01:00 + 7:56
SAMPLE: STANDARD
CONDS.: 50NG PURGED
ENHANCED (S 15B 2N 0T)

DATA: VS050A0823 #232
CALI: VS050A0823 #2

BASE M/Z: 49
RIC: 79616.

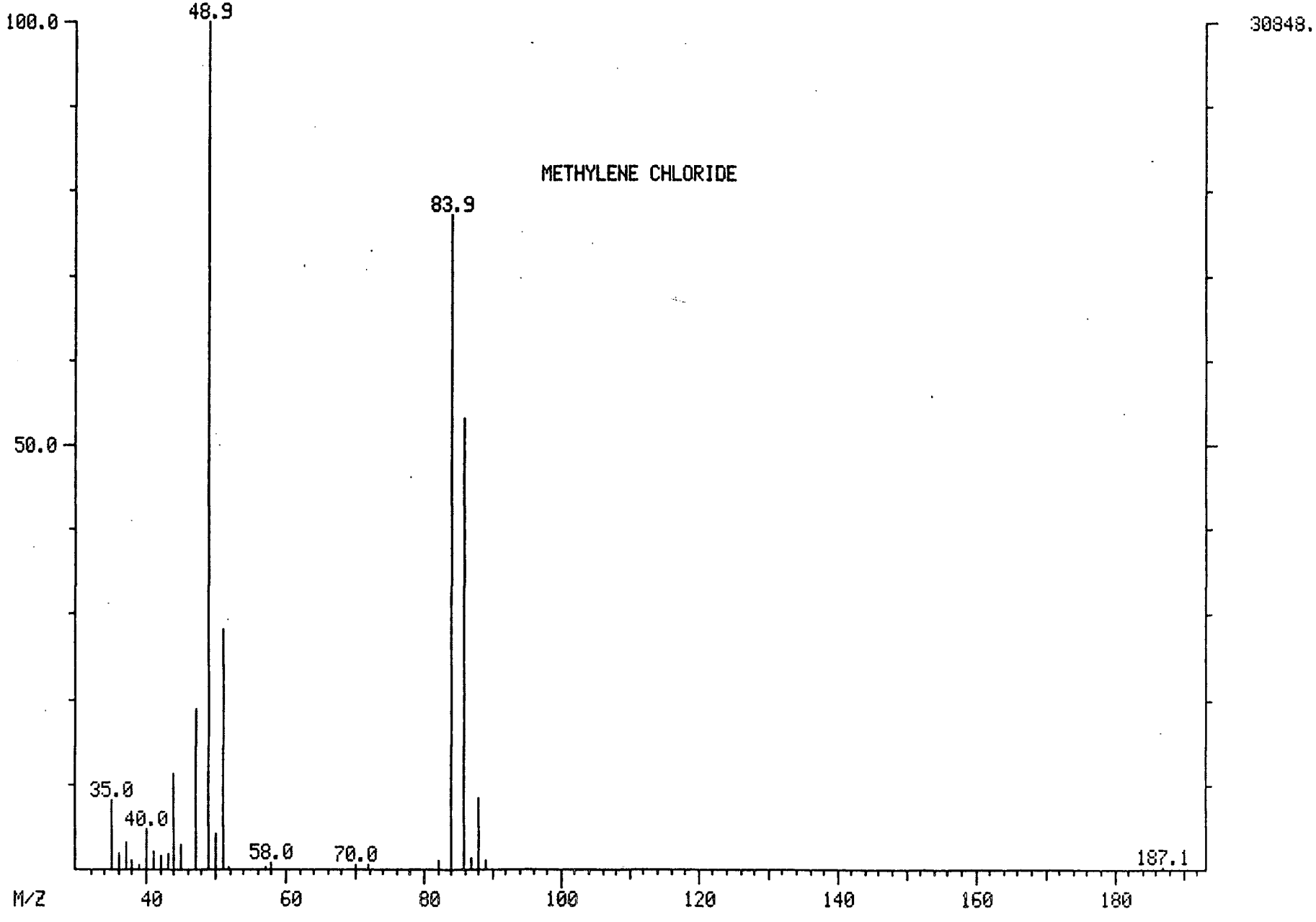


000051

MASS SPECTRUM
08/23/89 8:01:00 + 7:56
SAMPLE: STANDARD
CONDS.: 50NG PURGED

DATA: VS050A0823 #232
CALI: VS050A0823 #2

BASE M/Z: 49
RIC: 103168.

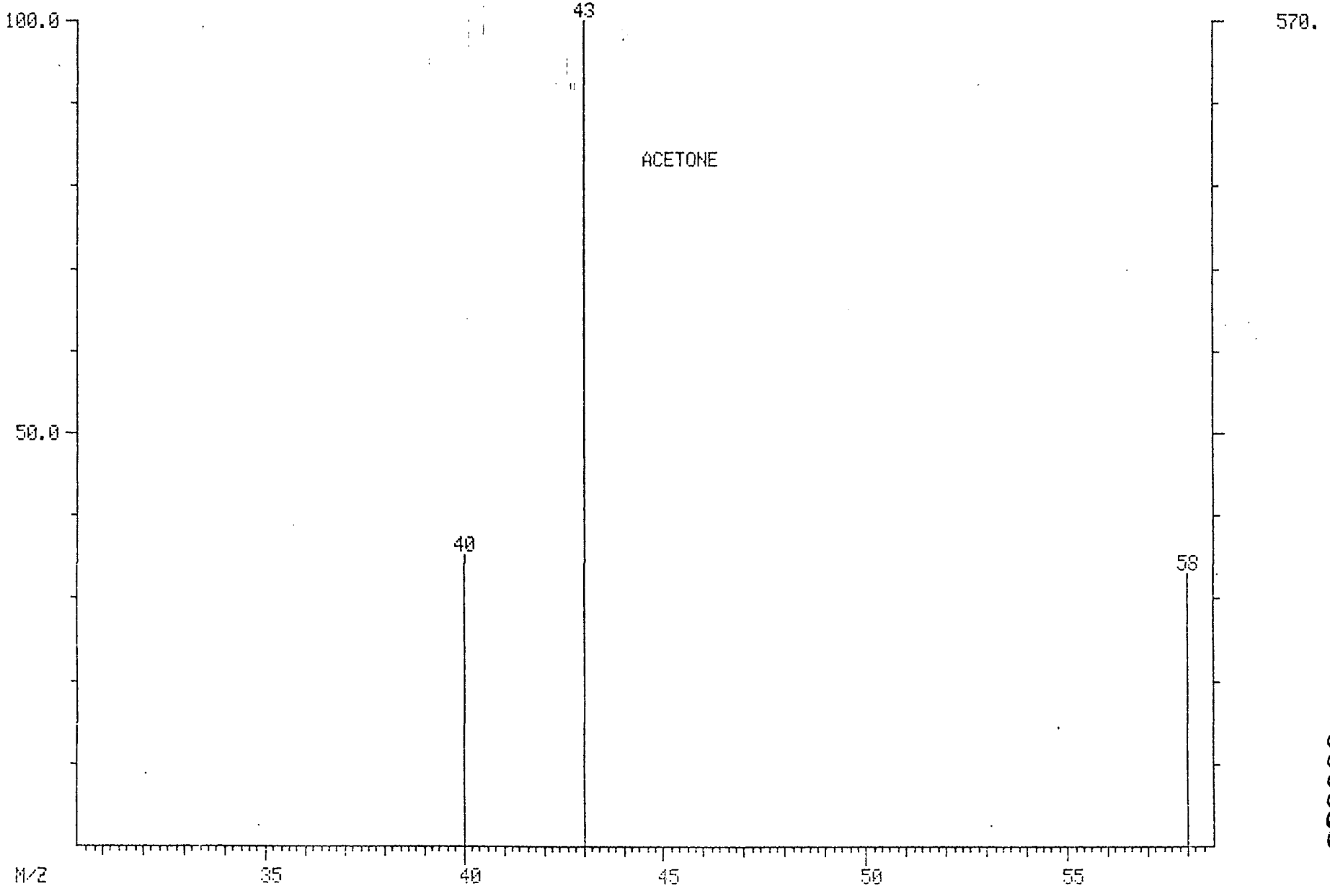


000052

MASS SPECTRUM
08/23/89 16:25:00 + 8:49
SAMPLE: MW C14B
CONDS.: 5MLS
ENHANCED (S 15B 2N 0T)

DATA: 10033V #258
CALI: 10033V #2

BASE M/Z: 43
RIC: 959.

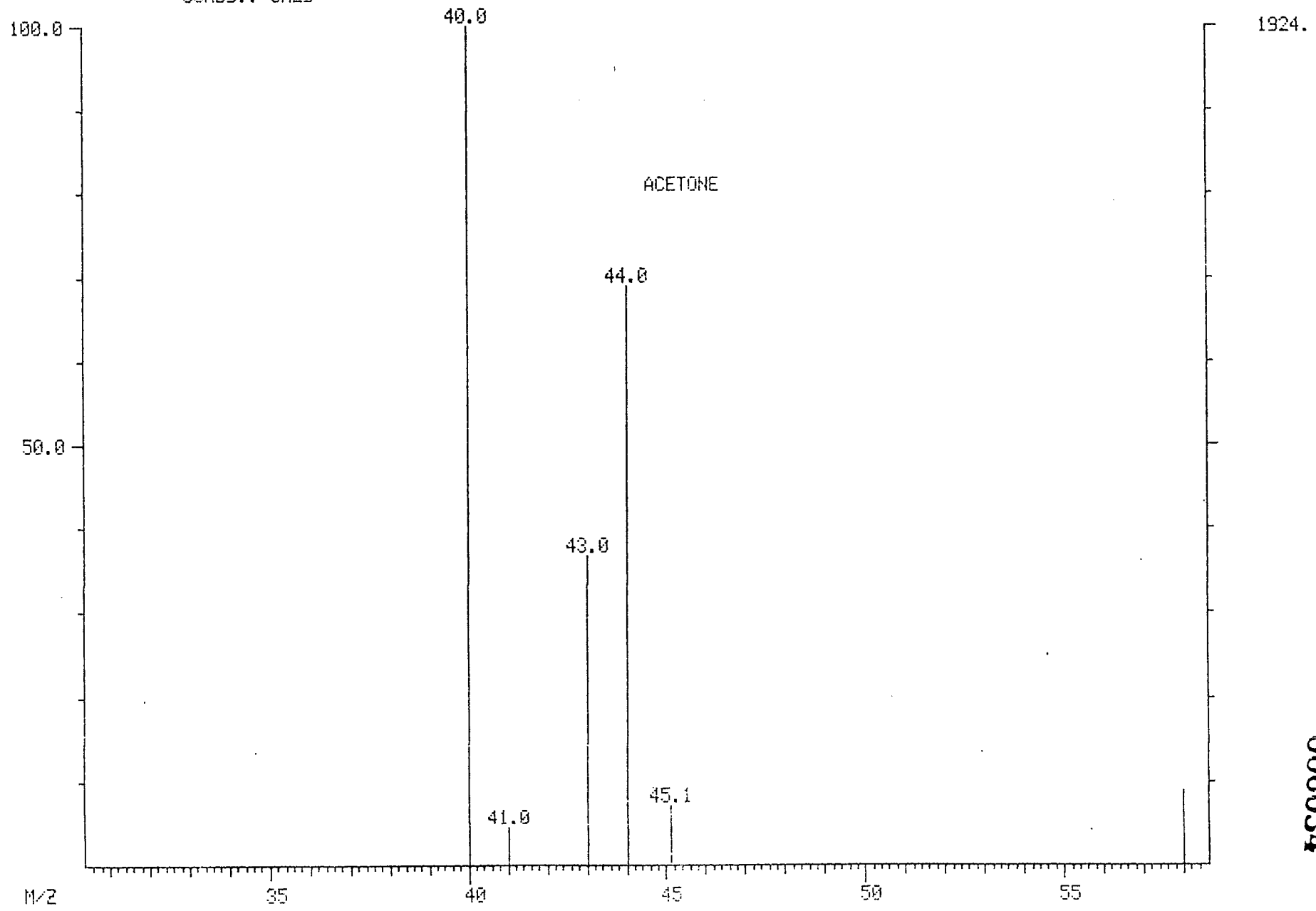


000053

MASS SPECTRUM
08/23/89 16:25:00 + 8:49
SAMPLE: MW C14B
CONDS.: 5MLS

DATA: 10033V #258
CALI: 10033V #2

BASE M/Z: 40
RIC: 4344.

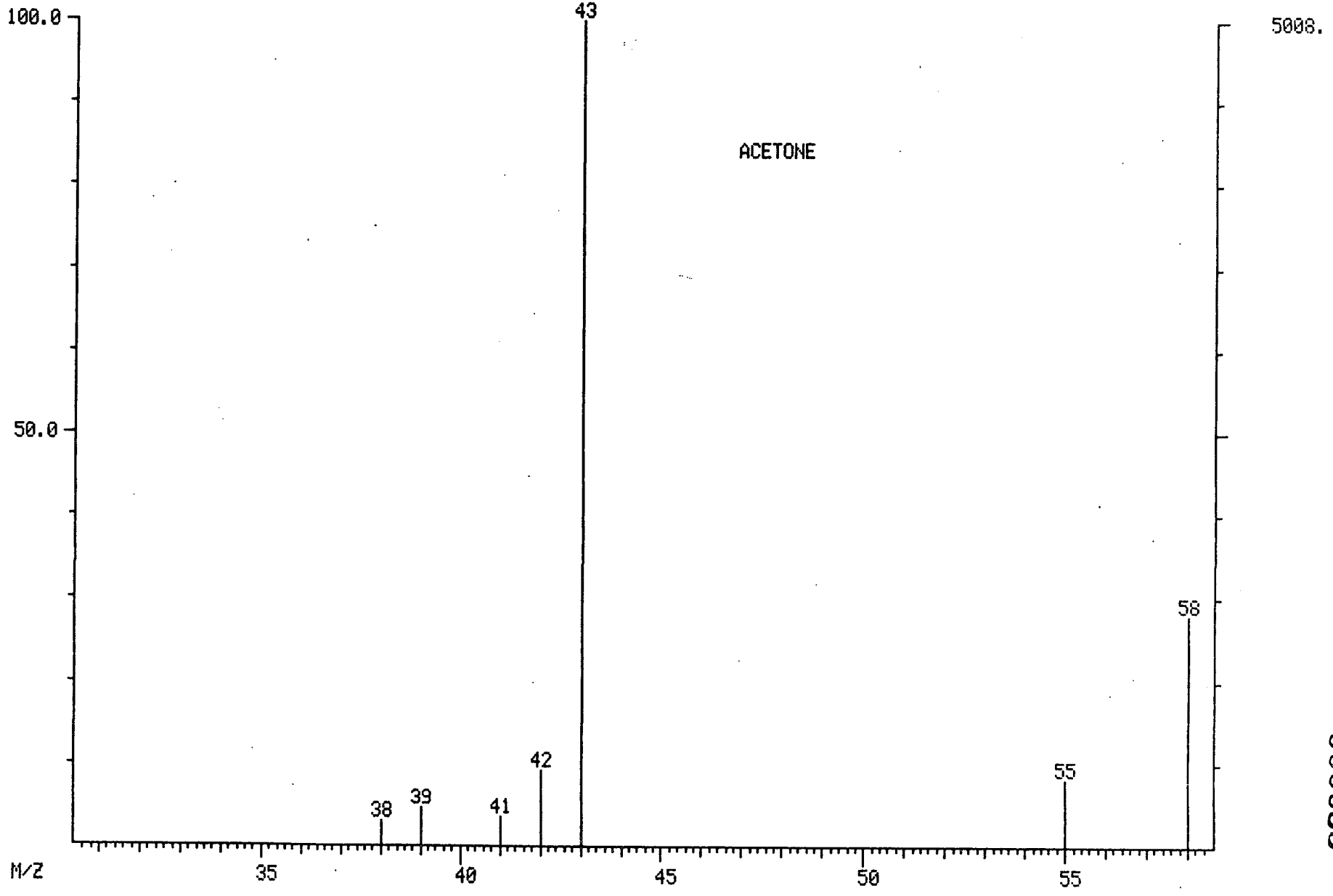


000054

MASS SPECTRUM
08/23/89 8:01:00 + 9:01
SAMPLE: STANDARD
CONDS.: 50NG PURGED
ENHANCED (S 15B 2N 0T)

DATA: VS050A0823 #264
CALI: VS050A0823 #2

BASE M/Z: 43
RIC: 7824.

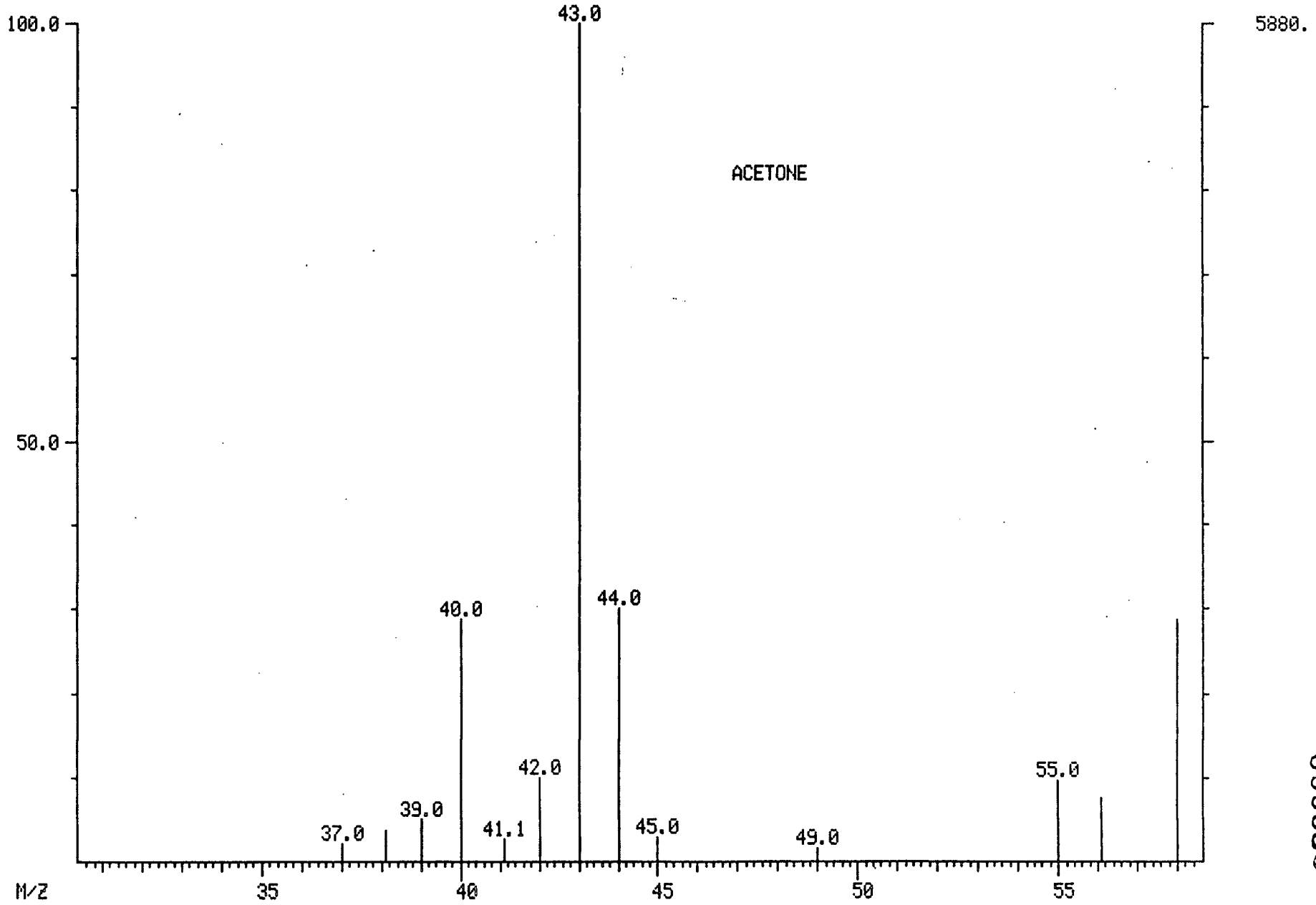


000055

MASS SPECTRUM
08/23/89 8:01:00 + 9:01
SAMPLE: STANDARD
CONDS.: 50NG PURGED

DATA: VS050A0823 #264
CALI: VS050A0823 #2

BASE M/Z: 43
RIC: 13664.



000036

QUANTITATION REPORT FILE: 10033V

000057

DATA: 10033V.TI
08/23/89 16:25:00
SAMPLE: MW C14B
CONDS.: 5MLS
FORMULA:
SUBMITTED BY: GANNETT

INSTRUMENT: 1050
ANALYST: DMW

WEIGHT: 0.007
ACCT. NO.: 10033

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
RESP. FAC. FROM LIBRARY ENTRY

No	NAME		
1	CI01	BROMOCHLOROMETHANE	*** INTERNAL STANDARD #1 ***
2	C010	CHLOROMETHANE	**
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	*
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8	C035	2-PROPANONE (ACETONE)	
9		ACROLEIN	
10	C040	CARBON DISULFIDE	
11		ACRYLONITRILE	
12	C045	1,1-DICHLOROETHENE	*
13	C050	1,1-DICHLOROETHANE	**
14	C053	TRANS-1,2-DICHLOROETHENE	
15	C060	CHLOROFORM	*
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	CS15	1,2-DICHLOROETHANE-D4	*** SURROGATE #1 ***
19	CI10	1,4-DIFLUOROBENZENE	*** INTERNAL STANDARD #2 ***
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=CHLOROETHYL VINYL ETHER	
33	C180	BROMOFORM	**
34	CI20	CHLOROBENZENE-D5	*** INTERNAL STANDARD #3 ***
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	XYLENES	
44	C250	XYLENES	
45	C350	1,2-DICHLOROBENZENE	
46	C340	1,4-DICHLOROBENZENE	
47	C335	1,3-DICHLOROBENZENE	

No	Name							
48	CS05	TOLUENE-D8				*** SURROGATE #2 ***		
49	CS10	4-BROMOFLUOROBENZENE				*** SURROGATE #3 ***		

No	M/Z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	351	12:00	1	1.000	A BB	122311.	50.000 UG/L	15.70
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	84	227	7:45	1	0.647	A BB	30904.	8.520 UG/L	2.68
8	43	259	8:51	1	0.738	A BB	6170.	8.095 UG/L	2.54
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	~~63~~	~~352~~	~~12:02~~	~~1~~	~~1.003~~	~~A BB~~	~~849.~~	~~0.133 UG/L~~	~~0.04~~ DMW 9/1/89
14	NOT FOUND								
15	NOT FOUND								
16	~~101~~	~~306~~	~~10:27~~	~~1~~	~~0.872~~	~~A BB~~	~~61609.~~	~~4.638 UG/L~~	~~1.46~~ DMW 9/1/89
17	NOT FOUND								
18	65	446	15:14	1	1.271	A BB	275359.	48.184 UG/L	15.13
19	114	668	23:30	19	1.000	A BB	482793.	50.000 UG/L	15.70
20	~~43~~	~~448~~	~~15:18~~	~~19~~	~~0.651~~	~~A BB~~	~~3173.~~	~~2.597 UG/L~~	~~0.82~~ DMW 9/1/89
21	NOT FOUND								
22	NOT FOUND								
23	~~43~~	~~506~~	~~17:17~~	~~19~~	~~0.735~~	~~A BB~~	~~313.~~	~~0.057 UG/L~~	~~0.02~~ DMW 9/1/89
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	~~78~~	~~607~~	~~20:44~~	~~19~~	~~0.882~~	~~A BB~~	~~1591.~~	~~0.175 UG/L~~	~~0.05~~ DMW 9/1/89
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	117	844	28:50	34	1.000	A BB	470136.	50.000 UG/L	15.70
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	~~83~~	~~769~~	~~26:16~~	~~34~~	~~0.911~~	~~A*VB~~	~~495.~~	~~0.086 UG/L~~	~~0.03~~ DMW 9/1/89
39	~~92~~	~~811~~	~~27:43~~	~~34~~	~~0.961~~	~~A BB~~	~~3768.~~	~~0.554 UG/L~~	~~0.17~~ DMW 9/1/89
40	~~112~~	~~847~~	~~28:56~~	~~34~~	~~1.004~~	~~A*BB~~	~~2327.~~	~~0.266 UG/L~~	~~0.08~~ DMW 9/1/89
41	NOT FOUND								
42	NOT FOUND								
43	~~106~~	~~1116~~	~~38:08~~	~~34~~	~~1.322~~	~~A BB~~	~~177.~~	~~0.041 UG/L~~	~~0.01~~ DMW 9/1/89
44	~~106~~	~~1116~~	~~38:08~~	~~34~~	~~1.322~~	~~A BB~~	~~177.~~	~~0.041 UG/L~~	~~0.01~~ DMW 9/1/89
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	98	805	27:30	34	0.954	A BB	421921.	46.297 UG/L	14.54
49	95	1014	34:39	34	1.201	A BB	349750.	49.183 UG/L	15.45

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	12:10	0.99	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:40		0.138						
3	2:40		0.219						
4	3:00		0.264						
5	3:27		0.284						
6	4:49		0.396						
7	7:56	0.98	0.652	0.99	8.52	50.00	0.253	1.483	0.17
8	9:01	0.98	0.742	1.00	8.09	50.00	0.050	0.312	0.16
9	9:05		0.747						
10	9:52		0.812						
11	9:54		0.815						
12	11:35		0.952						
13	13:05	0.92	1.076	0.93	0.13	50.00	0.007	2.615	0.00
14	14:00		1.152						
15	14:39		1.205						
16	10:38	0.98	0.874	1.00	4.64	50.00	0.504	5.430	0.09
17	15:29		1.272						
18	15:22	0.99	1.264	1.01	48.18	50.00	2.251	2.336	0.96
19	23:37	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
20	15:27	0.99	0.654	1.00	2.60	50.00	0.007	0.127	0.05
21	16:51		0.713						
22	17:15		0.731						
23	17:32	0.99	0.742	0.99	0.06	50.00	0.001	0.567	0.00
24	17:58		0.761						
25	19:24		0.822						
26	19:43		0.835						
27	20:18		0.860						
28	21:03		0.891						
29	21:09		0.896						
30	20:50	1.00	0.883	1.00	0.18	50.00	0.003	0.941	0.00
31	21:09		0.896						
32	22:17		0.944						
33	23:59		1.016						
34	28:58	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
35	24:26		0.843						
36	26:06		0.901						
37	26:27		0.913						
38	26:29	0.99	0.914	1.00	0.09	50.00	0.001	0.612	0.00
39	27:49	1.00	0.960	1.00	0.55	50.00	0.008	0.724	0.01
40	29:09	0.99	1.006	1.00	0.27	50.00	0.005	0.929	0.01
41	31:34		1.090						
42	36:50		1.271						
43	38:28	0.99	1.328	1.00	0.04	50.00	0.000	0.463	0.00
44	38:28	0.99	1.328	1.00	0.04	50.00	0.000	0.463	0.00
45	45:06		1.557						
46	45:53		1.584						
47	43:40		1.507						
48	27:36	1.00	0.953	1.00	46.30	50.00	0.897	0.969	0.93
49	34:55	0.99	1.205	1.00	49.18	50.00	0.744	0.756	0.98

B 1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C-14C_MW

Lab Name: Q C INC. Contract: GANNET-FLEM

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

Matrix: (soil/water) WATER Lab Sample ID: 883615

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 10034V

Level: (low/med) LOW Date Received: 08/15/89

% Moisture: not dec. Date Analyzed: 08/23/89

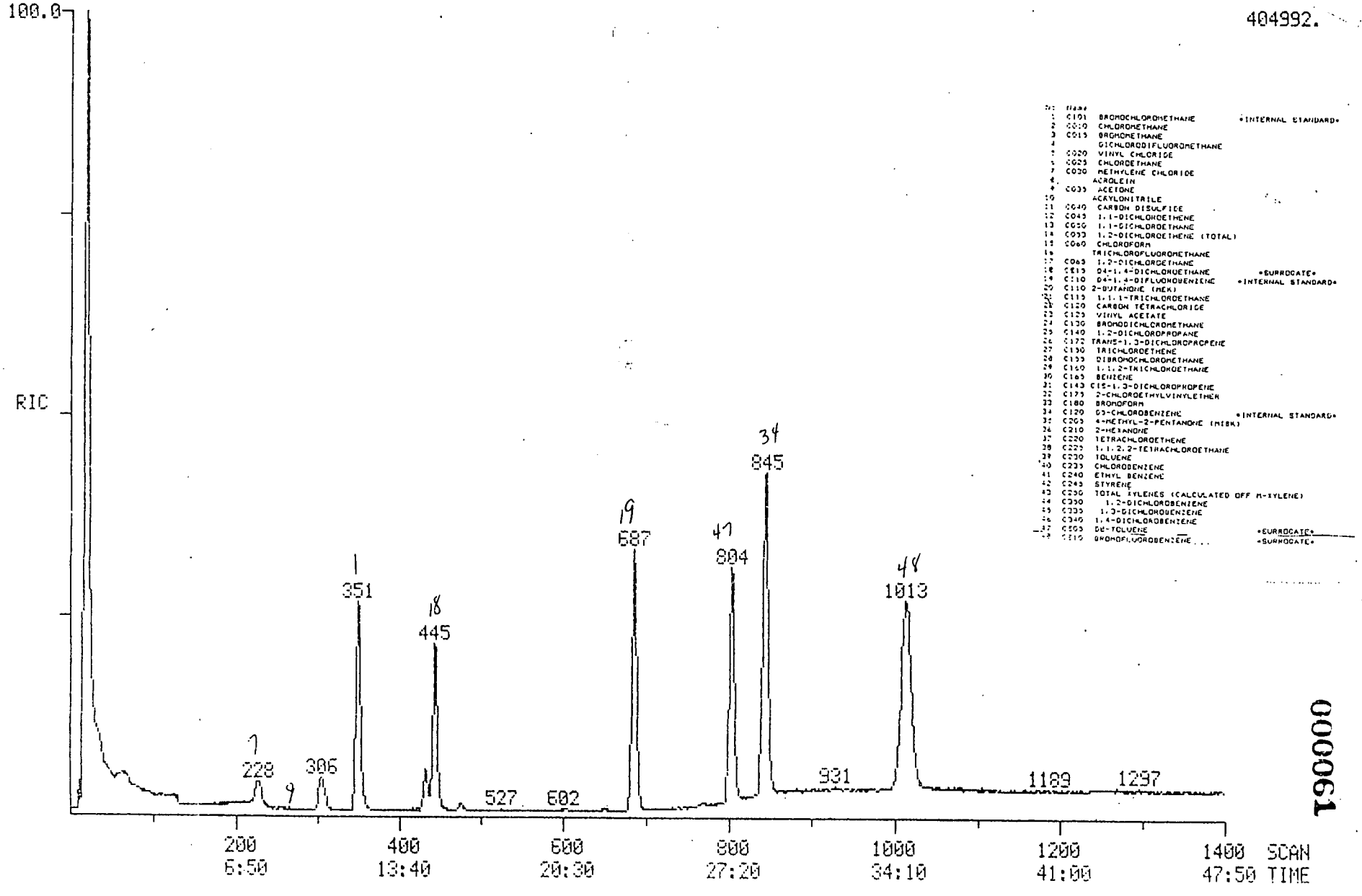
Column: (pack/cap) PACK Dilution Factor: 1.0

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	8	B
67-64-1	Acetone	7	BJ
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	100	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	50	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	50	U
591-78-6	2-Hexanone	50	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	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
08/23/88 17:30:00
SAMPLE: MW C14C
CONDS.: 5MLS
RANGE: G 1,1400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 10034V #1
CALI: 10034V #2

SCANS 1 TO 1400



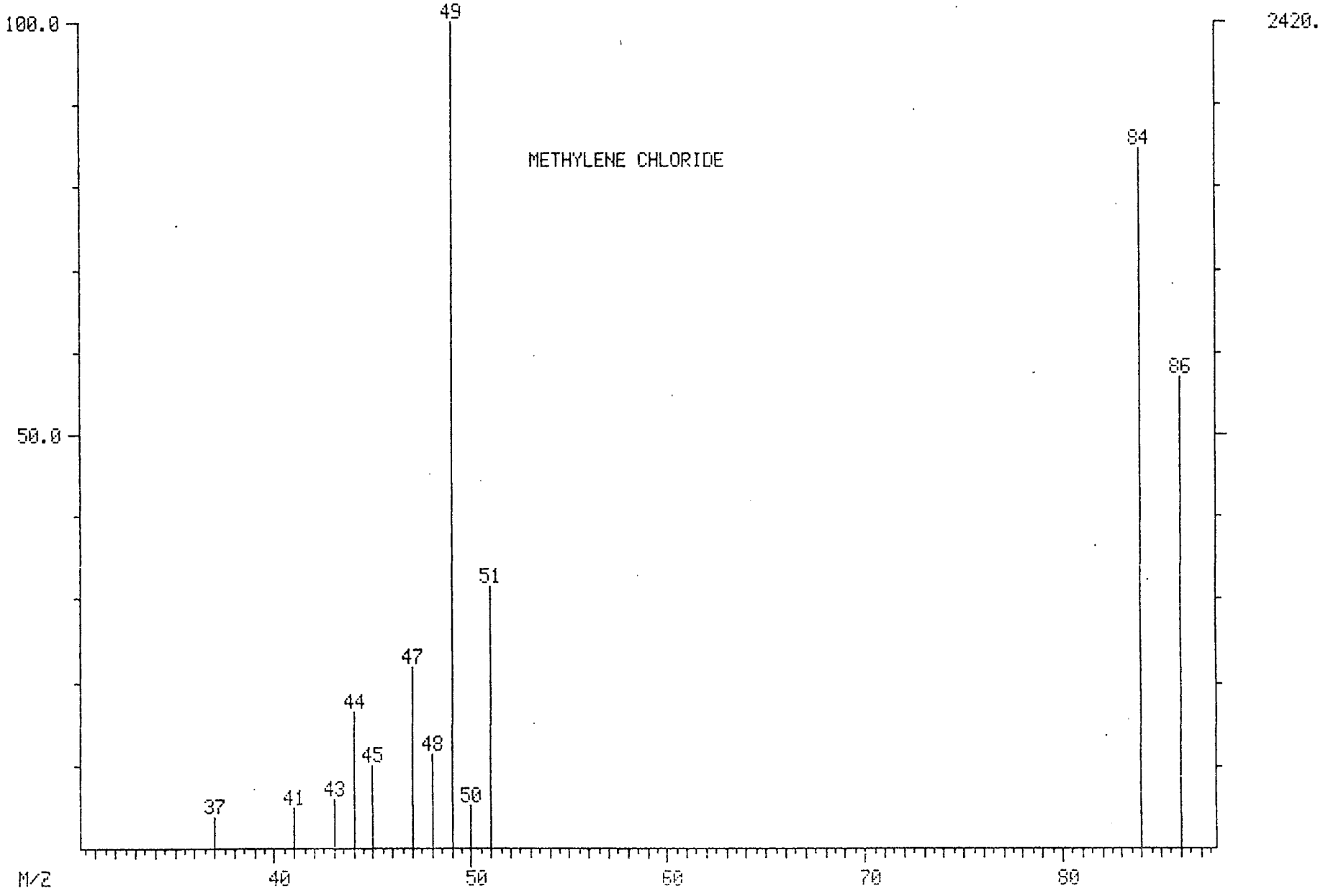
No.	Name	
1	C101 BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	C010 CHLOROMETHANE	
3	C015 BROMOMETHANE	
4	DICHLORODIFLUOROMETHANE	
5	C020 VINYL CHLORIDE	
6	C025 CHLOROETHANE	
7	C030 METHYLENE CHLORIDE	
8	ACROLEIN	
9	C035 ACETONE	
10	ACRYLONITRILE	
11	C040 CARBON DISULFIDE	
12	C045 1,1-DICHLOROETHENE	
13	C050 1,1-DICHLOROETHANE	
14	C055 1,2-DICHLOROETHENE (TOTAL)	
15	C060 CHLOROFORM	
16	TRICHLOROFLUOROMETHANE	
17	C065 1,2-DICHLOROETHANE	
18	C115 D4-1,4-DICHLOROETHANE	*SURROGATE*
19	C110 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	C173 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	C360 1,4-DICHLOROBENZENE	
47	C503 D8-TOLUENE	*SURROGATE*
48	C210 BROMOFLUOROBENZENE	*SURROGATE*

000061

MASS SPECTRUM
08/23/89 17:30:00 + 7:47
SAMPLE: MW C14C
CONDS.: 5MLS
ENHANCED (S 15B 2N 0T)

DATA: 10034V #228
CALI: 10034V #2

BASE M/Z: 49
RIC: 8528.

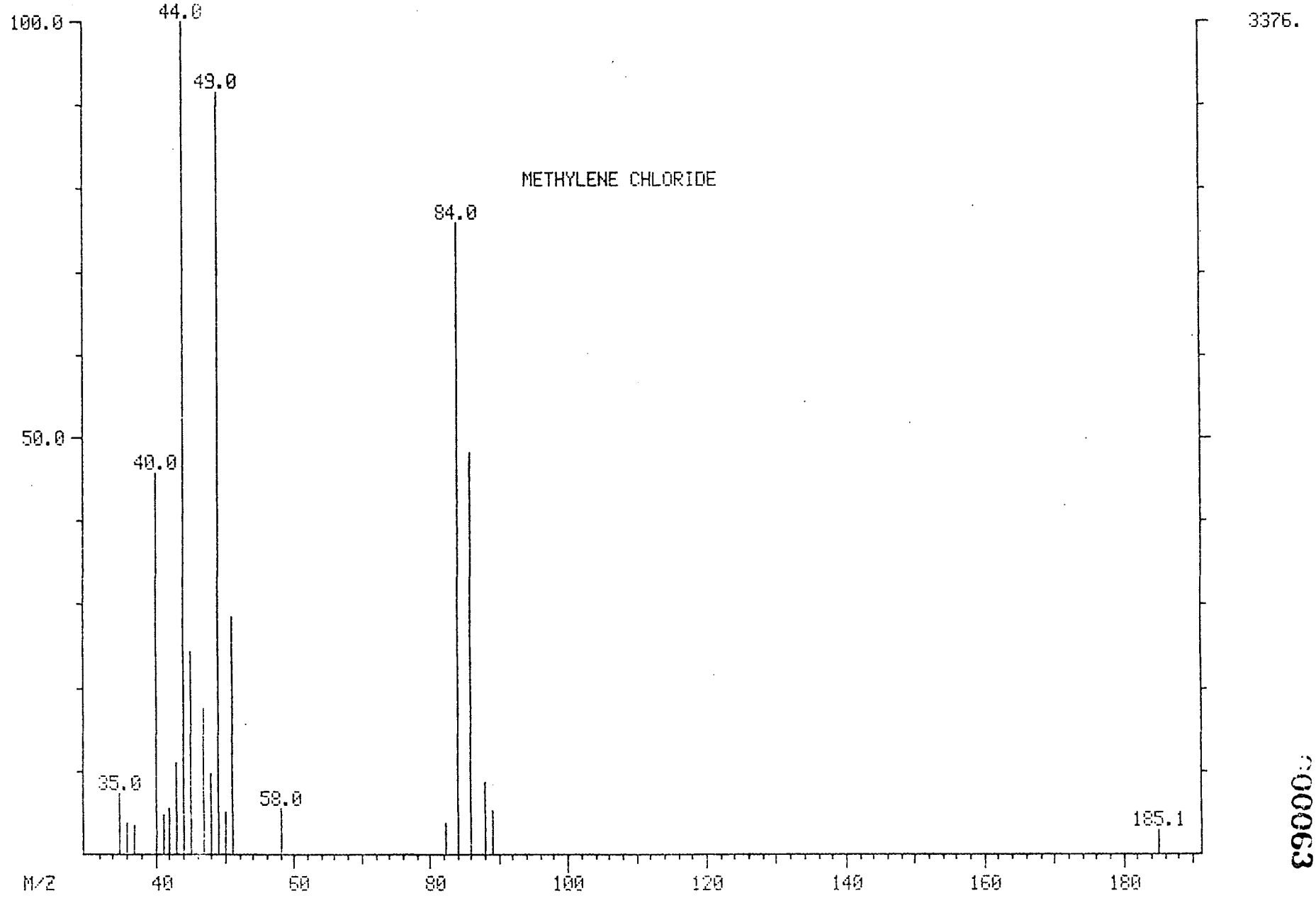


000062

MASS SPECTRUM
08/23/89 17:30:00 + 7:47
SAMPLE: MW C14C
CONDS.: 5ML5

DATA: 10034V #228
CALI: 10034V #2

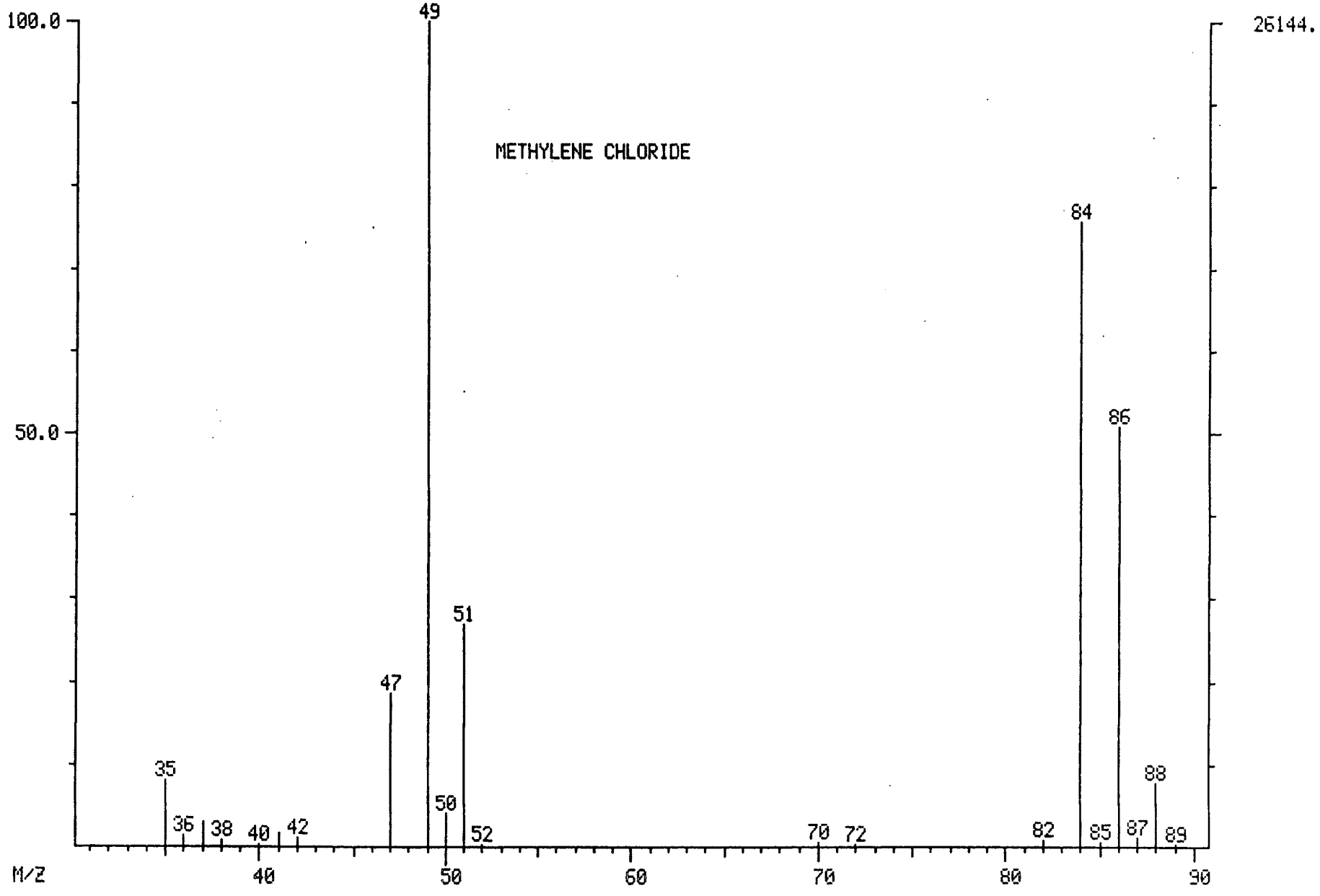
BASE M/Z: 44
RIC: 17152.



MASS SPECTRUM
08/23/89 8:01:00 + 7:56
SAMPLE: STANDARD
CONDS.: 50NG PURGED
ENHANCED (S 15B 2N 0T)

DATA: VS050A0823 #232
CALI: VS050A0823 #2

BASE M/Z: 49
RIC: 79616.

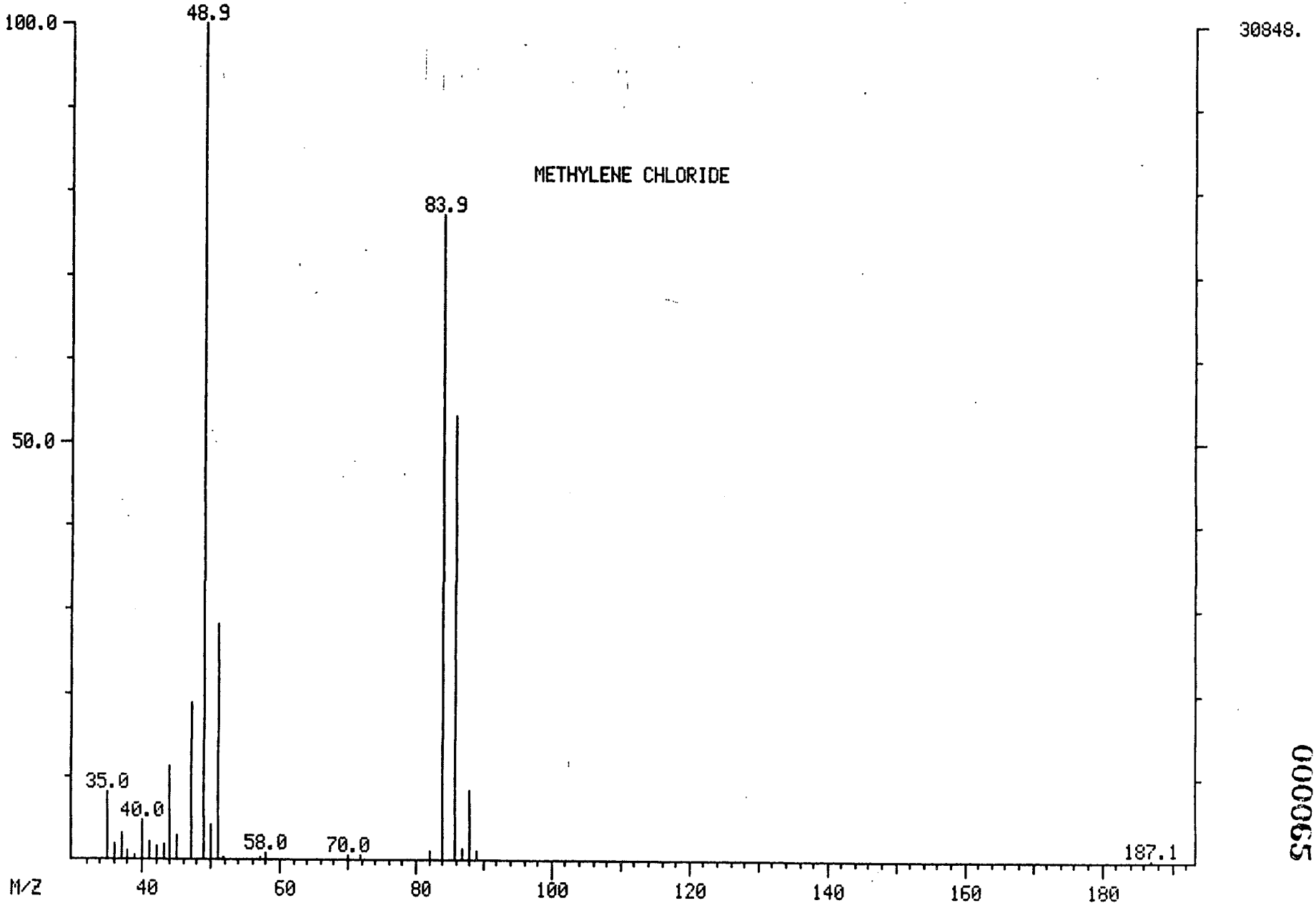


000064

MASS SPECTRUM
08/23/89 8:01:00 + 7:56
SAMPLE: STANDARD
CONDS.: 50NG PURGED

DATA: VS050A0823 #232
CALI: VS050A0823 #2

BASE M/Z: 49
RIC: 103168.

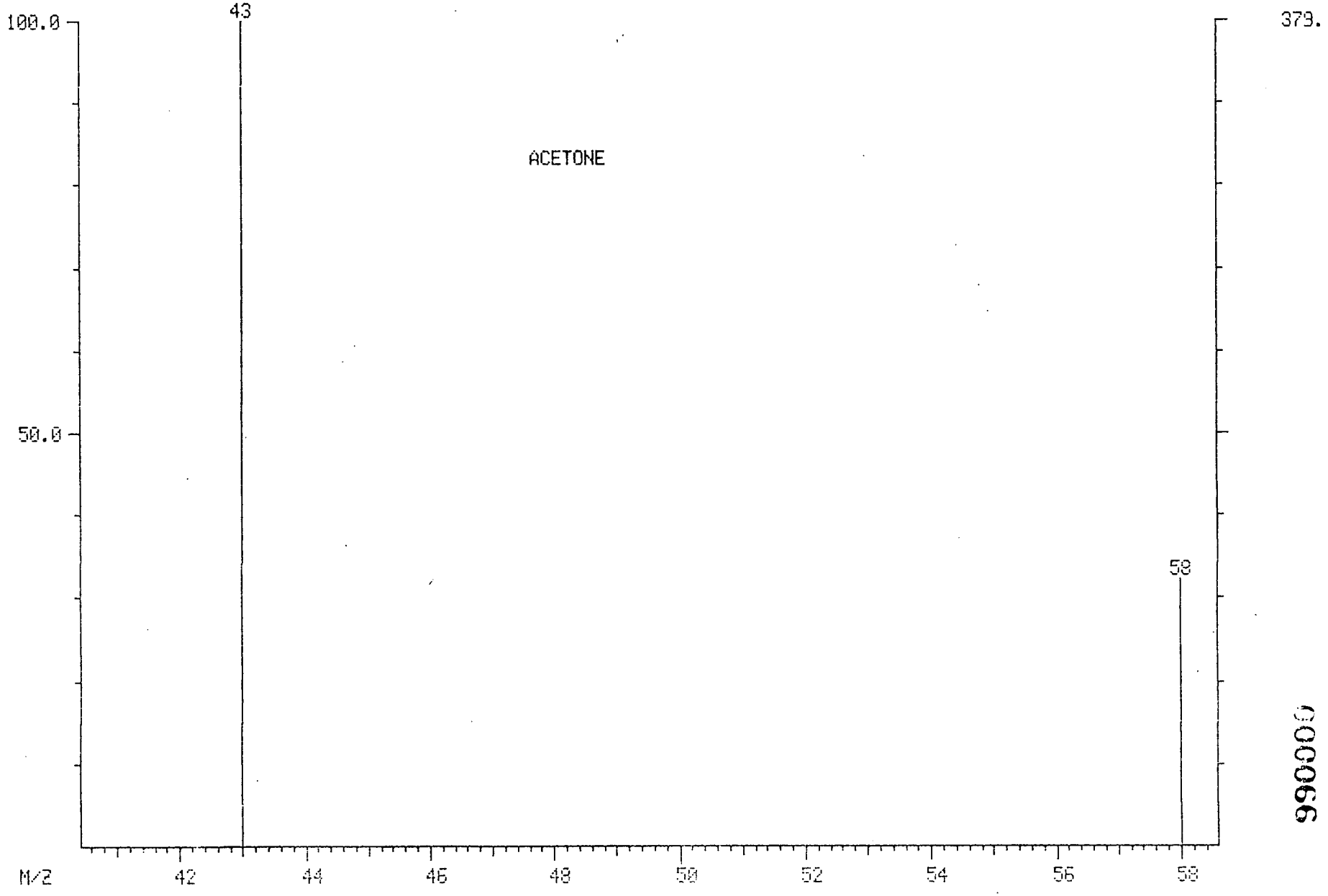


000065

MASS SPECTRUM
03/23/89 17:30:00 + 8:51
SAMPLE: MW C14C
CONDS.: 5MLS
ENHANCED (S 15B 2N 0T)

DATA: 10034V #259
CALI: 10034V #2

BASE M/Z: 43
RIC: 501.

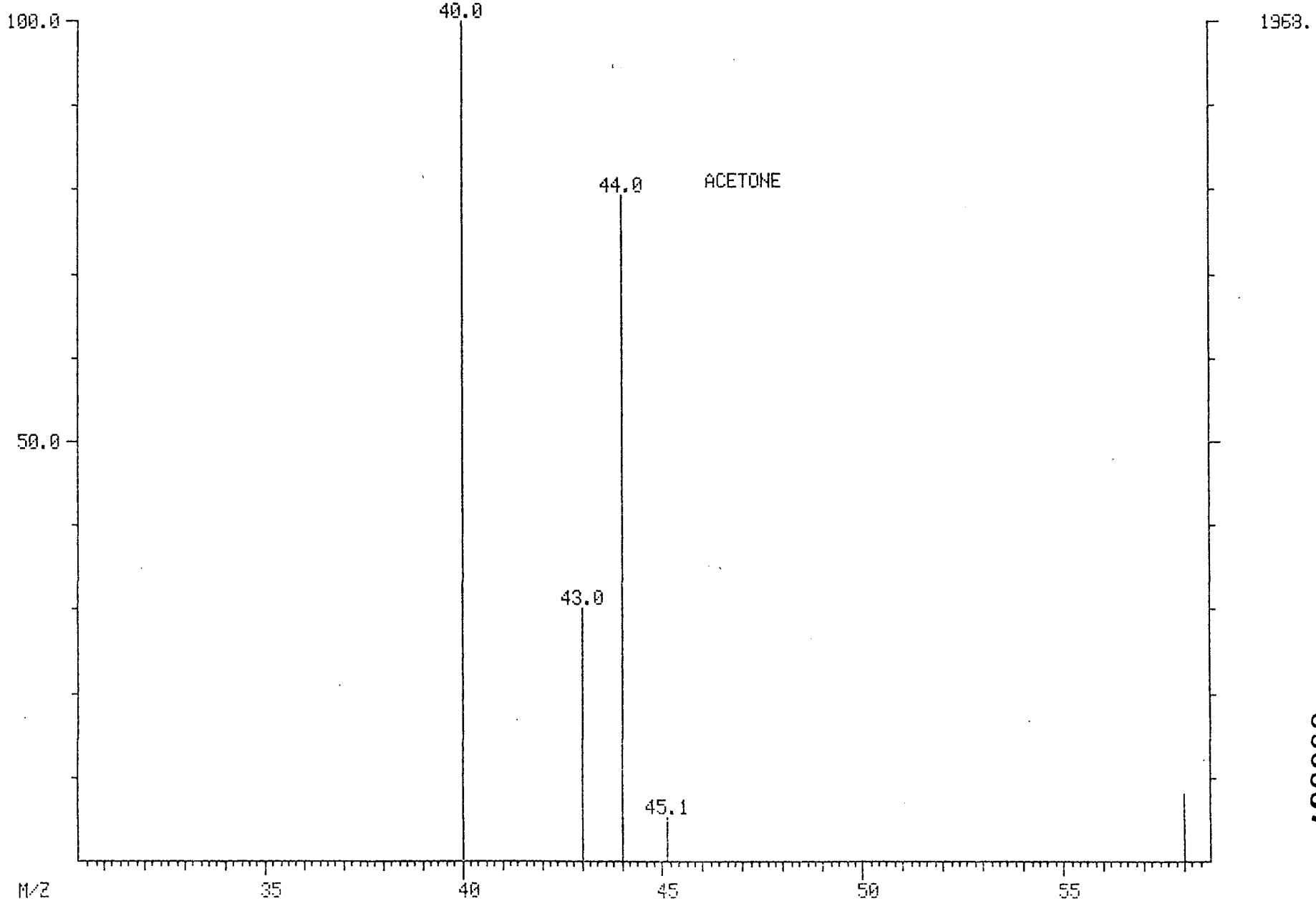


000066

MASS SPECTRUM
09/23/99 17:30:00 + 8:51
SAMPLE: MW C14C
CONDS.: 5ML5

DATA: 10034V #259
CALI: 10034V #2

BASE M/Z: 40
RIC: 4384.

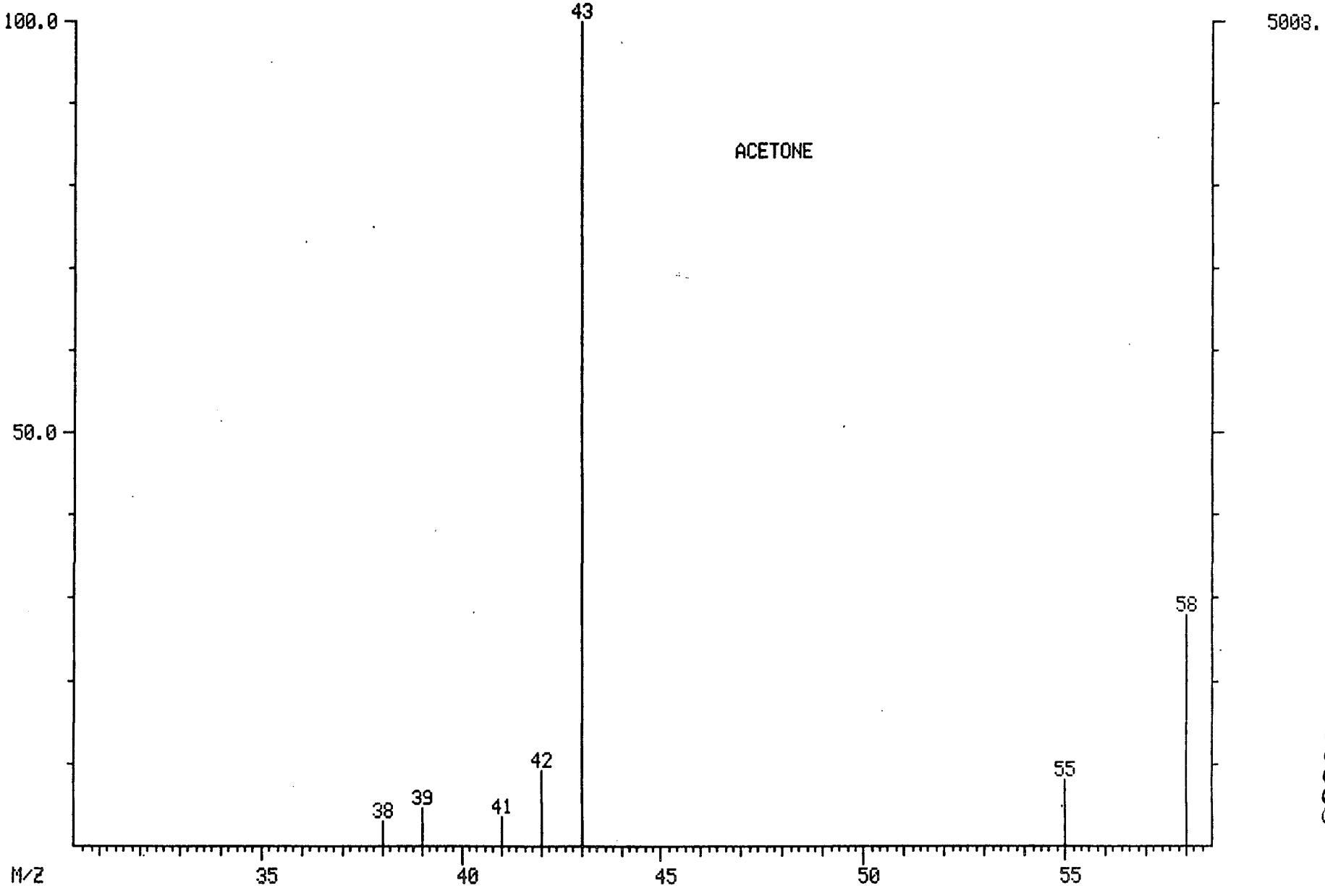


000067

MASS SPECTRUM
08/23/89 8:01:00 + 9:01
SAMPLE: STANDARD
CONDS.: 50NG PURGED
ENHANCED (S 15B 2N 0T)

DATA: VS050A0823 #264
CALI: VS050A0823 #2

BASE M/Z: 43
RIC: 7824.

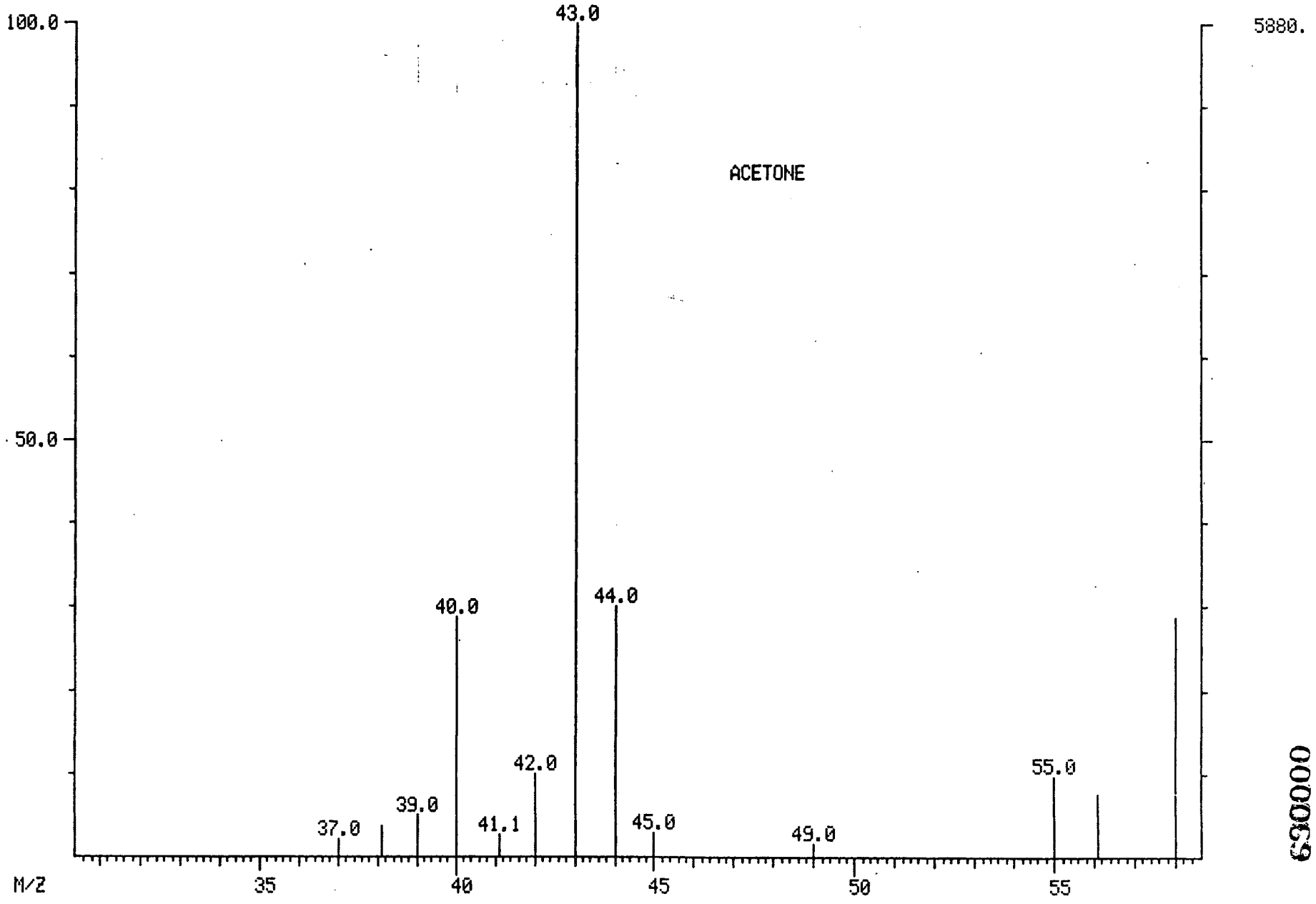


000068

MASS SPECTRUM
08/23/89 8:01:00 + 9:01
SAMPLE: STANDARD
CONDS.: 50NG PURGED

DATA: VS050A0823 #264
CALI: VS050A0823 #2

BASE M/Z: 43
RIC: 13664.



000069

QUANTITATION REPORT FILE: 10034V

000070

DATA: 10034V.TI
08/23/89 17:30:00
SAMPLE: MW C14C
CONDS.: 5MLS
FORMULA:
SUBMITTED BY: GANNETT

INSTRUMENT: 1050
ANALYST: DMW

WEIGHT: 0.006
ACCT. NO.: 10034

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
RESP. FAC. FROM LIBRARY ENTRY

No	NAME		
1	CI01	BROMOCHLOROMETHANE	*** INTERNAL STANDARD #1 ***
2	C010	CHLOROMETHANE	**
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	*
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8	C035	2-PROPANONE (ACETONE)	
7		ACROLEIN	
10	C040	CARBON DISULFIDE	
11		ACRYLONITRILE	
12	C045	1,1-DICHLOROETHENE	*
13	C050	1,1-DICHLOROETHANE	**
14	C053	TRANS-1,2-DICHLOROETHENE	
15	C060	CHLOROFORM	*
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	CS13	1,2-DICHLOROETHANE-D4	*** SURROGATE #1 ***
19	CI10	1,4-DIFLUOROBENZENE	*** INTERNAL STANDARD #2 ***
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-CHLOROETHYL VINYL ETHER	
33	C180	BROMOFORM	**
34	CI20	CHLOROBENZENE-D5	*** INTERNAL STANDARD #3 ***
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	XYLENES	
44	C250	XYLENES	
45	C350	1,2-DICHLOROBENZENE	
46	C340	1,4-DICHLOROBENZENE	
47	C335	1,3-DICHLOROBENZENE	

No	NAME			
48	CS05	TOLUENE-D8	*** SURROGATE #2 ***	
49	CS10	4-BROMOFLUOROBENZENE	*** SURROGATE #3 ***	

No	M/Z	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	128	351	12:00	1	1.000	A BB	98089.	50.000 UG/L	15.55
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	94	228	7:47	1	0.650	A BB	23425.	8.053 UG/L	2.50
8	43	259	8:51	1	0.738	A BV	4170.	6.822 UG/L	2.12
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	~~63~~	~~353~~	~~12:04~~	~~1~~	~~1.006~~	~~A BB~~	~~547.~~	~~0.107 UG/L~~	~~0.03~~ Dmi 9/1/89
14	NOT FOUND								
15	NOT FOUND								
16	~~101~~	~~506~~	~~10:27~~	~~1~~	~~0.872~~	~~A BB~~	~~64984.~~	~~6.100 UG/L~~	~~1.90~~ Dmi 9/1/89
17	NOT FOUND								
18	65	445	15:12	1	1.268	A BB	227801.	49.705 UG/L	15.46
19	114	687	23:28	19	1.000	A BB	329115.	50.000 UG/L	15.55
20	~~43~~	~~446~~	~~15:14~~	~~19~~	~~0.647~~	~~A BB~~	~~2766.~~	~~3.320 UG/L~~	~~1.03~~ Dmi 9/1/89
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	~~75~~	~~605~~	~~20:10~~	~~19~~	~~0.881~~	~~A BB~~	~~1803.~~	~~0.291 UG/L~~	~~0.09~~ Dmi 9/1/89
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	117	545	28:52	34	1.000	A BB	347027.	50.000 UG/L	15.55
35	~~73~~	~~711~~	~~24:18~~	~~34~~	~~0.841~~	~~A*BB~~	~~383.~~	~~0.140 UG/L~~	~~0.04~~ Dmi 9/1/89
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	~~73~~	~~811~~	~~27:43~~	~~34~~	~~0.960~~	~~A BB~~	~~3012.~~	~~0.600 UG/L~~	~~0.19~~ Dmi 9/1/89
40	~~113~~	~~847~~	~~28:56~~	~~34~~	~~1.002~~	~~A*BB~~	~~1886.~~	~~0.272 UG/L~~	~~0.07~~ Dmi 9/1/89
41	~~106~~	~~920~~	~~31:26~~	~~34~~	~~1.089~~	~~A BB~~	~~123.~~	~~0.038 UG/L~~	~~0.01~~ Dmi 9/1/89
42	NOT FOUND								
43	~~106~~	~~1118~~	~~38:12~~	~~34~~	~~1.323~~	~~A*BB~~	~~266.~~	~~0.083 UG/L~~	~~0.03~~ Dmi 9/1/89
44	~~106~~	~~1118~~	~~38:12~~	~~34~~	~~1.323~~	~~A*BB~~	~~266.~~	~~0.083 UG/L~~	~~0.03~~ Dmi 9/1/89
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	98	804	27:28	34	0.951	A BB	294078.	43.716 UG/L	13.59
49	95	1013	34:37	34	1.199	A BB	277423.	52.852 UG/L	16.43

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	12:10	0.99	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:40		0.138						
3	2:40		0.219						
4	3:00		0.264						
5	3:27		0.324						
6	4:49		0.396						
7	7:54	0.98	0.652	1.00	8.05	50.00	0.239	1.463	0.16
8	9:01	0.99	0.742	1.00	6.82	50.00	0.043	0.312	0.14
9	9:25		0.747						
10	9:52		0.812						
11	9:54		0.815						
12	11:33		0.952						
13	13:05	0.98	1.076	0.93	0.11	50.00	0.006	2.615	0.00
14	14:00		1.152						
15	14:39		1.205						
16	10:38	0.98	0.874	1.00	6.10	50.00	0.663	5.430	0.12
17	15:29		1.272						
18	15:22	0.99	1.264	1.00	49.71	50.00	2.322	2.336	0.99
19	23:37	0.99	1.000	1.00	50.00	50.00	1.000	1.000	1.00
20	15:27	0.99	0.654	0.99	3.32	50.00	0.008	0.127	0.07
21	16:51		0.713						
22	17:15		0.731						
23	17:32		0.742						
24	17:58		0.761						
25	19:24		0.822						
26	19:43		0.835						
27	20:18		0.860						
28	21:03		0.891						
29	21:09		0.895						
30	20:50	0.99	0.883	1.00	0.29	50.00	0.005	0.941	0.01
31	21:09		0.876						
32	22:17		0.944						
33	23:59		1.016						
34	28:58	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
35	24:26	0.99	0.843	1.00	0.14	50.00	0.001	0.395	0.00
36	26:06		0.901						
37	26:27		0.913						
38	26:29		0.914						
39	27:49	1.00	0.960	1.00	0.60	50.00	0.009	0.724	0.01
40	29:09	0.99	1.006	1.00	0.29	50.00	0.005	0.929	0.01
41	31:34	1.00	1.070	1.00	0.04	50.00	0.000	0.465	0.00
42	36:50		1.271						
43	38:28	0.99	1.328	1.00	0.08	50.00	0.001	0.463	0.00
44	38:28	0.99	1.328	1.00	0.08	50.00	0.001	0.463	0.00
45	45:06		1.557						
46	45:53		1.584						
47	43:40		1.507						
48	27:36	1.00	0.953	1.00	43.72	50.00	0.847	0.969	0.87
49	34:55	0.99	1.205	0.99	52.85	50.00	0.799	0.756	1.06

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FIELD_BLANK

Lab Name: Q C INC. Contract: GANNET-FLEM

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

Matrix: (soil/water) WATER Lab Sample ID: 883616

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 10035V

Level: (low/med) LOW Date Received: 08/15/89

% Moisture: not dec. Date Analyzed: 08/23/89

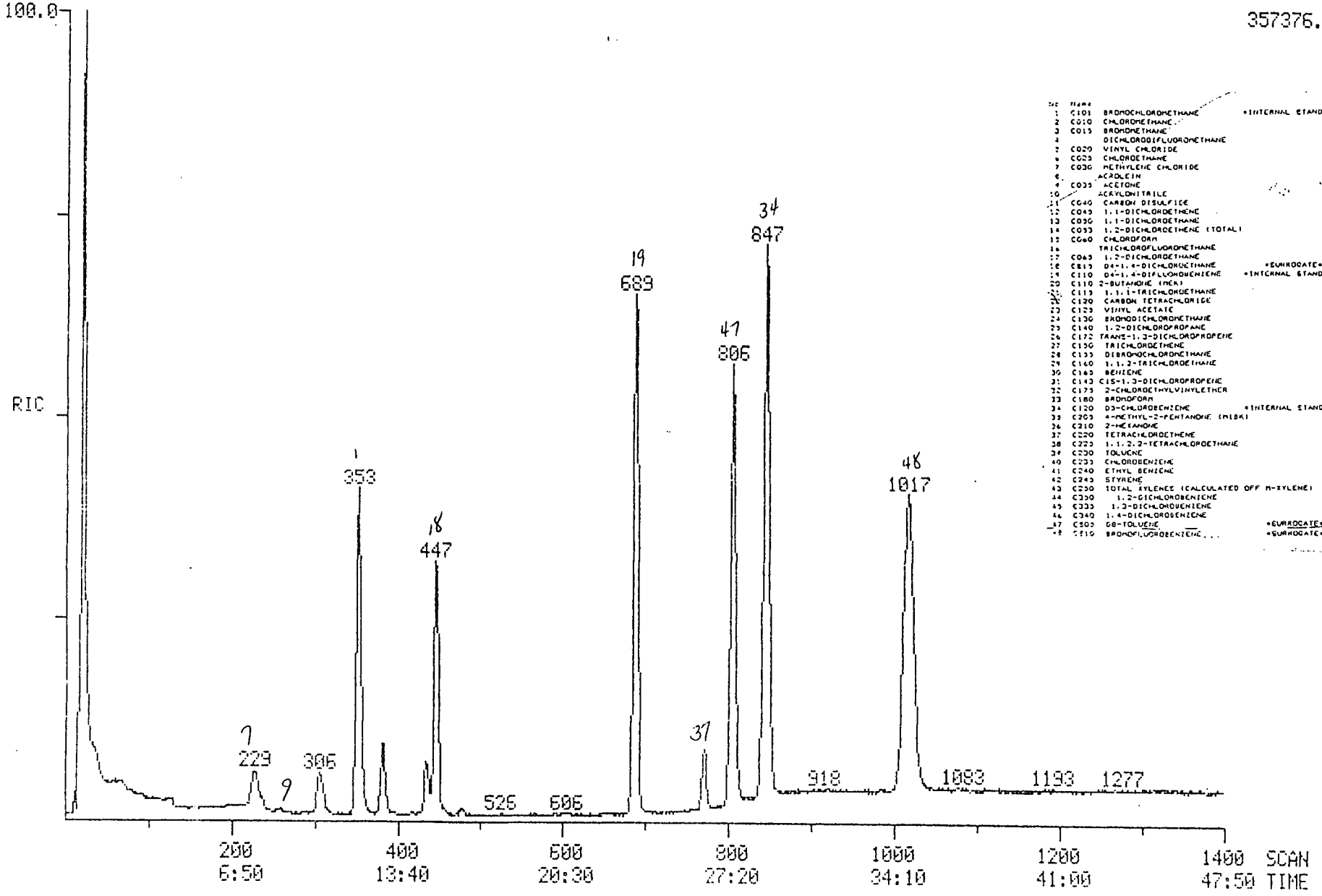
Column: (pack/cap) PACK Dilution Factor: 1.0

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	8	B
67-64-1	Acetone	8	BJ
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	100	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	50	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	50	U
591-78-6	2-Hexanone	50	U
127-18-4	Tetrachloroethene	5	
79-34-5	1,1,2,2-Tetrachloroethane	5	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
08/23/89 11:01:00
SAMPLE: FIELD BLANK
CONDS.: 5MLS
RANGE: G 1,1400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 10035V #1
CALI: 10035V #2

SCANS 1 TO 1400



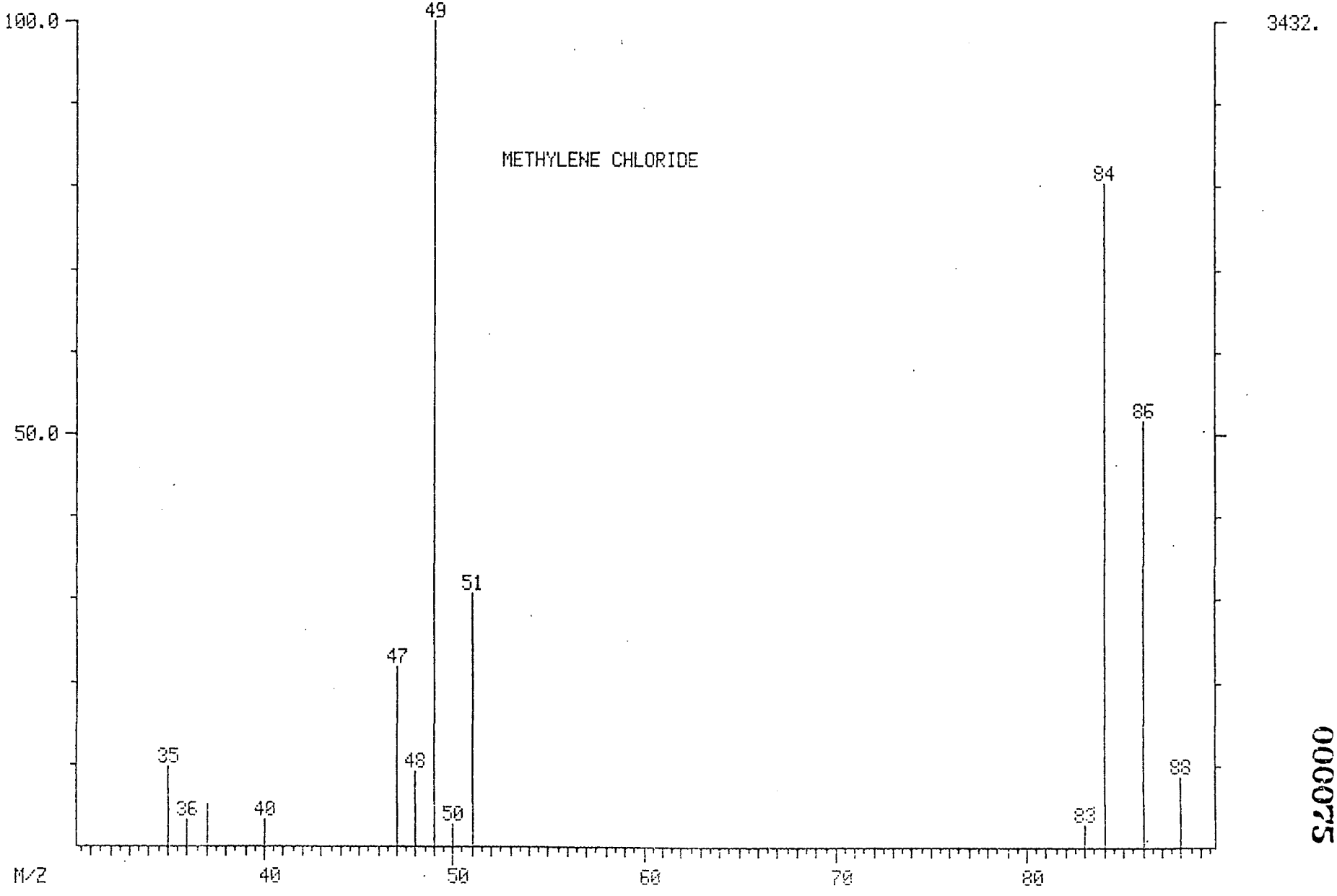
NO	NAME	
1	C001 BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	C010 CHLOROMETHANE	
3	C015 BROMOMETHANE	
4	DICHLORODIFLUOROMETHANE	
5	C020 VINYL CHLORIDE	
6	C025 CHLOROETHANE	
7	C030 METHYLENE CHLORIDE	
8	ACROLEIN	
9	C035 ACETONE	
10	ACRYLONITRILE	
11	C040 CARBON DISULFIDE	
12	C045 1,1-DICHLOROETHENE	
13	C050 1,1-DICHLOROETHANE	
14	C055 1,2-DICHLOROETHENE (TOTAL)	
15	C060 CHLOROFORM	
16	TRICHLOROFLUOROMETHANE	
17	C065 1,2-DICHLOROETHANE	
18	C815 D4-1,4-DICHLOROETHANE	*SURROGATE*
19	C110 D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
20	C115 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	C360 1,4-DICHLOROBENZENE	
47	C505 D8-TOLUENE	*SURROGATE*
48	C510 BROMOFLUOROBENZENE	*SURROGATE*

000074

MASS SPECTRUM
08/23/89 11:01:00 + 7:49
SAMPLE: FIELD BLANK
CONDS.: 5MLS
ENHANCED (S 15B 2N 0T)

DATA: 10035V #229
CALI: 10035V #2

BASE M/Z: 49
RIC: 11312.

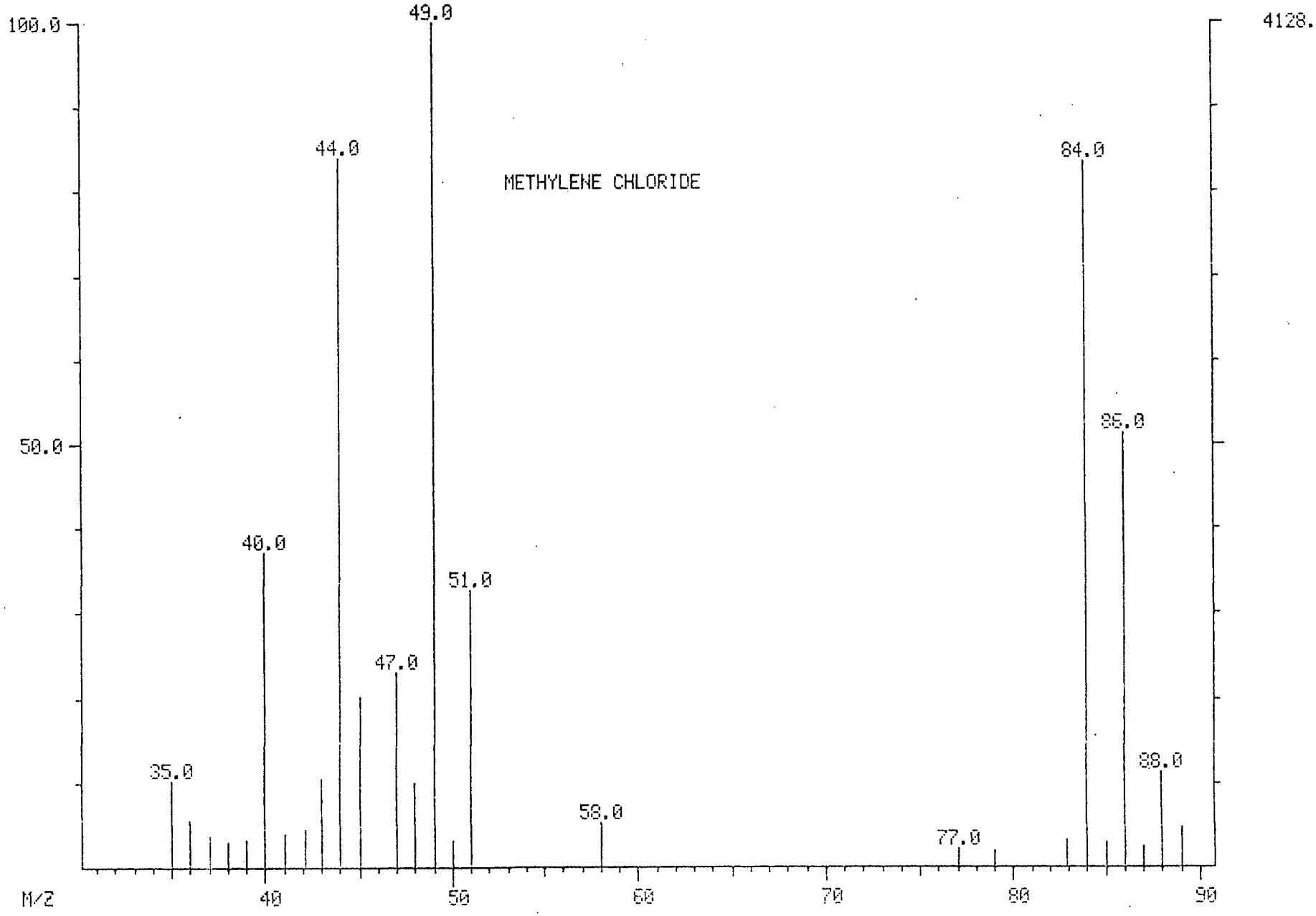


000075

MASS SPECTRUM
08/23/89 11:01:00 + 7:49
SAMPLE: FIELD BLANK
CONDS.: 5MLS

DATA: 10035V #229
CALI: 10035V #2

BASE M/Z: 49
RIC: 21568.

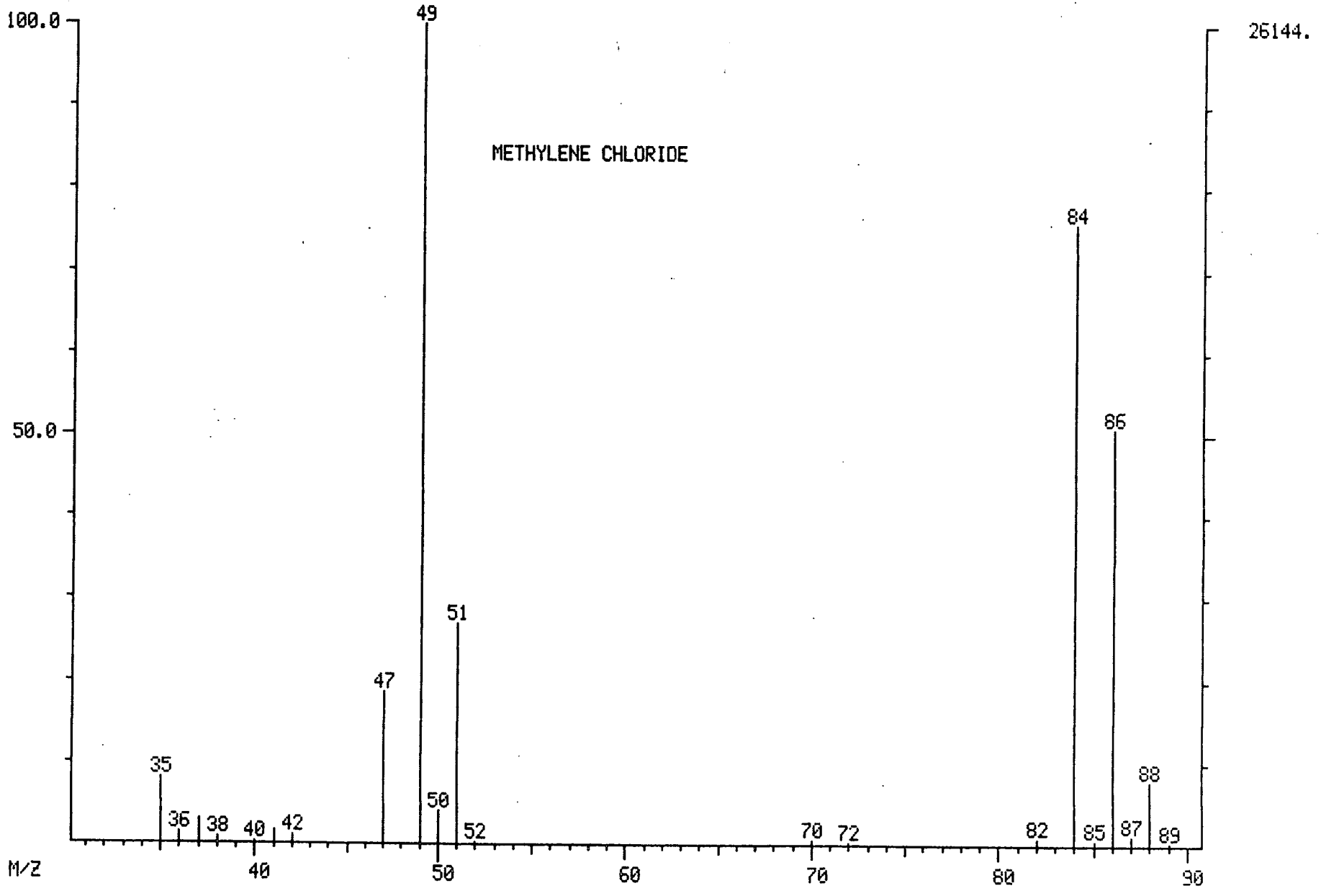


000076

MASS SPECTRUM
08/23/89 8:01:00 + 7:56
SAMPLE: STANDARD
CONDS.: 50NG PURGED
ENHANCED (S 15B 2N 0T)

DATA: VS050A0823 #232
CALI: VS050A0823 #2

BASE M/Z: 49
RIC: 79616.

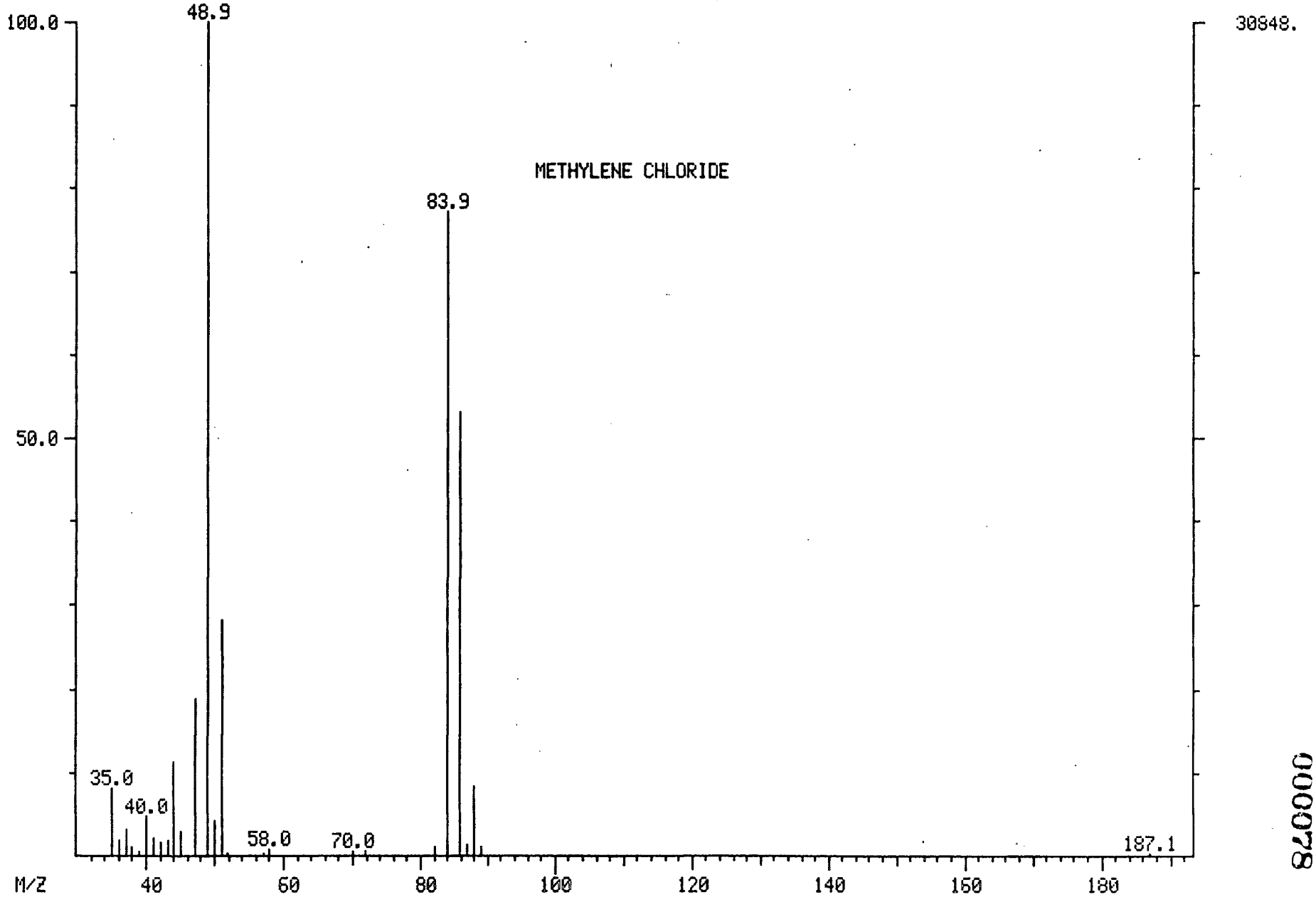


000077

MASS SPECTRUM
08/23/89 8:01:00 + 7:56
SAMPLE: STANDARD
CONDS.: 50NG PURGED

DATA: VS050A0823 #232
CALI: VS050A0823 #2

BASE M/Z: 49
RIC: 103168.

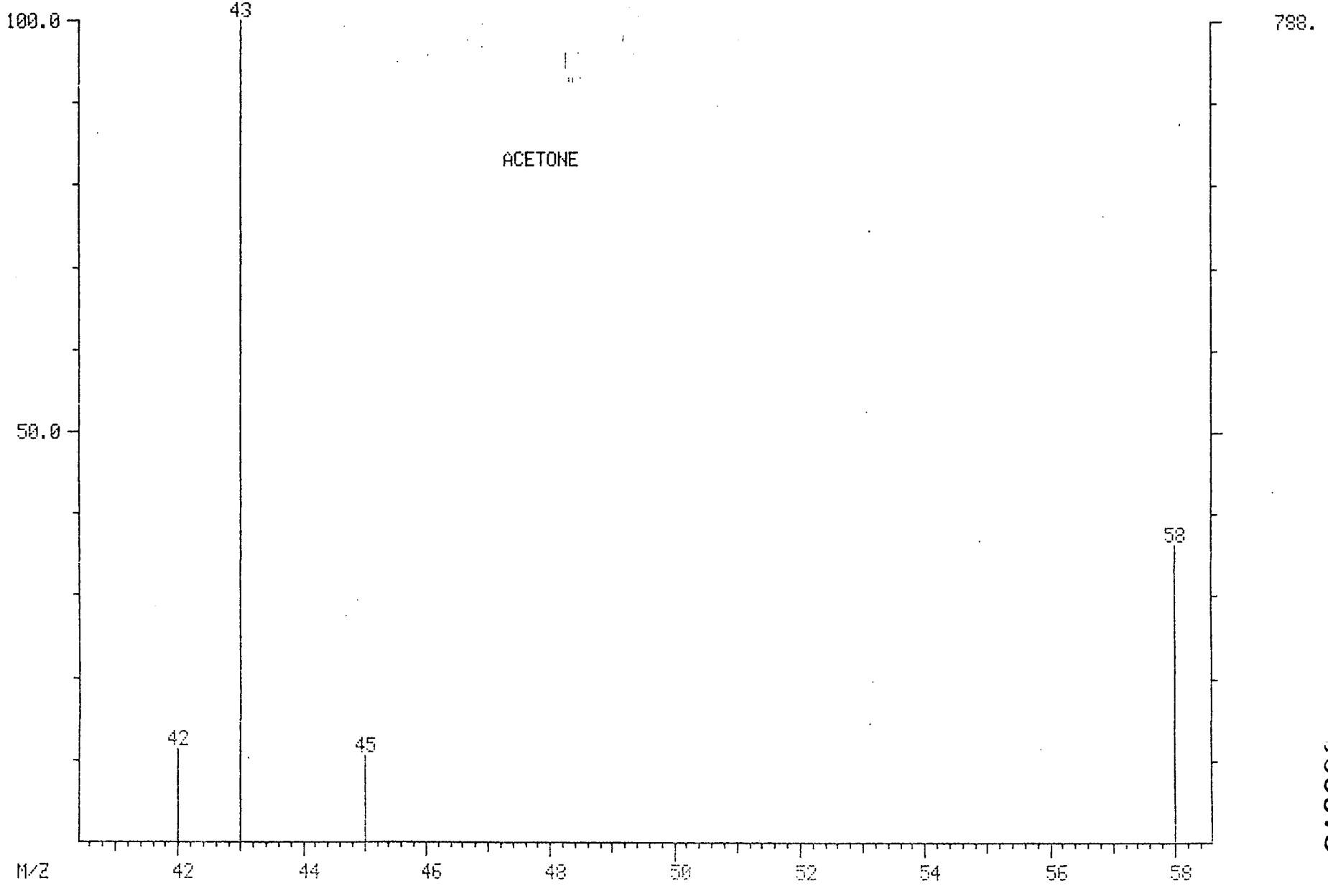


000078

MASS SPECTRUM
08/23/89 11:01:00 + 8:51
SAMPLE: FIELD BLANK
CONDS.: 5MLS
ENHANCED (S 15B 2N 0T)

DATA: 10035V #259
CALI: 10035V #2

BASE M/Z: 43
RIC: 1246.

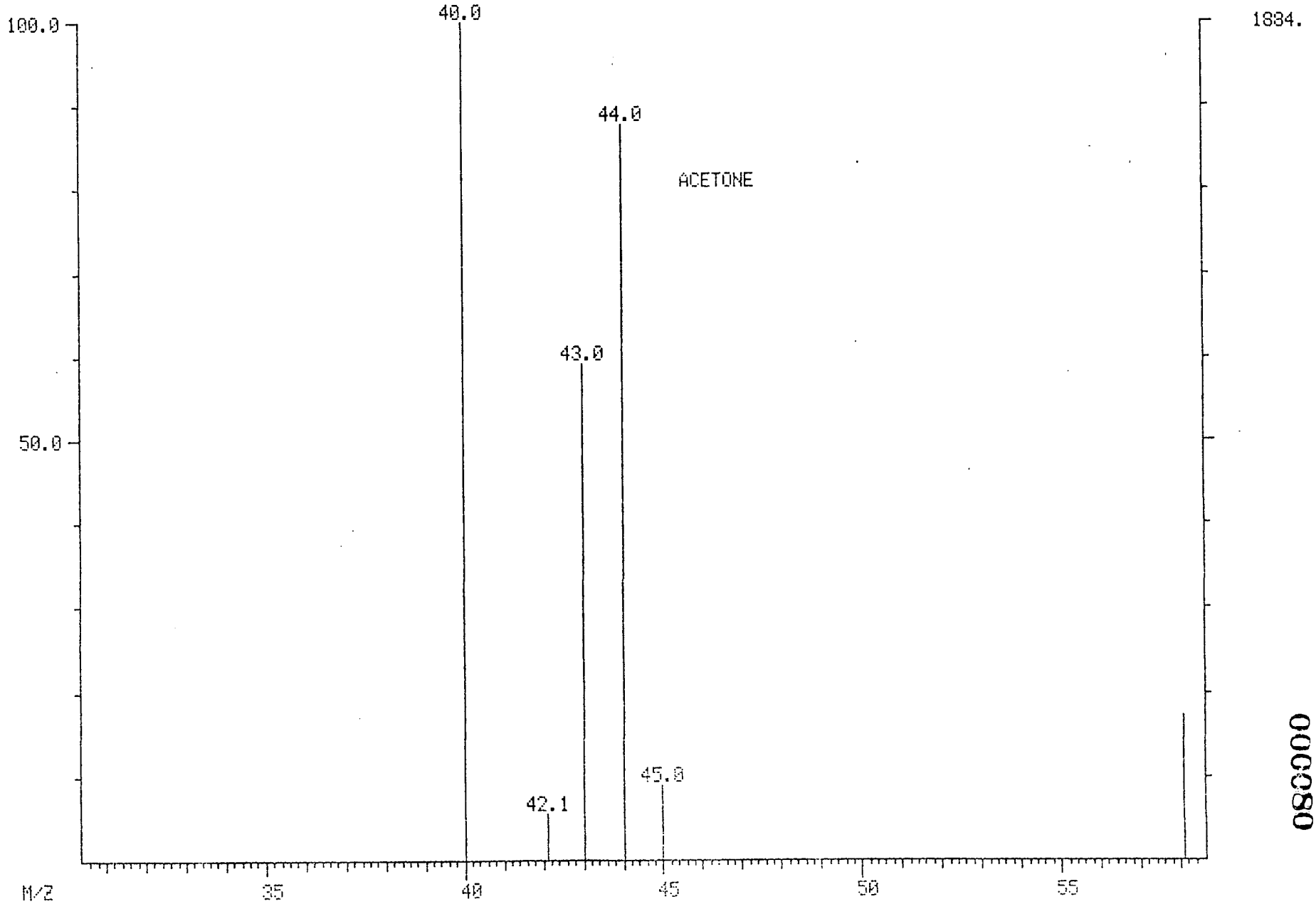


000079

MASS SPECTRUM
08/23/89 11:01:00 + 8:51
SAMPLE: FIELD BLANK
CONDS.: 5MLS

DATA: 10035V #259
CALI: 10035V #2

BASE M/Z: 40
RIC: 5248.

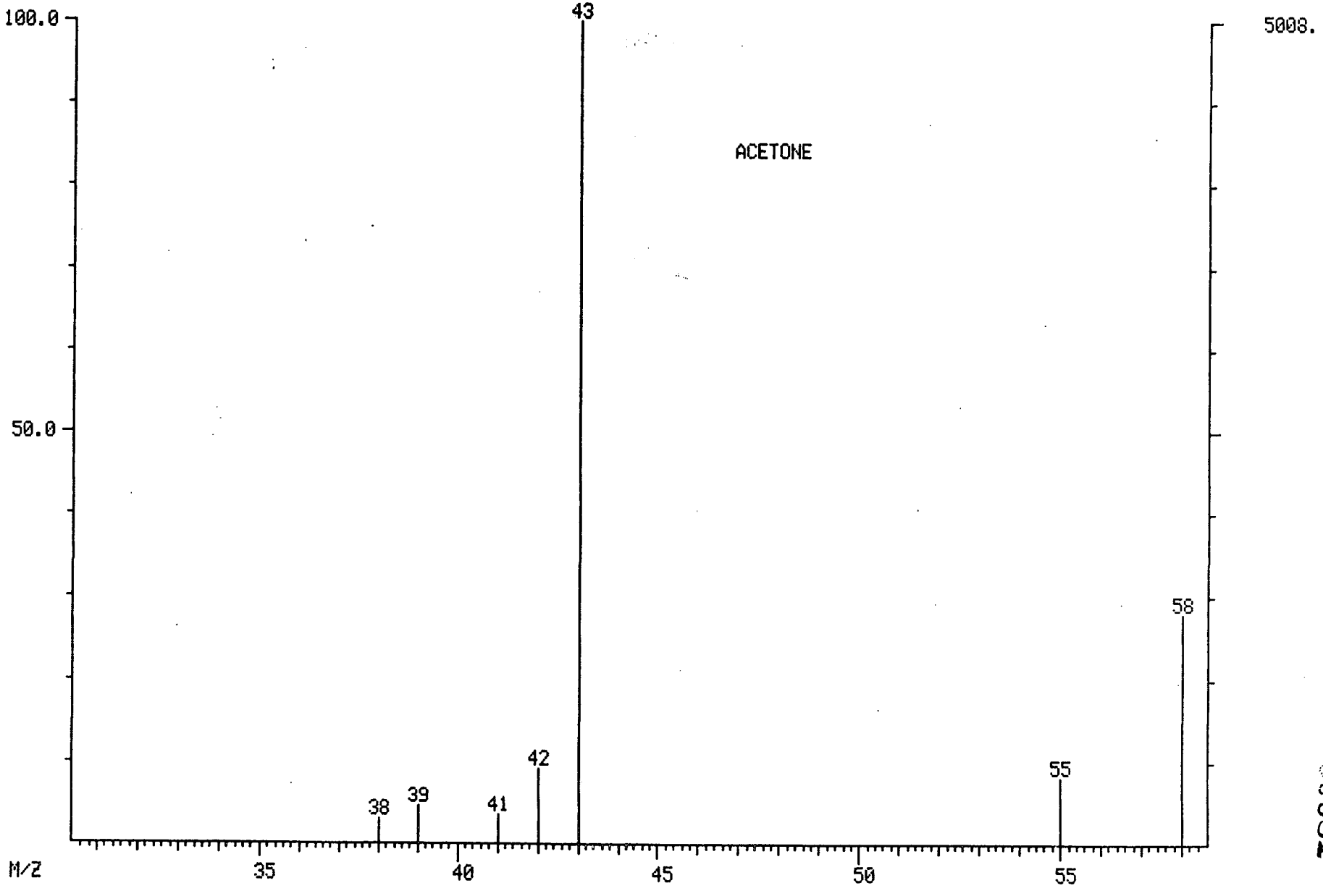


000080

MASS SPECTRUM
08/23/89 8:01:00 + 9:01
SAMPLE: STANDARD
CONDS.: 50NG PURGED
ENHANCED (S 15B 2N 0T)

DATA: VS050A0823 #264
CALI: VS050A0823 #2

BASE M/Z: 43
RIC: 7824.

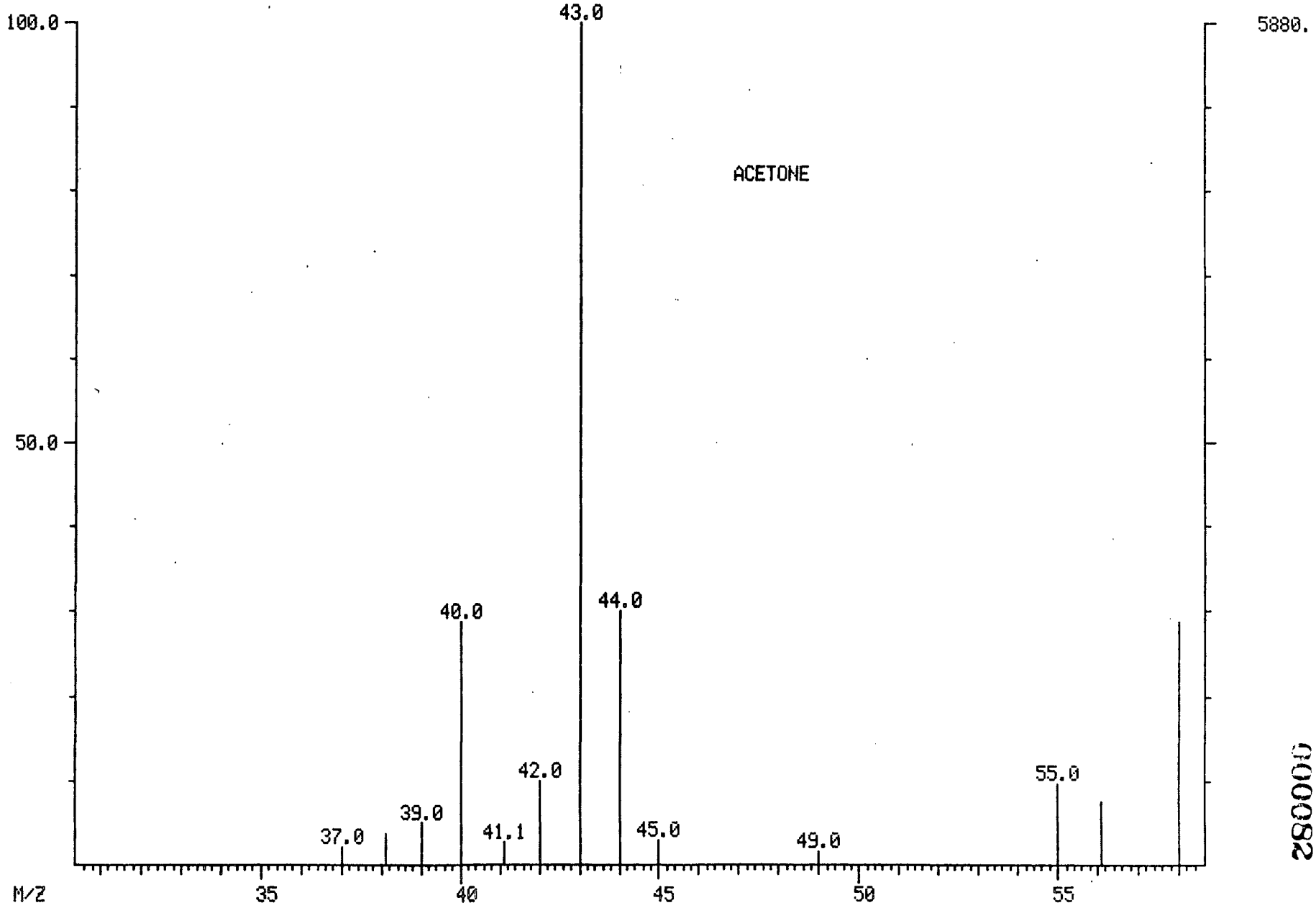


18000.

MASS SPECTRUM
08/23/89 8:01:00 + 9:01
SAMPLE: STANDARD
CONDS.: 50NG PURGED

DATA: V5050A0823 #264
CALI: V5050A0823 #2

BASE M/Z: 43
RIC: 13664.

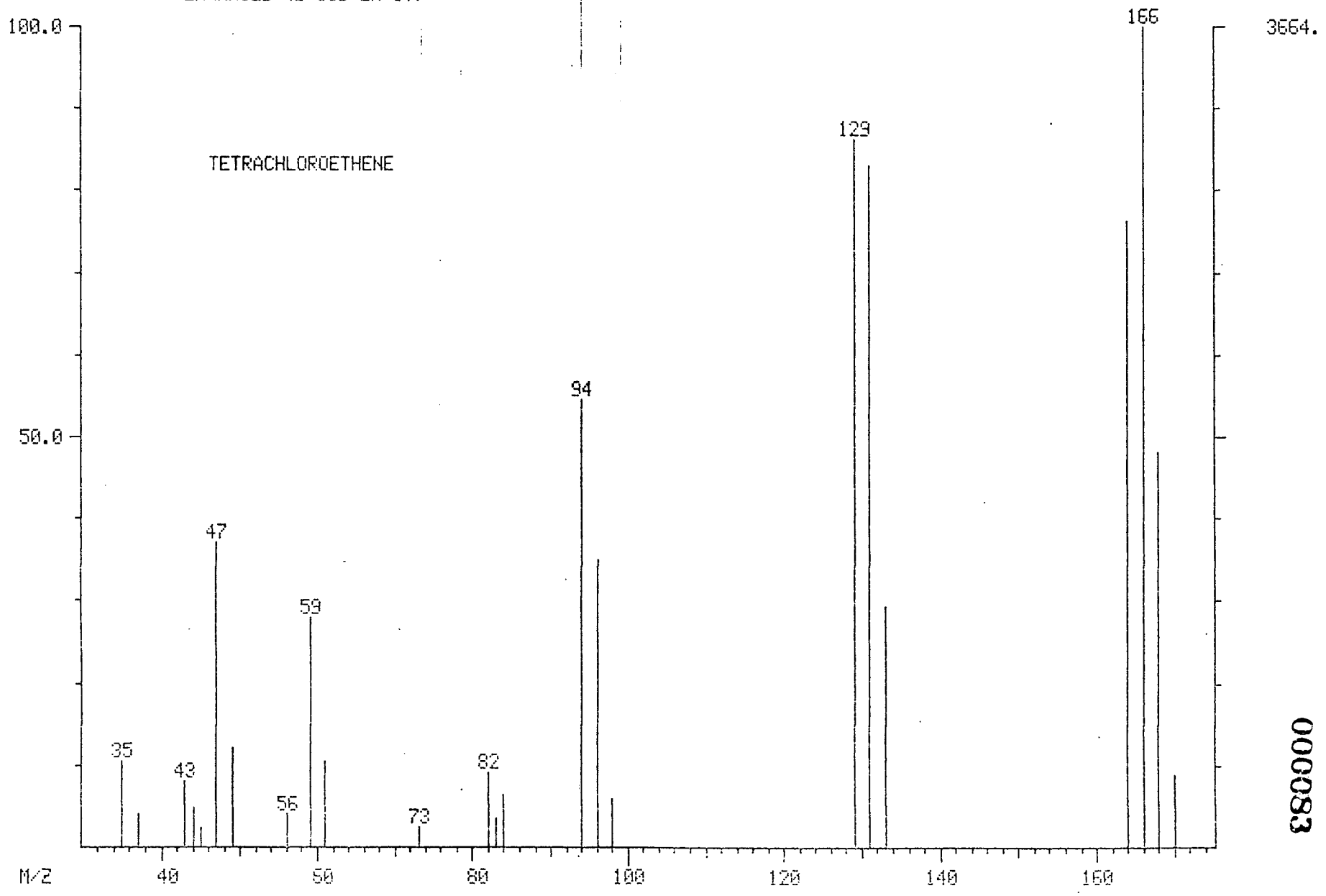


280082

MASS SPECTRUM
08/23/89 11:01:00 + 26:23
SAMPLE: FIELD BLANK
CONDS.: 5MLS
ENHANCED (S 15B 2N 0T)

DATA: 10035V #772
CALI: 10035V #2

BASE M/Z: 166
RIC: 24608.

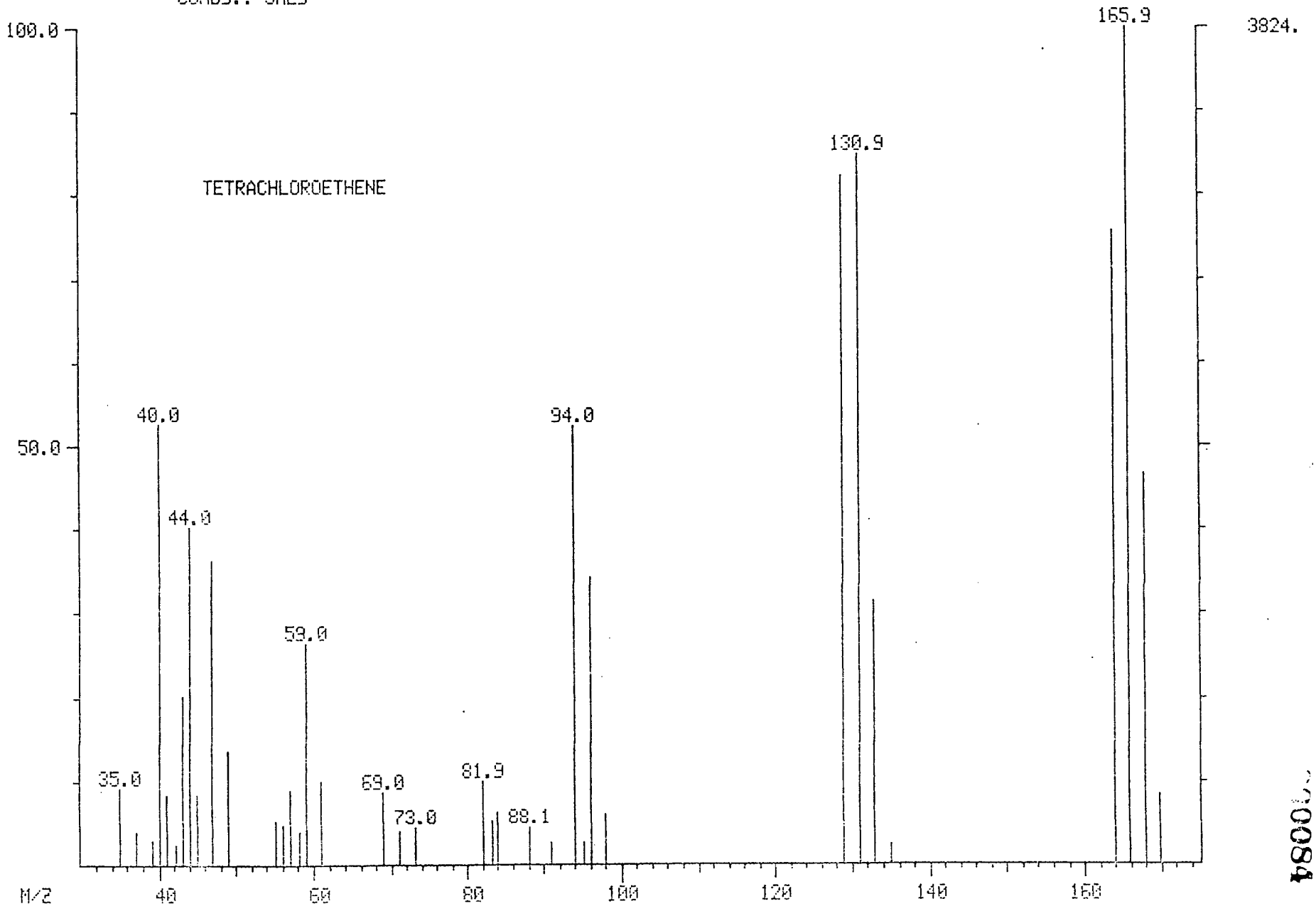


000083

MASS SPECTRUM
09/23/89 11:01:00 + 26:23
SAMPLE: FIELD BLANK
CONDS.: 5MLS

DATA: 10035V #772
CALI: 10035V #2

BASE M/Z: 166
RIC: 31808.

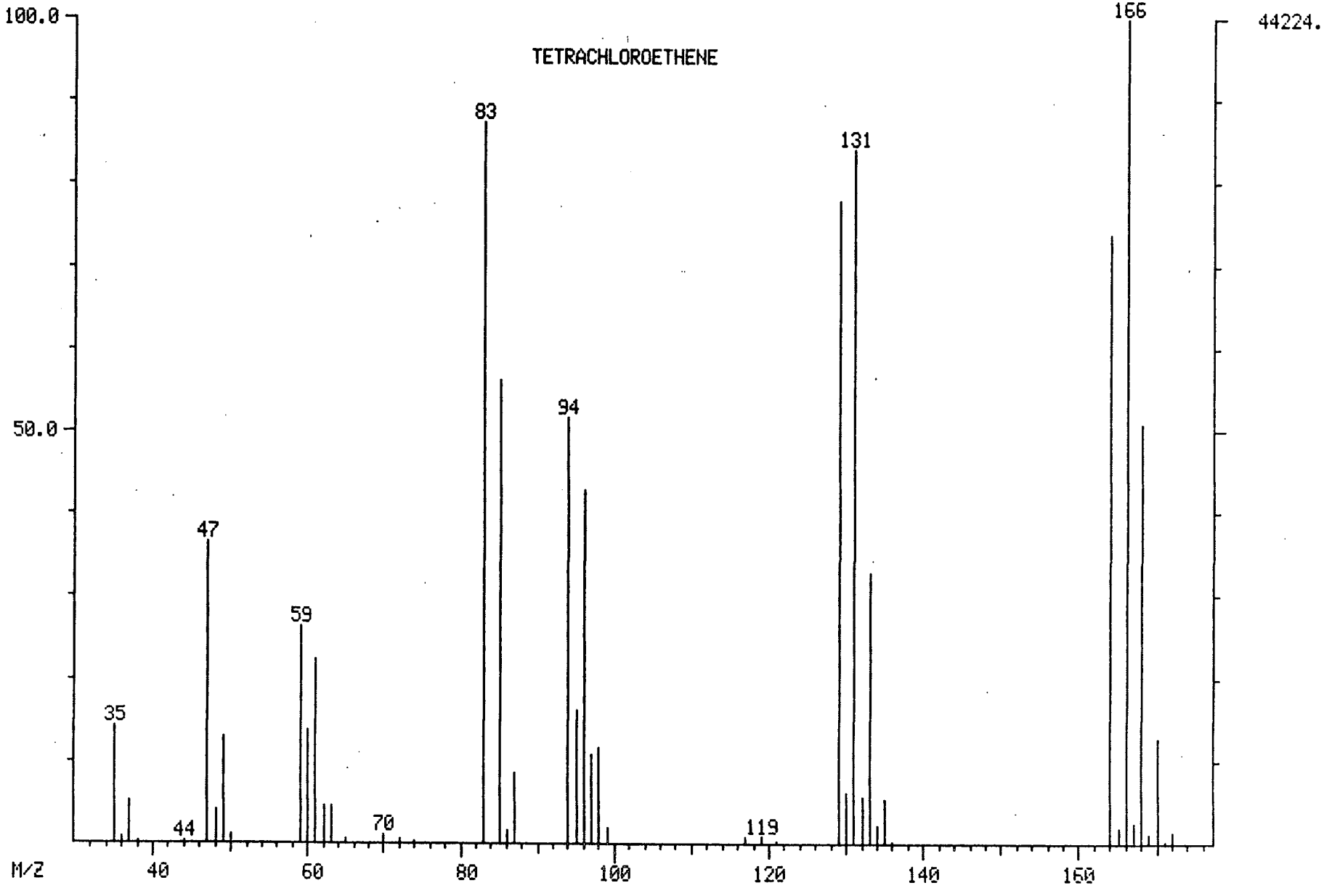


00084

MASS SPECTRUM
08/23/89 8:01:00 + 26:27
SAMPLE: STANDARD
CONDS.: 50NG PURGED
ENHANCED (S 15B 2N 0T)

DATA: VS050A0823 #774
CALI: VS050A0823 #2

BASE M/Z: 166
RIC: 397312.

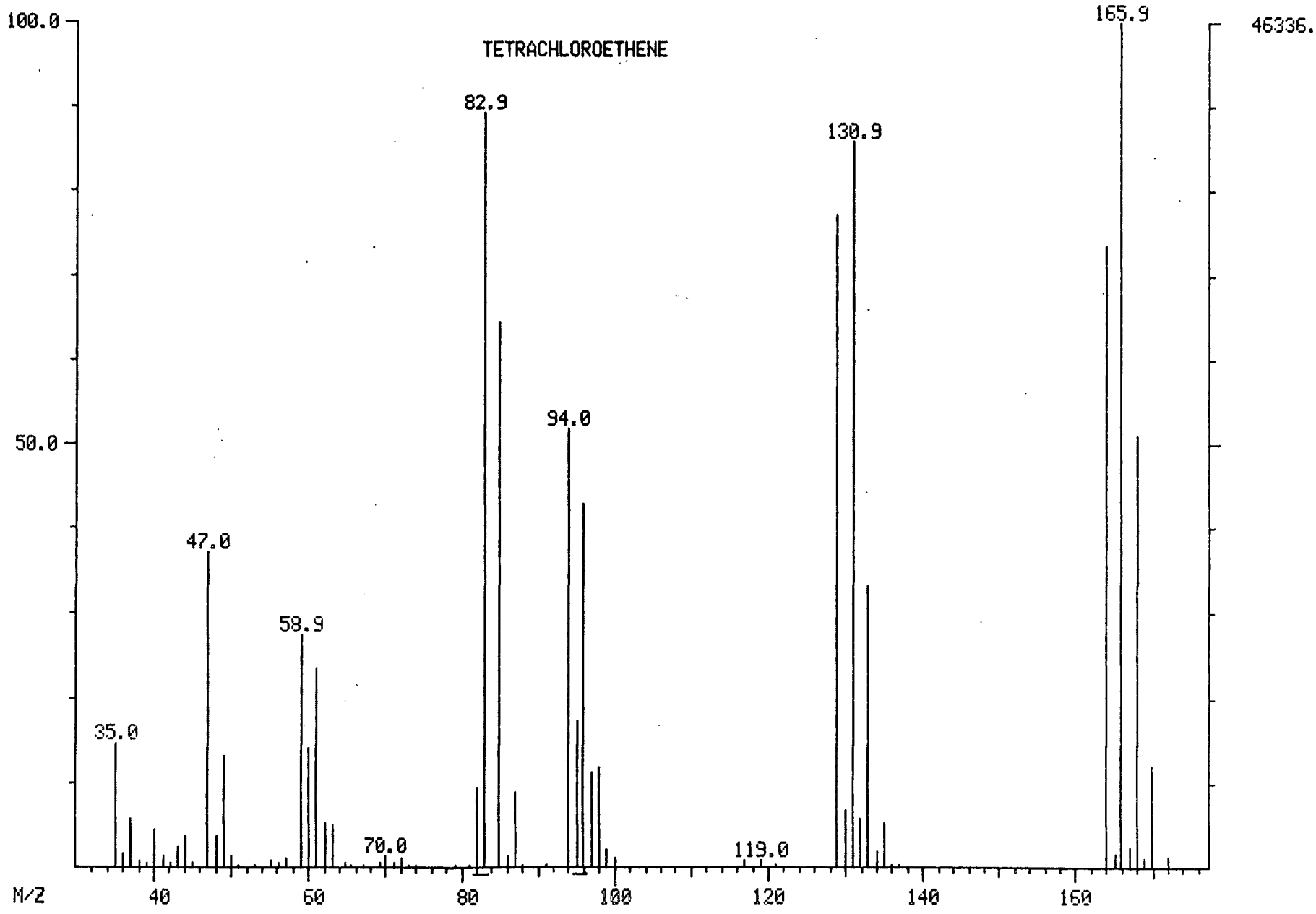


000085

MASS SPECTRUM
08/23/89 8:01:00 + 26:27
SAMPLE: STANDARD
CONDS.: 50NG PURGED

DATA: VS050A0823 #774
CALI: VS050A0823 #2

BASE M/Z: 166
RIC: 440320.



000086

QUANTITATION REPORT FILE: 10035V

000087

DATA: 10035V.TI
08/23/89 11:01:00
SAMPLE: FIELD BLANK
CONDS.: 5MLS
FORMULA: INSTRUMENT: 1050 WEIGHT: 0.006
SUBMITTED BY: GANNETT ANALYST: DMW ACCT. NO.: 10035

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
RESP. FAC. FROM LIBRARY ENTRY

No	Name		
1	CI01	BROMOCHLOROMETHANE	*** INTERNAL STANDARD #1 ***
2	C010	CHLOROMETHANE	**
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	*
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8	C035	2-PROPANONE (ACETONE)	
9		ACROLEIN	
10	C040	CARBON DISULFIDE	
11		ACRYLONITRILE	
12	C045	1,1-DICHLOROETHENE	*
13	C050	1,1-DICHLOROETHANE	**
14	C053	TRANS-1,2-DICHLOROETHENE	
15	C060	CHLOROFORM	*
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	CS15	1,2-DICHLOROETHANE-D4	*** SURROGATE #1 ***
19	CI10	1,4-DIFLUOROBENZENE	*** INTERNAL STANDARD #2 ***
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-CHLOROETHYL VINYL ETHER	
33	C180	BROMOFORM	**
34	CI20	CHLOROBENZENE-D5	*** INTERNAL STANDARD #3 ***
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	XYLENES	
44	C250	XYLENES	
45	C350	1,2-DICHLOROBENZENE	
46	C340	1,4-DICHLOROBENZENE	
47	C335	1,3-DICHLOROBENZENE	

No	Name							
48	CS05	TOLUENE-D8					*** SURROGATE #2 ***	
49	CS10	4-BROMOFLUOROBENZENE					*** SURROGATE #3 ***	

No	M/I	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	552	12:02	1	1.000	A BB	133532.	50.000 UG/L	15.17
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	84	229	7:49	1	0.651	A BB	31669.	7.997 UG/L	2.43
8	43	259	8:51	1	0.736	A BB	6975.	8.383 UG/L	2.54
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	~~63~~	~~354~~	~~12:06~~	~~1~~	~~1.006~~	~~A BB~~	~~769.~~	~~0.110 UG/L~~	~~0.03~~ Dmw 9/1/89
14	NOT FOUND								
15	NOT FOUND								
16	~~101~~	~~386~~	~~10:27~~	~~1~~	~~0.869~~	~~A BB~~	~~72701.~~	~~5.013 UG/L~~	~~1.52~~ Dmw 9/1/89
17	NOT FOUND								
18	65	447	15:16	1	1.270	A BB	306932.	49.195 UG/L	14.93
19	114	689	23:32	19	1.000	A BB	560770.	50.000 UG/L	15.17
20	~~43~~	~~456~~	~~15:22~~	~~19~~	~~0.653~~	~~A BB~~	~~3249.~~	~~2.287 UG/L~~	~~0.69~~ Dmw 9/1/89
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	~~150~~	~~571~~	~~20:12~~	~~17~~	~~0.858~~	~~A*BB~~	~~301.~~	~~0.059 UG/L~~	~~0.02~~ Dmw 9/1/89
28	NOT FOUND								
29	NOT FOUND								
30	~~75~~	~~608~~	~~20:46~~	~~17~~	~~0.882~~	~~A BB~~	~~2315.~~	~~0.219 UG/L~~	~~0.07~~ Dmw 9/1/89
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	117	846	28:54	34	1.000	A BB	515379.	50.000 UG/L	15.17
35	NOT FOUND								
36	NOT FOUND								
37	164	772	26:23	34	0.913	A BB	19573.	4.540 UG/L	1.38
38	~~83~~	~~773~~	~~26:25~~	~~34~~	~~0.914~~	~~A*BV~~	~~1324.~~	~~0.210 UG/L~~	~~0.06~~ Dmw 9/1/89
39	~~92~~	~~812~~	~~27:45~~	~~34~~	~~0.960~~	~~A BB~~	~~7229.~~	~~0.969 UG/L~~	~~0.29~~ Dmw 9/1/89
40	~~112~~	~~851~~	~~29:05~~	~~34~~	~~1.006~~	~~A BB~~	~~2460.~~	~~0.257 UG/L~~	~~0.08~~ Dmw 9/1/89
41	~~106~~	~~923~~	~~31:32~~	~~34~~	~~1.091~~	~~A BB~~	~~777.~~	~~0.162 UG/L~~	~~0.05~~ Dmw 9/1/89
42	~~104~~	~~1074~~	~~36:42~~	~~34~~	~~1.270~~	~~A*VB~~	~~552.~~	~~0.072 UG/L~~	~~0.02~~ Dmw 9/1/89
43	~~106~~	~~1116~~	~~38:00~~	~~34~~	~~1.319~~	~~A BV~~	~~216.~~	~~0.045 UG/L~~	~~0.01~~ Dmw 9/1/89
44	~~106~~	~~1116~~	~~38:08~~	~~34~~	~~1.319~~	~~A BV~~	~~216.~~	~~0.045 UG/L~~	~~0.01~~ Dmw 9/1/89
45	~~146~~	~~1341~~	~~45:49~~	~~34~~	~~1.585~~	~~A*VV~~	~~801.~~	~~0.185 UG/L~~	~~0.06~~ Dmw 9/1/89
46	~~146~~	~~1341~~	~~45:49~~	~~34~~	~~1.585~~	~~A*VV~~	~~1171.~~	~~0.161 UG/L~~	~~0.05~~ Dmw 9/1/89
47	~~146~~	~~1275~~	~~43:34~~	~~34~~	~~1.507~~	~~A VB~~	~~863.~~	~~0.204 UG/L~~	~~0.06~~ Dmw 9/1/89
48	98	806	27:32	34	0.953	A BB	491928.	49.240 UG/L	14.94
49	95	1017	34:45	34	1.202	A BB	394441.	50.598 UG/L	15.36

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	12:10	0.99	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:40		0.138						
3	2:40		0.219						
4	3:00		0.264						
5	3:27		0.284						
6	4:49		0.396						
7	7:56	0.99	0.652	1.00	8.00	50.00	0.237	1.483	0.16
8	9:01	0.98	0.742	0.99	8.38	50.00	0.052	0.312	0.17
9	9:03		0.747						
10	9:52		0.812						
11	9:54		0.815						
12	11:35		0.952						
13	13:05	0.92	1.076	0.93	0.11	50.00	0.006	2.615	0.00
14	14:00		1.152						
15	14:39		1.205						
16	10:38	0.98	0.874	1.00	5.01	50.00	0.544	5.430	0.10
17	15:29		1.272						
18	15:22	0.99	1.264	1.00	49.20	50.00	2.299	2.336	0.98
19	23:37	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
20	15:27	1.00	0.654	1.00	2.29	50.00	0.006	0.127	0.05
21	16:51		0.713						
22	17:15		0.731						
23	17:32		0.742						
24	17:58		0.761						
25	19:24		0.822						
26	19:43		0.835						
27	20:18	0.99	0.860	1.00	0.06	50.00	0.001	0.455	0.00
28	21:02		0.891						
29	21:09		0.896						
30	20:50	1.00	0.883	1.00	0.22	50.00	0.004	0.941	0.00
31	21:09		0.896						
32	22:17		0.944						
33	23:59		1.016						
34	28:58	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
35	24:26		0.843						
36	26:06		0.901						
37	26:27	1.00	0.913	1.00	4.54	50.00	0.038	0.418	0.09
38	26:29	1.00	0.914	1.00	0.21	50.00	0.003	0.612	0.00
39	27:49	1.00	0.960	1.00	0.97	50.00	0.014	0.724	0.02
40	29:09	1.00	1.006	1.00	0.26	50.00	0.005	0.929	0.01
41	31:34	1.00	1.090	1.00	0.16	50.00	0.002	0.465	0.00
42	36:50	1.00	1.271	1.00	0.07	50.00	0.001	0.746	0.00
43	38:28	0.99	1.328	0.99	0.05	50.00	0.000	0.463	0.00
44	38:28	0.99	1.328	0.99	0.05	50.00	0.000	0.463	0.00
45	45:06	1.02	1.557	1.02	0.19	50.00	0.002	0.420	0.00
46	45:53	1.00	1.584	1.00	0.16	50.00	0.002	0.704	0.00
47	43:40	1.00	1.507	1.00	0.20	50.00	0.002	0.411	0.00
48	27:36	1.00	0.953	1.00	49.24	50.00	0.954	0.969	0.98
49	34:55	1.00	1.205	1.00	50.60	50.00	0.765	0.756	1.01

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP_BLANK

Lab Name: Q C INC. Contract: GANNET-FLEM

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

Matrix: (soil/water) WATER Lab Sample ID: 883617

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 10036V

Level: (low/med) LOW Date Received: 08/15/89

% Moisture: not dec. Date Analyzed: 08/23/89

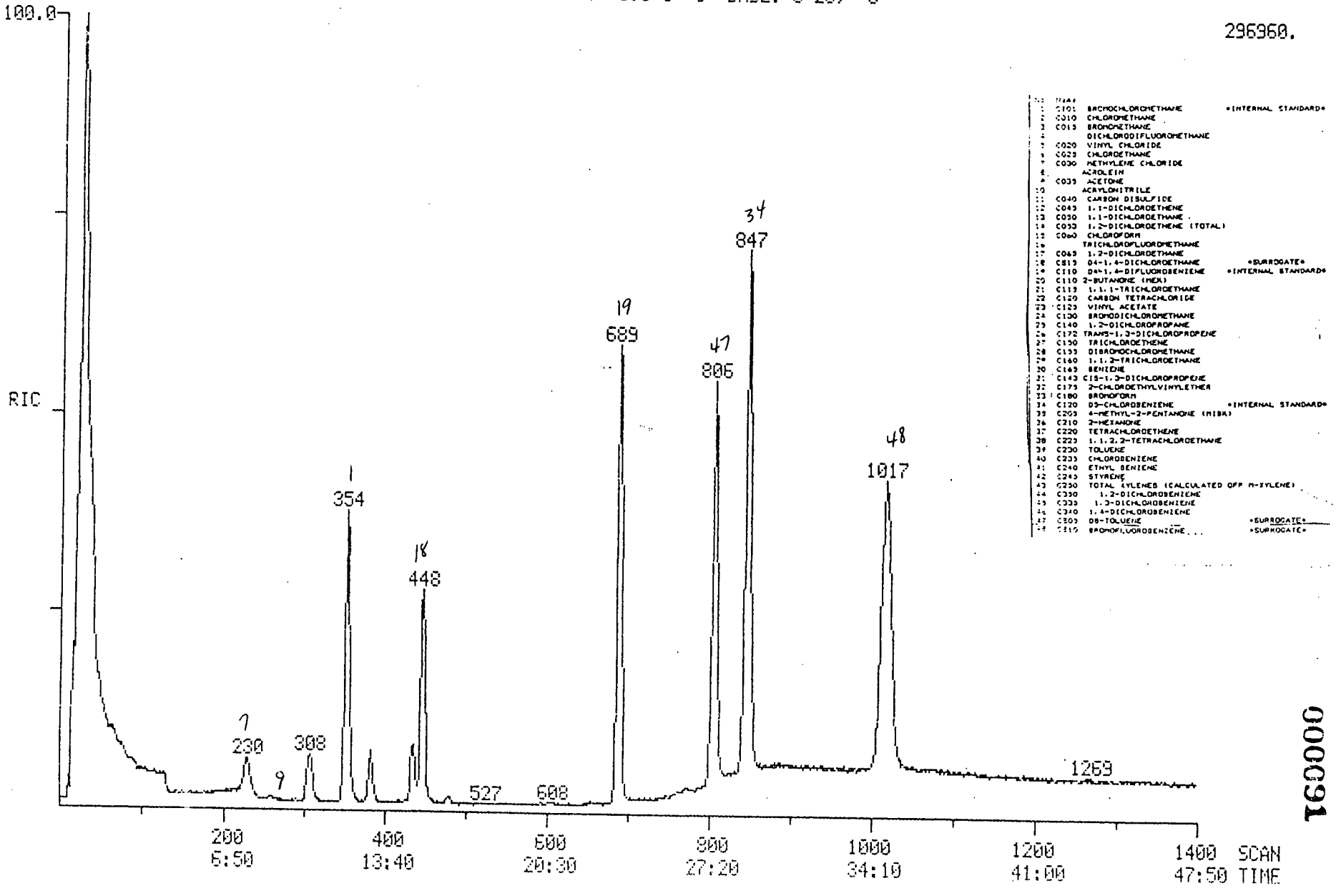
Column: (pack/cap) PACK Dilution Factor: 1.0

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	8	B
67-64-1	Acetone	9	BJ
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	100	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	50	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	50	U
591-78-6	2-Hexanone	50	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	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
08/23/89 9:57:00
SAMPLE: TRIP BLANK
CONDS.: 5MLS PURGED
RANGE: G 1.1400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 10036V #1
CALI: 10036V #2

SCANS 1 TO 1400



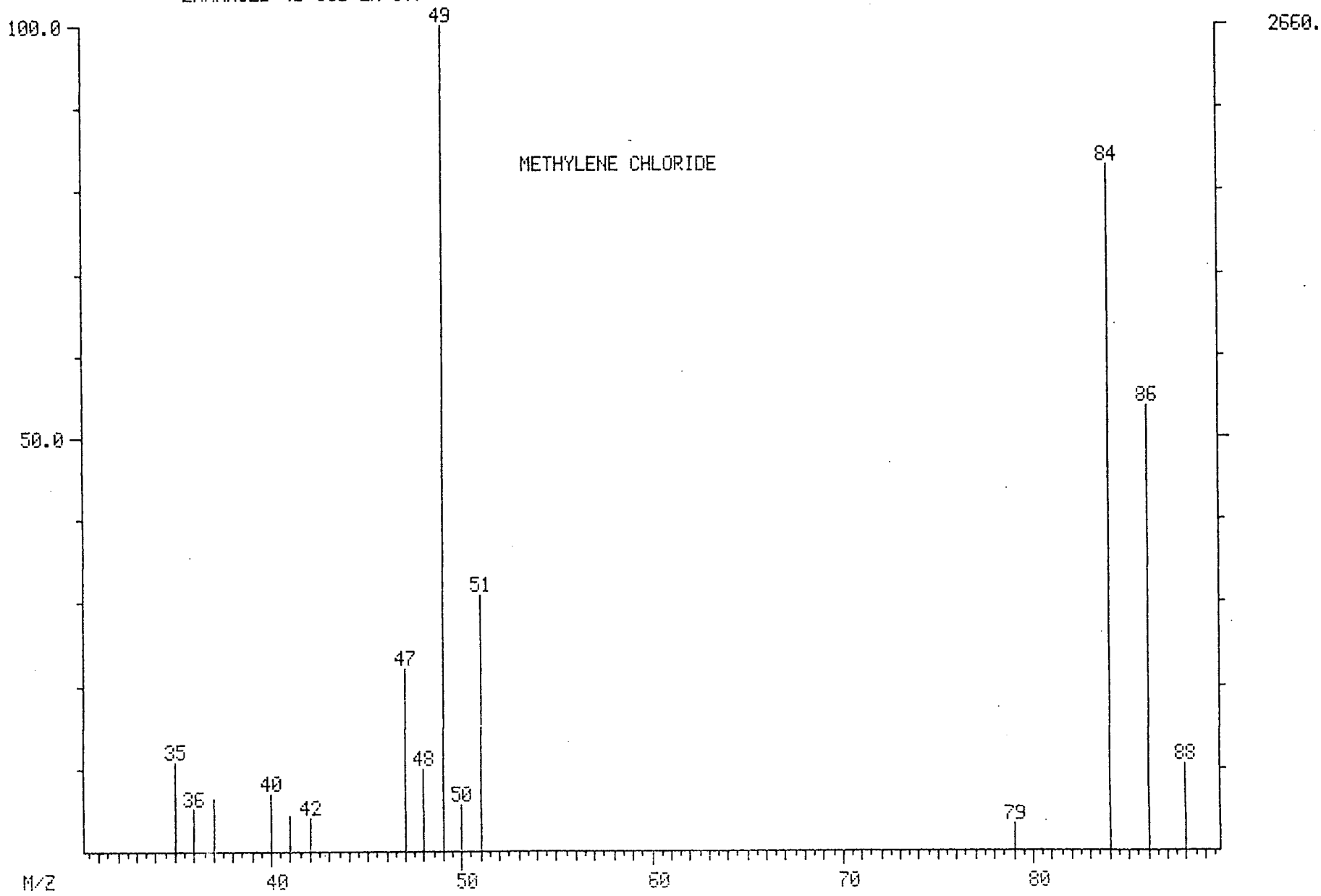
1	C101	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	C010	CHLOROMETHANE	
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8		ACROLEIN	
9	C035	ACETONE	
10		ACRYLONITRILE	
11	C040	CARBON DISULFIDE	
12	C045	1,1-DICHLOROETHENE	
13	C050	1,1-DICHLOROETHANE	
14	C055	1,2-DICHLOROETHENE (TOTAL)	
15	C060	CHLOROFORM	
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	C815	D4-1,4-DICHLOROETHANE	*SURROGATE*
19	C110	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	C330	1,2-DICHLOROBENZENE	
45	C335	1,3-DICHLOROBENZENE	
46	C340	1,4-DICHLOROBENZENE	
47	C805	D8-TOLUENE	*SURROGATE*
48	C810	BROMOFLUOROBENZENE	*SURROGATE*

000091

MASS SPECTRUM
08/23/89 9:57:00 + 7:51
SAMPLE: TRIP BLANK
CONDS.: 5MLS PURGED
ENHANCED (S 15B 2N 0T)

DATA: 10036V #230
CALI: 10036V #2

BASE M/Z: 49
RIC: 9504.

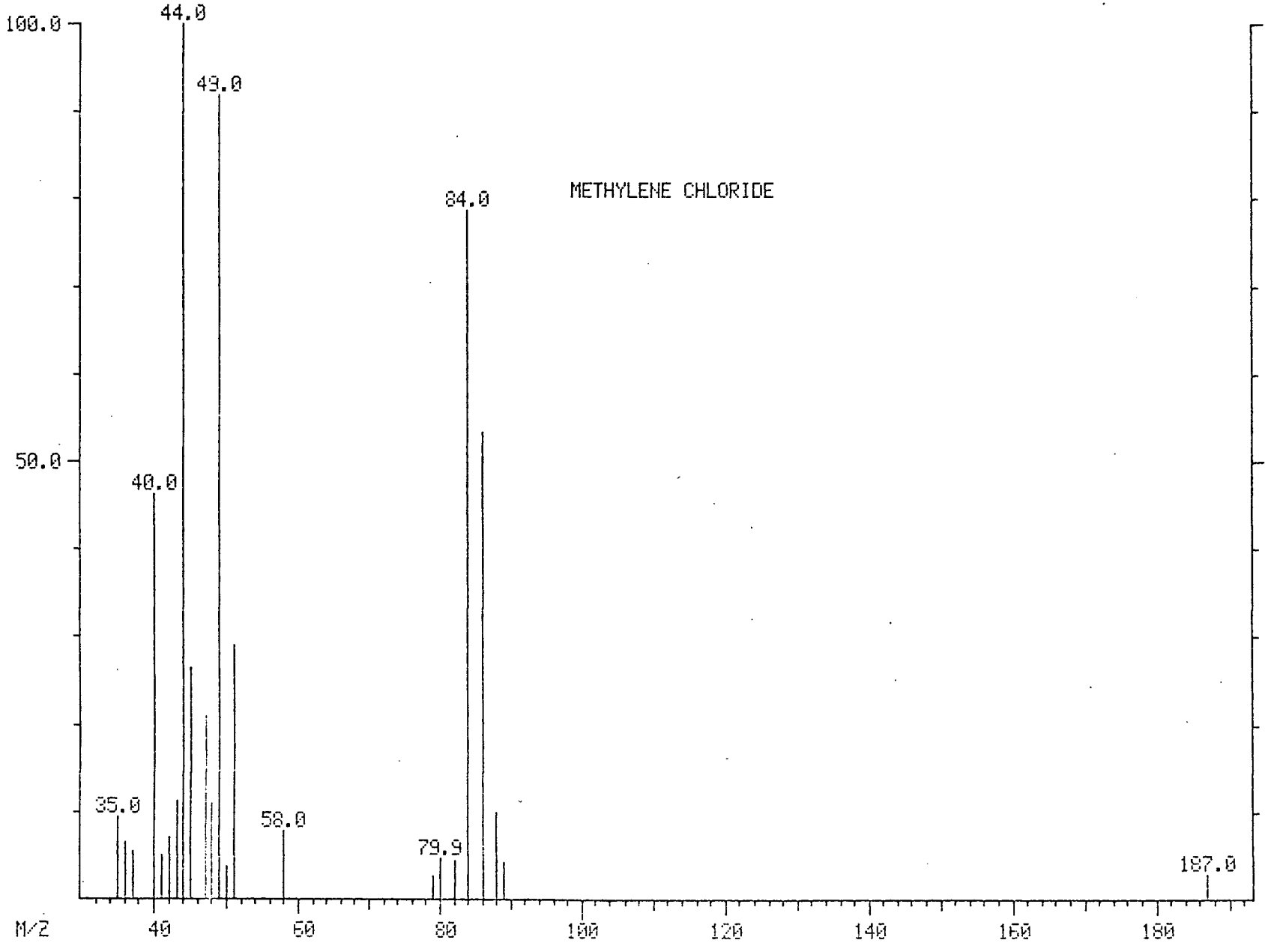


000092

MASS SPECTRUM
08/23/89 9:57:00 + 7:51
SAMPLE: TRIP BLANK
CONDS.: 5MLS PURGED

DATA: 10036V #230
CALI: 10036V #2

BASE M/Z: 44
RIC: 18316.

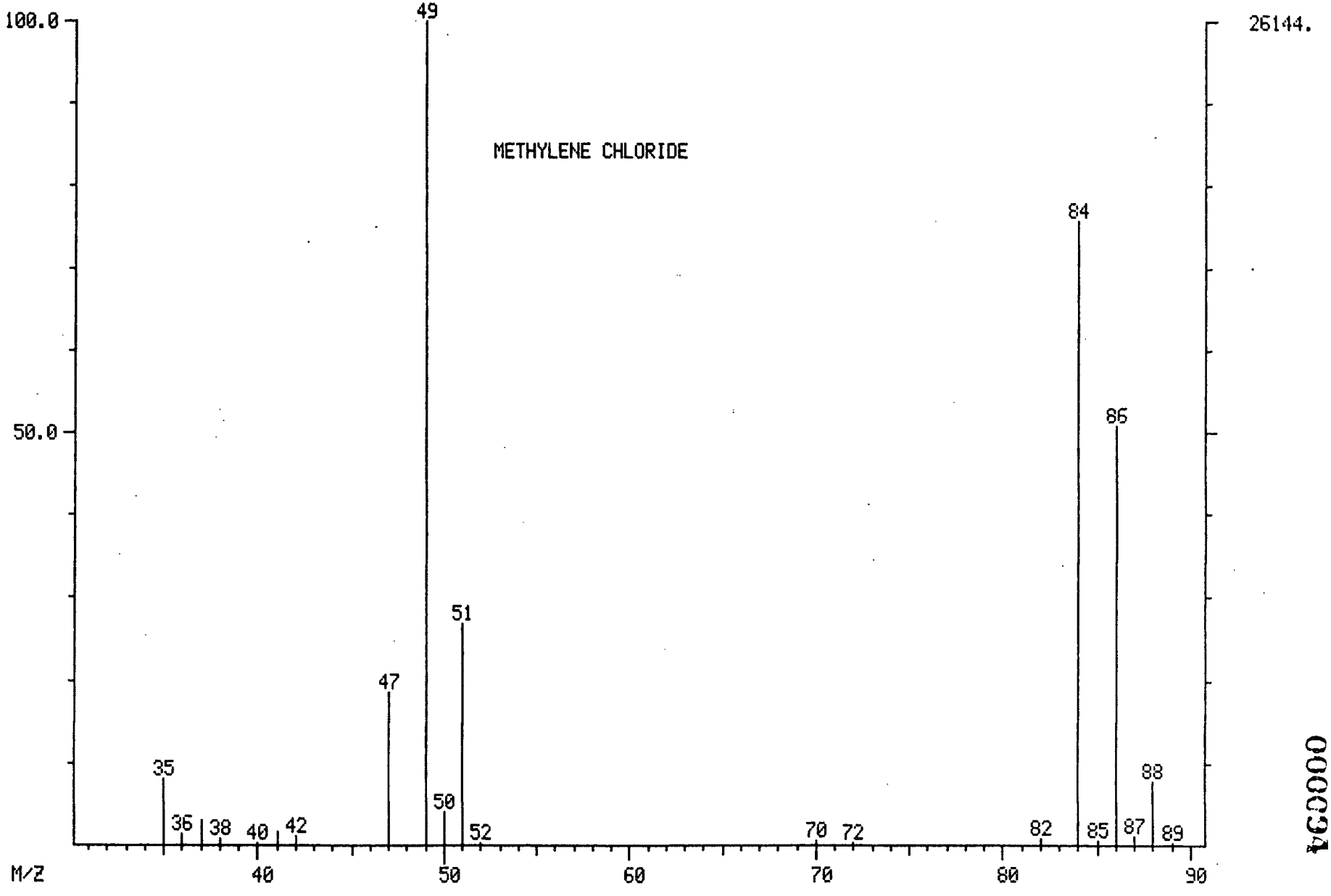


000093

MASS SPECTRUM
08/23/89 8:01:00 + 7:56
SAMPLE: STANDARD
CONDS.: 50NG PURGED
ENHANCED (S 15B 2N 0T)

DATA: VS050A0823 #232
CALI: VS050A0823 #2

BASE M/Z: 49
RIC: 79616.

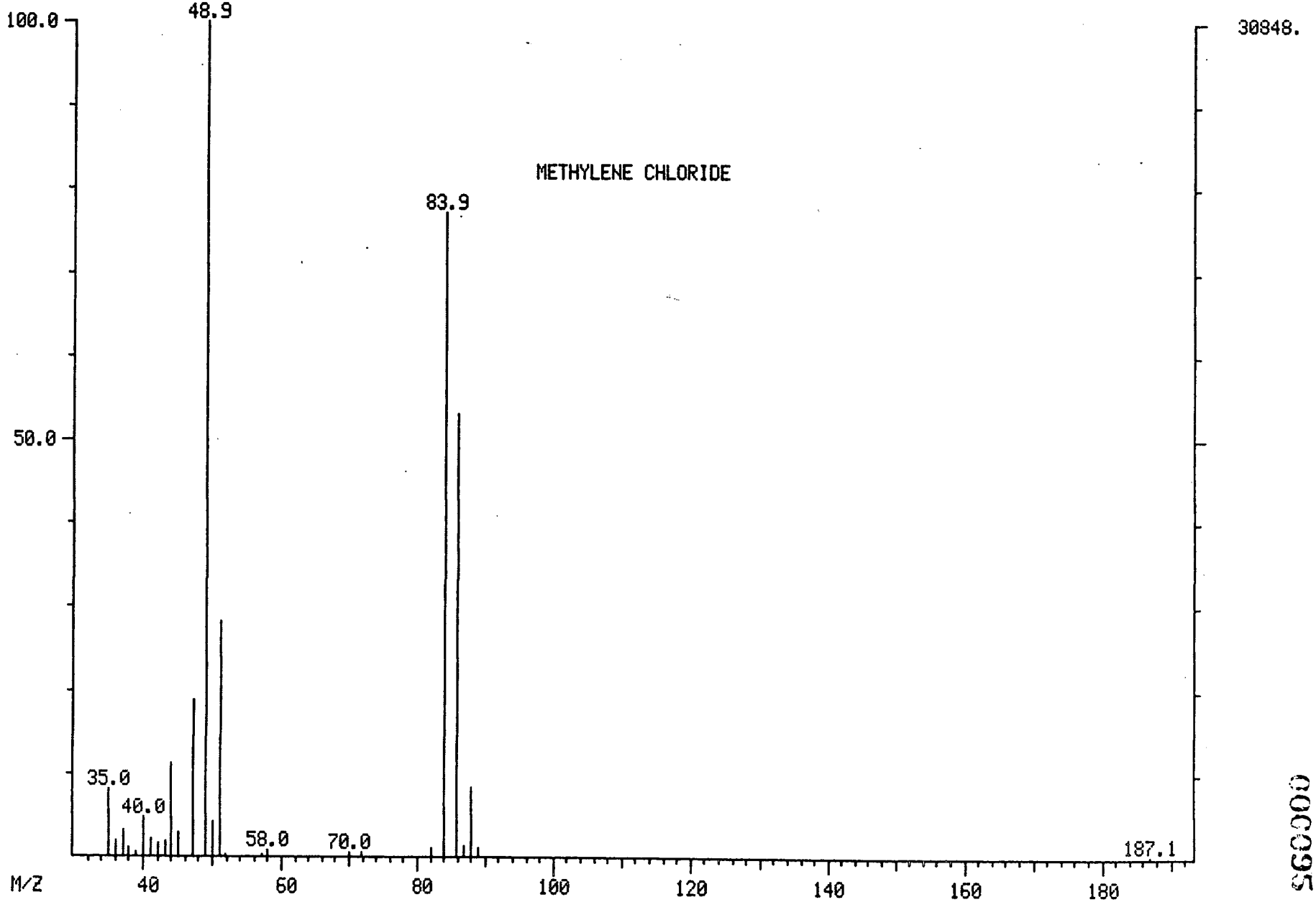


000034

MASS SPECTRUM
08/23/89 8:01:00 + 7:56
SAMPLE: STANDARD
CONDS.: 50NG PURGED

DATA: V5050A0823 #232
CALI: V5050A0823 #2

BASE M/Z: 49
RIC: 103168.

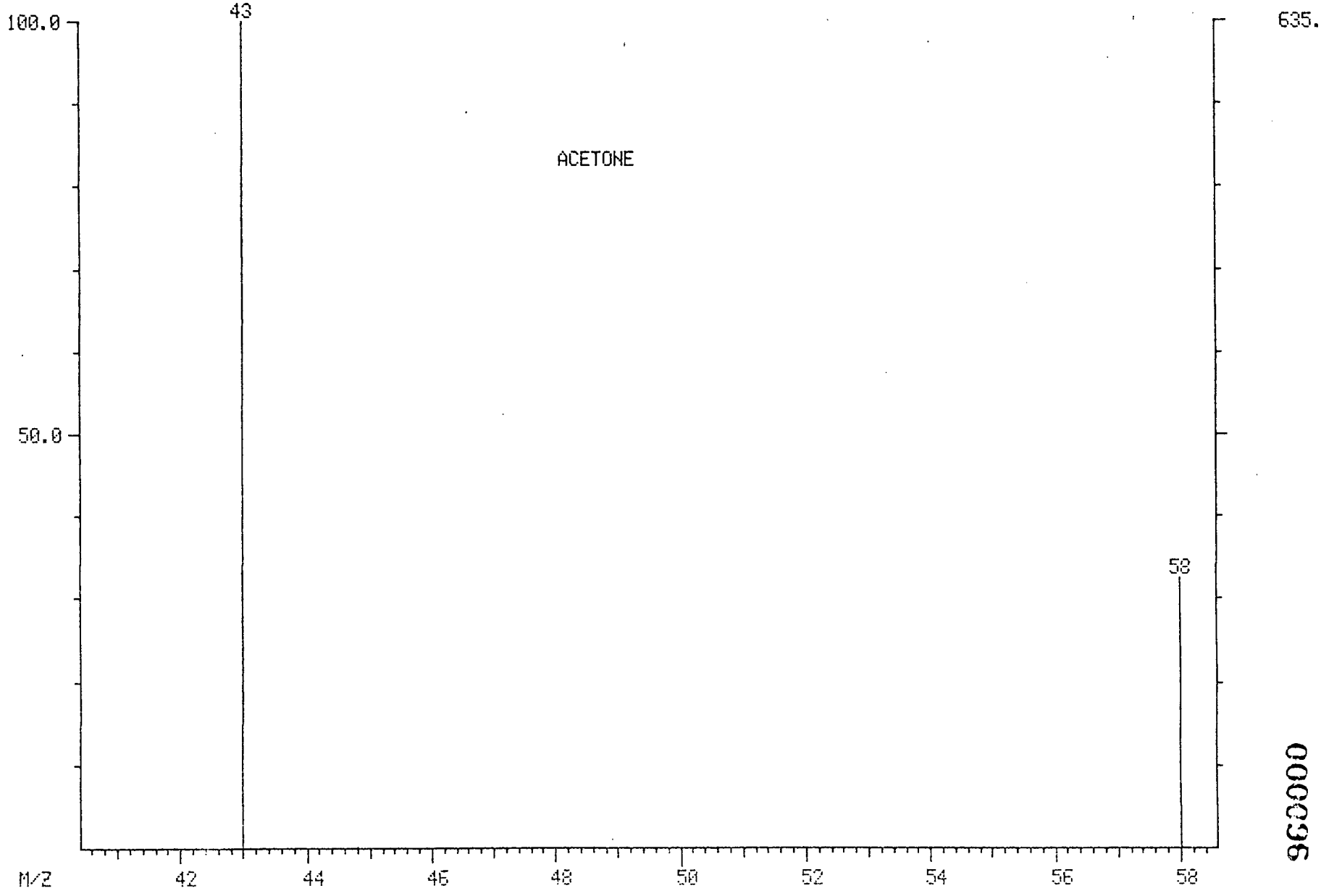


000095

MASS SPECTRUM
08/23/89 9:57:00 + 8:55
SAMPLE: TRIP BLANK
CONDS.: 5MLS PURGED
ENHANCED (S 15B 2N 0T)

DATA: 10036V #261
CALI: 10036V #2

BASE M/Z: 43
RIC: 841.

