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ORIGINAL
(Red)

APPENDIX 3

COMPLETE ANALYSIS SUMMARIES

Versar INC.

ENVIRONMENTAL RISK MANAGEMENT

Versar INC.

ORIGINAL
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SEMIVOLATILE ANALYSIS
ANALYTICAL DATA PACKAGE

CLIENT : VERSAR DIV.31
SITE : CDM
PROJECT: 420.1 B#3
CONTROL: 2548
DATE : 05/23/90

Versar INC.

Data Qualifier Flags

J For Target Compounds: This flag is used when mass spectral data indicates the presence of a compound but the result is less than the specified detection limit but still greater than zero.

For Non Target Compounds: This flag indicates that the concentration is an estimated value, assuming a 1 to 1 response with the internal standard.

B This flag is used when the analyte is found in the blank as well as in the sample. It indicates possible/probable contamination and warns the data user to take appropriate action.

u This flag states that the compound was analyzed for but was not detected. The number is the minimum attainable detection limit for the sample.

X or T This flag states that the mass spectrum does not meet EPA CLP criteria for confirmation, but compound presence is strongly suspected.

E This flag is used to indicate that the quantitation of the analyte is outside the linear calibration of the curve and that dilution was required in order to properly quantitate.

D This flag is used to indicate the value for the target analyte was calculated from a dilution (see "E" flag above).

Y This flag is used when a matrix spike compound is also confirmed present in the unspiked sample.

Flags excerpted from and established by the US EPA Contract Lab Program (CLP) protocol.

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ORIGINAL (Red)

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V. RAW QC DATA (CONT'D)

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Versar INC.

I. NARRATIVE

II. QC SUMMARY

Versar INC.

May 23, 1990

Narrative
Versar Division 31 - CDM
EPA CLP Protocol - Semivolatile Organic Analysis
Versar Project 420.1 - Batch 3
Control 2548

This report contains the analytical data for the semivolatile organic analysis of eleven (11) water samples. The samples for semivolatile organic analysis were analyzed following EPA CLP protocol. The samples listed below were received intact by Versar Laboratory on April 20, 1990. Results for other requested parameters are provided separately.

SAMPLE LIST

MW-38	MW-79A	TB-3A
MW-43	SW-1	TB-4A
MW-53	SW-2	TB-5A
MW-79		

//

GC/MS instrument calibrations using DFTPP met requirements for semivolatile analysis. SPCC and CCC criteria were met for the semivolatile initial calibration curve and the continuing calibration standard.

Extractions and analyses for semivolatile organic compounds were completed within specified sample holding times. All GC/MS analyses occurred during the twelve hour period following daily instrument calibration.

Semivolatile surrogate standard recovery values for the water samples met specified QC limits for all analyses. Internal standard area abundances and associated relative retention times met established limits for all analyses. One set of matrix spike and matrix spike duplicate (MS/MSD) QC analyses for semivolatile organic compounds was performed for this batch shipment of samples. Most recovery and all relative percent difference (RPD) values were within specified limits.

No field sample required dilution prior to volatile organic analysis in order to quantify detected target analytes within the established range of the standard calibration curve. 500 mLs of water was extracted for the QC samples, resulting in a dilution of two.

Definitions of data qualifier flags used on the individual data summary pages are provided in the listing which immediately follows this case narrative.

Continued.....

Versar INC.

Please contact Janet Beckman, Laboratory Project Manager, should you have any questions or require additional information pertaining to these analyses.

Data Release Approved By:

Linda E. Bock

Linda E. Bock
GC/MS Data Quality Manager
Laboratory Operations

Narrative Reviewed By:

Janet Beck for

Lawrence P. Pollack
GC/MS Quality Assurance Manager

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	OTHER	TOT OUT
01	MW38	79	78	83	34	28	28	0	0
02	MW43	81	78	68	44	39	38	0	0
03	MW53	80	65	64	71	71	72	0	0
04	MW79	79	65	68	64	65	48	0	0
05	MW79A	83	77	81	69	69	63	0	0
06	SW-1	83	70	89	86	88	87	0	0
07	SW-2	90	70	97	94	95	101	0	0
08	TB-1A	96	75	81	61	51	21	0	0
09	TB-3A	86	70	64	87	87	83	0	0
10	TB-4A	89	70	59	29	22	18	0	0
11	TB-5A	89	67	75	61	61	66	0	0
12	MW38MS	83	79	75	52	49	24	0	0
13	MW38MSD	87	73	79	54	52	21	0	0
14	SBLK51	88	89	85	88	96	90	0	0

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

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

3C

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix Spike - EPA Sample No.: MW38

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
Phenol	400	0	197	49	12- 89
2-Chlorophenol	400	0	222	56	27-123
1,4-Dichlorobenzene	200	0	92.0	46	36 97
N-Nitroso-di-n-prop.(1)	200	0	148	74	41 116
1,2,4-Trichlorobenzene	200	0	104	52	39 98
4-Chloro-3-methylphenol	400	0	198	50	23 97
enaphthene	200	0	144	72	46-118
-Nitrophenol	400	0	386	96 *	10- 80
2,4-Dinitrotoluene	200	0	167	84	24- 96
Pentachlorophenol	400	0	85.6	21	9-103
Pyrene	200	0	152	76	26-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	400	202	50	-2	42	12- 89
2-Chlorophenol	400	228	57	-2	40	27-123
1,4-Dichlorobenzene	200	105	52	-12	28	36 97
N-Nitroso-di-n-prop.(1)	200	148	74	0	38	41 116
,2,4-Trichlorobenzene	200	114	57	-9	28	39 98
-Chloro-3-methylphenol	400	225	56	-11	42	23 97
Acenaphthene	200	149	74	-3	31	46-118
4-Nitrophenol	400	383	96 *	0	50	10- 80
2,4-Dinitrotoluene	200	168	84	0	38	24- 96
Pentachlorophenol	400	83.6	21	0	50	9-103
Pyrene	200	150	75	1	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: 2 out of 22 outside limits

COMMENTS: CLP,VERSCDM,2548,MW38,L,W,16688,B,,420.1 B#3,1UL,
INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Lab File ID: T2574 Lab Sample ID: SBLK51

Date Extracted: 04/25/90 Extraction:(SepF/Cont/Sonc) CONT

Date Analyzed: 05/14/90 Time Analyzed: 2301

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

Instrument ID: T

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	MW38	16688	T2575	05/14/90
02	MW43	16689	T2578	05/15/90
03	MW53	16690	T2579	05/15/90
04	MW79	16691	T2580	05/15/90
05	MW79A	16692	T2581	05/15/90
06	SW-1	16693	T2584	05/15/90
07	SW-2	16694	T2585	05/15/90
08	TB-1A	16695	T2586	05/15/90
09	TB-3A	16696	T2587	05/15/90
10	TB-4A	16697	T2588	05/15/90
11	TB-5A	16698	T2589	05/15/90
12	MW38MS	16688MS	T2576	05/15/90
13	MW38MSD	16688MSD	T2577	05/15/90

C MENTS: CLP,VERSCDM,2548,SBLK51,L,W,RB7951,B,BLANK,420.1 B#3,1UL,
INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN

5B
SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS
CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

I Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Lab File ID: T2568 DFTPP Injection Date: 05/14/90

Instrument ID: T DFTPP Injection Time: 1723

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	52.9
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	61.8
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	45.4
7	Less than 1.0% of mass 198	0.0
8	Base peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.0
275	10.0 - 30.0% of mass 198	23.9
365	Greater than 1.00% of mass 198	2.00
441	Present, but less than mass 443	10.9
442	Greater than 40.0% of mass 198	74.2
443	17.0 - 23.0% of mass 442	13.9 (18.7)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD50	22658	T2569	05/14/90	1742
02	SSTD160	22659	T2570	05/14/90	1856
03	SSTD120	22660	T2571	05/14/90	1950
04	SSTD80	22661	T2572	05/14/90	2113
05	SSTD20	22662	T2573	05/14/90	2207
06	SBLK51	SBLK51	T2574	05/14/90	2301
07	MW38	16688	T2575	05/14/90	2355
08	MW38MS	16688MS	T2576	05/15/90	0049
09	MW38MSD	16688MSD	T2577	05/15/90	0143
10	MW43	16689	T2578	05/15/90	0237
11	MW53	16690	T2579	05/15/90	0330
12	MW79	16691	T2580	05/15/90	0424
13	MW79A	16692	T2581	05/15/90	0518

FORM V SV 1/87 Rev. 100008

5B
SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS
CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

I Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Lab File ID: T2582 DFTPP Injection Date: 05/15/90

Instrument ID: T DFTPP Injection Time: 0912

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	42.8
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	48.2
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	43.6
7	Less than 1.0% of mass 198	0.0
198	Base peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.3
275	10.0 - 30.0% of mass 198	23.5
365	Greater than 1.00% of mass 198	2.60
441	Present, but less than mass 443	11.8
442	Greater than 40.0% of mass 198	77.3
443	17.0 - 23.0% of mass 442	14.3 (18.5)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	SSTD50	22658	T2583	05/15/90	942
02	SW-1	16693	T2584	05/15/90	1056
03	SW-2	16694	T2585	05/15/90	1148
04	TB-1A	16695	T2586	05/15/90	1241
05	TB-3A	16696	T2587	05/15/90	1333
06	TB-4A	16697	T2588	05/15/90	1426
07	TB-5A	16698	T2589	05/15/90	1519

Versar INC.

III. SAMPLE DATA PACKAGE

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW38

La' Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16688

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2575

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/14/90

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	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
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	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
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	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
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	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	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.

MW38

La' Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16688

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2575

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/14/90

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

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

CAS NO.	COMPOUND		Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
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
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
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

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW38

La' Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16688

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2575

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/14/90

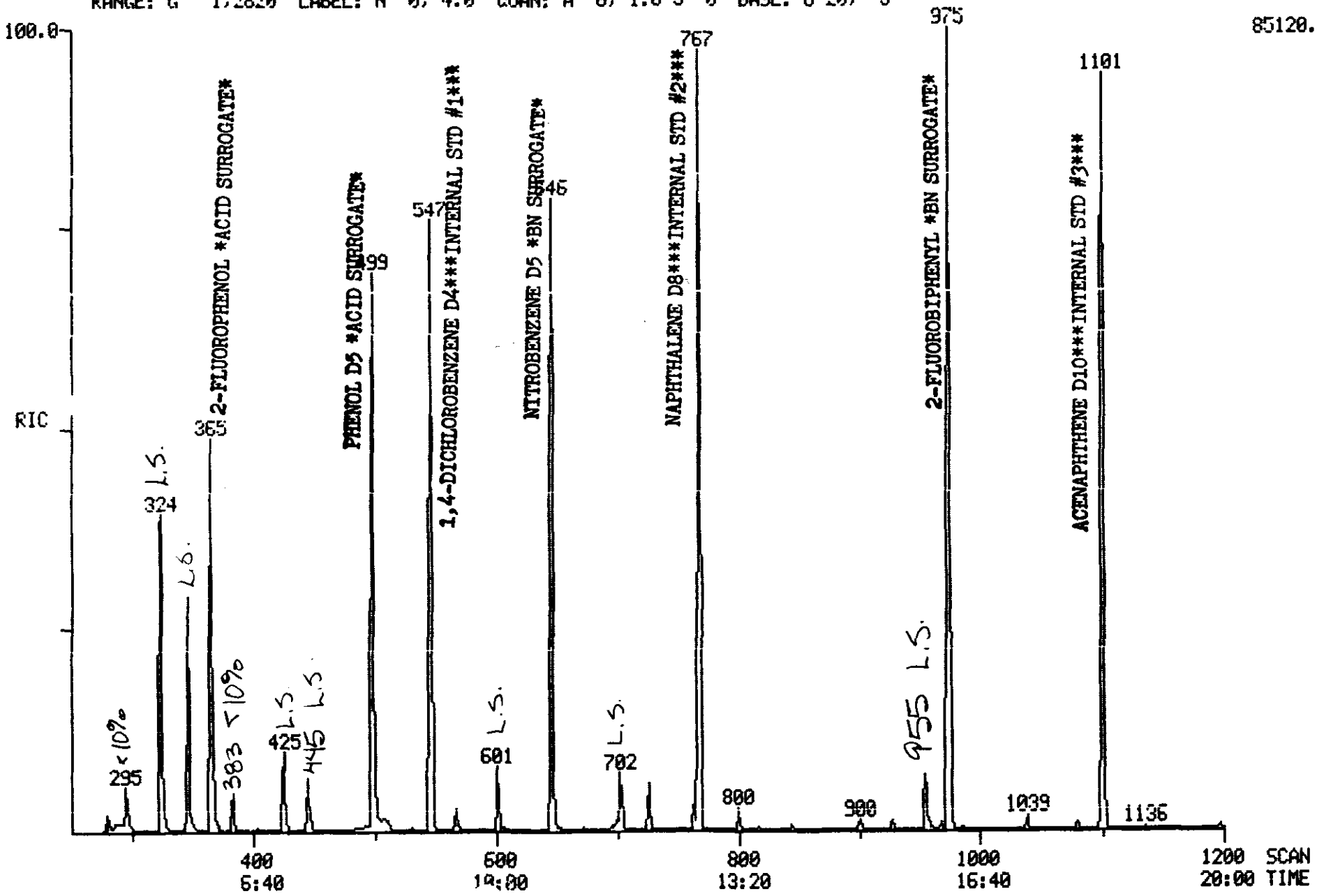
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

Number TICs found: 7

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.40	42	BJ
2.	UNKNOWN	5.77	28	BJ
3.	UNKNOWN	7.08	10	J
4. 930-68-7	2-CYCLOHEXEN-1-ONE	7.42	6.0	BJ
5.	UNKNOWN	10.02	6.0	BJ
6.	UNKNOWN	11.70	6.0	J
7. 74367-33-2	PROPANOIC ACID, 2-METHYL-, 2	15.92	6.0	BJ

RIC DATA: T2575 #1 SCANS 250 TO 1200
05/14/90 23:55:00 CALI: T2575 #2
SAMPLE: CLP,VERSCOM,2548,MW39,L,W,16688,B,,420.1 B#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30208C/MIN
RANGE: G 1,2820 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

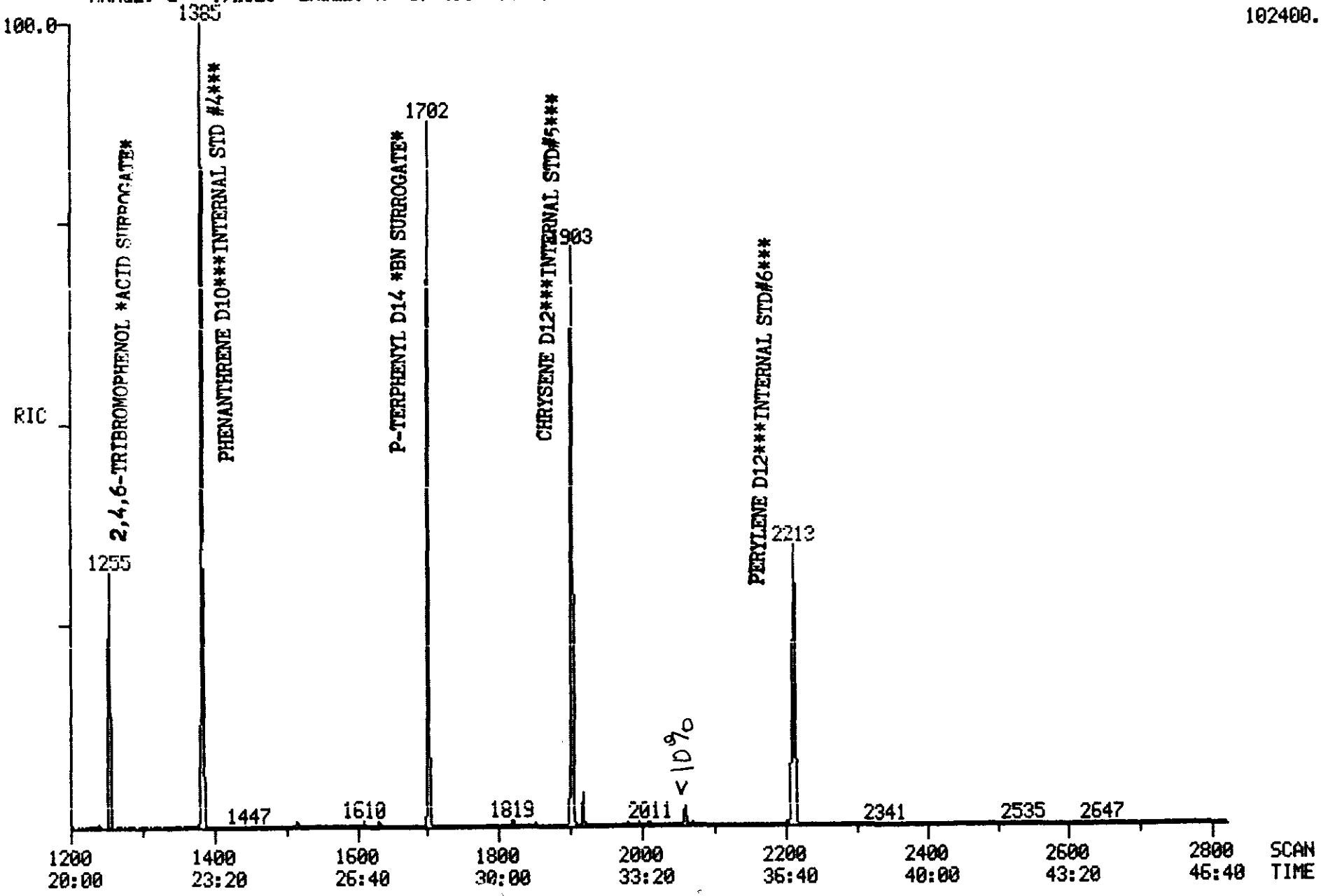


000014

RIC
05/14/90 23:55:00
SAMPLE: CLP,VERSCOM,2548,MW38,L,W,16688,R,,420.1 P#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30200C/MIN
RANGE: G 1,2820 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: T2575 #1
CALI: T2575 #2

SCANS 1200 TO 2820



Quantitation Report File: T2575

Data: T2575.TI
05/14/90 23:55:00
Sample: CLP,VERSCDM,2548,MW38,L,W,16688,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	C330 2-CHLOROPHENOL
3	C315 PHENOL
4	C325 BIS (2-CHLOROETHYL) ETHER
5	C335 1,3-DICHLOROBENZENE
6	C340 1,4-DICHLOROBENZENE
7	C350 1,2-DICHLOROBENZENE
8	C345 BENZYL ALCOHOL
9	C360 BIS (2-CHLOROISOPROPYL) ETHER
10	C355 2-METHYLPHENOL
11	C375 HEXACHLOROETHANE
12	C365 4-METHYLPHENOL
13	C370 N-NITROSO-DI-N-PROPYLAMINE
14	CS50 2-FLUOROPHENOL**ACID SURR.**
15	CS45 PHENOL-D5**ACID SURR.**
16	CI40 NAPHTHALENE-D8**INT. STD.#2**
17	C410 NITROBENZENE
18	C415 ISOPHORONE
19	C420 2-NITROPHENOL
20	C425 2,4-DIMETHYLPHENOL
21	C435 BIS (2-CHLOROETHOXY) METHANE
22	C440 2,4-DICHLOROPHENOL
23	C445 1,2,4-TRICHLOROBENZENE
24	C450 NAPHTHALENE
25	C430 BENZOIC ACID
26	C455 4-CHLOROANILINE
27	C460 HEXACHLOROBUTADIENE
28	C465 4-CHLORO-3-METHYLPHENOL
29	C470 2-METHYLNAPHTHALENE
30	CS20 NITROBENZENE-D5**BN SURR.**
31	CI50 ACENAPHTHENE-D10**INT. STD.#3**
32	C510 HEXACHLOROCYCLOPENTADIENE
33	C515 2,4,6-TRICHLOROPHENOL
34	C520 2,4,5-TRICHLOROPHENOL
35	C525 2-CHLORONAPHTHALENE
36	C530 2-NITROANILINE
37	C540 ACENAPHTHYLENE
38	C535 DIMETHYL PHTHALATE
39	C544 2,6-DINITROTOLUENE
40	C550 ACENAPHTHENE
41	C545 3-NITROANILINE
42	C555 2,4-DINITROPHENOL
43	C565 DIBENZOFURAN
44	C560 4-NITROPHENOL
45	C570 2,4-DINITROTOLUENE
46	C590 FLUORENE
47	C585 4-CHLOROPHENYL-PHENYLETHER

✓ OB 5/22/90

All IS areas & surrogate recoveries are compliant. SJD 5-15-90.

Ready for forms SJD 5-15-90.

T2575.

No	Name
48	C580 DIETHYLPHTHALATE
49	C595 4-NITROANILINE
50	C610 4,6-DINITRO-2-METHYLPHENOL

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	547	9:07	1	1.000	A BB	16502.	40.000 NG/UL	8.82
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	112	365	6:05	1	0.667	A BB	12358.	28.466 NG*A1	6.28
15	99	499	8:19	1	0.912	A BB	22545.	33.740 NG*A2	7.14
16	136	767	12:47	16	1.000	A BB	53147.	40.000 NG/UL	8.82
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	122	725	12:05	16	0.945	A BB	416.	BH ~~1.461 NG~~	0.32
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	82	646	10:46	16	0.842	A BB	40198.	39.618 NG*B1	8.74
31	164	1101	18:21	31	1.000	A BB	41814.	40.000 NG/UL	8.82
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	149	1200	20:00	31	1.090	A BB	346.	BH ~~0.186 NG~~	0.07
49	NOT FOUND								
50	NOT FOUND								

T2575

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:07	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	8:39		0.949						
3	8:21		0.916						
4	8:35		0.941						
5	9:00		0.987						
6	9:09		1.004						
7	9:40		1.060						
8	9:35		1.051						
9	10:01		1.099						
10	9:57		1.091						
11	10:29		1.150						
12	10:22		1.137						
13	10:26		1.144						
14	6:05	1.00	0.667	1.00	28.47	50.00	0.599	1.052	0.57
15	8:19	1.00	0.912	1.00	33.74	50.00	1.093	1.620	0.67
16	12:48	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
17	10:50		0.846						
18	11:29		0.897						
19	11:45		0.918						
20	11:54		0.930						
21	12:14		0.956						
22	12:26		0.971						
23	12:40		0.990						
24	12:51		1.004						
25	12:16	0.99	0.958	0.99	1.46	50.00	0.006	0.214	0.03
26	13:09		1.027						
27	13:23		1.046						
28	14:40		1.146						
29	14:59		1.171						
30	10:47	1.00	0.842	1.00	39.62	50.00	0.605	0.764	0.79
31	18:22	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
32	15:41		0.854						
33	16:00		0.871						
34	16:06		0.877						
35	16:32		0.900						
36	17:03		0.928						
37	17:52		0.973						
38	17:46		0.967						
39	18:00		0.980						
40	18:28		1.005						
41	18:24		1.002						
42	18:43		1.019						
43	18:58		1.033						
44	18:58		1.033						
45	19:13		1.046						
46	20:05		1.093						
47	20:08		1.096						
48	20:02	1.00	1.091	1.00	0.19	50.00	0.007	1.781	0.00
49	20:24		1.111						
50	20:29		1.115						

Quantitation Report File: T2575

Data: T2575.TI
05/14/90 23:55:00
Sample: CLP,VERSCDM,2548,MW38,L,W,16688,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: 420.1

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

No	Name
51	C615 N-NITROSODIPHENYLAMINE
52	C625 4-BROMOPHENYL-PHENYLETHER
53	C630 HEXACHLOROBENZENE
54	CS25 2-FLUOROBIPHENYL**BN SURR.**
55	CI60 PHENANTHRENE-D10**INT. STD.#4**
56	C635 PENTACHLOROPHENOL
57	C640 PHENANTHRENE
58	C645 ANTHRACENE
59	C650 DI-N-BUTYLPHTHALATE
60	C655 FLUORANTHENE
61	C715 PYRENE
62	CS55 2,4,6,-TRIBROMOPHENOL**ACID SURR.**
63	CI70 CHRYSENE-D12**INT. STD.#5**
64	C720 BUTYLBENZYLPHTHALATE
65	C730 BENZO(A)ANTHRACENE
66	C740 CHRYSENE
67	C725 3,3'-DICHLOROBENZIDINE
68	C741 BIS(2-ETHYLHEXYL)PHTHALATE
69	CS30 P-TERPHENYL-D14**BN SURR.**
70	CI75 PERYLENE-D12**INT. STD.#6**
71	C760 DI-N-OCTYL PHTHALATE
72	C765 BENZO(B)FLUORANTHENE
73	C770 BENZO(K)FLUORANTHENE
74	C775 BENZO(A)PYRENE
75	C780 INDENO(1,2,3-CD)PYRENE
76	C785 DIBENZ(A,H)ANTHRACENE
77	C790 BENZO(G,H,I)PERYLENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	NOT FOUND								
52	NOT FOUND								
53	NOT FOUND								
54	172	974	16:14	31	0.885	A BB	52046.	38.871 NG*B2	8.57
55	188	1385	23:05	55	1.000	A BV	90065.	40.000 NG/UL	8.82
56	NOT FOUND								
57	NOT FOUND								
58	NOT FOUND								
59	149	1515	25:15	55	1.094	A BB	1458.	~~0.389 NG~~	0.09
60	202	1622	27:02	55	1.171	A BB	565.	~~0.226 NG~~	0.05
61	202	1666	27:46	63	0.875	A BB	472.	~~0.186 NG~~.	0.04
62	330	1255	20:55	31	1.140	A BB	7880.	27.838 NG*A3	6.14
63	240	1903	31:43	63	1.000	A BB	70328.	40.000 NG/UL	8.82
64	NOT FOUND								
65	NOT FOUND								
66	NOT FOUND								

T2575

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
67	NOT FOUND								
68	149	1918	31:58	63	1.008	A BB	2314.	~~1.157 NG~~	0.25
69	244	1702	28:22	63	0.894	A BB	68540.	41.349 NG*B3	9.12
70	264	2212	36:52	70	1.000	A BB	60775.	40.000 NG/UL	8.82
71	NOT FOUND								
72	NOT FOUND								
73	NOT FOUND								
74	NOT FOUND								
75	NOT FOUND								
76	NOT FOUND								
77	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	20:34		1.120						
52	21:41		1.181						
53	22:06		1.203						
54	16:15	1.00	0.885	1.00	38.87	50.00	0.996	1.281	0.78
55	23:06	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
56	22:43		0.983						
57	23:11		1.004						
58	23:19		1.009						
59	25:17	1.00	1.095	1.00	0.39	50.00	0.013	1.667	0.01
60	27:04	1.00	1.172	1.00	0.23	50.00	0.005	1.109	0.00
61	27:48	1.00	0.876	1.00	0.19	50.00	0.005	1.446	0.00
62	20:56	1.00	1.140	1.00	27.84	50.00	0.151	0.271	0.56
63	31:45	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
64	30:10		0.950						
65	31:42		0.998						
66	31:50		1.003						
67	31:43		0.999						
68	32:00	1.00	1.008	1.00	1.14	50.00	0.026	1.156	0.02
69	28:23	1.00	0.894	1.00	41.35	50.00	0.780	0.943	0.83
70	36:56	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
71	33:53		0.917						
72	35:17		0.955						
73	35:23		0.958						
74	36:40		0.993						
75	43:01		1.165						
76	43:13		1.170						
77	44:53		1.215						

Quantitation Report File: QCREF

Data: T2575.TI
05/14/90 23:55:00
Sample: CLP,VERSCDM,2548,MW38,L,W,16688,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	CI40 NAPHTHALENE-D8**INT. STD.#2**
3	CI50 ACENAPHTHENE-D10**INT. STD.#3**
4	CI60 PHENANTHRENE-D10**INT. STD.#4**
5	CI70 CHRYSENE-D12**INT. STD.#5**
6	CI75 PERYLENE-D12**INT. STD.#6**
7	CS50 2-FLUOROPHENOL**ACID SURR.**
8	CS45 PHENOL-D5**ACID SURR.**
9	CS55 2,4,6,-TRIBROMOPHENOL**ACID SURR.**
10	CS20 NITROBENZENE-D5**BN SURR.**
11	CS25 2-FLUOROBIPHENYL**BN SURR.**
12	CS30 P-TERPHENYL-D14**BN SURR.**

Scan	Time	Area(Hght)	% Rec	Amount		Name
547	9:07	16502.		40.000	NG/UL	CI30 1,4-DICHLOROBENZENE-D4
767	12:47	53147.		40.000	NG/UL	CI40 NAPHTHALENE-D8**INT. ST
1101	18:21	41814.		40.000	NG/UL	CI50 ACENAPHTHENE-D10**INT.
1385	23:05	90065.		40.000	NG/UL	CI60 PHENANTHRENE-D10**INT.
1903	31:43	70328.		40.000	NG/UL	CI70 CHRYSENE-D12**INT. STD.
2212	36:52	60775.		40.000	NG/UL	CI75 PERYLENE-D12**INT. STD.
365	6:05	12358.	28	28.466	NG*A1	CS50 2-FLUOROPHENOL**ACID SU
499	8:19	22545.	34	33.740	NG*A2	CS45 PHENOL-D5**ACID SURR.**
1255	20:55	7880.	28	27.838	NG*A3	CS55 2,4,6,-TRIBROMOPHENOL**
646	10:46	40198.	79	39.618	NG*B1	CS20 NITROBENZENE-D5**BN SUR
974	16:14	52046.	78	38.871	NG*B2	CS25 2-FLUOROBIPHENYL**BN SU
1702	28:22	68540.	83	41.349	NG*B3	CS30 P-TERPHENYL-D14**BN SUR

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:07	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	12:48	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
3	18:22	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
4	23:06	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
5	31:45	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
6	36:56	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
7	6:05	1.00	0.667	1.00	28.47	50.00	0.599	1.052	0.57
8	8:19	1.00	0.912	1.00	33.74	50.00	1.093	1.620	0.67
9	20:56	1.00	1.140	1.00	27.84	50.00	0.151	0.271	0.56
10	10:47	1.00	0.842	1.00	39.62	50.00	0.605	0.764	0.79
11	16:15	1.00	0.885	1.00	38.87	50.00	0.996	1.281	0.78
12	28:23	1.00	0.894	1.00	41.35	50.00	0.780	0.943	0.83

Quantitation Report File: ISREF

Data: T2569.TI
05/14/90 17:42:00
Sample: CLP,,,SSTD50,,,22658,B,IC50,,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: --

Data: T2575.TI
05/14/90 23:55:00
Sample: CLP,VERSCDM,2548,MW38,L,W,16688,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
3	CI40 NAPHTHALENE-D8**INT. STD.#2**
4	CI40 NAPHTHALENE-D8**INT. STD.#2**
5	CI50 ACENAPHTHENE-D10**INT. STD.#3**
6	CI50 ACENAPHTHENE-D10**INT. STD.#3**
7	CI60 PHENANTHRENE-D10**INT. STD.#4**
8	CI60 PHENANTHRENE-D10**INT. STD.#4**
9	CI70 CHRYSENE-D12**INT. STD.#5**
10	CI70 CHRYSENE-D12**INT. STD.#5**
11	CI75 PERYLENE-D12**INT. STD.#6**
12	CI75 PERYLENE-D12**INT. STD.#6**

Scan	Time	Area(Hght)	Amount	Name
547	9:07	15621.	40.000 NG/UL	CI30 1,4-DICHLOROBENZENE-D4
547	9:07	16502.✓	42.256 NG/UL	CI30 1,4-DICHLOROBENZENE-D4
768	12:48	52080.	40.000 NG/UL	CI40 NAPHTHALENE-D8**INT. ST
767	12:47	53147.✓	40.819 NG/UL	CI40 NAPHTHALENE-D8**INT. ST
1102	18:22	37455.	40.000 NG/UL	CI50 ACENAPHTHENE-D10**INT.
1101	18:21	41814.✓	44.655 NG/UL	CI50 ACENAPHTHENE-D10**INT.
1386	23:06	75538.	40.000 NG/UL	CI60 PHENANTHRENE-D10**INT.
1385	23:05	90065.✓	47.693 NG/UL	CI60 PHENANTHRENE-D10**INT.
1905	31:45	56496.	40.000 NG/UL	CI70 CHRYSENE-D12**INT. STD.
1903	31:43	70328.✓	49.793 NG/UL	CI70 CHRYSENE-D12**INT. STD.
2216	36:56	45334.	40.000 NG/UL	CI75 PERYLENE-D12**INT. STD.
2212	36:52	60775.✓	53.624 NG/UL	CI75 PERYLENE-D12**INT. STD.

Library Search Data: T2575 # 324 Base m/z: 43
05/14/90 23:55:00 + 5:24 Cali: T2575 # 2 RIC: 29439.
Sample: CLP,VERSCDM,2548,MW33,L,W,16688,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
121 matched at least 7 of the 16 largest peaks in the unknown

B

Rank	In.	Name
1	806	HYDROPEROXIDE, 1,1-DIMETHYLETHYL
2	2776	2-PENTANOL, 2,4-DIMETHYL-
3	1334	OXIRANE, TETRAMETHYL-
4	2777	2-HEXANOL, 2-METHYL-
5	1349	OXEPANE, 2,2,4-TRIMETHYL-

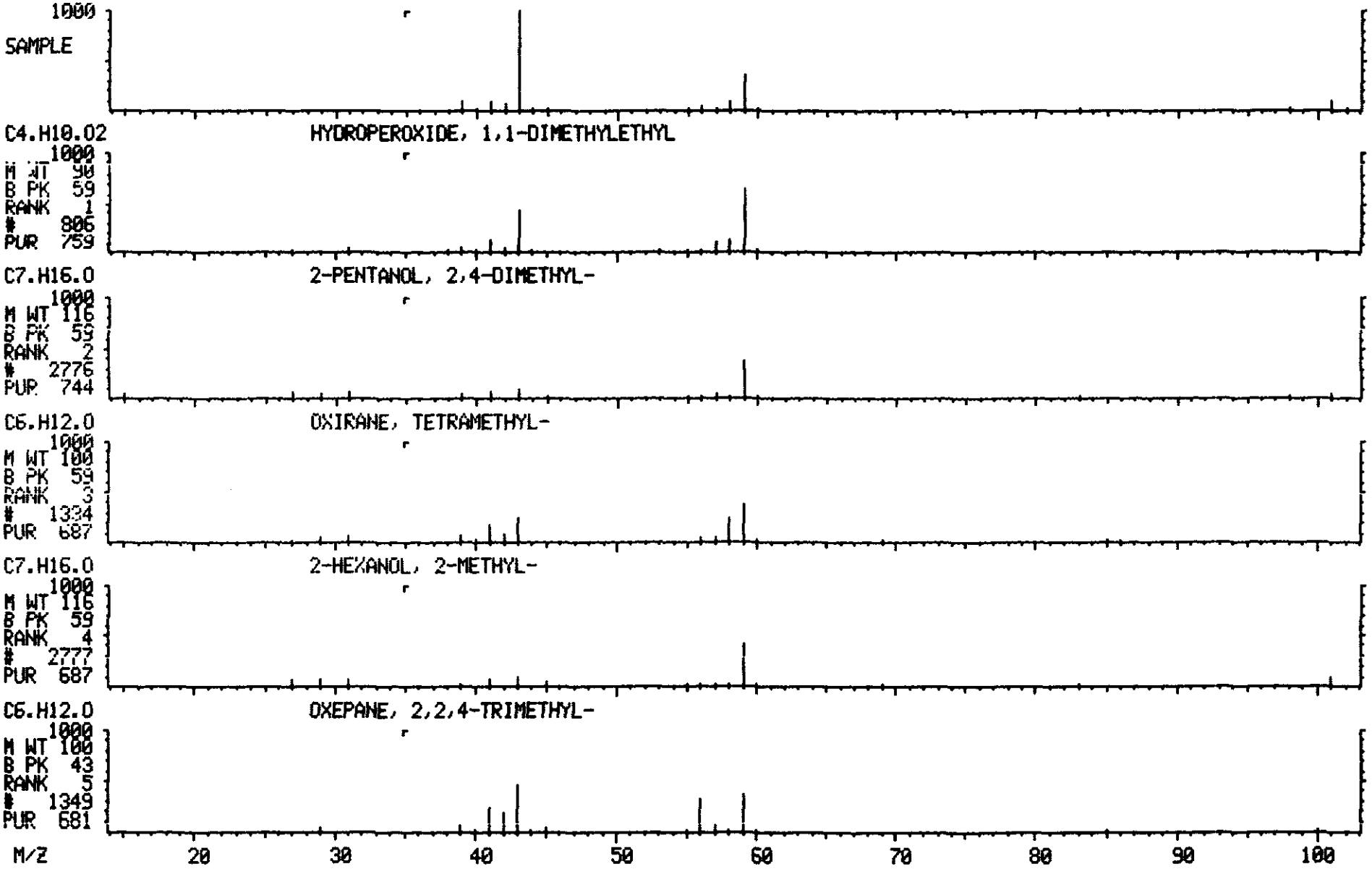
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C4.H10.O2	90	59	759	871	766
2	C7.H16.O	116	59	744	778	744
3	C6.H12.O	100	59	687	810	710
4	C7.H16.O	116	59	687	730	698
5	C6.H12.O	100	43	681	777	706

Rank	Ret. Time	B.P. Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	75-91-2
2	—	—	—	—	625-06-9
3	—	—	—	—	5076-20-0
4	—	—	—	—	625-23-0
5	—	—	—	—	23120-44-7

LIBRARY SEARCH
05/14/90 23:55:00 + 5:24
SAMPLE: CLP,VERSCOM,2543,MW36,L,W,16693,B,,420.1 B#2,1UL,
CONDS.: INST T COLUMN=PESTEK 30M RTX-5 4MIN038C TO 302C8C/MIN
ENHANCED (5 15B 2N 0T)

DATA: T2575 # 324
CALI: T2575 # 2

BASE M/Z: 43
RIC: 29439.



4-3023

Library Search Data: T2575 # 346 Base m/z: 41
05/14/90 23:55:00 + 5:46 Cali: T2575 # 2 RIC: 19583.
Sample: CLP,VERSCDM,2548,MW38,L,W,16688,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYN8 searched for maximum PURITY
79 matched at least 8 of the 16 largest peaks in the unknown

B

Rank	In.	Name
1	1076	1-PROPENE, 3,3'-OXYBIS-
2	1111	2-HEXENAL, (E)-
3	2216	2-HEPTENAL, (Z)-
4	1083	2-HEXYN-1-OL
5	3632	CYCLOBUTANONE, 2-METHYL-2-OXIRANYL-

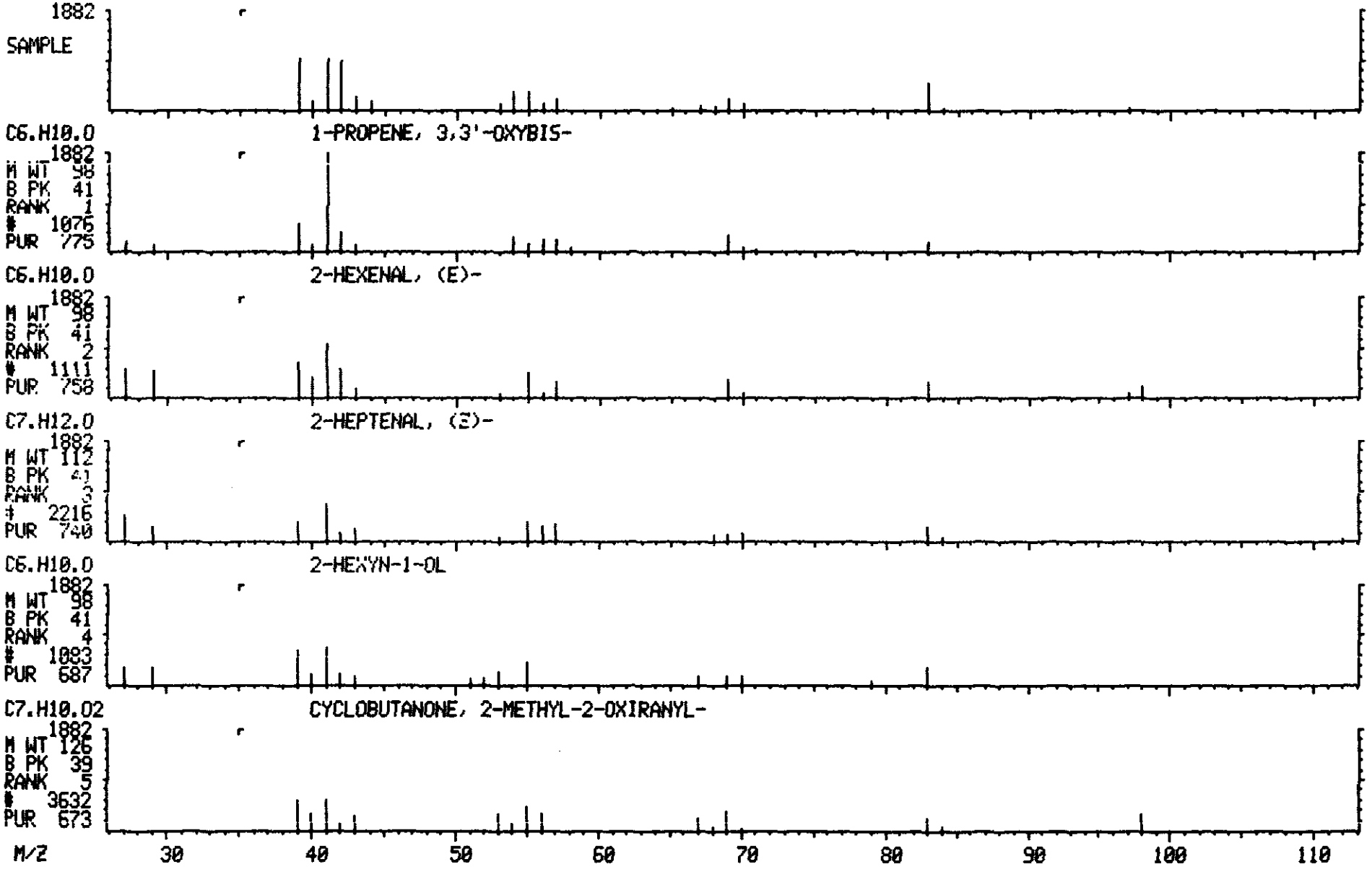
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C6.H10.O	98	41	775	879	803
2	C6.H10.O	98	41	758	883	821
3	C7.H12.O	112	41	740	876	763
4	C6.H10.O	98	41	687	856	742
5	C7.H10.O2	126	39	673	747	764

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	557-40-4
2	—	—	—	—	6728-26-3
3	—	—	—	—	57266-86-1
4	—	—	—	—	764-60-3
5	—	—	—	—	75314-19-1

LIBRARY SEARCH
05/14/90 23:55:00 + 5:46
SAMPLE: CLP,VERSCOM,2546,MW28,L,W,16668,B,,420.1 B#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN038C TO 30208C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2575 # 346
CALI: T2575 # 2

BASE M/Z: 41
RIC: 19563.



Library Search Data: T2575 # 425 Base m/z: 56
05/14/90 23:55:00 + 7:05 Cali: T2575 # 2 RIC: 6831.
Sample: CLP,VERSCDM,2548,MW38,L,W,16688,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
148 matched at least 5 of the 16 largest peaks in the unknown

Rank	In.	Name
1	3877	AZIRIDINE, 1-HEXYL-
2	3861	PIPERIDINE, 5-ETHYL-2-METHYL-
3	3863	PIPERIDINE, 1-ETHYL-2-METHYL-
4	3876	METHYLAMINE, N-(1-METHYLHEXYLIDENE)-
5	3862	PIPERIDINE, 1,2,6-TRIMETHYL-

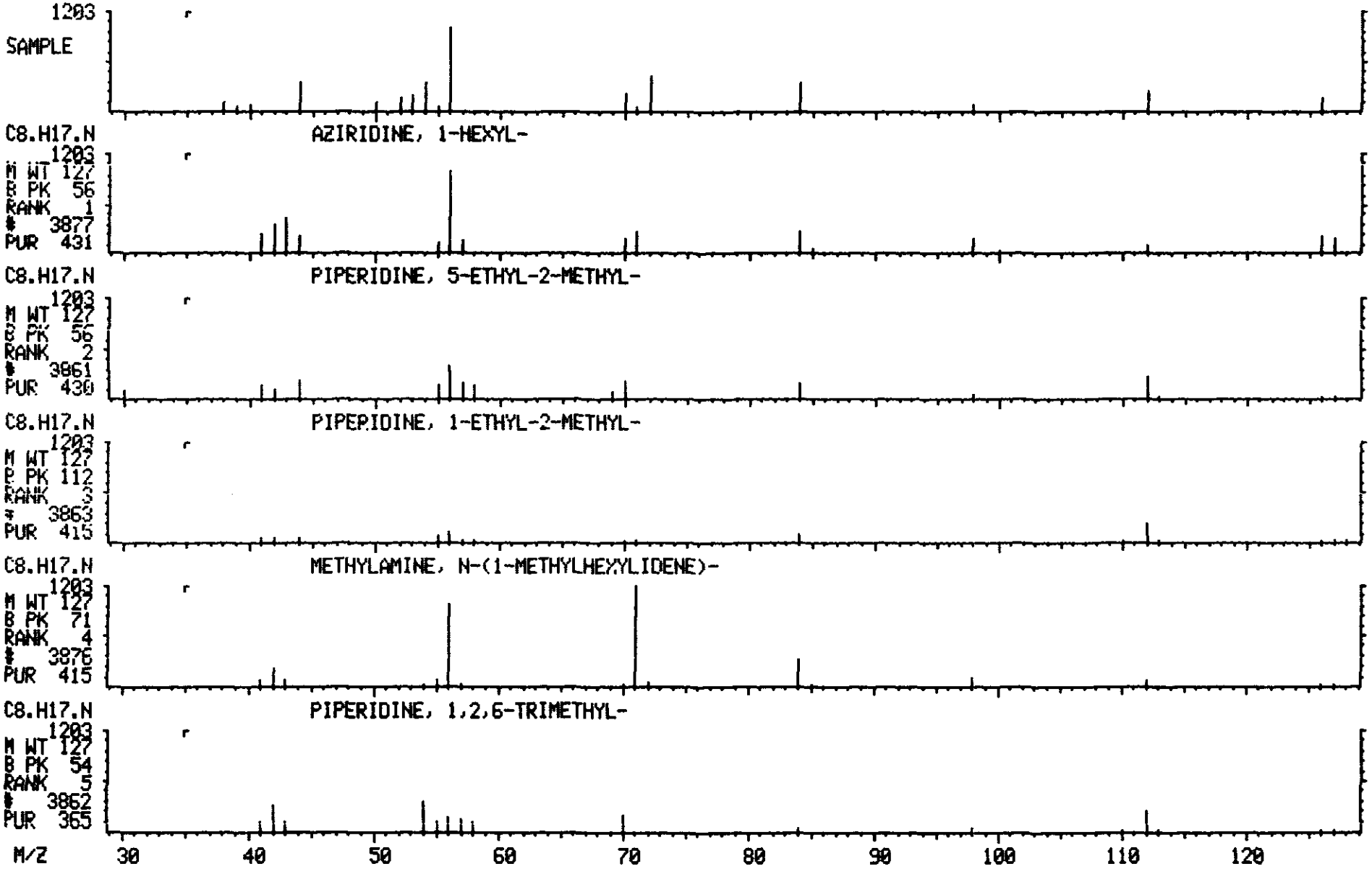
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C8.H17.N	127	56	431	631	626
2	C8.H17.N	127	56	430	642	579
3	C8.H17.N	127	112	415	636	520
4	C8.H17.N	127	71	415	509	461
5	C8.H17.N	127	54	365	534	539

Rank	Ret. Time	B.P. Int.	US. Par. 1	US. Par. 2	C.A.S. #
1	—	—	—	—	30691-59-9
2	—	—	—	—	104-89-2
3	—	—	—	—	766-52-9
4	—	—	—	—	22058-71-5
5	—	—	—	—	669-81-8

LIBRARY SEARCH
05/14/90 23:55:00 + 7:05
SAMPLE: CLP,VERSCOM,2548,MW38,L,W,16689,B,,420.1 B#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30208C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2575 # 425
CALI: T2575 # 2

BASE M/Z: 56
RIC: 6831.



Library Search Data: T2575 # 445 Base m/z: 68
05/14/90 23:55:00 + 7:25 Cali: T2575 # 2 RIC: 4383.
Sample: CLP,VERSCDM,2548,MW38,L,W,16688,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
164 matched at least 6 of the 14 largest peaks in the unknown

B

Rank	In.	Name
1	952	2-CYCLOHEXEN-1-ONE
2	936	3(2H)-PYRIDAZINONE
3	941	2H-PYRAN-2-ONE
4	2092	2,5-FURANDIONE, DIHYDRO-3-METHYLENE-
5	168	FURAN

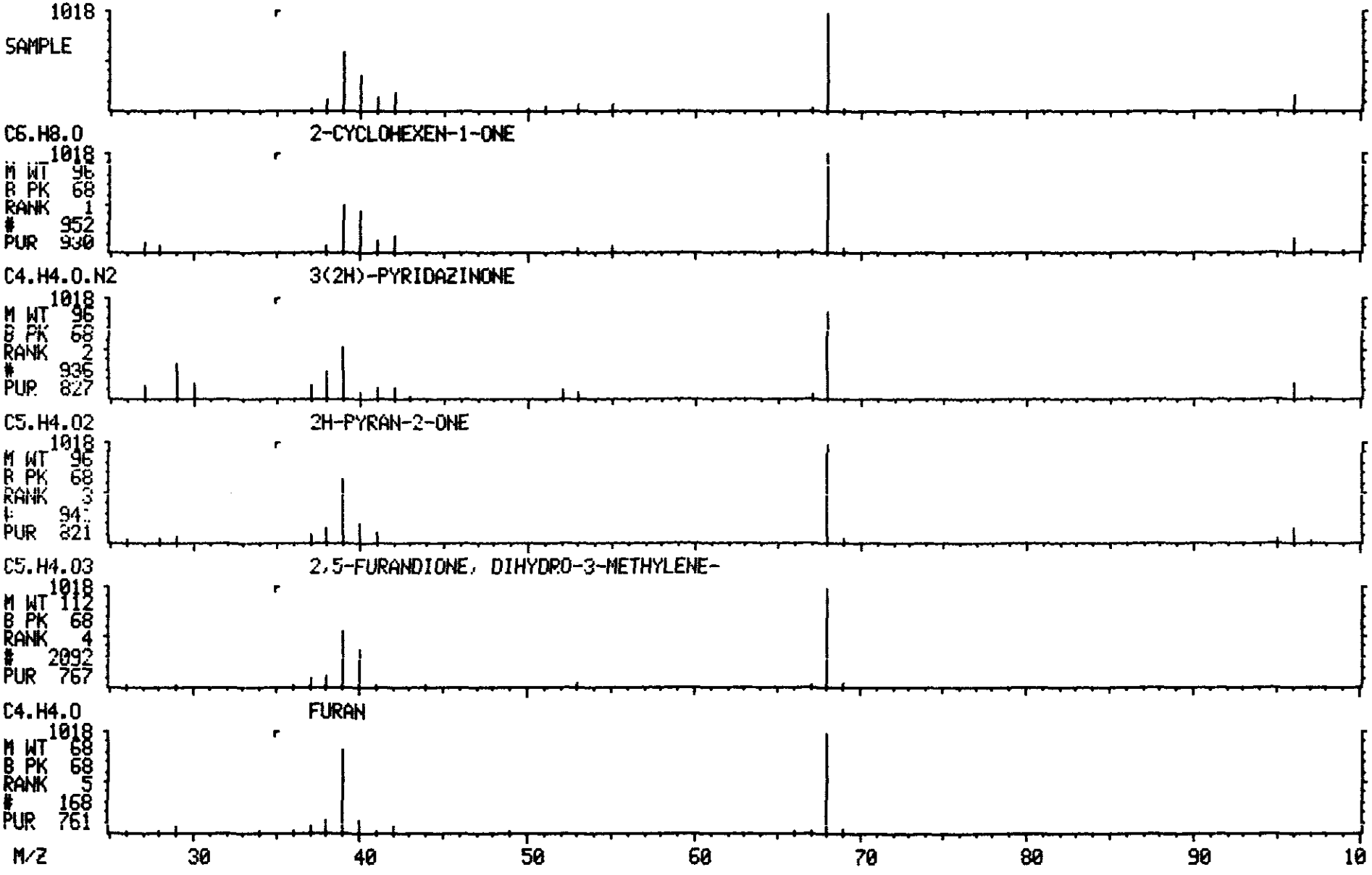
Rank	Formula	M. Wt	B. Pk	Purity	Fit	RFit
1	C6.H8.O	96	68	930	965	960
2	C4.H4.O.N2	96	68	827	886	873
3	C5.H4.O2	96	68	821	954	850
4	C5.H4.O3	112	68	767	959	774
5	C4.H4.O	68	68	761	925	767

Rank	Ret. Time	B.P. Int.	US. Par. 1	US. Par. 2	C.A.S. #
1	—	—	—	—	930-68-7 ✓
2	—	—	—	—	504-30-3
3	—	—	—	—	504-31-4
4	—	—	—	—	2170-03-8
5	—	—	—	—	110-00-9

LIBRARY SEARCH
05/14/90 23:55:00 + 7:25
SAMPLE: CLP,VERSCOM,2549,MW38,L,W,16688,6,,420.1 E#2,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2575 # 445
CALI: T2575 # 2

BASE M/Z: 68
RIC: 4383.



Library Search Data: T2575 # 601 Base m/z: 41
05/14/90 23:55:00 + 10:01 Cali: T2575 # 2 RIC: 4943.
Sample: CLP,VERSCDM,2548,MW38,L,W,16688,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
301 matched at least 6 of the 16 largest peaks in the unknown

B

Rank	In.	Name
1	9497	CYCLOHEXENE, 3-BROMO-
2	971	1,4-PENTADIENE, 3,3-DIMETHYL-
3	2763	CYCLOPROPANE, 1-CHLORO-2-ETHENYL-1-METHYL-
4	5826	7-OXABICYCLO[4.1.0]HEPTANE, 3-OXIRANYL-
5	986	1,5-HEXADIENE, 2-METHYL-

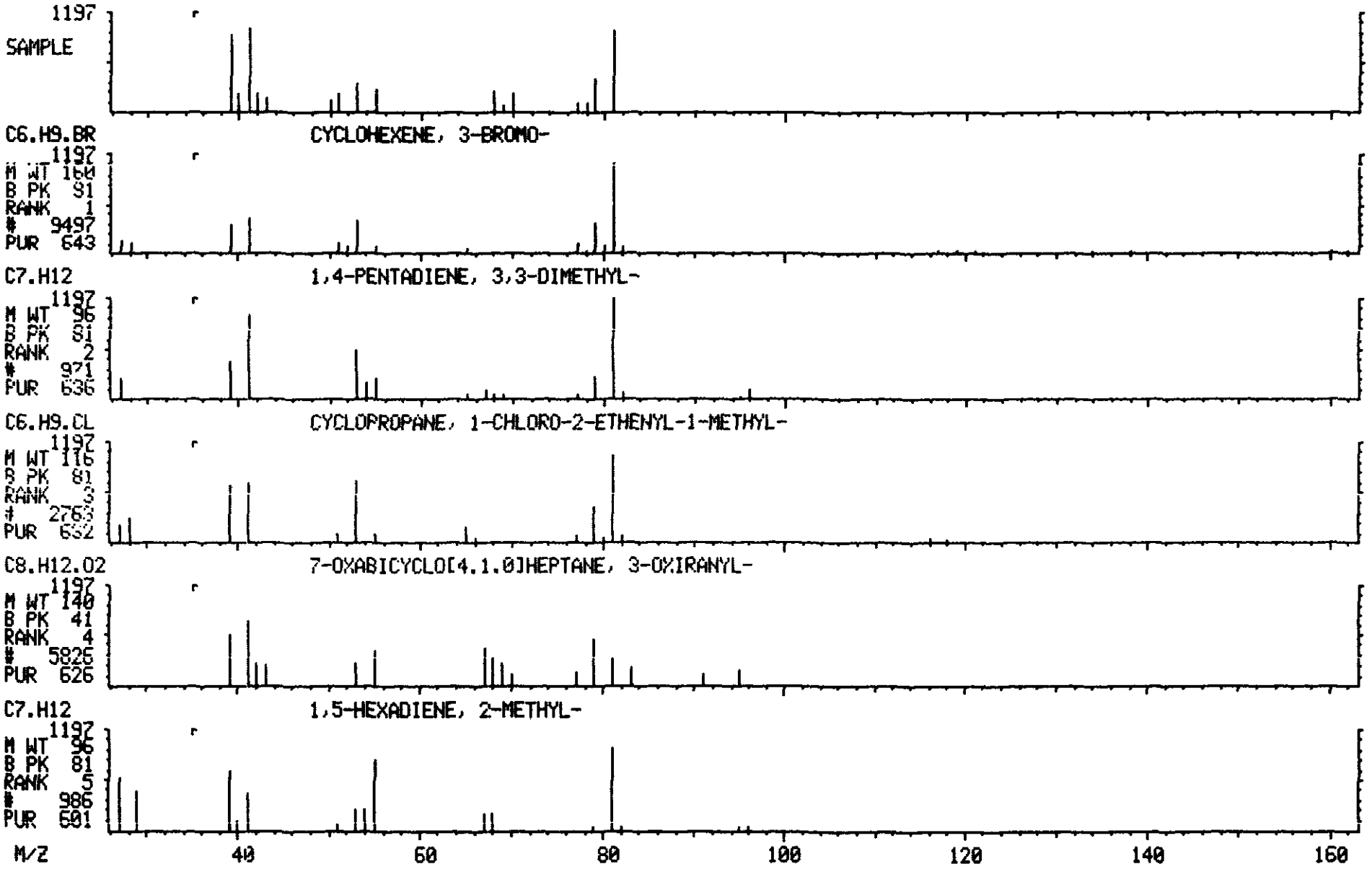
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C6.H9.BR	160	81	643	820	740
2	C7.H12	96	81	636	802	752
3	C6.H9.CL	116	81	632	836	731
4	C8.H12.O2	140	41	626	703	822
5	C7.H12	96	81	601	745	716

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	1521-51-3
2	—	—	—	—	1112-35-2
3	—	—	—	—	62337-93-3
4	—	—	—	—	106-87-6
5	—	—	—	—	4049-81-4

LIBRARY SEARCH
05/14/90 23:55:00 + 10:01
SAMPLE: CLP,VERSCDM,2548,MW38,L,W,16688,B,,420.1 B#3,1UL,
CONDS.: INST T COLUMN=PESTEK 30M RTX-5 4MIN@38C TO 30@08C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2575 # 601
CALI: T2575 # 2

BASE M/Z: 41
RIC: 4943.



Library Search Data: T2575 # 702 Base m/z: 73
05/14/90 23:55:00 + 11:42 Cali: T2575 # 2 RIC: 4799.
Sample: CLP,VERSCDM,2548,MW38,L,W,16688,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYN8 searched for maximum PURITY
56 matched at least 5 of the 16 largest peaks in the unknown

Rank	In.	Name
1	11778	DECANE, 3-METHOXY-
2	6389	L-PROLINE, ETHYL ESTER
3	28829	3-EICOSANONE
4	10341	PROPANENITRILE, 2,2'-AZOBIS[2-METHYL-
5	5807	2H-THIOCIN-2-ONE, 3,8-DIHYDRO-

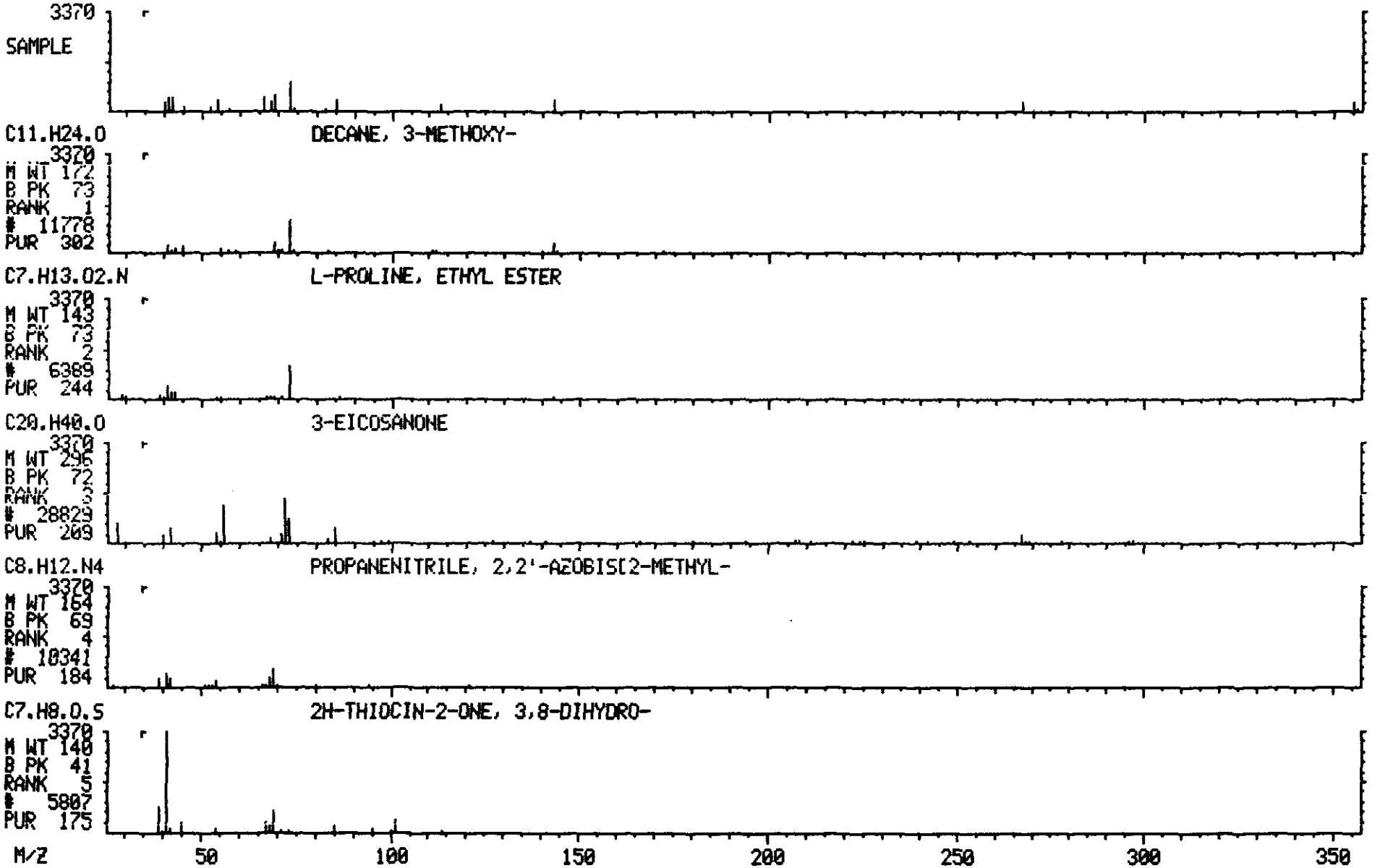
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C11.H24.O	172	73	302	791	365
2	C7.H13.O2.N	143	73	244	544	291
3	C20.H40.O	296	72	209	471	440
4	C8.H12.N4	164	69	184	722	229
5	C7.H8.O.S	140	41	175	423	255

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	55955-64-1
2	—	—	—	—	5817-26-5
3	—	—	—	—	2955-56-8
4	—	—	—	—	78-67-1
5	—	—	—	—	74764-26-4

LIBRARY SEARCH
05/14/90 23:55:00 + 11:42
SAMPLE: CLP,VERSCDM,2548,MW38,L,W,16689,B,,420.1 B#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2575 # 702
CALI: T2575 # 2

BASE M/Z: 73
RIC: 4799.



Library Search Data: T2575 # 955 Base m/z: 43
05/14/90 23:55:00 + 15:55 Cali: T2575 # 2 RIC: 4791.
Sample: CLP,VERSCDM,2548,MW3B,L,W,16688,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

B

42223 spectra in LIBRARYNB searched for maximum PURITY
417 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	18986	PROPANOIC ACID, 2-METHYL-, 2,2-DIMETHYL-1-(2-HYDROXY-1-METHYLETHYL)*
2	1181	CYCLOPROPANE, 1,1,2,3-TETRAMETHYL-
3	18987	PROPANOIC ACID, 2-METHYL-, 3-HYDROXY-2,4,4-TRIMETHYLPENTYL ESTER
4	2707	3-HEXENE-2,5-DIOL
5	6650	1-PENTANOL, 4-METHYL-2-PROPYL-

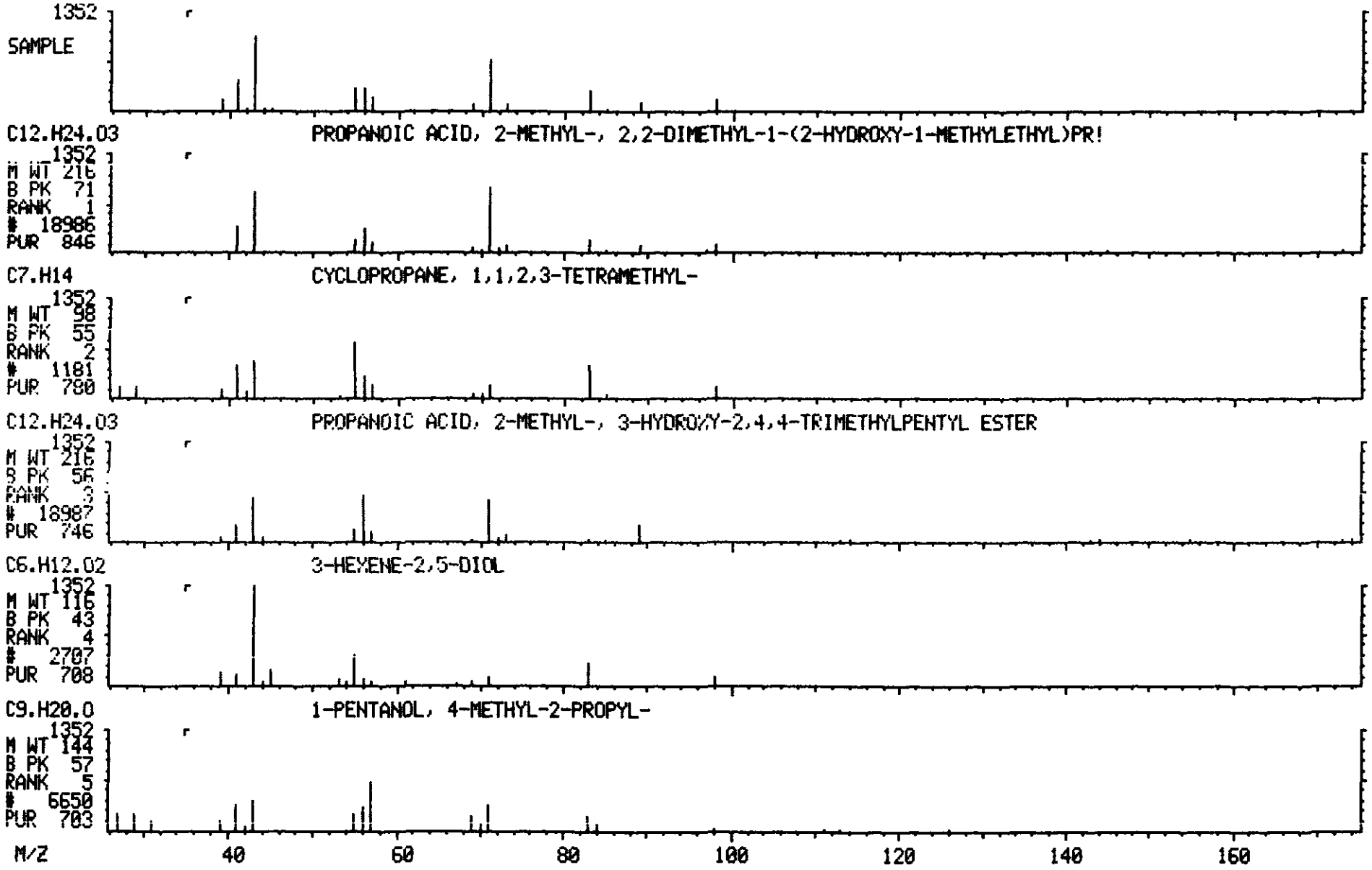
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C12.H24.O3	216	71	846	889	936
2	C7.H14	98	55	780	860	810
3	C12.H24.O3	216	56	746	807	821
4	C6.H12.O2	116	43	708	787	765
5	C9.H20.O	144	57	703	786	787

Rank	Ret. Time	B.P. Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	74367-33-2 ✓
2	—	—	—	—	74752-93-5
3	—	—	—	—	74367-34-3
4	—	—	—	—	7319-23-5
5	—	—	—	—	54004-41-0

LIBRARY SEARCH
05/14/90 23:55:00 + 15:55
SAMPLE: CLP,VERSCDM,2548,MW38,L,W,16698,B,,420.1 B#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30208C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2575 # 955
CALI: T2575 # 2

BASE M/Z: 43
RIC: 4791.



```
        >>>>INTERNAL STANDARD RIC REPORT<<<<
*****************************INTERNAL STANDARD#1*****************RIC
Mass List                        Data: T2575 # 547          Base m/z:  150
05/14/90 23:55:00 +  9:07        Cali: T2575 #   2          RIC:     57216.
Sample: CLP,VERSCDM,2548,MW38,L,W,16688,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     35       0.00   0.00        0. Minima     Min inten:      0.
     30                      #   0  Maxima
*****************************INTERNAL STANDARD#2*****************RIC
Mass List                        Data: T2575 # 767          Base m/z:  136
05/14/90 23:55:00 + 12:47        Cali: T2575 #   2          RIC:     71424.
Sample: CLP,VERSCDM,2548,MW38,L,W,16688,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38       0.00   0.00        0. Minima     Min inten:      0.
     30                      #   0  Maxima
*****************************INTERNAL STANDARD#3*****************RIC
Mass List                        Data: T2575 #1101          Base m/z:  164
05/14/90 23:55:00 + 18:21        Cali: T2575 #   2          RIC:     69504.
Sample: CLP,VERSCDM,2548,MW38,L,W,16688,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38       0.00   0.00        0. Minima     Min inten:      0.
     30                      #   0  Maxima
*****************************INTERNAL STANDARD#4*****************RIC
Mass List                        Data: T2575 #1385          Base m/z:  188
05/14/90 23:55:00 + 23:05        Cali: T2575 #   2          RIC:     91520.
Sample: CLP,VERSCDM,2548,MW38,L,W,16688,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38       0.00   0.00        0. Minima     Min inten:      0.
     30                      #   0  Maxima
*****************************INTERNAL STANDARD#5*****************RIC
Mass List                        Data: T2575 #1903          Base m/z:  240
05/14/90 23:55:00 + 31:43        Cali: T2575 #   2          RIC:     67840.
Sample: CLP,VERSCDM,2548,MW38,L,W,16688,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     40       0.00   0.00        0. Minima     Min inten:      0.
     30                      #   0  Maxima
*****************************INTERNAL STANDARD#6*****************RIC
Mass List                        Data: T2575 #2212          Base m/z:  264
05/14/90 23:55:00 + 36:52        Cali: T2575 #   2          RIC:     34304.
Sample: CLP,VERSCDM,2548,MW38,L,W,16688,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     42       0.00   0.00        0. Minima     Min inten:      0.
     30                      #   0  Maxima
     ANALYST: CHECK BASE M/Z AND RIC AMOUNT TO INSURE NO CONTAMINATION
```

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW43

La' Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16689

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2578

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/15/90

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	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
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	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
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	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
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	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	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.

MW43

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16689

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2578

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/15/90

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	50	U
100-02-7	4-Nitrophenol	50	U
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
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
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

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW43

La' Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16689

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2578

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/15/90

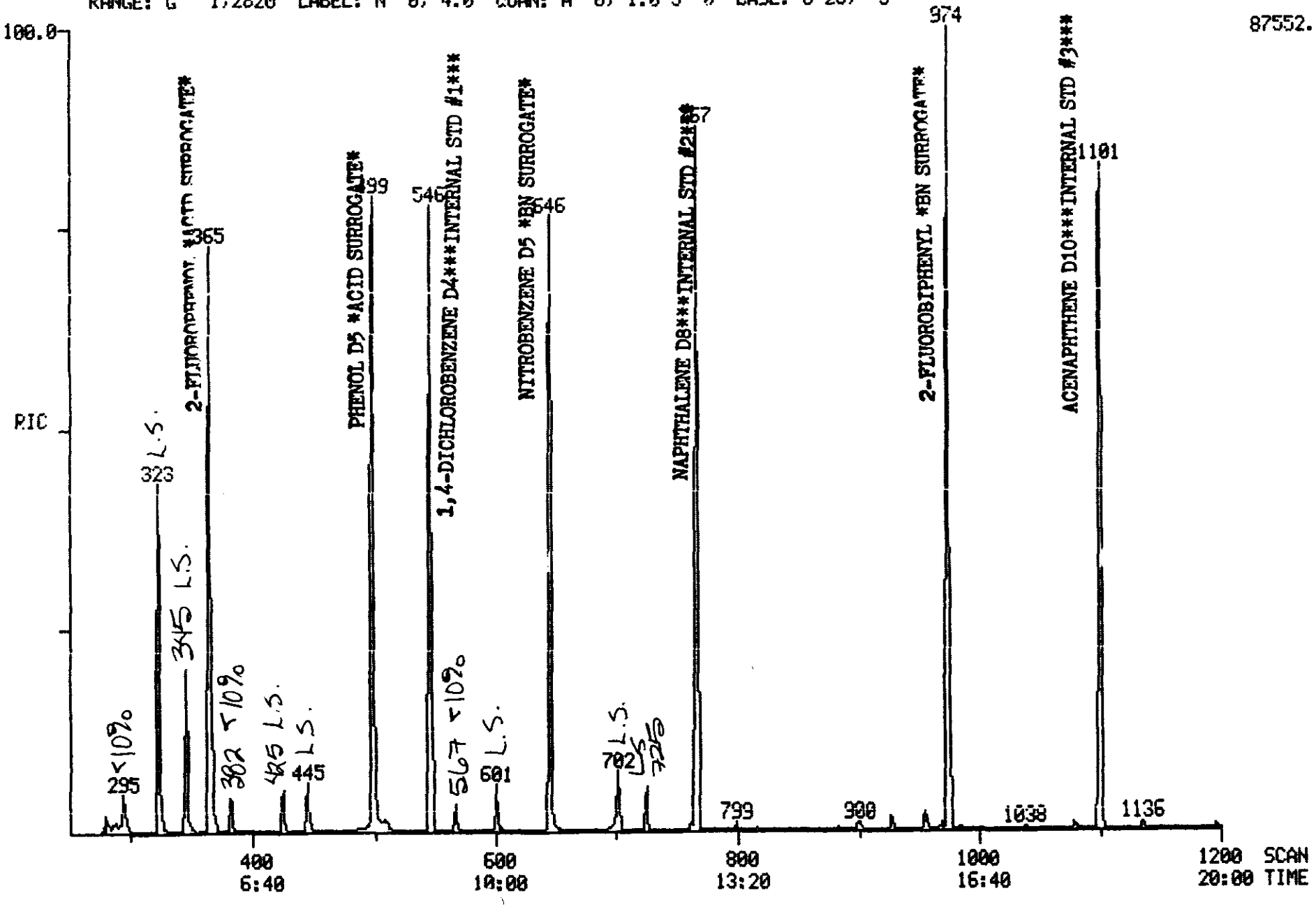
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

Number TICs found: 7

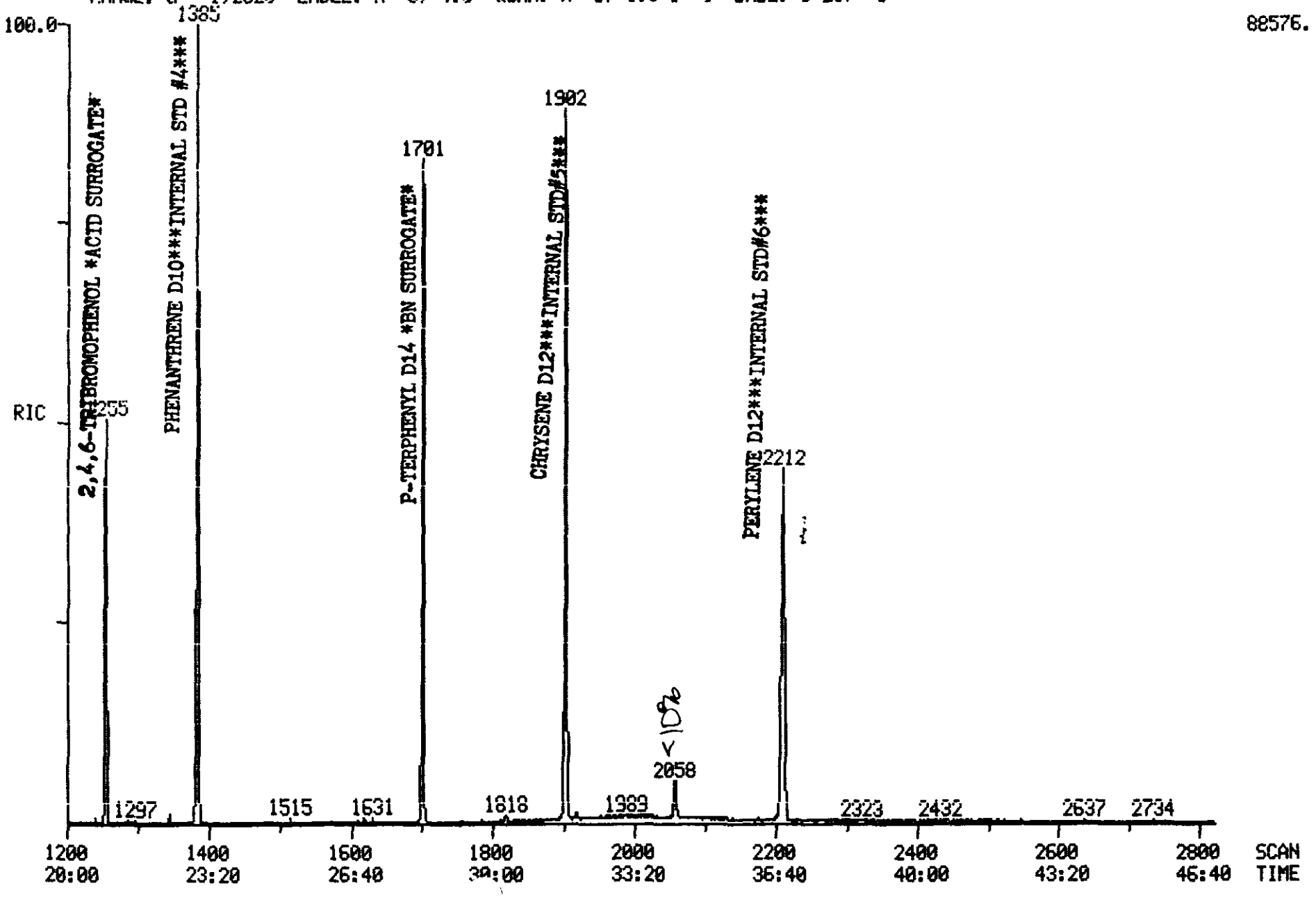
CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.38	42	BJ
2.	UNKNOWN	5.75	20	BJ
3.	UNKNOWN	7.08	6.0	J
4. 930-68-7	2-CYCLOHEXEN-1-ONE	7.42	6.0	BJ
5.	UNKNOWN	10.02	6.0	BJ
6.	UNKNOWN	11.70	6.0	J
7.	UNKNOWN	12.09	4.0	J

RIC DATA: T2578 #1 SCANS 250 TO 1200
05/15/90 2:37:00 CALI: T2578 #2
SAMPLE: CLP,VERSCOM,2548,MW43,L,W,16689,B,,420.1 B#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
RANGE: G 1,2820 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



RIC DATA: T2578 #1 SCANS 1200 TO 2820
05/15/90 2:37:00 CALI: T2578 #2
SAMPLE: CLP,VERSCDM,2548,MW43,L,N,16689,B,,420.1 B#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30208C/MIN
RANGE: G 1,2820 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: T2578

Data: T2578.TI
05/15/90 2:37:00
Sample: CLP,VERSCDM,2548,MW43,L,W,16689,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	C330 2-CHLOROPHENOL
3	C315 PHENOL
4	C325 BIS (2-CHLOROETHYL) ETHER
5	C335 1,3-DICHLOROBENZENE
6	C340 1,4-DICHLOROBENZENE
7	C350 1,2-DICHLOROBENZENE
8	C345 BENZYL ALCOHOL
9	C360 BIS (2-CHLOROISOPROPYL) ETHER
10	C355 2-METHYLPHENOL
11	C375 HEXACHLOROETHANE
12	C365 4-METHYLPHENOL
13	C370 N-NITROSO-DI-N-PROPYLAMINE
14	CS50 2-FLUOROPHENOL**ACID SURR.**
15	CS45 PHENOL-D5**ACID SURR.**
16	CI40 NAPHTHALENE-D8**INT. STD.#2**
17	C410 NITROBENZENE
18	C415 ISOPHORONE
19	C420 2-NITROPHENOL
20	C425 2,4-DIMETHYLPHENOL
21	C435 BIS (2-CHLOROETHOXY) METHANE
22	C440 2,4-DICHLOROPHENOL
23	C445 1,2,4-TRICHLOROBENZENE
24	C450 NAPHTHALENE
25	C430 BENZOIC ACID
26	C455 4-CHLOROANILINE
27	C460 HEXACHLOROBUTADIENE
28	C465 4-CHLORO-3-METHYLPHENOL
29	C470 2-METHYLNAPHTHALENE
30	CS20 NITROBENZENE-D5**BN SURR.**
31	CI50 ACENAPHTHENE-D10**INT. STD.#3**
32	C510 HEXACHLOROCYCLOPENTADIENE
33	C515 2,4,6-TRICHLOROPHENOL
34	C520 2,4,5-TRICHLOROPHENOL
35	C525 2-CHLORONAPHTHALENE
36	C530 2-NITROANILINE
37	C540 ACENAPHTHYLENE
38	C535 DIMETHYL PHTHALATE
39	C544 2,6-DINITROTOLUENE
40	C550 ACENAPHTHENE
41	C545 3-NITROANILINE
42	C555 2,4-DINITROPHENOL
43	C565 DIBENZOFURAN
44	C560 4-NITROPHENOL
45	C570 2,4-DINITROTOLUENE
46	C590 FLUORENE
47	C585 4-CHLOROPHENYL-PHENYLETHER

✓ DB 5/22/90

All IS areas & surrogate recoveries are compliant. SJD 5-15-90.

Ready for forms SJD 5-15-90

T2578

No	Name
48	C580 DIETHYLPHTHALATE
49	C595 4-NITROANILINE
50	C610 4,6-DINITRO-2-METHYLPHENOL

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	546	9:06	1	1.000	A BB	16280.	40.000 NG/UL	8.44
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	112	365	6:05	1	0.668	A BB	16537.	38.611 NG*A1	8.14
15	99	498	8:18	1	0.912	A BB	28787.	43.669 NG*A2	9.21
16	136	767	12:47	16	1.000	A BB	52120.	40.000 NG/UL	8.44
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
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	82	646	10:46	16	0.842	A BB	40515.	40.718 NG*B1	8.59
31	164	1101	18:21	31	1.000	A BB	41006.	40.000 NG/UL	8.44
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	149	1199	19:59	31	1.069	A BB	176.	BRL ~~0.096 NG~~	0.02
49	NOT FOUND								
50	NOT FOUND								

T2578

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	9:07	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	8:39		0.949						
3	8:21		0.916						
4	8:35		0.941						
5	9:00		0.987						
6	9:09		1.004						
7	9:40		1.060						
8	9:35		1.051						
9	10:01		1.099						
10	9:57		1.091						
11	10:29		1.150						
12	10:22		1.137						
13	10:26		1.144						
14	6:05	1.00	0.667	1.00	38.61	50.00	0.813	1.052	0.77
15	8:19	1.00	0.912	1.00	43.67	50.00	1.415	1.620	0.87
16	12:48	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
17	10:50		0.846						
18	11:29		0.897						
19	11:45		0.918						
20	11:54		0.930						
21	12:14		0.956						
22	12:26		0.971						
23	12:40		0.990						
24	12:51		1.004						
25	12:16		0.958						
26	13:09		1.027						
27	13:23		1.046						
28	14:40		1.146						
29	14:59		1.171						
30	10:47	1.00	0.842	1.00	40.72	50.00	0.622	0.764	0.81
31	18:22	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
32	15:41		0.854						
33	16:00		0.871						
34	16:06		0.877						
35	16:32		0.900						
36	17:03		0.928						
37	17:52		0.973						
38	17:46		0.967						
39	18:00		0.980						
40	18:28		1.005						
41	18:24		1.002						
42	18:43		1.019						
43	18:58		1.033						
44	18:58		1.033						
45	19:13		1.046						
46	20:05		1.093						
47	20:08		1.096						
48	20:02	1.00	1.091	1.00	0.10	50.00	0.003	1.781	0.00
49	20:24		1.111						
50	20:29		1.115						

Quantitation Report File: T2578

Data: T2578.TI
05/15/90 2:37:00
Sample: CLP,VERSCDM,2548,MW43,L,W,16689,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: 420.1

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

No	Name
51	C615 N-NITROSODIPHENYLAMINE
52	C625 4-BROMOPHENYL-PHENYLETHER
53	C630 HEXACHLOROBENZENE
54	CS25 2-FLUOROBIPHENYL**BN SURR.**
55	CI60 PHENANTHRENE-D10**INT. STD.#4**
56	C635 PENTACHLOROPHENOL
57	C640 PHENANTHRENE
58	C645 ANTHRACENE
59	C650 DI-N-BUTYLPHTHALATE
60	C655 FLUORANTHENE
61	C715 PYRENE
62	CS55 2,4,6,-TRIBROMOPHENOL**ACID SURR.**
63	CI70 CHRYSENE-D12**INT. STD.#5**
64	C720 BUTYLBENZYLPHTHALATE
65	C730 BENZO(A)ANTHRACENE
66	C740 CHRYSENE
67	C725 3,3'-DICHLOROBENZIDINE
68	C741 BIS(2-ETHYLHEXYL)PHTHALATE
69	CS30 P-TERPHENYL-D14**BN SURR.**
70	CI75 PERYLENE-D12**INT. STD.#6**
71	C760 DI-N-OCTYL PHTHALATE
72	C765 BENZO(B)FLUORANTHENE
73	C770 BENZO(K)FLUORANTHENE
74	C775 BENZO(A)PYRENE
75	C780 INDENO(1,2,3-CD)PYRENE
76	C785 DIBENZ(A,H)ANTHRACENE
77	C790 BENZO(G,H,I)PERYLENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	NOT FOUND								
52	NOT FOUND								
53	NOT FOUND								
54	172	974	16:14	31	0.885	A BB	50902.	38.766 NG*B2	8.18
55	188	1384	23:04	55	1.000	A BB	87210.	40.000 NG/UL	8.44
56	NOT FOUND								
57	NOT FOUND								
58	NOT FOUND								
59	149	1515	25:15	55	1.095	A BB	1068.	BRL ~~0.294 NG~~	0.06
60	NOT FOUND								
61	202	1665	27:45	63	0.875	A BB	191.	BRL ~~0.069 NG~~	0.01
62	330	1254	20:54	31	1.139	A BB	10415.	37.518 NG*A3	7.91
63	240	1902	31:42	63	1.000	A BB	76113.	40.000 NG/UL	8.44
64	NOT FOUND								
65	NOT FOUND								
66	NOT FOUND								

T2578

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
67	NOT FOUND								
68	149	1917	31:57	63	1.008	A BB	522.	~~0.237 NG~~	0.05
69	244	1701	28:21	63	0.894	A BB	61388.	34.220 NG*B3	7.22
70	264	2212	36:52	70	1.000	A BB	66600.	40.000 NG/UL	8.44
71	NOT FOUND								
72	NOT FOUND								
73	NOT FOUND								
74	NOT FOUND								
75	NOT FOUND								
76	NOT FOUND								
77	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	20:34		1.120						
52	21:41		1.181						
53	22:06		1.203						
54	16:15	1.00	0.885	1.00	38.77	50.00	0.993	1.281	0.78
55	23:06	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
56	22:43		0.983						
57	23:11		1.004						
58	23:19		1.009						
59	25:17	1.00	1.095	1.00	0.29	50.00	0.010	1.667	0.01
60	27:04		1.172						
61	27:48	1.00	0.876	1.00	0.07	50.00	0.002	1.446	0.00
62	20:56	1.00	1.140	1.00	37.52	50.00	0.203	0.271	0.75
63	31:45	1.00	1.000	1.00	40.00	40.00	1.000	1 000	1.00
64	30:10		0.950						
65	31:42		0.998						
66	31:50		1.003						
67	31:43		0.999						
68	32:00	1.00	1.008	1.00	0.24	50.00	0.005	1.156	0.00
69	28:23	1.00	0.894	1.00	34.22	50.00	0.645	0.943	0.68
70	36:56	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
71	33:53		0.917						
72	35:17		0.955						
73	35:23		0.958						
74	36:40		0.993						
75	43:01		1.165						
76	43:13		1.170						
77	44:53		1.215						

Quantitation Report File: GCREF

Data: T2578.TI
05/15/90 2:37:00
Sample: CLP,VERSCDM,2548,MW43,L,W,16669,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	CI40 NAPHTHALENE-D8**INT. STD.#2**
3	CI50 ACENAPHTHENE-D10**INT. STD.#3**
4	CI60 PHENANTHRENE-D10**INT. STD.#4**
5	CI70 CHRYSENE-D12**INT. STD.#5**
6	CI75 PERYLENE-D12**INT. STD.#6**
7	CS50 2-FLUOROPHENOL**ACID SURR.**
8	CS45 PHENOL-D5**ACID SURR.**
9	CS55 2,4,6,-TRIBROMOPHENOL**ACID SURR.**
10	CS20 NITROBENZENE-D5**BN SURR.**
11	CS25 2-FLUOROBIPHENYL**BN SURR.**
12	CS30 P-TERPHENYL-D14**BN SURR.**

Scan	Time	Area(Hght)		Amount		Name
546	9:06	16280.	9	40.000	NG/UL	CI30 1,4-DICHLOROBENZENE-D4
767	12:47	52120.	70	40.000	NG/UL	CI40 NAPHTHALENE-D8**INT. ST
1101	18:21	41006.	Rec	40.000	NG/UL	CI50 ACENAPHTHENE-D10**INT.
1384	23:04	87210.		40.000	NG/UL	CI60 PHENANTHRENE-D10**INT.
1902	31:42	76113.		40.000	NG/UL	CI70 CHRYSENE-D12**INT. STD.
2212	36:52	66600.		40.000	NG/UL	CI75 PERYLENE-D12**INT. STD.
365	6:05	16537.	39	38.611	NG*A1	CS50 2-FLUOROPHENOL**ACID SU
498	8:18	28787.	44	43.669	NG*A2	CS45 PHENOL-D5**ACID SURR.**
1254	20:54	10415.	30	37.518	NG*A3	CS55 2,4,6,-TRIBROMOPHENOL**
646	10:46	40515.	81	40.718	NG*B1	CS20 NITROBENZENE-D5**BN SUR
974	16:14	50902.	78	38.766	NG*B2	CS25 2-FLUOROBIPHENYL**BN SU
1701	28:21	61388.	68	34.220	NG*B3	CS30 P-TERPHENYL-D14**BN SUR

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:07	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	12:48	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
3	18:22	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
4	23:06	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
5	31:45	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
6	36:56	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
7	6:05	1.00	0.667	1.00	38.61	50.00	0.813	1.052	0.77
8	8:19	1.00	0.912	1.00	43.67	50.00	1.415	1.620	0.87
9	20:56	1.00	1.140	1.00	37.52	50.00	0.203	0.271	0.75
10	10:47	1.00	0.842	1.00	40.72	50.00	0.622	0.764	0.81
11	16:15	1.00	0.885	1.00	38.77	50.00	0.993	1.281	0.78
12	28:23	1.00	0.894	1.00	34.22	50.00	0.645	0.943	0.68

Quantitation Report File: ISREF

Data: T2569.TI
05/14/90 17:42:00
Sample: CLP,,,SSTD50,,,22658,B,IC50,,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: --

Data: T2578.TI
05/15/90 2:37:00
Sample: CLP,VERSCDM,2548,MW43,L,W,16689,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
3	CI40 NAPHTHALENE-D8**INT. STD.#2**
4	CI40 NAPHTHALENE-D8**INT. STD.#2**
5	CI50 ACENAPHTHENE-D10**INT. STD.#3**
6	CI50 ACENAPHTHENE-D10**INT. STD.#3**
7	CI60 PHENANTHRENE-D10**INT. STD.#4**
8	CI60 PHENANTHRENE-D10**INT. STD.#4**
9	CI70 CHRYSENE-D12**INT. STD.#5**
10	CI70 CHRYSENE-D12**INT. STD.#5**
11	CI75 PERYLENE-D12**INT. STD.#6**
12	CI75 PERYLENE-D12**INT. STD.#6**

Scan	Time	Area(Hght)	Amount		Name
547	9:07	15621.	40.000	NG/UL	CI30 1,4-DICHLOROBENZENE-D4
546	9:06	16280.	41.687	NG/UL	CI30 1,4-DICHLOROBENZENE-D4
768	12:48	52080.	40.000	NG/UL	CI40 NAPHTHALENE-D8**INT. ST
767	12:47	52120.	40.031	NG/UL	CI40 NAPHTHALENE-D8**INT. ST
1102	18:22	37455.	40.000	NG/UL	CI50 ACENAPHTHENE-D10**INT.
1101	18:21	41006.	43.792	NG/UL	CI50 ACENAPHTHENE-D10**INT.
1386	23:06	75538.	40.000	NG/UL	CI60 PHENANTHRENE-D10**INT.
1384	23:04	87210.	46.181	NG/UL	CI60 PHENANTHRENE-D10**INT.
1905	31:45	56496.	40.000	NG/UL	CI70 CHRYSENE-D12**INT. STD
1902	31:42	76113.	53.889	NG/UL	CI70 CHRYSENE-D12**INT. STD.
2216	36:56	45334.	40.000	NG/UL	CI75 PERYLENE-D12**INT. STD.
2212	36:52	66600.	58.764	NG/UL	CI75 PERYLENE-D12**INT. STD.

Library Search Data: T2578 # 323 Base m/z: 43
05/15/90 2:37:00 + 5:23 Cali: T2578 # 2 RIC: 30399.
Sample: CLP,VERSCDM,2548,MW43,L,W,16689,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
121 matched at least 7 of the 16 largest peaks in the unknown

B

Rank	In.	Name
1	806	HYDROPEROXIDE, 1,1-DIMETHYLETHYL
2	2776	2-PENTANOL, 2,4-DIMETHYL-
3	2777	2-HEXANOL, 2-METHYL-
4	1334	OXIRANE, TETRAMETHYL-
5	1349	OXEPANE, 2,2,4-TRIMETHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C4.H10.O2	90	59	756	873	763
2	C7.H16.O	116	59	738	772	738
3	C7.H16.O	116	59	686	731	698
4	C6.H12.O	100	59	681	808	705
5	C6.H12.O	100	43	674	774	699

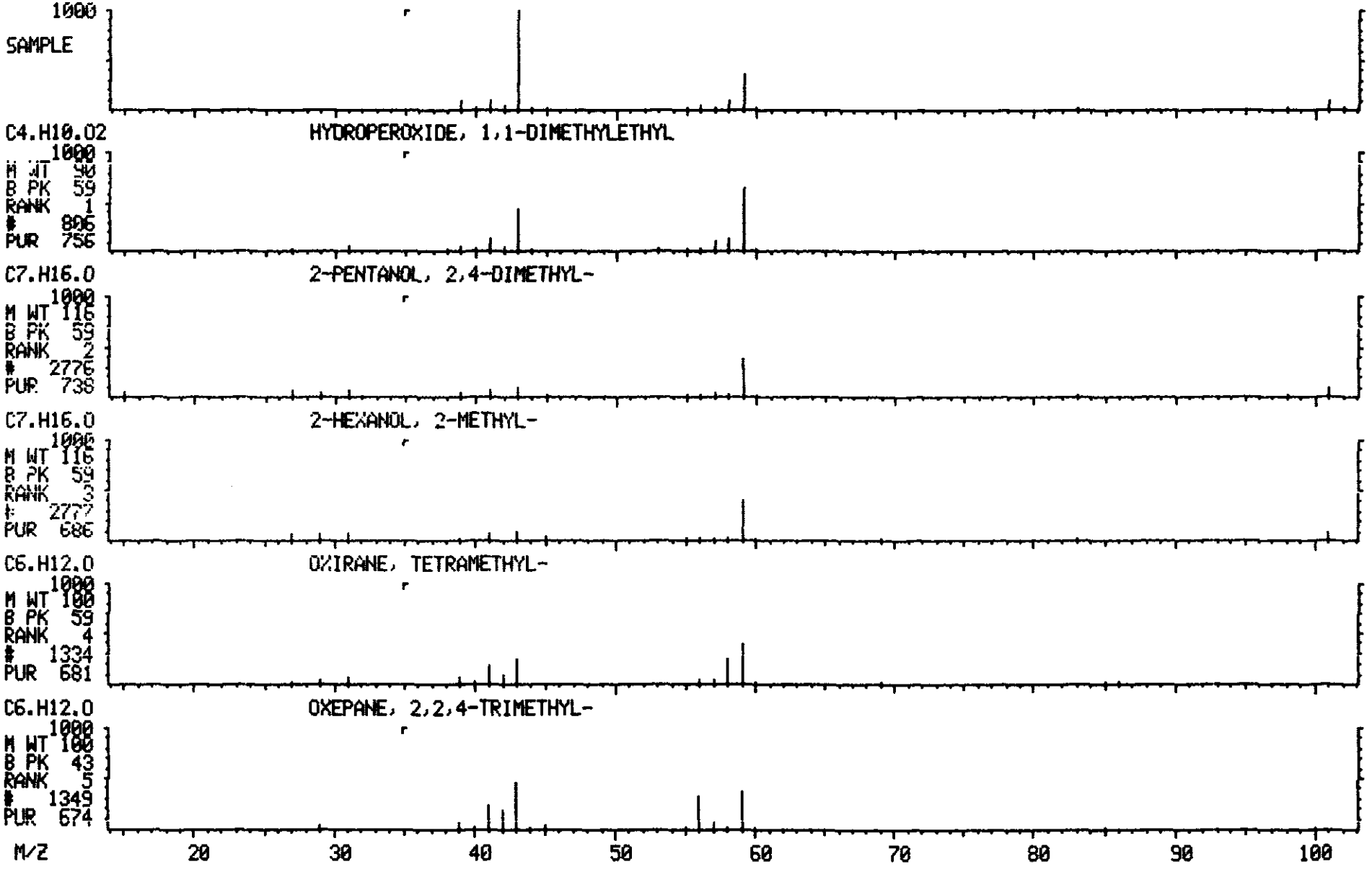
Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	75-91-2
2	—	—	—	—	625-06-9
3	—	—	—	—	625-23-0
4	—	—	—	—	5076-20-0
5	—	—	—	—	23120-44-7

LIBRARY SEARCH
05/15/90 2:37:00 + 5:23
SAMPLE: CLP,VERSCOM,254S,MW43,L,W,16689,B,,420.1 B#3,1UL,
CONDS.· INST T COLUMN=PESTEK 30M PTX-5 4MIN@38C TO 30@8C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2578 # 323
CALI: T2578 # 2

BASE M/Z: 43
RIC: 30399.

100050



Library Search Data: T2578 # 345 Base m/z: 41
05/15/90 2:37:00 + 5:45 Cali: T2578 # 2 RIC: 14223.
Sample: CLP,VERSCDM,2548,MW43,L,W,16689,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
108 matched at least 8 of the 16 largest peaks in the unknown

B

Rank	In.	Name
1	1076	1-PROPENE, 3,3'-OXYBIS-
2	1111	2-HEXENAL, (E)-
3	2216	2-HEPTENAL, (Z)-
4	2186	4-PENTENAL, 2,2-DIMETHYL-
5	1153	CYCLOPENTANE, 1,1-DIMETHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C6.H10.O	98	41	779	879	807
2	C6.H10.O	98	41	759	881	825
3	C7.H12.O	112	41	734	874	756
4	C7.H12.O	112	55	664	792	701
5	C7.H14	98	56	660	785	636

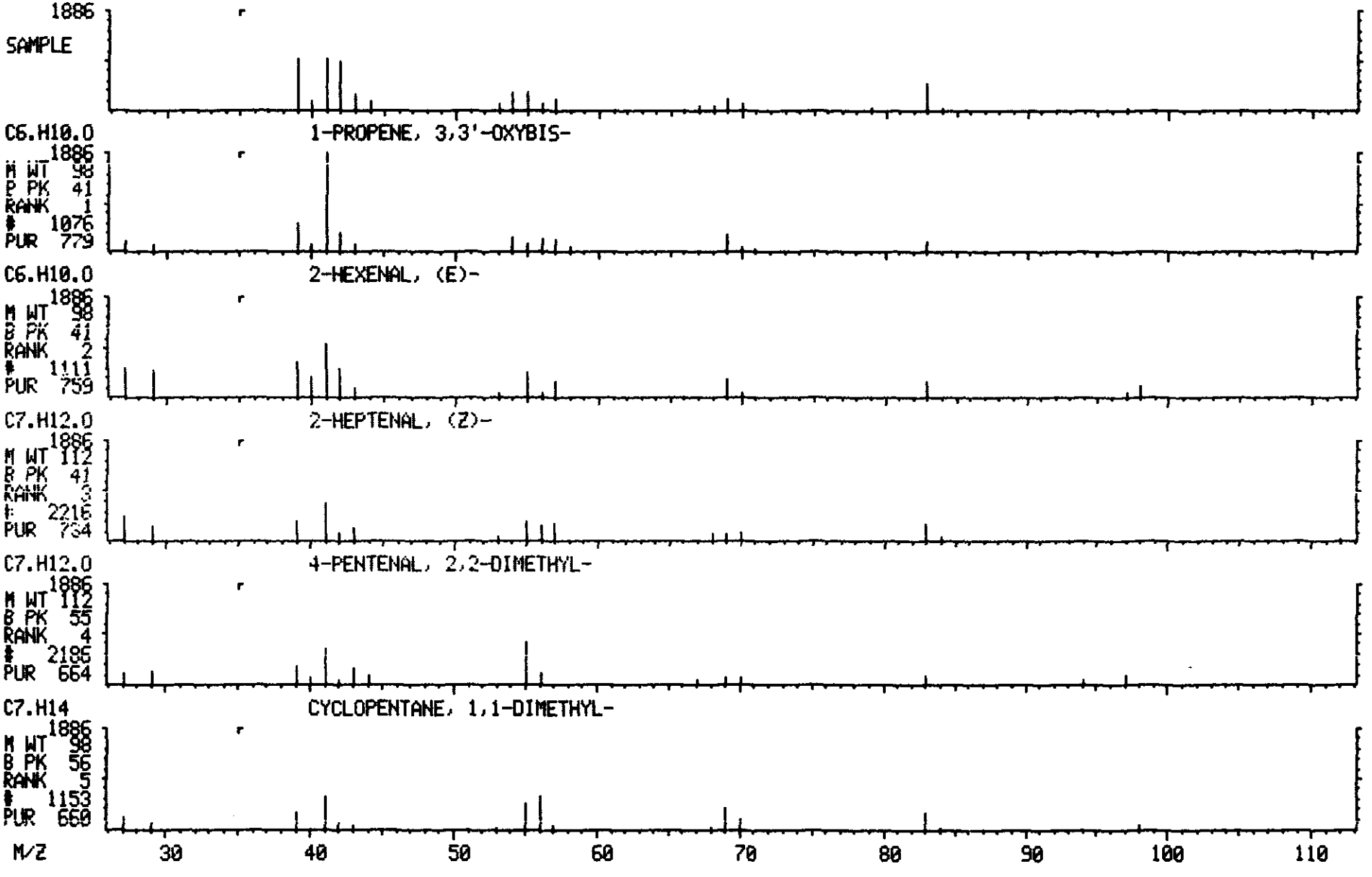
Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	557-40-4
2	—	—	—	—	6728-26-3
3	—	—	—	—	57266-86-1
4	—	—	—	—	5497-67-6
5	—	—	—	—	1638-26-2

LIBRARY SEARCH
05/15/90 2:37:00 + 5:45
SAMPLE: CLP,VERSCDM,2543,MW43,L,W,16689,P,,420.1 B#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30@8C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2578 # 345
CALI: T2578 # 2

BASE M/Z: 41
RIC: 14223.

100052



Library Search Data: T2578 # 425 Base m/z: 56
05/15/90 2:37:00 + 7:05 Cali: T2578 # 2 RIC: 3831.
Sample: CLP,VERSCDM,2548,MW43,L,W,16689,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYN8 searched for maximum PURITY
230 matched at least 4 of the 15 largest peaks in the unknown

Rank	In.	Name
1	3877	AZIRIDINE, 1-HEXYL-
2	3861	PIPERIDINE, 5-ETHYL-2-METHYL-
3	2105	PROPANENITRILE, 3-[(1-METHYLETHYL)AMINO]-
4	3862	PIPERIDINE, 1,2,6-TRIMETHYL-
5	3876	METHYLAMINE, N-(1-METHYLHEXYLIDENE)-

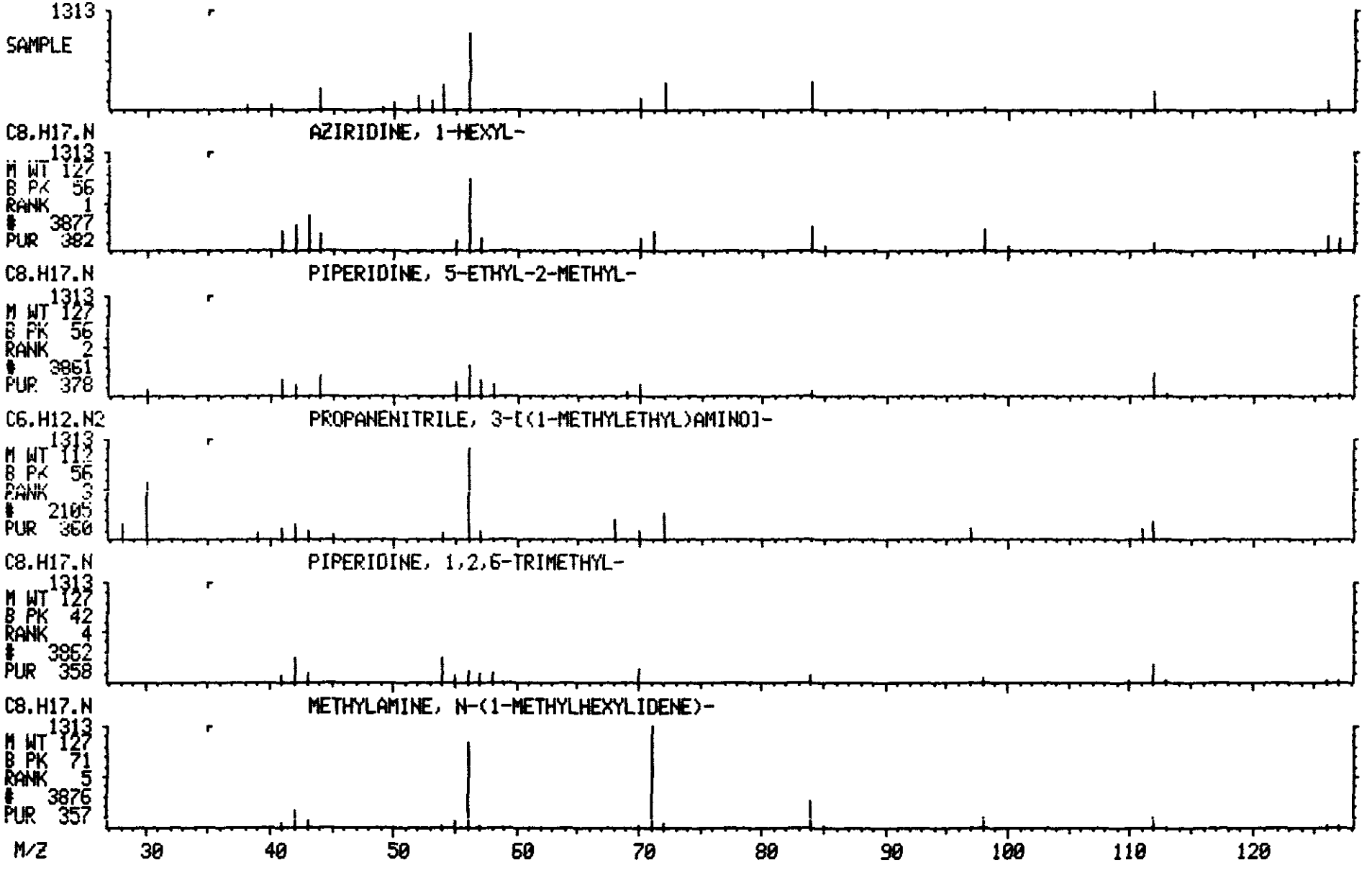
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C8.H17.N	127	56	382	553	629
2	C8.H17.N	127	56	378	548	609
3	C6.H12.N2	112	56	360	586	592
4	C8.H17.N	127	42	358	499	570
5	C8.H17.N	127	71	357	429	707

Rank	Ret. Time	B.P. Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	30691-59-9
2	—	—	—	—	104-89-2
3	—	—	—	—	692-98-8
4	—	—	—	—	669-81-8
5	—	—	—	—	22058-71-5

LIBRARY SEARCH
05/15/90 2:37:00 + 7:05
SAMPLE: CLP,VERSCOM,2548,MW43,L,W,16689,B,,420.1 B#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30208C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2578 # 425
CALI: T2578 # 2

BASE M/Z: 56
RIC: 3831.



