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Environmental Protection
Agency

Office of Air Quality
Planning and Standards
Research Triangle Park, NC 27711

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May 2000

AIR

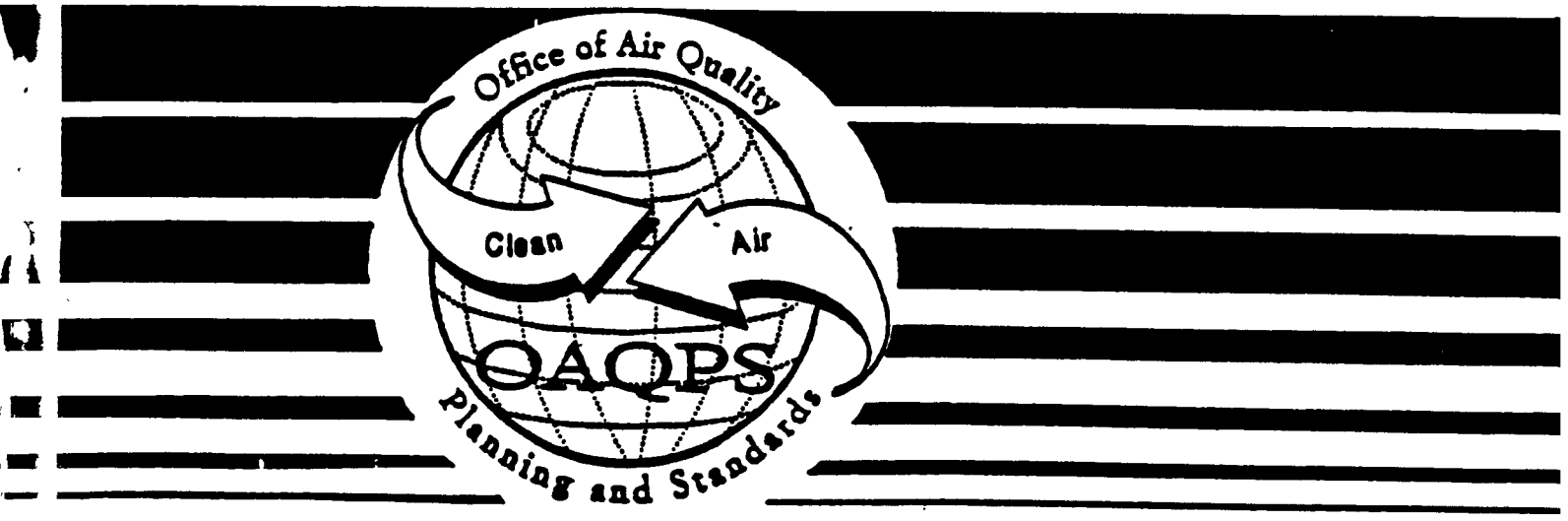
EPA

Final Report

Hot Mix Asphalt Plants
Truck Loading and Silo Filling
Manual Methods Testing

Asphalt Plant C
Los Angeles, California

Volume 5 of 8



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FINAL REPORT

HOT MIX ASPHALT PLANTS
TRUCK LOADING AND SILO FILLING
MANUAL METHODS TESTING
ASPHALT PLANT C, LOS ANGELES, CALIFORNIA

VOLUME 5 OF 8
APPENDIX G.3

EPA Contract No. 68-D-98-004
Work Assignment No. 3-02

Prepared for:

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May 2000

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GLOSSARY OF TERMS

ASTM – American Society for Testing and Materials
CEMS – Continuous Emissions Monitoring System
CTS – Calibration Transfer Standard
EMC – Emissions Measurement Center
EMAD – Emission Monitoring and Analysis Division
ESP – Electrostatic Precipitator
FID – Flame Ionization Detector
FTIR – Fourier Transform Infrared Spectroscopy
HAP – Hazardous Air Pollutant
MCEM – Methylene Chloride Extractable Matter
MRI – Midwest Research Institute
PES – Pacific Environmental Services
PM – Particulate Matter
PTE – Permanent Total Enclosure
RAP – Recycled Asphalt
RTFOT – Rolling Thin Film Oven Test
SED – Silo Exhaust Duct

SMTG – Source Measurement Technology Group
SVOHAP – Semi-Volatile Organic Hazardous Air Pollutant
TED – Tunnel Emissions Duct
TFOT – Thin Film Oven Test
THC – Total Hydrocarbons
VOHAP – Volatile Organic Hazardous Air Pollutant
VOST – Volatile Organic Sampling Train

VOLUME 5A

APPENDIX G

ANALYTICAL DATA (CONTINUED)

G.3 SVOHAPS DATA

Organics Raw Data Package

Sample Data

Semivolatile Organics
Method 0010/8270

Client Name: Pacific Environmental Services
Client ID: S-MM5-2-F,FH,XAD,COND,BH
LAB ID: 300681-0001-SA
Matrix: AIRTRAIN Sampled: 25 JUL 98 Received: 30 JUL 98
Authorized: 30 JUL 98 Prepared: 31 JUL 98 Analyzed: 31 AUG 98

Dilution Factor: 100

Parameter	Wet wt. Result	Units	Reporting Limit	Qualifier
Phenol	ND	ug/Sample	3000	GR
bis(2-Chloroethyl)ether	ND	ug/Sample	3000	
2-Chlorophenol	ND	ug/Sample	3000	
1,3-Dichlorobenzene	ND	ug/Sample	3000	
1,4-Dichlorobenzene	ND	ug/Sample	3000	
Benzyl alcohol	ND	ug/Sample	3000	
1,2-Dichlorobenzene	ND	ug/Sample	3000	
2-Methylphenol	ND	ug/Sample	3000	
2,2'-Oxybis(1-chloropropane)	ND	ug/Sample	3000	
3/4-Methylphenol	ND	ug/Sample	3000	
N-Nitroso-di-n-propylamine	ND	ug/Sample	3000	
Hexachloroethane	ND	ug/Sample	3000	
Nitrobenzene	ND	ug/Sample	3000	
Isophorone	ND	ug/Sample	3000	
2-Nitrophenol	ND	ug/Sample	3000	
2,4-Dimethylphenol	ND	ug/Sample	3000	
Benzoic acid	ND	ug/Sample	15000	
bis(2-Chloroethoxy)-methane	ND	ug/Sample	3000	
2,4-Dichlorophenol	ND	ug/Sample	3000	
1,2,4-Trichlorobenzene	ND	ug/Sample	3000	
Naphthalene	1600	ug/Sample	3000	J
4-Chloroaniline	ND	ug/Sample	3000	
Hexachlorobutadiene	ND	ug/Sample	3000	
4-Chloro-3-methylphenol	ND	ug/Sample	3000	
2-Methylnaphthalene	3600	ug/Sample	3000	
Hexachlorocyclopentadiene	ND	ug/Sample	3000	
2,4,6-Trichlorophenol	ND	ug/Sample	3000	
2,4,5-Trichlorophenol	ND	ug/Sample	15000	
2-Chloronaphthalene	ND	ug/Sample	3000	
2-Nitroaniline	ND	ug/Sample	3000	
Dimethyl phthalate	ND	ug/Sample	3000	
Acenaphthylene	ND	ug/Sample	3000	
3-Nitroaniline	ND	ug/Sample	15000	
Acenaphthene	ND	ug/Sample	3000	
2,4-Dinitrophenol	ND	ug/Sample	15000	

Note G = Reporting limit(s) raised due to matrix interference.
Note J = Result is detected below the reporting limit or is an estimated concentration.
Note R = Reporting limit(s) raised due to sample volume limitations.
ND = Not Detected

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Semivolatile Organics
Method 0010/8270 (cont.)

Client Name: Pacific Environmental Services
Client ID: S-MM5-2-F,FH,XAD,COND,BH
LAB ID: 300681-0001-SA
Matrix: AIRTRAIN Sampled: 25 JUL 98 Received: 30 JUL 98
Authorized: 30 JUL 98 Prepared: 31 JUL 98 Analyzed: 31 AUG 98

Dilution Factor: 100

Parameter	Wet wt. Result	Units	Reporting Limit	Qualifier
4-Nitrophenol	ND	ug/Sample	15000	
Dibenzofuran	ND	ug/Sample	3000	
2,4-Dinitrotoluene	ND	ug/Sample	3000	
2,6-Dinitrotoluene	ND	ug/Sample	3000	
Diethyl phthalate	ND	ug/Sample	3000	
4-Chlorophenyl phenyl ether	ND	ug/Sample	3000	
Fluorene	ND	ug/Sample	3000	
4-Nitroaniline	ND	ug/Sample	15000	
4,6-Dinitro-2-methylphenol	ND	ug/Sample	15000	
N-Nitrosodiphenylamine	ND	ug/Sample	3000	
4-Bromophenyl phenyl ether	ND	ug/Sample	3000	
Hexachlorobenzene	ND	ug/Sample	3000	
Pentachlorophenol	ND	ug/Sample	15000	
Phenanthrene	950	ug/Sample	3000	J
Anthracene	ND	ug/Sample	3000	
Di-n-butyl phthalate	ND	ug/Sample	3000	
Fluoranthene	ND	ug/Sample	3000	
Pyrene	ND	ug/Sample	3000	
Butyl benzyl phthalate	ND	ug/Sample	3000	
3,3'-Dichlorobenzidine	ND	ug/Sample	6000	
Benzo(a)anthracene	ND	ug/Sample	3000	
bis(2-Ethylhexyl)-phthalate	ND	ug/Sample	3000	
Chrysene	ND	ug/Sample	3000	
Di-n-octyl phthalate	ND	ug/Sample	3000	
Benzo(b)fluoranthene	ND	ug/Sample	3000	
Benzo(k)fluoranthene	ND	ug/Sample	3000	
Benzo(a)pyrene	ND	ug/Sample	3000	
Indeno(1,2,3-cd)pyrene	ND	ug/Sample	3000	
Dibenz(a,h)anthracene	ND	ug/Sample	3000	
Benzo(g,h,i)perylene	ND	ug/Sample	3000	
Acetophenone	ND	ug/Sample	3000	
4-Aminobiphenyl	ND	ug/Sample	15000	
Aniline	ND	ug/Sample	3000	
Benzidine	ND	ug/Sample	30000	
3,3'-Dimethylbenzidine	ND	ug/Sample	6000	
N-Nitrosodimethylamine	ND	ug/Sample	3000	
N-Nitrosomorpholine	ND	ug/Sample	3000	

Note J = Result is detected below the reporting limit or is an estimated concentration.
ND = Not Detected

Reported By: Emily Uebelhoer Approved By: Mike Orbanosky

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Semivolatile Organics
Method 0010/8270

(cont.)

Client Name: Pacific Environmental Services
Client ID: S-MM5-2-F,FH,XAD,COND,BH
LAB ID: 300681-0001-SA
Matrix: AIRTRAIN Sampled: 25 JUL 98 Received: 30 JUL 98
Authorized: 30 JUL 98 Prepared: 31 JUL 98 Analyzed: 31 AUG 98

Dilution Factor: 100

Parameter	Wet wt. Result	Units	Reporting Limit	Qualifier
Pentachloronitrobenzene (PCNB)	ND	ug/Sample	15000	
o-Toluidine	ND	ug/Sample	6000	
2-Methoxybenzenamine	ND	ug/Sample	--	
Biphenyl	ND	ug/Sample	--	
Chloroacetophenone	ND	ug/Sample	--	
Cumene	ND	ug/Sample	--	
DBCP (1,2-Dibromo-3-chloropropane)	ND	ug/Sample	--	
Benzo(e)pyrene	ND	ug/Sample	--	
N-N-Diethylaniline	ND	ug/Sample	--	
Dimethylaniline	ND	ug/Sample	--	
3,3'-Dimethoxybenzidine	ND	ug/Sample	--	
Hydroquinone	ND	ug/Sample	--	
4,4'-Methyl-bis(2-chloroaniline)	ND	ug/Sample	--	
4-Nitrodiphenyl	ND	ug/Sample	--	
Trifluralin	ND	ug/Sample	--	

Surrogate	Recovery	Acceptable Range
Nitrobenzene-d5	ND %	45 - 107
2-Fluorobiphenyl	ND %	62 - 110
Terphenyl-d14	ND %	58 - 135
Phenol-d5	ND %	43 - 130
2-Fluorophenol	ND %	36 - 111
2,4,6-Tribromophenol	ND %	58 - 131

ND = Not Detected

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Semivolatiles Library Search (20 Compound TID)
Method 8270

Client Name: Pacific Environmental Services
Client ID: S-MM5-2-F,FH,XAD,COND,BH
LAB ID: 300681-0001-SA
Matrix: AIRTRAIN Sampled: 25 JUL 98 Received: 30 JUL 98
Authorized: 30 JUL 98 Prepared: NA Analyzed: 31 AUG 98

Dilution Factor: 100

Parameter	Result	Units	Reporting Limit	Qualifier
Unknown alkane	7900	ug/Sample	--	
Unknown	13000	ug/Sample	--	
Unknown PAH	15000	ug/Sample	--	
Unknown alkene	8900	ug/Sample	--	
Undecane	8600	ug/Sample	--	0
Unknown	8400	ug/Sample	--	
Dodecane, 2,6,10-trimethyl-	17000	ug/Sample	--	0
Tetradecane	22000	ug/Sample	--	0
Unknown alkene	12000	ug/Sample	--	
Heptadecane, 2,6,10,14 -tetramethyl-	18000	ug/Sample	--	0
Undecane, 2-methyl-	19000	ug/Sample	--	0
Unknown alkane	13000	ug/Sample	--	
Nonadecane	24000	ug/Sample	--	0
Heptadecane, 2,6-dimethyl-	15000	ug/Sample	--	0
Heptadecane, 2,6-dimethyl-	32000	ug/Sample	--	0
Heptadecane, 2,6-dimethyl-	10000	ug/Sample	--	0
Heptadecane, 2,6-dimethyl-	14000	ug/Sample	--	0
Nonadecane	7700	ug/Sample	--	0
Heptadecane, 2,6,10,14 -tetramethyl-	9700	ug/Sample	--	0
Nonadecane	7500	ug/Sample	--	0

Note 0 = Or structurally similar compound (isomer).
NA = Not Applicable

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QUANTERRA GC/MS

Target Compound Data Summary Sheet

Data File: 30068101
Std Id: ST16980831

Sample: S-MM5-2 1/3SA/100M INST. ID: F16
Client: PACIFI Date Analyzed: 08/31/98 19:00
Analyst: DAT Instrument ID: F16 Run Factor: 300.
Quan List Threshold: 0.95 Surrogate Vol.: 100.

Surrogate Spike Recoveries
8270-G, LIMS 10/10/96

Surrogate	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured		QC limits	
CS20 NITROBENZENE-D5	50.0	BDL	0*	H	45	107
CS25 2-FLUOROBIPHENY	50.0	BDL	0*		62	110
CS30 TERPHENYL-D14	50.00	135.0	270.		*	58 135
CS45 PHENOL-D5	100.	BDL	0*		43	130
CS50 2-FLUOROPHENOL	100.	BDL	0*		36	111
CS55 2,4,6-TRIBROMOP	100.0	120.0	120.			58 131

Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
HEXACHLOROBENZENE-C13		ND	UG/A	3000.0
C310 N-NITROSODIMETHYLAMINE		ND	UG/A	3000.0
PYRIDINE		ND	UG/A	6000.0
2-PICOLINE		ND	UG/A	3000.0
N-NITROSOMETHYLETHYLAMINE		ND	UG/A	3000.0
METHYLMETHANESULFONATE		ND	UG/A	3000.0
N-NITROSODIETHYLAMINE		ND	UG/A	3000.0
ETHYLMETHANE SULFONATE		ND	UG/A	3000.0
PENTACHLOROETHANE		ND	UG/A	3000.0
C320 ANILINE		ND	UG/A	3000.0
C315 PHENOL		ND	UG/A	3000.0
C325 BIS(2-CHLOROETHYL)ETHER		ND	UG/A	3000.0
C330 2-CHLOROPHENOL		ND	UG/A	3000.0
C335 1,3-DICHLOROBENZENE		ND	UG/A	3000.0
C340 1,4-DICHLOROBENZENE		ND	UG/A	3000.0
C345 BENZYL ALCOHOL		ND	UG/A	3000.0
C350 1,2-DICHLOROBENZENE		ND	UG/A	3000.0
C355 2-METHYLPHENOL		ND	UG/A	3000.0
C360 2,2'-OXYBIS(1-CLPROPAN)		ND	UG/A	3000.0
C361 ACETOPHENONE		ND	UG/A	3000.0
N-NITROSOPYRROLIDINE		ND	UG/A	3000.0
N-NITROSOMORPHOLINE		ND	UG/A	3000.0
3-METHYL PHENOL		ND	UG/A	3000.0
C365 4-METHYLPHENOL		ND	UG/A	3000.0
C370 N-NITROSO-DI-N-PROPYLAM		ND	UG/A	3000.0
O-TOLUIDINE		ND	UG/A	3000.0
C375 HEXACHLOROETHANE		ND	UG/A	3000.0
C410 NITROBENZENE		ND	UG/A	3000.0
N-NITROSOPIPERIDINE		ND	UG/A	3000.0

Reviewed by: 9.18.98
DEG 10/6/98

QUANTERRA GC/MS

Target Compound Data Summary Sheet

Data File: 30068101
Std Id: ST16980831

Sample: S-MM5-2 1/3SA/100M INST. ID: F16
Client: PACIFI Date Analyzed: 08/31/98 19:00
Analyst: DAT Instrument ID: F16 Run Factor: 300.
Quan List Threshold: 0.95 Surrogate Vol.: 100.

Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit	
C415 ISOPHORONE		ND	UG/A	3000.0	
C420 2-NITROPHENOL		ND	UG/A	3000.0	
C425 2,4-DIMETHYLPHENOL		ND	UG/A	3000.0	
C435 BIS(2-CHLOROETHOXY)METH		ND	UG/A	3000.0	
C440 2,4-DICHLOROPHENOL		ND	UG/A	3000.0	
C430 BENZOIC ACID		ND	UG/A	15000.0	
AA-DIMETHYLPHENETHYLAMINE		ND	UG/A	3000.0	
C445 1,2,4-TRICHLOROBENZENE		ND	UG/A	3000.0	
C450 NAPHTHALENE		~~ND~~ 1600	UG/A	3000.0	J
C455 4-CHLOROANALINE		ND	UG/A	3000.0	
2,6-DICHLOROPHENOL		ND	UG/A	3000.0	
HEXACHLOROPROPENE		ND	UG/A	3000.0	
C460 HEXACHLOROBUTADIENE		ND	UG/A	3000.0	
P-PHENYLENE DIAMINE		ND	UG/A	3000.0	
N-NITROSODI-N-BUTYLAMINE		ND	UG/A	3000.0	
C465 4-CHLORO-3-METHYLPHENO		ND	UG/A	3000.0	
SAFROLE		ND	UG/A	3000.0	
C470 2-METHYLNAPHTHALENE	652	3600.	UG/A	3000.0	9/11/98
1,2,4,5-TETRACHLOROBENZENE		ND	UG/A	3000.0	
ISOSAFROLE (#1)		ND	UG/A	6000.0	
C510 HEXACHLOROCYCLOPENTADI		ND	UG/A	3000.0	
C515 2,4,6-TRICHLOROPHENOL		ND	UG/A	3000.0	
C520 2,4,5-TRICHLOROPHENOL		ND	UG/A	3000.0	
ISOSAFROLE (#2)		ND	UG/A	6000.0	
C525 2-CHLORONAPHTHALENE		ND	UG/A	3000.0	
1-CHLORONAPHTHALENE		ND	UG/A	1500.0	
C530 2-NITROANALINE		ND	UG/A	15000.0	
1,4-NAPHTHOQUINONE		ND	UG/A	3000.0	
C535 DIMETHYLPHTHALATE		ND	UG/A	3000.0	
1,3-DINITROBENZENE		ND	UG/A	3000.0	
C540 ACENAPHTHYLENE		ND	UG/A	3000.0	
C543 2,6-DINITROTOLUENE		ND	UG/A	3000.0	
C545 3-NITROANILINE		ND	UG/A	15000.0	
C550 ACENAPHTHENE		ND	UG/A	3000.0	
C555 2,4-DINITROPHENOL		ND	UG/A	15000.0	
C565 DIBENZOFURAN		ND	UG/A	3000.0	
C560 4-NITROPHENOL		ND	UG/A	15000.0	
PENTACHLOROBENZENE		ND	UG/A	3000.0	
C570 2,4-DINITROTOLUENE		ND	UG/A	3000.0	
1-NAPHTHYLAMINE		ND	UG/A	3000.0	
2-NAPHTHYLAMINE		ND	UG/A	3000.0	
2,3,4,6-TETRACHLOROPHENOL		ND	UG/A	6000.0	
C580 DIETHYLPHTHALATE		ND	UG/A	3000.0	DEL
C590 FLUORENE		ND ~~ND~~ 440	UG/A	3000.0	~~J~~

<MDL

QUANTERRA GC/MS

Target Compound Data Summary Sheet

Data File: 30068101
Std Id: ST16980831

Sample: S-MM5-2 1/3SA/100M INST. ID: F16
Client: PACIFI Date Analyzed: 08/31/98 19:00
Analyst: DAT Instrument ID: F16 Run Factor: 300.
Quan List Threshold: 0.95 Surrogate Vol.: 100.

Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit	
C585 4-CHLOROPHENYL-PHENYLE		ND	UG/A	3000.0	
5-NITRO-O-TOLUIDINE		ND	UG/A	3000.0	
C595 4-NITROANALINE		ND	UG/A	15000.0	
C610 4,6-DINITRO-2-METHYLPH		ND	UG/A	15000.0	
C615 N-NITROSODIPHENYLAMINE		ND	UG/A	3000.0	
C620 AZOBENZENE		ND	UG/A	3000.0	
SYM-TRINITROBENZENE		ND	UG/A	3000.0	
C625 4-BROMOPHENYL-PHENYLET		ND	UG/A	3000.0	
PHENACETIN		ND	UG/A	3000.0	
DIALLATE	234	ND	UG/A	3000.0	
C630 HEXACHLOROBENZENE		ND	UG/A	3000.0	
4-AMINOBIPHENYL		ND	UG/A	3000.0	
C635 PENTACHLOROPHENOL		ND	UG/A	15000.0	
PRONAMIDE		ND	UG/A	3000.0	
PENTACHLORONITROBENZENE		ND	UG/A	15000.0	
C640 PHENANTHRENE		950	UG/A	3000.0	J
C645 ANTHRACENE		ND	UG/A	3000.0	
2SECBUTYL-4,6-DINITROPHENOL		ND	UG/A	3000.0	
C647 CARBAZOLE		ND	UG/A	3000.0	
C650 DI-N-BUTYLPHTHALATE		ND	UG/A	3000.0	
4-NITROQUINOLINE-1-OXIDE		ND	UG/A	3000.0	
METHAPYRILENE		ND	UG/A	3000.0	
ISODRIN		ND	UG/A	3000.0	
C655 FLUORANTHENE		ND	UG/A	3000.0	
CHLOROBENZILATE		ND	UG/A	3000.0	
C710 BENZIDINE		ND	UG/A	30000.0	
C715 PYRENE		ND	UG/A	3000.0	
ARAMITE (#1)		ND	UG/A	3000.0	
ARAMITE (#2)		ND	UG/A	3000.0	
P-DIMETHYLAMINOAZOBENZENE		ND	UG/A	3000.0	
3,3'-DIMETHYLBENZIDINE		ND	UG/A	3000.0	
KEPONE		ND	UG/A	15000.0	
C720 BUTYLBENZYLPHTHALATE		ND	UG/A	3000.0	
2-ACETYLAMINOFLUORENE		ND	UG/A	3000.0	
C730 BENZO(A)ANTHRACENE		ND	UG/A	3000.0	
C725 3,3'-DICHLOROBENZIDINE		ND	UG/A	6000.0	
C740 CHRYSENE		ND	UG/A	3000.0	
C745 BIS(2-ETHYLHEXYL)PHTHA		ND	UG/A	3000.0	
3-METHYLCHOLANTHRENE		ND	UG/A	3000.0	
C760 DI-N-OCTYL PHTHALATE		ND	UG/A	3000.0	
C765 BENZO(B)FLUORANTHENE		ND	UG/A	3000.0	
7,12-DIMETHYLBENZANTHRACENE		ND	UG/A	3000.0	
C770 BENZO(K)FLUORANTHENE		ND	UG/A	3000.0	
HEXACHLOROPHENE		ND	UG/A	3000.0	

QUANTERRA GC/MS

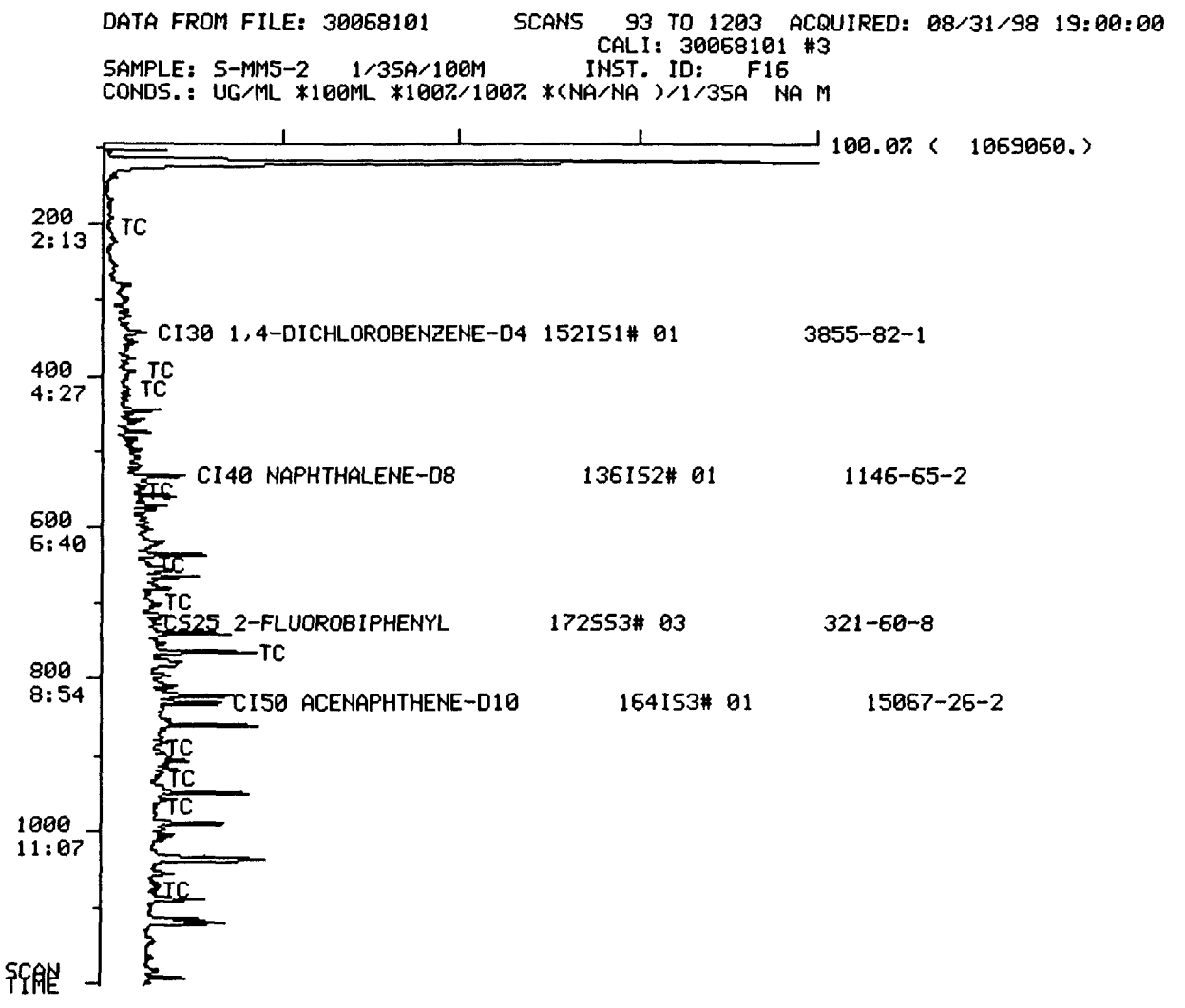
Target Compound Data Summary Sheet

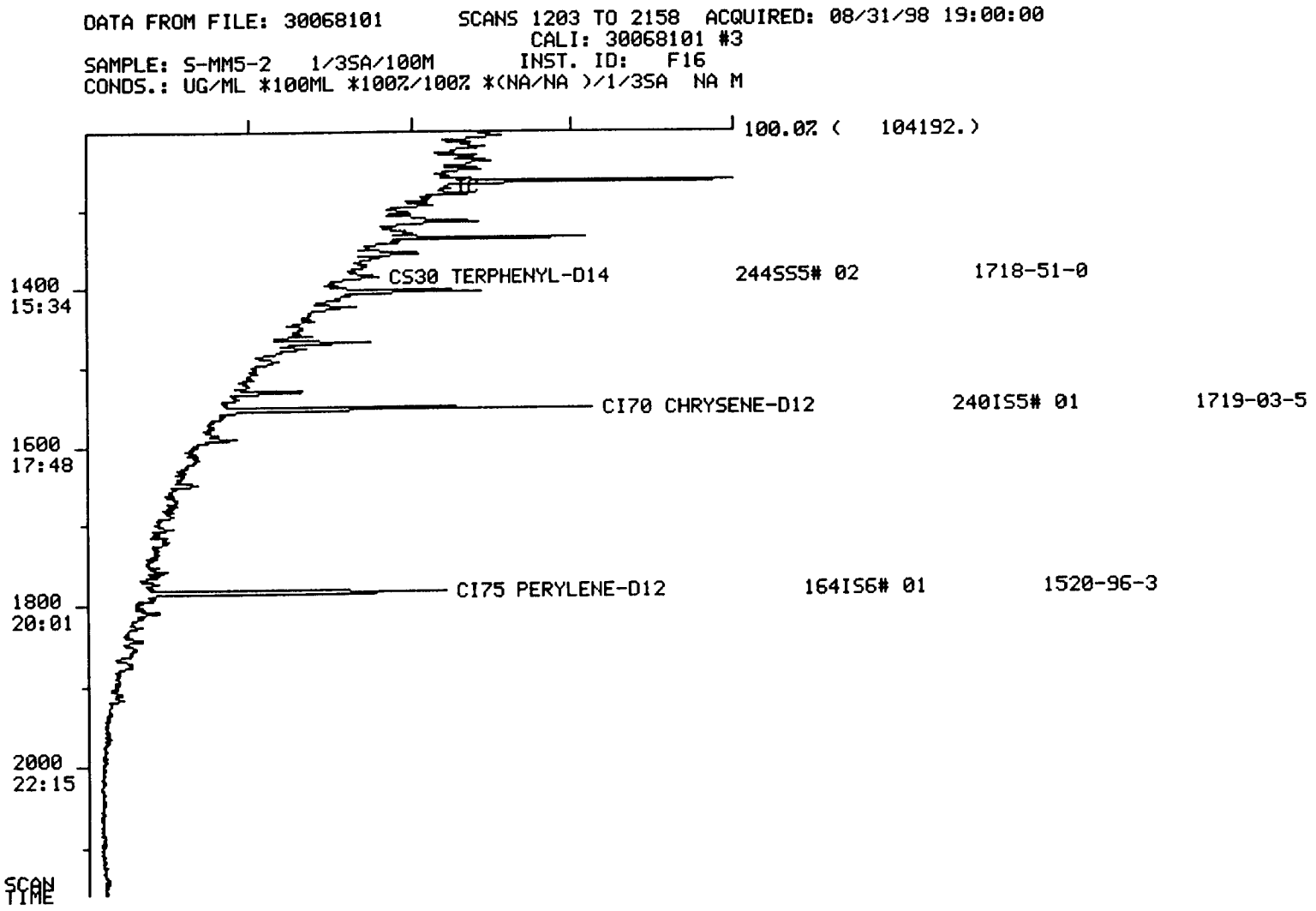
Data File: 30068101
Std Id: ST16980831

Sample: S-MM5-2 1/3SA/100M INST. ID: F16
Client: PACIFI Date Analyzed: 08/31/98 19:00
Analyst: DAT Instrument ID: F16 Run Factor: 300.
Quan List Threshold: 0.95 Surrogate Vol.: 100.

Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
C775 BENZO(A)PYRENE		ND	UG/A	3000.0
C780 INDENO(1,2,3-CD)PYRENE		ND	UG/A	3000.0
C785 DIBENZ(A,H)ANTHRACENE		ND	UG/A	3000.0
C790 BENZO(G,H,I)PERYLENE		ND	UG/A	3000.0


DATA FROM FILE: 30068101 SCANS 93 TO 1203 ACQUIRED: 08/31/98 19:00:00
CALI: 30068101 #3
SAMPLE: S-MM5-2 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
100.0% (1069060.)
200
2:13
TC
CI30 1,4-DICHLOROBENZENE-D4 152IS1# 01 3855-82-1
400
4:27
TC
TC
CI40 NAPHTHALENE-D8 136IS2# 01 1146-65-2
TC
600
6:40
TC
TC
CS25 2-FLUOROBIPHENYL 172SS3# 03 321-60-8
TC
800
8:54
CI50 ACENAPHTHENE-D10 164IS3# 01 15067-26-2
TC
TC
TC
1000
11:07
TC
SCAN
TIME


DATA FROM FILE: 30068101 SCANS 1203 TO 2158 ACQUIRED: 08/31/98 19:00:00
CALI: 30068101 #3
SAMPLE: S-MM5-2 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
100.0% (104192.)
1400
15:34
CS30 TERPHENYL-D14
244SS5# 02
1718-51-0
1600
17:48
CI70 CHRYSENE-D12
240IS5# 01
1719-03-5
1800
20:01
CI75 PERYLENE-D12
164IS6# 01
1520-96-3
2000
22:15
SCAN
TIME

STANDARD USED FOR THIS REPORT IS ST16980831 REPORT PRINTED: 9/01/98 11:51:51

ADDITIONAL STANDARD USED FOR THIS REPORT IS: ST16980831A

QUANTERRA QUANTITATION SUMMARY File: 30068101

Sample: S-MM5-2 1/3SA/100M INST. ID: F16
Analyst: DAT Instrument Id: F16 Analyzed: 08/31/98 19:00

Compounds with amounts less than 0.20 reported as NOT FOUND

No	Library Entry	Name	Mass	Meth	Scan	Ref	Area	RRF(L)	Units: UG/ML Amount
1	S1# 1	C130 1,4-DICHLOROBENZENE	152	A BV	341	1	25865.	1.000	40.000
2	S2# 1	C140 NAPHTHALENE-D8	136	A BB	530	2	96183.	1.000	40.000
3	S3# 1	C150 ACENAPHTHENE-D10	164	A BB	829	3	53596.	1.000	40.000
4	S4# 1	C160 PHENANTHRENE-D10	188	A BB	1087	4	95242.	1.000	40.000
5	S5# 1	C170 CHRYSENE-D12	240	A BB	1552	5	57183.	1.000	40.000
6	S6# 1	C175 PERYLENE-D12	264	A BB	1783	6	44948.	1.000	40.000
7	S2# 2	CS20 NITROBENZENE-D5	82	A BB	424	2	355.	0.470	0.314
8	S3# 3	CS25 2-FLUOROBIPHENYL	172	A BB	723	3	1150.	1.234	0.695
9	S5# 2	CS30 TERPHENYL-D14	244	A BB	1384	5	1924.	0.995	1.352
10	S1# 3	CS45 PHENOL-D5	99		1	NOT FOUND			
11	S1# 2	CS50 2-FLUOROPHENOL	112		1	NOT FOUND			
12	S3# 2	CS55 2,4,6-TRIBROMOPHENO	330	A BB	971	3	380.	0.236	1.203
13	S4# 4	HEXACHLOROBENZENE-C13	294		4	NOT FOUND			
14	S1# 15	C310 N-NITROSODIMETHYLAM	74		1	NOT FOUND			
15	S1# 20	PYRIDINE	79		1	NOT FOUND			
16	S1# 30	2-PICOLINE	93		1	NOT FOUND			
17	S1# 40	N-NITROSOMETHYLETHYLAMIN	42	A VB	180	1	405.	0.811	0.772
18	S1# 60	METHYLMETHANESULFONATE	80	A BB	201	1	448.	0.636	1.089
19	S1# 70	N-NITROSODIETHYLAMINE	102		1	NOT FOUND			
20	S1# 85	ETHYLMETHANE SULFONATE	79		1	NOT FOUND			
21	S1# 95	PENTACHLOROETHANE	117		1	NOT FOUND			
22	S1#100	C320 ANILINE	93		1	NOT FOUND			
23	S1#105	C315 PHENOL	94		1	NOT FOUND			
24	S1#110	C325 BIS(2-CHLOROETHYL)E	93	A BB	319	1	216.	1.368	0.244
25	S1#115	C330 2-CHLOROPHENOL	128		1	NOT FOUND			
26	S1#125	C335 1,3-DICHLOROBENZENE	146		1	NOT FOUND			
27	S1#130	C340 1,4-DICHLOROBENZENE	146		1	NOT FOUND			
28	S1#145	C345 BENZYL ALCOHOL	108	A VB	374	1	268.	0.854	0.485
29	S1#150	C350 1,2-DICHLOROBENZENE	146		1	NOT FOUND			
30	S1#160	C355 2-METHYLPHENOL	108	A BV	392	1	1488.	1.175	1.959
31	S1#165	C360 2,2'-OXYBIS(1-CLPRO	45	A BB	394	1	1758.	2.539	1.071
32	S1#170	C361 ACETOPHENONE	105		1	NOT FOUND			
33	S1#175	N-NITROSOPYRROLIDINE	100		1	NOT FOUND			
34	S1#180	N-NITROSOMORPHOLINE	56		1	NOT FOUND			
35	S1#182	3-METHYL PHENOL	108	A VB	423	1	363.	2.252	0.249
36	S1#185	C365 4-METHYLPHENOL	108	A VV	419	1	452.	1.276	0.548
37	S1#190	C370 N-NITROSO-DI-N-PROP	70	A BB	414	1	1123.	0.906	1.917
38	S1#195	O-TOLUIDINE	106	A BB	413	1	332.	2.160	0.238
39	S1#200	C375 HEXACHLOROETHANE	117		1	NOT FOUND			
40	S2# 10	C410 NITROBENZENE	77		2	NOT FOUND			
41	S2# 15	N-NITROSOPIPERIDINE	42		2	NOT FOUND			
42	S2# 20	C415 ISOPHORONE	82		2	NOT FOUND			
43	S2# 25	C420 2-NITROPHENOL	139		2	NOT FOUND			
44	S2# 30	C425 2,4-DIMETHYLPHENOL	107	A BB	500	2	714.	0.330	0.900
45	S2# 35	C435 BIS(2-CHLOROETHOXY)	93		2	NOT FOUND			

D46 1D 6/43

46	S2# 40	C440	2,4-DICHLOROPHENOL	162	A BB	519	2	200.	0.308	0.270
47	S2# 45	C430	BENZOIC ACID	122		2	NOT FOUND			
48	S2# 50		AA-DIMETHYLPHENETHYLAMIN	58		2	NOT FOUND			
49	S2# 55	C445	1,2,4-TRICHLOROBENZ	180		2	NOT FOUND			

50	S2# 60	C450 NAPHTHALENE	128	A	BV	533	2	13016.	1.022	5.295	1588 J
51	S2# 80	C455 4-CHLOROANALINE	127	A	BB	556	2	389.	0.454	0.356	
52	S2# 85	2,6-DICHLOROPHENOL	162	A	BV	552	2	1164.	0.257	1.880	
53	S2# 90	HEXACHLOROPROPENE	213			2	NOT FOUND				
54	S2# 95	C460 HEXACHLOROBUTADIENE	225			2	NOT FOUND				
55	S2#115	P-PHENYLENE DIAMINE	108			2	NOT FOUND				
56	S2#120	N-NITROSODI-N-BUTYLAMINE	84			2	NOT FOUND				
57	S2#130	C465 4-CHLORO-3-METHYLPH	107			2	NOT FOUND				
58	S2#140	SAFROLE	162	A	BB	648	2	852.	0.248	1.431	
59	S2#145	C470 2-METHYLNAPHTHALENE	142	A	BB	652	2	21609.	0.751	11.962	
60	S3# 10	1,2,4,5-TETRACHLOROBENZE	214			3	NOT FOUND				
61	S3# 15	ISOSAFROLE (#1)	162	A	BB	697	3	418.	0.044	7.156	
62	S3# 20	C510 HEXACHLOROCYCLOPENT	237			3	NOT FOUND				
63	S3# 25	C515 2,4,6-TRICHLOROPHEN	196			3	NOT FOUND				
64	S3# 30	C520 2,4,5-TRICHLOROPHEN	196			3	NOT FOUND				
65	S3# 35	ISOSAFROLE (#2)	104	A	VB	738	3	394.	0.195	1.508	
66	S3# 40	C525 2-CHLORONAPHTHALENE	162			3	NOT FOUND				
67	S3# 42	1-CHLORONAPHTHALEN	162			3	NOT FOUND				
68	S3# 45	C530 2-NITROANALINE	65	A	BB	764	3	755.	0.502	1.122	
69	S3# 50	1,4-NAPHTHOQUINONE	158	A	VB	772	3	450.	0.415	0.810	
70	S3# 55	C535 DIMETHYLPHTHALATE	163			3	NOT FOUND				
71	S3# 60	1,3-DINITROBENZENE	168			3	NOT FOUND				
72	S3# 65	C540 ACENAPHTHYLENE	152	A	BB	808	3	533.	1.838	0.216	
73	S3# 70	C543 2,6-DINITROTOLUENE	165	A	BB	816	3	267.	0.324	0.615	
74	S3# 75	C545 3-NITROANILINE	138			3	NOT FOUND				
75	S3# 80	C550 ACENAPHTHENE	153	A	BV	834	3	943.	1.159	0.608	
76	S3# 85	C555 2,4-DINITROPHENOL	184	A	BB	857	3	70.	0.189	0.276	
77	S3# 90	C565 DIBENZOFURAN	168	A	BB	867	3	838.	1.669	0.375	
78	S3# 95	C560 4-NITROPHENOL	109	A	BV	887	3	343.	0.173	1.483	
79	S3#100	PENTACHLOROBENZENE	250			3	NOT FOUND				
80	S3#105	C570 2,4-DINITROTOLUENE	165	A	BB	881	3	483.	0.397	0.908	
81	S3#110	1-NAPHTHYLAMINE	143			3	NOT FOUND				
82	S3#115	2-NAPHTHYLAMINE	143			3	NOT FOUND				
83	S3#120	2,3,4,6-TETRACHLOROPHENO	232	A*	BB	896	3	118.	0.297	0.297	
84	S3#130	C580 DIETHYLPHTHALATE	149			3	NOT FOUND				
85	S3#135	C590 FLUORENE	166	A	BB	926	3	2574.	1.298	1.480	449 J L MDL
86	S3#140	C585 4-CHLOROPHENYL-PHEN	204			3	NOT FOUND				
87	S3#145	5-NITRO-O-TOLUIDINE	152	A	BB	941	3	2148.	0.356	4.509	
88	S3#150	C595 4-NITROANALINE	138	A	BB	948	3	373.	0.307	0.907	
89	S4# 10	C610 4,6-DINITRO-2-METHY	198			4	NOT FOUND				
90	S4# 15	C615 N-NITROSODIPHENYLAM	169	A	BB	963	4	2520.	0.551	1.922	
91	S4# 20	C620 AZOBENZENE	77			4	NOT FOUND				
92	S4# 25	SYM-TRINITROBENZENE	75			4	NOT FOUND				
93	S4# 30	C625 4-BROMOPHENYL-PHENY	248	A	BB	1022	4	320.	0.222	0.604	
94	S4# 35	PHENACETIN	108			4	NOT FOUND				
95	S4# 37	DIALLATE	234			4	NOT FOUND				
96	S4# 40	C630 HEXACHLOROBENZENE	284			4	NOT FOUND				
97	S4# 45	4-AMINOBIPHENYL	169	A	BB	1076	4	1557.	0.609	1.074	
98	S4# 50	C635 PENTACHLOROPHENOL	266	A	VB	1063	4	156.	0.155	0.423	
99	S4# 55	PRONAMIDE	173			4	NOT FOUND				
100	S4# 60	PENTACHLORONITROBENZENE	237	A	BB	1064	4	54.	0.080	0.282	
101	S4# 65	C640 PHENANTHRENE	178	A	BB	1091	4	7792.	1.033	3.169	950.7 J
102	S4# 70	C645 ANTHRACENE	178			4	NOT FOUND				
103	S4# 75	2SECBUTYL-4,6-DINITROPHE	211			4	NOT FOUND				
104	S4# 80	C647 CARBAZOLE	167	A	BB	1148	4	364.	0.764	0.200	
105	S4# 85	C650 DI-N-BUTYLPHTHALATE	149			4	NOT FOUND				
106	S4#100	4-NITROQUINOLINE-1-OXIDE	190			4	NOT FOUND				
107	S4#105	METHAPYRILENE	58			4	NOT FOUND				
108	S4#106	ISODRIN	193	A	BB	1270	4	504.	0.127	1.671	
109	S4#110	C655 FLUORANTHENE	202			4	NOT FOUND				
110	S4#120	CHLOROBENZILATE	139			4	NOT FOUND				

111	S5#	10	C710	BENZIDINE	184		5	NOT FOUND				
112	S5#	15	C715	PYRENE	202	A	BB	1335	5	1175.	1.323	0.622
113	S5#	20		ARAMITE (#1)	185		5	NOT FOUND				
114	S5#	25		ARAMITE (#2)	185		5	NOT FOUND				
115	S5#	30		P-DIMETHYLAMINOAZOBENZEN	120		5	NOT FOUND				
116	S5#	35		3,3'-DIMETHYLBENZIDINE	212	A	BV	1472	5	120.	0.418	0.201
117	S5#	37		KEPONE	272		5	NOT FOUND				
118	S5#	40	C720	BUTYLBENZYLPHTHALAT	149		5	NOT FOUND				
119	S5#	45		2-ACETYLAMINOFLUORENE	181		5	NOT FOUND				
120	S5#	50	C730	BENZO(A)ANTHRACENE	228		5	NOT FOUND				
121	S5#	55	C725	3,3'-DICHLOROBENZID	252		5	NOT FOUND				
122	S5#	60	C740	CHRYSENE	228	A	VB	1554	5	825.	1.014	0.569
123	S5#	65	C745	BIS(2-ETHYLHEXYL)PH	149		5	NOT FOUND				
124	S5#	85		3-METHYLCHOLANTHRENE	268		5	NOT FOUND				
125	S6#	10	C760	DI-N-OCTYL PHTHALAT	149		6	NOT FOUND				
126	S6#	15	C765	BENZO(B)FLUORANTHEN	252		6	NOT FOUND				
127	S6#	20		7,12-DIMETHYLBENZANTHRAC	256		6	NOT FOUND				
128	S6#	25	C770	BENZO(K)FLUORANTHEN	252		6	NOT FOUND				
129	S6#	30		HEXACHLOROPHENE	196		6	NOT FOUND				
130	S6#	35	C775	BENZO(A)PYRENE	252		6	NOT FOUND				
131	S6#	55	C780	INDENO(1,2,3-CD)PYR	276		6	NOT FOUND				
132	S6#	60	C785	DIBENZ(A,H)ANTHRACE	278		6	NOT FOUND				
133	S6#	65	C790	BENZO(G,H,I)PERYLEN	276		6	NOT FOUND				

BNA, S LIBRARIES ANALYST: ____ DATE: _____

QUANTERRA Internal Standard Check

Standard Filename: ST16980831 Analyzed: 08/31/98 12:31

Standard	IS# 1 Area	%	RT	IS# 2 Area	%	RT	IS# 3 Area	%	RT
ST16980831	28649.		3.78	100432.		5.90	54347.		9.21
Upper Limit	57297.=+200		4.28	200864.=+200		6.40	108695.=+200		9.71
Lower Limit	14324.=+ 50		3.28	50216.=+ 50		5.40	27174.=+ 50		8.71
Filename									
1 30068101	25865.=	90	3.79	96183.=	95	5.90	53596.=	98	9.22

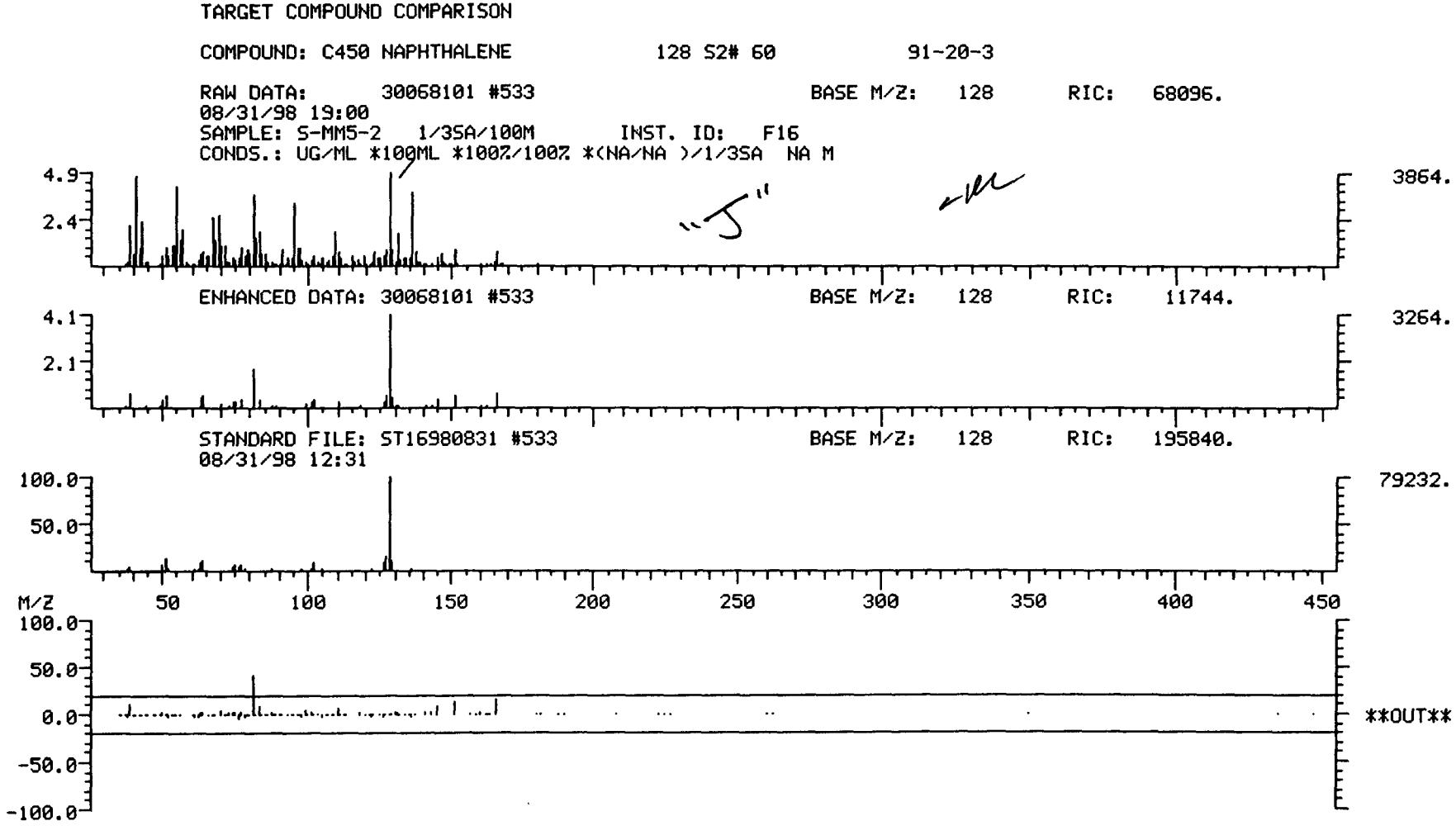
IS# 1 = C130 1,4-DICHLOROBENZENE-D4
IS# 2 = C140 NAPHTHALENE-D8
IS# 3 = C150 ACENAPHTHENE-D10

* - indicates an I.S. is outside QC limit(s)

Standard	IS# 4 Area	%	RT	IS# 5 Area	%	RT	IS# 6 Area	%	RT
ST16980831	98520.		12.08	62289.		17.26	50750.		19.83
Upper Limit	197039.=+200		12.58	124578.=+200		17.76	101500.=+200		20.33
Lower Limit	49260.=+ 50		11.58	31145.=+ 50		16.76	25375.=+ 50		19.33
Filename									
1 30068101	95242.=	96	12.09	57183.=	91	17.26	44948.=	88	19.83

IS# 4 = C160 PHENANTHRENE-D10
IS# 5 = C170 CHRYSENE-D12
IS# 6 = C175 PERYLENE-D12

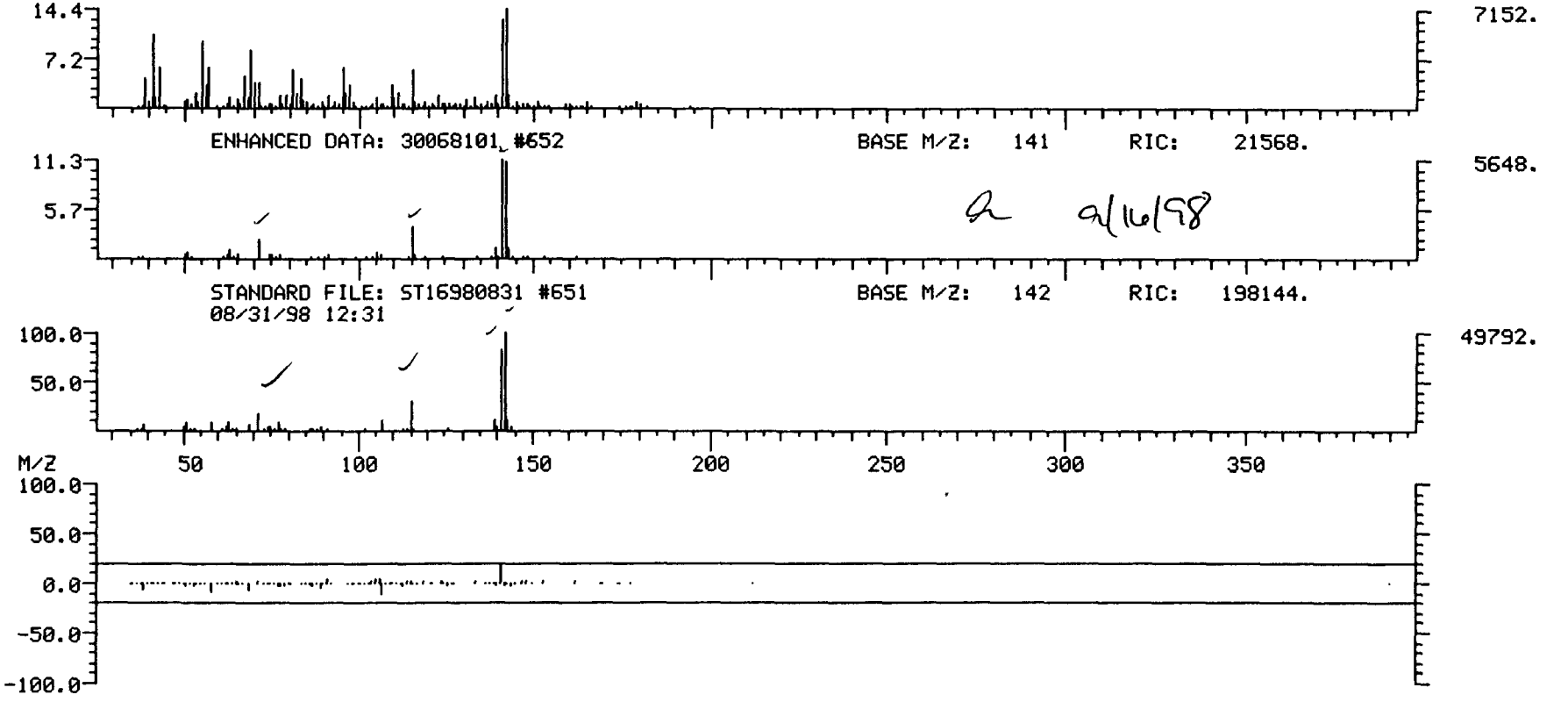
* - indicates an I.S. is outside QC limit(s)


TARGET COMPOUND COMPARISON
COMPOUND: C450 NAPHTHALENE 128 S2# 60 91-20-3
RAW DATA: 30068101 #533 BASE M/Z: 128 RIC: 68096.
08/31/98 19:00
SAMPLE: S-MM5-2 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
4.9
2.4
3864.
ENHANCED DATA: 30068101 #533 BASE M/Z: 128 RIC: 11744.
4.1
2.1
3264.
STANDARD FILE: ST16980831 #533 BASE M/Z: 128 RIC: 195840.
08/31/98 12:31
100.0
50.0
79232.
M/Z
50
100
150
200
250
300
350
400
450
100.0
50.0
0.0
-50.0
-100.0
OUT

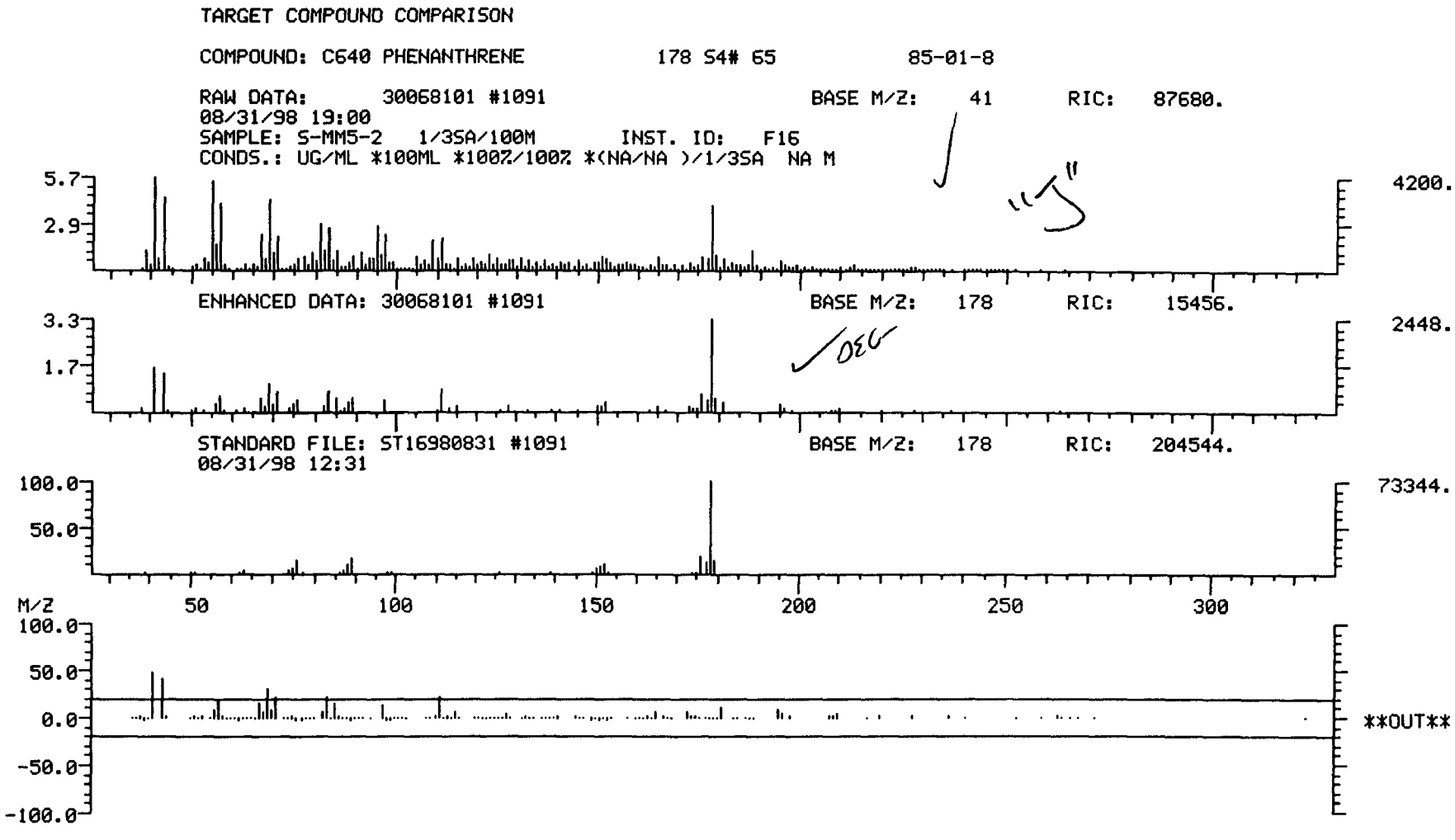
TARGET COMPOUND COMPARISON

COMPOUND: C470 2-METHYLNAPHTHALENE 142 S2#145 91-57-6

RAW DATA: 30068101 #652 BASE M/Z: 142 RIC: 97280.
08/31/98 19:00
SAMPLE: S-MM5-2 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M



9/16/98


TARGET COMPOUND COMPARISON
COMPOUND: C640 PHENANTHRENE 178 S4# 65 85-01-8
RAW DATA: 30068101 #1091 BASE M/Z: 41 RIC: 87680.
08/31/98 19:00
SAMPLE: S-MM5-2 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
5.7
2.9
4200.
ENHANCED DATA: 30068101 #1091 BASE M/Z: 178 RIC: 15456.
3.3
1.7
2448.
STANDARD FILE: ST16980831 #1091 BASE M/Z: 178 RIC: 204544.
08/31/98 12:31
100.0
50.0
73344.
M/Z
50
100
150
200
250
300
100.0
50.0
0.0
-50.0
-100.0
OUT

Data Reduced by: [illegible] Date: 9/16/98
Data Reviewed by: [illegible] Date: 9/14/98

Data File: 30068101

QUANTERRA GC/MS TIC REPORT (Part 1)

Sample: S-MM5-2 1/3SA/100M INST. ID: F16
Analyst: DAT Date Analyzed: 08/31/98 19:00
Run Factor: 300.

#	SCAN	Concentration in Sample (UG/A)	CAS #	
X	444	7100.	~~74630-39-0~~	~~1-UNDECENE, 4-METHYL-~~ unkn. alkane 574600
2	473	7900.	~~74962-98-4~~	~~2-IRIDECEN-1-OL, (E)-~~
X	556	6400.	1120-21-4	UNDECANE or isomer
4	617	13000.	00-00-0	UNKNOWN 5700
5	633	15000.	~~21078-65-9~~	~~1-DECANOL, 2-ETHYL-~~ 576100 PAH
6	654	8900.	~~41446-67-7~~	~~3-TETRADECENE, (Z)-~~ or isomer 9/18/98 alkene 572000
7	662	8600.	1120-21-4	UNDECANE or isomer
X	678	6700.	00-00-0	UNKNOWN 5700
9	700	8400.	00-00-0	UNKNOWN 5700
X	714	6100.	00-00-0	UNKNOWN

11 738 17000. 3891-98-3
DODECANE, 2,6,10-TRIMETHYL- or isomer

12 763 22000. 629-59-4
TETRADECANE or isomer

13 776 12000. 00-00-0 5720000
UNKNOWN
Unkn. alkene

14 820 18000. 18344-37-1
HEPTADECANE, 2,6,10,14-TETRAMETHYL- or isomer

15 858 19000. 7045-71-8
UNDECANE, 2-METHYL- or isomer

16 904 13000. ~~52783-43-4~~
~~NONADECANOL or isomer~~ alkane 5746400

17 948 24000. 629-92-5
NONADECANE or isomer

18 987 15000. 54105-67-8
HEPTADECANE, 2,6-DIMETHYL- or isomer

19 1035 32000. 54105-67-8
HEPTADECANE, 2,6-DIMETHYL- or isomer

20 1114 10000. 54105-67-8
HEPTADECANE, 2,6-DIMETHYL- or isomer

21 1119 14000. 54105-67-8
HEPTADECANE, 2,6-DIMETHYL- or isomer

22 1191 7700. 629-92-5
NONADECANE or isomer

~~23~~	1264	6400.	629-92-5
	NONADECANE	or 1 Isomer	
24	1335	9700.	18344-37-1
	HEPTADECANE, 2,6,10,14-TETRAMETHYL-		
25	1402	7500.	629-92-5
	NONADECANE		

DATA FILE: 30068101

QUANTERRA GC/MS TIC REPORT (Part 2)

CONCENTRATION = AREA(TIC)*CONC(IS)/AREA(IS)

#	FIT	PURITY	INT. STD.	RT	RRT	AREA	HEIGHT	AMOUNT AS ANALYZED (UG/ML)	LIB	LIB #
1	947	652	1	4:56	0.838	178482.	55205.	23.760	NB	14793.
2	862	667	1	5:15	0.892	198048.	49344.	26.364	NB	22482.
3	964	839	1	6:11	1.049	160442.	59857.	21.358	NB	11607.
4	883	598	1	6:51	1.164	331968.	36544.	44.192	UK	1.
5	954	748	1	7:02	1.194	368896.	98560.	49.108	NB	19523.
6	963	692	1	7:16	1.234	224000.	40832.	29.819	NB	21962.
7	962	868	1	7:21	1.249	215296.	76160.	28.660	NB	11607.
8	900	393	1	7:32	1.279	167552.	38144.	22.305	UK	1.
9	887	401	2	7:47	0.844	197952.	27102.	27.953	UK	1.
10	830	396	2	7:56	0.861	144707.	34489.	20.434	UK	1.
11	981	834	2	8:12	0.890	411520.	117376.	58.111	NB	25991.
12	959	739	2	8:29	0.920	522729.	149934.	73.815	NB	22530.
13	946	550	2	8:37	0.936	294272.	40960.	41.554	UK	1.
14	975	831	2	9:07	0.989	421760.	107008.	59.557	NB	42196.
15	945	752	2	9:32	1.035	441984.	145920.	62.413	NB	15352.
16	938	674	2	10:03	1.090	301824.	48512.	42.621	NB	40233.
17	956	833	2	10:32	1.144	567424.	133632.	80.127	NB	37465.
18	949	817	3	10:58	0.908	404224.	103040.	48.343	NB	37462.
19	975	872	3	11:30	0.952	897408.	162304.	107.325	NB	37462.
20	910	791	3	12:23	1.025	279936.	81024.	33.479	NB	37462.
21	950	823	3	12:26	1.029	383872.	114688.	45.909	NB	37462.
22	969	756	3	13:14	1.096	213440.	62304.	25.526	NB	37465.
23	969	773	3	14:03	1.163	179442.	48179.	21.460	NB	37465.
24	910	691	4	14:50	0.860	160448.	34827.	32.250	NB	42196.
25	961	716	4	15:35	0.903	123776.	25984.	24.879	NB	37465.

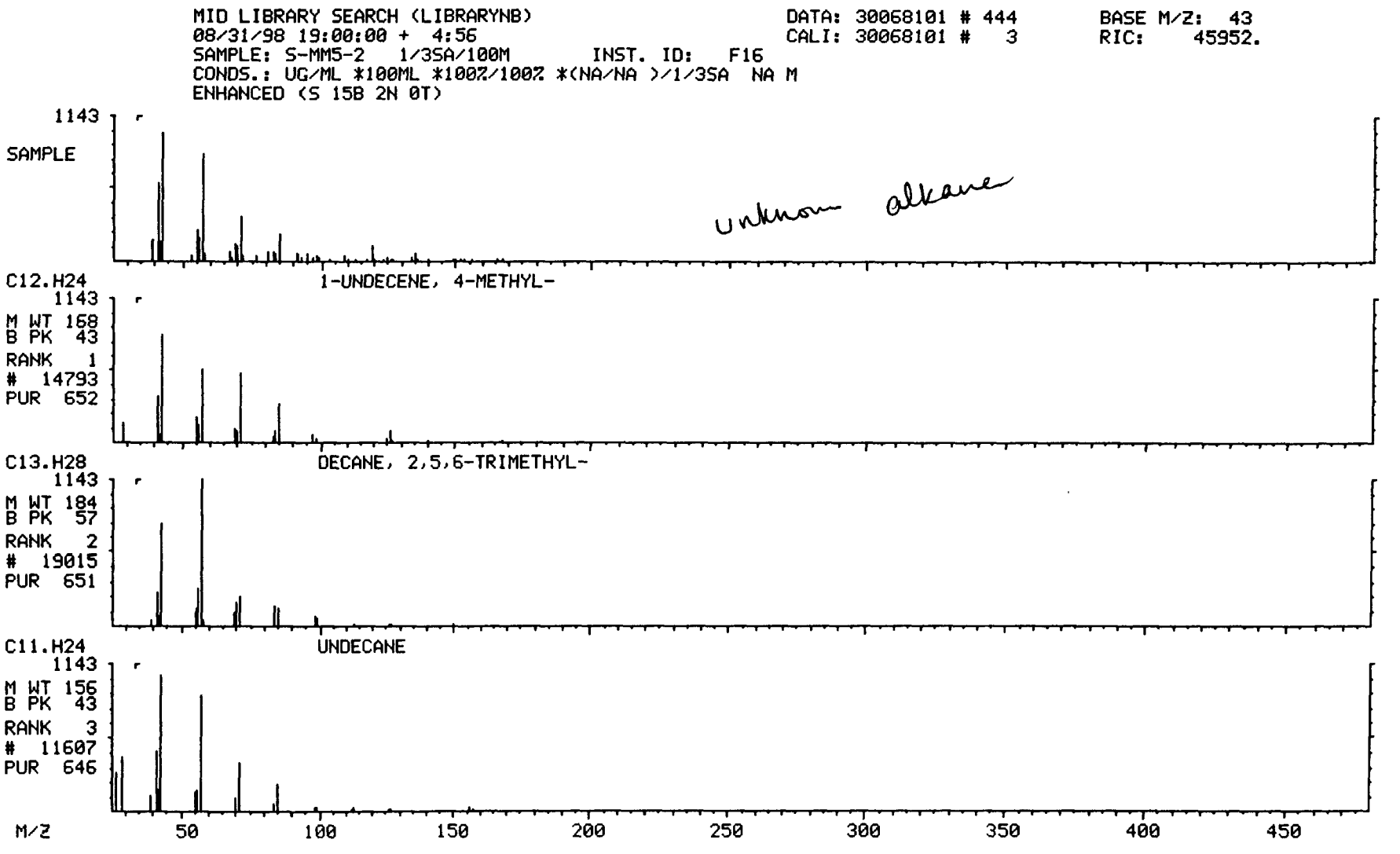
Library Search Data: 30068101 # 444 Base m/z: 43
08/31/98 19:00:00 + 4:56 Cali: 30068101 # 3 RIC: 45952.
Sample: S-MM5-2 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
740 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	14793	1-UNDECENE, 4-METHYL-
2	19015	DECANE, 2,5,6-TRIMETHYL-
3	11607	UNDECANE
4	19523	1-DECANOL, 2-ETHYL-
5	12074	1-HEPTANOL, 2-PROPYL-
6	11602	OCTANE, 2,4,6-TRIMETHYL-
7	8104	OCTANE, 3,5-DIMETHYL-
8	15969	HYDROXYLAMINE, O-DECYL-
9	8089	NONANE, 2-METHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C12.H24	168	43	652	947	652
2	C13.H28	184	57	651	939	651
3	C11.H24	156	43	646	979	653
4	C12.H26.O	186	57	636	922	661
5	C10.H22.O	158	43	631	936	640
6	C11.H24	156	57	625	948	627
7	C10.H22	142	57	623	930	635
8	C10.H23.O.N	173	43	620	928	658
9	C10.H22	142	43	620	941	628

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	74630-39-0
2	—	—	—	—	62108-23-0
3	—	—	—	—	1120-21-4
4	—	—	—	—	21078-65-9
5	—	—	—	—	10042-59-8
6	—	—	—	—	62016-37-9
7	—	—	—	—	15869-93-9
8	—	—	—	—	29812-79-1
9	—	—	—	—	871-83-0


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:00:00 + 4:56
SAMPLE: S-MM5-2 1/3SA/100M
INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068101 # 444
CALI: 30068101 # 3
BASE M/Z: 43
RIC: 45952.
1143
SAMPLE
unknown alkane
C12.H24
1-UNDECENE, 4-METHYL-
1143
M WT 168
B PK 43
RANK 1
14793
PUR 652
C13.H28
DECANE, 2,5,6-TRIMETHYL-
1143
M WT 184
B PK 57
RANK 2
19015
PUR 651
C11.H24
UNDECANE
1143
M WT 156
B PK 43
RANK 3
11607
PUR 646
M/Z
50
100
150
200
250
300
350
400
450

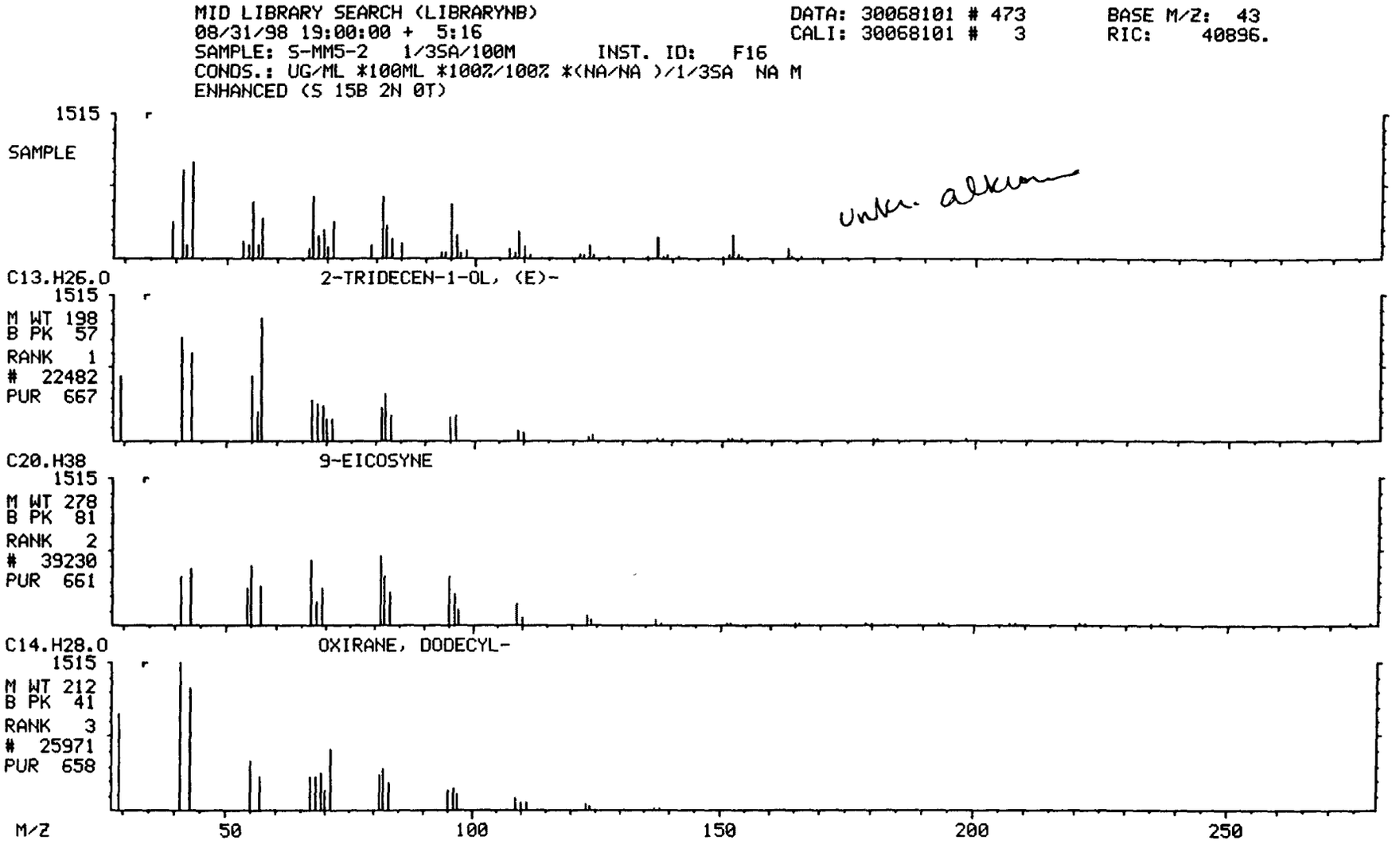
Library Search Data: 30068101 # 473 Base m/z: 43
08/31/98 19:00:00 + 5:16 Cali: 30068101 # 3 RIC: 40896.
Sample: S-MM5-2 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
459 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	22482	2-TRIDECEN-1-OL, (E)-
2	39230	9-EICOSYNE
3	25971	OXIRANE, DODECYL-
4	34800	(R)-(-)-(Z)-14-METHYL-8-HEXADECEN-1-OL
5	37449	OCTADECANAL
6	29222	(Z)6-PENTADECEN-1-OL
7	39224	1-EICOSYNE
8	37444	OXIRANE, HEXADECYL-
9	28267	3-HEXADECYNE

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C13.H26.O	198	57	667	862	673
2	C20.H38	278	81	661	902	679
3	C14.H28.O	212	41	658	917	658
4	C17.H34.O	254	55	654	848	664
5	C18.H36.O	268	43	639	830	682
6	C15.H30.O	226	67	637	869	655
7	C20.H38	278	82	630	837	657
8	C18.H36.O	268	57	626	808	670
9	C16.H30	222	67	622	930	626

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	74962-98-4
2	—	—	—	—	71899-38-2
3	—	—	—	—	3234-28-4
4	—	—	—	—	30689-78-2
5	—	—	—	—	638-66-4
6	—	—	—	—	68797-95-5
7	—	—	—	—	765-27-5
8	—	—	—	—	7390-81-0
9	—	—	—	—	61886-62-2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08/31/98 19:00:00 + 5:16
SAMPLE: S-MM5-2 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068101 # 473
CALI: 30068101 # 3
BASE M/Z: 43
RIC: 40896.
1515
SAMPLE
under alkane
C13.H26.O
2-TRIDECEN-1-OL, (E)-
M WT 198
B PK 57
RANK 1
22482
PUR 667
C20.H38
9-EICOSYNE
M WT 278
B PK 81
RANK 2
39230
PUR 661
C14.H28.O
OXIRANE, DODECYL-
M WT 212
B PK 41
RANK 3
25971
PUR 658
M/Z
50
100
150
200
250

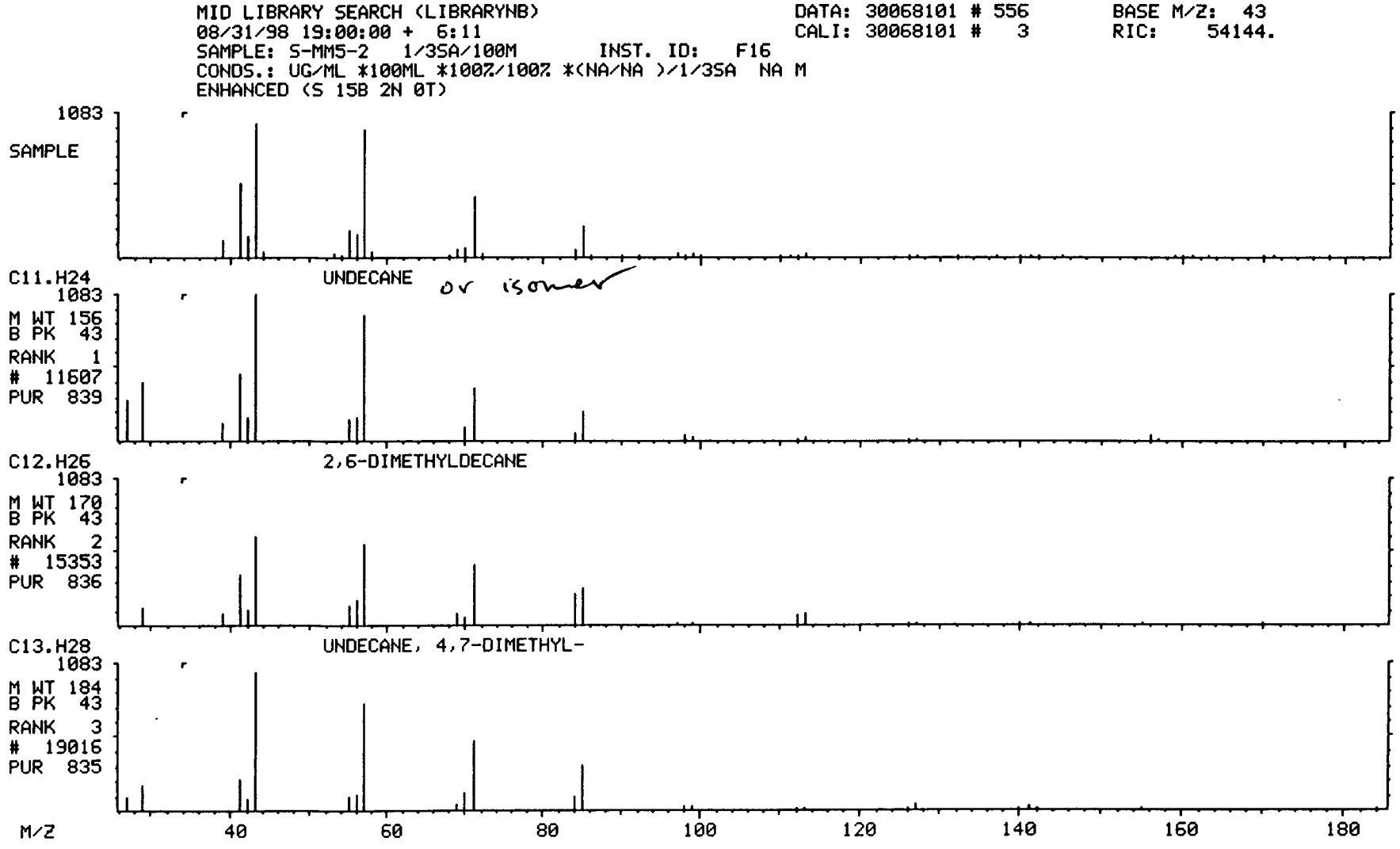
Library Search Data: 30068101 # 556 Base m/z: 43
08/31/98 19:00:00 + 6:11 Cali: 30068101 # 3 RIC: 54144.
Sample: S-MM5-2 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
890 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	11607	UNDECANE
2	15353	2,6-DIMETHYLDECANE
3	19016	UNDECANE, 4,7-DIMETHYL-
4	15357	DECANE, 2,9-DIMETHYL-
5	15352	UNDECANE, 2-METHYL-
6	19015	DECANE, 2,5,6-TRIMETHYL-
7	11602	OCTANE, 2,4,6-TRIMETHYL-
8	19028	DECANE, 2,4,6-TRIMETHYL-
9	22530	TETRADECANE

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C11.H24	156	43	839	964	864
2	C12.H26	170	43	836	924	842
3	C13.H28	184	43	835	959	836
4	C12.H26	170	43	832	967	842
5	C12.H26	170	43	829	949	845
6	C13.H28	184	57	825	929	826
7	C11.H24	156	57	822	967	822
8	C13.H28	184	43	822	941	828
9	C14.H30	198	43	821	923	876

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	1120-21-4
2	---	---	---	---	13150-81-7
3	---	---	---	---	17301-32-5
4	---	---	---	---	1002-17-1
5	---	---	---	---	7045-71-8
6	---	---	---	---	62108-23-0
7	---	---	---	---	62016-37-9
8	---	---	---	---	62108-27-4
9	---	---	---	---	629-59-4


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:00:00 + 6:11
SAMPLE: S-MM5-2 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068101 # 556
CALI: 30068101 # 3
BASE M/Z: 43
RIC: 54144.
1083
SAMPLE
C11.H24
UNDECANE
or isomer
1083
M WT 156
B PK 43
RANK 1
11607
PUR 839
C12.H26
2,6-DIMETHYLDECANE
1083
M WT 170
B PK 43
RANK 2
15353
PUR 836
C13.H28
UNDECANE, 4,7-DIMETHYL-
1083
M WT 184
B PK 43
RANK 3
19016
PUR 835
M/Z
40
60
80
100
120
140
160
180

C3

Library Search Data: 30068101 # 617 Base m/z: 41
08/31/98 19:00:00 + 6:52 Cali: 30068101 # 3 RIC: 33216.
Sample: S-MM5-2 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
207 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	24994	1,1'-BICYCLOHEXYL, 2-(1-METHYLETHYL)-, TRANS-
2	33979	BORINIC ACID, DIETHYL-, 1-CYCLODODECEN-1-YL ESTER
3	24993	1,1'-BICYCLOHEXYL, 2-(1-METHYLETHYL)-, CIS-
4	39227	NAPHTHALENE, DECAHYDRO-2,6-DIMETHYL-3-OCTYL-
5	39519	CYCLOHEXANE, 1-(1,5-DIMETHYLHEXYL)-4-(4-METHYLPENTYL)-
6	24990	MUUROLANE-B
7	31486	ACETAMIDE, N-METHYL-N-[4-[4-METHOXY-1-HEXAHYDROPYRIDYL]-2-BUTYNYL]-
8	24987	AMORPHANE-A
9	24991	AMORPHANE-B

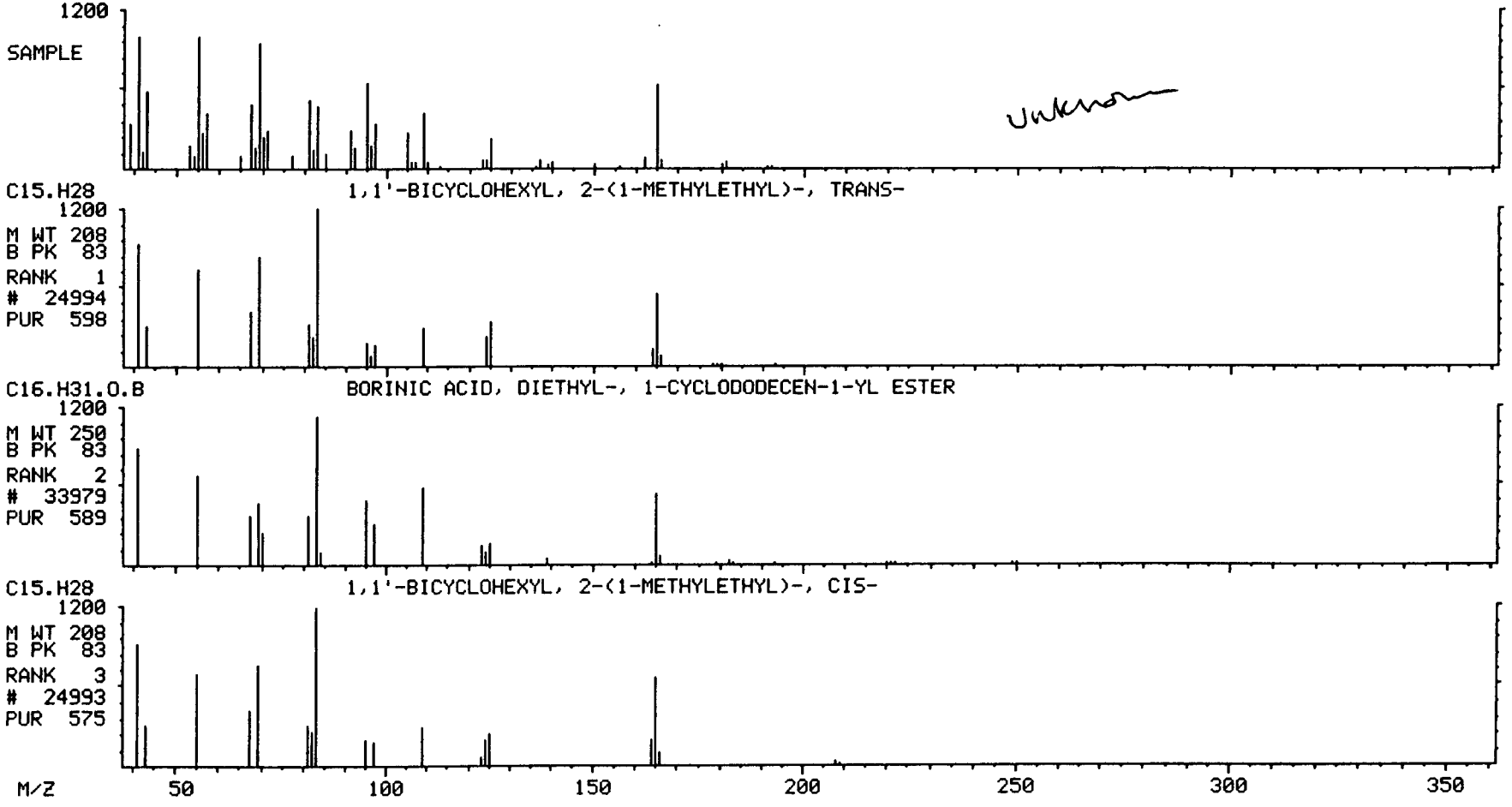
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C15.H28	208	83	598	883	622
2	C16.H31.O.B	250	83	589	911	617
3	C15.H28	208	83	575	868	615
4	C20.H38	278	109	539	820	606
5	C20.H40	280	43	537	741	636
6	C15.H28	208	109	534	830	586
7	C13.H22.O2.N2	238	43	527	732	606
8	C15.H28	208	109	519	817	552
9	C15.H28	208	95	518	804	581

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	50991-16-7
2	—	—	—	—	61142-73-2
3	—	—	—	—	50991-15-6
4	—	—	—	—	54964-85-1
5	—	—	—	—	56009-20-2
6	—	—	—	—	- -
7	—	—	—	—	- -
8	—	—	—	—	- -
9	—	—	—	—	- -

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:00:00 + 6:52
SAMPLE: S-MM5-2 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068101 # 617
CALI: 30068101 # 3

BASE M/Z: 41
RIC: 33216.



Library Search Data: 30068101 # 633 Base m/z: 57
08/31/98 19:00:00 + 7:02 Cali: 30068101 # 3 RIC: 84096.
Sample: S-MM5-2 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
919 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	19523	1-DECANOL, 2-ETHYL-
2	37462	HEPTADECANE, 2,6-DIMETHYL-
3	14799	1-DECENE, 3,4-DIMETHYL-
4	26409	2-HEXYL-1-OCTANOL
5	26408	2-ETHYL-1-DODECANOL
6	32418	2-HEXYL-1-DECANOL
7	22534	TRIDECANE, 7-METHYL-
8	14751	2-UNDECENE, 5-METHYL-
9	8539	1-PENTANOL, 4-METHYL-2-PROPYL-

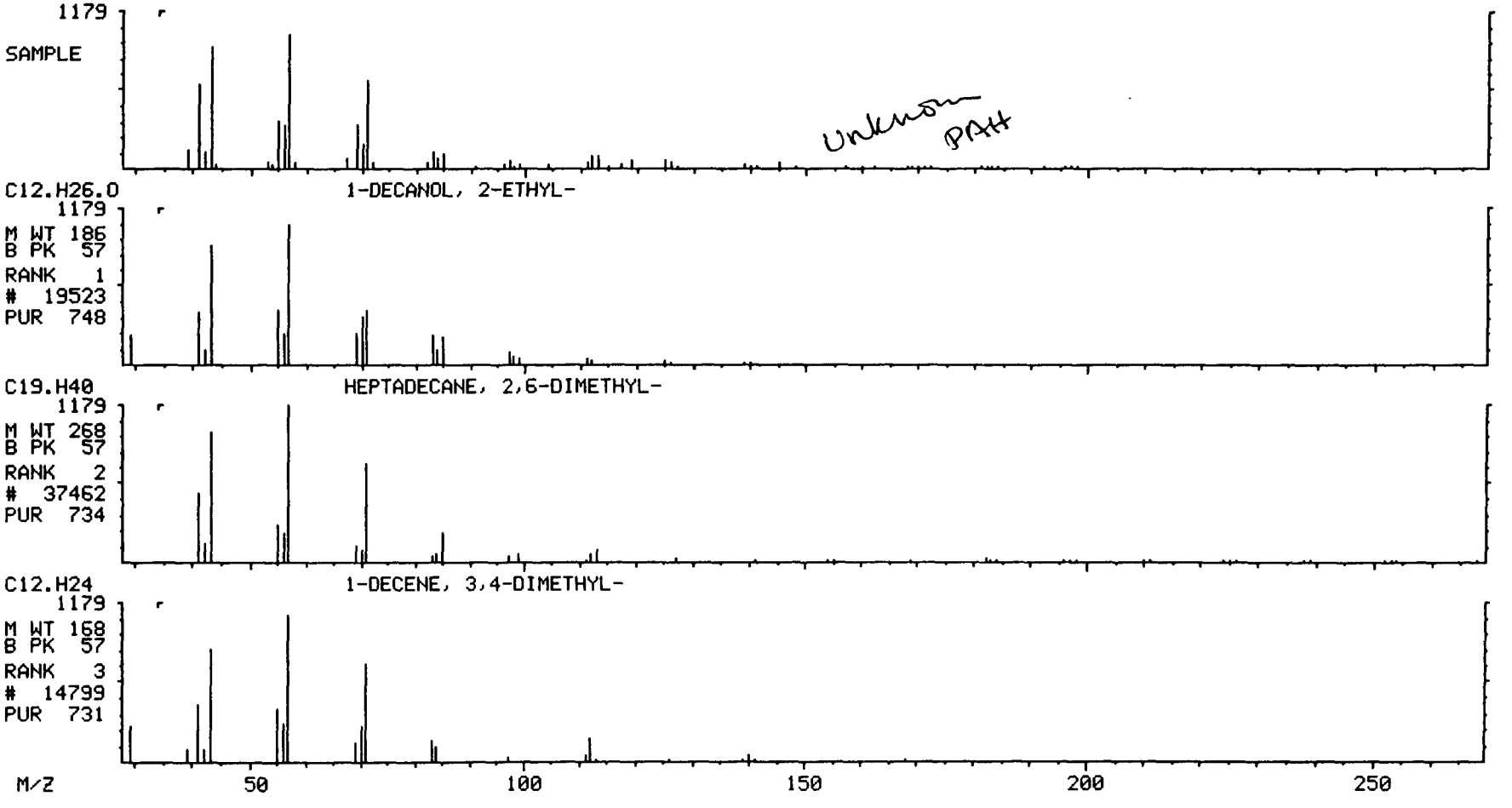
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C12.H26.O	186	57	748	954	748
2	C19.H40	268	57	734	932	748
3	C12.H24	168	57	731	944	731
4	C14.H30.O	214	57	727	927	741
5	C14.H30.O	214	57	725	923	730
6	C16.H34.O	242	57	724	924	737
7	C14.H30	198	57	711	911	719
8	C12.H24	168	57	709	958	709
9	C9.H20.O	144	57	705	979	705

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	21078-65-9
2	—	—	—	—	54105-67-8
3	—	—	—	—	50871-03-9
4	—	—	—	—	- -
5	—	—	—	—	- -
6	—	—	—	—	- -
7	—	—	—	—	26730-14-3
8	—	—	—	—	56851-34-4
9	—	—	—	—	54004-41-0

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:00:00 + 7:02
SAMPLE: S-MM5-2 1/35A/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068101 # 633
CALI: 30068101 # 3

BASE M/Z: 57
RIC: 84096.



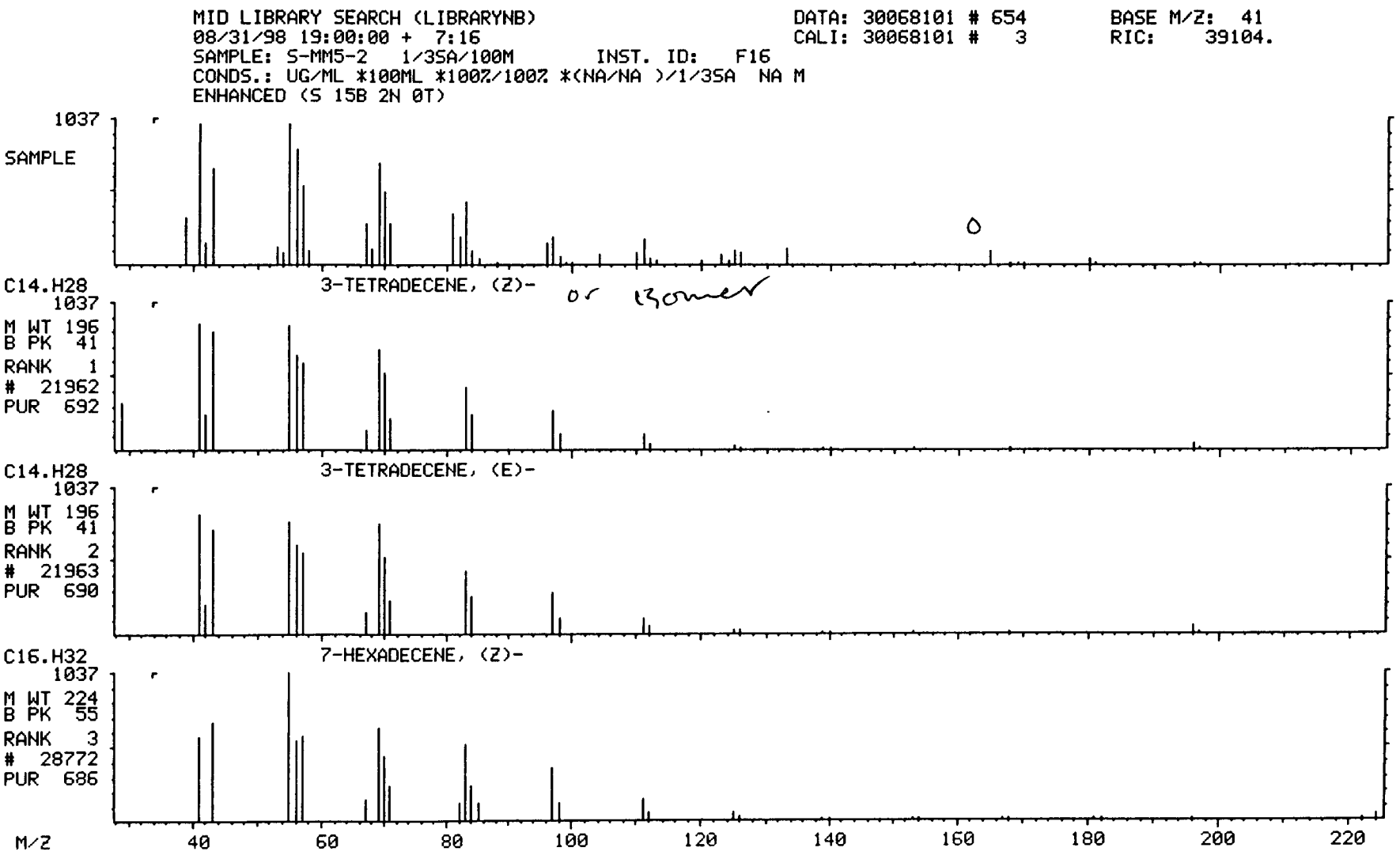
Library Search Data: 30068101 # 654 Base m/z: 41
08/31/98 19:00:00 + 7:16 Cali: 30068101 # 3 RIC: 39104.
Sample: S-MM5-2 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
687 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	21962	3-TETRADECENE, (Z)-
2	21963	3-TETRADECENE, (E)-
3	28772	7-HEXADECENE, (Z)-
4	11084	CYCLOPROPANE, 1-HEPTYL-2-METHYL-
5	28768	3-HEXADECENE, (Z)-
6	21973	7-TETRADECENE, (Z)-
7	34411	5-OCTADECENE, (E)-
8	34410	3-OCTADECENE, (E)-
9	21961	5-TETRADECENE, (E)-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C14.H28	196	41	692	963	695
2	C14.H28	196	41	690	959	693
3	C16.H32	224	55	686	923	710
4	C11.H22	154	56	685	943	689
5	C16.H32	224	55	685	925	711
6	C14.H28	196	55	683	952	687
7	C18.H36	252	55	682	917	708
8	C18.H36	252	69	681	904	708
9	C14.H28	196	55	680	949	683

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	41446-67-7
2	---	---	---	---	41446-68-8
3	---	---	---	---	35507-09-6
4	---	---	---	---	74663-91-5
5	---	---	---	---	34303-81-6
6	---	---	---	---	41446-60-0
7	---	---	---	---	7206-21-5
8	---	---	---	---	7206-19-1
9	---	---	---	---	41446-66-6


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:00:00 + 7:16
SAMPLE: S-MM5-2 1/35A/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068101 # 654
CALI: 30068101 # 3
BASE M/Z: 41
RIC: 39104.
1037
SAMPLE
C14.H28
3-TETRADECENE, (Z)-
or Isomer
1037
M WT 196
B PK 41
RANK 1
21962
PUR 692
C14.H28
3-TETRADECENE, (E)-
1037
M WT 196
B PK 41
RANK 2
21963
PUR 690
C16.H32
7-HEXADECENE, (Z)-
1037
M WT 224
B PK 55
RANK 3
28772
PUR 686
M/Z
40
60
80
100
120
140
160
180
200
220

53

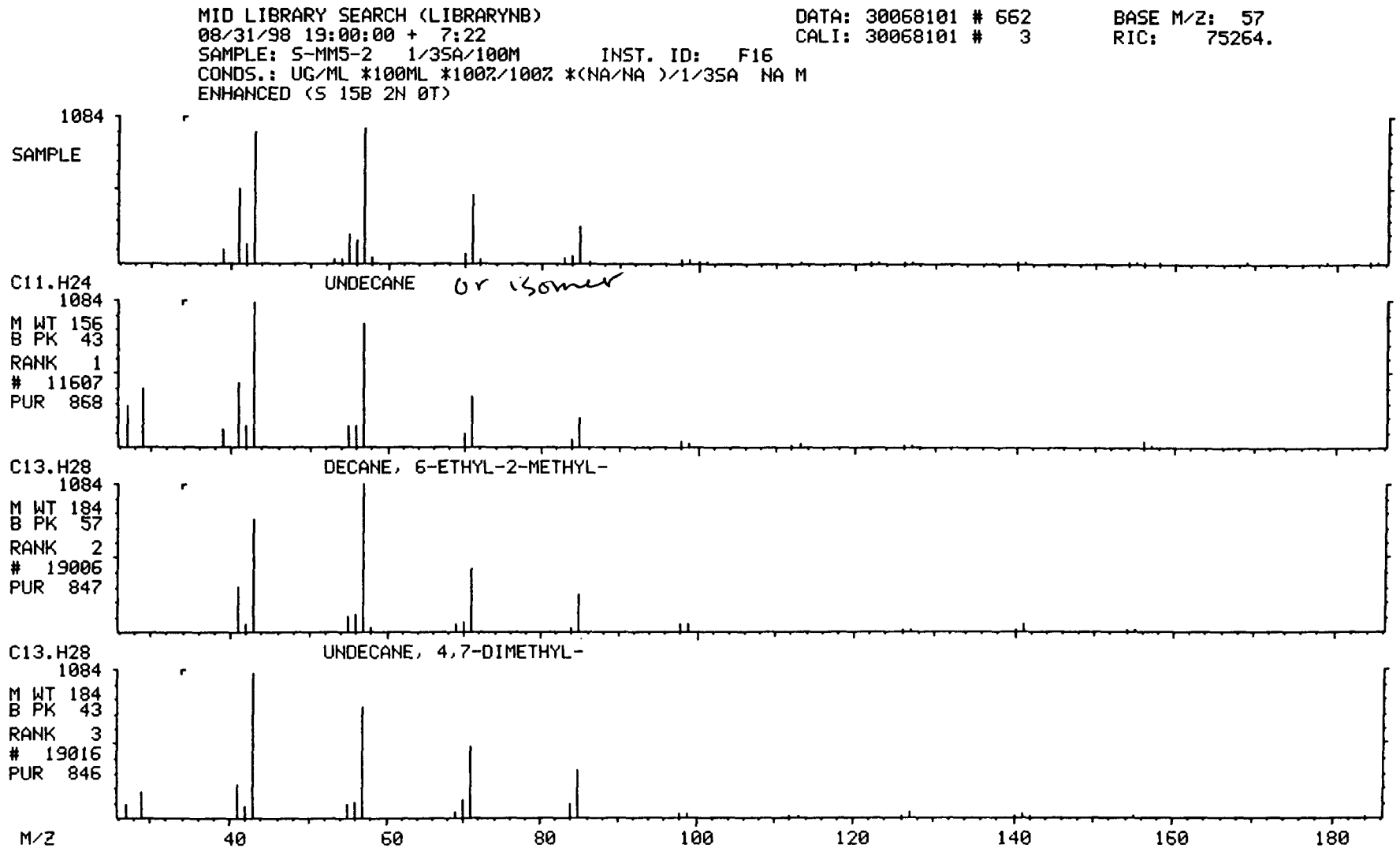
Library Search Data: 30068101 # 662 Base m/z: 57
08/31/98 19:00:00 + 7:22 Cali: 30068101 # 3 RIC: 75264.
Sample: S-MM5-2 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
632 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	11607	UNDECANE
2	19006	DECANE, 6-ETHYL-2-METHYL-
3	19016	UNDECANE, 4,7-DIMETHYL-
4	22530	TETRADECANE
5	11602	OCTANE, 2,4,6-TRIMETHYL-
6	15357	DECANE, 2,9-DIMETHYL-
7	18998	UNDECANE, 3,7-DIMETHYL-
8	19028	DECANE, 2,4,6-TRIMETHYL-
9	18985	TRIDECANE

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C11.H24	156	43	868	962	878
2	C13.H28	184	57	847	943	862
3	C13.H28	184	43	846	934	863
4	C14.H30	198	43	831	908	897
5	C11.H24	156	57	830	945	850
6	C12.H26	170	43	826	943	848
7	C13.H28	184	43	826	925	850
8	C13.H28	184	43	825	915	858
9	C13.H28	184	57	819	923	851

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	1120-21-4
2	---	---	---	---	62108-21-8
3	---	---	---	---	17301-32-5
4	---	---	---	---	629-59-4
5	---	---	---	---	62016-37-9
6	---	---	---	---	1002-17-1
7	---	---	---	---	17301-29-0
8	---	---	---	---	62108-27-4
9	---	---	---	---	629-50-5


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:00:00 + 7:22
SAMPLE: S-MM5-2 1/35A/100M
INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068101 # 662
CALI: 30068101 # 3
BASE M/Z: 57
RIC: 75264.
1084
SAMPLE
C11.H24
UNDECANE or isomer
1084
M WT 156
B PK 43
RANK 1
11607
PUR 868
C13.H28
DECANE, 6-ETHYL-2-METHYL-
1084
M WT 184
B PK 57
RANK 2
19006
PUR 847
C13.H28
UNDECANE, 4,7-DIMETHYL-
1084
M WT 184
B PK 43
RANK 3
19016
PUR 846
M/Z
40
60
80
100
120
140
160
180

Library Search Data: 30068101 # 678 Base m/z: 57
08/31/98 19:00:00 + 7:32 Cali: 30068101 # 3 RIC: 36736.
Sample: S-MM5-2 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
413 matched at least 6 of the 16 largest peaks in the unknown

Rank	In.	Name
1	11597	NONANE, 3,7-DIMETHYL-
2	5159	NONANE
3	37251	1-IODO-2-METHYLNONANE
4	5041	3-HEXANONE, 2,4-DIMETHYL-
5	12534	NAPHTHALENE, 1,2,3,4-TETRAHYDRO-2,6-DIMETHYL-
6	15343	DODECANE
7	11607	UNDECANE
8	19006	DECANE, 6-ETHYL-2-METHYL-
9	8093	OCTANE, 2,2-DIMETHYL-

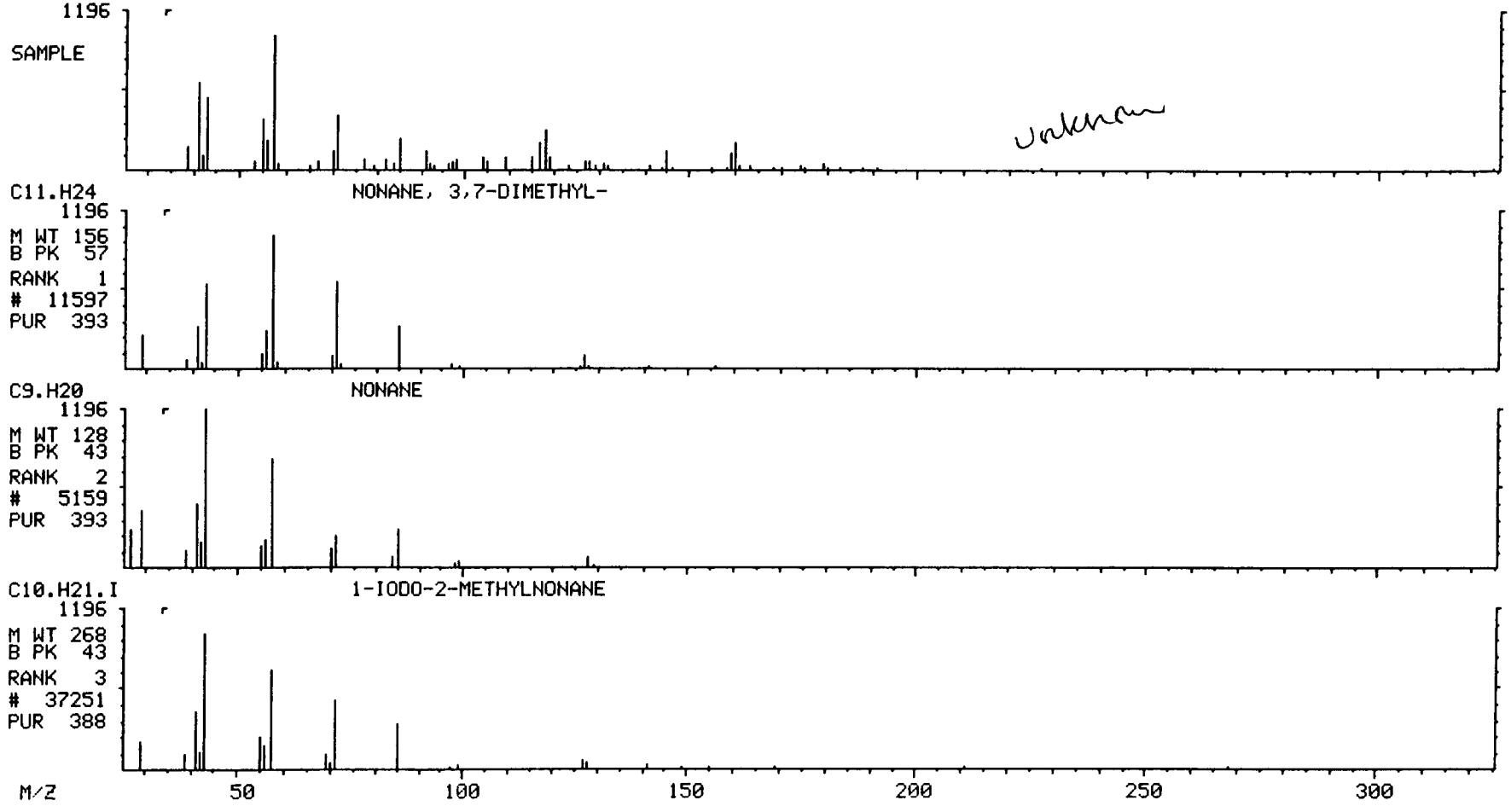
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C11.H24	156	57	393	900	404
2	C9.H20	128	43	393	912	402
3	C10.H21.I	268	43	388	897	412
4	C8.H16.O	128	57	385	918	389
5	C12.H16	160	118	375	821	387
6	C12.H26	170	57	373	870	399
7	C11.H24	156	43	373	885	401
8	C13.H28	184	57	372	881	395
9	C10.H22	142	57	371	894	376

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	17302-32-8
2	—	—	—	—	111-84-2
3	—	—	—	—	- -
4	—	—	—	—	18641-70-8
5	—	—	—	—	7524-63-2
6	—	—	—	—	112-40-3
7	—	—	—	—	1120-21-4
8	—	—	—	—	62108-21-8
9	—	—	—	—	15869-87-1

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:00:00 + 7:32
SAMPLE: S-MM5-2 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068101 # 678
CALI: 30068101 # 3

BASE M/Z: 57
RIC: 36736.



C3

Library Search Data: 30068101 # 700 Base m/z: 81
08/31/98 19:00:00 + 7:47 Cali: 30068101 # 3 RIC: 25344.
Sample: S-MM5-2 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
294 matched at least 6 of the 16 largest peaks in the unknown

Rank	In.	Name
1	6996	1-ETHYNYL-1-CYCLOHEPTANOL
2	28273	8-HEXADECYNE
3	36677	7-OCTADECYNE, 2-METHYL-
4	18371	5,7-DIMETHYLOCTAHYDROCOUMARIN
5	10423	3-UNDECYNE
6	28267	3-HEXADECYNE
7	14158	3-DODECYNE
8	25001	CYCLOHEXANE, 1-(CYCLOHEXYLMETHYL)-2-ETHYL-, TRANS-
9	34010	3-OCTADECYNE

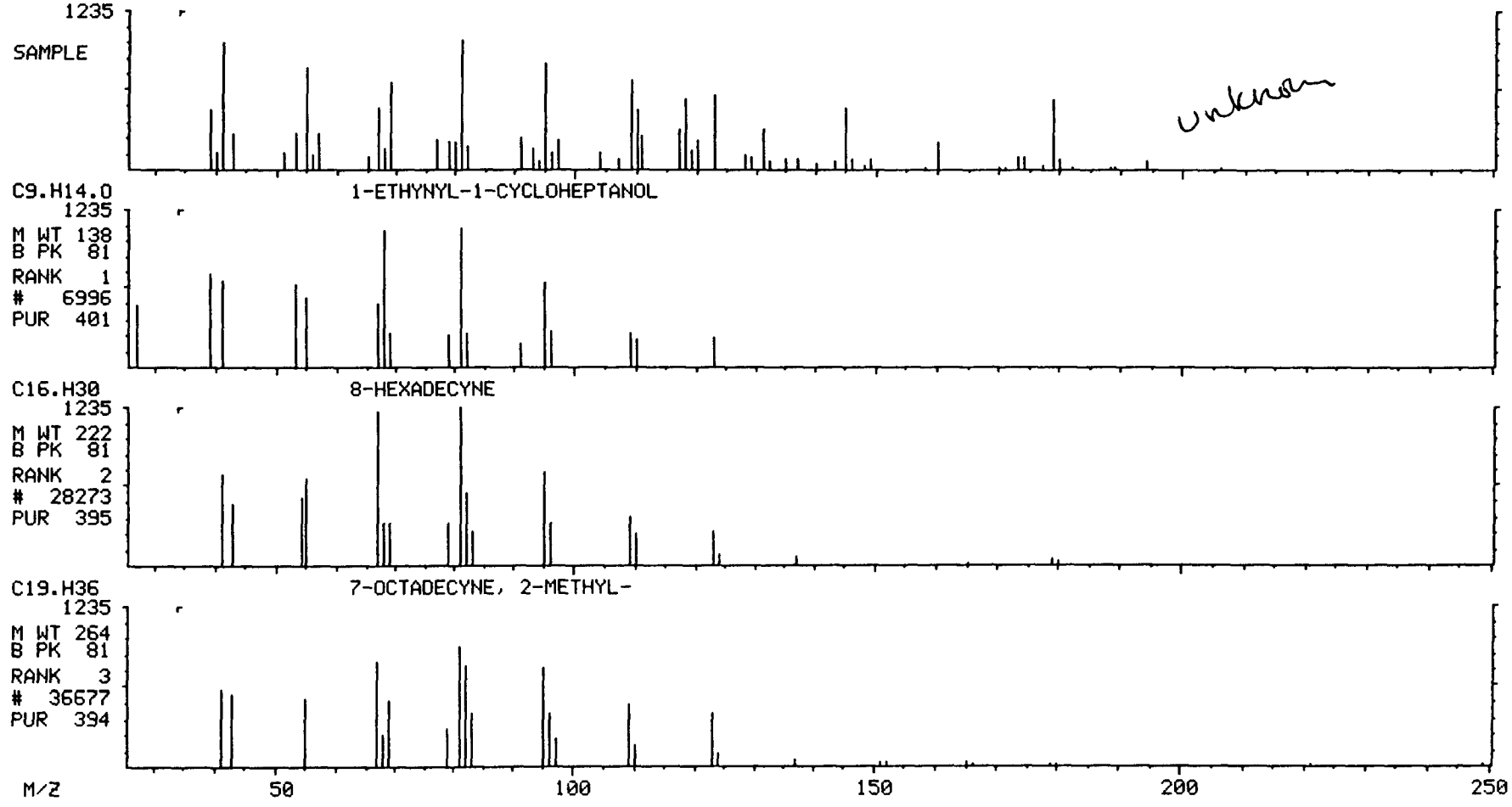
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C9.H14.O	138	81	401	887	401
2	C16.H30	222	81	395	777	436
3	C19.H36	264	81	394	749	439
4	C11.H18.O2	182	95	392	863	412
5	C11.H20	152	67	389	893	389
6	C16.H30	222	67	388	732	405
7	C12.H22	166	67	378	832	380
8	C15.H28	208	55	375	707	426
9	C18.H34	250	67	374	810	395

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	2809-78-1
2	---	---	---	---	19781-86-3
3	---	---	---	---	35354-38-2
4	---	---	---	---	- -
5	---	---	---	---	60212-30-8
6	---	---	---	---	61886-62-2
7	---	---	---	---	6790-27-8
8	---	---	---	---	54934-92-8
9	---	---	---	---	61886-64-4

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:00:00 + 7:47
SAMPLE: S-MM5-2 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068101 # 700 CALI: 30068101 # 3

BASE M/Z: 81 RIC: 25344.



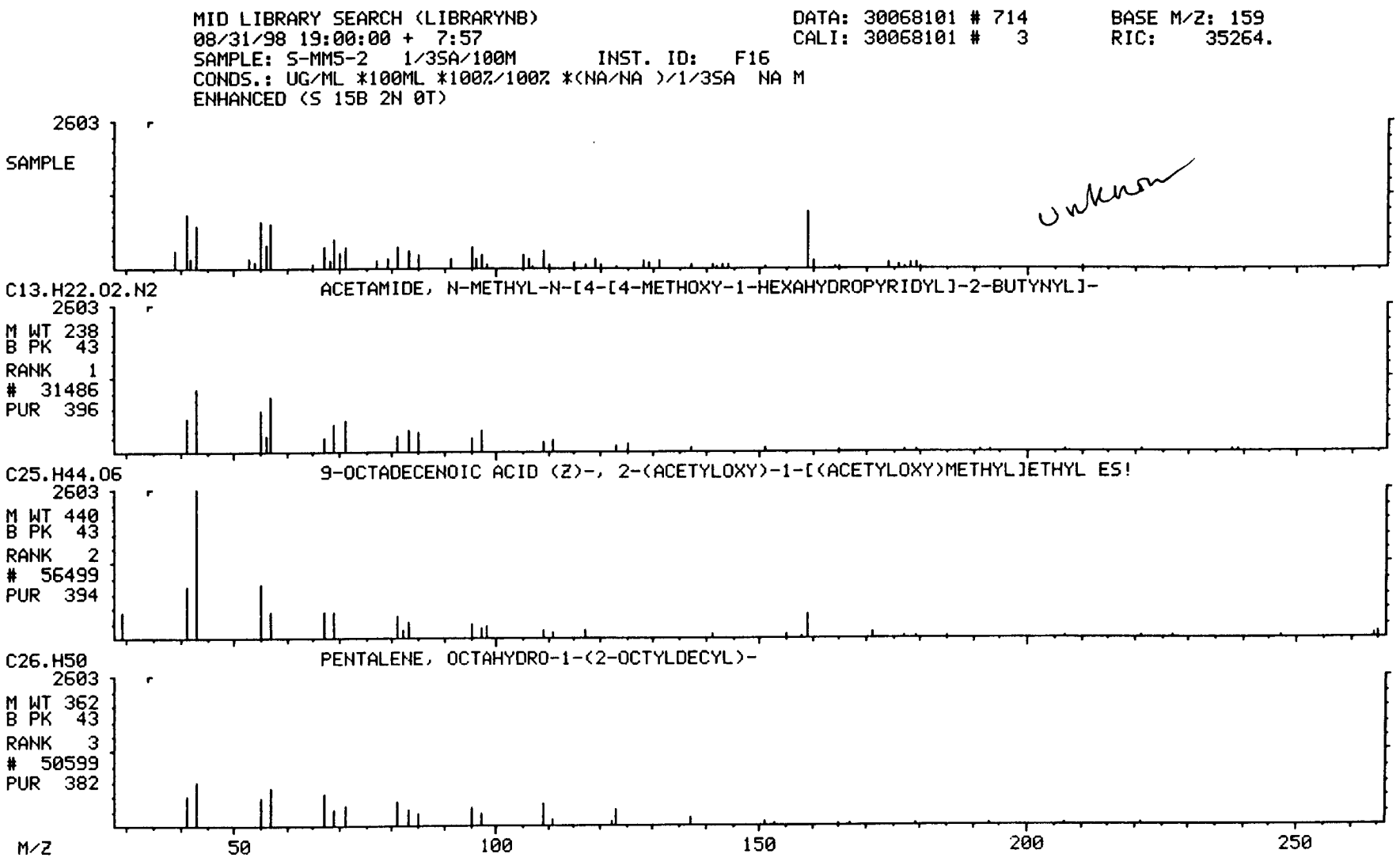
Library Search Data: 30068101 # 714 Base m/z: 159
08/31/98 19:00:00 + 7:57 Cali: 30068101 # 3 RIC: 35264.
Sample: S-MM5-2 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
310 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	31486	ACETAMIDE, N-METHYL-N-[4-[4-METHOXY-1-HEXAHYDROPYRIDYL]-2-BUTYNYL]-
2	56499	9-OCTADECENOIC ACID (Z)-, 2-(ACETYLOXY)-1-[(ACETYLOXY)METHYL]ETHYL *
3	50599	PENTALENE, OCTAHYDRO-1-(2-OCTYLDECYL)-
4	56413	9,12-OCTADECADIENOIC ACID (Z,Z)-, 2-(ACETYLOXY)-1-[(ACETYLOXY)METHY*
5	56303	9,12,15-OCTADECATRIENOIC ACID, 2-(ACETYLOXY)-1-[(ACETYLOXY)METHYL]E*
6	40193	CIS-9,10-EPOXYOCTADECAN-1-OL
7	32052	OXIRANE, TETRADECYL-
8	46251	DODECANE, 1,2-DIBROMO-
9	5032	3,4-DIMETHYLCYCLOHEXANOL

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C13.H22.O2.N2	238	43	396	830	457
2	C25.H44.O6	440	43	394	705	496
3	C26.H50	362	43	382	847	415
4	C25.H42.O6	438	43	380	708	454
5	C25.H40.O6	436	43	369	718	449
6	C18.H36.O2	284	55	367	848	415
7	C16.H32.O	240	41	366	847	411
8	C12.H24.BR2	326	41	351	778	432
9	C8.H16.O	128	71	339	834	357

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	- -
2	---	---	---	---	55401-63-3
3	---	---	---	---	55401-65-5
4	---	---	---	---	55320-03-1
5	---	---	---	---	55320-01-9
6	---	---	---	---	13980-12-6
7	---	---	---	---	7320-37-8
8	---	---	---	---	55334-42-4
9	---	---	---	---	5715-23-1


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:00:00 + 7:57
SAMPLE: S-MM5-2 1/35A/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068101 # 714
CALI: 30068101 # 3
BASE M/Z: 159
RIC: 35264.
2603
SAMPLE
Unknown
C13.H22.O2.N2
ACETAMIDE, N-METHYL-N-[4-[4-METHOXY-1-HEXAHYDROPYRIDYL]-2-BUTYNYL]-
M WT 238
B PK 43
RANK 1
31486
PUR 396
C25.H44.O6
9-OCTADECENOIC ACID (Z)-, 2-(ACETYLOXY)-1-[(ACETYLOXY)METHYL]ETHYL ES!
M WT 440
B PK 43
RANK 2
56499
PUR 394
C26.H50
PENTALENE, OCTAHYDRO-1-(2-OCTYLDECYL)-
M WT 362
B PK 43
RANK 3
50599
PUR 382
M/Z
50
100
150
200
250

Library Search Data: 30068101 # 738 Base m/z: 57
08/31/98 19:00:00 + 8:13 Cali: 30068101 # 3 RIC: 103296.
Sample: S-MM5-2 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
712 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	25991	DODECANE, 2,6,10-TRIMETHYL-
2	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
3	37462	HEPTADECANE, 2,6-DIMETHYL-
4	25997	PENTADECANE
5	26001	DODECANE, 2,7,10-TRIMETHYL-
6	22535	DODECANE, 4,6-DIMETHYL-
7	37465	NONADECANE
8	25994	DODECANE, 2,6,11-TRIMETHYL-
9	22530	TETRADECANE

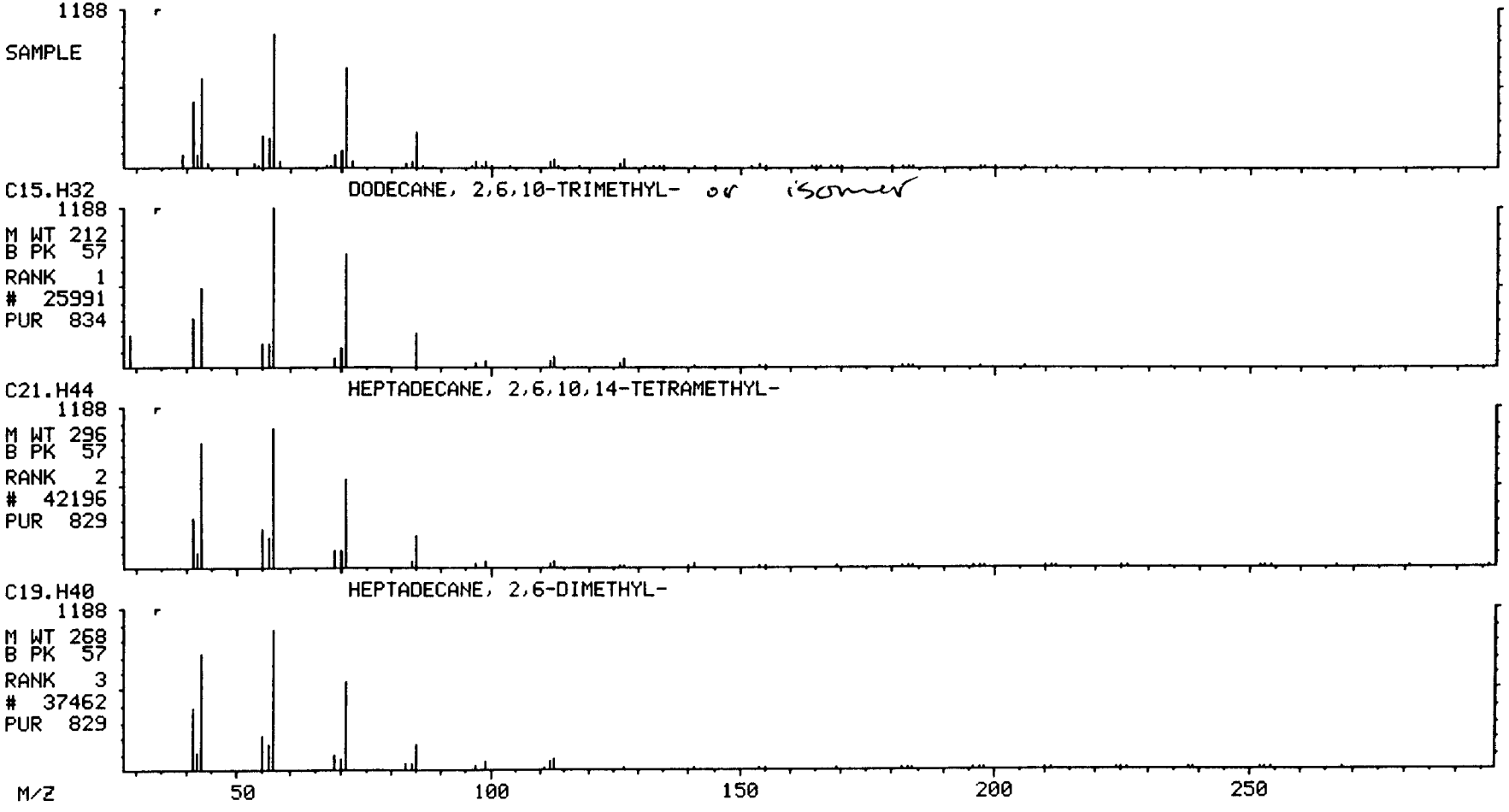
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C15.H32	212	57	834	981	834
2	C21.H44	296	57	829	944	850
3	C19.H40	268	57	829	950	846
4	C15.H32	212	57	817	948	829
5	C15.H32	212	57	815	982	821
6	C14.H30	198	57	811	953	817
7	C19.H40	268	57	811	929	841
8	C15.H32	212	57	805	968	814
9	C14.H30	198	43	802	928	813

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	3891-98-3
2	—	—	—	—	18344-37-1
3	—	—	—	—	54105-67-8
4	—	—	—	—	629-62-9
5	—	—	—	—	74645-98-0
6	—	—	—	—	61141-72-8
7	—	—	—	—	629-92-5
8	—	—	—	—	31295-56-4
9	—	—	—	—	629-59-4

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:00:00 + 8:13
SAMPLE: S-MM5-2 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068101 # 738
CALI: 30068101 # 3

BASE M/Z: 57
RIC: 103296.



E.C.J.

Library Search Data: 30068101 # 763 Base m/z: 43
08/31/98 19:00:00 + 8:29 Cali: 30068101 # 3 RIC: 136960.
Sample: S-MM5-2 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N OT)

62231 spectra in LIBRARYNB searched for maximum PURITY
611 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	22530	TETRADECANE
2	19006	DECANE, 6-ETHYL-2-METHYL-
3	19007	DODECANE, 3-METHYL-
4	11607	UNDECANE
5	11612	NONANE, 2,5-DIMETHYL-
6	15358	UNDECANE, 3-METHYL-
7	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
8	18990	UNDECANE, 2,9-DIMETHYL-
9	39681	1-IODOUNDECANE

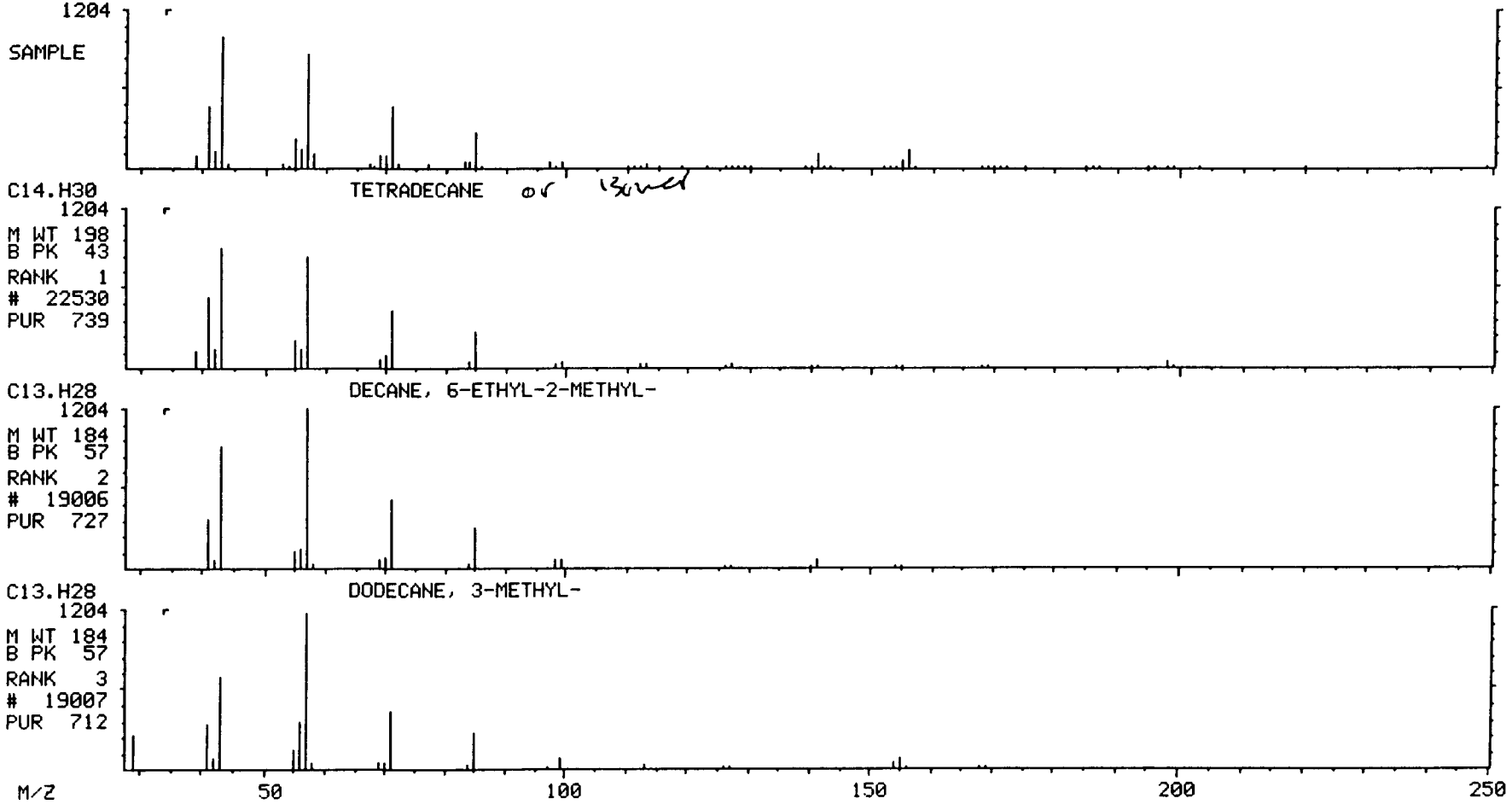
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C14.H30	198	43	739	959	739
2	C13.H28	184	57	727	964	727
3	C13.H28	184	57	712	904	712
4	C11.H24	156	43	711	968	711
5	C11.H24	156	57	708	871	708
6	C12.H26	170	57	703	924	703
7	C21.H44	296	57	700	918	729
8	C13.H28	184	57	699	876	699
9	C11.H23.I	282	57	697	875	704

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	629-59-4
2	—	—	—	—	62108-21-8
3	—	—	—	—	17312-57-1
4	—	—	—	—	1120-21-4
5	—	—	—	—	17302-27-1
6	—	—	—	—	1002-43-3
7	—	—	—	—	18344-37-1
8	—	—	—	—	17301-26-7
9	—	—	—	—	4282-44-4

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:00:00 + 8:29
SAMPLE: S-MM5-2 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068101 # 763
CALI: 30068101 # 3

BASE M/Z: 43
RIC: 136960.



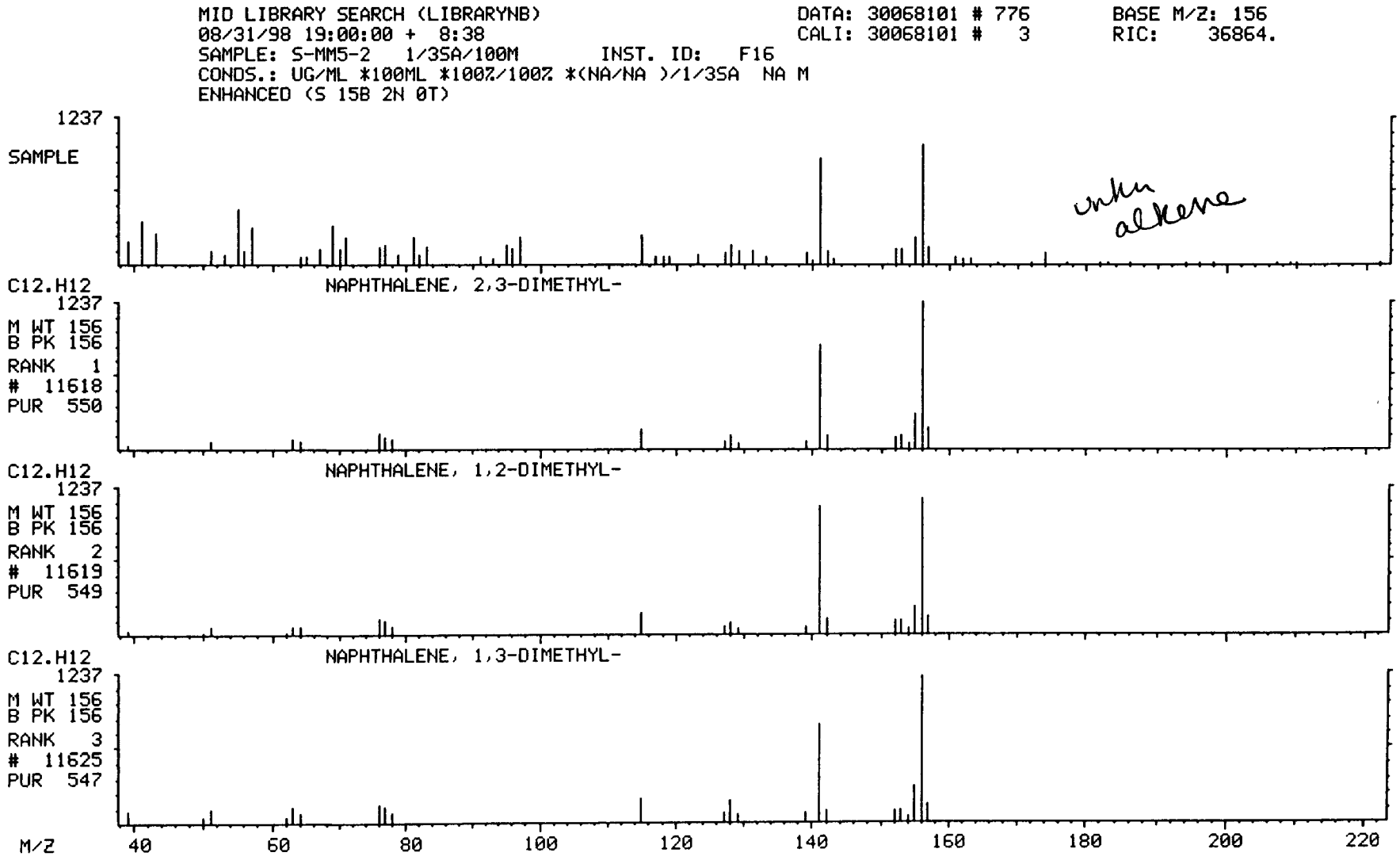
Library Search Data: 30068101 # 776 Base m/z: 156
08/31/98 19:00:00 + 8:38 Cali: 30068101 # 3 RIC: 36864.
Sample: S-MM5-2 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
205 matched at least 5 of the 16 largest peaks in the unknown

Rank	In.	Name
1	11618	NAPHTHALENE, 2,3-DIMETHYL-
2	11619	NAPHTHALENE, 1,2-DIMETHYL-
3	11625	NAPHTHALENE, 1,3-DIMETHYL-
4	11629	NAPHTHALENE, 1,5-DIMETHYL-
5	11624	NAPHTHALENE, 1,7-DIMETHYL-
6	11620	NAPHTHALENE, 2,6-DIMETHYL-
7	11628	NAPHTHALENE, 1,6-DIMETHYL-
8	11615	NAPHTHALENE, 2,7-DIMETHYL-
9	11626	NAPHTHALENE, 1,4-DIMETHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C12.H12	156	156	550	946	569
2	C12.H12	156	156	549	944	570
3	C12.H12	156	156	547	941	576
4	C12.H12	156	156	540	928	571
5	C12.H12	156	156	539	927	574
6	C12.H12	156	156	537	938	568
7	C12.H12	156	156	537	924	564
8	C12.H12	156	156	537	923	564
9	C12.H12	156	141	536	936	567

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	581-40-8
2	—	—	—	—	573-98-8
3	—	—	—	—	575-41-7
4	—	—	—	—	571-61-9
5	—	—	—	—	575-37-1
6	—	—	—	—	581-42-0
7	—	—	—	—	575-43-9
8	—	—	—	—	582-16-1
9	—	—	—	—	571-58-4


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:00:00 + 8:38
SAMPLE: S-MM5-2 1/35A/100M
INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068101 # 776
CALI: 30068101 # 3
BASE M/Z: 156
RIC: 36864.
1237
SAMPLE
unkn alkene
C12.H12
NAPHTHALENE, 2,3-DIMETHYL-
M WT 156
B PK 156
RANK 1
11618
PUR 550
C12.H12
NAPHTHALENE, 1,2-DIMETHYL-
M WT 156
B PK 156
RANK 2
11619
PUR 549
C12.H12
NAPHTHALENE, 1,3-DIMETHYL-
M WT 156
B PK 156
RANK 3
11625
PUR 547
M/Z
40
60
80
100
120
140
160
180
200
220

Library Search Data: 30068101 # 820 Base m/z: 57
08/31/98 19:00:00 + 9:07 Cali: 30068101 # 3 RIC: 98176.
Sample: S-MM5-2 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
760 matched at least 7 of the 16 largest peaks in the unknown

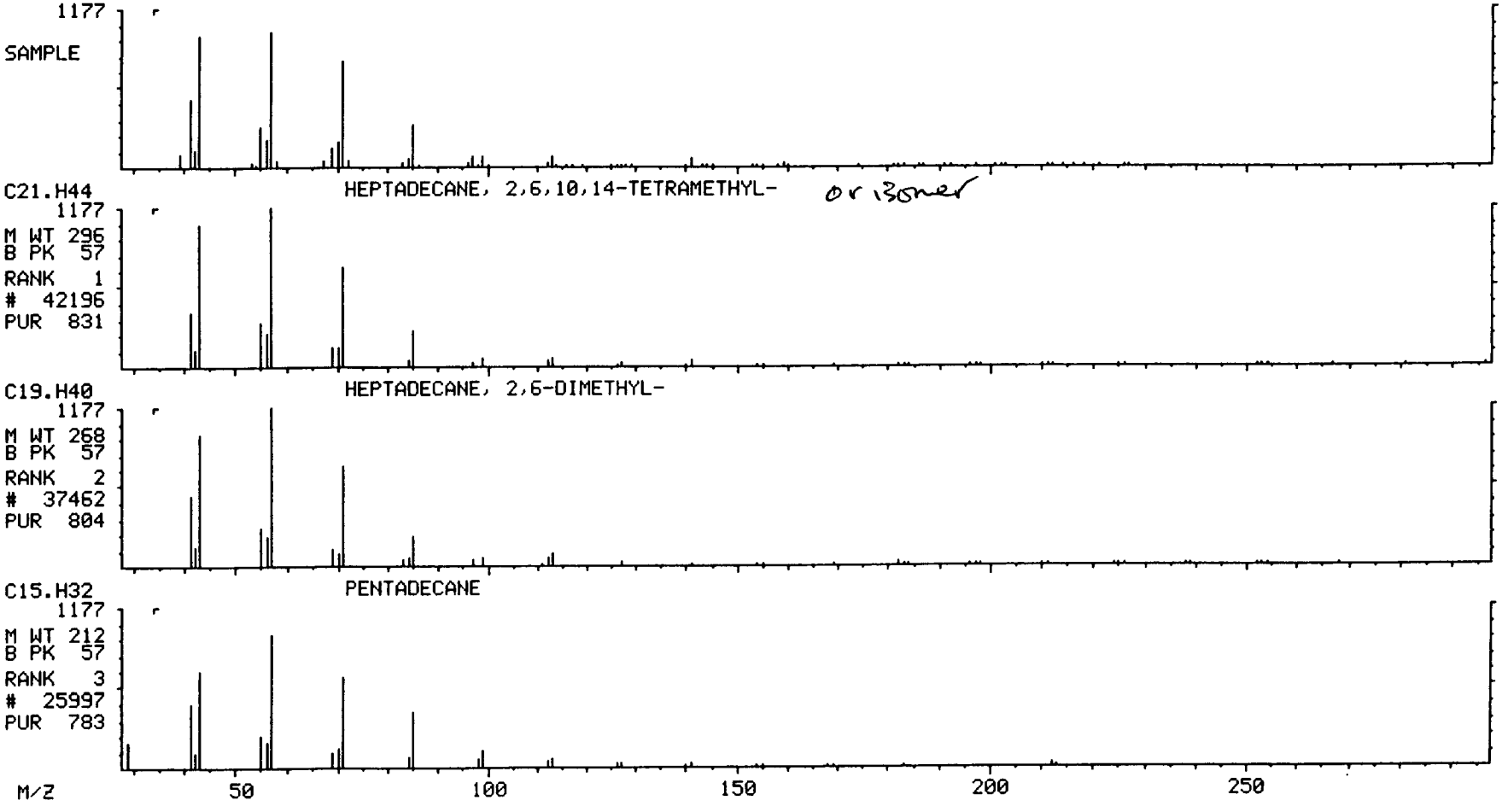
Rank	In.	Name
1	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
2	37462	HEPTADECANE, 2,6-DIMETHYL-
3	25997	PENTADECANE
4	37465	NONADECANE
5	19016	UNDECANE, 4,7-DIMETHYL-
6	25991	DODECANE, 2,6,10-TRIMETHYL-
7	18987	UNDECANE, 2,8-DIMETHYL-
8	15353	2,6-DIMETHYLDECANE
9	29263	HEXADECANE

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C21.H44	296	57	831	975	842
2	C19.H40	268	57	804	949	823
3	C15.H32	212	57	783	945	795
4	C19.H40	268	57	783	930	815
5	C13.H28	184	43	779	954	780
6	C15.H32	212	57	778	958	781
7	C13.H28	184	43	778	965	782
8	C12.H26	170	43	774	920	783
9	C16.H34	226	57	768	915	784

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	18344-37-1
2	---	---	---	---	54105-67-8
3	---	---	---	---	629-62-9
4	---	---	---	---	629-92-5
5	---	---	---	---	17301-32-5
6	---	---	---	---	3891-98-3
7	---	---	---	---	17301-25-6
8	---	---	---	---	13150-81-7
9	---	---	---	---	544-76-3

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:00:00 + 9:07
SAMPLE: S-MM5-2 1/35A/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068101 # 820 BASE M/Z: 57
CALI: 30068101 # 3 RIC: 98176.