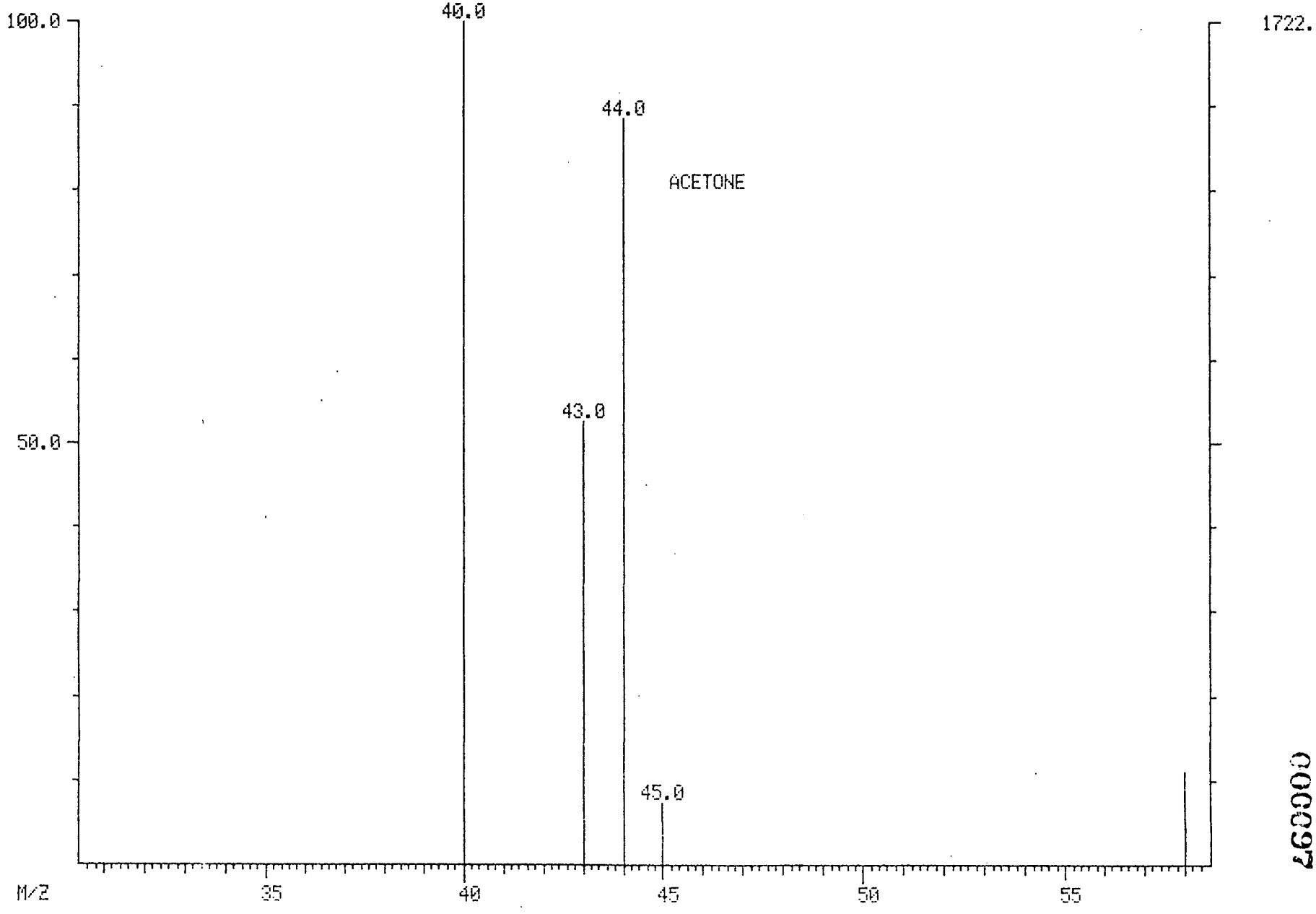


000036

MASS SPECTRUM
08/23/89 9:57:00 + 8:55
SAMPLE: TRIP BLANK
CONDS.: 5MLS PURGED

DATA: 10036V #261
CALI: 10036V #2

BASE M/Z: 40
RIC: 4472.

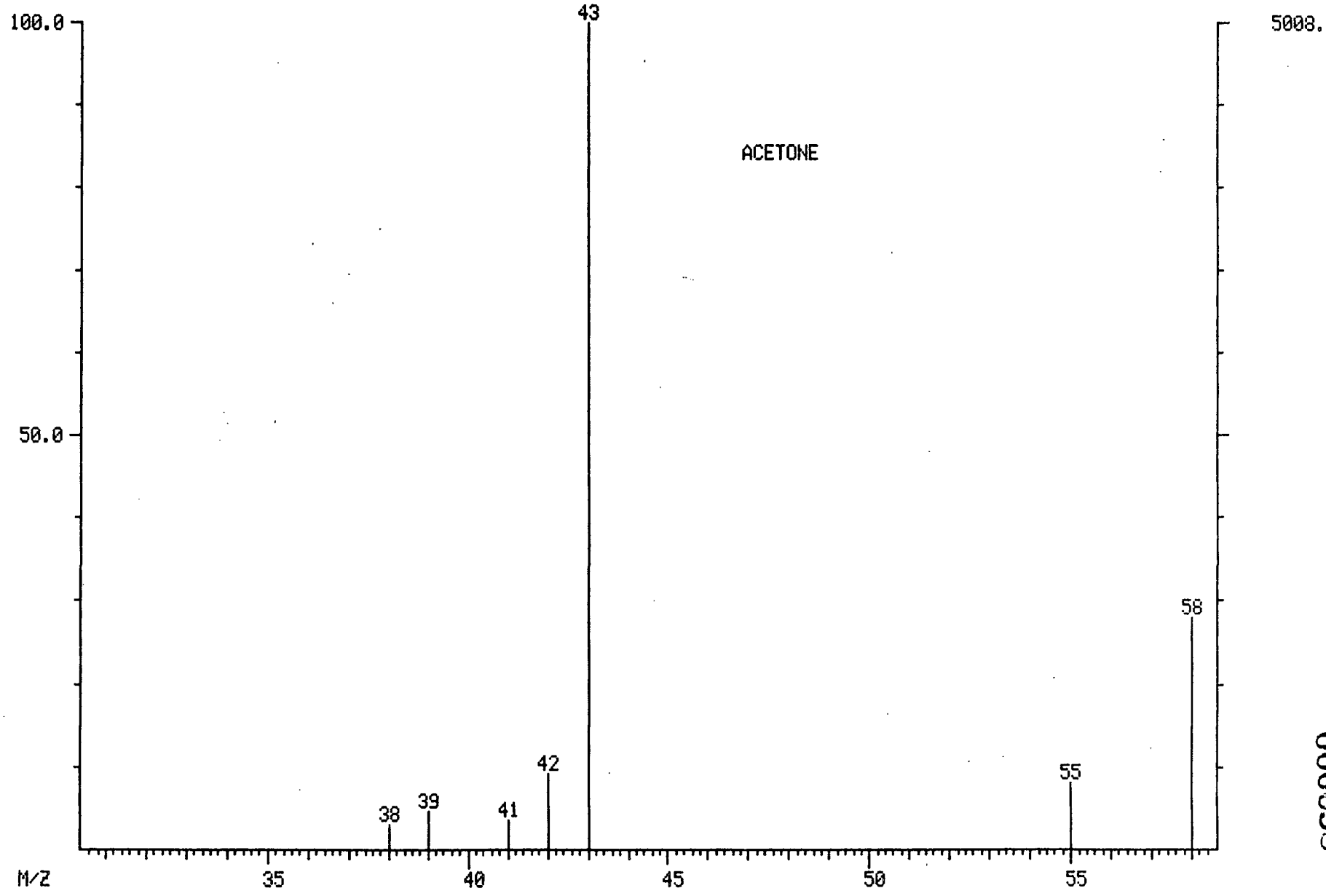


000097

MASS SPECTRUM
08/23/89 8:01:00 + 9:01
SAMPLE: STANDARD
CONDS.: 50NG PURGED
ENHANCED (S 15B 2N 0T)

DATA: VS050A0823 #264
CALI: VS050A0823 #2

BASE M/Z: 43
RIC: 7824.

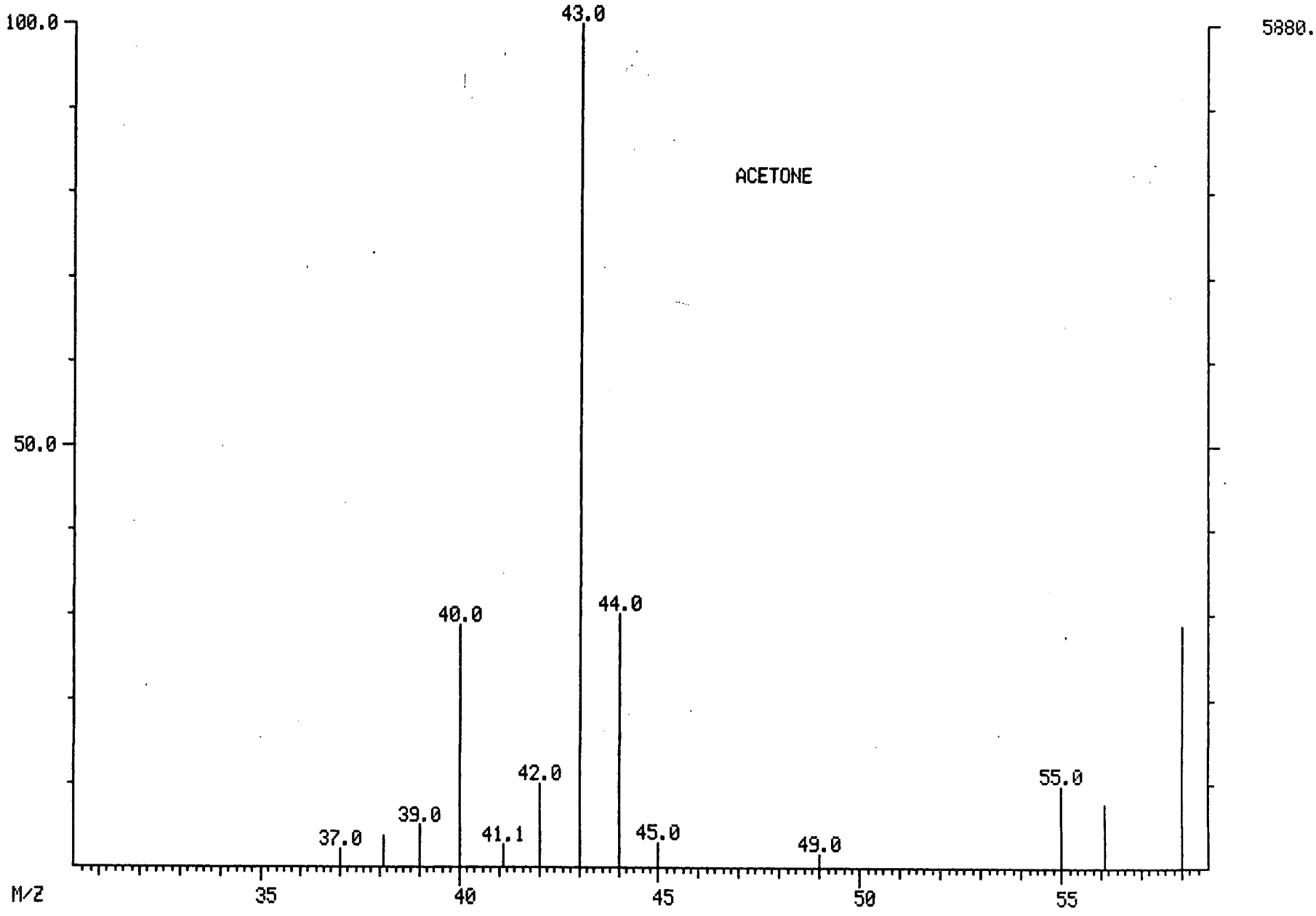


000098

MASS SPECTRUM
08/23/89 8:01:00 + 9:01
SAMPLE: STANDARD
CONDS.: 50NG PURGED

DATA: V5050A0823 #264
CALI: V5050A0823 #2

BASE M/Z: 43
RIC: 13664.



000039

QUANTITATION REPORT FILE: 10036V

000100

DATA: 10036V.TI
08/23/89 9:57:00
SAMPLE: TRIP BLANK
CONDS.: 5MLS PURGED
FORMULA:
SUBMITTED BY: GANNET

INSTRUMENT: 1050
ANALYST: DMW

WEIGHT: 0.006
ACCT. NO.: 10036

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
RESP. FAC. FROM LIBRARY ENTRY

No	NAME		
1	CI01	BROMOCHLOROMETHANE	*** INTERNAL STANDARD #1 ***
2	C010	CHLOROMETHANE	**
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	*
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8	C035	2-PROPANONE (ACETONE)	
9		ACROLEIN	
10	C040	CARBON DISULFIDE	
11		ACRYLONITRILE	
12	C045	1,1-DICHLOROETHENE	*
13	C050	1,1-DICHLOROETHANE	**
14	C053	TRANS-1,2-DICHLOROETHENE	
15	C060	CHLOROFORM	*
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	CS15	1,2-DICHLOROETHANE-D4	*** SURROGATE #1 ***
19	CI10	1,4-DIFLUOROBENZENE	*** INTERNAL STANDARD #2 ***
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-CHLOROETHYL VINYL ETHER	
33	C180	BROMOFORM	**
34	CI20	CHLOROBENZENE-D5	*** INTERNAL STANDARD #3 ***
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	XYLENES	
44	C250	XYLENES	
45	C350	1,2-DICHLOROBENZENE	
46	C340	1,4-DICHLOROBENZENE	
47	C335	1,3-DICHLOROBENZENE	

No	Name			
48	CS05	TOLUENE-D8	*** SURROGATE #2 ***	
49	CS10	4-BROMOFLUOROBENZENE	*** SURROGATE #3 ***	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot	
1	128	353	12:04	1	1.000	A BB	102004.	50.000 UG/L	15.45	
2	NOT FOUND									
3	NOT FOUND									
4	NOT FOUND									
5	NOT FOUND									
6	NOT FOUND									
7	84	230	7:51	1	0.652	A BB	24099.	7.966 UG/L	2.46	
8	43	261	8:55	1	0.739	A BB	5960.	9.376 UG/L	2.90	
9	NOT FOUND									
10	NOT FOUND									
11	NOT FOUND									
12	NOT FOUND									
13	~~63~~	~~356~~	~~12:10~~	~~1~~	~~1.008~~	~~A BB~~	~~645.~~	~~0.121 UG/L~~	~~0.04~~	Dmw 9/1/89
14	NOT FOUND									
15	NOT FOUND									
16	~~101~~	~~388~~	~~10:31~~	~~1~~	~~0.873~~	~~A BB~~	~~66011.~~	~~5.759 UG/L~~	~~1.84~~	Dmw 9/1/89
17	NOT FOUND									
18	65	448	15:18	1	1.269	A BB	220250.	46.213 UG/L	14.28	
19	114	689	23:32	19	1.000	A BB	419765.	50.000 UG/L	15.45	
20	~~43~~	~~451~~	~~15:25~~	~~19~~	~~0.655~~	~~A BB~~	~~2762.~~	~~2.599 UG/L~~	~~0.80~~	Dmw 9/1/89
21	NOT FOUND									
22	NOT FOUND									
23	NOT FOUND									
24	NOT FOUND									
25	NOT FOUND									
26	NOT FOUND									
27	~~130~~	~~593~~	~~20:16~~	~~19~~	~~0.861~~	~~A BB~~	~~589.~~	~~0.154 UG/L~~	~~0.05~~	Dmw 9/1/89
28	NOT FOUND									
29	NOT FOUND									
30	~~78~~	~~606~~	~~20:42~~	~~19~~	~~0.880~~	~~A*BB~~	~~2330.~~	~~0.295 UG/L~~	~~0.09~~	Dmw 9/1/89
31	NOT FOUND									
32	NOT FOUND									
33	NOT FOUND									
34	117	847	28:56	34	1.000	A BB	410511.	50.000 UG/L	15.45	
35	~~43~~	~~712~~	~~24:20~~	~~34~~	~~0.841~~	~~A BB~~	~~966.~~	~~0.298 UG/L~~	~~0.09~~	Dmw 9/1/89
36	~~43~~	~~762~~	~~26:02~~	~~34~~	~~0.900~~	~~A BB~~	~~1680.~~	~~0.704 UG/L~~	~~0.22~~	Dmw 9/1/89
37	~~164~~	~~773~~	~~26:25~~	~~34~~	~~0.913~~	~~A BB~~	~~540.~~	~~0.157 UG/L~~	~~0.05~~	Dmw 9/1/89
38	~~83~~	~~773~~	~~26:25~~	~~34~~	~~0.913~~	~~A BV~~	~~1420.~~	~~0.283 UG/L~~	~~0.09~~	Dmw 9/1/89
39	~~92~~	~~812~~	~~27:45~~	~~34~~	~~0.959~~	~~A BB~~	~~3602.~~	~~0.606 UG/L~~	~~0.19~~	Dmw 9/1/89
40	112	~~851~~	~~29:05~~	~~34~~	~~1.005~~	~~A BB~~	~~1834.~~	~~0.240 UG/L~~	~~0.07~~	Dmw 9/1/89
41	~~106~~	~~925~~	~~31:36~~	~~34~~	~~1.092~~	~~A BB~~	~~722.~~	~~0.187 UG/L~~	~~0.06~~	Dmw 9/1/89
42	104	~~1075~~	~~36:44~~	~~34~~	~~1.269~~	~~A*VB~~	~~593.~~	~~0.097 UG/L~~	~~0.03~~	Dmw 9/1/89
43	~~106~~	~~1120~~	~~38:16~~	~~34~~	~~1.322~~	~~A*VB~~	~~724.~~	~~0.191 UG/L~~	~~0.06~~	Dmw 9/1/89
44	~~106~~	~~1120~~	~~38:16~~	~~34~~	~~1.322~~	~~A*VB~~	~~724.~~	~~0.191 UG/L~~	~~0.06~~	Dmw 9/1/89
45	~~146~~	~~1321~~	~~45:08~~	~~34~~	~~1.560~~	~~A*VV~~	~~589.~~	~~0.171 UG/L~~	~~0.05~~	Dmw 9/1/89
46	~~146~~	~~1341~~	~~45:49~~	~~34~~	~~1.583~~	~~A*BB~~	~~1840.~~	~~0.318 UG/L~~	~~0.10~~	Dmw 9/1/89
47	~~146~~	~~1276~~	~~43:36~~	~~34~~	~~1.506~~	~~A*BV~~	~~771.~~	~~0.228 UG/L~~	~~0.07~~	Dmw 9/1/89
48	98	806	27:32	34	0.952	A BB	376401.	47.301 UG/L	14.62	
49	95	1017	34:45	34	1.201	A BB	313377.	50.469 UG/L	15.60	

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	12:10	0.99	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:40		0.138						
3	2:40		0.219						
4	3:00		0.264						
5	3:27		0.284						
6	4:49		0.396						
7	7:56	0.99	0.652	1.00	7.97	50.00	0.236	1.483	0.16
8	9:01	0.99	0.742	1.00	9.38	50.00	0.058	0.312	0.19
9	9:05		0.747						
10	9:52		0.812						
11	9:54		0.815						
12	11:35		0.952						
13	13:05	0.93	1.076	0.94	0.12	50.00	0.006	2.615	0.00
14	14:00		1.152						
15	14:39		1.205						
16	10:38	0.99	0.874	1.00	5.96	50.00	0.647	5.430	0.12
17	15:29		1.272						
18	15:22	1.00	1.264	1.00	46.21	50.00	2.159	2.336	0.92
19	23:37	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
20	15:27	1.00	0.654	1.00	2.60	50.00	0.007	0.127	0.05
21	16:51		0.713						
22	17:15		0.731						
23	17:32		0.742						
24	17:58		0.761						
25	19:24		0.822						
26	19:43		0.835						
27	20:18	1.00	0.860	1.00	0.15	50.00	0.001	0.455	0.00
28	21:03		0.891						
29	21:09		0.896						
30	20:50	0.99	0.883	1.00	0.29	50.00	0.006	0.941	0.01
31	21:09		0.896						
32	22:17		0.944						
33	23:59		1.016						
34	28:58	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
35	24:26	1.00	0.843	1.00	0.30	50.00	0.002	0.395	0.01
36	26:06	1.00	0.901	1.00	0.70	50.00	0.004	0.291	0.01
37	26:27	1.00	0.913	1.00	0.16	50.00	0.001	0.418	0.00
38	26:29	1.00	0.914	1.00	0.28	50.00	0.003	0.612	0.01
39	27:49	1.00	0.960	1.00	0.61	50.00	0.009	0.724	0.01
40	29:09	1.00	1.006	1.00	0.24	50.00	0.004	0.929	0.00
41	31:34	1.00	1.090	1.00	0.19	50.00	0.002	0.465	0.00
42	36:50	1.00	1.271	1.00	0.10	50.00	0.001	0.746	0.00
43	38:28	0.99	1.328	1.00	0.19	50.00	0.002	0.463	0.00
44	38:28	0.99	1.328	1.00	0.19	50.00	0.002	0.463	0.00
45	45:06	1.00	1.557	1.00	0.17	50.00	0.001	0.420	0.00
46	45:53	1.00	1.584	1.00	0.32	50.00	0.004	0.704	0.01
47	43:40	1.00	1.507	1.00	0.23	50.00	0.002	0.411	0.00
48	27:36	1.00	0.953	1.00	47.30	50.00	0.917	0.969	0.95
49	34:55	1.00	1.205	1.00	50.47	50.00	0.763	0.756	1.01

B

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Q C INC. Contract:

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

Instrument ID: 1050 Calibration Date(s): 08/22/89 08/22/89

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 = VS0200822A RRF50 = VS0500822A
RRF100= VS1000822A RRF150= VS1500822A RRF200= VS2000822A

COMPOUND	RRF20	RRF50	RRF100	RRF150	RRF200	$\overline{RRF}$	% RSD
Chloromethane #	0.656	0.606	0.745	0.734	0.603	0.669	10.2#
Bromomethane	0.841	0.839	0.876	0.865	0.728	0.830	7.1
Vinyl Chloride *	1.174	1.227	1.043	0.922	0.792	1.032	17.3*
Chloroethane	0.642	0.665	0.577	0.517	0.497	0.580	12.8
Methylene Chloride	1.680	1.523	1.238	1.184	1.123	1.350	17.8
Acetone	0.291	0.271	0.271	0.260	0.320	0.283	8.4
Carbon Disulfide	2.698	2.693	2.182	2.089	1.850	2.302	16.5
1,1-Dichloroethene *	1.010	1.023	0.853	0.796	0.714	0.879	15.3*
1,1-Dichloroethane #	2.453	2.465	2.303	2.198	2.119	2.308	6.6#
1,2-Dichloroethene (total)	1.116	1.159	1.022	0.956	0.906	1.032	10.3
Chloroform *	3.414	3.408	3.306	3.173	2.933	3.247	6.2*
1,2-Dichloroethane	2.848	2.877	2.979	2.889	2.758	2.870	2.8
2-Butanone	0.118	0.121	0.128	0.129	0.148	0.129	9.1
1,1,1-Trichloroethane	0.677	0.696	0.677	0.683	0.652	0.677	2.4
Carbon Tetrachloride	0.419	0.453	0.494	0.535	0.472	0.475	9.2
Vinyl Acetate	0.502	0.560	0.630	0.647	0.641	0.596	10.6
Bromodichloromethane	0.757	0.796	0.878	0.895	0.843	0.834	6.9
1,2-Dichloropropane *	0.378	0.382	0.414	0.423	0.430	0.405	5.9*
cis-1,3-Dichloropropene	0.381	0.416	0.472	0.490	0.510	0.454	11.8
Trichloroethene	0.439	0.440	0.445	0.441	0.423	0.438	1.9
Dibromochloromethane	0.558	0.595	0.682	0.704	0.715	0.651	10.8
1,1,2-Trichloroethane	0.343	0.356	0.398	0.409	0.428	0.387	9.3
Benzene	0.888	0.908	0.893	0.888	0.816	0.879	4.1
Trans-1,3-Dichloropropene	0.708	0.759	0.844	0.865	0.819	0.799	8.1
Bromoform #	0.382	0.419	0.503	0.505	0.551	0.472	14.7#
4-Methyl-2-Pentanone	0.339	0.373	0.409	0.388	0.462	0.394	11.6
2-Hexanone	0.226	0.246	0.283	0.265	0.317	0.267	13.1
Tetrachloroethene	0.427	0.419	0.386	0.359	0.348	0.388	9.0
1,1,2,2-Tetrachloroethane #	0.590	0.600	0.618	0.626	0.715	0.630	7.9#
Toluene *	0.738	0.734	0.694	0.682	0.671	0.704	4.3*
Chlorobenzene #	0.896	0.906	0.901	0.885	0.854	0.888	2.3#
Ethylbenzene *	0.456	0.451	0.443	0.430	0.431	0.442	2.6*
Styrene	0.788	0.823	0.848	0.848	0.834	0.828	3.0
Total Xylenes	0.463	0.487	0.481	0.475	0.481	0.477	1.9
Toluene-d8	0.996	0.983	0.947	0.923	0.924	0.955	3.5
BFB	0.793	0.812	0.846	0.817	0.858	0.825	3.2
1,2-Dichloroethane-d4	2.174	2.241	2.414	2.443	2.554	2.365	6.6

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Q C INC. Contract: GANNET-FLEM

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

Instrument ID: 1050 Calibration date: 08/23/89 Time: 0801

Lab File ID: VS050A0823 Init. Calib. Date(s): 08/22/89 08/22/89

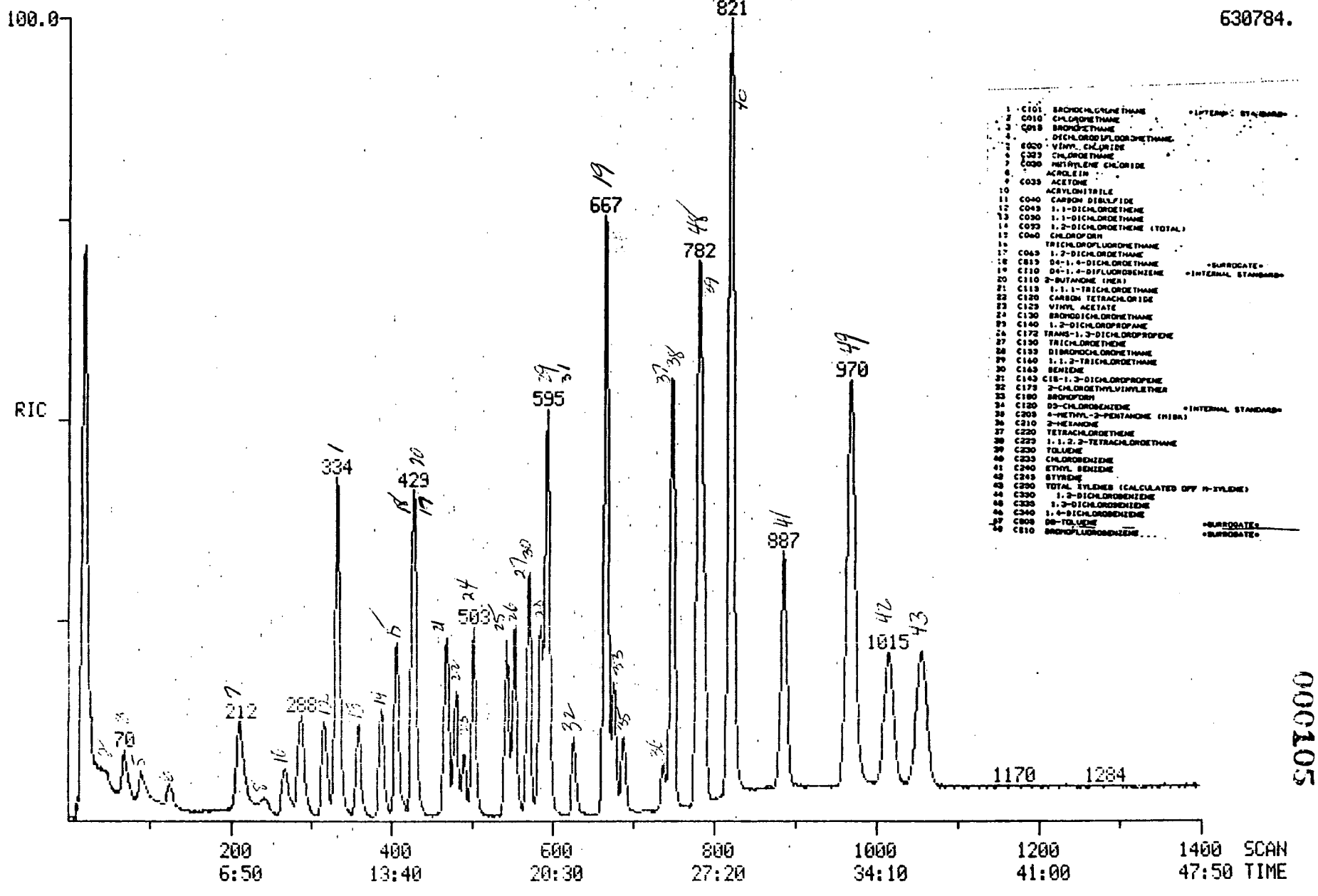
Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

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

COMPOUND		$\overline{RRF}$	RRF50	%D	
Chloromethane	#	0.669	0.799	-19.4	#
Bromomethane		0.830	0.975	-17.5	
Vinyl Chloride	*	1.032	1.165	-12.9	*
Chloroethane		0.580	0.631	-8.8	
Methylene Chloride		1.350	1.483	-9.9	
Acetone		0.283	0.312	-10.3	
Carbon Disulfide		2.302	2.571	-11.7	
1,1-Dichloroethene	*	0.879	1.028	-17.0	*
1,1-Dichloroethane	#	2.308	2.615	-13.3	#
1,2-Dichloroethene (total)		1.032	1.194	-15.7	
Chloroform	*	3.247	3.449	-6.2	*
1,2-Dichloroethane		2.870	3.038	-5.9	
2-Butanone		0.129	0.127	1.6	
1,1,1-Trichloroethane		0.677	0.710	-4.9	
Carbon Tetrachloride		0.475	0.480	-1.1	
Vinyl Acetate		0.596	0.567	4.9	
Bromodichloromethane		0.834	0.760	8.9	
1,2-Dichloropropane	*	0.405	0.414	-2.2	*
cis-1,3-Dichloropropene		0.454	0.403	11.2	
Trichloroethene		0.438	0.455	-3.9	
Dibromochloromethane		0.651	0.545	16.3	
1,1,2-Trichloroethane		0.387	0.356	8.0	
Benzene		0.879	0.941	-7.1	
Trans-1,3-Dichloropropene		0.799	0.751	6.0	
Bromoform	#	0.472	0.343	27.3	#
4-Methyl-2-Pentanone		0.394	0.395	-0.3	
2-Hexanone		0.267	0.291	-9.0	
Tetrachloroethene		0.388	0.418	-7.7	
1,1,2,2-Tetrachloroethane	#	0.630	0.612	2.9	#
Toluene	*	0.704	0.724	-2.8	*
Chlorobenzene	#	0.888	0.929	-4.6	#
Ethylbenzene	*	0.442	0.465	-5.2	*
Styrene		0.828	0.746	9.9	
Total Xylenes		0.477	0.463	2.9	
Toluene-d8		0.955	0.969	-1.5	
BFB		0.825	0.756	8.4	
1,2-Dichloroethane-d4		2.365	2.336	1.2	

RIC
08/22/89 8:27:00
SAMPLE: ~~889~~ STANDARD
CONDS.: ~~5G/5NLS~~ 20NG Purged
RANGE: G 1,1400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: VS0200822A #1 SCANS 1 TO 1400
CALI: 882280V #2



1 C101 BROMOCHLOROMETHANE *IPTEMP: STANDARD*
2 C010 CHLOROMETHANE
3 C018 BROMOMETHANE
4 DICHLORODIFLUOROMETHANE
5 C020 VINYL CHLORIDE
6 C023 CHLOROETHANE
7 C030 METHYLENE CHLORIDE
8 ACROLEIN
9 C039 ACETONE
10 ACRYLONITRILE
11 C040 CARBON DISULFIDE
12 C049 1,1-DICHLOROETHENE
13 C050 1,1-DICHLOROETHANE
14 C053 1,2-DICHLOROETHENE (TOTAL)
15 C060 CHLOROFORM
16 TRICHLOROFLUOROMETHANE
17 C063 1,2-DICHLOROETHANE
18 C813 D4-1,4-DICHLOROETHANE *SURROGATE*
19 C110 D4-1,4-DIFLUOROBENZENE *INTERNAL STANDARD*
20 C110 2-BUTANONE (MEK)
21 C113 1,1,1-TRICHLOROETHANE
22 C120 CARBON TETRACHLORIDE
23 C129 VINYL ACETATE
24 C130 BROMODICHLOROMETHANE
25 C140 1,2-DICHLOROPROPANE
26 C172 TRANS-1,3-DICHLOROPROPENE
27 C150 TRICHLOROETHENE
28 C153 DIBROMOCHLOROMETHANE
29 C160 1,1,2-TRICHLOROETHANE
30 C163 BENZENE
31 C143 CIS-1,3-DICHLOROPROPENE
32 C179 2-CHLOROETHYLVINYLETHER
33 C180 BROMOFORM
34 C120 D5-CHLOROBENZENE *INTERNAL STANDARD*
35 C203 4-METHYL-2-PENTANONE (MIBK)
36 C210 2-HEXANONE
37 C220 TETRACHLOROETHENE
38 C223 1,1,2,2-TETRACHLOROETHANE
39 C230 TOLUENE
40 C233 CHLOROBENZENE
41 C240 ETHYL BENZENE
42 C243 STYRENE
43 C290 TOTAL XYLENES (CALCULATED OFF M-XYLENE)
44 C330 1,2-DICHLOROBENZENE
45 C335 1,3-DICHLOROBENZENE
46 C340 1,4-DICHLOROBENZENE
47 C808 D8-TOLUENE *SURROGATE*
48 C810 BROMOFLUOROBENZENE *SURROGATE*

000105

QUANTITATION REPORT FILE: VS0200822A

000106

DATA: VS0200822A.TI
08/22/89 8:27:00
SAMPLE: ~~SBY~~ STANDARD
CONDS.: ~~5G/5ML~~ 20NG purged
FORMULA: INSTRUMENT: 1050 WEIGHT: 0.006
SUBMITTED BY: ~~OCEAN~~ QC. 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 #1 ***
2	C010	CHLOROMETHANE	**
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	*
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8	C035	2-PROPANONE (ACETONE)	
9		ACROLEIN	
10	C040	CARBON DISULFIDE	
11		ACRYLONITRILE	
12	C045	1,1-DICHLOROETHENE	*
13	C050	1,1-DICHLOROETHANE	**
14	C053	TRANS-1,2-DICHLOROETHENE	
15	C060	CHLOROFORM	*
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	CS15	1,2-DICHLOROETHANE-D4	*** SURROGATE #1 ***
19	CI10	1,4-DIFLUOROBENZENE	*** INTERNAL STANDARD #2 ***
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-CHLOROETHYL VINYL ETHER	
33	C180	BROMOFORM	**
34	CI20	CHLOROBENZENE-D5	*** INTERNAL STANDARD #3 ***
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	XYLENES	
44	C250	XYLENES	
45	C350	1,2-DICHLOROBENZENE	
46	C340	1,4-DICHLOROBENZENE	
47	C335	1,3-DICHLOROBENZENE	

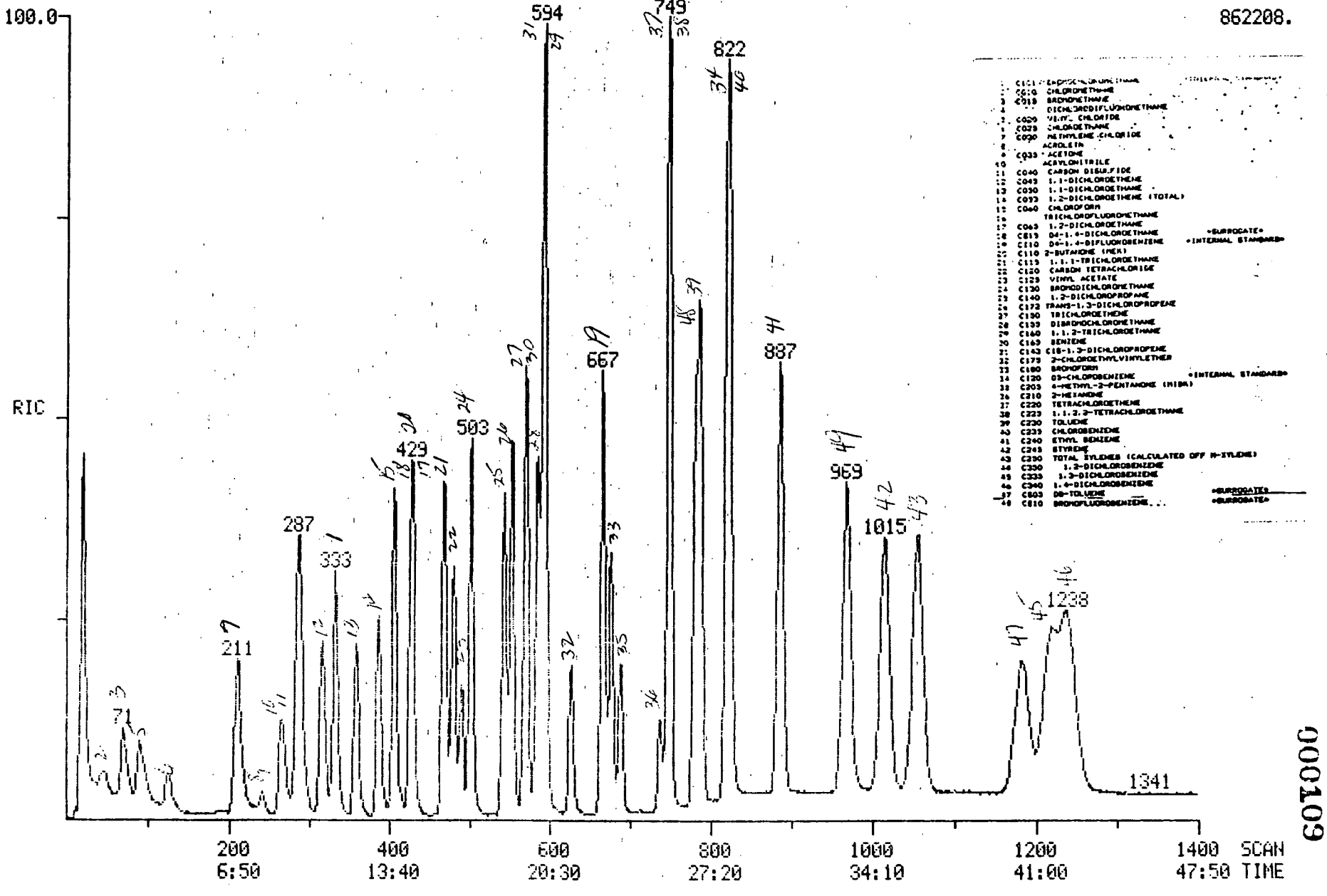
No	Name		
48	CS05	TOLUENE-D8	*** SURROGATE #2 ***
49	CS10	4-BROMOFLUOROBENZENE	*** SURROGATE #3 ***

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	334	11:25	1	1.000	A BB	254700.	50.000 UG/L	4.55
2	50	49	1:40	1	0.147	A BB	66858.	20.000 UG/L	1.82
3	94	70	2:23	1	0.210	A BB	85635.	20.000 UG/L	1.82
4	NOT FOUND								
5	62	91	3:07	1	0.272	A BB	119570.	20.000 UG/L	1.82
6	64	127	4:20	1	0.380	A BB	65380.	20.000 UG/L	1.82
7	84	212	7:15	1	0.635	A BB	171150.	20.000 UG/L	1.82
8	43	242	8:16	1	0.725	A BB	29690.	20.000 UG/L	1.82
9	~~56~~	~~243~~	~~8:18~~	~~1~~	~~0.728~~	~~A BB~~	~~878.~~	~~20.000 UG/L~~	~~1.82~~
10	76	268	9:09	1	0.802	A BB	274878.	20.000 UG/L	1.82
11	NOT FOUND								
12	96	318	10:52	1	0.952	A BB	102895.	20.000 UG/L	1.82
13	63	361	12:20	1	1.081	A BB	249931.	20.000 UG/L	1.82
14	96	388	13:15	1	1.162	A BB	113701.	20.000 UG/L	1.82
15	83	408	13:56	1	1.222	A BB	347779.	20.000 UG/L	1.82
16	~~101~~	~~288~~	~~9:50~~	~~1~~	~~0.862~~	~~A BB~~	~~304034.~~	~~20.000 UG/L~~	~~1.82~~
17	62	432	14:46	1	1.293	A BB	290131.	20.000 UG/L	1.82
18	65	428	14:37	1	1.281	A BB	553753.	50.000 UG/L	4.55
19	114	667	22:47	19	1.000	A BB	1110620.	50.000 UG/L	4.55
20	43	431	14:44	19	0.646	A BB	52498.	20.000 UG/L	1.82
21	97	470	16:03	19	0.705	A BB	300924.	20.000 UG/L	1.82
22	117	482	16:28	19	0.723	A VB	185978.	20.000 UG/L	1.82
23	43	492	16:49	19	0.738	A BB	223012.	20.000 UG/L	1.82
24	83	504	17:13	19	0.756	A BB	336243.	20.000 UG/L	1.82
25	63	544	18:35	19	0.816	A BB	167943.	20.000 UG/L	1.82
26	75	554	18:56	19	0.831	A BB	314726.	20.000 UG/L	1.82
27	130	571	19:31	19	0.856	A BB	195191.	20.000 UG/L	1.82
28	129	593	20:16	19	0.889	A BB	247735.	20.000 UG/L	1.82
29	97	595	20:20	19	0.892	A BB	152495.	20.000 UG/L	1.82
30	78	586	20:01	19	0.879	A BB	394678.	20.000 UG/L	1.82
31	75	595	20:20	19	0.892	A BB	169210.	20.000 UG/L	1.82
32	63	628	21:27	19	0.942	A BB	95964.	20.000 UG/L	1.82
33	173	677	23:08	19	1.015	A BB	169854.	20.000 UG/L	1.82
34	117	821	28:03	34	1.000	A BB	994336.	50.000 UG/L	4.55
35	43	690	23:34	34	0.840	A BB	134902.	20.000 UG/L	1.82
36	43	739	25:15	34	0.900	A BB	89988.	20.000 UG/L	1.82
37	164	749	25:35	34	0.912	A BB	169854.	20.000 UG/L	1.82
38	83	750	25:37	34	0.914	A BB	234780.	20.000 UG/L	1.82
39	92	788	26:55	34	0.960	A BB	293498.	20.000 UG/L	1.82
40	112	825	28:11	34	1.005	A BB	356380.	20.000 UG/L	1.82
41	106	888	30:20	34	1.082	A BB	181547.	20.000 UG/L	1.82
42	104	1017	34:45	34	1.239	A BB	313276.	20.000 UG/L	1.82
43	106	1056	36:05	34	1.286	A BB	184115.	20.000 UG/L	1.82
44	NOT FOUND								
45	~~146~~	~~1213~~	~~41:27~~	~~34~~	~~1.477~~	~~A*BV~~	~~1008.~~	~~20.000 UG/L~~	~~1.82~~
46	~~146~~	~~1236~~	~~42:14~~	~~34~~	~~1.505~~	~~A VV~~	~~1743.~~	~~20.000 UG/L~~	~~1.82~~
47	~~146~~	~~1183~~	~~40:25~~	~~34~~	~~1.441~~	~~A*BV~~	~~429.~~	~~20.000 UG/L~~	~~1.82~~
48	98	782	26:43	34	0.952	A BB	990341.	50.000 UG/L	4.55
49	95	969	33:06	34	1.180	A BB	788778.	50.000 UG/L	4.55

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	11:25	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:40	1.00	0.147	1.00	20.00	20.00	0.656	0.656	1.00
3	2:33	1.00	0.210	1.00	20.00	20.00	0.841	0.841	1.00
4	3:07		0.275						
5	3:07	1.00	0.272	1.00	20.00	20.00	1.174	1.174	1.00
6	4:20	1.00	0.380	1.00	20.00	20.00	0.642	0.642	1.00
7	7:15	1.00	0.635	1.00	20.00	20.00	1.680	1.680	1.00
8	8:16	1.00	0.725	1.00	20.00	20.00	0.291	0.291	1.00
9	8:18	1.00	0.728	1.00	20.00	20.00	0.009	0.009	1.00
10	9:09	1.00	0.802	1.00	20.00	20.00	2.698	2.698	1.00
11	9:07		0.797						
12	10:52	1.00	0.952	1.00	20.00	20.00	1.010	1.010	1.00
13	12:20	1.00	1.081	1.00	20.00	20.00	2.453	2.453	1.00
14	13:15	1.00	1.162	1.00	20.00	20.00	1.116	1.116	1.00
15	13:56	1.00	1.222	1.00	20.00	20.00	3.414	3.414	1.00
16	9:50	1.00	0.862	1.00	20.00	20.00	2.984	2.984	1.00
17	14:46	1.00	1.293	1.00	20.00	20.00	2.848	2.848	1.00
18	14:37	1.00	1.281	1.00	50.00	50.00	2.174	2.174	1.00
19	22:47	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
20	14:44	1.00	0.646	1.00	20.00	20.00	0.118	0.118	1.00
21	16:03	1.00	0.705	1.00	20.00	20.00	0.677	0.677	1.00
22	16:28	1.00	0.723	1.00	20.00	20.00	0.419	0.419	1.00
23	16:49	1.00	0.738	1.00	20.00	20.00	0.502	0.502	1.00
24	17:13	1.00	0.756	1.00	20.00	20.00	0.757	0.757	1.00
25	18:35	1.00	0.816	1.00	20.00	20.00	0.378	0.378	1.00
26	18:56	1.00	0.831	1.00	20.00	20.00	0.708	0.708	1.00
27	19:31	1.00	0.856	1.00	20.00	20.00	0.439	0.439	1.00
28	20:16	1.00	0.889	1.00	20.00	20.00	0.558	0.558	1.00
29	20:20	1.00	0.892	1.00	20.00	20.00	0.343	0.343	1.00
30	20:01	1.00	0.879	1.00	20.00	20.00	0.888	0.888	1.00
31	20:20	1.00	0.892	1.00	20.00	20.00	0.381	0.381	1.00
32	21:27	1.00	0.942	1.00	20.00	20.00	0.216	0.216	1.00
33	23:08	1.00	1.015	1.00	20.00	20.00	0.382	0.382	1.00
34	23:03	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
35	23:34	1.00	0.840	1.00	20.00	20.00	0.339	0.339	1.00
36	25:15	1.00	0.900	1.00	20.00	20.00	0.226	0.226	1.00
37	25:35	1.00	0.912	1.00	20.00	20.00	0.427	0.427	1.00
38	25:37	1.00	0.914	1.00	20.00	20.00	0.590	0.590	1.00
39	26:55	1.00	0.960	1.00	20.00	20.00	0.738	0.738	1.00
40	28:11	1.00	1.005	1.00	20.00	20.00	0.896	0.896	1.00
41	30:20	1.00	1.082	1.00	20.00	20.00	0.456	0.456	1.00
42	34:45	1.00	1.239	1.00	20.00	20.00	0.788	0.788	1.00
43	36:05	1.00	1.286	1.00	20.00	20.00	0.463	0.463	1.00
44	34:49		1.241						
45	41:37	1.00	1.477	1.00	20.00	20.00	0.003	0.003	1.00
46	42:14	1.00	1.505	1.00	20.00	20.00	0.004	0.004	1.00
47	40:35	1.00	1.441	1.00	20.00	20.00	0.001	0.001	1.00
48	26:13	1.00	0.952	1.00	50.00	50.00	0.996	0.996	1.00
49	33:06	1.00	1.180	1.00	50.00	50.00	0.793	0.793	1.00

RIC
09/22/89 9:31:00
SAMPLE: STANDARD
CONDS.: 50NG PURGED
RANGE: G 1,1400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: VS0500822A #1 SCANS 1 TO 1400
CALI: VS2000822A #2



1	C010	CHLOROMETHANE	
2	C019	BROMOMETHANE	
3		DICHLORODIFLUOROMETHANE	
4	C020	VINYL CHLORIDE	
5	C029	CHLOROETHANE	
6	C030	METHYLENE CHLORIDE	
7		ACROLEIN	
8	C035	ACETONE	
9		ACRYLONITRILE	
10	C040	CARBON DISULFIDE	
11	C043	1,1-DICHLOROETHENE	
12	C050	1,1-DICHLOROETHANE	
13	C053	1,2-DICHLOROETHENE (TOTAL)	
14	C060	CHLOROFORM	
15		TRICHLOROFLUOROMETHANE	
16	C063	1,2-DICHLOROETHANE	
17	C815	D4-1,4-DICHLOROETHANE	*SURROGATE*
18	C110	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
19	C110	2-BUTANONE (MEK)	
20	C113	1,1,1-TRICHLOROETHANE	
21	C120	CARBON TETRACHLORIDE	
22	C123	VINYL ACETATE	
23	C130	BROMODICHLOROMETHANE	
24	C140	1,2-DICHLOROPROPANE	
25	C172	TRANS-1,3-DICHLOROPROPENE	
26	C190	TRICHLOROETHENE	
27	C193	DIBROMOCHLOROMETHANE	
28	C160	1,1,2-TRICHLOROETHANE	
29	C163	BENZENE	
30	C143	CIS-1,3-DICHLOROPROPENE	
31	C173	2-CHLOROETHYLVINYLETHER	
32	C180	BROMOFORM	
33	C120	D5-CHLOROBENZENE	*INTERNAL STANDARD*
34	C203	4-METHYL-2-PENTANONE (MIBK)	
35	C210	2-HEXANONE	
36	C220	TETRACHLOROETHENE	
37	C223	1,1,2,2-TETRACHLOROETHANE	
38	C230	TOLUENE	
39	C233	CHLOROBENZENE	
40	C240	ETHYL BENZENE	
41	C243	STYRENE	
42	C250	TOTAL XYLENES (CALCULATED OFF M-XYLENE)	
43	C330	1,2-DICHLOROBENZENE	
44	C335	1,3-DICHLOROBENZENE	
45	C340	1,4-DICHLOROBENZENE	
46	C803	D8-TOLUENE	*SURROGATE*
47	C810	BROMOFLUOROBENZENE...	*SURROGATE*

000109

QUANTITATION REPORT FILE: VS0500822A

000110

DATA: VS0500822A.TI
08/22/89 9:31:00
SAMPLE: STANDARD
CONDS.: 30NG PURGED
FORMULA: INSTRUMENT: 1050 WEIGHT: 0.006
SUBMITTED BY: QC 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 #1 ***
2	C010	CHLOROMETHANE	**
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	*
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8	C035	2-PROPANONE (ACETONE)	
9		ACROLEIN	
10	C040	CARBON DISULFIDE	
11		ACRYLONITRILE	
12	C045	1,1-DICHLOROETHENE	*
13	C050	1,1-DICHLOROETHANE	**
14	C055	TRANS-1,2-DICHLOROETHENE	
15	C060	CHLOROFORM	*
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	CS15	1,2-DICHLOROETHANE-D4	*** SURROGATE #1 ***
19	CI10	1,4-DIFLUOROBENZENE	*** INTERNAL STANDARD #2 ***
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-CHLOROETHYL VINYL ETHER	
33	C180	BROMOFORM	**
34	CI20	CHLOROBENZENE-D5	*** INTERNAL STANDARD #3 ***
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	XYLENES	
44	C250	XYLENES	
45	C350	1,2-DICHLOROBENZENE	
46	C340	1,4-DICHLOROBENZENE	
47	C335	1,3-DICHLOROBENZENE	

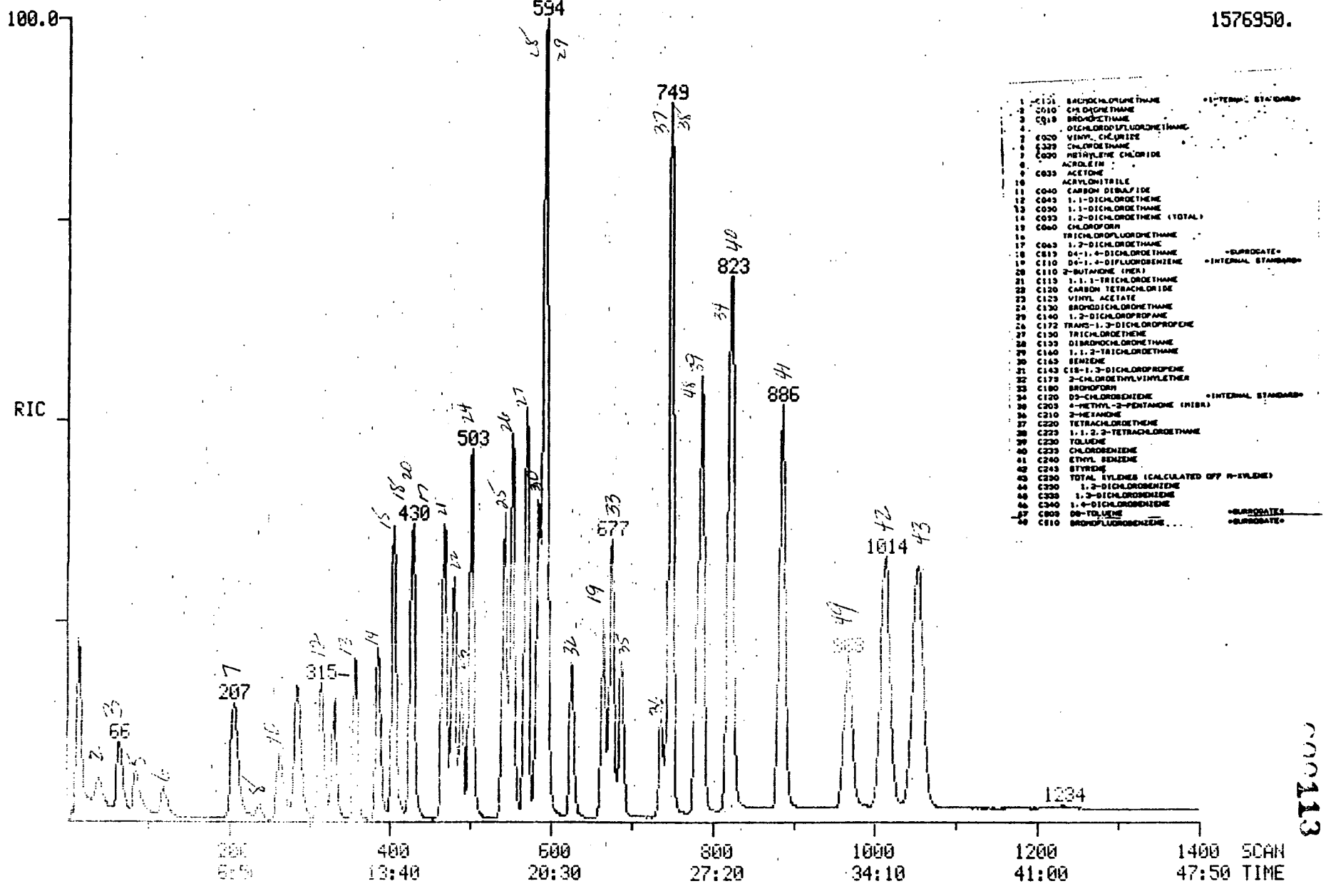
No	Name		
48	CS05	TOLUENE-D8	*** SURROGATE #2 ***
49	CS10	4-BROMOFLUOROBENZENE	*** SURROGATE #3 ***

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	333	11:23	1	1.000	A BB	252955.	50.000 UG/L	0.44
2	50	46	1:38	1	0.144	A BB	153313.	50.000 UG/L	0.44
3	94	71	2:26	1	0.213	A BB	212242.	50.000 UG/L	0.44
4	~~84~~	~~89~~	~~2:99~~	~~1~~	~~0.264~~	~~A BB~~	~~223.~~	~~50.000 UG/L~~	~~0.44~~
5	62	92	3:09	1	0.276	A BB	310486.	50.000 UG/L	0.44
6	64	126	4:18	1	0.378	A BB	168335.	50.000 UG/L	0.44
7	84	211	7:13	1	0.634	A BB	385320.	50.000 UG/L	0.44
8	43	242	8:16	1	0.727	A BB	68513.	50.000 UG/L	0.44
9	~~56~~	~~242~~	~~8:16~~	~~1~~	~~0.727~~	~~A BB~~	~~11851.~~	~~50.000 UG/L~~	~~0.44~~
10	76	266	9:05	1	0.799	A BB	681201.	50.000 UG/L	0.44
11	~~53~~	~~268~~	~~9:09~~	~~1~~	~~0.805~~	~~A BB~~	~~38704.~~	~~50.000 UG/L~~	~~0.44~~
12	96	317	10:50	1	0.952	A BB	258699.	50.000 UG/L	0.44
13	63	360	12:18	1	1.081	A BB	623511.	50.000 UG/L	0.44
14	96	388	13:15	1	1.165	A BB	293289.	50.000 UG/L	0.44
15	83	407	13:54	1	1.222	A BB	861982.	50.000 UG/L	0.44
16	~~101~~	~~287~~	~~9:48~~	~~1~~	~~0.862~~	~~A BB~~	~~1219360.~~	~~50.000 UG/L~~	~~0.44~~
17	62	431	14:44	1	1.294	A BB	727676.	50.000 UG/L	0.44
18	65	427	14:35	1	1.282	A BB	566992.	50.000 UG/L	0.44
19	114	667	22:47	19	1.000	A BB	1112750.	50.000 UG/L	0.44
20	43	430	14:41	19	0.645	A BB	134746.	50.000 UG/L	0.44
21	97	469	16:01	19	0.703	A BB	774257.	50.000 UG/L	0.44
22	117	481	16:26	19	0.721	A VB	503759.	50.000 UG/L	0.44
23	43	491	16:47	19	0.736	A BB	623496.	50.000 UG/L	0.44
24	83	503	17:11	19	0.754	A BB	885299.	50.000 UG/L	0.44
25	63	544	18:35	19	0.816	A BB	425167.	50.000 UG/L	0.44
26	75	553	18:54	19	0.829	A BB	844400.	50.000 UG/L	0.44
27	130	571	19:31	19	0.856	A BV	489390.	50.000 UG/L	0.44
28	129	592	20:14	19	0.888	A BB	661820.	50.000 UG/L	0.44
29	97	595	20:20	19	0.892	A BB	395788.	50.000 UG/L	0.44
30	78	585	19:59	19	0.877	A BB	1010830.	50.000 UG/L	0.44
31	75	594	20:18	19	0.891	A BB	463071.	50.000 UG/L	0.44
32	63	628	21:27	19	0.942	A BB	253447.	50.000 UG/L	0.44
33	173	677	23:08	19	1.015	A BB	466521.	50.000 UG/L	0.44
34	117	820	28:01	34	1.000	A BB	1001310.	50.000 UG/L	0.44
35	43	689	23:32	34	0.840	A BB	373933.	50.000 UG/L	0.44
36	43	738	25:13	34	0.900	A BB	245993.	50.000 UG/L	0.44
37	164	749	25:35	34	0.913	A BB	419400.	50.000 UG/L	0.44
38	83	750	25:37	34	0.915	A BB	601265.	50.000 UG/L	0.44
39	92	788	26:55	34	0.961	A BB	735058.	50.000 UG/L	0.44
40	112	824	28:09	34	1.005	A BB	907250.	50.000 UG/L	0.44
41	106	887	30:18	34	1.082	A BB	451496.	50.000 UG/L	0.44
42	104	1015	34:41	34	1.238	A BB	824428.	50.000 UG/L	0.44
43	106	1052	35:95	34	1.288	A BB	487496.	50.000 UG/L	0.44
44	~~106~~	~~1054~~	~~35:95~~	~~34~~	~~1.288~~	~~A BB~~	~~487496.~~	~~8982.020 UG/L~~	~~78.90~~
45	~~146~~	~~1220~~	~~41:31~~	~~34~~	~~1.488~~	~~A*BV~~	~~431152.~~	~~56.410 UG/L~~	~~0.50~~
46	~~146~~	~~1289~~	~~43:99~~	~~34~~	~~1.511~~	~~A VB~~	~~559424.~~	~~45.087 UG/L~~	~~0.40~~
47	~~146~~	~~1182~~	~~42:03~~	~~34~~	~~1.441~~	~~A BB~~	~~378560.~~	~~50.000 UG/L~~	~~0.44~~
48	98	782	26:13	34	0.954	A BB	984105.	50.000 UG/L	0.44
49	95	969	33:06	34	1.182	A BB	812714.	50.000 UG/L	0.44

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	11:23	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:38	1.00	0.144	1.00	50.00	50.00	0.606	0.606	1.00
3	2:26	1.00	0.213	1.00	50.00	50.00	0.839	0.839	1.00
4	3:00	1.00	0.264	1.00	50.00	50.00	0.001	0.001	1.00
5	3:09	1.00	0.276	1.00	50.00	50.00	1.227	1.227	1.00
6	4:18	1.00	0.378	1.00	50.00	50.00	0.665	0.665	1.00
7	7:13	1.00	0.634	1.00	50.00	50.00	1.523	1.523	1.00
8	8:16	1.00	0.727	1.00	50.00	50.00	0.271	0.271	1.00
9	8:16	1.00	0.727	1.00	50.00	50.00	0.047	0.047	1.00
10	9:05	1.00	0.799	1.00	50.00	50.00	2.693	2.693	1.00
11	9:09	1.00	0.805	1.00	50.00	50.00	0.153	0.153	1.00
12	10:50	1.00	0.952	1.00	50.00	50.00	1.023	1.023	1.00
13	12:18	1.00	1.081	1.00	50.00	50.00	2.465	2.465	1.00
14	13:15	1.00	1.165	1.00	50.00	50.00	1.159	1.159	1.00
15	13:54	1.00	1.222	1.00	50.00	50.00	3.408	3.408	1.00
16	9:48	1.00	0.862	1.00	50.00	50.00	4.820	4.820	1.00
17	14:44	1.00	1.294	1.00	50.00	50.00	2.877	2.877	1.00
18	14:35	1.00	1.282	1.00	50.00	50.00	2.241	2.241	1.00
19	22:47	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
20	14:41	1.00	0.645	1.00	50.00	50.00	0.121	0.121	1.00
21	16:01	1.00	0.703	1.00	50.00	50.00	0.696	0.696	1.00
22	16:26	1.00	0.721	1.00	50.00	50.00	0.453	0.453	1.00
23	16:47	1.00	0.736	1.00	50.00	50.00	0.560	0.560	1.00
24	17:11	1.00	0.754	1.00	50.00	50.00	0.796	0.796	1.00
25	18:35	1.00	0.816	1.00	50.00	50.00	0.382	0.382	1.00
26	18:54	1.00	0.829	1.00	50.00	50.00	0.759	0.759	1.00
27	19:31	1.00	0.854	1.00	50.00	50.00	0.440	0.440	1.00
28	20:14	1.00	0.888	1.00	50.00	50.00	0.595	0.595	1.00
29	20:20	1.00	0.892	1.00	50.00	50.00	0.356	0.356	1.00
30	19:59	1.00	0.877	1.00	50.00	50.00	0.908	0.908	1.00
31	20:18	1.00	0.891	1.00	50.00	50.00	0.416	0.416	1.00
32	21:27	1.00	0.942	1.00	50.00	50.00	0.228	0.228	1.00
33	23:08	1.00	1.015	1.00	50.00	50.00	0.419	0.419	1.00
34	28:01	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
35	23:32	1.00	0.940	1.00	50.00	50.00	0.373	0.373	1.00
36	25:13	1.00	0.990	1.00	50.00	50.00	0.246	0.246	1.00
37	25:35	1.00	0.913	1.00	50.00	50.00	0.419	0.419	1.00
38	25:37	1.00	0.915	1.00	50.00	50.00	0.600	0.600	1.00
39	26:55	1.00	0.961	1.00	50.00	50.00	0.734	0.734	1.00
40	28:09	1.00	1.005	1.00	50.00	50.00	0.906	0.906	1.00
41	30:18	1.00	1.082	1.00	50.00	50.00	0.451	0.451	1.00
42	34:41	1.00	1.238	1.00	50.00	50.00	0.823	0.823	1.00
43	36:05	1.00	1.288	1.00	50.00	50.00	0.487	0.487	1.00
44	34:49	1.04	1.241	1.04	8982.03	50.00	0.487	0.003	179.64
45	41:41	1.00	1.488	1.00	56.41	50.00	0.431	0.382	1.13
46	42:20	1.00	1.511	1.00	45.09	50.00	0.559	0.620	0.90
47	40:23	1.00	1.511	1.00	50.00	50.00	0.378	0.378	1.00
48	26:43	1.00	0.974	1.00	50.00	50.00	0.983	0.983	1.00
49	33:06	1.00	1.132	1.00	50.00	50.00	0.812	0.812	1.00

RIC
08/22/89 10:37:00
SAMPLE: STANDARD
CONDS.: 100NG PURGED
RANGE: G 1,1400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: VS1000822A #1 SCANS 1 TO 1400
CALI: VS0200822A #2



1	C101	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	C010	CHLOROMETHANE	
3	C018	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	
6	C329	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8		ACROLEIN	
9	C033	ACETONE	
10		ACRYLONITRILE	
11	C040	CARBON DISULFIDE	
12	C043	1,1-DICHLOROETHENE	
13	C030	1,1-DICHLOROETHANE	
14	C053	1,2-DICHLOROETHENE (TOTAL)	
15	C060	CHLOROFORM	
16		TRICHLOROFLUOROMETHANE	
17	C063	1,2-DICHLOROETHANE	
18	C815	D4-1,4-DICHLOROETHANE	*SURROGATE*
19	C110	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
20	C110	2-BUTANONE (MEK)	
21	C113	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C123	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C172	TRANS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C153	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C143	CIS-1,3-DICHLOROPROPENE	
32	C179	2-CHLOROETHYLVINYLETHER	
33	C180	BROMOFORM	
34	C120	D5-CHLOROBENZENE	*INTERNAL STANDARD*
35	C203	4-METHYL-2-PENTANONE (MIBK)	
36	C210	2-HEXANONE	
37	C220	TETRACHLOROETHENE	
38	C223	1,1,2,2-TETRACHLOROETHANE	
39	C230	TOLUENE	
40	C233	CHLOROBENZENE	
41	C240	ETHYL BENZENE	
42	C243	STYRENE	
43	C250	TOTAL XYLENES (CALCULATED OFF M-XYLENE)	
44	C330	1,3-DICHLOROBENZENE	
45	C330	1,3-DICHLOROBENZENE	
46	C340	1,4-DICHLOROBENZENE	
47	C809	D8-TOLUENE	*SURROGATE*
48	C810	BROMOFLUOROBENZENE	*SURROGATE*

000113

QUANTITATION REPORT FILE: VS1000822A

000114

DATA: VS1000822A.TI
08/22/89 10:37:00
SAMPLE: STANDARD
CONDS.: 100NG PURGED
FORMULA:
SUBMITTED BY: QC

INSTRUMENT: 1050
ANALYST: DMW

WEIGHT: 0.006
ACCT. No.: VS100

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
RESP. FAC. FROM LIBRARY ENTRY

No	NAME		
1	CI01	BROMOCHLOROMETHANE	*** INTERNAL STANDARD #1 ***
2	C010	CHLOROMETHANE	**
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	*
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8	C035	2-PROPANONE (ACETONE)	
9		ACROLEIN	
10	C040	CARBON DISULFIDE	
11		ACRYLONITRILE	
12	C045	1,1-DICHLOROETHENE	*
13	C050	1,1-DICHLOROETHANE	**
14	C053	TRANS-1,2-DICHLOROETHENE	
15	C060	CHLOROFORM	*
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	CS15	1,2-DICHLOROETHANE-D4	*** SURROGATE #1 ***
19	CI10	1,4-DIFLUOROBENZENE	*** INTERNAL STANDARD #2 ***
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-CHLOROETHYL VINYL ETHER	
33	C180	BROMOFORM	**
34	CI20	CHLOROBENZENE-D5	*** INTERNAL STANDARD #3 ***
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	XYLENES	
44	C250	XYLENES	
45	C350	1,2-DICHLOROBENZENE	
46	C340	1,4-DICHLOROBENZENE	
47	C335	1,3-DICHLOROBENZENE	

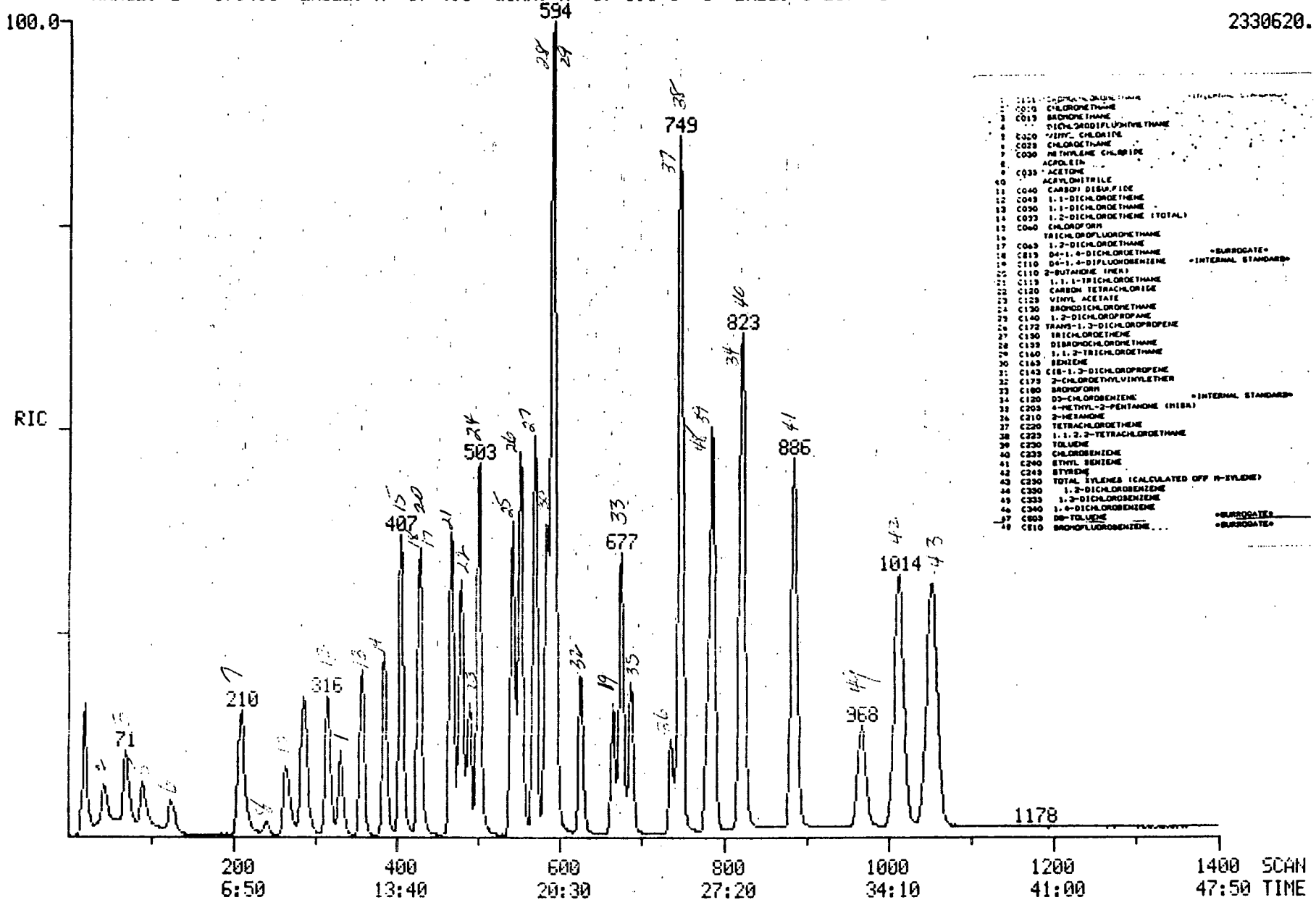
No	Name		
48	CS05	TOLUENE-D8	*** SURROGATE #2 ***
49	CS10	4-BROMOFLUOROBENZENE	*** SURROGATE #3 ***

No	M/Z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot	
1	128	331	11:19	1	1.000	A BB	220629.	50.000	UG/L	1.16	
2	50	41	1:24	1	0.124	A BB	328941.	100.000	UG/L	2.33	
3	94	66	2:15	1	0.199	A BB	386616.	100.000	UG/L	2.33	
4	NOT FOUND										
5	62	86	2:56	1	0.260	A BB	460345.	100.000	UG/L	2.33	
6	64	121	4:08	1	0.366	A BB	254415.	100.000	UG/L	2.33	
7	84	206	7:02	1	0.622	A BB	546355.	100.000	UG/L	2.33	
8	43	238	8:08	1	0.719	A BB	119740.	100.000	UG/L	2.33	
9	~~56~~	~~241~~	~~8:14~~	~~1~~	~~0.728~~	~~A*BB~~	~~432.~~	~~100.000~~	~~UG/L~~	~~2.33~~	
10	76	263	8:59	1	0.795	A BB	962837.	100.000	UG/L	2.33	
11	NOT FOUND										
12	96	315	10:46	1	0.952	A BB	376569.	100.000	UG/L	2.33	
13	63	358	12:14	1	1.082	A BB	1016170.	100.000	UG/L	2.33	
14	96	387	13:13	1	1.169	A BB	450981.	100.000	UG/L	2.33	
15	83	406	13:52	1	1.227	A BB	1458920.	100.000	UG/L	2.33	
16	~~101~~	~~285~~	~~9:44~~	~~1~~	~~0.861~~	~~A BB~~	~~1066340.~~	~~100.000~~	~~UG/L~~	~~2.33~~	
17	62	431	14:44	1	1.302	A BB	1314630.	100.000	UG/L	2.33	
18	65	427	14:35	1	1.290	A BB	532605.	50.000	UG/L	1.16	
19	114	666	22:45	19	1.000	A BB	916848.	50.000	UG/L	1.16	
20	43	430	14:41	19	0.646	A BB	234323.	100.000	UG/L	2.33	
21	97	469	16:01	19	0.704	A BB	1240980.	100.000	UG/L	2.33	
22	117	481	16:26	19	0.722	A VB	905522.	100.000	UG/L	2.33	
23	43	491	16:47	19	0.737	A BB	1154620.	100.000	UG/L	2.33	
24	83	503	17:11	19	0.755	A BB	1609910.	100.000	UG/L	2.33	
25	63	544	18:35	19	0.817	A BB	758666.	100.000	UG/L	2.33	
26	75	553	18:54	19	0.830	A BB	1548300.	100.000	UG/L	2.33	
27	130	571	19:31	19	0.857	A BB	815726.	100.000	UG/L	2.33	
28	129	592	20:14	19	0.889	A BB	1251370.	100.000	UG/L	2.33	
29	97	595	20:20	19	0.893	A BB	729717.	100.000	UG/L	2.33	
30	78	585	19:59	19	0.878	A BB	1636690.	100.000	UG/L	2.33	
31	75	594	20:18	19	0.892	A BB	865571.	100.000	UG/L	2.33	
32	63	627	21:25	19	0.941	A BB	480477.	100.000	UG/L	2.33	
33	173	677	23:08	19	1.017	A BB	921971.	100.000	UG/L	2.33	
34	117	819	27:59	34	1.000	A BB	876009.	50.000	UG/L	1.16	
35	43	689	23:32	34	0.841	A BB	716441.	100.000	UG/L	2.33	
36	43	738	25:13	34	0.901	A BB	495968.	100.000	UG/L	2.33	
37	164	748	25:33	34	0.913	A BB	675644.	100.000	UG/L	2.33	
38	83	749	25:35	34	0.915	A BB	1083600.	100.000	UG/L	2.33	
39	92	787	26:53	34	0.961	A BB	1216700.	100.000	UG/L	2.33	
40	112	823	28:07	34	1.005	A BB	1578270.	100.000	UG/L	2.33	
41	106	886	30:16	34	1.082	A BB	776511.	100.000	UG/L	2.33	
42	104	1014	34:39	34	1.238	A BB	1485740.	100.000	UG/L	2.33	
43	106	1053	35:59	34	1.286	A BB	842504.	100.000	UG/L	2.33	
44	NOT FOUND										
45	~~146~~	~~1216~~	~~41:33~~	~~34~~	~~1.485~~	~~A*BV~~	~~7823.~~	~~100.000~~	~~UG/L~~	~~2.33~~	
46	~~146~~	~~1233~~	~~42:08~~	~~34~~	~~1.505~~	~~A VV~~	~~5834.~~	~~100.000~~	~~UG/L~~	~~2.33~~	
47	~~146~~	~~1183~~	~~40:25~~	~~34~~	~~1.444~~	~~A BB~~	~~6134.~~	~~100.000~~	~~UG/L~~	~~2.33~~	
48	98	781	26:41	34	0.954	A BB	829392.	50.000	UG/L	1.16	
49	95	968	33:04	34	1.182	A BB	740686.	50.000	UG/L	1.16	

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	11:19	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:24	1.00	0.124	1.00	100.00	100.00	0.745	0.745	1.00
3	2:15	1.00	0.199	1.00	100.00	100.00	0.876	0.876	1.00
4	3:07		0.275						
5	2:56	1.00	0.260	1.00	100.00	100.00	1.043	1.043	1.00
6	4:08	1.00	0.366	1.00	100.00	100.00	0.577	0.577	1.00
7	7:02	1.00	0.622	1.00	100.00	100.00	1.238	1.238	1.00
8	8:08	1.00	0.719	1.00	100.00	100.00	0.271	0.271	1.00
9	8:14	1.00	0.728	1.00	100.00	100.00	0.001	0.001	1.00
10	8:59	1.00	0.795	1.00	100.00	100.00	2.182	2.182	1.00
11	9:07		0.797						
12	10:46	1.00	0.952	1.00	100.00	100.00	0.853	0.853	1.00
13	12:14	1.00	1.082	1.00	100.00	100.00	2.303	2.303	1.00
14	13:13	1.00	1.169	1.00	100.00	100.00	1.022	1.022	1.00
15	13:52	1.00	1.227	1.00	100.00	100.00	3.306	3.306	1.00
16	9:44	1.00	0.861	1.00	100.00	100.00	2.417	2.417	1.00
17	14:44	1.00	1.302	1.00	100.00	100.00	2.979	2.979	1.00
18	14:35	1.00	1.290	1.00	50.00	50.00	2.414	2.414	1.00
19	22:45	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
20	14:41	1.00	0.646	1.00	100.00	100.00	0.128	0.128	1.00
21	16:01	1.00	0.704	1.00	100.00	100.00	0.677	0.677	1.00
22	16:26	1.00	0.722	1.00	100.00	100.00	0.494	0.494	1.00
23	16:47	1.00	0.737	1.00	100.00	100.00	0.630	0.630	1.00
24	17:11	1.00	0.755	1.00	100.00	100.00	0.878	0.878	1.00
25	18:35	1.00	0.817	1.00	100.00	100.00	0.414	0.414	1.00
26	18:54	1.00	0.830	1.00	100.00	100.00	0.844	0.844	1.00
27	19:31	1.00	0.857	1.00	100.00	100.00	0.445	0.445	1.00
28	20:14	1.00	0.889	1.00	100.00	100.00	0.682	0.682	1.00
29	20:20	1.00	0.893	1.00	100.00	100.00	0.398	0.398	1.00
30	19:59	1.00	0.878	1.00	100.00	100.00	0.893	0.893	1.00
31	20:18	1.00	0.892	1.00	100.00	100.00	0.472	0.472	1.00
32	21:25	1.00	0.941	1.00	100.00	100.00	0.262	0.262	1.00
33	23:08	1.00	1.017	1.00	100.00	100.00	0.503	0.503	1.00
34	27:59	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
35	23:32	1.00	0.841	1.00	100.00	100.00	0.409	0.409	1.00
36	25:13	1.00	0.901	1.00	100.00	100.00	0.283	0.283	1.00
37	25:33	1.00	0.913	1.00	100.00	100.00	0.386	0.386	1.00
38	25:35	1.00	0.915	1.00	100.00	100.00	0.618	0.618	1.00
39	26:53	1.00	0.961	1.00	100.00	100.00	0.694	0.694	1.00
40	28:07	1.00	1.005	1.00	100.00	100.00	0.901	0.901	1.00
41	30:16	1.00	1.082	1.00	100.00	100.00	0.443	0.443	1.00
42	34:39	1.00	1.238	1.00	100.00	100.00	0.848	0.848	1.00
43	35:59	1.00	1.286	1.00	100.00	100.00	0.481	0.481	1.00
44	34:49		1.241						
45	41:33	1.00	1.485	1.00	100.00	100.00	0.004	0.004	1.00
46	42:08	1.00	1.505	1.00	100.00	100.00	0.003	0.003	1.00
47	40:25	1.00	1.444	1.00	100.00	100.00	0.004	0.004	1.00
48	26:41	1.00	0.954	1.00	50.00	50.00	0.947	0.947	1.00
49	33:04	1.00	1.182	1.00	50.00	50.00	0.846	0.846	1.00

RIC
08/22/89 11:42:00
SAMPLE: STANDARD
CONDS.: 150NG PURGED
RANGE: G 1,1400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: VS1500822A #1 SCANS 1 TO 1400
CALI: VS1000822A #2



1	C010	CHLOROMETHANE	
2	C015	BROMOMETHANE	
3		DICHLORODIFLUOROMETHANE	
4			
5	C020	VINYL CHLORIDE	
6	C023	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8		ACROLEIN	
9	C035	ACETONE	
10		ACRYLONITRILE	
11	C040	CARBON DISULFIDE	
12	C043	1,1-DICHLOROETHENE	
13	C050	1,1-DICHLOROETHANE	
14	C053	1,2-DICHLOROETHENE (TOTAL)	
15	C060	CHLOROFORM	
16		TRICHLOROFLUOROMETHANE	
17	C063	1,2-DICHLOROETHANE	
18	C815	D4-1,4-DICHLOROETHANE	*SURROGATE*
19	C110	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
20	C110	2-BUTANONE (MEK)	
21	C113	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C123	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C172	TRANS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C153	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C163	BENZENE	
31	C143	CIS-1,3-DICHLOROPROPENE	
32	C173	2-CHLOROETHYLVINYLETHER	
33	C180	BROMOFORM	
34	C120	D5-CHLOROBENZENE	*INTERNAL STANDARD*
35	C203	4-METHYL-2-PENTANONE (MIBK)	
36	C210	2-HEXANONE	
37	C220	TETRACHLOROETHENE	
38	C223	1,1,2,2-TETRACHLOROETHANE	
39	C230	TOLUENE	
40	C233	CHLOROBENZENE	
41	C240	ETHYL BENZENE	
42	C243	STYRENE	
43	C250	TOTAL XYLENES (CALCULATED OFF M-XYLENE)	
44	C330	1,2-DICHLOROBENZENE	
45	C333	1,3-DICHLOROBENZENE	
46	C340	1,4-DICHLOROBENZENE	
47	C803	D8-TOLUENE	*SURROGATE*
48	C810	BROMOFLUOROBENZENE	*SURROGATE*

000117

QUANTITATION REPORT FILE: VS1500822A

DATA: VS1500822A.TI
08/22/89 11:42:00
SAMPLE: STANDARD
CONDS.: 150NG PURGED
FORMULA:] INSTRUMENT: 1050 WEIGHT: 0.008
SUBMITTED BY: QC 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 #1 ***
2	C010	CHLOROMETHANE	**
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	*
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8	C035	2-PROPANONE (ACETONE)	
9		ACROLEIN	
10	C040	CARBON DISULFIDE	
11		ACRYLONITRILE	
12	C045	1,1-DICHLOROETHENE	*
13	C050	1,1-DICHLOROETHANE	**
14	C053	TRANS-1,2-DICHLOROETHENE	
15	C060	CHLOROFORM	*
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	CS15	1,2-DICHLOROETHANE-D4	*** SURROGATE #1 ***
19	CI10	1,4-DIFLUOROBENZENE	*** INTERNAL STANDARD #2 ***
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-CHLOROETHYL VINYL ETHER	
33	C180	BROMOFORM	**
34	CI20	CHLOROBENZENE-D5	*** INTERNAL STANDARD #3 ***
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	XYLENES	
44	C250	XYLENES	
45	C350	1,2-DICHLOROBENZENE	
46	C340	1,4-DICHLOROBENZENE	
47	C335	1,3-DICHLOROBENZENE	

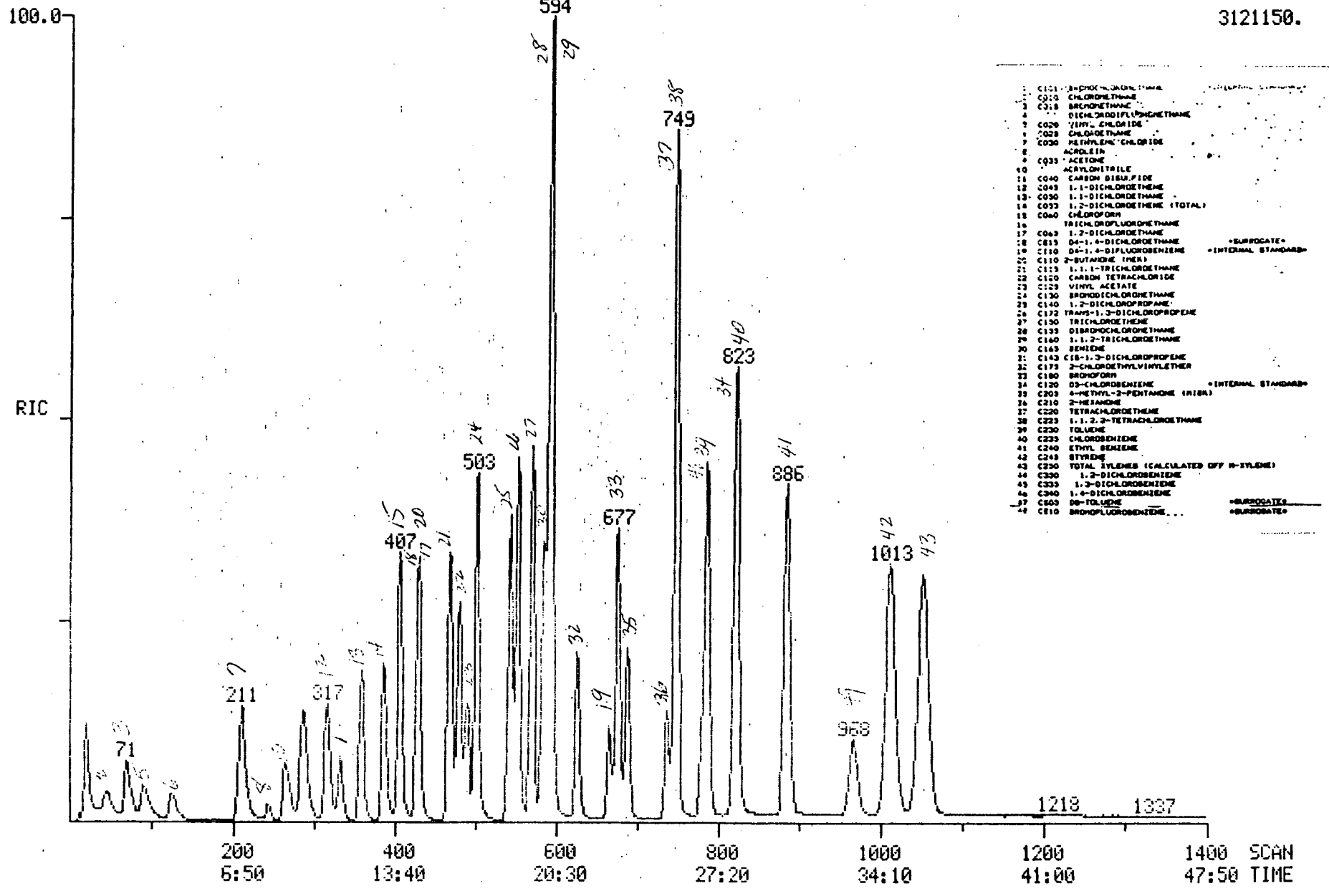
No	Name		
48	CS05	TOLUENE-D8	*** SURROGATE #2 ***
49	CS10	4-BROMOFLUOROBENZENE	*** SURROGATE #3 ***

No	M/Z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	333	11:23	1	1.000	A BB	226001.	50.000	UG/L	0.79
2	50	45	1:32	1	0.135	A BB	497559.	150.000	UG/L	2.38
3	94	71	2:26	1	0.213	A BB	586271.	150.000	UG/L	2.38
4	NOT	FOUND								
5	62	91	3:07	1	0.273	A BB	624946.	150.000	UG/L	2.38
6	64	125	4:16	1	0.375	A BB	350710.	150.000	UG/L	2.38
7	84	210	7:10	1	0.631	A BB	803050.	150.000	UG/L	2.38
8	43	242	8:16	1	0.727	A BB	176597.	150.000	UG/L	2.38
9	~~56~~	~~240~~	~~8:12~~	~~1~~	~~0.721~~	~~A BB~~	~~158.~~	~~150.000~~	~~UG/L~~	~~2.38~~
10	76	265	9:03	1	0.796	A BB	1416170.	150.000	UG/L	2.38
11	NOT	FOUND								
12	96	316	10:48	1	0.949	A BB	539516.	150.000	UG/L	2.38
13	63	359	12:16	1	1.078	A BB	1489930.	150.000	UG/L	2.38
14	96	386	13:11	1	1.159	A BB	648318.	150.000	UG/L	2.38
15	83	407	13:54	1	1.222	A BB	2151110.	150.000	UG/L	2.38
16	~~101~~	~~287~~	~~9:48~~	~~1~~	~~0.862~~	~~A BB~~	~~1496150.~~	~~150.000~~	~~UG/L~~	~~2.38~~
17	62	431	14:44	1	1.294	A BB	1958860.	150.000	UG/L	2.38
18	65	427	14:35	1	1.282	A BB	552206.	50.000	UG/L	0.79
19	114	667	22:47	19	1.000	A BB	881604.	50.000	UG/L	0.79
20	43	430	14:41	19	0.645	A BB	342310.	150.000	UG/L	2.38
21	97	469	16:01	19	0.703	A BB	1807490.	150.000	UG/L	2.38
22	117	481	16:26	19	0.721	A VB	1416270.	150.000	UG/L	2.38
23	43	491	16:47	19	0.736	A BB	1711050.	150.000	UG/L	2.38
24	83	503	17:11	19	0.754	A BB	2367920.	150.000	UG/L	2.38
25	63	544	18:35	19	0.816	A BB	1119480.	150.000	UG/L	2.38
26	75	553	18:54	19	0.829	A BB	2288140.	150.000	UG/L	2.38
27	130	571	19:31	19	0.856	A BV	1166340.	150.000	UG/L	2.38
28	129	592	20:14	19	0.888	A BB	1861340.	150.000	UG/L	2.38
29	97	595	20:20	19	0.892	A BB	1082380.	150.000	UG/L	2.38
30	78	585	19:59	19	0.877	A BB	2348460.	150.000	UG/L	2.38
31	75	594	20:18	19	0.891	A BB	1296340.	150.000	UG/L	2.38
32	63	627	21:25	19	0.940	A BB	712362.	150.000	UG/L	2.38
33	173	677	23:08	19	1.015	A BB	1336500.	150.000	UG/L	2.38
34	117	820	28:01	34	1.000	A BB	861278.	50.000	UG/L	0.79
35	43	689	23:32	34	0.840	A BB	1001370.	150.000	UG/L	2.38
36	43	738	25:13	34	0.900	A BB	684552.	150.000	UG/L	2.38
37	164	748	25:33	34	0.912	A BB	926869.	150.000	UG/L	2.38
38	83	749	25:35	34	0.913	A BB	1616530.	150.000	UG/L	2.38
39	92	787	26:53	34	0.960	A BB	1763120.	150.000	UG/L	2.38
40	112	823	28:07	34	1.004	A BB	2285910.	150.000	UG/L	2.38
41	106	886	30:16	34	1.080	A BB	1111310.	150.000	UG/L	2.38
42	104	1014	34:39	34	1.237	A BB	2191000.	150.000	UG/L	2.38
43	106	1053	35:59	34	1.284	A BB	1226700.	150.000	UG/L	2.38
44	NOT	FOUND								
45	~~146~~	~~1218~~	~~41:37~~	~~34~~	~~1.485~~	~~A VV~~	~~4621.~~	~~150.000~~	~~UG/L~~	~~2.38~~
46	~~146~~	~~1233~~	~~42:08~~	~~34~~	~~1.504~~	~~A*VV~~	~~6449.~~	~~150.000~~	~~UG/L~~	~~2.38~~
47	~~146~~	~~1181~~	~~40:21~~	~~34~~	~~1.440~~	~~A*BV~~	~~5826.~~	~~150.000~~	~~UG/L~~	~~2.38~~
48	98	781	26:41	34	0.952	A BB	795222.	50.000	UG/L	0.79
49	95	968	33:04	34	1.180	A BB	703632.	50.000	UG/L	0.79

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	11:23	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:32	1.00	0.135	1.00	150.00	150.00	0.734	0.734	1.00
3	2:26	1.00	0.213	1.00	150.00	150.00	0.865	0.865	1.00
4	3:07		0.275						
5	3:07	1.00	0.273	1.00	150.00	150.00	0.922	0.922	1.00
6	4:16	1.00	0.375	1.00	150.00	150.00	0.517	0.517	1.00
7	7:10	1.00	0.631	1.00	150.00	150.00	1.184	1.184	1.00
8	8:16	1.00	0.727	1.00	150.00	150.00	0.260	0.260	1.00
9	8:12	1.00	0.721	1.00	150.00	150.00	0.000	0.000	1.00
10	9:03	1.00	0.796	1.00	150.00	150.00	2.089	2.089	1.00
11	9:07		0.797						
12	10:48	1.00	0.949	1.00	150.00	150.00	0.796	0.796	1.00
13	12:16	1.00	1.078	1.00	150.00	150.00	2.198	2.198	1.00
14	13:11	1.00	1.159	1.00	150.00	150.00	0.956	0.956	1.00
15	13:54	1.00	1.222	1.00	150.00	150.00	3.173	3.173	1.00
16	9:48	1.00	0.862	1.00	150.00	150.00	2.207	2.207	1.00
17	14:44	1.00	1.294	1.00	150.00	150.00	2.889	2.889	1.00
18	14:35	1.00	1.282	1.00	50.00	50.00	2.443	2.443	1.00
19	22:47	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
20	14:41	1.00	0.645	1.00	150.00	150.00	0.129	0.129	1.00
21	16:01	1.00	0.703	1.00	150.00	150.00	0.683	0.683	1.00
22	16:26	1.00	0.721	1.00	150.00	150.00	0.535	0.535	1.00
23	16:47	1.00	0.736	1.00	150.00	150.00	0.647	0.647	1.00
24	17:11	1.00	0.754	1.00	150.00	150.00	0.895	0.895	1.00
25	18:35	1.00	0.816	1.00	150.00	150.00	0.423	0.423	1.00
26	18:54	1.00	0.829	1.00	150.00	150.00	0.865	0.865	1.00
27	19:31	1.00	0.856	1.00	150.00	150.00	0.441	0.441	1.00
28	20:14	1.00	0.888	1.00	150.00	150.00	0.704	0.704	1.00
29	20:20	1.00	0.892	1.00	150.00	150.00	0.409	0.409	1.00
30	19:59	1.00	0.877	1.00	150.00	150.00	0.888	0.888	1.00
31	20:18	1.00	0.891	1.00	150.00	150.00	0.490	0.490	1.00
32	21:25	1.00	0.940	1.00	150.00	150.00	0.269	0.269	1.00
33	23:08	1.00	1.015	1.00	150.00	150.00	0.505	0.505	1.00
34	28:01	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
35	23:32	1.00	0.840	1.00	150.00	150.00	0.388	0.388	1.00
36	25:13	1.00	0.900	1.00	150.00	150.00	0.265	0.265	1.00
37	25:33	1.00	0.912	1.00	150.00	150.00	0.359	0.359	1.00
38	25:35	1.00	0.913	1.00	150.00	150.00	0.626	0.626	1.00
39	26:53	1.00	0.960	1.00	150.00	150.00	0.682	0.682	1.00
40	28:07	1.00	1.004	1.00	150.00	150.00	0.885	0.885	1.00
41	30:16	1.00	1.080	1.00	150.00	150.00	0.430	0.430	1.00
42	34:39	1.00	1.237	1.00	150.00	150.00	0.848	0.848	1.00
43	35:59	1.00	1.284	1.00	150.00	150.00	0.475	0.475	1.00
44	34:49		1.241						
45	41:37	1.00	1.485	1.00	150.00	150.00	0.002	0.002	1.00
46	42:08	1.00	1.504	1.00	150.00	150.00	0.002	0.002	1.00
47	40:21	1.00	1.440	1.00	150.00	150.00	0.002	0.002	1.00
48	26:41	1.00	0.952	1.00	50.00	50.00	0.923	0.923	1.00
49	33:04	1.00	1.180	1.00	50.00	50.00	0.817	0.817	1.00

RIC
08/22/89 12:47:00
SAMPLE: STANDARD
CONDS.: 200NG PURGED
RANGE: G 1,1400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: VS2000822A #1 SCANS 1 TO 1400
CALI: VS1500822A #2



1	C031	BROMOCHLOROMETHANE
2	C033	CHLOROMETHANE
3	C038	BROMOMETHANE
4		DICHLORODIFLUOROMETHANE
5	C050	VINYL CHLORIDE
6	C028	CHLOROETHANE
7	C030	METHYLENE CHLORIDE
8		ACROLEIN
9	C035	ACETONE
10		ACRYLONITRILE
11	C040	CARBON DISULFIDE
12	C043	1,1-DICHLOROETHENE
13	C030	1,1-DICHLOROETHANE
14	C053	1,2-DICHLOROETHENE (TOTAL)
15	C060	CHLOROFORM
16		TRICHLOROFLUOROMETHANE
17	C063	1,2-DICHLOROETHANE
18	C815	D4-1,4-DICHLOROETHANE *SURROGATE*
19	C110	D4-1,4-DIFLUOROBENZENE *INTERNAL STANDARD*
20	C110	2-BUTANONE (MEK)
21	C113	1,1,1-TRICHLOROETHANE
22	C120	CARBON TETRACHLORIDE
23	C129	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	C163	BENZENE
31	C143	CIS-1,3-DICHLOROPROPENE
32	C179	2-CHLOROETHYLVINYLETHER
33	C180	BROMOFORM
34	C120	D5-CHLOROBENZENE *INTERNAL STANDARD*
35	C203	4-METHYL-2-PENTANONE (MIBK)
36	C210	2-HEXANONE
37	C220	TETRACHLOROETHENE
38	C223	1,1,2,2-TETRACHLOROETHANE
39	C230	TOLUENE
40	C233	CHLOROBENZENE
41	C240	ETHYL BENZENE
42	C249	STYRENE
43	C250	TOTAL XYLENES (CALCULATED OFF M-XYLENE)
44	C330	1,2-DICHLOROBENZENE
45	C333	1,3-DICHLOROBENZENE
46	C340	1,4-DICHLOROBENZENE
47	C803	D8-TOLUENE *SURROGATE*
48	C810	BROMOFLUOROBENZENE *SURROGATE*

000121

QUANTITATION REPORT FILE: VS2000822A

000122

DATA: VS2000822A.TI
08/22/89 12:47:00
SAMPLE: STANDARD
CONDS.: 200NC PURGED
FORMULA: 0 INSTRUMENT: 1050 WEIGHT: 0.008
SUBMITTED BY: QC 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 #1 ***
2	C010	CHLOROMETHANE	**
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	*
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8	C035	2-PROPANONE (ACETONE)	
9		ACROLEIN	
10	C040	CARBON DISULFIDE	
11		ACRYLONITRILE	
12	C045	1,1-DICHLOROETHENE	*
13	C050	1,1-DICHLOROETHANE	**
14	C053	TRANS-1,2-DICHLOROETHENE	
15	C060	CHLOROFORM	*
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	CS15	1,2-DICHLOROETHANE-D4	*** SURROGATE #1 ***
19	CI10	1,4-DIFLUOROBENZENE	*** INTERNAL STANDARD #2 ***
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-CHLOROETHYL VINYL ETHER	
33	C180	BROMOFORM	**
34	CI20	CHLOROBENZENE-D5	*** INTERNAL STANDARD #3 ***
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	XYLENES	
44	C250	XYLENES	
45	C350	1,2-DICHLOROBENZENE	
46	C340	1,4-DICHLOROBENZENE	
47	C335	1,3-DICHLOROBENZENE	

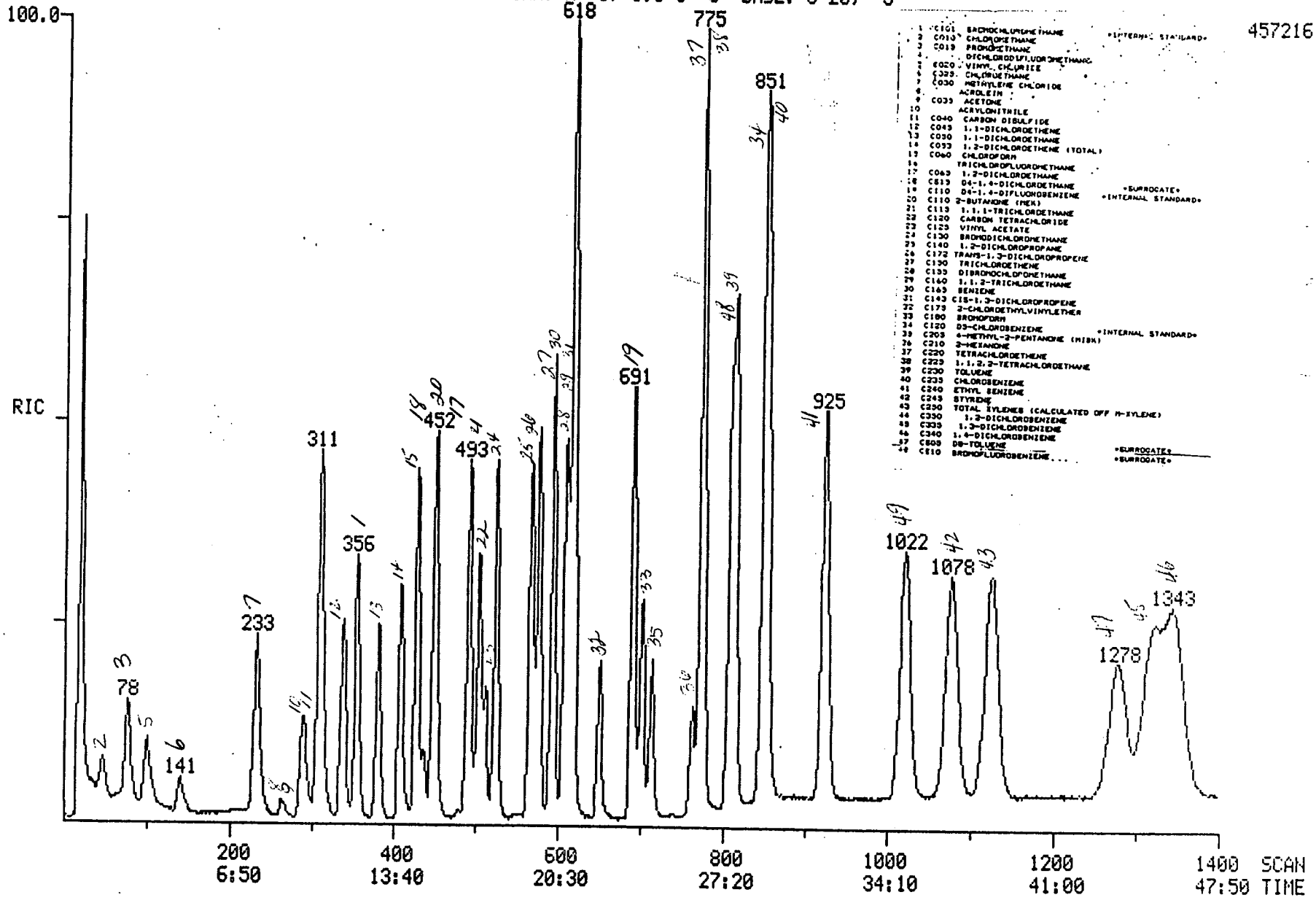
No	Name		
48	CS05	TOLUENE-D8	*** SURROGATE #2 ***
49	CS10	4-BROMOFLUOROBENZENE	*** SURROGATE #3 ***

No	M/Z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	334	11:25	1	1.000	A BB	224990.	50.000	UG/L	0.60
2	50	46	1:34	1	0.138	A BB	543080.	200.000	UG/L	2.41
3	94	71	2:26	1	0.213	A BB	655258.	200.000	UG/L	2.41
4	NOT	FOUND								
5	62	93	3:11	1	0.278	A BB	712446.	200.000	UG/L	2.41
6	64	126	4:18	1	0.377	A BB	447085.	200.000	UG/L	2.41
7	84	211	7:13	1	0.632	A BB	1010510.	200.000	UG/L	2.41
8	43	244	8:20	1	0.731	A BB	288397.	200.000	UG/L	2.41
9	~~56~~	~~244~~	~~8:20~~	~~1~~	~~0.731~~	~~A BB~~	~~82.~~	~~200.000~~	~~UG/L~~	~~2.41~~
10	76	265	9:03	1	0.793	A BB	1665170.	200.000	UG/L	2.41
11	NOT	FOUND								
12	96	317	10:50	1	0.949	A BB	642262.	200.000	UG/L	2.41
13	63	360	12:18	1	1.078	A BB	1907090.	200.000	UG/L	2.41
14	96	387	13:13	1	1.159	A BB	815692.	200.000	UG/L	2.41
15	83	407	13:54	1	1.219	A BB	2639560.	200.000	UG/L	2.41
16	~~101~~	~~287~~	~~9:48~~	~~1~~	~~0.859~~	~~A BB~~	~~1738640.~~	~~200.000~~	~~UG/L~~	~~2.41~~
17	62	431	14:44	1	1.290	A BB	2482500.	200.000	UG/L	2.41
18	65	428	14:37	1	1.281	A BB	574637.	50.000	UG/L	0.60
19	114	666	22:45	19	1.000	A BB	862228.	50.000	UG/L	0.60
20	43	430	14:41	19	0.646	A BB	510826.	200.000	UG/L	2.41
21	97	469	16:01	19	0.704	A BB	2250310.	200.000	UG/L	2.41
22	117	481	16:26	19	0.722	A VB	1627550.	200.000	UG/L	2.41
23	43	491	16:47	19	0.737	A BB	2210740.	200.000	UG/L	2.41
24	83	503	17:11	19	0.755	A BB	2908480.	200.000	UG/L	2.41
25	63	544	18:35	19	0.817	A BB	1483950.	200.000	UG/L	2.41
26	75	553	18:54	19	0.830	A BB	2824190.	200.000	UG/L	2.41
27	130	571	19:31	19	0.857	A BB	1458230.	200.000	UG/L	2.41
28	129	592	20:14	19	0.889	A BB	2467300.	200.000	UG/L	2.41
29	97	595	20:20	19	0.893	A BB	1475270.	200.000	UG/L	2.41
30	78	585	19:59	19	0.878	A BB	2815270.	200.000	UG/L	2.41
31	75	594	20:18	19	0.892	A BB	1759360.	200.000	UG/L	2.41
32	63	627	21:25	19	0.941	A BB	1037610.	200.000	UG/L	2.41
33	173	677	23:08	19	1.017	A BB	1899060.	200.000	UG/L	2.41
34	117	819	27:59	34	1.000	A BB	843809.	50.000	UG/L	0.60
35	43	689	23:32	34	0.841	A BB	1560560.	200.000	UG/L	2.41
36	43	738	25:13	34	0.901	A BB	1069320.	200.000	UG/L	2.41
37	164	748	25:33	34	0.913	A BB	1174050.	200.000	UG/L	2.41
38	83	749	25:35	34	0.915	A BB	2412620.	200.000	UG/L	2.41
39	92	787	26:53	34	0.961	A BB	2263940.	200.000	UG/L	2.41
40	112	823	28:07	34	1.005	A BB	2883630.	200.000	UG/L	2.41
41	106	886	30:16	34	1.082	A BB	1454530.	200.000	UG/L	2.41
42	104	1013	34:37	34	1.237	A BB	2816200.	200.000	UG/L	2.41
43	106	1053	35:59	34	1.286	A BB	1625160.	200.000	UG/L	2.41
44	NOT	FOUND								
45	~~146~~	~~1222~~	~~41:45~~	~~34~~	~~1.492~~	~~A*BV~~	~~7335.~~	~~200.000~~	~~UG/L~~	~~2.41~~
46	~~146~~	~~1236~~	~~42:14~~	~~34~~	~~1.509~~	~~A VB~~	~~4315.~~	~~200.000~~	~~UG/L~~	~~2.41~~
47	~~146~~	~~1180~~	~~40:19~~	~~34~~	~~1.441~~	~~A VV~~	~~3189.~~	~~200.000~~	~~UG/L~~	~~2.41~~
48	98	781	26:41	34	0.954	A BB	779503.	50.000	UG/L	0.60
49	95	968	33:04	34	1.182	A BB	724012.	50.000	UG/L	0.60

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	11:25	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:34	1.00	0.138	1.00	200.00	200.00	0.603	0.603	1.00
3	2:26	1.00	0.213	1.00	200.00	200.00	0.728	0.728	1.00
4	3:07		0.275						
5	3:11	1.00	0.278	1.00	200.00	200.00	0.792	0.792	1.00
6	4:18	1.00	0.377	1.00	200.00	200.00	0.497	0.497	1.00
7	7:13	1.00	0.632	1.00	200.00	200.00	1.123	1.123	1.00
8	8:20	1.00	0.731	1.00	200.00	200.00	0.320	0.320	1.00
9	8:20	1.00	0.731	1.00	200.00	200.00	0.000	0.000	1.00
10	9:03	1.00	0.793	1.00	200.00	200.00	1.850	1.850	1.00
11	9:07		0.797						
12	10:50	1.00	0.949	1.00	200.00	200.00	0.714	0.714	1.00
13	12:18	1.00	1.078	1.00	200.00	200.00	2.119	2.119	1.00
14	13:13	1.00	1.159	1.00	200.00	200.00	0.906	0.906	1.00
15	13:54	1.00	1.219	1.00	200.00	200.00	2.933	2.933	1.00
16	9:48	1.00	0.859	1.00	200.00	200.00	1.932	1.932	1.00
17	14:44	1.00	1.290	1.00	200.00	200.00	2.758	2.758	1.00
18	14:37	1.00	1.281	1.00	50.00	50.00	2.554	2.554	1.00
19	22:45	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
20	14:41	1.00	0.646	1.00	200.00	200.00	0.148	0.148	1.00
21	16:01	1.00	0.704	1.00	200.00	200.00	0.652	0.652	1.00
22	16:26	1.00	0.722	1.00	200.00	200.00	0.472	0.472	1.00
23	16:47	1.00	0.737	1.00	200.00	200.00	0.641	0.641	1.00
24	17:11	1.00	0.755	1.00	200.00	200.00	0.843	0.843	1.00
25	18:35	1.00	0.817	1.00	200.00	200.00	0.430	0.430	1.00
26	18:54	1.00	0.830	1.00	200.00	200.00	0.819	0.819	1.00
27	19:31	1.00	0.857	1.00	200.00	200.00	0.423	0.423	1.00
28	20:14	1.00	0.889	1.00	200.00	200.00	0.715	0.715	1.00
29	20:20	1.00	0.893	1.00	200.00	200.00	0.428	0.428	1.00
30	19:59	1.00	0.878	1.00	200.00	200.00	0.816	0.816	1.00
31	20:18	1.00	0.892	1.00	200.00	200.00	0.510	0.510	1.00
32	21:25	1.00	0.941	1.00	200.00	200.00	0.301	0.301	1.00
33	23:08	1.00	1.017	1.00	200.00	200.00	0.551	0.551	1.00
34	27:59	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
35	23:32	1.00	0.841	1.00	200.00	200.00	0.462	0.462	1.00
36	25:13	1.00	0.901	1.00	200.00	200.00	0.317	0.317	1.00
37	25:33	1.00	0.913	1.00	200.00	200.00	0.348	0.348	1.00
38	25:35	1.00	0.915	1.00	200.00	200.00	0.715	0.715	1.00
39	26:53	1.00	0.961	1.00	200.00	200.00	0.671	0.671	1.00
40	28:07	1.00	1.005	1.00	200.00	200.00	0.854	0.854	1.00
41	30:16	1.00	1.082	1.00	200.00	200.00	0.431	0.431	1.00
42	34:37	1.00	1.237	1.00	200.00	200.00	0.834	0.834	1.00
43	35:59	1.00	1.286	1.00	200.00	200.00	0.481	0.481	1.00
44	34:49		1.241						
45	41:45	1.00	1.492	1.00	200.00	200.00	0.002	0.002	1.00
46	42:14	1.00	1.509	1.00	200.00	200.00	0.001	0.001	1.00
47	40:19	1.00	1.441	1.00	200.00	200.00	0.001	0.001	1.00
48	26:41	1.00	0.954	1.00	50.00	50.00	0.924	0.924	1.00
49	33:04	1.00	1.182	1.00	50.00	50.00	0.858	0.858	1.00

RIC
08/23/89 8:01:00
SAMPLE: STANDARD
CONDS.: 50NG PURGED
RANGE: G 1,1400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: VS050A0823 #1 SCANS 1 TO 1400
CALI: VS050A0823 #2



1 C101 BROMOCHLOROMETHANE *INTERNAL STANDARD*
2 C010 CHLOROMETHANE
3 C019 BROMOMETHANE
4 DICHLORODIFLUOROMETHANE
5 C020 VINYL CHLORIDE
6 C029 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 C063 1,2-DICHLOROETHANE
18 C513 D4-1,4-DICHLOROETHANE *SURROGATE*
19 C110 D4-1,4-DIFLUOROBENZENE *INTERNAL STANDARD*
20 C110 2-BUTANONE (MEK)
21 C113 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 C190 TRICHLOROETHENE
28 C195 DIBROMOCHLOROMETHANE
29 C160 1,1,2-TRICHLOROETHANE
30 C165 BENZENE
31 C143 CIS-1,3-DICHLOROPROPENE
32 C179 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 C223 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 C809 D8-TOLUENE *SURROGATE*
48 C810 BROMOFLUOROBENZENE... *SURROGATE*

0001125

QUANTITATION REPORT FILE: VS050A0823

000126

DATA: VS050A0823 TI
08/23/89 8:01:00
SAMPLE: STANDARD
CONDS.: 50NG PURGED
FORMULA:
SUBMITTED BY: QC

INSTRUMENT: 1050
ANALYST: DMW

WEIGHT: 0.006
ACCT. NO.: VS050

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
RESP. FAC. FROM LIBRARY ENTRY

No	Name		
1	CI01	BROMOCHLOROMETHANE	*** INTERNAL STANDARD #1 ***
2	C010	CHLOROMETHANE	**
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	*
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8	C035	2-PROPANONE (ACETONE)	
9		ACROLEIN	
10	C040	CARBON DISULFIDE	
11		ACRYLONITRILE	
12	C045	1,1-DICHLOROETHENE	*
13	C050	1,1-DICHLOROETHANE	**
14	C053	TRANS-1,2-DICHLOROETHENE	
15	C060	CHLOROFORM	*
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	CS15	1,2-DICHLOROETHANE-D4	*** SURROGATE #1 ***
19	CI10	1,4-DIFLUOROBENZENE	*** INTERNAL STANDARD #2 ***
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-CHLOROETHYL VINYL ETHER	
33	C180	BROMOFORM	**
34	CI20	CHLOROBENZENE-D5	*** INTERNAL STANDARD #3 ***
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	XYLENES	
44	C250	XYLENES	
45	C350	1,2-DICHLOROBENZENE	
46	C340	1,4-DICHLOROBENZENE	
47	C335	1,3-DICHLOROBENZENE	

No	Name			
48	CS05	TOLUENE-D8	*** SURROGATE #2 ***	
49	CS10	4-BROMOFLUOROBENZENE	*** SURROGATE #3 ***	

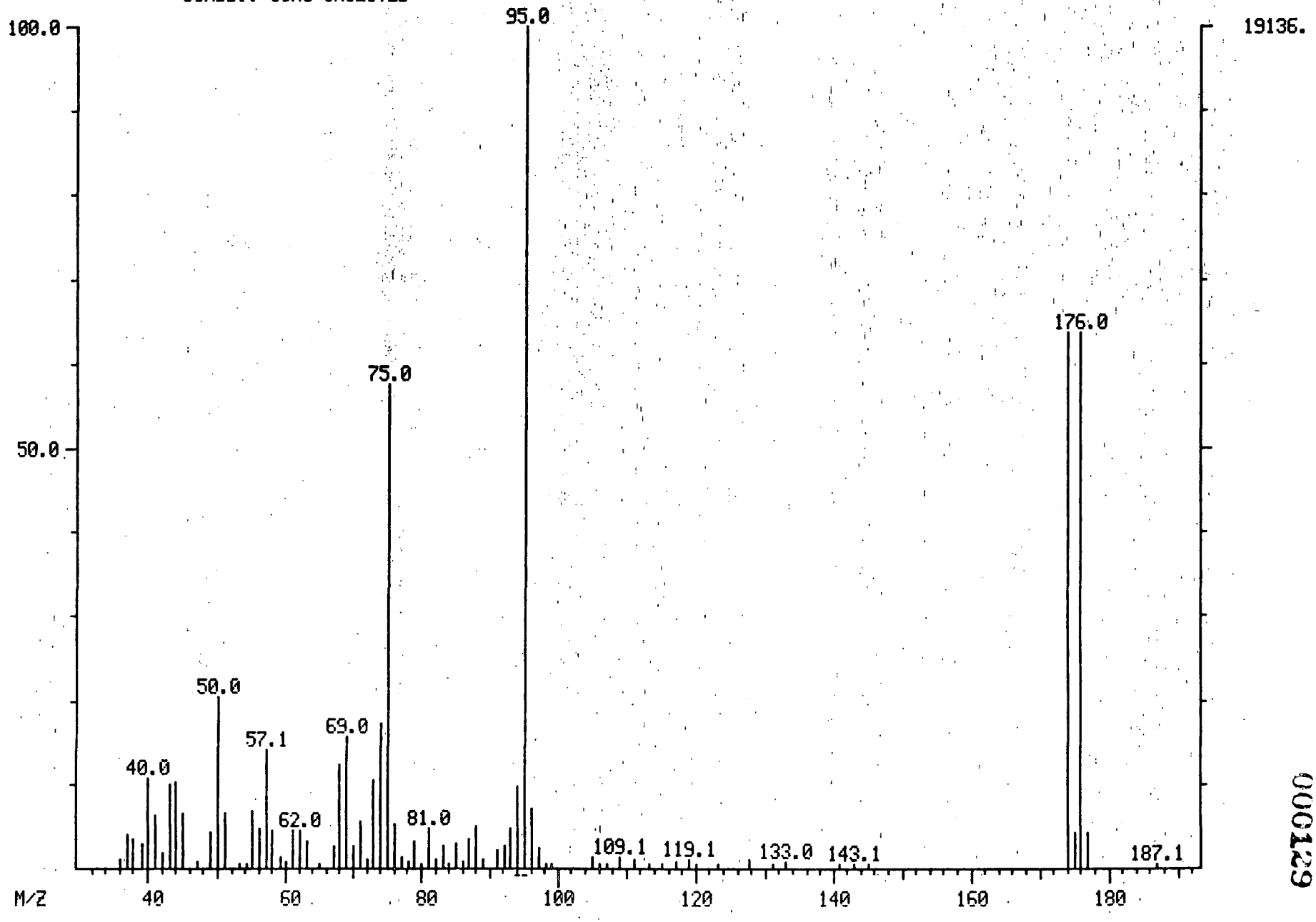
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot	
1	128	356	12:10	1	1.000	A BB	138304.	50.000 UG/L	2.08	
2	50	49	1:40	1	0.138	A BB	110450.	50.000 UG/L	2.08	
3	94	78	2:40	1	0.219	A BB	134858.	50.000 UG/L	2.08	
4	NOT	FOUND								
5	62	101	3:27	1	0.284	A BB	161063.	50.000 UG/L	2.08	
6	64	141	4:49	1	0.396	A BB	87325.	50.000 UG/L	2.08	
7	84	232	7:56	1	0.652	A BB	205084.	50.000 UG/L	2.08	
8	43	264	9:01	1	0.742	A BB	43093.	50.000 UG/L	2.08	
9	~~56~~	~~266~~	~~9:05~~	~~1~~	~~0.747~~	~~A BB~~	~~5509.~~	~~50.000 UG/L~~	~~2.08~~	
10	76	289	9:52	1	0.812	A BB	355575.	50.000 UG/L	2.08	
11	~~53~~	~~290~~	~~9:54~~	~~1~~	~~0.815~~	~~A BV~~	~~22809.~~	~~50.000 UG/L~~	~~2.08~~	
12	96	339	11:35	1	0.952	A BB	142210.	50.000 UG/L	2.08	
13	63	383	13:05	1	1.076	A BB	361598.	50.000 UG/L	2.08	
14	96	410	14:00	1	1.152	A BB	165133.	50.000 UG/L	2.08	
15	83	429	14:39	1	1.205	A BB	477017.	50.000 UG/L	2.08	
16	~~101~~	~~311~~	~~10:38~~	~~1~~	~~0.874~~	~~A BB~~	~~751021.~~	~~50.000 UG/L~~	~~2.08~~	
17	62	453	15:29	1	1.272	A BB	420214.	50.000 UG/L	2.08	
18	65	450	15:22	1	1.264	A BB	323102.	50.000 UG/L	2.08	
19	114	691	23:37	19	1.000	A BB	601618.	50.000 UG/L	2.08	
20	43	452	15:27	19	0.654	A BB	76142.	50.000 UG/L	2.08	
21	97	493	16:51	19	0.713	A BB	426930.	50.000 UG/L	2.08	
22	117	505	17:15	19	0.731	A VB	288916.	50.000 UG/L	2.08	
23	43	513	17:32	19	0.742	A BB	341260.	50.000 UG/L	2.08	
24	83	526	17:58	19	0.761	A BB	456962.	50.000 UG/L	2.08	
25	63	568	19:24	19	0.822	A BB	249163.	50.000 UG/L	2.08	
26	75	577	19:43	19	0.835	A BB	451770.	50.000 UG/L	2.08	
27	130	594	20:18	19	0.860	A BB	273612.	50.000 UG/L	2.08	
28	129	616	21:03	19	0.891	A BB	328041.	50.000 UG/L	2.08	
29	97	619	21:09	19	0.896	A BB	214028.	50.000 UG/L	2.08	
30	78	610	20:50	19	0.883	A BB	566210.	50.000 UG/L	2.08	
31	75	619	21:09	19	0.896	A BB	242721.	50.000 UG/L	2.08	
32	63	652	22:17	19	0.944	A BB	143009.	50.000 UG/L	2.08	
33	173	702	23:59	19	1.016	A BB	206511.	50.000 UG/L	2.08	
34	117	848	28:58	34	1.000	A BB	544722.	50.000 UG/L	2.08	
35	43	715	24:26	34	0.843	A BB	215343.	50.000 UG/L	2.08	
36	43	764	26:06	34	0.901	A BB	158483.	50.000 UG/L	2.08	
37	164	774	26:27	34	0.913	A BB	227835.	50.000 UG/L	2.08	
38	83	775	26:29	34	0.914	A BB	333444.	50.000 UG/L	2.08	
39	92	814	27:49	34	0.960	A BB	394211.	50.000 UG/L	2.08	
40	112	853	29:09	34	1.006	A BB	506186.	50.000 UG/L	2.08	
41	106	924	31:34	34	1.090	A BB	253180.	50.000 UG/L	2.08	
42	104	1078	36:50	34	1.271	A BB	406284.	50.000 UG/L	2.08	
43	106	1126	38:28	34	1.328	A BB	251978.	50.000 UG/L	2.08	
44	~~106~~	~~1126~~	~~38:28~~	~~34~~	~~1.328~~	~~A BB~~	~~251978.~~	~~50.000 UG/L~~	~~2.08~~	
45	~~146~~	~~1320~~	~~45:06~~	~~34~~	~~1.557~~	~~A BV~~	~~228552.~~	~~50.000 UG/L~~	~~2.08~~	
46	~~146~~	~~1343~~	~~45:53~~	~~34~~	~~1.584~~	~~A BB~~	~~383749.~~	~~50.000 UG/L~~	~~2.08~~	
47	~~146~~	~~1278~~	~~43:40~~	~~34~~	~~1.507~~	~~A BB~~	~~223869.~~	~~50.000 UG/L~~	~~2.08~~	
48	98	808	27:36	34	0.953	A BB	527964.	50.000 UG/L	2.08	
49	95	1022	34:55	34	1.205	A BB	411970.	50.000 UG/L	2.08	

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	12:10	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:40	1.00	0.138	1.00	50.00	50.00	0.799	0.799	1.00
3	2:40	1.00	0.219	1.00	50.00	50.00	0.975	0.975	1.00
4	3:00		0.264						
5	3:27	1.00	0.284	1.00	50.00	50.00	1.165	1.165	1.00
6	4:49	1.00	0.396	1.00	50.00	50.00	0.631	0.631	1.00
7	7:56	1.00	0.652	1.00	50.00	50.00	1.483	1.483	1.00
8	9:01	1.00	0.742	1.00	50.00	50.00	0.312	0.312	1.00
9	9:05	1.00	0.747	1.00	50.00	50.00	0.040	0.040	1.00
10	9:52	1.00	0.812	1.00	50.00	50.00	2.571	2.571	1.00
11	9:54	1.00	0.815	1.00	50.00	50.00	0.165	0.165	1.00
12	11:35	1.00	0.952	1.00	50.00	50.00	1.028	1.028	1.00
13	13:05	1.00	1.076	1.00	50.00	50.00	2.615	2.615	1.00
14	14:00	1.00	1.152	1.00	50.00	50.00	1.194	1.194	1.00
15	14:39	1.00	1.205	1.00	50.00	50.00	3.449	3.449	1.00
16	10:38	1.00	0.874	1.00	50.00	50.00	5.430	5.430	1.00
17	15:29	1.00	1.272	1.00	50.00	50.00	3.038	3.038	1.00
18	15:22	1.00	1.264	1.00	50.00	50.00	2.336	2.336	1.00
19	23:37	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
20	15:27	1.00	0.654	1.00	50.00	50.00	0.127	0.127	1.00
21	16:51	1.00	0.713	1.00	50.00	50.00	0.710	0.710	1.00
22	17:15	1.00	0.731	1.00	50.00	50.00	0.480	0.480	1.00
23	17:32	1.00	0.742	1.00	50.00	50.00	0.567	0.567	1.00
24	17:58	1.00	0.761	1.00	50.00	50.00	0.760	0.760	1.00
25	19:24	1.00	0.822	1.00	50.00	50.00	0.414	0.414	1.00
26	19:43	1.00	0.835	1.00	50.00	50.00	0.751	0.751	1.00
27	20:18	1.00	0.860	1.00	50.00	50.00	0.455	0.455	1.00
28	21:03	1.00	0.891	1.00	50.00	50.00	0.545	0.545	1.00
29	21:09	1.00	0.896	1.00	50.00	50.00	0.356	0.356	1.00
30	20:50	1.00	0.883	1.00	50.00	50.00	0.941	0.941	1.00
31	21:09	1.00	0.896	1.00	50.00	50.00	0.403	0.403	1.00
32	22:17	1.00	0.944	1.00	50.00	50.00	0.238	0.238	1.00
33	23:59	1.00	1.016	1.00	50.00	50.00	0.343	0.343	1.00
34	28:58	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
35	24:26	1.00	0.843	1.00	50.00	50.00	0.395	0.395	1.00
36	26:06	1.00	0.901	1.00	50.00	50.00	0.291	0.291	1.00
37	26:27	1.00	0.913	1.00	50.00	50.00	0.418	0.418	1.00
38	26:29	1.00	0.914	1.00	50.00	50.00	0.612	0.612	1.00
39	27:49	1.00	0.960	1.00	50.00	50.00	0.724	0.724	1.00
40	29:09	1.00	1.006	1.00	50.00	50.00	0.929	0.929	1.00
41	31:34	1.00	1.090	1.00	50.00	50.00	0.465	0.465	1.00
42	36:50	1.00	1.271	1.00	50.00	50.00	0.746	0.746	1.00
43	38:28	1.00	1.328	1.00	50.00	50.00	0.463	0.463	1.00
44	38:28	1.00	1.328	1.00	50.00	50.00	0.463	0.463	1.00
45	45:06	1.00	1.557	1.00	50.00	50.00	0.420	0.420	1.00
46	45:53	1.00	1.584	1.00	50.00	50.00	0.704	0.704	1.00
47	43:40	1.00	1.507	1.00	50.00	50.00	0.411	0.411	1.00
48	27:36	1.00	0.953	1.00	50.00	50.00	0.969	0.969	1.00
49	34:55	1.00	1.205	1.00	50.00	50.00	0.756	0.756	1.00

MASS SPECTRUM
08/22/89 8:02:00 + 10:21
SAMPLE: BFB TUNE
CONDS.: 50NG INJECTED

DATA: BFB0822A #303
CALI: 882220V #2

BASE M/Z: 95
RIC: 109824.



000129

GC/MS TUNING AND MASS CALIBRATION

BROMOFLUOROBENZENE

CASE NUMBER:
INST ID: 1050
LAB ID: BFB0822A

LABORATORY:
SENS DATE: 08/22/89
CALI DATE:

CONTRACT:
SENS TIME: 8:02:00
ANALYST: DMW

DATA RELEASE AUTHORIZED BY: Josephine M. Black

M/Z	ION ABUNDANCE CRITERIA	SPEC # 303	
50	15 TO 40% OF MASS 95	20.55	
75	30 TO 60% OF MASS 95	57.53	
95	BASE PEAK, 100% RELATIVE ABUNDANCE	100.00	
96	5 TO 9% OF MASS 95	7.19	
173	LESS THAN 1% OF MASS 95	0.00	
174	GREATER THAN 50% OF MASS 95	63.55	
175	5 TO 9% OF MASS 174	4.18	(6.58) 1
176	BETWEEN 95% AND 101% OF MASS 174	63.71	(*100.) 1
177	5 TO 9% OF MASS 176	4.14	(6.50) 2

1 - VALUE IN PARENTHESIS IS % OF MASS 174
2 - VALUE IN PARENTHESIS IS % OF MASS 176

MASS LIST
08/22/89 8:02:00 + 10:21
SAMPLE: BFB TUNE
CONDS.: 50NG INJECTED

DATA: BFB0822A # 303
CALI: 882220V # 2

BASE M/Z: 95
RIC: 109824

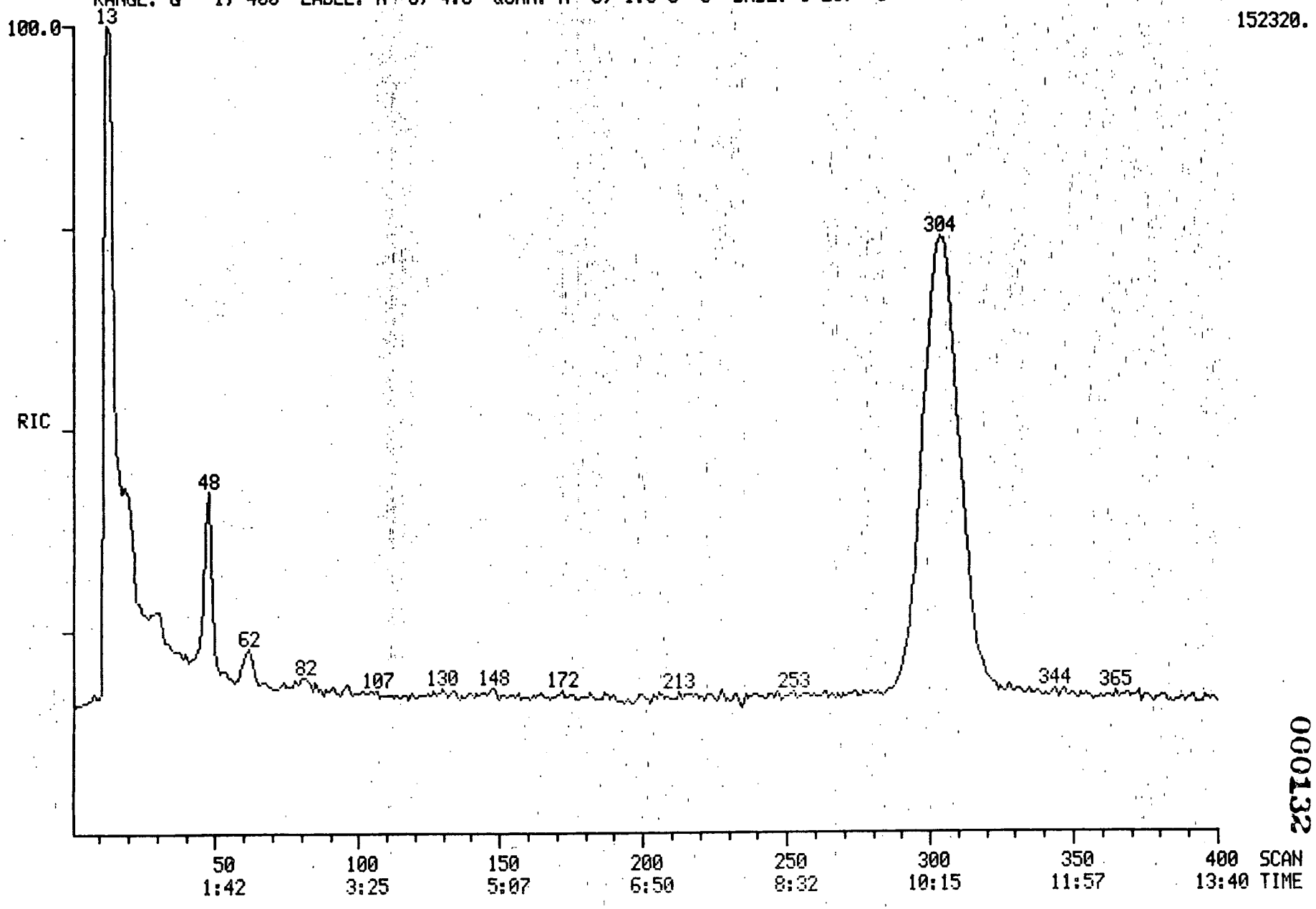
000131

36 0.00 MINIMA MIN INTEN: 0.
187 # 0 MAXIMA

MASS	% RA	MASS	% RA
36	1.08	93	4.82
37	3.93	94	9.77
38	3.30	95	100.00
39	2.87	96	7.19
40	10.77	97	2.47
41	6.36	98	0.63
42	1.80	99	0.65
43	9.83	105	1.28
44	10.19	106	0.46
45	6.59	107	0.42
47	0.72	109	1.30
49	4.14	111	1.13
50	20.55	113	0.47
51	6.58	115	0.64
53	0.63	117	0.70
54	0.56	119	0.98
55	6.75	120	0.50
56	4.78	123	0.60
57	14.07	128	1.09
58	4.42	131	0.62
59	1.37	133	0.67
60	0.70	141	0.54
61	4.52	143	0.58
62	4.53	145	0.43
63	3.20	174	63.55
65	0.45	175	4.18
67	2.63	176	63.71
68	12.42	177	4.14
69	15.76	187	0.47
70	2.70		
71	5.60		
72	1.09		
73	10.58		
74	17.16		
75	57.53		
76	5.28		
77	1.30		
78	0.66		
79	3.02		
80	0.52		
81	4.77		
82	1.11		
83	2.63		
84	0.57		
85	2.87		
86	0.87		
87	3.40		
88	5.06		
89	1.08		
91	2.11		
92	2.61		

RIC
08/22/89 8:02:00
SAMPLE: BFB TUNE
CONDS.: 50NG INJECTED
RANGE: G 1, 400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BFB0822A #1 SCANS 1 TO 400
CALI: 882220V #2

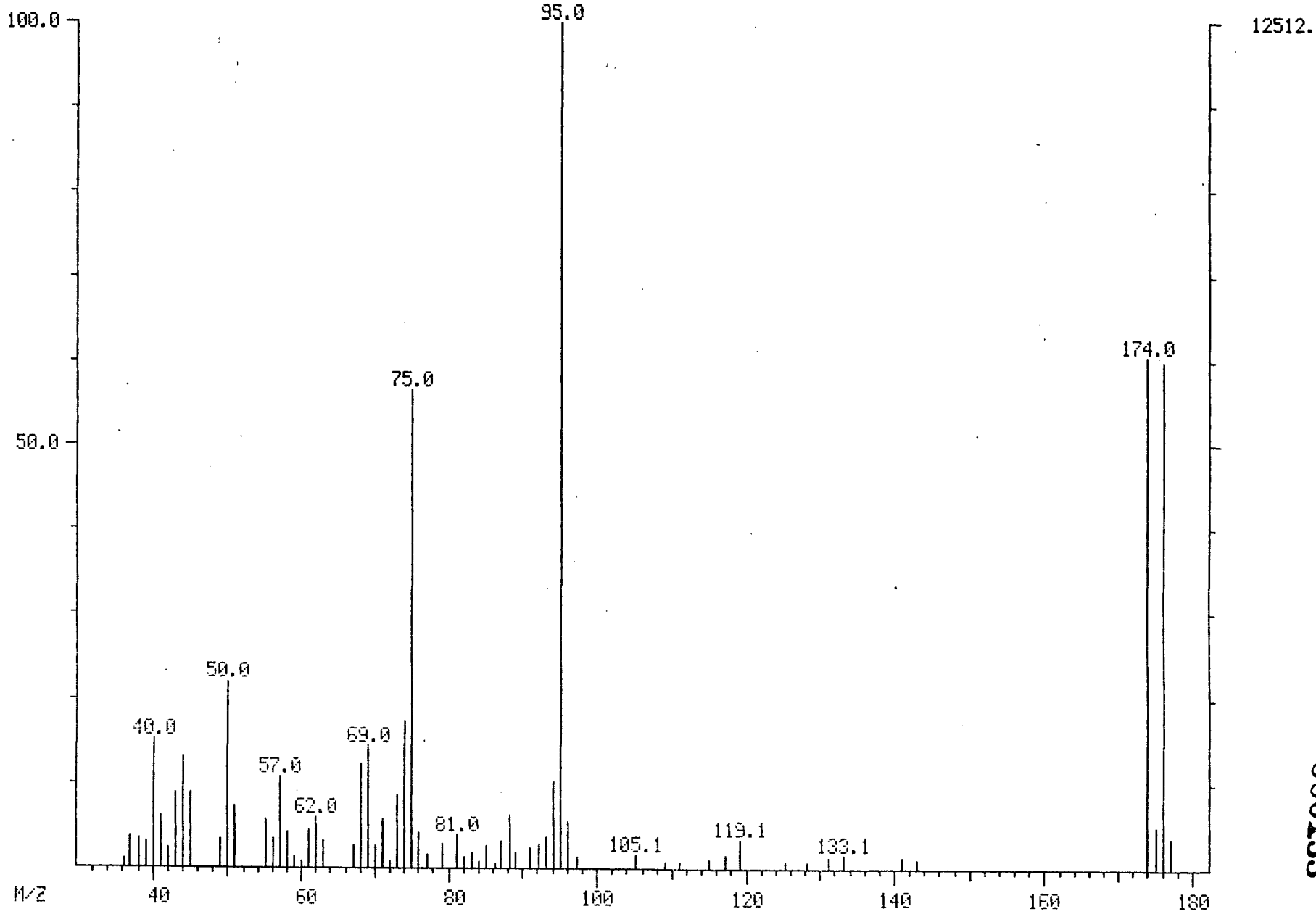


000132

MASS SPECTRUM
08/23/89 7:45:00 + 13:03
SAMPLE: BFB TUNE
CONDS.: 50NG INJECTED

DATA: BFB0823A #382
CALI: BFB0823A #2

BASE M/Z: 95
RIC: 70272.



000133

GC/MS TUNING AND MASS CALIBRATION

BROMOFLUOROBENZENE

CASE NUMBER:		LABORATORY:		CONTRACT:	
INST ID:	1050	SENS DATE:	08/23/89	SENS TIME:	7:45:00
LAB ID:	BFB0823A	CALI DATE:		ANALYST:	DMW

DATA RELEASE AUTHORIZED BY: Josephine M. Black

M/Z	ION ABUNDANCE CRITERIA	SPEC # 382	
50	15 TO 40% OF MASS 95	21.93	
75	30 TO 60% OF MASS 95	56.65	
95	BASE PEAK, 100% RELATIVE ABUNDANCE	100.00	
96	5 TO 9% OF MASS 95	5.60	
173	LESS THAN 1% OF MASS 95	0.00	
174	GREATER THAN 50% OF MASS 95	60.36	
175	5 TO 9% OF MASS 174	4.99	(8.27) 1
176	BETWEEN 95% AND 101% OF MASS 174	60.04	(99.47) 1
177	5 TO 9% OF MASS 176	3.60	(5.99) 2

1 - VALUE IN PARENTHESIS IS % OF MASS 174
2 - VALUE IN PARENTHESIS IS % OF MASS 176

Mass List
08/23/89 7:45:00 + 13:03
Sample: BFB TUNE
Conds.: 50NG INJECTED

Data: BFB0823A # 382
Cali: BFB0823A # 2

Base m/z: 95
RIC: 70272.

000135

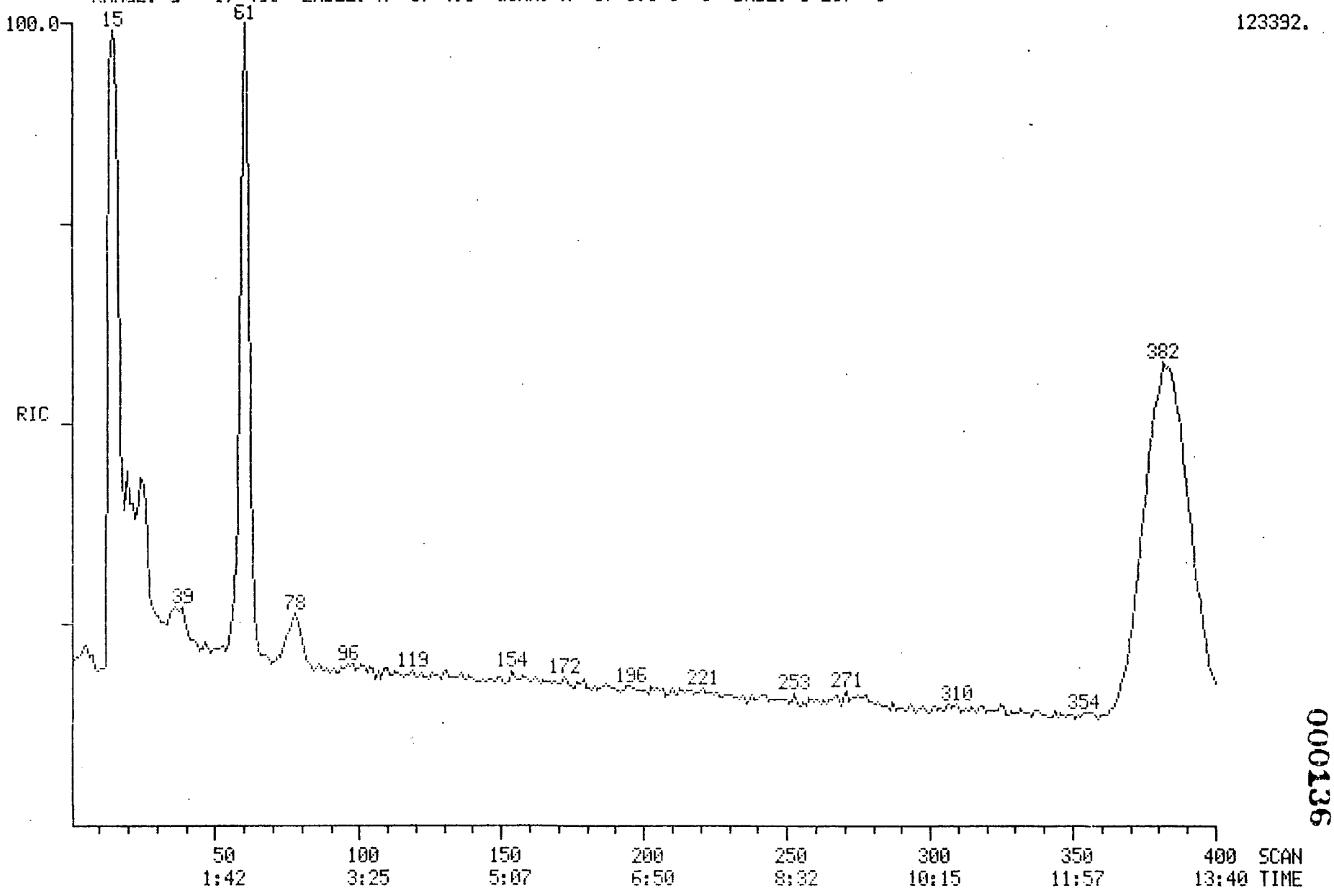
36 0.00 Minima
177 # 0 Maxima

Min inten: 0.

Mass	% RA	Mass	% RA
36	1.05	109	0.66
37	3.64	111	0.74
38	3.38	115	1.16
39	3.20	117	1.52
40	15.07	119	3.36
41	6.23	125	0.81
42	2.45	128	0.87
43	9.02	131	1.43
44	13.09	133	1.57
45	8.82	141	1.18
49	3.41	143	1.02
50	21.93	174	60.36
51	7.24	175	4.99
55	5.88	176	60.04
56	3.40	177	3.60
57	10.76		
58	4.27		
59	1.30		
60	0.69		
61	4.49		
62	5.93		
63	3.19		
67	2.60		
68	12.29		
69	14.42		
70	2.69		
71	5.75		
72	0.82		
73	8.54		
74	17.33		
75	56.65		
76	4.08		
77	1.53		
79	2.82		
81	4.00		
82	1.41		
83	1.94		
84	0.71		
85	2.73		
86	0.64		
87	3.06		
88	6.30		
89	1.77		
91	2.31		
92	2.89		
93	3.60		
94	10.31		
95	100.00		
96	5.60		
97	1.27		
105	1.69		

RIC
08/23/89 7:45:00
SAMPLE: BFB TUNE
CONDS.: 50NG INJECTED
RANGE: G 1, 400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BFB0823A #382 SCANS 1 TO 400
CALI: BFB0823A #2



000136

B 1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WATER_BLANK

Lab Name: Q C INC. Contract: GANNET-FLEM

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

Matrix: (soil/water) WATER Lab Sample ID: BLK0823A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: BLK0823A

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 08/23/89

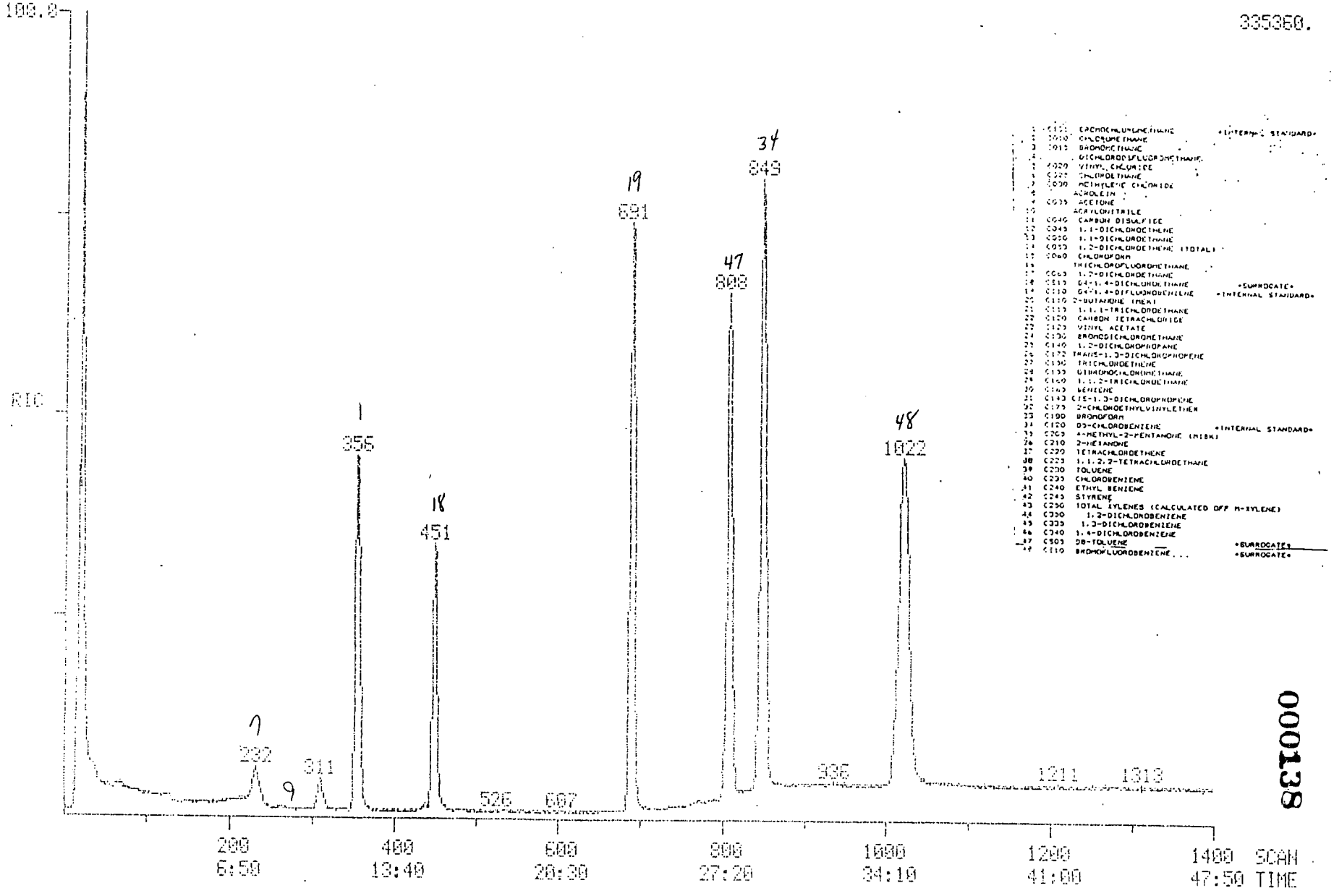
Column: (pack/cap) PACK Dilution Factor: 1.0

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	7	
67-64-1	Acetone	3	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	100	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	50	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	50	U
591-78-6	2-Hexanone	50	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	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
08/23/89 9:02:00
SAMPLE: STANDARD
CONDS.: 50NG PURGED
RANGE: G 1,1400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BLK0823A #1
CALI: BLK0823A #2

SCANS 1 TO 1400



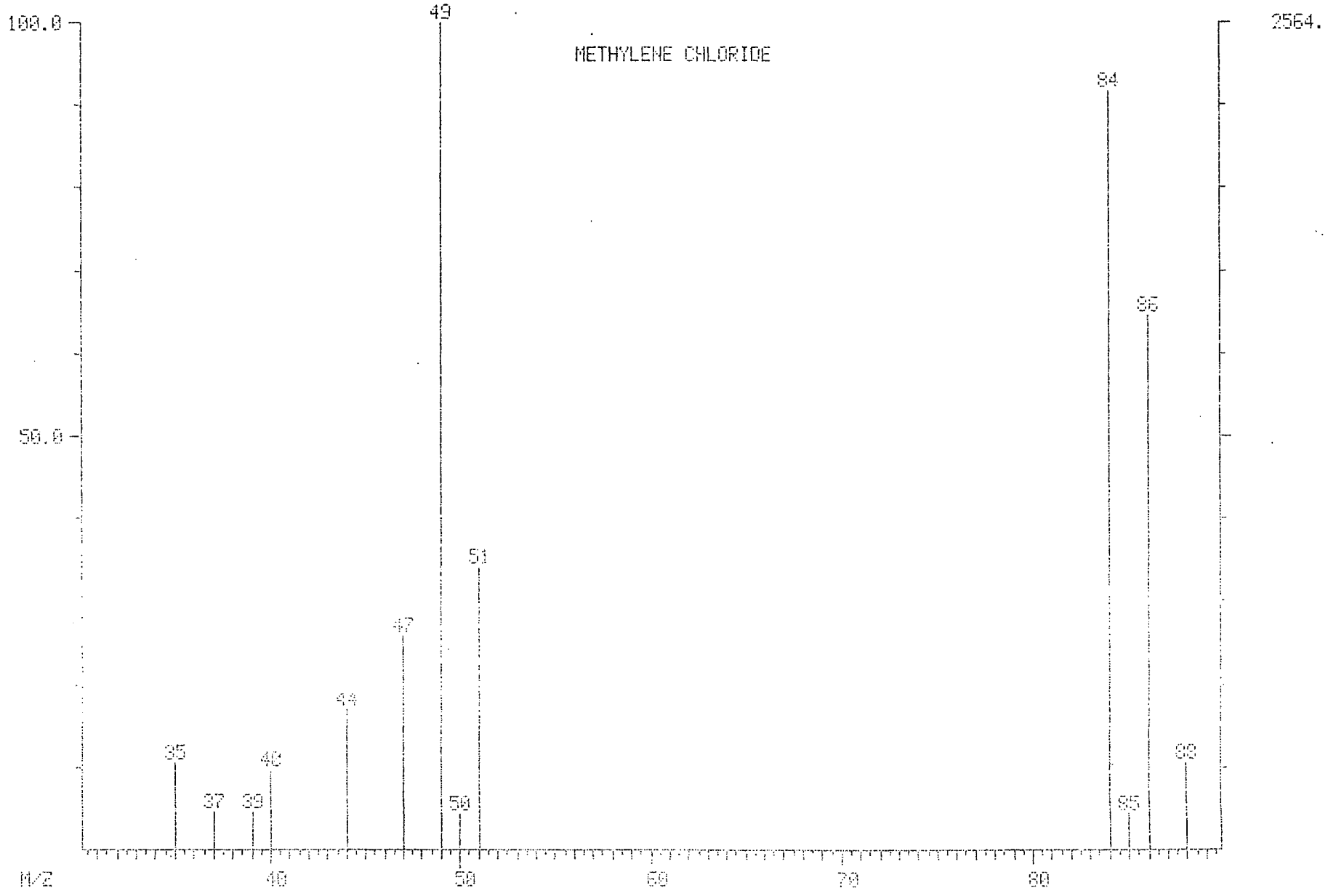
1 C105 DICHLORODIFLUOROMETHANE *INTERNAL STANDARD*
2 C010 CHLOROMETHANE
3 C015 BROMOMETHANE
4 DICHLORODIFLUOROMETHANE
5 C020 VINYL CHLORIDE
6 C025 CHLOROETHANE
7 C030 METHYLENE CHLORIDE
8 ACROLEIN
9 C035 ACETONE
10 ACRYLONITRILE
11 C040 CARBON DISULFIDE
12 C045 1,1-DICHLOROETHENE
13 C050 1,1-DICHLOROETHANE
14 C055 1,2-DICHLOROETHENE (TOTAL)
15 C060 CHLOROFORM
16 TRICHLOROFLUOROMETHANE
17 C065 1,2-DICHLOROETHANE
18 C115 D4-1,4-DICHLOROETHANE *SURROGATE*
19 C110 D4-1,4-DIFLUOROBENZENE *INTERNAL STANDARD*
20 C130 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 C330 1,2-DICHLOROBENZENE
45 C335 1,3-DICHLOROBENZENE
46 C340 1,4-DICHLOROBENZENE
47 C505 D8-TOLUENE *SURROGATE*
48 C510 BROMOFLUOROBENZENE *SURROGATE*

000138

MASS SPECTRUM
09/23/89 9:02:00 + 7:56
SAMPLE: STANDARD
CONDS.: 50NG PURGED
ENHANCED (S 15B 2N 0T)

DATA: BLK0923A #232
CALI: BLK0923A #2

BASE M/Z: 49
RIC: 9792.

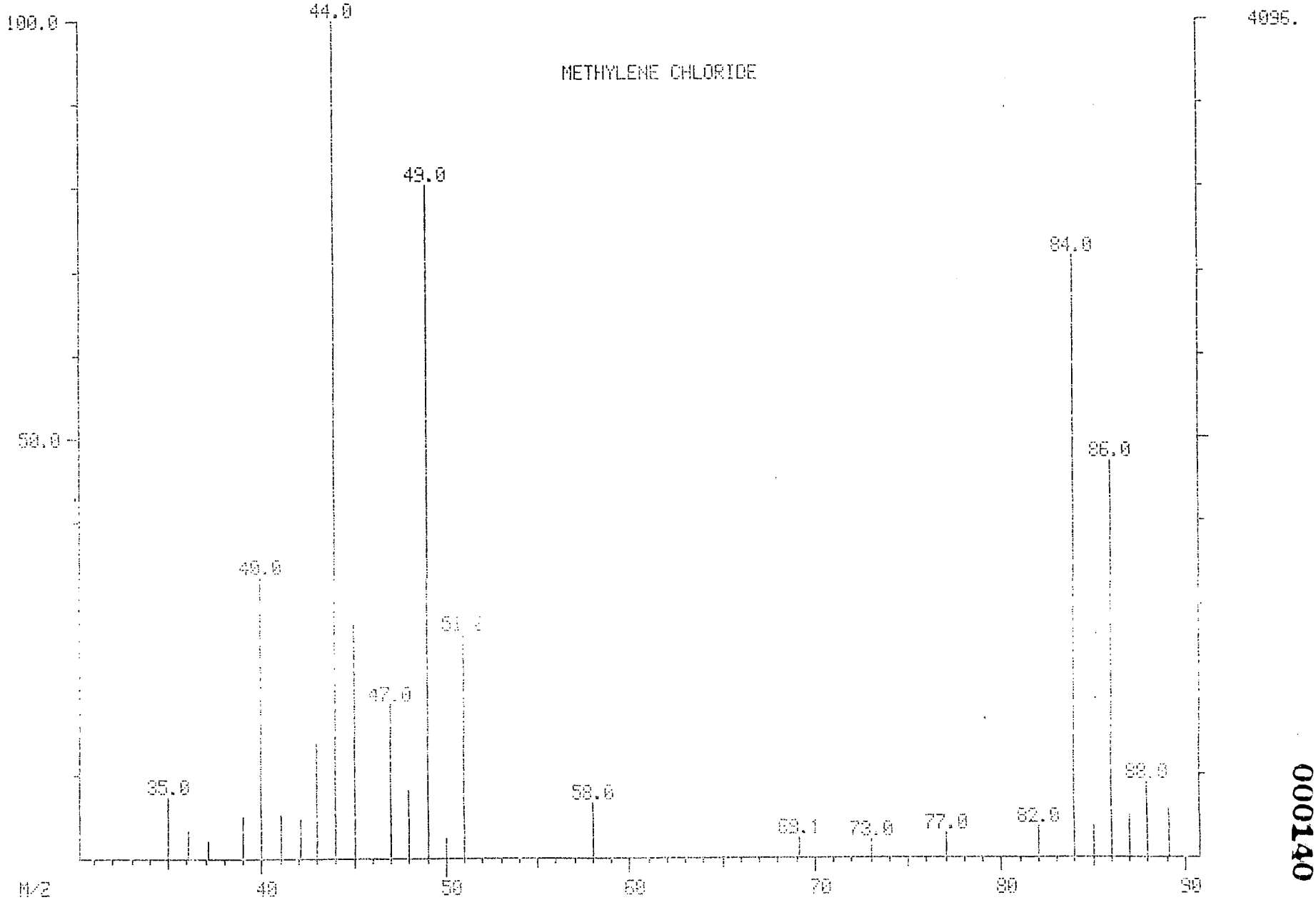


000139

MASS SPECTRUM
08/23/89 9:02:00 + 7:56
SAMPLE: STANDARD
CONDS.: 50NG PURGED

DATA: BLK0823A #232
CALI: BLK0823A #2

BASE M/Z: 44
RIC: 20415.