100054

Library Search Data: T2578 # 445 Base m/z: 68
05/15/90 2:37:00 + 7:25 Cali: T2578 # 2 RIC: 4223.
Sample: CLP,VERSCDM,2548,MW43,L,W,16689,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
94 matched at least 6 of the 13 largest peaks in the unknown

B

Rank	In.	Name
1	952	2-CYCLOHEXEN-1-ONE
2	936	3(2H)-PYRIDAZINONE
3	941	2H-PYRAN-2-ONE
4	2092	2,5-FURANDIONE, DIHYDRO-3-METHYLENE-
5	168	FURAN

Rank	Formula	M. Wt	B. Pk	Purity	Fit	RFit
1	C6.H8.O	96	68	915	944	964
2	C4.H4.O.N2	96	68	847	888	874
3	C5.H4.O2	96	68	805	933	852
4	C5.H4.O3	112	68	751	932	778
5	C4.H4.O	68	68	739	899	763

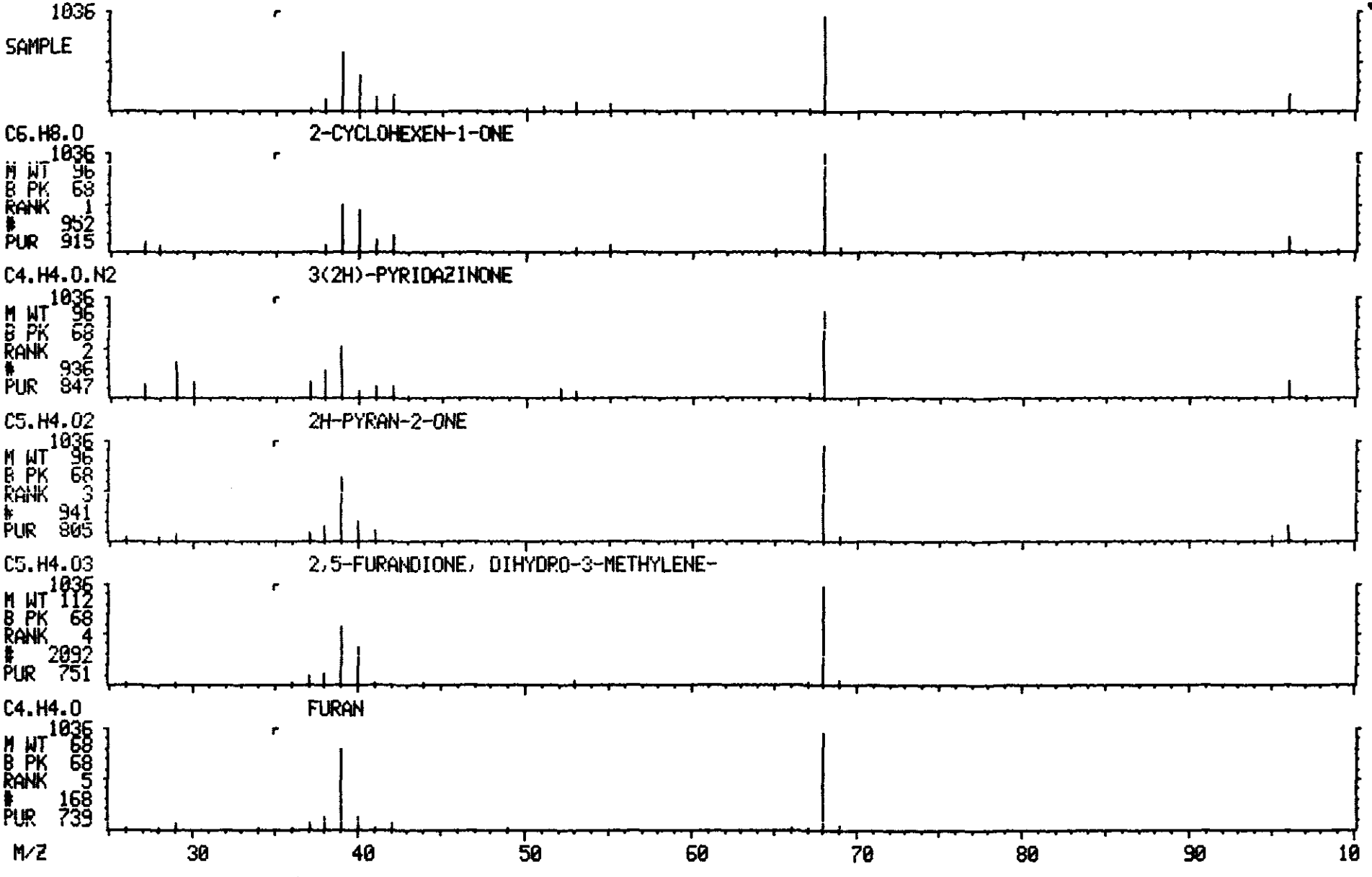
Rank	Ret. Time	B.P. Int.	US. Par. 1	US. Par. 2	C.A.S. #
1	—	—	—	—	930-68-7 ✓
2	—	—	—	—	504-30-3
3	—	—	—	—	504-31-4
4	—	—	—	—	2170-03-8
5	—	—	—	—	110-00-9

LIBRARY SEARCH
05/15/90 2:37:00 + 7:25
SAMPLE: CLP,VERSCOM,2548,MW43,L,W,16689,B,,420.1 B#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30200C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2578 # 445
CALI: T2576 # 2

BASE M/Z: 68
RIC: 4223.

100056



Library Search Data: T2578 # 601 Base m/z: 41
05/15/90 2:37:00 + 10:01 Cali: T2578 # 2 RIC: 3839.
Sample: CLP,VERSCDM,2548,MW43,L,W,16689,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYN8 searched for maximum PURITY
301 matched at least 6 of the 16 largest peaks in the unknown

B

Rank	In.	Name
1	9497	CYCLOHEXENE, 3-BROMO
2	971	1,4-PENTADIENE, 3,3-DIMETHYL-
3	2763	CYCLOPROPANE, 1-CHLORO-2-ETHENYL-1-METHYL-
4	5826	7-OXABICYCLO[4.1.0]HEPTANE, 3-OXIRANYL-
5	2179	3,4-PENTADIEN-1-OL, 2,2-DIMETHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C6.H9.BR	160	81	674	830	759
2	C7.H12	96	81	648	805	764
3	C6.H9.CL	116	81	643	836	743
4	C8.H12.O2	140	41	622	704	812
5	C7.H12.O	112	81	607	785	740

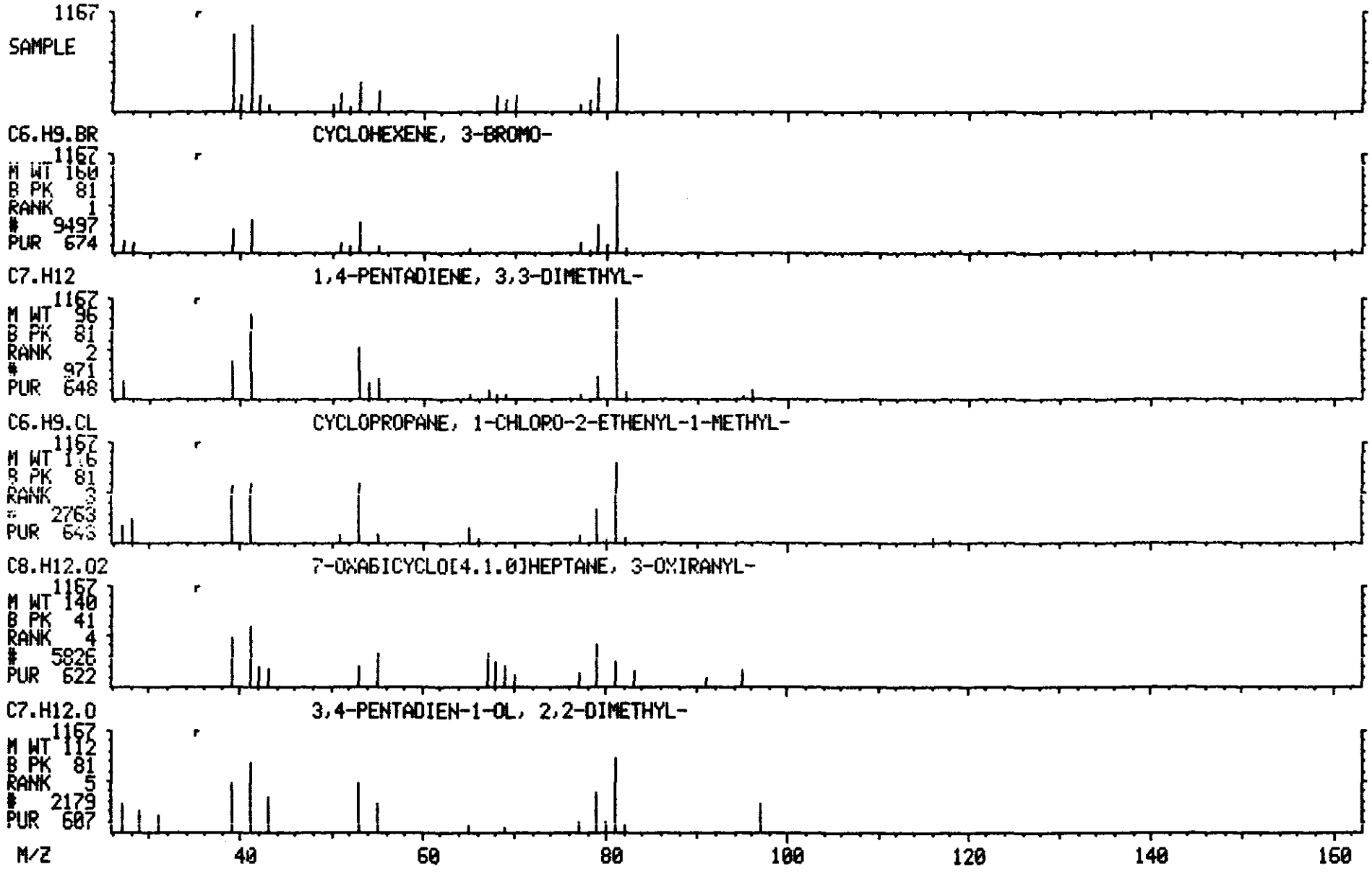
Rank	Ret. Time	B.P. Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	1521-51-3
2	—	—	—	—	1112-35-2
3	—	—	—	—	62337-93-3
4	—	—	—	—	106-87-6
5	—	—	—	—	4058-52-0

LIBRARY SEARCH
05/15/90 2:37:00 + 10:01
SAMPLE: CLP,VERSCOM,2549,MW43,L,W,16689,B,,420.1 B#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30208C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2578 # 601
CALI: T2578 # 2

BASE M/Z: 41
RIC: 3839.

100058



Library Search Data: T2578 # 702 Base m/z: 73
05/15/90 2:37:00 + 11:42 Cali: T2578 # 2 RIC: 5439.
Sample: CLP,VERSCDM,2548,MW43,L,W,16689,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
63 matched at least 5 of the 16 largest peaks in the unknown

Rank	In.	Name
1	6389	L-PROLINE, ETHYL ESTER
2	28829	3-EICOSANONE
3	10341	PROPANENITRILE, 2,2'-AZOBIS[2-METHYL-
4	16517	M-DIOXANE, 4,6-DIBUTYL-
5	2294	2-OXAZOLIDINONE, 3-ETHENYL-

Rank	Formula	M. Wt	B. Pk	Purity	Fit	RFit
1	C7. H13. O2. N	143	73	240	513	291
2	C20. H40. O	296	72	206	467	437
3	C8. H12. N4	164	69	205	720	256
4	C12. H24. O2	200	42	186	531	332
5	C5. H7. O2. N	113	54	184	659	214

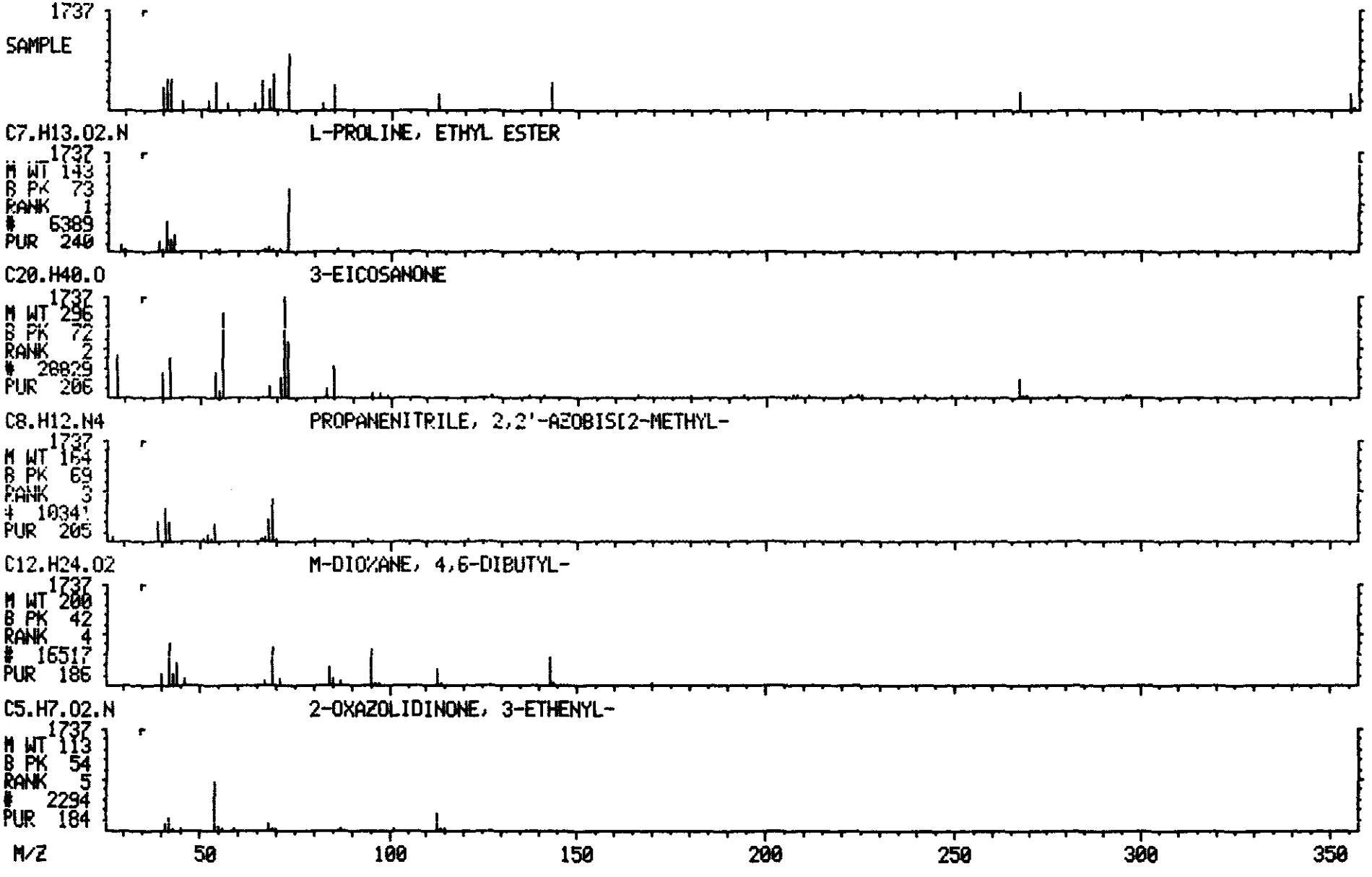
Rank	Ret. Time	B. P. Int.	US. Par. 1	US. Par. 2	C. A. S. #
1	—	—	—	—	5817-26-5
2	—	—	—	—	2955-56-8
3	—	—	—	—	78-67-1
4	—	—	—	—	16731-95-6
5	—	—	—	—	4271-26-5

LIBRARY SEARCH
05/15/90 2:37:00 + 11:42
SAMPLE: CLP,VERSCOM,2548,MW43,L,W,16689,B,,420.1 B#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30@8C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2578 # 702
CALI: T2578 # 2

BASE M/Z: 73
RIC: 5439.

100060



Library Search Data: T2578 # 725 Base m/z: 57
05/15/90 2:37:00 + 12:05 Cali: T2578 # 2 RIC: 3987.
Sample: CLP,VERSCDM,2548,MW43,L,W,16689,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYN8 searched for maximum PURITY
63 matched at least 5 of the 16 largest peaks in the unknown

Rank	In.	Name
1	2086	2-THIOPHENECARBOXALDEHYDE
2	5517	2-BUTANONE, 1-(2-FURANYL)-
3	431	FURAN, 2-METHYL-
4	8658	CYCLOHEXANOL, 4-(1,1-DIMETHYLETHYL)-, CIS-
5	8644	CYCLOHEXANOL, 4-(1,1-DIMETHYLETHYL)-

Rank	Formula	M. Wt	B. Pk	Purity	Fit	RFit
1	C5. H4. O. S	112	39	302	627	343
2	C8. H10. O2	138	57	284	549	357
3	C5. H6. O	82	82	282	705	303
4	C10. H20. O	156	57	273	586	447
5	C10. H20. O	156	57	273	586	447

Rank	Ret. Time	B. P. Int.	US. Par. 1	US. Par. 2	C. A. S. #
1	—	—	—	—	98-03-3
2	—	—	—	—	4208-63-3
3	—	—	—	—	534-22-5
4	—	—	—	—	937-05-3
5	—	—	—	—	98-52-2

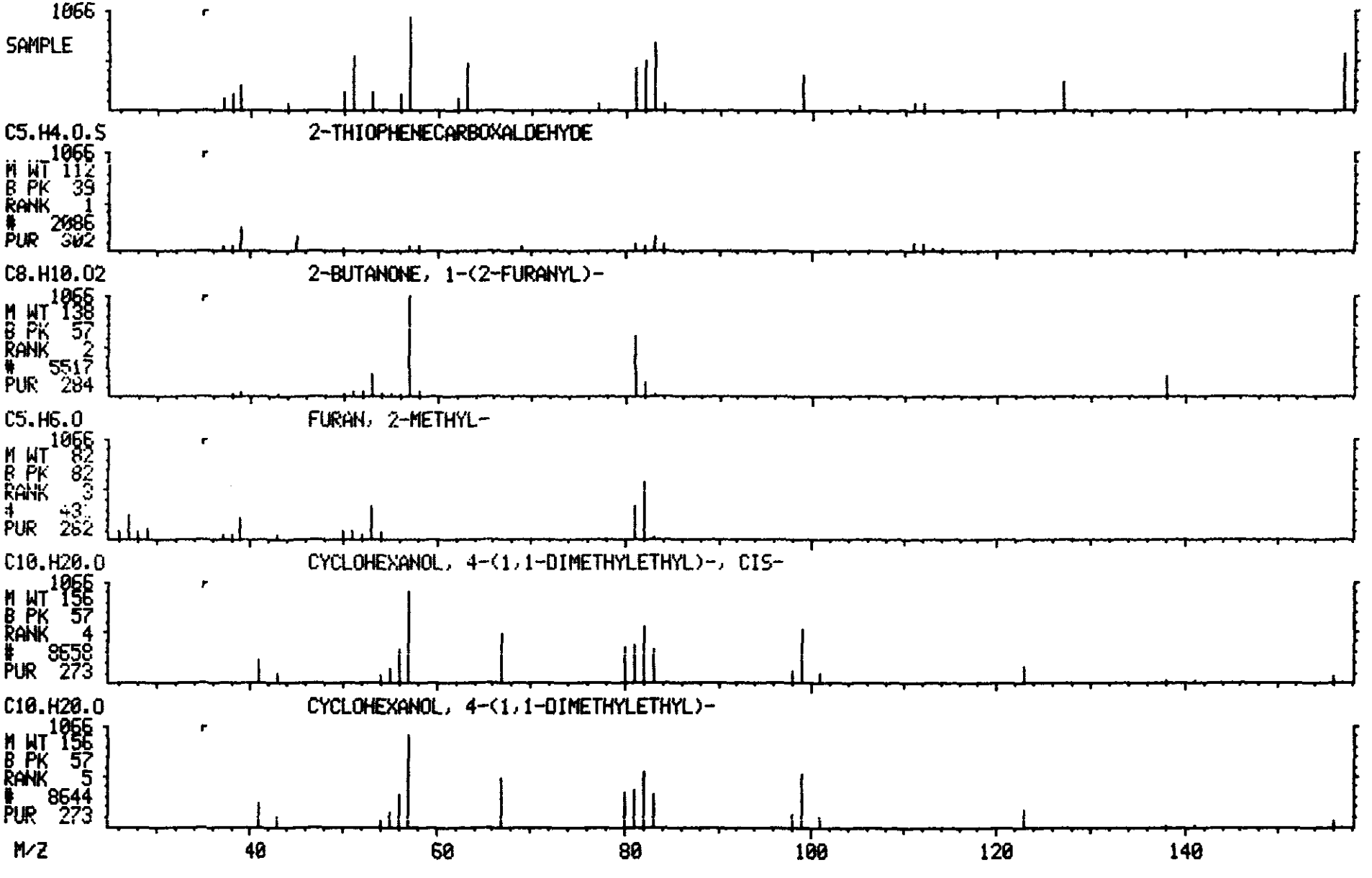
100061

LIBRARY SEARCH
05/15/90 2:37:00 + 12:05
SAMPLE: CLP,VERSCDM,2548,MW43,L,W,16669,B,,420.1 6#3,1UL,
CONDS.: INST T COLUMN=PESTEK 30M RTX-5 4MIN@38C TO 30200C/MIN
ENHANCED (5 15B 2N 0T)

DATA: T2578 # 725
CALI: T2576 # 2

BASE M/Z: 57
RIC: 3987.

100062



```
        >>>>INTERNAL STANDARD RIC REPORT<<<<
*****************************INTERNAL STANDARD#1*****************RIC
Mass List                        Data: T2578 # 546          Base m/z:   150
05/15/90  2:37:00 +  9:06        Cali: T2578 #   2          RIC:      58944.
Sample: CLP,VERSCDM,2548,MW43,L,W,16689,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     35       0.00   0.00        0. Minima     Min inten:       0.
     30                      #   0  Maxima
*****************************INTERNAL STANDARD#2*****************RIC
Mass List                        Data: T2578 # 767          Base m/z:   136
05/15/90  2:37:00 + 12:47        Cali: T2578 #   2          RIC:      66944.
Sample: CLP,VERSCDM,2548,MW43,L,W,16689,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38       0.00   0.00        0. Minima     Min inten:       0.
     30                      #   0  Maxima
*****************************INTERNAL STANDARD#3*****************RIC
Mass List                        Data: T2578 #1101          Base m/z:   164
05/15/90  2:37:00 + 18:21        Cali: T2578 #   2          RIC:      63104.
Sample: CLP,VERSCDM,2548,MW43,L,W,16689,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38       0.00   0.00        0. Minima     Min inten:       0.
     30                      #   0  Maxima
*****************************INTERNAL STANDARD#4*****************RIC
Mass List                        Data: T2578 #1384          Base m/z:   188
05/15/90  2:37:00 + 23:04        Cali: T2578 #   2          RIC:      83200.
Sample: CLP,VERSCDM,2548,MW43,L,W,16689,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38       0.00   0.00        0. Minima     Min inten:       0.
     30                      #   0  Maxima
*****************************INTERNAL STANDARD#5*****************RIC
Mass List                        Data: T2578 #1902          Base m/z:   210
05/15/90  2:37:00 + 31:42        Cali: T2578 #   2          RIC:      73216.
Sample: CLP,VERSCDM,2548,MW43,L,W,16689,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     36       0.00   0.00        0. Minima     Min inten:       0.
     30                      #   0  Maxima
*****************************INTERNAL STANDARD#6*****************RIC
Mass List                        Data: T2578 #2212          Base m/z:   264
05/15/90  2:37:00 + 36:52        Cali: T2578 #   2          RIC:      37184.
Sample: CLP,VERSCDM,2548,MW43,L,W,16689,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     41       0.00   0.00        0. Minima     Min inten:       0.
     30                      #   0  Maxima
     ANALYST: CHECK BASE M/Z AND RIC AMOUNT TO INSURE NO CONTAMINATION
```

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW53

La' Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16690

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2579

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/15/90

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	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
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	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
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	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
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	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	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.

MW53

La' Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16690

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2579

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/15/90

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	50	U
100-02-7	4-Nitrophenol	50	U
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
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
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

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW53

La Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16690

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2579

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/15/90

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

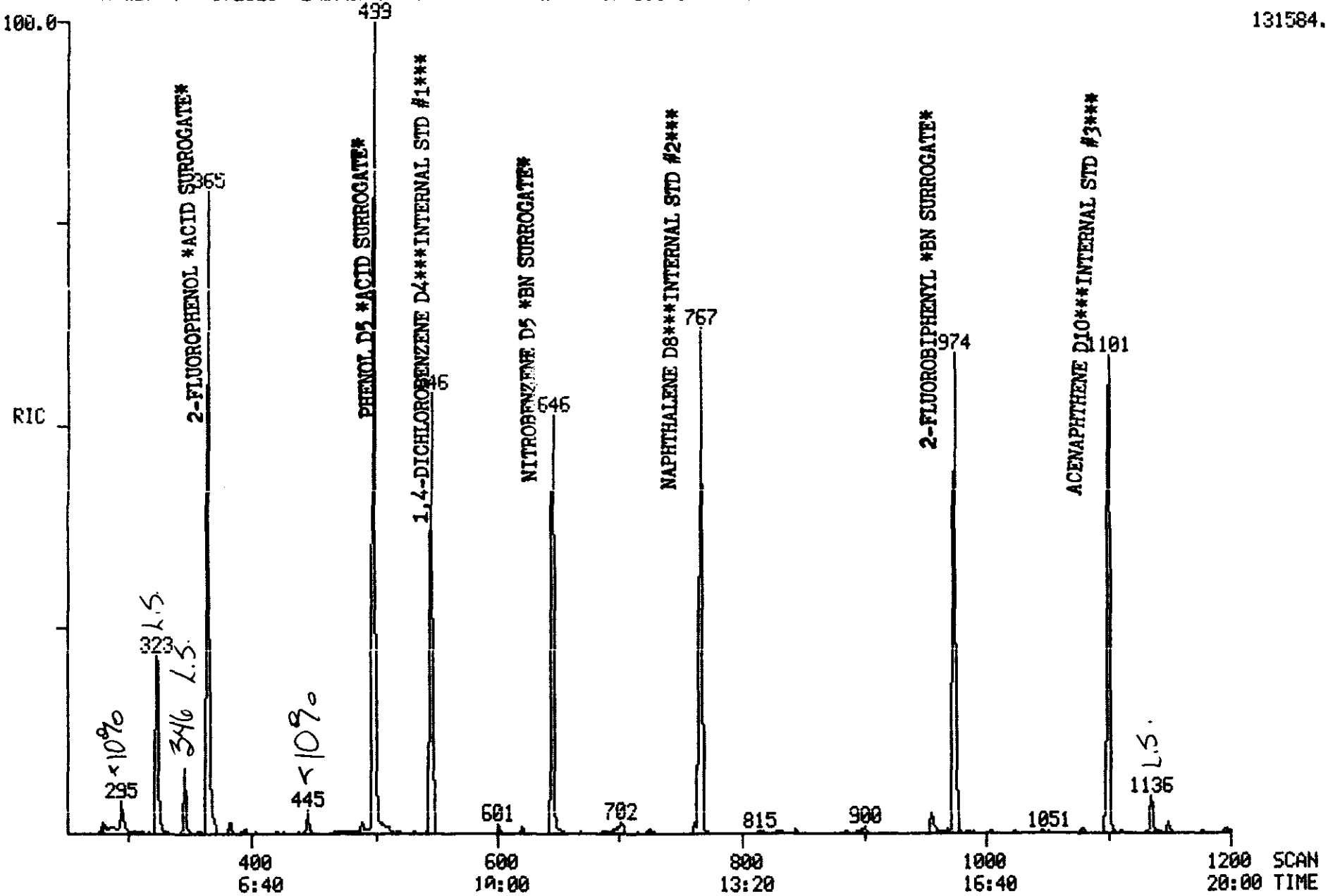
Number TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.38	32	BJ
2.	UNKNOWN	5.77	12	BJ
3.	UNKNOWN	18.94	6.0	J

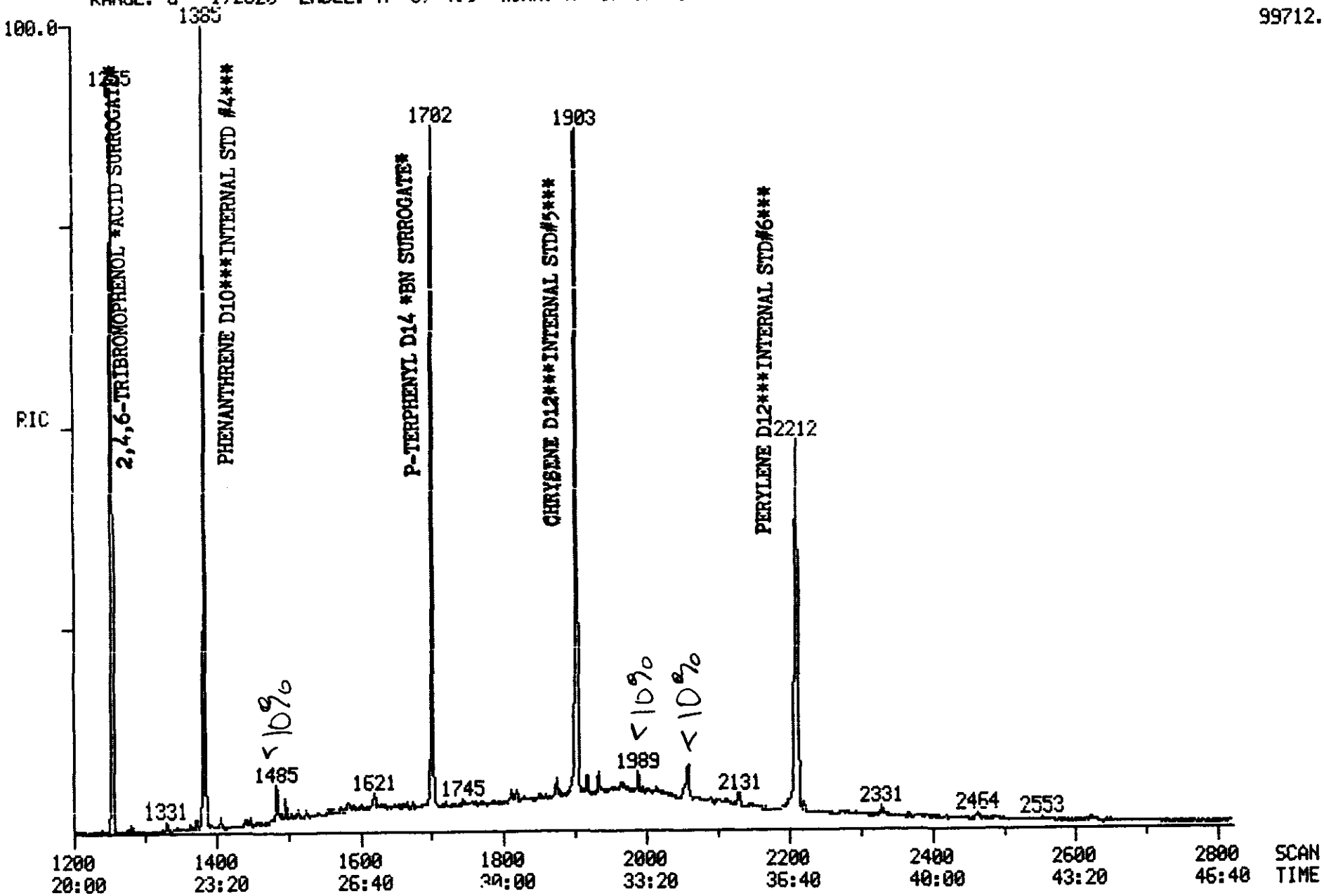
RIC DATA: T2579 #1 SCANS 250 TO 1200
05/15/90 3:30:00 CALI: T2579 #2
SAMPLE: CLP,VERSCOM,2548,MW53,L,W,16690,B,,420.1 B#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
RANGE: G 1,2820 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

100067



RIC
05/15/90 3:30:00
DATA: T2579 #1
CALI: T2579 #2
SCANS 1200 TO 2820
SAMPLE: CLP,VERSCDM,2548,MN53,L,W,16690,B,,420.1 B#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
RANGE: G 1,2820 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

100068



Quantitation Report File: T2579

Data: T2579.TI
05/15/90 3:30:00
Sample: CLP,VERSCDM,2548,MW53,L,W,16690,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	C330 2-CHLOROPHENOL
3	C315 PHENOL
4	C325 BIS (2-CHLOROETHYL) ETHER
5	C335 1,3-DICHLOROBENZENE
6	C340 1,4-DICHLOROBENZENE
7	C350 1,2-DICHLOROBENZENE
8	C345 BENZYL ALCOHOL
9	C360 BIS (2-CHLOROISOPROPYL) ETHER
10	C355 2-METHYLPHENOL
11	C375 HEXACHLOROETHANE
12	C365 4-METHYLPHENOL
13	C370 N-NITROSO-DI-N-PROPYLAMINE
14	CS50 2-FLUOROPHENOL**ACID SURR.**
15	CS45 PHENOL-D5**ACID SURR.**
16	CI40 NAPHTHALENE-D8**INT. STD.#2**
17	C410 NITROBENZENE
18	C415 ISOPHORONE
19	C420 2-NITROPHENOL
20	C425 2,4-DIMETHYLPHENOL
21	C435 BIS (2-CHLOROETHOXY) METHANE
22	C440 2,4-DICHLOROPHENOL
23	C445 1,2,4-TRICHLOROBENZENE
24	C450 NAPHTHALENE
25	C430 BENZOIC ACID
26	C455 4-CHLOROANILINE
27	C460 HEXACHLOROBUTADIENE
28	C465 4-CHLORO-3-METHYLPHENOL
29	C470 2-METHYLNAPHTHALENE
30	CS20 NITROBENZENE-D5**BN SURR.**
31	CI50 ACENAPHTHENE-D10**INT. STD.#3**
32	C510 HEXACHLOROCYCLOPENTADIENE
33	C515 2,4,6-TRICHLOROPHENOL
34	C520 2,4,5-TRICHLOROPHENOL
35	C525 2-CHLORONAPHTHALENE
36	C530 2-NITROANILINE
37	C540 ACENAPHTHYLENE
38	C535 DIMETHYL PHTHALATE
39	C544 2,6-DINITROTOLUENE
40	C550 ACENAPHTHENE
41	C545 3-NITROANILINE
42	C555 2,4-DINITROPHENOL
43	C565 DIBENZOFURAN
44	C560 4-NITROPHENOL
45	C570 2,4-DINITROTOLUENE
46	C590 FLUORENE
47	C585 4-CHLOROPHENYL-PHENYLETHER

QB 5/22/90

All IS areas & Surrogate recoveries are compliant. SJ 5/15/90.

Ready for forms SJ 5-15-90.

No	Name
48	C580 DIETHYLPHTHALATE
49	C595 4-NITROANILINE
50	C610 4,6-DINITRO-2-METHYLPHENOL

T2579

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	546	9:06	1	1.000	A BB	17022.	40.000 NG/UL	7.12
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	108	620	10:20	1	1.136	A BB	278.	BKL ~~0.437 NG~~	0.08
13	NOT FOUND								
14	112	365	6:05	1	0.668	A BB	31755.	70.911 NG*A1	12.62
15	99	499	8:19	1	0.914	A BB	48643.	70.574 NG*A2	12.56
16	136	767	12:47	16	1.000	A BB	54501.	40.000 NG/UL	7.12
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
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	82	646	10:46	16	0.842	A BB	41392.	39.782 NG*B1	7.08
31	164	1101	18:21	31	1.000	A BB	43825.	40.000 NG/UL	7.12
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	NOT FOUND								
43	168	1137	18:57	31	1.033	A BB	166.	BKL ~~0.086 NG~~	0.02
44	NOT FOUND								
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	149	1200	20:00	31	1.090	A BB	238.	BKL ~~0.122 NG~~	0.02
49	NOT FOUND								
50	NOT FOUND								

T2579

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:07	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	8:39		0.949						
3	8:21		0.916						
4	8:35		0.941						
5	9:00		0.987						
6	9:09		1.004						
7	9:40		1.060						
8	9:35		1.051						
9	10:01		1.099						
10	9:57		1.091						
11	10:29		1.150						
12	10:22	1.00	1.137	1.00	0.44	50.00	0.013	1.468	0.01
13	10:26		1.144						
14	6:05	1.00	0.667	1.00	70.91	50.00	1.492	1.052	1.42
15	8:19	1.00	0.912	1.00	70.57	50.00	2.286	1.620	1.41
16	12:48	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
17	10:50		0.846						
18	11:29		0.897						
19	11:45		0.918						
20	11:54		0.930						
21	12:14		0.956						
22	12:26		0.971						
23	12:40		0.990						
24	12:51		1.004						
25	12:16		0.958						
26	13:09		1.027						
27	13:23		1.046						
28	14:40		1.146						
29	14:59		1.171						
30	10:47	1.00	0.842	1.00	39.78	50.00	0.608	0.764	0.80
31	18:22	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
32	15:41		0.854						
33	16:00		0.871						
34	16:06		0.877						
35	16:32		0.900						
36	17:03		0.928						
37	17:52		0.973						
38	17:46		0.967						
39	18:00		0.980						
40	18:28		1.005						
41	18:24		1.002						
42	18:43		1.019						
43	18:58	1.00	1.033	1.00	0.09	50.00	0.003	1.770	0.00
44	18:58		1.033						
45	19:13		1.046						
46	20:05		1.093						
47	20:08		1.096						
48	20:02	1.00	1.091	1.00	0.12	50.00	0.004	1.781	0.00
49	20:24		1.111						
50	20:29		1.115						

Quantitation Report File: T2579

Data: T2579.TI
05/15/90 3:30:00
Sample: CLP,VERSCDM,2548,MW53,L,W,16690,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: 420.1

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

No	Name
51	C615 N-NITROSODIPHENYLAMINE
52	C625 4-BROMOPHENYL-PHENYLETHER
53	C630 HEXACHLOROBENZENE
54	CS25 2-FLUOROBIPHENYL**BN SURR.**
55	CI60 PHENANTHRENE-D10**INT. STD.#4**
56	C635 PENTACHLOROPHENOL
57	C640 PHENANTHRENE
58	C645 ANTHRACENE
59	C650 DI-N-BUTYLPHTHALATE
60	C655 FLUORANTHENE
61	C715 PYRENE
62	CS55 2,4,6,-TRIBROMOPHENOL**ACID SURR.**
63	CI70 CHRYSENE-D12**INT. STD.#5**
64	C720 BUTYLBENZYLPHTHALATE
65	C730 BENZO(A)ANTHRACENE
66	C740 CHRYSENE
67	C725 3,3'-DICHLOROBENZIDINE
68	C741 BIS(2-ETHYLHEXYL)PHTHALATE
69	CS30 P-TERPHENYL-D14**BN SURR.**
70	CI75 PERYLENE-D12**INT. STD.#6**
71	C760 DI-N-OCTYL PHTHALATE
72	C765 BENZO(B)FLUORANTHENE
73	C770 BENZO(K)FLUORANTHENE
74	C775 BENZO(A)PYRENE
75	C780 INDENO(1,2,3-CD)PYRENE
76	C785 DIBENZ(A,H)ANTHRACENE
77	C790 BENZO(G,H,I)PERYLENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	NOT FOUND								
52	NOT FOUND								
53	NOT FOUND								
54	172	974	16:14	31	0.885	A BB	45902.	32.709 NG*B2	5.82
55	188	1385	23:05	55	1.000	A BV	93060.	40.000 NG/UL	7.12
56	NOT FOUND								
57	178	1389	23:09	55	1.003	A BB	1527.	~~0.589 NG~~	0.10
58	178	1397	23:17	55	1.009	A BB	334.	~~0.131 NG~~	0.02
59	149	1515	25:15	55	1.094	A BB	1622.	~~0.418 NG~~	0.07
60	202	1621	27:01	55	1.170	A BB	979.	~~0.379 NG~~	0.07
61	202	1665	27:45	63	0.875	A BB	1109.	~~0.344 NG~~	0.06
62	330	1255	20:55	31	1.140	A BB	21404.	72.144 NG*A3	12.84
63	240	1902	31:42	63	1.000	A BB	89046.	40.000 NG/UL	7.12
64	NOT FOUND								
65	228	1899	31:39	63	0.998	A BB	352.	~~0.150 NG~~	0.03
66	228	1906	31:46	63	1.002	A BB	369.	~~0.206 NG~~	0.04

T2579

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
67	NOT FOUND								
68	149	1917	31:57	63	1.008	A BB	1591.	BRL ~~0.619 NG~~	0.11
69	244	1702	28:22	63	0.895	A BB	67443.	32.135 NG*B3	5.72
70	264	2212	36:52	70	1.000	A BB	74377.	40.000 NG/UL	7.12
71	NOT FOUND								
72	252	2112	35:12	70	0.955	A BB	172.	BRL ~~0.077 NG~~	0.01
73	NOT FOUND								
74	NOT FOUND								
75	NOT FOUND								
76	NOT FOUND								
77	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	20:34		1.120						
52	21:41		1.181						
53	22:06		1.203						
54	16:15	1.00	0.885	1.00	32.71	50.00	0.838	1.281	0.65
55	23:06	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
56	22:43		0.983						
57	23:11	1.00	1.004	1.00	0.59	50.00	0.013	1.114	0.01
58	23:19	1.00	1.009	1.00	0.13	50.00	0.003	1.092	0.00
59	25:17	1.00	1.095	1.00	0.42	50.00	0.014	1.667	0.01
60	27:04	1.00	1.172	1.00	0.38	50.00	0.008	1.109	0.01
61	27:48	1.00	0.876	1.00	0.34	50.00	0.010	1.446	0.01
62	20:56	1.00	1.140	1.00	72.14	50.00	0.391	0.271	1.44
63	31:45	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
64	30:10		0.950						
65	31:42	1.00	0.998	1.00	0.15	50.00	0.003	1.053	0.00
66	31:50	1.00	1.003	1.00	0.21	50.00	0.003	0.805	0.00
67	31:43		0.999						
68	32:00	1.00	1.008	1.00	0.62	50.00	0.014	1.156	0.01
69	28:23	1.00	0.894	1.00	32.13	50.00	0.606	0.943	0.64
70	36:56	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
71	33:53		0.917						
72	35:17	1.00	0.955	1.00	0.08	50.00	0.002	1.200	0.00
73	35:23		0.958						
74	36:40		0.993						
75	43:01		1.165						
76	43:13		1.170						
77	44:53		1.215						

Quantitation Report File: QCREF

Data: T2579.TI
05/15/90 3:30:00
Sample: CLP,VERSCDM,2548,MW53,L,W,16690,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	CI40 NAPHTHALENE-D8**INT. STD.#2**
3	CI50 ACENAPHTHENE-D10**INT. STD.#3**
4	CI60 PHENANTHRENE-D10**INT. STD.#4**
5	CI70 CHRYSENE-D12**INT. STD.#5**
6	CI75 PERYLENE-D12**INT. STD.#6**
7	CS50 2-FLUOROPHENOL**ACID SURR.**
8	CS45 PHENOL-D5**ACID SURR.**
9	CS55 2,4,6,-TRIBROMOPHENOL**ACID SURR.**
10	CS20 NITROBENZENE-D5**BN SURR.**
11	CS25 2-FLUOROBIPHENYL**BN SURR.**
12	CS30 P-TERPHENYL-D14**BN SURR.**

Scan	Time	Area(Hght)		Amount		Name
546	9:06	17022.		40.000	NG/UL	CI30 1,4-DICHLOROBENZENE-D4
767	12:47	54501.	90	40.000	NG/UL	CI40 NAPHTHALENE-D8**INT. ST
1101	18:21	43825.		40.000	NG/UL	CI50 ACENAPHTHENE-D10**INT.
1385	23:05	93060.	REC	40.000	NG/UL	CI60 PHENANTHRENE-D10**INT.
1902	31:42	89046.		40.000	NG/UL	CI70 CHRYSENE-D12**INT. STD.
2212	36:52	74377.		40.000	NG/UL	CI75 PERYLENE-D12**INT. STD.
365	6:05	31755.	71	70.911	NG*A1	CS50 2-FLUOROPHENOL**ACID SU
499	8:19	48643.	71	70.574	NG*A2	CS45 PHENOL-D5**ACID SURR.**
1255	20:55	21404.	72	72.144	NG*A3	CS55 2,4,6,-TRIBROMOPHENOL**
646	10:46	41392.	80	39.782	NG*B1	CS20 NITROBENZENE-D5**BN SUR
974	16:14	45902.	65	32.709	NG*B2	CS25 2-FLUOROBIPHENYL**BN SU
1702	28:22	67443.	64	32.135	NG*B3	CS30 P-TERPHENYL-D14**BN SUR

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:07	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	12:48	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
3	18:22	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
4	23:06	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
5	31:45	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
6	36:56	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
7	6:05	1.00	0.667	1.00	70.91	50.00	1.492	1.052	1.42
8	8:19	1.00	0.912	1.00	70.57	50.00	2.286	1.620	1.41
9	20:56	1.00	1.140	1.00	72.14	50.00	0.391	0.271	1.44
10	10:47	1.00	0.842	1.00	39.78	50.00	0.608	0.764	0.80
11	16:15	1.00	0.885	1.00	32.71	50.00	0.838	1.281	0.65
12	28:23	1.00	0.894	1.00	32.13	50.00	0.606	0.943	0.64

Quantitation Report File: ISREF

Data: T2569.TI
05/14/90 17:42:00
Sample: CLP,,,SSTD50,,,22658,B,IC50,,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: --

Data: T2579.TI
05/15/90 3:30:00
Sample: CLP,VERSCDM,2548,MW53,L,W,16690,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
3	CI40 NAPHTHALENE-D8**INT. STD.#2**
4	CI40 NAPHTHALENE-D8**INT. STD.#2**
5	CI50 ACENAPHTHENE-D10**INT. STD.#3**
6	CI50 ACENAPHTHENE-D10**INT. STD.#3**
7	CI60 PHENANTHRENE-D10**INT. STD.#4**
8	CI60 PHENANTHRENE-D10**INT. STD.#4**
9	CI70 CHRYSENE-D12**INT. STD.#5**
10	CI70 CHRYSENE-D12**INT. STD.#5**
11	CI75 PERYLENE-D12**INT. STD.#6**
12	CI75 PERYLENE-D12**INT. STD.#6**

Scan	Time	Area(Hght)	Amount	Name
547	9:07	15621.	40.000 NG/UL	CI30 1,4-DICHLOROBENZENE-D4
546	9:06	17022.✓	43.587 NG/UL	CI30 1,4-DICHLOROBENZENE-D4
768	12:48	52080.	40.000 NG/UL	CI40 NAPHTHALENE-D8**INT. ST
767	12:47	54501.✓	41.859 NG/UL	CI40 NAPHTHALENE-D8**INT. ST
1102	18:22	37455.	40.000 NG/UL	CI50 ACENAPHTHENE-D10**INT.
1101	18:21	43825.✓	46.803 NG/UL	CI50 ACENAPHTHENE-D10**INT.
1386	23:06	75538.	40.000 NG/UL	CI60 PHENANTHRENE-D10**INT.
1385	23:05	93060.✓	49.278 NG/UL	CI60 PHENANTHRENE-D10**INT.
1905	31:45	56496.	40.000 NG/UL	CI70 CHRYSENE-D12**INT. STD.
1902	31:42	89046.✓	63.046 NG/UL	CI70 CHRYSENE-D12**INT. STD.
2216	36:56	45334.	40.000 NG/UL	CI75 PERYLENE-D12**INT. STD.
2212	36:52	74377. ✓	65.626 NG/UL	CI75 PERYLENE-D12**INT. STD.

Library Search Data: T2579 # 323 Base m/z: 43
05/15/90 3:30:00 + 5:23 Cali: T2579 # 2 RIC: 23903
Sample: CLP,VERSCDM,2548,MW53,L,W,16690,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
121 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	806	HYDROPEROXIDE, 1,1-DIMETHYLETHYL
2	2776	2-PENTANOL, 2,4-DIMETHYL-
3	2777	2-HEXANOL, 2-METHYL-
4	1334	OXIRANE, TETRAMETHYL-
5	1349	OXEPANE, 2,2,4-TRIMETHYL-

B

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C4.H10.O2	90	59	758	873	765
2	C7.H16.O	116	59	750	782	750
3	C7.H16.O	116	59	692	734	704
4	C6.H12.O	100	59	685	810	707
5	C6.H12.O	100	43	678	776	704

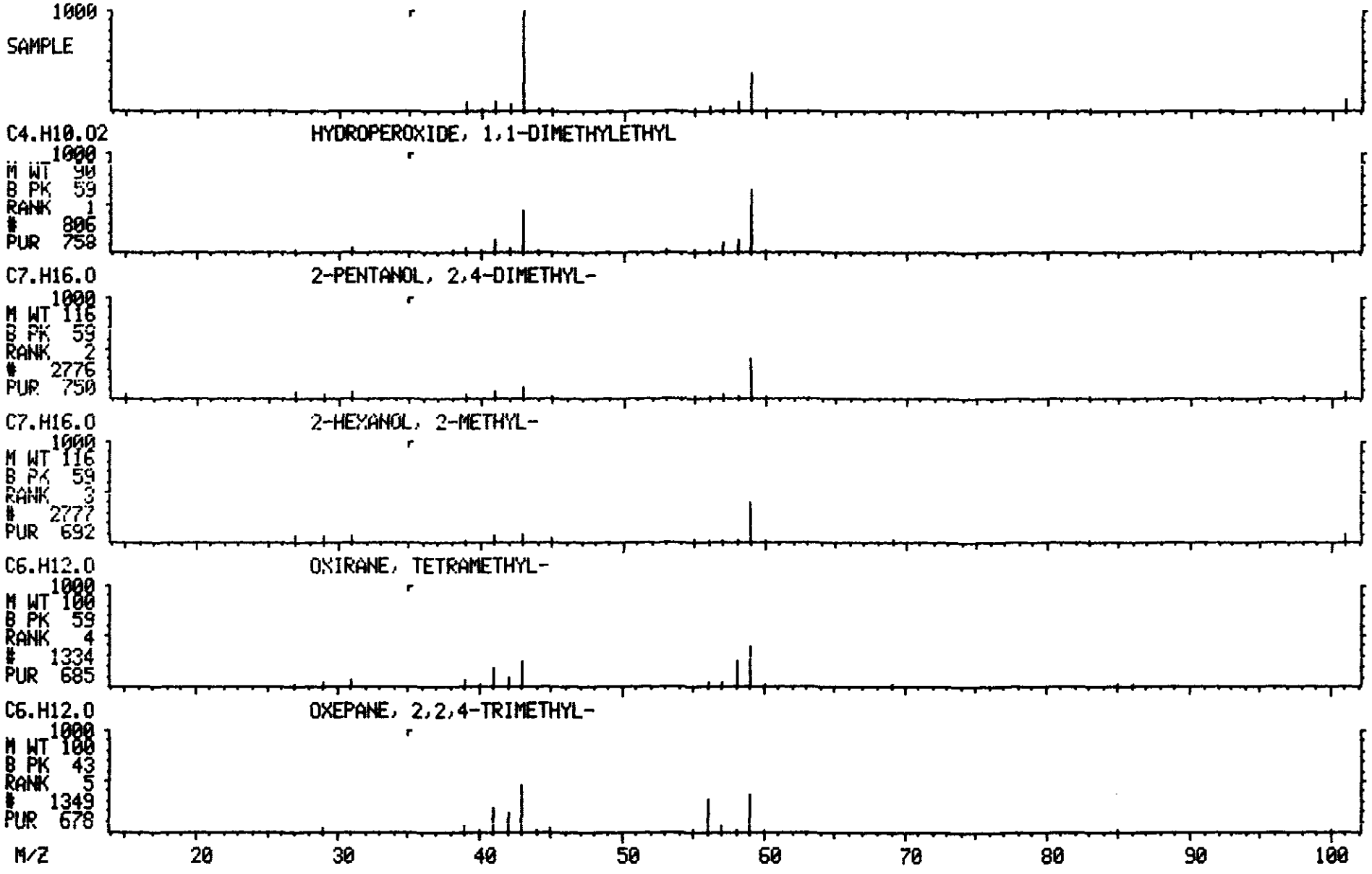
Rank	Ret. Time	B.P. Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	75-91-2
2	—	—	—	—	625-06-9
3	—	—	—	—	625-23-0
4	—	—	—	—	5076-20-0
5	—	—	—	—	23120-44-7

LIBRARY SEARCH
05/15/90 3:30:00 + 5:23
SAMPLE: CLP,VERSCOM,2549,MW53,L,W,16690,B,,420.1 B#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN038C TO 30208C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2579 # 323
CALI: T2579 # 2

BASE M/Z: 43
RIC: 23903.

100077



Library Search Data: T2579 # 346 Base m/z: 39
05/15/90 3:30:00 + 5:46 Cali: T2579 # 2 RIC: 6927.
Sample: CLP,VERSCDM,2548,MW53,L,W,16690,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
69 matched at least 8 of the 16 largest peaks in the unknown

Rank	In.	Name
1	1076	1-PROPENE, 3,3'-OXYBIS-
2	1111	2-HEXENAL, (E)-
3	2216	2-HEPTENAL, (Z)-
4	2186	4-PENTENAL, 2,2-DIMETHYL-
5	1163	1-HEXENE, 5-METHYL-

B

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C6.H10.O	98	41	767	874	795
2	C6.H10.O	98	41	747	884	806
3	C7.H12.O	112	41	699	850	744
4	C7.H12.O	112	55	644	787	677
5	C7.H14	98	56	641	715	641

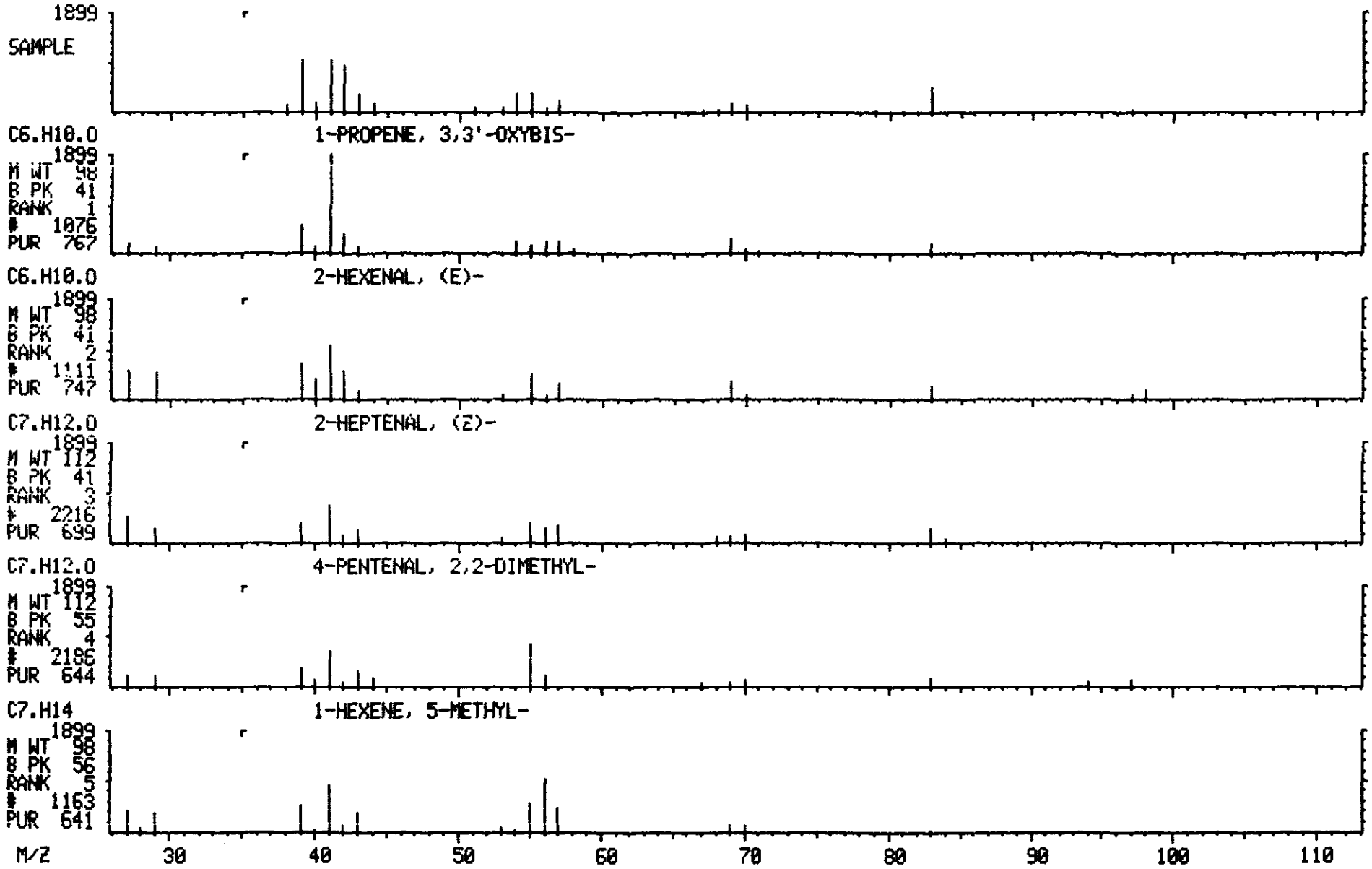
Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	557-40-4
2	—	—	—	—	6728-26-3
3	—	—	—	—	57266-86-1
4	—	—	—	—	5497-67-6
5	—	—	—	—	3524-73-0

LIBRARY SEARCH
05/15/90 3:30:00 + 5:46
SAMPLE: CLP,VERSCDM,2542,MW53,L,W,16690,B,,420.1 B#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30208C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2579 # 346
CALI: T2579 # 2

BASE M/Z: 39
RIC: 8927.

100079



Library Search Data: T2579 #1136 Base m/z: 64
05/15/90 3:30:00 + 18:56 Cali: T2579 # 2 RIC: 4831.
Sample: CLP,VERSCDM,2548,MW53,L,W,16690,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
57 matched at least 3 of the 9 largest peaks in the unknown

Rank	In.	Name
1	141	SULFUR DIOXIDE (ACN)(DOT)
2	24507	SULFUR, MOL. (S8)
3	1761	PROPANOIC ACID, 2-CHLORO-
4	25477	MANEB (ACN)
5	15196	BENZENE, 1,4-DIISOTHIOCYANATO-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	O2.S	64	64	468	719	641
2	S8	256	64	333	344	732
3	C3.H5.O2.CL	108	64	282	434	559
4	C4.H6.N2.S4.MN	265	64	251	282	685
5	C8.H4.N2.S2	192	192	218	263	378

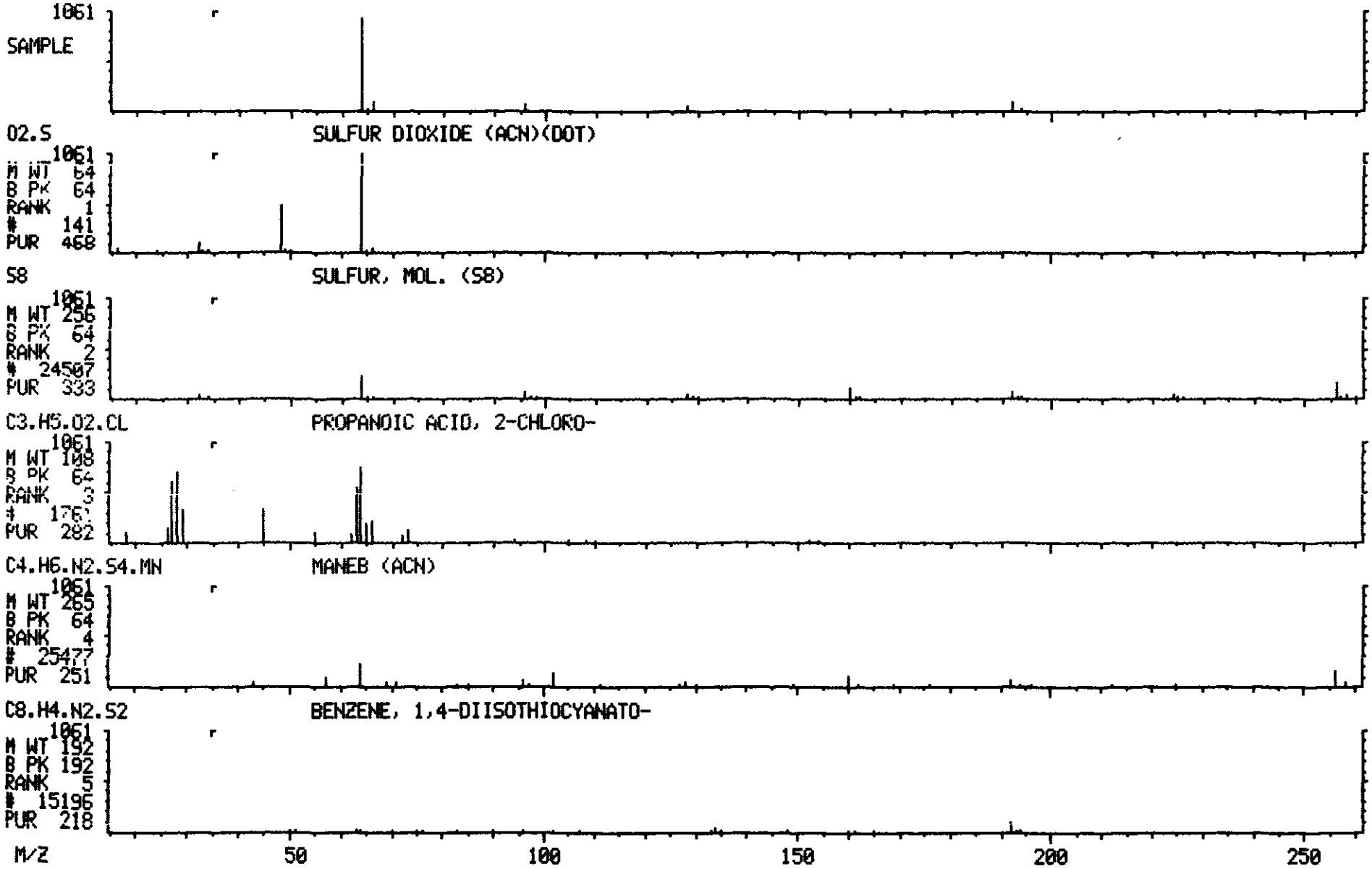
Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	7446-09-5
2	—	—	—	—	10544-50-0
3	—	—	—	—	598-78-7
4	—	—	—	—	12427-38-2
5	—	—	—	—	4044-65-9

LIBRARY SEARCH
05/15/90 3:30:00 + 18:56
SAMPLE: CLP,VERSCOM,2548,MW53,L,W,16690,B,,420.1 B#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN038C TO 302C8C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2579 #1136
CALI: T2579 # 2

BASE M/Z: 64
RIC: 4831.

100081



```
        >>>>INTERNAL STANDARD RIC REPORT<<<<
*****************************INTERNAL STANDARD#1*****************RIC
Mass List                      Data: T2579 # 546          Base m/z:  150
05/15/90  3:30:00 +  9:06     Cali: T2579 #   2          RIC:      61248.
Sample: CLP,VERSCDM,2548,MW53,L,W,16690,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     35       0.00   0.00        0. Minima     Min inten:      0.
     30                      *   0  Maxima
*****************************INTERNAL STANDARD#2*****************RIC
Mass List                      Data: T2579 # 767          Base m/z:  136
05/15/90  3:30:00 + 12:47     Cali: T2579 #   2          RIC:      70400.
Sample: CLP,VERSCDM,2548,MW53,L,W,16690,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38       0.00   0.00        0. Minima     Min inten:      0.
     30                      *   0  Maxima
*****************************INTERNAL STANDARD#3*****************RIC
Mass List                      Data: T2579 #1101          Base m/z:  164
05/15/90  3:30:00 + 18:21     Cali: T2579 #   2          RIC:      67584.
Sample: CLP,VERSCDM,2548,MW53,L,W,16690,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38       0.00   0.00        0. Minima     Min inten:      0.
     30                      *   0  Maxima
*****************************INTERNAL STANDARD#4*****************RIC
Mass List                      Data: T2579 #1385          Base m/z:  188
05/15/90  3:30:00 + 23:05     Cali: T2579 #   2          RIC:      87808.
Sample: CLP,VERSCDM,2548,MW53,L,W,16690,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38       0.00   0.00        0. Minima     Min inten:      0.
     30                      *   0  Maxima
*****************************INTERNAL STANDARD#5*****************RIC
Mass List                      Data: T2579 #1902          Base m/z:  240
05/15/90  3:30:00 + 31:42     Cali: T2579 #   2          RIC:      78464.
Sample: CLP,VERSCDM,2548,MW53,L,W,16690,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     35       0.00   0.00        0. Minima     Min inten:      0.
     30                      *   0  Maxima
*****************************INTERNAL STANDARD#6*****************RIC
Mass List                      Data: T2579 #2212          Base m/z:  264
05/15/90  3:30:00 + 36:52     Cali: T2579 #   2          RIC:      43904.
Sample: CLP,VERSCDM,2548,MW53,L,W,16690,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     36       0.00   0.00        0. Minima     Min inten:      0.
     30                      *   0  Maxima
     ANALYST: CHECK BASE M/Z AND RIC AMOUNT TO INSURE NO CONTAMINATION
```

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW79

La' Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16691

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2580

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/15/90

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	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
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	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
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	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
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	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	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.

MW79

La Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16691

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2580

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/15/90

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	50	U
100-02-7	4-Nitrophenol	50	U
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
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
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

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW79

La Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16691

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2580

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/15/90

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

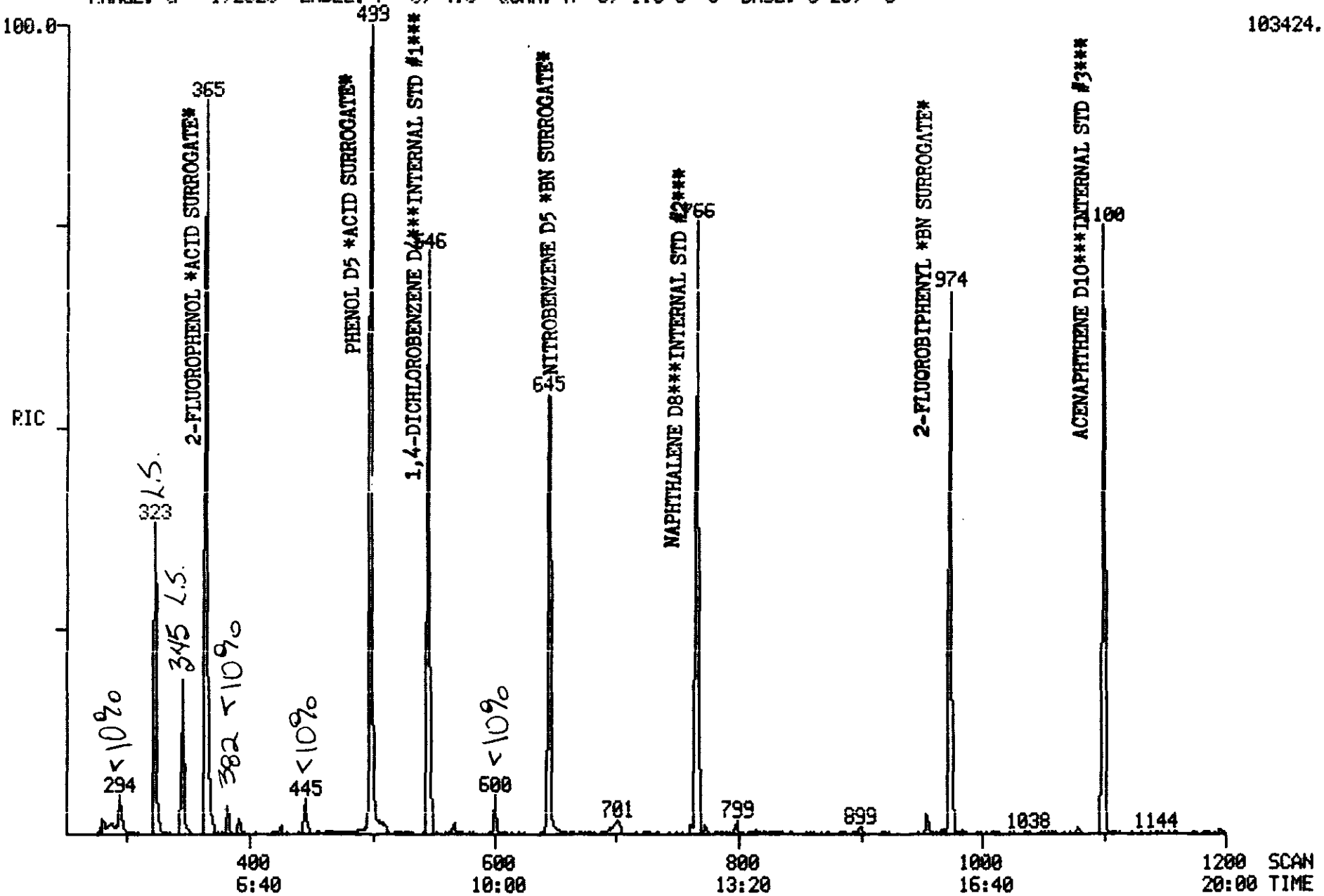
Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.38	40	BJ
2.	UNKNOWN	5.75	20	BJ

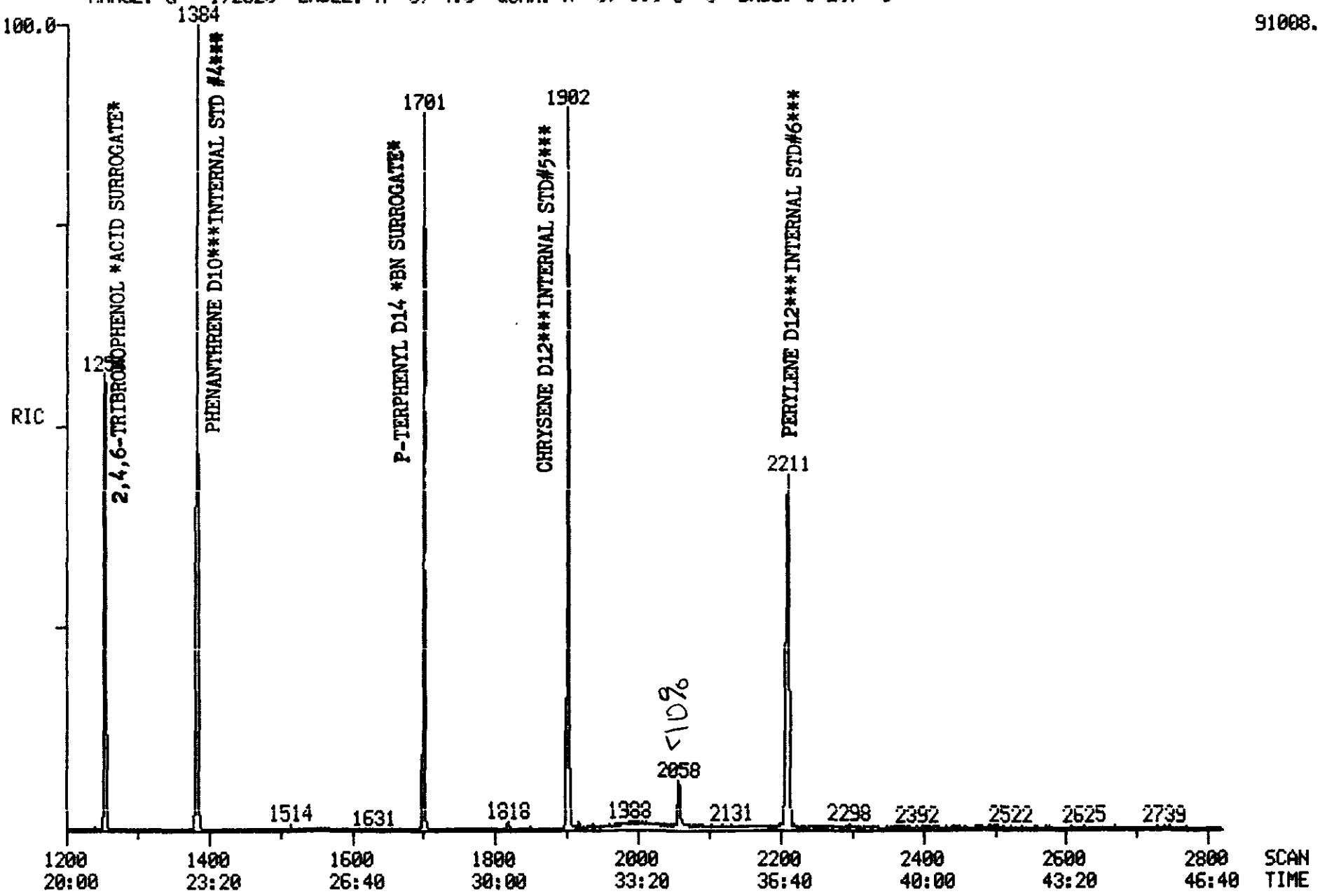
RIC
05/15/90 4:24:00
DATA: T2580 #1
CALI: T2580 #2
SCANS 250 TO 1200
SAMPLE: CLP,VERSCOM,2548,MW79,L,W,16691,6,,420.1 B#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302C@8C/MIN
RANGE: G 1,2820 LABEL: A 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

100086



RIC DATA: T2580 #1 SCANS 1200 TO 2820
05/15/90 4:24:00 CALI: T2580 #2
SAMPLE: CLP,VEPSCDM,2548,MW79,L,W,16691,B,,420.1 B#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
RANGE: G 1,2820 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

100087



Quantitation Report File: T2580

Data: T2580.TI
05/15/90 4:24:00
Sample: CLP,VERSCDM,2548,MW79,L,W,16691,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	C330 2-CHLOROPHENOL
3	C315 PHENOL
4	C325 BIS (2-CHLOROETHYL) ETHER
5	C335 1,3-DICHLOROBENZENE
6	C340 1,4-DICHLOROBENZENE
7	C350 1,2-DICHLOROBENZENE
8	C345 BENZYL ALCOHOL
9	C360 BIS (2-CHLOROISOPROPYL) ETHER
10	C355 2-METHYLPHENOL
11	C375 HEXACHLOROETHANE
12	C365 4-METHYLPHENOL
13	C370 N-NITROSO-DI-N-PROPYLAMINE
14	CS50 2-FLUOROPHENOL**ACID SURR.**
15	CS45 PHENOL-D5**ACID SURR.**
16	CI40 NAPHTHALENE-D8**INT. STD.#2**
17	C410 NITROBENZENE
18	C415 ISOPHORONE
19	C420 2-NITROPHENOL
20	C425 2,4-DIMETHYLPHENOL
21	C435 BIS (2-CHLOROETHOXY) METHANE
22	C440 2,4-DICHLOROPHENOL
23	C445 1,2,4-TRICHLOROBENZENE
24	C450 NAPHTHALENE
25	C430 BENZOIC ACID
26	C455 4-CHLOROANILINE
27	C460 HEXACHLOROBUTADIENE
28	C465 4-CHLORO-3-METHYLPHENOL
29	C470 2-METHYLNAPHTHALENE
30	CS20 NITROBENZENE-D5**BN SURR.**
31	CI50 ACENAPHTHENE-D10**INT. STD.#3**
32	C510 HEXACHLOROCYCLOPENTADIENE
33	C515 2,4,6-TRICHLOROPHENOL
34	C520 2,4,5-TRICHLOROPHENOL
35	C525 2-CHLORONAPHTHALENE
36	C530 2-NITROANILINE
37	C540 ACENAPHTHYLENE
38	C535 DIMETHYL PHTHALATE
39	C544 2,6-DINITROTOLUENE
40	C550 ACENAPHTHENE
41	C545 3-NITROANILINE
42	C555 2,4-DINITROPHENOL
43	C565 DIBENZOFURAN
44	C560 4-NITROPHENOL
45	C570 2,4-DINITROTOLUENE
46	C590 FLUORENE
47	C585 4-CHLOROPHENYL-PHENYLETHER

DB 5/22/90

All IS areas + Sunogate recoveries are compliant. SJD 5-15-90

Ready for forms SJD 5-15-90

100088

T2580

No	Name
48	C580 DIETHYLPHTHALATE
49	C595 4-NITROANILINE
50	C610 4,6-DINITRO-2-METHYLPHENOL

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	546	9:06	1	1.000	A BB	17451.	40.000 NG/UL	7.65
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	112	365	6:05	1	0.668	A BB	29677.	64.641 NG*A1	12.37
15	99	498	8:18	1	0.912	A BB	45190.	63.952 NG*A2	12.24
16	136	766	12:46	16	1.000	A BB	54579.	40.000 NG/UL	7.65
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
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	82	645	10:45	16	0.842	A BB	41108.	39.452 NG*B1	7.55
31	164	1100	18:20	31	1.000	A BB	41706.	40.000 NG/UL	7.65
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	NOT FOUND								
49	NOT FOUND								
50	NOT FOUND								

T2580

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	9:07	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	8:39		0.949						
3	8:21		0.916						
4	8:35		0.941						
5	9:00		0.987						
6	9:09		1.004						
7	9:40		1.060						
8	9:35		1.051						
9	10:01		1.099						
10	9:57		1.091						
11	10:29		1.150						
12	10:22		1.137						
13	10:26		1.144						
14	6:05	1.00	0.667	1.00	64.64	50.00	1.360	1.052	1.29
15	8:19	1.00	0.912	1.00	63.95	50.00	2.072	1.620	1.28
16	12:48	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
17	10:50		0.846						
18	11:29		0.897						
19	11:45		0.918						
20	11:54		0.930						
21	12:14		0.956						
22	12:26		0.971						
23	12:40		0.990						
24	12:51		1.004						
25	12:16		0.958						
26	13:09		1.027						
27	13:23		1.046						
28	14:40		1.146						
29	14:59		1.171						
30	10:47	1.00	0.842	1.00	39.45	50.00	0.603	0.764	0.79
31	18:22	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
32	15:41		0.854						
33	16:00		0.871						
34	16:06		0.877						
35	16:32		0.900						
36	17:03		0.928						
37	17:52		0.973						
38	17:46		0.967						
39	18:00		0.980						
40	18:28		1.005						
41	18:24		1.002						
42	18:43		1.019						
43	18:58		1.033						
44	18:58		1.033						
45	19:13		1.046						
46	20:05		1.093						
47	20:08		1.096						
48	20:02		1.091						
49	20:24		1.111						
50	20:29		1.115						

Quantitation Report File: T2580

Data: T2580.TI
05/15/90 4:24:00
Sample: CLP,VERSCDM,2548,MW79,L,W,16691,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: 420.1

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

No	Name
51	C615 N-NITROSODIPHENYLAMINE
52	C625 4-BROMOPHENYL-PHENYLETHER
53	C630 HEXACHLOROBENZENE
54	CS25 2-FLUOROBIPHENYL**BN SURR.**
55	CI60 PHENANTHRENE-D10**INT. STD.#4**
56	C635 PENTACHLOROPHENOL
57	C640 PHENANTHRENE
58	C645 ANTHRACENE
59	C650 DI-N-BUTYLPHTHALATE
60	C655 FLUORANTHENE
61	C715 PYRENE
62	CS55 2,4,6,-TRIBROMOPHENOL**ACID SURR.**
63	CI70 CHRYSENE-D12**INT. STD.#5**
64	C720 BUTYLBENZYLPHTHALATE
65	C730 BENZO(A)ANTHRACENE
66	C740 CHRYSENE
67	C725 3,3'-DICHLOROBENZIDINE
68	C741 BIS(2-ETHYLHEXYL)PHTHALATE
69	CS30 P-TERPHENYL-D14**BN SURR.**
70	CI75 PERYLENE-D12**INT. STD.#6**
71	C760 DI-N-OCTYL PHTHALATE
72	C765 BENZO(B)FLUORANTHENE
73	C770 BENZO(K)FLUORANTHENE
74	C775 BENZO(A)PYRENE
75	C780 INDENO(1,2,3-CD)PYRENE
76	C785 DIBENZ(A,H)ANTHRACENE
77	C790 BENZO(G,H,I)PERYLENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	NOT FOUND								
52	NOT FOUND								
53	NOT FOUND								
54	172	974	16:14	31	0.885	A BB	43150.	32.310 NG*B2	6.18
55	188	1384	23:04	55	1.000	A BB	86287.	40.000 NG/UL	7.65
56	NOT FOUND								
57	NOT FOUND								
58	NOT FOUND								
59	149	1514	25:14	55	1.094	A BB	1176.	BRL ~~0.327 NG~~	0.06
60	NOT FOUND								
61	NOT FOUND								
62	330	1254	20:54	31	1.140	A BB	13518.	47.879 NG*A3	9.16
63	240	1902	31:42	63	1.000	A BB	75749.	40.000 NG/UL	7.65
64	NOT FOUND								
65	NOT FOUND								
66	NOT FOUND								

T2580

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
67	NOT FOUND								
68	149	1917	31:57	63	1.008	A BB	473.	BRL ~~0.216 NG~~	0.04
69	244	1701	28:21	63	0.894	A BB	60651.	33.971 NG*B3	6.50
70	264	2211	36:51	70	1.000	A BB	66408.	40.000 NG/UL	7.65
71	NOT FOUND								
72	NOT FOUND								
73	NOT FOUND								
74	NOT FOUND								
75	NOT FOUND								
76	NOT FOUND								
77	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	20:34		1.120						
52	21:41		1.181						
53	22:06		1.203						
54	16:15	1.00	0.885	1.00	32.31	50.00	0.828	1.281	0.65
55	23:06	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
56	22:43		0.983						
57	23:11		1.004						
58	23:19		1.009						
59	25:17	1.00	1.095	1.00	0.33	50.00	0.011	1.667	0.01
60	27:04		1.172						
61	27:48		0.876						
62	20:56	1.00	1.140	1.00	47.68	50.00	0.259	0.271	0.96
63	31:45	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
64	30:10		0.950						
65	31:42		0.998						
66	31:50		1.003						
67	31:43		0.999						
68	32:00	1.00	1.008	1.00	0.22	50.00	0.005	1.156	0.00
69	28:23	1.00	0.894	1.00	33.97	50.00	0.641	0.943	0.68
70	36:56	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
71	33:53		0.917						
72	35:17		0.955						
73	35:23		0.958						
74	36:40		0.993						
75	43:01		1.165						
76	43:13		1.170						
77	44:53		1.215						

Quantitation Report File: QCREF

Data: T2580.TI
05/15/90 4:24:00
Sample: CLP,VERSCDM,2548,MW79,L,W,16691,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	CI40 NAPHTHALENE-D8**INT. STD.#2**
3	CI50 ACENAPHTHENE-D10**INT. STD.#3**
4	CI60 PHENANTHRENE-D10**INT. STD.#4**
5	CI70 CHRYSENE-D12**INT. STD.#5**
6	CI75 PERYLENE-D12**INT. STD.#6**
7	CS50 2-FLUOROPHENOL**ACID SURR.**
8	CS45 PHENOL-D5**ACID SURR.**
9	CS55 2,4,6,-TRIBROMOPHENOL**ACID SURR.**
10	CS20 NITROBENZENE-D5**BN SURR.**
11	CS25 2-FLUOROBIPHENYL**BN SURR.**
12	CS30 P-TERPHENYL-D14**BN SURR.**

Scan	Time	Area(Hght)	Amount	Name
546	9:06	17451. 90	40.000 NG/UL	CI30 1,4-DICHLOROBENZENE-D4
766	12:46	54579.	40.000 NG/UL	CI40 NAPHTHALENE-D8**INT. ST
1100	18:20	41706. Rec	40.000 NG/UL	CI50 ACENAPHTHENE-D10**INT.
1384	23:04	86287.	40.000 NG/UL	CI60 PHENANTHRENE-D10**INT.
1902	31:42	75749.	40.000 NG/UL	CI70 CHRYSENE-D12**INT. STD.
2211	36:51	66408.	40.000 NG/UL	CI75 PERYLENE-D12**INT. STD.
365	6:05	29677. 64	64.641 NG*A1	CS50 2-FLUOROPHENOL**ACID SU
498	8:18	45190. 64	63.952 NG*A2	CS45 PHENOL-D5**ACID SURR.**
1254	20:54	13518. 48	47.879 NG*A3	CS55 2,4,6,-TRIBROMOPHENOL**
645	10:45	41108. 79	39.452 NG*B1	CS20 NITROBENZENE-D5**BN SUR
974	16:14	43150. 65	32.310 NG*B2	CS25 2-FLUOROBIPHENYL**BN SU
1701	28:21	60651. 68	33.971 NG*B3	CS30 P-TERPHENYL-D14**BN SUR

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:07	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	12:48	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
3	18:22	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
4	23:06	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
5	31:45	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
6	36:56	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
7	6:05	1.00	0.667	1.00	64.64	50.00	1.360	1.052	1.29
8	8:19	1.00	0.912	1.00	63.95	50.00	2.072	1.620	1.28
9	20:56	1.00	1.140	1.00	47.88	50.00	0.259	0.271	0.96
10	10:47	1.00	0.842	1.00	39.45	50.00	0.603	0.764	0.79
11	16:15	1.00	0.885	1.00	32.31	50.00	0.828	1.281	0.65
12	28:23	1.00	0.894	1.00	33.97	50.00	0.641	0.943	0.68

Quantitation Report File: ISREF

Data: T2569.TI
05/14/90 17:42:00
Sample: CLP,,,SSTD50,,,22658,B,IC50,,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: --

Data: T2580.TI
05/15/90 4:24:00
Sample: CLP,VERSCDM,2548,MW79,L,W,16691,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
3	CI40 NAPHTHALENE-D8**INT. STD. #2**
4	CI40 NAPHTHALENE-D8**INT. STD. #2**
5	CI50 ACENAPHTHENE-D10**INT. STD. #3**
6	CI50 ACENAPHTHENE-D10**INT. STD. #3**
7	CI60 PHENANTHRENE-D10**INT. STD. #4**
8	CI60 PHENANTHRENE-D10**INT. STD. #4**
9	CI70 CHRYSENE-D12**INT. STD. #5**
10	CI70 CHRYSENE-D12**INT. STD. #5**
11	CI75 PERYLENE-D12**INT. STD. #6**
12	CI75 PERYLENE-D12**INT. STD. #6**

Scan	Time	Area(Hght)	Amount	Name
547	9:07	15621.	40.000 NG/UL	CI30 1,4-DICHLOROBENZENE-D4
546	9:06	17451. ✓	44.686 NG/UL	CI30 1,4-DICHLOROBENZENE-D4
768	12:48	52080.	40.000 NG/UL	CI40 NAPHTHALENE-D8**INT. ST
766	12:46	54579. ✓	41.919 NG/UL	CI40 NAPHTHALENE-D8**INT. ST
1102	18:22	37455.	40.000 NG/UL	CI50 ACENAPHTHENE-D10**INT.
1100	18:20	41706. ✓	44.540 NG/UL	CI50 ACENAPHTHENE-D10**INT.
1386	23:06	75538.	40.000 NG/UL	CI60 PHENANTHRENE-D10**INT.
1384	23:04	86287. ✓	45.692 NG/UL	CI60 PHENANTHRENE-D10**INT.
1905	31:45	56496.	40.000 NG/UL	CI70 CHRYSENE-D12**INT. STD.
1902	31:42	75749. ✓	53.631 NG/UL	CI70 CHRYSENE-D12**INT. STD.
2216	36:56	45334.	40.000 NG/UL	CI75 PERYLENE-D12**INT. STD.
2211	36:51	66408. ✓	58.594 NG/UL	CI75 PERYLENE-D12**INT. STD.

Library Search Data: T2580 # 323 Base m/z: 43
05/15/90 4:24:00 + 5:23 Cali: T2580 # 2 RIC: 31615.
Sample: CLP,VERSCDM,2548,MW79,L,W,16691,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYN8 searched for maximum PURITY
121 matched at least 7 of the 16 largest peaks in the unknown

B

Rank	In.	Name
1	806	HYDROPEROXIDE, 1,1-DIMETHYLETHYL
2	2776	2-PENTANOL, 2,4-DIMETHYL-
3	2777	2-HEXANOL, 2-METHYL-
4	1334	OXIRANE, TETRAMETHYL-
5	1349	OXEPANE, 2,2,4-TRIMETHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C4.H10.O2	90	59	754	872	761
2	C7.H16.O	116	59	746	781	716
3	C7.H16.O	116	59	688	734	700
4	C6.H12.O	100	59	680	807	704
5	C6.H12.O	100	43	674	775	701

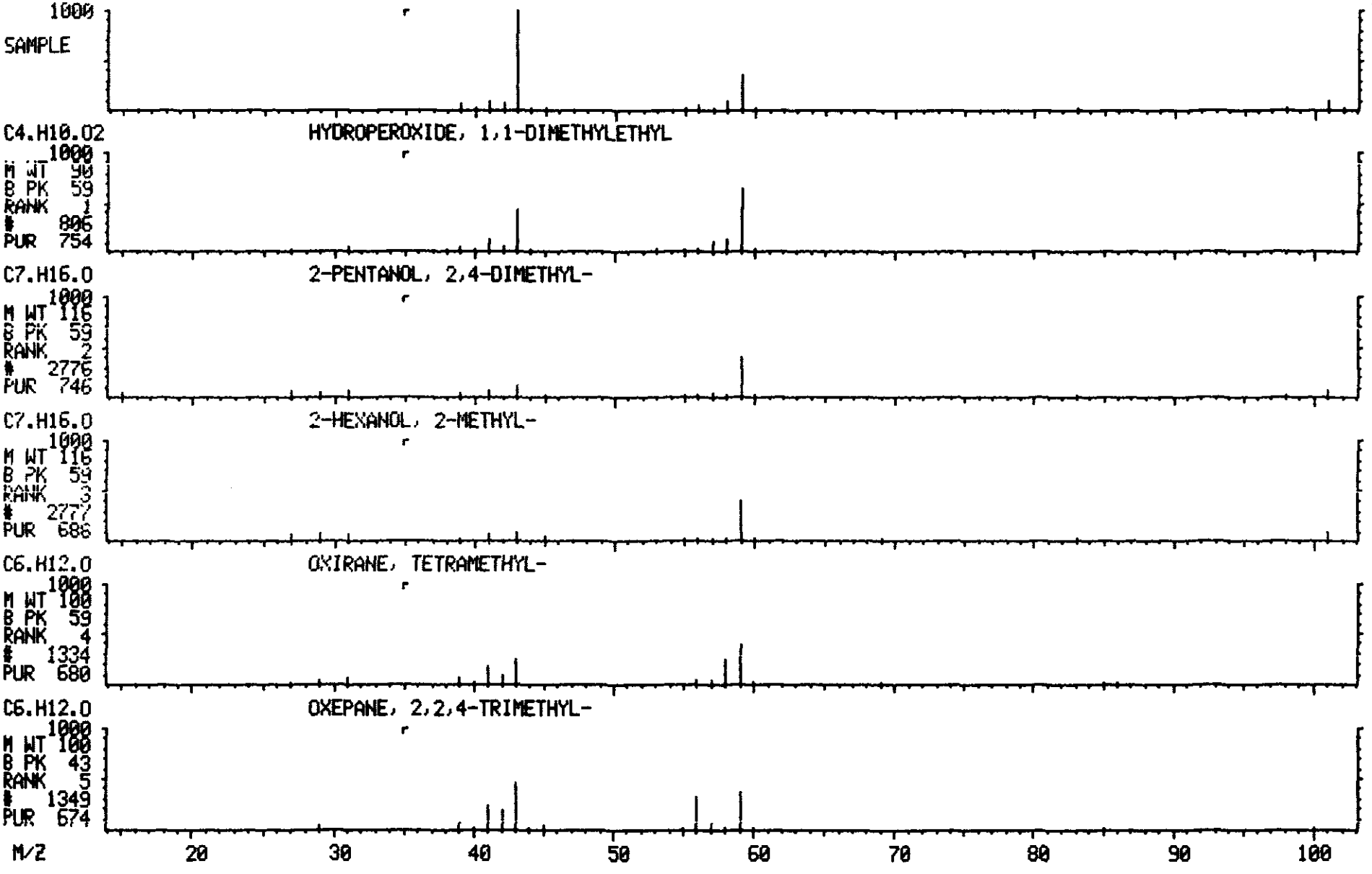
Rank	Ret. Time	B.P. Int.	US. Par. 1	US. Par. 2	C.A.S. #
1	—	—	—	—	75-91-2
2	—	—	—	—	625-06-9
3	—	—	—	—	625-23-0
4	—	—	—	—	5076-20-0
5	—	—	—	—	23120-44-7

LIBRARY SEARCH
05/15/90 4:24:00 + 5:23
SAMPLE: CLP,VEPSCOM,2548,MWF9,L,W,16691,B,,420.1 B#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30208C/MIN
ENHANCED (S 15R 2N 0T)

DATA: T2580 # 323
CALI: T2580 # 2

BASE M/Z: 43
RIC: 31615.

100096



Library Search Data: T2580 # 345 Base m/z: 41
05/15/90 4:24:00 + 5:45 Cali: T2580 # 2 RIC: 15119.
Sample: CLP,VERSCDM,2548,MW79,L,W,16691,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
108 matched at least 8 of the 16 largest peaks in the unknown

B

Rank	In.	Name
1	1076	1-PROPENE, 3,3'-OXYBIS-
2	1111	2-HEXENAL, (E)-
3	2216	2-HEPTENAL, (Z)-
4	2186	4-PENTENAL, 2,2-DIMETHYL-
5	1153	CYCLOPENTANE, 1,1-DIMETHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C6.H10.O	98	41	776	877	804
2	C6.H10.O	98	41	761	881	827
3	C7.H12.O	112	41	741	876	763
4	C7.H12.O	112	55	665	793	703
5	C7.H14	98	56	665	786	691

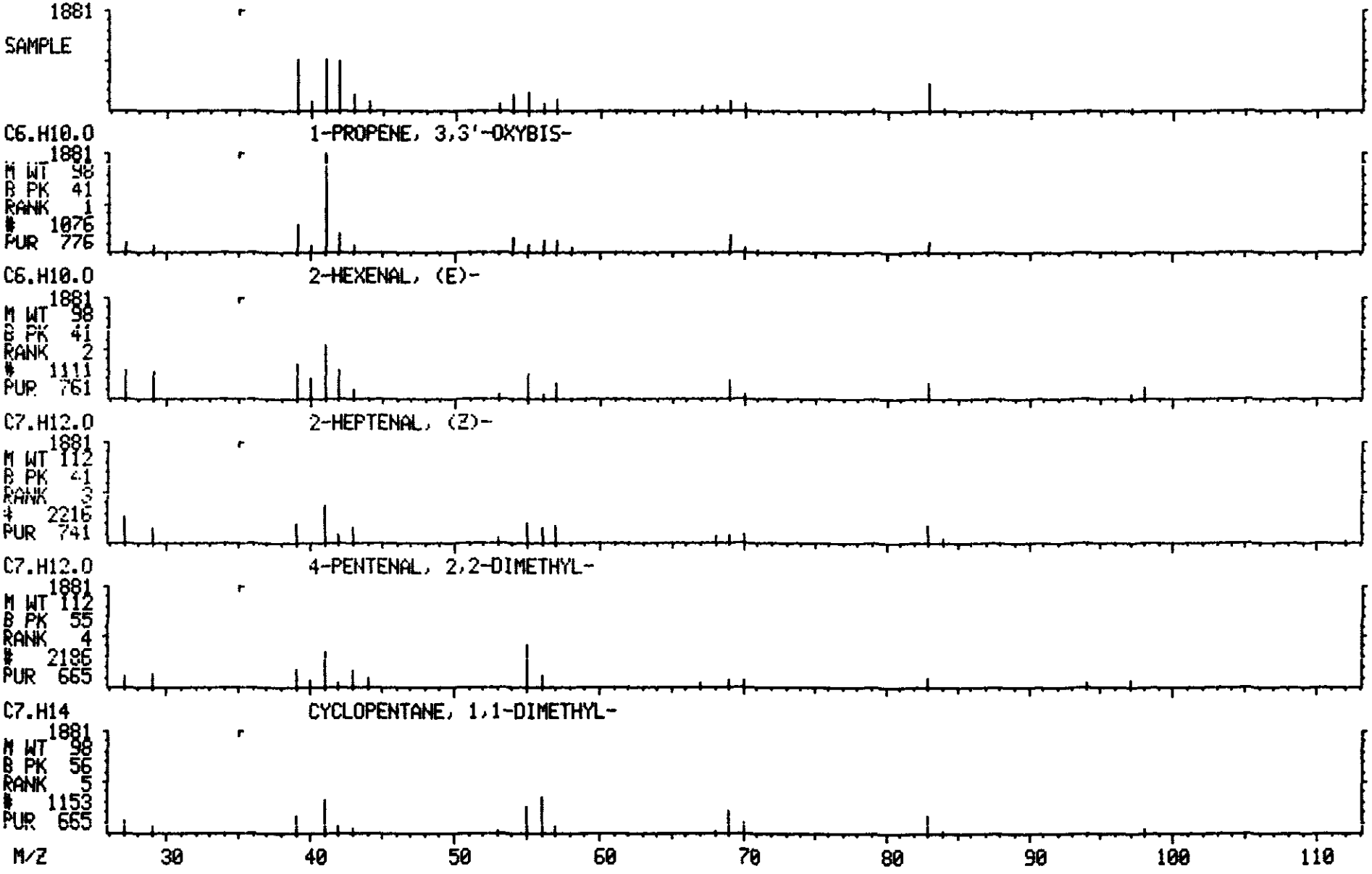
Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	557-40-4
2	—	—	—	—	6728-26-3
3	—	—	—	—	57266-86-1
4	—	—	—	—	5497-67-6
5	—	—	—	—	1638-26-2

LIBRARY SEARCH
05/15/90 4:24:00 + 5:45
SAMPLE: CLP,VERSCOM,2548,MW79,L,W,16631,B,,420.1 B#2,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30208C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2580 # 345
CALI: T2580 # 2

BASE M/Z: 41
RIC: 15119.

100098



```
        >>>>INTERNAL STANDARD RIC REPORT<<<<
*****************************INTERNAL STANDARD#1*****************RIC
Mass List                      Data: T2580 # 546          Base m/z:   150
05/15/90  4:24:00 +  9:06     Cali: T2580 #    2          RIC:      62528.
Sample: CLP,VERSCDM,2548,MW79,L,W,16691,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     35       0.00   0.00        0. Minima     Min inten:       0.
     30                      *   0  Maxima
*****************************INTERNAL STANDARD#2*****************RIC
Mass List                      Data: T2580 # 766          Base m/z:   136
05/15/90  4:24:00 + 12:46     Cali: T2580 #    2          RIC:      69120.
Sample: CLP,VERSCDM,2548,MW79,L,W,16691,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38       0.00   0.00        0. Minima     Min inten:       0.
     30                      *   0  Maxima
*****************************INTERNAL STANDARD#3*****************RIC
Mass List                      Data: T2580 #1100          Base m/z:   164
05/15/90  4:24:00 + 18:20     Cali: T2580 #    2          RIC:      68864.
Sample: CLP,VERSCDM,2548,MW79,L,W,16691,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38       0.00   0.00        0. Minima     Min inten:       0.
     30                      *   0  Maxima
*****************************INTERNAL STANDARD#4*****************RIC
Mass List                      Data: T2580 #1384          Base m/z:   188
05/15/90  4:24:00 + 23:04     Cali: T2580 #    2          RIC:      83840.
Sample: CLP,VERSCDM,2548,MW79,L,W,16691,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38       0.00   0.00        0. Minima     Min inten:       0.
     30                      *   0  Maxima
*****************************INTERNAL STANDARD#5*****************RIC
Mass List                      Data: T2580 #1902          Base m/z:   240
05/15/90  4:24:00 + 31:42     Cali: T2580 #    2          RIC:      73728.
Sample: CLP,VERSCDM,2548,MW79,L,W,16691,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     36       0.00   0.00        0. Minima     Min inten:       0.
     30                      *   0  Maxima
*****************************INTERNAL STANDARD#6*****************RIC
Mass List                      Data: T2580 #2211          Base m/z:   264
05/15/90  4:24:00 + 36:51     Cali: T2580 #    2          RIC:      38912.
Sample: CLP,VERSCDM,2548,MW79,L,W,16691,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     41       0.00   0.00        0. Minima     Min inten:       0.
     30                      *   0  Maxima
     ANALYST: CHECK BASE M/Z AND RIC AMOUNT TO INSURE NO CONTAMINATION
```

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW79A

La' Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16692

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2581

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/15/90

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	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
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	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
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	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
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	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	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.

MW79A

La' Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16692

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2581

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/15/90

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	50	U
100-02-7	4-Nitrophenol	50	U
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
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
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

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW79A

La' Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16692

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2581

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/15/90

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

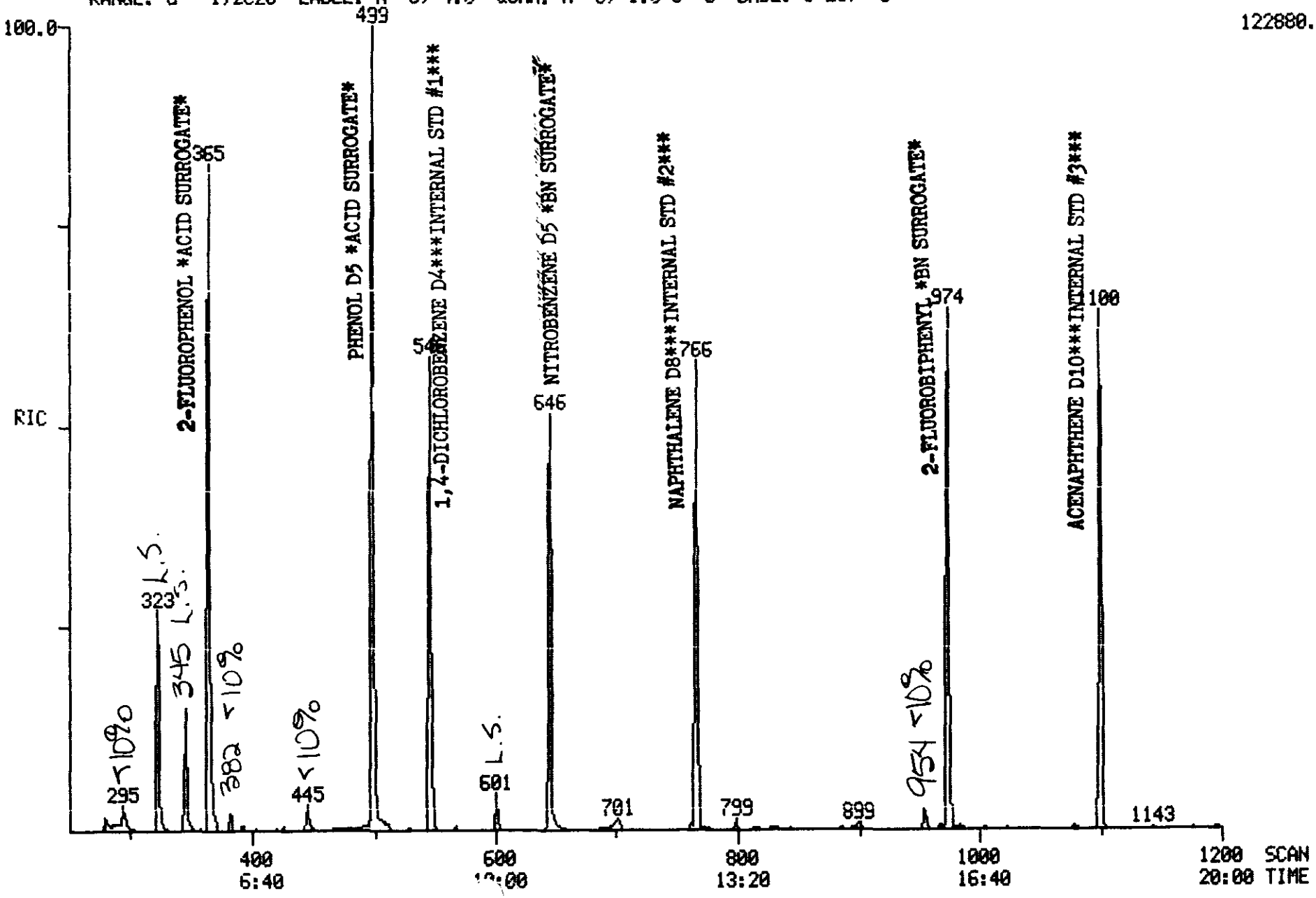
Number TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.38	34	BJ
2.	UNKNOWN	5.75	18	BJ
3.	UNKNOWN	10.02	6.0	BJ

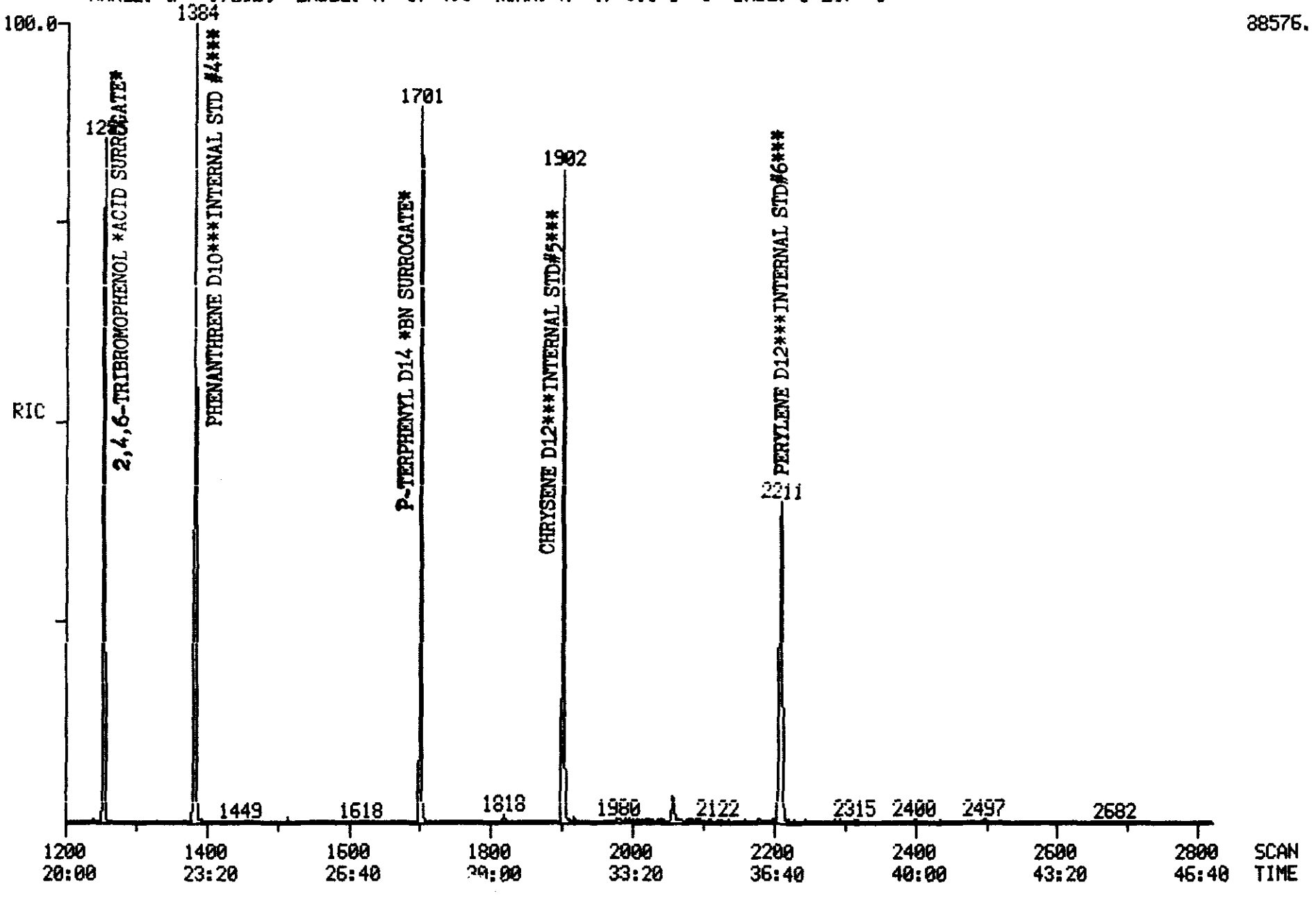
RIC DATA: T2581 #1 SCANS 250 TO 1200
05/15/90 5:18:00 CALI: T2581 #2
SAMPLE: CLP,VERSCOM,2548,MW79A,L,W,16692,B,,420.1 B#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
RANGE: G 1,2020 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

100103



RIC DATA: T2581 #1 SCANS 1200 TO 2820
05/15/90 5:18:00 CALI: T2581 #2
SAMPLE: CLP,VERSCOM,2548,MW79A,L,W,16692,B,,420.1 B#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30208C/MIN
RANGE: G 1,2820 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

100104



Quantitation Report File: T2581

Data: T2581.TI
05/15/90 5:18:00
Sample: CLP,VERSCDM,2548,MW79A,L,W,16692,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	C330 2-CHLOROPHENOL
3	C315 PHENOL
4	C325 BIS (2-CHLOROETHYL) ETHER
5	C335 1,3-DICHLOROBENZENE
6	C340 1,4-DICHLOROBENZENE
7	C350 1,2-DICHLOROBENZENE
8	C345 BENZYL ALCOHOL
9	C360 BIS (2-CHLOROISOPROPYL) ETHER
10	C355 2-METHYLPHENOL
11	C375 HEXACHLOROETHANE
12	C365 4-METHYLPHENOL
13	C370 N-NITROSO-DI-N-PROPYLAMINE
14	CS50 2-FLUOROPHENOL**ACID SURR.**
15	CS45 PHENOL-D5**ACID SURR.**
16	CI40 NAPHTHALENE-D8**INT. STD.#2**
17	C410 NITROBENZENE
18	C415 ISOPHORONE
19	C420 2-NITROPHENOL
20	C425 2,4-DIMETHYLPHENOL
21	C435 BIS (2-CHLOROETHOXY) METHANE
22	C440 2,4-DICHLOROPHENOL
23	C445 1,2,4-TRICHLOROBENZENE
24	C450 NAPHTHALENE
25	C430 BENZOIC ACID
26	C455 4-CHLOROANILINE
27	C460 HEXACHLOROBUTADIENE
28	C465 4-CHLORO-3-METHYLPHENOL
29	C470 2-METHYLNAPHTHALENE
30	CS20 NITROBENZENE-D5**BN SURR.**
31	CI50 ACENAPHTHENE-D10**INT. STD.#3**
32	C510 HEXACHLOROCYCLOPENTADIENE
33	C515 2,4,6-TRICHLOROPHENOL
34	C520 2,4,5-TRICHLOROPHENOL
35	C525 2-CHLORONAPHTHALENE
36	C530 2-NITROANILINE
37	C540 ACENAPHTHYLENE
38	C535 DIMETHYL PHTHALATE
39	C544 2,6-DINITROTOLUENE
40	C550 ACENAPHTHENE
41	C545 3-NITROANILINE
42	C555 2,4-DINITROPHENOL
43	C565 DIBENZOFURAN
44	C560 4-NITROPHENOL
45	C570 2,4-DINITROTOLUENE
46	C590 FLUORENE
47	C585 4-CHLOROPHENYL-PHENYLETHER

✓ 5/22/90

All IS areas + Surrogate recoveries are compliant.
SJO
5-15-90

Ready for forms
SJO
5-15-90

T2581

No	Name
48	C580 DIETHYLPHTHALATE
49	C595 4-NITROANILINE
50	C610 4,6-DINITRO-2-METHYLPHENOL

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	546	9:06	1	1.000	A BB	16820.	40.000 NG/UL	7.12
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	112	365	6:05	1	0.668	A BB	30653.	69.272 NG*A1	12.33
15	99	499	8:19	1	0.914	A BB	47030.	69.053 NG*A2	12.29
16	136	766	12:46	16	1.000	A BB	53146.	40.000 NG/UL	7.12
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
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	82	646	10:46	16	0.843	A BB	42152.	41.545 NG*B1	7.39
31	164	1100	18:20	31	1.000	A BB	40838.	40.000 NG/UL	7.12
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	NOT FOUND								
49	NOT FOUND								
50	NOT FOUND								

T2581

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:07	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	8:39		0.949						
3	8:21		0.916						
4	8:35		0.941						
5	9:00		0.987						
6	9:09		1.004						
7	9:40		1.060						
8	9:35		1.051						
9	10:01		1.099						
10	9:57		1.091						
11	10:29		1.150						
12	10:22		1.137						
13	10:26		1.144						
14	6:05	1.00	0.667	1.00	69.27	50.00	1.458	1.052	1.39
15	8:19	1.00	0.912	1.00	69.05	50.00	2.237	1.620	1.38
16	12:48	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
17	10:50		0.846						
18	11:29		0.897						
19	11:45		0.918						
20	11:54		0.930						
21	12:14		0.956						
22	12:26		0.971						
23	12:40		0.990						
24	12:51		1.004						
25	12:16		0.958						
26	13:09		1.027						
27	13:23		1.046						
28	14:40		1.146						
29	14:59		1.171						
30	10:47	1.00	0.842	1.00	41.54	50.00	0.635	0.764	0.83
31	18:22	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
32	15:41		0.854						
33	16:00		0.871						
34	16:06		0.877						
35	16:32		0.900						
36	17:03		0.928						
37	17:52		0.973						
38	17:46		0.967						
39	18:00		0.980						
40	18:28		1.005						
41	18:24		1.002						
42	18:43		1.019						
43	18:58		1.033						
44	18:58		1.033						
45	19:13		1.046						
46	20:05		1.093						
47	20:08		1.096						
48	20:02		1.091						
49	20:24		1.111						
50	20:29		1.115						

Quantitation Report File: T2581

Data: T2581.TI
05/15/90 5:18:00
Sample: CLP,VERSCDM,2548,MW79A,L,W,16692,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: 420.1

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

No	Name
51	C615 N-NITROSODIPHENYLAMINE
52	C625 4-BROMOPHENYL-PHENYLETHER
53	C630 HEXACHLOROBENZENE
54	CS25 2-FLUOROBIPHENYL**BN SURR.**
55	CI60 PHENANTHRENE-D10**INT. STD.#4**
56	C635 PENTACHLOROPHENOL
57	C640 PHENANTHRENE
58	C645 ANTHRACENE
59	C650 DI-N-BUTYLPHTHALATE
60	C655 FLUORANTHENE
61	C715 PYRENE
62	CS55 2,4,6,-TRIBROMOPHENOL**ACID SURR.**
63	CI70 CHRYSENE-D12**INT. STD.#5**
64	C720 BUTYLBENZYLPHTHALATE
65	C730 BENZO(A)ANTHRACENE
66	C740 CHRYSENE
67	C725 3,3'-DICHLOROBENZIDINE
68	C741 BIS(2-ETHYLHEXYL)PHTHALATE
69	CS30 P-TERPHENYL-D14**BN SURR.**
70	CI75 PERYLENE-D12**INT. STD.#6**
71	C760 DI-N-OCTYL PHTHALATE
72	C765 BENZO(B)FLUORANTHENE
73	C770 BENZO(K)FLUORANTHENE
74	C775 BENZO(A)PYRENE
75	C780 INDENO(1,2,3-CD)PYRENE
76	C785 DIBENZ(A,H)ANTHRACENE
77	C790 BENZO(G,H,I)PERYLENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	NOT FOUND								
52	NOT FOUND								
53	NOT FOUND								
54	172	974	16:14	31	0.885	A BB	50104.	38.315 NG*B2	6.82
55	188	1384	23:04	55	1.000	A BB	86676.	40.000 NG/UL	7.12
56	NOT FOUND								
57	NOT FOUND								
58	NOT FOUND								
59	149	1515	25:15	55	1.095	A BB	1412.	BRL ~~0.891 NG~~	0.07
60	NOT FOUND								
61	NOT FOUND								
62	330	1254	20:54	31	1.140	A BB	17309.	62.609 NG*A3	11.14
63	240	1902	31:42	63	1.000	A BB	67975.	40.000 NG/UL	7.12
64	NOT FOUND								
65	NOT FOUND								
66	NOT FOUND								

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
67	NOT FOUND								
68	149	1917	31:57	63	1.008	A BB	349.	~~0.178 NG~~	0.03
69	244	1701	28:21	63	0.894	A BB	65191.	40.690 NG*B3	7.24
70	264	2211	36:51	70	1.000	A BB	59371.	40.000 NG/UL	7.12
71	NOT FOUND								
72	NOT FOUND								
73	NOT FOUND								
74	NOT FOUND								
75	NOT FOUND								
76	NOT FOUND								
77	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	20:34		1.120						
52	21:41		1.181						
53	22:06		1.203						
54	16:15	1.00	0.885	1.00	38.31	50.00	0.982	1.281	0.77
55	23:06	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
56	22:43		0.983						
57	23:11		1.004						
58	23:19		1.009						
59	25:17	1.00	1.095	1.00	0.39	50.00	0.013	1.667	0.01
60	27:04		1.172						
61	27:48		0.876						
62	20:56	1.00	1.140	1.00	62.61	50.00	0.339	0.271	1.25
63	31:45	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
64	30:10		0.950						
65	31:42		0.998						
66	31:50		1.003						
67	31:43		0.999						
68	32:00	1.00	1.008	1.00	0.18	50.00	0.004	1.156	0.00
69	28:23	1.00	0.894	1.00	40.69	50.00	0.767	0.943	0.81
70	36:56	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
71	33:53		0.917						
72	35:17		0.955						
73	35:23		0.958						
74	36:40		0.993						
75	43:01		1.165						
76	43:13		1.170						
77	44:53		1.215						

Quantitation Report File: QCREF

Data: T2581.TI
05/15/90 5:18:00
Sample: CLP,VERSCDM,2548,MW79A,L,W,16692,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	CI40 NAPHTHALENE-D8**INT. STD.#2**
3	CI50 ACENAPHTHENE-D10**INT. STD.#3**
4	CI60 PHENANTHRENE-D10**INT. STD.#4**
5	CI70 CHRYSENE-D12**INT. STD.#5**
6	CI75 PERYLENE-D12**INT. STD.#6**
7	CS50 2-FLUOROPHENOL**ACID SURR.**
8	CS45 PHENOL-D5**ACID SURR.**
9	CS55 2,4,6,-TRIBROMOPHENOL**ACID SURR.**
10	CS20 NITROBENZENE-D5**BN SURR.**
11	CS25 2-FLUOROBIPHENYL**BN SURR.**
12	CS30 P-TERPHENYL-D14**BN SURR.**

Scan	Time	Area(Hght)		Amount		Name
546	9:06	16820.		40.000	NG/UL	CI30 1,4-DICHLOROBENZENE-D4
766	12:46	53146.	9%	40.000	NG/UL	CI40 NAPHTHALENE-D8**INT. ST
1100	18:20	40838.		40.000	NG/UL	CI50 ACENAPHTHENE-D10**INT.
1384	23:04	86676.	RC	40.000	NG/UL	CI60 PHENANTHRENE-D10**INT.
1902	31:42	67975.		40.000	NG/UL	CI70 CHRYSENE-D12**INT. STD.
2211	36:51	59371.		40.000	NG/UL	CI75 PERYLENE-D12**INT. STD.
365	6:05	30653.	69	69.272	NG*A1	CS50 2-FLUOROPHENOL**ACID SU
499	8:19	47030.	69	69.053	NG*A2	CS45 PHENOL-D5**ACID SURR.**
1254	20:54	17309.	63	62.609	NG*A3	CS55 2,4,6,-TRIBROMOPHENOL**
646	10:46	42152.	83	41.545	NG*B1	CS20 NITROBENZENE-D5**BN SUR
974	16:14	50104.	77	38.315	NG*B2	CS25 2-FLUOROBIPHENYL**BN SU
1701	28:21	65191.	81	40.690	NG*B3	CS30 P-TERPHENYL-D14**BN SUR

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:07	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	12:48	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
3	18:22	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
4	23:06	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
5	31:45	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
6	36:56	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
7	6:05	1.00	0.667	1.00	69.27	50.00	1.458	1.052	1.39
8	8:19	1.00	0.912	1.00	69.05	50.00	2.237	1.620	1.38
9	20:56	1.00	1.140	1.00	62.61	50.00	0.339	0.271	1.25
10	10:47	1.00	0.842	1.00	41.54	50.00	0.635	0.764	0.83
11	16:15	1.00	0.885	1.00	38.31	50.00	0.982	1.281	0.77
12	28:23	1.00	0.894	1.00	40.69	50.00	0.767	0.943	0.81

Quantitation Report File: ISREF

Data: T2569.TI
05/14/90 17:42:00
Sample: CLP,,,SSTD50,,,22658,B,IC50,,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: --

Data: T2581.TI
05/15/90 5:18:00
Sample: CLP,VERSCDM,2548,MW79A,L,W,16692,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
3	CI40 NAPHTHALENE-D8**INT. STD. #2**
4	CI40 NAPHTHALENE-D8**INT. STD. #2**
5	CI50 ACENAPHTHENE-D10**INT. STD. #3**
6	CI50 ACENAPHTHENE-D10**INT. STD. #3**
7	CI60 PHENANTHRENE-D10**INT. STD. #4**
8	CI60 PHENANTHRENE-D10**INT. STD. #4**
9	CI70 CHRYSENE-D12**INT. STD. #5**
10	CI70 CHRYSENE-D12**INT. STD. #5**
11	CI75 PERYLENE-D12**INT. STD. #6**
12	CI75 PERYLENE-D12**INT. STD. #6**

Scan	Time	Area(Hght)	Amount	Name
547	9:07	15621.	40.000 NG/UL	CI30 1,4-DICHLOROBENZENE-D4
546	9:06	16820.	43.070 NG/UL	CI30 1,4-DICHLOROBENZENE-D4
768	12:48	52080.	40.000 NG/UL	CI40 NAPHTHALENE-D8**INT. ST
766	12:46	53146.	40.819 NG/UL	CI40 NAPHTHALENE-D8**INT. ST
1102	18:22	37455.	40.000 NG/UL	CI50 ACENAPHTHENE-D10**INT.
1100	18:20	40838.	43.613 NG/UL	CI50 ACENAPHTHENE-D10**INT.
1386	23:06	75538.	40.000 NG/UL	CI60 PHENANTHRENE-D10**INT.
1384	23:04	86676.	45.898 NG/UL	CI60 PHENANTHRENE-D10**INT.
1905	31:45	56496.	40.000 NG/UL	CI70 CHRYSENE-D12**INT. STD.
1902	31:42	67975.	48.127 NG/UL	CI70 CHRYSENE-D12**INT. STD.
2216	36:56	45334.	40.000 NG/UL	CI75 PERYLENE-D12**INT. STD.
2211	36:51	59371.	52.385 NG/UL	CI75 PERYLENE-D12**INT. STD.