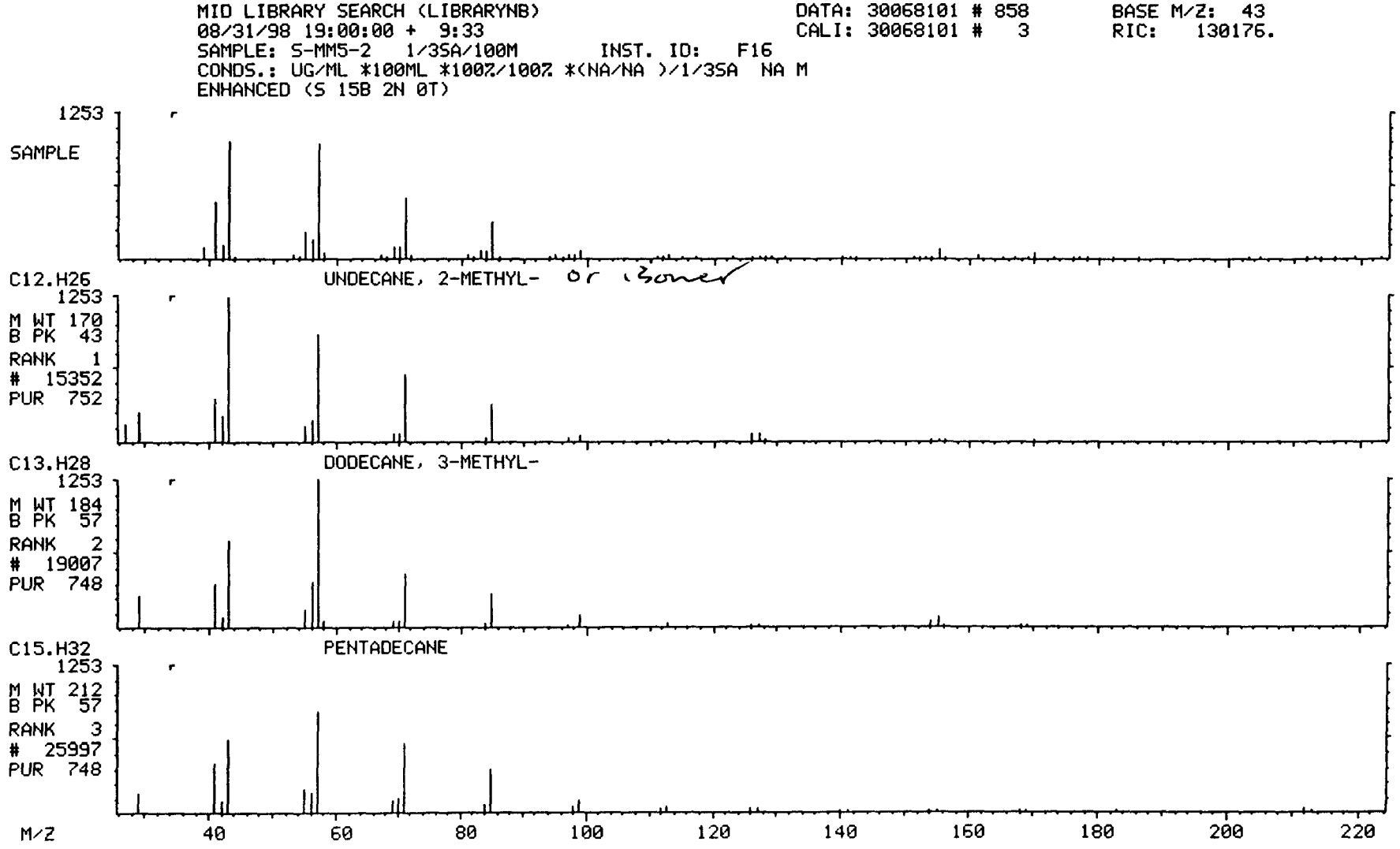
Library Search Data: 30068101 # 858 Base m/z: 43
08/31/98 19:00:00 + 9:33 Cali: 30068101 # 3 RIC: 130176.
Sample: S-MM5-2 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
835 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	15352	UNDECANE, 2-METHYL-
2	19007	DODECANE, 3-METHYL-
3	25997	PENTADECANE
4	19006	DECANE, 6-ETHYL-2-METHYL-
5	18998	UNDECANE, 3,7-DIMETHYL-
6	22530	TETRADECANE
7	15353	2,6-DIMETHYLDECANE
8	15343	DODECANE
9	37465	NONADECANE

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C12.H26	170	43	752	945	752
2	C13.H28	184	57	748	962	749
3	C15.H32	212	57	748	954	753
4	C13.H28	184	57	742	965	742
5	C13.H28	184	43	738	950	738
6	C14.H30	198	43	738	936	772
7	C12.H26	170	43	737	914	737
8	C12.H26	170	57	734	984	739
9	C19.H40	268	57	732	925	759

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	7045-71-8
2	—	—	—	—	17312-57-1
3	—	—	—	—	629-62-9
4	—	—	—	—	62108-21-8
5	—	—	—	—	17301-29-0
6	—	—	—	—	629-59-4
7	—	—	—	—	13150-81-7
8	—	—	—	—	112-40-3
9	—	—	—	—	629-92-5


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:00:00 + 9:33
SAMPLE: S-MM5-2 1/35A/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068101 # 858
CALI: 30068101 # 3
BASE M/Z: 43
RIC: 130176.
1253
SAMPLE
C12.H26
UNDECANE, 2-METHYL- or isomer
1253
M WT 170
B PK 43
RANK 1
15352
PUR 752
C13.H28
DODECANE, 3-METHYL-
1253
M WT 184
B PK 57
RANK 2
19007
PUR 748
C15.H32
PENTADECANE
1253
M WT 212
B PK 57
RANK 3
25997
PUR 748
M/Z
40
60
80
100
120
140
160
180
200
220

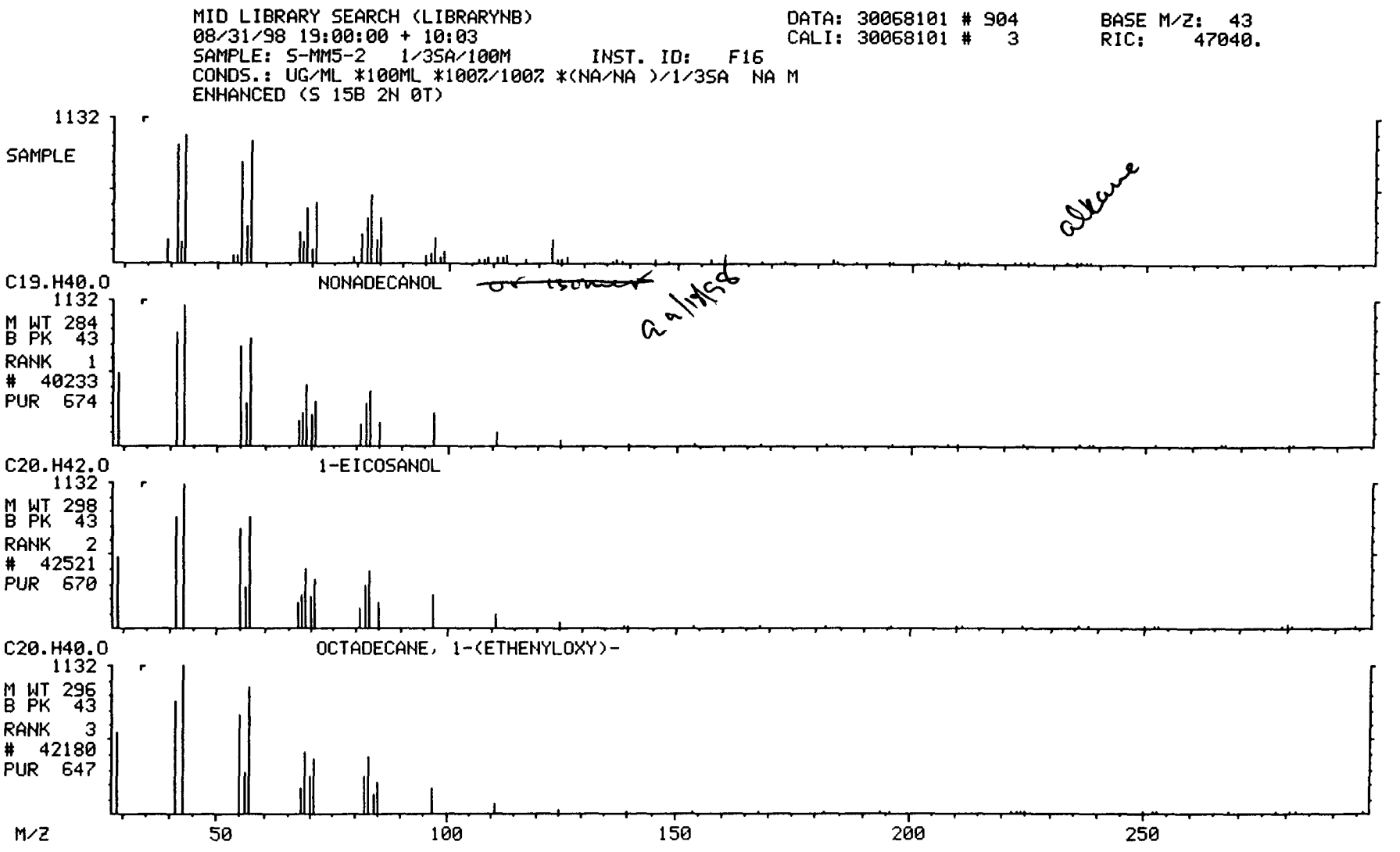
Library Search Data: 30068101 # 904 Base m/z: 43
08/31/98 19:00:00 + 10:03 Cali: 30068101 # 3 RIC: 47040.
Sample: S-MM5-2 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
751 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	40233	NONADECANOL
2	42521	1-EICOSANOL
3	42180	OCTADECANE, 1-(ETHENYLOXY)-
4	15969	HYDROXYLAMINE, O-DECYL-
5	25971	OXIRANE, DODECYL-
6	58380	DECANEDIOIC ACID, DIDECYL ESTER
7	37444	OXIRANE, HEXADECYL-
8	37449	OCTADECANAL
9	19520	1-OCTANOL, 2-BUTYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40.O	284	43	674	938	703
2	C20.H42.O	298	43	670	931	705
3	C20.H40.O	296	43	647	941	677
4	C10.H23.O.N	173	43	638	906	649
5	C14.H28.O	212	41	636	902	648
6	C30.H58.O4	482	57	634	919	649
7	C18.H36.O	268	57	634	841	687
8	C18.H36.O	268	43	633	852	687
9	C12.H26.O	186	57	633	921	642

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	52783-43-4
2	—	—	—	—	629-96-9
3	—	—	—	—	930-02-9
4	—	—	—	—	29812-79-1
5	—	—	—	—	3234-28-4
6	—	—	—	—	2432-89-5
7	—	—	—	—	7390-81-0
8	—	—	—	—	638-66-4
9	—	—	—	—	3913-02-8


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:00:00 + 10:03
SAMPLE: S-MM5-2 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068101 # 904
CALI: 30068101 # 3
BASE M/Z: 43
RIC: 47040.
1132
SAMPLE
alkene
C19.H40.O
NONADECANOL
2 9/14/98
1132
M WT 284
B PK 43
RANK 1
40233
PUR 674
C20.H42.O
1-EICOSANOL
1132
M WT 298
B PK 43
RANK 2
42521
PUR 670
C20.H40.O
OCTADECANE, 1-(ETHENYLOXY)-
1132
M WT 296
B PK 43
RANK 3
42180
PUR 647
M/Z
50
100
150
200
250

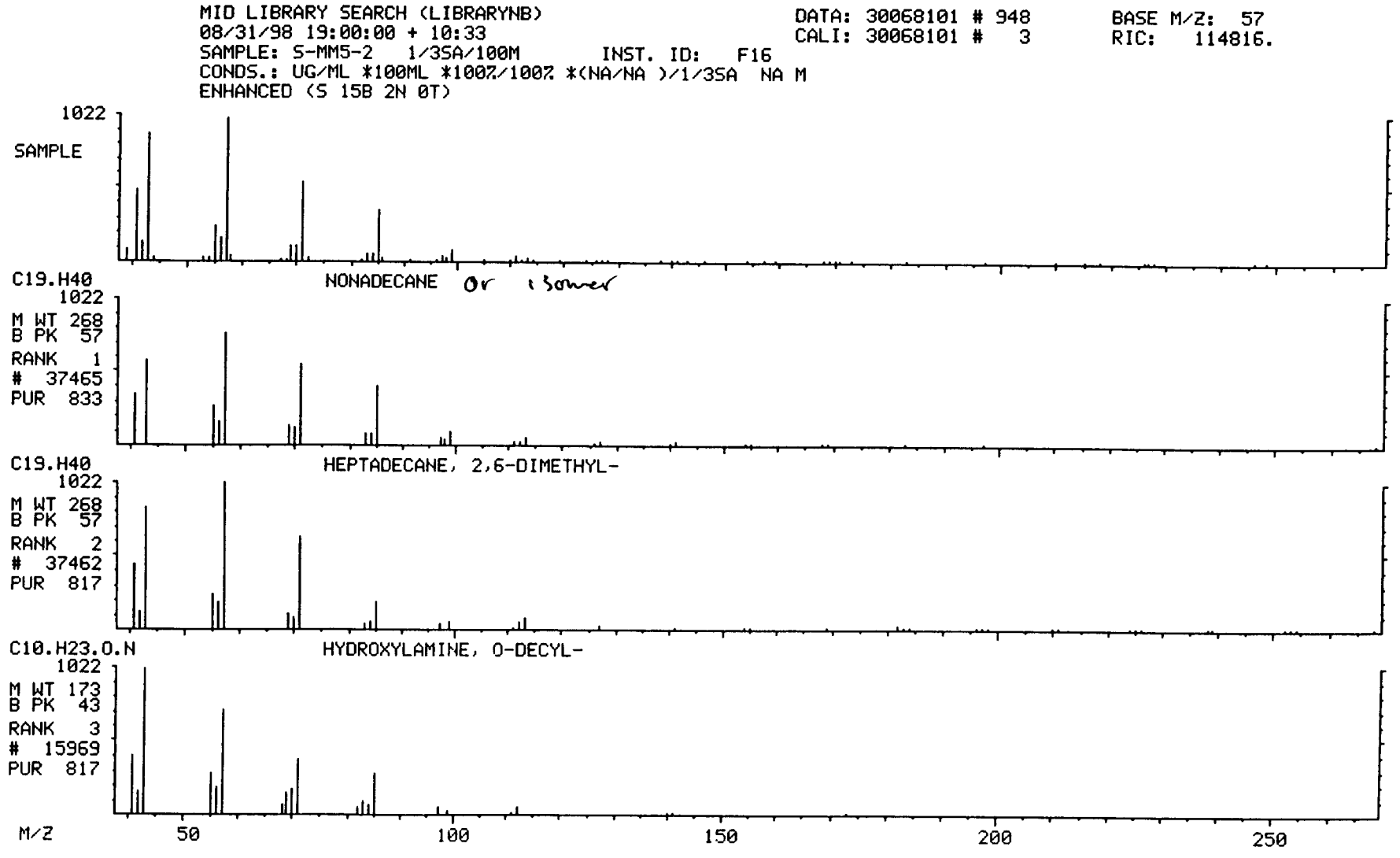
Library Search Data: 30068101 # 948 Base m/z: 57
08/31/98 19:00:00 + 10:33 Cali: 30068101 # 3 RIC: 114816.
Sample: S-MM5-2 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
343 matched at least 8 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37465	NONADECANE
2	37462	HEPTADECANE, 2,6-DIMETHYL-
3	15969	HYDROXYLAMINE, O-DECYL-
4	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
5	25997	PENTADECANE
6	19016	UNDECANE, 4,7-DIMETHYL-
7	25994	DODECANE, 2,6,11-TRIMETHYL-
8	26001	DODECANE, 2,7,10-TRIMETHYL-
9	19523	1-DECANOL, 2-ETHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	833	956	854
2	C19.H40	268	57	817	936	844
3	C10.H23.O.N	173	43	817	966	817
4	C21.H44	296	57	806	944	830
5	C15.H32	212	57	803	949	833
6	C13.H28	184	43	799	966	800
7	C15.H32	212	57	792	961	795
8	C15.H32	212	57	783	956	788
9	C12.H26.O	186	57	782	925	795

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	629-92-5
2	---	---	---	---	54105-67-8
3	---	---	---	---	29812-79-1
4	---	---	---	---	18344-37-1
5	---	---	---	---	629-62-9
6	---	---	---	---	17301-32-5
7	---	---	---	---	31295-56-4
8	---	---	---	---	74645-98-0
9	---	---	---	---	21078-65-9


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:00:00 + 10:33
SAMPLE: S-MM5-2 1/3SA/100M
INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068101 # 948
CALI: 30068101 # 3
BASE M/Z: 57
RIC: 114816.
1022
SAMPLE
C19.H40
NONADECANE or Isomer
1022
M WT 268
B PK 57
RANK 1
37465
PUR 833
C19.H40
HEPTADECANE, 2,6-DIMETHYL-
1022
M WT 268
B PK 57
RANK 2
37462
PUR 817
C10.H23.O.N
HYDROXYLAMINE, O-DECYL-
1022
M WT 173
B PK 43
RANK 3
15969
PUR 817
M/Z
50
100
150
200
250

F2

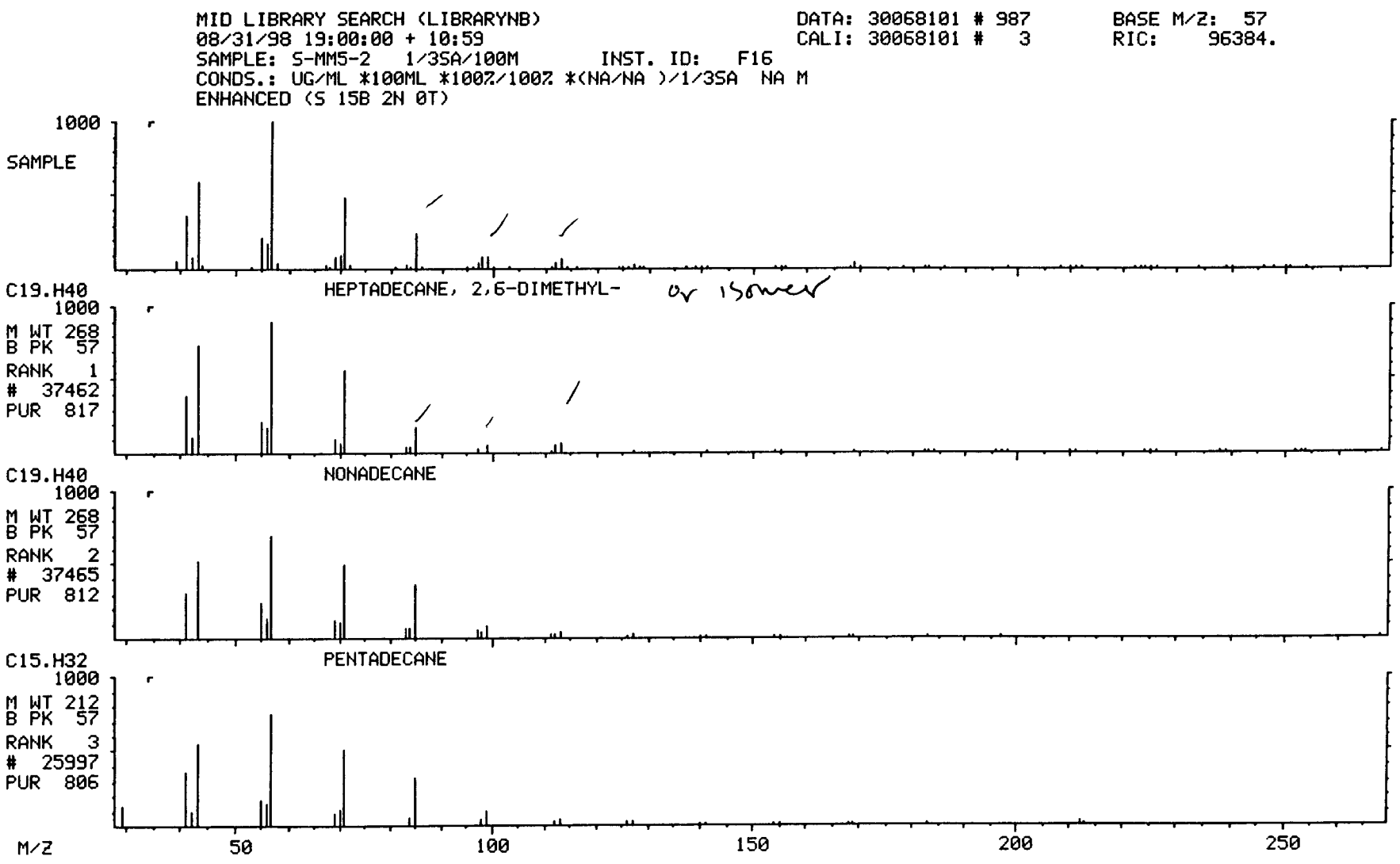
Library Search Data: 30068101 # 987 Base m/z: 57
08/31/98 19:00:00 + 10:59 Cali: 30068101 # 3 RIC: 96384.
Sample: S-MM5-2 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
644 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37462	HEPTADECANE, 2,6-DIMETHYL-
2	37465	NONADECANE
3	25997	PENTADECANE
4	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
5	25996	TRIDECANE, 4,8-DIMETHYL-
6	22530	TETRADECANE
7	32059	HEPTADECANE
8	29263	HEXADECANE
9	22527	DODECANE, 2,5-DIMETHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	817	949	825
2	C19.H40	268	57	812	938	831
3	C15.H32	212	57	806	952	810
4	C21.H44	296	57	805	951	812
5	C15.H32	212	57	803	936	814
6	C14.H30	198	43	801	942	806
7	C17.H36	240	57	801	935	811
8	C16.H34	226	57	799	934	808
9	C14.H30	198	57	796	942	797

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	___	___	___	___	54105-67-8
2	___	___	___	___	629-92-5
3	___	___	___	___	629-62-9
4	___	___	___	___	18344-37-1
5	___	___	___	___	55030-62-1
6	___	___	___	___	629-59-4
7	___	___	___	___	629-78-7
8	___	___	___	___	544-76-3
9	___	___	___	___	56292-65-0


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:00:00 + 10:59
SAMPLE: S-MM5-2 1/3SA/100M
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068101 # 987
CALI: 30068101 # 3
INST. ID: F16
BASE M/Z: 57
RIC: 96384.
1000
SAMPLE
C19.H40
HEPTADECANE, 2,6-DIMETHYL- or isomer
1000
M WT 268
B PK 57
RANK 1
37462
PUR 817
C19.H40
NONADECANE
1000
M WT 268
B PK 57
RANK 2
37465
PUR 812
C15.H32
PENTADECANE
1000
M WT 212
B PK 57
RANK 3
25997
PUR 806
M/Z
50
100
150
200
250

C15

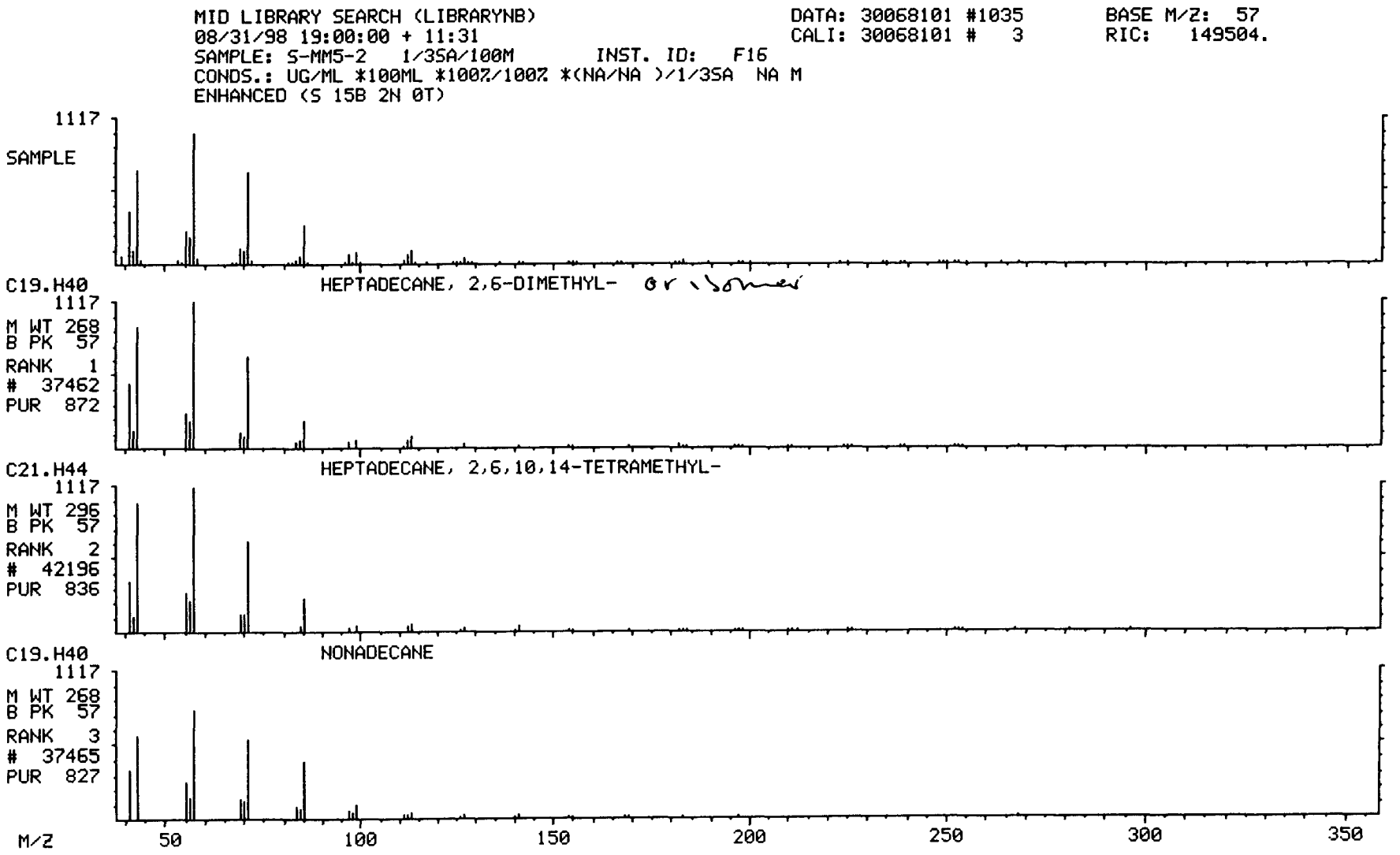
Library Search Data: 30068101 #1035 Base m/z: 57
08/31/98 19:00:00 + 11:31 Cali: 30068101 # 3 RIC: 149504.
Sample: S-MM5-2 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
713 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37462	HEPTADECANE, 2,6-DIMETHYL-
2	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
3	37465	NONADECANE
4	25991	DODECANE, 2,6,10-TRIMETHYL-
5	22535	DODECANE, 4,6-DIMETHYL-
6	26001	DODECANE, 2,7,10-TRIMETHYL-
7	37466	PENTADECANE, 2,6,10,14-TETRAMETHYL-
8	25994	DODECANE, 2,6,11-TRIMETHYL-
9	46161	TRICOSANE

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	872	975	879
2	C21.H44	296	57	836	950	860
3	C19.H40	268	57	827	944	844
4	C15.H32	212	57	822	972	826
5	C14.H30	198	57	821	967	822
6	C15.H32	212	57	821	971	825
7	C19.H40	268	71	815	941	833
8	C15.H32	212	57	802	948	810
9	C23.H48	324	43	794	892	858

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	54105-67-8
2	—	—	—	—	18344-37-1
3	—	—	—	—	629-92-5
4	—	—	—	—	3891-98-3
5	—	—	—	—	61141-72-8
6	—	—	—	—	74645-98-0
7	—	—	—	—	1921-70-6
8	—	—	—	—	31295-56-4
9	—	—	—	—	638-67-5


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:00:00 + 11:31
SAMPLE: S-MM5-2 1/35A/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068101 #1035
CALI: 30068101 # 3
BASE M/Z: 57
RIC: 149504.
1117
SAMPLE
C19.H40
HEPTADECANE, 2,6-DIMETHYL-
1117
M WT 268
B PK 57
RANK 1
37462
PUR 872
C21.H44
HEPTADECANE, 2,6,10,14-TETRAMETHYL-
1117
M WT 296
B PK 57
RANK 2
42196
PUR 836
C19.H40
NONADECANE
1117
M WT 268
B PK 57
RANK 3
37465
PUR 827
M/Z
50
100
150
200
250
300
350

Library Search Data: 30068101 #1114 Base m/z: 57
08/31/98 19:00:00 + 12:23 Cali: 30068101 # 3 RIC: 60416.
Sample: S-MM5-2 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
651 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37462	HEPTADECANE, 2,6-DIMETHYL-
2	37465	NONADECANE
3	19016	UNDECANE, 4,7-DIMETHYL-
4	19006	DECANE, 6-ETHYL-2-METHYL-
5	19056	UNDECANE, 2,7-DIMETHYL-
6	8102	HEXANE, 2,2,3,3-TETRAMETHYL-
7	19028	DECANE, 2,4,6-TRIMETHYL-
8	15356	DECANE, 2,4-DIMETHYL-
9	22530	TETRADECANE

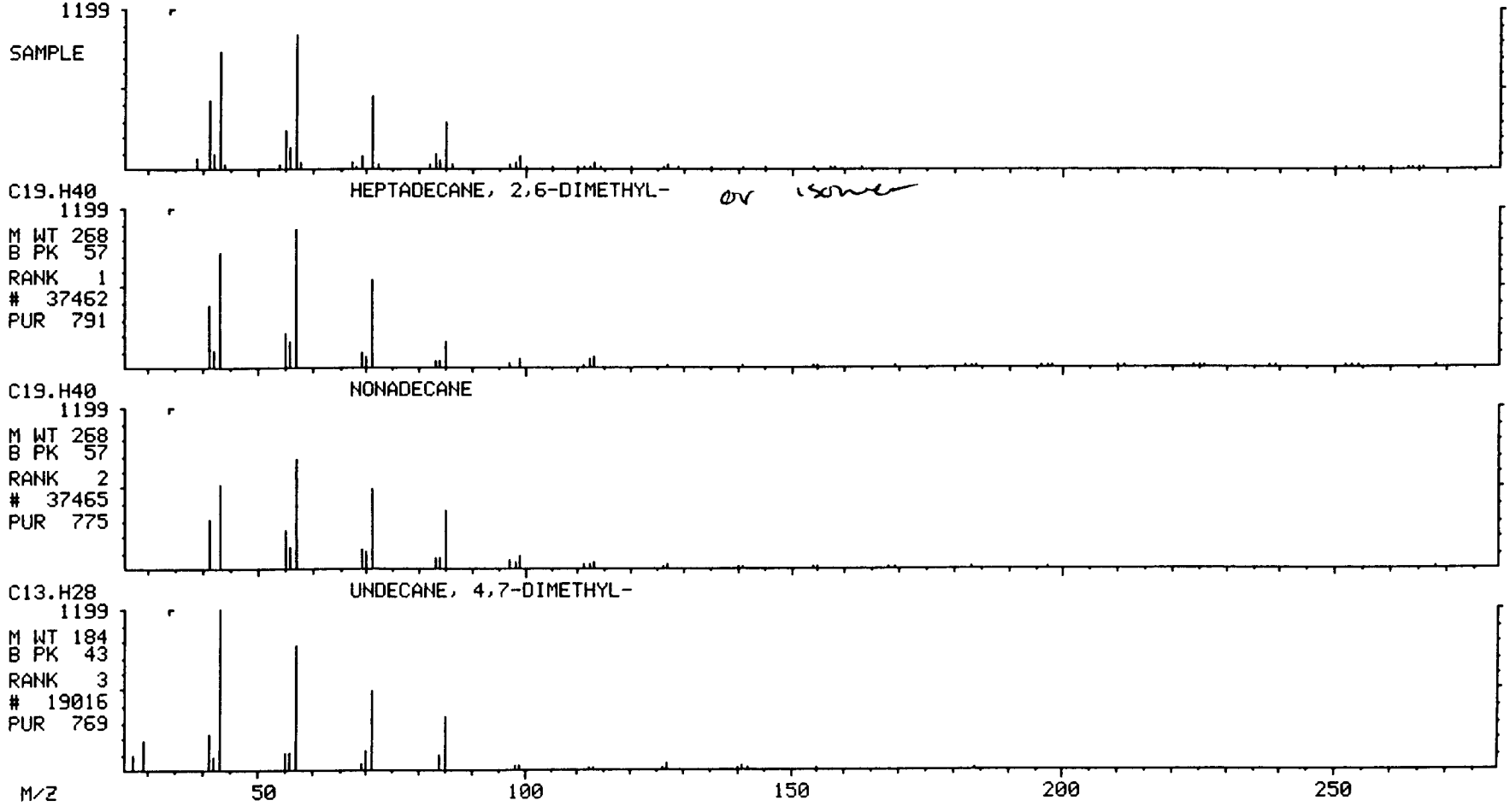
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	791	910	847
2	C19.H40	268	57	775	896	852
3	C13.H28	184	43	769	922	805
4	C13.H28	184	57	768	934	799
5	C13.H28	184	43	767	942	779
6	C10.H22	142	57	767	920	774
7	C13.H28	184	43	767	938	789
8	C12.H26	170	43	765	944	776
9	C14.H30	198	43	763	899	841

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	54105-67-8
2	—	—	—	—	629-92-5
3	—	—	—	—	17301-32-5
4	—	—	—	—	62108-21-8
5	—	—	—	—	17301-24-5
6	—	—	—	—	13475-81-5
7	—	—	—	—	62108-27-4
8	—	—	—	—	2801-84-5
9	—	—	—	—	629-59-4

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:00:00 + 12:23
SAMPLE: S-MM5-2 1/35A/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068101 #1114
CALI: 30068101 # 3

BASE M/Z: 57
RIC: 60416.



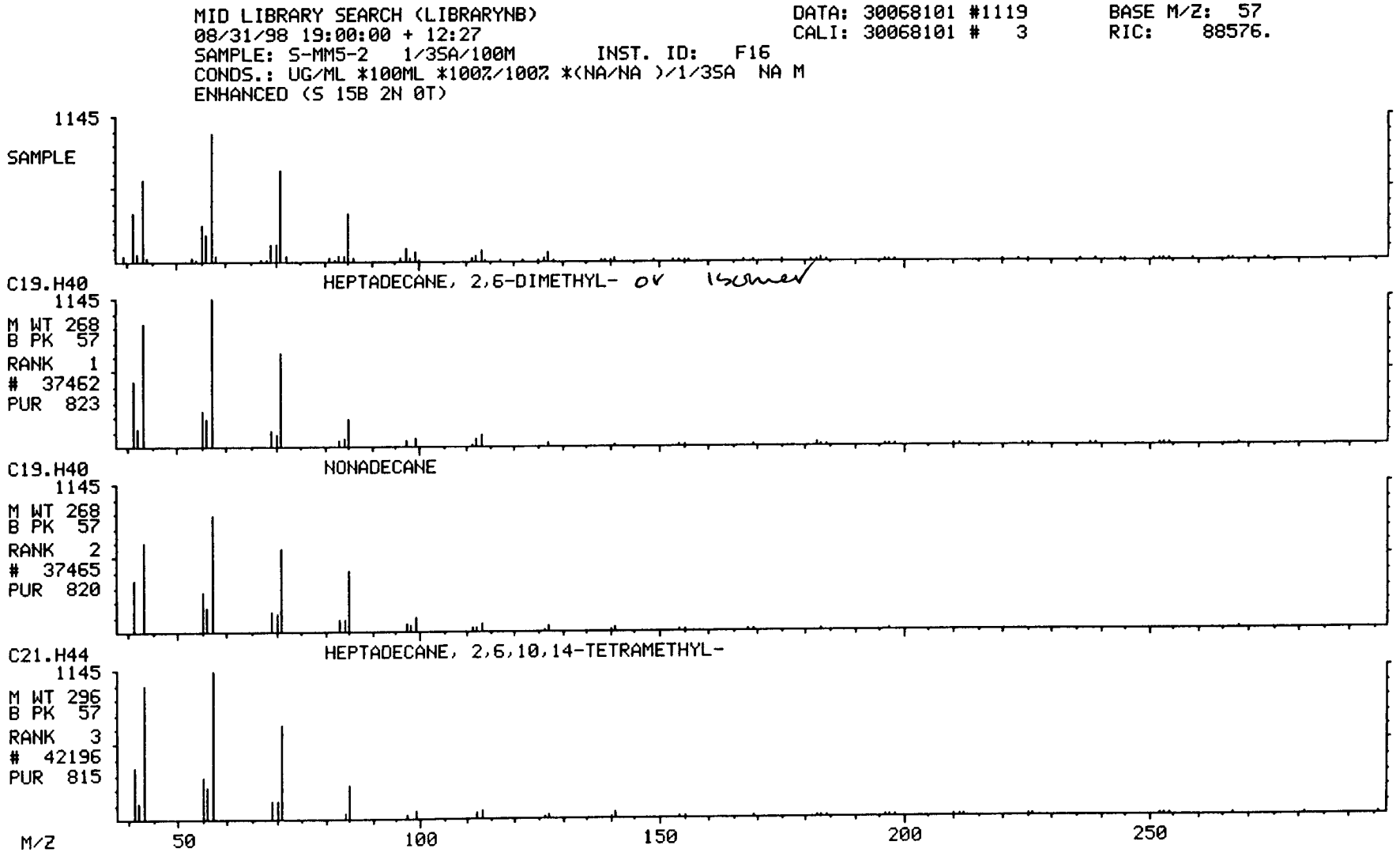
Library Search Data: 30068101 #1119 Base m/z: 57
08/31/98 19:00:00 + 12:27 Cali: 30068101 # 3 RIC: 88576.
Sample: S-MM5-2 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
590 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37462	HEPTADECANE, 2,6-DIMETHYL-
2	37465	NONADECANE
3	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
4	46161	TRICOSANE
5	25991	DODECANE, 2,6,10-TRIMETHYL-
6	37466	PENTADECANE, 2,6,10,14-TETRAMETHYL-
7	42192	HEPTADECANE, 2,6,10,15-TETRAMETHYL-
8	26001	DODECANE, 2,7,10-TRIMETHYL-
9	32059	HEPTADECANE

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	823	950	828
2	C19.H40	268	57	820	956	838
3	C21.H44	296	57	815	944	828
4	C23.H48	324	43	804	921	845
5	C15.H32	212	57	797	970	798
6	C19.H40	268	71	795	939	801
7	C21.H44	296	57	794	956	819
8	C15.H32	212	57	789	971	789
9	C17.H36	240	57	788	927	820

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	54105-67-8
2	---	---	---	---	629-92-5
3	---	---	---	---	18344-37-1
4	---	---	---	---	638-67-5
5	---	---	---	---	3891-98-3
6	---	---	---	---	1921-70-6
7	---	---	---	---	54833-48-6
8	---	---	---	---	74645-98-0
9	---	---	---	---	629-78-7


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:00:00 + 12:27
SAMPLE: S-MM5-2 1/35A/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068101 #1119
CALI: 30068101 # 3
BASE M/Z: 57
RIC: 88576.
1145
SAMPLE
C19.H40
HEPTADECANE, 2,6-DIMETHYL- or isomer
1145
M WT 268
B PK 57
RANK 1
37462
PUR 823
C19.H40
NONADECANE
1145
M WT 268
B PK 57
RANK 2
37465
PUR 820
C21.H44
HEPTADECANE, 2,6,10,14-TETRAMETHYL-
1145
M WT 296
B PK 57
RANK 3
42196
PUR 815
M/Z
50
100
150
200
250

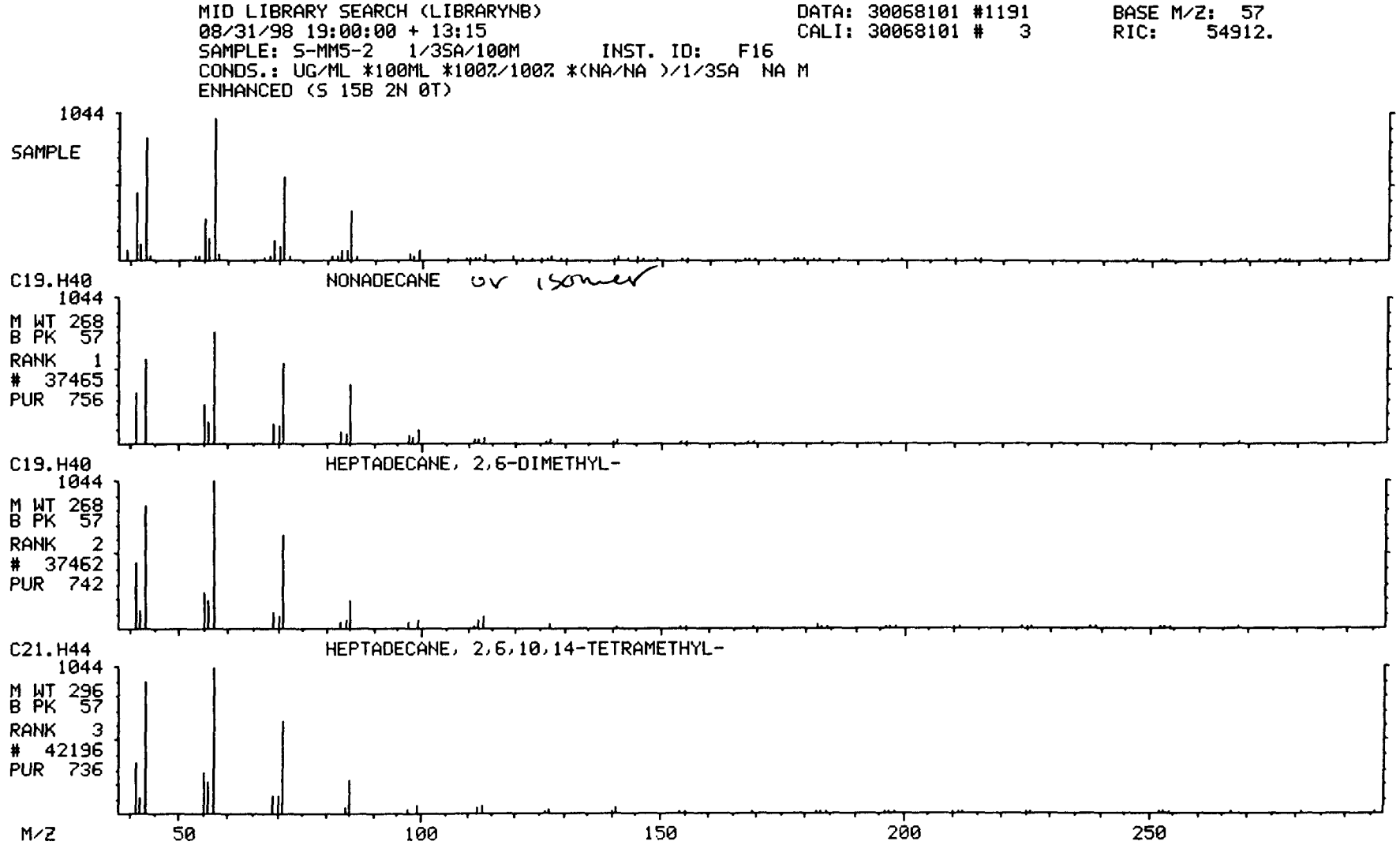
Library Search Data: 30068101 #1191 Base m/z: 57
08/31/98 19:00:00 + 13:15 Cali: 30068101 # 3 RIC: 54912.
Sample: S-MM5-2 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
294 matched at least 8 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37465	NONADECANE
2	37462	HEPTADECANE, 2,6-DIMETHYL-
3	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
4	15969	HYDROXYLAMINE, O-DECYL-
5	25997	PENTADECANE
6	46161	TRICOSANE
7	19016	UNDECANE, 4,7-DIMETHYL-
8	25994	DODECANE, 2,6,11-TRIMETHYL-
9	19523	1-DECANOL, 2-ETHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	756	969	766
2	C19.H40	268	57	742	941	760
3	C21.H44	296	57	736	952	758
4	C10.H23.O.N	173	43	729	968	729
5	C15.H32	212	57	725	958	747
6	C23.H48	324	43	724	910	786
7	C13.H28	184	43	719	962	720
8	C15.H32	212	57	706	958	709
9	C12.H26.O	186	57	703	937	707

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	629-92-5
2	---	---	---	---	54105-67-8
3	---	---	---	---	18344-37-1
4	---	---	---	---	29812-79-1
5	---	---	---	---	629-62-9
6	---	---	---	---	638-67-5
7	---	---	---	---	17301-32-5
8	---	---	---	---	31295-56-4
9	---	---	---	---	21078-65-9


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:00:00 + 13:15
SAMPLE: S-MM5-2 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068101 #1191
CALI: 30068101 # 3
BASE M/Z: 57
RIC: 54912.
1044
SAMPLE
C19.H40
NONADECANE or isomer
1044
M WT 268
B PK 57
RANK 1
37465
PUR 756
C19.H40
HEPTADECANE, 2,6-DIMETHYL-
1044
M WT 268
B PK 57
RANK 2
37462
PUR 742
C21.H44
HEPTADECANE, 2,6,10,14-TETRAMETHYL-
1044
M WT 296
B PK 57
RANK 3
42196
PUR 736
M/Z
50
100
150
200
250

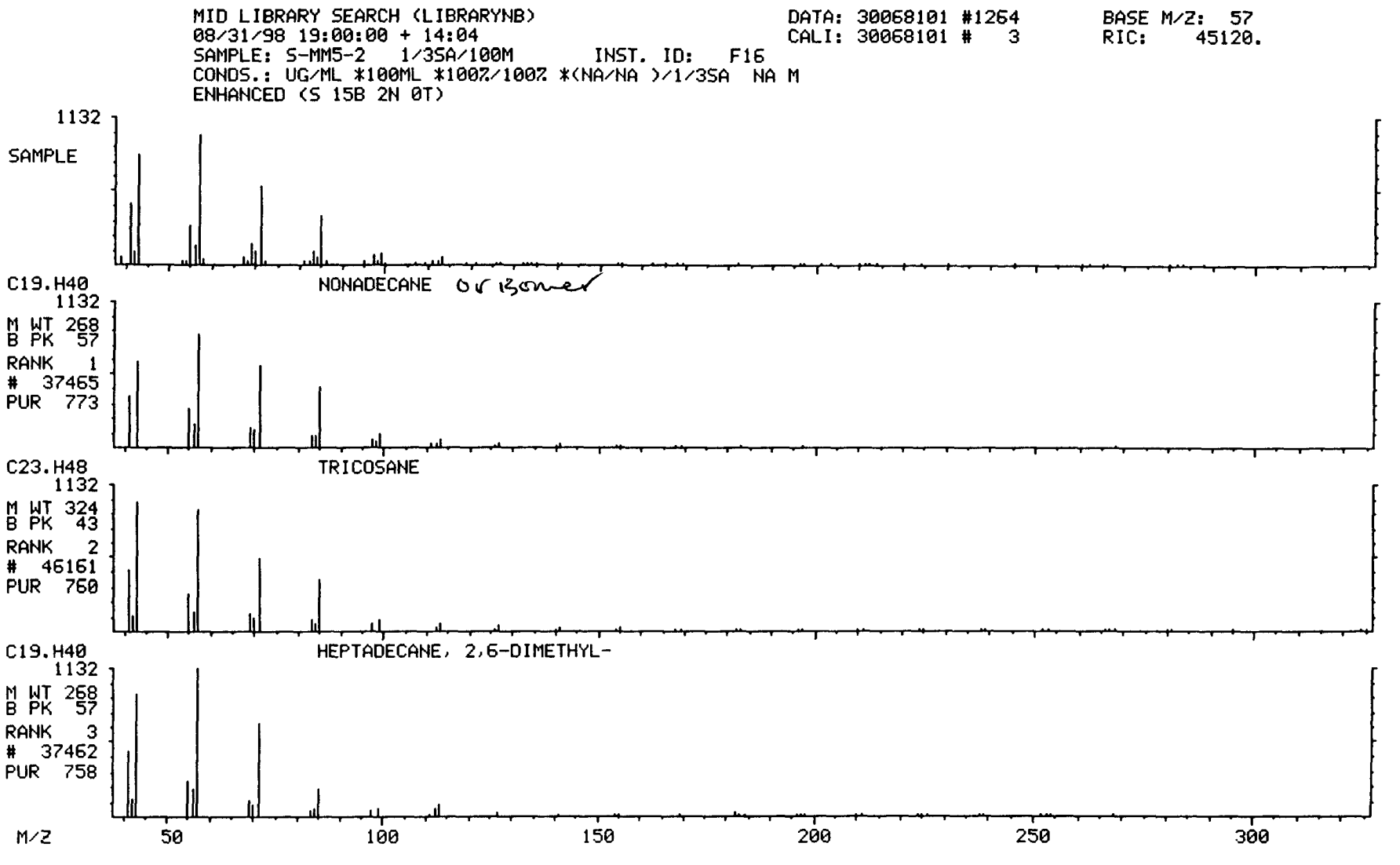
Library Search Data: 30068101 #1264 Base m/z: 57
08/31/98 19:00:00 + 14:04 Cali: 30068101 # 3 RIC: 45120.
Sample: S-MM5-2 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
298 matched at least 8 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37465	NONADECANE
2	46161	TRICOSANE
3	37462	HEPTADECANE, 2,6-DIMETHYL-
4	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
5	25997	PENTADECANE
6	49555	PENTACOSANE
7	42192	HEPTADECANE, 2,6,10,15-TETRAMETHYL-
8	32059	HEPTADECANE
9	15969	HYDROXYLAMINE, O-DECYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	773	969	791
2	C23.H48	324	43	760	923	816
3	C19.H40	268	57	758	931	778
4	C21.H44	296	57	755	947	771
5	C15.H32	212	57	748	982	753
6	C25.H52	352	43	745	901	819
7	C21.H44	296	57	731	932	759
8	C17.H36	240	57	731	928	759
9	C10.H23.O.N	173	43	730	967	732

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	629-92-5
2	---	---	---	---	638-67-5
3	---	---	---	---	54105-67-8
4	---	---	---	---	18344-37-1
5	---	---	---	---	629-62-9
6	---	---	---	---	629-99-2
7	---	---	---	---	54833-48-6
8	---	---	---	---	629-78-7
9	---	---	---	---	29812-79-1


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:00:00 + 14:04
SAMPLE: S-MM5-2 1/3SA/100M
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068101 #1264
CALI: 30068101 # 3
INST. ID: F16
BASE M/Z: 57
RIC: 45120.
1132
SAMPLE
C19.H40
NONADECANE or isomer
1132
M WT 268
B PK 57
RANK 1
37465
PUR 773
C23.H48
TRICOSANE
1132
M WT 324
B PK 43
RANK 2
46161
PUR 760
C19.H40
HEPTADECANE, 2,6-DIMETHYL-
1132
M WT 268
B PK 57
RANK 3
37462
PUR 758
M/Z
50
100
150
200
250
300

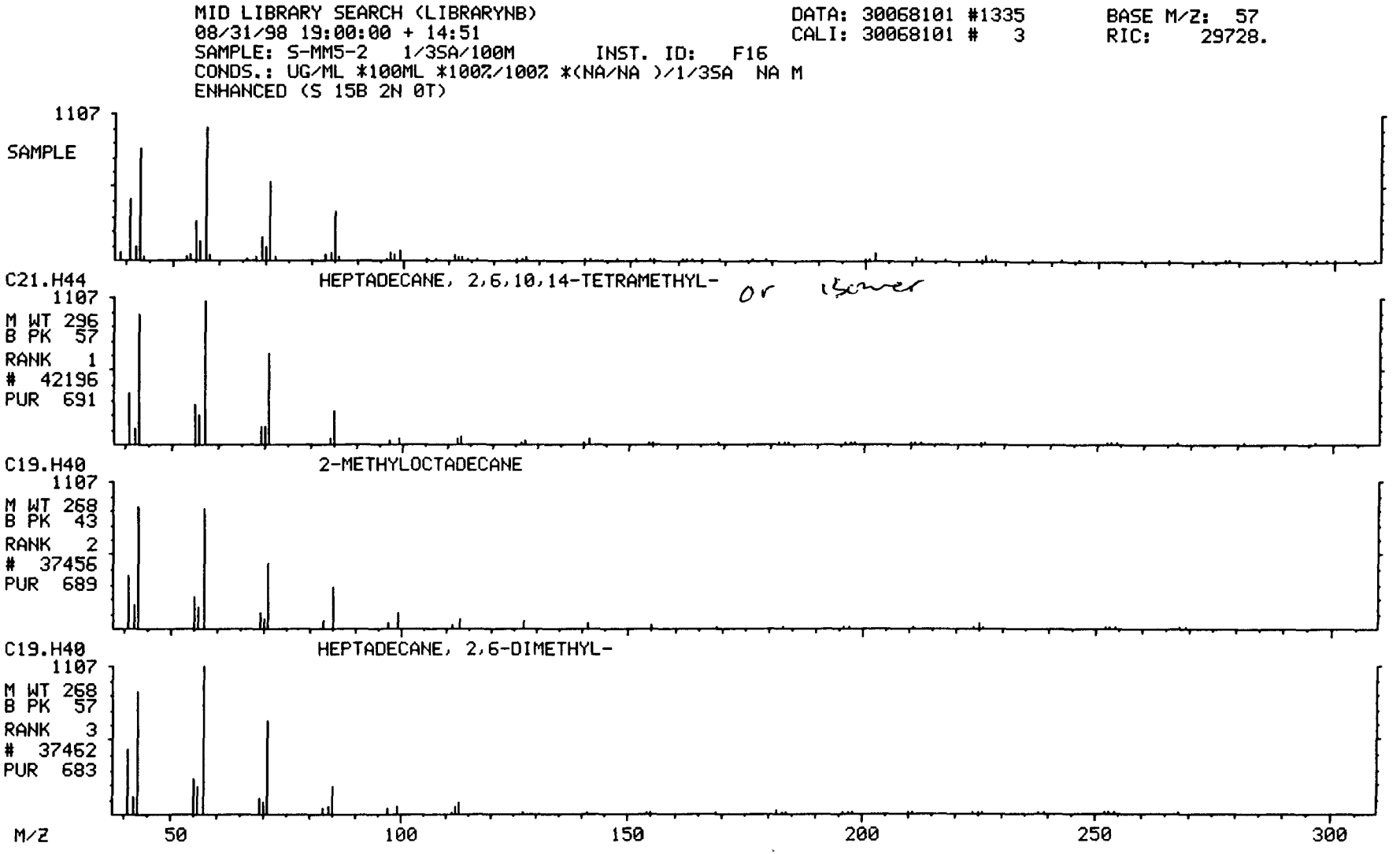
Library Search Data: 30068101 #1335 Base m/z: 57
08/31/98 19:00:00 + 14:51 Cali: 30068101 # 3 RIC: 29728.
Sample: S-MM5-2 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
474 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
2	37456	2-METHYLOCTADECANE
3	37462	HEPTADECANE, 2,6-DIMETHYL-
4	29263	HEXADECANE
5	37465	NONADECANE
6	25997	PENTADECANE
7	32058	HEXADECANE, 3-METHYL-
8	46161	TRICOSANE
9	42192	HEPTADECANE, 2,6,10,15-TETRAMETHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C21.H44	296	57	691	910	713
2	C19.H40	268	43	689	925	709
3	C19.H40	268	57	683	889	712
4	C16.H34	226	57	683	939	700
5	C19.H40	268	57	682	951	707
6	C15.H32	212	57	672	968	680
7	C17.H36	240	57	664	919	691
8	C23.H48	324	43	660	896	725
9	C21.H44	296	57	657	922	687

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	18344-37-1
2	—	—	—	—	- -
3	—	—	—	—	54105-67-8
4	—	—	—	—	544-76-3
5	—	—	—	—	629-92-5
6	—	—	—	—	629-62-9
7	—	—	—	—	6418-43-5
8	—	—	—	—	638-67-5
9	—	—	—	—	54833-48-6


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:00:00 + 14:51
SAMPLE: S-MM5-2 1/35A/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068101 #1335
CALI: 30068101 # 3
BASE M/Z: 57
RIC: 29728.
1107
SAMPLE
C21.H44
HEPTADECANE, 2,6,10,14-TETRAMETHYL-
or isomer
1107
M WT 296
B PK 57
RANK 1
42196
PUR 691
C19.H40
2-METHYLOCTADECANE
1107
M WT 268
B PK 43
RANK 2
37456
PUR 689
C19.H40
HEPTADECANE, 2,6-DIMETHYL-
1107
M WT 268
B PK 57
RANK 3
37462
PUR 683
M/Z
50
100
150
200
250
300

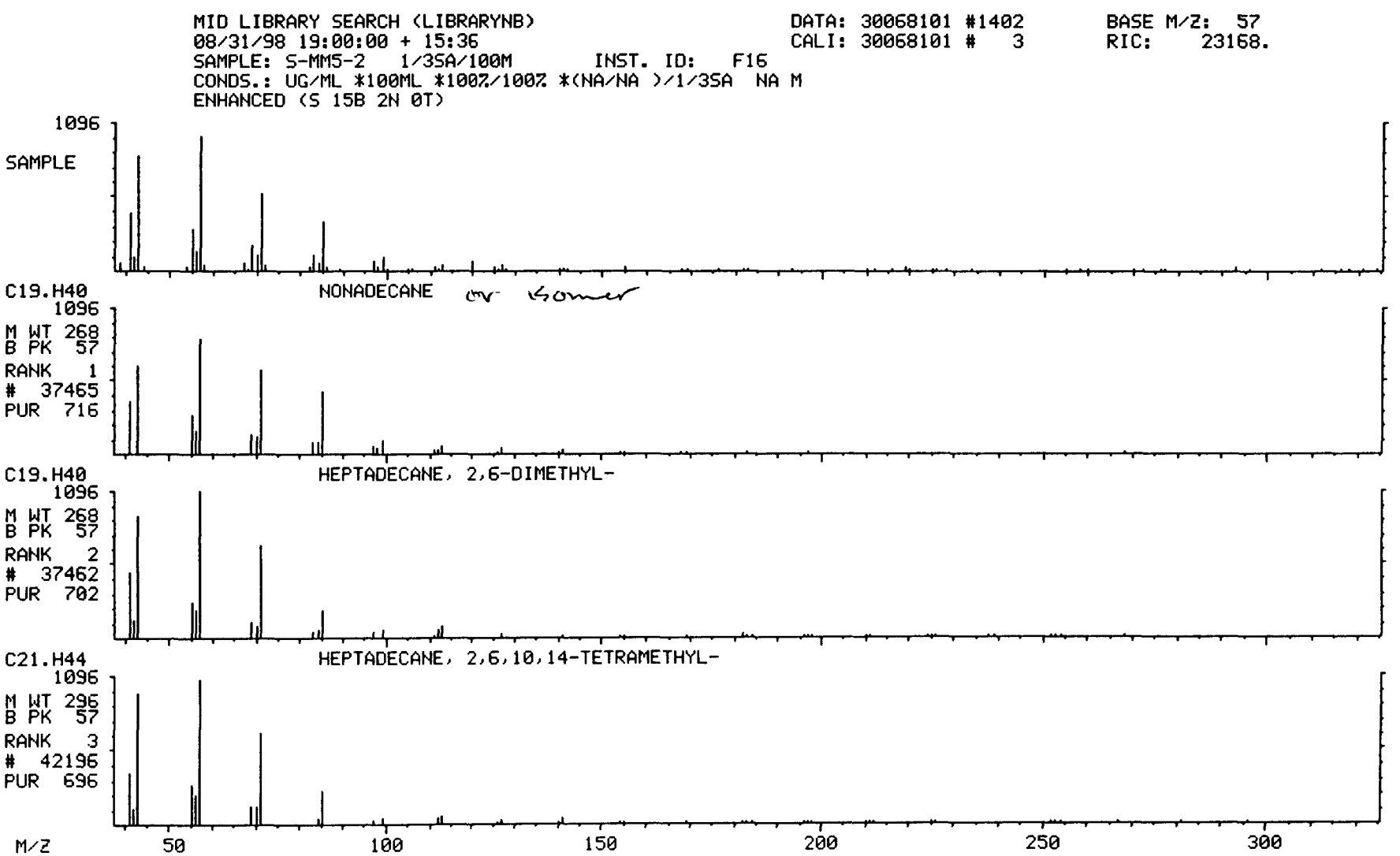
Library Search Data: 30068101 #1402 Base m/z: 57
08/31/98 19:00:00 + 15:36 Cali: 30068101 # 3 RIC: 23168.
Sample: S-MM5-2 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
850 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37465	NONADECANE
2	37462	HEPTADECANE, 2,6-DIMETHYL-
3	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
4	46161	TRICOSANE
5	37456	2-METHYLOCTADECANE
6	25997	PENTADECANE
7	42192	HEPTADECANE, 2,6,10,15-TETRAMETHYL-
8	15969	HYDROXYLAMINE, O-DECYL-
9	49555	PENTACOSANE

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	716	961	738
2	C19.H40	268	57	702	934	715
3	C21.H44	296	57	696	945	709
4	C23.H48	324	43	694	920	749
5	C19.H40	268	43	685	942	711
6	C15.H32	212	57	684	967	691
7	C21.H44	296	57	680	940	703
8	C10.H23.O.N	173	43	676	966	678
9	C25.H52	352	43	673	885	756

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	629-92-5
2	—	—	—	—	54105-67-8
3	—	—	—	—	18344-37-1
4	—	—	—	—	638-67-5
5	—	—	—	—	- -
6	—	—	—	—	629-62-9
7	—	—	—	—	54833-48-6
8	—	—	—	—	29812-79-1
9	—	—	—	—	629-99-2


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:00:00 + 15:36
SAMPLE: S-MM5-2 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068101 #1402
CALI: 30068101 # 3
BASE M/Z: 57
RIC: 23168.
1096
SAMPLE
C19.H40
NONADECANE
1096
M WT 268
B PK 57
RANK 1
37465
PUR 716
C19.H40
HEPTADECANE, 2,6-DIMETHYL-
1096
M WT 268
B PK 57
RANK 2
37462
PUR 702
C21.H44
HEPTADECANE, 2,6,10,14-TETRAMETHYL-
1096
M WT 296
B PK 57
RANK 3
42196
PUR 696
M/Z
50
100
150
200
250
300

TIC SELECTION REPORT

DATA FILE: 30068101

THE FOLLOWING PEAKS WERE REJECTED BECAUSE AT LEAST 40 % OF THEIR SIZE WAS ACCOUNTED FOR BY TARGET COMPOUNDS ELUTING WITHIN 4 SCANS OF THE PEAK TOP.

SCAN	SIZE	AMOUNT
341	170240.	22.662
530	300480.	40.000
829	283264.	40.000
1087	334464.	40.000
1552	199007.	40.000
1783	185564.	40.000

TOTAL NUMBER OF UNIDENTIFIED PEAKS WITH SIZE GREATER THAN 10 % OF THE CLOSEST INTERNAL STANDARD THAT DOES NOT HAVE INTERFERENCES = 94

INTERNAL STANDARDS THAT HAVE RIC SIZE LESS THAN 50 % OR GREATER THAN 200 % OF THE ESTIMATED RIC SIZE ARE CONSIDERED TO HAVE INTERFERENCES AND WILL NOT BE USED FOR QUANTITATION.

#	INTERNAL STANDARD	RIC SIZE	PERCENT OF ESTIMATED RIC SIZE	SCAN
1	C140 NAPHTHALENE-D8	300480.	196	530
2	C150 ACENAPHTHENE-D10	283264.	147	829
3	C160 PHENANTHRENE-D10	334464.	154	1087
4	C170 CHRYSENE-D12	199007.	142	1552
5	C175 PERYLENE-D12	185564.	154	1783

* INDICATES INTERFERENCE

SIZE = AREA

Semivolatile Organics
Method 0010/8270

Client Name: Pacific Environmental Services
Client ID: S-MM5-1B-F,FH,XAD,COND,BH
LAB ID: 300681-0002-SA
Matrix: AIRTRAIN Sampled: 25 JUL 98 Received: 30 JUL 98
Authorized: 30 JUL 98 Prepared: 31 JUL 98 Analyzed: 31 AUG 98

Dilution Factor: 100

Parameter	Wet wt. Result	Units	Reporting Limit	Qualifier
Phenol	ND	ug/Sample	3000	RG
bis(2-Chloroethyl)ether	ND	ug/Sample	3000	
2-Chlorophenol	ND	ug/Sample	3000	
1,3-Dichlorobenzene	ND	ug/Sample	3000	
1,4-Dichlorobenzene	ND	ug/Sample	3000	
Benzyl alcohol	ND	ug/Sample	3000	
1,2-Dichlorobenzene	ND	ug/Sample	3000	
2-Methylphenol	ND	ug/Sample	3000	
2,2'-Oxybis(1-chloropropane)	ND	ug/Sample	3000	
3/4-Methylphenol	ND	ug/Sample	3000	
N-Nitroso-di-n-propylamine	ND	ug/Sample	3000	
Hexachloroethane	ND	ug/Sample	3000	
Nitrobenzene	ND	ug/Sample	3000	
Isophorone	ND	ug/Sample	3000	
2-Nitrophenol	ND	ug/Sample	3000	
2,4-Dimethylphenol	ND	ug/Sample	3000	
Benzoic acid	ND	ug/Sample	15000	
bis(2-Chloroethoxy)-methane	ND	ug/Sample	3000	
2,4-Dichlorophenol	ND	ug/Sample	3000	
1,2,4-Trichlorobenzene	ND	ug/Sample	3000	
Naphthalene	ND	ug/Sample	3000	
4-Chloroaniline	ND	ug/Sample	3000	
Hexachlorobutadiene	ND	ug/Sample	3000	
4-Chloro-3-methylphenol	ND	ug/Sample	3000	
2-Methylnaphthalene	4700	ug/Sample	3000	
Hexachlorocyclopentadiene	ND	ug/Sample	3000	
2,4,6-Trichlorophenol	ND	ug/Sample	3000	
2,4,5-Trichlorophenol	ND	ug/Sample	15000	
2-Chloronaphthalene	ND	ug/Sample	3000	
2-Nitroaniline	ND	ug/Sample	3000	
Dimethyl phthalate	ND	ug/Sample	3000	
Acenaphthylene	ND	ug/Sample	3000	
3-Nitroaniline	ND	ug/Sample	15000	
Acenaphthene	ND	ug/Sample	3000	
2,4-Dinitrophenol	ND	ug/Sample	15000	
4-Nitrophenol	ND	ug/Sample	15000	

Note G = Reporting limit(s) raised due to matrix interference.
Note R = Reporting limit(s) raised due to sample volume limitations.
ND = Not Detected

Reported By: Emily Uebelhoer Approved By: Mike Orbanosky

The cover letter is an integral part of this report.
Rev 230787

Semivolatile Organics (cont.)
Method 0010/8270

Client Name: Pacific Environmental Services
Client ID: S-MM5-1B-F,FH,XAD,COND,BH
LAB ID: 300681-0002-SA
Matrix: AIRTRAIN Sampled: 25 JUL 98 Received: 30 JUL 98
Authorized: 30 JUL 98 Prepared: 31 JUL 98 Analyzed: 31 AUG 98

Dilution Factor: 100

Parameter	Wet wt. Result	Units	Reporting Limit	Qualifier
Dibenzofuran	ND	ug/Sample	3000	
2,4-Dinitrotoluene	ND	ug/Sample	3000	
2,6-Dinitrotoluene	ND	ug/Sample	3000	
Diethyl phthalate	ND	ug/Sample	3000	
4-Chlorophenyl phenyl ether	ND	ug/Sample	3000	
Fluorene	ND	ug/Sample	3000	
4-Nitroaniline	ND	ug/Sample	15000	
4,6-Dinitro-2-methylphenol	ND	ug/Sample	15000	
N-Nitrosodiphenylamine	ND	ug/Sample	3000	
4-Bromophenyl phenyl ether	ND	ug/Sample	3000	
Hexachlorobenzene	ND	ug/Sample	3000	
Pentachlorophenol	ND	ug/Sample	15000	
Phenanthrene	ND	ug/Sample	3000	
Anthracene	ND	ug/Sample	3000	
Di-n-butyl phthalate	ND	ug/Sample	3000	
Fluoranthene	ND	ug/Sample	3000	
Pyrene	ND	ug/Sample	3000	
Butyl benzyl phthalate	ND	ug/Sample	3000	
3,3'-Dichlorobenzidine	ND	ug/Sample	6000	
Benzo(a)anthracene	ND	ug/Sample	3000	
bis(2-Ethylhexyl)-phthalate	ND	ug/Sample	3000	
Chrysene	ND	ug/Sample	3000	
Di-n-octyl phthalate	ND	ug/Sample	3000	
Benzo(b)fluoranthene	ND	ug/Sample	3000	
Benzo(k)fluoranthene	ND	ug/Sample	3000	
Benzo(a)pyrene	ND	ug/Sample	3000	
Indeno(1,2,3-cd)pyrene	ND	ug/Sample	3000	
Dibenz(a,h)anthracene	ND	ug/Sample	3000	
Benzo(g,h,i)perylene	ND	ug/Sample	3000	
Acetophenone	ND	ug/Sample	3000	
4-Aminobiphenyl	ND	ug/Sample	15000	
Aniline	ND	ug/Sample	3000	
Benzidine	ND	ug/Sample	30000	
3,3'-Dimethylbenzidine	ND	ug/Sample	6000	
N-Nitrosodimethylamine	ND	ug/Sample	3000	
N-Nitrosomorpholine	ND	ug/Sample	3000	
Pentachloronitrobenzene (PCNB)	ND	ug/Sample	15000	
o-Toluidine	ND	ug/Sample	6000	

735

ND = Not Detected

Reported By: Emily Uebelhoer Approved By: Mike Orbanosky

The cover letter is an integral part of this report.
Rev 230787

Semivolatile Organics
Method 0010/8270 (cont.)

Client Name: Pacific Environmental Services
Client ID: S-MM5-1B-F,FH,XAD,COND,BH
LAB ID: 300681-0002-SA
Matrix: AIRTRAIN Sampled: 25 JUL 98 Received: 30 JUL 98
Authorized: 30 JUL 98 Prepared: 31 JUL 98 Analyzed: 31 AUG 98

Dilution Factor: 100

Parameter	Wet wt. Result	Units	Reporting Limit	Qualifier
2-Methoxybenzenamine	ND	ug/Sample	--	
Biphenyl	ND	ug/Sample	--	
Chloroacetophenone	ND	ug/Sample	--	
Cumene	ND	ug/Sample	--	
DBCP (1,2-Dibromo-3-chloropropane)	ND	ug/Sample	--	
Benzo(e)pyrene	ND	ug/Sample	--	
N-N-Diethylaniline	ND	ug/Sample	--	
Dimethylaniline	ND	ug/Sample	--	
3,3'-Dimethoxybenzidine	ND	ug/Sample	--	
Hydroquinone	ND	ug/Sample	--	
4,4'-Methyl-bis(2-chloroaniline)	ND	ug/Sample	--	
4-Nitrodiphenyl	ND	ug/Sample	--	
Trifluralin	ND	ug/Sample	--	

Surrogate	Recovery	Acceptable Range	
Nitrobenzene-d5	ND %	45 - 107	H
2-Fluorobiphenyl	ND %	62 - 110	
Terphenyl-d14	ND %	58 - 135	
Phenol-d5	ND %	43 - 130	
2-Fluorophenol	ND %	36 - 111	
2,4,6-Tribromophenol	ND %	58 - 131	

Note H = Spiked analyte not detected because of required sample dilution.
ND = Not Detected

Reported By: Emily Uebelhoer Approved By: Mike Orbanosky

The cover letter is an integral part of this report.
Rev 230787

Semivolatiles Library Search (20 Compound TID)
Method 8270

Client Name: Pacific Environmental Services
Client ID: S-MM5-1B-F,FH,XAD,COND,BH
LAB ID: 300681-0002-SA
Matrix: AIRTRAIN Sampled: 25 JUL 98 Received: 30 JUL 98
Authorized: 30 JUL 98 Prepared: NA Analyzed: 31 AUG 98

Dilution Factor: 100

Parameter	Result	Units	Reporting Limit	Qualifier
Unknown alkane	7800	ug/Sample	--	
Dodecane	7800	ug/Sample	--	0
Unknown	15000	ug/Sample	--	
Unknown hydrocarbon	17000	ug/Sample	--	
3-Hexadecene, (z)-	10000	ug/Sample	--	0
Undecane	11000	ug/Sample	--	0
Unknown alkane	20000	ug/Sample	--	
Unknown alkane	26000	ug/Sample	--	
Unknown	14000	ug/Sample	--	
Heptadecane, 2,6,10,14 -tetramethyl-	22000	ug/Sample	--	0
Dodecane, 3-methyl-	22000	ug/Sample	--	0
Unknown alkane	9900	ug/Sample	--	
Nonadecane	26000	ug/Sample	--	0
Nonadecane	18000	ug/Sample	--	0
Heptadecane, 2,6-dimethyl-	40000	ug/Sample	--	0
Unknown alkane	12000	ug/Sample	--	
Nonadecane	17000	ug/Sample	--	0
Nonadecane	8100	ug/Sample	--	0
Nonadecane	9800	ug/Sample	--	0
Nonadecane	7800	ug/Sample	--	0

737

Note 0 = Or structurally similar compound (isomer).
NA = Not Applicable

Reported By: Emily Uebelhoer Approved By: Mike Orbanosky

The cover letter is an integral part of this report.
Rev 230787

QUANTERRA GC/MS
Target Compound Data Summary Sheet

Data File: 30068102
Std Id: ST16980831

Sample: S-MM5-1B 1/3SA/100M INST. ID: F16
Client: PACIFI Date Analyzed: 08/31/98 19:31
Analyst: DAT Instrument ID: F16 Run Factor: 300.
Quan List Threshold: 0.95 Surrogate Vol.: 100.

Surrogate Spike Recoveries
8270-G, LIMS 10/10/96

Surrogate	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC limits
CS20 NITROBENZENE-D5	50.0	BDL	0*	45 107
CS25 2-FLUOROBIPHENY	50.0	BDL	0*	62 110
CS30 TERPHENYL-D14	50.0	BDL	0*	58 135
CS45 PHENOL-D5	100.	BDL	0*	43 130
CS50 2-FLUOROPHENOL	100.0	140.0	140.	* 36 111
CS55 2,4,6-TRIBROMOP	100.	BDL	0*	58 131

Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
HEXACHLOROBENZENE-C13		ND	UG/A	3000.0
C310 N-NITROSODIMETHYLAMINE		ND	UG/A	3000.0
PYRIDINE		ND	UG/A	6000.0
2-PICOLINE		ND	UG/A	3000.0
N-NITROSOMETHYLETHYLAMINE		ND	UG/A	3000.0
METHYLMETHANESULFONATE		ND	UG/A	3000.0
N-NITROSODIETHYLAMINE		ND	UG/A	3000.0
ETHYLMETHANE SULFONATE		ND	UG/A	3000.0
PENTACHLOROETHANE		ND	UG/A	3000.0
C320 ANILINE		ND	UG/A	3000.0
C315 PHENOL		ND	UG/A	3000.0
C325 BIS(2-CHLOROETHYL)ETHER		ND	UG/A	3000.0
C330 2-CHLOROPHENOL		ND	UG/A	3000.0
C335 1,3-DICHLOROBENZENE		ND	UG/A	3000.0
C340 1,4-DICHLOROBENZENE		ND	UG/A	3000.0
C345 BENZYL ALCOHOL		ND	UG/A	3000.0
C350 1,2-DICHLOROBENZENE		ND	UG/A	3000.0
C355 2-METHYLPHENOL		ND	UG/A	3000.0
C360 2,2'-OXYBIS(1-CLPROPAN)		ND	UG/A	3000.0
C361 ACETOPHENONE		ND	UG/A	3000.0
N-NITROSOPYRROLIDINE		ND	UG/A	3000.0
N-NITROSOMORPHOLINE		ND	UG/A	3000.0
3-METHYL PHENOL		ND	UG/A	3000.0
C365 4-METHYLPHENOL		ND	UG/A	3000.0
C370 N-NITROSO-DI-N-PROPYLAM		ND	UG/A	3000.0
O-TOLUIDINE		ND	UG/A	3000.0
C375 HEXACHLOROETHANE		ND	UG/A	3000.0
C410 NITROBENZENE		ND	UG/A	3000.0
N-NITROSOPIPERIDINE		ND	UG/A	3000.0

Reviewed by: 9.18.98

QUANTERRA GC/MS

Target Compound Data Summary Sheet

Data File: 30068102
Std Id: ST16980831

Sample: S-MM5-1B 1/3SA/100M INST. ID: F16
Client: PACIFI Date Analyzed: 08/31/98 19:31
Analyst: DAT Instrument ID: F16 Run Factor: 300.
Quan List Threshold: 0.95 Surrogate Vol.: 100.

Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
C415 ISOPHORONE		ND	UG/A	3000.0
C420 2-NITROPHENOL		ND	UG/A	3000.0
C425 2,4-DIMETHYLPHENOL		ND	UG/A	3000.0
C435 BIS(2-CHLOROETHOXY)METH		ND	UG/A	3000.0
C440 2,4-DICHLOROPHENOL		ND	UG/A	3000.0
C430 BENZOIC ACID		ND	UG/A	15000.0
AA-DIMETHYLPHENETHYLAMINE		ND	UG/A	3000.0
C445 1,2,4-TRICHLOROBENZENE		ND	UG/A	3000.0
C450 NAPHTHALENE		ND	UG/A	3000.0
C455 4-CHLOROANALINE		ND	UG/A	3000.0
2,6-DICHLOROPHENOL		ND	UG/A	3000.0
HEXACHLOROPROPENE		ND	UG/A	3000.0
C460 HEXACHLOROBUTADIENE		ND	UG/A	3000.0
P-PHENYLENE DIAMINE		ND	UG/A	3000.0
N-NITROSODI-N-BUTYLAMINE		ND	UG/A	3000.0
C465 4-CHLORO-3-METHYLPHENO		ND	UG/A	3000.0
SAFROLE		ND	UG/A	3000.0
C470 2-METHYLNAPHTHALENE	652	4700.	UG/A	3000.0
1,2,4,5-TETRACHLOROBENZENE		ND	UG/A	3000.0
ISOSAFROLE (#1)		ND	UG/A	6000.0
C510 HEXACHLOROCYCLOPENTADI		ND	UG/A	3000.0
C515 2,4,6-TRICHLOROPHENOL		ND	UG/A	3000.0
C520 2,4,5-TRICHLOROPHENOL		ND	UG/A	3000.0
ISOSAFROLE (#2)		ND	UG/A	6000.0
C525 2-CHLORONAPHTHALENE		ND	UG/A	3000.0
1-CHLORONAPHTHALENE		ND	UG/A	1500.0
C530 2-NITROANALINE		ND	UG/A	15000.0
1,4-NAPHTHOQUINONE		ND	UG/A	3000.0
C535 DIMETHYLPHTHALATE		ND	UG/A	3000.0
1,3-DINITROBENZENE		ND	UG/A	3000.0
C540 ACENAPHTHYLENE		ND	UG/A	3000.0
C543 2,6-DINITROTOLUENE		ND	UG/A	3000.0
C545 3-NITROANILINE		ND	UG/A	15000.0
C550 ACENAPHTHENE		ND	UG/A	3000.0
C555 2,4-DINITROPHENOL		ND	UG/A	15000.0
C565 DIBENZOFURAN		ND	UG/A	3000.0
C560 4-NITROPHENOL		ND	UG/A	15000.0
PENTACHLOROBENZENE		ND	UG/A	3000.0
C570 2,4-DINITROTOLUENE		ND	UG/A	3000.0
1-NAPHTHYLAMINE		ND	UG/A	3000.0
2-NAPHTHYLAMINE		ND	UG/A	3000.0
2,3,4,6-TETRACHLOROPHENOL		ND	UG/A	6000.0
C580 DIETHYLPHTHALATE		ND	UG/A	3000.0
C590 FLUORENE		ND	UG/A	3000.0

QUANTERRA GC/MS

Target Compound Data Summary Sheet

Data File: 30068102
Std Id: ST16980831

Sample: S-MM5-1B 1/3SA/100M INST. ID: F16
Client: PACIFI Date Analyzed: 08/31/98 19:31
Analyst: DAT Instrument ID: F16 Run Factor: 300.
Quan List Threshold: 0.95 Surrogate Vol.: 100.

Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
C585 4-CHLOROPHENYL-PHENYLE		ND	UG/A	3000.0
5-NITRO-O-TOLUIDINE		ND	UG/A	3000.0
C595 4-NITROANALINE		ND	UG/A	15000.0
C610 4,6-DINITRO-2-METHYLPH		ND	UG/A	15000.0
C615 N-NITROSODIPHENYLAMINE		ND	UG/A	3000.0
C620 AZOBENZENE		ND	UG/A	3000.0
SYM-TRINITROBENZENE		ND	UG/A	3000.0
C625 4-BROMOPHENYL-PHENYLET		ND	UG/A	3000.0
PHENACETIN		ND	UG/A	3000.0
DIALLATE	234	ND	UG/A	3000.0
C630 HEXACHLOROBENZENE		ND	UG/A	3000.0
4-AMINOBIPHENYL		ND	UG/A	3000.0
C635 PENTACHLOROPHENOL		ND	UG/A	15000.0
PRONAMIDE		ND	UG/A	3000.0
PENTACHLORONITROBENZENE		ND	UG/A	15000.0
C640 PHENANTHRENE		ND	UG/A	3000.0
C645 ANTHRACENE		ND	UG/A	3000.0
2SECBUTYL-4,6-DINITROPHENOL		ND	UG/A	3000.0
C647 CARBAZOLE		ND	UG/A	3000.0
C650 DI-N-BUTYLPHTHALATE		ND	UG/A	3000.0
4-NITROQUINOLINE-1-OXIDE		ND	UG/A	3000.0
METHAPYRILENE		ND	UG/A	3000.0
ISODRIN		ND	UG/A	3000.0
C655 FLUORANTHENE		ND	UG/A	3000.0
CHLOROBENZILATE		ND	UG/A	3000.0
C710 BENZIDINE		ND	UG/A	30000.0
C715 PYRENE		ND	UG/A	3000.0
ARAMITE (#1)		ND	UG/A	3000.0
ARAMITE (#2)		ND	UG/A	3000.0
P-DIMETHYLAMINOAZOBENZENE		ND	UG/A	3000.0
3,3'-DIMETHYLBENZIDINE		ND	UG/A	3000.0
KEPONE		ND	UG/A	15000.0
C720 BUTYLBENZYLPHTHALATE		ND	UG/A	3000.0
2-ACETYLAMINOFLUORENE		ND	UG/A	3000.0
C730 BENZO(A)ANTHRACENE		ND	UG/A	3000.0
C725 3,3'-DICHLOROBENZIDINE		ND	UG/A	6000.0
C740 CHRYSENE		ND	UG/A	3000.0
C745 BIS(2-ETHYLHEXYL)PHTHA		ND	UG/A	3000.0
3-METHYLCHOLANTHRENE		ND	UG/A	3000.0
C760 DI-N-OCTYL PHTHALATE		ND	UG/A	3000.0
C765 BENZO(B)FLUORANTHENE		ND	UG/A	3000.0
7,12-DIMETHYLBENZANTHRACENE		ND	UG/A	3000.0
C770 BENZO(K)FLUORANTHENE		ND	UG/A	3000.0
HEXACHLOROPHENE		ND	UG/A	3000.0

QUANTERRA GC/MS

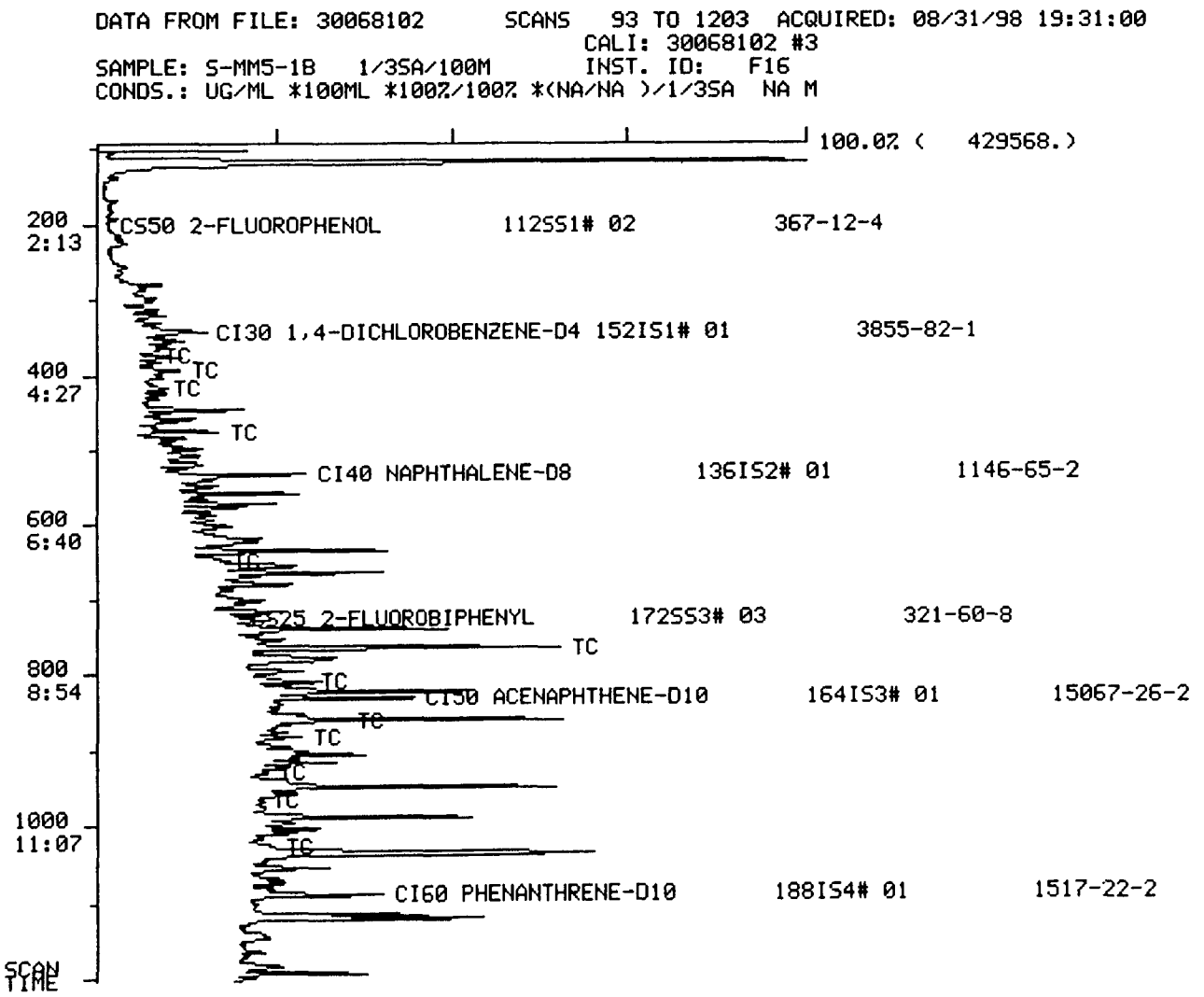
Target Compound Data Summary Sheet

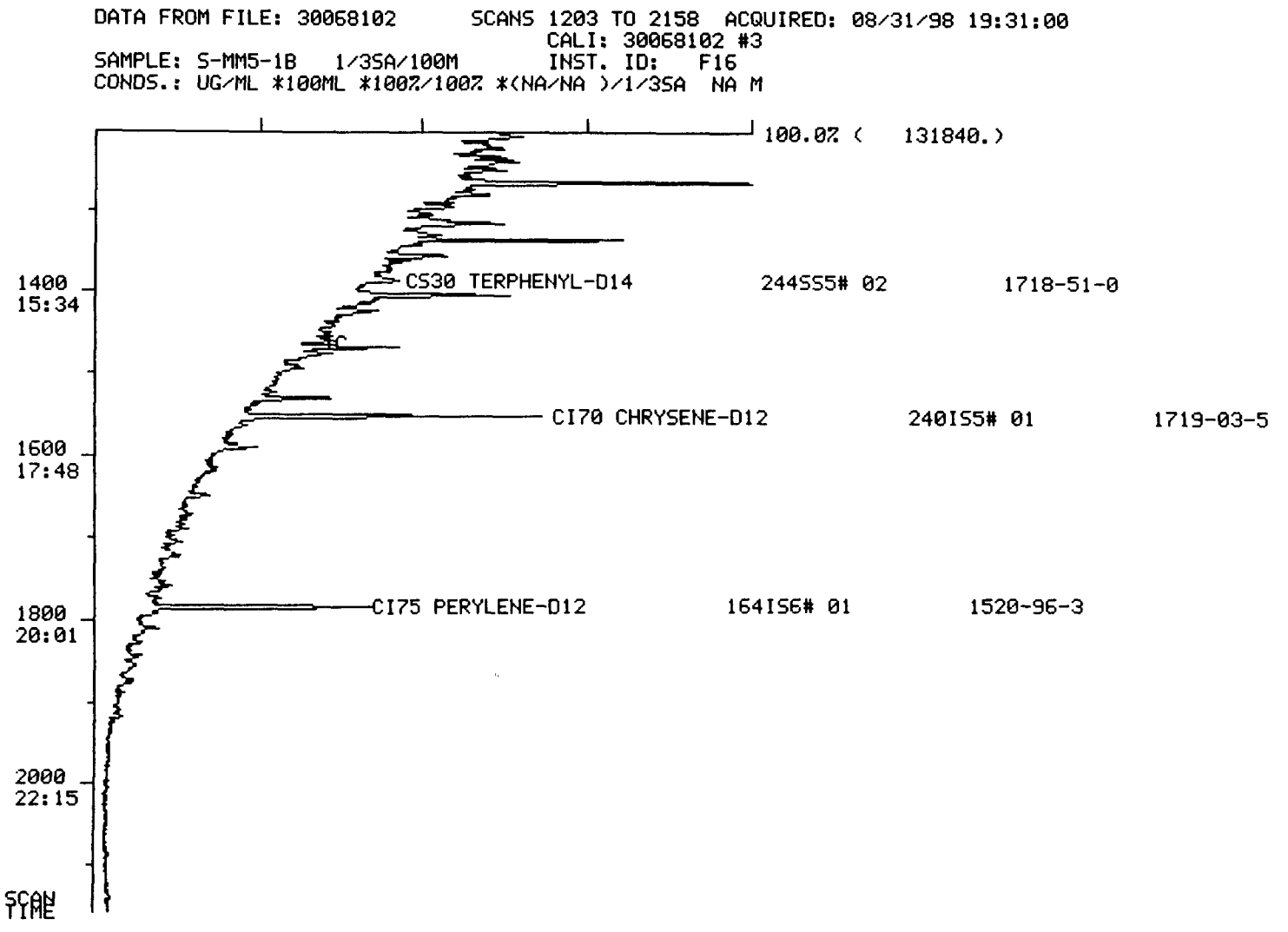
Data File: 30068102
Std Id: ST16980831

Sample: S-MM5-1B 1/3SA/100M INST. ID: F16
Client: PACIFI Date Analyzed: 08/31/98 19:31
Analyst: DAT Instrument ID: F16 Run Factor: 300.
Quan List Threshold: 0.95 Surrogate Vol.: 100.

Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
C775 BENZO(A)PYRENE		ND	UG/A	3000.0
C780 INDENO(1,2,3-CD)PYRENE		ND	UG/A	3000.0
C785 DIBENZ(A,H)ANTHRACENE		ND	UG/A	3000.0
C790 BENZO(G,H,I)PERYLENE		ND	UG/A	3000.0


DATA FROM FILE: 30068102 SCANS 93 TO 1203 ACQUIRED: 08/31/98 19:31:00
CALI: 30068102 #3
SAMPLE: S-MM5-1B 1/35A/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/35A NA M
100.0% (429568.)
200
2:13
CS50 2-FLUOROPHENOL 112SS1# 02 367-12-4
CI30 1,4-DICHLOROBENZENE-D4 152IS1# 01 3855-82-1
400
4:27
TC
CI40 NAPHTHALENE-D8 136IS2# 01 1146-65-2
600
6:40
CS25 2-FLUOROBIPHENYL 172SS3# 03 321-60-8
800
8:54
CI50 ACENAPHTHENE-D10 164IS3# 01 15067-26-2
1000
11:07
CI60 PHENANTHRENE-D10 188IS4# 01 1517-22-2
SCAN
TIME


DATA FROM FILE: 30068102 SCANS 1203 TO 2158 ACQUIRED: 08/31/98 19:31:00
CALI: 30068102 #3
SAMPLE: S-MM5-1B 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
100.0% (131840.)
1400
15:34
CS30 TERPHENYL-D14 244SS5# 02 1718-51-0
1600
17:48
CI70 CHRYSENE-D12 240IS5# 01 1719-03-5
1800
20:01
CI75 PERYLENE-D12 164IS6# 01 1520-96-3
2000
22:15
SCAN
TIME

7 of 13

STANDARD USED FOR THIS REPORT IS ST16980831 REPORT PRINTED: 9/01/98 13:16:54

ADDITIONAL STANDARD USED FOR THIS REPORT IS: ST16980831A

QUANTERRA QUANTITATION SUMMARY File: 30068102

Sample: S-MM5-1B 1/3SA/100M INST. ID: F16
Analyst: DAT Instrument Id: F16 Analyzed: 08/31/98 19:31

Compounds with amounts less than 0.20 reported as NOT FOUND

No	Library Entry	Name	Mass	Meth	Scan	Ref	Area	RRF(L)	Units: UG/ML Amount
1	S1# 1	C130 1,4-DICHLOROBENZENE	152	A BV	340	1	26359.	1.000	40.000
2	S2# 1	C140 NAPHTHALENE-D8	136	A BB	530	2	96109.	1.000	40.000
3	S3# 1	C150 ACENAPHTHENE-D10	164	A BB	829	3	54125.	1.000	40.000
4	S4# 1	C160 PHENANTHRENE-D10	188	A BB	1088	4	95829.	1.000	40.000
5	S5# 1	C170 CHRYSENE-D12	240	A BB	1552	5	57388.	1.000	40.000
6	S6# 1	C175 PERYLENE-D12	264	A BB	1782	6	44375.	1.000	40.000
7	S2# 2	CS20 NITROBENZENE-D5	82	A BB	425	2	385.	0.470	0.341
8	S3# 3	CS25 2-FLUOROBIPHENYL	172	A BB	724	3	1292.	1.234	0.774
9	S5# 2	CS30 TERPHENYL-D14	244	A BB	1384	5	1156.	0.995	0.810
10	S1# 3	CS45 PHENOL-D5	99		1	NOT FOUND			
11	S1# 2	CS50 2-FLUOROPHENOL	112	A BV	198	1	1262.	1.368	1.400
12	S3# 2	CS55 2,4,6-TRIBROMOPHENO	330	A BB	971	3	242.	0.236	0.759
13	S4# 4	HEXACHLOROBENZENE-C13	294		4	NOT FOUND			
14	S1# 15	C310 N-NITROSODIMETHYLAM	74		1	NOT FOUND			
15	S1# 20	PYRIDINE	79		1	NOT FOUND			
16	S1# 30	2-PICOLINE	93		1	NOT FOUND			
17	S1# 40	N-NITROSOMETHYLETHYLAMIN	42		1	NOT FOUND			
18	S1# 60	METHYLMETHANESULFONATE	80		1	NOT FOUND			
19	S1# 70	N-NITROSODIETHYLAMINE	102		1	NOT FOUND			
20	S1# 85	ETHYLMETHANE SULFONATE	79		1	NOT FOUND			
21	S1# 95	PENTACHLOROETHANE	117	A BB	306	1	210.	0.602	0.530
22	S1#100	C320 ANILINE	93		1	NOT FOUND			
23	S1#105	C315 PHENOL	94		1	NOT FOUND			
24	S1#110	C325 BIS(2-CHLOROETHYL)E	93		1	NOT FOUND			
25	S1#115	C330 2-CHLOROPHENOL	128		1	NOT FOUND			
26	S1#125	C335 1,3-DICHLOROBENZENE	146		1	NOT FOUND			
27	S1#130	C340 1,4-DICHLOROBENZENE	146		1	NOT FOUND			
28	S1#145	C345 BENZYL ALCOHOL	108	A VV	372	1	546.	0.854	0.970
29	S1#150	C350 1,2-DICHLOROBENZENE	146		1	NOT FOUND			
30	S1#160	C355 2-METHYLPHENOL	108	A BB	392	1	1048.	1.175	1.354
31	S1#165	C360 2,2'-OXYBIS(1-CLPRO	45		1	NOT FOUND			
32	S1#170	C361 ACETOPHENONE	105		1	NOT FOUND			
33	S1#175	N-NITROSOPYRROLIDINE	100		1	NOT FOUND			
34	S1#180	N-NITROSOMORPHOLINE	56		1	NOT FOUND			
35	S1#182	3-METHYL PHENOL	108		1	NOT FOUND			
36	S1#185	C365 4-METHYLPHENOL	108	A BB	418	1	1628.	1.276	1.936
37	S1#190	C370 N-NITROSO-DI-N-PROP	70	A BB	414	1	618.	0.906	1.035
38	S1#195	O-TOLUIDINE	106		1	NOT FOUND			
39	S1#200	C375 HEXACHLOROETHANE	117		1	NOT FOUND			
40	S2# 10	C410 NITROBENZENE	77	A BB	422	2	1481.	0.445	1.385
41	S2# 15	N-NITROSOPIPERIDINE	42		2	NOT FOUND			
42	S2# 20	C415 ISOPHORONE	82	A BB	473	2	4288.	0.741	2.407
43	S2# 25	C420 2-NITROPHENOL	139		2	NOT FOUND			
44	S2# 30	C425 2,4-DIMETHYLPHENOL	107	A BB	500	2	621.	0.330	0.784
45	S2# 35	C435 BIS(2-CHLOROETHOXY)	93		2	NOT FOUND			

46	S2#	40	C440	2,4-DICHLOROPHENOL	162	A	BB	520	2	306.	0.308	0.414
47	S2#	45	C430	BENZOIC ACID	122			2	NOT FOUND			
48	S2#	50	AA-DIMETHYLPHENETHYLAMIN		58			2	NOT FOUND			
49	S2#	55	C445	1,2,4-TRICHLOROBENZ	180			2	NOT FOUND			

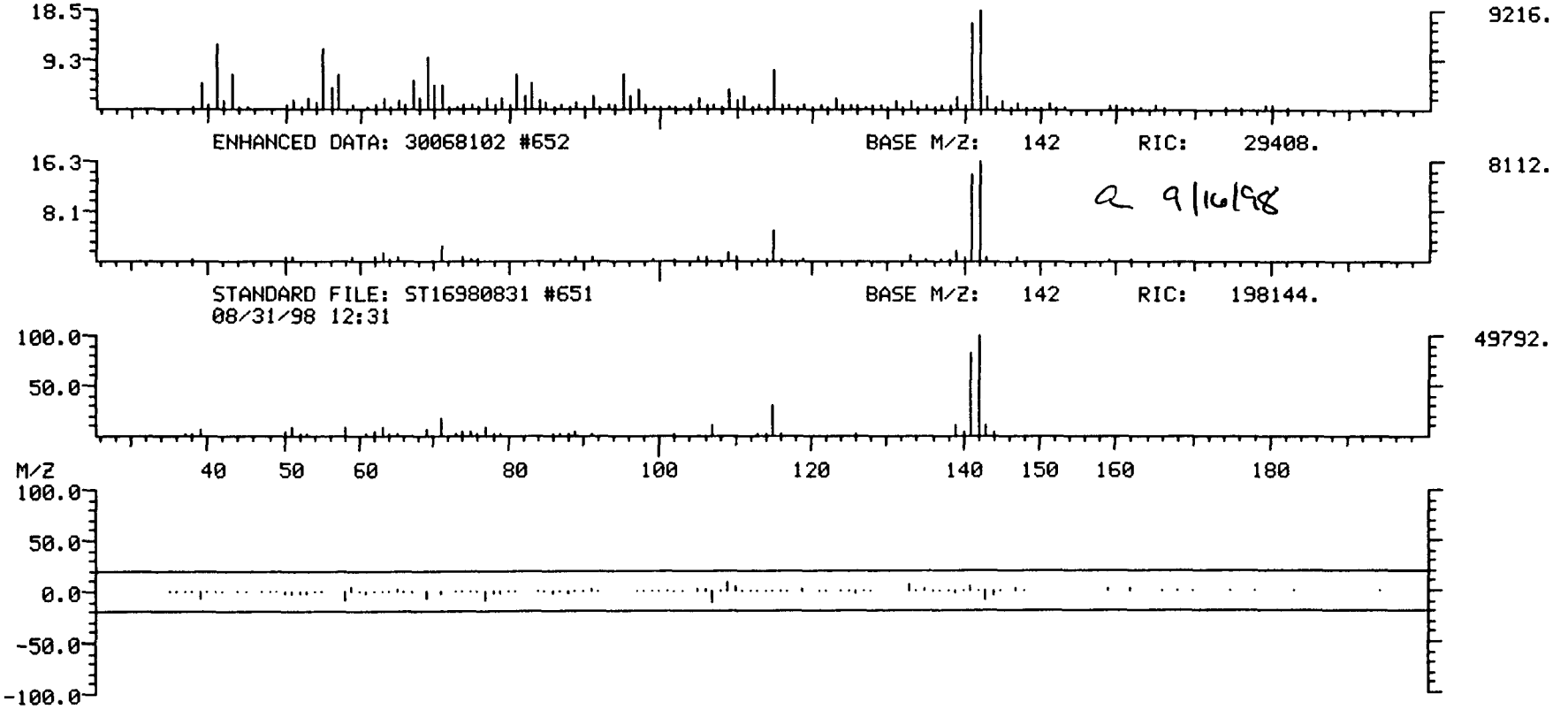
50	S2# 60	C450 NAPHTHALENE	128	A	BV	533	2	17654.	1.022	7.188
51	S2# 80	C455 4-CHLOROANALINE	127	A	BB	556	2	496.	0.454	0.455
52	S2# 85	2,6-DICHLOROPHENOL	162			2	NOT FOUND			
53	S2# 90	HEXACHLOROPROPENE	213			2	NOT FOUND			
54	S2# 95	C460 HEXACHLOROBUTADIENE	225			2	NOT FOUND			
55	S2#115	P-PHENYLENE DIAMINE	108			2	NOT FOUND			
56	S2#120	N-NITROSODI-N-BUTYLAMINE	84			2	NOT FOUND			
57	S2#130	C465 4-CHLORO-3-METHYLPH	107			2	NOT FOUND			
58	S2#140	SAFROLE	162	A	BB	648	2	1275.	0.248	2.142
59	S2#145	C470 2-METHYLNAPHTHALENE	142	A	BB	652	2	28264.	0.751	15.658
60	S3# 10	1,2,4,5-TETRACHLOROBENZE	214			3	NOT FOUND			
61	S3# 15	ISOSAFROLE (#1)	162			3	NOT FOUND			
62	S3# 20	C510 HEXACHLOROCYCLOPENT	237			3	NOT FOUND			
63	S3# 25	C515 2,4,6-TRICHLOROPHEN	196			3	NOT FOUND			
64	S3# 30	C520 2,4,5-TRICHLOROPHEN	196			3	NOT FOUND			
65	S3# 35	ISOSAFROLE (#2)	104	A	BB	738	3	390.	0.195	1.482
66	S3# 40	C525 2-CHLORONAPHTHALENE	162			3	NOT FOUND			
67	S3# 42	1-CHLORONAPHTHALEN	162			3	NOT FOUND			
68	S3# 45	C530 2-NITROANALINE	65	A	BB	764	3	655.	0.502	0.965
69	S3# 50	1,4-NAPHTHOQUINONE	158			3	NOT FOUND			
70	S3# 55	C535 DIMETHYLPHTHALATE	163			3	NOT FOUND			
71	S3# 60	1,3-DINITROBENZENE	168	A	BB	807	3	258.	0.197	0.966
72	S3# 65	C540 ACENAPHTHYLENE	152	A	BB	808	3	622.	1.838	0.250
73	S3# 70	C543 2,6-DINITROTOLUENE	165	A	BB	817	3	391.	0.324	0.892
74	S3# 75	C545 3-NITROANILINE	138			3	NOT FOUND			
75	S3# 80	C550 ACENAPHTHENE	153	A	BV	835	3	1132.	1.159	0.722
76	S3# 85	C555 2,4-DINITROPHENOL	184	A	BV	860	3	308.	0.189	1.202
77	S3# 90	C565 DIBENZOFURAN	168	A	BB	867	3	1063.	1.669	0.471
78	S3# 95	C560 4-NITROPHENOL	109			3	NOT FOUND			
79	S3#100	PENTACHLOROBENZENE	250			3	NOT FOUND			
80	S3#105	C570 2,4-DINITROTOLUENE	165	A	BB	881	3	551.	0.397	1.025
81	S3#110	1-NAPHTHYLAMINE	143	A	BB	882	3	280.	0.837	0.247
82	S3#115	2-NAPHTHYLAMINE	143			3	NOT FOUND			
83	S3#120	2,3,4,6-TETRACHLOROPHENO	232			3	NOT FOUND			
84	S3#130	C580 DIETHYLPHTHALATE	149			3	NOT FOUND			
85	S3#135	C590 FLUORENE	166	A	BB	926	3	3536.	1.298	2.014
86	S3#140	C585 4-CHLOROPHENYL-PHEN	204			3	NOT FOUND			
87	S3#145	5-NITRO-O-TOLUIDINE	152	A	VB	942	3	1876.	0.356	3.899
88	S3#150	C595 4-NITROANALINE	138			3	NOT FOUND			
89	S4# 10	C610 4,6-DINITRO-2-METHY	198			4	NOT FOUND			
90	S4# 15	C615 N-NITROSODIPHENYLAM	169	A	BB	964	4	3648.	0.551	2.765
91	S4# 20	C620 AZOBENZENE	77			4	NOT FOUND			
92	S4# 25	SYM-TRINITROBENZENE	75	A	BV	1025	4	464.	0.162	1.198
93	S4# 30	C625 4-BROMOPHENYL-PHENY	248			4	NOT FOUND			
94	S4# 35	PHENACETIN	108			4	NOT FOUND			
95	S4# 37	DIALLATE	234			4	NOT FOUND			
96	S4# 40	C630 HEXACHLOROBENZENE	284			4	NOT FOUND			
97	S4# 45	4-AMINOBIPHENYL	169			4	NOT FOUND			
98	S4# 50	C635 PENTACHLOROPHENOL	266			4	NOT FOUND			
99	S4# 55	PRONAMIDE	173			4	NOT FOUND			
100	S4# 60	PENTACHLORONITROBENZENE	237	A	BB	1066	4	106.	0.080	0.551
101	S4# 65	C640 PHENANTHRENE	178	A	BB	1091	4	11034.	1.033	4.460
102	S4# 70	C645 ANTHRACENE	178			4	NOT FOUND			
103	S4# 75	2SECBUTYL-4,6-DINITROPHE	211			4	NOT FOUND			
104	S4# 80	C647 CARBAZOLE	167	A	BB	1149	4	538.	0.764	0.294
105	S4# 85	C650 DI-N-BUTYLPHTHALATE	149			4	NOT FOUND			
106	S4#100	4-NITROQUINOLINE-1-OXIDE	190			4	NOT FOUND			
107	S4#105	METHAPYRILENE	58			4	NOT FOUND			
108	S4#106	ISODRIN	193	A	BV	1267	4	201.	0.127	0.662
109	S4#110	C655 FLUORANTHENE	202			4	NOT FOUND			
110	S4#120	CHLOROBENZILATE	139			4	NOT FOUND			

111	S5#	10	C710 BENZIDINE	184		5	NOT FOUND					
112	S5#	15	C715 PYRENE	202	A BB	1335	5		1044.	1.323		0.550
113	S5#	20	ARAMITE (#1)	185		5	NOT FOUND					
114	S5#	25	ARAMITE (#2)	185		5	NOT FOUND					
115	S5#	30	P-DIMETHYLAMINOAZOBENZEN	120		5	NOT FOUND					
116	S5#	35	3,3'-DIMETHYLBENZIDINE	212		5	NOT FOUND					
117	S5#	37	KEPONE	272	A BB	1461	5		278.	0.082		2.364
118	S5#	40	C720 BUTYLBENZYLPHTHALAT	149		5	NOT FOUND					
119	S5#	45	2-ACETYLAMINOFLUORENE	181		5	NOT FOUND					
120	S5#	50	C730 BENZO(A)ANTHRACENE	228		5	NOT FOUND					
121	S5#	55	C725 3,3'-DICHLOROBENZID	252		5	NOT FOUND					
122	S5#	60	C740 CHRYSENE	228	A BB	1555	5		1337.	1.014		0.919
123	S5#	65	C745 BIS(2-ETHYLHEXYL)PH	149		5	NOT FOUND					
124	S5#	85	3-METHYLCHOLANTHRENE	268		5	NOT FOUND					
125	S6#	10	C760 DI-N-OCTYL PHTHALAT	149		6	NOT FOUND					
126	S6#	15	C765 BENZO(B)FLUORANTHEN	252		6	NOT FOUND					
127	S6#	20	7,12-DIMETHYLBENZANTHRAC	256		6	NOT FOUND					
128	S6#	25	C770 BENZO(K)FLUORANTHEN	252		6	NOT FOUND					
129	S6#	30	HEXACHLOROPHENE	196		6	NOT FOUND					
130	S6#	35	C775 BENZO(A)PYRENE	252		6	NOT FOUND					
131	S6#	55	C780 INDENO(1,2,3-CD)PYR	276		6	NOT FOUND					
132	S6#	60	C785 DIBENZ(A,H)ANTHRACE	278		6	NOT FOUND					
133	S6#	65	C790 BENZO(G,H,I)PERYLEN	276		6	NOT FOUND					

TARGET COMPOUND COMPARISON

COMPOUND: C470 2-METHYLNAPHTHALENE 142 S2#145 91-57-6

RAW DATA: 30068102 #652 BASE M/Z: 142 RIC: 114048.
08/31/98 19:31
SAMPLE: S-MM5-1B 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M



740

BNA, S LIBRARIES ANALYST: _____ DATE: _____

QUANTERRA Internal Standard Check

Standard Filename: ST16980831 Analyzed: 08/31/98 12:31

Standard	IS# 1 Area	%	RT	IS# 2 Area	%	RT	IS# 3 Area	%	RT
ST16980831	28649.		3.78	100432.		5.90	54347.		9.21
Upper Limit	57297.=+200		4.28	200864.=+200		6.40	108695.=+200		9.71
Lower Limit	14324.=+ 50		3.28	50216.=+ 50		5.40	27174.=+ 50		8.71
Filename									
1 30068102	26359.=	92	3.78	96109.=	95	5.90	54125.=	99	9.22

IS# 1 = CI30 1,4-DICHLOROBENZENE-D4
IS# 2 = CI40 NAPHTHALENE-D8
IS# 3 = CI50 ACENAPHTHENE-D10

* - indicates an I.S. is outside QC limit(s)

Standard	IS# 4 Area	%	RT	IS# 5 Area	%	RT	IS# 6 Area	%	RT
ST16980831	98520.		12.08	62289.		17.26	50750.		19.83
Upper Limit	197039.=+200		12.58	124578.=+200		17.76	101500.=+200		20.33
Lower Limit	49260.=+ 50		11.58	31145.=+ 50		16.76	25375.=+ 50		19.33
Filename									
1 30068102	95829.=	97	12.10	57388.=	92	17.26	44375.=	87	19.82

IS# 4 = CI60 PHENANTHRENE-D10
IS# 5 = CI70 CHRYSENE-D12
IS# 6 = CI75 PERYLENE-D12

* - indicates an I.S. is outside QC limit(s)

Data Reduced by: [signature] Date: 9/8/98 9:48 Data File: 30068102
Data Reviewed by: [signature] Date: 9/11/98

QUANTERRA GC/MS TIC REPORT (Part 1)

Sample: S-MM5-1B 1/3SA/100M INST. ID: F16
Analyst: DAT Date Analyzed: 08/31/98 19:31
Run Factor: 300.

#	SCAN	Concentration in Sample (UG/A)	CAS #	
1	444	7800.	~~62108-23-0~~	57 46400
	~~DECANE, 2,5,6-TRIMETHYL-~~			alkane
~~2~~	473	7100.	~~74962-98-4~~	
	~~2-TRIDECEN-1-OL, (E)-~~			unknown 5700
3	556	7800.	112-40-3	
	DODECANE			or isomer
~~4~~	570	6700.	17301-23-4	
	UNDECANE, 2,6-DIMETHYL-			
5	617	15000.	00-00-0	5800
	UNKNOWN			
6	633	17000.	~~50871-03-9~~	57904300
	~~1-DECENE, 3,4-DIMETHYL-~~			unkn. hydrocarbon
7	654	10000.	34303-81-6	
	3-HEXADECENE, (Z)-			or isomer
8	663	11000.	1120-21-4	
	UNDECANE			
~~9~~	678	7400.	00-00-0	5700
	UNKNOWN			
10	738	20000.	~~54105-67-8~~	5746400
	~~HEPTADECANE, 2,6-DIMETHYL-~~			alkane

750

11 764 26000. ~~62108-21-8~~
~~DECANE, 6-ETHYL-2-METHYL-~~ alkane 5746400

12 777 14000. 00-00-0
UNKNOWN 5700

13 820 22000. 18344-37-1
HEPTADECANE, 2,6,10,14-TETRAMETHYL- or isomer

14 858 22000. 17312-57-1
DODECANE, 3-METHYL-

15 904 9900. ~~52783-43-4~~
~~NONADECANOL~~ alkane 5746400

16 948 26000. 629-92-5
NONADECANE Or Isomer

17 988 18000. 629-92-5
NONADECANE

18 1036 40000. 54105-67-8
HEPTADECANE, 2,6-DIMETHYL-

~~19~~ 1054 7000. 7206-19-1
3-OCTADECENE, (E)-

20 1114 12000. ~~29812-79-1~~
~~HYDROXYLAMINE, O-DECYL-~~ alkane 5646400

21 1119 17000. 629-92-5
NONADECANE Or Isomer

22 1191 8100. 629-92-5
NONADECANE

~~23~~ 1265 6900. ~~54105-67-8~~

~~HEPTADECANE, 2,6-DIMETHYL-~~ alkane

24 1335 9800.

~~2-METHYLOCTADECANE~~ ~~Or is~~ nonadecane or isomer

< 9/18/98

25 1402 7800. 629-92-5

NONADECANE

DATA FILE: 30068102

QUANTERRA GC/MS TIC REPORT (Part 2)

CONCENTRATION = AREA(TIC)*CONC(IS)/AREA(IS)

#	FIT	PURITY	INT. STD.	RT	RRT	AREA	HEIGHT	AMOUNT AS ANALYZED (UG/ML)	LIB	LIB #
1	941	658	2	4:56	0.536	197944.	59360.	26.115	NB	19015.
2	874	669	2	5:15	0.571	180512.	46417.	23.815	NB	22482.
3	943	842	2	6:11	0.671	196010.	69931.	25.860	NB	15343.
4	972	853	2	6:20	0.688	168832.	54235.	22.274	NB	19054.
5	901	595	2	6:51	0.744	367872.	39360.	48.534	UK	1.
6	948	721	2	7:02	0.764	429472.	115616.	56.661	NB	14799.
7	930	700	2	7:16	0.789	262912.	45696.	34.687	NB	28768.
8	960	846	2	7:22	0.800	268288.	94208.	35.396	NB	11607.
9	944	401	2	7:32	0.818	186752.	43392.	24.639	UK	1.
10	950	826	2	8:12	0.890	495104.	127744.	65.320	NB	37462.
11	953	716	2	8:29	0.922	666007.	189300.	87.868	NB	19006.
12	911	347	2	8:38	0.937	363392.	50048.	47.943	UK	1.
13	972	826	2	9:07	0.989	552366.	122822.	72.875	NB	42196.
14	964	773	2	9:32	1.035	565839.	173725.	74.652	NB	19007.
15	938	661	2	10:03	1.090	250112.	56832.	32.998	NB	40233.
16	958	847	2	10:32	1.144	648704.	177408.	85.585	NB	37465.
17	943	830	3	10:59	0.908	500650.	128483.	58.597	NB	37465.
18	970	865	3	11:31	0.952	1137280.	201472.	133.109	NB	37462.
19	906	703	3	11:43	0.969	200704.	46336.	23.491	NB	34410.
20	957	799	3	12:23	1.024	336000.	104960.	39.326	NB	15969.
21	964	842	3	12:26	1.028	471552.	141056.	55.191	NB	37465.
22	971	792	3	13:14	1.095	231936.	77312.	27.146	NB	37465.
23	924	763	3	14:04	1.163	195456.	57749.	22.876	NB	37462.
24	933	740	4	14:50	0.860	167008.	42891.	32.701	NB	37456.
25	965	690	4	15:35	0.903	132416.	30848.	25.927	NB	37465.

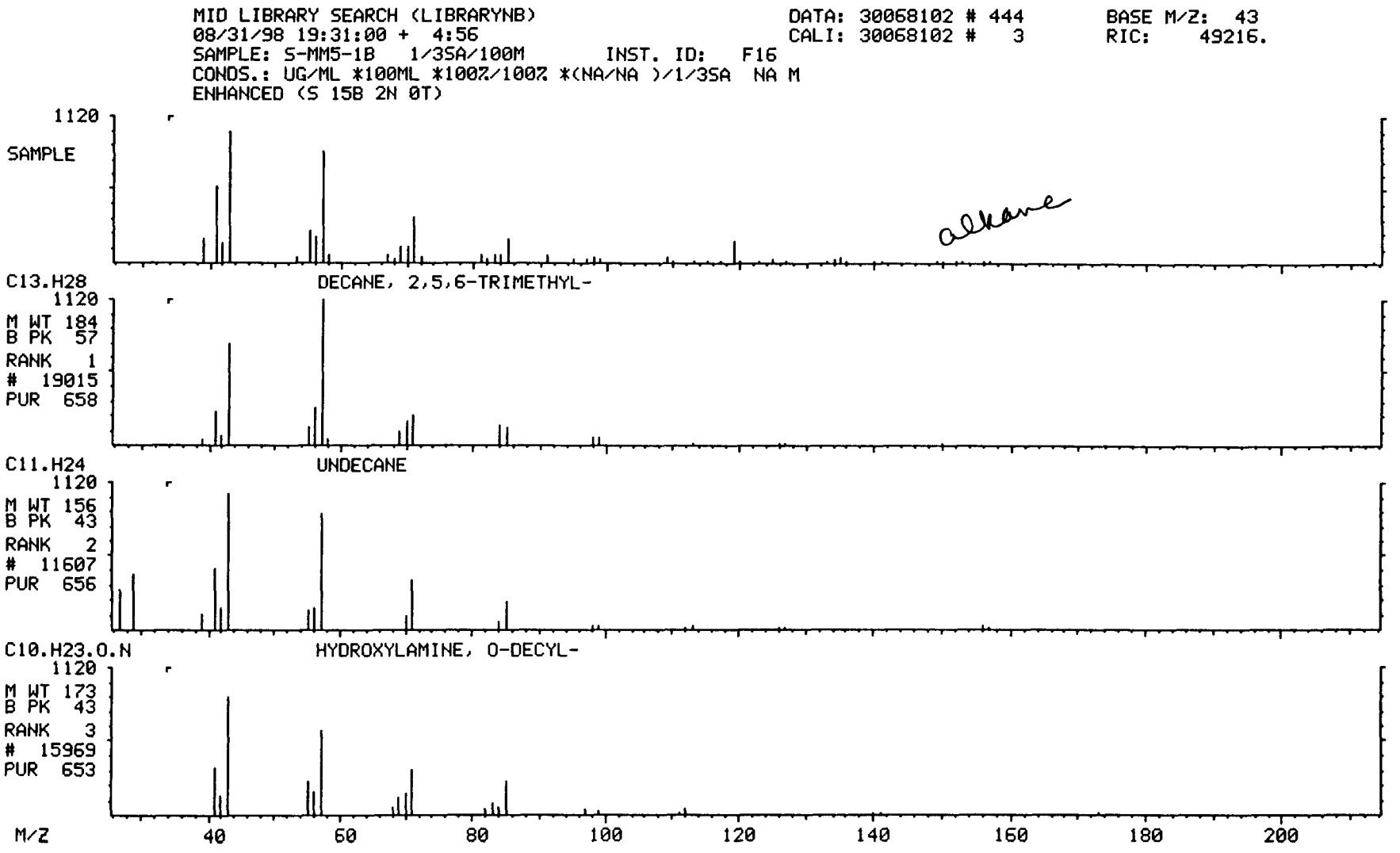
Library Search Data: 30068102 # 444 Base m/z: 43
08/31/98 19:31:00 + 4:56 Cali: 30068102 # 3 RIC: 49216.
Sample: S-MM5-1B 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
897 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	19015	DECANE, 2,5,6-TRIMETHYL-
2	11607	UNDECANE
3	15969	HYDROXYLAMINE, O-DECYL-
4	19523	1-DECANOL, 2-ETHYL-
5	11602	OCTANE, 2,4,6-TRIMETHYL-
6	14793	1-UNDECENE, 4-METHYL-
7	8104	OCTANE, 3,5-DIMETHYL-
8	5151	HEPTANE, 3,4-DIMETHYL-
9	12074	1-HEPTANOL, 2-PROPYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C13.H28	184	57	658	941	660
2	C11.H24	156	43	656	979	664
3	C10.H23.O.N	173	43	653	948	675
4	C12.H26.O	186	57	641	915	670
5	C11.H24	156	57	638	949	638
6	C12.H24	168	43	638	915	672
7	C10.H22	142	57	637	932	649
8	C9.H20	128	43	632	920	634
9	C10.H22.O	158	43	629	922	648

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	62108-23-0
2	---	---	---	---	1120-21-4
3	---	---	---	---	29812-79-1
4	---	---	---	---	21078-65-9
5	---	---	---	---	62016-37-9
6	---	---	---	---	74630-39-0
7	---	---	---	---	15869-93-9
8	---	---	---	---	922-28-1
9	---	---	---	---	10042-59-8


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:31:00 + 4:56
SAMPLE: S-MM5-1B 1/35A/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068102 # 444
CALI: 30068102 # 3
BASE M/Z: 43
RIC: 49216.
1120
SAMPLE
alkane
C13.H28
DECANE, 2,5,6-TRIMETHYL-
M WT 184
B PK 57
RANK 1
19015
PUR 658
C11.H24
UNDECANE
M WT 156
B PK 43
RANK 2
11607
PUR 656
C10.H23.O.N
HYDROXYLAMINE, O-DECYL-
M WT 173
B PK 43
RANK 3
15969
PUR 653
M/Z
40
60
80
100
120
140
160
180
200

C11

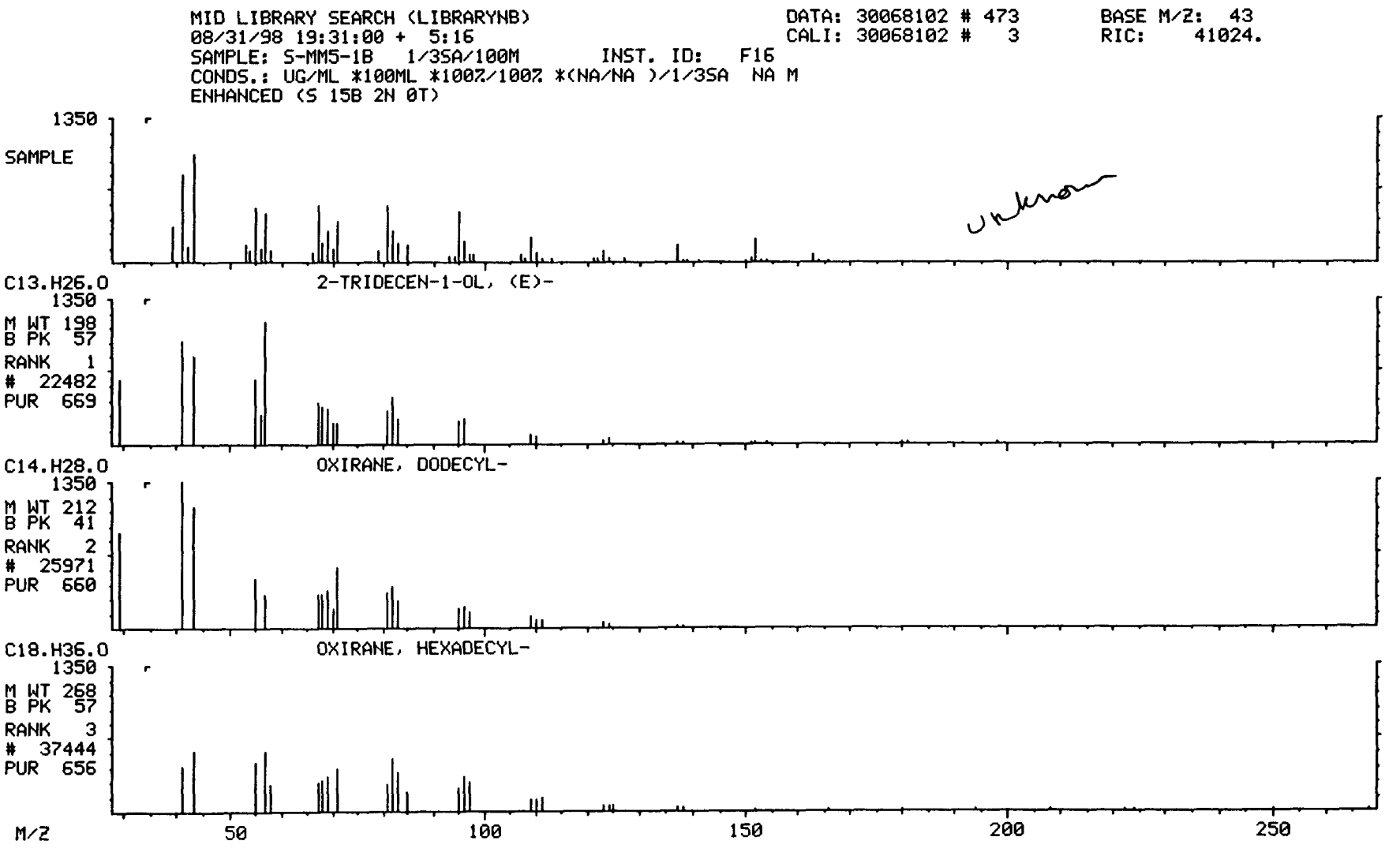
Library Search Data: 30068102 # 473 Base m/z: 43
08/31/98 19:31:00 + 5:16 Cali: 30068102 # 3 RIC: 41024.
Sample: S-MM5-1B 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
459 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	22482	2-TRIDECEN-1-OL, (E)-
2	25971	OXIRANE, DODECYL-
3	37444	OXIRANE, HEXADECYL-
4	34800	(R)-(-)-(Z)-14-METHYL-8-HEXADECEN-1-OL
5	39230	9-EICOSYNE
6	37449	OCTADECANAL
7	29222	(Z)6-PENTADECEN-1-OL
8	39224	1-EICOSYNE
9	29226	PENTADECANAL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C13.H26.O	198	57	669	874	675
2	C14.H28.O	212	41	660	933	660
3	C18.H36.O	268	57	656	845	679
4	C17.H34.O	254	55	651	852	661
5	C20.H38	278	81	649	902	666
6	C18.H36.O	268	43	642	843	685
7	C15.H30.O	226	67	624	867	642
8	C20.H38	278	82	622	841	648
9	C15.H30.O	226	82	606	890	606

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	74962-98-4
2	—	—	—	—	3234-28-4
3	—	—	—	—	7390-81-0
4	—	—	—	—	30689-78-2
5	—	—	—	—	71899-38-2
6	—	—	—	—	638-66-4
7	—	—	—	—	68797-95-5
8	—	—	—	—	765-27-5
9	—	—	—	—	2765-11-9


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:31:00 + 5:16
SAMPLE: S-MM5-1B 1/3SA/100M
INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068102 # 473
CALI: 30068102 # 3
BASE M/Z: 43
RIC: 41024.
1350
SAMPLE
Unknown
C13.H26.O
2-TRIDECEN-1-OL, (E)-
M WT 198
B PK 57
RANK 1
22482
PUR 669
C14.H28.O
OXIRANE, DODECYL-
M WT 212
B PK 41
RANK 2
25971
PUR 660
C18.H36.O
OXIRANE, HEXADECYL-
M WT 268
B PK 57
RANK 3
37444
PUR 656
M/Z
50
100
150
200
250

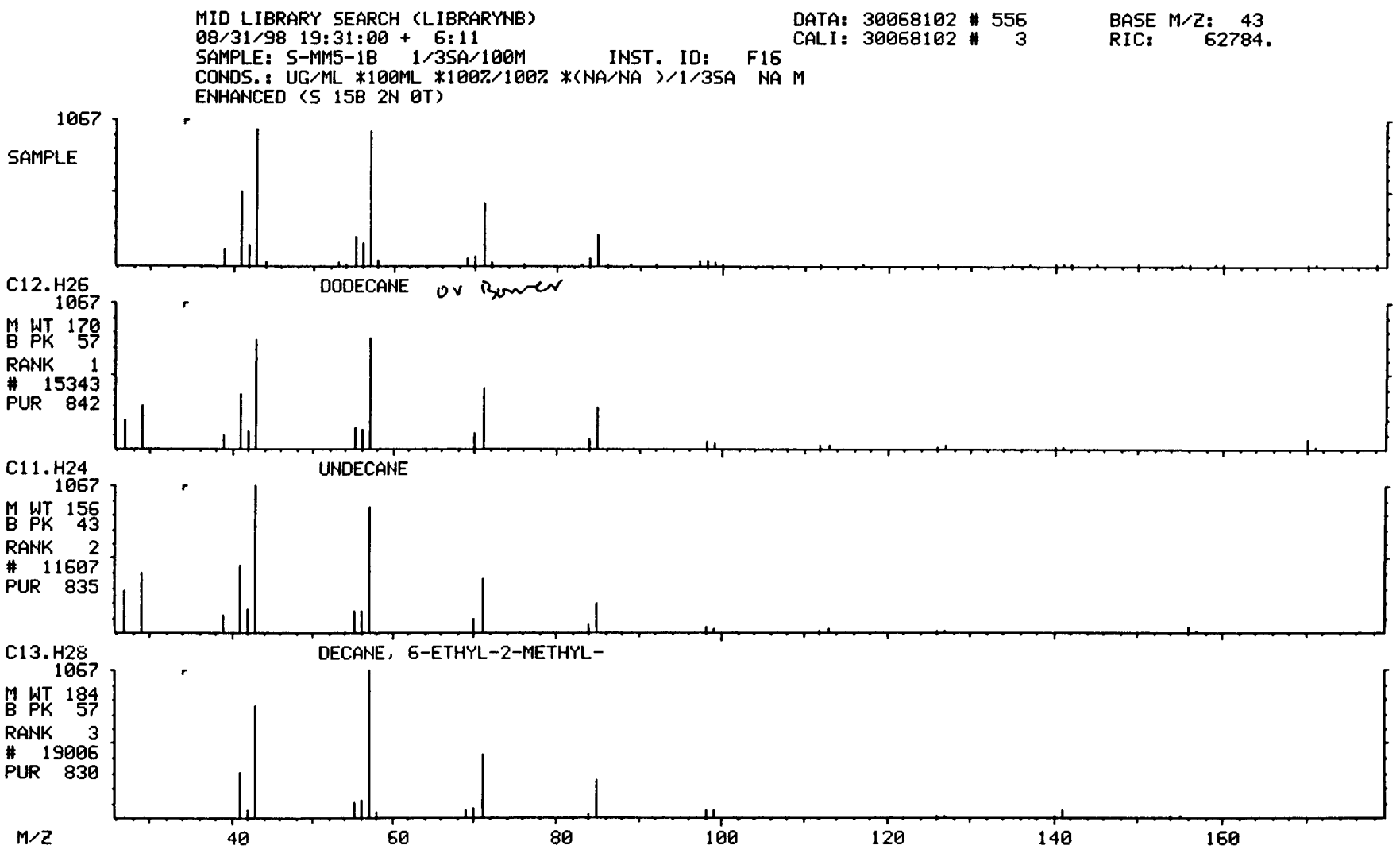
Library Search Data: 30068102 # 556 Base m/z: 43
08/31/98 19:31:00 + 6:11 Cali: 30068102 # 3 RIC: 62784.
Sample: S-MM5-1B 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
990 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	15343	DODECANE
2	11607	UNDECANE
3	19006	DECANE, 6-ETHYL-2-METHYL-
4	11602	OCTANE, 2,4,6-TRIMETHYL-
5	19016	UNDECANE, 4,7-DIMETHYL-
6	19015	DECANE, 2,5,6-TRIMETHYL-
7	19028	DECANE, 2,4,6-TRIMETHYL-
8	22530	TETRADECANE
9	15359	UNDECANE, 5-METHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C12.H26	170	57	842	943	868
2	C11.H24	156	43	835	955	856
3	C13.H28	184	57	830	945	842
4	C11.H24	156	57	825	957	836
5	C13.H28	184	43	819	933	845
6	C13.H28	184	57	817	917	833
7	C13.H28	184	43	812	916	852
8	C14.H30	198	43	810	904	883
9	C12.H26	170	43	808	929	829

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	112-40-3
2	—	—	—	—	1120-21-4
3	—	—	—	—	62108-21-8
4	—	—	—	—	62016-37-9
5	—	—	—	—	17301-32-5
6	—	—	—	—	62108-23-0
7	—	—	—	—	62108-27-4
8	—	—	—	—	629-59-4
9	—	—	—	—	1632-70-8


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:31:00 + 6:11
SAMPLE: S-MM5-1B 1/35A/100M
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068102 # 556
CALI: 30068102 # 3
BASE M/Z: 43
RIC: 62784.
INST. ID: F16
1067
SAMPLE
C12.H26
DODECANE
M WT 170
B PK 57
RANK 1
15343
PUR 842
C11.H24
UNDECANE
M WT 156
B PK 43
RANK 2
11607
PUR 835
C13.H28
DECANE, 6-ETHYL-2-METHYL-
M WT 184
B PK 57
RANK 3
19006
PUR 830
M/Z
40
60
80
100
120
140
160

Library Search Data: 30068102 # 570 Base m/z: 57
08/31/98 19:31:00 + 6:20 Cali: 30068102 # 3 RIC: 47680.
Sample: S-MM5-1B 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
876 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	19054	UNDECANE, 2,6-DIMETHYL-
2	19013	DECANE, 2,5,9-TRIMETHYL-
3	19052	UNDECANE, 2,5-DIMETHYL-
4	19002	DODECANE, 6-METHYL-
5	19026	DECANE, 2,6,8-TRIMETHYL-
6	8104	OCTANE, 3,5-DIMETHYL-
7	18996	UNDECANE, 3,6-DIMETHYL-
8	19015	DECANE, 2,5,6-TRIMETHYL-
9	8071	NONANE, 3-METHYL-

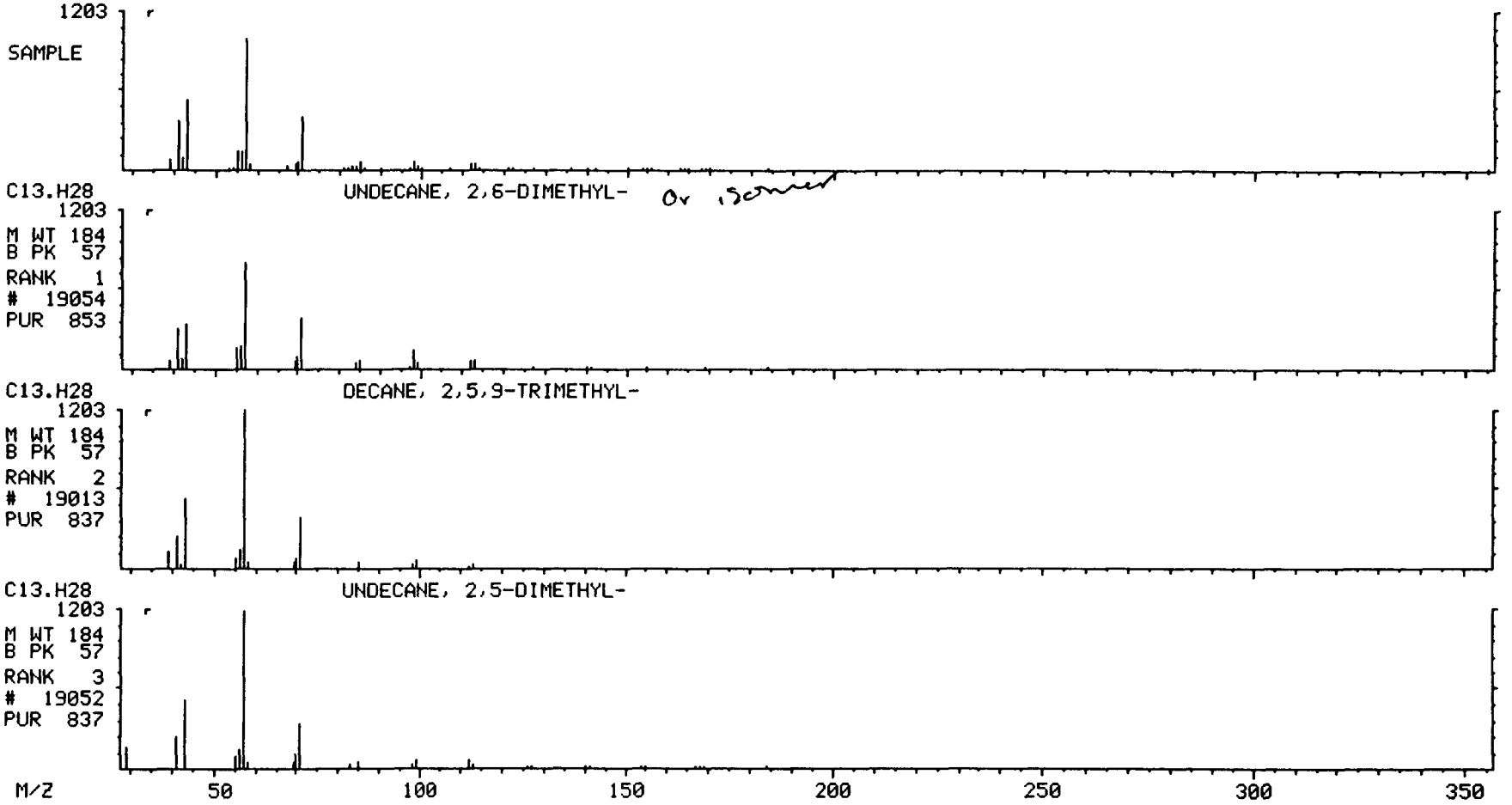
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C13.H28	184	57	853	972	859
2	C13.H28	184	57	837	977	837
3	C13.H28	184	57	837	972	842
4	C13.H28	184	57	834	971	839
5	C13.H28	184	57	833	969	838
6	C10.H22	142	57	820	959	820
7	C13.H28	184	57	815	968	817
8	C13.H28	184	57	796	935	798
9	C10.H22	142	57	793	979	793

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	17301-23-4
2	—	—	—	—	62108-22-9
3	—	—	—	—	17301-22-3
4	—	—	—	—	6044-71-9
5	—	—	—	—	62108-26-3
6	—	—	—	—	15869-93-9
7	—	—	—	—	17301-28-9
8	—	—	—	—	62108-23-0
9	—	—	—	—	5911-04-6

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:31:00 + 6:20
SAMPLE: S-MM5-1B 1/35A/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068102 # 570
CALI: 30068102 # 3

BASE M/Z: 57
RIC: 47680.



191

Library Search Data: 30068102 # 617 Base m/z: 41
08/31/98 19:31:00 + 6:52 Cali: 30068102 # 3 RIC: 34752.
Sample: S-MM5-1B 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
207 matched at least 7 of the 16 largest peaks in the unknown

Rank In. Name
1 24994 1,1'-BICYCLOHEXYL, 2-(1-METHYLETHYL)-, TRANS-
2 33979 BORINIC ACID, DIETHYL-, 1-CYCLODODECEN-1-YL ESTER
3 24993 1,1'-BICYCLOHEXYL, 2-(1-METHYLETHYL)-, CIS-
4 40193 CIS-9,10-EPOXYOCTADECAN-1-OL
5 39227 NAPHTHALENE, DECAHYDRO-2,6-DIMETHYL-3-OCTYL-
6 31486 ACETAMIDE, N-METHYL-N-[4-[4-METHOXY-1-HEXAHYDROPYRIDYL]-2-BUTYNYL]-
7 24990 MUUROLANE-B
8 39519 CYCLOHEXANE, 1-(1,5-DIMETHYLHEXYL)-4-(4-METHYLPENTYL)-
9 24987 AMORPHANE-A

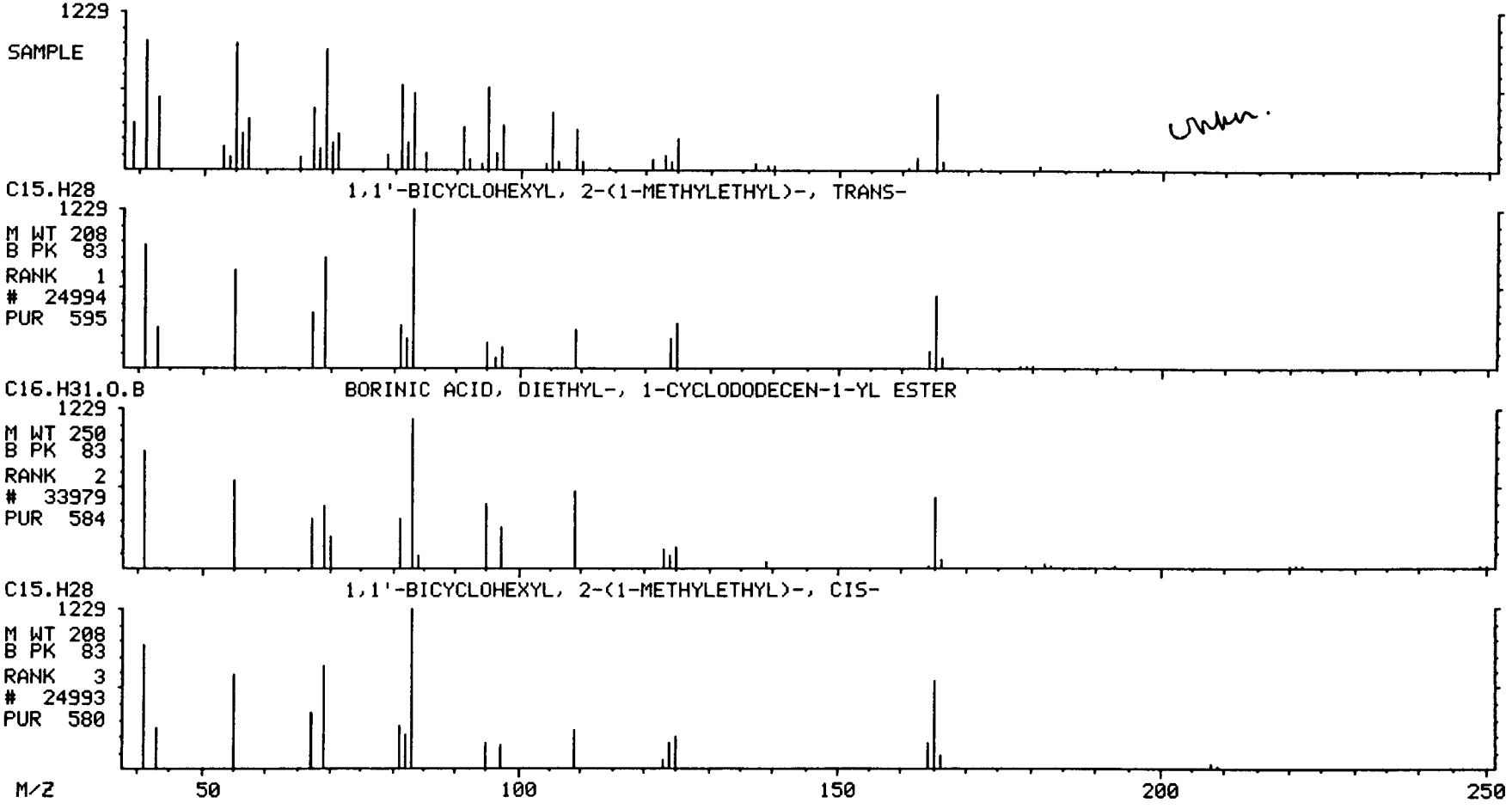
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C15.H28	208	83	595	901	619
2	C16.H31.O.B	250	83	584	913	612
3	C15.H28	208	83	580	877	621
4	C18.H36.O2	284	55	530	912	555
5	C20.H38	278	109	521	806	586
6	C13.H22.O2.N2	238	43	519	736	597
7	C15.H28	208	109	516	817	566
8	C20.H40	280	43	515	737	619
9	C15.H28	208	109	512	811	539

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	50991-16-7
2	---	---	---	---	61142-73-2
3	---	---	---	---	50991-15-6
4	---	---	---	---	13980-12-6
5	---	---	---	---	54964-85-1
6	---	---	---	---	- -
7	---	---	---	---	- -
8	---	---	---	---	56009-20-2
9	---	---	---	---	- -

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:31:00 + 6:52
SAMPLE: S-MM5-1B 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068102 # 617
CALI: 30068102 # 3

BASE M/Z: 41
RIC: 34752.