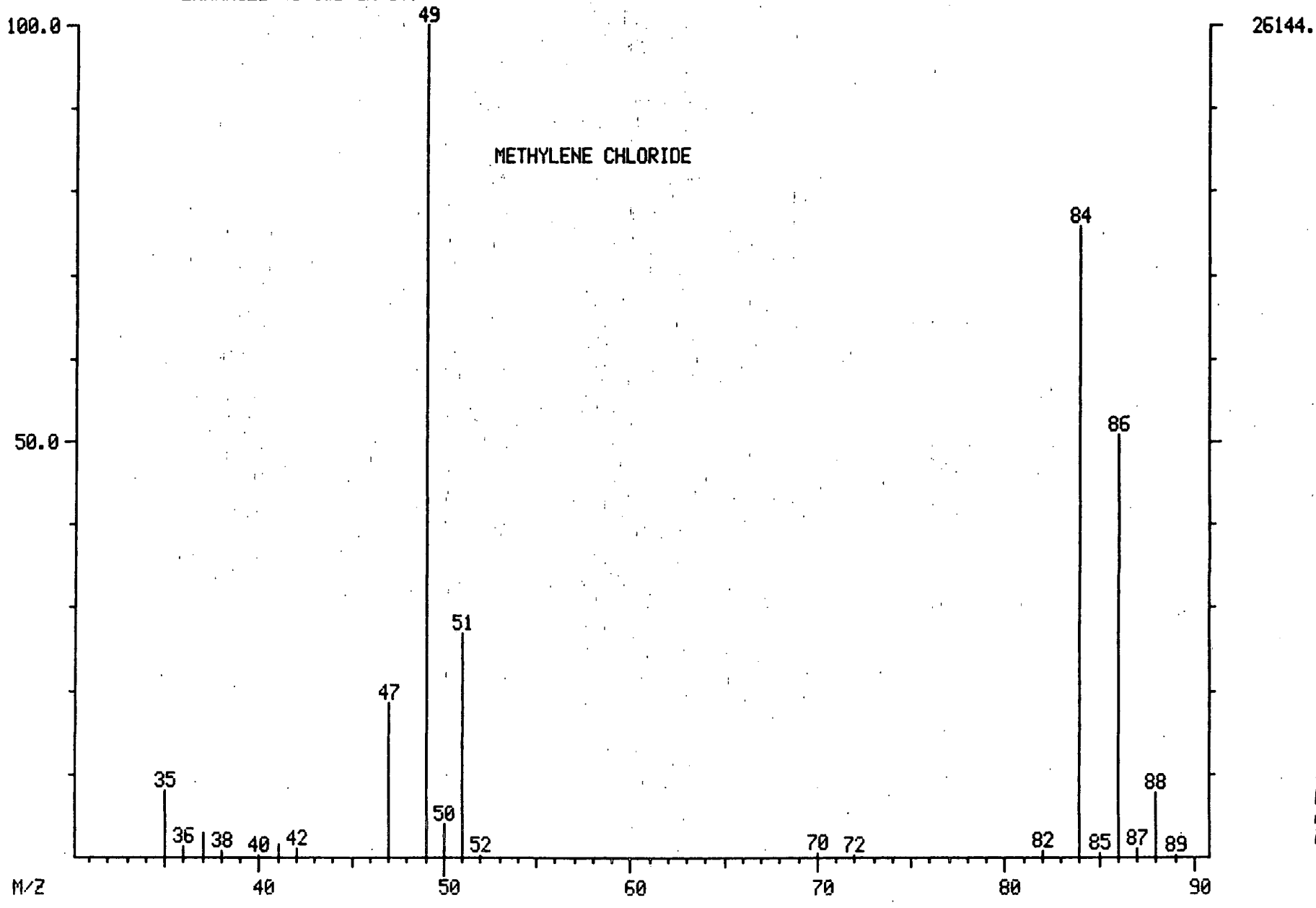


000140

MASS SPECTRUM
08/23/89 8:01:00 + 7:56
SAMPLE: STANDARD
CONDS.: 50NG PURGED
ENHANCED (S 15B 2N 0T)

DATA: VS050A0823 #232
CALI: VS050A0823 #2

BASE M/Z: 49
RIC: 79616.

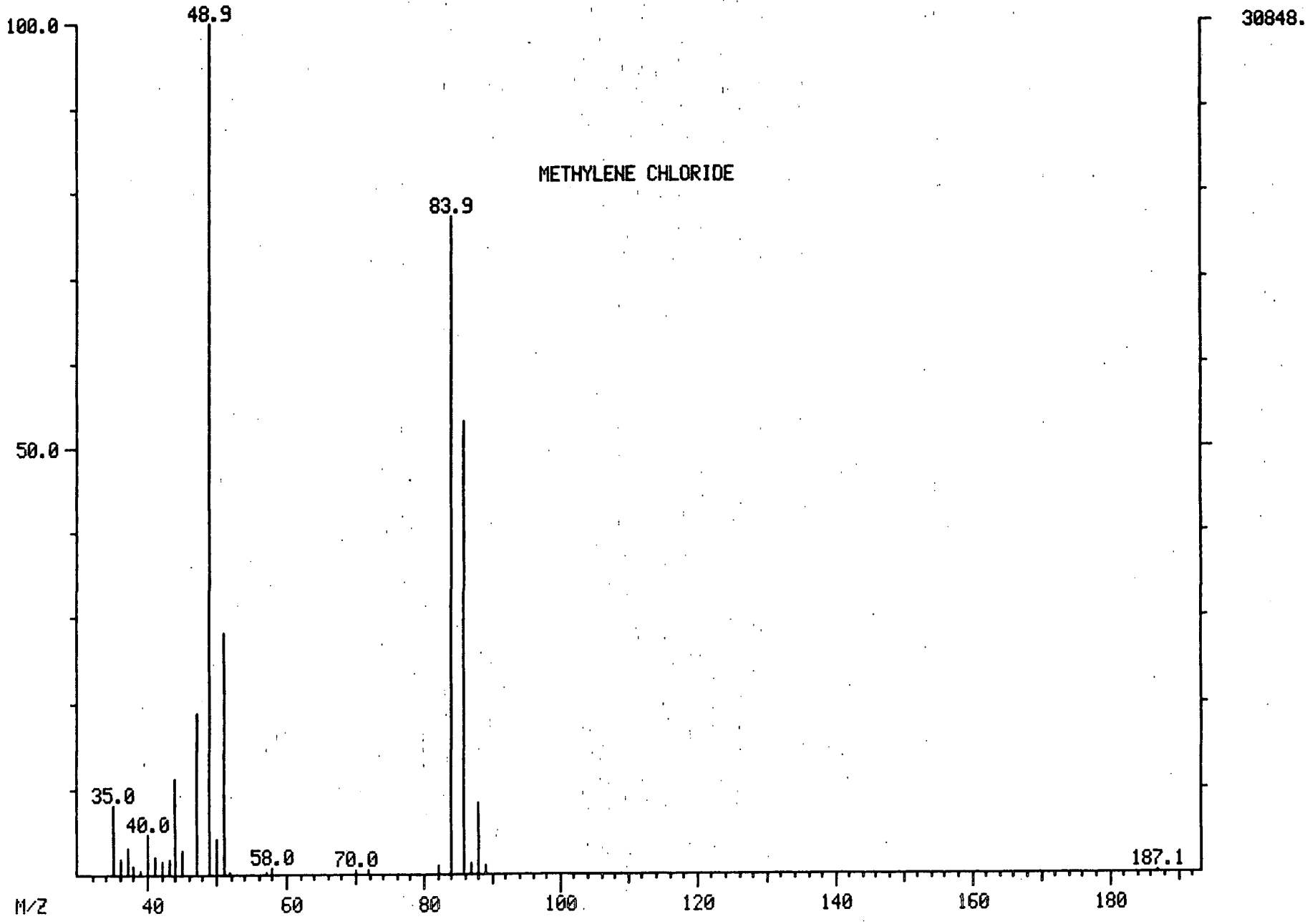


000141

MASS SPECTRUM
08/23/89 8:01:00 + 7:56
SAMPLE: STANDARD
CONDS.: 50NG PURGED

DATA: VS050A0823 #232
CALI: VS050A0823 #2

BASE M/Z: 49
RIC: 103168.

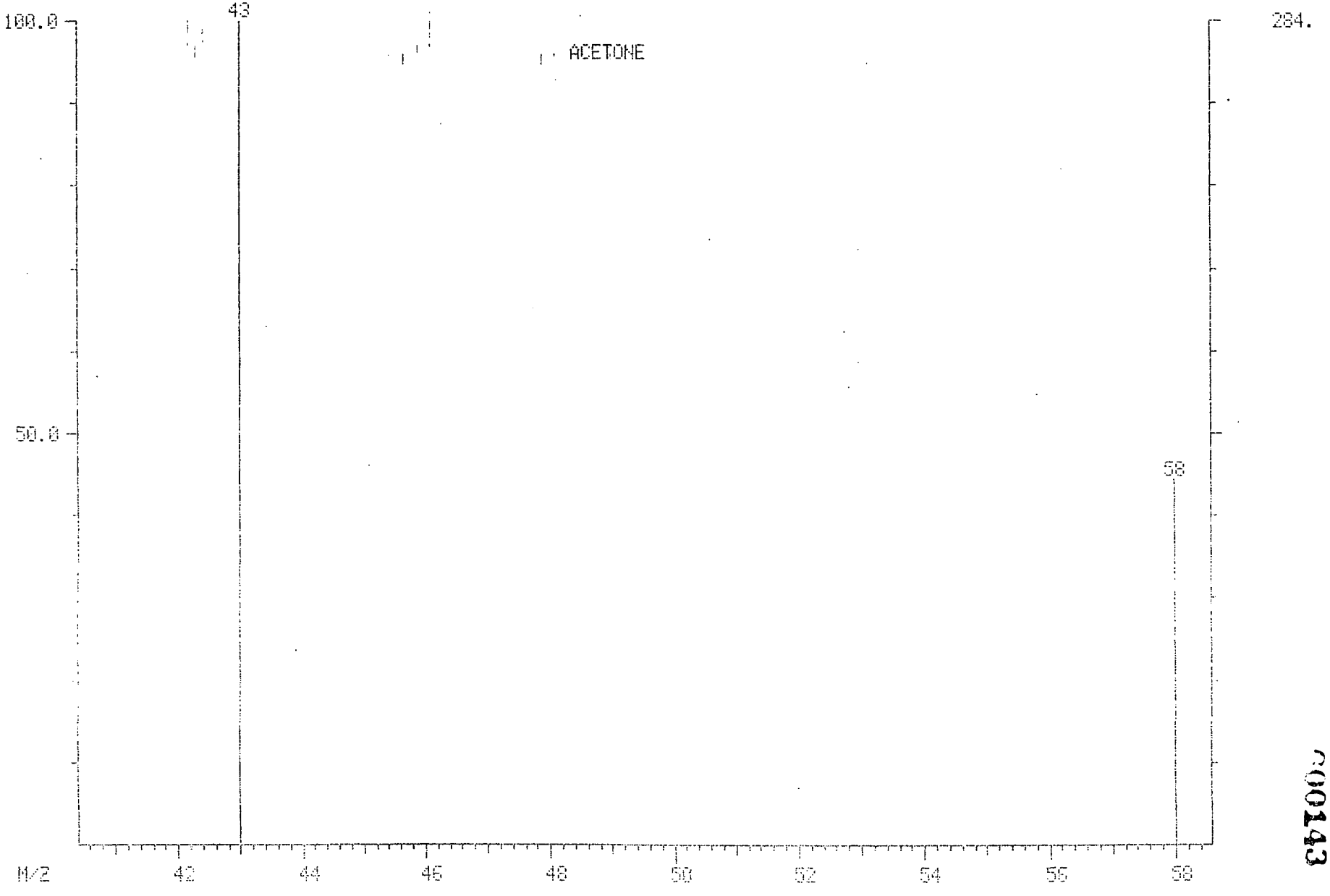


000142

MASS SPECTRUM
08/23/89 9:02:00 + 8:55
SAMPLE: STANDARD
CONDS.: 50NG PURGED
ENHANCED (S 15B 2N 0T)

DATA: BLK0823A #261
CALI: BLK0823A #2

BASE M/Z: 43
RIC: 410.

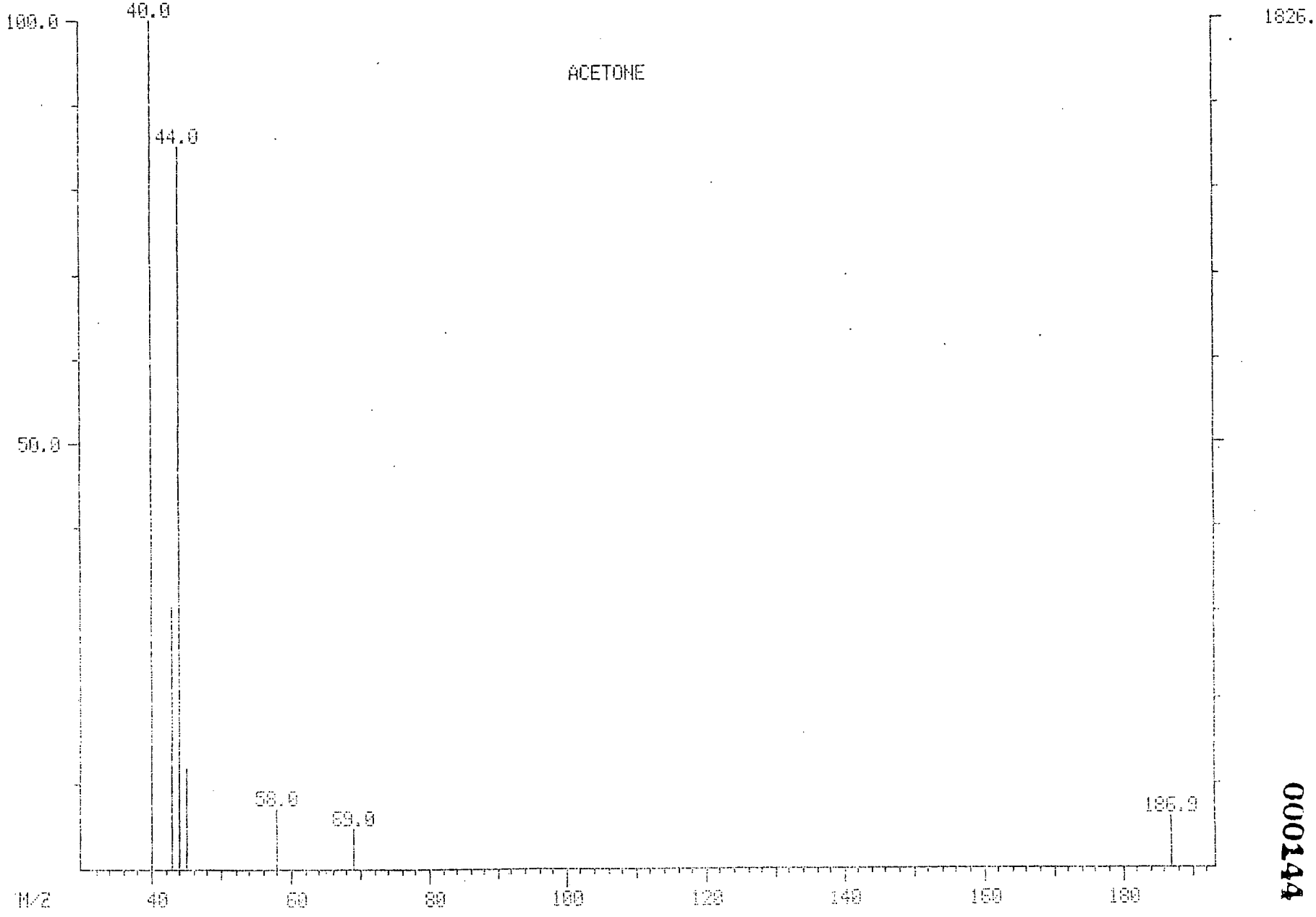


000143

MASS SPECTRUM
08/23/89 9:02:00 + 8:55
SAMPLE: STANDARD
CONDS.: 50NG PURGED

DATA: BLK0823A #261
CALI: BLK0823A #2

BASE M/Z: 40
RIC: 4488.

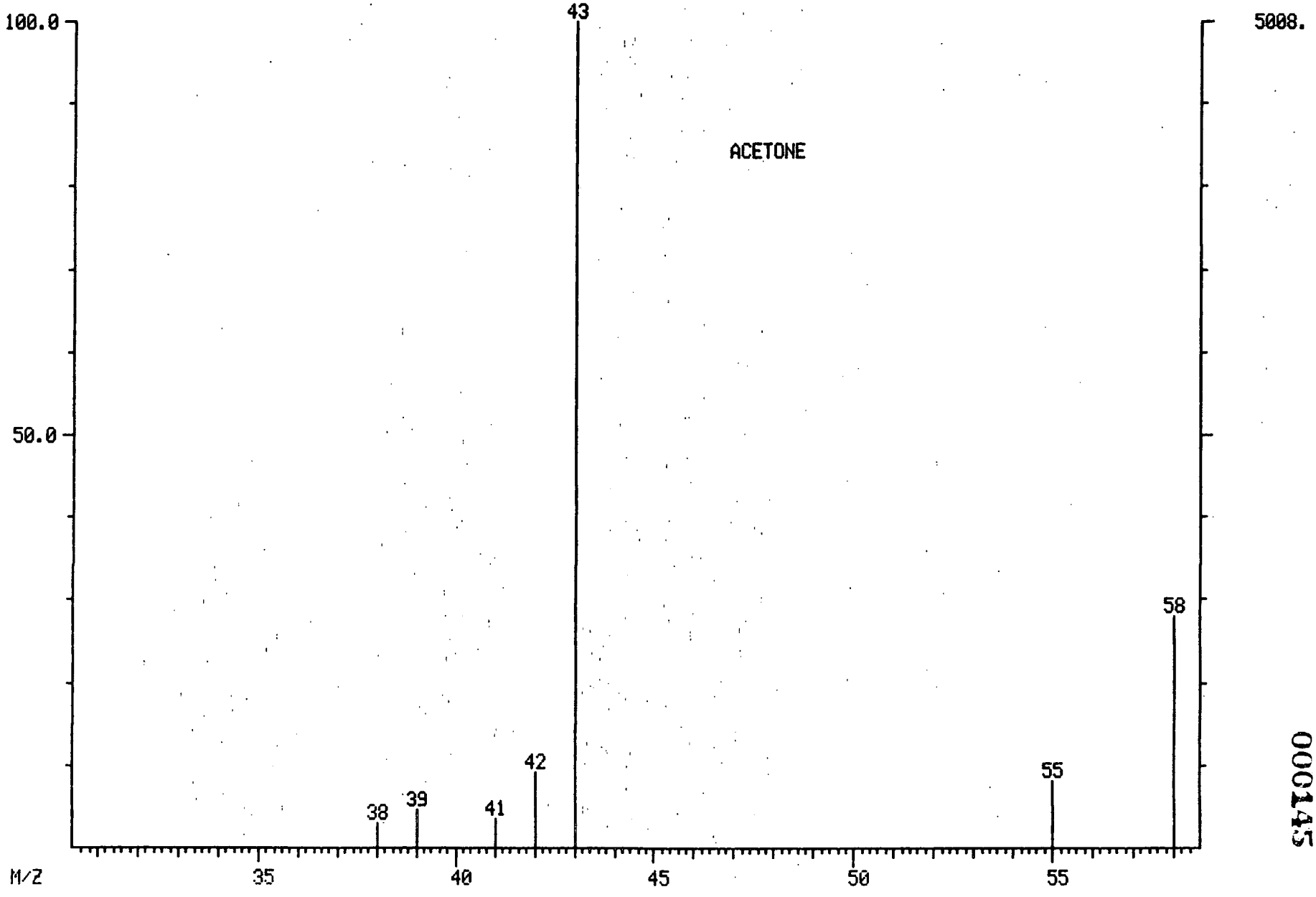


000144

MASS SPECTRUM
08/23/89 8:01:00 + 9:01
SAMPLE: STANDARD
CONDS.: 50NG PURGED
ENHANCED (S 15B 2N 0T)

DATA: V5050A0823 #264
CALI: V5050A0823 #2

BASE M/Z: 43
RIC: 7824.

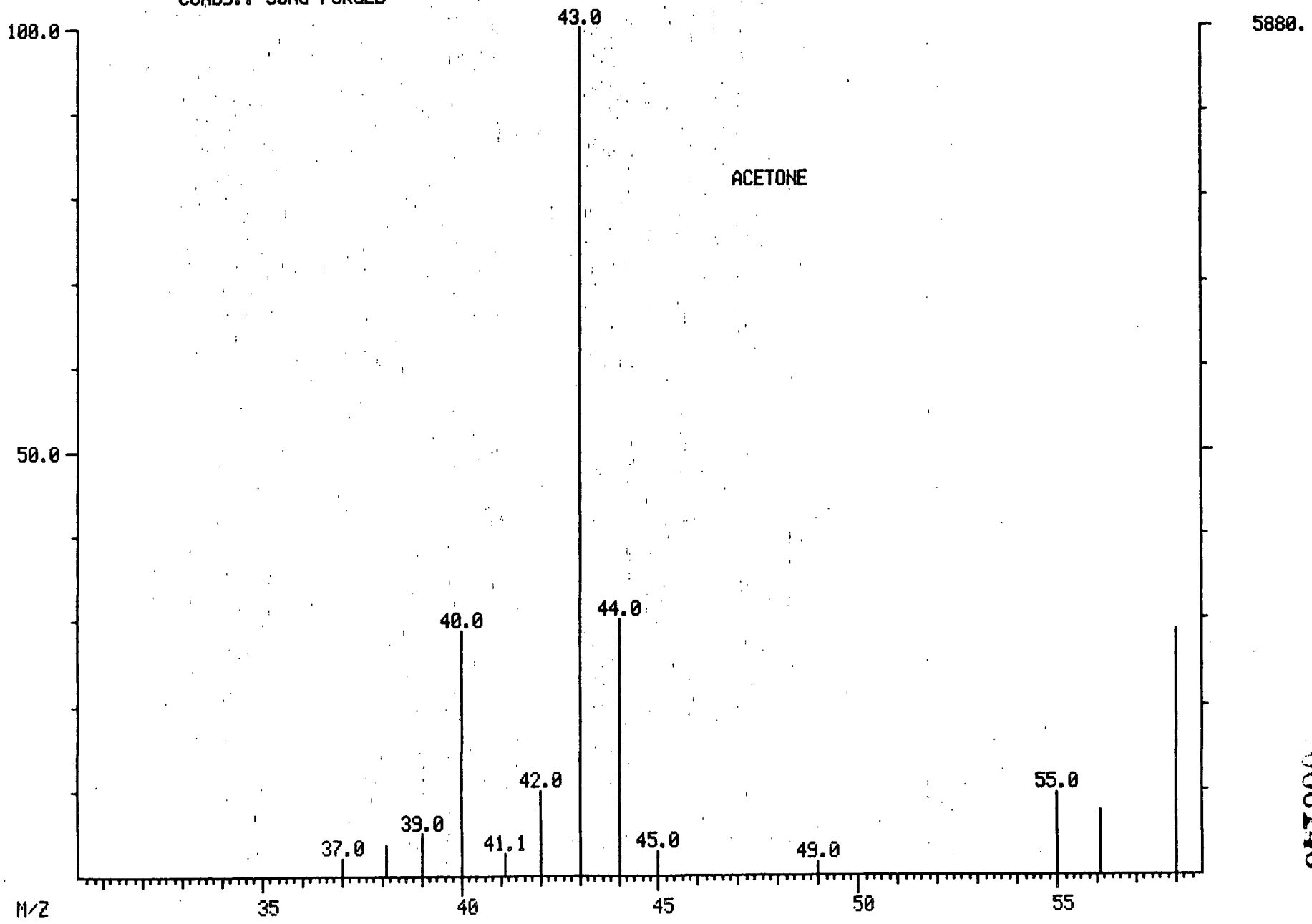


000145

MASS SPECTRUM
08/23/89 8:01:00 + 9:01
SAMPLE: STANDARD
CONDS.: 50NG PURGED

DATA: V5050A0823 #264
CALI: V5050A0823 #2

BASE M/Z: 43
RIC: 13664.



000146

QUANTITATION REPORT FILE: BLK0823A

DATA: BLK0823A.TI
08/23/89 9:02:00
SAMPLE: STANDARD
CONDS.: 50NG PURGED
FORMULA:
SUBMITTED BY: QC

INSTRUMENT: 1050
ANALYST: DMW

WEIGHT: 0.006
ACCT. NO.: VS050

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
RESP. FAC. FROM LIBRARY ENTRY

No	NAME		
1	CI01	BROMOCHLOROMETHANE	*** INTERNAL STANDARD #1 ***
2	C010	CHLOROMETHANE	**
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	*
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8	C035	2-PROPANONE (ACETONE)	
9		ACROLEIN	
10	C040	CARBON DISULFIDE	
11		ACRYLONITRILE	
12	C045	1,1-DICHLOROETHENE	*
13	C050	1,1-DICHLOROETHANE	**
14	C053	TRANS-1,2-DICHLOROETHENE	
15	C060	CHLOROFORM	*
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	CS15	1,2-DICHLOROETHANE-D4	*** SURROGATE #1 ***
19	CI10	1,4-DIFLUOROBENZENE	*** INTERNAL STANDARD #2 ***
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-CHLOROETHYL VINYL ETHER	
33	C180	BROMOFORM	**
34	CI20	CHLOROBENZENE-D5	*** INTERNAL STANDARD #3 ***
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	XYLENES	
44	C250	XYLENES	
45	C350	1,2-DICHLOROBENZENE	
46	C340	1,4-DICHLOROBENZENE	
47	C335	1,3-DICHLOROBENZENE	

No	Name								
48	CS05	TOLUENE-D8					*** SURROGATE #2 ***		
49	CS10	4-BROMOFLUOROBENZENE					*** SURROGATE #3 ***		

No	M/Z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	356	12:10	1	1.000	A BB	134602.	50.000 UG/L	15.93
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	84	232	7:56	1	0.652	A BB	26010.	6.516 UG/L	2.08
8	43	262	8:57	1	0.736	A BV	2257.	2.691 UG/L	0.86
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	~~63~~	~~352~~	~~12:14~~	~~1~~	~~1.006~~	~~A*BB~~	~~961.~~	~~0.137 UG/L~~	~~0.04~~ Dmw 9/1/89
14	NOT FOUND								
15	NOT FOUND								
16	~~101~~	~~311~~	~~10:38~~	~~1~~	~~0.874~~	~~A BB~~	~~49103.~~	~~3.359 UG/L~~	~~1.07~~ Dmw 9/1/89
17	NOT FOUND								
18	65	451	15:25	1	1.267	A BB	306545.	48.743 UG/L	15.53
19	114	691	23:37	19	1.000	A BB	594431.	50.000 UG/L	15.93 Dmw 9/1/89
20	~~43~~	~~451~~	~~15:31~~	~~19~~	~~0.657~~	~~A BV~~	~~4673.~~	~~3.106 UG/L~~	~~0.99~~ Dmw 9/1/89
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	~~130~~	~~575~~	~~20:20~~	~~19~~	~~0.861~~	~~A BB~~	~~211.~~	~~0.039 UG/L~~	~~0.01~~ Dmw 9/1/89
28	NOT FOUND								
29	NOT FOUND								
30	~~76~~	~~612~~	~~20:55~~	~~19~~	~~0.906~~	~~A BB~~	~~751.~~	~~0.067 UG/L~~	~~0.02~~ Dmw 9/1/89
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	117	849	29:00	34	1.000	A BB	537052.	50.000 UG/L	15.93 Dmw 9/1/89
35	~~43~~	~~714~~	~~24:24~~	~~34~~	~~0.841~~	~~A BB~~	~~1537.~~	~~0.362 UG/L~~	~~0.12~~ Dmw 9/1/89
36	~~42~~	~~765~~	~~26:12~~	~~34~~	~~0.901~~	~~A BB~~	~~1826.~~	~~0.424 UG/L~~	~~0.14~~ Dmw 9/1/89
37	NOT FOUND								
38	~~83~~	~~773~~	~~26:25~~	~~34~~	~~0.910~~	~~A*BV~~	~~761.~~	~~0.116 UG/L~~	~~0.04~~ Dmw 9/1/89
39	~~92~~	~~814~~	~~27:49~~	~~34~~	~~0.959~~	~~A BB~~	~~2034.~~	~~0.262 UG/L~~	~~0.08~~ Dmw 9/1/89
40	~~112~~	~~853~~	~~29:09~~	~~34~~	~~1.005~~	~~A BB~~	~~447.~~	~~0.045 UG/L~~	~~0.01~~ Dmw 9/1/89
41	~~106~~	~~922~~	~~31:20~~	~~34~~	~~1.086~~	~~A BB~~	~~194.~~	~~0.039 UG/L~~	~~0.01~~ Dmw 9/1/89
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	~~146~~	~~1326~~	~~45:18~~	~~34~~	~~1.562~~	~~A BB~~	~~114.~~	~~0.025 UG/L~~	~~0.01~~ Dmw 9/1/89
46	~~146~~	~~1347~~	~~45:81~~	~~34~~	~~1.587~~	~~A BV~~	~~159.~~	~~0.021 UG/L~~	~~0.01~~ Dmw 9/1/89
47	~~146~~	~~1275~~	~~43:34~~	~~34~~	~~1.502~~	~~A BB~~	~~80.~~	~~0.018 UG/L~~	~~0.01~~ Dmw 9/1/89
48	98	808	27:36	34	0.952	A BB	530064.	50.916 UG/L	16.22
49	95	1021	34:53	34	1.203	A BB	385182.	47.416 UG/L	15.11

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	12:10	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:40		0.138						
3	2:40		0.219						
4	3:00		0.264						
5	3:27		0.284						
6	4:49		0.396						
7	7:56	1.00	0.652	1.00	6.52	50.00	0.193	1.483	0.13
8	9:01	0.99	0.742	0.99	2.69	50.00	0.017	0.312	0.05
9	9:05		0.747						
10	9:52		0.812						
11	9:54		0.815						
12	11:35		0.952						
13	13:05	0.93	1.076	0.93	0.14	50.00	0.007	2.615	0.00
14	14:00		1.152						
15	14:39		1.205						
16	10:38	1.00	0.874	1.00	3.36	50.00	0.365	5.430	0.07
17	15:29		1.272						
18	15:22	1.00	1.264	1.00	48.74	50.00	2.277	2.336	0.97
19	23:37	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
20	15:27	1.00	0.654	1.00	3.11	50.00	0.008	0.127	0.06
21	16:51		0.713						
22	17:15		0.731						
23	17:32		0.742						
24	17:58		0.761						
25	19:24		0.822						
26	19:43		0.835						
27	20:18	1.00	0.860	1.00	0.04	50.00	0.000	0.455	0.00
28	21:03		0.891						
29	21:09		0.896						
30	20:50	1.00	0.883	1.00	0.07	50.00	0.001	0.941	0.00
31	21:09		0.896						
32	22:17		0.944						
33	23:59		1.016						
34	28:58	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
35	24:26	1.00	0.843	1.00	0.36	50.00	0.003	0.395	0.01
36	26:06	1.00	0.901	1.00	0.42	50.00	0.002	0.291	0.01
37	26:27		0.913						
38	26:23	1.00	0.914	1.00	0.12	50.00	0.001	0.612	0.00
39	27:49	1.00	0.960	1.00	0.26	50.00	0.004	0.724	0.01
40	29:09	1.00	1.006	1.00	0.04	50.00	0.001	0.929	0.00
41	31:34	1.00	1.090	1.00	0.04	50.00	0.000	0.465	0.00
42	36:50		1.271						
43	38:28		1.328						
44	38:28		1.328						
45	45:06	1.00	1.557	1.00	0.03	50.00	0.000	0.420	0.00
46	45:53	1.00	1.584	1.00	0.02	50.00	0.000	0.704	0.00
47	43:40	1.00	1.507	1.00	0.02	50.00	0.000	0.411	0.00
48	27:36	1.00	0.953	1.00	50.92	50.00	0.987	0.969	1.02
49	34:55	1.00	1.205	1.00	47.42	50.00	0.717	0.756	0.95

B 1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C29A_MWMS

Lab Name: Q C INC. Contract: GANNET-FLEM

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

Matrix: (soil/water) WATER Lab Sample ID: 883612

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 10031VS

Level: (low/med) LOW Date Received: 08/15/89

% Moisture: not dec. Date Analyzed: 08/23/89

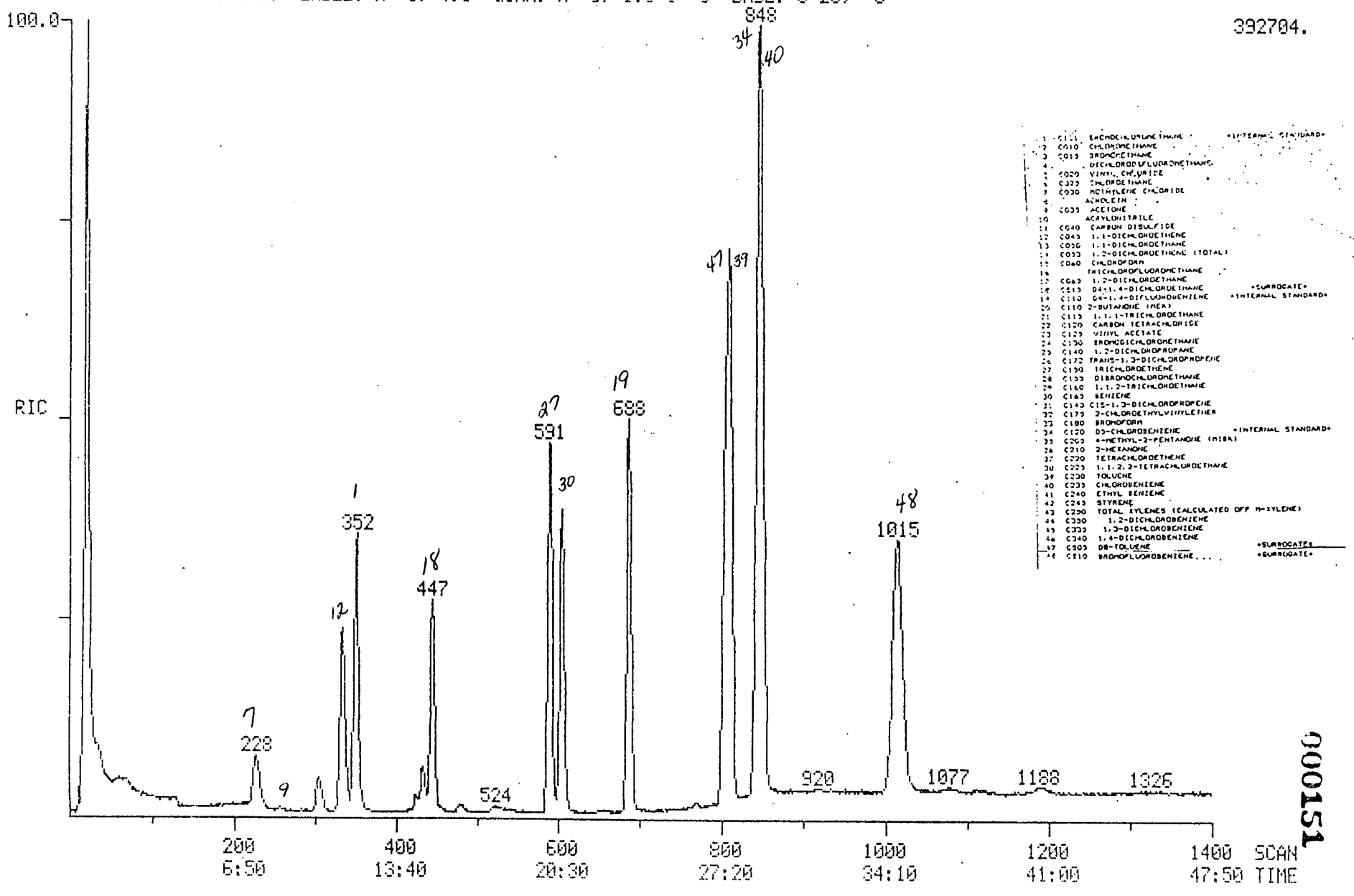
Column: (pack/cap) PACK Dilution Factor: 1.0

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	14	B
67-64-1	Acetone	10	BJ
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	100	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	50	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	50	U
591-78-6	2-Hexanone	50	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	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
08/23/88 13:10:00
SAMPLE: MATRIX SPIKE
CONDS.: 5MLS + 50NG CLP STD
RANGE: G 1,1400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 10031VS #1
CALI: 10031VS #2

SCANS 1 TO 1400



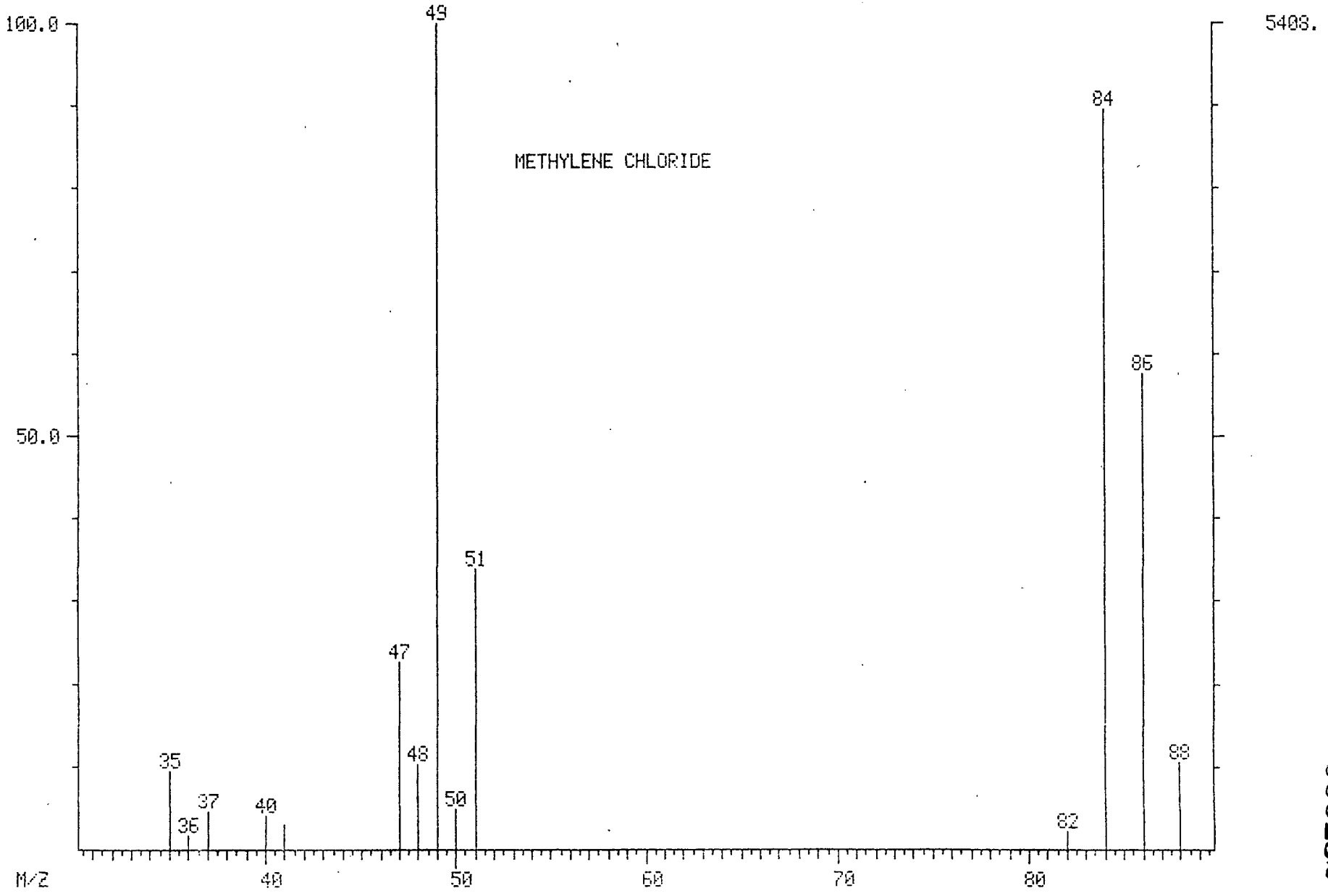
1	C005	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	C010	CHLOROMETHANE	
3	C013	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	
6	C023	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8		ACROLEIN	
9	C035	ACETONE	
10		ACRYLONITRILE	
11	C040	CARBON DISULFIDE	
12	C045	1,1-DICHLOROETHENE	
13	C050	1,1-DICHLOROETHANE	
14	C055	1,2-DICHLOROETHENE (TOTAL)	
15	C060	CHLOROFORM	
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	C075	D4-1,4-DICHLOROETHANE	*SURROGATE*
19	C110	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	C330	1,2-DICHLOROBENZENE	
45	C335	1,3-DICHLOROBENZENE	
46	C340	1,4-DICHLOROBENZENE	
47	C305	D8-TOLUENE	*SURROGATE*
48	C310	BROMOFLUOROBENZENE...	*SURROGATE*

000151

MASS SPECTRUM
08/23/89 13:10:00 + 7:47
SAMPLE: MATRIX SPIKE
CONDS.: 5ML5 + 50NG CLP STD
ENHANCED (S 15B 2N 0T)

DATA: 10031V5 #228
CALI: 10031V5 #2

BASE M/Z: 49
RIC: 19136.

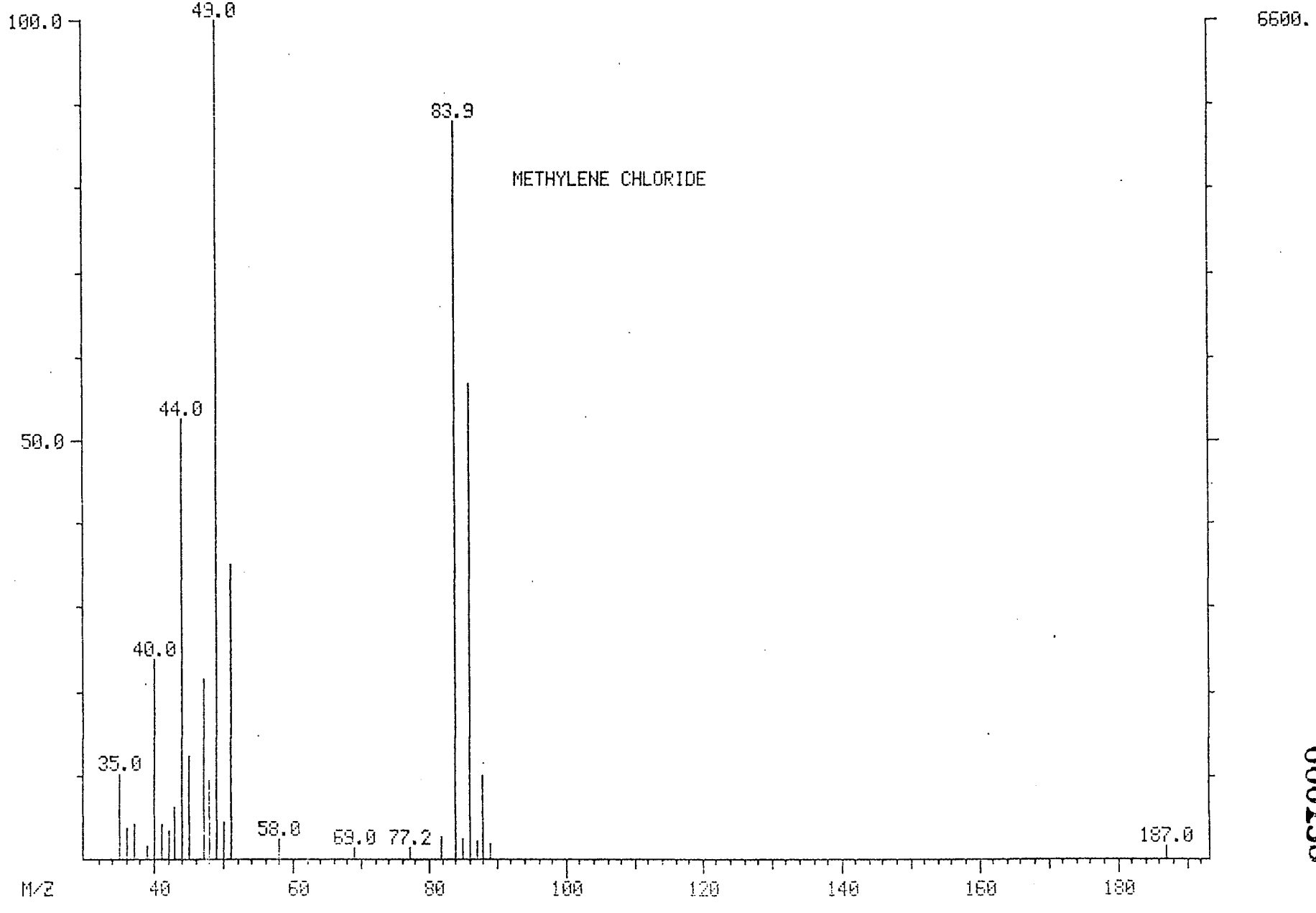


000152

MASS SPECTRUM
08/23/89 13:10:00 + 7:47
SAMPLE: MATRIX SPIKE
CONDS.: 5MLS + 50NG CLP STD

DATA: 10031VS #228
CALI: 10031VS #2

BASE M/Z: 49
RIC: 30560.

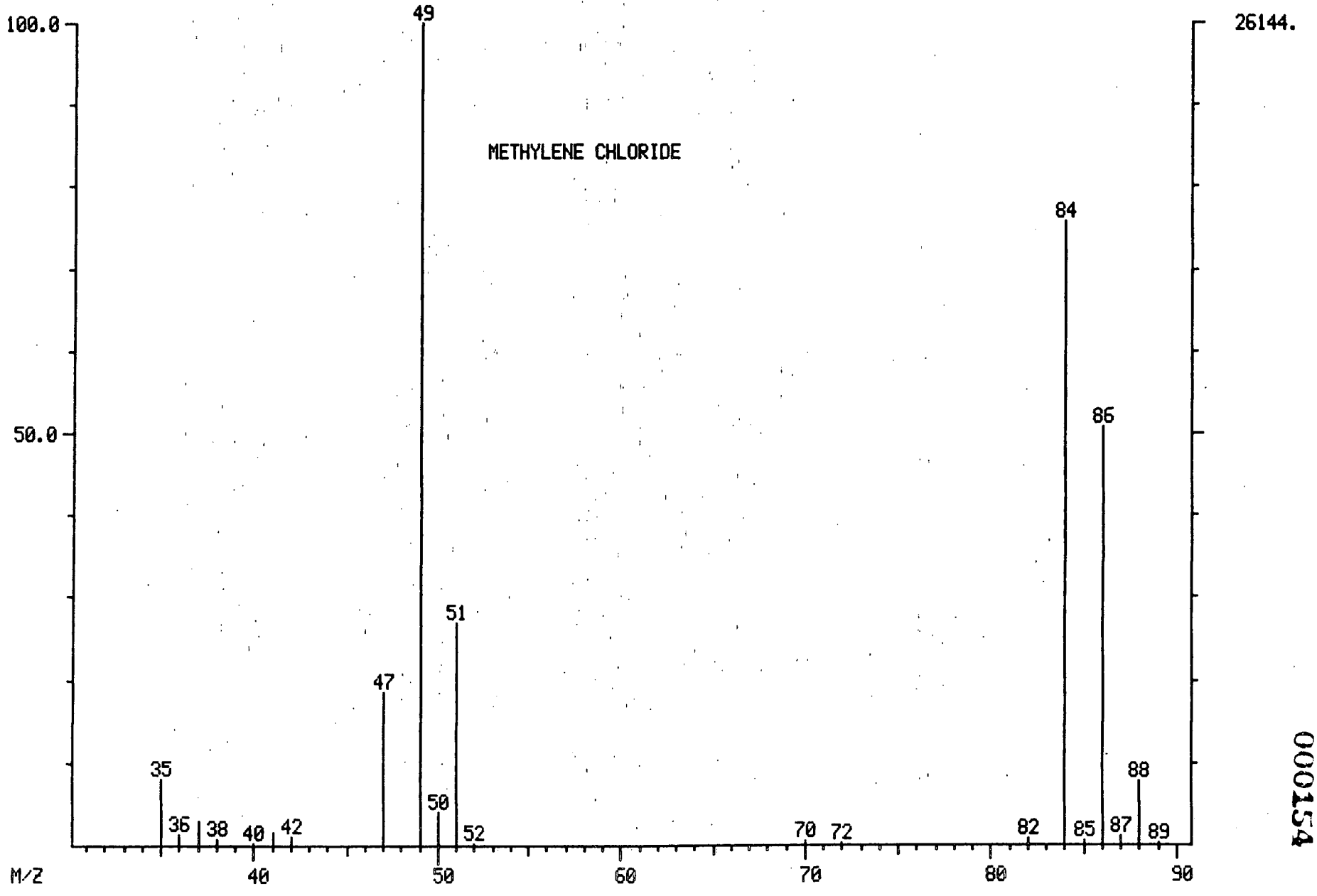


000153

MASS SPECTRUM
08/23/89 8:01:00 + 7:56
SAMPLE: STANDARD
CONDS.: 50NG PURGED
ENHANCED (S 15B 2N 0T)

DATA: VS050A0823 #232
CALI: VS050A0823 #2

BASE M/Z: 49
RIC: 79616.

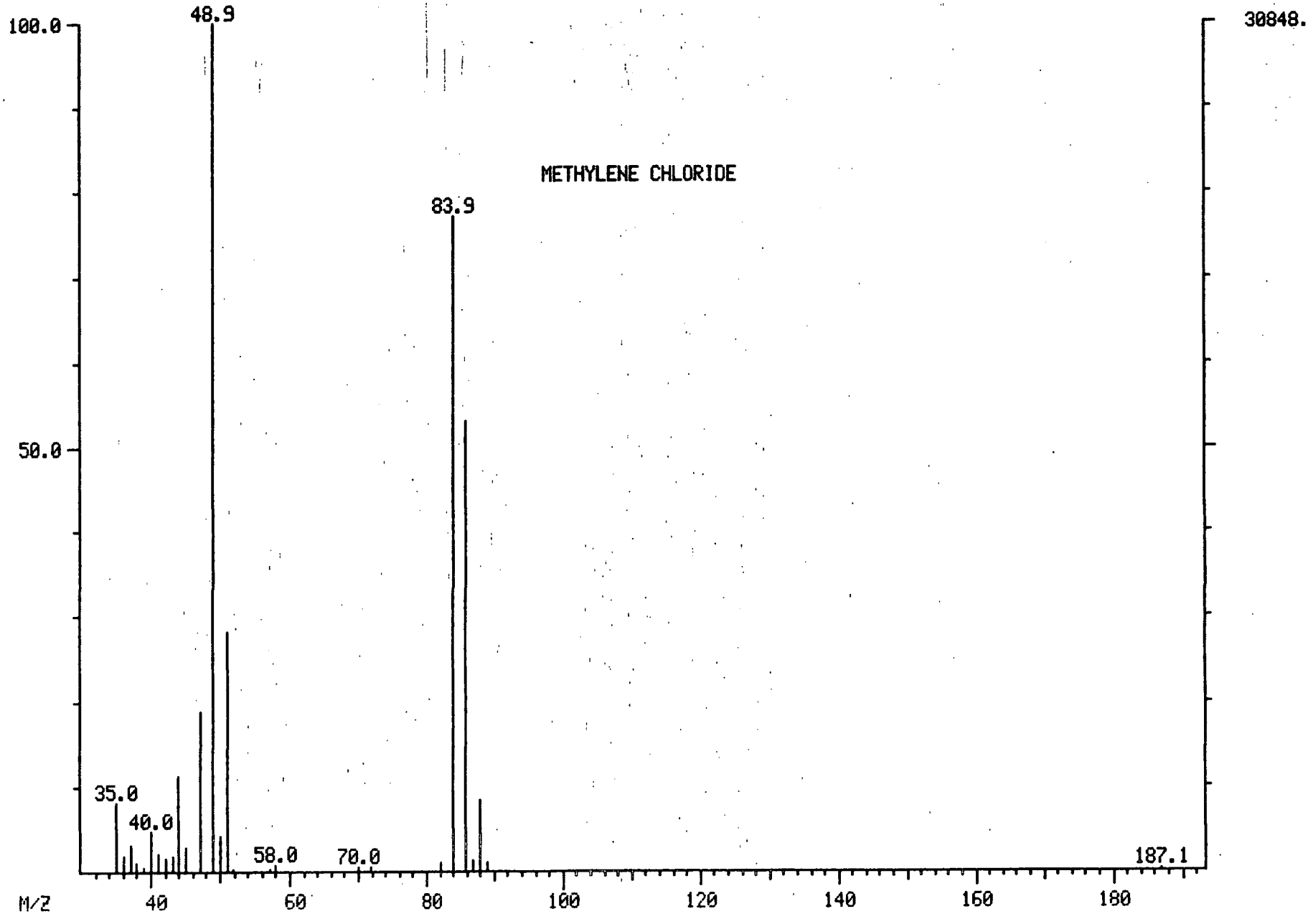


000154

MASS SPECTRUM
08/23/89 8:01:00 + 7:56
SAMPLE: STANDARD
CONDS.: 50NG PURGED

DATA: VS050A0823 #232
CALI: VS050A0823 #2

BASE M/Z: 49
RIC: 103168.

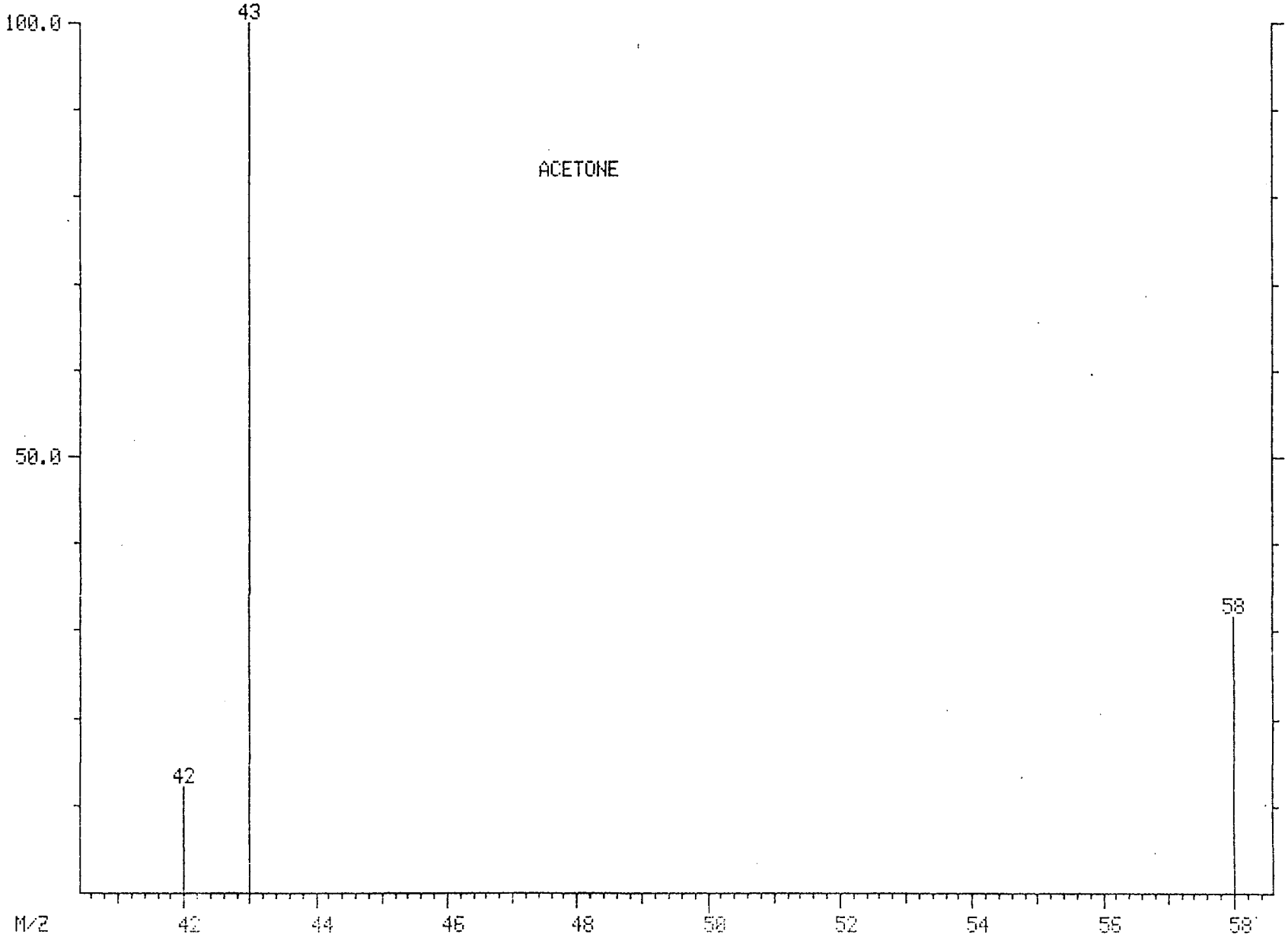


000155

MASS SPECTRUM
08/23/89 13:10:00 + 8:49
SAMPLE: MATRIX SPIKE
CONDS.: 5MLS + 50NG CLP STD
ENHANCED (S 15B 2N 0T)

DATA: 10031VS #258
CALI: 10031VS #2

BASE M/Z: 43
RIC: 1096.

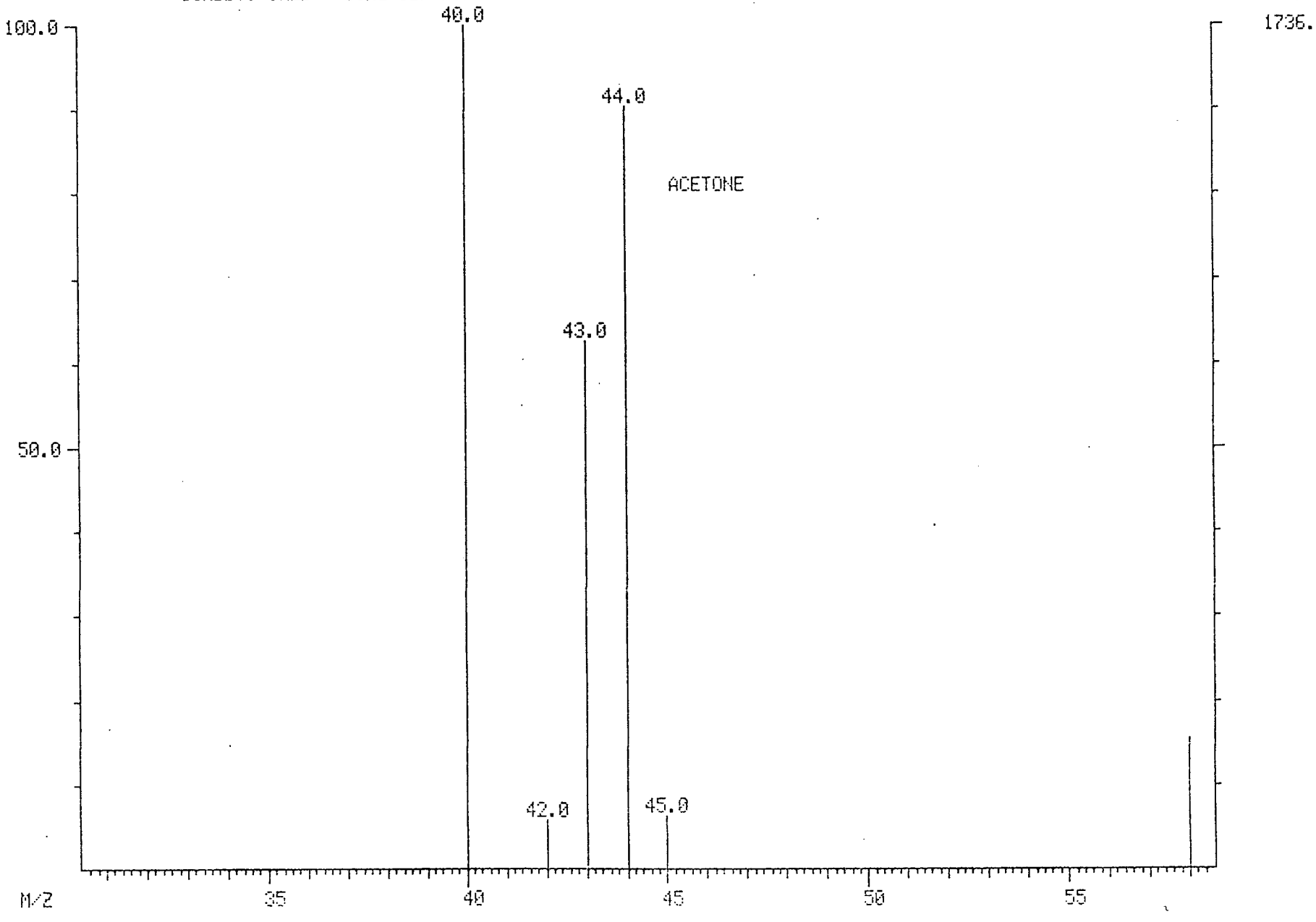


000156

MASS SPECTRUM
08/23/89 13:10:00 + 8:49
SAMPLE: MATRIX SPIKE
CONDS.: 5MLS + 50NG CLP STD

DATA: 10031VS #258
CALI: 10031VS #2

BASE M/Z: 40
RIC: 4864.

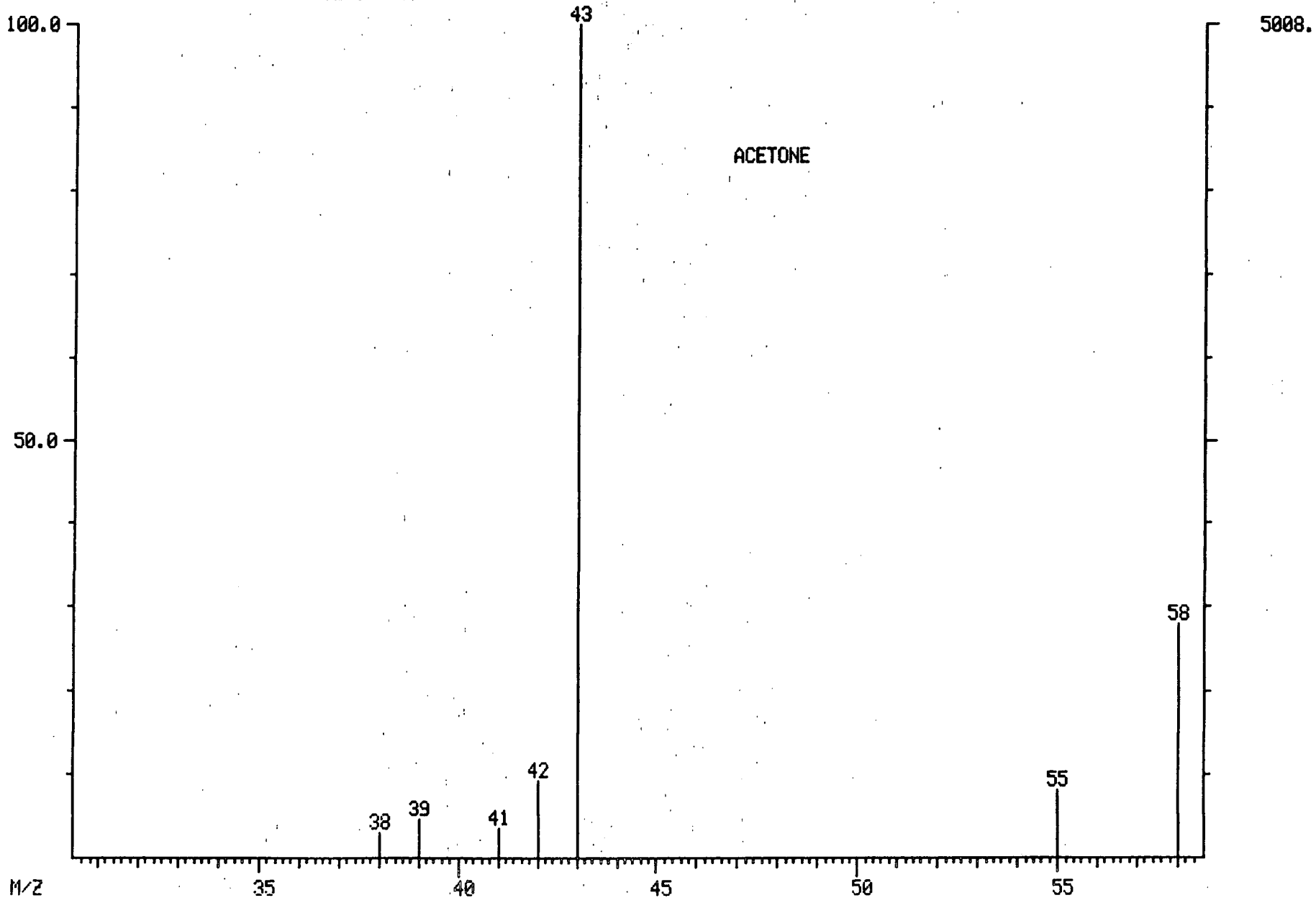


000157

MASS SPECTRUM
08/23/89 8:01:00 + 9:01
SAMPLE: STANDARD
CONDS.: 50NG PURGED
ENHANCED (S 15B 2N 0T)

DATA: VS050A0823 #264
CALI: VS050A0823 #2

BASE M/Z: 43
RIC: 7824.

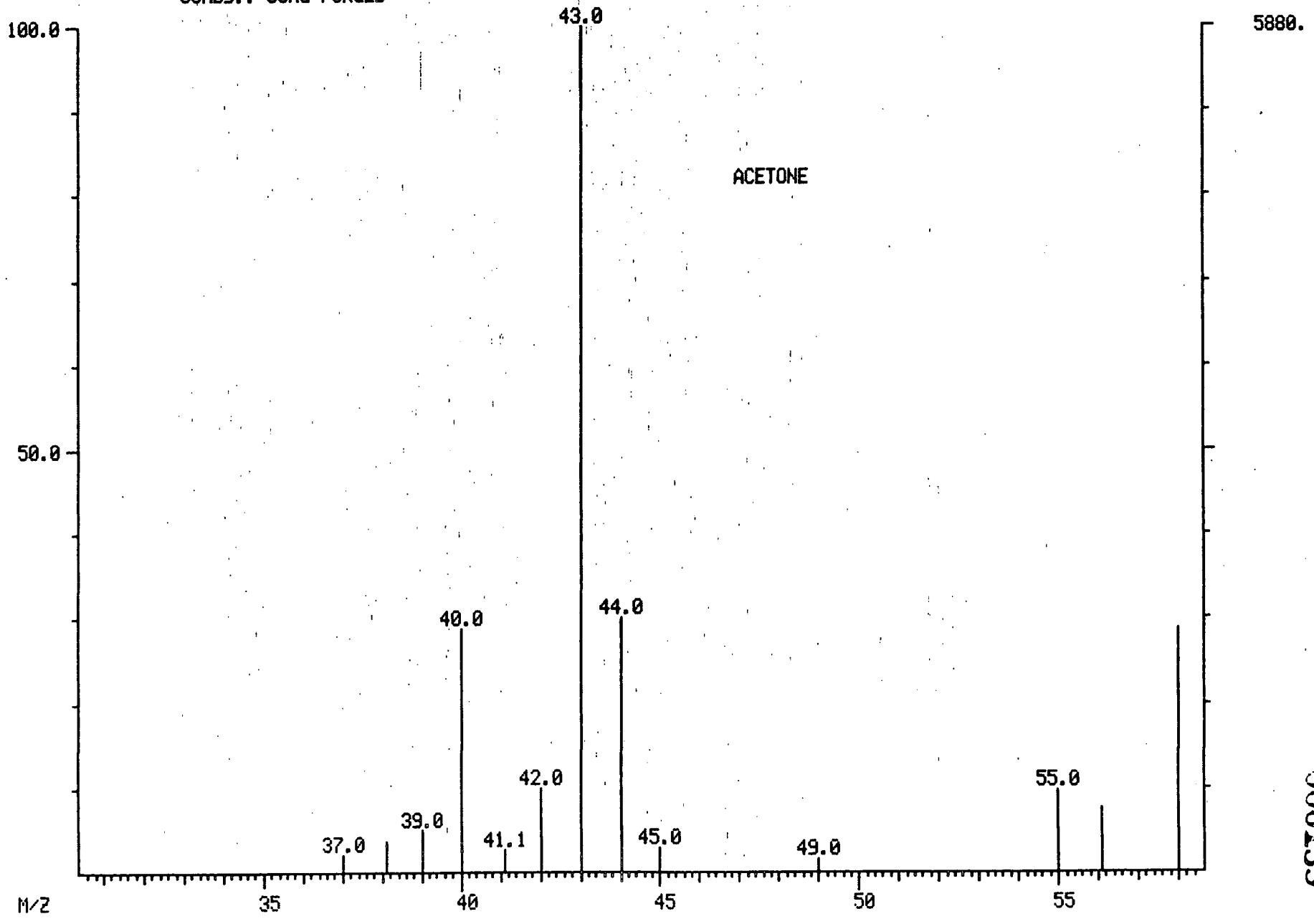


000158

MASS SPECTRUM
08/23/89 8:01:00 + 9:01
SAMPLE: STANDARD
CONDS.: 50NG PURGED

DATA: VS050A0823 #264
CALI: VS050A0823 #2

BASE M/Z: 43
RIC: 13664.



000159

QUANTITATION REPORT FILE: 10031VS

000160

DATA: 10031VS.TI
08/23/89 13:10:00
SAMPLE: MATRIX SPIKE
CONDS.: 5MLS + 50NG CLP STD
FORMULA: 0 INSTRUMENT: 1050 WEIGHT: 0.008
SUBMITTED BY: GANNETT ANALYST: DMW ACCT. NO.: 10031

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
RESP. FAC. FROM LIBRARY ENTRY

No	Name		
1	CI01	BROMOCHLOROMETHANE	*** INTERNAL STANDARD #1 ***
2	C010	CHLOROMETHANE	**
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	*
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8	C035	2-PROPANONE (ACETONE)	
9		ACROLEIN	
10	C040	CARBON DISULFIDE	
11		ACRYLONITRILE	
12	C045	1,1-DICHLOROETHENE	*
13	C050	1,1-DICHLOROETHANE	**
14	C053	TRANS-1,2-DICHLOROETHENE	
15	C060	CHLOROFORM	*
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	CS15	1,2-DICHLOROETHANE-D4	*** SURROGATE #1 ***
19	CI10	1,4-DIFLUOROBENZENE	*** INTERNAL STANDARD #2 ***
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-CHLOROETHYL VINYL ETHER	
33	C180	BROMOFORM	**
34	CI20	CHLOROBENZENE-D5	*** INTERNAL STANDARD #3 ***
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	XYLENES	
44	C250	XYLENES	
45	C350	1,2-DICHLOROBENZENE	
46	C340	1,4-DICHLOROBENZENE	
47	C335	1,3-DICHLOROBENZENE	

No	Name		
48	CS05	TOLUENE-D8	*** SURROGATE #2 ***
49	CS10	4-BROMOFLUOROBENZENE	*** SURROGATE #3 ***

No	M/Z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	352	12:02	1	1.000	A BB	125284.	50.000 UG/L	8.58
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	84	228	7:47	1	0.648	A BB	51482.	13.856 UG/L	2.38
8	43	258	8:49	1	0.733	A BB	7866.	10.075 UG/L	1.73
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	96	334	11:25	1	0.949	A BB	119696.	46.458 UG/L	7.97
13	~~63~~	~~351~~	~~12:00~~	~~1~~	~~0.997~~	~~A VB~~	~~560.~~	~~0.085 UG/L~~	~~0.01~~ Dmw 9/1/89
14	NOT FOUND								
15	NOT FOUND								
16	~~101~~	~~307~~	~~10:29~~	~~1~~	~~0.873~~	~~A BB~~	~~65268.~~	~~4.797 UG/L~~	~~0.82~~ Dmw 9/1/89
17	NOT FOUND								
18	65	447	15:16	1	1.270	A BB	284956.	48.680 UG/L	8.35
19	114	688	23:30	19	1.000	A BB	468924.	50.000 UG/L	8.58
20	~~43~~	~~449~~	~~15:29~~	~~19~~	~~0.683~~	~~A BB~~	~~3390.~~	~~2.856 UG/L~~	~~0.49~~ Dmw 9/1/89
21	~~97~~	~~469~~	~~16:42~~	~~19~~	~~0.711~~	~~A BB~~	~~554.~~	~~0.083 UG/L~~	~~0.01~~ Dmw 9/1/89
22	NOT FOUND								
23	NOT FOUND								
24	~~83~~	~~524~~	~~17:54~~	~~19~~	~~0.762~~	~~A BB~~	~~426.~~	~~0.069 UG/L~~	~~0.01~~ Dmw 9/1/89
25	NOT FOUND								
26	~~75~~	~~576~~	~~19:41~~	~~19~~	~~0.837~~	~~A BB~~	~~64.~~	~~0.009 UG/L~~	~~0.00~~ Dmw 9/1/89
27	130	591	20:12	19	0.859	A BB	196061.	45.967 UG/L	7.89
28	NOT FOUND								
29	NOT FOUND								
30	78	606	20:42	19	0.881	A BB	406906.	46.100 UG/L	7.91
31	~~75~~	~~615~~	~~21:01~~	~~19~~	~~0.894~~	~~A BB~~	~~145.~~	~~0.038 UG/L~~	~~0.01~~ Dmw 9/1/89
32	NOT FOUND								
33	NOT FOUND								
34	117	846	28:54	34	1.000	A BB	472419.	50.000 UG/L	8.58
35	~~43~~	~~712~~	~~23:29~~	~~34~~	~~0.842~~	~~A BB~~	~~420.~~	~~0.115 UG/L~~	~~0.02~~ Dmw 9/1/89
36	NOT FOUND								
37	NOT FOUND								
38	~~83~~	~~772~~	~~26:23~~	~~34~~	~~0.913~~	~~A*BB~~	~~519.~~	~~0.090 UG/L~~	~~0.02~~ Dmw 9/1/89
39	92	811	27:43	34	0.959	A BB	378679.	55.381 UG/L	9.50
40	112	849	29:00	34	1.004	A BB	532842.	60.688 UG/L	10.41
41	~~106~~	~~923~~	~~31:02~~	~~34~~	~~1.091~~	~~A BB~~	~~1035.~~	~~0.236 UG/L~~	~~0.04~~ Dmw 9/1/89
42	~~104~~	~~1078~~	~~36:38~~	~~34~~	~~1.267~~	~~A*BB~~	~~428.~~	~~0.061 UG/L~~	~~0.01~~ Dmw 9/1/89
43	~~106~~	~~1117~~	~~38:18~~	~~34~~	~~1.320~~	~~A VB~~	~~3487.~~	~~0.798 UG/L~~	~~0.14~~ Dmw 9/1/89
44	~~106~~	~~1117~~	~~38:18~~	~~34~~	~~1.320~~	~~A VB~~	~~3487.~~	~~0.798 UG/L~~	~~0.14~~ Dmw 9/1/89
45	~~146~~	~~1310~~	~~44:48~~	~~34~~	~~1.548~~	~~A BB~~	~~103.~~	~~0.026 UG/L~~	~~0.00~~ Dmw 9/1/89
46	NOT FOUND								
47	NOT FOUND								
48	98	806	27:32	34	0.953	A BB	420197.	45.885 UG/L	7.87
49	95	1017	34:45	34	1.202	A*BB	359072.	50.250 UG/L	8.62

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	12:10	0.99	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:40		0.138						
3	2:40		0.219						
4	3:00		0.264						
5	3:27		0.284						
6	4:49		0.396						
7	7:56	0.98	0.652	0.99	13.86	50.00	0.411	1.483	0.28
8	9:01	0.98	0.742	0.99	10.08	50.00	0.063	0.312	0.20
9	9:05		0.747						
10	9:52		0.812						
11	9:54		0.815						
12	11:35	0.99	0.952	1.00	46.46	50.00	0.955	1.028	0.93
13	13:05	0.92	1.076	0.93	0.09	50.00	0.004	2.615	0.00
14	14:00		1.152						
15	14:39		1.205						
16	10:38	0.99	0.874	1.00	4.80	50.00	0.521	5.430	0.10
17	15:29		1.272						
18	15:22	0.99	1.264	1.00	48.68	50.00	2.274	2.336	0.97
19	23:37	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
20	15:27	0.99	0.654	1.00	2.86	50.00	0.007	0.127	0.06
21	16:51	0.99	0.713	1.00	0.08	50.00	0.001	0.710	0.00
22	17:15		0.731						
23	17:32		0.742						
24	17:58	1.00	0.761	1.00	0.06	50.00	0.001	0.760	0.00
25	19:24		0.822						
26	19:43	1.00	0.835	1.00	0.01	50.00	0.000	0.751	0.00
27	20:18	0.99	0.860	1.00	45.97	50.00	0.418	0.455	0.92
28	21:03		0.891						
29	21:09		0.896						
30	20:50	0.99	0.883	1.00	46.10	50.00	0.868	0.941	0.92
31	21:09	0.99	0.896	1.00	0.04	50.00	0.000	0.403	0.00
32	22:17		0.944						
33	23:59		1.016						
34	28:58	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
35	24:26	1.00	0.843	1.00	0.12	50.00	0.001	0.395	0.00
36	26:06		0.901						
37	26:27		0.919						
38	26:29	1.00	0.914	1.00	0.09	50.00	0.001	0.612	0.00
39	27:49	1.00	0.963	1.00	55.38	50.00	0.802	0.724	1.11
40	29:09	1.00	1.006	1.00	60.69	50.00	1.128	0.929	1.21
41	31:34	1.00	1.090	1.00	0.24	50.00	0.002	0.465	0.00
42	36:50	0.99	1.271	1.00	0.06	50.00	0.001	0.746	0.00
43	38:28	0.99	1.328	0.99	0.80	50.00	0.007	0.463	0.02
44	38:28	0.99	1.328	0.99	0.80	50.00	0.007	0.463	0.02
45	45:06	0.99	1.557	0.99	0.03	50.00	0.000	0.420	0.00
46	45:53		1.584						
47	43:40		1.507						
48	27:36	1.00	0.953	1.00	45.88	50.00	0.889	0.969	0.92
49	34:55	1.00	1.205	1.00	50.25	50.00	0.760	0.756	1.00

EPA SAMPLE NO.

C29A_MWMSD

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Q C INC. Contract: GANNET-FLEM

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

Matrix: (soil/water) WATER Lab Sample ID: 883612

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 10031VSD

Level: (low/med) LOW Date Received: 08/15/89

% Moisture: not dec. Date Analyzed: 08/23/89

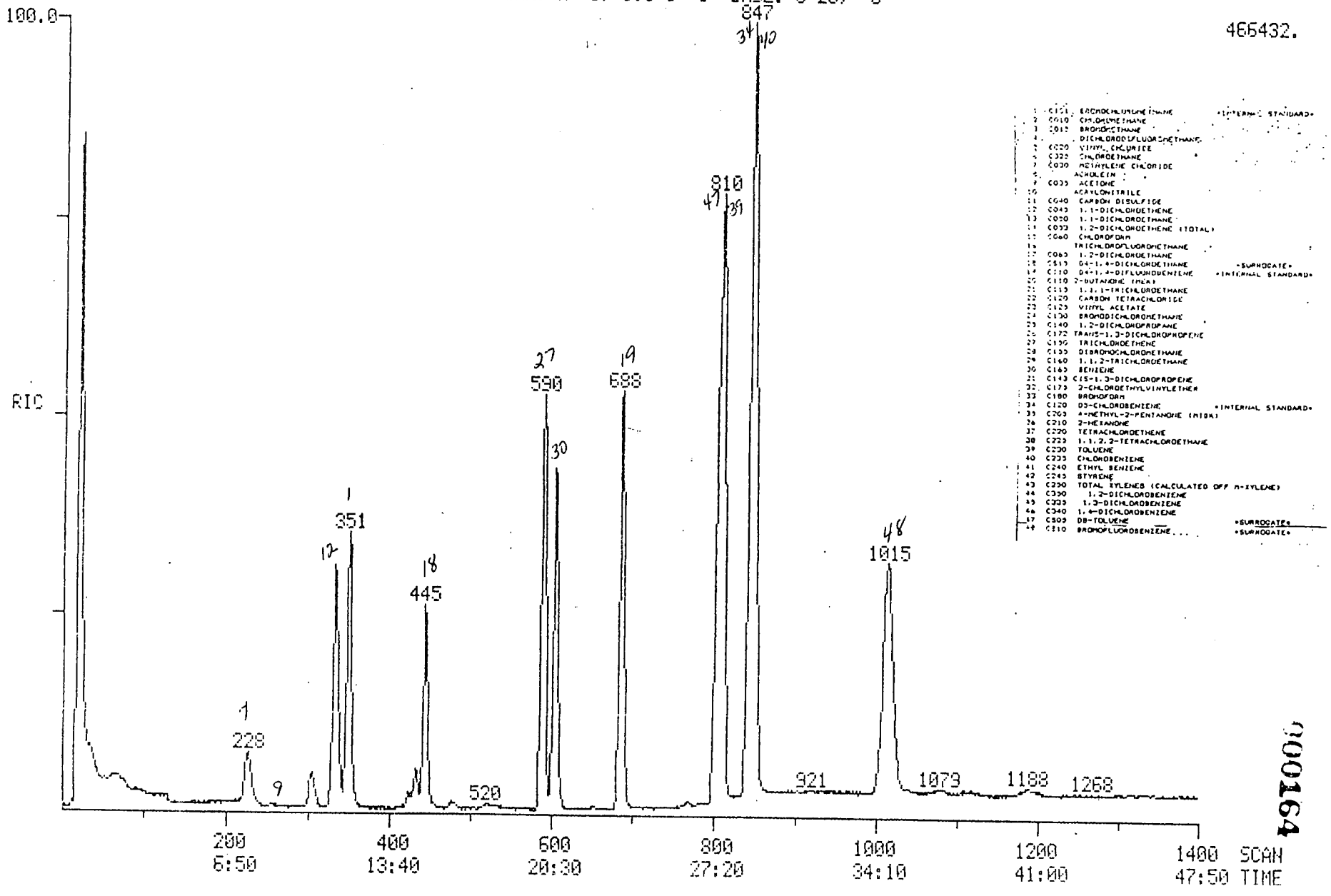
Column: (pack/cap) PACK Dilution Factor: 1.0

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	14	B
67-64-1	Acetone	9	BJ
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	100	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	50	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	50	U
591-78-6	2-Hexanone	50	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	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
08/23/89 14:16:00
SAMPLE: SPIKE DUPLICATE
CONDS.: 5MLS + 50NG CLP STD
RANGE: G 1,1400 LABEL: N 0, 4:0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 10031VSD #1
CALI: 10031VSD #2

SCANS 1 TO 1400



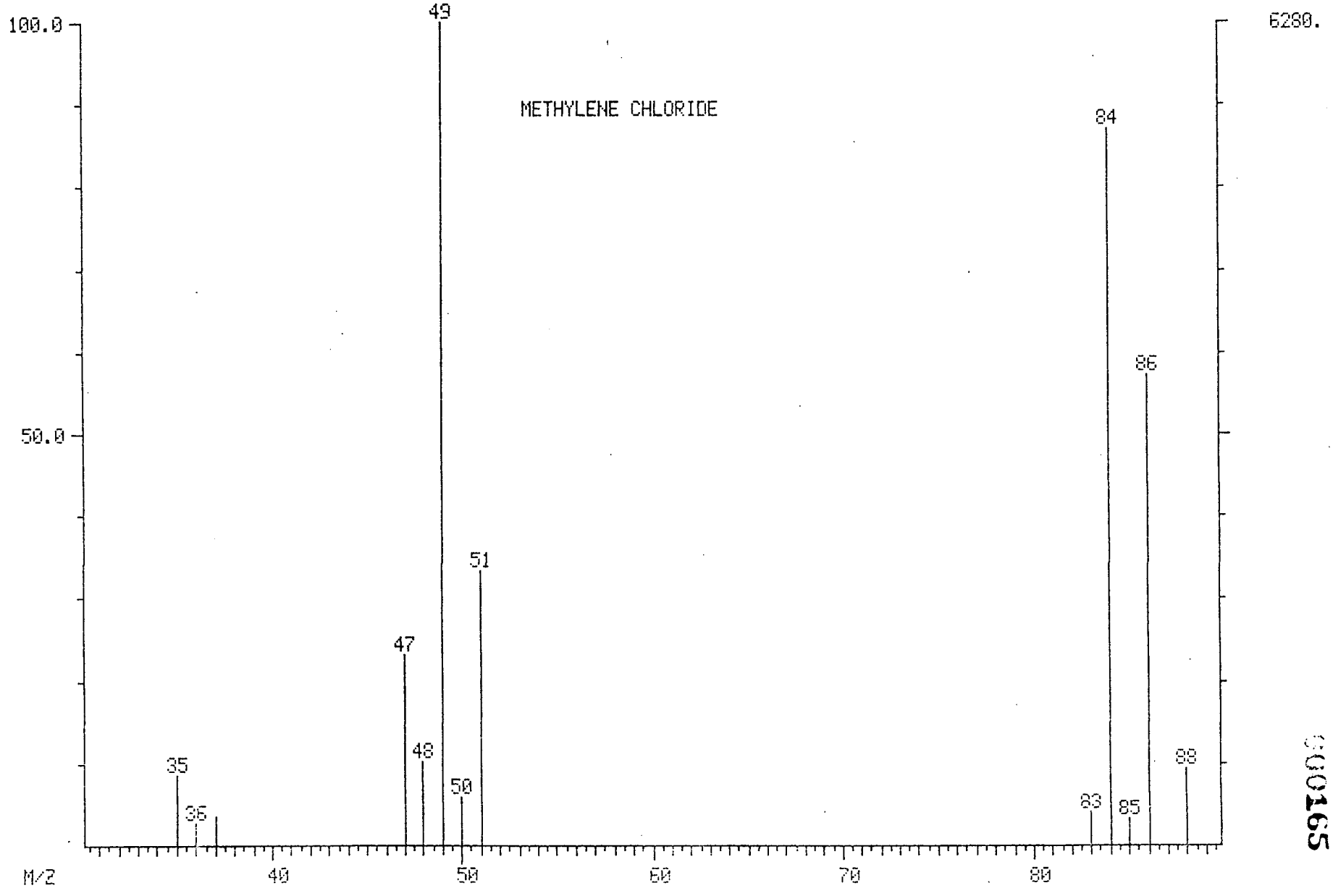
1	C101	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	C010	CHLOROMETHANE	
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8		ACROLEIN	
9	C035	ACETONE	
10		ACRYLONITRILE	
11	C040	CARBON DISULFIDE	
12	C045	1,1-DICHLOROETHENE	
13	C050	1,1-DICHLOROETHANE	
14	C055	1,2-DICHLOROETHENE (TOTAL)	
15	C060	CHLOROFORM	
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	C515	D4-1,4-DICHLOROETHANE	*SURROGATE*
19	C110	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
20	C115	2-BUTANONE (MEK)	
21	C115	1,2,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C172	TRANS-1,3-DICHLOROPROPENE	
27	C195	TRICHLOROETHENE	
28	C135	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C143	CIS-1,3-DICHLOROPROPENE	
32	C173	2-CHLOROETHYLVINYLETHER	
33	C180	BROMOFORM	
34	C120	D5-CHLOROBENZENE	*INTERNAL STANDARD*
35	C203	4-METHYL-2-PENTANONE (MIBK)	
36	C210	2-HEXANONE	
37	C220	TETRACHLOROETHENE	
38	C223	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	C505	D8-TOLUENE	*SURROGATE*
48	C510	BROMOFLUOROBENZENE	*SURROGATE*

000164

MASS SPECTRUM
08/23/89 14:16:00 + 7:47
SAMPLE: SPIKE DUPLICATE
CONDS.: 5MLS + 50NG CLP STD
ENHANCED (S 15B 2N 0T)

DATA: 10031VSD #228
CALI: 10031VSD #2

BASE M/Z: 49
RIC: 21920.

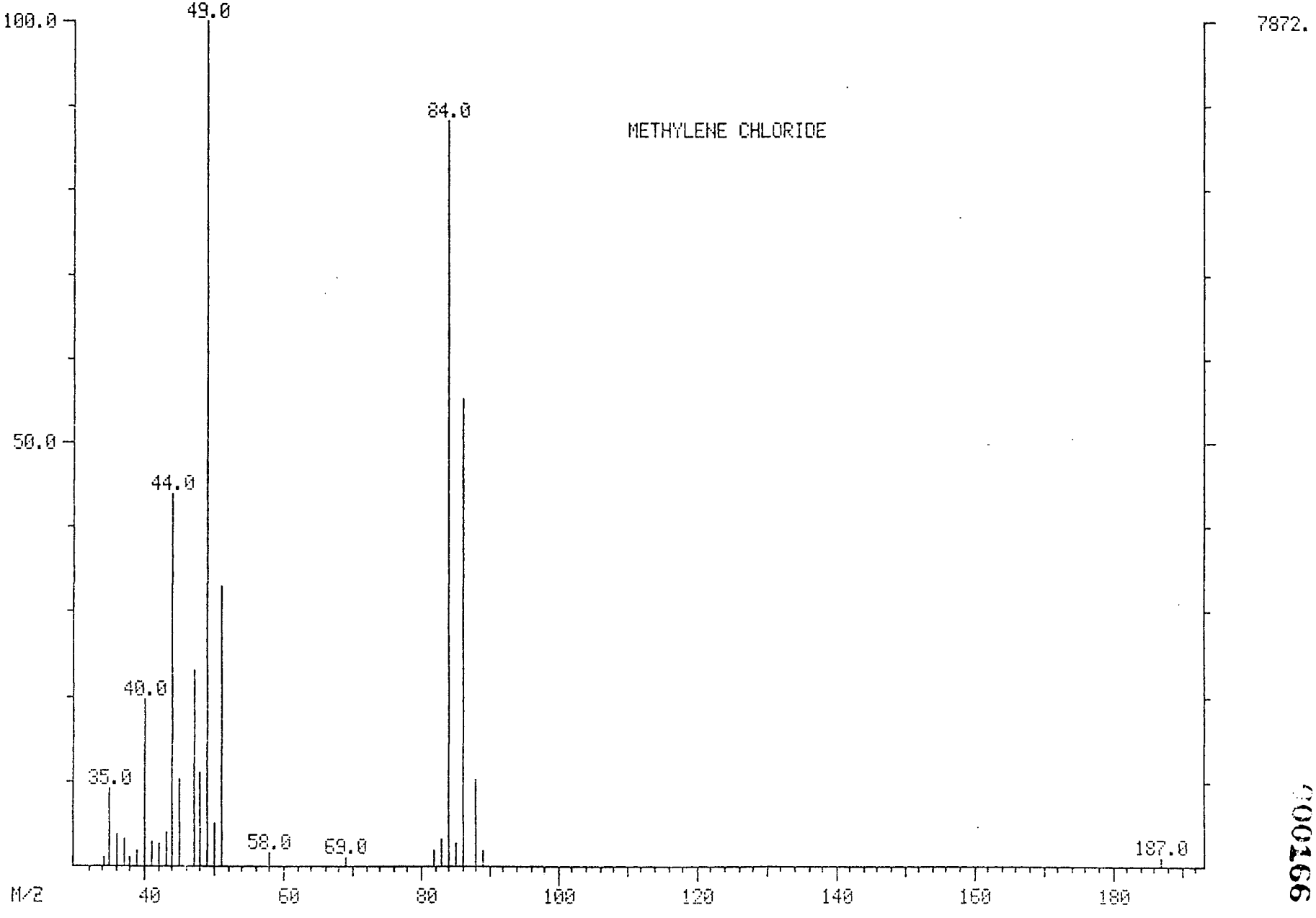


000165

MASS SPECTRUM
08/23/89 14:16:00 + 7:47
SAMPLE: SPIKE DUPLICATE
CONDS.: 5MLS + 50NG CLP STD

DATA: 10031VSD #228
CALI: 10031VSD #2

BASE M/Z: 49
RIC: 34752.

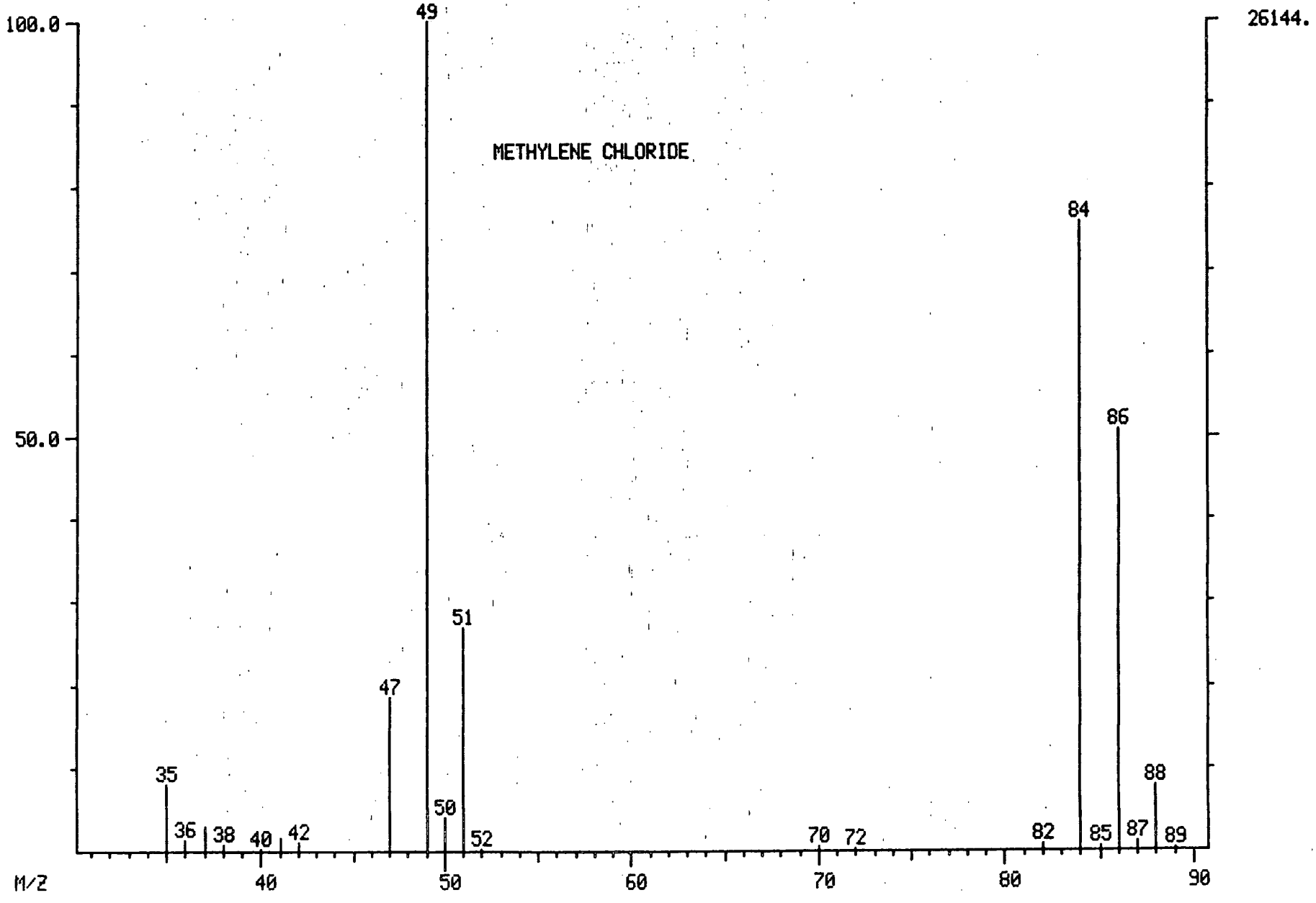


000166

MASS SPECTRUM
08/23/89 8:01:00 + 7:56
SAMPLE: STANDARD
CONDS.: 50NG PURGED
ENHANCED (S 15B 2N 0T)

DATA: VS050A0823 #232
CALI: VS050A0823 #2

BASE M/Z: 49
RIC: 79616.

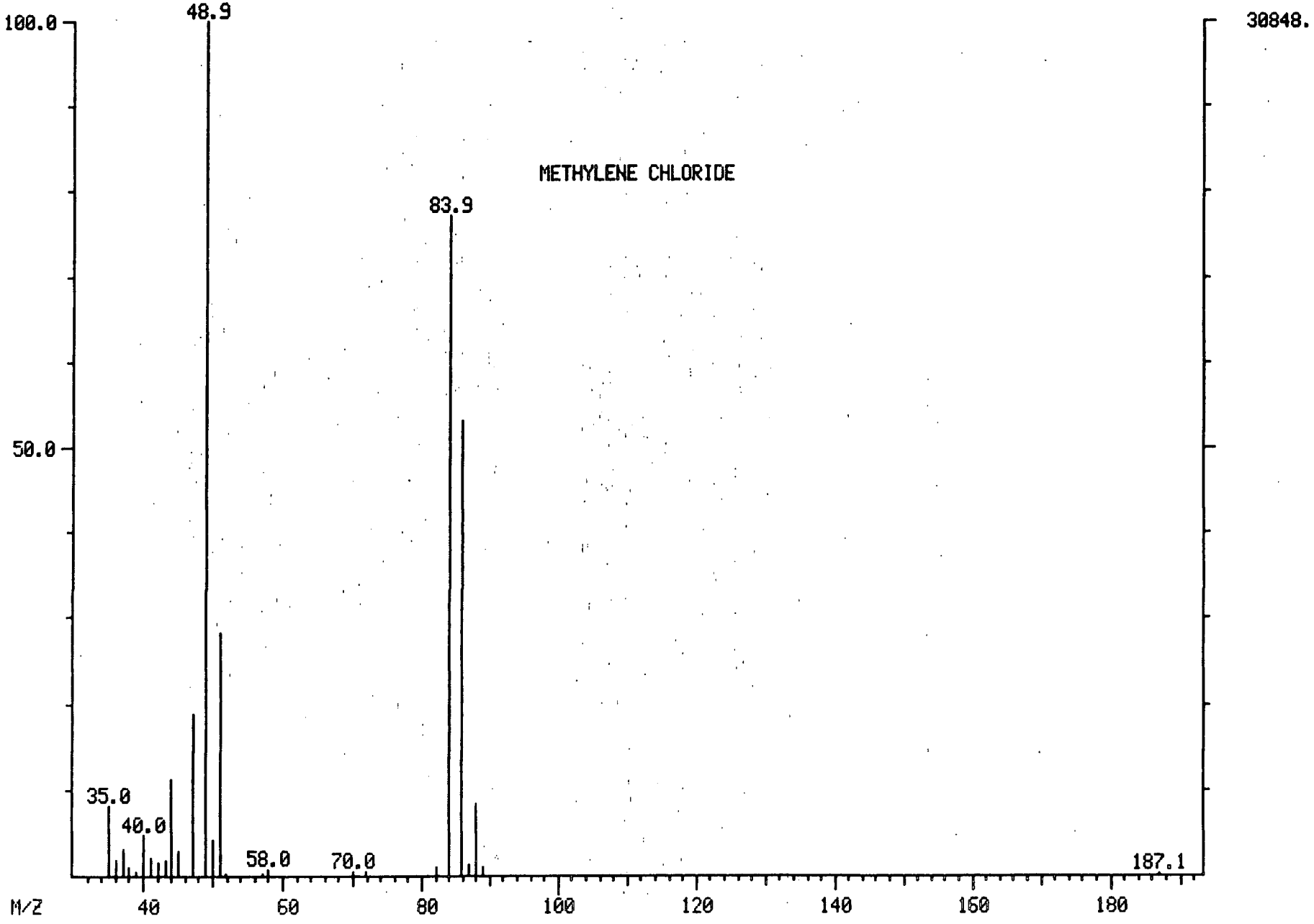


00467

MASS SPECTRUM
08/23/89 8:01:00 + 7:56
SAMPLE: STANDARD
CONDS.: 50NG PURGED

DATA: VS050A0823 #232
CALI: VS050A0823 #2

BASE M/Z: 49
RIC: 103168.

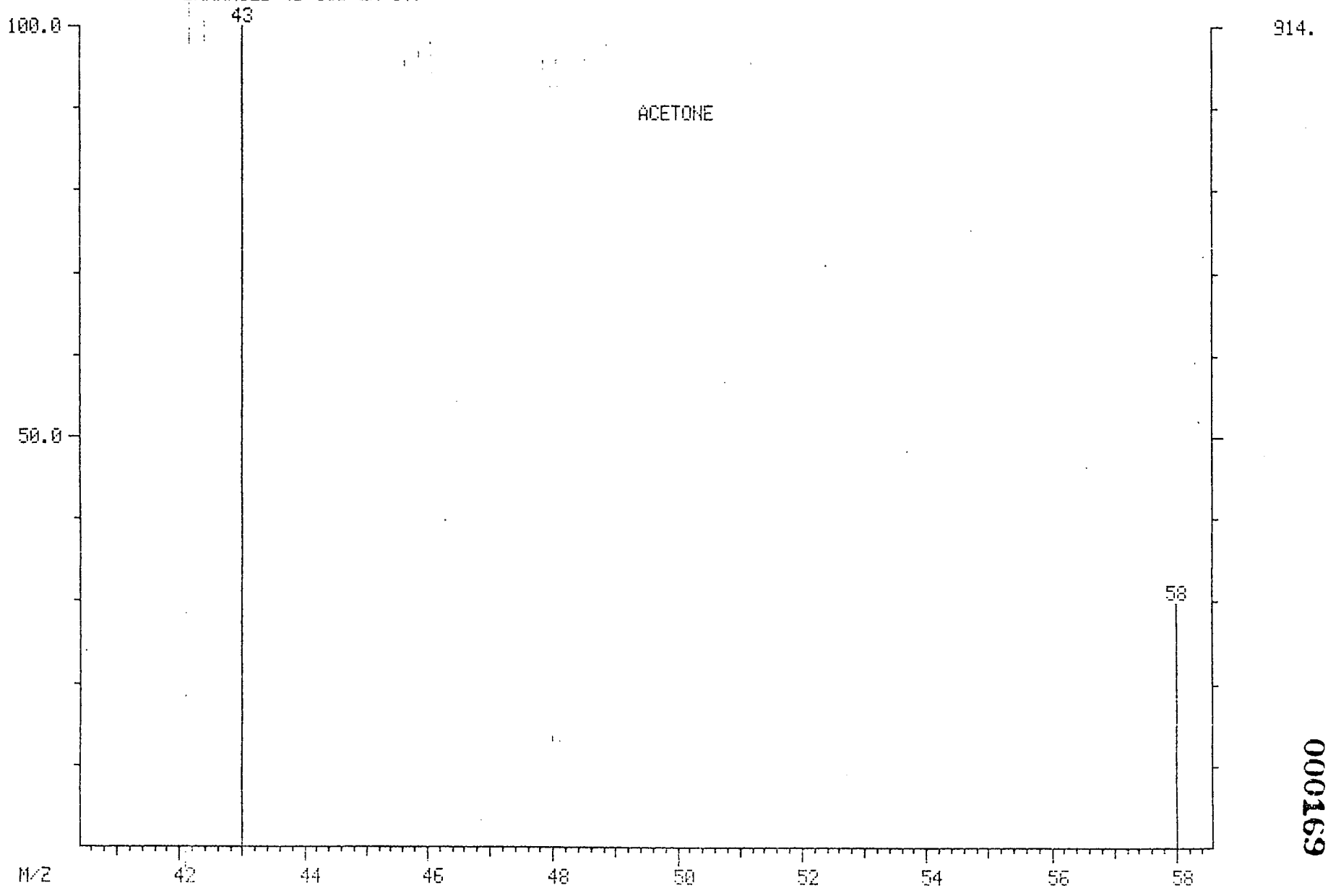


000168

MASS SPECTRUM
08/23/89 14:16:00 + 8:47
SAMPLE: SPIKE DUPLICATE
CONDS.: 5MLS + 50NG CLP STD
ENHANCED (S 15B 2N 0T)

DATA: 10031VSD #257
CALI: 10031VSD #2

BASE M/Z: 43
RIC: 1188.

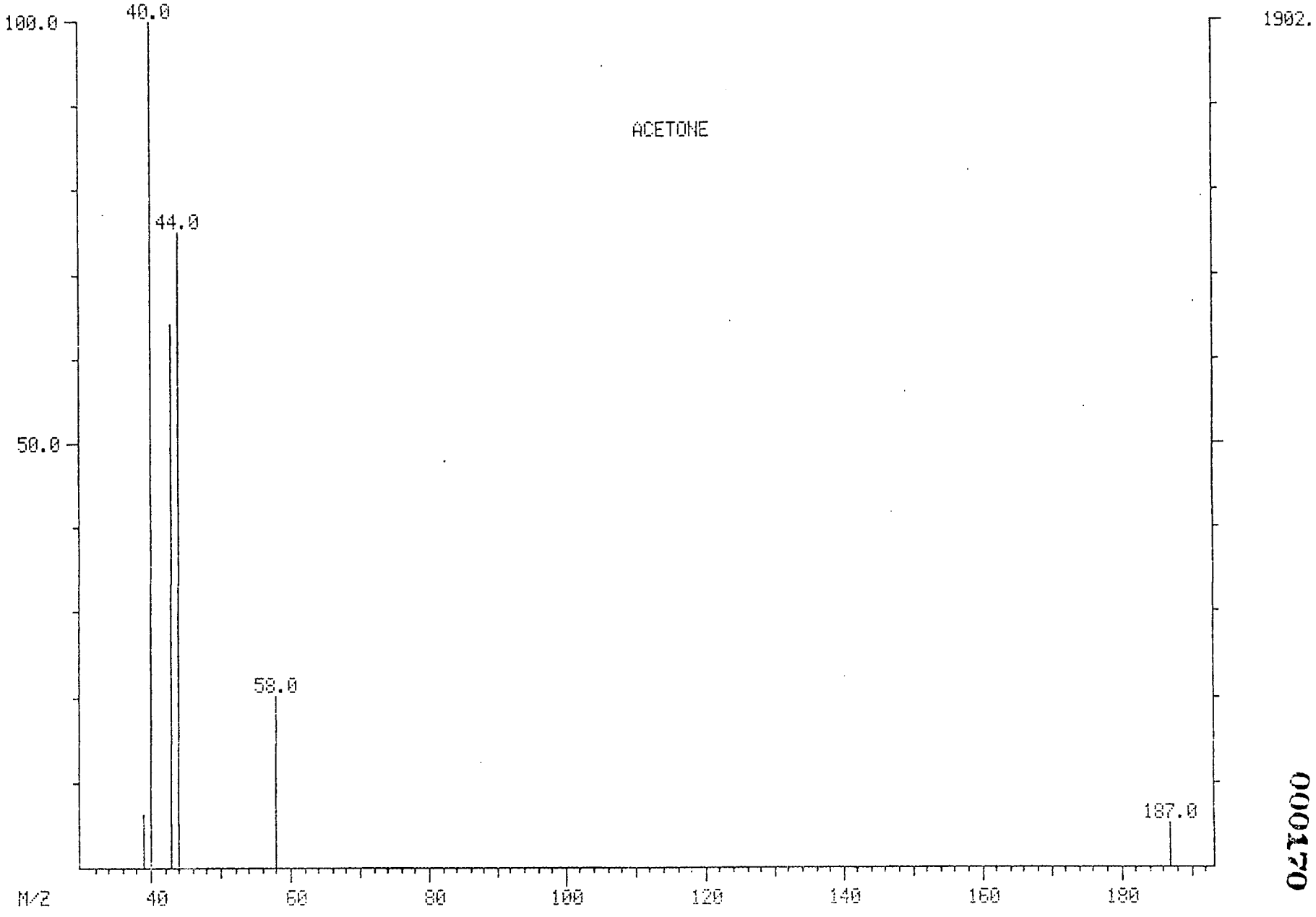


000169

MASS SPECTRUM
08/23/89 14:16:00 + 8:47
SAMPLE: SPIKE DUPLICATE
CONDS.: 5MLS + 50NG CLP STD

DATA: 10031VSD #257
CALI: 10031VSD #2

BASE M/Z: 40
RIC: 5160.

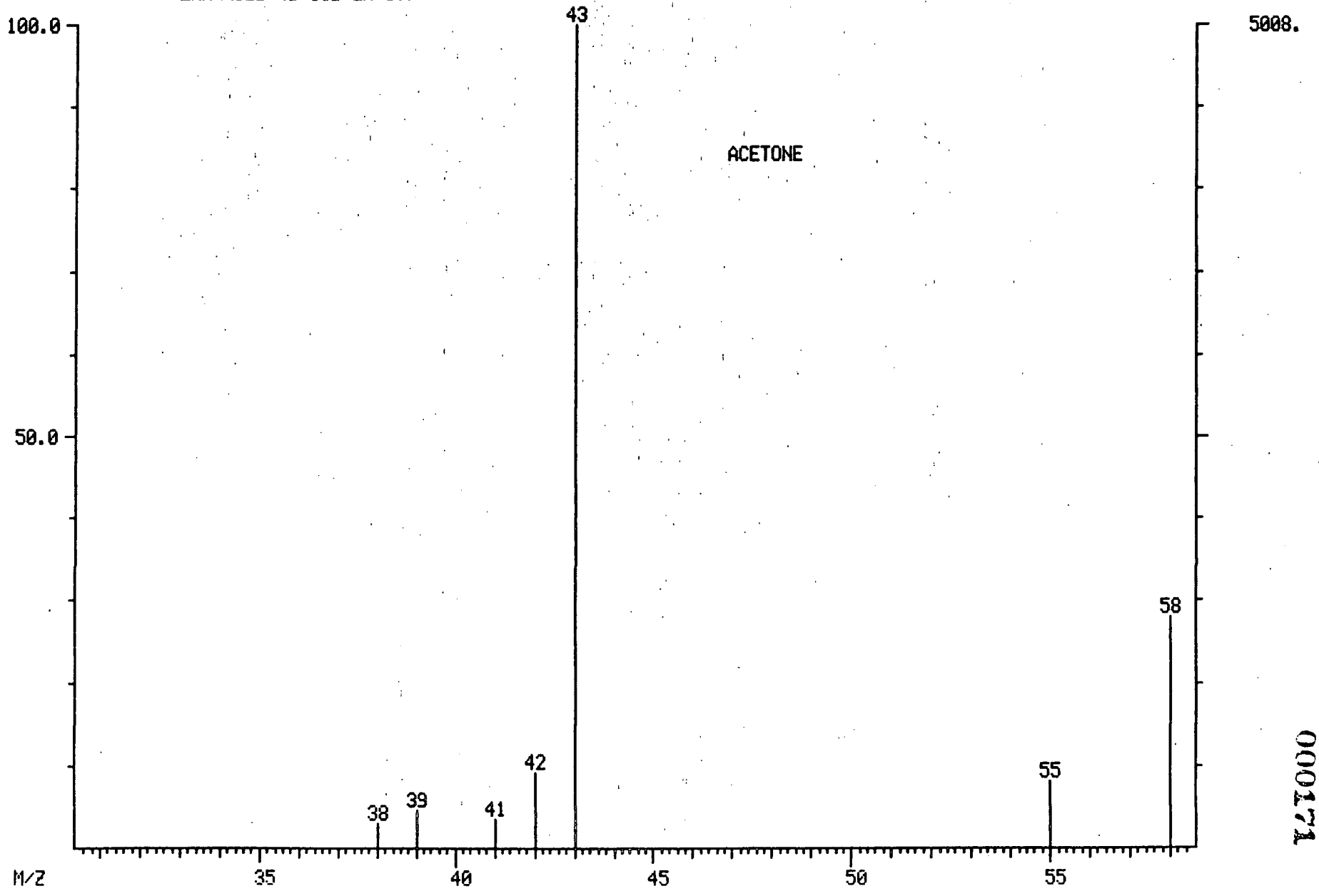


000170

MASS SPECTRUM
08/23/89 8:01:00 + 9:01
SAMPLE: STANDARD
CONDS.: 50NG PURGED
ENHANCED (S 15B 2N 0T)

DATA: VS050A0823 #264
CALI: VS050A0823 #2

BASE M/Z: 43
RIC: 7824.

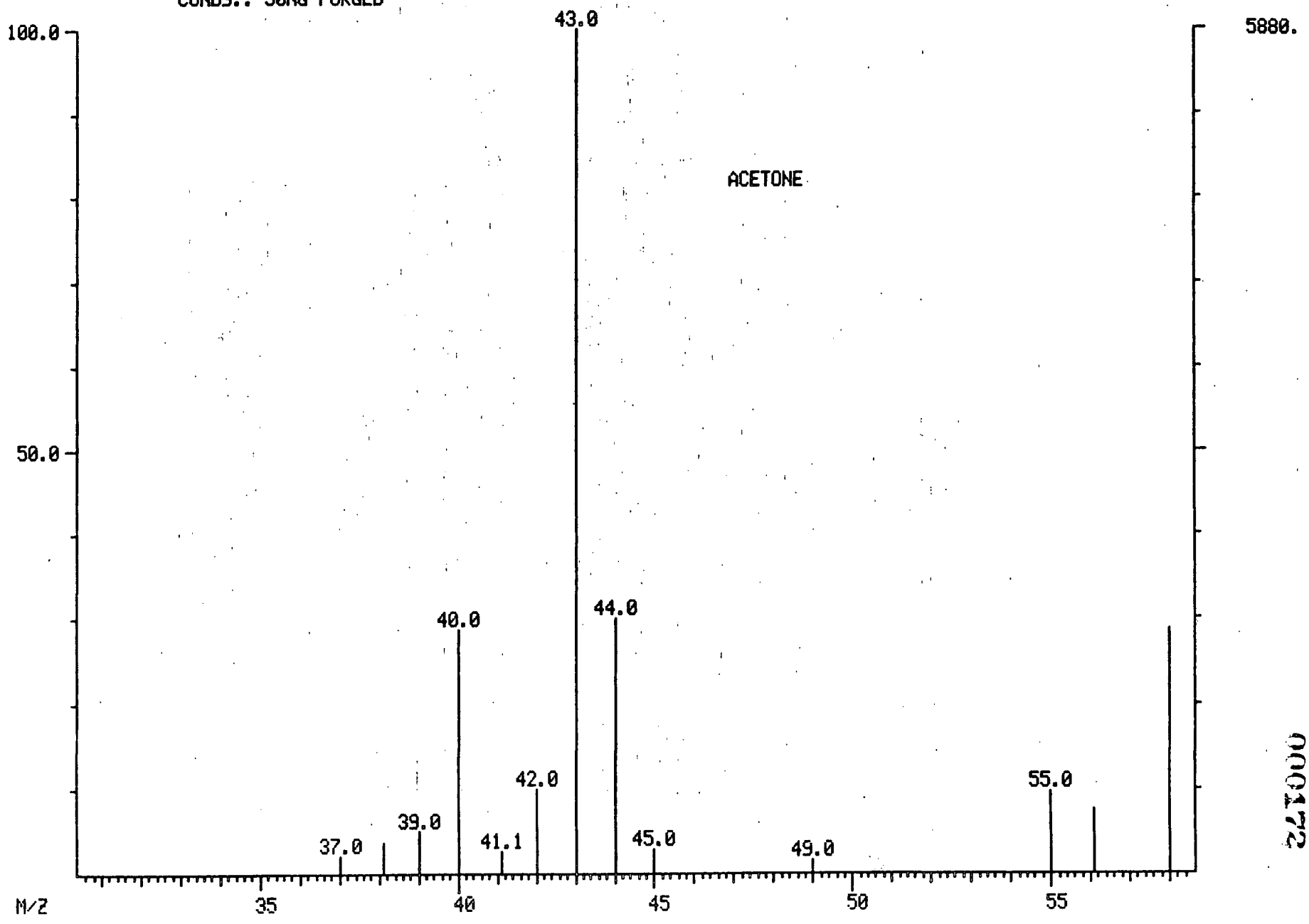


000174

MASS SPECTRUM
08/23/89 8:01:00 + 9:01
SAMPLE: STANDARD
CONDS.: 50NG PURGED

DATA: VS050A0823 #264
CALI: VS050A0823 #2

BASE M/Z: 43
RIC: 13664.



000172

QUANTITATION REPORT FILE: 10031VSD

DATA: 10031VSD.TI
08/23/89 14:16:00
SAMPLE: SPIKE DUPLICATE
CONDS.: 5MLS + 50NG CLP STD
FORMULA: INSTRUMENT: 1050 WEIGHT: 0.008
SUBMITTED BY: GANNETT ANALYST: DMW ACCT. NO.: 10031

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
RESP. FAC. FROM LIBRARY ENTRY

No	NAME		
1	CI01	BROMOCHLOROMETHANE	*** INTERNAL STANDARD #1 ***
2	C010	CHLOROMETHANE	**
3	C015	BROMOMETHANE	
4		DICHLORODIFLUOROMETHANE	
5	C020	VINYL CHLORIDE	*
6	C025	CHLOROETHANE	
7	C030	METHYLENE CHLORIDE	
8	C035	2-PROPANONE (ACETONE)	
9		ACROLEIN	
10	C040	CARBON DISULFIDE	
11		ACRYLONITRILE	
12	C045	1,1-DICHLOROETHENE	*
13	C050	1,1-DICHLOROETHANE	**
14	C053	TRANS-1,2-DICHLOROETHENE	
15	C060	CHLOROFORM	*
16		TRICHLOROFLUOROMETHANE	
17	C065	1,2-DICHLOROETHANE	
18	CS15	1,2-DICHLOROETHANE-D4	*** SURROGATE #1 ***
19	CI10	1,4-DIFLUOROBENZENE	*** INTERNAL STANDARD #2 ***
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-CHLOROETHYL VINYL ETHER	
33	C180	BROMOFORM	**
34	CI20	CHLOROBENZENE-D5	*** INTERNAL STANDARD #3 ***
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	XYLENES	
44	C250	XYLENES	
45	C350	1,2-DICHLOROBENZENE	
46	C340	1,4-DICHLOROBENZENE	
47	C335	1,3-DICHLOROBENZENE	

No	Name		
48	CS05	TOLUENE-D8	*** SURROGATE #2 ***
49	CS10	4-BROMOFLUOROBENZENE	*** SURROGATE #3 ***

No	M/Z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot	
1	128	351	12:00	1	1.000	A BB	146410.	50.000 UG/L	8.26	
2	NOT FOUND									
3	NOT FOUND									
4	NOT FOUND									
5	NOT FOUND									
6	NOT FOUND									
7	84	228	7:47	1	0.650	A BB	62310.	14.350 UG/L	2.37	
8	43	257	8:47	1	0.732	A BB	8375.	9.179 UG/L	1.52	
9	NOT FOUND									
10	NOT FOUND									
11	NOT FOUND									
12	96	334	11:25	1	0.952	A BB	184782.	61.371 UG/L	10.14	
13	NOT FOUND									
14	NOT FOUND									
15	NOT FOUND									
16	~~101~~	~~306~~	~~10:27~~	~~1~~	~~0.872~~	~~A BB~~	~~75478.~~	~~4.747 UG/L~~	~~0.78~~	DMW 9/1/89
17	NOT FOUND									
18	65	445	15:12	1	1.268	A BB	326755.	47.766 UG/L	7.89	
19	114	688	23:30	19	1.000	A BB	601944.	50.000 UG/L	8.26	DMW 9/1/89
20	~~43~~	~~448~~	~~15:18~~	~~19~~	~~0.651~~	~~A BB~~	~~4026.~~	~~2.642 UG/L~~	~~0.44~~	DMW 9/1/89
21	~~97~~	~~487~~	~~16:38~~	~~19~~	~~0.708~~	~~A BB~~	~~395.~~	~~0.046 UG/L~~	~~0.01~~	
22	NOT FOUND									
23	NOT FOUND									
24	~~83~~	~~522~~	~~17:50~~	~~19~~	~~0.759~~	~~A BB~~	~~375.~~	~~0.041 UG/L~~	~~0.01~~	DMW 9/1/89
25	NOT FOUND									
26	~~75~~	~~572~~	~~19:33~~	~~19~~	~~0.831~~	~~A BB~~	~~440.~~	~~0.049 UG/L~~	~~0.01~~	DMW 9/1/89
27	130	590	20:09	19	0.858	A BB	260141.	47.513 UG/L	7.85	
28	NOT FOUND									
29	NOT FOUND									
30	78	605	20:40	19	0.879	A BB	548323.	48.394 UG/L	7.99	
31	NOT FOUND									
32	NOT FOUND									
33	NOT FOUND									
34	117	845	28:52	34	1.000	A BB	554662.	50.000 UG/L	8.26	
35	~~43~~	~~712~~	~~24:20~~	~~34~~	~~0.843~~	~~A BB~~	~~547.~~	~~0.125 UG/L~~	~~0.02~~	DMW 9/1/89
36	NOT FOUND									
37	NOT FOUND									
38	~~83~~	~~774~~	~~26:27~~	~~34~~	~~0.916~~	~~A BB~~	~~648.~~	~~0.095 UG/L~~	~~0.02~~	DMW 9/1/89
39	92	810	27:40	34	0.959	A BB	483212.	60.190 UG/L	9.94	
40	112	849	29:00	34	1.005	A BB	642220.	62.300 UG/L	10.29	
41	~~106~~	~~917~~	~~31:20~~	~~34~~	~~1.085~~	~~A BB~~	~~1383.~~	~~0.268 UG/L~~	~~0.04~~	DMW 9/1/89
42	~~104~~	~~1073~~	~~36:40~~	~~34~~	~~1.270~~	~~A BB~~	~~193.~~	~~0.023 UG/L~~	~~0.00~~	DMW 9/1/89
43	~~106~~	~~1120~~	~~38:16~~	~~34~~	~~1.325~~	~~A BB~~	~~4690.~~	~~0.914 UG/L~~	~~0.15~~	DMW 9/1/89
44	~~106~~	~~1120~~	~~38:16~~	~~34~~	~~1.325~~	~~A BB~~	~~4690.~~	~~0.914 UG/L~~	~~0.15~~	DMW 9/1/89
45	NOT FOUND									
46	NOT FOUND									
47	NOT FOUND									
48	98	804	27:28	34	0.951	A BB	529307.	49.229 UG/L	8.13	
49	95	1013	34:37	34	1.199	A BB	383042.	45.656 UG/L	7.54	

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	12:10	0.99	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:40		0.138						
3	2:40		0.219						
4	3:00		0.264						
5	3:27		0.284						
6	4:49		0.396						
7	7:56	0.98	0.652	1.00	14.35	50.00	0.426	1.483	0.29
8	9:01	0.97	0.742	0.99	9.18	50.00	0.057	0.312	0.18
9	9:05		0.747						
10	9:52		0.812						
11	9:54		0.815						
12	11:35	0.99	0.952	1.00	61.37	50.00	1.262	1.028	1.23
13	13:05		1.076						
14	14:00		1.152						
15	14:39		1.205						
16	10:38	0.98	0.874	1.00	4.75	50.00	0.516	5.430	0.09
17	15:29		1.272						
18	15:22	0.99	1.264	1.00	47.77	50.00	2.232	2.336	0.96
19	23:37	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
20	15:27	0.99	0.654	1.00	2.64	50.00	0.007	0.127	0.05
21	16:51	0.99	0.713	0.99	0.05	50.00	0.001	0.710	0.00
22	17:15		0.731						
23	17:32		0.742						
24	17:58	0.99	0.761	1.00	0.04	50.00	0.001	0.760	0.00
25	19:24		0.822						
26	19:43	0.99	0.835	1.00	0.05	50.00	0.001	0.751	0.00
27	20:18	0.99	0.860	1.00	47.51	50.00	0.432	0.455	0.95
28	21:03		0.891						
29	21:09		0.896						
30	20:50	0.99	0.883	1.00	48.39	50.00	0.911	0.941	0.97
31	21:09		0.896						
32	22:17		0.944						
33	23:59		1.016						
34	28:58	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
35	24:26	1.00	0.843	1.00	0.12	50.00	0.001	0.395	0.00
36	26:06		0.901						
37	26:27		0.913						
38	26:29	1.00	0.914	1.00	0.10	50.00	0.001	0.612	0.00
39	27:49	1.00	0.960	1.00	60.19	50.00	0.871	0.724	1.20
40	29:09	1.00	1.006	1.00	62.30	50.00	1.158	0.929	1.25
41	31:34	0.99	1.090	1.00	0.27	50.00	0.002	0.465	0.01
42	36:50	1.00	1.271	1.00	0.02	50.00	0.000	0.746	0.00
43	38:28	0.99	1.328	1.00	0.91	50.00	0.008	0.463	0.02
44	38:28	0.99	1.328	1.00	0.91	50.00	0.008	0.463	0.02
45	45:06		1.557						
46	45:53		1.584						
47	43:40		1.507						
48	27:36	1.00	0.953	1.00	49.23	50.00	0.954	0.969	0.98
49	34:55	0.99	1.205	0.99	45.66	50.00	0.691	0.756	0.91

QC Inc

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

ANALYTICAL DATA REPORT
FOR
GANNET FLEMING

Part 2 of 3

Case Name	Field Sample ID	Laboratory Sample ID	Date of Collection
	C-29A MW	883612	08/15/89
	C-14A MW	883613	"
	C-14B MW	883614	"
	C-14C MW	883615	"
	FIELD BLANK	883616	"
	TRIP BLANK	883617	"

Laboratory Name	QC Inc.
Certification No.	PADER No. 09-131 NJDEP No. 77166
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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2C
WATER SEMIVOLATILE SURROGATE RECOVERY

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

Lab Code: _____ 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_MW	31 *	39 *	49					2
02	C-14B_MW	55	60	76					0
03	C-14C_MW	46	54	84					0
04	C-29A_MW	36	38 *	47					1
05	FB	46	49	65					0
06	TB	48	52	59					0
07	AQ_BLANK_MS	54	54	69					0
08	AQ_BLANK_MSD	55	58	73					0
09	AQ_BLANK	37	44	67					0

	QC LIMITS
S1 (NBZ) = Nitrobenzene-d5	(35-114)
S2 (FBP) = 2-Fluorobiphenyl	(43-116)
S3 (THP) = Terphenyl	(33-141)
S4 (PHL) = Phenol-d5	(10-94)
S5 (2FP) = 2-Flurorphenol	(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

3C
WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Q C INC. Contract : FLEMING

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

Matrix Spike - EPA Sample No.: AQ BLANK Level :(low/med) Low

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC
Phenol					12-86
2-Chlorophenol					27-123
1,4-Dichloro-benzene	100	0	49.6	50	36- 97
N-Nitroso-di-n-prop.(1)	100	0	65.7	66	41-116
1,2,4-Trichlorobenzene	100	0	53.9	54	39- 98
4-Chloro-3-methylphenol					23- 97
Acenaphthene	100	0	59.4	59	46-118
4-Nitrophenol					10- 80
2,4-Dinitrotoluene	100	0	65.4	65	24- 96
Pentachlorophenol					9-103
Pyrene	100	0	67.6	68	26-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC
Phenol					42	12-86
2-Chlorophenol					40	27-123
1,4-Dichloro-benzene	100	49.9	50	0	28	36- 97
N-Nitroso-di-n-prop.(1)	100	59.2	59	11	38	41-116
1,2,4-Trichlorobenzene	100	54.7	55	-2	28	39- 98
4-Chloro-3-methylphenol					42	23- 97
Acenaphthene	100	59.3	59	0	31	46-118
4-Nitrophenol					50	10- 80
2,4-Dinitrotoluene	100	66.1	66	-2	38	24- 96
Pentachlorophenol					50	9-103
Pyrene	100	77.0	77	-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: 0 out of 22 outside limits

COMMENTS:

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: Q C INC. Contract: FLEMING

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

Lab File ID: BWB0815 Lab Sample ID: BWB0815

Date Extracted: 08/20/89 Extraction:(SepF/Cont/Sonc) SEPF

Date Analyzed: 08/25/89 Time Analyzed: 1233

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

Instrument ID: 5100

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_MW	883613	883613ABR	08/28/89
02	C-14B_MW	883614	883614AB	08/25/89
03	C-14C_MW	883615	883615AB	08/25/89
04	C-29A_MW	883612	883612ABR	08/28/89
05	FB	883616	883616ABR	08/28/89
06	TB	883617	883617AB	08/28/89
07	AQ_BLANK_MS	BWB0815_MS	BWB0815SR	08/28/89
08	AQ_BLANK_MSD	BWB0815_MSD	BWB0815SD	08/25/89

COMMENTS: AQUEOUS BLANK
1000MLS/1.0ML

5B

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

000179

Lab Name: Q C INC. Contract: FLEMING

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

Lab File ID: DFTPPB0802 DFTPP Injection Date: 08/02/89

Instrument ID: 5100 DFTPP Injection Time: 0033

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	53.1
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	53.7
70	Less than 2.0% of mass 69	0.4 (0.7)1
127	40.0 - 60.0% of mass 198	41.2
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	6.1
275	10.0 - 30.0% of mass 198	17.9
365	Greater than 1.00% of mass 198	1.36
441	Present, but less than mass 443	6.6
442	Greater than 40.0% of mass 198	46.3
443	17.0 - 23.0% of mass 442	8.1 (17.6)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	50_NG_CALI	50_NG_CALI	HSB500802	08/02/89	0111
02	20_NG_CALI	20_NG_CALI	HSB200802	08/02/89	0232
03	80_NG_CALI	80_NG_CALI	HSB800802	08/02/89	0352
04	120_NG_CALI	120_NG_CALI	HSB1200802	08/02/89	0511
05	160_NG_CALI	160_NG_CALI	HSB1600802	08/02/89	0632

5B

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

000180

Lab Name: Q C INC. Contract: FLEMING

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

Lab File ID: DFTPPB0825 DFTPP Injection Date: 08/25/89

Instrument ID: 5100 DFTPP Injection Time: 1001

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	32.0
68	Less than 2.0% of mass 69	0.4 (1.3)1
69	Mass 69 relative abundance	32.1
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	41.4
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	5.6
275	10.0 - 30.0% of mass 198	23.6
365	Greater than 1.00% of mass 198	1.55
441	Present, but less than mass 443	10.7
442	Greater than 40.0% of mass 198	96.5
443	17.0 - 23.0% of mass 442	17.1 (17.7)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_CHK_STD	50NG_CHK_STD	HSB500825	08/25/89	1050
02	AQ_BLANK	BWB0815	BWB0815	08/25/89	1233
03	AQ_BLANK_MSD	BWB0815_MSD	BWB0815SD	08/25/89	1452
04	C-14B_MW	883614	883614AB	08/25/89	1826
05	C-14C_MW	883615	883615AB	08/25/89	1937

5B

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

000181

Lab Name: Q C INC. Contract: FLEMING

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

Lab File ID: DFTPPB0828 DFTPP Injection Date: 08/28/89

Instrument ID: 5100 DFTPP Injection Time: 1651

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	45.7
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	47.8
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	40.4
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	6.3
275	10.0 - 30.0% of mass 198	21.7
365	Greater than 1.00% of mass 198	1.89
441	Present, but less than mass 443	10.4
442	Greater than 40.0% of mass 198	84.3
443	17.0 - 23.0% of mass 442	14.7 (17.4)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	50_NG_CALI	50_NG_CALI	HSB500828	08/28/89	1730
02	AQ_BLANK_MS	BWB0815_MS	BWB0815SR	08/28/89	1906
03	C-29A_MW	883612	883612ABR	08/28/89	2019
04	C-14A_MW	883613	883613ABR	08/28/89	2131
05	FB	883616	883616ABR	08/28/89	2244
06	TB	883617	883617AB	08/28/89	2356

8B

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Q C INC. Contract: FLEMING

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

Lab File ID (Standard): HSB500825 Date Analyzed: 08/25/89

Instrument ID: 5100 Time Analyzed: 1050

		IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
	12 HOUR STD	207000	11.37	772000	15.29	420000	20.85
	UPPER LIMIT	414000		1544000		840000	
	LOWER LIMIT	103500		386000		210000	
	EPA SAMPLE NO.						
01	C-14B_MW	191000	11.30	686000	15.27	414000	20.87
02	C-14C_MW	159000	11.42	597000	15.32	354000	20.89
03	AQ_BLANK_MSD	182000	11.35	671000	15.30	386000	20.87
04	AQ_BLANK	196000	11.40	756000	15.30	388000	20.87

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: NONE Case No.: FLEMIN SAS No.: NONE SDG No.: NONE

Lab File ID (Standard): HSB500825 Date Analyzed: 08/25/89

Instrument ID: 5100 Time Analyzed: 1050

		IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
	12 HOUR STD	643000	25.51	403000	34.07	220000	40.04
	UPPER LIMIT	1286000		806000		440000	
	LOWER LIMIT	321500		201500		110000	
	EPA SAMPLE NO.						
01	C-14B_MW	681000	25.52	407000	34.07	235000	39.99
02	C-14C_MW	609000	25.52	379000	34.09	156000	39.99
03	AQ_BLANK_MSD	545000	25.52	347000	34.07	177000	40.01
04	AQ_BLANK	605000	25.52	334000	34.11	152000	40.14

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

8B

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Q C INC. Contract: FLEMING

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

Lab File ID (Standard): HSB500828 Date Analyzed: 08/28/89

Instrument ID: 5100 Time Analyzed: 1730

		IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
	12 HOUR STD	354000	11.02	1380000	15.04	724000	20.64
	UPPER LIMIT	708000		2760000		1448000	
	LOWER LIMIT	177000		690000		362000	
	EPA SAMPLE NO.						
01	C-14A_MW	387000	11.14	1410000	15.05	780000	20.62
02	C-29A_MW	266000	11.14	1020000	15.07	597000	20.62
03	FB	293000	11.14	1120000	15.07	624000	20.64
04	TB	238000	11.12	954000	15.05	546000	20.62
05	AQ_BLANK_MS	280000	11.12	1070000	15.05	631000	20.62

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: NONE Case No.: FLEMIN SAS No.: NONE SDG No.: NONE

Lab File ID (Standard): HSB500828 Date Analyzed: 08/28/89

Instrument ID: 5100 Time Analyzed: 1730

		IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
	12 HOUR STD	1220000	25.32	842000	33.92	683000	39.82
	UPPER LIMIT	2440000		1684000		1366000	
	LOWER LIMIT	610000		421000		341500	
	EPA SAMPLE NO.						
01	C-14A_MW	1460000	25.29	1140000	33.91	816000	39.81
02	C-29A_MW	1050000	25.29	836000	33.89	608000	39.71
03	FB	1090000	25.29	874000	33.91	573000	39.79
04	TB	1000000	25.29	727000	33.89	462000	39.77
05	AQ_BLANK_MS	1070000	25.29	814000	33.87	574000	39.66

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

000186

EPA SAMPLE NO.

C-29A_MW

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Q C INC. Contract: FLEMING

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

Matrix: (soil/water) WATER Lab Sample ID: 883612

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 883612ABR

Level: (low/med) LOW Date Received: 08/15/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 08/20/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 08/28/89

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

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

CAS NO.	COMPOUND		Q
108-95-2	Phenol		
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol		
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol		
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol		
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol		
105-67-9	2,4-Dimethylphenol		
65-85-0	Benzoic Acid		
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol		
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol		
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol		
95-95-4	2,4,5-Trichlorophenol		
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

000187

EPA SAMPLE NO.

C-29A_MW

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Q C INC. Contract: FLEMING

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

Matrix: (soil/water) WATER Lab Sample ID: 883612

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 883612ABR

Level: (low/med) LOW Date Received: 08/15/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 08/20/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 08/28/89

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

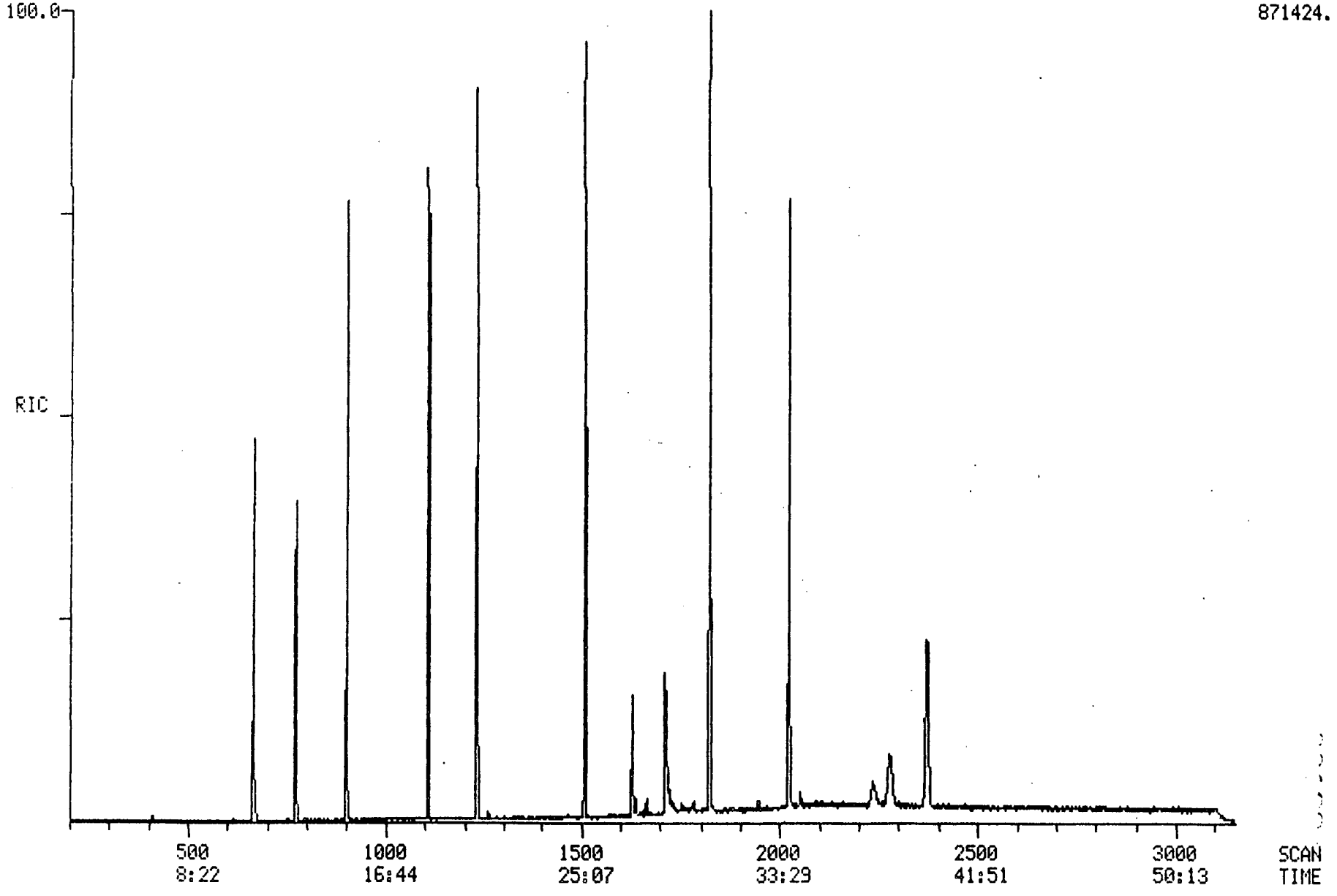
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol		
100-02-7	4-Nitrophenol		
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol		
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol		
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

MIDRIC
08/28/89 20:19:00
SAMPLE: C-29A MW
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

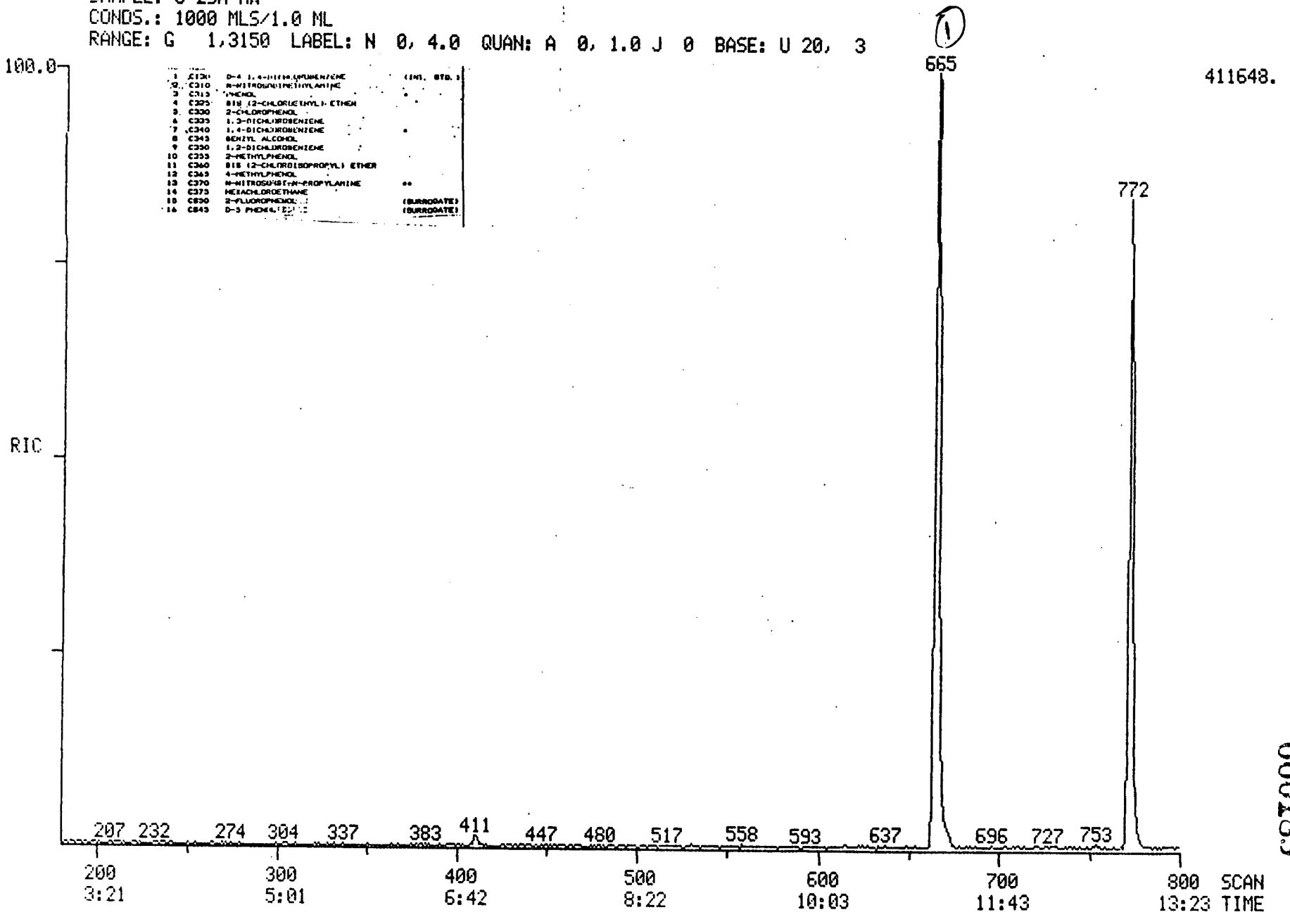
DATA: 883612ABR #1
CALI: 883612ABR #2

SCANS 200 TO 3150



MIDRIC
08/28/89 20:19:00
SAMPLE: C-29A MW
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883612ABR #1 SCANS 180 TO 800
CALI: 883612ABR #2



1	C300	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	(SURROGATE)

000189

Quantitation Report [redacted] 883612ABR

000190

Data: 883612ABR.TI
08/28/89 20:19:00
Sample: C-29A MW
Conds.: 1000 MLS/1.0 ML
Formula: [redacted] Instrument: 5100 Weight: 0.003
Submitted by: FLEMING[redacted] Analyst: WSS Acct. No.: 883612AB

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

No	Name		
1	CI30	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	CS50	2-FLUOROPHENOL	(SURROGATE)
16	CS45	D-5 PHENOL	(SURROGATE)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	665	11:08	1	1.000	A BB	266176.	40.000 NG	*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								

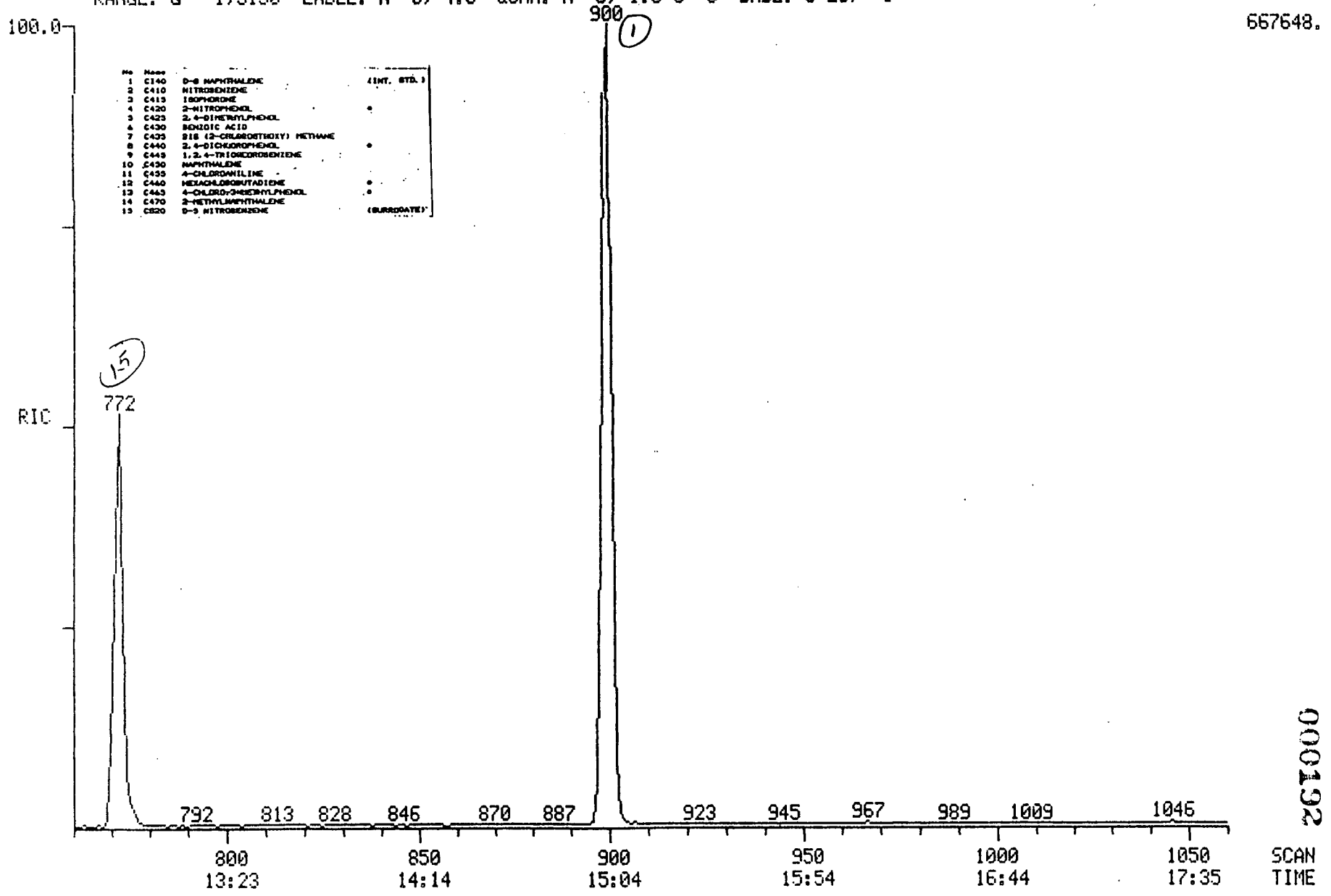
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	11:01	1.01	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	3:12		0.290						
3	10:18		0.935						
4	10:25		0.945						
5	10:30		0.953						
6	10:54		0.989						
7	11:04		1.005						

No	R t(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
8	12:35		1.143						
9	11:38		1.056						
10	11:37		1.055						
11	12:07		1.100						
12	12:06		1.099						
13	12:33		1.140						
14	12:35		1.143						
15	7:09		0.649						
16	10:16		0.932						

MIDRIC
08/28/89 20:19:00
SAMPLE: C-29A MW
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883612ABR #1
CALI: 883612ABR #2

SCANS 760 TO 1060



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	C520	D-5 NITROBENZENE	(SURROGATE)

000192

Quantitation Report [illegible] Files 883612ABR

Data: 883612ABR.TI
08/28/89 20:19:00
Sample: C-29A MW
Conds.: 1000 MLS/1.0 ML
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: FLEMING [illegible] Analyst: WSS Acct. No.: 883612AB

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

No	Name		
1	CI40	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	CS20	D-5 NITROBENZENE	(SURROGATE)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	136	900	15:04	[illegible]	1.000	A BB	1020220.	40.000 NG	52.79
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	180	893	14:57	[illegible]	0.992	A BB	~~224~~	~~0.026 NG~~	~~0.03~~
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	82	772	12:55	[illegible]	0.858	A BB	335040.	35.742 NG	47.17

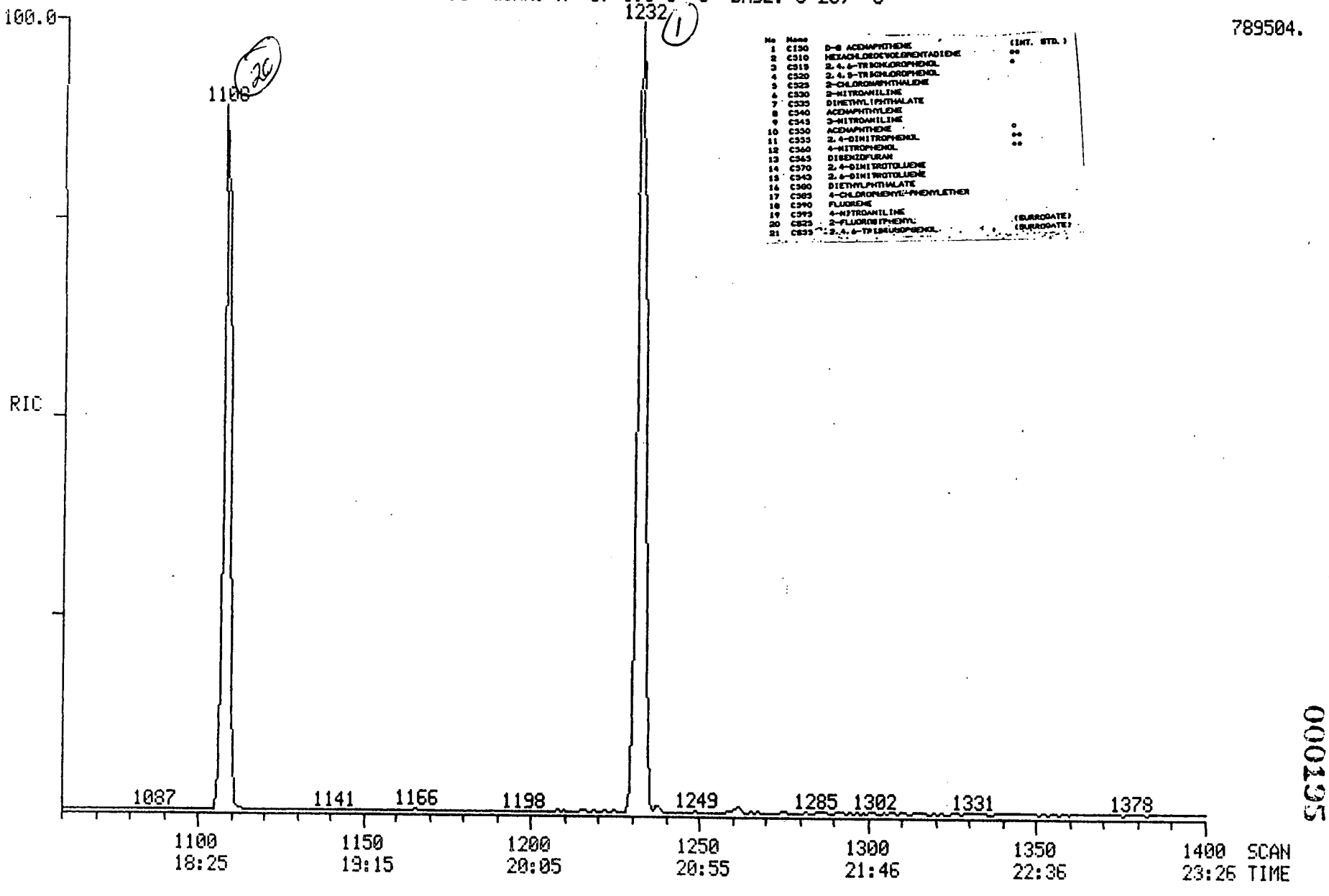
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	15:02	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	12:55		0.860						
3	13:42		0.911						
4	13:56		0.927						
5	14:12		0.944						
6	14:47		0.983						
7	14:29		0.963						
8	14:43		0.979						
9	14:55	1.00	0.992	1.00	0.03	50.00	0.000	0.334	0.00

No	R t(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
10	15:06		1.004						
11	15:24		1.024						
12	15:43		1.046						
13	17:02		1.134						
14	17:18		1.150						
15	12:52	1.00	0.856	1.00	35.74	50.00	0.263	0.368	0.71

MIDRIC
08/28/89 20:19:00
SAMPLE: C-29A MW
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883612ABR #1
CALI: 883612ABR #2

SCANS 1060 TO 1400



789504.