Library Search Data: T2581 # 323 Base m/z: 43
05/15/90 5:18:00 + 5:23 Cali: T2581 # 2 RIC: 26559.
Sample: CLP,VERSCDM,2548,MW79A,L,W,16692,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
121 matched at least 7 of the 16 largest peaks in the unknown

B

Rank	In.	Name
1	806	HYDROPEROXIDE, 1,1-DIMETHYLETHYL
2	2776	2-PENTANOL, 2,4-DIMETHYL-
3	2777	2-HEXANOL, 2-METHYL-
4	1334	OXIRANE, TETRAMETHYL-
5	1349	OXEPANE, 2,2,4-TRIMETHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C4.H10.O2	90	59	754	871	761
2	C7.H16.O	116	59	744	779	744
3	C7.H16.O	116	59	687	732	699
4	C6.H12.O	100	59	679	806	703
5	C6.H12.O	100	43	675	775	701

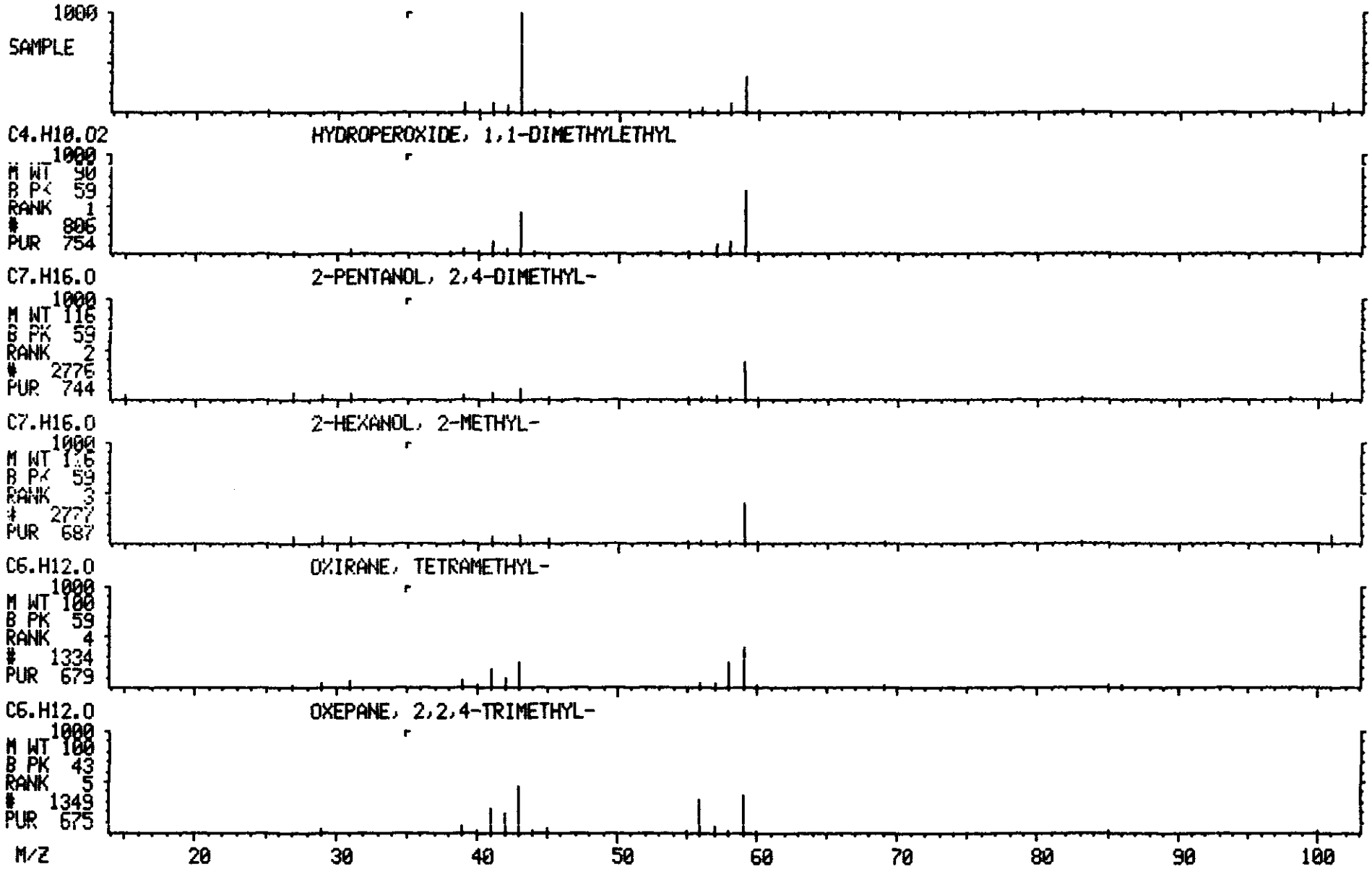
Rank	Ret. Time	B.P. Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	75-91-2
2	—	—	—	—	625-06-9
3	—	—	—	—	625-23-0
4	—	—	—	—	5076-20-0
5	—	—	—	—	23120-44-7

LIBRARY SEARCH
05/15/90 5:18:00 + 5:23
SAMPLE: CLP,VERSCOM,2545,MW79A,L,W,16692,B,,420.1 B#3,1UL,
CONDS.: INST T COLUMN=PESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2581 # 323
CALI: T2581 # 2

BASE M/Z: 43
RIC: 26559.

100113



Library Search Data: T2581 # 345 Base m/z: 41
05/15/90 5:18:00 + 5:45 Cali: T2581 # 2 RIC: 14463
Sample: CLP,VERSCDM,2548,MW79A,L,W,16692,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
108 matched at least 8 of the 16 largest peaks in the unknown

B

Rank	In.	Name
1	1076	1-PROPENE, 3,3'-OXYBIS-
2	1111	2-HEXENAL, (E)-
3	2216	2-HEPTENAL, (Z)-
4	1153	CYCLOPENTANE, 1,1-DIMETHYL-
5	2186	4-PENTENAL, 2,2-DIMETHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C6.H10.O	98	41	781	880	809
2	C6.H10.O	98	41	765	885	829
3	C7.H12.O	112	41	740	876	762
4	C7.H14	98	56	666	787	671
5	C7.H12.O	112	55	663	793	701

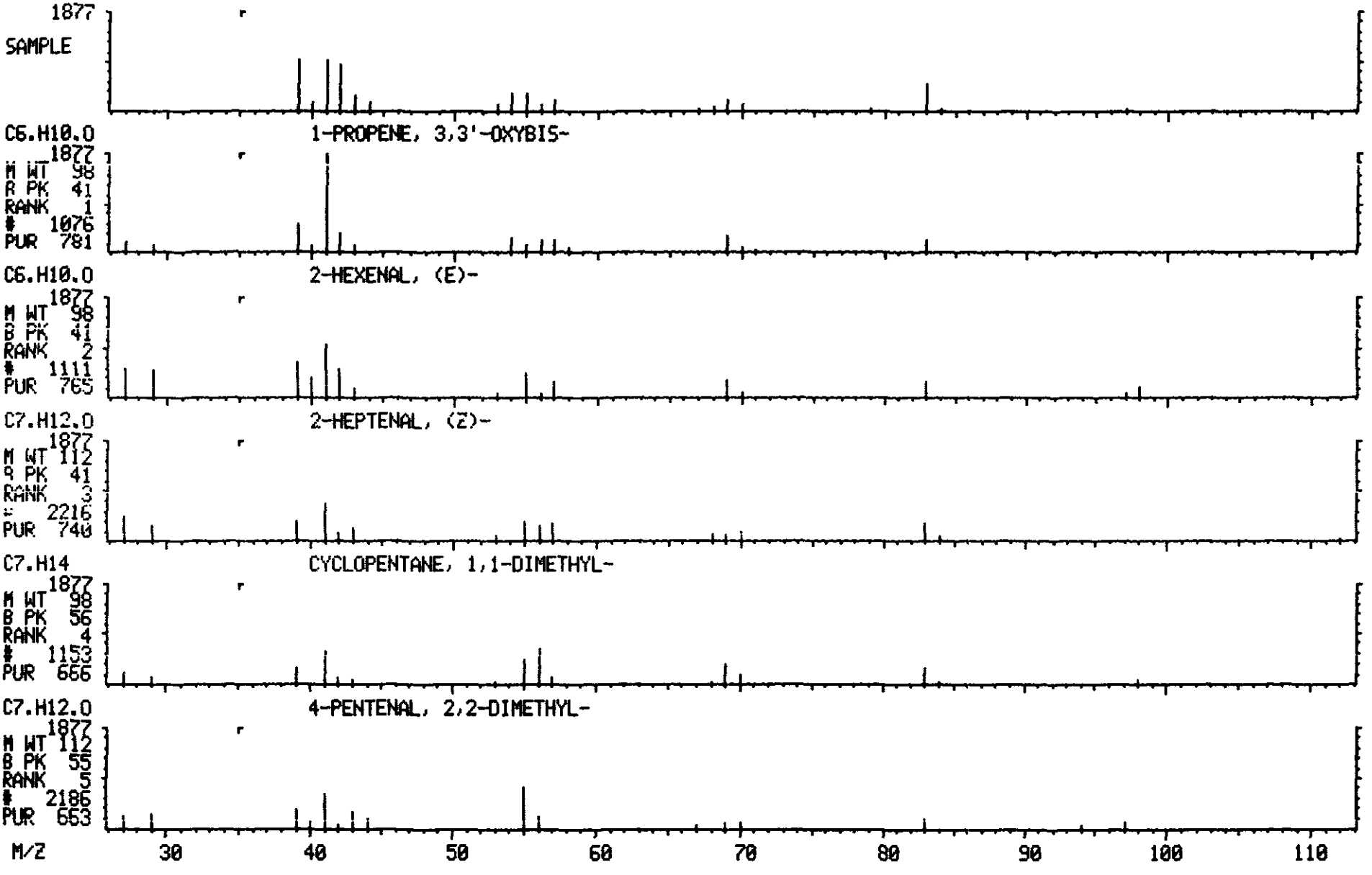
Rank	Ret. Time	B.P. Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	557-40-4
2	—	—	—	—	6728-26-3
3	—	—	—	—	57266-86-1
4	—	—	—	—	1638-26-2
5	—	—	—	—	5497-67-6

LIBRARY SEARCH
05/15/90 5:18:00 + 5:45
SAMPLE: CLP,VEPSCDM,2546,MW79A,L,W,16692,B,,420.1 B#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30@8C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2581 # 345
CALI: T2581 # 2

BASE M/Z: 41
RIC: 14463.

100115



Library Search Data: T2581 # 601 Base m/z: 41
05/15/90 5:18:00 + 10:01 Cali: T2581 # 2 RIC: 4207.
Sample: CLP,VERSCDM,2548,MW79A,L,W,16692,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYN8 searched for maximum PURITY
177 matched at least 6 of the 16 largest peaks in the unknown

B

Rank	In.	Name
1	2763	CYCLOPROPANE, 1-CHLORO-2-ETHENYL-1-METHYL-
2	9497	CYCLOHEXENE, 3-BROMO-
3	971	1,4-PENTADIENE, 3,3-DIMETHYL-
4	3111	CYCLOHEXENE, 3-(2-PROPYNYL)-
5	2764	CYCLOPROPANE, 1-CHLORO-2-(1-PROPENYL)-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C6.H9.CL	116	81	661	871	728
2	C6.H9.BR	160	81	655	826	744
3	C7.H12	96	81	654	812	761
4	C9.H12	120	81	618	815	731
5	C6.H9.CL	116	81	616	811	725

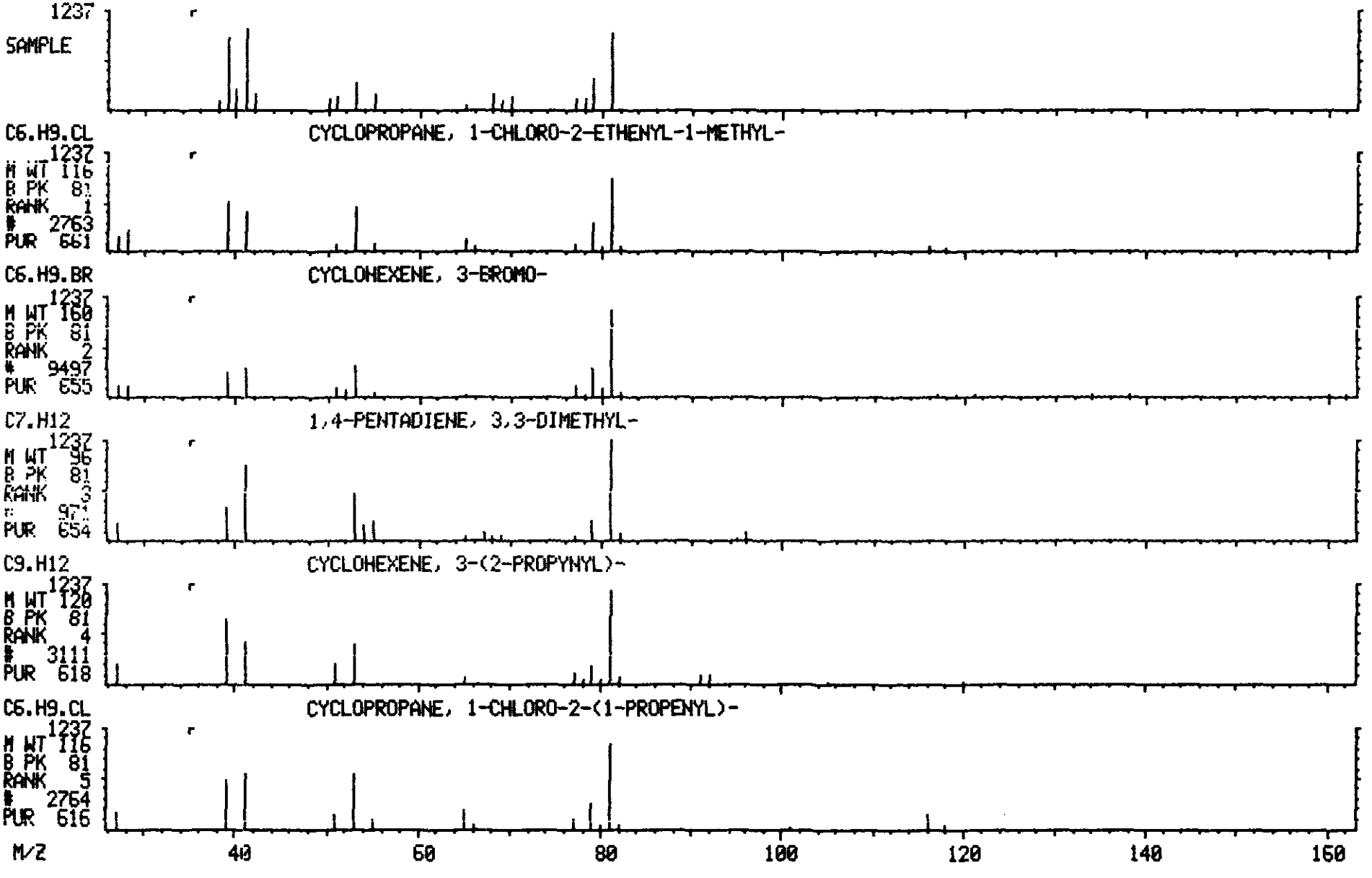
Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	62337-93-3
2	—	—	—	—	1521-51-3
3	—	—	—	—	1112-35-2
4	—	—	—	—	55956-43-9
5	—	—	—	—	74752-94-6

LIBRARY SEARCH
05/15/90 5:18:00 + 10:01
SAMPLE: CLP,VERSCOM,2543,MW79A,L,W,16692,B,,420.1 B#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
ENHANCED (S 1SB 2N 0T)

DATA: T2581 # 601
CALI: T2581 # 2

BASE M/Z: 41
RIC: 4207.

100117



```
        >>>>INTERNAL STANDARD RIC REPORT<<<<
*****************************INTERNAL STANDARD#1*****************RIC
Mass List                      Data: T2581 # 546          Base m/z:   150
05/15/90  5:18:00 +  9:06     Cali: T2581 #    2          RIC:      61120.
Sample: CLP,VERSCDM,2548,MW79A,L,W,16692,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     35        0.00    0.00        0. Minima      Min inten:       0.
     30                        *   0  Maxima
*****************************INTERNAL STANDARD#2*****************RIC
Mass List                      Data: T2581 # 766          Base m/z:   136
05/15/90  5:18:00 + 12:46     Cali: T2581 #    2          RIC:      66304.
Sample: CLP,VERSCDM,2548,MW79A,L,W,16692,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38        0.00    0.00        0. Minima      Min inten:       0.
     30                        *   0  Maxima
*****************************INTERNAL STANDARD#3*****************RIC
Mass List                      Data: T2581 #1100          Base m/z:   164
05/15/90  5:18:00 + 18:20     Cali: T2581 #    2          RIC:      68480.
Sample: CLP,VERSCDM,2548,MW79A,L,W,16692,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38        0.00    0.00        0. Minima      Min inten:       0.
     30                        *   0  Maxima
*****************************INTERNAL STANDARD#4*****************RIC
Mass List                      Data: T2581 #1384          Base m/z:   188
05/15/90  5:18:00 + 23:04     Cali: T2581 #    2          RIC:      83072.
Sample: CLP,VERSCDM,2548,MW79A,L,W,16692,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38        0.00    0.00        0. Minima      Min inten:       0.
     30                        *   0  Maxima
*****************************INTERNAL STANDARD#5*****************RIC
Mass List                      Data: T2581 #1902          Base m/z:   240
05/15/90  5:18:00 + 31:42     Cali: T2581 #    2          RIC:      65536.
Sample: CLP,VERSCDM,2548,MW79A,L,W,16692,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     40        0.00    0.00        0. Minima      Min inten:       0.
     30                        *   0  Maxima
*****************************INTERNAL STANDARD#6*****************RIC
Mass List                      Data: T2581 #2211          Base m/z:   264
05/15/90  5:18:00 + 36:51     Cali: T2581 #    2          RIC:      34752.
Sample: CLP,VERSCDM,2548,MW79A,L,W,16692,B,,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     42        0.00    0.00        0. Minima      Min inten:       0.
     30                        *   0  Maxima
     ANALYST: CHECK BASE M/Z AND RIC AMOUNT TO INSURE NO CONTAMINATION
```

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-1

La Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16693

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2584

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/15/90

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	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
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	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
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	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
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	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	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.

SW-1

La' Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16693

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2584

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/15/90

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	50	U
100-02-7	4-Nitrophenol	50	U
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
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
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

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SW-1

La Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16693

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2584

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/15/90

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

Number TICs found: 4

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

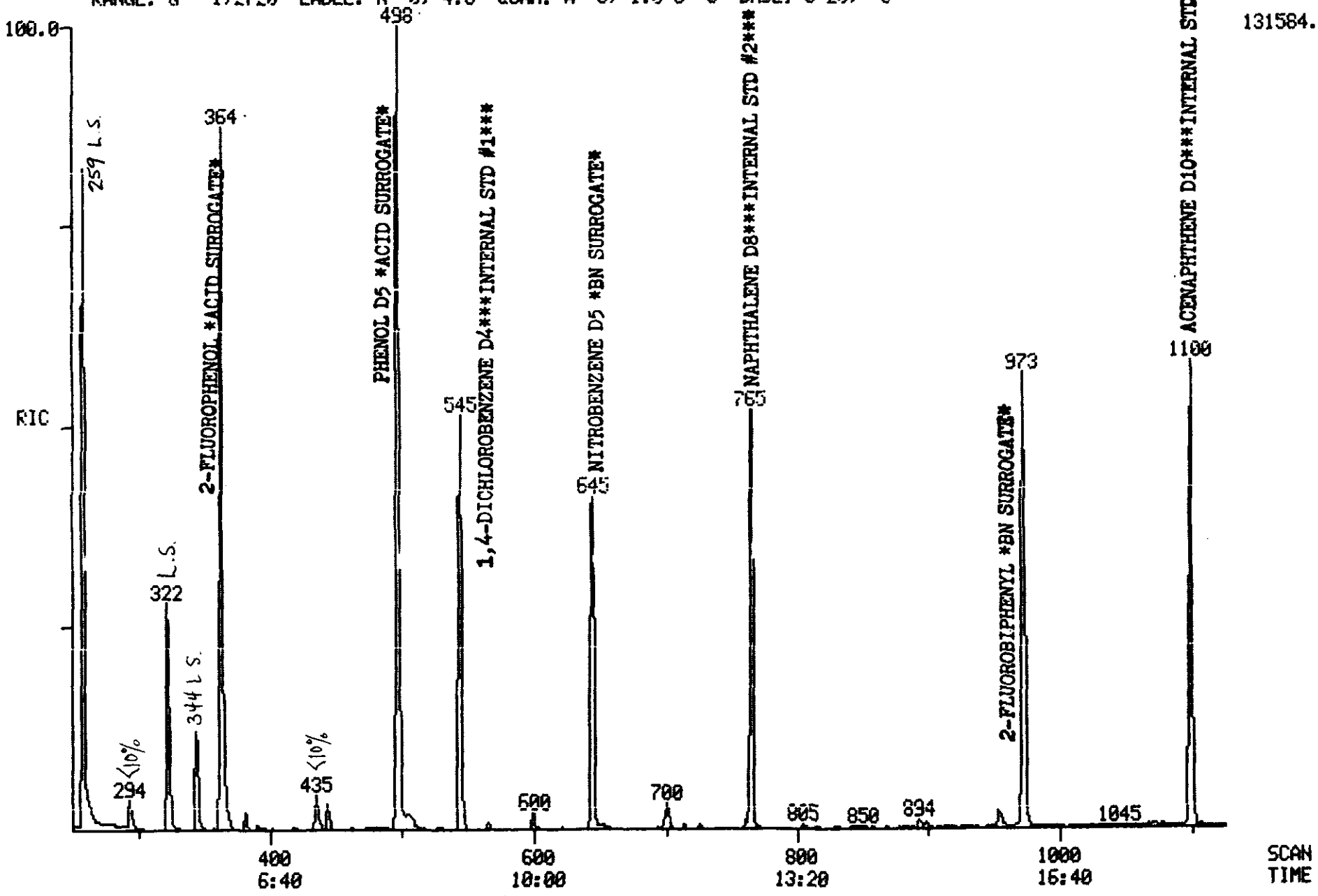
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.32	120	J
2.	UNKNOWN	5.37	42	BJ
3.	UNKNOWN	5.73	16	BJ
4.	UNKNOWN	34.32	10	J

RIC
05/15/90 10:56:00
SAMPLE: CLP,VERSCOM,2546,SW-1,L,W,16692,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
RANGE: G 1,2720 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

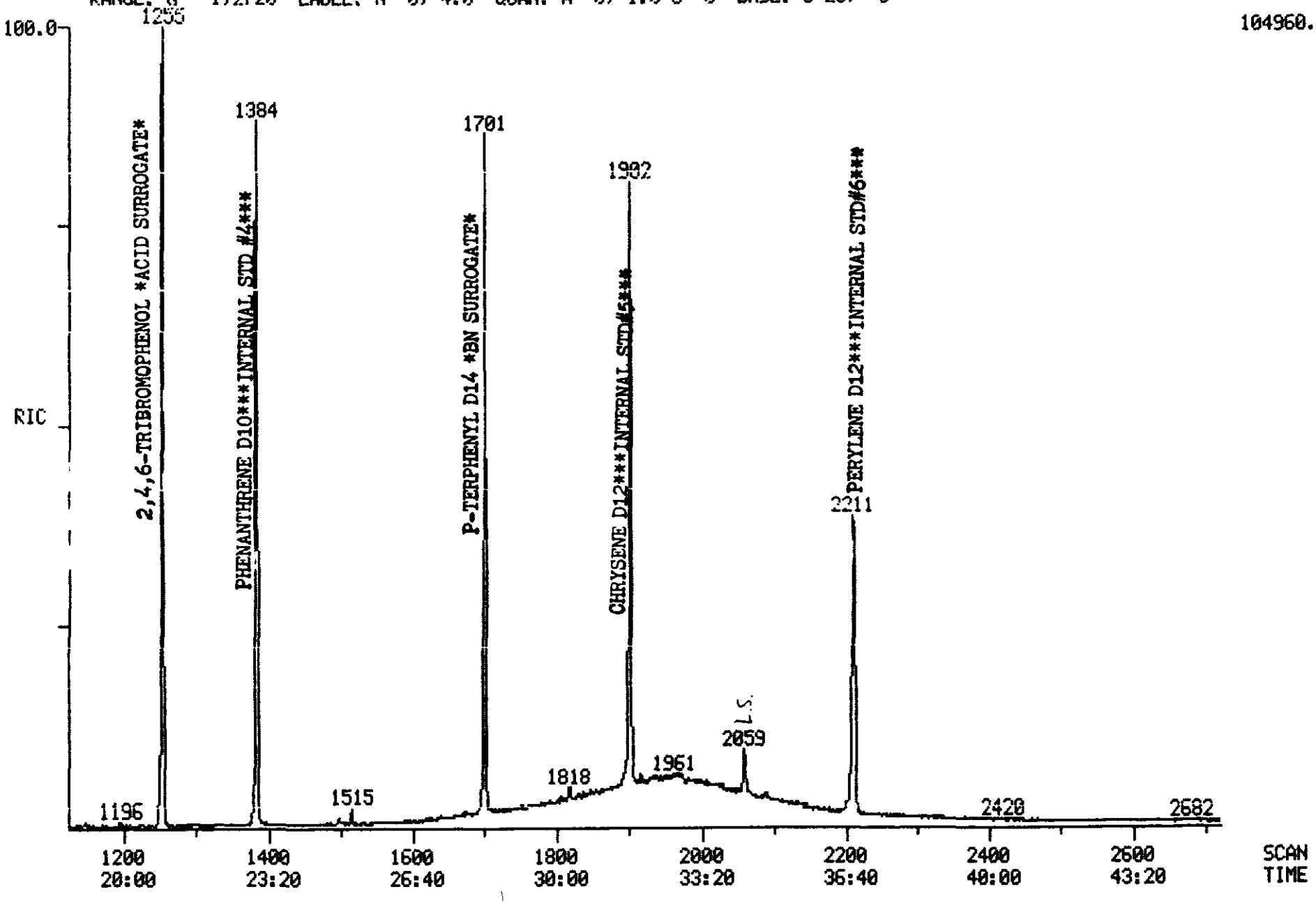
DATA: T2584 #1
CALI: T2584 #2

SCANS 250 TO 1125

100122



RIC DATA: T2584 #1 SCANS 1125 TO 2720
05/15/90 10:56:00 CALI: T2584 #2
SAMPLE: CLP,VERSCOM,2548,SW-1,L,N,16693,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30208C/MIN
RANGE: G 1,2720 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



00123

Quantitation Report File: T2594

Data: T2584.TI
05/15/90 10:56:00
Sample: CLP,VERSCDM,2548,SW-1,L,W,16693,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: SJD Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	C330 2-CHLOROPHENOL
3	C315 PHENOL
4	C325 BIS (2-CHLOROETHYL) ETHER
5	C335 1,3-DICHLOROBENZENE
6	C340 1,4-DICHLOROBENZENE
7	C350 1,2-DICHLOROBENZENE
8	C345 BENZYL ALCOHOL
9	C360 BIS (2-CHLOROISOPROPYL) ETHER
10	C355 2-METHYLPHENOL
11	C375 HEXACHLOROETHANE
12	C365 4-METHYLPHENOL
13	C370 N-NITROSO-DI-N-PROPYLAMINE
14	CS50 2-FLUOROPHENOL**ACID SURR.**
15	CS45 PHENOL-D5**ACID SURR.**
16	CI40 NAPHTHALENE-D8**INT. STD.#2**
17	C410 NITROBENZENE
18	C415 ISOPHORONE
19	C420 2-NITROPHENOL
20	C425 2,4-DIMETHYLPHENOL
21	C435 BIS (2-CHLOROETHOXY) METHANE
22	C440 2,4-DICHLOROPHENOL
23	C445 1,2,4-TRICHLOROBENZENE
24	C450 NAPHTHALENE
25	C430 BENZOIC ACID
26	C455 4-CHLOROANILINE
27	C460 HEXACHLOROBUTADIENE
28	C465 4-CHLORO-3-METHYLPHENOL
29	C470 2-METHYLNAPHTHALENE
30	CS20 NITROBENZENE-D5**BN SURR.**
31	CI50 ACENAPHTHENE-D10**INT. STD.#3**
32	C510 HEXACHLOROCYCLOPENTADIENE
33	C515 2,4,6-TRICHLOROPHENOL
34	C520 2,4,5-TRICHLOROPHENOL
35	C525 2-CHLORONAPHTHALENE
36	C530 2-NITROANILINE
37	C540 ACENAPHTHYLENE
38	C535 DIMETHYL PHTHALATE
39	C544 2,6-DINITROTOLUENE
40	C550 ACENAPHTHENE
41	C545 3-NITROANILINE
42	C555 2,4-DINITROPHENOL
43	C565 DIBENZOFURAN
44	C560 4-NITROPHENOL
45	C570 2,4-DINITROTOLUENE
46	C590 FLUORENE
47	C585 4-CHLOROPHENYL-PHENYLETHER

✓ QB 5/22/90

RFF
bnl

All IS areas & Surrogate recoveries are compliant.
SJD 5-15-90.

100124

T2584

No	Name
48	C580 DIETHYLPHTHALATE
49	C595 4-NITROANILINE
50	C610 4,6-DINITRO-2-METHYLPHENOL

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	545	9:05	1	1.000	A BB	15960.	40.000 NG/UL	6.41
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	112	364	6:04	1	0.668	A BB	37205.	88.272 NG*A1	14.15
15	99	498	8:18	1	0.914	A BB	52770.	85.829 NG*A2	13.76
16	136	765	12:45	16	1.000	A BB	51492.	40.000 NG/UL	6.41
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	122	725	12:05	16	0.948	A BB	208.	BRL ~~0.956 NG~~	0.15
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	82	644	10:44	16	0.842	A BB	38443.	41.627 NG*B1	6.67
31	164	1100	18:20	31	1.000	A BB	43102.	40.000 NG/UL	6.41
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	NOT FOUND								
49	NOT FOUND								
50	NOT FOUND								

T2584

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:05	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	8:37		0.949						
3	8:20		0.917						
4	8:33		0.941						
5	8:59		0.989						
6	9:08		1.006						
7	9:38		1.061						
8	9:34		1.053						
9	10:00		1.101						
10	9:55		1.092						
11	10:27		1.150						
12	10:20		1.138						
13	10:25		1.147						
14	6:03	1.00	0.666	1.00	88.27	50.00	1.865	1.056	1.77
15	8:18	1.00	0.914	1.00	85.83	50.00	2.645	1.541	1.72
16	12:46	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
17	10:48		0.846						
18	11:28		0.898						
19	11:43		0.918						
20	11:52		0.930						
21	12:12		0.956						
22	12:24		0.971						
23	12:38		0.990						
24	12:49		1.004						
25	12:14	0.99	0.958	0.99	0.96	50.00	0.003	0.169	0.02
26	13:07		1.027						
27	13:22		1.047						
28	14:38		1.146						
29	14:57		1.171						
30	10:45	1.00	0.842	1.00	41.63	50.00	0.597	0.717	0.83
31	18:20	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
32	15:39		0.854						
33	15:57		0.870						
34	16:04		0.876						
35	16:29		0.899						
36	17:01		0.928						
37	17:50		0.973						
38	17:43		0.966						
39	17:58		0.980						
40	18:26		1.005						
41	18:22		1.002						
42	18:40		1.018						
43	18:56		1.033						
44	18:56		1.033						
45	19:11		1.046						
46	20:03		1.094						
47	20:05		1.095						
48	20:00		1.091						
49	20:21		1.110						
50	20:27		1.115						

Quantitation Report File: T2594

Data: T2584.TI
05/15/90 10:56:00
Sample: CLP,VERSCDM,2548,SW-1,L,W,16693,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: SJD Acct. No.: 420.1

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

No	Name
51	C615 N-NITROSODIPHENYLAMINE
52	C625 4-BROMOPHENYL-PHENYLETHER
53	C630 HEXACHLOROBENZENE
54	CS25 2-FLUOROBIPHENYL**BN SURR.**
55	CI60 PHENANTHRENE-D10**INT. STD.#4**
56	C635 PENTACHLOROPHENOL
57	C640 PHENANTHRENE
58	C645 ANTHRACENE
59	C650 DI-N-BUTYLPHTHALATE
60	C655 FLUORANTHENE
61	C715 PYRENE
62	CS55 2,4,6,-TRIBROMOPHENOL**ACID SURR.**
63	CI70 CHRYSENE-D12**INT. STD.#5**
64	C720 BUTYLBENZYLPHTHALATE
65	C730 BENZO(A)ANTHRACENE
66	C740 CHRYSENE
67	C725 3,3'-DICHLOROBENZIDINE
68	C741 BIS(2-ETHYLHEXYL)PHTHALATE
69	CS30 P-TERPHENYL-D14**BN SURR.**
70	CI75 PERYLENE-D12**INT. STD.#6**
71	C760 DI-N-OCTYL PHTHALATE
72	C765 BENZO(B)FLUORANTHENE
73	C770 BENZO(K)FLUORANTHENE
74	C775 BENZO(A)PYRENE
75	C780 INDENO(1,2,3-CD)PYRENE
76	C785 DIBENZ(A,H)ANTHRACENE
77	C790 BENZO(G,H,I)PERYLENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	NOT FOUND								
52	NOT FOUND								
53	NOT FOUND								
54	172	973	16:13	31	0.885	A BB	48071.	34.803 NG*B2	5.58
55	188	1384	23:04	55	1.000	A BB	92555.	40.000 NG/UL	6.41
56	NOT FOUND								
57	NOT FOUND								
58	NOT FOUND								
59	149	1515	25:15	55	1.095	A BB	2492.	~~0.635 NG~~	0.10
60	NOT FOUND								
61	NOT FOUND								
62	330	1254	20:54	31	1.140	A BB	29225.	86.590 NG*A3	13.08
63	240	1902	31:42	63	1.000	A BB	79178.	40.000 NG/UL	6.41
64	149	1807	30:07	63	0.950	A BB	245.	~~9.156 NG~~	0.03
65	NOT FOUND								
66	NOT FOUND								

T2584

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
67	NOT FOUND								
68	149	1917	31:57	63	1.008	A BB	1160.	BL ~~0.336 NG~~	0.09
69	244	1701	28:21	63	0.894	A BB	76155.	44.506 NG*B3	7.13
70	264	2211	36:51	70	1.000	A BB	67715.	40.000 NG/UL	6.41
71	149	2029	33:49	70	0.918	A BB	319.	BL ~~0.088 NG~~	0.01
72	NOT FOUND								
73	NOT FOUND								
74	NOT FOUND								
75	NOT FOUND								
76	NOT FOUND								
77	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	20:32		1.120						
52	21:39		1.181						
53	22:03		1.203						
54	16:13	1.00	0.885	1.00	34.80	50.00	0.892	1.282	0.70
55	23:04	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
56	22:40		0.983						
57	23:08		1.003						
58	23:17		1.009						
59	25:14	1.00	1.094	1.00	0.64	50.00	0.022	1.695	0.01
60	27:01		1.171						
61	27:45		0.875						
62	20:54	1.00	1.140	1.00	86.59	50.00	0.542	0.313	1.73
63	31:42	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
64	30:07	1.00	0.950	1.00	0.16	50.00	0.002	0.792	0.00
65	31:39		0.998						
66	31:47		1.003						
67	31:40		0.999						
68	31:57	1.00	1.008	1.00	0.54	50.00	0.012	1.094	0.01
69	28:21	1.00	0.894	1.00	44.51	50.00	0.769	0.864	0.89
70	36:51	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
71	33:49	1.00	0.918	1.00	0.09	50.00	0.004	2.143	0.00
72	35:13		0.956						
73	35:19		0.958						
74	36:36		0.993						
75	42:54		1.164						
76	43:04		1.169						
77	44:45		1.214						

Quantitation Report File: QCREF

Data: T2584.TI
05/15/90 10:56:00
Sample: CLP,VERSCDM,2548,SW-1,L,W,16693,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: SJD Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	CI40 NAPHTHALENE-D8**INT. STD.#2**
3	CI50 ACENAPHTHENE-D10**INT. STD.#3**
4	CI60 PHENANTHRENE-D10**INT. STD.#4**
5	CI70 CHRYSENE-D12**INT. STD.#5**
6	CI75 PERYLENE-D12**INT. STD.#6**
7	CS50 2-FLUOROPHENOL**ACID SURR.**
8	CS45 PHENOL-D5**ACID SURR.**
9	CS55 2,4,6,-TRIBROMOPHENOL**ACID SURR.**
10	CS20 NITROBENZENE-D5**BN SURR.**
11	CS25 2-FLUOROBIPHENYL**BN SURR.**
12	CS30 P-TERPHENYL-D14**BN SURR.**

Scan	Time	Area(Hght)		Amount		Name
545	9:05	15960.	90	40.000	NG/UL	CI30 1,4-DICHLOROBENZENE-D4
765	12:45	51492.		40.000	NG/UL	CI40 NAPHTHALENE-D8**INT. ST
1100	18:20	43102.	Rec	40.000	NG/UL	CI50 ACENAPHTHENE-D10**INT.
1384	23:04	92555.		40.000	NG/UL	CI60 PHENANTHRENE-D10**INT.
1902	31:42	79178.		40.000	NG/UL	CI70 CHRYSENE-D12**INT. STD.
2211	36:51	67715.		40.000	NG/UL	CI75 PERYLENE-D12**INT. STD.
364	6:04	37205.	88	88.272	NG*A1	CS50 2-FLUOROPHENOL**ACID SU
498	8:18	52770.	86	85.829	NG*A2	CS45 PHENOL-D5**ACID SURR.**
1254	20:54	29225.	87	86.590	NG*A3	CS55 2,4,6,-TRIBROMOPHENOL**
644	10:44	38443.	83	41.627	NG*B1	CS20 NITROBENZENE-D5**BN SUR
973	16:13	48071.	70	34.803	NG*B2	CS25 2-FLUOROBIPHENYL**BN SU
1701	28:21	76155.	89	44.506	NG*B3	CS30 P-TERPHENYL-D14**BN SUR

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:05	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	12:46	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
3	18:20	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
4	23:04	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
5	31:42	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
6	36:51	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
7	6:03	1.00	0.666	1.00	88.27	50.00	1.865	1.056	1.77
8	8:18	1.00	0.914	1.00	85.83	50.00	2.645	1.541	1.72
9	20:54	1.00	1.140	1.00	86.59	50.00	0.542	0.313	1.73
10	10:45	1.00	0.842	1.00	41.63	50.00	0.597	0.717	0.83
11	16:13	1.00	0.885	1.00	34.80	50.00	0.892	1.282	0.70
12	28:21	1.00	0.894	1.00	44.51	50.00	0.769	0.864	0.89

Quantitation Report File: ISREF

Data: T2583.TI
05/15/90 9:42:00
Sample: CLP,,,SSTD 50,,,22658,B,CC-050,,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: SJD Acct. No.: -

Data: T2584.TI
05/15/90 10:56:00
Sample: CLP,VERSCDM,2548,SW-1,L,W,16693,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: SJD Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
3	CI40 NAPHTHALENE-D8**INT. STD.#2**
4	CI40 NAPHTHALENE-D8**INT. STD.#2**
5	CI50 ACENAPHTHENE-D10**INT. STD.#3**
6	CI50 ACENAPHTHENE-D10**INT. STD.#3**
7	CI60 PHENANTHRENE-D10**INT. STD.#4**
8	CI60 PHENANTHRENE-D10**INT. STD.#4**
9	CI70 CHRYSENE-D12**INT. STD.#5**
10	CI70 CHRYSENE-D12**INT. STD.#5**
11	CI75 PERYLENE-D12**INT. STD.#6**
12	CI75 PERYLENE-D12**INT. STD.#6**

Scan	Time	Area(Hght)	Amount	Name
545	9:05	15588.	40.000 NG/UL	CI30 1,4-DICHLOROBENZENE-D4
545	9:05	15960.	40.955 NG/UL	CI30 1,4-DICHLOROBENZENE-D4
766	12:46	52356.	40.000 NG/UL	CI40 NAPHTHALENE-D8**INT. ST
765	12:45	51492.	39.340 NG/UL	CI40 NAPHTHALENE-D8**INT. ST
1100	18:20	40125.	40.000 NG/UL	CI50 ACENAPHTHENE-D10**INT.
1100	18:20	43102.	42.968 NG/UL	CI50 ACENAPHTHENE-D10**INT.
1384	23:04	81463.	40.000 NG/UL	CI60 PHENANTHRENE-D10**INT.
1384	23:04	92555.	45.446 NG/UL	CI60 PHENANTHRENE-D10**INT.
1902	31:42	72781.	40.000 NG/UL	CI70 CHRYSENE-D12**INT. STD.
1902	31:42	79178.	43.516 NG/UL	CI70 CHRYSENE-D12**INT. STD.
2211	36:51	61203.	40.000 NG/UL	CI75 PERYLENE-D12**INT. STD.
2211	36:51	67715.	44.256 NG/UL	CI75 PERYLENE-D12**INT. STD.

Library Search Data: T2584 # 259 Base m/z: 43
05/15/90 10:56:00 + 4:19 Cali: T2584 # 2 RIC: 84607.
Sample: CLP,VERSCDM,2548,SW-1,L,W,16693,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
77 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	4294	2-BUTANONE, 4-(ACETYLOXY)-
2	4329	1-BUTANOL, 3-METHYL-, ACETATE
3	4338	ACETIC ACID, PENTYL ESTER
4	4427	PENTANE, 1-PROPOXY-
5	728	PROPANOIC ACID, 2-METHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C6.H10.O3	130	43	806	860	815
2	C7.H14.O2	130	43	789	886	803
3	C7.H14.O2	130	43	784	886	784
4	C8.H18.O	130	43	746	840	760
5	C4.H8.O2	88	43	730	881	734

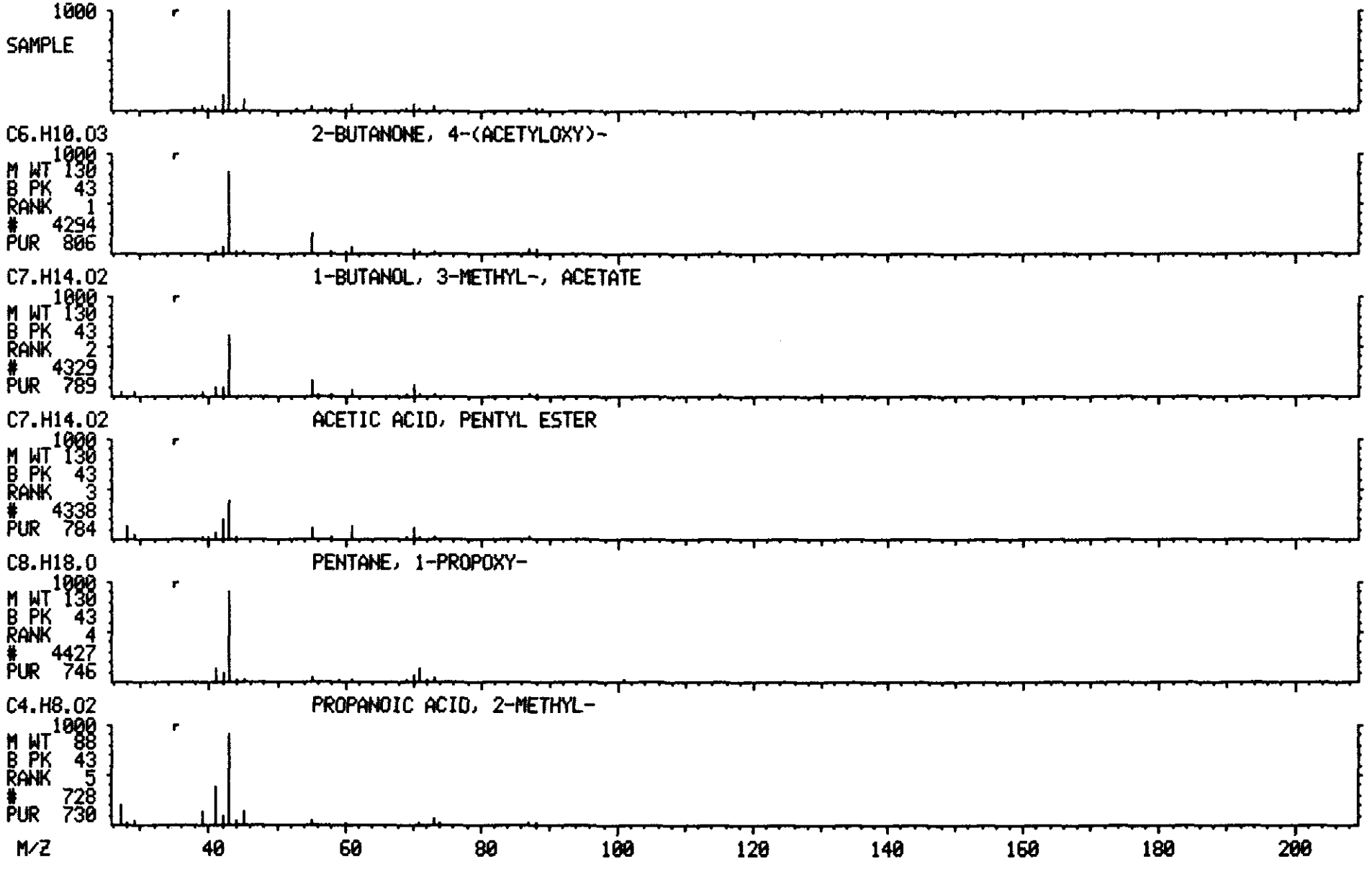
Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	10150-87-5
2	—	—	—	—	123-92-2
3	—	—	—	—	628-63-7
4	—	—	—	—	18641-82-2
5	—	—	—	—	79-31-2

LIBRARY SEARCH
05/15/90 10:56:00 + 4:19
SAMPLE: CLP,VERSCOM,2548,SW-1,L,W,16693,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2584 # 259
CALI: T2584 # 2

BASE M/Z: 43
RIC: 84607.

100132



Library Search Data: T2584 # 322 Base m/z: 43
05/15/90 10:56:00 + 5:22 Cali: T2584 # 2 RIC: 30335.
Sample: CLP,VERSCDM,2548,SW-1,L,W,16693,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
121 matched at least 7 of the 16 largest peaks in the unknown

B

Rank	In.	Name
1	806	HYDROPEROXIDE, 1,1-DIMETHYLETHYL
2	2776	2-PENTANOL, 2,4-DIMETHYL-
3	1334	OXIRANE, TETRAMETHYL-
4	2777	2-HEXANOL, 2-METHYL-
5	1349	OXEPANE, 2,2,4-TRIMETHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C4.H10.O2	90	59	760	868	768
2	C7.H16.O	116	59	741	776	741
3	C6.H12.O	100	59	687	805	709
4	C7.H16.O	116	59	684	726	695
5	C6.H12.O	100	43	683	776	708

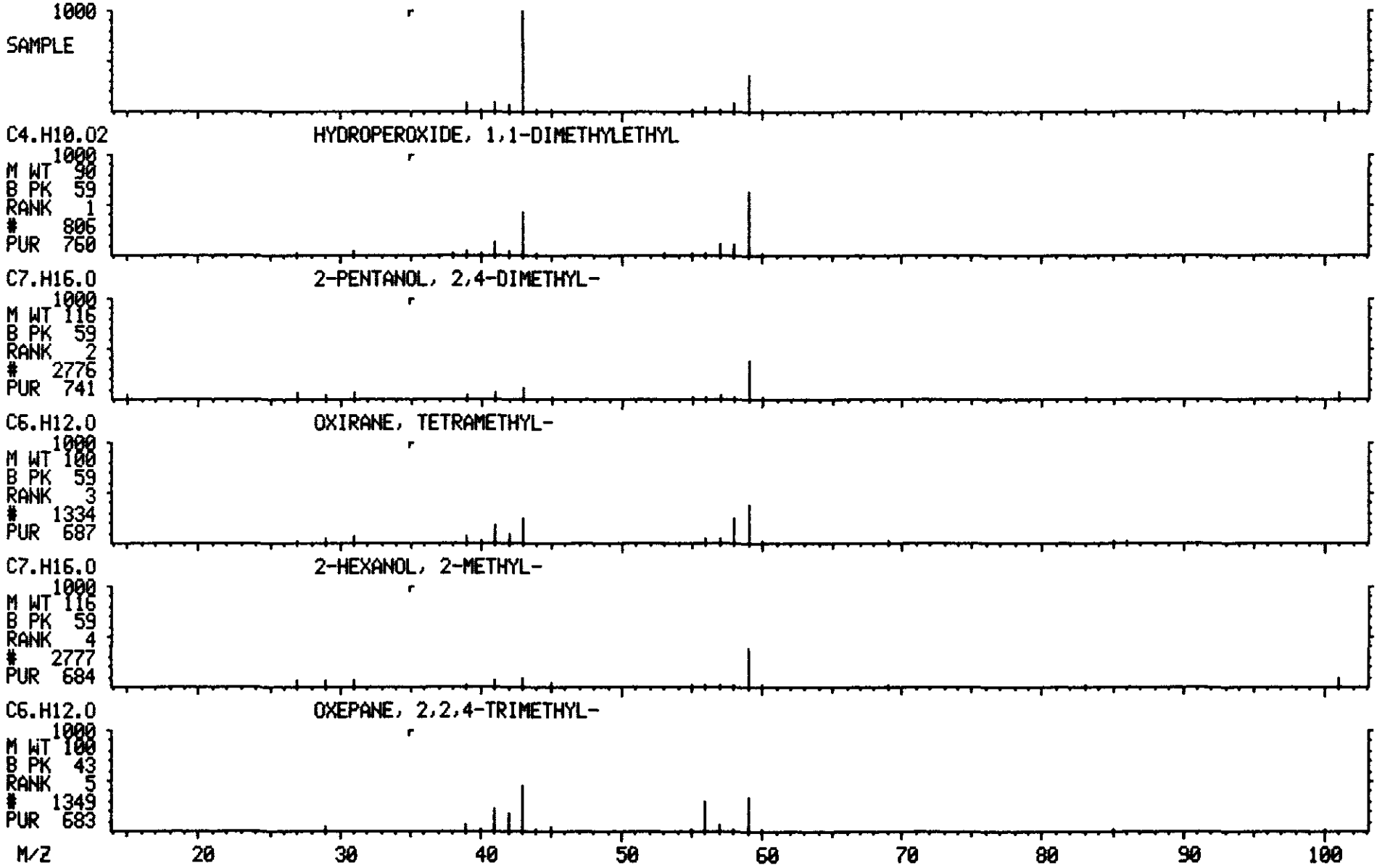
Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	75-91-2
2	—	—	—	—	625-06-9
3	—	—	—	—	5076-20-0
4	—	—	—	—	625-23-0
5	—	—	—	—	23120-44-7

LIBRARY SEARCH
05/15/90 10:56:00 + 5:22
SAMPLE: CLP,VERSCOM,2548,SW-1,L,W,16693,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2584 # 322
CALI: T2584 # 2

BASE M/Z: 43
RIC: 30335.

100134



Library Search Data: T2584 # 344 Base m/z: 41
05/15/90 10:56:00 + 5:44 Cali: T2584 # 2 RIC: 12303.
Sample: CLP,VERSCDM,2548,SW-1,L,W,16693,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
106 matched at least 8 of the 16 largest peaks in the unknown

unknown

bad

(B)

Rank	In.	Name
1	1076	1-PROPENE, 3,3'-OXYBIS-
2	1111	2-HEXENAL, (E)-
3	2216	2-HEPTENAL, (Z)-
4	1083	2-HEXYN-1-OL
5	3632	CYCLOBUTANONE, 2-METHYL-2-OXIRANYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C6.H10.O	98	41	780	877	808
2	C6.H10.O	98	41	762	883	827
3	C7.H12.O	112	41	735	873	757
4	C6.H10.O	98	41	696	858	751
5	C7.H10.O2	126	39	667	737	764

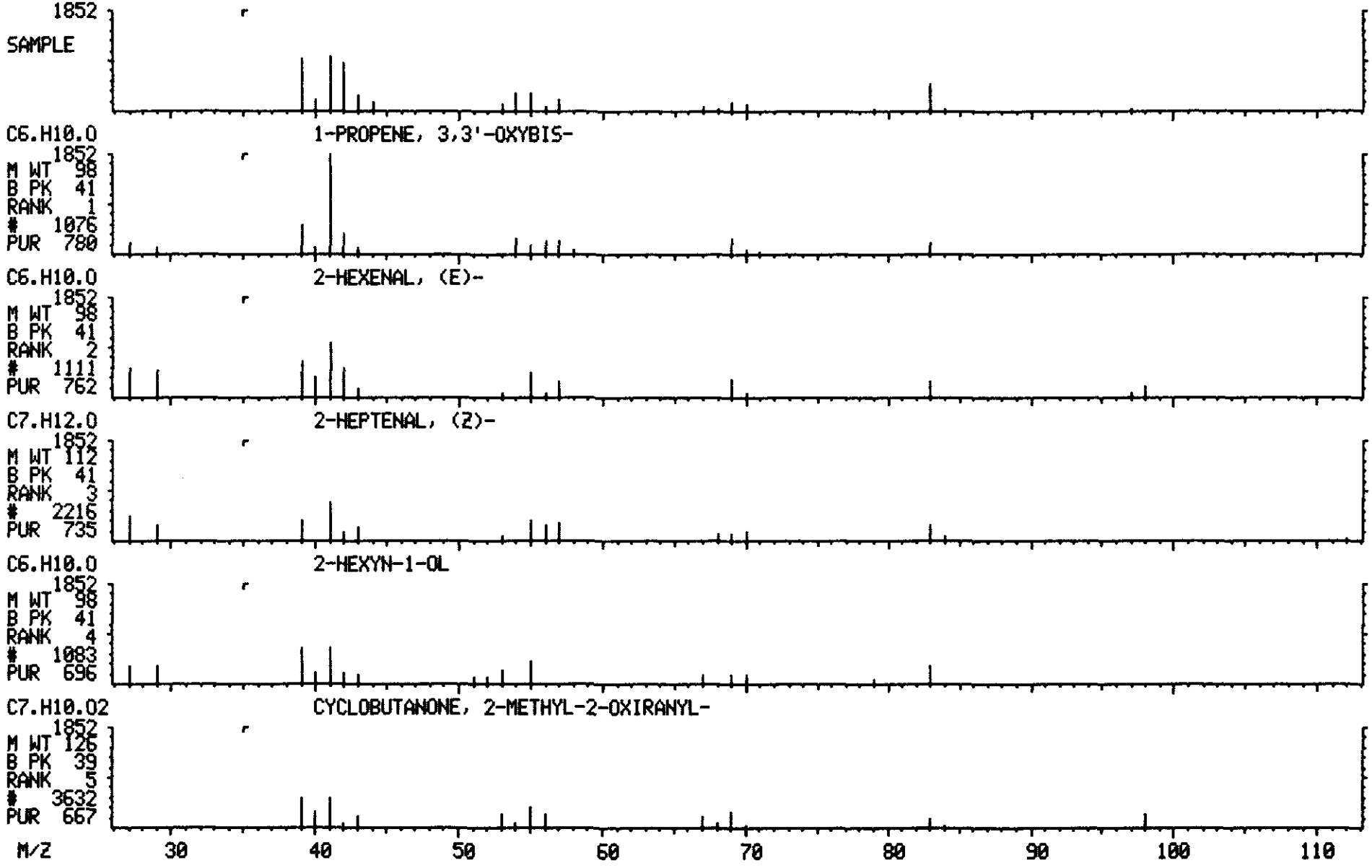
Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	557-40-4
2	—	—	—	—	6728-26-3
3	—	—	—	—	57266-86-1
4	—	—	—	—	764-60-3
5	—	—	—	—	75314-19-1

LIBRARY SEARCH
05/15/90 10:56:00 + 5:44
SAMPLE: CLP,VERSCDM,2548,SW-1,L,W,16693,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30200C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2584 # 344
CALI: T2584 # 2

BASE M/Z: 41
RIC: 12303.

100136



Library Search Data: T2584 #2059 Base m/z: 59
05/15/90 10:56:00 + 34:19 Cali: T2584 # 2 RIC: 4927.
Sample: CLP,VERSCDM,2548,SW-1,L,W,16693,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
287 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	27222	9-OCTADECENAMIDE, (Z)-
2	25602	9-OCTADECENAL
3	12029	1,7-OCTANEDIOL, 3,7-DIMETHYL-
4	13496	2-DODECENAL
5	14253	3-DODECANOL

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C18.H35.O.N	281	59	512	802	620
2	C18.H34.O	266	41	470	912	504
3	C10.H22.O2	174	59	461	829	535
4	C12.H22.O	182	43	417	835	472
5	C12.H26.O	186	59	414	797	481

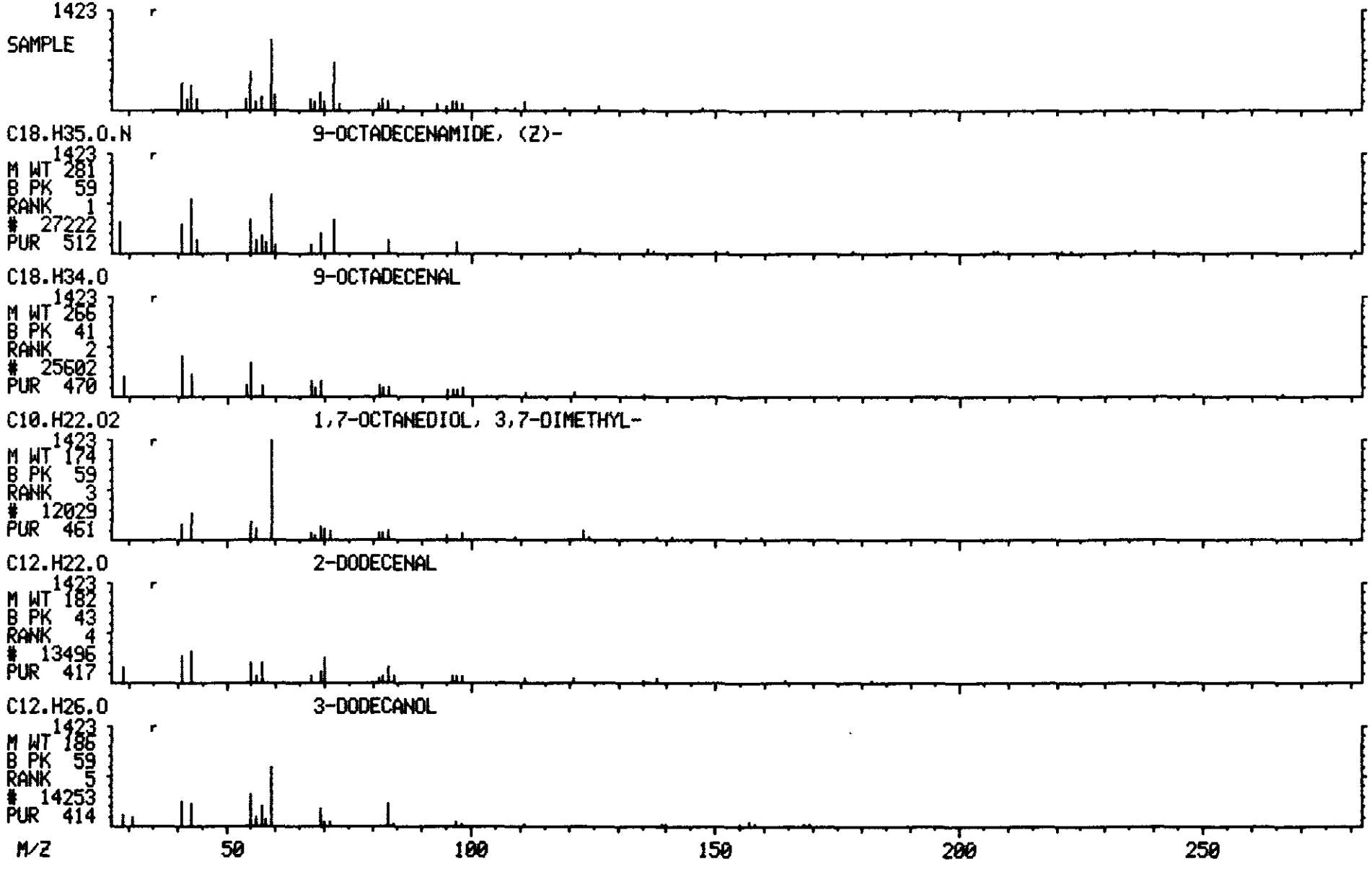
Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	301-02-0
2	—	—	—	—	5090-41-5
3	—	—	—	—	107-74-4
4	—	—	—	—	4826-62-4
5	—	—	—	—	10203-30-2

LIBRARY SEARCH
05/15/90 10:56:00 + 34:19
SAMPLE: CLP,VERSCDM,2548,SW-1,L,W,16693,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30@8C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2584 #2059
CALI: T2584 # 2

BASE M/Z: 59
RIC: 4927.

100138



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        >>>>INTERNAL STANDARD RIC REPORT<<<<
*****************************INTERNAL STANDARD#1*****************RIC
Mass List                      Data: T2584 # 545          Base m/z:   150
05/15/90 10:56:00 +  9:05     Cali: T2584 #    2          RIC:      58240.
Sample: CLP,VERSCDM,2548,SW-1,L,W,16693,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     35       0.00    0.00        0. Minima      Min inten:       0.
     30                      *    0  Maxima
*****************************INTERNAL STANDARD#2*****************RIC
Mass List                      Data: T2584 # 765          Base m/z:   136
05/15/90 10:56:00 + 12:45     Cali: T2584 #    2          RIC:      63488.
Sample: CLP,VERSCDM,2548,SW-1,L,W,16693,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38       0.00    0.00        0. Minima      Min inten:       0.
     30                      *    0  Maxima
*****************************INTERNAL STANDARD#3*****************RIC
Mass List                      Data: T2584 #1100          Base m/z:   164
05/15/90 10:56:00 + 18:20     Cali: T2584 #    2          RIC:      66560.
Sample: CLP,VERSCDM,2548,SW-1,L,W,16693,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38       0.00    0.00        0. Minima      Min inten:       0.
     30                      *    0  Maxima
*****************************INTERNAL STANDARD#4*****************RIC
Mass List                      Data: T2584 #1384          Base m/z:   188
05/15/90 10:56:00 + 23:04     Cali: T2584 #    2          RIC:      83328.
Sample: CLP,VERSCDM,2548,SW-1,L,W,16693,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38       0.00    0.00        0. Minima      Min inten:       0.
     30                      *    0  Maxima
*****************************INTERNAL STANDARD#5*****************RIC
Mass List                      Data: T2584 #1902          Base m/z:   240
05/15/90 10:56:00 + 31:42     Cali: T2584 #    2          RIC:      70784.
Sample: CLP,VERSCDM,2548,SW-1,L,W,16693,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     39       0.00    0.00        0. Minima      Min inten:       0.
     30                      *    0  Maxima
*****************************INTERNAL STANDARD#6*****************RIC
Mass List                      Data: T2584 #2211          Base m/z:   264
05/15/90 10:56:00 + 36:51     Cali: T2584 #    2          RIC:      37824.
Sample: CLP,VERSCDM,2548,SW-1,L,W,16693,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     40       0.00    0.00        0. Minima      Min inten:       0.
     30                      *    0  Maxima
     ANALYST: CHECK BASE M/Z AND RIC AMOUNT TO INSURE NO CONTAMINATION
```

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-2

La Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16694

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2585

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/15/90

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	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
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	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
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	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
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	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	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.

SW-2

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16694

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2585

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/15/90

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	50	U
100-02-7	4-Nitrophenol	50	U
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
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
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

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SW-2

La' Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16694

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2585

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/15/90

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

Number TICs found: 6

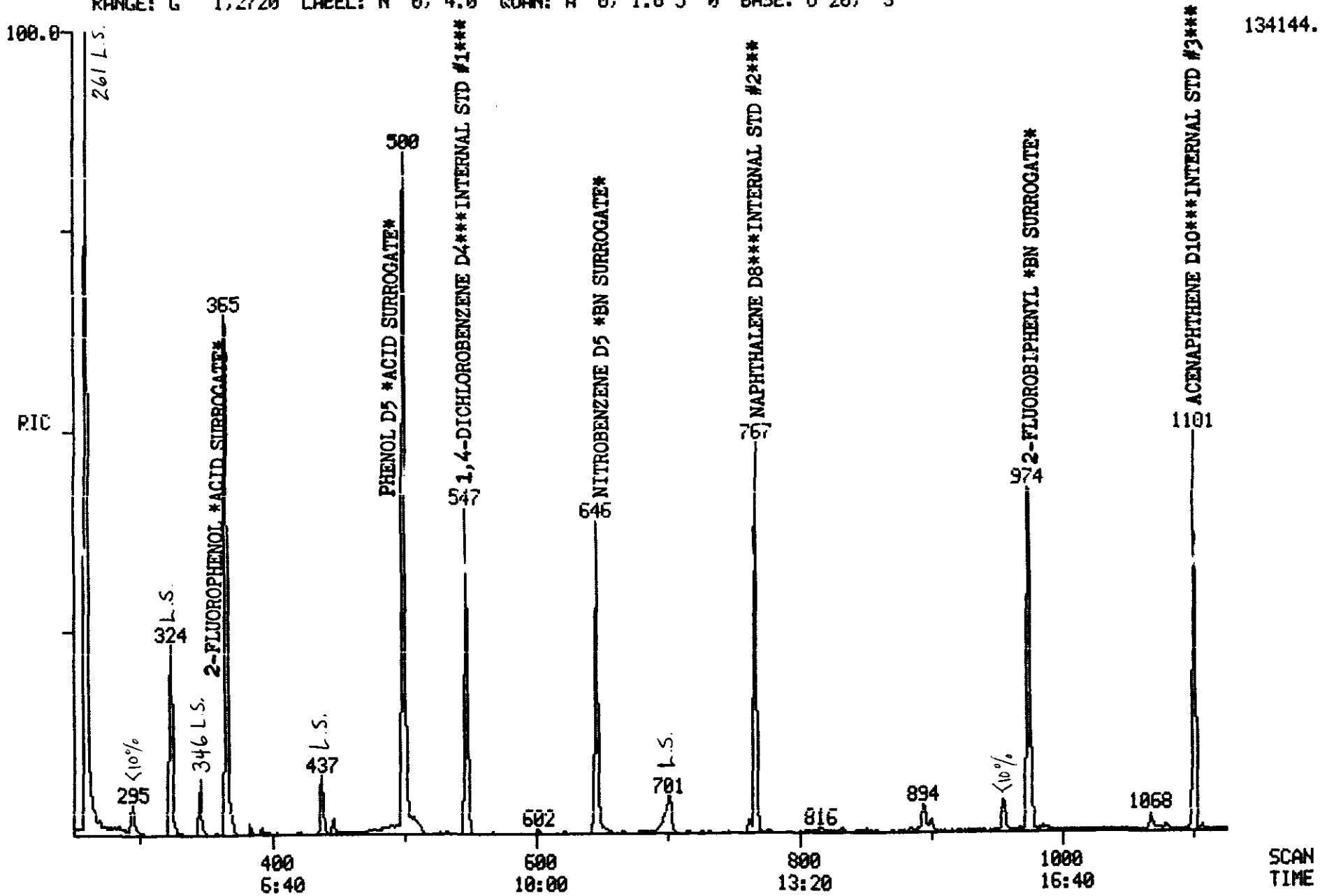
CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.35	170	J
2.	UNKNOWN	5.40	44	BJ
3.	UNKNOWN	5.77	12	BJ
4. 126-30-7	1,3-PROPANEDIOL, 2,2-DIMETHY	7.28	14	J
5.	UNKNOWN SILOXANE	11.69	8.0	J
6.	UNKNOWN	34.34	12	BJ

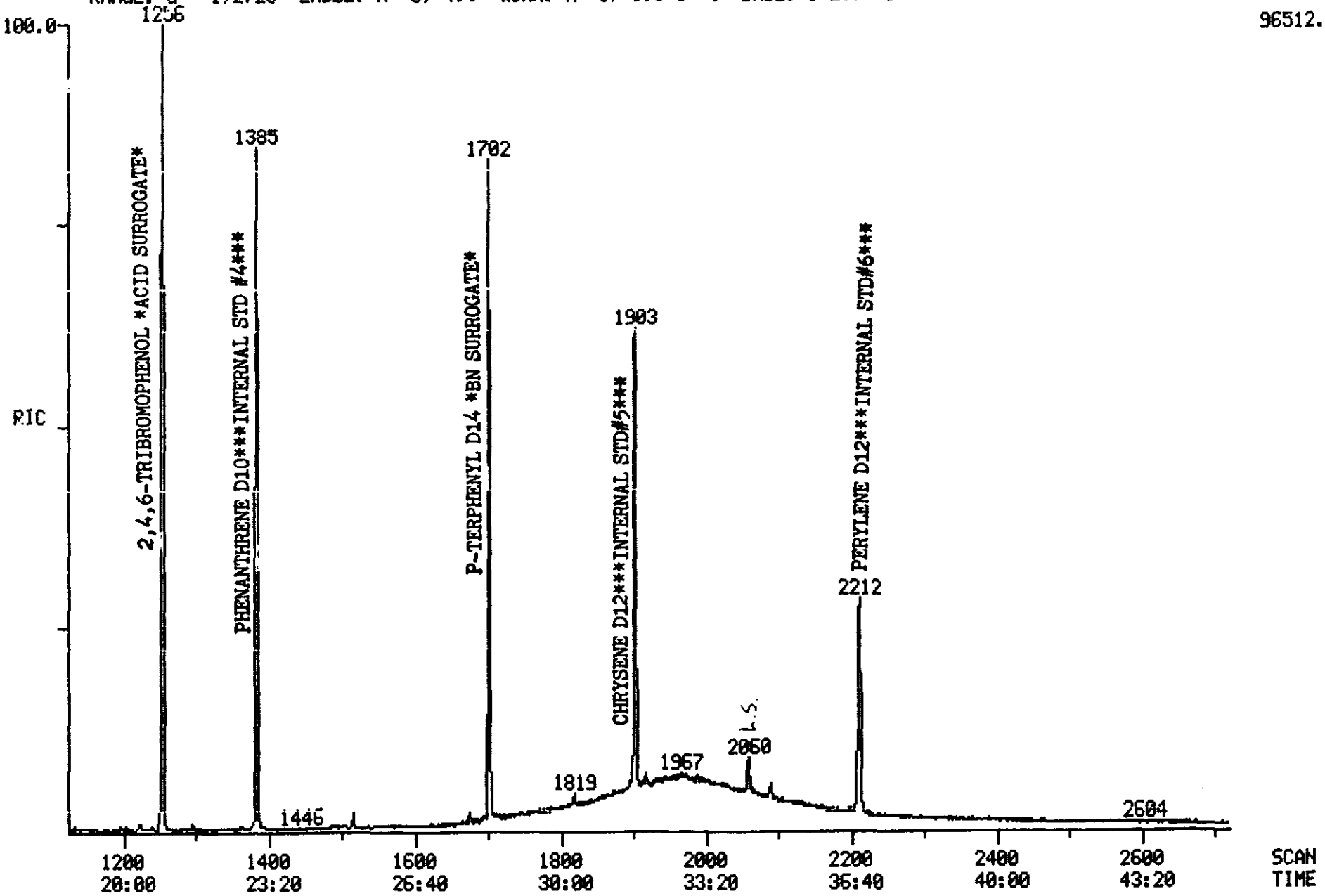
RIC DATA: T2585 #1 SCANS 250 TO 1125
05/15/90 11:48:00 CALI: T2585 #2
SAMPLE: CLP,VERSCDM,2548,SW-2,L,W,16694,B,,420.1,S,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30208C/MIN
RANGE: G 1,2720 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

100143

134144.



RIC DATA: T2585 #1 SCANS 1125 TO 2720
05/15/90 11:48:00 CALI: T2585 #2
SAMPLE: CLP,VERSCOM,2548,SW-2,L,W,16694,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
RANGE: G 1,2720 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



00144

Quantitation Report File: T2585

Data: T2585.TI
05/15/90 11:48:00
Sample: CLP,VERSCDM,2548,SW-2,L,W,16694,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: SJD Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	C330 2-CHLOROPHENOL
3	C315 PHENOL
4	C325 BIS (2-CHLOROETHYL) ETHER
5	C335 1,3-DICHLOROBENZENE
6	C340 1,4-DICHLOROBENZENE
7	C350 1,2-DICHLOROBENZENE
8	C345 BENZYL ALCOHOL
9	C360 BIS (2-CHLOROISOPROPYL) ETHER
10	C355 2-METHYLPHENOL
11	C375 HEXACHLOROETHANE
12	C365 4-METHYLPHENOL
13	C370 N-NITROSO-DI-N-PROPYLAMINE
14	CS50 2-FLUOROPHENOL**ACID SURR.**
15	CS45 PHENOL-D5**ACID SURR.**
16	CI40 NAPHTHALENE-D8**INT. STD.#2**
17	C410 NITROBENZENE
18	C415 ISOPHORONE
19	C420 2-NITROPHENOL
20	C425 2,4-DIMETHYLPHENOL
21	C435 BIS (2-CHLOROETHOXY) METHANE
22	C440 2,4-DICHLOROPHENOL
23	C445 1,2,4-TRICHLOROBENZENE
24	C450 NAPHTHALENE
25	C430 BENZOIC ACID
26	C455 4-CHLOROANILINE
27	C460 HEXACHLOROBUTADIENE
28	C465 4-CHLORO-3-METHYLPHENOL
29	C470 2-METHYLNAPHTHALENE
30	CS20 NITROBENZENE-D5**BN SURR.**
31	CI50 ACENAPHTHENE-D10**INT. STD.#3**
32	C510 HEXACHLOROCYCLOPENTADIENE
33	C515 2,4,6-TRICHLOROPHENOL
34	C520 2,4,5-TRICHLOROPHENOL
35	C525 2-CHLORONAPHTHALENE
36	C530 2-NITROANILINE
37	C540 ACENAPHTHYLENE
38	C535 DIMETHYL PHTHALATE
39	C544 2,6-DINITROTOLUENE
40	C550 ACENAPHTHENE
41	C545 3-NITROANILINE
42	C555 2,4-DINITROPHENOL
43	C565 DIBENZOFURAN
44	C560 4-NITROPHENOL
45	C570 2,4-DINITROTOLUENE
46	C590 FLUORENE
47	C585 4-CHLOROPHENYL-PHENYLETHER

✓ 5/22/90

RFF
pd

All IS areas + surrogate recoveries are compliant.
SJD
5-15-90

T2585

No	Name
48	C580 DIETHYLPHTHALATE
49	C595 4-NITROANILINE
50	C610 4,6-DINITRO-2-METHYLPHENOL

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	547	9:07	1	1.000	A BB	12900.	40.000 NG/UL	6.05
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	112	365	6:05	1	0.667	A BB	32494.	95.382 NG*A1	14.42
15	99	499	8:19	1	0.912	A BB	46920.	94.416 NG*A2	14.28
16	136	767	12:47	16	1.000	A BB	40586.	40.000 NG/UL	6.05
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
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	82	646	10:46	16	0.842	A BB	32869.	45.156 NG*B1	6.83
31	164	1101	18:21	31	1.000	A BB	34112.	40.000 NG/UL	6.05
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	NOT FOUND								
49	NOT FOUND								
50	NOT FOUND								

T2585

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:05	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	8:37		0.949						
3	8:20		0.917						
4	8:33		0.941						
5	8:59		0.989						
6	9:08		1.006						
7	9:38		1.061						
8	9:34		1.053						
9	10:00		1.101						
10	9:55		1.092						
11	10:27		1.150						
12	10:20		1.138						
13	10:25		1.147						
14	6:03	1.01	0.666	1.00	95.38	50.00	2.015	1.056	1.91
15	8:18	1.00	0.914	1.00	94.42	50.00	2.910	1.541	1.09
16	12:46	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
17	10:48		0.846						
18	11:28		0.898						
19	11:43		0.918						
20	11:52		0.930						
21	12:12		0.956						
22	12:24		0.971						
23	12:38		0.990						
24	12:49		1.004						
25	12:14		0.958						
26	13:07		1.027						
27	13:22		1.047						
28	14:38		1.146						
29	14:57		1.171						
30	10:45	1.00	0.842	1.00	45.16	50.00	0.648	0.717	0.90
31	18:20	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
32	15:39		0.854						
33	15:57		0.870						
34	16:04		0.876						
35	16:29		0.899						
36	17:01		0.928						
37	17:50		0.973						
38	17:43		0.966						
39	17:58		0.980						
40	18:26		1.005						
41	18:22		1.002						
42	18:40		1.018						
43	18:56		1.033						
44	18:56		1.033						
45	19:11		1.046						
46	20:03		1.094						
47	20:05		1.095						
48	20:00		1.091						
49	20:21		1.110						
50	20:27		1.115						

Quantitation Report File: T2585

Data: T2585.TI
05/15/90 11:48:00
Sample: CLP,VERSCDM,2548,SW-2,L,W,16694,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: SJD Acct. No.: 420.1

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

No	Name
51	C615 N-NITROSODIPHENYLAMINE
52	C625 4-BROMOPHENYL-PHENYLETHER
53	C630 HEXACHLOROBENZENE
54	CS25 2-FLUOROBIPHENYL**BN SURR.**
55	CI60 PHENANTHRENE-D10**INT. STD.#4**
56	C635 PENTACHLOROPHENOL
57	C640 PHENANTHRENE
58	C645 ANTHRACENE
59	C650 DI-N-BUTYLPHTHALATE
60	C655 FLUORANTHENE
61	C715 PYRENE
62	CS55 2,4,6,-TRIBROMOPHENOL**ACID SURR.**
63	CI70 CHRYSENE-D12**INT. STD.#5**
64	C720 BUTYLBENZYLPHTHALATE
65	C730 BENZO(A)ANTHRACENE
66	C740 CHRYSENE
67	C725 3,3'-DICHLOROBENZIDINE
68	C741 BIS(2-ETHYLHEXYL)PHTHALATE
69	CS30 P-TERPHENYL-D14**BN SURR.**
70	CI75 PERYLENE-D12**INT. STD.#6**
71	C760 DI-N-OCTYL PHTHALATE
72	C765 BENZO(B)FLUORANTHENE
73	C770 BENZO(K)FLUORANTHENE
74	C775 BENZO(A)PYRENE
75	C780 INDENO(1,2,3-CD)PYRENE
76	C785 DIBENZ(A,H)ANTHRACENE
77	C790 BENZO(G,H,I)PERYLENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
51	NOT FOUND									
52	NOT FOUND									
53	NOT FOUND									
54	172	974	16:14	31	0.885	A BB	38290.	35.028	NG*B2	5.30
55	188	1385	23:05	55	1.000	A BB	75508.	40.000	NG/UL	6.05
56	NOT FOUND									
57	NOT FOUND									
58	NOT FOUND									
59	149	1515	25:15	55	1.094	A BB	2864.	BQ ~~0.895~~	~~NG~~	0.14
60	NOT FOUND									
61	NOT FOUND									
62	330	1255	20:55	31	1.140	A BB	26904.	100.721	NG*A3	15.23
63	240	1902	31:42	63	1.000	A BB	58832.	40.000	NG/UL	6.05
64	NOT FOUND									
65	NOT FOUND									
66	NOT FOUND									

T2585

ORIGINAL (Red)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%TOT
67	NOT FOUND									
68	149	1918	31:58	63	1.008	A BB	1473.	BRL ~~0.916 NG~~		0.14
69	244	1702	28:22	63	0.895	A BB	61960.	48.733	NG+B3	7.37
70	264	2212	36:52	70	1.000	A VB	42765.	40.000	NG/UL	6.05
71	149	2030	33:50	70	0.918	A BB	483.	BRL ~~0.211 NG~~		0.03
72	NOT FOUND									
73	NOT FOUND									
74	NOT FOUND									
75	NOT FOUND									
76	NOT FOUND									
77	NOT FOUND									

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	20:32		1.120						
52	21:39		1.181						
53	22:03		1.203						
54	16:13	1.00	0.885	1.00	35.03	50.00	0.898	1.282	0.70
55	23:04	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
56	22:40		0.983						
57	23:08		1.003						
58	23:17		1.009						
59	25:14	1.00	1.094	1.00	0.90	50.00	0.030	1.695	0.02
60	27:01		1.171						
61	27:45		0.875						
62	20:54	1.00	1.140	1.00	100.72	50.00	0.631	0.313	2.01
63	31:42	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
64	30:07		0.950						
65	31:39		0.998						
66	31:47		1.003						
67	31:40		0.999						
68	31:57	1.00	1.008	1.00	0.92	50.00	0.020	1.094	0.02
69	28:21	1.00	0.894	1.00	48.73	50.00	0.843	0.864	0.97
70	36:51	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
71	33:49	1.00	0.918	1.00	0.21	50.00	0.009	2.143	0.00
72	35:13		0.956						
73	35:19		0.958						
74	36:36		0.993						
75	42:54		1.164						
76	43:04		1.169						
77	44:45		1.214						

Quantitation Report File: QCREF

ORIGINAL (Red)

Data: T2585.TI
05/15/90 11:48:00
Sample: CLP,VERSCDM,2548,SW-2,L,W,16694,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: SJD Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	CI40 NAPHTHALENE-D8**INT. STD.#2**
3	CI50 ACENAPHTHENE-D10**INT. STD.#3**
4	CI60 PHENANTHRENE-D10**INT. STD.#4**
5	CI70 CHRYSENE-D12**INT. STD.#5**
6	CI75 PERYLENE-D12**INT. STD.#6**
7	CS50 2-FLUOROPHENOL**ACID SURR.**
8	CS45 PHENOL-D5**ACID SURR.**
9	CS55 2,4,6,-TRIBROMOPHENOL**ACID SURR.**
10	CS20 NITROBENZENE-D5**BN SURR.**
11	CS25 2-FLUOROBIPHENYL**BN SURR.**
12	CS30 P-TERPHENYL-D14**BN SURR.**

Scan	Time	Area(Hght)		Amount		Name
547	9:07	12900.	90	40.000	NG/UL	CI30 1,4-DICHLOROBENZENE-D4
767	12:47	40586.		40.000	NG/UL	CI40 NAPHTHALENE-D8**INT. ST
1101	18:21	34112.	Rec.	40.000	NG/UL	CI50 ACENAPHTHENE-D10**INT.
1385	23:05	75508.		40.000	NG/UL	CI60 PHENANTHRENE-D10**INT.
1902	31:42	58832.		40.000	NG/UL	CI70 CHRYSENE-D12**INT. STD.
2212	36:52	42765.		40.000	NG/UL	CI75 PERYLENE-D12**INT. STD.
365	6:05	32494.	95	95.382	NG*A1	CS50 2-FLUOROPHENOL**ACID SU
499	8:19	46920.	94	94.416	NG*A2	CS45 PHENOL-D5**ACID SURR. **
1255	20:55	26904.	101	100.721	NG*A3	CS55 2,4,6,-TRIBROMOPHENOL**
646	10:46	32869.	90	45.156	NG*B1	CS20 NITROBENZENE-D5**BN SUR
974	16:14	38290.	70	35.028	NG*B2	CS25 2-FLUOROBIPHENYL**BN SU
1702	28:22	61960.	97	48.733	NG*B3	CS30 P-TERPHENYL-D14**BN SUR

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:05	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	12:46	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
3	18:20	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
4	23:04	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
5	31:42	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
6	36:51	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
7	6:03	1.01	0.666	1.00	95.38	50.00	2.015	1.056	1.91
8	8:18	1.00	0.914	1.00	94.42	50.00	2.910	1.541	1.89
9	20:54	1.00	1.140	1.00	100.72	50.00	0.631	0.313	2.01
10	10:45	1.00	0.842	1.00	45.16	50.00	0.648	0.717	0.90
11	16:13	1.00	0.885	1.00	35.03	50.00	0.898	1.282	0.70
12	28:21	1.00	0.894	1.00	48.73	50.00	0.843	0.864	0.97

Quantitation Report File: ISREF

ORIGINAL (Red)

Data: T2583.TI
05/15/90 9:42:00
Sample: CLP,,,SSTD 50,,,22659,B,CC-050,,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: SJD Acct. No.: -

Data: T2585.TI
05/15/90 11:48:00
Sample: CLP,VERSCDM,2548,SW-2,L,W,16694,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: SJD Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
3	CI40 NAPHTHALENE-D8**INT. STD. #2**
4	CI40 NAPHTHALENE-D8**INT. STD. #2**
5	CI50 ACENAPHTHENE-D10**INT. STD. #3**
6	CI50 ACENAPHTHENE-D10**INT. STD. #3**
7	CI60 PHENANTHRENE-D10**INT. STD. #4**
8	CI60 PHENANTHRENE-D10**INT. STD. #4**
9	CI70 CHRYSENE-D12**INT. STD. #5**
10	CI70 CHRYSENE-D12**INT. STD. #5**
11	CI75 PERYLENE-D12**INT. STD. #6**
12	CI75 PERYLENE-D12**INT. STD. #6**

Scan	Time	Area(Hght)	Amount	Name
545	9:05	15588.	40.000 NG/UL	CI30 1,4-DICHLOROBENZENE-D4
547	9:07	12900.	33.102 NG/UL	CI30 1,4-DICHLOROBENZENE-D4
766	12:46	52356.	40.000 NG/UL	CI40 NAPHTHALENE-D8**INT. ST
767	12:47	40586.	31.008 NG/UL	CI40 NAPHTHALENE-D8**INT. ST
1100	18:20	40125.	40.000 NG/UL	CI50 ACENAPHTHENE-D10**INT.
1101	18:21	34112.	34.006 NG/UL	CI50 ACENAPHTHENE-D10**INT.
1384	23:04	81463.	40.000 NG/UL	CI60 PHENANTHRENE-D10**INT.
1385	23:05	75508.	37.076 NG/UL	CI60 PHENANTHRENE-D10**INT.
1902	31:42	72781.	40.000 NG/UL	CI70 CHRYSENE-D12**INT. STD
1902	31:42	58832.	32.334 NG/UL	CI70 CHRYSENE-D12**INT. STD.
2211	36:51	61203.	40.000 NG/UL	CI75 PERYLENE-D12**INT. STD.
2212	36:52	42765.	27.950 NG/UL	CI75 PERYLENE-D12**INT. STD.

ORIGINAL

Library Search Data: T2585 # 261 Base m/z: 43
05/15/90 11:48:00 + 4:21 Cali: T2585 # 2 RIC: 102527.
Sample: CLP,VERSCDM,2548,SW-2,L,W,16694,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
77 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	4294	2-BUTANONE, 4-(ACETYLOXY)-
2	4338	ACETIC ACID, PENTYL ESTER
3	4329	1-BUTANOL, 3-METHYL-, ACETATE
4	4427	PENTANE, 1-PROPOXY-
5	728	PROPANOIC ACID, 2-METHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C6.H10.O3	130	43	797	844	844
2	C7.H14.O2	130	43	788	885	790
3	C7.H14.O2	130	43	780	869	824
4	C8.H18.O	130	43	739	828	754
5	C4.H8.O2	88	43	727	879	733

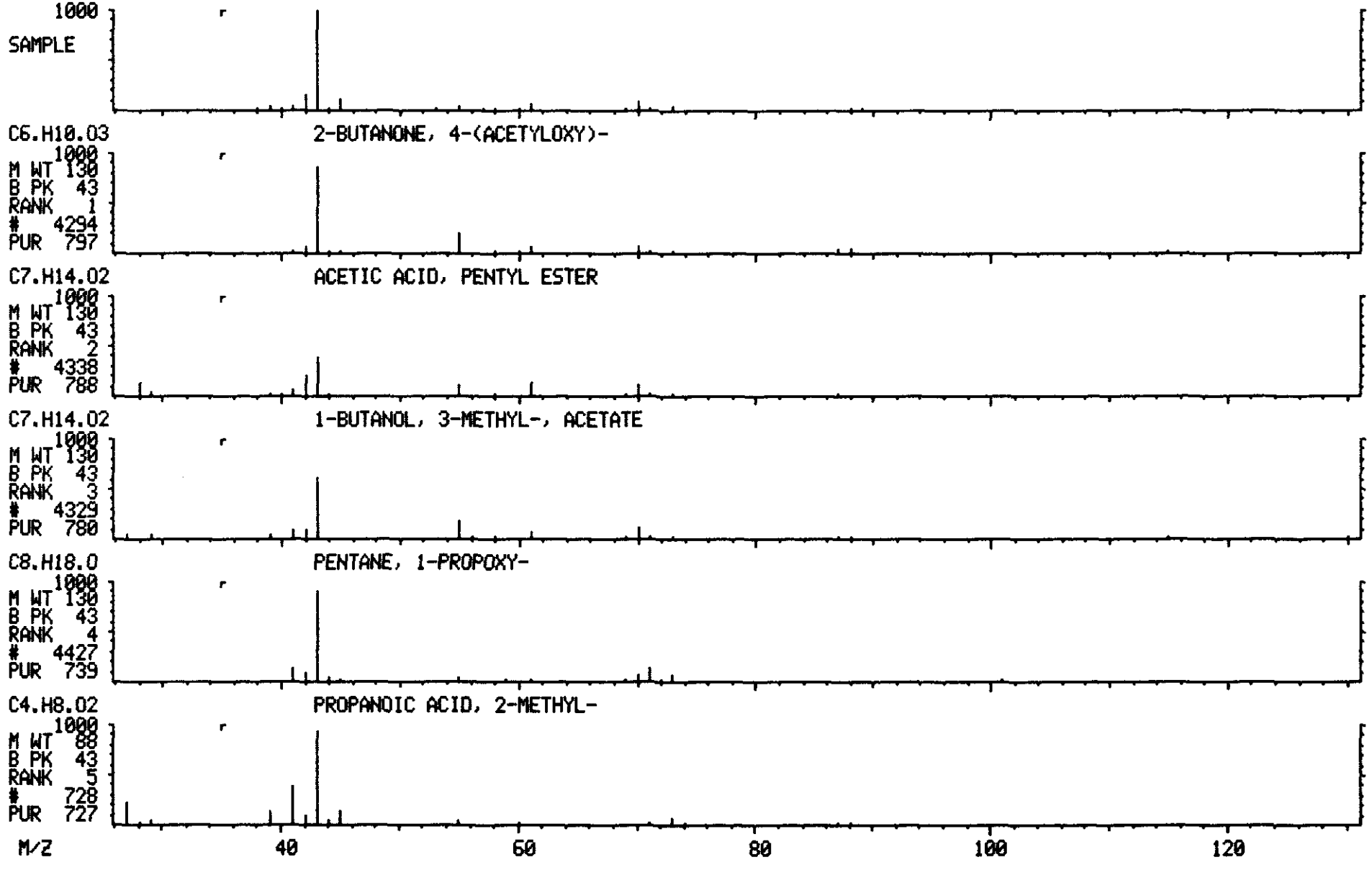
Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	10150-87-5
2	—	—	—	—	628-63-7
3	—	—	—	—	123-92-2
4	—	—	—	—	18641-82-2
5	—	—	—	—	79-31-2

LIBRARY SEARCH
05/15/90 11:48:00 + 4:21
SAMPLE: CLP,VERSCDM,2548,SW-2,L,W,16694,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30@8C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2585 # 261
CALI: T2585 # 2

BASE M/Z: 43
RIC: 102527.

100153



Library Search Data: T2585 # 324 Base m/z: 43
05/15/90 11:48:00 + 5:24 Cali: T2585 # 2 RIC: 26111.
Sample: CLP,VERSCDM,2548,SW-2,L,W,16694,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
121 matched at least 7 of the 16 largest peaks in the unknown

B

Rank	In.	Name
1	806	HYDROPEROXIDE, 1,1-DIMETHYLETHYL
2	2776	2-PENTANOL, 2,4-DIMETHYL-
3	1334	OXIRANE, TETRAMETHYL-
4	1349	OXEPANE, 2,2,4-TRIMETHYL-
5	2777	2-HEXANOL, 2-METHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C4.H10.O2	90	59	768	869	775
2	C7.H16.O	116	59	734	767	734
	C6.H12.O	100	59	696	808	718
	C6.H12.O	100	43	696	782	720
5	C7.H16.O	116	59	687	728	698

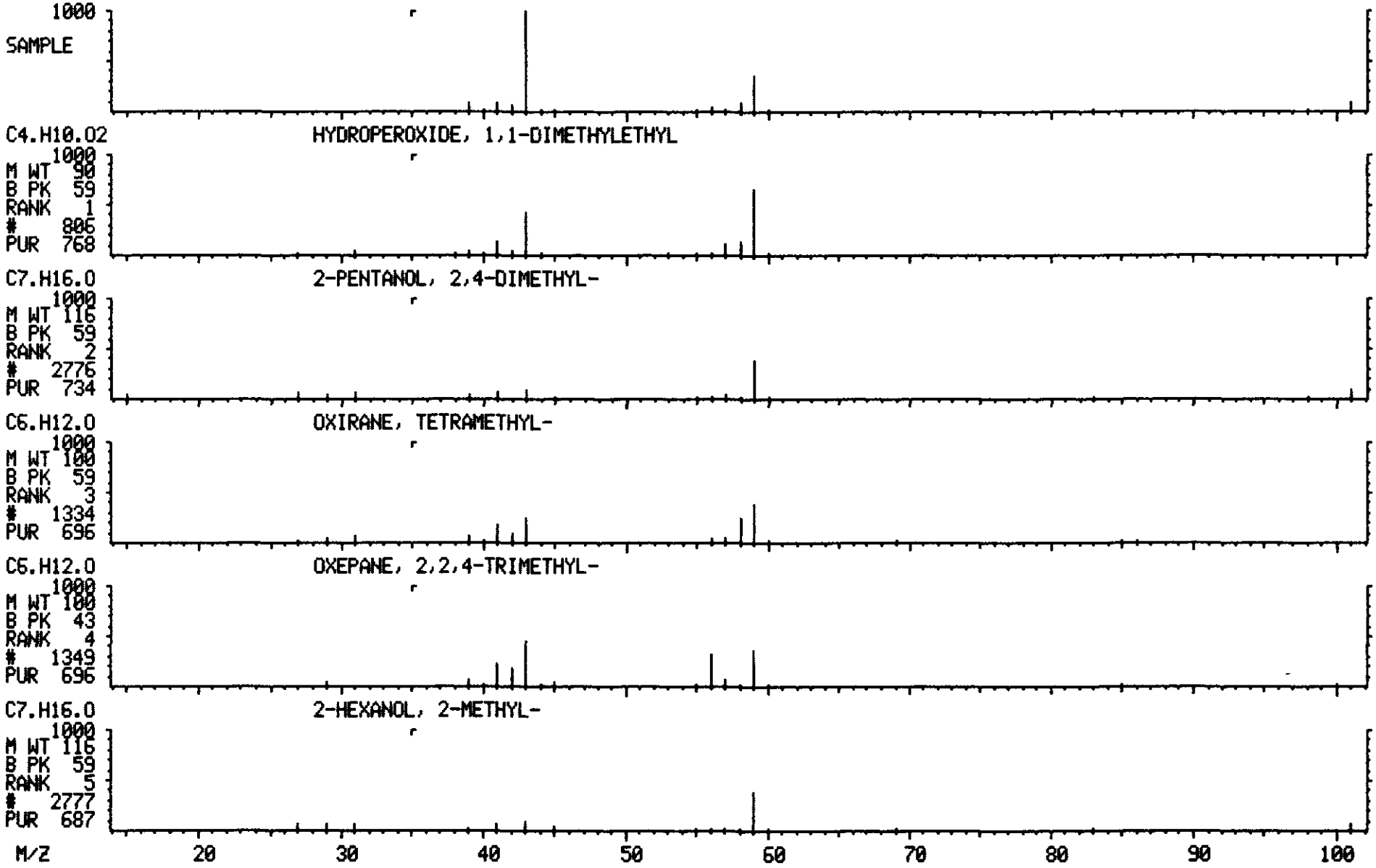
Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	75-91-2
2	—	—	—	—	625-06-9
3	—	—	—	—	5076-20-0
4	—	—	—	—	23120-44-7
5	—	—	—	—	625-23-0

LIBRARY SEARCH
05/15/90 11:48:00 + 5:24
SAMPLE: CLP,VERSCDM,2548,SW-2,L,W,16694,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30208C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2585 # 324
CALI: T2585 # 2

BASE M/Z: 43
RIC: 26111.

100155



Library Search Data: T2585 # 346 Base m/z: 41
05/15/90 11:48:00 + 5:46 Cali: T2585 # 2 RIC: 7343.
Sample: CLP,VERSCDM,2548,SW-2,L,W,16694,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
69 matched at least 8 of the 16 largest peaks in the unknown

Rank	In.	Name
1	1076	1-PROPENE, 3,3'-OXYBIS-
2	1111	2-HEXENAL, (E)-
3	2216	2-HEPTENAL, (Z)-
4	1163	1-HEXENE, 5-METHYL-
5	1153	CYCLOPENTANE, 1,1-DIMETHYL-

unknown

bad

B

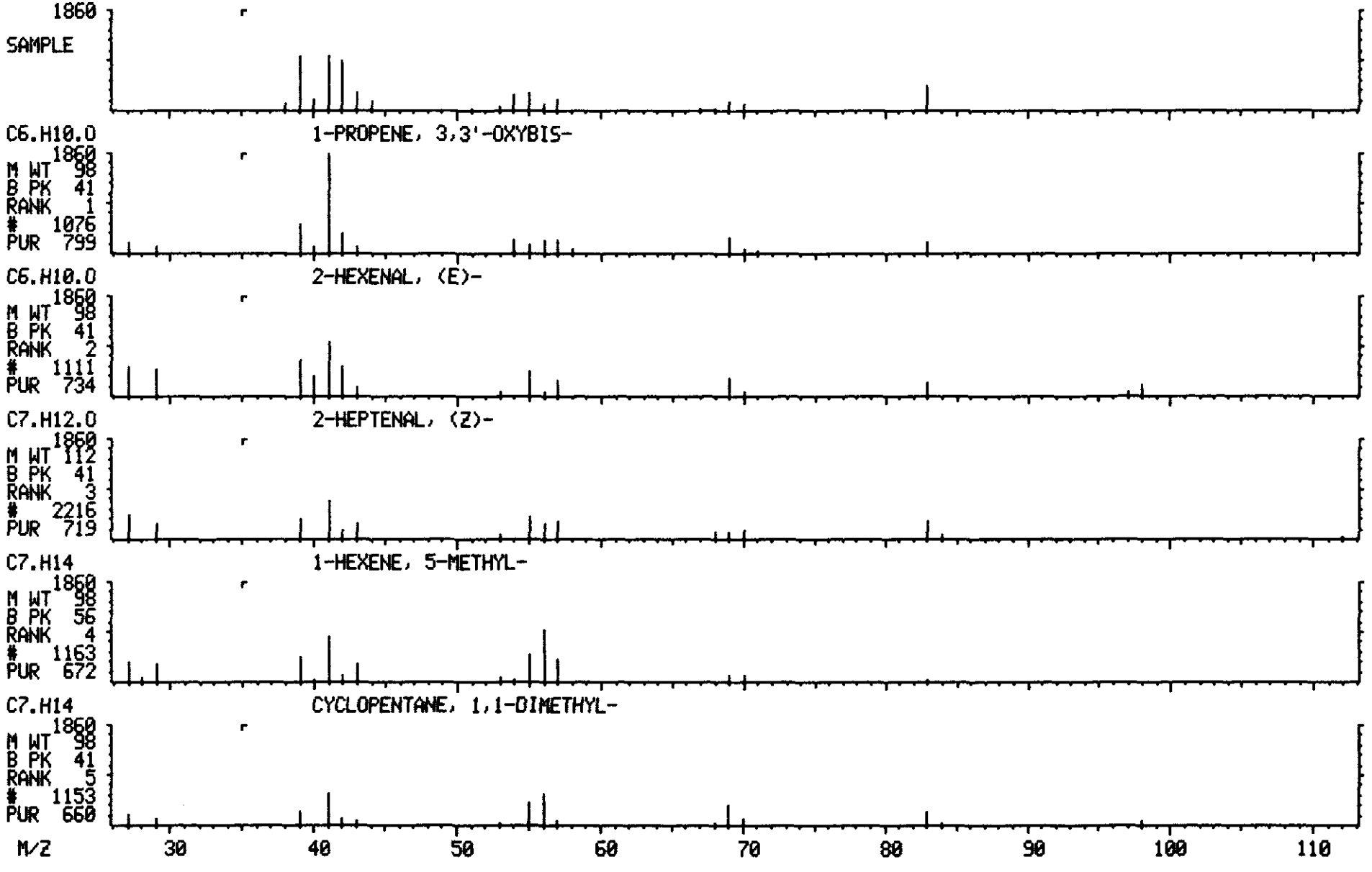
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C6.H10.O	98	41	799	875	827
2	C6.H10.O	98	41	734	840	837
3	C7.H12.O	112	41	719	841	765
4	C7.H14	98	56	672	721	672
5	C7.H14	98	41	660	771	692

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	557-40-4
2	—	—	—	—	6728-26-3
3	—	—	—	—	57266-86-1
4	—	—	—	—	3524-73-0
5	—	—	—	—	1638-26-2

LIBRARY SEARCH
05/15/90 11:48:00 + 5:46
SAMPLE: CLP,VERSCOM,2548,SW-2,L,W,16694,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30200C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2585 # 346
CALI: T2585 # 2

BASE M/Z: 41
RIC: 7343.



Library Search Data: T2585 # 437 Base m/z: 56
05/15/90 11:48:00 + 7:17 Cali: T2585 # 2 RIC: 8047.
Sample: CLP,VERSCDM,2548,SW-2,L,W,16694,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
81 matched at least 7 of the 15 largest peaks in the unknown

Rank	In.	Name
1	1608	1,3-PROPANEDIOL, 2,2-DIMETHYL-
2	2772	3-PENTANOL, 2,4-DIMETHYL-
3	4104	OXIRANE, 2,3-BIS(1-METHYLETHYL)-, TRANS-
4	4096	4-PENTEN-1-OL, 2,2,4-TRIMETHYL-
5	1320	OXIRANE, 2-METHYL-3-(1-METHYLETHYL)-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C5.H12.O2	104	56	911	945	927
2	C7.H16.O	116	43	784	828	830
3	C8.H16.O	128	56	749	831	790
4	C8.H16.O	128	55	723	775	804
5	C6.H12.O	100	56	720	854	726

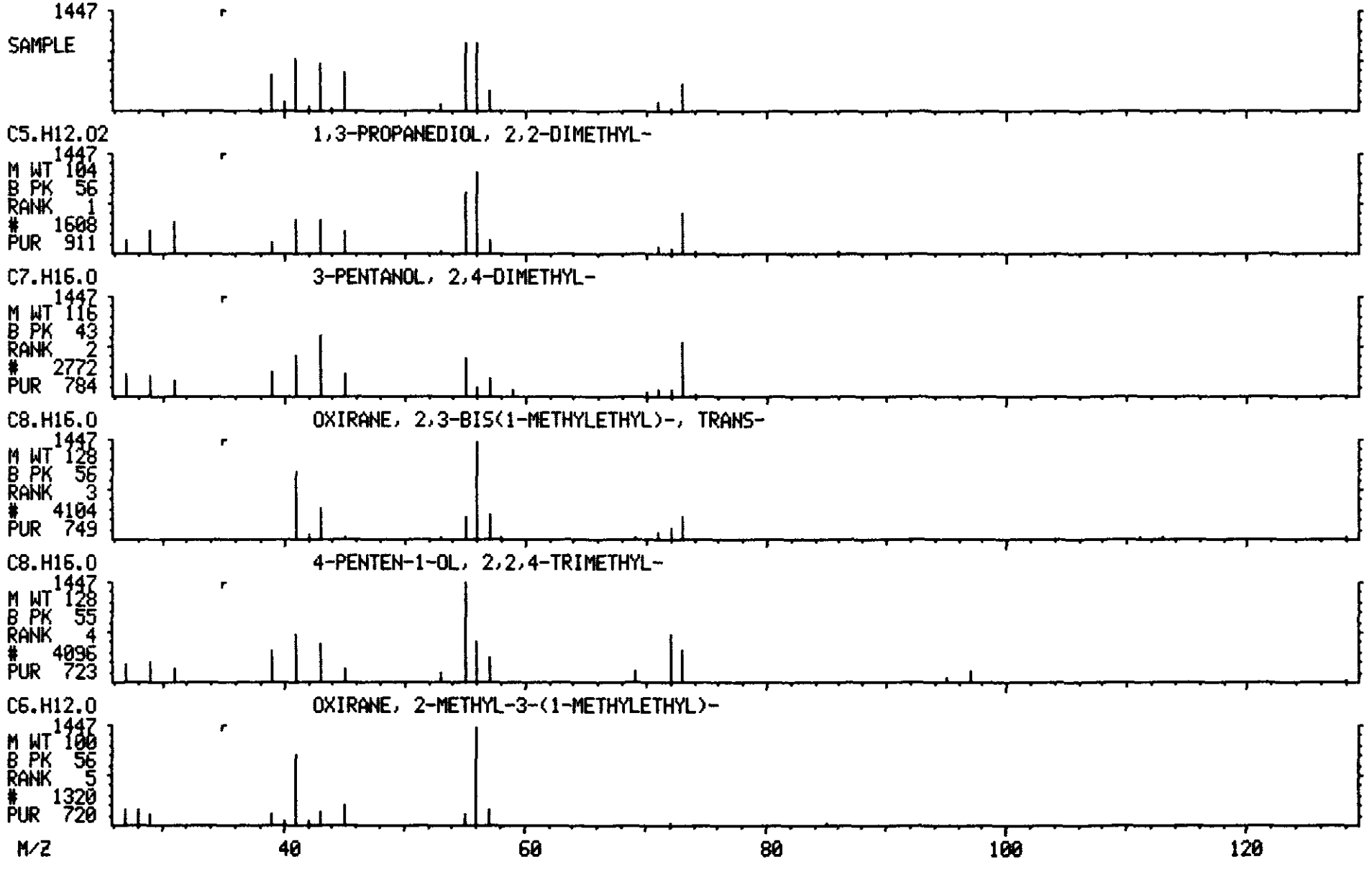
Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	126-30-7
2	—	—	—	—	600-36-2
3	—	—	—	—	54644-32-5
4	—	—	—	—	53907-70-3
5	—	—	—	—	1192-31-0

LIBRARY SEARCH
05/15/90 11:48:00 + 7:17
SAMPLE: CLP,VERSCDM,2548,SW-2,L,W,16694,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30200C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2585 # 437
CALI: T2585 # 2

BASE M/Z: 56
RIC: 8047.

100159



Library Search Data: T2585 # 701 Base m/z: 73
05/15/90 11:48:00 → 11:41 Cali: T2585 # 2 RIC: 5271.
Sample: CLP,VERSCDM,2548,SW-2,L,W,16694,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
97 matched at least 4 of the 16 largest peaks in the unknown

Substituted Cyclotetra siloxane

Rank	In.	Name
1	37373	CYCLOTETRASILOXANE, (IODOMETHYL)HEPTAMETHYL-
2	34667	BENZOIC ACID, 2,4-BIS[(TRIMETHYLSILYL)OXY]-, TRIMETHYLSILYL ESTER
3	28853	CYCLOTETRASILOXANE, OCTAMETHYL-
4	34666	BENZOIC ACID, 2,5-BIS(TRIMETHYLSILOXY)-, TRIMETHYLSILYL ESTER
5	38750	SILANE, [[4-[1,2-BIS[(TRIMETHYLSILYL)OXY]ETHYL]-1,2-PHENYLENE]BIS(O*

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C8.H23.O4.I.SI4	422	73	671	681	979
2	C16.H30.O4.SI3	370	73	567	624	675
3	C8.H24.O4.SI4	296	281	509	660	616
4	C16.H30.O4.SI3	370	73	508	529	640
5	C20.H42.O4.SI4	458	73	483	556	560

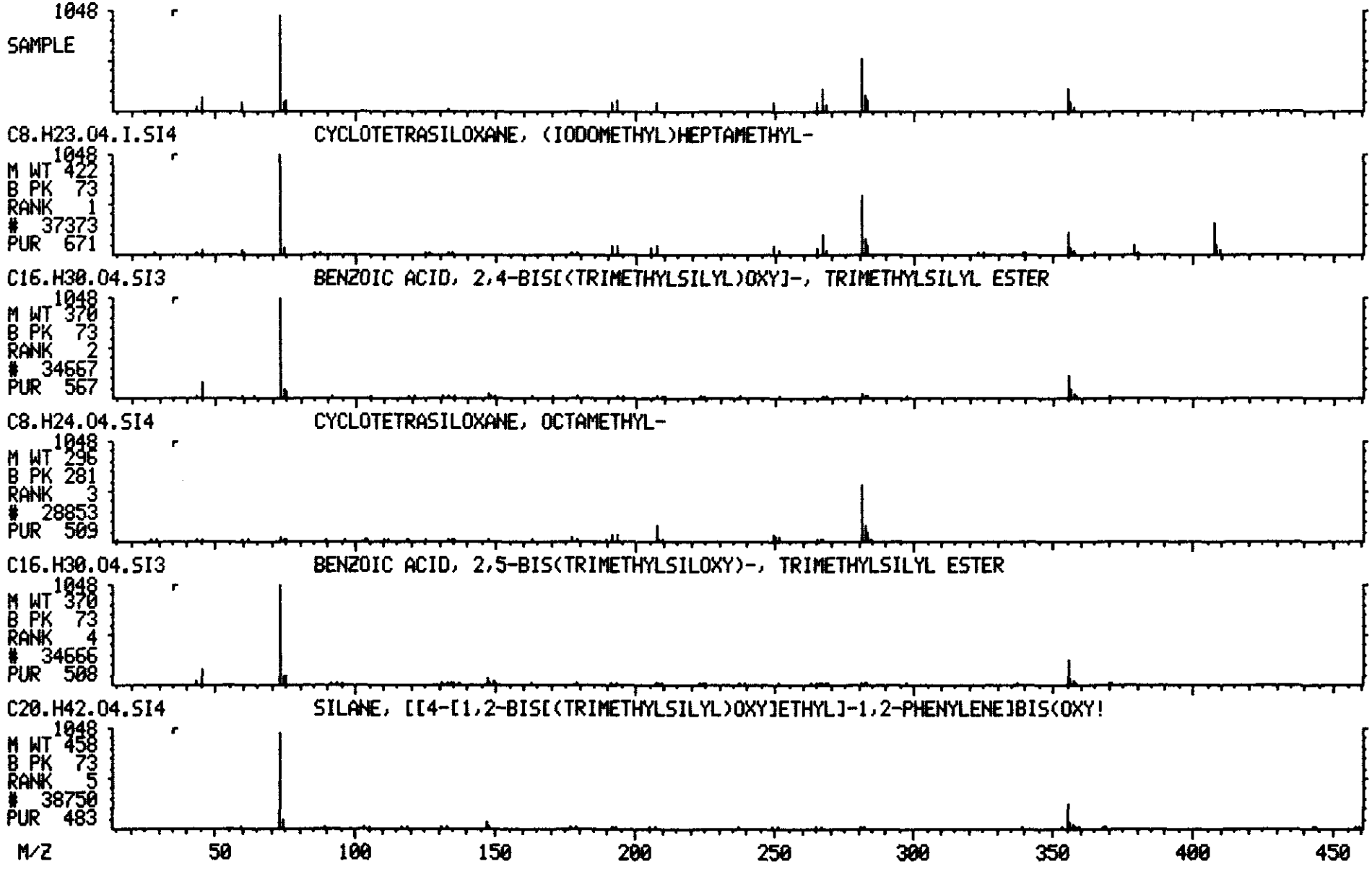
Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	17882-88-1
2	—	—	—	—	10586-16-0
3	—	—	—	—	556-67-2
4	—	—	—	—	3618-20-0
5	—	—	—	—	56114-62-6

LIBRARY SEARCH
05/15/90 11:48:00 + 11:41
SAMPLE: CLP,VERSCOM,2548,SW-2,L,W,16694,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2585 # 701
CALI: T2585 # 2

BASE M/Z: 73
RIC: 5271.

100161



Library Search Data: T2585 #2060 Base m/z: 59
05/15/90 11:48:00 + 34:20 Cali: T2585 # 2 RIC: 3883.
Sample: CLP,VERSCDM,2548,SW-2,L,W,16694,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
66 matched at least 8 of the 16 largest peaks in the unknown

Rank	In.	Name
1	27222	9-OCTADECENAMIDE, (Z)-
2	11020	CYCLOOCTANE, BUTYL-
3	5712	CYCLOPENTANE, (2-METHYLBUTYL)-
4	9058	1-DECANOL (ACN)
5	11013	5-DODECENE, (E)-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C18.H35.O.N	281	59	520	802	626
2	C12.H24	168	69	382	862	391
3	C10.H20	140	41	365	869	399
4	C10.H22.O	158	41	348	796	413
5	C12.H24	168	55	343	818	395

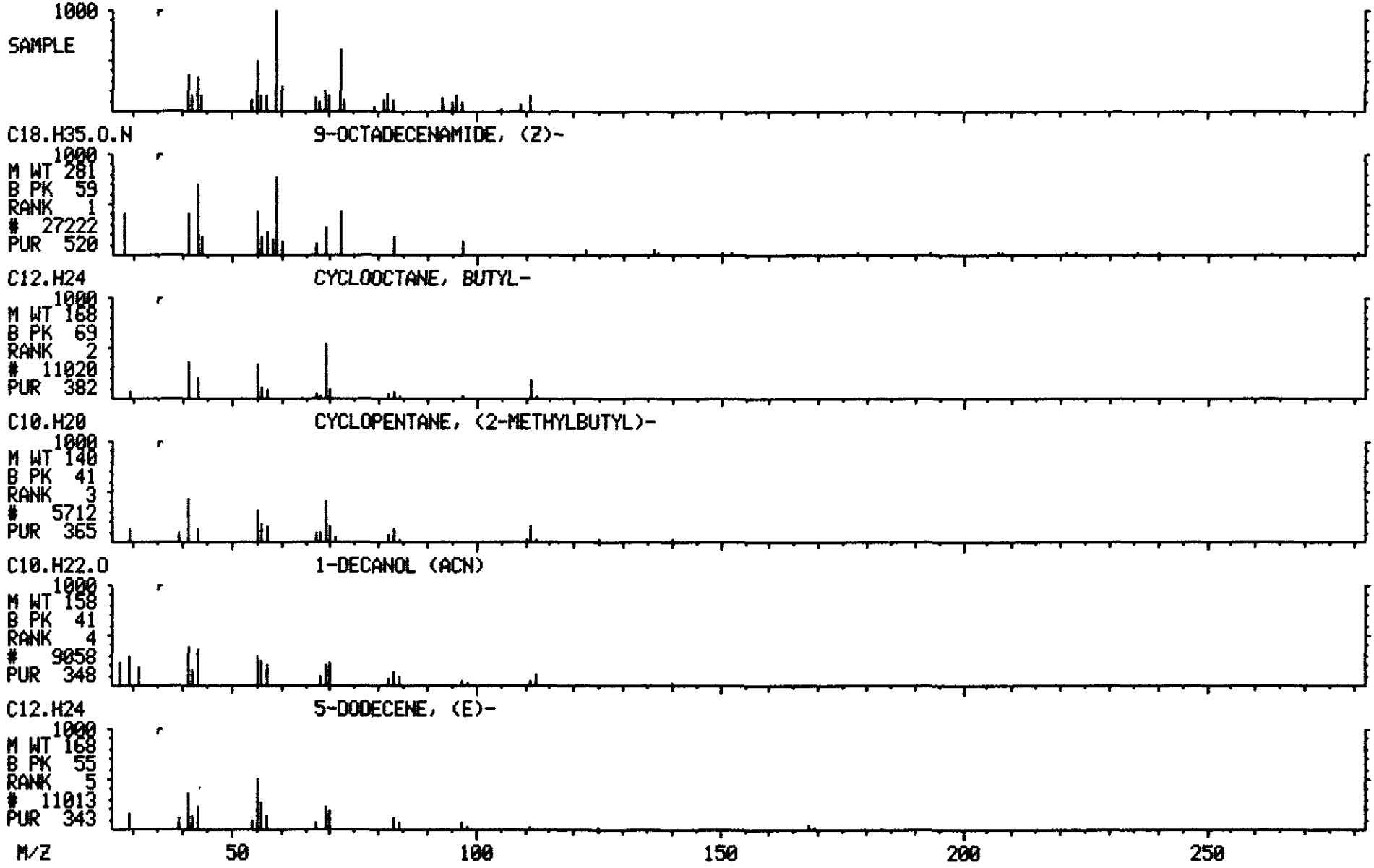
Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	301-02-0
2	—	—	—	—	16538-93-5
3	—	—	—	—	53366-38-4
4	—	—	—	—	112-30-1
5	—	—	—	—	7206-16-8

LIBRARY SEARCH
05/15/90 11:48:00 + 34:20
SAMPLE: CLP,VERSCOM,2548,SW-2,L,W,16694,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30@8C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2585 #2060
CALI: T2585 # 2

BASE M/Z: 59
RIC: 3883.

100163



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        >>>>INTERNAL STANDARD RIC REPORT<<<<
*****************************INTERNAL STANDARD#1*****************RIC
Mass List                      Data: T2585 # 547          Base m/z:   150
05/15/90 11:48:00 +  9:07      Cali: T2585 #   2          RIC:      47040.
Sample: CLP,VERSCDM,2548,SW-2,L,W,16694,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     35       0.00    0.00        0. Minima      Min inten:       0.
     30                       #   0  Maxima
*****************************INTERNAL STANDARD#2*****************RIC
Mass List                      Data: T2585 # 767          Base m/z:   136
05/15/90 11:48:00 + 12:47      Cali: T2585 #   2          RIC:      55168.
Sample: CLP,VERSCDM,2548,SW-2,L,W,16694,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38       0.00    0.00        0. Minima      Min inten:       0.
     30                       #   0  Maxima
*****************************INTERNAL STANDARD#3*****************RIC
Mass List                      Data: T2585 #1101          Base m/z:   164
05/15/90 11:48:00 + 18:21      Cali: T2585 #   2          RIC:      56320.
Sample: CLP,VERSCDM,2548,SW-2,L,W,16694,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38       0.00    0.00        0. Minima      Min inten:       0.
     30                       #   0  Maxima
*****************************INTERNAL STANDARD#4*****************RIC
Mass List                      Data: T2585 #1385          Base m/z:   188
05/15/90 11:48:00 + 23:05      Cali: T2585 #   2          RIC:      71296.
Sample: CLP,VERSCDM,2548,SW-2,L,W,16694,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38       0.00    0.00        0. Minima      Min inten:       0.
     30                       #   0  Maxima
*****************************INTERNAL STANDARD#5*****************RIC
Mass List                      Data: T2585 #1902          Base m/z:   240
05/15/90 11:48:00 + 31:42      Cali: T2585 #   2          RIC:      50368.
Sample: CLP,VERSCDM,2548,SW-2,L,W,16694,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     40       0.00    0.00        0. Minima      Min inten:       0.
     30                       #   0  Maxima
*****************************INTERNAL STANDARD#6*****************RIC
Mass List                      Data: T2585 #2212          Base m/z:   264
05/15/90 11:48:00 + 36:52      Cali: T2585 #   2          RIC:      24800.
Sample: CLP,VERSCDM,2548,SW-2,L,W,16694,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     40       0.00    0.00        0. Minima      Min inten:       0.
     30                       #   0  Maxima
     ANALYST: CHECK BASE M/Z AND RIC AMOUNT TO INSURE NO CONTAMINATION
```