C7

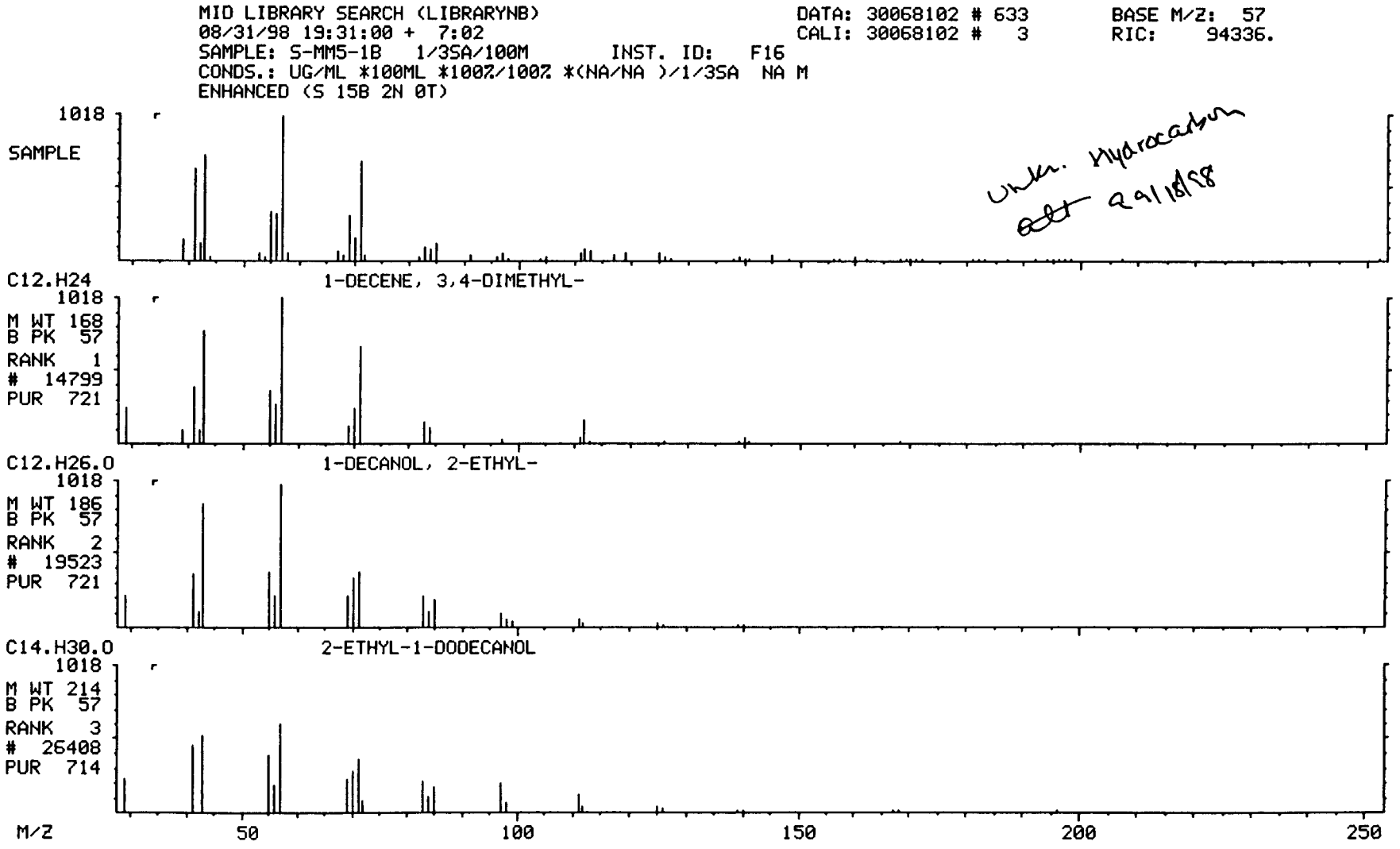
Library Search Data: 30068102 # 633 Base m/z: 57
08/31/98 19:31:00 + 7:02 Cali: 30068102 # 3 RIC: 94336.
Sample: S-MM5-1B 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
735 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	14799	1-DECENE, 3,4-DIMETHYL-
2	19523	1-DECANOL, 2-ETHYL-
3	26408	2-ETHYL-1-DODECANOL
4	37462	HEPTADECANE, 2,6-DIMETHYL-
5	26409	2-HEXYL-1-OCTANOL
6	32418	2-HEXYL-1-DECANOL
7	22534	TRIDECANE, 7-METHYL-
8	14751	2-UNDECENE, 5-METHYL-
9	8539	1-PENTANOL, 4-METHYL-2-PROPYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C12.H24	168	57	721	948	721
2	C12.H26.O	186	57	721	936	731
3	C14.H30.O	214	57	714	919	719
4	C19.H40	268	57	713	920	743
5	C14.H30.O	214	57	712	921	726
6	C16.H34.O	242	57	706	915	719
7	C14.H30	198	57	704	910	714
8	C12.H24	168	57	700	960	700
9	C9.H20.O	144	57	699	982	699

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	50871-03-9
2	---	---	---	---	21078-65-9
3	---	---	---	---	- -
4	---	---	---	---	54105-67-8
5	---	---	---	---	- -
6	---	---	---	---	- -
7	---	---	---	---	26730-14-3
8	---	---	---	---	56851-34-4
9	---	---	---	---	54004-41-0


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:31:00 + 7:02
SAMPLE: S-MM5-1B 1/35A/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068102 # 633
CALI: 30068102 # 3
BASE M/Z: 57
RIC: 94336.
1018
SAMPLE
Unkn. Hydrocarbon
9/18/98
C12.H24
1-DECENE, 3,4-DIMETHYL-
1018
M WT 168
B PK 57
RANK 1
14799
PUR 721
C12.H26.O
1-DECANOL, 2-ETHYL-
1018
M WT 186
B PK 57
RANK 2
19523
PUR 721
C14.H30.O
2-ETHYL-1-DODECANOL
1018
M WT 214
B PK 57
RANK 3
26408
PUR 714
M/Z
50
100
150
200
250

C9L

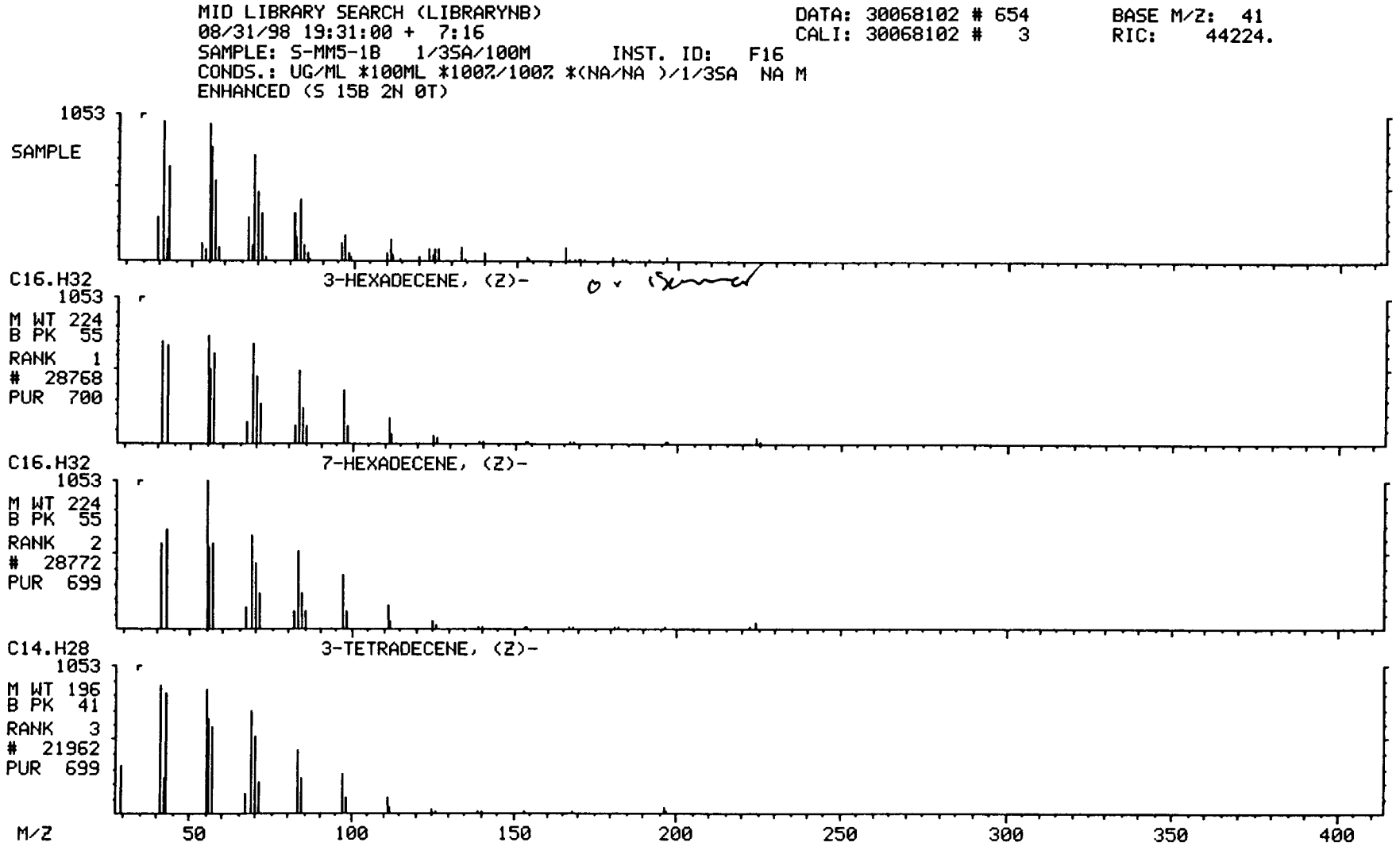
Library Search Data: 30068102 # 654 Base m/z: 41
08/31/98 19:31:00 + 7:16 Cali: 30068102 # 3 RIC: 44224.
Sample: S-MM5-1B 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
687 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	28768	3-HEXADECENE, (Z)-
2	28772	7-HEXADECENE, (Z)-
3	21962	3-TETRADECENE, (Z)-
4	21963	3-TETRADECENE, (E)-
5	34410	3-OCTADECENE, (E)-
6	32420	1-HEXADECANOL
7	34411	5-OCTADECENE, (E)-
8	21973	7-TETRADECENE, (Z)-
9	19526	1-DODECANOL

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C16.H32	224	55	700	930	721
2	C16.H32	224	55	699	929	719
3	C14.H28	196	41	699	956	702
4	C14.H28	196	41	697	953	702
5	C18.H36	252	69	696	914	716
6	C16.H34.O	242	55	696	927	703
7	C18.H36	252	55	695	924	715
8	C14.H28	196	55	694	949	696
9	C12.H26.O	186	43	693	962	693

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	34303-81-6
2	---	---	---	---	35507-09-6
3	---	---	---	---	41446-67-7
4	---	---	---	---	41446-68-8
5	---	---	---	---	7206-19-1
6	---	---	---	---	36653-82-4
7	---	---	---	---	7206-21-5
8	---	---	---	---	41446-60-0
9	---	---	---	---	112-53-8


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:31:00 + 7:16
SAMPLE: S-MM5-1B 1/35A/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068102 # 654
CALI: 30068102 # 3
BASE M/Z: 41
RIC: 44224.
1053
SAMPLE
C16.H32
3-HEXADECENE, (Z)-
1053
M WT 224
B PK 55
RANK 1
28768
PUR 700
C16.H32
7-HEXADECENE, (Z)-
1053
M WT 224
B PK 55
RANK 2
28772
PUR 699
C14.H28
3-TETRADECENE, (Z)-
1053
M WT 196
B PK 41
RANK 3
21962
PUR 699
M/Z
50
100
150
200
250
300
350
400

137

Library Search Data: 30068102 # 663 Base m/z: 57
08/31/98 19:31:00 + 7:22 Cali: 30068102 # 3 RIC: 86528.
Sample: S-MM5-1B 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
787 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	11607	UNDECANE
2	19013	DECANE, 2,5,9-TRIMETHYL-
3	8104	OCTANE, 3,5-DIMETHYL-
4	5159	NONANE
5	11602	OCTANE, 2,4,6-TRIMETHYL-
6	8073	DECANE
7	15356	DECANE, 2,4-DIMETHYL-
8	19016	UNDECANE, 4,7-DIMETHYL-
9	19026	DECANE, 2,6,8-TRIMETHYL-

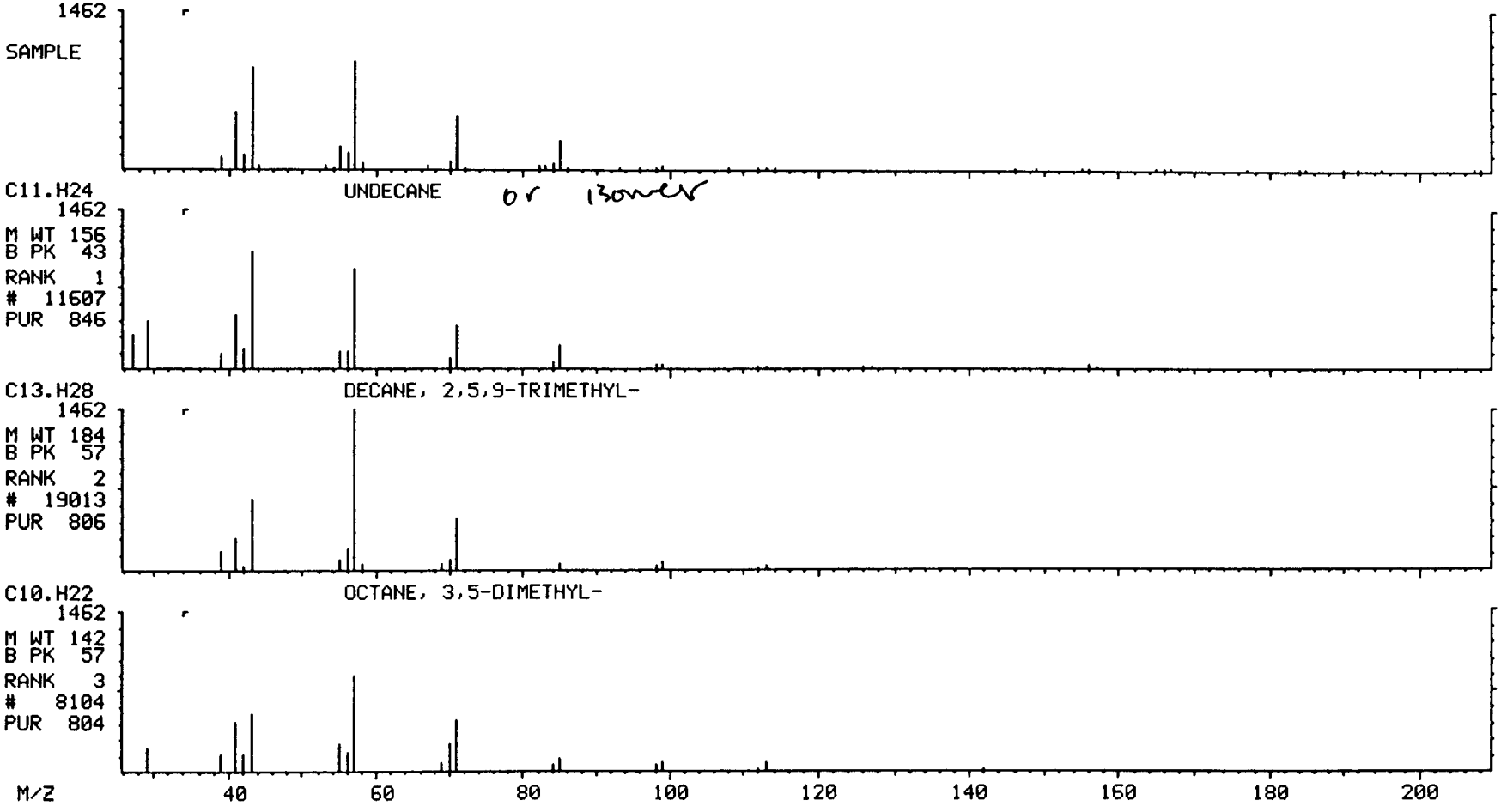
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C11.H24	156	43	846	960	858
2	C13.H28	184	57	806	921	820
3	C10.H22	142	57	804	913	832
4	C9.H20	128	43	803	929	842
5	C11.H24	156	57	799	938	831
6	C10.H22	142	43	797	922	850
7	C12.H26	170	43	794	930	823
8	C13.H28	184	43	793	904	846
9	C13.H28	184	57	792	907	826

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	1120-21-4
2	---	---	---	---	62108-22-9
3	---	---	---	---	15869-93-9
4	---	---	---	---	111-84-2
5	---	---	---	---	62016-37-9
6	---	---	---	---	124-18-5
7	---	---	---	---	2801-84-5
8	---	---	---	---	17301-32-5
9	---	---	---	---	62108-26-3

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:31:00 + 7:22
SAMPLE: S-MM5-1B 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068102 # 663
CALI: 30068102 # 3

BASE M/Z: 57
RIC: 86528.



S37

Library Search Data: 30068102 # 678 Base m/z: 57
08/31/98 19:31:00 + 7:32 Cali: 30068102 # 3 RIC: 45056.
Sample: S-MM5-1B 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
672 matched at least 6 of the 16 largest peaks in the unknown

Rank	In.	Name
1	5159	NONANE
2	12534	NAPHTHALENE, 1,2,3,4-TETRAHYDRO-2,6-DIMETHYL-
3	37251	1-IODO-2-METHYLNONANE
4	11597	NONANE, 3,7-DIMETHYL-
5	11602	OCTANE, 2,4,6-TRIMETHYL-
6	8089	NONANE, 2-METHYL-
7	15343	DODECANE
8	11607	UNDECANE
9	5041	3-HEXANONE, 2,4-DIMETHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C9.H20	128	43	401	944	401
2	C12.H16	160	118	398	832	413
3	C10.H21.I	268	43	388	918	404
4	C11.H24	156	57	381	903	390
5	C11.H24	156	57	377	912	386
6	C10.H22	142	43	376	894	388
7	C12.H26	170	57	373	884	409
8	C11.H24	156	43	373	906	394
9	C8.H16.O	128	57	372	916	375

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	111-84-2
2	---	---	---	---	7524-63-2
3	---	---	---	---	- -
4	---	---	---	---	17302-32-8
5	---	---	---	---	62016-37-9
6	---	---	---	---	871-83-0
7	---	---	---	---	112-40-3
8	---	---	---	---	1120-21-4
9	---	---	---	---	18641-70-8

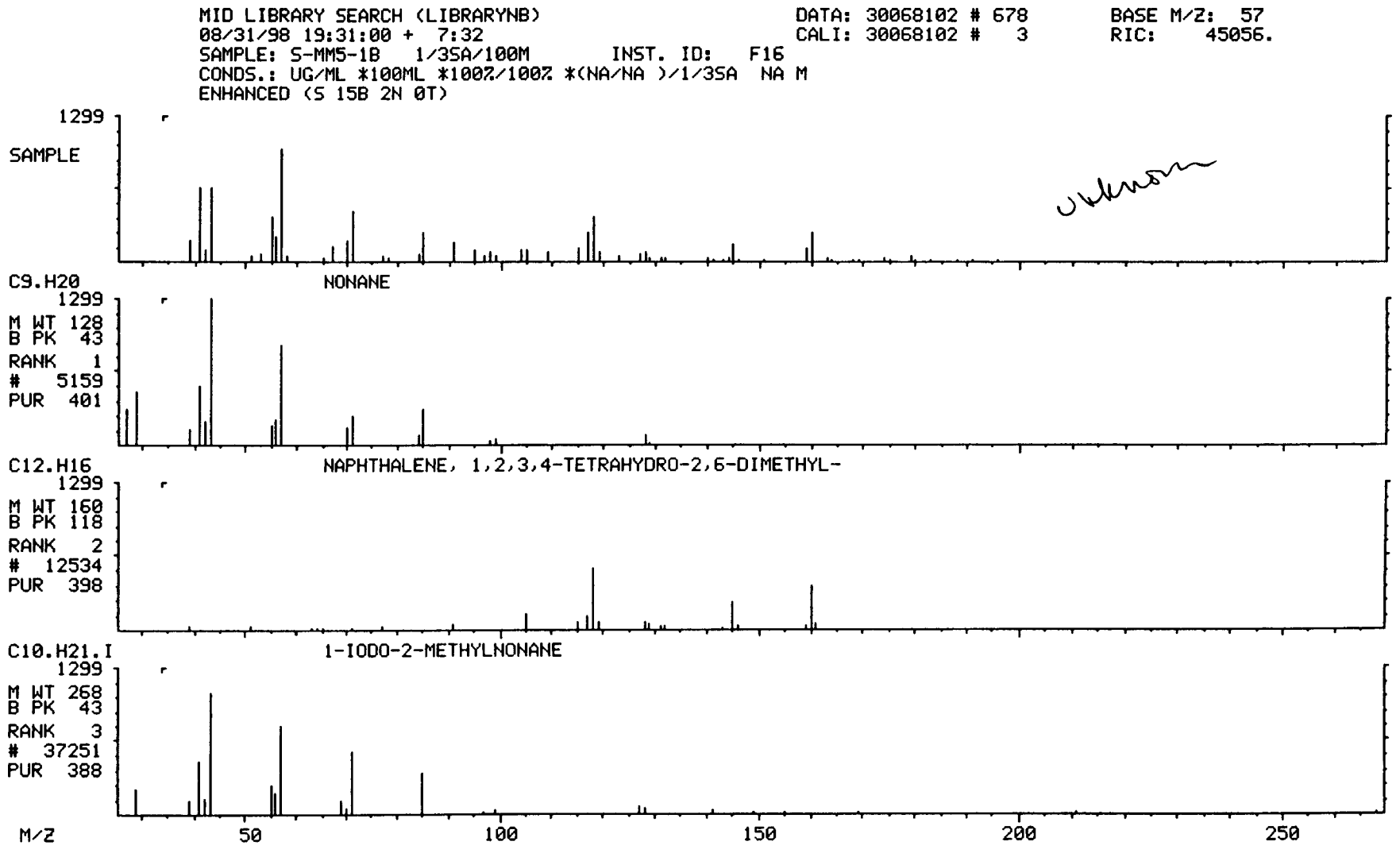

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:31:00 + 7:32
SAMPLE: S-MM5-1B 1/35A/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068102 # 678
CALI: 30068102 # 3
BASE M/Z: 57
RIC: 45056.
1299
SAMPLE
C9.H20
NONANE
1299
M WT 128
B PK 43
RANK 1
5159
PUR 401
C12.H16
NAPHTHALENE, 1,2,3,4-TETRAHYDRO-2,6-DIMETHYL-
1299
M WT 160
B PK 118
RANK 2
12534
PUR 398
C10.H21.I
1-IODO-2-METHYLNONANE
1299
M WT 268
B PK 43
RANK 3
37251
PUR 388
M/Z
50
100
150
200
250

FIG. 7A

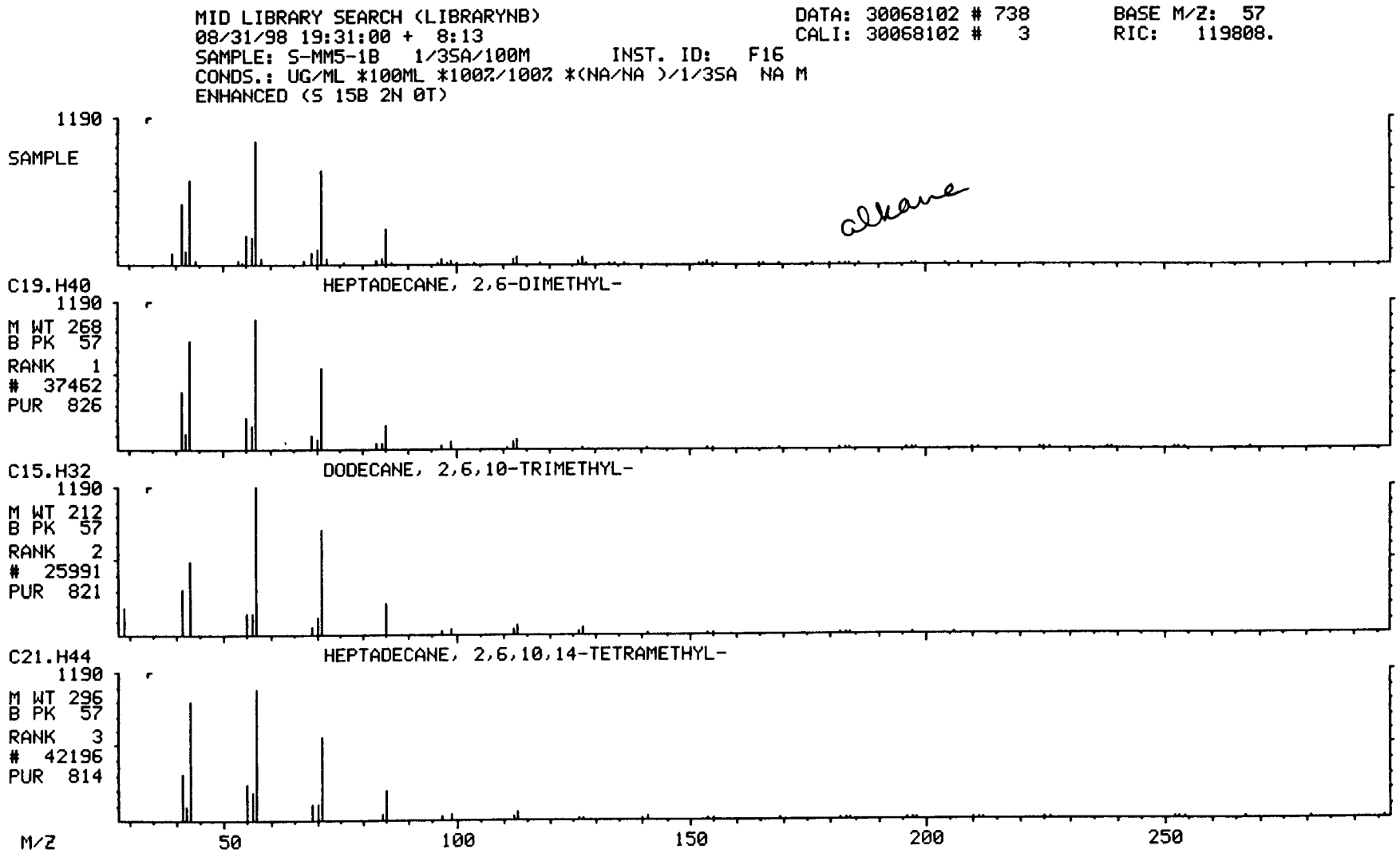
Library Search Data: 30068102 # 738 Base m/z: 57
08/31/98 19:31:00 + 8:13 Cali: 30068102 # 3 RIC: 119808.
Sample: S-MM5-1B 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
712 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37462	HEPTADECANE, 2,6-DIMETHYL-
2	25991	DODECANE, 2,6,10-TRIMETHYL-
3	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
4	22535	DODECANE, 4,6-DIMETHYL-
5	26001	DODECANE, 2,7,10-TRIMETHYL-
6	25997	PENTADECANE
7	25994	DODECANE, 2,6,11-TRIMETHYL-
8	18998	UNDECANE, 3,7-DIMETHYL-
9	15352	UNDECANE, 2-METHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	826	950	847
2	C15.H32	212	57	821	975	826
3	C21.H44	296	57	814	933	851
4	C14.H30	198	57	812	956	816
5	C15.H32	212	57	806	979	815
6	C15.H32	212	57	798	934	822
7	C15.H32	212	57	796	968	807
8	C13.H28	184	43	795	942	795
9	C12.H26	170	43	795	946	799

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	54105-67-8
2	—	—	—	—	3891-98-3
3	—	—	—	—	18344-37-1
4	—	—	—	—	61141-72-8
5	—	—	—	—	74645-98-0
6	—	—	—	—	629-62-9
7	—	—	—	—	31295-56-4
8	—	—	—	—	17301-29-0
9	—	—	—	—	7045-71-8


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:31:00 + 8:13
SAMPLE: S-MM5-1B 1/3SA/100M
INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068102 # 738
CALI: 30068102 # 3
BASE M/Z: 57
RIC: 119808.
1190
SAMPLE
alkane
C19.H40
HEPTADECANE, 2,6-DIMETHYL-
M WT 268
B PK 57
RANK 1
37462
PUR 826
C15.H32
DODECANE, 2,6,10-TRIMETHYL-
M WT 212
B PK 57
RANK 2
25991
PUR 821
C21.H44
HEPTADECANE, 2,6,10,14-TETRAMETHYL-
M WT 296
B PK 57
RANK 3
42196
PUR 814
M/Z
50
100
150
200
250

C17

Library Search Data: 30068102 # 764 Base m/z: 43
08/31/98 19:31:00 + 8:30 Cali: 30068102 # 3 RIC: 162304.
Sample: S-MM5-1B 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
672 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	19006	DECANE, 6-ETHYL-2-METHYL-
2	22530	TETRADECANE
3	19007	DODECANE, 3-METHYL-
4	18990	UNDECANE, 2,9-DIMETHYL-
5	11612	NONANE, 2,5-DIMETHYL-
6	39681	1-IODOUNDECANE
7	37252	DECANE, 1-IODO-
8	11607	UNDECANE
9	22532	TRIDECANE, 2-METHYL-

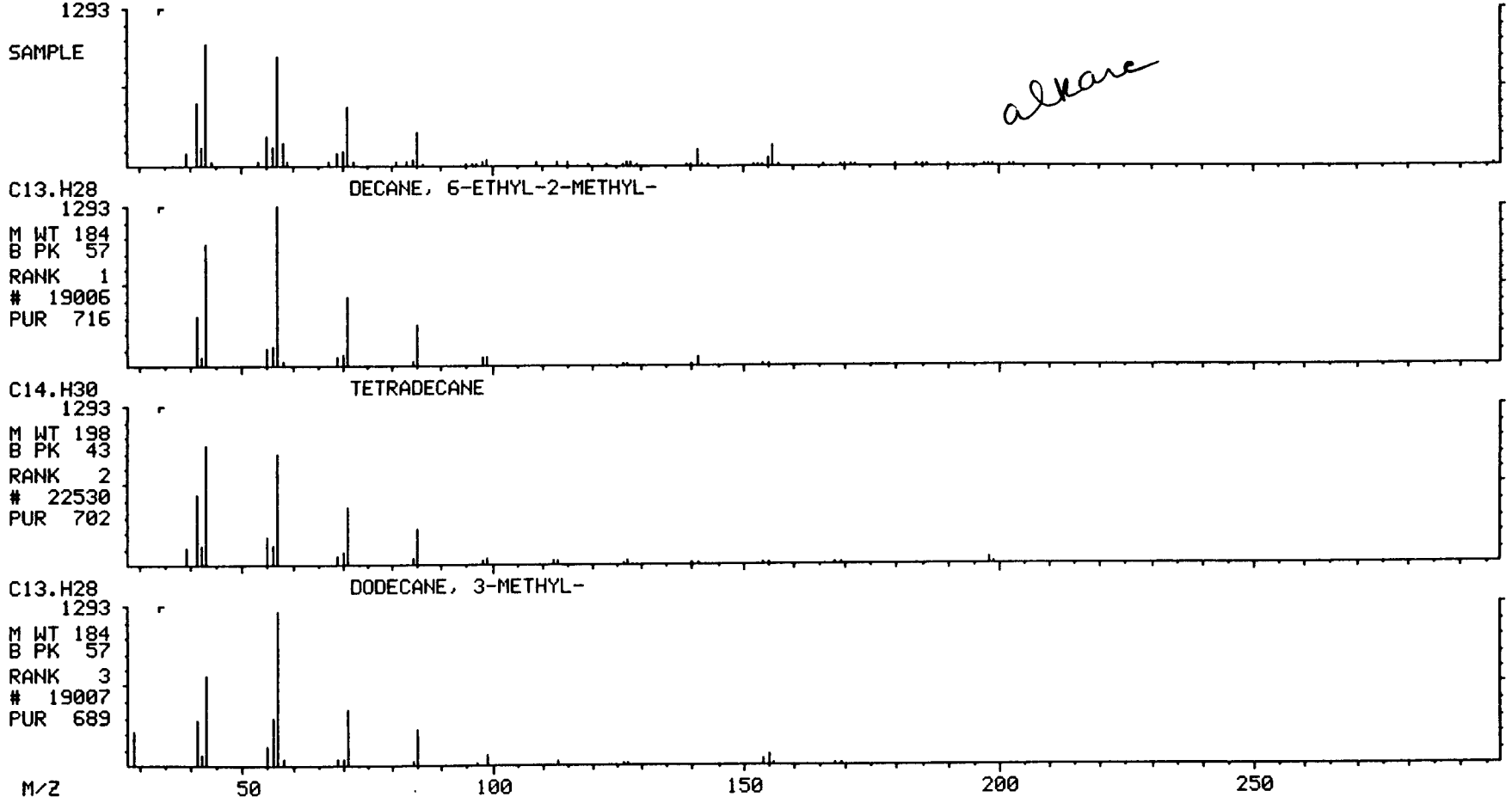
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C13.H28	184	57	716	953	716
2	C14.H30	198	43	702	936	712
3	C13.H28	184	57	689	893	689
4	C13.H28	184	57	683	862	683
5	C11.H24	156	57	683	848	688
6	C11.H23.I	282	57	681	853	687
7	C10.H21.I	268	57	678	876	684
8	C11.H24	156	43	677	956	683
9	C14.H30	198	57	670	859	695

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	62108-21-8
2	---	---	---	---	629-59-4
3	---	---	---	---	17312-57-1
4	---	---	---	---	17301-26-7
5	---	---	---	---	17302-27-1
6	---	---	---	---	4282-44-4
7	---	---	---	---	2050-77-3
8	---	---	---	---	1120-21-4
9	---	---	---	---	1560-96-9

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:31:00 + 8:30
SAMPLE: S-MM5-1B 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068102 # 764
CALI: 30068102 # 3

BASE M/Z: 43
RIC: 162304.



C11

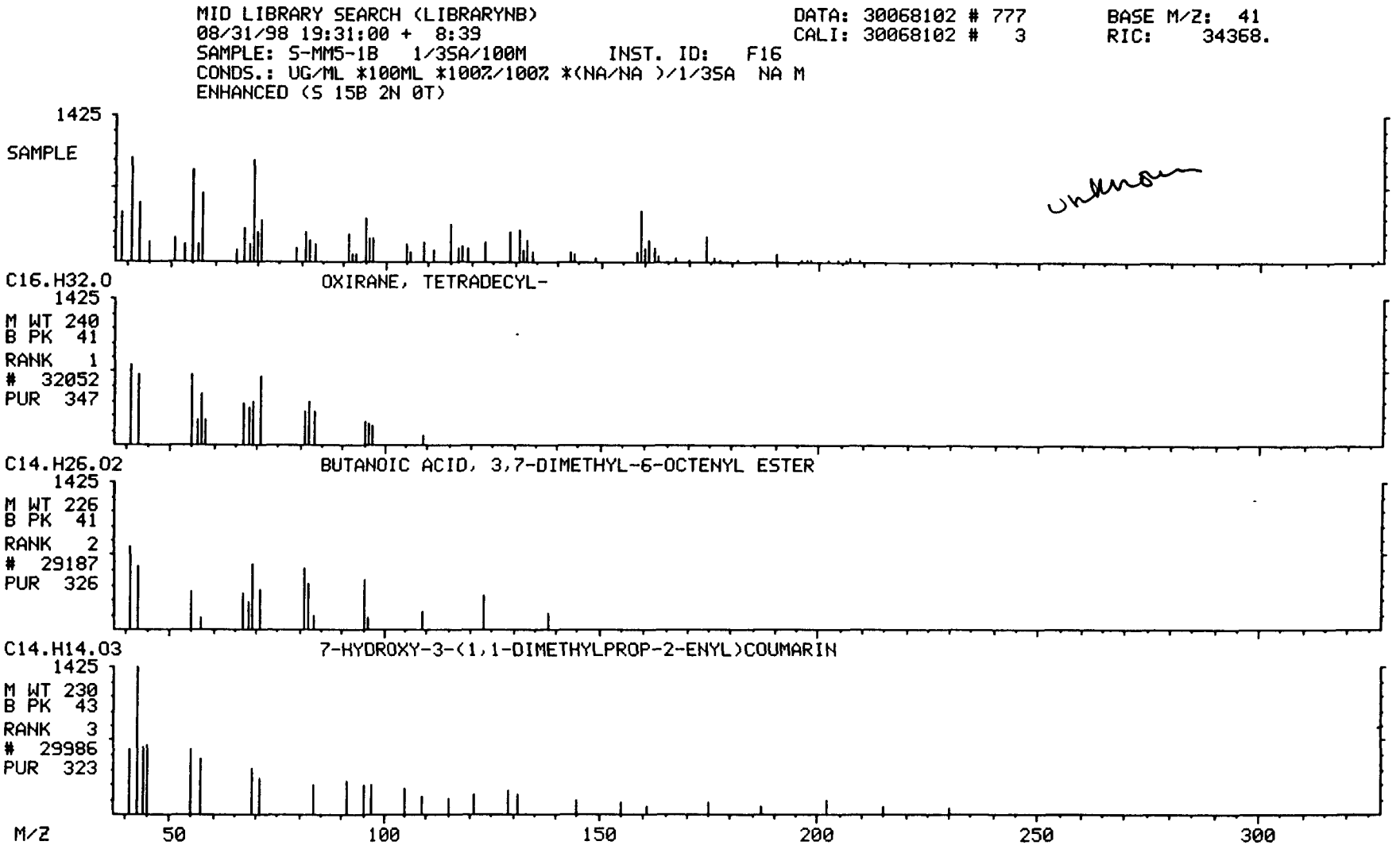
Library Search Data: 30068102 # 777 Base m/z: 41
08/31/98 19:31:00 + 8:39 Cali: 30068102 # 3 RIC: 34368.
Sample: S-MM5-1B 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
154 matched at least 6 of the 16 largest peaks in the unknown

Rank	In.	Name
1	32052	OXIRANE, TETRADECYL-
2	29187	BUTANOIC ACID, 3,7-DIMETHYL-6-OCTENYL ESTER
3	29986	7-HYDROXY-3-(1,1-DIMETHYLPROP-2-ENYL)COUMARIN
4	11518	CYCLOHEXANOL, 5-METHYL-2-(1-METHYLETHYL)-, [1S-(1.ALPHA.,2.BETA.,5.*
5	35931	HEXADECANE, 1-CHLORO-
6	50016	CETYLPYRIDINIUM CHLORIDE
7	46252	UNDECANE, 1,2-DIBROMO-2-METHYL-
8	32792	FALCARINOL (Z)-(-)-1,9-HEPTADECADIENE-4,6-DIYNE-3-OL
9	40866	OCTADECANE, 1-CHLORO-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C16.H32.O	240	41	347	911	359
2	C14.H26.O2	226	41	326	870	343
3	C14.H14.O3	230	43	323	696	420
4	C10.H20.O	156	71	313	833	333
5	C16.H33.CL	260	57	311	813	344
6	C21.H40.O.N.CL	357	55	305	824	334
7	C12.H24.BR2	326	41	294	808	349
8	C17.H24.O	244	55	288	706	388
9	C18.H37.CL	288	57	288	749	338

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	7320-37-8
2	---	---	---	---	141-16-2
3	---	---	---	---	56881-08-4
4	---	---	---	---	23283-97-8
5	---	---	---	---	4860-03-1
6	---	---	---	---	6004-24-6
7	---	---	---	---	55334-43-5
8	---	---	---	---	- -
9	---	---	---	---	3386-33-2


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:31:00 + 8:39
SAMPLE: S-MM5-1B 1/35A/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068102 # 777
CALI: 30068102 # 3
BASE M/Z: 41
RIC: 34368.
1425
SAMPLE
C16.H32.O
OXIRANE, TETRADECYL-
1425
M WT 240
B PK 41
RANK 1
32052
PUR 347
C14.H26.O2
BUTANOIC ACID, 3,7-DIMETHYL-6-OCTENYL ESTER
1425
M WT 226
B PK 41
RANK 2
29187
PUR 326
C14.H14.O3
7-HYDROXY-3-(1,1-DIMETHYLPROP-2-ENYL)COUMARIN
1425
M WT 230
B PK 43
RANK 3
29986
PUR 323
M/Z
50
100
150
200
250
300

777

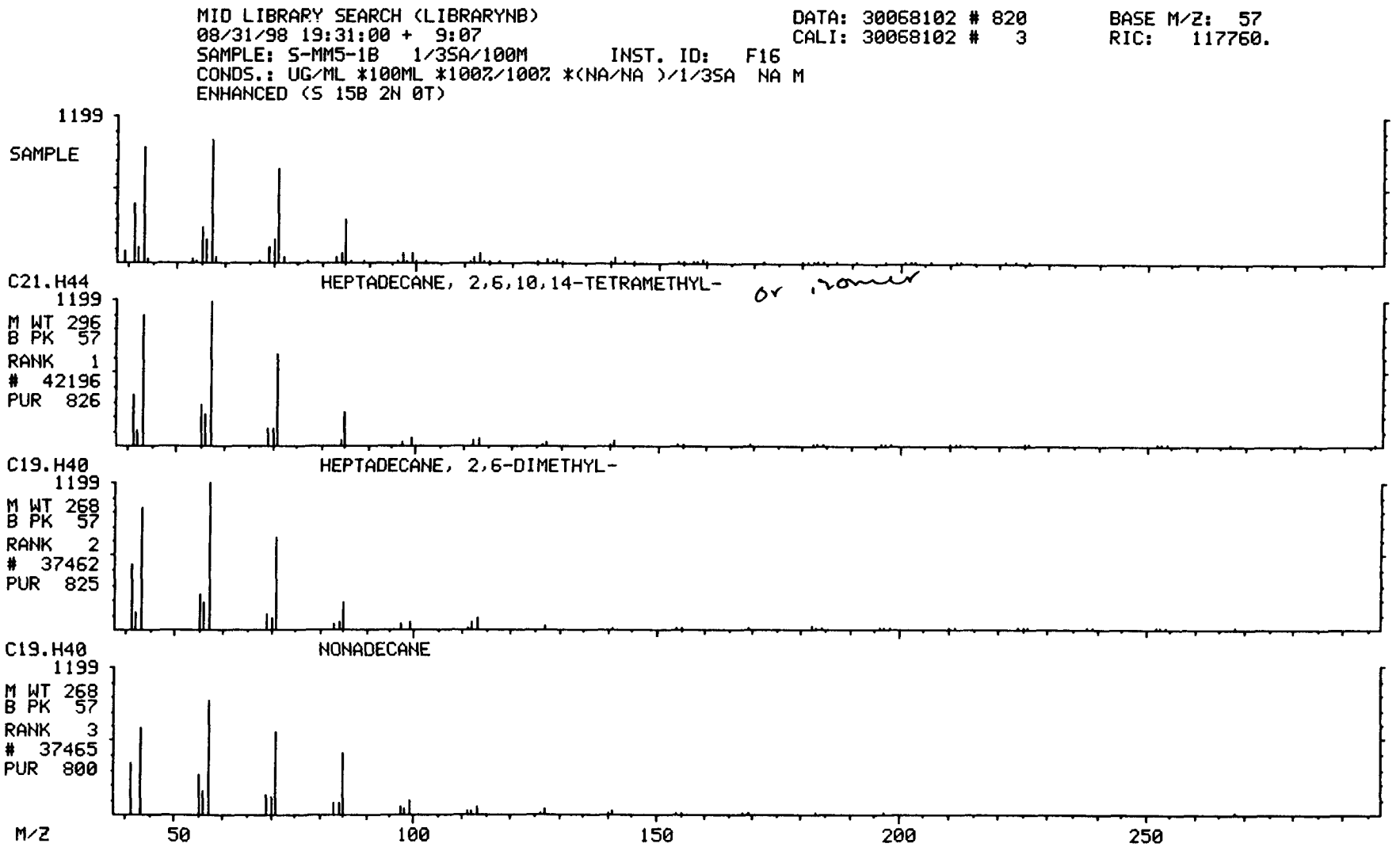
Library Search Data: 30068102 # 820 Base m/z: 57
08/31/98 19:31:00 + 9:07 Cali: 30068102 # 3 RIC: 117760.
Sample: S-MM5-1B 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
855 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
2	37462	HEPTADECANE, 2,6-DIMETHYL-
3	37465	NONADECANE
4	25997	PENTADECANE
5	18987	UNDECANE, 2,8-DIMETHYL-
6	19016	UNDECANE, 4,7-DIMETHYL-
7	25991	DODECANE, 2,6,10-TRIMETHYL-
8	26001	DODECANE, 2,7,10-TRIMETHYL-
9	15353	2,6-DIMETHYLDECANE

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C21.H44	296	57	826	972	841
2	C19.H40	268	57	825	959	838
3	C19.H40	268	57	800	943	832
4	C15.H32	212	57	777	943	800
5	C13.H28	184	43	776	964	779
6	C13.H28	184	43	775	951	781
7	C15.H32	212	57	774	958	783
8	C15.H32	212	57	773	956	785
9	C12.H26	170	43	773	924	788

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	18344-37-1
2	---	---	---	---	54105-67-8
3	---	---	---	---	629-92-5
4	---	---	---	---	629-62-9
5	---	---	---	---	17301-25-6
6	---	---	---	---	17301-32-5
7	---	---	---	---	3891-98-3
8	---	---	---	---	74645-98-0
9	---	---	---	---	13150-81-7


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:31:00 + 9:07
SAMPLE: S-MM5-1B 1/3SA/100M
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
INST. ID: F16
DATA: 30068102 # 820
CALI: 30068102 # 3
BASE M/Z: 57
RIC: 117760.
1199
SAMPLE
C21.H44
HEPTADECANE, 2,6,10,14-TETRAMETHYL-
or isomer
1199
M WT 296
B PK 57
RANK 1
42196
PUR 826
C19.H40
HEPTADECANE, 2,6-DIMETHYL-
1199
M WT 268
B PK 57
RANK 2
37462
PUR 825
C19.H40
NONADECANE
1199
M WT 268
B PK 57
RANK 3
37465
PUR 800
M/Z
50
100
150
200
250

S11

Library Search Data: 30068102 # 858 Base m/z: 57
08/31/98 19:31:00 + 9:33 Cali: 30068102 # 3 RIC: 162816.
Sample: S-MM5-1B 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
835 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	19007	DODECANE, 3-METHYL-
2	15352	UNDECANE, 2-METHYL-
3	15353	2,6-DIMETHYLDECANE
4	22535	DODECANE, 4,6-DIMETHYL-
5	18998	UNDECANE, 3,7-DIMETHYL-
6	22530	TETRADECANE
7	18990	UNDECANE, 2,9-DIMETHYL-
8	39681	1-IODOUNDECANE
9	19006	DECANE, 6-ETHYL-2-METHYL-

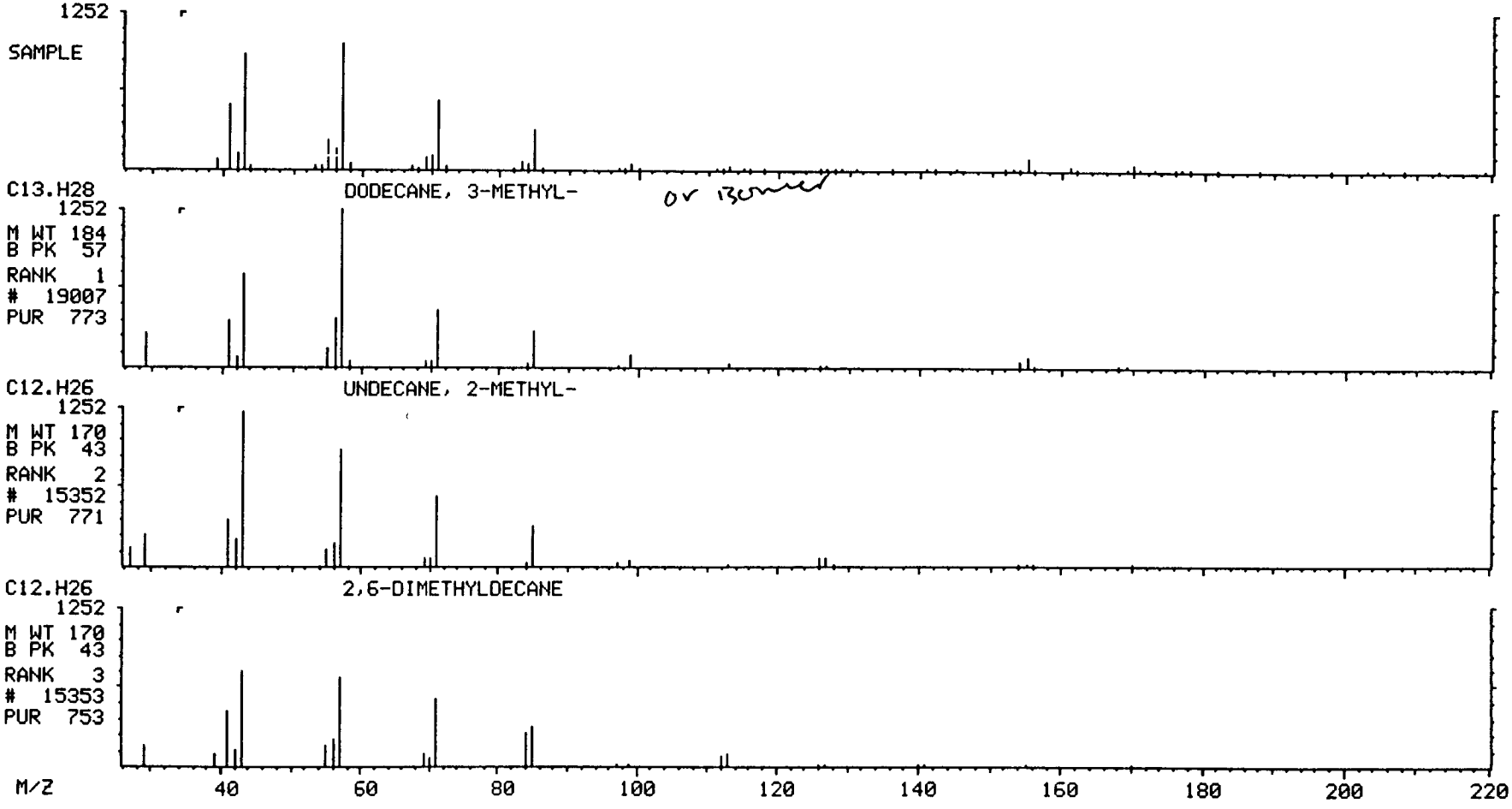
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C13.H28	184	57	773	964	774
2	C12.H26	170	43	771	935	771
3	C12.H26	170	43	753	908	757
4	C14.H30	198	57	753	946	755
5	C13.H28	184	43	752	938	752
6	C14.H30	198	43	751	928	762
7	C13.H28	184	57	750	958	751
8	C11.H23.I	282	57	749	965	756
9	C13.H28	184	57	746	949	747

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	17312-57-1
2	---	---	---	---	7045-71-8
3	---	---	---	---	13150-81-7
4	---	---	---	---	61141-72-8
5	---	---	---	---	17301-29-0
6	---	---	---	---	629-59-4
7	---	---	---	---	17301-26-7
8	---	---	---	---	4282-44-4
9	---	---	---	---	62108-21-8

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:31:00 + 9:33
SAMPLE: S-MM5-1B 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068102 # 858
CALI: 30068102 # 3

BASE M/Z: 57
RIC: 162816.



781

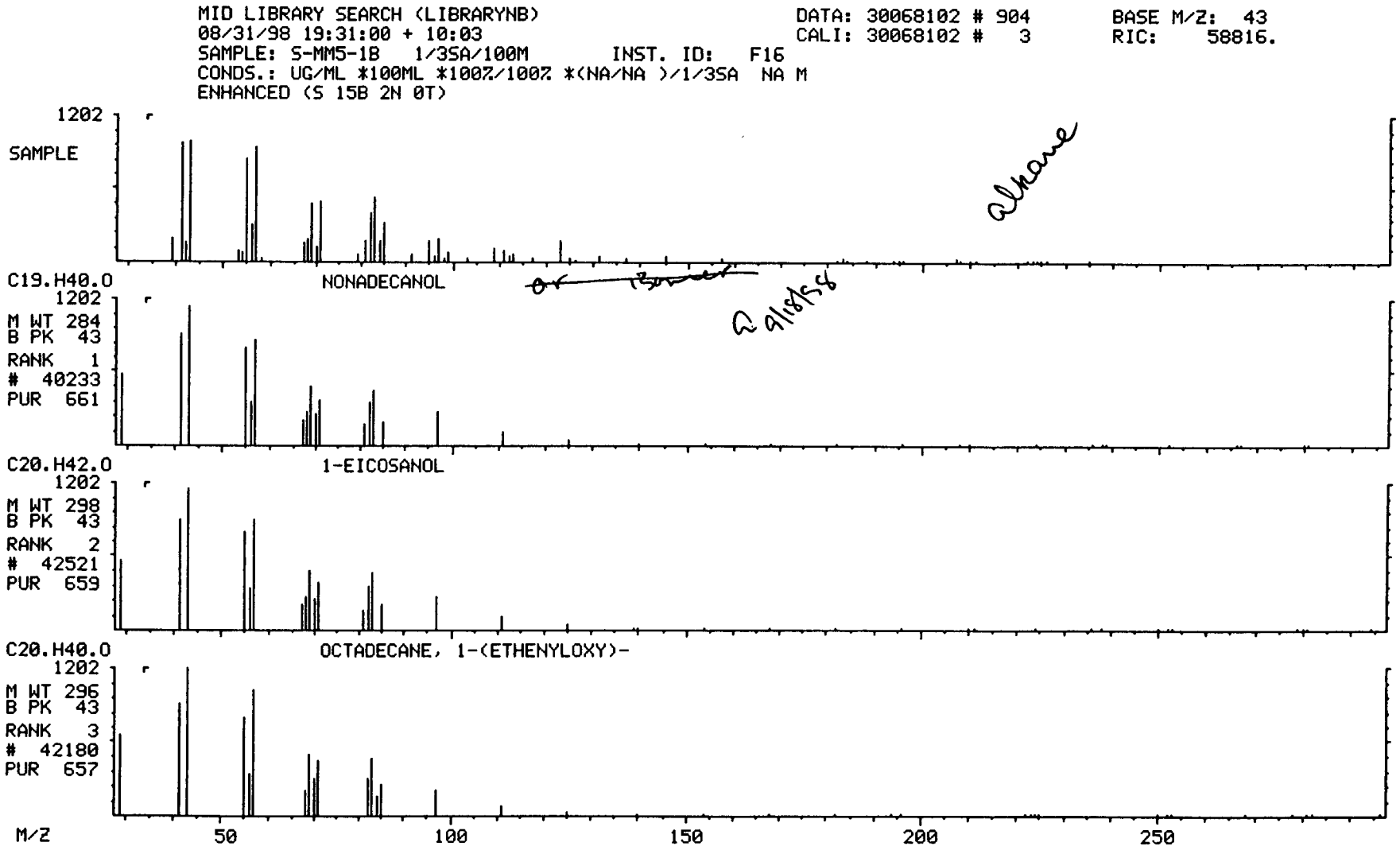
Library Search Data: 30068102 # 904 Base m/z: 43
08/31/98 19:31:00 + 10:03 Cali: 30068102 # 3 RIC: 58816.
Sample: S-MM5-1B 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
650 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	40233	NONADECANOL
2	42521	1-EICOSANOL
3	42180	OCTADECANE, 1-(ETHENYLOXY)-
4	37444	OXIRANE, HEXADECYL-
5	25971	OXIRANE, DODECYL-
6	58380	DECANEDIOIC ACID, DIDECYL ESTER
7	37449	OCTADECANAL
8	28772	7-HEXADECENE, (Z)-
9	19525	2-METHYL-1-UNDECANOL

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40.O	284	43	661	938	693
2	C20.H42.O	298	43	659	935	695
3	C20.H40.O	296	43	657	948	684
4	C18.H36.O	268	57	648	853	693
5	C14.H28.O	212	41	630	889	656
6	C30.H58.O4	482	57	629	917	643
7	C18.H36.O	268	43	626	850	688
8	C16.H32	224	55	625	894	634
9	C12.H26.O	186	57	624	935	634

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	52783-43-4
2	—	—	—	—	629-96-9
3	—	—	—	—	930-02-9
4	—	—	—	—	7390-81-0
5	—	—	—	—	3234-28-4
6	—	—	—	—	2432-89-5
7	—	—	—	—	638-66-4
8	—	—	—	—	35507-09-6
9	—	—	—	—	10522-26-6


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:31:00 + 10:03
SAMPLE: S-MM5-1B 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068102 # 904
CALI: 30068102 # 3
BASE M/Z: 43
RIC: 58816.
1202
SAMPLE
alkane
C19.H40.O
NONADECANOL
or isomer
Q 9/18/98
1202
M WT 284
B PK 43
RANK 1
40233
PUR 661
C20.H42.O
1-EICOSANOL
1202
M WT 298
B PK 43
RANK 2
42521
PUR 659
C20.H40.O
OCTADECANE, 1-(ETHENYLOXY)-
1202
M WT 296
B PK 43
RANK 3
42180
PUR 657
M/Z
50
100
150
200
250

78

Library Search Data: 30068102 # 948 Base m/z: 57
08/31/98 19:31:00 + 10:33 Cali: 30068102 # 3 RIC: 154112.
Sample: S-MM5-1B 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 158 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
360 matched at least 8 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37465	NONADECANE
2	37462	HEPTADECANE, 2,6-DIMETHYL-
3	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
4	15969	HYDROXYLAMINE, O-DECYL-
5	25997	PENTADECANE
6	19016	UNDECANE, 4,7-DIMETHYL-
7	22535	DODECANE, 4,6-DIMETHYL-
8	25994	DODECANE, 2,6,11-TRIMETHYL-
9	15353	2,6-DIMETHYLDECANE

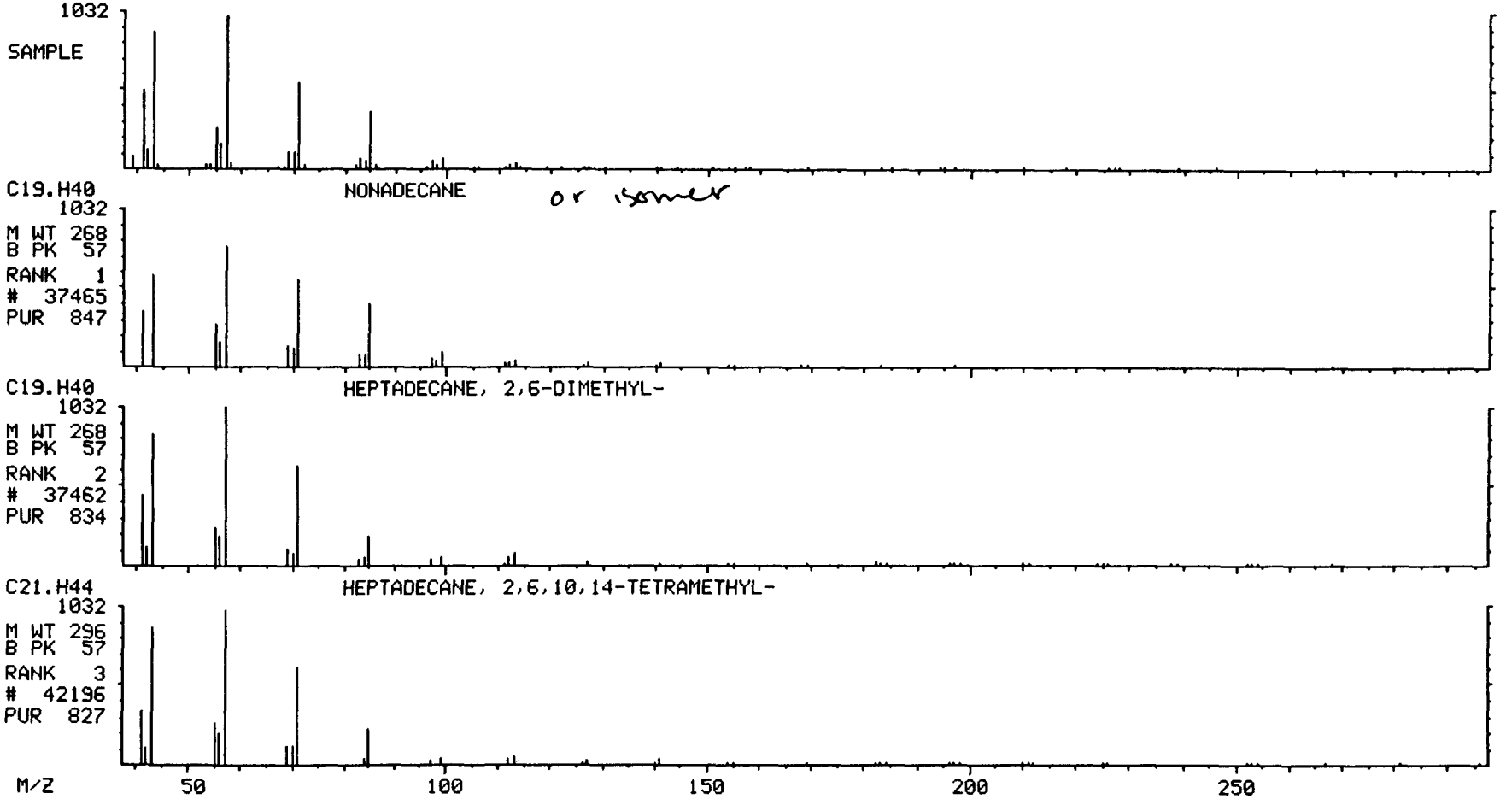
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	847	958	866
2	C19.H40	268	57	834	942	858
3	C21.H44	296	57	827	950	846
4	C10.H23.O.N	173	43	825	967	827
5	C15.H32	212	57	817	954	842
6	C13.H28	184	43	812	964	813
7	C14.H30	198	57	801	951	805
8	C15.H32	212	57	799	965	802
9	C12.H26	170	43	797	927	807

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	629-92-5
2	---	---	---	---	54105-67-8
3	---	---	---	---	18344-37-1
4	---	---	---	---	29812-79-1
5	---	---	---	---	629-62-9
6	---	---	---	---	17301-32-5
7	---	---	---	---	61141-72-8
8	---	---	---	---	31295-56-4
9	---	---	---	---	13150-81-7

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:31:00 + 10:33
SAMPLE: S-MM5-1B 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068102 # 948
CALI: 30068102 # 3

BASE M/Z: 57
RIC: 154112.



C37

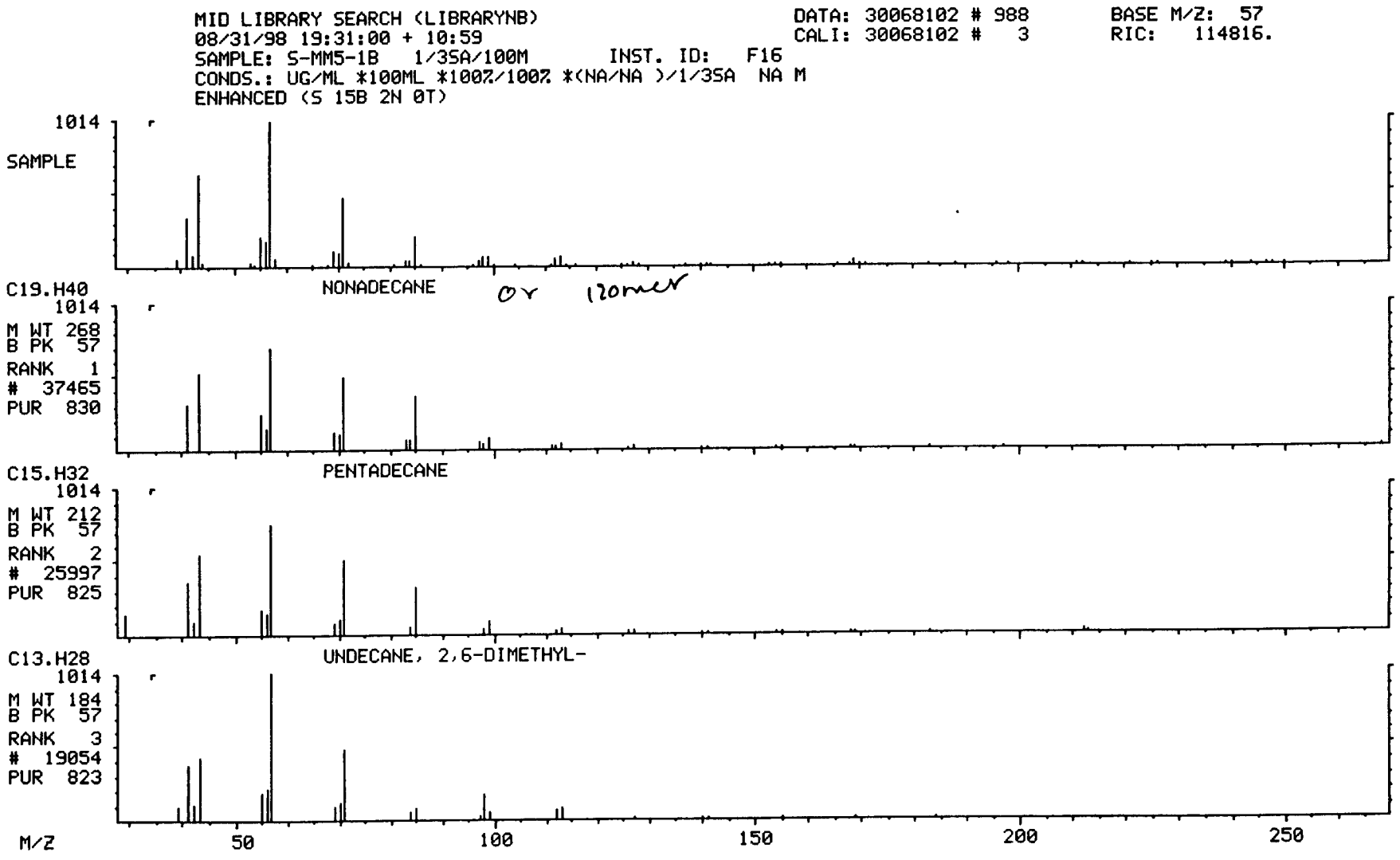
Library Search Data: 30068102 # 988 Base m/z: 57
08/31/98 19:31:00 + 10:59 Cali: 30068102 # 3 RIC: 114816.
Sample: S-MM5-1B 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
644 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37465	NONADECANE
2	25997	PENTADECANE
3	19054	UNDECANE, 2,6-DIMETHYL-
4	22530	TETRADECANE
5	37462	HEPTADECANE, 2,6-DIMETHYL-
6	25996	TRIDECANE, 4,8-DIMETHYL-
7	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
8	29263	HEXADECANE
9	32059	HEPTADECANE

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	830	943	849
2	C15.H32	212	57	825	959	828
3	C13.H28	184	57	823	951	830
4	C14.H30	198	43	820	947	825
5	C19.H40	268	57	819	945	841
6	C15.H32	212	57	818	944	826
7	C21.H44	296	57	816	950	830
8	C16.H34	226	57	809	933	821
9	C17.H36	240	57	807	929	821

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	629-92-5
2	—	—	—	—	629-62-9
3	—	—	—	—	17301-23-4
4	—	—	—	—	629-59-4
5	—	—	—	—	54105-67-8
6	—	—	—	—	55030-62-1
7	—	—	—	—	18344-37-1
8	—	—	—	—	544-76-3
9	—	—	—	—	629-78-7


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:31:00 + 10:59
SAMPLE: S-MM5-1B 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068102 # 988
CALI: 30068102 # 3
BASE M/Z: 57
RIC: 114816.
1014
SAMPLE
C19.H40
NONADECANE
or isomer
M WT 268
B PK 57
RANK 1
37465
PUR 830
C15.H32
PENTADECANE
M WT 212
B PK 57
RANK 2
25997
PUR 825
C13.H28
UNDECANE, 2,6-DIMETHYL-
M WT 184
B PK 57
RANK 3
19054
PUR 823
M/Z
50
100
150
200
250

Library Search Data: 30068102 #1036 Base m/z: 57
08/31/98 19:31:00 + 11:31 Cali: 30068102 # 3 RIC: 176640.
Sample: S-MM5-1B 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
840 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37462	HEPTADECANE, 2,6-DIMETHYL-
2	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
3	22535	DODECANE, 4,6-DIMETHYL-
4	26001	DODECANE, 2,7,10-TRIMETHYL-
5	25991	DODECANE, 2,6,10-TRIMETHYL-
6	37465	NONADECANE
7	37466	PENTADECANE, 2,6,10,14-TETRAMETHYL-
8	25994	DODECANE, 2,6,11-TRIMETHYL-
9	29264	TRIDECANE, 5-PROPYL-

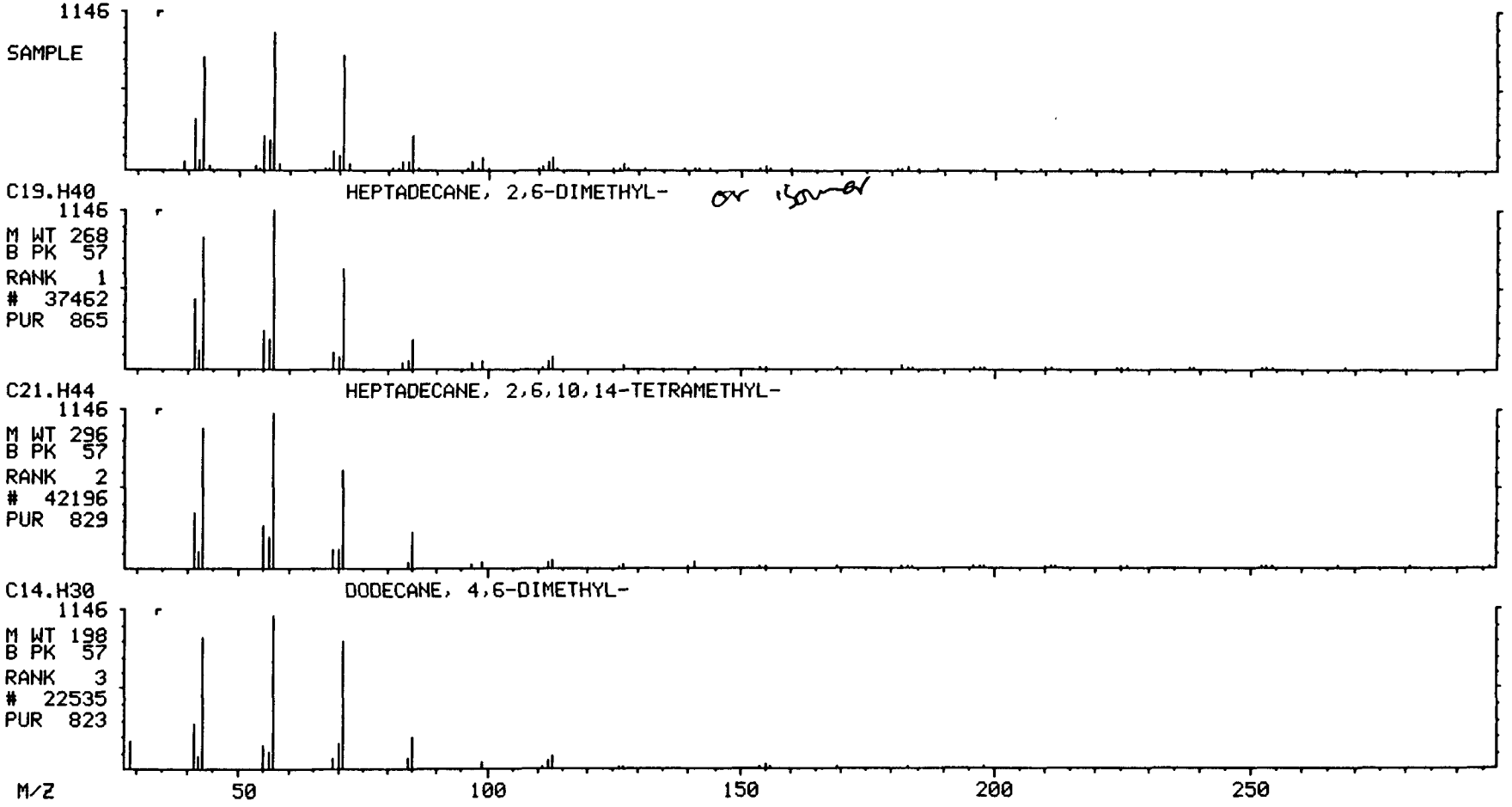
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	865	970	875
2	C21.H44	296	57	829	948	853
3	C14.H30	198	57	823	969	824
4	C15.H32	212	57	822	970	828
5	C15.H32	212	57	820	972	824
6	C19.H40	268	57	815	930	838
7	C19.H40	268	71	806	937	826
8	C15.H32	212	57	803	948	814
9	C16.H34	226	57	791	934	833

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	54105-67-8
2	---	---	---	---	18344-37-1
3	---	---	---	---	61141-72-8
4	---	---	---	---	74645-98-0
5	---	---	---	---	3891-98-3
6	---	---	---	---	629-92-5
7	---	---	---	---	1921-70-6
8	---	---	---	---	31295-56-4
9	---	---	---	---	55045-11-9

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:31:00 + 11:31
SAMPLE: S-MM5-1B 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068102 #1036
CALI: 30068102 # 3

BASE M/Z: 57
RIC: 176640.



S37

Library Search Data: 30068102 #1054 Base m/z: 55
08/31/98 19:31:00 + 11:43 Cali: 30068102 # 3 RIC: 48576.
Sample: S-MM5-1B 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
648 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	34410	3-OCTADECENE, (E)-
2	34411	5-OCTADECENE, (E)-
3	34418	9-OCTADECENE, (E)-
4	28768	3-HEXADECENE, (Z)-
5	32425	1-DECANOL, 2-HEXYL-
6	26409	2-HEXYL-1-OCTANOL
7	28772	7-HEXADECENE, (Z)-
8	21963	3-TETRADECENE, (E)-
9	32418	2-HEXYL-1-DECANOL

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C18.H36	252	69	703	906	717
2	C18.H36	252	55	702	904	713
3	C18.H36	252	55	700	901	711
4	C16.H32	224	55	700	903	722
5	C16.H34.O	242	57	698	911	720
6	C14.H30.O	214	57	696	924	703
7	C16.H32	224	55	694	895	713
8	C14.H28	196	41	693	925	696
9	C16.H34.O	242	57	692	916	704

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	7206-19-1
2	---	---	---	---	7206-21-5
3	---	---	---	---	7206-25-9
4	---	---	---	---	34303-81-6
5	---	---	---	---	2425-77-6
6	---	---	---	---	- -
7	---	---	---	---	35507-09-6
8	---	---	---	---	41446-68-8
9	---	---	---	---	- -

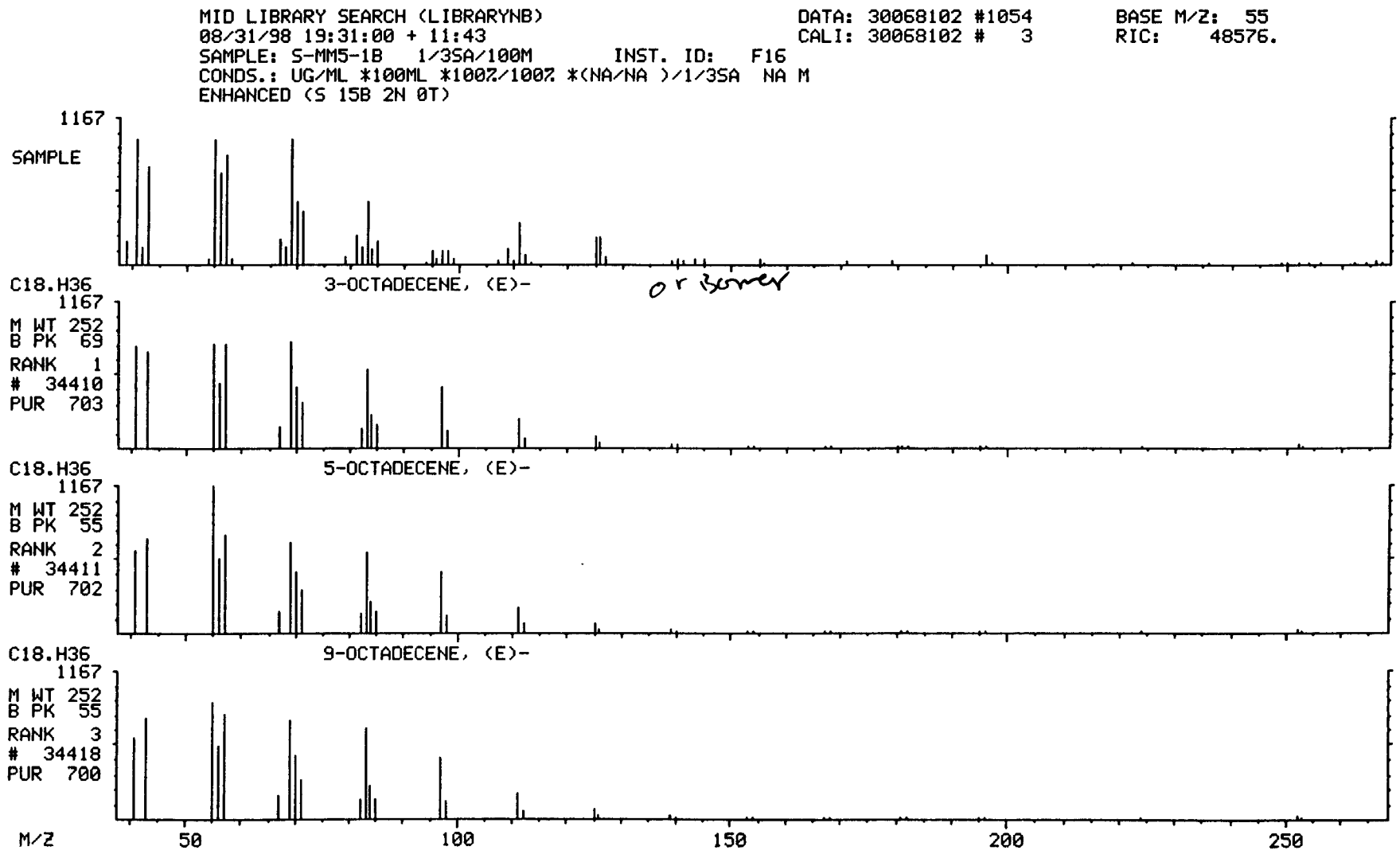

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:31:00 + 11:43
SAMPLE: S-MM5-1B 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068102 #1054
CALI: 30068102 # 3
BASE M/Z: 55
RIC: 48576.
1167
SAMPLE
C18.H36
3-OCTADECENE, (E)-
or isomer
1167
M WT 252
B PK 69
RANK 1
34410
PUR 703
C18.H36
5-OCTADECENE, (E)-
1167
M WT 252
B PK 55
RANK 2
34411
PUR 702
C18.H36
9-OCTADECENE, (E)-
1167
M WT 252
B PK 55
RANK 3
34418
PUR 700
M/Z
50
100
150
200
250

FIG. 7

Library Search Data: 30068102 #1114 Base m/z: 57
08/31/98 19:31:00 + 12:23 Cali: 30068102 # 3 RIC: 80128.
Sample: S-MM5-1B 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

362

62231 spectra in LIBRARYNB searched for maximum PURITY
360 matched at least 8 of the 16 largest peaks in the unknown

Rank	In.	Name
1	15969	HYDROXYLAMINE, O-DECYL-
2	19016	UNDECANE, 4,7-DIMETHYL-
3	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
4	37462	HEPTADECANE, 2,6-DIMETHYL-
5	37465	NONADECANE
6	11602	OCTANE, 2,4,6-TRIMETHYL-
7	11612	NONANE, 2,5-DIMETHYL-
8	25997	PENTADECANE
9	15353	2,6-DIMETHYLDECANE

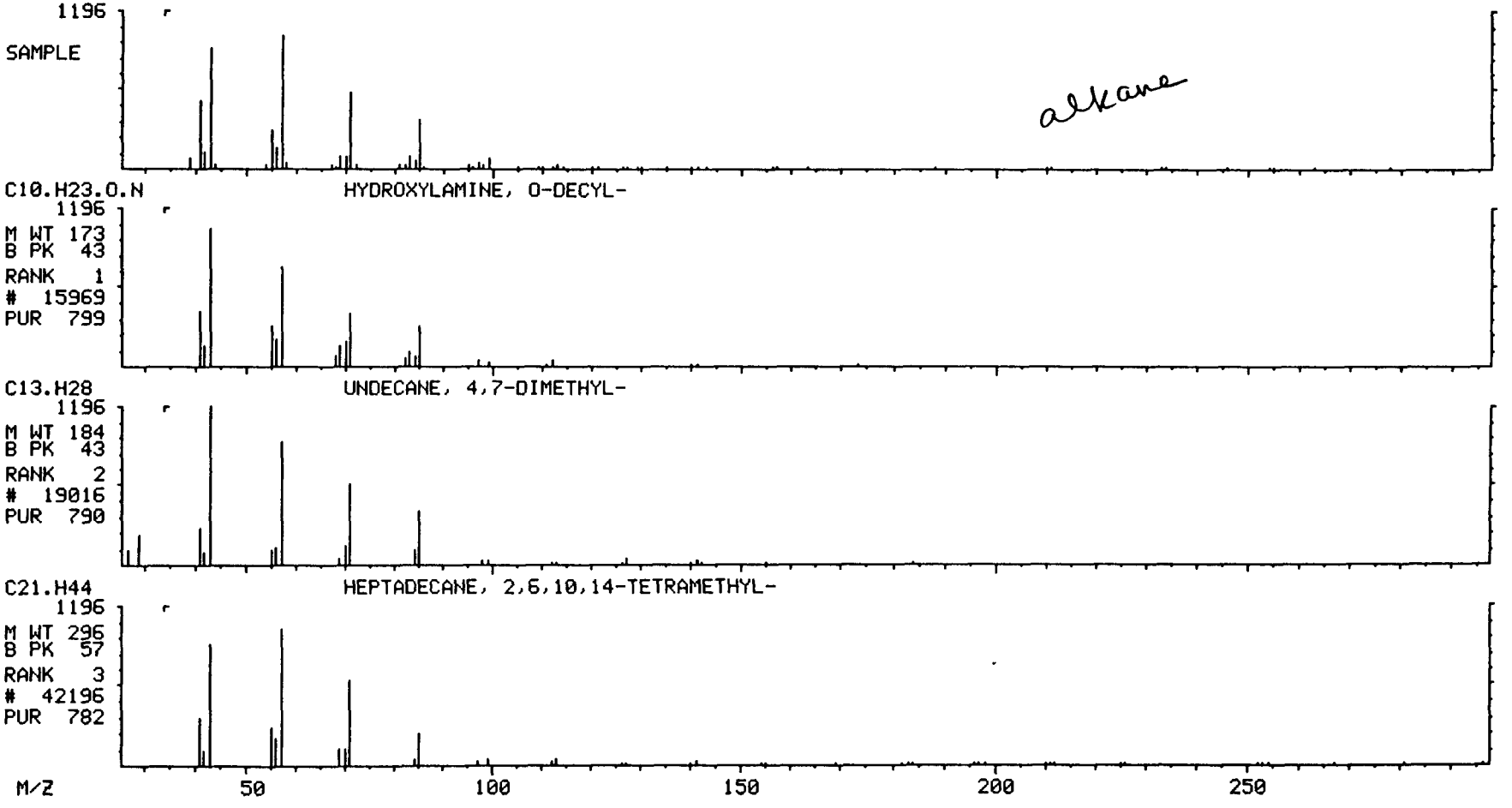
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C10.H23.O.N	173	43	799	957	808
2	C13.H28	184	43	790	966	792
3	C21.H44	296	57	782	940	814
4	C19.H40	268	57	777	917	823
5	C19.H40	268	57	773	919	829
6	C11.H24	156	57	765	968	765
7	C11.H24	156	57	762	913	762
8	C15.H32	212	57	761	930	807
9	C12.H26	170	43	760	916	775

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	29812-79-1
2	—	—	—	—	17301-32-5
3	—	—	—	—	18344-37-1
4	—	—	—	—	54105-67-8
5	—	—	—	—	629-92-5
6	—	—	—	—	62016-37-9
7	—	—	—	—	17302-27-1
8	—	—	—	—	629-62-9
9	—	—	—	—	13150-81-7

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:31:00 + 12:23
SAMPLE: S-MM5-1B 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068102 #1114
CALI: 30068102 # 3

BASE M/Z: 57
RIC: 80128.



Library Search Data: 30068102 #1119 Base m/z: 57
08/31/98 19:31:00 + 12:27 Cali: 30068102 # 3 RIC: 112896.
Sample: S-MM5-1B 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
840 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37465	NONADECANE
2	37462	HEPTADECANE, 2,6-DIMETHYL-
3	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
4	46161	TRICOSANE
5	32059	HEPTADECANE
6	25991	DODECANE, 2,6,10-TRIMETHYL-
7	26001	DODECANE, 2,7,10-TRIMETHYL-
8	42192	HEPTADECANE, 2,6,10,15-TETRAMETHYL-
9	37466	PENTADECANE, 2,6,10,14-TETRAMETHYL-

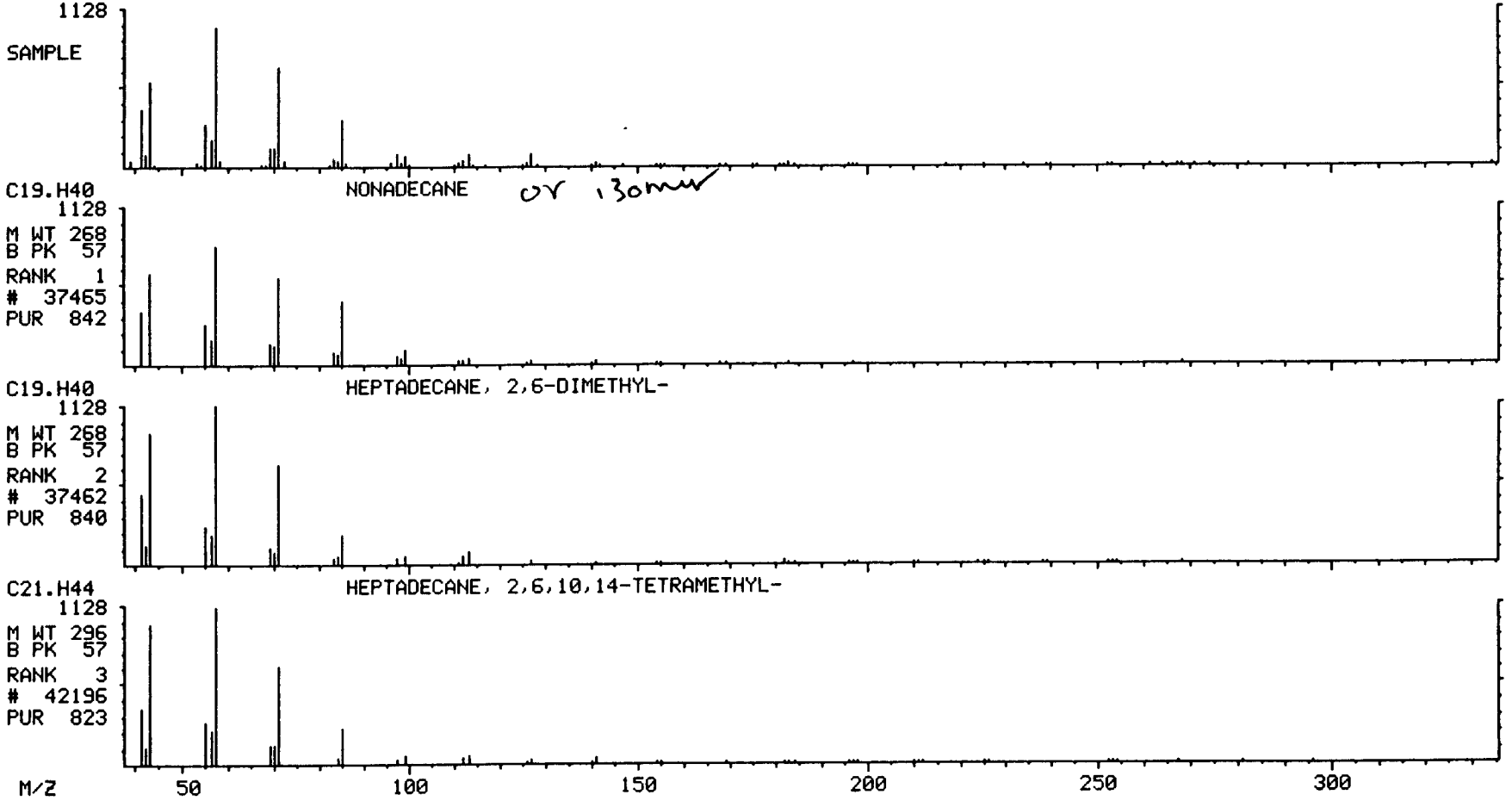
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	842	964	842
2	C19.H40	268	57	840	953	844
3	C21.H44	296	57	823	943	835
4	C23.H48	324	43	819	924	856
5	C17.H36	240	57	809	940	816
6	C15.H32	212	57	807	973	808
7	C15.H32	212	57	803	972	803
8	C21.H44	296	57	802	953	828
9	C19.H40	268	71	800	935	807

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	629-92-5
2	---	---	---	---	54105-67-8
3	---	---	---	---	18344-37-1
4	---	---	---	---	638-67-5
5	---	---	---	---	629-78-7
6	---	---	---	---	3891-98-3
7	---	---	---	---	74645-98-0
8	---	---	---	---	54833-48-6
9	---	---	---	---	1921-70-6

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:31:00 + 12:27
SAMPLE: S-MM5-1B 1/35A/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068102 #1119
CALI: 30068102 # 3

BASE M/Z: 57
RIC: 112896.



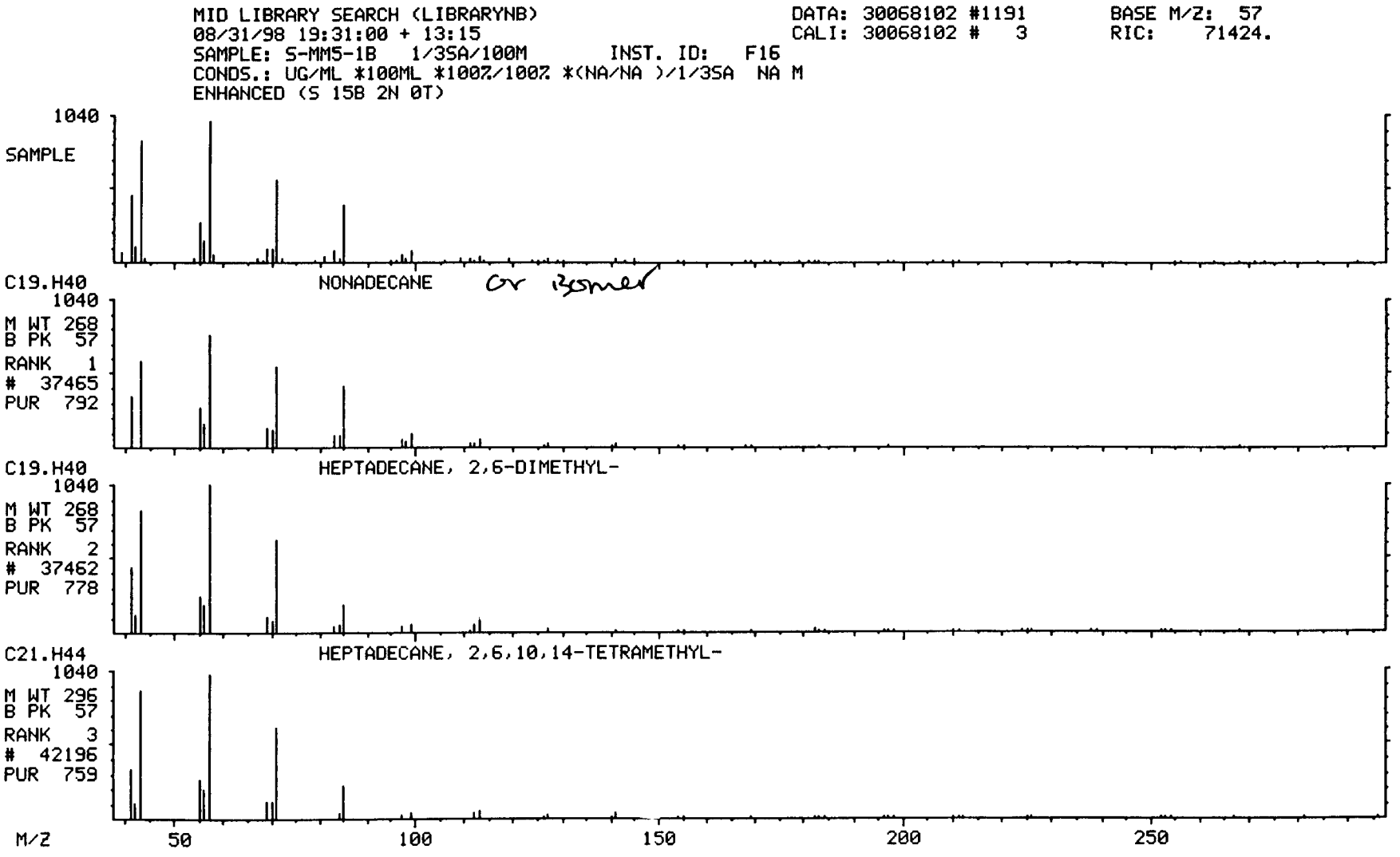
Library Search Data: 30068102 #1191 Base m/z: 57
08/31/98 19:31:00 + 13:15 Cali: 30068102 # 3 RIC: 71424.
Sample: S-MM5-1B 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
879 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37465	NONADECANE
2	37462	HEPTADECANE, 2,6-DIMETHYL-
3	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
4	46161	TRICOSANE
5	32058	HEXADECANE, 3-METHYL-
6	22530	TETRADECANE
7	22536	TRIDECANE, 3-METHYL-
8	25997	PENTADECANE
9	42192	HEPTADECANE, 2,6,10,15-TETRAMETHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	792	971	798
2	C19.H40	268	57	778	942	788
3	C21.H44	296	57	759	955	773
4	C23.H48	324	43	749	911	808
5	C17.H36	240	57	748	932	758
6	C14.H30	198	43	743	948	752
7	C14.H30	198	57	740	928	748
8	C15.H32	212	57	736	948	764
9	C21.H44	296	57	736	933	764

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	629-92-5
2	—	—	—	—	54105-67-8
3	—	—	—	—	18344-37-1
4	—	—	—	—	638-67-5
5	—	—	—	—	6418-43-5
6	—	—	—	—	629-59-4
7	—	—	—	—	6418-41-3
8	—	—	—	—	629-62-9
9	—	—	—	—	54833-48-6


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:31:00 + 13:15
SAMPLE: S-MM5-1B 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068102 #1191
CALI: 30068102 # 3
BASE M/Z: 57
RIC: 71424.
1040
SAMPLE
C19.H40
NONADECANE
Or isomer
1040
M WT 268
B PK 57
RANK 1
37465
PUR 792
C19.H40
HEPTADECANE, 2,6-DIMETHYL-
1040
M WT 268
B PK 57
RANK 2
37462
PUR 778
C21.H44
HEPTADECANE, 2,6,10,14-TETRAMETHYL-
1040
M WT 296
B PK 57
RANK 3
42196
PUR 759
M/Z
50
100
150
200
250

132

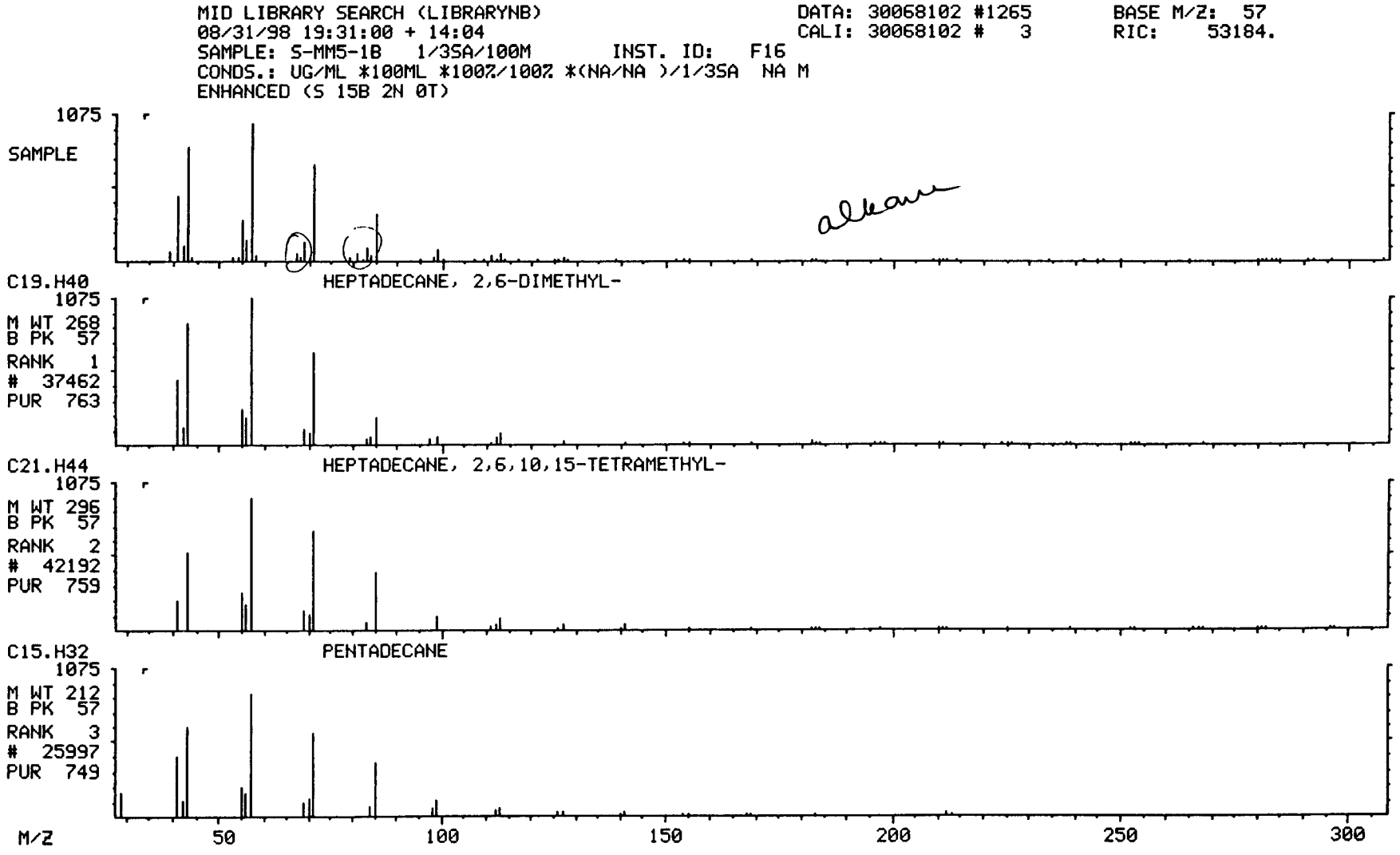
Library Search Data: 30068102 #1265 Base m/z: 57
08/31/98 19:31:00 + 14:04 Cali: 30068102 # 3 RIC: 53184.
Sample: S-MM5-1B 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
604 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37462	HEPTADECANE, 2,6-DIMETHYL-
2	42192	HEPTADECANE, 2,6,10,15-TETRAMETHYL-
3	25997	PENTADECANE
4	37465	NONADECANE
5	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
6	25994	DODECANE, 2,6,11-TRIMETHYL-
7	26001	DODECANE, 2,7,10-TRIMETHYL-
8	32058	HEXADECANE, 3-METHYL-
9	22535	DODECANE, 4,6-DIMETHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	763	924	790
2	C21.H44	296	57	759	923	793
3	C15.H32	212	57	749	949	771
4	C19.H40	268	57	747	919	796
5	C21.H44	296	57	746	926	779
6	C15.H32	212	57	745	960	750
7	C15.H32	212	57	745	959	749
8	C17.H36	240	57	739	917	765
9	C14.H30	198	57	736	939	739

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	54105-67-8
2	—	—	—	—	54833-48-6
3	—	—	—	—	629-62-9
4	—	—	—	—	629-92-5
5	—	—	—	—	18344-37-1
6	—	—	—	—	31295-56-4
7	—	—	—	—	74645-98-0
8	—	—	—	—	6418-43-5
9	—	—	—	—	61141-72-8


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:31:00 + 14:04
SAMPLE: S-MM5-1B 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068102 #1265
CALI: 30068102 # 3
BASE M/Z: 57
RIC: 53184.
1075
SAMPLE
C19.H40
HEPTADECANE, 2,6-DIMETHYL-
M WT 268
B PK 57
RANK 1
37462
PUR 763
C21.H44
HEPTADECANE, 2,6,10,15-TETRAMETHYL-
M WT 296
B PK 57
RANK 2
42192
PUR 759
C15.H32
PENTADECANE
M WT 212
B PK 57
RANK 3
25997
PUR 749
M/Z
50
100
150
200
250
300

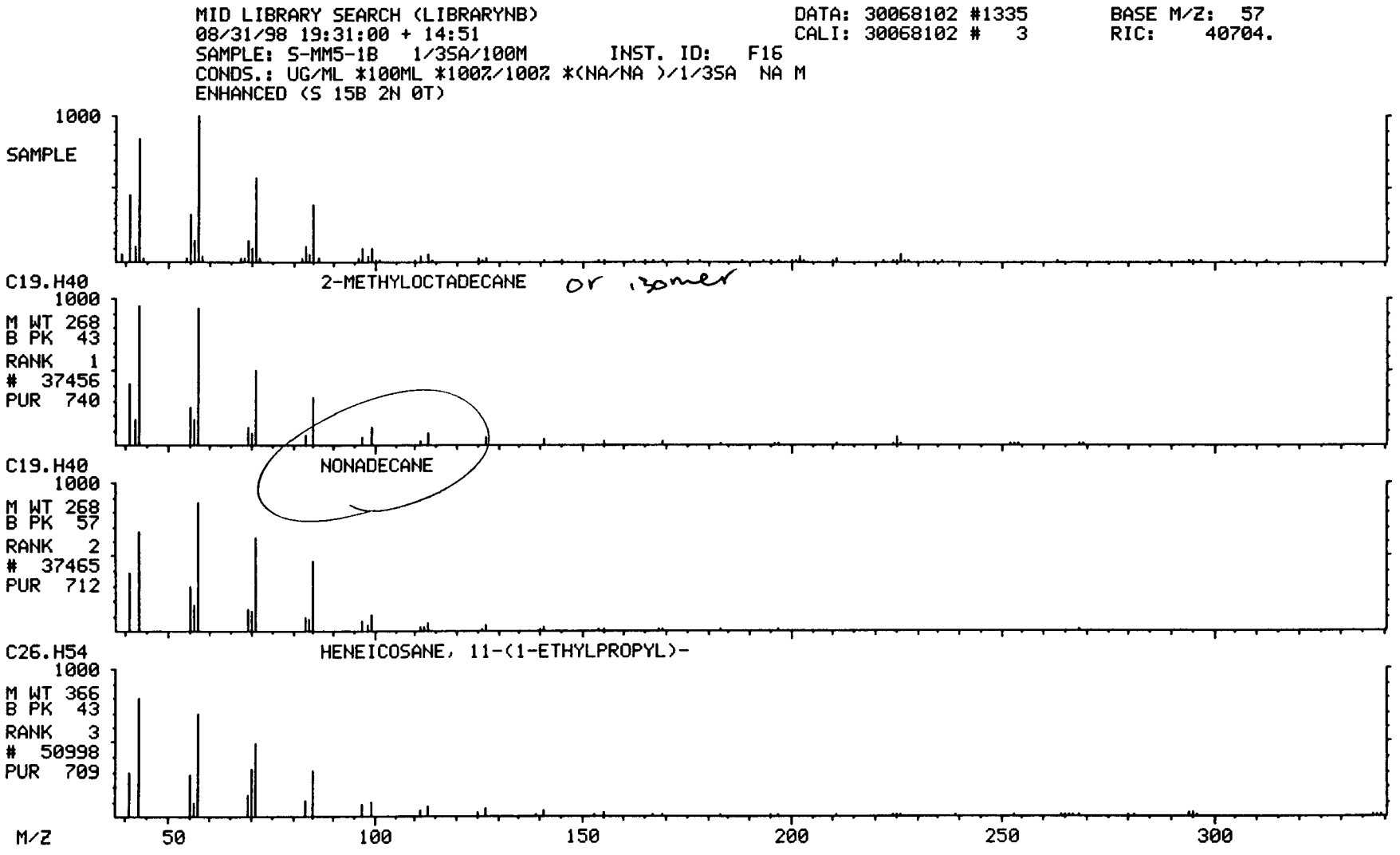
Library Search Data: 30068102 #1335 Base m/z: 57
08/31/98 19:31:00 + 14:51 Cali: 30068102 # 3 RIC: 40704.
Sample: S-MM5-1B 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
715 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37456	2-METHYLOCTADECANE
2	37465	NONADECANE
3	50998	HENEICOSANE, 11-(1-ETHYLPROPYL)-
4	37462	HEPTADECANE, 2,6-DIMETHYL-
5	32058	HEXADECANE, 3-METHYL-
6	49555	PENTACOSANE
7	46161	TRICOSANE
8	29263	HEXADECANE
9	34808	HEPTADECANE, 3-METHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	43	740	933	758
2	C19.H40	268	57	712	942	748
3	C26.H54	366	43	709	885	738
4	C19.H40	268	57	708	872	755
5	C17.H36	240	57	707	928	723
6	C25.H52	352	43	703	889	782
7	C23.H48	324	43	701	901	770
8	C16.H34	226	57	697	919	737
9	C18.H38	254	57	695	894	714

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	- -
2	—	—	—	—	629-92-5
3	—	—	—	—	55282-11-6
4	—	—	—	—	54105-67-8
5	—	—	—	—	6418-43-5
6	—	—	—	—	629-99-2
7	—	—	—	—	638-67-5
8	—	—	—	—	544-76-3
9	—	—	—	—	6418-44-6


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:31:00 + 14:51
SAMPLE: S-MM5-1B 1/35A/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068102 #1335
CALI: 30068102 # 3
BASE M/Z: 57
RIC: 40704.
1000
SAMPLE
C19.H40
2-METHYLOCTADECANE or isomer
1000
M WT 268
B PK 43
RANK 1
37456
PUR 740
C19.H40
NONADECANE
1000
M WT 268
B PK 57
RANK 2
37465
PUR 712
C26.H54
HENEICOSANE, 11-(1-ETHYLPROPYL)-
1000
M WT 366
B PK 43
RANK 3
50998
PUR 709
M/Z
50
100
150
200
250
300

Library Search Data: 30068102 #1402 Base m/z: 57
08/31/98 19:31:00 + 15:36 Cali: 30068102 # 3 RIC: 29856.
Sample: S-MM5-1B 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
714 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37465	NONADECANE
2	37462	HEPTADECANE, 2,6-DIMETHYL-
3	46161	TRICOSANE
4	49555	PENTACOSANE
5	32059	HEPTADECANE
6	42193	EICOSANE, 10-METHYL-
7	37456	2-METHYLOCTADECANE
8	44314	DOCOSANE
9	42197	HENEICOSANE

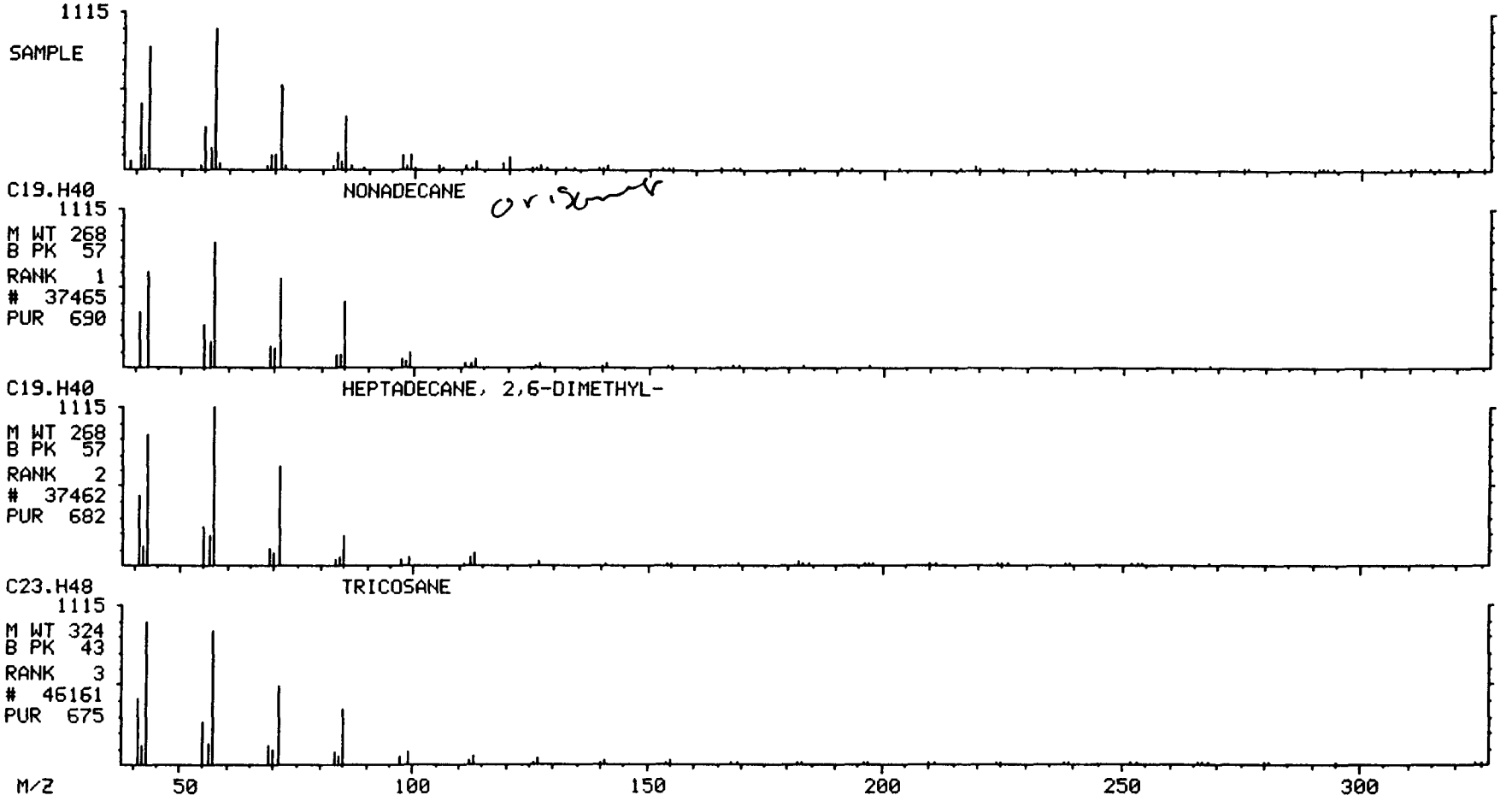
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	690	965	706
2	C19.H40	268	57	682	938	692
3	C23.H48	324	43	675	923	727
4	C25.H52	352	43	664	898	734
5	C17.H36	240	57	660	954	671
6	C21.H44	296	57	658	914	679
7	C19.H40	268	43	658	948	677
8	C22.H46	310	57	656	912	701
9	C21.H44	296	57	654	912	692

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	629-92-5
2	---	---	---	---	54105-67-8
3	---	---	---	---	638-67-5
4	---	---	---	---	629-99-2
5	---	---	---	---	629-78-7
6	---	---	---	---	54833-23-7
7	---	---	---	---	- -
8	---	---	---	---	629-97-0
9	---	---	---	---	629-94-7

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 19:31:00 + 15:36
SAMPLE: S-MM5-1B 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068102 #1402
CALI: 30068102 # 3

BASE M/Z: 57
RIC: 29856.



TIC SELECTION REPORT

DATA FILE: 30068102

THE FOLLOWING PEAKS WERE REJECTED BECAUSE AT LEAST 40 % OF THEIR SIZE WAS ACCOUNTED FOR BY TARGET COMPOUNDS ELUTING WITHIN 4 SCANS OF THE PEAK TOP.

SCAN	SIZE	AMOUNT
341	188320.	24.846
530	398528.	52.579
829	303185.	40.000
1088	341760.	40.000
1552	204287.	40.000
1783	192640.	40.000

TOTAL NUMBER OF UNIDENTIFIED PEAKS WITH SIZE GREATER THAN 10 % OF THE CLOSEST INTERNAL STANDARD THAT DOES NOT HAVE INTERFERENCES = 95

INTERNAL STANDARDS THAT HAVE RIC SIZE LESS THAN 50 % OR GREATER THAN 200 % OF THE ESTIMATED RIC SIZE ARE CONSIDERED TO HAVE INTERFERENCES AND WILL NOT BE USED FOR QUANTITATION.

#	INTERNAL STANDARD	RIC SIZE	PERCENT OF ESTIMATED RIC SIZE	SCAN
1	C140 NAPHTHALENE-D8	398528.	260 *	530
2	C150 ACENAPHTHENE-D10	303185.	156	829
3	C160 PHENANTHRENE-D10	341760.	157	1088
4	C170 CHRYSENE-D12	204287.	145	1552
5	C175 PERYLENE-D12	192640.	162	1783

* INDICATES INTERFERENCE

SIZE = AREA

Semivolatile Organics
Method 0010/8270

Client Name: Pacific Environmental Services
Client ID: T-MM5-2-F,FH,XAD,COND,BH
LAB ID: 300681-0003-SA
Matrix: AIRTRAIN Sampled: 25 JUL 98 Received: 30 JUL 98
Authorized: 30 JUL 98 Prepared: 31 JUL 98 Analyzed: 31 AUG 98

Dilution Factor: 1.0

Parameter	Wet wt. Result	Units	Reporting Limit	Qualifier
Phenol	ND	ug/Sample	30	R
bis(2-Chloroethyl)ether	ND	ug/Sample	30	
2-Chlorophenol	ND	ug/Sample	30	
1,3-Dichlorobenzene	ND	ug/Sample	30	
1,4-Dichlorobenzene	ND	ug/Sample	30	
Benzyl alcohol	ND	ug/Sample	30	
1,2-Dichlorobenzene	ND	ug/Sample	30	
2-Methylphenol	ND	ug/Sample	30	
2,2'-Oxybis(1-chloropropane)	ND	ug/Sample	30	
3/4-Methylphenol	ND	ug/Sample	30	
N-Nitroso-di-n-propylamine	ND	ug/Sample	30	
Hexachloroethane	ND	ug/Sample	30	
Nitrobenzene	ND	ug/Sample	30	
Isophorone	ND	ug/Sample	30	
2-Nitrophenol	ND	ug/Sample	30	
2,4-Dimethylphenol	ND	ug/Sample	30	
Benzoic acid	ND	ug/Sample	150	
bis(2-Chloroethoxy)-methane	ND	ug/Sample	30	
2,4-Dichlorophenol	ND	ug/Sample	30	
1,2,4-Trichlorobenzene	ND	ug/Sample	30	
Naphthalene	ND	ug/Sample	30	
4-Chloroaniline	ND	ug/Sample	30	
Hexachlorobutadiene	ND	ug/Sample	30	
4-Chloro-3-methylphenol	ND	ug/Sample	30	
2-Methylnaphthalene	60	ug/Sample	30	
Hexachlorocyclopentadiene	ND	ug/Sample	30	
2,4,6-Trichlorophenol	ND	ug/Sample	30	
2,4,5-Trichlorophenol	ND	ug/Sample	150	
2-Chloronaphthalene	ND	ug/Sample	30	
2-Nitroaniline	ND	ug/Sample	30	
Dimethyl phthalate	ND	ug/Sample	30	
Acenaphthylene	ND	ug/Sample	30	
3-Nitroaniline	ND	ug/Sample	150	
Acenaphthene	ND	ug/Sample	30	
2,4-Dinitrophenol	ND	ug/Sample	150	
4-Nitrophenol	ND	ug/Sample	150	
Dibenzofuran	ND	ug/Sample	30	

Note R = Reporting limit(s) raised due to sample volume limitations.
ND = Not Detected

Reported By: Emily Uebelhoer Approved By: Karin Yee

The cover letter is an integral part of this report.
Rev 230787

Semivolatile Organics
Method 0010/8270 (cont.)

Client Name: Pacific Environmental Services
Client ID: T-MM5-2-F,FH,XAD,COND,BH
LAB ID: 300681-0003-SA
Matrix: AIRTRAIN Sampled: 25 JUL 98 Received: 30 JUL 98
Authorized: 30 JUL 98 Prepared: 31 JUL 98 Analyzed: 31 AUG 98

Dilution Factor: 1.0

Parameter	Wet wt. Result	Units	Reporting Limit	Qualifier
2,4-Dinitrotoluene	ND	ug/Sample	30	
2,6-Dinitrotoluene	ND	ug/Sample	30	
Diethyl phthalate	ND	ug/Sample	30	
4-Chlorophenyl phenyl ether	ND	ug/Sample	30	
Fluorene	ND	ug/Sample	30	
4-Nitroaniline	ND	ug/Sample	150	
4,6-Dinitro-2-methylphenol	ND	ug/Sample	150	
N-Nitrosodiphenylamine	ND	ug/Sample	30	
4-Bromophenyl phenyl ether	ND	ug/Sample	30	
Hexachlorobenzene	ND	ug/Sample	30	
Pentachlorophenol	ND	ug/Sample	150	
Phenanthrene	ND	ug/Sample	30	
Anthracene	ND	ug/Sample	30	
Di-n-butyl phthalate	ND	ug/Sample	30	
Fluoranthene	ND	ug/Sample	30	
Pyrene	ND	ug/Sample	30	
Butyl benzyl phthalate	ND	ug/Sample	30	
3,3'-Dichlorobenzidine	ND	ug/Sample	60	
Benzo(a)anthracene	ND	ug/Sample	30	
bis(2-Ethylhexyl)-phthalate	ND	ug/Sample	30	
Chrysene	ND	ug/Sample	30	
Di-n-octyl phthalate	ND	ug/Sample	30	
Benzo(b)fluoranthene	ND	ug/Sample	30	
Benzo(k)fluoranthene	ND	ug/Sample	30	
Benzo(a)pyrene	ND	ug/Sample	30	
Indeno(1,2,3-cd)pyrene	ND	ug/Sample	30	
Dibenz(a,h)anthracene	ND	ug/Sample	30	
Benzo(g,h,i)perylene	ND	ug/Sample	30	
Acetophenone	ND	ug/Sample	30	
4-Aminobiphenyl	ND	ug/Sample	150	
Aniline	ND	ug/Sample	30	
Benzidine	ND	ug/Sample	300	
3,3'-Dimethylbenzidine	ND	ug/Sample	60	
N-Nitrosodimethylamine	ND	ug/Sample	30	
N-Nitrosomorpholine	ND	ug/Sample	30	
Pentachloronitrobenzene (PCNB)	ND	ug/Sample	150	
o-Toluidine	ND	ug/Sample	60	

ND = Not Detected

Reported By: Emily Uebelhoer Approved By: Karin Yee

The cover letter is an integral part of this report.
Rev 230787

Semivolatile Organics (cont.)
Method 0010/8270

Client Name: Pacific Environmental Services
Client ID: T-MM5-2-F,FH,XAD,COND,BH
LAB ID: 300681-0003-SA
Matrix: AIRTRAIN Sampled: 25 JUL 98 Received: 30 JUL 98
Authorized: 30 JUL 98 Prepared: 31 JUL 98 Analyzed: 31 AUG 98

Dilution Factor: 1.0

Parameter	Wet wt. Result	Units	Reporting Limit	Qualifier
2-Methoxybenzenamine	ND	ug/Sample	--	K
Biphenyl	ND	ug/Sample	--	K
Chloroacetophenone	ND	ug/Sample	--	K
Cumene	ND	ug/Sample	--	K
DBCP (1,2-Dibromo-3-chloropropane)	ND	ug/Sample	--	K
Benzo(e)pyrene	ND	ug/Sample	--	K
N-N-Diethylaniline	ND	ug/Sample	--	K
Dimethylaniline	ND	ug/Sample	--	K
3,3'-Dimethoxybenzidine	ND	ug/Sample	--	K
Hydroquinone	ND	ug/Sample	--	K
4,4'-Methyl-bis(2-chloroaniline)	ND	ug/Sample	--	K
4-Nitrodiphenyl	ND	ug/Sample	--	K
Trifluralin	ND	ug/Sample	--	K

Surrogate	Recovery	Acceptable Range	
Nitrobenzene-d5	87 %	45 - 107	
2-Fluorobiphenyl	105 %	62 - 110	
Terphenyl-d14	78 %	58 - 135	
Phenol-d5	67 %	43 - 130	
2-Fluorophenol	62 %	36 - 111	
2,4,6-Tribromophenol	49 %	58 - 131	i

Note i = Surrogate recovery is outside of control limits.
Note K = Identified by mass spectrum only; quantitation based on 1:1 response with internal standard.
ND = Not Detected

Reported By: Emily Uebelhoer Approved By: Karin Yee

807

The cover letter is an integral part of this report.
Rev 230787

Semivolatiles Library Search (20 Compound TID)
Method 8270

Client Name: Pacific Environmental Services
Client ID: T-MM5-2-F,FH,XAD,COND,BH
LAB ID: 300681-0003-SA
Matrix: AIRTRAIN Sampled: 25 JUL 98 Received: 30 JUL 98
Authorized: 30 JUL 98 Prepared: NA Analyzed: 31 AUG 98

Dilution Factor: 1.0

Parameter	Result	Units	Reporting Limit	Qualifier
4-Hydroxy-4-methyl-2-pentanone	450	ug/Sample	--	0
n-Nonane	370	ug/Sample	--	0
Unknown alkane	180	ug/Sample	--	
1H-Indene, 1-ethylidene-	240	ug/Sample	--	0
Undecane	180	ug/Sample	--	0
Heptadecane, 2,6,10,14 -tetramethyl-	220	ug/Sample	--	0
Unknown alkane	320	ug/Sample	--	
Unknown	200	ug/Sample	--	
Heptadecane, 2,6,10,14 -tetramethyl-	260	ug/Sample	--	0
Pentadecane	320	ug/Sample	--	0
Nonadecane	290	ug/Sample	--	0
Heptadecane, 2,6-dimethyl-	190	ug/Sample	--	0
Heptadecane, 2,6-dimethyl-	460	ug/Sample	--	0
Unknown alkane	160	ug/Sample	--	
Nonadecane	200	ug/Sample	--	0
Nonadecane	110	ug/Sample	--	0
Heptadecane, 2,6-dimethyl-	130	ug/Sample	--	0
Nonadecane	110	ug/Sample	--	0
3-Octadecene, (E)-	160	ug/Sample	--	0
Unknown	120	ug/Sample	--	

Note 0 = Or structurally similar compound (isomer).
NA = Not Applicable

Reported By: Emily Uebelhoer Approved By: Karin Yee

8C6

The cover letter is an integral part of this report.
Rev 230787

QUANTERRA GC/MS

Target Compound Data Summary Sheet

Data File: 30068103
Std Id: ST16980831

Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Client: PACIFI Date Analyzed: 08/31/98 20:01
Analyst: DAT Instrument ID: F16 Run Factor: 3.00
Quan List Threshold: 0.95 Surrogate Vol.: 1.00

Surrogate Spike Recoveries
8270-G, LIMS 10/10/96

Surrogate	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured		QC limits
CS20 NITROBENZENE-D5	50.00	43.50	87.0		45 107
CS25 2-FLUOROBIPHENY	50.00	52.50	105.		62 110
CS30 TERPHENYL-D14	50.00	38.80	77.6		58 135
CS45 PHENOL-D5	100.0	67.20	67.2		43 130
CS50 2-FLUOROPHENOL	100.0	61.90	61.9		36 111
CS55 2,4,6-TRIBROMOP	100.0	48.90	48.9	*	58 131

RI confirms 9/16/98

Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
HEXACHLOROBENZENE-C13		ND	UG/A	30.0
C310 N-NITROSODIMETHYLAMINE		ND	UG/A	30.0
PYRIDINE		ND	UG/A	60.0
2-PICOLINE		ND	UG/A	30.0
N-NITROSOMETHYLETHYLAMINE		ND	UG/A	30.0
METHYLMETHANESULFONATE		ND	UG/A	30.0
N-NITROSODIETHYLAMINE		ND	UG/A	30.0
ETHYLMETHANE SULFONATE		ND	UG/A	30.0
PENTACHLOROETHANE		ND	UG/A	30.0
C320 ANILINE		ND	UG/A	30.0
C315 PHENOL		ND	UG/A	30.0
C325 BIS(2-CHLOROETHYL)ETHER		ND	UG/A	30.0
C330 2-CHLOROPHENOL		ND	UG/A	30.0
C335 1,3-DICHLOROBENZENE		ND	UG/A	30.0
C340 1,4-DICHLOROBENZENE		ND	UG/A	30.0
C345 BENZYL ALCOHOL		ND	UG/A	30.0
C350 1,2-DICHLOROBENZENE		ND	UG/A	30.0
C355 2-METHYLPHENOL		ND	UG/A	30.0
C360 2,2'-OXYBIS(1-CLPROPAN)		ND	UG/A	30.0
C361 ACETOPHENONE		ND	UG/A	30.0
N-NITROSOPYRROLIDINE		ND	UG/A	30.0
N-NITROSOMORPHOLINE		ND	UG/A	30.0
3-METHYL PHENOL		ND	UG/A	30.0
C365 4-METHYLPHENOL		ND	UG/A	30.0
C370 N-NITROSO-DI-N-PROPYLAM		ND	UG/A	30.0
O-TOLUIDINE		ND	UG/A	30.0
C375 HEXACHLOROETHANE		ND	UG/A	30.0
C410 NITROBENZENE		ND	UG/A	30.0
N-NITROSOPIPERIDINE		ND	UG/A	30.0

Reviewed by: 9/17/98

8C5

QUANTERRA GC/MS

Target Compound Data Summary Sheet

Data File: 30068103
Std Id: ST16980831

Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Client: PACIFI Date Analyzed: 08/31/98 20:01
Analyst: DAT Instrument ID: F16 Run Factor: 3.00
Quan List Threshold: 0.95 Surrogate Vol.: 1.00

Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
C415 ISOPHORONE		ND	UG/A	30.0
C420 2-NITROPHENOL		ND	UG/A	30.0
C425 2,4-DIMETHYLPHENOL		ND	UG/A	30.0
C435 BIS(2-CHLOROETHOXY)METH		ND	UG/A	30.0
C440 2,4-DICHLOROPHENOL		ND	UG/A	30.0
C430 BENZOIC ACID		ND	UG/A	150.0
AA-DIMETHYLPHENETHYLAMINE		ND	UG/A	30.0
C445 1,2,4-TRICHLOROBENZENE		ND	UG/A	30.0
C450 NAPHTHALENE		ND	UG/A	30.0
C455 4-CHLOROANALINE		ND	UG/A	30.0
2,6-DICHLOROPHENOL		ND	UG/A	30.0
HEXACHLOROPROPENE		ND	UG/A	30.0
C460 HEXACHLOROBUTADIENE		ND	UG/A	30.0
P-PHENYLENE DIAMINE		ND	UG/A	30.0
N-NITROSODI-N-BUTYLAMINE		ND	UG/A	30.0
C465 4-CHLORO-3-METHYLPHENO		ND	UG/A	30.0
SAFROLE		ND	UG/A	30.0
C470 2-METHYLNAPHTHALENE	653	60	UG/A	30.0
1,2,4,5-TETRACHLOROBENZENE		ND	UG/A	30.0
ISOSAFROLE (#1)		ND	UG/A	60.0
C510 HEXACHLOROCYCLOPENTADI		ND	UG/A	30.0
C515 2,4,6-TRICHLOROPHENOL		ND	UG/A	30.0
C520 2,4,5-TRICHLOROPHENOL		ND	UG/A	30.0
ISOSAFROLE (#2)		ND	UG/A	60.0
C525 2-CHLORONAPHTHALENE		ND	UG/A	30.0
1-CHLORONAPHTHALENE		ND	UG/A	15.0
C530 2-NITROANALINE		ND	UG/A	150.0
1,4-NAPHTHOQUINONE		ND	UG/A	30.0
C535 DIMETHYLPHTHALATE		ND	UG/A	30.0
1,3-DINITROBENZENE		ND	UG/A	30.0
C540 ACENAPHTHYLENE		ND	UG/A	30.0
C543 2,6-DINITROTOLUENE		ND	UG/A	30.0
C545 3-NITROANILINE		ND	UG/A	150.0
C550 ACENAPHTHENE		ND	UG/A	30.0
C555 2,4-DINITROPHENOL		ND	UG/A	150.0
C565 DIBENZOFURAN		ND	UG/A	30.0
C560 4-NITROPHENOL		ND	UG/A	150.0
PENTACHLOROBENZENE		ND	UG/A	30.0
C570 2,4-DINITROTOLUENE		ND	UG/A	30.0
1-NAPHTHYLAMINE		ND	UG/A	30.0
2-NAPHTHYLAMINE		ND	UG/A	30.0
2,3,4,6-TETRACHLOROPHENOL		ND	UG/A	60.0
C580 DIETHYLPHTHALATE		ND	UG/A	30.0
C590 FLUORENE		ND	UG/A	30.0

QUANTERRA GC/MS

Target Compound Data Summary Sheet

Data File: 30068103
Std Id: ST16980831

Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Client: PACIFI Date Analyzed: 08/31/98 20:01
Analyst: DAT Instrument ID: F16 Run Factor: 3.00
Quan List Threshold: 0.95 Surrogate Vol.: 1.00

Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
C585 4-CHLOROPHENYL-PHENYLE		ND	UG/A	30.0
5-NITRO-O-TOLUIDINE		ND	UG/A	30.0
C595 4-NITROANALINE		ND	UG/A	150.0
C610 4,6-DINITRO-2-METHYLPH		ND	UG/A	150.0
C615 N-NITROSODIPHENYLAMINE		ND	UG/A	30.0
C620 AZOBENZENE		ND	UG/A	30.0
SYM-TRINITROBENZENE		ND	UG/A	30.0
C625 4-BROMOPHENYL-PHENYLET		ND	UG/A	30.0
PHENACETIN		ND	UG/A	30.0
DIALLATE	234	ND	UG/A	30.0
C630 HEXACHLOROBENZENE		ND	UG/A	30.0
4-AMINOBIPHENYL		ND	UG/A	30.0
C635 PENTACHLOROPHENOL		ND	UG/A	150.0
PRONAMIDE		ND	UG/A	30.0
PENTACHLORONITROBENZENE		ND	UG/A	150.0
C640 PHENANTHRENE		ND	UG/A	30.0
C645 ANTHRACENE		ND	UG/A	30.0
2SECBUTYL-4,6-DINITROPHENOL		ND	UG/A	30.0
C647 CARBAZOLE		ND	UG/A	30.0
C650 DI-N-BUTYLPHTHALATE		ND	UG/A	30.0
4-NITROQUINOLINE-1-OXIDE		ND	UG/A	30.0
METHAPYRILENE		ND	UG/A	30.0
ISODRIN		ND	UG/A	30.0
C655 FLUORANTHENE		ND	UG/A	30.0
CHLOROBENZILATE		ND	UG/A	30.0
C710 BENZIDINE		ND	UG/A	300.0
C715 PYRENE		ND	UG/A	30.0
ARAMITE (#1)		ND	UG/A	30.0
ARAMITE (#2)		ND	UG/A	30.0
P-DIMETHYLAMINOAZOBENZENE		ND	UG/A	30.0
3,3'-DIMETHYLBENZIDINE		ND	UG/A	30.0
KEPONE		ND	UG/A	150.0
C720 BUTYLBENZYLPHTHALATE		ND	UG/A	30.0
2-ACETYLAMINOFLUORENE		ND	UG/A	30.0
C730 BENZO(A)ANTHRACENE		ND	UG/A	30.0
C725 3,3'-DICHLOROBENZIDINE		ND	UG/A	60.0
C740 CHRYSENE		ND	UG/A	30.0
C745 BIS(2-ETHYLHEXYL)PHTHA		ND	UG/A	30.0
3-METHYLCHOLANTHRENE		ND	UG/A	30.0
C760 DI-N-OCTYL PHTHALATE		ND	UG/A	30.0
C765 BENZO(B)FLUORANTHENE		ND	UG/A	30.0
7,12-DIMETHYLBENZANTHRACENE		ND	UG/A	30.0
C770 BENZO(K)FLUORANTHENE		ND	UG/A	30.0
HEXACHLOROPHENE		ND	UG/A	30.0

QUANTERRA GC/MS

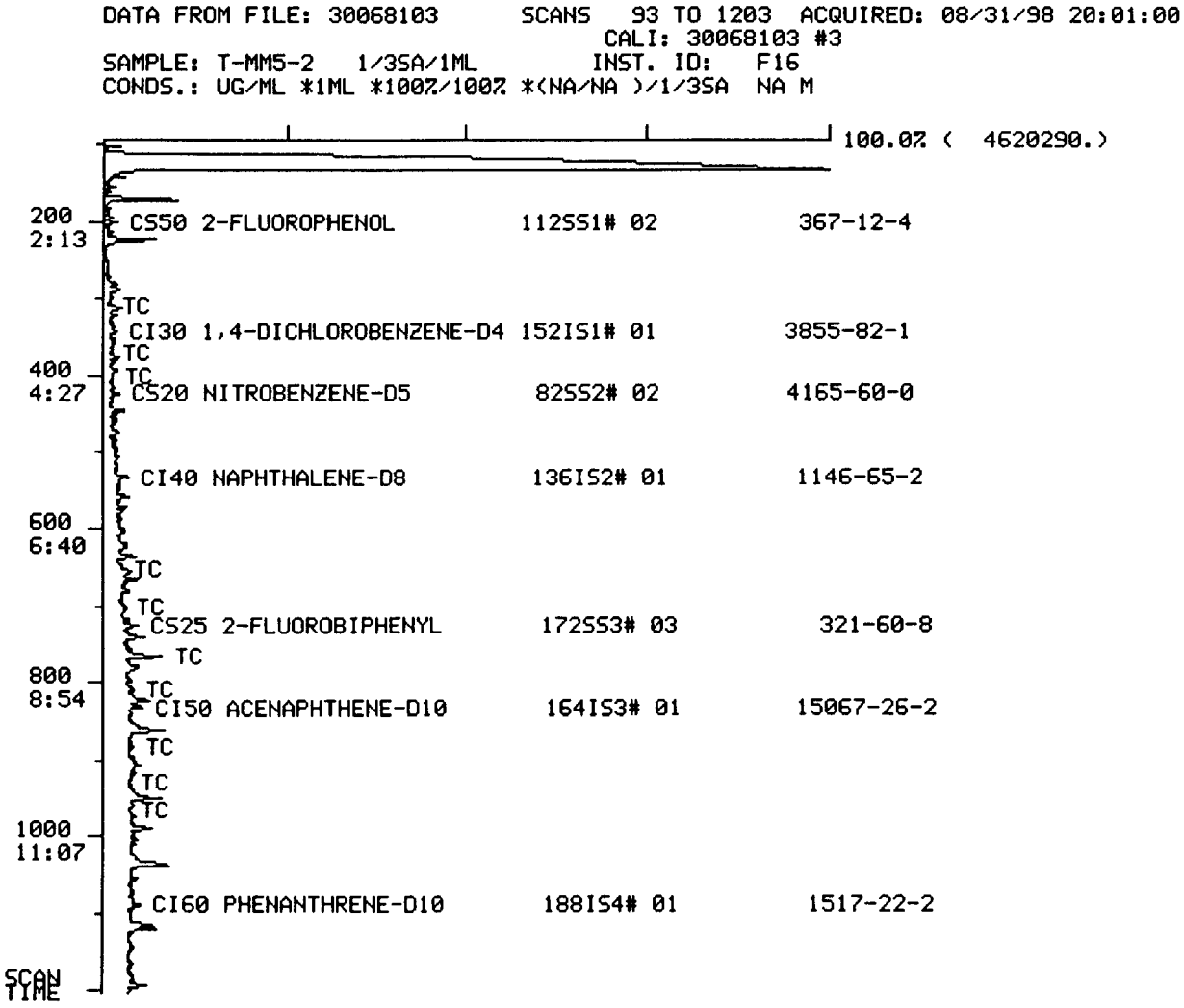
Target Compound Data Summary Sheet

Data File: 30068103
Std Id: ST16980831

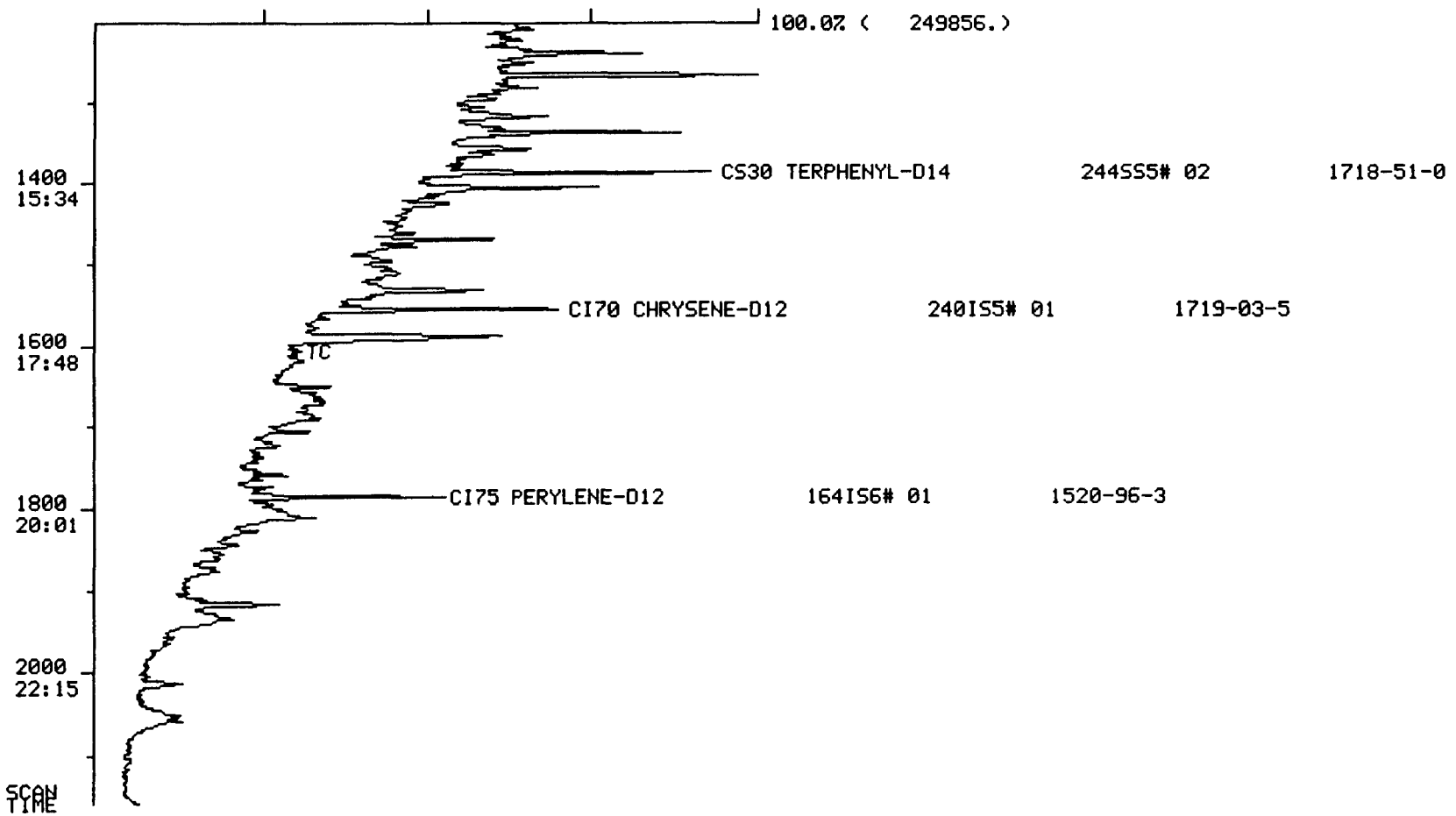
Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Client: PACIFI Date Analyzed: 08/31/98 20:01
Analyst: DAT Instrument ID: F16 Run Factor: 3.00
Quan List Threshold: 0.95 Surrogate Vol.: 1.00

Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
C775 BENZO(A)PYRENE		ND	UG/A	30.0
C780 INDENO(1,2,3-CD)PYRENE		ND	UG/A	30.0
C785 DIBENZ(A,H)ANTHRACENE		ND	UG/A	30.0
C790 BENZO(G,H,I)PERYLENE		ND	UG/A	30.0


DATA FROM FILE: 30068103 SCANS 93 TO 1203 ACQUIRED: 08/31/98 20:01:00
CALI: 30068103 #3
SAMPLE: T-MM5-2 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
100.0% (4620290.)
200
2:13
CS50 2-FLUOROPHENOL 112SS1# 02 367-12-4
TC
CI30 1,4-DICHLOROBENZENE-D4 152IS1# 01 3855-82-1
TC
400
4:27
TC
CS20 NITROBENZENE-D5 82SS2# 02 4165-60-0
CI40 NAPHTHALENE-D8 136IS2# 01 1146-65-2
600
6:40
TC
TC
CS25 2-FLUOROBIPHENYL 172SS3# 03 321-60-8
TC
800
8:54
TC
CI50 ACENAPHTHENE-D10 164IS3# 01 15067-26-2
TC
TC
TC
1000
11:07
CI60 PHENANTHRENE-D10 188IS4# 01 1517-22-2
SCAN
TIME

DATA FROM FILE: 30068103 SCANS 1203 TO 2158 ACQUIRED: 08/31/98 20:01:00
CALI: 30068103 #3
SAMPLE: T-MM5-2 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M



814

STANDARD USED FOR THIS REPORT IS ST16980831 REPORT PRINTED: 9/01/98 15:07:43

ADDITIONAL STANDARD USED FOR THIS REPORT IS: ST16980831A

QUANTERRA QUANTITATION SUMMARY File: 30068103

Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Analyst: DAT Instrument Id: F16 Analyzed: 08/31/98 20:01

Compounds with amounts less than 0.20 reported as NOT FOUND

No	Library Entry	Name	Mass	Meth	Scan	Ref	Area	RRF(L)	Units: UG/ML Amount
1	S1# 1	CI30 1,4-DICHLOROBENZENE	152	A BV	341	1	31920.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	A BB	531	2	111468.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	A BB	830	3	58555.	1.000	40.000
4	S4# 1	CI60 PHENANTHRENE-D10	188	A BB	1088	4	96270.	1.000	40.000
5	S5# 1	CI70 CHRYSENE-D12	240	A BB	1554	5	92258.	1.000	40.000
6	S6# 1	CI75 PERYLENE-D12	264	A BB	1784	6	85395.	1.000	40.000
7	S2# 2	CS20 NITROBENZENE-D5	82	A BB	422	2	56985.	0.470	43.550
8	S3# 3	CS25 2-FLUOROBIPHENYL	172	A BB	724	3	94839.	1.234	52.489
9	S5# 2	CS30 TERPHENYL-D14	244	A BB	1386	5	89070.	0.995	38.803
10	S1# 3	CS45 PHENOL-D5	99	A BB	310	1	108633.	2.025	67.210
11	S1# 2	CS50 2-FLUOROPHENOL	112	A BB	199	1	67610.	1.368	61.923
12	S3# 2	CS55 2,4,6-TRIBROMOPHENO	330	A BB	971	3	16861.	0.236	48.877
13	S4# 4	HEXACHLOROBENZENE-C13	294		4	NOT FOUND			
14	S1# 15	C310 N-NITROSODIMETHYLAM	74		1	NOT FOUND			
15	S1# 20	PYRIDINE	79		1	NOT FOUND			
16	S1# 30	2-PICOLINE	93		1	NOT FOUND			
17	S1# 40	N-NITROSOMETHYLETHYLAMIN	42		1	NOT FOUND			
18	S1# 60	METHYLMETHANESULFONATE	80		1	NOT FOUND			
19	S1# 70	N-NITROSODIETHYLAMINE	102		1	NOT FOUND			
20	S1# 85	ETHYLMETHANE SULFONATE	79		1	NOT FOUND			
21	S1# 95	PENTACHLOROETHANE	117	A BB	307	1	821.	0.602	1.710
22	S1#100	C320 ANILINE	93		1	NOT FOUND			
23	S1#105	C315 PHENOL	94	A BB	311	1	11667.	1.968	7.430
24	S1#110	C325 BIS(2-CHLOROETHYL)E	93	A BB	320	1	634.	1.368	0.581
25	S1#115	C330 2-CHLOROPHENOL	128		1	NOT FOUND			
26	S1#125	C335 1,3-DICHLOROBENZENE	146		1	NOT FOUND			
27	S1#130	C340 1,4-DICHLOROBENZENE	146	A BB	343	1	532.	1.617	0.412
28	S1#145	C345 BENZYL ALCOHOL	108	A VB	370	1	5992.	0.854	8.789
29	S1#150	C350 1,2-DICHLOROBENZENE	146		1	NOT FOUND			
30	S1#160	C355 2-METHYLPHENOL	108		1	NOT FOUND			
31	S1#165	C360 2,2'-OXYBIS(1-CLPRO	45		1	NOT FOUND			
32	S1#170	C361 ACETOPHENONE	105	A BB	401	1	11312.	1.934	7.330
33	S1#175	N-NITROSOPYRROLIDINE	100	A VB	402	1	224.	0.553	0.508
34	S1#180	N-NITROSOMORPHOLINE	56	A VV	410	1	3898.	0.821	5.952
35	S1#182	3-METHYL PHENOL	108		1	NOT FOUND			
36	S1#185	C365 4-METHYLPHENOL	108		1	NOT FOUND			
37	S1#190	C370 N-NITROSO-DI-N-PROP	70	A VB	404	1	1437.	0.906	1.988
38	S1#195	O-TOLUIDINE	106		1	NOT FOUND			
39	S1#200	C375 HEXACHLOROETHANE	117		1	NOT FOUND			
40	S2# 10	C410 NITROBENZENE	77	A BB	423	2	1534.	0.445	1.237
41	S2# 15	N-NITROSOPIPERIDINE	42		2	NOT FOUND			
42	S2# 20	C415 ISOPHORONE	82		2	NOT FOUND			
43	S2# 25	C420 2-NITROPHENOL	139		2	NOT FOUND			
44	S2# 30	C425 2,4-DIMETHYLPHENOL	107	A BB	500	2	820.	0.330	0.892
45	S2# 35	C435 BIS(2-CHLOROETHOXY)	93		2	NOT FOUND			

46	S2#	40	C440	2,4-DICHLOROPHENOL	162	A	BB	519	2		346.	0.308	0.404
47	S2#	45	C430	BENZOIC ACID	122			2	NOT FOUND				
48	S2#	50	AA-DIMETHYLPHENETHYLAMIN		58			2	NOT FOUND				
49	S2#	55	C445	1,2,4-TRICHLOROBENZ	180	A	VV	527	2		220.	0.331	0.239

50	S2# 60	C450	NAPHTHALENE	128	A	BV	534	2	27047.	1.022	9.495
51	S2# 80	C455	4-CHLOROANALINE	127	A	BB	556	2	596.	0.454	0.471
52	S2# 85		2,6-DICHLOROPHENOL	162			2	NOT FOUND			
53	S2# 90		HEXACHLOROPROPENE	213			2	NOT FOUND			
54	S2# 95	C460	HEXACHLOROBUTADIENE	225			2	NOT FOUND			
55	S2#115		P-PHENYLENE DIAMINE	108			2	NOT FOUND			
56	S2#120		N-NITROSODI-N-BUTYLAMINE	84			2	NOT FOUND			
57	S2#130	C465	4-CHLORO-3-METHYLPH	107			2	NOT FOUND			
58	S2#140		SAFROLE	162	A	BB	649	2	1150.	0.248	1.666
59	S2#145	C470	2-METHYLNAPHTHALENE	142	A	BB	653	2	42032.	0.751	20.077
60	S3# 10		1,2,4,5-TETRACHLOROBENZE	214			3	NOT FOUND			
61	S3# 15		ISOSAFROLE (#1)	162	A	BB	698	3	451.	0.044	7.066
62	S3# 20	C510	HEXACHLOROCYCLOPENT	237			3	NOT FOUND			
63	S3# 25	C515	2,4,6-TRICHLOROPHEN	196			3	NOT FOUND			
64	S3# 30	C520	2,4,5-TRICHLOROPHEN	196			3	NOT FOUND			
65	S3# 35		ISOSAFROLE (#2)	104			3	NOT FOUND			
66	S3# 40	C525	2-CHLORONAPHTHALENE	162			3	NOT FOUND			
67	S3# 42		1-CHLORONAPHTHALEN	162			3	NOT FOUND			
68	S3# 45	C530	2-NITROANALINE	65	A	BB	765	3	848.	0.502	1.155
69	S3# 50		1,4-NAPHTHOQUINONE	158			3	NOT FOUND			
70	S3# 55	C535	DIMETHYLPHTHALATE	163			3	NOT FOUND			
71	S3# 60		1,3-DINITROBENZENE	168	A	BB	808	3	398.	0.197	1.378
72	S3# 65	C540	ACENAPHTHYLENE	152			3	NOT FOUND			
73	S3# 70	C543	2,6-DINITROTOLUENE	165			3	NOT FOUND			
74	S3# 75	C545	3-NITROANILINE	138			3	NOT FOUND			
75	S3# 80	C550	ACENAPHTHENE	153	A	VV	836	3	1939.	1.159	1.143
76	S3# 85	C555	2,4-DINITROPHENOL	184	A	BB	858	3	158.	0.189	0.570
77	S3# 90	C565	DIBENZOFURAN	168	A	VB	868	3	1797.	1.669	0.735
78	S3# 95	C560	4-NITROPHENOL	109			3	NOT FOUND			
79	S3#100		PENTACHLOROBENZENE	250			3	NOT FOUND			
80	S3#105	C570	2,4-DINITROTOLUENE	165	A	VB	882	3	891.	0.397	1.532
81	S3#110		1-NAPHTHYLAMINE	143	A	BV	882	3	394.	0.837	0.321
82	S3#115		2-NAPHTHYLAMINE	143	A	BB	903	3	418.	0.966	0.296
83	S3#120		2,3,4,6-TETRACHLOROPHENO	232			3	NOT FOUND			
84	S3#130	C580	DIETHYLPHTHALATE	149			3	NOT FOUND			
85	S3#135	C590	FLUORENE	166	A	BB	927	3	5465.	1.298	2.877
86	S3#140	C585	4-CHLOROPHENYL-PHEN	204			3	NOT FOUND			
87	S3#145		5-NITRO-O-TOLUIDINE	152	A	VB	942	3	1762.	0.356	3.386
88	S3#150	C595	4-NITROANALINE	138	A	BB	950	3	223.	0.307	0.495
89	S4# 10	C610	4,6-DINITRO-2-METHY	198			4	NOT FOUND			
90	S4# 15	C615	N-NITROSODIPHENYLAM	169	A	BB	965	4	4015.	0.551	3.029
91	S4# 20	C620	AZOBENZENE	77			4	NOT FOUND			
92	S4# 25		SYM-TRINITROBENZENE	75	A	BB	1026	4	132.	0.162	0.340
93	S4# 30	C625	4-BROMOPHENYL-PHENY	248			4	NOT FOUND			
94	S4# 35		PHENACETIN	108			4	NOT FOUND			
95	S4# 37		DIALLATE	234			4	NOT FOUND			
96	S4# 40	C630	HEXACHLOROBENZENE	284			4	NOT FOUND			
97	S4# 45		4-AMINOBIPHENYL	169			4	NOT FOUND			
98	S4# 50	C635	PENTACHLOROPHENOL	266			4	NOT FOUND			
99	S4# 55		PRONAMIDE	173			4	NOT FOUND			
100	S4# 60		PENTACHLORONITROBENZENE	237			4	NOT FOUND			
101	S4# 65	C640	PHENANTHRENE	178	A	BB	1092	4	17905.	1.033	7.205
102	S4# 70	C645	ANTHRACENE	178			4	NOT FOUND			
103	S4# 75		2SECBUTYL-4,6-DINITROPHE	211			4	NOT FOUND			
104	S4# 80	C647	CARBAZOLE	167	A	BB	1149	4	650.	0.764	0.354
105	S4# 85	C650	DI-N-BUTYLPHTHALATE	149			4	NOT FOUND			
106	S4#100		4-NITROQUINOLINE-1-OXIDE	190			4	NOT FOUND			
107	S4#105		METHAPYRILENE	58			4	NOT FOUND			
108	S4#106		ISODRIN	193			4	NOT FOUND			
109	S4#110	C655	FLUORANTHENE	202	A	BB	1300	4	550.	0.900	0.254
110	S4#120		CHLOROBENZILATE	139			4	NOT FOUND			

111	S5#	10	C710	BENZIDINE	184		5	NOT FOUND			
112	S5#	15	C715	PYRENE	202	A BB	1336	5	2225.	1.323	0.729
113	S5#	20		ARAMITE (#1)	185		5	NOT FOUND			
114	S5#	25		ARAMITE (#2)	185		5	NOT FOUND			
115	S5#	30		P-DIMETHYLAMINOAZOBENZEN	120		5	NOT FOUND			
116	S5#	35		3,3'-DIMETHYLBENZIDINE	212		5	NOT FOUND			
117	S5#	37		KEPONE	272		5	NOT FOUND			
118	S5#	40	C720	BUTYLBENZYLPHTHALAT	149		5	NOT FOUND			
119	S5#	45		2-ACETYLAMINOFLUORENE	181		5	NOT FOUND			
120	S5#	50	C730	BENZO(A)ANTHRACENE	228	A BB	1557	5	1896.	1.125	0.731
121	S5#	55	C725	3,3'-DICHLOROBENZID	252		5	NOT FOUND			
122	S5#	60	C740	CHRYSENE	228	A BB	1557	5	1896.	1.014	0.811
123	S5#	65	C745	BIS(2-ETHYLHEXYL)PH	149	A BB	1604	5	3863.	0.980	1.710
124	S5#	85		3-METHYLCHOLANTHRENE	268	A*BV	1832	5	454.	0.548	0.359
125	S6#	10	C760	DI-N-OCTYL PHTHALAT	149		6	NOT FOUND			
126	S6#	15	C765	BENZO(B)FLUORANTHEN	252		6	NOT FOUND			
127	S6#	20		7,12-DIMETHYLBENZANTHRAC	256	A BB	1742	6	376.	0.610	0.289
128	S6#	25	C770	BENZO(K)FLUORANTHEN	252		6	NOT FOUND			
129	S6#	30		HEXACHLOROPHENE	196		6	NOT FOUND			
130	S6#	35	C775	BENZO(A)PYRENE	252		6	NOT FOUND			
131	S6#	55	C780	INDENO(1,2,3-CD)PYR	276		6	NOT FOUND			
132	S6#	60	C785	DIBENZ(A,H)ANTHRACE	278		6	NOT FOUND			
133	S6#	65	C790	BENZO(G,H,I)PERYLEN	276		6	NOT FOUND			

BNA, S LIBRARIES ANALYST: ____ DATE: _____

QUANTERRA Internal Standard Check

Standard Filename: ST16980831 Analyzed: 08/31/98 12:31

Standard	IS# 1 Area	%	RT	IS# 2 Area	%	RT	IS# 3 Area	%	RT
ST16980831	28649.		3.78	100432.		5.90	54347.		9.21
Upper Limit	57297.=+200		4.28	200864.=+200		6.40	108695.=+200		9.71
Lower Limit	14324.=+ 50		3.28	50216.=+ 50		5.40	27174.=+ 50		8.71
Filename									
1 30068103	31920.= 111		3.79	111468.= 110		5.91	58555.= 107		9.23

IS# 1 = C130 1,4-DICHLOROBENZENE-D4
IS# 2 = C140 NAPHTHALENE-D8
IS# 3 = C150 ACENAPHTHENE-D10

* - indicates an I.S. is outside QC limit(s)

Standard	IS# 4 Area	%	RT	IS# 5 Area	%	RT	IS# 6 Area	%	RT
ST16980831	98520.		12.08	62289.		17.26	50750.		19.83
Upper Limit	197039.=+200		12.58	124578.=+200		17.76	101500.=+200		20.33
Lower Limit	49260.=+ 50		11.58	31145.=+ 50		16.76	25375.=+ 50		19.33
Filename									
1 30068103	96270.= 97		12.10	92258.= 148		17.29	85395.= 168		19.84

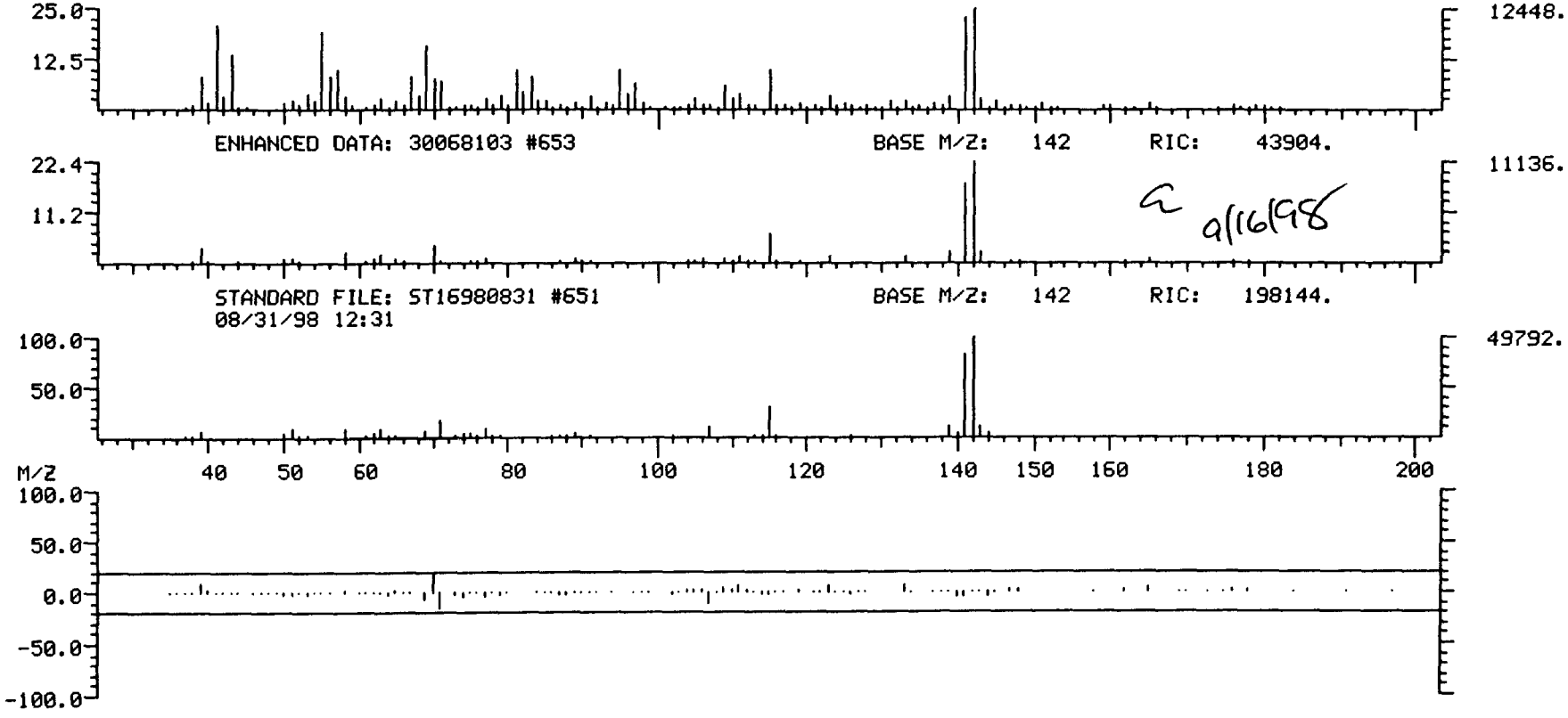
IS# 4 = C160 PHENANTHRENE-D10
IS# 5 = C170 CHRYSENE-D12
IS# 6 = C175 PERYLENE-D12

* - indicates an I.S. is outside QC limit(s)

TARGET COMPOUND COMPARISON

COMPOUND: C470 2-METHYLNAPHTHALENE 142 S2#145 91-57-6

RAW DATA: 30068103 #653 BASE M/Z: 142 RIC: 179200.
08/31/98 20:01
SAMPLE: T-MM5-2 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M



9/16/98

Data Reduced by: [illegible] Date: 9/17/98
Data Reviewed by: [illegible] Date: 9/17/98

Data File: 30068103

QUANTERRA GC/MS TIC REPORT (Part 1)

Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Analyst: DAT Date Analyzed: 08/31/98 20:01
Run Factor: 3.00

#	SCAN	Concentration in Sample (UG/A)	CAS #	
1	171	450.	123-42-2	
	2-PENTANONE, 4-HYDROXY-4-METHYL-			or isomer
2	222	370.	111-84-2	
	NONANE			or isomer
3	444	110.	00-00-0	
	UNKNOWN			
4	473	99.	71899-38-2	
	9-EICOSYNE			
5	633	180.	~~54105-67-8~~	5746400
	~~HEPTADECANE, 2,6-DIMETHYL-~~			unkn. alkane
6	653	240.	2471-83-2	
	1H-INDENE, 1-ETHYLIDENE-			or isomer
7	663	180.	1120-21-4	
	UNDECANE			or isomer
8	739	220.	18344-37-1	
	HEPTADECANE, 2,6,10,14-TETRAMETHYL-			or isomer
9	765	320.	~~62108-21-8~~	5746400
	~~DECANE, 6-ETHYL-2-METHYL-~~			unkn alkane
10	778	200.	00-00-0	5700
	UNKNOWN			

021

11 821 260. 18344-37-1
HEPTADECANE, 2,6,10,14-TETRAMETHYL- or isomer

12 859 320. 629-62-9
PENTADECANE or isomer

13 949 290. 629-92-5
NONADECANE or isomer

14 989 190. 54105-67-8
HEPTADECANE, 2,6-DIMETHYL- or isomer

15 1037 460. 54105-67-8
HEPTADECANE, 2,6-DIMETHYL- or isomer

16 1115 160. ~~29812-79-1~~ 5746400
~~HYDROXYLAMINE, O-DECYL-~~ unknown alkane

17 1120 200. 629-92-5
NONADECANE or isomer

~~18~~ 1192 110. 629-92-5
NONADECANE or isomer

~~19~~ 1266 110. 18344-37-1
HEPTADECANE, 2,6,10,14-TETRAMETHYL-

20 1336 130. 54105-67-8
HEPTADECANE, 2,6-DIMETHYL- or isomer

~~21~~ 1386 140. 1718-51-0
P-TERPHENYL-D14 surrogate

~~22~~ 1404 100. 629-92-5
NONADECANE

23	1531	110.	629-92-5	
	NONADECANE	or isomer		
24	1587	160.	7206-19-1	
	3-OCTADECENE, (E)-	or isomer		
25	1809	120.	00-00-0	5702
	UNKNOWN			

DATA FILE: 30068103

QUANTERRA GC/MS TIC REPORT (Part 2)

CONCENTRATION = AREA(TIC)*CONC(IS)/AREA(IS)

#	FIT	PURITY	INT. STD.	RT	RRT	AREA	HEIGHT	AMOUNT AS ANALYZED (UG/ML)	LIB	LIB #
1	954	915	2	1:54	0.206	1275650.	442368.	149.865	NB	3241.
2	988	937	2	2:28	0.267	1058960.	304107.	124.408	NB	5159.
3	905	600	2	4:56	0.535	311232.	78208.	36.564	UK	1.
4	900	659	2	5:15	0.570	280064.	64471.	32.902	NB	39230.
5	940	770	2	7:02	0.763	524416.	118784.	61.609	NB	37462.
6	934	735	2	7:15	0.787	681600.	76288.	80.075	NB	8109.
7	971	876	2	7:22	0.799	517888.	111232.	60.842	NB	11607.
8	928	808	2	8:13	0.890	615424.	133888.	72.301	NB	42196.
9	944	680	2	8:30	0.922	912896.	219904.	107.248	NB	19006.
10	682	318	2	8:39	0.937	556544.	73216.	65.383	UK	1.
11	965	833	2	9:07	0.989	750848.	136960.	88.211	NB	42196.
12	947	756	2	9:33	1.035	919808.	206592.	108.060	NB	25997.
13	965	853	2	10:33	1.143	825600.	197632.	96.992	NB	37465.
14	949	820	3	11:00	0.909	541952.	136192.	63.383	NB	37462.
15	971	854	3	11:32	0.953	1300990.	226560.	152.156	NB	37462.
16	924	767	3	12:24	1.025	443904.	134912.	51.916	NB	15969.
17	966	858	3	12:27	1.029	572928.	170752.	67.006	NB	37465.
18	967	784	3	13:15	1.096	324480.	112256.	37.949	NB	37465.
19	959	808	3	14:04	1.164	306688.	96256.	35.868	NB	42196.
20	888	698	4	14:51	0.860	340129.	83833.	42.894	NB	37462.
21	976	782	4	15:24	0.892	376192.	105344.	47.441	NB	32801.
22	931	695	4	15:36	0.903	272768.	66706.	34.399	NB	37465.
23	945	731	4	17:01	0.985	297984.	50304.	37.579	NB	37465.
24	968	767	4	17:39	1.021	421120.	74240.	53.107	NB	34410.
25	755	342	5	20:07	1.013	234560.	24576.	38.447	UK	1.