No	Mass		
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	C835	2,4,6-TRIBROMOPHENOL	(SURROGATE)

000195

Quantitation Report [illegible] File: 883612ABR

000196

Data: 883612ABR.TI
08/28/89 20:19:00
Sample: C-29A MW
Conds.: 1000 MLS/1.0 ML
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: FLEMING[illegible] Analyst: WSS Acct. No.: 883612AB

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

No	Name		
1	CI50	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	C543	2,6-DINITROTOLUENE	
16	C580	DIETHYLPHTHALATE	
17	C585	4-CHLOROPHENYL-PHENYLETHER	
18	C590	FLUORENE	
19	C595	4-NITROANILINE	
20	CS25	2-FLUOROBIPHENYL	(SURROGATE)
21	CS55	2,4,6-TRIBROMOPHENOL	(SURROGATE)

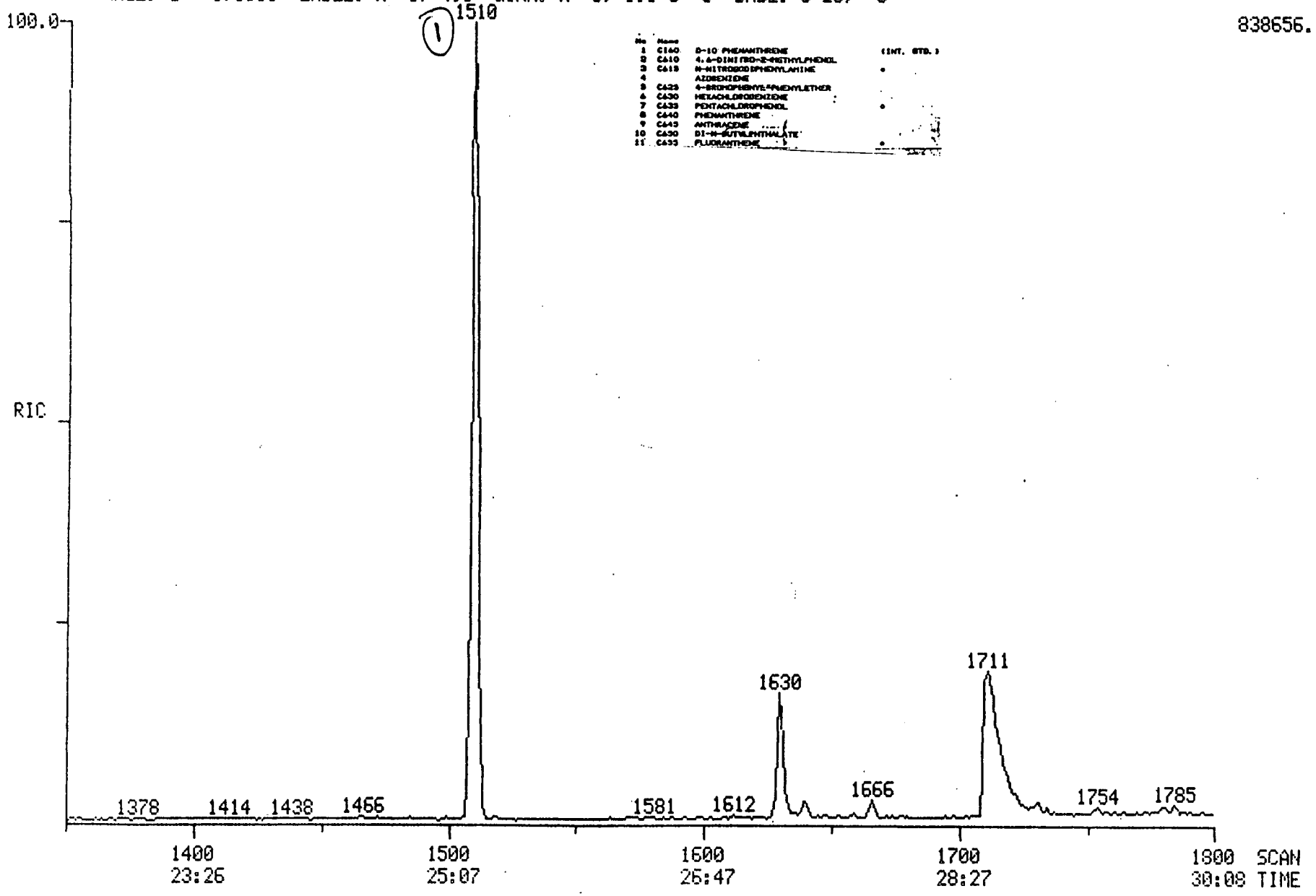
No	m/z	Scan	Time	Ref#	RRT	Meth	Area(Hght)	Amount		%Tot
1	164	1232	20:37[illegible]	1	1.000	A BB	597152.	40.000	NG	51.30
2	NOT FOUND									
3	NOT FOUND									
4	NOT FOUND									
5	NOT FOUND									
6	NOT FOUND									
7	NOT FOUND									
8	NOT FOUND									
9	NOT FOUND									
10	153	1238	20:43[illegible]	1	1.005	A BB	~~6476.~~	~~0.441~~	~~NG~~	~~0.57~~
11	NOT FOUND									
12	NOT FOUND									
13	NOT FOUND									
14	NOT FOUND									
15	NOT FOUND									
16	NOT FOUND									
17	NOT FOUND									
18	NOT FOUND									
19	NOT FOUND									
20	172	1108	18:3[illegible]	1	0.899	A BB	692832.	37.543	NG	48.14
21	NOT FOUND									

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	20:38	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	18:01		0.873						
3	18:19		0.887						
4	18:27		0.894						
5	18:49		0.912						
6	19:18		0.935						
7	20:01		0.970						
8	20:08		0.976						
9	20:37		0.999						
10	20:44	1.00	1.005	1.00	0.44	50.00	0.009	0.986	0.01
11	20:56		1.015						
12	21:17		1.031						
13	21:15		1.029						
14	21:26		1.038						
15	20:13		0.980						
16	22:17		1.079						
17	22:23		1.084						
18	22:20		1.082						
19	22:36		1.095						
20	18:34	1.00	0.899	1.00	37.54	50.00	0.928	1.236	0.75
21	23:10		1.122						

MIDRIC
08/28/89 20:19:00
SAMPLE: C-29A MW
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883612ABR #1
CALI: 883612ABR #2

SCANS 1350 TO 1800



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	•

000198

Quantitation Report [illegible] 883612ABR

000199

Data: 883612ABR.TI
08/28/89 20:19:00
Sample: C-29A MW
Conds.: 1000 MLS/1.0 ML
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: FLEMING[illegible] Analyst: WSS Acct. No.: 883612AB

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

No	Name		
1	CI60	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	*

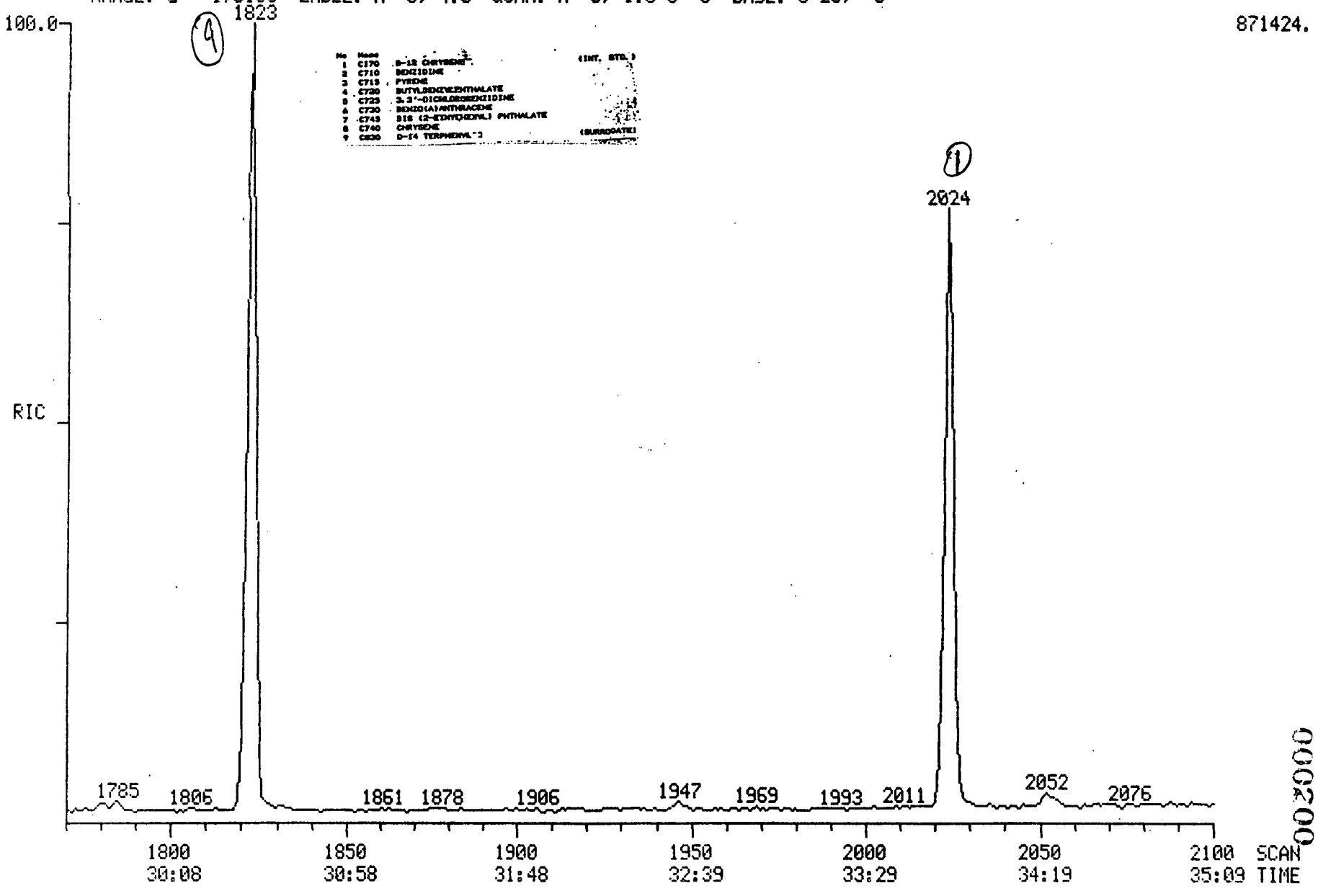
No	m/z	Scan	Time	RRT	Meth	Area(Hght)	Amount	%Tot
1	188	1510	25:1[illegible]	1.000	A BB	1052380.	40.000 NG	97.94
2	NOT FOUND							
3	NOT FOUND							
4	NOT FOUND							
5	NOT FOUND							
6	NOT FOUND							
7	NOT FOUND							
8	NOT FOUND							
9	NOT FOUND							
10	149	1639	27:2[illegible]	1.085	A BB	~~27200.~~	~~0.844 NG~~	~~2.07~~
11	NOT FOUND							

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	25:19	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	22:43		0.897						
3	22:48		0.901						
4	22:53		0.904						
5	23:54		0.944						
6	24:20		0.962						
7	24:57		0.985						
8	25:23		1.003						
9	25:31		1.008						
10	27:28	1.00	1.085	1.00	0.84	50.00	0.021	1.225	0.02
11	29:12		1.153						

MIDRIC
08/28/89 20:19:00
SAMPLE: C-29A MW
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883612ABR #1
CALI: 883612ABR #2

SCANS 1770 TO 2100



000200

Quantitation Report File: 883612ABR

000201

Data: 883612ABR.TI
08/28/89 20:19:00
Sample: C-29A MW
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: 5100 Weight: 0.003
Submitted by: FLEMING Analyst: WSS Acct. No.: 883612AB

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

No	Name		
1	CI70	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-ETHYEHEXYL) PHTHALATE	
8	C740	CHRYSENE	
9	CS30	D-14 TERPHENYL	(SURROGATE)

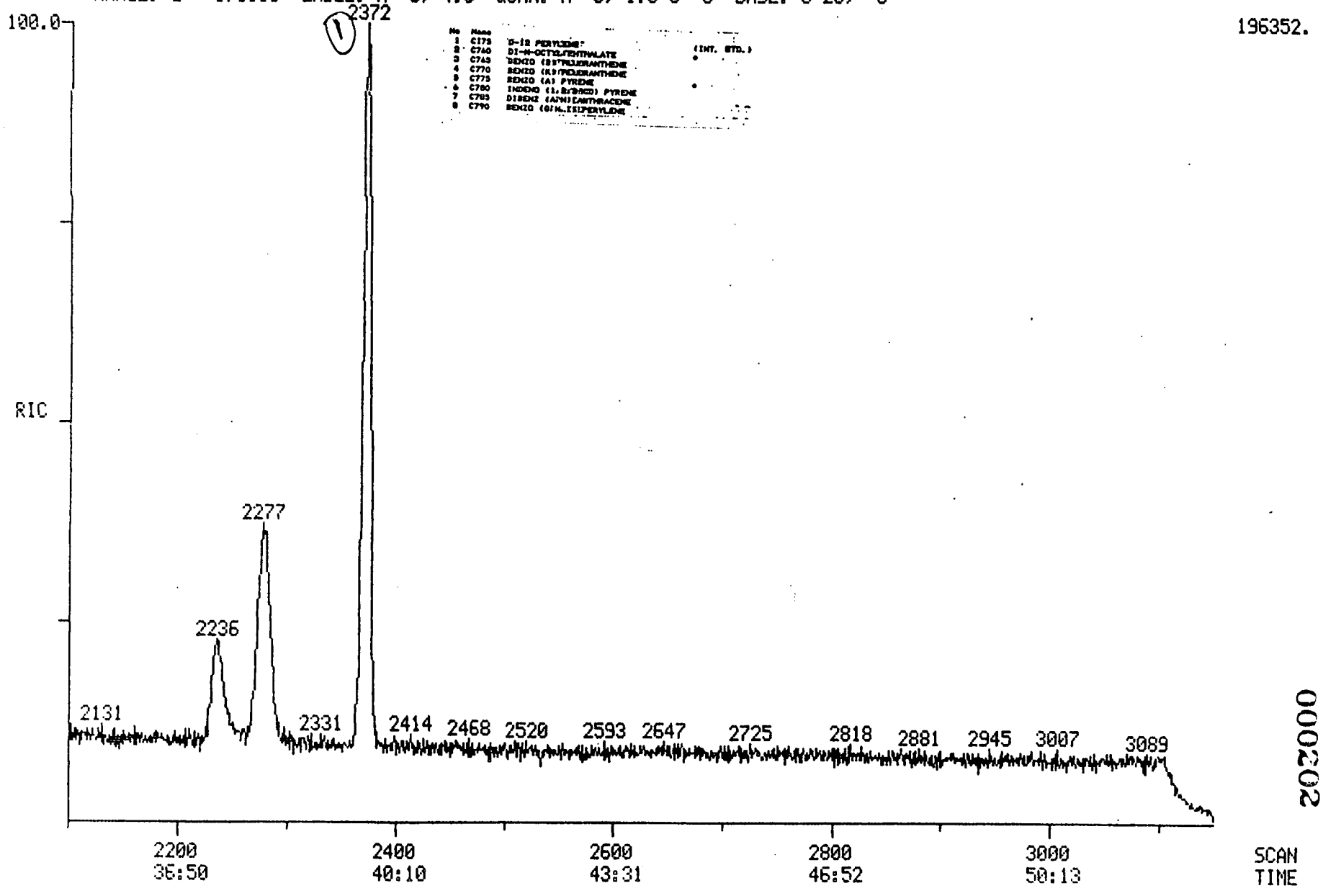
No	m/z	Scan	Time	RRT	Meth	Area(Hght)	Amount	%Tot
1	240	2024	33:53	1.000	A BB	836378.	40.000 NG	45.46
2	NOT FOUND							
3	202	1785	29:50	0.882	A BB	~~14080.~~	~~0.500 NG~~	~~0.57~~
4	149	1927	32:15	0.952	A BB	~~1056.~~	~~0.079 NG~~	~~0.09~~
5	NOT FOUND							
6	NOT FOUND							
7	149	2052	34:21	1.014	A BB	~~14048.~~	~~0.647 NG~~	~~0.74~~
8	NOT FOUND							
9	244	1823	30:31	0.901	A BB	1077310.	46.760 NG	53.15

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	33:55	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	29:42		0.876						
3	29:55	1.00	0.882	1.00	0.50	50.00	0.013	1.346	0.01
4	32:17	1.00	0.952	1.00	0.08	50.00	0.001	0.642	0.00
5	33:53		0.999						
6	33:51		0.998						
7	34:23	1.00	1.014	1.00	0.65	50.00	0.013	1.038	0.01
8	34:00		1.002						
9	30:31	1.00	0.900	1.00	46.76	50.00	1.030	1.102	0.94

MIDRIC
08/28/89 20:19:00
SAMPLE: C-29A MW
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883612ABR #1
CALI: 883612ABR #2

SCANS 2100 TO 3150



No	Name		
1	C172	'D-12 PERYLENE'	
2	C760	DI-N-OCTYL/PHTHALATE	(INT. STD.)
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	

000202

Quantitation R port [illegible] File: 883612ABR

000203

Data: 883612ABR.TI
08/28/89 20:19:00
Sample: C-29A MW
Conds.: 1000 MLS/1.0 ML
F rmula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: FLEMING[illegible] Analyst: WSS Acct. No.: 883612AB

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

No	Name		
1	CI75	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	

N	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	264	2372	39:42	51	1.000	A BB	608285.	40.000 NG	*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	39:49	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	36:44		0.922						
3	37:57		0.953						
4	38:03		0.955						
5	39:31		0.992						
6	47:39		1.197						
7	48:04		1.207						
8	49:59		1.255						

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C-14A_MW

Lab Name: Q C INC. Contract: FLEMING

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

Matrix: (soil/water) WATER Lab Sample ID: 883613

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 883613ABR

Level: (low/med) LOW Date Received: 08/15/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 08/20/89

Extraction: (SepF/Cont/Sonc) SEPF. Date Analyzed: 08/28/89

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol		
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol		
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol		
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol		
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol		
65-85-0	Benzoic Acid		
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol		
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol		
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol		
95-95-4	2,4,5-Trichlorophenol		
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

000205

EPA SAMPLE NO.

C-14A_MW

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Q C INC. Contract: FLEMING

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

Matrix: (soil/water) WATER Lab Sample ID: 883613

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 883613ABR

Level: (low/med) LOW Date Received: 08/15/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 08/20/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 08/28/89

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

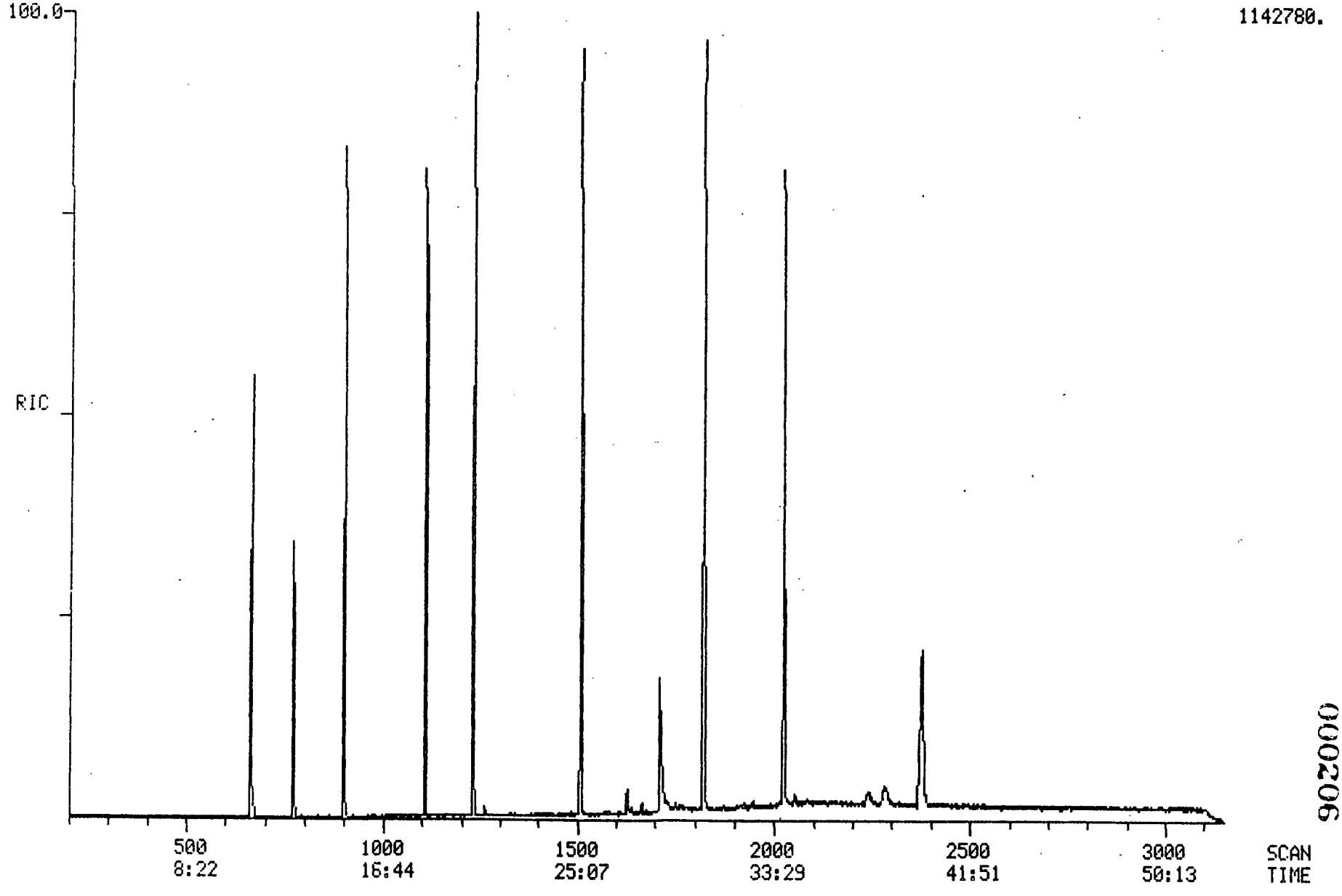
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol		
100-02-7	4-Nitrophenol		
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol		
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol		
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

MIDRIC
08/28/89 21:31:00
SAMPLE: C-14A MW
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883613ABR #1
CALI: 883613ABR #2

SCANS 200 TO 3150

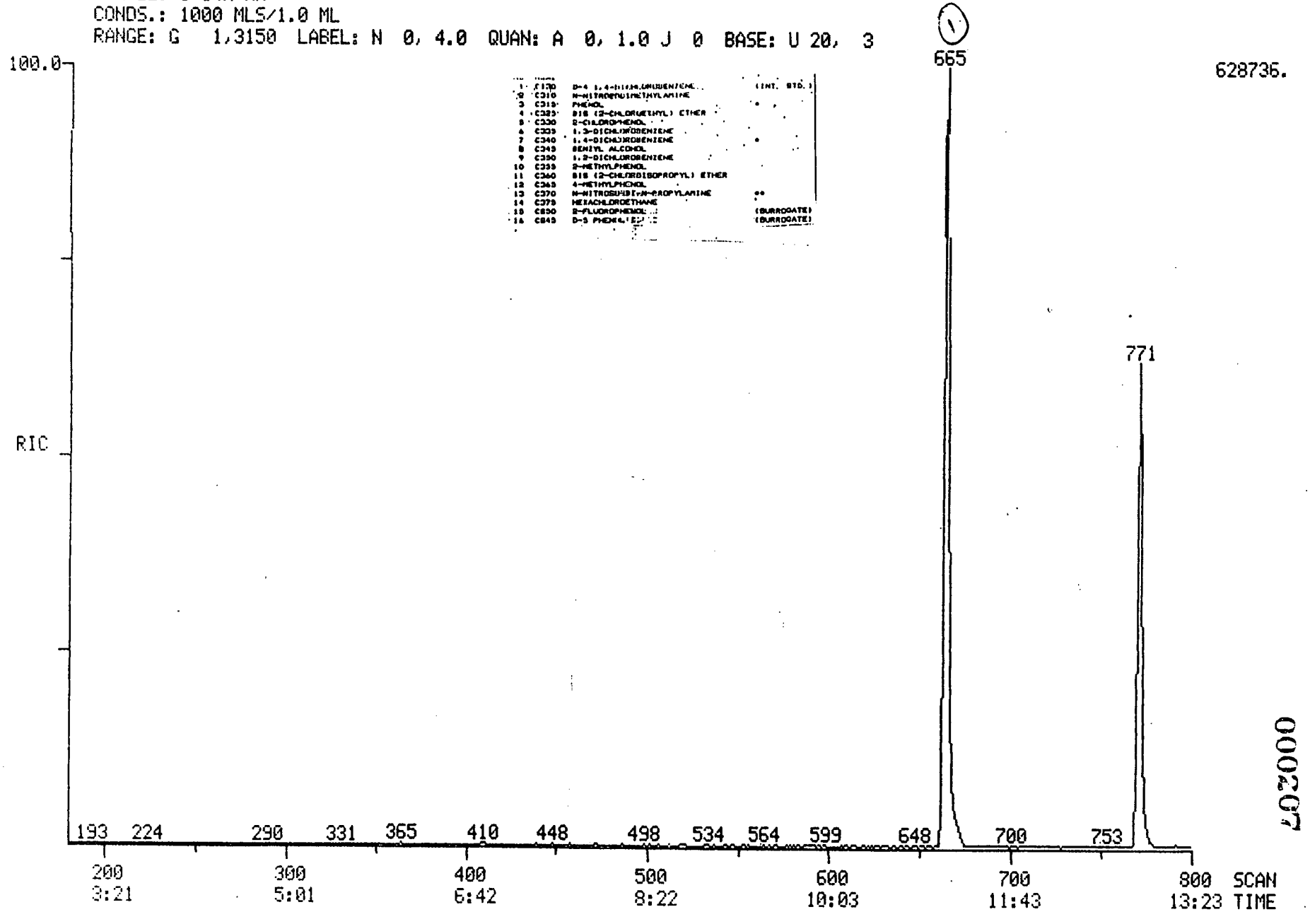


000206

MIDRIC
08/28/89 21:31:00
SAMPLE: C-14A MW
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883613ABR #1
CALI: 883613ABR #2

SCANS 180 TO 800



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	C850	2-FLUOROPHENOL	(SURROGATE)
16	C845	D-5 PHENOL	(SURROGATE)

000207

Quantitation Rep rt [illegible] 883613ABR

Data: 883613ABR.TI
08/28/89 21:31:00
Sample: C-14A MW
Conds.: 1000 MLS/1.0 ML
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: FLEMING[illegible] Analyst: WSS Acct. No.: 883613AB

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

No	Name		
1	CI30	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	CS50	2-FLUOROPHENOL	(SURROGATE)
16	CS45	D-5 PHENOL	(SURROGATE)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	665	11:08	1	1.000	A BB	386816.	40.000 NG	*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								

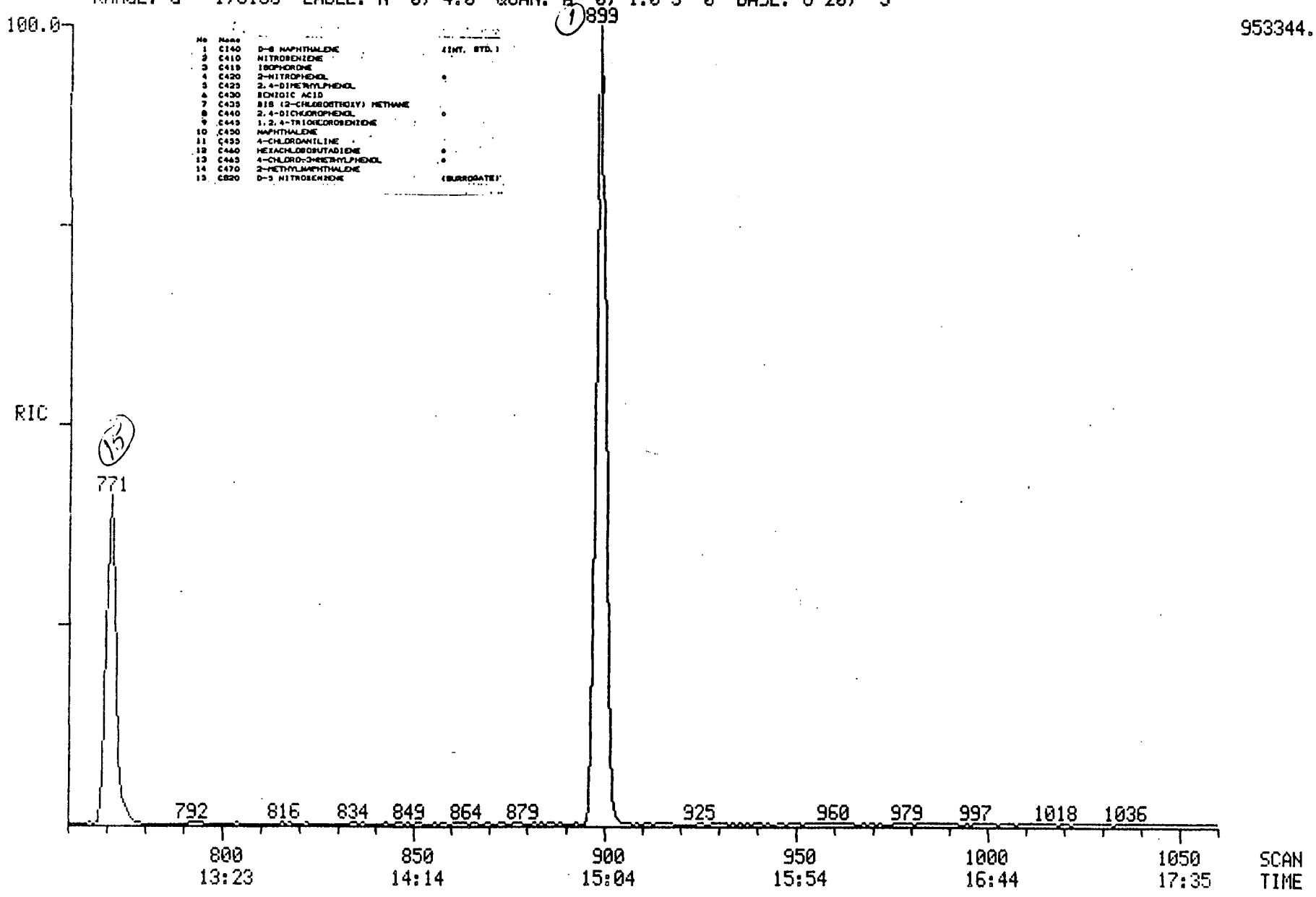
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	11:01	1.01	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	3:12		0.290						
3	10:18		0.935						
4	10:25		0.945						
5	10:30		0.953						
6	10:54		0.989						
7	11:04		1.005						

No	R t(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
8	12:35		1.143						
9	11:38		1.056						
10	11:37		1.055						
11	12:07		1.100						
12	12:06		1.099						
13	12:33		1.140						
14	12:35		1.143						
15	7:09		0.649						
16	10:16		0.932						

MIDRIC
08/28/89 21:31:00
SAMPLE: C-14A MW
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1.3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883613ABR #1
CALI: 883613ABR #2

SCANS 760 TO 1060



No	Name		
1	C140	D-8 NAPHTHALENE	(INT. STD.)
2	C410	NITROBENZENE	
3	C419	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)

000210

Quantitation Report [illegible] 883613ABR

Data: 883613ABR.TI
08/28/89 21:31:00
Sample: C-14A MW
Conds.: 1000 MLS/1.0 ML
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: FLEMING[illegible] Analyst: WSS Acct. No.: 883613AB

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

No	Name		
1	CI40	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	CS20	D-5 NITROBENZENE	(SURROGATE)

No	m/z	Scan	Time	RRT	Meth	Area(Hght)	Amount	%Tot
1	136	899	15:09	1.000	A BB	1410870.	40.000 NG	56.44
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	82	771	12:54	0.858	A BB	400256.	30.876 NG	43.56

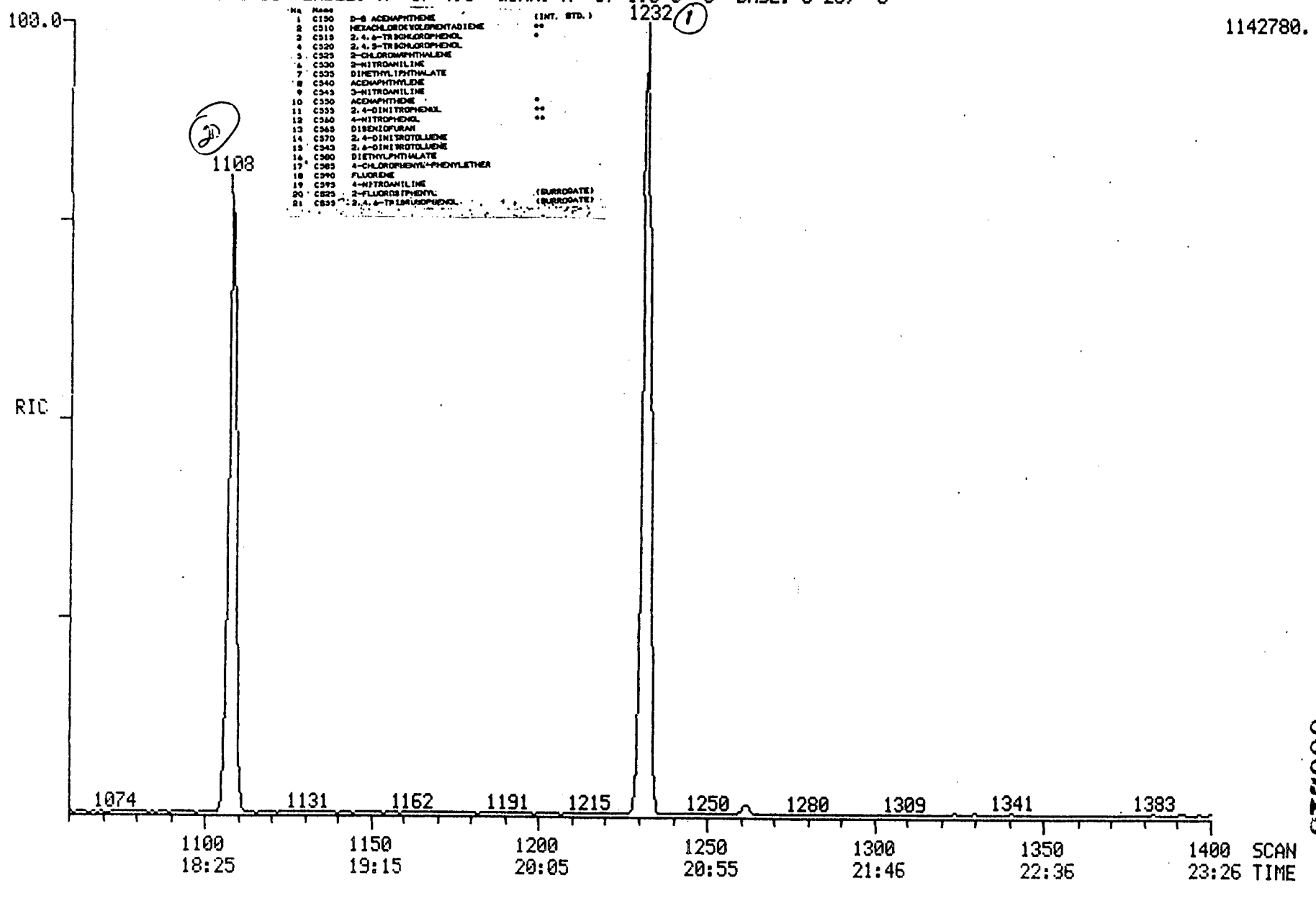
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	15:02	1.00	1.600	1.00	40.00	40.00	1.000	1.000	1.00
2	12:55		0.860						
3	13:42		0.911						
4	13:56		0.927						
5	14:12		0.944						
6	14:47		0.983						
7	14:29		0.963						
8	14:43		0.979						
9	14:55		0.992						

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
10	15:06		1.004						
11	15:24		1.024						
12	15:43		1.046						
13	17:02		1.134						
14	17:18		1.150						
15	12:52	1.00	0.855	1.00	30.88	50.00	0.227	0.368	0.62

MIDRIC
08/28/89 21:31:00
SAMPLE: C-14A MW
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883613ABR #1
CALI: 883613ABR #2

SCANS 1060 TO 1400



No	Mass		
1	C190	D-8 ACENAPHTHENE	(INT. STD.)
2	C210	HEXACHLOROCYCLOPENTADIENE	**
3	C215	2,4,6-TRICHLOROPHENOL	*
4	C220	2,4,5-TRICHLOROPHENOL	
5	C225	2-CHLORONAPHTHALENE	
6	C230	2-NITROANILINE	
7	C235	DIMETHYLPHTHALATE	
8	C240	ACENAPHTHYLENE	
9	C245	3-NITROANILINE	
10	C250	ACENAPHTHENE	*
11	C255	2,4-DINITROPHENOL	**
12	C260	4-NITROPHENOL	**
13	C265	DIBENZOFURAN	
14	C270	2,4-DINITROTOLUENE	
15	C275	2,6-DINITROTOLUENE	
16	C280	DIETHYLPHTHALATE	
17	C285	4-CHLOROPHENYL-PHENYLETHER	
18	C290	FLUORENE	
19	C295	4-NITROANILINE	
20	C325	2-FLUOROBIPHENYL	(SURROGATE)
21	C335	2,4,6-TRIBROMOPHENOL	(SURROGATE)

000213

Quantitation Report [illegible] 883613ABR

000214

Data: 883613ABR.TI
08/28/89 21:31:00
Sampl : C-14A MW
Conds.: 1000 MLS/1.0 ML
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitt d by: FLEMING[illegible] Analyst: WSS Acct. No.: 883613AB

AMOUNT=AREA * REF AM[illegible]AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI50	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	C543	2,6-DINITROTOLUENE	
16	C580	DIETHYLPHTHALATE	
17	C585	4-CHLOROPHENYL-PHENYLETHER	
18	C590	FLUORENE	
19	C595	4-NITROANILINE	
20	CS25	2-FLUOROBIPHENYL	(SURROGATE)
21	CS55	2,4,6-TRIBROMOPHENOL	(SURROGATE)

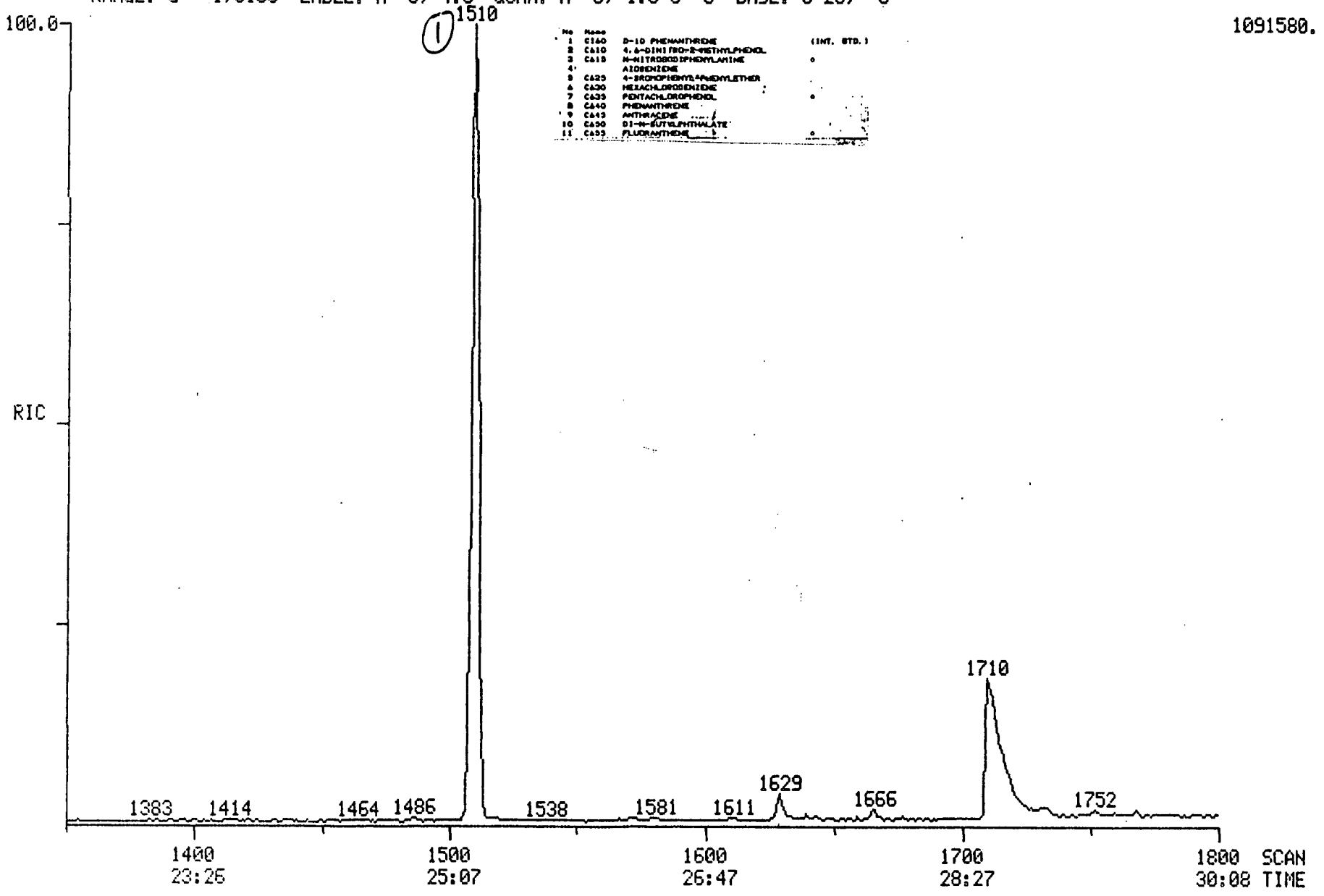
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	164	1232	20:37[illegible]	[illegible]	1.000	A BB	779648.	40.000 NG	50.44
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	172	1108	18:33[illegible]	[illegible]	0.899	A BV	947072.	39.307 NG	49.56
21	NOT FOUND								

No	Ret(L)	Ratio	RRT	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	20:38	1.00	1.000	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	18:01		0.873							
3	18:19		0.887							
4	18:27		0.894							
5	18:49		0.912							
6	19:18		0.935							
7	20:01		0.970							
8	20:08		0.976							
9	20:37		0.999							
10	20:44		1.005							
11	20:56		1.015							
12	21:17		1.031							
13	21:15		1.029							
14	21:26		1.038							
15	20:13		0.980							
16	22:17		1.079							
17	22:23		1.084							
18	22:20		1.082							
19	22:36		1.095							
20	18:34	1.00	0.899	1.000	1.00	39.31	50.00	0.972	1.236	0.79
21	23:10		1.122							

MIDRIC
08/28/89 21:31:00
SAMPLE: C-14A MW
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883613ABR #1
CALI: 883613ABR #2

SCANS 1350 TO 1800



No	Name		
1	C160	D-10 PHENANTHRENE	(INT. STD.)
2	C610	4,6-DINITRO-2-METHYLPHENOL	
3	C615	N-NITROSODIPHENYLAMINE	
4		AIDRENIONE	
5	C625	4-BROMOPHENYL-PHENYLETHER	
6	C630	HEXACHLOROBENZENE	
7	C635	PENTACHLOROPHENOL	
8	C640	PHENANTHRENE	
9	C643	ANTHRACENE	
10	C650	DI-N-BUTYLPHTHALATE	
11	C655	FLUORANTHENE	

000216

Quantitation R port [illegible] 883613ABR

Data: 883613ABR.TI
08/28/89 21:31:00
Sample: C-14A MW
Conds.: 1000 MLS/1.0 ML
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: FLEMING [illegible] Analyst: WSS Acct. No.: 883613AB

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

No	Name		
1	CI60	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	*

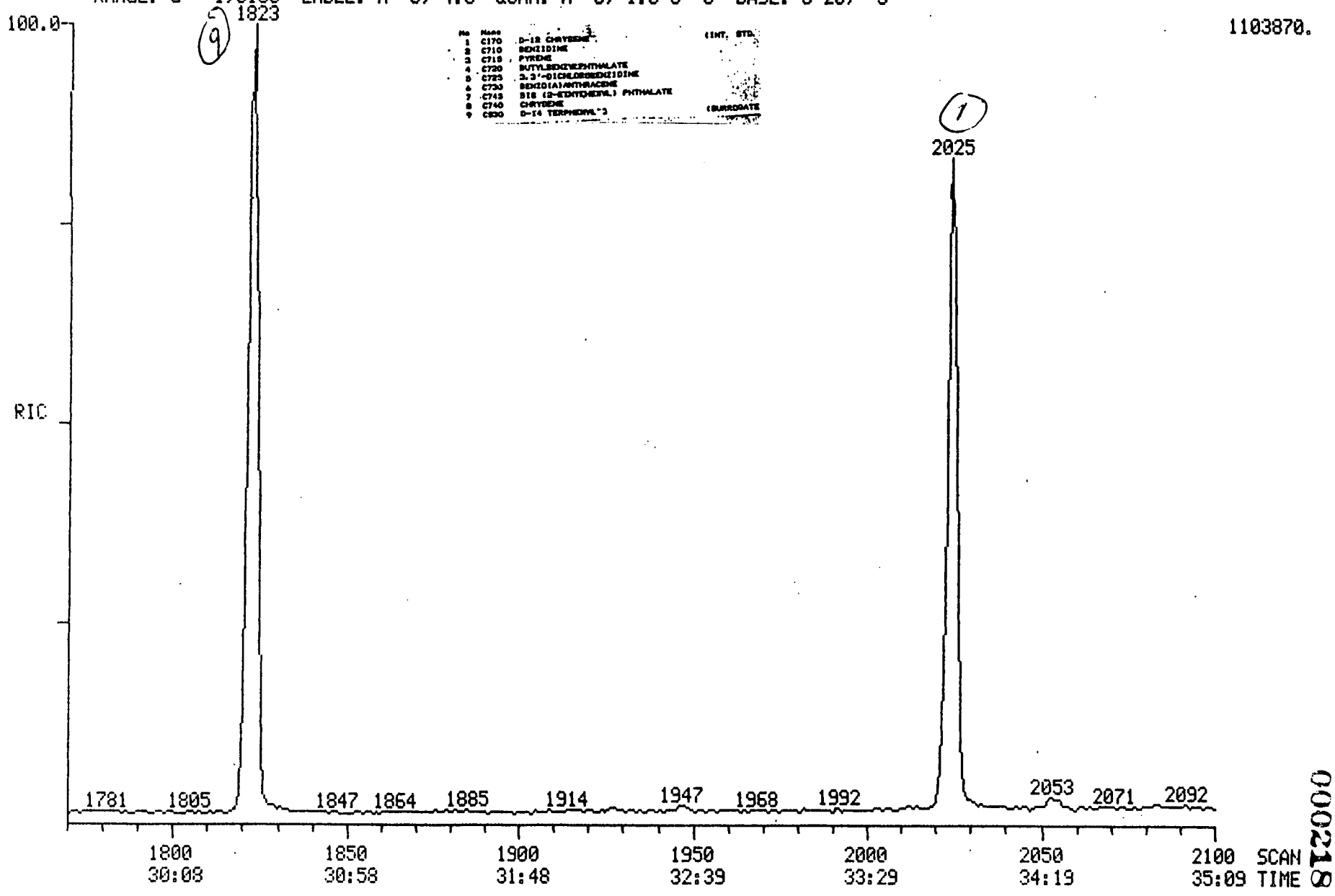
No	m/z	Scan	Time	RRT	Meth	Area(Hght)	Amount	%Tot
1	188	1510	25:17 [illegible]	1.000	A BV	1455550.	40.000 NG	99.52
2	NOT FOUND							
3	169	1361	22:47 [illegible]	0.901	A BB	~~384~~	~~0.022 NG~~	~~0.05~~
4	NOT FOUND							
5	NOT FOUND							
6	NOT FOUND							
7	NOT FOUND							
8	NOT FOUND							
9	NOT FOUND							
10	149	1639	27:26 [illegible]	1.085	A BB	~~7648~~	~~0.172 NG~~	~~0.43~~
11	NOT FOUND							

N	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	25:19	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	22:43		0.897						
3	22:48	1.00	0.901	1.00	0.02	50.00	0.000	0.489	0.00
4	22:53		0.904						
5	23:54		0.944						
6	24:20		0.962						
7	24:57		0.985						
8	25:23		1.003						
9	25:31		1.008						
10	27:28	1.00	1.085	1.00	0.17	50.00	0.004	1.225	0.00
11	29:12		1.153						

MIDRIC
08/28/89 21:31:00
SAMPLE: C-14A MW
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883613ABR #1
CALI: 883613ABR #2

SCANS 1770 TO 2100



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

000218

Quantitation Report [illegible] 883613ABR

000219

Data: 883613ABR.TI
08/28/89 21:31:00
Sample: C-14A MW
Conds.: 1000 MLS/1.0 ML
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: FLEMING[illegible] Analyst: WSS Acct. No.: 883613AB

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

No	Name		
1	CI70	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	CS30	D-14 TERPHENYL	(SURROGATE)

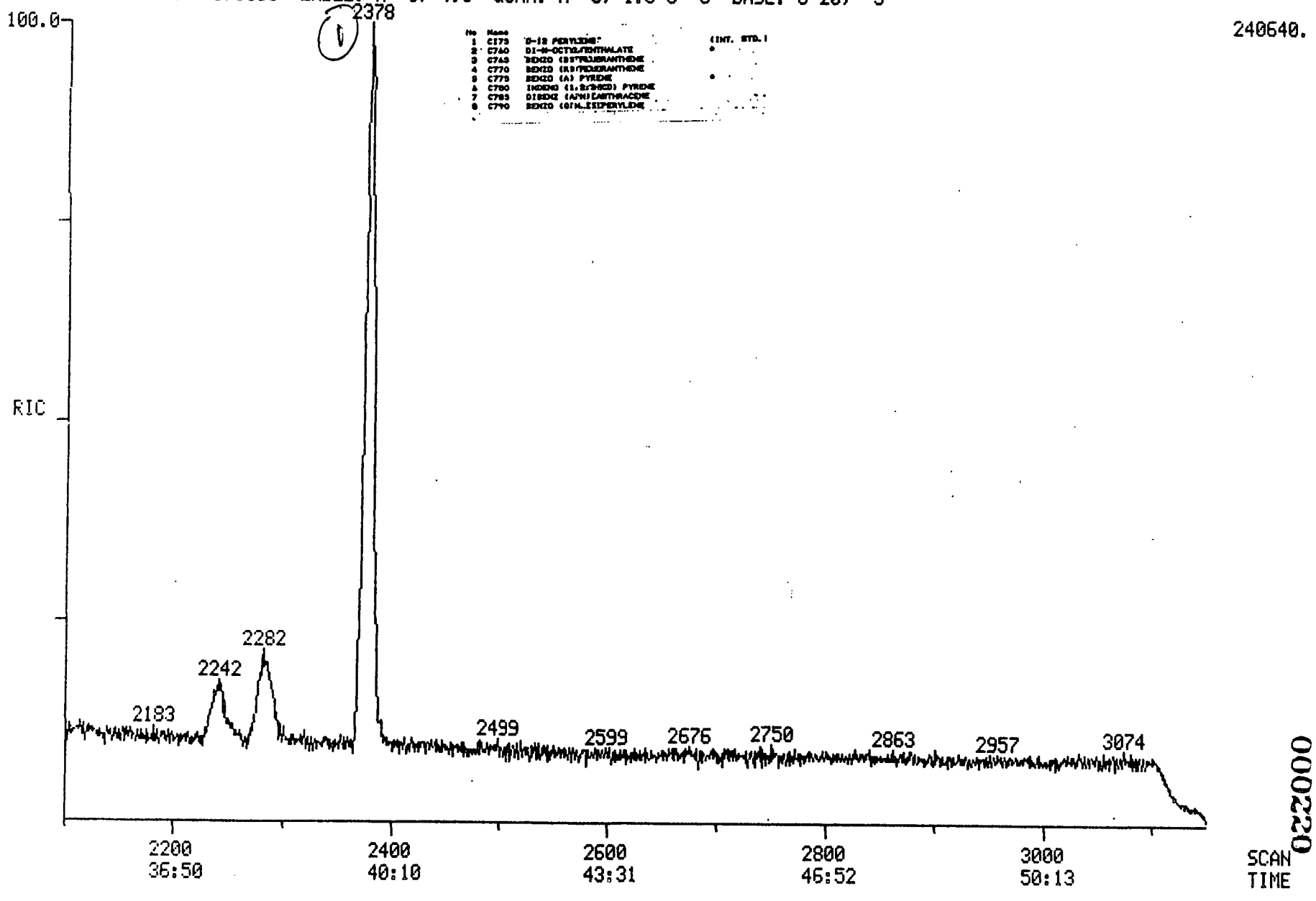
No	m/z	Scan	Time	RRT	Meth	Area(Hght)	Amount	%Tot
1	240	2025	33:5[illegible]	1.000	A BB	1143570.	40.000 NG	44.59
2	NOT FOUND							
3	NOT FOUND							
4	149	1927	32:1[illegible]	0.952	A BB	~~4576.~~	~~0.249 NG~~	~~0.28~~
5	NOT FOUND							
6	NOT FOUND							
7	149	2053	34:2[illegible]	1.014	A BB	~~14400.~~	~~0.485 NG~~	~~0.54~~
8	NOT FOUND							
9	244	1823	30:3[illegible]	0.900	A BB	1542970.	48.982 NG	54.60

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	33:55	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	29:42		0.876						
3	29:55		0.882						
4	32:17	1.00	0.952	1.00	0.25	50.00	0.003	0.642	0.00
5	33:53		0.999						
6	33:51		0.998						
7	34:23	1.00	1.014	1.00	0.49	50.00	0.010	1.038	0.01
8	34:00		1.002						
9	30:31	1.00	0.900	1.00	48.98	50.00	1.079	1.102	0.98

MIDRIC
08/28/89 21:31:00
SAMPLE: C-14A MW
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883613ABR #1
CALI: 883613ABR #2

SCANS 2100 TO 3150



000220

Quantitation Report [illegible] 883613ABR

000221

Data: 883613ABR.TI
08/28/89 21:31:00
Sample: C-14A MW
Conds.: 1000 MLS/1.0 ML
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: FLEMING[illegible] Analyst: WSS Acct. No.: 883613AB

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

No	Name		
1	CI75	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	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	264	2378	39:48	[illegible]	1.000	A BB	816285.	40.000 NG	*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	39:49	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	36:44		0.922						
3	37:57		0.953						
4	38:03		0.955						
5	39:31		0.992						
6	47:39		1.197						
7	48:04		1.207						
8	49:59		1.255						

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C-14B_MW

Lab Name: Q C INC. Contract: FLEMING

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

Matrix: (soil/water) WATER Lab Sample ID: 883614

Sample wt/vol: 950 (g/mL) ML Lab File ID: 883614AB

Level: (low/med) LOW Date Received: 08/15/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 08/20/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 08/25/89

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 0.95

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol		
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol		
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol		
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol		
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol		
105-67-9	2,4-Dimethylphenol		
65-85-0	Benzoic Acid		
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol		
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol		
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol		
95-95-4	2,4,5-Trichlorophenol		
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C-14B_MW

Lab Name: Q C INC. Contract: FLEMING

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

Matrix: (soil/water) WATER Lab Sample ID: 883614

Sample wt/vol: 950 (g/mL) ML Lab File ID: 883614AB

Level: (low/med) LOW Date Received: 08/15/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 08/20/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 08/25/89

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 0.95

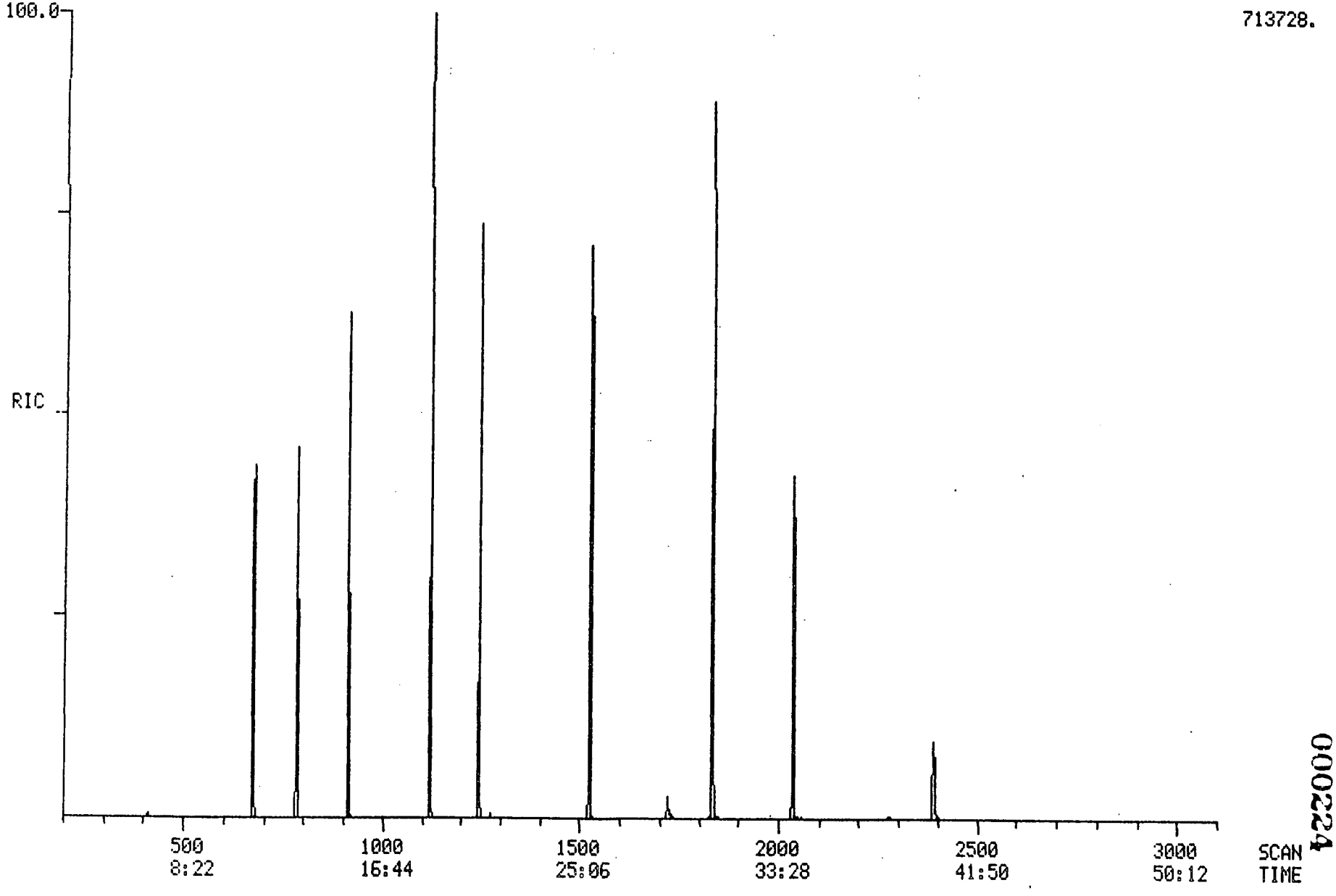
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol		
100-02-7	4-Nitrophenol		
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol		
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol		
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

MIDRIC
08/25/89 18:26:00
SAMPLE: C-14B MW
CONDS.: 950MLS/1.0ML
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883614AB #1
CALI: 883614AB #2

SCANS 200 TO 3100

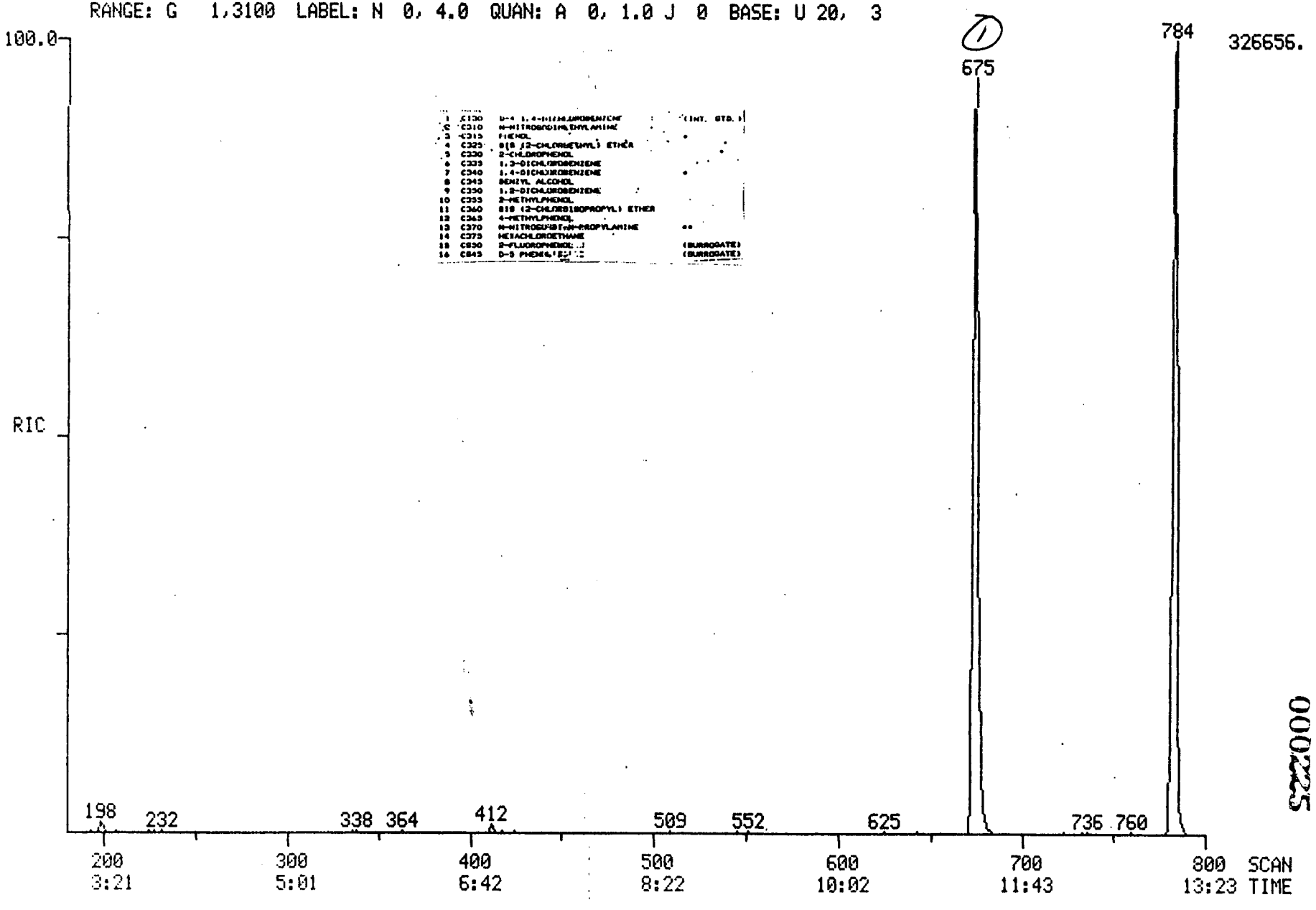


000224

MIDRIC
08/25/89 18:26:00
SAMPLE: C-14B MW
CONDS.: 950MLS/1.0ML
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883614AB #1
CALI: 883614AB #2

SCANS 180 TO 800



1	C300	D-4 1,4-DICHLOROBENZENE	(INT. STD.)
2	C310	N-NITROSODIMETHYLAMINE	
3	C315	PHENOL	
4	C325	B(B /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	B1B (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	(SURROGATE)

000225

Quantitation R port [illegible] File: 883614AB

Data: 883614AB.TI
08/25/89 18:26:00
Sample: C-14B MW
Conds.: 950MLS/1.0ML
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: FLEMING[illegible] Analyst: DMM Acct. No.: 883614AB

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

No	Name		
1	CI30	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	CS50	2-FLUOROPHENOL	(SURROGATE)
16	CS45	D-5 PHENOL	(SURROGATE)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	675	11:18	[illegible]1	1.000	A BB	191360.	40.000 NG	*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								

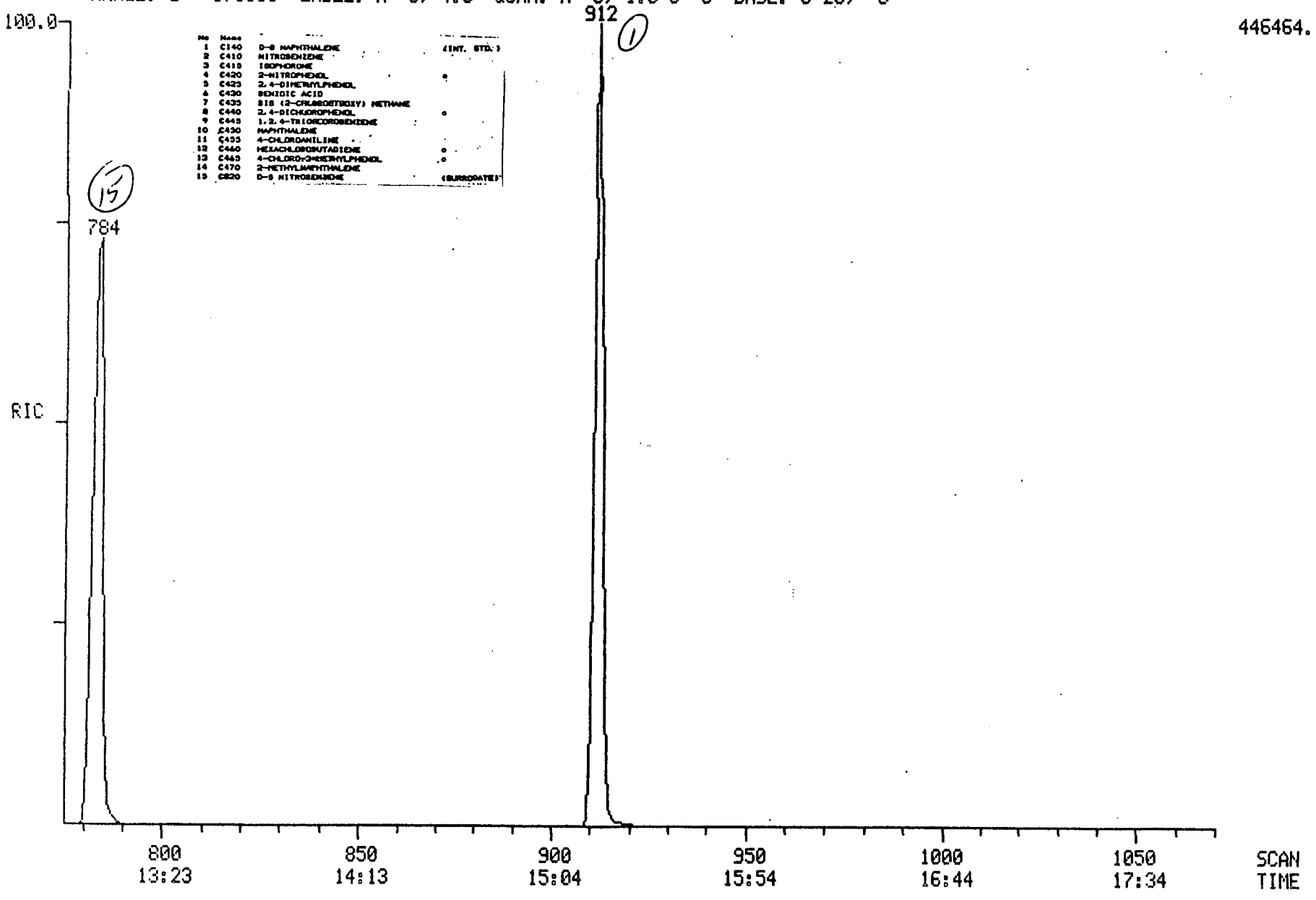
No	Ret(L)	Ratio	RRT(E)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	11:22	0.99	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	3:49		0.336						
3	10:39		0.937						
4	10:47		0.948						
5	10:53		0.957						
6	11:15		0.990						
7	11:25		1.004						

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
8	12:50		1.130						
9	11:58		1.053						
10	11:56		1.050						
11	12:24		1.091						
12	12:23		1.090						
13	12:50		1.130						
14	12:53		1.134						
15	7:46		0.683						
16	10:37		0.934						

MIDRIC
08/25/89 18:26:00
SAMPLE: C-14B MW
CONDS.: 950MLS/1.0ML
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883614AB #1
CALI: 883614AB #2

SCANS 775 TO 1070



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-8 NITROBENZENE	(SURROGATE)

446464.

000228

Quantitation Report [illegible] 883614AB

000229

Data: 883614AB.TI
08/25/89 18:26:00
Sample: C-14B MW
Conds.: 950MLS/1.0ML
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: FLEMING[illegible] Analyst: DMM Acct. No.: 883614AB

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

No	Name		
1	CI40	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	CS20	D-5 NITROBENZENE	(SURROGATE)

No	m/z	Scan	Time	RRT	Meth	Area(Hght)	Amount	%Tot
1	136	912	15:16	1.000	A BB	686368.	40.000 NG	41.97
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	82	783	13:06	0.859	A BB	340960.	55.306 NG	58.03

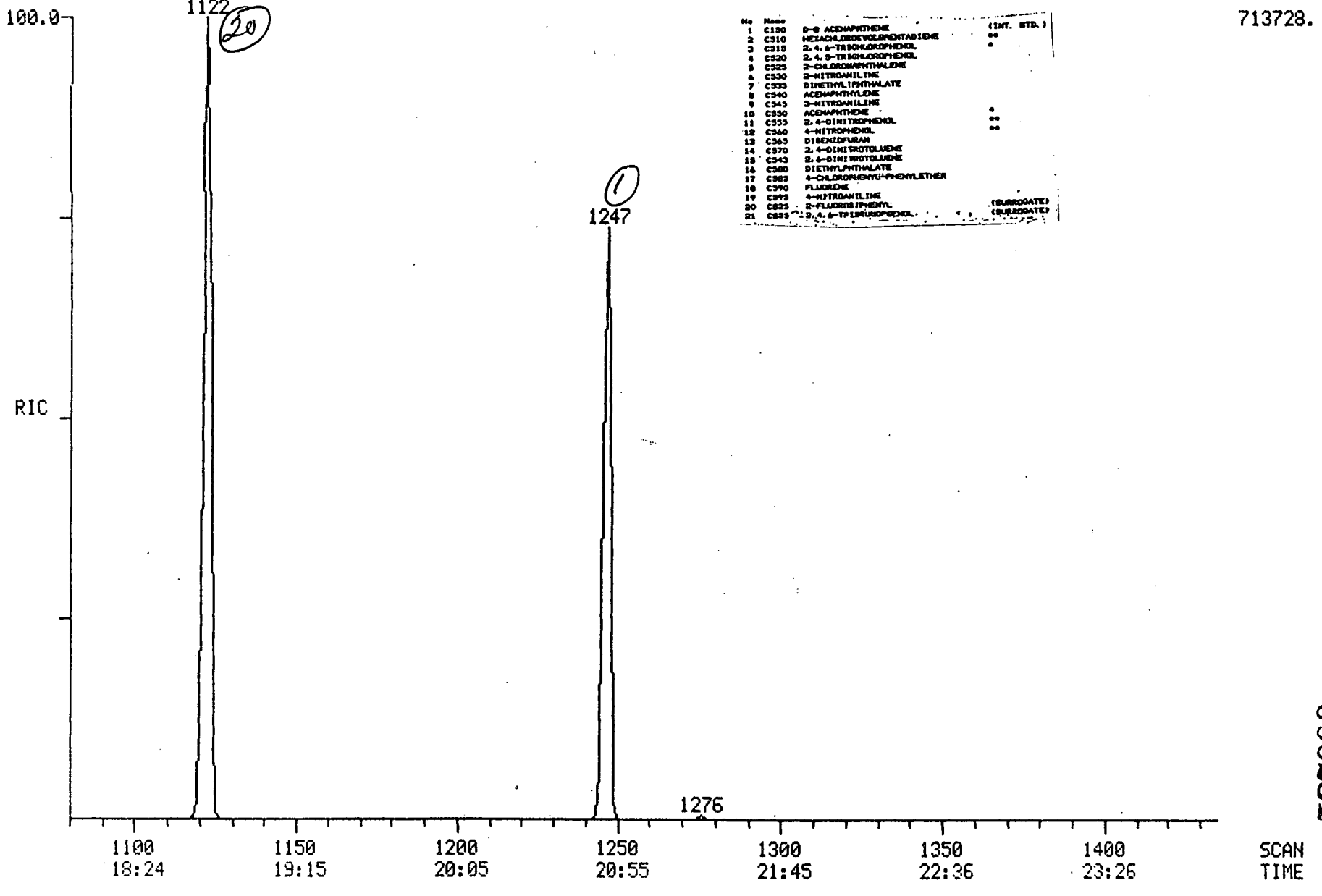
No	Ret(L)	Ratio	RRT	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	15:17	1.00	1.000	1.00	1.00	40.00	40.00	1.000	1.000	1.00
2	13:12		0.864							
3	13:56		0.912							
4	14:11		0.929							
5	14:26		0.944							
6	14:58		0.979							
7	14:42		0.962							
8	14:57		0.978							
9	15:10		0.992							

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
10	15:21		1.004						
11	15:38		1.023						
12	15:56		1.043						
13	17:13		1.127						
14	17:30		1.146						
15	13:09	1.00	0.861	1.00	55.31	50.00	0.397	0.359	1.11

MIDRIC
08/25/89 18:26:00
SAMPLE: C-14B MW
CONDS.: 950MLS/1.0ML
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883614AB #1
CALI: 883614AB #2

SCANS 1080 TO 1435



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	C625 2-FLUOROBIPHENYL	(SURROGATE)
21	C635 2,4,6-TRIBROMOPHENOL	(SURROGATE)

713728.

000231

Quantitation Report [illegible] File: 883614AB

000232

Data: 883614AB.TI
08/25/89 18:26:00
Sampl : C-14B MW
Conds.: 950MLS/1.0ML
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: FLEMING[illegible] Analyst: DMM Acct. No.: 883614AB

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

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	C543	2,6-DINITROTOLUENE	
16	C580	DIETHYLPHTHALATE	
17	C585	4-CHLOROPHENYL-PHENYLETHER	
18	C590	FLUORENE	
19	C595	4-NITROANILINE	
20	CS25	2-FLUOROBIPHENYL	(SURROGATE)
21	CS55	2,4,6-TRIBROMOPHENOL	(SURROGATE)

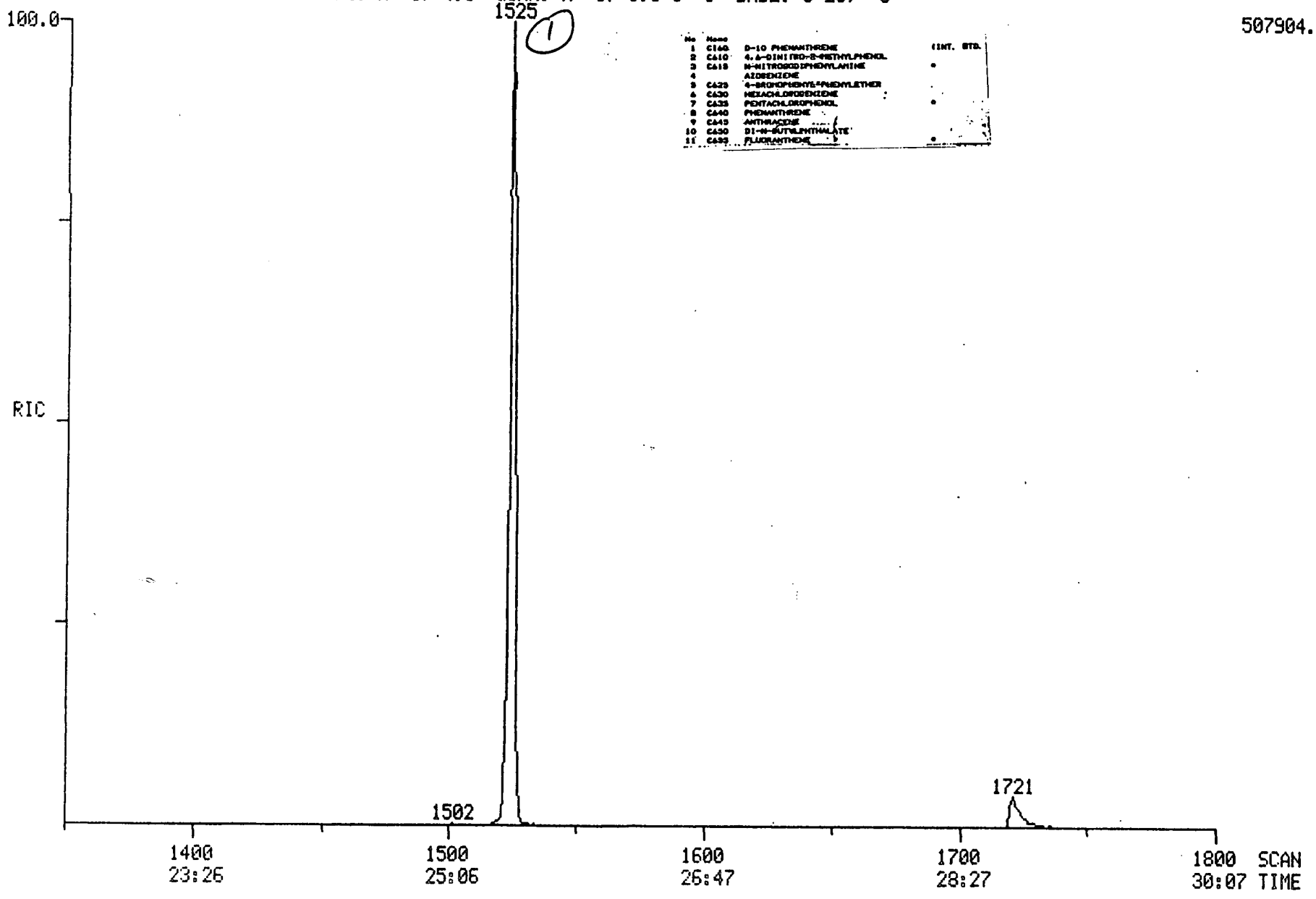
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	164	1247	20:52	[illegible]	1.000	A BB	413984.	40.000	NG	40.04
2	NOT FOUND									
3	NOT FOUND									
4	NOT FOUND									
5	NOT FOUND									
6	NOT FOUND									
7	NOT FOUND									
8	NOT FOUND									
9	NOT FOUND									
10	NOT FOUND									
11	NOT FOUND									
12	NOT FOUND									
13	NOT FOUND									
14	NOT FOUND									
15	NOT FOUND									
16	NOT FOUND									
17	NOT FOUND									
18	NOT FOUND									
19	NOT FOUND									
20	172	1122	18:47	[illegible]	0.900	A BV	760800.	59.918	NG	59.97
21	NOT FOUND									

N	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	20:51	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	18:13		0.874						
3	18:32		0.888						
4	18:39		0.894						
5	19:02		0.913						
6	19:31		0.936						
7	20:13		0.970						
8	20:21		0.976						
9	20:50		0.999						
10	20:57		1.005						
11	21:08		1.014						
12	21:27		1.029						
13	21:27		1.029						
14	21:38		1.038						
15	20:25		0.979						
16	22:28		1.078						
17	22:36		1.083						
18	22:33		1.081						
19	22:48		1.093						
20	18:46	1.00	0.900	1.00	59.92	50.00	1.470	1.227	1.20
21	23:23		1.121						

MIDRIC
08/25/89 18:26:00
SAMPLE: C-14B MW
CONDS.: 950MLS/1.0ML
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883614AB #1
CALI: 883614AB #2

SCANS 1350 TO 1800



No	Name		(INT. STD.
1	C140	D-10 PHENANTHRENE	
2	C610	4,6-DINITRO-2-METHYLPHENOL	
3	C618	N-NITROSODIPHENYLAMINE	•
4		AZOBENZENE	
5	C625	4-BROMOPHENYL-PHENYLETHER	
6	C630	HEXACHLOROBENZENE	
7	C633	PENTACHLOROPHENOL	•
8	C640	PHENANTHRENE	
9	C645	ANTHRACENE	
10	C650	DI-N-BUTYLPHTHALATE	
11	C655	FLUORANTHENE	•

507904.

000234

Quantitation R p rt [illegible] File: 883614AB

Data: 883614AB.TI
08/25/89 18:26:00
Sample: C-14B MW
Conds.: 950MLS/1.0ML
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: FLEMING[illegible] Analyst: DMM Acct. No.: 883614AB

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

No	Name		
1	CI60	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	*

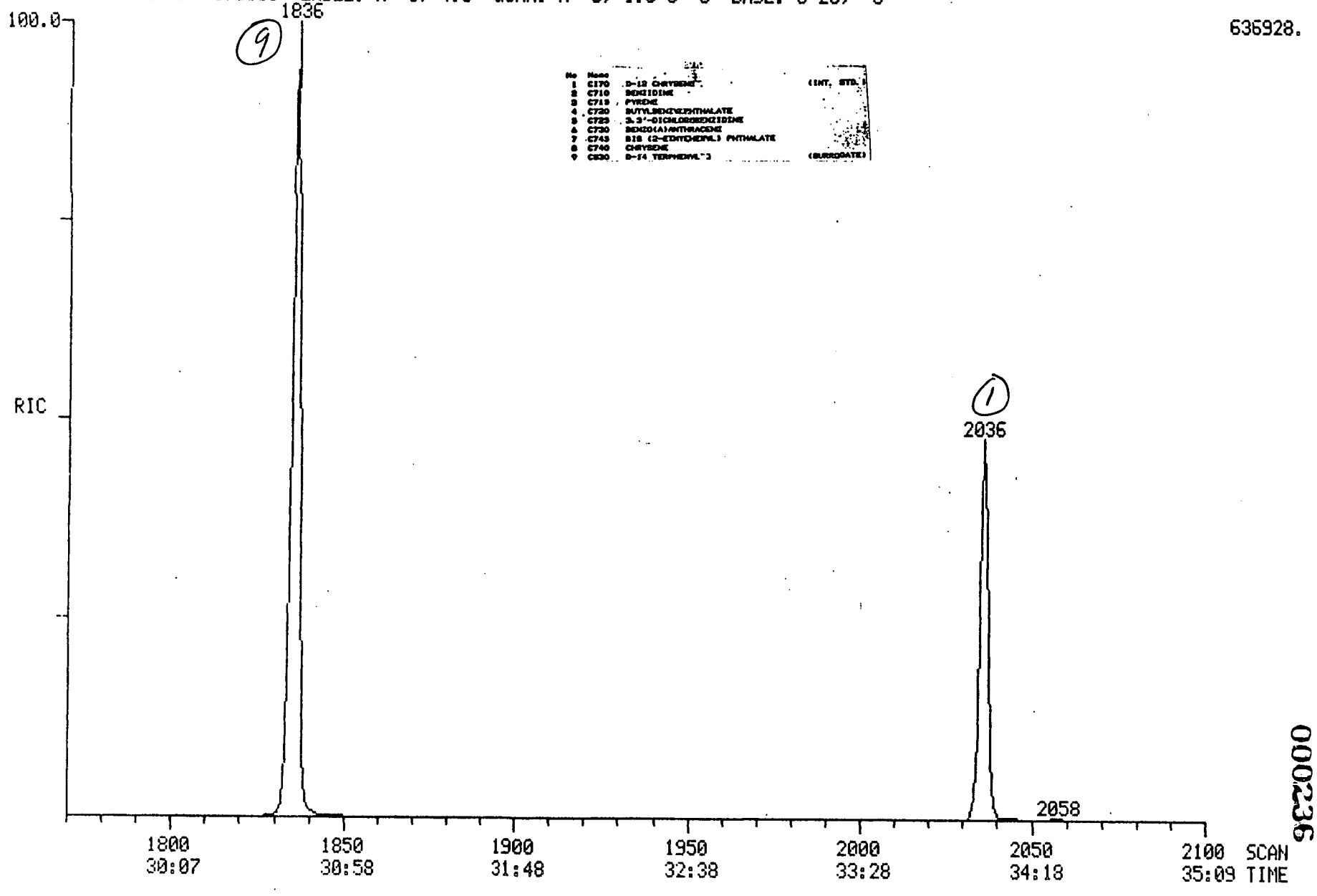
No	m/z	Scan	Time	RRT	Meth	Area(Hght)	Amount	%Tot
1	188	1525	25:31	1.000	A BB	681312.	40.000 NG	99.93
2	NOT FOUND							
3	NOT FOUND							
4	NOT FOUND							
5	NOT FOUND							
6	NOT FOUND							
7	NOT FOUND							
8	NOT FOUND							
9	NOT FOUND							
10	149	1652	27:39	1.083	A BB	~~736.~~	~~0.032 NG~~	~~0.08~~
11	NOT FOUND							

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	25:30	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	22:55		0.898						
3	23:01		0.902						
4	23:05		0.905						
5	24:07		0.946						
6	24:33		0.963						
7	25:09		0.986						
8	25:35		1.003						
9	25:43		1.009						
10	27:39	1.00	1.084	1.00	0.03	50.00	0.001	1.333	0.00
11	29:24		1.153						

MIDRIC
08/25/89 18:26:00
SAMPLE: C-14B MW
CONDS.: 950MLS/1.0ML
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883614AB #1
CALI: 883614AB #2

SCANS 1770 TO 2100



636928.

No	Name		
1	C170	D-12 CHRYSENE	(INT. STD.)
2	C710	BENZIDINE	
3	C719	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-3	(SURROGATE)

000236

Quantitation Report File: 883614AB

000237

Data: 883614AB.TI
08/25/89 18:26:00
Sample: C-14B MW
Conds.: 950MLS/1.0ML
Formula: Instrument: 5100 Weight: 0.003
Submitted by: FLEMING Analyst: DMM Acct. No.: 883614AB

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

No	Name		
1	CI70	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	CS30	D-14 TERPHENYL	(SURROGATE)

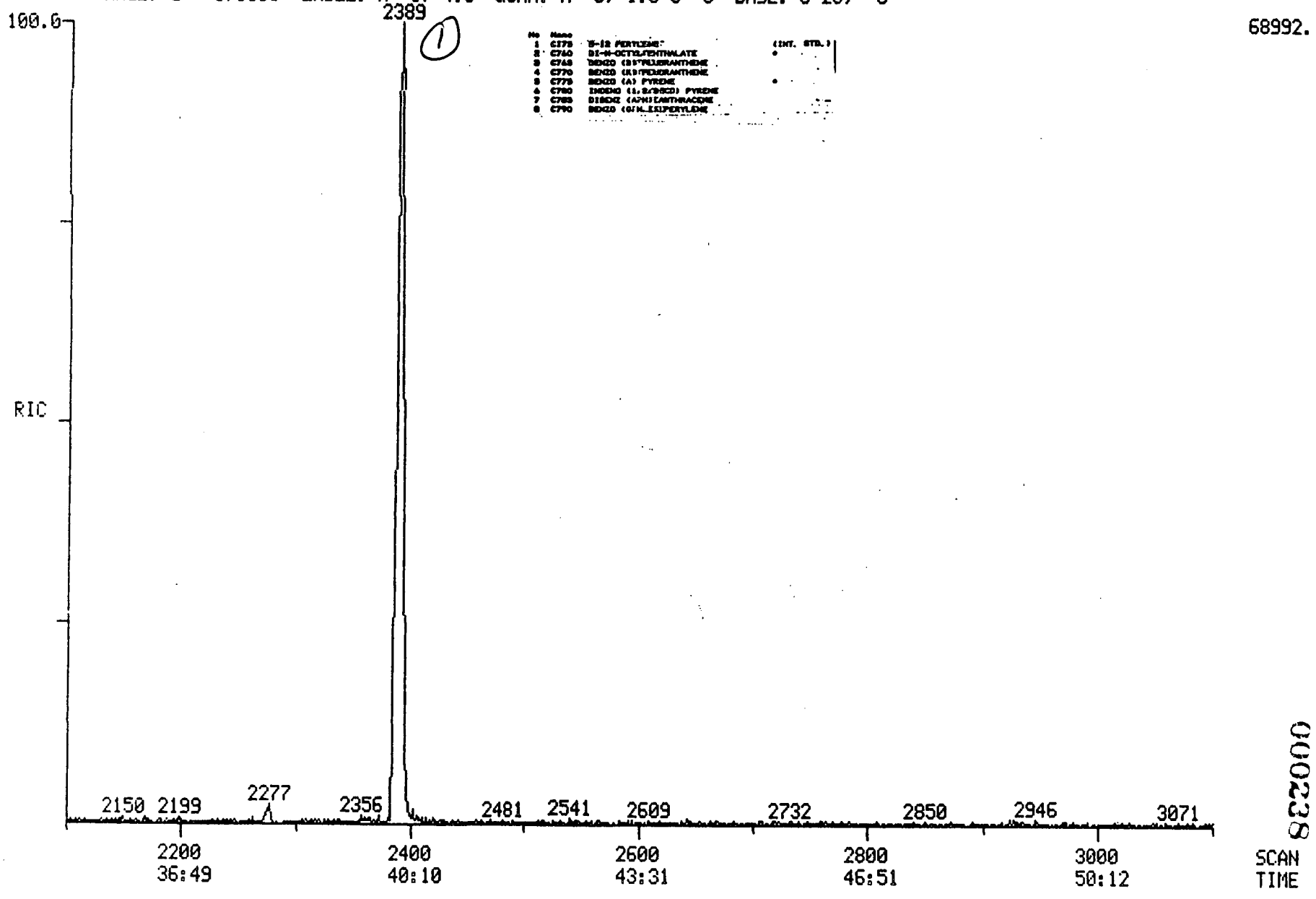
No	m/z	Scan	Time	RRT	Meth	Area(Hght)	Amount	%Tot
1	240	2036	34:04	1.000	A BB	407456.	40.000 NG	34.23
2	NOT FOUND							
3	NOT FOUND							
4	NOT FOUND							
5	NOT FOUND							
6	NOT FOUND							
7	149	2058	34:26	1.011	A BB	~~5824.~~	~~0.541 NG~~	~~0.46~~
8	NOT FOUND							
9	244	1836	30:41	0.902	A BV	899471.	76.324 NG	65.31

No	Ret(L)	Ratio	RRT	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	34:04	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	29:52		0.877						
3	30:06		0.884						
4	32:26		0.952						
5	34:01		0.999						
6	34:00		0.998						
7	34:26	1.00	1.011	1.00	0.54	50.00	0.011	1.056	0.01
8	34:09		1.002						
9	30:41	1.00	0.901	1.00	76.32	50.00	1.766	1.157	1.53

MIDRIC
08/25/89 18:26:00
SAMPLE: C-14B MW
CONDS.: 950MLS/1.0ML
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883614AB #1
CALI: 883614AB #2

SCANS 2100 TO 3100



000238

Quantitation Report [illegible] 883614AB

000239

Data: 883614AB.TI
08/25/89 18:26:00
Sample: C-14B MW
Conds.: 950MLS/1.0ML
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: FLEMING[illegible] Analyst: DMM Acct. No.: 883614AB

AMOUNT=AREA * REF AM[illegible](REF[illegible]AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI75	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	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	264	2389	39:59	[illegible]	1.000	A BB	234912.	40.000 NG	*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	(E)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	40:02	1.00	1.000	[illegible]	1.00	40.00	40.00	1.000	1.000	1.00
2	36:45		0.918							
3	38:06		0.952							
4	38:13		0.955							
5	39:44		0.992							
6	47:40		1.191							
7	48:00		1.199							
8	49:54		1.247							

000240

EPA SAMPLE NO.

C-14C_MW

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Q C INC. Contract: FLEMING

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

Matrix: (soil/water) WATER Lab Sample ID: 883615

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 883615AB

Level: (low/med) LOW Date Received: 08/15/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 08/20/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 08/25/89

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol		
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol		
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol		
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol		
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol		
105-67-9	2,4-Dimethylphenol		
65-85-0	Benzoic Acid		
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol		
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol		
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol		
95-95-4	2,4,5-Trichlorophenol		
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C-14C_MW

Lab Name: Q C INC. Contract: FLEMING

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

Matrix: (soil/water) WATER Lab Sample ID: 883615

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 883615AB

Level: (low/med) LOW Date Received: 08/15/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 08/20/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 08/25/89

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

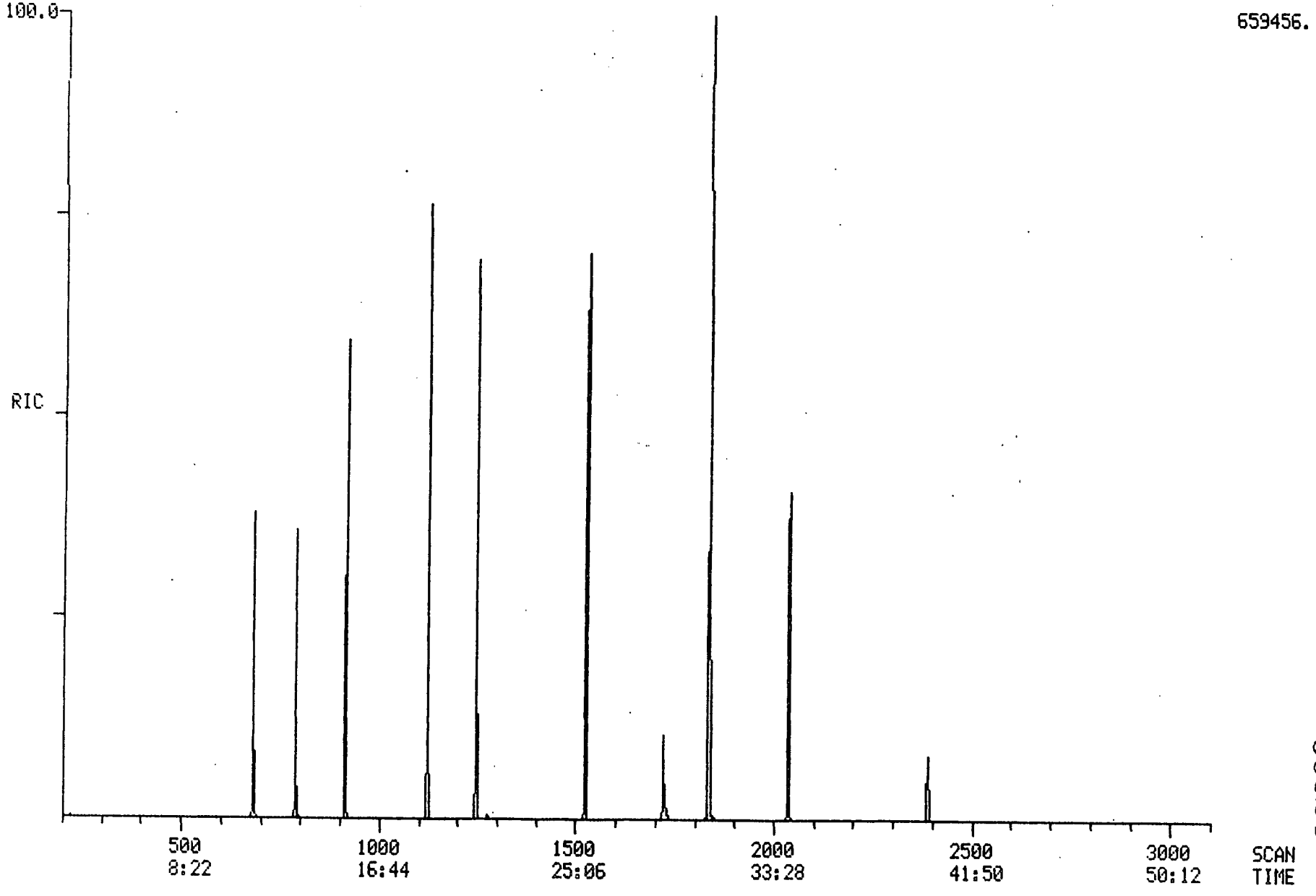
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol		
100-02-7	4-Nitrophenol		
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol		
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol		
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

MIDRIC
08/25/89 19:37:00
SAMPLE: C-14C MW
CONDS.: 1000MLS/1.0ML
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883615AB #1
CALI: 883615AB #2

SCANS 200 TO 3100

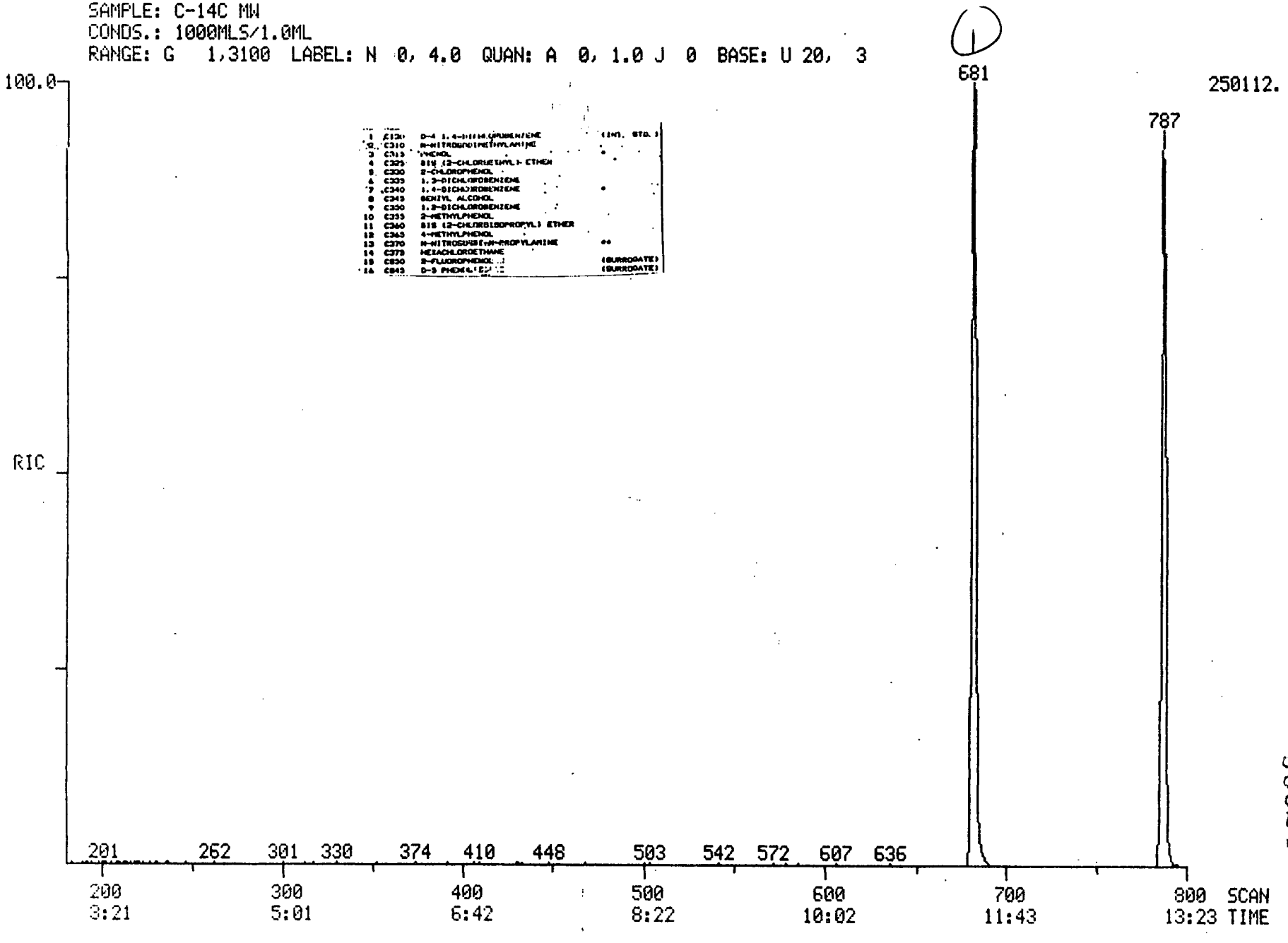


000242

MIDRIC
08/25/89 19:37:00
SAMPLE: C-14C MW
CONDS.: 1000MLS/1.0ML
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883615AB #1
CALI: 883615AB #2

SCANS 180 TO 800



1	C320	D-4 1,4-DIIIH.URUMEN/ENE	(INT. STD.)
2	C310	N-NITROSO(METHYLAMI)NE	
3	C313	PHENOL	
4	C325	BIS (2-CHLORIETHYL) 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(E[illegible]	(SURROGATE)

000243

Quantitation Report [illegible] 883615AB

000244

Data: 883615AB.TI
08/25/89 19:37:00
Sample: C-14C MW
Conds.: 1000MLS/1.0ML
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: FLEMING[illegible] Analyst: DMM Acct. No.: 883615AB

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

No	Name		
1	CI30	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	CS50	2-FLUOROPHENOL	(SURROGATE)
16	CS45	D-5 PHENOL	(SURROGATE)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	682	11:25	[illegible]	1.000	A BB	159168.	40.000 NG	*100.
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
	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								

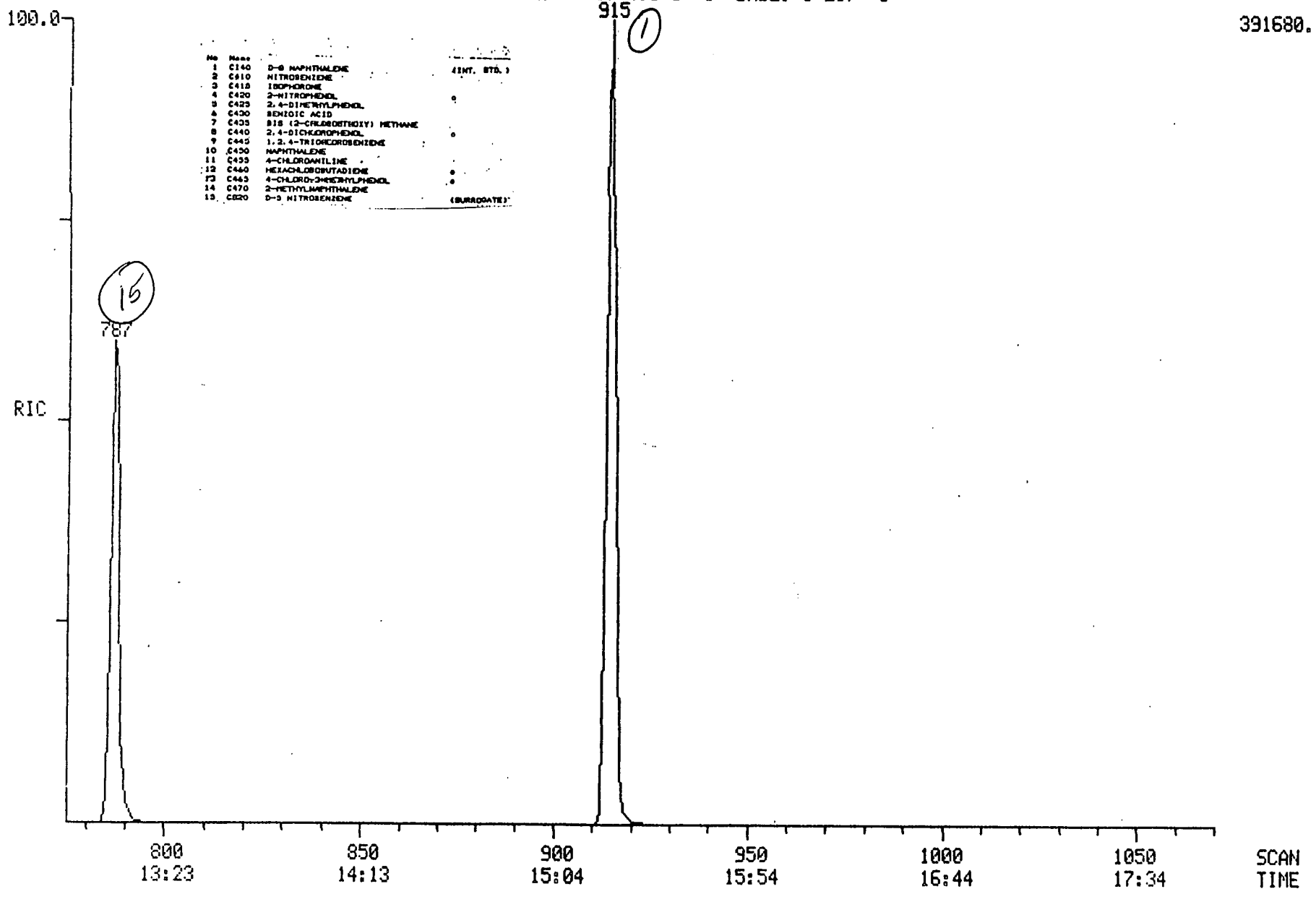
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	11:22	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	3:49		0.336						
3	10:39		0.937						
4	10:47		0.948						
5	10:53		0.957						
6	11:15		0.990						
7	11:25		1.004						

No	Ret(L)	Rati	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
8	12:50		1.130						
9	11:58		1.053						
10	11:56		1.050						
11	12:24		1.091						
12	12:23		1.090						
13	12:50		1.130						
14	12:53		1.134						
15	7:46		0.683						
16	10:37		0.934						

MIDRIC
08/25/89 19:37:00
SAMPLE: C-14C MW
CONDS.: 1000MLS/1.0ML
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883615AB #1
CALI: 883615AB #2

SCANS 775 TO 1070



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)

000246

Quantitation Report File: 883615AB

000247

Data: 883615AB.TI
08/25/89 19:37:00
Sample: C-14C MW
Conds.: 1000MLS/1.0ML
Formula: Instrument: 5100 Weight: 0.003
Submitted by: FLEMING Analyst: DMM Acct. No.: 883615AB

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

No	Name		
1	CI40	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	CS20	D-5 NITROBENZENE	(SURROGATE)

No	m/z	Scan	Time	RRT	Meth	Area(Hght)	Amount	%Tot
1	136	915	15:19	1.000	A BB	597376.	40.000 NG	46.38
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	82	787	13:10	0.860	A BB	248096.	46.238 NG	53.62

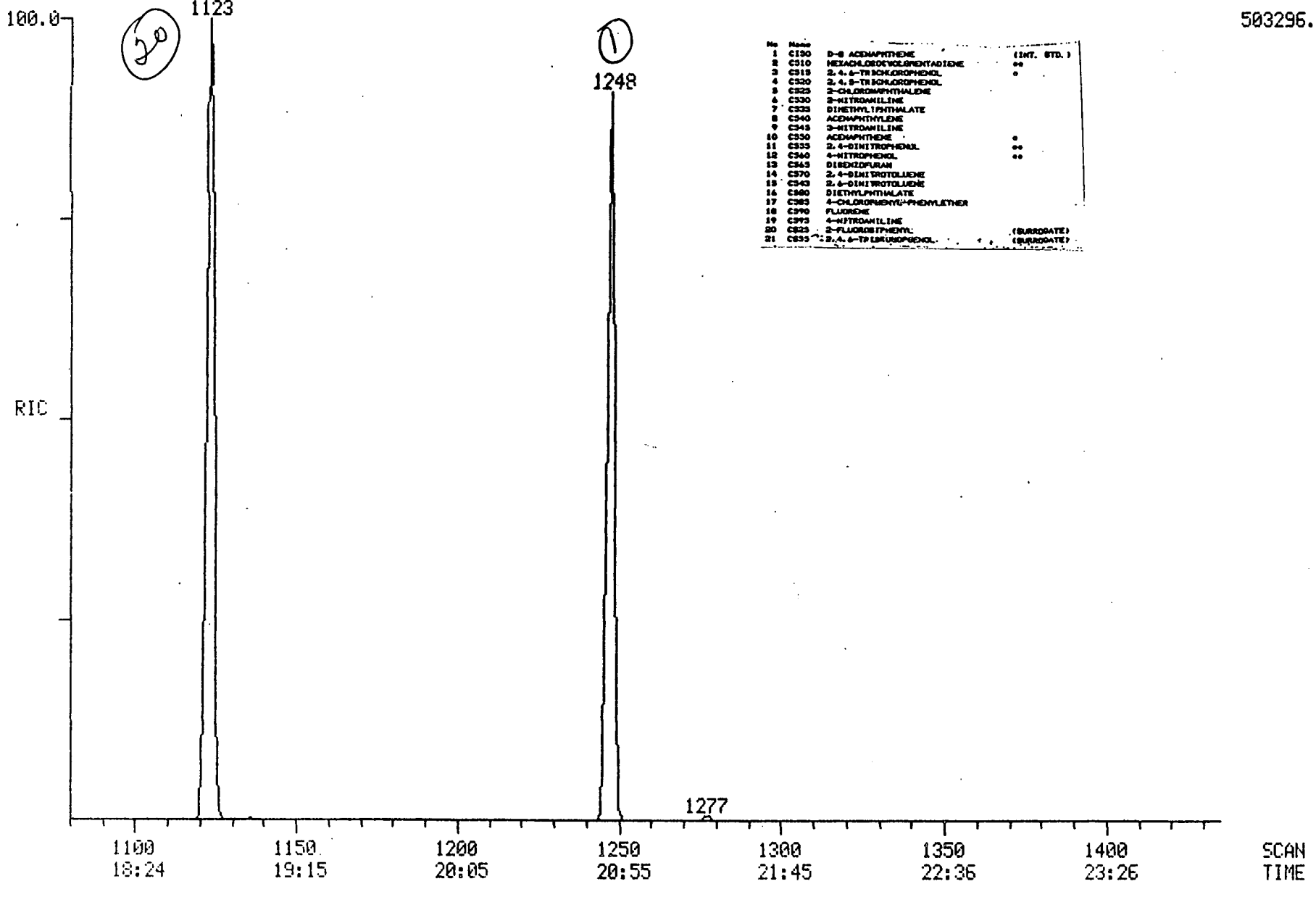
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	15:17	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	13:12		0.864						
3	13:56		0.912						
4	14:11		0.929						
5	14:26		0.944						
6	14:58		0.979						
7	14:42		0.962						
8	14:57		0.978						
9	15:10		0.992						

No	Ret(L)	Ratio	RRT(E)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
10	15:21		1.004						
11	15:38		1.023						
12	15:56		1.043						
13	17:13		1.127						
14	17:30		1.146						
15	13:09	1.00	0.86	1.00	46.24	50.00	0.332	0.359	0.92

MIDRIC
08/25/89 19:37:00
SAMPLE: C-14C MW
CONDS.: 1000MLS/1.0ML
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883615AB #1
CALI: 883615AB #2

SCANS 1080 TO 1435



503296.

No	Name		
1	C190	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)

000249

Quantitation Report File: 883615AB

000250

Data: 883615AB.TI
08/25/89 19:37:00
Sample: C-14C MW
Conds.: 1000MLS/1.0ML
Formula: Instrument: 5100 Weight: 0.003
Submitted by: FLEMING Analyst: DMM Acct. No.: 883615AB

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

N	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	C543	2,6-DINITROTOLUENE	
16	C580	DIETHYLPHTHALATE	
17	C585	4-CHLOROPHENYL-PHENYLETHER	
18	C590	FLUORENE	
19	C595	4-NITROANILINE	
20	CS25	2-FLUOROBIPHENYL	(SURROGATE)
21	CS55	2,4,6-TRIBROMOPHENOL	(SURROGATE)

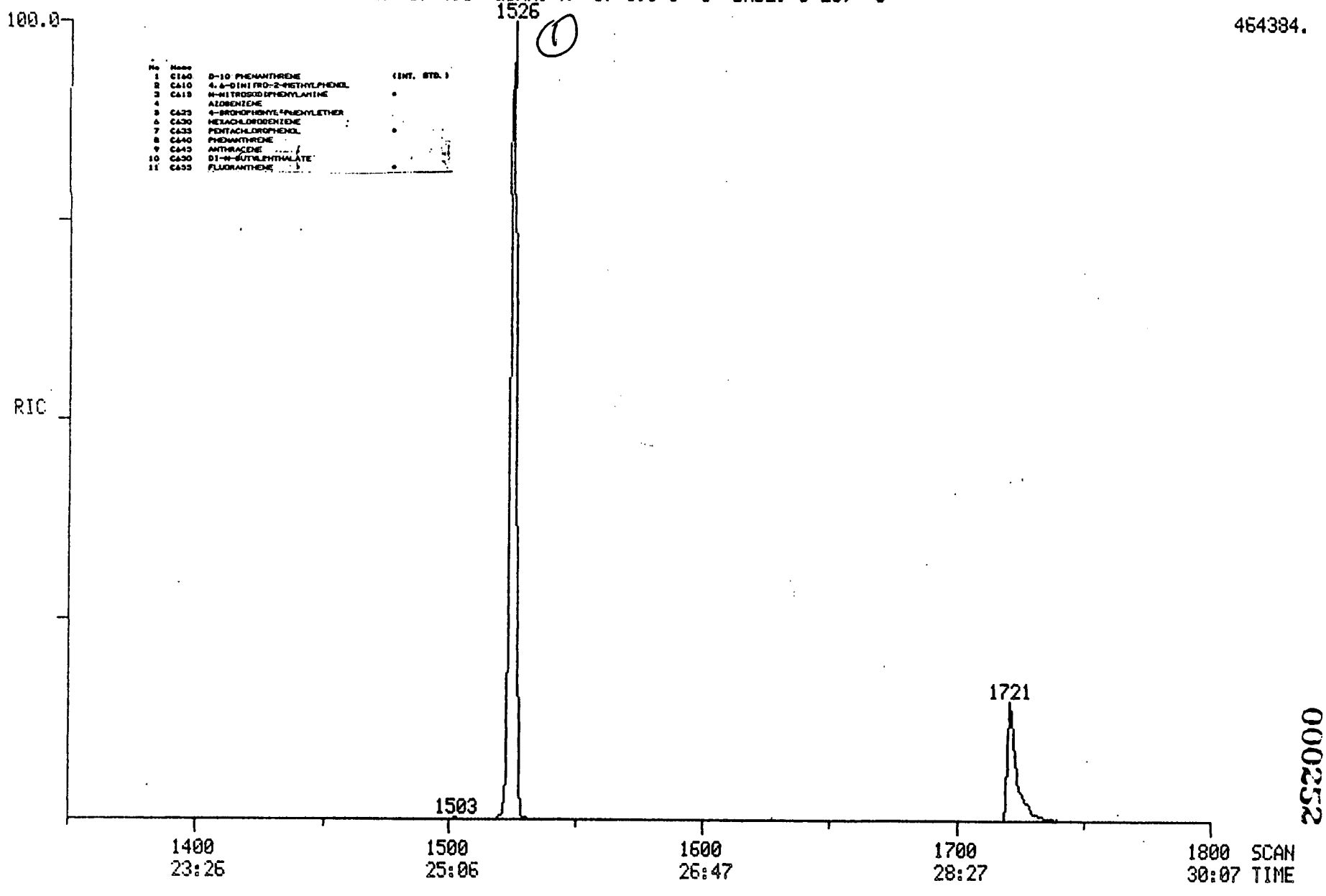
No	m/z	Scan	Time	RRT	Meth	Area(Hght)	Amount	%Tot
1	164	1248	20:53	1.000	A BB	354144.	40.000 NG	42.37
2	NOT FOUND							
3	NOT FOUND							
4	NOT FOUND							
5	NOT FOUND							
6	NOT FOUND							
7	NOT FOUND							
8	NOT FOUND							
9	NOT FOUND							
10	NOT FOUND							
11	NOT FOUND							
12	NOT FOUND							
13	NOT FOUND							
14	NOT FOUND							
15	NOT FOUND							
16	NOT FOUND							
17	NOT FOUND							
18	NOT FOUND							
19	NOT FOUND							
20	172	1123	18:4	0.900	A BB	591008.	54.410 NG	57.64
21	NOT FOUND							

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	20:51	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	18:13		0.874						
3	18:32		0.888						
4	18:39		0.894						
5	19:02		0.913						
6	19:31		0.936						
7	20:13		0.970						
8	20:21		0.976						
9	20:50		0.999						
10	20:57		1.005						
11	21:08		1.014						
12	21:27		1.029						
13	21:27		1.029						
14	21:38		1.038						
15	20:25		0.979						
16	22:28		1.078						
17	22:36		1.083						
18	22:33		1.081						
19	22:48		1.093						
20	18:46	1.00	0.900	1.00	54.41	50.00	1.335	1.227	1.09
21	23:23		1.121						

MIDRIC
08/25/89 19:37:00
SAMPLE: C-14C MW
CONDS.: 1000MLS/1.0ML
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883615AB #1
CALI: 883615AB #2

SCANS 1350 TO 1800



No	Name		
1	C160	D-10 PHENANTHRENE	(INT. STD.)
2	C610	4,6-DINITRO-2-METHYLPHENOL	
3	C619	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	C653	FLUORANTHENE	•

000252

Quantitation Report File: 883615AB

Data: 883615AB.TI
08/25/89 19:37:00
Sample: C-14C MW
Conds.: 1000MLS/1.0ML
Formula: Instrument: 5100 Weight: 0.003
Submitted by: FLEMING Analyst: DMM Acct. No.: 883615AB

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

No	Name		
1	CI60	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	*

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	188	1525	25:30	1	1.000	A BB	608992.	40.000 NG	*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								

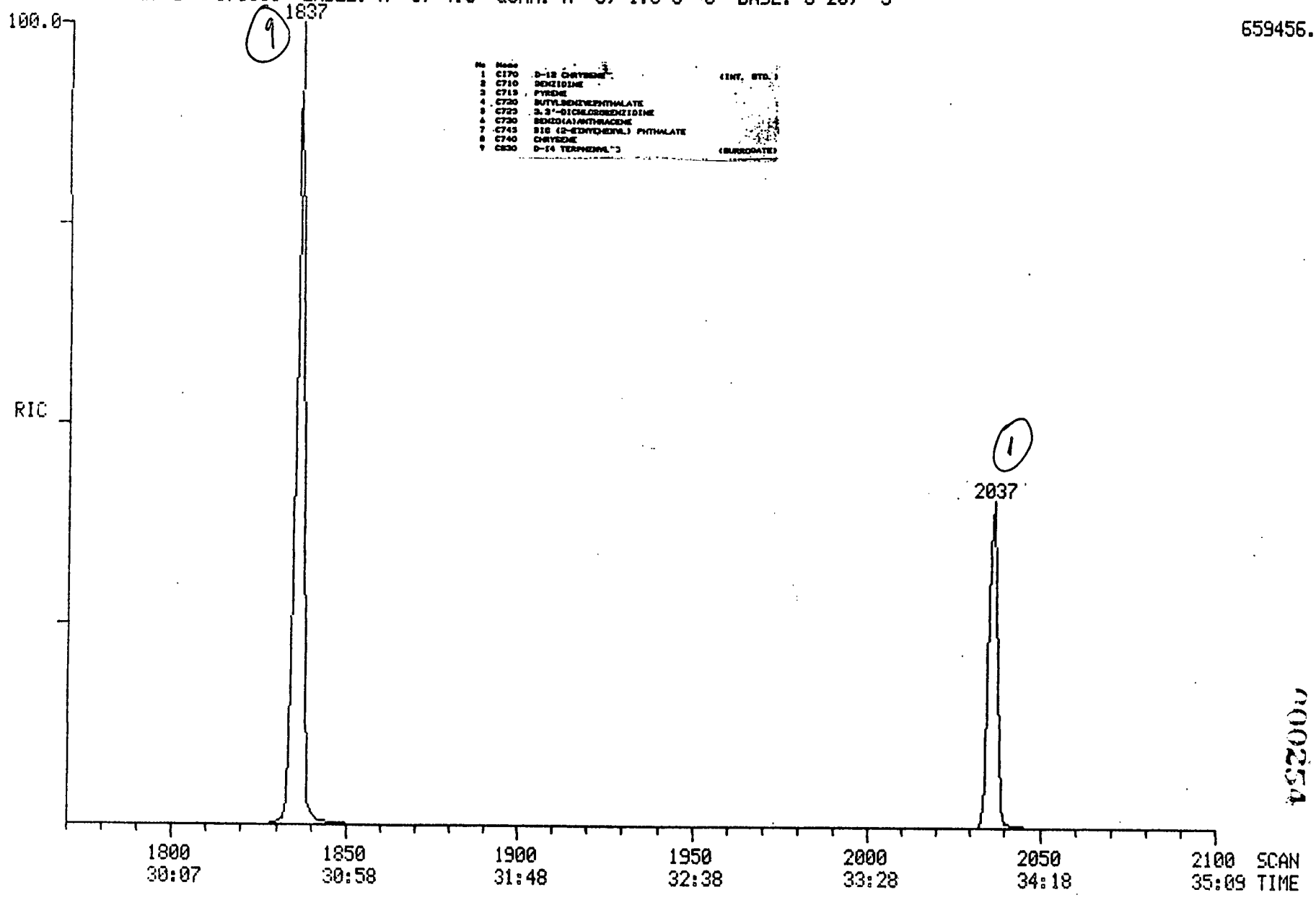
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	25:30	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	22:55		0.898						
3	23:01		0.902						
4	23:05		0.905						
5	24:07		0.946						
6	24:33		0.963						
7	25:09		0.986						
8	25:35		1.003						
9	25:43		1.009						
10	27:39		1.084						
11	29:24		1.153						

MIDRIC
08/25/89 19:37:00
SAMPLE: C-14C MW
CONDS.: 1000MLS/1.0ML
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883615AB #1
CALI: 883615AB #2

SCANS 1770 TO 2100

659456.



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)

000234

Quantitation Report [illegible] 883615AB

000255

Data: 883615AB.TI
08/25/89 19:37:00
Sample: C-14C MW
Conds.: 1000MLS/1.0ML
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: FLEMING[illegible] Analyst: DMM Acct. No.: 883615AB

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

No	Name		
1	CI70	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	CS30	D-14 TERPHENYL	(SURROGATE)

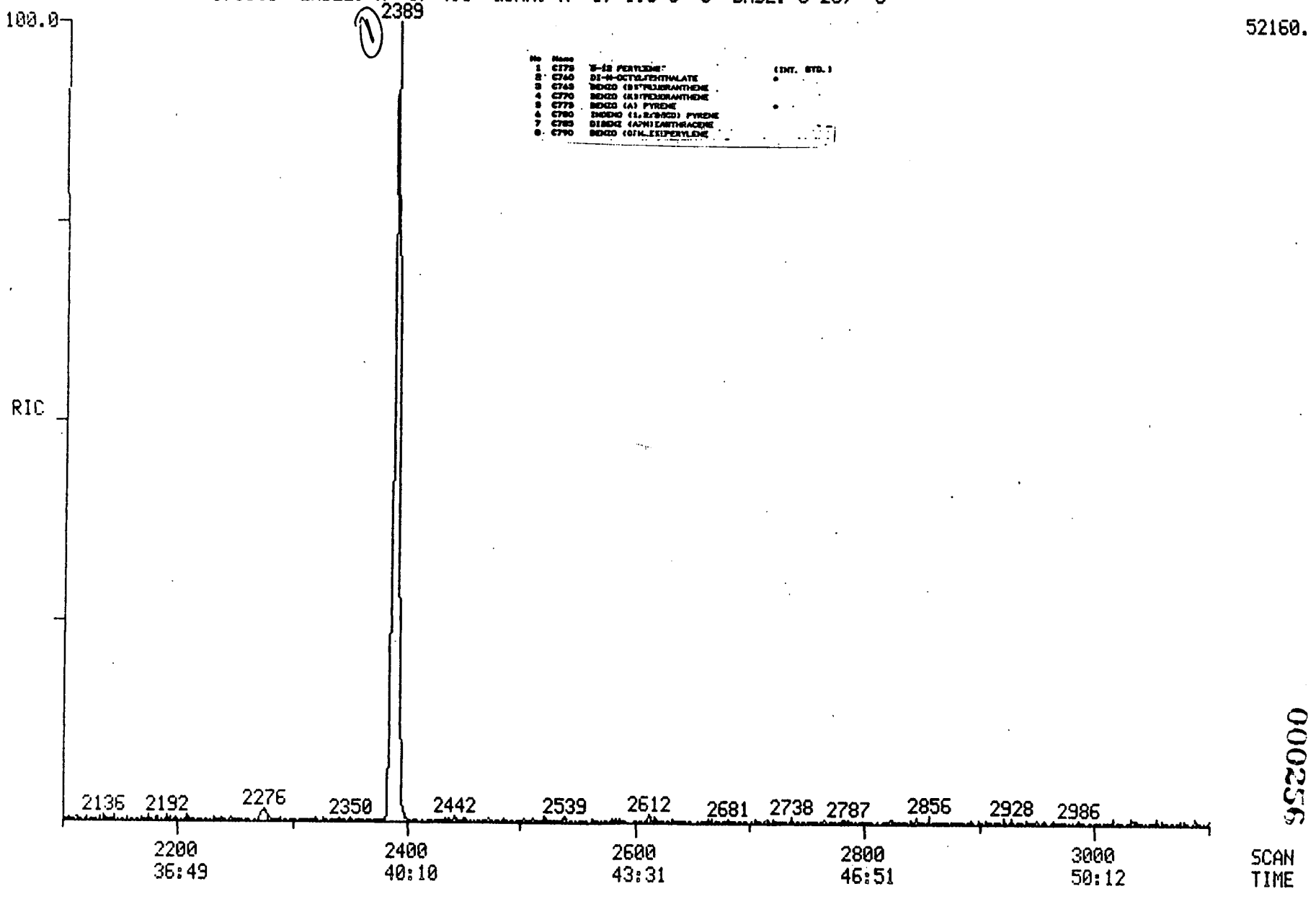
No	m/z	Scan	Time	RRT	Meth	Area(Hght)	Amount	%Tot
1	240	2037	34:05	1.000	A BB	379392.	40.000 NG	32.13
2	NOT FOUND							
3	NOT FOUND							
4	NOT FOUND							
5	NOT FOUND							
6	NOT FOUND							
7	149	2058	34:26	1.010	A BB	~~704.~~	~~0.070 NG~~	~~0.06~~
8	NOT FOUND							
9	244	1837	30:45	0.902	A BB	926375.	84.422 NG	67.81

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	34:04	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	29:52		0.877						
3	30:06		0.884						
4	32:26		0.952						
5	34:01		0.999						
6	34:00		0.998						
7	34:26	1.00	1.011	1.00	0.07	50.00	0.001	1.056	0.00
8	34:09		1.002						
9	30:41	1.00	0.901	1.00	84.42	50.00	1.953	1.157	1.69

MIDRIC
08/25/89 19:37:00
SAMPLE: C-14C MW
CONDS.: 1000MLS/1.0ML
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883615AB #1
CALI: 883615AB #2

SCANS 2100 TO 3100



No	Mass		
1	C770	5-12 PERYLENE*	(INT. STD.)
2	C760	DI-N-OCTYLPENTHALATE	
3	C760	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	

000256

Quantitation Report [illegible] 883615AB

Data: 883615AB.TI
08/25/89 19:37:00
Sample: C-14C MW
Conds.: 1000MLS/1.0ML
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: FLEMING[illegible] Analyst: DMM Acct. No.: 883615AB

AMOUNT=AREA * REF AM[illegible]Z(REF[illegible]AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI75	D-12 PERYLENE	(INT. STD.)
2	C760	DI-N-OCTYL[illegible]HTHALATE	*
3	C765	BENZO (B[illegible]FLUORANTHENE	
4	C770	BENZO (K[illegible]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	

No	m/z	Scan	Time[illegible]	RRT	Meth	Area(Hght)	Amount	%Tot
1	264	2389	39:59[illegible]	1.000	A BB	156160.	40.000 NG	*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	40:02	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	36:45		0.918						
3	38:06		0.952						
4	38:13		0.955						
5	39:44		0.992						
6	47:40		1.191						
7	48:00		1.199						
8	49:54		1.247						

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FB

Lab Name: Q C INC. Contract: FLEMING

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

Matrix: (soil/water) WATER Lab Sample ID: 883616

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 883616ABR

Level: (low/med) LOW Date Received: 08/15/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 08/20/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 08/28/89

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol		
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol		
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol		
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol		
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol		
105-67-9	2,4-Dimethylphenol		
65-85-0	Benzoic Acid		
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol		
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol		
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol		
95-95-4	2,4,5-Trichlorophenol		
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FB

Lab Name: Q C INC. Contract: FLEMING

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

Matrix: (soil/water) WATER Lab Sample ID: 883616

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 883616ABR

Level: (low/med) LOW Date Received: 08/15/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 08/20/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 08/28/89

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

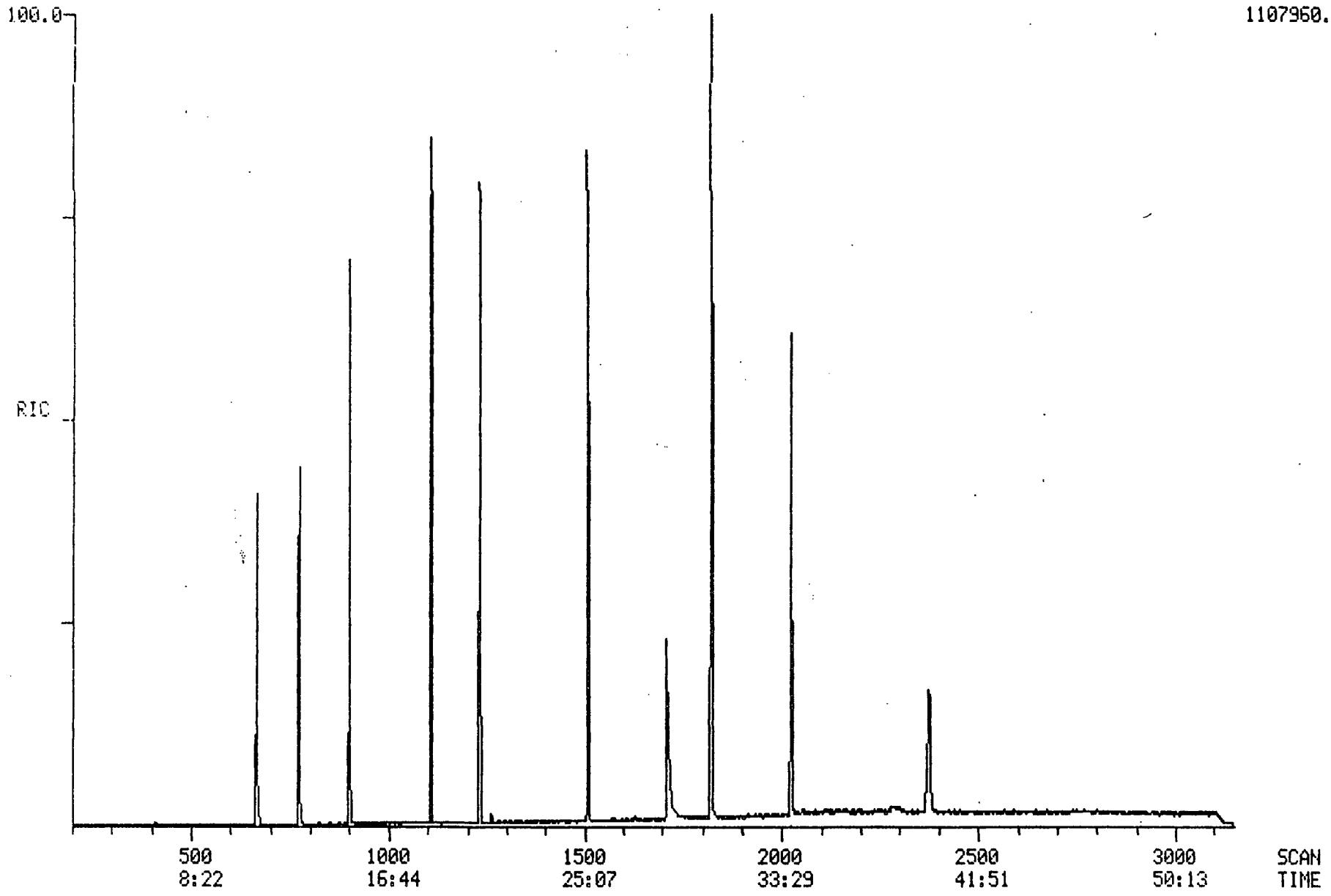
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol		
100-02-7	4-Nitrophenol		
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol		
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol		
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

MIDRIC
08/28/89 22:44:00
SAMPLE: FB
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883616ABR #1
CALI: 883616ABR #2

SCANS 200 TO 3150

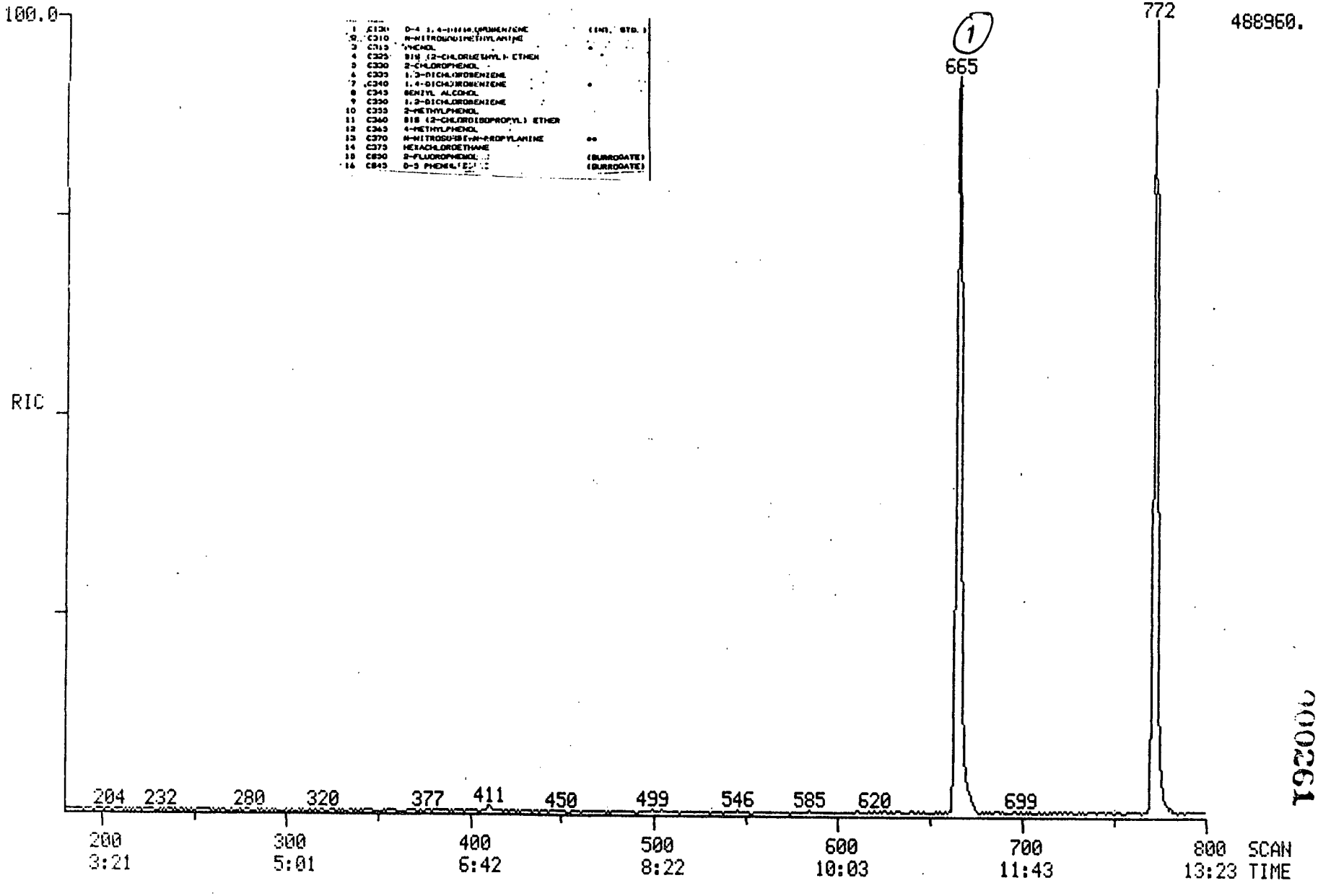


000260

MIDRIC
08/28/89 22:44:00
SAMPLE: FB
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883616ABR #1
CALI: 883616ABR #2

SCANS 180 TO 800



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-NITROSODI-N-PROPYLAMINE	
14	C375	HEXACHLOROETHANE	
15	C850	2-FLUOROPHENOL	(SURROGATE)
16	C845	D-5 PHENOL (E2)	(SURROGATE)

000261

Quantitation Report [illegible] 883616ABR

000262

Data: 883616ABR.TI
08/28/89 22:44:00
Sample: FB
Conds.: 1000 MLS/1.0 ML
Formula: [illegible] Instrument: 5100 Weight: 0.004
Submitted by: FLEMING[illegible] Analyst: WSS Acct. No.: 883616AB

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

No	Name		
1	CI30	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	CS50	2-FLUOROPHENOL	(SURROGATE)
16	CS45	D-5 PHENOL	(SURROGATE)

No	m/z	Scan	Time	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	665	11:08	1.000	A BB	292896.	40.000 NG	*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							

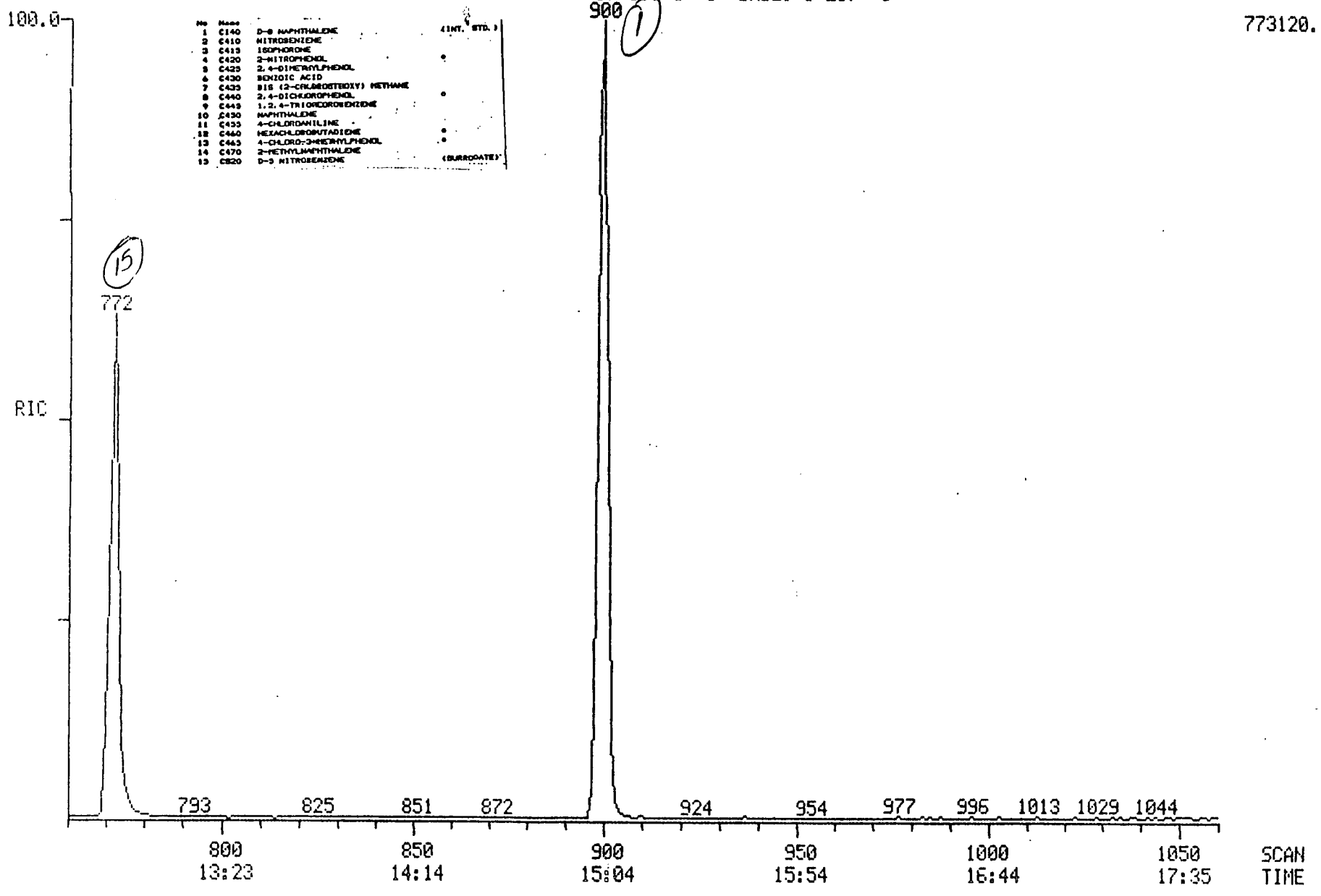
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	11:01	1.01	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	3:12		0.290						
3	10:18		0.935						
4	10:25		0.945						
5	10:30		0.953						
6	10:54		0.989						
7	11:04		1.005						

No	Ret(L)	Ratio	RRT(E)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
8	12:35		1.143						
9	11:38		1.056						
10	11:37		1.055						
11	12:07		1.100						
12	12:06		1.099						
13	12:33		1.140						
14	12:35		1.143						
15	7:09		0.649						
16	10:16		0.932						

MIDRIC
08/28/89 22:44:00
SAMPLE: FB
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883616ABR #1
CALI: 883616ABR #2

SCANS 760 TO 1060



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)

000264

Quantitation Report [illegible] 883616ABR

Data: 883616ABR.TI
08/28/89 22:44:00
Sample: FB
Conds.: 1000 MLS/1.0 ML
Formula: [illegible] Instrument: 5100 Weight: 0.004
Submitted by: FLEMING[illegible] Analyst: WSS Acct. No.: 883616AB

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

No	Name		
1	CI40	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	CS20	D-5 NITROBENZENE	(SURROGATE)

No	m/z	Scan	Time	RRT	Meth	Area(Hght)	Amount	%Tot
1	136	900	15:04	1.000	A BB	1118360.	40.000 NG	46.52
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	82	772	12:55	0.858	A BB	472544.	45.987 NG	53.48

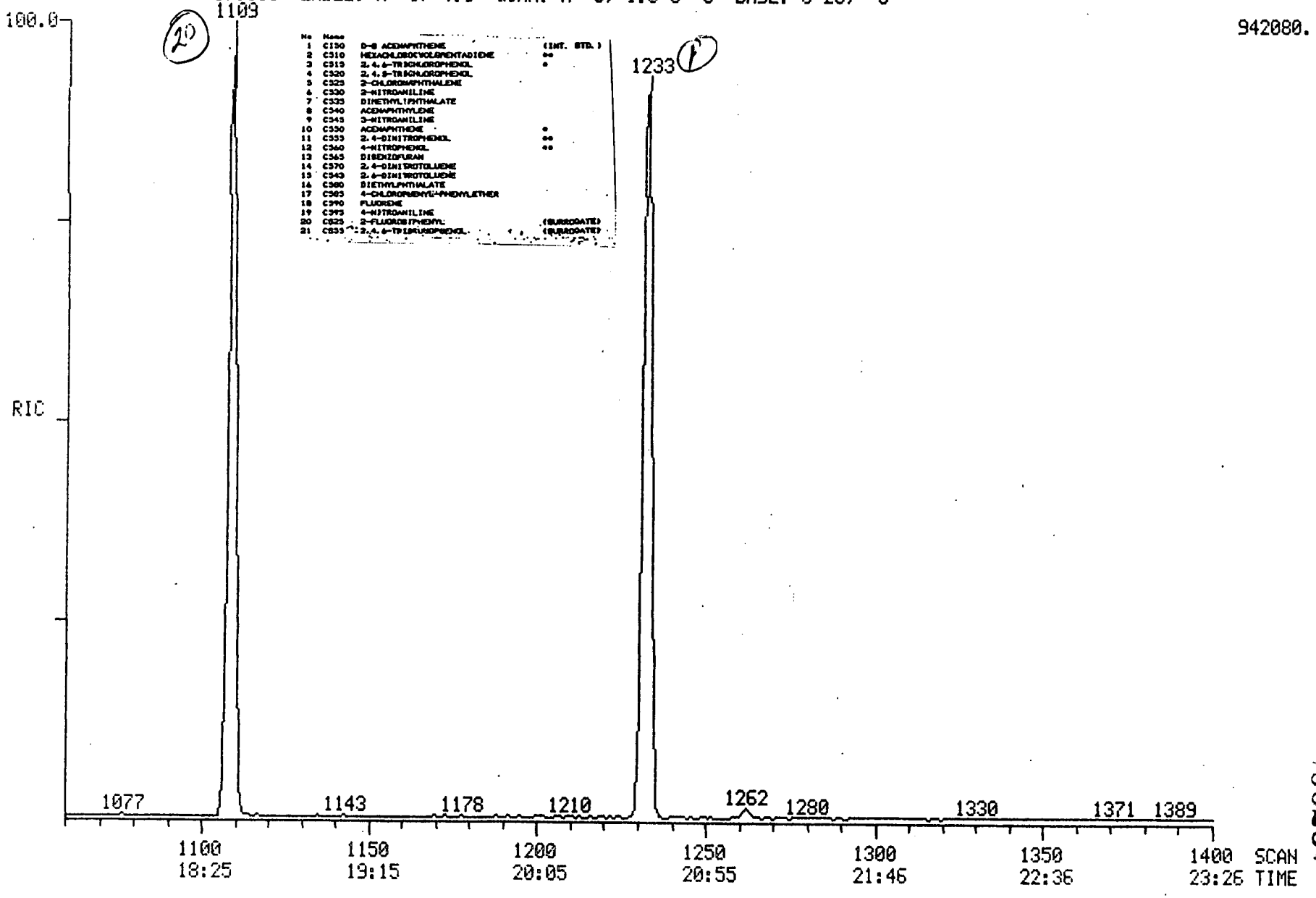
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	15:02	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	12:55		0.860						
3	13:42		0.911						
4	13:56		0.927						
5	14:12		0.944						
6	14:47		0.983						
7	14:29		0.963						
8	14:43		0.979						
9	14:55		0.992						

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
10	15:06		1.004						
11	15:24		1.024						
12	15:43		1.046						
13	17:02		1.134						
14	17:18		1.150						
15	12:52	1.00	0.856	1.00	45.99	50.00	0.338	0.368	0.92

MIDRIC
08/28/89 22:44:00
SAMPLE: FB
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883616ABR #1
CALI: 883616ABR #2

SCANS 1060 TO 1400



No	Name		
1	C130	D-8 ACENAPHTHENE	(INT. STD.)
2	C310	HEXACHLOROCYCLOPENTADIENE	**
3	C319	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	C625	2-FLUOROBIPHENYL	(SURROGATE)
21	C635	2,4,6-TRIBROMOPHENOL	(SURROGATE)

000267

Quantitation Report [illegible] File: 883616ABR

000268

Data: 883616ABR.TI
08/28/89 22:44:00
Sample: FB
Conds.: 1000 MLS/1.0 ML
Formula: [illegible] Instrument: 5100 Weight: 0.004
Submitted by: FLEMING[illegible] Analyst: WSS Acct. No.: 883616AB

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

No	Nam		
1	CI50	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	C543	2,6-DINITROTOLUENE	
16	C580	DIETHYLPHTHALATE	
17	C585	4-CHLOROPHENYL-PHENYLETHER	
18	C590	FLUORENE	
19	C595	4-NITROANILINE	
20	CS25	2-FLUOROBIPHENYL	(SURROGATE)
21	CS55	2,4,6-TRIBROMOPHENOL	(SURROGATE)

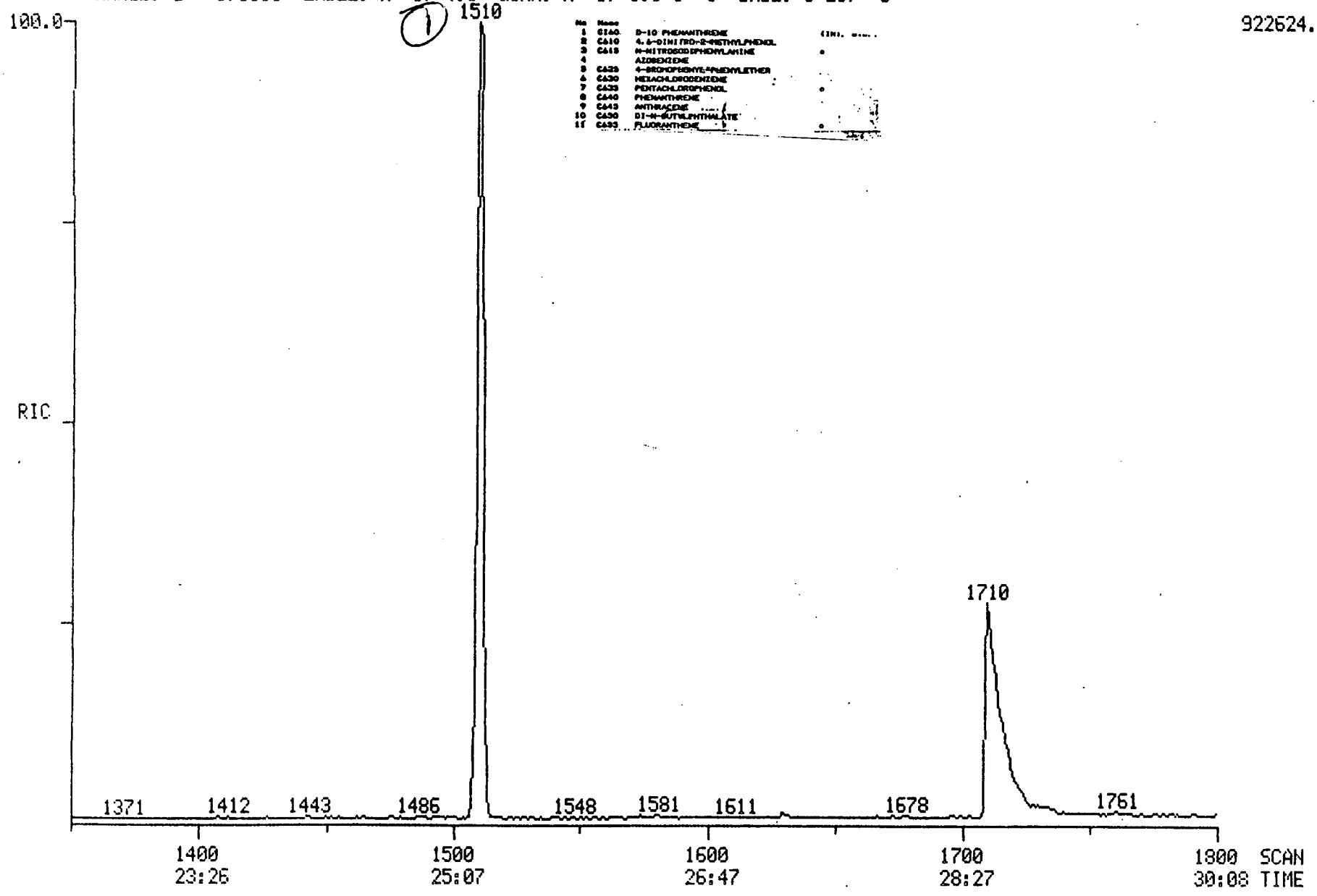
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	164	1233	20:38[illegible]	[illegible]	1.000	A BB	624000.	40.000 NG	44.85
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	172	1109	18:34[illegible]	[illegible]	0.899	A BB	948576.	49.189 NG	55.15
21	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	20:38	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	18:01		0.873						
3	18:19		0.887						
4	18:27		0.894						
5	18:49		0.912						
6	19:18		0.935						
7	20:01		0.970						
8	20:08		0.976						
9	20:37		0.999						
10	20:44		1.005						
11	20:56		1.015						
12	21:17		1.031						
13	21:15		1.029						
14	21:26		1.038						
15	20:13		0.980						
16	22:17		1.079						
17	22:23		1.084						
18	22:20		1.082						
19	22:36		1.095						
20	18:34	1.00	0.899	1.00	49.19	50.00	1.216	1.236	0.98
21	23:10		1.122						

MIDRIC
08/28/89 22:44:00
SAMPLE: FB
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883616ABR #1
CALI: 883616ABR #2

SCANS 1350 TO 1800



922624.