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-1A

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16695

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2586

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/15/90

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	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
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	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
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	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
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	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	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-1A

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16695

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2586

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/15/90

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	50	U
100-02-7	4-Nitrophenol	50	U
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
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
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

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TB-1A

La Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16695

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2586

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/15/90

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

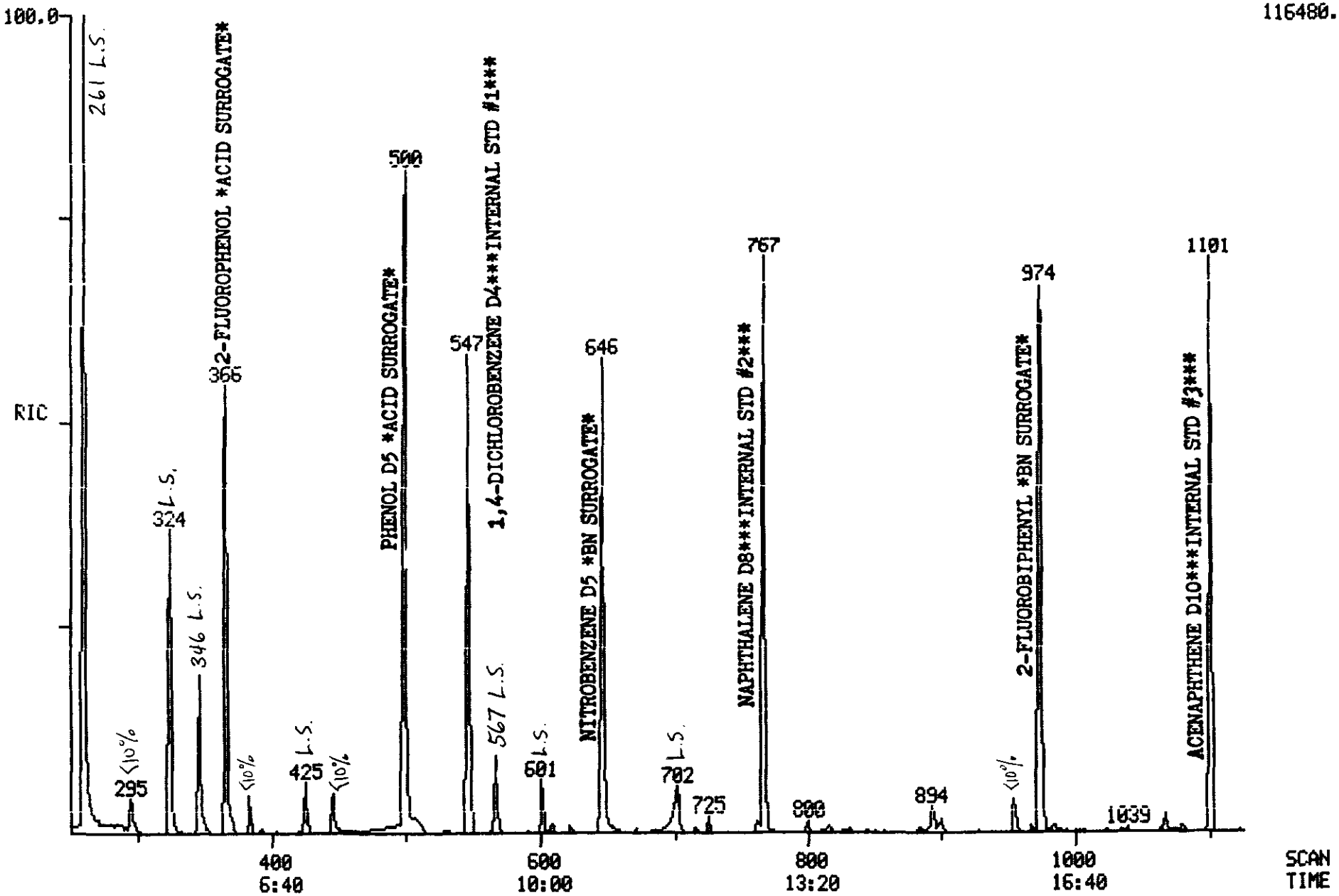
Number TICs found: 7

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.35	120	J
2.	UNKNOWN	5.40	46	BJ
3.	UNKNOWN	5.77	24	BJ
4.	UNKNOWN	7.08	8.0	J
5. 29538-77-0	CYCLOHEXANOL, 4-CHLORO-, TRA	9.45	12	J
6.	UNKNOWN	10.02	8.0	BJ
7.	UNKNOWN SILOXANE	11.70	6.0	J

RIC DATA: T2586 #1 SCANS 250 TO 1125
05/15/90 12:41:00 CALI: T2586 #2
SAMPLE: CLP,VERSCDM,2548,TB-1A,L,W,16695,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30208C/MIN
RANGE: G 1,2720 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

100168

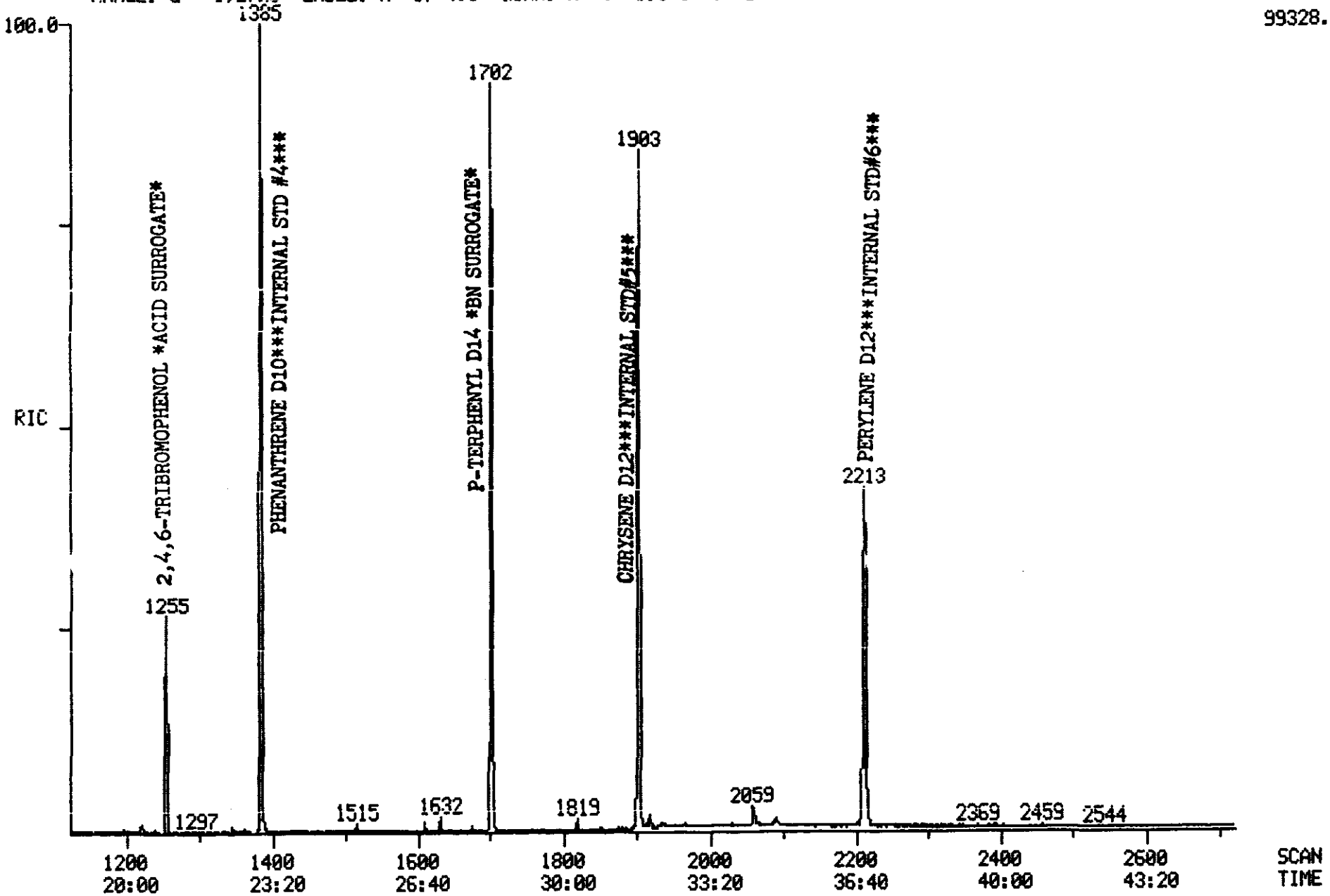


RIC
05/15/90 12:41:00
SAMPLE: CLP,VERSCDM,2546,TB-1A,L,W,16695,B,,420.1,3,1UL,
CONDS.· INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
RANGE: G 1,2720 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: T2586 #1
CALI: T2586 #2

SCANS 1125 TO 2720

100169



Quantitation Report File: T2596

Data: T2586.TI
05/15/90 12:41:00
Sample: CLP,VERSCDM,2548,TB-1A,L,W,16695,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: SJD Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	C330 2-CHLOROPHENOL
3	C315 PHENOL
4	C325 BIS (2-CHLOROETHYL) ETHER
5	C335 1,3-DICHLOROBENZENE
6	C340 1,4-DICHLOROBENZENE
7	C350 1,2-DICHLOROBENZENE
8	C345 BENZYL ALCOHOL
9	C360 BIS (2-CHLOROISOPROPYL) ETHER
10	C355 2-METHYLPHENOL
11	C375 HEXACHLOROETHANE
12	C365 4-METHYLPHENOL
13	C370 N-NITROSO-DI-N-PROPYLAMINE
14	CS50 2-FLUOROPHENOL**ACID SURR.**
15	CS45 PHENOL-D5**ACID SURR.**
16	CI40 NAPHTHALENE-D8**INT. STD.#2**
17	C410 NITROBENZENE
18	C415 ISOPHORONE
19	C420 2-NITROPHENOL
20	C425 2,4-DIMETHYLPHENOL
21	C435 BIS (2-CHLOROETHOXY) METHANE
22	C440 2,4-DICHLOROPHENOL
23	C445 1,2,4-TRICHLOROBENZENE
24	C450 NAPHTHALENE
25	C430 BENZOIC ACID
26	C455 4-CHLOROANILINE
27	C460 HEXACHLOROBUTADIENE
28	C465 4-CHLORO-3-METHYLPHENOL
29	C470 2-METHYLNAPHTHALENE
30	CS20 NITROBENZENE-D5**BN SURR.**
31	CI50 ACENAPHTHENE-D10**INT. STD.#3**
32	C510 HEXACHLOROCYCLOPENTADIENE
33	C515 2,4,6-TRICHLOROPHENOL
34	C520 2,4,5-TRICHLOROPHENOL
35	C525 2-CHLORONAPHTHALENE
36	C530 2-NITROANILINE
37	C540 ACENAPHTHYLENE
38	C535 DIMETHYL PHTHALATE
39	C544 2,6-DINITROTOLUENE
40	C550 ACENAPHTHENE
41	C545 3-NITROANILINE
42	C555 2,4-DINITROPHENOL
43	C565 DIBENZOFURAN
44	C560 4-NITROPHENOL
45	C570 2,4-DINITROTOLUENE
46	C590 FLUORENE
47	C585 4-CHLOROPHENYL-PHENYLETHER

✓ DB 5/22/90

RFF pd

All IS areas + Surrogate recoveries are compliant.
SJD 5-15-90.

No	Name
48	C580 DIETHYLPHTHALATE
49	C595 4-NITROANILINE
50	C610 4,6-DINITRO-2-METHYLPHENOL

T2586.

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	547	9:07	1	1.000	A BB	16654.	40.000 NG/UL	8.00
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	112	365	6:05	1	0.667	A BB	22514.	51.190 NG*A1	10.23
15	99	499	8:19	1	0.912	A BB	39188.	61.082 NG*A2	12.21
16	136	767	12:47	16	1.000	A BB	52036.	40.000 NG/UL	8.00
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
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	82	646	10:46	16	0.842	A BB	44758.	47.959 NG*B1	9.59
31	164	1101	18:21	31	1.000	A BB	42433.	40.000 NG/UL	8.00
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	NOT FOUND								
49	NOT FOUND								
50	NOT FOUND								

T2586

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:05	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	8:37		0.949						
3	8:20		0.917						
4	8:33		0.941						
5	8:59		0.989						
6	9:08		1.006						
7	9:38		1.061						
8	9:34		1.053						
9	10:00		1.101						
10	9:55		1.092						
11	10:27		1.150						
12	10:20		1.138						
13	10:25		1.147						
14	6:03	1.01	0.666	1.00	51.19	50.00	1.081	1.056	1.02
15	8:18	1.00	0.914	1.00	61.08	50.00	1.882	1.541	1.22
16	12:46	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
17	10:48		0.846						
18	11:28		0.898						
19	11:43		0.918						
20	11:52		0.930						
21	12:12		0.956						
22	12:24		0.971						
23	12:38		0.990						
24	12:49		1.004						
25	12:14		0.958						
26	13:07		1.027						
27	13:22		1.047						
28	14:38		1.146						
29	14:57		1.171						
30	10:45	1.00	0.842	1.00	47.96	50.00	0.688	0.717	0.96
31	18:20	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
32	15:39		0.854						
33	15:57		0.870						
34	16:04		0.876						
35	16:29		0.899						
36	17:01		0.928						
37	17:50		0.973						
38	17:43		0.966						
39	17:58		0.980						
40	18:26		1.005						
41	18:22		1.002						
42	18:40		1.018						
43	18:56		1.033						
44	18:56		1.033						
45	19:11		1.046						
46	20:03		1.094						
47	20:05		1.095						
48	20:00		1.091						
49	20:21		1.110						
50	20:27		1.115						

Quantitation Report File: T2586

Data: T2586.TI
05/15/90 12:41:00
Sample: CLP,VERSCDM,2548,TB-1A,L,W,16695,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: SJD Acct. No.: 420.1

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

No	Name
51	C615 N-NITROSODIPHENYLAMINE
52	C625 4-BROMOPHENYL-PHENYLETHER
53	C630 HEXACHLOROBENZENE
54	CS25 2-FLUOROBIPHENYL**BN SURR.**
55	CI60 PHENANTHRENE-D10**INT. STD.#4**
56	C635 PENTACHLOROPHENOL
57	C640 PHENANTHRENE
58	C645 ANTHRACENE
59	C650 DI-N-BUTYLPHTHALATE
60	C655 FLUORANTHENE
61	C715 PYRENE
62	CS55 2,4,6,-TRIBROMOPHENOL**ACID SURR.**
63	CI70 CHRYSENE-D12**INT. STD.#5**
64	C720 BUTYLBENZYLPHTHALATE
65	C730 BENZO(A)ANTHRACENE
66	C740 CHRYSENE
67	C725 3,3'-DICHLOROBENZIDINE
68	C741 BIS(2-ETHYLHEXYL)PHTHALATE
69	CS30 P-TERPHENYL-D14**BN SURR.**
70	CI75 PERYLENE-D12**INT. STD.#6**
71	C760 DI-N-OCTYL PHTHALATE
72	C765 BENZO(B)FLUORANTHENE
73	C770 BENZO(K)FLUORANTHENE
74	C775 BENZO(A)PYRENE
75	C780 INDENO(1,2,3-CD)PYRENE
76	C785 DIBENZ(A,H)ANTHRACENE
77	C790 BENZO(G,H,I)PERYLENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	NOT FOUND								
52	NOT FOUND								
53	NOT FOUND								
54	172	974	16:14	31	0.885	A BB	50921.	37.448 NG*B2	7.49
55	188	1385	23:05	55	1.000	A BB	90783.	40.000 NG/UL	8.00
56	NOT FOUND								
57	NOT FOUND								
58	NOT FOUND								
59	149	1515	25:15	55	1.094	A BB	2214.	BL ~~0.576 NG~~	0.12
60	NOT FOUND								
61	NOT FOUND								
62	330	1255	20:55	31	1.140	A BB	6976.	20.995 NG*A3	4.20
63	240	1903	31:43	63	1.000	A BB	83121.	40.000 NG/UL	8.00
64	NOT FOUND								
65	NOT FOUND								
66	NOT FOUND								

T2586

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	Tot
67	NOT FOUND								
68	149	1918	31:58	63	1.008	A BB	952.	BRL ~~0.417 NG~~	0.08
69	244	1702	28:22	63	0.894	A BB	73029.	40.655 NG*B3	8.13
70	264	2213	36:53	70	1.000	A BB	70680.	40.000 NG/UL	8.00
71	149	2031	33:51	70	0.918	A BB	188.	BRL ~~0.050 NG~~	0.01
72	NOT FOUND								
73	NOT FOUND								
74	NOT FOUND								
75	NOT FOUND								
76	NOT FOUND								
77	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	20:32		1.120						
52	21:39		1.181						
53	22:03		1.203						
54	16:13	1.00	0.885	1.00	37.45	50.00	0.960	1.282	0.75
55	23:04	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
56	22:40		0.983						
57	23:08		1.003						
58	23:17		1.009						
59	25:14	1.00	1.094	1.00	0.58	50.00	0.020	1.695	0.01
60	27:01		1.171						
61	27:45		0.875						
62	20:54	1.00	1.140	1.00	20.99	50.00	0.132	0.313	0.42
63	31:42	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
64	30:07		0.950						
65	31:39		0.998						
66	31:47		1.003						
67	31:40		0.999						
68	31:57	1.00	1.008	1.00	0.42	50.00	0.009	1.094	0.01
69	28:21	1.00	0.894	1.00	40.65	50.00	0.703	0.864	0.81
70	36:51	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
71	33:49	1.00	0.918	1.00	0.05	50.00	0.002	2.143	0.00
72	35:13		0.956						
73	35:19		0.958						
74	36:36		0.993						
75	42:54		1.164						
76	43:04		1.169						
77	44:45		1.214						

Quantitation Report File: QCREF

Data: T2586.TI
05/15/90 12:41:00
Sample: CLP,VERSCDM,2548,TB-1A,L,W,16695,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: SJD Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	CI40 NAPHTHALENE-D8**INT. STD.#2**
3	CI50 ACENAPHTHENE-D10**INT. STD.#3**
4	CI60 PHENANTHRENE-D10**INT. STD.#4**
5	CI70 CHRYSENE-D12**INT. STD.#5**
6	CI75 PERYLENE-D12**INT. STD.#6**
7	CS50 2-FLUOROPHENOL**ACID SURR.**
8	CS45 PHENOL-D5**ACID SURR.**
9	CS55 2,4,6,-TRIBROMOPHENOL**ACID SURR.**
10	CS20 NITROBENZENE-D5**BN SURR.**
11	CS25 2-FLUOROBIPHENYL**BN SURR.**
12	CS30 P-TERPHENYL-D14**BN SURR.**

Scan	Time	Area(Hght)		Amount		Name
547	9:07	16654.	90	40.000	NG/UL	CI30 1,4-DICHLOROBENZENE-D4
767	12:47	52036.		40.000	NG/UL	CI40 NAPHTHALENE-D8**INT. ST
1101	18:21	42433.	Rec.	40.000	NG/UL	CI50 ACENAPHTHENE-D10**INT.
1385	23:05	90783.		40.000	NG/UL	CI60 PHENANTHRENE-D10**INT.
1903	31:43	83121.		40.000	NG/UL	CI70 CHRYSENE-D12**INT. STD.
2213	36:53	70680.		40.000	NG/UL	CI75 PERYLENE-D12**INT. STD.
365	6:05	22514.	51	51.190	NG*A1	CS50 2-FLUOROPHENOL**ACID SU
499	8:19	39188.	61	61.082	NG*A2	CS45 PHENOL-D5**ACID SURR.**
1255	20:55	6976.	21	20.995	NG*A3	CS55 2,4,6,-TRIBROMOPHENOL**
646	10:46	44758.	96	47.959	NG*B1	CS20 NITROBENZENE-D5**BN SUR
974	16:14	50921.	75	37.448	NG*B2	CS25 2-FLUOROBIPHENYL**BN SU
1702	28:22	73029.	81	40.655	NG*B3	CS30 P-TERPHENYL-D14**BN SUR

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:05	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	12:46	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
3	18:20	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
4	23:04	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
5	31:42	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
6	36:51	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
7	6:03	1.01	0.666	1.00	51.19	50.00	1.081	1.056	1.02
8	8:18	1.00	0.914	1.00	61.08	50.00	1.882	1.541	1.22
9	20:54	1.00	1.140	1.00	20.99	50.00	0.132	0.313	0.42
10	10:45	1.00	0.842	1.00	47.96	50.00	0.688	0.717	0.96
11	16:13	1.00	0.885	1.00	37.45	50.00	0.960	1.282	0.75
12	28:21	1.00	0.894	1.00	40.65	50.00	0.703	0.864	0.81

Quantitation Report File: ISREF

ORIGINAL (Red)

Data: T2583.TI
05/15/90 9:42:00
Sample: CLP,,,SSTD 50,,,22658,B,CC-050,,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: SJD Acct. No.: -

Data: T2586.TI
05/15/90 12:41:00
Sample: CLP,VERSCDM,2548,TB-1A,L,W,16695,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: SJD Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
3	CI40 NAPHTHALENE-D8**INT. STD. #2**
4	CI40 NAPHTHALENE-D8**INT. STD. #2**
5	CI50 ACENAPHTHENE-D10**INT. STD. #3**
6	CI50 ACENAPHTHENE-D10**INT. STD. #3**
7	CI60 PHENANTHRENE-D10**INT. STD. #4**
8	CI60 PHENANTHRENE-D10**INT. STD. #4**
9	CI70 CHRYSENE-D12**INT. STD. #5**
10	CI70 CHRYSENE-D12**INT. STD. #5**
11	CI75 PERYLENE-D12**INT. STD. #6**
12	CI75 PERYLENE-D12**INT. STD. #6**

Scan	Time	Area(Hght)	Amount	Name
545	9:05	15588.	40.000 NG/UL	CI30 1,4-DICHLOROBENZENE-D4
547	9:07	16654.	42.735 NG/UL	CI30 1,4-DICHLOROBENZENE-D4
766	12:46	52356.	40.000 NG/UL	CI40 NAPHTHALENE-D8**INT. ST
767	12:47	52036.	39.755 NG/UL	CI40 NAPHTHALENE-D8**INT. ST
1100	18:20	40125.	40.000 NG/UL	CI50 ACENAPHTHENE-D10**INT.
1101	18:21	42433.	42.301 NG/UL	CI50 ACENAPHTHENE-D10**INT.
1384	23:04	81463.	40.000 NG/UL	CI60 PHENANTHRENE-D10**INT.
1385	23:05	90783.	44.576 NG/UL	CI60 PHENANTHRENE-D10**INT.
1902	31:42	72781.	40.000 NG/UL	CI70 CHRYSENE-D12**INT. STD.
1903	31:43	83121.	45.683 NG/UL	CI70 CHRYSENE-D12**INT. STD.
2211	36:51	61203.	40.000 NG/UL	CI75 PERYLENE-D12**INT. STD.
2213	36:53	70680.	46.194 NG/UL	CI75 PERYLENE-D12**INT. STD.

Library Search Data: T2586 # 261 Base m/z: 43
05/15/90 12:41:00 + 4:21 Cali: T2586 # 2 RIC: 87295.
Sample: CLP,VERSCDM,2548,TB-1A,L,W,16695,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
77 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	4294	2-BUTANONE, 4-(ACETYLOXY)-
2	4338	ACETIC ACID, PENTYL ESTER
3	4329	1-BUTANOL, 3-METHYL-, ACETATE
4	4427	PENTANE, 1-PROPOXY-
5	728	PROPANOIC ACID, 2-METHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C6.H10.O3	130	43	796	843	844
2	C7.H14.O2	130	43	788	885	791
3	C7.H14.O2	130	43	779	869	823
4	C8.H18.O	130	43	737	826	751
5	C4.H8.O2	88	43	726	879	733

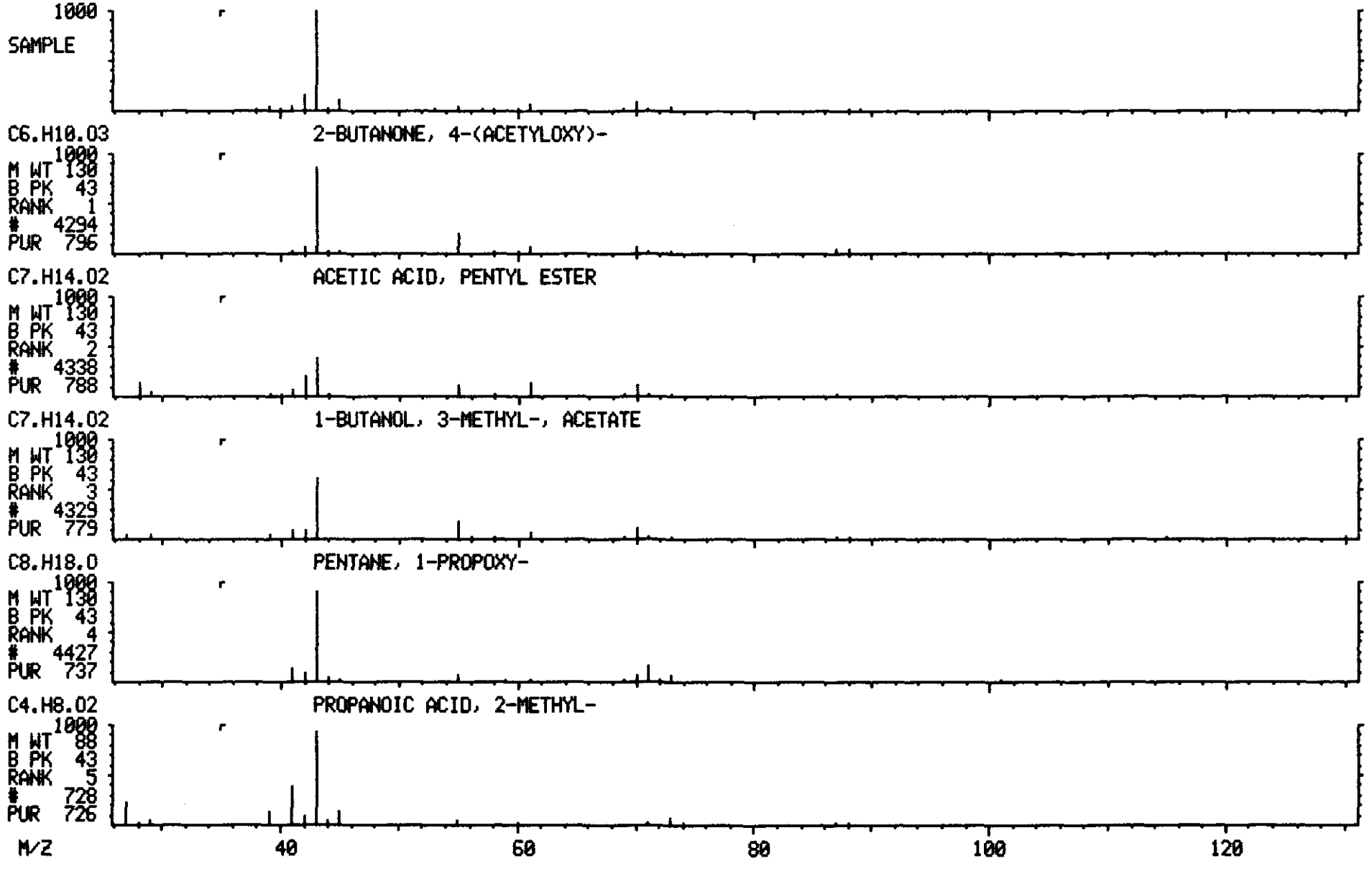
Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	10150-87-5
2	—	—	—	—	628-63-7
3	—	—	—	—	123-92-2
4	—	—	—	—	18641-82-2
5	—	—	—	—	79-31-2

LIBRARY SEARCH
05/15/90 12:41:00 + 4:21
SAMPLE: CLP,VERSCDM,2548,TB-1A,L,W,16695,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30@8C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2586 # 261
CALI: T2586 # 2

BASE M/Z: 43
RIC: 87295.

100178



Library Search Data: T2586 # 324 Base m/z: 43
05/15/90 12:41:00 + 5:24 Cali: T2586 # 2 RIC: 34239.
Sample: CLP,VERSCDM,2548,TB-1A,L,W,16695,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
121 matched at least 7 of the 16 largest peaks in the unknown

B

Rank	In.	Name
1	806	HYDROPEROXIDE, 1,1-DIMETHYLETHYL
2	2776	2-PENTANOL, 2,4-DIMETHYL-
3	1334	OXIRANE, TETRAMETHYL-
4	1349	OXEPANE, 2,2,4-TRIMETHYL-
5	2777	2-HEXANOL, 2-METHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C4.H10.O2	90	59	764	869	772
2	C7.H16.O	116	59	740	775	740
	C6.H12.O	100	59	690	805	713
4	C6.H12.O	100	43	689	778	715
5	C7.H16.O	116	59	684	727	696

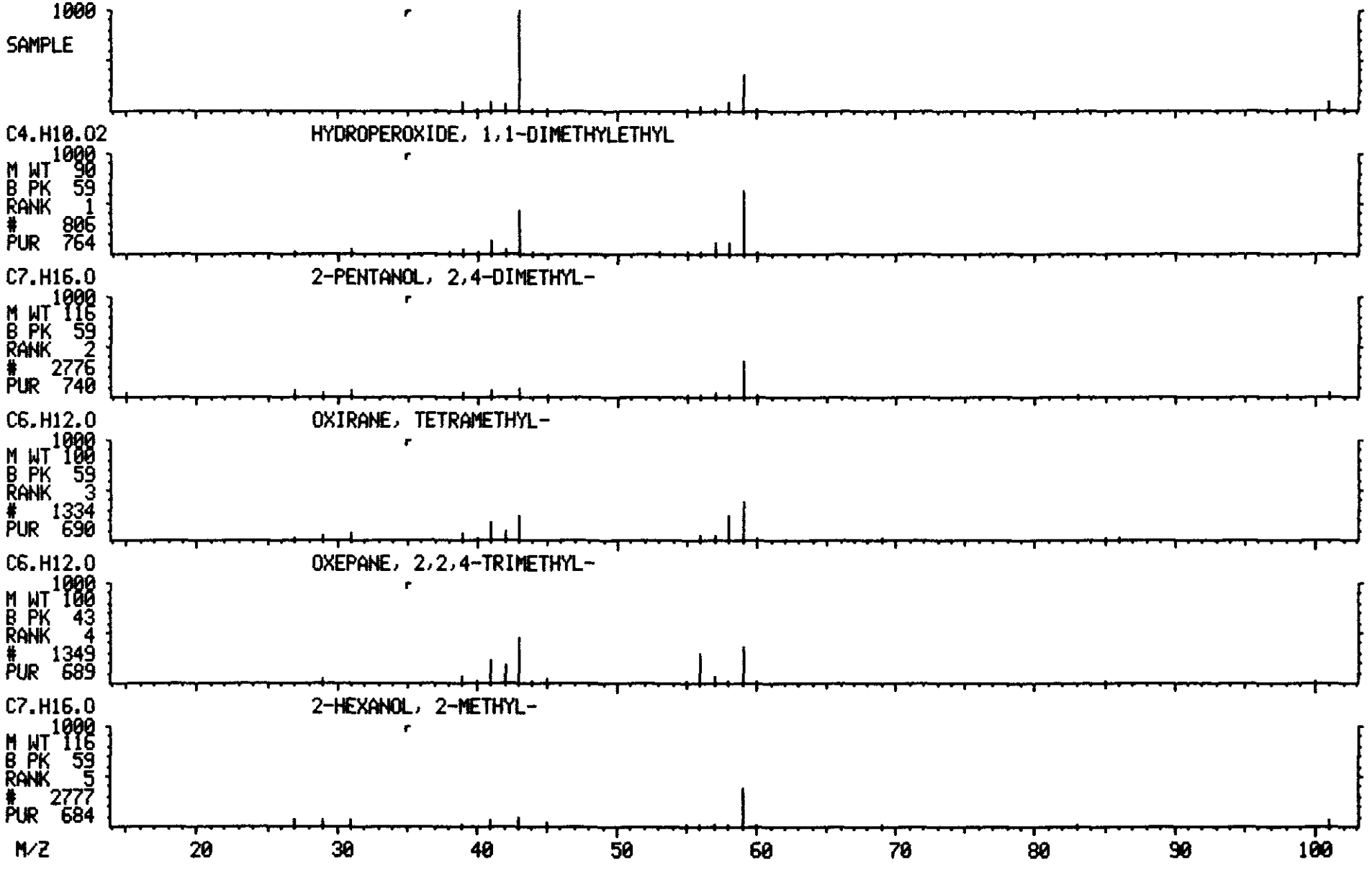
Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	75-91-2
2	—	—	—	—	625-06-9
3	—	—	—	—	5076-20-0
4	—	—	—	—	23120-44-7
5	—	—	—	—	625-23-0

LIBRARY SEARCH
05/15/90 12:41:00 + 5:24
SAMPLE: CLP,VERSCOM,2548,TB-1A,L,W,16695,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30200C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2586 # 324
CALI: T2586 # 2

BASE M/Z: 43
RIC: 34239.

100180



Library Search Data: T2586 # 346 Base m/z: 41
05/15/90 12:41:00 + 5:46 Cali: T2586 # 2 RIC: 17151.
Sample: CLP,VERSCDM,2548,TB-1A,L,W,16695,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
72 matched at least 8 of the 16 largest peaks in the unknown

unknown

B

Rank	In.	Name
1	1076	1-PROPENE, 3,3'-OXYBIS-
2	1111	2-HEXENAL, (E)-
3	2216	2-HEPTENAL, (Z)-
4	1153	CYCLOPENTANE, 1,1-DIMETHYL-
5	2186	4-PENTENAL, 2,2-DIMETHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C6.H10.O	98	41	764	878	791
2	C6.H10.O	98	41	749	884	809
	C7.H12.O	112	41	727	874	748
4	C7.H14	98	56	652	784	677
5	C7.H12.O	112	55	650	792	685

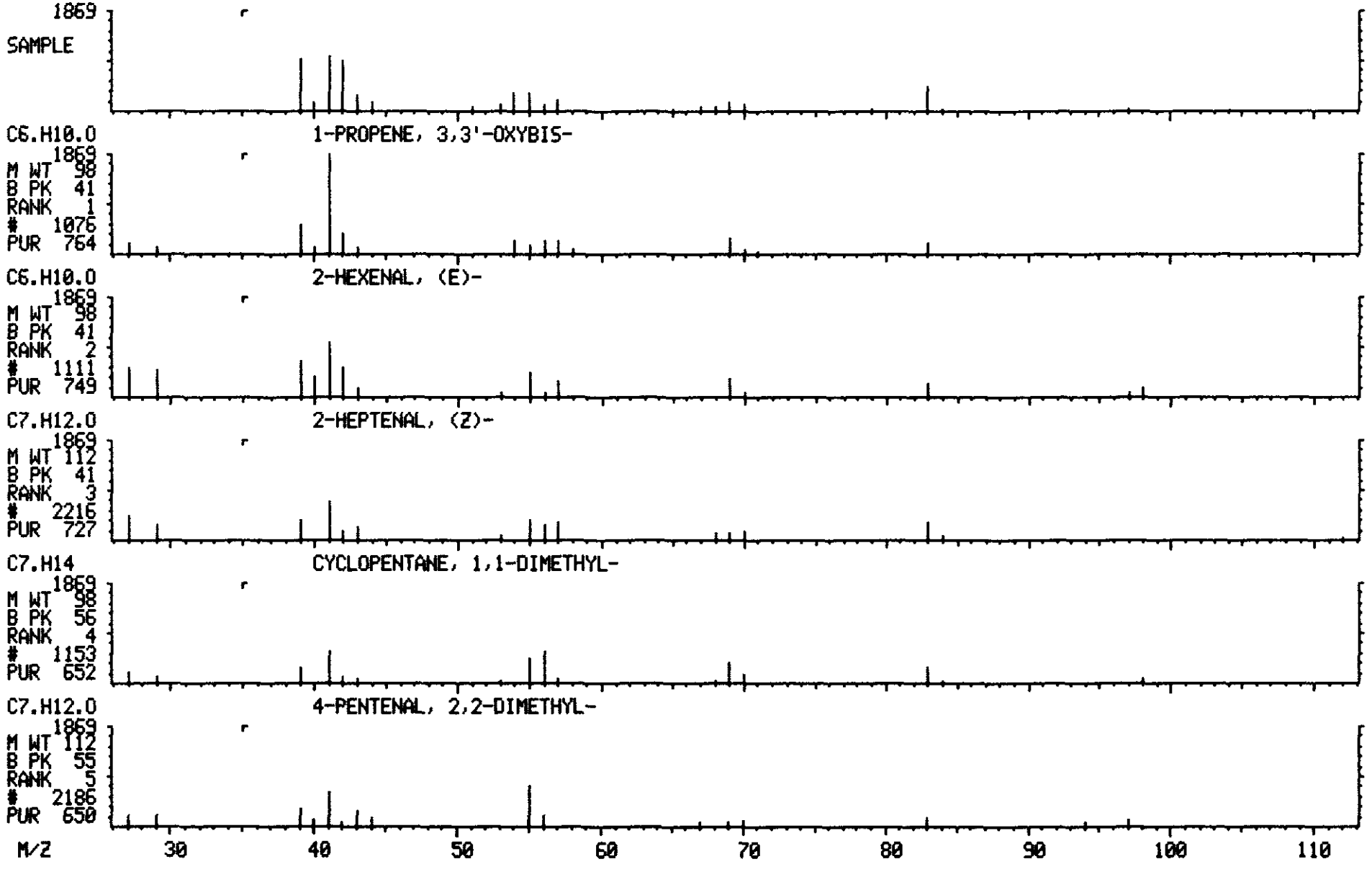
Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	557-40-4
2	—	—	—	—	6728-26-3
3	—	—	—	—	57266-86-1
4	—	—	—	—	1638-26-2
5	—	—	—	—	5497-67-6

LIBRARY SEARCH
05/15/90 12:41:00 + 5:46
SAMPLE: CLP,VERSCDM,2548,TB-1A,L,W,16695,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30200C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2586 # 346
CALI: T2586 # 2

BASE M/Z: 41
RIC: 17151.

100182



Library Search Data: T2586 # 425 Base m/z: 56
05/15/90 12:41:00 + 7:05 Cali: T2586 # 2 RIC: 5695.
Sample: CLP,VERSCDM,2548,TB-1A,L,W,16695,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
284 matched at least 4 of the 16 largest peaks in the unknown

Rank	In.	Name
1	3877	AZIRIDINE, 1-HEXYL-
2	3874	AZIRIDINE, 2-HEXYL-
3	3876	METHYLAMINE, N-(1-METHYLHEXYLIDENE)-
4	3863	PIPERIDINE, 1-ETHYL-2-METHYL-
5	3861	PIPERIDINE, 5-ETHYL-2-METHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C8.H17.N	127	56	388	605	591
2	C8.H17.N	127	56	365	568	541
[illegible]	C8.H17.N	127	71	365	466	414
[illegible]	C8.H17.N	127	112	357	580	480
5	C8.H17.N	127	56	347	549	574

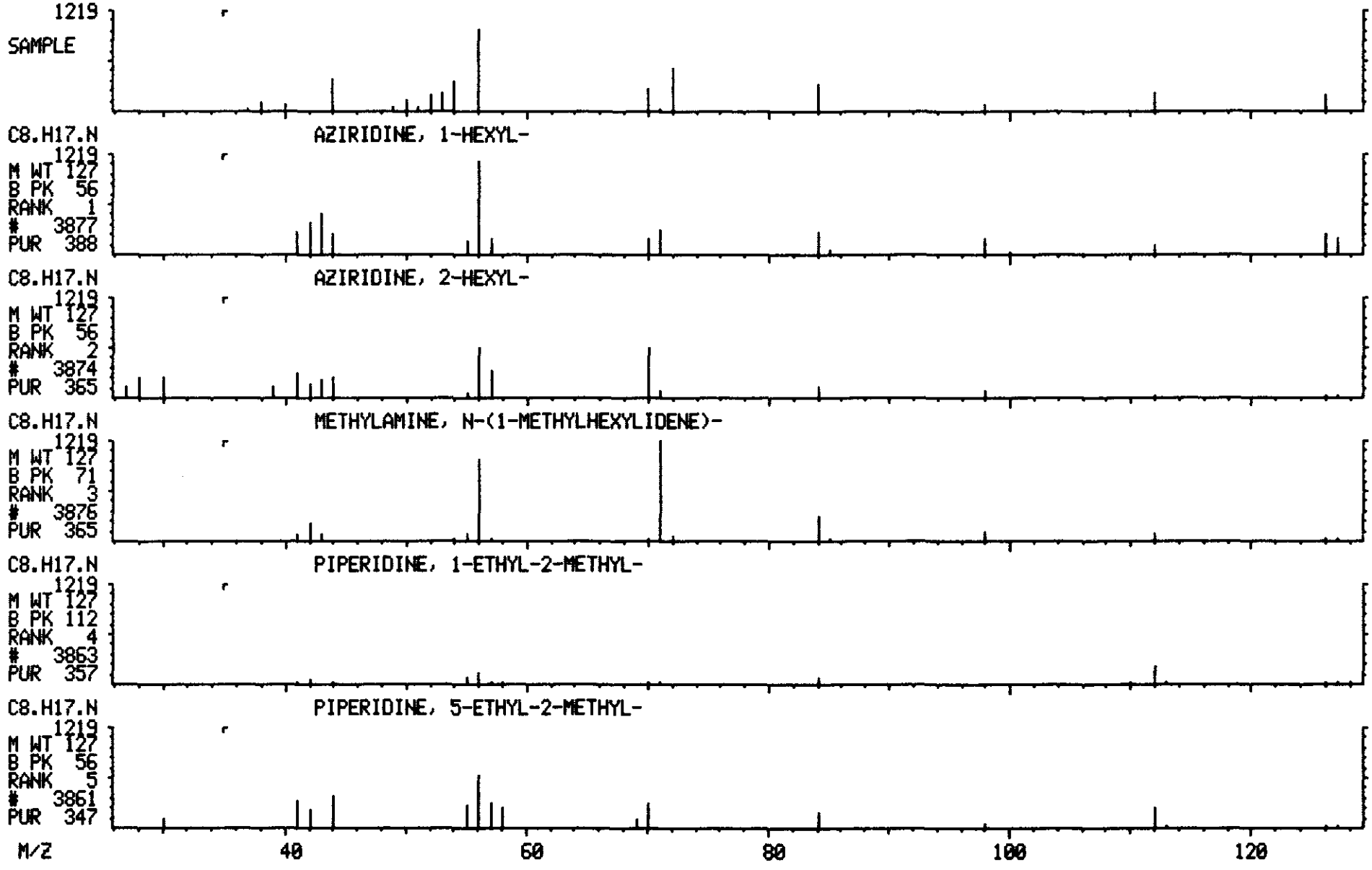
Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	30691-59-9
2	—	—	—	—	13906-89-3
3	—	—	—	—	22058-71-5
4	—	—	—	—	766-52-9
5	—	—	—	—	104-89-2

LIBRARY SEARCH
05/15/90 12:41:00 + 7:05
SAMPLE: CLP,VERSCOM,2548,TB-1A,L,W,16695,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30200C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2586 # 425
CALI: T2586 # 2

BASE M/Z: 56
RIC: 5695.

100184



Library Search Data: T2586 # 567 Base m/z: 57
05/15/90 12:41:00 + 9:27 Cali: T2586 # 2 RIC: 8975.
Sample: CLP,VERSCDM,2548,TB-1A,L,W,16695,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
77 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	4834	CYCLOHEXANOL, 4-CHLORO-, TRANS-
2	2693	1,2-CYCLOHEXANEDIOL
3	4833	CYCLOHEXANOL, 2-CHLORO-, CIS-
4	2681	1,4-CYCLOHEXANEDIOL
5	10993	CYCLOHEXENE, 3-(2,2-DIMETHYLPROPOXY)-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C6.H11.O.CL	134	57	680	845	723
2	C6.H12.O2	116	70	604	766	646
	C6.H11.O.CL	134	57	597	859	652
	C6.H12.O2	116	58	561	717	603
5	C11.H20.O	168	41	545	779	574

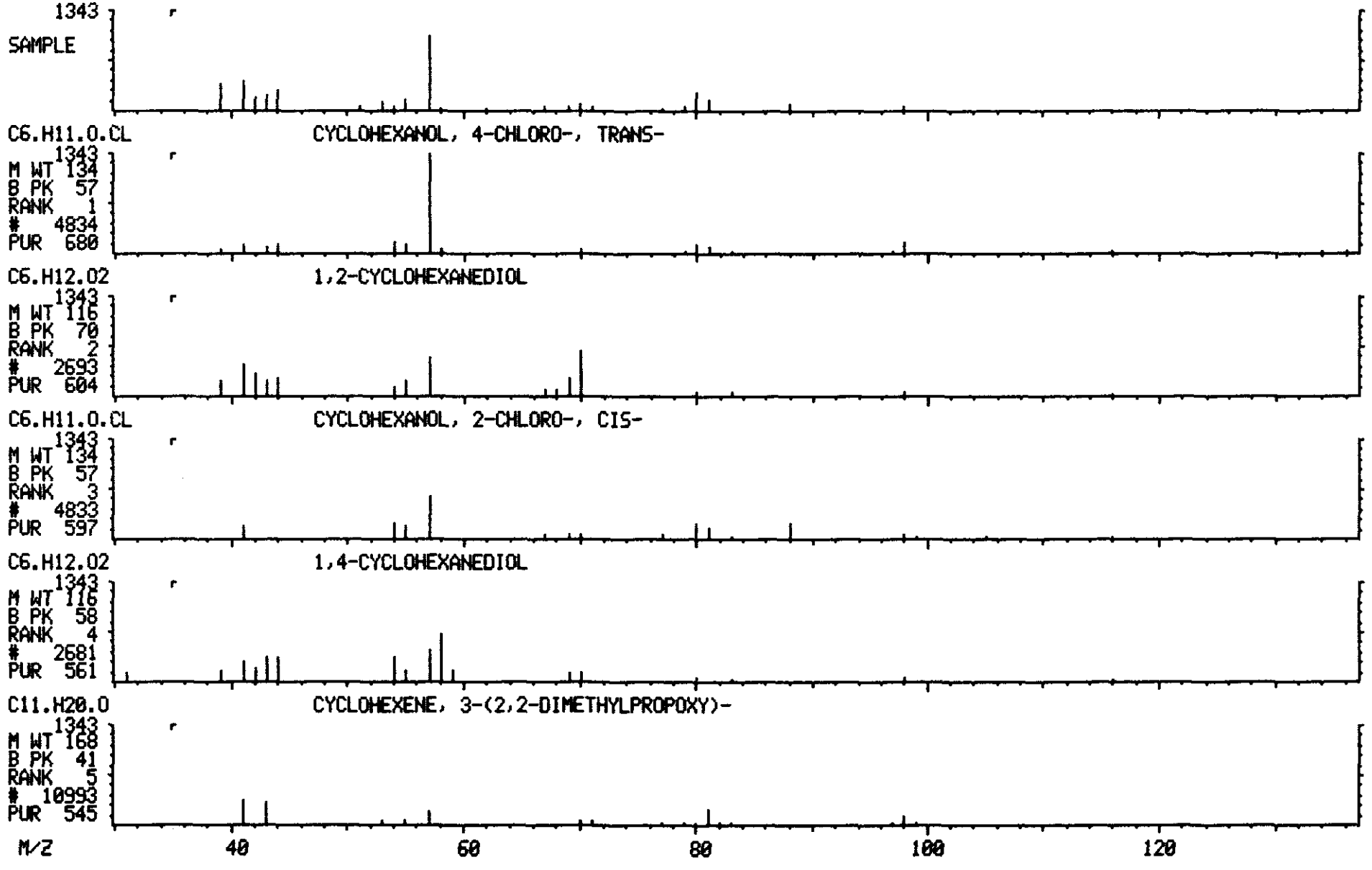
Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	29538-77-0
2	—	—	—	—	931-17-9
3	—	—	—	—	16536-58-6
4	—	—	—	—	556-48-9
5	—	—	—	—	54965-85-4

LIBRARY SEARCH
05/15/90 12:41:00 + 9:27
SAMPLE: CLP,VERSCOM,2548,TB-1A,L,W,16695,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30208C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2586 # 567
CALI: T2586 # 2

BASE M/Z: 57
RIC: 8975.

100186



Library Search Data: T2586 # 601 Base m/z: 41
05/15/90 12:41:00 + 10:01 Cali: T2586 # 2 RIC: 5415.
Sample: CLP,VERSCDM,2548,TB-1A,L,W,16695,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
197 matched at least 6 of the 16 largest peaks in the unknown

B

Rank	In.	Name
1	9497	CYCLOHEXENE, 3-BROMO-
2	971	1,4-PENTADIENE, 3,3-DIMETHYL-
3	2763	CYCLOPROPANE, 1-CHLORO-2-ETHENYL-1-METHYL-
4	3111	CYCLOHEXENE, 3-(2-PROPYNYL)-
5	986	1,5-HEXADIENE, 2-METHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C6.H9.BR	160	81	698	843	785
2	C7.H12	96	81	663	807	785
	C6.H9.CL	116	81	658	837	762
	C9.H12	120	81	619	804	749
5	C7.H12	96	81	609	740	725

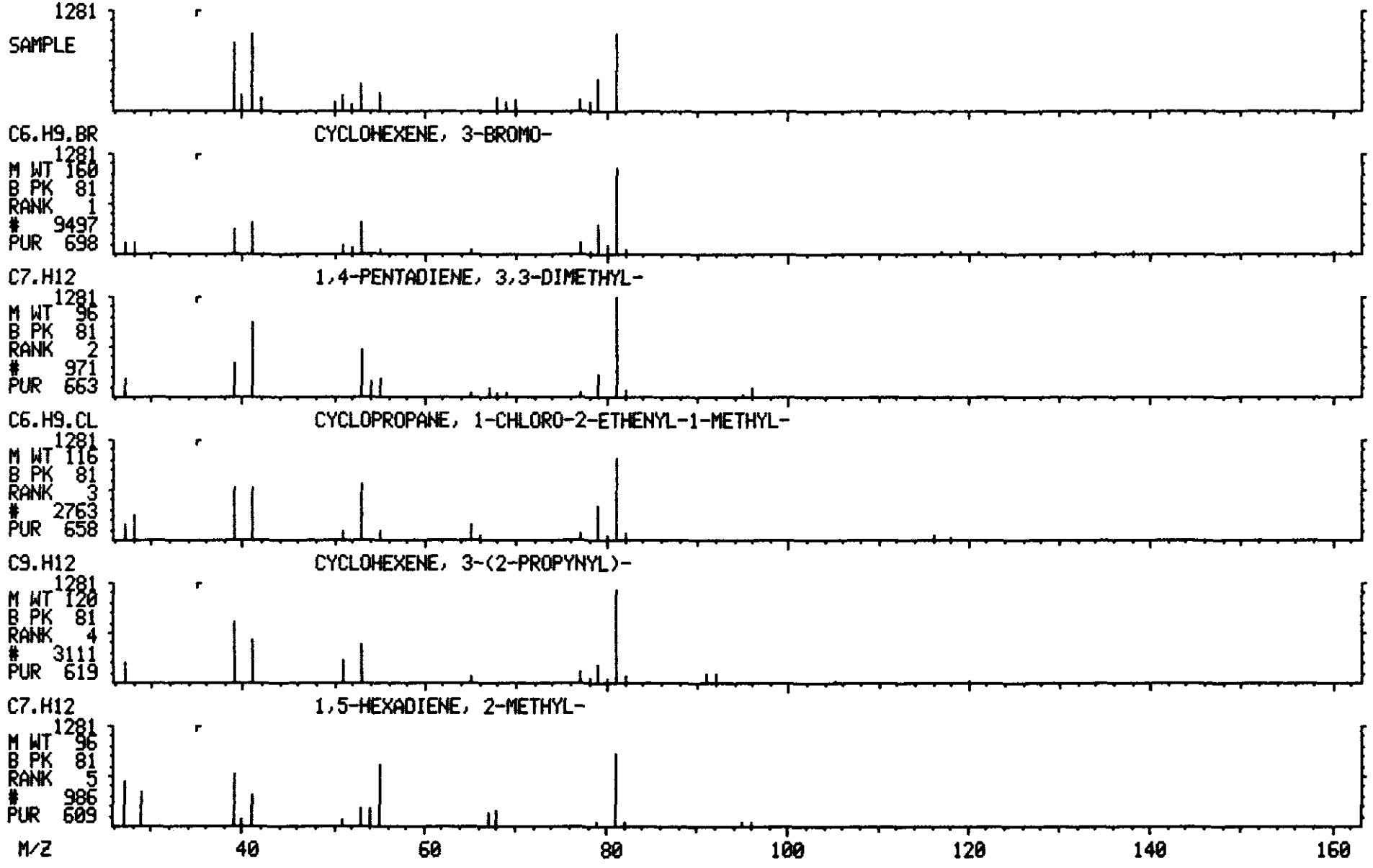
Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	1521-51-3
2	—	—	—	—	1112-35-2
3	—	—	—	—	62337-93-3
4	—	—	—	—	55956-43-9
5	—	—	—	—	4049-81-4

LIBRARY SEARCH
05/15/90 12:41:00 + 10:01
SAMPLE: CLP,VERSCDM,2548,TB-1A,L,W,16695,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30208C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2586 # 601
CALI: T2586 # 2

BASE M/Z: 41
RIC: 5415.

100188



Library Search Data: T2586 # 702 Base m/z: 73
05/15/90 12:41:00 + 11:42 Cali: T2586 # 2 RIC: 5231.
Sample: CLP,VERSCDM,2548,TB-1A,L,W,16695,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
82 matched at least 4 of the 16 largest peaks in the unknown

siloxane

Rank	In.	Name
1	34667	BENZOIC ACID, 2,4-BIS[(TRIMETHYLSILYL)OXY]-, TRIMETHYLSILYL ESTER
2	37373	CYCLOTETRASILOXANE, (IODOMETHYL)HEPTAMETHYL-
3	34650	CYCLOPENTASILOXANE, DECAMETHYL-
4	34666	BENZOIC ACID, 2,5-BIS(TRIMETHYLSILOXY)-, TRIMETHYLSILYL ESTER
5	40810	BENZENEETHANAMINE, N-[(PENTAFLUOROPHENYL)METHYLENE]-.BETA.,3,4-TRIS*

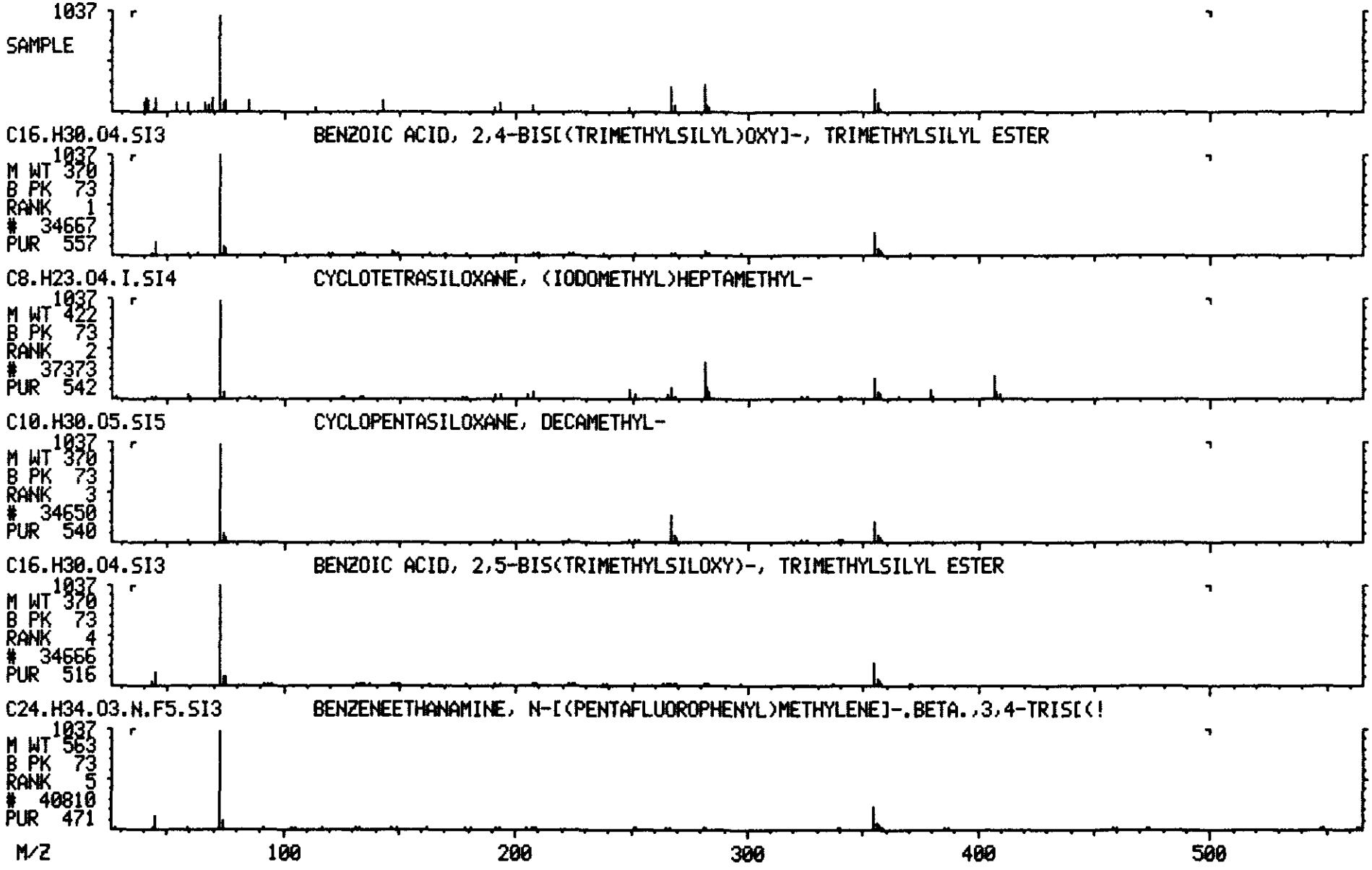
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C16.H30.O4.SI3	370	73	557	667	663
2	C8.H23.O4.I.SI4	422	73	542	618	826
	C10.H30.O5.SI5	370	73	540	815	616
	C16.H30.O4.SI3	370	73	516	611	628
5	C24.H34.O3.N.F5.SI3	563	73	471	620	540

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	10586-16-0
2	—	—	—	—	17882-88-1
3	—	—	—	—	541-02-6
4	—	—	—	—	3618-20-0
5	—	—	—	—	55429-13-5

LIBRARY SEARCH
05/15/90 12:41:00 + 11:42
SAMPLE: CLP,VERSCOM,2548,TB-1A,L,W,16695,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2586 # 702
CALI: T2586 # 2

BASE M/Z: 73
RIC: 5231.



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        >>>>INTERNAL STANDARD RIC REPORT<<<<
*****************************INTERNAL STANDARD#1*****************RIC
Mass List                      Data: T2586 # 547          Base m/z:   150
05/15/90 12:41:00 +  9:07      Cali: T2586 #   2          RIC:      59584.
Sample: CLP,VERSCDM,2548,TB-1A,L,W,16695,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     35        0.00    0.00        0. Minima      Min inten:       0.
     30                        #   0  Maxima
*****************************INTERNAL STANDARD#2*****************RIC
Mass List                      Data: T2586 # 767          Base m/z:   136
05/15/90 12:41:00 + 12:47      Cali: T2586 #   2          RIC:      70144.
Sample: CLP,VERSCDM,2548,TB-1A,L,W,16695,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38        0.00    0.00        0. Minima      Min inten:       0.
     30                        #   0  Maxima
*****************************INTERNAL STANDARD#3*****************RIC
Mass List                      Data: T2586 #1101          Base m/z:   164
05/15/90 12:41:00 + 18:21      Cali: T2586 #   2          RIC:      69888.
Sample: CLP,VERSCDM,2548,TB-1A,L,W,16695,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38        0.00    0.00        0. Minima      Min inten:       0.
     30                        #   0  Maxima
*****************************INTERNAL STANDARD#4*****************RIC
Mass List                      Data: T2586 #1385          Base m/z:   188
05/15/90 12:41:00 + 23:05      Cali: T2586 #   2          RIC:      89088.
Sample: CLP,VERSCDM,2548,TB-1A,L,W,16695,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38        0.00    0.00        0. Minima      Min inten:       0.
     30                        #   0  Maxima
*****************************INTERNAL STANDARD#5*****************RIC
Mass List                      Data: T2586 #1903          Base m/z:   240
05/15/90 12:41:00 + 31:43      Cali: T2586 #   2          RIC:      75904.
Sample: CLP,VERSCDM,2548,TB-1A,L,W,16695,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     40        0.00    0.00        0. Minima      Min inten:       0.
     30                        #   0  Maxima
*****************************INTERNAL STANDARD#6*****************RIC
Mass List                      Data: T2586 #2213          Base m/z:   264
05/15/90 12:41:00 + 36:53      Cali: T2586 #   2          RIC:      40384.
Sample: CLP,VERSCDM,2548,TB-1A,L,W,16695,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     40        0.00    0.00        0. Minima      Min inten:       0.
     30                        #   0  Maxima
     ANALYST: CHECK BASE M/Z AND RIC AMOUNT TO INSURE NO CONTAMINATION
```

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-3A

La Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16696

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2587

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/15/90

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	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
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	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
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	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
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	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	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-3A

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16696

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2587

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/15/90

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	50	U
100-02-7	4-Nitrophenol	50	U
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
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
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

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TB-3A

La Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16696

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2587

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/15/90

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

Number TICs found: 4

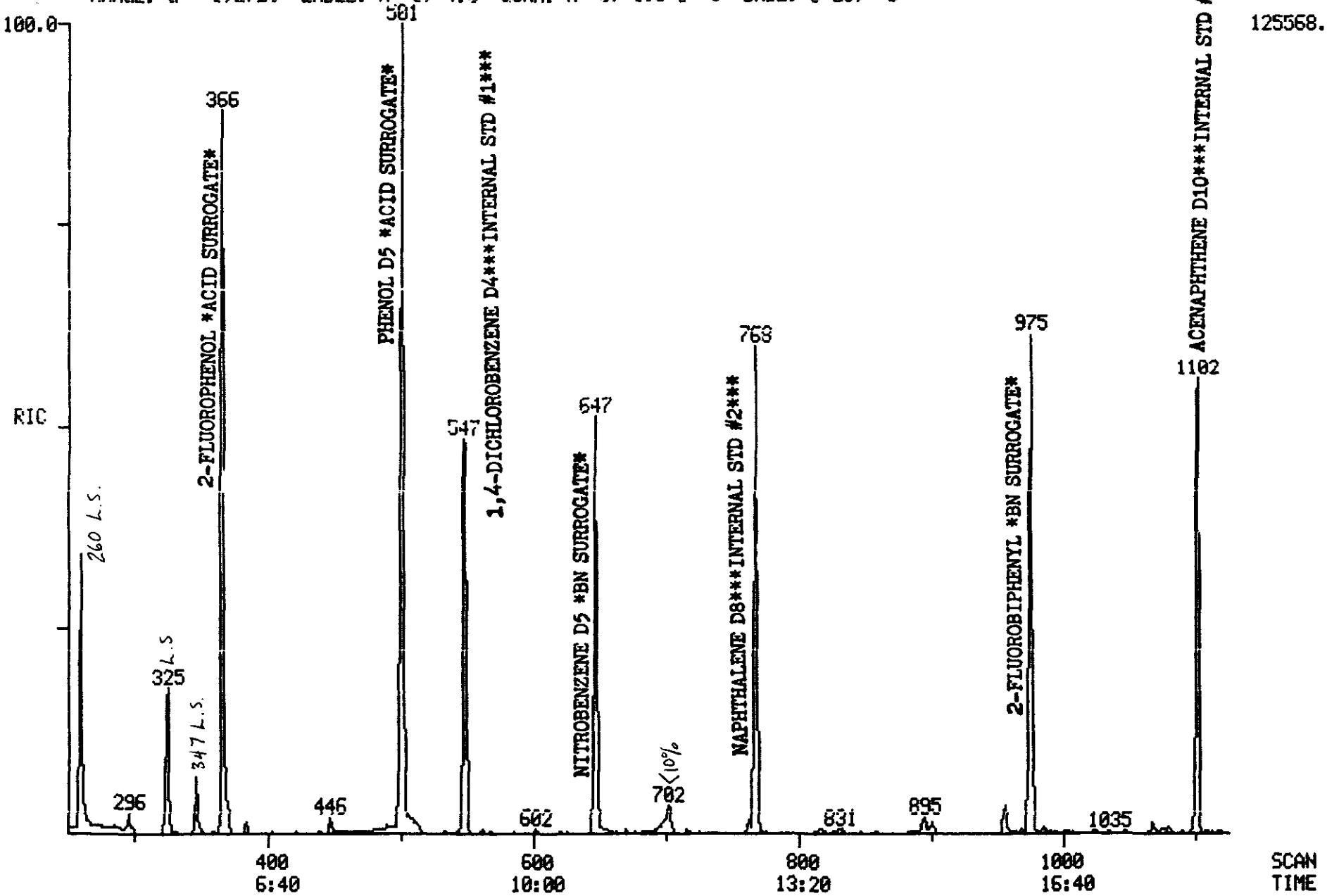
CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.33	44	J
2.	UNKNOWN	5.42	28	BJ
3.	UNKNOWN	5.78	10	BJ
4. 10544-50-0	SULFUR, MOL. (S8)	18.95	8.0	J

RIC
05/15/90 13:33:00
SAMPLE: CLP,VERSCOM,2548,TB-3A,L,W,16696,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
RANGE: G 1,2720 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: T2587 #1
CALI: T2587 #2

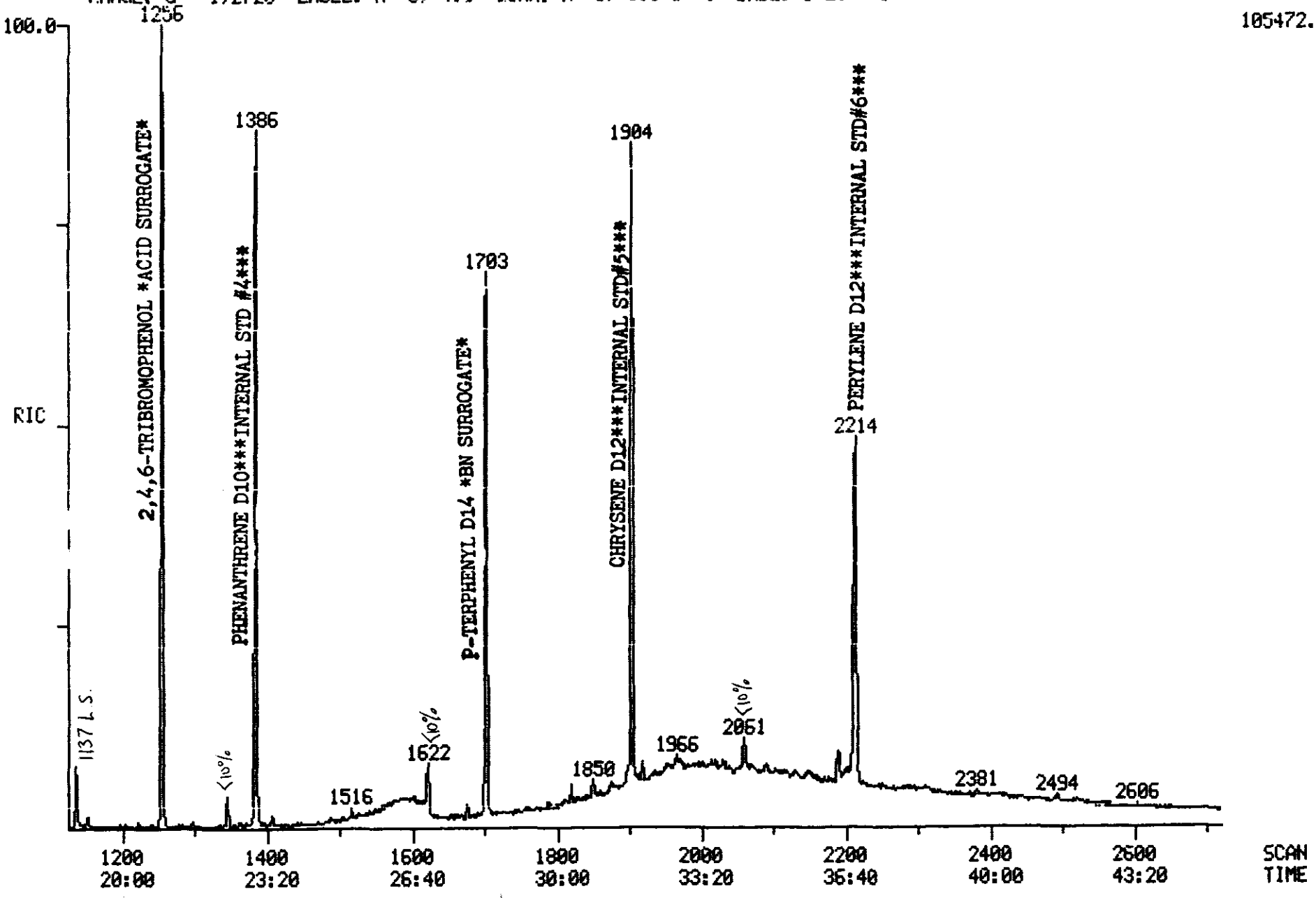
SCANS 250 TO 1125



00195

RIC DATA: T2587 #1 SCANS 1125 TO 2720
05/15/90 13:33:00 CALI: T2587 #2
SAMPLE: CLP,VERSCOM,2548,TB-3A,L,W,16696,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
RANGE: C 1,2720 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

100196



Quantitation Report File: T2587

Data: T2587.TI
05/15/90 13:33:00
Sample: CLP,VERSCDM,2548,TB-3A,L,W,16696,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: SJD Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	C330 2-CHLOROPHENOL
3	C315 PHENOL
4	C325 BIS (2-CHLOROETHYL) ETHER
5	C335 1,3-DICHLOROBENZENE
6	C340 1,4-DICHLOROBENZENE
7	C350 1,2-DICHLOROBENZENE
8	C345 BENZYL ALCOHOL
9	C360 BIS (2-CHLOROISOPROPYL) ETHER
10	C355 2-METHYLPHENOL
11	C375 HEXACHLOROETHANE
12	C365 4-METHYLPHENOL
13	C370 N-NITROSO-DI-N-PROPYLAMINE
14	CS50 2-FLUOROPHENOL**ACID SURR.**
15	CS45 PHENOL-D5**ACID SURR.**
16	CI40 NAPHTHALENE-D8**INT. STD.#2**
17	C410 NITROBENZENE
18	C415 ISOPHORONE
19	C420 2-NITROPHENOL
20	C425 2,4-DIMETHYLPHENOL
21	C435 BIS (2-CHLOROETHOXY) METHANE
22	C440 2,4-DICHLOROPHENOL
23	C445 1,2,4-TRICHLOROBENZENE
24	C450 NAPHTHALENE
25	C430 BENZOIC ACID
26	C455 4-CHLOROANILINE
27	C460 HEXACHLOROBUTADIENE
28	C465 4-CHLORO-3-METHYLPHENOL
29	C470 2-METHYLNAPHTHALENE
30	CS20 NITROBENZENE-D5**BN SURR.**
31	CI50 ACENAPHTHENE-D10**INT. STD.#3**
32	C510 HEXACHLOROCYCLOPENTADIENE
33	C515 2,4,6-TRICHLOROPHENOL
34	C520 2,4,5-TRICHLOROPHENOL
35	C525 2-CHLORONAPHTHALENE
36	C530 2-NITROANILINE
37	C540 ACENAPHTHYLENE
38	C535 DIMETHYL PHTHALATE
39	C544 2,6-DINITROTOLUENE
40	C550 ACENAPHTHENE
41	C545 3-NITROANILINE
42	C555 2,4-DINITROPHENOL
43	C565 DIBENZOFURAN
44	C560 4-NITROPHENOL
45	C570 2,4-DINITROTOLUENE
46	C590 FLUORENE
47	C585 4-CHLOROPHENYL-PHENYLETHER

✓ 5/22/90

RFF
bd

All surrogates + IS areas are compliant. SJD 5-15-90

T 2587

No	Name
48	C580 DIETHYLPHTHALATE
49	C595 4-NITROANILINE
50	C610 4,6-DINITRO-2-METHYLPHENOL

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	547	9:07	1	1.000	A BB	15695.	40.000 NG/UL	6.57
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	112	366	6:06	1	0.669	A BB	35982.	86.811 NG*A1	14.26
15	99	500	8:20	1	0.914	A BB	52373.	86.621 NG*A2	14.22
16	136	768	12:48	16	1.000	A BB	50353.	40.000 NG/UL	6.57
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
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	82	647	10:47	16	0.842	A BB	38884.	43.057 NG*B1	7.07
31	164	1101	18:21	31	1.000	A BB	41883.	40.000 NG/UL	6.57
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	NOT FOUND								
49	NOT FOUND								
50	NOT FOUND								

T2587

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	9:05	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	8:37		0.949						
3	8:20		0.917						
4	8:33		0.941						
5	8:59		0.989						
6	9:08		1.006						
7	9:38		1.061						
8	9:34		1.053						
9	10:00		1.101						
10	9:55		1.092						
11	10:27		1.150						
12	10:20		1.138						
13	10:25		1.147						
14	6:03	1.01	0.666	1.00	86.81	50.00	1.834	1.056	1.74
15	8:18	1.00	0.914	1.00	86.62	50.00	2.670	1.541	1.73
16	12:46	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
17	10:48		0.846						
18	11:28		0.898						
19	11:43		0.918						
20	11:52		0.930						
21	12:12		0.956						
22	12:24		0.971						
23	12:38		0.990						
24	12:49		1.004						
25	12:14		0.958						
26	13:07		1.027						
27	13:22		1.047						
28	14:38		1.146						
29	14:57		1.171						
30	10:45	1.00	0.842	1.00	43.06	50.00	0.618	0 717	0.86
31	18:20	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
32	15:39		0.854						
33	15:57		0.870						
34	16:04		0.876						
35	16:29		0.899						
36	17:01		0.928						
37	17:50		0.973						
38	17:43		0.966						
39	17:58		0.980						
40	18:26		1.005						
41	18:22		1.002						
42	18:40		1.018						
43	18:56		1.033						
44	18:56		1.033						
45	19:11		1.046						
46	20:03		1.094						
47	20:05		1.095						
48	20:00		1.091						
49	20:21		1.110						
50	20:27		1.115						

Quantitation Report File: T2587

Data: T2587.TI
05/15/90 13:33:00
Sample: CLP,VERSCDM,2548,TB-3A,L,W,16696,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: SJD Acct. No.: 420.1

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

No	Name
51	C615 N-NITROSODIPHENYLAMINE
52	C625 4-BROMOPHENYL-PHENYLETHER
53	C630 HEXACHLOROBENZENE
54	CS25 2-FLUOROBIPHENYL**BN SURR.**
55	CI60 PHENANTHRENE-D10**INT. STD.#4**
56	C635 PENTACHLOROPHENOL
57	C640 PHENANTHRENE
58	C645 ANTHRACENE
59	C650 DI-N-BUTYLPHTHALATE
60	C655 FLUORANTHENE
61	C715 PYRENE
62	CS55 2,4,6,-TRIBROMOPHENOL**ACID SURR.**
63	CI70 CHRYSENE-D12**INT. STD.#5**
64	C720 BUTYLBENZYLPHTHALATE
65	C730 BENZO(A)ANTHRACENE
66	C740 CHRYSENE
67	C725 3,3'-DICHLOROBENZIDINE
68	C741 BIS(2-ETHYLHEXYL)PHTHALATE
69	CS30 P-TERPHENYL-D14**BN SURR.**
70	CI75 PERYLENE-D12**INT. STD.#6**
71	C760 DI-N-OCTYL PHTHALATE
72	C765 BENZO(B)FLUORANTHENE
73	C770 BENZO(K)FLUORANTHENE
74	C775 BENZO(A)PYRENE
75	C780 INDENO(1,2,3-CD)PYRENE
76	C785 DIBENZ(A,H)ANTHRACENE
77	C790 BENZO(G,H,I)PERYLENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	NOT FOUND								
52	NOT FOUND								
53	NOT FOUND								
54	172	975	16:15	31	0.886	A BB	46935.	34.970 NG*B2	5.74
55	188	1385	23:05	55	1.000	A BB	93199.	40.000 NG/UL	6.57
56	NOT FOUND								
57	178	1389	23:09	55	1.003	A BB	347.	~~0.135 NG~~	0.02
58	NOT FOUND								
59	149	1516	25:16	55	1.095	A BB	2082.	BRL ~~0.527 NG~~	0.09
60	202	1623	27:03	55	1.172	A BB	267.	~~0.099 NG~~	0.02
61	202	1666	27:46	63	0.875	A BB	367.	~~0.129 NG~~	0.02
62	330	1256	20:56	31	1.141	A BB	27347.	83.384 NG*A3	13.69
63	240	1904	31:44	63	1.000	A BB	86832.	40.000 NG/UL	6.57
64	149	1808	30:08	63	0.950	A BB	195.	BRL ~~0.113 NG~~	0.02
65	228	1903	31:43	63	0.999	A BB	163.	~~0.074 NG~~	0.01
66	NOT FOUND								

T2587

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
67	NOT FOUND								
68	149	1919	31:59	63	1.008	A BB	1781.	BRL ~~0.750 NG~~	0.12
69	244	1702	28:22	63	0.894	A BB	60417.	32.196 NG*B3	5.29
70	264	2214	36:54	70	1.000	A BB	73732.	40.000 NG/UL	6.57
71	149	2031	33:51	70	0.917	A BB	707.	BRL ~~0.179 NG~~	0.03
72	NOT FOUND								
73	NOT FOUND								
74	NOT FOUND								
75	NOT FOUND								
76	NOT FOUND								
77	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	20:32		1.120						
52	21:39		1.181						
53	22:03		1.203						
54	16:13	1.00	0.885	1.00	34.97	50.00	0.896	1.282	0.70
55	23:04	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
56	22:40		0.983						
57	23:08	1.00	1.003	1.00	0.14	50.00	0.003	1.099	0.00
58	23:17		1.009						
59	25:14	1.00	1.094	1.00	0.53	50.00	0.018	1.695	0.01
60	27:01	1.00	1.171	1.00	0.10	50.00	0.002	1.160	0.00
61	27:45	1.00	0.875	1.00	0.13	50.00	0.003	1.316	0.00
62	20:54	1.00	1.140	1.00	83.38	50.00	0.522	0.313	1.67
63	31:42	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
64	30:07	1.00	0.950	1.00	0.11	50.00	0.002	0.792	0.00
65	31:39	1.00	0.998	1.00	0.07	50.00	0.002	1.014	0.00
66	31:47		1.003						
67	31:40		0.999						
68	31:57	1.00	1.008	1.00	0.75	50.00	0.016	1.094	0.02
69	28:21	1.00	0.894	1.00	32.20	50.00	0.557	0.864	0.64
70	36:51	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
71	33:49	1.00	0.918	1.00	0.18	50.00	0.008	2.143	0.00
72	35:13		0.956						
73	35:19		0.958						
74	36:36		0.993						
75	42:54		1.164						
76	43:04		1.169						
77	44:45		1.214						

Quantitation Report File: QCREF

Data: T2587.TI
05/15/90 13:33:00
Sample: CLP,VERSCDM,2548,TB-3A,L,W,16696,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: SJD Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	CI40 NAPHTHALENE-D8**INT. STD.#2**
3	CI50 ACENAPHTHENE-D10**INT. STD.#3**
4	CI60 PHENANTHRENE-D10**INT. STD.#4**
5	CI70 CHRYSENE-D12**INT. STD.#5**
6	CI75 PERYLENE-D12**INT. STD.#6**
7	CS50 2-FLUOROPHENOL**ACID SURR.**
8	CS45 PHENOL-D5**ACID SURR.**
9	CS55 2,4,6,-TRIBROMOPHENOL**ACID SURR.**
10	CS20 NITROBENZENE-D5**BN SURR.**
11	CS25 2-FLUOROBIPHENYL**BN SURR.**
12	CS30 P-TERPHENYL-D14**BN SURR.**

Scan	Time	Area(Hght)		Amount		Name
547	9:07	15695.		40.000	NG/UL	CI30 1,4-DICHLOROBENZENE-D4
768	12:48	50353.	%	40.000	NG/UL	CI40 NAPHTHALENE-D8**INT. ST
1101	18:21	41883.		40.000	NG/UL	CI50 ACENAPHTHENE-D10**INT.
1385	23:05	93199.	Rec.	40.000	NG/UL	CI60 PHENANTHRENE-D10**INT.
1904	31:44	86832.		40.000	NG/UL	CI70 CHRYSENE-D12**INT. STD.
2214	36:54	73732.		40.000	NG/UL	CI75 PERYLENE-D12**INT. STD.
366	6:06	35982.	87	86.811	NG*A1	CS50 2-FLUOROPHENOL**ACID SU
500	8:20	52373.	87	86.621	NG*A2	CS45 PHENOL-D5**ACID SURR.**
1256	20:56	27347.	83	83.384	NG*A3	CS55 2,4,6,-TRIBROMOPHENOL**
647	10:47	38884.	86	43.057	NG*B1	CS20 NITROBENZENE-D5**BN SUR
975	16:15	46935.	70	34.970	NG*B2	CS25 2-FLUOROBIPHENYL**BN SU
1702	28:22	60417.	64	32.196	NG*B3	CS30 P-TERPHENYL-D14**BN SUR

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:05	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	12:46	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
3	18:20	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
4	23:04	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
5	31:42	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
6	36:51	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
7	6:03	1.01	0.666	1.00	86.81	50.00	1.834	1.056	1.74
8	8:18	1.00	0.914	1.00	86.62	50.00	2.670	1.541	1.73
9	20:54	1.00	1.140	1.00	83.38	50.00	0.522	0.313	1.67
10	10:45	1.00	0.842	1.00	43.06	50.00	0.618	0.717	0.86
11	16:13	1.00	0.885	1.00	34.97	50.00	0.896	1.282	0.70
12	28:21	1.00	0.894	1.00	32.20	50.00	0.557	0.864	0.64

Quantitation Report File: ISREF

Data: T2583.TI
05/15/90 9:42:00
Sample: CLP,,,SSTD 50,,,22658,B,CC-050,,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: SJD Acct. No.: -

Data: T2587.TI
05/15/90 13:33:00
Sample: CLP,VERSCDM,2548,TB-3A,L,W,16696,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: SJD Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
3	CI40 NAPHTHALENE-D8**INT. STD. #2**
4	CI40 NAPHTHALENE-D8**INT. STD. #2**
5	CI50 ACENAPHTHENE-D10**INT. STD. #3**
6	CI50 ACENAPHTHENE-D10**INT. STD. #3**
7	CI60 PHENANTHRENE-D10**INT. STD. #4**
8	CI60 PHENANTHRENE-D10**INT. STD. #4**
9	CI70 CHRYSENE-D12**INT. STD. #5**
10	CI70 CHRYSENE-D12**INT. STD. #5**
11	CI75 PERYLENE-D12**INT. STD. #6**
12	CI75 PERYLENE-D12**INT. STD. #6**

Scan	Time	Area(Hght)	Amount	Name
545	9:05	15588.	40.000 NG/UL	CI30 1,4-DICHLOROBENZENE-D4
547	9:07	15695.	40.275 NG/UL	CI30 1,4-DICHLOROBENZENE-D4
766	12:46	52356.	40.000 NG/UL	CI40 NAPHTHALENE-D8**INT. ST
768	12:48	50353.	38.470 NG/UL	CI40 NAPHTHALENE-D8**INT. ST
1100	18:20	40125.	40.000 NG/UL	CI50 ACENAPHTHENE-D10**INT.
1101	18:21	41883.	41.752 NG/UL	CI50 ACENAPHTHENE-D10**INT.
1384	23:04	81463.	40.000 NG/UL	CI60 PHENANTHRENE-D10**INT.
1385	23:05	93199.	45.763 NG/UL	CI60 PHENANTHRENE-D10**INT.
1902	31:42	72781.	40.000 NG/UL	CI70 CHRYSENE-D12**INT. STD.
1904	31:44	86832.	47.722 NG/UL	CI70 CHRYSENE-D12**INT. STD.
2211	36:51	61203.	40.000 NG/UL	CI75 PERYLENE-D12**INT. STD.
2214	36:54	73732.	48.189 NG/UL	CI75 PERYLENE-D12**INT. STD.

Library Search Data: T2587 # 260 Base m/z: 43
05/15/90 13:33:00 → 4:20 Cali: T2587 # 2 RIC: 30911.
Sample: CLP,VERSCDM,2548,TB-3A,L,W,16696,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
282 matched at least 6 of the 16 largest peaks in the unknown

Rank	In.	Name
1	734	ACETIC ACID, ETHYL ESTER
2	4294	2-BUTANONE, 4-(ACETYLOXY)-
3	4338	ACETIC ACID, PENTYL ESTER
4	4329	1-BUTANOL, 3-METHYL-, ACETATE
5	728	PROPANOIC ACID, 2-METHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C4.H8.O2	88	43	796	923	796
2	C6.H10.O3	130	43	777	839	824
[illegible]	C7.H14.O2	130	43	776	889	778
4	C7.H14.O2	130	43	762	868	804
5	C4.H8.O2	88	43	711	878	719

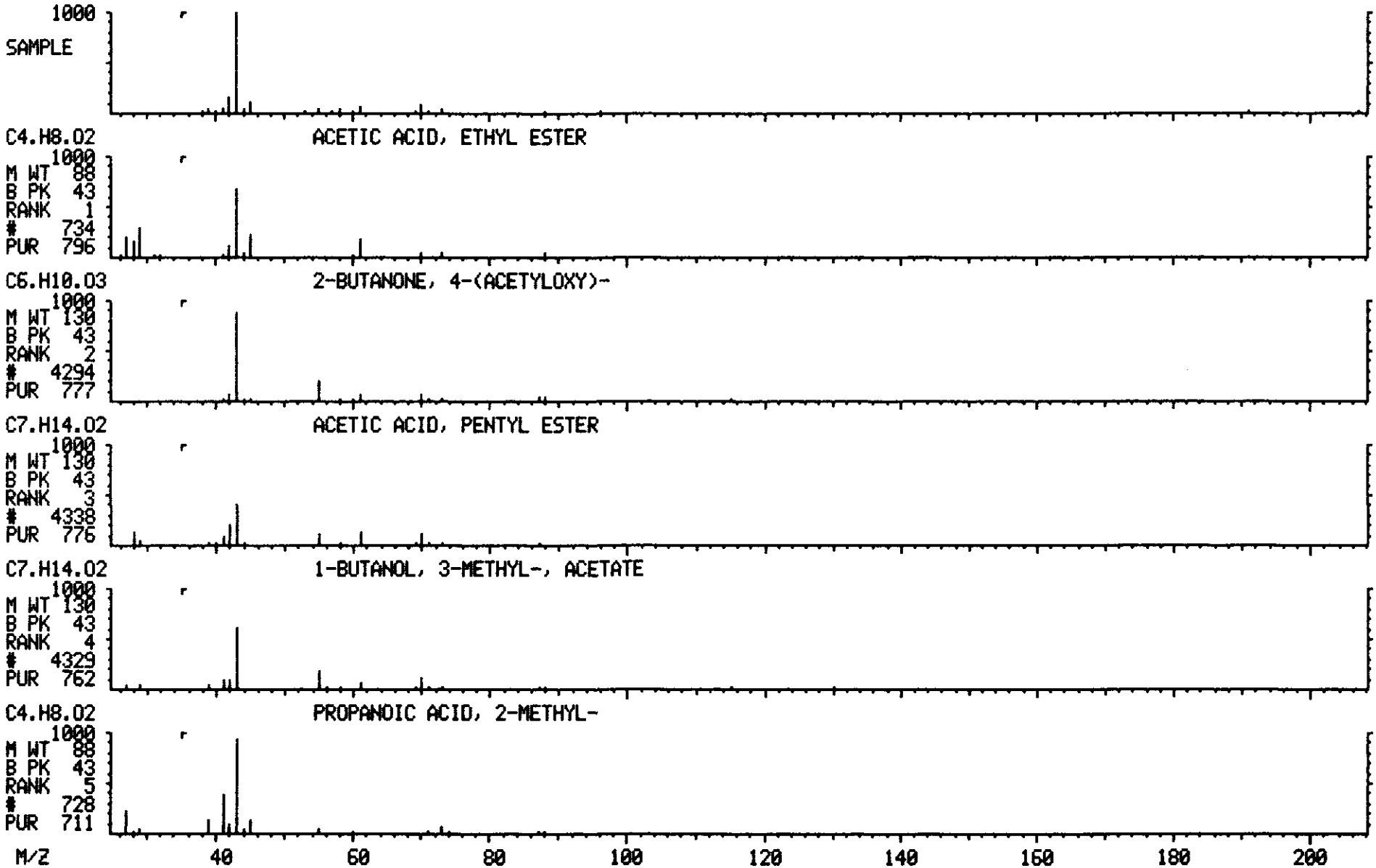
Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	141-78-6
2	—	—	—	—	10150-87-5
3	—	—	—	—	628-63-7
4	—	—	—	—	123-92-2
5	—	—	—	—	79-31-2

LIBRARY SEARCH
05/15/90 13:33:00 + 4:20
SAMPLE: CLP,VERSCOM,2548,TB-3A,L,W,16696,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30200C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2587 # 260
CALI: T2587 # 2

BASE M/Z: 43
RIC: 30911.

100205



Library Search Data: T2587 # 325 Base m/z: 43
05/15/90 13:33:00 + 5:25 Cali: T2587 # 2 RIC: 19775.
Sample: CLP,VERSCDM,2548,TB-3A,L,W,16696,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
121 matched at least 7 of the 16 largest peaks in the unknown

B

Rank	In.	Name
1	806	HYDROPEROXIDE, 1,1-DIMETHYLETHYL
2	2776	2-PENTANOL, 2,4-DIMETHYL-
3	1349	OXEPANE, 2,2,4-TRIMETHYL-
4	1334	OXIRANE, TETRAMETHYL-
5	2777	2-HEXANOL, 2-METHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C4.H10.O2	90	59	769	865	776
2	C7.H16.O	116	59	731	765	731
3	C6.H12.O	100	43	697	781	720
4	C6.H12.O	100	59	696	805	718
5	C7.H16.O	116	59	682	723	693

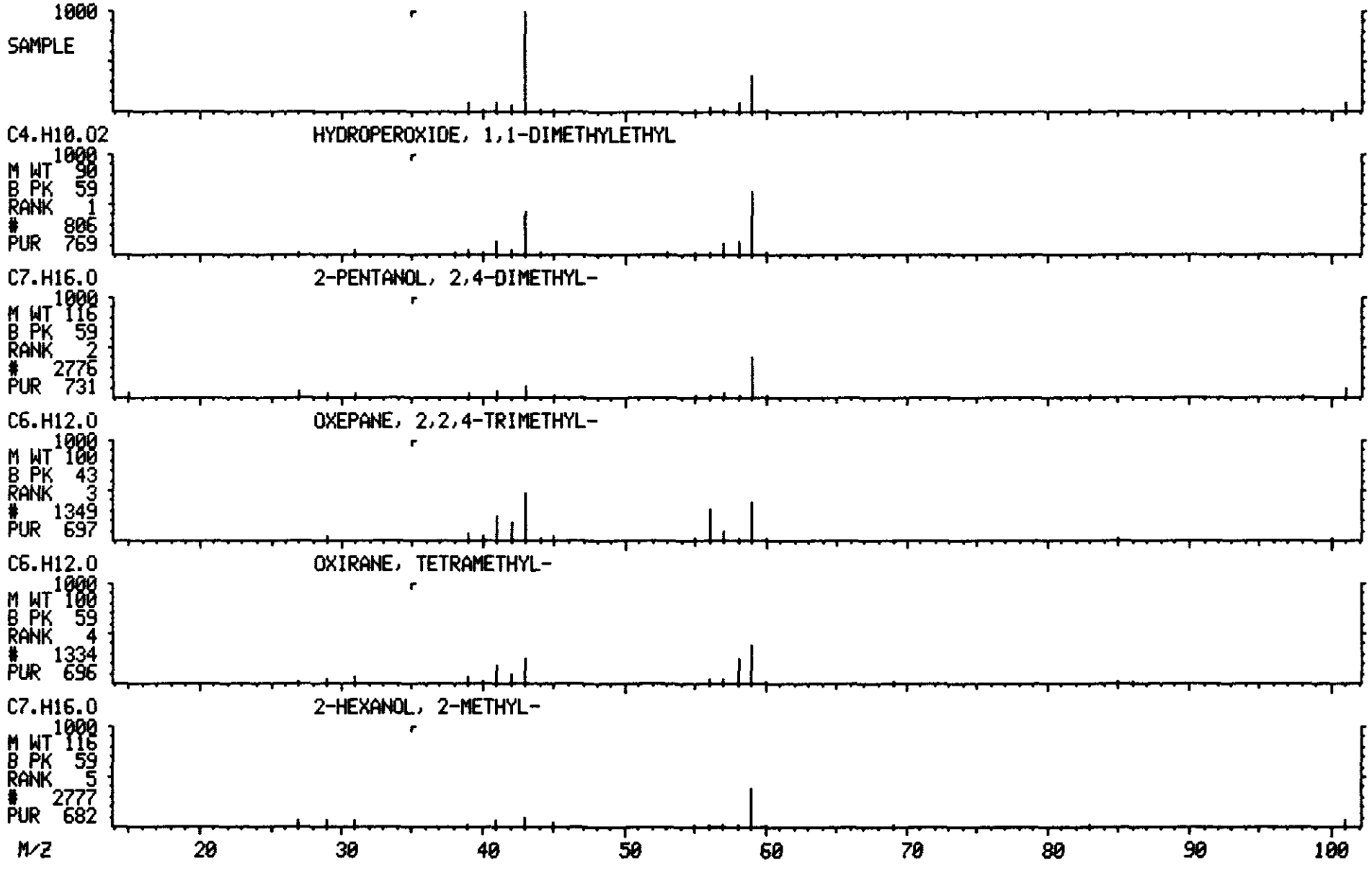
Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	75-91-2
2	—	—	—	—	625-06-9
3	—	—	—	—	23120-44-7
4	—	—	—	—	5076-20-0
5	—	—	—	—	625-23-0

LIBRARY SEARCH
05/15/90 13:33:00 + 5:25
SAMPLE: CLP,VERSCDM,2548,TB-3A,L,W,16696,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2587 # 325
CALI: T2587 # 2

BASE M/Z: 43
RIC: 19775.

100207



Library Search Data: T2587 # 347 Base m/z: 41
05/15/90 13:33:00 → 5:47 Cali: T2587 # 2 RIC: 7199.
Sample: CLP,VERSCDM,2548,TB-3A,L,W,16696,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
72 matched at least 8 of the 16 largest peaks in the unknown

Rank	In.	Name
1	1076	1-PROPENE, 3,3'-OXYBIS-
2	1111	2-HEXENAL, (E)-
3	2216	2-HEPTENAL, (Z)-
4	1083	2-HEXYN-1-OL
5	1163	1-HEXENE, 5-METHYL-

unknown

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C6.H10.O	98	41	801	874	829
2	C6.H10.O	98	41	733	839	836
	C7.H12.O	112	41	715	837	760
4	C6.H10.O	98	41	711	851	765
5	C7.H14	98	56	665	710	665

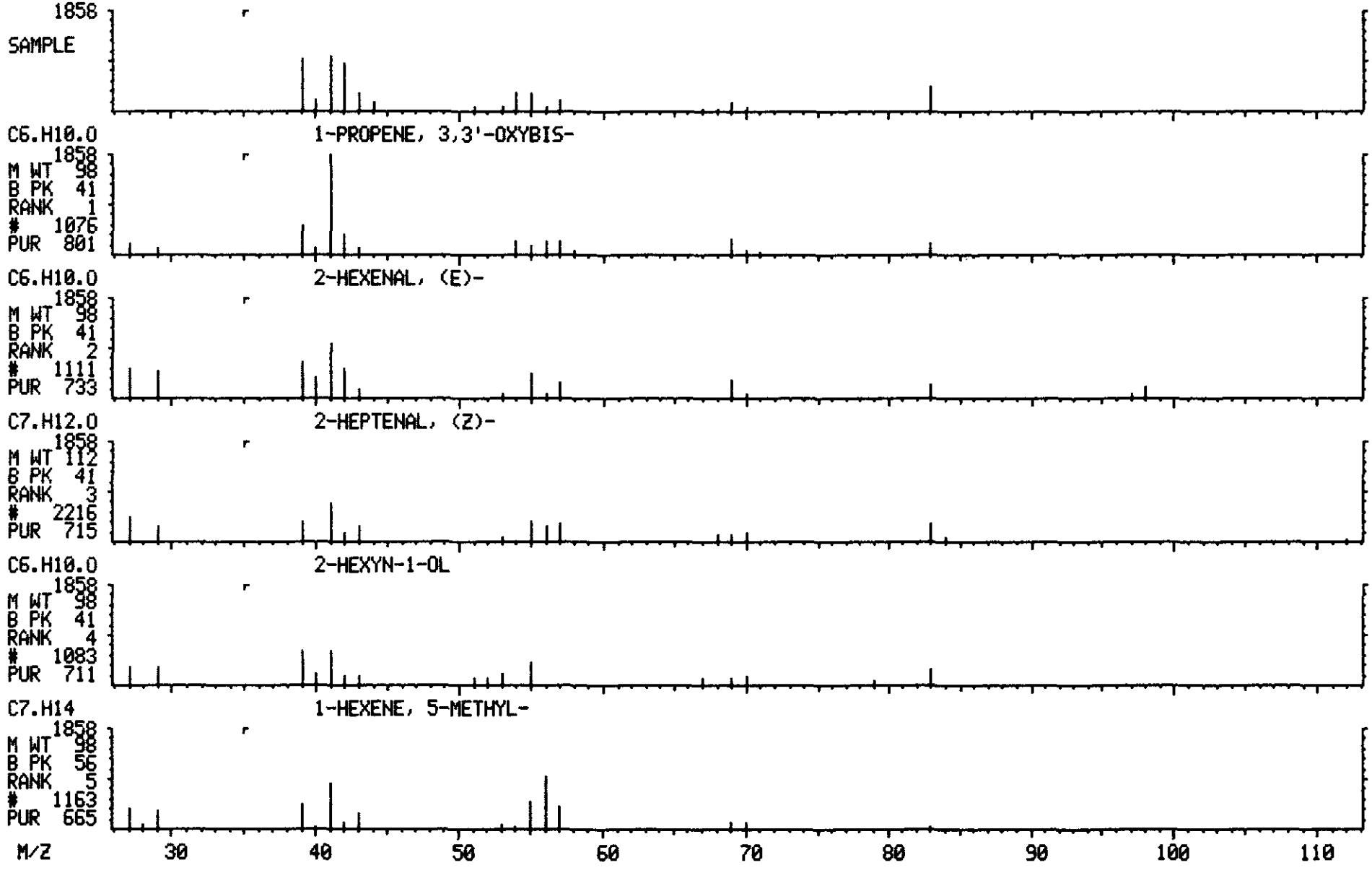
Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	557-40-4
2	—	—	—	—	6728-26-3
3	—	—	—	—	57266-86-1
4	—	—	—	—	764-60-3
5	—	—	—	—	3524-73-0

LIBRARY SEARCH
05/15/90 13:33:00 + 5:47
SAMPLE: CLP,VERSCOM,2548,TB-3A,L,W,16696,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30200C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2587 # 347
CALI: T2587 # 2

BASE M/Z: 41
RIC: 7199.

100209



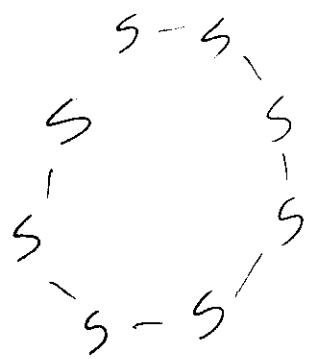
Library Search Data: T2587 #1137 Base m/z: 64
05/15/90 13:33:00 + 18:57 Cali: T2587 # 2 RIC: 6799.
Sample: CLP,VERSCDM,2548,TB-3A,L,W,16696,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
363 matched at least 3 of the 10 largest peaks in the unknown

Rank	In.	Name
1	24507	SULFUR, MOL. (S8)
2	141	SULFUR DIOXIDE (ACN)(DOT)
3	25477	MANEB (ACN)
4	15196	BENZENE, 1,4-DIISOTHIOCYANATO-
5	1761	PROPANOIC ACID, 2-CHLORO-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	S8	256	64	545	552	937
2	O2.S	64	64	421	718	577
	C4.H6.N2.S4.MN	265	64	373	406	843
4	C8.H4.N2.S2	192	192	265	314	448
5	C3.H5.O2.CL	108	64	255	435	533

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	10544-50-0
2	—	—	—	—	7446-09-5
3	—	—	—	—	12427-38-2
4	—	—	—	—	4044-65-9
5	—	—	—	—	598-78-7



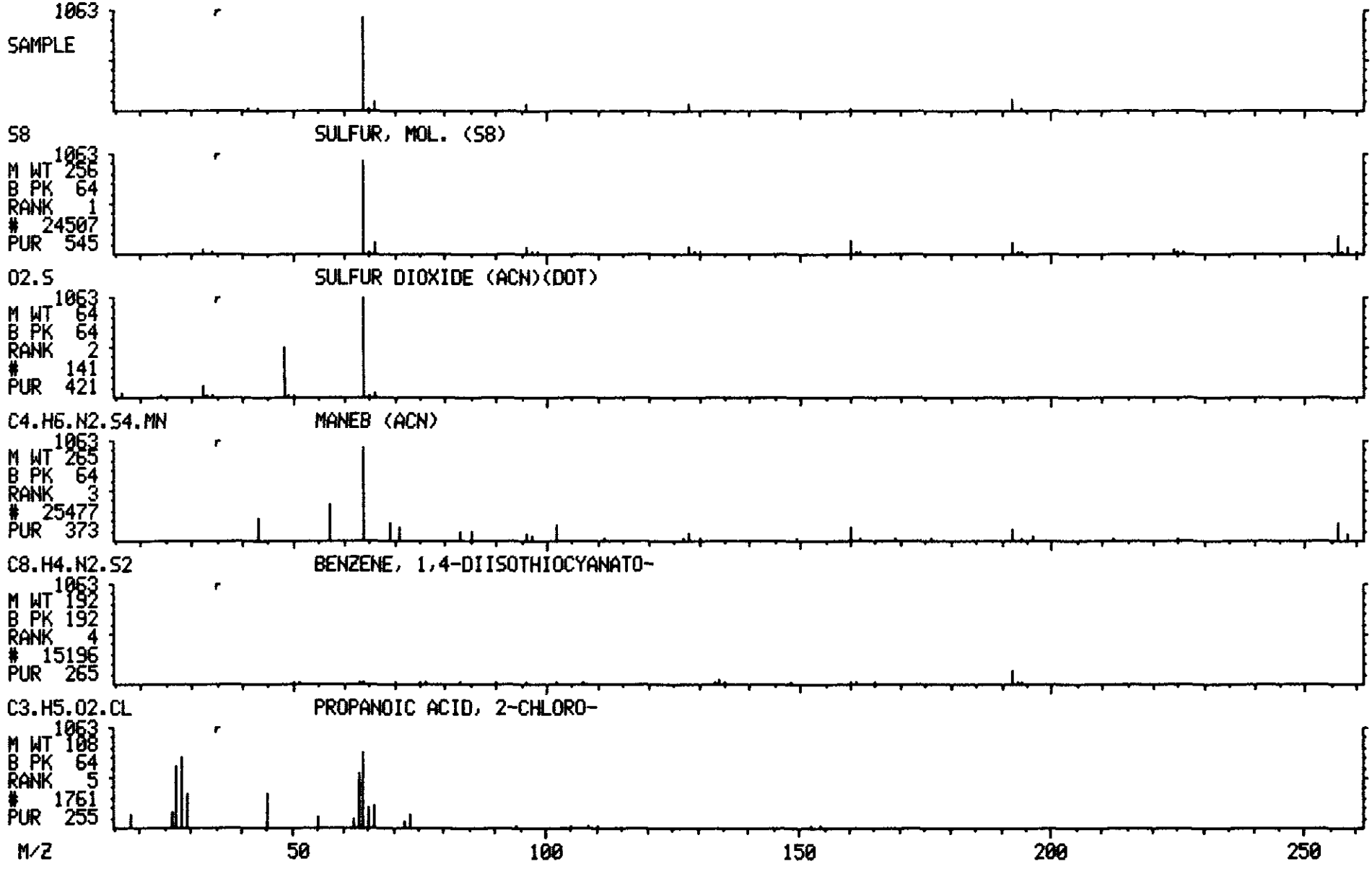
100210

100211

LIBRARY SEARCH
05/15/90 13:33:00 + 18:57
SAMPLE: CLP,VERSCDM,2548,TB-3A,L,W,16696,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2587 #1137
CALI: T2587 # 2

BASE M/Z: 64
RIC: 6799.



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        >>>>INTERNAL STANDARD RIC REPORT<<<<
*****************************INTERNAL STANDARD#1*****************RIC
Mass List                      Data: T2587 # 547          Base m/z:   150
05/15/90 13:33:00 +  9:07     Cali: T2587 #   2          RIC:      54976.
Sample: CLP,VERSCDM,2548,TB-3A,L,W,16696,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     35       0.00   0.00        0. Minima     Min inten:       0.
     30                      #   0  Maxima
*****************************INTERNAL STANDARD#2*****************RIC
Mass List                      Data: T2587 # 768          Base m/z:   136
05/15/90 13:33:00 + 12:48     Cali: T2587 #   2          RIC:      65408.
Sample: CLP,VERSCDM,2548,TB-3A,L,W,16696,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38       0.00   0.00        0. Minima     Min inten:       0.
     30                      #   0  Maxima
*****************************INTERNAL STANDARD#3*****************RIC
Mass List                      Data: T2587 #1102          Base m/z:   164
05/15/90 13:33:00 + 18:22     Cali: T2587 #   2          RIC:      62656.
Sample: CLP,VERSCDM,2548,TB-3A,L,W,16696,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38       0.00   0.00        0. Minima     Min inten:       0.
     30                      #   0  Maxima
*****************************INTERNAL STANDARD#4*****************RIC
Mass List                      Data: T2587 #1386          Base m/z:   188
05/15/90 13:33:00 + 23:06     Cali: T2587 #   2          RIC:      82304.
Sample: CLP,VERSCDM,2548,TB-3A,L,W,16696,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38       0.00   0.00        0. Minima     Min inten:       0.
     30                      #   0  Maxima
*****************************INTERNAL STANDARD#5*****************RIC
Mass List                      Data: T2587 #1904          Base m/z:   240
05/15/90 13:33:00 + 31:44     Cali: T2587 #   2          RIC:      74880.
Sample: CLP,VERSCDM,2548,TB-3A,L,W,16696,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     35       0.00   0.00        0. Minima     Min inten:       0.
     30                      #   0  Maxima
*****************************INTERNAL STANDARD#6*****************RIC
Mass List                      Data: T2587 #2214          Base m/z:   264
05/15/90 13:33:00 + 36:54     Cali: T2587 #   2          RIC:      43712.
Sample: CLP,VERSCDM,2548,TB-3A,L,W,16696,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     36       0.00   0.00        0. Minima     Min inten:       0.
     30                      #   0  Maxima
     ANALYST: CHECK BASE M/Z AND RIC AMOUNT TO INSURE NO CONTAMINATION
```