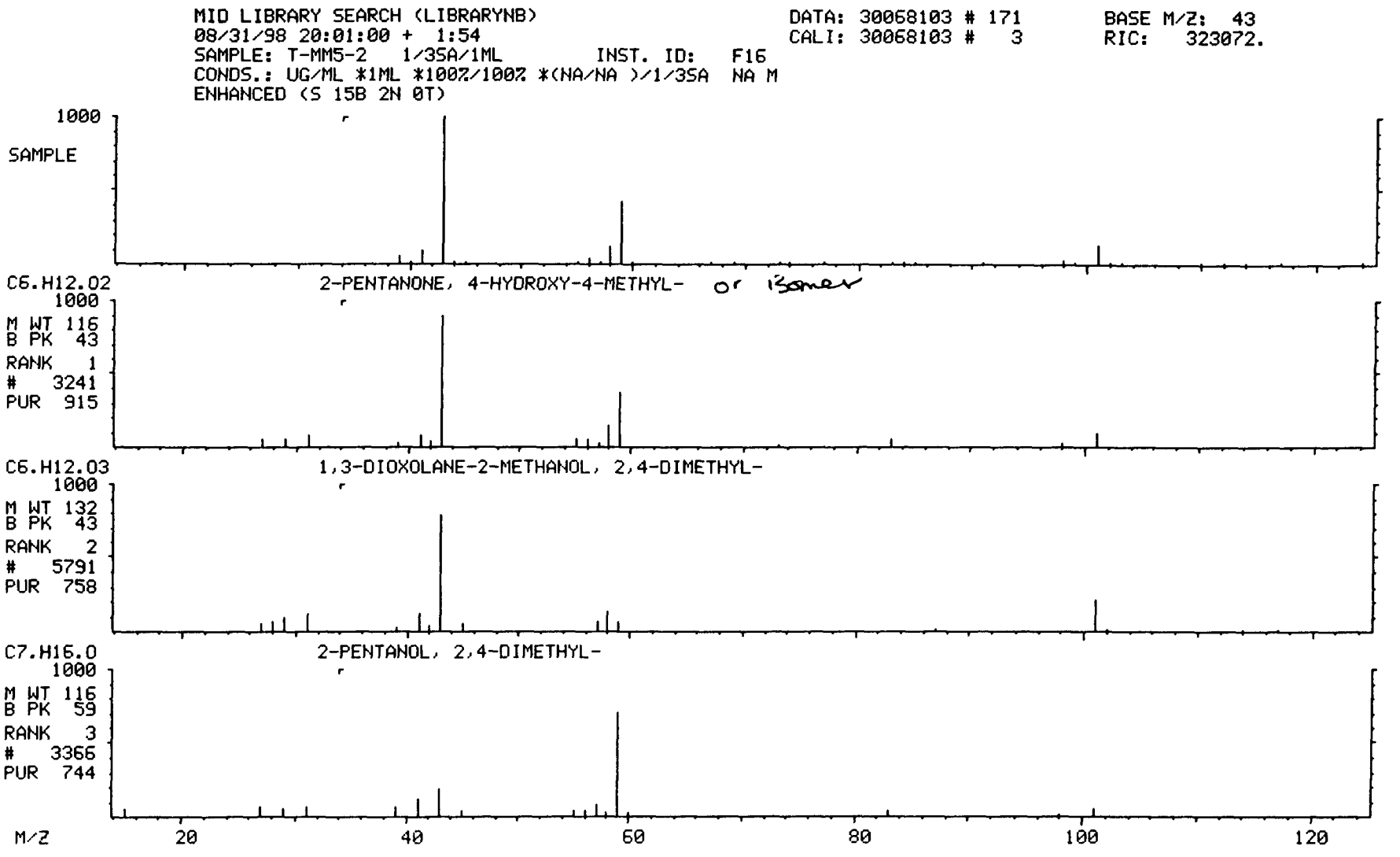
Library Search Data: 30068103 # 171 Base m/z: 43
08/31/98 20:01:00 + 1:54 Cali: 30068103 # 3 RIC: 323072.
Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 158 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
630 matched at least 6 of the 16 largest peaks in the unknown

Rank	In.	Name
1	3241	2-PENTANONE, 4-HYDROXY-4-METHYL-
2	5791	1,3-DIOXOLANE-2-METHANOL, 2,4-DIMETHYL-
3	3366	2-PENTANOL, 2,4-DIMETHYL-
4	3288	ACETIC ACID, 1,1-DIMETHYLETHYL ESTER
5	3349	2-HEXANOL, 2-METHYL-
6	919	TERT-BUTYL HYDROPEROXIDE
7	5594	2-PROPANOL, 2-NITROSO-, ACETATE (ESTER)
8	8432	2-HEXANONE, 3-HYDROXY-3,5-DIMETHYL-
9	8425	2-HEPTANONE, 3-HYDROXY-3-METHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C6.H12.O2	116	43	915	954	928
2	C6.H12.O3	132	43	758	833	785
3	C7.H16.O	116	59	744	767	744
4	C6.H12.O2	116	43	728	780	742
5	C7.H16.O	116	59	709	744	709
6	C4.H10.O2	90	59	709	864	732
7	C5.H9.O3.N	131	43	708	819	799
8	C8.H16.O2	144	59	670	733	697
9	C8.H16.O2	144	59	657	713	678

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	123-42-2
2	---	---	---	---	53951-43-2
3	---	---	---	---	625-06-9
4	---	---	---	---	540-88-5
5	---	---	---	---	625-23-0
6	---	---	---	---	75-91-2
7	---	---	---	---	6931-04-0
8	---	---	---	---	6321-14-8
9	---	---	---	---	13757-91-0


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:01:00 + 1:54
SAMPLE: T-MM5-2 1/35A/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068103 # 171
CALI: 30068103 # 3
BASE M/Z: 43
RIC: 323072.
1000
SAMPLE
C6.H12.02
2-PENTANONE, 4-HYDROXY-4-METHYL- or Isomer
1000
M WT 116
B PK 43
RANK 1
3241
PUR 915
C6.H12.03
1,3-DIOXOLANE-2-METHANOL, 2,4-DIMETHYL-
1000
M WT 132
B PK 43
RANK 2
5791
PUR 758
C7.H16.O
2-PENTANOL, 2,4-DIMETHYL-
1000
M WT 116
B PK 59
RANK 3
3366
PUR 744
M/Z
20
40
60
80
100
120

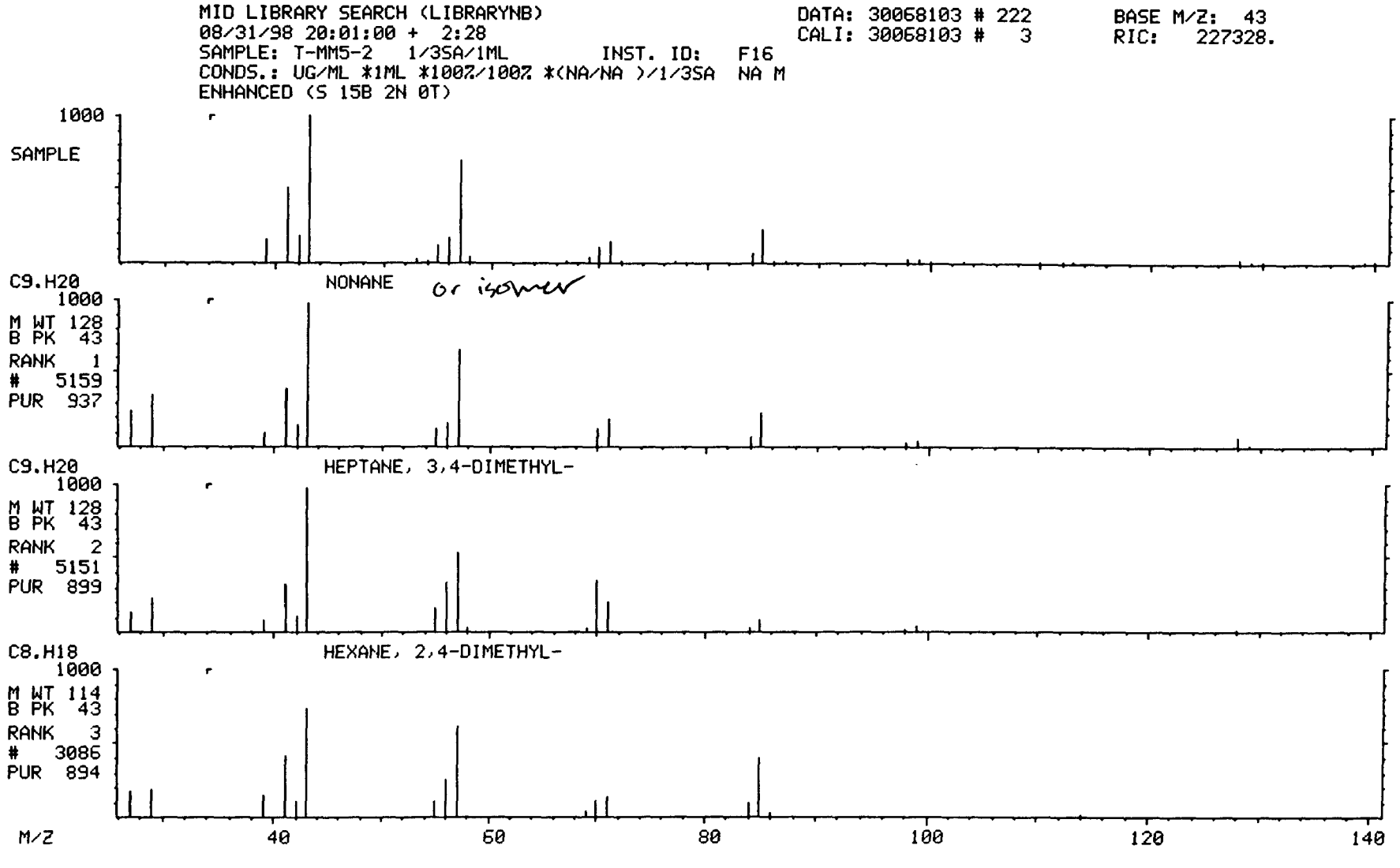
Library Search Data: 30068103 # 222 Base m/z: 43
08/31/98 20:01:00 + 2:28 Cali: 30068103 # 3 RIC: 227328.
Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
921 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	5159	NONANE
2	5151	HEPTANE, 3,4-DIMETHYL-
3	3086	HEXANE, 2,4-DIMETHYL-
4	5141	HEPTANE, 2,4-DIMETHYL-
5	19015	DECANE, 2,5,6-TRIMETHYL-
6	11607	UNDECANE
7	8085	HEPTANE, 2,4,6-TRIMETHYL-
8	19028	DECANE, 2,4,6-TRIMETHYL-
9	5144	HEPTANE, 4-ETHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C9.H20	128	43	937	988	937
2	C9.H20	128	43	899	925	899
3	C8.H18	114	43	894	964	904
4	C9.H20	128	43	879	933	888
5	C13.H28	184	57	874	914	884
6	C11.H24	156	43	868	929	905
7	C10.H22	142	43	865	909	881
8	C13.H28	184	43	861	890	906
9	C9.H20	128	43	861	910	868

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	111-84-2
2	---	---	---	---	922-28-1
3	---	---	---	---	589-43-5
4	---	---	---	---	2213-23-2
5	---	---	---	---	62108-23-0
6	---	---	---	---	1120-21-4
7	---	---	---	---	2613-61-8
8	---	---	---	---	62108-27-4
9	---	---	---	---	2216-32-2


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:01:00 + 2:28
SAMPLE: T-MM5-2 1/3SA/1ML
INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068103 # 222
CALI: 30068103 # 3
BASE M/Z: 43
RIC: 227328.
1000
SAMPLE
C9.H20
NONANE
or isomer
1000
M WT 128
B PK 43
RANK 1
5159
PUR 937
C9.H20
HEPTANE, 3,4-DIMETHYL-
1000
M WT 128
B PK 43
RANK 2
5151
PUR 899
C8.H18
HEXANE, 2,4-DIMETHYL-
1000
M WT 114
B PK 43
RANK 3
3086
PUR 894
M/Z
40
60
80
100
120
140

Library Search Data: 30068103 # 444 Base m/z: 43
08/31/98 20:01:00 + 4:56 Cali: 30068103 # 3 RIC: 66688.
Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
463 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	19523	1-DECANOL, 2-ETHYL-
2	14793	1-UNDECENE, 4-METHYL-
3	35931	HEXADECANE, 1-CHLORO-
4	12074	1-HEPTANOL, 2-PROPYL-
5	15969	HYDROXYLAMINE, O-DECYL-
6	19015	DECANE, 2,5,6-TRIMETHYL-
7	40866	OCTADECANE, 1-CHLORO-
8	11607	UNDECANE
9	11602	OCTANE, 2,4,6-TRIMETHYL-

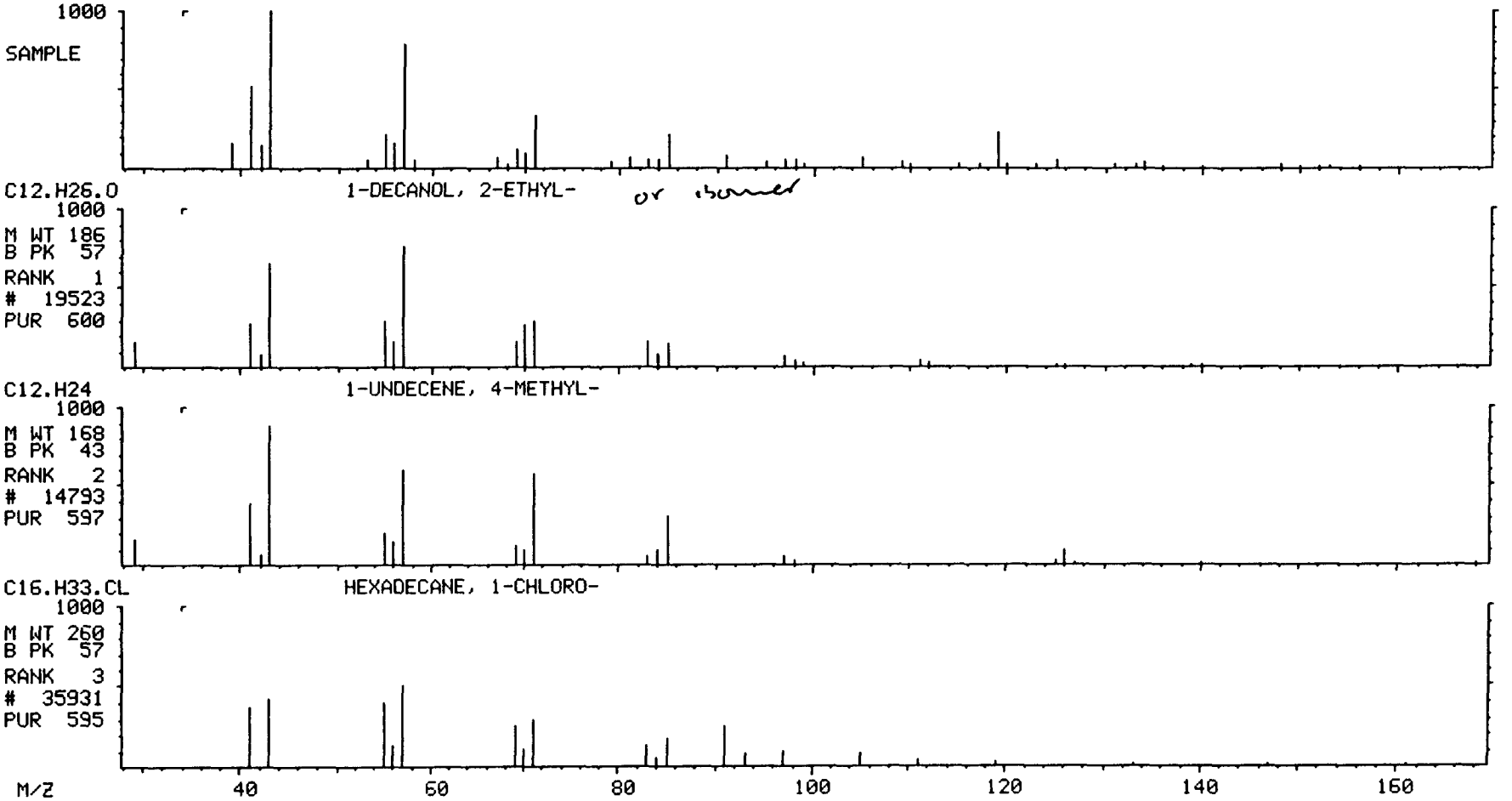
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C12.H26.O	186	57	600	905	627
2	C12.H24	168	43	597	909	635
3	C16.H33.CL	260	57	595	824	635
4	C10.H22.O	158	43	589	928	607
5	C10.H23.O.N	173	43	588	929	624
6	C13.H28	184	57	583	916	596
7	C18.H37.CL	288	57	583	816	648
8	C11.H24	156	43	579	957	600
9	C11.H24	156	57	576	939	585

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	21078-65-9
2	---	---	---	---	74630-39-0
3	---	---	---	---	4860-03-1
4	---	---	---	---	10042-59-8
5	---	---	---	---	29812-79-1
6	---	---	---	---	62108-23-0
7	---	---	---	---	3386-33-2
8	---	---	---	---	1120-21-4
9	---	---	---	---	62016-37-9

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:01:00 + 4:56
SAMPLE: T-MM5-2 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068103 # 444
CALI: 30068103 # 3

BASE M/Z: 43
RIC: 66688.



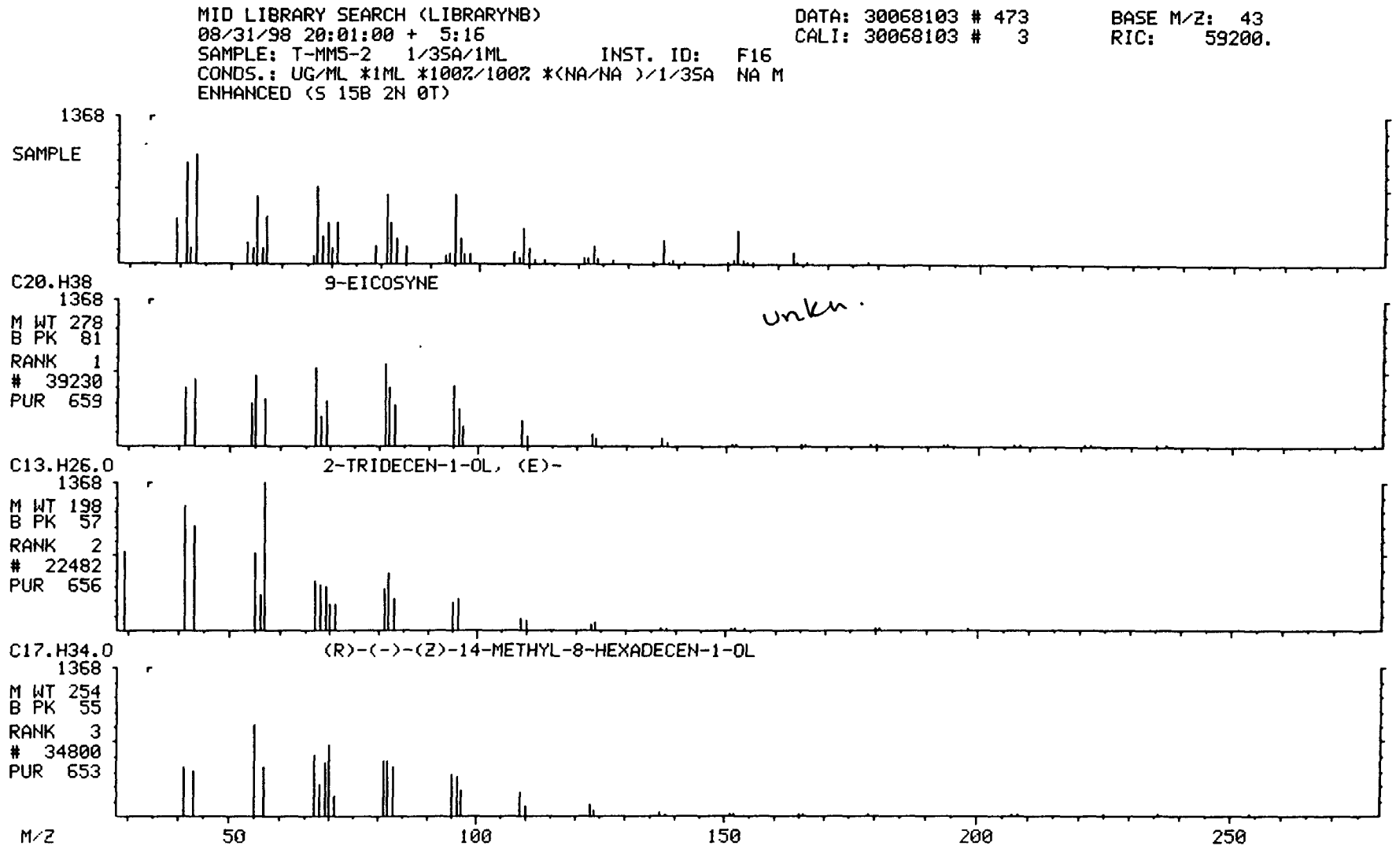
Library Search Data: 30068103 # 473 Base m/z: 43
08/31/98 20:01:00 + 5:16 Cali: 30068103 # 3 RIC: 59200.
Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
459 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	39230	9-EICOSYNE
2	22482	2-TRIDECEN-1-OL, (E)-
3	34800	(R)-(-)-(Z)-14-METHYL-8-HEXADECEN-1-OL
4	25971	OXIRANE, DODECYL-
5	29222	(Z)6-PENTADECEN-1-OL
6	37449	OCTADECANAL
7	36677	7-OCTADECYNE, 2-METHYL-
8	37444	OXIRANE, HEXADECYL-
9	17938	1,12-TRIDECADIENE

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C20.H38	278	81	659	900	677
2	C13.H26.O	198	57	656	854	662
3	C17.H34.O	254	55	653	850	663
4	C14.H28.O	212	41	650	918	650
5	C15.H30.O	226	67	636	869	654
6	C18.H36.O	268	43	635	828	677
7	C19.H36	264	81	626	889	642
8	C18.H36.O	268	57	624	808	667
9	C13.H24	180	55	624	876	627

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	71899-38-2
2	---	---	---	---	74962-98-4
3	---	---	---	---	30689-78-2
4	---	---	---	---	3234-28-4
5	---	---	---	---	68797-95-5
6	---	---	---	---	638-66-4
7	---	---	---	---	35354-38-2
8	---	---	---	---	7390-81-0
9	---	---	---	---	21964-48-7


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:01:00 + 5:16
SAMPLE: T-MM5-2 1/35A/1ML
INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068103 # 473
CALI: 30068103 # 3
BASE M/Z: 43
RIC: 59200.
1368
SAMPLE
C20.H38
9-EICOSYNE
M WT 278
B PK 81
RANK 1
39230
PUR 659
unkn.
C13.H26.O
2-TRIDECEN-1-OL, (E)-
M WT 198
B PK 57
RANK 2
22482
PUR 656
C17.H34.O
(R)-(-)-(Z)-14-METHYL-8-HEXADECEN-1-OL
M WT 254
B PK 55
RANK 3
34800
PUR 653
M/Z
50
100
150
200
250

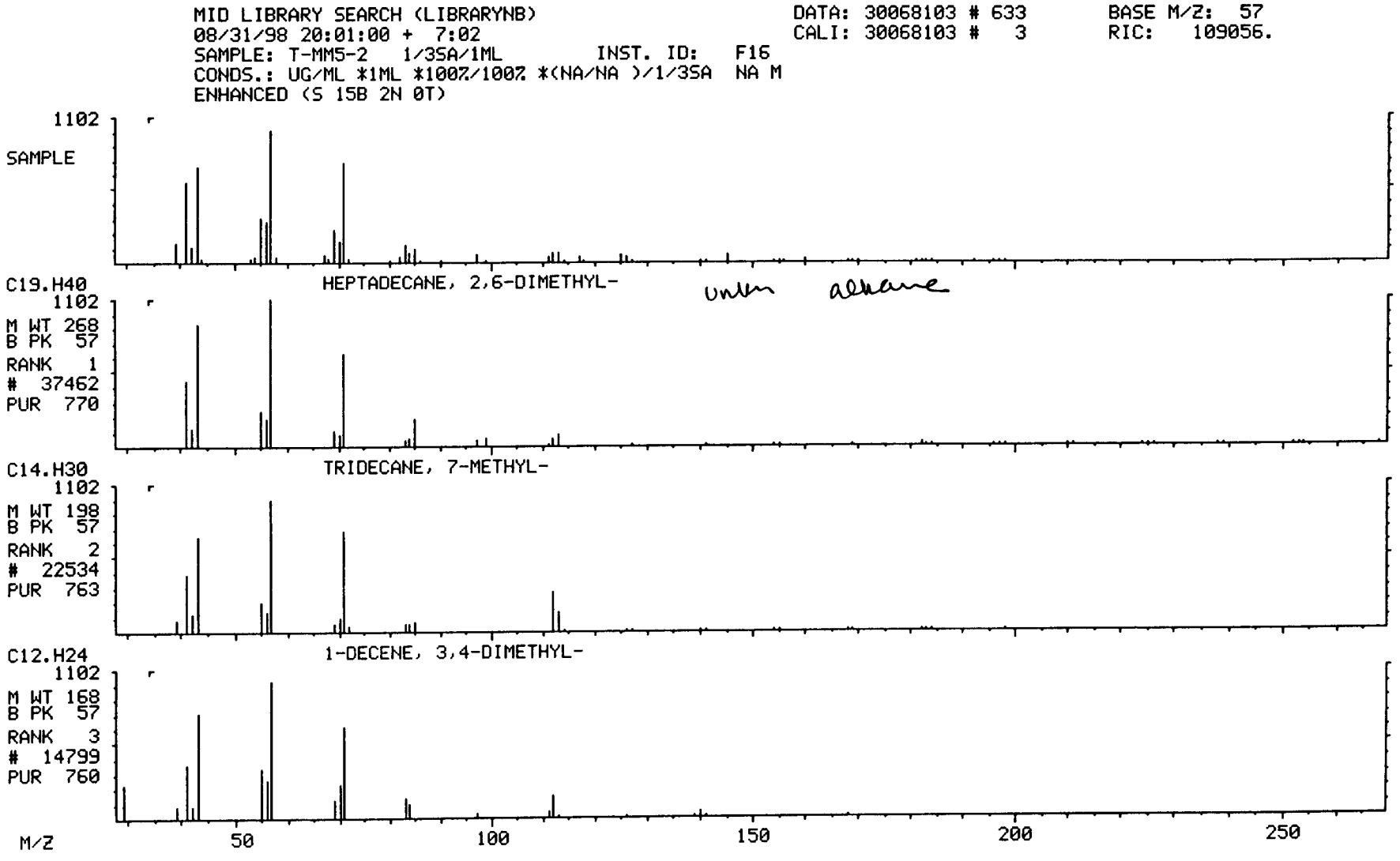
Library Search Data: 30068103 # 633 Base m/z: 57
08/31/98 20:01:00 + 7:02 Cali: 30068103 # 3 RIC: 109056.
Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
862 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37462	HEPTADECANE, 2,6-DIMETHYL-
2	22534	TRIDECANE, 7-METHYL-
3	14799	1-DECENE, 3,4-DIMETHYL-
4	15969	HYDROXYLAMINE, O-DECYL-
5	19523	1-DECANOL, 2-ETHYL-
6	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
7	14751	2-UNDECENE, 5-METHYL-
8	32422	OCTANE, 1,1'-OXYBIS-
9	8539	1-PENTANOL, 4-METHYL-2-PROPYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	770	940	780
2	C14.H30	198	57	763	928	763
3	C12.H24	168	57	760	958	761
4	C10.H23.O.N	173	43	738	943	740
5	C12.H26.O	186	57	736	925	755
6	C21.H44	296	57	735	926	750
7	C12.H24	168	57	732	957	740
8	C16.H34.O	242	57	728	961	736
9	C9.H20.O	144	57	727	971	733

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	54105-67-8
2	—	—	—	—	26730-14-3
3	—	—	—	—	50871-03-9
4	—	—	—	—	29812-79-1
5	—	—	—	—	21078-65-9
6	—	—	—	—	18344-37-1
7	—	—	—	—	56851-34-4
8	—	—	—	—	629-82-3
9	—	—	—	—	54004-41-0


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:01:00 + 7:02
SAMPLE: T-MM5-2 1/3SA/1ML
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
INST. ID: F16
DATA: 30068103 # 633
CALI: 30068103 # 3
BASE M/Z: 57
RIC: 109056.
1102
SAMPLE
C19.H40
HEPTADECANE, 2,6-DIMETHYL-
M WT 268
B PK 57
RANK 1
37462
PUR 770
C14.H30
TRIDECANE, 7-METHYL-
M WT 198
B PK 57
RANK 2
22534
PUR 763
C12.H24
1-DECENE, 3,4-DIMETHYL-
M WT 168
B PK 57
RANK 3
14799
PUR 760
M/Z
50
100
150
200
250

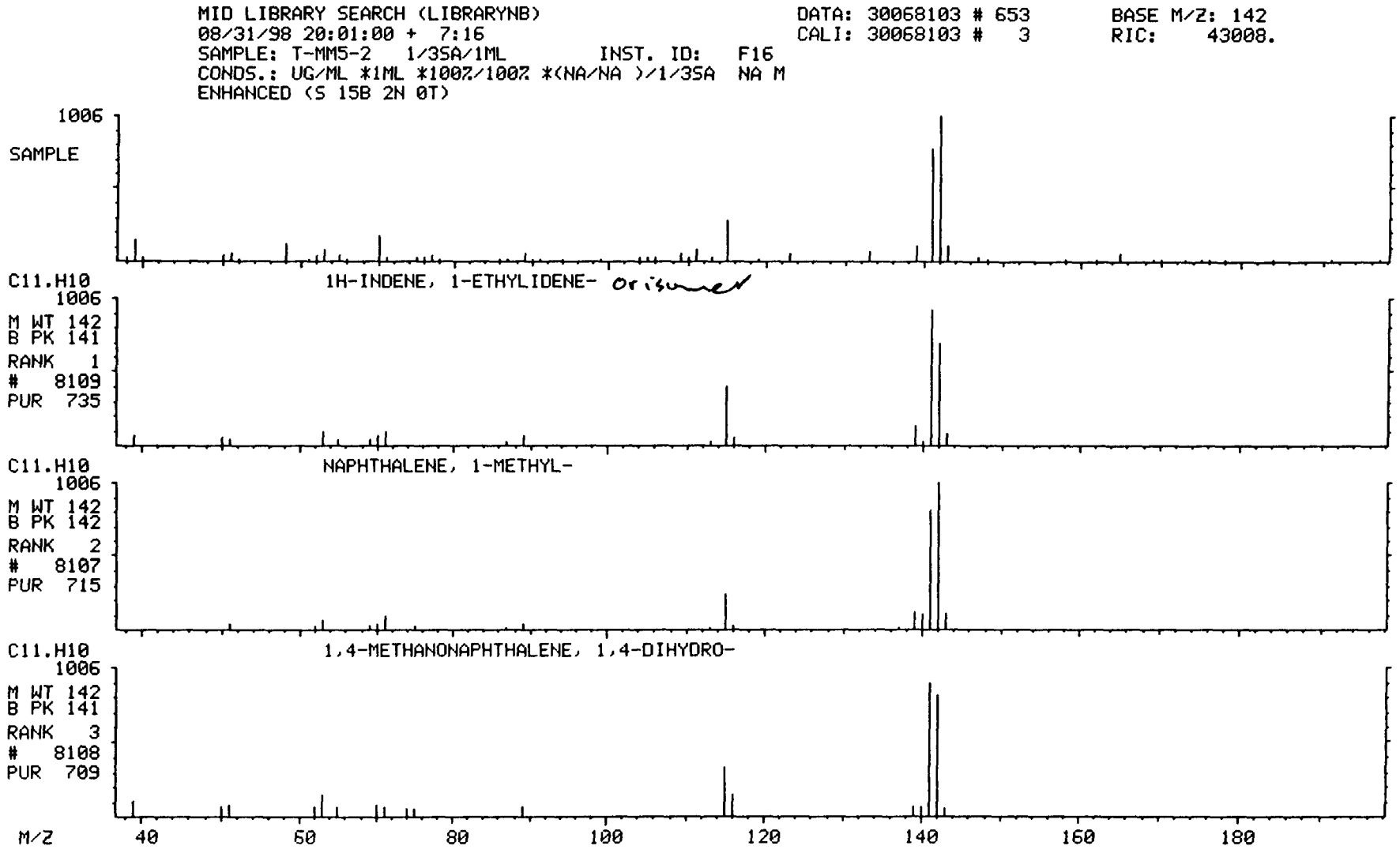
Library Search Data: 30068103 # 653 Base m/z: 142
08/31/98 20:01:00 + 7:16 Cali: 30068103 # 3 RIC: 43008.
Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
227 matched at least 4 of the 16 largest peaks in the unknown

Rank	In.	Name
1	8109	1H-INDENE, 1-ETHYLIDENE-
2	8107	NAPHTHALENE, 1-METHYL-
3	8108	1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-
4	8111	NAPHTHALENE, 2-METHYL-
5	8110	BENZOCYCLOHEPTATRIENE
6	15368	BICYCLO[2.2.1]HEPT-2-ENE, 2-PHENYL-
7	19065	NAPHTHALENE, 2-BUTYL-
8	7994	BENZENEACETONITRILE, 2-CYANO-
9	7992	BENZENEACETONITRILE, 4-CYANO-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C11.H10	142	141	735	934	763
2	C11.H10	142	142	715	924	762
3	C11.H10	142	141	709	901	768
4	C11.H10	142	142	703	914	758
5	C11.H10	142	141	672	903	708
6	C13.H14	170	142	564	748	632
7	C14.H16	184	141	563	742	651
8	C9.H6.N2	142	142	560	776	620
9	C9.H6.N2	142	142	551	777	630

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	2471-83-2
2	---	---	---	---	90-12-0
3	---	---	---	---	4453-90-1
4	---	---	---	---	91-57-6
5	---	---	---	---	264-09-5
6	---	---	---	---	4237-08-5
7	---	---	---	---	1134-62-9
8	---	---	---	---	3759-28-2
9	---	---	---	---	876-31-3



CONFIDENTIAL

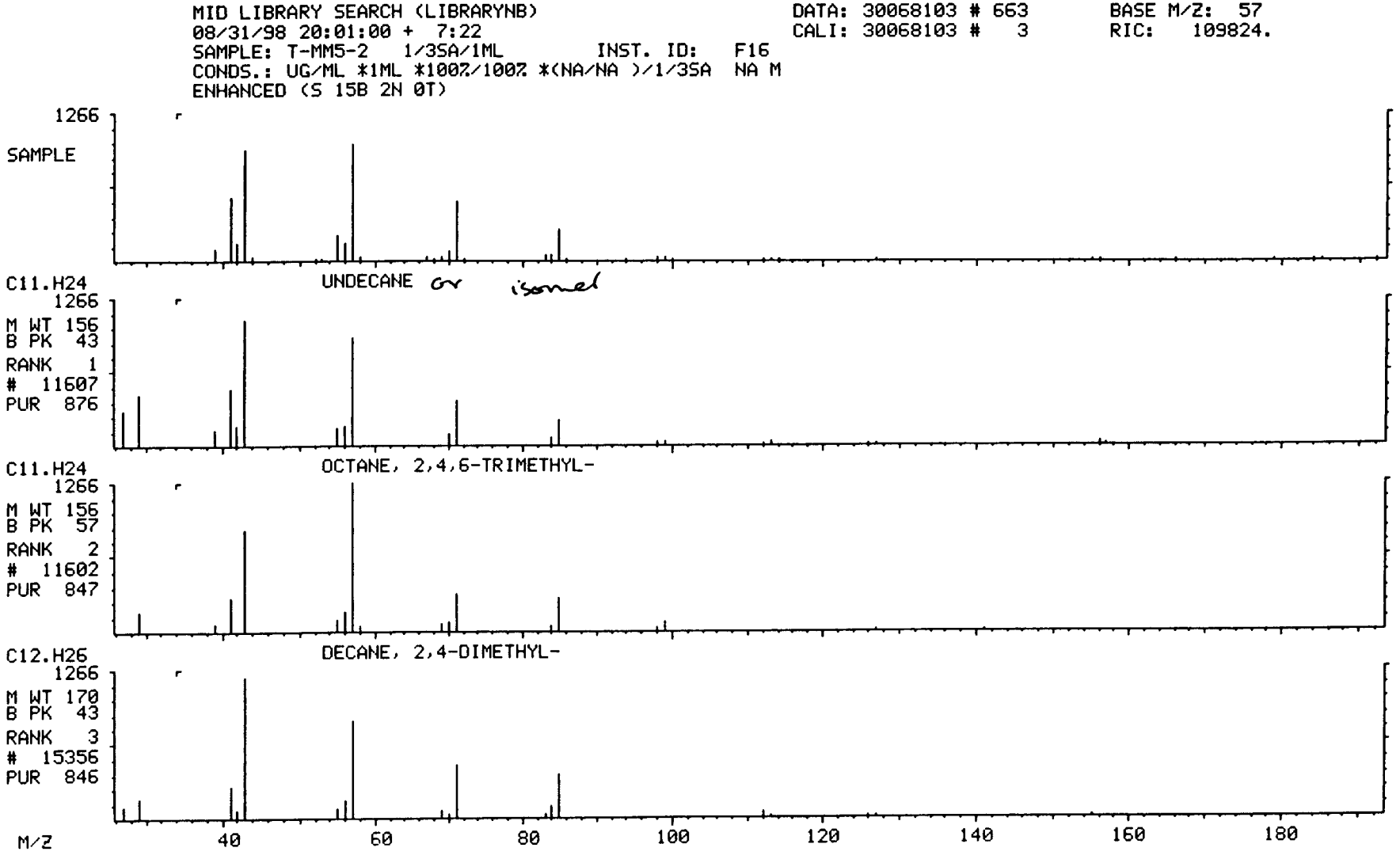
Library Search Data: 30068103 # 663 Base m/z: 57
08/31/98 20:01:00 + 7:22 Cali: 30068103 # 3 RIC: 109824.
Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
723 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	11607	UNDECANE
2	11602	OCTANE, 2,4,6-TRIMETHYL-
3	15356	DECANE, 2,4-DIMETHYL-
4	19016	UNDECANE, 4,7-DIMETHYL-
5	8104	OCTANE, 3,5-DIMETHYL-
6	19015	DECANE, 2,5,6-TRIMETHYL-
7	19026	DECANE, 2,6,8-TRIMETHYL-
8	19028	DECANE, 2,4,6-TRIMETHYL-
9	19013	DECANE, 2,5,9-TRIMETHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C11.H24	156	43	876	971	882
2	C11.H24	156	57	847	966	849
3	C12.H26	170	43	846	955	850
4	C13.H28	184	43	846	934	869
5	C10.H22	142	57	845	936	853
6	C13.H28	184	57	841	924	844
7	C13.H28	184	57	840	933	849
8	C13.H28	184	43	839	932	852
9	C13.H28	184	57	838	935	838

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	1120-21-4
2	—	—	—	—	62016-37-9
3	—	—	—	—	2801-84-5
4	—	—	—	—	17301-32-5
5	—	—	—	—	15869-93-9
6	—	—	—	—	62108-23-0
7	—	—	—	—	62108-26-3
8	—	—	—	—	62108-27-4
9	—	—	—	—	62108-22-9


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:01:00 + 7:22
SAMPLE: T-MM5-2 1/3SA/1ML
INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068103 # 663
CALI: 30068103 # 3
BASE M/Z: 57
RIC: 109824.
1266
SAMPLE
C11.H24
UNDECANE or isomer
M WT 156
B PK 43
RANK 1
11607
PUR 876
C11.H24
OCTANE, 2,4,6-TRIMETHYL-
M WT 156
B PK 57
RANK 2
11602
PUR 847
C12.H26
DECANE, 2,4-DIMETHYL-
M WT 170
B PK 43
RANK 3
15356
PUR 846
M/Z
40
60
80
100
120
140
160
180

Library Search Data: 30068103 # 739 Base m/z: 57
08/31/98 20:01:00 + 8:13 Cali: 30068103 # 3 RIC: 131328.
Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
799 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
2	25991	DODECANE, 2,6,10-TRIMETHYL-
3	25997	PENTADECANE
4	37462	HEPTADECANE, 2,6-DIMETHYL-
5	22535	DODECANE, 4,6-DIMETHYL-
6	26001	DODECANE, 2,7,10-TRIMETHYL-
7	22530	TETRADECANE
8	18998	UNDECANE, 3,7-DIMETHYL-
9	37465	NONADECANE

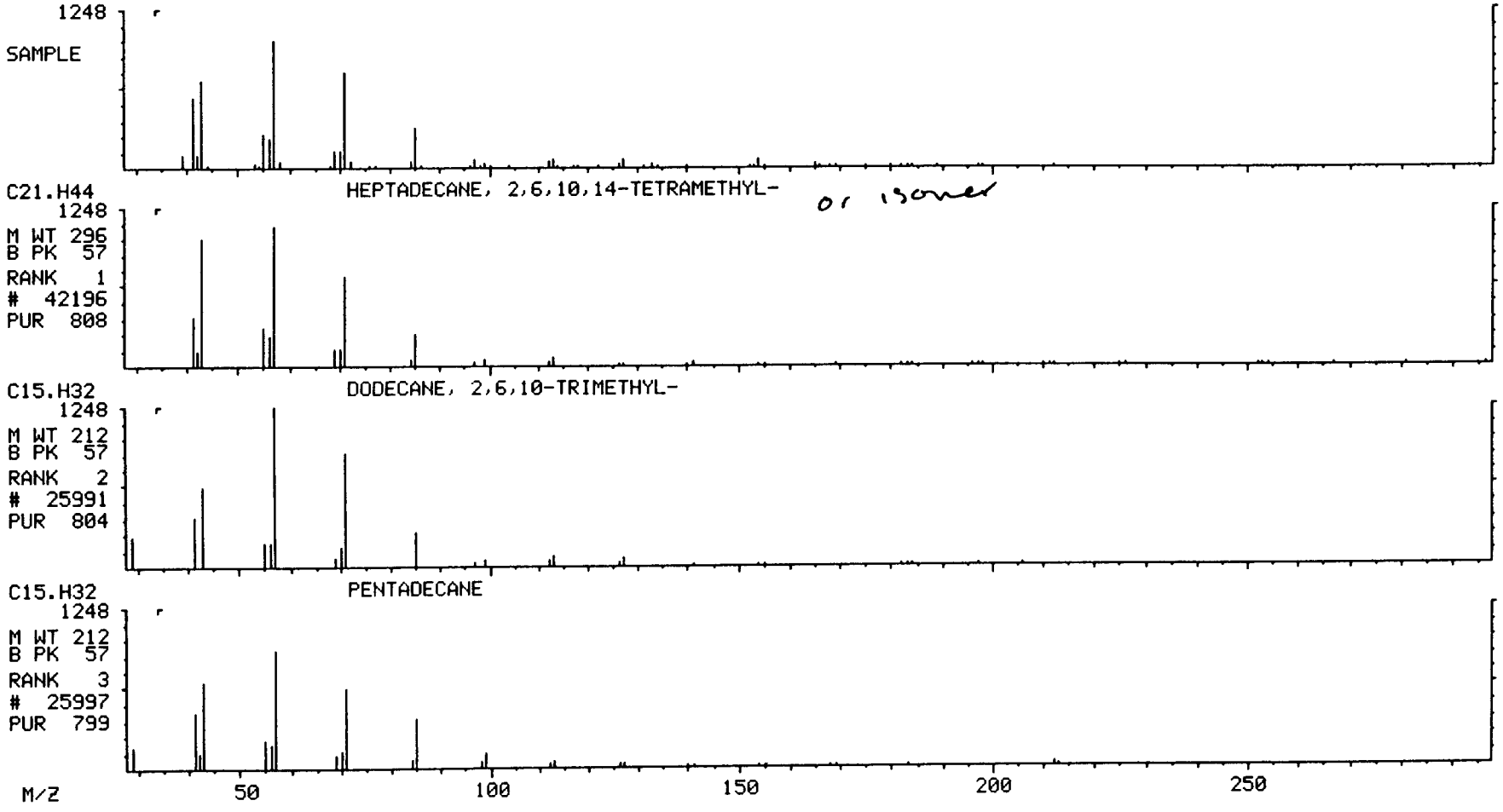
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C21.H44	296	57	808	928	839
2	C15.H32	212	57	804	960	809
3	C15.H32	212	57	799	941	812
4	C19.H40	268	57	792	924	825
5	C14.H30	198	57	789	941	796
6	C15.H32	212	57	782	972	792
7	C14.H30	198	43	781	916	796
8	C13.H28	184	43	779	929	781
9	C19.H40	268	57	776	904	829

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	18344-37-1
2	---	---	---	---	3891-98-3
3	---	---	---	---	629-62-9
4	---	---	---	---	54105-67-8
5	---	---	---	---	61141-72-8
6	---	---	---	---	74645-98-0
7	---	---	---	---	629-59-4
8	---	---	---	---	17301-29-0
9	---	---	---	---	629-92-5

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:01:00 + 8:13
SAMPLE: T-MM5-2 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068103 # 739
CALI: 30068103 # 3

BASE M/Z: 57
RIC: 131328.



C38

Library Search Data: 30068103 # 765 Base m/z: 43
08/31/98 20:01:00 + 8:31 Cali: 30068103 # 3 RIC: 193536.
Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
513 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	19006	DECANE, 6-ETHYL-2-METHYL-
2	22530	TETRADECANE
3	19007	DODECANE, 3-METHYL-
4	29249	TETRADECANE, 6,9-DIMETHYL-
5	39681	1-IODOUNDECANE
6	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
7	37252	DECANE, 1-IODO-
8	25996	TRIDECANE, 4,8-DIMETHYL-
9	11607	UNDECANE

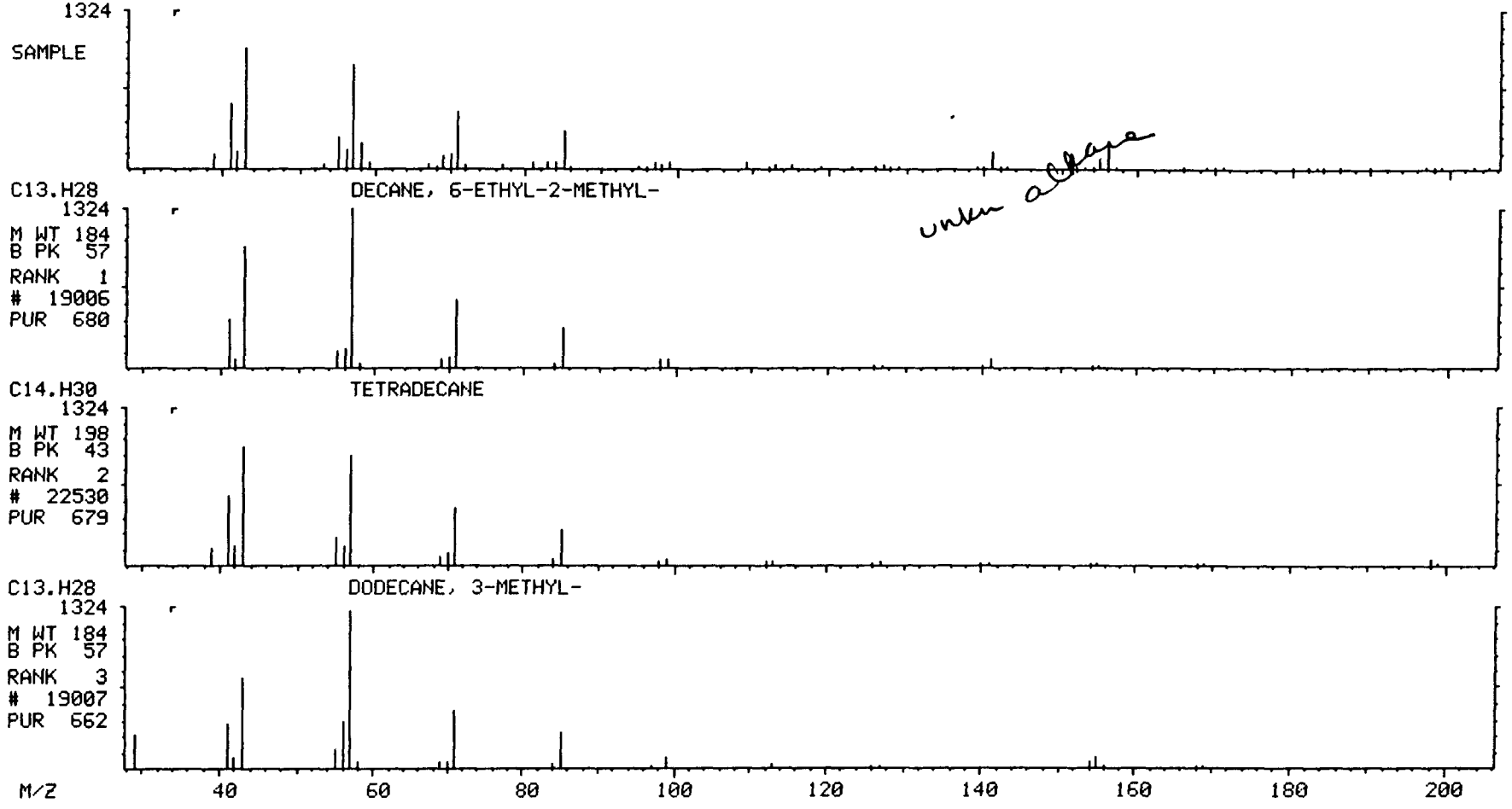
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C13.H28	184	57	680	944	680
2	C14.H30	198	43	679	942	680
3	C13.H28	184	57	662	882	662
4	C16.H34	226	57	659	852	673
5	C11.H23.I	282	57	656	848	660
6	C21.H44	296	57	654	914	667
7	C10.H21.I	268	57	654	877	657
8	C15.H32	212	57	654	918	662
9	C11.H24	156	43	652	957	652

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	62108-21-8
2	---	---	---	---	629-59-4
3	---	---	---	---	17312-57-1
4	---	---	---	---	55045-13-1
5	---	---	---	---	4282-44-4
6	---	---	---	---	18344-37-1
7	---	---	---	---	2050-77-3
8	---	---	---	---	55030-62-1
9	---	---	---	---	1120-21-4

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:01:00 + 8:31
SAMPLE: T-MM5-2 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068103 # 765
CALI: 30068103 # 3

BASE M/Z: 43
RIC: 193536.



unlikely a hydrocarbon

Library Search Data: 30068103 # 778 Base m/z: 141
08/31/98 20:01:00 + 8:39 Cali: 30068103 # 3 RIC: 61952.
Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
554 matched at least 5 of the 16 largest peaks in the unknown

Rank	In.	Name
1	29224	11-DODECEN-1-OL, 2,4,6-TRIMETHYL-, (R,R,R)-
2	46107	2H-PYRAN-2-CARBOXYLIC ACID, 3,6-DIHYDRO-6-PROPOXY-, 4-(1-METHYLETHY*
3	56499	9-OCTADECENOIC ACID (Z)-, 2-(ACETYLOXY)-1-[(ACETYLOXY)METHYL]ETHYL *
4	32188	NONYLAMINE, 1-HEPTYL-
5	16353	INDAN, 1,1,6,7-TETRAMETHYL-
6	16347	1H-INDENE, 2,3-DIHYDRO-1,1,4,7-TETRAMETHYL-
7	21930	CYCLOPROPANOL, 1-(3,7-DIMETHYL-1-OCTENYL)-
8	56413	9,12-OCTADECADIENOIC ACID (Z,Z)-, 2-(ACETYLOXY)-1-[(ACETYLOXY)METHY*
9	56303	9,12,15-OCTADECATRIENOIC ACID, 2-(ACETYLOXY)-1-[(ACETYLOXY)METHYL]E*

Rank	Formula	M.Wt	B.Pk	Purity	Fit	Rfit
1	C15.H30.O	226	55	318	682	384
2	C19.H32.O4	324	83	318	752	378
3	C25.H44.O6	440	43	305	649	386
4	C16.H35.N	241	128	288	723	305
5	C13.H18	174	159	276	591	280
6	C13.H18	174	159	270	591	275
7	C13.H24.O	196	83	269	768	315
8	C25.H42.O6	438	43	266	741	323
9	C25.H40.O6	436	43	264	759	319

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	27829-54-5
2	---	---	---	---	55124-82-8
3	---	---	---	---	55401-63-3
4	---	---	---	---	24539-83-1
5	---	---	---	---	16204-58-3
6	---	---	---	---	1078-04-2
7	---	---	---	---	65147-72-0
8	---	---	---	---	55320-03-1
9	---	---	---	---	55320-01-9

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:01:00 + 8:39
SAMPLE: T-MM5-2 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068103 # 778
CALI: 30068103 # 3

BASE M/Z: 141
RIC: 61952.

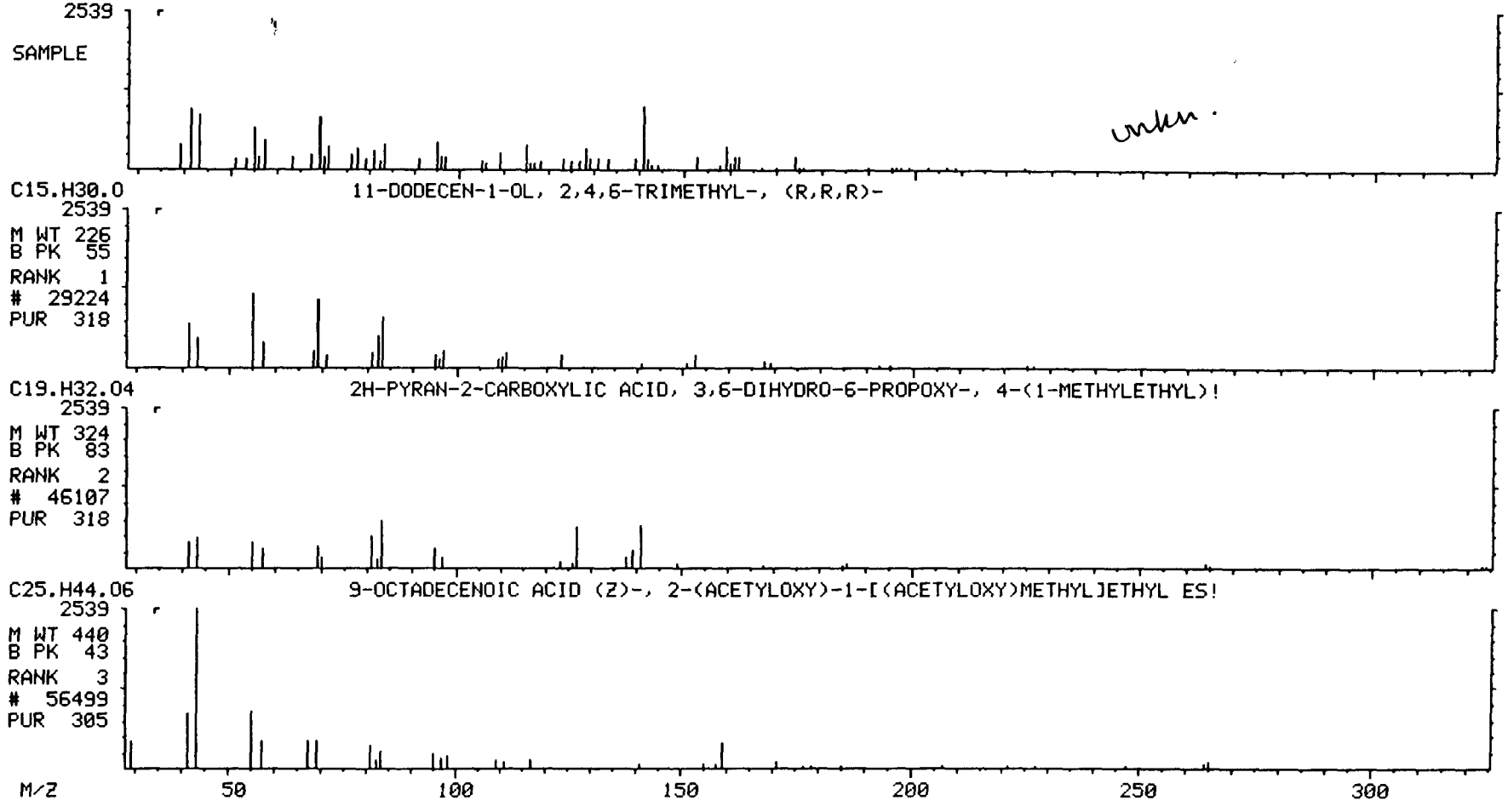


FIG. 8

Library Search Data: 30068103 # 821 Base m/z: 57
08/31/98 20:01:00 + 9:08 Cali: 30068103 # 3 RIC: 128128.
Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
284 matched at least 8 of the 16 largest peaks in the unknown

Rank	In.	Name
1	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
2	37462	HEPTADECANE, 2,6-DIMETHYL-
3	19016	UNDECANE, 4,7-DIMETHYL-
4	18987	UNDECANE, 2,8-DIMETHYL-
5	15353	2,6-DIMETHYLDECANE
6	19022	UNDECANE, 4,8-DIMETHYL-
7	37465	NONADECANE
8	19023	DECANE, 2,6,7-TRIMETHYL-
9	19004	UNDECANE, 4,6-DIMETHYL-

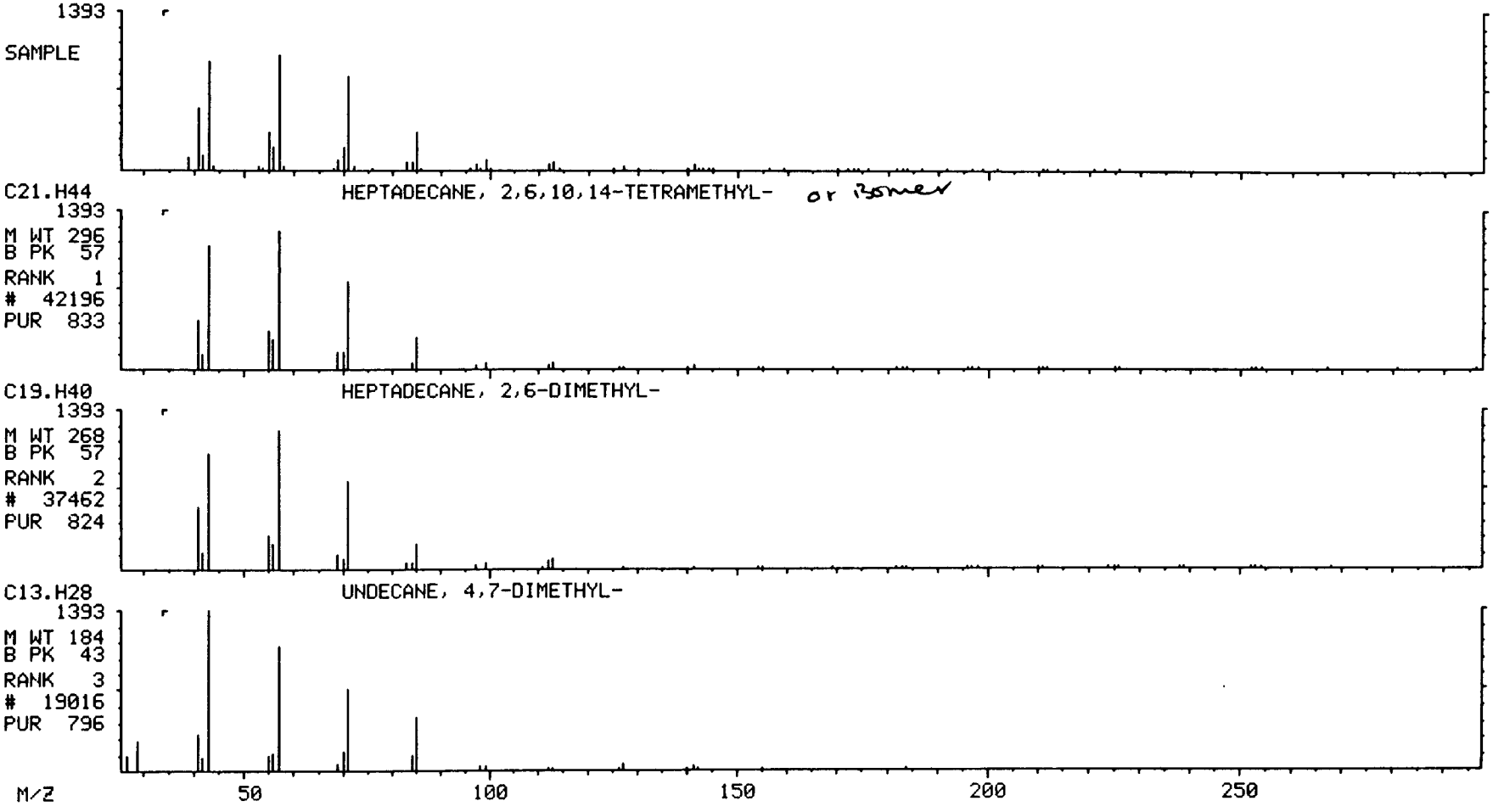
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C21.H44	296	57	833	965	854
2	C19.H40	268	57	824	946	847
3	C13.H28	184	43	796	948	802
4	C13.H28	184	43	795	966	799
5	C12.H26	170	43	790	924	802
6	C13.H28	184	43	790	960	791
7	C19.H40	268	57	787	917	840
8	C13.H28	184	57	786	950	786
9	C13.H28	184	57	785	964	785

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	18344-37-1
2	—	—	—	—	54105-67-8
3	—	—	—	—	17301-32-5
4	—	—	—	—	17301-25-6
5	—	—	—	—	13150-81-7
6	—	—	—	—	17301-33-6
7	—	—	—	—	629-92-5
8	—	—	—	—	62108-25-2
9	—	—	—	—	17312-82-2

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:01:00 + 9:08
SAMPLE: T-MM5-2 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068103 # 821
CALI: 30068103 # 3

BASE M/Z: 57
RIC: 128128.



Library Search Data: 30068103 # 859 Base m/z: 57
08/31/98 20:01:00 + 9:33 Cali: 30068103 # 3 RIC: 195328.
Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
835 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	25997	PENTADECANE
2	19007	DODECANE, 3-METHYL-
3	22530	TETRADECANE
4	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
5	15343	DODECANE
6	15353	2,6-DIMETHYLDECANE
7	39681	1-IODOUNDECANE
8	37462	HEPTADECANE, 2,6-DIMETHYL-
9	19006	DECANE, 6-ETHYL-2-METHYL-

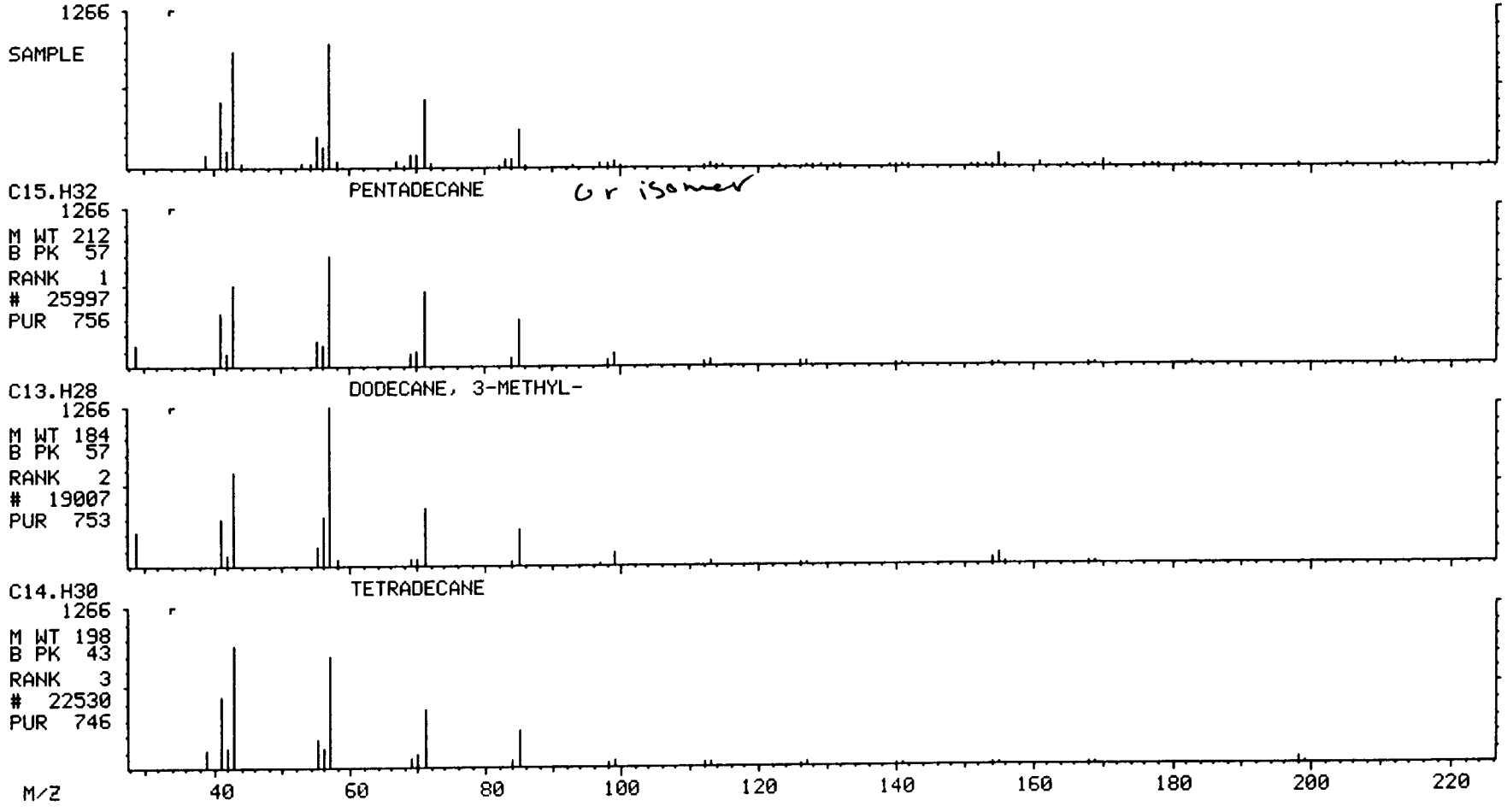
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C15.H32	212	57	756	947	769
2	C13.H28	184	57	753	959	757
3	C14.H30	198	43	746	932	759
4	C21.H44	296	57	744	930	762
5	C12.H26	170	57	743	985	748
6	C12.H26	170	43	742	911	747
7	C11.H23.I	282	57	740	965	745
8	C19.H40	268	57	739	918	755
9	C13.H28	184	57	739	952	744

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	629-62-9
2	---	---	---	---	17312-57-1
3	---	---	---	---	629-59-4
4	---	---	---	---	18344-37-1
5	---	---	---	---	112-40-3
6	---	---	---	---	13150-81-7
7	---	---	---	---	4282-44-4
8	---	---	---	---	54105-67-8
9	---	---	---	---	62108-21-8

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:01:00 + 9:33
SAMPLE: T-MM5-2 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068103 # 859
CALI: 30068103 # 3

BASE M/Z: 57
RIC: 195328.



Library Search Data: 30068103 # 949 Base m/z: 57
08/31/98 20:01:00 + 10:33 Call: 30068103 # 3 RIC: 184064.
Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
338 matched at least 8 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37465	NONADECANE
2	37462	HEPTADECANE, 2,6-DIMETHYL-
3	25997	PENTADECANE
4	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
5	15969	HYDROXYLAMINE, O-DECYL-
6	19016	UNDECANE, 4,7-DIMETHYL-
7	46161	TRICOSANE
8	25994	DODECANE, 2,6,11-TRIMETHYL-
9	15353	2,6-DIMETHYLDECANE

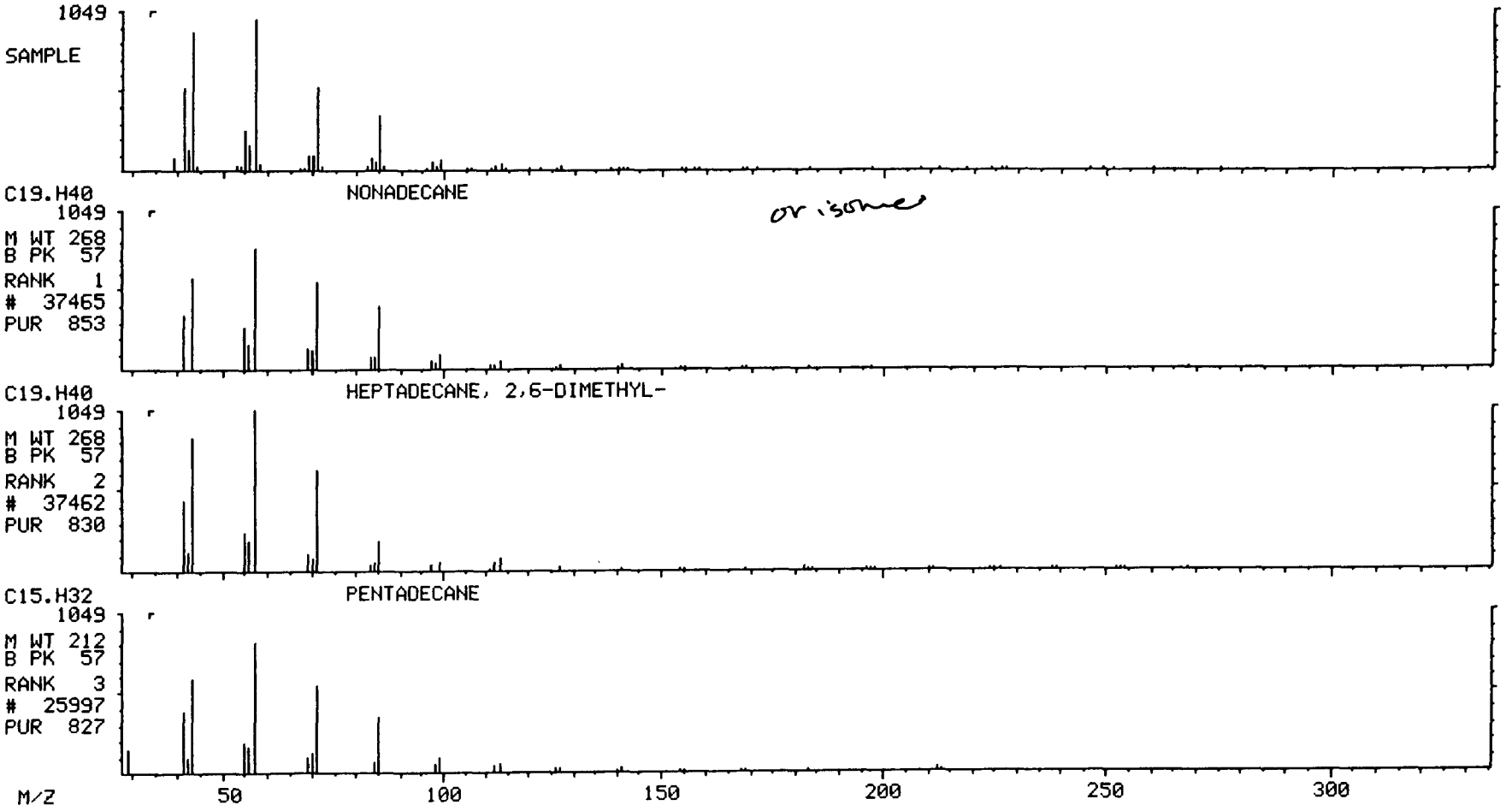
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	853	965	868
2	C19.H40	268	57	830	942	855
3	C15.H32	212	57	827	967	830
4	C21.H44	296	57	823	950	844
5	C10.H23.O.N	173	43	821	967	823
6	C13.H28	184	43	806	963	806
7	C23.H48	324	43	801	904	873
8	C15.H32	212	57	793	962	795
9	C12.H26	170	43	792	927	801

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	629-92-5
2	—	—	—	—	54105-67-8
3	—	—	—	—	629-62-9
4	—	—	—	—	18344-37-1
5	—	—	—	—	29812-79-1
6	—	—	—	—	17301-32-5
7	—	—	—	—	638-67-5
8	—	—	—	—	31295-56-4
9	—	—	—	—	13150-81-7

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:01:00 + 10:33
SAMPLE: T-MM5-2 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068103 # 949
CALI: 30068103 # 3

BASE M/Z: 57
RIC: 184064.



Library Search Data: 30068103 # 989 Base m/z: 57
08/31/98 20:01:00 + 11:00 Cali: 30068103 # 3 RIC: 133376.
Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 158 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
644 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37462	HEPTADECANE, 2,6-DIMETHYL-
2	19054	UNDECANE, 2,6-DIMETHYL-
3	25996	TRIDECANE, 4,8-DIMETHYL-
4	37465	NONADECANE
5	25997	PENTADECANE
6	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
7	22530	TETRADECANE
8	22536	TRIDECANE, 3-METHYL-
9	29263	HEXADECANE

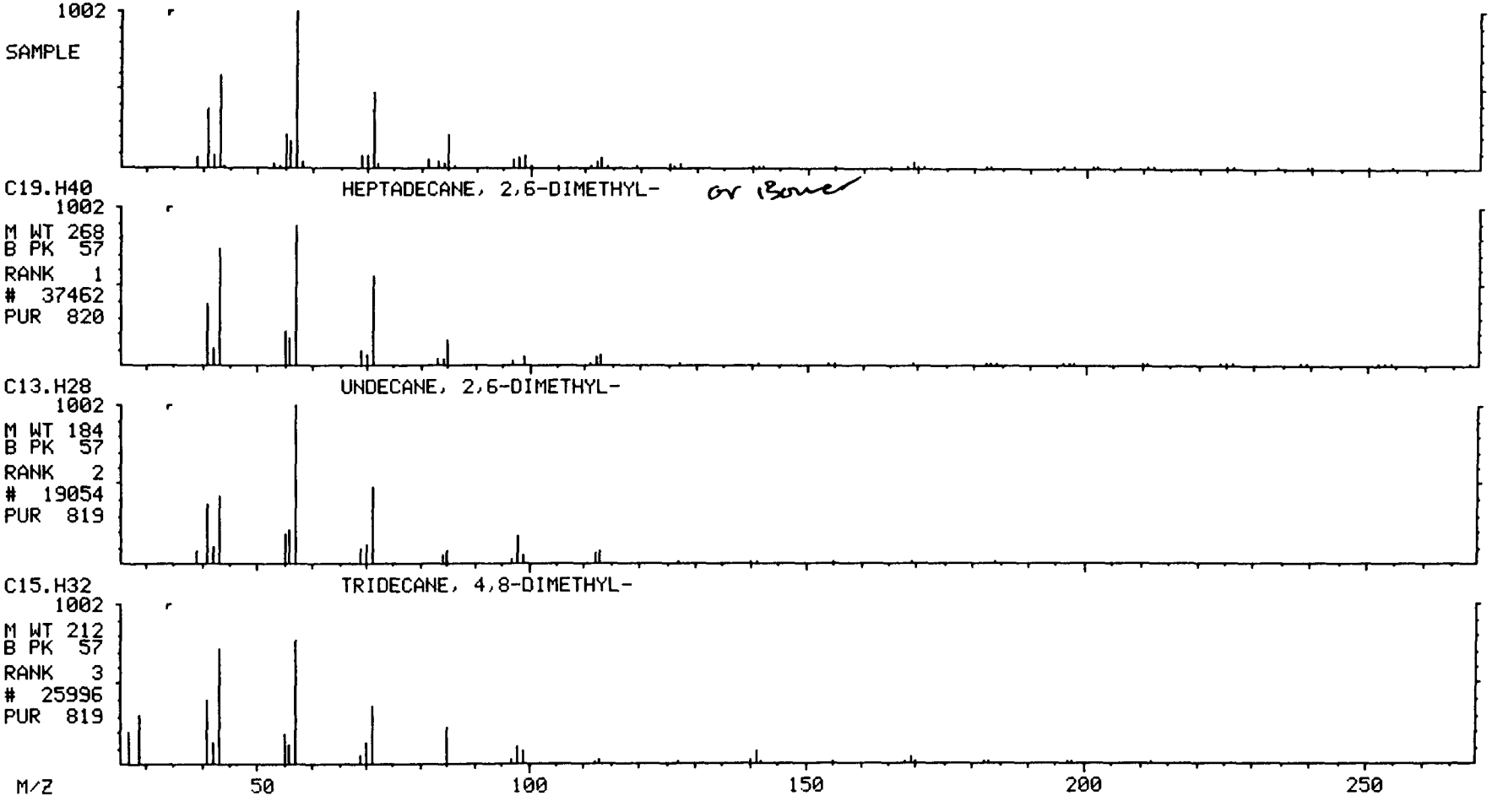
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	820	949	832
2	C13.H28	184	57	819	949	826
3	C15.H32	212	57	819	945	826
4	C19.H40	268	57	816	935	841
5	C15.H32	212	57	809	951	817
6	C21.H44	296	57	809	948	820
7	C14.H30	198	43	807	940	816
8	C14.H30	198	57	801	961	801
9	C16.H34	226	57	800	928	815

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	54105-67-8
2	—	—	—	—	17301-23-4
3	—	—	—	—	55030-62-1
4	—	—	—	—	629-92-5
5	—	—	—	—	629-62-9
6	—	—	—	—	18344-37-1
7	—	—	—	—	629-59-4
8	—	—	—	—	6418-41-3
9	—	—	—	—	544-76-3

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:01:00 + 11:00
SAMPLE: T-MM5-2 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068103 # 989
CALI: 30068103 # 3

BASE M/Z: 57
RIC: 133376.



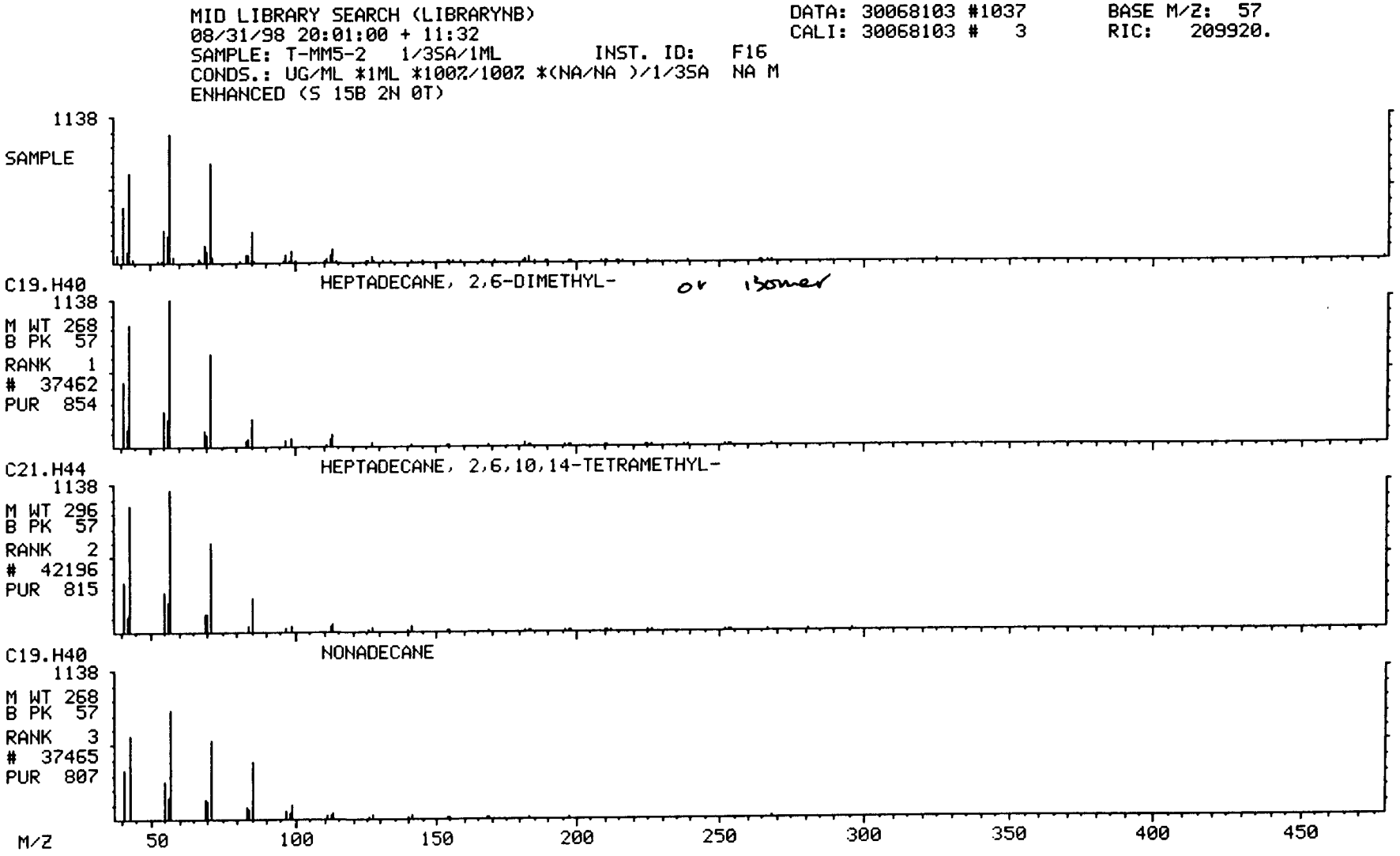
Library Search Data: 30068103 #1037 Base m/z: 57
08/31/98 20:01:00 + 11:32 Cali: 30068103 # 3 RIC: 209920.
Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
840 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37462	HEPTADECANE, 2,6-DIMETHYL-
2	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
3	37465	NONADECANE
4	26001	DODECANE, 2,7,10-TRIMETHYL-
5	25991	DODECANE, 2,6,10-TRIMETHYL-
6	22535	DODECANE, 4,6-DIMETHYL-
7	37466	PENTADECANE, 2,6,10,14-TETRAMETHYL-
8	25994	DODECANE, 2,6,11-TRIMETHYL-
9	42192	HEPTADECANE, 2,6,10,15-TETRAMETHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	854	971	863
2	C21.H44	296	57	815	950	831
3	C19.H40	268	57	807	937	824
4	C15.H32	212	57	805	968	809
5	C15.H32	212	57	803	970	806
6	C14.H30	198	57	800	961	801
7	C19.H40	268	71	796	943	814
8	C15.H32	212	57	786	945	795
9	C21.H44	296	57	782	934	810

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	54105-67-8
2	---	---	---	---	18344-37-1
3	---	---	---	---	629-92-5
4	---	---	---	---	74645-98-0
5	---	---	---	---	3891-98-3
6	---	---	---	---	61141-72-8
7	---	---	---	---	1921-70-6
8	---	---	---	---	31295-56-4
9	---	---	---	---	54833-48-6


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:01:00 + 11:32
SAMPLE: T-MM5-2 1/35A/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068103 #1037
CALI: 30068103 # 3
BASE M/Z: 57
RIC: 209920.
1138
SAMPLE
C19.H40
HEPTADECANE, 2,6-DIMETHYL- or isomer
1138
M WT 268
B PK 57
RANK 1
37462
PUR 854
C21.H44
HEPTADECANE, 2,6,10,14-TETRAMETHYL-
1138
M WT 296
B PK 57
RANK 2
42196
PUR 815
C19.H40
NONADECANE
1138
M WT 268
B PK 57
RANK 3
37465
PUR 807
M/Z
50
100
150
200
250
300
350
400
450

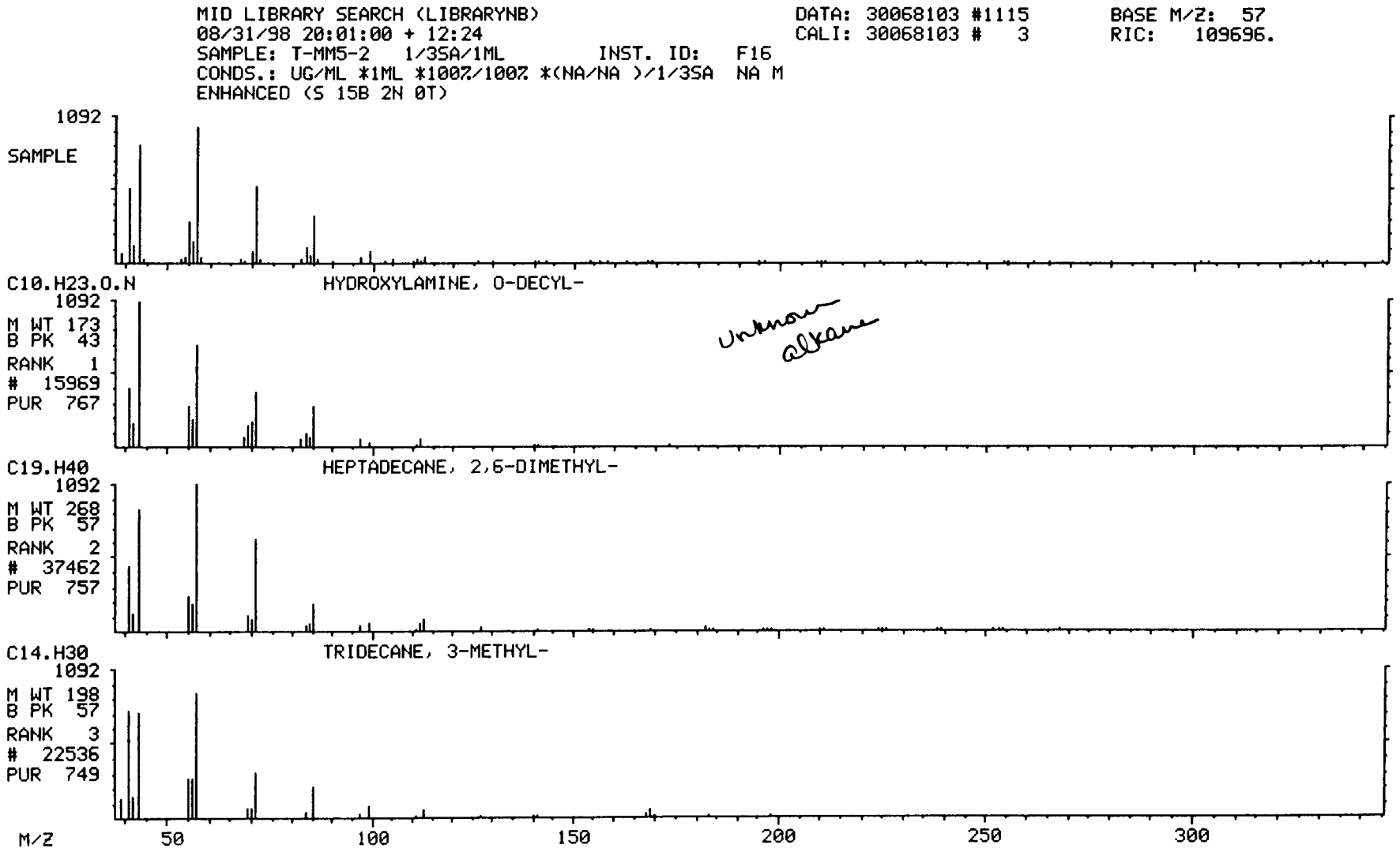
Library Search Data: 30068103 #1115 Base m/z: 57
08/31/98 20:01:00 + 12:24 Cali: 30068103 # 3 RIC: 109696.
Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
766 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	15969	HYDROXYLAMINE, O-DECYL-
2	37462	HEPTADECANE, 2,6-DIMETHYL-
3	22536	TRIDECANE, 3-METHYL-
4	11607	UNDECANE
5	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
6	19035	DODECANE, 2-METHYL-
7	37465	NONADECANE
8	19022	UNDECANE, 4,8-DIMETHYL-
9	18987	UNDECANE, 2,8-DIMETHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C10.H23.O.N	173	43	767	924	803
2	C19.H40	268	57	757	888	824
3	C14.H30	198	57	749	910	779
4	C11.H24	156	43	743	945	764
5	C21.H44	296	57	743	902	804
6	C13.H28	184	43	737	946	756
7	C19.H40	268	57	736	884	819
8	C13.H28	184	43	736	925	740
9	C13.H28	184	43	729	931	742

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	29812-79-1
2	—	—	—	—	54105-67-8
3	—	—	—	—	6418-41-3
4	—	—	—	—	1120-21-4
5	—	—	—	—	18344-37-1
6	—	—	—	—	1560-97-0
7	—	—	—	—	629-92-5
8	—	—	—	—	17301-33-6
9	—	—	—	—	17301-25-6


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:01:00 + 12:24
SAMPLE: T-MM5-2 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068103 #1115
CALI: 30068103 # 3
BASE M/Z: 57
RIC: 109696.
1092
SAMPLE
C10.H23.O.N
HYDROXYLAMINE, O-DECYL-
1092
M WT 173
B PK 43
RANK 1
15969
PUR 767
Unknown alkane
C19.H40
HEPTADECANE, 2,6-DIMETHYL-
1092
M WT 268
B PK 57
RANK 2
37462
PUR 757
C14.H30
TRIDECANE, 3-METHYL-
1092
M WT 198
B PK 57
RANK 3
22536
PUR 749
M/Z
50
100
150
200
250
300

Library Search Data: 30068103 #1120 Base m/z: 57
08/31/98 20:01:00 + 12:27 Cali: 30068103 # 3 RIC: 144384.
Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
774 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37465	NONADECANE
2	37462	HEPTADECANE, 2,6-DIMETHYL-
3	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
4	46161	TRICOSANE
5	42192	HEPTADECANE, 2,6,10,15-TETRAMETHYL-
6	25991	DODECANE, 2,6,10-TRIMETHYL-
7	26001	DODECANE, 2,7,10-TRIMETHYL-
8	32059	HEPTADECANE
9	37466	PENTADECANE, 2,6,10,14-TETRAMETHYL-

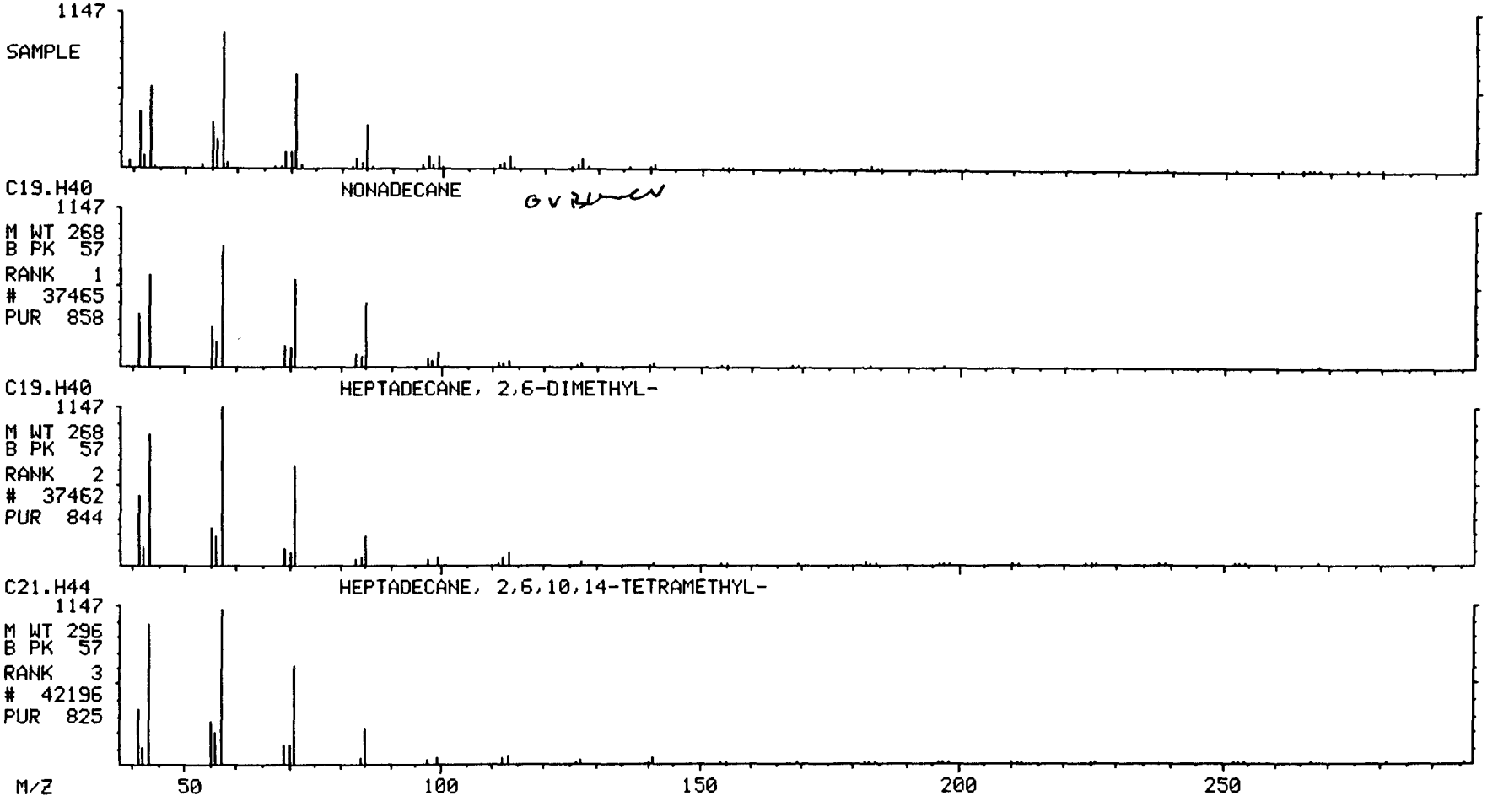
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	858	966	858
2	C19.H40	268	57	844	946	853
3	C21.H44	296	57	825	939	840
4	C23.H48	324	43	824	917	872
5	C21.H44	296	57	812	951	839
6	C15.H32	212	57	811	968	812
7	C15.H32	212	57	811	966	811
8	C17.H36	240	57	811	931	837
9	C19.H40	268	71	808	935	818

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	629-92-5
2	—	—	—	—	54105-67-8
3	—	—	—	—	18344-37-1
4	—	—	—	—	638-67-5
5	—	—	—	—	54833-48-6
6	—	—	—	—	3891-98-3
7	—	—	—	—	74645-98-0
8	—	—	—	—	629-78-7
9	—	—	—	—	1921-70-6

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:01:00 + 12:27
SAMPLE: T-MM5-2 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068103 #1120
CALI: 30068103 # 3

BASE M/Z: 57
RIC: 144384.



Library Search Data: 30068103 #1192 Base m/z: 57
08/31/98 20:01:00 + 13:16 Cali: 30068103 # 3 RIC: 108288.
Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
294 matched at least 8 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37465	NONADECANE
2	37462	HEPTADECANE, 2,6-DIMETHYL-
3	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
4	15969	HYDROXYLAMINE, O-DECYL-
5	25997	PENTADECANE
6	19016	UNDECANE, 4,7-DIMETHYL-
7	46161	TRICOSANE
8	19523	1-DECANOL, 2-ETHYL-
9	15353	2,6-DIMETHYLDECANE

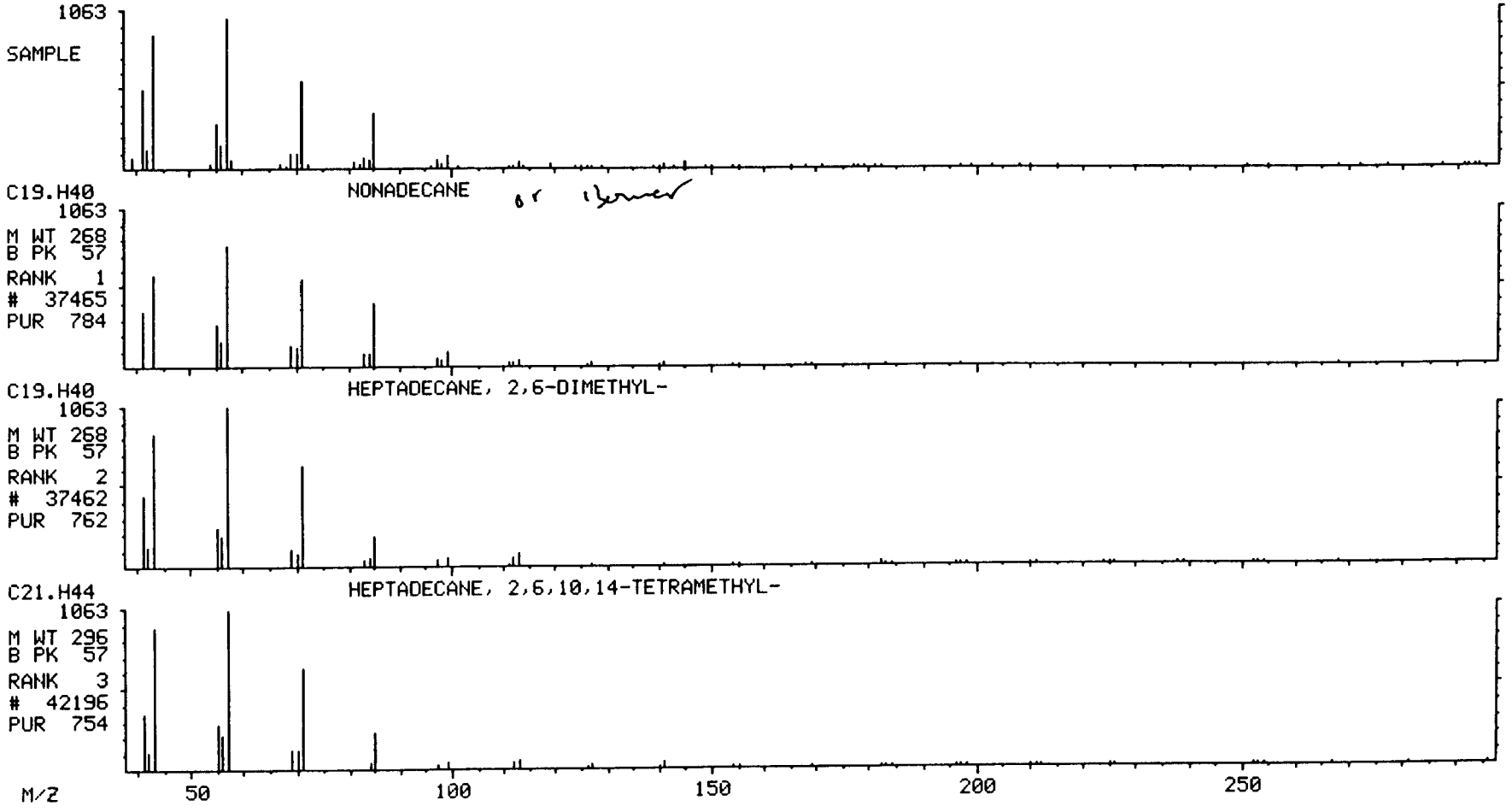
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	784	967	795
2	C19.H40	268	57	762	935	784
3	C21.H44	296	57	754	944	780
4	C10.H23.O.N	173	43	748	961	750
5	C15.H32	212	57	741	950	769
6	C13.H28	184	43	735	956	736
7	C23.H48	324	43	735	892	813
8	C12.H26.O	186	57	726	934	726
9	C12.H26	170	43	724	922	733

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	629-92-5
2	---	---	---	---	54105-67-8
3	---	---	---	---	18344-37-1
4	---	---	---	---	29812-79-1
5	---	---	---	---	629-62-9
6	---	---	---	---	17301-32-5
7	---	---	---	---	638-67-5
8	---	---	---	---	21078-65-9
9	---	---	---	---	13150-81-7

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:01:00 + 13:16
SAMPLE: T-MM5-2 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068103 #1192
CALI: 30068103 # 3

BASE M/Z: 57
RIC: 108288.



Library Search Data: 30068103 #1266 Base m/z: 57
08/31/98 20:01:00 + 14:05 Cali: 30068103 # 3 RIC: 91520.
Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
883 matched at least 7 of the 16 largest peaks in the unknown

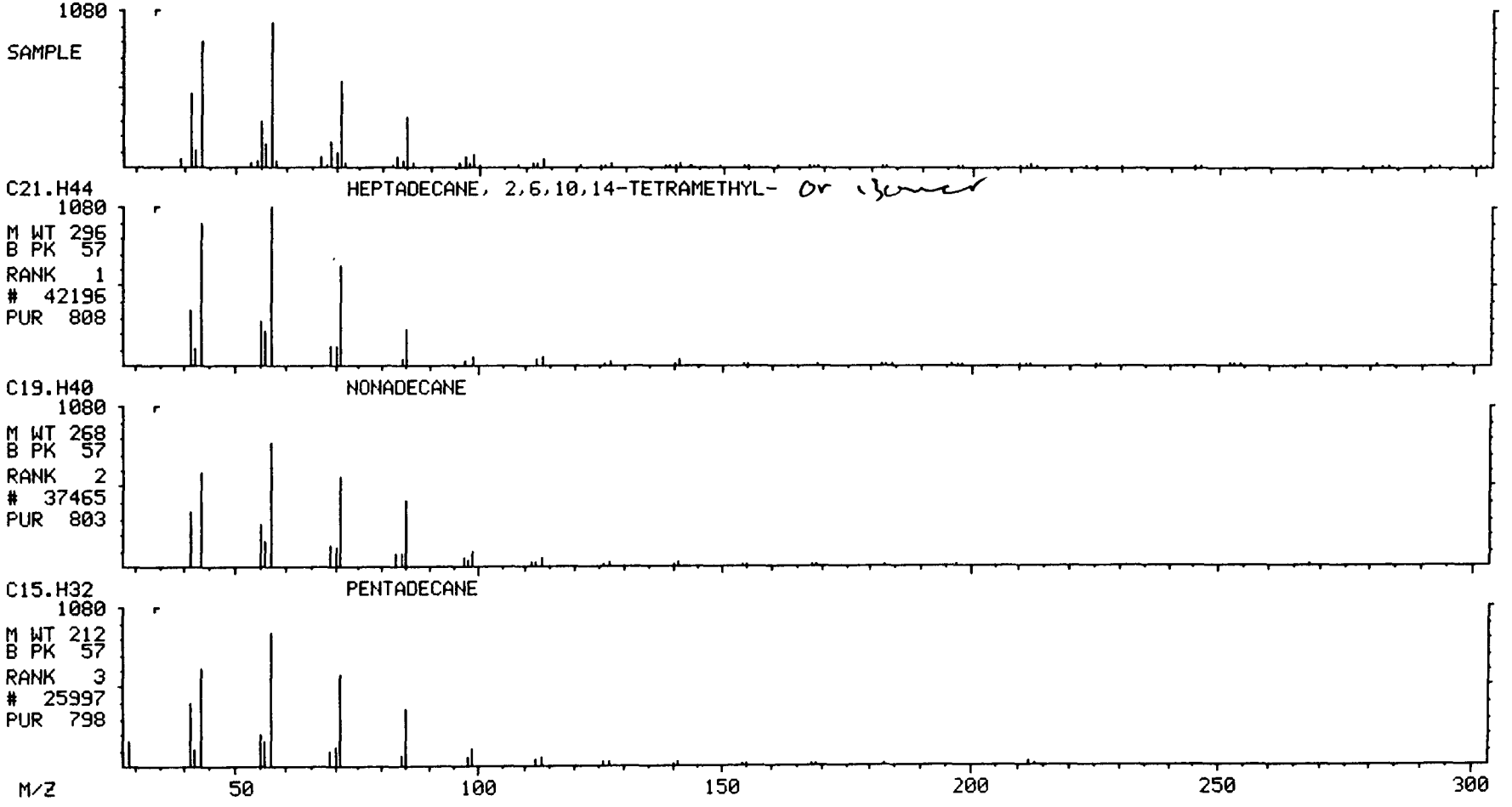
Rank	In.	Name
1	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
2	37465	NONADECANE
3	25997	PENTADECANE
4	37462	HEPTADECANE, 2,6-DIMETHYL-
5	32058	HEXADECANE, 3-METHYL-
6	39858	EICOSANE
7	46161	TRICOSANE
8	42192	HEPTADECANE, 2,6,10,15-TETRAMETHYL-
9	49555	PENTACOSANE

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C21.H44	296	57	808	959	815
2	C19.H40	268	57	803	971	816
3	C15.H32	212	57	798	988	798
4	C19.H40	268	57	797	950	807
5	C17.H36	240	57	785	953	789
6	C20.H42	282	57	785	921	809
7	C23.H48	324	43	784	929	837
8	C21.H44	296	57	768	939	790
9	C25.H52	352	43	765	903	837

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	18344-37-1
2	—	—	—	—	629-92-5
3	—	—	—	—	629-62-9
4	—	—	—	—	54105-67-8
5	—	—	—	—	6418-43-5
6	—	—	—	—	112-95-8
7	—	—	—	—	638-67-5
8	—	—	—	—	54833-48-6
9	—	—	—	—	629-99-2

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:01:00 + 14:05
SAMPLE: T-MM5-2 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068103 #1266 BASE M/Z: 57
CALI: 30068103 # 3 RIC: 91520.



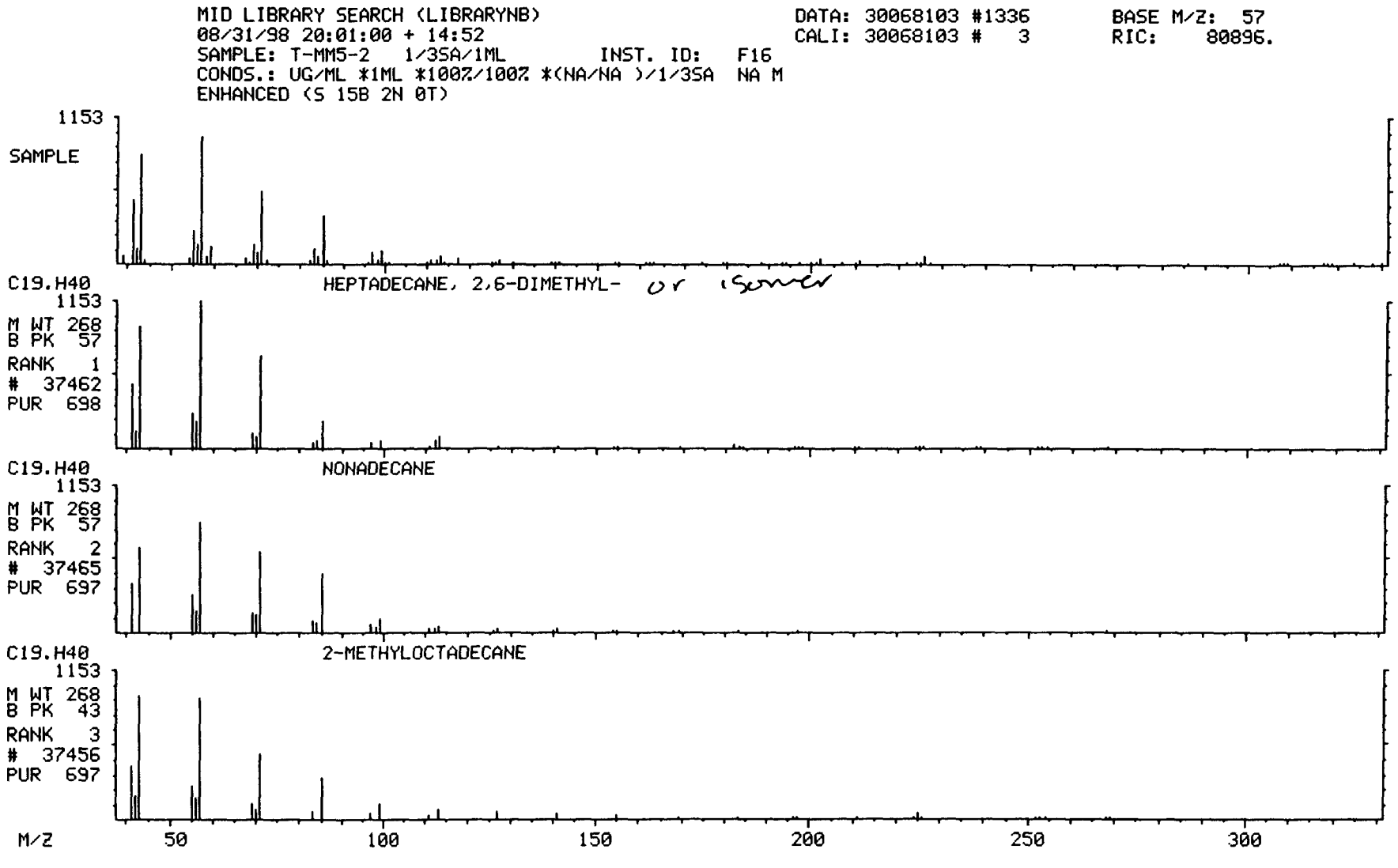
Library Search Data: 30068103 #1336 Base m/z: 57
08/31/98 20:01:00 + 14:52 Cali: 30068103 # 3 RIC: 80896.
Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
743 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37462	HEPTADECANE, 2,6-DIMETHYL-
2	37465	NONADECANE
3	37456	2-METHYLOCTADECANE
4	29263	HEXADECANE
5	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
6	46161	TRICOSANE
7	32058	HEXADECANE, 3-METHYL-
8	19523	1-DECANOL, 2-ETHYL-
9	15969	HYDROXYLAMINE, O-DECYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	698	888	727
2	C19.H40	268	57	697	954	723
3	C19.H40	268	43	697	918	722
4	C16.H34	226	57	690	942	712
5	C21.H44	296	57	688	907	710
6	C23.H48	324	43	682	907	739
7	C17.H36	240	57	674	929	693
8	C12.H26.O	186	57	672	949	672
9	C10.H23.O.N	173	43	672	962	675

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	54105-67-8
2	---	---	---	---	629-92-5
3	---	---	---	---	- -
4	---	---	---	---	544-76-3
5	---	---	---	---	8344-37-1
6	---	---	---	---	638-67-5
7	---	---	---	---	6418-43-5
8	---	---	---	---	21078-65-9
9	---	---	---	---	29812-79-1


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:01:00 + 14:52
SAMPLE: T-MM5-2 1/3SA/1ML
INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068103 #1336
CALI: 30068103 # 3
BASE M/Z: 57
RIC: 80896.
1153
SAMPLE
C19.H40
HEPTADECANE, 2,6-DIMETHYL- or isomer
1153
M WT 268
B PK 57
RANK 1
37462
PUR 698
C19.H40
NONADECANE
1153
M WT 268
B PK 57
RANK 2
37465
PUR 697
C19.H40
2-METHYLOCTADECANE
1153
M WT 268
B PK 43
RANK 3
37456
PUR 697
M/Z
50
100
150
200
250
300

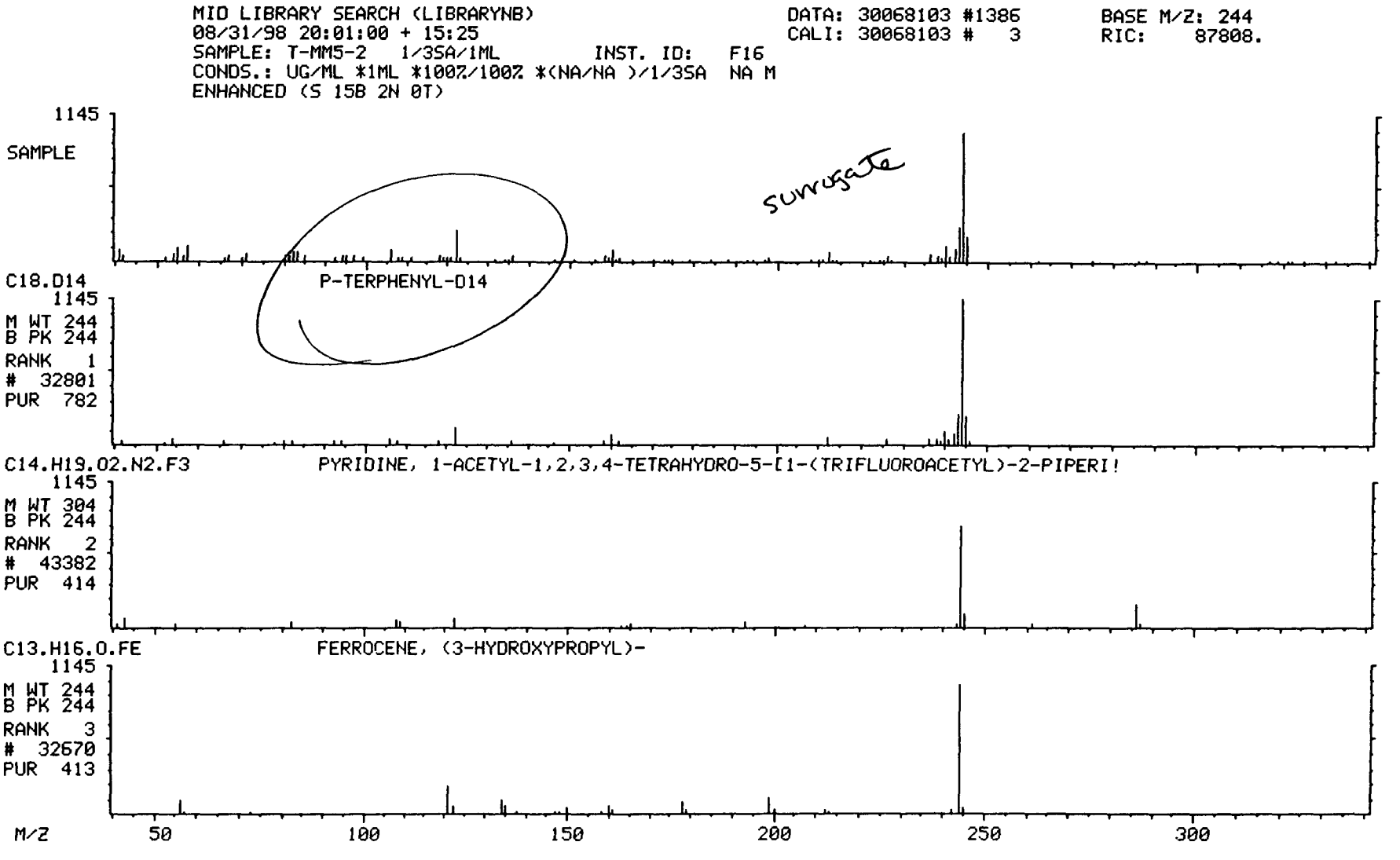
Library Search Data: 30068103 #1386 Base m/z: 244
08/31/98 20:01:00 + 15:25 Cali: 30068103 # 3 RIC: 87808.
Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N OT)

62231 spectra in LIBRARYNB searched for maximum PURITY
801 matched at least 3 of the 16 largest peaks in the unknown

Rank	In.	Name
1	32801	P-TERPHENYL-D14
2	43382	PYRIDINE, 1-ACETYL-1,2,3,4-TETRAHYDRO-5-[1-(TRIFLUOROACETYL)-2-PIPE*
3	32670	FERROCENE, (3-HYDROXYPROPYL)-
4	32765	MATRIDIN-15-ONE, 11,12,13,14-TETRADEHYDRO-, (6.BETA.)-
5	32768	ANAGYRINE
6	48867	SULFIDE, PENTYL TRITYL
7	50992	SULFIDE, BENZYL TRITYL
8	32560	9H-CARBAZOLE, 9-PHENYL-
9	40723	ETHYLAMINE, N-TRITYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C18.D14	244	244	782	976	791
2	C14.H19.O2.N2.F3	304	244	414	732	442
3	C13.H16.O.FE	244	244	413	742	482
4	C15.H20.O.N2	244	243	401	679	519
5	C15.H20.O.N2	244	98	367	614	542
6	C24.H26.S	346	243	365	579	410
7	C26.H22.S	366	243	363	554	448
8	C18.H13.N	243	243	361	553	394
9	C21.H21.N	287	244	360	630	481

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	1718-51-0
2	---	---	---	---	54966-10-8
3	---	---	---	---	12093-88-8
4	---	---	---	---	6838-34-2
5	---	---	---	---	486-89-5
6	---	---	---	---	20705-42-4
7	---	---	---	---	6622-14-6
8	---	---	---	---	1150-62-5
9	---	---	---	---	7370-34-5


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:01:00 + 15:25
SAMPLE: T-MM5-2 1/3SA/1ML
INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068103 #1386
CALI: 30068103 # 3
BASE M/Z: 244
RIC: 87808.
1145
SAMPLE
surrogate
C18.D14
P-TERPHENYL-D14
1145
M WT 244
B PK 244
RANK 1
32801
PUR 782
C14.H19.O2.N2.F3
PYRIDINE, 1-ACETYL-1,2,3,4-TETRAHYDRO-5-[1-(TRIFLUOROACETYL)-2-PIPERI!
1145
M WT 304
B PK 244
RANK 2
43382
PUR 414
C13.H16.O.FE
FERROCENE, (3-HYDROXYPROPYL)-
1145
M WT 244
B PK 244
RANK 3
32670
PUR 413
M/Z
50
100
150
200
250
300

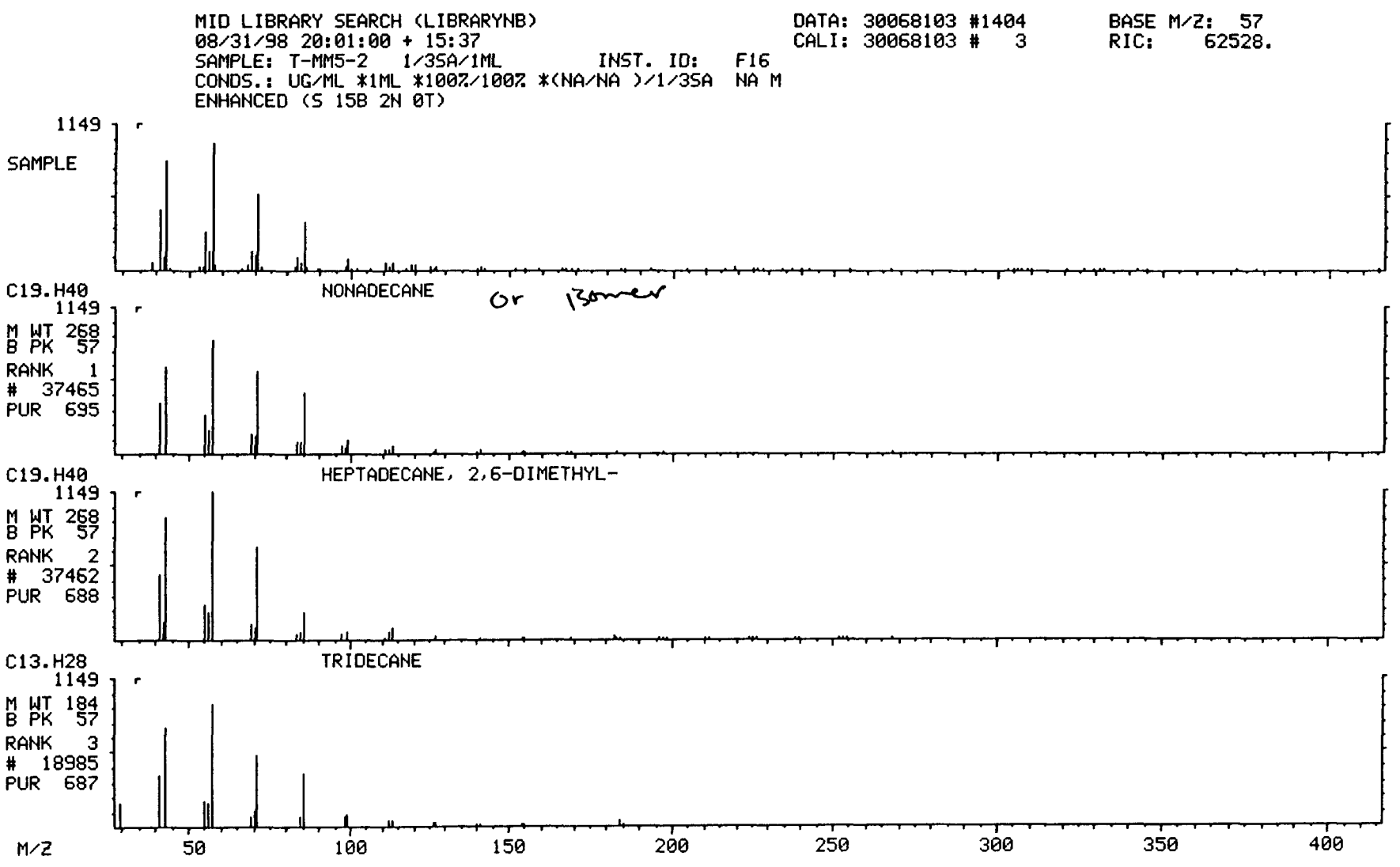
Library Search Data: 30068103 #1404 Base m/z: 57
08/31/98 20:01:00 + 15:37 Cali: 30068103 # 3 RIC: 62528.
Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
793 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37465	NONADECANE
2	37462	HEPTADECANE, 2,6-DIMETHYL-
3	18985	TRIDECANE
4	25997	PENTADECANE
5	42192	HEPTADECANE, 2,6,10,15-TETRAMETHYL-
6	19016	UNDECANE, 4,7-DIMETHYL-
7	15969	HYDROXYLAMINE, O-DECYL-
8	25994	DODECANE, 2,6,11-TRIMETHYL-
9	22530	TETRADECANE

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	695	931	741
2	C19.H40	268	57	688	912	729
3	C13.H28	184	57	687	970	689
4	C15.H32	212	57	686	953	714
5	C21.H44	296	57	684	924	723
6	C13.H28	184	43	684	951	684
7	C10.H23.O.N	173	43	681	950	697
8	C15.H32	212	57	680	956	685
9	C14.H30	198	43	680	938	714

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	629-92-5
2	---	---	---	---	54105-67-8
3	---	---	---	---	629-50-5
4	---	---	---	---	629-62-9
5	---	---	---	---	54833-48-6
6	---	---	---	---	17301-32-5
7	---	---	---	---	29812-79-1
8	---	---	---	---	31295-56-4
9	---	---	---	---	629-59-4


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:01:00 + 15:37
SAMPLE: T-MM5-2 1/35A/1ML
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)
INST. ID: F16
DATA: 30068103 #1404
CALI: 30068103 # 3
BASE M/Z: 57
RIC: 62528.
1149
SAMPLE
C19.H40
NONADECANE
Or Isomer
1149
M WT 268
B PK 57
RANK 1
37465
PUR 695
C19.H40
HEPTADECANE, 2,6-DIMETHYL-
1149
M WT 268
B PK 57
RANK 2
37462
PUR 688
C13.H28
TRIDECANE
1149
M WT 184
B PK 57
RANK 3
18985
PUR 687
M/Z
50
100
150
200
250
300
350
400

Library Search Data: 30068103 #1531 Base m/z: 57
08/31/98 20:01:00 + 17:02 Cali: 30068103 # 3 RIC: 41152.
Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
783 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37465	NONADECANE
2	15969	HYDROXYLAMINE, O-DECYL-
3	37462	HEPTADECANE, 2,6-DIMETHYL-
4	25997	PENTADECANE
5	19523	1-DECANOL, 2-ETHYL-
6	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
7	19016	UNDECANE, 4,7-DIMETHYL-
8	19006	DECANE, 6-ETHYL-2-METHYL-
9	22530	TETRADECANE

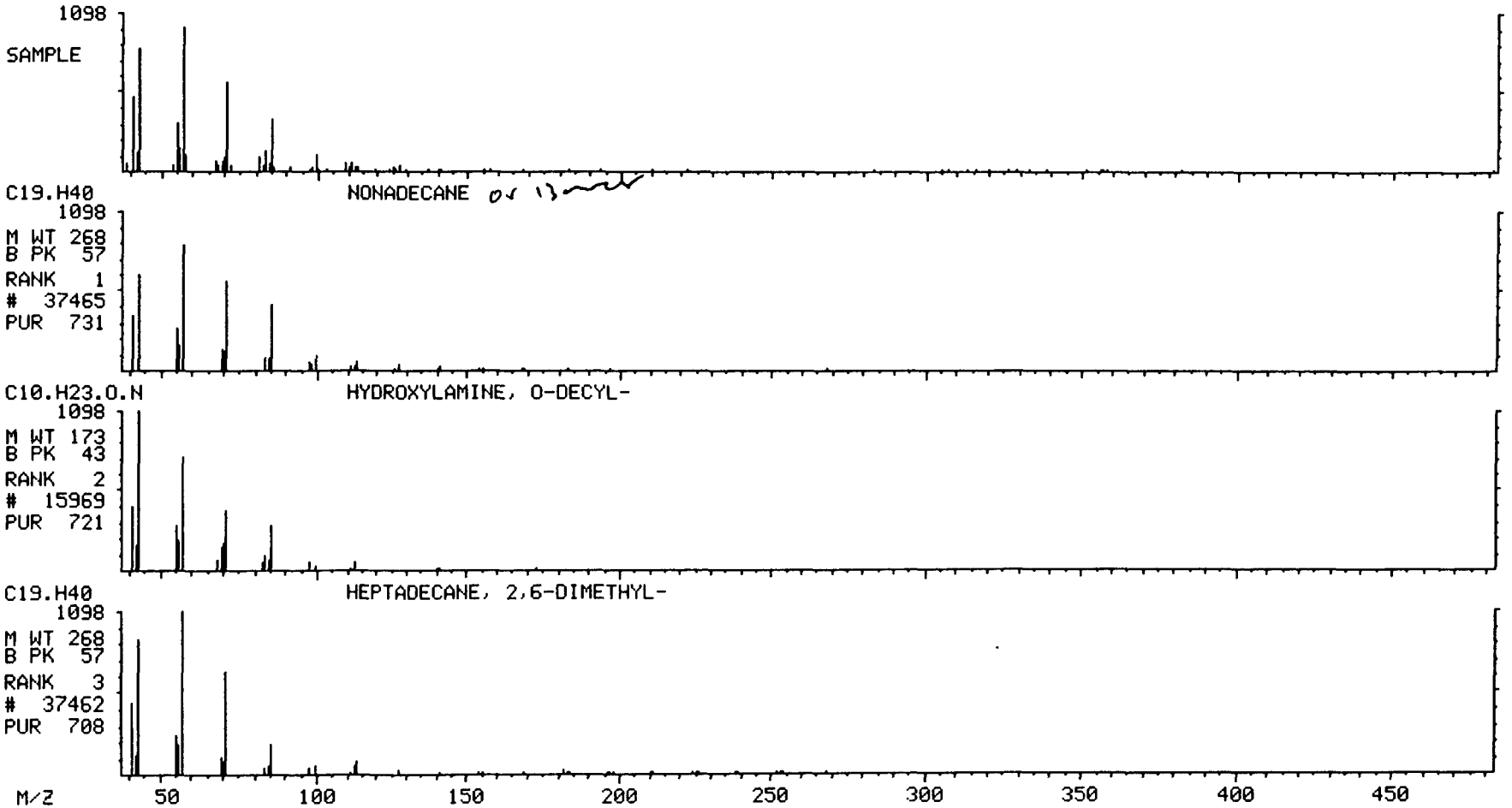
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	731	945	759
2	C10.H23.O.N	173	43	721	957	723
3	C19.H40	268	57	708	924	735
4	C15.H32	212	57	698	949	726
5	C12.H26.O	186	57	698	929	702
6	C21.H44	296	57	694	948	715
7	C13.H28	184	43	692	953	693
8	C13.H28	184	57	691	948	697
9	C14.H30	198	43	688	935	725

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	629-92-5
2	---	---	---	---	29812-79-1
3	---	---	---	---	54105-67-8
4	---	---	---	---	629-62-9
5	---	---	---	---	21078-65-9
6	---	---	---	---	18344-37-1
7	---	---	---	---	17301-32-5
8	---	---	---	---	62108-21-8
9	---	---	---	---	629-59-4

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:01:00 + 17:02
SAMPLE: T-MM5-2 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068103 #1531
CALI: 30068103 # 3

BASE M/Z: 57
RIC: 41152.