No	Mass		
1	C140	D-10 PHENANTHRENE	(IN).
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	•

000270

Quantitation Report [illegible] 883616ABR

Data: 883616ABR.TI
08/28/89 22:44:00
Sample: FB
Conds.: 1000 MLS/1.0 ML
Formula: [illegible] Instrument: 5100 Weight: 0.004
Submitted by: FLEMING[illegible] Analyst: WSS Acct. No.: 883616AB

AMOUNT=AREA * REF AM[illegible]/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI60	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	*

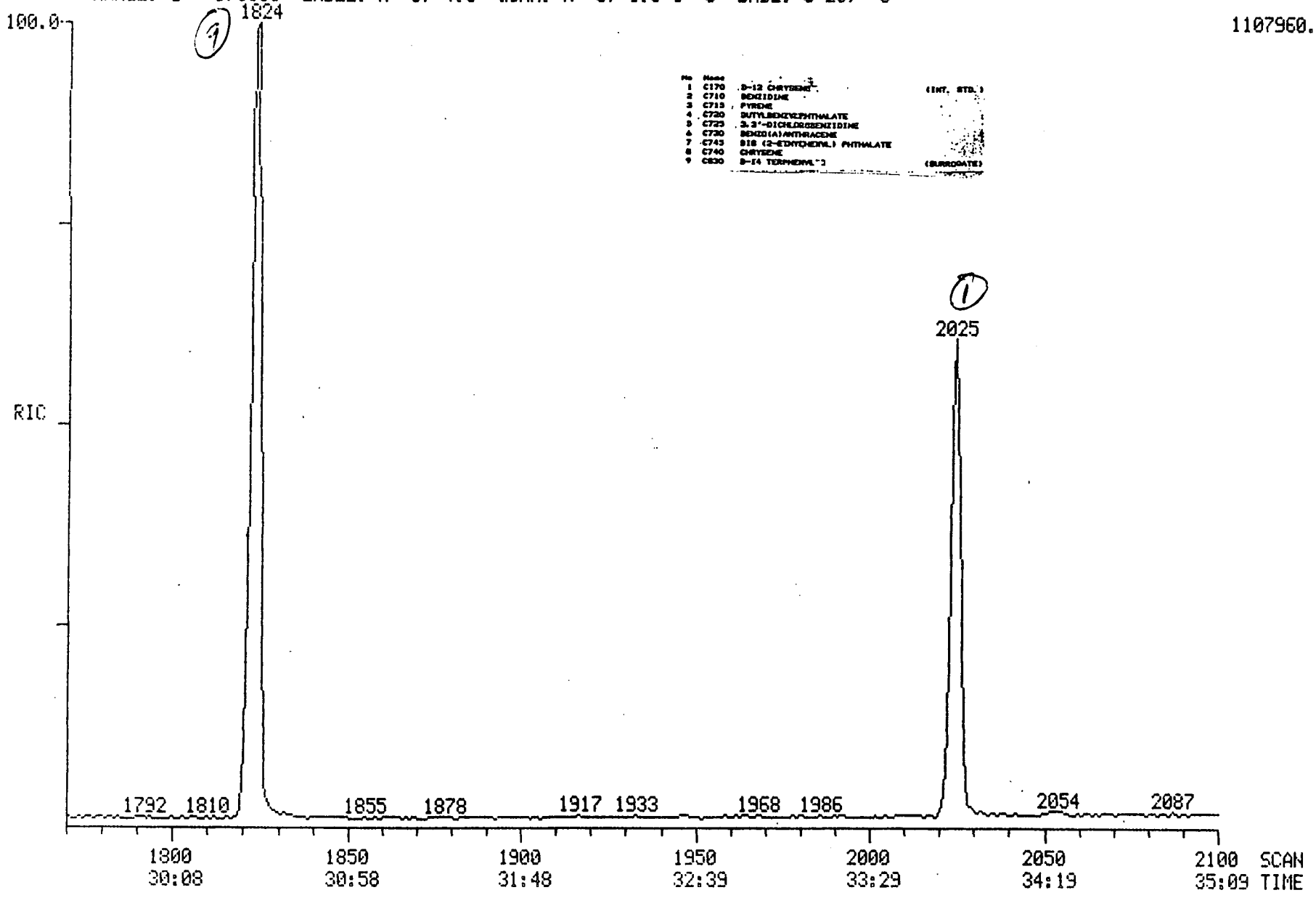
No	m/z	Scan	Time	RRT	Meth	Area(Hght)	Amount	%Tot
1	188	1510	25:1[illegible]	1.000	A BB	1094300.	40.000 NG	99.86
2	NOT FOUND							
3	NOT FOUND							
4	NOT FOUND							
5	NOT FOUND							
6	NOT FOUND							
7	NOT FOUND							
8	NOT FOUND							
9	NOT FOUND							
10	149	1640	27:27[illegible]	1.086	A BB	~~1984.~~	~~0.059 NG~~	~~0.15~~
11	NOT FOUND							

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	25:19	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	22:43		0.897						
3	22:48		0.901						
4	22:53		0.904						
5	23:54		0.944						
6	24:20		0.962						
7	24:57		0.985						
8	25:23		1.003						
9	25:31		1.008						
10	27:28	1.00	1.085	1.00	0.06	50.00	0.001	1.225	0.00
11	29:12		1.153						

MIDRIC
08/28/89 22:44:00
SAMPLE: FB
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883616ABR #1
CALI: 883616ABR #2

SCANS 1770 TO 2100



No	Name	
1	C170 D-12 CHRYSENE	(INT. STD.)
2	C710 BENZIDINE	
3	C715 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	(SURROGATE)

000272

Quantitation Report [illegible] File: 883616ABR

Data: 883616ABR.TI
08/28/89 22:44:00
Sample: FB
Conds.: 1000 MLS/1.0 ML
Formula: [illegible] Instrument: 5100 Weight: 0.004
Submitted by: FLEMING[illegible] Analyst: WSS Acct. No.: 883616AB

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

No	Name		
1	CI70	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	CS30	D-14 TERPHENYL[illegible]	(SURROGATE)

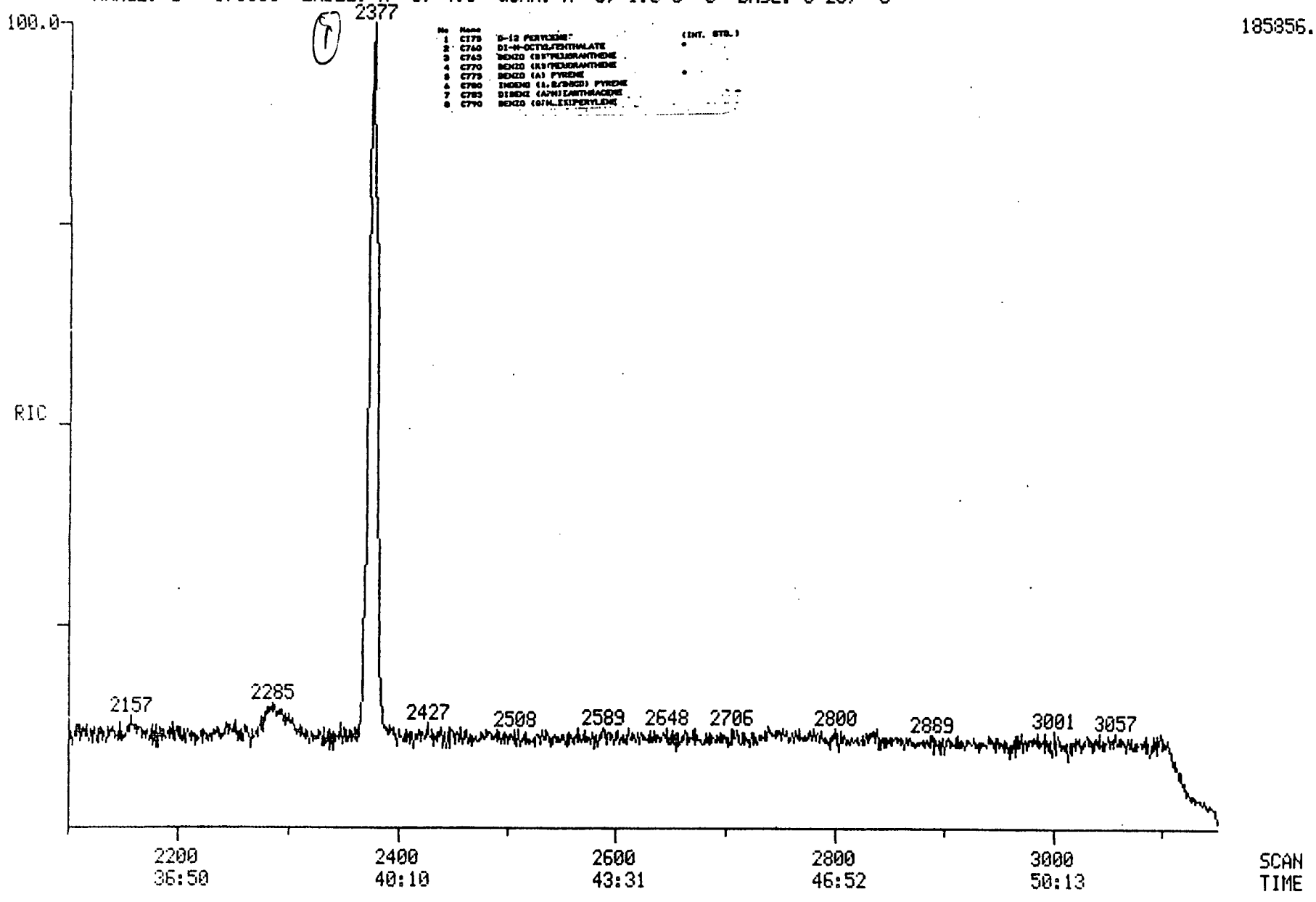
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	240	2025	33:5[illegible]	[illegible]1	1.000	A BB	873813.	40.000 NG	37.93
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	149	2054	34:23[illegible]	[illegible]	1.014	A BB	~~5728.~~	~~0.253 NG~~	~~0.24~~
8	NOT FOUND								
9	244	1823	30:31[illegible]	[illegible]	0.900	A BB	1569770.	65.217 NG	61.84

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	33:55	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	29:42		0.876						
3	29:55		0.882						
4	32:17		0.952						
5	33:53		0.999						
6	33:51		0.998						
7	34:23	1.00	1.014	1.00	0.25	50.00	0.005	1.038	0.01
8	34:00		1.002						
9	30:31	1.00	0.900	1.00	65.22	50.00	1.437	1.102	1.30

MIDRIC
08/28/89 22:44:00
SAMPLE: FB
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883616ABR #1
CALI: 883616ABR #2

SCANS 2100 TO 3150



No	Name		(INT. STD.)
1	C775	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)(B) PYRENE	
7	C785	DIBENZ (A,H)ANTHRACENE	
8	C790	BENZO (GHI)PERYLENE	

Quantitation Report [illegible] File: 883616ABR

Data: 883616ABR.TI
08/28/89 22:44:00
Sample: FB
Conds.: 1000 MLS/1.0 ML
Formula: [illegible] Instrument: 5100 Weight: 0.004
Submitted by: FLEMING[illegible] Analyst: WSS Acct. No.: 883616AB

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

No	Name		
1	CI75	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	

N	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	264	2377	39:47	[illegible]	1.000	A BB	573154.	40.000 NG	*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	39:49	1.00	1.000		1.00	40.00	40.00	1.000	1.000	1.00
2	36:44		0.922							
3	37:57		0.953							
4	38:03		0.955							
5	39:31		0.992							
6	47:39		1.197							
7	48:04		1.207							
8	49:59		1.255							

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB

Lab Name: Q C INC. Contract: FLEMING

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

Matrix: (soil/water) WATER Lab Sample ID: 883617

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 883617AB

Level: (low/med) LOW Date Received: 08/15/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 08/20/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 08/28/89

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol		
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol		
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol		
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol		
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol		
105-67-9	2,4-Dimethylphenol		
65-85-0	Benzoic Acid		
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol		
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol		
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol		
95-95-4	2,4,5-Trichlorophenol		
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB

Lab Name: Q C INC. Contract: FLEMING

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

Matrix: (soil/water) WATER Lab Sample ID: 883617

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 883617AB

Level: (low/med) LOW Date Received: 08/15/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 08/20/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 08/28/89

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

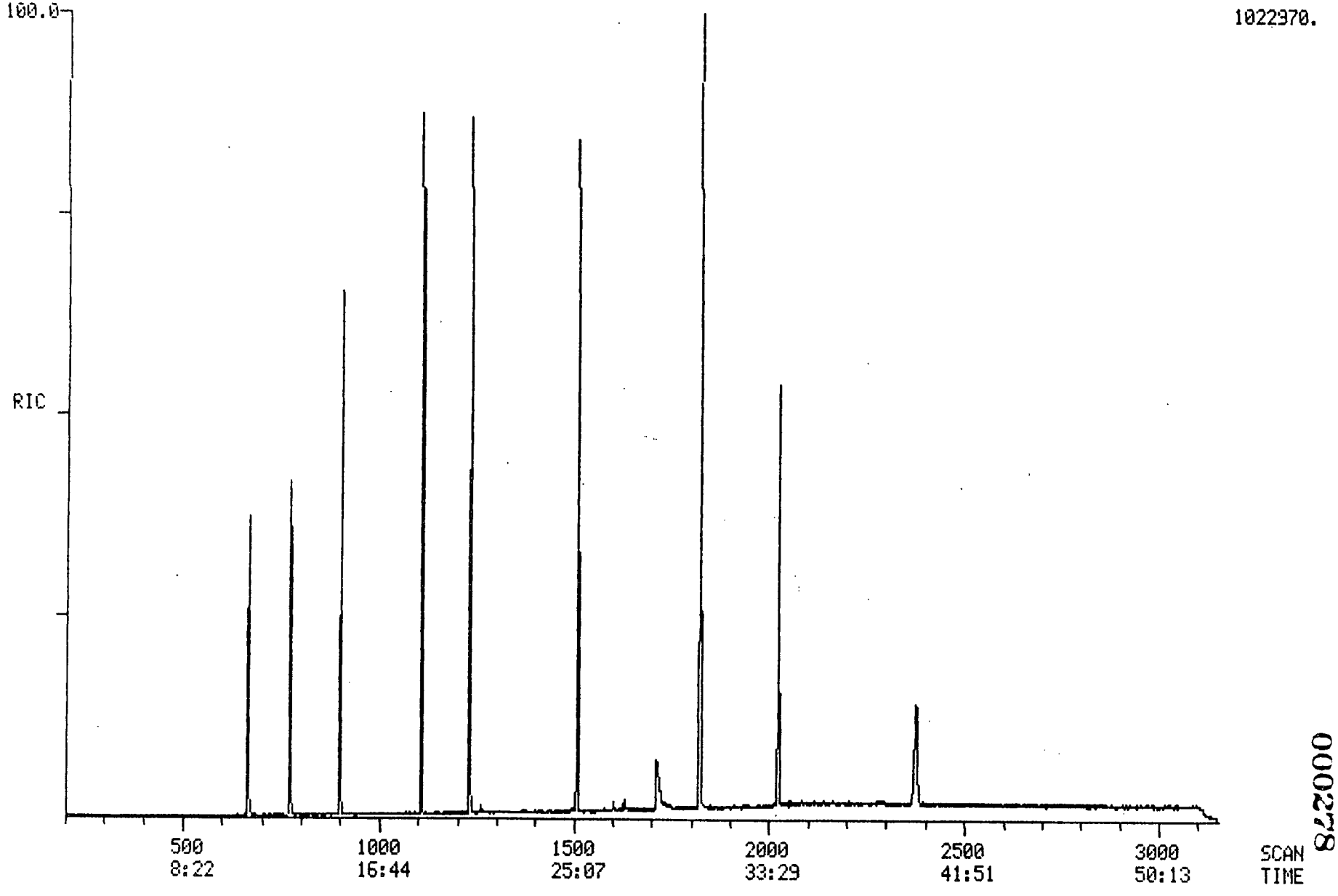
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol		
100-02-7	4-Nitrophenol		
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol		
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol		
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

MIDRIC
08/28/89 23:56:00
SAMPLE: TB
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883617AB #1
CALI: 883617AB #2

SCANS 200 TO 3150

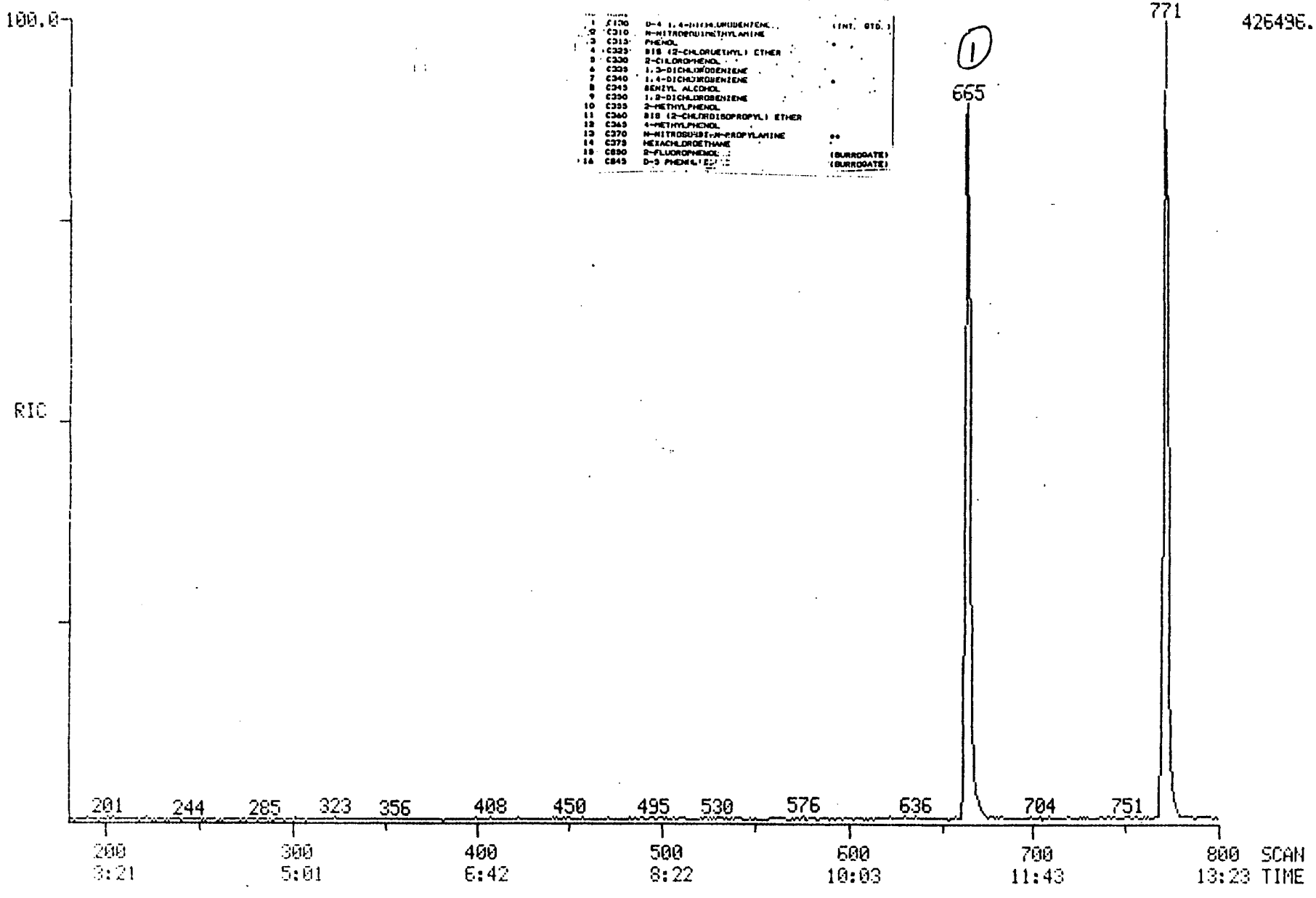


000278

MIDRIC
08/28/89 23:56:00
SAMPLE: TB
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1.3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883617AB #1
CALI: 883617AB #2

SCANS 180 TO 800



Quantitation Report File: 883617AB

Data: 883617AB.TI
08/28/89 23:56:00
Sample: TB
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: 5100 Weight: 0.004
Submitt d by: FLEMING Analyst: WSS Acct. No.: 883617AB

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

No	Name		
1	CI30	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	CS50	2-FLUOROPHENOL	(SURROGATE)
16	CS45	D-5 PHENOL	(SURROGATE)

No	m/z	Scan	Time	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	664	11:01	1.000	A BB	238208.	40.000 NG	*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							

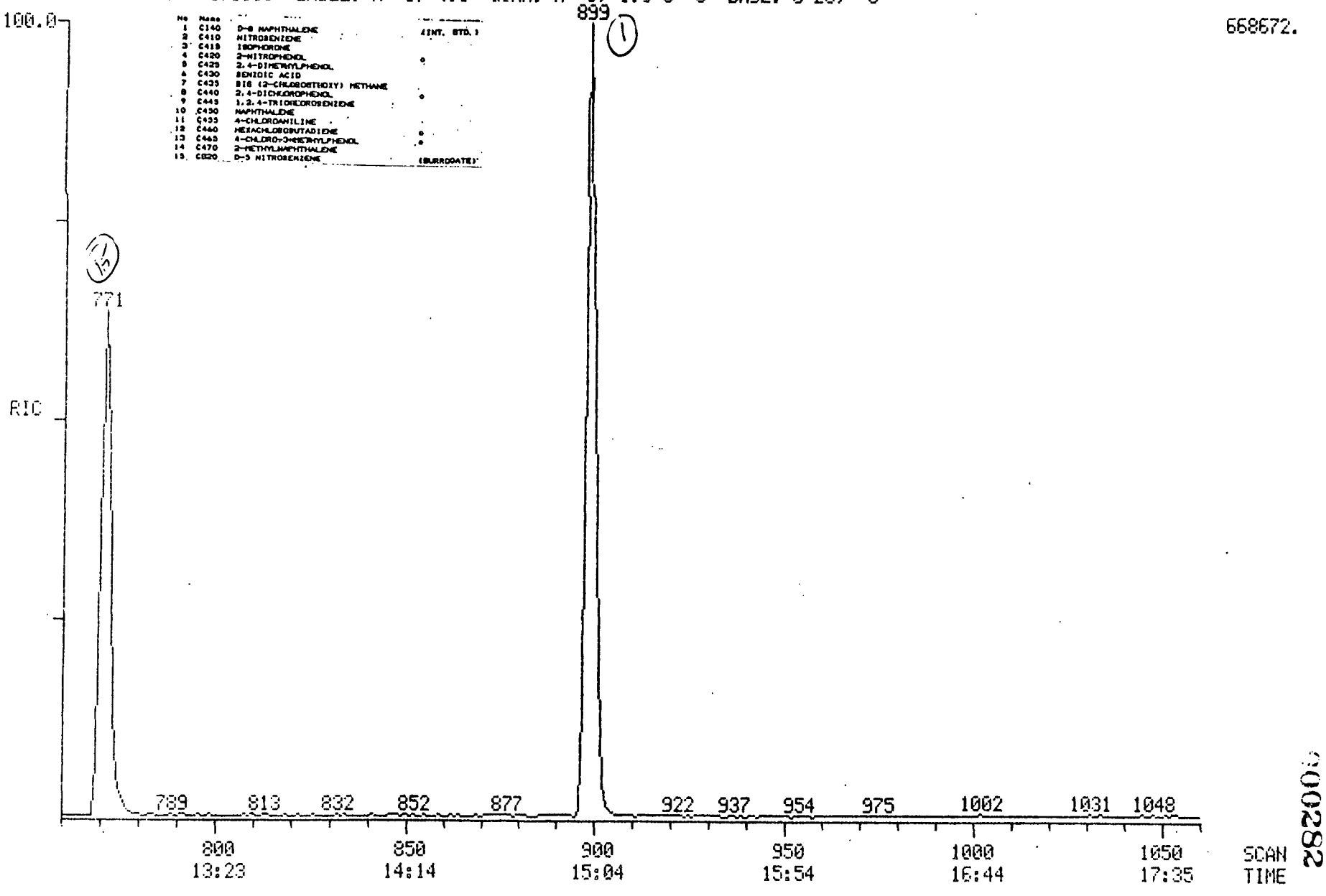
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	11:01	1.01	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	3:12		0.290						
3	10:18		0.935						
4	10:25		0.945						
5	10:30		0.953						
6	10:54		0.989						
7	11:04		1.005						

No	Ret(L)	Ratio	RRT(E)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
8	12:35		1.143						
9	11:38		1.056						
10	11:37		1.055						
11	12:07		1.100						
12	12:06		1.099						
13	12:33		1.140						
14	12:35		1.143						
15	7:09		0.649						
16	10:16		0.932						

MIDRIC
08/28/89 23:56:00
SAMPLE: TB
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883617AB #1
CALI: 883617AB #2

SCANS 760 TO 1060



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)

002282

Quantitation Report [illegible] File: 883617AB

Data: 883617AB.TI
08/28/89 23:56:00
Sample: TB
Conds.: 1000 MLS/1.0 ML
Formula: [illegible] Instrument: 5100 Weight: 0.004
Submitted by: FLEMING[illegible] Analyst: WSS Acct. No.: 883617AB

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

N	Name		
1	CI40	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	CS20	D-5 NITROBENZENE	(SURROGATE)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	136	899	15:03	1	1.000	A BB	954400.	40.000 NG	45.68
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	82	771	12:54	1	0.858	A BB	417184.	47.574 NG	54.33

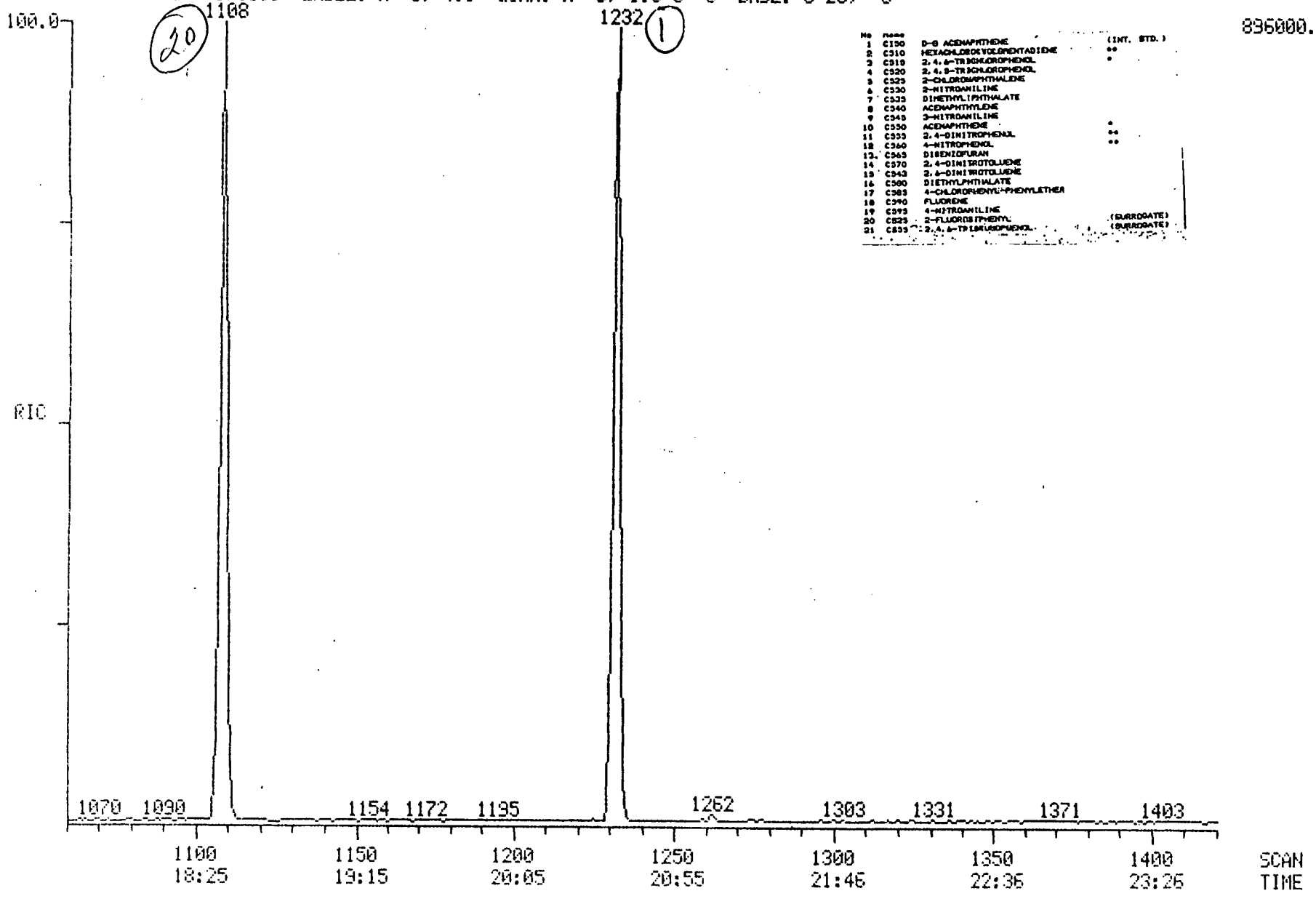
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	15:02	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	12:55		0.860						
3	13:42		0.911						
4	13:56		0.927						
5	14:12		0.944						
6	14:47		0.983						
7	14:29		0.963						
8	14:43		0.979						
9	14:55		0.992						

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
10	15:06		1.004						
11	15:24		1.024						
12	15:43		1.046						
13	17:02		1.134						
14	17:18		1.150						
15	12:52	1.00	0.856	1.00	47.57	50.00	0.350	0.368	0.95

MIDRIC
08/28/89 23:56:00
SAMPLE: TB
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1.3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883617AB #1
CALI: 883617AB #2

SCANS 1060 TO 1420



No	name		
1	C150	D-8 ACENAPHTHENE	(INT. STD.)
2	C510	HEXACHLOROCYCLOPENTADIENE	**
3	C519	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)

000285

Quantitation Report [illegible] 883617AB

000286

Data: 883617AB.TI
08/28/89 23:56:00
Sample: TB
Conds.: 1000 MLS/1.0 ML
Formula: [illegible] Instrument: 5100 Weight: 0.004
Submitted by: FLEMING[illegible] Analyst: WSS Acct. No.: 883617AB

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

No	Name		
1	CI50	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	C543	2,6-DINITROTOLUENE	
16	C580	DIETHYLPHTHALATE	
17	C585	4-CHLOROPHENYL-PHENYLETHER	
18	C590	FLUORENE	
19	C595	4-NITROANILINE	
20	CS25	2-FLUOROBIPHENYL	(SURROGATE)
21	CS55	2,4,6-TRIBROMOPHENOL	(SURROGATE)

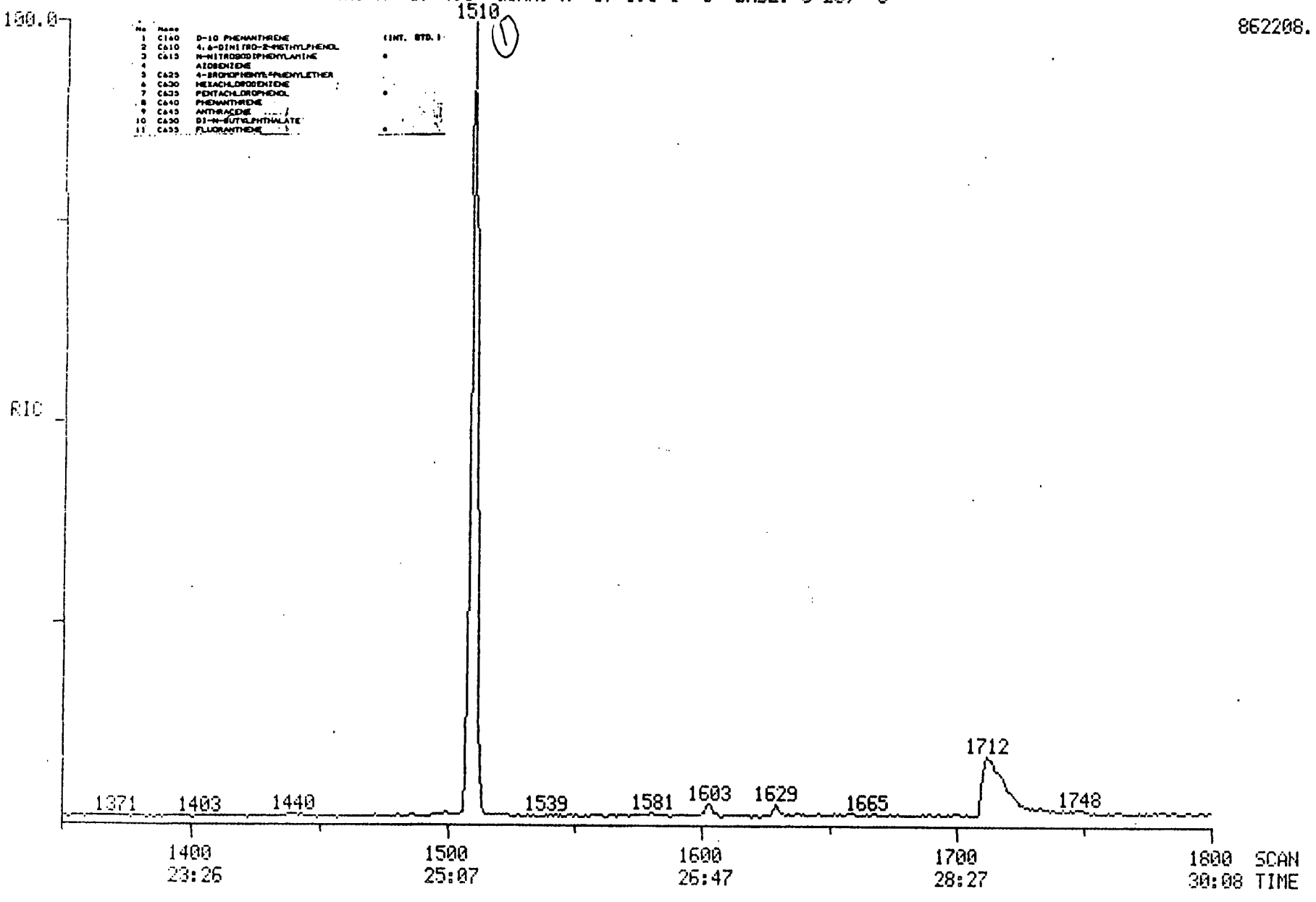
No	m/z	Scan	Time	Ref#	RRT	Meth	Area(Hght)	Amount	%Tot
1	164	1232	20:3[illegible]	1	1.000	A BB	546080.	40.000 NG	43.30
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	172	1108	18:3[illegible]	1	0.899	A BV	884096.	52.387 NG	56.71
21	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	20:38	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	18:01		0.873						
3	18:19		0.887						
4	18:27		0.894						
5	18:49		0.912						
6	19:18		0.935						
7	20:01		0.970						
8	20:08		0.976						
9	20:37		0.999						
10	20:44		1.005						
11	20:56		1.015						
12	21:17		1.031						
13	21:15		1.029						
14	21:26		1.038						
15	20:13		0.980						
16	22:17		1.079						
17	22:23		1.084						
18	22:20		1.082						
19	22:36		1.095						
20	18:34	1.00	0.899	1.00	52.39	50.00	1.295	1.236	1.05
21	23:10		1.122						

MIDRIC
08/28/89 23:56:00
SAMPLE: TB
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883617AB #1
CALI: 883617AB #2

SCANS 1350 TO 1800



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

000288

Quantitation Report [illegible] File: 883617AB

Data: 883617AB.TI
08/28/89 23:56:00
Sample: TB
Conds.: 1000 MLS/1.0 ML
Formula: [illegible] Instrument: 5100 Weight: 0.004
Submitted by: FLEMING[illegible] Analyst: WSS Acct. No.: 883617AB

AMOUNT=AREA * REF AM[illegible]/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

N	Name		
1	CI60	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	*

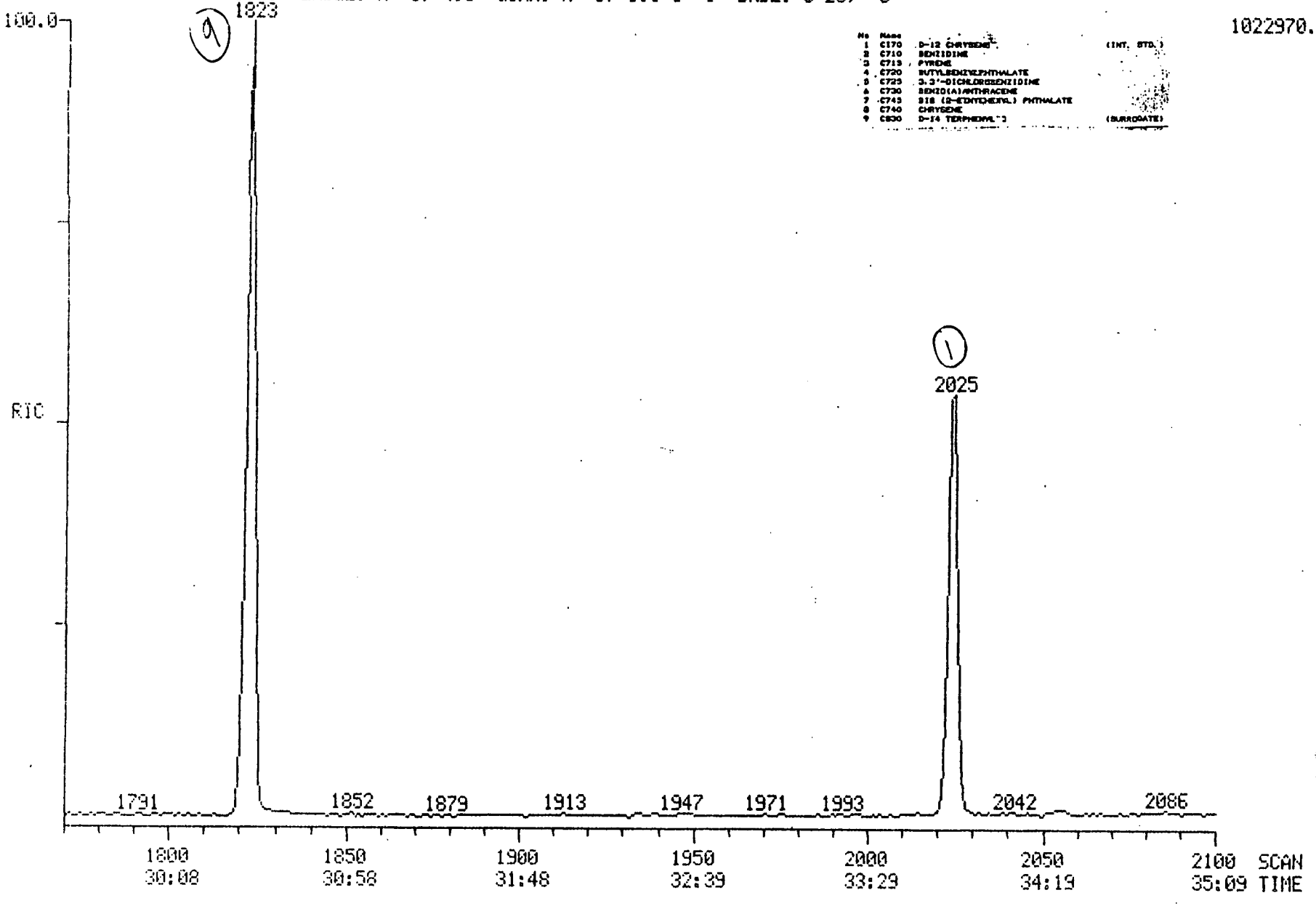
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	188	1510	25:17	[illegible]	1.000	A BV	999552.	40.000 NG	99.92
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	149	1640	27:27	[illegible]	1.086	A BB	~~792.~~	~~0.032 NG~~	~~0.08~~
11	NOT FOUND								

N	Ret(L)	Ratio	RRT	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	25:19	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	22:43		0.897						
3	22:48		0.901						
4	22:53		0.904						
5	23:54		0.944						
6	24:20		0.962						
7	24:57		0.985						
8	25:23		1.003						
9	25:31		1.008						
10	27:28	1.00	1.085	1.00	0.03	50.00	0.001	1.225	0.00
11	29:12		1.153						

MIDRIC
08/28/89 23:56:00
SAMPLE: TB
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1.3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883617AB #1
CALI: 883617AB #2

SCANS 1770 TO 2100



062000

Quantitation Report [illegible] Files 883617AB

Data: 883617AB.TI
08/28/89 23:56:00
Sample: TB
Conds.: 1000 MLS/1.0 ML
Formula: [illegible] Instrument: 5100 Weight: 0.004
Submitted by: FLEMING[illegible] Analyst: WSS Acct. No.: 883617AB

AMOUNT=AREA * REF AM[illegible]Z(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI70	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	CS30	D-14 TERPHENYL	(SURROGATE)

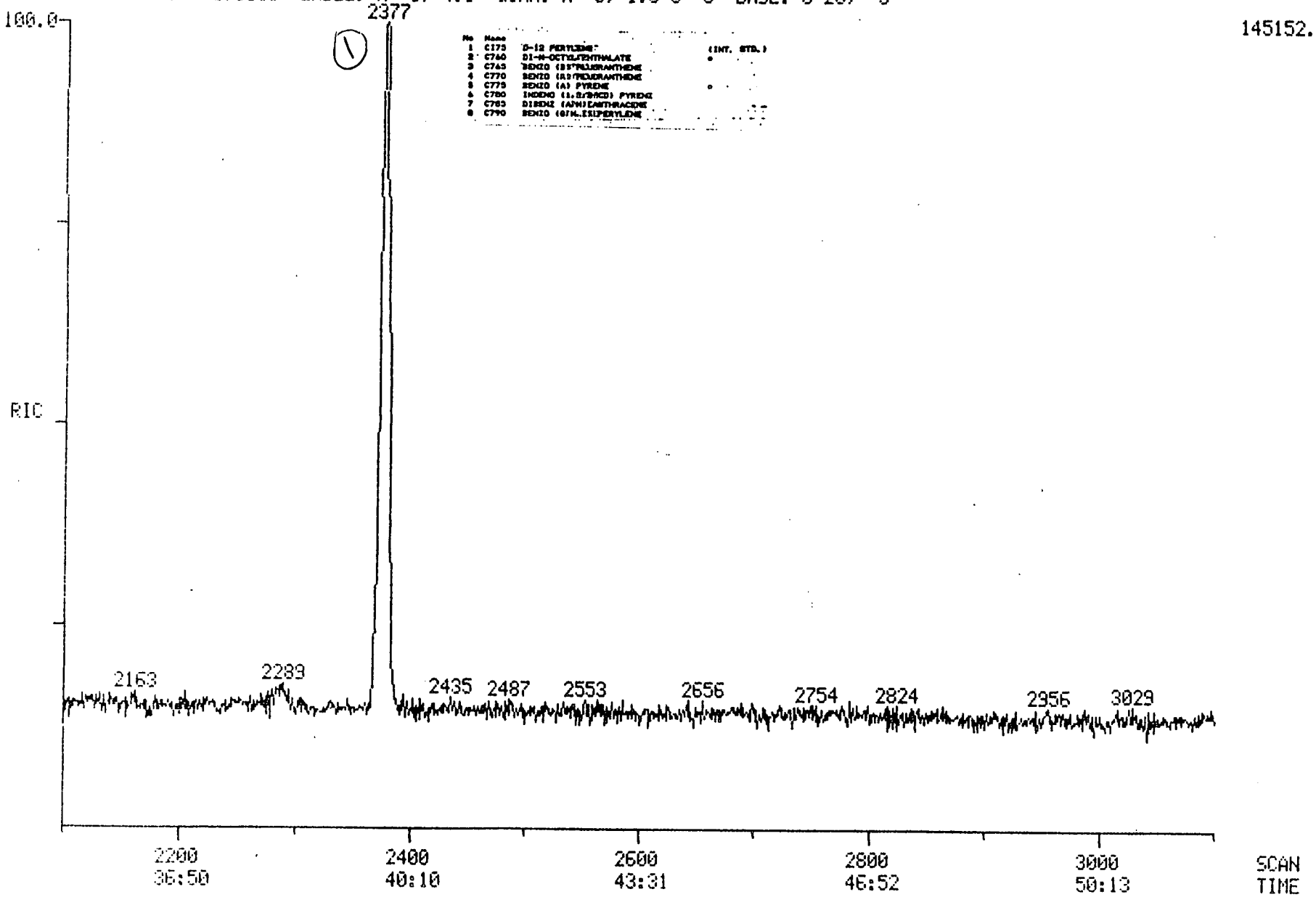
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	240	2024	33:59	[illegible]	1.000	A BB	726976.	40.000 NG	40.28
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	149	2053	34:22	[illegible]	1.014	A BB	~~5344.~~	~~0.283 NG~~	~~0.29~~
8	NOT FOUND								
9	244	1823	30:31	[illegible]	0.901	A BB	1181960.	59.023 NG	59.44

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	33:55	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	29:42		0.876						
3	29:55		0.882						
4	32:17		0.952						
5	33:53		0.999						
6	33:51		0.998						
7	34:23	1.00	1.014	1.00	0.28	50.00	0.006	1.038	0.01
8	34:00		1.002						
9	30:31	1.00	0.900	1.00	59.02	50.00	1.301	1.102	1.18

MIDRIC
08/28/89 23:56:00
SAMPLE: TB
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 883617AB #1
CALI: 883617AB #2

SCANS 2100 TO 3100



145152.

26

Quantitation Report [illegible] 883617AB

Data: 883617AB.TI
08/28/89 23:56:00
Sample: TB
Conds.: 1000 MLS/1.0 ML
Formula: [illegible] Instrument: 5100 Weight: 0.004
Submitted by: FLEMING[illegible] Analyst: WSS Acct. No.: 883617AB

AMOUNT=AREA * REF AM[illegible]/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI75	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	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	264	2376	39:4[illegible]	[illegible]	1.000	A BB	462080.	40.000 NG	*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	39:49	1.00	1.000	[illegible]	1.00	40.00	40.00	1.000	1.000	1.00
2	36:44		0.922							
3	37:57		0.953							
4	38:03		0.955							
5	39:31		0.992							
6	47:39		1.197							
7	48:04		1.207							
8	49:59		1.255							

6B
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Q C INC. Contract: QC INC

Lab Code: _____ Case No.: QC SAS No.: _____ SDG No.: _____

Instrument ID: 5100 Calibration Date(s): 08/02/89 08/02/89

Min RRF for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = HSB200802 RRF50 = HSB500802
RRF80 = HSB800802 RRF120= HSB1200802 RRF160= HSB1600802

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD
Phenol *	1.567	1.598	1.435	1.346	1.360	1.461	8.0*
bis(2-Chloroethyl)Ether	1.774	1.794	1.723	1.609	1.580	1.696	5.7
2-Chlorophenol	1.372	1.459	1.443	1.323	1.334	1.386	4.5
1,3-Dichlorobenzene	1.625	1.451	1.539	1.351	1.540	1.501	6.9
1,4-Dichlorobenzene *	1.681	1.443	1.518	1.320	1.510	1.494	8.8*
Benzyl Alcohol	1.201	1.153	1.056	0.967	0.996	1.075	9.3
1,2-Dichlorobenzene	1.541	1.363	1.420	1.250	1.334	1.382	7.8
2-Methylphenol	1.160	1.145	1.030	0.763	0.646	0.949	24.5
bis(2-Chloroisopropyl)Ether	2.479	2.502	2.213	2.127	1.970	2.258	10.2
4-Methylphenol	0.716	0.800	0.716	0.701	0.639	0.714	8.0
N-Nitroso-Di-n-Propylamine #	1.257	1.244	1.050	0.715	0.328	0.919	43.1#
Hexachloroethane	0.655	0.577	0.607	0.511	0.561	0.582	9.2
Nitrobenzene	0.426	0.367	0.382	0.353	0.405	0.387	7.6
Isophorone	0.837	0.792	0.849	0.822	0.935	0.847	6.3
2-Nitrophenol *	0.188	0.214	0.214	0.195	0.205	0.203	5.7*
2,4-Dimethylphenol	0.273	0.279	0.277	0.251	0.258	0.268	4.6
Benzoic Acid		0.134	0.112	0.046	0.039	0.083	57.1
bis(2-Chloroethoxy)Methane	0.475	0.487	0.445	0.450	0.441	0.460	4.4
2,4-Dichlorophenol *	0.331	0.326	0.315	0.303	0.306	0.316	3.9*
1,2,4-Trichlorobenzene	0.375	0.324	0.346	0.299	0.344	0.338	8.3
Naphthalene	0.906	0.813	0.729	0.747	0.709	0.781	10.3
4-Chloroaniline	0.449	0.446	0.433	0.419	0.407	0.431	4.1
Hexachlorobutadiene *	0.199	0.174	0.186	0.162	0.178	0.180	7.7*
4-Chloro-3-Methylphenol *	0.329	0.365	0.341	0.318	0.337	0.338	5.2*
2-Methylnaphthalene	0.679	0.629	0.578	0.547	0.513	0.589	11.2
Hexachlorocyclopentadiene #	0.262	0.348	0.352	0.319	0.420	0.340	16.9#
2,4,6-Trichlorophenol *	0.376	0.559	0.466	0.467	0.531	0.480	14.7*
2,4,5-Trichlorophenol		0.476	0.371	0.287	0.298	0.358	24.3
2-Chloronaphthalene	1.171	1.294	1.199	1.077	1.339	1.216	8.5
2-Nitroaniline		0.655	0.501	0.505	0.501	0.541	14.1
Dimethyl Phthalate	1.451	1.764	1.329	1.242	1.318	1.421	14.5
Acenaphthylene	1.751	2.005	1.580	1.581	1.551	1.694	11.3
2,6-Dinitrotoluene	0.311	0.341	0.285	0.248	0.356	0.308	14.1
3-Nitroaniline		0.301	0.251	0.248	0.269	0.267	9.1
Acenaphthene *	1.126	1.268	1.004	1.022	1.024	1.089	10.2*
2,4-Dinitrophenol #		0.130	0.119	0.117	0.175	0.135	20.1#
4-Nitrophenol #		0.150	0.126	0.119	0.119	0.129	11.4#

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Q C INC. Contract: QC INC

Lab Code: _____ Case No.: QC SAS No.: _____ SDG No.: _____

Instrument ID: 5100 Calibration Date(s): 08/02/89 08/02/89

Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = HSB200802 RRF50 = HSB500802
RRF80 = HSB800802 RRF120= HSB1200802 RRF160= HSB1600802

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD
Dibenzofuran	1.843	1.779	1.459	1.519	1.465	1.613	11.4
2,4-Dinitrotoluene	0.298	0.329	0.283	0.270	0.326	0.301	8.6
Diethylphthalate	1.514	1.642	1.215	1.066	1.091	1.306	19.8
4-Chlorophenyl-phenylether	0.710	0.649	0.502	0.409	0.413	0.537	25.6
Fluorene	1.294	1.330	0.891	0.699	0.841	1.011	28.1
4-Nitroaniline		0.289	0.246	0.230	0.199	0.241	15.6
4,6-Dinitro-2-Methylphenol		0.105	0.100	0.092	0.088	0.096	8.0
N-Nitrosodiphenylamine *	0.556	0.457	0.428	0.329	0.393	0.433	19.4*
4-Bromophenyl-phenylether	0.211	0.204	0.178	0.178	0.194	0.193	7.8
Hexachlorobenzene	0.254	0.224	0.219	0.215	0.273	0.237	10.7
Pentachlorophenol *		0.117	0.114	0.111	0.124	0.117	4.8*
Phenanthrene	1.079	1.095	0.947	0.918	0.786	0.965	13.2
Anthracene	1.076	0.893	0.818	0.736	0.696	0.844	17.8
Di-n-Butylphthalate	1.450	1.309	1.128	1.085	1.083	1.211	13.4
Fluoranthene *	1.085	0.968	0.787	0.801	0.778	0.884	15.5*
Pyrene	1.807	1.582	1.343	1.406	1.165	1.461	16.7
Butylbenzylphthalate	0.882	0.838	0.682	0.731	0.659	0.758	12.9
3,3'-Dichlorobenzidine	0.301	0.317	0.301	0.227	0.264	0.282	12.9
Benzo(a)Anthracene	1.189	1.129	0.966	0.975	0.966	1.045	10.2
Chrysene	1.125	1.063	0.931	0.912	0.912	0.989	10.0
bis(2-Ethylhexyl)Phthalate	1.216	1.237	1.078	1.059	1.072	1.132	7.6
Di-n-Octyl Phthalate *	2.909	2.452	2.030	2.332	1.836	2.312	17.9*
Benzo(b)Fluoranthene	1.513	1.558	1.383	1.574	1.536	1.513	5.0
Benzo(k)Fluoranthene	1.532	1.301	1.211	1.234	0.845	1.225	20.2
Benzo(a)Pyrene *	1.374	1.443	1.264	1.405	1.274	1.352	5.9*
Indeno(1,2,3-cd)Pyrene	1.065	1.124	1.106	1.241	1.192	1.146	6.1
Dibenz(a,h)Anthracene	1.030	0.647	0.469	0.532	0.607	0.657	33.4
Benzo(g,h,i)Perylene	1.135	1.147	0.924	0.999	0.482	0.937	29.0
Nitrobenzene-d5	0.415	0.426	0.426	0.392	0.382	0.408	4.9
2-Fluorobiphenyl	1.253	1.436	1.192	1.108	1.100	1.218	11.3
Terphenyl-d14	1.254	1.093	1.054	0.938	0.818	1.031	16.0
Phenol-d5	1.259	1.298	1.155	1.197	1.200	1.222	4.6
2-Fluorophenyl	1.053	1.170	1.076	1.068	1.114	1.096	4.3
2,4,6-Tribromophenol	0.123	0.182	0.141	0.159	0.177	0.156	15.8

(1) Cannot be separated from Diphenylamine

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Q C INC. Contract: QC_INC

Lab Code: Case No.: QC SAS No.: SDG No.:

Instrument ID: 5100 Calibration date: 08/25/89 Time: 1050

Lab File ID: HSB500825 Init. Calib. Date(s): 08/02/89 08/02/89

Min RRF50 for SPCC(#) = 0.050 Max %D for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Phenol *	1.461	1.782	-22.0 *
bis(2-Chloroethyl)Ether	1.696	1.464	13.7
2-Chlorophenol	1.386	1.326	4.3
1,3-Dichlorobenzene	1.501	1.479	1.5
1,4-Dichlorobenzene *	1.494	1.489	0.3 *
Benzyl Alcohol	1.075	1.118	-4.0
1,2-Dichlorobenzene	1.382	1.402	-1.4
2-Methylphenol	0.949	0.715	24.7
bis(2-Chloroisopropyl)Ether	2.258	1.793	20.6
4-Methylphenol	0.714	1.128	-58.0
N-Nitroso-Di-n-Propylamine #	0.919	0.910	1.0 #
Hexachloroethane	0.582	0.580	0.3
Nitrobenzene	0.387	0.344	11.1
Isophorone	0.847	0.703	17.0
2-Nitrophenol *	0.203	0.191	5.9 *
2,4-Dimethylphenol	0.268	0.293	-9.3
Benzoic Acid	0.083	0.120	-44.6
bis(2-Chloroethoxy)Methane	0.460	0.475	-3.3
2,4-Dichlorophenol *	0.316	0.310	1.9 *
1,2,4-Trichlorobenzene	0.338	0.331	2.1
Naphthalene	0.781	0.919	-17.7
4-Chloroaniline	0.431	0.401	7.0
Hexachlorobutadiene *	0.180	0.186	-3.3 *
4-Chloro-3-Methylphenol *	0.338	0.261	22.8 *
2-Methylnaphthalene	0.589	0.631	-7.1
Hexachlorocyclopentadiene #	0.340	0.265	22.1 #
2,4,6-Trichlorophenol *	0.480	0.382	20.4 *
2,4,5-Trichlorophenol	0.358	0.389	-8.7
2-Chloronaphthalene	1.216	1.162	4.4
2-Nitroaniline	0.541	0.290	46.4
Dimethyl Phthalate	1.421	1.303	8.3
Acenaphthylene	1.694	1.853	-9.4
2,6-Dinitrotoluene	0.308	0.264	14.3
3-Nitroaniline	0.267	0.244	8.6
Acenaphthene *	1.089	1.081	0.7 *
2,4-Dinitrophenol #	0.135	0.057	57.8 #
4-Nitrophenol #	0.129	0.250	-93.8 #

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

000297

Lab Name: Q C INC. Contract: QC_INC

Lab Code: Case No.: QC SAS No.: SDG No.:

Instrument ID: 5100 Calibration date: 08/25/89 Time: 1050

Lab File ID: HSB500825 Init. Calib. Date(s): 08/02/89 08/02/89

Min RRF50 for SPCC(#) = 0.050 Max %D for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Dibenzofuran	1.613	1.597	1.0
2,4-Dinitrotoluene	0.301	0.191	36.5
Diethylphthalate	1.306	1.244	4.7
4-Chlorophenyl-phenylether	0.537	0.600	-11.7
Fluorene	1.011	1.186	-17.3
4-Nitroaniline	0.241	0.197	18.3
4,6-Dinitro-2-Methylphenol	0.096	0.063	34.4
N-Nitrosodiphenylamine *	0.433	0.510	-17.8 *
4-Bromophenyl-phenylether	0.193	0.217	-12.4
Hexachlorobenzene	0.237	0.310	-30.8
Pentachlorophenol *	0.117	0.092	21.4 *
Phenanthrene	0.965	1.029	-6.6
Anthracene	0.844	1.024	-21.3
Di-n-Butylphthalate	1.211	1.333	-10.1
Fluoranthene *	0.884	0.983	-11.2 *
Pyrene	1.461	1.592	-9.0
Butylbenzylphthalate	0.758	0.699	7.8
3,3'-Dichlorobenzidine	0.282	0.275	2.5
Benzo(a)Anthracene	1.045	1.103	-5.6
Chrysene	0.989	1.029	-4.0
bis(2-Ethylhexyl)Phthalate	1.132	1.056	6.7
Di-n-Octyl Phthalate *	2.312	2.791	-20.7 *
Benzo(b)Fluoranthene	1.513	1.834	-21.2
Benzo(k)Fluoranthene	1.225	1.494	-22.0
Benzo(a)Pyrene *	1.352	1.414	-4.6 *
Indeno(1,2,3-cd)Pyrene	1.146	0.488	57.4
Dibenz(a,h)Anthracene	0.657	0.662	-0.8
Benzo(g,h,i)Perylene	0.937	0.211	77.5
Nitrobenzene-d5	0.408	0.359	12.0
2-Fluorobiphenyl	1.218	1.227	-0.7
Terphenyl-d14	1.031	1.157	-12.2
Phenol-d5	1.222	1.492	-22.1
2-Fluorophenyl	1.096	1.093	0.3
2,4,6-Tribromophenol	0.156	0.184	-18.0

(1) Cannot be separated from Diphenylamine

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Q C INC. Contract: QC INC

Lab Code: _____ Case No.: QC SAS No.: _____ SDG No.: _____

Instrument ID: 5100 Calibration date: 08/28/89 Time: 1730

Lab File ID: HSB500828 Init. Calib. Date(s): 08/02/89 08/02/89

Min RRF50 for SPCC(#) = 0.050 Max %D for CCC(*) = 25.0%

COMPOUND		RRF	RRF50	%D	
Phenol	*	1.461	1.439	1.5	*
bis(2-Chloroethyl)Ether		1.696	1.709	-0.8	
2-Chlorophenol		1.386	1.380	0.4	
1,3-Dichlorobenzene		1.501	1.502	-0.1	
1,4-Dichlorobenzene	*	1.494	1.538	-2.9	*
Benzyl Alcohol		1.075	1.189	-10.6	
1,2-Dichlorobenzene		1.382	1.436	-3.9	
2-Methylphenol		0.949	0.774	18.4	
bis(2-Chloroisopropyl)Ether		2.258	2.039	9.7	
4-Methylphenol		0.714	1.255	-75.8	
N-Nitroso-Di-n-Propylamine	#	0.919	1.028	-11.9	#
Hexachloroethane		0.582	0.488	16.2	
Nitrobenzene		0.387	0.358	7.5	
Isophorone		0.847	0.770	9.1	
2-Nitrophenol	*	0.203	0.177	12.8	*
2,4-Dimethylphenol		0.268	0.312	-16.4	
Benzoic Acid		0.083	0.137	-65.1	
bis(2-Chloroethoxy)Methane		0.460	0.496	-7.8	
2,4-Dichlorophenol	*	0.316	0.319	-0.9	*
1,2,4-Trichlorobenzene		0.338	0.334	1.2	
Naphthalene		0.781	0.872	-11.7	
4-Chloroaniline		0.431	0.429	0.5	
Hexachlorobutadiene	*	0.180	0.184	-2.2	*
4-Chloro-3-Methylphenol	*	0.338	0.300	11.2	*
2-Methylnaphthalene		0.589	0.600	-1.9	
Hexachlorocyclopentadiene	#	0.340	0.369	-8.5	#
2,4,6-Trichlorophenol	*	0.480	0.412	14.2	*
2,4,5-Trichlorophenol		0.358	0.445	-24.3	
2-Chloronaphthalene		1.216	1.195	1.7	
2-Nitroaniline		0.541	0.370	31.6	
Dimethyl Phthalate		1.421	1.361	4.2	
Acenaphthylene		1.694	1.817	-7.3	
2,6-Dinitrotoluene		0.308	0.280	9.1	
3-Nitroaniline		0.267	0.271	-1.5	
Acenaphthene	*	1.089	0.986	9.5	*
2,4-Dinitrophenol	#	0.135	0.078	42.2	#
4-Nitrophenol	#	0.129	0.086	33.3	#

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Q C INC. Contract: QC INC

Lab Code: _____ Case No.: QC SAS No.: _____ SDG No.: _____

Instrument ID: 5100 Calibration date: 08/28/89 Time: 1730

Lab File ID: HSB500828 Init. Calib. Date(s): 08/02/89 08/02/89

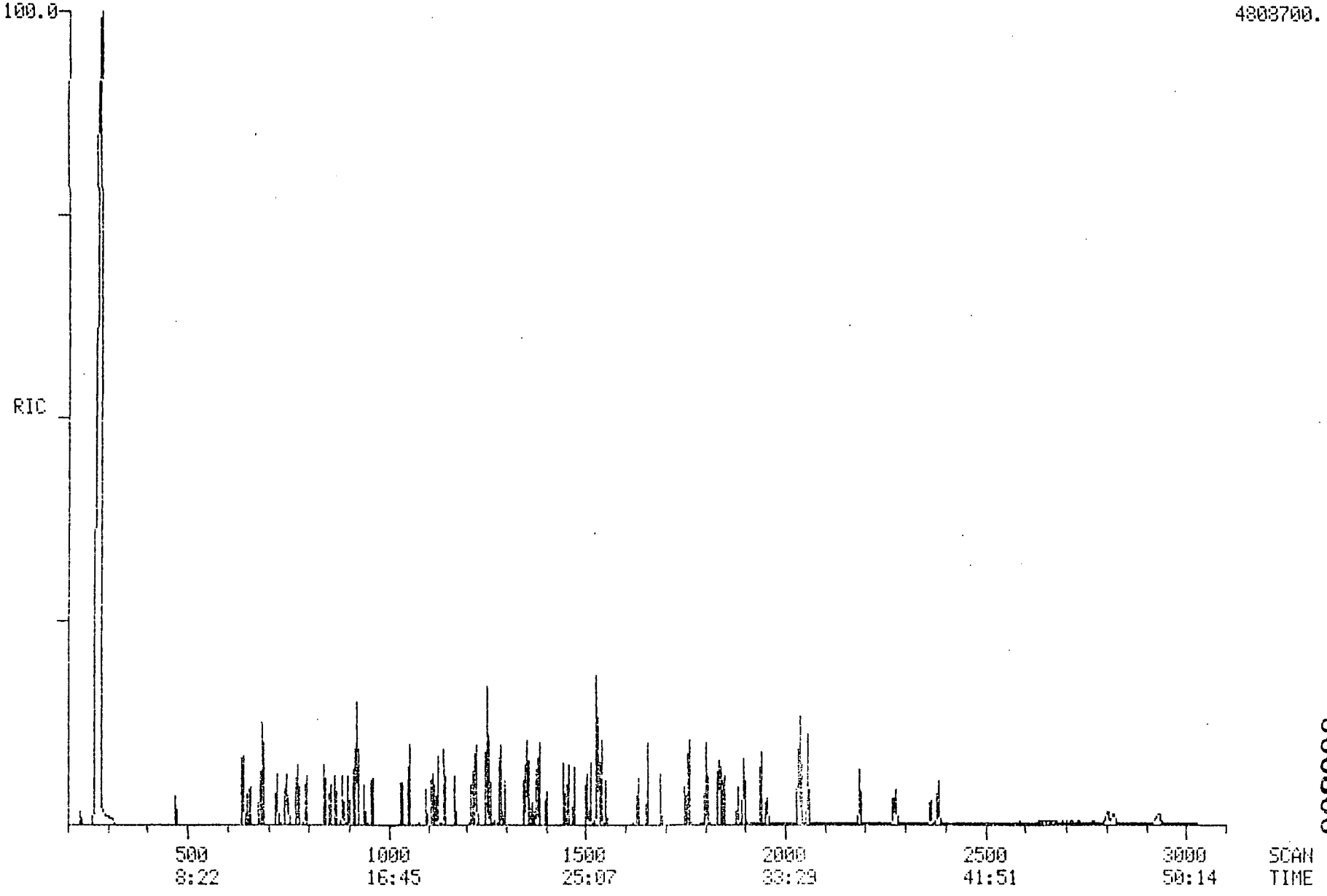
Min RRF50 for SPCC(#) = 0.050 Max %D for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Dibenzofuran	1.613	1.684	-4.4
2,4-Dinitrotoluene	0.301	0.246	18.3
Diethylphthalate	1.306	1.338	-2.5
4-Chlorophenyl-phenylether	0.537	0.640	-19.2
Fluorene	1.011	1.174	-16.1
4-Nitroaniline	0.241	0.216	10.4
4,6-Dinitro-2-Methylphenol	0.096	0.077	19.8
N-Nitrosodiphenylamine *	0.433	0.489	-12.9 *
4-Bromophenyl-phenylether	0.193	0.240	-24.4
Hexachlorobenzene	0.237	0.337	-42.2
Pentachlorophenol *	0.117	0.116	0.9 *
Phenanthrene	0.965	0.977	-1.2
Anthracene	0.844	0.919	-8.9
Di-n-Butylphthalate	1.211	1.225	-1.2
Fluoranthene *	0.884	0.914	-3.4 *
Pyrene	1.461	1.346	7.9
Butylbenzylphthalate	0.758	0.642	15.3
3,3'-Dichlorobenzidine	0.282	0.288	-2.1
Benzo(a)Anthracene	1.045	1.123	-7.5
Chrysene	0.989	1.031	-4.2
bis(2-Ethylhexyl)Phthalate	1.132	1.038	8.3
Di-n-Octyl Phthalate *	2.312	2.086	9.8 *
Benzo(b)Fluoranthene	1.513	1.859	-22.9
Benzo(k)Fluoranthene	1.225	0.952	22.3
Benzo(a)Pyrene *	1.352	1.350	0.1 *
Indeno(1,2,3-cd)Pyrene	1.146	0.960	16.2
Dibenz(a,h)Anthracene	0.657	0.414	37.0
Benzo(g,h,i)Perylene	0.937	0.582	37.9
Nitrobenzene-d5	0.408	0.368	9.8
2-Fluorobiphenyl	1.218	1.236	-1.5
Terphenyl-d14	1.031	1.102	-6.9
Phenol-d5	1.222	1.535	-25.6
2-Fluorophenyl	1.096	1.096	0.0
2,4,6-Tribromophenol	0.156	0.254	-62.8

(1) Cannot be separated from Diphenylamine

MIDRIC
08/02/89 2:32:00
SAMPLE: HSL-B STANDARD 08/02/89
CONDS.: 20 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB200802 #1 SCANS 200 TO 3100
CALI: HSB200802 #2

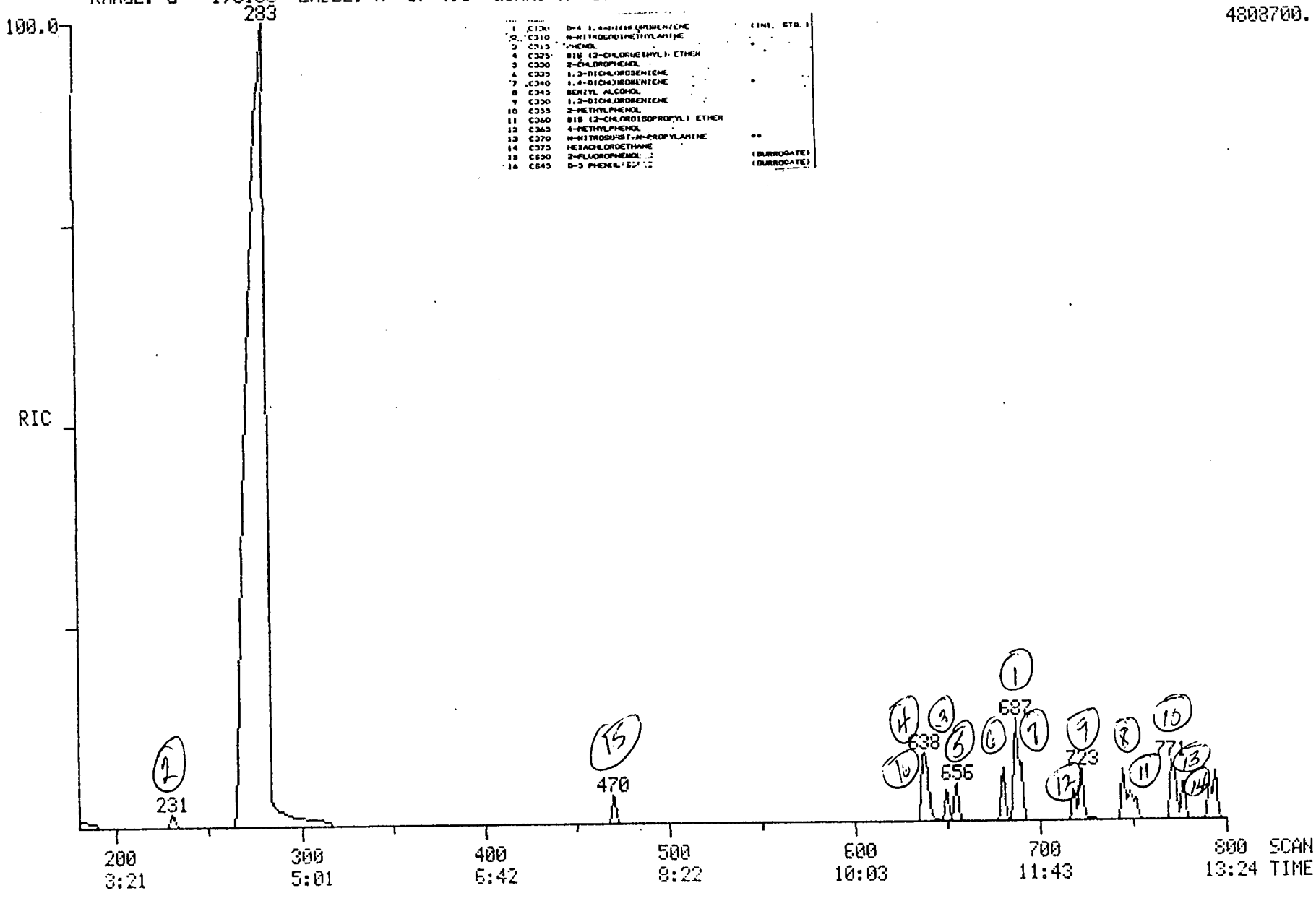


000300

MIDRIC
08/02/89 2:32:00
SAMPLE: HSL-B STANDARD 08/02/89
CONDS.: 20 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB200802 #1 SCANS 180 TO 800
CALI: HSB200802 #2

4808700.



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	C630	2-FLUOROPHENOL	(SURROGATE)
16	C645	D-5 PHENOL (SURROGATE)	(SURROGATE)

000301

Quantitation Report (File) HSB200802

Data: HSB200802.TI
08/02/89 2:32:00
Sample: HSL-B STANDARD 08/02/89
Conds.: 20 NG INJECTION
Formula: Instrument: 5100 Weight: 0.001
Submitted by: QC INC Analyst: DMM Acct. No.: HSB20080

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

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	CS50	2-FLUOROPHENOL	(SURROGATE)
16	CS45	D-5 PHENOL	(SURROGATE)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	687	11:30	1	1.000	A BB	233024.	40.000 NG	11.76
2	74	231	3:52	1	0.336	A BB	79328.	20.000 NG	5.88
3	94	639	10:42	1	0.930	A BB	182592.	20.000 NG	5.88
4	93	637	10:40	1	0.927	A BV	206736.	20.000 NG	5.88
5	128	655	10:58	1	0.953	A BB	159904.	20.000 NG	5.88
6	146	680	11:23	1	0.990	A BV	189312.	20.000 NG	5.88
7	146	690	11:33	1	1.004	A VB	195872.	20.000 NG	5.88
8	108	744	12:27	1	1.083	A BB	139969.	20.000 NG	5.88
9	146	722	12:05	1	1.051	A BB	179552.	20.000 NG	5.88
10	108	771	12:54	1	1.122	A BB	135104.	20.000 NG	5.88
11	45	748	12:31	1	1.089	A BB	288864.	20.000 NG	5.88
12	108	718	12:01	1	1.045	A BB	83470.	20.000 NG	5.88
13	70	773	12:56	1	1.125	A BB	146432.	20.000 NG	5.88
14	117	778	13:02	1	1.132	A BB	76320.	20.000 NG	5.88
15	112	470	7:52	1	0.684	A BB	122688.	20.000 NG	5.88
16	99	637	10:40	1	0.927	A BB	146656.	20.000 NG	5.88

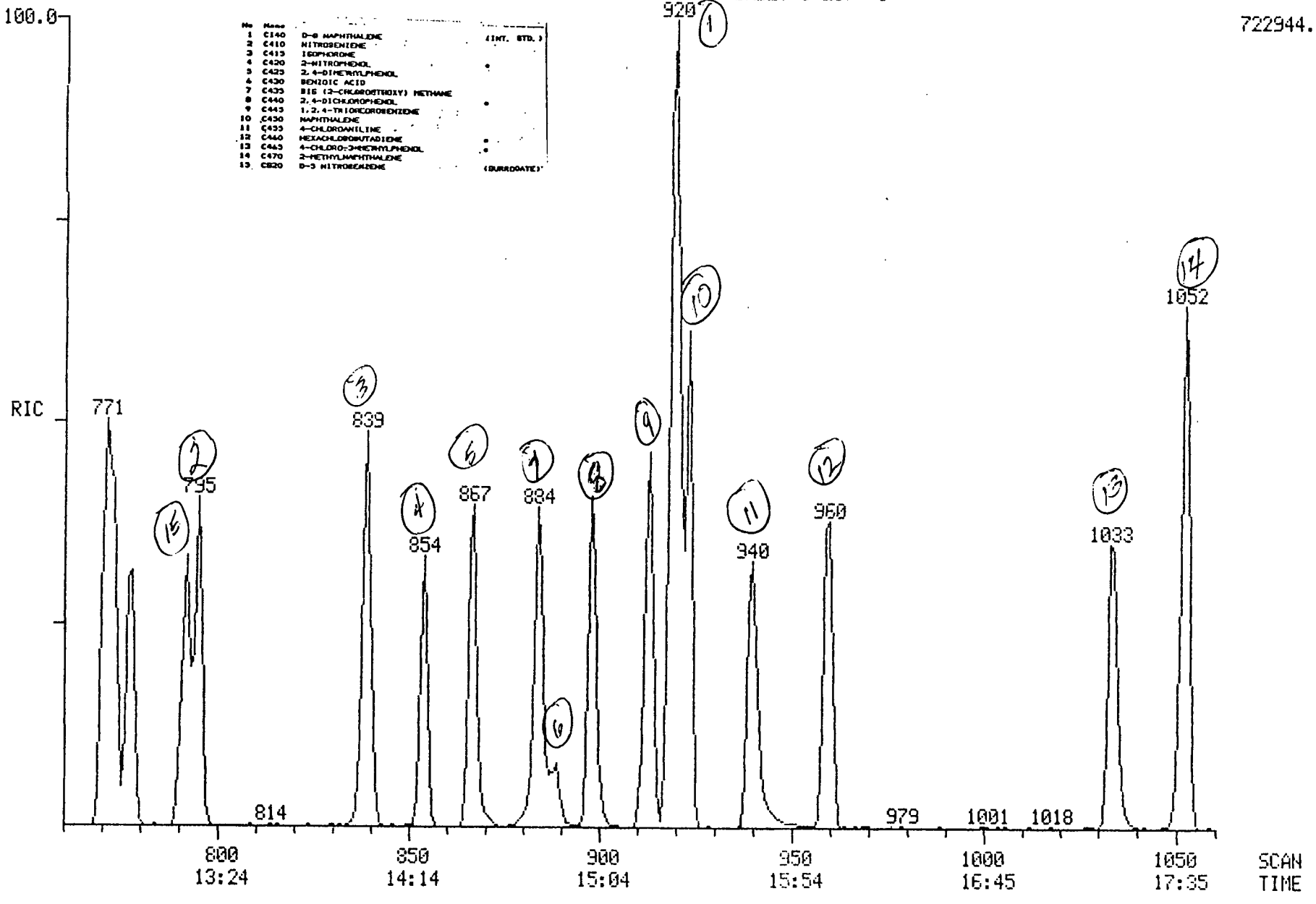
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	11:30	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	3:52	1.00	0.336	1.00	20.00	20.00	0.681	0.681	1.00
3	10:42	1.00	0.930	1.00	20.00	20.00	1.567	1.567	1.00
4	10:40	1.00	0.927	1.00	20.00	20.00	1.774	1.774	1.00
5	10:58	1.00	0.953	1.00	20.00	20.00	1.372	1.372	1.00
6	11:23	1.00	0.990	1.00	20.00	20.00	1.625	1.625	1.00
7	11:33	1.00	1.004	1.00	20.00	20.00	1.681	1.681	1.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
8	12:27	1.00	1.083	1.00	20.00	20.00	1.201	1.201	1.00
9	12:05	1.00	1.051	1.00	20.00	20.00	1.541	1.541	1.00
10	12:54	1.00	1.122	1.00	20.00	20.00	1.160	1.160	1.00
11	12:31	1.00	1.089	1.00	20.00	20.00	2.479	2.479	1.00
12	12:01	1.00	1.045	1.00	20.00	20.00	0.716	0.716	1.00
13	12:56	1.00	1.125	1.00	20.00	20.00	1.257	1.257	1.00
14	13:02	1.00	1.132	1.00	20.00	20.00	0.655	0.655	1.00
15	7:52	1.00	0.684	1.00	20.00	20.00	1.053	1.053	1.00
16	10:40	1.00	0.927	1.00	20.00	20.00	1.259	1.259	1.00

MIDRIC
08/02/89 2:32:00
SAMPLE: HSL-B STANDARD 08/02/89
CONDS.: 20 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB200802 #1
CALI: HSB200802 #2

SCANS 760 TO 1060



000304

Quantitation Report File: HSB200802

Data: HSB200802.TI
08/02/89 2:32:00
Sample: HSL-B STANDARD 08/02/89
Conds.: 20 NG INJECTION
Formula: Instrument: 5100 Weight: 0.001
Submitted by: QC INC Analyst: DMM Acct. No.: HSB20080

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

No	Name		
1	CI40	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	CS20	D-5 NITROBENZENE	(SURROGATE)

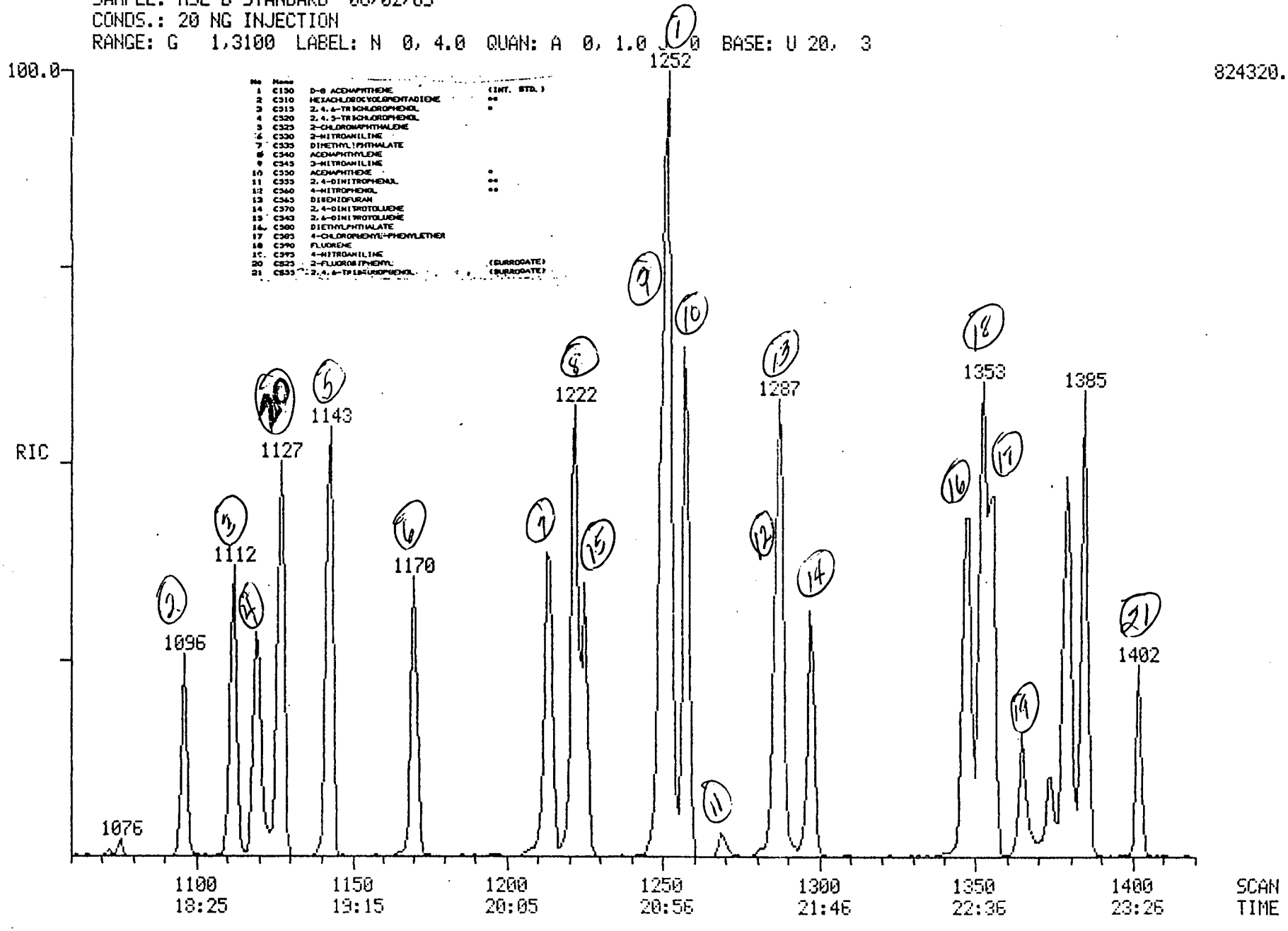
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	136	920	15:24	1	1.000	A BB	946112.	40.000 NG	12.50
2	77	795	13:19	1	0.864	A BB	201696.	20.000 NG	6.25
3	82	839	14:03	1	0.912	A BB	395840.	20.000 NG	6.25
4	139	854	14:18	1	0.928	A BB	88832.	20.000 NG	6.25
5	122	867	14:31	1	0.942	A BB	129376.	20.000 NG	6.25
6	122	889	14:53	1	0.966	A BB	63136.	20.000 NG	6.25
7	93	884	14:48	1	0.961	A BB	224832.	20.000 NG	6.25
8	162	898	15:02	1	0.976	A BB	156384.	20.000 NG	6.25
9	180	913	15:17	1	0.992	A BB	177184.	20.000 NG	6.25
10	128	923	15:27	1	1.003	A BB	428768.	20.000 NG	6.25
11	127	940	15:44	1	1.022	A BB	212630.	20.000 NG	6.25
12	225	959	16:03	1	1.042	A BB	94272.	20.000 NG	6.25
13	107	1033	17:18	1	1.123	A BB	155840.	20.000 NG	6.25
14	142	1052	17:37	1	1.143	A BB	320992.	20.000 NG	6.25
15	82	792	13:16	1	0.861	A BB	196160.	20.000 NG	6.25

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	15:24	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	13:19	1.00	0.864	1.00	20.00	20.00	0.426	0.426	1.00
3	14:03	1.00	0.912	1.00	20.00	20.00	0.837	0.837	1.00
4	14:18	1.00	0.928	1.00	20.00	20.00	0.188	0.188	1.00
5	14:31	1.00	0.942	1.00	20.00	20.00	0.273	0.273	1.00
6	14:53	1.00	0.966	1.00	20.00	20.00	0.133	0.133	1.00
7	14:48	1.00	0.961	1.00	20.00	20.00	0.475	0.475	1.00
8	15:02	1.00	0.976	1.00	20.00	20.00	0.331	0.331	1.00
9	15:17	1.00	0.992	1.00	20.00	20.00	0.375	0.375	1.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
10	15:27	1.00	1.003	1.00	20.00	20.00	0.906	0.906	1.00
11	15:44	1.00	1.022	1.00	20.00	20.00	0.449	0.449	1.00
12	16:03	1.00	1.042	1.00	20.00	20.00	0.199	0.199	1.00
13	17:18	1.00	1.123	1.00	20.00	20.00	0.329	0.329	1.00
14	17:37	1.00	1.143	1.00	20.00	20.00	0.679	0.679	1.00
15	13:16	1.00	0.864	1.00	20.00	20.00	0.415	0.415	1.00

MIDRIC
08/02/89 2:32:00
SAMPLE: HSL-B STANDARD 08/02/89
CONDS.: 20 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB200802 #1 SCANS 1060 TO 1420
CALI: HSB200802 #2



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)

000307

Quantitation Report File: HSB200802

Data: HSB200802.TI
08/02/89 2:32:00
Sample: HSL-B STANDARD 08/02/89
Conds.: 20 NG INJECTION
Formula: Instrument: 5100 Weight: 0.001
Submitted by: QC INC Analyst: DMM Acct. No.: HSB20080

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

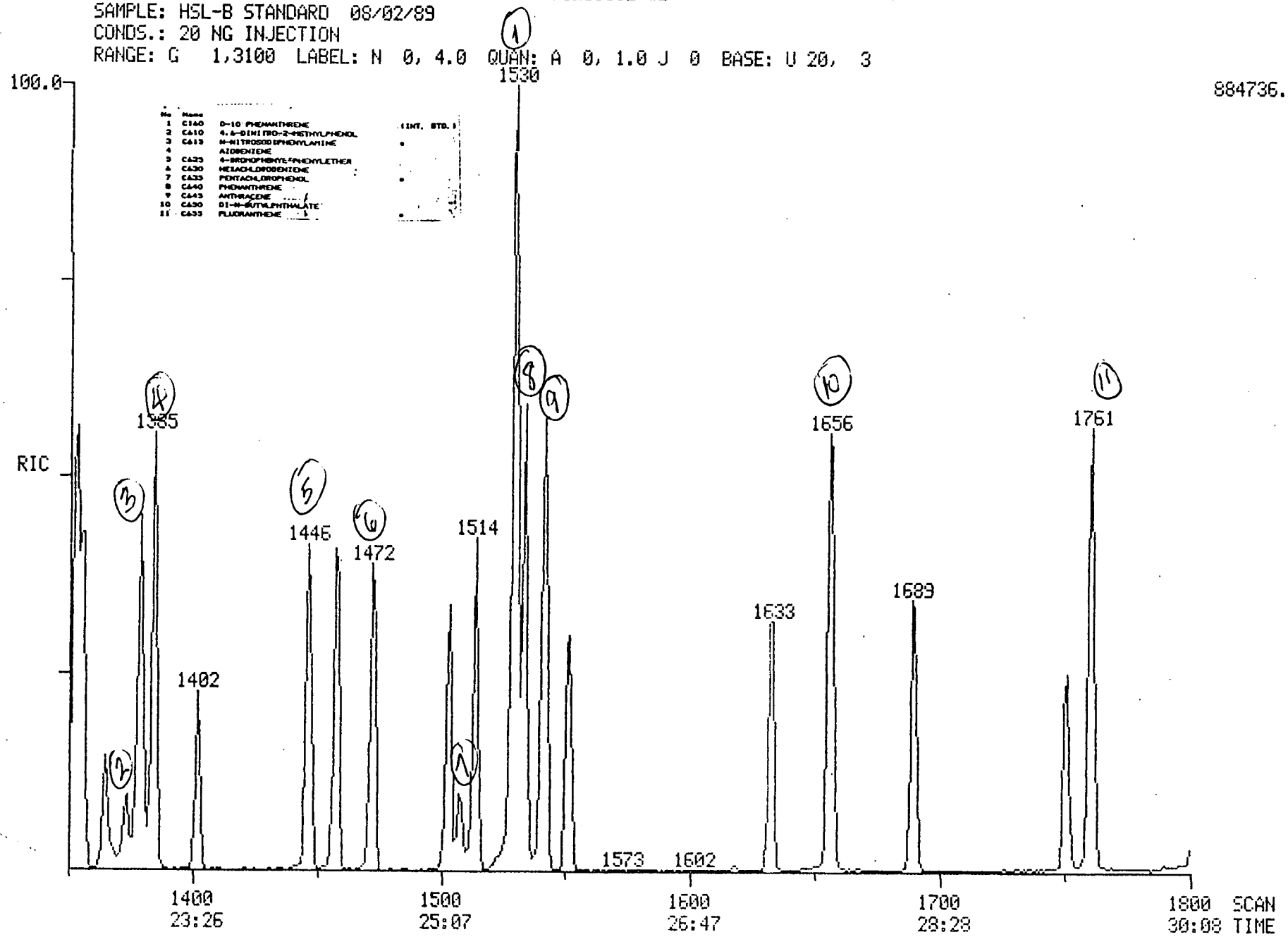
No	Name		
1	CI50	D-8 ACENAPHTHENE	(INT. STD.)
2	C510	HEXACHLOROCYCLOPENTADIENE	**
3	C515	2,4,6-TRICHLOROPHENOL	*
4	C520	2,4,5-TRICHLOROPHENOL	
5	C525	2-CHLORONAPHTHALENE	
6	C530	2-NITROANILINE	
7	C535	DIMETHYLPHTHALATE	
8	C540	ACENAPHTHYLENE	
9	C545	3-NITROANILINE	
10	C550	ACENAPHTHENE	*
11	C555	2,4-DINITROPHENOL	**
12	C560	4-NITROPHENOL	
13	C565	DIBENZOFURAN	
14	C570	2,4-DINITROTOLUENE	
15	C543	2,6-DINITROTOLUENE	
16	C580	DIETHYLPHTHALATE	
17	C585	4-CHLOROPHENYL-PHENYLETHER	
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	1252	20:58	1	1.000	A BB	610624.	40.000	NG	9.09
2	237	1096	18:21	1	0.875	A BB	80128.	20.000	NG	4.55
3	196	1112	18:37	1	0.888	A BV	114944.	20.000	NG	4.55
4	196	1119	18:44	1	0.894	A VB	122912.	20.000	NG	4.55
5	162	1143	19:08	1	0.913	A BB	357568.	20.000	NG	4.55
6	65	1170	19:35	1	0.935	A BB	147968.	20.000	NG	4.55
7	163	1213	20:18	1	0.969	A BB	443040.	20.000	NG	4.55
8	152	1222	20:28	1	0.976	A BB	534720.	20.000	NG	4.55
9	138	1249	20:55	1	0.998	A BB	81344.	20.000	NG	4.55
10	153	1257	21:03	1	1.004	A BB	343744.	20.000	NG	4.55
11	184	1268	21:14	1	1.013	A BB	11584.	20.000	NG	4.55
12	109	1285	21:31	1	1.026	A BB	25056.	20.000	NG	4.55
13	168	1287	21:33	1	1.028	A BB	562784.	20.000	NG	4.55
14	89	1297	21:43	1	1.036	A VB	91008.	20.000	NG	4.55
15	165	1225	20:31	1	0.978	A BB	95008.	20.000	NG	4.55
16	149	1347	22:33	1	1.076	A BV	462368.	20.000	NG	4.55
17	204	1355	22:41	1	1.082	A BB	216672.	20.000	NG	4.55
18	166	1352	22:38	1	1.080	A BB	394976.	20.000	NG	4.55
19	138	1365	22:51	1	1.090	A BV	62485.	20.000	NG	4.55
20	172	1127	18:52	1	0.900	A BB	382560.	20.000	NG	4.55
21	330	1402	23:28	1	1.120	A BB	37536.	20.000	NG	4.55

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	20:58	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	18:21	1.00	0.875	1.00	20.00	20.00	0.262	0.262	1.00
3	18:37	1.00	0.888	1.00	20.00	20.00	0.376	0.376	1.00
4	18:44	1.00	0.894	1.00	20.00	20.00	0.403	0.403	1.00
5	19:08	1.00	0.913	1.00	20.00	20.00	1.171	1.171	1.00
6	19:35	1.00	0.935	1.00	20.00	20.00	0.485	0.485	1.00
7	20:18	1.00	0.969	1.00	20.00	20.00	1.451	1.451	1.00
8	20:28	1.00	0.976	1.00	20.00	20.00	1.751	1.751	1.00
9	20:55	1.00	0.998	1.00	20.00	20.00	0.266	0.266	1.00
10	21:03	1.00	1.005	1.00	20.00	20.00	1.126	1.126	1.00
11	21:14	1.00	1.013	1.00	20.00	20.00	0.038	0.038	1.00
12	21:31	1.00	1.026	1.00	20.00	20.00	0.082	0.082	1.00
13	21:33	1.00	1.028	1.00	20.00	20.00	1.843	1.843	1.00
14	21:43	1.00	1.036	1.00	20.00	20.00	0.298	0.298	1.00
15	20:31	1.00	0.978	1.00	20.00	20.00	0.311	0.311	1.00
16	22:33	1.00	1.076	1.00	20.00	20.00	1.514	1.514	1.00
17	22:41	1.00	1.082	1.00	20.00	20.00	0.710	0.710	1.00
18	22:38	1.00	1.080	1.00	20.00	20.00	1.294	1.294	1.00
19	22:51	1.00	1.090	1.00	20.00	20.00	0.205	0.205	1.00
20	18:52	1.00	0.900	1.00	20.00	20.00	1.253	1.253	1.00
21	23:28	1.00	1.120	1.00	20.00	20.00	0.123	0.123	1.00

MIDRIC
08/02/89 2:32:00
SAMPLE: HSL-B STANDARD 08/02/89
CONDS.: 20 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB200802 #1 SCANS 1350 TO 1800
CALI: HSB200802 #2



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	•

000210

Quantitation Report File: HSB200802

Data: HSB200802.TI
08/02/89 2:32:00
Sample: HSL-B STANDARD 08/02/89
Conds.: 20 NG INJECTION
Formula: Instrument: 5100 Weight: 0.001
Submitted by: QC INC Analyst: DMM Acct. No.: HSB20080

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

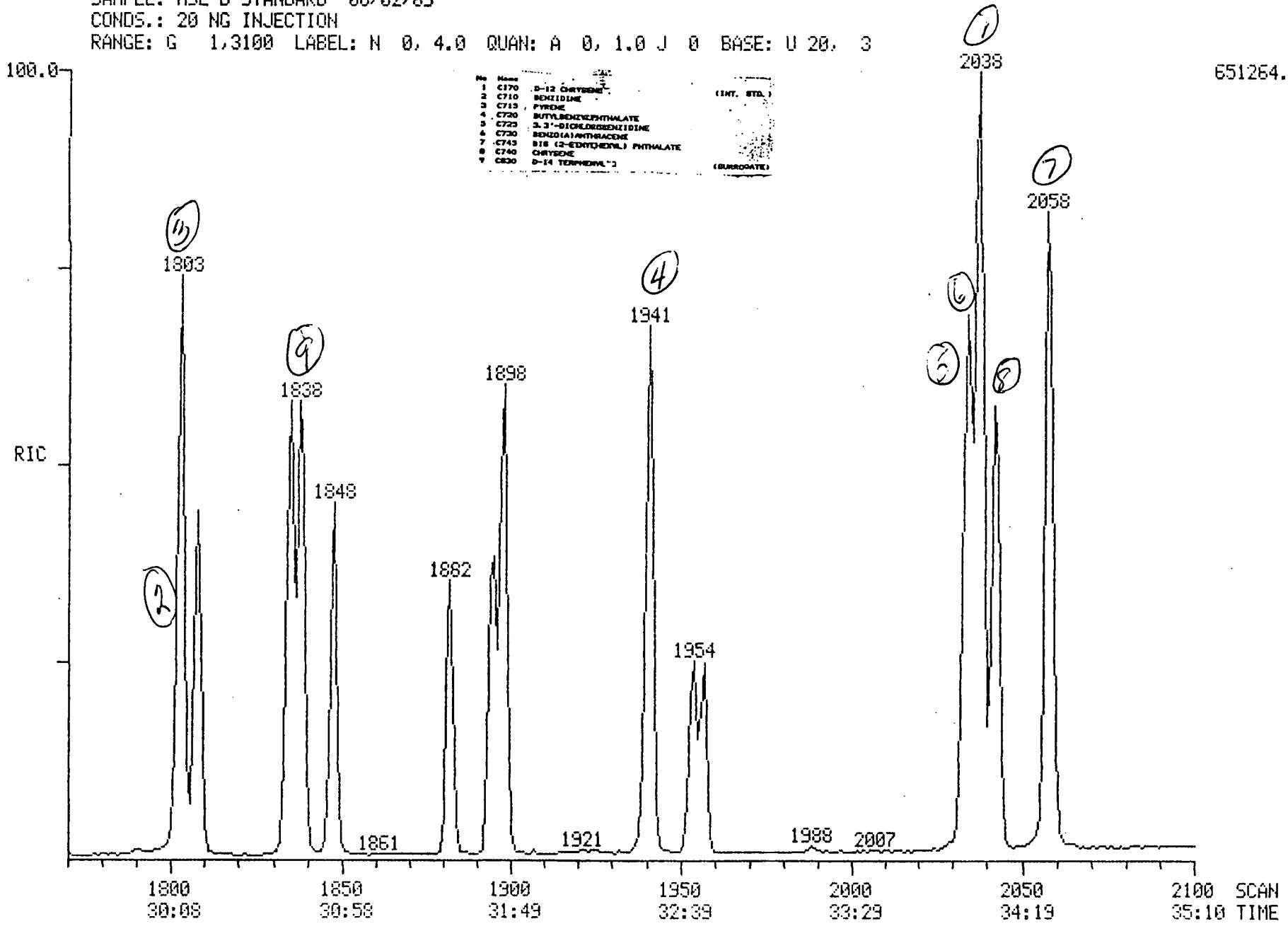
No	Name		
1	CI60	D-10 PHENANTHRENE	(INT. STD.)
2	C610	4,6-DINITRO-2-METHYLPHENOL	
3	C615	N-NITROSODIPHENYLAMINE	*
4		AZOBENZENE	
5	C625	4-BROMOPHENYL-PHENYLETHER	
6	C630	HEXACHLOROBENZENE	
7	C635	PENTACHLOROPHENOL	*
8	C640	PHENANTHRENE	
9	C645	ANTHRACENE	
10	C650	DI-N-BUTYLPHTHALATE	
11	C655	FLUORANTHENE	*

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	188	1530	25:37	1	1.000	A BV	1040960.	40.000 NG	16.67
2	198	1373	22:59	1	0.897	A BB	28192.	20.000 NG	8.33
3	169	1379	23:05	1	0.901	A BB	289248.	20.000 NG	8.33
4	77	1385	23:11	1	0.905	A BB	580160.	20.000 NG	8.33
5	248	1446	24:13	1	0.945	A BB	110016.	20.000 NG	8.33
6	284	1472	24:39	1	0.962	A BB	132288.	20.000 NG	8.33
7	266	1507	25:14	1	0.985	A BV	36192.	20.000 NG	8.33
8	178	1534	25:41	1	1.003	A BV	561541.	20.000 NG	8.33
9	178	1542	25:49	1	1.008	A VB	559784.	20.000 NG	8.33
10	149	1656	27:43	1	1.082	A BB	754710.	20.000 NG	8.33
11	202	1761	29:29	1	1.151	A BB	564931.	20.000 NG	8.33

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	25:37	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	22:59	1.00	0.897	1.00	20.00	20.00	0.054	0.054	1.00
3	23:05	1.00	0.901	1.00	20.00	20.00	0.556	0.556	1.00
4	23:11	1.00	0.905	1.00	20.00	20.00	1.115	1.115	1.00
5	24:13	1.00	0.945	1.00	20.00	20.00	0.211	0.211	1.00
6	24:39	1.00	0.962	1.00	20.00	20.00	0.254	0.254	1.00
7	25:14	1.00	0.985	1.00	20.00	20.00	0.070	0.070	1.00
8	25:41	1.00	1.003	1.00	20.00	20.00	1.079	1.079	1.00
9	25:49	1.00	1.008	1.00	20.00	20.00	1.076	1.076	1.00
10	27:43	1.00	1.082	1.00	20.00	20.00	1.450	1.450	1.00
11	29:29	1.00	1.151	1.00	20.00	20.00	1.085	1.085	1.00

MIDRIC
08/02/89 2:32:00
SAMPLE: HSL-B STANDARD 08/02/89
CONDS.: 20 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB200802 #1 SCANS 1770 TO 2100
CALI: HSB200802 #2



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)

000212

Quantitation Report [illegible] HSB200802

Data: HSB200802.TI
08/02/89 2:32:00
Sample: HSL-B STANDARD[illegible] 08/02/89
Conds.: 20 NG INJECTION
Formula: [illegible] Instrument: 5100 Weight: 0.001
Submitted by: GC INC[illegible] Analyst: DMM Acct. No.: HSB20080

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

No	Name		
1	CI70	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-ETHYEHEXYL) PHTHALATE	
8	C740	CHRYSENE	
9	CS30	D-14 TERPHENYL[illegible]	(SURROGATE)

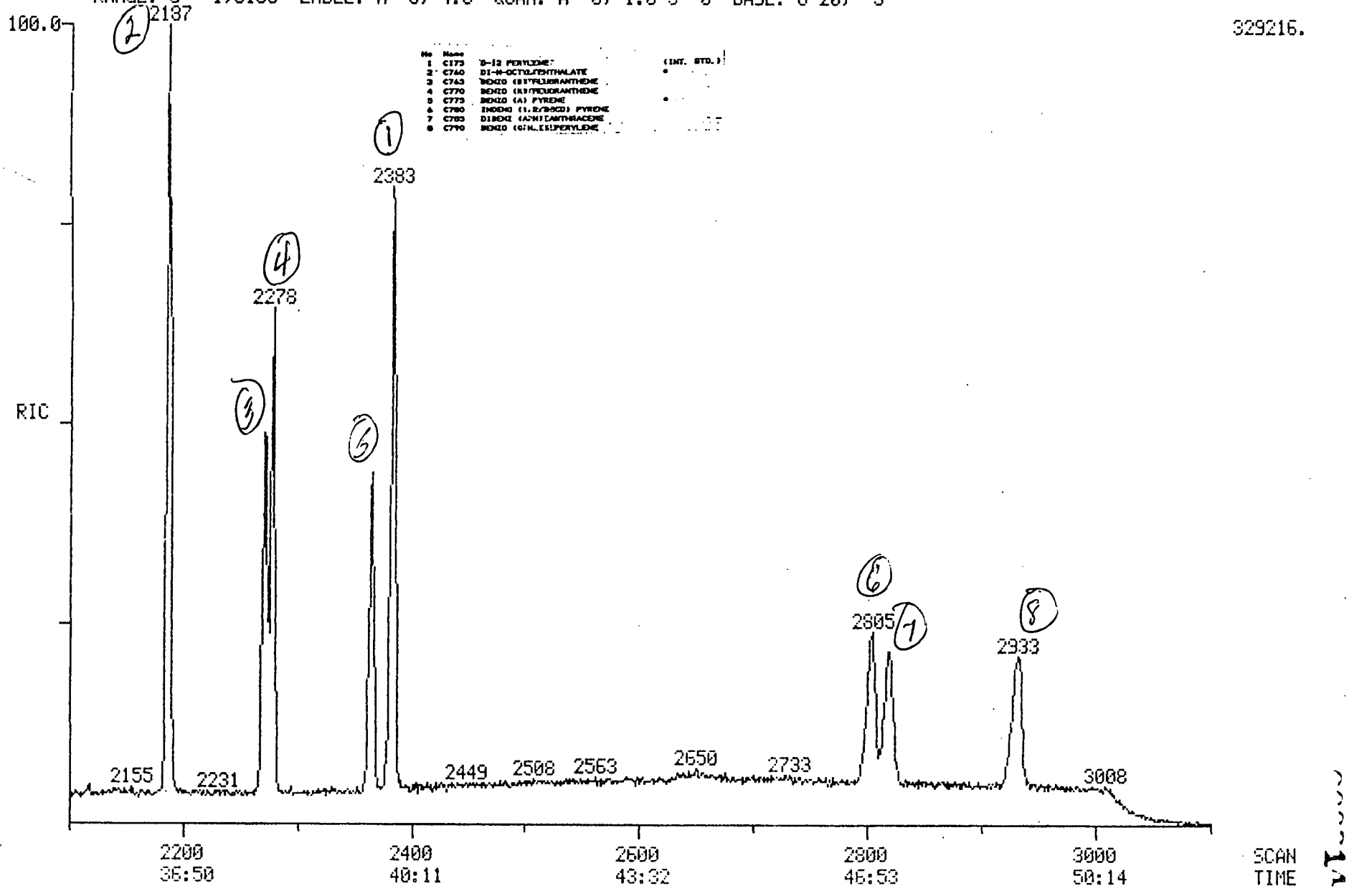
No	m/z	Scan	Time	RRT	Meth	Area(Hght)	Amount	%Tot
1	240	2038	34:0[illegible]	1.000	A BB	638975.	40.000 NG	20.00
2	184	1797	30:05[illegible]	0.882	A VB	21376.	20.000 NG	10.00
3	202	1803	30:11[illegible]	0.885	A BB	577166.	20.000 NG	10.00
4	149	1941	32:30[illegible]	0.952	A BB	281920.	20.000 NG	10.00
5	252	2034	34:03[illegible]	0.998	A BB	96320.	20.000 NG	10.00
6	228	2034	34:03[illegible]	0.998	A BV	379787.	20.000 NG	10.00
7	149	2058	34:2[illegible]	1.010	A BB	388480.	20.000 NG	10.00
8	228	2042	34:11[illegible]	1.002	A VB	359568.	20.000 NG	10.00
9	244	1838	30:46[illegible]	0.902	A BV	400734.	20.000 NG	10.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	34:07	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	30:05	1.00	0.882	1.00	20.00	20.00	0.067	0.067	1.00
3	30:11	1.00	0.885	1.00	20.00	20.00	1.807	1.807	1.00
4	32:30	1.00	0.952	1.00	20.00	20.00	0.882	0.882	1.00
5	34:03	1.00	0.998	1.00	20.00	20.00	0.301	0.301	1.00
6	34:03	1.00	0.998	1.00	20.00	20.00	1.189	1.189	1.00
7	34:27	1.00	1.010	1.00	20.00	20.00	1.216	1.216	1.00
8	34:11	1.00	1.002	1.00	20.00	20.00	1.125	1.125	1.00
9	30:46	1.00	0.902	1.00	20.00	20.00	1.254	1.254	1.00

MIDRIC
08/02/89 2:32:00
SAMPLE: HSL-B STANDARD 08/02/89
CONDS.: 20 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB200802 #1
CALI: HSB200802 #2

SCANS 2100 TO 3100



Quantitation Report File: HSB200802

Data: HSB200802.TI
08/02/89 2:32:00
Sample: HSL-B STANDARD 08/02/89
Conds.: 20 NG INJECTION
Formula: Instrument: 5100 Weight: 0.001
Submitted by: QC INC Analyst: DMM Acct. No.: HSB20080

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

No	Name		
1	CI75	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	

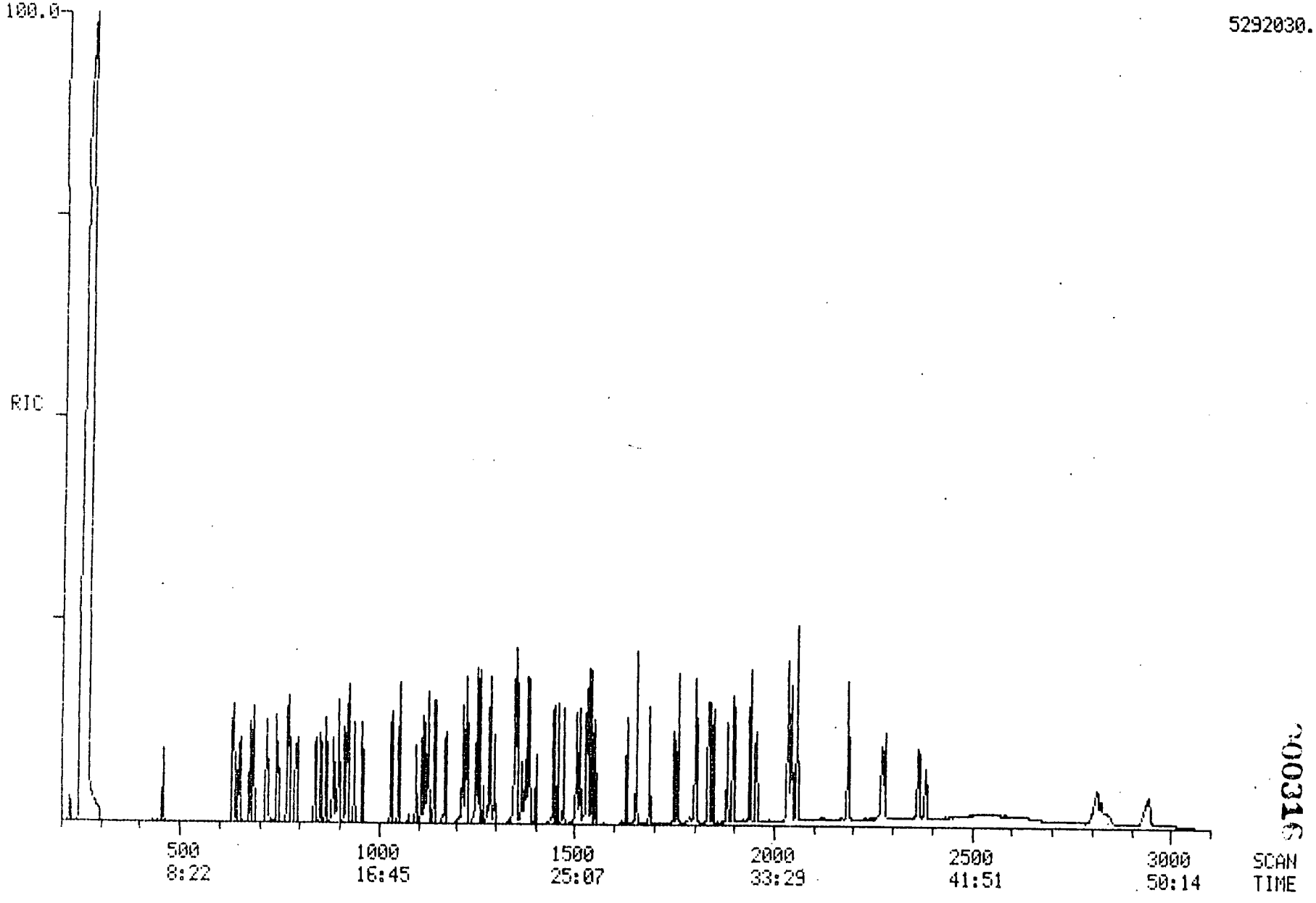
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	264	2383	39:54	1	1.000	A BB	407936.	40.000 NG	22.22
2	149	2187	36:37	1	0.918	A BB	593289.	20.000 NG	11.11
3	252	2271	38:01	1	0.953	A BV	308606.	20.000 NG	11.11
4	252	2278	38:08	1	0.956	A VB	312406.	20.000 NG	11.11
5	252	2364	39:35	1	0.992	A BV	280256.	20.000 NG	11.11
6	276	2805	46:58	1	1.177	A BV	217254.	20.000 NG	11.11
7	278	2820	47:13	1	1.183	A BB	210020.	20.000 NG	11.11
8	276	2933	49:06	1	1.231	A BB	231488.	20.000 NG	11.11

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	39:54	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	36:37	1.00	0.918	1.00	20.00	20.00	2.909	2.909	1.00
3	38:01	1.00	0.953	1.00	20.00	20.00	1.513	1.513	1.00
4	38:08	1.00	0.956	1.00	20.00	20.00	1.532	1.532	1.00
5	39:35	1.00	0.992	1.00	20.00	20.00	1.374	1.374	1.00
6	46:58	1.00	1.177	1.00	20.00	20.00	1.065	1.065	1.00
7	47:13	1.00	1.183	1.00	20.00	20.00	1.030	1.030	1.00
8	49:06	1.00	1.231	1.00	20.00	20.00	1.135	1.135	1.00

NIDRIC
08/02/89 1:11:00
SAMPLE: HSL-B STANDARD 08/02/89
CONDS.: 50 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB500802 #1
CALI: HSB500802 #2

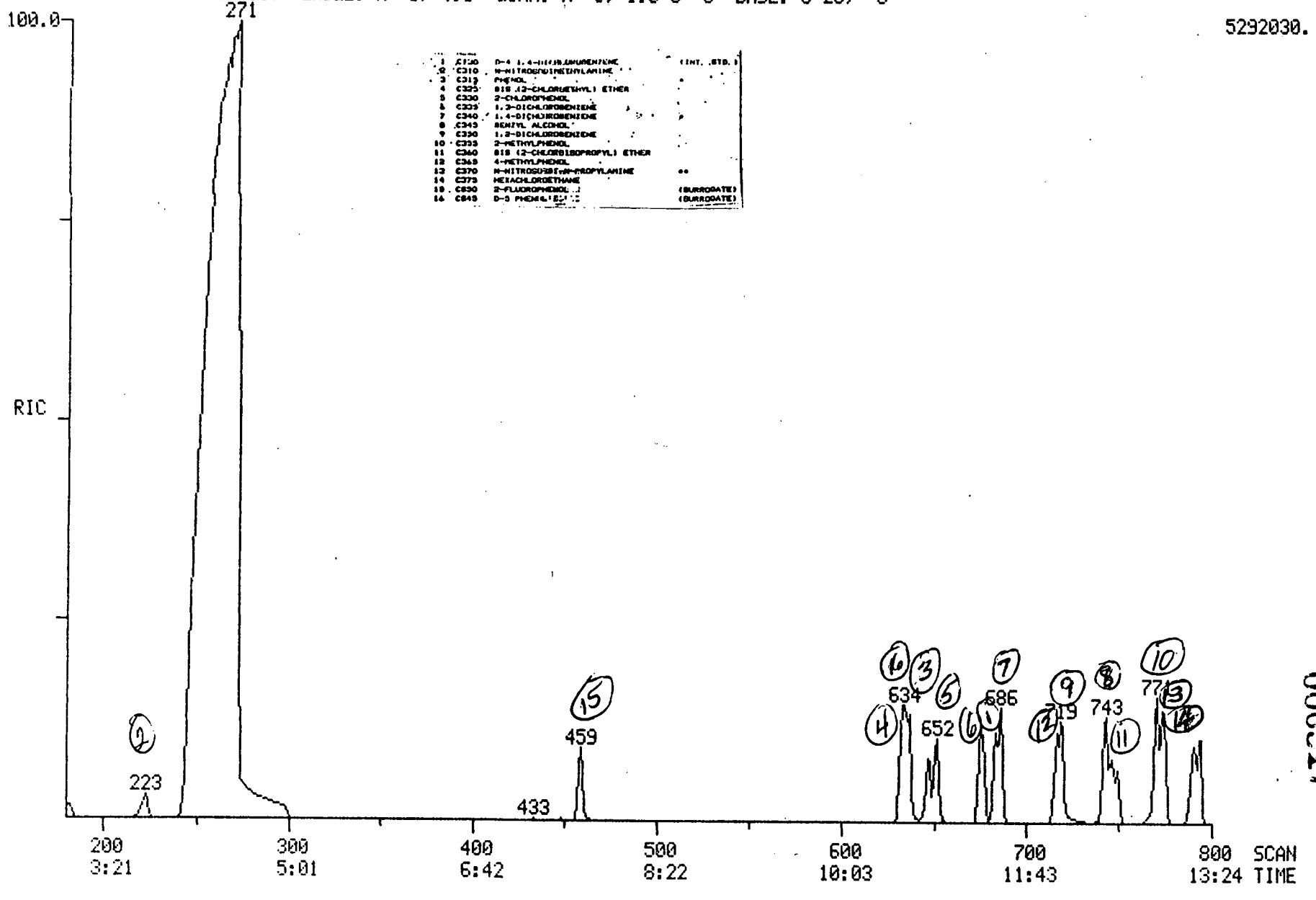
SCANS 200 TO 3100



MIDRIC
08/02/89 1:11:00
SAMPLE: HSL-B STANDARD 08/02/89
CONDS.: 50 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB500802 #1
CALI: HSB500802 #2

SCANS 180 TO 800



1	C290	D-4 1,4-DIFLUOROBENZENE	(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-PROPYL)AMINE	**
14	C373	HEXACHLOROETHANE	
15	C390	2-FLUOROPHENOL	(SURROGATE)
16	C845	D-5 PHENOL	(SURROGATE)

000317

Quantitation Report [illegible] HSB500802

Data: HSB500802.TI
08/02/89 1:11:00
Sample: HSL-B STANDARD [illegible] 08/02/89
Conds.: 50 NG INJECTION
Formula: [illegible] Instrument: 5100 Weight: 0.001
Submitted by: QC INC [illegible] Analyst: DMM Acct. No.: HSB50080

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

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	CS50	2-FLUOROPHENOL	(SURROGATE)
16	CS45	D-5 PHENOL	(SURROGATE)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	152	683	11:26	1	1.000	A BB	244032.	40.000	NG	5.06
2	74	223	3:44	1	0.327	A BB	247744.	50.000	NG	6.33
3	94	637	10:40	1	0.933	A BV	487520.	50.000	NG	6.33
4	93	633	10:36	1	0.927	A BV	547145.	50.000	NG	6.33
5	128	652	10:55	1	0.955	A BB	444928.	50.000	NG	6.33
6	146	676	11:19	1	0.990	A BV	442688.	50.000	NG	6.33
7	146	686	11:29	1	1.004	A VB	440256.	50.000	NG	6.33
8	108	742	12:23	1	1.086	A BB	351612.	50.000	NG	6.33
9	146	719	12:02	1	1.053	A BB	415776.	50.000	NG	6.33
10	108	771	12:54	1	1.129	A BB	349248.	50.000	NG	6.33
11	45	746	12:29	1	1.092	A BB	763104.	50.000	NG	6.33
12	108	717	12:00	1	1.050	A BB	244168.	50.000	NG	6.33
13	70	773	12:56	1	1.132	A BB	379552.	50.000	NG	6.33
14	117	775	12:59	1	1.135	A BB	176032.	50.000	NG	6.33
15	112	459	7:41	1	0.672	A BB	356988.	50.000	NG	6.33
16	99	634	10:37	1	0.928	A BB	395872.	50.000	NG	6.33

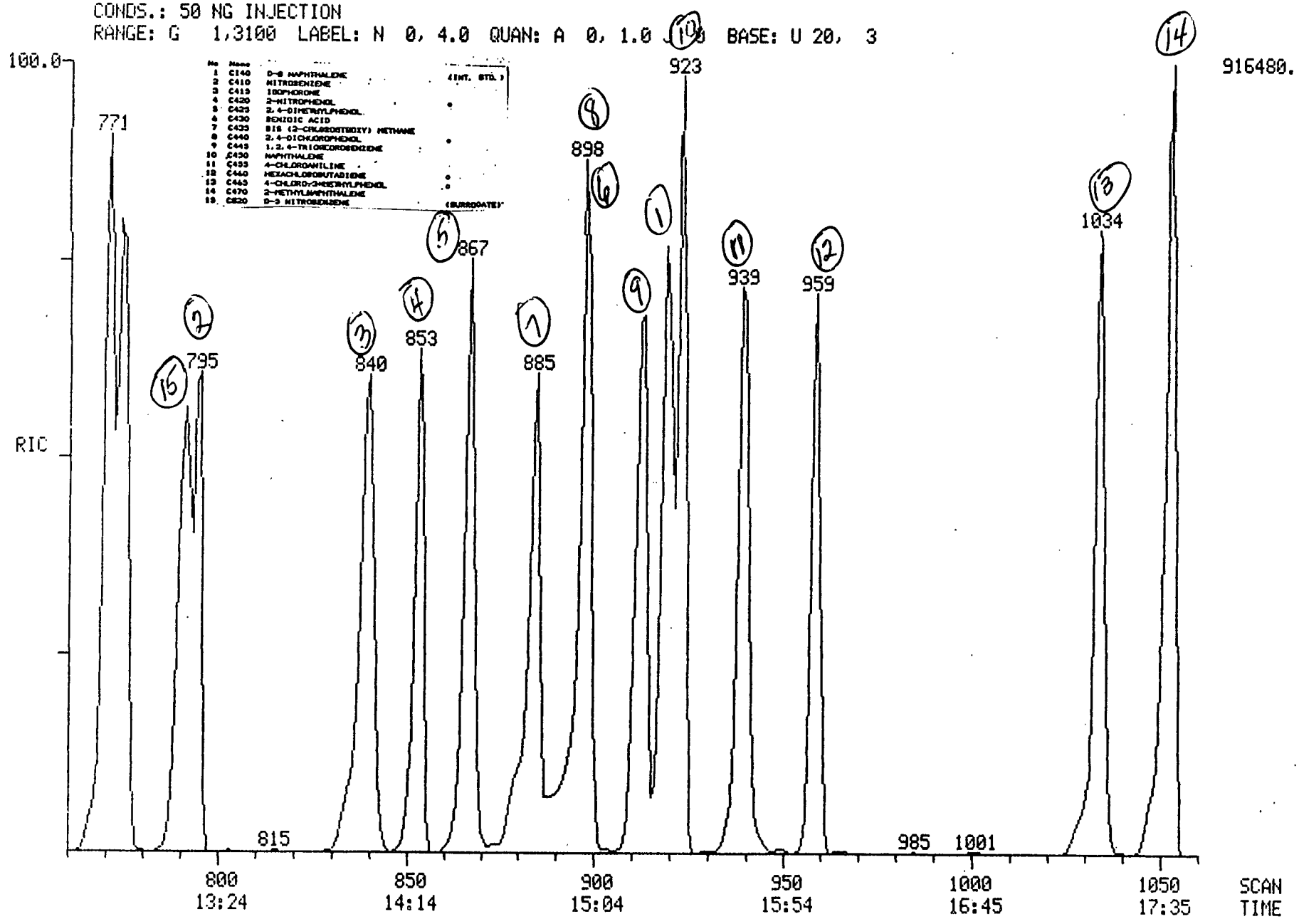
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	11:26	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	3:44	1.00	0.327	1.00	50.00	50.00	0.812	0.812	1.00
3	10:40	1.00	0.933	1.00	50.00	50.00	1.598	1.598	1.00
4	10:36	1.00	0.927	1.00	50.00	50.00	1.794	1.794	1.00
5	10:55	1.00	0.955	1.00	50.00	50.00	1.459	1.459	1.00
6	11:19	1.00	0.990	1.00	50.00	50.00	1.451	1.451	1.00
7	11:29	1.00	1.004	1.00	50.00	50.00	1.443	1.443	1.00

N	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
8	12:25	1.00	1.086	1.00	50.00	50.00	1.153	1.153	1.00
9	12:02	1.00	1.053	1.00	50.00	50.00	1.363	1.363	1.00
10	12:54	1.00	1.129	1.00	50.00	50.00	1.145	1.145	1.00
11	12:29	1.00	1.092	1.00	50.00	50.00	2.502	2.502	1.00
12	12:00	1.00	1.050	1.00	50.00	50.00	0.800	0.800	1.00
13	12:56	1.00	1.132	1.00	50.00	50.00	1.244	1.244	1.00
14	12:59	1.00	1.135	1.00	50.00	50.00	0.577	0.577	1.00
15	7:41	1.00	0.672	1.00	50.00	50.00	1.170	1.170	1.00
16	10:37	1.00	0.928	1.00	50.00	50.00	1.298	1.298	1.00

MIDRIC
08/02/89 1:11:00
SAMPLE: HSL-B STANDARD 08/02/89
CONDS.: 50 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB500802 #1
CALI: HSB500802 #2

SCANS 760 TO 1060



Quantitation Report File: HSB500802

Data: HSB500802.TI
08/02/89 1:11:00
Sample: HSL-B STANDARD 08/02/89
Conds.: 50 NG INJECTION
Formula: Instrument: 5100 Weight: 0.001
Submitted by: QC INC Analyst: DMM Acct. No.: HSB50080

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

No	Name		
1	CI40	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	CS20	D-5 NITROBENZENE	(SURROGATE)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	136	919	15:23	1	1.000	A BB	1029760.	40.000 NG	5.41
2	77	795	13:19	1	0.865	A BB	472288.	50.000 NG	6.76
3	82	840	14:04	1	0.914	A BB	1019160.	50.000 NG	6.76
4	139	853	14:17	1	0.928	A BB	275520.	50.000 NG	6.76
5	122	867	14:31	1	0.943	A BB	358697.	50.000 NG	6.76
6	122	899	15:03	1	0.978	A BB	172872.	50.000 NG	6.76
7	93	885	14:49	1	0.963	A BB	626688.	50.000 NG	6.76
8	162	898	15:02	1	0.977	A BB	419296.	50.000 NG	6.76
9	180	912	15:16	1	0.992	A BB	417184.	50.000 NG	6.76
10	128	923	15:27	1	1.004	A BB	1046970.	50.000 NG	6.76
11	127	939	15:42	1	1.022	A BB	574118.	50.000 NG	6.76
12	225	959	16:02	1	1.044	A BB	224544.	50.000 NG	6.76
13	107	1034	17:19	1	1.125	A BB	469952.	50.000 NG	6.76
14	142	1053	17:38	1	1.146	A BB	809344.	50.000 NG	6.76
15	82	791	13:15	1	0.861	A BB	547776.	50.000 NG	6.76

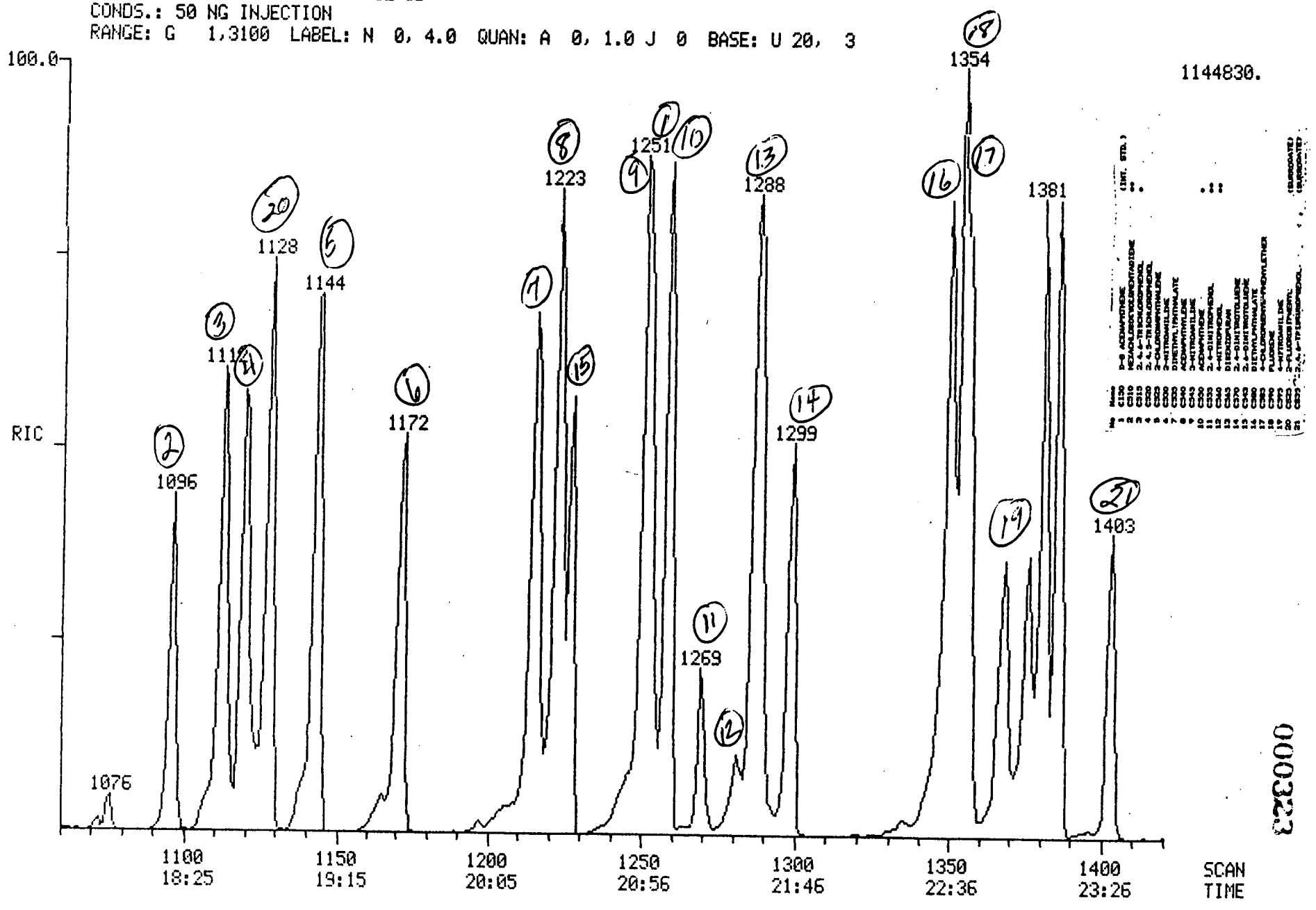
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	15:23	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	13:19	1.00	0.865	1.00	50.00	50.00	0.367	0.367	1.00
3	14:04	1.00	0.914	1.00	50.00	50.00	0.792	0.792	1.00
4	14:17	1.00	0.928	1.00	50.00	50.00	0.214	0.214	1.00
5	14:31	1.00	0.943	1.00	50.00	50.00	0.279	0.279	1.00
6	15:03	1.00	0.978	1.00	50.00	50.00	0.134	0.134	1.00
7	14:49	1.00	0.963	1.00	50.00	50.00	0.487	0.487	1.00
8	15:02	1.00	0.977	1.00	50.00	50.00	0.326	0.326	1.00
9	15:16	1.00	0.992	1.00	50.00	50.00	0.324	0.324	1.00

No	Ret(L)	Rati	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
10	15:27	1.00	1.004	1.00	50.00	50.00	0.813	0.813	1.00
11	15:43	1.00	1.022	1.00	50.00	50.00	0.446	0.446	1.00
12	16:03	1.00	1.044	1.00	50.00	50.00	0.174	0.174	1.00
13	17:19	1.00	1.125	1.00	50.00	50.00	0.365	0.365	1.00
14	17:38	1.00	1.146	1.00	50.00	50.00	0.629	0.629	1.00
15	13:15	1.00	0.861	1.00	50.00	50.00	0.426	0.426	1.00

MIDRIC
08/02/89 1:11:00
SAMPLE: HSL-B STANDARD 08/02/89
CONDS.: 50 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB500802 #1
CALI: HSB500802 #2

SCANS 1060 TO 1420



000323

Quantitation Report File: HSB500802

Data: HSB500802.TI
08/02/89 1:11:00
Sample: HSL-B STANDARD 08/02/89
Conds.: 50 NG INJECTION
Formula: Instrument: 5100 Weight: 0.001
Submitted by: QC INC Analyst: DMM Acct. No.: HSB50080

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

No	Name		
1	CI50	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	C543	2,6-DINITROTOLUENE	
16	C580	DIETHYLPHTHALATE	
17	C585	4-CHLOROPHENYL-PHENYLETHER	
18	C590	FLUORENE	
19	C595	4-NITROANILINE	
20	CS25	2-FLUOROBIPHENYL	(SURROGATE)
21	CS55	2,4,6-TRIBROMOPHENOL	(SURROGATE)

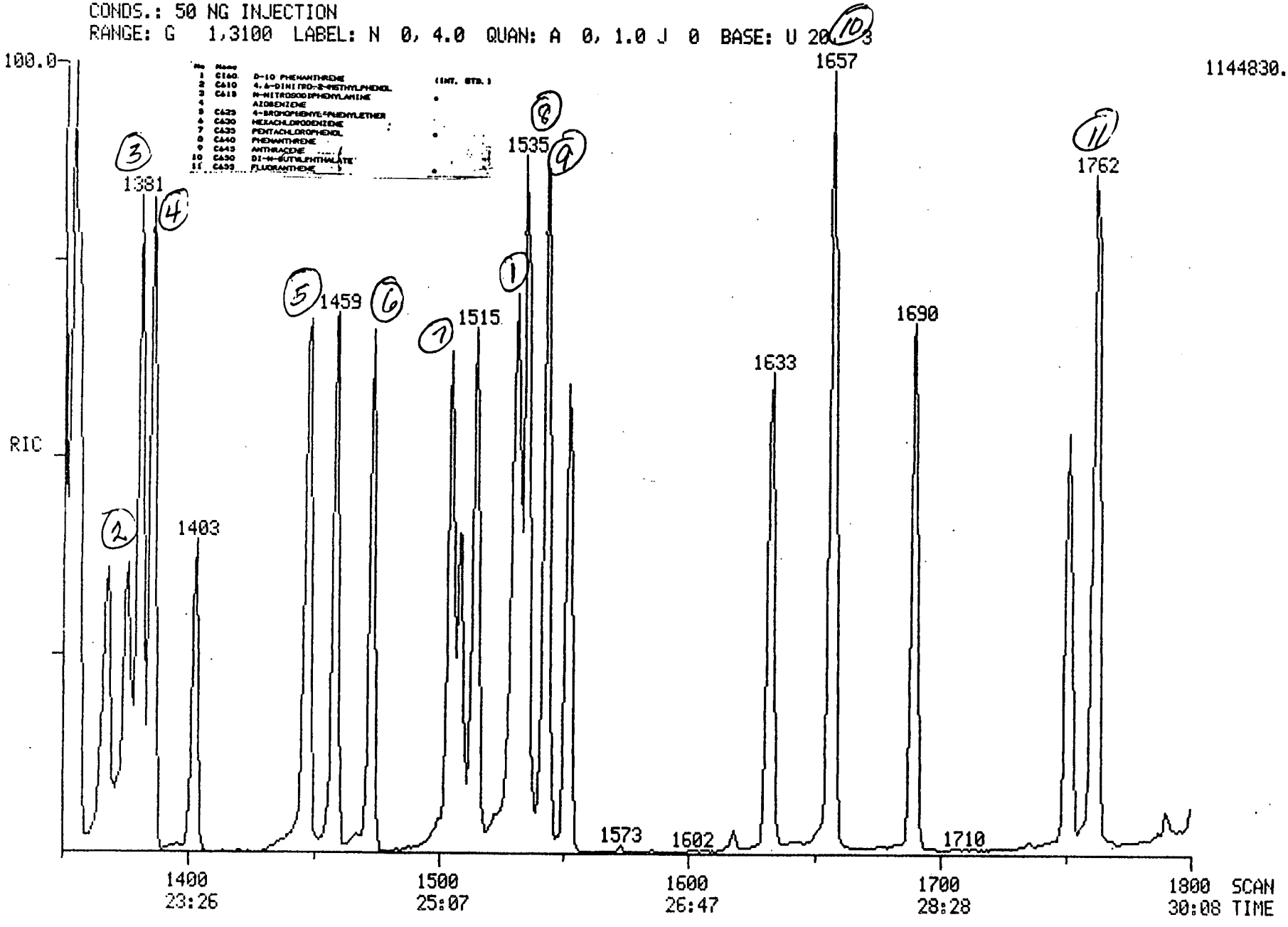
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	164	1252	20:58	1	1.000	A VB	544448.	40.000	NG	3.85
2	237	1096	18:21	1	0.875	A BB	236960.	50.000	NG	4.81
3	196	1112	18:37	1	0.888	A BV	380601.	50.000	NG	4.81
4	196	1119	18:44	1	0.894	A VB	323856.	50.000	NG	4.81
5	162	1143	19:08	1	0.913	A BB	880704.	50.000	NG	4.81
6	65	1172	19:37	1	0.936	A BB	445552.	50.000	NG	4.81
7	163	1215	20:20	1	0.970	A BB	1200510.	50.000	NG	4.81
8	152	1223	20:29	1	0.977	A BB	1364190.	50.000	NG	4.81
9	138	1251	20:57	1	0.999	A VB	204587.	50.000	NG	4.81
10	153	1259	21:05	1	1.006	A BB	863232.	50.000	NG	4.81
11	184	1269	21:15	1	1.014	A VB	88672.	50.000	NG	4.81
12	109	1286	21:32	1	1.027	A VB	102143.	50.000	NG	4.81
13	168	1288	21:34	1	1.029	A VB	1210960.	50.000	NG	4.81
14	89	1299	21:45	1	1.038	A VB	223952.	50.000	NG	4.81
15	165	1227	20:33	1	0.980	A VB	232392.	50.000	NG	4.81
16	149	1350	22:36	1	1.078	A VB	1117580.	50.000	NG	4.81
17	204	1356	22:42	1	1.083	A VB	441981.	50.000	NG	4.81
18	166	1354	22:40	1	1.081	A BB	905200.	50.000	NG	4.81
19	138	1368	22:54	1	1.093	A VB	196867.	50.000	NG	4.81
20	172	1128	18:53	1	0.901	A BB	977056.	50.000	NG	4.81
21	330	1402	23:28	1	1.120	A BB	123968.	50.000	NG	4.81

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	20:58	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	18:21	1.00	0.875	1.00	50.00	50.00	0.348	0.348	1.00
3	18:37	1.00	0.888	1.00	50.00	50.00	0.559	0.559	1.00
4	18:44	1.00	0.894	1.00	50.00	50.00	0.476	0.476	1.00
5	19:08	1.00	0.913	1.00	50.00	50.00	1.294	1.294	1.00
6	19:37	1.00	0.936	1.00	50.00	50.00	0.655	0.655	1.00
7	20:20	1.00	0.970	1.00	50.00	50.00	1.764	1.764	1.00
8	20:29	1.00	0.977	1.00	50.00	50.00	2.005	2.005	1.00
9	20:57	1.00	0.999	1.00	50.00	50.00	0.301	0.301	1.00
10	21:05	1.00	1.006	1.00	50.00	50.00	1.268	1.268	1.00
11	21:15	1.00	1.014	1.00	50.00	50.00	0.130	0.130	1.00
12	21:32	1.00	1.027	1.00	50.00	50.00	0.150	0.150	1.00
13	21:34	1.00	1.029	1.00	50.00	50.00	1.779	1.779	1.00
14	21:45	1.00	1.038	1.00	50.00	50.00	0.329	0.329	1.00
15	20:33	1.00	0.980	1.00	50.00	50.00	0.341	0.341	1.00
16	22:36	1.00	1.078	1.00	50.00	50.00	1.642	1.642	1.00
17	22:42	1.00	1.083	1.00	50.00	50.00	0.649	0.649	1.00
18	22:40	1.00	1.081	1.00	50.00	50.00	1.330	1.330	1.00
19	22:54	1.00	1.093	1.00	50.00	50.00	0.289	0.289	1.00
20	18:53	1.00	0.901	1.00	50.00	50.00	1.436	1.436	1.00
21	23:28	1.00	1.120	1.00	50.00	50.00	0.182	0.182	1.00

MIDRIC
08/02/89 1:11:00
SAMPLE: HSL-B STANDARD 08/02/89
CONDS.: 50 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20 3

DATA: HSB500802 #1
CALI: HSB500802 #2

SCANS 1350 TO 1800



000326

Quantitation Report File: HSB500802

Data: HSB500802.TI
08/02/89 1:11:00
Sample: HSL-B STANDARD 08/02/89
Conds.: 50 NG INJECTION
Formula: Instrument: 5100 Weight: 0.001
Submitted by: QC INC Analyst: DMM Acct. No.: HSB50080.

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

No	Name		
1	CI60	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	*

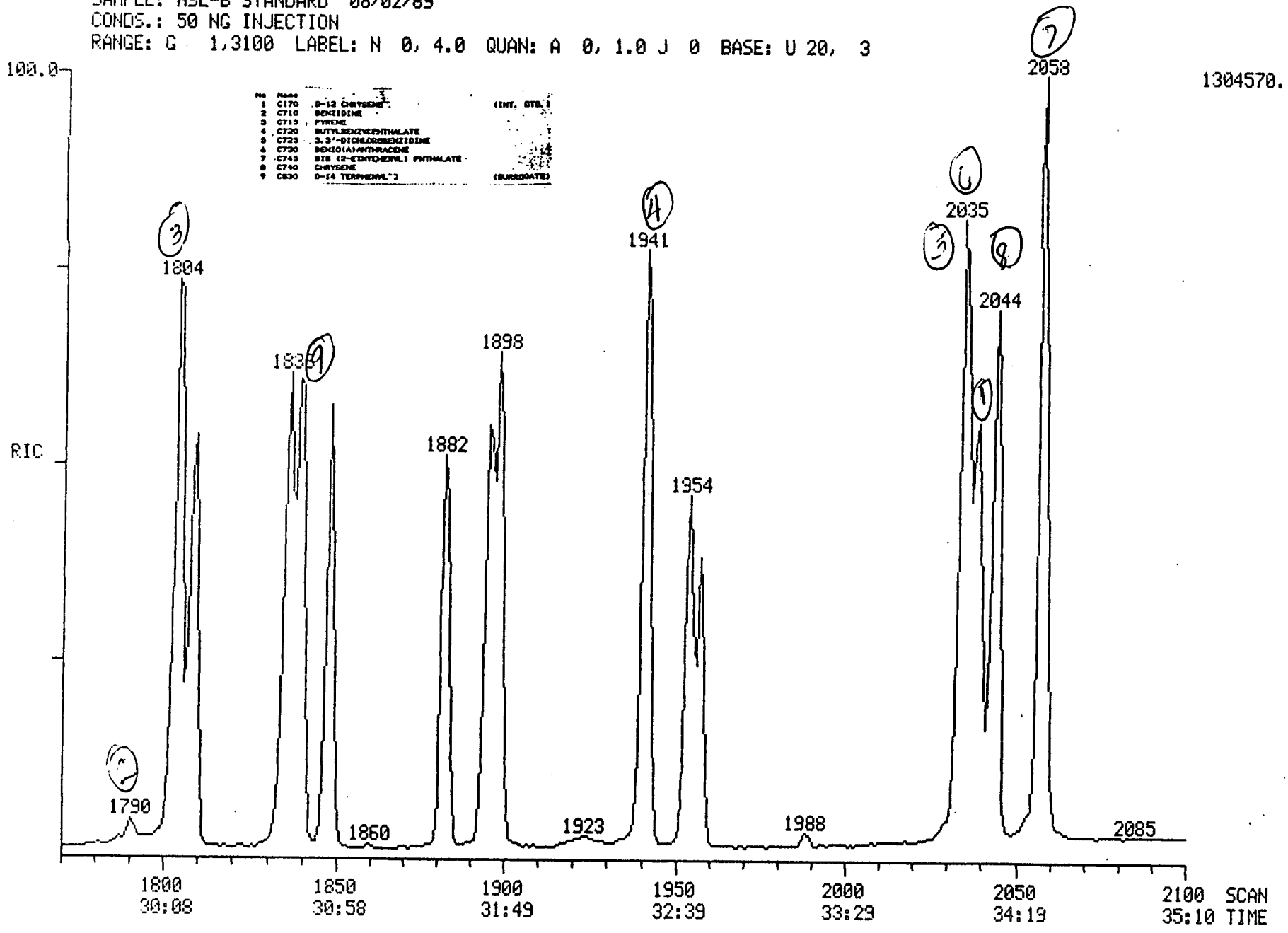
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	188	1531	25:38	1	1.000	A BB	1098590.	40.000 NG	7.41
2	198	1375	23:01	1	0.898	A VB	144181.	50.000 NG	9.26
3	169	1381	23:07	1	0.902	A VB	628054.	50.000 NG	9.26
4	77	1386	23:12	1	0.905	A BB	1440250.	50.000 NG	9.26
5	248	1447	24:14	1	0.945	A BB	280320.	50.000 NG	9.26
6	284	1473	24:40	1	0.962	A BB	307648.	50.000 NG	9.26
7	266	1508	25:15	1	0.985	A BB	161120.	50.000 NG	9.26
8	178	1535	25:42	1	1.003	A BV	1503900.	50.000 NG	9.26
9	178	1543	25:50	1	1.008	A VB	1226240.	50.000 NG	9.26
10	149	1657	27:44	1	1.082	A VB	1798170.	50.000 NG	9.26
11	202	1762	29:30	1	1.151	A BB	1329420.	50.000 NG	9.26

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	25:38	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	23:01	1.00	0.898	1.00	50.00	50.00	0.105	0.105	1.00
3	23:07	1.00	0.902	1.00	50.00	50.00	0.457	0.457	1.00
4	23:12	1.00	0.905	1.00	50.00	50.00	1.049	1.049	1.00
5	24:14	1.00	0.945	1.00	50.00	50.00	0.204	0.204	1.00
6	24:40	1.00	0.962	1.00	50.00	50.00	0.224	0.224	1.00
7	25:15	1.00	0.985	1.00	50.00	50.00	0.117	0.117	1.00
8	25:42	1.00	1.003	1.00	50.00	50.00	1.095	1.095	1.00
9	25:50	1.00	1.008	1.00	50.00	50.00	0.893	0.893	1.00
10	27:44	1.00	1.082	1.00	50.00	50.00	1.309	1.309	1.00
11	29:30	1.00	1.151	1.00	50.00	50.00	0.968	0.968	1.00

MIDRIC
08/02/89 1:11:00
SAMPLE: HSL-B STANDARD 08/02/89
CONDS.: 50 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB500802 #1
CALI: HSB500802 #2

SCANS 1770 TO 2100



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)

000328

Quantitation R port File: HSB500802

000329

Data: HSB500802.TI
08/02/89 1:11:00
Sample: HSL-B STANDARD 08/02/89
Conds.: 50 NG INJECTION
Formula: Instrument: 5100 Weight: 0.001
Submitted by: QC INC Analyst: DMM Acct. No.: HSB50080

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

No	Name		
1	CI70	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	CS30	D-14 TERPHENYL	(SURROGATE)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	240	2039	34:08	1	1.000	A BV	683666.	40.000	NG	9.09
2	184	1791	29:59	1	0.878	A BV	72858.	50.000	NG	11.36
3	202	1804	30:12	1	0.885	A BB	1351750.	50.000	NG	11.36
4	149	1941	32:30	1	0.952	A BV	716140.	50.000	NG	11.36
5	252	2034	34:03	1	0.998	A VB	271264.	50.000	NG	11.36
6	228	2036	34:05	1	0.999	A BV	964468.	50.000	NG	11.36
7	149	2058	34:27	1	1.009	A VB	1057000.	50.000	NG	11.36
8	228	2044	34:13	1	1.002	A VB	908064.	50.000	NG	11.36
9	244	1839	30:47	1	0.902	A BV	934226.	50.000	NG	11.36

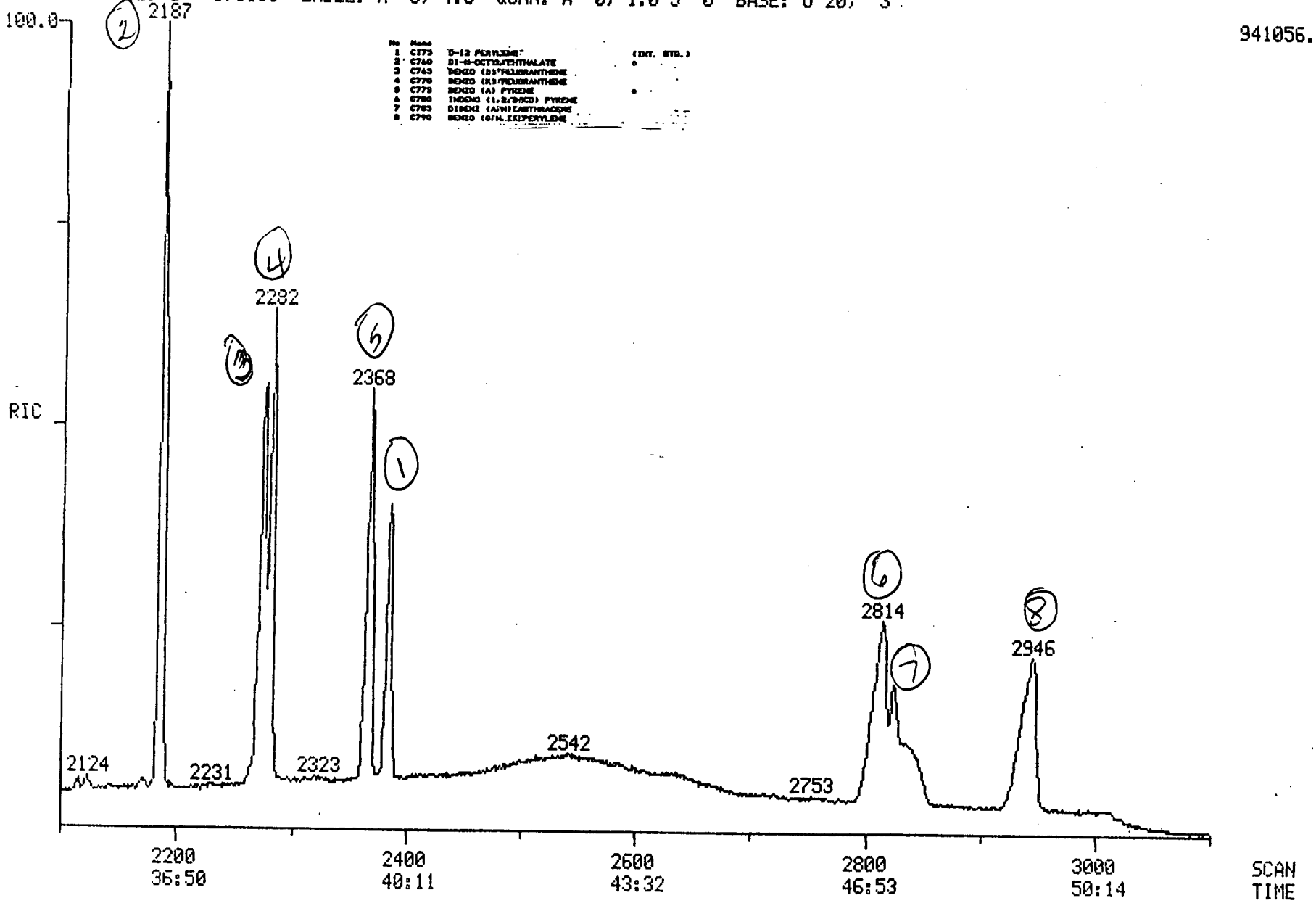
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	34:08	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	29:59	1.00	0.878	1.00	50.00	50.00	0.085	0.085	1.00
3	30:12	1.00	0.885	1.00	50.00	50.00	1.582	1.582	1.00
4	32:30	1.00	0.952	1.00	50.00	50.00	0.838	0.838	1.00
5	34:03	1.00	0.998	1.00	50.00	50.00	0.317	0.317	1.00
6	34:05	1.00	0.999	1.00	50.00	50.00	1.129	1.129	1.00
7	34:27	1.00	1.009	1.00	50.00	50.00	1.237	1.237	1.00
8	34:13	1.00	1.002	1.00	50.00	50.00	1.063	1.063	1.00
9	30:47	1.00	0.902	1.00	50.00	50.00	1.093	1.093	1.00

MIDRIC
08/02/89 1:11:00
SAMPLE: HSL-B STANDARD 08/02/89
CONDS.: 50 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB500802 #1
CALI: HSB500802 #2

SCANS 2100 TO 3100

941056.



No	Name	
1	C775	"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

000330

Quantitation Report [illegible] HSB500802

Data: HSB500802.TI
08/02/89 1:11:00
Sample: HSL-B STANDARD [illegible] 08/02/89
Conds.: 50 NG INJECTION
Formula: [illegible] Instrument: 5100 Weight: 0.001
Submitted by: QC INC [illegible] Analyst: DMM Acct. No.: HSB50080.

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

No	Name		
1	CI75	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	

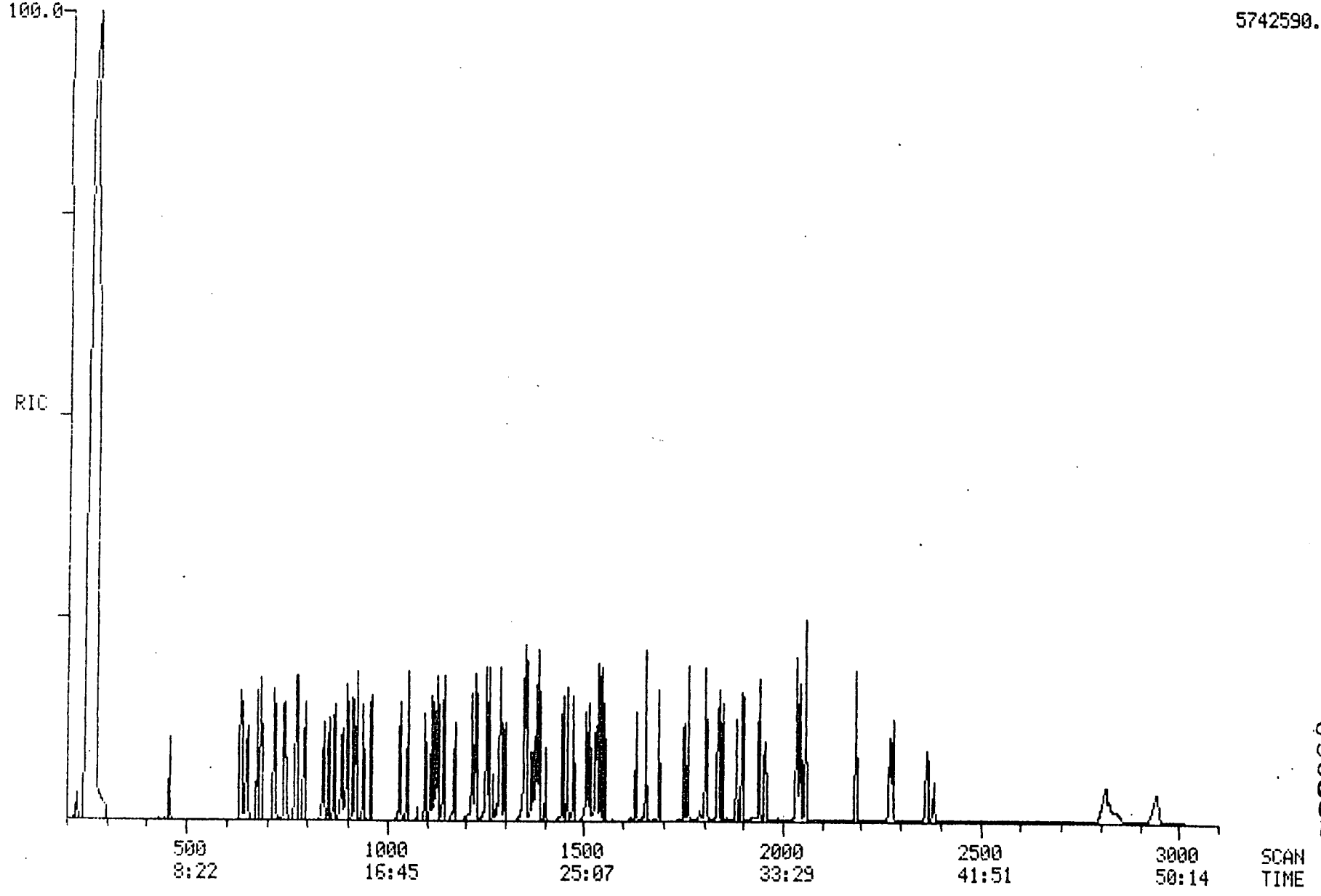
No	m/z	Scan	Time	Refer	RRT	Meth	Area(Hght)	Amount	%Tot
1	264	2385	39:56	1	1.000	A BB	573408.	40.000 NG	10.26
2	149	2187	36:37	1	0.917	A BB	1757280.	50.000 NG	12.82
3	252	2275	38:05	1	0.954	A BV	1116710.	50.000 NG	12.82
4	252	2282	38:12	1	0.957	A VB	932285.	50.000 NG	12.82
5	252	2368	39:39	1	0.993	A BB	1034480.	50.000 NG	12.82
6	276	2814	47:07	1	1.180	A BV	805760.	50.000 NG	12.82
7	278	2824	47:17	1	1.184	A BB	463476.	50.000 NG	12.82
8	276	2947	49:20	1	1.236	A BB	822208.	50.000 NG	12.82

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	39:56	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	36:37	1.00	0.917	1.00	50.00	50.00	2.452	2.452	1.00
3	38:05	1.00	0.954	1.00	50.00	50.00	1.558	1.558	1.00
4	38:12	1.00	0.957	1.00	50.00	50.00	1.301	1.301	1.00
5	39:39	1.00	0.993	1.00	50.00	50.00	1.443	1.443	1.00
6	47:07	1.00	1.180	1.00	50.00	50.00	1.124	1.124	1.00
7	47:17	1.00	1.184	1.00	50.00	50.00	0.647	0.647	1.00
8	49:20	1.00	1.236	1.00	50.00	50.00	1.147	1.147	1.00

MIDRIC
08/02/89 3:52:00
SAMPLE: HSL-B STANDARD 08/02/89
CONDS.: 80 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB800802 #1
CALI: HSB800802 #2

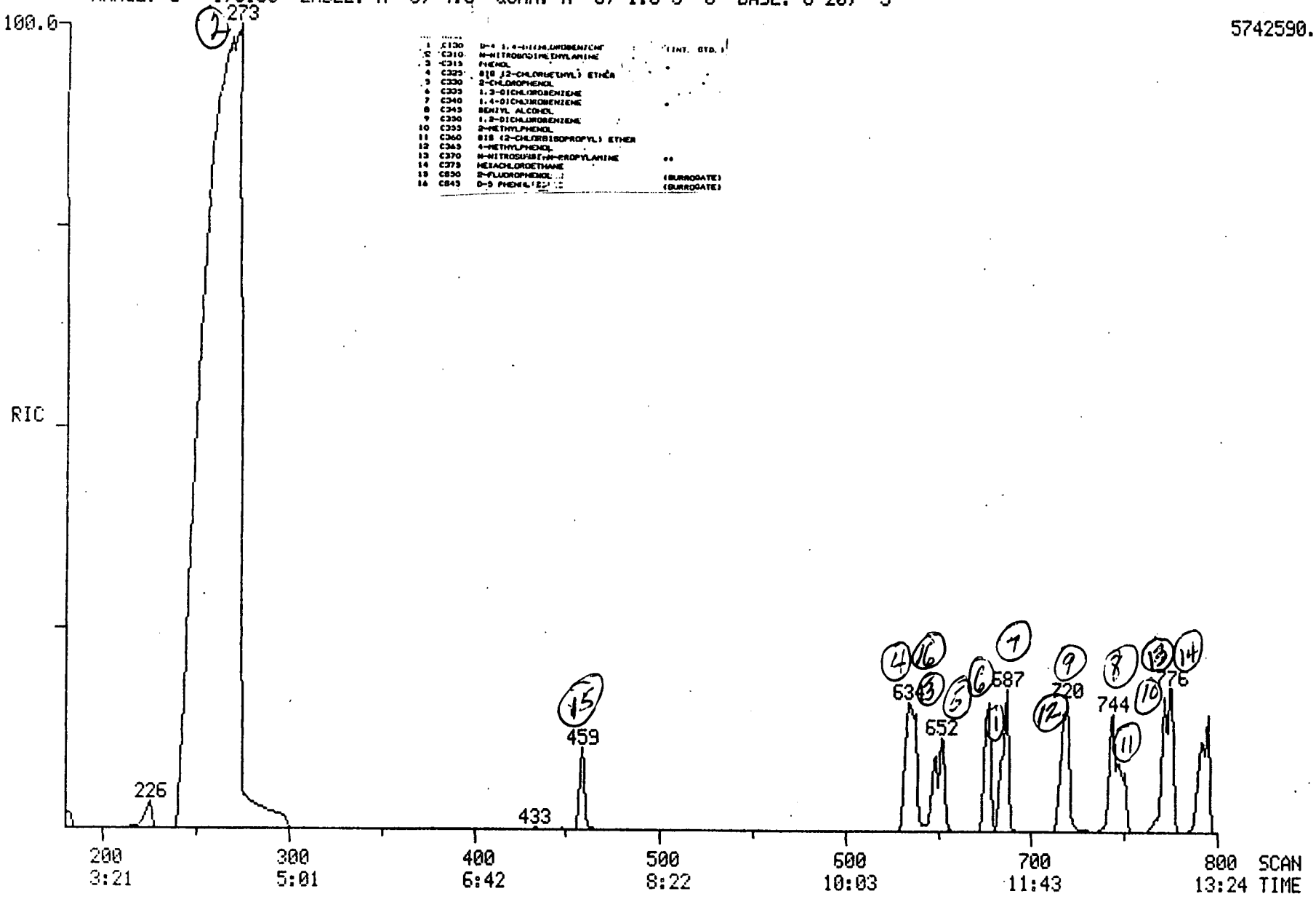
SCANS 200 TO 3100



000332

MIDRIC
08/02/89 3:52:00
SAMPLE: HSL-B STANDARD 08/02/89
CONDS.: 80 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB800802 #1 SCANS 180 TO 800
CALI: HSB800802 #2



1	C130	D-4 1,4-DICHLOROBENZENE	(INT. STD.)
2	C210	N-NITROSODIMETHYLAMINE	
3	C215	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(2)	(SURROGATE)

000333

Quantitation Report [illegible] HSB800802

Data: HSB800802.TI
08/02/89 3:52:00
Sample: HSL-B STANDARD [illegible] 08/02/89
Conds.: 80 NG INJECTION
Formula: [illegible] Instrument: 5100 Weight: 0.001
Submitted by: QC INC [illegible] Analyst: DMM Acct. No.: HSB80080.