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-4A

La' Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16697

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2588

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/15/90

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	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
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	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
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	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
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	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	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-4A

La' Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16697

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2588

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/15/90

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	50	U
100-02-7	4-Nitrophenol	50	U
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
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
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

100214

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TB-4A

La' Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16697

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2588

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/15/90

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

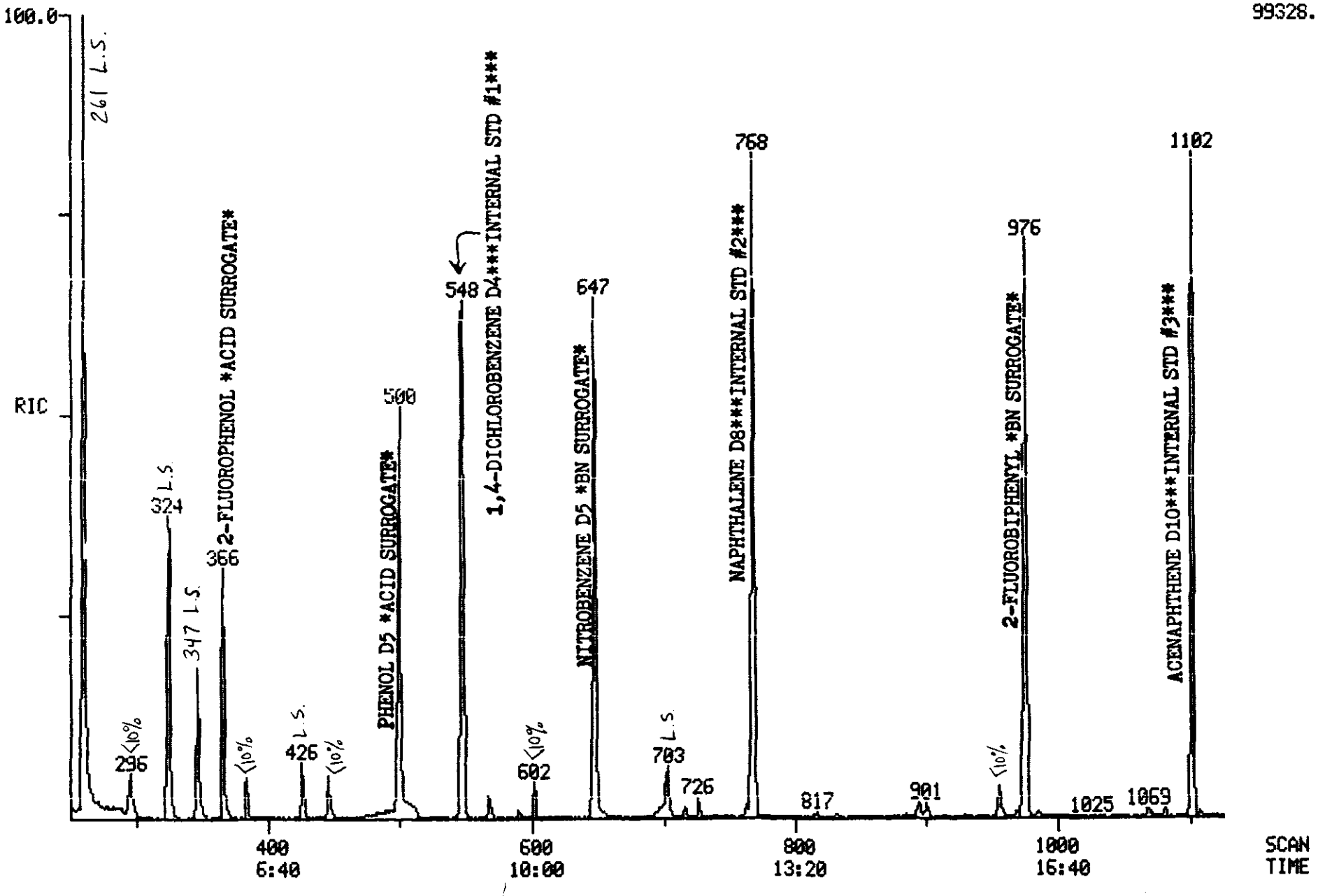
Number TICs found: 5

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

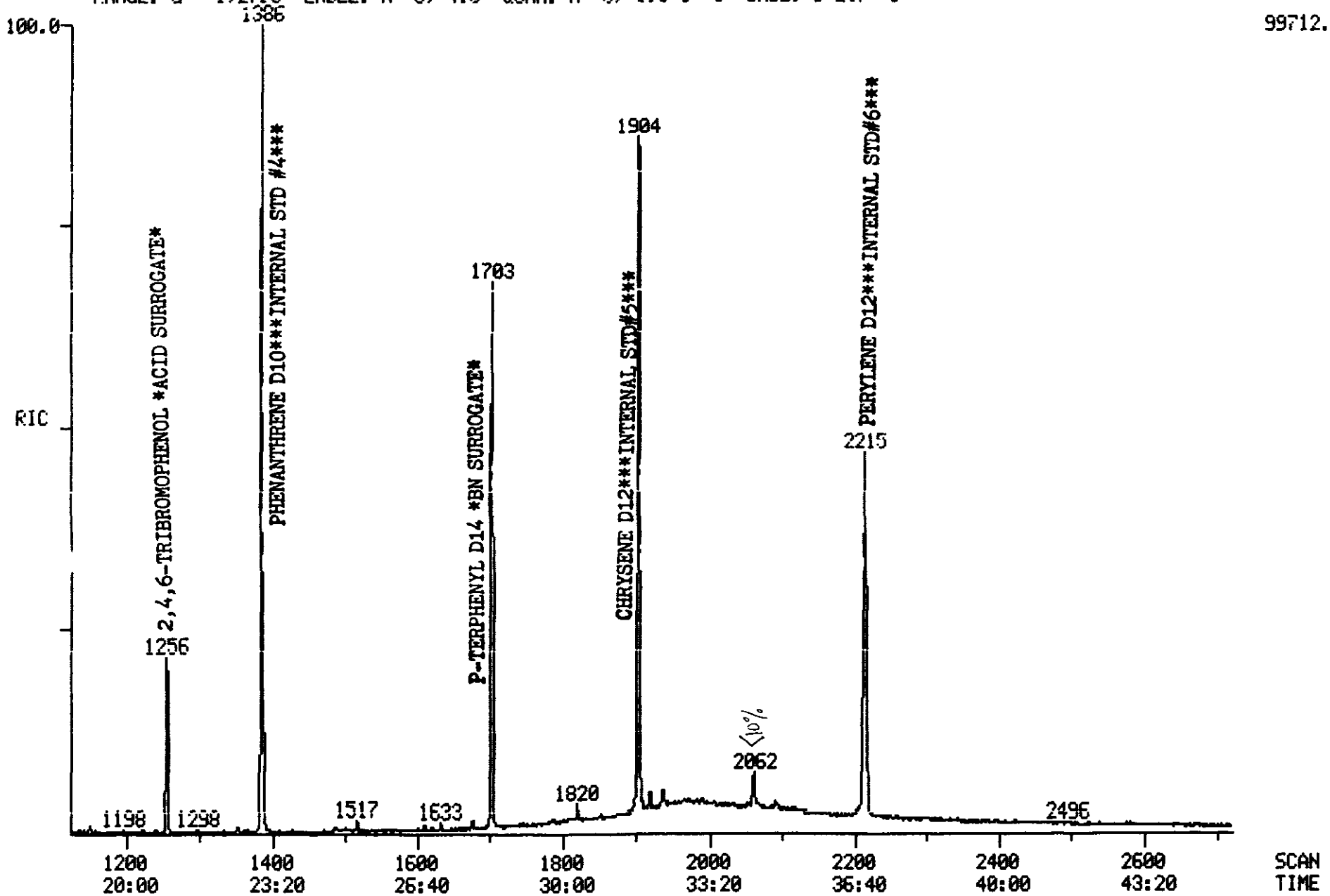
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.35	110	J
2.	UNKNOWN	5.40	44	BJ
3.	UNKNOWN	5.78	22	BJ
4.	UNKNOWN	7.10	8.0	J
5.	UNKNOWN SILOXANE	11.72	6.0	J

RIC DATA: T2588 #1 SCANS 250 TO 1125
05/15/90 14:26:00 CALI: T2588 #2
SAMPLE: CLP,VERSCOM,2548,TB-4A,L,W,16697,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
RANGE: G 1,2720 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

100216



RIC DATA: T2588 #1 SCANS 1125 TO 2720
05/15/90 14:26:00 CALI: T2588 #2
SAMPLE: CLP,VERSCOM,2548,TB-4A,L,W,16697,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30208C/MIN
RANGE: G 1,2720 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



100217

Quantitation Report File: T2588

Data: T2588.TI
05/15/90 14:26:00
Sample: CLP,VERSCDM,2548,TB-4A,L,W,16697,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: SJD Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	C330 2-CHLOROPHENOL
3	C315 PHENOL
4	C325 BIS (2-CHLOROETHYL) ETHER
5	C335 1,3-DICHLOROBENZENE
6	C340 1,4-DICHLOROBENZENE
7	C350 1,2-DICHLOROBENZENE
8	C345 BENZYL ALCOHOL
9	C360 BIS (2-CHLOROISOPROPYL) ETHER
10	C355 2-METHYLPHENOL
11	C375 HEXACHLOROETHANE
12	C365 4-METHYLPHENOL
13	C370 N-NITROSO-DI-N-PROPYLAMINE
14	CS50 2-FLUOROPHENOL**ACID SURR.**
15	CS45 PHENOL-D5**ACID SURR.**
16	CI40 NAPHTHALENE-D8**INT. STD.#2**
17	C410 NITROBENZENE
18	C415 ISOPHORONE
19	C420 2-NITROPHENOL
20	C425 2,4-DIMETHYLPHENOL
21	C435 BIS (2-CHLOROETHOXY) METHANE
22	C440 2,4-DICHLOROPHENOL
23	C445 1,2,4-TRICHLOROBENZENE
24	C450 NAPHTHALENE
25	C430 BENZOIC ACID
26	C455 4-CHLOROANILINE
27	C460 HEXACHLOROBUTADIENE
28	C465 4-CHLORO-3-METHYLPHENOL
29	C470 2-METHYLNAPHTHALENE
30	CS20 NITROBENZENE-D5**BN SURR.**
31	CI50 ACENAPHTHENE-D10**INT. STD.#3**
32	C510 HEXACHLOROCYCLOPENTADIENE
33	C515 2,4,6-TRICHLOROPHENOL
34	C520 2,4,5-TRICHLOROPHENOL
35	C525 2-CHLORONAPHTHALENE
36	C530 2-NITROANILINE
37	C540 ACENAPHTHYLENE
38	C535 DIMETHYL PHTHALATE
39	C544 2,6-DINITROTOLUENE
40	C550 ACENAPHTHENE
41	C545 3-NITROANILINE
42	C555 2,4-DINITROPHENOL
43	C565 DIBENZOFURAN
44	C560 4-NITROPHENOL
45	C570 2,4-DINITROTOLUENE
46	C590 FLUORENE
47	C585 4-CHLOROPHENYL-PHENYLETHER

✓ QB 5/22/90

RFF
pd

All IS areas & Surrogate recoveries are Compliant.
SJD
5-15-90.

100218

T2588

No	Name
48	C580 DIETHYLPHTHALATE
49	C595 4-NITROANILINE
50	C610 4,6-DINITRO-2-METHYLPHENOL

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	547	9:07	1	1.000	A BB	17120.	40.000 NG/UL	9.54
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	112	366	6:06	1	0.669	A BB	10183.	22.523 NG*A1	5.37
15	99	500	8:20	1	0.914	A BB	18838.	28.563 NG*A2	6.81
16	136	768	12:48	16	1.000	A BB	53419.	40.000 NG/UL	9.54
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
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	82	647	10:47	16	0.842	A BB	42483.	44.342 NG*B1	10.57
31	164	1102	18:22	31	1.000	A BB	43249.	40.000 NG/UL	9.54
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	NOT FOUND								
49	NOT FOUND								
50	NOT FOUND								

T2588

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:05	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	8:37		0.949						
3	8:20		0.917						
4	8:33		0.941						
5	8:59		0.989						
6	9:08		1.006						
7	9:38		1.061						
8	9:34		1.053						
9	10:00		1.101						
10	9:55		1.092						
11	10:27		1.150						
12	10:20		1.138						
13	10:25		1.147						
14	6:03	1.01	0.666	1.00	22.52	50.00	0.476	1.056	0.45
15	8:18	1.00	0.914	1.00	28.56	50.00	0.880	1.541	0.57
16	12:46	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
17	10:48		0.846						
18	11:28		0.898						
19	11:43		0.918						
20	11:52		0.930						
21	12:12		0.956						
22	12:24		0.971						
23	12:38		0.990						
24	12:49		1.004						
25	12:14		0.958						
26	13:07		1.027						
27	13:22		1.047						
28	14:38		1.146						
29	14:57		1.171						
30	10:45	1.00	0.842	1.00	44.34	50.00	0.636	0.717	0.89
31	18:20	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
32	15:39		0.854						
33	15:57		0.870						
34	16:04		0.876						
35	16:29		0.899						
36	17:01		0.928						
37	17:50		0.973						
38	17:43		0.966						
39	17:58		0.980						
40	18:26		1.005						
41	18:22		1.002						
42	18:40		1.018						
43	18:56		1.033						
44	18:56		1.033						
45	19:11		1.046						
46	20:03		1.094						
47	20:05		1.095						
48	20:00		1.091						
49	20:21		1.110						
50	20:27		1.115						

Quantitation Report File: T2588

Data: T2588.TI
05/15/90 14:26:00
Sample: CLP,VERSCDM,2548,TB-4A,L,W,16697,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: SJD Acct. No.: 420.1

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

No	Name
51	C615 N-NITROSODIPHENYLAMINE
52	C625 4-BROMOPHENYL-PHENYLETHER
53	C630 HEXACHLOROBENZENE
54	CS25 2-FLUOROBIPHENYL**BN SURR.**
55	CI60 PHENANTHRENE-D10**INT. STD.#4**
56	C635 PENTACHLOROPHENOL
57	C640 PHENANTHRENE
58	C645 ANTHRACENE
59	C650 DI-N-BUTYLPHTHALATE
60	C655 FLUORANTHENE
61	C715 PYRENE
62	CS55 2,4,6,-TRIBROMOPHENOL**ACID SURR.**
63	CI70 CHRYSENE-D12**INT. STD.#5**
64	C720 BUTYLBENZYLPHTHALATE
65	C730 BENZO(A)ANTHRACENE
66	C740 CHRYSENE
67	C725 3,3'-DICHLOROBENZIDINE
68	C741 BIS(2-ETHYLHEXYL)PHTHALATE
69	CS30 P-TERPHENYL-D14**BN SURR.**
70	CI75 PERYLENE-D12**INT. STD.#6**
71	C760 DI-N-OCTYL PHTHALATE
72	C765 BENZO(B)FLUORANTHENE
73	C770 BENZO(K)FLUORANTHENE
74	C775 BENZO(A)PYRENE
75	C780 INDENO(1,2,3-CD)PYRENE
76	C785 DIBENZ(A,H)ANTHRACENE
77	C790 BENZO(G,H,I)PERYLENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	NOT FOUND								
52	NOT FOUND								
53	NOT FOUND								
54	172	975	16:15	31	0.885	A BB	48731.	35.161 NG*B2	8.38
55	188	1386	23:06	55	1.000	A BB	95519.	40.000 NG/UL	9.54
56	NOT FOUND								
57	178	1390	23:10	55	1.003	A BB	475.	~~0.181 NG~~	0.04
58	NOT FOUND								
59	149	1517	25:17	55	1.095	A BB	2176.	~~0.538 NG~~	0.13
60	202	1623	27:03	55	1.171	A BB	383.	~~0.138 NG~~	0.03
61	202	1667	27:47	63	0.876	A BB	377.	~~0.129 NG~~	0.03
62	330	1256	20:56	31	1.140	A BB	6007.	17.737 NG*A3	4.23
63	240	1904	31:44	63	1.000	A BB	88612.	40.000 NG/UL	9.54
64	NOT FOUND								
65	NOT FOUND								
66	NOT FOUND								

BRL

T2588

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
67	NOT FOUND								
68	149	1919	31:59	63	1.008	A BB	1659.	BRL ~~0.685 NG~~	0.16
69	244	1703	28:23	63	0.894	A BB	56430.	29.468 NG*B3	7.03
70	264	2215	36:55	70	1.000	A BB	74314.	40.000 NG/UL	9.51
71	149	2032	33:52	70	0.917	A BB	328.	BRL ~~0.082 NG~~	0.02
72	NOT FOUND								
73	NOT FOUND								
74	NOT FOUND								
75	NOT FOUND								
76	NOT FOUND								
77	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	20:32		1.120						
52	21:39		1.181						
53	22:03		1.203						
54	16:13	1.00	0.885	1.00	35.16	50.00	0.901	1.282	0.70
55	23:04	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
56	22:40		0.983						
57	23:08	1.00	1.003	1.00	0.18	50.00	0.004	1.099	0.00
58	23:17		1.009						
59	25:14	1.00	1.094	1.00	0.54	50.00	0.018	1.695	0.01
60	27:01	1.00	1.171	1.00	0.14	50.00	0.003	1.160	0.00
61	27:45	1.00	0.875	1.00	0.13	50.00	0.003	1.316	0.00
62	20:54	1.00	1.140	1.00	17.74	50.00	0.111	0.313	0.35
63	31:42	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
64	30:07		0.950						
65	31:39		0.998						
66	31:47		1.003						
67	31:40		0.999						
68	31:57	1.00	1.008	1.00	0.68	50.00	0.015	1.094	0.01
69	28:21	1.00	0.894	1.00	29.47	50.00	0.509	0.864	0.59
70	36:51	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
71	33:49	1.00	0.918	1.00	0.08	50.00	0.004	2.143	0.00
72	35:13		0.956						
73	35:19		0.958						
74	36:36		0.993						
75	42:54		1.164						
76	43:04		1.169						
77	44:45		1.214						

Quantitation Report File: QCREF

Data: T2588.TI
05/15/90 14:26:00
Sample: CLP,VERSCDM,2548,TB-1A,L,W,16697,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: SJD Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	CI40 NAPHTHALENE-D8**INT. STD.#2**
3	CI50 ACENAPHTHENE-D10**INT. STD.#3**
4	CI60 PHENANTHRENE-D10**INT. STD.#4**
5	CI70 CHRYSENE-D12**INT. STD.#5**
6	CI75 PERYLENE-D12**INT. STD.#6**
7	CS50 2-FLUOROPHENOL**ACID SURR.**
8	CS45 PHENOL-D5**ACID SURR.**
9	CS55 2,4,6,-TRIBROMOPHENOL**ACID SURR.**
10	CS20 NITROBENZENE-D5**BN SURR.**
11	CS25 2-FLUOROBIPHENYL**BN SURR.**
12	CS30 P-TERPHENYL-D14**BN SURR.**

Scan	Time	Area(Hght)		Amount		Name
547	9:07	17120.		40.000	NG/UL	CI30 1,4-DICHLOROBENZENE-D4
768	12:48	53419.	90	40.000	NG/UL	CI40 NAPHTHALENE-D8**INT. ST
1102	18:22	43249.		40.000	NG/UL	CI50 ACENAPHTHENE-D10**INT.
1386	23:06	95519.	Rec	40.000	NG/UL	CI60 PHENANTHRENE-D10**INT.
1904	31:44	88612.		40.000	NG/UL	CI70 CHRYSENE-D12**INT. STD.
2215	36:55	74314.		40.000	NG/UL	CI75 PERYLENE-D12**INT. STD.
366	6:06	10183.	23	22.523	NG*A1	CS50 2-FLUOROPHENOL**ACID SU
500	8:20	18838.	29	28.563	NG*A2	CS45 PHENOL-D5**ACID SURR.**
1256	20:56	6007.	18	17.737	NG*A3	CS55 2,4,6,-TRIBROMOPHENOL**
647	10:47	42483.	89	44.342	NG*B1	CS20 NITROBENZENE-D5**BN SUR
975	16:15	48731.	70	35.161	NG*B2	CS25 2-FLUOROBIPHENYL**BN SU
1703	28:23	56430.	59	29.468	NG*B3	CS30 P-TERPHENYL-D14**BN SUR

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:05	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	12:46	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
3	18:20	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
4	23:04	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
5	31:42	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
6	36:51	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
7	6:03	1.01	0.666	1.00	22.52	50.00	0.476	1.056	0.45
8	8:18	1.00	0.914	1.00	28.56	50.00	0.880	1.541	0.57
9	20:54	1.00	1.140	1.00	17.74	50.00	0.111	0.313	0.35
10	10:45	1.00	0.842	1.00	44.34	50.00	0.636	0.717	0.89
11	16:13	1.00	0.885	1.00	35.16	50.00	0.901	1.282	0.70
12	28:21	1.00	0.894	1.00	29.47	50.00	0.509	0.864	0.59

Quantitation Report File: ISREF

Data: T2583.TI
05/15/90 9:42:00
Sample: CLP,,,SSTD 50,,,22658,B,CC-050,,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: SJD Acct. No.: -

Data: T2588.TI
05/15/90 14:26:00
Sample: CLP,VERSCDM,2548,TB-4A,L,W,16697,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: SJD Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
3	CI40 NAPHTHALENE-D8**INT. STD.#2**
4	CI40 NAPHTHALENE-D8**INT. STD.#2**
5	CI50 ACENAPHTHENE-D10**INT. STD.#3**
6	CI50 ACENAPHTHENE-D10**INT. STD.#3**
7	CI60 PHENANTHRENE-D10**INT. STD.#4**
8	CI60 PHENANTHRENE-D10**INT. STD.#4**
9	CI70 CHRYSENE-D12**INT. STD.#5**
10	CI70 CHRYSENE-D12**INT. STD.#5**
11	CI75 PERYLENE-D12**INT. STD.#6**
12	CI75 PERYLENE-D12**INT. STD.#6**

Scan	Time	Area(Hght)	Amount	Name
545	9:05	15588.	40.000 NG/UL	CI30 1,4-DICHLOROBENZENE-D4
547	9:07	17120.	43.931 NG/UL	CI30 1,4-DICHLOROBENZENE-D4
766	12:46	52356.	40.000 NG/UL	CI40 NAPHTHALENE-D8**INT. ST
768	12:48	53419.	40.812 NG/UL	CI40 NAPHTHALENE-D8**INT. ST
1100	18:20	40125.	40.000 NG/UL	CI50 ACENAPHTHENE-D10**INT.
1102	18:22	43249.	43.114 NG/UL	CI50 ACENAPHTHENE-D10**INT.
1384	23:04	81463.	40.000 NG/UL	CI60 PHENANTHRENE-D10**INT.
1386	23:06	95519.	46.902 NG/UL	CI60 PHENANTHRENE-D10**INT.
1902	31:42	72781.	40.000 NG/UL	CI70 CHRYSENE-D12**INT. STD.
1904	31:44	88612.	48.701 NG/UL	CI70 CHRYSENE-D12**INT. STD.
2211	36:51	61203.	40.000 NG/UL	CI75 PERYLENE-D12**INT. STD.
2215	36:55	74314.	48.569 NG/UL	CI75 PERYLENE-D12**INT. STD.

Library Search Data: T2588 # 261 Base m/z: 43
05/15/90 14:26:00 + 4:21 Cali: T2588 # 2 RIC: 75647.
Sample: CLP,VERSCDM,2548,TB-4A,L,W,16697,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
77 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	4294	2-BUTANONE, 4-(ACETYLOXY)-
2	4329	1-BUTANOL, 3-METHYL-, ACETATE
3	4338	ACETIC ACID, PENTYL ESTER
4	4427	PENTANE, 1-PROPOXY-
5	728	PROPANOIC ACID, 2-METHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C6.H10.O3	130	43	809	859	817
2	C7.H14.O2	130	43	791	885	805
3	C7.H14.O2	130	43	788	888	788
4	C8.H18.O	130	43	734	825	748
5	C4.H8.O2	88	43	728	884	731

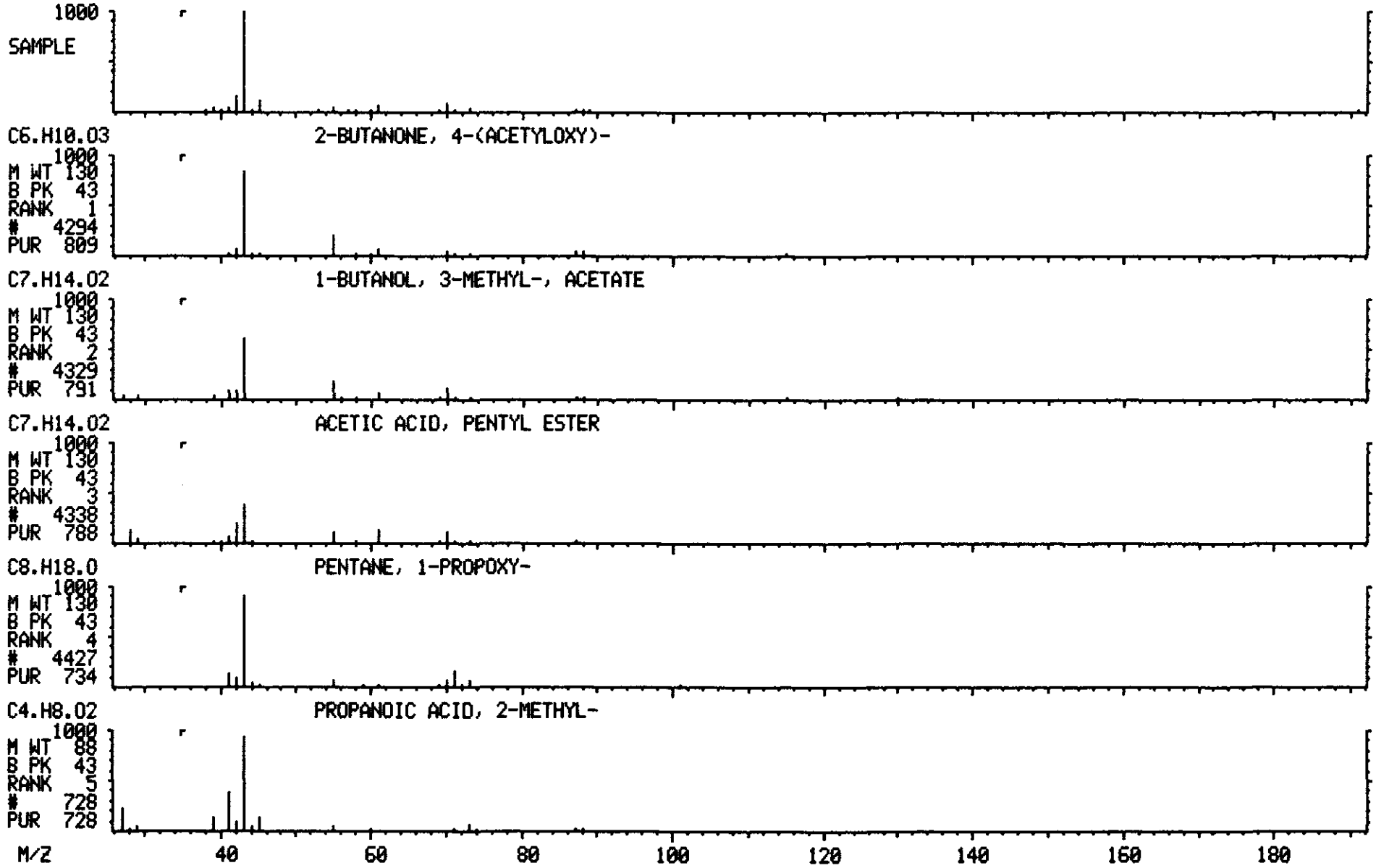
Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	10150-87-5
2	—	—	—	—	123-92-2
3	—	—	—	—	628-63-7
4	—	—	—	—	18641-82-2
5	—	—	—	—	79-31-2

100226

LIBRARY SEARCH
05/15/90 14:26:00 + 4:21
SAMPLE: CLP,VERSCDM,2548,TB-4A,L,W,16697,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2588 # 261
CALI: T2588 # 2

BASE M/Z: 43
RIC: 75647.



Library Search Data: T2588 # 324 Base m/z: 43
05/15/90 14:26:00 + 5:24 Cali: T2588 # 2 RIC: 31103.
Sample: CLP,VERSCDM,2548,TB-4A,L,W,16697,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
121 matched at least 7 of the 16 largest peaks in the unknown

B

Rank	In.	Name
1	806	HYDROPEROXIDE, 1,1-DIMETHYLETHYL
2	2776	2-PENTANOL, 2,4-DIMETHYL-
3	2777	2-HEXANOL, 2-METHYL-
4	1349	OXEPANE, 2,2,4-TRIMETHYL-
5	1334	OXIRANE, TETRAMETHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C4.H10.O2	90	59	757	866	764
2	C7.H16.O	116	59	740	775	740
3	C7.H16.O	116	59	685	728	696
4	C6.H12.O	100	43	685	779	708
5	C6.H12.O	100	59	683	802	706

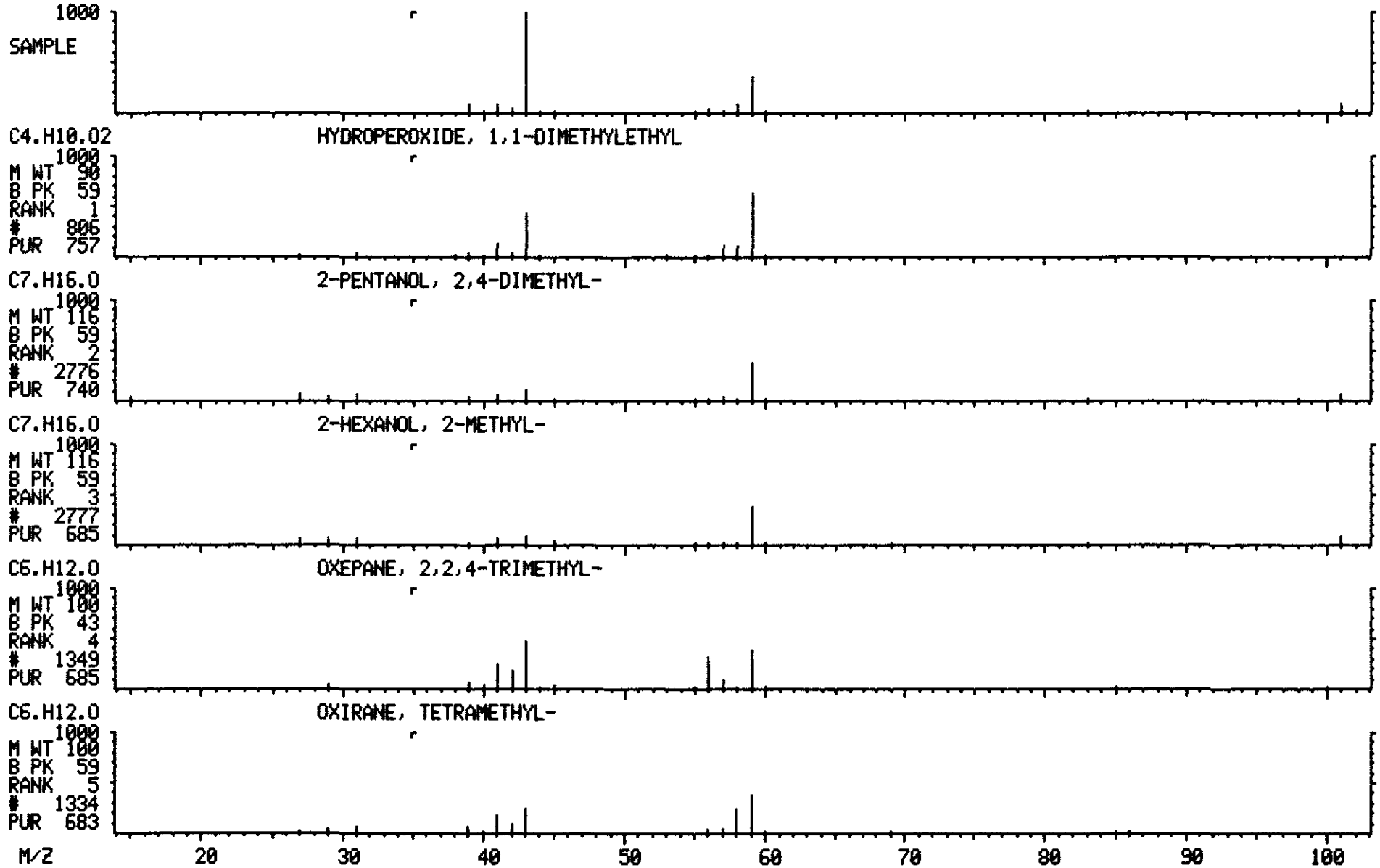
Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	75-91-2
2	—	—	—	—	625-06-9
3	—	—	—	—	625-23-0
4	—	—	—	—	23120-44-7
5	—	—	—	—	5076-20-0

LIBRARY SEARCH
05/15/90 14:26:00 + 5:24
SAMPLE: CLP,VERSCDM,2548,TB-4A,L,W,16697,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2588 # 324
CALI: T2588 # 2

BASE M/Z: 43
RIC: 31103.

100228



Library Search Data: T2588 # 347 Base m/z: 41
05/15/90 14:26:00 → 5:47 Cali: T2588 # 2 RIC: 15695.
Sample: CLP,VERSCDM,2548,TB-4A,L,W,16697,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
104 matched at least 8 of the 16 largest peaks in the unknown

Rank	In.	Name
1	1076	1-PROPENE, 3,3'-OXYBIS-
2	1111	2-HEXENAL, (E)-
3	2216	2-HEPTENAL, (Z)-
4	1153	CYCLOPENTANE, 1,1-DIMETHYL-
5	2186	4-PENTENAL, 2,2-DIMETHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C6.H10.O	98	41	771	880	799
2	C6.H10.O	98	41	757	885	818
3	C7.H12.O	112	41	733	875	756
4	C7.H14	98	56	657	784	682
5	C7.H12.O	112	55	653	789	689

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	557-40-4
2	—	—	—	—	6728-26-3
3	—	—	—	—	57266-86-1
4	—	—	—	—	1638-26-2
5	—	—	—	—	5497-67-6

B

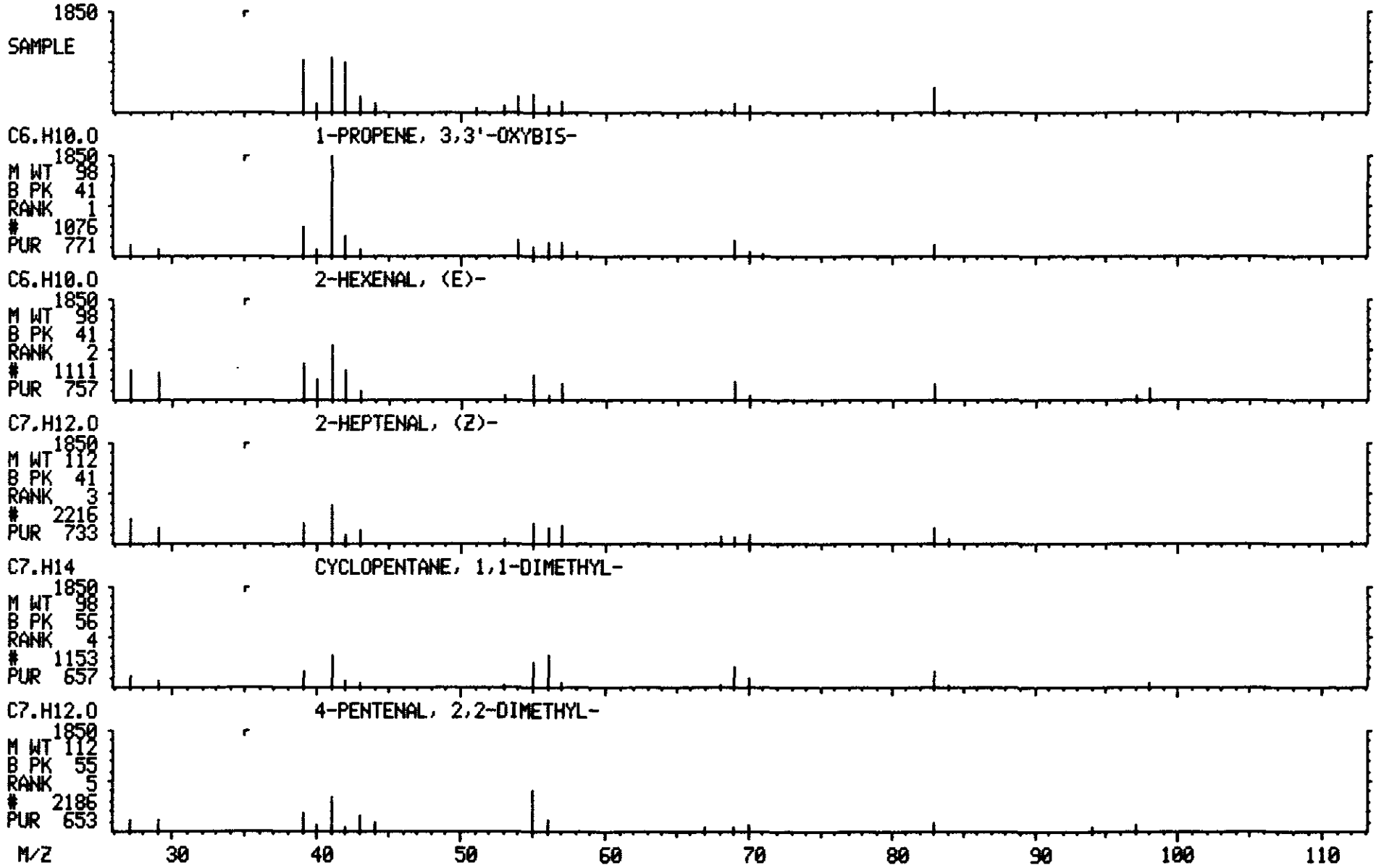
100229

LIBRARY SEARCH
05/15/90 14:26:00 + 5:47
SAMPLE: CLP,VERSCOM,2548,TB-4A,L,W,16697,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
ENHANCED (5 15B 2N 0T)

DATA: T2588 # 347
CALI: T2588 # 2

BASE M/Z: 41
RIC: 15695.

100230



Library Search Data: T2588 # 426 Base m/z: 56
05/15/90 14:26:00 → 7:06 Cali: T2588 # 2 RIC: 5519.
Sample: CLP,VERSCDM,2548,TB-4A,L,W,16697,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
106 matched at least 5 of the 16 largest peaks in the unknown

Rank	In.	Name
1	3861	PIPERIDINE, 5-ETHYL-2-METHYL-
2	3863	PIPERIDINE, 1-ETHYL-2-METHYL-
3	3876	METHYLAMINE, N-(1-METHYLHEXYLIDENE)-
4	3862	PIPERIDINE, 1,2,6-TRIMETHYL-
5	2080	PYRAZINE, 1,4-DIOXIDE

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C8.H17.N	127	56	435	646	598
2	C8.H17.N	127	112	369	571	497
3	C8.H17.N	127	71	367	454	684
4	C8.H17.N	127	54	363	526	541
5	C4.H4.O2.N2	112	112	339	593	407

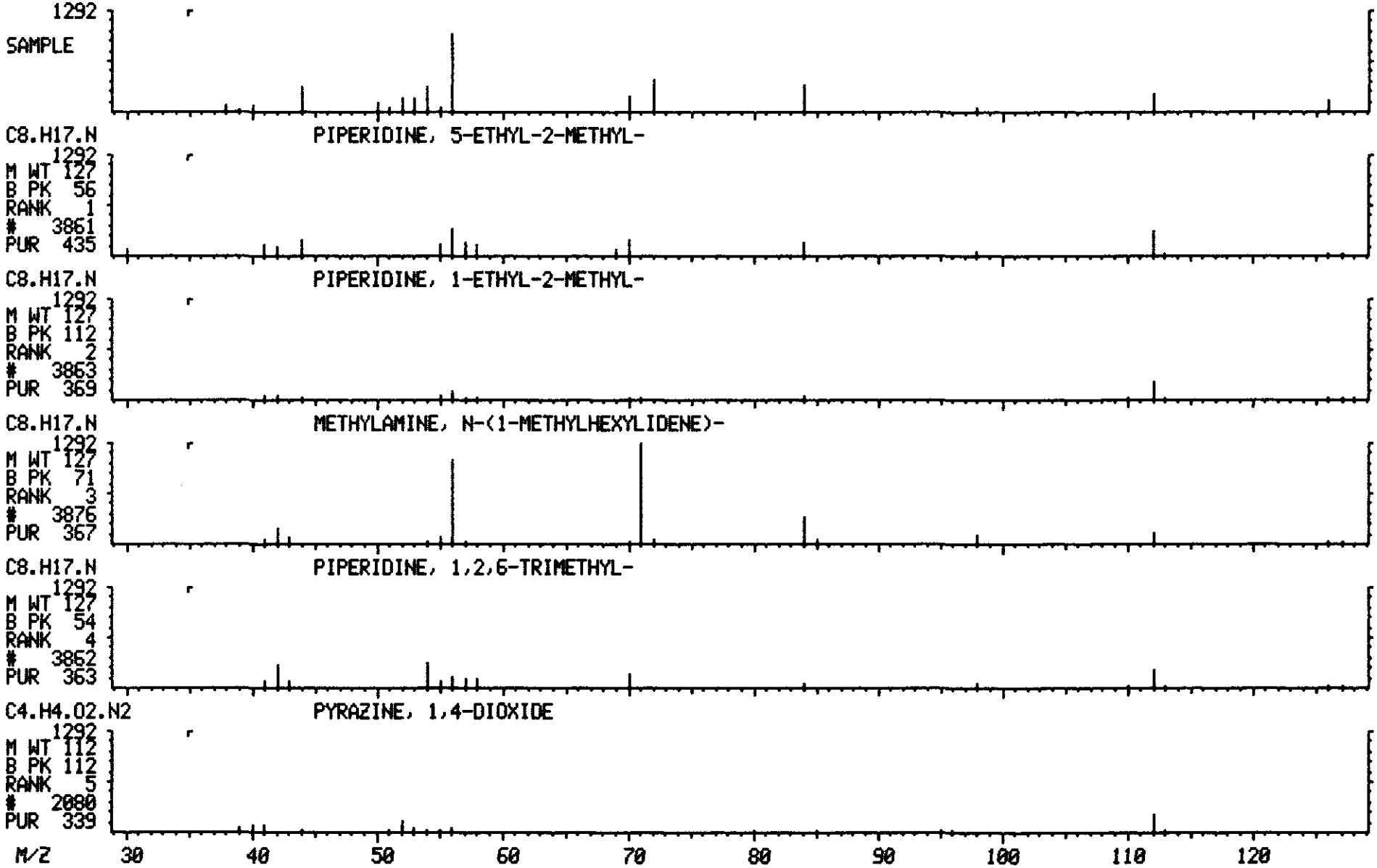
Rank	Ret.Time	B.P. Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	104-89-2
2	—	—	—	—	766-52-9
3	—	—	—	—	22058-71-5
4	—	—	—	—	669-81-8
5	—	—	—	—	2423-84-9

100232

LIBRARY SEARCH
05/15/90 14:26:00 + 7:06
SAMPLE: CLP,VERSCDM,2548,TB-4A,L,W,16697,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2588 # 426
CALI: T2588 # 2

BASE M/Z: 56
RIC: 5519.



Library Search Data: T2588 # 703 Base m/z: 73
05/15/90 14:26:00 + 11:43 Cali: T2588 # 2 RIC: 5087.
Sample: CLP,VERSCDM,2548,TB-4A,L,W,16697,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
274 matched at least 4 of the 16 largest peaks in the unknown

siloxane

Rank	In.	Name
1	34650	CYCLOPENTASILOXANE, DECAMETHYL-
2	34667	BENZOIC ACID, 2,4-BIS[(TRIMETHYLSILYL)OXY]-, TRIMETHYLSILYL ESTER
3	34666	BENZOIC ACID, 2,5-BIS(TRIMETHYLSILOXY)-, TRIMETHYLSILYL ESTER
4	40810	BENZENEETHANAMINE, N-[(PENTAFLUOROPHENYL)METHYLENE]-.BETA.,3,4-TRIS*
5	36250	PHENETHYLAMINE, N-METHYL-.BETA.,3,4-TRIS(TRIMETHYLSILOXY)-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C10.H30.O5.SI5	370	73	505	800	629
2	C16.H30.O4.SI3	370	73	465	631	606
	C16.H30.O4.SI3	370	73	441	604	582
	C24.H34.O3.N.F5.SI3	563	73	431	632	535
5	C18.H37.O3.N.SI3	399	73	415	553	545

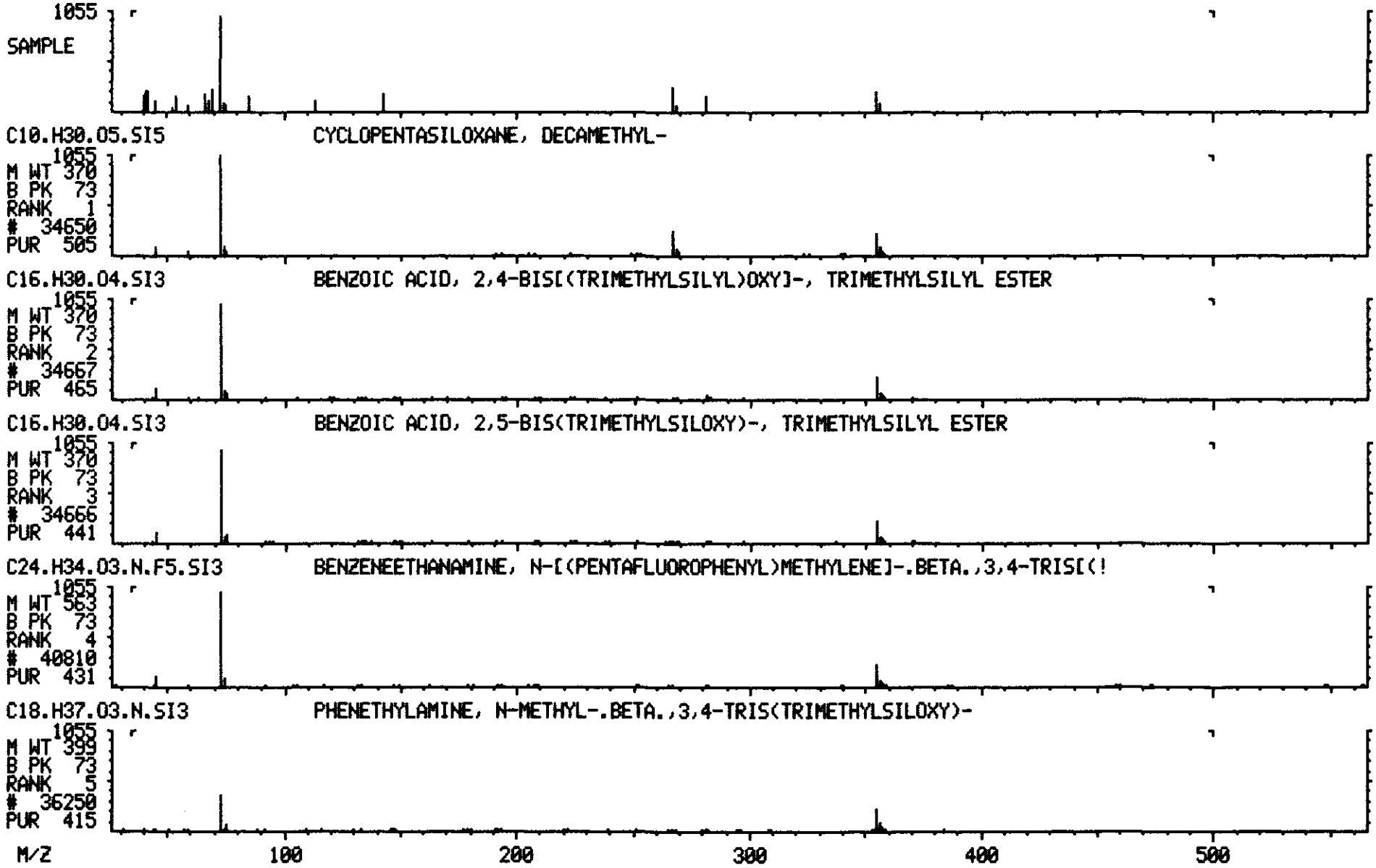
Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	541-02-6
2	—	—	—	—	10586-16-0
3	—	—	—	—	3618-20-0
4	—	—	—	—	55429-13-5
5	—	—	—	—	10538-85-9

LIBRARY SEARCH
05/15/90 14:26:00 + 11:43
SAMPLE: CLP,VERSCDM,2548,TB-4A,L,W,16697,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30@8C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2588 # 703
CALI: T2588 # 2

BASE M/Z: 73
RIC: 5087.

100234



```
        >>>>INTERNAL STANDARD RIC REPORT<<<<
*****************************INTERNAL STANDARD#1*****************RIC
Mass List                      Data: T2588 # 547          Base m/z:   150
05/15/90 14:26:00 +  9:07      Cali: T2588 #   2          RIC:      56128.
Sample: CLP,VERSCDM,2548,TB-4A,L,W,16697,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     35       0.00   0.00        0. Minima     Min inten:       0.
     30                      #   0  Maxima
*****************************INTERNAL STANDARD#2*****************RIC
Mass List                      Data: T2588 # 768          Base m/z:   136
05/15/90 14:26:00 + 12:48      Cali: T2588 #   2          RIC:      70784.
Sample: CLP,VERSCDM,2548,TB-4A,L,W,16697,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38       0.00   0.00        0. Minima     Min inten:       0.
     30                      #   0  Maxima
*****************************INTERNAL STANDARD#3*****************RIC
Mass List                      Data: T2588 #1102          Base m/z:   164
05/15/90 14:26:00 + 18:22      Cali: T2588 #   2          RIC:      71296.
Sample: CLP,VERSCDM,2548,TB-4A,L,W,16697,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38       0.00   0.00        0. Minima     Min inten:       0.
     30                      #   0  Maxima
*****************************INTERNAL STANDARD#4*****************RIC
Mass List                      Data: T2588 #1386          Base m/z:   188
05/15/90 14:26:00 + 23:06      Cali: T2588 #   2          RIC:      91264.
Sample: CLP,VERSCDM,2548,TB-4A,L,W,16697,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38       0.00   0.00        0. Minima     Min inten:       0.
     30                      #   0  Maxima
*****************************INTERNAL STANDARD#5*****************RIC
Mass List                      Data: T2588 #1904          Base m/z:   240
05/15/90 14:26:00 + 31:44      Cali: T2588 #   2          RIC:      78848.
Sample: CLP,VERSCDM,2548,TB-4A,L,W,16697,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     36       0.00   0.00        0. Minima     Min inten:       0.
     30                      #   0  Maxima
*****************************INTERNAL STANDARD#6*****************RIC
Mass List                      Data: T2588 #2215          Base m/z:   264
05/15/90 14:26:00 + 36:55      Cali: T2588 #   2          RIC:      42752.
Sample: CLP,VERSCDM,2548,TB-4A,L,W,16697,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     40       0.00   0.00        0. Minima     Min inten:       0.
     30                      #   0  Maxima
     ANALYST: CHECK BASE M/Z AND RIC AMOUNT TO INSURE NO CONTAMINATION
```

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-5A

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16698

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2589

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/15/90

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	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
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	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
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	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
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	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	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-5A

La' Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16698

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2589

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/15/90

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	50	U
100-02-7	4-Nitrophenol	50	U
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
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
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	50	
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

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TB-5A

La' Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16698

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2589

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/15/90

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

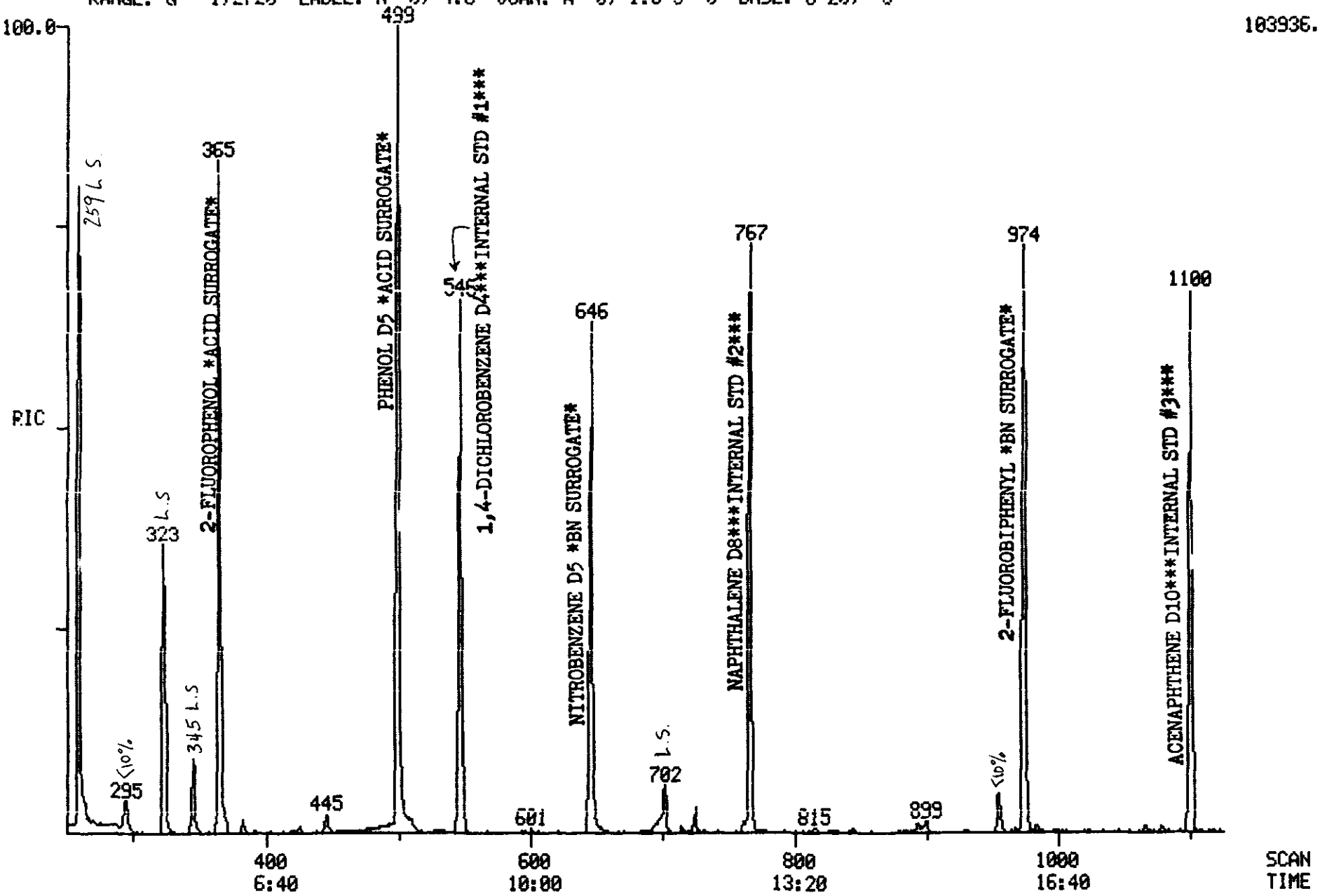
Number TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.32	96	J
2.	UNKNOWN	5.38	40	BJ
3.	UNKNOWN	5.75	10	BJ
4.	UNKNOWN SILOXANE	11.70	6.0	J

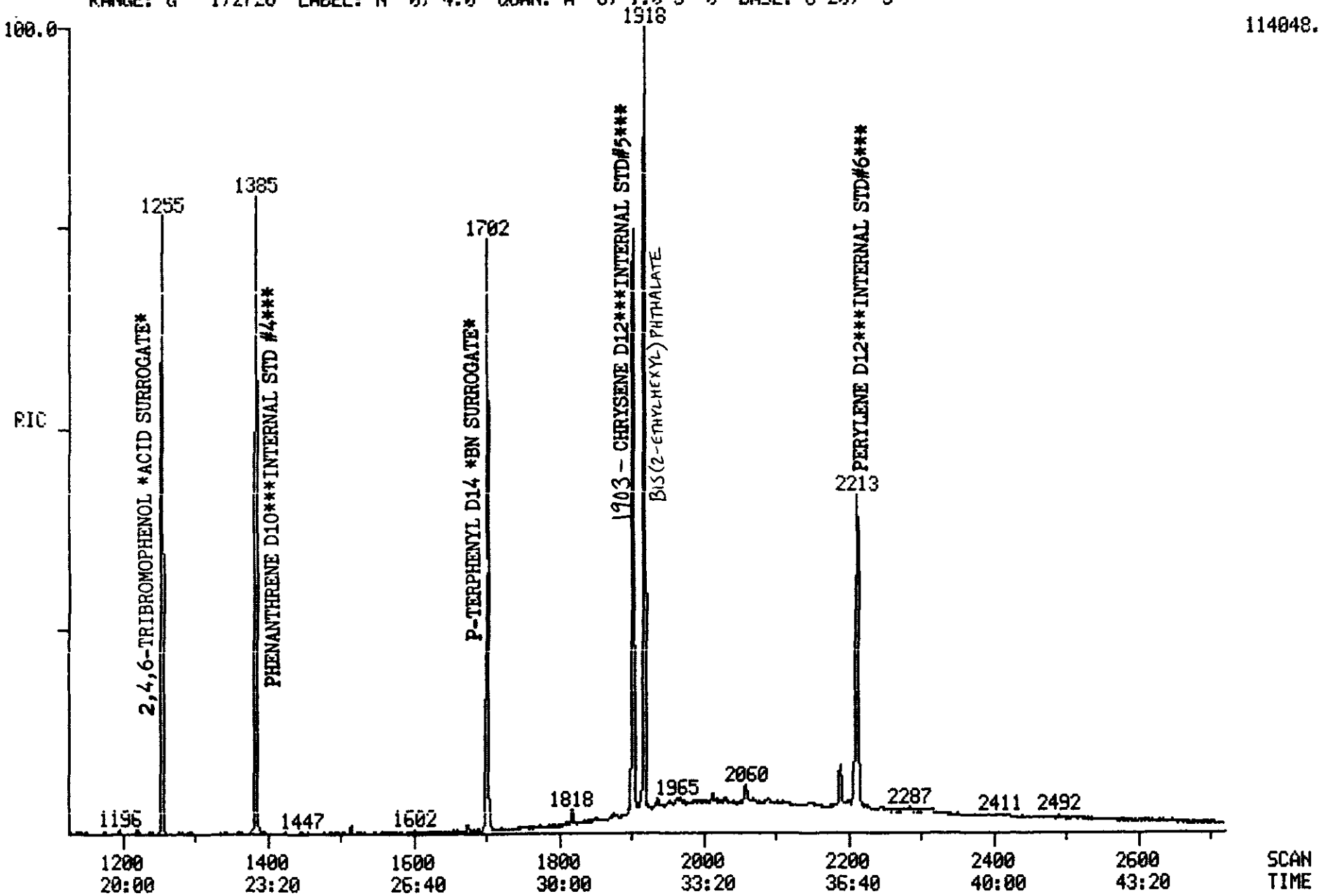
RIC DATA: T2589 #1 SCANS 250 TO 1125
05/15/90 15:19:00 CALI: T2589 #2
SAMPLE: CLP,VERSCDM,2548,TB-5A,L,W,16698,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
RANGE: G 1,2720 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

100239



RIC DATA: T2589 #1 SCANS 1125 TO 2720
05/15/90 15:19:00 CALI: T2589 #2
SAMPLE: CLP,VERSCOM,2548,TB-5A,L,W,16698,B,,420.1,3,1UL,
CONDS.· INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
RANGE: G 1,2720 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

100240



Quantitation Report File: T2589

Data: T2589.TI
05/15/90 15:19:00
Sample: CLP,VERSCDM,2548,TB-5A,L,W,16698,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: SJD Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	C330 2-CHLOROPHENOL
3	C315 PHENOL
4	C325 BIS (2-CHLOROETHYL) ETHER
5	C335 1,3-DICHLOROBENZENE
6	C340 1,4-DICHLOROBENZENE
7	C350 1,2-DICHLOROBENZENE
8	C345 BENZYL ALCOHOL
9	C360 BIS (2-CHLOROISOPROPYL) ETHER
10	C355 2-METHYLPHENOL
11	C375 HEXACHLOROETHANE
12	C365 4-METHYLPHENOL
13	C370 N-NITROSO-DI-N-PROPYLAMINE
14	CS50 2-FLUOROPHENOL**ACID SURR.**
15	CS45 PHENOL-D5**ACID SURR.**
16	CI40 NAPHTHALENE-D8**INT. STD.#2**
17	C410 NITROBENZENE
18	C415 ISOPHORONE
19	C420 2-NITROPHENOL
20	C425 2,4-DIMETHYLPHENOL
21	C435 BIS (2-CHLOROETHOXY) METHANE
22	C440 2,4-DICHLOROPHENOL
23	C445 1,2,4-TRICHLOROBENZENE
24	C450 NAPHTHALENE
25	C430 BENZOIC ACID
26	C455 4-CHLOROANILINE
27	C460 HEXACHLOROBUTADIENE
28	C465 4-CHLORO-3-METHYLPHENOL
29	C470 2-METHYLNAPHTHALENE
30	CS20 NITROBENZENE-D5**BN SURR.**
31	CI50 ACENAPHTHENE-D10**INT. STD.#3**
32	C510 HEXACHLOROCYCLOPENTADIENE
33	C515 2,4,6-TRICHLOROPHENOL
34	C520 2,4,5-TRICHLOROPHENOL
35	C525 2-CHLORONAPHTHALENE
36	C530 2-NITROANILINE
37	C540 ACENAPHTHYLENE
38	C535 DIMETHYL PHTHALATE
39	C544 2,6-DINITROTOLUENE
40	C550 ACENAPHTHENE
41	C545 3-NITROANILINE
42	C555 2,4-DINITROPHENOL
43	C565 DIBENZOFURAN
44	C560 4-NITROPHENOL
45	C570 2,4-DINITROTOLUENE
46	C590 FLUORENE
47	C585 4-CHLOROPHENYL-PHENYLETHER

✓ DB 5/22/90

RFF bid

IS Areas and Surrogate Recoveries are Compliant bid

100241

T2589

No	Name
48	C580 DIETHYLPHTHALATE
49	C595 4-NITROANILINE
50	C610 4,6-DINITRO-2-METHYLPHENOL

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	152	546	9:06	1	1.000	A BB	16718.	40.000	NG/UL	7.03
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	112	365	6:05	1	0.668	A BB	27094.	61.368	NG*A1	10.78
15	99	499	8:19	1	0.914	A BB	39117.	60.738	NG*A2	10.67
16	136	767	12:47	16	1.000	A BB	52047.	40.000	NG/UL	7.03
17	NOT FOUND									
18	NOT FOUND									
19	NOT FOUND									
20	NOT FOUND									
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	82	646	10:46	16	0.842	A BB	41616.	44.583	NG*B1	7.83
31	164	1100	18:20	31	1.000	A BB	41165.	40.000	NG/UL	7.03
32	NOT FOUND									
33	NOT FOUND									
34	NOT FOUND									
35	NOT FOUND									
36	NOT FOUND									
37	NOT FOUND									
38	NOT FOUND									
39	NOT FOUND									
40	NOT FOUND									
41	NOT FOUND									
42	NOT FOUND									
43	NOT FOUND									
44	NOT FOUND									
45	NOT FOUND									
46	NOT FOUND									
47	NOT FOUND									
48	NOT FOUND									
49	NOT FOUND									
50	NOT FOUND									

T2589

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:05	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	8:37		0.949						
3	8:20		0.917						
4	8:33		0.941						
5	8:59		0.989						
6	9:08		1.006						
7	9:38		1.061						
8	9:34		1.053						
9	10:00		1.101						
10	9:55		1.092						
11	10:27		1.150						
12	10:20		1.138						
13	10:25		1.147						
14	6:03	1.01	0.666	1.00	61.37	50.00	1.297	1.056	1.23
15	8:18	1.00	0.914	1.00	60.74	50.00	1.872	1.541	1.21
16	12:46	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
17	10:48		0.846						
18	11:28		0.898						
19	11:43		0.918						
20	11:52		0.930						
21	12:12		0.956						
22	12:24		0.971						
23	12:38		0.990						
24	12:49		1.004						
25	12:14		0.958						
26	13:07		1.027						
27	13:22		1.047						
28	14:38		1.146						
29	14:57		1.171						
30	10:45	1.00	0.842	1.00	44.58	50.00	0.640	0.717	0.89
31	18:20	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
32	15:39		0.854						
33	15:57		0.870						
34	16:04		0.876						
35	16:29		0.899						
36	17:01		0.928						
37	17:50		0.973						
38	17:43		0.966						
39	17:58		0.980						
40	18:26		1.005						
41	18:22		1.002						
42	18:40		1.018						
43	18:56		1.033						
44	18:56		1.033						
45	19:11		1.046						
46	20:03		1.094						
47	20:05		1.095						
48	20:00		1.091						
49	20:21		1.110						
50	20:27		1.115						

Quantitation Report File: T2589

Data: T2589.TI
05/15/90 15:19:00
Sample: CLP,VERSCDM,2548,TB-5A,L,W,16698,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: SJD Acct. No.: 420.1

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

No	Name
51	C615 N-NITROSODIPHENYLAMINE
52	C625 4-BROMOPHENYL-PHENYLETHER
53	C630 HEXACHLOROBENZENE
54	CS25 2-FLUOROBIPHENYL**BN SURR.**
55	CI60 PHENANTHRENE-D10**INT. STD.#4**
56	C635 PENTACHLOROPHENOL
57	C640 PHENANTHRENE
58	C645 ANTHRACENE
59	C650 DI-N-BUTYLPHTHALATE
60	C655 FLUORANTHENE
61	C715 PYRENE
62	CS55 2,4,6,-TRIBROMOPHENOL**ACID SURR.**
63	CI70 CHRYSENE-D12**INT. STD.#5**
64	C720 BUTYLBENZYLPHTHALATE
65	C730 BENZO(A)ANTHRACENE
66	C740 CHRYSENE
67	C725 3,3'-DICHLOROBENZIDINE
68	C741 BIS(2-ETHYLHEXYL)PHTHALATE
69	CS30 P-TERPHENYL-D14**BN SURR.**
70	CI75 PERYLENE-D12**INT. STD.#6**
71	C760 DI-N-OCTYL PHTHALATE
72	C765 BENZO(B)FLUORANTHENE
73	C770 BENZO(K)FLUORANTHENE
74	C775 BENZO(A)PYRENE
75	C780 INDENO(1,2,3-CD)PYRENE
76	C785 DIBENZ(A,H)ANTHRACENE
77	C790 BENZO(G,H,I)PERYLENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	NOT FOUND								
52	NOT FOUND								
53	NOT FOUND								
54	172	974	16:14	31	0.885	A BB	44388.	33.649 NG*B2	5.91
55	188	1385	23:05	55	1.000	A BB	89524.	40.000 NG/UL	7.03
56	NOT FOUND								
57	NOT FOUND								
58	NOT FOUND								
59	149	1515	25:15	55	1.094	A BB	2104.	BRL ~~0.555 NG~~	0.10
60	NOT FOUND								
61	NOT FOUND								
62	330	1255	20:55	31	1.141	A BB	21254.	65.936 NG*A3	11.58
63	240	1903	31:43	63	1.000	A BB	85239.	40.000 NG/UL	7.03
64	NOT FOUND								
65	NOT FOUND								
66	NOT FOUND								

T2589

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
67	NOT FOUND								
68	149	1918	31:58	63	1.008	A BB	58800.	25.232 NG	4.43
69	244	1702	28:22	63	0.894	A BB	68715.	37.303 NG*B3	6.55
70	264	2213	36:53	70	1.000	A BB	72357.	40.000 NG/UL	7.03
71	149	2030	33:50	70	0.917	A BB	414.	BRL ~~0.107 NG~~	0.02
72	NOT FOUND								
73	NOT FOUND								
74	NOT FOUND								
75	NOT FOUND								
76	NOT FOUND								
77	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	20:32		1.120						
52	21:39		1.181						
53	22:03		1.203						
54	16:13	1.00	0.885	1.00	33.65	50.00	0.863	1.282	0.67
55	23:04	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
56	22:40		0.983						
57	23:08		1.003						
58	23:17		1.009						
59	25:14	1.00	1.094	1.00	0.55	50.00	0.019	1.695	0.01
60	27:01		1.171						
61	27:45		0.875						
62	20:54	1.00	1.140	1.00	65.94	50.00	0.413	0.313	1.32
63	31:42	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
64	30:07		0.950						
65	31:39		0.998						
66	31:47		1.003						
67	31:40		0.999						
68	31:57	1.00	1.008	1.00	25.23	50.00	0.552	1.094	0.50
69	28:21	1.00	0.894	1.00	37.30	50.00	0.645	0.864	0.75
70	36:51	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
71	33:49	1.00	0.918	1.00	0.11	50.00	0.005	2.143	0.00
72	35:13		0.956						
73	35:19		0.958						
74	36:36		0.993						
75	42:54		1.164						
76	43:04		1.169						
77	44:45		1.214						

Quantitation Report File: QCREF

Data: T2589.TI
05/15/90 15:19:00
Sample: CLP,VERSCDM,2548,TB-5A,L,W,16698,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: SJD Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	CI40 NAPHTHALENE-D8**INT. STD.#2**
3	CI50 ACENAPHTHENE-D10**INT. STD.#3**
4	CI60 PHENANTHRENE-D10**INT. STD.#4**
5	CI70 CHRYSENE-D12**INT. STD.#5**
6	CI75 PERYLENE-D12**INT. STD.#6**
7	CS50 2-FLUOROPHENOL**ACID SURR.**
8	CS45 PHENOL-D5**ACID SURR.**
9	CS55 2,4,6,-TRIBROMOPHENOL**ACID SURR.**
10	CS20 NITROBENZENE-D5**BN SURR.**
11	CS25 2-FLUOROBIPHENYL**BN SURR.**
12	CS30 P-TERPHENYL-D14**BN SURR.**

Scan	Time	Area(Hght)		Amount		Name
546	9:06	16718.		40.000	NG/UL	CI30 1,4-DICHLOROBENZENE-D4
767	12:47	52047.		40.000	NG/UL	CI40 NAPHTHALENE-D8**INT. ST
1100	18:20	41165.		40.000	NG/UL	CI50 ACENAPHTHENE-D10**INT.
1385	23:05	89524.		40.000	NG/UL	CI60 PHENANTHRENE-D10**INT.
1903	31:43	85239.		40.000	NG/UL	CI70 CHRYSENE-D12**INT. STD.
2213	36:53	72357.		40.000	NG/UL	CI75 PERYLENE-D12**INT. STD.
365	6:05	27094.	61	61.368	NG*A1	CS50 2-FLUOROPHENOL**ACID SU
499	8:19	39117.	61	60.738	NG*A2	CS45 PHENOL-D5**ACID SURR.**
1255	20:55	21254.	66	65.936	NG*A3	CS55 2,4,6,-TRIBROMOPHENOL**
646	10:46	41616.	89	44.583	NG*B1	CS20 NITROBENZENE-D5**BN SUR
974	16:14	44388.	67	33.649	NG*B2	CS25 2-FLUOROBIPHENYL**BN SU
1702	28:22	68715.	75	37.303	NG*B3	CS30 P-TERPHENYL-D14**BN SUR

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:05	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	12:46	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
3	18:20	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
4	23:04	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
5	31:42	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
6	36:51	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
7	6:03	1.01	0.666	1.00	61.37	50.00	1.297	1.056	1.23
8	8:18	1.00	0.914	1.00	60.74	50.00	1.872	1.541	1.21
9	20:54	1.00	1.140	1.00	65.94	50.00	0.413	0.313	1.32
10	10:45	1.00	0.842	1.00	44.58	50.00	0.640	0.717	0.89
11	16:13	1.00	0.885	1.00	33.65	50.00	0.863	1.282	0.67
12	28:21	1.00	0.894	1.00	37.30	50.00	0.645	0.864	0.75

Quantitation Report File: ISREF

Data: T2583.TI
05/15/90 9:42:00
Sample: CLP,,,SSTD 50,,,22659,B,CC-050,,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: SJD Acct. No.: -

Data: T2589.TI
05/15/90 15:19:00
Sample: CLP,VERSCDM,2548,TB-5A,L,W,16698,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: SJD Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
3	CI40 NAPHTHALENE-D8**INT. STD.#2**
4	CI40 NAPHTHALENE-D8**INT. STD.#2**
5	CI50 ACENAPHTHENE-D10**INT. STD.#3**
6	CI50 ACENAPHTHENE-D10**INT. STD.#3**
7	CI60 PHENANTHRENE-D10**INT. STD.#4**
8	CI60 PHENANTHRENE-D10**INT. STD.#4**
9	CI70 CHRYSENE-D12**INT. STD.#5**
10	CI70 CHRYSENE-D12**INT. STD.#5**
11	CI75 PERYLENE-D12**INT. STD.#6**
12	CI75 PERYLENE-D12**INT. STD.#6**

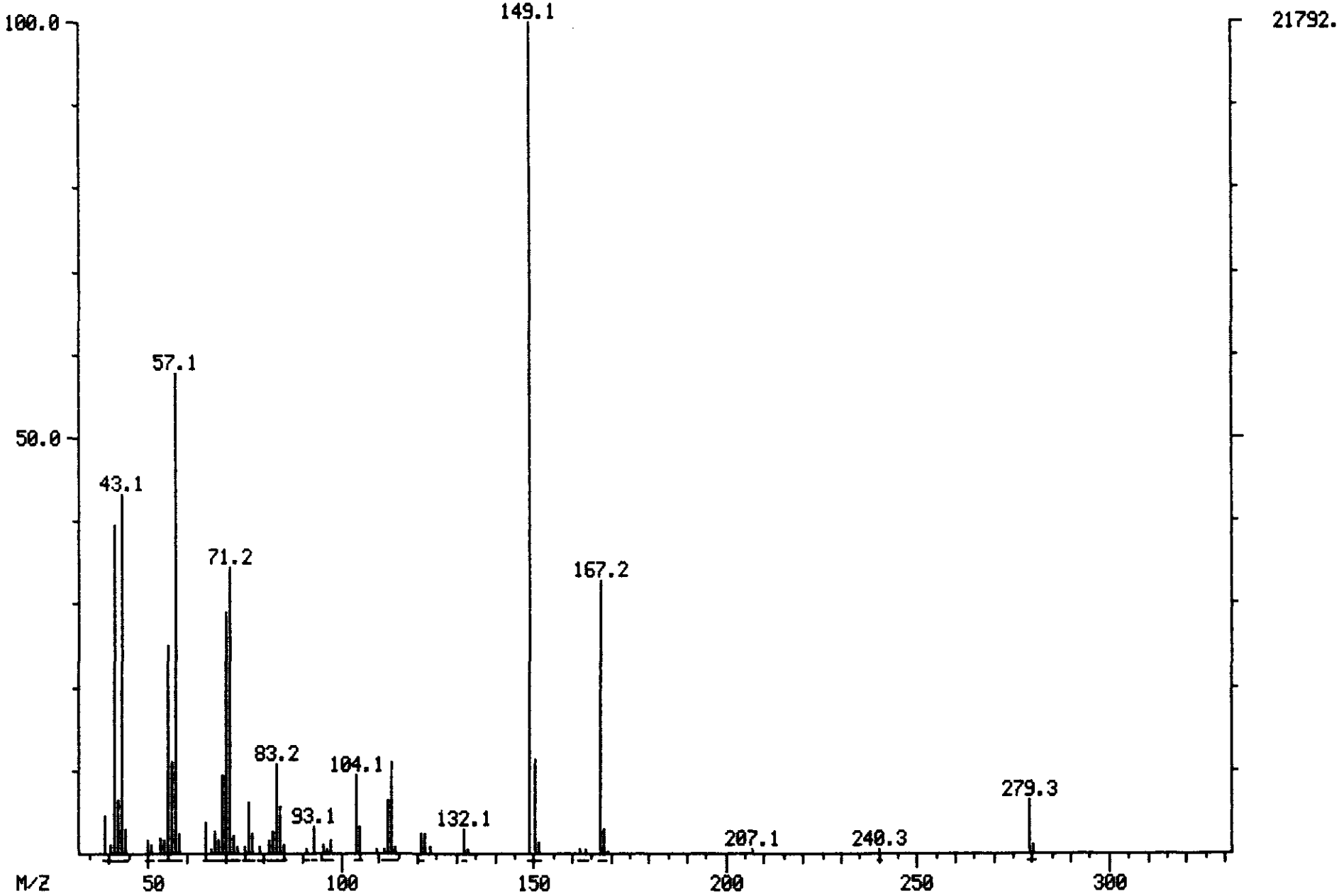
Scan	Time	Area(Hght)	Amount	Name
545	9:05	15588.	40.000 NG/UL	CI30 1,4-DICHLOROBENZENE-D4
546	9:06	16718.	42.900 NG/UL	CI30 1,4-DICHLOROBENZENE-D4
766	12:46	52356.	40.000 NG/UL	CI40 NAPHTHALENE-D8**INT. ST
767	12:47	52047.	39.764 NG/UL	CI40 NAPHTHALENE-D8**INT. ST
1100	18:20	40125.	40.000 NG/UL	CI50 ACENAPHTHENE-D10**INT.
1100	18:20	41165.	41.037 NG/UL	CI50 ACENAPHTHENE-D10**INT.
1384	23:04	81463.	40.000 NG/UL	CI60 PHENANTHRENE-D10**INT.
1385	23:05	89524.	43.958 NG/UL	CI60 PHENANTHRENE-D10**INT.
1902	31:42	72781.	40.000 NG/UL	CI70 CHRYSENE-D12**INT. STD.
1903	31:43	85239.	46.847 NG/UL	CI70 CHRYSENE-D12**INT. STD.
2211	36:51	61203.	40.000 NG/UL	CI75 PERYLENE-D12**INT. STD.
2213	36:53	72357.	47.290 NG/UL	CI75 PERYLENE-D12**INT. STD.

100248

MASS SPECTRUM
05/15/90 15:19:00 + 31:58
SAMPLE: CLP,VERSCDM,2548,TB-5A,L,W,16698,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30200C/MIN
** NAME: C741 BIS(2-ETHYLHEXYL)PHTHALATE

DATA: T2589 #1918
CALI: T2589 #2

BASE M/Z: 149
RIC: 114304.

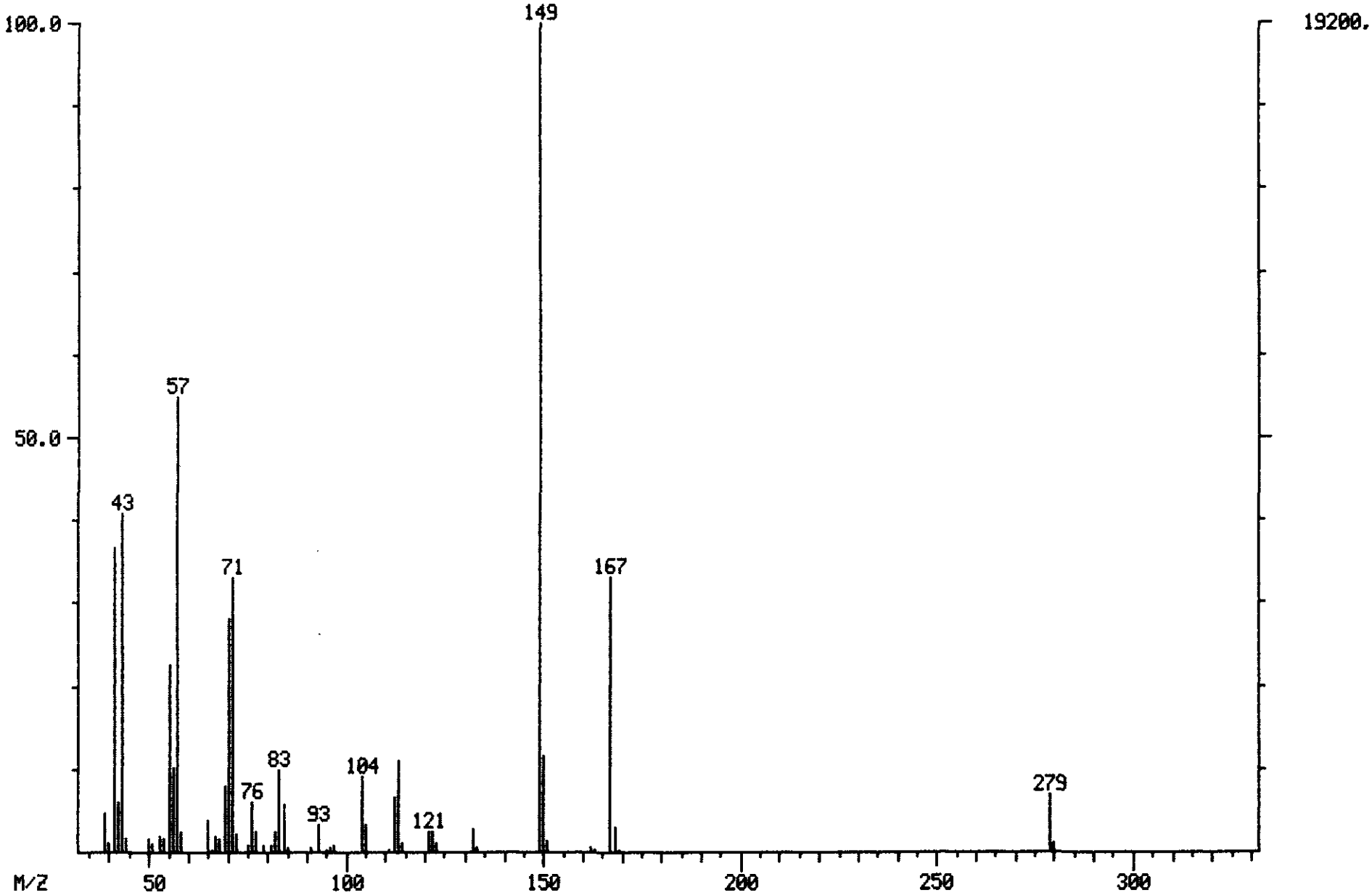


100249

MASS SPECTRUM
05/15/90 15:19:00 + 31:58
SAMPLE: CLP,VERSCOM,2548,TB-5A,L,W,16698,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
** NAME: C741 BIS(2-ETHYLHEXYL)PHTHALATE
ENHANCED (S 15B 2N 0T)

DATA: T2589 #1918
CALI: T2589 #2

BASE M/Z: 149
RIC: 96256.

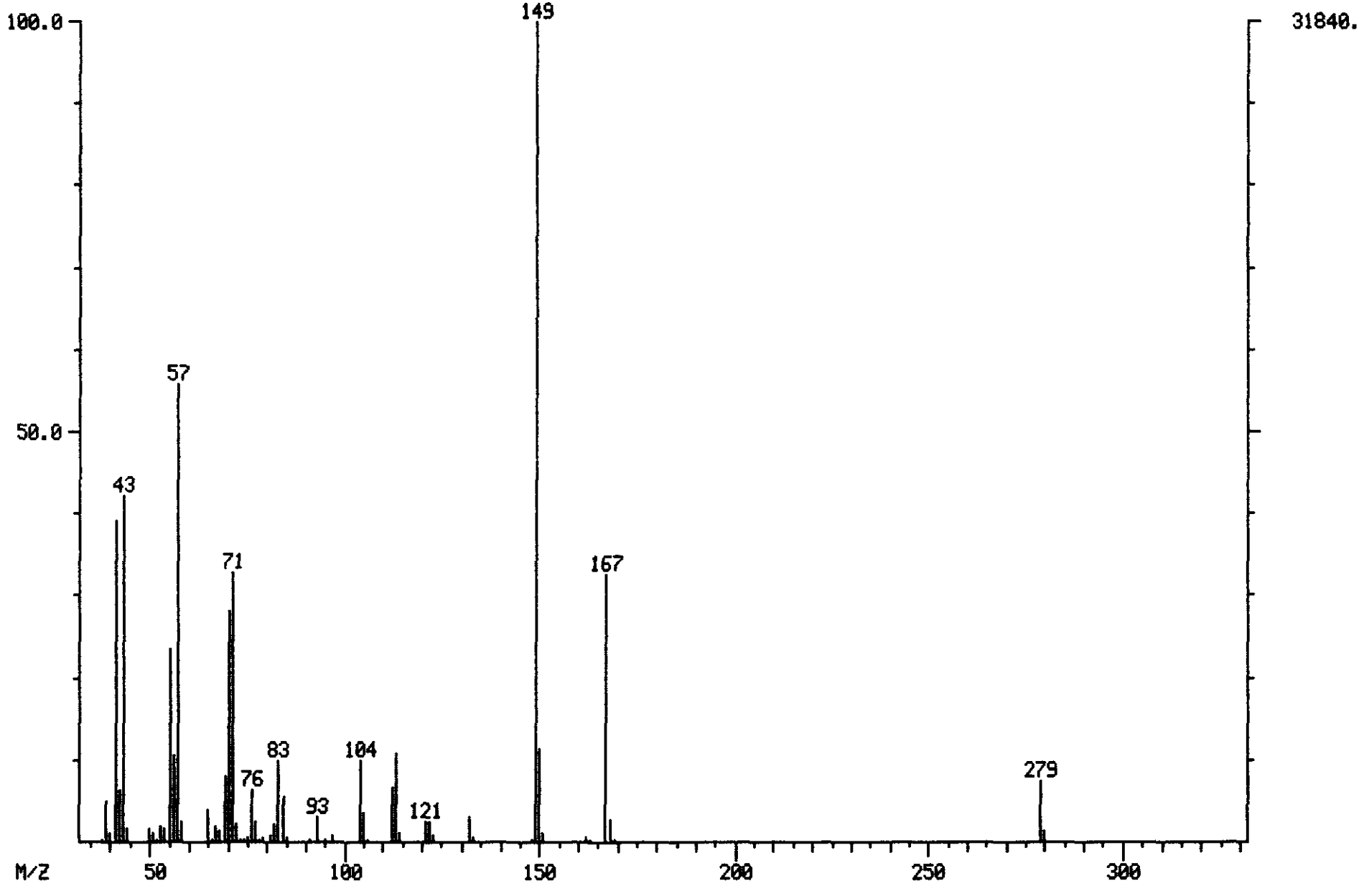


100250

MASS SPECTRUM
05/15/90 9:42:00 + 31:57
SAMPLE: CLP,,,SSTD 50,,,22658,B,CC-050,,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30@8C/MIN
** NAME: C741 BIS(2-ETHYLHEXYL)PHTHALATE
ENHANCED (S 15B 2N 0T)

DATA: T2583 #1917
CALI: T2583 #2

BASE M/Z: 149
RIC: 161792.



Library Search Data: T2589 # 259 Base m/z: 43
05/15/90 15:19:00 + 4:19 Cali: T2589 # 2 RIC: 70399.
Sample: CLP,VERSCDM,2548,TB-5A,L,W,16698,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
77 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	4294	2-BUTANONE, 4-(ACETYLOXY)-
2	4329	1-BUTANOL, 3-METHYL-, ACETATE
3	4338	ACETIC ACID, PENTYL ESTER
4	4427	PENTANE, 1-PROPOXY-
5	728	PROPANOIC ACID, 2-METHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C6.H10.O3	130	43	802	855	811
2	C7.H14.O2	130	43	787	885	801
[illegible]	C7.H14.O2	130	43	783	889	783
4	C8.H18.O	130	43	740	836	754
5	C4.H8.O2	88	43	726	883	731

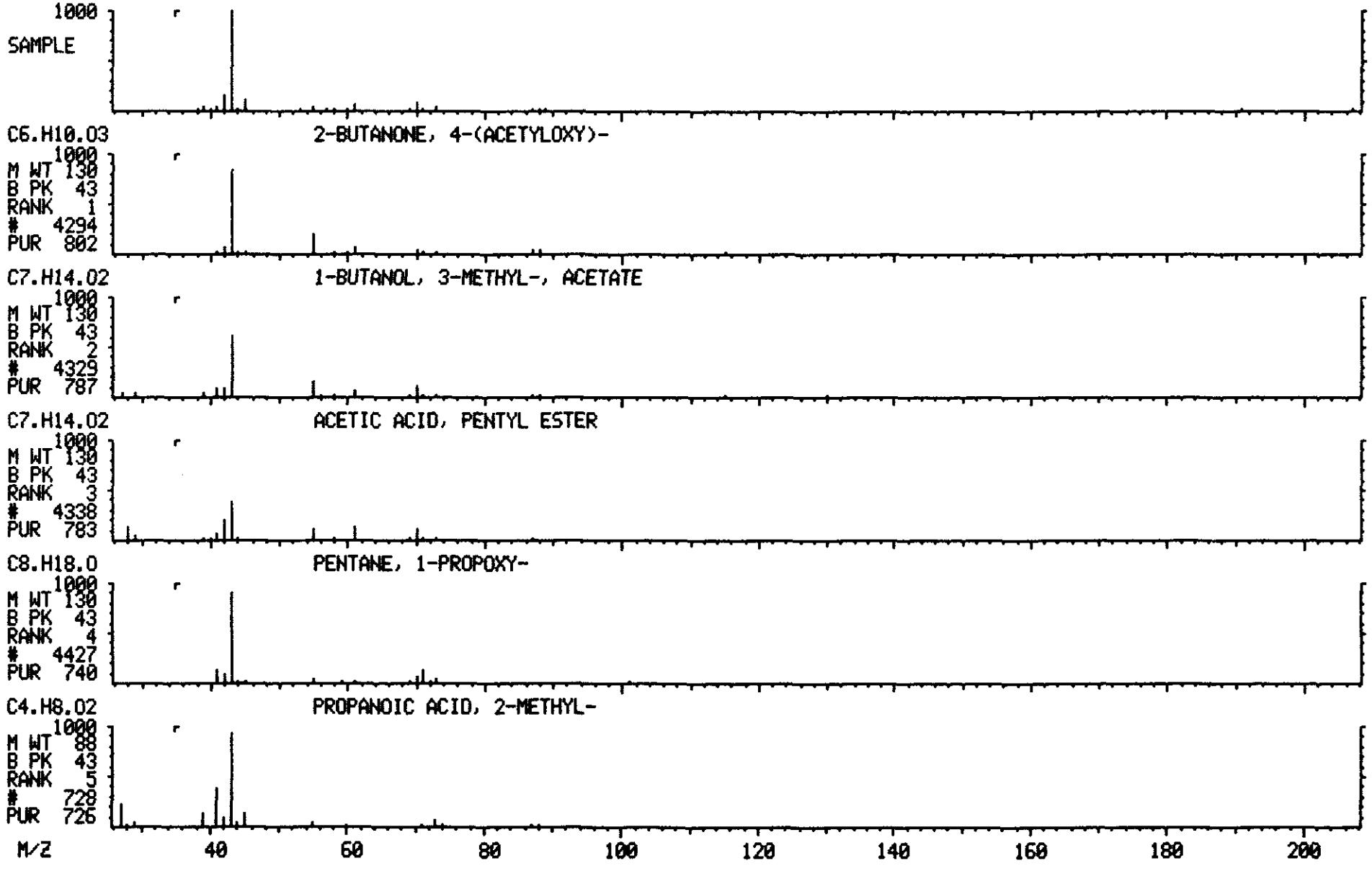
Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	10150-87-5
2	—	—	—	—	123-92-2
3	—	—	—	—	628-63-7
4	—	—	—	—	18641-82-2
5	—	—	—	—	79-31-2

100252

LIBRARY SEARCH
05/15/90 15:19:00 + 4:19
SAMPLE: CLP,VERSCDM,2548,TB-5A,L,W,16698,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30200C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2589 # 259
CALI: T2589 # 2

BASE M/Z: 43
RIC: 70399.



Library Search Data: T2589 # 323 Base m/z: 43
05/15/90 15:19:00 → 5:23 Cali: T2589 # 2 RIC: 29855.
Sample: CLP,VERSCDM,2548,TB-5A,L,W,16698,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
121 matched at least 7 of the 16 largest peaks in the unknown

B

Rank	In.	Name
1	806	HYDROPEROXIDE, 1,1-DIMETHYLETHYL
2	2776	2-PENTANOL, 2,4-DIMETHYL-
3	1334	OXIRANE, TETRAMETHYL-
4	1349	OXEPANE, 2,2,4-TRIMETHYL-
5	2777	2-HEXANOL, 2-METHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C4.H10.O2	90	59	760	868	768
2	C7.H16.O	116	59	739	774	739
	C6.H12.O	100	59	687	805	709
	C6.H12.O	100	43	685	779	709
5	C7.H16.O	116	59	683	726	695

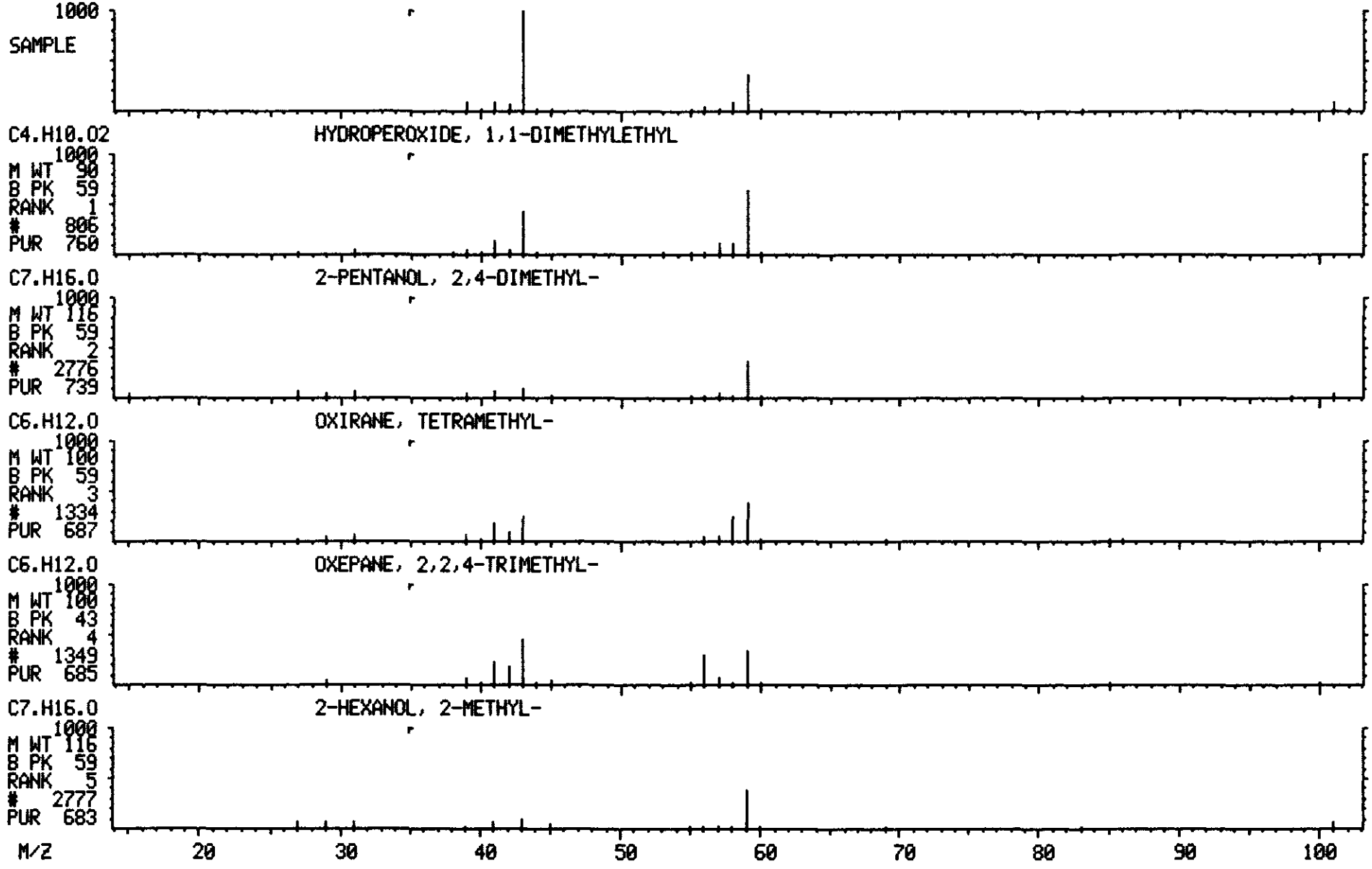
Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	75-91-2
2	—	—	—	—	625-06-9
3	—	—	—	—	5076-20-0
4	—	—	—	—	23120-44-7
5	—	—	—	—	625-23-0

100254

LIBRARY SEARCH
05/15/90 15:19:00 + 5:23
SAMPLE: CLP,VERSCOM,2548,TB-5A,L,W,16698,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2589 # 323
CALI: T2589 # 2

BASE M/Z: 43
RIC: 29855.



Library Search Data: T2589 # 345 Base m/z: 41
05/15/90 15:19:00 + 5:45 Cali: T2589 # 2 RIC: 7559.
Sample: CLP,VERSCDM,2548,TB-5A,L,W,16698,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
79 matched at least 8 of the 16 largest peaks in the unknown

B

Rank	In.	Name
1	1076	1-PROPENE, 3,3'-OXYBIS-
2	2216	2-HEPTENAL, (Z)-
3	1111	2-HEXENAL, (E)-
4	1083	2-HEXYN-1-OL
5	1163	1-HEXENE, 5-METHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C6.H10.O	98	41	799	872	828
2	C7.H12.O	112	41	736	849	783
	C6.H10.O	98	41	728	830	838
4	C6.H10.O	98	41	707	850	764
5	C7.H14	98	56	667	712	667

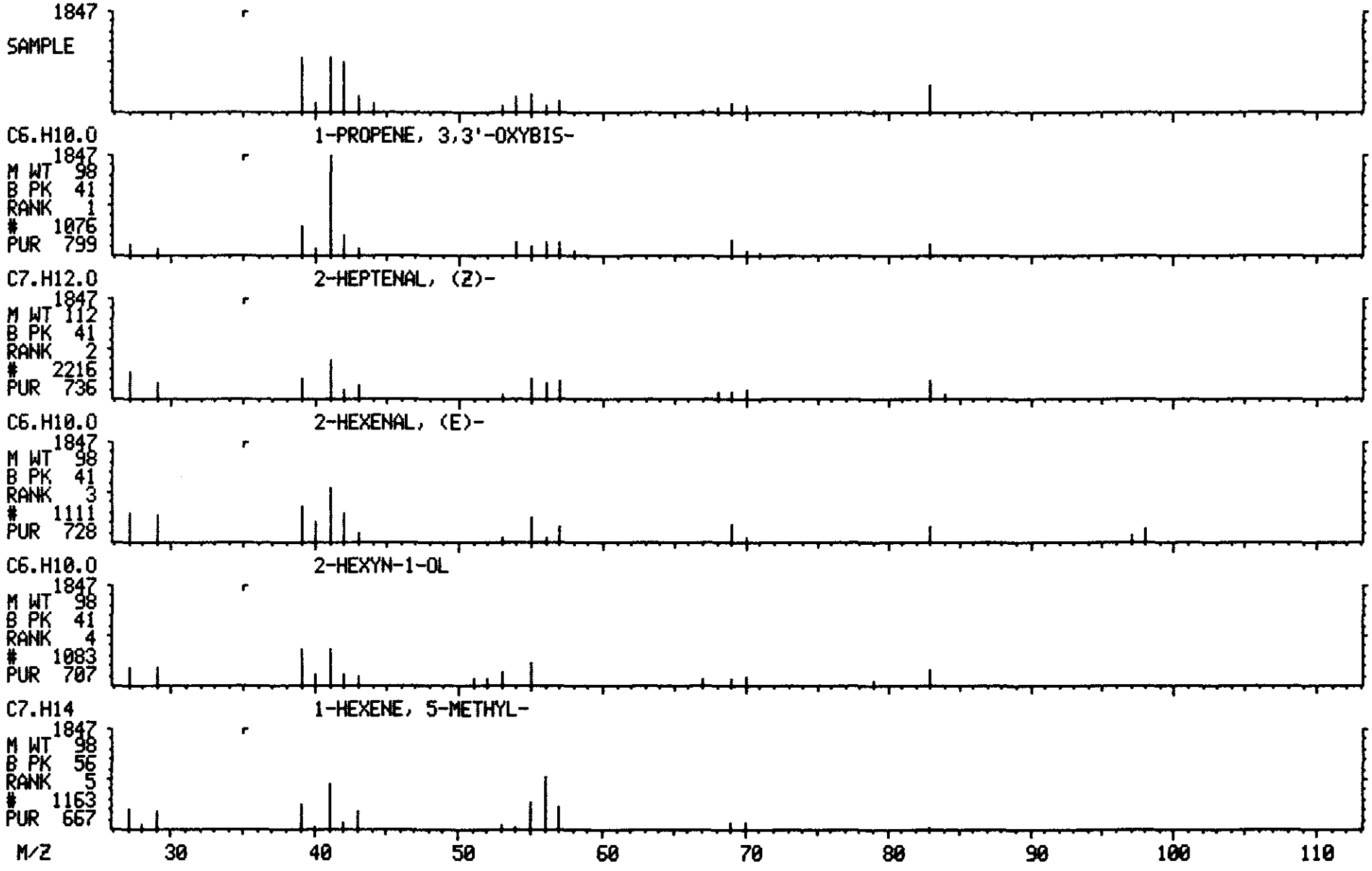
Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	557-40-4
2	—	—	—	—	57266-86-1
3	—	—	—	—	6728-26-3
4	—	—	—	—	764-60-3
5	—	—	—	—	3524-73-0

100256

LIBRARY SEARCH
05/15/90 15:19:00 + 5:45
SAMPLE: CLP,VERSCOM,2548,TB-5A,L,W,16698,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2589 # 345
CALI: T2589 # 2

BASE M/Z: 41
RIC: 7559.