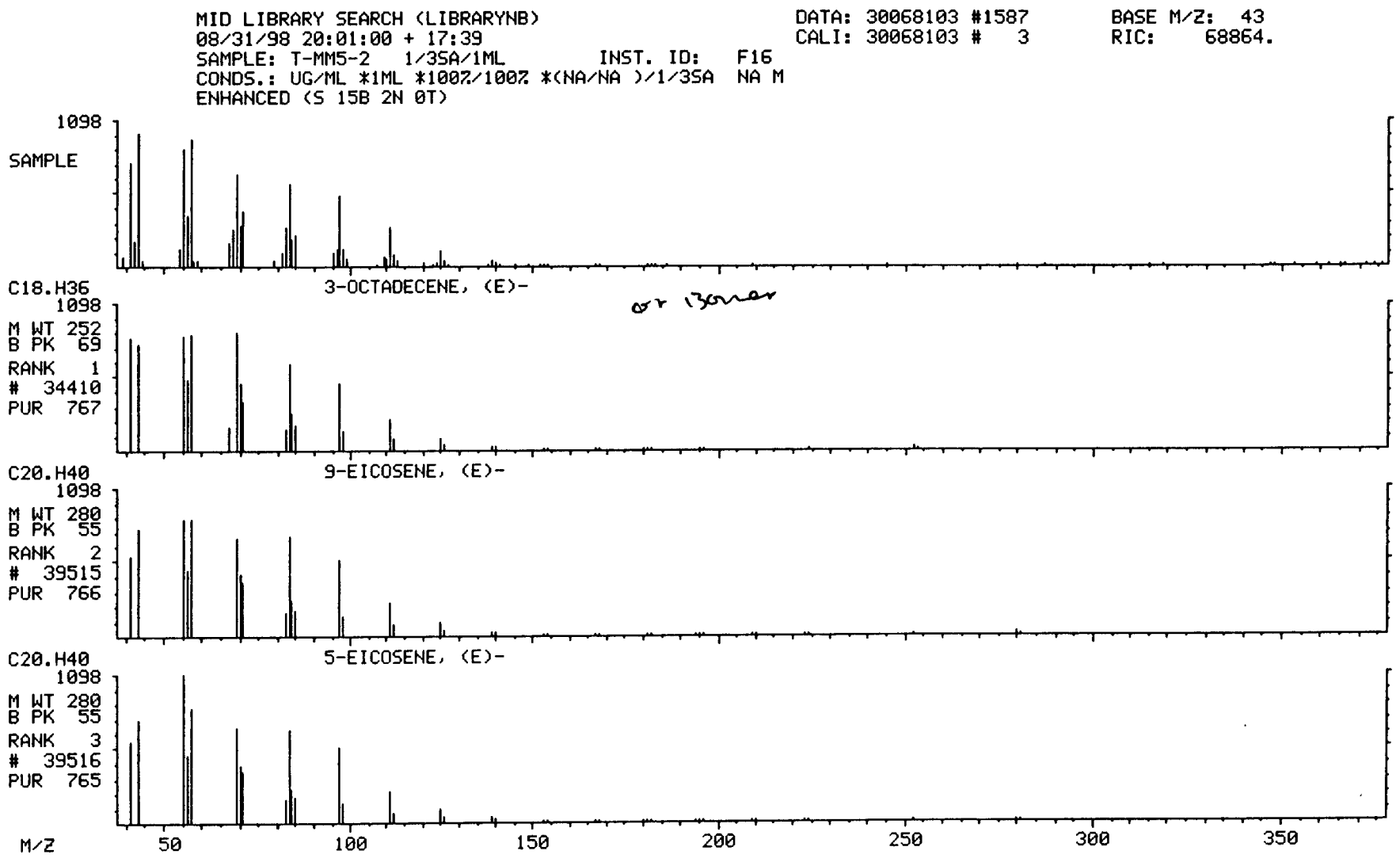
Library Search Data: 30068103 #1587 Base m/z: 43
08/31/98 20:01:00 + 17:39 Cali: 30068103 # 3 RIC: 68864.
Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
950 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	34410	3-OCTADECENE, (E)-
2	39515	9-EICOSENE, (E)-
3	39516	5-EICOSENE, (E)-
4	34418	9-OCTADECENE, (E)-
5	34411	5-OCTADECENE, (E)-
6	31653	1-HEPTADECENE
7	39517	3-EICOSENE, (E)-
8	28772	7-HEXADECENE, (Z)-
9	32420	1-HEXADECANOL

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C18.H36	252	69	767	968	782
2	C20.H40	280	55	766	979	770
3	C20.H40	280	55	765	978	771
4	C18.H36	252	55	763	963	777
5	C18.H36	252	55	762	962	777
6	C17.H34	238	55	756	970	770
7	C20.H40	280	57	755	982	760
8	C16.H32	224	55	749	945	766
9	C16.H34.O	242	55	748	973	758

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	7206-19-1
2	—	—	—	—	74685-29-3
3	—	—	—	—	74685-30-6
4	—	—	—	—	7206-25-9
5	—	—	—	—	7206-21-5
6	—	—	—	—	6765-39-5
7	—	—	—	—	74685-33-9
8	—	—	—	—	35507-09-6
9	—	—	—	—	36653-82-4


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:01:00 + 17:39
SAMPLE: T-MM5-2 1/35A/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068103 #1587
CALI: 30068103 # 3
BASE M/Z: 43
RIC: 68864.
1098
SAMPLE
C18.H36
3-OCTADECENE, (E)-
or isomer
1098
M WT 252
B PK 69
RANK 1
34410
PUR 767
C20.H40
9-EICOSENE, (E)-
1098
M WT 280
B PK 55
RANK 2
39515
PUR 766
C20.H40
5-EICOSENE, (E)-
1098
M WT 280
B PK 55
RANK 3
39516
PUR 765
M/Z
50
100
150
200
250
300
350

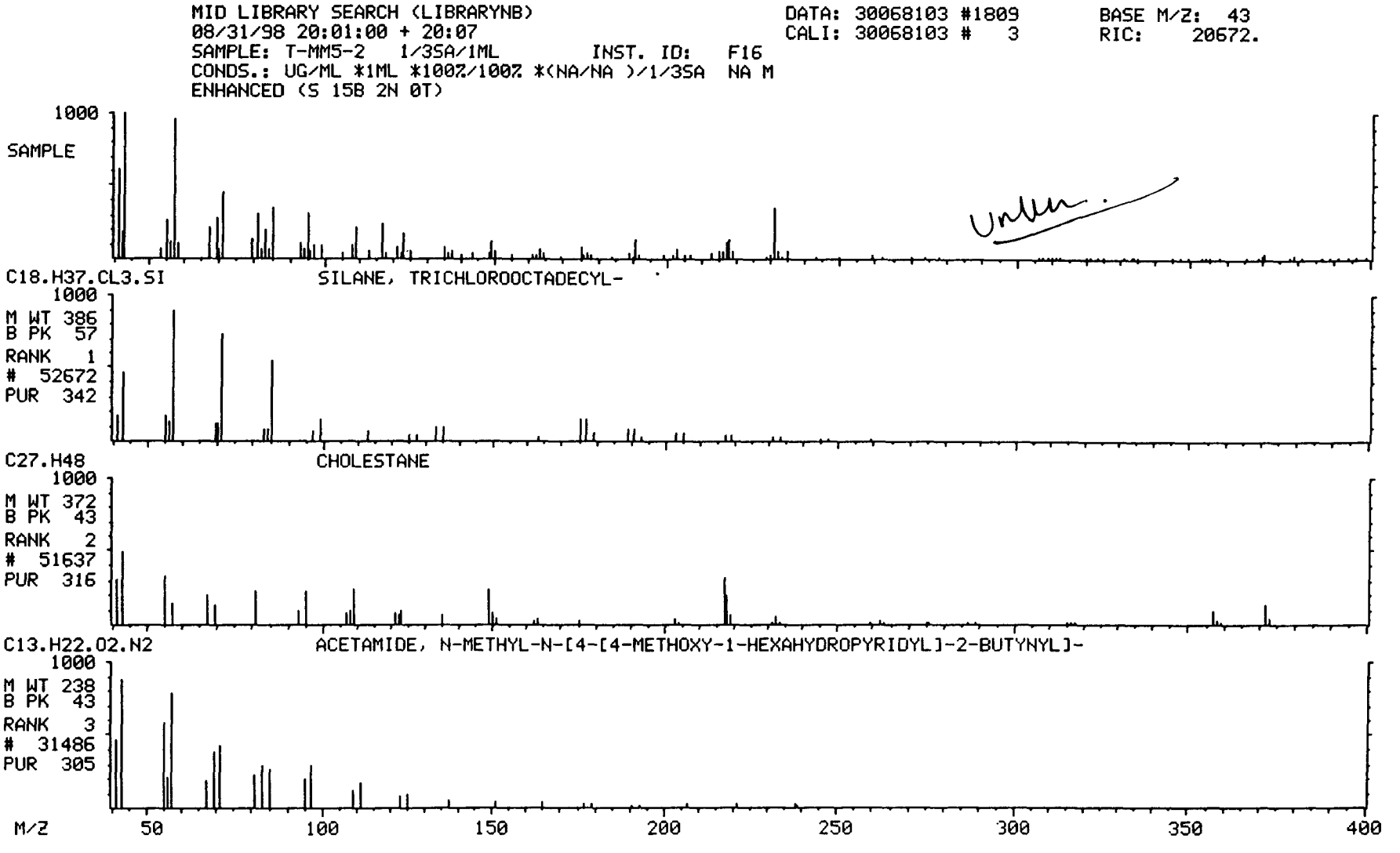
Library Search Data: 30068103 #1809 Base m/z: 43
08/31/98 20:01:00 + 20:07 Cali: 30068103 # 3 RIC: 20672.
Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
761 matched at least 5 of the 16 largest peaks in the unknown

Rank In. Name
1 52672 SILANE, TRICHLOROOCTADECYL-
2 51637 CHOLESTANE
3 31486 ACETAMIDE, N-METHYL-N-[4-[4-METHOXY-1-HEXAHYDROPYRIDYL]-2-BUTYNYL]-
4 40940 PREGNANE
5 54646 SQUALENE
6 50599 PENTALENE, OCTAHYDRO-1-(2-OCTYLDECYL)-
7 46251 DODECANE, 1,2-DIBROMO-
8 40165 HEXADECANOIC ACID, 2-OXO-, METHYL ESTER
9 48865 5.ALPHA.-ANDROSTAN-3.BETA.-OL, 4,4-DIMETHYL-, ACETATE

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C18.H37.CL3.SI	386	57	342	755	375
2	C27.H48	372	43	316	625	402
3	C13.H22.O2.N2	238	43	305	813	348
4	C21.H36	288	55	300	677	376
5	C30.H50	410	69	294	687	347
6	C26.H50	362	43	292	863	320
7	C12.H24.BR2	326	41	290	770	345
8	C17.H32.O3	284	57	286	817	337
9	C23.H38.O2	346	43	283	672	393

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	112-04-9
2	---	---	---	---	481-21-0
3	---	---	---	---	- -
4	---	---	---	---	481-26-5
5	---	---	---	---	7683-64-9
6	---	---	---	---	55401-65-5
7	---	---	---	---	55334-42-4
8	---	---	---	---	55836-30-1
9	---	---	---	---	7761-08-2


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:01:00 + 20:07
SAMPLE: T-MM5-2 1/35A/1ML
INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068103 #1809
CALI: 30068103 # 3
BASE M/Z: 43
RIC: 20672.
1000
SAMPLE
C18.H37.CL3.SI
SILANE, TRICHLOROOCTADECYL-
1000
M WT 386
B PK 57
RANK 1
52672
PUR 342
C27.H48
CHOLESTANE
1000
M WT 372
B PK 43
RANK 2
51637
PUR 316
C13.H22.O2.N2
ACETAMIDE, N-METHYL-N-[4-[4-METHOXY-1-HEXAHYDROPYRIDYL]-2-BUTYNYL]-
1000
M WT 238
B PK 43
RANK 3
31486
PUR 305
M/Z
50
100
150
200
250
300
350
400

TIC SELECTION REPORT

DATA FILE: 30068103

THE FOLLOWING PEAKS WERE REJECTED BECAUSE AT LEAST 40 % OF THEIR SIZE WAS ACCOUNTED FOR BY TARGET COMPOUNDS ELUTING WITHIN 4 SCANS OF THE PEAK TOP.

SCAN	SIZE	AMOUNT
199	205984.	24.199
310	455754.	53.543
341	148864.	17.489
398	55273.	6.494
402	58805.	6.908
422	191616.	22.511
531	377600.	44.361
724	383252.	45.025
830	340480.	40.000
1088	342016.	40.000
1554	317184.	40.000
1785	244032.	40.000

TOTAL NUMBER OF UNIDENTIFIED PEAKS WITH SIZE GREATER THAN 10 % OF THE CLOSEST INTERNAL STANDARD THAT DOES NOT HAVE INTERFERENCES = 121

INTERNAL STANDARDS THAT HAVE RIC SIZE LESS THAN 50 % OR GREATER THAN 200 % OF THE ESTIMATED RIC SIZE ARE CONSIDERED TO HAVE INTERFERENCES AND WILL NOT BE USED FOR QUANTITATION.

#	INTERNAL STANDARD	RIC SIZE	PERCENT OF ESTIMATED RIC SIZE	SCAN
1	C140 NAPHTHALENE-D8	377600.	212 *	531
2	C150 ACENAPHTHENE-D10	340480.	162	830
3	C160 PHENANTHRENE-D10	342016.	156	1088
4	C170 CHRYSENE-D12	317184.	140	1554
5	C175 PERYLENE-D12	244032.	106	1785

* INDICATES INTERFERENCE

SIZE = AREA

QUANTERRA GC/MS
Target Compound Data Summary Sheet

Data File: 300681RI03
Std Id: ST16980902

Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Client: PACIFI Date Analyzed: 09/02/98 19:59
Analyst: DAT Instrument ID: F16 Run Factor: 3.00
Quan List Threshold: 0.95 Surrogate Vol.: 1.00

Surrogate Spike Recoveries
8270-G, LIMS 10/10/96

Surrogate	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured		QC limits
CS20 NITROBENZENE-D5	50.00	40.80	81.6		45 107
CS25 2-FLUOROBIPHENY	50.00	53.80	108.		62 110
CS30 TERPHENYL-D14	50.00	39.50	79.0		58 135
CS45 PHENOL-D5	100.0	64.50	64.5		43 130
CS50 2-FLUOROPHENOL	100.0	58.30	58.3		36 111
CS55 2,4,6-TRIBROMOP	100.0	45.00	45.0	*	58 131

Target Compounds: SAP9 Confirms

Parameter	Scan	Result	Units	Reporting Limit
CS70 2-CHLOROPHENOL-D4		ND	UG/A	30.0
CS75 1,2-DICHLOROBNZN-D4	342	130.	UG/A	30.0
HEXACHLOROBENZENE-C13		ND	UG/A	30.0
C310 N-NITROSODIMETHYLAMINE		ND	UG/A	30.0
PYRIDINE		ND	UG/A	60.0
2-PICOLINE		ND	UG/A	30.0
N-NITROSOMETHYLETHYLAMINE		ND	UG/A	30.0
METHYLMETHANESULFONATE		ND	UG/A	30.0
N-NITROSODIETHYLAMINE		ND	UG/A	30.0
ETHYLMETHANE SULFONATE		ND	UG/A	30.0
PENTACHLOROETHANE		ND	UG/A	30.0
C320 ANILINE		ND	UG/A	30.0
C315 PHENOL		ND	UG/A	30.0
C325 BIS(2-CHLOROETHYL)ETHER		ND	UG/A	30.0
C330 2-CHLOROPHENOL		ND	UG/A	30.0
C335 1,3-DICHLOROBENZENE		ND	UG/A	30.0
C340 1,4-DICHLOROBENZENE		ND	UG/A	30.0
C345 BENZYL ALCOHOL		ND	UG/A	30.0
C350 1,2-DICHLOROBENZENE		ND	UG/A	30.0
C355 2-METHYLPHENOL		ND	UG/A	30.0
C360 2,2'-OXYBIS(1-CLPROPAN)		ND	UG/A	30.0
C361 ACETOPHENONE		ND	UG/A	30.0
N-NITROSOPYRROLIDINE		ND	UG/A	30.0
N-NITROSOMORPHOLINE		ND	UG/A	30.0
3-METHYL PHENOL		ND	UG/A	30.0
C365 4-METHYLPHENOL		ND	UG/A	30.0
C370 N-NITROSO-DI-N-PROPYLAM		ND	UG/A	30.0
O-TOLUIDINE		ND	UG/A	30.0
C375 HEXACHLOROETHANE		ND	UG/A	30.0

Reviewed by: _____

QUANTERRA GC/MS
Target Compound Data Summary Sheet

Data File: 300681RI03
Std Id: ST16980902

Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Client: PACIFI Date Analyzed: 09/02/98 19:59
Analyst: DAT Instrument ID: F16 Run Factor: 3.00
Quan List Threshold: 0.95 Surrogate Vol.: 1.00

Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
C410 NITROBENZENE		ND	UG/A	30.0
N-NITROSOPIPERIDINE		ND	UG/A	30.0
C415 ISOPHORONE		ND	UG/A	30.0
C420 2-NITROPHENOL		ND	UG/A	30.0
C425 2,4-DIMETHYLPHENOL		ND	UG/A	30.0
C435 BIS(2-CHLOROETHOXY)METH		ND	UG/A	30.0
C440 2,4-DICHLOROPHENOL		ND	UG/A	30.0
C430 BENZOIC ACID		ND	UG/A	150.0
AA-DIMETHYLPHENETHYLAMINE		ND	UG/A	30.0
C445 1,2,4-TRICHLOROBENZENE		ND	UG/A	30.0
C450 NAPHTHALENE		ND	UG/A	30.0
C455 4-CHLOROANALINE		ND	UG/A	30.0
2,6-DICHLOROPHENOL		ND	UG/A	30.0
HEXACHLOROPROPENE		ND	UG/A	30.0
C460 HEXACHLOROBUTADIENE		ND	UG/A	30.0
P-PHENYLENE DIAMINE		ND	UG/A	30.0
N-NITROSODI-N-BUTYLAMINE		ND	UG/A	30.0
C465 4-CHLORO-3-METHYLPHENO		ND	UG/A	30.0
SAFROLE		ND	UG/A	30.0
C470 2-METHYLNAPHTHALENE	654	60.	UG/A	30.0
1,2,4,5-TETRACHLOROBENZENE		ND	UG/A	30.0
ISOSAFROLE (#1)		ND	UG/A	60.0
C510 HEXACHLOROCYCLOPENTADI		ND	UG/A	30.0
C515 2,4,6-TRICHLOROPHENOL		ND	UG/A	30.0
C520 2,4,5-TRICHLOROPHENOL		ND	UG/A	30.0
ISOSAFROLE (#2)		ND	UG/A	60.0
C525 2-CHLORONAPHTHALENE		ND	UG/A	30.0
1-CHLORONAPHTHALENE		ND	UG/A	15.0
C530 2-NITROANALINE		ND	UG/A	150.0
1,4-NAPHTHOQUINONE		ND	UG/A	30.0
C535 DIMETHYLPHTHALATE		ND	UG/A	30.0
1,3-DINITROBENZENE		ND	UG/A	30.0
C540 ACENAPHTHYLENE		ND	UG/A	30.0
C543 2,6-DINITROTOLUENE		ND	UG/A	30.0
C545 3-NITROANILINE		ND	UG/A	150.0
C550 ACENAPHTHENE		ND	UG/A	30.0
C555 2,4-DINITROPHENOL		ND	UG/A	150.0
C565 DIBENZOFURAN		ND	UG/A	30.0
C560 4-NITROPHENOL		ND	UG/A	150.0
PENTACHLOROBENZENE		ND	UG/A	30.0
C570 2,4-DINITROTOLUENE		ND	UG/A	30.0
1-NAPHTHYLAMINE		ND	UG/A	30.0
2-NAPHTHYLAMINE		ND	UG/A	30.0
2,3,4,6-TETRACHLOROPHENOL		ND	UG/A	60.0

QUANTERRA GC/MS
Target Compound Data Summary Sheet

Data File: 300681RI03
Std Id: ST16980902

Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Client: PACIFI Date Analyzed: 09/02/98 19:59
Analyst: DAT Instrument ID: F16 Run Factor: 3.00
Quan List Threshold: 0.95 Surrogate Vol.: 1.00

Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
C580 DIETHYLPHTHALATE		ND	UG/A	30.0
C590 FLUORENE		ND	UG/A	30.0
C585 4-CHLOROPHENYL-PHENYLE		ND	UG/A	30.0
5-NITRO-O-TOLUIDINE		ND	UG/A	30.0
C595 4-NITROANALINE		ND	UG/A	150.0
C610 4,6-DINITRO-2-METHYLPH		ND	UG/A	150.0
C615 N-NITROSODIPHENYLAMINE		ND	UG/A	30.0
C620 AZOBENZENE		ND	UG/A	30.0
SYM-TRINITROBENZENE		ND	UG/A	30.0
C625 4-BROMOPHENYL-PHENYLET		ND	UG/A	30.0
PHENACETIN		ND	UG/A	30.0
DIALLATE	234	ND	UG/A	30.0
C630 HEXACHLOROBENZENE		ND	UG/A	30.0
4-AMINOBIPHENYL		ND	UG/A	30.0
C635 PENTACHLOROPHENOL		ND	UG/A	150.0
PRONAMIDE		ND	UG/A	30.0
PENTACHLORONITROBENZENE		ND	UG/A	150.0
C640 PHENANTHRENE		ND	UG/A	30.0
C645 ANTHRACENE		ND	UG/A	30.0
2SECBUTYL-4,6-DINITROPHENOL		ND	UG/A	30.0
C647 CARBAZOLE		ND	UG/A	30.0
C650 DI-N-BUTYLPHTHALATE		ND	UG/A	30.0
4-NITROQUINOLINE-1-OXIDE		ND	UG/A	30.0
METHAPYRILENE		ND	UG/A	30.0
ISODRIN		ND	UG/A	30.0
C655 FLUORANTHENE		ND	UG/A	30.0
CHLOROBENZILATE		ND	UG/A	30.0
C710 BENZIDINE		ND	UG/A	300.0
C715 PYRENE		ND	UG/A	30.0
ARAMITE (#1)		ND	UG/A	30.0
ARAMITE (#2)		ND	UG/A	30.0
P-DIMETHYLAMINOAZOBENZENE		ND	UG/A	30.0
3,3'-DIMETHYLBENZIDINE		ND	UG/A	30.0
KEPONE		ND	UG/A	150.0
C720 BUTYLBENZYLPHTHALATE		ND	UG/A	30.0
2-ACETYLAMINOFLUORENE		ND	UG/A	30.0
C730 BENZO(A)ANTHRACENE		ND	UG/A	30.0
C725 3,3'-DICHLOROBENZIDINE		ND	UG/A	60.0
C740 CHRYSENE		ND	UG/A	30.0
C745 BIS(2-ETHYLHEXYL)PHTHA		ND	UG/A	30.0
3-METHYLCHOLANTHRENE		ND	UG/A	30.0
C760 DI-N-OCTYL PHTHALATE		ND	UG/A	30.0
C765 BENZO(B)FLUORANTHENE		ND	UG/A	30.0
7,12-DIMETHYLBENZANTHRACENE		ND	UG/A	30.0

QUANTERRA GC/MS
Target Compound Data Summary Sheet

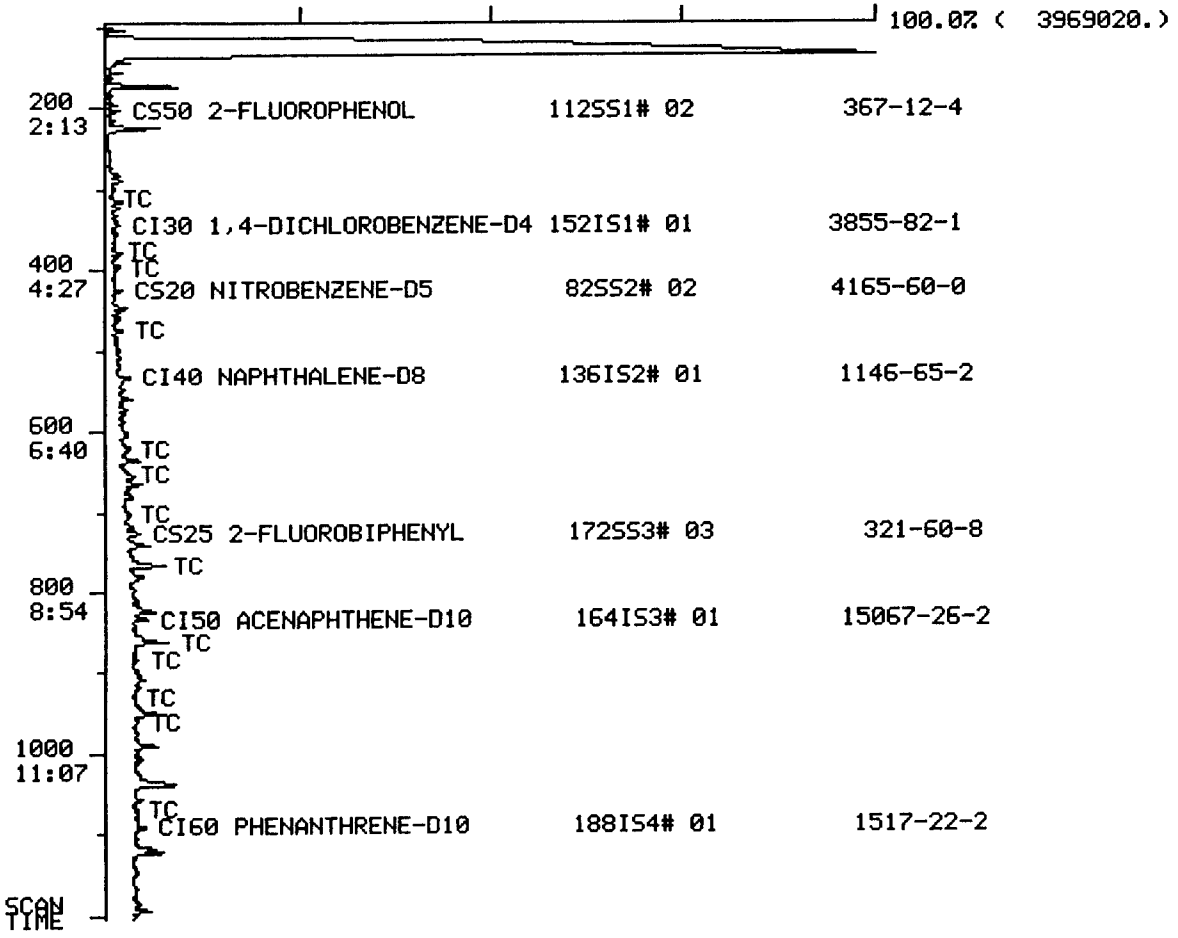
Data File: 300681RI03
Std Id: ST16980902

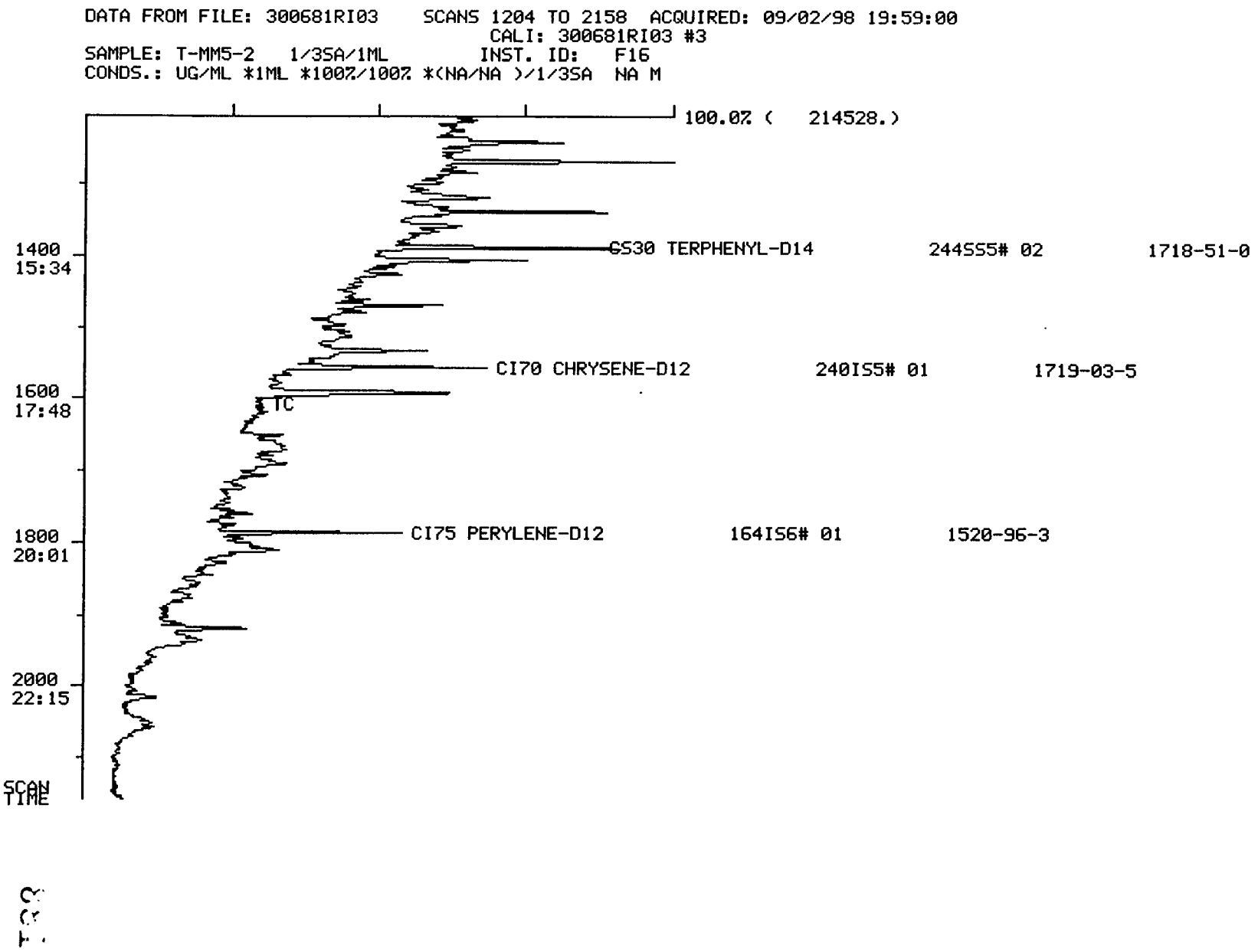
Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Client: PACIFI Date Analyzed: 09/02/98 19:59
Analyst: DAT Instrument ID: F16 Run Factor: 3.00
Quan List Threshold: 0.95 Surrogate Vol.: 1.00

Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
C770 BENZO(K)FLUORANTHENE		ND	UG/A	30.0
HEXACHLOROPHENE		ND	UG/A	30.0
C775 BENZO(A)PYRENE		ND	UG/A	30.0
C780 INDENO(1,2,3-CD)PYRENE		ND	UG/A	30.0
C785 DIBENZ(A,H)ANTHRACENE		ND	UG/A	30.0
C790 BENZO(G,H,I)PERYLENE		ND	UG/A	30.0

DATA FROM FILE: 300681RI03 SCANS 94 TO 1204 ACQUIRED: 09/02/98 19:59:00
CALI: 300681RI03 #3
SAMPLE: T-MM5-2 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M




DATA FROM FILE: 300681RI03 SCANS 1204 TO 2158 ACQUIRED: 09/02/98 19:59:00
CALI: 300681RI03 #3
SAMPLE: T-MM5-2 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
100.0% (214528.)
1400
15:34
CS30 TERPHENYL-D14 244SS5# 02 1718-51-0
1600
17:48
CI70 CHRYSENE-D12 240IS5# 01 1719-03-5
TC
1800
20:01
CI75 PERYLENE-D12 164IS6# 01 1520-96-3
2000
22:15
SCAN
TIME

STANDARD USED FOR THIS REPORT IS ST16980902 REPORT PRINTED: 9/03/98 12:47:25

ADDITIONAL STANDARD USED FOR THIS REPORT IS: ST16980902A

QUANTERRA QUANTITATION SUMMARY File: 300681RI03

Sample: T-MM5-2 1/3SA/1ML INST. ID: F16
Analyst: DAT Instrument Id: F16 Analyzed: 09/02/98 19:59

Compounds with amounts less than 0.20 reported as NOT FOUND

No	Library Entry	Name	Mass	Meth	Scan	Ref	Area	RRF(L)	Units: UG/ML Amount
1	S1# 1	CI30 1,4-DICHLOROBENZENE	152	A BV	342	1	27571.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	A BB	531	2	95690.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	A BB	831	3	49039.	1.000	40.000
4	S4# 1	CI60 PHENANTHRENE-D10	188	A BB	1089	4	81651.	1.000	40.000
5	S5# 1	CI70 CHRYSENE-D12	240	A BB	1555	5	77811.	1.000	40.000
6	S6# 1	CI75 PERYLENE-D12	264	A BB	1786	6	72812.	1.000	40.000
7	S2# 2	CS20 NITROBENZENE-D5	82	A BV	423	2	45877.	0.470	40.841
8	S3# 3	CS25 2-FLUOROBIPHENYL	172	A VB	725	3	81379.	1.234	53.778
9	S5# 2	CS30 TERPHENYL-D14	244	A BB	1386	5	76441.	0.995	39.485
10	S1# 3	CS45 PHENOL-D5	99	A BV	312	1	90022.	2.025	64.480
11	S1# 2	CS50 2-FLUOROPHENOL	112	A BB	200	1	55021.	1.368	58.341
12	S3# 2	CS55 2,4,6-TRIBROMOPHENO	330	A BB	973	3	13000.	0.236	44.998
13	S1# 5	CS70 2-CHLOROPHENOL-D4	132		1	NOT FOUND			
14	S1# 6	CS75 1,2-DICHLOROBNZN-D4	152	A BV	342	1	27571.	0.920	43.476
15	S4# 4	HEXACHLOROBENZENE-C13	294		4	NOT FOUND			
16	S1# 15	C310 N-NITROSODIMETHYLAM	74		1	NOT FOUND			
17	S1# 20	PYRIDINE	79		1	NOT FOUND			
18	S1# 30	2-PICOLINE	93		1	NOT FOUND			
19	S1# 40	N-NITROSOMETHYLETHYLAMIN	42		1	NOT FOUND			
20	S1# 60	METHYLMETHANESULFONATE	80		1	NOT FOUND			
21	S1# 70	N-NITROSODIETHYLAMINE	102		1	NOT FOUND			
22	S1# 85	ETHYLMETHANE SULFONATE	79		1	NOT FOUND			
23	S1# 95	PENTACHLOROETHANE	117	A VB	307	1	448.	0.602	1.081
24	S1#100	C320 ANILINE	93		1	NOT FOUND			
25	S1#105	C315 PHENOL	94	A BB	313	1	10332.	1.968	7.617
26	S1#110	C325 BIS(2-CHLOROETHYL)E	93	A VB	321	1	808.	1.368	0.857
27	S1#115	C330 2-CHLOROPHENOL	128	A VB	321	1	310.	1.497	0.300
28	S1#125	C335 1,3-DICHLOROBENZENE	146		1	NOT FOUND			
29	S1#130	C340 1,4-DICHLOROBENZENE	146		1	NOT FOUND			
30	S1#145	C345 BENZYL ALCOHOL	108	A BB	373	1	4387.	0.854	7.449
31	S1#150	C350 1,2-DICHLOROBENZENE	146		1	NOT FOUND			
32	S1#160	C355 2-METHYLPHENOL	108		1	NOT FOUND			
33	S1#165	C360 2,2'-OXYBIS(1-CLPRO	45	A BB	395	1	3495.	2.539	1.997
34	S1#170	C361 ACETOPHENONE	105	A BB	402	1	8684.	1.934	6.515
35	S1#175	N-NITROSOPYRROLIDINE	100	A*VB	403	1	350.	0.553	0.918
36	S1#180	N-NITROSOMORPHOLINE	56	A VV	411	1	2422.	0.821	4.281
37	S1#182	3-METHYL PHENOL	108		1	NOT FOUND			
38	S1#185	C365 4-METHYLPHENOL	108		1	NOT FOUND			
39	S1#190	C370 N-NITROSO-DI-N-PROP	70	A VB	404	1	1369.	0.906	2.192
40	S1#195	O-TOLUIDINE	106		1	NOT FOUND			
41	S1#200	C375 HEXACHLOROETHANE	117		1	NOT FOUND			
42	S2# 10	C410 NITROBENZENE	77	A BB	424	2	1347.	0.445	1.266
43	S2# 15	N-NITROSOPIPERIDINE	42		2	NOT FOUND			
44	S2# 20	C415 ISOPHORONE	82	A VB	467	2	449.	0.741	0.253
45	S2# 25	C420 2-NITROPHENOL	139	A BB	473	2	817.	0.213	1.600

46	S2#	30	C425	2,4-DIMETHYLPHENOL	107	A	BB	501	2	737.	0.330	0.934
47	S2#	35	C435	BIS(2-CHLOROETHOXY)	93			2	NOT FOUND			
48	S2#	40	C440	2,4-DICHLOROPHENOL	162	A	BB	520	2	340.	0.308	0.462
49	S2#	45	C430	BENZOIC ACID	122	A	BB	543	2	6945.	0.276	10.527

50	S2# 50	AA-DIMETHYLPHENETHYLAMIN	58	A	BB	707	2	3330.	1.285	1.083
51	S2# 55	C445 1,2,4-TRICHLOROBENZ	180			2	NOT FOUND			
52	S2# 60	C450 NAPHTHALENE	128	A	BV	534	2	23287.	1.022	9.523
53	S2# 80	C455 4-CHLOROANALINE	127	A	BB	557	2	540.	0.454	0.498
54	S2# 85	2,6-DICHLOROPHENOL	162	A	BB	553	2	453.	0.257	0.736
55	S2# 90	HEXACHLOROPROPENE	213			2	NOT FOUND			
56	S2# 95	C460 HEXACHLOROBUTADIENE	225			2	NOT FOUND			
57	S2#115	P-PHENYLENE DIAMINE	108			2	NOT FOUND			
58	S2#120	N-NITROSODI-N-BUTYLAMINE	84	A	VB	620	2	1528.	0.213	2.997
59	S2#130	C465 4-CHLORO-3-METHYLPH	107			2	NOT FOUND			
60	S2#140	SAFROLE	162	A	BB	650	2	808.	0.248	1.363
61	S2#145	C470 2-METHYLNAPHTHALENE	142	A	BV	654	2	35943.	0.751	19.999
62	S3# 10	1,2,4,5-TETRACHLOROBENZE	214			3	NOT FOUND			
63	S3# 15	ISOSAFROLE (#1)	162	A	BB	699	3	481.	0.044	8.988
64	S3# 20	C510 HEXACHLOROCYCLOPENT	237			3	NOT FOUND			
65	S3# 25	C515 2,4,6-TRICHLOROPHEN	196			3	NOT FOUND			
66	S3# 30	C520 2,4,5-TRICHLOROPHEN	196			3	NOT FOUND			
67	S3# 35	ISOSAFROLE (#2)	104			3	NOT FOUND			
68	S3# 40	C525 2-CHLORONAPHTHALENE	162			3	NOT FOUND			
69	S3# 42	1-CHLORONAPHTHALEN	162			3	NOT FOUND			
70	S3# 45	C530 2-NITROANALINE	65	A	BB	766	3	848.	0.502	1.378
71	S3# 50	1,4-NAPHTHOQUINONE	158			3	NOT FOUND			
72	S3# 55	C535 DIMETHYLPHTHALATE	163			3	NOT FOUND			
73	S3# 60	1,3-DINITROBENZENE	168			3	NOT FOUND			
74	S3# 65	C540 ACENAPHTHYLENE	152			3	NOT FOUND			
75	S3# 70	C543 2,6-DINITROTOLUENE	165			3	NOT FOUND			
76	S3# 75	C545 3-NITROANILINE	138			3	NOT FOUND			
77	S3# 80	C550 ACENAPHTHENE	153	A	BB	836	3	2115.	1.159	1.489
78	S3# 85	C555 2,4-DINITROPHENOL	184	A	BV	860	3	386.	0.189	1.663
79	S3# 90	C565 DIBENZOFURAN	168	A	VB	868	3	1281.	1.669	0.626
80	S3# 95	C560 4-NITROPHENOL	109	A	BB	895	3	788.	0.173	3.723
81	S3#100	PENTACHLOROBENZENE	250			3	NOT FOUND			
82	S3#105	C570 2,4-DINITROTOLUENE	165	A	BB	883	3	553.	0.397	1.136
83	S3#110	1-NAPHTHYLAMINE	143			3	NOT FOUND			
84	S3#115	2-NAPHTHYLAMINE	143			3	NOT FOUND			
85	S3#120	2,3,4,6-TETRACHLOROPHENO	232			3	NOT FOUND			
86	S3#130	C580 DIETHYLPHTHALATE	149			3	NOT FOUND			
87	S3#135	C590 FLUORENE	166	A	BB	928	3	4501.	1.298	2.829
88	S3#140	C585 4-CHLOROPHENYL-PHEN	204	A	BB	941	3	161.	0.613	0.214
89	S3#145	5-NITRO-O-TOLUIDINE	152	A	VB	943	3	1742.	0.356	3.998
90	S3#150	C595 4-NITROANALINE	138			3	NOT FOUND			
91	S4# 10	C610 4,6-DINITRO-2-METHY	198	A	VV	954	4	178.	0.132	0.662
92	S4# 15	C615 N-NITROSODIPHENYLAM	169	A	BV	960	4	4922.	0.551	4.378
93	S4# 20	C620 AZOBENZENE	77			4	NOT FOUND			
94	S4# 25	SYM-TRINITROBENZENE	75			4	NOT FOUND			
95	S4# 30	C625 4-BROMOPHENYL-PHENY	248			4	NOT FOUND			
96	S4# 35	PHENACETIN	108			4	NOT FOUND			
97	S4# 37	DIALLATE	234			4	NOT FOUND			
98	S4# 40	C630 HEXACHLOROBENZENE	284			4	NOT FOUND			
99	S4# 45	4-AMINOBIPHENYL	169	A	BB	1078	4	2317.	0.609	1.864
100	S4# 50	C635 PENTACHLOROPHENOL	266	A	BB	1068	4	242.	0.155	0.765
101	S4# 55	PRONAMIDE	173			4	NOT FOUND			
102	S4# 60	PENTACHLORONITROBENZENE	237	A	BB	1066	4	216.	0.080	1.317
103	S4# 65	C640 PHENANTHRENE	178	A	BB	1093	4	14817.	1.033	7.030
104	S4# 70	C645 ANTHRACENE	178			4	NOT FOUND			
105	S4# 75	2SECBUTYL-4,6-DINITROPHE	211			4	NOT FOUND			
106	S4# 80	C647 CARBAZOLE	167	A	BB	1150	4	482.	0.764	0.309
107	S4# 85	C650 DI-N-BUTYLPHTHALATE	149			4	NOT FOUND			
108	S4#100	4-NITROQUINOLINE-1-OXIDE	190			4	NOT FOUND			
109	S4#105	METHAPYRILENE	58			4	NOT FOUND			
110	S4#106	ISODRIN	193			4	NOT FOUND			

111	S4#110	C655	FLUORANTHENE	202	A	BB	1301	4	404.	0.900	0.220
112	S4#120		CHLOROBENZILATE	139				4	NOT FOUND		
113	S5# 10	C710	BENZIDINE	184				5	NOT FOUND		
114	S5# 15	C715	PYRENE	202	A	BB	1337	5	2218.	1.323	0.862
115	S5# 20		ARAMITE (#1)	185				5	NOT FOUND		
116	S5# 25		ARAMITE (#2)	185				5	NOT FOUND		
117	S5# 30		P-DIMETHYLAMINOAZOBENZEN	120				5	NOT FOUND		
118	S5# 35		3,3'-DIMETHYLBENZIDINE	212	A	BV	1474	5	510.	0.418	0.628
119	S5# 37		KEPONE	272				5	NOT FOUND		
120	S5# 40	C720	BUTYLBENZYLPHTHALAT	149				5	NOT FOUND		
121	S5# 45		2-ACETYLAMINOFLUORENE	181				5	NOT FOUND		
122	S5# 50	C730	BENZO(A)ANTHRACENE	228	A	BB	1558	5	1798.	1.125	0.822
123	S5# 55	C725	3,3'-DICHLOROBENZID	252				5	NOT FOUND		
124	S5# 60	C740	CHRYSENE	228	A	BB	1558	5	1799.	1.014	0.912
125	S5# 65	C745	BIS(2-ETHYLHEXYL)PH	149	A	BB	1605	5	3055.	0.980	1.603
126	S5# 85		3-METHYLCHOLANTHRENE	268	A*	BB	1841	5	287.	0.548	0.270
127	S6# 10	C760	DI-N-OCTYL PHTHALAT	149				6	NOT FOUND		
128	S6# 15	C765	BENZO(B)FLUORANTHEN	252				6	NOT FOUND		
129	S6# 20		7,12-DIMETHYLBENZANTHRAC	256	A	BB	1743	6	337.	0.610	0.303
130	S6# 25	C770	BENZO(K)FLUORANTHEN	252				6	NOT FOUND		
131	S6# 30		HEXACHLOROPHENE	196				6	NOT FOUND		
132	S6# 35	C775	BENZO(A)PYRENE	252				6	NOT FOUND		
133	S6# 55	C780	INDENO(1,2,3-CD)PYR	276				6	NOT FOUND		
134	S6# 60	C785	DIBENZ(A,H)ANTHRACE	278				6	NOT FOUND		
135	S6# 65	C790	BENZO(G,H,I)PERYLEN	276				6	NOT FOUND		

BNA, S LIBRARIES ANALYST: _____ DATE: _____

QUANTERRA Internal Standard Check

Standard Filename: ST16980902 Analyzed: 09/02/98 14:53

Standard	IS# 1 Area	%	RT	IS# 2 Area	%	RT	IS# 3 Area	%	RT
ST16980902	23319.		3.78	79260.		5.91	43605.		9.22
Upper Limit	46638.	=+200	4.28	158519.	=+200	6.41	87211.	=+200	9.72
Lower Limit	11659.	=+ 50	3.28	39630.	=+ 50	5.41	21803.	=+ 50	8.72
Filename									
1 300681RI03	27571.	= 118	3.80	95690.	= 120	5.91	49039.	= 112	9.24

IS# 1 = CI30 1,4-DICHLOROBENZENE-D4
IS# 2 = CI40 NAPHTHALENE-D8
IS# 3 = CI50 ACENAPHTHENE-D10

* - indicates an I.S. is outside QC limit(s)

Standard	IS# 4 Area	%	RT	IS# 5 Area	%	RT	IS# 6 Area	%	RT
ST16980902	76218.		12.09	51424.		17.27	44306.		19.84
Upper Limit	152436.	=+200	12.59	102848.	=+200	17.77	88612.	=+200	20.34
Lower Limit	38109.	=+ 50	11.59	25712.	=+ 50	16.77	22153.	=+ 50	19.34
Filename									
1 300681RI03	81651.	= 107	12.11	77811.	= 151	17.30	72812.	= 164	19.87

IS# 4 = CI60 PHENANTHRENE-D10
IS# 5 = CI70 CHRYSENE-D12
IS# 6 = CI75 PERYLENE-D12

* - indicates an I.S. is outside QC limit(s)

Semivolatile Organics
Method 0010/8270

Client Name: Pacific Environmental Services
Client ID: T-MM5-FB-F,FH,XAD,COND,BH
LAB ID: 300681-0004-SA
Matrix: AIRTRAIN Sampled: 25 JUL 98 Received: 30 JUL 98
Authorized: 30 JUL 98 Prepared: 31 JUL 98 Analyzed: 31 AUG 98

Dilution Factor: 1.0

Parameter	Wet wt. Result	Units	Reporting Limit	Qualifier
Phenol	ND	ug/Sample	30	R
bis(2-Chloroethyl)ether	ND	ug/Sample	30	
2-Chlorophenol	ND	ug/Sample	30	
1,3-Dichlorobenzene	ND	ug/Sample	30	
1,4-Dichlorobenzene	ND	ug/Sample	30	
Benzyl alcohol	ND	ug/Sample	30	
1,2-Dichlorobenzene	ND	ug/Sample	30	
2-Methylphenol	ND	ug/Sample	30	
2,2'-Oxybis(1-chloropropane)	ND	ug/Sample	30	
3/4-Methylphenol	ND	ug/Sample	30	
N-Nitroso-di-n-propylamine	ND	ug/Sample	30	
Hexachloroethane	ND	ug/Sample	30	
Nitrobenzene	ND	ug/Sample	30	
Isophorone	ND	ug/Sample	30	
2-Nitrophenol	ND	ug/Sample	30	
2,4-Dimethylphenol	ND	ug/Sample	30	
Benzoic acid	ND	ug/Sample	150	
bis(2-Chloroethoxy)-methane	ND	ug/Sample	30	
2,4-Dichlorophenol	ND	ug/Sample	30	
1,2,4-Trichlorobenzene	ND	ug/Sample	30	
Naphthalene	ND	ug/Sample	30	
4-Chloroaniline	ND	ug/Sample	30	
Hexachlorobutadiene	ND	ug/Sample	30	
4-Chloro-3-methylphenol	ND	ug/Sample	30	
2-Methylnaphthalene	ND	ug/Sample	30	
Hexachlorocyclopentadiene	ND	ug/Sample	30	
2,4,6-Trichlorophenol	ND	ug/Sample	30	
2,4,5-Trichlorophenol	ND	ug/Sample	150	
2-Chloronaphthalene	ND	ug/Sample	30	
2-Nitroaniline	ND	ug/Sample	30	
Dimethyl phthalate	ND	ug/Sample	30	
Acenaphthylene	ND	ug/Sample	30	
3-Nitroaniline	ND	ug/Sample	150	
Acenaphthene	ND	ug/Sample	30	
2,4-Dinitrophenol	ND	ug/Sample	150	
4-Nitrophenol	ND	ug/Sample	150	
Dibenzofuran	ND	ug/Sample	30	

Note R = Reporting limit(s) raised due to sample volume limitations.
ND = Not Detected

Reported By: Emily Uebelhoer Approved By: Karin Yee

The cover letter is an integral part of this report.
Rev 230787

887

Semivolatile Organics
Method 0010/8270

(cont.)

Client Name: Pacific Environmental Services
Client ID: T-MM5-FB-F,FH,XAD,COND,BH
LAB ID: 300681-0004-SA
Matrix: AIRTRAIN Sampled: 25 JUL 98 Received: 30 JUL 98
Authorized: 30 JUL 98 Prepared: 31 JUL 98 Analyzed: 31 AUG 98

Dilution Factor: 1.0

Parameter	Wet wt. Result	Units	Reporting Limit	Qualifier
2,4-Dinitrotoluene	ND	ug/Sample	30	
2,6-Dinitrotoluene	ND	ug/Sample	30	
Diethyl phthalate	ND	ug/Sample	30	
4-Chlorophenyl phenyl ether	ND	ug/Sample	30	
Fluorene	ND	ug/Sample	30	
4-Nitroaniline	ND	ug/Sample	150	
4,6-Dinitro-2-methylphenol	ND	ug/Sample	150	
N-Nitrosodiphenylamine	ND	ug/Sample	30	
4-Bromophenyl phenyl ether	ND	ug/Sample	30	
Hexachlorobenzene	ND	ug/Sample	30	
Pentachlorophenol	ND	ug/Sample	150	
Phenanthrene	ND	ug/Sample	30	
Anthracene	ND	ug/Sample	30	
Di-n-butyl phthalate	ND	ug/Sample	30	
Fluoranthene	ND	ug/Sample	30	
Pyrene	ND	ug/Sample	30	
Butyl benzyl phthalate	ND	ug/Sample	30	
3,3'-Dichlorobenzidine	ND	ug/Sample	60	
Benzo(a)anthracene	ND	ug/Sample	30	
bis(2-Ethylhexyl)-phthalate	ND	ug/Sample	30	
Chrysene	ND	ug/Sample	30	
Di-n-octyl phthalate	ND	ug/Sample	30	
Benzo(b)fluoranthene	ND	ug/Sample	30	
Benzo(k)fluoranthene	ND	ug/Sample	30	
Benzo(a)pyrene	ND	ug/Sample	30	
Indeno(1,2,3-cd)pyrene	ND	ug/Sample	30	
Dibenz(a,h)anthracene	ND	ug/Sample	30	
Benzo(g,h,i)perylene	ND	ug/Sample	30	
Acetophenone	ND	ug/Sample	30	
4-Aminobiphenyl	ND	ug/Sample	150	
Aniline	ND	ug/Sample	30	
Benzidine	ND	ug/Sample	300	
3,3'-Dimethylbenzidine	ND	ug/Sample	60	
N-Nitrosodimethylamine	ND	ug/Sample	30	
N-Nitrosomorpholine	ND	ug/Sample	30	
Pentachloronitrobenzene (PCNB)	ND	ug/Sample	150	
o-Toluidine	ND	ug/Sample	60	

ND = Not Detected

Reported By: Emily Uebelhoer Approved By: Karin Yee

The cover letter is an integral part of this report.
Rev 230787

Semivolatile Organics
Method 0010/8270 (cont.)

Client Name: Pacific Environmental Services
Client ID: T-MM5-FB-F,FH,XAD,COND,BH
LAB ID: 300681-0004-SA
Matrix: AIRTRAIN Sampled: 25 JUL 98 Received: 30 JUL 98
Authorized: 30 JUL 98 Prepared: 31 JUL 98 Analyzed: 31 AUG 98

Dilution Factor: 1.0

Parameter	Wet wt. Result	Units	Reporting Limit	Qualifier
2-Methoxybenzenamine	ND	ug/Sample	--	K
Biphenyl	ND	ug/Sample	--	K
Chloroacetophenone	ND	ug/Sample	--	K
Cumene	ND	ug/Sample	--	K
DBCP (1,2-Dibromo-3-chloropropane)	ND	ug/Sample	--	K
Benzo(e)pyrene	ND	ug/Sample	--	K
N-N-Diethylaniline	ND	ug/Sample	--	K
Dimethylaniline	ND	ug/Sample	--	K
3,3'-Dimethoxybenzidine	ND	ug/Sample	--	K
Hydroquinone	ND	ug/Sample	--	K
4,4'-Methyl-bis(2-chloroaniline)	ND	ug/Sample	--	K
4-Nitrodiphenyl	ND	ug/Sample	--	K
Trifluralin	ND	ug/Sample	--	K

Surrogate	Recovery	Acceptable Range
Nitrobenzene-d5	60 %	45 - 107
2-Fluorobiphenyl	85 %	62 - 110
Terphenyl-d14	94 %	58 - 135
Phenol-d5	65 %	43 - 130
2-Fluorophenol	56 %	36 - 111
2,4,6-Tribromophenol	70 %	58 - 131

Note K = Identified by mass spectrum only; quantitation based on 1:1 response with internal standard.
ND = Not Detected

Reported By: Emily Uebelhoer Approved By: Karin Yee

The cover letter is an integral part of this report.
Rev 230787

Semivolatiles Library Search (20 Compound TID)
Method 8270

Client Name: Pacific Environmental Services
Client ID: T-MM5-FB-F,FH,XAD,COND,BH
LAB ID: 300681-0004-SA
Matrix: AIRTRAIN Sampled: 25 JUL 98 Received: 30 JUL 98
Authorized: 30 JUL 98 Prepared: NA Analyzed: 31 AUG 98

Dilution Factor: 1.0

Parameter	Result	Units	Reporting Limit	Qualifier
4-Hydroxy-4-methyl-2-pentanone	260	ug/Sample	--	0
n-Nonane	260	ug/Sample	--	0
Benzaldehyde	22	ug/Sample	--	0
Unknown	23	ug/Sample	--	
Hexadecanoic acid	29	ug/Sample	--	
Unknown	54	ug/Sample	--	
Unknown	48	ug/Sample	--	
Unknown	42	ug/Sample	--	0
Unknown	62	ug/Sample	--	
5-Eiconsene,(E) -	160	ug/Sample	--	0
Unknown	55	ug/Sample	--	
Unknown	40	ug/Sample	--	
Unknown	20	ug/Sample	--	
Unknown	58	ug/Sample	--	
Unknown	73	ug/Sample	--	
Unknown alkene	75	ug/Sample	--	
Unknown	74	ug/Sample	--	
Unknown alkene	46	ug/Sample	--	
Unknown	40	ug/Sample	--	
Unknown	29	ug/Sample	--	

Note 0 = Or structurally similar compound (isomer).
NA = Not Applicable

Reported By: Emily Uebelhoer Approved By: Karin Yee

The cover letter is an integral part of this report.
Rev 230787

QUANTERRA GC/MS
Target Compound Data Summary Sheet

Data File: 30068104
Std Id: ST16980831

Sample: T-MM5-FB 1/3SA/1ML INST. ID: F16
Client: PACIFI Date Analyzed: 08/31/98 20:30
Analyst: DAT Instrument ID: F16 Run Factor: 3.00
Quan List Threshold: 0.95 Surrogate Vol.: 1.00

Surrogate Spike Recoveries
8270-G, LIMS 10/10/96

Surrogate	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC limits
CS20 NITROBENZENE-D5	50.00	29.90	59.8	45 107
CS25 2-FLUOROBIPHENY	50.00	42.70	85.4	62 110
CS30 TERPHENYL-D14	50.00	47.00	94.0	58 135
CS45 PHENOL-D5	100.0	65.10	65.1	43 130
CS50 2-FLUOROPHENOL	100.0	55.70	55.7	36 111
CS55 2,4,6-TRIBROMOP	100.0	69.90	69.9	58 131

Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
HEXACHLOROBENZENE-C13		ND	UG/A	30.0
C310 N-NITROSODIMETHYLAMINE		ND	UG/A	30.0
PYRIDINE		ND	UG/A	60.0
2-PICOLINE		ND	UG/A	30.0
N-NITROSOMETHYLETHYLAMINE		ND	UG/A	30.0
METHYLMETHANESULFONATE		ND	UG/A	30.0
N-NITROSODIETHYLAMINE		ND	UG/A	30.0
ETHYLMETHANE SULFONATE		ND	UG/A	30.0
PENTACHLOROETHANE		ND	UG/A	30.0
C320 ANILINE		ND	UG/A	30.0
C315 PHENOL		ND	UG/A	30.0
C325 BIS(2-CHLOROETHYL)ETHER		ND	UG/A	30.0
C330 2-CHLOROPHENOL		ND	UG/A	30.0
C335 1,3-DICHLOROBENZENE		ND	UG/A	30.0
C340 1,4-DICHLOROBENZENE		ND	UG/A	30.0
C345 BENZYL ALCOHOL		ND	UG/A	30.0
C350 1,2-DICHLOROBENZENE		ND	UG/A	30.0
C355 2-METHYLPHENOL		ND	UG/A	30.0
C360 2,2'-OXYBIS(1-CLPROPAN)		ND	UG/A	30.0
C361 ACETOPHENONE		ND	UG/A	30.0
N-NITROSOPYRROLIDINE		ND	UG/A	30.0
N-NITROSOMORPHOLINE		ND	UG/A	30.0
3-METHYL PHENOL		ND	UG/A	30.0
C365 4-METHYLPHENOL		ND	UG/A	30.0
C370 N-NITROSO-DI-N-PROPYLAM		ND	UG/A	30.0
O-TOLUIDINE		ND	UG/A	30.0
C375 HEXACHLOROETHANE		ND	UG/A	30.0
C410 NITROBENZENE		ND	UG/A	30.0
N-NITROSOPIPERIDINE		ND	UG/A	30.0

Reviewed by: 9/17/98

QUANTERRA GC/MS
Target Compound Data Summary Sheet

Data File: 30068104
Std Id: ST16980831

Sample: T-MM5-FB 1/3SA/1ML INST. ID: F16
Client: PACIFI Date Analyzed: 08/31/98 20:30
Analyst: DAT Instrument ID: F16 Run Factor: 3.00
Quan List Threshold: 0.95 Surrogate Vol.: 1.00

Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
C415 ISOPHORONE		ND	UG/A	30.0
C420 2-NITROPHENOL		ND	UG/A	30.0
C425 2,4-DIMETHYLPHENOL		ND	UG/A	30.0
C435 BIS(2-CHLOROETHOXY)METH		ND	UG/A	30.0
C440 2,4-DICHLOROPHENOL		ND	UG/A	30.0
C430 BENZOIC ACID		ND	UG/A	150.0
AA-DIMETHYLPHENETHYLAMINE		ND	UG/A	30.0
C445 1,2,4-TRICHLOROBENZENE		ND	UG/A	30.0
C450 NAPHTHALENE		ND	UG/A	30.0
C455 4-CHLOROANALINE		ND	UG/A	30.0
2,6-DICHLOROPHENOL		ND	UG/A	30.0
HEXACHLOROPROPENE		ND	UG/A	30.0
C460 HEXACHLOROBUTADIENE		ND	UG/A	30.0
P-PHENYLENE DIAMINE		ND	UG/A	30.0
N-NITROSODI-N-BUTYLAMINE		ND	UG/A	30.0
C465 4-CHLORO-3-METHYLPHENO		ND	UG/A	30.0
SAFROLE		ND	UG/A	30.0
C470 2-METHYLNAPHTHALENE		ND	UG/A	30.0
1,2,4,5-TETRACHLOROBENZENE		ND	UG/A	30.0
ISOSAFROLE (#1)		ND	UG/A	60.0
C510 HEXACHLOROCYCLOPENTADI		ND	UG/A	30.0
C515 2,4,6-TRICHLOROPHENOL		ND	UG/A	30.0
C520 2,4,5-TRICHLOROPHENOL		ND	UG/A	30.0
ISOSAFROLE (#2)		ND	UG/A	60.0
C525 2-CHLORONAPHTHALENE		ND	UG/A	30.0
1-CHLORONAPHTHALENE		ND	UG/A	15.0
C530 2-NITROANALINE		ND	UG/A	150.0
1,4-NAPHTHOQUINONE		ND	UG/A	30.0
C535 DIMETHYLPHTHALATE		ND	UG/A	30.0
1,3-DINITROBENZENE		ND	UG/A	30.0
C540 ACENAPHTHYLENE		ND	UG/A	30.0
C543 2,6-DINITROTOLUENE		ND	UG/A	30.0
C545 3-NITROANILINE		ND	UG/A	150.0
C550 ACENAPHTHENE		ND	UG/A	30.0
C555 2,4-DINITROPHENOL		ND	UG/A	150.0
C565 DIBENZOFURAN		ND	UG/A	30.0
C560 4-NITROPHENOL		ND	UG/A	150.0
PENTACHLOROBENZENE		ND	UG/A	30.0
C570 2,4-DINITROTOLUENE		ND	UG/A	30.0
1-NAPHTHYLAMINE		ND	UG/A	30.0
2-NAPHTHYLAMINE		ND	UG/A	30.0
2,3,4,6-TETRACHLOROPHENOL		ND	UG/A	60.0
C580 DIETHYLPHTHALATE		ND	UG/A	30.0
C590 FLUORENE		ND	UG/A	30.0

QUANTERRA GC/MS

Target Compound Data Summary Sheet

Data File: 30068104
Std Id: ST16980831

Sample: T-MM5-FB 1/3SA/1ML INST. ID: F16
Client: PACIFI Date Analyzed: 08/31/98 20:30
Analyst: DAT Instrument ID: F16 Run Factor: 3.00
Quan List Threshold: 0.95 Surrogate Vol.: 1.00

Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
C585 4-CHLOROPHENYL-PHENYLE		ND	UG/A	30.0
5-NITRO-O-TOLUIDINE		ND	UG/A	30.0
C595 4-NITROANALINE		ND	UG/A	150.0
C610 4,6-DINITRO-2-METHYLPH		ND	UG/A	150.0
C615 N-NITROSODIPHENYLAMINE		ND	UG/A	30.0
C620 AZOBENZENE		ND	UG/A	30.0
SYM-TRINITROBENZENE		ND	UG/A	30.0
C625 4-BROMOPHENYL-PHENYLET		ND	UG/A	30.0
PHENACETIN		ND	UG/A	30.0
DIALLATE	234	ND	UG/A	30.0
C630 HEXACHLOROBENZENE		ND	UG/A	30.0
4-AMINOBIPHENYL		ND	UG/A	30.0
C635 PENTACHLOROPHENOL		ND	UG/A	150.0
PRONAMIDE		ND	UG/A	30.0
PENTACHLORONITROBENZENE		ND	UG/A	150.0
C640 PHENANTHRENE		ND	UG/A	30.0
C645 ANTHRACENE		ND	UG/A	30.0
2SECBUTYL-4,6-DINITROPHENOL		ND	UG/A	30.0
C647 CARBAZOLE		ND	UG/A	30.0
C650 DI-N-BUTYLPHTHALATE		ND	UG/A	30.0
4-NITROQUINOLINE-1-OXIDE		ND	UG/A	30.0
METHAPYRILENE		ND	UG/A	30.0
ISODRIN		ND	UG/A	30.0
C655 FLUORANTHENE		ND	UG/A	30.0
CHLOROBENZILATE		ND	UG/A	30.0
C710 BENZIDINE		ND	UG/A	300.0
C715 PYRENE		ND	UG/A	30.0
ARAMITE (#1)		ND	UG/A	30.0
ARAMITE (#2)		ND	UG/A	30.0
P-DIMETHYLAMINOAZOBENZENE		ND	UG/A	30.0
3,3'-DIMETHYLBENZIDINE		ND	UG/A	30.0
KEPONE		ND	UG/A	150.0
C720 BUTYLBENZYLPHTHALATE		ND	UG/A	30.0
2-ACETYLAMINOFLUORENE		ND	UG/A	30.0
C730 BENZO(A)ANTHRACENE		ND	UG/A	30.0
C725 3,3'-DICHLOROBENZIDINE		ND	UG/A	60.0
C740 CHRYSENE		ND	UG/A	30.0
C745 BIS(2-ETHYLHEXYL)PHTHA		ND	UG/A	30.0
3-METHYLCHOLANTHRENE		ND	UG/A	30.0
C760 DI-N-OCTYL PHTHALATE		ND	UG/A	30.0
C765 BENZO(B)FLUORANTHENE		ND	UG/A	30.0
7,12-DIMETHYLBENZANTHRACENE		ND	UG/A	30.0
C770 BENZO(K)FLUORANTHENE		ND	UG/A	30.0
HEXACHLOROPHENE		ND	UG/A	30.0

QUANTERRA GC/MS

Target Compound Data Summary Sheet

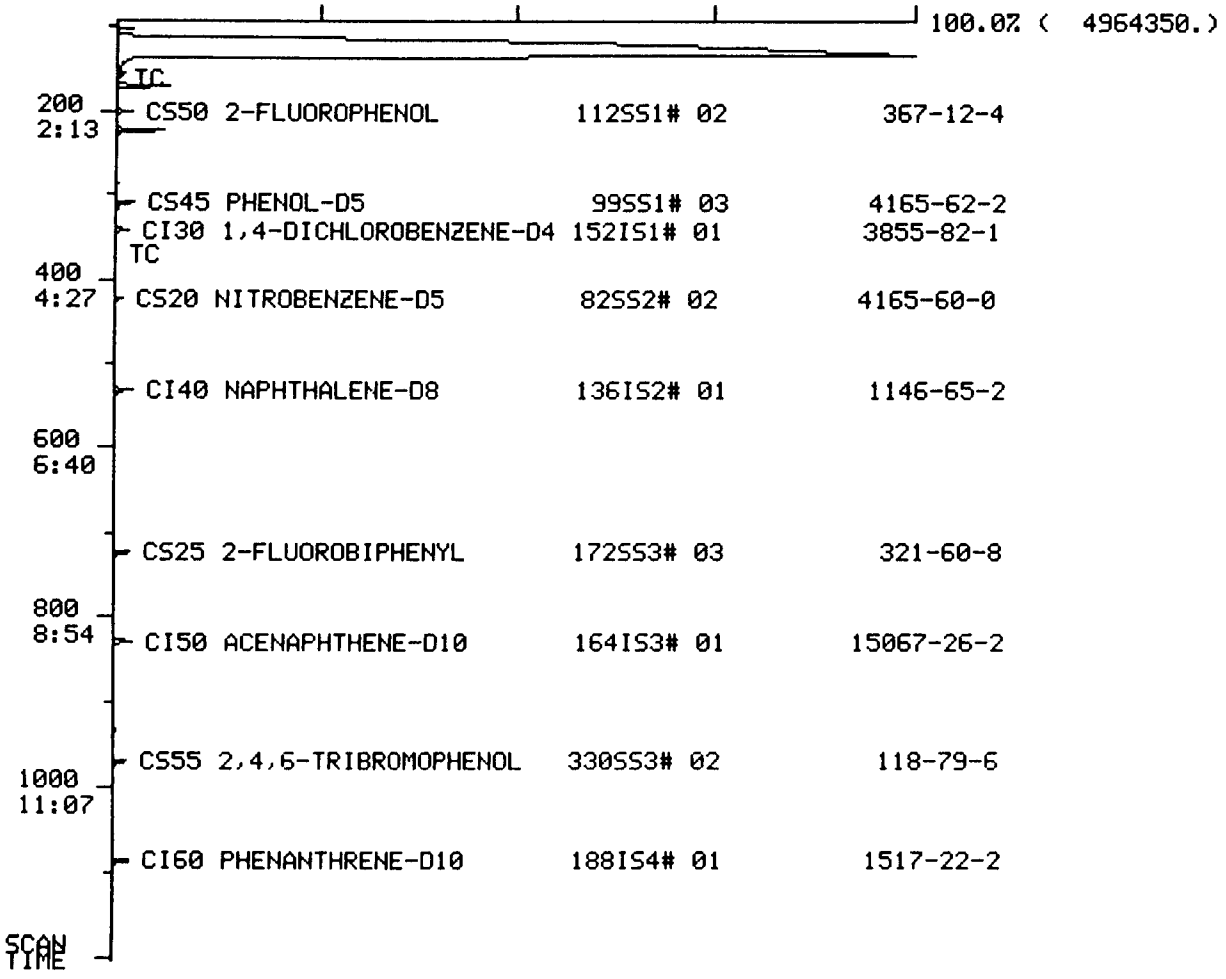
Data File: 30068104
Std Id: ST16980831

Sample: T-MM5-FB 1/3SA/1ML INST. ID: F16
Client: PACIFI Date Analyzed: 08/31/98 20:30
Analyst: DAT Instrument ID: F16 Run Factor: 3.00
Quan List Threshold: 0.95 Surrogate Vol.: 1.00

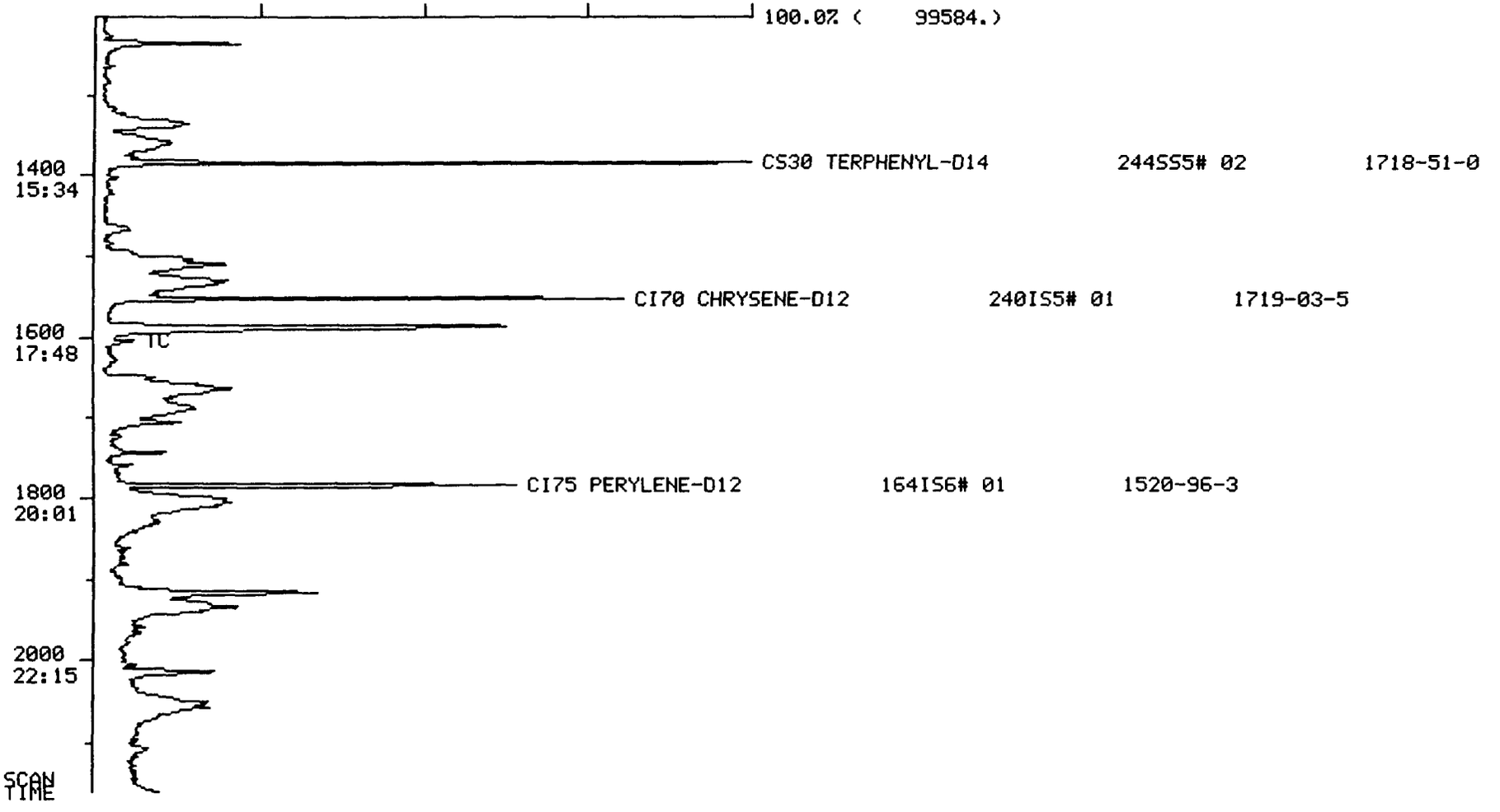
Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
C775 BENZO(A)PYRENE		ND	UG/A	30.0
C780 INDENO(1,2,3-CD)PYRENE		ND	UG/A	30.0
C785 DIBENZ(A,H)ANTHRACENE		ND	UG/A	30.0
C790 BENZO(G,H,I)PERYLENE		ND	UG/A	30.0

DATA FROM FILE: 30068104 SCANS 93 TO 1203 ACQUIRED: 08/31/98 20:30:00
CALI: 30068104 #3
SAMPLE: T-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M



DATA FROM FILE: 30068104 SCANS 1203 TO 2158 ACQUIRED: 08/31/98 20:30:00
CALI: 30068104 #3
SAMPLE: T-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M



STANDARD USED FOR THIS REPORT IS ST16980831 REPORT PRINTED: 9/01/98 16:35:13

ADDITIONAL STANDARD USED FOR THIS REPORT IS: ST16980831A

QUANTERRA QUANTITATION SUMMARY File: 30068104

Sample: T-MM5-FB 1/3SA/1ML INST. ID: F16
Analyst: DAT Instrument Id: F16 Analyzed: 08/31/98 20:30

Compounds with amounts less than 0.20 reported as NOT FOUND

No	Library Entry	Name	Mass	Meth	Scan	Ref	Area	RRF(L)	Amount (Units: UG/ML)
1	S1# 1	C130 1,4-DICHLOROBENZENE	152	A BB	341	1	33946.	1.000	40.000
2	S2# 1	C140 NAPHTHALENE-D8	136	A BB	529	2	129608.	1.000	40.000
3	S3# 1	C150 ACENAPHTHENE-D10	164	A BB	828	3	68092.	1.000	40.000
4	S4# 1	C160 PHENANTHRENE-D10	188	A BB	1085	4	115982.	1.000	40.000
5	S5# 1	C170 CHRYSENE-D12	240	A BB	1551	5	71692.	1.000	40.000
6	S6# 1	C175 PERYLENE-D12	264	A BB	1782	6	58915.	1.000	40.000
7	S2# 2	CS20 NITROBENZENE-D5	82	A BB	421	2	45553.	0.470	29.940
8	S3# 3	CS25 2-FLUOROBIPHENYL	172	A BB	722	3	89717.	1.234	42.699
9	S5# 2	CS30 TERPHENYL-D14	244	A BB	1383	5	83889.	0.995	47.030
10	S1# 3	CS45 PHENOL-D5	99	A BB	308	1	111982.	2.025	65.145
11	S1# 2	CS50 2-FLUOROPHENOL	112	A BB	199	1	64661.	1.368	55.686
12	S3# 2	CS55 2,4,6-TRIBROMOPHENO	330	A BB	968	3	28049.	0.236	69.918
13	S4# 4	HEXACHLOROBENZENE-C13	294		4	NOT FOUND			
14	S1# 15	C310 N-NITROSODIMETHYLAM	74		1	NOT FOUND			
15	S1# 20	PYRIDINE	79		1	NOT FOUND			
16	S1# 30	2-PICOLINE	93		1	NOT FOUND			
17	S1# 40	N-NITROSOMETHYLETHYLAMIN	42	A VB	159	1	3558.	0.811	5.169
18	S1# 60	METHYLMETHANESULFONATE	80		1	NOT FOUND			
19	S1# 70	N-NITROSODIETHYLAMINE	102		1	NOT FOUND			
20	S1# 85	ETHYLMETHANE SULFONATE	79		1	NOT FOUND			
21	S1# 95	PENTACHLOROETHANE	117		1	NOT FOUND			
22	S1#100	C320 ANILINE	93		1	NOT FOUND			
23	S1#105	C315 PHENOL	94	A BB	309	1	388.	1.968	0.232
24	S1#110	C325 BIS(2-CHLOROETHYL)E	93		1	NOT FOUND			
25	S1#115	C330 2-CHLOROPHENOL	128		1	NOT FOUND			
26	S1#125	C335 1,3-DICHLOROBENZENE	146		1	NOT FOUND			
27	S1#130	C340 1,4-DICHLOROBENZENE	146		1	NOT FOUND			
28	S1#145	C345 BENZYL ALCOHOL	108	A BB	369	1	2780.	0.854	3.834
29	S1#150	C350 1,2-DICHLOROBENZENE	146		1	NOT FOUND			
30	S1#160	C355 2-METHYLPHENOL	108		1	NOT FOUND			
31	S1#165	C360 2,2'-OXYBIS(1-CLPRO	45		1	NOT FOUND			
32	S1#170	C361 ACETOPHENONE	105	A BB	404	1	412.	1.934	0.251
33	S1#175	N-NITROSOPYRROLIDINE	100		1	NOT FOUND			
34	S1#180	N-NITROSOMORPHOLINE	56	A BB	413	1	224.	0.821	0.322
35	S1#182	3-METHYL PHENOL	108	A BB	422	1	402.	2.252	0.210
36	S1#185	C365 4-METHYLPHENOL	108		1	NOT FOUND			
37	S1#190	C370 N-NITROSO-DI-N-PROP	70		1	NOT FOUND			
38	S1#195	O-TOLUIDINE	106		1	NOT FOUND			
39	S1#200	C375 HEXACHLOROETHANE	117		1	NOT FOUND			
40	S2# 10	C410 NITROBENZENE	77		2	NOT FOUND			
41	S2# 15	N-NITROSOPIPERIDINE	42		2	NOT FOUND			
42	S2# 20	C415 ISOPHORONE	82		2	NOT FOUND			
43	S2# 25	C420 2-NITROPHENOL	139		2	NOT FOUND			
44	S2# 30	C425 2,4-DIMETHYLPHENOL	107		2	NOT FOUND			
45	S2# 35	C435 BIS(2-CHLOROETHOXY)	93		2	NOT FOUND			

46	S2#	40	C440	2,4-DICHLOROPHENOL	162	2 NOT FOUND
47	S2#	45	C430	BENZOIC ACID	122	2 NOT FOUND
48	S2#	50		AA-DIMETHYLPHENETHYLAMIN	58	2 NOT FOUND
49	S2#	55	C445	1,2,4-TRICHLOROBENZ	180	2 NOT FOUND

50	S2# 60	C450 NAPHTHALENE	128		2	NOT FOUND					
51	S2# 80	C455 4-CHLOROANALINE	127		2	NOT FOUND					
52	S2# 85	2,6-DICHLOROPHENOL	162		2	NOT FOUND					
53	S2# 90	HEXACHLOROPROPENE	213		2	NOT FOUND					
54	S2# 95	C460 HEXACHLOROBUTADIENE	225		2	NOT FOUND					
55	S2#115	P-PHENYLENE DIAMINE	108		2	NOT FOUND					
56	S2#120	N-NITROSODI-N-BUTYLAMINE	84		2	NOT FOUND					
57	S2#130	C465 4-CHLORO-3-METHYLPH	107		2	NOT FOUND					
58	S2#140	SAFROLE	162		2	NOT FOUND					
59	S2#145	C470 2-METHYLNAPHTHALENE	142		2	NOT FOUND					
60	S3# 10	1,2,4,5-TETRACHLOROBENZE	214		3	NOT FOUND					
61	S3# 15	ISOSAFROLE (#1)	162		3	NOT FOUND					
62	S3# 20	C510 HEXACHLOROCYCLOPENT	237		3	NOT FOUND					
63	S3# 25	C515 2,4,6-TRICHLOROPHEN	196		3	NOT FOUND					
64	S3# 30	C520 2,4,5-TRICHLOROPHEN	196		3	NOT FOUND					
65	S3# 35	ISOSAFROLE (#2)	104		3	NOT FOUND					
66	S3# 40	C525 2-CHLORONAPHTHALENE	162		3	NOT FOUND					
67	S3# 42	1-CHLORONAPHTHALEN	162		3	NOT FOUND					
68	S3# 45	C530 2-NITROANALINE	65		3	NOT FOUND					
69	S3# 50	1,4-NAPHTHOQUINONE	158		3	NOT FOUND					
70	S3# 55	C535 DIMETHYLPHTHALATE	163		3	NOT FOUND					
71	S3# 60	1,3-DINITROBENZENE	168		3	NOT FOUND					
72	S3# 65	C540 ACENAPHTHYLENE	152		3	NOT FOUND					
73	S3# 70	C543 2,6-DINITROTOLUENE	165		3	NOT FOUND					
74	S3# 75	C545 3-NITROANILINE	138		3	NOT FOUND					
75	S3# 80	C550 ACENAPHTHENE	153		3	NOT FOUND					
76	S3# 85	C555 2,4-DINITROPHENOL	184		3	NOT FOUND					
77	S3# 90	C565 DIBENZOFURAN	168		3	NOT FOUND					
78	S3# 95	C560 4-NITROPHENOL	109		3	NOT FOUND					
79	S3#100	PENTACHLOROBENZENE	250		3	NOT FOUND					
80	S3#105	C570 2,4-DINITROTOLUENE	165		3	NOT FOUND					
81	S3#110	1-NAPHTHYLAMINE	143		3	NOT FOUND					
82	S3#115	2-NAPHTHYLAMINE	143		3	NOT FOUND					
83	S3#120	2,3,4,6-TETRACHLOROPHENO	232		3	NOT FOUND					
84	S3#130	C580 DIETHYLPHTHALATE	149		3	NOT FOUND					
85	S3#135	C590 FLUORENE	166		3	NOT FOUND					
86	S3#140	C585 4-CHLOROPHENYL-PHEN	204		3	NOT FOUND					
87	S3#145	5-NITRO-O-TOLUIDINE	152		3	NOT FOUND					
88	S3#150	C595 4-NITROANALINE	138		3	NOT FOUND					
89	S4# 10	C610 4,6-DINITRO-2-METHY	198		4	NOT FOUND					
90	S4# 15	C615 N-NITROSODIPHENYLAM	169		4	NOT FOUND					
91	S4# 20	C620 AZOBENZENE	77		4	NOT FOUND					
92	S4# 25	SYM-TRINITROBENZENE	75		4	NOT FOUND					
93	S4# 30	C625 4-BROMOPHENYL-PHENY	248		4	NOT FOUND					
94	S4# 35	PHENACETIN	108		4	NOT FOUND					
95	S4# 37	DIALLATE	234		4	NOT FOUND					
96	S4# 40	C630 HEXACHLOROBENZENE	284		4	NOT FOUND					
97	S4# 45	4-AMINOBIPHENYL	169		4	NOT FOUND					
98	S4# 50	C635 PENTACHLOROPHENOL	266		4	NOT FOUND					
99	S4# 55	PRONAMIDE	173		4	NOT FOUND					
100	S4# 60	PENTACHLORONITROBENZENE	237		4	NOT FOUND					
101	S4# 65	C640 PHENANTHRENE	178		4	NOT FOUND					
102	S4# 70	C645 ANTHRACENE	178		4	NOT FOUND					
103	S4# 75	2SECBUTYL-4,6-DINITROPHE	211		4	NOT FOUND					
104	S4# 80	C647 CARBAZOLE	167		4	NOT FOUND					
105	S4# 85	C650 DI-N-BUTYLPHTHALATE	149	A BB	1226	4	2068.	1.247	0.572		
106	S4#100	4-NITROQUINOLINE-1-OXIDE	190		4	NOT FOUND					
107	S4#105	METHAPYRILENE	58		4	NOT FOUND					
108	S4#106	ISODRIN	193		4	NOT FOUND					
109	S4#110	C655 FLUORANTHENE	202		4	NOT FOUND					
110	S4#120	CHLOROBENZILATE	139		4	NOT FOUND					

111	S5#	10	C710	BENZIDINE	184		5	NOT FOUND					
112	S5#	15	C715	PYRENE	202		5	NOT FOUND					
113	S5#	20	ARAMITE (#1)		185		5	NOT FOUND					
114	S5#	25	ARAMITE (#2)		185		5	NOT FOUND					
115	S5#	30	P-DIMETHYLAMINOAZOBENZEN		120		5	NOT FOUND					
116	S5#	35	3,3'-DIMETHYLBENZIDINE		212		5	NOT FOUND					
117	S5#	37	KEPONE		272		5	NOT FOUND					
118	S5#	40	C720	BUTYLBENZYLPHTHALAT	149	A	BB	1487	5	344.	0.685	0.280	
119	S5#	45	2-ACETYLAMINOFLUORENE		181		5	NOT FOUND					
120	S5#	50	C730	BENZO(A)ANTHRACENE	228		5	NOT FOUND					
121	S5#	55	C725	3,3'-DICHLOROBENZID	252		5	NOT FOUND					
122	S5#	60	C740	CHRYSENE	228		5	NOT FOUND					
123	S5#	65	C745	BIS(2-ETHYLHEXYL)PH	149	A	BB	1603	5	3064.	0.980	1.745	
124	S5#	85	3-METHYLCHOLANTHRENE		268		5	NOT FOUND					
125	S6#	10	C760	DI-N-OCTYL PHTHALAT	149		6	NOT FOUND					
126	S6#	15	C765	BENZO(B)FLUORANTHEN	252		6	NOT FOUND					
127	S6#	20	7,12-DIMETHYLBENZANTHRAC		256		6	NOT FOUND					
128	S6#	25	C770	BENZO(K)FLUORANTHEN	252		6	NOT FOUND					
129	S6#	30	HEXACHLOROPHENE		196		6	NOT FOUND					
130	S6#	35	C775	BENZO(A)PYRENE	252		6	NOT FOUND					
131	S6#	55	C780	INDENO(1,2,3-CD)PYR	276		6	NOT FOUND					
132	S6#	60	C785	DIBENZ(A,H)ANTHRACE	278		6	NOT FOUND					
133	S6#	65	C790	BENZO(G,H,I)PERYLEN	276		6	NOT FOUND					

BNA, S LIBRARIES ANALYST: ____ DATE: _____

QUANTERRA Internal Standard Check

Standard Filename: ST16980831 Analyzed: 08/31/98 12:31

Standard	IS# 1 Area	%	RT	IS# 2 Area	%	RT	IS# 3 Area	%	RT
ST16980831	28649.		3.78	100432.		5.90	54347.		9.21
Upper Limit	57297.=+200		4.28	200864.=+200		6.40	108695.=+200		9.71
Lower Limit	14324.=+ 50		3.28	50216.=+ 50		5.40	27174.=+ 50		8.71
Filename									
1 30068104	33946.= 118		3.79	129608.= 129		5.88	68092.= 125		9.21

IS# 1 = CI30 1,4-DICHLOROBENZENE-D4
IS# 2 = CI40 NAPHTHALENE-D8
IS# 3 = CI50 ACENAPHTHENE-D10

* - indicates an I.S. is outside QC limit(s)

Standard	IS# 4 Area	%	RT	IS# 5 Area	%	RT	IS# 6 Area	%	RT
ST16980831	98520.		12.08	62289.		17.26	50750.		19.83
Upper Limit	197039.=+200		12.58	124578.=+200		17.76	101500.=+200		20.33
Lower Limit	49260.=+ 50		11.58	31145.=+ 50		16.76	25375.=+ 50		19.33
Filename									
1 30068104	115982.= 117		12.07	71692.= 115		17.25	58915.= 116		19.82

IS# 4 = CI60 PHENANTHRENE-D10
IS# 5 = CI70 CHRYSENE-D12
IS# 6 = CI75 PERYLENE-D12

* - indicates an I.S. is outside QC limit(s)

Data Reduced by: [signature] Date: 9/17/98
Data Reviewed by: [signature] Date: 9/17/98

Data File: 30068104

QUANTERRA GC/MS TIC REPORT (Part 1)

Sample: T-MM5-FB 1/3SA/1ML INST. ID: F16
Analyst: DAT Date Analyzed: 08/31/98 20:30
Run Factor: 3.00

#	SCAN	Concentration in Sample (UG/A)	CAS #	
1	170	260.	123-42-2	2-PENTANONE, 4-HYDROXY-4-METHYL- or isomer
2	222	260.	111-84-2	NONANE or isomer
3	286	22.	100-52-7	BENZALDEHYDE or isomer
4	932	23.	~~74381-40-1~~	~~PROPANOIC ACID, 2-METHYL-, 1-(1,1-DIMETHYLETHYL)-2-METHYL-1,3-PROPANE~~ Unknown 5700
5	1235	29.	57-10-3	HEXADECANOIC ACID or isomer
6	1333	54.	00-00-0	UNKNOWN 5700
7	1357	48.	00-00-0	UNKNOWN
8	1466	12.	62108-23-0	DECANE, 2,5,6-TRIMETHYL- or isomer
9	1502	21.	00-00-0	UNKNOWN 5700
10	1509	42.	00-00-0	UNKNOWN

11 1528 62. 00-00-0 5700
UNKNOWN

12 1586 160. 74685-30-6
5-EICOSENE, (E)- or Borneo

13 1661 55. 00-00-0 5700
UNKNOWN

14 1686 40. 00-00-0
UNKNOWN

~~15~~ 1704 21. - -
~~2-HEXYL-1-OCTANOL~~ Unknown 5700

16 1741 20. 00-00-0
UNKNOWN

17 1799 58. 00-00-0
UNKNOWN

18 1804 73. 00-00-0
UNKNOWN

19 1914 75. ~~1653-33-4~~ 5720000
~~4-TETRADECANOL~~ Unkn alkene

20 1932 74. 00-00-0 5700
UNKNOWN

21 2012 46. ~~74685-29-3~~ 5720000
~~9-EICOSENE, (E)-~~ Unkn alkene

22 2049 40. 00-00-0 5700
UNKNOWN

23 2056	29.	00-00-0

UNKNOWN

DATA FILE: 30068104

QUANTERRA GC/MS TIC REPORT (Part 2)

CONCENTRATION = AREA(TIC)*CONC(IS)/AREA(IS)

#	FIT	PURITY	INT. STD.	RT	RRT	AREA	HEIGHT	AMOUNT AS ANALYZED (UG/ML)	LIB	LIB #
1	954	918	1	1:53	0.321	708264.	317440.	87.787	NB	3241.
2	987	933	1	2:28	0.420	697660.	287744.	86.472	NB	5159.
3	967	920	1	3:10	0.541	60288.	15312.	7.472	NB	2017.
4	930	779	2	10:21	1.126	60114.	20417.	7.544	NB	40501.
5	957	752	3	13:44	1.137	77738.	20052.	9.738	NB	35182.
6	764	558	4	14:49	0.859	101780.	10208.	17.848	UK	1.
7	816	655	4	15:05	0.875	92128.	6768.	16.156	UK	1.
8	905	707	4	16:18	0.945	23692.	3066.	4.155	NB	19015.
9	711	295	4	16:42	0.968	40720.	7264.	7.141	UK	1.
10	842	583	4	16:47	0.973	79168.	11824.	13.883	UK	1.
11	873	536	4	16:59	0.985	116992.	10160.	20.516	UK	1.
12	983	808	4	17:38	1.023	313592.	57920.	54.992	NB	39516.
13	788	502	4	18:28	1.071	104880.	10496.	18.392	UK	1.
14	621	481	5	18:45	0.946	65416.	5616.	13.475	UK	1.
15	960	726	5	18:57	0.956	34164.	7268.	7.037	NB	26409.
16	866	568	5	19:21	0.977	33084.	8195.	6.815	UK	1.
17	678	326	5	20:00	1.010	93760.	12192.	19.313	UK	1.
18	865	474	5	20:03	1.012	118128.	12992.	24.333	UK	1.
19	982	754	5	21:17	1.074	121984.	25021.	25.127	NB	26416.
20	910	435	5	21:29	1.084	119248.	11408.	24.563	UK	1.
21	945	692	5	22:22	1.129	73644.	13181.	15.170	NB	39515.
22	814	463	5	22:47	1.150	64720.	8112.	13.331	UK	1.
23	717	429	5	22:52	1.154	46608.	7984.	9.601	UK	1.

Library Search Data: 30068104 # 170 Base m/z: 43
08/31/98 20:30:00 + 1:53 Cali: 30068104 # 3 RIC: 236032.
Sample: T-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
495 matched at least 6 of the 16 largest peaks in the unknown

Rank	In.	Name
1	3241	2-PENTANONE, 4-HYDROXY-4-METHYL-
2	5791	1,3-DIOXOLANE-2-METHANOL, 2,4-DIMETHYL-
3	3366	2-PENTANOL, 2,4-DIMETHYL-
4	3288	ACETIC ACID, 1,1-DIMETHYLETHYL ESTER
5	919	TERT-BUTYL HYDROPEROXIDE
6	5594	2-PROPANOL, 2-NITROSO-, ACETATE (ESTER)
7	3349	2-HEXANOL, 2-METHYL-
8	11889	2-HEXANONE, 6-(ACETYLOXY)-
9	1576	OXIRANE, TETRAMETHYL-

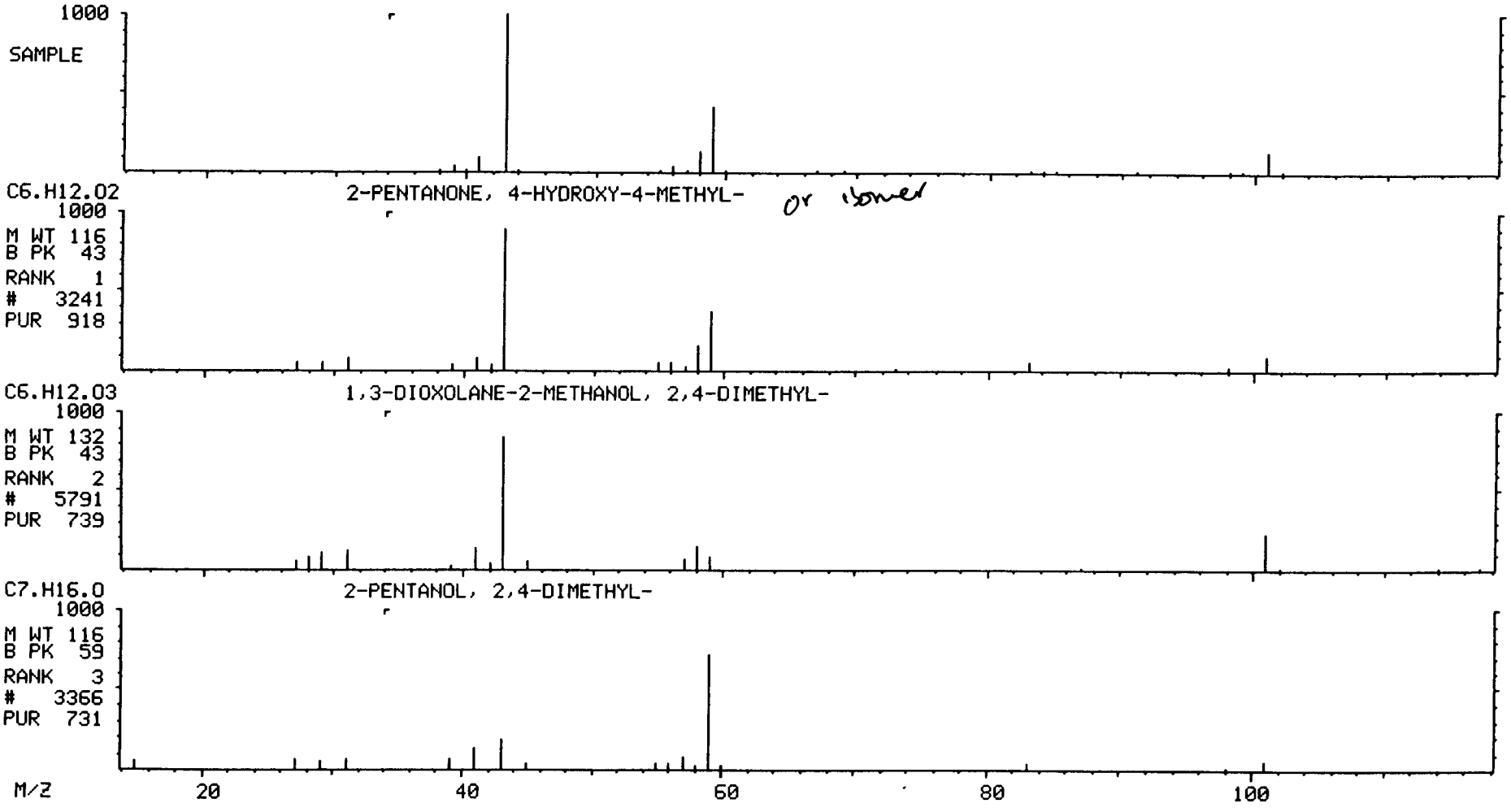
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C6.H12.O2	116	43	918	954	941
2	C6.H12.O3	132	43	739	813	805
3	C7.H16.O	116	59	731	753	749
4	C6.H12.O2	116	43	731	778	745
5	C4.H10.O2	90	59	723	870	742
6	C5.H9.O3.N	131	43	705	817	793
7	C7.H16.O	116	59	686	719	722
8	C8.H14.O3	158	43	651	681	711
9	C6.H12.O	100	59	635	781	676

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	123-42-2
2	---	---	---	---	53951-43-2
3	---	---	---	---	625-06-9
4	---	---	---	---	540-88-5
5	---	---	---	---	75-91-2
6	---	---	---	---	6931-04-0
7	---	---	---	---	625-23-0
8	---	---	---	---	4305-26-4
9	---	---	---	---	5076-20-0

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:30:00 + 1:53
SAMPLE: T-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068104 # 170
CALI: 30068104 # 3

BASE M/Z: 43
RIC: 236032.



Library Search Data: 30068104 # 222 Base m/z: 43
08/31/98 20:30:00 + 2:28 Cali: 30068104 # 3 RIC: 214784.
Sample: T-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
921 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	5159	NONANE
2	5151	HEPTANE, 3,4-DIMETHYL-
3	5141	HEPTANE, 2,4-DIMETHYL-
4	3086	HEXANE, 2,4-DIMETHYL-
5	19015	DECANE, 2,5,6-TRIMETHYL-
6	11607	UNDECANE
7	5154	HEXANE, 4-ETHYL-2-METHYL-
8	8085	HEPTANE, 2,4,6-TRIMETHYL-
9	5144	HEPTANE, 4-ETHYL-

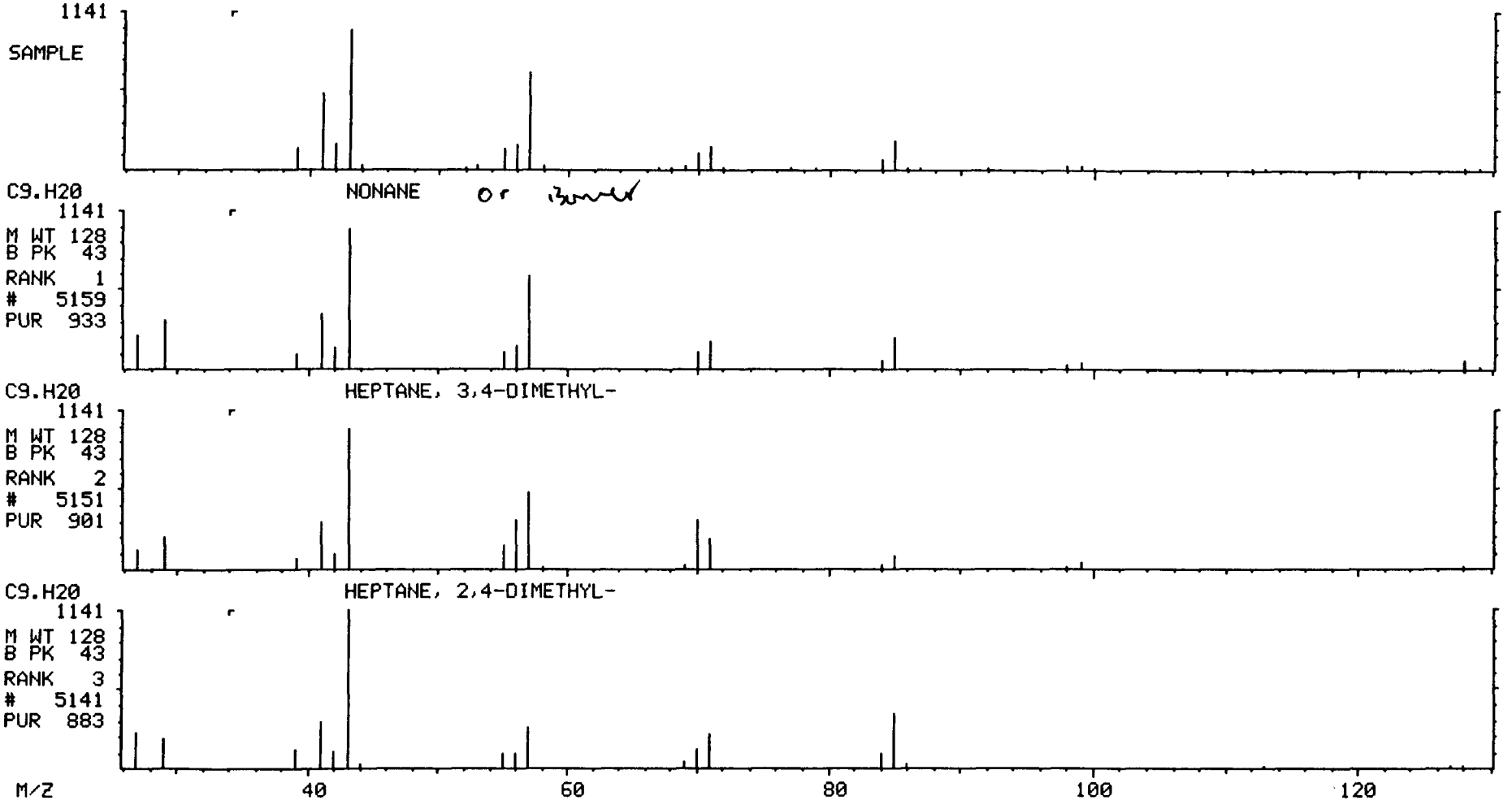
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C9.H20	128	43	933	987	933
2	C9.H20	128	43	901	933	901
3	C9.H20	128	43	883	941	884
4	C8.H18	114	43	880	960	891
5	C13.H28	184	57	873	918	883
6	C11.H24	156	43	866	931	902
7	C9.H20	128	57	860	920	860
8	C10.H22	142	43	857	904	872
9	C9.H20	128	43	857	910	865

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	111-84-2
2	---	---	---	---	922-28-1
3	---	---	---	---	2213-23-2
4	---	---	---	---	589-43-5
5	---	---	---	---	62108-23-0
6	---	---	---	---	1120-21-4
7	---	---	---	---	3074-75-7
8	---	---	---	---	2613-61-8
9	---	---	---	---	2216-32-2

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:30:00 + 2:28
SAMPLE: T-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068104 # 222
CALI: 30068104 # 3

BASE M/Z: 43
RIC: 214784.



Library Search Data: 30068104 # 286 Base m/z: 77
08/31/98 20:30:00 + 3:11 Cali: 30068104 # 3 RIC: 12928.
Sample: T-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
354 matched at least 5 of the 16 largest peaks in the unknown

Rank	In.	Name
1	2017	BENZALDEHYDE
2	7284	BENZOYL CHLORIDE
3	6466	ETHANONE, 2-HYDROXY-1-PHENYL-
4	2014	2,4-HEPTADIEN-6-YNAL, (E,E)-
5	9645	BENZOYLFORMIC ACID
6	13112	BENZOYL ISOTHIOCYANATE
7	6857	BENZENECARBOTHIOIC ACID
8	6111	1,2-BENZENEDICARBOXALDEHYDE
9	13359	BENZENEACETIC ACID, .ALPHA.-OXO-, METHYL ESTER

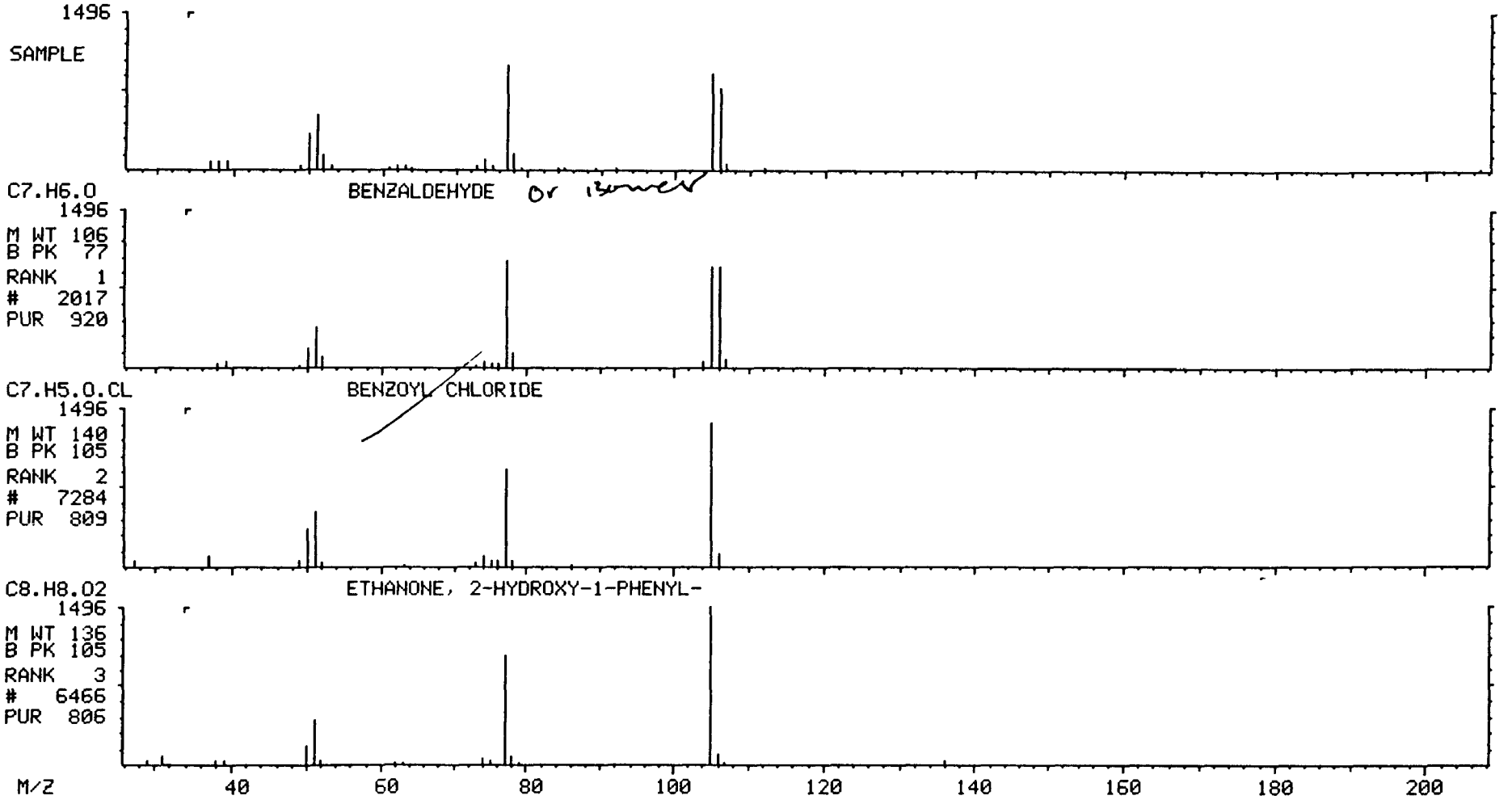
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C7.H6.O	106	77	920	967	941
2	C7.H5.O.CL	140	105	809	871	826
3	C8.H8.O2	136	105	806	843	822
4	C7.H6.O	106	105	805	844	809
5	C8.H6.O3	150	105	779	849	803
6	C8.H5.O.N.S	163	105	767	818	785
7	C7.H6.O.S	138	77	760	846	807
8	C8.H6.O2	134	105	759	806	915
9	C9.H8.O3	164	105	758	834	786

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	100-52-7
2	—	—	—	—	98-88-4
3	—	—	—	—	582-24-1
4	—	—	—	—	7200-04-6
5	—	—	—	—	611-73-4
6	—	—	—	—	532-55-8
7	—	—	—	—	98-91-9
8	—	—	—	—	643-79-8
9	—	—	—	—	15206-55-0

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:30:00 + 3:11
SAMPLE: T-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068104 # 286
CALI: 30068104 # 3

BASE M/Z: 77
RIC: 12928.



Library Search Data: 30068104 # 932 Base m/z: 71
08/31/98 20:30:00 + 10:22 Cali: 30068104 # 3 RIC: 17504.
Sample: T-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
410 matched at least 6 of the 16 largest peaks in the unknown

Rank	In.	Name
1	40501	PROPANOIC ACID, 2-METHYL-, 1-(1,1-DIMETHYLETHYL)-2-METHYL-1,3-PROPA*
2	40500	PROPANOIC ACID, 2-METHYL-, 2-ETHYL-1-PROPYL-1,3-PROPANEDIYL ESTER
3	26739	PROPANOIC ACID, 2-METHYL-, 2,2-DIMETHYL-1-(2-HYDROXY-1-METHYLETHYL)*
4	26740	PROPANOIC ACID, 2-METHYL-, 3-HYDROXY-2,4,4-TRIMETHYLPENTYL ESTER
5	4625	1-HEXENE, 3,4,5-TRIMETHYL-
6	11945	PROPANOIC ACID, 2-METHYL-, 1-METHYLBUTYL ESTER
7	19470	BUTANOIC ACID, 1-METHYLHEXYL ESTER
8	26737	PROPANOIC ACID, 2-METHYL-, 2-ETHYL-3-HYDROXYHEXYL ESTER
9	14787	1-NONENE, 4,6,8-TRIMETHYL-

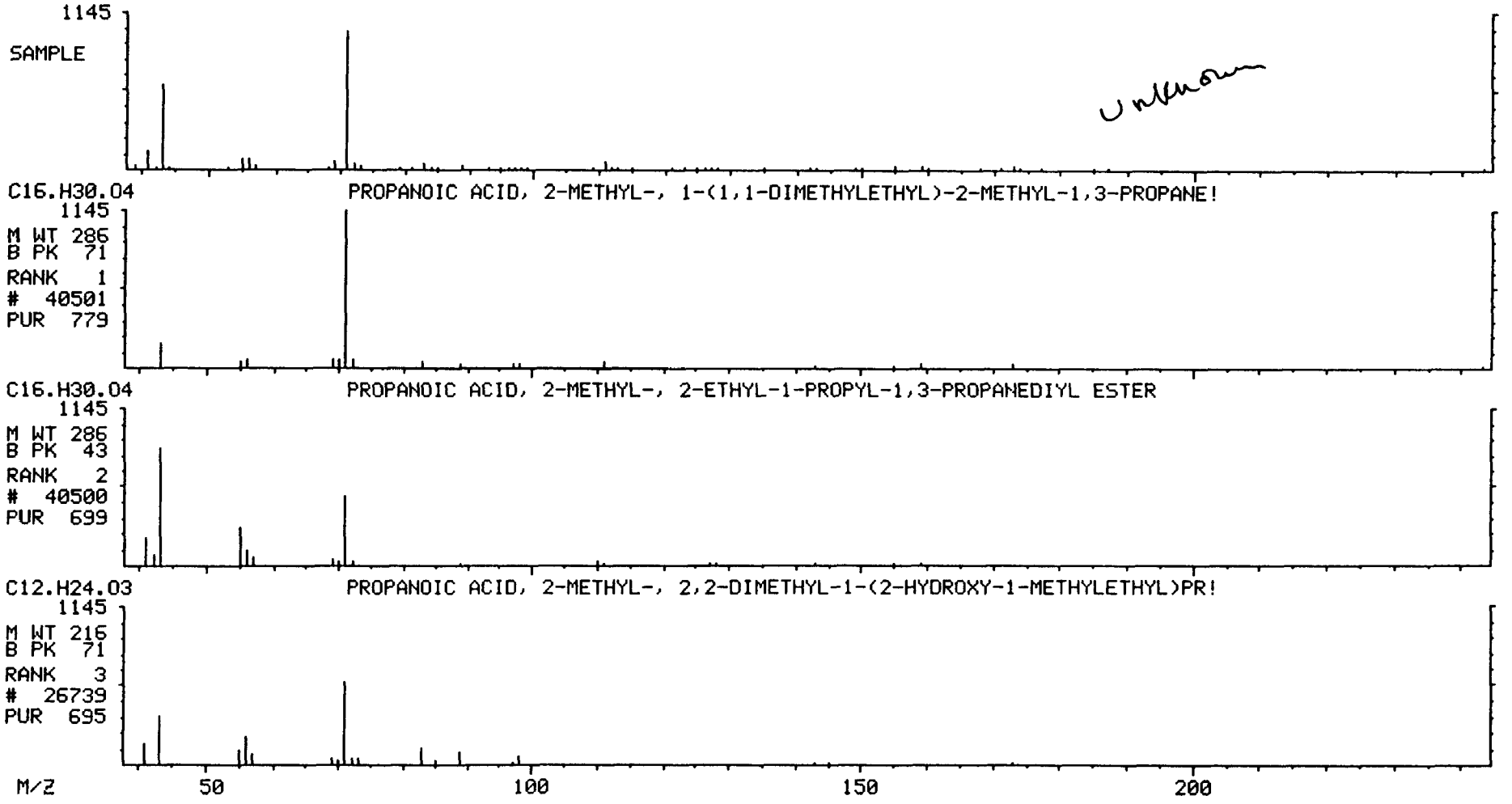
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C16.H30.O4	286	71	779	930	800
2	C16.H30.O4	286	43	699	866	726
3	C12.H24.O3	216	71	695	883	714
4	C12.H24.O3	216	71	638	794	643
5	C9.H18	126	43	575	800	658
6	C9.H18.O2	158	71	539	799	610
7	C11.H22.O2	186	71	539	755	578
8	C12.H24.O3	216	71	528	691	551
9	C12.H24	168	43	519	715	531

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	74381-40-1
2	---	---	---	---	74367-30-9
3	---	---	---	---	74367-33-2
4	---	---	---	---	74367-34-3
5	---	---	---	---	56728-10-0
6	---	---	---	---	54340-93-1
7	---	---	---	---	39026-94-3
8	---	---	---	---	74367-31-0
9	---	---	---	---	54410-98-9

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:30:00 + 10:22
SAMPLE: T-MM5-FB 1/35A/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068104 # 932
CALI: 30068104 # 3

BASE M/Z: 71
RIC: 17504.



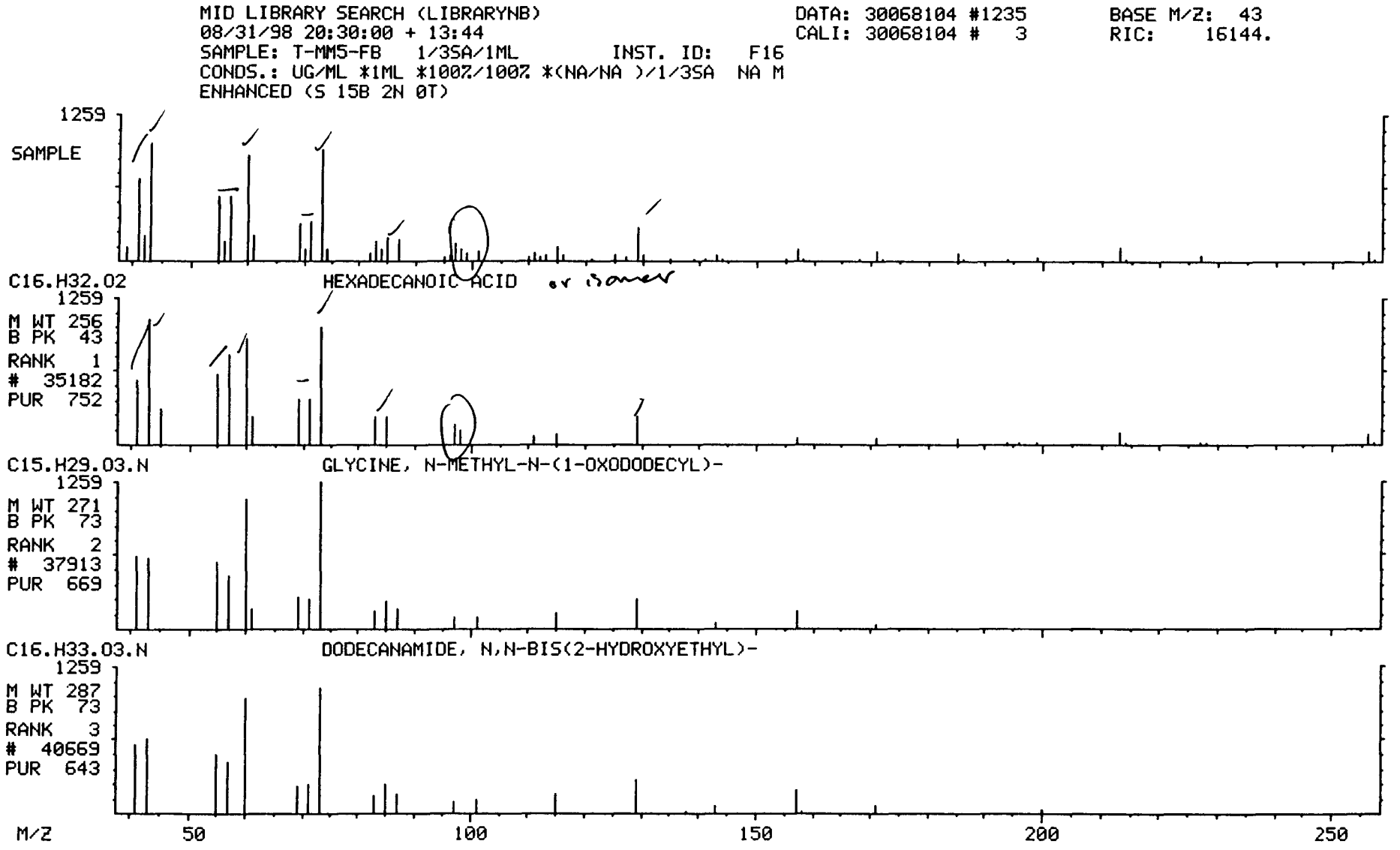
Library Search Data: 30068104 #1235 Base m/z: 43
08/31/98 20:30:00 + 13:44 Cali: 30068104 # 3 RIC: 16144.
Sample: T-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
912 matched at least 6 of the 16 largest peaks in the unknown

Rank	In.	Name
1	35182	HEXADECANOIC ACID
2	37913	GLYCINE, N-METHYL-N-(1-OXODODECYL)-
3	40669	DODECANAMIDE, N,N-BIS(2-HYDROXYETHYL)-
4	29642	TETRADECANOIC ACID
5	40184	OCTADECANOIC ACID
6	22949	DODECANOIC ACID
7	26351	TRIDECANOIC ACID
8	19469	UNDECANOIC ACID
9	32392	PENTADECANOIC ACID

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C16.H32.O2	256	43	752	957	774
2	C15.H29.O3.N	271	73	669	982	669
3	C16.H33.O3.N	287	73	643	966	655
4	C14.H28.O2	228	73	625	898	673
5	C18.H36.O2	284	43	607	767	770
6	C12.H24.O2	200	60	602	902	660
7	C13.H26.O2	214	73	595	878	616
8	C11.H22.O2	186	60	586	941	598
9	C15.H30.O2	242	43	573	801	688

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	57-10-3
2	---	---	---	---	97-78-9
3	---	---	---	---	120-40-1
4	---	---	---	---	544-63-8
5	---	---	---	---	57-11-4
6	---	---	---	---	143-07-7
7	---	---	---	---	638-53-9
8	---	---	---	---	112-37-8
9	---	---	---	---	1002-84-2


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:30:00 + 13:44
SAMPLE: T-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068104 #1235
CALI: 30068104 # 3
BASE M/Z: 43
RIC: 16144.
1259
SAMPLE
C16.H32.02
HEXADECANOIC ACID
1259
M WT 256
B PK 43
RANK 1
35182
PUR 752
C15.H29.03.N
GLYCINE, N-METHYL-N-(1-OXODODECYL)-
1259
M WT 271
B PK 73
RANK 2
37913
PUR 669
C16.H33.03.N
DODECANAMIDE, N,N-BIS(2-HYDROXYETHYL)-
1259
M WT 287
B PK 73
RANK 3
40669
PUR 643
M/Z
50
100
150
200
250

Library Search Data: 30068104 #1333 Base m/z: 59
08/31/98 20:30:00 + 14:50 Cali: 30068104 # 3 RIC: 7024.
Sample: T-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
636 matched at least 6 of the 16 largest peaks in the unknown

Rank	In.	Name
1	24247	2-PROPANOL, 1-[2-(2-METHOXY-1-METHYLETHOXY)-1-METHYLETHOXY]-
2	16192	2-PROPANOL, 1-[1-METHYL-2-(2-PROPENYLOXY)ETHOXY]-
3	3502	BUTANOIC ACID, 3-HYDROXY-3-METHYL-
4	5522	2-HEXANOL, 2,3-DIMETHYL-
5	8460	SILANE, OCTYL-
6	20626	2-PROPANOL, 1,1'-[(1-METHYL-1,2-ETHANEDIYL)BIS(OXY)]BIS-
7	3522	2,3-BUTANEDIOL, 2,3-DIMETHYL-
8	3000	OXIRANE, 2,2-DIMETHYL-3-PROPYL-
9	8506	4,5-DIMETHYL-3-HEPTANOL

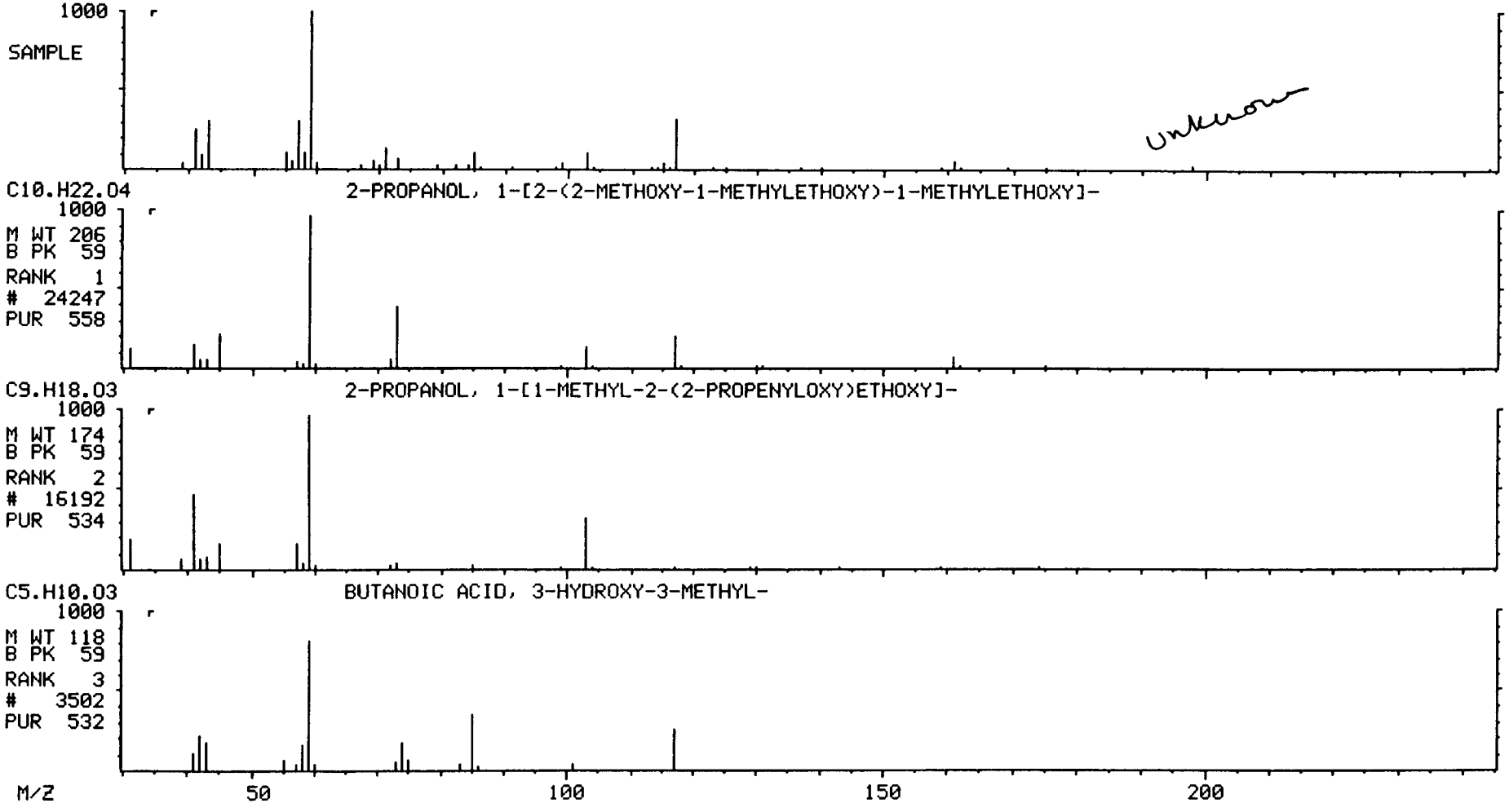
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C10.H22.O4	206	59	558	764	624
2	C9.H18.O3	174	59	534	728	574
3	C5.H10.O3	118	59	532	771	618
4	C8.H18.O	130	59	526	821	547
5	C8.H20.SI	144	59	508	866	521
6	C9.H20.O4	192	59	503	720	563
7	C6.H14.O2	118	59	500	885	516
8	C7.H14.O	114	43	493	813	524
9	C9.H20.O	144	59	482	815	550

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	20324-33-8
2	---	---	---	---	55956-25-7
3	---	---	---	---	625-08-1
4	---	---	---	---	19550-03-9
5	---	---	---	---	871-92-1
6	---	---	---	---	1638-16-0
7	---	---	---	---	76-09-5
8	---	---	---	---	17612-35-0
9	---	---	---	---	- -

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:30:00 + 14:50
SAMPLE: T-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068104 #1333
CALI: 30068104 # 3

BASE M/Z: 59
RIC: 7024.



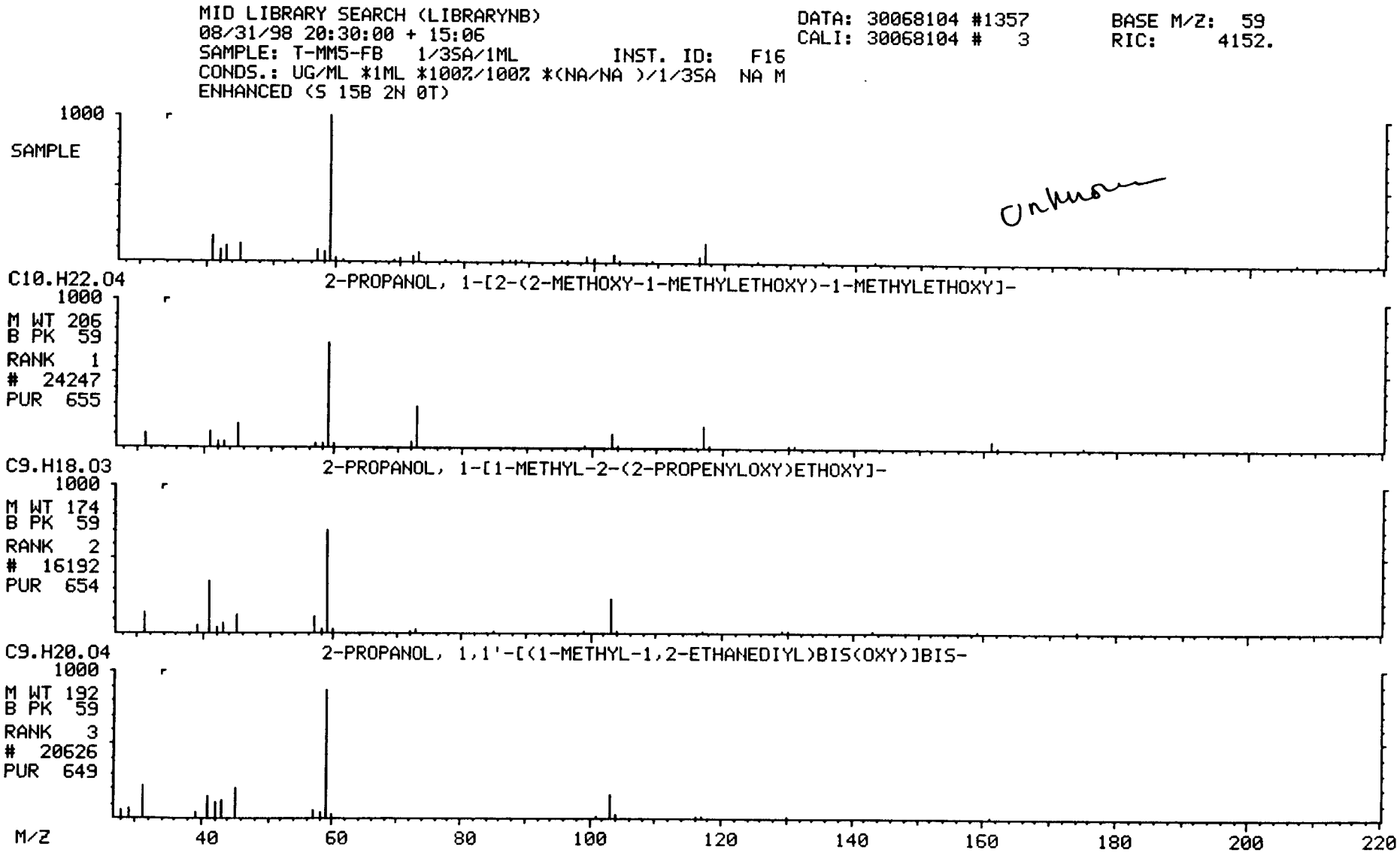
Library Search Data: 30068104 #1357 Base m/z: 59
08/31/98 20:30:00 + 15:06 Cali: 30068104 # 3 RIC: 4152.
Sample: T-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
803 matched at least 5 of the 16 largest peaks in the unknown

Rank	In.	Name
1	24247	2-PROPANOL, 1-[2-(2-METHOXY-1-METHYLETHOXY)-1-METHYLETHOXY]-
2	16192	2-PROPANOL, 1-[1-METHYL-2-(2-PROPENYLOXY)ETHOXY]-
3	20626	2-PROPANOL, 1,1'-[(1-METHYL-1,2-ETHANEDIYL)BIS(OXY)]BIS-
4	9229	2-PROPANOL, 1-(2-METHOXYPROPOXY)-
5	9228	1-PROPANOL, 2-(2-METHOXYPROPOXY)-
6	36537	2,5,8,11-TETRAOXATETRADECAN-13-OL, 4,7,10-TRIMETHYL-
7	9235	1-PROPANOL, 2-(2-METHOXY-1-METHYLETHOXY)-
8	9234	2-PROPANOL, 1-(2-METHOXY-1-METHYLETHOXY)-
9	5786	PROPANOIC ACID, 2-HYDROXY-2-METHYL-, ETHYL ESTER

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C10.H22.O4	206	59	655	816	728
2	C9.H18.O3	174	59	654	807	681
3	C9.H20.O4	192	59	649	858	674
4	C7.H16.O3	148	59	643	942	650
5	C7.H16.O3	148	59	624	853	652
6	C13.H28.O5	264	59	617	755	732
7	C7.H16.O3	148	59	585	768	594
8	C7.H16.O3	148	59	584	749	595
9	C6.H12.O3	132	59	581	861	606

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	20324-33-8
2	—	—	—	—	55956-25-7
3	—	—	—	—	1638-16-0
4	—	—	—	—	13429-07-7
5	—	—	—	—	13588-28-8
6	—	—	—	—	20324-34-9
7	—	—	—	—	55956-21-3
8	—	—	—	—	20324-32-7
9	—	—	—	—	80-55-7


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:30:00 + 15:06
SAMPLE: T-MM5-FB 1/35A/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068104 #1357
CALI: 30068104 # 3
BASE M/Z: 59
RIC: 4152.
1000
SAMPLE
C10.H22.04
2-PROPANOL, 1-[2-(2-METHOXY-1-METHYLETHOXY)-1-METHYLETHOXY]-
M WT 206
B PK 59
RANK 1
24247
PUR 655
C9.H18.03
2-PROPANOL, 1-[1-METHYL-2-(2-PROPENYLOXY)ETHOXY]-
M WT 174
B PK 59
RANK 2
16192
PUR 654
C9.H20.04
2-PROPANOL, 1,1'-[(1-METHYL-1,2-ETHANEDIYL)BIS(OXY)]BIS-
M WT 192
B PK 59
RANK 3
20626
PUR 649
M/Z
40
60
80
100
120
140
160
180
200
220

Library Search Data: 30068104 #1466 Base m/z: 57
08/31/98 20:30:00 + 16:18 Cali: 30068104 # 3 RIC: 2364.
Sample: T-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
603 matched at least 7 of the 16 largest peaks in the unknown

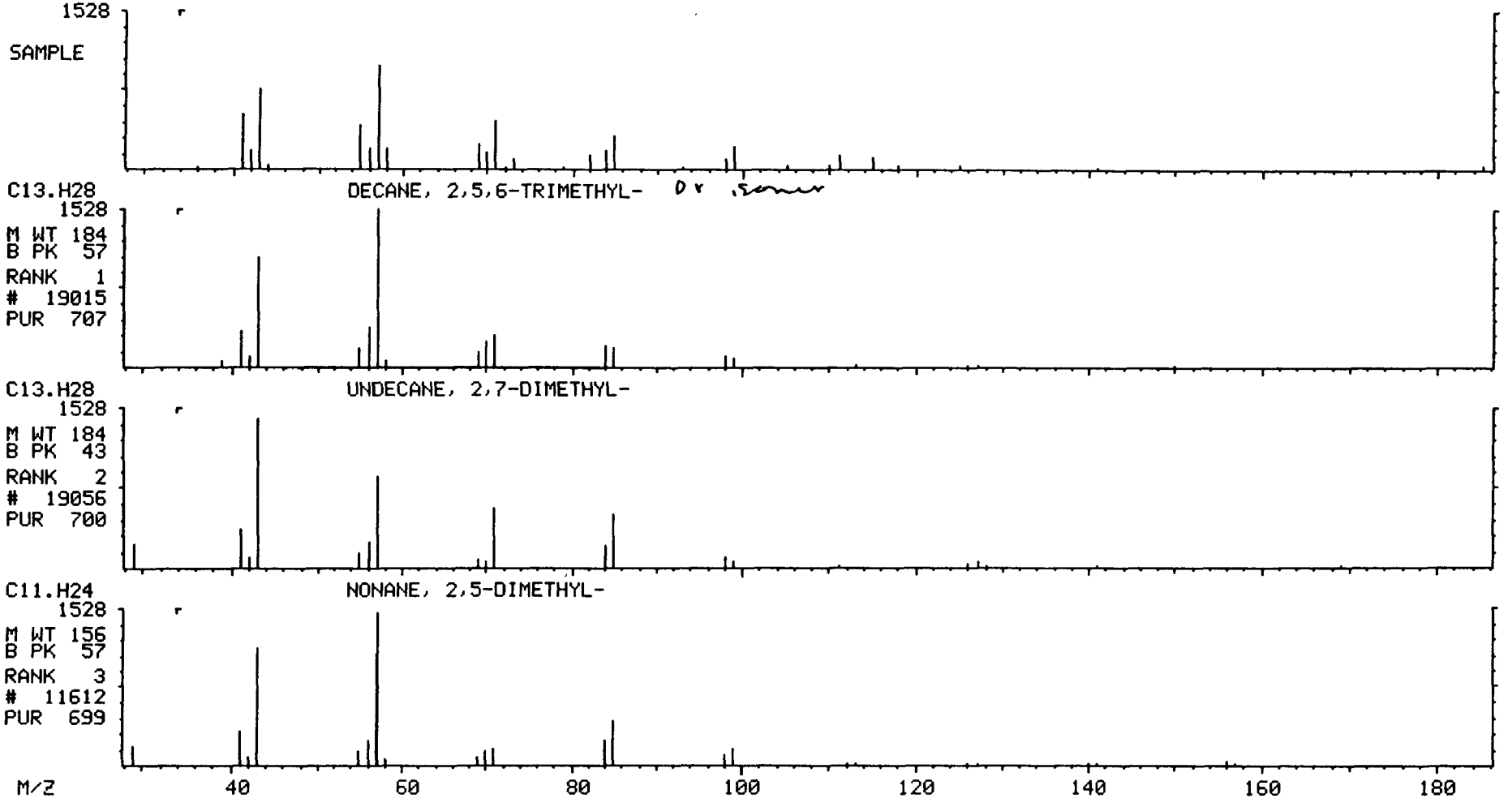
Rank	In.	Name
1	19015	DECANE, 2,5,6-TRIMETHYL-
2	19056	UNDECANE, 2,7-DIMETHYL-
3	11612	NONANE, 2,5-DIMETHYL-
4	19006	DECANE, 6-ETHYL-2-METHYL-
5	11602	OCTANE, 2,4,6-TRIMETHYL-
6	19045	DECANE, 2,3,8-TRIMETHYL-
7	19000	UNDECANE, 5,6-DIMETHYL-
8	15969	HYDROXYLAMINE, O-DECYL-
9	19523	1-DECANOL, 2-ETHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C13.H28	184	57	707	905	730
2	C13.H28	184	43	700	872	729
3	C11.H24	156	57	699	882	732
4	C13.H28	184	57	695	877	722
5	C11.H24	156	57	693	898	711
6	C13.H28	184	57	692	881	713
7	C13.H28	184	57	678	889	697
8	C10.H23.O.N	173	43	676	842	756
9	C12.H26.O	186	57	674	837	766

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	62108-23-0
2	—	—	—	—	17301-24-5
3	—	—	—	—	17302-27-1
4	—	—	—	—	62108-21-8
5	—	—	—	—	62016-37-9
6	—	—	—	—	62238-14-6
7	—	—	—	—	17615-91-7
8	—	—	—	—	29812-79-1
9	—	—	—	—	21078-65-9

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:30:00 + 16:18
SAMPLE: T-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068104 #1466 BASE M/Z: 57
CALI: 30068104 # 3 RIC: 2364.



Library Search Data: 30068104 #1502 Base m/z: 45
08/31/98 20:30:00 + 16:42 Cali: 30068104 # 3 RIC: 2424.
Sample: T-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
384 matched at least 5 of the 16 largest peaks in the unknown

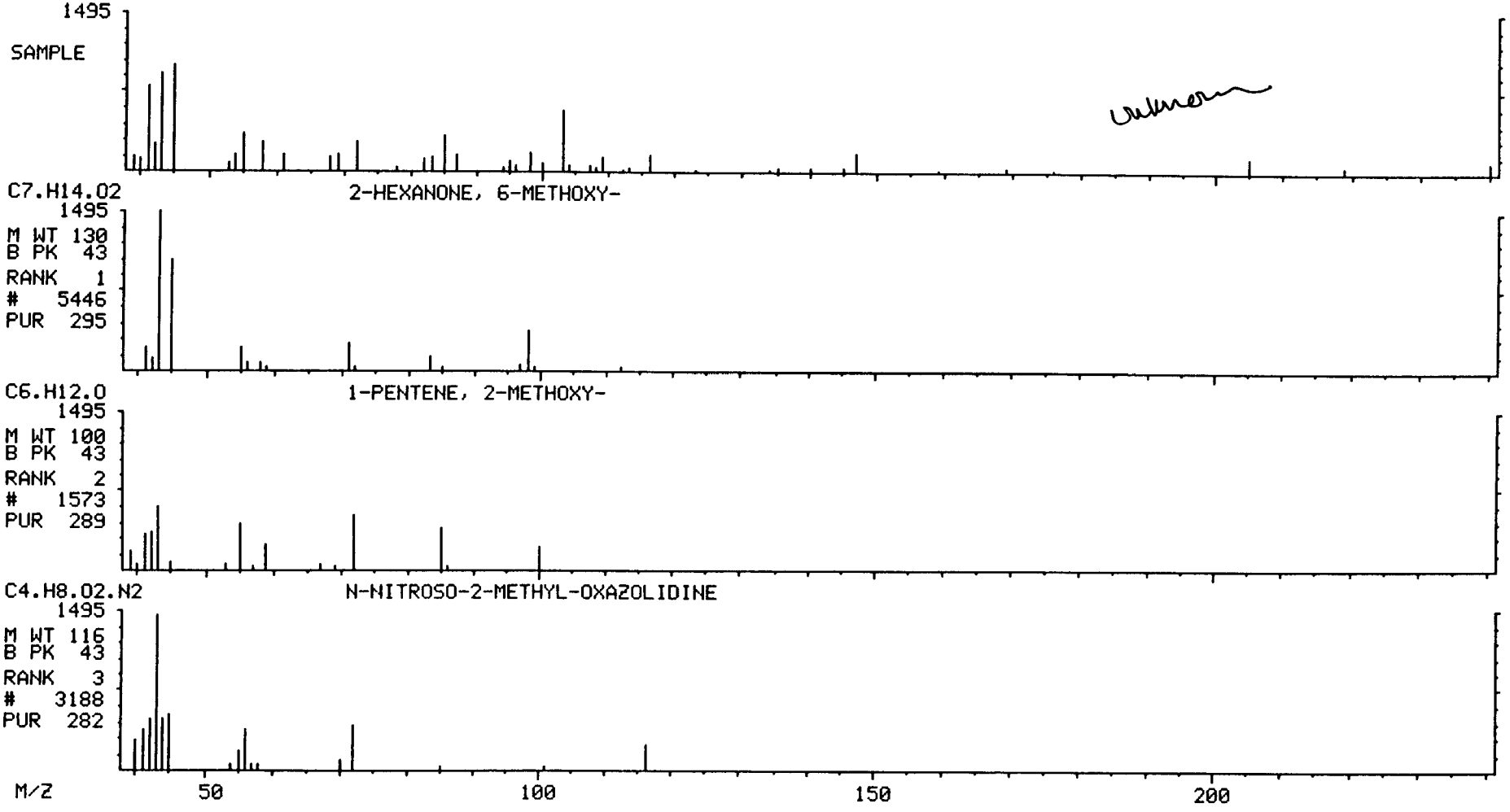
Rank	In.	Name
1	5446	2-HEXANONE, 6-METHOXY-
2	1573	1-PENTENE, 2-METHOXY-
3	3188	N-NITROSO-2-METHYL-OXAZOLIDINE
4	1567	2-PENTENE, 2-METHOXY-
5	6418	2-PENTANOL, 3-CHLORO-4-METHYL-, (R@,S@)-(.+/-.)-
6	6417	2-PENTANOL, 3-CHLORO-4-METHYL-, (R@,R@)-(.+/-.)-
7	20219	1-PROPANOL, 2,2-BIS(METHOXYMETHYL)-, ACETATE
8	3339	1-PENTANOL, 2,3-DIMETHYL-
9	1789	2-HEXANOL

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C7.H14.O2	130	43	295	711	348
2	C6.H12.O	100	43	289	735	327
3	C4.H8.O2.N2	116	43	282	679	359
4	C6.H12.O	100	43	281	743	326
5	C6.H13.O.CL	136	45	276	783	309
6	C6.H13.O.CL	136	45	275	780	312
7	C9.H18.O4	190	43	269	564	410
8	C7.H16.O	116	43	268	660	371
9	C6.H14.O	102	45	264	764	293

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	29006-00-6
2	---	---	---	---	53119-70-3
3	---	---	---	---	39884-53-2
4	---	---	---	---	61142-47-0
5	---	---	---	---	74685-48-6
6	---	---	---	---	74685-47-5
7	---	---	---	---	20637-35-8
8	---	---	---	---	10143-23-4
9	---	---	---	---	626-93-7

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:30:00 + 16:42
SAMPLE: T-MM5-FB 1/35A/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068104 #1502 BASE M/Z: 45
CALI: 30068104 # 3 RIC: 2424.