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

No	Name		
1	CI30	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	CS50	2-FLUOROPHENOL	(SURROGATE)
16	CS45	D-5 PHENOL	(SURROGATE)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	152	683	11:26	1	1.000	A BB	216192.	40.000	NG	3.23
2	74	261	4:22	1	0.382	A BV	332268.	80.000	NG	6.45
3	94	638	10:41	1	0.934	A BV	620386.	80.000	NG	6.45
4	93	634	10:37	1	0.928	A BV	744932.	80.000	NG	6.45
5	128	652	10:55	1	0.955	A BB	623776.	80.000	NG	6.45
6	146	677	11:20	1	0.991	A BV	665248.	80.000	NG	6.45
7	146	687	11:30	1	1.006	A VB	656544.	80.000	NG	6.45
8	108	743	12:26	1	1.088	A BB	456760.	80.000	NG	6.45
9	146	720	12:03	1	1.054	A BB	613792.	80.000	NG	6.45
10	108	772	12:55	1	1.130	A BB	445184.	80.000	NG	6.45
11	45	747	12:30	1	1.094	A BB	956896.	80.000	NG	6.45
12	108	718	12:01	1	1.051	A BB	309692.	80.000	NG	6.45
13	70	775	12:59	1	1.135	A BB	453856.	80.000	NG	6.45
14	117	776	13:00	1	1.136	A BB	262560.	80.000	NG	6.45
15	112	459	7:41	1	0.672	A BB	465059.	80.000	NG	6.45
16	99	635	10:38	1	0.930	A BB	499488.	80.000	NG	6.45

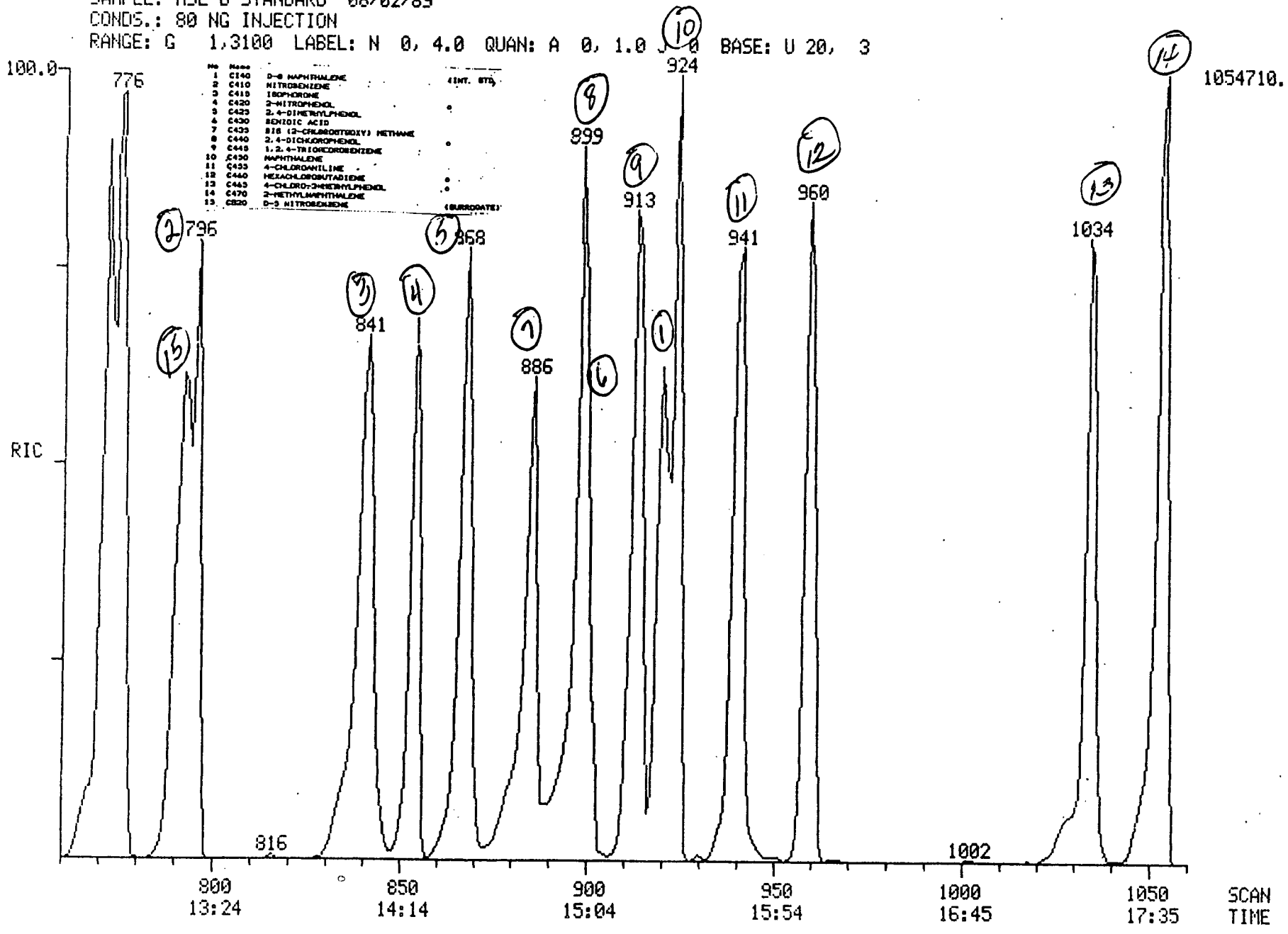
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	11:26	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	4:22	1.00	0.382	1.00	80.00	80.00	0.768	0.768	1.00
3	10:41	1.00	0.934	1.00	80.00	80.00	1.435	1.435	1.00
4	10:37	1.00	0.928	1.00	80.00	80.00	1.723	1.723	1.00
5	10:55	1.00	0.955	1.00	80.00	80.00	1.443	1.443	1.00
6	11:20	1.00	0.991	1.00	80.00	80.00	1.539	1.539	1.00
7	11:30	1.00	1.006	1.00	80.00	80.00	1.518	1.518	1.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
8	12:26	1.00	1.088	1.00	80.00	80.00	1.056	1.056	1.00
9	12:03	1.00	1.054	1.00	80.00	80.00	1.420	1.420	1.00
10	12:55	1.00	1.130	1.00	80.00	80.00	1.030	1.030	1.00
11	12:30	1.00	1.094	1.00	80.00	80.00	2.213	2.213	1.00
12	12:01	1.00	1.051	1.00	80.00	80.00	0.716	0.716	1.00
13	12:59	1.00	1.135	1.00	80.00	80.00	1.050	1.050	1.00
14	13:00	1.00	1.136	1.00	80.00	80.00	0.607	0.607	1.00
15	7:41	1.00	0.672	1.00	80.00	80.00	1.076	1.076	1.00
16	10:38	1.00	0.930	1.00	80.00	80.00	1.155	1.155	1.00

MIDRIC
08/02/89 3:52:00
SAMPLE: HSL-B STANDARD 08/02/89
CONDS.: 80 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB800802 #1
CALI: HSB800802 #2

SCANS 760 TO 1060



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)

000336

Quantitation Report File: HSB800802

Data: HSB800802.TI
08/02/89 3:52:00
Sample: HSL-B STANDARD 08/02/89
Conds.: 80 NG INJECTION
Formula: Instrument: 5100 Weight: 0.001
Submitted by: QC INC Analyst: DMM Acct. No.: HSB80080

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

No	Name		
1	CI40	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	CS20	D-5 NITROBENZENE	(SURROGATE)

No	m/z	Scan	Time	RRT	Meth	Area(Hght)	Amount	%Tot
1	136	920	15:24	1.000	A BB	893888.	40.000 NG	3.45
2	77	796	13:20	0.865	A BB	682656.	80.000 NG	6.90
3	82	841	14:05	0.914	A BB	1516950.	80.000 NG	6.90
4	139	854	14:18	0.928	A BB	382906.	80.000 NG	6.90
5	122	868	14:32	0.943	A BV	495356.	80.000 NG	6.90
6	122	902	15:06	0.980	A BB	199527.	80.000 NG	6.90
7	93	886	14:50	0.963	A BB	794976.	80.000 NG	6.90
8	162	899	15:03	0.977	A BB	562784.	80.000 NG	6.90
9	180	913	15:17	0.992	A BB	618880.	80.000 NG	6.90
10	128	924	15:28	1.004	A BB	1303580.	80.000 NG	6.90
11	127	940	15:44	1.022	A BB	774324.	80.000 NG	6.90
12	225	960	16:04	1.043	A BB	332960.	80.000 NG	6.90
13	107	1034	17:19	1.124	A BB	608998.	80.000 NG	6.90
14	142	1054	17:39	1.146	A BB	1032840.	80.000 NG	6.90
15	82	792	13:16	0.861	A BB	761792.	80.000 NG	6.90

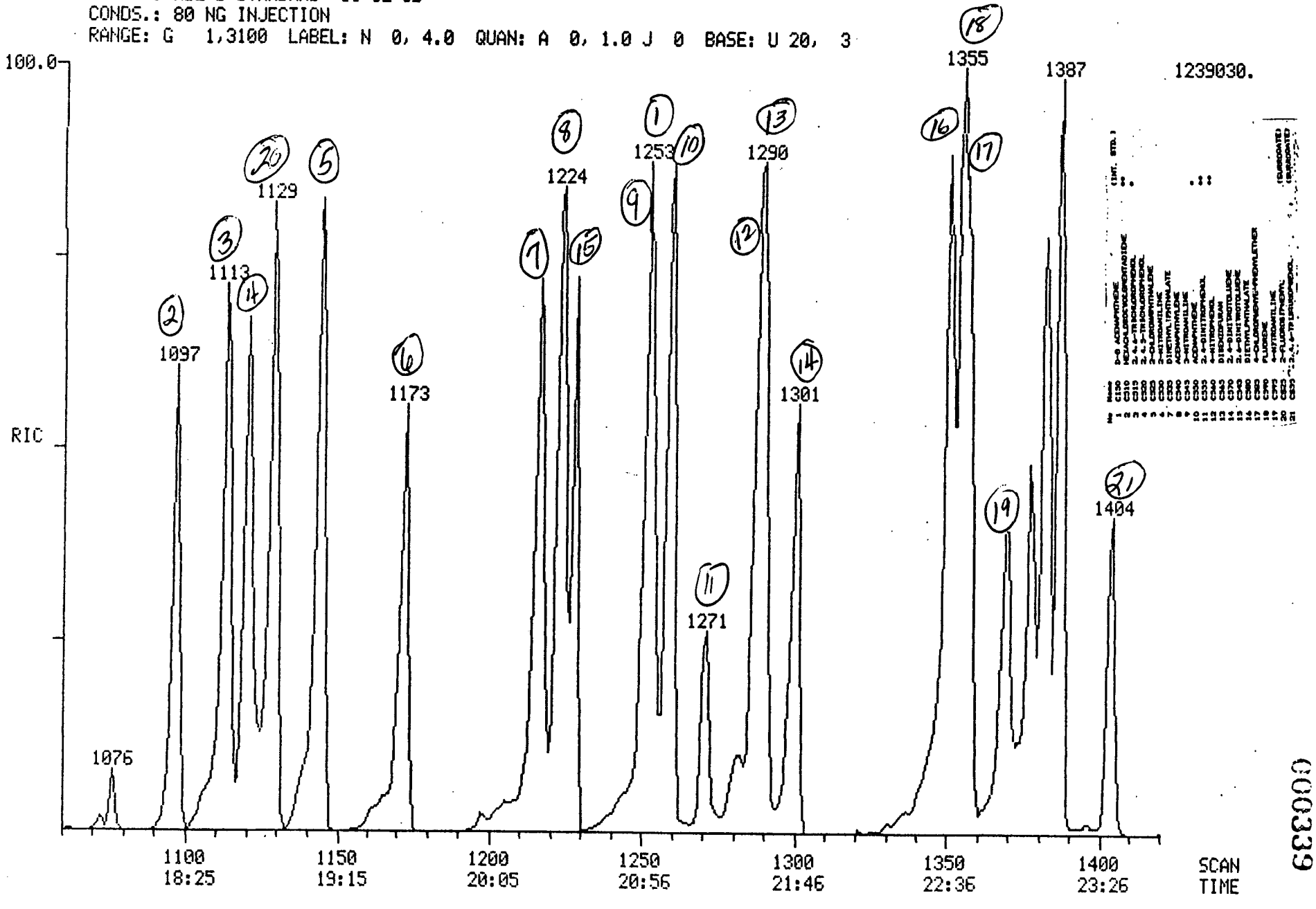
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	15:24	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	13:20	1.00	0.865	1.00	80.00	80.00	0.382	0.382	1.00
3	14:05	1.00	0.914	1.00	80.00	80.00	0.849	0.849	1.00
4	14:18	1.00	0.928	1.00	80.00	80.00	0.214	0.214	1.00
5	14:32	1.00	0.943	1.00	80.00	80.00	0.277	0.277	1.00
6	15:06	1.00	0.980	1.00	80.00	80.00	0.112	0.112	1.00
7	14:50	1.00	0.963	1.00	80.00	80.00	0.445	0.445	1.00
8	15:03	1.00	0.977	1.00	80.00	80.00	0.315	0.315	1.00
9	15:17	1.00	0.992	1.00	80.00	80.00	0.346	0.346	1.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
10	15:28	1.00	1.004	1.00	80.00	80.00	0.729	0.729	1.00
11	15:44	1.00	1.022	1.00	80.00	80.00	0.433	0.433	1.00
12	16:04	1.00	1.043	1.00	80.00	80.00	0.186	0.186	1.00
13	17:19	1.00	1.124	1.00	80.00	80.00	0.341	0.341	1.00
14	17:39	1.00	1.146	1.00	80.00	80.00	0.578	0.578	1.00
15	13:16	1.00	0.861	1.00	80.00	80.00	0.426	0.426	1.00

MIDRIC
08/02/89 3:52:00
SAMPLE: HSL-B STANDARD 08/02/89
CONDS.: 80 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB800802 #1
CALI: HSB800802 #2

SCANS 1060 TO 1420



000339

Quantitation Report File: HSB800802

Data: HSB800802.TI
08/02/89 3:52:00
Sample: HSL-B STANDARD 08/02/89
Conds.: 80 NG INJECTION
Formula: Instrument: 5100 Weight: 0.001
Submitted by: QC INC Analyst: DMM Acct. No.: HSB80080

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

No	Name		
1	CI50	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	C543	2,6-DINITROTOLUENE	
16	C580	DIETHYLPHTHALATE	
17	C585	4-CHLOROPHENYL-PHENYLETHER	
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	1253	20:59	1	1.000	A BB	527232.	40.000	NG	2.44
2	237	1097	18:22	1	0.875	A BB	371616.	80.000	NG	4.88
3	196	1113	18:38	1	0.888	A BV	491120.	80.000	NG	4.88
4	196	1120	18:45	1	0.894	A VB	391684.	80.000	NG	4.88
5	162	1144	19:09	1	0.913	A BB	1264280.	80.000	NG	4.88
6	65	1173	19:38	1	0.936	A BB	528316.	80.000	NG	4.88
7	163	1216	20:22	1	0.970	A BB	1400900.	80.000	NG	4.88
8	152	1224	20:30	1	0.977	A BB	1665750.	80.000	NG	4.88
9	138	1252	20:58	1	0.999	A VB	265145.	80.000	NG	4.88
10	153	1260	21:06	1	1.006	A BB	1058260.	80.000	NG	4.88
11	184	1270	21:16	1	1.014	A VB	125440.	80.000	NG	4.88
12	109	1287	21:33	1	1.027	A VB	132336.	80.000	NG	4.88
13	168	1290	21:36	1	1.030	A VB	1538600.	80.000	NG	4.88
14	89	1301	21:47	1	1.038	A VB	298783.	80.000	NG	4.88
15	165	1228	20:34	1	0.980	A VB	300752.	80.000	NG	4.88
16	149	1351	22:37	1	1.078	A BB	1280910.	80.000	NG	4.88
17	204	1357	22:43	1	1.083	A VB	529336.	80.000	NG	4.88
18	166	1355	22:41	1	1.081	A VB	939124.	80.000	NG	4.88
19	138	1369	22:55	1	1.093	A VB	259782.	80.000	NG	4.88
20	172	1129	18:54	1	0.901	A BB	1256990.	80.000	NG	4.88
21	330	1403	23:29	1	1.120	A VB	148544.	80.000	NG	4.88

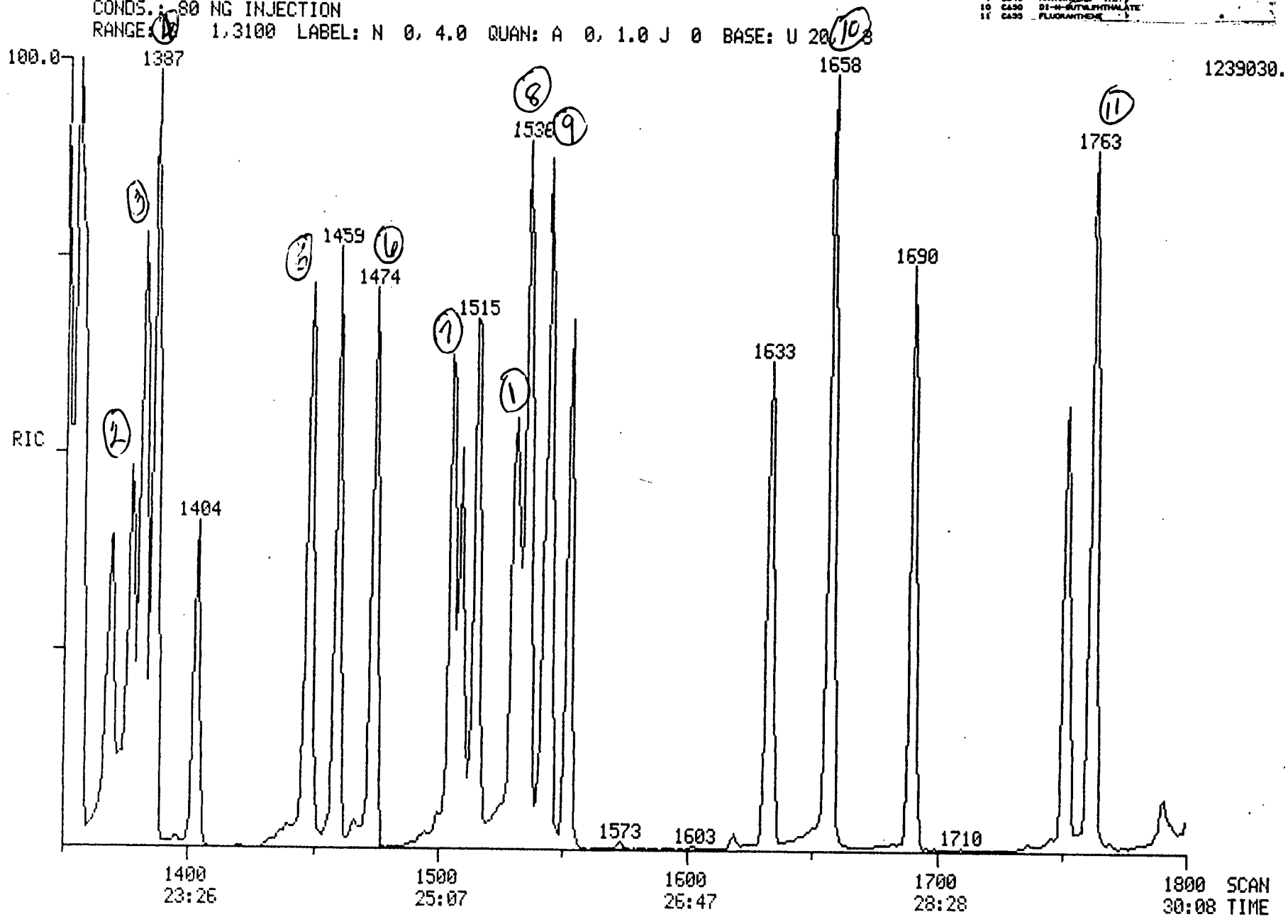
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	20:59	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	18:22	1.00	0.875	1.00	80.00	80.00	0.352	0.352	1.00
3	18:38	1.00	0.888	1.00	80.00	80.00	0.466	0.466	1.00
4	18:45	1.00	0.894	1.00	80.00	80.00	0.371	0.371	1.00
5	19:09	1.00	0.913	1.00	80.00	80.00	1.199	1.199	1.00
6	19:38	1.00	0.936	1.00	80.00	80.00	0.501	0.501	1.00
7	20:22	1.00	0.970	1.00	80.00	80.00	1.329	1.329	1.00
8	20:30	1.00	0.977	1.00	80.00	80.00	1.580	1.580	1.00
9	20:58	1.00	0.999	1.00	80.00	80.00	0.251	0.251	1.00
10	21:06	1.00	1.006	1.00	80.00	80.00	1.004	1.004	1.00
11	21:16	1.00	1.014	1.00	80.00	80.00	0.119	0.119	1.00
12	21:33	1.00	1.027	1.00	80.00	80.00	0.126	0.126	1.00
13	21:36	1.00	1.030	1.00	80.00	80.00	1.459	1.459	1.00
14	21:47	1.00	1.038	1.00	80.00	80.00	0.283	0.283	1.00
15	20:34	1.00	0.980	1.00	80.00	80.00	0.285	0.285	1.00
16	22:37	1.00	1.078	1.00	80.00	80.00	1.215	1.215	1.00
17	22:43	1.00	1.083	1.00	80.00	80.00	0.502	0.502	1.00
18	22:41	1.00	1.081	1.00	80.00	80.00	0.891	0.891	1.00
19	22:55	1.00	1.093	1.00	80.00	80.00	0.246	0.246	1.00
20	18:54	1.00	0.901	1.00	80.00	80.00	1.192	1.192	1.00
21	23:29	1.00	1.120	1.00	80.00	80.00	0.141	0.141	1.00

MIDRIC
08/02/89 3:52:00
SAMPLE: HSL-B STANDARD 08/02/89
CONDS.: 80 NG INJECTION
RANGE: 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 8

DATA: HSB800802 #1
CALI: HSB800802 #2

SCANS 1350 TO 1800

No	Name		(INT. STD.
1	C140	D-10 PHENANTHRENE	
2	C610	4,6-DINITRO-2-METHYLPHENOL	
3	C615	N-NITROSODIPHENYLAMINE	•
4		AIDRENIZINE	
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	•



1239030.

000342

Quantitation Report File: HSB800802

Data: HSB800802.TI
08/02/89 3:52:00
Sample: HSL-B STANDARD 08/02/89
C nds.: 80 NG INJECTION
Formula: Instrument: 5100 Weight: 0.001
Submitted by: QC INC Analyst: DMM Acct. No.: HSB80080

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

No	Name		
1	CI60	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	*

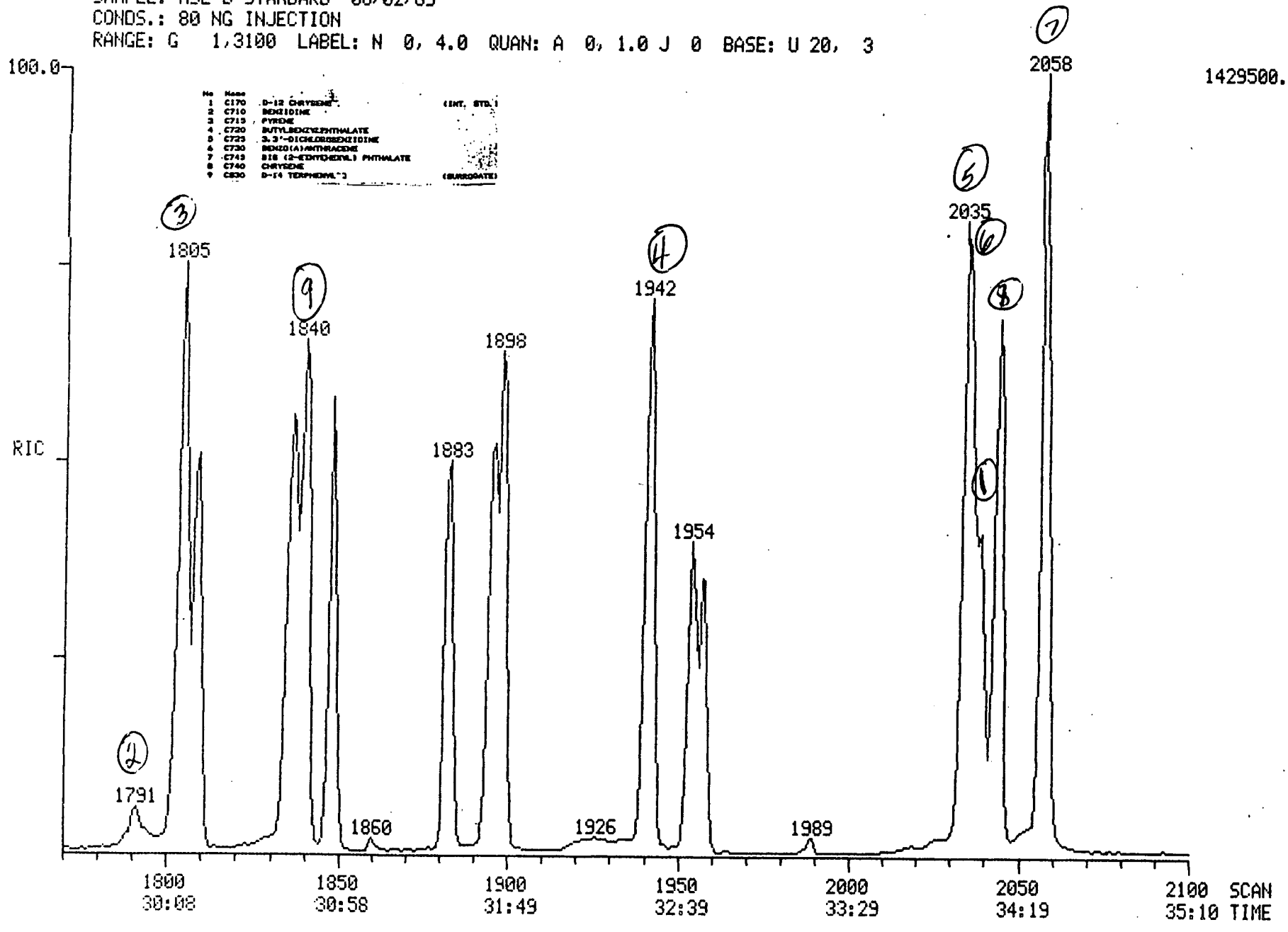
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	188	1531	25:38	1	1.000	A VB	889696.	40.000 NG	4.76
2	198	1377	23:03	1	0.899	A VB	178544.	80.000 NG	9.52
3	169	1382	23:08	1	0.903	A VB	761237.	80.000 NG	9.52
4	77	1387	23:13	1	0.906	A VB	1534470.	80.000 NG	9.52
5	248	1448	24:15	1	0.946	A VB	317008.	80.000 NG	9.52
6	284	1474	24:41	1	0.963	A VB	389792.	80.000 NG	9.52
7	266	1509	25:16	1	0.986	A VB	202526.	80.000 NG	9.52
8	178	1536	25:43	1	1.003	A BV	1684790.	80.000 NG	9.52
9	178	1545	25:52	1	1.009	A VB	1456360.	80.000 NG	9.52
10	149	1658	27:46	1	1.083	A BB	2007510.	80.000 NG	9.52
11	202	1763	29:31	1	1.152	A VB	1400800.	80.000 NG	9.52

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	25:38	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	23:03	1.00	0.899	1.00	80.00	80.00	0.100	0.100	1.00
3	23:08	1.00	0.903	1.00	80.00	80.00	0.428	0.428	1.00
4	23:13	1.00	0.906	1.00	80.00	80.00	0.862	0.862	1.00
5	24:15	1.00	0.946	1.00	80.00	80.00	0.178	0.178	1.00
6	24:41	1.00	0.963	1.00	80.00	80.00	0.219	0.219	1.00
7	25:16	1.00	0.986	1.00	80.00	80.00	0.114	0.114	1.00
8	25:43	1.00	1.003	1.00	80.00	80.00	0.947	0.947	1.00
9	25:52	1.00	1.009	1.00	80.00	80.00	0.818	0.818	1.00
10	27:46	1.00	1.083	1.00	80.00	80.00	1.128	1.128	1.00
11	29:31	1.00	1.152	1.00	80.00	80.00	0.787	0.787	1.00

MIDRIC
08/02/89 3:52:00
SAMPLE: HSL-B STANDARD 08/02/89
CONDS.: 80 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB800802 #1
CALI: HSB800802 #2

SCANS 1770 TO 2100



000344

Quantitation Report [illegible] HSB800802

Data: HSB800802.TI
08/02/89 3:52:00
Sample: HSL-B STANDARD [illegible] 08/02/89
Conds.: 80 NG INJECTION
Formula: [illegible] Instrument: 5100 Weight: 0.001
Submitted by: QC INC [illegible] Analyst: DMM Acct. No.: HSB80080

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

No	Name		
1	CI70	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	CS30	D-14 TERPHENYL	(SURROGATE)

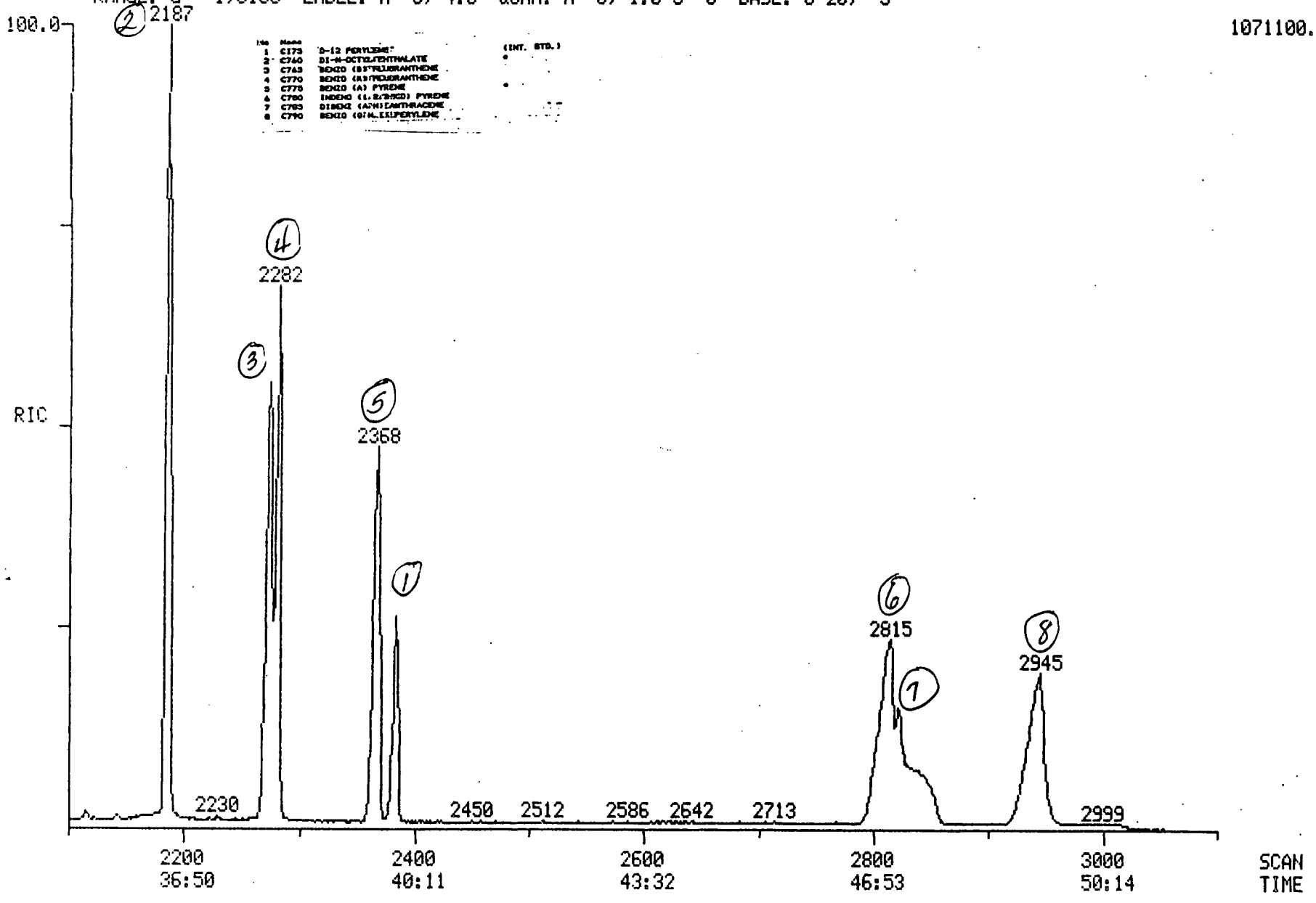
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	240	2039	34:08	[illegible]	1.000	A VV	548334.	40.000	NG	5.88
2	184	1791	29:59	[illegible]	0.878	A VV	127912.	80.000	NG	11.76
3	202	1805	30:13	[illegible]	0.885	A VB	1472480.	80.000	NG	11.76
4	149	1942	32:31	[illegible]	0.952	A VB	748325.	80.000	NG	11.76
5	252	2034	34:03	[illegible]	0.998	A VB	329780.	80.000	NG	11.76
6	228	2036	34:05	[illegible]	0.999	A VV	1059040.	80.000	NG	11.76
7	149	2058	34:27	[illegible]	1.009	A VB	1181950.	80.000	NG	11.76
8	228	2044	34:13	[illegible]	1.002	A VB	1021330.	80.000	NG	11.76
9	244	1840	30:48	[illegible]	0.902	A VV	1156210.	80.000	NG	11.76

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	34:08	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	29:59	1.00	0.878	1.00	80.00	80.00	0.117	0.117	1.00
3	30:13	1.00	0.885	1.00	80.00	80.00	1.343	1.343	1.00
4	32:31	1.00	0.952	1.00	80.00	80.00	0.682	0.682	1.00
5	34:03	1.00	0.998	1.00	80.00	80.00	0.301	0.301	1.00
6	34:05	1.00	0.999	1.00	80.00	80.00	0.966	0.966	1.00
7	34:27	1.00	1.009	1.00	80.00	80.00	1.078	1.078	1.00
8	34:13	1.00	1.002	1.00	80.00	80.00	0.931	0.931	1.00
9	30:48	1.00	0.902	1.00	80.00	80.00	1.054	1.054	1.00

MIDRIC
08/02/89 3:52:00
SAMPLE: HSL-B STANDARD 08/02/89
CONDS.: 80 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB800802 #1
CALI: HSB800802 #2

SCANS 2100 TO 3100



Quantitation Report File: HSB800802

Data: HSB800802.TI
08/02/89 3:52:00
Sample: HSL-B STANDARD 08/02/89
C nds.: 80 NG INJECTION
Formula: Instrument: 5100 Weight: 0.001
Submitted by: QC INC Analyst: DMM Acct. No.: HSB80080

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

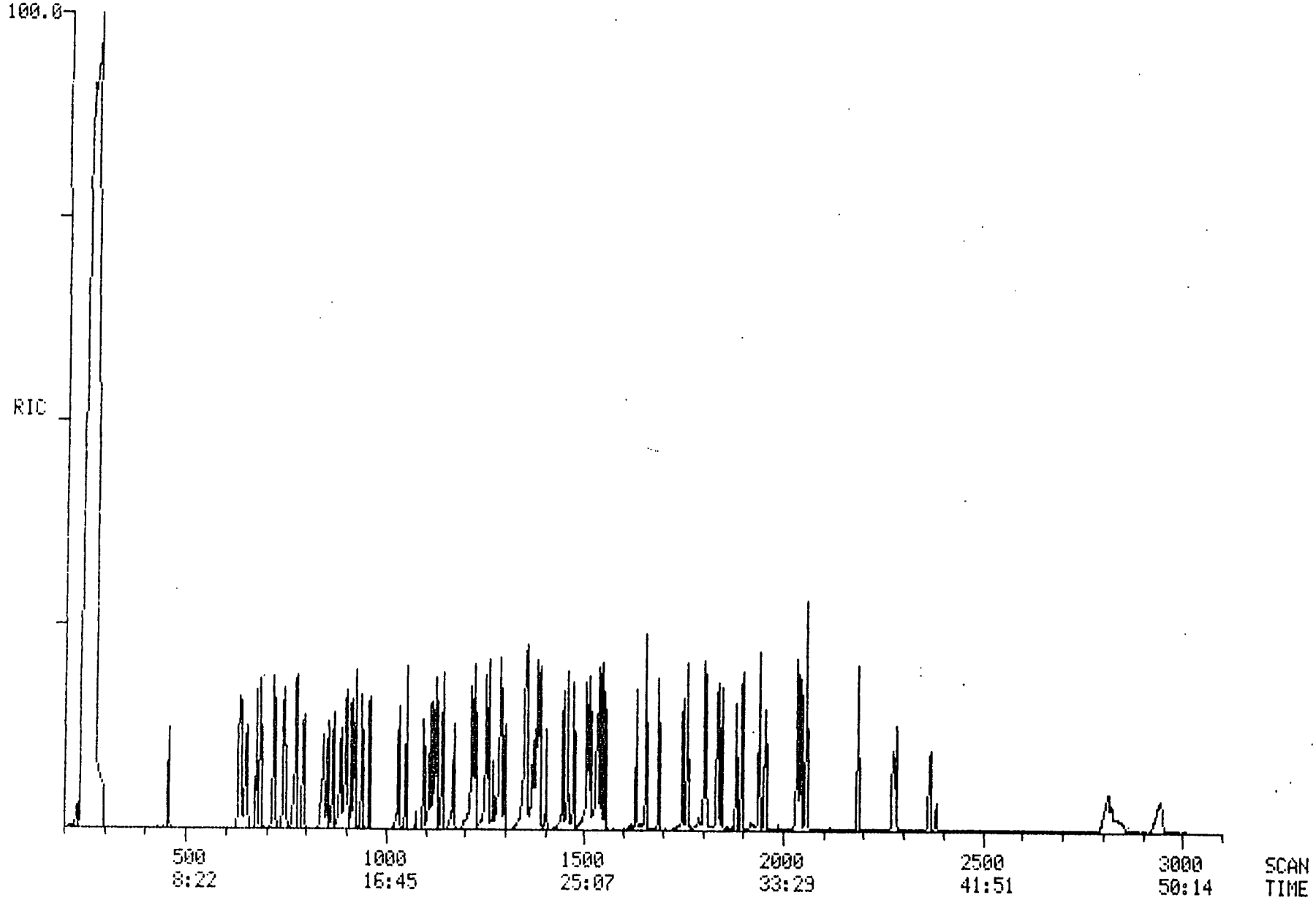
No	Name		
1	CI75	D-12 PERYLENE	(INT. STD.)
2	C760	DI-N-OCTYL PHTHALATE	*
3	C765	BENZO (B) FLUORANTHENE	
4	C770	BENZO (K) FLUORANTHENE	
5	C775	BENZO (A) PYRENE	*
6	C780	INDENO (1,2,3-CD) PYRENE	
7	C785	DIBENZ (A,H) ANTHRACENE	
8	C790	BENZO (G,H,I) PERYLENE	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	264	2383	39:54	1	1.000	A BB	488384.	40.000	NG	6.67
2	149	2187	36:37	1	0.918	A VB	1983290.	80.000	NG	13.33
3	252	2274	38:04	1	0.954	A BV	1351000.	80.000	NG	13.33
4	252	2282	38:12	1	0.958	A VB	1182710.	80.000	NG	13.33
5	252	2367	39:38	1	0.993	A BB	1234200.	80.000	NG	13.33
6	276	2812	47:05	1	1.180	A BB	1079960.	80.000	NG	13.33
7	278	2822	47:15	1	1.184	A BB	457968.	80.000	NG	13.33
8	276	2942	49:15	1	1.235	A BB	902560.	80.000	NG	13.33

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	39:54	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	36:37	1.00	0.918	1.00	80.00	80.00	2.030	2.030	1.00
3	38:04	1.00	0.954	1.00	80.00	80.00	1.383	1.383	1.00
4	38:12	1.00	0.958	1.00	80.00	80.00	1.211	1.211	1.00
5	39:38	1.00	0.993	1.00	80.00	80.00	1.264	1.264	1.00
6	47:05	1.00	1.180	1.00	80.00	80.00	1.106	1.106	1.00
7	47:15	1.00	1.184	1.00	80.00	80.00	0.469	0.469	1.00
8	49:15	1.00	1.235	1.00	80.00	80.00	0.924	0.924	1.00

MIDRIC
08/02/89 5:11:00
SAMPLE: HSL-B STANDARD 08/02/89
CONDS.: 120 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

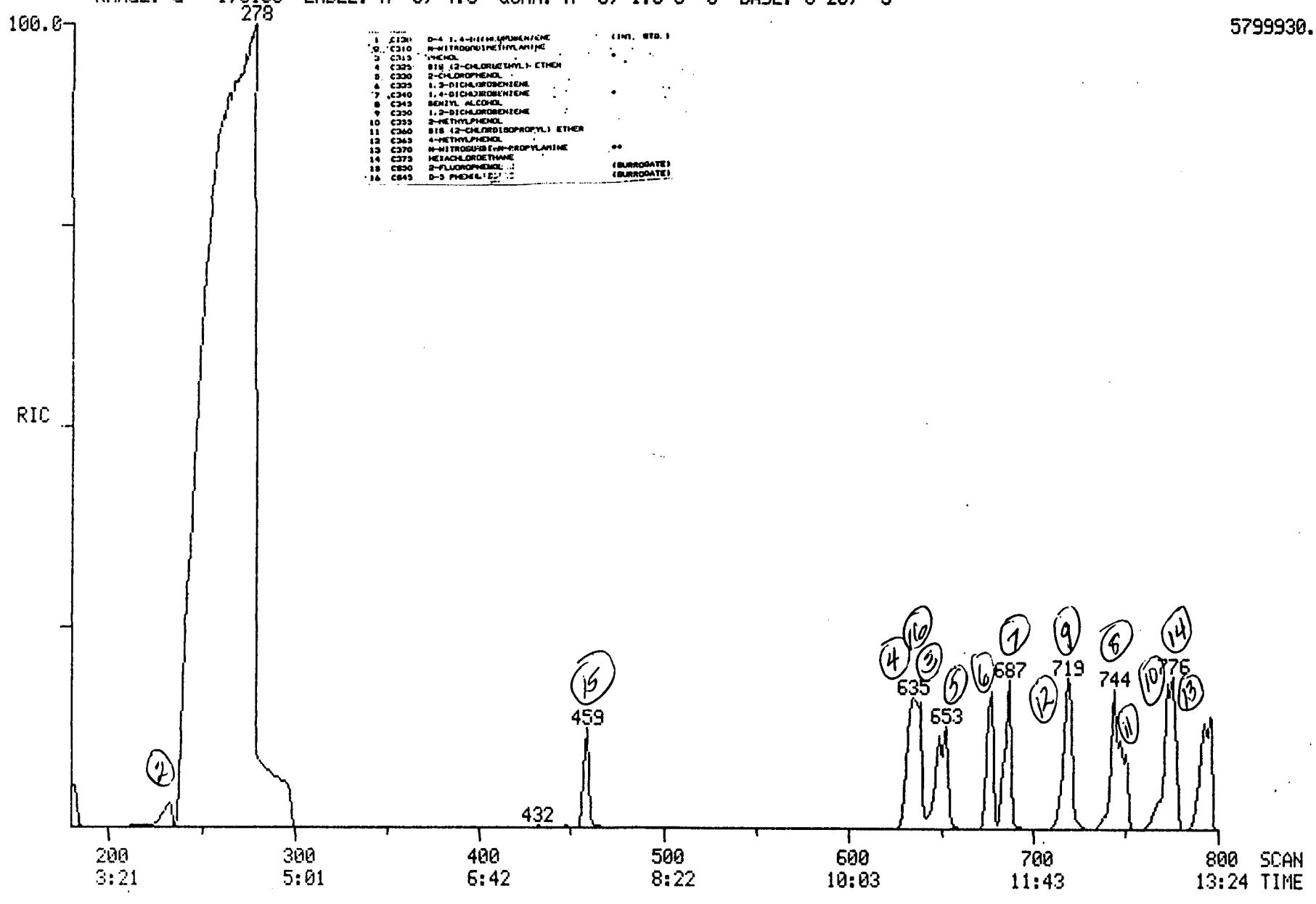
DATA: HSB1200802 #1 SCANS 200 TO 3100
CALI: HSB1200802 #2



000348

MIDRIC
08/02/89 5:11:00
SAMPLE: HSL-B STANDARD 08/02/89
CONDS.: 120 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB1200802 #1 SCANS 180 TO 800
CALI: HSB1200802 #2



1	C300	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-PROPYL)AMINE	**
14	C375	HEXACHLOROETHANE	
15	C830	2-FLUOROPHENOL	(SURROGATE)
16	C845	D-5 PHENOL	(SURROGATE)

000369

Quantitation Report [illegible] File: HSB1200802

Data: HSB1200802.TI
08/02/89 5:11:00
Sample: HSL-B STANDARD [illegible] 08/02/89
Conds.: 120 NG INJECTION
Formula: [illegible] Instrument: 5100 Weight: 0.001
Submitted by: QC INC [illegible] Analyst: DMM Acct. No.: HSB12008

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

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	CS50	2-FLUOROPHENOL	(SURROGATE)
16	CS45	D-5 PHENOL	(SURROGATE)

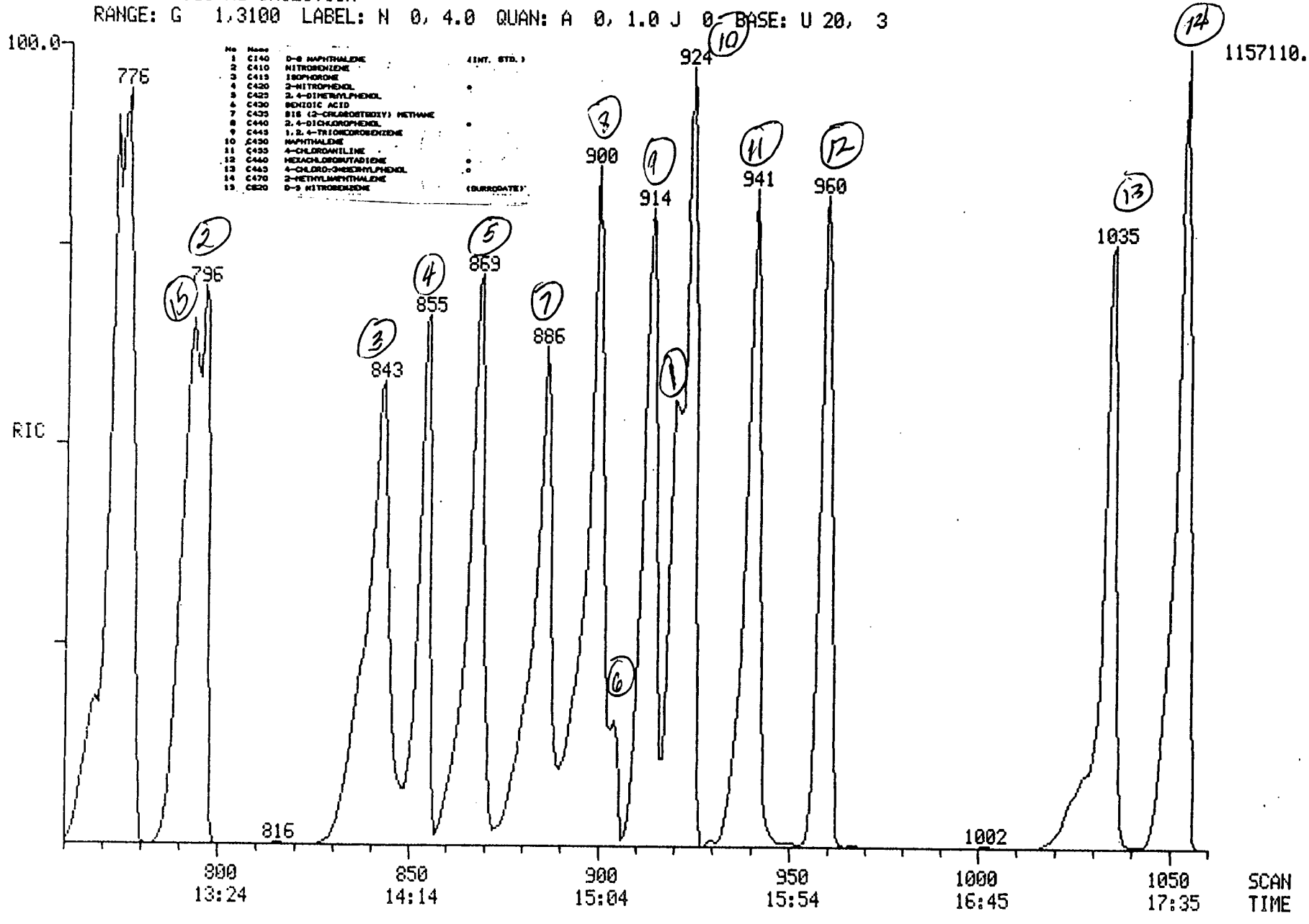
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	152	683	11:26	1	1.000	A BB	190592.	40.000	NG	2.17
2	74	233	3:54	1	0.341	A BB	394297.	120.000	NG	6.52
3	94	639	10:42	1	0.936	A BV	769501.	120.000	NG	6.52
4	93	634	10:37	1	0.928	A BV	920208.	120.000	NG	6.52
5	128	653	10:56	1	0.956	A BB	756544.	120.000	NG	6.52
6	146	677	11:20	1	0.991	A BV	772492.	120.000	NG	6.52
7	146	687	11:30	1	1.006	A VB	754908.	120.000	NG	6.52
8	108	744	12:27	1	1.089	A BB	552889.	120.000	NG	6.52
9	146	720	12:02	1	1.054	A BB	714656.	120.000	NG	6.52
10	108	773	12:56	1	1.132	A VB	436544.	120.000	NG	6.52
11	45	747	12:30	1	1.094	A BB	1216310.	120.000	NG	6.52
12	108	718	12:01	1	1.051	A BB	401018.	120.000	NG	6.52
13	70	778	13:02	1	1.139	A VB	408742.	120.000	NG	6.52
14	117	776	13:00	1	1.136	A BB	291904.	120.000	NG	6.52
15	112	459	7:4[illegible]	1	0.672	A BB	610662.	120.000	NG	6.52
16	99	636	10:39	1	0.931	A BB	684448.	120.000	NG	6.52

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	11:26	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	3:54	1.00	0.341	1.00	120.00	120.00	0.690	0.690	1.00
3	10:42	1.00	0.936	1.00	120.00	120.00	1.346	1.346	1.00
4	10:37	1.00	0.928	1.00	120.00	120.00	1.609	1.609	1.00
5	10:56	1.00	0.956	1.00	120.00	120.00	1.323	1.323	1.00
6	11:20	1.00	0.991	1.00	120.00	120.00	1.351	1.351	1.00
7	11:30	1.00	1.006	1.00	120.00	120.00	1.320	1.320	1.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
8	12:27	1.00	1.089	1.00	120.00	120.00	0.967	0.967	1.00
9	12:03	1.00	1.054	1.00	120.00	120.00	1.250	1.250	1.00
10	12:56	1.00	1.132	1.00	120.00	120.00	0.763	0.763	1.00
11	12:30	1.00	1.094	1.00	120.00	120.00	2.127	2.127	1.00
12	12:01	1.00	1.051	1.00	120.00	120.00	0.701	0.701	1.00
13	13:02	1.00	1.139	1.00	120.00	120.00	0.715	0.715	1.00
14	13:00	1.00	1.136	1.00	120.00	120.00	0.511	0.511	1.00
15	7:41	1.00	0.672	1.00	120.00	120.00	1.068	1.068	1.00
16	10:39	1.00	0.931	1.00	120.00	120.00	1.197	1.197	1.00

MIDRIC
08/02/89 5:11:00
SAMPLE: HSL-B STANDARD 08/02/89
CONDS.: 120 NG INJECTION
RANGE: G 1.3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0, BASE: U 20, 3

DATA: HSB1200802 #1 SCANS 760 TO 1060
CALI: HSB1200802 #2



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-3MEDHYLPHENOL	
14	C470	2-METHYLNAPHTHALENE	
15	C820	D-5 NITROBENZENE	(SURROGATE)

000352

Quantitation Report File: HSB1200802

Data: HSB1200802.TI
08/02/89 5:11:00
Sample: HSL-B STANDARD 08/02/89
Conds.: 120 NG INJECTION
Formula: Instrument: 5100 Weight: 0.001
Submitted by: QC INC. Analyst: DMM Acct. No.: HSB12008

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

No	Name		
1	CI40	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	CS20	D-5 NITROBENZENE	(SURROGATE)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	136	920	15:24	1	1.000	A BB	799008.	40.000	NG	2.33
2	77	796	13:20	1	0.865	A BB	847136.	120.000	NG	6.98
3	82	843	14:07	1	0.916	A BB	1971430.	120.000	NG	6.98
4	139	854	14:18	1	0.928	A VB	467305.	120.000	NG	6.98
5	122	868	14:32	1	0.943	A BB	602264.	120.000	NG	6.98
6	122	904	15:08	1	0.983	A VB	110048.	120.000	NG	6.98
7	93	886	14:50	1	0.963	A BB	1079580.	120.000	NG	6.98
8	162	900	15:04	1	0.978	A BB	726304.	120.000	NG	6.98
9	180	914	15:18	1	0.993	A BB	715552.	120.000	NG	6.98
10	128	924	15:28	1	1.004	A BB	1791420.	120.000	NG	6.98
11	127	941	15:45	1	1.023	A BB	1004640.	120.000	NG	6.98
12	225	959	16:03	1	1.042	A BB	389280.	120.000	NG	6.98
13	107	1034	17:19	1	1.124	A BB	763340.	120.000	NG	6.98
14	142	1054	17:39	1	1.146	A BB	1311730.	120.000	NG	6.98
15	82	793	13:17	1	0.862	A BB	938784.	120.000	NG	6.98

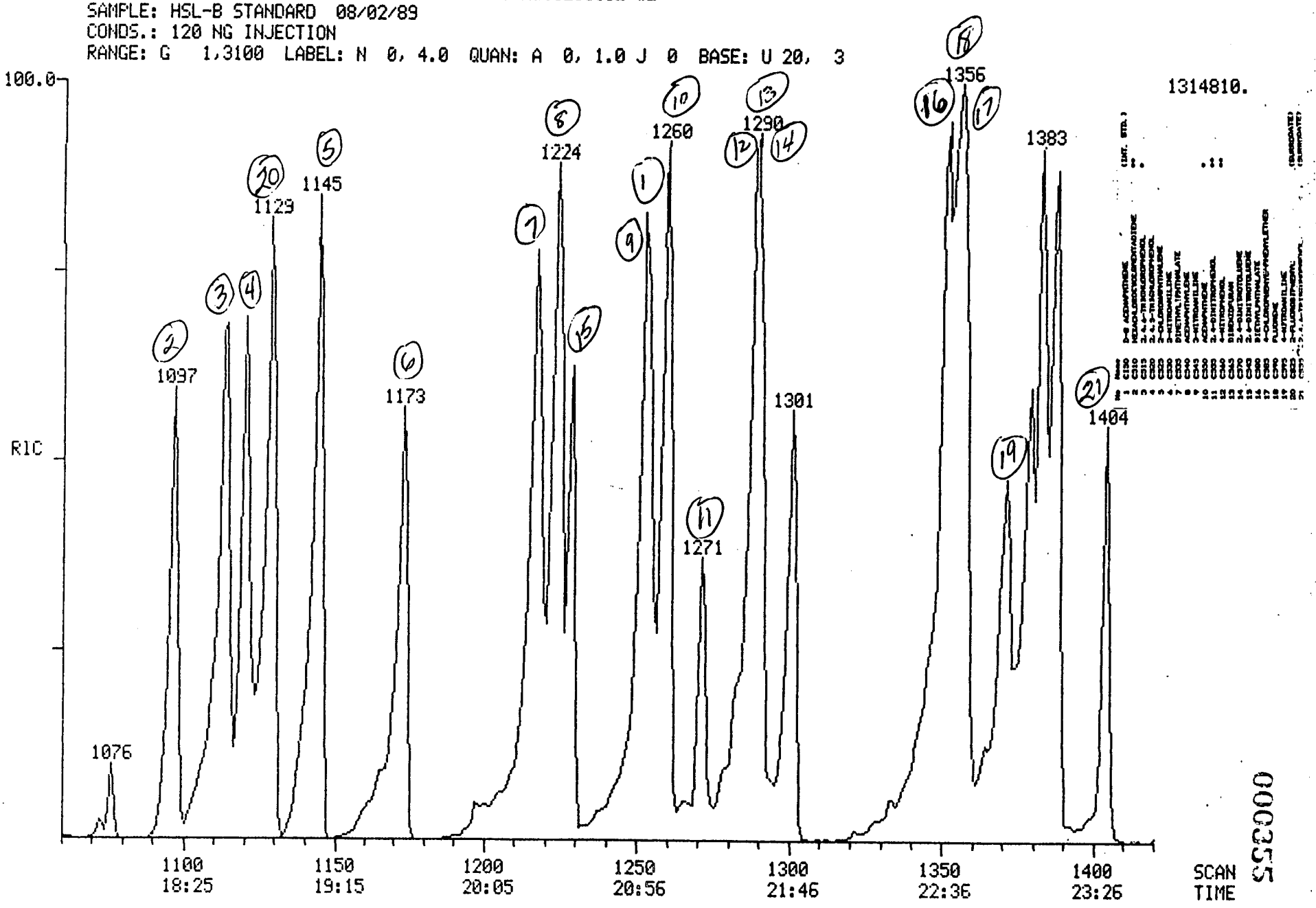
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	15:24	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	13:20	1.00	0.865	1.00	120.00	120.00	0.353	0.353	1.00
3	14:07	1.00	0.916	1.00	120.00	120.00	0.822	0.822	1.00
4	14:18	1.00	0.928	1.00	120.00	120.00	0.195	0.195	1.00
5	14:32	1.00	0.943	1.00	120.00	120.00	0.251	0.251	1.00
6	15:08	1.00	0.983	1.00	120.00	120.00	0.046	0.046	1.00
7	14:50	1.00	0.963	1.00	120.00	120.00	0.450	0.450	1.00
8	15:04	1.00	0.978	1.00	120.00	120.00	0.303	0.303	1.00
9	15:18	1.00	0.993	1.00	120.00	120.00	0.299	0.299	1.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
10	15:28	1.00	1.004	1.00	120.00	120.00	0.747	0.747	1.00
11	15:45	1.00	1.023	1.00	120.00	120.00	0.419	0.419	1.00
12	16:03	1.00	1.042	1.00	120.00	120.00	0.162	0.162	1.00
13	17:19	1.00	1.124	1.00	120.00	120.00	0.318	0.318	1.00
14	17:39	1.00	1.148	1.00	120.00	120.00	0.547	0.547	1.00
15	13:17	1.00	0.862	1.00	120.00	120.00	0.392	0.392	1.00

MIDRIC
08/02/89 5:11:00
SAMPLE: HSL-B STANDARD 08/02/89
CONDS.: 120 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB1200802 #1
CALI: HSB1200802 #2

SCANS 1060 TO 1420



000355

Quantitation Report File: HSB1200802

Data: HSB1200802.TI
08/02/89 5:11:00
Sample: HSL-B STANDARD 08/02/89
Conds.: 120 NG INJECTION
Formula: Instrument: 5100 Weight: 0.001
Submitted by: GC INC Analyst: DMM Acct. No.: HSB12008

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

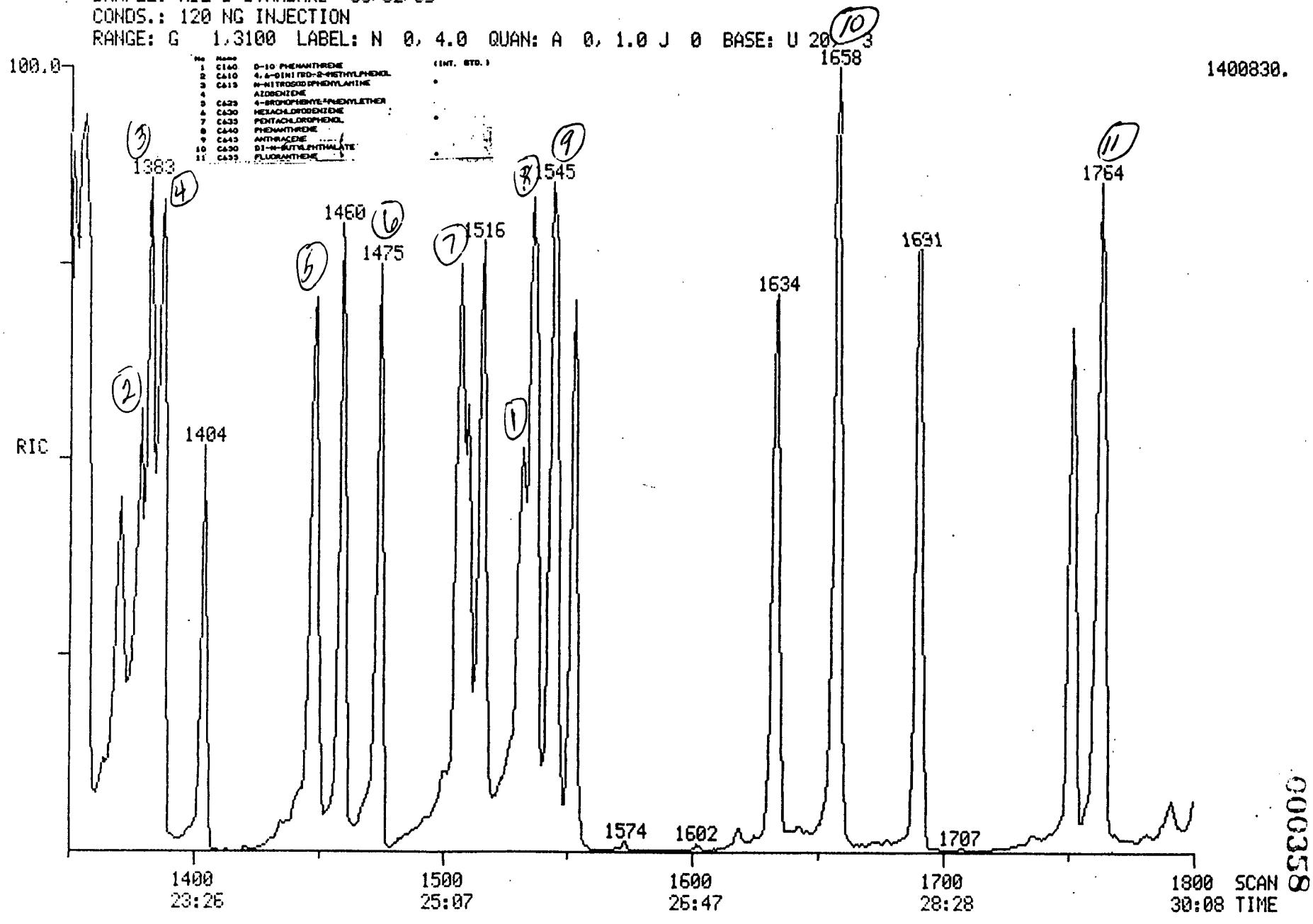
No	Name		
1	CI50	D-8 ACENAPHTHENE	(INT. STD.)
2	C510	HEXACHLOROCYCLOPENTADIENE	**
3	C515	2,4,6-TRICHLOROPHENOL	*
4	C520	2,4,5-TRICHLOROPHENOL	
5	C525	2-CHLORONAPHTHALENE	
6	C530	2-NITROANILINE	
7	C535	DIMETHYLPHTHALATE	
8	C540	ACENAPHTHYLENE	
9	C545	3-NITROANILINE	
10	C550	ACENAPHTHENE	*
11	C555	2,4-DINITROPHENOL	**
12	C560	4-NITROPHENOL	
13	C565	DIBENZOFURAN	
14	C570	2,4-DINITROTOLUENE	
15	C543	2,6-DINITROTOLUENE	
16	C580	DIETHYLPHTHALATE	
17	C585	4-CHLOROPHENYL-PHENYLETHER	
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	1253	20:59	1	1.000	A BB	477184.	40.000	NG	1.64
2	237	1097	18:22	1	0.875	A BB	456832.	120.000	NG	4.92
3	196	1113	18:36	1	0.888	A BV	667952.	120.000	NG	4.92
4	196	1120	18:45	1	0.894	A VB	411272.	120.000	NG	4.92
5	162	1145	19:10	1	0.914	A BB	1542270.	120.000	NG	4.92
6	65	1173	19:38	1	0.936	A BB	722480.	120.000	NG	4.92
7	163	1217	20:23	1	0.971	A BB	1778050.	120.000	NG	4.92
8	152	1224	20:30	1	0.977	A BB	2263570.	120.000	NG	4.92
9	138	1253	20:59	1	1.000	A BB	355196.	120.000	NG	4.92
10	153	1260	21:08	1	1.006	A BB	1462550.	120.000	NG	4.92
11	184	1271	21:17	1	1.014	A VB	167257.	120.000	NG	4.92
12	109	1288	21:34	1	1.028	A VB	170738.	120.000	NG	4.92
13	168	1290	21:36	1	1.030	A BB	2175150.	120.000	NG	4.92
14	89	1301	21:47	1	1.038	A VB	385856.	120.000	NG	4.92
15	165	1228	20:34	1	0.980	A VB	355424.	120.000	NG	4.92
16	149	1352	22:38	1	1.079	A VB	1525530.	120.000	NG	4.92
17	204	1357	22:43	1	1.083	A VB	585504.	120.000	NG	4.92
18	166	1355	22:41	1	1.081	A VB	1000230.	120.000	NG	4.92
19	138	1371	22:57	1	1.094	A VB	329242.	120.000	NG	4.92
20	172	1129	18:54	1	0.901	A BB	1585690.	120.000	NG	4.92
21	330	1404	23:30	1	1.121	A BB	227851.	120.000	NG	4.92

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	20:59	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	18:22	1.00	0.875	1.00	120.00	120.00	0.319	0.319	1.00
3	18:38	1.00	0.888	1.00	120.00	120.00	0.467	0.467	1.00
4	18:45	1.00	0.894	1.00	120.00	120.00	0.287	0.287	1.00
5	19:10	1.00	0.914	1.00	120.00	120.00	1.077	1.077	1.00
6	19:38	1.00	0.936	1.00	120.00	120.00	0.505	0.505	1.00
7	20:23	1.00	0.971	1.00	120.00	120.00	1.242	1.242	1.00
8	20:30	1.00	0.977	1.00	120.00	120.00	1.581	1.581	1.00
9	20:59	1.00	1.000	1.00	120.00	120.00	0.248	0.248	1.00
10	21:06	1.00	1.006	1.00	120.00	120.00	1.022	1.022	1.00
11	21:17	1.00	1.014	1.00	120.00	120.00	0.117	0.117	1.00
12	21:34	1.00	1.028	1.00	120.00	120.00	0.119	0.119	1.00
13	21:36	1.00	1.030	1.00	120.00	120.00	1.519	1.519	1.00
14	21:47	1.00	1.038	1.00	120.00	120.00	0.270	0.270	1.00
15	20:34	1.00	0.980	1.00	120.00	120.00	0.248	0.248	1.00
16	22:38	1.00	1.079	1.00	120.00	120.00	1.066	1.066	1.00
17	22:43	1.00	1.083	1.00	120.00	120.00	0.409	0.409	1.00
18	22:41	1.00	1.081	1.00	120.00	120.00	0.699	0.699	1.00
19	22:57	1.00	1.094	1.00	120.00	120.00	0.230	0.230	1.00
20	18:54	1.00	0.901	1.00	120.00	120.00	1.108	1.108	1.00
21	23:30	1.00	1.121	1.00	120.00	120.00	0.159	0.159	1.00

MIDRIC
08/02/89 5:11:00
SAMPLE: HSL-B STANDARD 08/02/89
CONDS.: 120 NG INJECTION
RANGE: G 1.3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20 3

DATA: HSB1200802 #1 SCANS 1350 TO 1800
CALI: HSB1200802 #2



000358

Quantitation Report File: HSB1200802

000353

Data: HSB1200802.TI
08/02/89 5:11:00
Sample: HSL-B STANDARD 08/02/89
Conds.: 120 NG INJECTION
Formula: Instrument: 5100 Weight: 0.001
Submitted by: QC INC. Analyst: DMM Acct. No.: HSB12008

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

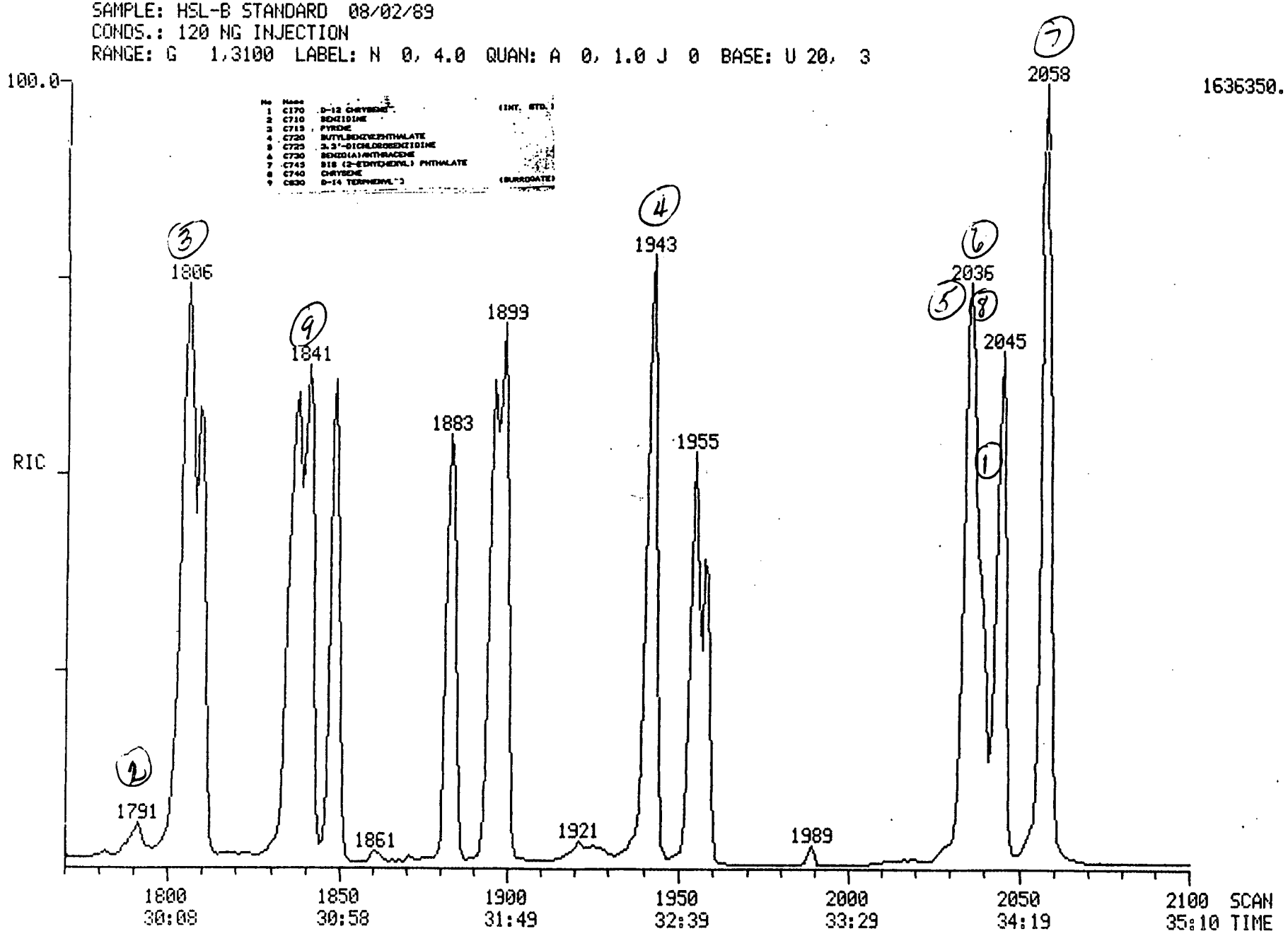
No	Name		
1	CI60	D-10 PHENANTHRENE	(INT. STD.)
2	C610	4,6-DINITRO-2-METHYLPHENOL	
3	C615	N-NITROSODIPHENYLAMINE	*
4		AZOBENZENE	
5	C625	4-BROMOPHENYL-PHENYLETHER	
6	C630	HEXACHLOROBENZENE	
7	C635	PENTACHLOROPHENOL	*
8	C640	PHENANTHRENE	
9	C645	ANTHRACENE	
10	C650	DI-N-BUTYLPHTHALATE	
11	C655	FLUORANTHENE	*

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	188	1532	25:39	1	1.000	A BB	839828.	40.000	NG	3.23
2	198	1379	23:05	1	0.900	A VB	231068.	120.000	NG	9.68
3	169	1383	23:09	1	0.903	A VB	829699.	120.000	NG	9.68
4	77	1388	23:14	1	0.906	A BB	2237110.	120.000	NG	9.68
5	248	1448	24:15	1	0.945	A VB	448419.	120.000	NG	9.68
6	284	1475	24:42	1	0.963	A BB	542808.	120.000	NG	9.68
7	266	1510	25:17	1	0.986	A VB	278484.	120.000	NG	9.68
8	178	1537	25:44	1	1.003	A BV	2314010.	120.000	NG	9.68
9	178	1545	25:52	1	1.008	A VB	1854590.	120.000	NG	9.68
10	149	1658	27:46	1	1.082	A VB	2734760.	120.000	NG	9.68
11	202	1764	29:32	1	1.151	A BB	2016900.	120.000	NG	9.68

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	25:39	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	23:05	1.00	0.900	1.00	120.00	120.00	0.092	0.092	1.00
3	23:09	1.00	0.903	1.00	120.00	120.00	0.329	0.329	1.00
4	23:14	1.00	0.906	1.00	120.00	120.00	0.888	0.888	1.00
5	24:15	1.00	0.945	1.00	120.00	120.00	0.178	0.178	1.00
6	24:42	1.00	0.963	1.00	120.00	120.00	0.215	0.215	1.00
7	25:17	1.00	0.986	1.00	120.00	120.00	0.111	0.111	1.00
8	25:44	1.00	1.003	1.00	120.00	120.00	0.918	0.918	1.00
9	25:52	1.00	1.008	1.00	120.00	120.00	0.736	0.736	1.00
10	27:46	1.00	1.082	1.00	120.00	120.00	1.085	1.085	1.00
11	29:32	1.00	1.151	1.00	120.00	120.00	0.801	0.801	1.00

MIDRIC
08/02/89 5:11:00
SAMPLE: HSL-B STANDARD 08/02/89
CONDS.: 120 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB1200802 #1 SCANS 1770 TO 2100
CALI: HSB1200802 #2



000360

Quantitation Report File: HSB1200802

Data: HSB1200802.TI
08/02/89 5:11:00
Sample: HSL-B STANDARD 08/02/89
Conds.: 120 NG INJECTION
Formula: Instrument: 5100 Weight: 0.001
Submitted by: QC INC Analyst: DMM Acct. No.: HSB12008

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

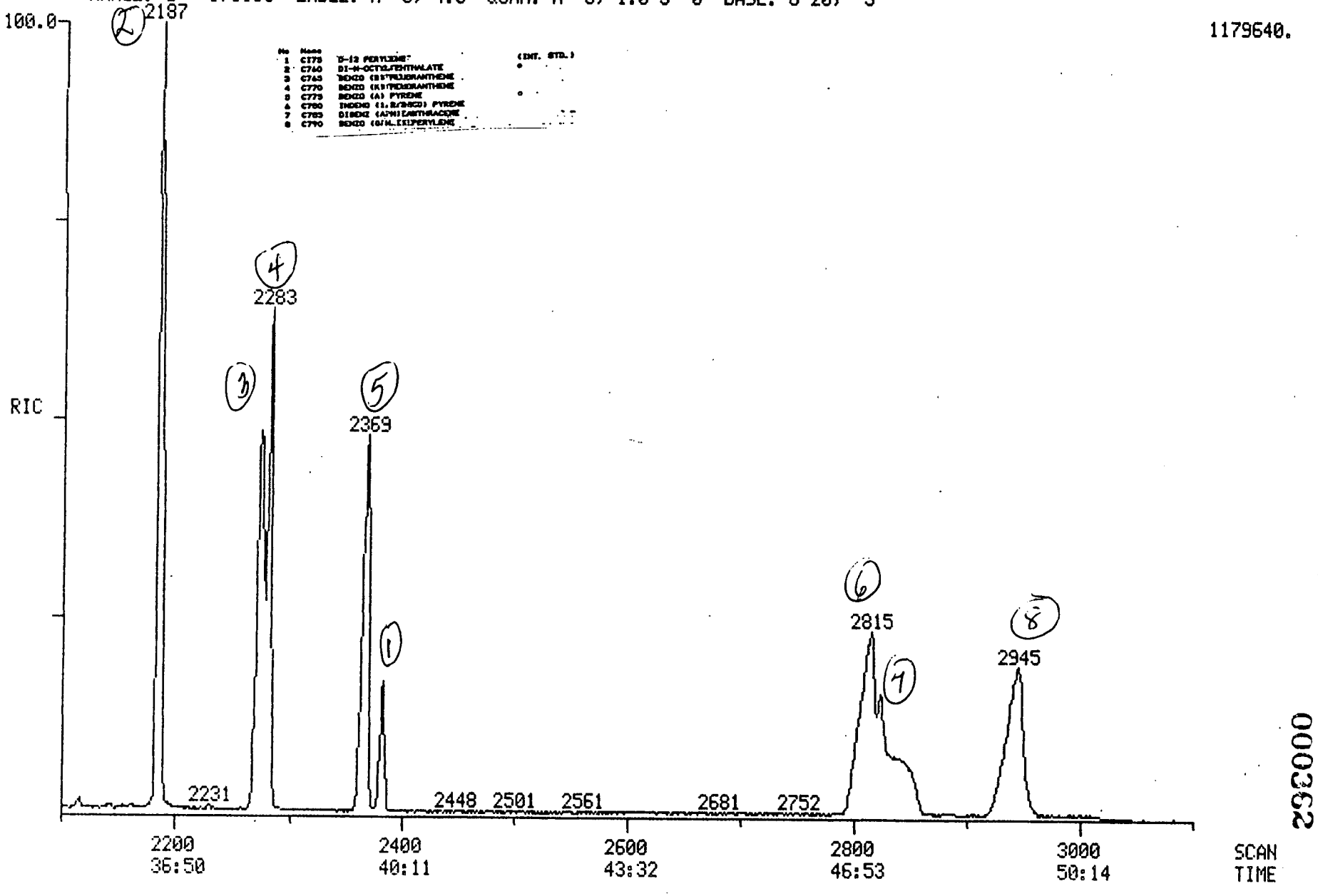
No	Name		
1	CI70	D-12 CHRYSENE	(INT. STD.)
2	C710	BENZIDINE	
3	C715	PYRENE	
4	C720	BUTYLBENZYLPHTHALATE	
5	C725	3,3'-DICHLOROBENZIDINE	
6	C730	BENZO(A)ANTHRACENE	
7	C745	BIS (2-ETHYLHEXYL) PHTHALATE	
8	C740	CHRYSENE	
9	CS30	D-14 TERPHENYL	(SURROGATE)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	240	2039	34:08	1	1.000	A BB	476105.	40.000	NG	4.00
2	184	1792	30:00	1	0.879	A BB	96086.	120.000	NG	12.00
3	202	1806	30:14	1	0.886	A BB	2008910.	120.000	NG	12.00
4	149	1943	32:32	1	0.953	A VB	1044230.	120.000	NG	12.00
5	252	2035	34:04	1	0.998	A BB	323624.	120.000	NG	12.00
6	228	2037	34:06	1	0.999	A BV	1392110.	120.000	NG	12.00
7	149	2058	34:27	1	1.009	A VB	1513130.	120.000	NG	12.00
8	228	2037	34:08	1	0.999	A BV	1392110.	120.000	NG	12.00
9	244	1841	30:49	1	0.903	A BV	1339870.	120.000	NG	12.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	34:08	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	30:00	1.00	0.879	1.00	120.00	120.00	0.067	0.067	1.00
3	30:14	1.00	0.886	1.00	120.00	120.00	1.406	1.406	1.00
4	32:32	1.00	0.953	1.00	120.00	120.00	0.731	0.731	1.00
5	34:04	1.00	0.998	1.00	120.00	120.00	0.227	0.227	1.00
6	34:06	1.00	0.999	1.00	120.00	120.00	0.975	0.975	1.00
7	34:27	1.00	1.009	1.00	120.00	120.00	1.059	1.059	1.00
8	34:06	1.00	0.999	1.00	120.00	120.00	0.975	0.975	1.00
9	30:49	1.00	0.903	1.00	120.00	120.00	0.938	0.938	1.00

MIDRIC
08/02/89 5:11:00
SAMPLE: HSL-B STANDARD 08/02/89
CONDS.: 120 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB1200802 #1 SCANS 2100 TO 3100
CALI: HSB1200802 #2



293000

Quantitation Report File: HSB1200802

Data: HSB1200802.TI
08/02/89 5:11:00
Sample: HSL-B STANDARD 08/02/89
Conds.: 120 NG INJECTION
Formula: Instrument: 5100 Weight: 0.001
Submitted by: QC INC Analyst: DMM Acct. No.: HSB12008

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

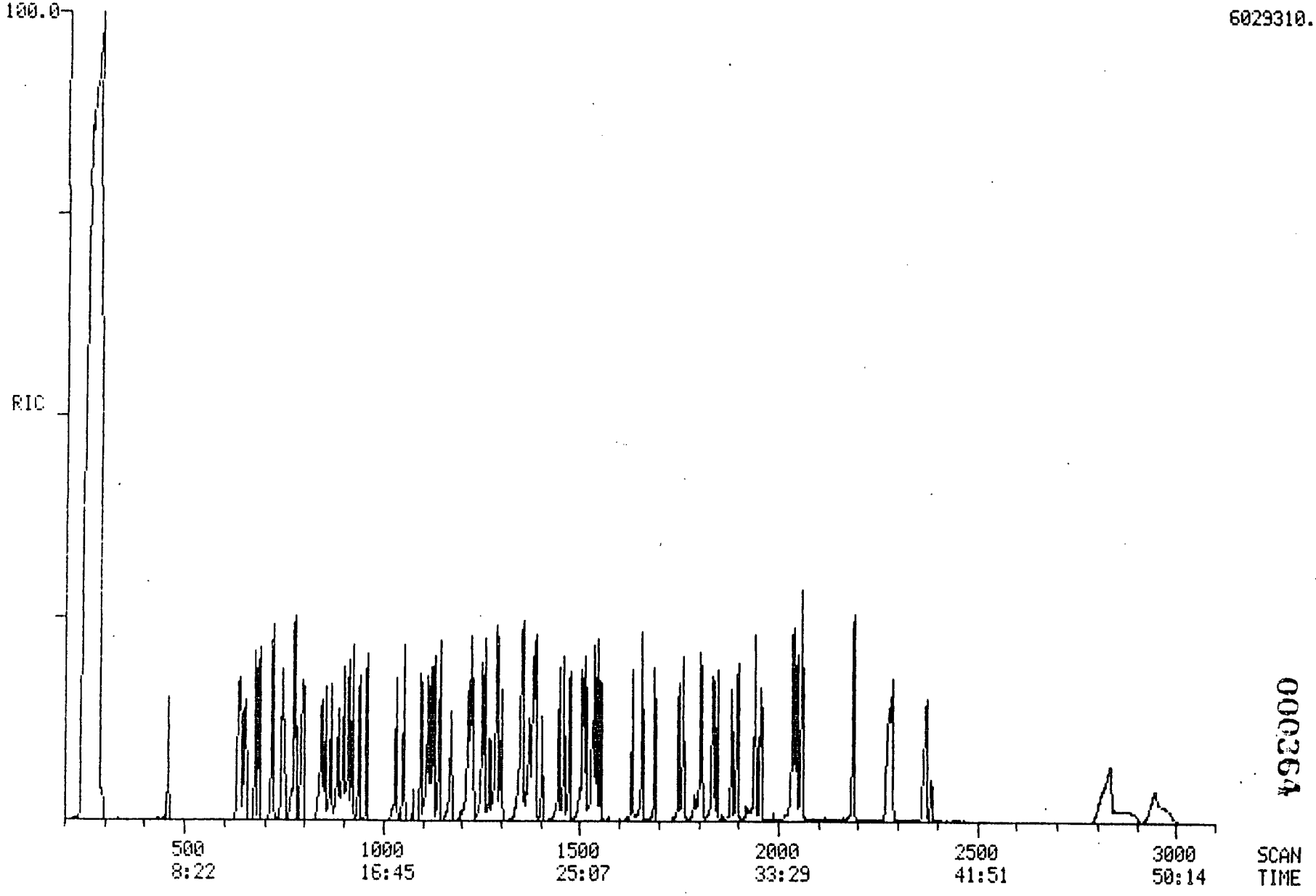
No	Name		
1	CI75	D-12 PERYLENE	(INT. STD.)
2	C760	DI-N-OCTYL PHTHALATE	*
3	C765	BENZO (B) FLUORANTHENE	
4	C770	BENZO (K) FLUORANTHENE	
5	C775	BENZO (A) PYRENE	*
6	C780	INDENO (1,2,3-CD) PYRENE	
7	C785	DIBENZ (A,H) ANTHRACENE	
8	C790	BENZO (G,H,I) PERYLENE	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	264	2382	39:53	1	1.000	A BB	332544.	40.000	NG	4.55
2	149	2187	36:37	1	0.918	A BB	2326460.	120.000	NG	13.64
3	252	2274	38:04	1	0.955	A BV	1570120.	120.000	NG	13.64
4	252	2283	38:13	1	0.958	A VB	1230640.	120.000	NG	13.64
5	252	2369	39:40	1	0.995	A BV	1401440.	120.000	NG	13.64
6	276	2815	47:08	1	1.182	A BB	1238110.	120.000	NG	13.64
7	278	2823	47:16	1	1.185	A BB	530248.	120.000	NG	13.64
8	276	2943	49:16	1	1.236	A BB	996544.	120.000	NG	13.64

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	39:53	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	36:37	1.00	0.918	1.00	120.00	120.00	2.332	2.332	1.00
3	38:04	1.00	0.955	1.00	120.00	120.00	1.574	1.574	1.00
4	38:13	1.00	0.958	1.00	120.00	120.00	1.234	1.234	1.00
5	39:40	1.00	0.995	1.00	120.00	120.00	1.405	1.405	1.00
6	47:08	1.00	1.182	1.00	120.00	120.00	1.241	1.241	1.00
7	47:16	1.00	1.185	1.00	120.00	120.00	0.532	0.532	1.00
8	49:16	1.00	1.236	1.00	120.00	120.00	0.999	0.999	1.00

MIDRIC
08/02/89 6:32:00
SAMPLE: HSL-B STANDARD 08/02/89
CONDS.: 160 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB1600802 #1 SCANS 200 TO 3100
CALI: HSB1600802 #2

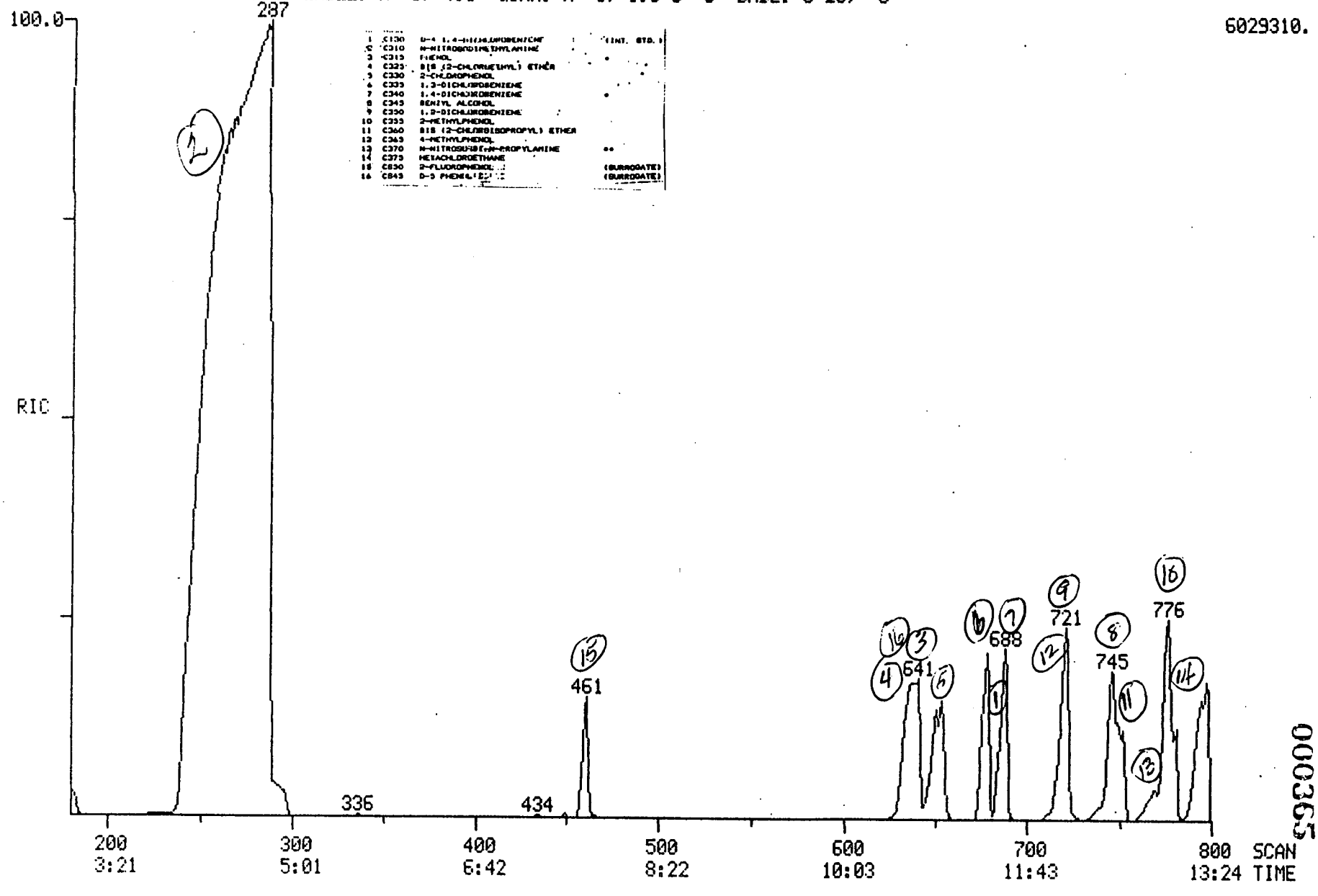


000264

MIDRIC
08/02/89 6:32:00
SAMPLE: HSL-B STANDARD 08/02/89
CONDS.: 160 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB1600802 #1 SCANS 180 TO 800
CALI: HSB1600802 #2

6029310.



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-NITROSODI-N-PROPYLAMINE	**
14	C375	HEXACHLOROETHANE	
15	C850	2-FLUOROPHENOL	(SURROGATE)
16	C845	D-5 PHENOL	(SURROGATE)

000365

Quantitation Report File: HSB1600802

Data: HSB1600802.TI
08/02/89 6:32:00
Sample: HSL-B STANDARD 08/02/89
Conds.: 160 NG INJECTION
Formula: Instrument: 5100 Weight: 0.001
Submitted by: QC INC Analyst: DMM Acct. No.: HSB16008

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

No	Name		
1	CI30	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	CS50	2-FLUOROPHENOL	(SURROGATE)
16	CS45	D-5 PHENOL	(SURROGATE)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	152	684	11:27	1	1.000	A BB	186912.	40.000	NG	1.64
2	74	246	4:07	1	0.360	A BV	342976.	160.000	NG	6.56
3	94	641	10:44	1	0.937	A BV	1016480.	160.000	NG	6.56
4	93	635	10:38	1	0.928	A BV	1181530.	160.000	NG	6.56
5	128	654	10:57	1	0.956	A BB	997536.	160.000	NG	6.56
6	146	678	11:21	1	0.991	A BV	1151260.	160.000	NG	6.56
7	146	688	11:31	1	1.006	A VB	1128760.	160.000	NG	6.56
8	108	745	12:28	1	1.089	A BB	744351.	160.000	NG	6.56
9	146	722	12:05	1	1.056	A BB	997376.	160.000	NG	6.56
10	108	775	12:59	1	1.133	A VB	483072.	160.000	NG	6.56
11	45	748	12:31	1	1.094	A BB	1473080.	160.000	NG	6.56
12	108	719	12:02	1	1.051	A BB	477638.	160.000	NG	6.56
13	70	771	12:54	1	1.127	A BV	245492.	160.000	NG	6.56
14	117	777	13:01	1	1.136	A BB	419680.	160.000	NG	6.56
15	112	461	7:48	1	0.674	A BB	832660.	160.000	NG	6.56
16	99	639	10:42	1	0.934	A BB	897116.	160.000	NG	6.56

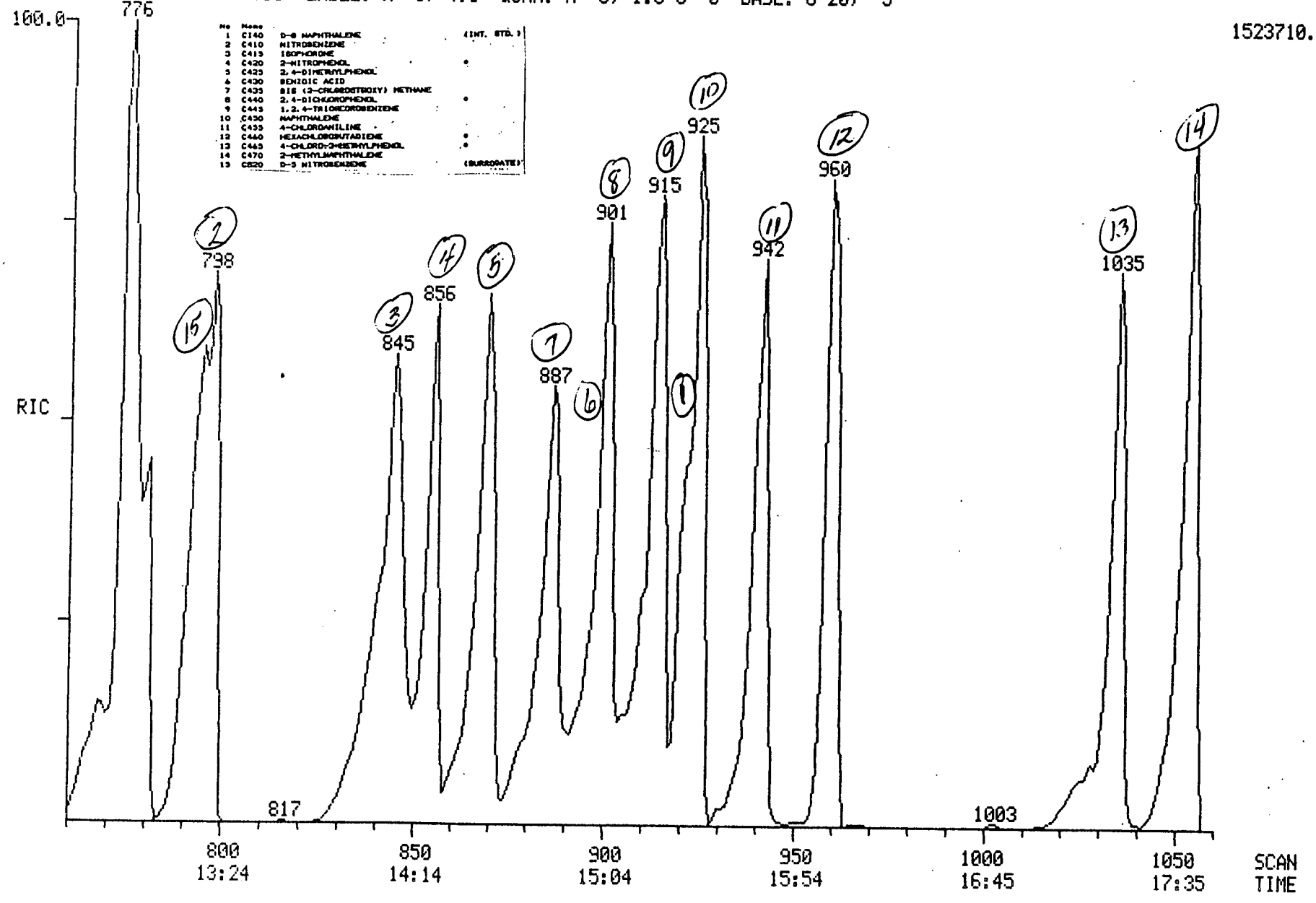
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	11:27	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	4:07	1.00	0.360	1.00	160.00	160.00	0.459	0.459	1.00
3	10:44	1.00	0.937	1.00	160.00	160.00	1.360	1.360	1.00
4	10:38	1.00	0.928	1.00	160.00	160.00	1.580	1.580	1.00
5	10:57	1.00	0.956	1.00	160.00	160.00	1.334	1.334	1.00
6	11:21	1.00	0.991	1.00	160.00	160.00	1.540	1.540	1.00
7	11:31	1.00	1.006	1.00	160.00	160.00	1.510	1.510	1.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
8	12:28	1.00	1.089	1.00	160.00	160.00	0.996	0.996	1.00
9	12:05	1.00	1.056	1.00	160.00	160.00	1.334	1.334	1.00
10	12:59	1.00	1.133	1.00	160.00	160.00	0.646	0.646	1.00
11	12:31	1.00	1.094	1.00	160.00	160.00	1.970	1.970	1.00
12	12:02	1.00	1.051	1.00	160.00	160.00	0.639	0.639	1.00
13	12:54	1.00	1.127	1.00	160.00	160.00	0.328	0.328	1.00
14	13:01	1.00	1.136	1.00	160.00	160.00	0.561	0.561	1.00
15	7:43	1.00	0.674	1.00	160.00	160.00	1.114	1.114	1.00
16	10:42	1.00	0.934	1.00	160.00	160.00	1.200	1.200	1.00

MIDRIC
08/02/89 6:32:00
SAMPLE: HSL-B STANDARD 08/02/89
CONDS.: 160 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB1600802 #1
CALI: HSB1600802 #2

SCANS 760 TO 1060



No	Name		
1	C140	D-8 NAPHTHALENE	(INT. STD.)
2	C410	NITROBENZENE	
3	C413	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)

000368

Quantitation Report File: HSB1600802

Data: HSB1600802.TI
08/02/89 6:32:00
Sample: HSL-B STANDARD 08/02/89
Conds.: 160 NG INJECTION
Formula: Instrument: 5100 Weight: 0.001
Submitted by: QC INC Analyst: DMM Acct. No.: HSB16008

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

No	Name		
1	CI40	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	CS20	D-5 NITROBENZENE	(SURROGATE)

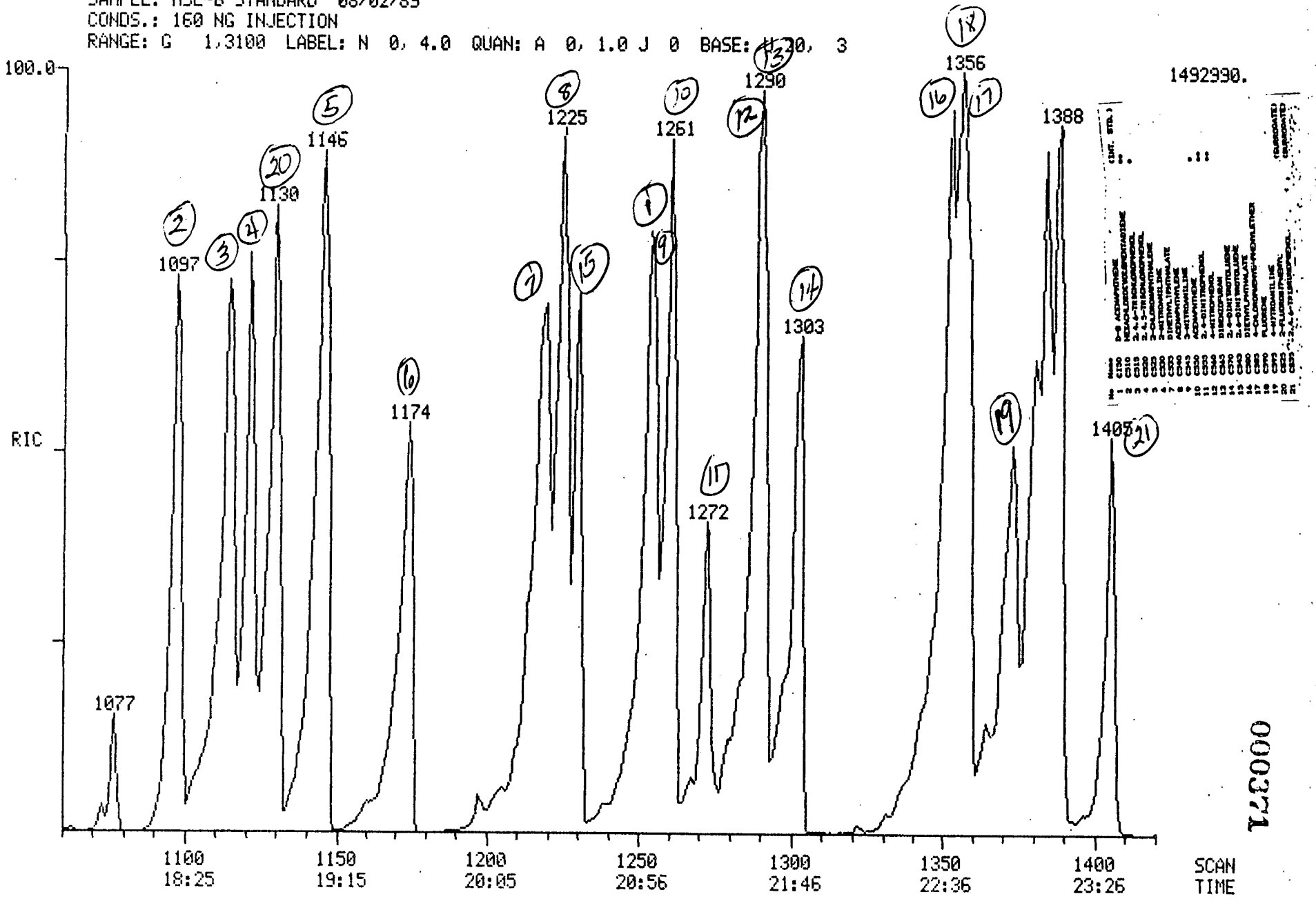
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	136	921	15:25	1	1.000	A BB	784768.	40.000	NG	1.75
2	77	798	13:22	1	0.866	A BB	1272730.	160.000	NG	7.02
3	82	845	14:09	1	0.917	A BB	2933550.	160.000	NG	7.02
4	139	856	14:20	1	0.929	A BB	642723.	160.000	NG	7.02
5	122	870	14:34	1	0.945	A VB	809902.	160.000	NG	7.02
6	122	898	15:02	1	0.975	A VV	122672.	160.000	NG	7.02
7	93	887	14:51	1	0.963	A BB	1385110.	160.000	NG	7.02
8	162	901	15:05	1	0.978	A BB	959172.	160.000	NG	7.02
9	180	915	15:19	1	0.993	A BB	1078810.	160.000	NG	7.02
10	128	925	15:29	1	1.004	A BB	2227070.	160.000	NG	7.02
11	127	942	15:46	1	1.023	A BB	1276100.	160.000	NG	7.02
12	225	960	16:04	1	1.042	A BB	559744.	160.000	NG	7.02
13	107	1035	17:20	1	1.124	A BB	1057440.	160.000	NG	7.02
14	142	1055	17:40	1	1.145	A BB	1610220.	160.000	NG	7.02
15	82	794	13:18	1	0.862	A BB	1200380.	160.000	NG	7.02

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	15:25	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	13:22	1.00	0.866	1.00	160.00	160.00	0.405	0.405	1.00
3	14:09	1.00	0.917	1.00	160.00	160.00	0.935	0.935	1.00
4	14:20	1.00	0.929	1.00	160.00	160.00	0.205	0.205	1.00
5	14:34	1.00	0.945	1.00	160.00	160.00	0.258	0.258	1.00
6	15:02	1.00	0.975	1.00	160.00	160.00	0.039	0.039	1.00
7	14:51	1.00	0.963	1.00	160.00	160.00	0.441	0.441	1.00
8	15:05	1.00	0.978	1.00	160.00	160.00	0.306	0.306	1.00
9	15:19	1.00	0.993	1.00	160.00	160.00	0.344	0.344	1.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
10	15:29	1.00	1.004	1.00	160.00	160.00	0.709	0.709	1.00
11	15:46	1.00	1.023	1.00	160.00	160.00	0.407	0.407	1.00
12	16:04	1.00	1.042	1.00	160.00	160.00	0.178	0.178	1.00
13	17:20	1.00	1.124	1.00	160.00	160.00	0.337	0.337	1.00
14	17:40	1.00	1.145	1.00	160.00	160.00	0.513	0.513	1.00
15	13:18	1.00	0.862	1.00	160.00	160.00	0.382	0.382	1.00

MIDRIC
08/02/89 6:32:00
SAMPLE: HSL-B STANDARD 08/02/89
CONDS.: 160 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: H 20, 3

DATA: HSB1600802 #1 SCANS 1060 TO 1420
CALI: HSB1600802 #2



000371

Quantitation Report File: HSB1600802

000372

Data: HSB1600802.TI
08/02/89 6:32:00
Sample: HSL-B STANDARD 08/02/89
Conds.: 160 NG INJECTION
Formula: Instrument: 5100 Weight: 0.001
Submitted by: QC INC. Analyst: DMM Acct. No.: HSB16008

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

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	C543	2,6-DINITROTOLUENE	
16	C580	DIETHYLPHTHALATE	
17	C585	4-CHLOROPHENYL-PHENYLETHER	
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	1253	20:59	1	1.000	A BB	438086.	40.000	NG	1.23
2	237	1097	18:22	1	0.875	A BB	735168.	160.000	NG	4.94
3	196	1114	18:39	1	0.889	A BV	930976.	160.000	NG	4.94
4	196	1121	18:46	1	0.895	A VB	522236.	160.000	NG	4.94
5	162	1146	19:11	1	0.915	A BB	2345870.	160.000	NG	4.94
6	65	1174	19:39	1	0.937	A BB	878110.	160.000	NG	4.94
7	163	1218	20:24	1	0.972	A BB	2309640.	160.000	NG	4.94
8	152	1225	20:31	1	0.978	A BB	2717910.	160.000	NG	4.94
9	138	1254	21:00	1	1.001	A VB	471079.	160.000	NG	4.94
10	153	1261	21:07	1	1.006	A BB	1794230.	160.000	NG	4.94
11	184	1272	21:18	1	1.015	A VB	305993.	160.000	NG	4.94
12	109	1289	21:35	1	1.029	A VB	209291.	160.000	NG	4.94
13	168	1291	21:37	1	1.030	A BB	2567930.	160.000	NG	4.94
14	89	1303	21:49	1	1.040	A VB	571824.	160.000	NG	4.94
15	165	1230	20:36	1	0.982	A VB	623728.	160.000	NG	4.94
16	149	1352	22:38	1	1.079	A VB	1912510.	160.000	NG	4.94
17	204	1358	22:44	1	1.084	A VB	723504.	160.000	NG	4.94
18	166	1356	22:42	1	1.082	A BB	1473610.	160.000	NG	4.94
19	138	1373	22:59	1	1.096	A VB	349328.	160.000	NG	4.94
20	172	1130	18:55	1	0.902	A BB	1927580.	160.000	NG	4.94
21	330	1405	23:31	1	1.121	A BB	310099.	160.000	NG	4.94

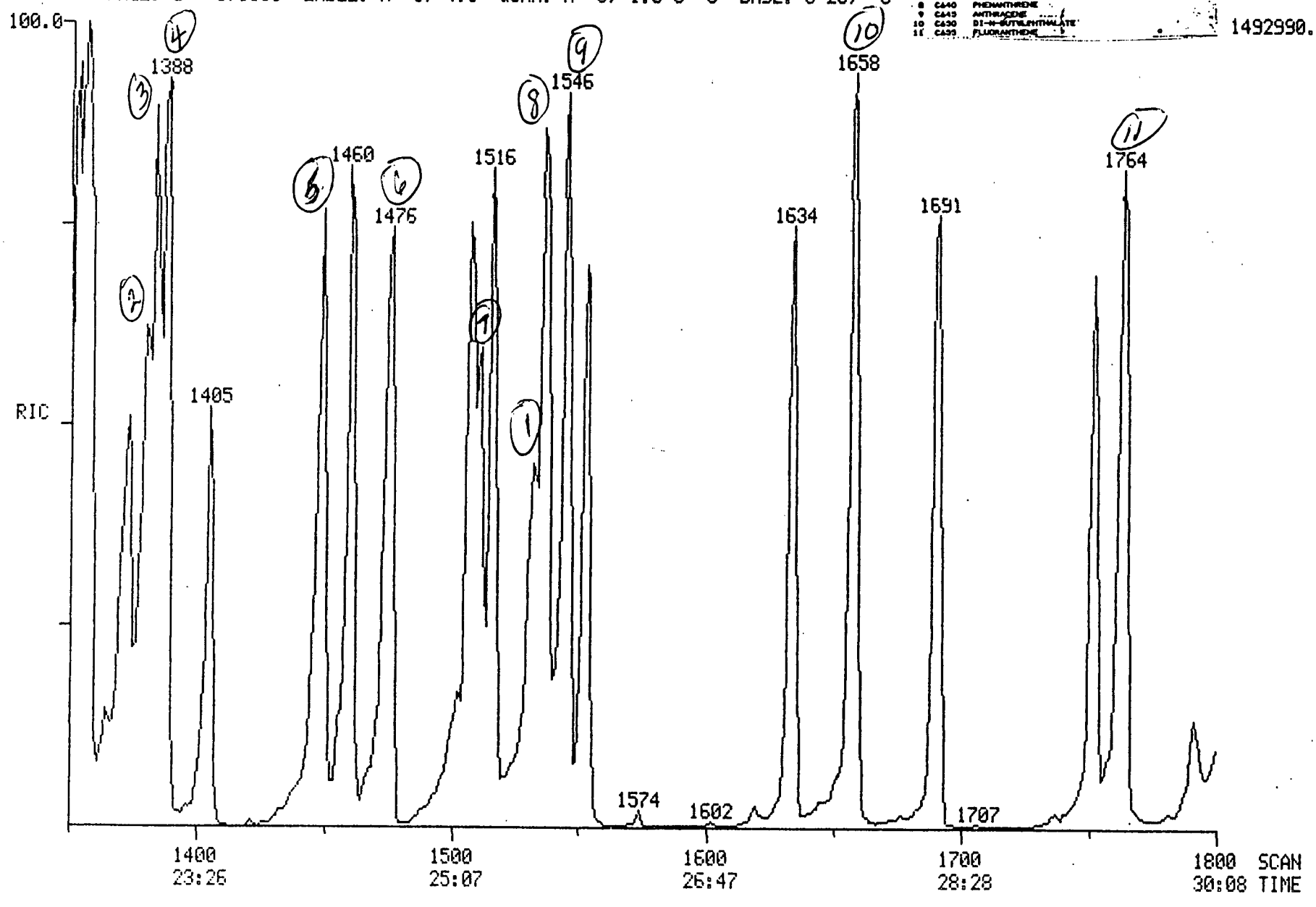
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	20:59	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	18:22	1.00	0.875	1.00	160.00	160.00	0.420	0.420	1.00
3	18:39	1.00	0.889	1.00	160.00	160.00	0.531	0.531	1.00
4	18:46	1.00	0.895	1.00	160.00	160.00	0.298	0.298	1.00
5	19:11	1.00	0.915	1.00	160.00	160.00	1.339	1.339	1.00
6	19:39	1.00	0.937	1.00	160.00	160.00	0.501	0.501	1.00
7	20:24	1.00	0.972	1.00	160.00	160.00	1.318	1.318	1.00
8	20:31	1.00	0.978	1.00	160.00	160.00	1.551	1.551	1.00
9	21:00	1.00	1.001	1.00	160.00	160.00	0.269	0.269	1.00
10	21:07	1.00	1.006	1.00	160.00	160.00	1.024	1.024	1.00
11	21:18	1.00	1.015	1.00	160.00	160.00	0.175	0.175	1.00
12	21:35	1.00	1.029	1.00	160.00	160.00	0.119	0.119	1.00
13	21:37	1.00	1.030	1.00	160.00	160.00	1.465	1.465	1.00
14	21:49	1.00	1.040	1.00	160.00	160.00	0.326	0.326	1.00
15	20:36	1.00	0.982	1.00	160.00	160.00	0.356	0.356	1.00
16	22:38	1.00	1.079	1.00	160.00	160.00	1.091	1.091	1.00
17	22:44	1.00	1.084	1.00	160.00	160.00	0.413	0.413	1.00
18	22:42	1.00	1.082	1.00	160.00	160.00	0.841	0.841	1.00
19	22:59	1.00	1.096	1.00	160.00	160.00	0.199	0.199	1.00
20	18:55	1.00	0.902	1.00	160.00	160.00	1.100	1.100	1.00
21	23:31	1.00	1.121	1.00	160.00	160.00	0.177	0.177	1.00

MIDRIC
08/02/89 6:32:00
SAMPLE: HSL-B STANDARD 08/02/89
CONDS.: 160 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB1600802 #1
CALI: HSB1600802 #2

SCANS 1350 TO 1800

No	Name	
1	C160	D-10 PHENANTHRENE (INT. STD.)
2	C610	4,6-DINITRO-2-METHYLPHENOL
3	C619	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



000374

Quantitation Report (File) HSB1600802

Data: HSB1600802.TI
08/02/89 6:32:00
Sample: HSL-B STANDARD 08/02/89
Conds.: 160 NG INJECTION
Formula: Instrument: 5100 Weight: 0.001
Submitted by: QC INC Analyst: DMM Acct. No.: HSB16008

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

No	Name		
1	CI60	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	*

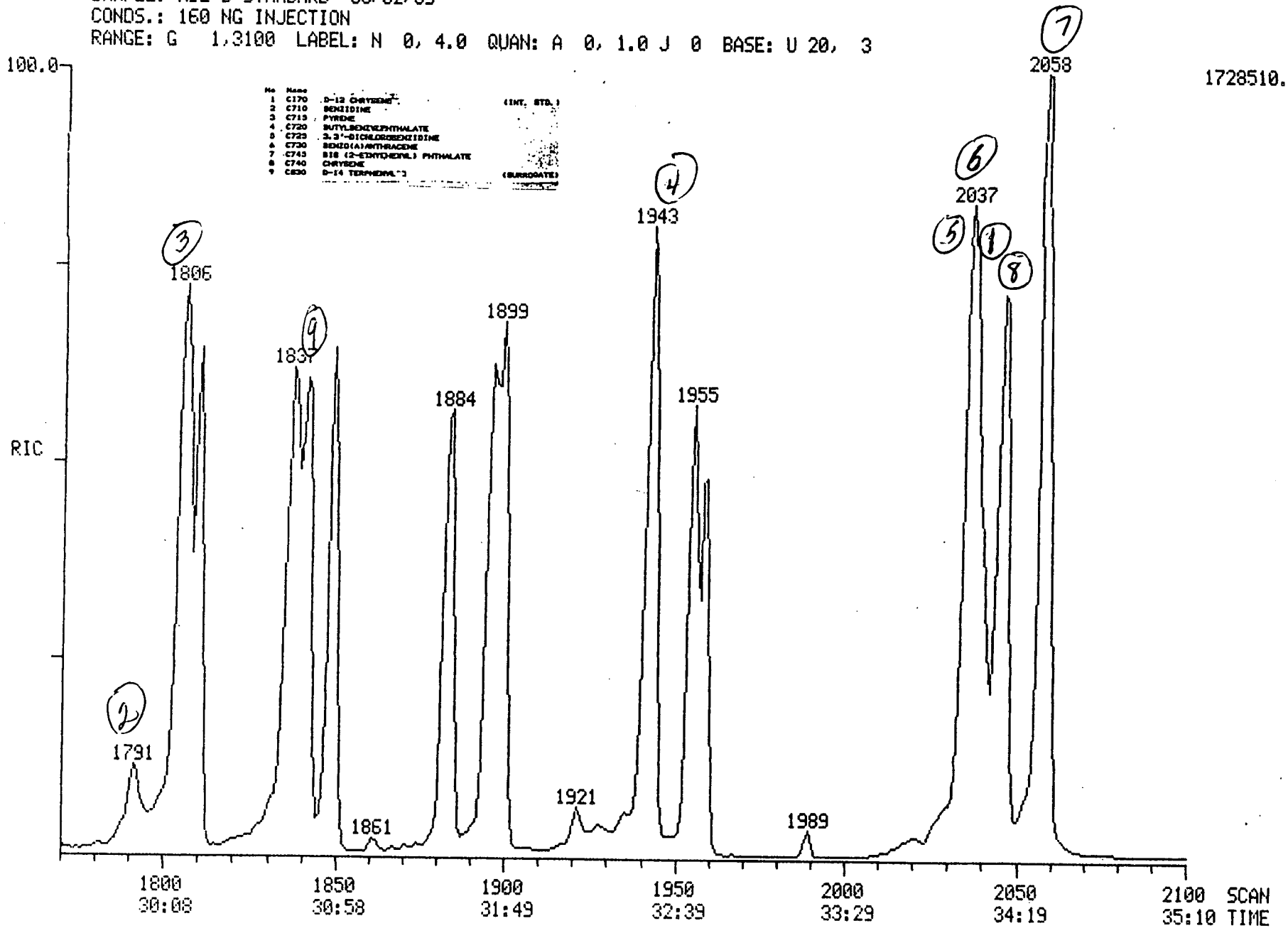
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	188	1532	25:39	1	1.000	A BB	748886.	40.000	NG	2.44
2	198	1380	23:06	1	0.901	A VB	264742.	160.000	NG	9.76
3	169	1384	23:10	1	0.903	A VB	1177280.	160.000	NG	9.76
4	77	1389	23:15	1	0.907	A BB	2811790.	160.000	NG	9.76
5	248	1449	24:16	1	0.946	A BB	581650.	160.000	NG	9.76
6	284	1476	24:43	1	0.963	A BB	818508.	160.000	NG	9.76
7	266	1510	25:17	1	0.986	A BB	371596.	160.000	NG	9.76
8	178	1537	25:44	1	1.003	A BV	2353790.	160.000	NG	9.76
9	178	1546	25:53	1	1.009	A VB	2085660.	160.000	NG	9.76
10	149	1658	27:46	1	1.082	A BB	3244940.	160.000	NG	9.76
11	202	1764	29:32	1	1.151	A VB	2329580.	160.000	NG	9.76

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	25:39	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	23:06	1.00	0.901	1.00	160.00	160.00	0.088	0.088	1.00
3	23:10	1.00	0.903	1.00	160.00	160.00	0.393	0.393	1.00
4	23:15	1.00	0.907	1.00	160.00	160.00	0.939	0.939	1.00
5	24:16	1.00	0.946	1.00	160.00	160.00	0.194	0.194	1.00
6	24:43	1.00	0.963	1.00	160.00	160.00	0.273	0.273	1.00
7	25:17	1.00	0.986	1.00	160.00	160.00	0.124	0.124	1.00
8	25:44	1.00	1.003	1.00	160.00	160.00	0.786	0.786	1.00
9	25:53	1.00	1.009	1.00	160.00	160.00	0.696	0.696	1.00
10	27:46	1.00	1.082	1.00	160.00	160.00	1.083	1.083	1.00
11	29:32	1.00	1.151	1.00	160.00	160.00	0.778	0.778	1.00

MIDRIC
08/02/89 6:32:00
SAMPLE: HSL-B STANDARD 08/02/89
CONDS.: 160 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB1600802 #1
CALI: HSB1600802 #2

SCANS 1770 TO 2100



000376

Quantitation Report File: HSB1600802

Data: HSB1600802.TI
08/02/89 6:32:00
Sample: HSL-B STANDARD 08/02/89
Conds.: 160 NG INJECTION
Formula: Instrument: 5100 Weight: 0.001
Submitted by: QC INC Analyst: DMM Acct. No.: HSB16008

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

No	Name		
1	CI70	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	CS30	D-14 TERPHENYL	(SURROGATE)

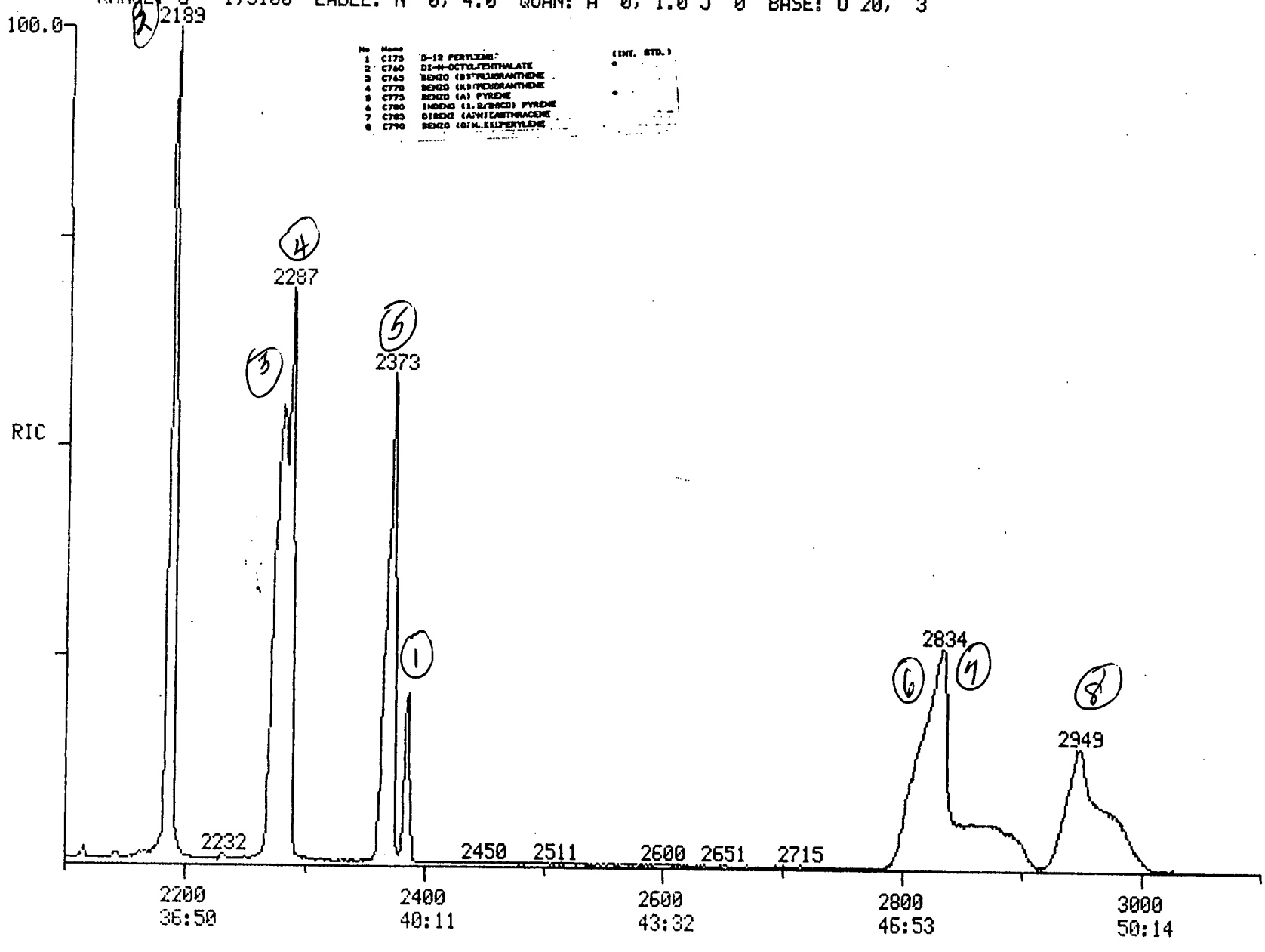
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	240	2040	34:09	1	1.000	A VB	489233.	40.000	NG	3.03
2	184	1791	29:59	1	0.878	A VB	246218.	160.000	NG	12.12
3	202	1806	30:14	1	0.885	A BV	2280620.	160.000	NG	12.12
4	149	1943	32:32	1	0.952	A VB	1289770.	160.000	NG	12.12
5	252	2037	34:06	1	0.999	A VB	516991.	160.000	NG	12.12
6	228	2038	34:07	1	0.999	A BV	1890460.	160.000	NG	12.12
7	149	2058	34:27	1	1.009	A BB	2098410.	160.000	NG	12.12
8	228	2046	34:15	1	1.003	A VB	1784270.	160.000	NG	12.12
9	244	1841	30:49	1	0.902	A BV	1599940.	160.000	NG	12.12

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	34:09	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	29:59	1.00	0.878	1.00	160.00	160.00	0.126	0.126	1.00
3	30:14	1.00	0.885	1.00	160.00	160.00	1.165	1.165	1.00
4	32:32	1.00	0.952	1.00	160.00	160.00	0.659	0.659	1.00
5	34:06	1.00	0.999	1.00	160.00	160.00	0.264	0.264	1.00
6	34:07	1.00	0.999	1.00	160.00	160.00	0.966	0.966	1.00
7	34:27	1.00	1.009	1.00	160.00	160.00	1.072	1.072	1.00
8	34:15	1.00	1.003	1.00	160.00	160.00	0.912	0.912	1.00
9	30:49	1.00	0.902	1.00	160.00	160.00	0.818	0.818	1.00

MIDRIC
08/02/89 6:32:00
SAMPLE: HSL-B STANDARD 08/02/89
CONDS.: 160 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB1600802 #1
CALI: HSB1600802 #2

SCANS 2100 TO 3100



1546230.

000378

Quantitation Report File: HSB1600802

Data: HSB1600802.TI
08/02/89 6:32:00
Sample: HSL-B STANDARD 08/02/89
Conds.: 160 NG INJECTION
Formula: Instrument: 5100 Weight: 0.001
Submitted by: QC INC Analyst: DMM Acct. No.: HSB16008

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

No	Name		
1	CI75	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	

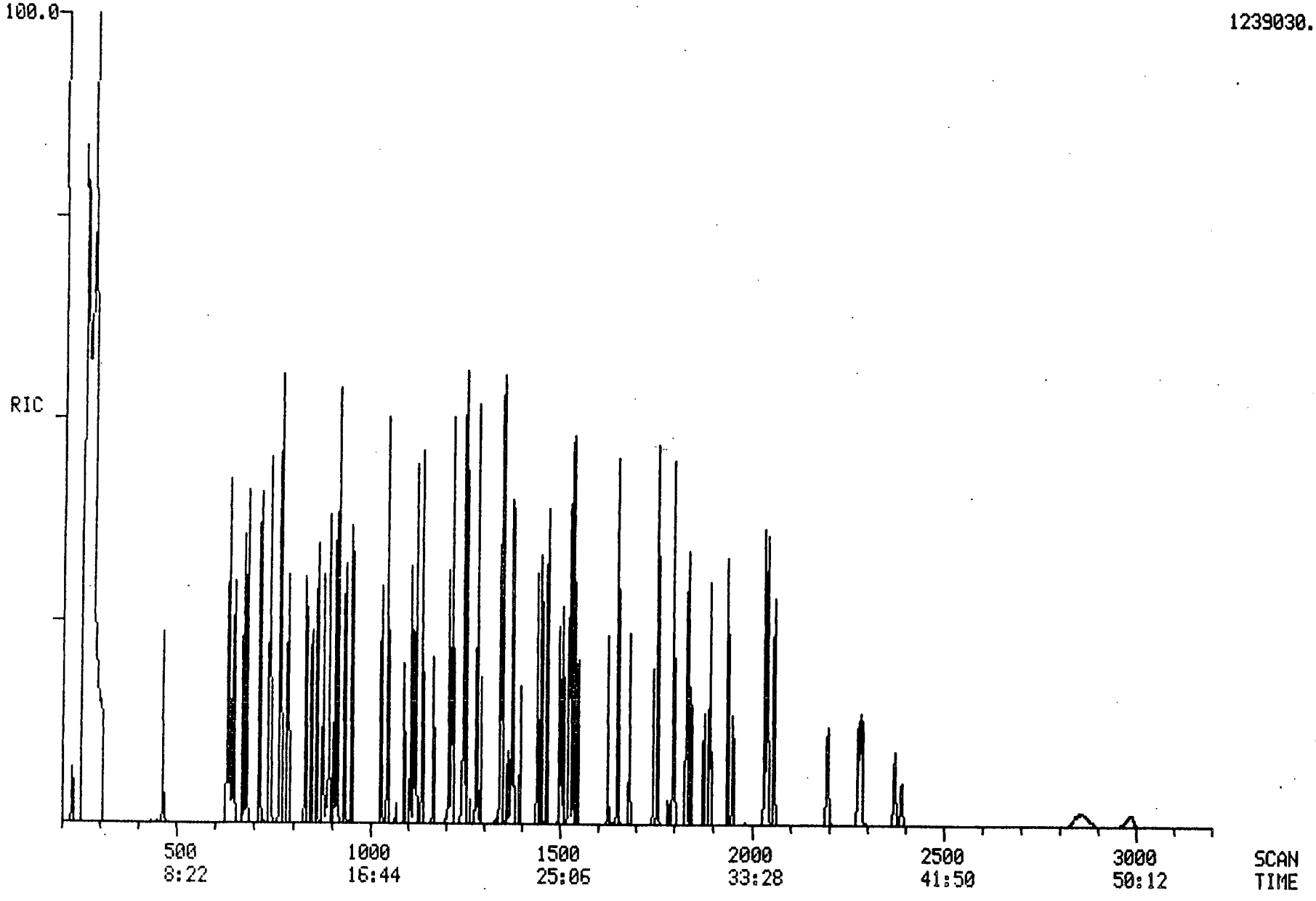
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	264	2386	39:57	1	1.000	A BB	525423.	40.000	NG	3.45
2	149	2189	36:39	1	0.917	A BB	3859180.	160.000	NG	13.79
3	252	2279	38:09	1	0.955	A BV	3227480.	160.000	NG	13.79
4	252	2287	38:17	1	0.959	A VB	1776310.	160.000	NG	13.79
5	252	2373	39:44	1	0.995	A BB	2678520.	160.000	NG	13.79
6	276	2832	47:25	1	1.187	A*BB	2504590.	160.000	NG	13.79
7	278	2837	47:30	1	1.189	A*BB	1275070.	160.000	NG	13.79
8	276	2948	49:21	1	1.236	A*BB	1012910.	160.000	NG	13.79

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	39:57	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	36:39	1.00	0.917	1.00	160.00	160.00	1.836	1.836	1.00
3	38:09	1.00	0.955	1.00	160.00	160.00	1.536	1.536	1.00
4	38:17	1.00	0.959	1.00	160.00	160.00	0.845	0.845	1.00
5	39:44	1.00	0.995	1.00	160.00	160.00	1.274	1.274	1.00
6	47:25	1.00	1.187	1.00	160.00	160.00	1.192	1.192	1.00
7	47:30	1.00	1.189	1.00	160.00	160.00	0.607	0.607	1.00
8	49:21	1.00	1.236	1.00	160.00	160.00	0.482	0.482	1.00

MIDRIC
08/25/89 10:50:00
SAMPLE: HSL-B STANDARD 8/25/89
CONDS.: 50NG INJECTION
RANGE: G 1,3200 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB500825 #1
CALI: HSB500825 #2

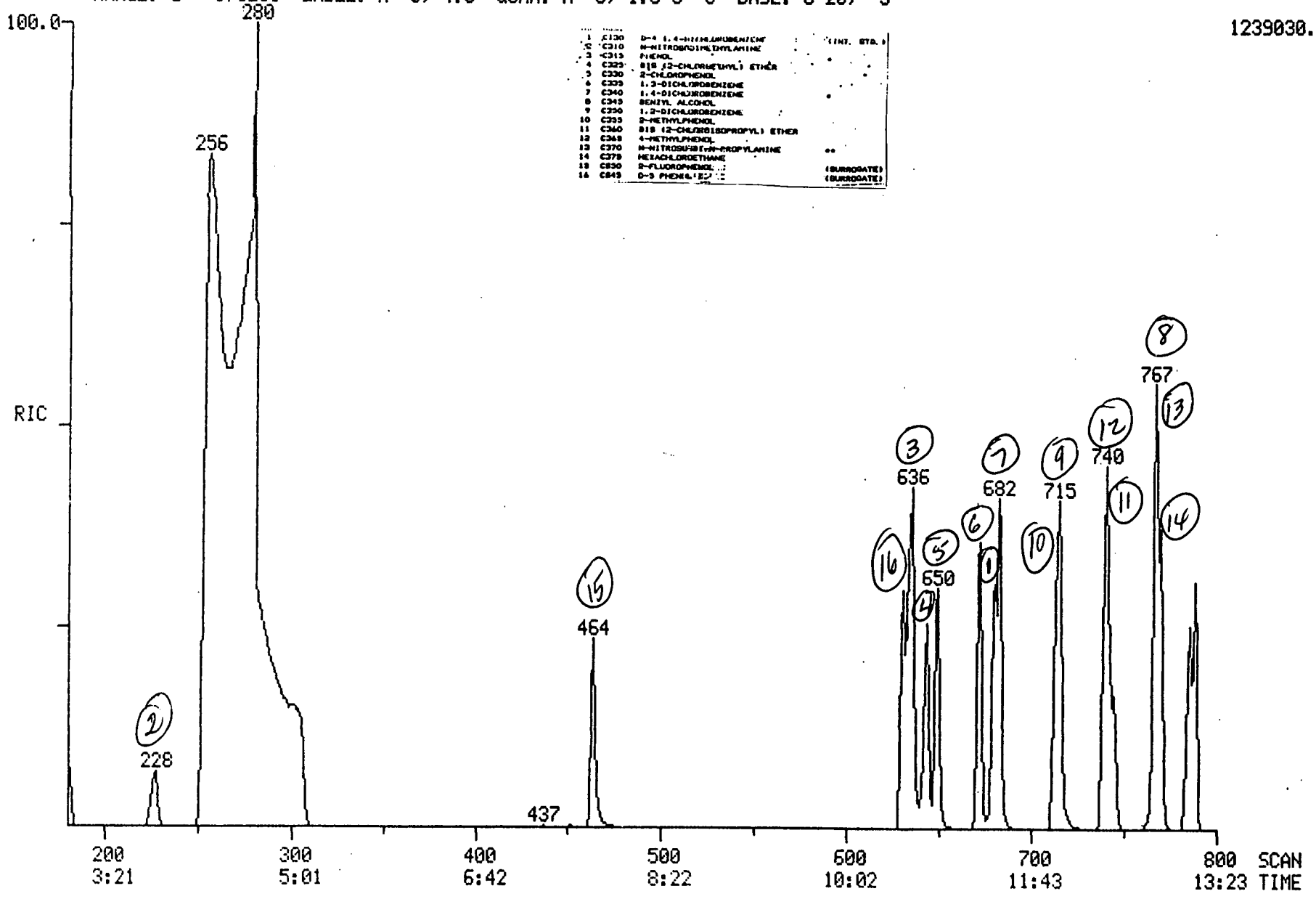
SCANS 200 TO 3200



000380

MIDRIC
08/25/89 10:50:00
SAMPLE: HSL-B STANDARD 8/25/89
CONDS.: 50NG INJECTION
RANGE: G 1,3200 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB500825 #1 SCANS 180 TO 800
CALI: HSB500825 #2



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	C830	2-FLUOROPHENOL	(SURROGATE)
16	C845	D-5 PHENOL (2)	(SURROGATE)

000381

Quantitation Report [illegible] HSB500825

Data: HSB500825.TI
08/25/89 10:50:00
Sample: HSL-B STANDARD 8/25/89
Conds.: 50NG INJECTION
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: QC INC [illegible] Analyst: DDD Acct. No.: HSB50082

AMOUNT=AREA * REF AM[illegible] (REF [illegible] AREA * RESP FACT)
R sp. fac. from Library Entry

No	Name		
1	CI30	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	CS50	2-FLUOROPHENOL [illegible]	(SURROGATE)
16	CS45	D-5 PHENOL [illegible]	(SURROGATE)

No	m/z	Scan	Time Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	152	679	11:22 [illegible]	1.000	A BB	206624.	40.000	NG	5.06
2	74	228	3:49 [illegible]	0.336	A BB	171072.	50.000	NG	6.33
3	94	636	10:39 [illegible]	0.937	A BB	460288.	50.000	NG	6.33
4	93	644	10:47 [illegible]	0.948	A VB	378143.	50.000	NG	6.33
5	128	650	10:53 [illegible]	0.957	A BB	342368.	50.000	NG	6.33
6	146	672	11:15 [illegible]	0.990	A BV	381910.	50.000	NG	6.33
7	146	682	11:25 [illegible]	1.004	A VB	384622.	50.000	NG	6.33
8	108	767	12:50 [illegible]	1.130	A BB	288736.	50.000	NG	6.33
9	146	715	11:58 [illegible]	1.053	A BB	362208.	50.000	NG	6.33
10	108	713	11:56 [illegible]	1.050	A BB	184768.	50.000	NG	6.33
11	45	741	12:24 [illegible]	1.091	A BB	462976.	50.000	NG	6.33
12	108	740	12:23 [illegible]	1.090	A BB	291232.	50.000	NG	6.33
13	70	767	12:50 [illegible]	1.130	A BB	234912.	50.000	NG	6.33
14	117	770	12:53 [illegible]	1.134	A BB	149696.	50.000	NG	6.33
15	112	464	7:48 [illegible]	0.683	A BB	282177.	50.000	NG	6.33
16	99	634	10:37 [illegible]	0.934	A BB	385312.	50.000	NG	6.33

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	11:22	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	3:49	1.00	0.336	1.00	50.00	50.00	0.662	0.662	1.00
3	10:39	1.00	0.937	1.00	50.00	50.00	1.782	1.782	1.00
4	10:47	1.00	0.948	1.00	50.00	50.00	1.464	1.464	1.00
5	10:53	1.00	0.957	1.00	50.00	50.00	1.326	1.326	1.00
6	11:15	1.00	0.990	1.00	50.00	50.00	1.479	1.479	1.00
7	11:25	1.00	1.004	1.00	50.00	50.00	1.489	1.489	1.00

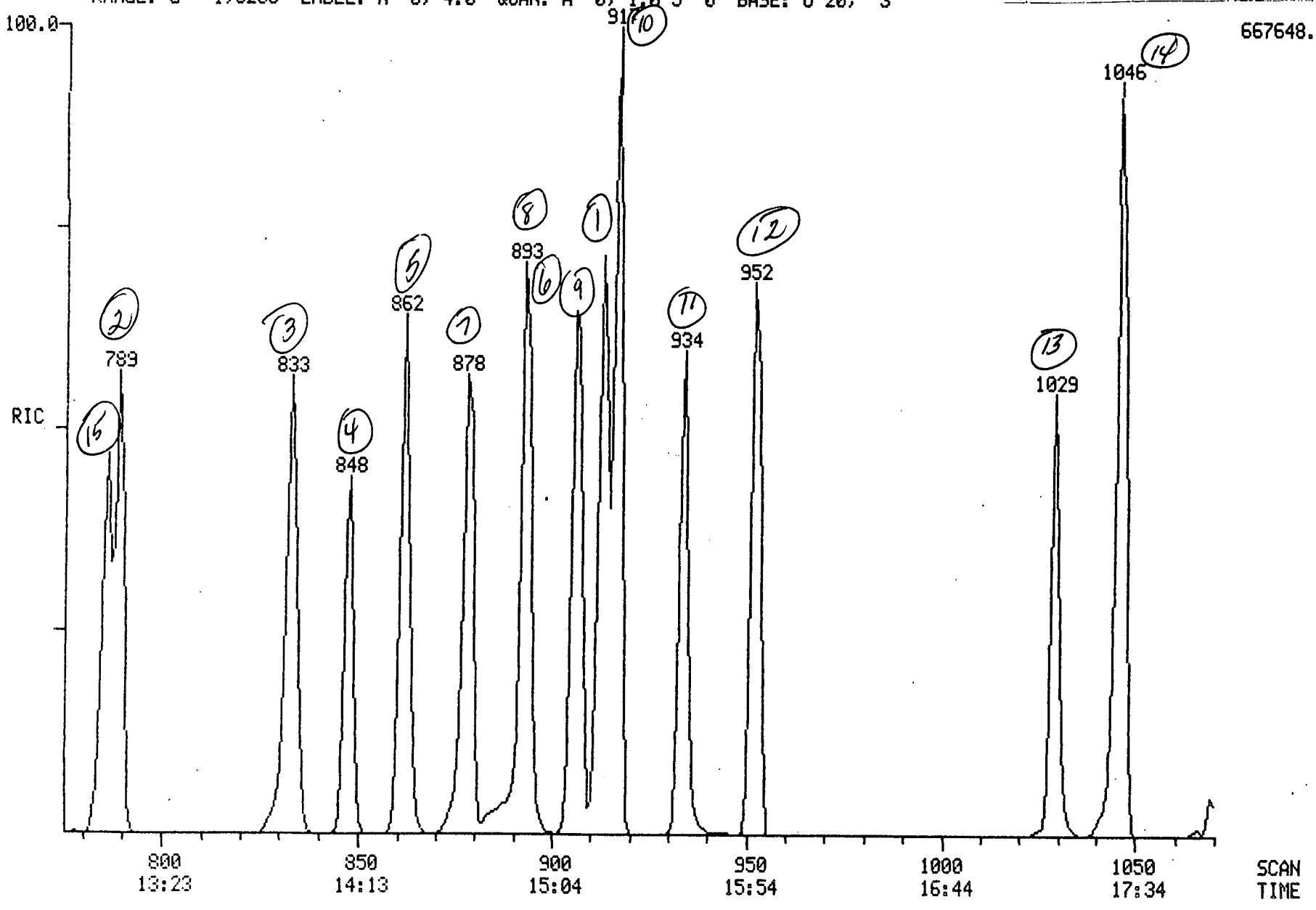
No	Ret(L)	Ratio	RRT(E)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
8	12:50	1.00	1.130	1.00	50.00	50.00	1.118	1.118	1.00
9	11:58	1.00	1.053	1.00	50.00	50.00	1.402	1.402	1.00
10	11:56	1.00	1.050	1.00	50.00	50.00	0.715	0.715	1.00
11	12:24	1.00	1.091	1.00	50.00	50.00	1.793	1.793	1.00
12	12:23	1.00	1.090	1.00	50.00	50.00	1.128	1.128	1.00
13	12:50	1.00	1.130	1.00	50.00	50.00	0.910	0.910	1.00
14	12:53	1.00	1.134	1.00	50.00	50.00	0.580	0.580	1.00
15	7:46	1.00	0.883	1.00	50.00	50.00	1.093	1.093	1.00
16	10:37	1.00	0.934	1.00	50.00	50.00	1.492	1.492	1.00

MIDRIC
08/25/89 10:50:00
SAMPLE: HSL-B STANDARD 8/25/89
CONDS.: 50NG INJECTION
RANGE: G 1,3200 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB500825 #1
CALI: HSB500825 #2

SCANS 775 TO 1070

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	C520	D-5 NITROBENZENE	(SURROGATE)



000384

Quantitation Report [illegible] HSB500825

Data: HSB500825.TI
08/25/89 10:50:00
Sample: HSL-B STANDARD 8/25/89
Conds.: 50NG INJECTION
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: GC INC [illegible] Analyst: DDD Acct. No.: HSB50082

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

No	Name		
1	CI40	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	CS20	D-5 NITROBENZENE	(SURROGATE)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	136	913	15:17	[illegible]	1.000	A BB	772032.	40.000	NG	5.41
2	77	789	13:12	[illegible]	0.864	A BB	331776.	50.000	NG	6.76
3	82	833	13:56	[illegible]	0.912	A BB	677952.	50.000	NG	6.76
4	139	848	14:11	[illegible]	0.929	A BB	184800.	50.000	NG	6.76
5	122	862	14:26	[illegible]	0.944	A BB	282464.	50.000	NG	6.76
6	122	894	14:58	[illegible]	0.979	A BB	115394.	50.000	NG	6.76
7	93	878	14:42	[illegible]	0.962	A BB	458336.	50.000	NG	6.76
8	162	893	14:57	[illegible]	0.978	A BB	298944.	50.000	NG	6.76
9	180	906	15:10	[illegible]	0.992	A BB	319648.	50.000	NG	6.76
10	128	917	15:21	[illegible]	1.004	A BB	886720.	50.000	NG	6.76
11	127	934	15:38	[illegible]	1.023	A BB	387328.	50.000	NG	6.76
12	225	952	15:56	[illegible]	1.043	A BB	179392.	50.000	NG	6.76
13	107	1029	17:13	[illegible]	1.127	A BB	251840.	50.000	NG	6.76
14	142	1046	17:30	[illegible]	1.146	A BB	608992.	50.000	NG	6.76
15	82	786	13:09	[illegible]	0.861	A BB	346720.	50.000	NG	6.76

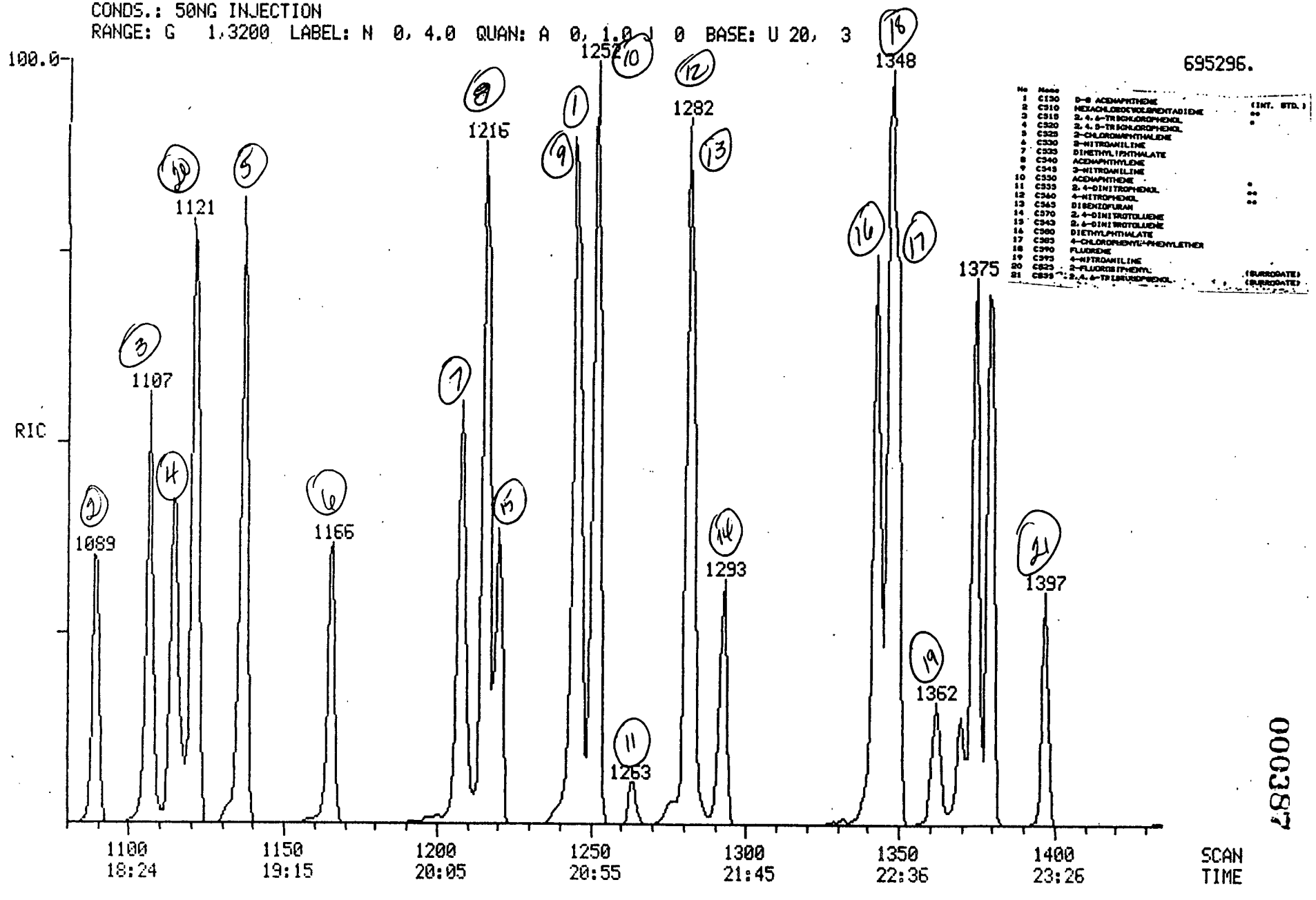
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	15:17	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	13:12	1.00	0.864	1.00	50.00	50.00	0.344	0.344	1.00
3	13:56	1.00	0.912	1.00	50.00	50.00	0.703	0.703	1.00
4	14:11	1.00	0.929	1.00	50.00	50.00	0.191	0.191	1.00
5	14:26	1.00	0.944	1.00	50.00	50.00	0.293	0.293	1.00
6	14:58	1.00	0.979	1.00	50.00	50.00	0.120	0.120	1.00
7	14:42	1.00	0.962	1.00	50.00	50.00	0.475	0.475	1.00
8	14:57	1.00	0.978	1.00	50.00	50.00	0.310	0.310	1.00
9	15:10	1.00	0.992	1.00	50.00	50.00	0.331	0.331	1.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
10	15:21	1.00	1.004	1.00	50.00	50.00	0.919	0.919	1.00
11	15:38	1.00	1.023	1.00	50.00	50.00	0.401	0.401	1.00
12	15:56	1.00	1.043	1.00	50.00	50.00	0.186	0.186	1.00
13	17:13	1.00	1.127	1.00	50.00	50.00	0.261	0.261	1.00
14	17:30	1.00	1.146	1.00	50.00	50.00	0.631	0.631	1.00
15	13:09	1.00	0.861	1.00	50.00	50.00	0.359	0.359	1.00

MIDRIC
08/25/89 10:50:00
SAMPLE: HSL-B STANDARD 8/25/89
CONDS.: 50NG INJECTION
RANGE: G 1.3200 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB500825 #1
CALI: HSB500825 #2

SCANS 1080 TO 1435



000387

Quantitation Report [illegible] HSB500825

Data: HSB500825.TI
08/25/89 10:50:00
Sample: HSL-B STANDARD 8/25/89
Conds.: 50NG INJECTION
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitt d by: QC INC[illegible] Analyst: DDD Acct. No.: HSB50082

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

No	Name		
1	CI50	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	C543	2,6-DINITROTOLUENE	
16	C580	DIETHYLPHTHALATE	
17	C585	4-CHLOROPHENYL-PHENYLETHER	
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	1246	20:51[illegible]	[illegible]	1.000	A BB	420000.	40.000	NG	3.85
2	237	1089	18:13[illegible]	[illegible]	0.874	A BB	139296.	50.000	NG	4.81
3	196	1107	18:32[illegible]	[illegible]	0.888	A BV	200540.	50.000	NG	4.81
4	196	1114	18:39[illegible]	[illegible]	0.894	A VB	204370.	50.000	NG	4.81
5	162	1137	19:02[illegible]	[illegible]	0.913	A BB	610144.	50.000	NG	4.81
6	65	1166	19:31[illegible]	[illegible]	0.936	A BB	152096.	50.000	NG	4.81
7	163	1208	20:13[illegible]	[illegible]	0.970	A BB	684096.	50.000	NG	4.81
8	152	1216	20:21[illegible]	[illegible]	0.976	A BB	972672.	50.000	NG	4.81
9	138	1245	20:50[illegible]	[illegible]	0.999	A BB	128288.	50.000	NG	4.81
10	153	1252	20:57[illegible]	[illegible]	1.005	A BB	567392.	50.000	NG	4.81
11	184	1263	21:08[illegible]	[illegible]	1.014	A BB	30080.	50.000	NG	4.81
12	139	1282	21:27[illegible]	[illegible]	1.029	A BB	131328.	50.000	NG	4.81
13	168	1282	21:27[illegible]	[illegible]	1.029	A BB	838432.	50.000	NG	4.81
14	89	1293	21:38[illegible]	[illegible]	1.038	A BB	100032.	50.000	NG	4.81
15	165	1220	20:25[illegible]	[illegible]	0.979	A VB	138592.	50.000	NG	4.81
16	149	1343	22:28[illegible]	[illegible]	1.078	A VB	652896.	50.000	NG	4.81
17	204	1350	22:36[illegible]	[illegible]	1.083	A BB	314752.	50.000	NG	4.81
18	166	1347	22:33[illegible]	[illegible]	1.081	A BB	622880.	50.000	NG	4.81
19	138	1362	22:48[illegible]	[illegible]	1.093	A BB	103654.	50.000	NG	4.81
20	172	1121	18:46[illegible]	[illegible]	0.900	A BB	644096.	50.000	NG	4.81
21	330	1397	23:23[illegible]	[illegible]	1.121	A BB	96736.	50.000	NG	4.81

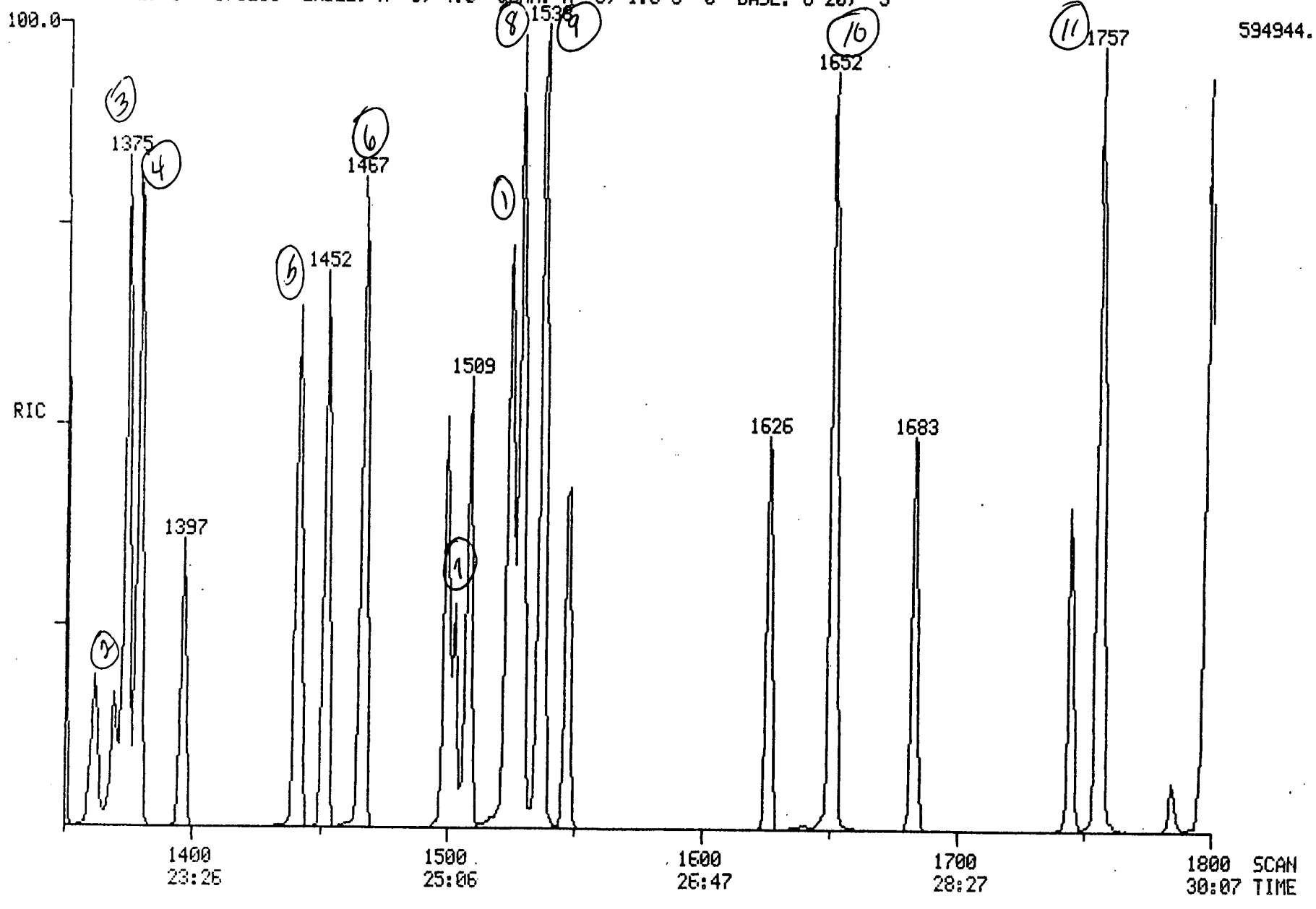
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	20:51	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	18:13	1.00	0.874	1.00	50.00	50.00	0.265	0.265	1.00
3	18:32	1.00	0.888	1.00	50.00	50.00	0.382	0.382	1.00
4	18:39	1.00	0.894	1.00	50.00	50.00	0.389	0.389	1.00
5	19:02	1.00	0.913	1.00	50.00	50.00	1.162	1.162	1.00
6	19:31	1.00	0.936	1.00	50.00	50.00	0.290	0.290	1.00
7	20:13	1.00	0.970	1.00	50.00	50.00	1.303	1.303	1.00
8	20:21	1.00	0.976	1.00	50.00	50.00	1.853	1.853	1.00
9	20:50	1.00	0.999	1.00	50.00	50.00	0.244	0.244	1.00
10	20:57	1.00	1.005	1.00	50.00	50.00	1.081	1.081	1.00
11	21:08	1.00	1.014	1.00	50.00	50.00	0.057	0.057	1.00
12	21:27	1.00	1.029	1.00	50.00	50.00	0.250	0.250	1.00
13	21:27	1.00	1.029	1.00	50.00	50.00	1.597	1.597	1.00
14	21:38	1.00	1.038	1.00	50.00	50.00	0.191	0.191	1.00
15	20:25	1.00	0.979	1.00	50.00	50.00	0.264	0.264	1.00
16	22:28	1.00	1.078	1.00	50.00	50.00	1.244	1.244	1.00
17	22:36	1.00	1.083	1.00	50.00	50.00	0.600	0.600	1.00
18	22:33	1.00	1.081	1.00	50.00	50.00	1.186	1.186	1.00
19	22:48	1.00	1.093	1.00	50.00	50.00	0.197	0.197	1.00
20	18:46	1.00	0.900	1.00	50.00	50.00	1.227	1.227	1.00
21	23:23	1.00	1.121	1.00	50.00	50.00	0.184	0.184	1.00

MIDRIC
08/25/89 10:50:00
SAMPLE: HSL-B STANDARD 8/25/89
CONDS.: 50NG INJECTION
RANGE: G 1,3200 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB500825 #1
CALI: HSB500825 #2

SCANS 1350 TO 1800

No	Name		(INT. STD.
1	C140	D-10 PHENANTHRENE	•
2	C410	4,6-DINITRO-2-METHYLPHENOL	
3	C418	N-NITROSODIPHENYLAMINE	
4		AZOBENZENE	
5	C428	4-BROMOPHENYL-PHENYLETHER	
6	C430	HEXACHLOROBENZENE	•
7	C438	PENTACHLOROPHENOL	
8	C440	PHENANTHRENE	
9	C448	ANTHRACENE	
10	C450	DI-N-BUTYLPHTHALATE	•
11	C458	FLUORANTHENE	



003090

Quantitation Report [illegible] HSB500825

Data: HSB500825.TI
08/25/89 10:50:00
Sample: HSL-B STANDARD 8/25/89
Conds.: 50NG INJECTION
F rmula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: QC INC[illegible] Analyst: DDD Acct. No.: HSB50082

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

No	Name		
1	CI60	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	*

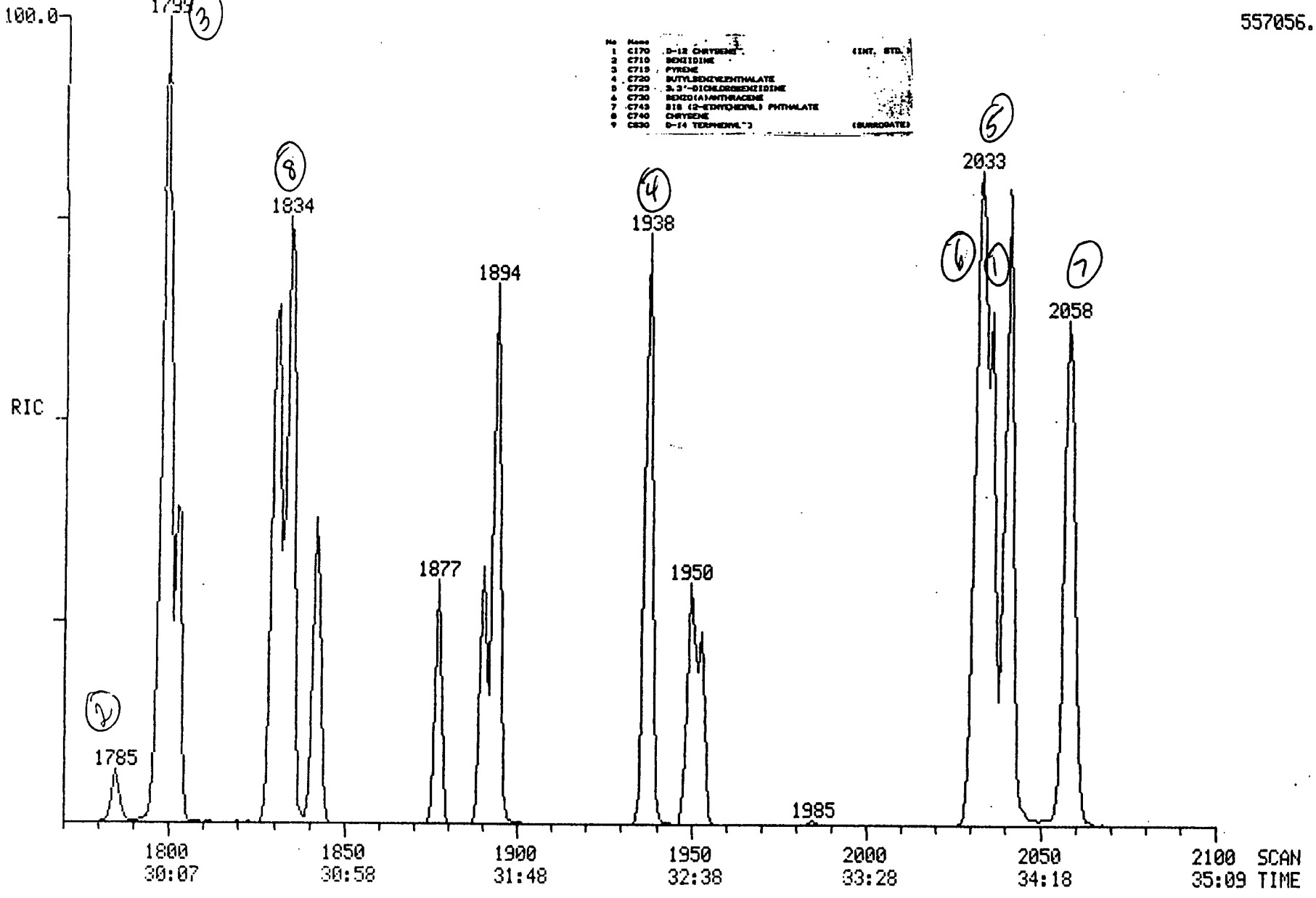
No	m/z	Scan	Time	RRT	Meth	Area(Hght)	Amount		%Tot
1	188	1524	25:30	1.000	A VV	642944.	40.000	NG	7.41
2	198	1369	22:55	0.898	A BB	50432.	50.000	NG	9.26
3	169	1375	23:01	0.902	A BB	409920.	50.000	NG	9.26
4	77	1379	23:05	0.905	A BB	685088.	50.000	NG	9.26
5	248	1441	24:07	0.946	A BB	174304.	50.000	NG	9.26
6	284	1467	24:33	0.963	A BB	248864.	50.000	NG	9.26
7	266	1503	25:09	0.986	A BB	74080.	50.000	NG	9.26
8	178	1529	25:35	1.003	A BV	827034.	50.000	NG	9.26
9	178	1537	25:43	1.009	A VB	822872.	50.000	NG	9.26
10	149	1652	27:39	1.084	A VB	1071550.	50.000	NG	9.26
11	202	1757	29:24	1.153	A VB	790157.	50.000	NG	9.26

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	25:30	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	22:55	1.00	0.898	1.00	50.00	50.00	0.063	0.063	1.00
3	23:01	1.00	0.902	1.00	50.00	50.00	0.510	0.510	1.00
4	23:05	1.00	0.905	1.00	50.00	50.00	0.852	0.852	1.00
5	24:07	1.00	0.946	1.00	50.00	50.00	0.217	0.217	1.00
6	24:33	1.00	0.963	1.00	50.00	50.00	0.310	0.310	1.00
7	25:09	1.00	0.986	1.00	50.00	50.00	0.092	0.092	1.00
8	25:35	1.00	1.003	1.00	50.00	50.00	1.029	1.029	1.00
9	25:43	1.00	1.009	1.00	50.00	50.00	1.024	1.024	1.00
10	27:39	1.00	1.084	1.00	50.00	50.00	1.333	1.333	1.00
11	29:24	1.00	1.153	1.00	50.00	50.00	0.983	0.983	1.00

MIDRIC
08/25/89 10:50:00
SAMPLE: HSL-B STANDARD 8/25/89
CONDS.: 50NG INJECTION
RANGE: G 1,3200 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB500825 #1
CALI: HSB500825 #2

SCANS 1770 TO 2100



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)

000392

Quantitation Report [illegible] HSB500825

Data: HSB500825.TI
08/25/89 10:50:00
Sample: HSL-B STANDARD 8/25/89
Conds.: 50NG INJECTION
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: GC INC [illegible] Analyst: DDD Acct. No.: HSB50082

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

N	Name		
1	CI70	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	CS30	D-14 TERPHENYL	(SURROGATE)

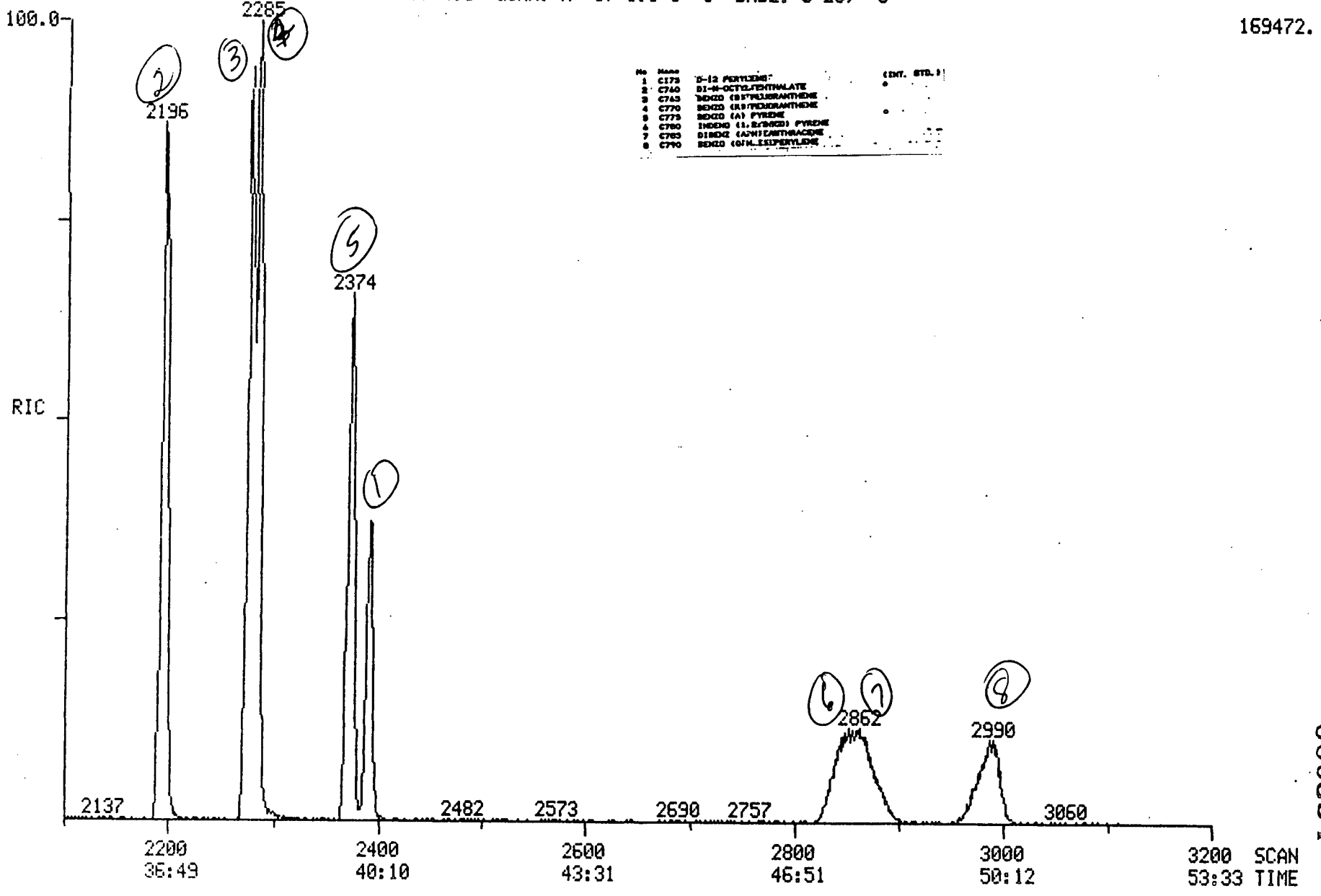
No	m/z	Scan	Time	RRT	Meth	Area(Hght)	Amount	%Tot
1	240	2036	34:04	1.000	A BB	403392.	40.000 NG	9.09
2	184	1785	29:52	0.877	A BB	67040.	50.000 NG	11.36
3	202	1799	30:06	0.884	A VB	802541.	50.000 NG	11.36
4	149	1938	32:26	0.952	A BV	352480.	50.000 NG	11.36
5	252	2033	34:01	0.999	A BB	138592.	50.000 NG	11.36
6	228	2032	34:00	0.998	A BV	556238.	50.000 NG	11.36
7	149	2058	34:26	1.011	A BB	532480.	50.000 NG	11.36
8	228	2041	34:09	1.002	A VB	519108.	50.000 NG	11.36
9	244	1834	30:41	0.901	A BB	583366.	50.000 NG	11.36

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	34:04	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	29:52	1.00	0.877	1.00	50.00	50.00	0.133	0.133	1.00
3	30:06	1.00	0.884	1.00	50.00	50.00	1.592	1.592	1.00
4	32:26	1.00	0.952	1.00	50.00	50.00	0.699	0.699	1.00
5	34:01	1.00	0.999	1.00	50.00	50.00	0.275	0.275	1.00
6	34:00	1.00	0.998	1.00	50.00	50.00	1.103	1.103	1.00
7	34:26	1.00	1.011	1.00	50.00	50.00	1.056	1.056	1.00
8	34:09	1.00	1.002	1.00	50.00	50.00	1.029	1.029	1.00
9	30:41	1.00	0.901	1.00	50.00	50.00	1.157	1.157	1.00

MIDRIC
08/25/89 10:50:00
SAMPLE: HSL-B STANDARD 8/25/89
CONDS.: 50NG INJECTION
RANGE: G 1,3200 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB500825 #1
CALI: HSB500825 #2

SCANS 2100 TO 3200



No	Name		(INT. STD.)
1	C173	D-12 PERYLENE	
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 (GHI)-PERYLENE	

000394

Quantitation Report [illegible] File: HSB500825

Data: HSB500825.TI
08/25/89 10:50:00
Sample: HSL-B STANDARD 8/25/89
Conds.: 50NG INJECTION
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: QC INC [illegible] Analyst: DDD Acct. No.: HSB50082

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

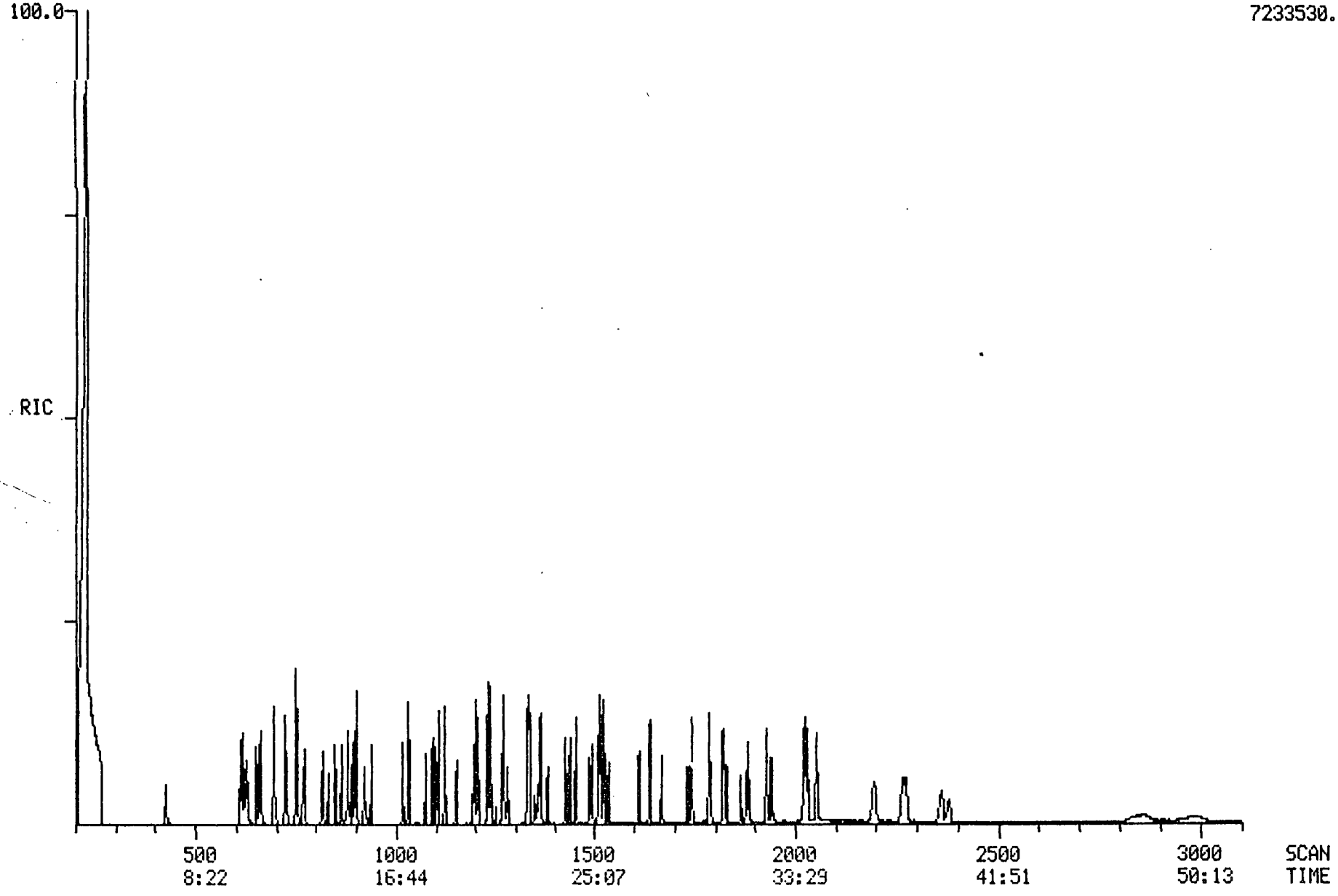
No	Name		
1	CI75	D-12 PERYLENE	(INT. STD.)
2	C760	DI-N-OCTYL PHTHALATE	*
3	C765	BENZO (B) FLUORANTHENE	
4	C770	BENZO (K) FLUORANTHENE	
5	C775	BENZO (A) PYRENE	*
6	C780	INDENO (1,2,3-CD) PYRENE	
7	C785	DIBENZ (A,H) ANTHRACENE	
8	C790	BENZO (G,H,I) PERYLENE	

N	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	264	2392	40:02	[illegible]	1.000	A BB	219848.	40.000 NG	10.26
2	149	2196	36:45	[illegible]	0.918	A BB	766912.	50.000 NG	12.82
3	252	2277	38:06	[illegible]	0.952	A BV	504110.	50.000 NG	12.82
4	252	2284	38:13	[illegible]	0.955	A VB	410470.	50.000 NG	12.82
5	252	2374	39:44	[illegible]	0.992	A BB	388524.	50.000 NG	12.82
6	276	2848	47:40	[illegible]	1.191	A BB	134239.	50.000 NG	12.82
7	278	2868	48:00	[illegible]	1.199	A BB	181922.	50.000 NG	12.82
8	276	2982	49:54	[illegible]	1.247	A VV	58028.	50.000 NG	12.82

No	Ret(L)	Ratio	RRT(E)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Rati
1	40:02	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	36:45	1.00	0.918	1.00	50.00	50.00	2.791	2.791	1.00
3	38:06	1.00	0.952	1.00	50.00	50.00	1.834	1.834	1.00
4	38:13	1.00	0.955	1.00	50.00	50.00	1.494	1.494	1.00
5	39:44	1.00	0.992	1.00	50.00	50.00	1.414	1.414	1.00
6	47:40	1.00	1.191	1.00	50.00	50.00	0.488	0.488	1.00
7	48:00	1.00	1.199	1.00	50.00	50.00	0.662	0.662	1.00
8	49:54	1.00	1.247	1.00	50.00	50.00	0.211	0.211	1.00

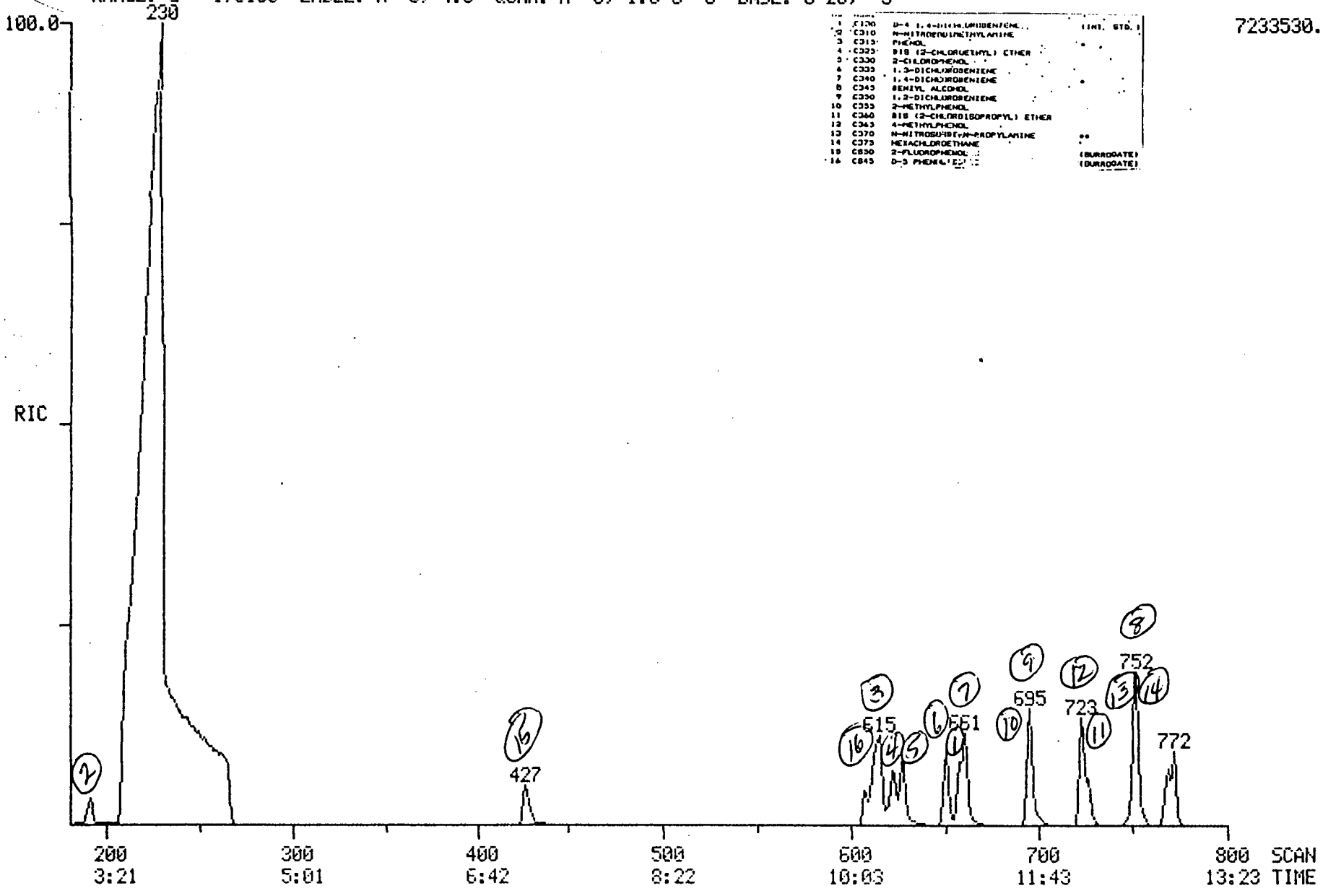
MIDRIC
08/28/89 17:30:00
SAMPLE: HSL-B STANDARD 8/28/89
CONDS.: 50 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB500828 #1 SCANS 200 TO 3100
CALI: HSB500828 #2



MIDRIC
08/28/89 17:30:00
SAMPLE: HSL-B STANDARD 8/28/89
CONDS.: 50 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB500828 #1 SCANS 180 TO 800
CALI: HSG #2



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	C380	2-FLUOROPHENOL	(SURROGATE)
16	C385	D-5 PHENOL	(SURROGATE)

7233530.