Library Search Data: T2589 # 702 Base m/z: 73
05/15/90 15:19:00 + 11:42 Cali: T2589 # 2 RIC: 4991.
Sample: CLP,VERSCDM,2548,TB-5A,L,W,16698,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
341 matched at least 4 of the 16 largest peaks in the unknown

siloxane

Rank	In.	Name
1	34650	CYCLOPENTASILOXANE, DECAMETHYL-
2	34666	BENZOIC ACID, 2,5-BIS(TRIMETHYLSILOXY)-, TRIMETHYLSILYL ESTER
3	40810	BENZENEETHANAMINE, N-[(PENTAFLUOROPHENYL)METHYLENE]-.BETA.,3,4-TRIS*
4	36250	PHENETHYLAMINE, N-METHYL-.BETA.,3,4-TRIS(TRIMETHYLSILOXY)-
5	11778	DECANE, 3-METHOXY-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C10.H30.O5.SI5	370	73	485	796	605
2	C16.H30.O4.SI3	370	73	386	637	513
	C24.H34.O3.N.F5.SI3	563	73	384	671	480
.	C18.H37.O3.N.SI3	399	355	340	534	455
5	C11.H24.O	172	73	307	809	367

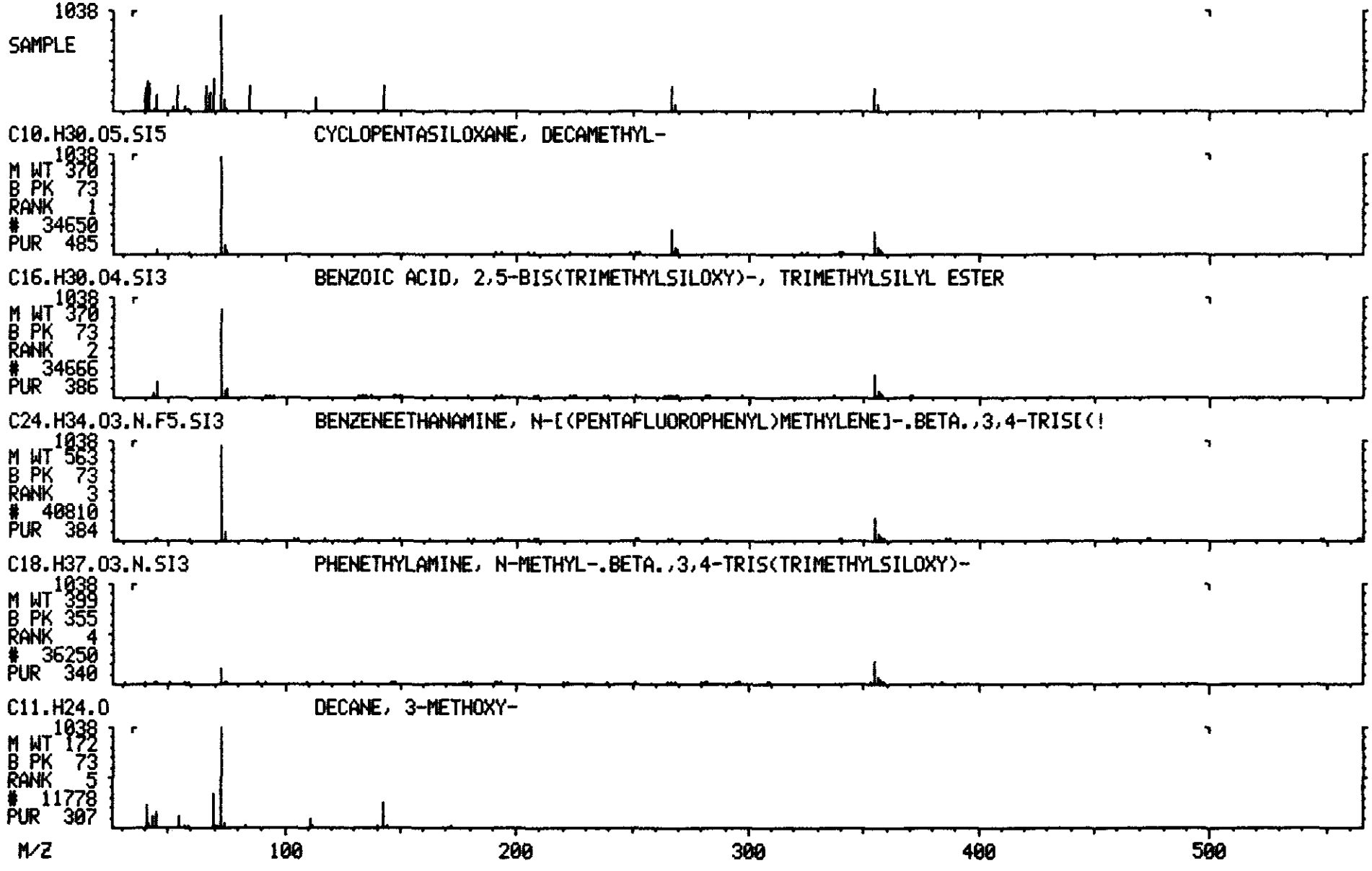
Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	541-02-6
2	—	—	—	—	3618-20-0
3	—	—	—	—	55429-13-5
4	—	—	—	—	10538-85-9
5	—	—	—	—	55955-64-1

LIBRARY SEARCH
05/15/90 15:19:00 + 11:42
SAMPLE: CLP,VERSCOM,2548,TB-5A,L,W,16698,B,,420.1,3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30200C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2589 # 702
CALI: T2589 # 2

BASE M/Z: 73
RIC: 4991.