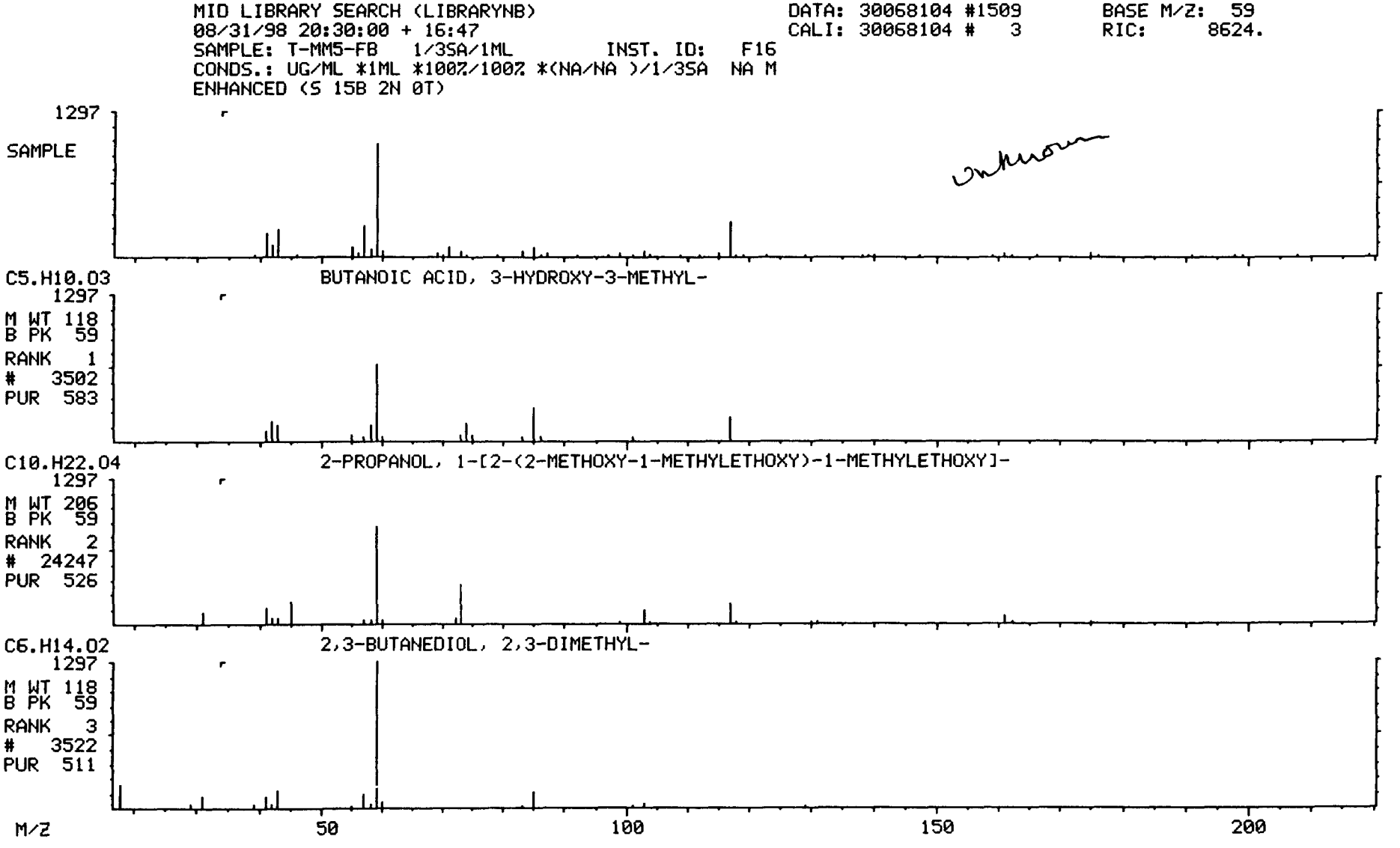
Library Search Data: 30068104 #1509 Base m/z: 59
08/31/98 20:30:00 + 16:47 Cali: 30068104 # 3 RIC: 8624.
Sample: T-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
570 matched at least 6 of the 16 largest peaks in the unknown

Rank	In.	Name
1	3502	BUTANOIC ACID, 3-HYDROXY-3-METHYL-
2	24247	2-PROPANOL, 1-[2-(2-METHOXY-1-METHYLETHOXY)-1-METHYLETHOXY]-
3	3522	2,3-BUTANEDIOL, 2,3-DIMETHYL-
4	5522	2-HEXANOL, 2,3-DIMETHYL-
5	16192	2-PROPANOL, 1-[1-METHYL-2-(2-PROPENYLOXY)ETHOXY]-
6	5506	2,3,3-TRIMETHYL-2-PENTANOL
7	8460	SILANE, OCTYL-
8	20626	2-PROPANOL, 1,1'-[(1-METHYL-1,2-ETHANEDIYL)BIS(OXY)]BIS-
9	8805	1,3-DIOXAN-5-OL, 4,4,5-TRIMETHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C5.H10.O3	118	59	583	842	598
2	C10.H22.O4	206	59	526	741	581
3	C6.H14.O2	118	59	511	937	511
4	C8.H18.O	130	59	506	831	514
5	C9.H18.O3	174	59	479	692	513
6	C8.H18.O	130	59	471	931	471
7	C8.H20.SI	144	59	467	848	517
8	C9.H20.O4	192	59	458	714	506
9	C7.H14.O3	146	59	442	903	467

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	625-08-1
2	---	---	---	---	20324-33-8
3	---	---	---	---	76-09-5
4	---	---	---	---	19550-03-9
5	---	---	---	---	55956-25-7
6	---	---	---	---	23171-85-9
7	---	---	---	---	871-92-1
8	---	---	---	---	1638-16-0
9	---	---	---	---	54063-14-8


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:30:00 + 16:47
SAMPLE: T-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068104 #1509
CALI: 30068104 # 3
BASE M/Z: 59
RIC: 8624.
1297
SAMPLE
C5.H10.03
BUTANOIC ACID, 3-HYDROXY-3-METHYL-
1297
M WT 118
B PK 59
RANK 1
3502
PUR 583
C10.H22.04
2-PROPANOL, 1-[2-(2-METHOXY-1-METHYLETHOXY)-1-METHYLETHOXY]-
1297
M WT 206
B PK 59
RANK 2
24247
PUR 526
C6.H14.02
2,3-BUTANEDIOL, 2,3-DIMETHYL-
1297
M WT 118
B PK 59
RANK 3
3522
PUR 511
M/Z
50
100
150
200

Library Search Data: 30068104 #1528 Base m/z: 59
08/31/98 20:30:00 + 17:00 Cali: 30068104 # 3 RIC: 7552.
Sample: T-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
904 matched at least 6 of the 16 largest peaks in the unknown

Rank	In.	Name
1	5522	2-HEXANOL, 2,3-DIMETHYL-
2	5527	2-HEPTANOL, 2-METHYL-
3	16192	2-PROPANOL, 1-[1-METHYL-2-(2-PROPENYLOXY)ETHOXY]-
4	8506	4,5-DIMETHYL-3-HEPTANOL
5	9228	1-PROPANOL, 2-(2-METHOXYPROPOXY)-
6	26482	4-O-ACETYL-2,5-DI-O-METHYL-3,6-DIDEOXY-D-GLUCONITRILE
7	3528	2-METHYL-2,3-PENTANEDIOL
8	3502	BUTANOIC ACID, 3-HYDROXY-3-METHYL-
9	5497	3-ETHYL-2-METHYL-2-PENTANOL

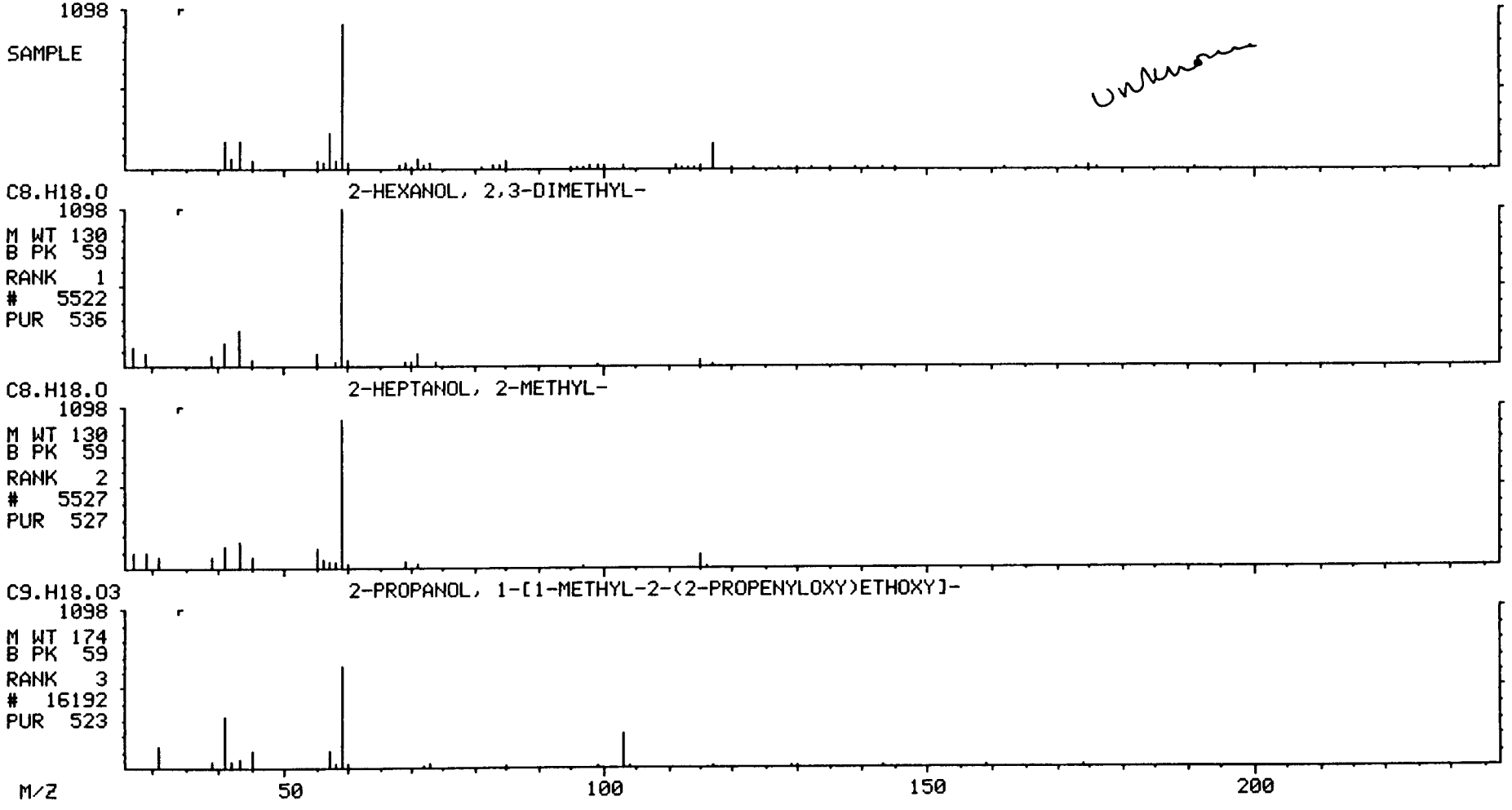
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C8.H18.O	130	59	536	873	562
2	C8.H18.O	130	59	527	903	544
3	C9.H18.O3	174	59	523	745	541
4	C9.H20.O	144	59	503	846	520
5	C7.H16.O3	148	59	499	790	521
6	C10.H17.O4.N	215	59	496	844	522
7	C6.H14.O2	118	59	496	896	524
8	C5.H10.O3	118	59	496	749	574
9	C8.H18.O	130	59	495	952	508

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	19550-03-9
2	---	---	---	---	625-25-2
3	---	---	---	---	55956-25-7
4	---	---	---	---	- -
5	---	---	---	---	13588-28-8
6	---	---	---	---	- -
7	---	---	---	---	7795-80-4
8	---	---	---	---	625-08-1
9	---	---	---	---	- -

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:30:00 + 17:00
SAMPLE: T-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068104 #1528
CALI: 30068104 # 3

BASE M/Z: 59
RIC: 7552.



927

Library Search Data: 30068104 #1586 Base m/z: 55
08/31/98 20:30:00 + 17:38 Cali: 30068104 # 3 RIC: 52032.
Sample: T-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
950 matched at least 7 of the 16 largest peaks in the unknown

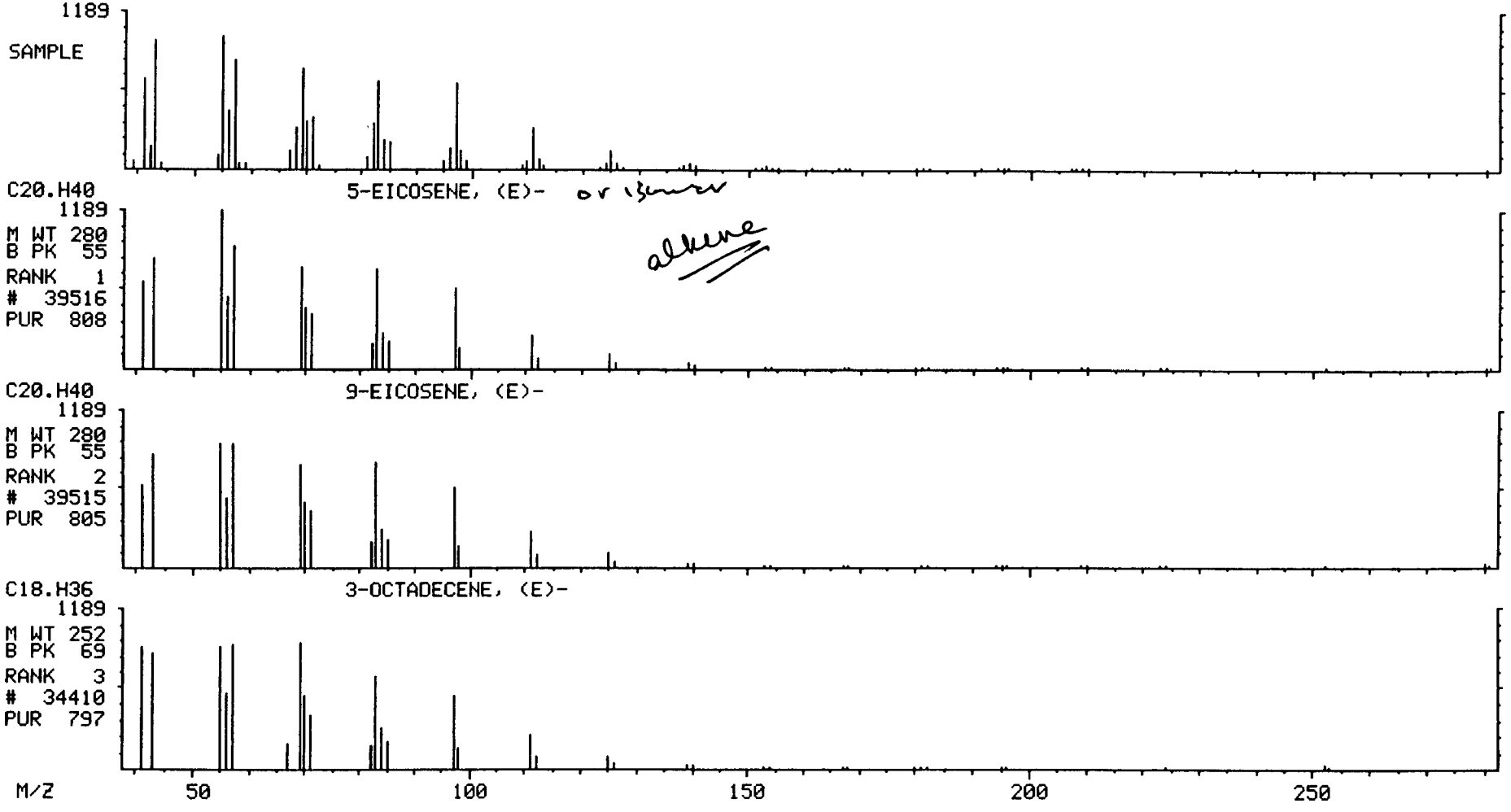
Rank	In.	Name
1	39516	5-EICOSENE, (E)-
2	39515	9-EICOSENE, (E)-
3	34410	3-OCTADECENE, (E)-
4	37062	1-NONADECENE
5	34411	5-OCTADECENE, (E)-
6	39517	3-EICOSENE, (E)-
7	34418	9-OCTADECENE, (E)-
8	26416	4-TETRADECANOL
9	31653	1-HEPTADECENE

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C20.H40	280	55	808	983	812
2	C20.H40	280	55	805	982	808
3	C18.H36	252	69	797	962	812
4	C19.H38	266	97	794	971	804
5	C18.H36	252	55	793	961	807
6	C20.H40	280	57	793	985	796
7	C18.H36	252	55	792	960	806
8	C14.H30.O	214	43	792	989	798
9	C17.H34	238	55	792	977	800

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	74685-30-6
2	—	—	—	—	74685-29-3
3	—	—	—	—	7206-19-1
4	—	—	—	—	18435-45-5
5	—	—	—	—	7206-21-5
6	—	—	—	—	74685-33-9
7	—	—	—	—	7206-25-9
8	—	—	—	—	1653-33-4
9	—	—	—	—	6765-39-5

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:30:00 + 17:38
SAMPLE: T-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068104 #1586 BASE M/Z: 55
CALI: 30068104 # 3 RIC: 52032.



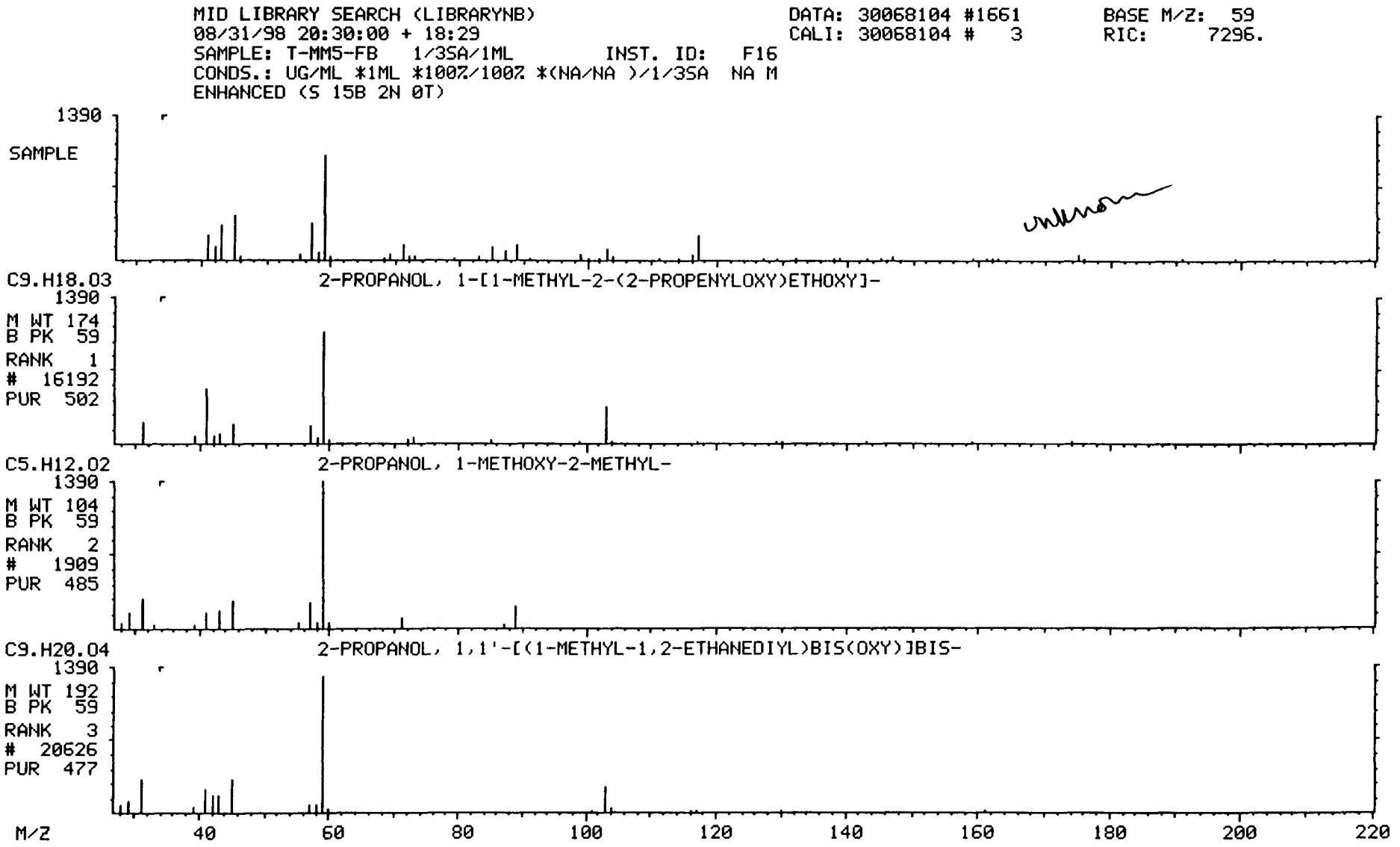
Library Search Data: 30068104 #1661 Base m/z: 59
08/31/98 20:30:00 + 18:29 Cali: 30068104 # 3 RIC: 7296.
Sample: T-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
221 matched at least 6 of the 16 largest peaks in the unknown

Rank	In.	Name
1	16192	2-PROPANOL, 1-[1-METHYL-2-(2-PROPENYLOXY)ETHOXY]-
2	1909	2-PROPANOL, 1-METHOXY-2-METHYL-
3	20626	2-PROPANOL, 1,1'-[(1-METHYL-1,2-ETHANEDIYL)BIS(OXY)]BIS-
4	6083	2-PROPANOL, 1,1'-OXYBIS-
5	3528	2-METHYL-2,3-PENTANEDIOL
6	5809	1-ETHOXYPENTAN-3-OL
7	16651	DIETHYLENE GLYCOL TERT-BUTYL ETHER METHYL ETHER
8	8460	SILANE, OCTYL-
9	6082	1-PROPANOL, 2-(2-HYDROXYPROPOXY)-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C9.H18.O3	174	59	502	788	513
2	C5.H12.O2	104	59	485	945	490
3	C9.H20.O4	192	59	477	819	494
4	C6.H14.O3	134	59	452	889	464
5	C6.H14.O2	118	59	445	860	476
6	C7.H16.O2	132	59	440	868	480
7	C9.H20.O3	176	57	438	824	462
8	C8.H20.SI	144	59	430	863	455
9	C6.H14.O3	134	59	421	818	429

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	55956-25-7
2	---	---	---	---	3587-64-2
3	---	---	---	---	1638-16-0
4	---	---	---	---	110-98-5
5	---	---	---	---	7795-80-4
6	---	---	---	---	- -
7	---	---	---	---	52788-79-1
8	---	---	---	---	871-92-1
9	---	---	---	---	106-62-7


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:30:00 + 18:29
SAMPLE: T-MM5-FB 1/35A/1ML
INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068104 #1661
CALI: 30068104 # 3
BASE M/Z: 59
RIC: 7296.
1390
SAMPLE
C9.H18.03
2-PROPANOL, 1-[1-METHYL-2-(2-PROPENYLOXY)ETHOXY]-
M WT 174
B PK 59
RANK 1
16192
PUR 502
C5.H12.02
2-PROPANOL, 1-METHOXY-2-METHYL-
M WT 104
B PK 59
RANK 2
1909
PUR 485
C9.H20.04
2-PROPANOL, 1,1'-[(1-METHYL-1,2-ETHANEDIYL)BIS(OXY)]BIS-
M WT 192
B PK 59
RANK 3
20626
PUR 477
M/Z
40
60
80
100
120
140
160
180
200
220

Library Search Data: 30068104 #1686 Base m/z: 59
08/31/98 20:30:00 + 18:45 Cali: 30068104 # 3 RIC: 3724.
Sample: T-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
301 matched at least 4 of the 16 largest peaks in the unknown

Rank	In.	Name
1	43635	TRIETHYL (S)-2-(CARBOXYMETHOXYMETHYL)OXYDIACETATE
2	8432	2-HEXANONE, 3-HYDROXY-3,5-DIMETHYL-
3	42663	2,4,6,8,9-PENTATHIATRICYCLO[3.3.1.13,7]DECANE-1-THIOL, 3,5,7-TRIMET*
4	5826	2-PROPANOL, 1-ISOPROPOXY-2-METHYL-
5	5815	1-TERT-BUTOXY-2-METHOXYETHANE
6	51383	4-HEXADECEN-2-OL, 1-[(2,2-DIMETHYL-1,3-DIOXOLAN-4-YL)METHOXY]-
7	60820	2,4,6,8,9-PENTATHIATRICYCLO[3.3.1.13,7]DECANE, 3,3'-DITHIOBIS[1,5,7*
8	5778	BUTANOIC ACID, 3-HYDROXY-3-METHYL-, METHYL ESTER
9	5916	BUTANOIC ACID, 4-NITRO-

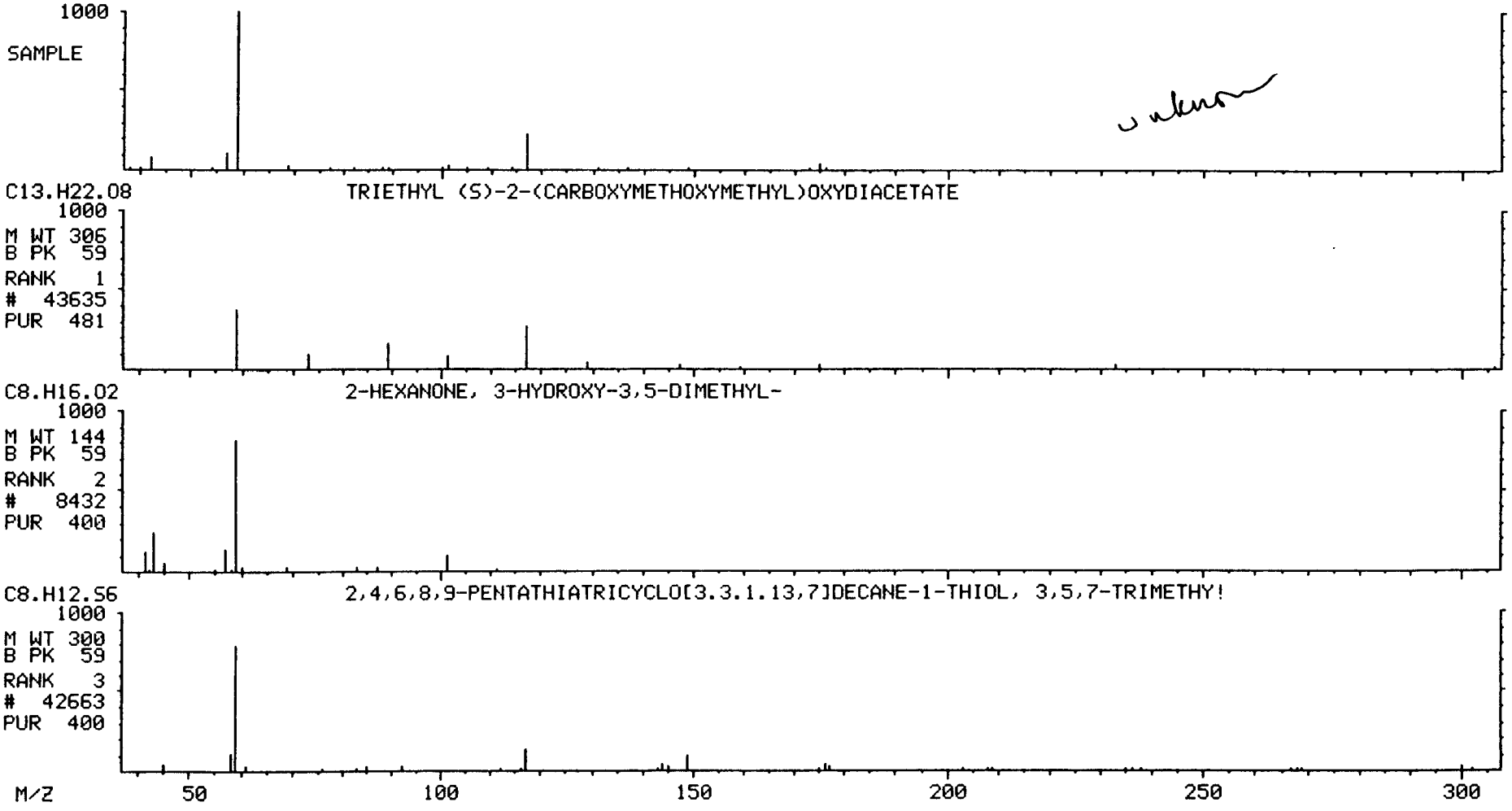
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C13.H22.O8	306	59	481	621	627
2	C8.H16.O2	144	59	400	683	552
3	C8.H12.S6	300	59	400	517	690
4	C7.H16.O2	132	59	384	512	636
5	C7.H16.O2	132	57	372	480	524
6	C22.H42.O4	370	117	347	453	412
7	C16.H22.S12	598	59	330	400	735
8	C6.H12.O3	132	43	328	446	722
9	C4.H7.O4.N	133	59	309	404	586

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	- -
2	—	—	—	—	6321-14-8
3	—	—	—	—	57274-31-4
4	—	—	—	—	3587-75-5
5	—	—	—	—	66728-50-5
6	—	—	—	—	56256-43-0
7	—	—	—	—	57274-52-9
8	—	—	—	—	6149-45-7
9	—	—	—	—	16488-43-0

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:30:00 + 18:45
SAMPLE: T-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068104 #1686
CALI: 30068104 # 3

BASE M/Z: 59
RIC: 3724.



Library Search Data: 30068104 #1704 Base m/z: 57
08/31/98 20:30:00 + 18:57 Cali: 30068104 # 3 RIC: 7400.
Sample: T-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
922 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	26409	2-HEXYL-1-OCTANOL
2	32418	2-HEXYL-1-DECANOL
3	19523	1-DECANOL, 2-ETHYL-
4	32425	1-DECANOL, 2-HEXYL-
5	34410	3-OCTADECENE, (E)-
6	34418	9-OCTADECENE, (E)-
7	34411	5-OCTADECENE, (E)-
8	58380	DECANEDIOIC ACID, DIDECYL ESTER
9	19520	1-OCTANOL, 2-BUTYL-

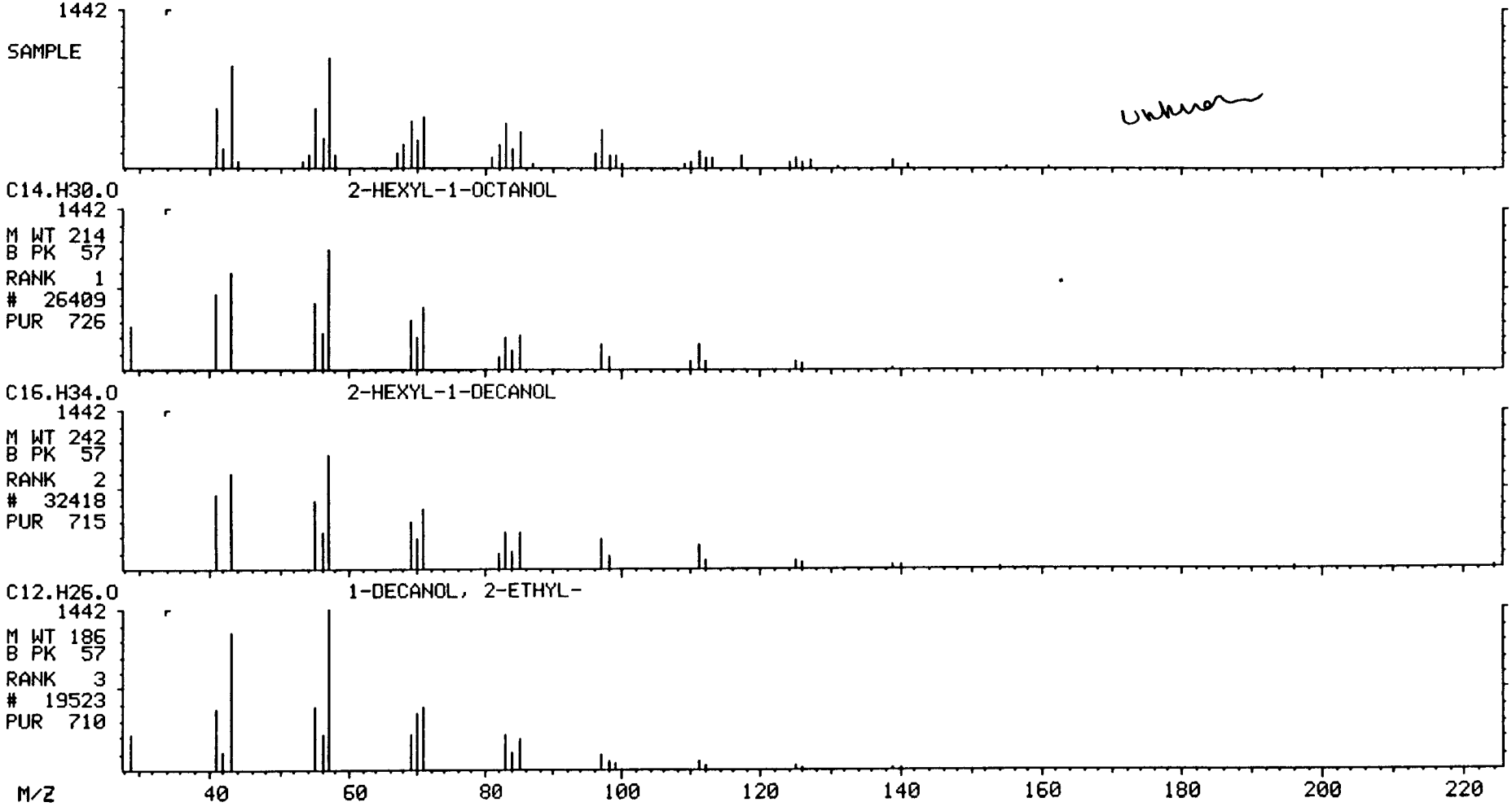
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C14.H30.O	214	57	726	960	743
2	C16.H34.O	242	57	715	957	742
3	C12.H26.O	186	57	710	944	712
4	C16.H34.O	242	57	708	942	742
5	C18.H36	252	69	704	923	733
6	C18.H36	252	55	701	919	726
7	C18.H36	252	55	699	916	726
8	C30.H58.04	482	57	696	960	707
9	C12.H26.O	186	57	695	945	718

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	- -
2	—	—	—	—	- -
3	—	—	—	—	21078-65-9
4	—	—	—	—	2425-77-6
5	—	—	—	—	7206-19-1
6	—	—	—	—	7206-25-9
7	—	—	—	—	7206-21-5
8	—	—	—	—	2432-89-5
9	—	—	—	—	3913-02-8

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:30:00 + 18:57
SAMPLE: T-MM5-F8 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068104 #1704
CALI: 30068104 # 3

BASE M/Z: 57
RIC: 7400.



Library Search Data: 30068104 #1741 Base m/z: 59
08/31/98 20:30:00 + 19:22 Cali: 30068104 # 3 RIC: 7064.
Sample: T-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
544 matched at least 6 of the 16 largest peaks in the unknown

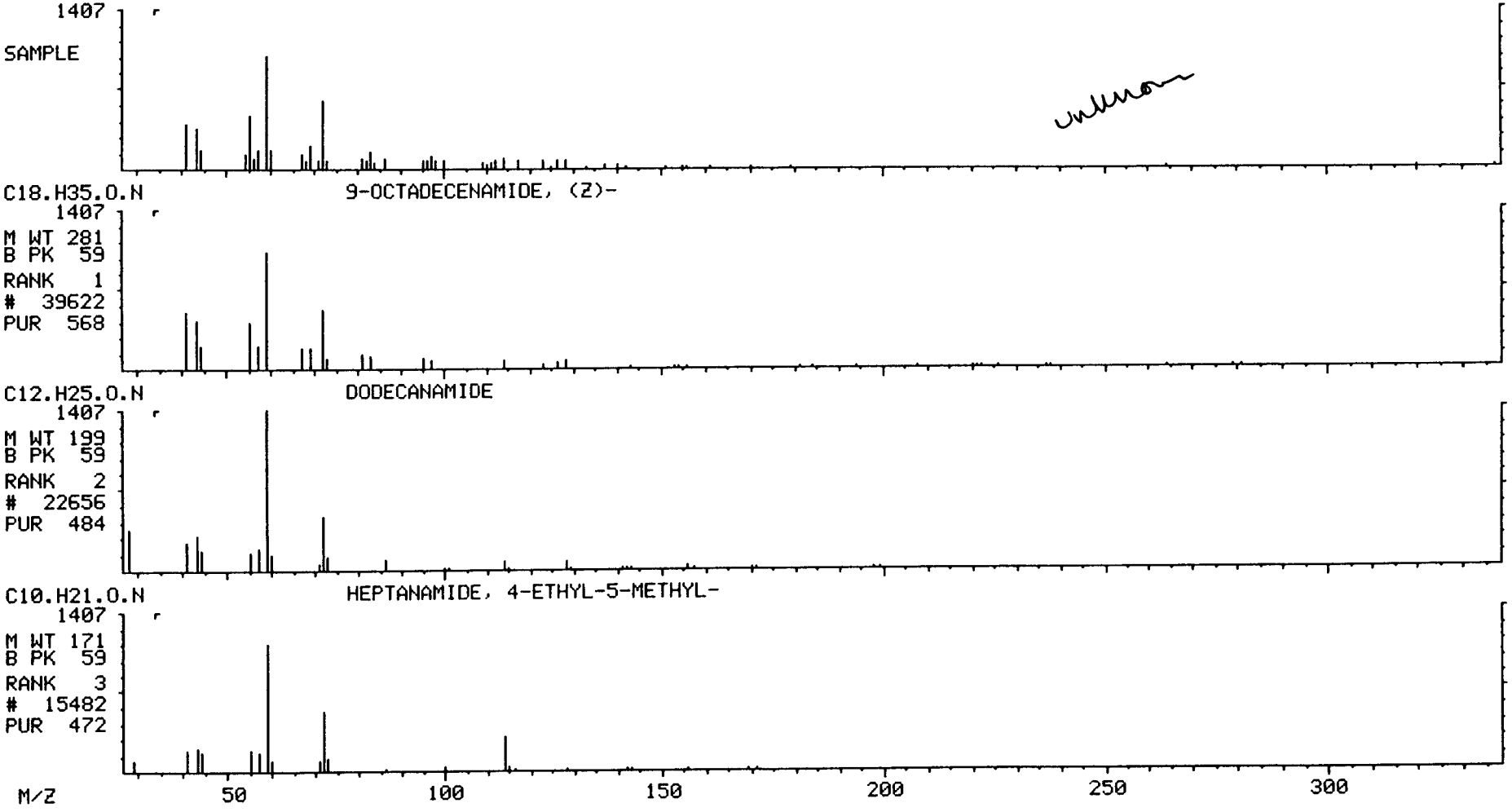
Rank	In.	Name
1	39622	9-OCTADECENAMIDE, (Z)-
2	22656	DODECANAMIDE
3	15482	HEPTANAMIDE, 4-ETHYL-5-METHYL-
4	11721	NONANAMIDE
5	3133	PENTANAMIDE, 4-METHYL-
6	19516	1-DECANOL, 5,9-DIMETHYL-
7	16267	1,7-OCTANEDIOL, 3,7-DIMETHYL-
8	7998	TRANS-3,4-EPOXYNONANE
9	11584	7-OCTEN-2-OL, 2,6-DIMETHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C18.H35.O.N	281	59	568	866	647
2	C12.H25.O.N	199	59	484	883	523
3	C10.H21.O.N	171	59	472	867	488
4	C9.H19.O.N	157	59	472	867	487
5	C6.H13.O.N	115	59	444	892	456
6	C12.H26.O	186	41	436	747	488
7	C10.H22.O2	174	59	433	887	473
8	C9.H18.O	142	41	419	748	480
9	C10.H20.O	156	59	412	921	433

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	301-02-0
2	—	—	—	—	1120-16-7
3	—	—	—	—	54789-40-1
4	—	—	—	—	1120-07-6
5	—	—	—	—	1119-29-5
6	—	—	—	—	91482-38-1
7	—	—	—	—	107-74-4
8	—	—	—	—	- -
9	—	—	—	—	18479-58-8

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:30:00 + 19:22
SAMPLE: T-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068104 #1741 BASE M/Z: 59
CALI: 30068104 # 3 RIC: 7064.



Library Search Data: 30068104 #1799 Base m/z: 45
08/31/98 20:30:00 + 20:01 Cali: 30068104 # 3 RIC: 4152.
Sample: T-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
996 matched at least 4 of the 16 largest peaks in the unknown

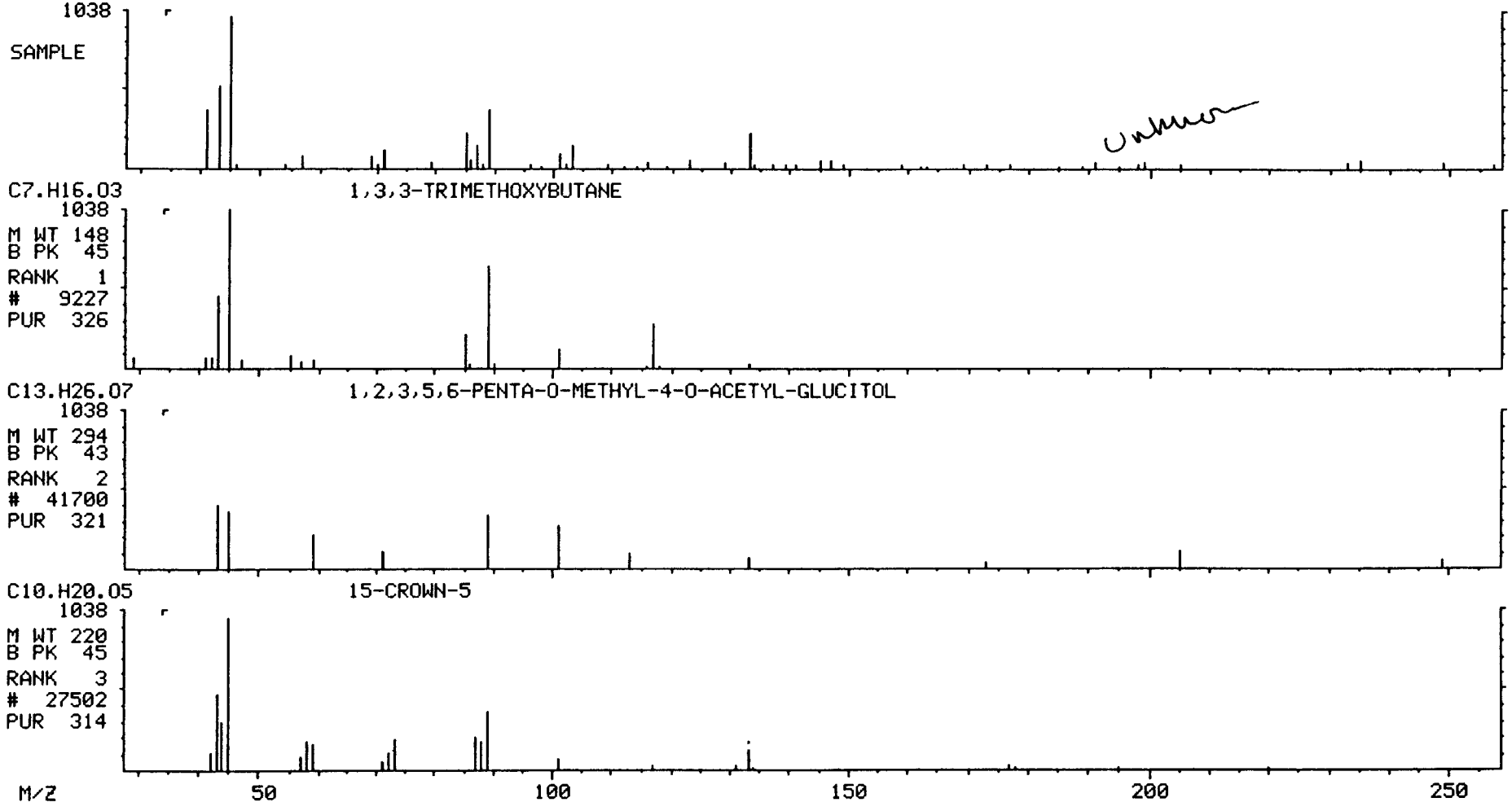
Rank	In.	Name
1	9227	1,3,3-TRIMETHOXYBUTANE
2	41700	1,2,3,5,6-PENTA-O-METHYL-4-O-ACETYL-GLUCITOL
3	27502	15-CROWN-5
4	41712	3,6,9,12,15-PENTAOXANONADECAN-1-OL
5	21103	ETHANOL, 2,2'-[OXYBIS(2,1-ETHANEDIYLOXY)]BIS-
6	43636	.BETA.-D-MANNOPYRANOSE, 2,4,6-TRI-O-METHYL-, DIACETATE
7	33841	3,6,9,12-TETRAOXAHEXADECAN-1-OL
8	36510	1,4,7,10,13,16-HEXAOXACYCLOOCTADECANE
9	34224	2,5,8,11,14-PENTAOXAHEXADECAN-16-OL

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C7.H16.O3	148	45	326	678	424
2	C13.H26.O7	294	43	321	748	370
3	C10.H20.O5	220	45	314	686	435
4	C14.H30.O6	294	45	304	678	398
5	C8.H18.O5	194	45	294	718	343
6	C13.H22.O8	306	45	293	610	353
7	C12.H26.O5	250	45	292	588	414
8	C12.H24.O6	264	45	281	660	404
9	C11.H24.O6	252	45	277	580	433

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	6607-66-5
2	---	---	---	---	- -
3	---	---	---	---	33100-27-5
4	---	---	---	---	1786-94-3
5	---	---	---	---	112-60-7
6	---	---	---	---	55255-81-7
7	---	---	---	---	1559-34-8
8	---	---	---	---	17455-13-9
9	---	---	---	---	23778-52-1

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:30:00 + 20:01
SAMPLE: T-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068104 #1799 BASE M/Z: 45
CALI: 30068104 # 3 RIC: 4152.



Library Search Data: 30068104 #1804 Base m/z: 59
08/31/98 20:30:00 + 20:04 Cali: 30068104 # 3 RIC: 6872.
Sample: T-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
221 matched at least 6 of the 16 largest peaks in the unknown

Rank	In.	Name
1	9228	1-PROPANOL, 2-(2-METHOXYPROPOXY)-
2	5826	2-PROPANOL, 1-ISOPROPOXY-2-METHYL-
3	1909	2-PROPANOL, 1-METHOXY-2-METHYL-
4	5786	PROPANOIC ACID, 2-HYDROXY-2-METHYL-, ETHYL ESTER
5	1905	2-BUTANOL, 3-METHOXY-
6	1919	1-BUTANOL, 3-METHOXY-
7	3502	BUTANOIC ACID, 3-HYDROXY-3-METHYL-
8	3528	2-METHYL-2,3-PENTANEDIOL
9	36510	1,4,7,10,13,16-HEXAOXACYCLOOCTADECANE

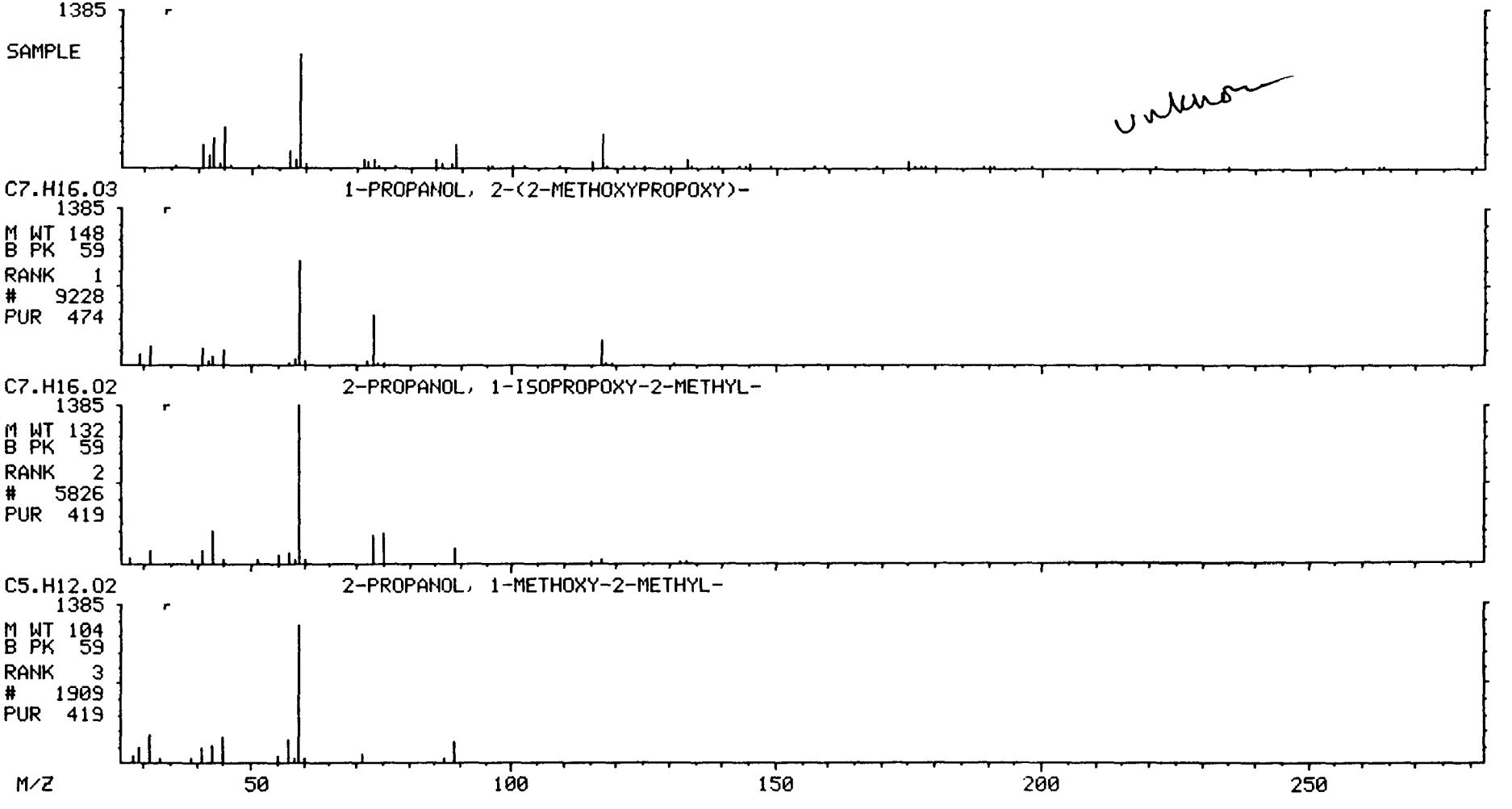
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C7.H16.O3	148	59	474	865	479
2	C7.H16.O2	132	59	419	676	492
3	C5.H12.O2	104	59	419	930	441
4	C6.H12.O3	132	59	412	760	422
5	C5.H12.O2	104	59	404	860	418
6	C5.H12.O2	104	59	403	877	429
7	C5.H10.O3	118	59	402	801	439
8	C6.H14.O2	118	59	401	860	430
9	C12.H24.O6	264	45	398	608	450

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	13588-28-8
2	—	—	—	—	3587-75-5
3	—	—	—	—	3587-64-2
4	—	—	—	—	80-55-7
5	—	—	—	—	53778-72-6
6	—	—	—	—	2517-43-3
7	—	—	—	—	625-08-1
8	—	—	—	—	7795-80-4
9	—	—	—	—	17455-13-9

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:30:00 + 20:04
SAMPLE: T-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068104 #1804
CALI: 30068104 # 3

BASE M/Z: 59
RIC: 6872.



Library Search Data: 30068104 #1914 Base m/z: 43
08/31/98 20:30:00 + 21:17 Cali: 30068104 # 3 RIC: 22720.
Sample: T-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
818 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	26416	4-TETRADECANOL
2	37062	1-NONADECENE
3	39515	9-EICOSENE, (E)-
4	39516	5-EICOSENE, (E)-
5	31653	1-HEPTADECENE
6	34410	3-OCTADECENE, (E)-
7	34418	9-OCTADECENE, (E)-
8	58701	17-PENTATRIACONTENE
9	34411	5-OCTADECENE, (E)-

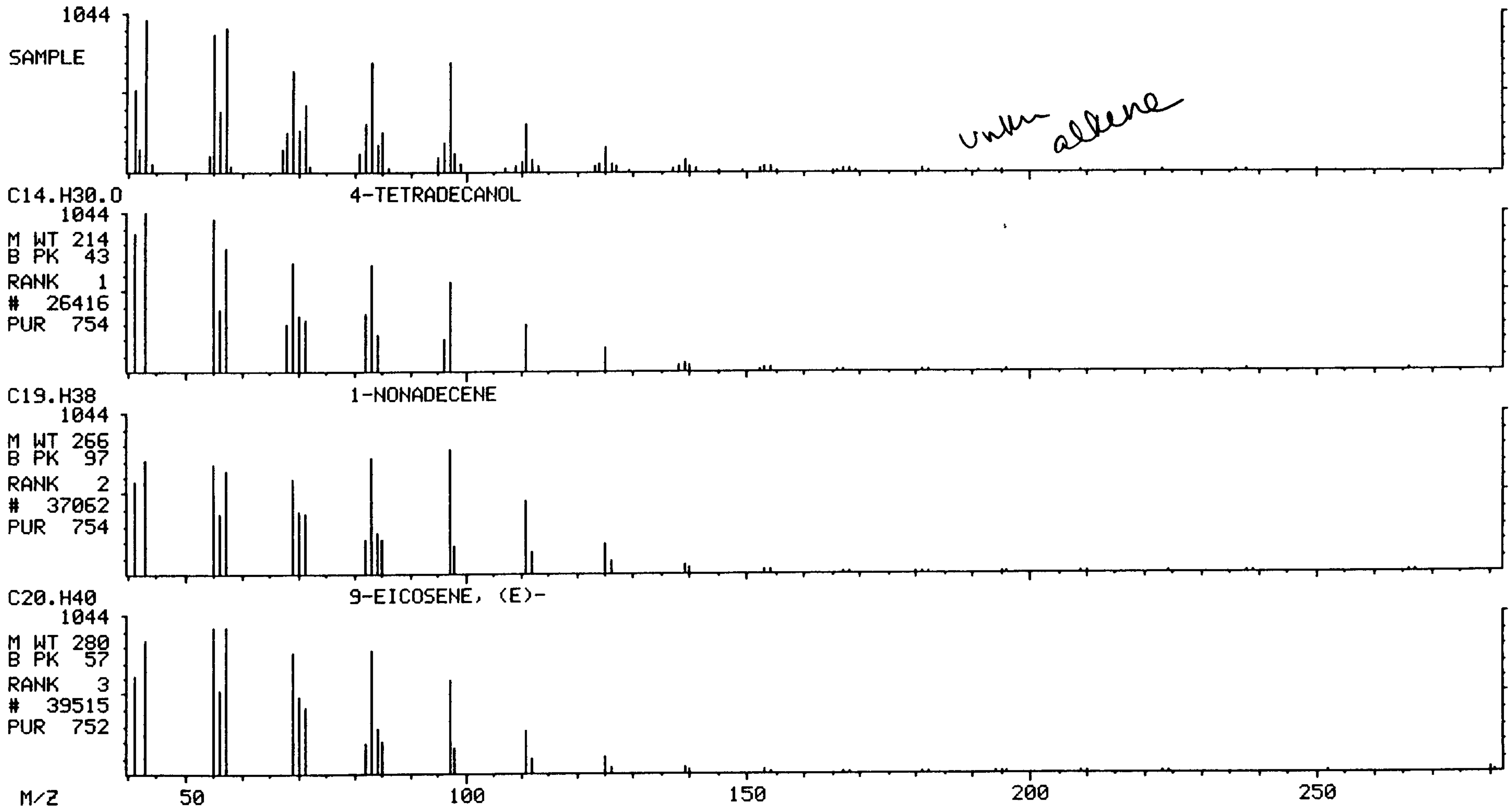
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C14.H30.O	214	43	754	982	758
2	C19.H38	266	97	754	963	768
3	C20.H40	280	57	752	958	764
4	C20.H40	280	55	750	956	764
5	C17.H34	238	55	750	961	754
6	C18.H36	252	69	747	945	761
7	C18.H36	252	55	745	942	758
8	C35.H70	490	43	745	935	785
9	C18.H36	252	55	745	942	758

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	1653-33-4
2	---	---	---	---	18435-45-5
3	---	---	---	---	74685-29-3
4	---	---	---	---	74685-30-6
5	---	---	---	---	6765-39-5
6	---	---	---	---	7206-19-1
7	---	---	---	---	7206-25-9
8	---	---	---	---	6971-40-0
9	---	---	---	---	7206-21-5

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:30:00 + 21:17
SAMPLE: T-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068104 #1914
CALI: 30068104 # 3

BASE M/Z: 43
RIC: 22720.



Library Search Data: 30068104 #1932 Base m/z: 59
08/31/98 20:30:00 + 21:29 Cali: 30068104 # 3 RIC: 7480.
Sample: T-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100%*(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
816 matched at least 5 of the 16 largest peaks in the unknown

Rank	In.	Name
1	1909	2-PROPANOL, 1-METHOXY-2-METHYL-
2	3528	2-METHYL-2,3-PENTANEDIOL
3	27502	15-CROWN-5
4	5825	2-PROPANOL, 1-(2-METHYLPROPOXY)-
5	5809	1-ETHOXYPENTAN-3-OL
6	41712	3,6,9,12,15-PENTAOXANONADECAN-1-OL
7	1760	2-PENTANOL, 2-METHYL-
8	8813	ETHENE, (2-ETHOXY-1-METHOXYETHOXY)-
9	34224	2,5,8,11,14-PENTAOXAHEXADECAN-16-OL

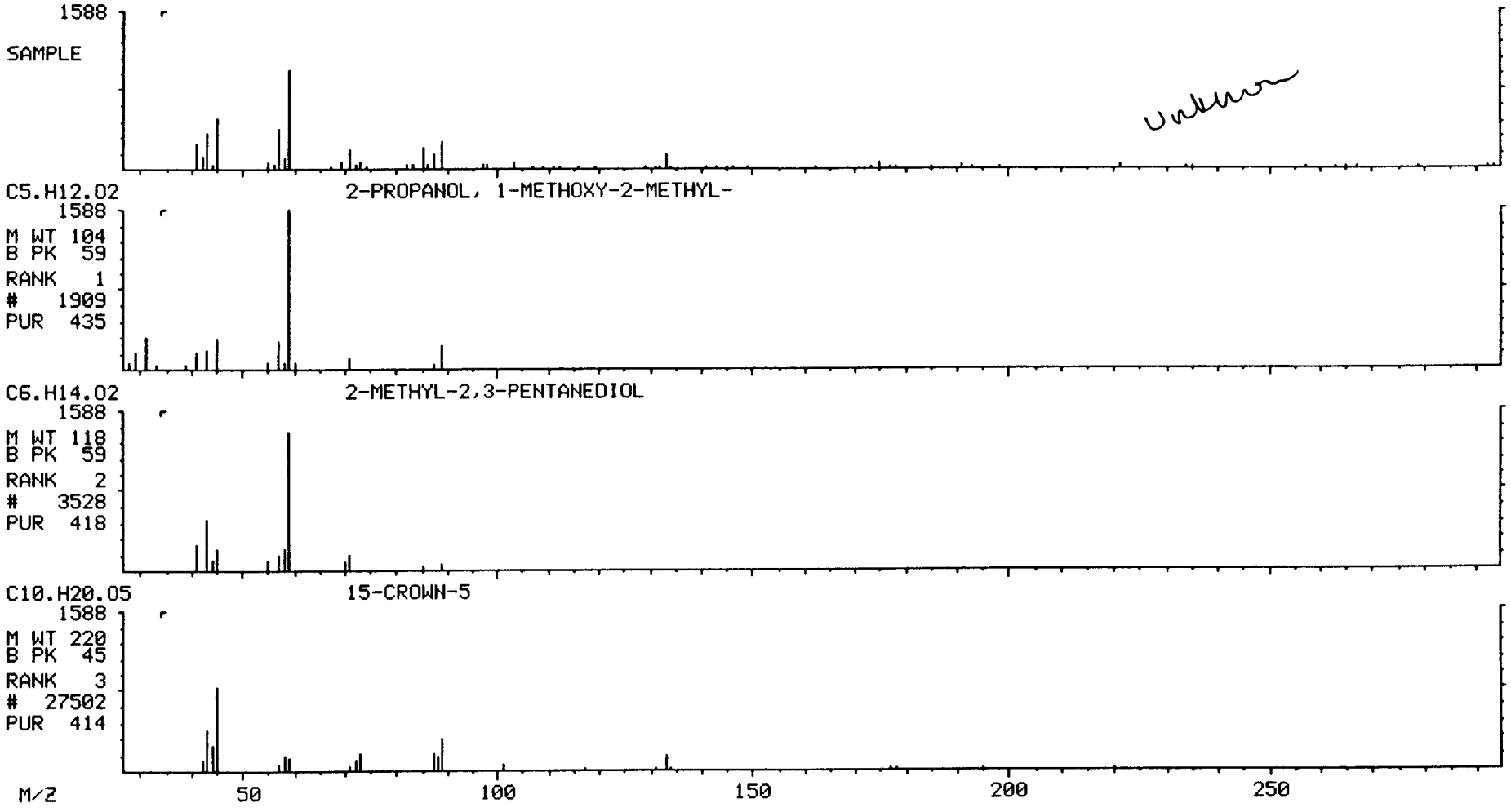
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C5.H12.O2	104	59	435	910	447
2	C6.H14.O2	118	59	418	848	435
3	C10.H20.O5	220	45	414	719	462
4	C7.H16.O2	132	57	400	777	441
5	C7.H16.O2	132	59	400	892	425
6	C14.H30.O6	294	45	393	727	445
7	C6.H14.O	102	59	391	858	397
8	C7.H14.O3	146	59	390	826	401
9	C11.H24.O6	252	45	388	840	424

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	___	___	___	___	3587-64-2
2	___	___	___	___	7795-80-4
3	___	___	___	___	33100-27-5
4	___	___	___	___	23436-19-3
5	___	___	___	___	- -
6	___	___	___	___	1786-94-3
7	___	___	___	___	590-36-3
8	___	___	___	___	54063-18-2
9	___	___	___	___	23778-52-1

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:30:00 + 21:29
SAMPLE: T-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068104 #1932
CALI: 30068104 # 3

BASE M/Z: 59
RIC: 7480.



S
C 1

Library Search Data: 30068104 #2012 Base m/z: 57
08/31/98 20:30:00 + 22:23 Cali: 30068104 # 3 RIC: 11760.
Sample: T-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
818 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	39515	9-EICOSENE, (E)-
2	39516	5-EICOSENE, (E)-
3	26416	4-TETRADECANOL
4	34410	3-OCTADECENE, (E)-
5	34418	9-OCTADECENE, (E)-
6	37062	1-NONADECENE
7	37049	2-OCTADECENAL
8	34411	5-OCTADECENE, (E)-
9	31653	1-HEPTADECENE

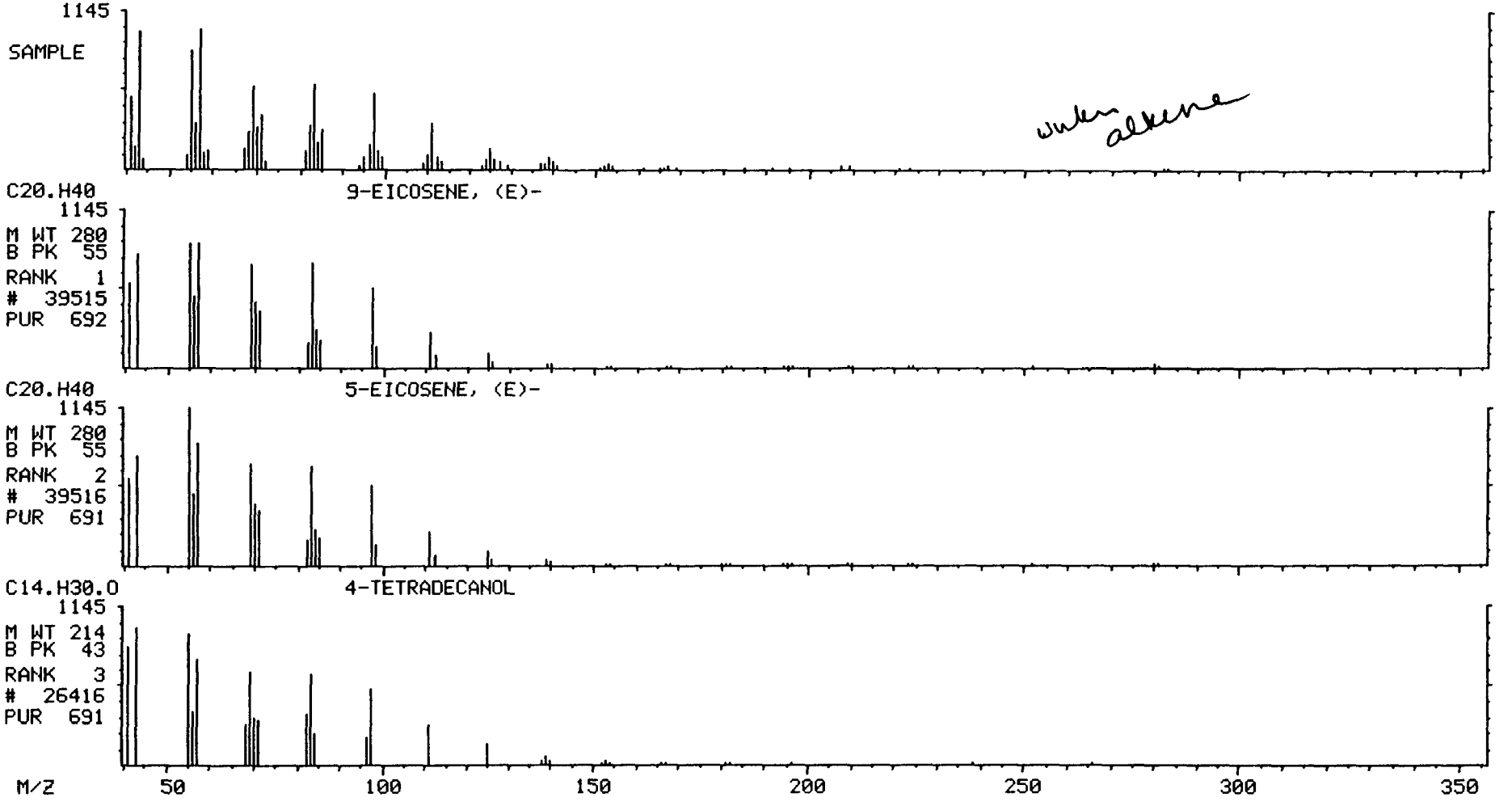
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C20.H40	280	55	692	945	708
2	C20.H40	280	55	691	943	708
3	C14.H30.O	214	43	691	973	701
4	C18.H36	252	69	690	941	707
5	C18.H36	252	55	689	939	704
6	C19.H38	266	97	687	943	710
7	C18.H34.O	266	43	687	909	731
8	C18.H36	252	55	687	937	704
9	C17.H34	238	55	685	945	700

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	74685-29-3
2	—	—	—	—	74685-30-6
3	—	—	—	—	1653-33-4
4	—	—	—	—	7206-19-1
5	—	—	—	—	7206-25-9
6	—	—	—	—	18435-45-5
7	—	—	—	—	56554-96-2
8	—	—	—	—	7206-21-5
9	—	—	—	—	6765-39-5

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:30:00 + 22:23
SAMPLE: T-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068104 #2012
CALI: 30068104 # 3

BASE M/Z: 57
RIC: 11760.



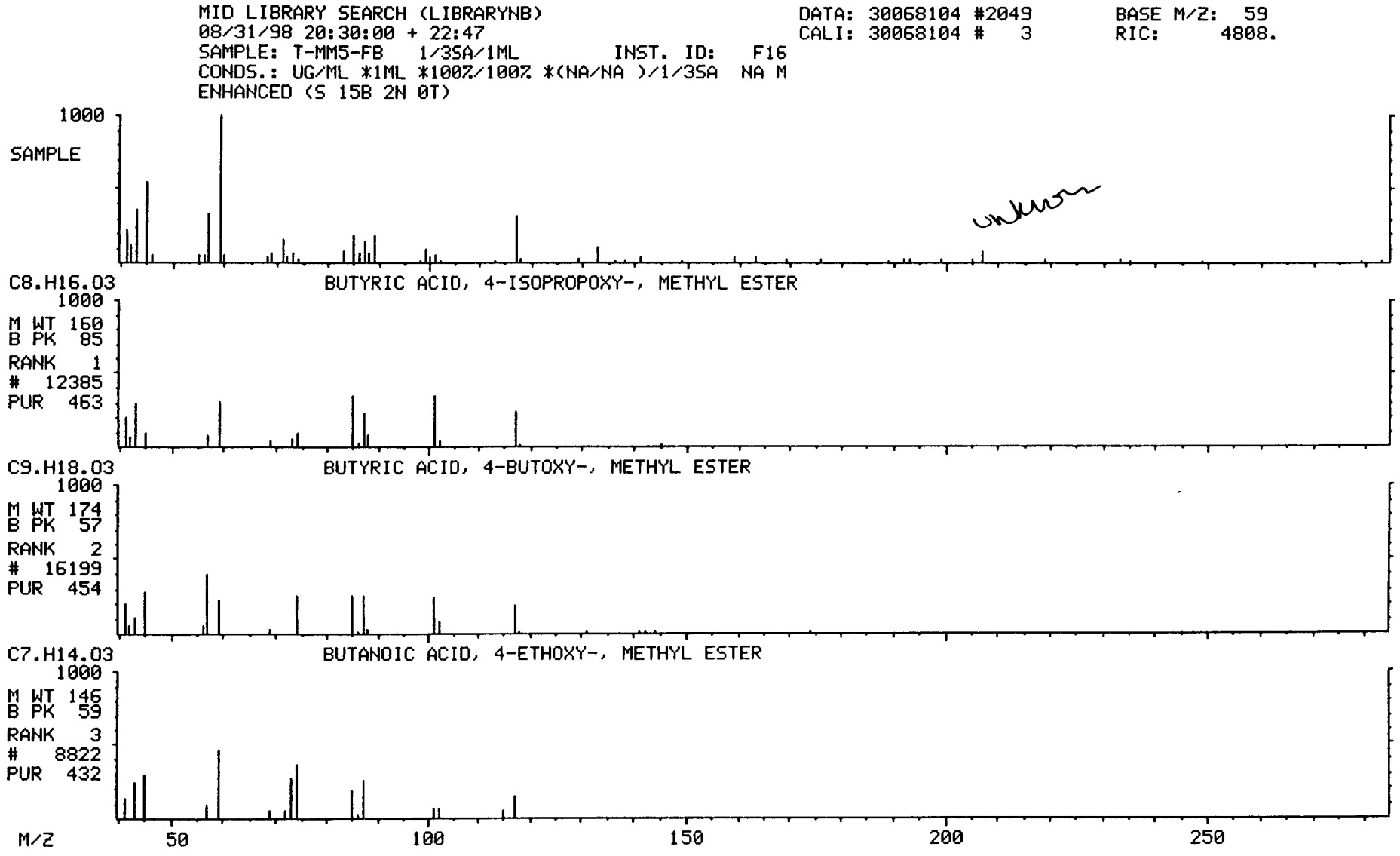
Library Search Data: 30068104 #2049 Base m/z: 59
08/31/98 20:30:00 + 22:47 Cali: 30068104 # 3 RIC: 4808.
Sample: T-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
932 matched at least 5 of the 16 largest peaks in the unknown

Rank	In.	Name
1	12385	BUTYRIC ACID, 4-ISOPROPOXY-, METHYL ESTER
2	16199	BUTYRIC ACID, 4-BUTOXY-, METHYL ESTER
3	8822	BUTANOIC ACID, 4-ETHOXY-, METHYL ESTER
4	9227	1,3,3-TRIMETHOXYBUTANE
5	1909	2-PROPANOL, 1-METHOXY-2-METHYL-
6	8425	2-HEPTANONE, 3-HYDROXY-3-METHYL-
7	5825	2-PROPANOL, 1-(2-METHYLPROPOXY)-
8	27502	15-CROWN-5
9	1760	2-PENTANOL, 2-METHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C8.H16.O3	160	85	463	814	464
2	C9.H18.O3	174	57	454	787	464
3	C7.H14.O3	146	59	432	802	448
4	C7.H16.O3	148	45	408	712	420
5	C5.H12.O2	104	59	388	913	399
6	C8.H16.O2	144	59	382	793	385
7	C7.H16.O2	132	57	379	804	408
8	C10.H20.O5	220	45	369	643	429
9	C6.H14.O	102	59	367	877	372

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	29006-05-1
2	---	---	---	---	29006-06-2
3	---	---	---	---	29006-04-0
4	---	---	---	---	6607-66-5
5	---	---	---	---	3587-64-2
6	---	---	---	---	13757-91-0
7	---	---	---	---	23436-19-3
8	---	---	---	---	33100-27-5
9	---	---	---	---	590-36-3


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:30:00 + 22:47
SAMPLE: T-MM5-FB 1/35A/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068104 #2049
CALI: 30068104 # 3
BASE M/Z: 59
RIC: 4808.
1000
SAMPLE
unknown
C8.H16.03
BUTYRIC ACID, 4-ISOPROPOXY-, METHYL ESTER
1000
M WT 160
B PK 85
RANK 1
12385
PUR 463
C9.H18.03
BUTYRIC ACID, 4-BUTOXY-, METHYL ESTER
1000
M WT 174
B PK 57
RANK 2
16199
PUR 454
C7.H14.03
BUTANOIC ACID, 4-ETHOXY-, METHYL ESTER
1000
M WT 146
B PK 59
RANK 3
8822
PUR 432
M/Z
50
100
150
200
250

Library Search Data: 30068104 #2056 Base m/z: 59
08/31/98 20:30:00 + 22:52 Cali: 30068104 # 3 RIC: 5416.
Sample: T-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
338 matched at least 6 of the 16 largest peaks in the unknown

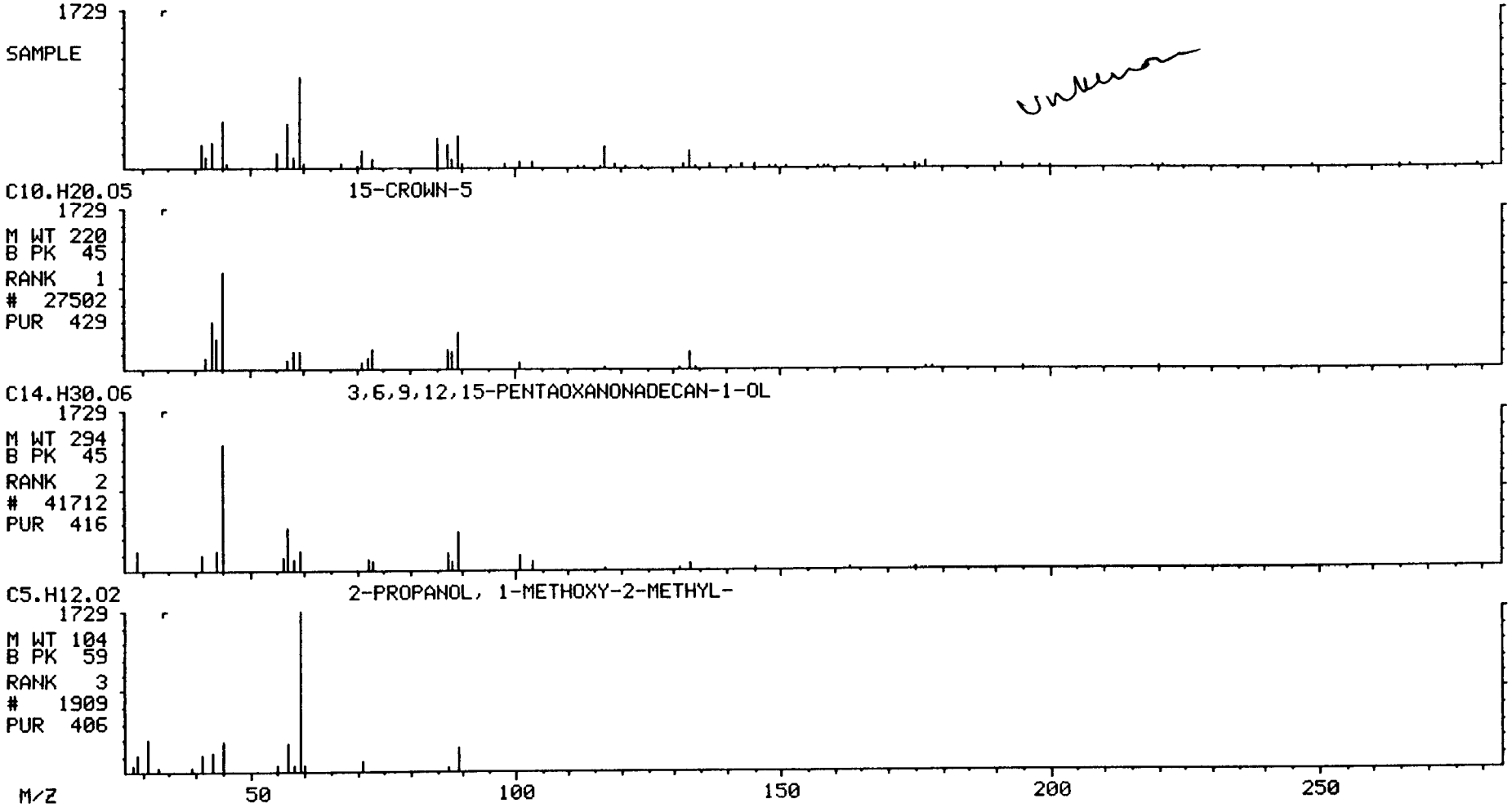
Rank	In.	Name
1	27502	15-CROWN-5
2	41712	3,6,9,12,15-PENTAOXANONADECAN-1-OL
3	1909	2-PROPANOL, 1-METHOXY-2-METHYL-
4	9227	1,3,3-TRIMETHOXYBUTANE
5	36510	1,4,7,10,13,16-HEXAOXACYCLOOCTADECANE
6	34224	2,5,8,11,14-PENTAOXAHEXADECAN-16-OL
7	12385	BUTYRIC ACID, 4-ISOPROPOXY-, METHYL ESTER
8	5825	2-PROPANOL, 1-(2-METHYLPROPOXY)-
9	3528	2-METHYL-2,3-PENTANEDIOL

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C10.H20.O5	220	45	429	717	481
2	C14.H30.O6	294	45	416	727	470
3	C5.H12.O2	104	59	406	906	410
4	C7.H16.O3	148	45	401	715	414
5	C12.H24.O6	264	45	396	725	441
6	C11.H24.O6	252	45	378	834	407
7	C8.H16.O3	160	85	377	751	416
8	C7.H16.O2	132	57	373	777	418
9	C6.H14.O2	118	59	373	812	383

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	33100-27-5
2	---	---	---	---	1786-94-3
3	---	---	---	---	3587-64-2
4	---	---	---	---	6607-66-5
5	---	---	---	---	17455-13-9
6	---	---	---	---	23778-52-1
7	---	---	---	---	29006-05-1
8	---	---	---	---	23436-19-3
9	---	---	---	---	7795-80-4

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 20:30:00 + 22:52
SAMPLE: T-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068104 #2056 BASE M/Z: 59
CALI: 30068104 # 3 RIC: 5416.



TIC SELECTION REPORT

DATA FILE: 30068104

THE FOLLOWING PEAKS WERE REJECTED BECAUSE AT LEAST 40 % OF THEIR SIZE WAS ACCOUNTED FOR BY TARGET COMPOUNDS ELUTING WITHIN 4 SCANS OF THE PEAK TOP.

SCAN	SIZE	AMOUNT
199	232884.	28.865
308	294104.	36.453
341	217648.	26.977
421	128124.	15.881
529	322720.	40.000
722	288940.	36.262
828	318724.	40.000
968	253508.	31.756
1086	319320.	40.000
1383	309316.	54.242
1383	311820.	54.681
1551	228100.	40.000
1782	194188.	40.000

TOTAL NUMBER OF UNIDENTIFIED PEAKS WITH SIZE GREATER THAN 10 % OF THE CLOSEST INTERNAL STANDARD THAT DOES NOT HAVE INTERFERENCES = 23

INTERNAL STANDARDS THAT HAVE RIC SIZE LESS THAN 50 % OR GREATER THAN 200 % OF THE ESTIMATED RIC SIZE ARE CONSIDERED TO HAVE INTERFERENCES AND WILL NOT BE USED FOR QUANTITATION.

#	INTERNAL STANDARD	RIC SIZE	PERCENT OF ESTIMATED RIC SIZE	SCAN
1	C140 NAPHTHALENE-D8	322720.	156	529
2	C150 ACENAPHTHENE-D10	318724.	130	828
3	C160 PHENANTHRENE-D10	319320.	121	1086
4	C170 CHRYSENE-D12	228100.	130	1551
5	C175 PERYLENE-D12	194188.	123	1782

* INDICATES INTERFERENCE

SIZE = AREA

Semivolatile Organics
Method 0010/8270

Client Name: Pacific Environmental Services
Client ID: T-MM5-4-F,FH,XAD,COND,BH
LAB ID: 300681-0005-SA
Matrix: AIRTRAIN Sampled: 26 JUL 98 Received: 30 JUL 98
Authorized: 30 JUL 98 Prepared: 31 JUL 98 Analyzed: 31 AUG 98

Dilution Factor: 1.0

Parameter	Wet wt. Result	Units	Reporting Limit	Qualifier
Phenol	ND	ug/Sample	30	R
bis(2-Chloroethyl)ether	ND	ug/Sample	30	
2-Chlorophenol	ND	ug/Sample	30	
1,3-Dichlorobenzene	ND	ug/Sample	30	
1,4-Dichlorobenzene	ND	ug/Sample	30	
Benzyl alcohol	ND	ug/Sample	30	
1,2-Dichlorobenzene	ND	ug/Sample	30	
2-Methylphenol	ND	ug/Sample	30	
2,2'-Oxybis(1-chloropropane)	ND	ug/Sample	30	
3/4-Methylphenol	ND	ug/Sample	30	
N-Nitroso-di-n-propylamine	ND	ug/Sample	30	
Hexachloroethane	ND	ug/Sample	30	
Nitrobenzene	ND	ug/Sample	30	
Isophorone	ND	ug/Sample	30	
2-Nitrophenol	ND	ug/Sample	30	
2,4-Dimethylphenol	ND	ug/Sample	30	
Benzoic acid	ND	ug/Sample	150	
bis(2-Chloroethoxy)-methane	ND	ug/Sample	30	
2,4-Dichlorophenol	ND	ug/Sample	30	
1,2,4-Trichlorobenzene	ND	ug/Sample	30	
Naphthalene	ND	ug/Sample	30	
4-Chloroaniline	ND	ug/Sample	30	
Hexachlorobutadiene	ND	ug/Sample	30	
4-Chloro-3-methylphenol	ND	ug/Sample	30	
2-Methylnaphthalene	ND	ug/Sample	30	
Hexachlorocyclopentadiene	ND	ug/Sample	30	
2,4,6-Trichlorophenol	ND	ug/Sample	30	
2,4,5-Trichlorophenol	ND	ug/Sample	150	
2-Chloronaphthalene	ND	ug/Sample	30	
2-Nitroaniline	ND	ug/Sample	30	
Dimethyl phthalate	ND	ug/Sample	30	
Acenaphthylene	ND	ug/Sample	30	
3-Nitroaniline	ND	ug/Sample	150	
Acenaphthene	ND	ug/Sample	30	
2,4-Dinitrophenol	ND	ug/Sample	150	
4-Nitrophenol	ND	ug/Sample	150	
Dibenzofuran	ND	ug/Sample	30	

Note R = Reporting limit(s) raised due to sample volume limitations.
ND = Not Detected

Reported By: Emily Uebelhoer Approved By: Karin Yee

The cover letter is an integral part of this report.
Rev 230787

Semivolatile Organics (cont.)
Method 0010/8270

Client Name: Pacific Environmental Services
Client ID: T-MM5-4-F,FH,XAD,COND,BH
LAB ID: 300681-0005-SA
Matrix: AIRTRAIN Sampled: 26 JUL 98 Received: 30 JUL 98
Authorized: 30 JUL 98 Prepared: 31 JUL 98 Analyzed: 31 AUG 98

Dilution Factor: 1.0

Parameter	Wet wt. Result	Units	Reporting Limit	Qualifier
2,4-Dinitrotoluene	ND	ug/Sample	30	
2,6-Dinitrotoluene	ND	ug/Sample	30	
Diethyl phthalate	ND	ug/Sample	30	
4-Chlorophenyl phenyl ether	ND	ug/Sample	30	
Fluorene	ND	ug/Sample	30	
4-Nitroaniline	ND	ug/Sample	150	
4,6-Dinitro-2-methylphenol	ND	ug/Sample	150	
N-Nitrosodiphenylamine	ND	ug/Sample	30	
4-Bromophenyl phenyl ether	ND	ug/Sample	30	
Hexachlorobenzene	ND	ug/Sample	30	
Pentachlorophenol	ND	ug/Sample	150	
Phenanthrene	ND	ug/Sample	30	
Anthracene	ND	ug/Sample	30	
Di-n-butyl phthalate	ND	ug/Sample	30	
Fluoranthene	ND	ug/Sample	30	
Pyrene	ND	ug/Sample	30	
Butyl benzyl phthalate	ND	ug/Sample	30	
3,3'-Dichlorobenzidine	ND	ug/Sample	60	
Benzo(a)anthracene	ND	ug/Sample	30	
bis(2-Ethylhexyl)-phthalate	ND	ug/Sample	30	
Chrysene	ND	ug/Sample	30	
Di-n-octyl phthalate	ND	ug/Sample	30	
Benzo(b)fluoranthene	ND	ug/Sample	30	
Benzo(k)fluoranthene	ND	ug/Sample	30	
Benzo(a)pyrene	ND	ug/Sample	30	
Indeno(1,2,3-cd)pyrene	ND	ug/Sample	30	
Dibenz(a,h)anthracene	ND	ug/Sample	30	
Benzo(g,h,i)perylene	ND	ug/Sample	30	
Acetophenone	ND	ug/Sample	30	
4-Aminobiphenyl	ND	ug/Sample	150	
Aniline	ND	ug/Sample	30	
Benzidine	ND	ug/Sample	300	
3,3'-Dimethylbenzidine	ND	ug/Sample	60	
N-Nitrosodimethylamine	ND	ug/Sample	30	
N-Nitrosomorpholine	ND	ug/Sample	30	
Pentachloronitrobenzene (PCNB)	ND	ug/Sample	150	
o-Toluidine	ND	ug/Sample	60	

ND = Not Detected

Reported By: Emily Uebelhoer Approved By: Karin Yee

The cover letter is an integral part of this report.
Rev 230787

Client Name: Pacific Environmental Services
Client ID: T-MM5-4-F,FH,XAD,COND,BH
LAB ID: 300681-0005-SA
Matrix: AIRTRAIN Sampled: 26 JUL 98 Received: 30 JUL 98
Authorized: 30 JUL 98 Prepared: 31 JUL 98 Analyzed: 31 AUG 98

Dilution Factor: 1.0

Parameter	Wet wt. Result	Units	Reporting Limit	Qualifier
2-Methoxybenzenamine	ND	ug/Sample	--	K
Biphenyl	ND	ug/Sample	--	K
Chloroacetophenone	ND	ug/Sample	--	K
Cumene	ND	ug/Sample	--	K
DBCP (1,2-Dibromo-3-chloropropane)	ND	ug/Sample	--	K
Benzo(e)pyrene	ND	ug/Sample	--	K
N-N-Diethylaniline	ND	ug/Sample	--	K
Dimethylaniline	ND	ug/Sample	--	K
3,3'-Dimethoxybenzidine	ND	ug/Sample	--	K
Hydroquinone	ND	ug/Sample	--	K
4,4'-Methyl-bis(2-chloroaniline)	ND	ug/Sample	--	K
4-Nitrodiphenyl	ND	ug/Sample	--	K
Trifluralin	ND	ug/Sample	--	K

Surrogate	Recovery	Acceptable Range
Nitrobenzene-d5	62 %	45 - 107
2-Fluorobiphenyl	86 %	62 - 110
Terphenyl-d14	110 %	58 - 135
Phenol-d5	61 %	43 - 130
2-Fluorophenol	54 %	36 - 111
2,4,6-Tribromophenol	65 %	58 - 131

Note K = Identified by mass spectrum only; quantitation based on 1:1 response with internal standard.
ND = Not Detected

Reported By: Emily Uebelhoer Approved By: Karin Yee

The cover letter is an integral part of this report.
Rev 230787

Semivolatiles Library Search (20 Compound TID)
Method 8270

Client Name: Pacific Environmental Services
Client ID: T-MM5-4-F,FH,XAD,COND,BH
LAB ID: 300681-0005-SA
Matrix: AIRTRAIN Sampled: 26 JUL 98 Received: 30 JUL 98
Authorized: 30 JUL 98 Prepared: NA Analyzed: 31 AUG 98

Dilution Factor: 1.0

Parameter	Result	Units	Reporting Limit	Qualifier
Benzaldehyde	43	ug/Sample	--	0
Pentadecane	61	ug/Sample	--	0
Nonadecane	66	ug/Sample	--	0
Heptadecane, 2,6-dimethyl-	41	ug/Sample	--	0
Heptadecane, 2,6-dimethyl-	120	ug/Sample	--	0
Nonadecane	45	ug/Sample	--	0
Nonadecane	36	ug/Sample	--	0
Unknown	36	ug/Sample	--	
Unknown	97	ug/Sample	--	
Unknown	40	ug/Sample	--	
Tricosane	37	ug/Sample	--	0
4-Hydroxy-4-methyl-2-pentanone	320	ug/Sample	--	0
Unknown	63	ug/Sample	--	
Unknown	58	ug/Sample	--	
5-Eiconsene,(E) -	120	ug/Sample	--	0
Unknown	42	ug/Sample	--	
n-Nonane	350	ug/Sample	--	0
Unknown	63	ug/Sample	--	
3-Octadecene, (E)-	38	ug/Sample	--	0
Unknown	47	ug/Sample	--	

Note 0 = Or structurally similar compound (isomer).
NA = Not Applicable

Reported By: Emily Uebelhoer Approved By: Karin Yee

The cover letter is an integral part of this report.
Rev 230787

QUANTERRA GC/MS
Target Compound Data Summary Sheet

Data File: 30068105
Std Id: ST16980831

Sample: T-MM5-4 1/3SA/1ML INST. ID: F16
Client: PACIFI Date Analyzed: 08/31/98 21:00
Analyst: DAT Instrument ID: F16 Run Factor: 3.00
Quan List Threshold: 0.95 Surrogate Vol.: 1.00

Surrogate Spike Recoveries
8270-G, LIMS 10/10/96

Surrogate	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC limits
CS20 NITROBENZENE-D5	50.00	31.20	62.4	45 107
CS25 2-FLUOROBIPHENY	50.00	43.00	86.0	62 110
CS30 TERPHENYL-D14	50.00	55.00	110.	58 135
CS45 PHENOL-D5	100.0	61.10	61.1	43 130
CS50 2-FLUOROPHENOL	100.0	53.90	53.9	36 111
CS55 2,4,6-TRIBROMOP	100.0	65.00	65.0	58 131

Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
HEXACHLOROBENZENE-C13		ND	UG/A	30.0
C310 N-NITROSODIMETHYLAMINE		ND	UG/A	30.0
PYRIDINE		ND	UG/A	60.0
2-PICOLINE		ND	UG/A	30.0
N-NITROSOMETHYLETHYLAMINE	153	~~30~~ ND	UG/A	30.0
METHYLMETHANESULFONATE		ND	UG/A	30.0
N-NITROSODIETHYLAMINE		ND	UG/A	30.0
ETHYLMETHANE SULFONATE		ND	UG/A	30.0
PENTACHLOROETHANE		ND	UG/A	30.0
C320 ANILINE		ND	UG/A	30.0
C315 PHENOL		ND	UG/A	30.0
C325 BIS(2-CHLOROETHYL)ETHER		ND	UG/A	30.0
C330 2-CHLOROPHENOL		ND	UG/A	30.0
C335 1,3-DICHLOROBENZENE		ND	UG/A	30.0
C340 1,4-DICHLOROBENZENE		ND	UG/A	30.0
C345 BENZYL ALCOHOL		ND	UG/A	30.0
C350 1,2-DICHLOROBENZENE		ND	UG/A	30.0
C355 2-METHYLPHENOL		ND	UG/A	30.0
C360 2,2'-OXYBIS(1-CLPROPAN)		ND	UG/A	30.0
C361 ACETOPHENONE		ND	UG/A	30.0
N-NITROSOPYRROLIDINE		ND	UG/A	30.0
N-NITROSOMORPHOLINE		ND	UG/A	30.0
3-METHYL PHENOL		ND	UG/A	30.0
C365 4-METHYLPHENOL		ND	UG/A	30.0
C370 N-NITROSO-DI-N-PROPYLAM		ND	UG/A	30.0
O-TOLUIDINE		ND	UG/A	30.0
C375 HEXACHLOROETHANE		ND	UG/A	30.0
C410 NITROBENZENE		ND	UG/A	30.0
N-NITROSOPIPERIDINE		ND	UG/A	30.0

Q 9/12/98

Reviewed by: 9/9/17/98

QUANTERRA GC/MS

Target Compound Data Summary Sheet

Data File: 30068105
Std Id: ST16980831

Sample: T-MM5-4 1/3SA/1ML INST. ID: F16
Client: PACIFI Date Analyzed: 08/31/98 21:00
Analyst: DAT Instrument ID: F16 Run Factor: 3.00
Quan List Threshold: 0.95 Surrogate Vol.: 1.00

Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
C415 ISOPHORONE		ND	UG/A	30.0
C420 2-NITROPHENOL		ND	UG/A	30.0
C425 2,4-DIMETHYLPHENOL		ND	UG/A	30.0
C435 BIS(2-CHLOROETHOXY)METH		ND	UG/A	30.0
C440 2,4-DICHLOROPHENOL		ND	UG/A	30.0
C430 BENZOIC ACID		ND	UG/A	150.0
AA-DIMETHYLPHENETHYLAMINE		ND	UG/A	30.0
C445 1,2,4-TRICHLOROBENZENE		ND	UG/A	30.0
C450 NAPHTHALENE		ND	UG/A	30.0
C455 4-CHLOROANALINE		ND	UG/A	30.0
2,6-DICHLOROPHENOL		ND	UG/A	30.0
HEXACHLOROPROPENE		ND	UG/A	30.0
C460 HEXACHLOROBUTADIENE		ND	UG/A	30.0
P-PHENYLENE DIAMINE		ND	UG/A	30.0
N-NITROSODI-N-BUTYLAMINE		ND	UG/A	30.0
C465 4-CHLORO-3-METHYLPHENO		ND	UG/A	30.0
SAFROLE		ND	UG/A	30.0
C470 2-METHYLNAPHTHALENE		ND	UG/A	30.0
1,2,4,5-TETRACHLOROBENZENE		ND	UG/A	30.0
ISOSAFROLE (#1)		ND	UG/A	60.0
C510 HEXACHLOROCYCLOPENTADI		ND	UG/A	30.0
C515 2,4,6-TRICHLOROPHENOL		ND	UG/A	30.0
C520 2,4,5-TRICHLOROPHENOL		ND	UG/A	30.0
ISOSAFROLE (#2)		ND	UG/A	60.0
C525 2-CHLORONAPHTHALENE		ND	UG/A	30.0
1-CHLORONAPHTHALENE		ND	UG/A	15.0
C530 2-NITROANALINE		ND	UG/A	150.0
1,4-NAPHTHOQUINONE		ND	UG/A	30.0
C535 DIMETHYLPHTHALATE		ND	UG/A	30.0
1,3-DINITROBENZENE		ND	UG/A	30.0
C540 ACENAPHTHYLENE		ND	UG/A	30.0
C543 2,6-DINITROTOLUENE		ND	UG/A	30.0
C545 3-NITROANILINE		ND	UG/A	150.0
C550 ACENAPHTHENE		ND	UG/A	30.0
C555 2,4-DINITROPHENOL		ND	UG/A	150.0
C565 DIBENZOFURAN		ND	UG/A	30.0
C560 4-NITROPHENOL		ND	UG/A	150.0
PENTACHLOROBENZENE		ND	UG/A	30.0
C570 2,4-DINITROTOLUENE		ND	UG/A	30.0
1-NAPHTHYLAMINE		ND	UG/A	30.0
2-NAPHTHYLAMINE		ND	UG/A	30.0
2,3,4,6-TETRACHLOROPHENOL		ND	UG/A	60.0
C580 DIETHYLPHTHALATE		ND	UG/A	30.0
C590 FLUORENE		ND	UG/A	30.0

QUANTERRA GC/MS
Target Compound Data Summary Sheet

Data File: 30068105
Std Id: ST16980831

Sample: T-MM5-4 1/3SA/1ML INST. ID: F16
Client: PACIFI Date Analyzed: 08/31/98 21:00
Analyst: DAT Instrument ID: F16 Run Factor: 3.00
Quan List Threshold: 0.95 Surrogate Vol.: 1.00

Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
C585 4-CHLOROPHENYL-PHENYLE		ND	UG/A	30.0
5-NITRO-O-TOLUIDINE		ND	UG/A	30.0
C595 4-NITROANALINE		ND	UG/A	150.0
C610 4,6-DINITRO-2-METHYLPH		ND	UG/A	150.0
C615 N-NITROSODIPHENYLAMINE		ND	UG/A	30.0
C620 AZOBENZENE		ND	UG/A	30.0
SYM-TRINITROBENZENE		ND	UG/A	30.0
C625 4-BROMOPHENYL-PHENYLET		ND	UG/A	30.0
PHENACETIN		ND	UG/A	30.0
DIALLATE	234	ND	UG/A	30.0
C630 HEXACHLOROBENZENE		ND	UG/A	30.0
4-AMINOBIPHENYL		ND	UG/A	30.0
C635 PENTACHLOROPHENOL		ND	UG/A	150.0
PRONAMIDE		ND	UG/A	30.0
PENTACHLORONITROBENZENE		ND	UG/A	150.0
C640 PHENANTHRENE		ND	UG/A	30.0
C645 ANTHRACENE		ND	UG/A	30.0
2SECBUTYL-4,6-DINITROPHENOL		ND	UG/A	30.0
C647 CARBAZOLE		ND	UG/A	30.0
C650 DI-N-BUTYLPHTHALATE		ND	UG/A	30.0
4-NITROQUINOLINE-1-OXIDE		ND	UG/A	30.0
METHAPYRILENE		ND	UG/A	30.0
ISODRIN		ND	UG/A	30.0
C655 FLUORANTHENE		ND	UG/A	30.0
CHLOROBENZILATE		ND	UG/A	30.0
C710 BENZIDINE		ND	UG/A	300.0
C715 PYRENE		ND	UG/A	30.0
ARAMITE (#1)		ND	UG/A	30.0
ARAMITE (#2)		ND	UG/A	30.0
P-DIMETHYLAMINOAZOBENZENE		ND	UG/A	30.0
3,3'-DIMETHYLBENZIDINE		ND	UG/A	30.0
KEPONE		ND	UG/A	150.0
C720 BUTYLBENZYLPHTHALATE		ND	UG/A	30.0
2-ACETYLAMINOFLUORENE		ND	UG/A	30.0
C730 BENZO(A)ANTHRACENE		ND	UG/A	30.0
C725 3,3'-DICHLOROBENZIDINE		ND	UG/A	60.0
C740 CHRYSENE		ND	UG/A	30.0
C745 BIS(2-ETHYLHEXYL)PHTHA		ND	UG/A	30.0
3-METHYLCHOLANTHRENE		ND	UG/A	30.0
C760 DI-N-OCTYL PHTHALATE		ND	UG/A	30.0
C765 BENZO(B)FLUORANTHENE		ND	UG/A	30.0
7,12-DIMETHYLBENZANTHRACENE		ND	UG/A	30.0
C770 BENZO(K)FLUORANTHENE		ND	UG/A	30.0
HEXACHLOROPHENE		ND	UG/A	30.0

QUANTERRA GC/MS

Target Compound Data Summary Sheet

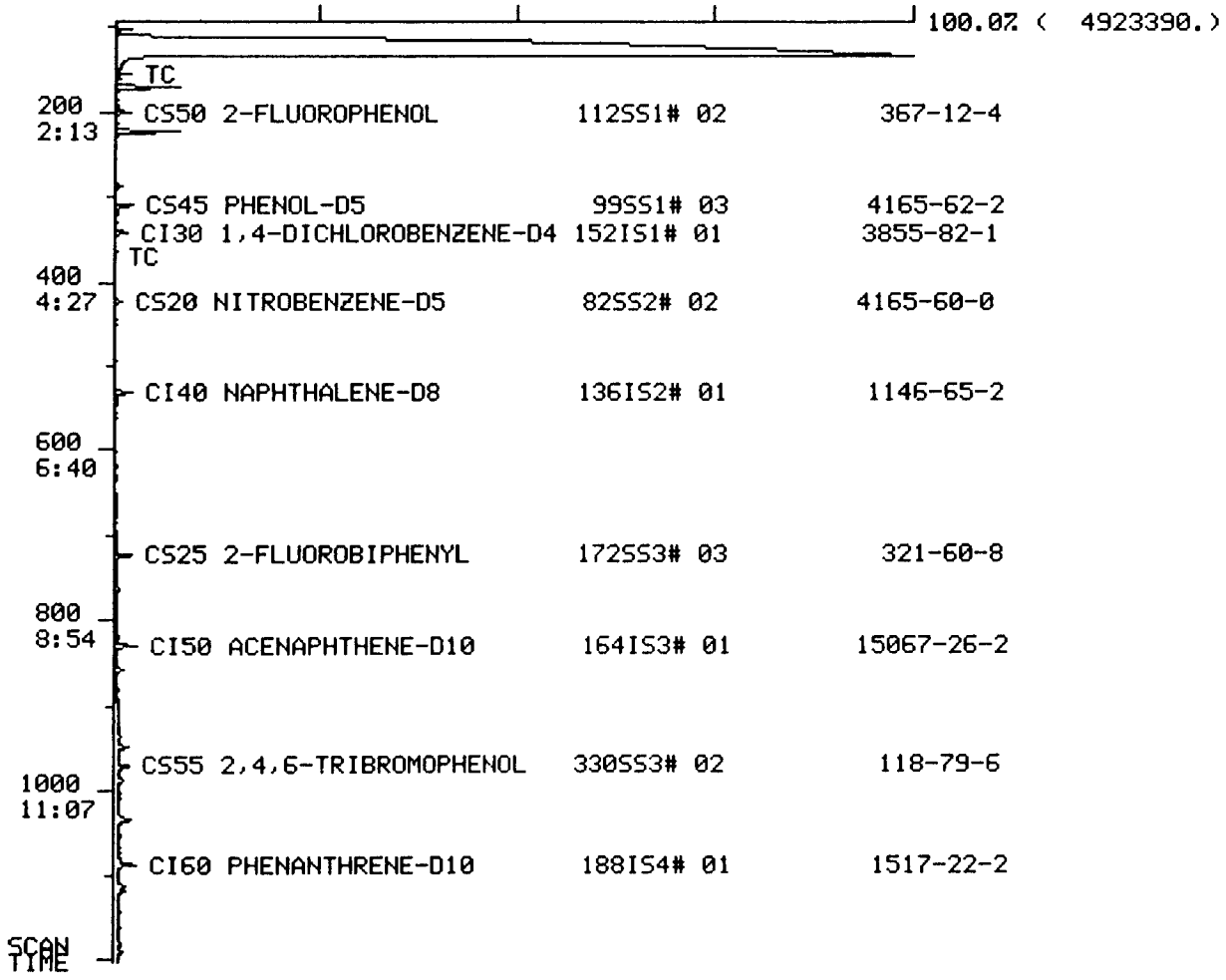
Data File: 30068105
Std Id: ST16980831

Sample: T-MM5-4 1/3SA/1ML INST. ID: F16
Client: PACIFI Date Analyzed: 08/31/98 21:00
Analyst: DAT Instrument ID: F16 Run Factor: 3.00
Quan List Threshold: 0.95 Surrogate Vol.: 1.00

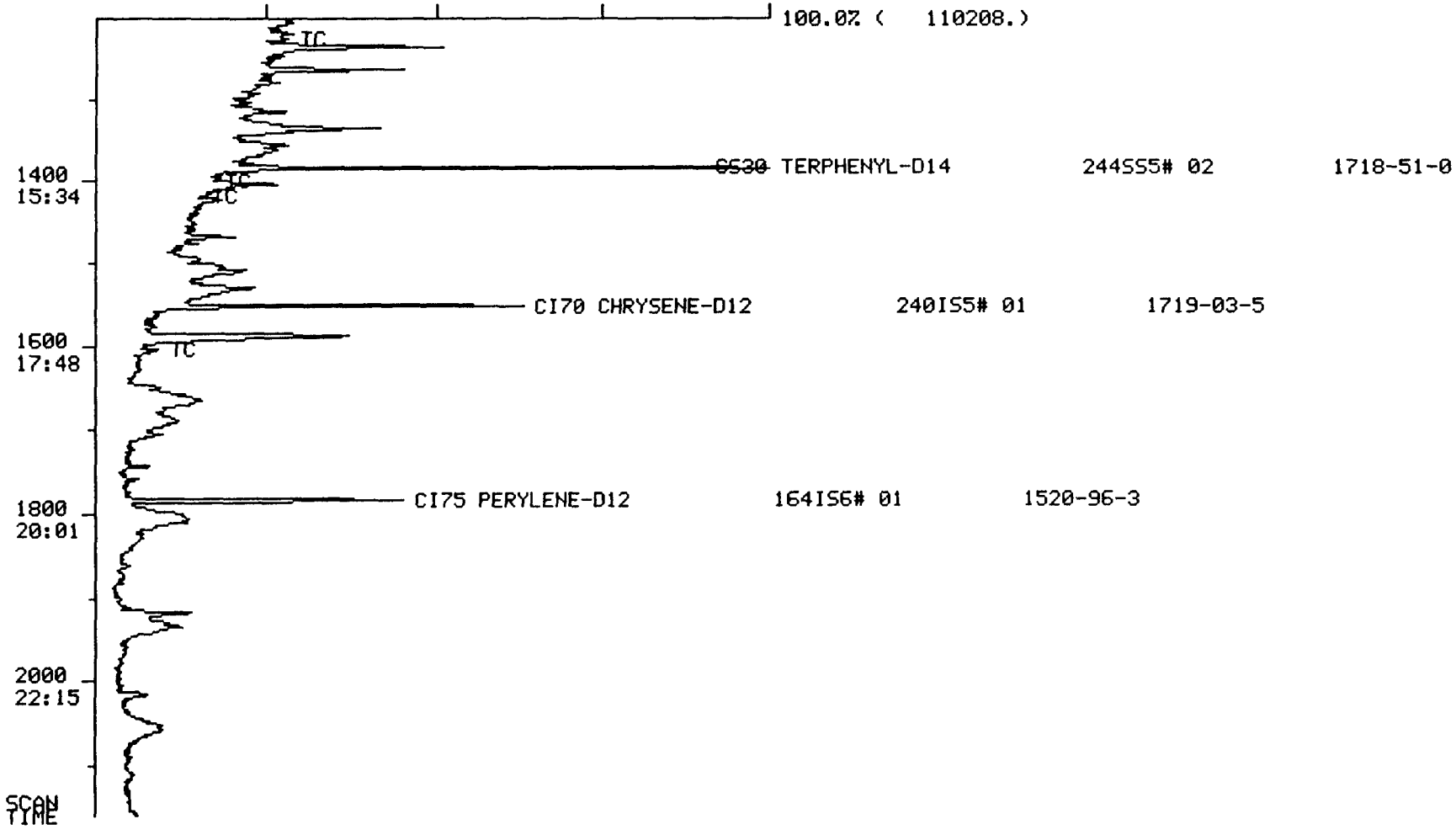
Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
C775 BENZO(A)PYRENE		ND	UG/A	30.0
C780 INDENO(1,2,3-CD)PYRENE		ND	UG/A	30.0
C785 DIBENZ(A,H)ANTHRACENE		ND	UG/A	30.0
C790 BENZO(G,H,I)PERYLENE		ND	UG/A	30.0

DATA FROM FILE: 30068105 SCANS 93 TO 1203 ACQUIRED: 08/31/98 21:00:00
CALI: 30068105 #3
SAMPLE: T-MM5-4 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M



DATA FROM FILE: 30068105 SCANS 1203 TO 2158 ACQUIRED: 08/31/98 21:00:00
CALI: 30068105 #3
SAMPLE: T-MM5-4 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M



SEE

STANDARD USED FOR THIS REPORT IS ST16980831 REPORT PRINTED: 9/01/98 17:44:30

ADDITIONAL STANDARD USED FOR THIS REPORT IS: ST16980831A

QUANTERRA QUANTITATION SUMMARY File: 30068105

Sample: T-MM5-4 1/3SA/1ML INST. ID: F16
Analyst: DAT Instrument Id: F16 Analyzed: 08/31/98 21:00

Compounds with amounts less than 0.20 reported as NOT FOUND

No	Library Entry	Name	Mass	Meth	Scan	Ref	Area	RRF(L)	Units: UG/ML Amount
1	S1# 1	C130 1,4-DICHLOROBENZENE	152	A BB	340	1	35775.	1.000	40.000
2	S2# 1	C140 NAPHTHALENE-D8	136	A BB	529	2	135276.	1.000	40.000
3	S3# 1	C150 ACENAPHTHENE-D10	164	A BB	828	3	72725.	1.000	40.000
4	S4# 1	C160 PHENANTHRENE-D10	188	A BB	1086	4	117535.	1.000	40.000
5	S5# 1	C170 CHRYSENE-D12	240	A BB	1551	5	55639.	1.000	40.000
6	S6# 1	C175 PERYLENE-D12	264	A BB	1782	6	42978.	1.000	40.000
7	S2# 2	CS20 NITROBENZENE-D5	82	A BB	421	2	49476.	0.470	31.156
8	S3# 3	CS25 2-FLUOROBIPHENYL	172	A BB	722	3	96577.	1.234	43.036
9	S5# 2	CS30 TERPHENYL-D14	244	A BB	1383	5	76073.	0.995	54.953
10	S1# 3	CS45 PHENOL-D5	99	A BB	308	1	110653.	2.025	61.081
11	S1# 2	CS50 2-FLUOROPHENOL	112	A BB	198	1	65971.	1.368	53.910
12	S3# 2	CS55 2,4,6-TRIBROMOPHENO	330	A BV	968	3	27845.	0.236	64.989
13	S4# 4	HEXACHLOROBENZENE-C13	294		4	NOT FOUND			
14	S1# 15	C310 N-NITROSODIMETHYLAM	74		1	NOT FOUND			
15	S1# 20	PYRIDINE	79		1	NOT FOUND			
16	S1# 30	2-PICOLINE	93		1	NOT FOUND			
17	S1# 40	N-NITROSOMETHYLETHYLAMIN	42	A BV	153	1	7174.	0.811	9.890
18	S1# 60	METHYLMETHANESULFONATE	80		1	NOT FOUND			
19	S1# 70	N-NITROSODIETHYLAMINE	102	A BB	212	1	332.	0.521	0.712
20	S1# 85	ETHYLMETHANE SULFONATE	79	A BB	253	1	338.	1.108	0.341
21	S1# 95	PENTACHLOROETHANE	117		1	NOT FOUND			
22	S1#100	C320 ANILINE	93	A BB	301	1	408.	1.846	0.247
23	S1#105	C315 PHENOL	94	A BV	309	1	1292.	1.968	0.734
24	S1#110	C325 BIS(2-CHLOROETHYL)E	93		1	NOT FOUND			
25	S1#115	C330 2-CHLOROPHENOL	128		1	NOT FOUND			
26	S1#125	C335 1,3-DICHLOROBENZENE	146		1	NOT FOUND			
27	S1#130	C340 1,4-DICHLOROBENZENE	146	A BB	342	1	812.	1.617	0.561
28	S1#145	C345 BENZYL ALCOHOL	108	A BB	370	1	4056.	0.854	5.308
29	S1#150	C350 1,2-DICHLOROBENZENE	146		1	NOT FOUND			
30	S1#160	C355 2-METHYLPHENOL	108		1	NOT FOUND			
31	S1#165	C360 2,2'-OXYBIS(1-CLPRO	45		1	NOT FOUND			
32	S1#170	C361 ACETOPHENONE	105	A BB	400	1	1325.	1.934	0.766
33	S1#175	N-NITROSOPYRROLIDINE	100		1	NOT FOUND			
34	S1#180	N-NITROSOMORPHOLINE	56		1	NOT FOUND			
35	S1#182	3-METHYL PHENOL	108	A BB	422	1	825.	2.252	0.410
36	S1#185	C365 4-METHYLPHENOL	108		1	NOT FOUND			
37	S1#190	C370 N-NITROSO-DI-N-PROP	70		1	NOT FOUND			
38	S1#195	O-TOLUIDINE	106		1	NOT FOUND			
39	S1#200	C375 HEXACHLOROETHANE	117		1	NOT FOUND			
40	S2# 10	C410 NITROBENZENE	77		2	NOT FOUND			
41	S2# 15	N-NITROSOPIPERIDINE	42	A BB	449	2	348.	0.320	0.321
42	S2# 20	C415 ISOPHORONE	82		2	NOT FOUND			
43	S2# 25	C420 2-NITROPHENOL	139		2	NOT FOUND			
44	S2# 30	C425 2,4-DIMETHYLPHENOL	107		2	NOT FOUND			
45	S2# 35	C435 BIS(2-CHLOROETHOXY)	93		2	NOT FOUND			

46	S2#	40	C440	2,4-DICHLOROPHENOL	162	2	NOT FOUND
47	S2#	45	C430	BENZOIC ACID	122	2	NOT FOUND
48	S2#	50	AA-DIMETHYLPHENETHYLAMIN		58	2	NOT FOUND
49	S2#	55	C445	1,2,4-TRICHLOROBENZ	180	2	NOT FOUND

50	S2# 60	C450 NAPHTHALENE	128	A	BB	532	2	2438.	1.022	0.705	
51	S2# 80	C455 4-CHLOROANALINE	127			2	NOT FOUND				
52	S2# 85	2,6-DICHLOROPHENOL	162			2	NOT FOUND				
53	S2# 90	HEXACHLOROPROPENE	213			2	NOT FOUND				
54	S2# 95	C460 HEXACHLOROBUTADIENE	225			2	NOT FOUND				
55	S2#115	P-PHENYLENE DIAMINE	108			2	NOT FOUND				
56	S2#120	N-NITROSODI-N-BUTYLAMINE	84			2	NOT FOUND				
57	S2#130	C465 4-CHLORO-3-METHYLPH	107	A	BB	649	2	496.	0.338	0.434	
58	S2#140	SAFROLE	162			2	NOT FOUND				
59	S2#145	C470 2-METHYLNAPHTHALENE	142	A	BB	651	2	2124.	0.751	0.836	
60	S3# 10	1,2,4,5-TETRACHLOROBENZE	214			3	NOT FOUND				
61	S3# 15	ISOSAFROLE (#1)	162			3	NOT FOUND				
62	S3# 20	C510 HEXACHLOROCYCLOPENT	237			3	NOT FOUND				
63	S3# 25	C515 2,4,6-TRICHLOROPHEN	196			3	NOT FOUND				
64	S3# 30	C520 2,4,5-TRICHLOROPHEN	196			3	NOT FOUND				
65	S3# 35	ISOSAFROLE (#2)	104			3	NOT FOUND				
66	S3# 40	C525 2-CHLORONAPHTHALENE	162			3	NOT FOUND				
67	S3# 42	1-CHLORONAPHTHALEN	162			3	NOT FOUND				
68	S3# 45	C530 2-NITROANALINE	65			3	NOT FOUND				
69	S3# 50	1,4-NAPHTHOQUINONE	158			3	NOT FOUND				
70	S3# 55	C535 DIMETHYLPHTHALATE	163	A	BB	804	3	549.	1.341	0.225	
71	S3# 60	1,3-DINITROBENZENE	168			3	NOT FOUND				
72	S3# 65	C540 ACENAPHTHYLENE	152			3	NOT FOUND				
73	S3# 70	C543 2,6-DINITROTOLUENE	165			3	NOT FOUND				
74	S3# 75	C545 3-NITROANILINE	138			3	NOT FOUND				
75	S3# 80	C550 ACENAPHTHENE	153			3	NOT FOUND				
76	S3# 85	C555 2,4-DINITROPHENOL	184			3	NOT FOUND				
77	S3# 90	C565 DIBENZOFURAN	168			3	NOT FOUND				
78	S3# 95	C560 4-NITROPHENOL	109			3	NOT FOUND				
79	S3#100	PENTACHLOROBENZENE	250			3	NOT FOUND				
80	S3#105	C570 2,4-DINITROTOLUENE	165			3	NOT FOUND				
81	S3#110	1-NAPHTHYLAMINE	143			3	NOT FOUND				
82	S3#115	2-NAPHTHYLAMINE	143			3	NOT FOUND				
83	S3#120	2,3,4,6-TETRACHLOROPHENO	232			3	NOT FOUND				
84	S3#130	C580 DIETHYLPHTHALATE	149			3	NOT FOUND				
85	S3#135	C590 FLUORENE	166	A	BB	925	3	880.	1.298	0.373	
86	S3#140	C585 4-CHLOROPHENYL-PHEN	204			3	NOT FOUND				
87	S3#145	5-NITRO-O-TOLUIDINE	152	A	VB	940	3	425.	0.356	0.658	
88	S3#150	C595 4-NITROANALINE	138			3	NOT FOUND				
89	S4# 10	C610 4,6-DINITRO-2-METHY	198			4	NOT FOUND				
90	S4# 15	C615 N-NITROSODIPHENYLAM	169	A	BB	956	4	479.	0.551	0.296	
91	S4# 20	C620 AZOBENZENE	77			4	NOT FOUND				
92	S4# 25	SYM-TRINITROBENZENE	75	A	VV	1023	4	404.	0.162	0.851	
93	S4# 30	C625 4-BROMOPHENYL-PHENY	248			4	NOT FOUND				
94	S4# 35	PHENACETIN	108			4	NOT FOUND				
95	S4# 37	DIALLATE	234			4	NOT FOUND				
96	S4# 40	C630 HEXACHLOROBENZENE	284			4	NOT FOUND				
97	S4# 45	4-AMINOBIPHENYL	169			4	NOT FOUND				
98	S4# 50	C635 PENTACHLOROPHENOL	266			4	NOT FOUND				
99	S4# 55	PRONAMIDE	173			4	NOT FOUND				
00	S4# 60	PENTACHLORONITROBENZENE	237			4	NOT FOUND				
01	S4# 65	C640 PHENANTHRENE	178	A	BB	1090	4	3844.	1.033	1.267	
02	S4# 70	C645 ANTHRACENE	178			4	NOT FOUND				
03	S4# 75	2SECBUTYL-4,6-DINITROPHE	211			4	NOT FOUND				
04	S4# 80	C647 CARBAZOLE	167			4	NOT FOUND				
05	S4# 85	C650 DI-N-BUTYLPHTHALATE	149	A	BB	1226	4	3511.	1.247	0.959	
06	S4#100	4-NITROQUINOLINE-1-OXIDE	190			4	NOT FOUND				
07	S4#105	METHAPYRILENE	58	A	BB	1264	4	552.	0.305	0.617	
08	S4#106	ISODRIN	193			4	NOT FOUND				
09	S4#110	C655 FLUORANTHENE	202			4	NOT FOUND				
10	S4#120	CHLOROBENZILATE	139			4	NOT FOUND				

111	S5# 10	C710 BENZIDINE	184			5	NOT FOUND				
112	S5# 15	C715 PYRENE	202	A	BB	1335	5	572.	1.323	0.311	
113	S5# 20	ARAMITE (#1)	185	A	BV	1398	5	96.	0.061	1.125	
114	S5# 25	ARAMITE (#2)	185	A	VB	1417	5	346.	0.087	2.871	
115	S5# 30	P-DIMETHYLAMINOAZOBENZEN	120			5	NOT FOUND				
116	S5# 35	3,3'-DIMETHYLBENZIDINE	212			5	NOT FOUND				
117	S5# 37	KEPONE	272			5	NOT FOUND				
118	S5# 40	C720 BUTYLBENZYLPHTHALAT	149	A	BB	1487	5	234.	0.685	0.246	
119	S5# 45	2-ACETYLAMINOFLUORENE	181			5	NOT FOUND				
120	S5# 50	C730 BENZO(A)ANTHRACENE	228	A	BB	1552	5	438.	1.125	0.280	
121	S5# 55	C725 3,3'-DICHLOROBENZID	252			5	NOT FOUND				
122	S5# 60	C740 CHRYSENE	228			5	NOT FOUND				
123	S5# 65	C745 BIS(2-ETHYLHEXYL)PH	149	A	BB	1603	5	2203.	0.980	1.616	
124	S5# 85	3-METHYLCHOLANTHRENE	268			5	NOT FOUND				
125	S6# 10	C760 DI-N-OCTYL PHTHALAT	149			6	NOT FOUND				
126	S6# 15	C765 BENZO(B)FLUORANTHEN	252			6	NOT FOUND				
127	S6# 20	7,12-DIMETHYLBENZANTHRAC	256			6	NOT FOUND				
128	S6# 25	C770 BENZO(K)FLUORANTHEN	252			6	NOT FOUND				
129	S6# 30	HEXACHLOROPHENE	196			6	NOT FOUND				
130	S6# 35	C775 BENZO(A)PYRENE	252			6	NOT FOUND				
131	S6# 55	C780 INDENO(1,2,3-CD)PYR	276			6	NOT FOUND				
132	S6# 60	C785 DIBENZ(A,H)ANTHRACE	278			6	NOT FOUND				
133	S6# 65	C790 BENZO(G,H,I)PERYLEN	276			6	NOT FOUND				

BNA, S LIBRARIES ANALYST: _____ DATE: _____

QUANTERRA Internal Standard Check

Standard Filename: ST16980831 Analyzed: 08/31/98 12:31

Standard	IS# 1 Area	%	RT	IS# 2 Area	%	RT	IS# 3 Area	%	RT
ST16980831	28649.		3.78	100432.		5.90	54347.		9.21
Upper Limit	57297.=+200		4.28	200864.=+200		6.40	108695.=+200		9.71
Lower Limit	14324.=+ 50		3.28	50216.=+ 50		5.40	27174.=+ 50		8.71
Filename									
1 30068105	35775.= 124		3.78	135276.= 134		5.88	72725.= 133		9.21

IS# 1 = CI30 1,4-DICHLOROBENZENE-D4
IS# 2 = CI40 NAPHTHALENE-D8
IS# 3 = CI50 ACENAPHTHENE-D10

* - indicates an I.S. is outside QC limit(s)

Standard	IS# 4 Area	%	RT	IS# 5 Area	%	RT	IS# 6 Area	%	RT
ST16980831	98520.		12.08	62289.		17.26	50750.		19.83
Upper Limit	197039.=+200		12.58	124578.=+200		17.76	101500.=+200		20.33
Lower Limit	49260.=+ 50		11.58	31145.=+ 50		16.76	25375.=+ 50		19.33
Filename									
1 30068105	117535.= 119		12.08	55639.= 89		17.25	42978.= 84		19.82

IS# 4 = CI60 PHENANTHRENE-D10
IS# 5 = CI70 CHRYSENE-D12
IS# 6 = CI75 PERYLENE-D12

* - indicates an I.S. is outside QC limit(s)

Data Reduced by: [illegible] Date: 9/17/98
Data Reviewed by: [illegible] Date: 9/17/98

Data File: 30068105

QUANTERRA GC/MS TIC REPORT (Part 1)

Sample: T-MM5-4 1/3SA/1ML INST. ID: F16
Analyst: DAT Date Analyzed: 08/31/98 21:00
Run Factor: 3.00

#	SCAN	Concentration in Sample (UG/A)	CAS #
1	170	320.	~~123-42-2~~ 5700
	~~2-PENTANONE, 4-HYDROXY-4-METHYL-~~		unkn
2	222	350.	111-84-2
	NONANE or Isomer		
3	285	43.	100-52-7
	BENZALDEHYDE or Isomer		
X	761	31.	629-59-4
	TETRADECANE or Isomer		
5	856	61.	629-62-9
	PENTADECANE		
6	946	66.	629-92-5
	NONADECANE		
7	986	41.	54105-67-8
	HEPTADECANE, 2,6-DIMETHYL-		
8	1032	120.	54105-67-8
	HEPTADECANE, 2,6-DIMETHYL-		
9	1113	45.	629-92-5
	NONADECANE		
10	1117	36.	629-92-5
	NONADECANE		

1190 29. 629-92-5
NONADECANE or isomer

12 1236 36. 57-10-3
~~HEXADECANOIC ACID~~ unkn. 5700

13 1334 97. 00-00-0
UNKNOWN

14 1360 40. 00-00-0
UNKNOWN

15 1402 37. 638-67-5
TRICOSANE Or isomer

16 1467 31. 00-00-0
UNKNOWN alkane 5746400

17 1508 63. 00-00-0
UNKNOWN 5700

18 1529 58. 00-00-0
UNKNOWN

19 1587 120. 74685-30-6
5-EICOSENE, (E)- or isomer

20 1662 42. 00-00-0
UNKNOWN 5700

21 1688 32. 00-00-0
UNKNOWN

22 1804 63. 00-00-0
UNKNOWN

23 1916 38. 7206-19-1
3-OCTADECENE, (E)- or Butter

24 1933 47. 00-00-0
UNKNOWN

25 2057 29. 00-00-0
UNKNOWN

DATA FILE: 30068105

QUANTERRA GC/MS TIC REPORT (Part 2)

CONCENTRATION = AREA(TIC)*CONC(IS)/AREA(IS)

#	FIT	PURITY	INT. STD.	RT	RRT	AREA	HEIGHT	AMOUNT AS ANALYZED (UG/ML)	LIB	LIB #
1	956	919	1	1:53	0.321	915820.	389859.	108.038	NB	3241.
2	986	938	1	2:28	0.420	976832.	382976.	115.236	NB	5159.
3	975	926	1	3:10	0.539	120816.	35462.	14.253	NB	2017.
4	960	762	2	8:27	0.919	86560.	25764.	10.201	NB	22530.
5	965	792	2	9:31	1.034	171391.	43553.	20.199	NB	25997.
6	963	834	2	10:31	1.143	185824.	58432.	21.900	NB	37465.
7	957	814	3	10:58	0.908	134784.	36544.	13.810	NB	37462.
8	972	850	3	11:28	0.950	391552.	70400.	40.118	NB	37462.
9	939	785	3	12:22	1.025	144896.	41984.	14.846	NB	37465.
10	941	811	3	12:25	1.029	116416.	38400.	11.928	NB	37465.
11	971	746	3	13:14	1.096	92992.	30528.	9.528	NB	37465.
12	975	682	3	13:44	1.138	118352.	27355.	12.126	NB	35182.
13	881	596	4	14:50	0.860	144384.	22400.	32.404	UK	1.
14	725	270	4	15:07	0.877	58976.	5928.	13.236	UK	1.
15	890	654	4	15:35	0.904	55232.	10688.	12.396	NB	46161.
16	891	588	4	16:19	0.946	45440.	8408.	10.198	UK	1.
17	772	423	4	16:46	0.972	93120.	9152.	20.899	UK	1.
18	913	506	4	17:00	0.986	85616.	10128.	19.214	UK	1.
19	974	771	4	17:39	1.023	177728.	31680.	39.887	NB	39516.
20	916	471	4	18:29	1.072	62400.	6960.	14.004	UK	1.
21	646	240	5	18:46	0.947	37296.	3821.	10.683	UK	1.
22	799	436	5	20:03	1.012	73392.	5788.	21.023	UK	1.
23	930	699	5	21:18	1.075	44560.	9603.	12.764	NB	34410.
24	677	407	5	21:30	1.085	54336.	5944.	15.565	UK	1.
25	704	420	5	22:52	1.154	33762.	4298.	9.671	UK	1.

Library Search Data: 30068105 # 170 Base m/z: 43
08/31/98 21:00:00 + 1:53 Cali: 30068105 # 3 RIC: 278528.
Sample: T-MM5-4 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
617 matched at least 6 of the 16 largest peaks in the unknown

Rank	In.	Name
1	3241	2-PENTANONE, 4-HYDROXY-4-METHYL-
2	5791	1,3-DIOXOLANE-2-METHANOL, 2,4-DIMETHYL-
3	3366	2-PENTANOL, 2,4-DIMETHYL-
4	3288	ACETIC ACID, 1,1-DIMETHYLETHYL ESTER
5	919	TERT-BUTYL HYDROPEROXIDE
6	5594	2-PROPANOL, 2-NITROSO-, ACETATE (ESTER)
7	3349	2-HEXANOL, 2-METHYL-
8	8432	2-HEXANONE, 3-HYDROXY-3,5-DIMETHYL-
9	8425	2-HEPTANONE, 3-HYDROXY-3-METHYL-

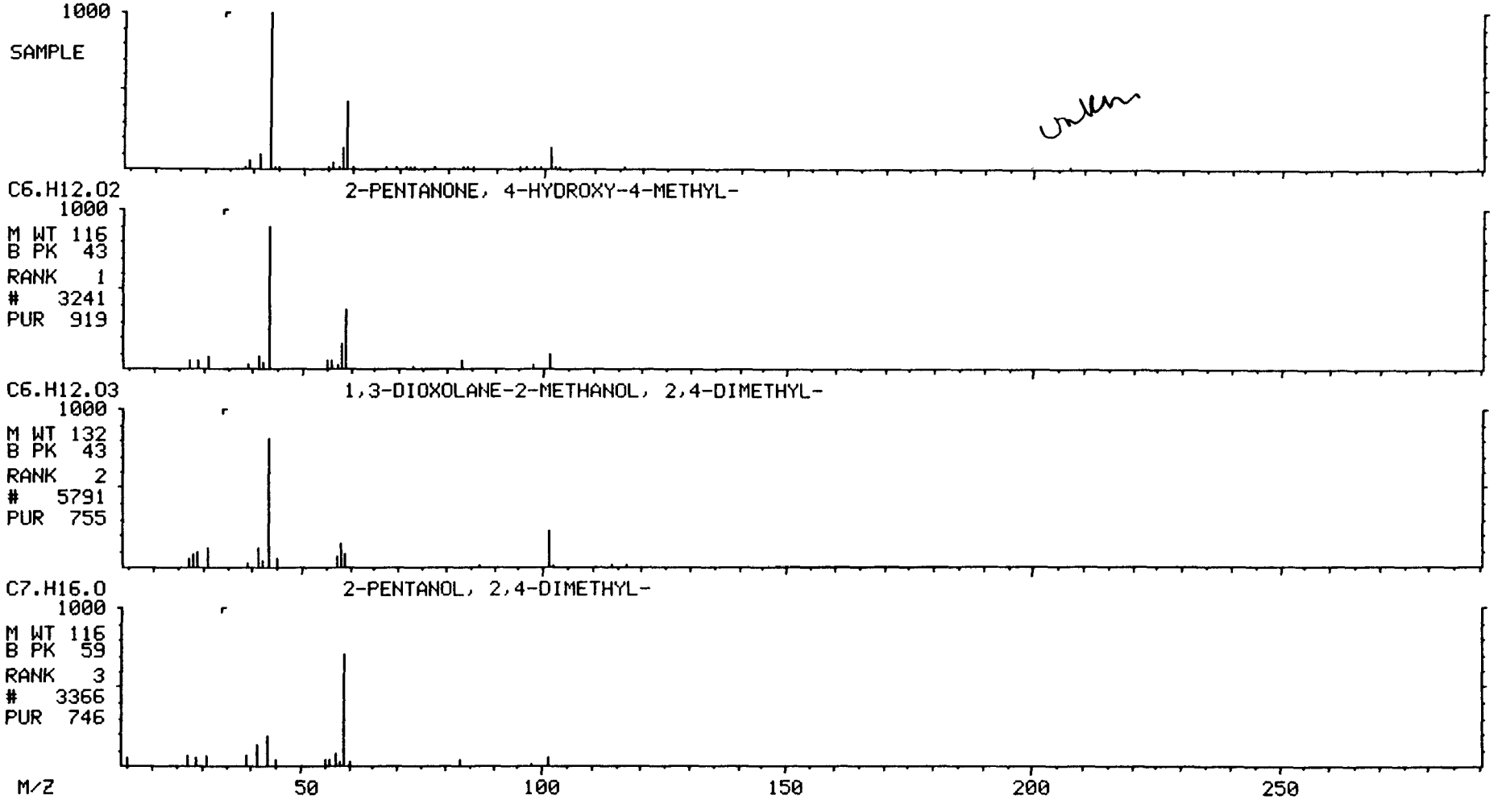
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C6.H12.O2	116	43	919	956	932
2	C6.H12.O3	132	43	755	828	798
3	C7.H16.O	116	59	746	768	746
4	C6.H12.O2	116	43	729	777	742
5	C4.H10.O2	90	59	714	866	736
6	C5.H9.O3.N	131	43	711	824	763
7	C7.H16.O	116	59	708	741	708
8	C8.H16.O2	144	59	667	729	694
9	C8.H16.O2	144	59	661	715	677

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	123-42-2
2	---	---	---	---	53951-43-2
3	---	---	---	---	625-06-9
4	---	---	---	---	540-88-5
5	---	---	---	---	75-91-2
6	---	---	---	---	6931-04-0
7	---	---	---	---	625-23-0
8	---	---	---	---	6321-14-8
9	---	---	---	---	13757-91-0

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:00:00 + 1:53
SAMPLE: T-MM5-4 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068105 # 170
CALI: 30068105 # 3

BASE M/Z: 43
RIC: 278528.



Library Search Data: 30068105 # 222 Base m/z: 43
08/31/98 21:00:00 + 2:28 Cali: 30068105 # 3 RIC: 282112.
Sample: T-MM5-4 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
921 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	5159	NONANE
2	5151	HEPTANE, 3,4-DIMETHYL-
3	5141	HEPTANE, 2,4-DIMETHYL-
4	3086	HEXANE, 2,4-DIMETHYL-
5	3081	OCTANE
6	11607	UNDECANE
7	19015	DECANE, 2,5,6-TRIMETHYL-
8	5154	HEXANE, 4-ETHYL-2-METHYL-
9	19028	DECANE, 2,4,6-TRIMETHYL-

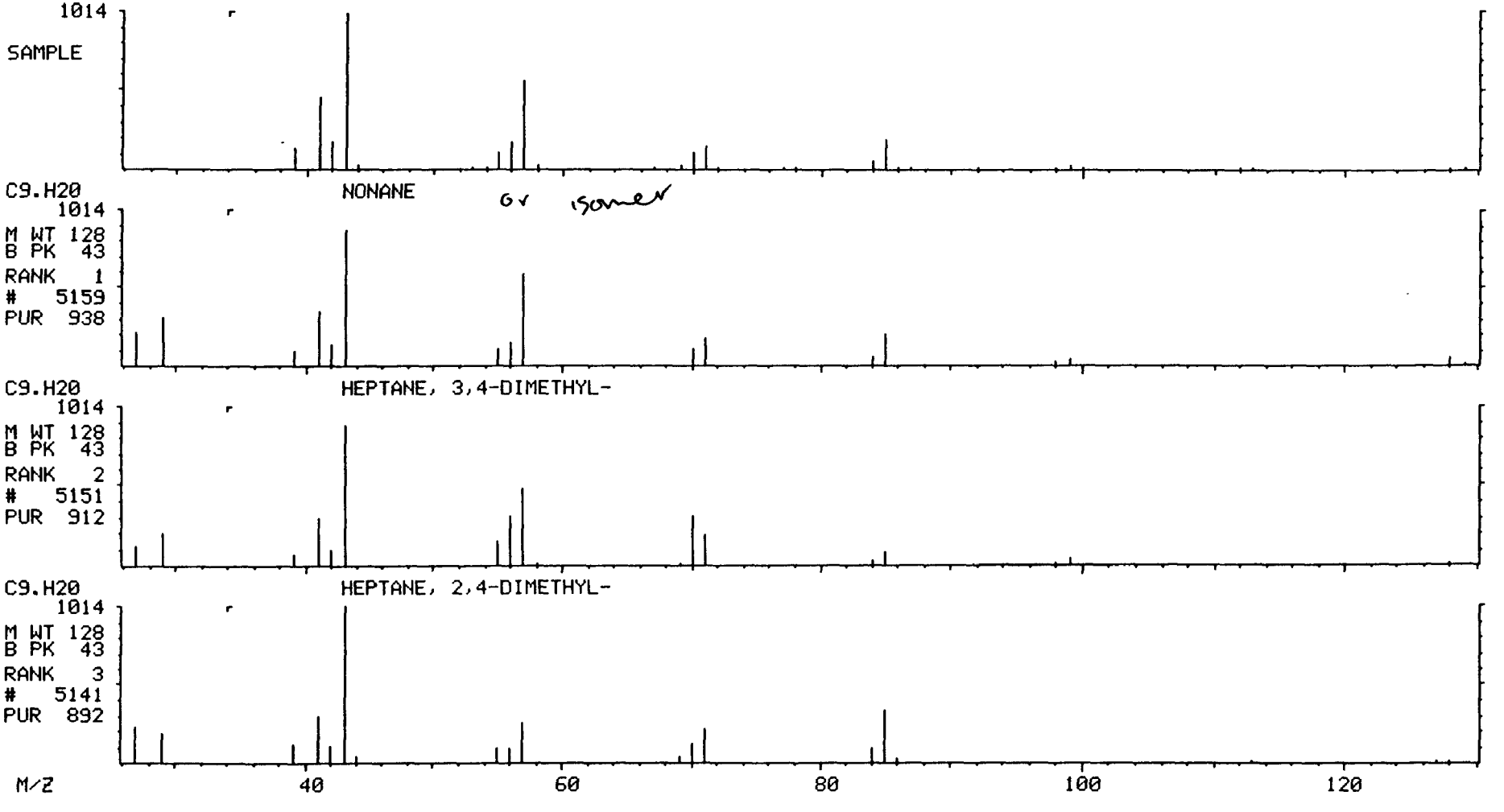
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C9.H20	128	43	938	986	938
2	C9.H20	128	43	912	940	912
3	C9.H20	128	43	892	944	893
4	C8.H18	114	43	884	956	894
5	C8.H18	114	43	870	945	893
6	C11.H24	156	43	867	926	905
7	C13.H28	184	57	866	906	876
8	C9.H20	128	57	856	907	856
9	C13.H28	184	43	853	884	898

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	111-84-2
2	—	—	—	—	922-28-1
3	—	—	—	—	2213-23-2
4	—	—	—	—	589-43-5
5	—	—	—	—	111-65-9
6	—	—	—	—	1120-21-4
7	—	—	—	—	62108-23-0
8	—	—	—	—	3074-75-7
9	—	—	—	—	62108-27-4

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:00:00 + 2:28
SAMPLE: T-MM5-4 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068105 # 222
CALI: 30068105 # 3

BASE M/Z: 43
RIC: 282112.



Library Search Data: 30068105 # 285 Base m/z: 77
08/31/98 21:00:00 + 3:10 Cali: 30068105 # 3 RIC: 28832.
Sample: T-MM5-4 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
416 matched at least 5 of the 16 largest peaks in the unknown

Rank	In.	Name
1	2017	BENZALDEHYDE
2	7284	BENZOYL CHLORIDE
3	2014	2,4-HEPTADIEN-6-YNAL, (E,E)-
4	6466	ETHANONE, 2-HYDROXY-1-PHENYL-
5	13112	BENZOYL ISOTHIOCYANATE
6	6857	BENZENECARBOTHIOIC ACID
7	9645	BENZOYLFORMIC ACID
8	6111	1,2-BENZENEDICARBOXALDEHYDE
9	13359	BENZENEACETIC ACID, .ALPHA.-OXO-, METHYL ESTER

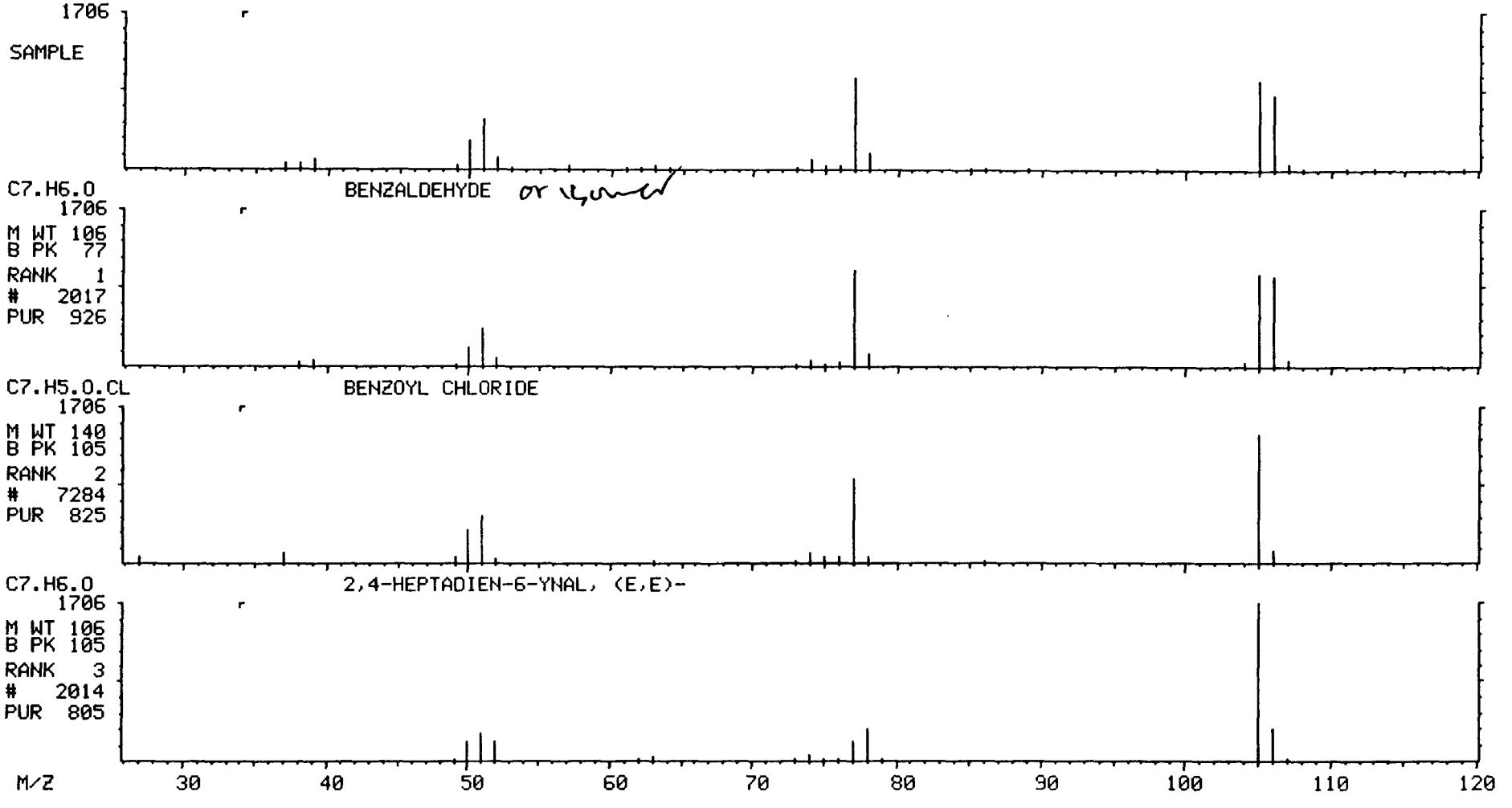
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C7.H6.O	106	77	926	975	941
2	C7.H5.O.CL	140	105	825	889	825
3	C7.H6.O	106	105	805	854	810
4	C8.H8.O2	136	105	793	842	812
5	C8.H5.O.N.S	163	105	784	835	790
6	C7.H6.O.S	138	77	779	865	805
7	C8.H6.O3	150	105	775	849	800
8	C8.H6.O2	134	105	773	825	908
9	C9.H8.O3	164	105	773	846	791

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	100-52-7
2	—	—	—	—	98-88-4
3	—	—	—	—	7200-04-6
4	—	—	—	—	582-24-1
5	—	—	—	—	532-55-8
6	—	—	—	—	98-91-9
7	—	—	—	—	611-73-4
8	—	—	—	—	643-79-8
9	—	—	—	—	15206-55-0

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:00:00 + 3:10
SAMPLE: T-MM5-4 1/35A/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068105 # 285
CALI: 30068105 # 3

BASE M/Z: 77
RIC: 28832.