000397

Quantitation Report [illegible] HSB500828

Data: HSB500828.TI
08/28/89 17:30:00
Sample: HSL-B STANDARD 8/28/89
Conds.: 50 NG INJECTION
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: GC INC[illegible] Analyst: WSS Acct. No.: HSB50082

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

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	CS50	2-FLUOROPHENOL	(SURROGATE)
16	CS45	D-5 PHENOL	(SURROGATE)

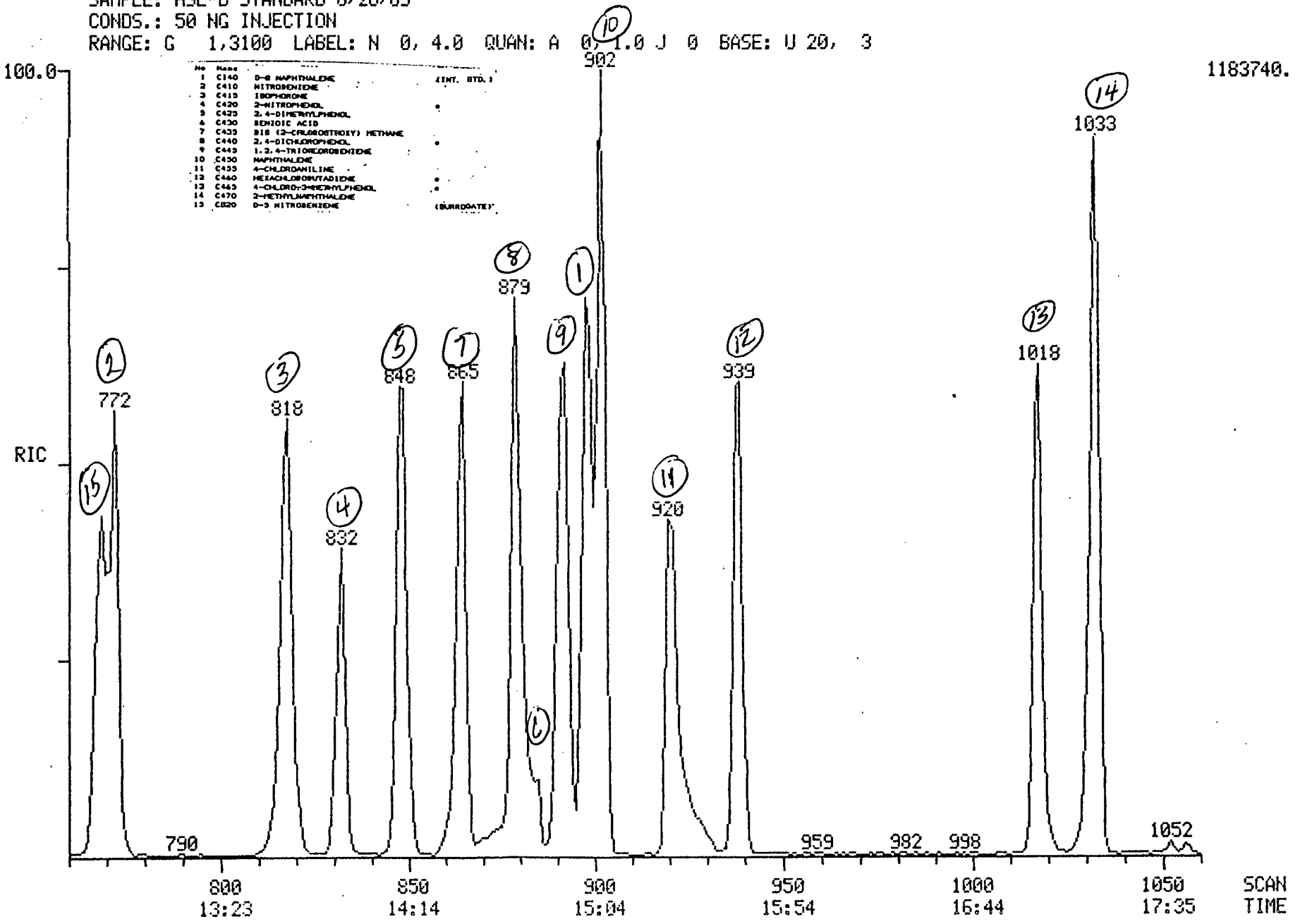
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	152	658	11:01	[illegible]	1.000	A BB	354112.	40.000	NG	5.06
2	74	191	3:12	[illegible]	0.290	A BB	397292.	50.000	NG	6.33
3	94	615	10:18	[illegible]	0.935	A BB	636856.	50.000	NG	6.33
4	93	622	10:25	[illegible]	0.945	A VB	756536.	50.000	NG	6.33
5	128	627	10:30	[illegible]	0.953	A BB	610632.	50.000	NG	6.33
6	146	651	10:54	[illegible]	0.989	A BV	664656.	50.000	NG	6.33
7	146	661	11:04	[illegible]	1.005	A VB	680984.	50.000	NG	6.33
8	108	752	12:35	[illegible]	1.143	A BB	526218.	50.000	NG	6.33
9	146	695	11:38	[illegible]	1.056	A BB	635776.	50.000	NG	6.33
10	108	694	11:37	[illegible]	1.055	A BB	342816.	50.000	NG	6.33
11	45	724	12:07	[illegible]	1.100	A BB	902336.	50.000	NG	6.33
12	108	723	12:06	[illegible]	1.099	A BB	555424.	50.000	NG	6.33
13	70	750	12:33	[illegible]	1.140	A BB	455136.	50.000	NG	6.33
14	117	752	12:35	[illegible]	1.143	A BB	215968.	50.000	NG	6.33
15	112	427	7:09	[illegible]	0.649	A BV	485218.	50.000	NG	6.33
16	99	613	10:18	[illegible]	0.932	A BV	679424.	50.000	NG	6.33

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	11:01	1.00	1.000	[illegible]	40.00	40.00	1.000	1.000	1.00
2	3:12	1.00	0.290	[illegible]	50.00	50.00	0.898	0.898	1.00
3	10:18	1.00	0.935	[illegible]	50.00	50.00	1.439	1.439	1.00
4	10:25	1.00	0.945	[illegible]	50.00	50.00	1.709	1.709	1.00
5	10:30	1.00	0.953	[illegible]	50.00	50.00	1.380	1.380	1.00
6	10:54	1.00	0.989	[illegible]	50.00	50.00	1.502	1.502	1.00
7	11:04	1.00	1.005	[illegible]	50.00	50.00	1.538	1.538	1.00

N	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
8	12:35	1.00	1.143	1.00	50.00	50.00	1.189	1.189	1.00
9	11:38	1.00	1.056	1.00	50.00	50.00	1.436	1.436	1.00
10	11:37	1.00	1.055	1.00	50.00	50.00	0.774	0.774	1.00
11	12:07	1.00	1.100	1.00	50.00	50.00	2.039	2.039	1.00
12	12:06	1.00	1.099	1.00	50.00	50.00	1.255	1.255	1.00
13	12:33	1.00	1.140	1.00	50.00	50.00	1.028	1.028	1.00
14	12:35	1.00	1.143	1.00	50.00	50.00	0.488	0.488	1.00
15	7:09	1.00	0.849	1.00	50.00	50.00	1.096	1.096	1.00
16	10:16	1.00	0.932	1.00	50.00	50.00	1.535	1.535	1.00

MIDRIC
08/28/89 17:30:00
SAMPLE: HSL-B STANDARD 8/28/89
CONDS.: 50 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB500828 #1 SCANS 760 TO 1060
CALI: HS6 #2



000400

Quantitation Rep rt [illegible] File: HSB500828

Data: HSB500828.TI
08/28/89 17:30:00
Sample: HSL-B STANDARD 8/28/89
Conds.: 50 NG INJECTION
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: QC INC[illegible] Analyst: WSS Acct. No.: HSB50082

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

No	Name		
1	CI40	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	CS20	D-5 NITROBENZENE	(SURROGATE)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	136	898	15:02	[illegible]	1.000	A BB	1375480.	40.000	NG	5.41
2	77	772	12:55	[illegible]	0.860	A BB	615232.	50.000	NG	6.76
3	82	818	13:42	[illegible]	0.911	A BB	1323740.	50.000	NG	6.76
4	139	832	13:56	[illegible]	0.927	A BB	303776.	50.000	NG	6.76
5	122	848	14:12	[illegible]	0.944	A BB	535744.	50.000	NG	6.76
6	122	883	14:47	[illegible]	0.983	A BB	235202.	50.000	NG	6.76
7	93	865	14:29	[illegible]	0.963	A BB	853408.	50.000	NG	6.76
8	162	879	14:43	[illegible]	0.979	A BB	549152.	50.000	NG	6.76
9	180	891	14:55	[illegible]	0.992	A BB	574112.	50.000	NG	6.76
10	128	902	15:06	[illegible]	1.004	A BB	1499100.	50.000	NG	6.76
11	127	920	15:24	[illegible]	1.024	A BB	736837.	50.000	NG	6.76
12	225	939	15:43	[illegible]	1.046	A BB	315936.	50.000	NG	6.76
13	107	1018	17:02	[illegible]	1.134	A BB	516576.	50.000	NG	6.76
14	142	1033	17:18	[illegible]	1.150	A VB	1031180.	50.000	NG	6.76
15	82	769	12:52	[illegible]	0.856	A BB	631904.	50.000	NG	6.76

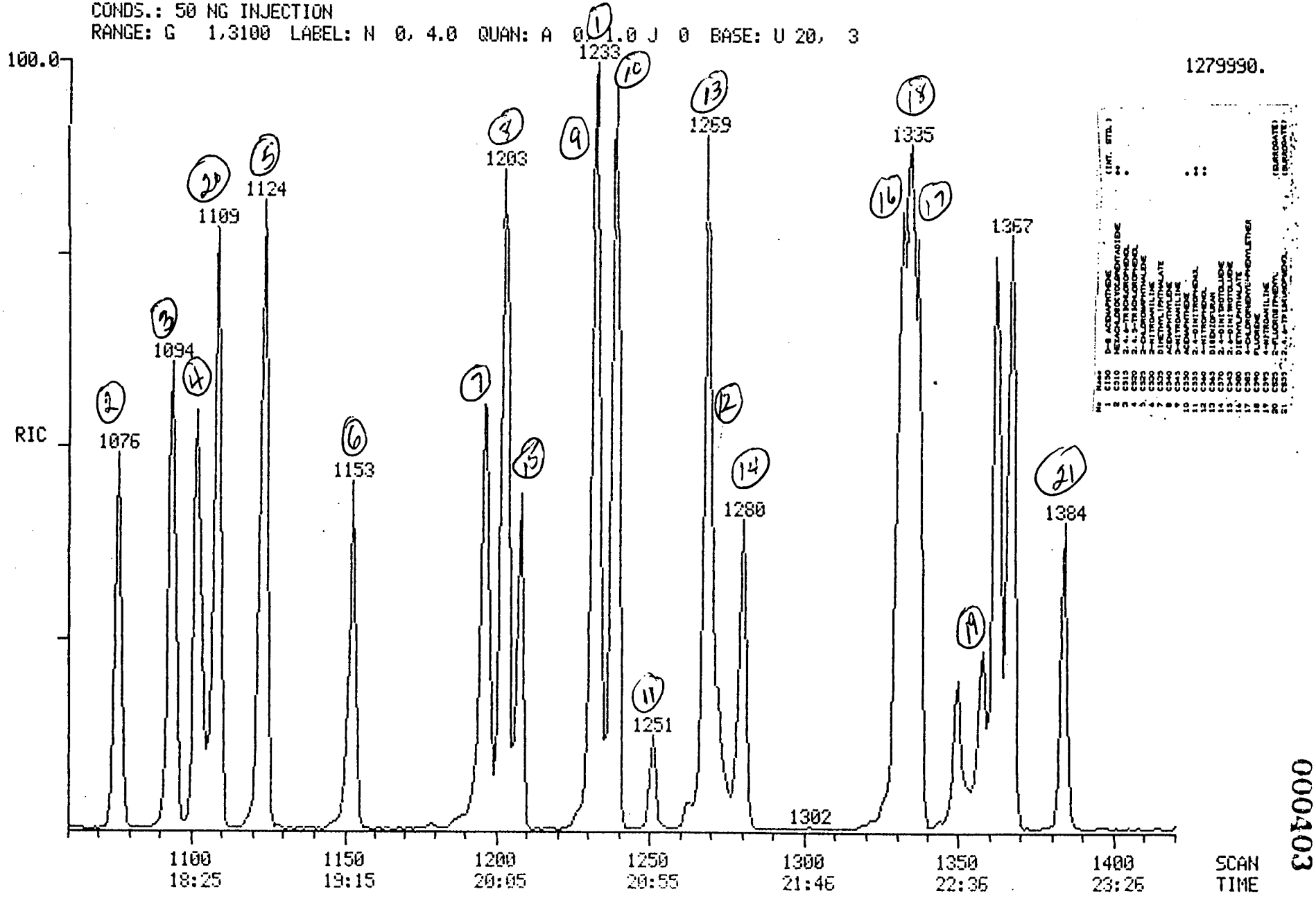
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	15:02	1.00	1.000	[illegible]	40.00	40.00	1.000	1.000	1.00
2	12:55	1.00	0.860	[illegible]	50.00	50.00	0.358	0.358	1.00
3	13:42	1.00	0.911	[illegible]	50.00	50.00	0.770	0.770	1.00
4	13:56	1.00	0.927	[illegible]	50.00	50.00	0.177	0.177	1.00
5	14:12	1.00	0.944	[illegible]	50.00	50.00	0.312	0.312	1.00
6	14:47	1.00	0.983	[illegible]	50.00	50.00	0.137	0.137	1.00
7	14:29	1.00	0.963	[illegible]	50.00	50.00	0.496	0.496	1.00
8	14:43	1.00	0.979	[illegible]	50.00	50.00	0.319	0.319	1.00
9	14:55	1.00	0.992	[illegible]	50.00	50.00	0.334	0.334	1.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
10	15:06	1.00	1.004	1.00	50.00	50.00	0.872	0.872	1.00
11	15:24	1.00	1.024	1.00	50.00	50.00	0.429	0.429	1.00
12	15:43	1.00	1.046	1.00	50.00	50.00	0.184	0.184	1.00
13	17:02	1.00	1.134	1.00	50.00	50.00	0.300	0.300	1.00
14	17:18	1.00	1.150	1.00	50.00	50.00	0.600	0.600	1.00
15	12:52	1.00	0.856	1.00	50.00	50.00	0.368	0.368	1.00

MIDRIC
08/28/89 17:30:00
SAMPLE: HSL-B STANDARD 8/28/89
CONDS.: 50 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB500828 #1
CALI: HS6 #2

SCANS 1060 TO 1420



000403

Quantitation Report [illegible] HSB500828

Data: HSB500828.TI
08/28/89 17:30:00
Sample: HSL-B STANDARD 8/28/89
Conds.: 50 NG INJECTION
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: QC INC[illegible] Analyst: WSS Acct. No.: HSB50082

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

No	Name		
1	CI50	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	C543	2,6-DINITROTOLUENE	
16	C580	DIETHYLPHTHALATE	
17	C585	4-CHLOROPHENYL-PHENYLETHER	
18	C590	FLUORENE	
19	C595	4-NITROANILINE	
20	CS25	2-FLUOROBIPHENYL	(SURROGATE)
21	CS55	2,4,6-TRIBROMOPHENOL	(SURROGATE)

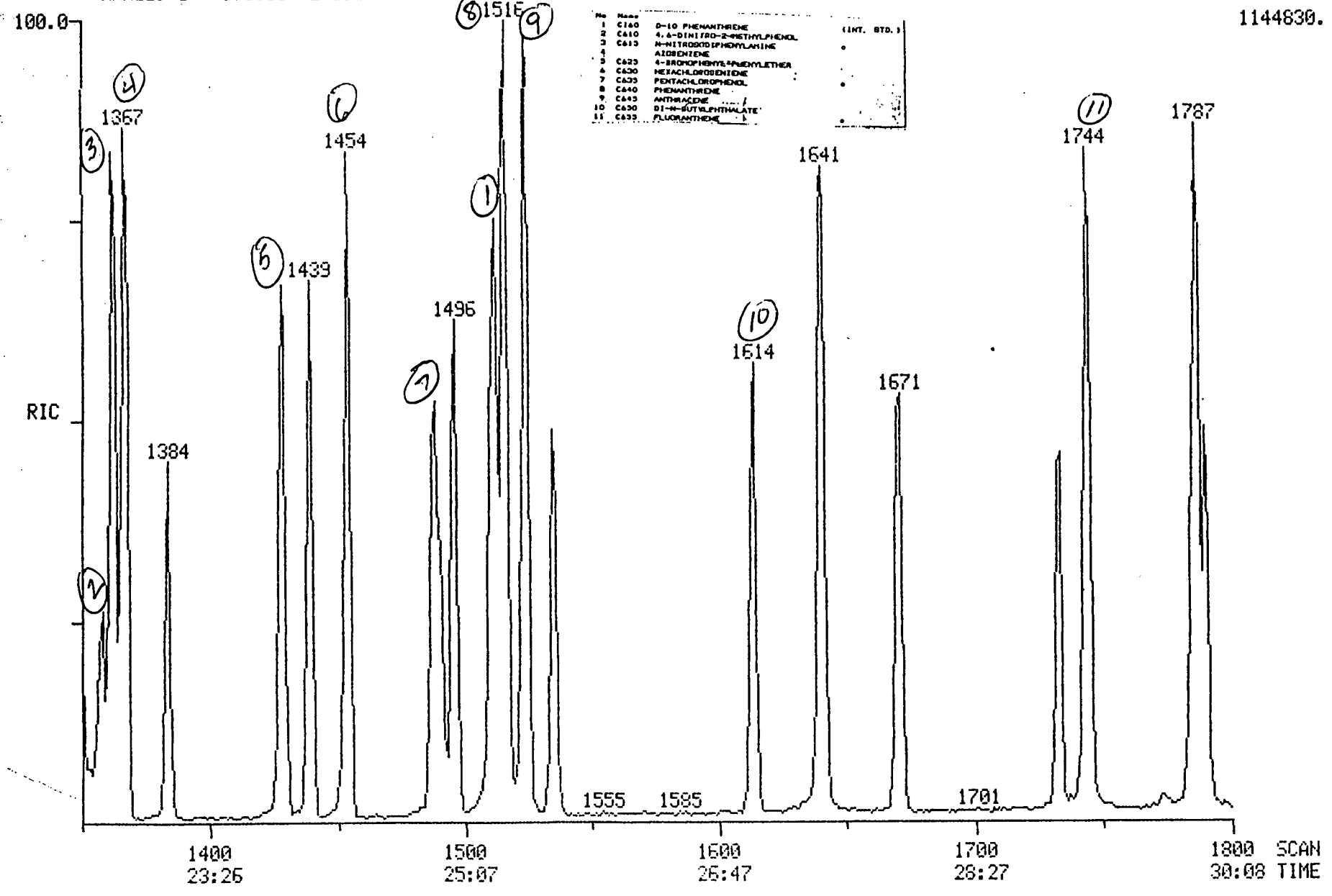
No	m/z	Scan	Time	RRT	Meth	Area(Hght)	Amount	%Tot
1	164	1233	20:38[illegible]	1.000	A BB	723968.	40.000 NG	3.85
2	237	1076	18:0[illegible]	0.873	A BB	333632.	50.000 NG	4.81
3	196	1094	18:19[illegible]	0.887	A BV	372884.	50.000 NG	4.81
4	196	1102	18:27[illegible]	0.894	A VB	402600.	50.000 NG	4.81
5	162	1124	18:49[illegible]	0.912	A BB	1081690.	50.000 NG	4.81
6	65	1153	19:18[illegible]	0.935	A BB	334464.	50.000 NG	4.81
7	163	1196	20:01[illegible]	0.970	A BB	1231830.	50.000 NG	4.81
8	152	1203	20:08[illegible]	0.976	A BB	1644120.	50.000 NG	4.81
9	138	1232	20:37[illegible]	0.999	A BB	245248.	50.000 NG	4.81
10	153	1239	20:44[illegible]	1.005	A BB	892672.	50.000 NG	4.81
11	184	1251	20:58[illegible]	1.015	A BB	70432.	50.000 NG	4.81
12	109	1271	21:17[illegible]	1.031	A BB	77376.	50.000 NG	4.81
13	168	1269	21:15[illegible]	1.029	A BB	1524060.	50.000 NG	4.81
14	89	1280	21:26[illegible]	1.038	A VB	222432.	50.000 NG	4.81
15	165	1208	20:13[illegible]	0.980	A VB	253664.	50.000 NG	4.81
16	149	1331	22:17[illegible]	1.079	A BB	1211130.	50.000 NG	4.81
17	204	1337	22:23[illegible]	1.084	A BB	578848.	50.000 NG	4.81
18	166	1334	22:20[illegible]	1.082	A BB	1062300.	50.000 NG	4.81
19	138	1350	22:38[illegible]	1.095	A VB	195028.	50.000 NG	4.81
20	172	1109	18:34[illegible]	0.899	A BB	1118680.	50.000 NG	4.81
21	330	1384	23:10[illegible]	1.122	A BB	230048.	50.000 NG	4.81

No	Ret(L)	Ratio	RRT(E)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	20:38	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	18:01	1.00	0.873	1.00	50.00	50.00	0.369	0.369	1.00
3	18:19	1.00	0.887	1.00	50.00	50.00	0.412	0.412	1.00
4	18:27	1.00	0.894	1.00	50.00	50.00	0.445	0.445	1.00
5	18:49	1.00	0.912	1.00	50.00	50.00	1.195	1.195	1.00
6	19:18	1.00	0.935	1.00	50.00	50.00	0.370	0.370	1.00
7	20:01	1.00	0.970	1.00	50.00	50.00	1.361	1.361	1.00
8	20:08	1.00	0.976	1.00	50.00	50.00	1.817	1.817	1.00
9	20:37	1.00	0.999	1.00	50.00	50.00	0.271	0.271	1.00
10	20:44	1.00	1.005	1.00	50.00	50.00	0.986	0.986	1.00
11	20:56	1.00	1.015	1.00	50.00	50.00	0.078	0.078	1.00
12	21:17	1.00	1.031	1.00	50.00	50.00	0.086	0.086	1.00
13	21:15	1.00	1.029	1.00	50.00	50.00	1.684	1.684	1.00
14	21:26	1.00	1.038	1.00	50.00	50.00	0.246	0.246	1.00
15	20:13	1.00	0.980	1.00	50.00	50.00	0.280	0.280	1.00
16	22:17	1.00	1.079	1.00	50.00	50.00	1.338	1.338	1.00
17	22:23	1.00	1.084	1.00	50.00	50.00	0.640	0.640	1.00
18	22:20	1.00	1.082	1.00	50.00	50.00	1.174	1.174	1.00
19	22:36	1.00	1.095	1.00	50.00	50.00	0.216	0.216	1.00
20	18:34	1.00	0.899	1.00	50.00	50.00	1.236	1.236	1.00
21	23:10	1.00	1.122	1.00	50.00	50.00	0.254	0.254	1.00

MIDRIC
08/28/89 17:30:00
SAMPLE: HSL-B STANDARD 8/28/89
CONDS.: 50 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB500828 #1
CALI: HS6 #2

SCANS 1350 TO 1800



No	Name	
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

(INT. STD.)

000406

Quantitation Report [illegible] HSB500828

Data: HSB500828.TI
08/28/89 17:30:00
Sample: HSL-B STANDARD 8/28/89
Conds.: 50 NG INJECTION
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: QC INC [illegible] Analyst: WSS Acct. No.: HSB50082

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

N	Name		
1	CI60	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	*

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	188	1512	25:19	[illegible]	1.000	A BV	1219190.	40.000 NG	7.41
2	198	1357	22:43	[illegible]	0.897	A BB	116864.	50.000 NG	9.26
3	169	1362	22:48	[illegible]	0.901	A BB	745472.	50.000 NG	9.26
4	77	1367	22:53	[illegible]	0.904	A BB	1488760.	50.000 NG	9.26
5	248	1428	23:54	[illegible]	0.944	A BB	366080.	50.000 NG	9.26
6	284	1454	24:20	[illegible]	0.962	A BB	513184.	50.000 NG	9.26
7	266	1490	24:57	[illegible]	0.985	A BB	176224.	50.000 NG	9.26
8	178	1516	25:23	[illegible]	1.003	A BV	1489440.	50.000 NG	9.26
9	178	1524	25:31	[illegible]	1.008	A VB	1399960.	50.000 NG	9.26
10	149	1641	27:28	[illegible]	1.085	A BB	1867210.	50.000 NG	9.26
11	202	1744	29:12	[illegible]	1.153	A BB	1392400.	50.000 NG	9.26

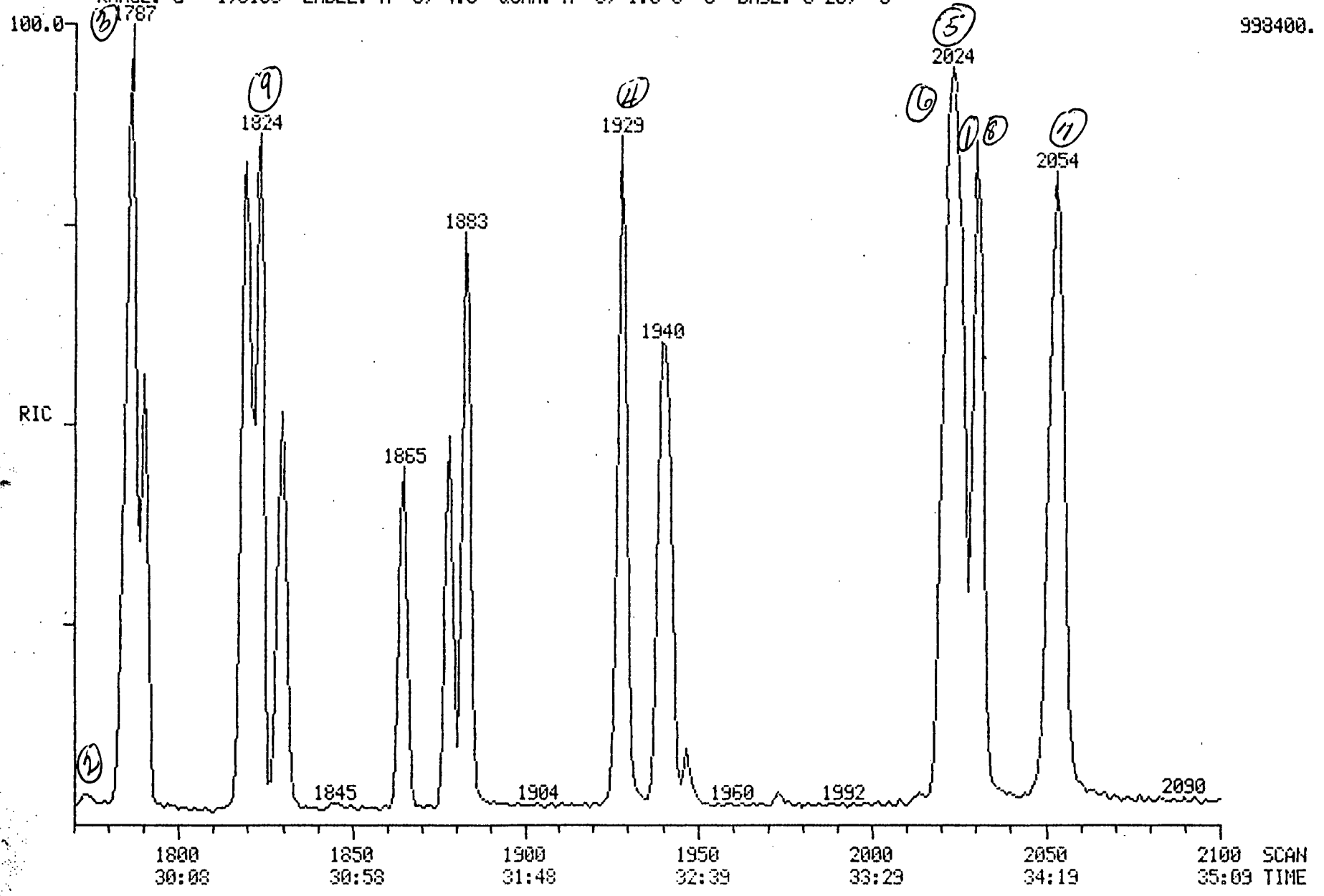
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	25:19	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	22:43	1.00	0.897	1.00	50.00	50.00	0.077	0.077	1.00
3	22:48	1.00	0.901	1.00	50.00	50.00	0.489	0.489	1.00
4	22:53	1.00	0.904	1.00	50.00	50.00	0.977	0.977	1.00
5	23:54	1.00	0.944	1.00	50.00	50.00	0.240	0.240	1.00
6	24:20	1.00	0.962	1.00	50.00	50.00	0.337	0.337	1.00
7	24:57	1.00	0.985	1.00	50.00	50.00	0.116	0.116	1.00
8	25:23	1.00	1.003	1.00	50.00	50.00	0.977	0.977	1.00
9	25:31	1.00	1.008	1.00	50.00	50.00	0.919	0.919	1.00
10	27:28	1.00	1.085	1.00	50.00	50.00	1.225	1.225	1.00
11	29:12	1.00	1.153	1.00	50.00	50.00	0.914	0.914	1.00

MIDRIC
08/28/89 17:30:00
SAMPLE: HSL-B STANDARD 8/28/89
CONDS.: 50 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB500828 #1
CALI: HS6 #2

SCANS 1770 TO 2100

No	Mass		
1	C170	D-12 CHRYSENE	(INT. STD.)
2	C710	BENZIDINE	
3	C713	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-14 TERPHENYL	(SURROGATE)



000408

Quantitation Report [illegible] HSB500828

Data: HSB500828.TI
08/28/89 17:30:00
Sample: HSL-B STANDARD 8/28/89
Conds.: 50 NG INJECTION
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: QC INC[illegible] Analyst: WSS Acct. No.: HSB50082

AMOUNT=AREA * REF AM[illegible]T/(REF[illegible]AREA * RESP FACT)
Resp. fac. from Library Entry

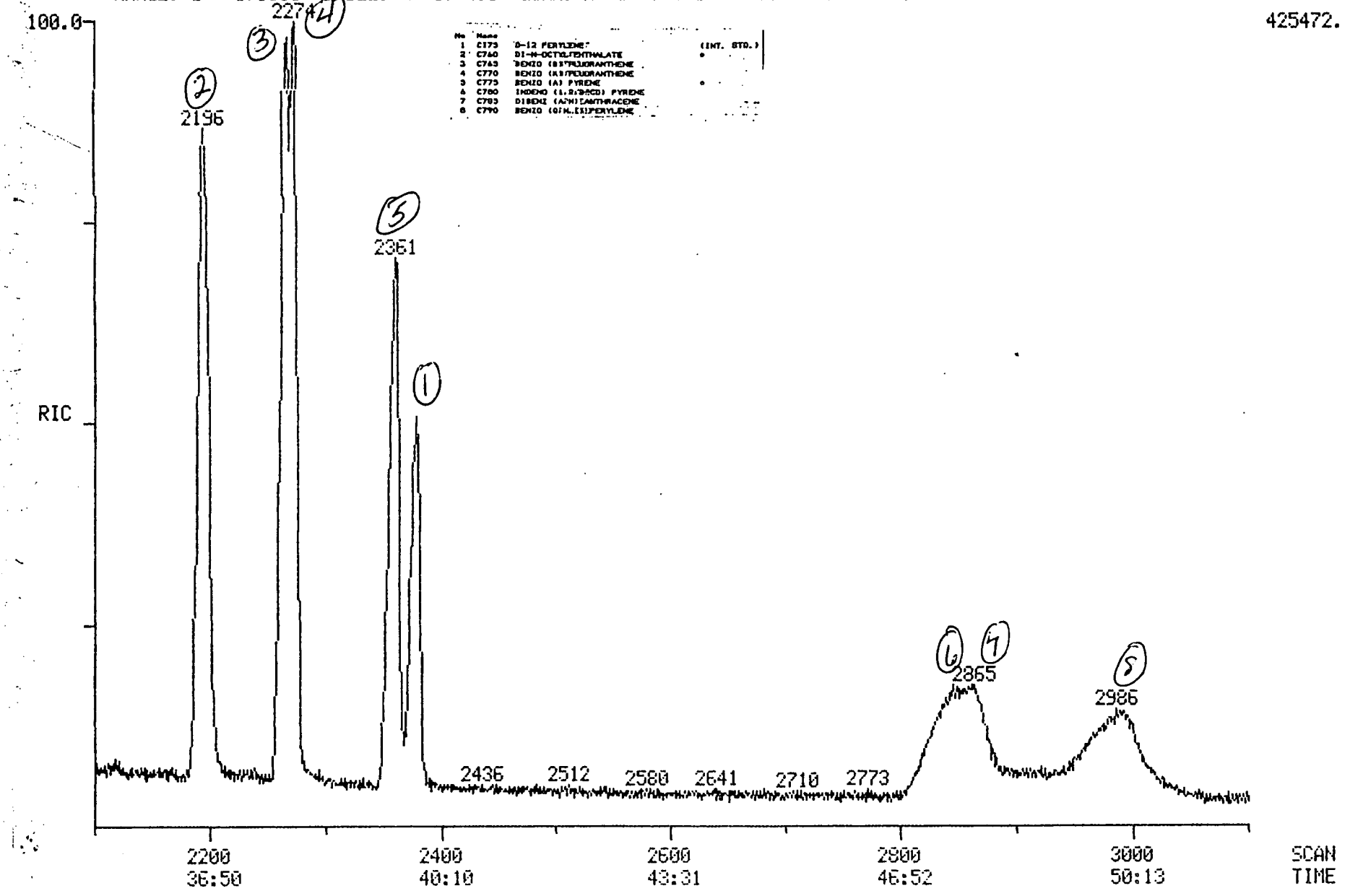
No	Name		
1	CI70	D-12 CHRYSENE	(INT. STD.)
2	C710	BENZIDINE	
2	C715	PYRENE	
4	C720	BUTYLBENZYLPHTHALATE	
5	C725	3,3'-DICHLOROBENZIDINE	
6	C730	BENZO(A)ANTHRACENE	
7	C745	BIS (2-ETHYLHEXYL) PHTHALATE	
8	C740	CHRYSENE	
9	CS30	D-14 TERPHENYL[illegible]	(SURROGATE)

No	m/z	Scan	Time[illegible]Ref[illegible]	RRT	Meth	Area(Hght)	Amount	%Tot
1	240	2026	33:55[illegible]	1.000	A BB	841782.	40.000 NG	9.09
2	184	1774	29:42[illegible]	0.876	A BB	46048.	50.000 NG	11.36
3	202	1787	29:55[illegible]	0.882	A BB	1416740.	50.000 NG	11.36
4	149	1929	32:17[illegible]	0.952	A BV	675136.	50.000 NG	11.36
5	252	2024	33:53[illegible]	0.999	A BB	303040.	50.000 NG	11.36
6	228	2022	33:51[illegible]	0.998	A BV	1181230.	50.000 NG	11.36
7	149	2054	34:23[illegible]	1.014	A BB	1091880.	50.000 NG	11.36
8	228	2031	34:00[illegible]	1.002	A VB	1084470.	50.000 NG	11.36
9	244	1823	30:31[illegible]	0.900	A BB	1159390.	50.000 NG	11.36

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	33:55	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	29:42	1.00	0.876	1.00	50.00	50.00	0.044	0.044	1.00
3	29:55	1.00	0.882	1.00	50.00	50.00	1.346	1.346	1.00
4	32:17	1.00	0.952	1.00	50.00	50.00	0.642	0.642	1.00
5	33:53	1.00	0.999	1.00	50.00	50.00	0.288	0.288	1.00
6	33:51	1.00	0.998	1.00	50.00	50.00	1.123	1.123	1.00
7	34:23	1.00	1.014	1.00	50.00	50.00	1.038	1.038	1.00
8	34:00	1.00	1.002	1.00	50.00	50.00	1.031	1.031	1.00
9	30:31	1.00	0.900	1.00	50.00	50.00	1.102	1.102	1.00

MIDRIC
08/28/89 17:30:00
SAMPLE: HSL-B STANDARD 8/28/89
CONDS.: 50 NG INJECTION
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HSB500828 #1 SCANS 2100 TO 3100
CALI: HS6 #2



No	Name		
1	C173	D-12 PERYLENE	(INT. STD.)
2	C760	DI-N-OCTYL(ENTHALATE	*
3	C763	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	

000410

Quantitation Report [illegible] HSB500828

Data: HSB500828.TI
08/28/89 17:30:00
Sample: HSL-B STANDARD 8/28/89
Conds.: 50 NG INJECTION
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: QC INC[illegible] Analyst: WSS Acct. No.: HSB50082

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

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	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	264	2379	39:49	[illegible]	1.000	A BB	683073.	40.000 NG	10.26
2	149	2194	36:44	[illegible]	0.922	A BB	1780910.	50.000 NG	12.82
3	252	2267	37:57	[illegible]	0.953	A BV	1586890.	50.000 NG	12.82
4	252	2273	38:03	[illegible]	0.955	A VB	813153.	50.000 NG	12.82
5	252	2361	39:31	[illegible]	0.992	A BB	1152410.	50.000 NG	12.82
6	276	2847	47:39	[illegible]	1.197	A*BB	819492.	50.000 NG	12.82
7	278	2871	48:04	[illegible]	1.207	A*BB	353666.	50.000 NG	12.82
8	276	2986	49:59	[illegible]	1.255	A*BB	497052.	50.000 NG	12.82

No	Ret(L)	Ratio	RRT(E)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	39:49	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	36:44	1.00	0.922	1.00	50.00	50.00	2.086	2.086	1.00
3	37:57	1.00	0.953	1.00	50.00	50.00	1.859	1.859	1.00
4	38:03	1.00	0.955	1.00	50.00	50.00	0.952	0.952	1.00
5	39:31	1.00	0.992	1.00	50.00	50.00	1.350	1.350	1.00
6	47:39	1.00	1.197	1.00	50.00	50.00	0.960	0.960	1.00
7	48:04	1.00	1.207	1.00	50.00	50.00	0.414	0.414	1.00
8	49:59	1.00	1.255	1.00	50.00	50.00	0.582	0.582	1.00

QC Inc

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

ANALYTICAL DATA REPORT
FOR
GANNET FLEMING

Part 3 of 3

Case Name	Field Sample ID	Laboratory Sample ID	Date of Collection
	C-29A MW	883612	08/15/89
	C-14A MW	883613	"
	C-14B MW	883614	"
	C-14C MW	883615	"
	FIELD BLANK	883616	"
	TRIP BLANK	883617	"

Laboratory Name	QC Inc.
Certification No.	PADER No. 09-131 NJDEP No. 77166
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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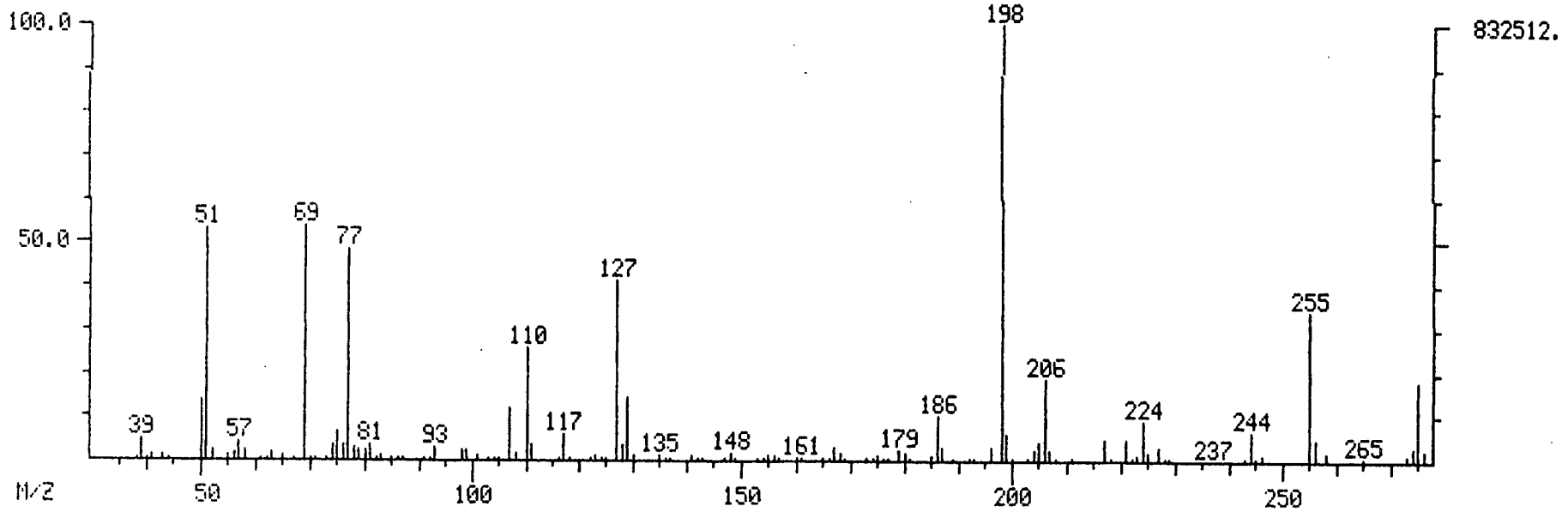
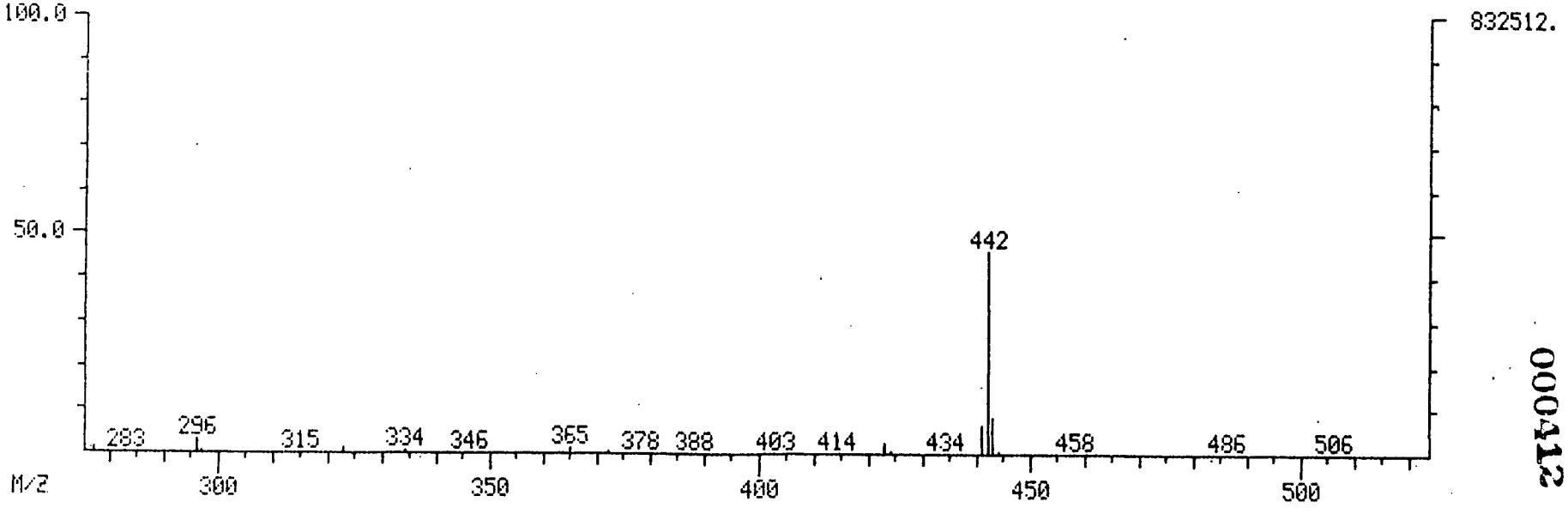
	(C-29A-MW)	499
	(C-14A-MW)	500
	(C-14B-MW)	501
	(C-14C-MW)	502
	(FIELD BLANK)	503
	(TRIP BLANK)	504
QC GEN-2	General Analysis MS/MSD Recovery	505
	General Analysis Raw Data:	
	(Petroleum Hydrocarbons)	506
	(Total Organic Carbon)	515
	(Total Dissolved Solids)	525
	(pH)	528

MID MASS SPECTRUM
08/02/89 0:33:00 + 10:34
SAMPLE: DFTPP-B TUNE 8/2/89
CONDS.: 50 NG INJECTION
GC TEMP: 227 DEG. C
#630 TO #632 SUMMED

DATA: DFTPPB0802 #631
CALI: DFTPPB0802 #2

BASE M/Z: 198
RIC: 5939190.





000412

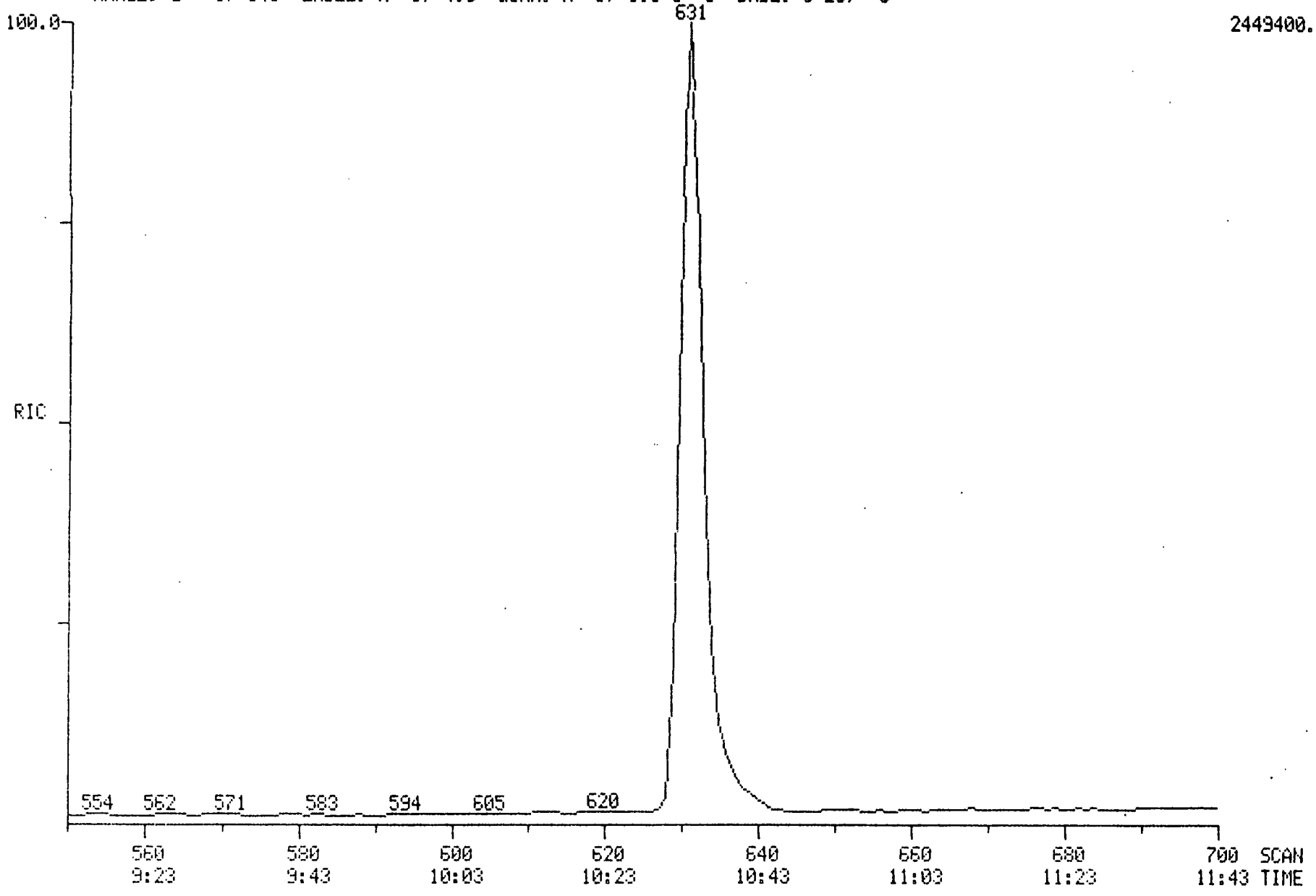
MID Mass List [illegible] Data: DFTPPB0802 # 631 Base m/z: 198
08/02/89 0:33:00 + [illegible] Cali: DFTPPB0802 # 2 RIC: 5939190.
Sample: DFTPP-B TUNE 8/2/89
Conds.: 50 NG INJECTION
#630 to #632 Summed

36 0.00 [illegible] 0. Minima Min inten: 5312.
506 [illegible] # 0 Maxima

Mass	% RA	% RIC	Inten.	Mass	% RA	% RIC	Inten.
38.00?	0.71	[illegible]	5888.	155.00	0.91	0.13	7584.
39.00?	4.79	[illegible]	39872.	156.00	1.43	0.20	11936.
41.00?	1.18	[illegible]	9824.	161.00	0.82	0.12	6848.
43.00?	1.17	[illegible]	9728.	166.00	0.73	0.10	6112.
44.00?	0.70	[illegible]	5792.	167.00	3.11	0.44	25888.
50.00?	13.71	[illegible]	114176.	168.00	1.90	0.27	15840.
51.00?	53.14	[illegible]	442368.	174.00	0.68	0.10	5664.
52.00?	2.56	[illegible]	21344.	175.00	1.25	0.18	10400.
55.00?	1.36	[illegible]	11360.	179.00	2.36	0.33	19680.
56.00?	1.79	[illegible]	14912.	180.00	1.80	0.25	14944.
57.00?	4.42	[illegible]	36800.	181.00	0.80	0.11	6656.
58.00?	2.60	[illegible]	21632.	185.00	1.34	0.19	11168.
63.00?	1.86	[illegible]	15456.	186.00	10.16	1.42	84608.
65.00?	0.93	[illegible]	7744.	187.00	2.86	0.40	23776.
69.00	53.69	[illegible]	446976.	192.00	0.72	0.10	5984.
73.00	0.65	[illegible]	5376.	193.00	0.76	0.11	6336.
74.00	3.81	[illegible]	31712.	196.00	3.04	0.43	25344.
75.00	6.86	[illegible]	57088.	198.00	100.00	14.02	832512.
76.00	3.47	[illegible]	28928.	199.00	6.07	0.85	50496.
77.00	48.22	[illegible]	401408.	204.00	2.50	0.35	20832.
78.00	3.25	[illegible]	27072.	205.00	4.31	0.60	35840.
79.00	2.50	[illegible]	20832.	206.00	18.39	2.58	153088.
80.00	2.16	[illegible]	17952.	207.00	2.32	0.32	19296.
81.00	3.42	[illegible]	28512.	211.00	0.78	0.11	6464.
82.00	0.76	[illegible]	6368.	217.00	4.52	0.63	37632.
83.00	1.13	[illegible]	9408.	221.00	4.91	0.69	40896.
85.00	0.66	[illegible]	5504.	222.00	0.78	0.11	6464.
91.00	0.76	[illegible]	6336.	223.00	1.05	0.15	8704.
92.00	0.78	[illegible]	6528.	224.00	8.87	1.24	73856.
93.00	3.26	[illegible]	27104.	225.00	2.09	0.29	17408.
98.00	2.66	[illegible]	22176.	227.00	3.21	0.45	26752.
99.00	2.45	[illegible]	20416.	244.00	6.87	0.96	57152.
101.00	1.47	[illegible]	12256.	245.00	0.79	0.11	6592.
104.00	0.78	[illegible]	6496.	246.00	0.99	0.14	8224.
105.00	0.74	[illegible]	6144.	255.00	34.01	4.77	283136.
107.00	11.95	[illegible]	99456.	256.00	4.69	0.66	39040.
108.00	1.83	[illegible]	15200.	258.00	1.61	0.23	13376.
110.00	25.98	[illegible]	216320.	273.00	1.01	0.14	8384.
111.00	3.37	[illegible]	28096.	274.00	3.24	0.45	26976.
117.00	5.75	[illegible]	47872.	275.00	17.87	2.50	148736.
123.00	0.98	[illegible]	8192.	276.00	2.12	0.30	17664.
127.00	41.21	[illegible]	343040.	277.00	1.04	0.15	8672.
128.00	3.53	[illegible]	29376.	296.00	3.23	0.45	26912.
129.00	14.39	[illegible]	119808.	323.00	0.99	0.14	8256.
130.00	1.13	[illegible]	9376.	365.00	1.36	0.19	11296.
135.00	1.36	[illegible]	11296.	423.00	2.28	0.32	19008.
137.00	0.66	[illegible]	5536.	441.00	6.63	0.93	55168.
141.00	1.48	[illegible]	12288.	442.00	46.31	6.49	385536.
147.00	0.88	[illegible]	7328.	443.00	8.15	1.14	67840.
148.00	1.52	[illegible]	12640.	444.00	0.69	0.10	5728.

MIDRIC
08/02/89 0:33:00
SAMPLE: DFTPP-B TUNE 8/2/89
CONDS.: 50 NG INJECTION
RANGE: G 1, 641 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: DFTPPB0802 #630 SCANS 550 TO 700
CALI: DFTPPB0802 #2

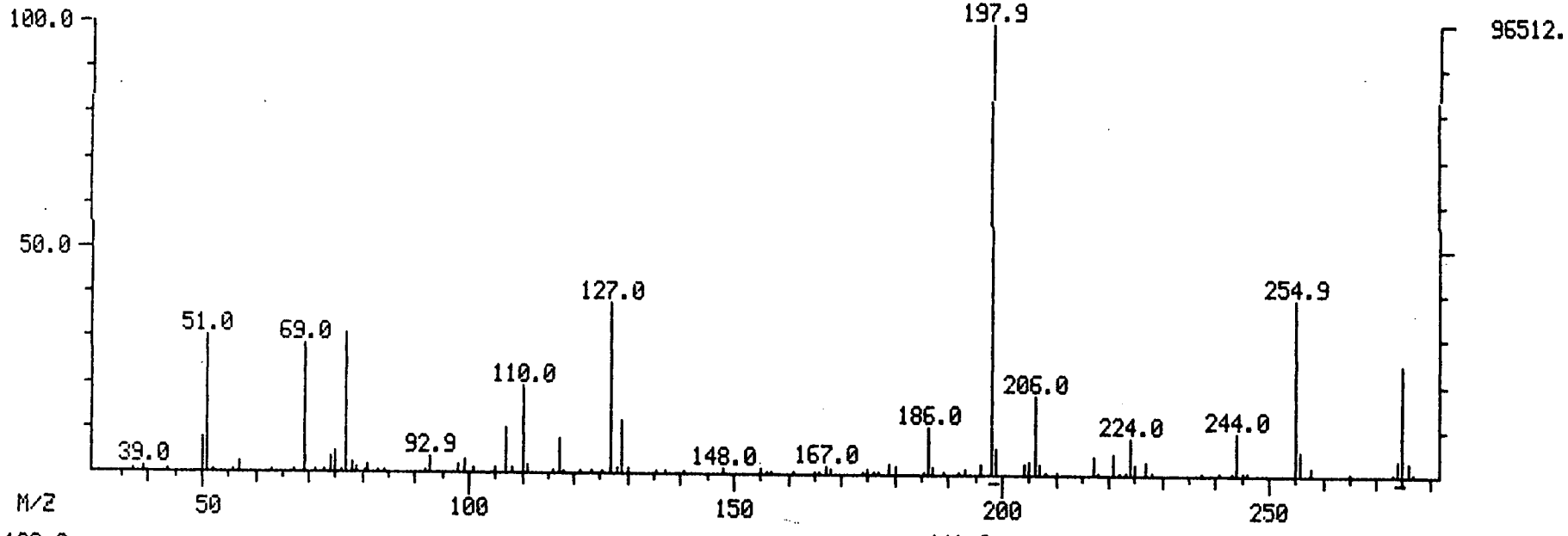


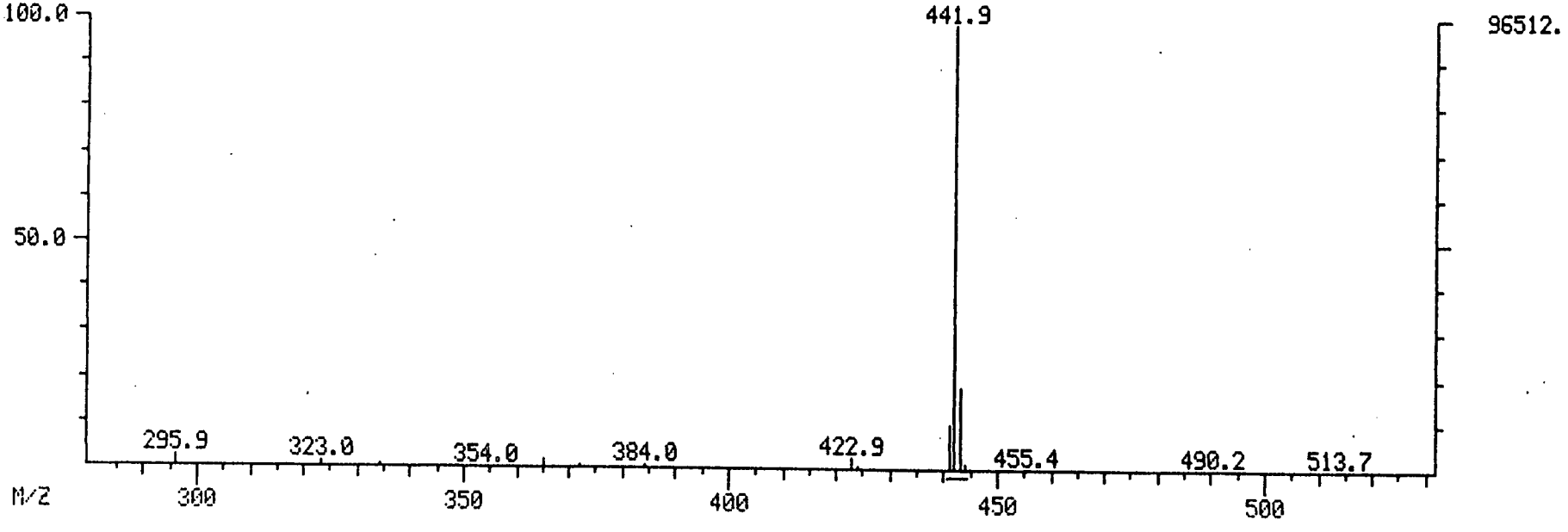
114

MID MASS SPECTRUM
08/25/89 10:01:00 + 10:31
SAMPLE: DFTPP-B TUNE 8/25/89
CONDS.: 50NG INJECTION
GC TEMP: 227 DEG. C

DATA: DFTPPB0825 #628
CALI: HSB500824 #2

BASE M/Z: 198
RIC: 627712.



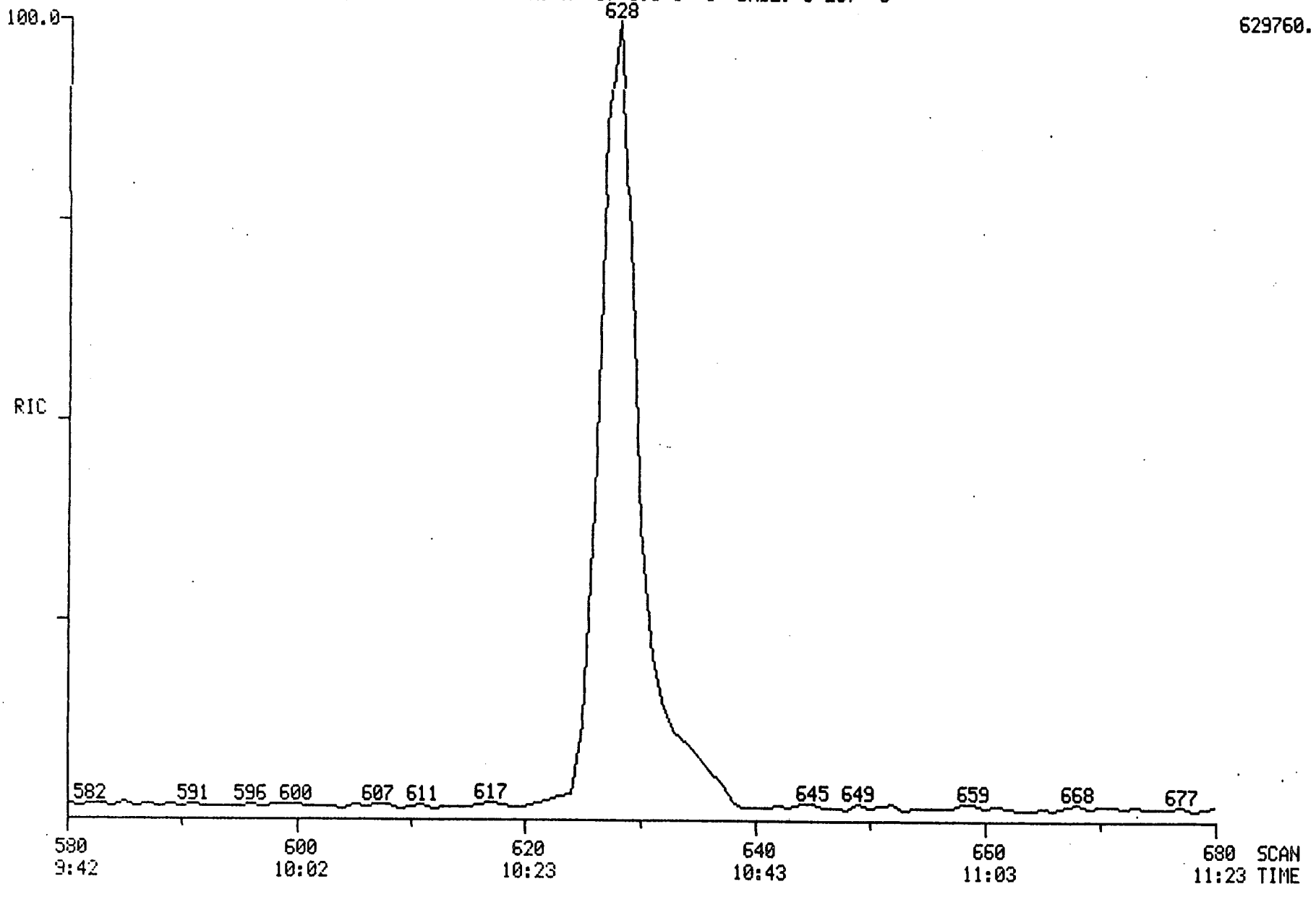


MID Mass List [illegible] Data: DFTPPB0825 # 628 Base m/z: 198
08/25/89 10:01:00 + [illegible] Cali: HSB500824 # 2 RIC: 1077240.
Sample: DFTPP-B TUNE 8/25/89
Conds.: 50NG INJECTION
#628 t #629 Summed

36	0.00	[illegible]	0.	Minima	Min inten:	545.	
514		[illegible]	0	Maxima			
Mass	% RA	% RIC	Inten.	Mass	% RA	% RIC	Inten.
39.00?	1.43	[illegible]	2272.	180.00	1.19	0.18	1888.
50.00?	8.68	[illegible]	13760.	185.00	0.77	0.11	1216.
51.00?	31.99	[illegible]	50688.	186.00	12.14	1.79	19232.
52.00?	0.59	[illegible]	928.	187.00	2.28	0.34	3616.
56.00?	0.89	[illegible]	1408.	192.00	0.61	0.09	960.
57.00?	2.14	[illegible]	3392.	193.00	0.85	0.12	1344.
68.00?	0.40	[illegible]	640.	196.00	2.36	0.35	3744.
69.00	32.11	[illegible]	50880.	198.00	100.00	14.71	158464.
74.00	2.40	[illegible]	3808.	199.00	5.59	0.82	8864.
75.00	5.19	[illegible]	8224.	204.00	2.36	0.35	3744.
76.00	0.63	[illegible]	992.	205.00	2.87	0.42	4544.
77.00	33.20	[illegible]	52608.	206.00	17.67	2.60	28000.
78.00	1.70	[illegible]	2688.	207.00	2.22	0.33	3520.
79.00	1.23	[illegible]	1952.	217.00	3.92	0.58	6208.
80.00	1.13	[illegible]	1792.	221.00	4.54	0.67	7200.
81.00	2.18	[illegible]	3456.	222.00	0.40	0.06	640.
83.00	0.36	[illegible]	576.	223.00	0.73	0.11	1152.
85.00	0.59	[illegible]	928.	224.00	10.34	1.52	16384.
93.00	2.34	[illegible]	3712.	225.00	2.67	0.39	4224.
98.00	1.88	[illegible]	2976.	227.00	3.80	0.56	6016.
99.00	2.56	[illegible]	4064.	228.00	0.40	0.06	640.
101.00	0.73	[illegible]	1152.	229.00	0.55	0.08	864.
105.00	0.79	[illegible]	1248.	244.00	10.08	1.48	15968.
107.00	11.97	[illegible]	18976.	245.00	0.40	0.06	640.
108.00	1.17	[illegible]	1856.	246.00	0.65	0.10	1024.
110.00	21.04	[illegible]	33344.	255.00	41.92	6.17	66432.
111.00	2.30	[illegible]	3648.	256.00	5.94	0.87	9408.
117.00	7.96	[illegible]	12608.	258.00	1.58	0.23	2496.
118.00	0.42	[illegible]	672.	265.00	0.73	0.11	1152.
123.00	0.42	[illegible]	672.	273.00	0.81	0.12	1280.
127.00	41.44	[illegible]	65664.	274.00	3.59	0.53	5696.
128.00	1.51	[illegible]	2400.	275.00	23.63	3.48	37440.
129.00	15.91	[illegible]	25216.	276.00	2.30	0.34	3648.
130.00	1.41	[illegible]	2240.	277.00	0.42	0.06	672.
131.00	0.36	[illegible]	576.	296.00	2.99	0.44	4736.
137.00	0.42	[illegible]	672.	323.00	1.15	0.17	1824.
141.00	0.93	[illegible]	1472.	334.00	0.55	0.08	864.
147.00	0.42	[illegible]	672.	365.00	1.55	0.23	2464.
148.00	0.97	[illegible]	1536.	372.00	0.67	0.10	1056.
154.00	0.36	[illegible]	576.	423.00	3.01	0.44	4768.
155.00	0.67	[illegible]	1056.	424.00	0.55	0.08	864.
156.00	0.95	[illegible]	1504.	441.00	10.66	1.57	16896.
166.00	0.38	[illegible]	608.	442.00	96.45	14.19	152832.
167.00	2.16	[illegible]	3424.	443.00	17.08	2.51	27072.
168.00	1.74	[illegible]	2752.	444.00	1.09	0.16	1728.
174.00	0.46	0.07	736.				
175.00	0.85	0.12	1344.				
176.00	0.46	0.07	736.				
177.00	0.77	0.11	1216.				
179.00	2.85	0.42	4512.				

MIDRIC
08/25/89 10:01:00
SAMPLE: DFTPP-B TUNE 8/25/89
CONDS.: 50NG INJECTION
RANGE: G 1,1000 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: DFTPPB0825 #1 SCANS 580 TO 680
CALI: 882464AB #2

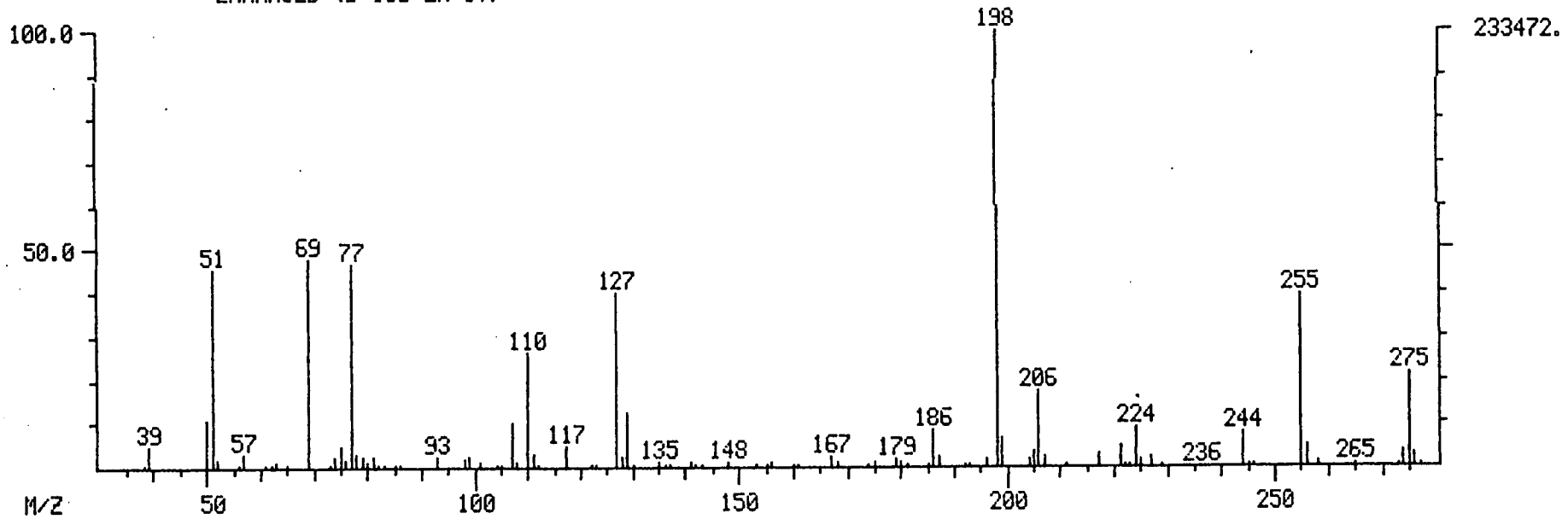


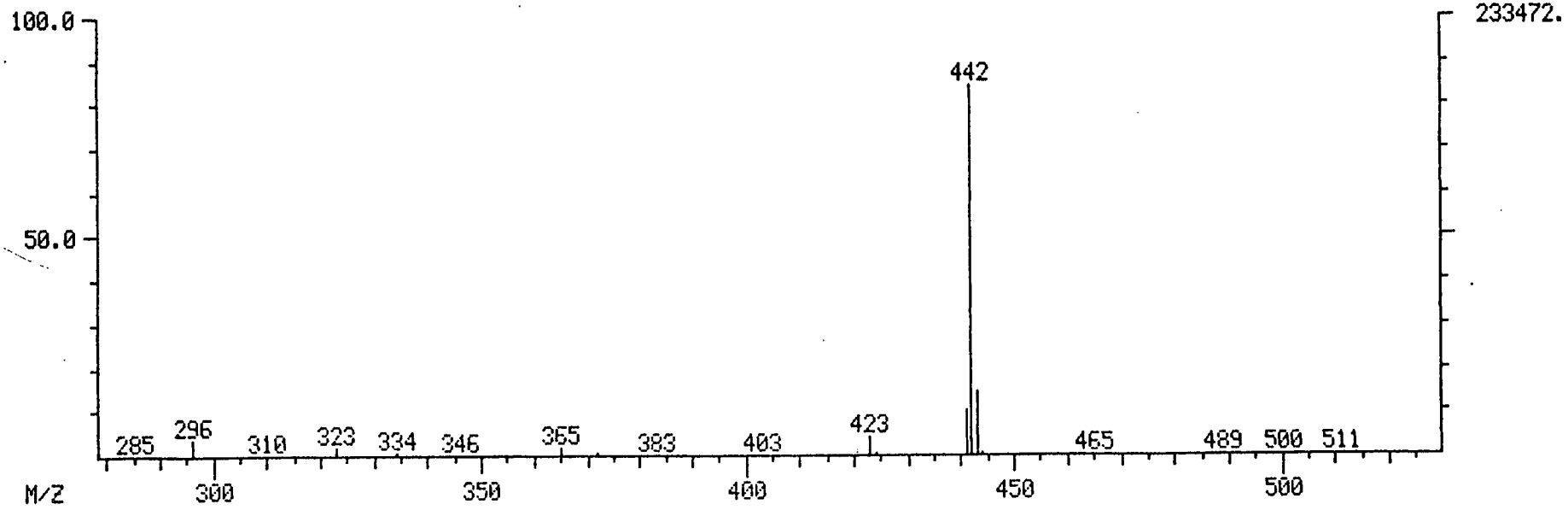
000117

MID MASS SPECTRUM
08/28/89 16:51:00 + 10:24
SAMPLE: DFTPP-B TUNE 8/28/89
CONDS.: 50 NG INJECTION
GC TEMP: 226 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: DFTPPB0828 #621
CALI: DFTPPB0828 #2

BASE M/Z: 198
RIC: 1628150.





000418

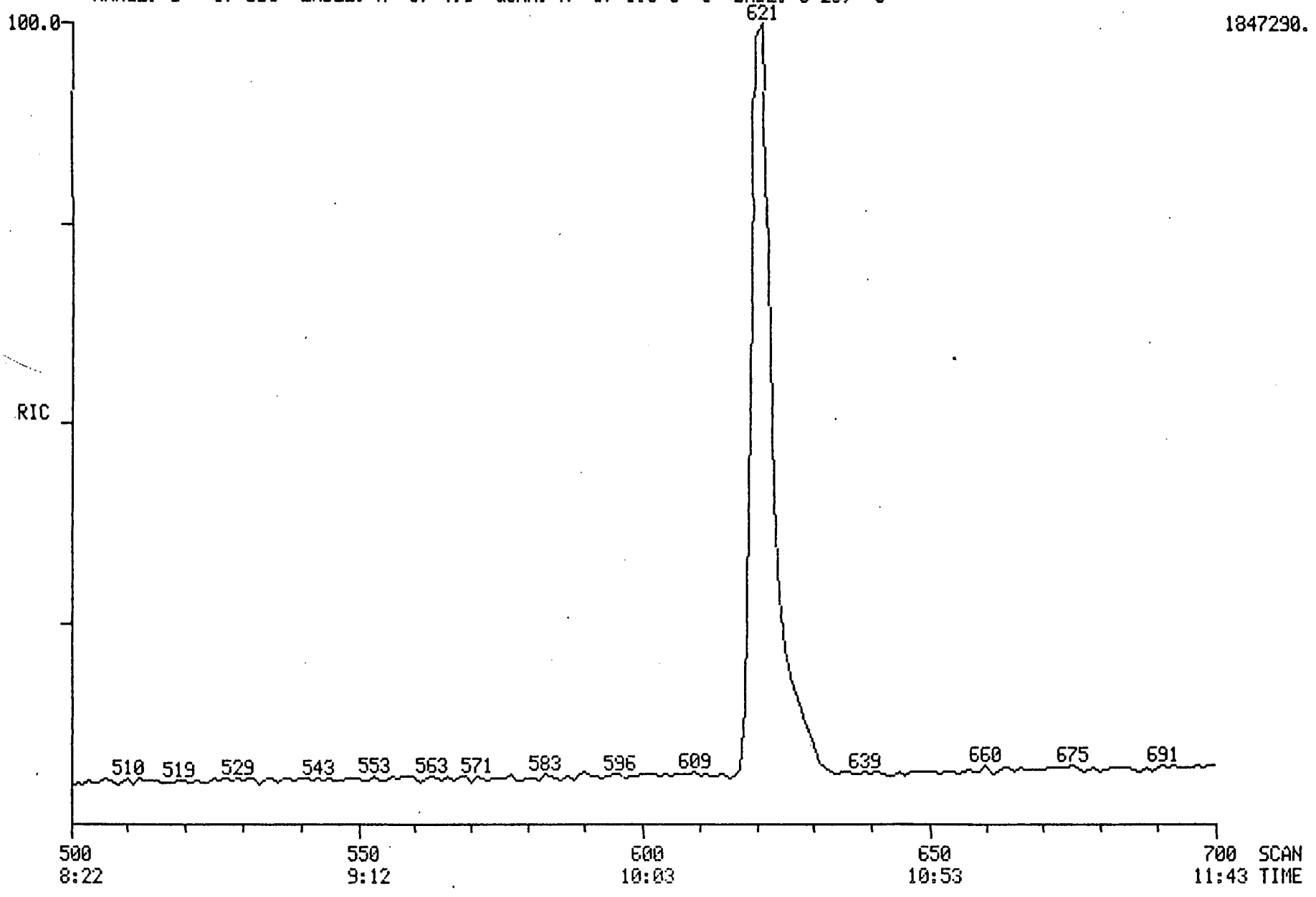
MID Mass List [illegible] Data: DFTPPB0828 # 621 Base m/z: 198
08/28/89 16:51:00 + [illegible] Cali: DFTPPB0828 # 2 RIC: 1628150.
Sample: DFTPP-B TUNE 8/28/89
Conds.: 50 NG INJECTION
Enhanced (S 15B 2N OT)

36 0.00 Minima [illegible] Min inten: 107.
511 # 0 Maxima

Mass	% RA	Mass	% RA	Mass	% RA	Mass	% RA
36	0.10	115	0.10	188	0.17	256	4.55
38	0.35	117	4.70	189	0.27	257	0.19
39	4.89	118	0.18	191	0.08	258	0.99
49	0.11	120	0.09	192	0.34	259	0.13
50	10.55	121	0.11	193	0.66	263	0.06
51	45.67	122	0.34	194	0.09	265	0.34
52	1.62	123	0.85	195	0.07	266	0.07
56	0.86	127	40.35	196	1.79	272	0.05
57	3.24	128	112.89	198	100.00	273	0.86
61	0.41	129	12.40	199	6.30	274	3.46
62	0.43	130	10.82	200	0.15	275	21.71
63	1.24	132	0.08	201	0.15	276	2.97
64	0.14	134	0.18	202	0.09	277	0.72
65	0.66	135	1.07	203	0.12	285	0.06
69	47.81	136	0.31	204	1.76	293	0.16
73	0.43	137	0.43	205	3.67	294	0.08
74	2.65	140	10.12	206	17.57	296	3.73
75	5.06	141	1.26	207	2.40	303	0.30
76	2.08	142	0.40	208	0.15	310	0.06
77	46.82	143	0.37	210	0.12	323	1.54
78	2.81	148	1.08	211	0.39	327	0.23
79	2.48	149	0.26	212	0.07	328	0.06
80	1.42	151	0.17	215	0.11	332	0.07
81	2.26	152	0.19	216	0.11	333	0.06
82	0.45	153	0.33	217	3.12	334	0.71
83	0.65	154	0.27	218	0.17	341	0.08
84	0.20	155	0.39	221	4.53	342	0.08
85	0.42	156	0.99	222	0.32	346	0.21
86	0.36	157	0.11	223	0.55	351	0.05
87	0.24	158	0.09	224	9.16	352	0.28
88	0.11	159	0.19	225	1.69	353	0.25
89	0.05	160	0.38	227	2.44	354	0.27
90	0.05	161	0.34	228	0.22	355	0.08
92	0.27	162	0.05	229	0.51	365	1.89
93	2.62	165	0.29	231	0.09	371	0.06
94	0.25	167	2.63	234	0.08	372	0.68
95	0.20	168	1.09	236	0.13	373	0.10
96	0.18	172	0.13	237	0.05	383	0.11
98	1.93	173	0.14	240	0.05	385	0.06
99	2.33	174	0.47	241	0.10	403	0.28
100	0.13	175	1.11	242	0.30	404	0.11
101	1.26	176	0.12	243	0.16	421	0.29
103	0.19	177	0.19	244	7.81	422	0.16
104	0.32	179	1.65	245	0.84	423	4.02
105	0.54	180	1.07	246	0.88	424	0.44
107	9.99	181	10.41	247	0.07	441	10.39
108	1.45	184	0.06	248	0.11	442	84.32
110	26.56	185	10.86	249	0.10	443	14.64
111	3.05	186	8.66	252	0.07	444	0.86
112	0.31	187	2.56	255	39.80	447	0.05

MIDRIC
08/28/89 16:51:00
SAMPLE: DFTPP-B TUNE 8/28/89
CONDS.: 50 NG INJECTION
RANGE: G 1, 996 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: DFTPPB0828 #621 SCANS 500 TO 700
CALI: DFTPPB0828 #2



000420

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AQ_BLANK

Lab Name: Q C INC. Contract: FLEMING

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

Matrix: (soil/water) WATER Lab Sample ID: BWB0815

Sample wt/vol: 1000 (g/mL) ML Lab File ID: BWB0815

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

% Moisture: not dec. ____ dec. ____ Date Extracted: 08/20/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 08/25/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol		
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol		
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol		
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol		
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol		
105-67-9	2,4-Dimethylphenol		
65-85-0	Benzoic Acid		
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol		
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol		
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol		
95-95-4	2,4,5-Trichlorophenol		
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AQ_BLANK

Lab Name: Q C INC. Contract: FLEMING

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

Matrix: (soil/water) WATER Lab Sample ID: BWB0815

Sample wt/vol: 1000 (g/mL) ML Lab File ID: BWB0815

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

% Moisture: not dec. ____ dec. ____ Date Extracted: 08/20/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 08/25/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

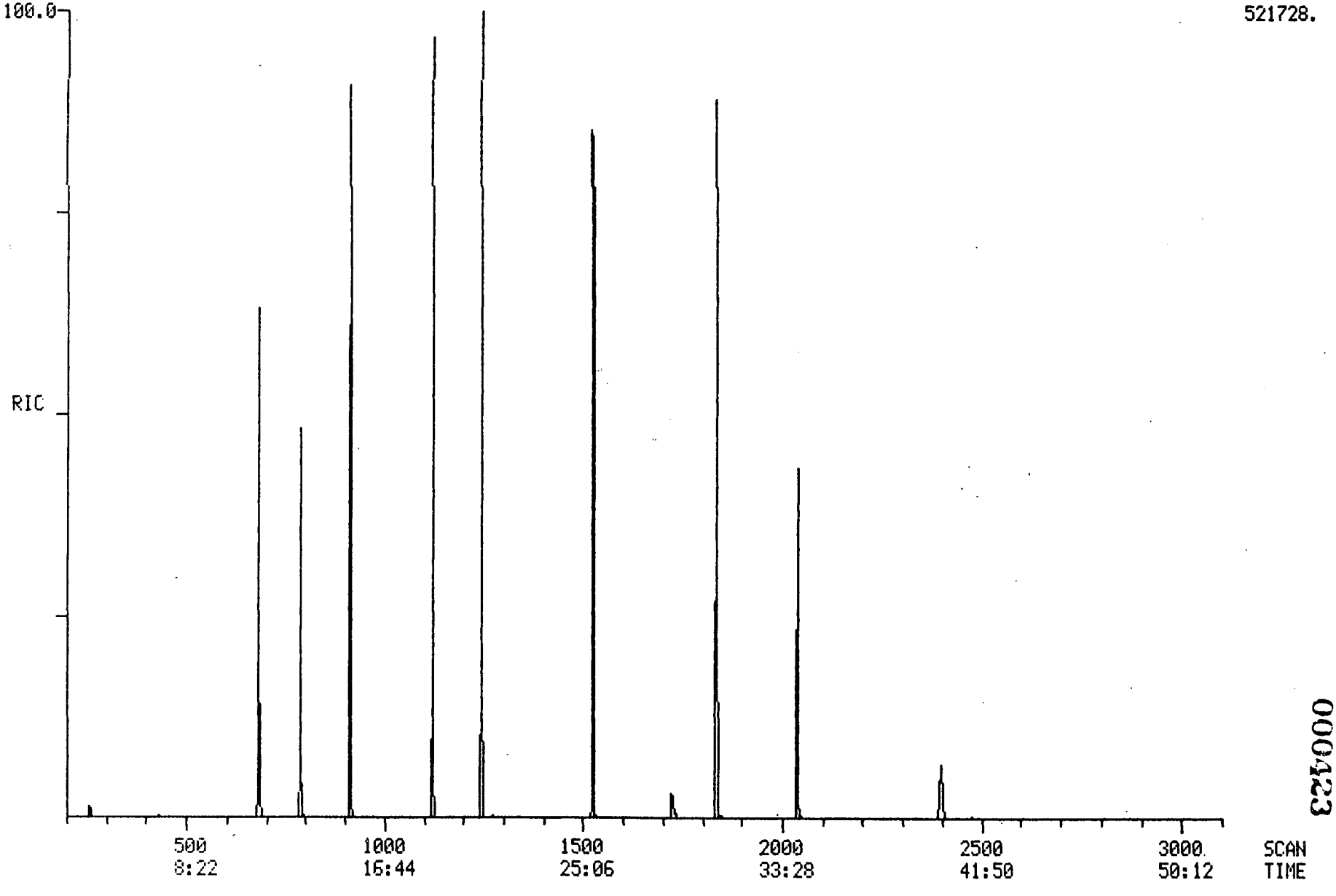
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol		
100-02-7	4-Nitrophenol		
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol		
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol		
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

MIDRIC
08/25/89 12:33:00
SAMPLE: AQUEOUS BLANK
CONDS.: 1000MLS/1.0ML
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BWB0815 #1
CALI: BWB0815 #2

SCANS 200 TO 3100

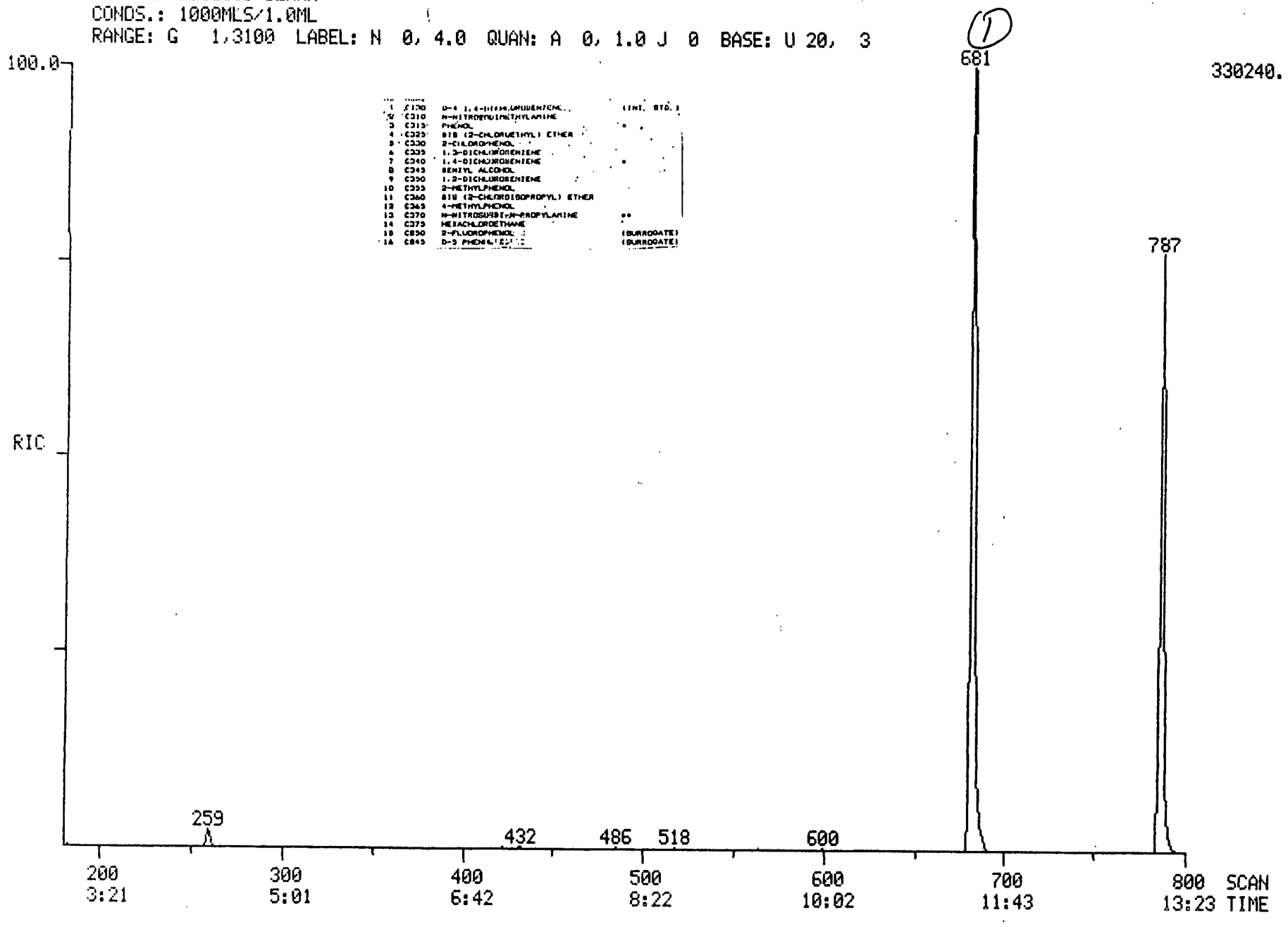


000423

MIDRIC
08/25/89 12:33:00
SAMPLE: AQUEOUS BLANK
CONDS.: 1000MLS/1.0ML
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BWB0815 #1
CALI: BWB0815 #2

SCANS 180 TO 800



1	C300	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	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(E)	(SURROGATE)

000424

Quantitation Report File: BWB0815

Data: BWB0815.TI
08/25/89 12:33:00
Sample: AQUEOUS BLANK
Conds.: 1000MLS/1.0ML
Formula: Instrument: 5100 Weight: 0.003
Submitted by: QC INC Analyst: DDD Acct. No.: BWB0815

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

N	Name		
1	CI30	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	CS50	2-FLUOROPHENOL	(SURROGATE)
16	CS45	D-5 PHENOL	(SURROGATE)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	681	11:24	1	1.000	A BB	196288.	40.000 NG	*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								

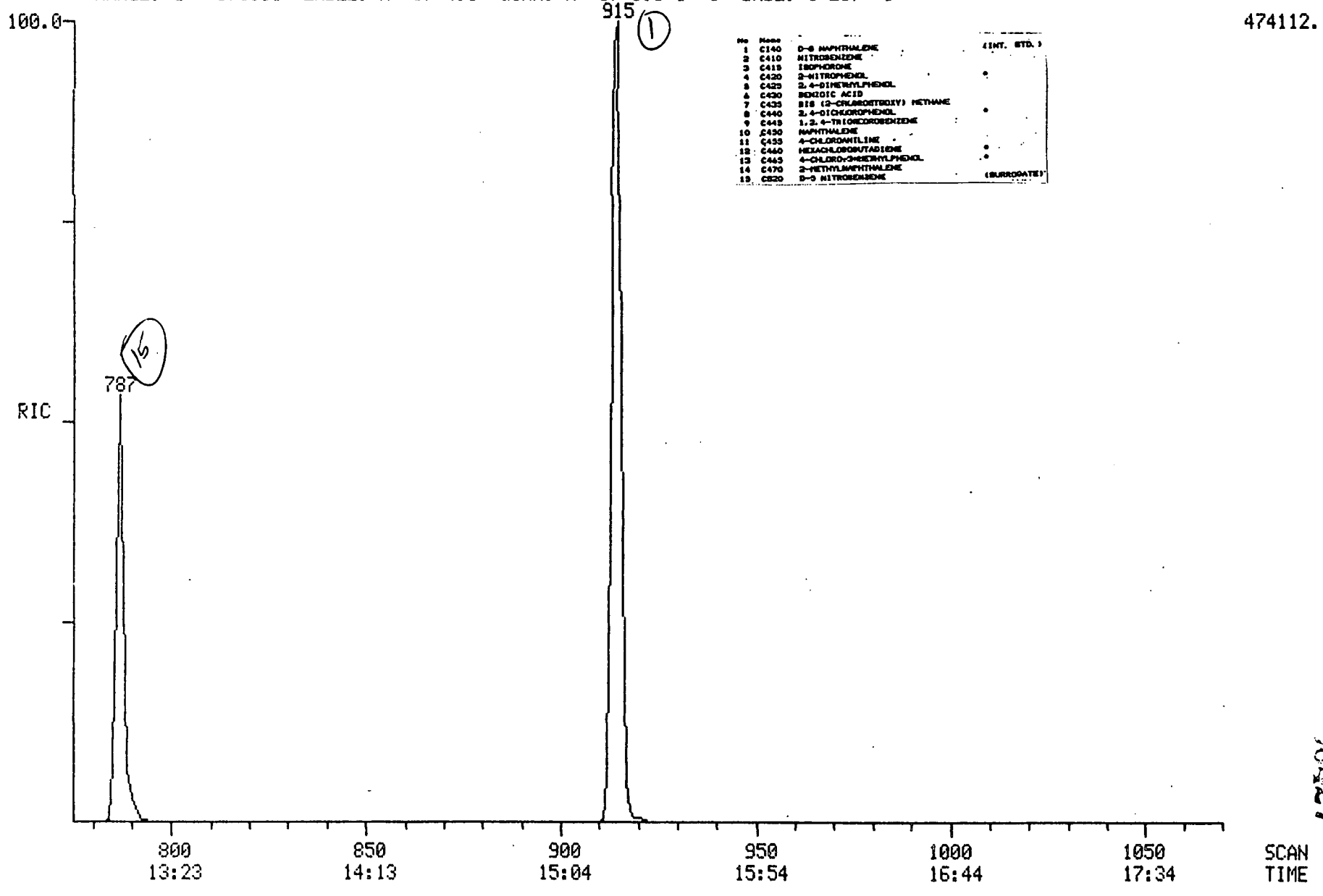
No	Ret(L)	Ratio	RRT	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	11:22	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	3:49		0.336						
3	10:39		0.937						
4	10:47		0.948						
5	10:53		0.957						
6	11:15		0.990						
7	11:25		1.004						

N	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
8	12:50		1.130						
9	11:58		1.053						
10	11:56		1.050						
11	12:24		1.091						
12	12:23		1.090						
13	12:50		1.130						
14	12:53		1.134						
15	7:46		0.683						
16	10:37		0.934						

MIDRIC
08/25/89 12:33:00
SAMPLE: AQUEOUS BLANK
CONDS.: 1000MLS/1.0ML
RANGE: G 1.3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BWB0815 #1
CALI: BWB0815 #2

SCANS 775 TO 1070



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	C520	D-5 NITROBENZENE (SURROGATE)

10427

Quantitation Rep rt [illegible] BWB0815 [illegible]0428

Data: BWB0815.TI
08/25/89 12:33:00
Sample: AQUEOUS BLANK
Conds.: 1000MLS/1.0ML
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitt d by: QC INC: [illegible] Analyst: DDD Acct. No.: BWB0815

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

No	Name		
1	CI40	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	CS20	D-5 NITROBENZENE	(SURROGATE)

No	m/z	Scan	Time	RRT	Meth	Area(Hght)	Amount	%Tot
1	136	914	15:18	1.000	A BB	755552.	40.000 NG	52.31
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	82	787	13:10	0.861	A BB	247520.	36.473 NG	47.70

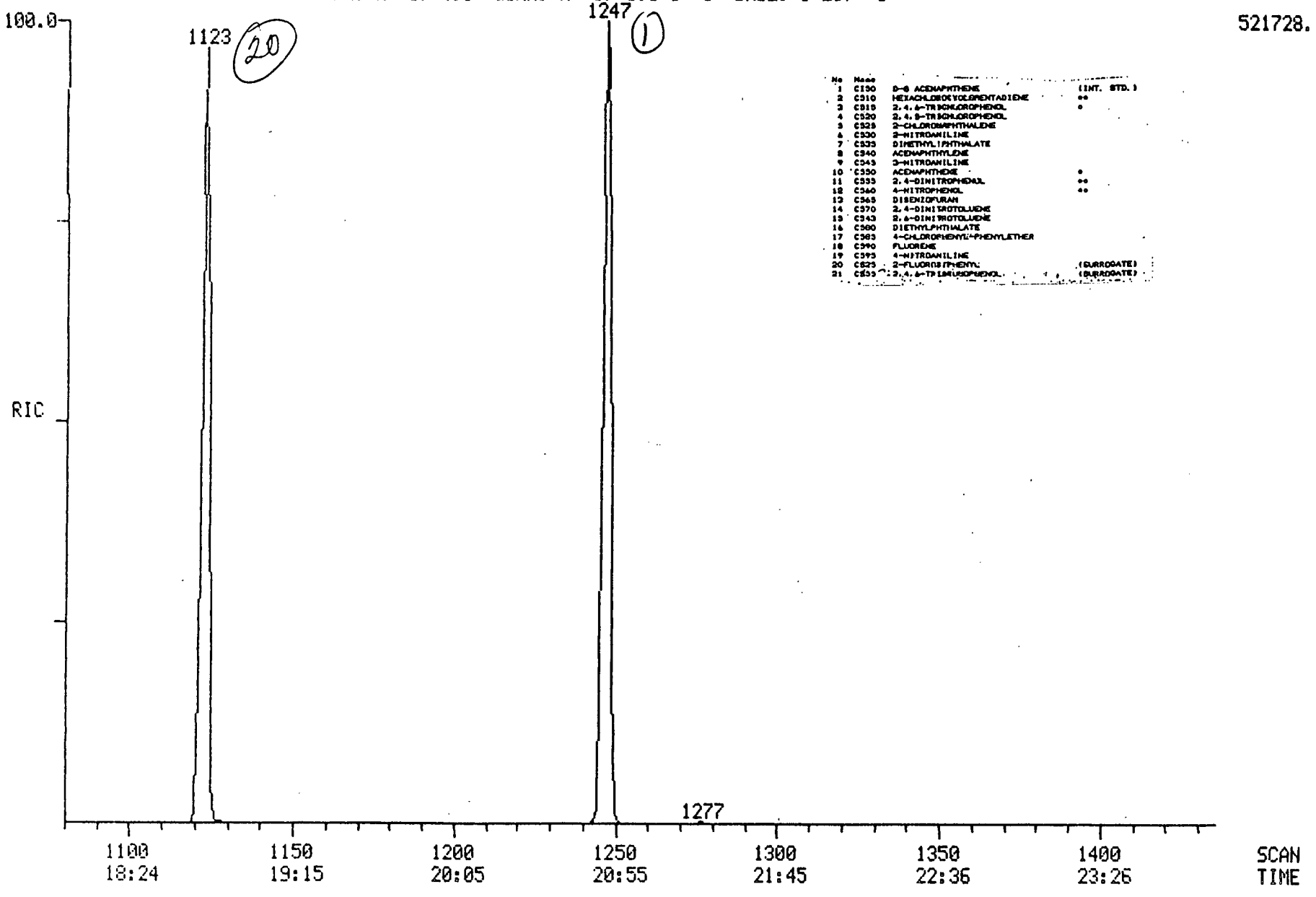
No	Ret(L)	Ratio	RRT(E)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	15:17	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	13:12		0.864						
3	13:56		0.912						
4	14:11		0.929						
5	14:26		0.944						
6	14:58		0.979						
7	14:42		0.962						
8	14:57		0.978						
9	15:10		0.992						

N	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
10	15:21		1.004						
11	15:38		1.023						
12	15:56		1.043						
13	17:13		1.127						
14	17:30		1.146						
15	13:09	1.00	0.861	1.00	36.47	50.00	0.262	0.359	0.73

MIDRIC
08/25/89 12:33:00
SAMPLE: AQUEOUS BLANK
CONDS.: 1000MLS/1.0ML
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BWB0815 #1
CALI: BWB0815 #2

SCANS 1080 TO 1435



No	Mass		
1	C150	D-8 ACENAPHTHENE	(INT. STD.)
2	C210	HEXACHLOROCYCLOPENTADIENE	**
3	C210	2,4,6-TRICHLOROPHENOL	*
4	C220	2,4,5-TRICHLOROPHENOL	
5	C225	2-CHLORONAPHTHALENE	
6	C230	2-NITROANILINE	
7	C235	DIMETHYLPHTHALATE	
8	C240	ACENAPHTHYLENE	
9	C245	3-NITROANILINE	
10	C250	ACENAPHTHENE	*
11	C255	2,4-DINITROPHENOL	**
12	C260	4-NITROPHENOL	**
13	C265	DIBENZOFURAN	
14	C270	2,4-DINITROTOLUENE	
15	C275	2,6-DINITROTOLUENE	
16	C280	DIETHYLPHTHALATE	
17	C285	4-CHLOROPHENYL-PHENYLETHER	
18	C290	FLUORENE	
19	C295	4-NITROANILINE	
20	C325	2-FLUOROBIPHENYL	(SURROGATE)
21	C355	2,4,6-TRIBROMOPHENOL	(SURROGATE)

Quantitation Report [illegible] File: BWB0815

Data: BWB0815.TI
08/25/89 12:33:00
Sample: AQUEOUS BLANK
Conds.: 1000MLS/1.0ML
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: QC INC[illegible] Analyst: DDD Acct. No.: BWB0815

AMOUNT=AREA * REF AMN[illegible](REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI50	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	C543	2,6-DINITROTOLUENE	
16	C580	DIETHYLPHTHALATE	
17	C585	4-CHLOROPHENYL-PHENYLETHER	
18	C590	FLUORENE	
19	C595	4-NITROANILINE	
20	CS25	2-FLUOROBIPHENYL	(SURROGATE)
21	CS55	2,4,6-TRIBROMOPHENOL	(SURROGATE)

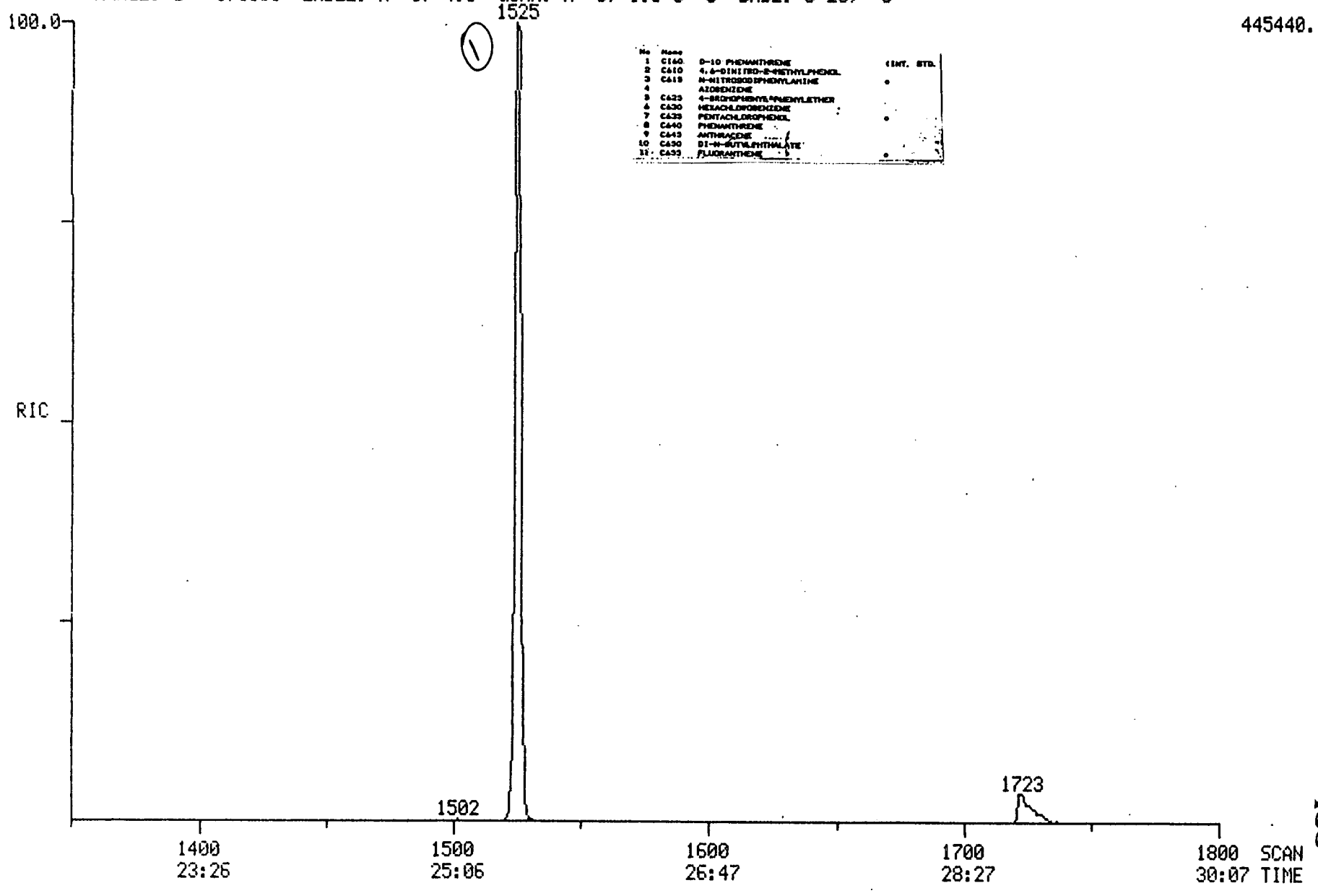
No	m/z	Scan	Time	RRT	Meth	Area(Hght)	Amount		%Tot
1	164	1247	20:52[illegible]	1.000	A BB	387808.	40.000	NG	47.40
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	172	1123	18:4[illegible]	0.901	A BB	528128.	44.401	NG	52.61
21	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	20:51	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	18:13		0.874						
3	18:32		0.888						
4	18:39		0.894						
5	19:02		0.913						
6	19:31		0.936						
7	20:13		0.970						
8	20:21		0.976						
9	20:50		0.999						
10	20:57		1.005						
11	21:08		1.014						
12	21:27		1.029						
13	21:27		1.029						
14	21:38		1.038						
15	20:25		0.979						
16	22:28		1.078						
17	22:36		1.083						
18	22:33		1.081						
19	22:48		1.093						
20	18:46	1.00	0.900	1.00	44.40	50.00	1.089	1.227	0.89
21	23:23		1.121						

MIDRIC
08/25/89 12:33:00
SAMPLE: AQUEOUS BLANK
CONDS.: 1000MLS/1.0ML
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BWB0815 #1
CALI: BWB0815 #2

SCANS 1350 TO 1800



Quantitation Report File: BWB0815

000434

Data: BWB0815.TI
08/25/89 12:33:00
Sample: AQUEOUS BLANK
Conds.: 1000MLS/1.0ML
Formula: Instrument: 5100 Weight: 0.003
Submitted by: QC INC Analyst: DDD Acct. No.: BWB0815

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

No	Name		
1	CI60	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	*

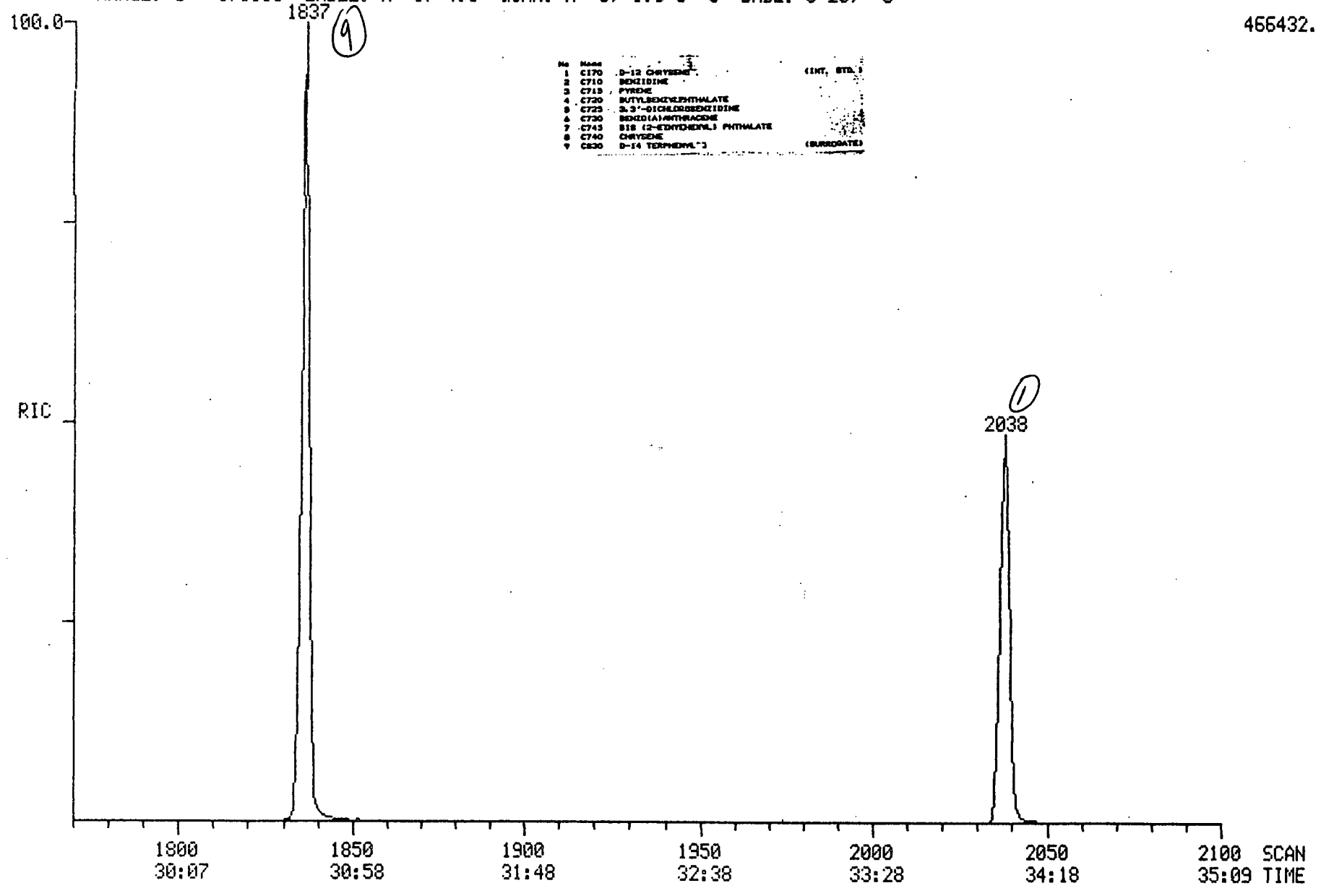
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	188	1525	25:31	1	1.000	A BB	605152.	40.000 NG	*100.
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	25:30	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	22:55		0.898						
3	23:01		0.902						
4	23:05		0.905						
5	24:07		0.946						
6	24:33		0.963						
7	25:09		0.986						
8	25:35		1.003						
9	25:43		1.009						
10	27:39		1.084						
11	29:24		1.153						

MIDRIC
08/25/89 12:33:00
SAMPLE: AQUEOUS BLANK
CONDS.: 1000MLS/1.0ML
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BWB0815 #1
CALI: BWB0815 #2

SCANS 1770 TO 2100



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)

000435

Quantitation Report [illegible] BWB0815

000436

Data: BWB0815.TI
08/25/89 12:33:00
Sample: AQUEOUS BLANK
C nds.: 1000MLS/1.0ML
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: QC INC[illegible] Analyst: DDD Acct. No.: BWB0815

AMOUNT=AREA * REF AM[illegible]/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI70	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-ETHYEHEXYL) PHTHALATE	
8	C740	CHRYSENE	
9	CS30	D-14 TERPHENYL	(SURROGATE)

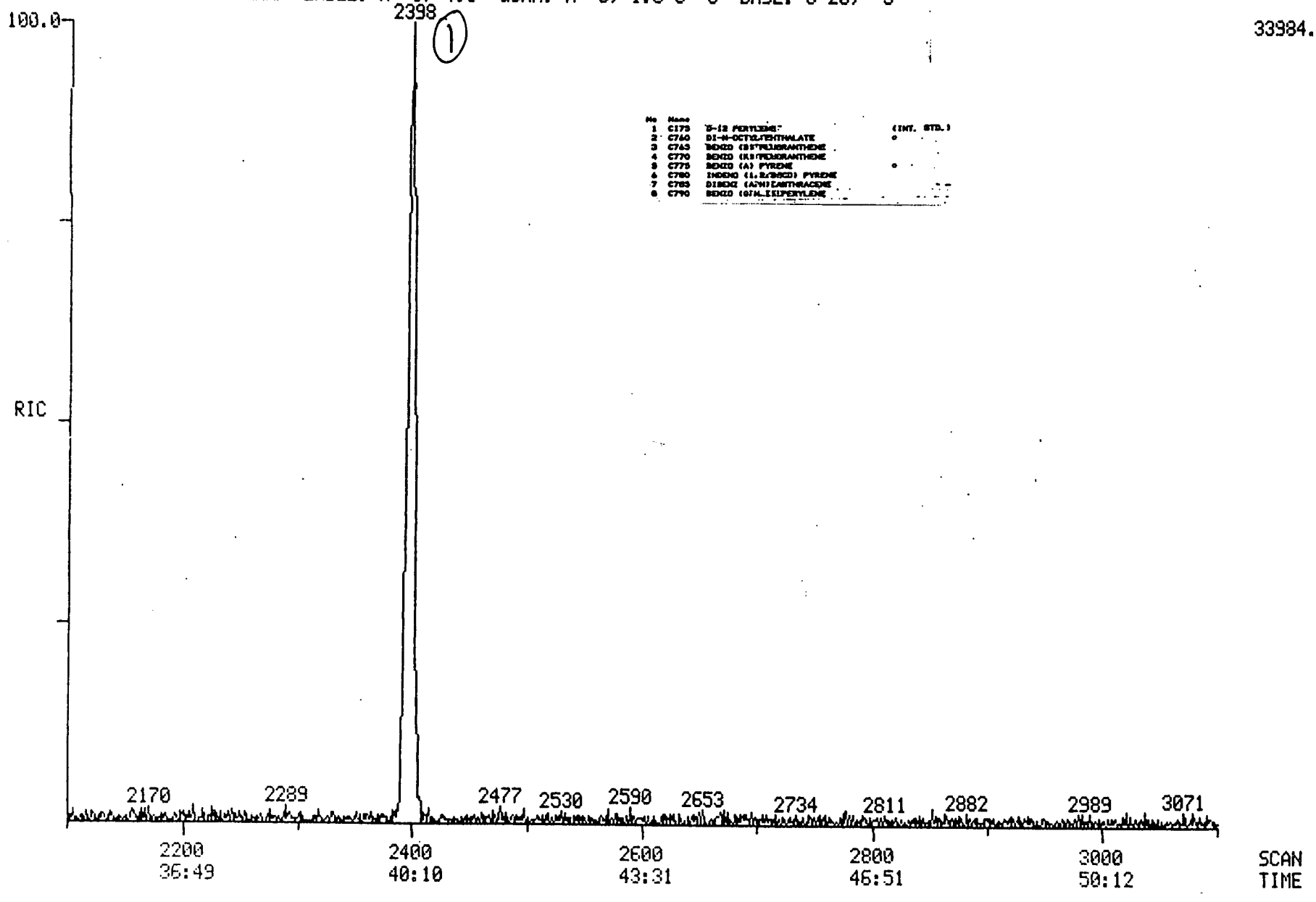
No	m/z	Scan	Time[illegible]	Ref[illegible] RRT	Meth	Area(Hght)	Amount	%Tot
1	240	2038	34:06[illegible]	1.000	A BB	334080.	40.000 NG	37.33
2	NOT FOUND							
3	NOT FOUND							
4	NOT FOUND							
5	NOT FOUND							
6	NOT FOUND							
7	NOT FOUND							
8	NOT FOUND							
9	244	1837	30:4[illegible]	0.901	A BV	648864.	67.152 NG	62.67

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	34:04	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	29:52		0.877						
3	30:06		0.884						
4	32:26		0.952						
5	34:01		0.999						
6	34:00		0.998						
7	34:26		1.011						
8	34:09		1.002						
9	30:41	1.00	0.901	1.00	67.15	50.00	1.554	1.157	1.34

MIDRIC
08/25/89 12:33:00
SAMPLE: AQUEOUS BLANK
CONDS.: 1000MLS/1.0ML
RANGE: G 1,3100 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BWB0815 #1
CALI: BWB0815 #2

SCANS 2100 TO 3100



No	Name		
1	C175	"D-12 PERYLENE"	(INT. STD.)
2	C760	DI-N-OCTYL/TERTHALATE	o
3	C765	BENZO (B)"FLUORANTHENE	
4	C770	BENZO (K)"FLUORANTHENE	
5	C775	BENZO (A) PYRENE	o
6	C780	INDENO (1,2/3BCD) PYRENE	
7	C785	DIBENZ (A/H)ANTHRACENE	
8	C790	BENZO (GH)_PERYLENE	

Quantitation R port File: BWB0815

000438

Data: BWB0815.TI
08/25/89 12:33:00
Sample: AQUEOUS BLANK
Conds.: 1000MLS/1.0ML
Formula: Instrument: 5100 Weight: 0.003
Submitt d by: QC INC Analyst: DDD Acct. No.: BWB0815

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

No	Name		
1	C175	D-12 PERYLENE	(INT. STD.)
2	C760	DI-N-OCTYL PHTHALATE	*
3	C765	BENZO (B) FLUORANTHENE	
3	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	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	264	2398	40:08	1	1.000	A BB	151904.	40.000 NG	*100.
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								

No	R t(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	40:02	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	36:45		0.918						
3	38:06		0.952						
4	38:13		0.955						
5	39:44		0.992						
6	47:40		1.191						
7	48:00		1.199						
8	49:54		1.247						

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AQ_BLANK_MS

Lab Name: Q C INC. Contract: FLEMING

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

Matrix: (soil/water) WATER Lab Sample ID: BWB0815 MS

Sample wt/vol: 1000 (g/mL) ML Lab File ID: BWB0815SR

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

% Moisture: not dec. ____ dec. ____ Date Extracted: 08/20/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 08/28/89

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol		
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol		
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol		
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol		
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol		
105-67-9	2,4-Dimethylphenol		
65-85-0	Benzoic Acid		
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol		
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol		
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol		
95-95-4	2,4,5-Trichlorophenol		
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

000440

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AQ_BLANK_MS

Lab Name: Q C INC. Contract: FLEMING

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

Matrix: (soil/water) WATER Lab Sample ID: BWB0815 MS

Sample wt/vol: 1000 (g/mL) ML Lab File ID: BWB0815SR

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

% Moisture: not dec. ____ dec. ____ Date Extracted: 08/20/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 08/28/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

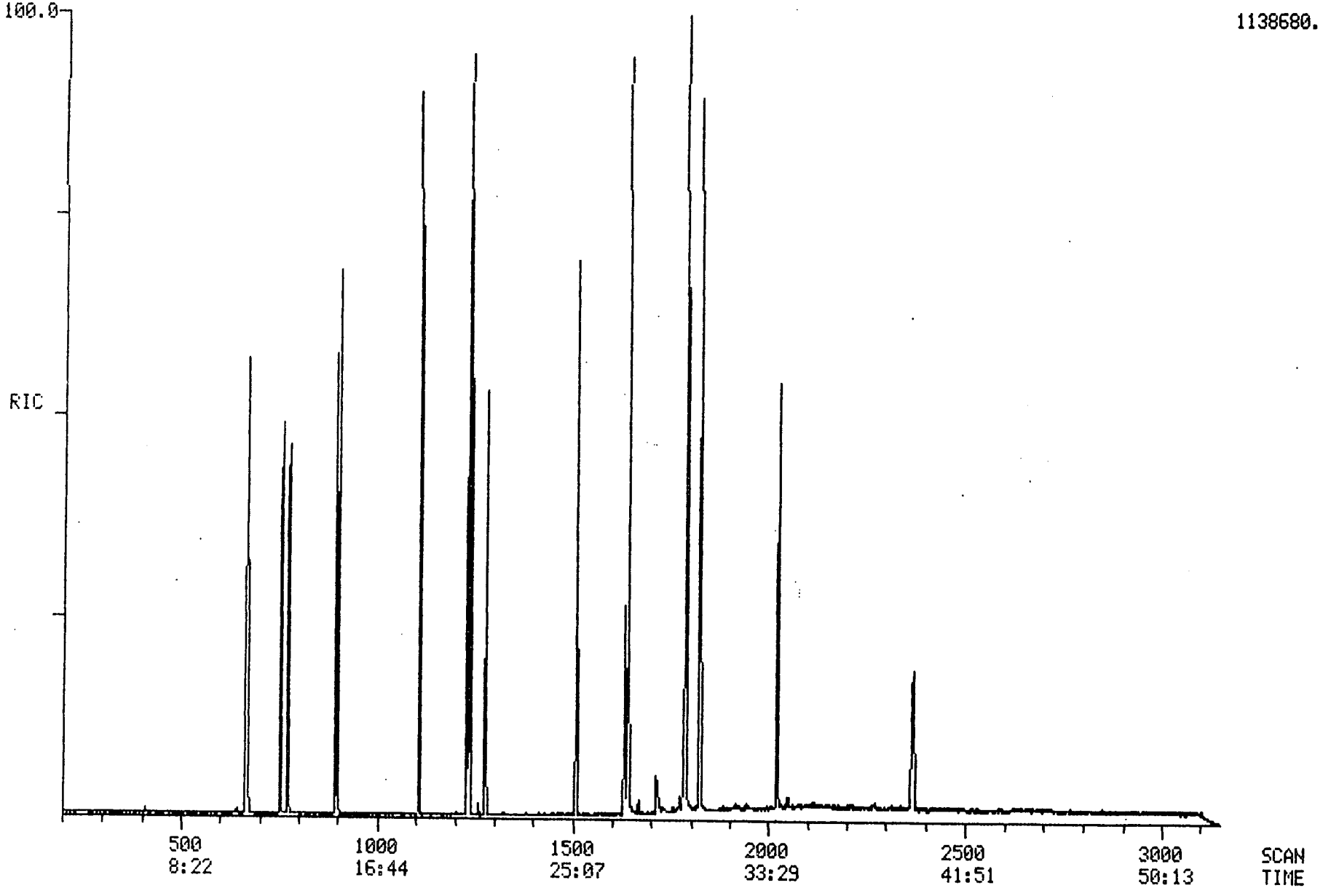
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol		
100-02-7	4-Nitrophenol		
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol		
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol		
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

MIDRIC
08/28/89 19:06:00
SAMPLE: BLANK SPIKE
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BWB0815SR #1
CALI: BWB0815SR #2

SCANS 200 TO 3150

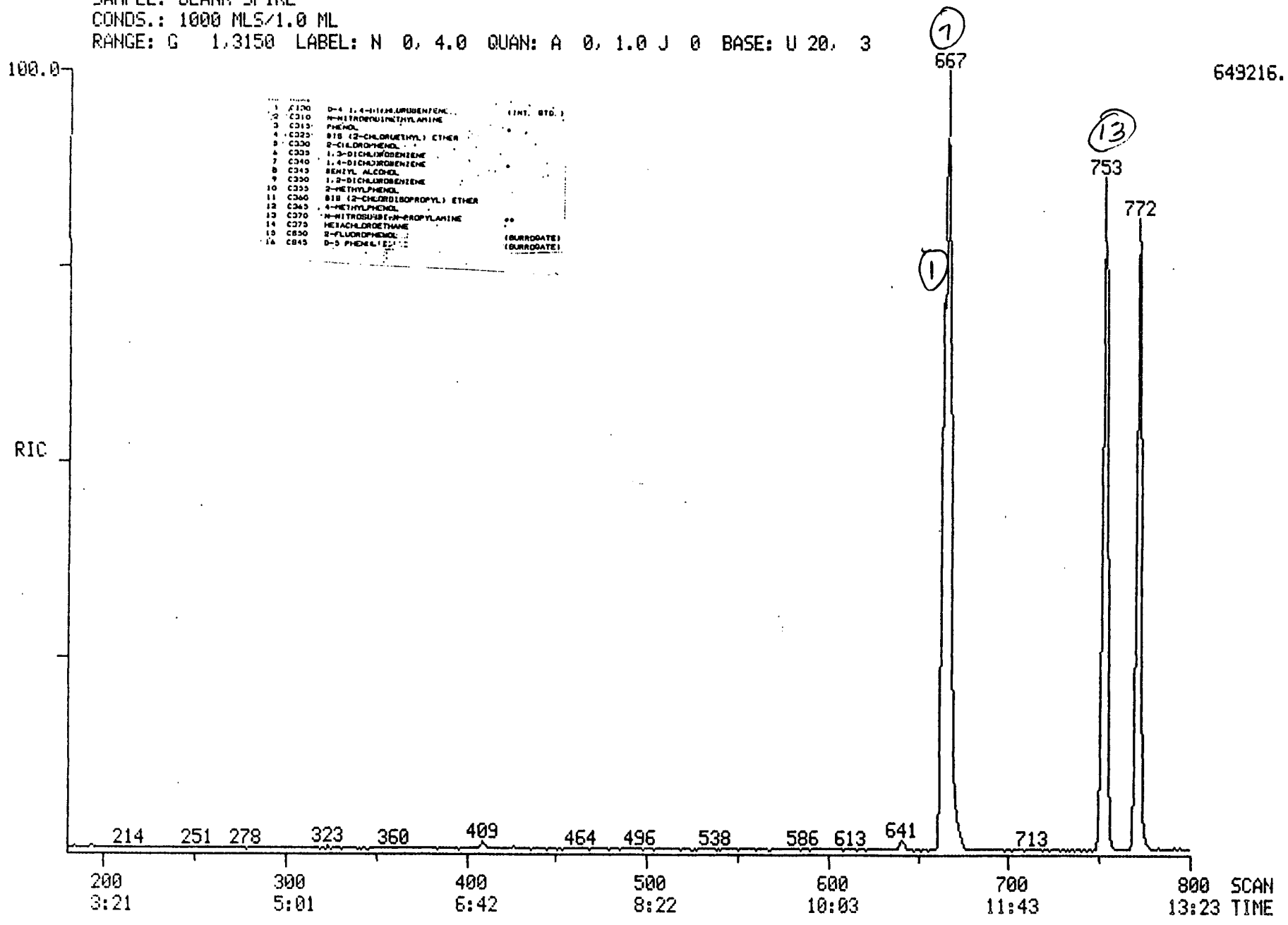


000441

MIDRIC
08/28/89 19:06:00
SAMPLE: BLANK SPIKE
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1.3150 LABEL: N 0. 4.0 QUAN: A 0. 1.0 J 0 BASE: U 20. 3

DATA: BWB0815SR #1
CALI: BWB0815SR #2

SCANS 180 TO 800



0442

Quantitation Report File: BWB0815SR

Data: BWB0815SR.TI
08/28/89 19:06:00
Sample: BLANK SPIKE
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: 5100 Weight: 0.003
Submitted by: FLEMING Analyst: WSS Acct. No.: BWB0815S

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

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-NITROSODI-N-PROPYLAMINE	**
14	C375	HEXACHLOROETHANE	
15	CS50	2-FLUOROPHENOL	(SURROGATE)
16	CS45	D-5 PHENOL	(SURROGATE)

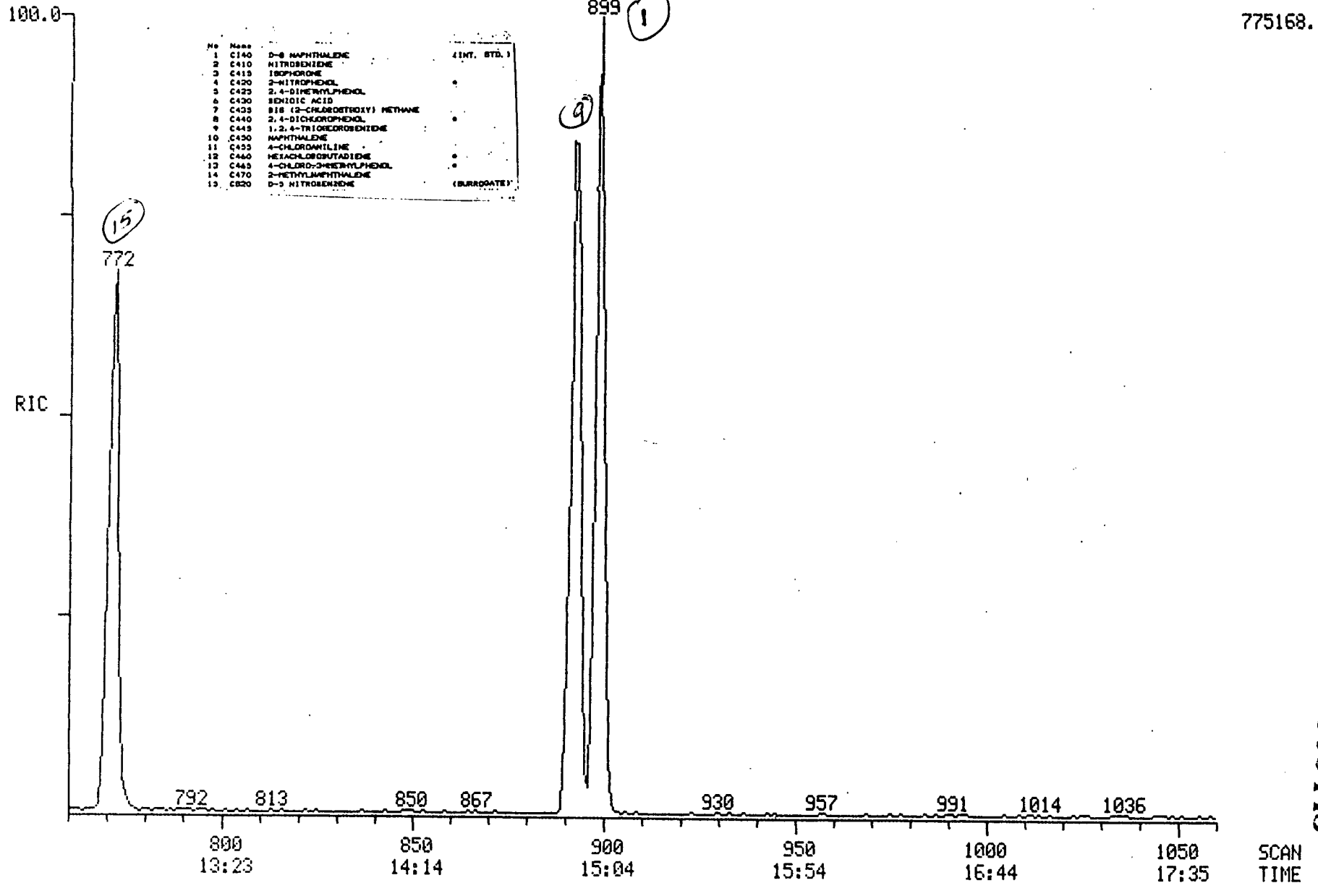
No	m/z	Scan	Time	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	664	11:07	1.000	A BB	280320.	40.000 NG	19.40
2	NOT FOUND							
3	NOT FOUND							
4	NOT FOUND							
5	NOT FOUND							
6	146	667	11:10	1.005	A BB	~~534912.~~	~~50.833 NG~~	~~24.65~~
7	146	667	11:10	1.005	A BB	534912.	49.614 NG	24.06
8	NOT FOUND							
9	NOT FOUND							
10	NOT FOUND							
11	NOT FOUND							
12	NOT FOUND							
13	70	753	12:38	1.134	A BB	473664.	65.733 NG	31.88
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	11:01	1.01	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	3:12		0.290						
3	10:18		0.935						
4	10:25		0.945						
5	10:30		0.953						
6	10:54	1.02	0.989	1.02	50.83	50.00	1.527	1.502	1.02
7	11:04	1.01	1.005	1.00	49.61	50.00	1.527	1.538	0.99

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
8	12:35		1.143						
9	11:38		1.056						
10	11:37		1.055						
11	12:07		1.100						
12	12:06		1.099						
13	12:33	1.00	1.140	0.99	65.73	50.00	1.352	1.028	1.31
14	12:35		1.143						
15	7:09		0.649						
16	10:16		0.932						

MIDRIC
08/28/89 19:06:00
SAMPLE: BLANK SPIKE
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1.3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BWB0815SR #1 SCANS 760 TO 1060
CALI: BWB0815SR #2



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)

000445

Quantitation Report File: BWB0815SR

000446

Data: BWB0815SR.TI
08/28/89 19:06:00
Sample: BLANK SPIKE
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: 5100 Weight: 0.003
Submitted by: FLEMING Analyst: WSS Acct. No.: BWB0815S

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

No	Name		
1	CI40	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	CS20	D-5 NITROBENZENE	(SURROGATE)

No	m/z	Scan	Time	RRT	Meth	Area(Hght)	Amount		%Tot
1	136	899	15:03	1.000	A BB	1071480.	40.000	NG	27.04
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	180	892	14:58	0.992	A BB	481728.	53.857	NG	36.41
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	82	772	12:55	0.859	A BB	532320.	54.071	NG	36.55

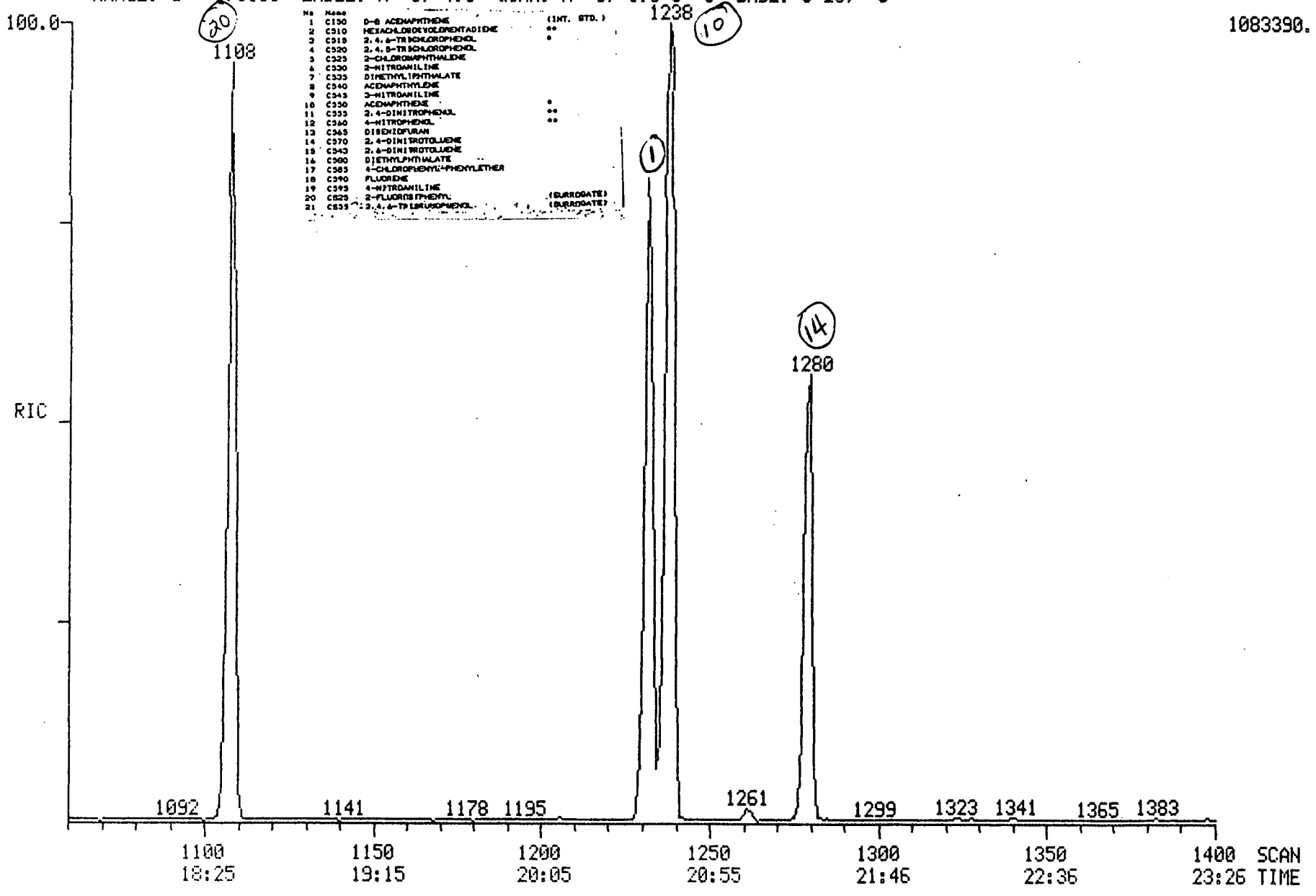
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	15:02	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	12:55		0.860						
3	13:42		0.911						
4	13:56		0.927						
5	14:12		0.944						
6	14:47		0.983						
7	14:29		0.963						
8	14:43		0.979						
9	14:55	1.00	0.992	1.00	53.86	50.00	0.360	0.334	1.08

N	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
10	15:06		1.004						
11	15:24		1.024						
12	15:43		1.046						
13	17:02		1.134						
14	17:18		1.150						
15	12:52	1.00	0.856	1.00	54.07	50.00	0.397	0.368	1.08

MIDRIC
08/28/89 19:06:00
SAMPLE: BLANK SPIKE
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BWB0815SR #1
CALI: BWB0815SR #2

SCANS 1060 TO 1400



No	Mass		
1	C150	D-8 ACENAPHTHENE	(INT. STD.)
2	C310	HEXACHLOROCYCLOPENTADIENE	**
3	C318	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)

000448

Quantitation Report File: BWB0815SR

000449

Data: BWB0815SR.TI
08/28/89 19:06:00
Sample: BLANK SPIKE
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: 5100 Weight: 0.003
Submitted by: FLEMING Analyst: WSS Acct. No.: BWB0815S

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

No	Name		
1	CI50	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	C543	2,6-DINITROTOLUENE	
16	C580	DIETHYLPHTHALATE	
17	C585	4-CHLOROPHENYL-PHENYLETHER	
18	C590	FLUORENE	
19	C595	4-NITROANILINE	
20	CS25	2-FLUOROBIPHENYL	(SURROGATE)
21	CS55	2,4,6-TRIBROMOPHENOL	(SURROGATE)

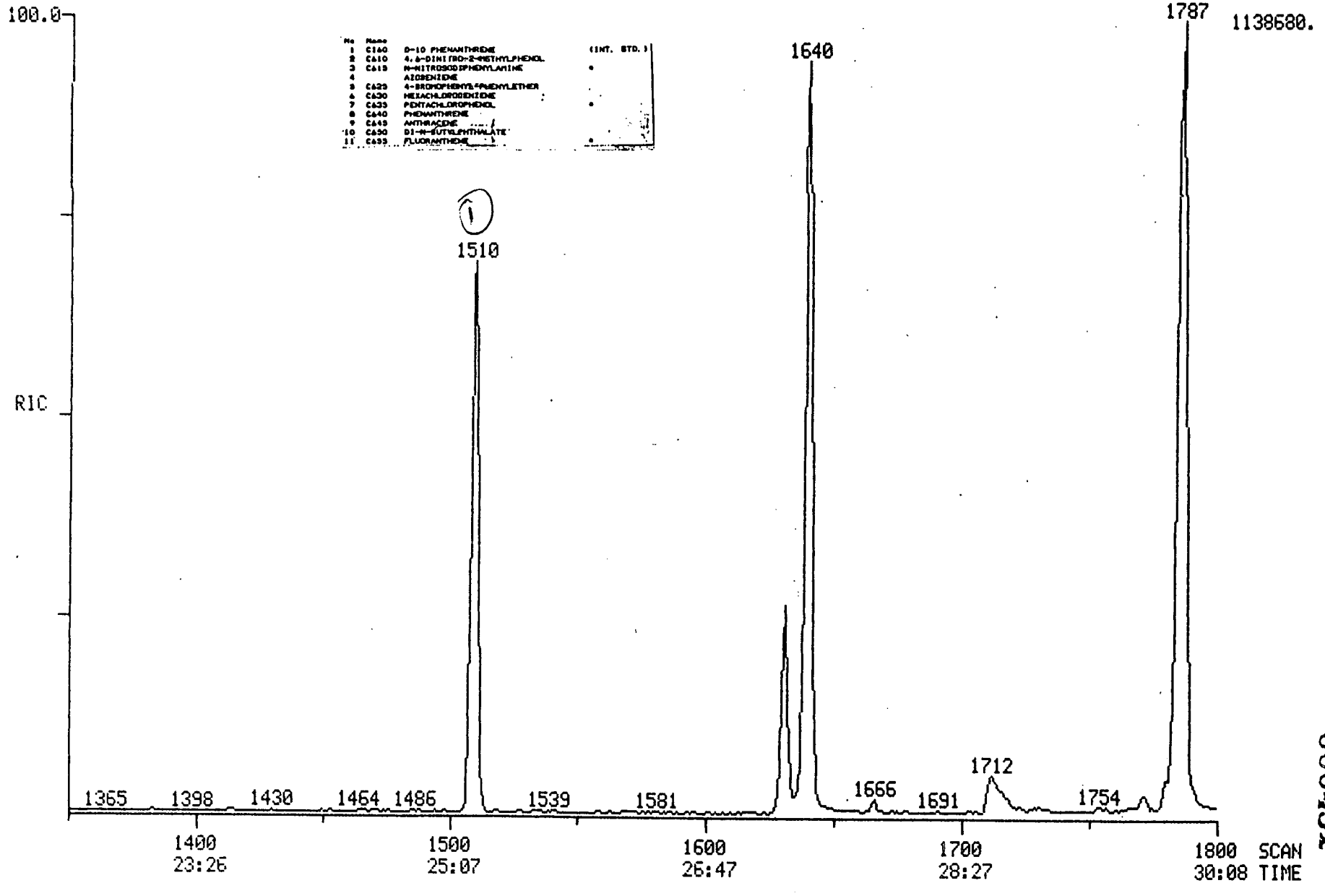
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	164	1232	20:37	1	1.000	A BB	631424.	40.000	NG	18.22
2	NOT FOUND									
3	NOT FOUND									
4	NOT FOUND									
5	NOT FOUND									
6	NOT FOUND									
7	NOT FOUND									
8	152	1202	20:07	1	0.976	A BB	~~288.~~	~~0.010~~	~~NG~~	~~0.00~~
9	NOT FOUND									
10	153	1238	20:43	1	1.005	A BB	924832.	59.394	NG	27.06
11	NOT FOUND									
12	NOT FOUND									
13	168	1267	21:13	1	1.028	A BB	~~2432.~~	~~0.071~~	~~NG~~	~~0.04~~
14	89	1280	21:26	1	1.039	A BB	253600.	65.361	NG	29.77
15	165	1206	20:11	1	0.979	A BB	~~1920.~~	~~0.434~~	~~NG~~	~~0.20~~
16	NOT FOUND									
17	NOT FOUND									
18	NOT FOUND									
19	NOT FOUND									
20	172	1108	18:33	1	0.899	A BB	1057340.	54.185	NG	24.68
21	330	1382	23:08	1	1.122	A BB	~~224.~~	~~0.056~~	~~NG~~	~~0.03~~

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	20:38	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	18:01		0.873						
3	18:19		0.887						
4	18:27		0.894						
5	18:49		0.912						
6	19:18		0.935						
7	20:01		0.970						
8	20:08	1.00	0.976	1.00	0.01	50.00	0.000	1.817	0.00
9	20:37		0.999						
10	20:44	1.00	1.005	1.00	59.39	50.00	1.172	0.986	1.19
11	20:56		1.015						
12	21:17		1.031						
13	21:15	1.00	1.029	1.00	0.09	50.00	0.003	1.684	0.00
14	21:26	1.00	1.038	1.00	65.36	50.00	0.321	0.246	1.31
15	20:13	1.00	0.980	1.00	0.43	50.00	0.002	0.280	0.01
16	22:17		1.079						
17	22:23		1.084						
18	22:20		1.082						
19	22:36		1.095						
20	18:34	1.00	0.899	1.00	54.18	50.00	1.340	1.236	1.08
21	23:10	1.00	1.122	1.00	0.06	50.00	0.000	0.254	0.00

MIDRIC
08/28/89 19:06:00
SAMPLE: BLANK SPIKE
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BWB0815SR #1
CALI: BWB0815SR #2

SCANS 1350 TO 1800



No	Name		
1	C160	D-10 PHENANTHRENE	(INT. STD.)
2	C610	4,6-DINITRO-2-METHYLPHENOL	
3	C615	N-NITROSODIPHENYLAMINE	*
4		AIDRENIDNE	
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	*

000451

Quantitation Report File: BWB0815SR

Data: BWB0815SR.TI
08/28/89 19:06:00
Sample: BLANK SPIKE
Conds.: 1000 MLS/1.0 ML
Formula: Instrument: 5100 Weight: 0.003
Submitted by: FLEMING Analyst: WSS Acct. No.: BWB0815S

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

No	Name		
1	CI60	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	*

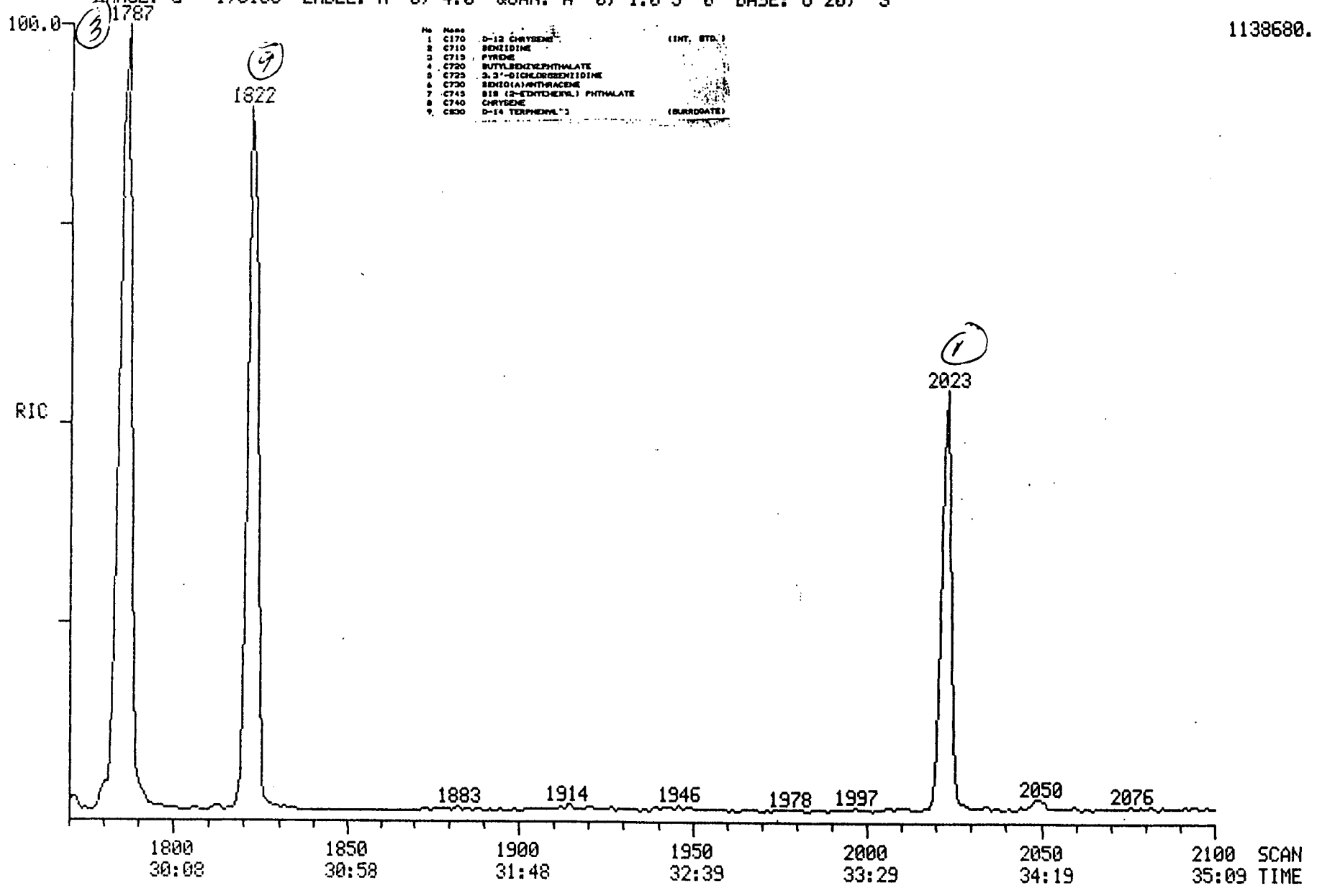
N	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	188	1510	25:17	1	1.000	A BV	1067450.	40.000 NG	40.16
2	NOT FOUND								
3	169	1360	22:46	1	0.901	A BB	~~320.~~	~~0.025 NG~~	~~0.02~~
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	149	1640	27:27	1	1.086	A BV	~~1948170.~~	~~59.583 NG~~	~~59.82~~
11	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	25:19	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	22:43		0.897						
3	22:48	1.00	0.901	1.00	0.02	50.00	0.000	0.489	0.00
4	22:53		0.904						
5	23:54		0.944						
6	24:20		0.962						
7	24:57		0.985						
8	25:23		1.003						
9	25:31		1.008						
10	27:28	1.00	1.085	1.00	59.58	50.00	1.460	1.225	1.19
11	29:12		1.153						

MIDRIC
08/28/89 19:06:00
SAMPLE: BLANK SPIKE
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1,3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BWB0815SR #1
CALI: BWB0815SR #2

SCANS 1770 TO 2100



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)

1138680.