100258



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        >>>>INTERNAL STANDARD RIC REPORT<<<<
*****************************INTERNAL STANDARD#1*****************RIC
Mass List                      Data: T2589 # 546          Base m/z:   150
05/15/90 15:19:00 +  9:06     Cali: T2589 #   2          RIC:      59072.
Sample: CLP,VERSCDM,2548,TB-5A,L,W,16698,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     35        0.00    0.00        0. Minima      Min inten:       0.
     30                       #    0  Maxima
*****************************INTERNAL STANDARD#2*****************RIC
Mass List                      Data: T2589 # 767          Base m/z:   136
05/15/90 15:19:00 + 12:47     Cali: T2589 #   2          RIC:      65408.
Sample: CLP,VERSCDM,2548,TB-5A,L,W,16698,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38        0.00    0.00        0. Minima      Min inten:       0.
     30                       #    0  Maxima
*****************************INTERNAL STANDARD#3*****************RIC
Mass List                      Data: T2589 #1100          Base m/z:   164
05/15/90 15:19:00 + 18:20     Cali: T2589 #   2          RIC:      64256.
Sample: CLP,VERSCDM,2548,TB-5A,L,W,16698,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38        0.00    0.00        0. Minima      Min inten:       0.
     30                       #    0  Maxima
*****************************INTERNAL STANDARD#4*****************RIC
Mass List                      Data: T2589 #1385          Base m/z:   188
05/15/90 15:19:00 + 23:05     Cali: T2589 #   2          RIC:      80128.
Sample: CLP,VERSCDM,2548,TB-5A,L,W,16698,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38        0.00    0.00        0. Minima      Min inten:       0.
     30                       #    0  Maxima
*****************************INTERNAL STANDARD#5*****************RIC
Mass List                      Data: T2589 #1903          Base m/z:   240
05/15/90 15:19:00 + 31:43     Cali: T2589 #   2          RIC:      74240.
Sample: CLP,VERSCDM,2548,TB-5A,L,W,16698,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     40        0.00    0.00        0. Minima      Min inten:       0.
     30                       #    0  Maxima
*****************************INTERNAL STANDARD#6*****************RIC
Mass List                      Data: T2589 #2213          Base m/z:   264
05/15/90 15:19:00 + 36:53     Cali: T2589 #   2          RIC:      42624.
Sample: CLP,VERSCDM,2548,TB-5A,L,W,16698,B,,420.1,3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     40        0.00    0.00        0. Minima      Min inten:       0.
     30                       #    0  Maxima
     ANALYST: CHECK BASE M/Z AND RIC AMOUNT TO INSURE NO CONTAMINATION
```

Versar INC.

IV. STANDARDS DATA

6B

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Instrument ID: T Calibration Date(s): 05/14/90 05/14/90

Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = T2573 RRF50 = T2569
RRF80 = T2572 RRF120= T2571 RRF160= T2570

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD
Phenol *	1.916	1.828	1.768	1.848	1.862	1.844	2.9*
bis(2-Chloroethyl)ether	1.735	1.703	1.597	1.564	1.570	1.634	4.9
2-Chlorophenol	1.335	1.289	1.277	1.217	1.267	1.277	3.3
1,3-Dichlorobenzene	1.503	1.453	1.436	1.409	1.429	1.446	2.5
1,4-Dichlorobenzene *	1.589	1.536	1.504	1.475	1.459	1.513	3.4*
Benzyl alcohol	0.912	0.948	0.947	0.917	0.928	0.930	1.8
1,2-Dichlorobenzene	1.486	1.447	1.440	1.369	1.370	1.422	3.6
2-Methylphenol	1.383	1.396	1.348	1.292	1.301	1.344	3.5
bis(2-Chloroisopropyl)ether	4.113	4.046	3.921	3.712	3.576	3.874	5.8
4-Methylphenol	1.414	1.488	1.412	1.360	1.391	1.413	3.3
N-Nitroso-di-n-propylamine #	1.896	1.921	1.824	1.778	1.750	1.834	4.0#
Hexachloroethane	0.954	0.955	0.892	0.819	0.798	0.884	8.3
Nitrobenzene	0.830	0.821	0.781	0.758	0.749	0.788	4.6
Isophorone	1.361	1.393	1.326	1.304	1.320	1.341	2.7
2-Nitrophenol *	0.243	0.256	0.251	0.248	0.253	0.250	2.0*
2,4-Dimethylphenol	0.572	0.579	0.568	0.548	0.561	0.566	2.1
Benzoic Acid	0.212	0.214	0.216	0.189	0.158	0.198	12.5
bis(2-Chloroethoxy)methane	0.749	0.787	0.737	0.729	0.747	0.750	3.0
2,4-Dichlorophenol *	0.397	0.380	0.390	0.380	0.380	0.385	2.0*
1,2,4-Trichlorobenzene	0.451	0.405	0.415	0.402	0.378	0.410	6.5
Naphthalene	1.378	1.351	1.299	1.265	1.214	1.301	5.1
4-Chloroaniline	0.566	0.601	0.601	0.581	0.587	0.587	2.5
Hexachlorobutadiene *	0.312	0.266	0.281	0.260	0.235	0.271	10.5*
4-Chloro-3-methylphenol *	0.544	0.565	0.555	0.548	0.548	0.552	1.5*
2-Methylnaphthalene	0.862	0.839	0.829	0.783	0.759	0.814	5.2
Hexachlorocyclopentadiene #	0.434	0.440	0.449	0.444	0.435	0.440	1.4#
2,4,6-Trichlorophenol *	0.410	0.397	0.402	0.428	0.434	0.414	3.9*
2,4,5-Trichlorophenol	0.448	0.409	0.414	0.396	0.352	0.404	8.6
2-Chloronaphthalene	1.281	1.214	1.203	1.152	1.136	1.197	4.8
2-Nitroaniline	0.828	0.904	0.888	0.882	0.882	0.877	3.3
Dimethylphthalate	1.623	1.531	1.527	1.496	1.427	1.521	4.6
Acenaphthylene	2.139	2.027	1.989	1.906	1.887	1.990	5.1
2,6-Dinitrotoluene	0.379	0.387	0.386	0.379	0.360	0.378	2.9
3-Nitroaniline	0.436	0.455	0.455	0.444	0.428	0.444	2.7
Acenaphthene *	1.379	1.237	1.214	1.176	1.134	1.228	7.6*
2,4-Dinitrophenol #	0.168	0.229	0.242	0.250	0.257	0.229	15.6#
4-Nitrophenol #	0.281	0.294	0.349	0.342	0.302	0.314	9.6#

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Instrument ID: T Calibration Date(s): 05/14/90 05/14/90

Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = T2573 RRF50 = T2569
RRF80 = T2572 RRF120= T2571 RRF160= T2570

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD
Dibenzofuran	1.974	1.770	1.724	1.676	1.621	1.753	7.7
2,4-Dinitrotoluene	0.531	0.530	0.531	0.511	0.486	0.518	3.8
Diethylphthalate	1.902	1.781	1.814	1.759	1.623	1.776	5.7
4-Chlorophenyl-phenylether	0.829	0.736	0.703	0.684	0.636	0.718	10.0
Fluorene	1.573	1.393	1.370	1.322	1.249	1.381	8.7
4-Nitroaniline	0.369	0.407	0.436	0.363	0.313	0.378	12.4
4,6-Dinitro-2-methylphenol	0.268	0.312	0.317	0.300	0.200	0.279	17.3
N-nitrosodiphenylamine (1) *	1.170	1.057	1.026	0.981	0.925	1.032	8.9*
4-Bromophenyl-phenylether	0.470	0.454	0.470	0.451	0.432	0.455	3.5
Hexachlorobenzene	0.598	0.537	0.553	0.525	0.493	0.541	7.1
Pentachlorophenol *	0.127	0.148	0.159	0.157	0.162	0.151	9.4*
Phenanthrene	1.203	1.114	1.059	1.047	0.993	1.083	7.3
Anthracene	1.219	1.092	1.006	0.912	0.812	1.008	15.6
Di-n-butylphthalate	1.779	1.667	1.649	1.477	1.340	1.582	11.0
Fluoranthene *	1.214	1.109	1.076	0.963	0.876	1.048	12.5*
Pyrene	1.689	1.446	1.321	1.255	1.247	1.392	13.2
Butylbenzylphthalate	0.875	0.846	0.814	0.834	0.846	0.843	2.6
3,3'-Dichlorobenzidine	0.348	0.292	0.318	0.333	0.317	0.322	6.5
Benzo(a)anthracene	1.086	1.053	1.034	1.083	1.148	1.081	4.0
Chrysene	0.861	0.805	0.711	0.712	0.668	0.751	10.5
Bis(2-Ethylhexyl)phthalate	1.185	1.156	1.098	1.093	1.157	1.138	3.5
Di-n-octyl phthalate *	2.280	2.333	2.206	2.204	1.874	2.179	8.2*
Benzo(b)fluoranthene	1.251	1.200	1.209	1.201	1.163	1.205	2.6
Benzo(k)fluoranthene	1.165	1.108	0.936	0.954	0.906	1.014	11.4
Benzo(a)pyrene *	1.109	1.092	1.058	1.026	0.975	1.052	5.1*
Indeno(1,2,3-cd)pyrene	0.891	0.917	0.904	0.967	0.960	0.928	3.7
Dibenz(a,h)anthracene	0.814	0.822	0.819	0.899	0.896	0.850	5.1
Benzo(g,h,i)perylene	0.888	0.923	0.890	0.968	0.941	0.922	3.7
Nitrobenzene-d5	0.754	0.764	0.734	0.726	0.707	0.737	3.1
2-Fluorobiphenyl	1.381	1.281	1.257	1.231	1.189	1.268	5.7
Terphenyl-d14	1.083	0.943	0.900	0.880	0.872	0.936	9.3
Phenol-d5	1.700	1.620	1.609	1.592	1.622	1.629	2.6
2-Fluorophenol	1.191	1.052	1.106	1.158	1.138	1.129	4.7
2,4,6-Tribromophenol	0.301	0.271	0.310	0.286	0.271	0.288	6.1

(1) Cannot be separated from Diphenylamine

7B
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Instrument ID: T Calibration date: 05/15/90 Time: 942

Lab File ID: T2583 Init. Calib. Date(s): 05/14/90 05/14/90

Min RRF50 for SPCC(#) = 0.050 Max %D for CCC(*) = 25.0%

COMPOUND		$\overline{RRF}$	RRF50	%D	
Phenol	*	1.844	1.749	5.2	*
bis(2-Chloroethyl)ether		1.634	1.605	1.8	
2-Chlorophenol		1.277	1.271	0.5	
1,3-Dichlorobenzene		1.446	1.485	-2.7	
1,4-Dichlorobenzene	*	1.513	1.532	-1.3	*
Benzyl alcohol		0.930	0.882	5.2	
1,2-Dichlorobenzene		1.422	1.449	-1.9	
2-Methylphenol		1.344	1.322	1.6	
bis(2-Chloroisopropyl)ether		3.874	3.994	-3.1	
4-Methylphenol		1.413	1.393	1.4	
N-Nitroso-di-n-propylamine	#	1.834	1.807	1.5	#
Hexachloroethane		0.884	0.946	-7.0	
Nitrobenzene		0.788	0.785	0.4	
Isophorone		1.341	1.334	0.5	
2-Nitrophenol	*	0.250	0.242	3.2	*
2,4-Dimethylphenol		0.566	0.559	1.2	
Benzoic Acid		0.198	0.169	14.6	
bis(2-Chloroethoxy)methane		0.750	0.752	-0.3	
2,4-Dichlorophenol	*	0.385	0.392	-1.8	*
1,2,4-Trichlorobenzene		0.410	0.434	-5.9	
Naphthalene		1.301	1.339	-2.9	
4-Chloroaniline		0.587	0.594	-1.2	
Hexachlorobutadiene	*	0.271	0.298	-10.0	*
4-Chloro-3-methylphenol	*	0.552	0.541	2.0	*
2-Methylnaphthalene		0.814	0.870	-6.9	
Hexachlorocyclopentadiene	#	0.440	0.434	1.4	#
2,4,6-Trichlorophenol	*	0.414	0.382	7.7	*
2,4,5-Trichlorophenol		0.404	0.421	-4.2	
2-Chloronaphthalene		1.197	1.214	-1.4	
2-Nitroaniline		0.877	0.823	6.2	
Dimethylphthalate		1.521	1.539	-1.2	
Acenaphthylene		1.990	2.016	-1.3	
2,6-Dinitrotoluene		0.378	0.372	1.6	
3-Nitroaniline		0.444	0.435	2.0	
Acenaphthene	*	1.228	1.268	-3.3	*
2,4-Dinitrophenol	#	0.229	0.201	12.2	#
4-Nitrophenol	#	0.314	0.309	1.6	#

7C
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Instrument ID: T Calibration date: 05/15/90 Time: 942

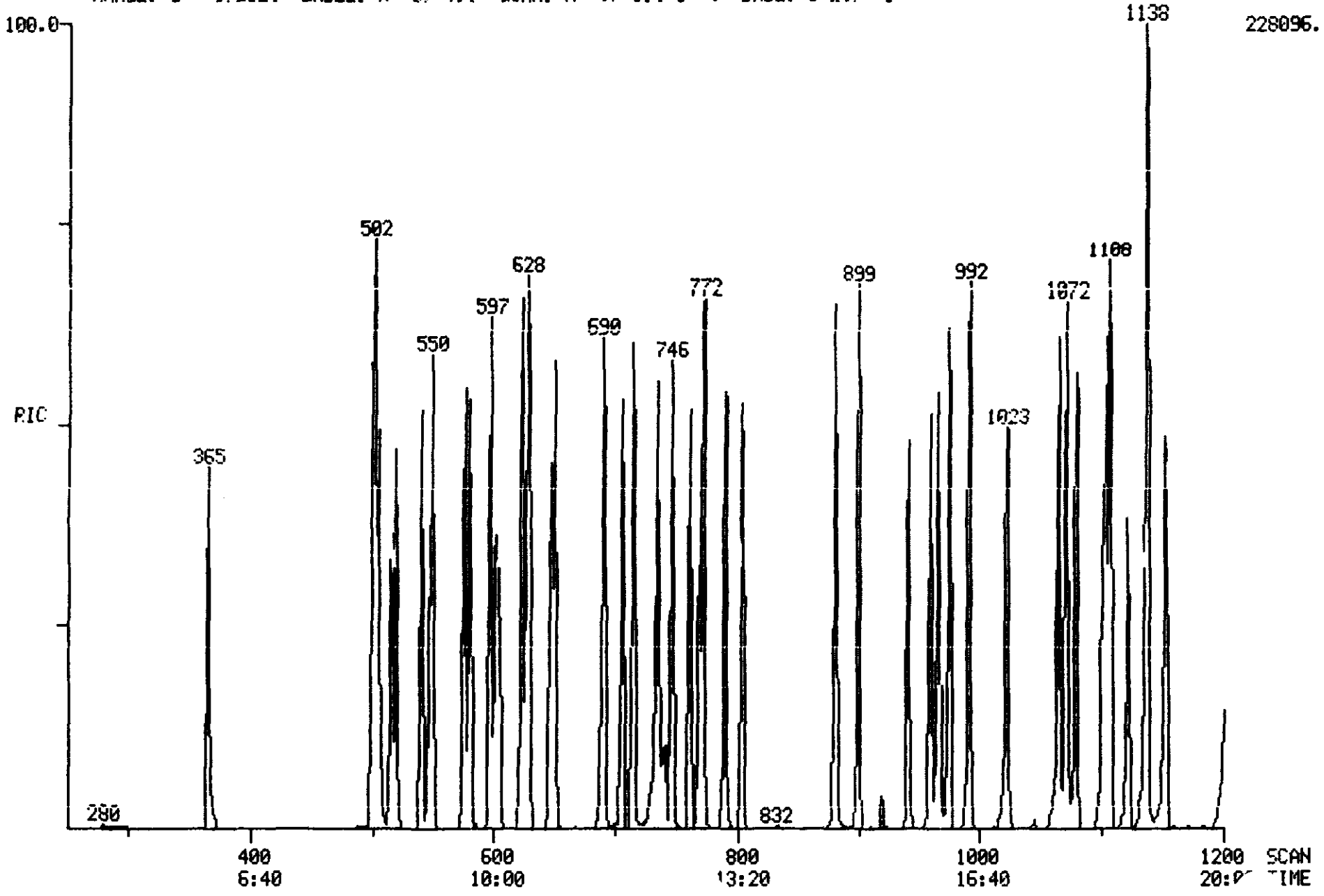
Lab File ID: T2583 Init. Calib. Date(s): 05/14/90 05/14/90

Min RRF50 for SPCC(#) = 0.050 Max %D for CCC(*) = 25.0%

COMPOUND	$\overline{RRF}$	RRF50	%D
Dibenzofuran	1.753	1.796	-2.5
2,4-Dinitrotoluene	0.518	0.510	1.5
Diethylphthalate	1.776	1.835	-3.3
4-Chlorophenyl-phenylether	0.718	0.737	-2.6
Fluorene	1.381	1.425	-3.2
4-Nitroaniline	0.378	0.407	-7.7
4,6-Dinitro-2-methylphenol	0.279	0.297	-6.5
N-nitrosodiphenylamine (1) *	1.032	1.077	-4.4 *
4-Bromophenyl-phenylether	0.455	0.465	-2.2
Hexachlorobenzene	0.541	0.578	-6.8
Pentachlorophenol *	0.151	0.143	5.3 *
Phenanthrene	1.083	1.099	-1.5
Anthracene	1.008	1.087	-7.8
Di-n-butylphthalate	1.582	1.695	-7.1
Fluoranthene *	1.048	1.160	-10.7 *
Pyrene	1.392	1.316	5.5
Butylbenzylphthalate	0.843	0.792	6.0
3,3'-Dichlorobenzidine	0.322	0.325	-0.9
Benzo(a)anthracene	1.081	1.014	6.2
Chrysene	0.751	0.752	-0.1
bis(2-Ethylhexyl)phthalate	1.138	1.094	3.9
Di-n-octyl phthalate *	2.179	2.143	1.7 *
Benzo(b)fluoranthene	1.205	1.154	4.2
Benzo(k)fluoranthene	1.014	0.999	1.5
Benzo(a)pyrene *	1.052	1.068	-1.5 *
Indeno(1,2,3-cd)pyrene	0.928	0.877	5.5
Dibenz(a,h)anthracene	0.850	0.862	-1.4
Benzo(g,h,i)perylene	0.922	0.896	2.8
Nitrobenzene-d5	0.737	0.717	2.7
2-Fluorobiphenyl	1.268	1.282	-1.1
Terphenyl-d14	0.936	0.864	7.7
Phenol-d5	1.629	1.541	5.4
2-Fluorophenol	1.129	1.056	6.5
2,4,6-Tribromophenol	0.288	0.313	-8.7

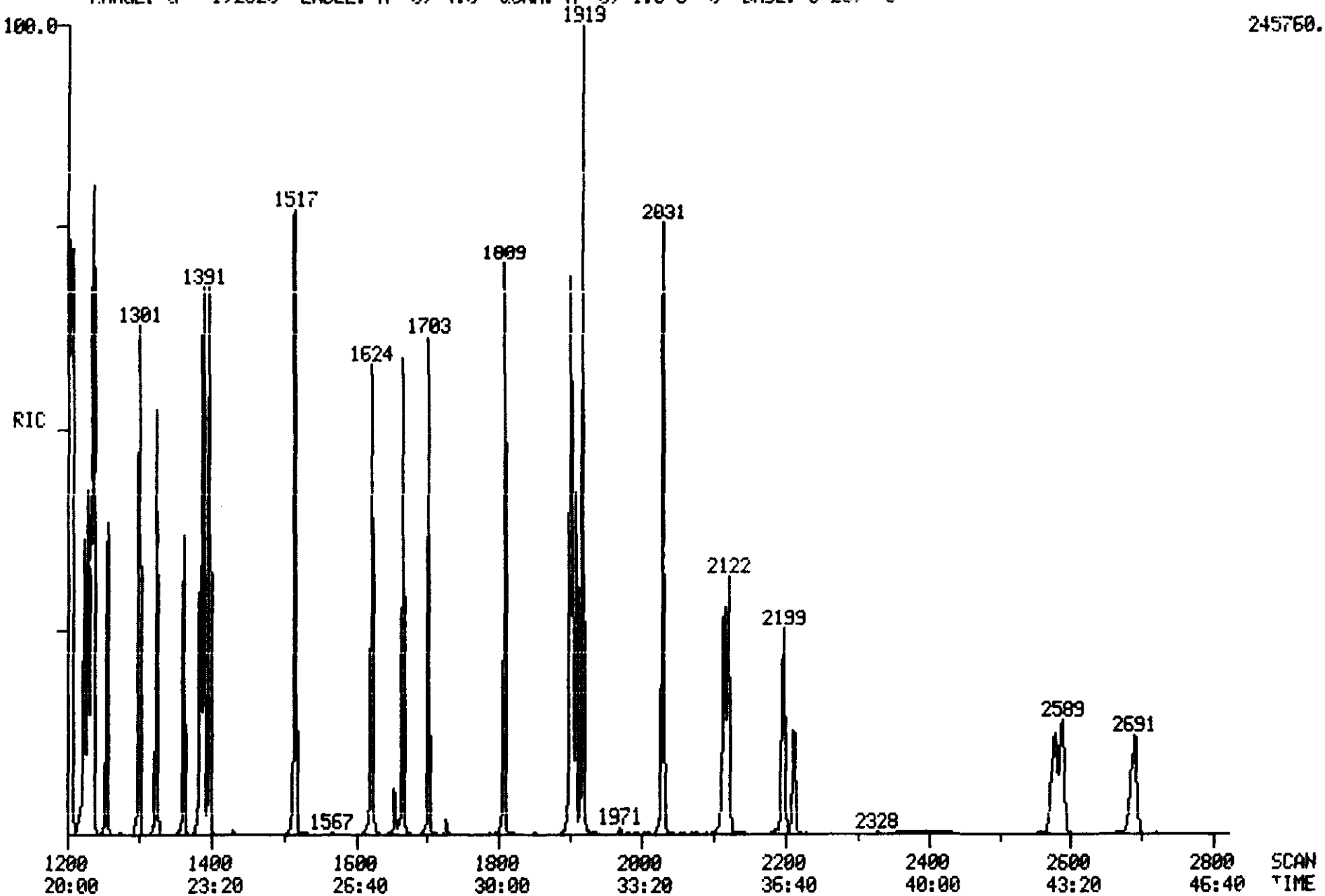
(1) Cannot be separated from Diphenylamine

RIC DATA: T2572 #2391 SCANS 250 TO 1200
05/14/90 21:13:00 CALI: T2572 #2
SAMPLE: CLP,,,SSTD80,,,22661,B,IC80,,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN038C TO 302C8C/MIN
RANGE: C 1,2820 LABEL: N 0, 4.0 CUAN: A 0, 1.0 J 0 BASE: U 20, 3



00265

RIC DATA: T2572 #2391 SCANS 1200 TO 2820
05/14/90 21:13:00 CALI: T2572 #2
SAMPLE: CLP,,,SSTD80,,,22661,B,IC20,,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN038C TO 302@8C/MIN
RANGE: G 1,2820 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



100266

Quantitation Report File: T2573

Data: T2573.TI
05/14/90 22:07:00
Sample: CLP,,,SSTD20,,,22662,B,IC20,,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: ---

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	C330 2-CHLOROPHENOL
3	C315 PHENOL
4	C325 BIS (2-CHLOROETHYL) ETHER
5	C335 1,3-DICHLOROBENZENE
6	C340 1,4-DICHLOROBENZENE
7	C350 1,2-DICHLOROBENZENE
8	C345 BENZYL ALCOHOL
9	C360 BIS (2-CHLOROISOPROPYL) ETHER
10	C355 2-METHYLPHENOL
11	C375 HEXACHLOROETHANE
12	C365 4-METHYLPHENOL
13	C370 N-NITROSO-DI-N-PROPYLAMINE
14	CS50 2-FLUOROPHENOL**ACID SURR.**
15	CS45 PHENOL-D5**ACID SURR.**
16	CI40 NAPHTHALENE-D8**INT. STD.#2**
17	C410 NITROBENZENE
18	C415 ISOPHORONE
19	C420 2-NITROPHENOL
20	C425 2,4-DIMETHYLPHENOL
21	C435 BIS (2-CHLOROETHOXY) METHANE
22	C440 2,4-DICHLOROPHENOL
23	C445 1,2,4-TRICHLOROBENZENE
24	C450 NAPHTHALENE
25	C430 BENZOIC ACID
26	C455 4-CHLOROANILINE
27	C460 HEXACHLOROBUTADIENE
28	C465 4-CHLORO-3-METHYLPHENOL
29	C470 2-METHYLNAPHTHALENE
30	CS20 NITROBENZENE-D5**BN SURR.**
31	CI50 ACENAPHTHENE-D10**INT. STD.#3**
32	C510 HEXACHLOROCYCLOPENTADIENE
33	C515 2,4,6-TRICHLOROPHENOL
34	C520 2,4,5-TRICHLOROPHENOL
35	C525 2-CHLORONAPHTHALENE
36	C530 2-NITROANILINE
37	C540 ACENAPHTHYLENE
38	C535 DIMETHYL PHTHALATE
39	C544 2,6-DINITROTOLUENE
40	C550 ACENAPHTHENE
41	C545 3-NITROANILINE
42	C555 2,4-DINITROPHENOL
43	C565 DIBENZOFURAN
44	C560 4-NITROPHENOL
45	C570 2,4-DINITROTOLUENE
46	C590 FLUORENE
47	C585 4-CHLOROPHENYL-PHENYLETHER

No	Name
48	C580 DIETHYLPHTHALATE
49	C595 4-NITROANILINE
50	C610 4,6-DINITRO-2-METHYLPHENOL

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	547	9:07	1	1.000	A BB	14214.	40.000 NG/UL	2.41
2	128	518	8:38	1	0.947	A BB	9491.	20.000 NG.	1.20
3	94	501	8:21	1	0.916	A BB	13614.	20.000 NG.	1.20
4	93	514	8:34	1	0.940	A BB	12331.	20.000 NG	1.20
5	146	540	9:00	1	0.987	A BB	10684.	20.000 NG	1.20
6	146	549	9:09	1	1.004	A BB	11293.	20.000 NG.	1.20
7	146	580	9:40	1	1.060	A BB	10560.	20.000 NG	1.20
8	108	575	9:35	1	1.051	A BB	6483.	20.000 NG	1.20
9	45	601	10:01	1	1.099	A BB	29234.	20.000 NG	1.20
10	108	596	9:56	1	1.090	A BB	9831.	20.000 NG	1.20
11	117	629	10:29	1	1.150	A BB	6782.	20.000 NG	1.20
12	108	621	10:21	1	1.135	A BB	10051.	20.000 NG	1.20
13	70	625	10:25	1	1.143	A BB	13474.	20.000 NG.	1.20
14	112	365	6:05	1	0.667	A BB	8466.	20.000 NG*A1	1.20
15	99	499	8:19	1	0.912	A BB	12081.	20.000 NG*A2	1.20
16	136	767	12:47	16	1.000	A BB	47653.	40.000 NG/UL	2.41
17	77	650	10:50	16	0.847	A BB	19777.	20.000 NG	1.20
18	82	689	11:29	16	0.898	A BB	32421.	20.000 NG	1.20
19	139	705	11:45	16	0.919	A BB	5800.	20.000 NG	1.20
20	107	713	11:53	16	0.930	A BB	13628.	20.000 NG	1.20
21	93	733	12:13	16	0.956	A BB	17841.	20.000 NG	1.20
22	162	745	12:25	16	0.971	A BB	9467.	20.000 NG	1.20
23	180	760	12:40	16	0.991	A BB	10749.	20.000 NG.	1.20
24	128	771	12:51	16	1.005	A BB	32837.	20.000 NG	1.20
25	122	731	12:11	16	0.953	A BB	5053.	20.000 NG	1.20
26	127	789	13:09	16	1.029	A BB	13493.	20.000 NG	1.20
27	225	803	13:23	16	1.047	A BB	7440.	20.000 NG	1.20
28	107	880	14:40	16	1.147	A BB	12962.	20.000 NG.	1.20
29	142	899	14:59	16	1.172	A BB	20538.	20.000 NG	1.20
30	82	646	10:46	16	0.842	A BB	17963.	20.000 NG*B1	1.20
31	164	1101	18:21	31	1.000	A BB	35828.	40.000 NG/UL	2.41
32	237	941	15:41	31	0.855	A BB	7774.	20.000 NG	1.20
33	196	959	15:59	31	0.871	A BB	7336.	20.000 NG	1.20
34	196	966	16:06	31	0.877	A BB	8026.	20.000 NG	1.20
35	162	991	16:31	31	0.900	A BB	22939.	20.000 NG	1.20
36	65	1023	17:03	31	0.929	A BB	14831.	20.000 NG	1.20
37	152	1072	17:52	31	0.974	A BB	38323.	20.000 NG	1.20
38	163	1065	17:45	31	0.967	A BB	29066.	20.000 NG	1.20
39	165	1079	17:59	31	0.980	A BB	6786.	20.000 NG	1.20
40	153	1107	18:27	31	1.005	A BB	24709.	20.000 NG.	1.20
41	138	1103	18:23	31	1.002	A BB	7811.	20.000 NG	1.20
42	184	1122	18:42	31	1.019	A BB	3002.	20.000 NG	1.20
43	168	1138	18:58	31	1.034	A BB	35367.	20.000 NG	1.20
44	109	1137	18:57	31	1.033	A BB	5040.	20.000 NG.	1.20
45	165	1152	19:12	31	1.046	A BB	9508.	20.000 NG.	1.20
46	166	1204	20:04	31	1.094	A BB	28178.	20.000 NG	1.20
47	204	1207	20:07	31	1.096	A BB	14853.	20.000 NG	1.20
48	149	1201	20:01	31	1.091	A BB	34072.	20.000 NG	1.20
49	138	1222	20:22	31	1.110	A BB	6616.	20.000 NG	1.20
50	198	1228	20:28	31	1.115	A BB	4797.	20.000 NG	1.20

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:07	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	8:38	1.00	0.947	1.00	20.00	20.00	1.335	1.335	1.00
3	8:21	1.00	0.916	1.00	20.00	20.00	1.916	1.916	1.00
4	8:34	1.00	0.940	1.00	20.00	20.00	1.735	1.735	1.00
5	9:00	1.00	0.987	1.00	20.00	20.00	1.503	1.503	1.00
6	9:09	1.00	1.004	1.00	20.00	20.00	1.589	1.589	1.00
7	9:40	1.00	1.060	1.00	20.00	20.00	1.486	1.486	1.00
8	9:35	1.00	1.051	1.00	20.00	20.00	0.912	0.912	1.00
9	10:01	1.00	1.099	1.00	20.00	20.00	4.113	4.113	1.00
10	9:56	1.00	1.090	1.00	20.00	20.00	1.383	1.383	1.00
11	10:29	1.00	1.150	1.00	20.00	20.00	0.954	0.954	1.00
12	10:21	1.00	1.135	1.00	20.00	20.00	1.414	1.414	1.00
13	10:25	1.00	1.143	1.00	20.00	20.00	1.896	1.896	1.00
14	6:05	1.00	0.667	1.00	20.00	20.00	1.191	1.191	1.00
15	8:19	1.00	0.912	1.00	20.00	20.00	1.700	1.700	1.00
16	12:47	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
17	10:50	1.00	0.847	1.00	20.00	20.00	0.830	0.830	1.00
18	11:29	1.00	0.898	1.00	20.00	20.00	1.361	1.361	1.00
19	11:45	1.00	0.919	1.00	20.00	20.00	0.243	0.243	1.00
20	11:53	1.00	0.930	1.00	20.00	20.00	0.572	0.572	1.00
21	12:13	1.00	0.956	1.00	20.00	20.00	0.749	0.749	1.00
22	12:25	1.00	0.971	1.00	20.00	20.00	0.397	0.397	1.00
23	12:40	1.00	0.991	1.00	20.00	20.00	0.451	0.451	1.00
24	12:51	1.00	1.005	1.00	20.00	20.00	1.378	1.378	1.00
25	12:11	1.00	0.953	1.00	20.00	20.00	0.212	0.212	1.00
26	13:09	1.00	1.029	1.00	20.00	20.00	0.566	0.566	1.00
27	13:23	1.00	1.047	1.00	20.00	20.00	0.312	0.312	1.00
28	14:40	1.00	1.147	1.00	20.00	20.00	0.544	0.544	1.00
29	14:59	1.00	1.172	1.00	20.00	20.00	0.862	0.862	1.00
30	10:46	1.00	0.842	1.00	20.00	20.00	0.754	0.754	1.00
31	18:21	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
32	15:41	1.00	0.855	1.00	20.00	20.00	0.434	0.434	1.00
33	15:59	1.00	0.871	1.00	20.00	20.00	0.410	0.410	1.00
34	16:06	1.00	0.877	1.00	20.00	20.00	0.448	0.448	1.00
35	16:31	1.00	0.900	1.00	20.00	20.00	1.281	1.281	1.00
36	17:03	1.00	0.929	1.00	20.00	20.00	0.828	0.828	1.00
37	17:52	1.00	0.974	1.00	20.00	20.00	2.139	2.139	1.00
38	17:45	1.00	0.967	1.00	20.00	20.00	1.623	1.623	1.00
39	17:59	1.00	0.980	1.00	20.00	20.00	0.379	0.379	1.00
40	18:27	1.00	1.005	1.00	20.00	20.00	1.379	1.379	1.00
41	18:23	1.00	1.002	1.00	20.00	20.00	0.436	0.436	1.00
42	18:42	1.00	1.019	1.00	20.00	20.00	0.168	0.168	1.00
43	18:58	1.00	1.034	1.00	20.00	20.00	1.974	1.974	1.00
44	18:57	1.00	1.033	1.00	20.00	20.00	0.281	0.281	1.00
45	19:12	1.00	1.046	1.00	20.00	20.00	0.531	0.531	1.00
46	20:04	1.00	1.094	1.00	20.00	20.00	1.573	1.573	1.00
47	20:07	1.00	1.096	1.00	20.00	20.00	0.829	0.829	1.00
48	20:01	1.00	1.091	1.00	20.00	20.00	1.902	1.902	1.00
49	20:22	1.00	1.110	1.00	20.00	20.00	0.369	0.369	1.00
50	20:28	1.00	1.115	1.00	20.00	20.00	0.268	0.268	1.00

Quantitation Report File: T2573

Data: T2573.TI
05/14/90 22:07:00
Sample: CLP,,,SSTD20,,,22662,B,IC20,,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: ---

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

No	Name
51	C615 N-NITROSODIPHENYLAMINE
52	C625 4-BROMOPHENYL-PHENYLETHER
53	C630 HEXACHLOROBENZENE
54	CS25 2-FLUOROBIPHENYL**BN SURR.**
55	CI60 PHENANTHRENE-D10**INT. STD.#4**
56	C635 PENTACHLOROPHENOL
57	C640 PHENANTHRENE
58	C645 ANTHRACENE
59	C650 DI-N-BUTYLPHTHALATE
60	C655 FLUORANTHENE
61	C715 PYRENE
62	CS55 2,4,6,-TRIBROMOPHENOL**ACID SURR.**
63	CI70 CHRYSENE-D12**INT. STD.#5**
64	C720 BUTYLBENZYLPHTHALATE
65	C730 BENZO(A)ANTHRACENE
66	C740 CHRYSENE
67	C725 3,3'-DICHLOROBENZIDINE
68	C741 BIS(2-ETHYLHEXYL)PHTHALATE
69	CS30 P-TERPHENYL-D14**BN SURR.**
70	CI75 PERYLENE-D12**INT. STD.#6**
71	C760 DI-N-OCTYL PHTHALATE
72	C765 BENZO(B)FLUORANTHENE
73	C770 BENZO(K)FLUORANTHENE
74	C775 BENZO(A)PYRENE
75	C780 INDENO(1,2,3-CD)PYRENE
76	C785 DIBENZ(A,H)ANTHRACENE
77	C790 BENZO(G,H,I)PERYLENE

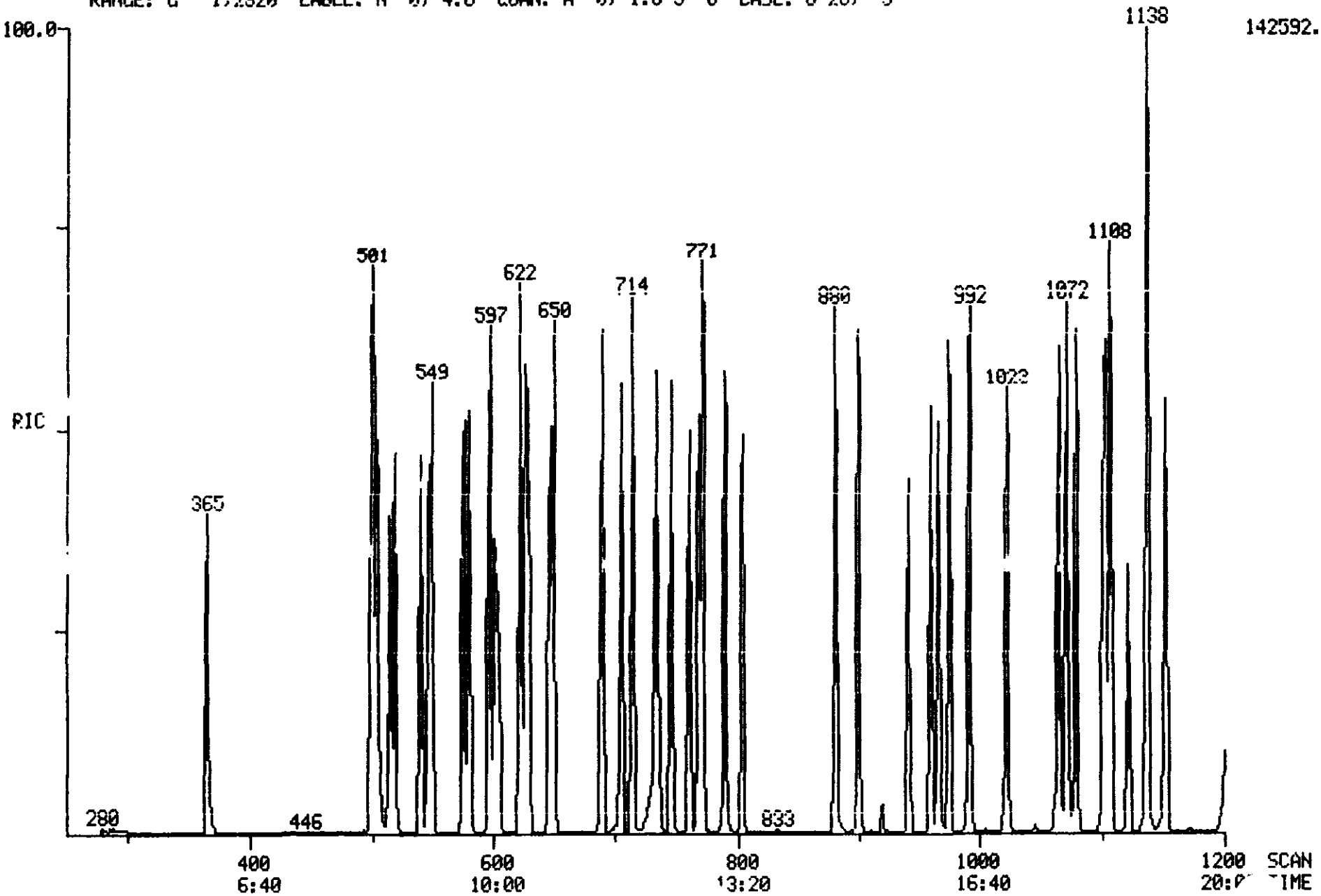
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	169	1233	20:33	31	1.120	A BB	20964.	20.000 NG	1.20
52	248	1301	21:41	31	1.182	A BB	8415.	20.000 NG	1.20
53	284	1325	22:05	31	1.203	A BB	10715.	20.000 NG	1.20
54	172	975	16:15	31	0.886	A BB	24745.	20.000 NG*B2	1.20
55	188	1385	23:05	55	1.000	A BV	74969.	40.000 NG/UL	2.41
56	266	1362	22:42	55	0.983	A BB	4767.	20.000 NG.	1.20
57	178	1390	23:10	55	1.004	A BV	45094.	20.000 NG	1.20
58	178	1398	23:18	55	1.009	A VB	45709.	20.000 NG	1.20
59	149	1516	25:16	55	1.095	A BB	66674.	20.000 NG	1.20
60	202	1622	27:02	55	1.171	A BB	45522.	20.000 NG	1.20
61	202	1666	27:46	63	0.875	A BB	45559.	20.000 NG.	1.20
62	330	1255	20:55	31	1.140	A BB	5396.	20.000 NG*A3	1.20
63	240	1903	31:43	63	1.000	A BB	53961.	40.000 NG/UL	2.41
64	149	1808	30:08	63	0.950	A BB	23617.	20.000 NG	1.20
65	228	1899	31:39	63	0.998	A BV	29309.	20.000 NG	1.20
66	228	1907	31:47	63	1.002	A VB	23237.	20.000 NG	1.20

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
67	252	1901	31:41	63	0.999	A BB	9390.	20.000 NG	1.20
68	149	1918	31:58	63	1.008	A BB	31981.	20.000 NG	1.20
69	244	1702	28:22	63	0.894	A BB	29210.	20.000 NG*B3	1.20
70	264	2212	36:52	70	1.000	A BB	42822.	40.000 NG/UL	2.41
71	149	2030	33:50	70	0.918	A BB	48812.	20.000 NG	1.20
72	252	2113	35:13	70	0.955	A BV	26780.	20.000 NG	1.20
73	252	2119	35:19	70	0.958	A VB	24940.	20.000 NG	1.20
74	252	2195	36:35	70	0.992	A BB	23746.	20.000 NG	1.20
75	276	2572	42:52	70	1.163	A BV	19076.	20.000 NG	1.20
76	278	2583	43:03	70	1.168	A BB	17434.	20.000 NG	1.20
77	276	2681	44:41	70	1.212	A BB	19004.	20.000 NG	1.20

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	20:33	1.00	1.120	1.00	20.00	20.00	1.170	1.170	1.00
52	21:41	1.00	1.182	1.00	20.00	20.00	0.470	0.470	1.00
53	22:05	1.00	1.203	1.00	20.00	20.00	0.598	0.598	1.00
54	16:15	1.00	0.886	1.00	20.00	20.00	1.381	1.381	1.00
55	23:05	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
56	22:42	1.00	0.983	1.00	20.00	20.00	0.127	0.127	1.00
57	23:10	1.00	1.004	1.00	20.00	20.00	1.203	1.203	1.00
58	23:18	1.00	1.009	1.00	20.00	20.00	1.219	1.219	1.00
59	25:16	1.00	1.095	1.00	20.00	20.00	1.779	1.779	1.00
60	27:02	1.00	1.171	1.00	20.00	20.00	1.214	1.214	1.00
61	27:46	1.00	0.875	1.00	20.00	20.00	1.689	1.689	1.00
62	20:55	1.00	1.140	1.00	20.00	20.00	0.301	0.301	1.00
63	31:43	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
64	30:08	1.00	0.950	1.00	20.00	20.00	0.875	0.875	1.00
65	31:39	1.00	0.998	1.00	20.00	20.00	1.086	1.086	1.00
66	31:47	1.00	1.002	1.00	20.00	20.00	0.861	0.861	1.00
67	31:41	1.00	0.999	1.00	20.00	20.00	0.348	0.348	1.00
68	31:58	1.00	1.008	1.00	20.00	20.00	1.185	1.185	1.00
69	28:22	1.00	0.894	1.00	20.00	20.00	1.083	1.083	1.00
70	36:52	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
71	33:50	1.00	0.918	1.00	20.00	20.00	2.280	2.280	1.00
72	35:13	1.00	0.955	1.00	20.00	20.00	1.251	1.251	1.00
73	35:19	1.00	0.958	1.00	20.00	20.00	1.165	1.165	1.00
74	36:35	1.00	0.992	1.00	20.00	20.00	1.109	1.109	1.00
75	42:52	1.00	1.163	1.00	20.00	20.00	0.891	0.891	1.00
76	43:03	1.00	1.168	1.00	20.00	20.00	0.814	0.814	1.00
77	44:41	1.00	1.212	1.00	20.00	20.00	0.888	0.888	1.00

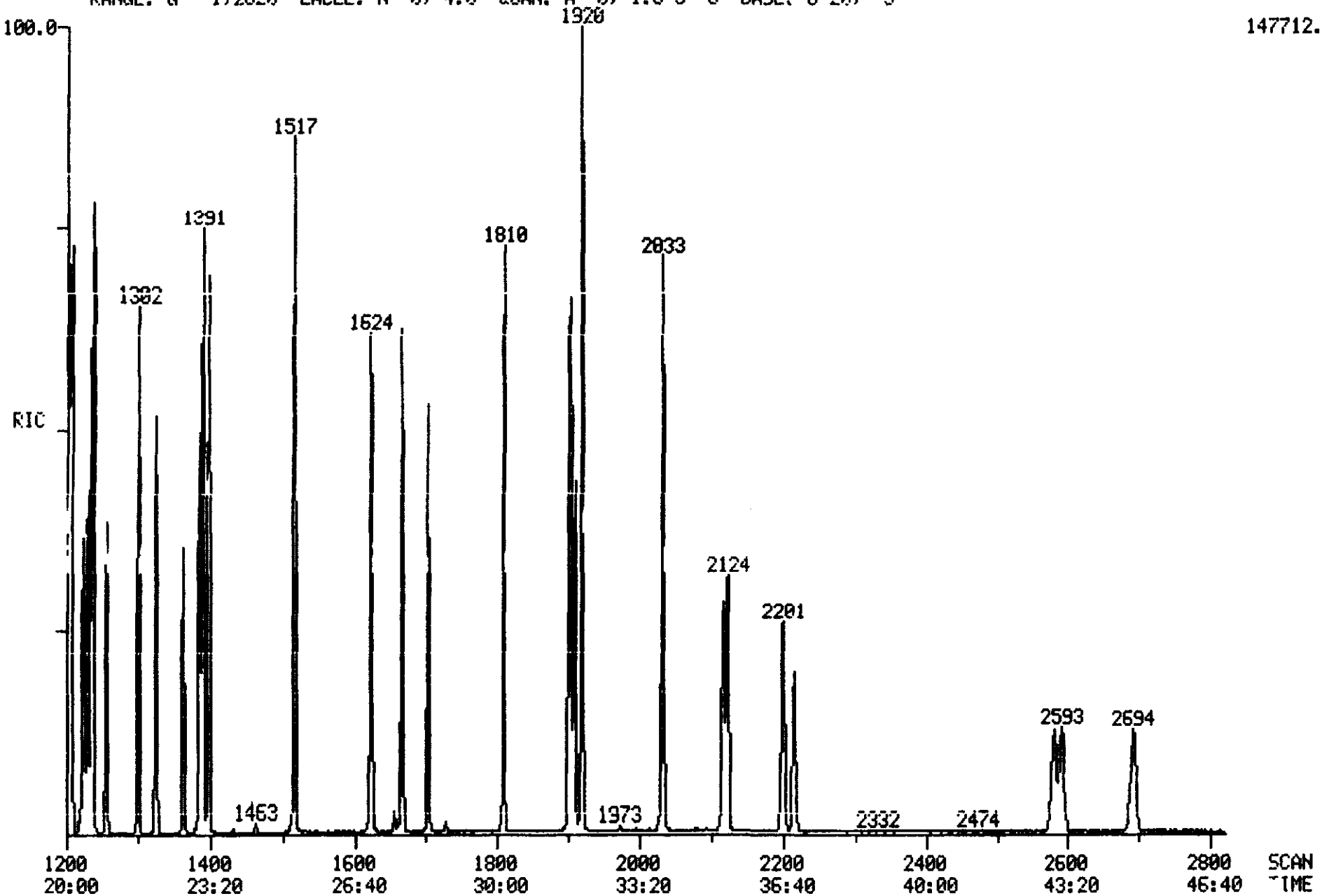
RIC DATA: T2569 #1 SCANS 250 TO 1200
05/14/90 17:42:00 CALI: T2569 #2
SAMPLE: CLP,,,SSTD50,,,22658,6,IC50,,1UL,
CONDS.· INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
RANGE: G 1,2820 LABEL: N 0, 4.0 CUAN: A 0, 1.0 J 0 BASE: U 20, 3

100272



RIC DATA: T2569 #1 SCANS 1200 TO 2820
05/14/90 17:42:00 CALI: T2569 #2
SAMPLE: CLP,,,SSTD50,,,22658,B,IC50,,1UL,
CONDS.· INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
RANGE: G 1,2820 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

100273



Quantitation Report File: T2569

Data: T2569.TI
05/14/90 17:42:00
Sample: CLP,,,SSTD50,,,22658,B,IC50,,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: --

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	C330 2-CHLOROPHENOL
3	C315 PHENOL
4	C325 BIS (2-CHLOROETHYL) ETHER
5	C335 1,3-DICHLOROBENZENE
6	C340 1,4-DICHLOROBENZENE
7	C350 1,2-DICHLOROBENZENE
8	C345 BENZYL ALCOHOL
9	C360 BIS (2-CHLOROISOPROPYL) ETHER
10	C355 2-METHYLPHENOL
11	C375 HEXACHLOROETHANE
12	C365 4-METHYLPHENOL
13	C370 N-NITROSO-DI-N-PROPYLAMINE
14	CS50 2-FLUOROPHENOL**ACID SURR.**
15	CS45 PHENOL-D5**ACID SURR.**
16	CI40 NAPHTHALENE-D8**INT. STD.#2**
17	C410 NITROBENZENE
18	C415 ISOPHORONE
19	C420 2-NITROPHENOL
20	C425 2,4-DIMETHYLPHENOL
21	C435 BIS (2-CHLOROETHOXY) METHANE
22	C440 2,4-DICHLOROPHENOL
23	C445 1,2,4-TRICHLOROBENZENE
24	C450 NAPHTHALENE
25	C430 BENZOIC ACID
26	C455 4-CHLOROANILINE
27	C460 HEXACHLOROBUTADIENE
28	C465 4-CHLORO-3-METHYLPHENOL
29	C470 2-METHYLNAPHTHALENE
30	CS20 NITROBENZENE-D5**BN SURR.**
31	CI50 ACENAPHTHENE-D10**INT. STD.#3**
32	C510 HEXACHLOROCYCLOPENTADIENE
33	C515 2,4,6-TRICHLOROPHENOL
34	C520 2,4,5-TRICHLOROPHENOL
35	C525 2-CHLORONAPHTHALENE
36	C530 2-NITROANILINE
37	C540 ACENAPHTHYLENE
38	C535 DIMETHYL PHTHALATE
39	C544 2,6-DINITROTOLUENE
40	C550 ACENAPHTHENE
41	C545 3-NITROANILINE
42	C555 2,4-DINITROPHENOL
43	C565 DIBENZOFURAN
44	C560 4-NITROPHENOL
45	C570 2,4-DINITROTOLUENE
46	C590 FLUORENE
47	C585 4-CHLOROPHENYL-PHENYLETHER

No	Name
48	C580 DIETHYLPHTHALATE
49	C595 4-NITROANILINE
50	C610 4,6-DINITRO-2-METHYLPHENOL

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	152	547	9:07	1	1.000	A BB	15621.	40.000	NG/UL	1.06
2	128	519	8:39	1	0.949	A BB	25165.	50.000	NG.	1.32
3	94	501	8:21	1	0.916	A BB	35694.	50.000	NG.	1.32
4	93	515	8:35	1	0.941	A VB	33251.	50.000	NG	1.32
5	146	540	9:00	1	0.987	A BB	28368.	50.000	NG	1.32
6	146	549	9:09	1	1.004	A BB	29990.	50.000	NG.	1.32
7	146	580	9:40	1	1.060	A BB	28248.	50.000	NG	1.32
8	108	575	9:35	1	1.051	A BB	18519.	50.000	NG	1.32
9	45	601	10:01	1	1.099	A BB	79012.	50.000	NG	1.32
10	108	597	9:57	1	1.091	A BB	27267.	50.000	NG	1.32
11	117	629	10:29	1	1.150	A BB	18654.	50.000	NG	1.32
12	108	622	10:22	1	1.137	A BB	29046.	50.000	NG	1.32
13	70	626	10:26	1	1.144	A BB	37511.	50.000	NG.	1.32
14	112	365	6:05	1	0.667	A BB	20548.	50.000	NG*A1	1.32
15	99	499	8:19	1	0.912	A BB	31626.	50.000	NG*A2	1.32
16	136	768	12:48	16	1.000	A BB	52080.	40.000	NG/UL	1.06
17	77	650	10:50	16	0.846	A BB	53433.	50.000	NG	1.32
18	82	689	11:29	16	0.897	A BB	90702.	50.000	NG	1.32
19	139	705	11:45	16	0.918	A BB	16679.	50.000	NG	1.32
20	107	714	11:54	16	0.930	A BB	37663.	50.000	NG	1.32
21	93	734	12:14	16	0.956	A BB	51224.	50.000	NG	1.32
22	162	746	12:26	16	0.971	A BB	24762.	50.000	NG	1.32
23	180	760	12:40	16	0.990	A BB	26359.	50.000	NG.	1.32
24	128	771	12:51	16	1.004	A BB	87935.	50.000	NG	1.32
25	122	736	12:16	16	0.958	A BB	13954.	50.000	NG	1.32
26	127	789	13:09	16	1.027	A BB	39132.	50.000	NG	1.32
27	225	803	13:23	16	1.046	A BB	17332.	50.000	NG	1.32
28	107	880	14:40	16	1.146	A BB	36793.	50.000	NG.	1.32
29	142	899	14:59	16	1.171	A BB	54639.	50.000	NG	1.32
30	82	647	10:47	16	0.842	A BB	49713.	50.000	NG*B1	1.32
31	164	1102	18:22	31	1.000	A BB	37455.	40.000	NG/UL	1.06
32	237	941	15:41	31	0.854	A BB	20609.	50.000	NG	1.32
33	196	960	16:00	31	0.871	A BV	18582.	50.000	NG	1.32
34	196	966	16:06	31	0.877	A VB	19169.	50.000	NG	1.32
35	162	992	16:32	31	0.900	A BB	56832.	50.000	NG	1.32
36	65	1023	17:03	31	0.928	A BB	42308.	50.000	NG	1.32
37	152	1072	17:52	31	0.973	A BB	94880.	50.000	NG	1.32
38	163	1066	17:46	31	0.967	A BB	71668.	50.000	NG	1.32
39	165	1080	18:00	31	0.980	A BB	18134.	50.000	NG	1.32
40	153	1108	18:28	31	1.005	A BB	57936.	50.000	NG.	1.32
41	138	1104	18:24	31	1.002	A BB	21297.	50.000	NG	1.32
42	184	1123	18:43	31	1.019	A BB	10715.	50.000	NG	1.32
43	168	1138	18:58	31	1.033	A BB	82874.	50.000	NG	1.32
44	109	1138	18:58	31	1.033	A BB	13742.	50.000	NG.	1.32
45	165	1153	19:13	31	1.046	A BB	24810.	50.000	NG.	1.32
46	166	1205	20:05	31	1.093	A BB	65220.	50.000	NG	1.32
47	204	1208	20:08	31	1.096	A BB	34449.	50.000	NG	1.32
48	149	1202	20:02	31	1.091	A BB	83379.	50.000	NG	1.32
49	138	1224	20:24	31	1.111	A BB	19051.	50.000	NG	1.32
50	198	1229	20:29	31	1.115	A BB	14622.	50.000	NG	1.32

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:07	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	8:39	1.00	0.949	1.00	50.00	50.00	1.289	1.289	1.00
3	8:21	1.00	0.916	1.00	50.00	50.00	1.828	1.828	1.00
4	8:35	1.00	0.941	1.00	50.00	50.00	1.703	1.703	1.00
5	9:00	1.00	0.987	1.00	50.00	50.00	1.453	1.453	1.00
6	9:09	1.00	1.004	1.00	50.00	50.00	1.536	1.536	1.00
7	9:40	1.00	1.060	1.00	50.00	50.00	1.447	1.447	1.00
8	9:35	1.00	1.051	1.00	50.00	50.00	0.948	0.948	1.00
9	10:01	1.00	1.099	1.00	50.00	50.00	4.046	4.046	1.00
10	9:57	1.00	1.091	1.00	50.00	50.00	1.396	1.396	1.00
11	10:29	1.00	1.150	1.00	50.00	50.00	0.955	0.955	1.00
12	10:22	1.00	1.137	1.00	50.00	50.00	1.488	1.488	1.00
13	10:26	1.00	1.144	1.00	50.00	50.00	1.921	1.921	1.00
14	6:05	1.00	0.667	1.00	50.00	50.00	1.052	1.052	1.00
15	8:19	1.00	0.912	1.00	50.00	50.00	1.620	1.620	1.00
16	12:48	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
17	10:50	1.00	0.846	1.00	50.00	50.00	0.821	0.821	1.00
18	11:29	1.00	0.897	1.00	50.00	50.00	1.393	1.393	1.00
19	11:45	1.00	0.918	1.00	50.00	50.00	0.256	0.256	1.00
20	11:54	1.00	0.930	1.00	50.00	50.00	0.579	0.579	1.00
21	12:14	1.00	0.956	1.00	50.00	50.00	0.787	0.787	1.00
22	12:26	1.00	0.971	1.00	50.00	50.00	0.380	0.380	1.00
23	12:40	1.00	0.990	1.00	50.00	50.00	0.405	0.405	1.00
24	12:51	1.00	1.004	1.00	50.00	50.00	1.351	1.351	1.00
25	12:16	1.00	0.958	1.00	50.00	50.00	0.214	0.214	1.00
26	13:09	1.00	1.027	1.00	50.00	50.00	0.601	0.601	1.00
27	13:23	1.00	1.046	1.00	50.00	50.00	0.266	0.266	1.00
28	14:40	1.00	1.146	1.00	50.00	50.00	0.565	0.565	1.00
29	14:59	1.00	1.171	1.00	50.00	50.00	0.839	0.839	1.00
30	10:47	1.00	0.842	1.00	50.00	50.00	0.764	0.764	1.00
31	18:22	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
32	15:41	1.00	0.854	1.00	50.00	50.00	0.440	0.440	1.00
33	16:00	1.00	0.871	1.00	50.00	50.00	0.397	0.397	1.00
34	16:06	1.00	0.877	1.00	50.00	50.00	0.409	0.409	1.00
35	16:32	1.00	0.900	1.00	50.00	50.00	1.214	1.214	1.00
36	17:03	1.00	0.928	1.00	50.00	50.00	0.904	0.904	1.00
37	17:52	1.00	0.973	1.00	50.00	50.00	2.027	2.027	1.00
38	17:46	1.00	0.967	1.00	50.00	50.00	1.531	1.531	1.00
39	18:00	1.00	0.980	1.00	50.00	50.00	0.387	0.387	1.00
40	18:28	1.00	1.005	1.00	50.00	50.00	1.237	1.237	1.00
41	18:24	1.00	1.002	1.00	50.00	50.00	0.455	0.455	1.00
42	18:43	1.00	1.019	1.00	50.00	50.00	0.229	0.229	1.00
43	18:58	1.00	1.033	1.00	50.00	50.00	1.770	1.770	1.00
44	18:58	1.00	1.033	1.00	50.00	50.00	0.294	0.294	1.00
45	19:13	1.00	1.046	1.00	50.00	50.00	0.530	0.530	1.00
46	20:05	1.00	1.093	1.00	50.00	50.00	1.393	1.393	1.00
47	20:08	1.00	1.096	1.00	50.00	50.00	0.736	0.736	1.00
48	20:02	1.00	1.091	1.00	50.00	50.00	1.781	1.781	1.00
49	20:24	1.00	1.111	1.00	50.00	50.00	0.407	0.407	1.00
50	20:29	1.00	1.115	1.00	50.00	50.00	0.312	0.312	1.00

Quantitation Report File: T2569

Data: T2569.TI
05/14/90 17:42:00
Sample: CLP,,,SSTD50,,,22658,B,IC50,,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: --

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

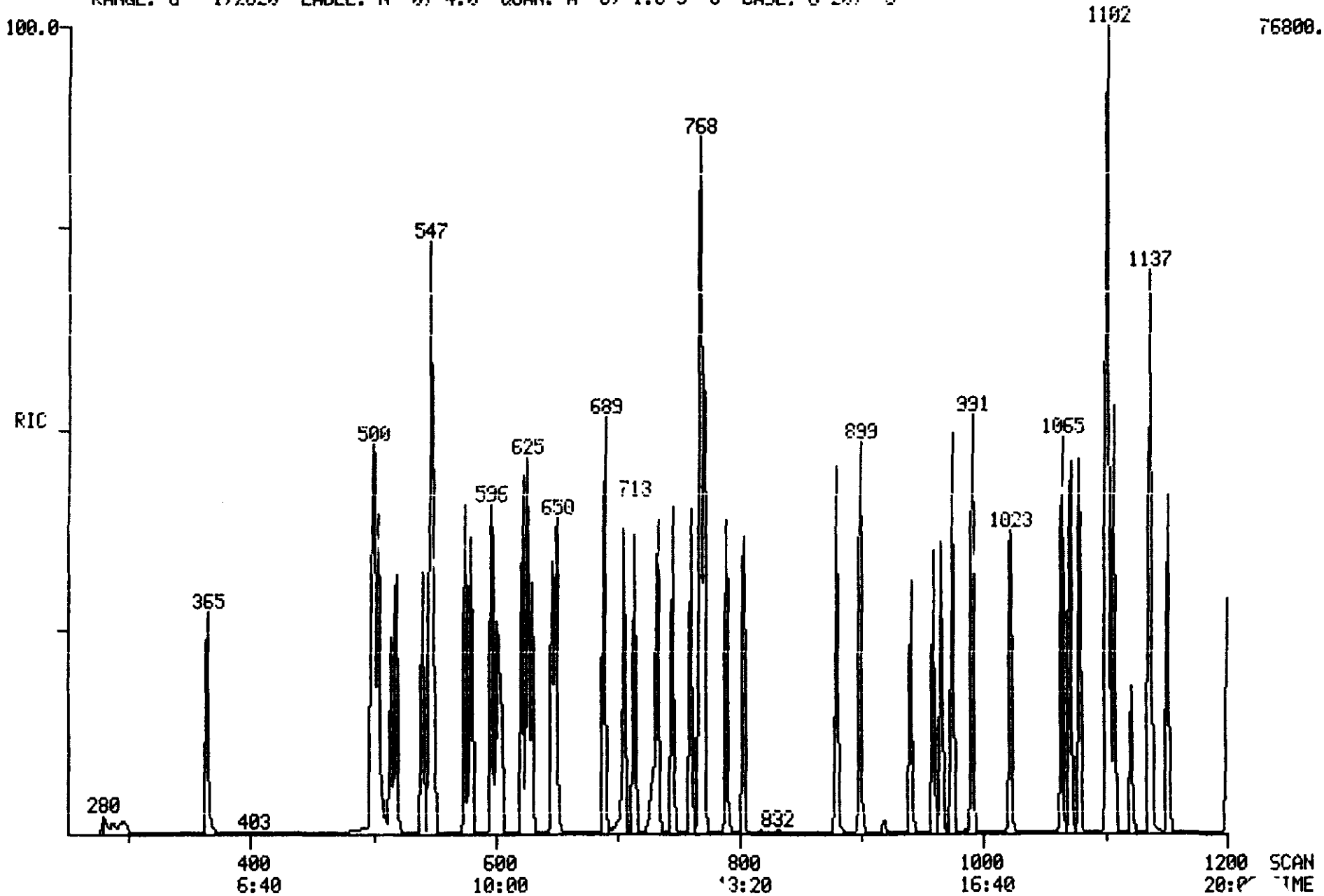
No	Name
51	C615 N-NITROSODIPHENYLAMINE
52	C625 4-BROMOPHENYL-PHENYLETHER
53	C630 HEXACHLOROBENZENE
54	CS25 2-FLUOROBIPHENYL**BN SURR.**
55	CI60 PHENANTHRENE-D10**INT. STD.#4**
56	C635 PENTACHLOROPHENOL
57	C640 PHENANTHRENE
58	C645 ANTHRACENE
59	C650 DI-N-BUTYLPHTHALATE
60	C655 FLUORANTHENE
61	C715 PYRENE
62	CS55 2,4,6,-TRIBROMOPHENOL**ACID SURR.**
63	CI70 CHRYSENE-D12**INT. STD.#5**
64	C720 BUTYLBENZYLPHTHALATE
65	C730 BENZO(A)ANTHRACENE
66	C740 CHRYSENE
67	C725 3,3'-DICHLOROBENZIDINE
68	C741 BIS(2-ETHYLHEXYL)PHTHALATE
69	CS30 P-TERPHENYL-D14**BN SURR.**
70	CI75 PERYLENE-D12**INT. STD.#6**
71	C760 DI-N-OCTYL PHTHALATE
72	C765 BENZO(B)FLUORANTHENE
73	C770 BENZO(K)FLUORANTHENE
74	C775 BENZO(A)PYRENE
75	C780 INDENO(1,2,3-CD)PYRENE
76	C785 DIBENZ(A,H)ANTHRACENE
77	C790 BENZO(G,H,I)PERYLENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	169	1234	20:34	31	1.120	A BB	49488.	50.000 NG	1.32
52	248	1301	21:41	31	1.181	A BB	21260.	50.000 NG	1.32
53	284	1326	22:06	31	1.203	A BB	25148.	50.000 NG	1.32
54	172	975	16:15	31	0.885	A BB	59968.	50.000 NG*B2	1.32
55	188	1386	23:06	55	1.000	A BB	75538.	40.000 NG/UL	1.06
56	266	1363	22:43	55	0.983	A BB	13999.	50.000 NG.	1.32
57	178	1391	23:11	55	1.004	A BV	105164.	50.000 NG	1.32
58	178	1399	23:19	55	1.009	A VB	103153.	50.000 NG	1.32
59	149	1517	25:17	55	1.095	A BV	157368.	50.000 NG	1.32
60	202	1624	27:04	55	1.172	A BB	104709.	50.000 NG	1.32
61	202	1668	27:48	63	0.876	A BB	102146.	50.000 NG.	1.32
62	330	1256	20:56	31	1.140	A BB	12678.	50.000 NG*A3	1.32
63	240	1905	31:45	63	1.000	A BB	56496.	40.000 NG/UL	1.06
64	149	1810	30:10	63	0.950	A BB	59766.	50.000 NG	1.32
65	228	1902	31:42	63	0.998	A BV	74370.	50.000 NG	1.32
66	228	1910	31:50	63	1.003	A VB	56857.	50.000 NG	1.32

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
67	252	1903	31:43	63	0.999	A BB	20611.	50.000 NG	1.32
68	149	1920	32:00	63	1.008	A BB	81602.	50.000 NG	1.32
69	244	1703	28:23	63	0.894	A BB	66579.	50.000 NG*B3	1.32
70	264	2216	36:56	70	1.000	A BB	45334.	40.000 NG/UL	1.06
71	149	2033	33:53	70	0.917	A BB	132179.	50.000 NG	1.32
72	252	2117	35:17	70	0.955	A BV	68027.	50.000 NG	1.32
73	252	2123	35:23	70	0.958	A VB	62799.	50.000 NG	1.32
74	252	2200	36:40	70	0.993	A BB	61879.	50.000 NG	1.32
75	276	2581	43:01	70	1.165	A BV	51958.	50.000 NG	1.32
76	278	2593	43:13	70	1.170	A BB	46607.	50.000 NG	1.32
77	276	2693	44:53	70	1.215	A BB	52321.	50.000 NG	1.32

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	20:34	1.00	1.120	1.00	50.00	50.00	1.057	1.057	1.00
52	21:41	1.00	1.181	1.00	50.00	50.00	0.454	0.454	1.00
53	22:06	1.00	1.203	1.00	50.00	50.00	0.537	0.537	1.00
54	16:15	1.00	0.885	1.00	50.00	50.00	1.281	1.281	1.00
55	23:06	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
56	22:43	1.00	0.983	1.00	50.00	50.00	0.148	0.148	1.00
57	23:11	1.00	1.004	1.00	50.00	50.00	1.114	1.114	1.00
58	23:19	1.00	1.009	1.00	50.00	50.00	1.092	1.092	1.00
59	25:17	1.00	1.095	1.00	50.00	50.00	1.667	1.667	1.00
60	27:04	1.00	1.172	1.00	50.00	50.00	1.109	1.109	1.00
61	27:48	1.00	0.876	1.00	50.00	50.00	1.446	1.446	1.00
62	20:56	1.00	1.140	1.00	50.00	50.00	0.271	0.271	1.00
63	31:45	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
64	30:10	1.00	0.950	1.00	50.00	50.00	0.846	0.846	1.00
65	31:42	1.00	0.998	1.00	50.00	50.00	1.053	1.053	1.00
66	31:50	1.00	1.003	1.00	50.00	50.00	0.805	0.805	1.00
67	31:43	1.00	0.999	1.00	50.00	50.00	0.292	0.292	1.00
68	32:00	1.00	1.008	1.00	50.00	50.00	1.156	1.156	1.00
69	28:23	1.00	0.894	1.00	50.00	50.00	0.943	0.943	1.00
70	36:56	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
71	33:53	1.00	0.917	1.00	50.00	50.00	2.333	2.333	1.00
72	35:17	1.00	0.955	1.00	50.00	50.00	1.200	1.200	1.00
73	35:23	1.00	0.958	1.00	50.00	50.00	1.108	1.108	1.00
74	36:40	1.00	0.993	1.00	50.00	50.00	1.092	1.092	1.00
75	43:01	1.00	1.165	1.00	50.00	50.00	0.917	0.917	1.00
76	43:13	1.00	1.170	1.00	50.00	50.00	0.822	0.822	1.00
77	44:53	1.00	1.215	1.00	50.00	50.00	0.923	0.923	1.00

RIC DATA: T2573 #2391 SCANS 250 TO 1200
05/14/90 22:07:00 CALI: T2573 #2
SAMPLE: CLP,,,SSTD2C,,,22662,B,IC20,,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30208C/MIN
RANGE: G 1,2820 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

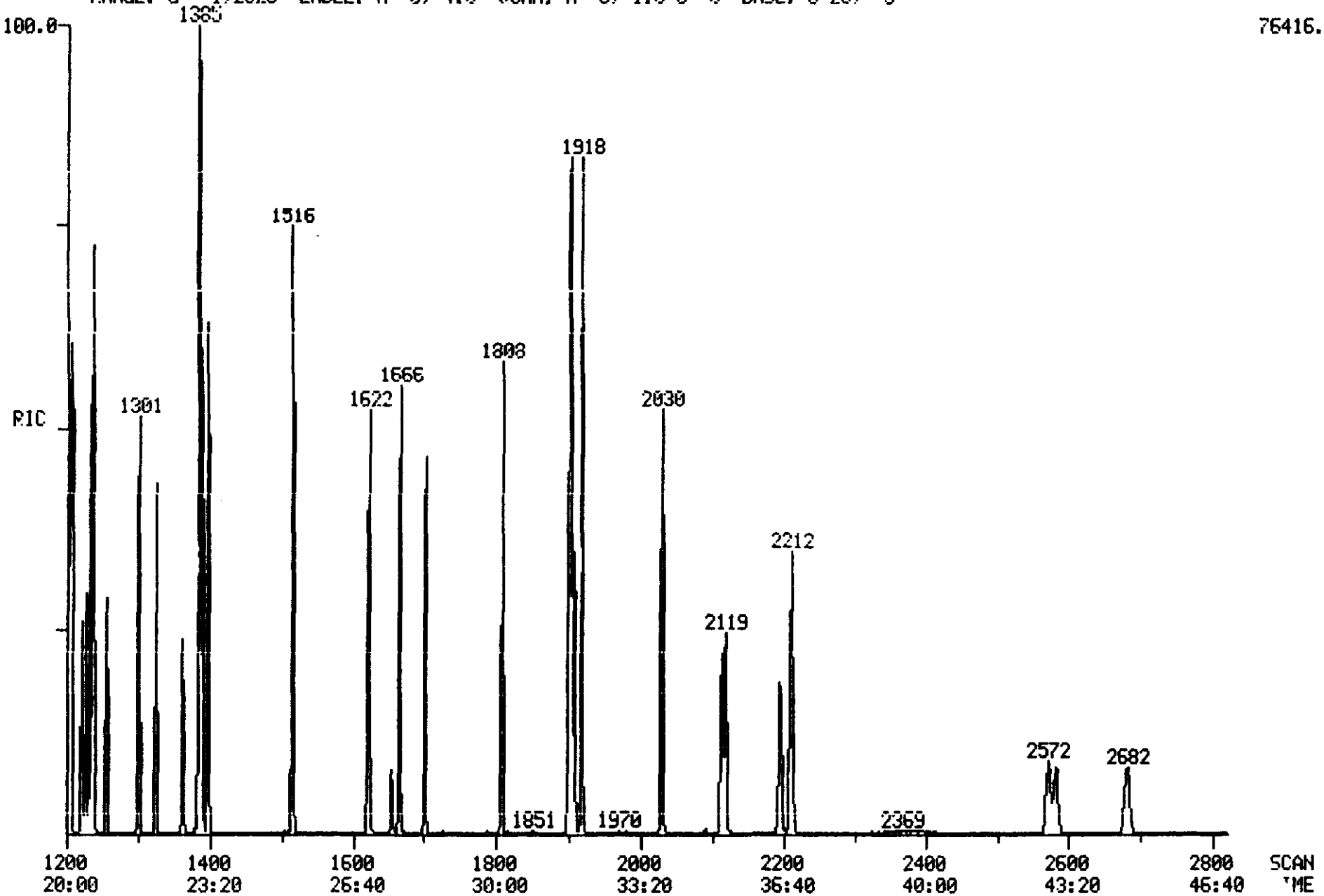


1002773

1

RIC DATA: T2573 #2391 SCANS 1200 TO 2820
05/14/90 22:07:00 CALI: T2573 #2
SAMPLE: CLP,,,SSTD20,,,22662,B,IC20,,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30208C/MIN
RANGE: G 1,2820 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

100280



Quantitation Report File: T2572

Data: T2572.TI
05/14/90 21:13:00
Sample: CLP,,,SSTD80,,,22661,B,IC80,,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: ---

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	C330 2-CHLOROPHENOL
3	C315 PHENOL
4	C325 BIS (2-CHLOROETHYL) ETHER
5	C335 1,3-DICHLOROBENZENE
6	C340 1,4-DICHLOROBENZENE
7	C350 1,2-DICHLOROBENZENE
8	C345 BENZYL ALCOHOL
9	C360 BIS (2-CHLOROISOPROPYL) ETHER
10	C355 2-METHYLPHENOL
11	C375 HEXACHLOROETHANE
12	C365 4-METHYLPHENOL
13	C370 N-NITROSO-DI-N-PROPYLAMINE
14	CS50 2-FLUOROPHENOL**ACID SURR.**
15	CS45 PHENOL-D5**ACID SURR.**
16	CI40 NAPHTHALENE-D8**INT. STD.#2**
17	C410 NITROBENZENE
18	C415 ISOPHORONE
19	C420 2-NITROPHENOL
20	C425 2,4-DIMETHYLPHENOL
21	C435 BIS (2-CHLOROETHOXY) METHANE
22	C440 2,4-DICHLOROPHENOL
23	C445 1,2,4-TRICHLOROBENZENE
24	C450 NAPHTHALENE
25	C430 BENZOIC ACID
26	C455 4-CHLOROANILINE
27	C460 HEXACHLOROBUTADIENE
28	C465 4-CHLORO-3-METHYLPHENOL
29	C470 2-METHYLNAPHTHALENE
30	CS20 NITROBENZENE-D5**BN SURR.**
31	CI50 ACENAPHTHENE-D10**INT. STD.#3**
32	C510 HEXACHLOROCYCLOPENTADIENE
33	C515 2,4,6-TRICHLOROPHENOL
34	C520 2,4,5-TRICHLOROPHENOL
35	C525 2-CHLORONAPHTHALENE
36	C530 2-NITROANILINE
37	C540 ACENAPHTHYLENE
38	C535 DIMETHYL PHTHALATE
39	C544 2,6-DINITROTOLUENE
40	C550 ACENAPHTHENE
41	C545 3-NITROANILINE
42	C555 2,4-DINITROPHENOL
43	C565 DIBENZOFURAN
44	C560 4-NITROPHENOL
45	C570 2,4-DINITROTOLUENE
46	C590 FLUORENE
47	C585 4-CHLOROPHENYL-PHENYLETHER

No	Name
48	C580 DIETHYLPHTHALATE
49	C595 4-NITROANILINE
50	C610 4,6-DINITRO-2-METHYLPHENOL

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	152	547	9:07	1	1.000	A BB	16068.	40.000	NG/UL	0.68
2	128	519	8:39	1	0.949	A BB	41052.	80.000	NG.	1.35
3	94	502	8:22	1	0.918	A BB	56825.	80.000	NG.	1.35
4	93	515	8:35	1	0.941	A VB	51311.	80.000	NG	1.35
5	146	541	9:01	1	0.989	A BB	46160.	80.000	NG	1.35
6	146	550	9:10	1	1.005	A BB	48323.	80.000	NG.	1.35
7	146	580	9:40	1	1.060	A BB	46291.	80.000	NG	1.35
8	108	576	9:36	1	1.053	A BB	30427.	80.000	NG	1.35
9	45	602	10:02	1	1.101	A BB	125990.	80.000	NG	1.35
10	108	597	9:57	1	1.091	A BB	43318.	80.000	NG	1.35
11	117	629	10:29	1	1.150	A BB	28665.	80.000	NG	1.35
12	108	623	10:23	1	1.139	A BB	45373.	80.000	NG	1.35
13	70	627	10:27	1	1.146	A BB	58607.	80.000	NG.	1.35
14	112	365	6:05	1	0.667	A BB	35530.	80.000	NG*A1	1.35
15	99	500	8:20	1	0.914	A BB	51722.	80.000	NG*A2	1.35
16	136	768	12:48	16	1.000	A BB	54192.	40.000	NG/UL	0.68
17	77	651	10:51	16	0.848	A BB	84682.	80.000	NG	1.35
18	82	690	11:30	16	0.898	A BB	143669.	80.000	NG	1.35
19	139	705	11:45	16	0.918	A BB	27248.	80.000	NG	1.35
20	107	714	11:54	16	0.930	A BB	61596.	80.000	NG	1.35
21	93	734	12:14	16	0.956	A BB	79832.	80.000	NG	1.35
22	162	746	12:26	16	0.971	A BB	42297.	80.000	NG	1.35
23	180	760	12:40	16	0.990	A BB	44939.	80.000	NG.	1.35
24	128	771	12:51	16	1.004	A BB	140750.	80.000	NG	1.35
25	122	741	12:21	16	0.965	A BB	23365.	80.000	NG	1.35
26	127	789	13:09	16	1.027	A BB	65174.	80.000	NG	1.35
27	225	803	13:23	16	1.046	A BB	30483.	80.000	NG	1.35
28	107	880	14:40	16	1.146	A BB	60171.	80.000	NG.	1.35
29	142	899	14:59	16	1.171	A BB	89824.	80.000	NG	1.35
30	82	647	10:47	16	0.842	A BB	79530.	80.000	NG*B1	1.35
31	164	1101	18:21	31	1.000	A BB	40078.	40.000	NG/UL	0.68
32	237	941	15:41	31	0.855	A BB	35977.	80.000	NG	1.35
33	196	960	16:00	31	0.872	A BV	32226.	80.000	NG	1.35
34	196	966	16:06	31	0.877	A VB	33216.	80.000	NG	1.35
35	162	992	16:32	31	0.901	A BB	96437.	80.000	NG	1.35
36	65	1024	17:04	31	0.930	A BB	71191.	80.000	NG	1.35
37	152	1072	17:52	31	0.974	A BB	159468.	80.000	NG	1.35
38	163	1066	17:46	31	0.968	A BB	122438.	80.000	NG	1.35
39	165	1080	18:00	31	0.981	A BB	30950.	80.000	NG	1.35
40	153	1108	18:28	31	1.006	A BB	97302.	80.000	NG.	1.35
41	138	1105	18:25	31	1.004	A BB	36450.	80.000	NG	1.35
42	184	1123	18:43	31	1.020	A BB	19387.	80.000	NG	1.35
43	168	1138	18:58	31	1.034	A BB	138211.	80.000	NG	1.35
44	109	1138	18:58	31	1.034	A BB	27942.	80.000	NG.	1.35
45	165	1153	19:13	31	1.047	A BB	42583.	80.000	NG.	1.35
46	166	1205	20:05	31	1.094	A BB	109827.	80.000	NG	1.35
47	204	1208	20:08	31	1.097	A BB	56311.	80.000	NG	1.35
48	149	1203	20:03	31	1.093	A BB	145422.	80.000	NG	1.35
49	138	1225	20:25	31	1.113	A BB	34932.	80.000	NG	1.35
50	198	1230	20:30	31	1.117	A BB	25445.	80.000	NG	1.35

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	9:07	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	8:39	1.00	0.949	1.00	80.00	80.00	1.277	1.277	1.00
3	8:22	1.00	0.918	1.00	80.00	80.00	1.768	1.768	1.00
4	8:35	1.00	0.941	1.00	80.00	80.00	1.597	1.597	1.00
5	9:01	1.00	0.989	1.00	80.00	80.00	1.436	1.436	1.00
6	9:10	1.00	1.005	1.00	80.00	80.00	1.504	1.504	1.00
7	9:40	1.00	1.060	1.00	80.00	80.00	1.440	1.440	1.00
8	9:36	1.00	1.053	1.00	80.00	80.00	0.947	0.947	1.00
9	10:02	1.00	1.101	1.00	80.00	80.00	3.921	3.921	1.00
10	9:57	1.00	1.091	1.00	80.00	80.00	1.348	1.348	1.00
11	10:29	1.00	1.150	1.00	80.00	80.00	0.892	0.892	1.00
12	10:23	1.00	1.139	1.00	80.00	80.00	1.412	1.412	1.00
13	10:27	1.00	1.146	1.00	80.00	80.00	1.824	1.824	1.00
14	6:05	1.00	0.667	1.00	80.00	80.00	1.106	1.106	1.00
15	8:20	1.00	0.914	1.00	80.00	80.00	1.609	1.609	1.00
16	12:48	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
17	10:51	1.00	0.848	1.00	80.00	80.00	0.781	0.781	1.00
18	11:30	1.00	0.898	1.00	80.00	80.00	1.326	1.326	1.00
19	11:45	1.00	0.918	1.00	80.00	80.00	0.251	0.251	1.00
20	11:54	1.00	0.930	1.00	80.00	80.00	0.568	0.568	1.00
21	12:14	1.00	0.956	1.00	80.00	80.00	0.737	0.737	1.00
22	12:26	1.00	0.971	1.00	80.00	80.00	0.390	0.390	1.00
23	12:40	1.00	0.990	1.00	80.00	80.00	0.415	0.415	1.00
24	12:51	1.00	1.004	1.00	80.00	80.00	1.299	1.299	1.00
25	12:21	1.00	0.965	1.00	80.00	80.00	0.216	0.216	1.00
26	13:09	1.00	1.027	1.00	80.00	80.00	0.601	0.601	1.00
27	13:23	1.00	1.046	1.00	80.00	80.00	0.281	0.281	1.00
28	14:40	1.00	1.146	1.00	80.00	80.00	0.555	0.555	1.00
29	14:59	1.00	1.171	1.00	80.00	80.00	0.829	0.829	1.00
30	10:47	1.00	0.842	1.00	80.00	80.00	0.734	0.734	1.00
31	18:21	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
32	15:41	1.00	0.855	1.00	80.00	80.00	0.449	0.449	1.00
33	16:00	1.00	0.872	1.00	80.00	80.00	0.402	0.402	1.00
34	16:06	1.00	0.877	1.00	80.00	80.00	0.414	0.414	1.00
35	16:32	1.00	0.901	1.00	80.00	80.00	1.203	1.203	1.00
36	17:04	1.00	0.930	1.00	80.00	80.00	0.888	0.888	1.00
37	17:52	1.00	0.974	1.00	80.00	80.00	1.989	1.989	1.00
38	17:46	1.00	0.968	1.00	80.00	80.00	1.527	1.527	1.00
39	18:00	1.00	0.981	1.00	80.00	80.00	0.386	0.386	1.00
40	18:28	1.00	1.006	1.00	80.00	80.00	1.214	1.214	1.00
41	18:25	1.00	1.004	1.00	80.00	80.00	0.455	0.455	1.00
42	18:43	1.00	1.020	1.00	80.00	80.00	0.242	0.242	1.00
43	18:58	1.00	1.034	1.00	80.00	80.00	1.724	1.724	1.00
44	18:58	1.00	1.034	1.00	80.00	80.00	0.349	0.349	1.00
45	19:13	1.00	1.047	1.00	80.00	80.00	0.531	0.531	1.00
46	20:05	1.00	1.094	1.00	80.00	80.00	1.370	1.370	1.00
47	20:08	1.00	1.097	1.00	80.00	80.00	0.703	0.703	1.00
48	20:03	1.00	1.093	1.00	80.00	80.00	1.814	1.814	1.00
49	20:25	1.00	1.113	1.00	80.00	80.00	0.436	0 436	1.00
50	20:30	1.00	1.117	1.00	80.00	80.00	0.317	0.317	1.00

Quantitation Report File: T2572

Data: T2572.TI
05/14/90 21:13:00
Sample: CLP,,,SSTD80,,,22661,B,IC80,,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: ---

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

No	Name
51	C615 N-NITROSODIPHENYLAMINE
52	C625 4-BROMOPHENYL-PHENYLETHER
53	C630 HEXACHLOROBENZENE
54	CS25 2-FLUOROBIPHENYL**BN SURR.**
55	CI60 PHENANTHRENE-D10**INT. STD.#4**
56	C635 PENTACHLOROPHENOL
57	C640 PHENANTHRENE
58	C645 ANTHRACENE
59	C650 DI-N-BUTYLPHTHALATE
60	C655 FLUORANTHENE
61	C715 PYRENE
62	CS55 2,4,6,-TRIBROMOPHENOL**ACID SURR.**
63	CI70 CHRYSENE-D12**INT. STD.#5**
64	C720 BUTYLBENZYLPHTHALATE
65	C730 BENZO(A)ANTHRACENE
66	C740 CHRYSENE
67	C725 3,3'-DICHLOROBENZIDINE
68	C741 BIS(2-ETHYLHEXYL)PHTHALATE
69	CS30 P-TERPHENYL-D14**BN SURR.**
70	CI75 PERYLENE-D12**INT. STD.#6**
71	C760 DI-N-OCTYL PHTHALATE
72	C765 BENZO(B)FLUORANTHENE
73	C770 BENZO(K)FLUORANTHENE
74	C775 BENZO(A)PYRENE
75	C780 INDENO(1,2,3-CD)PYRENE
76	C785 DIBENZ(A,H)ANTHRACENE
77	C790 BENZO(G,H,I)PERYLENE

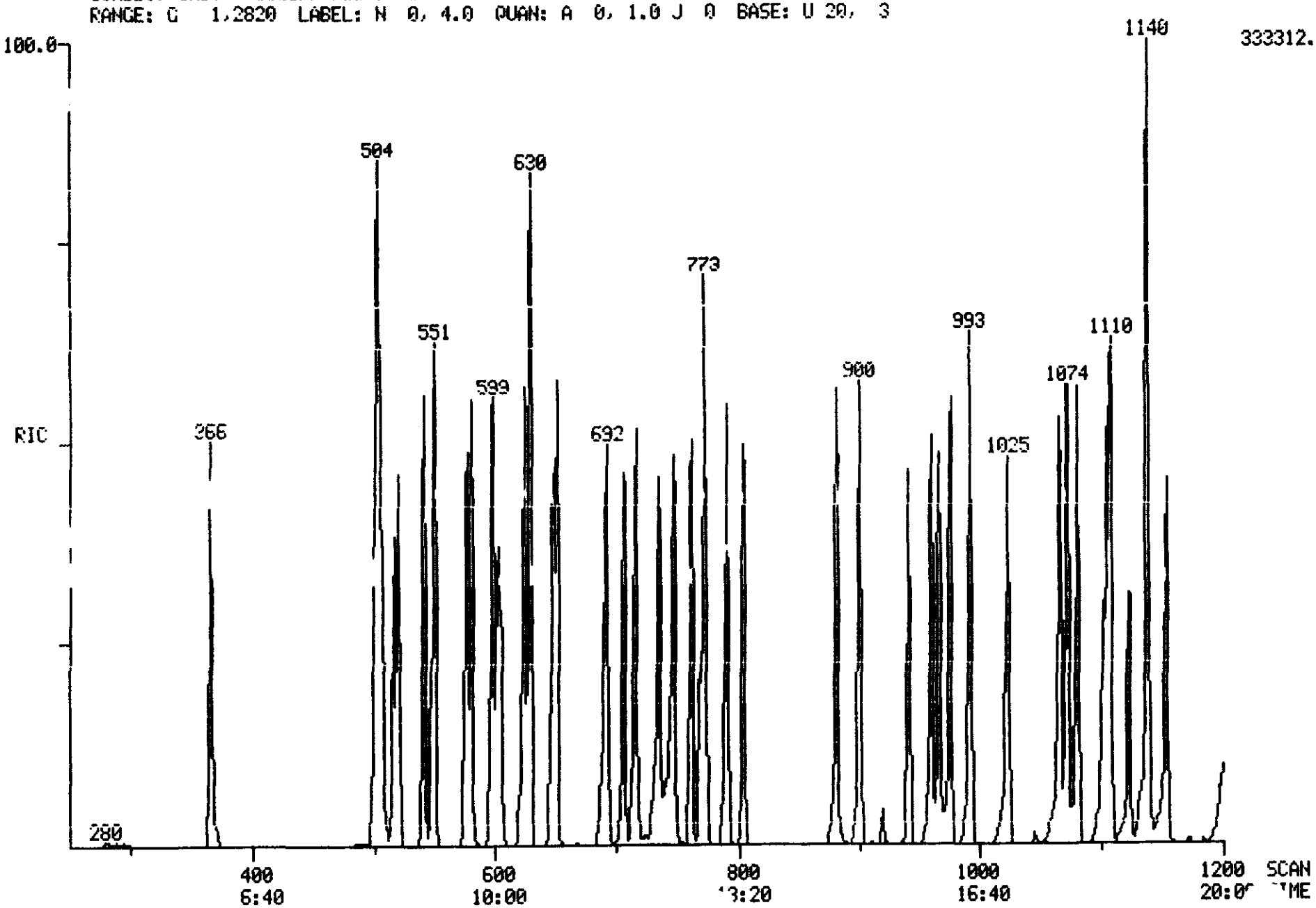
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	169	1235	20:35	31	1.122	A BB	82270.	80.000 NG	1.35
52	248	1301	21:41	31	1.182	A BB	37698.	80.000 NG	1.35
53	284	1326	22:06	31	1.204	A BB	44324.	80.000 NG	1.35
54	172	975	16:15	31	0.886	A BB	100749.	80.000 NG*B2	1.35
55	188	1386	23:06	55	1.000	A BB	80782.	40.000 NG/UL	0.68
56	266	1363	22:43	55	0.983	A BB	25637.	80.000 NG.	1.35
57	178	1391	23:11	55	1.004	A BV	171019.	80.000 NG	1.35
58	178	1399	23:19	55	1.009	A VB	162544.	80.000 NG	1.35
59	149	1516	25:16	55	1.094	A BV	266470.	80.000 NG	1.35
60	202	1623	27:03	55	1.171	A BB	173889.	80.000 NG	1.35
61	202	1667	27:47	63	0.876	A BB	169269.	80.000 NG.	1.35
62	330	1256	20:56	31	1.141	A BB	24816.	80.000 NG*A3	1.35
63	240	1904	31:44	63	1.000	A BB	64051.	40.000 NG/UL	0.68
64	149	1809	30:09	63	0.950	A BB	104320.	80.000 NG	1.35
65	228	1901	31:41	63	0.998	A BV	132512.	80.000 NG	1.35
66	228	1909	31:49	63	1.003	A VB	91112.	80.000 NG	1.35

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
67	252	1902	31:42	63	0.999	A BB	40743.	80.000 NG	1.35
68	149	1919	31:59	63	1.008	A BB	140652.	80.000 NG	1.35
69	244	1703	28:23	63	0.894	A BB	115309.	80.000 NG*B3	1.35
70	264	2213	36:53	70	1.000	A BB	51458.	40.000 NG/UL	0.68
71	149	2031	33:51	70	0.918	A BB	226991.	80.000 NG	1.35
72	252	2116	35:16	70	0.956	A BV	124381.	80.000 NG	1.35
73	252	2122	35:22	70	0.959	A VB	96333.	80.000 NG	1.35
74	252	2199	36:39	70	0.994	A BB	108866.	80.000 NG	1.35
75	276	2579	42:59	70	1.165	A BV	93014.	80.000 NG	1.35
76	278	2589	43:09	70	1.170	A BB	84260.	80.000 NG	1.35
77	276	2691	44:51	70	1.216	A BB	91596.	80.000 NG	1.35

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	20:35	1.00	1.122	1.00	80.00	80.00	1.026	1.026	1.00
52	21:41	1.00	1.182	1.00	80.00	80.00	0.470	0.470	1.00
53	22:06	1.00	1.204	1.00	80.00	80.00	0.553	0.553	1.00
54	16:15	1.00	0.886	1.00	80.00	80.00	1.257	1.257	1.00
55	23:06	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
56	22:43	1.00	0.983	1.00	80.00	80.00	0.159	0.159	1.00
57	23:11	1.00	1.004	1.00	80.00	80.00	1.059	1.059	1.00
58	23:19	1.00	1.009	1.00	80.00	80.00	1.006	1.006	1.00
59	25:16	1.00	1.094	1.00	80.00	80.00	1.649	1.649	1.00
60	27:03	1.00	1.171	1.00	80.00	80.00	1.076	1.076	1.00
61	27:47	1.00	0.876	1.00	80.00	80.00	1.321	1.321	1.00
62	20:56	1.00	1.141	1.00	80.00	80.00	0.310	0.310	1.00
63	31:44	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
64	30:09	1.00	0.950	1.00	80.00	80.00	0.814	0.814	1.00
65	31:41	1.00	0.998	1.00	80.00	80.00	1.034	1.034	1.00
66	31:49	1.00	1.003	1.00	80.00	80.00	0.711	0.711	1.00
67	31:42	1.00	0.999	1.00	80.00	80.00	0.318	0.318	1.00
68	31:59	1.00	1.008	1.00	80.00	80.00	1.098	1.098	1.00
69	28:23	1.00	0.894	1.00	80.00	80.00	0.900	0.900	1.00
70	36:53	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
71	33:51	1.00	0.918	1.00	80.00	80.00	2.206	2.206	1.00
72	35:16	1.00	0.956	1.00	80.00	80.00	1.209	1.209	1.00
73	35:22	1.00	0.959	1.00	80.00	80.00	0.936	0.936	1.00
74	36:39	1.00	0.994	1.00	80.00	80.00	1.058	1.058	1.00
75	42:59	1.00	1.165	1.00	80.00	80.00	0.904	0.904	1.00
76	43:09	1.00	1.170	1.00	80.00	80.00	0.819	0.819	1.00
77	44:51	1.00	1.216	1.00	80.00	80.00	0.890	0.890	1.00

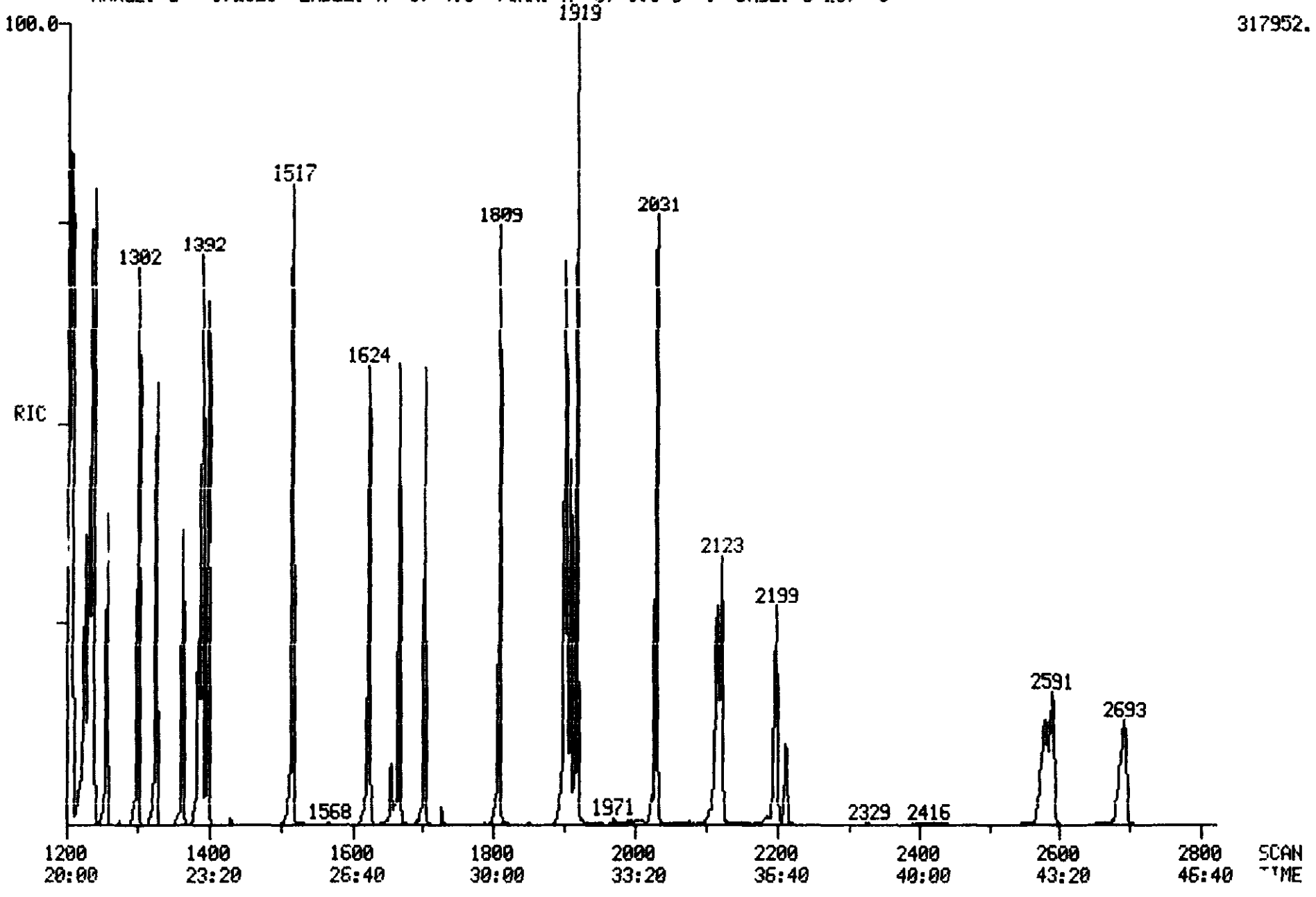
RIC DATA: T2571 #1 SCANS 250 TO 1200
05/14/90 19:50:00 CALI: T2571 #2
SAMPLE: CLP,,,SSTD120,,,22660,B,IC120,,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30208C/MIN
RANGE: G 1,2820 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

100286



RIC DATA: T2571 #1 SCANS 1200 TO 2820
05/14/90 19:50:00 CALI: T2571 #2
SAMPLE: CLP,,,SSTD120,,,22660,B,IC120,,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
RANGE: C 1,2820 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

100287



Quantitation Report File: T2571

Data: T2571.TI
05/14/90 19:50:00
Sample: CLP,,,SSTD120,,,22660,B,IC120,,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: ---

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	C330 2-CHLOROPHENOL
3	C315 PHENOL
4	C325 BIS (2-CHLOROETHYL) ETHER
5	C335 1,3-DICHLOROBENZENE
6	C340 1,4-DICHLOROBENZENE
7	C350 1,2-DICHLOROBENZENE
8	C345 BENZYL ALCOHOL
9	C360 BIS (2-CHLOROISOPROPYL) ETHER
10	C355 2-METHYLPHENOL
11	C375 HEXACHLOROETHANE
12	C365 4-METHYLPHENOL
13	C370 N-NITROSO-DI-N-PROPYLAMINE
14	CS50 2-FLUOROPHENOL**ACID SURR.**
15	CS45 PHENOL-D5**ACID SURR.**
16	CI40 NAPHTHALENE-D8**INT. STD.#2**
17	C410 NITROBENZENE
18	C415 ISOPHORONE
19	C420 2-NITROPHENOL
20	C425 2,4-DIMETHYLPHENOL
21	C435 BIS (2-CHLOROETHOXY) METHANE
22	C440 2,4-DICHLOROPHENOL
23	C445 1,2,4-TRICHLOROBENZENE
24	C450 NAPHTHALENE
25	C430 BENZOIC ACID
26	C455 4-CHLOROANILINE
27	C460 HEXACHLOROBUTADIENE
28	C465 4-CHLORO-3-METHYLPHENOL
29	C470 2-METHYLNAPHTHALENE
30	CS20 NITROBENZENE-D5**BN SURR.**
31	CI50 ACENAPHTHENE-D10**INT. STD.#3**
32	C510 HEXACHLOROCYCLOPENTADIENE
33	C515 2,4,6-TRICHLOROPHENOL
34	C520 2,4,5-TRICHLOROPHENOL
35	C525 2-CHLORONAPHTHALENE
36	C530 2-NITROANILINE
37	C540 ACENAPHTHYLENE
38	C535 DIMETHYL PHTHALATE
39	C544 2,6-DINITROTOLUENE
40	C550 ACENAPHTHENE
41	C545 3-NITROANILINE
42	C555 2,4-DINITROPHENOL
43	C565 DIBENZOFURAN
44	C560 4-NITROPHENOL
45	C570 2,4-DINITROTOLUENE
46	C590 FLUORENE
47	C585 4-CHLOROPHENYL-PHENYLETHER

No	Name
48	C580 DIETHYLPHTHALATE
49	C595 4-NITROANILINE
50	C610 4,6-DINITRO-2-METHYLPHENOL

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	152	548	9:08	1	1.000	A BB	17383.	40.000	NG/UL	0.46
2	128	520	8:40	1	0.949	A BB	63449.	120.000	NG.	1.37
3	94	504	8:24	1	0.920	A BB	96354.	120.000	NG.	1.37
4	93	517	8:37	1	0.943	A VB	81538.	120.000	NG	1.37
5	146	542	9:02	1	0.989	A BB	73469.	120.000	NG	1.37
6	146	551	9:11	1	1.005	A BB	76936.	120.000	NG.	1.37
7	146	581	9:41	1	1.060	A BB	71388.	120.000	NG	1.37
8	108	578	9:38	1	1.055	A BB	47802.	120.000	NG	1.37
9	45	603	10:03	1	1.100	A BB	193597.	120.000	NG	1.37
10	108	598	9:58	1	1.091	A BB	67373.	120.000	NG	1.37
11	117	630	10:30	1	1.150	A BB	42734.	120.000	NG	1.37
12	108	624	10:24	1	1.139	A BB	70923.	120.000	NG	1.37
13	70	629	10:29	1	1.148	A BB	92744.	120.000	NG.	1.37
14	112	366	6:06	1	0.668	A BB	60406.	120.000	NG*A1	1.37
15	99	502	8:22	1	0.916	A BB	83036.	120.000	NG*A2	1.37
16	136	769	12:49	16	1.000	A BB	55552.	40.000	NG/UL	0.46
17	77	652	10:52	16	0.848	A BB	126325.	120.000	NG	1.37
18	82	692	11:32	16	0.900	A BB	217390.	120.000	NG	1.37
19	139	706	11:46	16	0.918	A BB	41393.	120.000	NG	1.37
20	107	716	11:56	16	0.931	A BB	91263.	120.000	NG	1.37
21	93	735	12:15	16	0.956	A BB	121459.	120.000	NG	1.37
22	162	747	12:27	16	0.971	A BB	63349.	120.000	NG	1.37
23	180	761	12:41	16	0.990	A BB	66943.	120.000	NG.	1.37
24	128	773	12:53	16	1.005	A BB	210869.	120.000	NG	1.37
25	122	744	12:24	16	0.967	A BB	31434.	120.000	NG	1.37
26	127	791	13:11	16	1.029	A BB	96897.	120.000	NG	1.37
27	225	804	13:24	16	1.046	A BB	43399.	120.000	NG	1.37
28	107	881	14:41	16	1.146	A BB	91248.	120.000	NG.	1.37
29	142	900	15:00	16	1.170	A BB	130566.	120.000	NG	1.37
30	82	649	10:49	16	0.844	A BB	121065.	120.000	NG*B1	1.37
31	164	1102	18:22	31	1.000	A BB	39921.	40.000	NG/UL	0.46
32	237	942	15:42	31	0.855	A BB	53150.	120.000	NG	1.37
33	196	961	16:01	31	0.872	A BV	51235.	120.000	NG	1.37
34	196	967	16:07	31	0.877	A VB	47415.	120.000	NG	1.37
35	162	993	16:33	31	0.901	A BB	137962.	120.000	NG	1.37
36	65	1025	17:05	31	0.930	A BB	105581.	120.000	NG	1.37
37	152	1073	17:53	31	0.974	A BB	228235.	120.000	NG	1.37
38	163	1067	17:47	31	0.968	A BB	179144.	120.000	NG	1.37
39	165	1082	18:02	31	0.982	A VB	45401.	120.000	NG	1.37
40	153	1110	18:30	31	1.007	A BB	140845.	120.000	NG.	1.37
41	138	1106	18:26	31	1.004	A BB	53153.	120.000	NG	1.37
42	184	1124	18:44	31	1.020	A BB	29890.	120.000	NG	1.37
43	168	1140	19:00	31	1.034	A BB	200762.	120.000	NG	1.37
44	109	1140	19:00	31	1.034	A BB	40911.	120.000	NG.	1.37
45	165	1155	19:15	31	1.048	A BB	61185.	120.000	NG.	1.37
46	166	1206	20:06	31	1.094	A BB	158326.	120.000	NG	1.37
47	204	1209	20:09	31	1.097	A BB	81925.	120.000	NG	1.37
48	149	1204	20:04	31	1.093	A BB	210613.	120.000	NG	1.37
49	138	1227	20:27	31	1.113	A BV	43477.	120.000	NG	1.37
50	198	1232	20:32	31	1.118	A BB	35896.	120.000	NG	1.37

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	9:08	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	8:40	1.00	0.949	1.00	120.00	120.00	1.217	1.217	1.00
3	8:24	1.00	0.920	1.00	120.00	120.00	1.848	1 848	1.00
4	8:37	1.00	0.943	1.00	120.00	120.00	1.564	1.564	1.00
5	9:02	1.00	0.989	1.00	120.00	120.00	1.409	1.409	1.00
6	9:11	1.00	1.005	1.00	120.00	120.00	1.475	1.475	1.00
7	9:41	1.00	1.060	1.00	120.00	120.00	1.369	1.369	1.00
8	9:38	1.00	1.055	1.00	120.00	120.00	0.917	0.917	1.00
9	10:03	1.00	1.100	1.00	120.00	120.00	3.712	3.712	1.00
10	9:58	1.00	1.091	1.00	120.00	120.00	1.292	1.292	1.00
11	10:30	1.00	1.150	1.00	120.00	120.00	0.819	0.819	1.00
12	10:24	1.00	1.139	1.00	120.00	120.00	1.360	1.360	1.00
13	10:29	1.00	1.148	1.00	120.00	120.00	1.778	1.778	1.00
14	6:06	1.00	0.668	1.00	120.00	120.00	1.158	1.158	1.00
15	8:22	1.00	0.916	1.00	120.00	120.00	1.592	1.592	1.00
16	12:49	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
17	10:52	1.00	0.848	1.00	120.00	120.00	0.758	0.758	1.00
18	11:32	1.00	0.900	1.00	120.00	120.00	1.304	1.304	1.00
19	11:46	1.00	0.918	1.00	120.00	120.00	0.248	0.248	1.00
20	11:56	1.00	0.931	1.00	120.00	120.00	0.548	0.548	1.00
21	12:15	1.00	0.956	1.00	120.00	120.00	0.729	0.729	1.00
22	12:27	1.00	0.971	1.00	120.00	120.00	0.380	0.380	1.00
23	12:41	1.00	0.990	1.00	120.00	120.00	0.402	0.402	1.00
24	12:53	1.00	1.005	1.00	120.00	120.00	1.265	1.265	1.00
25	12:24	1.00	0.967	1.00	120.00	120.00	0.189	0.189	1.00
26	13:11	1.00	1.029	1.00	120.00	120.00	0.581	0.581	1.00
27	13:24	1.00	1.046	1.00	120.00	120.00	0.260	0.260	1.00
28	14:41	1.00	1.146	1.00	120.00	120.00	0.548	0.548	1.00
29	15:00	1.00	1.170	1.00	120.00	120.00	0.783	0.783	1.00
30	10:49	1.00	0.844	1.00	120.00	120.00	0.726	0.726	1.00
31	18:22	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
32	15:42	1.00	0.855	1.00	120.00	120.00	0.444	0.444	1.00
33	16:01	1.00	0.872	1.00	120.00	120.00	0.428	0.428	1.00
34	16:07	1.00	0.877	1.00	120.00	120.00	0.396	0.396	1.00
35	16:33	1.00	0.901	1.00	120.00	120.00	1.152	1.152	1.00
36	17:05	1.00	0.930	1.00	120.00	120.00	0.882	0.882	1.00
37	17:53	1.00	0.974	1.00	120.00	120.00	1.906	1.906	1.00
38	17:47	1.00	0.968	1.00	120.00	120.00	1.496	1.496	1.00
39	18:02	1.00	0.982	1.00	120.00	120.00	0.379	0.379	1.00
40	18:30	1.00	1.007	1.00	120.00	120.00	1.176	1.176	1.00
41	18:26	1.00	1.004	1.00	120.00	120.00	0.444	0.444	1.00
42	18:44	1.00	1.020	1.00	120.00	120.00	0.250	0.250	1.00
43	19:00	1.00	1.034	1.00	120.00	120.00	1.676	1.676	1.00
44	19:00	1.00	1.034	1.00	120.00	120.00	0.342	0.342	1.00
45	19:15	1.00	1.048	1.00	120.00	120.00	0.511	0.511	1.00
46	20:06	1.00	1.094	1.00	120.00	120.00	1.322	1.322	1.00
47	20:09	1.00	1.097	1.00	120.00	120.00	0.684	0.684	1.00
48	20:04	1.00	1.093	1.00	120.00	120.00	1.759	1.759	1.00
49	20:27	1.00	1.113	1.00	120.00	120.00	0.363	0.363	1.00
50	20:32	1.00	1.118	1.00	120.00	120.00	0.300	0.300	1.00

Quantitation Report File: T2571

Data: T2571.TI
05/14/90 19:50:00
Sample: CLP,,,SSTD120,,,22660,B,IC120,,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: ---

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

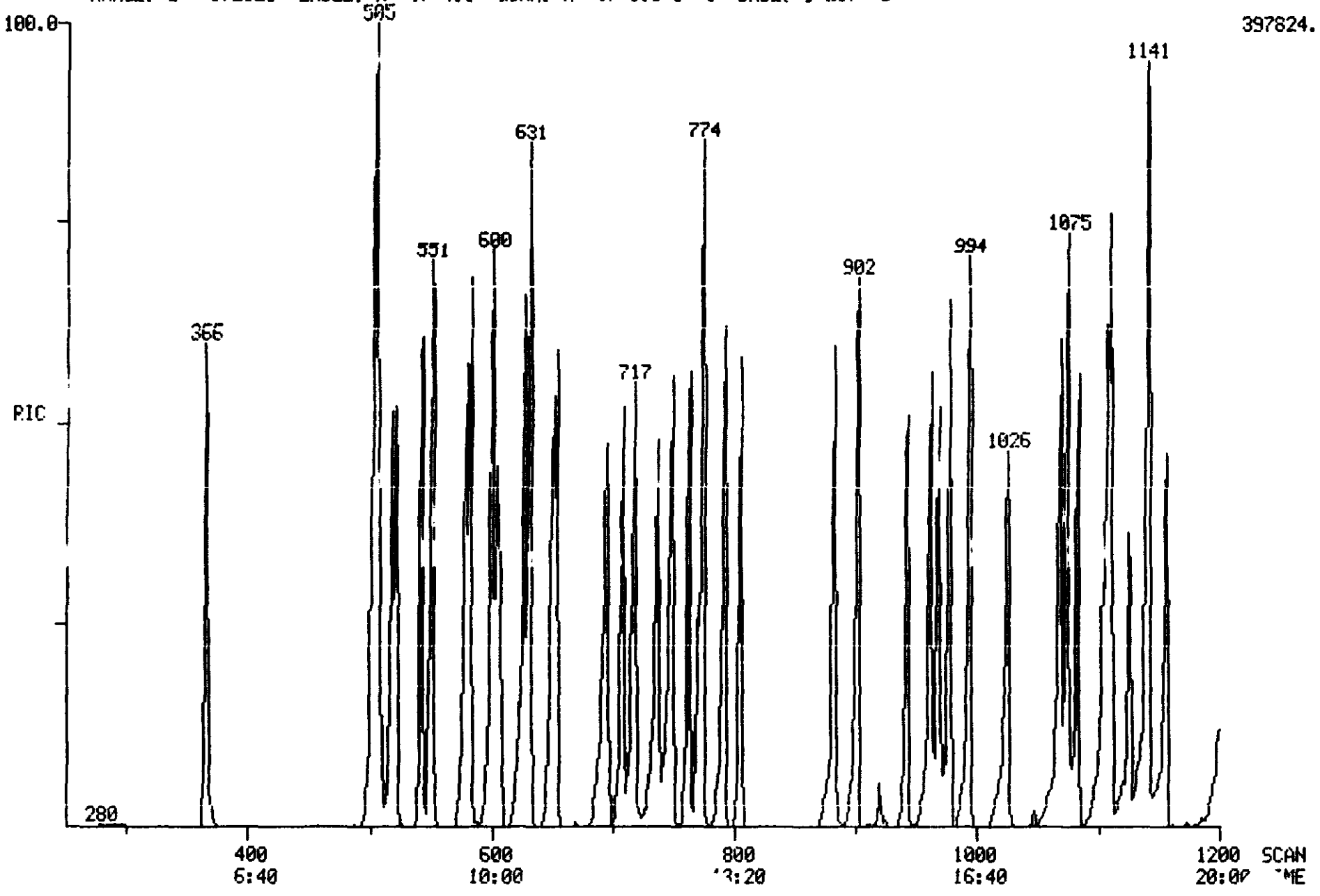
No	Name
51	C615 N-NITROSODIPHENYLAMINE
52	C625 4-BROMOPHENYL-PHENYLETHER
53	C630 HEXACHLOROBENZENE
54	CS25 2-FLUOROBIPHENYL**BN SURR.**
55	CI60 PHENANTHRENE-D10**INT. STD.#4**
56	C635 PENTACHLOROPHENOL
57	C640 PHENANTHRENE
58	C645 ANTHRACENE
59	C650 DI-N-BUTYLPHTHALATE
60	C655 FLUORANTHENE
61	C715 PYRENE
62	CS55 2,4,6,-TRIBROMOPHENOL**ACID SURR.**
63	CI70 CHRYSENE-D12**INT. STD.#5**
64	C720 BUTYLBENZYLPHTHALATE
65	C730 BENZO(A)ANTHRACENE
66	C740 CHRYSENE
67	C725 3,3'-DICHLOROBENZIDINE
68	C741 BIS(2-ETHYLHEXYL)PHTHALATE
69	CS30 P-TERPHENYL-D14**BN SURR.**
70	CI75 PERYLENE-D12**INT. STD.#6**
71	C760 DI-N-OCTYL PHTHALATE
72	C765 BENZO(B)FLUORANTHENE
73	C770 BENZO(K)FLUORANTHENE
74	C775 BENZO(A)PYRENE
75	C780 INDENO(1,2,3-CD)PYRENE
76	C785 DIBENZ(A,H)ANTHRACENE
77	C790 BENZO(G,H,I)PERYLENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
51	169	1236	20:36	31	1.122	A BB	117438.	120.000	NG	1.37
52	248	1302	21:42	31	1.181	A BB	54025.	120.000	NG	1.37
53	284	1327	22:07	31	1.204	A BB	62867.	120.000	NG	1.37
54	172	976	16:16	31	0.886	A BB	147459.	120.000	NG*B2	1.37
55	188	1386	23:06	55	1.000	A BB	77945.	40.000	NG/UL	0.46
56	266	1364	22:44	55	0.984	A BB	36699.	120.000	NG.	1.37
57	178	1392	23:12	55	1.004	A BV	244789.	120.000	NG	1.37
58	178	1400	23:20	55	1.010	A VB	213274.	120.000	NG	1.37
59	149	1517	25:17	55	1.095	A BB	345461.	120.000	NG	1.37
60	202	1624	27:04	55	1.172	A BB	225257.	120.000	NG	1.37
61	202	1668	27:48	63	0.876	A BB	222089.	120.000	NG.	1.37
62	330	1257	20:57	31	1.141	A BB	34299.	120.000	NG*A3	1.37
63	240	1904	31:44	63	1.000	A VB	58996.	40.000	NG/UL	0.46
64	149	1809	30:09	63	0.950	A BB	147644.	120.000	NG	1.37
65	228	1901	31:41	63	0.998	A BV	191625.	120.000	NG	1.37
66	228	1909	31:49	63	1.003	A VB	125987.	120.000	NG	1.37

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
67	252	1902	31:42	63	0.999	A BB	58908.	120.000	NG	1.37
68	149	1918	31:58	63	1.007	A BB	193507.	120.000	NG	1.37
69	244	1703	28:23	63	0.894	A BB	155700.	120.000	NG*B3	1.37
70	264	2213	36:53	70	1.000	A VB	48058.	40.000	NG/UL	0.46
71	149	2031	33:51	70	0.918	A BB	317713.	120.000	NG	1.37
72	252	2116	35:16	70	0.956	A BV	173161.	120.000	NG	1.37
73	252	2123	35:23	70	0.959	A VB	137612.	120.000	NG	1.37
74	252	2199	36:39	70	0.994	A VB	147877.	120.000	NG	1.37
75	276	2580	43:00	70	1.166	A BV	139361.	120.000	NG	1.37
76	278	2591	43:11	70	1.171	A BB	129607.	120.000	NG	1.37
77	276	2693	44:53	70	1.217	A BB	139583.	120.000	NG	1.37

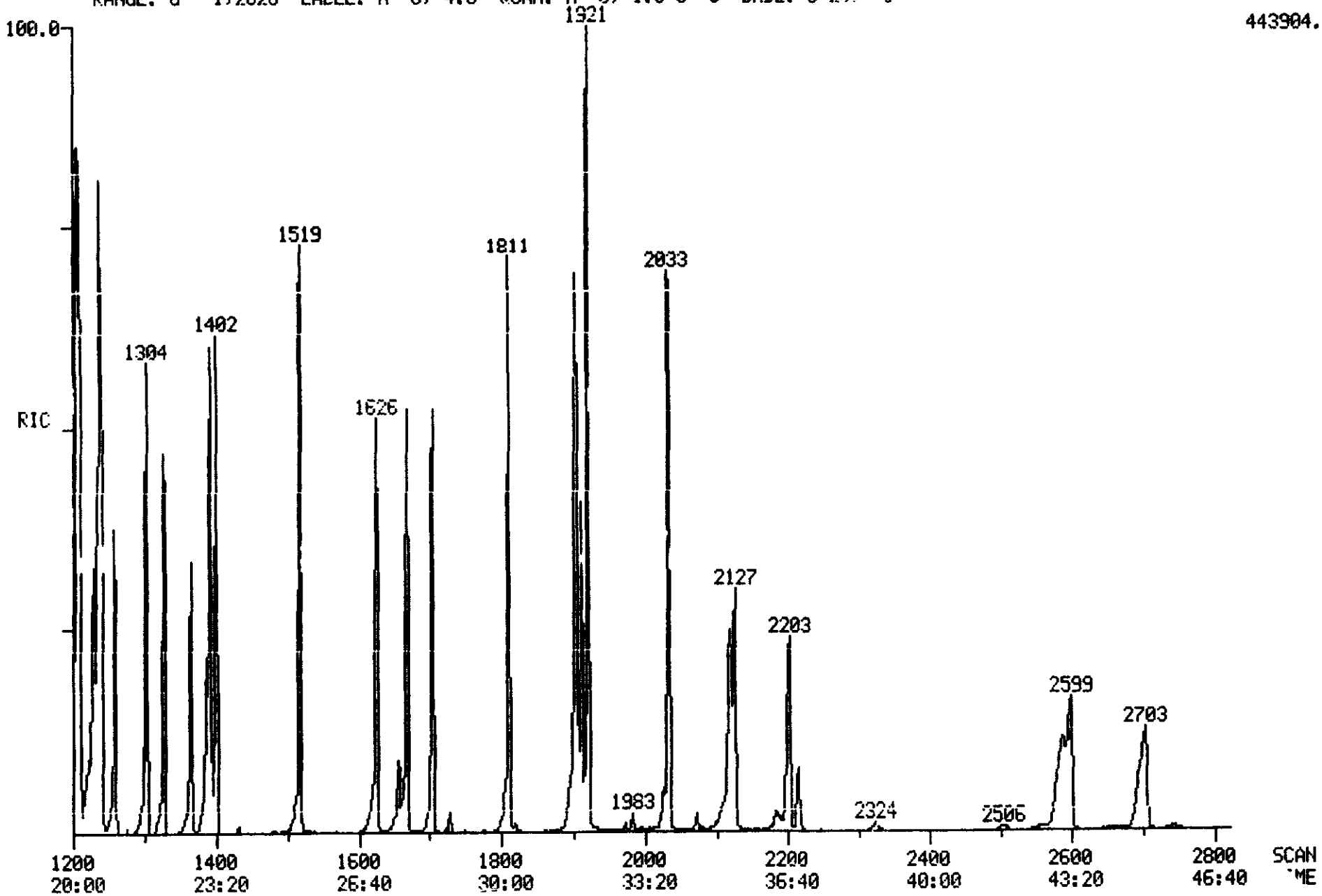
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	20:36	1.00	1.122	1.00	120.00	120.00	0.981	0.981	1.00
52	21:42	1.00	1.181	1.00	120.00	120.00	0.451	0.451	1.00
53	22:07	1.00	1.204	1.00	120.00	120.00	0.525	0.525	1.00
54	16:16	1.00	0.886	1.00	120.00	120.00	1.231	1.231	1.00
55	23:06	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
56	22:44	1.00	0.984	1.00	120.00	120.00	0.157	0.157	1.00
57	23:12	1.00	1.004	1.00	120.00	120.00	1.047	1.047	1.00
58	23:20	1.00	1.010	1.00	120.00	120.00	0.912	0.912	1.00
59	25:17	1.00	1.095	1.00	120.00	120.00	1.477	1.477	1.00
60	27:04	1.00	1.172	1.00	120.00	120.00	0.963	0.963	1.00
61	27:48	1.00	0.876	1.00	120.00	120.00	1.255	1.255	1.00
62	20:57	1.00	1.141	1.00	120.00	120.00	0.286	0.286	1.00
63	31:44	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
64	30:09	1.00	0.950	1.00	120.00	120.00	0.834	0.834	1.00
65	31:41	1.00	0.998	1.00	120.00	120.00	1.083	1.083	1.00
66	31:49	1.00	1.003	1.00	120.00	120.00	0.712	0.712	1.00
67	31:42	1.00	0.999	1.00	120.00	120.00	0.333	0.333	1.00
68	31:58	1.00	1.007	1.00	120.00	120.00	1.093	1.093	1.00
69	28:23	1.00	0.894	1.00	120.00	120.00	0.880	0.880	1.00
70	36:53	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
71	33:51	1.00	0.918	1.00	120.00	120.00	2.204	2.204	1.00
72	35:16	1.00	0.956	1.00	120.00	120.00	1.201	1.201	1.00
73	35:23	1.00	0.959	1.00	120.00	120.00	0.954	0.954	1.00
74	36:39	1.00	0.994	1.00	120.00	120.00	1.026	1.026	1.00
75	43:00	1.00	1.166	1.00	120.00	120.00	0.967	0.967	1.00
76	43:11	1.00	1.171	1.00	120.00	120.00	0.899	0.899	1.00
77	44:53	1.00	1.217	1.00	120.00	120.00	0.968	0.968	1.00

RIC DATA: T2570 #1 SCANS 250 TO 1200
05/14/90 18:56:00 CALI: T2570 #2
SAMPLE. CLP,,,SSTD160,,,22659,B,IC160,,1UL
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30208C/MIN
RANGE: C 1,2820 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



100294

RIC DATA: T2570 #1 SCANS 1200 TO 2820
05/14/90 18:56:00 CALI: T2570 #2
SAMPLE: CLP,,,SSTD160,,,22659,B,IC160,,1UL
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30208C/MIN
RANGE: C 1,2820 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: T2570

Data: T2570.TI
05/14/90 18:56:00
Sample: CLP,,,SSTD160,,,22659,B,IC160,,1UL
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: --

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	C330 2-CHLOROPHENOL
3	C315 PHENOL
4	C325 BIS (2-CHLOROETHYL) ETHER
5	C335 1,3-DICHLOROBENZENE
6	C340 1,4-DICHLOROBENZENE
7	C350 1,2-DICHLOROBENZENE
8	C345 BENZYL ALCOHOL
9	C360 BIS (2-CHLOROISOPROPYL) ETHER
10	C355 2-METHYLPHENOL
11	C375 HEXACHLOROETHANE
12	C365 4-METHYLPHENOL
13	C370 N-NITROSO-DI-N-PROPYLAMINE
14	CS50 2-FLUOROPHENOL**ACID SURR.**
15	CS45 PHENOL-D5**ACID SURR.**
16	CI40 NAPHTHALENE-D8**INT. STD.#2**
17	C410 NITROBENZENE
18	C415 ISOPHORONE
19	C420 2-NITROPHENOL
20	C425 2,4-DIMETHYLPHENOL
21	C435 BIS (2-CHLOROETHOXY) METHANE
22	C440 2,4-DICHLOROPHENOL
23	C445 1,2,4-TRICHLOROBENZENE
24	C450 NAPHTHALENE
25	C430 BENZOIC ACID
26	C455 4-CHLOROANILINE
27	C460 HEXACHLOROBUTADIENE
28	C465 4-CHLORO-3-METHYLPHENOL
29	C470 2-METHYLNAPHTHALENE
30	CS20 NITROBENZENE-D5**BN SURR.**
31	CI50 ACENAPHTHENE-D10**INT. STD.#3**
32	C510 HEXACHLOROCYCLOPENTADIENE
33	C515 2,4,6-TRICHLOROPHENOL
34	C520 2,4,5-TRICHLOROPHENOL
35	C525 2-CHLORONAPHTHALENE
36	C530 2-NITROANILINE
37	C540 ACENAPHTHYLENE
38	C535 DIMETHYL PHTHALATE
39	C544 2,6-DINITROTOLUENE
40	C550 ACENAPHTHENE
41	C545 3-NITROANILINE
42	C555 2,4-DINITROPHENOL
43	C565 DIBENZOFURAN
44	C560 4-NITROPHENOL
45	C570 2,4-DINITROTOLUENE
46	C590 FLUORENE
47	C585 4-CHLOROPHENYL-PHENYLETHER

No	Name
48	C580 DIETHYLPHTHALATE
49	C595 4-NITROANILINE
50	C610 4,6-DINITRO-2-METHYLPHENOL

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	152	548	9:08	1	1.000	A BB	20282.	40.000	NG/UL	0.34
2	128	521	8:41	1	0.951	A BB	102825.	160.000	NG.	1.38
3	94	505	8:25	1	0.922	A BV	151079.	160.000	NG.	1.38
4	93	518	8:38	1	0.945	A VB	127377.	160.000	NG	1.38
5	146	542	9:02	1	0.989	A BV	115936.	160.000	NG	1.38
6	146	551	9:11	1	1.005	A VB	118346.	160.000	NG.	1.38
7	146	582	9:42	1	1.062	A BB	111135.	160.000	NG	1.38
8	108	579	9:39	1	1.057	A BB	75320.	160.000	NG	1.38
9	45	604	10:04	1	1.102	A BB	290105.	160.000	NG	1.38
10	108	600	10:00	1	1.095	A BB	105561.	160.000	NG	1.38
11	117	630	10:30	1	1.150	A BB	64706.	160.000	NG	1.38
12	108	626	10:26	1	1.142	A BB	112812.	160.000	NG	1.38
13	70	632	10:32	1	1.153	A BB	141991.	160.000	NG.	1.38
14	112	366	6:06	1	0.668	A BB	92303.	160.000	NG*A1	1.38
15	99	503	8:23	1	0.918	A BB	131614.	160.000	NG*A2	1.38
16	136	770	12:50	16	1.000	A BB	65796.	40.000	NG/UL	0.34
17	77	653	10:53	16	0.848	A BB	197046.	160.000	NG	1.38
18	82	694	11:34	16	0.901	A BB	347501.	160.000	NG	1.38
19	139	707	11:47	16	0.918	A BB	66477.	160.000	NG	1.38
20	107	717	11:57	16	0.931	A BB	147672.	160.000	NG	1.38
21	93	736	12:16	16	0.956	A BB	196639.	160.000	NG	1.38
22	162	748	12:28	16	0.971	A BB	99941.	160.000	NG	1.38
23	180	762	12:42	16	0.990	A BB	99439.	160.000	NG.	1.38
24	128	774	12:54	16	1.005	A BB	319615.	160.000	NG	1.38
25	122	748	12:28	16	0.971	A BB	41503.	160.000	NG	1.38
26	127	792	13:12	16	1.029	A BB	154504.	160.000	NG	1.38
27	225	805	13:25	16	1.045	A BB	61914.	160.000	NG	1.38
28	107	882	14:42	16	1.145	A BB	144217.	160.000	NG.	1.38
29	142	902	15:02	16	1.171	A BB	199678.	160.000	NG	1.38
30	82	650	10:50	16	0.844	A BB	186015.	160.000	NG*B1	1.38
31	164	1104	18:24	31	1.000	A BB	45409.	40.000	NG/UL	0.34
32	237	942	15:42	31	0.853	A BB	78981.	160.000	NG	1.38
33	196	962	16:02	31	0.871	A BV	78920.	160.000	NG	1.38
34	196	968	16:08	31	0.877	A VB	63954.	160.000	NG	1.38
35	162	994	16:34	31	0.900	A BB	206261.	160.000	NG	1.38
36	65	1026	17:06	31	0.929	A BB	160195.	160.000	NG	1.38
37	152	1075	17:55	31	0.974	A BB	342668.	160.000	NG	1.38
38	163	1069	17:49	31	0.968	A BB	259281.	160.000	NG	1.38
39	165	1083	18:03	31	0.981	A VB	65416.	160.000	NG	1.38
40	153	1111	18:31	31	1.006	A BB	206047.	160.000	NG.	1.38
41	138	1108	18:28	31	1.004	A BB	77777.	160.000	NG	1.38
42	184	1126	18:46	31	1.020	A BB	46771.	160.000	NG	1.38
43	168	1141	19:01	31	1.034	A BB	294406.	160.000	NG	1.38
44	109	1142	19:02	31	1.034	A BB	54793.	160.000	NG.	1.38
45	165	1157	19:17	31	1.048	A BB	88276.	160.000	NG.	1.38
46	166	1208	20:08	31	1.094	A BB	226882.	160.000	NG	1.38
47	204	1210	20:10	31	1.096	A BB	115497.	160.000	NG	1.38
48	149	1205	20:05	31	1.091	A BB	294808.	160.000	NG	1.38
49	138	1229	20:29	31	1.113	A BB	56864.	160.000	NG	1.38
50	198	1234	20:34	31	1.118	A VB	36326.	160.000	NG	1.38

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	9:08	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	8:41	1.00	0.951	1.00	160.00	160.00	1.267	1.267	1.00
3	8:25	1.00	0.922	1.00	160.00	160.00	1.862	1.862	1.00
4	8:38	1.00	0.945	1.00	160.00	160.00	1.570	1.570	1.00
5	9:02	1.00	0.989	1.00	160.00	160.00	1.429	1.429	1.00
6	9:11	1.00	1.005	1.00	160.00	160.00	1.459	1.459	1.00
7	9:42	1.00	1.062	1.00	160.00	160.00	1.370	1.370	1.00
8	9:39	1.00	1.057	1.00	160.00	160.00	0.928	0.928	1.00
9	10:04	1.00	1.102	1.00	160.00	160.00	3.576	3.576	1.00
10	10:00	1.00	1.095	1.00	160.00	160.00	1.301	1.301	1.00
11	10:30	1.00	1.150	1.00	160.00	160.00	0.798	0.798	1.00
12	10:26	1.00	1.142	1.00	160.00	160.00	1.391	1.391	1.00
13	10:32	1.00	1.153	1.00	160.00	160.00	1.750	1.750	1.00
14	6:06	1.00	0.668	1.00	160.00	160.00	1.138	1.138	1.00
15	8:23	1.00	0.918	1.00	160.00	160.00	1.622	1.622	1.00
16	12:50	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
17	10:53	1.00	0.848	1.00	160.00	160.00	0.749	0.749	1.00
18	11:34	1.00	0.901	1.00	160.00	160.00	1.320	1.320	1.00
19	11:47	1.00	0.918	1.00	160.00	160.00	0.253	0.253	1.00
20	11:57	1.00	0.931	1.00	160.00	160.00	0.561	0.561	1.00
21	12:16	1.00	0.956	1.00	160.00	160.00	0.747	0.747	1.00
22	12:28	1.00	0.971	1.00	160.00	160.00	0.380	0.380	1.00
23	12:42	1.00	0.990	1.00	160.00	160.00	0.378	0.378	1.00
24	12:54	1.00	1.005	1.00	160.00	160.00	1.214	1.214	1.00
25	12:28	1.00	0.971	1.00	160.00	160.00	0.158	0.158	1.00
26	13:12	1.00	1.029	1.00	160.00	160.00	0.587	0.587	1.00
27	13:25	1.00	1.045	1.00	160.00	160.00	0.235	0.235	1.00
28	14:42	1.00	1.145	1.00	160.00	160.00	0.548	0.548	1.00
29	15:02	1.00	1.171	1.00	160.00	160.00	0.759	0.759	1.00
30	10:50	1.00	0.844	1.00	160.00	160.00	0.707	0.707	1.00
31	18:24	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
32	15:42	1.00	0.853	1.00	160.00	160.00	0.435	0.435	1.00
33	16:02	1.00	0.871	1.00	160.00	160.00	0.434	0.434	1.00
34	16:08	1.00	0.877	1.00	160.00	160.00	0.352	0.352	1.00
35	16:34	1.00	0.900	1.00	160.00	160.00	1.136	1.136	1.00
36	17:06	1.00	0.929	1.00	160.00	160.00	0.882	0.882	1.00
37	17:55	1.00	0.974	1.00	160.00	160.00	1.887	1 887	1.00
38	17:49	1.00	0.968	1.00	160.00	160.00	1.427	1.427	1.00
39	18:03	1.00	0.981	1.00	160.00	160.00	0.360	0.360	1.00
40	18:31	1.00	1.006	1.00	160.00	160.00	1.134	1.134	1.00
41	18:28	1.00	1.004	1.00	160.00	160.00	0.428	0.428	1.00
42	18:46	1.00	1.020	1.00	160.00	160.00	0.257	0.257	1.00
43	19:01	1.00	1.034	1.00	160.00	160.00	1.621	1.621	1.00
44	19:02	1.00	1.034	1.00	160.00	160.00	0.302	0.302	1.00
45	19:17	1.00	1.048	1.00	160.00	160.00	0.486	0.486	1.00
46	20:08	1.00	1.094	1.00	160.00	160.00	1.249	1.249	1.00
47	20:10	1.00	1.096	1.00	160.00	160.00	0.636	0.636	1.00
48	20:05	1.00	1.091	1.00	160.00	160.00	1.623	1.623	1.00
49	20:29	1.00	1.113	1.00	160.00	160.00	0.313	0.313	1.00
50	20:34	1.00	1.118	1.00	160.00	160.00	0.200	0.200	1.00

Quantitation Report File: T2570

Data: T2570.TI
05/14/90 18:56:00
Sample: CLP,,,SSTD160,,,22659,B,IC160,,1UL
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: --

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

No	Name
51	C615 N-NITROSODIPHENYLAMINE
52	C625 4-BROMOPHENYL-PHENYLETHER
53	C630 HEXACHLOROBENZENE
54	CS25 2-FLUOROBIPHENYL**BN SURR.**
55	CI60 PHENANTHRENE-D10**INT. STD.#4**
56	C635 PENTACHLOROPHENOL
57	C640 PHENANTHRENE
58	C645 ANTHRACENE
59	C650 DI-N-BUTYLPHTHALATE
60	C655 FLUORANTHENE
61	C715 PYRENE
62	CS55 2,4,6,-TRIBROMOPHENOL**ACID SURR.**
63	CI70 CHRYSENE-D12**INT. STD.#5**
64	C720 BUTYLBENZYLPHTHALATE
65	C730 BENZO(A)ANTHRACENE
66	C740 CHRYSENE
67	C725 3,3'-DICHLOROBENZIDINE
68	C741 BIS(2-ETHYLHEXYL)PHTHALATE
69	CS30 P-TERPHENYL-D14**BN SURR.**
70	CI75 PERYLENE-D12**INT. STD.#6**
71	C760 DI-N-OCTYL PHTHALATE
72	C765 BENZO(B)FLUORANTHENE
73	C770 BENZO(K)FLUORANTHENE
74	C775 BENZO(A)PYRENE
75	C780 INDENO(1,2,3-CD)PYRENE
76	C785 DIBENZ(A,H)ANTHRACENE
77	C790 BENZO(G,H,I)PERYLENE

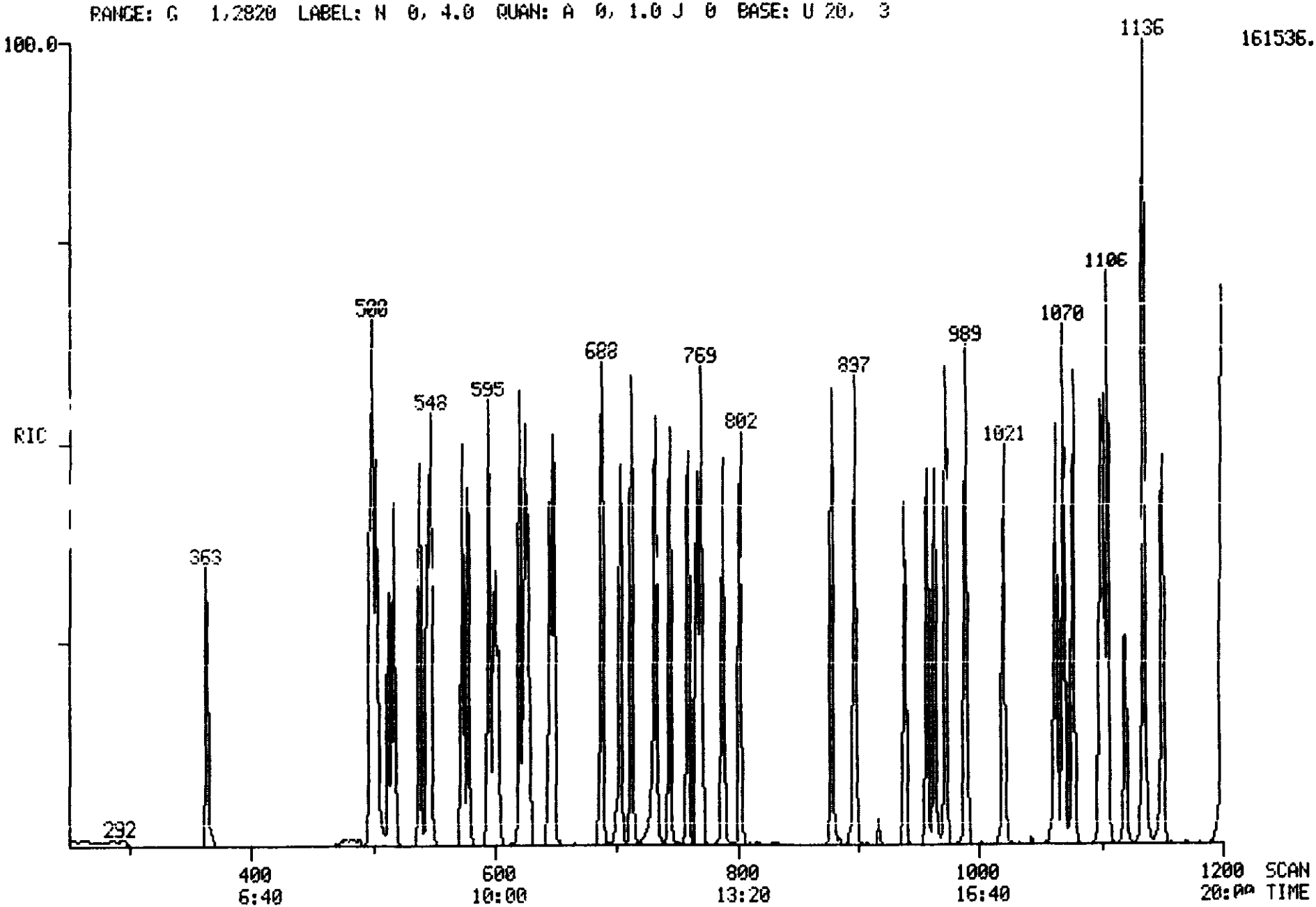
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	169	1238	20:38	31	1.121	A BB	167955.	160.000 NG	1.38
52	248	1303	21:43	31	1.180	A BB	78410.	160.000 NG	1.38
53	284	1328	22:08	31	1.203	A BB	89603.	160.000 NG	1.38
54	172	978	16:18	31	0.886	A BB	215882.	160.000 NG*B2	1.38
55	188	1388	23:08	55	1.000	A BB	85615.	40.000 NG/UL	0.34
56	266	1365	22:45	55	0.983	A BB	55455.	160.000 NG.	1.38
57	178	1393	23:13	55	1.004	A BV	340098.	160.000 NG	1.38
58	178	1402	23:22	55	1.010	A VB	277988.	160.000 NG	1.38
59	149	1519	25:19	55	1.094	A BB	459053.	160.000 NG	1.38
60	202	1626	27:06	55	1.171	A BB	300116.	160.000 NG	1.38
61	202	1670	27:50	63	0.876	A BB	303471.	160.000 NG.	1.38
62	330	1259	20:59	31	1.140	A BB	49198.	160.000 NG*A3	1.38
63	240	1906	31:46	63	1.000	A VB	60818.	40.000 NG/UL	0.34
64	149	1811	30:11	63	0.950	A BB	205802.	160.000 NG	1.38
65	228	1903	31:43	63	0.998	A BV	279375.	160.000 NG	1.38
66	228	1911	31:51	63	1.003	A VB	162429.	160.000 NG	1.38

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
67	252	1904	31:44	63	0.999	A BB	77082.	160.000	NG	1.38
68	149	1921	32:01	63	1.008	A VB	281407.	160.000	NG	1.38
69	244	1705	28:25	63	0.895	A BB	212033.	160.000	NG*B3	1.38
70	264	2216	36:56	70	1.000	A VB	51864.	40.000	NG/UL	0.34
71	149	2033	33:53	70	0.917	A VB	388751.	160.000	NG	1.38
72	252	2120	35:20	70	0.957	A BV	241287.	160.000	NG	1.38
73	252	2126	35:26	70	0.959	A VB	187902.	160.000	NG	1.38
74	252	2203	36:43	70	0.994	A VB	202203.	160.000	NG	1.38
75	276	2587	43:07	70	1.167	A BV	199186.	160.000	NG	1.38
76	278	2599	43:19	70	1.173	A BB	185883.	160.000	NG	1.38
77	276	2703	45:03	70	1.220	A BB	195194.	160.000	NG	1.38

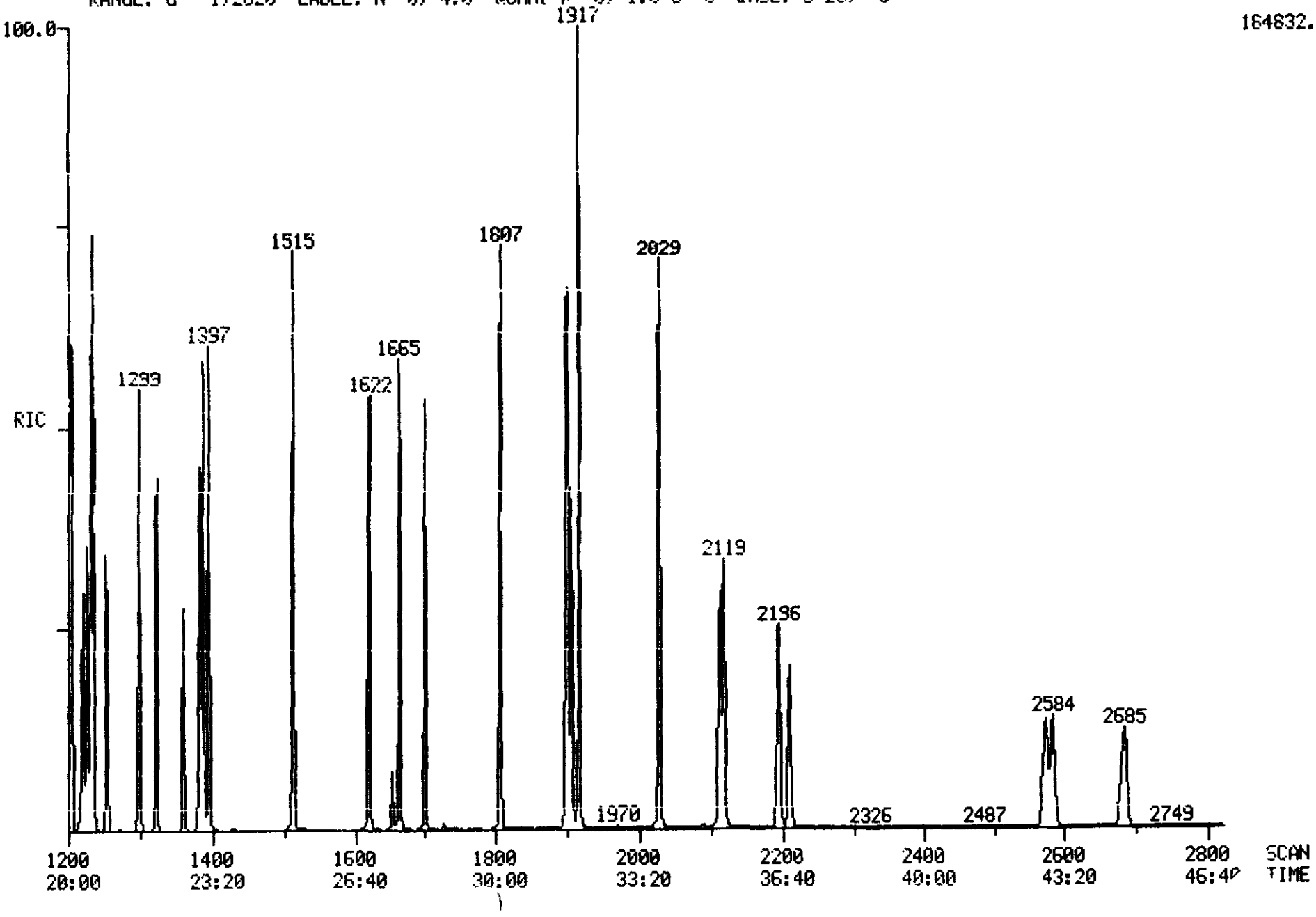
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	20:38	1.00	1.121	1.00	160.00	160.00	0.925	0.925	1.00
52	21:43	1.00	1.180	1.00	160.00	160.00	0.432	0.432	1.00
53	22:08	1.00	1.203	1.00	160.00	160.00	0.493	0.493	1.00
54	16:18	1.00	0.886	1.00	160.00	160.00	1.189	1.189	1.00
55	23:08	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
56	22:45	1.00	0.983	1.00	160.00	160.00	0.162	0.162	1.00
57	23:13	1.00	1.004	1.00	160.00	160.00	0.993	0.993	1.00
58	23:22	1.00	1.010	1.00	160.00	160.00	0.812	0.812	1.00
59	25:19	1.00	1.094	1.00	160.00	160.00	1.340	1.340	1.00
60	27:06	1.00	1.171	1.00	160.00	160.00	0.876	0.876	1.00
61	27:50	1.00	0.876	1.00	160.00	160.00	1.247	1.247	1.00
62	20:59	1.00	1.140	1.00	160.00	160.00	0.271	0.271	1.00
63	31:46	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
64	30:11	1.00	0.950	1.00	160.00	160.00	0.846	0.846	1.00
65	31:43	1.00	0.998	1.00	160.00	160.00	1.148	1.148	1.00
66	31:51	1.00	1.003	1.00	160.00	160.00	0.668	0.668	1.00
67	31:44	1.00	0.999	1.00	160.00	160.00	0.317	0.317	1.00
68	32:01	1.00	1.008	1.00	160.00	160.00	1.157	1.157	1.00
69	28:25	1.00	0.895	1.00	160.00	160.00	0.872	0.872	1.00
70	36:56	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
71	33:53	1.00	0.917	1.00	160.00	160.00	1.874	1.874	1.00
72	35:20	1.00	0.957	1.00	160.00	160.00	1.163	1.163	1.00
73	35:26	1.00	0.959	1.00	160.00	160.00	0.906	0.906	1.00
74	36:43	1.00	0.994	1.00	160.00	160.00	0.975	0.975	1.00
75	43:07	1.00	1.167	1.00	160.00	160.00	0.960	0.960	1.00
76	43:19	1.00	1.173	1.00	160.00	160.00	0.896	0.896	1.00
77	45:03	1.00	1.220	1.00	160.00	160.00	0.941	0.941	1.00

RIC DATA: T2583 #1 SCANS 250 TO 1200
05/15/90 9:42:00 CALI: T2583 #2
SAMPLE: CLP,,,SSTD 50,,,22659,B,CC-050,,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
RANGE: G 1,2820 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

100300



RIC DATA: T2583 #1 SCANS 1200 TO 2820
05/15/90 9:42:00 CALI: T2563 #2
SAMPLE: CLP,,,SSTD 50,,,22658,B,CC-050,,1UL,
CONDS.: INST T COLUMN=PESTEK 30M RTX-5 4MIN@38C TO 30208C/MIN
RANGE: C 1,2820 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



000301

Quantitation Report File: T2583

Data: T2583.TI
05/15/90 9:42:00
Sample: CLP,,,SSTD 50,,,22658,B,CC-050,,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: SJD Acct. No.: -

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	C330 2-CHLOROPHENOL
3	C315 PHENOL
4	C325 BIS (2-CHLOROETHYL) ETHER
5	C335 1,3-DICHLOROBENZENE
6	C340 1,4-DICHLOROBENZENE
7	C350 1,2-DICHLOROBENZENE
8	C345 BENZYL ALCOHOL
9	C360 BIS (2-CHLOROISOPROPYL) ETHER
10	C355 2-METHYLPHENOL
11	C375 HEXACHLOROETHANE
12	C365 4-METHYLPHENOL
13	C370 N-NITROSO-DI-N-PROPYLAMINE
14	CS50 2-FLUOROPHENOL**ACID SURR.**
15	CS45 PHENOL-D5**ACID SURR.**
16	CI40 NAPHTHALENE-D8**INT. STD.#2**
17	C410 NITROBENZENE
18	C415 ISOPHORONE
19	C420 2-NITROPHENOL
20	C425 2,4-DIMETHYLPHENOL
21	C435 BIS (2-CHLOROETHOXY) METHANE
22	C440 2,4-DICHLOROPHENOL
23	C445 1,2,4-TRICHLOROBENZENE
24	C450 NAPHTHALENE
25	C430 BENZOIC ACID
26	C455 4-CHLOROANILINE
27	C460 HEXACHLOROBUTADIENE
28	C465 4-CHLORO-3-METHYLPHENOL
29	C470 2-METHYLNAPHTHALENE
30	CS20 NITROBENZENE-D5**BN SURR.**
31	CI50 ACENAPHTHENE-D10**INT. STD.#3**
32	C510 HEXACHLOROCYCLOPENTADIENE
33	C515 2,4,6-TRICHLOROPHENOL
34	C520 2,4,5-TRICHLOROPHENOL
35	C525 2-CHLORONAPHTHALENE
36	C530 2-NITROANILINE
37	C540 ACENAPHTHYLENE
38	C535 DIMETHYL PHTHALATE
39	C544 2,6-DINITROTOLUENE
40	C550 ACENAPHTHENE
41	C545 3-NITROANILINE
42	C555 2,4-DINITROPHENOL
43	C565 DIBENZOFURAN
44	C560 4-NITROPHENOL
45	C570 2,4-DINITROTOLUENE
46	C590 FLUORENE
47	C585 4-CHLOROPHENYL-PHENYLETHER

T2583

No	Name
48	C580 DIETHYLPHTHALATE
49	C595 4-NITROANILINE
50	C610 4,6-DINITRO-2-METHYLPHENOL

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	152	545	9:05	1	1.000	A BB	15588.	40.000	NG/UL	1.06
2	128	517	8:37	1	0.949	A BB	24772.	50.000	NG.	1.32
3	94	500	8:20	1	0.917	A BB	34088.	50.000	NG.	1.32
4	93	513	8:33	1	0.941	A VB	31270.	50.000	NG	1.32
5	146	539	8:59	1	0.989	A BB	28927.	50.000	NG	1.32
6	146	548	9:08	1	1.006	A BB	29853.	50.000	NG.	1.32
7	146	578	9:38	1	1.061	A BB	28229.	50.000	NG	1.32
8	108	574	9:34	1	1.053	A BB	17184.	50.000	NG	1.32
9	45	600	10:00	1	1.101	A BB	77815.	50.000	NG	1.32
10	108	595	9:55	1	1.092	A BB	25765.	50.000	NG	1.32
11	117	627	10:27	1	1.150	A BB	18430.	50.000	NG	1.32
12	108	620	10:20	1	1.138	A BB	27149.	50.000	NG	1.32
13	70	625	10:25	1	1.147	A BB	35204.	50.000	NG.	1.32
14	112	363	6:03	1	0.666	A BB	20583.	50.000	NG*A1	1.32
15	99	498	8:18	1	0.914	A BB	30025.	50.000	NG*A2	1.32
16	136	766	12:46	16	1.000	A BB	52356.	40.000	NG/UL	1.06
17	77	648	10:48	16	0.846	A BB	51377.	50.000	NG	1.32
18	82	688	11:28	16	0.898	A BB	87273.	50.000	NG	1.32
19	139	703	11:43	16	0.918	A BB	15806.	50.000	NG	1.32
20	107	712	11:52	16	0.930	A BB	36610.	50.000	NG	1.32
21	93	732	12:12	16	0.956	A BB	49188.	50.000	NG	1.32
22	162	744	12:24	16	0.971	A BB	25635.	50.000	NG	1.32
23	180	758	12:38	16	0.990	A BB	28380.	50.000	NG.	1.32
24	128	769	12:49	16	1.004	A BB	87600.	50.000	NG	1.32
25	122	734	12:14	16	0.958	A BB	11064.	50.000	NG	1.32
26	127	787	13:07	16	1.027	A BB	38895.	50.000	NG	1.32
27	225	802	13:22	16	1.047	A BB	19505.	50.000	NG	1.32
28	107	878	14:38	16	1.146	A BB	35402.	50.000	NG.	1.32
29	142	897	14:57	16	1.171	A BB	56916.	50.000	NG	1.32
30	82	645	10:45	16	0.842	A BB	46950.	50.000	NG*B1	1.32
31	164	1100	18:20	31	1.000	A BB	40125.	40.000	NG/UL	1.06
32	237	939	15:39	31	0.854	A BB	21785.	50.000	NG	1.32
33	196	957	15:57	31	0.870	A BV	19181.	50.000	NG	1.32
34	196	964	16:04	31	0.876	A VB	21092.	50.000	NG	1.32
35	162	989	16:29	31	0.899	A BB	60904.	50.000	NG	1.32
36	65	1021	17:01	31	0.928	A BB	41260.	50.000	NG	1.32
37	152	1070	17:50	31	0.973	A BB	101133.	50.000	NG	1.32
38	163	1063	17:43	31	0.966	A BB	77193.	50.000	NG	1.32
39	165	1078	17:58	31	0.980	A BB	18649.	50.000	NG	1.32
40	153	1106	18:26	31	1.005	A BB	63613.	50.000	NG.	1.32
41	138	1102	18:22	31	1.002	A BB	21800.	50.000	NG	1.32
42	184	1120	18:40	31	1.018	A BB	10074.	50.000	NG	1.32
43	168	1136	18:56	31	1.033	A BB	90105.	50.000	NG	1.32
44	109	1136	18:56	31	1.033	A BB	15495.	50.000	NG.	1.32
45	165	1151	19:11	31	1.046	A BB	25583.	50.000	NG.	1.32
46	166	1203	20:03	31	1.094	A BB	71463.	50.000	NG	1.32
47	204	1205	20:05	31	1.095	A BB	36990.	50.000	NG	1.32
48	149	1200	20:00	31	1.091	A BB	92058.	50.000	NG	1.32
49	138	1221	20:21	31	1.110	A BV	20403.	50.000	NG	1.32
50	198	1227	20:27	31	1.115	A BB	14891.	50.000	NG	1.32

T2583

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	9:05	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	8:37	1.00	0.949	1.00	50.00	50.00	1.271	1.271	1.00
3	8:20	1.00	0.917	1.00	50.00	50.00	1.749	1.749	1.00
4	8:33	1.00	0.941	1.00	50.00	50.00	1.605	1.605	1.00
5	8:59	1.00	0.989	1.00	50.00	50.00	1.485	1.485	1.00
6	9:08	1.00	1.006	1.00	50.00	50.00	1.532	1.532	1.00
7	9:38	1.00	1.061	1.00	50.00	50.00	1.449	1.449	1.00
8	9:34	1.00	1.053	1.00	50.00	50.00	0.882	0.882	1.00
9	10:00	1.00	1.101	1.00	50.00	50.00	3.994	3.994	1.00
10	9:55	1.00	1.092	1.00	50.00	50.00	1.322	1.322	1.00
11	10:27	1.00	1.150	1.00	50.00	50.00	0.946	0.946	1.00
12	10:20	1.00	1.138	1.00	50.00	50.00	1.393	1.393	1.00
13	10:25	1.00	1.147	1.00	50.00	50.00	1.607	1.807	1.00
14	6:03	1.00	0.666	1.00	50.00	50.00	1.056	1.056	1.00
15	8:18	1.00	0.914	1.00	50.00	50.00	1.541	1.541	1.00
16	12:46	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
17	10:48	1.00	0.846	1.00	50.00	50.00	0.785	0.785	1.00
18	11:28	1.00	0.898	1.00	50.00	50.00	1.334	1.334	1.00
19	11:43	1.00	0.918	1.00	50.00	50.00	0.242	0.242	1.00
20	11:52	1.00	0.930	1.00	50.00	50.00	0.559	0.559	1.00
21	12:12	1.00	0.956	1.00	50.00	50.00	0.752	0.752	1.00
22	12:24	1.00	0.971	1.00	50.00	50.00	0.392	0.392	1.00
23	12:38	1.00	0.990	1.00	50.00	50.00	0.434	0.434	1.00
24	12:49	1.00	1.004	1.00	50.00	50.00	1.339	1.339	1.00
25	12:14	1.00	0.958	1.00	50.00	50.00	0.169	0.169	1.00
26	13:07	1.00	1.027	1.00	50.00	50.00	0.594	0.594	1.00
27	13:22	1.00	1.047	1.00	50.00	50.00	0.298	0.298	1.00
28	14:38	1.00	1.146	1.00	50.00	50.00	0.541	0.541	1.00
29	14:57	1.00	1.171	1.00	50.00	50.00	0.870	0.870	1.00
30	10:45	1.00	0.842	1.00	50.00	50.00	0.717	0.717	1.00
31	18:20	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
32	15:39	1.00	0.854	1.00	50.00	50.00	0.434	0.434	1.00
33	15:57	1.00	0.870	1.00	50.00	50.00	0.382	0.382	1.00
34	16:04	1.00	0.876	1.00	50.00	50.00	0.421	0.421	1.00
35	16:29	1.00	0.899	1.00	50.00	50.00	1.214	1.214	1.00
36	17:01	1.00	0.928	1.00	50.00	50.00	0.823	0.823	1.00
37	17:50	1.00	0.973	1.00	50.00	50.00	2.016	2.016	1.00
38	17:43	1.00	0.966	1.00	50.00	50.00	1.539	1.539	1.00
39	17:58	1.00	0.980	1.00	50.00	50.00	0.372	0.372	1.00
40	18:26	1.00	1.005	1.00	50.00	50.00	1.268	1 268	1.00
41	18:22	1.00	1.002	1.00	50.00	50.00	0.435	0.435	1.00
42	18:40	1.00	1.018	1.00	50.00	50.00	0.201	0.201	1.00
43	18:56	1.00	1.033	1.00	50.00	50.00	1.796	1.796	1.00
44	18:56	1.00	1.033	1.00	50.00	50.00	0.309	0.309	1.00
45	19:11	1.00	1.046	1.00	50.00	50.00	0.510	0.510	1.00
46	20:03	1.00	1.094	1.00	50.00	50.00	1.425	1.425	1.00
47	20:05	1.00	1.095	1.00	50.00	50.00	0.737	0.737	1.00
48	20:00	1.00	1.091	1.00	50.00	50.00	1.835	1.835	1.00
49	20:21	1.00	1.110	1.00	50.00	50.00	0.407	0.407	1.00
50	20:27	1.00	1.115	1.00	50.00	50.00	0.297	0.297	1.00

Quantitation Report File: T2583

Data: T2583.TI
05/15/90 9:42:00
Sample: CLP,,,SSTD 50,,,22658,B,CC-050,,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: SJD Acct. No.: -

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

No	Name
51	C615 N-NITROSODIPHENYLAMINE
52	C625 4-BROMOPHENYL-PHENYLETHER
53	C630 HEXACHLOROBENZENE
54	CS25 2-FLUOROBIPHENYL**BN SURR.**
55	CI60 PHENANTHRENE-D10**INT. STD.#4**
56	C635 PENTACHLOROPHENOL
57	C640 PHENANTHRENE
58	C645 ANTHRACENE
59	C650 DI-N-BUTYLPHTHALATE
60	C655 FLUORANTHENE
61	C715 PYRENE
62	CS55 2,4,6,-TRIBROMOPHENOL**ACID SURR.**
63	CI70 CHRYSENE-D12**INT. STD.#5**
64	C720 BUTYLBENZYLPHTHALATE
65	C730 BENZO(A)ANTHRACENE
66	C740 CHRYSENE
67	C725 3,3'-DICHLOROBENZIDINE
68	C741 BIS(2-ETHYLHEXYL)PHTHALATE
69	CS30 P-TERPHENYL-D14**BN SURR.**
70	CI75 PERYLENE-D12**INT. STD.#6**
71	C760 DI-N-OCTYL PHTHALATE
72	C765 BENZO(B)FLUORANTHENE
73	C770 BENZO(K)FLUORANTHENE
74	C775 BENZO(A)PYRENE
75	C780 INDENO(1,2,3-CD)PYRENE
76	C785 DIBENZ(A,H)ANTHRACENE
77	C790 BENZO(G,H,I)PERYLENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	169	1232	20:32	31	1.120	A BB	54018.	50.000 NG	1.32
52	248	1299	21:39	31	1.181	A BB	23313.	50.000 NG	1.32
53	284	1323	22:03	31	1.203	A BB	29002.	50.000 NG	1.32
54	172	973	16:13	31	0.885	A BB	64291.	50.000 NG*B2	1.32
55	188	1384	23:04	55	1.000	A BB	81463.	40.000 NG/UL	1.06
56	266	1360	22:40	55	0.983	A BB	14582.	50.000 NG.	1.32
57	178	1388	23:08	55	1.003	A BV	111921.	50.000 NG	1.32
58	178	1397	23:17	55	1.009	A VB	110704.	50.000 NG	1.32
59	149	1514	25:14	55	1.094	A BV	172592.	50.000 NG	1.32
60	202	1621	27:01	55	1.171	A BB	118171.	50.000 NG	1.32
61	202	1665	27:45	63	0.875	A BB	119692.	50.000 NG.	1.32
62	330	1254	20:54	31	1.140	A BB	15710.	50.000 NG*A3	1.32
63	240	1902	31:42	63	1.000	A BB	72781.	40.000 NG/UL	1.06
64	149	1807	30:07	63	0.950	A BB	72060.	50.000 NG	1.32
65	228	1899	31:39	63	0.998	A BV	92263.	50.000 NG	1.32
66	228	1907	31:47	63	1.003	A VB	68434.	50.000 NG	1.32

T2583

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
67	252	1900	31:40	63	0.999	A BB	29549.	50.000	NG	1.32
68	149	1917	31:57	63	1.008	A BB	99489.	50.000	NG	1.32
69	244	1701	28:21	63	0.894	A BB	78643.	50.000	NG*B3	1.32
70	264	2211	36:51	70	1.000	A BB	61203.	40.000	NG/UL	1.06
71	149	2029	33:49	70	0.918	A BB	163916.	50.000	NG	1.32
72	252	2113	35:13	70	0.956	A BV	88270.	50.000	NG	1.32
73	252	2119	35:19	70	0.958	A VB	76404.	50.000	NG	1.32
74	252	2196	36:36	70	0.993	A BV	81710.	50.000	NG	1.32
75	276	2574	42:54	70	1.164	A BV	67119.	50.000	NG	1.32
76	278	2584	43:04	70	1.169	A BB	65977.	50.000	NG	1.32
77	276	2685	44:45	70	1.214	A BB	68584.	50.000	NG	1.32

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	20:32	1.00	1.120	1.00	50.00	50.00	1.077	1.077	1.00
52	21:39	1.00	1.181	1.00	50.00	50.00	0.465	0.465	1.00
53	22:03	1.00	1.203	1.00	50.00	50.00	0.578	0.578	1.00
54	16:13	1.00	0.885	1.00	50.00	50.00	1.282	1.282	1.00
55	23:04	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
56	22:40	1.00	0.983	1.00	50.00	50.00	0.143	0.143	1.00
57	23:08	1.00	1.003	1.00	50.00	50.00	1.099	1.099	1.00
58	23:17	1.00	1.009	1.00	50.00	50.00	1.087	1.087	1.00
59	25:14	1.00	1.094	1.00	50.00	50.00	1.695	1.695	1.00
60	27:01	1.00	1.171	1.00	50.00	50.00	1.160	1.160	1.00
61	27:45	1.00	0.875	1.00	50.00	50.00	1.316	1.316	1.00
62	20:54	1.00	1.140	1.00	50.00	50.00	0.313	0.313	1.00
63	31:42	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
64	30:07	1.00	0.950	1.00	50.00	50.00	0.792	0.792	1.00
65	31:39	1.00	0.998	1.00	50.00	50.00	1.014	1.014	1.00
66	31:47	1.00	1.003	1.00	50.00	50.00	0.752	0.752	1.00
67	31:40	1.00	0.999	1.00	50.00	50.00	0.325	0.325	1.00
68	31:57	1.00	1.008	1.00	50.00	50.00	1.094	1.094	1.00
69	28:21	1.00	0.894	1.00	50.00	50.00	0.864	0.864	1.00
70	36:51	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
71	33:49	1.00	0.918	1.00	50.00	50.00	2.143	2.143	1.00
72	35:13	1.00	0.956	1.00	50.00	50.00	1.154	1.154	1.00
73	35:19	1.00	0.958	1.00	50.00	50.00	0.999	0.999	1.00
74	36:36	1.00	0.993	1.00	50.00	50.00	1.068	1.068	1.00
75	42:54	1.00	1.164	1.00	50.00	50.00	0.877	0.877	1.00
76	43:04	1.00	1.169	1.00	50.00	50.00	0.862	0.862	1.00
77	44:45	1.00	1.214	1.00	50.00	50.00	0.896	0.896	1.00

8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Lab File ID (Standard): T2569 Date Analyzed: 05/14/90

Instrument ID: T Time Analyzed: 1742

		IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
	12 HOUR STD	15600	9.12	52100	12.80	37500	18.37
	UPPER LIMIT	31200		104200		75000	
	LOWER LIMIT	7800		26050		18750	
	EPA SAMPLE NO.						
01	MW38	16500	9.12	53100	12.79	41800	18.35
02	MW43	16300	9.10	52100	12.79	41000	18.35
03	MW53	17000	9.10	54500	12.79	43800	18.35
04	MW79	17500	9.10	54600	12.77	41700	18.34
05	MW79A	16800	9.10	53100	12.77	40800	18.34
06	MW38MS	16800	9.12	52800	12.79	41100	18.35
07	MW38MSD	16800	9.10	53700	12.79	40900	18.35
08	SBLK51	15900	9.10	49800	12.77	38100	18.34

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: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Lab File ID (Standard): T2569 Date Analyzed: 05/14/90

Instrument ID: T Time Analyzed: 1742

		IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
	12 HOUR STD	75500	23.10	56500	31.76	45300	36.94
	UPPER LIMIT	151000		113000		90600	
	LOWER LIMIT	37750		28250		22650	
	EPA SAMPLE NO.						
01	MW38	90100	23.09	70300	31.72	60800	36.87
02	MW43	87200	23.07	76100	31.71	66600	36.87
03	MW53	93100	23.09	89000	31.71	74400	36.87
04	MW79	86300	23.07	75700	31.71	66400	36.86
05	MW79A	86700	23.07	68000	31.71	59400	36.86
06	MW38MS	85400	23.09	68100	31.72	57800	36.87
07	MW38MSD	86800	23.09	70000	31.71	61700	36.86
08	SBLK51	78400	23.07	52400	31.71	45200	36.86

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

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

Column used to flag internal standard area values with an asterisk

FORM VIII SV-2 1/87 Rev. 100303

8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Lab File ID (Standard): T2583 Date Analyzed: 05/15/90

Instrument ID: T Time Analyzed: 942

		IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
	12 HOUR STD	15600	9.09	52400	12.77	40100	18.34
	UPPER LIMIT	31200		104800		80200	
	LOWER LIMIT	7800		26200		20050	
	EPA SAMPLE NO.						
01	SW-1	16000	9.09	51500	12.75	43100	18.34
02	SW-2	12900	9.12	40600	12.79	34100	18.35
03	TB-1A	16700	9.12	52000	12.79	42400	18.35
04	TB-3A	15700	9.12	50400	12.80	41900	18.35
05	TB-4A	17100	9.12	53400	12.80	43200	18.37
06	TB-5A	16700	9.10	52000	12.79	41200	18.34

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

FORM VIII SV-1 1/87 Rev.

8C
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Lab File ID (Standard): T2583 Date Analyzed: 05/15/90

Instrument ID: T Time Analyzed: 942

		IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
	12 HOUR STD	81500	23.07	72800	31.71	61200	36.86
	UPPER LIMIT	163000		145600		122400	
	LOWER LIMIT	40750		36400		30600	
	EPA SAMPLE NO.						
01	SW-1	92600	23.07	79200	31.71	67700	36.86
02	SW-2	75500	23.09	58800	31.71	42800	36.87
03	TB-1A	90800	23.09	83100	31.72	70700	36.89
04	TB-3A	93200	23.09	86800	31.74	73700	36.91
05	TB-4A	95500	23.10	88600	31.74	74300	36.92
06	TB-5A	89500	23.09	85200	31.72	72400	36.89

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

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

Column used to flag internal standard area values with an asterisk

FORM VIII SV-2 1/87 Rev. 100310

Versar INC.

V. RAW QC DATA

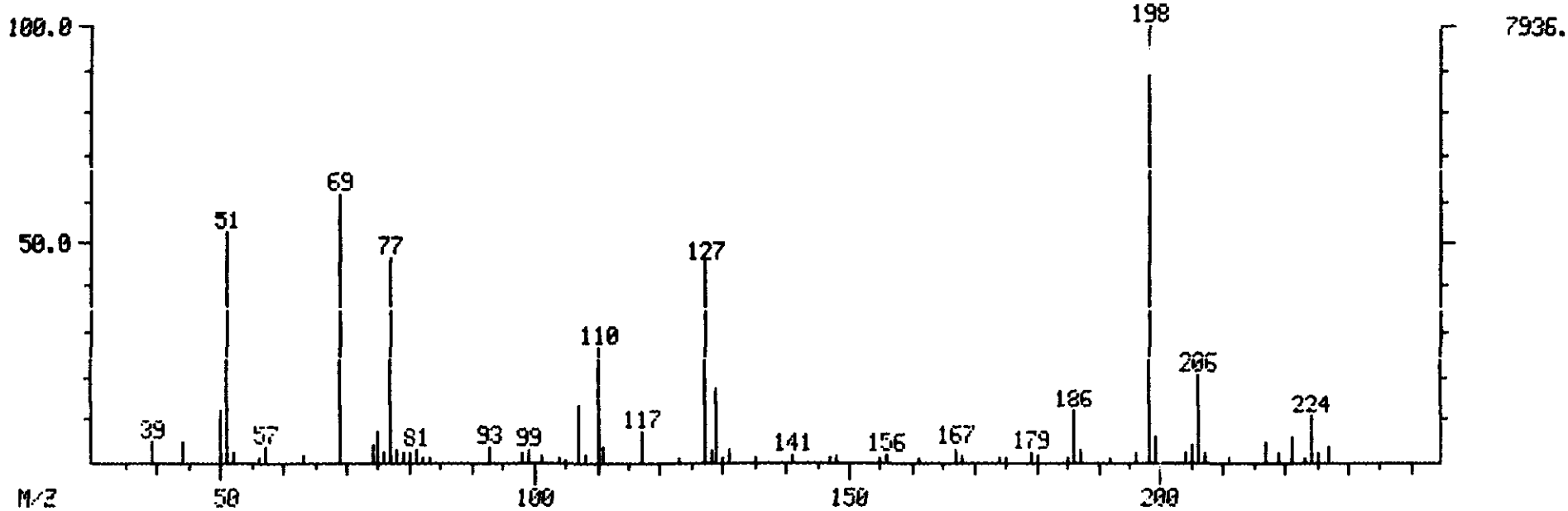
MASS SPECTRUM
05/14/90 17:23:00 + 9:21
SAMPLE: DFTPP 50NG 1UL
CONDS.: INSTRUMENT T COLUMN: RESTEK 30M RTX-5 1MIN@50C TO 300C @ 25C/MIN

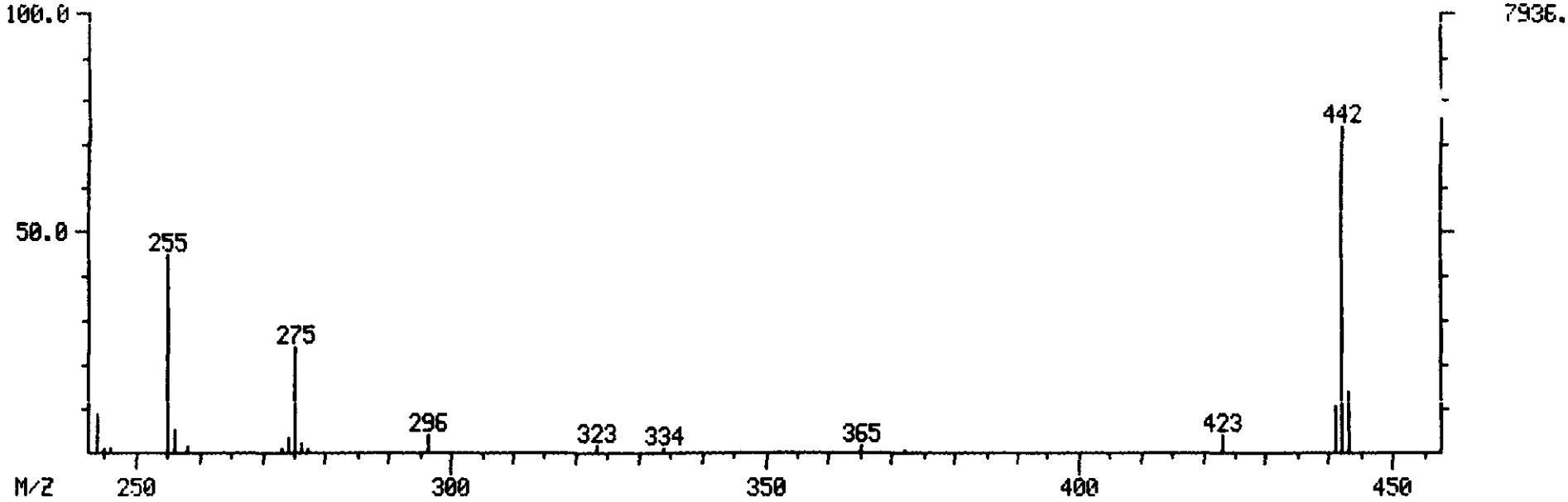
DATA: T2568 #561
CALI: T2568 #2

BASE M/Z: 198
RIC: 61248.

100312

#561 TO #562 SUMMED





Mass List Data: T2568 # 561 Base m/z: 198
05/14/90 17:23:00 + 9:21 Cali: T2568 # 2 RIC: 61218.
Sample: DFTPP 50NG 1UL
Conds.: INSTRUMENT T COLUMN: RESTEK 30M RTX-5 1MIN@50C TO 300C @ 25C/MIN
#561 to #562 Summed

39	0.00	0.00	0.	Minima	Min inten:		0.
443			# 0	Maxima			
Mass	% RA	% RIC	Inten.	Mass	% RA	% RIC	Inten.
39.00?	4.64	0.60	368.	186.00	12.03	1.56	955.
44.00?	5.08	0.66	403.	187.00	3.20	0.41	254.
50.00?	11.86	1.54	941.	192.00	0.92	0.12	73.
51.00?	52.92	6.86	4200.	196.00	2.33	0.30	185.
52.00?	2.48	0.32	197.	198.00	100.00	12.96	7936
56.00?	1.41	0.18	112.	199.00	5.97	0.77	474.
57.00?	3.77	0.49	299.	204.00	2.33	0.30	185.
63.00?	1.73	0.22	137.	205.00	4.11	0.53	326.
69.00	61.79	8.01	4904.	206.00	20.46	2.65	1624.
74.00	3.96	0.51	314.	207.00	2.51	0.32	199.
75.00	7.02	0.91	557.	211.00	1.01	0.13	80
76.00	2.24	0.29	178.	217.00	4.80	0.62	381.
77.00	46.87	6.07	3720.	219.00	2.62	0.34	208
78.00	3.00	0.39	238.	221.00	5.93	0.77	471.
79.00	2.48	0.32	197.	223.00	1.13	0.15	90.
80.00	2.10	0.27	167.	224.00	10.80	1.40	857.
81.00	3.28	0.42	260.	225.00	2.52	0.33	200
82.00	0.95	0.12	75.	227.00	3.55	0.46	282.
83.00	0.96	0.12	76.	244.00	8.86	1.15	703.
93.00	3.73	0.48	296.	245.00	1.06	0.14	84.
98.00	2.58	0.33	205.	246.00	1.25	0.16	99.
99.00	2.71	0.35	215.	255.00	45.01	5.83	3572.
101.00	1.84	0.24	146.	256.00	5.68	0.74	451.
104.00	0.95	0.12	75.	258.00	1.84	0.24	146.
105.00	0.88	0.11	70.	273.00	1.17	0.15	93.
107.00	13.31	1.72	1056.	274.00	3.88	0.50	308.
108.00	1.90	0.25	151.	275.00	23.89	3.10	1896.
110.00	26.21	3.40	2080.	276.00	2.68	0.35	213.
111.00	3.57	0.46	283.	277.00	1.44	0.19	114.
117.00	7.27	0.94	577.	296.00	4.07	0.53	323.
123.00	1.11	0.14	88.	323.00	1.78	0.23	141.
127.00	45.41	5.88	3604.	334.00	1.08	0.14	86.
128.00	3.21	0.42	255.	365.00	2.00	0.26	159.
129.00	17.64	2.29	1400.	372.00	0.88	0.11	70.
130.00	1.23	0.16	98.	423.00	4.47	0.58	355.
131.00	3.29	0.43	261.	441.00	10.92	1.42	867.
135.00	1.31	0.17	104.	442.00	74.19	9.61	5888.
141.00	1.63	0.21	129.	443.00	13.89	1.80	1102.
147.00	0.96	0.12	76.				
148.00	1.84	0.24	146.				
155.00	1.02	0.13	81.				
156.00	1.69	0.22	134.				
161.00	0.95	0.12	75.				
167.00	3.45	0.45	274.				
168.00	1.75	0.23	139.				
174.00	0.91	0.12	72.				
175.00	1.30	0.17	103.				
179.00	2.62	0.34	208.				
180.00	1.81	0.24	144.				
185.00	1.16	0.15	92.				

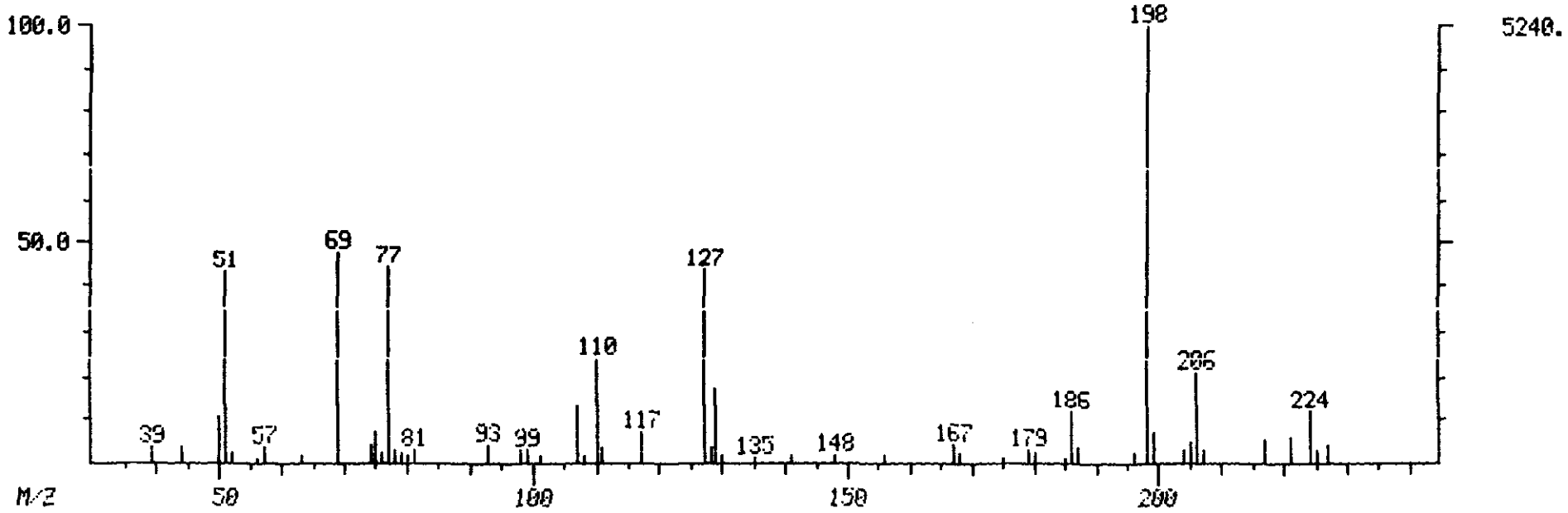
MASS SPECTRUM
05/15/90 9:12:00 + 9:31
SAMPLE: DFTPP 50NG 1UL
CONDS.· INSTRUMENT T COLUMN: RESTEK 30M RTX-5 1MIN@50C TO 300C @ 25C/MIN

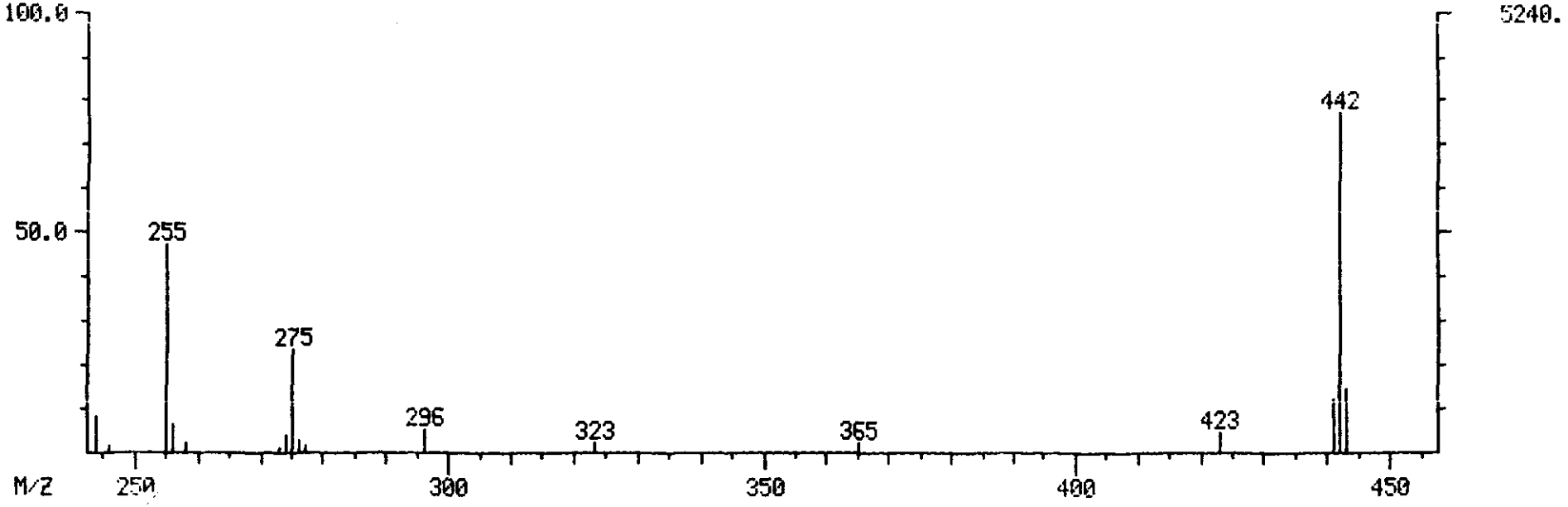
DATA: T2582 #571
CALI: T2582 #2

BASE M/Z: 198
RIC: 38784.

100314

#571





Mass List Data: T2582 # 571 Base m/z: 198
05/15/90 9:12:00 - 9:31 Cali: T2592 # 2 RIC: 38784.
Sample: DFTPP 50NG 1UL
Conds.: INSTRUMENT T COLUMN: RESTEK 30M RTX-5 1MIN250C TO 300C @ 25C/MIN
#571

39 0.00 0.00 0. Minima Min inten: 0.
443 # 0 Maxima

Mass	% RA	% RIC	Inten.	Mass	% RA	% RIC	Inten.
39.00?	3.68	0.50	193.	221.00	5.95	0.80	312.
44.00?	3.49	0.47	183.	224.00	11.77	1.59	617.
50.00?	11.07	1.50	580.	225.00	2.92	0.39	153.
51.00?	42.82	5.79	2244.	227.00	4.39	0.59	230.
52.00?	2.37	0.32	124.	244.00	8.65	1.17	453.
56.00?	1.34	0.18	70.	246.00	1.56	0.21	82.
57.00?	3.40	0.46	178.	255.00	47.10	6.36	2468
63.00?	1.60	0.22	84.	256.00	6.83	0.92	358.
69.00	48.17	6.51	2524.	258.00	2.42	0.33	127.
74.00	4.08	0.55	214.	273.00	1.47	0.20	77.
75.00	7.00	0.95	367.	274.00	4.45	0.60	233.
76.00	2.42	0.33	127.	275.00	23.47	3.17	1230.
77.00	44.05	5.95	2308.	276.00	3.17	0.43	166.
78.00	3.00	0.40	157.	277.00	1.77	0.24	93.
79.00	2.56	0.35	134.	296.00	5.40	0.73	283.
80.00	1.97	0.27	103.	323.00	2.31	0.31	121.
81.00	3.24	0.44	170.	365.00	2.60	0.35	136.
93.00	3.99	0.54	209.	423.00	4.66	0.63	244.
98.00	3.02	0.41	158.	441.00	11.85	1.60	621.
99.00	3.15	0.43	165.	442.00	77.33	10.45	4052.
101.00	1.76	0.24	92.	443.00	14.31	1.93	750.
107.00	12.90	1.74	676.				
108.00	1.95	0.26	102.				
110.00	23.85	3.22	1250.				
111.00	3.47	0.47	182.				
117.00	7.00	0.95	367.				
127.00	43.59	5.89	2284.				
128.00	3.55	0.48	186.				
129.00	17.40	2.35	912.				
130.00	1.55	0.21	81.				
135.00	1.34	0.18	70.				
141.00	1.91	0.26	100.				
148.00	2.02	0.27	106.				
156.00	1.87	0.25	98.				
167.00	3.93	0.53	206.				
168.00	2.37	0.32	124.				
175.00	1.49	0.20	78.				
179.00	3.03	0.41	159.				
180.00	2.10	0.28	110.				
185.00	1.47	0.20	77.				
186.00	11.97	1.62	627.				
187.00	3.84	0.52	201.				
196.00	2.40	0.32	126.				
198.00	100.00	13.51	5240.				
199.00	7.31	0.99	383.				
204.00	2.73	0.37	143.				
205.00	4.56	0.62	239.				
206.00	21.15	2.86	1108.				
207.00	3.11	0.42	163.				
217.00	5.61	0.76	294.				

Versar INC.

REAGENT BLANK DATA

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK51

La' Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: SBLK51

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2574

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

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/14/90

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	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
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	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
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	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
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	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	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.

SBLK51

La' Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: SBLK51

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2574

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

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/14/90

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	50	U
100-02-7	4-Nitrophenol	50	U
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
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
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

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK51

La' Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: SBLK51

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T2574

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

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/14/90

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

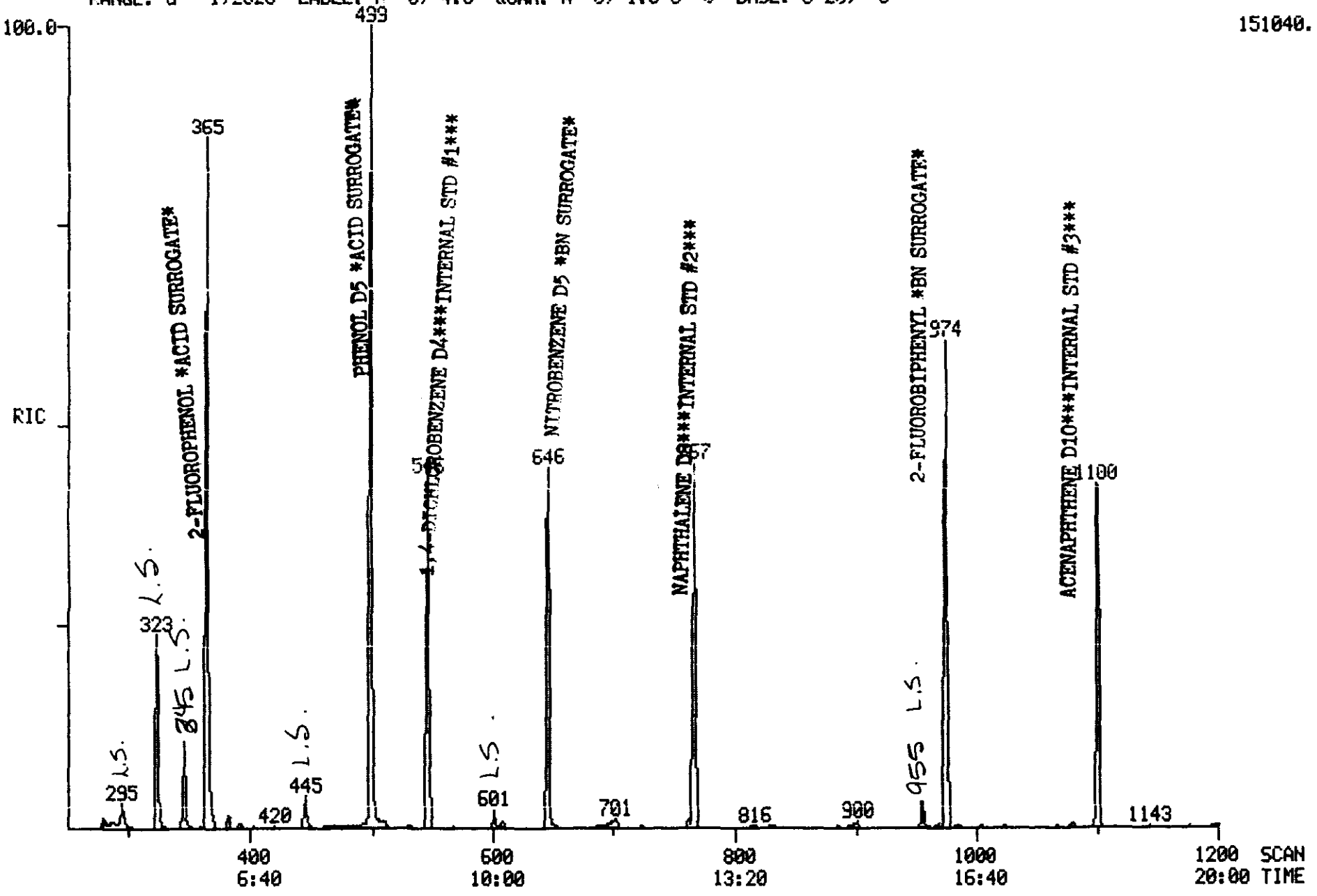
Number TICs found: 6

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.92	4.0	J
2.	UNKNOWN	5.38	42	J
3.	UNKNOWN	5.75	18	J
4. 930-68-7	2-CYCLOHEXEN-1-ONE	7.42	6.0	J
5.	UNKNOWN	10.02	4.0	J
6. 74367-33-2	PROPANOIC ACID, 2-METHYL-, 2	15.92	6.0	J

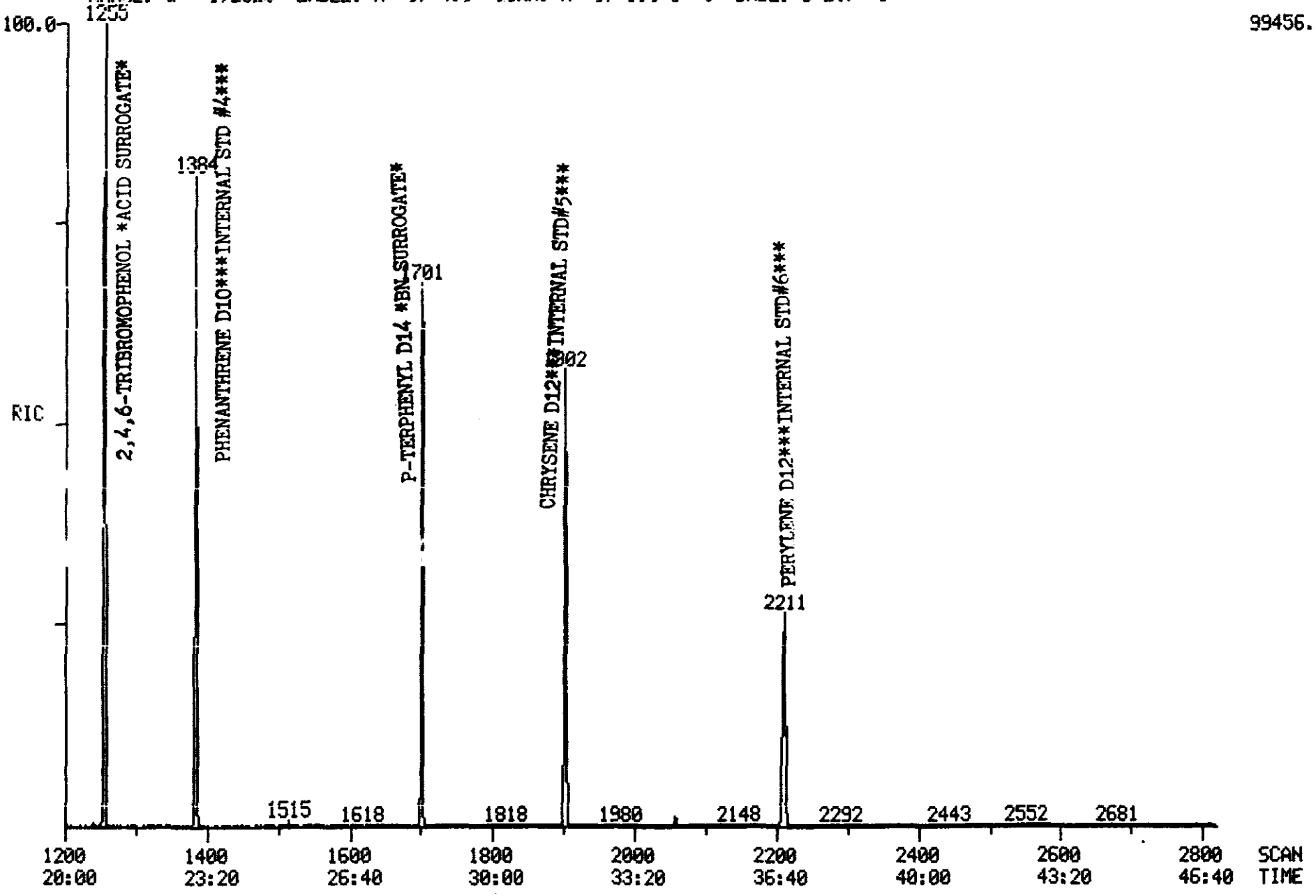
100320

RIC DATA: T2574 #1 SCANS 250 TO 1200
05/14/90 23:01:00 CALI: T2574 #2
SAMPLE: CLP,VERSCOM,2548,SBLK51,L,W,PB7951,B,BLANK,420.1 G#2,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
RANGE: G 1,2820 LABEL: A 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



RIC DATA: T2574 #1 SCANS 1200 TO 2820
05/14/90 23:01:00 CALI: T2574 #2
SAMPLE: CLP,VERSCOM,2548,SBLK51,L,W,RB7951,B,BLANK,420.1 B#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@SC/MIN
RANGE: G 1,2820 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

100321



Quantitation Report File: T2574

Data: T2574.TI
05/14/90 23:01:00
Sample: CLP,VERSCDM,2548,SBLK51,L,W,RB7951,B,BLANK,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	C330 2-CHLOROPHENOL
3	C315 PHENOL
4	C325 BIS (2-CHLOROETHYL) ETHER
5	C335 1,3-DICHLOROBENZENE
6	C340 1,4-DICHLOROBENZENE
7	C350 1,2-DICHLOROBENZENE
8	C345 BENZYL ALCOHOL
9	C360 BIS (2-CHLOROISOPROPYL) ETHER
10	C355 2-METHYLPHENOL
11	C375 HEXACHLOROETHANE
12	C365 4-METHYLPHENOL
13	C370 N-NITROSO-DI-N-PROPYLAMINE
14	CS50 2-FLUOROPHENOL**ACID SURR.**
15	CS45 PHENOL-D5**ACID SURR.**
16	CI40 NAPHTHALENE-D8**INT. STD.#2**
17	C410 NITROBENZENE
18	C415 ISOPHORONE
19	C420 2-NITROPHENOL
20	C425 2,4-DIMETHYLPHENOL
21	C435 BIS (2-CHLOROETHOXY) METHANE
22	C440 2,4-DICHLOROPHENOL
23	C445 1,2,4-TRICHLOROBENZENE
24	C450 NAPHTHALENE
25	C430 BENZOIC ACID
26	C455 4-CHLOROANILINE
27	C460 HEXACHLOROBUTADIENE
28	C465 4-CHLORO-3-METHYLPHENOL
29	C470 2-METHYLNAPHTHALENE
30	CS20 NITROBENZENE-D5**BN SURR.**
31	CI50 ACENAPHTHENE-D10**INT. STD.#3**
32	C510 HEXACHLOROCYCLOPENTADIENE
33	C515 2,4,6-TRICHLOROPHENOL
34	C520 2,4,5-TRICHLOROPHENOL
35	C525 2-CHLORONAPHTHALENE
36	C530 2-NITROANILINE
37	C540 ACENAPHTHYLENE
38	C535 DIMETHYL PHTHALATE
39	C544 2,6-DINITROTOLUENE
40	C550 ACENAPHTHENE
41	C545 3-NITROANILINE
42	C555 2,4-DINITROPHENOL
43	C565 DIBENZOFURAN
44	C560 4-NITROPHENOL
45	C570 2,4-DINITROTOLUENE
46	C590 FLUORENE
47	C585 4-CHLOROPHENYL-PHENYLETHER

✓ 5/22/90

All IS areas + surrogate recoveries are compliant. SJD 5-15-90.

Ready for forms SJD 5-15-90

T2574

No	Name
48	C580 DIETHYLPHTHALATE
49	C595 4-NITROANILINE
50	C610 4,6-DINITRO-2-METHYLPHENOL

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	546	9:06	1	1.000	A BB	15857.	40.000 NG/UL	6.21
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	112	365	6:05	1	0.668	A BB	39923.	95.700 NG*A1	14.85
15	99	499	8:19	1	0.914	A BB	56190.	87.513 NG*A2	13.58
16	136	766	12:46	16	1.000	A BB	49784.	40.000 NG/UL	6.21
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
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	82	646	10:46	16	0.843	A BB	41975.	44.164 NG*B1	6.85
31	164	1100	18:20	31	1.000	A BB	38110.	40.000 NG/UL	6.21
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	149	1199	19:59	31	1.090	A BB	250.	BH ~~0.147 NG~~	0.02
49	NOT FOUND								
50	NOT FOUND								

100323

T2574

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:07	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	8:39		0.949						
3	8:21		0.916						
4	8:35		0.941						
5	9:00		0.987						
6	9:09		1.004						
7	9:40		1.060						
8	9:35		1.051						
9	10:01		1.099						
10	9:57		1.091						
11	10:29		1.150						
12	10:22		1.137						
13	10:26		1.144						
14	6:05	1.00	0.667	1.00	95.70	50.00	2.014	1.052	1.91
15	8:19	1.00	0.912	1.00	87.51	50.00	2.835	1.620	1.75
16	12:48	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
17	10:50		0.846						
18	11:29		0.897						
19	11:45		0.918						
20	11:54		0.930						
21	12:14		0.956						
22	12:26		0.971						
23	12:40		0.990						
24	12:51		1.004						
25	12:16		0.958						
26	13:09		1.027						
27	13:23		1.046						
28	14:40		1.146						
29	14:59		1.171						
30	10:47	1.00	0.842	1.00	44.16	50.00	0.675	0.764	0.88
31	18:22	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
32	15:41		0.854						
33	16:00		0.871						
34	16:06		0.877						
35	16:32		0.900						
36	17:03		0.928						
37	17:52		0.973						
38	17:46		0.967						
39	18:00		0.980						
40	18:28		1.005						
41	18:24		1.002						
42	18:43		1.019						
43	18:58		1.033						
44	18:58		1.033						
45	19:13		1.046						
46	20:05		1.093						
47	20:08		1.096						
48	20:02	1.00	1.091	1.00	0.15	50.00	0.005	1.781	0.00
49	20:24		1.111						
50	20:29		1.115						

Quantitation Report File: T2574

Data: T2574.TI
05/14/90 23:01:00
Sample: CLP,VERSCDM,2548,SBLK51,L,W,RB7951,B,BLANK,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: 420.1

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

No	Name
51	C615 N-NITROSODIPHENYLAMINE
52	C625 4-BROMOPHENYL-PHENYLETHER
53	C630 HEXACHLOROBENZENE
54	CS25 2-FLUOROBIPHENYL**BN SURR.**
55	CI60 PHENANTHRENE-D10**INT. STD.#4**
56	C635 PENTACHLOROPHENOL
57	C640 PHENANTHRENE
58	C645 ANTHRACENE
59	C650 DI-N-BUTYLPHTHALATE
60	C655 FLUORANTHENE
61	C715 PYRENE
62	CS55 2,4,6,-TRIBROMOPHENOL**ACID SURR.**
63	CI70 CHRYSENE-D12**INT. STD.#5**
64	C720 BUTYLBENZYLPHTHALATE
65	C730 BENZO(A)ANTHRACENE
66	C740 CHRYSENE
67	C725 3,3'-DICHLOROBENZIDINE
68	C741 BIS(2-ETHYLHEXYL)PHTHALATE
69	CS30 P-TERPHENYL-D14**BN SURR.**
70	CI75 PERYLENE-D12**INT. STD.#6**
71	C760 DI-N-OCTYL PHTHALATE
72	C765 BENZO(B)FLUORANTHENE
73	C770 BENZO(K)FLUORANTHENE
74	C775 BENZO(A)PYRENE
75	C780 INDENO(1,2,3-CD)PYRENE
76	C785 DIBENZ(A,H)ANTHRACENE
77	C790 BENZO(G,H,I)PERYLENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	NOT FOUND								
52	NOT FOUND								
53	NOT FOUND								
54	172	974	16:14	31	0.885	A BB	54048.	44.290 NG*B2	6.87
55	188	1384	23:04	55	1.000	A BV	78402.	40.000 NG/UL	6.21
56	NOT FOUND								
57	NOT FOUND								
58	NOT FOUND								
59	149	1515	25:15	55	1.095	A BB	1271.	~~0.389 NG~~	0.06
60	NOT FOUND								
61	NOT FOUND								
62	330	1255	20:55	31	1.141	A BB	23175.	89.828 NG*A3	13.94
63	240	1902	31:42	63	1.000	A BB	52368.	40.000 NG/UL	6.21
64	NOT FOUND								
65	NOT FOUND								
66	NOT FOUND								

T2574

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
67	NOT FOUND								
68	NOT FOUND								
69	244	1701	28:21	63	0.894	A BB	52473.	42.513 NG*B3	6.60
70	264	2211	36:51	70	1.000	A BB	45178.	40.000 NG/UL	6.21
71	NOT FOUND								
72	NOT FOUND								
73	NOT FOUND								
74	NOT FOUND								
75	NOT FOUND								
76	NOT FOUND								
77	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	20:34		1.120						
52	21:41		1.181						
53	22:06		1.203						
54	16:15	1.00	0.885	1.00	44.29	50.00	1.135	1.281	0.69
55	23:06	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
56	22:43		0.983						
57	23:11		1.004						
58	23:19		1.009						
59	25:17	1.00	1.095	1.00	0.39	50.00	0.013	1.667	0.01
60	27:04		1.172						
61	27:48		0.876						
62	20:56	1.00	1.140	1.00	89.83	50.00	0.486	0.271	1.80
63	31:45	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
64	30:10		0.950						
65	31:42		0.998						
66	31:50		1.003						
67	31:43		0.999						
68	32:00		1.008						
69	28:23	1.00	0.894	1.00	42.51	50.00	0.802	0.943	0.85
70	36:56	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
71	33:53		0.917						
72	35:17		0.955						
73	35:23		0.958						
74	36:40		0.993						
75	43:01		1.165						
76	43:13		1.170						
77	44:53		1.215						

Quantitation Report File: QCREF

Data: T2574.TI
05/14/90 23:01:00
Sample: CLP,VERSCDM,2548,SBLK51,L,W,RB7951,B,BLANK,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	CI40 NAPHTHALENE-D8**INT. STD.#2**
3	CI50 ACENAPHTHENE-D10**INT. STD.#3**
4	CI60 PHENANTHRENE-D10**INT. STD.#4**
5	CI70 CHRYSENE-D12**INT. STD.#5**
6	CI75 PERYLENE-D12**INT. STD.#6**
7	CS50 2-FLUOROPHENOL**ACID SURR.**
8	CS45 PHENOL-D5**ACID SURR.**
9	CS55 2,4,6,-TRIBROMOPHENOL**ACID SURR.**
10	CS20 NITROBENZENE-D5**BN SURR.**
11	CS25 2-FLUOROBIPHENYL**BN SURR.**
12	CS30 P-TERPHENYL-D14**BN SURR.**

Scan	Time	Area(Hght)		Amount		Name
546	9:06	15857.		40.000	NG/UL	CI30 1,4-DICHLOROBENZENE-D4
766	12:46	49784.	90	40.000	NG/UL	CI40 NAPHTHALENE-D8**INT. ST
1100	18:20	38110.		40.000	NG/UL	CI50 ACENAPHTHENE-D10**INT.
1384	23:04	78402.	100	40.000	NG/UL	CI60 PHENANTHRENE-D10**INT.
1902	31:42	52368.		40.000	NG/UL	CI70 CHRYSENE-D12**INT. STD.
2211	36:51	45178.		40.000	NG/UL	CI75 PERYLENE-D12**INT. STD.
365	6:05	39923.	96	95.700	NG*A1	CS50 2-FLUOROPHENOL**ACID SU
499	8:19	56190.	88	87.513	NG*A2	CS45 PHENOL-D5**ACID SURR.**
1255	20:55	23175.	90	89.828	NG*A3	CS55 2,4,6,-TRIBROMOPHENOL**
646	10:46	41975.	88	44.164	NG*B1	CS20 NITROBENZENE-D5**BN SUR
974	16:14	54048.	89	44.290	NG*B2	CS25 2-FLUOROBIPHENYL**BN SU
1701	28:21	52473.	85	42.513	NG*B3	CS30 P-TERPHENYL-D14**BN SUR

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:07	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	12:48	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
3	18:22	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
4	23:06	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
5	31:45	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
6	36:56	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
7	6:05	1.00	0.667	1.00	95.70	50.00	2.014	1.052	1.91
8	8:19	1.00	0.912	1.00	87.51	50.00	2.835	1.620	1.75
9	20:56	1.00	1.140	1.00	89.83	50.00	0.486	0.271	1.80
10	10:47	1.00	0.842	1.00	44.16	50.00	0.675	0.764	0.88
11	16:15	1.00	0.885	1.00	44.29	50.00	1.135	1.281	0.89
12	28:23	1.00	0.894	1.00	42.51	50.00	0.802	0.943	0.85

Quantitation Report File: ISREF

Data: T2569.TI
05/14/90 17:42:00
Sample: CLP,,,SSTD50,,,22658,B,IC50,,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: --

Data: T2574.TI
05/14/90 23:01:00
Sample: CLP,VERSCDM,2548,SBLK51,L,W,RB7951,B,BLANK,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
3	CI40 NAPHTHALENE-D8**INT. STD.#2**
4	CI40 NAPHTHALENE-D8**INT. STD.#2**
5	CI50 ACENAPHTHENE-D10**INT. STD.#3**
6	CI50 ACENAPHTHENE-D10**INT. STD.#3**
7	CI60 PHENANTHRENE-D10**INT. STD.#4**
8	CI60 PHENANTHRENE-D10**INT. STD.#4**
9	CI70 CHRYSENE-D12**INT. STD.#5**
10	CI70 CHRYSENE-D12**INT. STD.#5**
11	CI75 PERYLENE-D12**INT. STD.#6**
12	CI75 PERYLENE-D12**INT. STD.#6**

Scan	Time	Area(Hght)	Amount	Name
547	9:07	15621.	40.000 NG/UL	CI30 1,4-DICHLOROBENZENE-D4
546	9:06	15857.	40.604 NG/UL	CI30 1,4-DICHLOROBENZENE-D4
768	12:48	52080.	40.000 NG/UL	CI40 NAPHTHALENE-D8**INT. ST
766	12:46	49784.	38.237 NG/UL	CI40 NAPHTHALENE-D8**INT. ST
1102	18:22	37455.	40.000 NG/UL	CI50 ACENAPHTHENE-D10**INT.
1100	18:20	38110.	40.699 NG/UL	CI50 ACENAPHTHENE-D10**INT.
1386	23:06	75538.	40.000 NG/UL	CI60 PHENANTHRENE-D10**INT.
1384	23:04	78402.	41.517 NG/UL	CI60 PHENANTHRENE-D10**INT.
1905	31:45	56496.	40.000 NG/UL	CI70 CHRYSENE-D12**INT. STD
1902	31:42	52368.	37.077 NG/UL	CI70 CHRYSENE-D12**INT. STD.
2216	36:56	45334.	40.000 NG/UL	CI75 PERYLENE-D12**INT. STD.
2211	36:51	45178.	39.862 NG/UL	CI75 PERYLENE-D12**INT. STD.

Library Search Data: T2574 # 295 Base m/z: 43
05/14/90 23:01:00 + 4:55 Cali: T2574 # 2 RIC: 3411.
Sample: CLP,VERSCDM,2548,SBLK51,L,W,RB7951,B,BLANK,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
195 matched at least 5 of the 14 largest peaks in the unknown

Rank	In.	Name
1	346	HYDROPEROXIDE, 1-METHYLETHYL
2	1454	ACETIC ACID, 1-METHYLETHYL ESTER
3	747	2-PROPANONE, 1-METHOXY-
4	646	OXIRANE, TRIMETHYL-
5	94	BUTANE

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C3.H8.O2	76	43	463	882	482
2	C5.H10.O2	102	43	430	820	469
3	C4.H8.O2	88	45	407	775	425
4	C5.H10.O	86	43	396	789	428
5	C4.H10	58	43	377	890	401

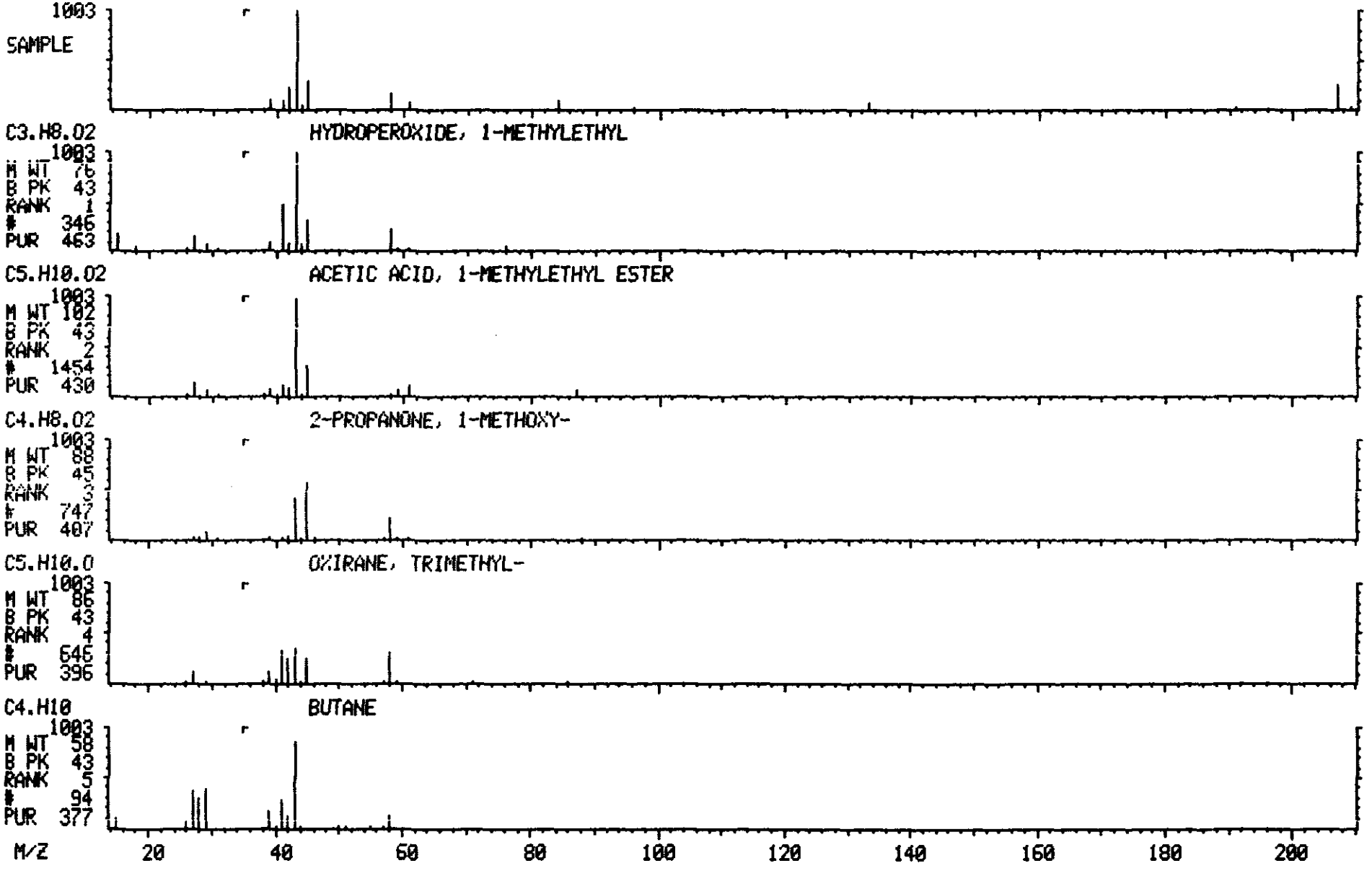
Rank	Ret. Time	B.P. Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	3031-75-2
2	—	—	—	—	108-21-4
3	—	—	—	—	5878-19-3
4	—	—	—	—	5076-19-7
5	—	—	—	—	106-97-8

LIBRARY SEARCH
05/14/90 23:01:00 + 4:55
SAMPLE: CLP,VERSCOM,2548,SBLK51,L,W,RB7951,B,BLANK,420.1 B#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30@8C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2574 # 295
CALI: T2574 # 2

BASE M/Z: 43
RIC: 3411.

100330



Library Search Data: T2574 # 323 Base m/z: 43
05/14/90 23:01:00 + 5:23 Cali: T2574 # 2 RIC: 29503.
Sample: CLP,VERSCDM,2548,SBLK51,L,W,RB7951,B,BLANK,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
121 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	806	HYDROPEROXIDE, 1,1-DIMETHYLETHYL
2	2776	2-PENTANOL, 2,4-DIMETHYL-
3	2777	2-HEXANOL, 2-METHYL-
4	1334	OXIRANE, TETRAMETHYL-
5	1349	OXEPANE, 2,2,4-TRIMETHYL-

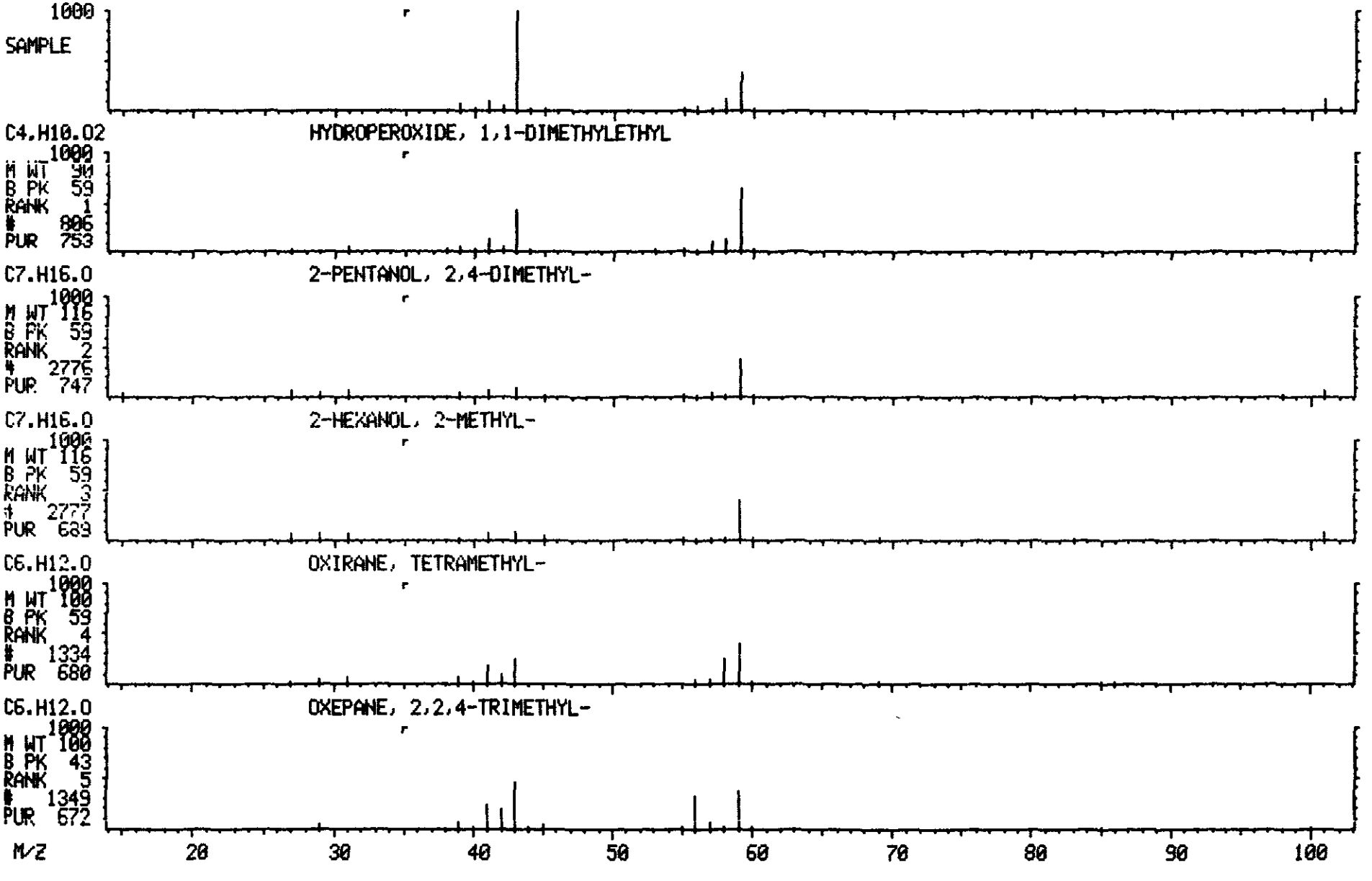
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C4.H10.O2	90	59	753	875	760
2	C7.H16.O	116	59	747	781	747
3	C7.H16.O	116	59	689	735	701
4	C6.H12.O	100	59	680	811	703
5	C6.H12.O	100	43	672	776	697

Rank	Ret. Time	B.P. Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	75-91-2
2	—	—	—	—	625-06-9
3	—	—	—	—	625-23-0
4	—	—	—	—	5076-20-0
5	—	—	—	—	23120-44-7

LIBRARY SEARCH
05/14/90 23:01:00 + 5:23
SAMPLE: CLP,VERSCOM,2548,SBLK51,L,W,PB7951,B,BLANK,420.1 P#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MINC38C TO 302@8C/MIN
ENHANCED (S 15@ 2N 0T)

DATA: T2574 # 323
CALI: T2574 # 2

BASE M/Z: 43
RIC: 2950G.



0332

Library Search Data: T2574 # 345 Base m/z: 39
05/14/90 23:01:00 + 5:45 Cali: T2574 # 2 RIC: 13007.
Sample: CLP,VERSCDM,2548,SBLK51,L,W,RB7951,B,BLANK,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
108 matched at least 8 of the 16 largest peaks in the unknown

Rank	In.	Name
1	1076	1-PROPENE, 3,3'-OXYBIS-
2	1111	2-HEXENAL, (E)-
3	2216	2-HEPTENAL, (Z)-
4	2186	4-PENTENAL, 2,2-DIMETHYL-
5	1153	CYCLOPENTANE, 1,1-DIMETHYL-

Rank	Formula	M. Wt	B. Pk	Purity	Fit	RFit
1	C6.H10.O	98	41	778	876	806
2	C6.H10.O	98	41	760	881	826
3	C7.H12.O	112	41	739	877	761
4	C7.H12.O	112	55	667	795	706
5	C7.H14	98	56	666	790	692

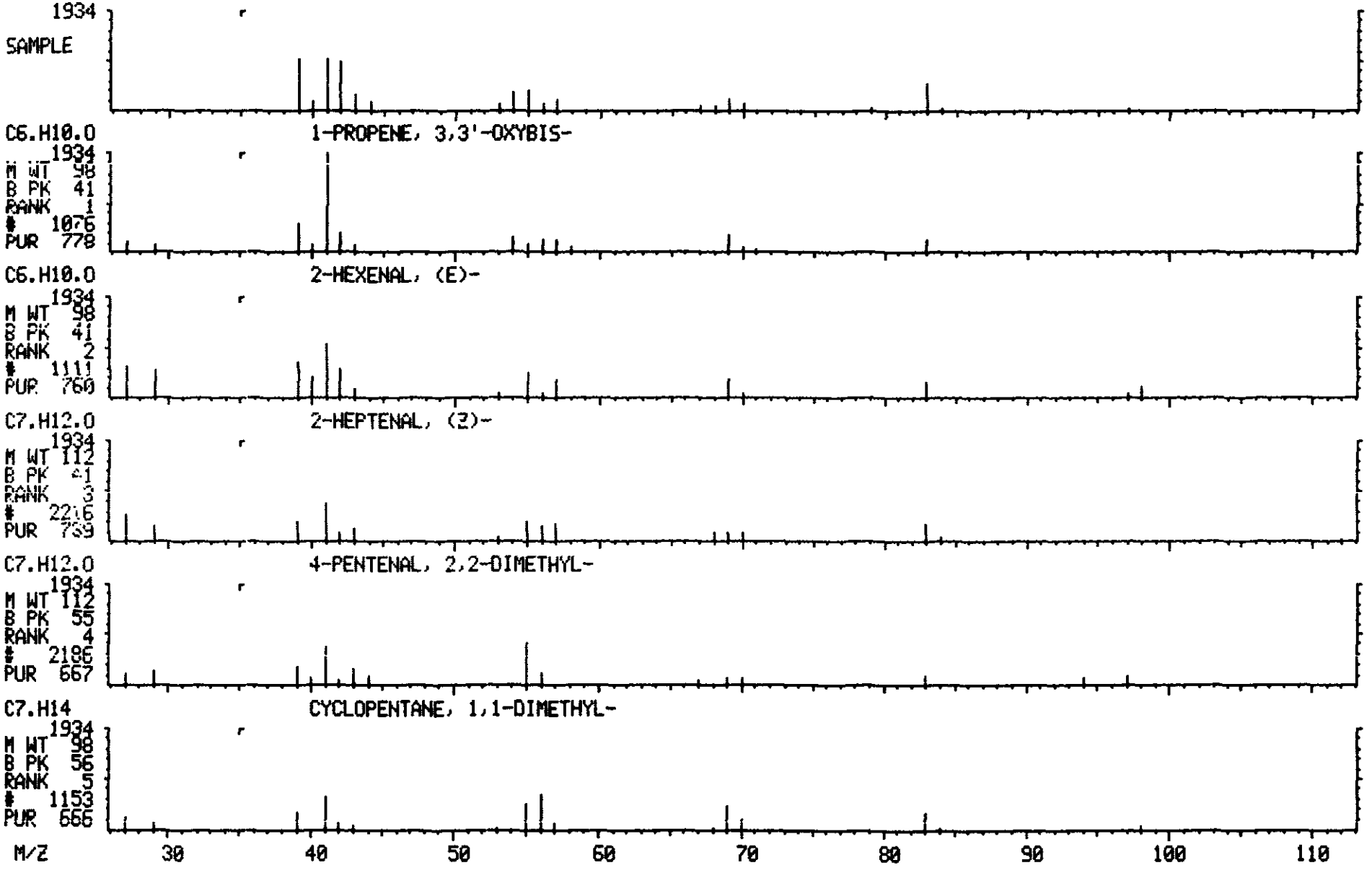
Rank	Ret. Time	B.P. Int.	US. Par. 1	US. Par. 2	C.A.S. #
1	—	—	—	—	557-40-4
2	—	—	—	—	6728-26-3
3	—	—	—	—	57266-86-1
4	—	—	—	—	5497-67-6
5	—	—	—	—	1638-26-2

LIBRARY SEARCH
05/14/90 23:01:00 + 5:45
SAMPLE: CLP,VERSCDM,2548,SBLK51,L,W,RB7951,B,BLANK,420.1 B#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN038C TO 30208C/MIN
ENHANCED (5 15B 2N 0T)

DATA: T2574 # 345
CALI: T2574 # 2

BASE M/Z: 39
RIC: 13007.

100334



Library Search Data: T2574 # 445 Base m/z: 68
05/14/90 23:01:00 + 7:25 Cali: T2574 # 2 RIC: 4615.
Sample: CLP,VERSCDM,2548,SBLK51,L,W,RB7951,B,BLANK,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
164 matched at least 6 of the 14 largest peaks in the unknown

Rank	In.	Name
1	952	2-CYCLOHEXEN-1-ONE
2	936	3(2H)-PYRIDAZINONE
3	941	2H-PYRAN-2-ONE
4	2092	2,5-FURANDIONE, DIHYDRO-3-METHYLENE-
5	168	FURAN

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C6.H8.O	96	68	934	961	965 ✓
2	C4.H4.O.N2	96	68	836	889	882
3	C5.H4.O2	96	68	824	954	854
4	C5.H4.O3	112	68	767	958	775
5	C4.H4.O	68	68	759	927	765

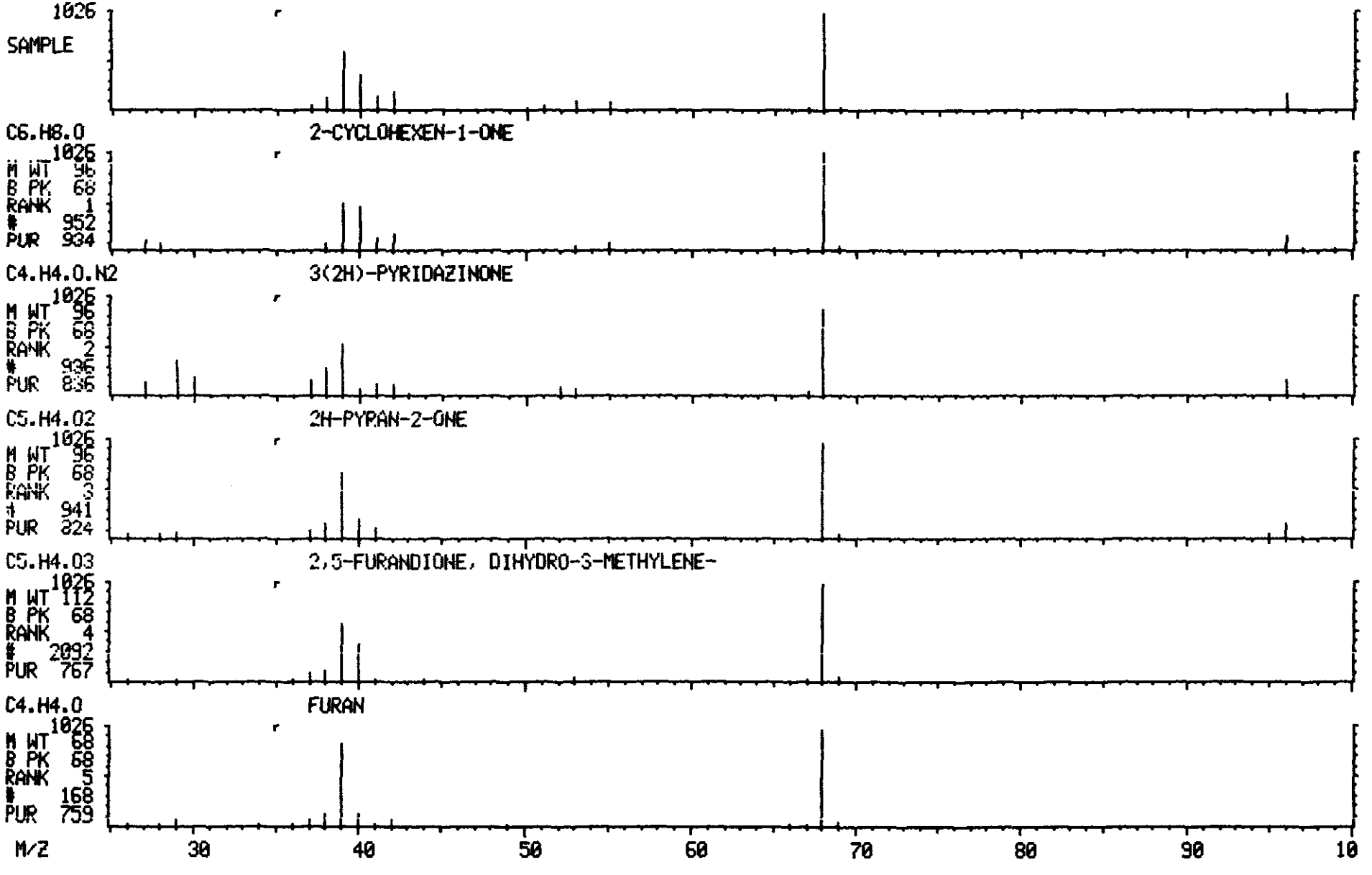
Rank	Ret. Time	B.P. Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	930-68-7
2	—	—	—	—	504-30-3
3	—	—	—	—	504-31-4
4	—	—	—	—	2170-03-8
5	—	—	—	—	110-00-9

LIBRARY SEARCH
05/14/90 23:01:00 + 7:25
SAMPLE: CLP,VERSCOM,2545,SBLK51,L,W,PB7951,B,BLANK,420.1 B#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2574 # 445
CALI: T2574 # 2

BASE M/Z: 68
RIC: 4615.

100336



Library Search Data: T2574 # 601 Base m/z: 41
05/14/90 23:01:00 + 10:01 Cali: T2574 # 2 RIC: 2371.
Sample: CLP,VERSCDM,2548,SBLK51,L,W,RB7951,B,BLANK,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
301 matched at least 6 of the 16 largest peaks in the unknown

Rank	In.	Name
1	9497	CYCLOHEXENE, 3-BROMO
2	971	1,4-PENTADIENE, 3,3-DIMETHYL-
3	2763	CYCLOPROPANE, 1-CHLORO-2-ETHENYL-1-METHYL-
4	3111	CYCLOHEXENE, 3-(2-PROPYNYL)-
5	986	1,5-HEXADIENE, 2-METHYL-

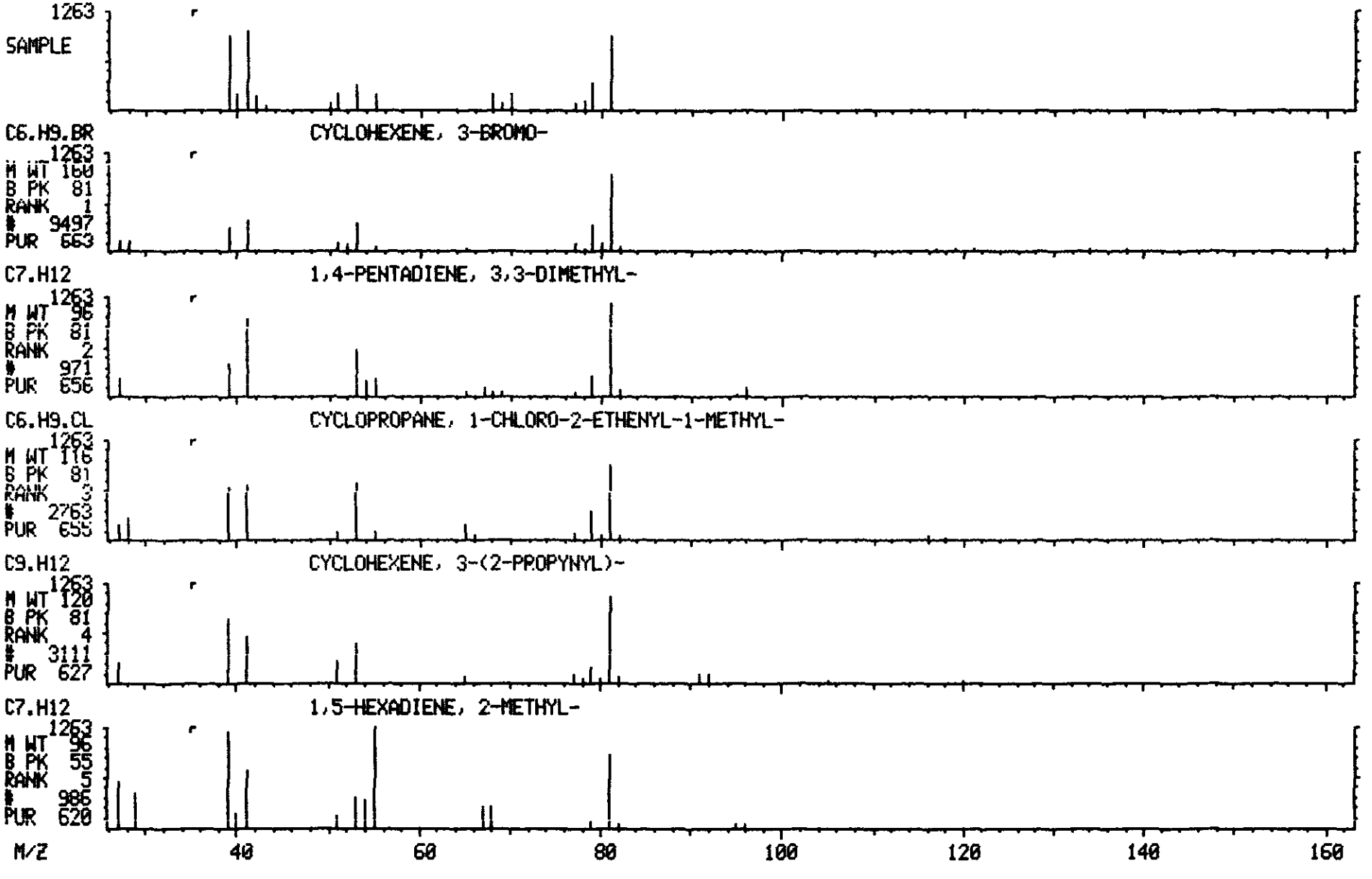
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C6.H9.BR	160	81	663	815	763
2	C7.H12	96	81	656	804	774
3	C6.H9.CL	116	81	655	836	757
4	C9.H12	120	81	627	809	753
5	C7.H12	96	55	620	743	731

Rank	Ret. Time	B.P. Int.	US. Par. 1	US. Par. 2	C.A.S. #
1	—	—	—	—	1521-51-3
2	—	—	—	—	1112-35-2
3	—	—	—	—	62337-93-3
4	—	—	—	—	55956-43-9
5	—	—	—	—	4049-81-4

LIBRARY SEARCH
05/14/90 23:01:00 + 10:01
SAMPLE: CLP,VERSCDM,2548,SBLK51,L,W,R67951,B,BLANK,420.1 B#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2574 # 601
CALI: T2574 # 2

BASE M/Z: 41
RIC: 2371.



Library Search Data: T2574 # 955 Base m/z: 43
05/14/90 23:01:00 + 15:55 Cali: T2574 # 2 RIC: 3895.
Sample: CLP,VERSCDM,2548,SBLK51,L,W,RB7951,B,BLANK,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum PURITY
188 matched at least 7 of the 13 largest peaks in the unknown

Rank	In.	Name
1	18986	PROPANOIC ACID, 2-METHYL-, 2,2-DIMETHYL-1-(2-HYDROXY-1-METHYLETHYL)*
2	18987	PROPANOIC ACID, 2-METHYL-, 3 HYDROXY-2,4,4-TRIMETHYLPENTYL ESTER
3	1181	CYCLOPROPANE, 1,1,2,3-TETRAMETHYL-
4	6650	1-PENTANOL, 4-METHYL-2-PROPYL-
5	2707	3-HEXENE-2,5-DIOL

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C12.H24.O3	216	71	848	875	954
2	C12.H24.O3	216	56	746	788	838
3	C7.H14	98	55	743	816	802
4	C9.H20.O	144	57	705	775	792
5	C6.H12.O2	116	43	692	753	795

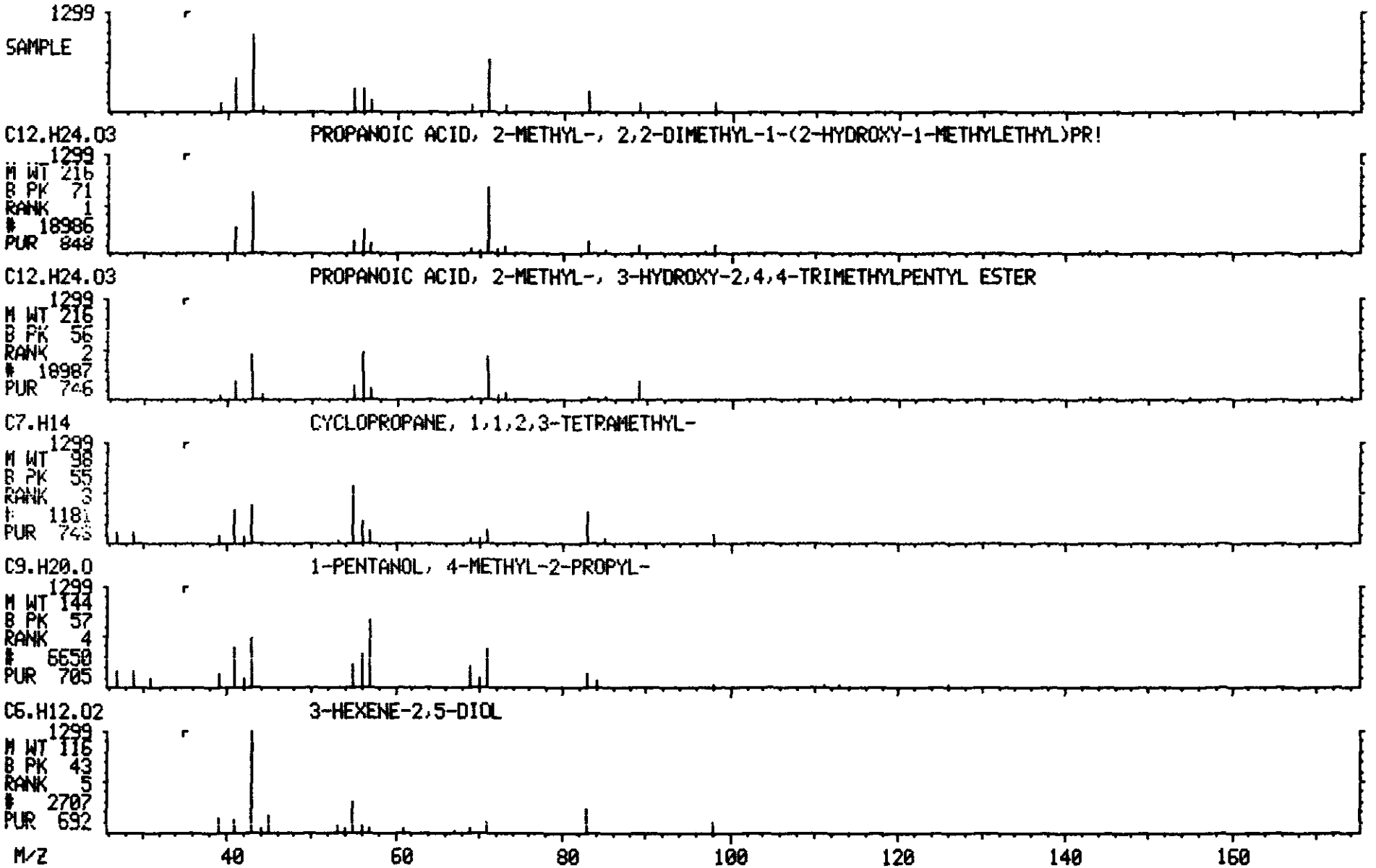
Rank	Ret. Time	B.P. Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	74367-33-2 ✓
2	—	—	—	—	74367-34-3
3	—	—	—	—	74752-93-5
4	—	—	—	—	54004-41-0
5	—	—	—	—	7319-23-5

LIBRARY SEARCH
05/14/90 23:01:00 + 15:55
SAMPLE: CLP,VERSCOM,2548,SELK51,L,W,RB7951,P,BLANK,420.1 P#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30200C/MIN
ENHANCED (S 15B 2N 0T)

DATA: T2574 # 955
CALI: T2574 # 2

BASE M/Z: 43
RIC: 3895.

100340



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        >>>>INTERNAL STANDARD RIC REPORT<<<<
*****************************INTERNAL STANDARD#1*****************RIC
Mass List                      Data: T2574 # 546          Base m/z:  150
05/14/90 23:01:00 +  9:06     Cali: T2574 #   2          RIC:      56576.
Sample: CLP,VERSCDM,2548,SBLK51,L,W,RB7951,B,BLANK,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     35       0.00   0.00        0. Minima     Min inten:      0.
     30                      #   0  Maxima
*****************************INTERNAL STANDARD#2*****************RIC
Mass List                      Data: T2574 # 766          Base m/z:  136
05/14/90 23:01:00 + 12:46     Cali: T2574 #   2          RIC:      60928.
Sample: CLP,VERSCDM,2548,SBLK51,L,W,RB7951,B,BLANK,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38       0.00   0.00        0. Minima     Min inten:      0.
     30                      #   0  Maxima
*****************************INTERNAL STANDARD#3*****************RIC
Mass List                      Data: T2574 #1100          Base m/z:  164
05/14/90 23:01:00 + 18:20     Cali: T2574 #   2          RIC:      59840.
Sample: CLP,VERSCDM,2548,SBLK51,L,W,RB7951,B,BLANK,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38       0.00   0.00        0. Minima     Min inten:      0.
     30                      #   0  Maxima
*****************************INTERNAL STANDARD#4*****************RIC
Mass List                      Data: T2574 #1384          Base m/z:  168
05/14/90 23:01:00 + 23:04     Cali: T2574 #   2          RIC:      75520.
Sample: CLP,VERSCDM,2548,SBLK51,L,W,RB7951,B,BLANK,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38       0.00   0.00        0. Minima     Min inten:      0.
     30                      #   0  Maxima
*****************************INTERNAL STANDARD#5*****************RIC
Mass List                      Data: T2574 #1902          Base m/z:  240
05/14/90 23:01:00 + 31:42     Cali: T2574 #   2          RIC:      50752.
Sample: CLP,VERSCDM,2548,SBLK51,L,W,RB7951,B,BLANK,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     40       0.00   0.00        0. Minima     Min inten:      0.
     30                      #   0  Maxima
*****************************INTERNAL STANDARD#6*****************RIC
Mass List                      Data: T2574 #2211          Base m/z:  264
05/14/90 23:01:00 + 36:51     Cali: T2574 #   2          RIC:      25792.
Sample: CLP,VERSCDM,2548,SBLK51,L,W,RB7951,B,BLANK,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     66       0.00   0.00        0. Minima     Min inten:      0.
     30                      #   0  Maxima
     ANALYST: CHECK BASE M/Z AND RIC AMOUNT TO INSURE NO CONTAMINATION
```