Library Search Data: 30068105 # 761 Base m/z: 57
08/31/98 21:00:00 + 8:28 Cali: 30068105 # 3 RIC: 22976.
Sample: T-MM5-4 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
611 matched at least 7 of the 16 largest peaks in the unknown

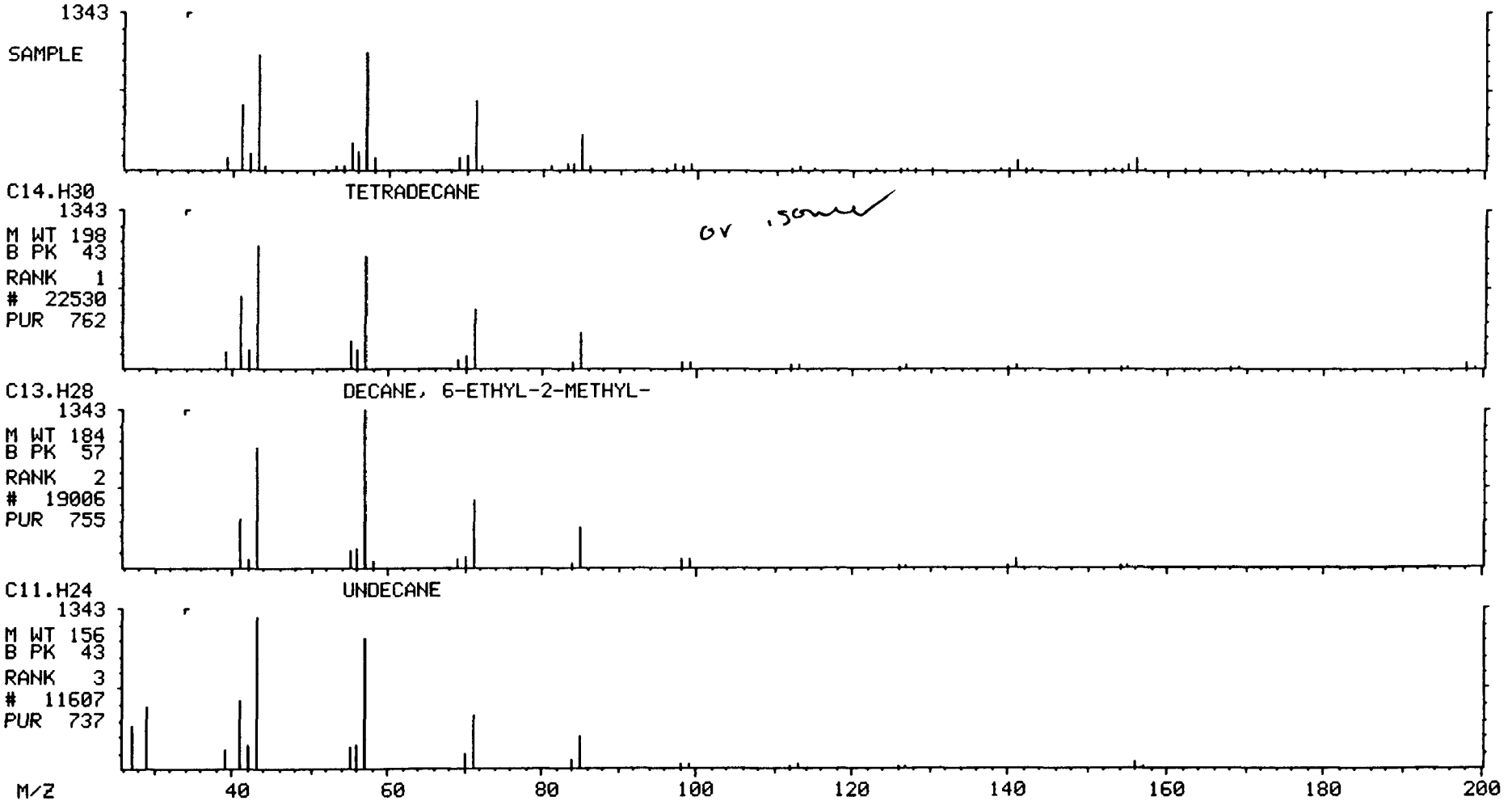
Rank	In.	Name
1	22530	TETRADECANE
2	19006	DECANE, 6-ETHYL-2-METHYL-
3	11607	UNDECANE
4	19007	DODECANE, 3-METHYL-
5	19016	UNDECANE, 4,7-DIMETHYL-
6	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
7	15358	UNDECANE, 3-METHYL-
8	11612	NONANE, 2,5-DIMETHYL-
9	25997	PENTADECANE

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C14.H30	198	43	762	960	773
2	C13.H28	184	57	755	975	755
3	C11.H24	156	43	737	980	737
4	C13.H28	184	57	734	927	738
5	C13.H28	184	43	727	938	727
6	C21.H44	296	57	727	927	760
7	C12.H26	170	57	724	934	728
8	C11.H24	156	57	724	887	724
9	C15.H32	212	57	722	932	753

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	629-59-4
2	---	---	---	---	62108-21-8
3	---	---	---	---	1120-21-4
4	---	---	---	---	17312-57-1
5	---	---	---	---	17301-32-5
6	---	---	---	---	18344-37-1
7	---	---	---	---	1002-43-3
8	---	---	---	---	17302-27-1
9	---	---	---	---	629-62-9

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:00:00 + 8:28
SAMPLE: T-MM5-4 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068105 # 761 BASE M/Z: 57
CALI: 30068105 # 3 RIC: 22976.



Library Search Data: 30068105 # 856 Base m/z: 57
08/31/98 21:00:00 + 9:31 Cali: 30068105 # 3 RIC: 35840.
Sample: T-MM5-4 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
792 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	25997	PENTADECANE
2	22530	TETRADECANE
3	19006	DECANE, 6-ETHYL-2-METHYL-
4	15343	DODECANE
5	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
6	19007	DODECANE, 3-METHYL-
7	39681	1-IODOUNDECANE
8	15352	UNDECANE, 2-METHYL-
9	18990	UNDECANE, 2,9-DIMETHYL-

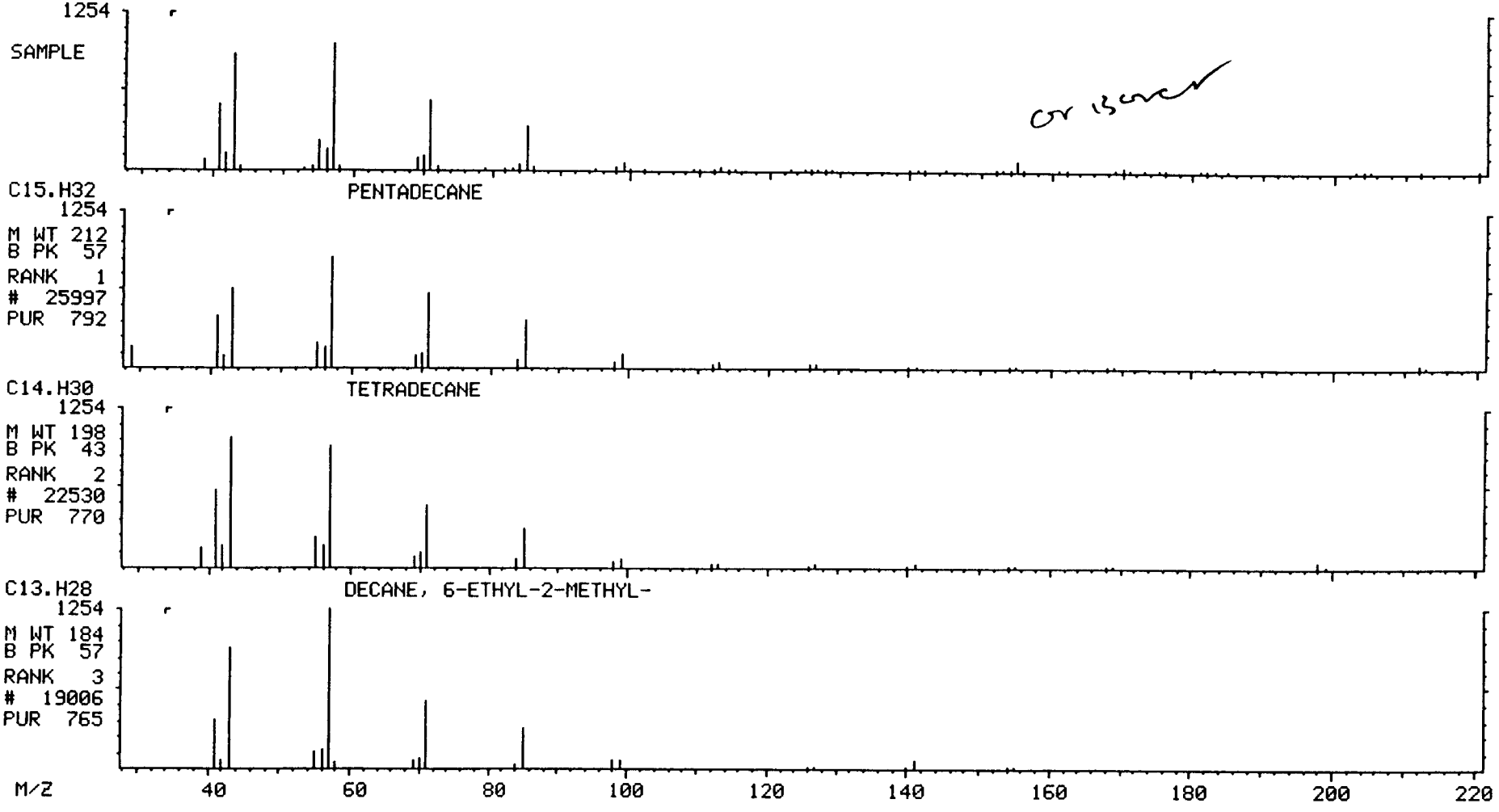
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C15.H32	212	57	792	965	798
2	C14.H30	198	43	770	939	804
3	C13.H28	184	57	765	966	765
4	C12.H26	170	57	764	989	764
5	C21.H44	296	57	759	930	783
6	C13.H28	184	57	755	954	763
7	C11.H23.I	282	57	755	971	760
8	C12.H26	170	43	754	939	762
9	C13.H28	184	57	754	957	756

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	629-62-9
2	---	---	---	---	629-59-4
3	---	---	---	---	62108-21-8
4	---	---	---	---	112-40-3
5	---	---	---	---	18344-37-1
6	---	---	---	---	17312-57-1
7	---	---	---	---	4282-44-4
8	---	---	---	---	7045-71-8
9	---	---	---	---	17301-26-7

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:00:00 + 9:31
SAMPLE: T-MM5-4 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068105 # 856
CALI: 30068105 # 3

BASE M/Z: 57
RIC: 35840.



or isomer

65

Library Search Data: 30068105 # 946 Base m/z: 57
08/31/98 21:00:00 + 10:31 Cali: 30068105 # 3 RIC: 52608.
Sample: T-MM5-4 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
360 matched at least 8 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37465	NONADECANE
2	37462	HEPTADECANE, 2,6-DIMETHYL-
3	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
4	25997	PENTADECANE
5	15969	HYDROXYLAMINE, O-DECYL-
6	25994	DODECANE, 2,6,11-TRIMETHYL-
7	26001	DODECANE, 2,7,10-TRIMETHYL-
8	19016	UNDECANE, 4,7-DIMETHYL-
9	22535	DODECANE, 4,6-DIMETHYL-

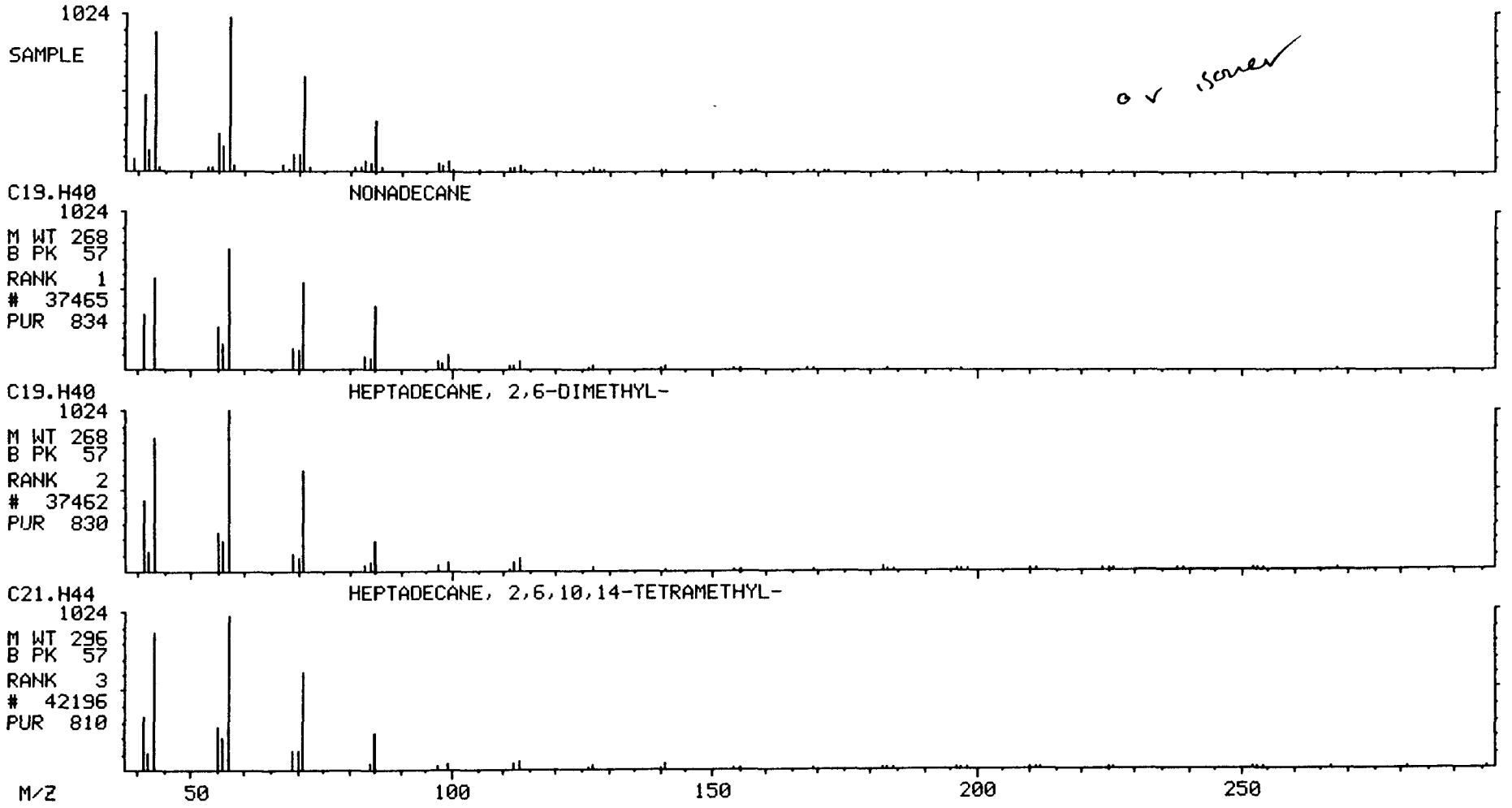
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	834	963	848
2	C19.H40	268	57	830	954	844
3	C21.H44	296	57	810	955	827
4	C15.H32	212	57	801	957	819
5	C10.H23.O.N	173	43	797	962	799
6	C15.H32	212	57	794	971	795
7	C15.H32	212	57	791	972	792
8	C13.H28	184	43	790	965	791
9	C14.H30	198	57	789	956	793

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	629-92-5
2	—	—	—	—	54105-67-8
3	—	—	—	—	18344-37-1
4	—	—	—	—	629-62-9
5	—	—	—	—	29812-79-1
6	—	—	—	—	31295-56-4
7	—	—	—	—	74645-98-0
8	—	—	—	—	17301-32-5
9	—	—	—	—	61141-72-8

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:00:00 + 10:31
SAMPLE: T-MM5-4 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068105 # 946
CALI: 30068105 # 3

BASE M/Z: 57
RIC: 52608.



Library Search Data: 30068105 # 986 Base m/z: 57
08/31/98 21:00:00 + 10:58 Cali: 30068105 # 3 RIC: 33280.
Sample: T-MM5-4 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
644 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37462	HEPTADECANE, 2,6-DIMETHYL-
2	37465	NONADECANE
3	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
4	19054	UNDECANE, 2,6-DIMETHYL-
5	22530	TETRADECANE
6	25997	PENTADECANE
7	19026	DECANE, 2,6,8-TRIMETHYL-
8	26001	DODECANE, 2,7,10-TRIMETHYL-
9	22535	DODECANE, 4,6-DIMETHYL-

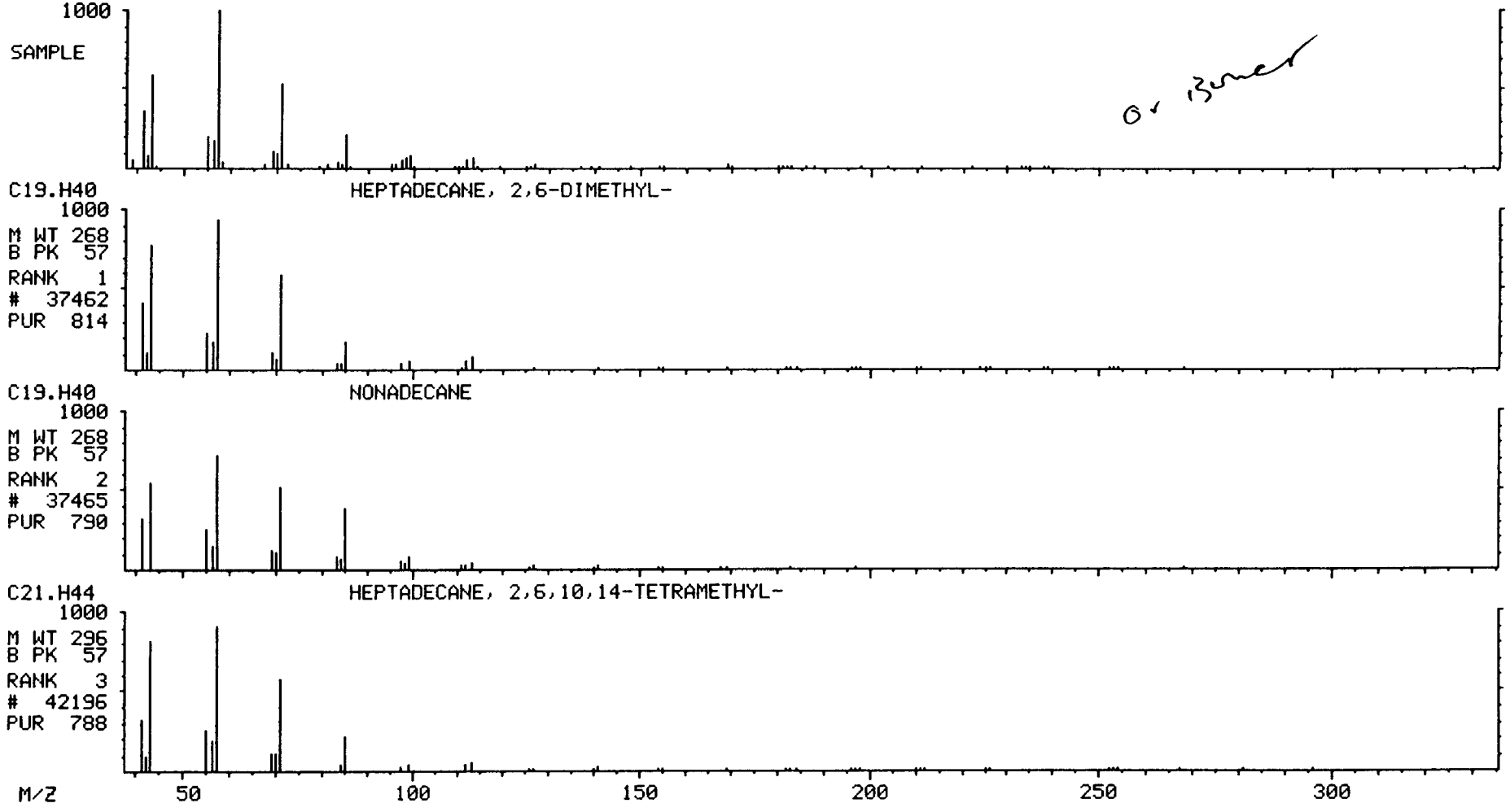
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	814	957	825
2	C19.H40	268	57	790	933	820
3	C21.H44	296	57	788	946	806
4	C13.H28	184	57	787	947	798
5	C14.H30	198	43	781	941	793
6	C15.H32	212	57	773	939	805
7	C13.H28	184	57	771	953	776
8	C15.H32	212	57	770	970	772
9	C14.H30	198	57	766	953	769

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	54105-67-8
2	---	---	---	---	629-92-5
3	---	---	---	---	18344-37-1
4	---	---	---	---	17301-23-4
5	---	---	---	---	629-59-4
6	---	---	---	---	629-62-9
7	---	---	---	---	62108-26-3
8	---	---	---	---	74645-98-0
9	---	---	---	---	61141-72-8

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:00:00 + 10:58
SAMPLE: T-MM5-4 1/35A/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068105 # 986
CALI: 30068105 # 3

BASE M/Z: 57
RIC: 33280.



6 of 13 met

36

Library Search Data: 30068105 #1032 Base m/z: 57
08/31/98 21:00:00 + 11:29 Cali: 30068105 # 3 RIC: 62400.
Sample: T-MM5-4 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
360 matched at least 8 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37462	HEPTADECANE, 2,6-DIMETHYL-
2	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
3	37465	NONADECANE
4	32059	HEPTADECANE
5	46161	TRICOSANE
6	25991	DODECANE, 2,6,10-TRIMETHYL-
7	26001	DODECANE, 2,7,10-TRIMETHYL-
8	25997	PENTADECANE
9	22535	DODECANE, 4,6-DIMETHYL-

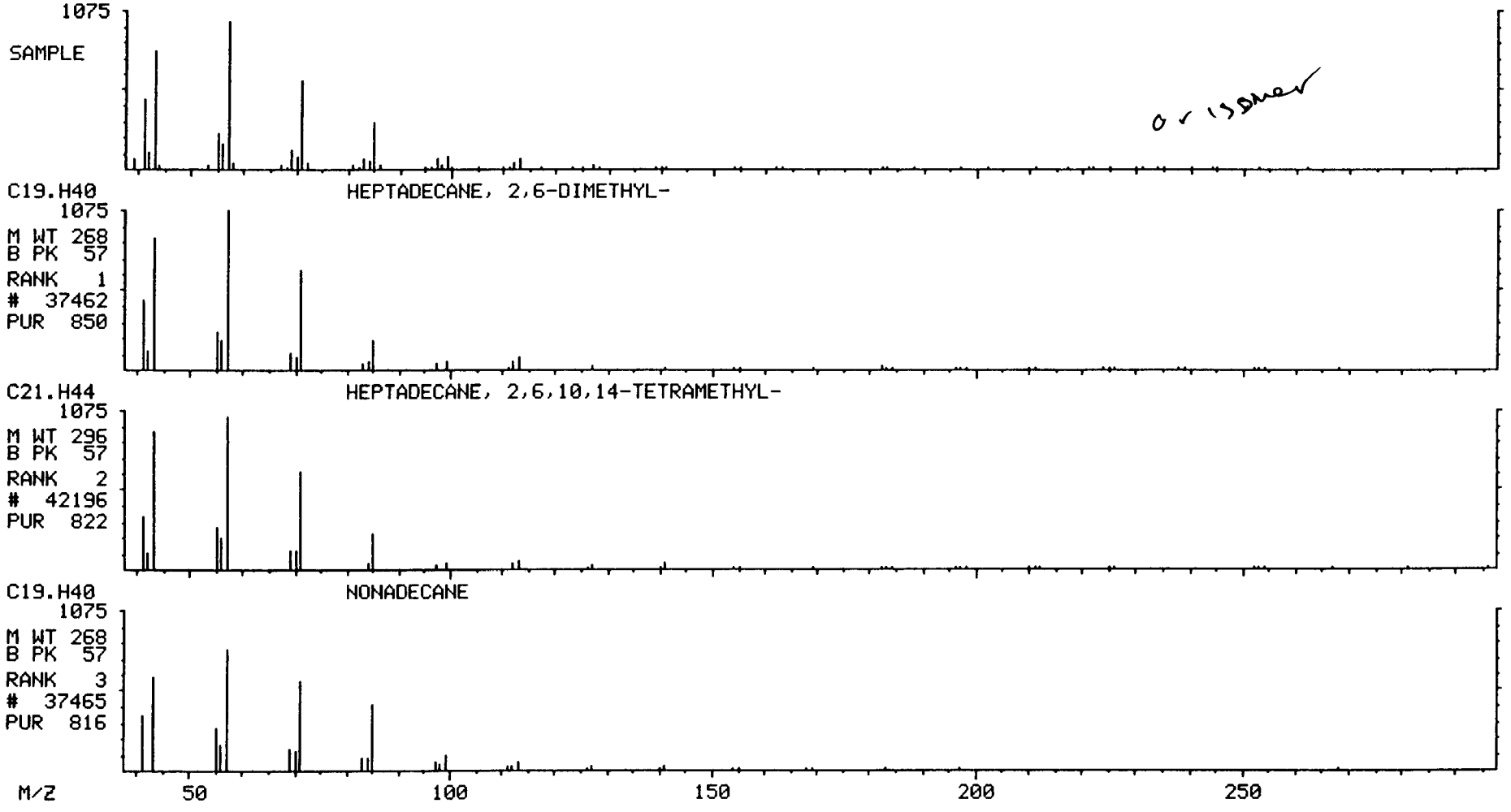
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	850	972	861
2	C21.H44	296	57	822	963	838
3	C19.H40	268	57	816	948	849
4	C17.H36	240	57	788	925	821
5	C23.H48	324	43	785	901	854
6	C15.H32	212	57	783	958	795
7	C15.H32	212	57	781	959	795
8	C15.H32	212	57	778	938	819
9	C14.H30	198	57	778	954	788

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	54105-67-8
2	—	—	—	—	18344-37-1
3	—	—	—	—	629-92-5
4	—	—	—	—	629-78-7
5	—	—	—	—	638-67-5
6	—	—	—	—	3891-98-3
7	—	—	—	—	74645-98-0
8	—	—	—	—	629-62-9
9	—	—	—	—	61141-72-8

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:00:00 + 11:29
SAMPLE: T-MM5-4 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068105 #1032
CALI: 30068105 # 3

BASE M/Z: 57
RIC: 62400.



Library Search Data: 30068105 #1113 Base m/z: 57
08/31/98 21:00:00 + 12:23 Cali: 30068105 # 3 RIC: 34816.
Sample: T-MM5-4 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
312 matched at least 8 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37465	NONADECANE
2	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
3	25997	PENTADECANE
4	19016	UNDECANE, 4,7-DIMETHYL-
5	37462	HEPTADECANE, 2,6-DIMETHYL-
6	15969	HYDROXYLAMINE, O-DECYL-
7	15352	UNDECANE, 2-METHYL-
8	18998	UNDECANE, 3,7-DIMETHYL-
9	46161	TRICOSANE

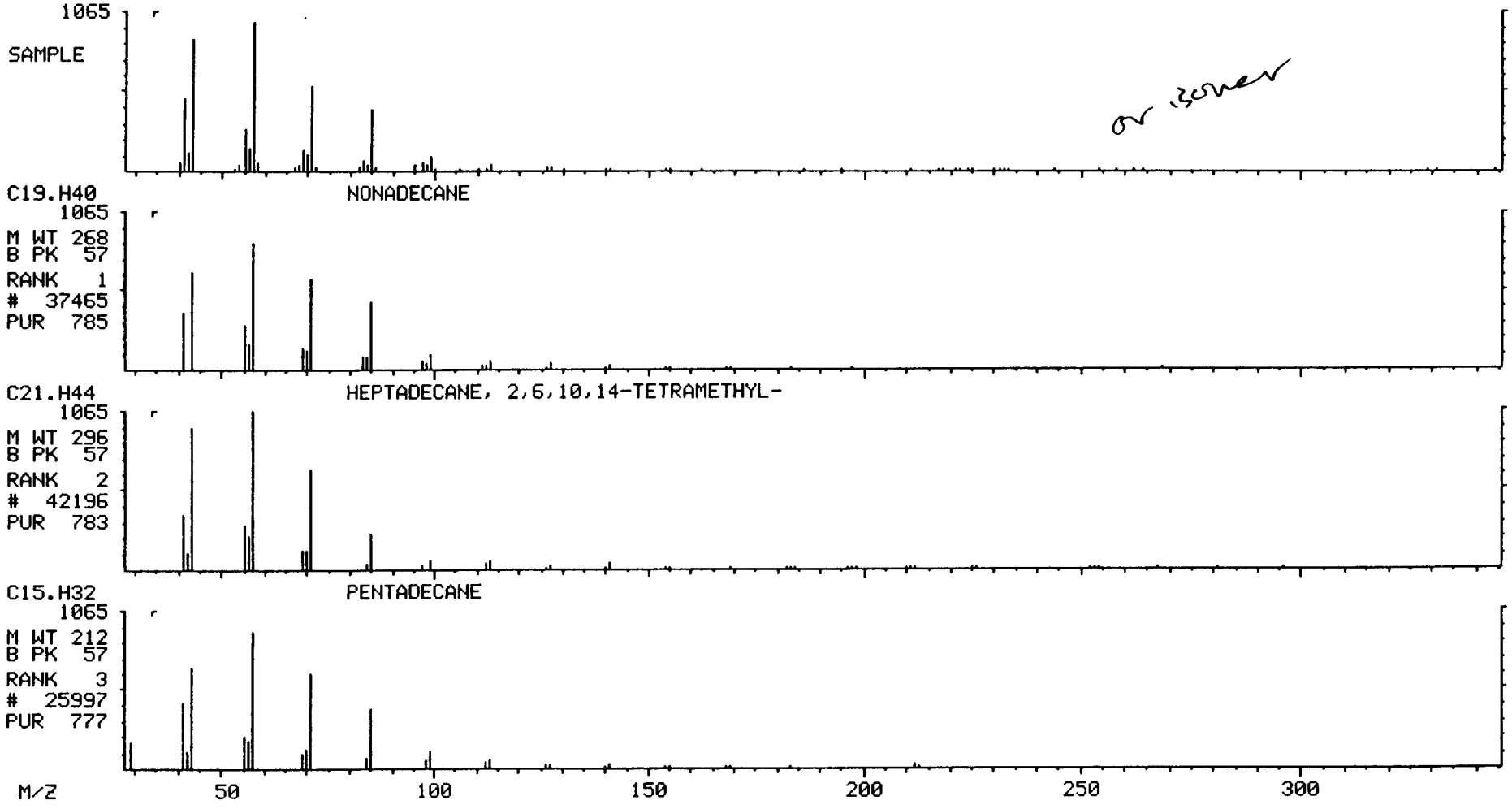
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	785	939	829
2	C21.H44	296	57	783	940	811
3	C15.H32	212	57	777	951	809
4	C13.H28	184	43	777	958	777
5	C19.H40	268	57	775	924	815
6	C10.H23.O.N	173	43	775	958	785
7	C12.H26	170	43	767	955	773
8	C13.H28	184	43	766	954	770
9	C23.H48	324	43	759	893	844

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	629-92-5
2	—	—	—	—	18344-37-1
3	—	—	—	—	629-62-9
4	—	—	—	—	17301-32-5
5	—	—	—	—	54105-67-8
6	—	—	—	—	29812-79-1
7	—	—	—	—	7045-71-8
8	—	—	—	—	17301-29-0
9	—	—	—	—	638-67-5

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:00:00 + 12:23
SAMPLE: T-MM5-4 1/35A/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068105 #1113
CALI: 30068105 # 3

BASE M/Z: 57
RIC: 34816.



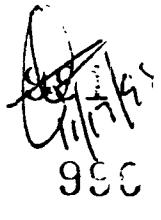
Library Search Data: 30068105 #1117 Base m/z: 57
08/31/98 21:00:00 + 12:25 Cali: 30068105 # 3 RIC: 29952.
Sample: T-MM5-4 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

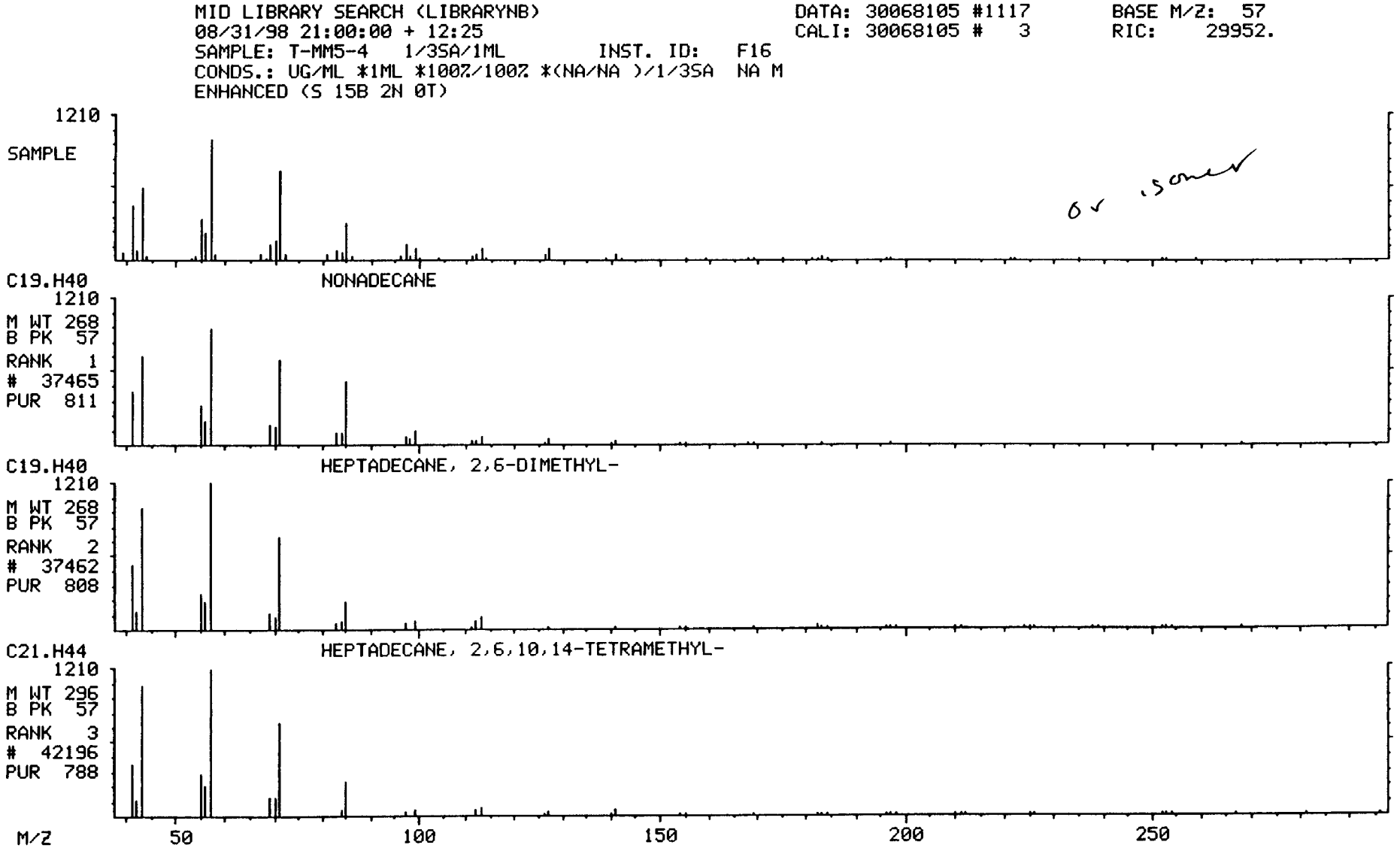
62231 spectra in LIBRARYNB searched for maximum PURITY
774 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37465	NONADECANE
2	37462	HEPTADECANE, 2,6-DIMETHYL-
3	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
4	25991	DODECANE, 2,6,10-TRIMETHYL-
5	26001	DODECANE, 2,7,10-TRIMETHYL-
6	37466	PENTADECANE, 2,6,10,14-TETRAMETHYL-
7	29264	TRIDECANE, 5-PROPYL-
8	32059	HEPTADECANE
9	46161	TRICOSANE

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	811	941	838
2	C19.H40	268	57	808	932	819
3	C21.H44	296	57	788	923	809
4	C15.H32	212	57	782	958	784
5	C15.H32	212	57	780	959	780
6	C19.H40	268	71	779	924	798
7	C16.H34	226	57	775	928	777
8	C17.H36	240	57	770	909	813
9	C23.H48	324	43	770	888	835

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	629-92-5
2	---	---	---	---	54105-67-8
3	---	---	---	---	18344-37-1
4	---	---	---	---	3891-98-3
5	---	---	---	---	74645-98-0
6	---	---	---	---	1921-70-6
7	---	---	---	---	55045-11-9
8	---	---	---	---	629-78-7
9	---	---	---	---	638-67-5




MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:00:00 + 12:25
SAMPLE: T-MM5-4 1/3SA/1ML
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068105 #1117
CALI: 30068105 # 3
BASE M/Z: 57
RIC: 29952.
1210
SAMPLE
C19.H40
NONADECANE
1210
M WT 268
B PK 57
RANK 1
37465
PUR 811
C19.H40
HEPTADECANE, 2,6-DIMETHYL-
1210
M WT 268
B PK 57
RANK 2
37462
PUR 808
C21.H44
HEPTADECANE, 2,6,10,14-TETRAMETHYL-
1210
M WT 296
B PK 57
RANK 3
42196
PUR 788
M/Z
50
100
150
200
250

136

Library Search Data: 30068105 #1190 Base m/z: 57
08/31/98 21:00:00 + 13:14 Cali: 30068105 # 3 RIC: 26400.
Sample: T-MM5-4 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
294 matched at least 8 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37465	NONADECANE
2	37462	HEPTADECANE, 2,6-DIMETHYL-
3	46161	TRICOSANE
4	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
5	15969	HYDROXYLAMINE, O-DECYL-
6	25997	PENTADECANE
7	15353	2,6-DIMETHYLDECANE
8	19016	UNDECANE, 4,7-DIMETHYL-
9	32059	HEPTADECANE

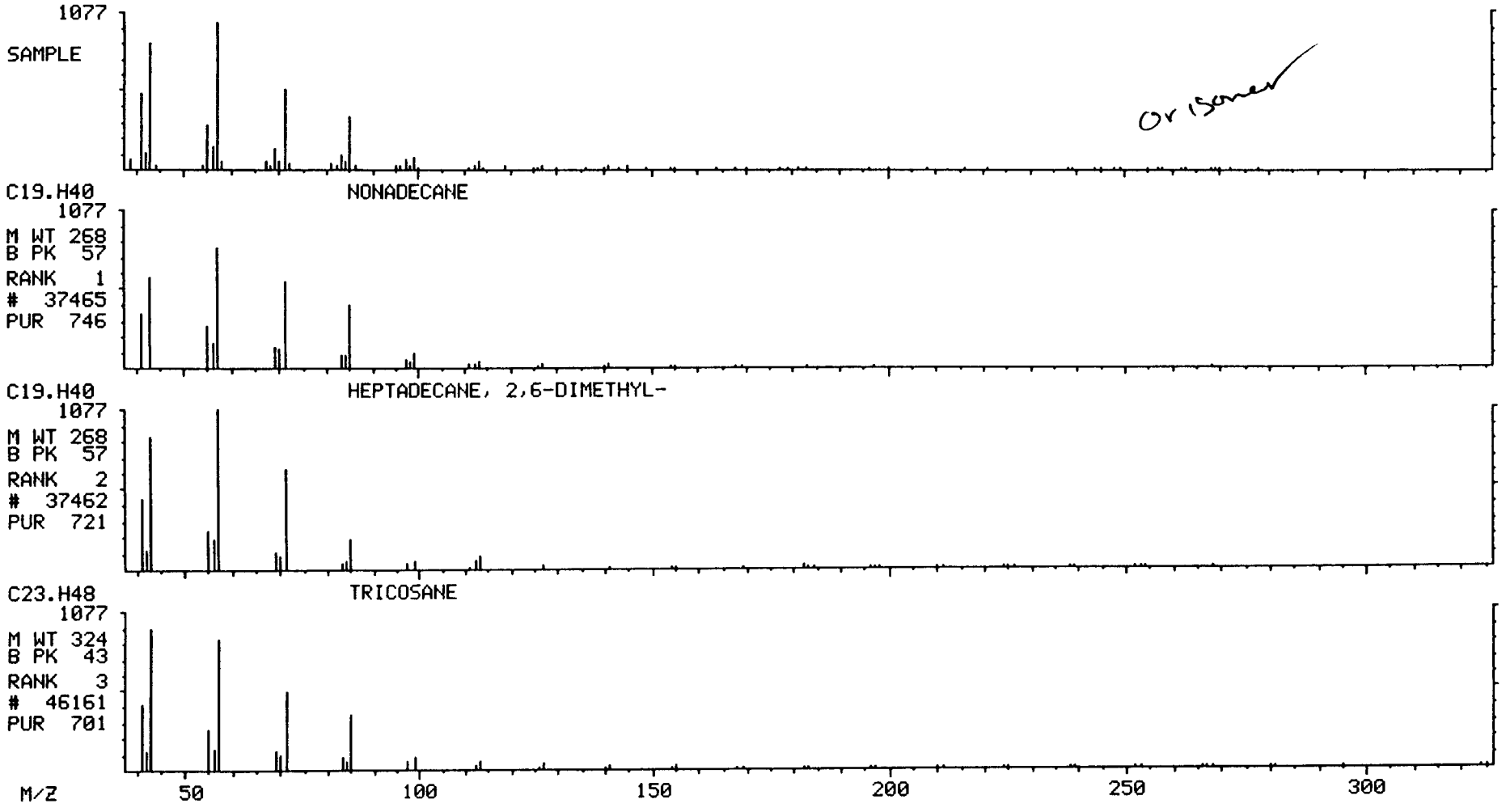
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	746	971	757
2	C19.H40	268	57	721	941	743
3	C23.H48	324	43	701	902	770
4	C21.H44	296	57	700	946	722
5	C10.H23.O.N	173	43	699	961	702
6	C15.H32	212	57	698	954	722
7	C12.H26	170	43	689	932	689
8	C13.H28	184	43	684	950	684
9	C17.H36	240	57	676	914	714

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	629-92-5
2	—	—	—	—	54105-67-8
3	—	—	—	—	638-67-5
4	—	—	—	—	18344-37-1
5	—	—	—	—	29812-79-1
6	—	—	—	—	629-62-9
7	—	—	—	—	13150-81-7
8	—	—	—	—	17301-32-5
9	—	—	—	—	629-78-7

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:00:00 + 13:14
SAMPLE: T-MM5-4 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068105 #1190
CALI: 30068105 # 3

BASE M/Z: 57
RIC: 26400.



Library Search Data: 30068105 #1236 Base m/z: 73
08/31/98 21:00:00 + 13:45 Cali: 30068105 # 3 RIC: 23072.
Sample: T-MM5-4 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
747 matched at least 6 of the 16 largest peaks in the unknown

Rank	In.	Name
1	35182	HEXADECANOIC ACID
2	37913	GLYCINE, N-METHYL-N-(1-OXODODECYL)-
3	40669	DODECANAMIDE, N,N-BIS(2-HYDROXYETHYL)-
4	22949	DODECANOIC ACID
5	26351	TRIDECANOIC ACID
6	29642	TETRADECANOIC ACID
7	40184	OCTADECANOIC ACID
8	19469	UNDECANOIC ACID
9	15784	DECANOIC ACID

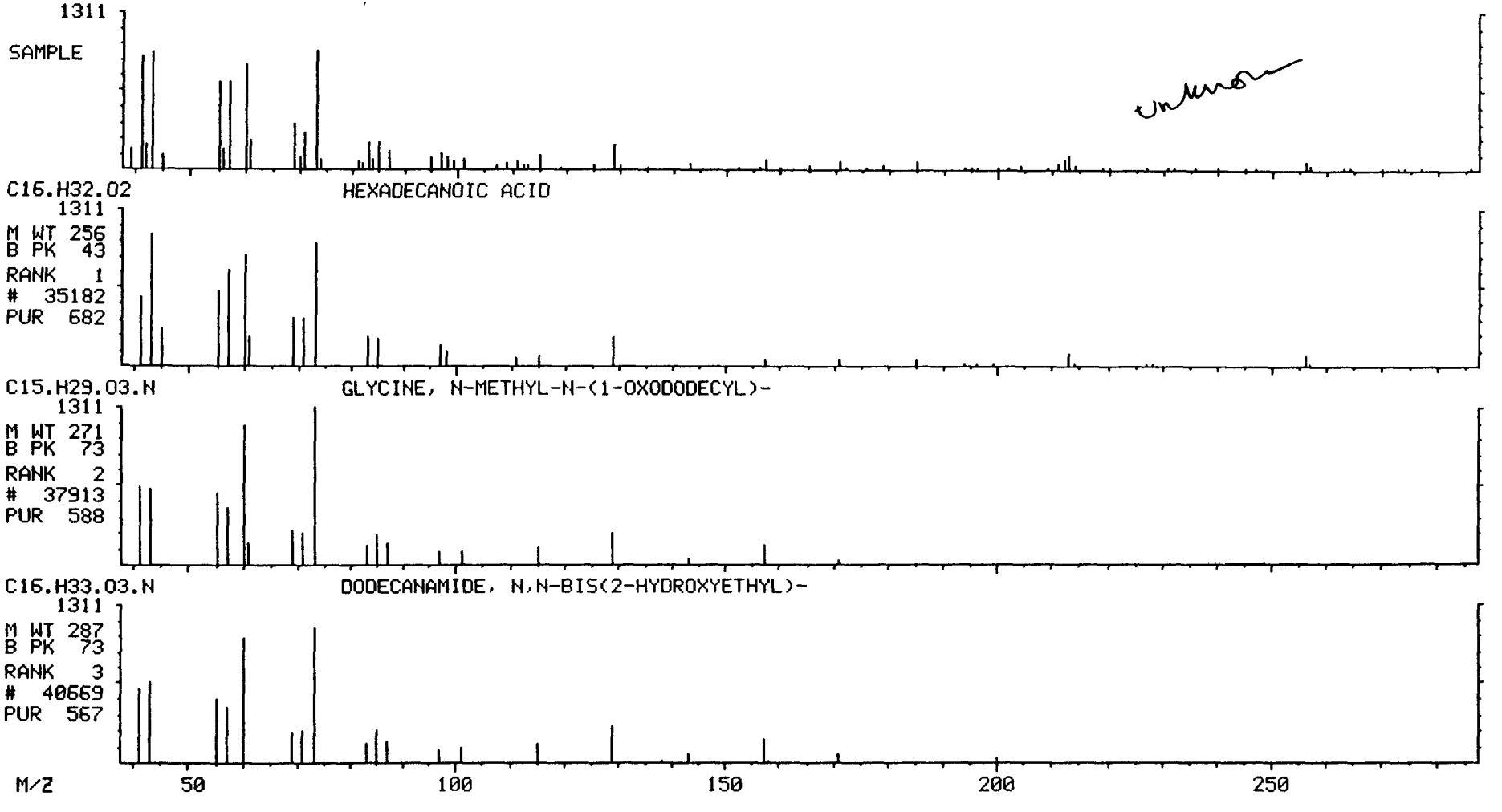
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C16.H32.O2	256	43	682	975	688
2	C15.H29.O3.N	271	73	588	974	588
3	C16.H33.O3.N	287	73	567	959	573
4	C12.H24.O2	200	60	542	916	566
5	C13.H26.O2	214	73	542	887	558
6	C14.H28.O2	228	73	532	871	589
7	C18.H36.O2	284	43	514	753	665
8	C11.H22.O2	186	60	506	912	531
9	C10.H20.O2	172	60	504	939	506

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	57-10-3
2	---	---	---	---	97-78-9
3	---	---	---	---	120-40-1
4	---	---	---	---	143-07-7
5	---	---	---	---	638-53-9
6	---	---	---	---	544-63-8
7	---	---	---	---	57-11-4
8	---	---	---	---	112-37-8
9	---	---	---	---	334-48-5

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:00:00 + 13:45
SAMPLE: T-MM5-4 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068105 #1236
CALI: 30068105 # 3

BASE M/Z: 73
RIC: 23072.



Library Search Data: 30068105 #1334 Base m/z: 57
08/31/98 21:00:00 + 14:50 Cali: 30068105 # 3 RIC: 18240.
Sample: T-MM5-4 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
439 matched at least 7 of the 16 largest peaks in the unknown

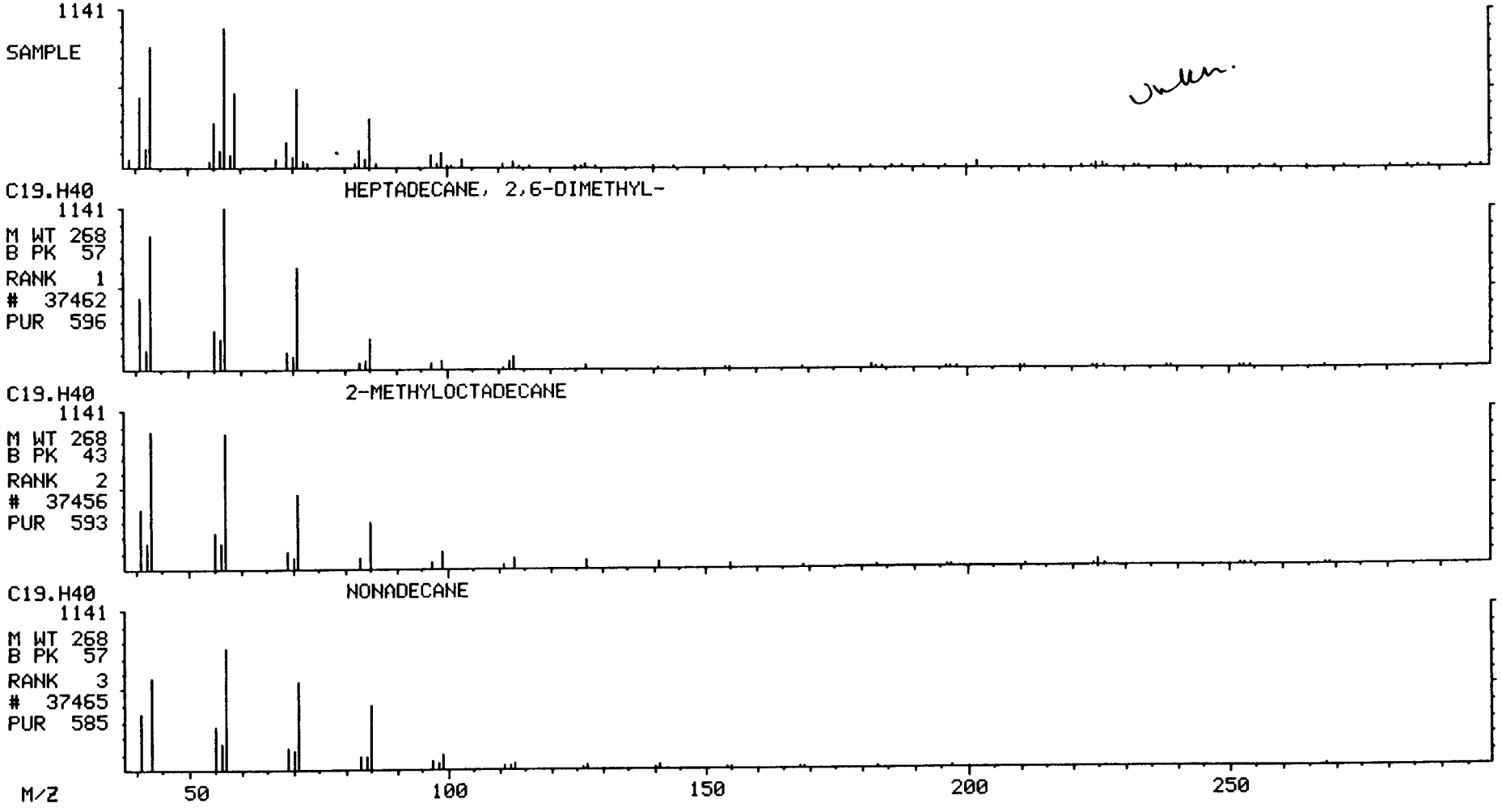
Rank	In.	Name
1	37462	HEPTADECANE, 2,6-DIMETHYL-
2	37456	2-METHYLOCTADECANE
3	37465	NONADECANE
4	19523	1-DECANOL, 2-ETHYL-
5	14793	1-UNDECENE, 4-METHYL-
6	37458	OCTADECANE, 2-METHYL-
7	29263	HEXADECANE
8	46161	TRICOSANE
9	42481	OXIRANE, [(HEXADECYLOXY)METHYL]-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	596	881	632
2	C19.H40	268	43	593	901	640
3	C19.H40	268	57	585	919	628
4	C12.H26.O	186	57	582	931	593
5	C12.H24	168	43	581	957	581
6	C19.H40	268	43	577	864	639
7	C16.H34	226	57	577	899	621
8	C23.H48	324	43	577	863	659
9	C19.H38.O2	298	57	576	872	583

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	54105-67-8
2	---	---	---	---	- -
3	---	---	---	---	629-92-5
4	---	---	---	---	21078-65-9
5	---	---	---	---	74630-39-0
6	---	---	---	---	1560-88-9
7	---	---	---	---	544-76-3
8	---	---	---	---	638-67-5
9	---	---	---	---	15965-99-8

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:00:00 + 14:50
SAMPLE: T-MM5-4 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068105 #1334 BASE M/Z: 57
CALI: 30068105 # 3 RIC: 18240.



Library Search Data: 30068105 #1360 Base m/z: 57
08/31/98 21:00:00 + 15:08 Cali: 30068105 # 3 RIC: 3440.
Sample: T-MM5-4 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
144 matched at least 5 of the 16 largest peaks in the unknown

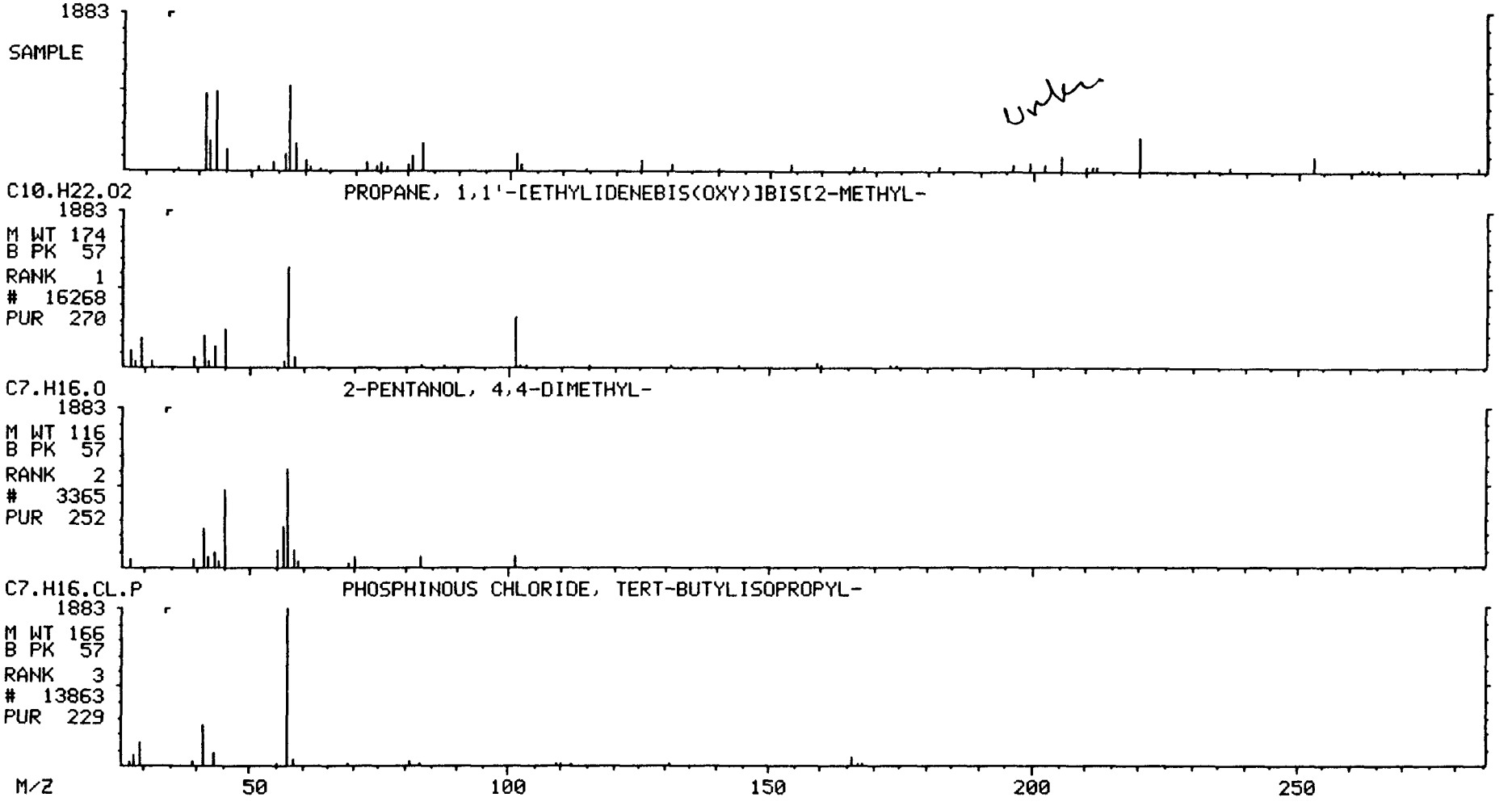
Rank	In.	Name
1	16268	PROPANE, 1,1'-[ETHYLIDENEBIS(OXY)]BIS[2-METHYL-
2	3365	2-PENTANOL, 4,4-DIMETHYL-
3	13863	PHOSPHINOUS CHLORIDE, TERT-BUTYLISOPROPYL-
4	7691	BUTANE, 2-AZIDO-2,3,3-TRIMETHYL-
5	38965	PHENOL, 2,6-BIS(1,1-DIMETHYLETHYL)-4-METHYL-, METHYLCARBAMATE
6	3052	OXIRANE, (2,2-DIMETHYLPROPYL)-
7	5791	1,3-DIOXOLANE-2-METHANOL, 2,4-DIMETHYL-
8	5551	DI-SEC-BUTYL ETHER
9	29529	THIOPHENE, 2,5-BIS(1,1-DIMETHYLETHOXY)-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C10.H22.O2	174	57	270	725	292
2	C7.H16.O	116	57	252	722	295
3	C7.H16.CL.P	166	57	229	707	243
4	C7.H15.N3	141	57	228	753	264
5	C17.H27.O2.N	277	205	221	521	308
6	C7.H14.O	114	57	214	741	274
7	C6.H12.O3	132	43	213	697	235
8	C8.H18.O	130	45	212	628	252
9	C12.H20.O2.S	228	41	207	700	282

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	5669-09-0
2	---	---	---	---	6144-93-0
3	---	---	---	---	29949-66-4
4	---	---	---	---	51677-41-9
5	---	---	---	---	1918-11-2
6	---	---	---	---	2245-29-6
7	---	---	---	---	53951-43-2
8	---	---	---	---	6863-58-7
9	---	---	---	---	55162-43-1

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:00:00 + 15:08
SAMPLE: T-MM5-4 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068105 #1360 BASE M/Z: 57
CALI: 30068105 # 3 RIC: 3440.



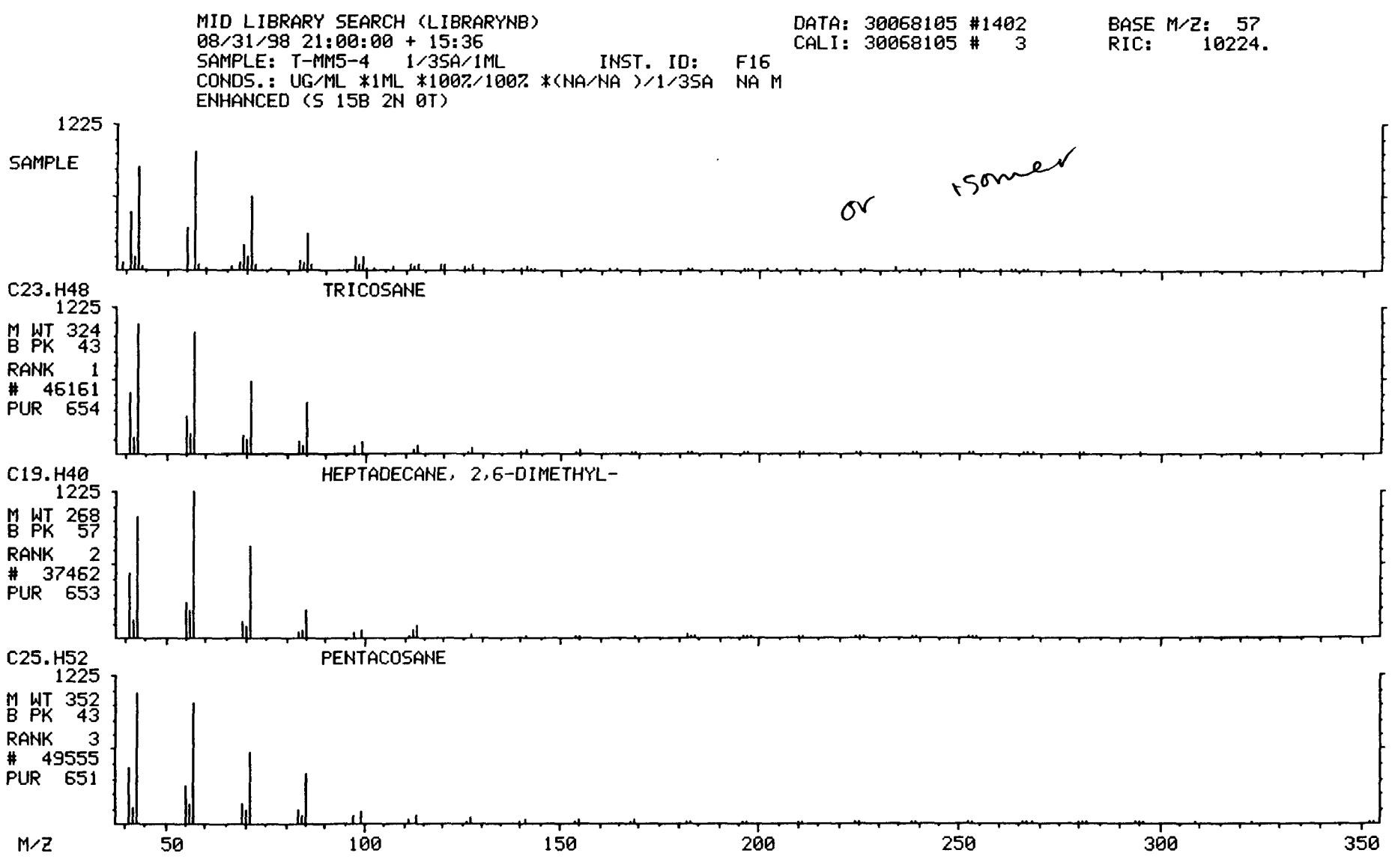
Library Search Data: 30068105 #1402 Base m/z: 57
08/31/98 21:00:00 + 15:36 Cali: 30068105 # 3 RIC: 10224.
Sample: T-MM5-4 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 158 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
488 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	46161	TRICOSANE
2	37462	HEPTADECANE, 2,6-DIMETHYL-
3	49555	PENTACOSANE
4	37465	NONADECANE
5	42197	HENEICOSANE
6	58739	PENTATRIACONTANE
7	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
8	42192	HEPTADECANE, 2,6,10,15-TETRAMETHYL-
9	39858	EICOSANE

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C23.H48	324	43	654	890	721
2	C19.H40	268	57	653	895	688
3	C25.H52	352	43	651	870	734
4	C19.H40	268	57	635	914	684
5	C21.H44	296	57	633	879	689
6	C35.H72	492	57	627	882	698
7	C21.H44	296	57	625	877	671
8	C21.H44	296	57	612	885	661
9	C20.H42	282	57	612	852	706

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	638-67-5
2	---	---	---	---	54105-67-8
3	---	---	---	---	629-99-2
4	---	---	---	---	629-92-5
5	---	---	---	---	629-94-7
6	---	---	---	---	630-07-9
7	---	---	---	---	18344-37-1
8	---	---	---	---	54833-48-6
9	---	---	---	---	112-95-8


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:00:00 + 15:36
SAMPLE: T-MM5-4 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068105 #1402
CALI: 30068105 # 3
BASE M/Z: 57
RIC: 10224.
1225
SAMPLE
or isomer
C23.H48
TRICOSANE
1225
M WT 324
B PK 43
RANK 1
46161
PUR 654
C19.H40
HEPTADECANE, 2,6-DIMETHYL-
1225
M WT 268
B PK 57
RANK 2
37462
PUR 653
C25.H52
PENTACOSANE
1225
M WT 352
B PK 43
RANK 3
49555
PUR 651
M/Z
50
100
150
200
250
300
350

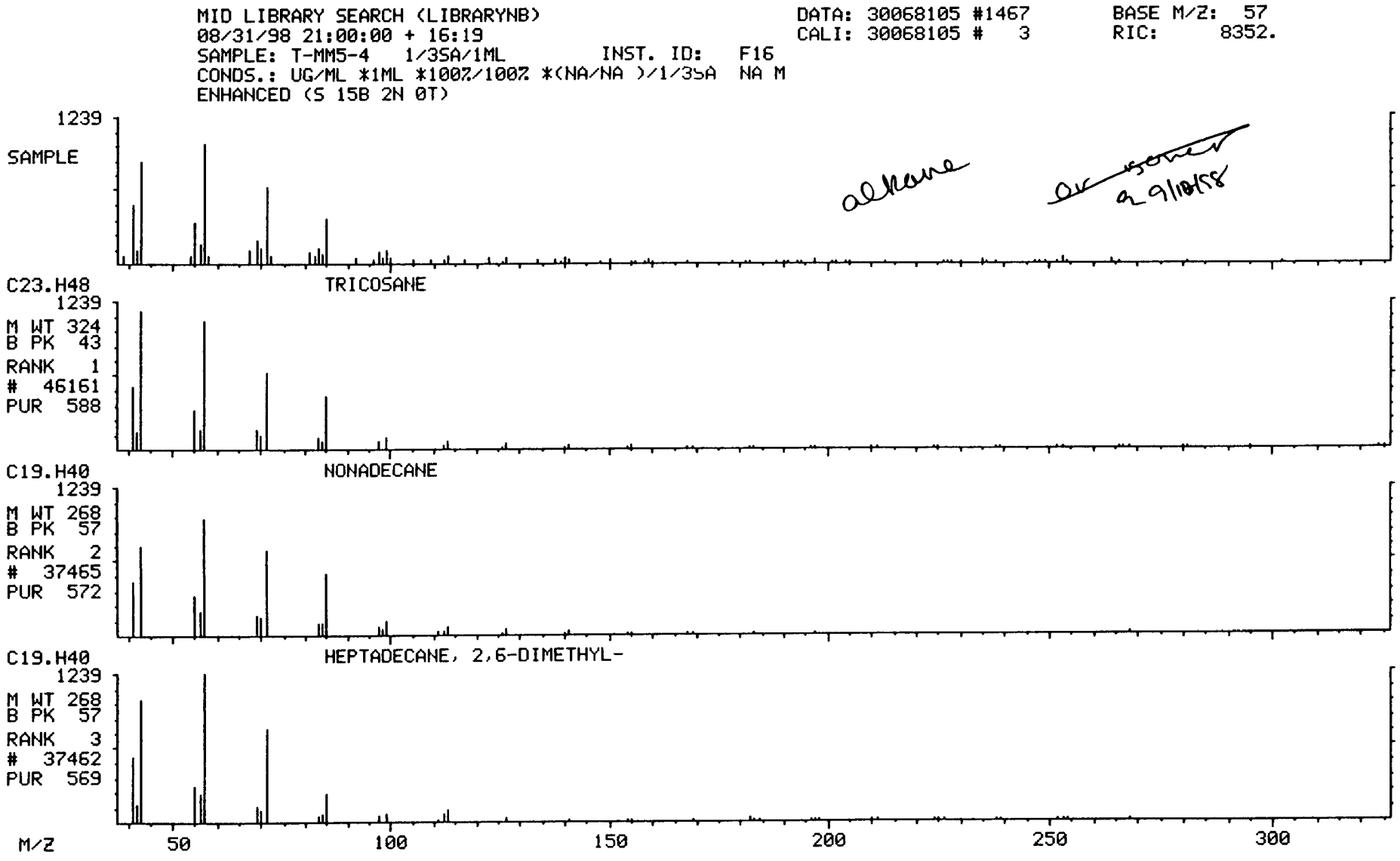
Library Search Data: 30068105 #1467 Base m/z: 57
08/31/98 21:00:00 + 16:19 Cali: 30068105 # 3 RIC: 8352.
Sample: T-MM5-4 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
751 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	46161	TRICOSANE
2	37465	NONADECANE
3	37462	HEPTADECANE, 2,6-DIMETHYL-
4	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
5	49555	PENTACOSANE
6	42190	EICOSANE, 2-METHYL-
7	58739	PENTATRIACONTANE
8	39858	EICOSANE
9	25997	PENTADECANE

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C23.H48	324	43	588	891	644
2	C19.H40	268	57	572	941	600
3	C19.H40	268	57	569	900	588
4	C21.H44	296	57	567	898	587
5	C25.H52	352	43	565	862	642
6	C21.H44	296	57	549	861	608
7	C35.H72	492	57	544	864	614
8	C20.H42	282	57	538	845	622
9	C15.H32	212	57	538	949	560

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	638-67-5
2	—	—	—	—	629-92-5
3	—	—	—	—	54105-67-8
4	—	—	—	—	18344-37-1
5	—	—	—	—	629-99-2
6	—	—	—	—	1560-84-5
7	—	—	—	—	630-07-9
8	—	—	—	—	112-95-8
9	—	—	—	—	629-62-9


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:00:00 + 16:19
SAMPLE: T-MM5-4 1/35A/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068105 #1467
CALI: 30068105 # 3
BASE M/Z: 57
RIC: 8352.
1239
SAMPLE
alkane
or isomer
9 9/10/98
C23.H48
TRICOSANE
1239
M WT 324
B PK 43
RANK 1
46161
PUR 588
C19.H40
NONADECANE
1239
M WT 268
B PK 57
RANK 2
37465
PUR 572
C19.H40
HEPTADECANE, 2,6-DIMETHYL-
1239
M WT 268
B PK 57
RANK 3
37462
PUR 569
M/Z
50
100
150
200
250
300

100

Library Search Data: 30068105 #1508 Base m/z: 59
08/31/98 21:00:00 + 16:46 Cali: 30068105 # 3 RIC: 7352.
Sample: T-MM5-4 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
179 matched at least 6 of the 16 largest peaks in the unknown

Rank In. Name
1 24247 2-PROPANOL, 1-[2-(2-METHOXY-1-METHYLETHOXY)-1-METHYLETHOXY]-
2 20265 3-HEXANOL, 1,5-DIMETHOXY-2,4-DIMETHYL-
3 16192 2-PROPANOL, 1-[1-METHYL-2-(2-PROPENYLOXY)ETHOXY]-
4 20626 2-PROPANOL, 1,1'-[(1-METHYL-1,2-ETHANEDIYL)BIS(OXY)]BIS-
5 9228 1-PROPANOL, 2-(2-METHOXYPROPOXY)-
6 3522 2,3-BUTANEDIOL, 2,3-DIMETHYL-
7 8432 2-HEXANONE, 3-HYDROXY-3,5-DIMETHYL-
8 9235 1-PROPANOL, 2-(2-METHOXY-1-METHYLETHOXY)-
9 5832 2-PROPANOL, 1-(1-METHYLPROPOXY)-

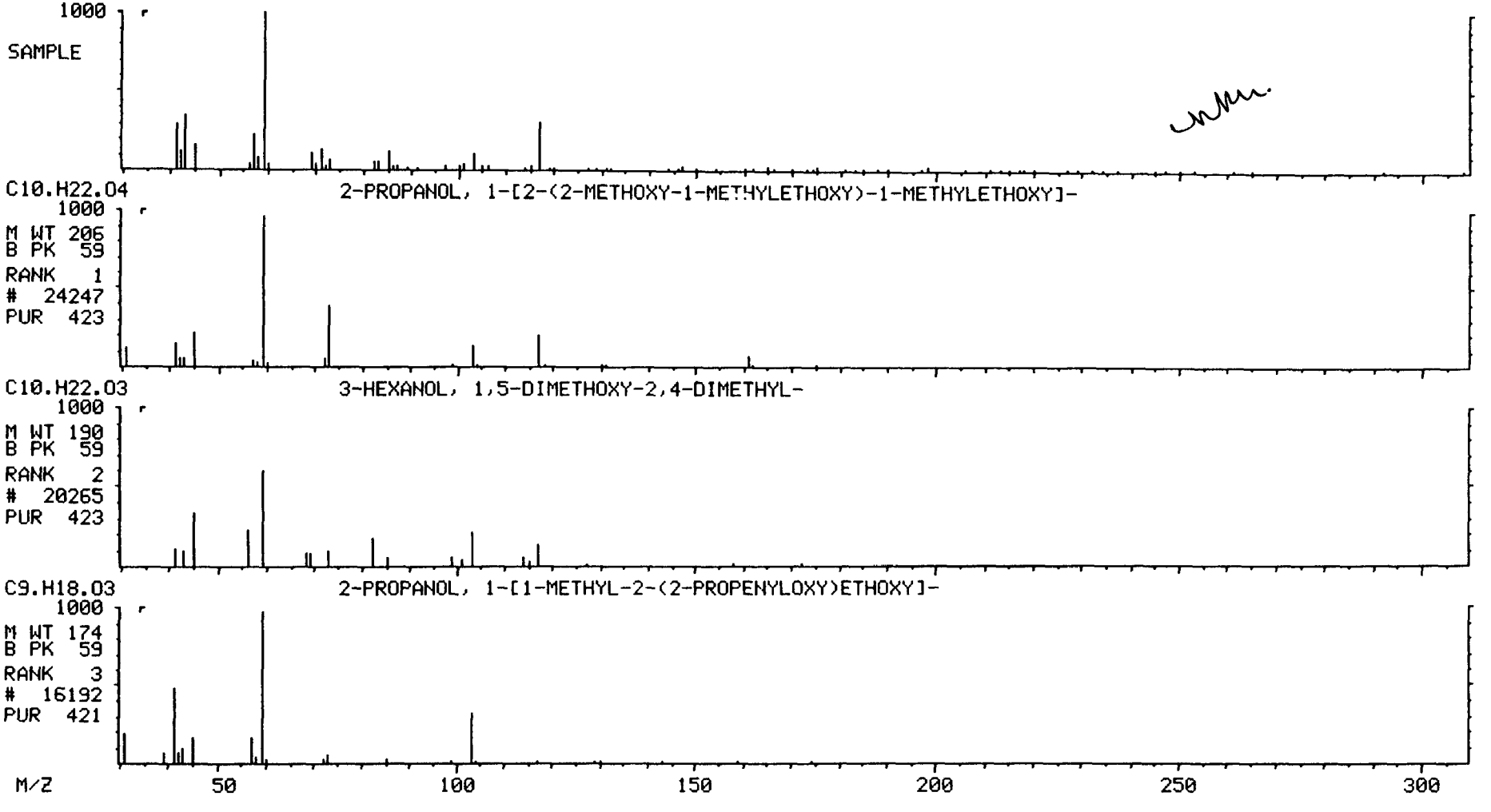
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C10.H22.O4	206	59	423	772	466
2	C10.H22.O3	190	59	423	782	466
3	C9.H18.O3	174	59	421	756	441
4	C9.H20.O4	192	59	404	794	427
5	C7.H16.O3	148	59	397	799	414
6	C6.H14.O2	118	59	384	901	391
7	C8.H16.O2	144	59	378	922	385
8	C7.H16.O3	148	59	378	740	388
9	C7.H16.O2	132	43	375	689	400

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	20324-33-8
2	—	—	—	—	13897-22-8
3	—	—	—	—	55956-25-7
4	—	—	—	—	1638-16-0
5	—	—	—	—	13588-28-8
6	—	—	—	—	76-09-5
7	—	—	—	—	6321-14-8
8	—	—	—	—	55956-21-3
9	—	—	—	—	53907-95-2

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:00:00 + 16:46
SAMPLE: T-MM5-4 1/35A/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068105 #1508
CALI: 30068105 # 3

BASE M/Z: 59
RIC: 7352.



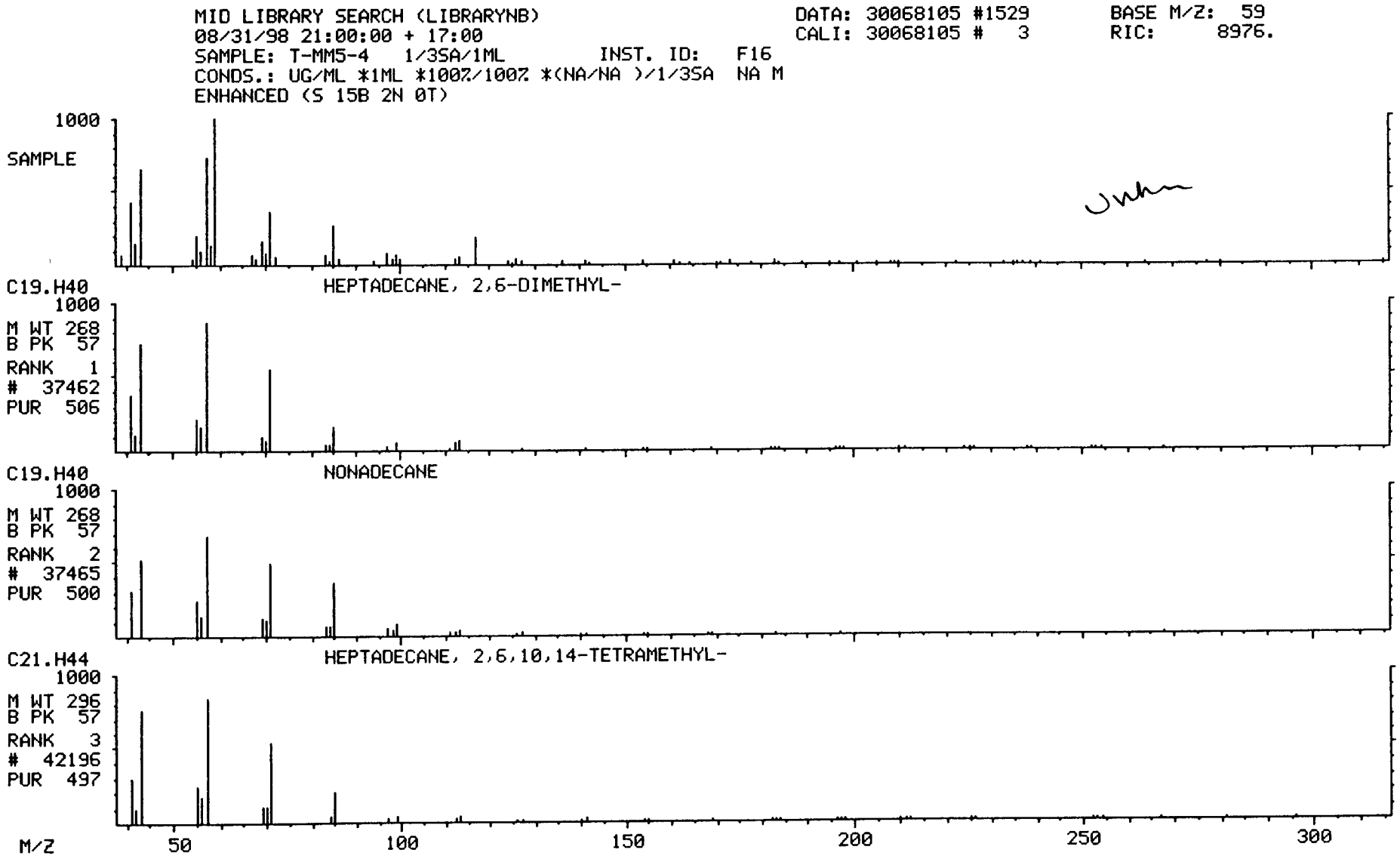
Library Search Data: 30068105 #1529 Base m/z: 59
08/31/98 21:00:00 + 17:00 Cali: 30068105 # 3 RIC: 8976.
Sample: T-MM5-4 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
562 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37462	HEPTADECANE, 2,6-DIMETHYL-
2	37465	NONADECANE
3	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
4	46161	TRICOSANE
5	3000	OXIRANE, 2,2-DIMETHYL-3-PROPYL-
6	19515	5,9-DIMETHYL-3-DECANOL
7	25991	DODECANE, 2,6,10-TRIMETHYL-
8	32059	HEPTADECANE
9	25997	PENTADECANE

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	506	913	526
2	C19.H40	268	57	500	915	530
3	C21.H44	296	57	497	913	516
4	C23.H48	324	43	496	871	556
5	C7.H14.O	114	43	488	860	508
6	C12.H26.O	186	57	481	837	521
7	C15.H32	212	57	479	918	484
8	C17.H36	240	57	478	888	518
9	C15.H32	212	57	476	915	505

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	54105-67-8
2	—	—	—	—	629-92-5
3	—	—	—	—	18344-37-1
4	—	—	—	—	638-67-5
5	—	—	—	—	17612-35-0
6	—	—	—	—	- -
7	—	—	—	—	3891-98-3
8	—	—	—	—	629-78-7
9	—	—	—	—	629-62-9


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:00:00 + 17:00
SAMPLE: T-MM5-4 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068105 #1529
CALI: 30068105 # 3
BASE M/Z: 59
RIC: 8976.
1000
SAMPLE
C19.H40
HEPTADECANE, 2,6-DIMETHYL-
1000
M WT 268
B PK 57
RANK 1
37462
PUR 506
C19.H40
NONADECANE
1000
M WT 268
B PK 57
RANK 2
37465
PUR 500
C21.H44
HEPTADECANE, 2,6,10,14-TETRAMETHYL-
1000
M WT 296
B PK 57
RANK 3
42196
PUR 497
M/Z
50
100
150
200
250
300

Library Search Data: 30068105 #1587 Base m/z: 43
08/31/98 21:00:00 + 17:39 Cali: 30068105 # 3 RIC: 27744.
Sample: T-MM5-4 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
965 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	39516	5-EICOSENE, (E)-
2	39515	9-EICOSENE, (E)-
3	34410	3-OCTADECENE, (E)-
4	37062	1-NONADECENE
5	28776	CYCLOHEXADECANE
6	34418	9-OCTADECENE, (E)-
7	34411	5-OCTADECENE, (E)-
8	58701	17-PENTATRIACONTENE
9	39517	3-EICOSENE, (E)-

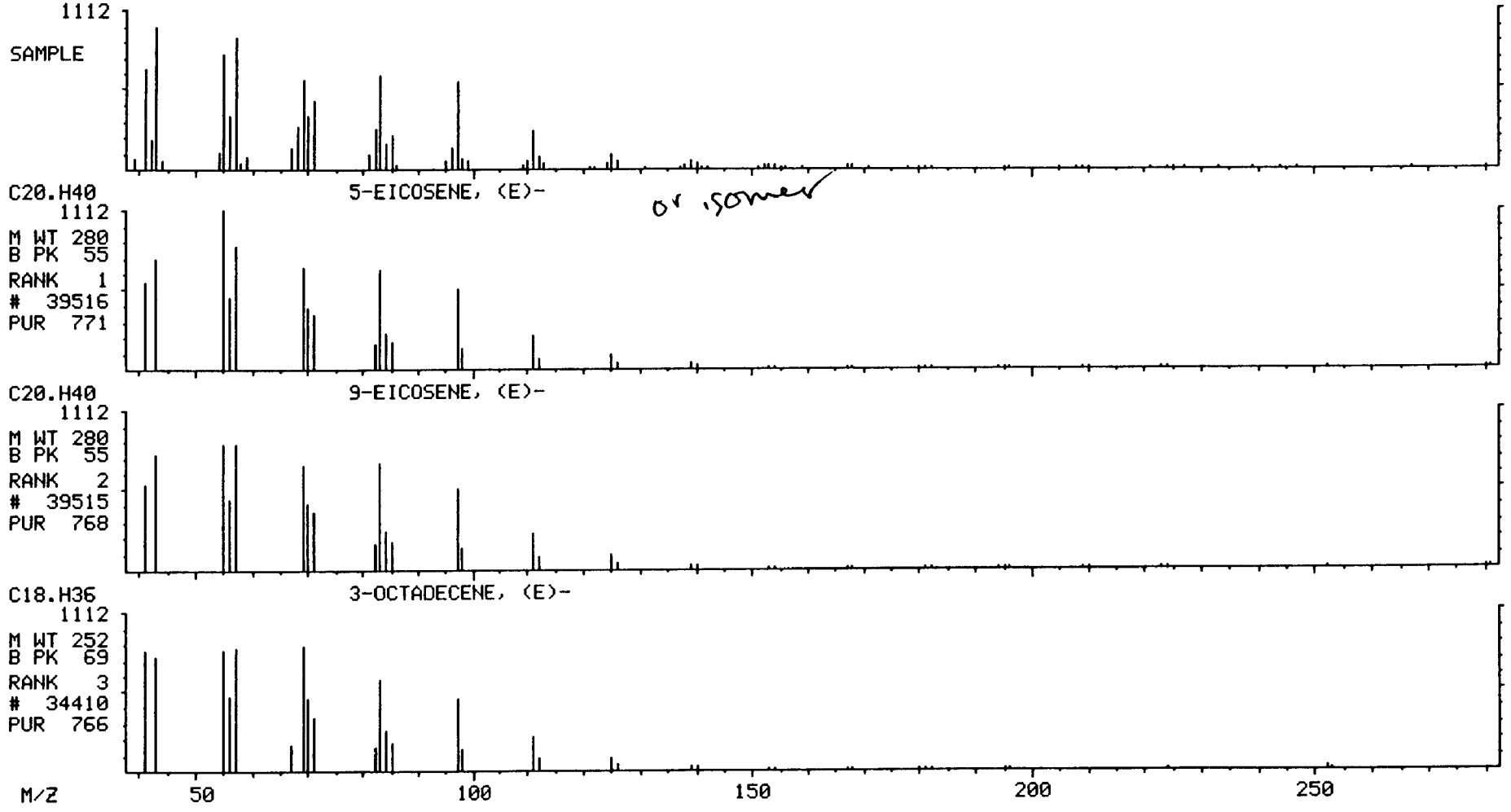
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C20.H40	280	55	771	974	774
2	C20.H40	280	55	768	974	771
3	C18.H36	252	69	766	957	778
4	C19.H38	266	97	763	965	771
5	C16.H32	224	55	762	970	762
6	C18.H36	252	55	759	952	771
7	C18.H36	252	55	759	952	771
8	C35.H70	490	43	759	948	793
9	C20.H40	280	57	757	977	760

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	74685-30-6
2	—	—	—	—	74685-29-3
3	—	—	—	—	7206-19-1
4	—	—	—	—	18435-45-5
5	—	—	—	—	295-65-8
6	—	—	—	—	7206-25-9
7	—	—	—	—	7206-21-5
8	—	—	—	—	6971-40-0
9	—	—	—	—	74685-33-9

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:00:00 + 17:39
SAMPLE: T-MM5-4 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068105 #1587
CALI: 30068105 # 3

BASE M/Z: 43
RIC: 27744.



Library Search Data: 30068105 #1662 Base m/z: 59
08/31/98 21:00:00 + 18:29 Cali: 30068105 # 3 RIC: 5128.
Sample: T-MM5-4 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
707 matched at least 5 of the 16 largest peaks in the unknown

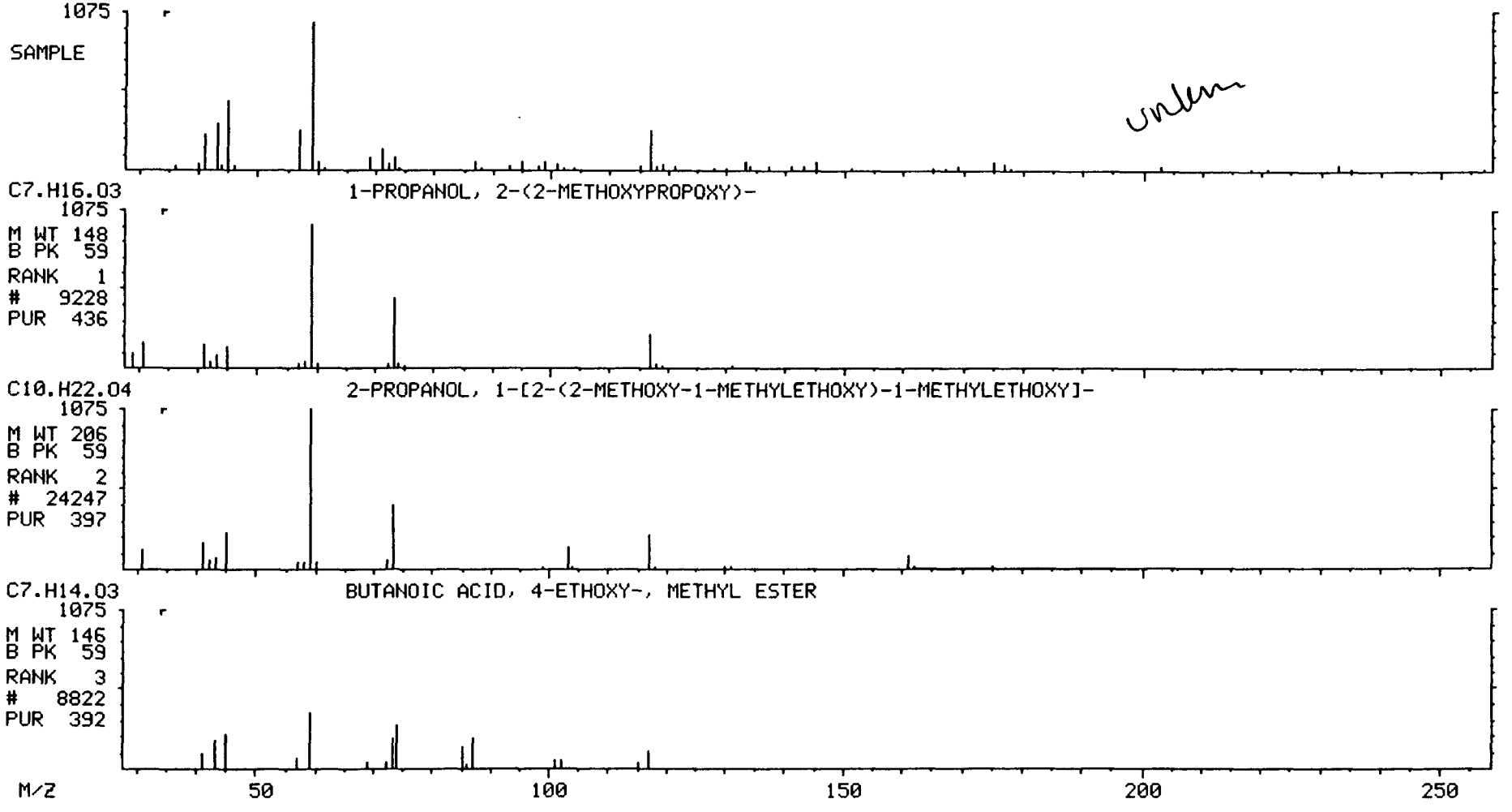
Rank	In.	Name
1	1909	2-PROPANOL, 1-METHOXY-2-METHYL-
2	20626	2-PROPANOL, 1,1'-[(1-METHYL-1,2-ETHANEDIYL)BIS(OXY)]BIS-
3	9235	1-PROPANOL, 2-(2-METHOXY-1-METHYLETHOXY)-
4	24247	2-PROPANOL, 1-[2-(2-METHOXY-1-METHYLETHOXY)-1-METHYLETHOXY]-
5	36537	2,5,8,11-TETRAOXATETRADECAN-13-OL, 4,7,10-TRIMETHYL-
6	6083	2-PROPANOL, 1,1'-OXYBIS-
7	9228	1-PROPANOL, 2-(2-METHOXYPROPOXY)-
8	16192	2-PROPANOL, 1-[1-METHYL-2-(2-PROPENYLOXY)ETHOXY]-
9	12856	2-PROPANOL, 1-(2-ETHOXYPROPOXY)-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C5.H12.O2	104	59	471	916	491
2	C9.H20.O4	192	59	453	812	475
3	C7.H16.O3	148	59	448	773	455
4	C10.H22.O4	206	59	447	757	513
5	C13.H28.O5	264	59	441	705	530
6	C6.H14.O3	134	59	440	886	447
7	C7.H16.O3	148	59	439	776	467
8	C9.H18.O3	174	59	438	746	466
9	C8.H18.O3	162	59	436	732	482

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	3587-64-2
2	---	---	---	---	1638-16-0
3	---	---	---	---	55956-21-3
4	---	---	---	---	20324-33-8
5	---	---	---	---	20324-34-9
6	---	---	---	---	110-98-5
7	---	---	---	---	13588-28-8
8	---	---	---	---	55956-25-7
9	---	---	---	---	10143-32-5

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:00:00 + 20:04
SAMPLE: T-MM5-4 1/35A/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068105 #1804 BASE M/Z: 59
CALI: 30068105 # 3 RIC: 4592.



Library Search Data: 30068105 #1916 Base m/z: 43
08/31/98 21:00:00 + 21:19 Cali: 30068105 # 3 RIC: 8736.
Sample: T-MM5-4 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
950 matched at least 7 of the 16 largest peaks in the unknown

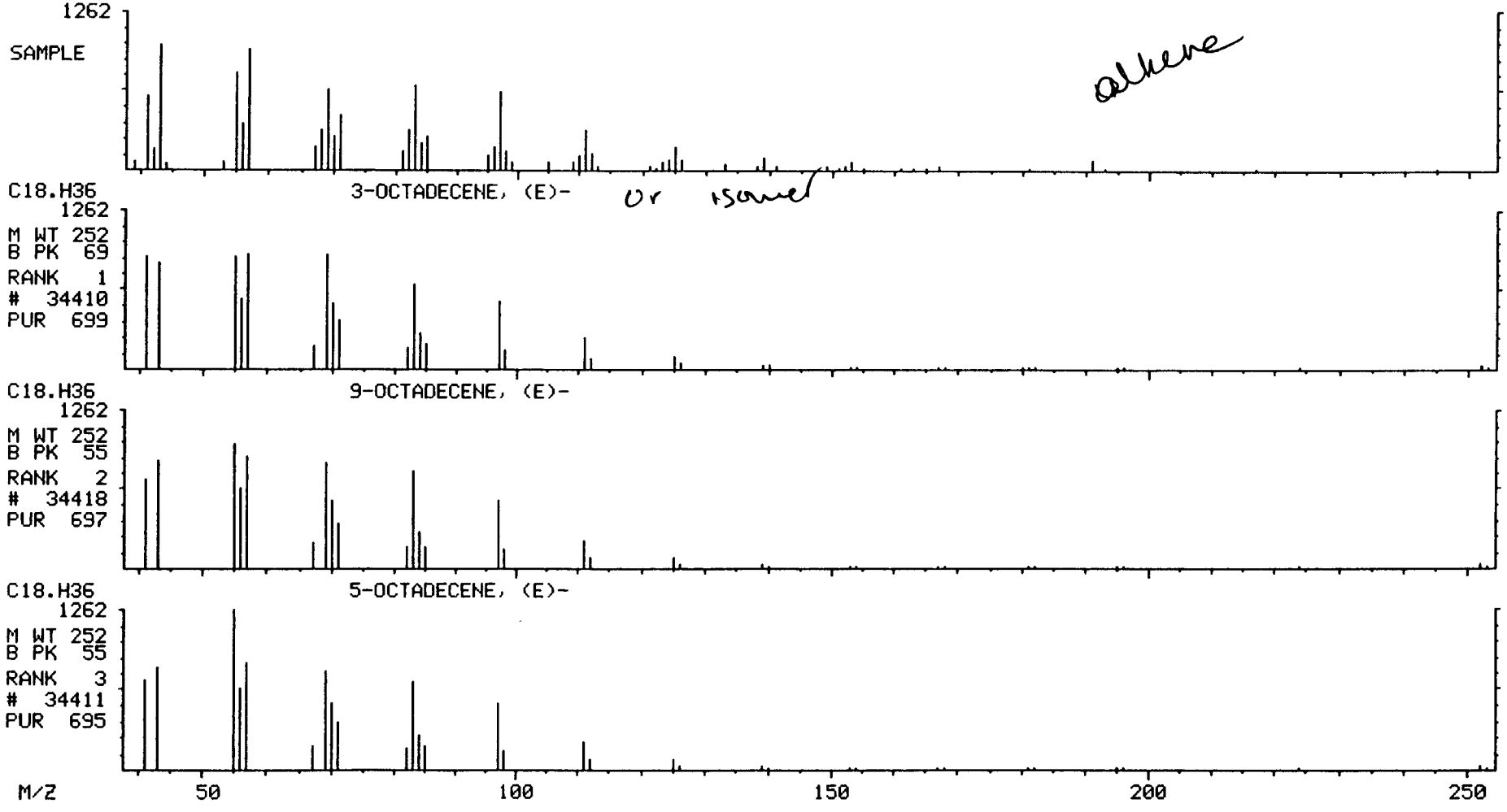
Rank	In.	Name
1	34410	3-OCTADECENE, (E)-
2	34418	9-OCTADECENE, (E)-
3	34411	5-OCTADECENE, (E)-
4	39515	9-EICOSENE, (E)-
5	39516	5-EICOSENE, (E)-
6	26416	4-TETRADECANOL
7	31653	1-HEPTADECENE
8	37062	1-NONADECENE
9	40232	1-NONADECANOL

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C18.H36	252	69	699	930	723
2	C18.H36	252	55	697	927	719
3	C18.H36	252	55	695	925	718
4	C20.H40	280	55	693	942	717
5	C20.H40	280	55	691	939	716
6	C14.H30.O	214	43	689	955	711
7	C17.H34	238	55	687	933	710
8	C19.H38	266	97	687	933	722
9	C19.H40.O	284	55	684	965	703

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	7206-19-1
2	—	—	—	—	7206-25-9
3	—	—	—	—	7206-21-5
4	—	—	—	—	74685-29-3
5	—	—	—	—	74685-30-6
6	—	—	—	—	1653-33-4
7	—	—	—	—	6765-39-5
8	—	—	—	—	18435-45-5
9	—	—	—	—	1454-84-8

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:00:00 + 21:19
SAMPLE: T-MM5-4 1/35A/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068105 #1916 BASE M/Z: 43
CALI: 30068105 # 3 RIC: 8736.



10

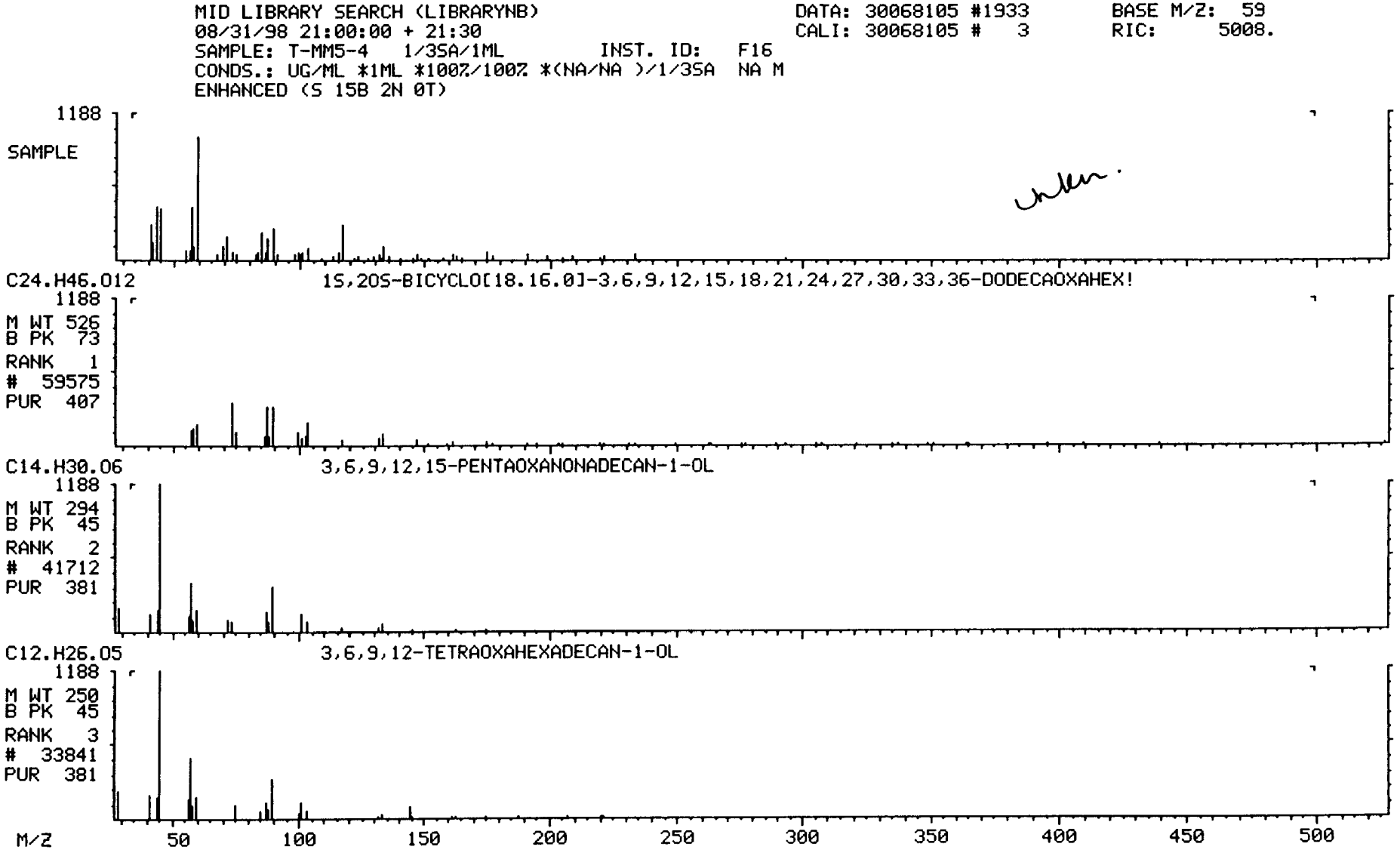
Library Search Data: 30068105 #1933 Base m/z: 59
08/31/98 21:00:00 + 21:30 Cali: 30068105 # 3 RIC: 5008.
Sample: T-MM5-4 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
705 matched at least 5 of the 16 largest peaks in the unknown

Rank	In.	Name
1	59575	1S,20S-BICYCLO[18.16.0]-3,6,9,12,15,18,21,24,27,30,33,36-DODECAOXAH*
2	41712	3,6,9,12,15-PENTAOXANONADECAN-1-OL
3	33841	3,6,9,12-TETRAOXAHEXADECAN-1-OL
4	5825	2-PROPANOL, 1-(2-METHYLPROPOXY)-
5	16648	1-BUTOXYETHOXY-2-PROPANOL
6	5832	2-PROPANOL, 1-(1-METHYLPROPOXY)-
7	31381	6-O-METHYL-2,4-METHYLENE-.BETA.-SEDOHEPTITOL
8	16651	DIETHYLENE GLYCOL TERT-BUTYL ETHER METHYL ETHER
9	1909	2-PROPANOL, 1-METHOXY-2-METHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C24.H46.O12	526	73	407	677	475
2	C14.H30.O6	294	45	381	704	423
3	C12.H26.O5	250	45	381	696	437
4	C7.H16.O2	132	57	380	798	410
5	C9.H20.O3	176	57	378	864	395
6	C7.H16.O2	132	43	376	795	402
7	C9.H18.O7	238	58	372	676	431
8	C9.H20.O3	176	57	372	840	389
9	C5.H12.O2	104	59	371	904	382

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	- -
2	—	—	—	—	1786-94-3
3	—	—	—	—	1559-34-8
4	—	—	—	—	23436-19-3
5	—	—	—	—	124-16-3
6	—	—	—	—	53907-95-2
7	—	—	—	—	- -
8	—	—	—	—	52788-79-1
9	—	—	—	—	3587-64-2


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:00:00 + 21:30
SAMPLE: T-MM5-4 1/3SA/1ML
INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068105 #1933
CALI: 30068105 # 3
BASE M/Z: 59
RIC: 5008.
1188
SAMPLE
C24.H46.012
1S,20S-BICYCLO[18.16.0]-3,6,9,12,15,18,21,24,27,30,33,36-DODECAOXAHEX!
M WT 526
B PK 73
RANK 1
59575
PUR 407
C14.H30.06
3,6,9,12,15-PENTAOXANONADECAN-1-OL
M WT 294
B PK 45
RANK 2
41712
PUR 381
C12.H26.05
3,6,9,12-TETRAOXAHEXADECAN-1-OL
M WT 250
B PK 45
RANK 3
33841
PUR 381
M/Z
50
100
150
200
250
300
350
400
450
500

10

Library Search Data: 30068105 #2057 Base m/z: 59
08/31/98 21:00:00 + 22:53 Cali: 30068105 # 3 RIC: 3196.
Sample: T-MM5-4 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
352 matched at least 5 of the 16 largest peaks in the unknown

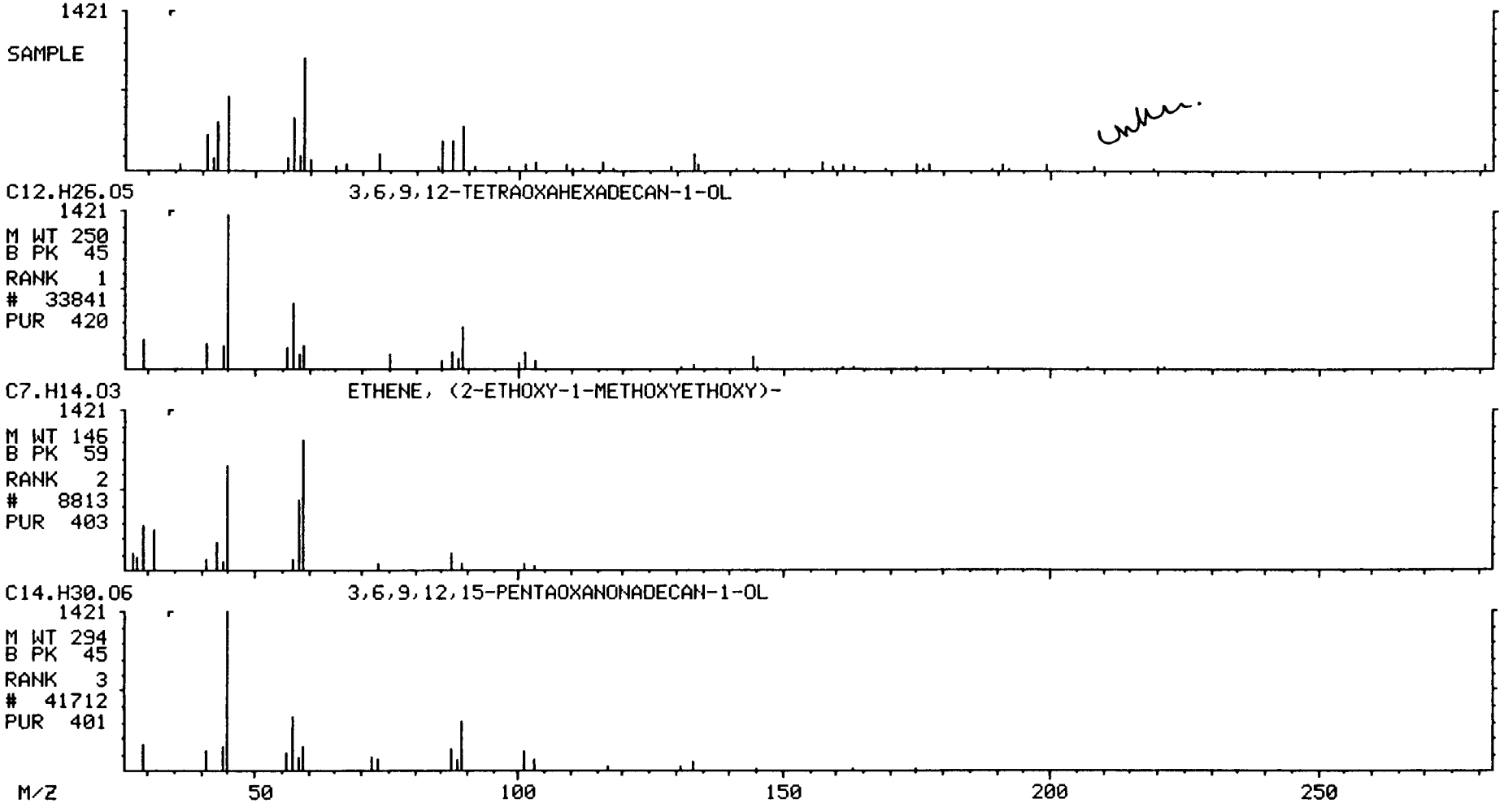
Rank	In.	Name
1	33841	3,6,9,12-TETRAOXAHEXADECAN-1-OL
2	8813	ETHENE, (2-ETHOXY-1-METHOXYETHOXY)-
3	41712	3,6,9,12,15-PENTAOXANONADECAN-1-OL
4	16651	DIETHYLENE GLYCOL TERT-BUTYL ETHER METHYL ETHER
5	34224	2,5,8,11,14-PENTAOXAHEXADECAN-16-OL
6	5832	2-PROPANOL, 1-(1-METHYLPROPOXY)-
7	8871	METHANE, TERT-BUTOXYISOPROPOXY-
8	16648	1-BUTOXYETHOXY-2-PROPANOL
9	1909	2-PROPANOL, 1-METHOXY-2-METHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C12.H26.O5	250	45	420	704	492
2	C7.H14.O3	146	59	403	823	409
3	C14.H30.O6	294	45	401	735	469
4	C9.H20.O3	176	57	397	782	436
5	C11.H24.O6	252	45	394	809	438
6	C7.H16.O2	132	43	383	863	419
7	C8.H18.O2	146	57	381	748	410
8	C9.H20.O3	176	57	380	780	444
9	C5.H12.O2	104	59	375	832	405

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	1559-34-8
2	—	—	—	—	54063-18-2
3	—	—	—	—	1786-94-3
4	—	—	—	—	52788-79-1
5	—	—	—	—	23778-52-1
6	—	—	—	—	53907-95-2
7	—	—	—	—	4346-01-4
8	—	—	—	—	124-16-3
9	—	—	—	—	3587-64-2

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:00:00 + 22:53
SAMPLE: T-MM5-4 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068105 #2057 BASE M/Z: 59
CALI: 30068105 # 3 RIC: 3196.



10-17

TIC SELECTION REPORT

DATA FILE: 30068105

THE FOLLOWING PEAKS WERE REJECTED BECAUSE AT LEAST 40 % OF THEIR SIZE WAS ACCOUNTED FOR BY TARGET COMPOUNDS ELUTING WITHIN 4 SCANS OF THE PEAK TOP.

SCAN	SIZE	AMOUNT
198	221024.	26.074
308	308392.	36.381
340	226080.	26.670
421	158208.	18.664
529	339072.	40.000
722	329502.	38.833
828	339403.	40.000
969	255936.	26.223
1086	390400.	40.000
1384	295584.	66.337
1384	285536.	64.082
1551	178232.	40.000
1782	139640.	40.000

TOTAL NUMBER OF UNIDENTIFIED PEAKS WITH SIZE GREATER THAN 10 % OF THE CLOSEST INTERNAL STANDARD THAT DOES NOT HAVE INTERFERENCES = 41

INTERNAL STANDARDS THAT HAVE RIC SIZE LESS THAN 50 % OR GREATER THAN 200 % OF THE ESTIMATED RIC SIZE ARE CONSIDERED TO HAVE INTERFERENCES AND WILL NOT BE USED FOR QUANTITATION.

#	INTERNAL STANDARD	RIC SIZE	PERCENT OF ESTIMATED RIC SIZE	SCAN
1	C140 NAPHTHALENE-D8	339072.	157	529
2	C150 ACENAPHTHENE-D10	339403.	130	828
3	C160 PHENANTHRENE-D10	390400.	146	1086
4	C170 CHRYSENE-D12	178232.	130	1551
5	C175 PERYLENE-D12	139640.	121	1782

* INDICATES INTERFERENCE

SIZE = AREA

Semivolatile Organics
Method 0010/8270

Client Name: Pacific Environmental Services
Client ID: T-MM5-3-F,FH,XAD,COND,BH
LAB ID: 300681-0006-SA
Matrix: AIRTRAIN Sampled: 27 JUL 98 Received: 30 JUL 98
Authorized: 30 JUL 98 Prepared: 31 JUL 98 Analyzed: 31 AUG 98

Dilution Factor: 1.0

Parameter	Wet wt. Result	Units	Reporting Limit	Qualifier
Phenol	53	ug/Sample	30	R
bis(2-Chloroethyl)ether	ND	ug/Sample	30	
2-Chlorophenol	ND	ug/Sample	30	
1,3-Dichlorobenzene	ND	ug/Sample	30	
1,4-Dichlorobenzene	ND	ug/Sample	30	
Benzyl alcohol	ND	ug/Sample	30	
1,2-Dichlorobenzene	ND	ug/Sample	30	
2-Methylphenol	ND	ug/Sample	30	
2,2'-Oxybis(1-chloropropane)	ND	ug/Sample	30	
3/4-Methylphenol	ND	ug/Sample	30	
N-Nitroso-di-n-propylamine	ND	ug/Sample	30	
Hexachloroethane	ND	ug/Sample	30	
Nitrobenzene	ND	ug/Sample	30	
Isophorone	ND	ug/Sample	30	
2-Nitrophenol	ND	ug/Sample	30	
2,4-Dimethylphenol	ND	ug/Sample	30	
Benzoic acid	ND	ug/Sample	150	
bis(2-Chloroethoxy)-methane	ND	ug/Sample	30	
2,4-Dichlorophenol	ND	ug/Sample	30	
1,2,4-Trichlorobenzene	ND	ug/Sample	30	
Naphthalene	39	ug/Sample	30	
4-Chloroaniline	ND	ug/Sample	30	
Hexachlorobutadiene	ND	ug/Sample	30	
4-Chloro-3-methylphenol	ND	ug/Sample	30	
2-Methylnaphthalene	74	ug/Sample	30	
Hexachlorocyclopentadiene	ND	ug/Sample	30	
2,4,6-Trichlorophenol	ND	ug/Sample	30	
2,4,5-Trichlorophenol	ND	ug/Sample	150	
2-Chloronaphthalene	ND	ug/Sample	30	
2-Nitroaniline	ND	ug/Sample	30	
Dimethyl phthalate	ND	ug/Sample	30	
Acenaphthylene	ND	ug/Sample	30	
3-Nitroaniline	ND	ug/Sample	150	
Acenaphthene	ND	ug/Sample	30	
2,4-Dinitrophenol	ND	ug/Sample	150	
4-Nitrophenol	ND	ug/Sample	150	
Dibenzofuran	ND	ug/Sample	30	

Note R = Reporting limit(s) raised due to sample volume limitations.
ND = Not Detected

Reported By: Emily Uebelhoer Approved By: Karin Yee

1018

The cover letter is an integral part of this report.
Rev 230787

Semivolatile Organics
Method 0010/8270

(cont.)

Client Name: Pacific Environmental Services
Client ID: T-MM5-3-F,FH,XAD,COND,BH
LAB ID: 300681-0006-SA
Matrix: AIRTRAIN Sampled: 27 JUL 98 Received: 30 JUL 98
Authorized: 30 JUL 98 Prepared: 31 JUL 98 Analyzed: 31 AUG 98

Dilution Factor: 1.0

Parameter	Wet wt. Result	Units	Reporting Limit	Qualifier
2,4-Dinitrotoluene	ND	ug/Sample	30	
2,6-Dinitrotoluene	ND	ug/Sample	30	
Diethyl phthalate	ND	ug/Sample	30	
4-Chlorophenyl phenyl ether	ND	ug/Sample	30	
Fluorene	ND	ug/Sample	30	
4-Nitroaniline	ND	ug/Sample	150	
4,6-Dinitro-2-methylphenol	ND	ug/Sample	150	
N-Nitrosodiphenylamine	ND	ug/Sample	30	
4-Bromophenyl phenyl ether	ND	ug/Sample	30	
Hexachlorobenzene	ND	ug/Sample	30	
Pentachlorophenol	ND	ug/Sample	150	
Phenanthrene	ND	ug/Sample	30	
Anthracene	ND	ug/Sample	30	
Di-n-butyl phthalate	ND	ug/Sample	30	
Fluoranthene	ND	ug/Sample	30	
Pyrene	ND	ug/Sample	30	
Butyl benzyl phthalate	ND	ug/Sample	30	
3,3'-Dichlorobenzidine	ND	ug/Sample	60	
Benzo(a)anthracene	ND	ug/Sample	30	
bis(2-Ethylhexyl)-phthalate	ND	ug/Sample	30	
Chrysene	ND	ug/Sample	30	
Di-n-octyl phthalate	ND	ug/Sample	30	
Benzo(b)fluoranthene	ND	ug/Sample	30	
Benzo(k)fluoranthene	ND	ug/Sample	30	
Benzo(a)pyrene	ND	ug/Sample	30	
Indeno(1,2,3-cd)pyrene	ND	ug/Sample	30	
Dibenz(a,h)anthracene	ND	ug/Sample	30	
Benzo(g,h,i)perylene	ND	ug/Sample	30	
Acetophenone	ND	ug/Sample	30	
4-Aminobiphenyl	ND	ug/Sample	150	
Aniline	ND	ug/Sample	30	
Benzidine	ND	ug/Sample	300	
3,3'-Dimethylbenzidine	ND	ug/Sample	60	
N-Nitrosodimethylamine	ND	ug/Sample	30	
N-Nitrosomorpholine	ND	ug/Sample	30	
Pentachloronitrobenzene (PCNB)	ND	ug/Sample	150	
o-Toluidine	ND	ug/Sample	60	

ND = Not Detected

Reported By: Emily Uebelhoer Approved By: Karin Yee

The cover letter is an integral part of this report.
Rev 230787

Semivolatile Organics
Method 0010/8270 (cont.)

Client Name: Pacific Environmental Services
Client ID: T-MM5-3-F,FH,XAD,COND,BH
LAB ID: 300681-0006-SA
Matrix: AIRTRAIN Sampled: 27 JUL 98 Received: 30 JUL 98
Authorized: 30 JUL 98 Prepared: 31 JUL 98 Analyzed: 31 AUG 98

Dilution Factor: 1.0

Parameter	Wet wt. Result	Units	Reporting Limit	Qualifier
2-Methoxybenzenamine	ND	ug/Sample	--	K
Biphenyl	ND	ug/Sample	--	K
Chloroacetophenone	ND	ug/Sample	--	K
Cumene	ND	ug/Sample	--	K
DBCP (1,2-Dibromo-3-chloropropane)	ND	ug/Sample	--	K
Benzo(e)pyrene	ND	ug/Sample	--	K
N-N-Diethylaniline	ND	ug/Sample	--	K
Dimethylaniline	ND	ug/Sample	--	K
3,3'-Dimethoxybenzidine	ND	ug/Sample	--	K
Hydroquinone	ND	ug/Sample	--	K
4,4'-Methyl-bis(2-chloroaniline)	ND	ug/Sample	--	K
4-Nitrodiphenyl	ND	ug/Sample	--	K
Trifluralin	ND	ug/Sample	--	K

Surrogate	Recovery	Acceptable Range	
Nitrobenzene-d5	78 %	45 - 107	
2-Fluorobiphenyl	106 %	62 - 110	
Terphenyl-d14	80 %	58 - 135	
Phenol-d5	69 %	43 - 130	
2-Fluorophenol	71 %	36 - 111	
2,4,6-Tribromophenol	52 %	58 - 131	i

Note i = Surrogate recovery is outside of control limits.
Note K = Identified by mass spectrum only; quantitation based on 1:1 response with internal standard.
ND = Not Detected

Reported By: Emily Uebelhoer Approved By: Karin Yee

The cover letter is an integral part of this report.
Rev 230787

Semivolatiles Library Search (20 Compound TID)
Method 8270

Client Name: Pacific Environmental Services
Client ID: T-MM5-3-F,FH,XAD,COND,BH
LAB ID: 300681-0006-SA
Matrix: AIRTRAIN Sampled: 27 JUL 98 Received: 30 JUL 98
Authorized: 30 JUL 98 Prepared: NA Analyzed: 31 AUG 98

Dilution Factor: 1.0

Parameter	Result	Units	Reporting Limit	Qualifier
n-Nonane	390	ug/Sample	--	0
Unknown	270	ug/Sample	--	
Undecane	180	ug/Sample	--	0
Dodecane	160	ug/Sample	--	0
Unknown alkane	240	ug/Sample	--	
1H-Indene, 1-ethylidene-	170	ug/Sample	--	0
Undecane,4,7-dimethyl-	240	ug/Sample	--	0
4-Hydroxy-4-methyl-2-pentanone	350	ug/Sample	--	0
Heptadecane, 2,6,10,14 -tetramethyl-	250	ug/Sample	--	0
Tetradecane	430	ug/Sample	--	0
Unknown aromatic hydrocarbon	230	ug/Sample	--	
Heptadecane, 2,6,10,14 -tetramethyl-	300	ug/Sample	--	0
Pentadecane	440	ug/Sample	--	
Nonadecane	400	ug/Sample	--	0
Heptadecane, 2,6-dimethyl-	230	ug/Sample	--	0
Heptadecane, 2,6-dimethyl-	520	ug/Sample	--	0
Nonadecane	170	ug/Sample	--	0
Nonadecane	180	ug/Sample	--	0
Nonadecane	150	ug/Sample	--	0
9-Eicosene (E)-	240	ug/Sample	--	0

Note O = Or structurally similar compound (isomer).
NA = Not Applicable

Reported By: Emily Uebelhoer Approved By: Karin Yee

The cover letter is an integral part of this report.
Rev 230787

QUANTERRA GC/MS
Target Compound Data Summary Sheet

Data File: 30068106
Std Id: ST16980831

Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Client: PACIFI Date Analyzed: 08/31/98 21:30
Analyst: DAT Instrument ID: F16 Run Factor: 3.00
Quan List Threshold: 0.95 Surrogate Vol.: 1.00

Surrogate Spike Recoveries
8270-G, LIMS 10/10/96

Surrogate	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured		QC limits
CS20 NITROBENZENE-D5	50.00	39.20	78.4		45 107
CS25 2-FLUOROBIPHENY	50.00	52.90	106.		62 110
CS30 TERPHENYL-D14	50.00	39.90	79.8		58 135
CS45 PHENOL-D5	100.0	68.90	68.9		43 130
CS50 2-FLUOROPHENOL	100.0	71.40	71.4		36 111
CS55 2,4,6-TRIBROMOP	100.0	52.50	52.5	*	58 131

RI confirms
9/16/98

Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
HEXACHLOROBENZENE-C13		ND	UG/A	30.0
C310 N-NITROSODIMETHYLAMINE		ND	UG/A	30.0
PYRIDINE		ND	UG/A	60.0
2-PICOLINE		ND	UG/A	30.0
N-NITROSOMETHYLETHYLAMINE	157	~~38.~~ ND	UG/A	30.0
METHYLMETHANESULFONATE		ND	UG/A	30.0
N-NITROSODIETHYLAMINE		ND	UG/A	30.0
ETHYLMETHANE SULFONATE		ND	UG/A	30.0
PENTACHLOROETHANE		ND	UG/A	30.0
C320 ANILINE		ND	UG/A	30.0
C315 PHENOL	311	63.	UG/A	30.0
C325 BIS(2-CHLOROETHYL)ETHER		ND	UG/A	30.0
C330 2-CHLOROPHENOL		ND	UG/A	30.0
C335 1,3-DICHLOROBENZENE		ND	UG/A	30.0
C340 1,4-DICHLOROBENZENE		ND	UG/A	30.0
C345 BENZYL ALCOHOL		ND	UG/A	30.0
C350 1,2-DICHLOROBENZENE		ND	UG/A	30.0
C355 2-METHYLPHENOL		ND	UG/A	30.0
C360 2,2'-OXYBIS(1-CLPROPAN)		ND	UG/A	30.0
C361 ACETOPHENONE	401	31 NA	UG/A	30.0
N-NITROSOPYRROLIDINE		ND	UG/A	30.0
N-NITROSOMORPHOLINE	410	~~31.~~ ND	UG/A	30.0
3-METHYL PHENOL		ND	UG/A	30.0
C365 4-METHYLPHENOL		ND	UG/A	30.0
C370 N-NITROSO-DI-N-PROPYLAM		ND	UG/A	30.0
O-TOLUIDINE		ND	UG/A	30.0
C375 HEXACHLOROETHANE		ND	UG/A	30.0
C410 NITROBENZENE		ND	UG/A	30.0
N-NITROSOPIPERIDINE		ND	UG/A	30.0

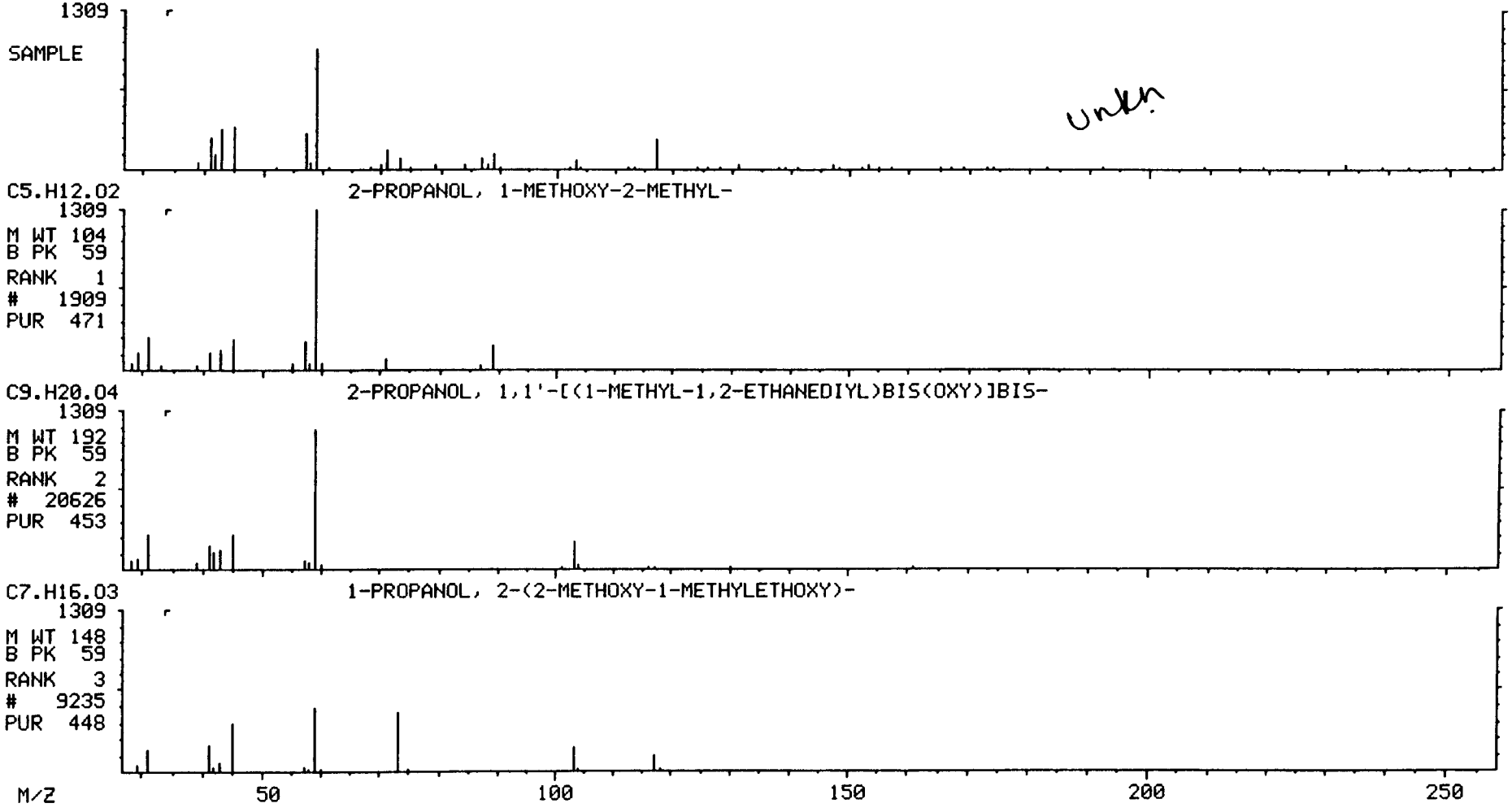
Reviewed by: 9/17/98

1023

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:00:00 + 18:29
SAMPLE: T-MM5-4 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068105 #1662
CALI: 30068105 # 3

BASE M/Z: 59
RIC: 5128.



10~5

Library Search Data: 30068105 #1688 Base m/z: 41
08/31/98 21:00:00 + 18:47 Cali: 30068105 # 3 RIC: 2780.
Sample: T-MM5-4 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
246 matched at least 5 of the 16 largest peaks in the unknown

Rank	In.	Name
1	15753	2,2-DIMETHYL-3-HEXANOL ACETATE
2	43380	BUTANOIC ACID, 4-(2,4-DICHLOROPHENOXY)-, 2-METHYLPROPYL ESTER
3	43381	2,4-DB BUTYL ESTER
4	11858	1,3,2-DIOXABOROLANE, 4-METHYL-2-(2-METHYLPROPOXY)-
5	11857	1,3,2-DIOXABORINANE, 2-(2-METHYLPROPOXY)-
6	3130	2-BUTANONE, 3-METHYL-, O-METHYLOXIME
7	12049	4-OCTANOL, 4,7-DIMETHYL-
8	3139	2-PENTANONE, O-METHYLOXIME
9	52020	D-MANNITOL, 2,4-DI-O-METHYL-, TETRAACETATE

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C10.H20.O2	172	43	240	646	291
2	C14.H18.O3.CL2	304	87	224	660	270
3	C14.H18.O3.CL2	304	87	220	664	247
4	C7.H15.O3.B	158	115	208	609	273
5	C7.H15.O3.B	158	115	199	557	237
6	C6.H13.O.N	115	42	198	758	211
7	C10.H22.O	158	87	187	660	234
8	C6.H13.O.N	115	42	185	707	196
9	C16.H26.O10	378	43	175	622	217

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	- -
2	—	—	—	—	51550-64-2
3	—	—	—	—	6753-24-8
4	—	—	—	—	52910-21-1
5	—	—	—	—	55162-67-9
6	—	—	—	—	27685-13-8
7	—	—	—	—	19781-13-6
8	—	—	—	—	31377-00-1
9	—	—	—	—	24406-90-4

Library Search Data: 30068105 #1804 Base m/z: 59
08/31/98 21:00:00 + 20:04 Cali: 30068105 # 3 RIC: 4592.
Sample: T-MM5-4 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
465 matched at least 5 of the 16 largest peaks in the unknown

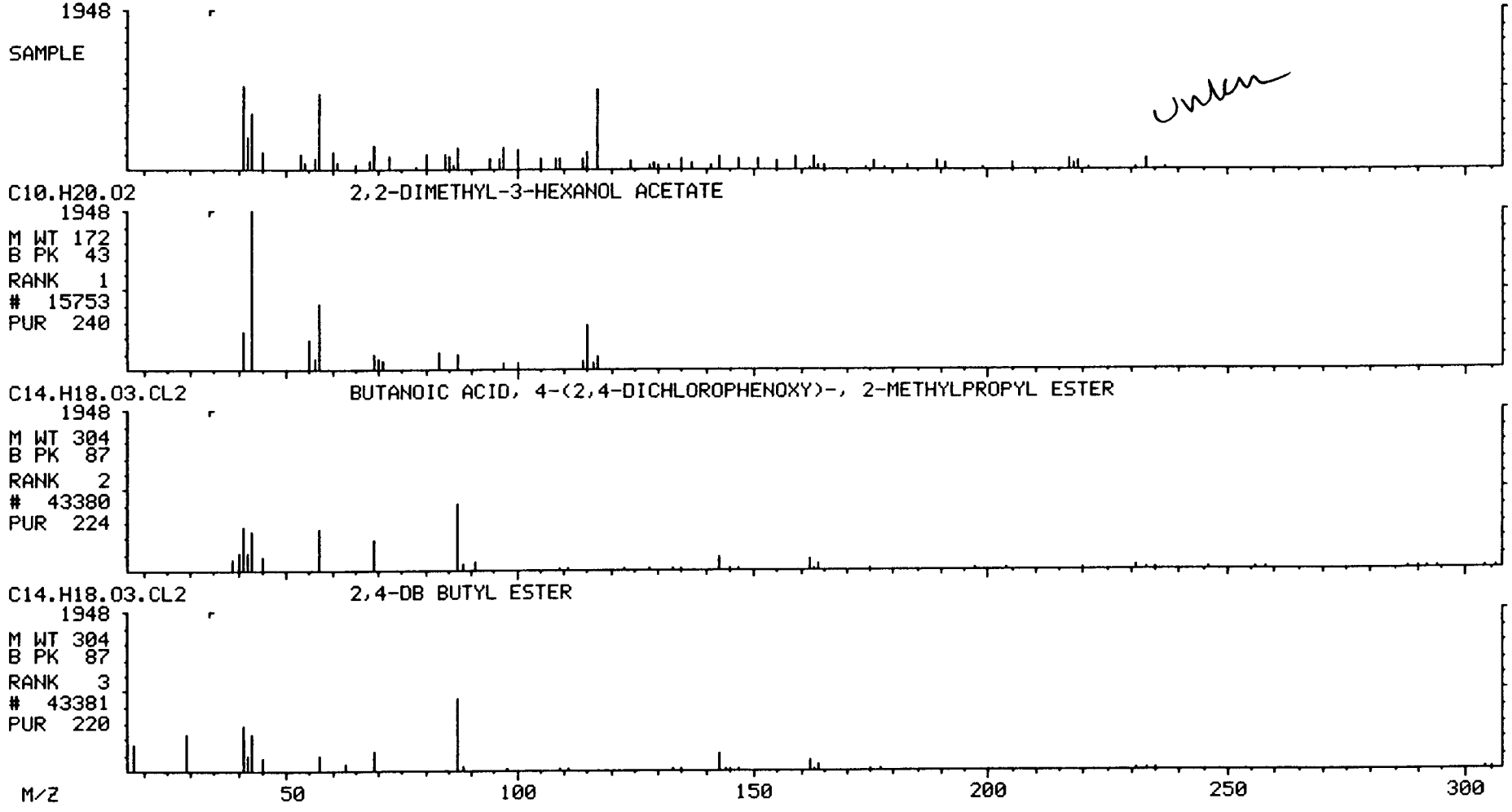
Rank	In.	Name
1	9228	1-PROPANOL, 2-(2-METHOXYPROPOXY)-
2	24247	2-PROPANOL, 1-[2-(2-METHOXY-1-METHYLETHOXY)-1-METHYLETHOXY]-
3	8822	BUTANOIC ACID, 4-ETHOXY-, METHYL ESTER
4	8432	2-HEXANONE, 3-HYDROXY-3,5-DIMETHYL-
5	1760	2-PENTANOL, 2-METHYL-
6	1905	2-BUTANOL, 3-METHOXY-
7	16649	1-PROPANOL, 3-[3-(1-METHYLETHOXY)PROPOXY]-
8	5832	2-PROPANOL, 1-(1-METHYLPROPOXY)-
9	9235	1-PROPANOL, 2-(2-METHOXY-1-METHYLETHOXY)-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C7.H16.O3	148	59	436	799	454
2	C10.H22.O4	206	59	397	681	490
3	C7.H14.O3	146	59	392	687	433
4	C8.H16.O2	144	59	369	851	391
5	C6.H14.O	102	59	365	867	385
6	C5.H12.O2	104	59	362	825	392
7	C9.H20.O3	176	59	356	768	413
8	C7.H16.O2	132	43	354	624	433
9	C7.H16.O3	148	59	349	668	423

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	13588-28-8
2	---	---	---	---	20324-33-8
3	---	---	---	---	29006-04-0
4	---	---	---	---	6321-14-8
5	---	---	---	---	590-36-3
6	---	---	---	---	53778-72-6
7	---	---	---	---	54518-03-5
8	---	---	---	---	53907-95-2
9	---	---	---	---	55956-21-3

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:00:00 + 18:47
SAMPLE: T-MM5-4 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068105 #1688 BASE M/Z: 41
CALI: 30068105 # 3 RIC: 2780.