0004453

Quantitation R p rt [illegible] BWB0815SR

Data: BWB0815SR.TI
08/28/89 19:06:00
Sample: BLANK SPIKE
Conds.: 1000 MLS/1.0 ML
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: FLEMING[illegible] Analyst: WSS Acct. No.: BWB0815S

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

No	Name		
1	CI70	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	CS30	D-14 TERPHENYL	(SURROGATE)

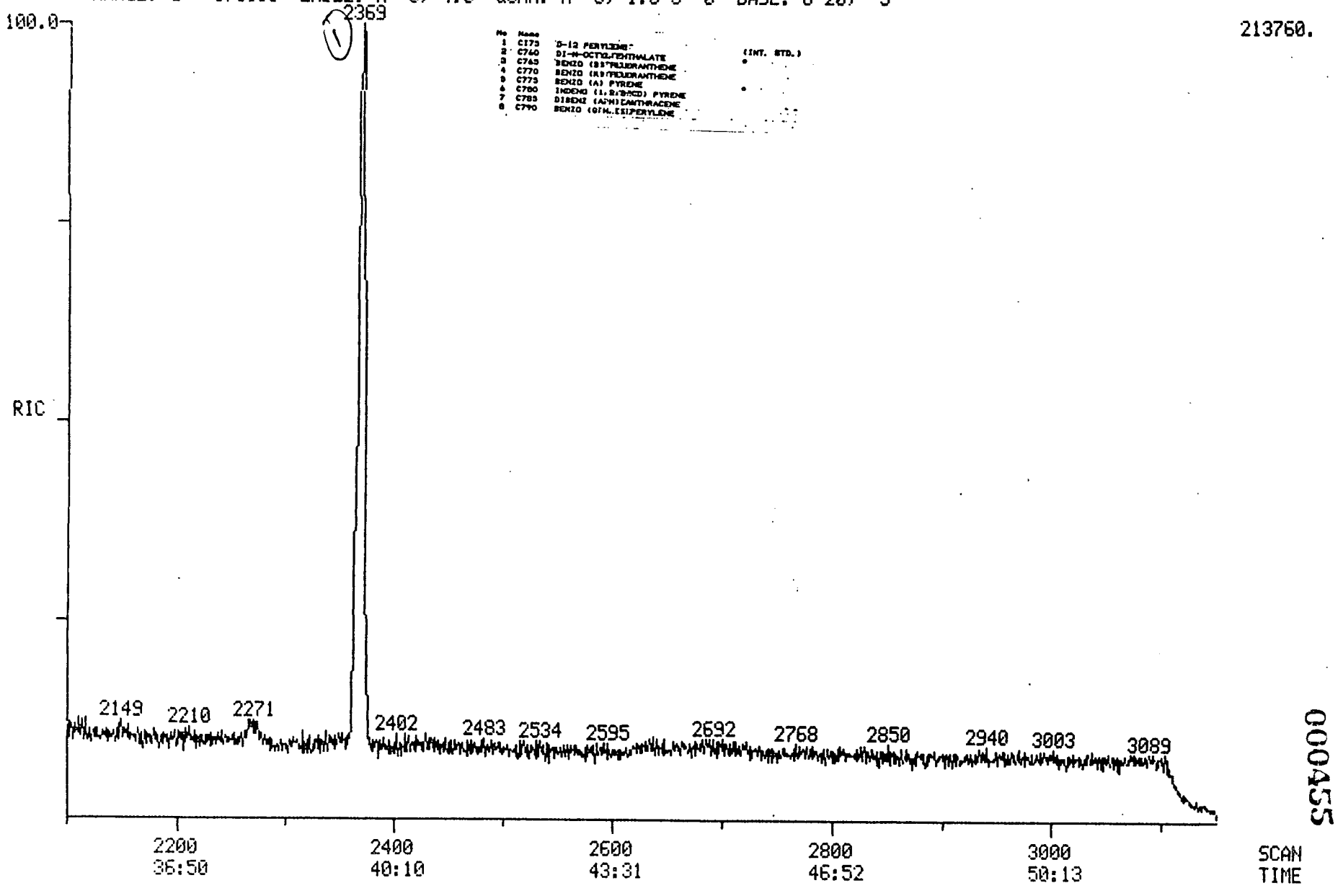
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	240	2023	33:52	[illegible]	1.000	A BV	813560.	40.000	NG	22.56
2	NOT FOUND									
3	202	1787	29:59	[illegible]	0.883	A BB	1849860.	67.551	NG	38.09
4	NOT FOUND									
5	NOT FOUND									
6	NOT FOUND									
7	149	2049	34:18	[illegible]	1.013	A BB	~~14976.~~	~~0.710~~	~~NG~~	~~0.40~~
8	NOT FOUND									
9	244	1822	30:30	[illegible]	0.901	A BB	1547730.	69.063	NG	38.95

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	33:55	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	29:42		0.876						
3	29:55	1.00	0.882	1.00	67.55	50.00	1.819	1.346	1.35
4	32:17		0.952						
5	33:53		0.999						
6	33:51		0.998						
7	34:23	1.00	1.014	1.00	0.71	50.00	0.015	1.038	0.01
8	34:00		1.002						
9	30:31	1.00	0.900	1.00	69.06	50.00	1.522	1.102	1.38

MIDRIC
08/28/89 19:06:00
SAMPLE: BLANK SPIKE
CONDS.: 1000 MLS/1.0 ML
RANGE: G 1.3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BWB0815SR #1
CALI: BWB0815SR #2

SCANS 2100 TO 3150



000455

Quantitation Report [illegible] BWB0815SR

Data: BWBO 15SR.TI
08/28/89 19:06:00
Sample: BLANK SPIKE
Conds.: 1000 MLS/1.0 ML
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: FLEMING[illegible] Analyst: WSS Acct. No.: BWB0815S

AMOUNT=AREA * REF AM[illegible]/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI75	D-12 PERYLENE	(INT. STD.)
2	C760	DI-N-OCTYL PHTHALATE	*
3	C765	BENZO (B) FLUORANTHENE	
3	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	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	264	2369	39:39	[illegible]	1.000	A BB	573844.	40.000 NG	*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	39:49	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	36:44		0.922						
3	37:57		0.953						
4	38:03		0.955						
5	39:31		0.992						
6	47:39		1.197						
7	48:04		1.207						
8	49:59		1.255						

000457
EPA SAMPLE NO.

AQ_BLANK_MSD

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Q C INC. Contract: FLEMING

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

Matrix: (soil/water) WATER Lab Sample ID: BWB0815 MSD

Sample wt/vol: 1000 (g/mL) ML Lab File ID: BWB0815SD

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

% Moisture: not dec. ____ dec. ____ Date Extracted: 08/20/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 08/25/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol		
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol		
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol		
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol		
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol		
105-67-9	2,4-Dimethylphenol		
65-85-0	Benzoic Acid		
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol		
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol		
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol		
95-95-4	2,4,5-Trichlorophenol		
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

000458

EPA SAMPLE NO.

AQ_BLANK_MSD

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Q C INC. Contract: FLEMING

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

Matrix: (soil/water) WATER Lab Sample ID: BWB0815 MSD

Sample wt/vol: 1000 (g/mL) ML Lab File ID: BWB0815SD

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

% Moisture: not dec. ____ dec. ____ Date Extracted: 08/20/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 08/25/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

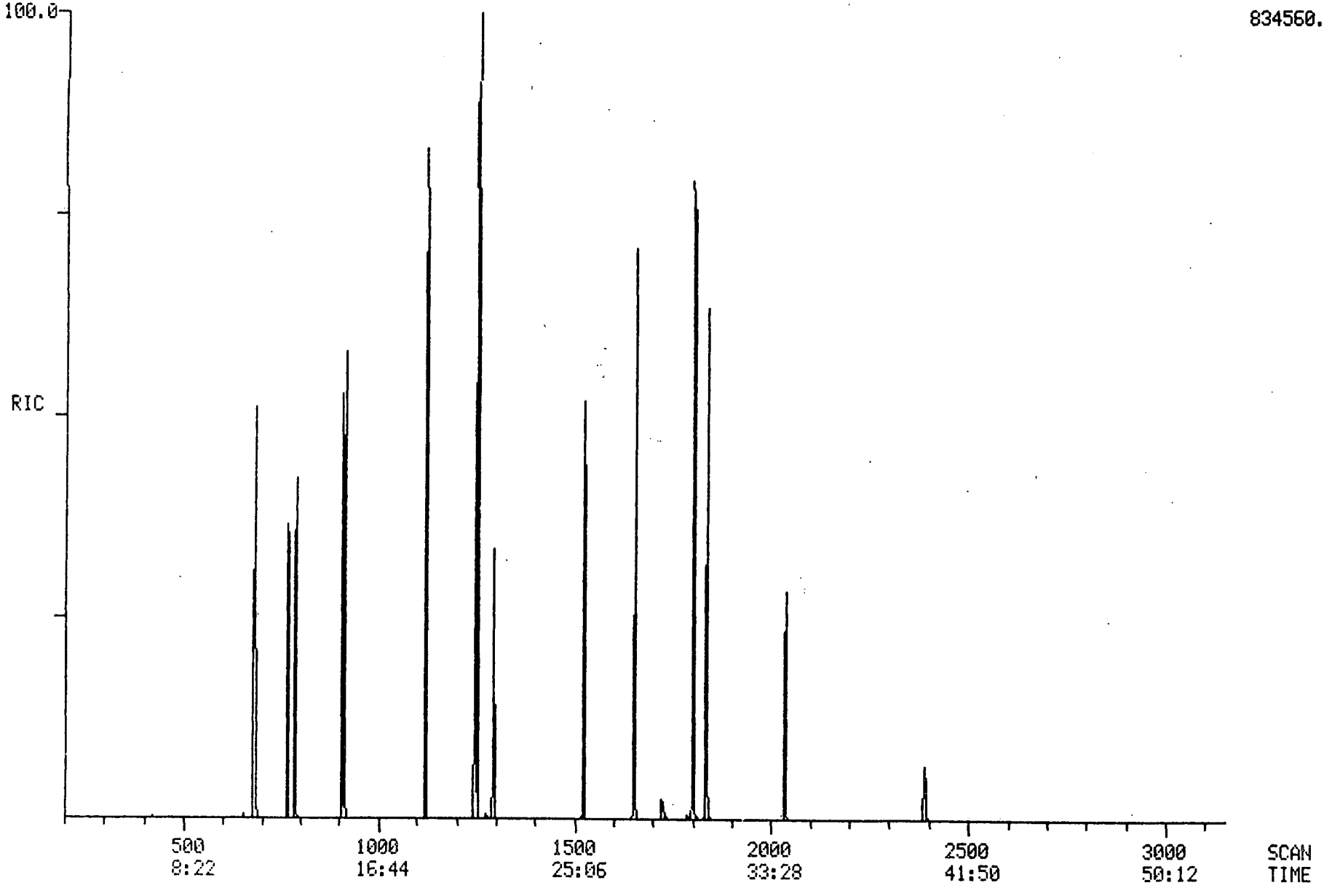
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol		
100-02-7	4-Nitrophenol		
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol		
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol		
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

MIDRIC
08/25/89 14:52:00
SAMPLE: AQUEOUS BLANK SPIKE DUP
CONDS.: 1000MLS/1.0ML
RANGE: G 1,3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BWB0815SD #1
CALI: BWB0815SD #2

SCANS 200 TO 3150

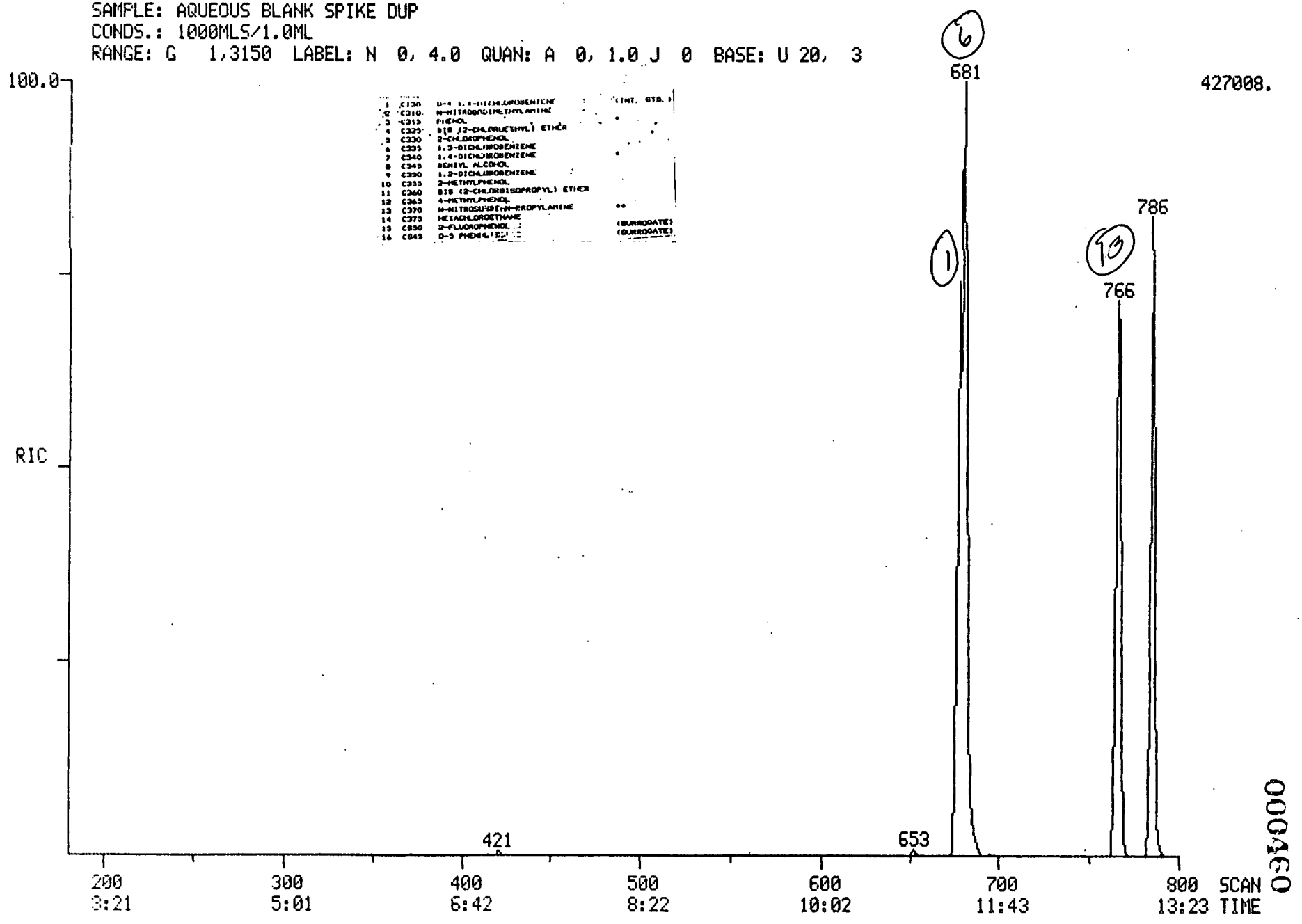


000459

MIDRIC
08/25/89 14:52:00
SAMPLE: AQUEOUS BLANK SPIKE DUP
CONDS.: 1000MLS/1.0ML
RANGE: G 1,3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BWB0815SD #1
CALI: BWB0815SD #2

SCANS 180 TO 800



000460

Quantitation Report [illegible] BWB0815SD

Data: BWB0815SD.TI
08/25/89 14:52:00
Sample: AQUEOUS BLANK SPIKE DUP
C nds.: 1000MLS/1.0ML
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: FLEMING[illegible] Analyst: DMM Acct. No.: BWB0815S

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

No	Name		
1	CI30	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	CS50	2-FLUOROPHENOL	(SURROGATE)
16	CS45	D-5 PHENOL	(SURROGATE)

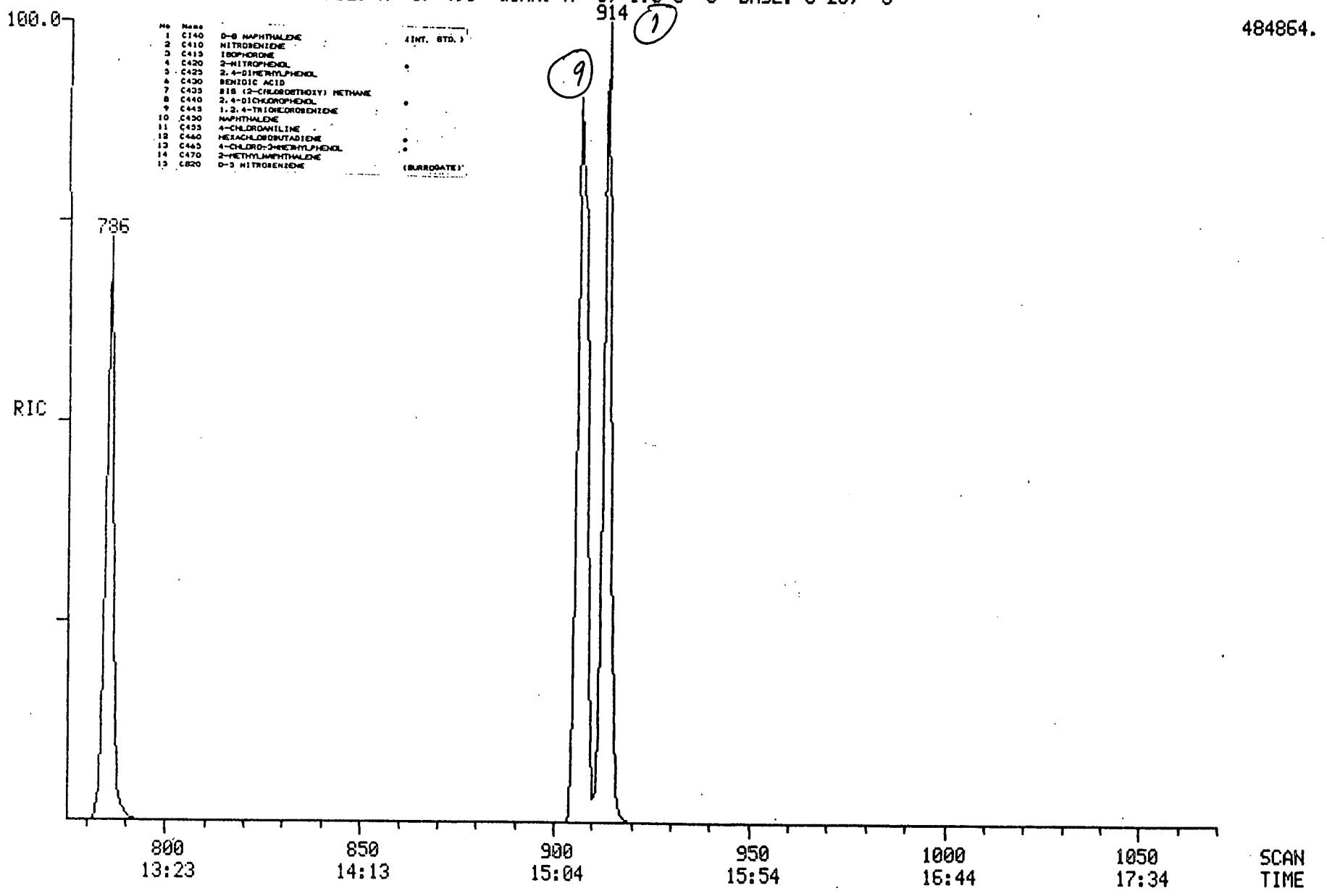
No	m/z	Scan	Time	RRT	Meth	Area(Hght)	Amount		%Tot
1	152	678	11:21 [illegible]	1.000	A BB	181536.	40.000	NG	20.06
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	146	681	11:24 [illegible]	1.004	A BB	~~337440.~~	~~50.283~~	~~NG~~	~~25.22~~
7	146	681	11:24 [illegible]	1.004	A BB	337440.	49.929	NG	25.04
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	70	766	12:49 [illegible]	1.130	A BB	244160.	59.150	NG	29.67
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.	11:22	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	3:49		0.336						
3	10:39		0.937						
4	10:47		0.948						
5	10:53		0.957						
6	11:15	1.01	0.990	1.01	50.28	50.00	1.487	1.479	1.01
7	11:25	1.00	1.004	1.00	49.93	50.00	1.487	1.489	1.00

No	R t(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
8	12:50		1.130						
9	11:58		1.053						
10	11:56		1.050						
11	12:24		1.091						
12	12:23		1.090						
13	12:50	1.00	1.130	1.00	59.15	50.00	1.076	0.910	1.18
14	12:53		1.134						
15	7:46		0.683						
16	10:37		0.934						

MIDRIC
08/25/89 14:52:00
SAMPLE: AQUEOUS BLANK SPIKE DUP
CONDS.: 1000MLS/1.0ML
RANGE: G 1,3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BWB0815SD #1 SCANS 775 TO 1070
CALI: BWB0815SD #2



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)

000463

Quantitation Report [illegible] BWB0815SD

Data: BWB0815SD.TI
08/25/89 14:52:00
Sample: AQUEOUS BLANK SPIKE DUP
Conds.: 1000MLS/1.0ML
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: FLEMING [illegible] Analyst: DMM Acct. No.: BWB0815S

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

No	Name		
1	CI40	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	CS20	D-5 NITROBENZENE	(SURROGATE)

No	m/z	Scan	Time	Ref#	RRT	Meth	Area(Hght)	Amount		%Tot
1	136	914	15:18	[illegible]	1.000	A BB	671008.	40.000	NG	26.80
2	NOT FOUND									
3	NOT FOUND									
4	NOT FOUND									
5	NOT FOUND									
6	NOT FOUND									
7	NOT FOUND									
8	NOT FOUND									
9	180	907	15:11	[illegible]	0.992	A BB	303680.	54.654	NG	36.62
10	NOT FOUND									
11	NOT FOUND									
12	NOT FOUND									
13	NOT FOUND									
14	NOT FOUND									
15	82	786	13:09	[illegible]	0.860	A BB	328992.	54.586	NG	36.58

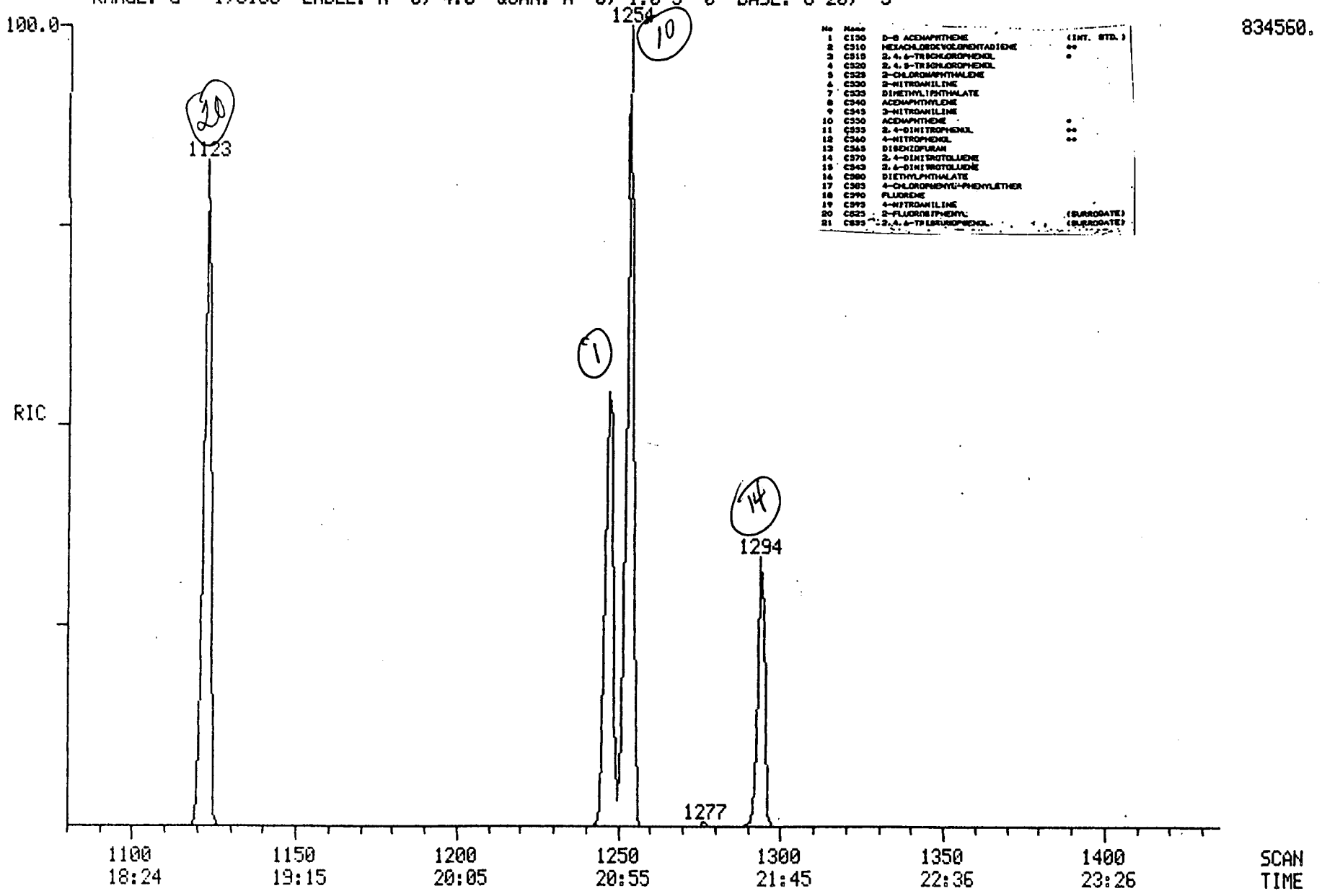
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	15:17	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	13:12		0.864						
3	13:56		0.912						
4	14:11		0.929						
5	14:26		0.944						
6	14:58		0.979						
7	14:42		0.962						
8	14:57		0.978						
9	15:10	1.00	0.992	1.00	54.65	50.00	0.362	0.331	1.09

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
10	15:21		1.004						
11	15:38		1.023						
12	15:56		1.043						
13	17:13		1.127						
14	17:30		1.146						
15	13:09	1.00	0.861	1.00	54.59	50.00	0.392	0.359	1.09

MIDRIC
08/25/89 14:52:00
SAMPLE: AQUEOUS BLANK SPIKE DUP
CONDS.: 1000MLS/1.0ML
RANGE: G 1.3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BWB0815SD #1
CALI: BWB0815SD #2

SCANS 1080 TO 1435



No	Mass		
1	C150	D-8 ACENAPHTHENE	(INT. STD.)
2	C310	HEXACHLOROCYCLOPENTADIENE	**
3	C318	2,4,6-TRICHLOROPHENOL	*
4	C320	2,4,5-TRICHLOROPHENOL	
5	C329	2-CHLORONAPHTHALENE	
6	C330	2-NITROANILINE	
7	C333	DIMETHYLPHTHALATE	
8	C340	ACENAPHTHYLENE	
9	C343	3-NITROANILINE	
10	C350	ACENAPHTHENE	*
11	C353	2,4-DINITROPHENOL	**
12	C360	4-NITROPHENOL	**
13	C365	DIBENZOFURAN	
14	C370	2,4-DINITROTOLUENE	
15	C373	2,6-DINITROTOLUENE	
16	C380	DIETHYLPHTHALATE	
17	C383	4-CHLOROPHENYL-PHENYLETHER	
18	C390	FLUORENE	
19	C393	4-NITROANILINE	
20	C625	2-FLUOROBIPHENYL	(SURROGATE)
21	C633	2,4,6-TRIBROMOPHENOL	(SURROGATE)

000465

Quantitation Report [illegible] File: BWB0815SD

000466

Data: BWB0815SD.TI
08/25/89 14:52:00
Sample: AQUEOUS BLANK SPIKE DUP
Conds.: 1000MLS/1.0ML
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: FLEMING[illegible] Analyst: DMM Acct. No.: BWB0815S

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

No	Name		
1	CI50	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	C543	2,6-DINITROTOLUENE	
16	C580	DIETHYLPHTHALATE	
17	C585	4-CHLOROPHENYL-PHENYLETHER	
18	C590	FLUORENE	
19	C595	4-NITROANILINE	
20	CS25	2-FLUOROBIPHENYL	(SURROGATE)
21	CS55	2,4,6-TRIBROMOPHENOL	(SURROGATE)

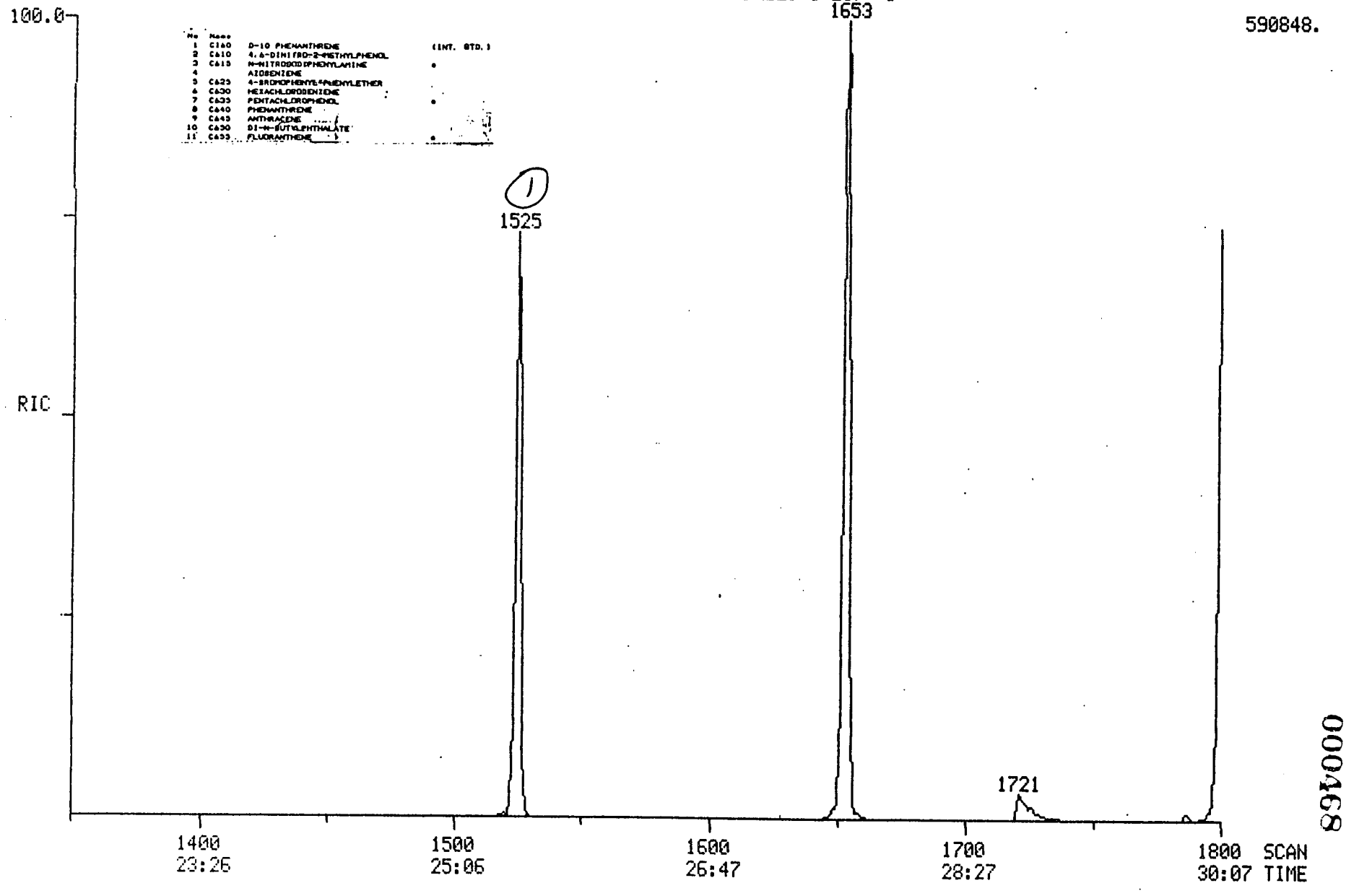
No	m/z	Scan	Time	RRT	Meth	Area(Hght)	Amount		%Tot
1	164	1247	20:52[illegible]	1.000	A BB	385600.	40.000	NG	17.94
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	153	1254	20:59[illegible]	1.006	A BB	617792.	59.298	NG	26.60
11	NOT FOUND								
12	NOT FOUND								
13	168	1282	21:27[illegible]	1.028	A BB	~~544.~~	~~0.035~~	~~NG~~	~~0.02~~
14	89	1294	21:39[illegible]	1.038	A BB	121440.	66.116	NG	29.66.
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	172	1123	18:48[illegible]	0.901	A BB	679936.	57.491	NG	25.79
21	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Rati
1	20:51	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	18:13		0.874						
3	18:32		0.888						
4	18:39		0.894						
5	19:02		0.913						
6	19:31		0.936						
7	20:13		0.970						
8	20:21		0.976						
9	20:50		0.999						
10	20:57	1.00	1.005	1.00	59.30	50.00	1.282	1.081	1.19
11	21:08		1.014						
12	21:27		1.029						
13	21:27	1.00	1.029	1.00	0.04	50.00	0.001	1.597	0.00
14	21:38	1.00	1.038	1.00	66.12	50.00	0.252	0.191	1.32
15	20:25		0.979						
16	22:28		1.078						
17	22:36		1.083						
18	22:33		1.081						
19	22:48		1.093						
20	18:46	1.00	0.900	1.00	57.49	50.00	1.411	1.227	1.15
21	23:23		1.121						

MIDRIC
08/25/89 14:52:00
SAMPLE: AQUEOUS BLANK SPIKE DUP
CONDS.: 1000MLS/1.0ML
RANGE: G 1,3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BWB0815SD #1
CALI: BWB0815SD #2

SCANS 1350 TO 1800



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	•

000468

Quantitation Rep rt [illegible] BWB0815SD

000469

Data: BWB0815SD.TI
08/25/89 14:52:00
Sample: AQUEOUS BLANK SPIKE DUP
Conds.: 1000MLS/1.0ML
F rmula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: FLEMING[illegible] Analyst: DMM Acct. No.: BWB0815S

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

No	Name		
1	CI60	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	*

No	m/z	Scan	Time	RRT	Meth	Area(Hght)	Amount	%Tot
1	188	1525	25:31	1.000	A BV	544736.	40.000 NG	37.61
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	149	1653	27:40	1.084	A BB	~~1205110.~~	~~66.370 NG~~	~~62.40~~
11	NOT FOUND							

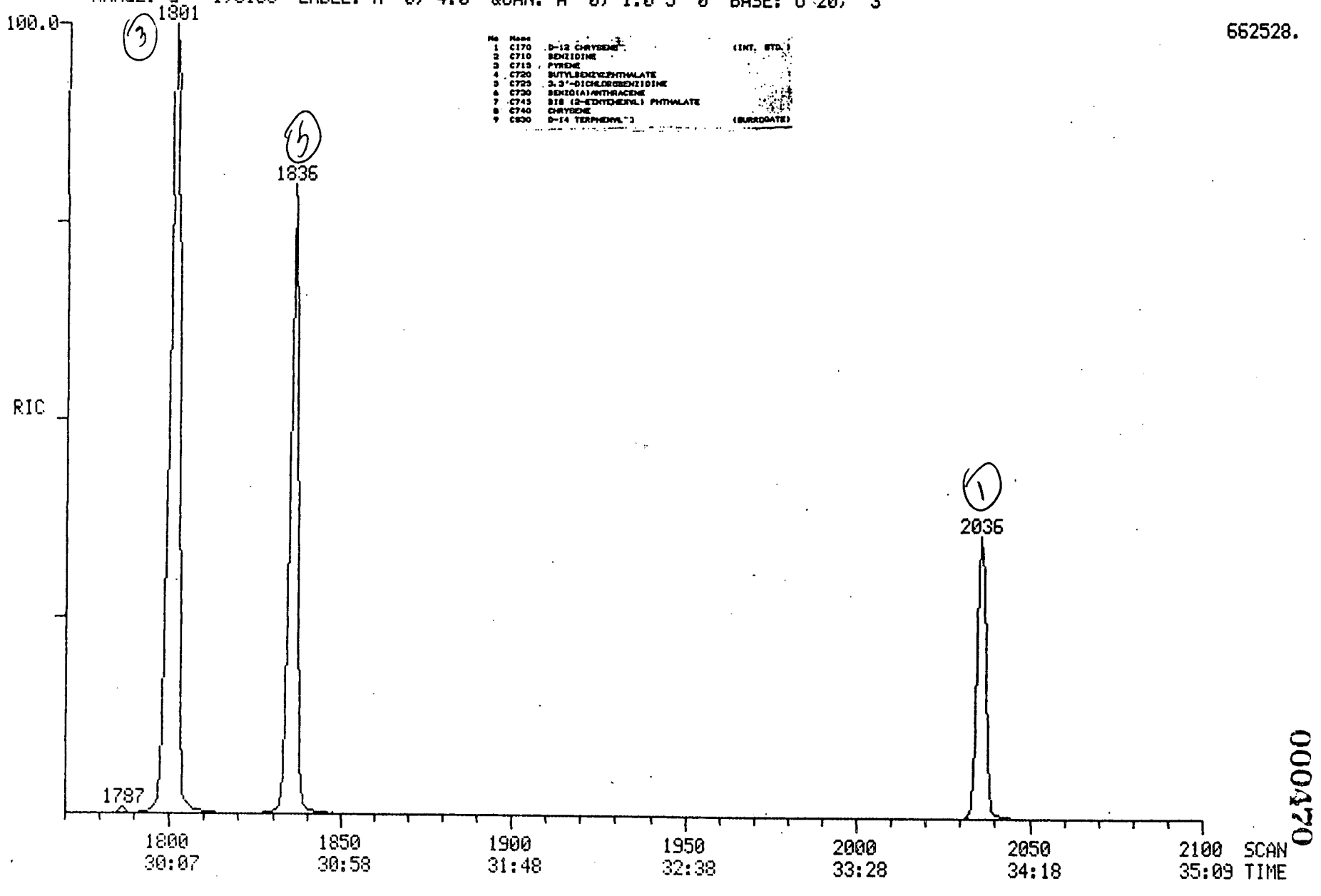
No	Ret(L)	Ratio	RRT	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	25:30	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	22:55		0.898						
3	23:01		0.902						
4	23:05		0.905						
5	24:07		0.946						
6	24:33		0.963						
7	25:09		0.986						
8	25:35		1.003						
9	25:43		1.009						
10	27:39	1.00	1.084	1.00	66.37	50.00	1.770	1.333	1.33
11	29:24		1.153						

MIDRIC
08/25/89 14:52:00
SAMPLE: AQUEOUS BLANK SPIKE DUP
CONDS.: 1000MLS/1.0ML
RANGE: G 1,3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BWB0815SD #1
CALI: BWB0815SD #2

SCANS 1770 TO 2100

662528.



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)

000470

Quantitation Rep rt [illegible] BWB0815SD

000471

Data: BWB0815SD.TI
08/25/89 14:52:00
Sample: AQUEOUS BLANK SPIKE DUP
Conds.: 1000MLS/1.0ML
F rmula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: FLEMING[illegible] Analyst: DMM Acct. No.: BWB0815S

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

No	Name		
1	CI70	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	CS30	D-14 TERPHENYL	(SURROGATE)

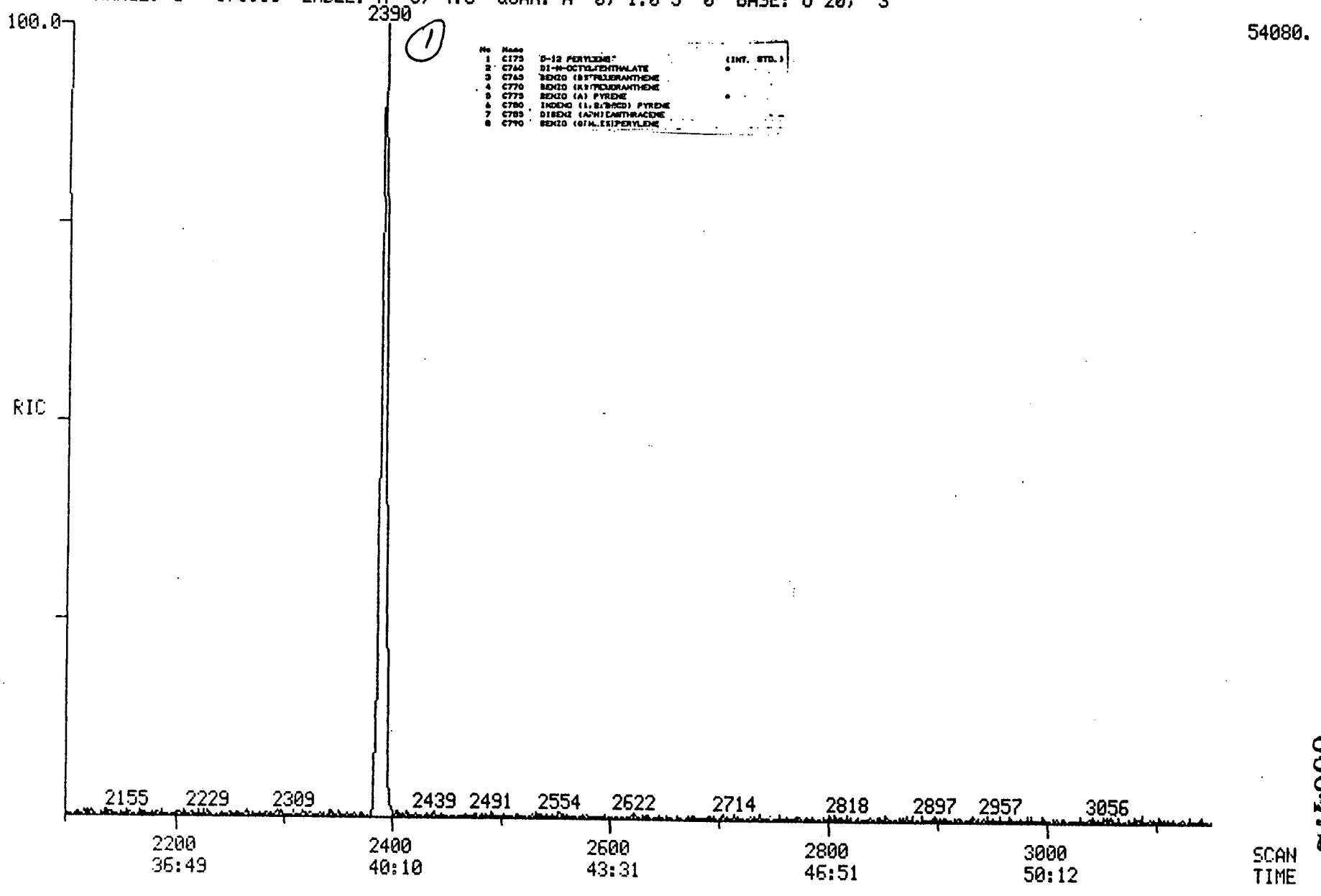
No	m/z	Scan	Time	RRT	Meth	Area(Hght)	Amount		%Tot
1	240	2036	34:04	1.000	A BB	346880.	40.000	NG	21.05
2	NOT FOUND								
3	202	1801	30:08	0.885	A BB	1063180.	77.030	NG	40.54
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	244	1836	30:44	0.902	A BB	732071.	72.968	NG	38.40

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	34:04	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	29:52		0.877						
3	30:06	1.00	0.884	1.00	77.03	50.00	2.452	1.592	1.54
4	32:26		0.952						
5	34:01		0.999						
6	34:00		0.998						
7	34:26		1.011						
8	34:09		1.002						
9	30:41	1.00	0.901	1.00	72.97	50.00	1.688	1.157	1.46

MIDRIC
08/25/89 14:52:00
SAMPLE: AQUEOUS BLANK SPIKE DUP
CONDS.: 1000MLS/1.0ML
RANGE: G 1,3150 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BWB0815SD #1
CALI: BWB0815SD #2

SCANS 2100 TO 3150



000472

Quantitation Rep rt [illegible] BWB0815SD

Data: BWB0815SD.TI
08/25/89 14:52:00
Sample: AQUEOUS BLANK SPIKE DUP
Conds.: 1000MLS/1.0ML
Formula: [illegible] Instrument: 5100 Weight: 0.003
Submitted by: FLEMING [illegible] Analyst: DMM Acct. No.: BWB0815S

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

No	Name		
1	CI75	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	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	264	2390	40:02	1	1.000	A BB	176960.	40.000 NG	*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	40:02	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	36:45		0.918						
3	38:06		0.952						
4	38:13		0.955						
5	39:44		0.992						
6	47:40		1.191						
7	48:00		1.199						
8	49:54		1.247						

QC Inc

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METALS
ANALYTICAL RESULTS AND QUALITY ASSURANCE DATA

SAMPLE ID: 883612
SAMPLE LABEL: C-29A MW

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	0.003	883614	ND	0.02	89.8	883614	0.0185	0.0174	6.1	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: 883613

SAMPLE LABEL: C-14A MW

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	0.003	883614	ND	0.02	89.8	883614	0.0185	0.0174	6.1	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: 883614
SAMPLE LABEL: C-14B MW

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	0.003	883614	ND	0.02	89.8	883614	0.0185	0.0174	6.1	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: 883615
SAMPLE LABEL: C-14C MW

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	0.003	883614	ND	0.02	89.8	883614	0.0185	0.0174	6.1	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: 883616
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	0.003	883614	ND	0.02	89.8	883614	0.0185	0.0174	6.1	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: 883617
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	0.003	883614	ND	0.02	89.8	883614	0.0185	0.0174	6.1	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

INITIAL AND CONTINUING CALIBRATION VERIFICATION

PROJECT ID: GANNET FLEMING

Analyte	INITIAL CALIBRATION Standard Concentration (mg/l) Blank	1	2	3	CONTINUOUS CALIBRATION VERIFICATION TRUE Value (mg/l)	Reported Value 1	% Recovery	Reported Value 2	% Recovery	Reported Value 3	% Recovery	FINAL BLANK ANALYSIS Continuing Calibration 1	2	3
Aluminum														
Antimony														
Arsenic														
Barium														
Beryllium														
Boron														
Cadmium														
Calcium														
Chromium														
Cobalt														
Copper														
Iron														
Lead	<0.003	0.003	0.015	0.03	0.026	0.0261	100.4	0.0236	90.8	0.0239	91.9	<0.003	<0.003	<0.003
Magnesium														
Manganese														
Molybdenum														
Mercury														
Nickel														
Potassium														
Selenium														
Silver														
Sodium														
Thallium														
Tin														
Vanadium														
Zinc														

(1) IS = Insufficient Sample

Form QC M-2 Rev. 2 9/15/88

Carol / Richard
8-29-89
Pb

000481

CLP Tier I SMs (Garrett Flemming) & Regular SMs

QA entered

Element File: PB.GEL
Element: Pb
Date: 08/29/89
Time: 15:48
Data Storage File: PB.DAT
ID/Weight File: CAL.A60
Technique: HGA
Calibration Type: Linear
Remark 1: Platform
Remark 2: Modifier NH4H2PO4 + Mg(NO3)*6H2O

~~~~~~

Sample ID: Blank Sequence No.: 00001 Sampler Position: 1

uL dispensed: 2 from 1, 5 from 36, 20 from 1
Replicate 1
Peak Area (A-s): 0.230 Peak Height (A): 0.280
Background Pk Area (A-s): 0.064 Background Pk Height (A): 0.076
Blank Corrected Pk Area (A-s): 0.230

uL dispensed: 2 from 1, 5 from 36, 20 from 1
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.010 Peak Height (A): 0.014
Background Pk Area (A-s): 0.012 Background Pk Height (A): 0.005
Blank Corrected Pk Area (A-s): 0.010

Mean Pk Area (A-s): 0.120 SD: 0.1559 RSD(%): 130.14

Auto-zero performed.

~~~~~~

Sample ID: Standard 1 Sequence No.: 00002 Sampler Position: 2

uL dispensed: 18 from 1, 5 from 36, 2 from 2
Replicate 1
Peak Area (A-s): 0.019 Peak Height (A): 0.036
Background Pk Area (A-s): 0.014 Background Pk Height (A): 0.009
Blank Corrected Pk Area (A-s): -0.101

~~~~~~

Sample ID: Blank Sequence No.: 00003 Sampler Position: 1

uL dispensed: 2 from 1, 5 from 36, 20 from 1
Replicate 1
Peak Area (A-s): 0.016 Peak Height (A): 0.024
Background Pk Area (A-s): 1.280 Background Pk Height (A): 0.475
Blank Corrected Pk Area (A-s): -0.104

uL dispensed: 2 from 1, 5 from 36, 20 from 1
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.009 Peak Height (A): 0.013
Background Pk Area (A-s): 0.020 Background Pk Height (A): 0.016
Blank Corrected Pk Area (A-s): -0.111
~~~~~~

Auto-zero performed. 000482

~~~~~~

Sample ID: Blank Sequence No.: 00004 Sampler Position: 1

uL dispensed: 2 from 1, 5 from 36, 20 from 1
The background signal is changing during BOC measurement.
Replicate 1
Peak Area (A-s): -0.100 Peak Height (A): 0.176
Background Pk Area (A-s): -0.313 Background Pk Height (A): 0.243
Blank Corrected Pk Area (A-s): -0.113

~~~~~~

Sample ID: Blank Sequence No.: 00005 Sampler Position: 1

uL dispensed: 2 from 1, 5 from 36, 20 from 1
Replicate 1
Peak Area (A-s): 0.012 Peak Height (A): 0.016
Background Pk Area (A-s): 0.014 Background Pk Height (A): 0.007
Blank Corrected Pk Area (A-s): -0.001

uL dispensed: 2 from 1, 5 from 36, 20 from 1
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.011 Peak Height (A): 0.020
Background Pk Area (A-s): 0.014 Background Pk Height (A): 0.007
Blank Corrected Pk Area (A-s): -0.001

Mean Pk Area (A-s): -0.001 SD: 0.0003 RSD(%): 37.49

Auto-zero performed.

~~~~~~

Sample ID: Standard 1 Sequence No.: 00006 Sampler Position: 2

uL dispensed: 18 from 1, 5 from 36, 2 from 2
Replicate 1
Peak Area (A-s): 0.022 Peak Height (A): 0.035
Background Pk Area (A-s): 0.017 Background Pk Height (A): 0.009
Blank Corrected Pk Area (A-s): 0.011

uL dispensed: 18 from 1, 5 from 36, 2 from 2
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.030 Peak Height (A): 0.038
Background Pk Area (A-s): 0.016 Background Pk Height (A): 0.010
Blank Corrected Pk Area (A-s): 0.018

Mean Pk Area (A-s): 0.015 SD: 0.0054 RSD(%): 36.90

Standard number 1 applied. [3.0]
Correlation coefficient: 1.00000 Slope: 0.005

~~~~~~

Sample ID: Standard 2 Sequence No.: 00007 Sampler Position: 2

uL dispensed: 10 from 1, 5 from 36, 10 from 2
Replicate 1

Background Pk Area (A-s): 0.028 Background Pk Height (A): 0.032
Blank Corrected Pk Area (A-s): 0.069
Concentration (ug/L): 14.1

uL dispensed: 10 from 1, 5 from 36, 10 from 2
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.079 Peak Height (A): 0.121

Background Pk Area (A-s): 0.028 Background Pk Height (A): 0.027
Blank Corrected Pk Area (A-s): 0.067
Concentration (ug/L): 13.8

Mean Conc (ug/L): 14.0 SD: 0.22 RSD(%): 1.57

Standard number 2 applied. [15.0]
Correlation coefficient: 0.99967 Slope: 0.005

~~~~~~

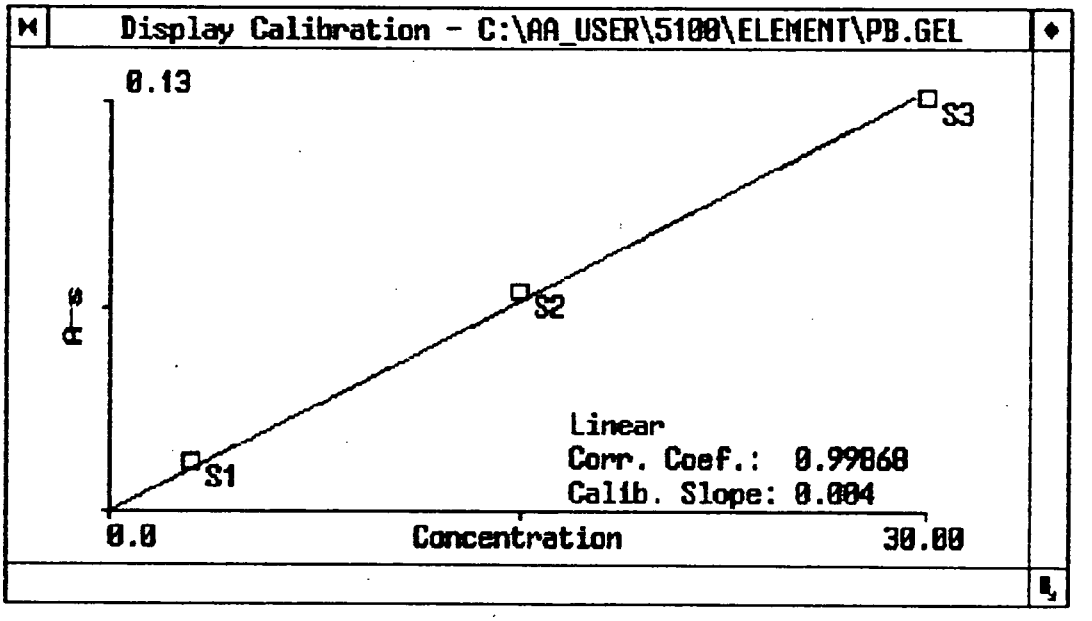
Sample ID: Standard 3 Sequence No.: 00008 Sampler Position: 2

uL dispensed: 5 from 36, 20 from 2
Replicate 1
Peak Area (A-s): 0.138 Peak Height (A): 0.214
Background Pk Area (A-s): 0.041 Background Pk Height (A): 0.048
Blank Corrected Pk Area (A-s): 0.127
Concentration (ug/L): 27.9

uL dispensed: 5 from 36, 20 from 2
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.139 Peak Height (A): 0.212
Background Pk Area (A-s): 0.041 Background Pk Height (A): 0.049
Blank Corrected Pk Area (A-s): 0.127
Concentration (ug/L): 28.1

Mean Conc (ug/L): 28.0 SD: 0.14 RSD(%): 0.51

Standard number 3 applied. [30.0]
Correlation coefficient: 0.99868 Slope: 0.004
~~~~~~


Display Calibration - C:\AA_USER\5100\ELEMENT\PB.GEL
0.13
A-s
S1
S2
S3
Linear
Corr. Coef.: 0.99868
Calib. Slope: 0.004
0.0
Concentration
30.00

~~~~~~

Sample ID: LCW   Sequence No.: 00009   Sampler Position: 7

uL dispensed: 5 from 36, 20 from 7
Replicate 1
Peak Area (A-s): 0.126   Peak Height (A): 0.212
Background Pk Area (A-s): 0.040   Background Pk Height (A): 0.050
Blank Corrected Pk Area (A-s): 0.114
Concentration (ug/L): 26.5

uL dispensed: 5 from 36, 20 from 7
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.128   Peak Height (A): 0.204
Background Pk Area (A-s): 0.039   Background Pk Height (A): 0.044
Blank Corrected Pk Area (A-s): 0.116
Concentration (ug/L): 27.0

Mean Conc (ug/L): 26.8 103.1% SD: 0.35   RSD(%): 1.31
TV=26.0

~~~~~~

Sample ID: ICV   Sequence No.: 00010   Sampler Position: 3

uL dispensed: 5 from 36, 20 from 3
Replicate 1
Peak Area (A-s): 0.132   Peak Height (A): 0.229
Background Pk Area (A-s): 0.038   Background Pk Height (A): 0.049
Blank Corrected Pk Area (A-s): 0.121
Concentration (ug/L): 28.1

uL dispensed: 5 from 36, 20 from 3
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.131   Peak Height (A): 0.207
Background Pk Area (A-s): 0.039   Background Pk Height (A): 0.046
Blank Corrected Pk Area (A-s): 0.120
Concentration (ug/L): 27.8

TV=26.0
Mean Conc (ug/L): 28.0 107.7% SD: 0.17   RSD(%): 0.61

~~~~~~

Sample ID: ICB   Sequence No.: 00011   Sampler Position: 4

uL dispensed: 5 from 36, 20 from 4
Replicate 1
Peak Area (A-s): 0.021   Peak Height (A): 0.035
Background Pk Area (A-s): 0.014   Background Pk Height (A): 0.012
Blank Corrected Pk Area (A-s): 0.009
Concentration (ug/L): 2.2

uL dispensed: 5 from 36, 20 from 4
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.026   Peak Height (A): 0.045
~~~~~~

Blank Corrected Pk Area (A-s): 0.014
Concentration (ug/L): 3.3

Mean Conc (ug/L): 2.7 SD: 0.77 RSD(%): 28.54

~~~~~~

Sample ID: CRDL Sequence No.: 00012 Sampler Position: 5

uL dispensed: 5 from 36, 20 from 5
Replicate 1
Peak Area (A-s): 0.035 Peak Height (A): 0.045
Background Pk Area (A-s): 0.019 Background Pk Height (A): 0.012
Blank Corrected Pk Area (A-s): 0.024
Concentration (ug/L): 5.5

uL dispensed: 5 from 36, 20 from 5
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.036 Peak Height (A): 0.051
Background Pk Area (A-s): 0.019 Background Pk Height (A): 0.013
Blank Corrected Pk Area (A-s): 0.025
Concentration (ug/L): 5.7

Mean Conc (ug/L): 5.6 SD: 0.16 RSD(%): 2.78

~~~~~~

Sample ID: PBW Sequence No.: 00013 Sampler Position: 6

uL dispensed: 5 from 36, 20 from 6
Replicate 1
Peak Area (A-s): 0.025 Peak Height (A): 0.040
Background Pk Area (A-s): 0.017 Background Pk Height (A): 0.015
Blank Corrected Pk Area (A-s): 0.013
Concentration (ug/L): 3.0

uL dispensed: 5 from 36, 20 from 6
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.024 Peak Height (A): 0.039
Background Pk Area (A-s): 0.017 Background Pk Height (A): 0.014
Blank Corrected Pk Area (A-s): 0.012
Concentration (ug/L): 2.9

Mean Conc (ug/L): 2.9 SD: 0.09 RSD(%): 3.16

~~~~~~

Sample ID: LCW Sequence No.: 00014 Sampler Position: 7

uL dispensed: 5 from 36, 20 from 7
Replicate 1
Peak Area (A-s): 0.139 Peak Height (A): 0.218
Background Pk Area (A-s): 0.040 Background Pk Height (A): 0.049
Blank Corrected Pk Area (A-s): 0.128
Concentration (ug/L): 29.7

uL dispensed: 5 from 36, 20 from 7
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.134 Peak Height (A): 0.199
Background Pk Area (A-s): 0.041 Background Pk Height (A): 0.045
~~~~~~

Concentration (ug/L): 28.5

000487

Mean Conc (ug/L): 29.1 SD: 0.79 RSD(%): 2.72

~~~~~~

Sample ID: Blank Sequence No.: 00015 Sampler Position: 1

uL dispensed: 2 from 1, 5 from 36, 20 from 1
Replicate 1
Peak Area (A-s): 0.037 Peak Height (A): 0.067
Background Pk Area (A-s): 0.032 Background Pk Height (A): 0.038
Blank Corrected Pk Area (A-s): 0.025
Concentration (ug/L): 5.8

uL dispensed: 2 from 1, 5 from 36, 20 from 1
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.022 Peak Height (A): 0.041
Background Pk Area (A-s): 0.019 Background Pk Height (A): 0.015
Blank Corrected Pk Area (A-s): 0.011
Concentration (ug/L): 2.5

Mean Conc (ug/L): 4.1 SD: 2.34 RSD(%): 56.44

Auto-zero performed.

~~~~~~

Sample ID: Reslope Sequence No.: 00016 Sampler Position: 2

uL dispensed: 10 from 1, 5 from 36, 10 from 2
Replicate 1
Peak Area (A-s): 0.089 Peak Height (A): 0.155
Background Pk Area (A-s): 0.033 Background Pk Height (A): 0.035
Blank Corrected Pk Area (A-s): 0.060
Concentration (ug/L): 13.9

uL dispensed: 10 from 1, 5 from 36, 10 from 2
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.028 Peak Height (A): 0.042
Background Pk Area (A-s): 0.021 Background Pk Height (A): 0.014
Blank Corrected Pk Area (A-s): -0.002
Concentration (ug/L): -0.4

Mean Conc (ug/L): 6.7 SD: 10.15 RSD(%): 150.35

Measured resloped conc. differs (>20%) from entered value.

~~~~~~

Sample ID: Blank Sequence No.: 00017 Sampler Position: 1

uL dispensed: 2 from 1, 5 from 36, 20 from 1
Replicate 1
Peak Area (A-s): 0.055 Peak Height (A): 0.059
Background Pk Area (A-s): 0.038 Background Pk Height (A): 0.039
Blank Corrected Pk Area (A-s): 0.025
Concentration (ug/L): 5.8

uL dispensed: 2 from 1, 5 from 36, 20 from 1
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.024 Peak Height (A): 0.036
~~~~~~

Blank Corrected Pk Area (A-s): -0.008
Concentration (ug/L): -1.3

Mean Conc (ug/L): 2.3 SD: 5.06 RSD(%): 223.82

Auto-zero performed.

~~~~~~

Sample ID: Reslope Sequence No.: 00018 Sampler Position: 2

uL dispensed: 10 from 1, 5 from 36, 10 from 2
Replicate 1
Peak Area (A-s): 0.091 Peak Height (A): 0.177
Background Pk Area (A-s): 0.029 Background Pk Height (A): 0.036
Blank Corrected Pk Area (A-s): 0.052
Concentration (ug/L): 12.0

uL dispensed: 10 from 1, 5 from 36, 10 from 2

~~~~~~

Sample ID: Blank Sequence No.: 00019 Sampler Position: 1

uL dispensed: 2 from 1, 5 from 36, 20 from 1
Replicate 1
Peak Area (A-s): 0.025 Peak Height (A): 0.035
Background Pk Area (A-s): 0.019 Background Pk Height (A): 0.014
Blank Corrected Pk Area (A-s): -0.015
Concentration (ug/L): -3.4

uL dispensed: 2 from 1, 5 from 36, 20 from 1
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.026 Peak Height (A): 0.033
Background Pk Area (A-s): 0.017 Background Pk Height (A): 0.010
Blank Corrected Pk Area (A-s): -0.014
Concentration (ug/L): -3.2

Mean Conc (ug/L): -3.3 SD: 0.18 RSD(%): 5.44

Auto-zero performed.

~~~~~~

Sample ID: Reslope Sequence No.: 00020 Sampler Position: 2

uL dispensed: 10 from 1, 5 from 36, 10 from 2
Replicate 1
Peak Area (A-s): 0.089 Peak Height (A): 0.165
Background Pk Area (A-s): 0.031 Background Pk Height (A): 0.035
Blank Corrected Pk Area (A-s): 0.064
Concentration (ug/L): 14.8

uL dispensed: 10 from 1, 5 from 36, 10 from 2
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.084 Peak Height (A): 0.149
Background Pk Area (A-s): 0.033 Background Pk Height (A): 0.034
Blank Corrected Pk Area (A-s): 0.059
Concentration (ug/L): 13.8

Mean Conc (ug/L): 14.3 SD: 0.75 RSD(%): 5.26
~~~~~~

Correlation Coefficient: 0.99888 Slope: 0.004

~~~~~~

Sample ID: ICV Sequence No.: 00021 Sampler Position: 3

uL dispensed: 5 from 36, 20 from 3

000489

Replicate 1
Peak Area (A-s): 0.132 Peak Height (A): 0.206
Background Pk Area (A-s): 0.041 Background Pk Height (A): 0.047
Blank Corrected Pk Area (A-s): 0.107
Concentration (ug/L): 26.2

uL dispensed: 5 from 36, 20 from 3
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.132 Peak Height (A): 0.235
Background Pk Area (A-s): 0.039 Background Pk Height (A): 0.052
Blank Corrected Pk Area (A-s): 0.107
Concentration (ug/L): 26.1

Mean Conc (ug/L): 26.1 100.4% SD: 0.04 RSD(%): 0.16
TV = 26.0

~~~~~~

Sample ID: ICB Sequence No.: 00022 Sampler Position: 4

uL dispensed: 5 from 36, 20 from 4
Replicate 1
Peak Area (A-s): 0.014 Peak Height (A): 0.024
Background Pk Area (A-s): 0.013 Background Pk Height (A): 0.009
Blank Corrected Pk Area (A-s): -0.011
Concentration (ug/L): -2.7

uL dispensed: 5 from 36, 20 from 4
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.017 Peak Height (A): 0.024
Background Pk Area (A-s): 0.015 Background Pk Height (A): 0.009
Blank Corrected Pk Area (A-s): -0.008
Concentration (ug/L): -1.9

Mean Conc (ug/L): -2.3 SD: 0.56 RSD(%): 24.20

~~~~~~

Sample ID: CRDL Sequence No.: 00023 Sampler Position: 5

uL dispensed: 5 from 36, 20 from 5
Replicate 1
Peak Area (A-s): 0.029 Peak Height (A): 0.045
Background Pk Area (A-s): 0.017 Background Pk Height (A): 0.010
Blank Corrected Pk Area (A-s): 0.004
Concentration (ug/L): 0.9

uL dispensed: 5 from 36, 20 from 5
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.028 Peak Height (A): 0.039
Background Pk Area (A-s): 0.016 Background Pk Height (A): 0.012
Blank Corrected Pk Area (A-s): 0.002
Concentration (ug/L): 0.6
~~~~~~

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Sample ID: PBW　　Sequence No.: 00024　　Sampler Position: 6

000490

uL dispensed: 5 from 36, 20 from 6
Replicate 1
Peak Area (A-s): 0.014　　Peak Height (A): 0.017

Background Pk Area (A-s): 0.011　　Background Pk Height (A): 0.007
Blank Corrected Pk Area (A-s): -0.012
Concentration (ug/L): -2.8

uL dispensed: 5 from 36, 20 from 6
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.012　　Peak Height (A): 0.017
Background Pk Area (A-s): 0.014　　Background Pk Height (A): 0.007
Blank Corrected Pk Area (A-s): -0.013
Concentration (ug/L): -3.1

Mean Conc (ug/L): -3.0　　SD: 0.19　　RSD(%): 6.50

~~~~~~

Sample ID: LCW　　Sequence No.: 00025　　Sampler Position: 7

uL dispensed: 5 from 36, 20 from 7
Replicate 1
Peak Area (A-s): 0.129　　Peak Height (A): 0.205
Background Pk Area (A-s): 0.038　　Background Pk Height (A): 0.047
Blank Corrected Pk Area (A-s): 0.104
Concentration (ug/L): 25.3

uL dispensed: 5 from 36, 20 from 7
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.123　　Peak Height (A): 0.220
Background Pk Area (A-s): 0.041　　Background Pk Height (A): 0.053
Blank Corrected Pk Area (A-s): 0.098
Concentration (ug/L): 24.0

Mean Conc (ug/L): TV = 26 24.7 95 %　　SD: 0.91　　RSD(%): 3.70

~~~~~~

Sample ID: 10033　　Sequence No.: 00026　　Sampler Position: 8
883614
uL dispensed: 5 from 1, 5 from 36, 20 from 8
Replicate 1
Peak Area (A-s): 0.017　　Peak Height (A): 0.023
Background Pk Area (A-s): 0.026　　Background Pk Height (A): 0.011
Blank Corrected Pk Area (A-s): -0.008
Concentration (ug/L): -1.9

uL dispensed: 5 from 1, 5 from 36, 20 from 8
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.015　　Peak Height (A): 0.021
Background Pk Area (A-s): 0.027　　Background Pk Height (A): 0.012
Blank Corrected Pk Area (A-s): -0.010
Concentration (ug/L): -2.5

Mean Conc (ug/L): -2.2　　SD: 0.40　　RSD(%): 17.98
~~~~~~

Sample ID: 10033 Sequence No.: 00027 Sampler Position: 8

883614

uL dispensed: 5 from 36, 5 from 2, 20 from 8 **000491**

Replicate 1

Peak Area (A-s): 0.044 Peak Height (A): 0.072

Background Pk Area (A-s): 0.029 Background Pk Height (A): 0.021

Blank Corrected Pk Area (A-s): 0.019

Concentration (ug/L): 4.7

uL dispensed: 5 from 36, 5 from 2, 20 from 8

Replicate 2 (Peak Stored)

Peak Area (A-s): 0.044 Peak Height (A): 0.075

Background Pk Area (A-s): 0.030 Background Pk Height (A): 0.019

Blank Corrected Pk Area (A-s): 0.019

Concentration (ug/L): 4.7

Mean Conc (ug/L): 4.7 SD: 0.00 RSD(%): 0.07

Recovery is 92.4%

Sample ID: 10033+20 Sequence No.: 00028 Sampler Position: 9

883614

uL dispensed: 5 from 1, 5 from 36, 20 from 9

Replicate 1

Peak Area (A-s): 0.101 Peak Height (A): 0.174

Background Pk Area (A-s): 0.045 Background Pk Height (A): 0.044

Blank Corrected Pk Area (A-s): 0.076

Concentration (ug/L): 18.4

uL dispensed: 5 from 1, 5 from 36, 20 from 9

Replicate 2 (Peak Stored)

Peak Area (A-s): 0.101 Peak Height (A): 0.175

Background Pk Area (A-s): 0.048 Background Pk Height (A): 0.045

Blank Corrected Pk Area (A-s): 0.076

Concentration (ug/L): 18.7

Mean Conc (ug/L): 18.5 SD: 0.15 RSD(%): 0.80

Sample ID: 10033+20 Sequence No.: 00029 Sampler Position: 9

883614

uL dispensed: 5 from 36, 5 from 2, 20 from 9

Replicate 1

Peak Area (A-s): 0.130 Peak Height (A): 0.233

Background Pk Area (A-s): 0.050 Background Pk Height (A): 0.056

Blank Corrected Pk Area (A-s): 0.105

Concentration (ug/L): 25.7

uL dispensed: 5 from 36, 5 from 2, 20 from 9

Replicate 2 (Peak Stored)

Peak Area (A-s): 0.128 Peak Height (A): 0.223

Background Pk Area (A-s): 0.048 Background Pk Height (A): 0.054

Blank Corrected Pk Area (A-s): 0.103

Concentration (ug/L): 25.1

Mean Conc (ug/L): 25.4 SD: 0.38 RSD(%): 1.49

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Sample ID: CCB Sequence No.: 00033 Sampler Position: 12

000493

uL dispensed: 5 from 36, 20 from 12
Replicate 1
Peak Area (A-s): 0.007 Peak Height (A): 0.012

Background Pk Area (A-s): 0.015 Background Pk Height (A): 0.007
Blank Corrected Pk Area (A-s): -0.018
Concentration (ug/L): -4.4

uL dispensed: 5 from 36, 20 from 12
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.008 Peak Height (A): 0.013
Background Pk Area (A-s): 0.015 Background Pk Height (A): 0.007
Blank Corrected Pk Area (A-s): -0.018
Concentration (ug/L): -4.3

Mean Conc (ug/L): -4.4 SD: 0.09 RSD(%): 2.15

Sample ID: 10031 Sequence No.: 00034 Sampler Position: 13
883612
uL dispensed: 5 from 1, 5 from 36, 20 from 13
Replicate 1
Peak Area (A-s): 0.018 Peak Height (A): 0.028
Background Pk Area (A-s): 0.031 Background Pk Height (A): 0.013
Blank Corrected Pk Area (A-s): -0.007
Concentration (ug/L): -1.8

uL dispensed: 5 from 1, 5 from 36, 20 from 13
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.015 Peak Height (A): 0.028
Background Pk Area (A-s): 0.032 Background Pk Height (A): 0.013
Blank Corrected Pk Area (A-s): -0.010
Concentration (ug/L): -2.4

Mean Conc (ug/L): -2.1 SD: 0.40 RSD(%): 19.15

Sample ID: 10031 Sequence No.: 00035 Sampler Position: 13
883612
uL dispensed: 5 from 36, 5 from 2, 20 from 13
Replicate 1
Peak Area (A-s): 0.050 Peak Height (A): 0.078
Background Pk Area (A-s): 0.032 Background Pk Height (A): 0.021
Blank Corrected Pk Area (A-s): 0.025
Concentration (ug/L): 6.0

uL dispensed: 5 from 36, 5 from 2, 20 from 13
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.044 Peak Height (A): 0.076
Background Pk Area (A-s): 0.038 Background Pk Height (A): 0.021
Blank Corrected Pk Area (A-s): 0.019
Concentration (ug/L): 4.7

Mean Conc (ug/L): 5.4 SD: 0.94 RSD(%): 17.43

~~~~~~

Sample ID: 10032 883613   Sequence No.: 00036   Sampler Position: 14

000494

uL dispensed: 5 from 1, 5 from 36, 20 from 14
Replicate 1
Peak Area (A-s): 0.015   Peak Height (A): 0.025

Background Pk Area (A-s): 0.033   Background Pk Height (A): 0.014
Blank Corrected Pk Area (A-s): -0.011
Concentration (ug/L): -2.6

uL dispensed: 5 from 1, 5 from 36, 20 from 14
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.014   Peak Height (A): 0.017
Background Pk Area (A-s): 0.035   Background Pk Height (A): 0.045
Blank Corrected Pk Area (A-s): -0.012
Concentration (ug/L): -2.8

Mean Conc (ug/L): -2.7   SD: 0.17   RSD(%): 6.48

~~~~~~

Sample ID: 10032 883613   Sequence No.: 00037   Sampler Position: 14

uL dispensed: 5 from 36, 5 from 2, 20 from 14
Replicate 1
Peak Area (A-s): 0.044   Peak Height (A): 0.076
Background Pk Area (A-s): 0.034   Background Pk Height (A): 0.020
Blank Corrected Pk Area (A-s): 0.019
Concentration (ug/L): 4.7

uL dispensed: 5 from 36, 5 from 2, 20 from 14
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.045   Peak Height (A): 0.078
Background Pk Area (A-s): 0.034   Background Pk Height (A): 0.020
Blank Corrected Pk Area (A-s): 0.020
Concentration (ug/L): 4.9

Mean Conc (ug/L): 4.8   SD: 0.18   RSD(%): 3.87

Recovery is 99.7%

~~~~~~

Sample ID: 10034 883615   Sequence No.: 00038   Sampler Position: 15

uL dispensed: 5 from 1, 5 from 36, 20 from 15
Replicate 1
Peak Area (A-s): 0.017   Peak Height (A): 0.026
Background Pk Area (A-s): 0.033   Background Pk Height (A): 0.015
Blank Corrected Pk Area (A-s): -0.009
Concentration (ug/L): -2.1

uL dispensed: 5 from 1, 5 from 36, 20 from 15
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.015   Peak Height (A): 0.024
Background Pk Area (A-s): 0.035   Background Pk Height (A): 0.016
Blank Corrected Pk Area (A-s): -0.010
Concentration (ug/L): -2.4
~~~~~~

~~~~~~

Sample ID: 10034   Sequence No.: 00039   Sampler Position: 15

883615

000495

uL dispensed: 5 from 36, 5 from 2, 20 from 15
Replicate 1
Peak Area (A-s): 0.041   Peak Height (A): 0.047

Background Pk Area (A-s): 0.034   Background Pk Height (A): 0.040
Blank Corrected Pk Area (A-s): 0.016
Concentration (ug/L): 3.8

uL dispensed: 5 from 36, 5 from 2, 20 from 15
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.044   Peak Height (A): 0.071
Background Pk Area (A-s): 0.028   Background Pk Height (A): 0.017
Blank Corrected Pk Area (A-s): 0.019
Concentration (ug/L): 4.7

Mean Conc (ug/L): 4.3   SD: 0.59   RSD(%): 13.77

Recovery is 86.5%

~~~~~~

Sample ID: 10035   Sequence No.: 00040   Sampler Position: 16

883616

uL dispensed: 5 from 1, 5 from 36, 20 from 16
Replicate 1
Peak Area (A-s): 0.012   Peak Height (A): 0.019
Background Pk Area (A-s): 0.022   Background Pk Height (A): 0.009
Blank Corrected Pk Area (A-s): -0.013
Concentration (ug/L): -3.2

uL dispensed: 5 from 1, 5 from 36, 20 from 16
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.010   Peak Height (A): 0.020
Background Pk Area (A-s): 0.022   Background Pk Height (A): 0.009
Blank Corrected Pk Area (A-s): -0.015
Concentration (ug/L): -3.6

Mean Conc (ug/L): -3.4   SD: 0.29   RSD(%): 8.40

~~~~~~

Sample ID: 10035   Sequence No.: 00041   Sampler Position: 16

883616

uL dispensed: 5 from 36, 5 from 2, 20 from 16
Replicate 1
Peak Area (A-s): 0.041   Peak Height (A): 0.065
Background Pk Area (A-s): 0.022   Background Pk Height (A): 0.016
Blank Corrected Pk Area (A-s): 0.016
Concentration (ug/L): 3.9

uL dispensed: 5 from 36, 5 from 2, 20 from 16
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.041   Peak Height (A): 0.067
Background Pk Area (A-s): 0.021   Background Pk Height (A): 0.016
Blank Corrected Pk Area (A-s): 0.016
Concentration (ug/L): 3.9
~~~~~~

Recovery is 97.4%

~~~~~~

Sample ID: 10036 Sequence No.: 00042 Sampler Position: 17
883617

uL dispensed: 5 from 1, 5 from 36, 20 from 17

Replicate 1
Peak Area (A-s): 0.007 Peak Height (A): 0.015
Background Pk Area (A-s): 0.020 Background Pk Height (A): 0.010
Blank Corrected Pk Area (A-s): -0.018
Concentration (ug/L): -4.5

uL dispensed: 5 from 1, 5 from 36, 20 from 17
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.010 Peak Height (A): 0.015
Background Pk Area (A-s): 0.022 Background Pk Height (A): 0.009
Blank Corrected Pk Area (A-s): -0.015
Concentration (ug/L): -3.7

Mean Conc (ug/L): -4.1 SD: 0.57 RSD(%): 13.92

~~~~~~

Sample ID: 10036 Sequence No.: 00043 Sampler Position: 17
883617
uL dispensed: 5 from 36, 5 from 2, 20 from 17
Replicate 1
Peak Area (A-s): 0.040 Peak Height (A): 0.061
Background Pk Area (A-s): 0.023 Background Pk Height (A): 0.015
Blank Corrected Pk Area (A-s): 0.015
Concentration (ug/L): 3.8

uL dispensed: 5 from 36, 5 from 2, 20 from 17
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.039 Peak Height (A): 0.060
Background Pk Area (A-s): 0.023 Background Pk Height (A): 0.015
Blank Corrected Pk Area (A-s): 0.014
Concentration (ug/L): 3.3

Mean Conc (ug/L): 3.5 SD: 0.33 RSD(%): 9.28

Recovery is 101.7%

~~~~~~

Sample ID: 877386 Sequence No.: 00044 Sampler Position: 18

uL dispensed: 5 from 1, 5 from 36, 20 from 18
Sample abs. is greater than that of the largest standard.
Replicate 1
Peak Area (A-s): 0.204 Peak Height (A): 0.394
Background Pk Area (A-s): 0.070 Background Pk Height (A): 0.089
Blank Corrected Pk Area (A-s): 0.179
Concentration (ug/L): 43.7

~~~~~~

Sample ID: 877386 Sequence No.: 00045 Sampler Position: 18

uL dispensed: 20 from 1, 5 from 36, 5 from 18

Background Pk Area (A-s): 0.033
Blank Corrected Pk Area (A-s): 0.032
Concentration (ug/L): 7.7

Background Pk Height (A): 0.028

Corrected Conc (ug/L): 30.9

000497

uL dispensed: 20 from 1, 5 from 36, 5 from 18
Replicate 2 (Peak Stored)

Peak Area (A-s): 0.058
Background Pk Area (A-s): 0.035
Blank Corrected Pk Area (A-s): 0.033
Concentration (ug/L): 8.1

Peak Height (A): 0.134
Background Pk Height (A): 0.030

Corrected Conc (ug/L): 32.4

Mean Conc (ug/L): 7.9 SD: 0.27 RSD(%): 3.47
Corrected Conc (ug/L): 31.7

~~~~~~

Sample ID: 877386 Sequence No.: 00046 Sampler Position: 18

uL dispensed: 15 from 1, 5 from 36, 5 from 2, 5 from 18
Replicate 1
Peak Area (A-s): 0.085
Background Pk Area (A-s): 0.042
Blank Corrected Pk Area (A-s): 0.060
Concentration (ug/L): 14.7

Peak Height (A): 0.150
Background Pk Height (A): 0.035

Corrected Conc (ug/L): 58.7

uL dispensed: 15 from 1, 5 from 36, 5 from 2, 5 from 18
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.087
Background Pk Area (A-s): 0.037
Blank Corrected Pk Area (A-s): 0.062
Concentration (ug/L): 15.1

Peak Height (A): 0.155
Background Pk Height (A): 0.034

Corrected Conc (ug/L): 60.4

Mean Conc (ug/L): 14.9 SD: 0.31 RSD(%): 2.09
Corrected Conc (ug/L): 59.5

Recovery is 92.9%

~~~~~~

Sample ID: CCV Sequence No.: 00047 Sampler Position: 19

uL dispensed: 5 from 36, 20 from 19
Replicate 1
Peak Area (A-s): 0.124
Background Pk Area (A-s): 0.042
Blank Corrected Pk Area (A-s): 0.099
Concentration (ug/L): 24.1

Peak Height (A): 0.177
Background Pk Height (A): 0.041

uL dispensed: 5 from 36, 20 from 19
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.122
Background Pk Area (A-s): 0.041
Blank Corrected Pk Area (A-s): 0.097
Concentration (ug/L): 23.7

Peak Height (A): 0.172
Background Pk Height (A): 0.040

Mean Conc (ug/L): 23.9 SD: 0.25 RSD(%): 1.04

TV = 26.0 91.9%

~~~~~~

Sample ID: CCB Sequence No.: 00048 Sampler Position: 20
~~~~~~

Replicate 1
Peak Area (A-s): 0.005 Peak Height (A): 0.008
Background Pk Area (A-s): 0.018 Background Pk Height (A): 0.008
Blank Corrected Pk Area (A-s): -0.020
Concentration (ug/L): -4.8

000498

uL dispensed: 5 from 36, 20 from 20
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.006 Peak Height (A): 0.010
Background Pk Area (A-s): 0.018 Background Pk Height (A): 0.009
Blank Corrected Pk Area (A-s): -0.019
Concentration (ug/L): -4.7

Mean Conc (ug/L): -4.7 SD: 0.08 RSD(%): 1.76

~~~~~~

Sample ID: 877386 + Sequence No.: 00049 Sampler Position: 21

uL dispensed: 5 from 1, 5 from 36, 20 from 21
Sample abs. is greater than that of the largest standard.
Replicate 1
Peak Area (A-s): 0.243 Peak Height (A): 0.484
Background Pk Area (A-s): 0.077 Background Pk Height (A): 0.113
Blank Corrected Pk Area (A-s): 0.218
Concentration (ug/L): 53.2

~~~~~~

Sample ID: 877386 + Sequence No.: 00050 Sampler Position: 21

uL dispensed: 20 from 1, 5 from 36, 5 from 21
Replicate 1
Peak Area (A-s): 0.063 Peak Height (A): 0.132
Background Pk Area (A-s): 0.035 Background Pk Height (A): 0.029
Blank Corrected Pk Area (A-s): 0.038
Concentration (ug/L): 9.3 Corrected Conc (ug/L): 37.1

uL dispensed: 20 from 1, 5 from 36, 5 from 21
Replicate 2 (Peak Stored)
Peak Area (A-s): 0.070 Peak Height (A): 0.143
Background Pk Area (A-s): 0.037 Background Pk Height (A): 0.032
Blank Corrected Pk Area (A-s): 0.045
Concentration (ug/L): 11.0 Corrected Conc (ug/L): 43.8

Mean Conc (ug/L): 10.1 SD: 1.18 RSD(%): 11.66
Corrected Conc (ug/L): 40.5

~~~~~~

Sample ID: 877386 + Sequence No.: 00051 Sampler Position: 21

uL dispensed: 15 from 1, 5 from 36, 5 from 2, 5 from 21
Replicate 1
Peak Area (A-s): 0.099 Peak Height (A): 0.208
Background Pk Area (A-s): 0.042 Background Pk Height (A): 0.045
Blank Corrected Pk Area (A-s): 0.073
Concentration (ug/L): 17.9 Corrected Conc (ug/L): 71.7

uL dispensed: 15 from 1, 5 from 36, 5 from 2, 5 from 21
~~~~~~

QC Inc

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

GENERAL ANALYSIS DATA REPORT

SAMPLE ID. #

C-29A

Lab Name: QC Inc.

Lab Code: 77166 Contract/P.O. No.: Gannett Fleming

Matrix (Soil/Water): Water Lab Sample ID: 883612

Sample Wt/Vol: _____(g/ml)_____ Date Received: 8/15/89

% Moisture: not dec._X_ dec.___

RESULTS

Parameter	Date Analyzed	Sample Concentration Units	Method Blank Units
Petroleum Hydrocarbons	8/16/89	<0.5 mg/l	<0.5 mg/l
Total Organic Carbon	8/17/89	3.9 mg/l	<1 mg/l
Total Dissolved Solids	8/16/89	120 mg/l	<2 mg/l
pH	8/16/89	4.35	N/A

Form QC GEN-1

QC Inc

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GENERAL ANALYSIS DATA REPORT

SAMPLE ID. #

C-14A

Lab Name: QC Inc.

Lab Code: 77166 Contract/P.O. No.: Gannett Fleming

Matrix (Soil/Water): Water Lab Sample ID: 883613

Sample Wt/Vol: _____(g/ml)_____ Date Received: 8/15/89

% Moisture: not dec._X_ dec.___

RESULTS

Parameter	Date Analyzed	Sample Concentration Units	Method Blank Units
Petroleum Hydrocarbons	8/16/89	<0.5 mg/l	<0.5 mg/l
Total Organic Carbon	8/17/89	5.5 mg/l	<1 mg/l
Total Dissolved Solids	8/16/89	140 mg/l	<2 mg/l
pH	8/16/89	5.32	N/A

Form QC GEN-1

QC Inc

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GENERAL ANALYSIS DATA REPORT

SAMPLE ID. #

C-14B

Lab Name: QC Inc.

Lab Code: 77166 Contract/P.O. No.: Gannett Fleming

Matrix (Soil/Water): Water Lab Sample ID: 883614

Sample Wt/Vol: _____(g/ml)_____ Date Received: 8/15/89

% Moisture: not dec._X_ dec.___

RESULTS

Parameter	Date Analyzed	Sample Concentration Units	Method Blank Units
Petroleum Hydrocarbons	8/16/89	<0.5 mg/l	<0.5 mg/l
Total Organic Carbon	8/17/89	2.2 mg/l	<1 mg/l
Total Dissolved Solids	8/16/89	60 mg/l	<2 mg/l
pH	8/16/89	4.40	N/A

Form QC GEN-1

QC Inc

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GENERAL ANALYSIS DATA REPORT

SAMPLE ID. #

C-14C

Lab Name: QC Inc.

Lab Code: 77166 Contract/P.O. No.: Gannett Fleming

Matrix (Soil/Water): Water Lab Sample ID: 883615

Sample Wt/Vol: _____(g/ml)_____ Date Received: 8/15/89

% Moisture: not dec._X_ dec.___

RESULTS

Parameter	Date Analyzed	Sample Concentration Units	Method Blank Units
Petroleum Hydrocarbons	8/16/89	<0.5 mg/l	<0.5 mg/l
Total Organic Carbon	8/17/89	8.8 mg/l	<1 mg/l
Total Dissolved Solids	8/16/89	58 mg/l	<2 mg/l
pH	8/16/89	4.02	N/A

Form QC GEN-1

000503

QC Inc

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GENERAL ANALYSIS DATA REPORT

SAMPLE ID. #

FB

Lab Name: QC Inc.

Lab Code: 77166 Contract/P.O. No.: Gannett Fleming

Matrix (Soil/Water): Water Lab Sample ID: 883616

Sample Wt/Vol: _____(g/ml)_____ Date Received: 8/15/89

% Moisture: not dec._X_ dec.___

RESULTS

Parameter	Date Analyzed	Sample Concentration Units	Method Blank Units
Petroleum Hydrocarbons	8/16/89	<0.5 mg/l	<0.5 mg/l
Total Organic Carbon	8/18/89	<1 mg/l	<1 mg/l
Total Dissolved Solids	8/16/89	<2 mg/l	<2 mg/l
pH	8/16/89	5.33	N/A

Form QC GEN-1

QC Inc

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GENERAL ANALYSIS DATA REPORT

SAMPLE ID. #

TB

Lab Name: QC Inc.

Lab Code: 77166 Contract/P.O. No.: Gannett Fleming

Matrix (Soil/Water): Water Lab Sample ID: 883617

Sample Wt/Vol: _____(g/ml)_____ Date Received: 8/15/89

% Moisture: not dec._X_ dec.___

RESULTS

Parameter	Date Analyzed	Sample Concentration Units	Method Blank Units
Petroleum Hydrocarbons	8/16/89	<0.5 mg/l	<0.5 mg/l
Total Organic Carbon	8/18/89	<1 mg/l	<1 mg/l
Total Dissolved Solids	8/16/89	<2 mg/l	<2 mg/l
pH	8/16/89	5.45	N/A

Form QC GEN-1

QC Inc

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GENERAL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: QC Inc.

Lab Code: 77166 Contract/P.O. No.: Gannett Fleming

Matrix Spike Sample #: 883613: TOC, PHC 883612: TDS

Lab Sample ID #: 883612 thru 883617

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 #
TOC, 883613	10	5.5	15.9	104.7	80-120	16.0	0.62
PHC, 883613	16.7	<0.5	13.6	81	80-120	13.4	1.5
TDS, 883612	128.4	120	368	95.8	80-120	352	4.4

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

Tier I~~X~~ QA Report Sheet

Client Name: Garnet Fleming

Analysis Date: 8/17/89 Analyst Name: Susan Mullally

Matrix: Solid/Liquid (circle one)

Accession Numbers in This Set: (Max. 20)
883612 - 883617, 883956

Test Parameter: PNC

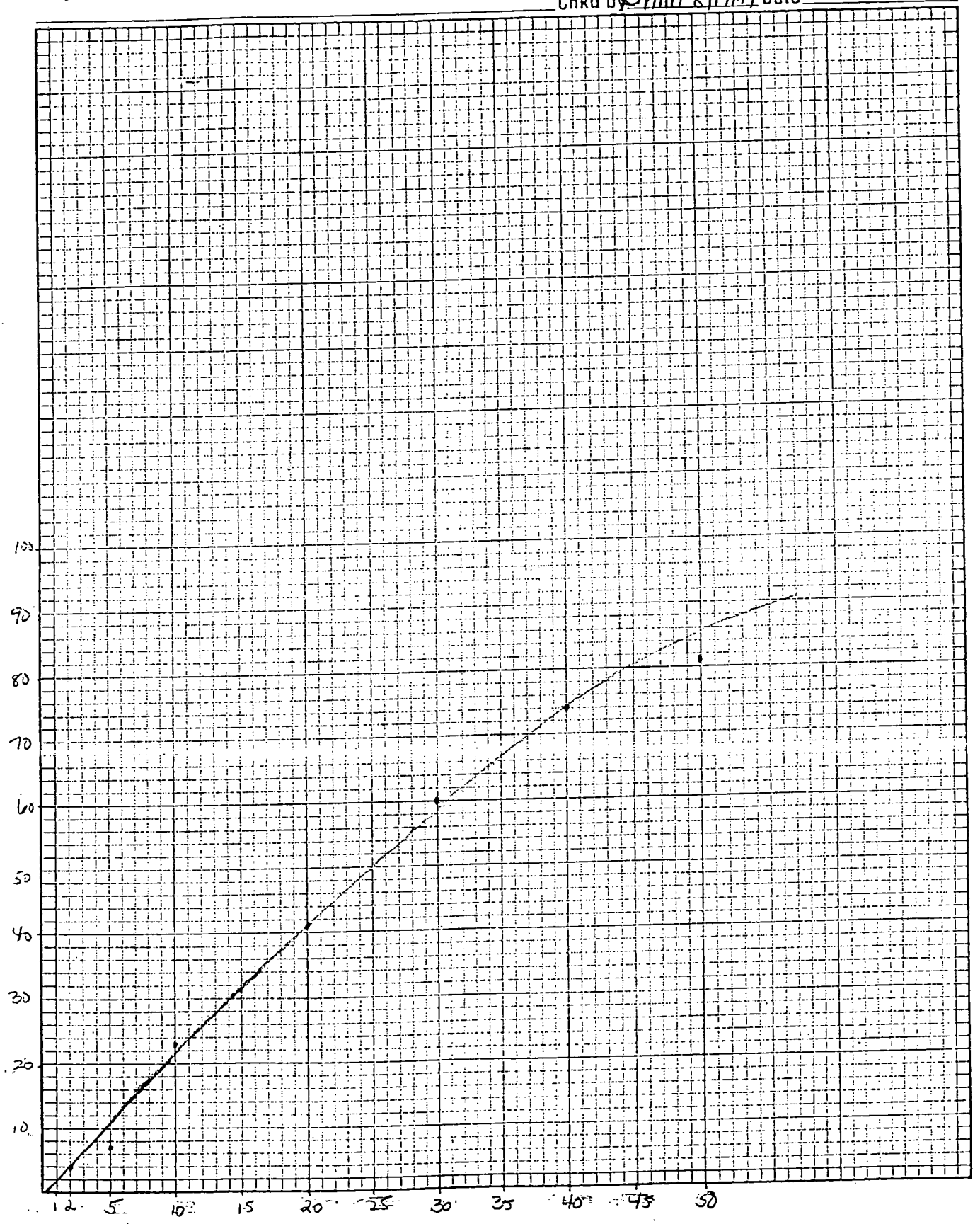
Accession Number	Amt. Added (ppm)	Sample Result	Spike Result	Spike Rec. %	Spike Dup.	RPD MS/MSD
883613	16.7 ppm	<.5	13.6	81.9	13.4	13.6/13.4 = 1.5% RPD

Environmental Resources Management, inc. West Chester, PA 19380 • (215) 696-5007

Project PHC CURVE W.O. No. _____ Sheet _____ of _____

Subject _____ By dcm Date 7-31-89

Chkd by SMM 8/17/89 Date _____



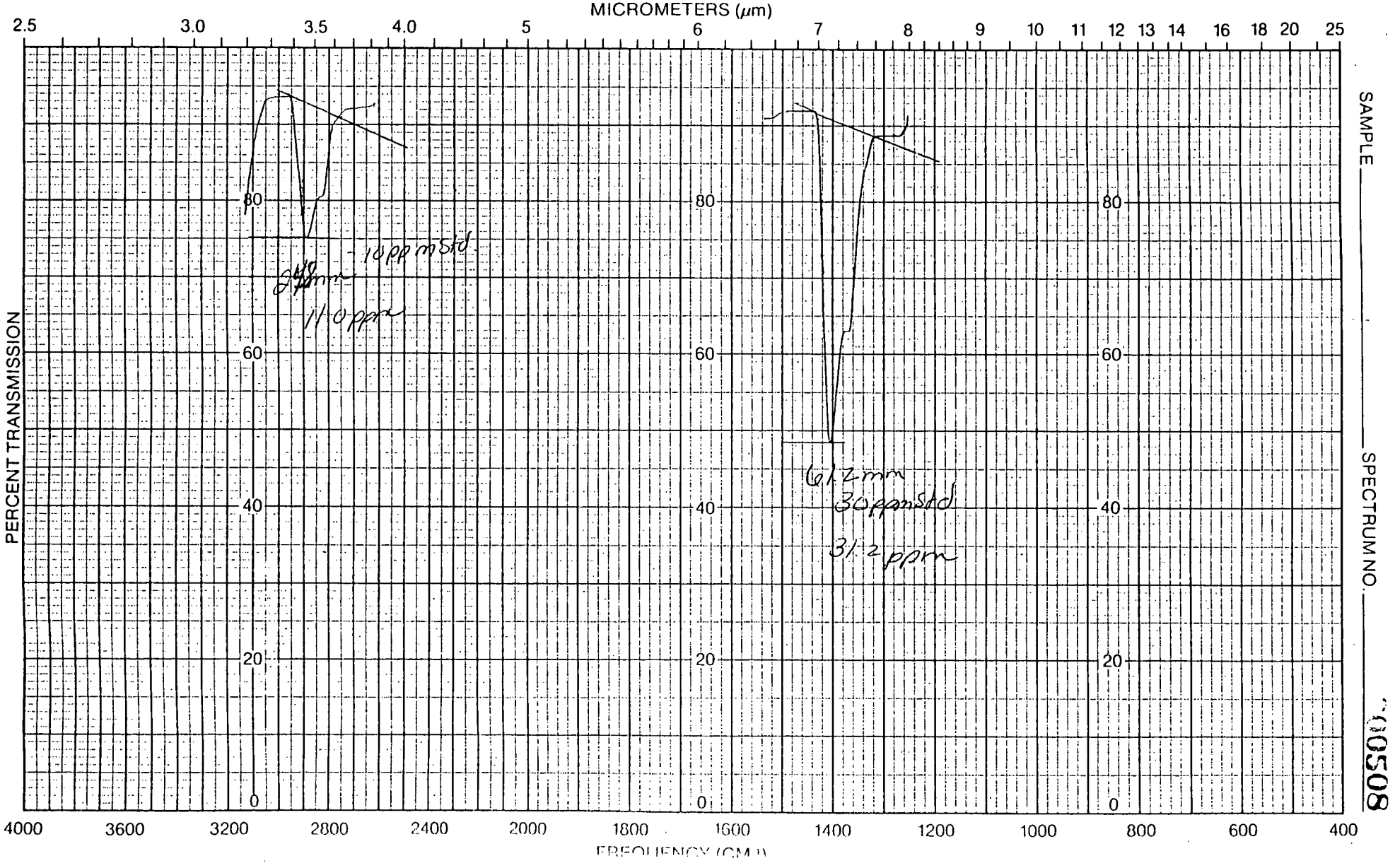
DMM PHC

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

CONCENTRATION	SCAN MODE ACCY. ☐ SURVEY ☐	SPECTRUM NO.
THICKNESS	HI ENERGY ☐ CAL. ☐	SAMPLE IR standardization
PHASE	RESOLUTION ☐	
REMARKS	OPERATOR Smm DATE 8/17/89	ORIGIN



SAMPLE

SPECTRUM NO.

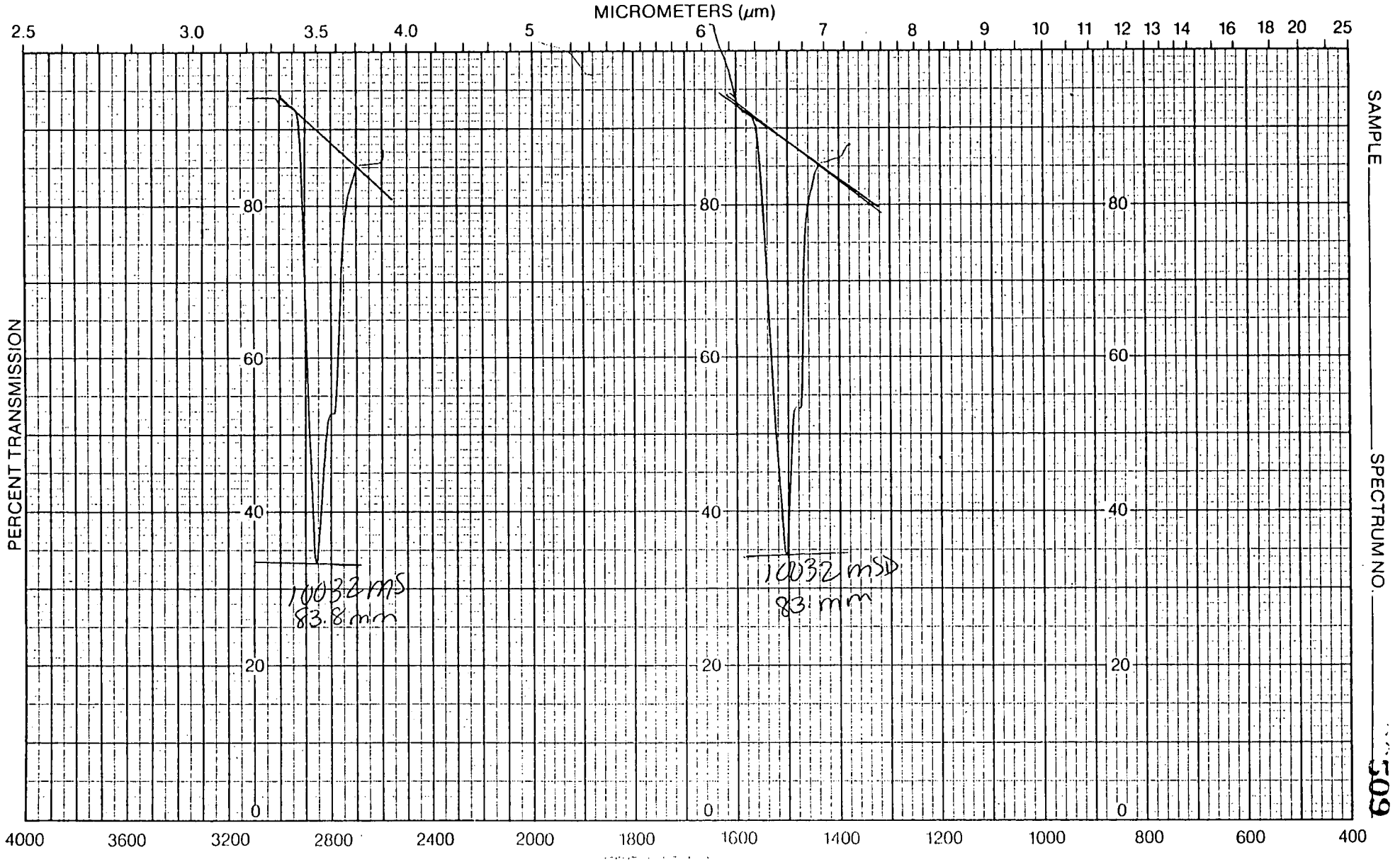
00508

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

CONCENTRATION	SCAN MODE: ACCY. ☐ SURVEY ☐ HI ENERGY ☐ CAL. ☐ RESOLUTION ☐	SPECTRUM NO.
THICKNESS		SAMPLE
PHASE		
REMARKS	OPERATOR SMM DATE 8/17/89	ORIGIN



SAMPLE

SPECTRUM NO.

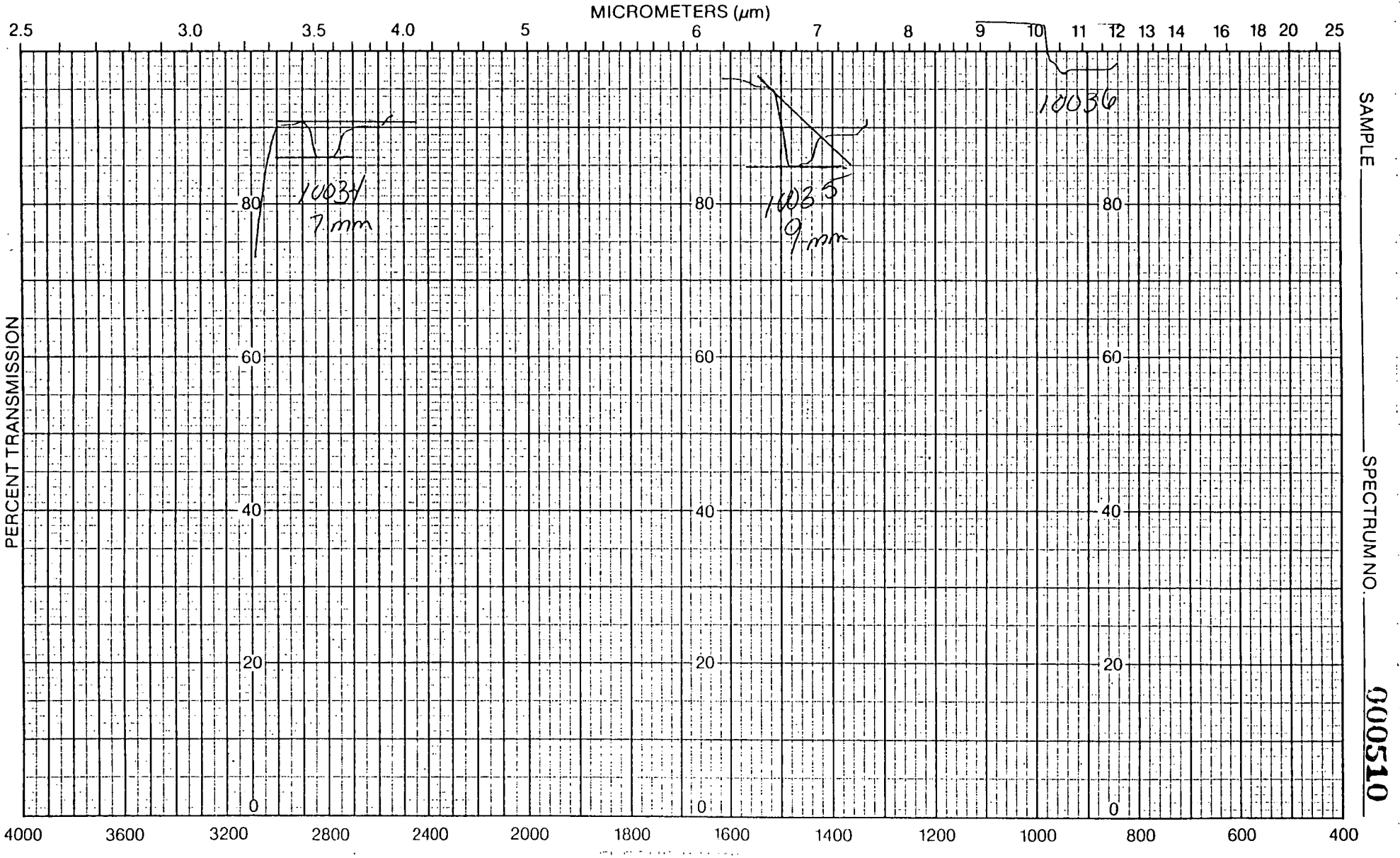
509

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

CONCENTRATION	SCAN MODE: ACCY. ☐ SURVEY ☐	SPECTRUM NO.
THICKNESS	HI ENERGY ☐ CAL. ☐	SAMPLE
PHASE	RESOLUTION ☐	
REMARKS	OPERATOR SMM DATE 8/17/89	ORIGIN



SAMPLE

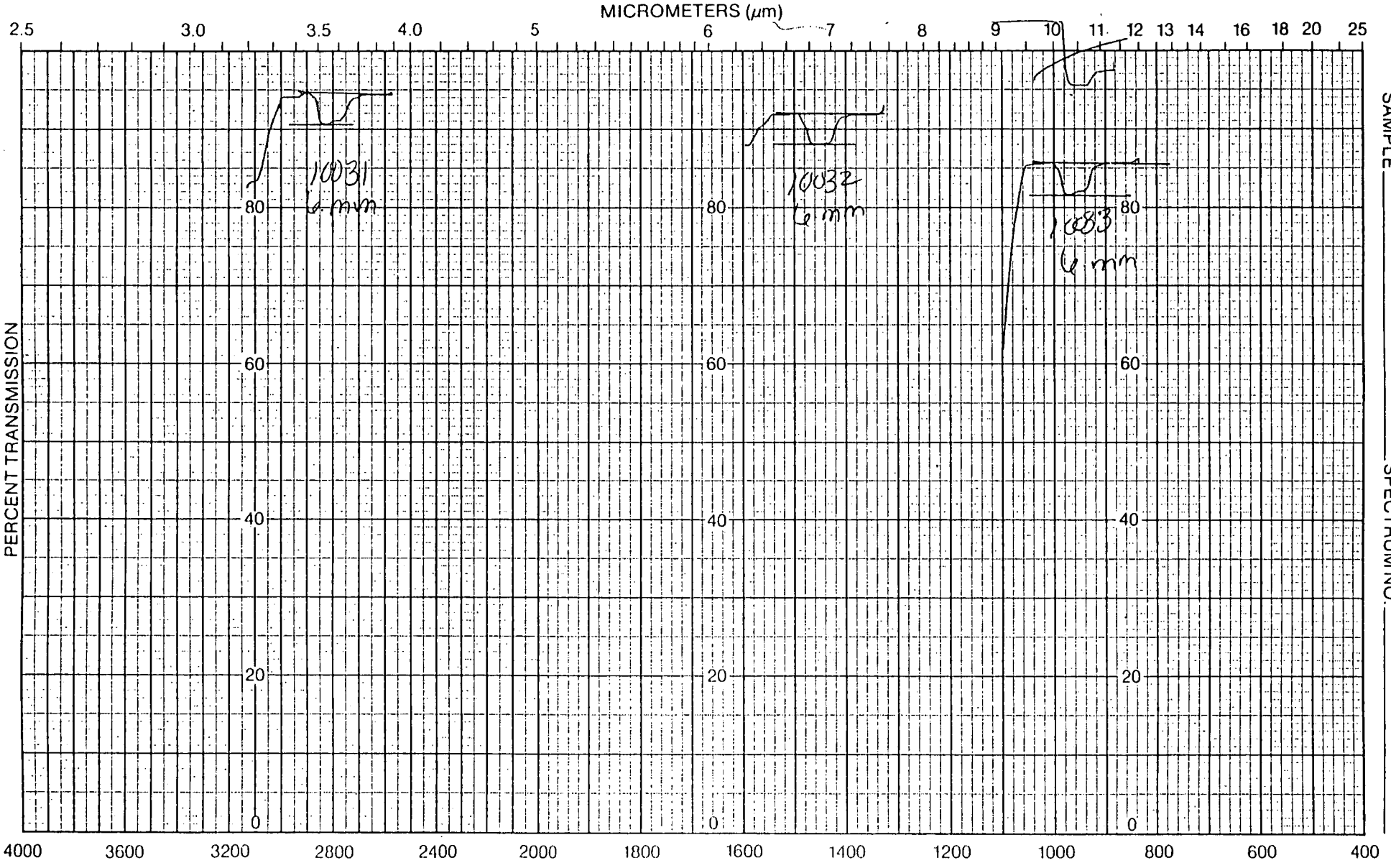
SPECTRUM NO. 000510

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

CONCENTRATION	SCAN MODE ACCY. ☐ SURVEY ☐	SPECTRUM NO.
THICKNESS	HI ENERGY ☐ CAL. ☐	SAMPLE
PHASE	RESOLUTION ☐	
REMARKS	OPERATOR SMM DATE 8/17/89	ORIGIN



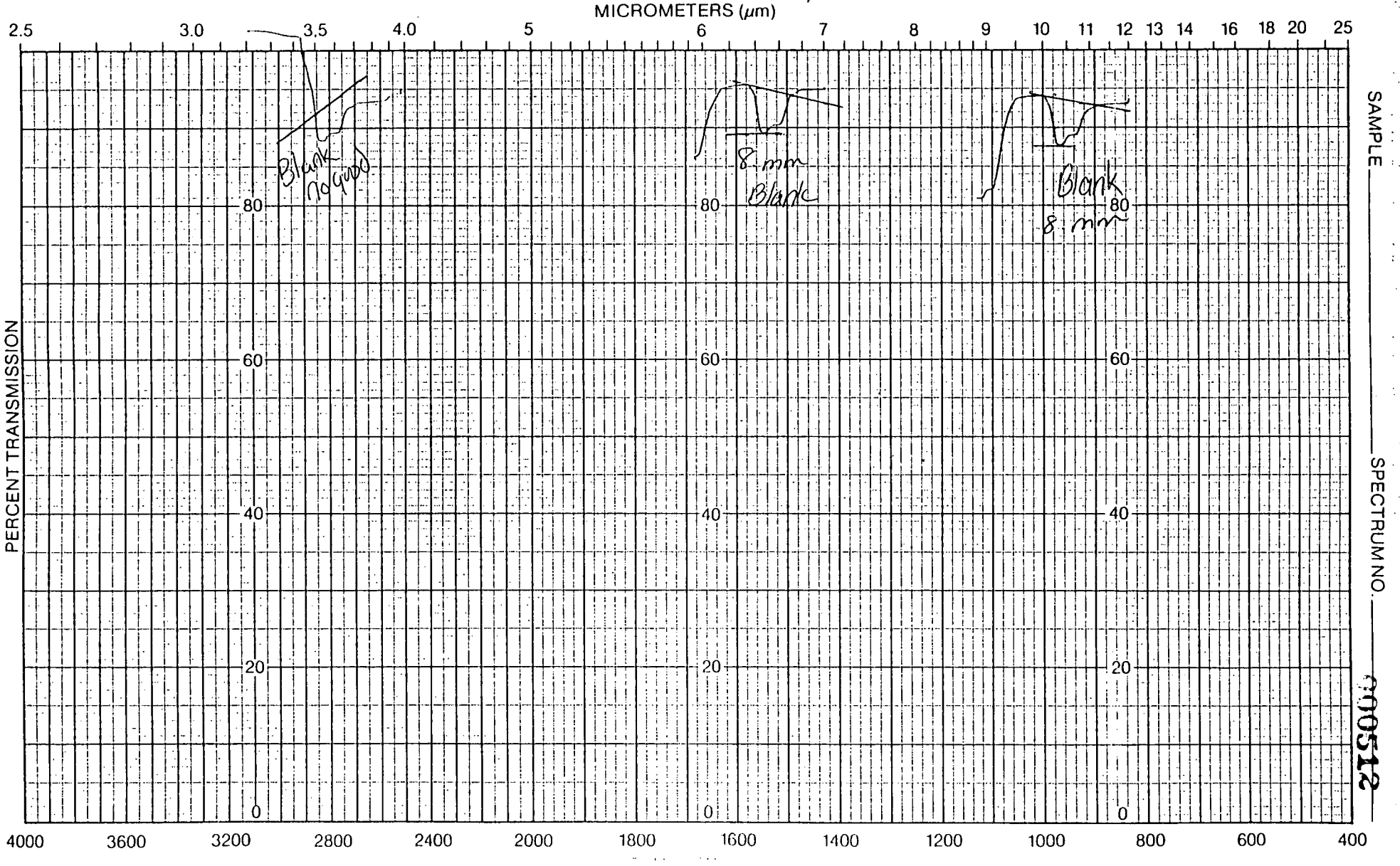
SAMPLE

SPECTRUM NO. 000511

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

CONCENTRATION	SCAN MODE: ACCY. ☐ SURVEY ☐ HI ENERGY ☐ CAL. ☐ RESOLUTION ☐	SPECTRUM NO.
THICKNESS		SAMPLE
PHASE		
REMARKS	OPERATOR Sam DATE 8/17/89	ORIGIN



SAMPLE

SPECTRUM NO. 000512

PHC SAMPLE DATA

1989

DATE	I.D. #	CLIENT	ODOR (x)	AMT. SAMPLE	FINAL VOL.	ADDIT. DIL.	FINAL DIL f	PEAK (mm)	ppm PHC	ppm PHC x DIL f	INIT
8-14-89	BLANK	—	—	500ml DI	100 ml	—	—	Nil	<.5	<.5	CP/WJ
8-16-89	Blank			300ml	100		.33	8mm			SM
8-16-89	882828	Westing.	none	300	100		.33	0 42-8	<.5	<.5	SM
8-16-89	883140	Analytical Lab.	slight	350	100		.28	0 5-8	<.5	<.5	SM
8-16-89	883236	Johanna Farms	none	250	100		.4	0 58-8	<.5	<.5	SM
8-16-89	883237	Johanna Farms	none	350	100		.28	0 38-8	<.5	<.5	SM
8-16-89	883240	Johanna Farms	none	200	100		.5	0 6-8	<.5	<.5	SM
8-16-89	883241	Johanna Farms	none	150	100		.66	0 68-8	<.5	<.5	SM
8-16-89	883270	Seabrook Bros	none	200	100		.5	0 48-8	<.5	<.5	SM
8-16-89	10031		none	250	100		.4	0 6mm8	<.5	<.5	SM
DUP 8-16-89	883270	Seab Bros	none	200	100		.5	0 68-8	<.5	<.5	SM
MS/MSD 8-16-89											

AMT ADDED

000513

PHC SAMPLE DATA

1989

DATE	I.D. #	CLIENT	ODOR (x)	AMT. SAMPLE	FINAL VOL.	ADDIT. DIL.	FINAL DIL f	PEAK (mm)	ppm PHC	ppm PHC x DIL f	INIT
8-16-89	10032		none	300	100		.33	0 6-8	<.5	<.5	SM
8-16-89	10033		none	300	100		.33	0 6-8	<.5	<.5	SM
8-16-89	10034		none	350	100		.29	0 7-8	<.5	<.5	SM
8-16-89	10035		none	500	100		.20	1 9-8	.5	<.5	SM
8-16-89	10036		none	500	100		.20	ND	<.5	<.5	SM
DUP		~~100~~									
MS / MSD	8-16-87	10032			300 / 300	100 / 100	—	.33 / .33	75.8 83-8 / 75 83-8	41.2 / 40.5	13.6 / 13.4	SM / SM	16.7 / 16.7

ART ADEL

Tier II QA Report Sheet

Client Name: Garrett and Blenney

Analysis Date: 8-17-89 Analyst Name: [illegible]

Matrix: Solid/Liquid (circle one)

Accession Numbers in This Set: (Max. 20)

883612 - 883617

Test Parameter: TOC

Accession Number	Amt. Added (ppm)	Sample Result	Spike Result	Spike Rec. %	Spike Dup.	RPD MS/MSD
883613	10	5.46	15.93	104.7%	16.03	0.62%

TOC

8-17-

000516

Sample	Dilution	ppm
883615	–	8.8 µm
883616	–	1.3 µm
883612	–	3.9 µm
883613	–	5.46 µm
883613 dup	–	5.46 µm
883613 MS	10 µm spike conc.	15.93 µm
883613 MSD	10 µm spike conc.	16.03 µm
883614	–	2.2 µm
883617	–	1.6 µm

$$\text{spike conc.} = \frac{1\text{ml of 1000 ppm stock solution}}{100\text{ml of sample}} = 10\,\mu\text{m spike conc.}$$

$$\text{RPD} = \frac{\text{difference between dups}}{\text{average of dups}} \times 100 = \frac{0\,\mu\text{m}}{5.46\,\mu\text{m}} \times 100 = 0\%$$

$$\text{MS spike recovery} = \frac{15.93\,\mu\text{m} - 5.46\,\mu\text{m}}{10\,\mu\text{m spike}} \times 100 = 104.7\%$$

$$\text{MSD spike recovery} = \frac{16.03\,\mu\text{m} - 5.46\,\mu\text{m}}{10\,\mu\text{m spike}} \times 100 = 105.7\%$$

$$\text{RPD of spikes} = \frac{0.10\,\mu\text{m}}{15.98\,\mu\text{m}} \times 100 = 0.62\%$$

8-17-89

*** MODEL 700 TOC ANALYZER ***

CALIBRATION FACTORS:

IC BLANK= 1.60000 mV OC BLANK= 12.2280 mV POC BLANK= 000000 mV
STD. MASS= 9.54000 ug STD. AVG.= 187.317 mV SCALING FACTOR= 0.05092 ug/mV

VOLUMES:

SPL. VOL.= 0.31800 ml ACID VOL.= 00004 x100ul OXID. VOL.= 00008 x100ul

LOW/HIGH ALARM SETPOINTS (ppm C):

TIC LO= 000000 TIC HI= 000000 TOC LO= 000000 TOC HI= 000000

TIME PRESETS:

EXTD. REACTION TIME 00:00:00 EXTD. PURGE TIME 00:00:00

LAST ANALYSIS RESULTS:

SPL# 00023	00:25:14	TIC =	000000	mV	000000	ug C	000000	ppm
SPL# 00023	00:25:15	POC =	0.72474	mV	0.03992	ug C	0.12555	ppm
SPL# 00023	00:25:18	TOC =	000000	mV	000000	ug C	000000	ppm
SPL# 00001	00:29:11	TIC =	7.39778	mV	0.37676	ug C	1.18480	ppm
SPL# 00001	00:34:11	TOC =	20.9092	mV	1.06490	ug C	3.34873	ppm
SPL# 00001	00:37:16	TIC =	2.03489	mV	0.10363	ug C	0.32590	ppm
SPL# 00001	00:42:16	TOC =	13.2215	mV	0.67336	ug C	2.11751	ppm
SPL# 00001	00:45:21	TIC =	2.31566	mV	0.11793	ug C	0.37086	ppm
SPL# 00001	00:50:21	TOC =	15.5746	mV	0.79321	ug C	2.49437	ppm
SPL# 00001	00:53:26	TIC =	2.31566	mV	0.11793	ug C	0.37086	ppm
SPL# 00001	00:58:26	TOC =	12.9282	mV	0.65842	ug C	2.07053	ppm

SPL# 00001	01:01:31	TIC = 2.31566 mV	0.11793 ug C	0.37086 ppm
SPL# 00001	01:06:31	TOC = 10.2955 mV	0.52434 ug C	1.64889 ppm
SPL# 00001	02:16:25	TIC = 15.6995 mV	0.79957 ug C	2.51437 ppm
SPL# 00001	02:21:57	TIC = 5.41500 mV	0.27578 ug C	0.86724 ppm
SPL# 00001	02:26:57	TOC = 6.80674 mV	0.34666 ug C	1.09014 ppm

30ppm

SPL# 00002	02:48:19	TIC = 6.26377 mV	0.31901 ug C	1.00318 ppm
SPL# 00002	02:53:19	TOC = 186.928 mV	9.52017 ug C	29.9376 ppm
SPL# 00002	02:56:24	TIC = 4.84999 mV	0.24700 ug C	0.77675 ppm
SPL# 00002	03:01:24	TOC = 192.006 mV	9.77881 ug C	30.7510 ppm

30 ppm

SPL# 00003	03:09:14	TIC = 4.00372 mV	0.20159 ug C	0.63394 ppm
SPL# 00003	03:14:14	TOC = 190.831 mV	9.60873 ug C	30.2161 ppm

High 30 ÷ 100 Alphatrol

SPL# 00004	03:27:29	TIC = 35.4246 mV	1.78370 ug C	5.60912 ppm
SPL# 00004	03:32:29	TOC = 274.600 mV	13.8267 ug C	43.4801 ppm

DI H_2O

SPL# 00005	03:38:50	TIC = 2.03489 mV	0.10246 ug C	0.32220 ppm
SPL# 00005	03:43:50	TOC = 11.4639 mV	0.57723 ug C	1.81519 ppm
SPL# 00005	03:46:55	TIC = 1.47386 mV	0.07421 ug C	0.23337 ppm
SPL# 00005	03:51:55	TOC = 8.25744 mV	0.41577 ug C	1.30748 ppm
SPL# 00005	03:55:00	TIC = 2.03489 mV	0.10246 ug C	0.32220 ppm
SPL# 00005	04:00:00	TOC = 7.96696 mV	0.40115 ug C	1.26149 ppm

Low 5 ÷ 100 Alphatrol

SPL# 00006	04:19:49	TIC = 5.13241 mV	0.25842 ug C	0.81266 ppm
SPL# 00006	04:24:49	TOC = 39.4048 mV	1.98411 ug C	6.23934 ppm
SPL# 00006	04:29:26	TIC = 3.72196 mV	0.18740 ug C	0.58933 ppm
SPL# 00006	04:34:26	TOC = 36.0214 mV	1.81375 ug C	5.70363 ppm
SPL# 00007	05:15:45	TIC = 9.38874 mV	0.47274 ug C	1.48661 ppm
SPL# 00007	05:20:45	TOC = 58.8762 mV	2.96454 ug C	9.32244 ppm
SPL# 00007	05:26:16	TIC = 1.75429 mV	0.08833 ug C	0.27777 ppm
SPL# 00007	05:31:16	TOC = 56.3251 mV	2.83608 ug C	8.91850 ppm

SPL# 00007	05:34:44	TIC =	2.31566 mV	0.11659 ug C	0.36666 ppm
SPL# 00007	05:39:44	TOC =	54.1023 mV	2.72416 ug C	8.56655 ppm
SPL# 00007	05:43:05	TIC =	2.03489 mV	0.10246 ug C	0.32220 ppm
SPL# 00007	05:48:05	TOC =	52.8362 mV	2.66041 ug C	8.36606 ppm
SPL# 00007	05:56:31	TIC =	2.31566 mV	0.11659 ug C	0.36666 ppm
SPL# 00007	06:01:31	TOC =	50.6272 mV	2.54918 ug C	8.01630 ppm
SPL# 00007	06:11:12	TIC =	2.59659 mV	0.13074 ug C	0.41114 ppm
SPL# 00007	06:16:12	TOC =	48.4270 mV	2.43840 ug C	7.66792 ppm

DI H_2O

SPL# 00008	06:23:28	TIC =	2.03489 mV	0.10246 ug C	0.32220 ppm
SPL# 00008	06:28:28	TOC =	8.83890 mV	0.44505 ug C	1.39955 ppm

883612

SPL# 00009	06:36:41	TIC =	117.432 mV	5.91296 ug C	18.5942 ppm
SPL# 00009	06:41:41	TOC =	24.4965 mV	1.23345 ug C	3.87877 ppm
SPL# 00009	06:44:46	TIC =	116.394 mV	5.86069 ug C	18.4298 ppm
SPL# 00009	06:49:46	TOC =	25.3972 mV	1.27880 ug C	4.02139 ppm

883613

SPL# 00010	06:55:33	TIC =	194.835 mV	9.81036 ug C	30.8502 ppm
SPL# 00010	07:00:33	TOC =	34.4906 mV	1.73667 ug C	5.46123 ppm
SPL# 00010	07:03:38	TIC =	191.739 mV	9.65444 ug C	30.3599 ppm
SPL# 00010	07:08:38	TOC =	34.4906 mV	1.73667 ug C	5.46123 ppm

883614

SPL# 00011	07:13:17	TIC =	145.026 mV	7.30238 ug C	22.9635 ppm
SPL# 00011	07:18:17	TOC =	13.5151 mV	0.68051 ug C	2.13997 ppm
SPL# 00011	07:21:22	TIC =	142.826 mV	7.19158 ug C	22.6150 ppm
SPL# 00011	07:26:22	TOC =	14.3967 mV	0.72490 ug C	2.27957 ppm

883615

SPL# 00012	07:31:53	TIC =	245.351 mV	12.3539 ug C	38.8489 ppm

SPL# 00012	07:39:58	TIC =	246.595 mV	12.4165 ug C	39.0457 ppm
SPL# 00012	07:44:58	TOC =	55.3714 mV	2.78806 ug C	8.76750 ppm

000520

DI H_2O

SPL# 00013	08:31:41	TIC =	14.2581 mV	0.71792 ug C	2.25762 ppm
SPL# 00013	08:36:41	TOC =	14.3967 mV	0.72490 ug C	2.27957 ppm
SPL# 00013	08:39:46	TIC =	2.59659 mV	0.13074 ug C	0.41114 ppm
SPL# 00013	08:44:46	TOC =	8.54808 mV	0.43041 ug C	1.35350 ppm
SPL# 00013	09:02:32	TIC =	4.00372 mV	0.20159 ug C	0.63394 ppm
SPL# 00013	09:07:32	TOC =	10.5874 mV	0.53309 ug C	1.67640 ppm
SPL# 00013	09:10:37	TIC =	1.75429 mV	0.08833 ug C	0.27777 ppm
SPL# 00013	09:15:37	TOC =	8.83890 mV	0.44505 ug C	1.39955 ppm
SPL# 00013	09:38:11	TIC =	4.56773 mV	0.22999 ug C	0.72325 ppm
SPL# 00013	09:43:11	TOC =	11.1715 mV	0.56251 ug C	1.76890 ppm
SPL# 00013	09:46:16	TIC =	1.47386 mV	0.07421 ug C	0.23337 ppm
SPL# 00013	09:51:16	TOC =	7.67665 mV	0.38653 ug C	1.21552 ppm
SPL# 00013	10:04:36	TIC =	2.31566 mV	0.11659 ug C	0.36666 ppm
SPL# 00013	10:09:36	TOC =	7.96696 mV	0.40115 ug C	1.26149 ppm
SPL# 00013	10:12:41	TIC =	1.75429 mV	0.08833 ug C	0.27777 ppm
SPL# 00013	10:17:41	TOC =	7.67665 mV	0.38653 ug C	1.21552 ppm
SPL# 00013	10:20:46	TIC =	1.47386 mV	0.07421 ug C	0.23337 ppm
SPL# 00013	10:25:46	TOC =	6.51711 mV	0.32815 ug C	1.03192 ppm
SPL# 00013	10:28:51	TIC =	1.75429 mV	0.08833 ug C	0.27777 ppm
SPL# 00013	10:33:51	TOC =	7.38651 mV	0.37192 ug C	1.16958 ppm
SPL# 00013	10:36:56	TIC =	2.03489 mV	0.10246 ug C	0.32220 ppm
SPL# 00013	10:41:56	TOC =	7.09654 mV	0.35732 ug C	1.12366 ppm

883616

SPL# 00014	10:52:28	TIC =	2.03489 mV	0.10246 ug C	0.32220 ppm
SPL# 00014	10:57:28	TOC =	8.25744 mV	0.41577 ug C	1.30748 ppm
SPL# 00014	11:00:33	TIC =	2.31566 mV	0.11659 ug C	0.36666 ppm
SPL# 00014	11:05:33	TOC =	7.96696 mV	0.40115 ug C	1.26149 ppm

883617

SPL# 00015	11:22:17	TIC =	2.87768 mV	0.14489 ug C	0.45565 ppm
SPL# 00015	11:27:17	TOC =	10.0039 mV	0.50371 ug C	1.58401 ppm
SPL# 00015	11:30:22	TIC =	1.75429 mV	0.08833 ug C	0.27777 ppm
SPL# 00015	11:35:22	TOC =	10.0039 mV	0.50371 ug C	1.58401 ppm

883613 spike MS + MSD

SPL# 00016	11:42:59	TIC =	146.473 mV	7.37523 ug C	23.1926 ppm
SPL# 00016	11:47:59	TOC =	100.602 mV	5.06551 ug C	15.9293 ppm
SPL# 00016	11:51:04	TIC =	151.927 mV	7.64983 ug C	24.0561 ppm
SPL# 00016	11:56:04	TOC =	101.288 mV	5.10005 ug C	16.0379 ppm

8-18-89

*** MODEL 700 TOC ANALYZER ***

CALIBRATION FACTORS:

IC BLANK= 1.60000 mV OC BLANK= 12.2280 mV POC BLANK= 000000 mV
STD. MASS= 9.54000 ug STD. AVG.= 189.466 mV SCALING FACTOR= 0.05035 ug/mV

VOLUMES:

SPL. VOL.= 0.31800 ml ACID VOL.= 00004 x100ul OXID. VOL.= 00008 x100ul

LOW/HIGH ALARM SETPOINTS (ppm C):

TIC LO= 000000 TIC HI= 000000 TOC LO= 000000 TOC HI= 000000

TIME PRESETS:

EXTD. REACTION TIME 00:00:00 EXTD. PURGE TIME 00:00:00

LAST ANALYSIS RESULTS:

SPL# 00017	00:18:45	TIC =	000000	mV	000000	ug C	000000	ppm
SPL# 00017	00:18:47	POC =	0.72474	mV	0.03992	ug C	0.12555	ppm
SPL# 00017	00:18:49	TOC =	000000	mV	000000	ug C	000000	ppm

DI H_2O

SPL# 00001	00:22:57	TIC =	11.9606	mV	0.60224	ug C	1.89384	ppm
SPL# 00001	00:27:57	TOC =	19.4218	mV	0.97792	ug C	3.07524	ppm
SPL# 00001	00:31:02	TIC =	2.03489	mV	0.10246	ug C	0.32220	ppm
SPL# 00001	00:36:02	TOC =	13.8088	mV	0.69530	ug C	2.18648	ppm
SPL# 00001	00:39:07	TIC =	1.47386	mV	0.07421	ug C	0.23337	ppm
SPL# 00001	00:44:07	TOC =	12.0491	mV	0.60669	ug C	1.90785	ppm
SPL# 00001	01:02:48	TIC =	4.28564	mV	0.21579	ug C	0.67858	ppm
SPL# 00001	01:07:48	TOC =	12.6350	mV	0.63619	ug C	2.00062	ppm

SPL# 00001	01:10:53	TIC =	1.19359 mV	0.06009 ug C	0.18899 ppm
SPL# 00001	01:15:53	TOC =	7.96696 mV	0.40115 ug C	1.26149 ppm

000523

SPL# 00001	01:18:58	TIC =	1.19359 mV	0.06009 ug C	0.18899 ppm
SPL# 00001	01:23:58	TOC =	8.83890 mV	0.44505 ug C	1.39955 ppm
SPL# 00001	02:12:15	TIC =	4.00372 mV	0.20159 ug C	0.63394 ppm
SPL# 00001	02:17:15	TOC =	15.5746 mV	0.78421 ug C	2.46608 ppm
SPL# 00001	02:20:20	TIC =	2.31566 mV	0.11659 ug C	0.36666 ppm
SPL# 00001	02:25:20	TOC =	7.09654 mV	0.35732 ug C	1.12366 ppm
SPL# 00001	02:28:25	TIC =	1.75429 mV	0.08833 ug C	0.27777 ppm
SPL# 00001	02:33:25	TOC =	7.38651 mV	0.37192 ug C	1.16958 ppm

30 ppm std

SPL# 00002	02:44:03	TIC =	4.56773 mV	0.22999 ug C	0.72325 ppm
SPL# 00002	02:49:03	TOC =	180.339 mV	9.08043 ug C	28.5548 ppm
SPL# 00002	02:52:08	TIC =	5.13241 mV	0.25842 ug C	0.81266 ppm
SPL# 00002	02:57:08	TOC =	186.149 mV	9.37300 ug C	29.4748 ppm
SPL# 00002	03:00:13	TIC =	5.98068 mV	0.30113 ug C	0.94697 ppm
SPL# 00002	03:05:13	TOC =	184.984 mV	9.31430 ug C	29.2903 ppm

DI H_2O

SPL# 00003	04:03:15	TOC =	14.6909 mV	0.76242 ug C	2.39755 ppm
SPL# 00003	04:10:41	TOC =	5.36027 mV	0.27818 ug C	0.87479 ppm

Low std

SPL# 00004	04:22:45	TIC =	3.72196 mV	0.19316 ug C	0.60742 ppm
SPL# 00004	04:27:45	TOC =	44.6756 mV	2.31855 ug C	7.29104 ppm
SPL# 00004	04:30:50	TIC =	7.96579 mV	0.41340 ug C	1.30001 ppm
SPL# 00004	04:35:50	TOC =	39.7134 mV	2.06103 ug C	6.48121 ppm

High Std

SPL# 00005	04:41:03	TIC =	20.3404 mV	1.05561 ug C	3.31954 ppm
SPL# 00005	04:46:03	TOC =	263.808 mV	13.6910 ug C	43.0534 ppm
SPL# 00005	04:49:08	TIC =	22.3844 mV	1.16169 ug C	3.65313 ppm
SPL# 00005	04:54:08	TOC =	268.540 mV	13.9365 ug C	43.8256 ppm

DI H_2O

SPL# 00006	05:09:13	TIC =	2.87768 mV	0.14934 ug C	0.46963 ppm
SPL# 00006	05:14:13	TOC =	5.64923 mV	0.29318 ug C	0.92195 ppm

SPL# 00006	05:17:18	TIC =	0.91349 mV	0.04740 ug C	0.14908 ppm
SPL# 00006	05:22:18	TOC =	1.33258 mV	0.06915 ug C	0.21747 ppm

000524

883616 rev

SPL# 00007	05:32:23	TIC =	2.03489 mV	0.10560 ug C	0.33209 ppm
SPL# 00007	05:37:23	TOC =	2.47999 mV	0.12870 ug C	0.40473 ppm

883617 rev

SPL# 00008	05:48:49	TIC =	2.31566 mV	0.12017 ug C	0.37791 ppm
SPL# 00008	05:53:49	TOC =	2.47999 mV	0.12870 ug C	0.40473 ppm

883107 + dup

SPL# 00009	05:58:36	TIC =	51.2684 mV	2.66070 ug C	8.36698 ppm
SPL# 00009	06:03:36	TOC =	14.1027 mV	0.73189 ug C	2.30155 ppm
SPL# 00009	06:11:42	TIC =	49.1079 mV	2.54858 ug C	8.01439 ppm
SPL# 00009	06:16:42	TOC =	14.1027 mV	0.73189 ug C	2.30155 ppm

spike response

SPL# 00010	06:20:20	TIC =	43.5921 mV	2.26232 ug C	7.11422 ppm
SPL# 00010	06:25:20	TOC =	56.6434 mV	2.93965 ug C	9.24417 ppm
SPL# 00010	06:38:22	TIC =	41.4624 mV	2.15179 ug C	6.76665 ppm
SPL# 00010	06:43:22	TOC =	57.2804 mV	2.97271 ug C	9.34814 ppm

SPL# 00011	07:01:33	TIC =	4.28564 mV	0.22241 ug C	0.69941 ppm

Tine I

180C 000525

LABORATORY REPORT

Plant TDS Date 8/16

	1	2	3	4	5	
TEST No.	Known	No. 10031	Spike No. 10031	Spike No. 10031	No. 10032	
DISH + FAT	3.1310	3.1288	3.1244	3.1418	3.1926	
DISH	3.1283	3.1227	3.1152	3.1330	3.1855	
FAT	0.0027	0.0061	0.0092	0.0088	0.0071	
PIPETTES + SAMPLE						
PIPETTES						
SAMPLE	50 ml	50	25+25	25+25	50	
% FAT	54	122	184	176	142	

	6	7	8	9	10	
DISH + SOLIDS	No. 10033	No. 10034	No. 10035	No. 10036		
DISH	3.2073	3.2071	3.1134	3.1829		
SOLIDS	3.2043	3.2042	3.1134	3.1791		
DISH or PIPETTE + SAMPLE	0.0030	0.0029	0	0.0038		
DISH or PIPETTE						
SAMPLE	50	—	—	—		
% SOLIDS	60	58	<2	76		

[illegible] Operator

FORM NO. 97-10-2 LAB REPORT

Order New Pads from MEYER MOJONNIER

Known: WSS713 Value 52.2 mg/l Range 46.9-57.5 mg/l

Spike: 256.8 mg/l

No. 10031. $\text{Spike} = \dfrac{184 - \frac{25}{50} \cdot 122}{\frac{25}{50} \cdot 256.8} = 95.8\%$

$\text{Spike} = \dfrac{176 - \frac{25}{50} \cdot 122}{\frac{25}{50} \cdot 256.8} = 89.6\%$

DATE	BALANCE	10.00g READING	10.0mg READING	ANALYST
8/16	Mettler AE160	10.0000	0.0100	H.T
8/16	OHAUS	10.00	.01	H.T
8/17				
8/17				
8/18				
8/18				
8/21				
8/21				
8/22				
8/22				
8/23				
8/23				
8/24				
8/24				
8/25				
8/25				
8/28				
8/28				
8/29				
8/29				
8/30				
8/30				
8/31				
8/31				

MONTHLY CHECKS

DATE	BALANCE	READINGS 10.0mg	100mg	10.00g	100.00g	ANALYST
9/1	METTLER AE160					
9/1	OHAUS BRAINWEIGH					
9/2						
9/2						
9/3						
9/3						
9/4						
9/4						
9/8						
9/8						
9/9						
9/9						
9/10						
9/10						
9/11						
9/11						

TS

000527 8-24-8

QC Inc

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

RESIDUE ANALYSIS
Liquids

ACCESS. NUM.	PAN Wt. (g)	SAMPLE Vol. (ml)	FINAL Wt. (g) @105C	FINAL Wt. (g) @550C	
recheck 883617	.9793	20ml	.9793		<2µm

SUPERVI

PH Meter Calibrations:

mon. 4.00 / 7.00

actual 4.02 / 7.00

temp. 24°C

Eff. 0.9756

Sample #	Ph Reading	Duplicate Ph Reading
1. 883236	7.38	
2. 883278	3.64	
3. 883449	6.88	
4. 883144	7.26	
5. 883263	4.29	
6. 883270	4.69	
7. 883267	4.45	→ 4.47
8. 883422	~~7.66~~ 7.66	
9. 883450	5.67	
10. 883266	4.62	
DUP 883226	7.61	
12. 883238	7.21	→ 7.37 / (after RECAL) 7.24
13. 883440	7.31	
14. 883257	6.32	
15. 883265	4.23	
16. 883227	4.82	
17. 883260	7.98	
18. 883237	7.52	
19. 883241	7.49	
20. 883228	8.66	
21. 883439	7.09	
DUP 883408	7.69	
23. 883256	~~6.77~~ 6.77	→ 6.75
24. 883451	7.25	
25. 883255	4.45	
26. 883258	6.71	
27. 883240	7.29	
28. 883229	7.66	
29. 883264	4.89	
30. 883259	7.75	
31. 883239	7.16	

Sample #	PH Reading
32. 883138	7.14
33. 008183	4.32
34. 008190	7.53

Refer to 8/14 and 8/15 Results for Remaining PH Readings on Test Worksheet.

PH Readings - Gannet Fleming

		PH
1	C-25A ~	4.35
2	C-14A ~	5.32
3	C-14B ~	4.40
4	C-14C ~	4.02
5	FB ~	5.33
6	TB ~	5.45

Duplicate ≈ 4.38

882356 = PH 1.55

882939 = 8.06

GANNETT FLEMING

ATTACHMENT B

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.

NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE (YR. MO. DAY)	NJ LAB CERT. NO.	WQM USE
R NJ 0 0 2 3 5 4 0	2 9 - 2 0 6 6 8 - 5	8 9 0 8 1 5	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.)

Owners 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
	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	12.00	
	x			x			x			x		Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	12.00	
												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	0.003	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	29-2066 8-5	89 08 15	77166	

77648

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 1088 (MO. YR.) TO 1089 (MO. YR.)

Owner's Well N . 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
												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	5.32	
												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	140	
x			x				x			x		Total Organic Carbon (TOC)	PPM	00680	5.5	
												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-017
4.83

P1

NEW J[illegible] DEPARTMENT [illegible] ENVIR[illegible]NMENTAL PROTE[illegible]ON
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.: 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 8 1 5
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

SUBMIT WITH SIGNED T-VWX-014

(C-14-4)

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	10	K
	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.

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 8 1 5 | 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

SUBMIT WITH SIGNED T-VWX-014

Owner's Well No. C-14A

(C-14-4)

SAMPLING MONTHS												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	20	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		
												Fluoranthene	ug/l	34376	10	K
												Fluorene	ug/l	34381	50	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-Nitrosodimethylamine	ug/l	34438		
												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

Form VWX-016
1/83

NEW JE Y DEPARTMENT F ENVIRONMENTAL PR TE IN
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 8 - 5

SAMPLE DATE YR. MO. DAY 8 9 0 8 1 5

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 # 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	8	J
	1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	5	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	32105	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

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	29-20666-9	890815	77166	

77648

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 1088 (MO. YR.) TO 1089 (MO. YR.)

Owners Well N . 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	16.50	
	X			X			X			X		Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	14.67	
												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	0.003	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 6 - 9	8 9 0 8 1 5	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

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	4.40	
												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	610	
x			x				x			x		Total Organic Carbon (TOC)	PPM	00680	2.2	
												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 | NJPDES NO. -NJ 0 0 2 3 5 4 0 | WELL PERMIT NO. 2 9 - 2 0 6 6 6 - 9 | SAMPLE DATE YR. MO. DAY 8 9 0 8 1 5 | 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

SUBMIT WITH SIGNED T-VWX-014

(C-14-1)

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	9	J
	1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	5	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
4.83

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.

U | NJPDES NO.: NJ 0023540 | WELL PERMIT NO.: 29-20666-9 | SAMPLE DATE YR. MO. DAY: 89 08 15 | NJ LAB CERT. NO.: 77166 | WOM USE

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

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		
	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	10	K
	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.

LAB NAME: QC Inc.

U | NJPDES NO. NJ 0 0 2 3 5 4 0 | WELL PERMIT NO. 2 9 - 2 0 6 6 6 - 9 | SAMPLE DATE YR. MO. DAY 8 9 0 8 1 5 | 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

SUBMIT WITH SIGNED T-VWX-014

Owner's Well No. C-14B

(C-14-1)

SAMPLING MONTHS												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	20	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		
												Fluoranthene	ug/1	34376	10	K
												Fluorene	ug/1	34381	50	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	34447	10	K
												N-Nitrosodimenthylamine	ug/1	34428		
												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
	K						X					1,2,4-Trichlor benzen	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 (1) | NJPDES NO. NJ 0 0 2 3 5 4 0 (2–8) | WELL PERMIT NO. 2 9 - 2 0 6 6 9 - 3 (9–16) | SAMPLE DATE YR. MO. DAY 8 9 0 8 1 5 (17–22) | NJ LAB CERT. NO. 7 7 1 6 6 (23–27) | WQM USE (28)

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 1 0 8 8 (MO. YR.) TO 1 0 8 9 (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	13.40	
	x			x			x			x		Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	11.23	
												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	74058		
												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	0.003	K
												Lindane, Total	UG/L	39782		
												Manganese, Dissolved	UG/L	01056		
												Mercury, Dissolved	UG/L	71890		

VALUE CODING RULES AND
REMARK CODES ON REVERSE

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	29-2066 9-3	890815	77166	

77648

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 1088 (MO. YR.) TO 1089 (MO. YR.)

Owner's Well N . 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	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	4.02	
												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	518	
x			x			x				x		Total Organic Carbon (TOC)	PPM	00680	8.8	
												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 IN
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.: 29-20669-3
SAMPLE DATE (YR. MO. DAY): 8 9 0 8 1 5
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	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X	Acrylonitrile	UG/L	34215		
X	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	8	J
	1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	5	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	34418	10	K
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 J[illegible]Y DEPARTMENT OF ENVIR[illegible]NMENTAL PROTE[illegible]ON
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONIT RING 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 8 1 5	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 N . C- 14C
(C-14-2)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS	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		
	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-chloroisopropyl) Ether	ug/1	34283	10	K
	Bis(2-ethylhexyl) Phthalate	ug/1	39100	10	K
	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

VWX017

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.:

NAME: QC Inc.

NJPDES NO.: U 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 8 1 5

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

SUBMIT WITH SIGNED T-VWX-014

Owner's Well No. C-14C

(C-14-2)

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	20	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		
												Fluoranthene	ug/l	34376	10	K
												Fluorene	ug/l	34381	50	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		
												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)	29-20667-7 (9–16)	890815 (17–22)	77166 (23–27)	

77648

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 1018 (MO. YR.) TO 1019 (MO. YR.)

Owners Well N . C-29A

(C-14-3)

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		108.23	
	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	82646	14.80	
	X			X			X			X		Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	11.30	
												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	0.003	K
												Lindane, Total	UG/L	39782		
												Manganese, Dissolved	UG/L	01056		
												Mercury, Dissolved	UG/L	71890		

SAMPLING MONTHS

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	29-2066 7-7	8 9 0 8 1 5	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 N . 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
												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	4.35	
												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	1210	
x			x				x			x		Total Organic Carbon (TOC)	PPM	00680	3.9	
												Total Organic Halogen (TOX)	UG/L	70353		
												Toxaphene	UG/L	39400		
												Turbidity	NTU	00078		
												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 F ENVIRONMENTAL PROTE IN
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.: T -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 8 1 5

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.)

OWNER'S WELL # C-29A

77648

SUBMIT WITH SIGNED T-VWX-014

(C-14-3)

SAMPLING MONTHS	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
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	11	J
	1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	5	K
	Tetrachloroethylene	UG/L	34478	5	K
	Toluene	UG/L	34012	1	J
	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	39178	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	1, 2 - trans - Dichloroethylene	UG/L	34546	5	K
	1, 2 Dichlorobenzene	UG/L	34526		
	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 J[illegible]Y DEPARTMENT OF ENVIRONMENTAL PROTE[illegible]ON
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 7 - 7 | SAMPLE DATE YR. MO. DAY: 8 9 0 8 1 5 | 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		
												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	10	K
												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.:

NAME: QC Inc.

NJPDES NO.: U 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 8 1 5

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 No. C-29A

SUBMIT WITH SIGNED T-VWX-014

(C-14-3)

SAMPLING MONTHS												ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.					
	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	20	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	50	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	34467	10	K
												N-Nitrosodimenthylamine	ug/l	34438		
												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