Versar INC.

MATRIX SPIKE DATA

100342

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW38MS

La Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16688MS

Sample wt/vol: 500 (g/mL) ML Lab File ID: T2576

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/15/90

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	20	U
111-44-4	bis(2-Chloroethyl)ether	20	U
95-57-8	2-Chlorophenol	20	U
541-73-1	1,3-Dichlorobenzene	20	U
106-46-7	1,4-Dichlorobenzene	20	U
100-51-6	Benzyl alcohol	20	U
95-50-1	1,2-Dichlorobenzene	20	U
95-48-7	2-Methylphenol	20	U
108-60-1	bis(2-Chloroisopropyl)ether	20	U
106-44-5	4-Methylphenol	20	U
621-64-7	N-Nitroso-di-n-propylamine	20	U
67-72-1	Hexachloroethane	20	U
98-95-3	Nitrobenzene	20	U
78-59-1	Isophorone	20	U
88-75-5	2-Nitrophenol	20	U
105-67-9	2,4-Dimethylphenol	20	U
65-85-0	Benzoic Acid	100	U
111-91-1	bis(2-Chloroethoxy)methane	20	U
120-83-2	2,4-Dichlorophenol	20	U
120-82-1	1,2,4-Trichlorobenzene	20	U
91-20-3	Naphthalene	20	U
106-47-8	4-Chloroaniline	20	U
87-68-3	Hexachlorobutadiene	20	U
59-50-7	4-Chloro-3-methylphenol	20	U
91-57-6	2-Methylnaphthalene	20	U
77-47-4	Hexachlorocyclopentadiene	20	U
88-06-2	2,4,6-Trichlorophenol	20	U
95-95-4	2,4,5-Trichlorophenol	100	U
91-58-7	2-Chloronaphthalene	20	U
88-74-4	2-Nitroaniline	100	U
131-11-3	Dimethylphthalate	20	U
208-96-8	Acenaphthylene	20	U
606-20-2	2,6-Dinitrotoluene	20	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW38MS

La Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16688MS

Sample wt/vol: 500 (g/mL) ML Lab File ID: T2576

Level: (low/med) LOW Date Received: 04/20/90

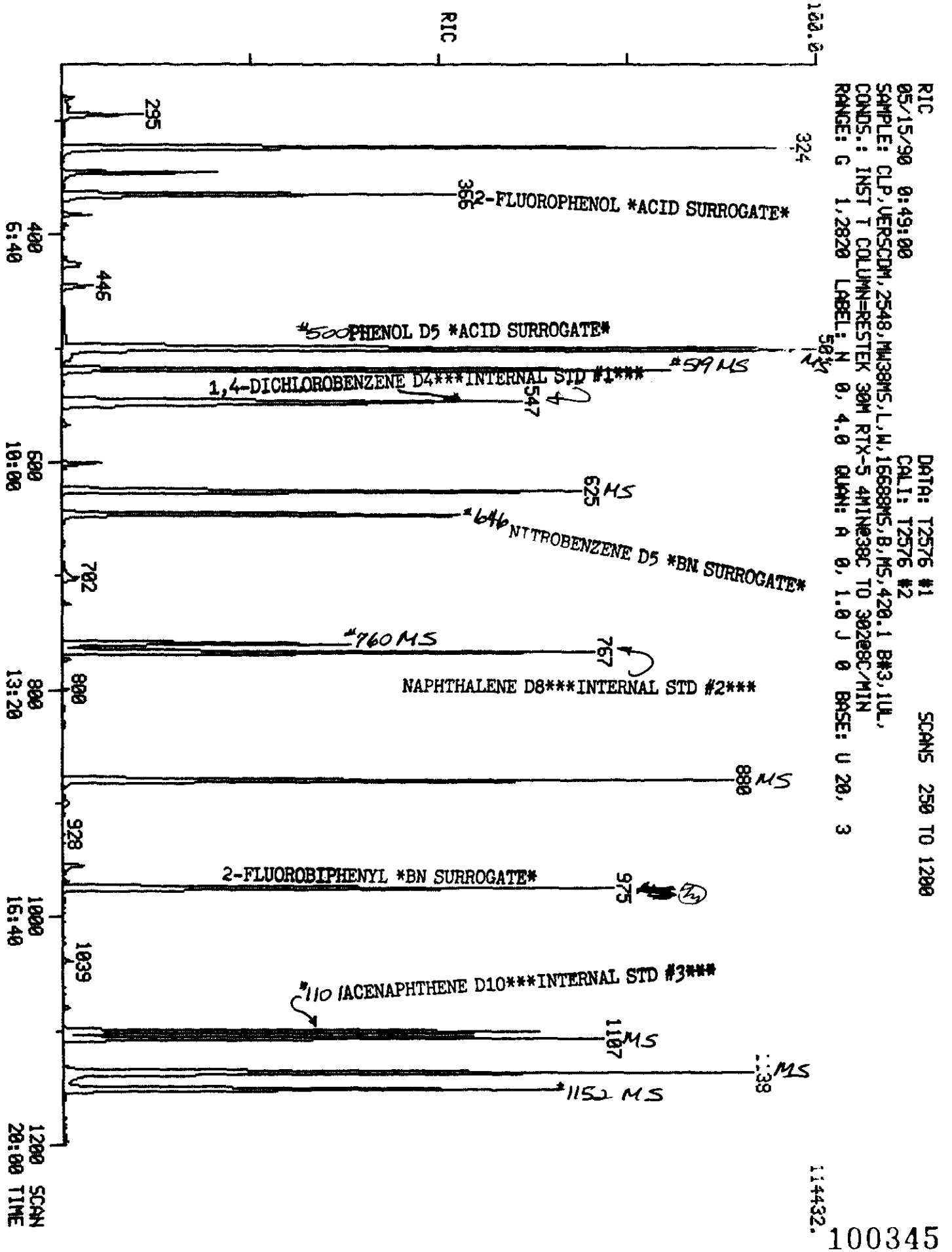
% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/15/90

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	100	U
83-32-9	Acenaphthene	20	U
51-28-5	2,4-Dinitrophenol	100	U
100-02-7	4-Nitrophenol	100	U
132-64-9	Dibenzofuran	20	U
121-14-2	2,4-Dinitrotoluene	20	U
84-66-2	Diethylphthalate	20	U
7005-72-3	4-Chlorophenyl-phenylether	20	U
86-73-7	Fluorene	20	U
100-01-6	4-Nitroaniline	100	U
534-52-1	4,6-Dinitro-2-methylphenol	100	U
86-30-6	N-nitrosodiphenylamine (1)	20	U
101-55-3	4-Bromophenyl-phenylether	20	U
118-74-1	Hexachlorobenzene	20	U
87-86-5	Pentachlorophenol	100	U
85-01-8	Phenanthrene	20	U
120-12-7	Anthracene	20	U
84-74-2	Di-n-butylphthalate	20	U
206-44-0	Fluoranthene	20	U
129-00-0	Pyrene	20	U
85-68-7	Butylbenzylphthalate	20	U
91-94-1	3,3'-Dichlorobenzidine	40	U
56-55-3	Benzo(a)anthracene	20	U
218-01-9	Chrysene	20	U
117-81-7	bis(2-Ethylhexyl)phthalate	20	U
117-84-0	Di-n-octyl phthalate	20	U
205-99-2	Benzo(b)fluoranthene	20	U
207-08-9	Benzo(k)fluoranthene	20	U
50-32-8	Benzo(a)pyrene	20	U
193-39-5	Indeno(1,2,3-cd)pyrene	20	U
53-70-3	Dibenz(a,h)anthracene	20	U
191-24-2	Benzo(g,h,i)perylene	20	U

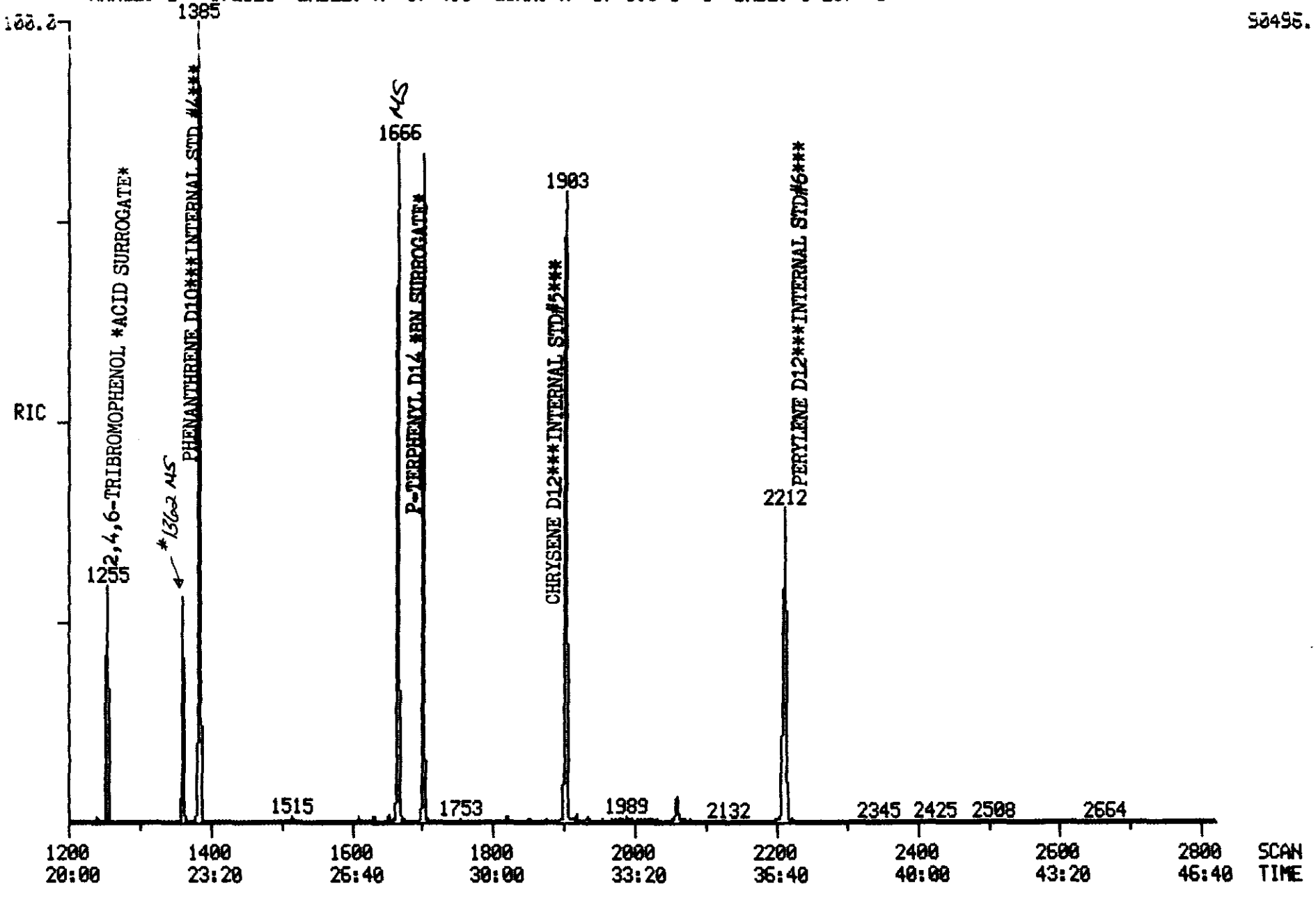
(1) - Cannot be separated from Diphenylamine


RIC
05/15/90 0:49:00
SAMPLE: CLP,VERSCDM,2548,MW38MS,L,W,16688MS,B,MS,420.1 B#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
RANGE: G 1,2820 LABEL: N 0, 4.0 GAIN: A 0, 1.0 J 0 BASE: U 20, 3
DATA: T2576 #1
CALI: T2576 #2
SCANS 250 TO 1200
RIC
100.0
295
324
362
2-FLUOROPHENOL *ACID SURROGATE*
400
6:40
445
#500 PHENOL D5 *ACID SURROGATE*
#59 MS
1,4-DICHLOROBENZENE D4***INTERNAL STD #1***
547
600
10:00
625 MS
#646 NITROBENZENE D5 *BN SURROGATE*
702
#760 MS
767
NAPHTHALENE D8***INTERNAL STD #2***
800
13:20
880 MS
928
2-FLUOROBIPHENYL *BN SURROGATE*
975
1000
16:40
1039
#110 ACENAPHTHENE D10***INTERNAL STD #3***
1107 MS
1138 MS
#1152 MS
1200
20:00
SCAN
TIME
114432.

100345

RIC DATA: T2576 #1 SCANS 1200 TO 2820
05/15/90 0:49:00 CALI: T2576 #2
SAMPLE: CLP,VERSCOM,2548,MW38MS,L,W,16688MS,B,MS,420.1 B#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
RANGE: G 1,2820 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

100346



Quantitation Report File: T2576

Data: T2576.TI
05/15/90 0:49:00
Sample: CLP,VERSCDM,2548,MW38MS,L,W,16688MS,B,MS,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	C330 2-CHLOROPHENOL
3	C315 PHENOL
4	C325 BIS (2-CHLOROETHYL) ETHER
5	C335 1,3-DICHLOROBENZENE
6	C340 1,4-DICHLOROBENZENE
7	C350 1,2-DICHLOROBENZENE
8	C345 BENZYL ALCOHOL
9	C360 BIS (2-CHLOROISOPROPYL) ETHER
10	C355 2-METHYLPHENOL
11	C375 HEXACHLOROETHANE
12	C365 4-METHYLPHENOL
13	C370 N-NITROSO-DI-N-PROPYLAMINE
14	CS50 2-FLUOROPHENOL**ACID SURR.**
15	CS45 PHENOL-D5**ACID SURR.**
16	CI40 NAPHTHALENE-D8**INT. STD.#2**
17	C410 NITROBENZENE
18	C415 ISOPHORONE
19	C420 2-NITROPHENOL
20	C425 2,4-DIMETHYLPHENOL
21	C435 BIS (2-CHLOROETHOXY) METHANE
22	C440 2,4-DICHLOROPHENOL
23	C445 1,2,4-TRICHLOROBENZENE
24	C450 NAPHTHALENE
25	C430 BENZOIC ACID
26	C455 4-CHLOROANILINE
27	C460 HEXACHLOROBUTADIENE
28	C465 4-CHLORO-3-METHYLPHENOL
29	C470 2-METHYLNAPHTHALENE
30	CS20 NITROBENZENE-D5**BN SURR.**
31	CI50 ACENAPHTHENE-D10**INT. STD.#3**
32	C510 HEXACHLOROCYCLOPENTADIENE
33	C515 2,4,6-TRICHLOROPHENOL
34	C520 2,4,5-TRICHLOROPHENOL
35	C525 2-CHLORONAPHTHALENE
36	C530 2-NITROANILINE
37	C540 ACENAPHTHYLENE
38	C535 DIMETHYL PHTHALATE
39	C544 2,6-DINITROTOLUENE
40	C550 ACENAPHTHENE
41	C545 3-NITROANILINE
42	C555 2,4-DINITROPHENOL
43	C565 DIBENZOFURAN
44	C560 4-NITROPHENOL
45	C570 2,4-DINITROTOLUENE
46	C590 FLUORENE
47	C585 4-CHLOROPHENYL-PHENYLETHER

✓DB 5/22/90

All IS areas + surrogate recoveries are compliant.
SJD 5-15-90

RFF

100347

T2574.

No	Name
48	C580 DIETHYLPHTHALATE
49	C595 4-NITROANILINE
50	C610 4,6-DINITRO-2-METHYLPHENOL

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	547	9:07	1	1.000	A BB	16770.	40.000 NG/UL	4.06
2	128	519	8:39	1	0.949	A BB	29976.	55.478 NG. MS	5.63
3	94	502	8:22	1	0.918	A BB	37730.	49.231 NG. MS	5.00
4	NOT FOUND								
5	146	549	9:09	1	1.004	A BB	14780.	MISID ~~24.266 NG~~	2.46
6	146	549	9:09	1	1.004	A BB	14780.	22.953 NG. MS	2.33
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	70	625	10:25	1	1.143	A BB	29756.	36.946 NG. MS	3.75
14	112	365	6:05	1	0.667	A BB	21671.	49.120 NG*A1	4.99
15	99	500	8:20	1	0.914	A BB	35394.	52.123 NG*A2	5.29
16	136	767	12:47	16	1.000	A BB	52800.	40.000 NG/UL	4.06
17	NOT FOUND								
18	NOT FOUND								
19	139	704	11:44	16	0.918	A BB	223.	~~0.659 NG~~	0.07
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	180	760	12:40	16	0.991	A BB	13825.	25.867 NG.MS	2.63
24	NOT FOUND								
25	122	724	12:04	16	0.944	A BB	200.	~~0.707 NG~~	0.07
26	NOT FOUND								
27	NOT FOUND								
28	107	880	14:40	16	1.147	A BB	36963.	49.546 NG. MS	5.03
29	NOT FOUND								
30	82	646	10:46	16	0.842	A BB	41887.	41.554 NG*B1	4.22
31	164	1101	18:21	31	1.000	A BB	41063.	40.000 NG/UL	4.06
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	153	1107	18:27	31	1.005	A BB	45863.	36.103 NG. MS	3.67
41	NOT FOUND								
42	NOT FOUND								
43	168	1137	18:57	31	1.033	A BB	330.	~~0.182 NG~~	0.02
44	109	1138	18:58	31	1.034	A BB	29117.	96.633 NG.MS	9.81
45	165	1152	19:12	31	1.046	A BB	22727.	41.778 NG.MS	4.24
46	NOT FOUND								
47	NOT FOUND								
48	149	1200	20:00	31	1.090	A BB	219.	~~0.120 NG~~	0.01
49	NOT FOUND								
50	NOT FOUND								

T2576

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:07	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	8:39	1.00	0.949	1.00	55.48	50.00	1.430	1.289	1.11
3	8:21	1.00	0.916	1.00	49.23	50.00	1.800	1.828	0.98
4	8:35		0.941						
5	9:00	1.02	0.987	1.02	24.27	50.00	0.705	1.453	0.49
6	9:09	1.00	1.004	1.00	22.95	50.00	0.705	1.536	0.46
7	9:40		1.060						
8	9:35		1.051						
9	10:01		1.099						
10	9:57		1.091						
11	10:29		1.150						
12	10:22		1.137						
13	10:26	1.00	1.144	1.00	36.95	50.00	1.419	1.921	0.74
14	6:05	1.00	0.667	1.00	49.12	50.00	1.034	1.052	0.98
15	8:19	1.00	0.912	1.00	52.12	50.00	1.688	1.620	1.04
16	12:48	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
17	10:50		0.846						
18	11:29		0.897						
19	11:45	1.00	0.918	1.00	0.66	50.00	0.003	0.256	0.01
20	11:54		0.930						
21	12:14		0.956						
22	12:26		0.971						
23	12:40	1.00	0.990	1.00	25.87	50.00	0.209	0.405	0.52
24	12:51		1.004						
25	12:16	0.98	0.958	0.98	0.71	50.00	0.003	0.214	0.01
26	13:09		1.027						
27	13:23		1.046						
28	14:40	1.00	1.146	1.00	49.55	50.00	0.560	0.565	0.99
29	14:59		1.171						
30	10:47	1.00	0.842	1.00	41.55	50.00	0.635	0.764	0.83
31	18:22	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
32	15:41		0.854						
33	16:00		0.871						
34	16:06		0.877						
35	16:32		0.900						
36	17:03		0.928						
37	17:52		0.973						
38	17:46		0.967						
39	18:00		0.980						
40	18:28	1.00	1.005	1.00	36.10	50.00	0.894	1.237	0.72
41	18:24		1.002						
42	18:43		1.019						
43	18:58	1.00	1.033	1.00	0.18	50.00	0.006	1.770	0.00
44	18:58	1.00	1.033	1.00	96.63	50.00	0.567	0.294	1.93
45	19:13	1.00	1.046	1.00	41.78	50.00	0.443	0.530	0.84
46	20:05		1.093						
47	20:08		1.096						
48	20:02	1.00	1.091	1.00	0.12	50.00	0.004	1.781	0.00
49	20:24		1.111						
50	20:29		1.115						

Quantitation Report File: T2576

Data: T2576.TI
05/15/90 0:49:00
Sample: CLP,VERSCDM,2548,MW3SMS,L,W,16688MS,B,MS,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: 420.1

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

No	Name
51	C615 N-NITROSODIPHENYLAMINE
52	C625 4-BROMOPHENYL-PHENYLETHER
53	C630 HEXACHLOROBENZENE
54	CS25 2-FLUOROBIPHENYL**BN SURR.**
55	CI60 PHENANTHRENE-D10**INT. STD.#4**
56	C635 PENTACHLOROPHENOL
57	C640 PHENANTHRENE
58	C645 ANTHRACENE
59	C650 DI-N-BUTYLPHTHALATE
60	C655 FLUORANTHENE
61	C715 PYRENE
62	CS55 2,4,6,-TRIBROMOPHENOL**ACID SURR.**
63	CI70 CHRYSENE-D12**INT. STD.#5**
64	C720 BUTYLBENZYLPHTHALATE
65	C730 BENZO(A)ANTHRACENE
66	C740 CHRYSENE
67	C725 3,3'-DICHLOROBENZIDINE
68	C741 BIS(2-ETHYLHEXYL)PHTHALATE
69	CS30 P-TERPHENYL-D14**BN SURR.**
70	CI75 PERYLENE-D12**INT. STD.#6**
71	C760 DI-N-OCTYL PHTHALATE
72	C765 BENZO(B)FLUORANTHENE
73	C770 BENZO(K)FLUORANTHENE
74	C775 BENZO(A)PYRENE
75	C780 INDENO(1,2,3-CD)PYRENE
76	C785 DIBENZ(A,H)ANTHRACENE
77	C790 BENZO(G,H,I)PERYLENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	NOT FOUND								
52	NOT FOUND								
53	NOT FOUND								
54	172	975	16:15	31	0.886	A BB	52171.	39.677 NG*B2	4.03
55	188	1385	23:05	55	1.000	A BV	85435.	40.000 NG/UL	4.06
56	266	1362	22:42	55	0.983	A BB	6782.	21.417 NG. MS	2.18
57	NOT FOUND								
58	NOT FOUND								
59	149	1515	25:15	55	1.094	A BB	1387.	BL ~~0.390 NG~~	0.04
60	NOT FOUND								
61	202	1666	27:46	63	0.875	A BB	93399.	37.905 NG.MS	3.85
62	330	1255	20:55	31	1.140	A BB	6763.	24.329 NG*A3	2.47
63	240	1903	31:43	63	1.000	A BB	68142.	40.000 NG/UL	4.06
64	NOT FOUND								
65	NOT FOUND								
66	NOT FOUND								

T2576

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
67	NOT FOUND								
68	149	1918	31:58	63	1.008	A BB	406.	~~0.206 NG~~	0.02
69	244	1702	28:22	63	0.894	A BB	60169.	37.463 NG*B3	3.81
70	264	2212	36:52	70	1.000	A BB	57773.	40.000 NG/UL	4.06
71	NOT FOUND								
72	NOT FOUND								
73	NOT FOUND								
74	NOT FOUND								
75	NOT FOUND								
76	NOT FOUND								
77	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	20:34		1.120						
52	21:41		1.181						
53	22:06		1.203						
54	16:15	1.00	0.885	1.00	39.68	50.00	1.016	1.281	0.79
55	23:06	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
56	22:43	1.00	0.983	1.00	21.42	50.00	0.064	0.148	0.43
57	23:11		1.004						
58	23:19		1.009						
59	25:17	1.00	1.095	1.00	0.39	50.00	0.013	1.667	0.01
60	27:04		1.172						
61	27:48	1.00	0.876	1.00	37.90	50.00	1.097	1.446	0.76
62	20:56	1.00	1.140	1.00	24.33	50.00	0.132	0.271	0.49
63	31:45	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
64	30:10		0.950						
65	31:42		0.998						
66	31:50		1.003						
67	31:43		0.999						
68	32:00	1.00	1.008	1.00	0.21	50.00	0.005	1.156	0.00
69	28:23	1.00	0.894	1.00	37.46	50.00	0.706	0.943	0.75
70	36:56	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
71	33:53		0.917						
72	35:17		0.955						
73	35:23		0.958						
74	36:40		0.993						
75	43:01		1.165						
76	43:13		1.170						
77	44:53		1.215						

Quantitation Report File: QCREF

Data: T2576.TI
05/15/90 0:49:00
Sample: CLP,VERSCDM,2548,MW38MS,L,W,16688MS,B,MS,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	CI40 NAPHTHALENE-D8**INT. STD.#2**
3	CI50 ACENAPHTHENE-D10**INT. STD.#3**
4	CI60 PHENANTHRENE-D10**INT. STD.#4**
5	CI70 CHRYSENE-D12**INT. STD.#5**
6	CI75 PERYLENE-D12**INT. STD.#6**
7	CS50 2-FLUOROPHENOL**ACID SURR.**
8	CS45 PHENOL-D5**ACID SURR.**
9	CS55 2,4,6,-TRIBROMOPHENOL**ACID SURR.**
10	CS20 NITROBENZENE-D5**BN SURR.**
11	CS25 2-FLUOROBIPHENYL**BN SURR.**
12	CS30 P-TERPHENYL-D14**BN SURR.**

Scan	Time	Area(Hght)		Amount		Name
547	9:07	16770.		40.000	NG/UL	CI30 1,4-DICHLOROBENZENE-D4
767	12:47	52800.	%	40.000	NG/UL	CI40 NAPHTHALENE-D8**INT. ST
1101	18:21	41063.		40.000	NG/UL	CI50 ACENAPHTHENE-D10**INT.
1385	23:05	85435.	Rec.	40.000	NG/UL	CI60 PHENANTHRENE-D10**INT.
1903	31:43	68142.		40.000	NG/UL	CI70 CHRYSENE-D12**INT. STD.
2212	36:52	57773.		40.000	NG/UL	CI75 PERYLENE-D12**INT. STD.
365	6:05	21671.	49	49.120	NG*A1	CS50 2-FLUOROPHENOL**ACID SU
500	8:20	35394.	62	52.123	NG*A2	CS45 PHENOL-D5**ACID SURR.**
1255	20:55	6763.	24	24.329	NG*A3	CS55 2,4,6,-TRIBROMOPHENOL**
646	10:46	41887.	83	41.554	NG*B1	CS20 NITROBENZENE-D5**BN SUR
975	16:15	52171.	79	39.677	NG*B2	CS25 2-FLUOROBIPHENYL**BN SU
1702	28:22	60169.	75	37.463	NG*B3	CS30 P-TERPHENYL-D14**BN SUR

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:07	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	12:48	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
3	18:22	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
4	23:06	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
5	31:45	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
6	36:56	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
7	6:05	1.00	0.667	1.00	49.12	50.00	1.034	1.052	0.98
8	8:19	1.00	0.912	1.00	52.12	50.00	1.688	1.620	1.04
9	20:56	1.00	1.140	1.00	24.33	50.00	0.132	0.271	0.49
10	10:47	1.00	0.842	1.00	41.55	50.00	0.635	0.764	0.83
11	16:15	1.00	0.885	1.00	39.68	50.00	1.016	1.281	0.79
12	28:23	1.00	0.894	1.00	37.46	50.00	0.706	0.943	0.75

Quantitation Report File: ISREF

Data: T2569.TI
05/14/90 17:42:00
Sample: CLP,,,SSTD50,,,22658,B,IC50,,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: --

Data: T2576.TI
05/15/90 0:49:00
Sample: CLP,VERSCDM,2548,MW38MS,L,W,16688MS,B,MS,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
3	CI40 NAPHTHALENE-D8**INT. STD. #2**
4	CI40 NAPHTHALENE-D8**INT. STD. #2**
5	CI50 ACENAPHTHENE-D10**INT. STD. #3**
6	CI50 ACENAPHTHENE-D10**INT. STD. #3**
7	CI60 PHENANTHRENE-D10**INT. STD. #4**
8	CI60 PHENANTHRENE-D10**INT. STD. #4**
9	CI70 CHRYSENE-D12**INT. STD. #5**
10	CI70 CHRYSENE-D12**INT. STD. #5**
11	CI75 PERYLENE-D12**INT. STD. #6**
12	CI75 PERYLENE-D12**INT. STD. #6**

Scan	Time	Area(Hght)	Amount	Name
547	9:07	15621.	40.000 NG/UL	CI30 1,4-DICHLOROBENZENE-D4
547	9:07	16770.	42.942 NG/UL	CI30 1,4-DICHLOROBENZENE-D4
768	12:48	52080.	40.000 NG/UL	CI40 NAPHTHALENE-D8**INT. ST
767	12:47	52800.	40.553 NG/UL	CI40 NAPHTHALENE-D8**INT. ST
1102	18:22	37455.	40.000 NG/UL	CI50 ACENAPHTHENE-D10**INT.
1101	18:21	41063.	43.853 NG/UL	CI50 ACENAPHTHENE-D10**INT.
1386	23:06	75538.	40.000 NG/UL	CI60 PHENANTHRENE-D10**INT.
1385	23:05	85435.	45.241 NG/UL	CI60 PHENANTHRENE-D10**INT.
1905	31:45	56496.	40.000 NG/UL	CI70 CHRYSENE-D12**INT. STD.
1903	31:43	68142.	48.245 NG/UL	CI70 CHRYSENE-D12**INT. STD.
2216	36:56	45334.	40.000 NG/UL	CI75 PERYLENE-D12**INT. STD.
2212	36:52	57773.	50.975 NG/UL	CI75 PERYLENE-D12**INT. STD.

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*****************************INTERNAL STANDARD#2*****************RIC
              >>>>INTERNAL STANDARD RIC REPORT<<<<
*****************************INTERNAL STANDARD#1*****************RIC
Mass List                      Data: T2576 # 547          Base m/z:   150
05/15/90  0:49:00 +  9:07     Cali: T2576 #   2          RIC:      54720.
Sample: CLP,VERSCDM,2548,MW38MS,L,W,16688MS,B,MS,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     35       0.00   0.00        0. Minima     Min inten:       0.
     30                      #   0  Maxima
*****************************INTERNAL STANDARD#2*****************RIC
Mass List                      Data: T2576 # 767          Base m/z:   136
05/15/90  0:49:00 + 12:47     Cali: T2576 #   2          RIC:      70016.
Sample: CLP,VERSCDM,2548,MW38MS,L,W,16688MS,B,MS,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38       0.00   0.00        0. Minima     Min inten:       0.
     30                      #   0  Maxima
*****************************INTERNAL STANDARD#3*****************RIC
Mass List                      Data: T2576 #1101          Base m/z:   164
05/15/90  0:49:00 + 18:21     Cali: T2576 #   2          RIC:      65344.
Sample: CLP,VERSCDM,2548,MW38MS,L,W,16688MS,B,MS,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38       0.00   0.00        0. Minima     Min inten:       0.
     30                      #   0  Maxima
*****************************INTERNAL STANDARD#4*****************RIC
Mass List                      Data: T2576 #1385          Base m/z:   188
05/15/90  0:49:00 + 23:05     Cali: T2576 #   2          RIC:      84608.
Sample: CLP,VERSCDM,2548,MW38MS,L,W,16688MS,B,MS,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38       0.00   0.00        0. Minima     Min inten:       0.
     30                      #   0  Maxima
*****************************INTERNAL STANDARD#5*****************RIC
Mass List                      Data: T2576 #1903          Base m/z:   240
05/15/90  0:49:00 + 31:43     Cali: T2576 #   2          RIC:      64064.
Sample: CLP,VERSCDM,2548,MW38MS,L,W,16688MS,B,MS,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     40       0.00   0.00        0. Minima     Min inten:       0.
     30                      #   0  Maxima
*****************************INTERNAL STANDARD#6*****************RIC
Mass List                      Data: T2576 #2212          Base m/z:   264
05/15/90  0:49:00 + 36:52     Cali: T2576 #   2          RIC:      34752.
Sample: CLP,VERSCDM,2548,MW38MS,L,W,16688MS,B,MS,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     42       0.00   0.00        0. Minima     Min inten:       0.
     30                      #   0  Maxima
       CHECK BASE M/Z AND RIC AMOUNT TO INSURE NO COELUTION
```

Versar INC.

MATRIX SPIKE DUPLICATE DATA

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW38MSD

La Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16688MSD

Sample wt/vol: 500 (g/mL) ML Lab File ID: T2577

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/15/90

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	20	U
111-44-4	bis(2-Chloroethyl)ether	20	U
95-57-8	2-Chlorophenol	20	U
541-73-1	1,3-Dichlorobenzene	20	U
106-46-7	1,4-Dichlorobenzene	20	U
100-51-6	Benzyl alcohol	20	U
95-50-1	1,2-Dichlorobenzene	20	U
95-48-7	2-Methylphenol	20	U
108-60-1	bis(2-Chloroisopropyl)ether	20	U
106-44-5	4-Methylphenol	20	U
621-64-7	N-Nitroso-di-n-propylamine	20	U
67-72-1	Hexachloroethane	20	U
98-95-3	Nitrobenzene	20	U
78-59-1	Isophorone	20	U
88-75-5	2-Nitrophenol	20	U
105-67-9	2,4-Dimethylphenol	20	U
65-85-0	Benzoic Acid	100	U
111-91-1	bis(2-Chloroethoxy)methane	20	U
120-83-2	2,4-Dichlorophenol	20	U
120-82-1	1,2,4-Trichlorobenzene	20	U
91-20-3	Naphthalene	20	U
106-47-8	4-Chloroaniline	20	U
87-68-3	Hexachlorobutadiene	20	U
59-50-7	4-Chloro-3-methylphenol	20	U
91-57-6	2-Methylnaphthalene	20	U
77-47-4	Hexachlorocyclopentadiene	20	U
88-06-2	2,4,6-Trichlorophenol	20	U
95-95-4	2,4,5-Trichlorophenol	100	U
91-58-7	2-Chloronaphthalene	20	U
88-74-4	2-Nitroaniline	100	U
131-11-3	Dimethylphthalate	20	U
208-96-8	Acenaphthylene	20	U
606-20-2	2,6-Dinitrotoluene	20	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW38MSD

La Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2548 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 16688MSD

Sample wt/vol: 500 (g/mL) ML Lab File ID: T2577

Level: (low/med) LOW Date Received: 04/20/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/25/90

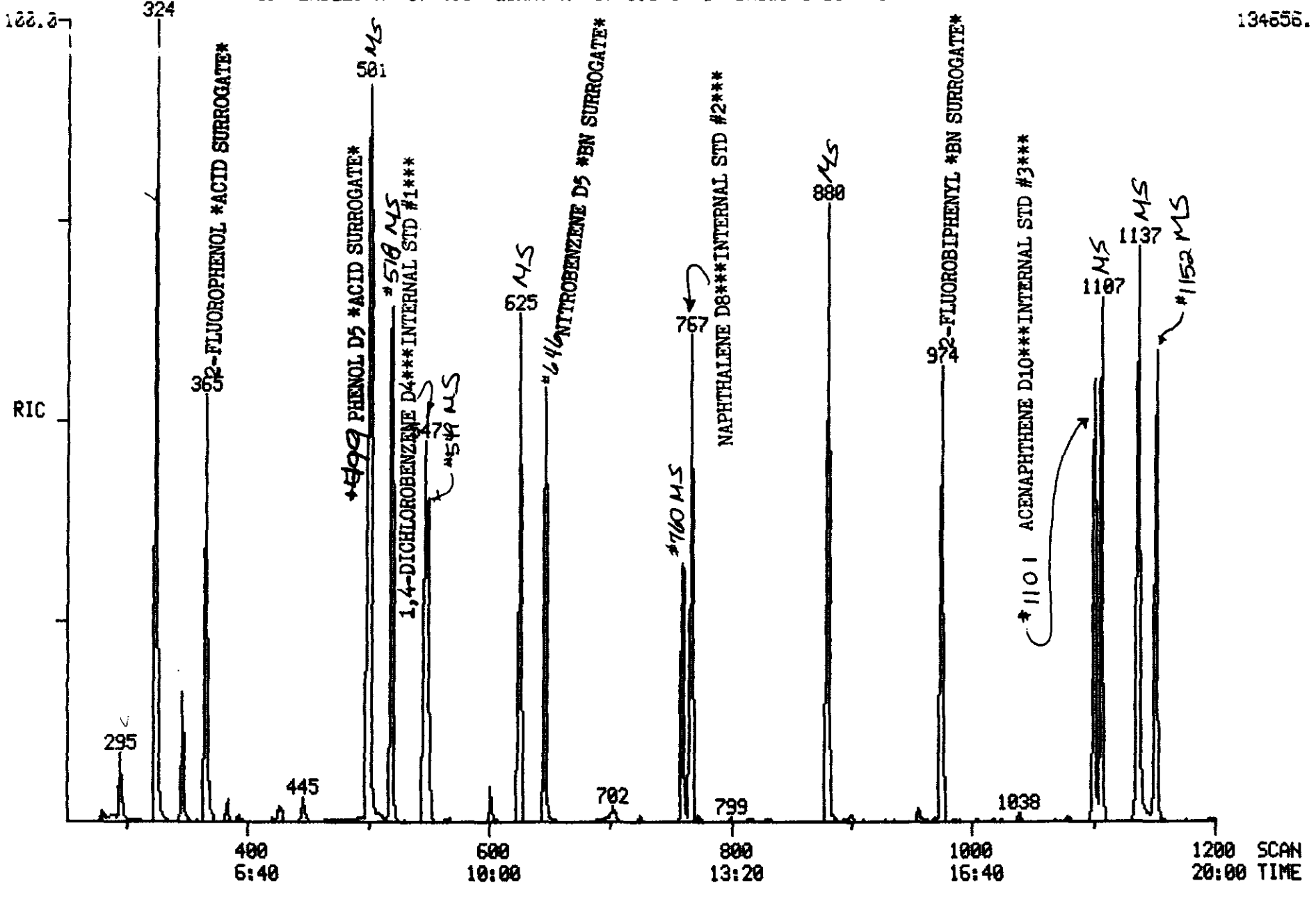
Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/15/90

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	100	U
83-32-9	Acenaphthene	20	U
51-28-5	2,4-Dinitrophenol	100	U
100-02-7	4-Nitrophenol	100	U
132-64-9	Dibenzofuran	20	U
121-14-2	2,4-Dinitrotoluene	20	U
84-66-2	Diethylphthalate	20	U
7005-72-3	4-Chlorophenyl-phenylether	20	U
86-73-7	Fluorene	20	U
100-01-6	4-Nitroaniline	100	U
534-52-1	4,6-Dinitro-2-methylphenol	100	U
86-30-6	N-nitrosodiphenylamine (1)	20	U
101-55-3	4-Bromophenyl-phenylether	20	U
118-74-1	Hexachlorobenzene	20	U
87-86-5	Pentachlorophenol	100	U
85-01-8	Phenanthrene	20	U
120-12-7	Anthracene	20	U
84-74-2	Di-n-butylphthalate	20	U
206-44-0	Fluoranthene	20	U
129-00-0	Pyrene	20	U
85-68-7	Butylbenzylphthalate	20	U
91-94-1	3,3'-Dichlorobenzidine	40	U
56-55-3	Benzo(a)anthracene	20	U
218-01-9	Chrysene	20	U
117-81-7	bis(2-Ethylhexyl)phthalate	20	U
117-84-0	Di-n-octyl phthalate	20	U
205-99-2	Benzo(b)fluoranthene	20	U
207-08-9	Benzo(k)fluoranthene	20	U
50-32-8	Benzo(a)pyrene	20	U
193-39-5	Indeno(1,2,3-cd)pyrene	20	U
53-70-3	Dibenz(a,h)anthracene	20	U
191-24-2	Benzo(g,h,i)perylene	20	U

(1) - Cannot be separated from Diphenylamine

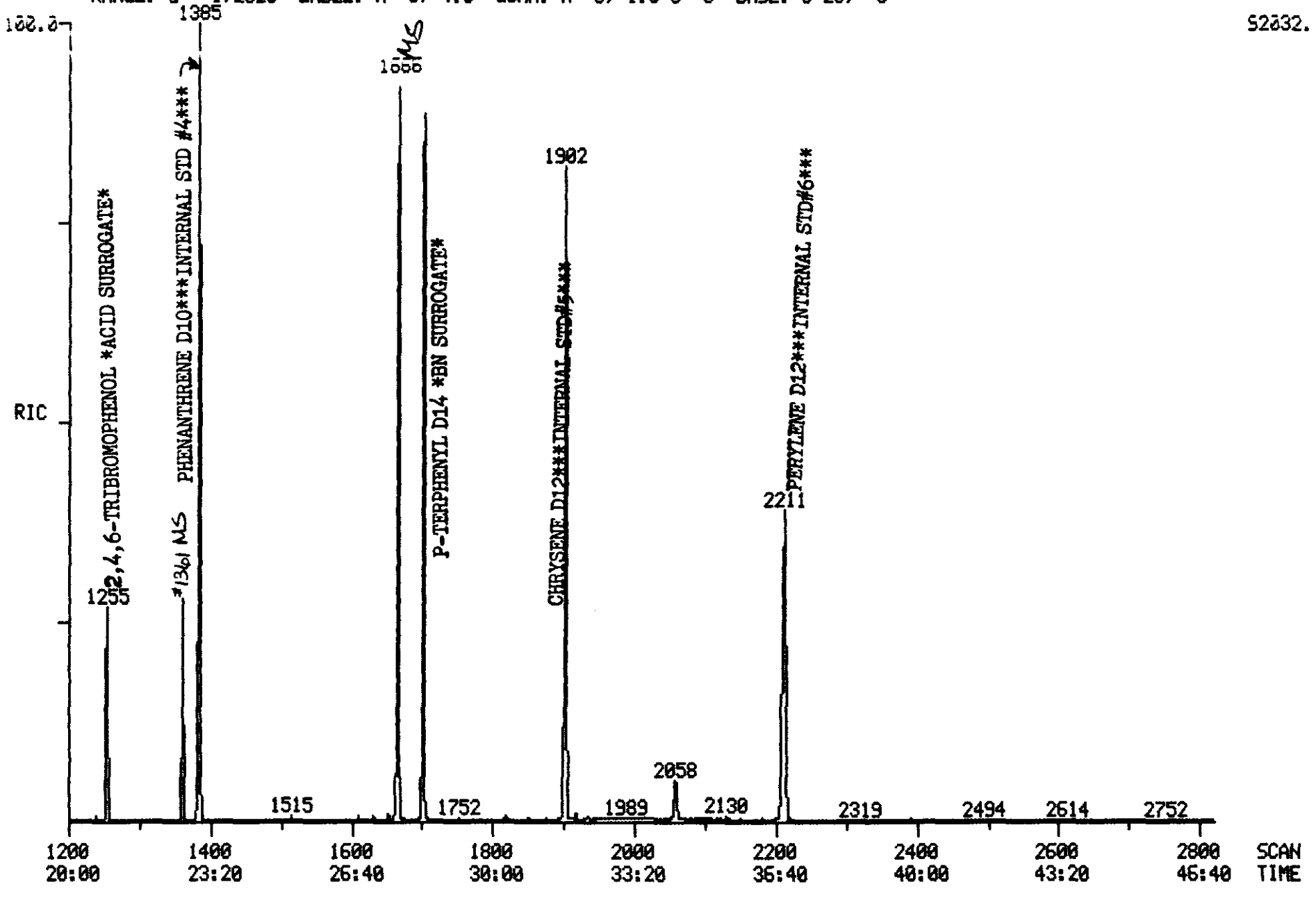
RIC
05/15/90 1:43:00
DATA: T2577 #1
CALI: T2577 #2
SCANS 250 TO 1200
SAMPLE: CLP,VERSCDM,2548,MW38MSD,L,W,16688MSD,B,MSD,420.1 B#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 30200C/MIN
RANGE: G 1,2820 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



00358

100359

RIC DATA: T2577 #1 SCANS 1200 TO 2820
05/15/90 1:43:00 CALI: T2577 #2
SAMPLE: CLP,VERSCDM,2548,MW38MSD,L,W,16688MSD,B,MSD,420.1 B#3,1UL,
CONDS.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
RANGE: G 1,2820 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: T2577

Data: T2577.TI
05/15/90 1:43:00
Sample: CLP,VERSCDM,2548,MW38MSD,L,W,16688MSD,B,MSD,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	C330 2-CHLOROPHENOL
3	C315 PHENOL
4	C325 BIS (2-CHLOROETHYL) ETHER
5	C335 1,3-DICHLOROBENZENE
6	C340 1,4-DICHLOROBENZENE
7	C350 1,2-DICHLOROBENZENE
8	C345 BENZYL ALCOHOL
9	C360 BIS (2-CHLOROISOPROPYL) ETHER
10	C355 2-METHYLPHENOL
11	C375 HEXACHLOROETHANE
12	C365 4-METHYLPHENOL
13	C370 N-NITROSO-DI-N-PROPYLAMINE
14	CS50 2-FLUOROPHENOL**ACID SURR.**
15	CS45 PHENOL-D5**ACID SURR.**
16	CI40 NAPHTHALENE-D8**INT. STD.#2**
17	C410 NITROBENZENE
18	C415 ISOPHORONE
19	C420 2-NITROPHENOL
20	C425 2,4-DIMETHYLPHENOL
21	C435 BIS (2-CHLOROETHOXY) METHANE
22	C440 2,4-DICHLOROPHENOL
23	C445 1,2,4-TRICHLOROBENZENE
24	C450 NAPHTHALENE
25	C430 BENZOIC ACID
26	C455 4-CHLOROANILINE
27	C460 HEXACHLOROBUTADIENE
28	C465 4-CHLORO-3-METHYLPHENOL
29	C470 2-METHYLNAPHTHALENE
30	CS20 NITROBENZENE-D5**BN SURR.**
31	CI50 ACENAPHTHENE-D10**INT. STD.#3**
32	C510 HEXACHLOROCYCLOPENTADIENE
33	C515 2,4,6-TRICHLOROPHENOL
34	C520 2,4,5-TRICHLOROPHENOL
35	C525 2-CHLORONAPHTHALENE
36	C530 2-NITROANILINE
37	C540 ACENAPHTHYLENE
38	C535 DIMETHYL PHTHALATE
39	C544 2,6-DINITROTOLUENE
40	C550 ACENAPHTHENE
41	C545 3-NITROANILINE
42	C555 2,4-DINITROPHENOL
43	C565 DIBENZOFURAN
44	C560 4-NITROPHENOL
45	C570 2,4-DINITROTOLUENE
46	C590 FLUORENE
47	C585 4-CHLOROPHENYL-PHENYLETHER

✓ DB 5/22/90

All IS areas + Surrogate recoveries are compliant. SJD 5-15-90

T2577

No	Name
48	C580 DIETHYLPHTHALATE
49	C595 4-NITROANILINE
50	C610 4,6-DINITRO-2-METHYLPHENOL

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	546	9:06	1	1.000	A BB	16778.	40.000 NG/UL	3.98
2	128	518	8:38	1	0.949	A BB	30877.	57.119 NG. MS	5.69
3	94	501	8:21	1	0.918	A BB	38709.	50.484 NG. MS	5.03
4	NOT FOUND								
5	146	549	9:09	1	1.005	A BB	16968.	MS ID ~~27.845 NG~~	2.77
6	146	549	9:09	1	1.005	A BB	16968.	26.339 NG. MS	2.62
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	70	625	10:25	1	1.145	A BB	29790.	36.970 NG. MS	3.68
14	112	365	6:05	1	0.668	A BB	23141.	52.427 NG*A1	5.22
15	99	499	8:19	1	0.914	A BB	36584.	53.850 NG*A2	5.36
16	136	767	12:47	16	1.000	A BB	53654.	40.000 NG/UL	3.98
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	180	759	12:39	16	0.990	A BB	15456.	28.458 NG. MS	2.83
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	107	879	14:39	16	1.146	A BB	42646.	56.254 NG. MS	5.60
29	NOT FOUND								
30	82	646	10:46	16	0.842	A BB	44537.	43.480 NG*B1	4.33
31	164	1101	18:21	31	1.000	A BB	40865.	40.000 NG/UL	3.98
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	153	1107	18:27	31	1.005	A BB	46977.	37.159 NG. MS	3.70
41	NOT FOUND								
42	NOT FOUND								
43	168	1137	18:57	31	1.033	A BB	270.	BRL ~~0.149 NG~~	0.01
44	109	1137	18:57	31	1.033	A BB	28724.	95.791 NG. MS	9.54
45	165	1152	19:12	31	1.046	A BB	22777.	42.072 NG. MS	4.19
46	NOT FOUND								
47	NOT FOUND								
48	149	1200	20:00	31	1.090	A BB	228.	BRL ~~0.125 NG~~	0.01
49	NOT FOUND								
50	NOT FOUND								

T7577

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:07	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	8:39	1.00	0.949	1.00	57.12	50.00	1.472	1.289	1.14
3	8:21	1.00	0.916	1.00	50.48	50.00	1.846	1.828	1.01
4	8:35		0.941						
5	9:00	1.02	0.987	1.02	27.84	50.00	0.809	1.453	0.56
6	9:09	1.00	1.004	1.00	26.34	50.00	0.809	1.536	0.53
7	9:40		1.060						
8	9:35		1.051						
9	10:01		1.099						
10	9:57		1.091						
11	10:29		1.150						
12	10:22		1.137						
13	10:26	1.00	1.144	1.00	36.97	50.00	1.420	1.921	0.74
14	6:05	1.00	0.667	1.00	52.43	50.00	1.103	1.052	1.05
15	8:19	1.00	0.912	1.00	53.85	50.00	1.744	1.620	1.08
16	12:48	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
17	10:50		0.846						
18	11:29		0.897						
19	11:45		0.918						
20	11:54		0.930						
21	12:14		0.956						
22	12:26		0.971						
23	12:40	1.00	0.990	1.00	28.46	50.00	0.230	0.405	0.57
24	12:51		1.004						
25	12:16		0.958						
26	13:09		1.027						
27	13:23		1.046						
28	14:40	1.00	1.146	1.00	56.25	50.00	0.636	0.565	1.13
29	14:59		1.171						
30	10:47	1.00	0.842	1.00	43.48	50.00	0.664	0.764	0.87
31	18:22	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
32	15:41		0.854						
33	16:00		0.871						
34	16:06		0.877						
35	16:32		0.900						
36	17:03		0.928						
37	17:52		0.973						
38	17:46		0.967						
39	18:00		0.980						
40	18:28	1.00	1.005	1.00	37.16	50.00	0.920	1.237	0.74
41	18:24		1.002						
42	18:43		1.019						
43	18:58	1.00	1.033	1.00	0.15	50.00	0.005	1.770	0.00
44	18:58	1.00	1.033	1.00	95.79	50.00	0.562	0.294	1.92
45	19:13	1.00	1.046	1.00	42.07	50.00	0.446	0.530	0.84
46	20:05		1.093						
47	20:08		1.096						
48	20:02	1.00	1.091	1.00	0.13	50.00	0.004	1.781	0.00
49	20:24		1.111						
50	20:29		1.115						

Quantitation Report File: T2577

Data: T2577.TI
05/15/90 1:43:00
Sample: CLP,VERSCDM,2548,MW38MSD,L,W,16688MSD,B,MSD,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: 420.1

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

No	Name
51	C615 N-NITROSODIPHENYLAMINE
52	C625 4-BROMOPHENYL-PHENYLETHER
53	C630 HEXACHLOROBENZENE
54	CS25 2-FLUOROBIPHENYL**BN SURR.**
55	CI60 PHENANTHRENE-D10**INT. STD.#4**
56	C635 PENTACHLOROPHENOL
57	C640 PHENANTHRENE
58	C645 ANTHRACENE
59	C650 DI-N-BUTYLPHTHALATE
60	C655 FLUORANTHENE
61	C715 PYRENE
62	CS55 2,4,6,-TRIBROMOPHENOL**ACID SURR.**
63	CI70 CHRYSENE-D12**INT. STD.#5**
64	C720 BUTYLBENZYLPHTHALATE
65	C730 BENZO(A)ANTHRACENE
66	C740 CHRYSENE
67	C725 3,3'-DICHLOROBENZIDINE
68	C741 BIS(2-ETHYLHEXYL)PHTHALATE
69	CS30 P-TERPHENYL-D14**BN SURR.**
70	CI75 PERYLENE-D12**INT. STD.#6**
71	C760 DI-N-OCTYL PHTHALATE
72	C765 BENZO(B)FLUORANTHENE
73	C770 BENZO(K)FLUORANTHENE
74	C775 BENZO(A)PYRENE
75	C780 INDENO(1,2,3-CD)PYRENE
76	C785 DIBENZ(A,H)ANTHRACENE
77	C790 BENZO(G,H,I)PERYLENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	NOT FOUND								
52	NOT FOUND								
53	NOT FOUND								
54	172	974	16:14	31	0.885	A BB	47650.	36.414 NG*B2	3.63
55	188	1385	23:05	55	1.000	A BB	86789.	40.000 NG/UL	3.98
56	266	1361	22:41	55	0.983	A BB	6718.	20.884 NG. MS	2.08
57	NOT FOUND								
58	NOT FOUND								
59	149	1515	25:15	55	1.094	A BB	1443.	BKL ~~0.399 NG~~	0.01
60	202	1621	27:01	55	1.170	A BB	173.	~~0.072 NG~~	0.01
61	202	1666	27:46	63	0.876	A BB	94564.	37.376 NG. MS	3.72
62	330	1255	20:55	31	1.140	A BB	5768.	20.850 NG*A3	2.08
63	240	1902	31:42	63	1.000	A BB	69968.	40.000 NG/UL	3.98
64	NOT FOUND								
65	NOT FOUND								
66	NOT FOUND								

T2577

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
67	NOT FOUND								
68	149	1917	31:57	63	1.008	A BB	417.	~~0.206 NG~~	0.02
69	244	1701	28:21	63	0.894	A BB	65270.	39.579 NG*B3	3.94
70	264	2211	36:51	70	1.000	A BB	61710.	40.000 NG/UL	3.98
71	NOT FOUND								
72	NOT FOUND								
73	NOT FOUND								
74	NOT FOUND								
75	NOT FOUND								
76	NOT FOUND								
77	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	20:34		1.120						
52	21:41		1.181						
53	22:06		1.203						
54	16:15	1.00	0.885	1.00	36.41	50.00	0.933	1.281	0.73
55	23:06	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
56	22:43	1.00	0.983	1.00	20.88	50.00	0.062	0.148	0.42
57	23:11		1.004						
58	23:19		1.009						
59	25:17	1.00	1.095	1.00	0.40	50.00	0.013	1.667	0.01
60	27:04	1.00	1.172	1.00	0.07	50.00	0.002	1.109	0.00
61	27:48	1.00	0.876	1.00	37.38	50.00	1.081	1.446	0.75
62	20:56	1.00	1.140	1.00	20.85	50.00	0.113	0.271	0.42
63	31:45	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
64	30:10		0.950						
65	31:42		0.998						
66	31:50		1.003						
67	31:43		0.999						
68	32:00	1.00	1.008	1.00	0.21	50.00	0.005	1.156	0.00
69	28:23	1.00	0.894	1.00	39.58	50.00	0.746	0.943	0.79
70	36:56	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
71	33:53		0.917						
72	35:17		0.955						
73	35:23		0.958						
74	36:40		0.993						
75	43:01		1.165						
76	43:13		1.170						
77	44:53		1.215						

Quantitation Report File: QCREF

Data: T2577.TI
05/15/90 1:43:00
Sample: CLP,VERSCDM,2548,MW38MSD,L,W,16688MSD,B,MSD,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	CI40 NAPHTHALENE-D8**INT. STD.#2**
3	CI50 ACENAPHTHENE-D10**INT. STD.#3**
4	CI60 PHENANTHRENE-D10**INT. STD.#4**
5	CI70 CHRYSENE-D12**INT. STD.#5**
6	CI75 PERYLENE-D12**INT. STD.#6**
7	CS50 2-FLUOROPHENOL**ACID SURR.**
8	CS45 PHENOL-D5**ACID SURR.**
9	CS55 2,4,6,-TRIBROMOPHENOL**ACID SURR.**
10	CS20 NITROBENZENE-D5**BN SURR.**
11	CS25 2-FLUOROBIPHENYL**BN SURR.**
12	CS30 P-TERPHENYL-D14**BN SURR.**

Scan	Time	Area(Hght)	Amount		Name
546	9:06	16778.	40.000	NG/UL	CI30 1,4-DICHLOROBENZENE-D4
767	12:47	53654. 90	40.000	NG/UL	CI40 NAPHTHALENE-D8**INT. ST
1101	18:21	40865.	40.000	NG/UL	CI50 ACENAPHTHENE-D10**INT.
1385	23:05	86789. Rec	40.000	NG/UL	CI60 PHENANTHRENE-D10**INT.
1902	31:42	69968.	40.000	NG/UL	CI70 CHRYSENE-D12**INT. STD.
2211	36:51	61710.	40.000	NG/UL	CI75 PERYLENE-D12**INT. STD.
365	6:05	23141. 52	52.427	NG*A1	CS50 2-FLUOROPHENOL**ACID SU
499	8:19	36584. 54	53.850	NG*A2	CS45 PHENOL-D5**ACID SURR.**
1255	20:55	5768. 21	20.850	NG*A3	CS55 2,4,6,-TRIBROMOPHENOL**
646	10:46	44537. 87	43.480	NG*B1	CS20 NITROBENZENE-D5**BN SUR
974	16:14	47650. 73	36.414	NG*B2	CS25 2-FLUOROBIPHENYL**BN SU
1701	28:21	65270. 79	39.579	NG*B3	CS30 P-TERPHENYL-D14**BN SUR

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:07	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	12:48	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
3	18:22	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
4	23:06	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
5	31:45	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
6	36:56	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
7	6:05	1.00	0.667	1.00	52.43	50.00	1.103	1.052	1.05
8	8:19	1.00	0.912	1.00	53.85	50.00	1.744	1.620	1.08
9	20:56	1.00	1.140	1.00	20.85	50.00	0.113	0.271	0.42
10	10:47	1.00	0.842	1.00	43.48	50.00	0.664	0.764	0.87
11	16:15	1.00	0.885	1.00	36.41	50.00	0.933	1.281	0.73
12	28:23	1.00	0.894	1.00	39.58	50.00	0.746	0.943	0.79

Quantitation Report File: ISREF

Data: T2569.TI
05/14/90 17:42:00
Sample: CLP,,,SSTD50,,,22658,B,IC50,,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: --

Data: T2577.TI
05/15/90 1:43:00
Sample: CLP,VERSCDM,2548,MW38MSD,L,W,16688MSD,B,MSD,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Formula: --- Instrument: T Weight: 0.003
Submitted by: VERSAR Analyst: TS Acct. No.: 420.1

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

No	Name
1	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
2	CI30 1,4-DICHLOROBENZENE-D4 **INT. STD. #1**
3	CI40 NAPHTHALENE-D8**INT. STD. #2**
4	CI40 NAPHTHALENE-D8**INT. STD. #2**
5	CI50 ACENAPHTHENE-D10**INT. STD. #3**
6	CI50 ACENAPHTHENE-D10**INT. STD. #3**
7	CI60 PHENANTHRENE-D10**INT. STD. #4**
8	CI60 PHENANTHRENE-D10**INT. STD. #4**
9	CI70 CHRYSENE-D12**INT. STD. #5**
10	CI70 CHRYSENE-D12**INT. STD. #5**
11	CI75 PERYLENE-D12**INT. STD. #6**
12	CI75 PERYLENE-D12**INT. STD. #6**

Scan	Time	Area(Hght)	Amount	Name
547	9:07	15621.	40.000 NG/UL	CI30 1,4-DICHLOROBENZENE-D4
546	9:06	16778.✓	42.963 NG/UL	CI30 1,4-DICHLOROBENZENE-D4
768	12:48	52080.	40.000 NG/UL	CI40 NAPHTHALENE-D8**INT. ST
767	12:47	53654.✓	41.209 NG/UL	CI40 NAPHTHALENE-D8**INT. ST
1102	18:22	37455.	40.000 NG/UL	CI50 ACENAPHTHENE-D10**INT.
1101	18:21	40865.✓	43.642 NG/UL	CI50 ACENAPHTHENE-D10**INT.
1386	23:06	75538.	40.000 NG/UL	CI60 PHENANTHRENE-D10**INT.
1385	23:05	86789.✓	45.958 NG/UL	CI60 PHENANTHRENE-D10**INT.
1905	31:45	56496.	40.000 NG/UL	CI70 CHRYSENE-D12**INT. STD.
1902	31:42	69968.✓	49.538 NG/UL	CI70 CHRYSENE-D12**INT. STD.
2216	36:56	45334.	40.000 NG/UL	CI75 PERYLENE-D12**INT. STD.
2211	36:51	61710. ✓	54.449 NG/UL	CI75 PERYLENE-D12**INT. STD.

```
            >>>>INTERNAL STANDARD RIC REPORT<<<<
*****************************INTERNAL STANDARD#1*****************RIC
Mass List                      Data: T2577 # 546          Base m/z:  150
05/15/90  1:43:00 +  9:06     Cali: T2577 #   2          RIC:      51136.
Sample: CLP,VERSCDM,2548,MW38MSD,L,W,16688MSD,B,MSD,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     35       0.00   0.00        0. Minima     Min inten:       0.
     30                      #   0  Maxima
*****************************INTERNAL STANDARD#2*****************RIC
Mass List                      Data: T2577 # 767          Base m/z:  136
05/15/90  1:43:00 + 12:47     Cali: T2577 #   2          RIC:      70528.
Sample: CLP,VERSCDM,2548,MW38MSD,L,W,16688MSD,B,MSD,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38       0.00   0.00        0. Minima     Min inten:       0.
     30                      #   0  Maxima
*****************************INTERNAL STANDARD#3*****************RIC
Mass List                      Data: T2577 #1101          Base m/z:  164
05/15/90  1:43:00 + 18:21     Cali: T2577 #   2          RIC:      63744.
Sample: CLP,VERSCDM,2548,MW38MSD,L,W,16688MSD,B,MSD,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38       0.00   0.00        0. Minima     Min inten:       0.
     30                      #   0  Maxima
*****************************INTERNAL STANDARD#4*****************RIC
Mass List                      Data: T2577 #1385          Base m/z:  188
05/15/90  1:43:00 + 23:05     Cali: T2577 #   2          RIC:      82432.
Sample: CLP,VERSCDM,2548,MW38MSD,L,W,16688MSD,B,MSD,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     38       0.00   0.00        0. Minima     Min inten:       0.
     30                      #   0  Maxima
*****************************INTERNAL STANDARD#5*****************RIC
Mass List                      Data: T2577 #1902          Base m/z:  240
05/15/90  1:43:00 + 31:42     Cali: T2577 #   2          RIC:      68992.
Sample: CLP,VERSCDM,2548,MW38MSD,L,W,16688MSD,B,MSD,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     36       0.00   0.00        0. Minima     Min inten:       0.
     30                      #   0  Maxima
*****************************INTERNAL STANDARD#6*****************RIC
Mass List                      Data: T2577 #2211          Base m/z:  264
05/15/90  1:43:00 + 36:51     Cali: T2577 #   2          RIC:      34752.
Sample: CLP,VERSCDM,2548,MW38MSD,L,W,16688MSD,B,MSD,420.1 B#3,1UL,
Conds.: INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN
Enhanced (S 15B 2N OT)

     36       0.00   0.00        0. Minima     Min inten:       0.
     30                      #   0  Maxima
       CHECK BASE M/Z AND RIC AMOUNT TO INSURE NO COELUTION
```

Versar INC.

VI. SAMPLE PREPARATION PACKAGE

1. Parameter Request Sheet
2. Screening Data Summary (soils only)
3. Comments
   a. Extraction
   b. Volatiles
   c. Semivolatiles
   d. Pesticides
4. Extraction Worksheets
   a. Chronicle
   b. Dry Weight Factor (soils only)
   c. Dilution Factor (B) Worksheets
5. Injection Sequence Logs
6. Chain of Custody

VERSAR LABORATORY OPERATIONS
PARAMETER REQUEST SHEET

Deliver To: 46

Control: 2548
Code: VERSCDM
Batch: 3
Job Number: 420.1.0

Case: R3-7
SDG: MW-38
Quote: 9000194 - 90
Charge:

Manager: BECKMAN
Company: VERSAR DIV 31

Site: CDM

Received: 20-APR-90
Due: 18-MAY-90

Sampled: 19-APR-90
Report: 18-MAY-90
Disposal: 20-AUG-90

QC Level:
Deliver:

Rep Type:
Required: 1 Full

Comments: Protocols-See VERSCDM-2(2536); Do 1 set of sample QC on this batch.

Test	Sample	X	C	Field Number	Matrix	Location	Other Tests		
BNAL - 48									
	16688	A		MW-38	HOH	C-48	XACD XPES	XBN	PEST
	16689	A		MW-43	HOH	C-48	XACD XPES	XBN	PEST
	16690	A		MW-53	HOH	C-48	XACD XPES	XBN	PEST
	16691	A		MW-79	HOH	C-48	XACD XPES	XBN	PEST
	16692	A		MW-79A	HOH	C-48	XACD XPES	XBN	PEST
	16693	A		SW-1	HOH	C-48	XACD XPES	XBN	PEST
	16694	A		SW-2	HOH	C-48	XACD XPES	XBN	PEST
	16695	A		TB-1A	HOH	C-48	XACD XPES	XBN	PEST
	16696	A		TB-3A	HOH	C-48	XACD XPES	XBN	PEST
	16697	A		TB-4A	HOH	C-48	XACD XPES	XBN	PEST
	16698	A		TB-5B	HOH	C-48	XACD XPES	XBN	PEST
CLPM - 43									
	16657	A		MW-38	HOH	D-22			
	16658	A		MW-43	HOH	D-22			
	16659	A		MW-53	HOH	D-22			
	16660	A		MW-79	HOH	D-22			
	16661	A		MW-79A	HOH	D-22			
	16662	A		SW-1	HOH	D-22			
	16663	A		SW-2	HOH	D-22			
	16664	A		TB-1A	HOH	D-22			
	16665	A		TB-3A	HOH	D-22			
	16666	A		TB-4A	HOH	D-22			

Continued ->

Control #: 2548

Test	Sample	X	C	Field Number	Matrix	Location	Other Tests		
	16667	A		TB-5B	HOH	D-22			
	16668	A		MW-38	DHOH	D-22			
	16669	A		MW-43	DHOH	D-22			
	16670	A		MW-53	DHOH	D-22			
	16671	A		MW-79	DHOH	D-22			
	16672	A		MW-79A	DHOH	D-22			
	16673	A		TB-1A	DHOH	D-22			
	16674	A		TB-3A	DHOH	D-22			
	16675	A		TB-4A	DHOH	D-22			
	16676	A		TB-5B	DHOH	D-22			
CNM - 44									
	16677	A		MW-38	HOH	A-71			
	16678	A		MW-43	HOH	A-71			
	16679	A		MW-53	HOH	A-71			
	16680	A		MW-79	HOH	A-71			
	16681	A		MW-79A	HOH	A-71			
	16682	A		SW-1	HOH	A-71			
	16683	A		SW-2	HOH	A-71			
	16684	A		TB-1A	HOH	A-71			
	16685	A		TB-3A	HOH	A-71			
	16686	A		TB-4A	HOH	A-71			
	16687	A		TB-5B	HOH	A-71			
PEST - 47									
	16688	A		MW-38	HOH	C-48	BNAL XPES	XACD	XBN
	16689	A		MW-43	HOH	C-48	BNAL XPES	XACD	XBN
	16690	A		MW-53	HOH	C-48	BNAL XPES	XACD	XBN
	16691	A		MW-79	HOH	C-48	BNAL XPES	XACD	XBN
	16692	A		MW-79A	HOH	C-48	BNAL XPES	XACD	XBN
	16693	A		SW-1	HOH	C-48	BNAL XPES	XACD	XBN
	16694	A		SW-2	HOH	C-48	BNAL XPES	XACD	XBN
	16695	A		TB-1A	HOH	C-48	BNAL XPES	XACD	XBN
	16696	A		TB-3A	HOH	C-48	BNAL XPES	XACD	XBN
	16697	A		TB-4A	HOH	C-48	BNAL XPES	XACD	XBN
	16698	A		TB-5B	HOH	C-48	BNAL XPES	XACD	XBN
VOAL - 48									
	16699	B		MW-38	HOH	GCMS			
	16700	B		MW-43	HOH	GCMS			
	16701	B		MW-53	HOH	GCMS			
	16702	B		MW-79	HOH	GCMS			
	16703	B		MW-79A	HOH	GCMS			
	16704	B		SW-1	HOH	GCMS			
	16705	B		SW-2	HOH	GCMS			
	16706	B		TB-1	HOH	GCMS			
	16707	B		TB-1A	HOH	GCMS			
	16708	B		TB-3A	HOH	GCMS			

Continued ->

Control #: 2548

Test	Sample	X	C	Field Number	Matrix	Location	Other Tests
	16709	B		TB-4A	HOH	GCMS	
	16710	B		TB-5B	HOH	GCMS	
XACD - 46							
	16688	A		MW-38	HOH	C-48	BNAL XBN PEST XPES
	16689	A		MW-43	HOH	C-48	BNAL XBN PEST XPES
	16690	A		MW-53	HOH	C-48	BNAL XBN PEST XPES
	16691	A		MW-79	HOH	C-48	BNAL XBN PEST XPES
	16692	A		MW-79A	HOH	C-48	BNAL XBN PEST XPES
	16693	A		SW-1	HOH	C-48	BNAL XBN PEST XPES
	16694	A		SW-2	HOH	C-48	BNAL XBN PEST XPES
	16695	A		TB-1A	HOH	C-48	BNAL XBN PEST XPES
	16696	A		TB-3A	HOH	C-48	BNAL XBN PEST XPES
	16697	A		TB-4A	HOH	C-48	BNAL XBN PEST XPES
	16698	A		TB-5B	HOH	C-48	BNAL XBN PEST XPES
XBN - 46							
	16688	A		MW-38	HOH	C-48	BNAL XACD PEST XPES
	16689	A		MW-43	HOH	C-48	BNAL XACD PEST XPES
	16690	A		MW-53	HOH	C-48	BNAL XACD PEST XPES
	16691	A		MW-79	HOH	C-48	BNAL XACD PEST XPES
	16692	A		MW-79A	HOH	C-48	BNAL XACD PEST XPES
	16693	A		SW-1	HOH	C-48	BNAL XACD PEST XPES
	16694	A		SW-2	HOH	C-48	BNAL XACD PEST XPES
	16695	A		TB-1A	HOH	C-48	BNAL XACD PEST XPES
	16696	A		TB-3A	HOH	C-48	BNAL XACD PEST XPES
	16697	A		TB-4A	HOH	C-48	BNAL XACD PEST XPES
	16698	A		TB-5B	HOH	C-48	BNAL XACD PEST XPES
XPES - 46							
	16688	A		MW-38	HOH	C-48	BNAL XACD XBN PEST
	16689	A		MW-43	HOH	C-48	BNAL XACD XBN PEST
	16690	A		MW-53	HOH	C-48	BNAL XACD XBN PEST

Continued ->

Control #: 2548

Test	Sample	X	C	Field Number	Matrix	Location	Other Tests		
	16691	A		MW-79	HOH	C-48	BNAL PEST	XACD	XBN
	16692	A		MW-79A	HOH	C-48	BNAL PEST	XACD	XBN
	16693	A		SW-1	HOH	C-48	BNAL PEST	XACD	XBN
	16694	A		SW-2	HOH	C-48	BNAL PEST	XACD	XBN
	16695	A		TB-1A	HOH	C-48	BNAL PEST	XACD	XBN
	16696	A		TB-3A	HOH	C-48	BNAL PEST	XACD	XBN
	16697	A		TB-4A	HOH	C-48	BNAL PEST	XACD	XBN
	16698	A		TB-5B	HOH	C-48	BNAL PEST	XACD	XBN

VERSAR INC.

SAMPLE PREPARATION COMMENT SHEET

PROJECT VERSCDM BATCH 3 CASE R3-7 CONTROL 2548

MATRIX 404 PREPARATION PARAMETER BNAL

VERSAR SAMPLE NUMBER 16688	orange, cloudy water w/sediment that settled. Dem 4-25-90
FIELD SAMPLE NUMBER MW-38	
SOIL SAMPLE pH	
VERSAR SAMPLE NUMBER 16689 ~~16688 MS~~ MSR	pale orange, cloudy water w/ 1/4" sediment layer that settled. Dem 4-25-90
FIELD SAMPLE NUMBER MW-43	
SOIL SAMPLE pH	
VERSAR SAMPLE NUMBER 16690 ~~16688 MSD~~ MSD	brown, cloudy water w/some sediment. Dem 4-25-90
FIELD SAMPLE NUMBER MW-53	
SOIL SAMPLE pH	

100373

VERSAR INC.

SAMPLE PREPARATION COMMENT SHEET

PROJECT VERSCDM BATCH 3 CASE R3-7

MATRIX #OH PREPARATION PARAMETER BNAL CONTROL 2548

VERSAR SAMPLE NUMBER 16691	orange, cloudy water w/sediment. Dem 4-25-90
FIELD SAMPLE NUMBER MW-79	
SOIL SAMPLE pH	
VERSAR SAMPLE NUMBER 16692	orange, cloudy water w/~ 1/2" sediment layer that settled. Dem 4-25-90
FIELD SAMPLE NUMBER MW-79A	
SOIL SAMPLE pH	
VERSAR SAMPLE NUMBER 16693	very pale yellow water, clear. Dem 4-25-90
FIELD SAMPLE NUMBER SW-1	
SOIL SAMPLE pH	

VERSAR INC.

SAMPLE PREPARATION COMMENT SHEET

PROJECT VERSCOM BATCH 3 CASE R3-7 CONTROL 2548

MATRIX HOH PREPARATION PARAMETER BNAL

VERSAR SAMPLE NUMBER 16694 ~~16691~~ MSR	very pale yellow water, clear Dem 4-25-90
FIELD SAMPLE NUMBER SW-2 ~~MW-79~~ MSR	
SOIL SAMPLE pH	
VERSAR SAMPLE NUMBER 16695 ~~16692~~ MS.R	orange, cloudy water w/sediment. Dem 4-25-90
FIELD SAMPLE NUMBER TB-1A	
SOIL SAMPLE pH	
VERSAR SAMPLE NUMBER 16696	orange, cloudy water w/ settled sediment. Dem 4-25-90
FIELD SAMPLE NUMBER TB-3A	
SOIL SAMPLE pH	

VERSAR INC.

SAMPLE PREPARATION COMMENT SHEET

PROJECT VERSCOM BATCH 3 CASE R3-7

CONTROL 2548

MATRIX HOH PREPARATION PARAMETER BNAL

VERSAR SAMPLE NUMBER 16697	Brownish-orange, cloudy water w/small amount Sediment. Dem 4-25-90
FIELD SAMPLE NUMBER TB-4A	
SOIL SAMPLE pH	
VERSAR SAMPLE NUMBER 16698	orange, cloudy water w/settled Sediment. Dem 4-25-90
FIELD SAMPLE NUMBER TB-5A	
SOIL SAMPLE pH	
VERSAR SAMPLE NUMBER RB	
FIELD SAMPLE NUMBER	
SOIL SAMPLE pH	

EXTRACTS READY FOR ANALYSIS

DATE 05-09-90

CODE VERSCAM BATCH 3 CONTROL # 2548

DATE RECEIVED 04-20-90 DATE EXTRACTED ~~05-24-90~~ 4-25-90

OF EXTRACT 14 # OF SAMPLES 11

MATRIX HOH PARAMETER BNA LOCATION Fridge 3

IS THIS A RE-EXTRACTION? NO

COMMENTS 16688, 16688MS, 16688MSD, 16689, 16690, 16691, 16692, 16693, 16694, 16695, 16696, 16697, 16698, RB7951

TECHNICIAN SIGNATURE D Nanan

==========

SUPERVISOR USE ONLY

PROVIDE AN EXPLANATION IF ANSWER IS NO

Was the extraction holding time met?	☑ YES	☐ NO
Was proper QC performed with the extraction?	☑ YES	☐ NO
Are all columns complete, initialed, and dated?	☑ YES	☐ NO
Is column information accurate?	☑ YES	☐ NO
Is header information complete and accurate?	☑ YES	☐ NO
Were the correct standards used in the extraction?	☑ YES	☐ NO
Are final volumes correct?	☑ YES	☐ NO
Are sample comments included, initialed and dated?	☑ YES	☐ NO
Are dry weights included with the data package?	☐ YES	☑ NO H2O
Are dry weights correct?	☐ YES	☑ NO

What clean-up procedure was used? None

SUPERVISOR _____ SECTION CHIEF _____

100577

VERSAR [illegible] BNA TYPE WATER SAMPLE P[illegible]ARATION SHEE[illegible] -BY CONTINUOUS EXTRACTION

CONTRO[illegible] 2548

PROJECT VERSC DM

CASE R3-7

BATCH 3

DATE 4-25-90

EXTRACTION PARAMETER BNAL

EXTRACTION START DATE 4-25-90

DATE EXTRACTION COMPLETE 05-25-90

MATRIX SPIKE SOLUTION 22402

SURROGATE SOLUTION 22449

PAGE 1 OF 1

B/N – 100 ppm
Acid – 200 ppm.

VERSAR SAMPLE NUMBER	FIELD SAMPLE NUMBER	SAMPLE VOLUME IN ML.	SPIKE SURR.	SPIKE MS	DATE B/N RECOVERED	DATE ACID RECOVERED	DATE B/N CONCENTRN	DATE ACID CONCENTRN	B/N FINAL VOLUME	ACID FINAL VOLUME	GENERAL SAMPLE COMMENTS
16688	MW-38	1000 mL	1.0 mL	–	4-26-90	4-27-90	~~5-8-90~~ 5-9-90	~~5-8-90~~ 5-9-90	1 ml	1 ml	
16688 MS	" "	500 mL		1.0 mL							
16688 MSD	" "	500 mL		1.0 mL							
16689	MW-43	1000 mL		–							
16690	MW-53	1000 mL		–							
16691	MW-79	1000 mL		–							
16692	MW-79A	1000 mL		–							
16693	SW-1	1000 mL		–							
16694	SW-2	1000 mL		–							
16695	TB-1A	1000 mL		–							
16696	TB-3A	1000 mL		–							
16697	TB-4A	1000 mL		–							
16698	TB-5A	1000 mL		–							
RB7951	BLK51	1000 mL		–							
		Dem 4-25-90	Dem 4-25-90		MH 4-26-90	MH 4-27-90	DN	DN	MH 5-19-90		

100378

VERSAR, INC.
GCMS INSTRUMENT ID T
DATE 5-14-90

INJECTION LOG

T051490_.91/MSQ

Filename	ASCII Filename	Streamer ID	Method	Case	SDG	Field Sample ID	Level	Matrix	Versar Sample No.	Fraction	Type	Project	Batch	Ext. Vol.	Comb. Vol.	Final Vol.	Dil.	IS Vol.	IS No.	B Factor
T2566		220				DFTPP 50ng			22486											
T2567		220				DFTPP 50ng			22486											
T2568	.MSQ	220				DFTPP 50ng			22486			MET	@ 1723							
T2569	T051490A.91	220	CLP			SSTD50			22658	B	IC 50	RAN	TCALIB							
T2570		220	CLP			SSTD160			22659	B	IC 160									
T2571		220	CLP			SSTD120			22660	B	IC 120									
T2572		220	CLP			SSTD80			22661	B	IC 80									
T2573		220	CLP			SSTD20			22662	B	IC 20									
T2574	.MSQ B	220	CLP	VERSCDM	2548	SBLK51	L	W	RB7951	B	BLK	420.1	3	1mL	.2mL	.4mL		4µL	22078	
T2575		220	CLP			MW-38	L	W	16688	B	-									
T2576		220	CLP			MW-38 MS	L	W	16688ms	B	-									
T2577		220	CLP			MW-38 MSD	L	W	16688msd	B	-									
T2578		220	CLP			MW-43	L	W	16689	B	-									
T2579		220	CLP			MW-53	L	W	16690	B	-									
T2580		220	CLP			MW-79	L	W	16691	B	-									
T2581		220	CLP			MW-79A	L	W	16692	B	-									

100379

Analyst Signature Terri D Schaffer Date 5/14/90

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 3
Curtis Bldg., 6th & Walnut Sts.
Philadelphia, Pennsylvania 19106

CHAIN OF CUSTODY RECORD

PROJ. NO.: R3-7
PROJECT NAME: R3-7
SAMPLERS: (Signature) Sharon E. Stoffer, Andrew P. Hopkins, Clare R. Frank

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	BNA/Pest./PCB	VOA	TAL Metals	Cyanide	TAL Metals (Filter)		REMARKS (Tag #'s)
TB3A	4/18/90	1025		X	Location TB3A	6	1	2	1	1	1		3-1068400, 195, 96, 97, 98, 99
TB4A	4/18/90	1125		X	Location TB4A	6	1	2	1	1	1		3-1068200, 201, 202, 203, 204, 205
TB1A	4/18/90	1415		X	Location TB1A	6	1	2	1	1	1		3-1068206, 07, 08, 09, 10, 11
TB5B	4/18/90	1500		X	Location TB5B	6	1	2	1	1	1		3-1068212, 13, 14, 15, 16, 17
N-43	4/19/90	1100		X	Location 43	6	1	2	1	1	1		3-1068218, 19, 20, 21, 22, 23
NW-79	4/19/90	1135		X	Location 79	6	1	2	1	1	1		3-1068224, 25, 26, 27, 28, 29
NW-79A	4/19/90	1000		X	Location 79A	6	1	2	1	1	1		3-1068230, 31, 32, 33, 34, 35
NW-38	4/19/90	1245		X	Location 38	6	1	2	1	1	1		3-1068236, 37, 38, 39, 40, 41
NW-53	4/19/90	1325		X	Location 53	6	1	2	1	1	1		3-1068242, 43, 44, 45, 46, 47
SW-1	4/19/90	1345		X	Location SW-1	5	1	2	1	1			3-1068248, 49, 50, 401, 402.
SW-2	4/19/90	1350		X	Location SW-2	5	1	2	1	1			3-1068403, 4, 5, 6, 7
TB-1	4/19/90	1830		X	Location TB-1	2		2					3-1068408, 9

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Sharon E. Stoffer	~~4/18/90 0000~~ 4/19/90 0900 SES 4/19/90				
Relinquished by: (Signature)	Date / Time	Received by: (Signature) J. L. Morrison	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature) J. L. Morrison	Date / Time 4/20/90 0900	Remarks Shipped via Federal Express 4026936082 Airbill # ~~4026936093~~ SES 4/19/90	

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

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