10[illegible]

QUANTERRA GC/MS

Target Compound Data Summary Sheet

Data File: 30068106
Std Id: ST16980831

Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Client: PACIFI Date Analyzed: 08/31/98 21:30
Analyst: DAT Instrument ID: F16 Run Factor: 3.00
Quan List Threshold: 0.95 Surrogate Vol.: 1.00

Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
C415 ISOPHORONE		ND	UG/A	30.0
C420 2-NITROPHENOL		ND	UG/A	30.0
C425 2,4-DIMETHYLPHENOL		ND	UG/A	30.0
C435 BIS(2-CHLOROETHOXY)METH		ND	UG/A	30.0
C440 2,4-DICHLOROPHENOL		ND	UG/A	30.0
C430 BENZOIC ACID		ND	UG/A	150.0
AA-DIMETHYLPHENETHYLAMINE		ND	UG/A	30.0
C445 1,2,4-TRICHLOROBENZENE		ND	UG/A	30.0
C450 NAPHTHALENE	534	39	UG/A	30.0
C455 4-CHLOROANALINE		ND	UG/A	30.0
2,6-DICHLOROPHENOL		ND	UG/A	30.0
HEXACHLOROPROPENE		ND	UG/A	30.0
C460 HEXACHLOROBUTADIENE		ND	UG/A	30.0
P-PHENYLENE DIAMINE		ND	UG/A	30.0
N-NITROSODI-N-BUTYLAMINE		ND	UG/A	30.0
C465 4-CHLORO-3-METHYLPHENO		ND	UG/A	30.0
SAFROLE		ND	UG/A	30.0
C470 2-METHYLNAPHTHALENE	653	74	UG/A	30.0
1,2,4,5-TETRACHLOROBENZENE		ND	UG/A	30.0
ISOSAFROLE (#1)		ND	UG/A	60.0
C510 HEXACHLOROCYCLOPENTADI		ND	UG/A	30.0
C515 2,4,6-TRICHLOROPHENOL		ND	UG/A	30.0
C520 2,4,5-TRICHLOROPHENOL		ND	UG/A	30.0
ISOSAFROLE (#2)		ND	UG/A	60.0
C525 2-CHLORONAPHTHALENE		ND	UG/A	30.0
1-CHLORONAPHTHALENE		ND	UG/A	15.0
C530 2-NITROANALINE		ND	UG/A	150.0
1,4-NAPHTHOQUINONE		ND	UG/A	30.0
C535 DIMETHYLPHTHALATE		ND	UG/A	30.0
1,3-DINITROBENZENE		ND	UG/A	30.0
C540 ACENAPHTHYLENE		ND	UG/A	30.0
C543 2,6-DINITROTOLUENE		ND	UG/A	30.0
C545 3-NITROANILINE		ND	UG/A	150.0
C550 ACENAPHTHENE		ND	UG/A	30.0
C555 2,4-DINITROPHENOL		ND	UG/A	150.0
C565 DIBENZOFURAN		ND	UG/A	30.0
C560 4-NITROPHENOL		ND	UG/A	150.0
PENTACHLOROBENZENE		ND	UG/A	30.0
C570 2,4-DINITROTOLUENE		ND	UG/A	30.0
1-NAPHTHYLAMINE		ND	UG/A	30.0
2-NAPHTHYLAMINE		ND	UG/A	30.0
2,3,4,6-TETRACHLOROPHENOL		ND	UG/A	60.0
C580 DIETHYLPHTHALATE		ND	UG/A	30.0
C590 FLUORENE		ND	UG/A	30.0

QUANTERRA GC/MS
Target Compound Data Summary Sheet

Data File: 30068106
Std Id: ST16980831

Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Client: PACIFI Date Analyzed: 08/31/98 21:30
Analyst: DAT Instrument ID: F16 Run Factor: 3.00
Quan List Threshold: 0.95 Surrogate Vol.: 1.00

Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
C585 4-CHLOROPHENYL-PHENYLE		ND	UG/A	30.0
5-NITRO-O-TOLUIDINE		ND	UG/A	30.0
C595 4-NITROANALINE		ND	UG/A	150.0
C610 4,6-DINITRO-2-METHYLPH		ND	UG/A	150.0
C615 N-NITROSODIPHENYLAMINE		ND	UG/A	30.0
C620 AZOBENZENE		ND	UG/A	30.0
SYM-TRINITROBENZENE		ND	UG/A	30.0
C625 4-BROMOPHENYL-PHENYLET		ND	UG/A	30.0
PHENACETIN		ND	UG/A	30.0
DIALLATE	234	ND	UG/A	30.0
C630 HEXACHLOROBENZENE		ND	UG/A	30.0
4-AMINOBIPHENYL		ND	UG/A	30.0
C635 PENTACHLOROPHENOL		ND	UG/A	150.0
PRONAMIDE		ND	UG/A	30.0
PENTACHLORONITROBENZENE		ND	UG/A	150.0
C640 PHENANTHRENE		ND	UG/A	30.0
C645 ANTHRACENE		ND	UG/A	30.0
2SECBUTYL-4,6-DINITROPHENOL		ND	UG/A	30.0
C647 CARBAZOLE		ND	UG/A	30.0
C650 DI-N-BUTYLPHTHALATE		ND	UG/A	30.0
4-NITROQUINOLINE-1-OXIDE		ND	UG/A	30.0
METHAPYRILENE		ND	UG/A	30.0
ISODRIN		ND	UG/A	30.0
C655 FLUORANTHENE		ND	UG/A	30.0
CHLOROBENZILATE		ND	UG/A	30.0
C710 BENZIDINE		ND	UG/A	300.0
C715 PYRENE		ND	UG/A	30.0
ARAMITE (#1)		ND	UG/A	30.0
ARAMITE (#2)		ND	UG/A	30.0
P-DIMETHYLAMINOAZOBENZENE		ND	UG/A	30.0
3,3'-DIMETHYLBENZIDINE		ND	UG/A	30.0
KEPONE		ND	UG/A	150.0
C720 BUTYLBENZYLPHTHALATE		ND	UG/A	30.0
2-ACETYLAMINOFLUORENE		ND	UG/A	30.0
C730 BENZO(A)ANTHRACENE		ND	UG/A	30.0
C725 3,3'-DICHLOROBENZIDINE		ND	UG/A	60.0
C740 CHRYSENE		ND	UG/A	30.0
C745 BIS(2-ETHYLHEXYL)PHTHA		ND	UG/A	30.0
3-METHYLCHOLANTHRENE		ND	UG/A	30.0
C760 DI-N-OCTYL PHTHALATE		ND	UG/A	30.0
C765 BENZO(B)FLUORANTHENE		ND	UG/A	30.0
7,12-DIMETHYLBENZANTHRACENE		ND	UG/A	30.0
C770 BENZO(K)FLUORANTHENE		ND	UG/A	30.0
HEXACHLOROPHENE		ND	UG/A	30.0

QUANTERRA GC/MS

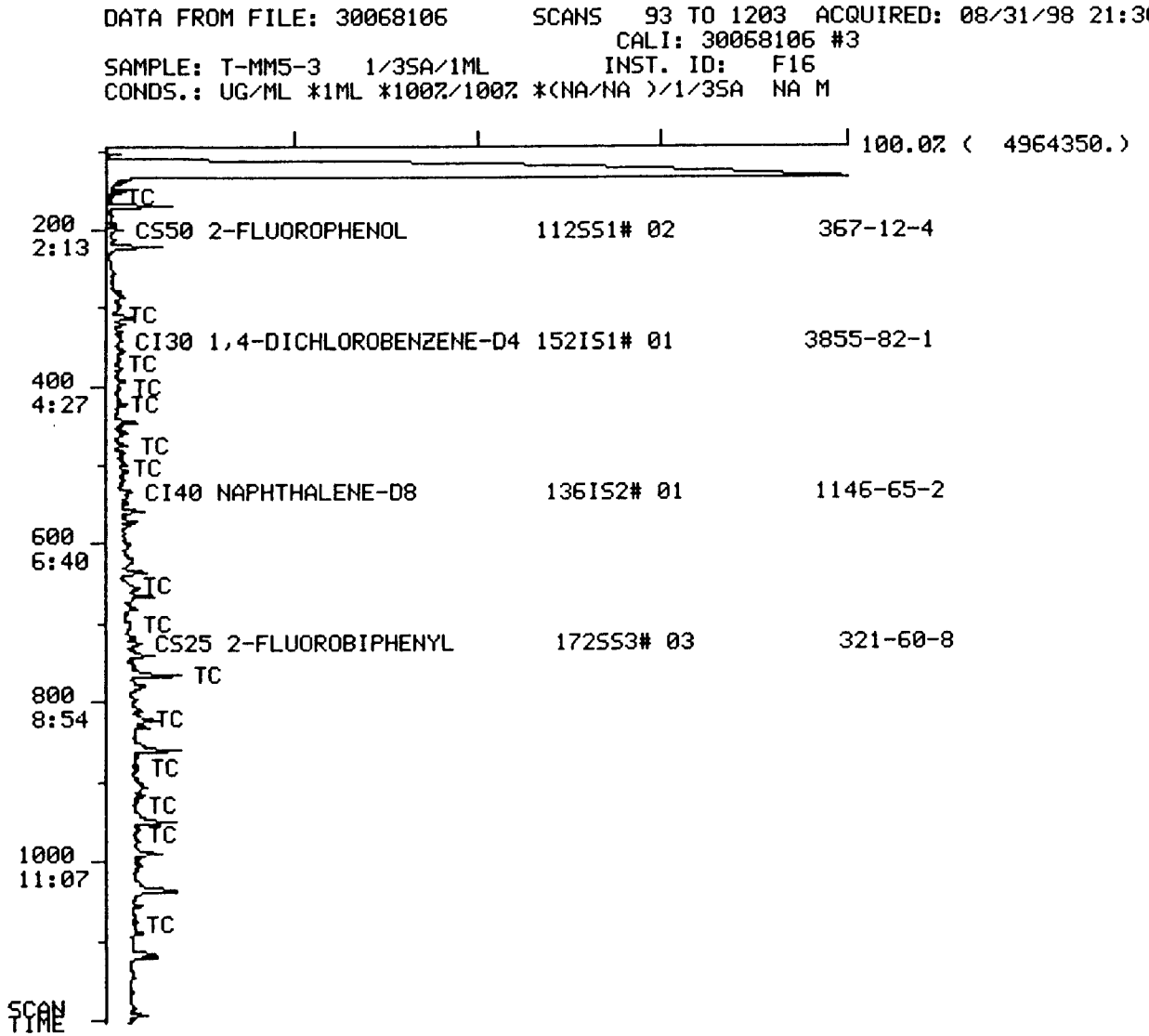
Target Compound Data Summary Sheet

Data File: 30068106
Std Id: ST16980831

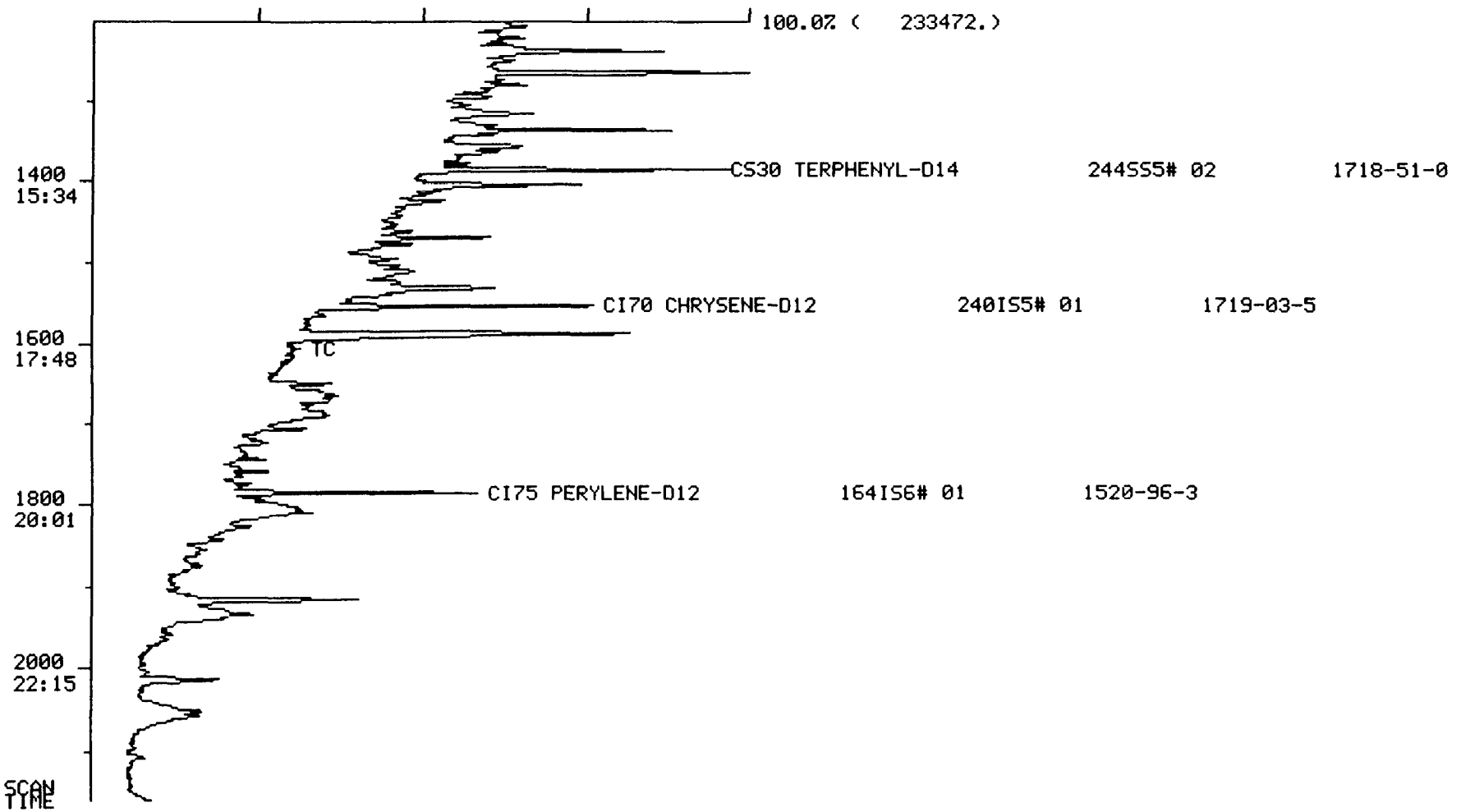
Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Client: PACIFI Date Analyzed: 08/31/98 21:30
Analyst: DAT Instrument ID: F16 Run Factor: 3.00
Quan List Threshold: 0.95 Surrogate Vol.: 1.00

Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
C775 BENZO(A)PYRENE		ND	UG/A	30.0
C780 INDENO(1,2,3-CD)PYRENE		ND	UG/A	30.0
C785 DIBENZ(A,H)ANTHRACENE		ND	UG/A	30.0
C790 BENZO(G,H,I)PERYLENE		ND	UG/A	30.0


DATA FROM FILE: 30068106 SCANS 93 TO 1203 ACQUIRED: 08/31/98 21:30:00
CALI: 30068106 #3
SAMPLE: T-MM5-3 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
100.0% (4964350.)
CS50 2-FLUOROPHENOL 112SS1# 02 367-12-4
CI30 1,4-DICHLOROBENZENE-D4 152IS1# 01 3855-82-1
CI40 NAPHTHALENE-D8 136IS2# 01 1146-65-2
CS25 2-FLUOROBIPHENYL 172SS3# 03 321-60-8
200
2:13
400
4:27
600
6:40
800
8:54
1000
11:07
SCAN
TIME

DATA FROM FILE: 30068106 SCANS 1203 TO 2158 ACQUIRED: 08/31/98 21:30:00
CALI: 30068106 #3
SAMPLE: T-MM5-3 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M



10

STANDARD USED FOR THIS REPORT IS ST16980831 REPORT PRINTED: 9/01/98 19:04:45

ADDITIONAL STANDARD USED FOR THIS REPORT IS: ST16980831A

QUANTERRA QUANTITATION SUMMARY File: 30068106

Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Analyst: DAT Instrument Id: F16 Analyzed: 08/31/98 21:30

Compounds with amounts less than 0.20 reported as NOT FOUND

Units: UG/ML

No	Library Entry	Name	Mass	Meth	Scan	Ref	Area	RRF(L)	Amount
1	S1# 1	C130 1,4-DICHLOROBENZENE	152	A BB	341	1	33301.	1.000	40.000
2	S2# 1	C140 NAPHTHALENE-D8	136	A BB	531	2	120808.	1.000	40.000
3	S3# 1	C150 ACENAPHTHENE-D10	164	A BB	831	3	61921.	1.000	40.000
4	S4# 1	C160 PHENANTHRENE-D10	188	A BB	1088	4	101964.	1.000	40.000
5	S5# 1	C170 CHRYSENE-D12	240	A BB	1553	5	101687.	1.000	40.000
6	S6# 1	C175 PERYLENE-D12	264	A VB	1784	6	95704.	1.000	40.000
7	S2# 2	CS20 NITROBENZENE-D5	82	A BV	422	2	55580.	0.470	39.192
8	S3# 3	CS25 2-FLUOROBIPHENYL	172	A VB	724	3	101124.	1.234	52.925
9	S5# 2	CS30 TERPHENYL-D14	244	A BB	1385	5	100901.	0.995	39.882
10	S1# 3	CS45 PHENOL-D5	99	A BB	310	1	116232.	2.025	68.929
11	S1# 2	CS50 2-FLUOROPHENOL	112	A BB	198	1	81364.	1.368	71.429
12	S3# 2	CS55 2,4,6-TRIBROMOPHENO	330	A BB	972	3	19151.	0.236	52.497
13	S4# 4	HEXACHLOROBENZENE-C13	294		4	NOT FOUND			
14	S1# 15	C310 N-NITROSODIMETHYLAM	74		1	NOT FOUND			
15	S1# 20	PYRIDINE	79		1	NOT FOUND			
16	S1# 30	2-PICOLINE	93		1	NOT FOUND			
17	S1# 40	N-NITROSOMETHYLETHYLAMIN	42	A VV	157	1	8518.	0.811	12.614
18	S1# 60	METHYLMETHANESULFONATE	80	A BB	183	1	468.	0.636	0.884
19	S1# 70	N-NITROSODIETHYLAMINE	102		1	NOT FOUND			
20	S1# 85	ETHYLMETHANE SULFONATE	79		1	NOT FOUND			
21	S1# 95	PENTACHLOROETHANE	117	A BB	307	1	1144.	0.602	2.285
22	S1#100	C320 ANILINE	93		1	NOT FOUND			
23	S1#105	C315 PHENOL	94	A BB	311	1	28734.	1.968	17.540
24	S1#110	C325 BIS(2-CHLOROETHYL)E	93	A BB	320	1	3814.	1.368	3.349
25	S1#115	C330 2-CHLOROPHENOL	128	A BV	315	1	330.	1.497	0.265
26	S1#125	C335 1,3-DICHLOROBENZENE	146		1	NOT FOUND			
27	S1#130	C340 1,4-DICHLOROBENZENE	146		1	NOT FOUND			
28	S1#145	C345 BENZYL ALCOHOL	108	A VB	370	1	6573.	0.854	9.241
29	S1#150	C350 1,2-DICHLOROBENZENE	146		1	NOT FOUND			
30	S1#160	C355 2-METHYLPHENOL	108		1	NOT FOUND			
31	S1#165	C360 2,2'-OXYBIS(1-CLPRO	45	A BV	386	1	640.	2.539	0.303
32	S1#170	C361 ACETOPHENONE	105	A BB	401	1	16818.	1.934	10.446
33	S1#175	N-NITROSOPYRROLIDINE	100	A BB	404	1	250.	0.553	0.543
34	S1#180	N-NITROSOMORPHOLINE	56	A BB	410	1	7023.	0.821	10.279
35	S1#182	3-METHYL PHENOL	108	A BB	420	1	4135.	2.252	2.206
36	S1#185	C365 4-METHYLPHENOL	108		1	NOT FOUND			
37	S1#190	C370 N-NITROSO-DI-N-PROP	70	A VB	404	1	1969.	0.906	2.611
38	S1#195	O-TOLUIDINE	106		1	NOT FOUND			
39	S1#200	C375 HEXACHLOROETHANE	117		1	NOT FOUND			
40	S2# 10	C410 NITROBENZENE	77	A VB	423	2	2891.	0.445	2.151
41	S2# 15	N-NITROSOPIPERIDINE	42		2	NOT FOUND			
42	S2# 20	C415 ISOPHORONE	82	A BB	473	2	10146.	0.741	4.532
43	S2# 25	C420 2-NITROPHENOL	139		2	NOT FOUND			
44	S2# 30	C425 2,4-DIMETHYLPHENOL	107	A BB	501	2	1308.	0.330	1.313
45	S2# 35	C435 BIS(2-CHLOROETHOXY)	93	A BB	516	2	744.	0.511	0.483

46	S2#	40	C440	2,4-DICHLOROPHENOL	162	A	BB	520	2	548. 0.308	0.590
47	S2#	45	C430	BENZOIC ACID	122			2	NOT FOUND		
48	S2#	50	AA-DIMETHYLPHENETHYLAMIN		58			2	NOT FOUND		
49	S2#	55	C445	1,2,4-TRICHLOROBENZ	180			2	NOT FOUND		

50	S2# 60	C450	NAPHTHALENE	128	A	BV	534	2	40335.	1.022	13.065
51	S2# 80	C455	4-CHLOROANALINE	127	A	BB	557	2	1230.	0.454	0.898
52	S2# 85		2,6-DICHLOROPHENOL	162			2	NOT FOUND			
53	S2# 90		HEXACHLOROPROPENE	213			2	NOT FOUND			
54	S2# 95	C460	HEXACHLOROBUTADIENE	225			2	NOT FOUND			
55	S2#115		P-PHENYLENE DIAMINE	108			2	NOT FOUND			
56	S2#120		N-NITROSODI-N-BUTYLAMINE	84			2	NOT FOUND			
57	S2#130	C465	4-CHLORO-3-METHYLPH	107			2	NOT FOUND			
58	S2#140		SAFROLE	162	A	BB	649	2	1554.	0.248	2.077
59	S2#145	C470	2-METHYLNAPHTHALENE	142	A	BB	653	2	56007.	0.751	24.684
60	S3# 10		1,2,4,5-TETRACHLOROBENZE	214			3	NOT FOUND			
61	S3# 15		ISOSAFROLE (#1)	162	A	BB	699	3	1059.	0.044	15.673
62	S3# 20	C510	HEXACHLOROCYCLOPENT	237			3	NOT FOUND			
63	S3# 25	C515	2,4,6-TRICHLOROPHEN	196			3	NOT FOUND			
64	S3# 30	C520	2,4,5-TRICHLOROPHEN	196			3	NOT FOUND			
65	S3# 35		ISOSAFROLE (#2)	104			3	NOT FOUND			
66	S3# 40	C525	2-CHLORONAPHTHALENE	162			3	NOT FOUND			
67	S3# 42		1-CHLORONAPHTHALEN	162			3	NOT FOUND			
68	S3# 45	C530	2-NITROANALINE	65	A	BB	765	3	1407.	0.502	1.812
69	S3# 50		1,4-NAPHTHOQUINONE	158			3	NOT FOUND			
70	S3# 55	C535	DIMETHYLPHTHALATE	163			3	NOT FOUND			
71	S3# 60		1,3-DINITROBENZENE	168	A	BB	808	3	278.	0.197	0.909
72	S3# 65	C540	ACENAPHTHYLENE	152	A	BB	809	3	1258.	1.838	0.442
73	S3# 70	C543	2,6-DINITROTOLUENE	165	A	BB	818	3	645.	0.324	1.287
74	S3# 75	C545	3-NITROANILINE	138			3	NOT FOUND			
75	S3# 80	C550	ACENAPHTHENE	153	A	VB	836	3	2658.	1.159	1.482
76	S3# 85	C555	2,4-DINITROPHENOL	184	A	BV	859	3	224.	0.189	0.764
77	S3# 90	C565	DIBENZOFURAN	168	A	BB	868	3	1768.	1.669	0.684
78	S3# 95	C560	4-NITROPHENOL	109			3	NOT FOUND			
79	S3#100		PENTACHLOROBENZENE	250			3	NOT FOUND			
80	S3#105	C570	2,4-DINITROTOLUENE	165	A	BB	882	3	682.	0.397	1.109
81	S3#110		1-NAPHTHYLAMINE	143	A	BV	883	3	602.	0.837	0.464
82	S3#115		2-NAPHTHYLAMINE	143			3	NOT FOUND			
83	S3#120		2,3,4,6-TETRACHLOROPHENO	232			3	NOT FOUND			
84	S3#130	C580	DIETHYLPHTHALATE	149	A	VB	934	3	1179.	1.369	0.556
85	S3#135	C590	FLUORENE	166	A	BB	927	3	5987.	1.298	2.980
86	S3#140	C585	4-CHLOROPHENYL-PHEN	204			3	NOT FOUND			
87	S3#145		5-NITRO-O-TOLUIDINE	152	A	VB	943	3	2476.	0.356	4.499
88	S3#150	C595	4-NITROANALINE	138			3	NOT FOUND			
89	S4# 10	C610	4,6-DINITRO-2-METHY	198			4	NOT FOUND			
90	S4# 15	C615	N-NITROSODIPHENYLAM	169	A	VB	965	4	5818.	0.551	4.145
91	S4# 20	C620	AZOBENZENE	77	A	VB	966	4	643.	1.171	0.216
92	S4# 25		SYM-TRINITROBENZENE	75	A	BV	1026	4	206.	0.162	0.501
93	S4# 30	C625	4-BROMOPHENYL-PHENY	248			4	NOT FOUND			
94	S4# 35		PHENACETIN	108			4	NOT FOUND			
95	S4# 37		DIALLATE	234	A	VB	1021	4	156.	0.090	0.678
96	S4# 40	C630	HEXACHLOROBENZENE	284			4	NOT FOUND			
97	S4# 45		4-AMINOBIPHENYL	169	A	BB	1077	4	3167.	0.609	2.040
98	S4# 50	C635	PENTACHLOROPHENOL	266	A	VB	1064	4	261.	0.155	0.660
99	S4# 55		PRONAMIDE	173			4	NOT FOUND			
00	S4# 60		PENTACHLORONITROBENZENE	237			4	NOT FOUND			
01	S4# 65	C640	PHENANTHRENE	178	A	BB	1092	4	18337.	1.033	6.966
02	S4# 70	C645	ANTHRACENE	178			4	NOT FOUND			
03	S4# 75		2SECBUTYL-4,6-DINITROPHE	211			4	NOT FOUND			
04	S4# 80	C647	CARBAZOLE	167			4	NOT FOUND			
05	S4# 85	C650	DI-N-BUTYLPHTHALATE	149			4	NOT FOUND			
06	S4#100		4-NITROQUINOLINE-1-OXIDE	190			4	NOT FOUND			
07	S4#105		METHAPYRILENE	58			4	NOT FOUND			
08	S4#106		ISODRIN	193			4	NOT FOUND			
09	S4#110	C655	FLUORANTHENE	202	A	BB	1300	4	602.	0.900	0.263
10	S4#120		CHLOROBENZILATE	139			4	NOT FOUND			

111	S5#	10	C710	BENZIDINE	184		5	NOT FOUND			
112	S5#	15	C715	PYRENE	202	A BB	1336	5	2881.	1.323	0.857
113	S5#	20	ARAMITE (#1)		185		5	NOT FOUND			
114	S5#	25	ARAMITE (#2)		185		5	NOT FOUND			
115	S5#	30	P-DIMETHYLAMINOAZOBENZEN		120		5	NOT FOUND			
116	S5#	35	3,3'-DIMETHYLBENZIDINE		212		5	NOT FOUND			
117	S5#	37	KEPONE		272		5	NOT FOUND			
118	S5#	40	C720	BUTYLBENZYLPHTHALAT	149		5	NOT FOUND			
119	S5#	45	2-ACETYLAMINOFLUORENE		181		5	NOT FOUND			
120	S5#	50	C730	BENZO(A)ANTHRACENE	228	A BB	1556	5	2250.	1.125	0.787
121	S5#	55	C725	3,3'-DICHLOROBENZID	252		5	NOT FOUND			
122	S5#	60	C740	CHRYSENE	228	A BB	1556	5	2250.	1.014	0.873
123	S5#	65	C745	BIS(2-ETHYLHEXYL)PH	149	A BB	1604	5	6255.	0.980	2.511
124	S5#	85	3-METHYLCHOLANTHRENE		268		5	NOT FOUND			
125	S6#	10	C760	DI-N-OCTYL PHTHALAT	149	A VB	1717	6	1093.	1.925	0.237
126	S6#	15	C765	BENZO(B)FLUORANTHEN	252	A BV	1728	6	1158.	1.443	0.335
127	S6#	20	7,12-DIMETHYLBENZANTHRAC		256		6	NOT FOUND			
128	S6#	25	C770	BENZO(K)FLUORANTHEN	252		6	NOT FOUND			
129	S6#	30	HEXACHLOROPHENE		196		6	NOT FOUND			
130	S6#	35	C775	BENZO(A)PYRENE	252	A BB	1787	6	643.	1.182	0.227
131	S6#	55	C780	INDENO(1,2,3-CD)PYR	276		6	NOT FOUND			
132	S6#	60	C785	DIBENZ(A,H)ANTHRACE	278		6	NOT FOUND			
133	S6#	65	C790	BENZO(G,H,I)PERYLEN	276		6	NOT FOUND			

BNA, S LIBRARIES ANALYST: _____ DATE: _____

QUANTERRA Internal Standard Check

Standard Filename: ST16980831 Analyzed: 08/31/98 12:31

Standard	IS# 1 Area	%	RT	IS# 2 Area	%	RT	IS# 3 Area	%	RT
ST16980831	28649.		3.78	100432.		5.90	54347.		9.21
Upper Limit	57297.=+200		4.28	200864.=+200		6.40	108695.=+200		9.71
Lower Limit	14324.=+ 50		3.28	50216.=+ 50		5.40	27174.=+ 50		8.71
Filename									
1 30068106	33301.= 116		3.79	120808.= 120		5.91	61921.= 113		9.24

IS# 1 = C130 1,4-DICHLOROBENZENE-D4
IS# 2 = C140 NAPHTHALENE-D8
IS# 3 = C150 ACENAPHTHENE-D10

* - indicates an I.S. is outside QC limit(s)

Standard	IS# 4 Area	%	RT	IS# 5 Area	%	RT	IS# 6 Area	%	RT
ST16980831	98520.		12.08	62289.		17.26	50750.		19.83
Upper Limit	197039.=+200		12.58	124578.=+200		17.76	101500.=+200		20.33
Lower Limit	49260.=+ 50		11.58	31145.=+ 50		16.76	25375.=+ 50		19.33
Filename									
1 30068106	101964.= 103		12.10	101687.= 163		17.27	95704.= 188		19.84

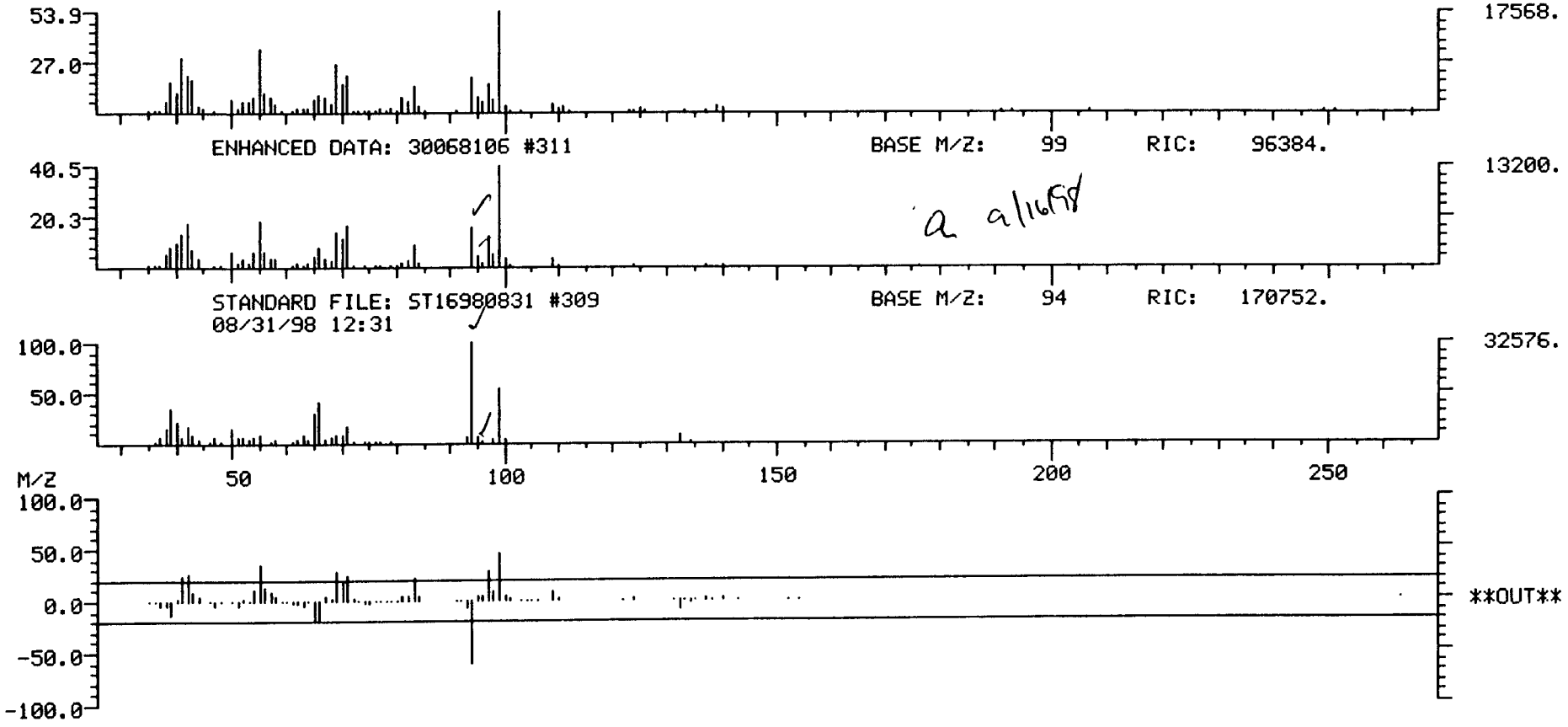
IS# 4 = C160 PHENANTHRENE-D10
IS# 5 = C170 CHRYSENE-D12
IS# 6 = C175 PERYLENE-D12

* - indicates an I.S. is outside QC limit(s)

TARGET COMPOUND COMPARISON

COMPOUND: C315 PHENOL 94 S1#105CC 108-95-2

RAW DATA: 30068106 #311 BASE M/Z: 99 RIC: 170752.
08/31/98 21:30
SAMPLE: T-MM5-3 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M

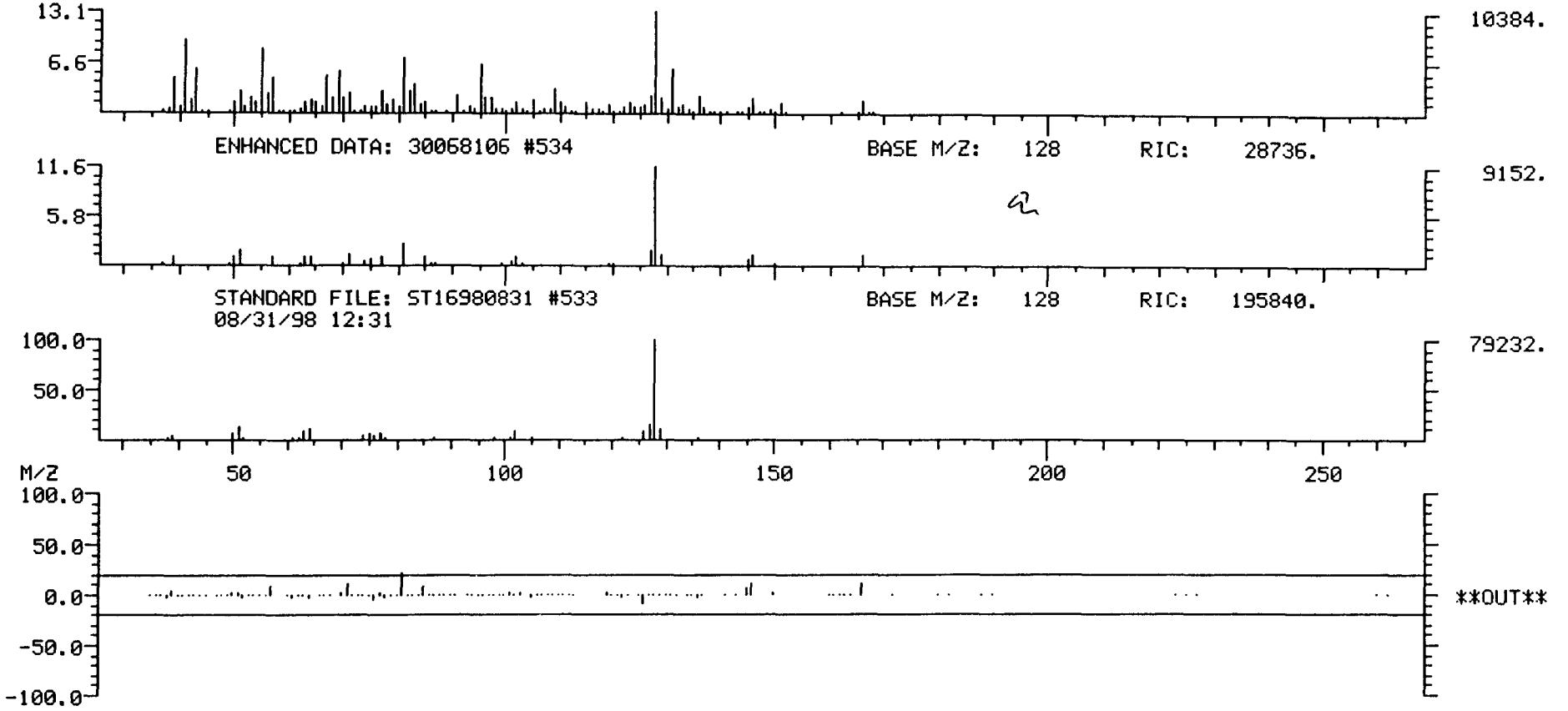


10

TARGET COMPOUND COMPARISON

COMPOUND: C450 NAPHTHALENE 128 S2# 60 91-20-3

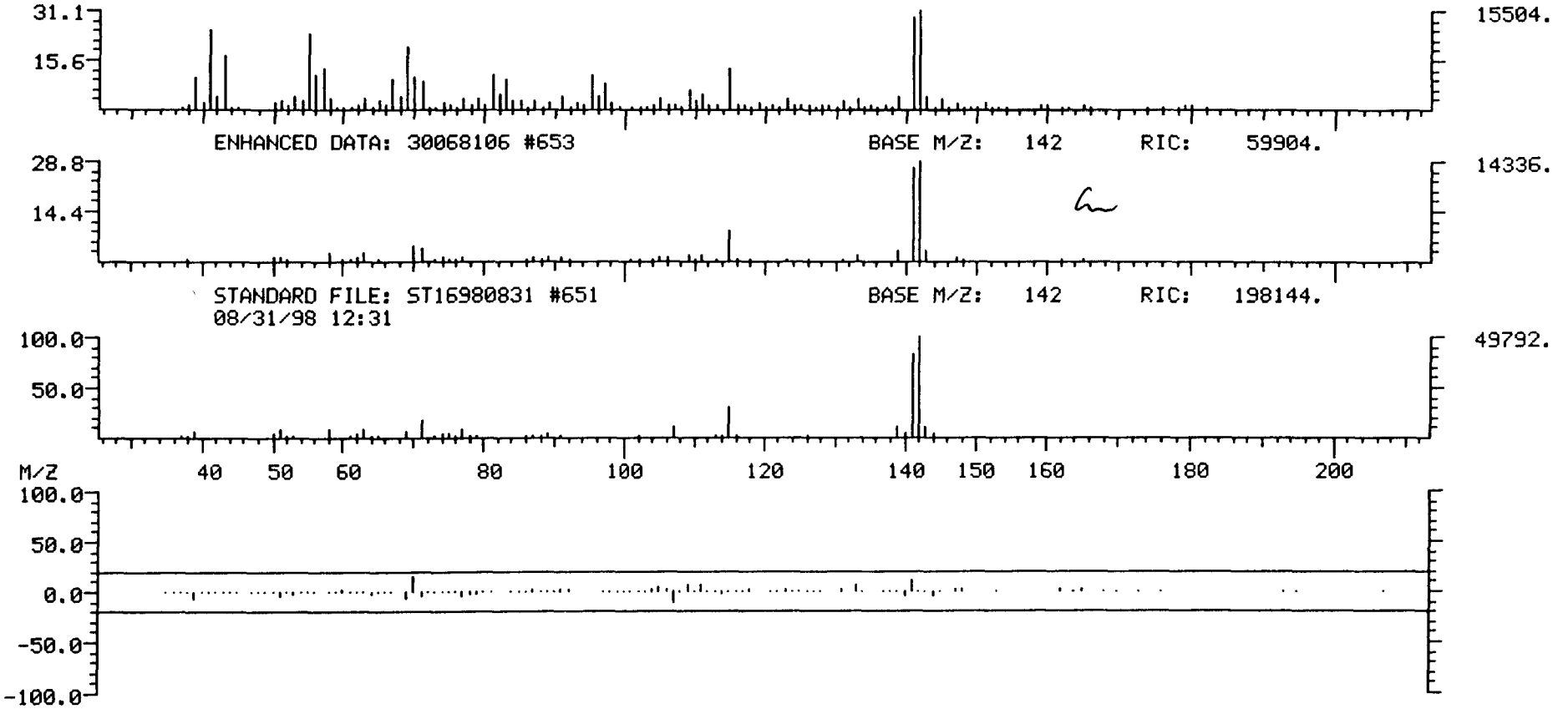
RAW DATA: 30068106 #534 BASE M/Z: 128 RIC: 139264.
08/31/98 21:30
SAMPLE: T-MM5-3 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M



TARGET COMPOUND COMPARISON

COMPOUND: C470 2-METHYLNAPHTHALENE 142 S2#145 91-57-6

RAW DATA: 30068106 #653 BASE M/Z: 142 RIC: 218368.
08/31/98 21:30
SAMPLE: T-MM5-3 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M



1043

Data Reduced by: [illegible] Date: 9/17/98
Data Reviewed by: [illegible] Date: 9/17/98

Data File: 30068106

QUANTERRA GC/MS TIC REPORT (Part 1)

Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Analyst: DAT Date Analyzed: 08/31/98 21:30
Run Factor: 3.00

#	SCAN	Concentration in Sample (UG/A)	CAS #	
1	170	350.	123-42-2	2-PENTANONE, 4-HYDROXY-4-METHYL- or isomer
2	221	390.	111-84-2	NONANE or isomer
3	311	270.	00-00-0	UNKNOWN 5700
4	445	180.	1120-21-4	UNDECANE or isomer
5	557	160.	112-40-3	DODECANE or isomer
6	634	240.	~~54105-67-8~~	~~HEPTADECANE, 2,6-DIMETHYL-~~ alkane 5746400
7	653	170.	2471-83-2	1H-INDENE, 1-ETHYLIDENE- or isomer
8	664	240.	17301-32-5	UNDECANE, 4,7-DIMETHYL- or isomer
9	724	150.	321-60-8	1,1'-BIPHENYL, 2-FLUORO- or isomer surrogate
10	739	250.	18344-37-1	HEPTADECANE, 2,6,10,14-TETRAMETHYL- or isomer

11 765 430. 629-59-4
TETRADECANE isomer

12 778 230. ~~00-00-0~~ 5740201000
~~UNKNOWN~~ PAH

13 822 300. 18344-37-1
HEPTADECANE, 2,6,10,14-TETRAMETHYL- or isomer

14 860 440. 629-62-9
PENTADECANE or isomer

~~15~~ 905 120. 52783-43-4
NONADECANOL or isomer

16 949 400. 629-92-5
NONADECANE

17 989 230. 54105-67-8
HEPTADECANE, 2,6-DIMETHYL-

18 1037 520. 54105-67-8
HEPTADECANE, 2,6-DIMETHYL-

19 1115 170. 629-92-5
NONADECANE or isomer

20 1120 180. 629-92-5
NONADECANE

~~21~~ 1192 140. 629-92-5
NONADECANE

~~22~~ 1336 130. - -
2-METHYLOCTADECANE

23	1531	150.	629-92-5
	NONADECANE	or isomer	
24	1587	240.	74685-29-3
	9-EICOSENE, (E)-		
25	1809	120.	00-00-0
	UNKNOWN		

DATA FILE: 30068106

QUANTERRA GC/MS TIC REPORT (Part 2)

CONCENTRATION = AREA(TIC)*CONC(IS)/AREA(IS)

#	FIT	PURITY	INT. STD.	RT	RRT	AREA	HEIGHT	AMOUNT AS ANALYZED (UG/ML)	LIB	LIB #
1	948	906	2	1:53	0.205	1066940.	387584.	117.319	NB	3241.
2	986	942	2	2:27	0.266	1174820.	346624.	129.180	NB	5159.
3	829	529	2	3:27	0.375	827993.	123904.	91.044	UK	1.
4	975	722	2	4:56	0.536	541092.	131657.	59.497	NB	11607.
5	970	895	2	6:11	0.671	494208.	143104.	54.342	NB	15343.
6	938	687	2	7:03	0.764	724224.	159488.	79.634	NB	37462.
7	956	760	2	7:15	0.787	513280.	72192.	56.439	NB	8109.
8	939	829	2	7:23	0.800	715264.	174336.	78.649	NB	19016.
9	994	843	2	8:03	0.872	444928.	87552.	48.923	NB	15856.
10	930	812	2	8:13	0.890	768256.	166144.	84.476	NB	42196.
11	960	744	2	8:30	0.922	1312510.	320000.	144.321	NB	22530.
12	910	451	2	8:39	0.937	701952.	90624.	77.185	UK	1.
13	959	792	2	9:08	0.990	914944.	165632.	100.605	NB	42196.
14	963	816	2	9:33	1.036	1321220.	301056.	145.278	NB	25997.
15	934	653	2	10:03	1.090	375040.	81152.	41.239	NB	40233.
16	952	842	2	10:33	1.143	1198340.	266752.	131.766	NB	37465.
17	955	834	2	11:00	1.192	708891.	168771.	77.948	NB	37462.
18	974	872	2	11:32	1.249	1565700.	264192.	172.160	NB	37462.
19	947	806	2	12:24	1.343	528896.	153600.	58.156	NB	37465.
20	952	822	2	12:27	1.349	551424.	169472.	60.633	NB	37465.
21	950	774	4	13:15	0.768	357120.	115968.	45.964	NB	37465.
22	908	662	4	14:51	0.860	335488.	76717.	43.180	NB	37456.
23	935	663	4	17:01	0.986	392960.	48384.	50.577	NB	37465.
24	984	795	4	17:39	1.022	617728.	115968.	79.506	NB	39515.
25	706	329	5	20:07	1.014	281792.	23360.	41.621	UK	1.

Library Search Data: 30068106 # 170 Base m/z: 43
08/31/98 21:30:00 + 1:53 Cali: 30068106 # 3 RIC: 273920.
Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
495 matched at least 6 of the 16 largest peaks in the unknown

Rank	In.	Name
1	3241	2-PENTANONE, 4-HYDROXY-4-METHYL-
2	3366	2-PENTANOL, 2,4-DIMETHYL-
3	919	TERT-BUTYL HYDROPEROXIDE
4	5791	1,3-DIOXOLANE-2-METHANOL, 2,4-DIMETHYL-
5	3288	ACETIC ACID, 1,1-DIMETHYLETHYL ESTER
6	5594	2-PROPANOL, 2-NITROSO-, ACETATE (ESTER)
7	3349	2-HEXANOL, 2-METHYL-
8	1576	OXIRANE, TETRAMETHYL-
9	3353	2-PENTANOL, 2,3-DIMETHYL-

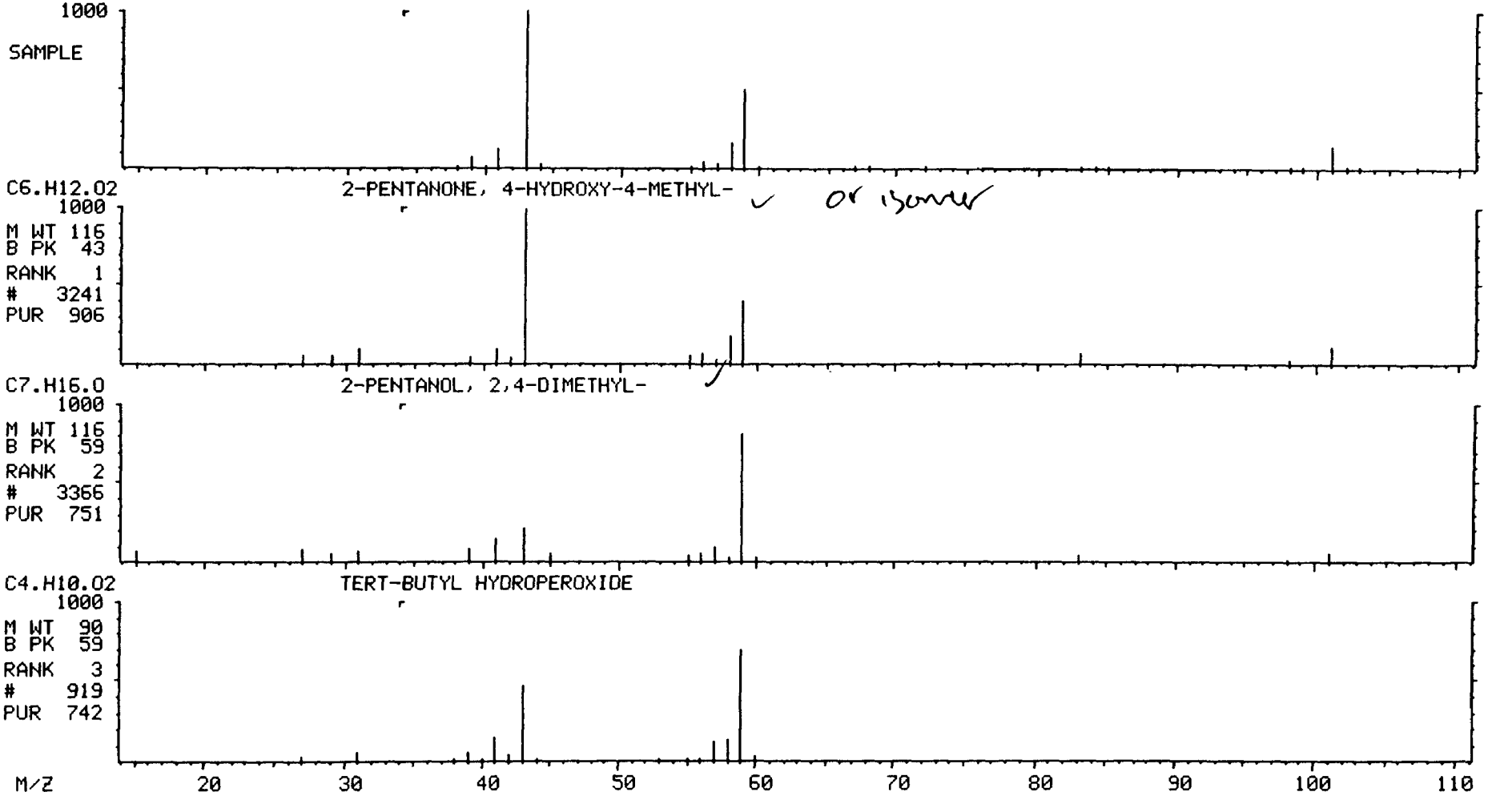
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C6.H12.O2	116	43	906	948	928
2	C7.H16.O	116	59	751	778	769
3	C4.H10.O2	90	59	742	894	761
4	C6.H12.O3	132	43	734	805	800
5	C6.H12.O2	116	43	729	779	742
6	C5.H9.O3.N	131	43	713	830	760
7	C7.H16.O	116	59	698	736	750
8	C6.H12.O	100	59	653	805	705
9	C7.H16.O	116	59	643	689	706

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	123-42-2
2	---	---	---	---	625-06-9
3	---	---	---	---	75-91-2
4	---	---	---	---	53951-43-2
5	---	---	---	---	540-88-5
6	---	---	---	---	6931-04-0
7	---	---	---	---	625-23-0
8	---	---	---	---	5076-20-0
9	---	---	---	---	4911-70-0

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:30:00 + 1:53
SAMPLE: T-MM5-3 1/35A/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068106 # 170
CALI: 30068106 # 3

BASE M/Z: 43
RIC: 273920.



10/23

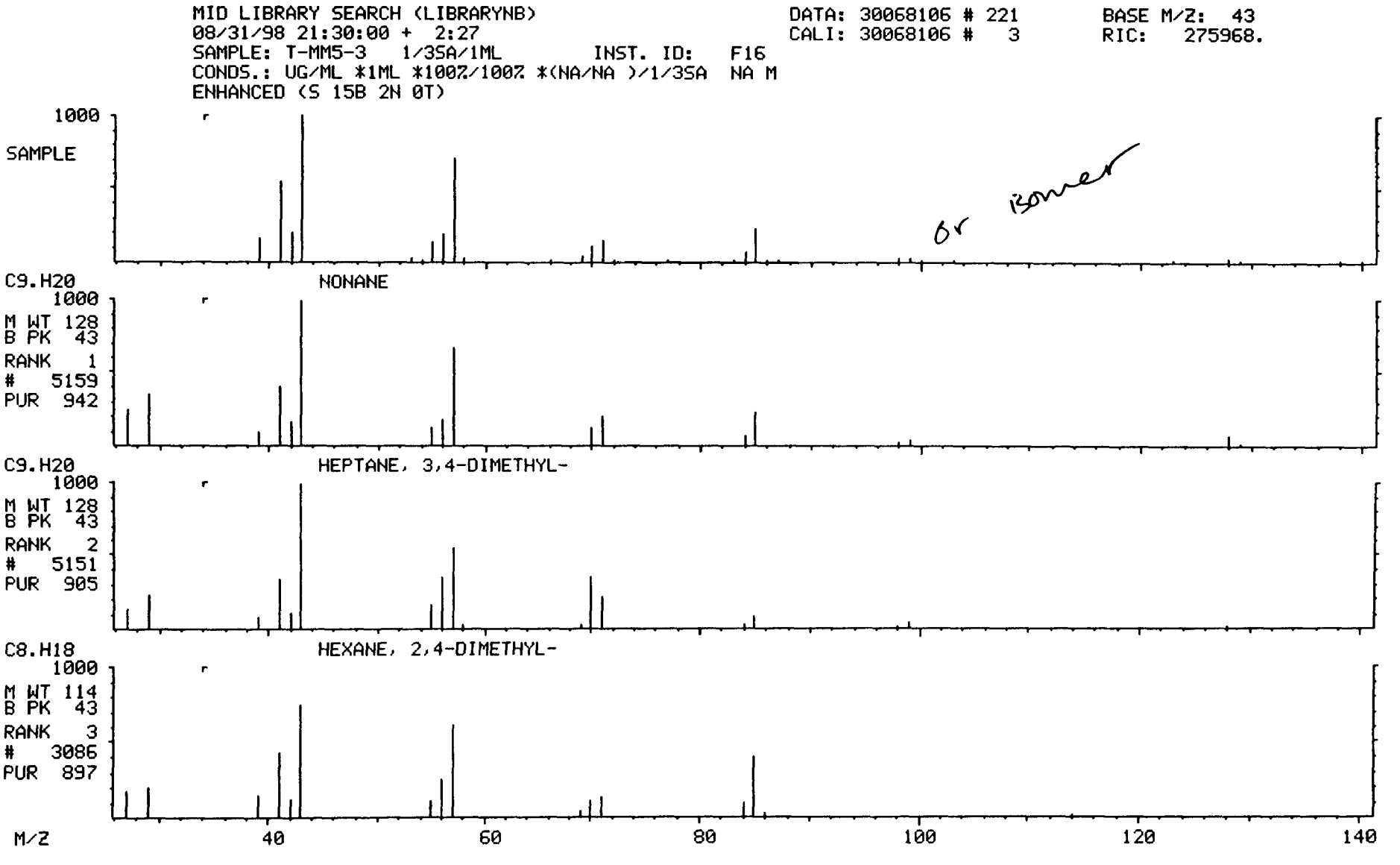
Library Search Data: 30068106 # 221 Base m/z: 43
08/31/98 21:30:00 + 2:27 Cali: 30068106 # 3 RIC: 275968.
Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
921 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	5159	NONANE
2	5151	HEPTANE, 3,4-DIMETHYL-
3	3086	HEXANE, 2,4-DIMETHYL-
4	5141	HEPTANE, 2,4-DIMETHYL-
5	19015	DECANE, 2,5,6-TRIMETHYL-
6	5144	HEPTANE, 4-ETHYL-
7	8085	HEPTANE, 2,4,6-TRIMETHYL-
8	11607	UNDECANE
9	5154	HEXANE, 4-ETHYL-2-METHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C9.H20	128	43	942	986	942
2	C9.H20	128	43	905	928	905
3	C8.H18	114	43	897	962	908
4	C9.H20	128	43	877	926	890
5	C13.H28	184	57	871	907	891
6	C9.H20	128	43	869	912	869
7	C10.H22	142	43	865	903	881
8	C11.H24	156	43	863	918	919
9	C9.H20	128	57	862	909	862

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	111-84-2
2	---	---	---	---	922-28-1
3	---	---	---	---	589-43-5
4	---	---	---	---	2213-23-2
5	---	---	---	---	62108-23-0
6	---	---	---	---	2216-32-2
7	---	---	---	---	2613-61-8
8	---	---	---	---	1120-21-4
9	---	---	---	---	3074-75-7


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:30:00 + 2:27
SAMPLE: T-MM5-3 1/3SA/1ML
INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068106 # 221
CALI: 30068106 # 3
BASE M/Z: 43
RIC: 275968.
1000
SAMPLE
or isomer
C9.H20
NONANE
1000
M WT 128
B PK 43
RANK 1
5159
PUR 942
C9.H20
HEPTANE, 3,4-DIMETHYL-
1000
M WT 128
B PK 43
RANK 2
5151
PUR 905
C8.H18
HEXANE, 2,4-DIMETHYL-
1000
M WT 114
B PK 43
RANK 3
3086
PUR 897
M/Z
40
60
80
100
120
140

10(

Library Search Data: 30068106 # 311 Base m/z: 99
08/31/98 21:30:00 + 3:28 Cali: 30068106 # 3 RIC: 84864.
Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
346 matched at least 6 of the 16 largest peaks in the unknown

Rank	In.	Name
1	15124	2,5-FURANDIONE, 3-(1,1-DIMETHYLPROPYL)DIHYDRO-
2	1394	2-PIPERIDINONE
3	18863	CIS-4-HYDROXY-3-METHYLDECANOIC ACID LACTONE
4	18864	TRANS-4-HYDROXY-3-METHYLDECANOIC ACID LACTONE
5	1501	PHENOL-D6-
6	11410	5-HYDROXYNONANOIC ACID LACTONE
7	22383	CIS-4-HYDROXY-3-METHYLUNDECANOIC ACID LACTONE
8	1399	1-PYRROLIDINECARBOXALDEHYDE
9	4906	2H-PYRAN-2-ONE, 6-ETHYLTETRAHYDRO-

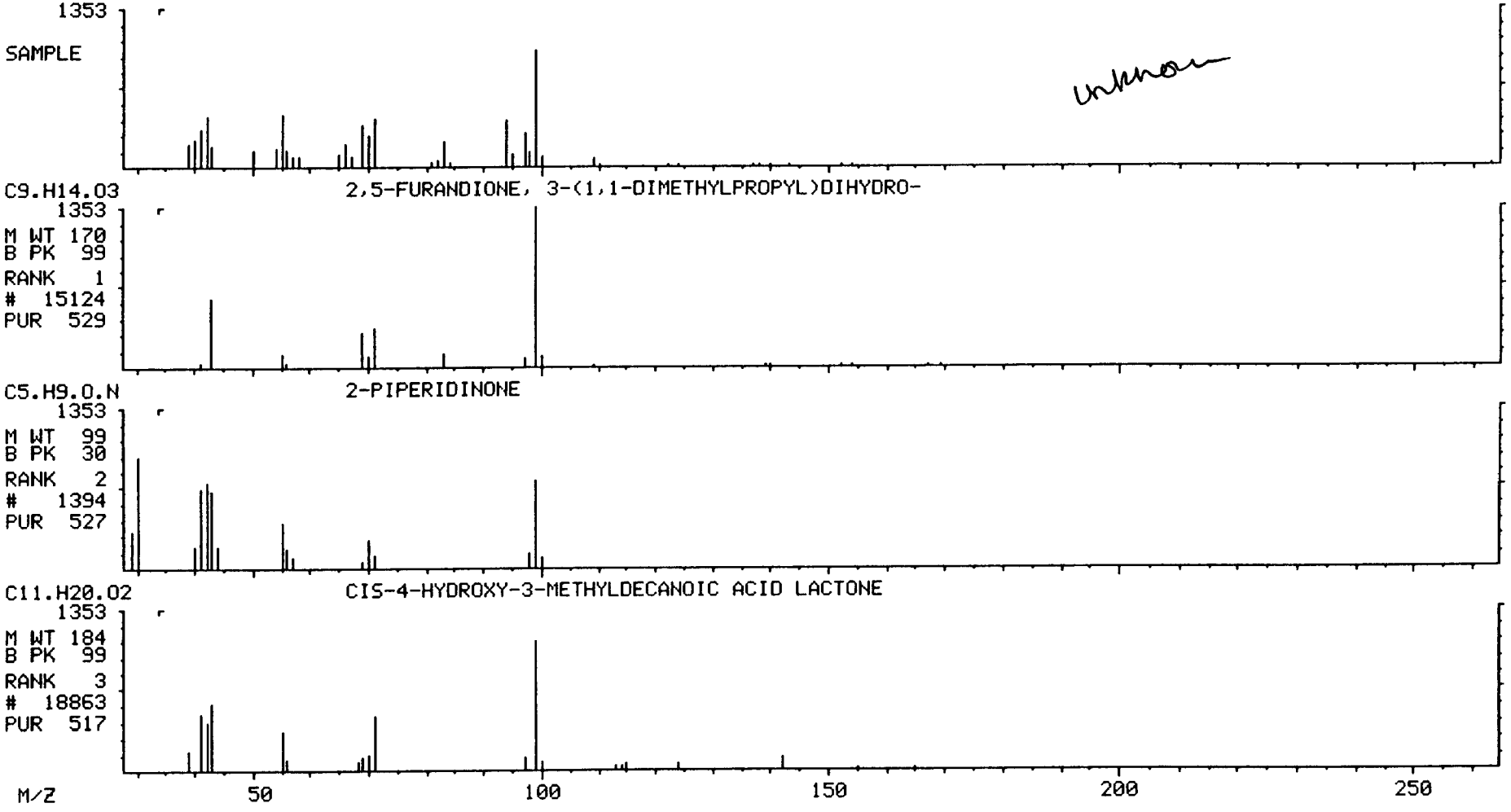
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C9.H14.O3	170	99	529	829	553
2	C5.H9.O.N	99	30	527	870	544
3	C11.H20.O2	184	99	517	819	587
4	C11.H20.O2	184	99	514	814	598
5	C6.O.D6	100	99	512	879	549
6	C9.H16.O2	156	99	501	856	555
7	C12.H22.O2	198	99	495	856	548
8	C5.H9.O.N	99	99	494	868	514
9	C7.H12.O2	128	42	478	871	525

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	56666-76-3
2	—	—	—	—	675-20 7
3	—	—	—	—	- -
4	—	—	—	—	- -
5	—	—	—	—	13127-88-3
6	—	—	—	—	- -
7	—	—	—	—	- -
8	—	—	—	—	3760-54-1
9	—	—	—	—	3301-90-4

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:30:00 + 3:28
SAMPLE: T-MM5-3 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068106 # 311
CALI: 30068106 # 3

BASE M/Z: 99
RIC: 84864.



105

Library Search Data: 30068106 # 445 Base m/z: 43
08/31/98 21:30:00 + 4:57 Cali: 30068106 # 3 RIC: 110592.
Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
578 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	11607	UNDECANE
2	8104	OCTANE, 3,5-DIMETHYL-
3	19013	DECANE, 2,5,9-TRIMETHYL-
4	19015	DECANE, 2,5,6-TRIMETHYL-
5	5151	HEPTANE, 3,4-DIMETHYL-
6	5154	HEXANE, 4-ETHYL-2-METHYL-
7	8089	NONANE, 2-METHYL-
8	11602	OCTANE, 2,4,6-TRIMETHYL-
9	5160	PENTANE, 2,2,3,4-TETRAMETHYL-

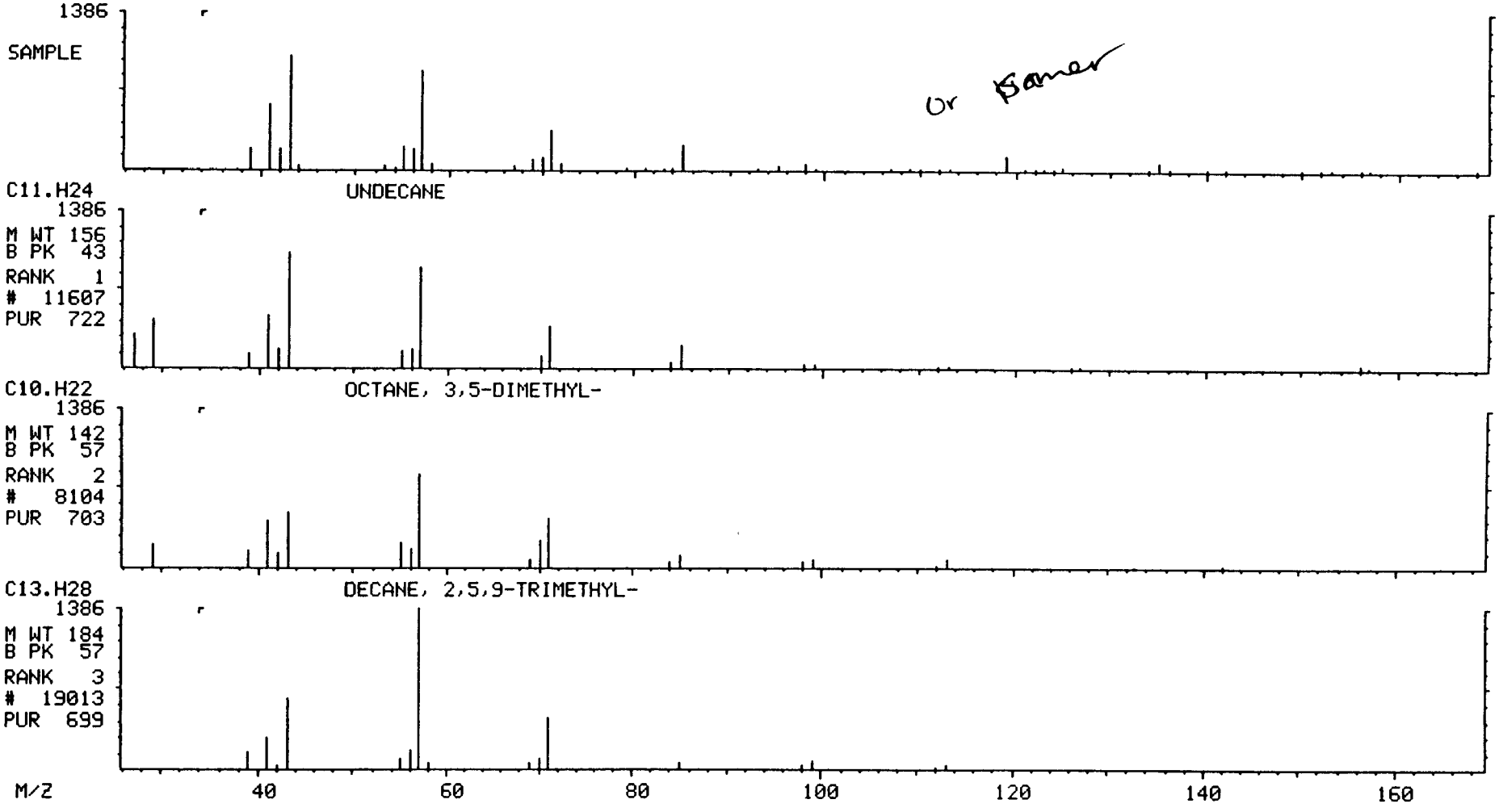
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C11.H24	156	43	722	975	730
2	C10.H22	142	57	703	936	703
3	C13.H28	184	57	699	923	699
4	C13.H28	184	57	695	913	702
5	C9.H20	128	43	688	916	690
6	C9.H20	128	57	686	920	690
7	C10.H22	142	43	680	924	710
8	C11.H24	156	57	680	939	691
9	C9.H20	128	57	677	919	677

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	1120-21-4
2	---	---	---	---	15869-93-9
3	---	---	---	---	62108-22-9
4	---	---	---	---	62108-23-0
5	---	---	---	---	922-28-1
6	---	---	---	---	3074-75-7
7	---	---	---	---	871-83-0
8	---	---	---	---	62016-37-9
9	---	---	---	---	1186-53-4

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:30:00 + 4:57
SAMPLE: T-MM5-3 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068106 # 445
CALI: 30068106 # 3

BASE M/Z: 43
RIC: 110592.



10 (m

Library Search Data: 30068106 # 557 Base m/z: 43
08/31/98 21:30:00 + 6:12 Cali: 30068106 # 3 RIC: 132352.
Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
990 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	15343	DODECANE
2	11607	UNDECANE
3	19016	UNDECANE, 4,7-DIMETHYL-
4	15353	2,6-DIMETHYLDECANE
5	8104	OCTANE, 3,5-DIMETHYL-
6	19015	DECANE, 2,5,6-TRIMETHYL-
7	22530	TETRADECANE
8	19028	DECANE, 2,4,6-TRIMETHYL-
9	11602	OCTANE, 2,4,6-TRIMETHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C12.H26	170	57	895	970	895
2	C11.H24	156	43	874	966	901
3	C13.H28	184	43	871	962	872
4	C12.H26	170	43	862	923	869
5	C10.H22	142	57	860	946	860
6	C13.H28	184	57	860	933	861
7	C14.H30	198	43	855	924	912
8	C13.H28	184	43	855	941	861
9	C11.H24	156	57	855	965	855

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	112-40-3
2	---	---	---	---	1120-21-4
3	---	---	---	---	17301-32-5
4	---	---	---	---	13150-81-7
5	---	---	---	---	15869-93-9
6	---	---	---	---	62108-23-0
7	---	---	---	---	629-59-4
8	---	---	---	---	62108-27-4
9	---	---	---	---	62016-37-9

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:30:00 + 6:12
SAMPLE: T-MM5-3 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068106 # 557
CALI: 30068106 # 3

BASE M/Z: 43
RIC: 132352.

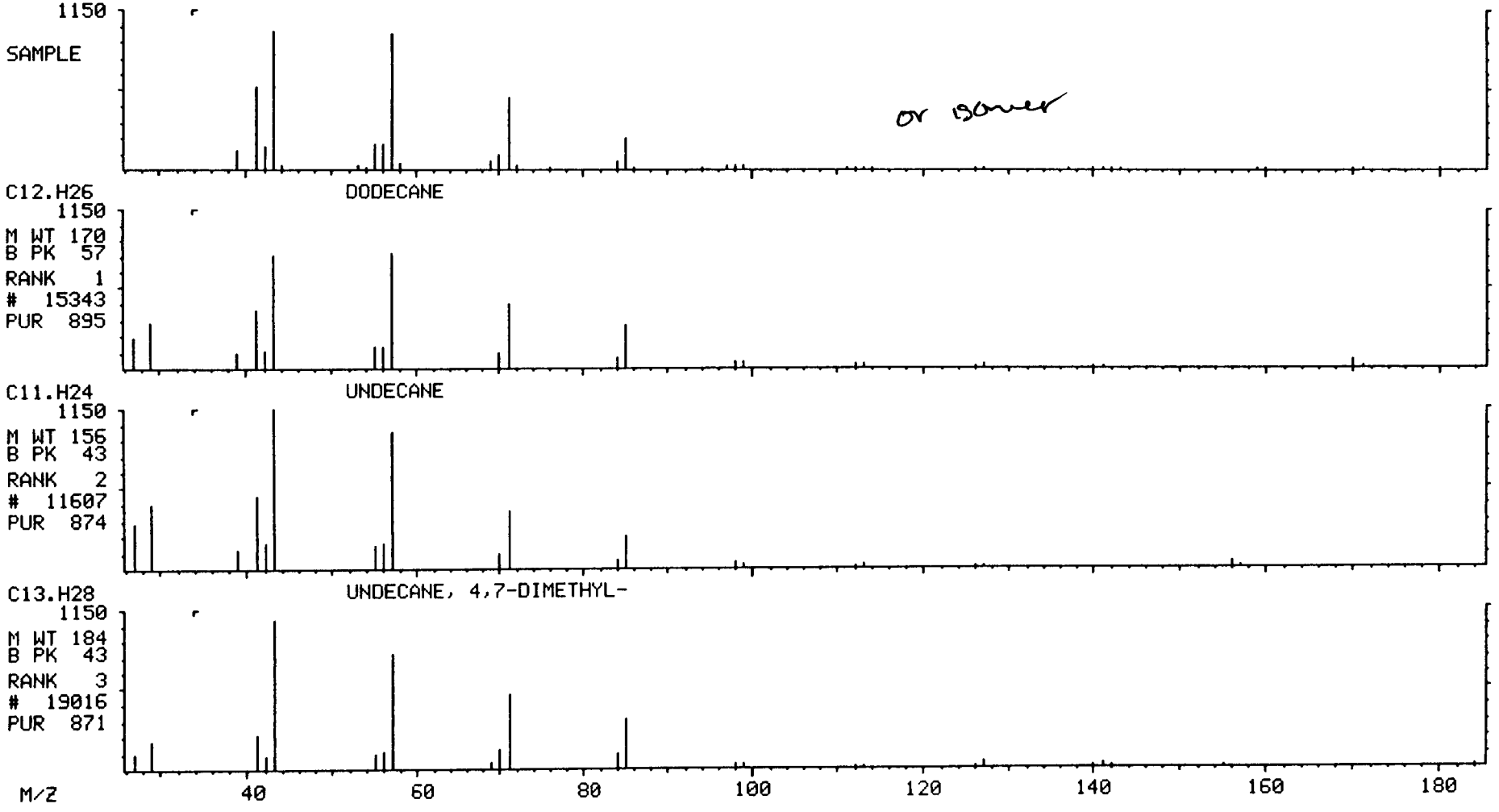


Fig. 4.3

Library Search Data: 30068106 # 634 Base m/z: 57
08/31/98 21:30:00 + 7:03 Cali: 30068106 # 3 RIC: 136960.
Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
748 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37462	HEPTADECANE, 2,6-DIMETHYL-
2	14799	1-DECENE, 3,4-DIMETHYL-
3	19523	1-DECANOL, 2-ETHYL-
4	22534	TRIDECANE, 7-METHYL-
5	15353	2,6-DIMETHYLDECANE
6	26408	2-ETHYL-1-DODECANOL
7	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
8	26409	2-HEXYL-1-OCTANOL
9	32418	2-HEXYL-1-DECANOL

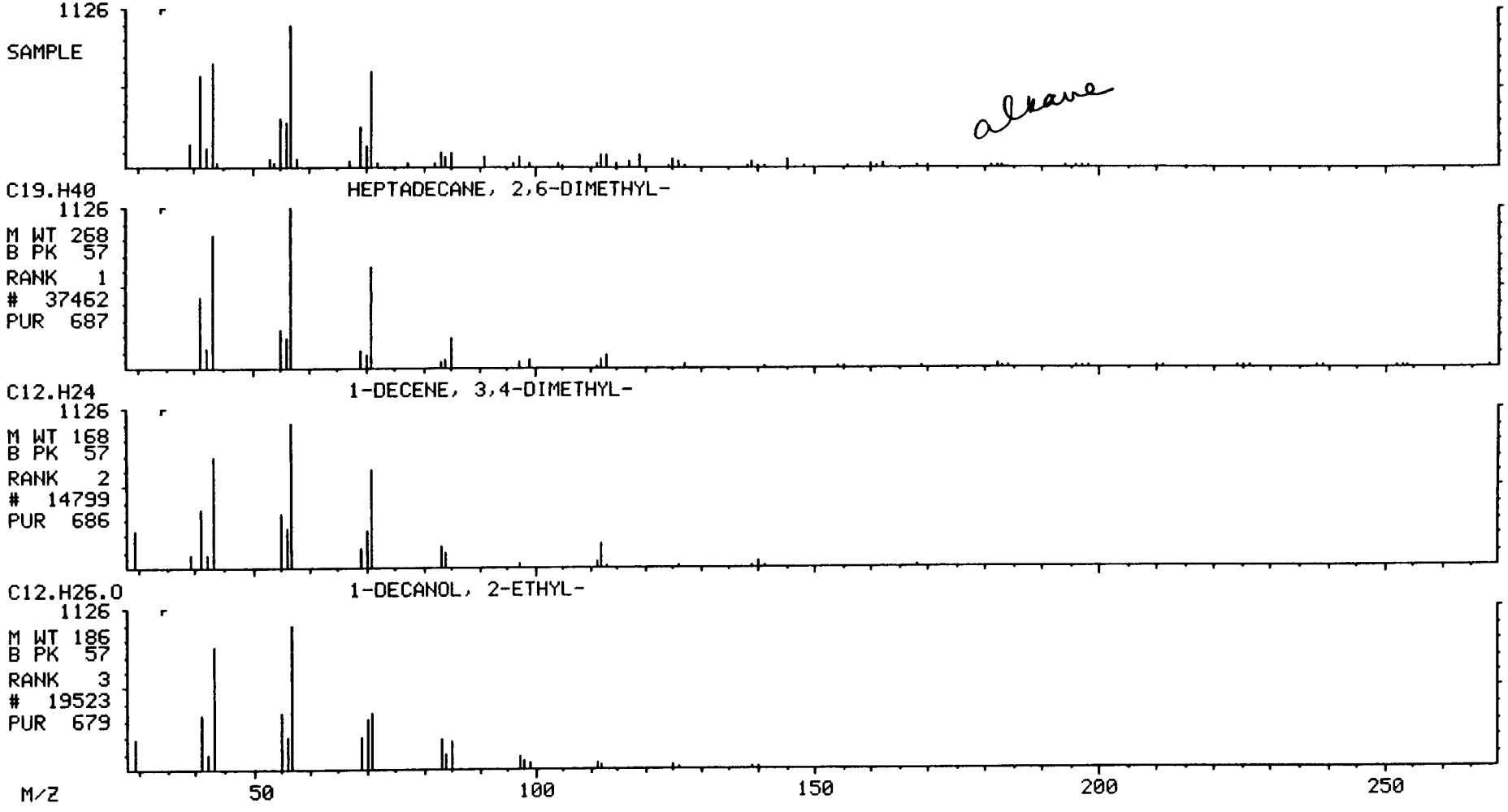
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	687	938	702
2	C12.H24	168	57	686	940	686
3	C12.H26.O	186	57	679	928	692
4	C14.H30	198	57	667	913	681
5	C12.H26	170	43	659	918	664
6	C14.H30.O	214	57	656	899	675
7	C21.H44	296	57	654	910	675
8	C14.H30.O	214	57	653	899	683
9	C16.H34.O	242	57	652	897	680

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	___	___	___	___	54105-67-8
2	___	___	___	___	50871-03-9
3	___	___	___	___	21078-65-9
4	___	___	___	___	26730-14-3
5	___	___	___	___	13150-81-7
6	___	___	___	___	- -
7	___	___	___	___	18344-37-1
8	___	___	___	___	- -
9	___	___	___	___	- -

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:30:00 + 7:03
SAMPLE: T-MM5-3 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068106 # 634
CALI: 30068106 # 3

BASE M/Z: 57
RIC: 136960.



10

Library Search Data: 30068106 # 653 Base m/z: 142
08/31/98 21:30:00 + 7:16 Cali: 30068106 # 3 RIC: 57920.
Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
298 matched at least 4 of the 16 largest peaks in the unknown

Rank	In.	Name
1	8109	1H-INDENE, 1-ETHYLIDENE-
2	8107	NAPHTHALENE, 1-METHYL-
3	8108	1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-
4	8111	NAPHTHALENE, 2-METHYL-
5	8110	BENZOCYCLOHEPTATRIENE
6	12521	2-CYCLOPENTEN-1-OL, 1-PHENYL-
7	7992	BENZENEACETONITRILE, 4-CYANO-
8	15865	1-NAPHTHALENEETHANOL
9	15368	BICYCLO[2.2.1]HEPT-2-ENE, 2-PHENYL-

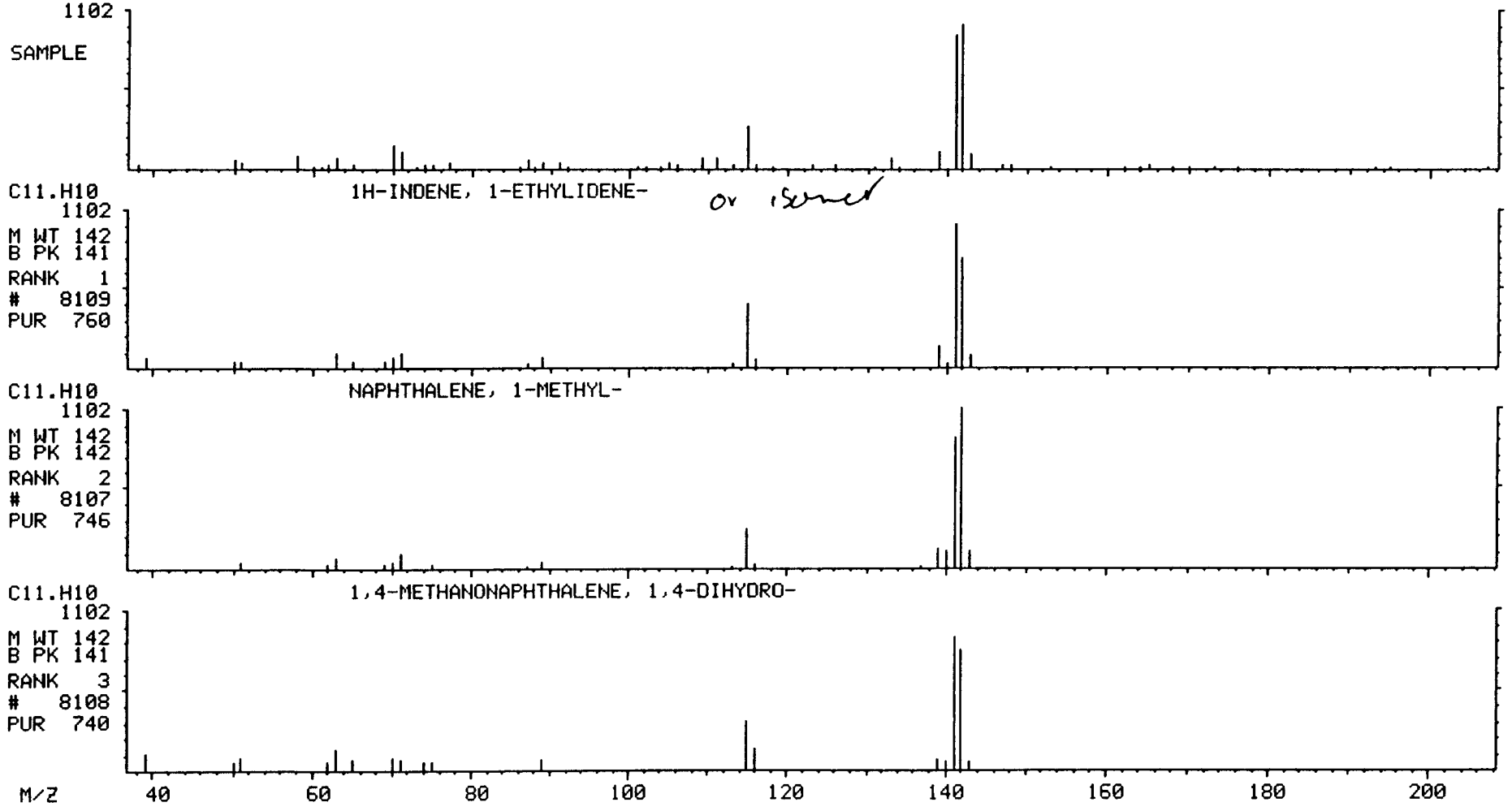
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C11.H10	142	141	760	956	779
2	C11.H10	142	142	746	938	787
3	C11.H10	142	141	740	932	767
4	C11.H10	142	142	728	926	779
5	C11.H10	142	141	706	931	721
6	C11.H12.O	160	142	577	758	743
7	C9.H6.N2	142	142	574	790	622
8	C12.H12.O	172	141	563	733	677
9	C13.H14	170	142	562	738	622

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	2471-83-2
2	---	---	---	---	90-12-0
3	---	---	---	---	4453-90-1
4	---	---	---	---	91-57-6
5	---	---	---	---	264-09-5
6	---	---	---	---	56667-10-8
7	---	---	---	---	876-31-3
8	---	---	---	---	773-99-9
9	---	---	---	---	4237-08-5

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:30:00 + 7:16
SAMPLE: T-MM5-3 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068106 # 653
CALI: 30068106 # 3

BASE M/Z: 142
RIC: 57920.



Library Search Data: 30068106 # 664 Base m/z: 57
08/31/98 21:30:00 + 7:23 Cali: 30068106 # 3 RIC: 165888.
Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
324 matched at least 8 of the 16 largest peaks in the unknown

Rank	In.	Name
1	19016	UNDECANE, 4,7-DIMETHYL-
2	8104	OCTANE, 3,5-DIMETHYL-
3	19015	DECANE, 2,5,6-TRIMETHYL-
4	19026	DECANE, 2,6,8-TRIMETHYL-
5	11602	OCTANE, 2,4,6-TRIMETHYL-
6	19013	DECANE, 2,5,9-TRIMETHYL-
7	18985	TRIDECANE
8	8089	NONANE, 2-METHYL-
9	8102	HEXANE, 2,2,3,3-TETRAMETHYL-

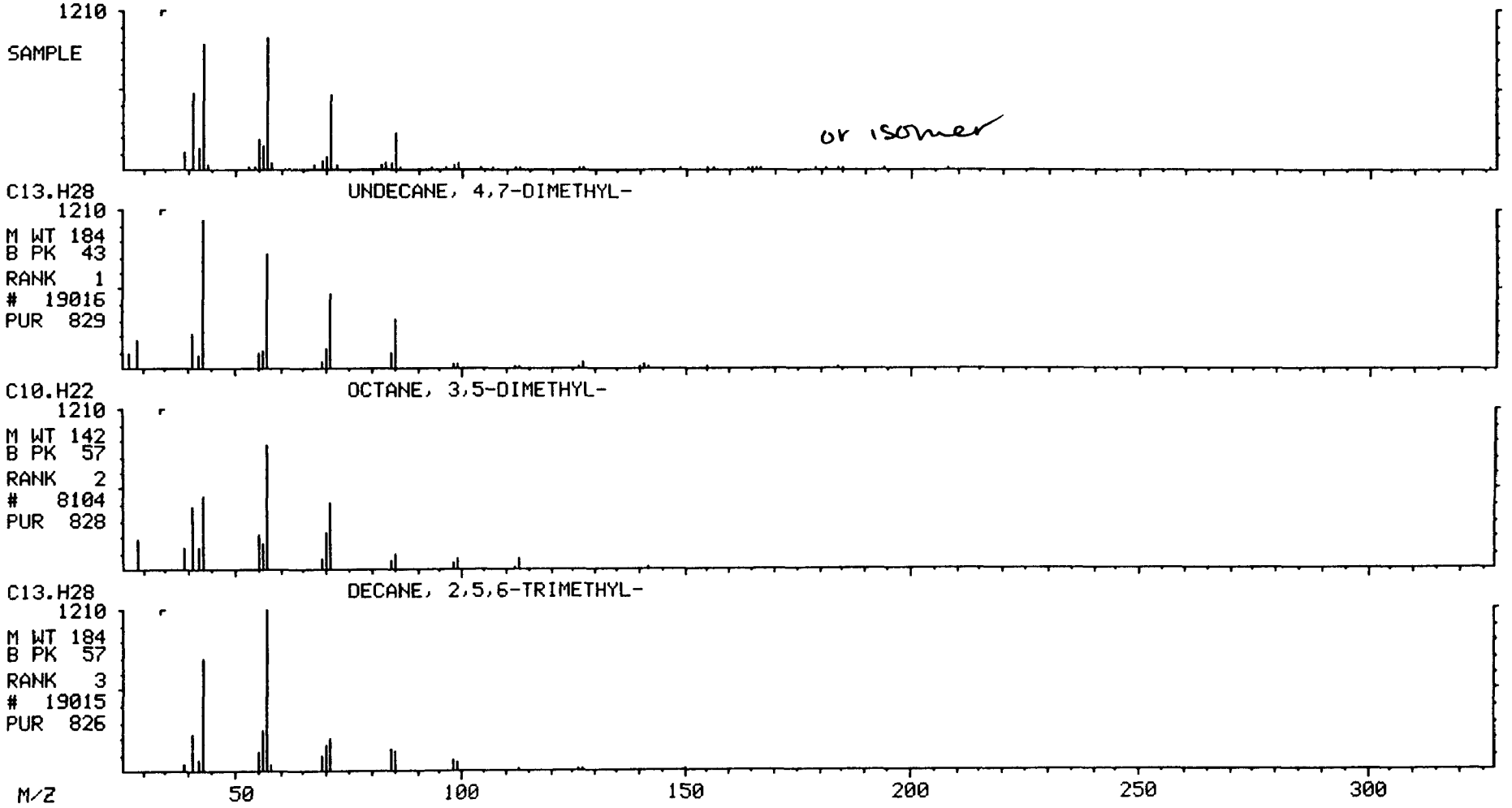
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C13.H28	184	43	829	939	845
2	C10.H22	142	57	828	941	836
3	C13.H28	184	57	826	931	826
4	C13.H28	184	57	823	940	827
5	C11.H24	156	57	823	965	825
6	C13.H28	184	57	816	935	816
7	C13.H28	184	57	815	948	831
8	C10.H22	142	43	798	934	808
9	C10.H22	142	57	795	918	795

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	17301-32-5
2	---	---	---	---	15869-93-9
3	---	---	---	---	62108-23-0
4	---	---	---	---	62108-26-3
5	---	---	---	---	62016-37-9
6	---	---	---	---	62108-22-9
7	---	---	---	---	629-50-5
8	---	---	---	---	871-83-0
9	---	---	---	---	13475-81-5

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:30:00 + 7:23
SAMPLE: T-MM5-3 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068106 # 664
CALI: 30068106 # 3

BASE M/Z: 57
RIC: 165888.



Library Search Data: 30068106 # 724 Base m/z: 172
08/31/98 21:30:00 + 8:03 Cali: 30068106 # 3 RIC: 82816.
Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
224 matched at least 4 of the 16 largest peaks in the unknown

Rank	In.	Name
1	15856	1,1'-BIPHENYL, 2-FLUORO-
2	15857	1,1'-BIPHENYL, 4-FLUORO-
3	15721	4-(2-HYDROXYPHENYL)PYRIMIDINE
4	15828	1,8-NAPHTHYRIDINE, 2,4,7-TRIMETHYL-
5	15722	2-(2-HYDROXYPHENYL)PYRIMIDINE
6	15004	BENZENE, 1-BROMO-4-METHYL-
7	15719	5-(4-HYDROXYPHENYL)PYRIMIDINE
8	39206	1-(2-(2-METHYL-5-PYRIDYL)ETHYL)-2,3,5-TRIMETHYLINDOLE
9	14964	IMIDAZOLE, 4-CHLORO-2-TRIFLUOROMETHYL-

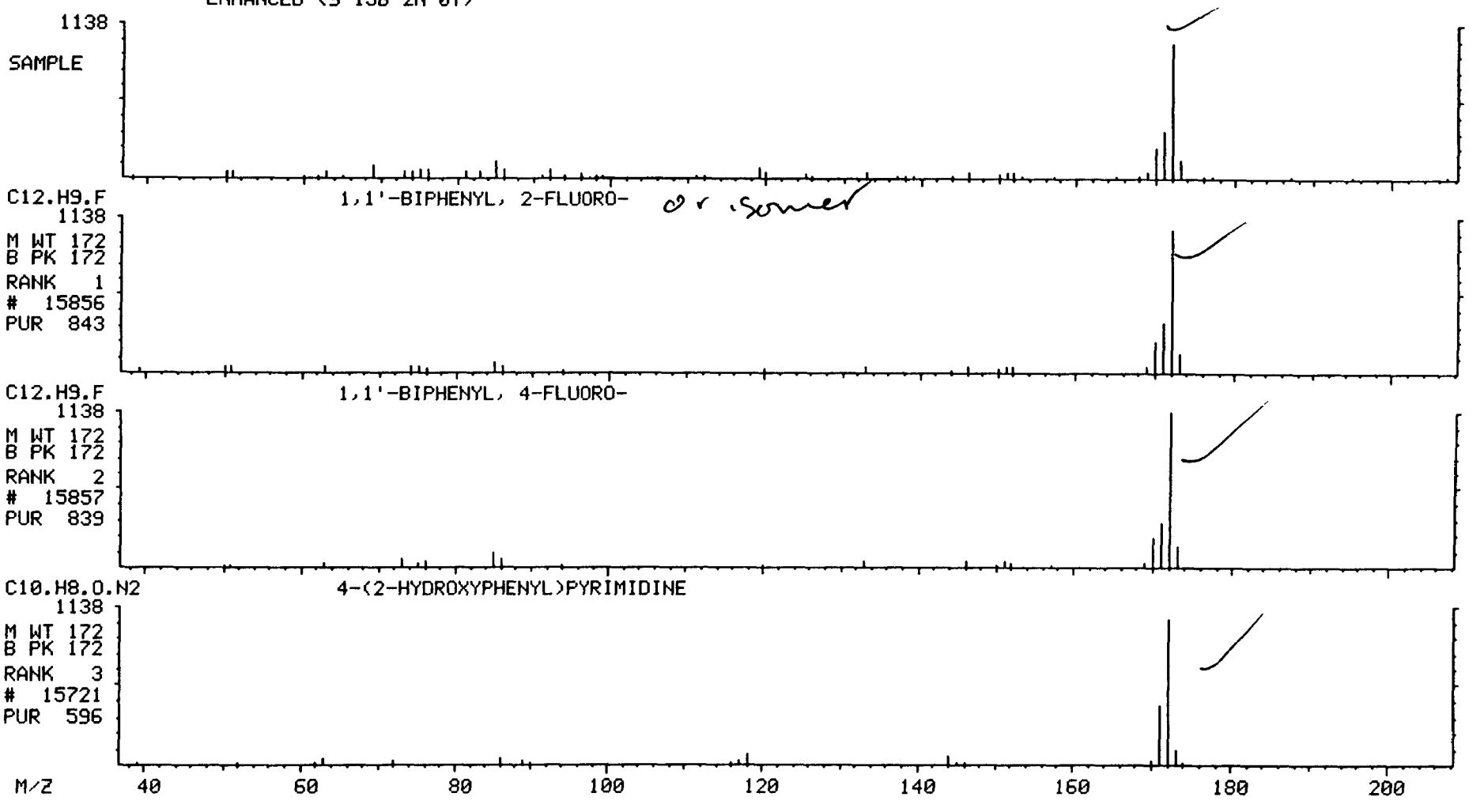
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C12.H9.F	172	172	843	994	845
2	C12.H9.F	172	172	839	989	839
3	C10.H8.O.N2	172	172	596	854	652
4	C11.H12.N2	172	172	507	885	547
5	C10.H8.O.N2	172	172	474	755	529
6	C7.H7.BR	170	91	431	596	474
7	C10.H8.O.N2	172	172	426	684	555
8	C19.H22.N2	278	172	379	571	535
9	C4.H2.N2.CL.F3	170	170	378	542	451

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
	---	---	---	---	321-60-8
	---	---	---	---	324-74-3
	---	---	---	---	68535-55-7
	---	---	---	---	14757-44-9
	---	---	---	---	64435-20-7
	---	---	---	---	106-38-7
	---	---	---	---	- -
	---	---	---	---	- -
	---	---	---	---	- -

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:30:00 + 8:03
SAMPLE: T-MM5-3 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068106 # 724
CALI: 30068106 # 3

BASE M/Z: 172
RIC: 82816.



IC(3)

Library Search Data: 30068106 # 739 Base m/z: 57
08/31/98 21:30:00 + 8:13 Cali: 30068106 # 3 RIC: 158720.
Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
712 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
2	25991	DODECANE, 2,6,10-TRIMETHYL-
3	25997	PENTADECANE
4	22535	DODECANE, 4,6-DIMETHYL-
5	37462	HEPTADECANE, 2,6-DIMETHYL-
6	19007	DODECANE, 3-METHYL-
7	26001	DODECANE, 2,7,10-TRIMETHYL-
8	22530	TETRADECANE
9	18998	UNDECANE, 3,7-DIMETHYL-

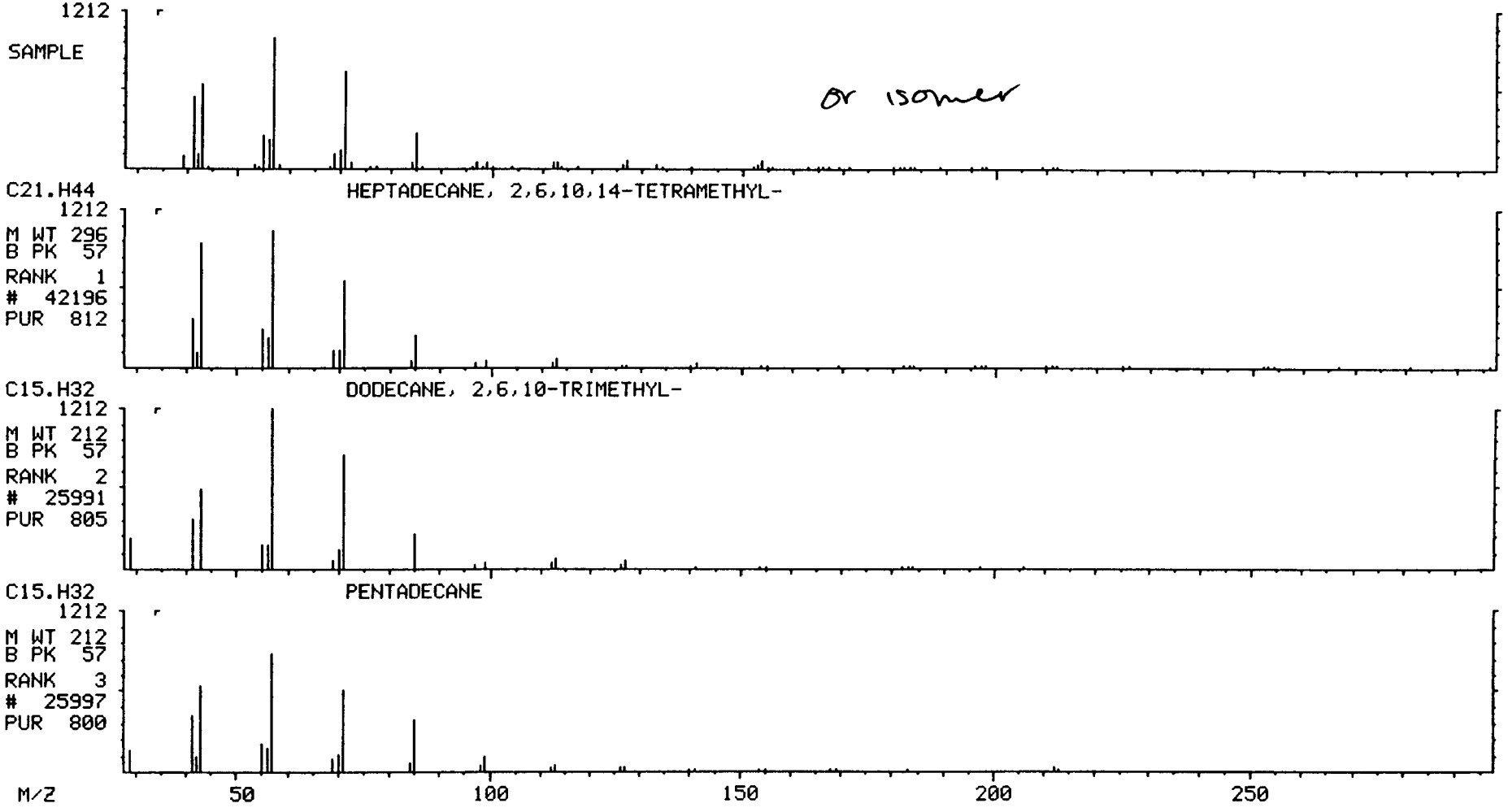
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C21.H44	296	57	812	930	835
2	C15.H32	212	57	805	959	810
3	C15.H32	212	57	800	936	815
4	C14.H30	198	57	796	940	800
5	C19.H40	268	57	791	924	824
6	C13.H28	184	57	787	931	788
7	C15.H32	212	57	785	973	795
8	C14.H30	198	43	782	912	799
9	C13.H28	184	43	777	924	778

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	18344-37-1
2	---	---	---	---	3891-98-3
3	---	---	---	---	629-62-9
4	---	---	---	---	61141-72-8
5	---	---	---	---	54105-67-8
6	---	---	---	---	17312-57-1
7	---	---	---	---	74645-98-0
8	---	---	---	---	629-59-4
9	---	---	---	---	17301-29-0

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:30:00 + 8:13
SAMPLE: T-MM5-3 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068106 # 739
CALI: 30068106 # 3

BASE M/Z: 57
RIC: 158720.



Library Search Data: 30068106 # 765 Base m/z: 43
08/31/98 21:30:00 + 8:31 Cali: 30068106 # 3 RIC: 285184.
Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
634 matched at least 7 of the 16 largest peaks in the unknown

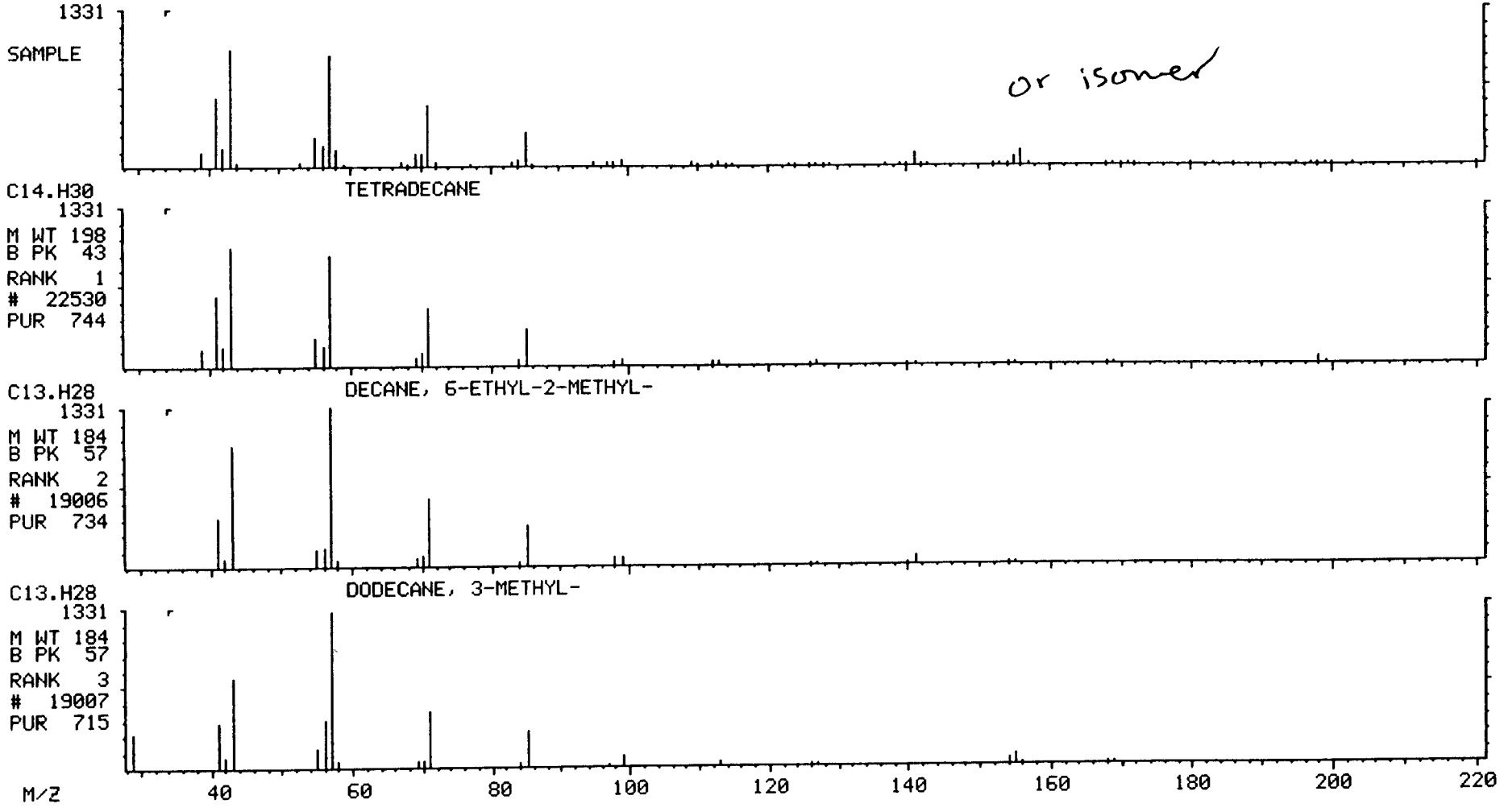
Rank	In.	Name
1	22530	TETRADECANE
2	19006	DECANE, 6-ETHYL-2-METHYL-
3	19007	DODECANE, 3-METHYL-
4	11607	UNDECANE
5	11612	NONANE, 2,5-DIMETHYL-
6	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
7	25996	TRIDECANE, 4,8-DIMETHYL-
8	39681	1-IODOUNDECANE
9	25997	PENTADECANE

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C14.H30	198	43	744	960	744
2	C13.H28	184	57	734	963	734
3	C13.H28	184	57	715	917	715
4	C11.H24	156	43	711	977	711
5	C11.H24	156	57	708	877	708
6	C21.H44	296	57	706	925	726
7	C15.H32	212	57	705	929	710
8	C11.H23.I	282	57	703	888	707
9	C15.H32	212	57	703	928	722

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	629-59-4
2	—	—	—	—	62108-21-8
3	—	—	—	—	17312-57-1
4	—	—	—	—	1120-21-4
5	—	—	—	—	17302-27-1
6	—	—	—	—	18344-37-1
7	—	—	—	—	55030-62-1
8	—	—	—	—	4282-44-4
9	—	—	—	—	629-62-9

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:30:00 + 8:31
SAMPLE: T-MM5-3 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068106 # 765 BASE M/Z: 43
CALI: 30068106 # 3 RIC: 285184.



105

Library Search Data: 30068106 # 778 Base m/z: 141
08/31/98 21:30:00 + 8:39 Cali: 30068106 # 3 RIC: 79232.
Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
421 matched at least 5 of the 16 largest peaks in the unknown

Rank	In.	Name
1	11622	NAPHTHALENE, 1-ETHYL-
2	11614	NAPHTHALENE, 2-ETHYL-
3	11626	NAPHTHALENE, 1,4-DIMETHYL-
4	11619	NAPHTHALENE, 1,2-DIMETHYL-
5	11625	NAPHTHALENE, 1,3-DIMETHYL-
6	11618	NAPHTHALENE, 2,3-DIMETHYL-
7	11621	NAPHTHALENE, 1,8-DIMETHYL-
8	11624	NAPHTHALENE, 1,7-DIMETHYL-
9	11620	NAPHTHALENE, 2,6-DIMETHYL-

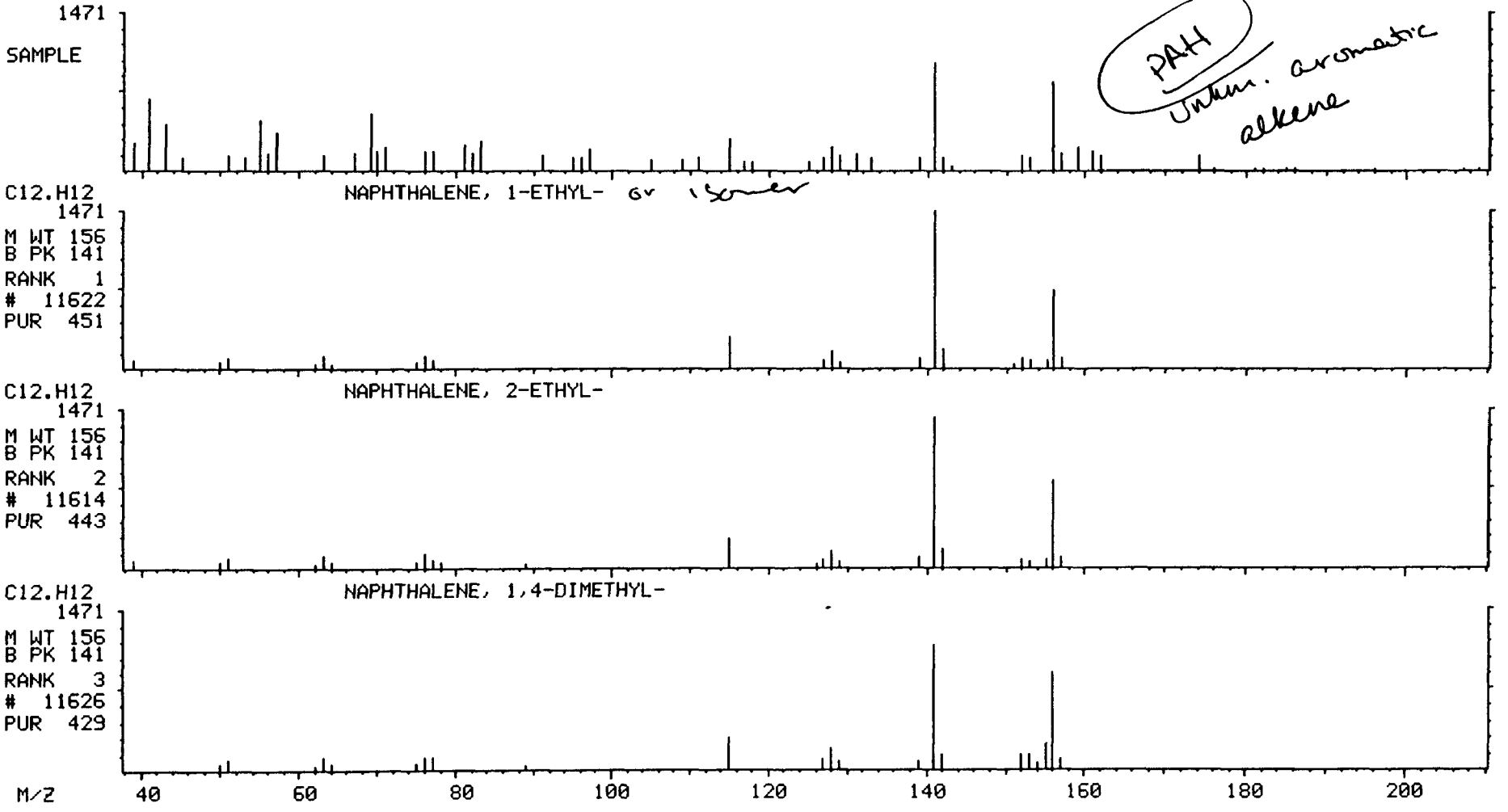
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C12.H12	156	141	451	910	477
2	C12.H12	156	141	443	892	480
3	C12.H12	156	141	429	882	481
4	C12.H12	156	156	429	866	477
5	C12.H12	156	156	421	850	483
6	C12.H12	156	156	417	841	474
7	C12.H12	156	156	408	840	471
8	C12.H12	156	156	408	823	484
9	C12.H12	156	156	407	838	479

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	1127-76-0
2	—	—	—	—	939-27-5
3	—	—	—	—	571-58-4
4	—	—	—	—	573-98-8
5	—	—	—	—	575-41-7
6	—	—	—	—	581-40-8
7	—	—	—	—	569-41-5
8	—	—	—	—	575-37-1
9	—	—	—	—	581-42-0

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:30:00 + 8:39
SAMPLE: T-MM5-3 1/35A/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068106 # 778
CALI: 30068106 # 3

BASE M/Z: 141
RIC: 79232.



Library Search Data: 30068106 # 822 Base m/z: 57
08/31/98 21:30:00 + 9:09 Cali: 30068106 # 3 RIC: 145152.
Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
855 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
2	19016	UNDECANE, 4,7-DIMETHYL-
3	37462	HEPTADECANE, 2,6-DIMETHYL-
4	15353	2,6-DIMETHYLDECANE
5	18987	UNDECANE, 2,8-DIMETHYL-
6	19023	DECANE, 2,6,7-TRIMETHYL-
7	8104	OCTANE, 3,5-DIMETHYL-
8	19035	DODECANE, 2-METHYL-
9	19054	UNDECANE, 2,6-DIMETHYL-

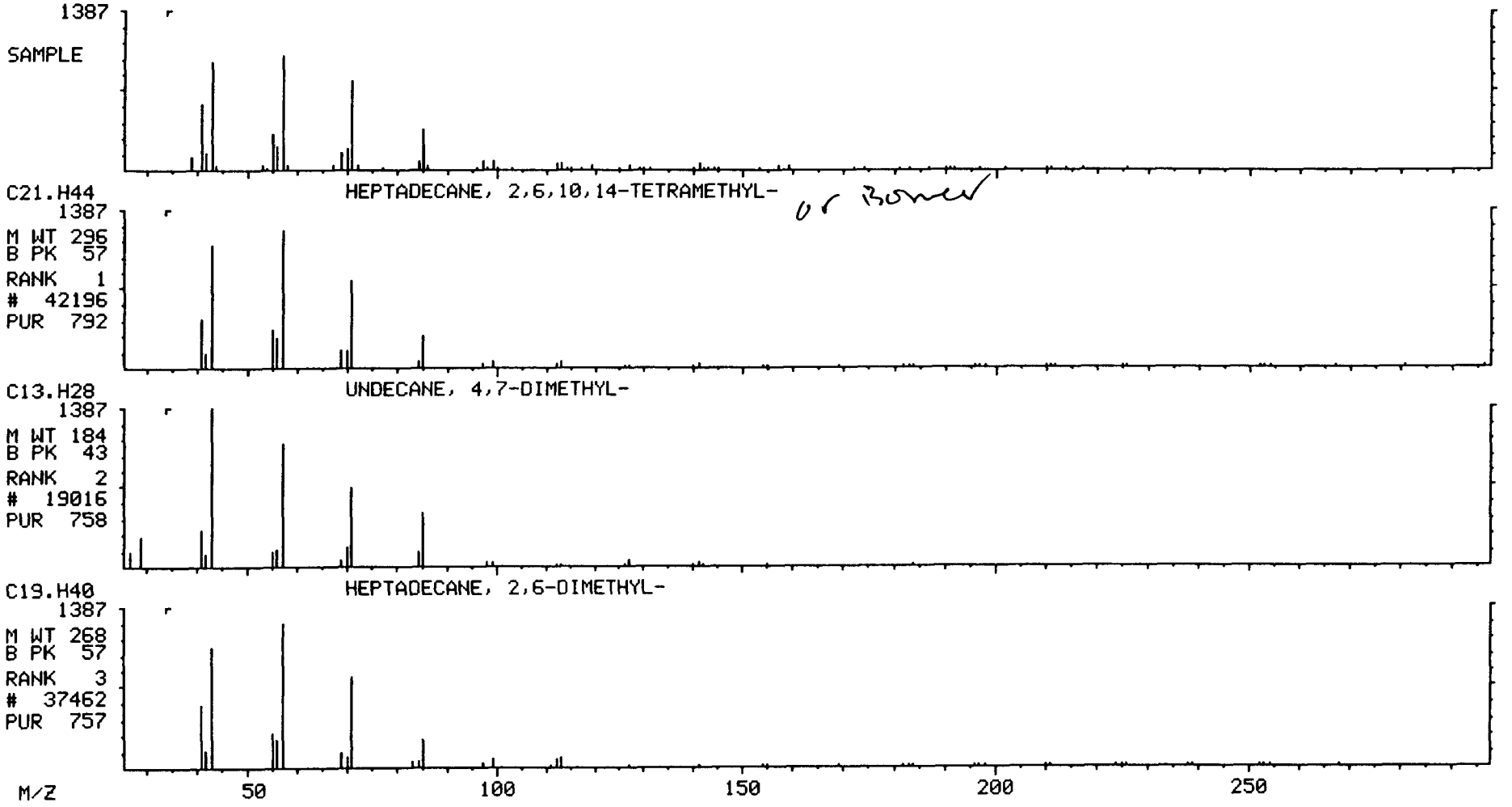
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C21.H44	296	57	792	959	816
2	C13.H28	184	43	758	947	765
3	C19.H40	268	57	757	923	803
4	C12.H26	170	43	754	916	774
5	C13.H28	184	43	753	959	758
6	C13.H28	184	57	749	948	749
7	C10.H22	142	57	747	961	747
8	C13.H28	184	43	745	950	755
9	C13.H28	184	57	742	897	757

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	18344-37-1
2	---	---	---	---	17301-32-5
3	---	---	---	---	54105-67-8
4	---	---	---	---	13150-81-7
5	---	---	---	---	17301-25-6
6	---	---	---	---	62108-25-2
7	---	---	---	---	15869-93-9
8	---	---	---	---	1560-97-0
9	---	---	---	---	17301-23-4

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:30:00 + 9:09
SAMPLE: T-MM5-3 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068106 # 822
CALI: 30068106 # 3

BASE M/Z: 57
RIC: 145152.



or Bonnet

T-MM5-3

Library Search Data: 30068106 # 860 Base m/z: 57
08/31/98 21:30:00 + 9:34 Cali: 30068106 # 3 RIC: 246528.
Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
792 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	25997	PENTADECANE
2	19007	DODECANE, 3-METHYL-
3	22530	TETRADECANE
4	15352	UNDECANE, 2-METHYL-
5	15343	DODECANE
6	19006	DECANE, 6-ETHYL-2-METHYL-
7	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
8	15353	2,6-DIMETHYLDECANE
9	18998	UNDECANE, 3,7-DIMETHYL-

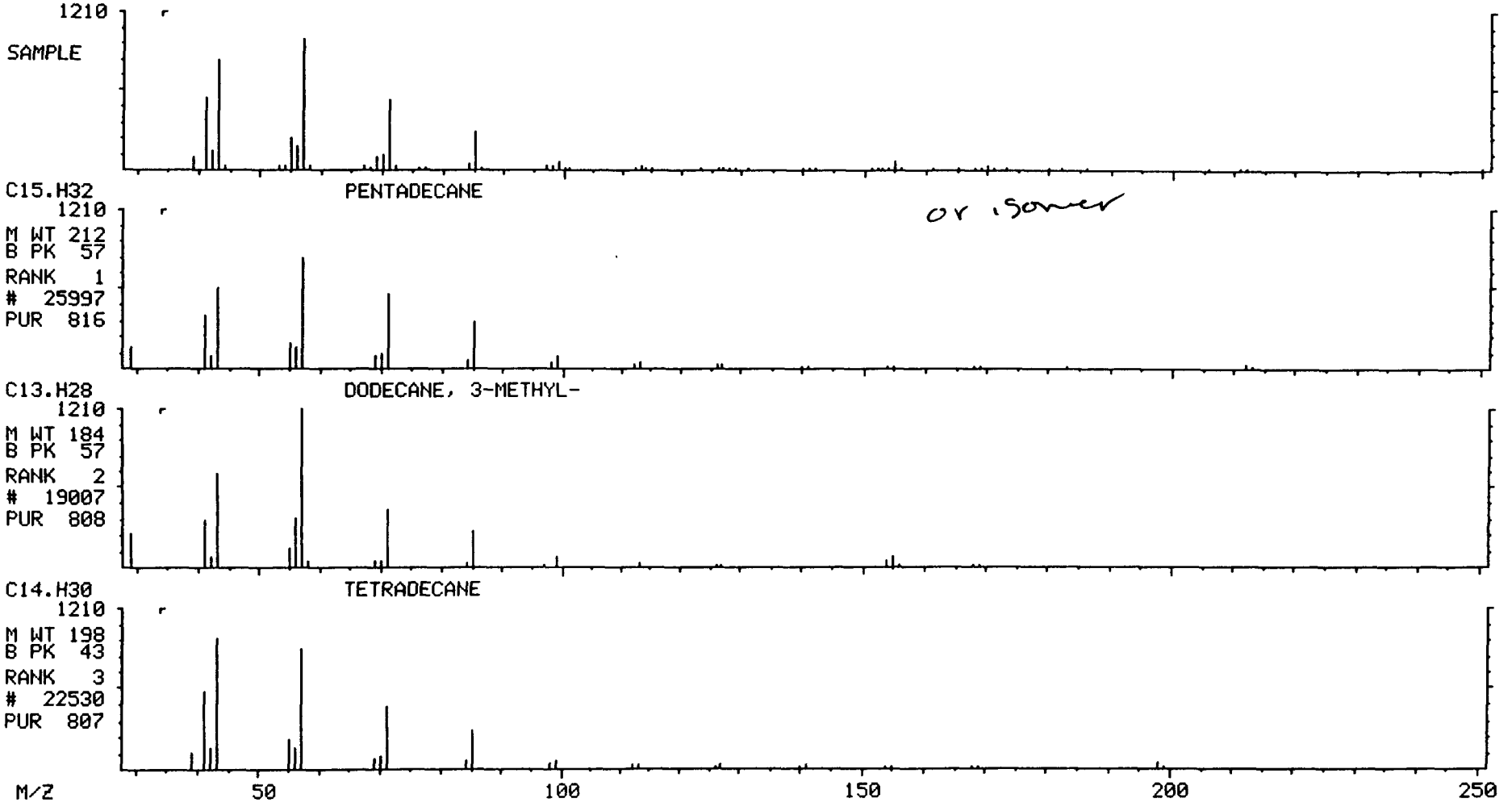
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C15.H32	212	57	816	963	823
2	C13.H28	184	57	808	965	808
3	C14.H30	198	43	807	945	841
4	C12.H26	170	43	807	952	807
5	C12.H26	170	57	800	985	800
6	C13.H28	184	57	799	967	799
7	C21.H44	296	57	797	939	819
8	C12.H26	170	43	796	923	796
9	C13.H28	184	43	790	949	791

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	629-62-9
2	---	---	---	---	17312-57-1
3	---	---	---	---	629-59-4
4	---	---	---	---	7045-71-8
5	---	---	---	---	112-40-3
6	---	---	---	---	62108-21-8
7	---	---	---	---	18344-37-1
8	---	---	---	---	13150-81-7
9	---	---	---	---	17301-29-0

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:30:00 + 9:34
SAMPLE: T-MM5-3 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068106 # 860
CALI: 30068106 # 3

BASE M/Z: 57
RIC: 246528.



or isomer

Library Search Data: 30068106 # 905 Base m/z: 41
08/31/98 21:30:00 + 10:04 Cali: 30068106 # 3 RIC: 89088.
Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
751 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	40233	NONADECANOL
2	42521	1-EICOSANOL
3	37444	OXIRANE, HEXADECYL-
4	40193	CIS-9,10-EPOXYOCTADECAN-1-OL
5	37449	OCTADECANAL
6	42180	OCTADECANE, 1-(ETHENYLOXY)-
7	25971	OXIRANE, DODECYL-
8	22482	2-TRIDECEN-1-OL, (E)-
9	32052	OXIRANE, TETRADECYL-

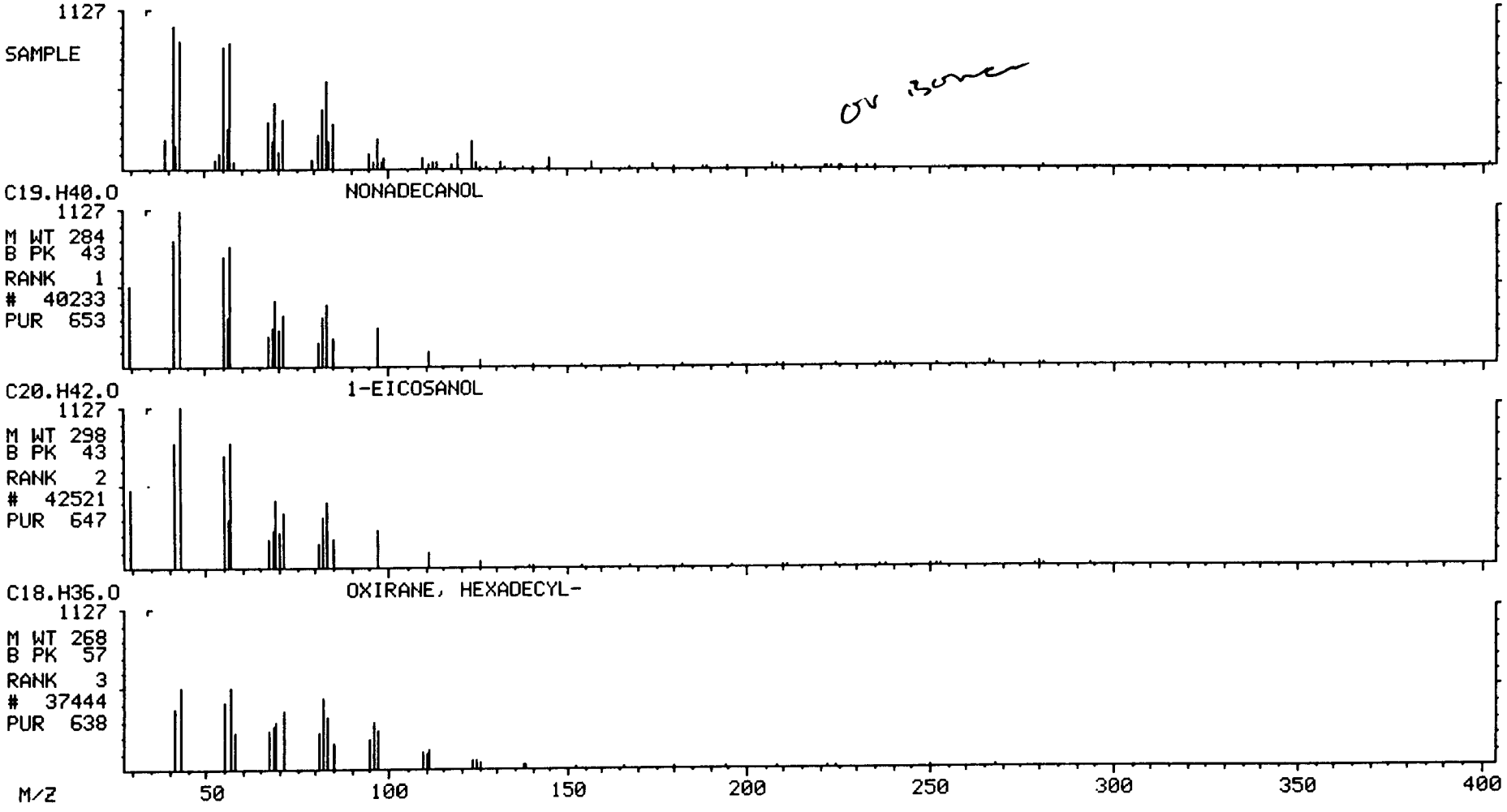
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40.O	284	43	653	934	682
2	C20.H42.O	298	43	647	928	680
3	C18.H36.O	268	57	638	853	674
4	C18.H36.O2	284	55	638	904	668
5	C18.H36.O	268	43	628	851	687
6	C20.H40.O	296	43	625	939	650
7	C14.H28.O	212	41	625	891	643
8	C13.H26.O	198	57	621	898	644
9	C16.H32.O	240	41	619	935	619

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	52783-43-4
2	---	---	---	---	629-96-9
3	---	---	---	---	7390-81-0
4	---	---	---	---	13980-12-6
5	---	---	---	---	638-66-4
6	---	---	---	---	930-02-9
7	---	---	---	---	3234-28-4
8	---	---	---	---	74962-98-4
9	---	---	---	---	7320-37-8

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:30:00 + 10:04
SAMPLE: T-MM5-3 1/35A/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068106 # 905
CALI: 30068106 # 3

BASE M/Z: 41
RIC: 89088.



10-1

Library Search Data: 30068106 # 949 Base m/z: 57
08/31/98 21:30:00 + 10:33 Cali: 30068106 # 3 RIC: 260096.
Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
360 matched at least 8 of the 16 largest peaks in the unknown

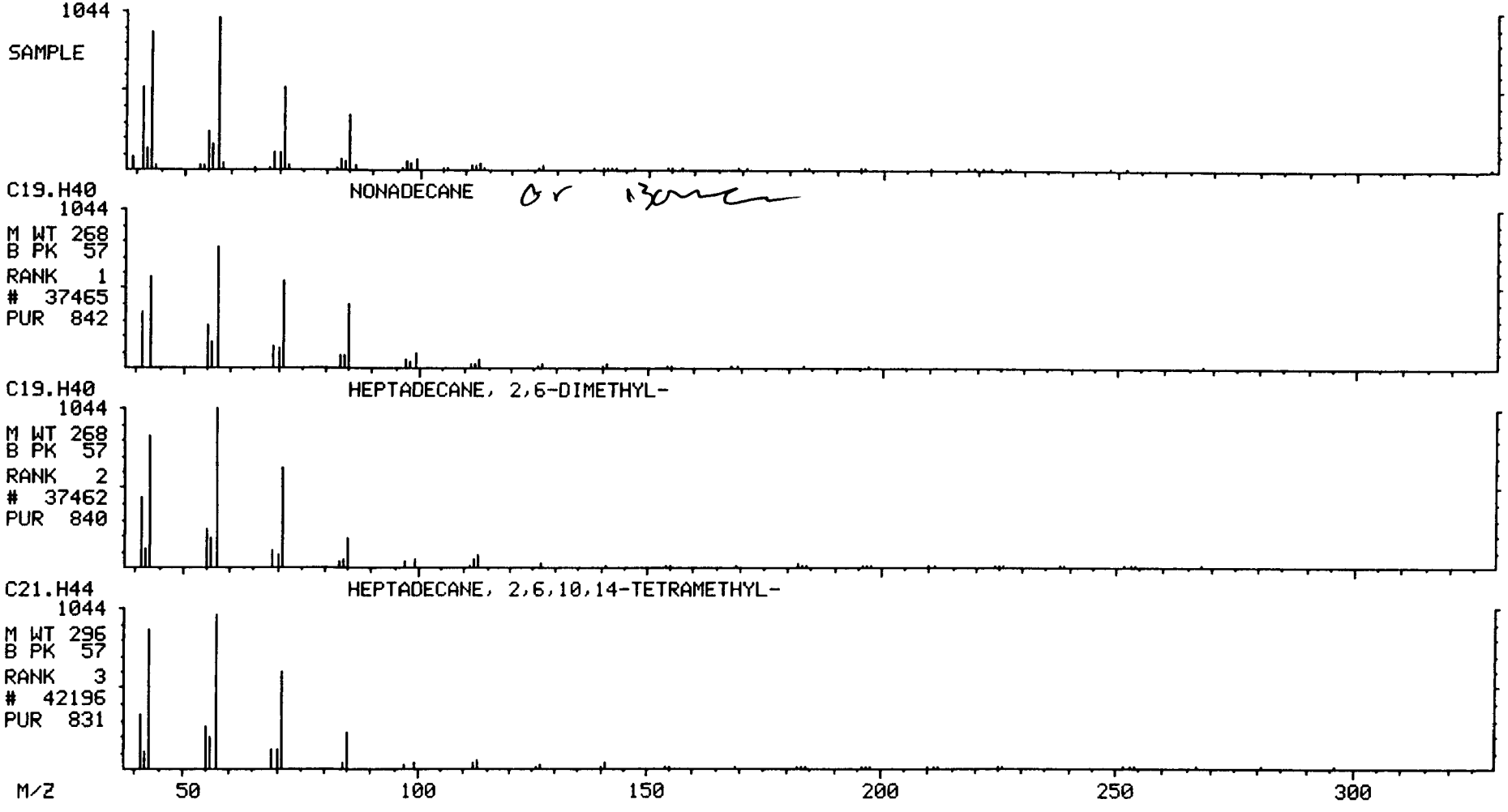
Rank	In.	Name
1	37465	NONADECANE
2	37462	HEPTADECANE, 2,6-DIMETHYL-
3	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
4	15969	HYDROXYLAMINE, O-DECYL-
5	19016	UNDECANE, 4,7-DIMETHYL-
6	25997	PENTADECANE
7	19054	UNDECANE, 2,6-DIMETHYL-
8	18985	TRIDECANE
9	19523	1-DECANOL, 2-ETHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	842	952	867
2	C19.H40	268	57	840	944	865
3	C21.H44	296	57	831	951	849
4	C10.H23.O.N	173	43	823	962	826
5	C13.H28	184	43	819	962	819
6	C15.H32	212	57	819	953	844
7	C13.H28	184	57	805	919	805
8	C13.H28	184	57	804	964	807
9	C12.H26.O	186	57	800	927	813

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	629-92-5
2	---	---	---	---	54105-67-8
3	---	---	---	---	18344-37-1
4	---	---	---	---	29812-79-1
5	---	---	---	---	17301-32-5
6	---	---	---	---	629-62-9
7	---	---	---	---	17301-23-4
8	---	---	---	---	629-50-5
9	---	---	---	---	21078-65-9

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:30:00 + 10:33
SAMPLE: T-MM5-3 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068106 # 949 BASE M/Z: 57
CALI: 30068106 # 3 RIC: 260096.



10.7

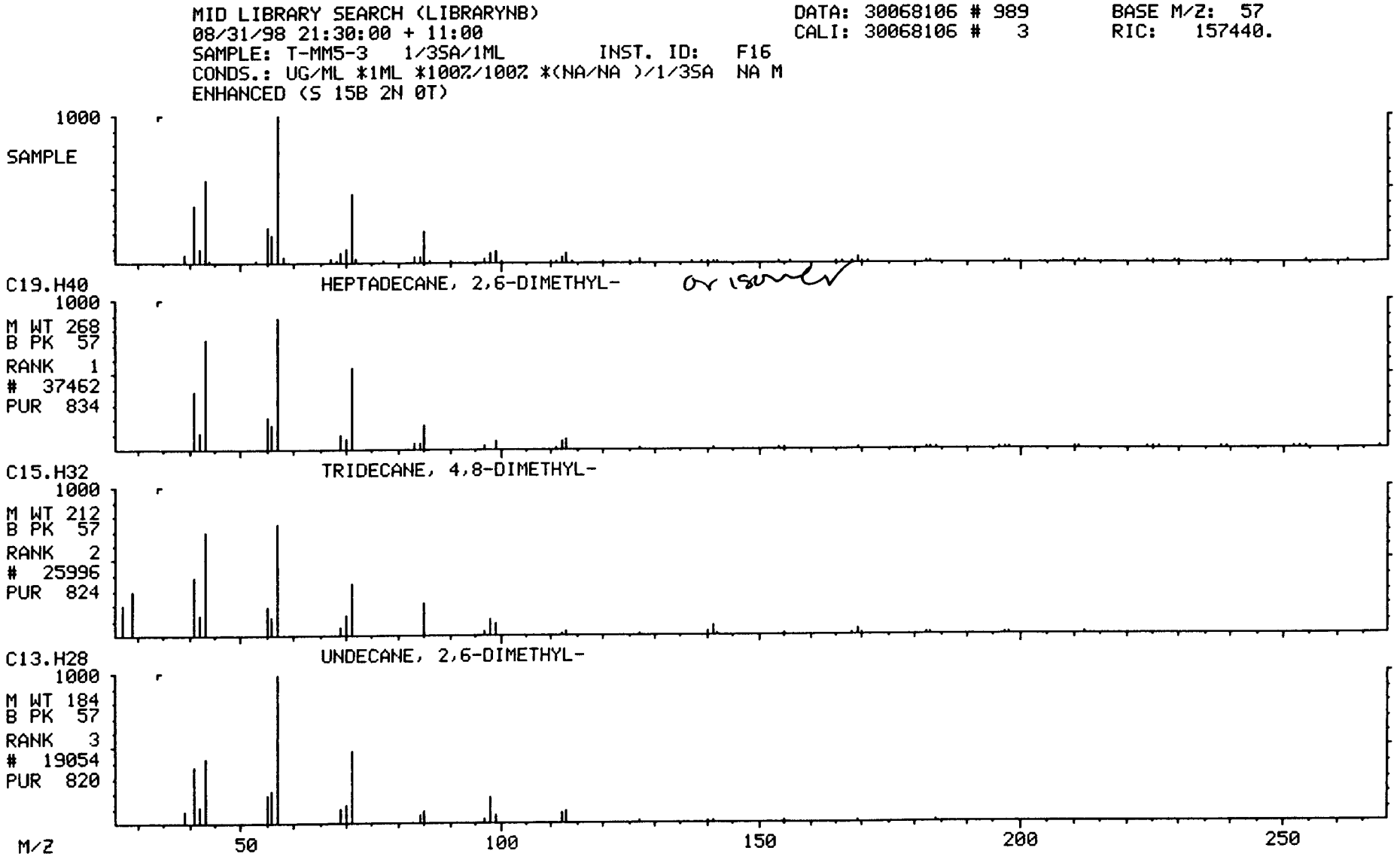
Library Search Data: 30068106 # 989 Base m/z: 57
08/31/98 21:30:00 + 11:00 Cali: 30068106 # 3 RIC: 157440.
Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
691 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37462	HEPTADECANE, 2,6-DIMETHYL-
2	25996	TRIDECANE, 4,8-DIMETHYL-
3	19054	UNDECANE, 2,6-DIMETHYL-
4	22536	TRIDECANE, 3-METHYL-
5	37465	NONADECANE
6	25997	PENTADECANE
7	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
8	22530	TETRADECANE
9	29264	TRIDECANE, 5-PROPYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	834	955	844
2	C15.H32	212	57	824	949	825
3	C13.H28	184	57	820	948	830
4	C14.H30	198	57	816	968	816
5	C19.H40	268	57	814	930	842
6	C15.H32	212	57	807	936	830
7	C21.H44	296	57	807	943	823
8	C14.H30	198	43	803	925	823
9	C16.H34	226	57	803	957	807

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	54105-67-8
2	---	---	---	---	55030-62-1
3	---	---	---	---	17301-23-4
4	---	---	---	---	6418-41-3
5	---	---	---	---	629-92-5
6	---	---	---	---	629-62-9
7	---	---	---	---	18344-37-1
8	---	---	---	---	629-59-4
9	---	---	---	---	55045-11-9


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:30:00 + 11:00
SAMPLE: T-MM5-3 1/35A/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068106 # 989
CALI: 30068106 # 3
BASE M/Z: 57
RIC: 157440.
1000
SAMPLE
C19.H40
HEPTADECANE, 2,6-DIMETHYL-
1000
M WT 268
B PK 57
RANK 1
37462
PUR 834
C15.H32
TRIDECANE, 4,8-DIMETHYL-
1000
M WT 212
B PK 57
RANK 2
25996
PUR 824
C13.H28
UNDECANE, 2,6-DIMETHYL-
1000
M WT 184
B PK 57
RANK 3
19054
PUR 820
M/Z
50
100
150
200
250

Library Search Data: 30068106 #1037 Base m/z: 57
08/31/98 21:30:00 + 11:32 Cali: 30068106 # 3 RIC: 239616.
Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
713 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37462	HEPTADECANE, 2,6-DIMETHYL-
2	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
3	26001	DODECANE, 2,7,10-TRIMETHYL-
4	25991	DODECANE, 2,6,10-TRIMETHYL-
5	22535	DODECANE, 4,6-DIMETHYL-
6	37466	PENTADECANE, 2,6,10,14-TETRAMETHYL-
7	37465	NONADECANE
8	25994	DODECANE, 2,6,11-TRIMETHYL-
9	22534	TRIDECANE, 7-METHYL-

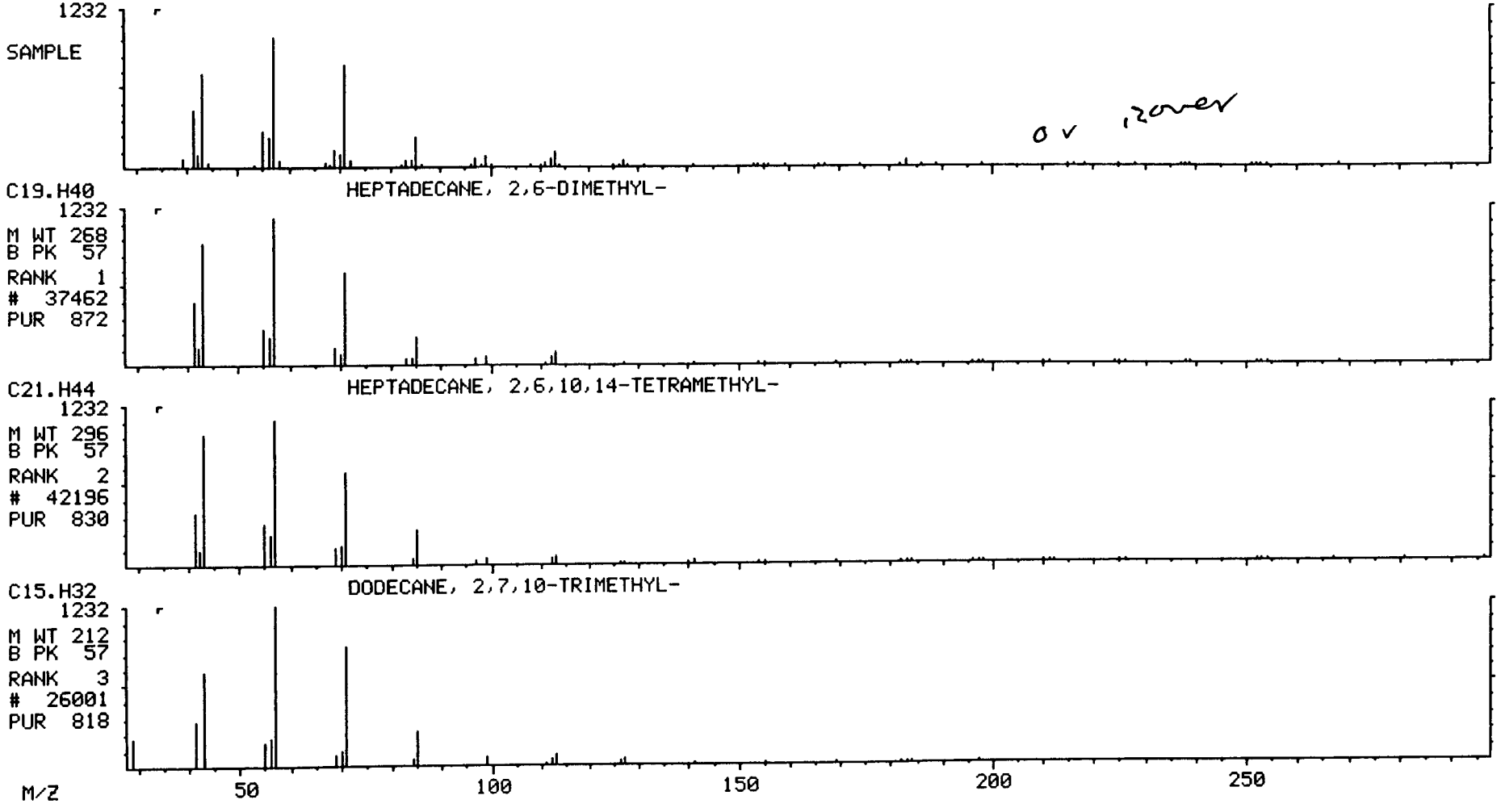
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	872	974	880
2	C21.H44	296	57	830	945	855
3	C15.H32	212	57	818	966	824
4	C15.H32	212	57	818	968	823
5	C14.H30	198	57	818	962	819
6	C19.H40	268	71	816	944	832
7	C19.H40	268	57	812	928	836
8	C15.H32	212	57	796	941	807
9	C14.H30	198	57	792	914	805

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	54105-67-8
2	—	—	—	—	18344-37-1
3	—	—	—	—	74645-98-0
4	—	—	—	—	3891-98-3
5	—	—	—	—	61141-72-8
6	—	—	—	—	1921-70-6
7	—	—	—	—	629-92-5
8	—	—	—	—	31295-56-4
9	—	—	—	—	26730-14-3

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:30:00 + 11:32
SAMPLE: T-MM5-3 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068106 #1037
CALI: 30068106 # 3

BASE M/Z: 57
RIC: 239616.



over

1030

Library Search Data: 30068106 #1115 Base m/z: 57
08/31/98 21:30:00 + 12:24 Cali: 30068106 # 3 RIC: 131328.
Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
934 matched at least 7 of the 16 largest peaks in the unknown

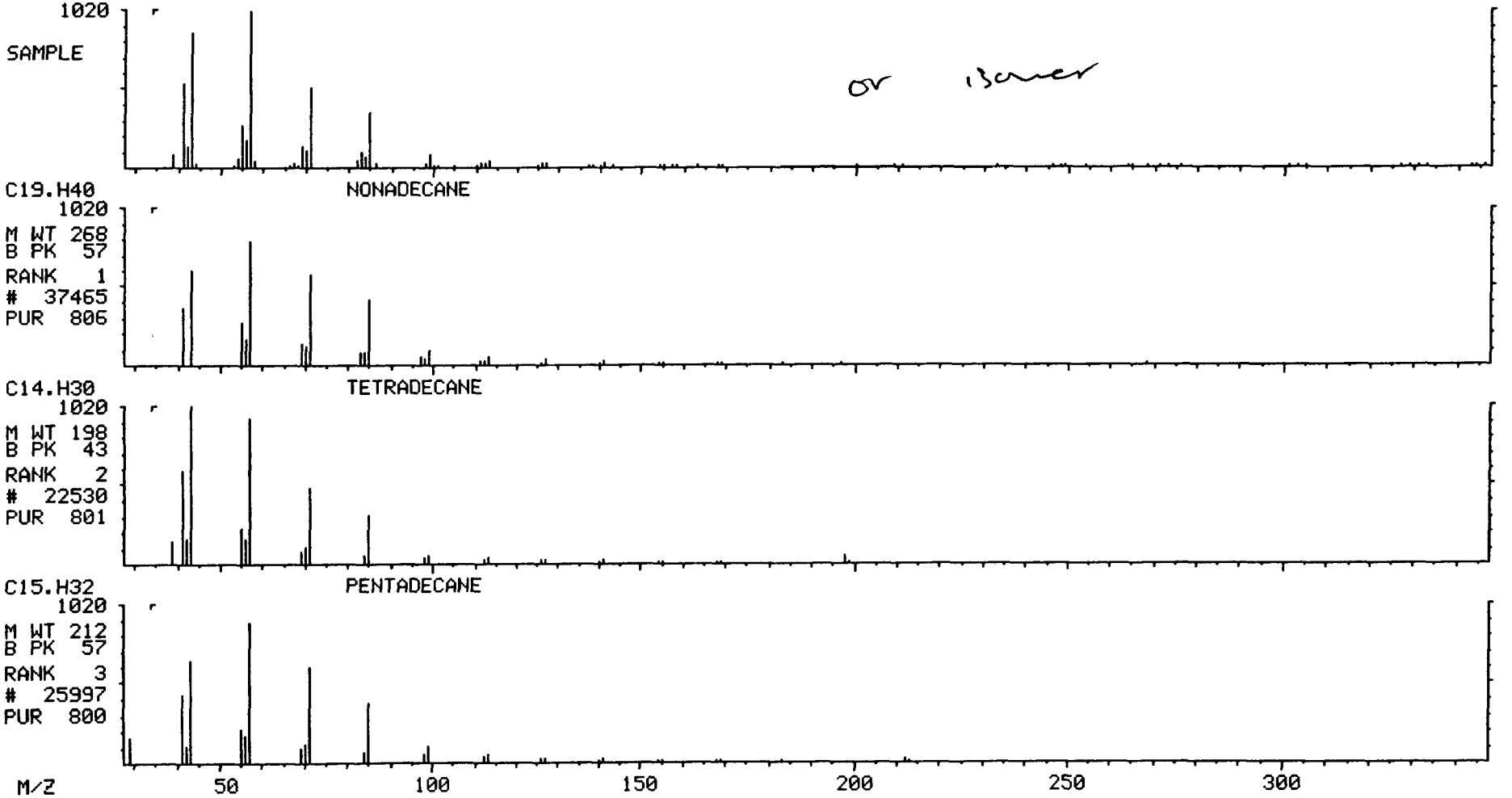
Rank	In.	Name
1	37465	NONADECANE
2	22530	TETRADECANE
3	25997	PENTADECANE
4	19016	UNDECANE, 4,7-DIMETHYL-
5	19006	DECANE, 6-ETHYL-2-METHYL-
6	15969	HYDROXYLAMINE, O-DECYL-
7	15358	UNDECANE, 3-METHYL-
8	37462	HEPTADECANE, 2,6-DIMETHYL-
9	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	806	947	832
2	C14.H30	198	43	801	950	835
3	C15.H32	212	57	800	959	823
4	C13.H28	184	43	788	958	789
5	C13.H28	184	57	785	966	785
6	C10.H23.O.N	173	43	780	949	798
7	C12.H26	170	57	780	945	783
8	C19.H40	268	57	780	917	826
9	C21.H44	296	57	778	937	812

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	629-92-5
2	---	---	---	---	629-59-4
3	---	---	---	---	629-62-9
4	---	---	---	---	17301-32-5
5	---	---	---	---	62108-21-8
6	---	---	---	---	29812-79-1
7	---	---	---	---	1002-43-3
8	---	---	---	---	54105-67-8
9	---	---	---	---	18344-37-1

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:30:00 + 12:24
SAMPLE: T-MM5-3 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068106 #1115 BASE M/Z: 57
CALI: 30068106 # 3 RIC: 131328.



10 of 21

Library Search Data: 30068106 #1120 Base m/z: 57
08/31/98 21:30:00 + 12:27 Cali: 30068106 # 3 RIC: 135680.
Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
840 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37465	NONADECANE
2	37462	HEPTADECANE, 2,6-DIMETHYL-
3	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
4	46161	TRICOSANE
5	25991	DODECANE, 2,6,10-TRIMETHYL-
6	42192	HEPTADECANE, 2,6,10,15-TETRAMETHYL-
7	26001	DODECANE, 2,7,10-TRIMETHYL-
8	29264	TRIDECANE, 5-PROPYL-
9	39859	OCTADECANE, 2,6-DIMETHYL-

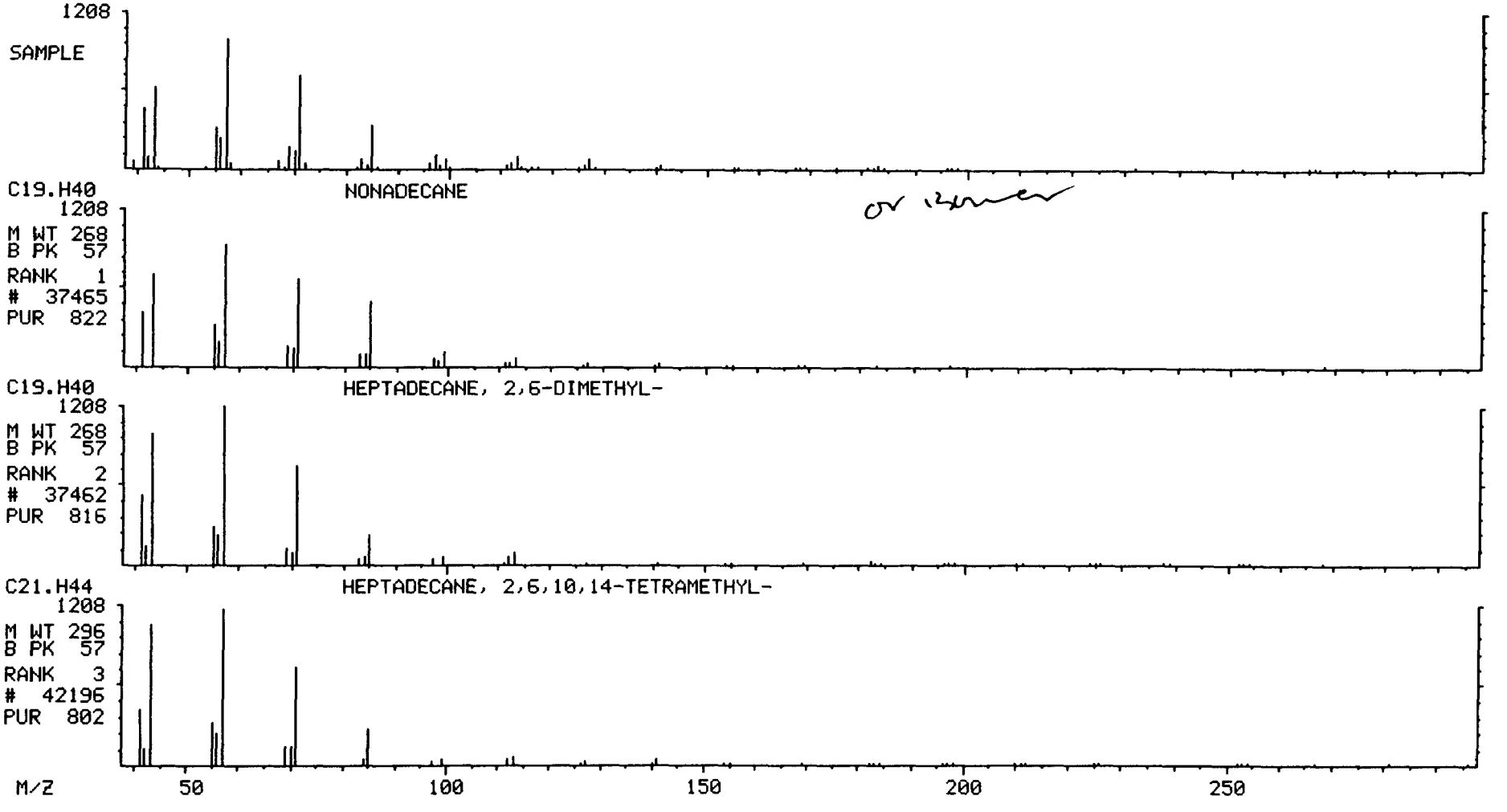
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	822	952	841
2	C19.H40	268	57	816	937	829
3	C21.H44	296	57	802	934	818
4	C23.H48	324	43	792	905	847
5	C15.H32	212	57	788	961	791
6	C21.H44	296	57	782	945	810
7	C15.H32	212	57	782	964	782
8	C16.H34	226	57	782	931	784
9	C20.H42	282	57	781	920	795

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	___	___	___	___	629-92-5
2	___	___	___	___	54105-67-8
3	___	___	___	___	18344-37-1
4	___	___	___	___	638-67-5
5	___	___	___	___	3891-98-3
6	___	___	___	___	54833-48-6
7	___	___	___	___	74645-98-0
8	___	___	___	___	55045-11-9
9	___	___	___	___	75163-97-2

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:30:00 + 12:27
SAMPLE: T-MM5-3 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068106 #1120
CALI: 30068106 # 3

BASE M/Z: 57
RIC: 135680.



or isomer

Library Search Data: 30068106 #1192 Base m/z: 57
08/31/98 21:30:00 + 13:16 Cali: 30068106 # 3 RIC: 107648.
Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
294 matched at least 8 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37465	NONADECANE
2	37462	HEPTADECANE, 2,6-DIMETHYL-
3	15969	HYDROXYLAMINE, O-DECYL-
4	19016	UNDECANE, 4,7-DIMETHYL-
5	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
6	25997	PENTADECANE
7	19523	1-DECANOL, 2-ETHYL-
8	15353	2,6-DIMETHYLDECANE
9	22535	DODECANE, 4,6-DIMETHYL-

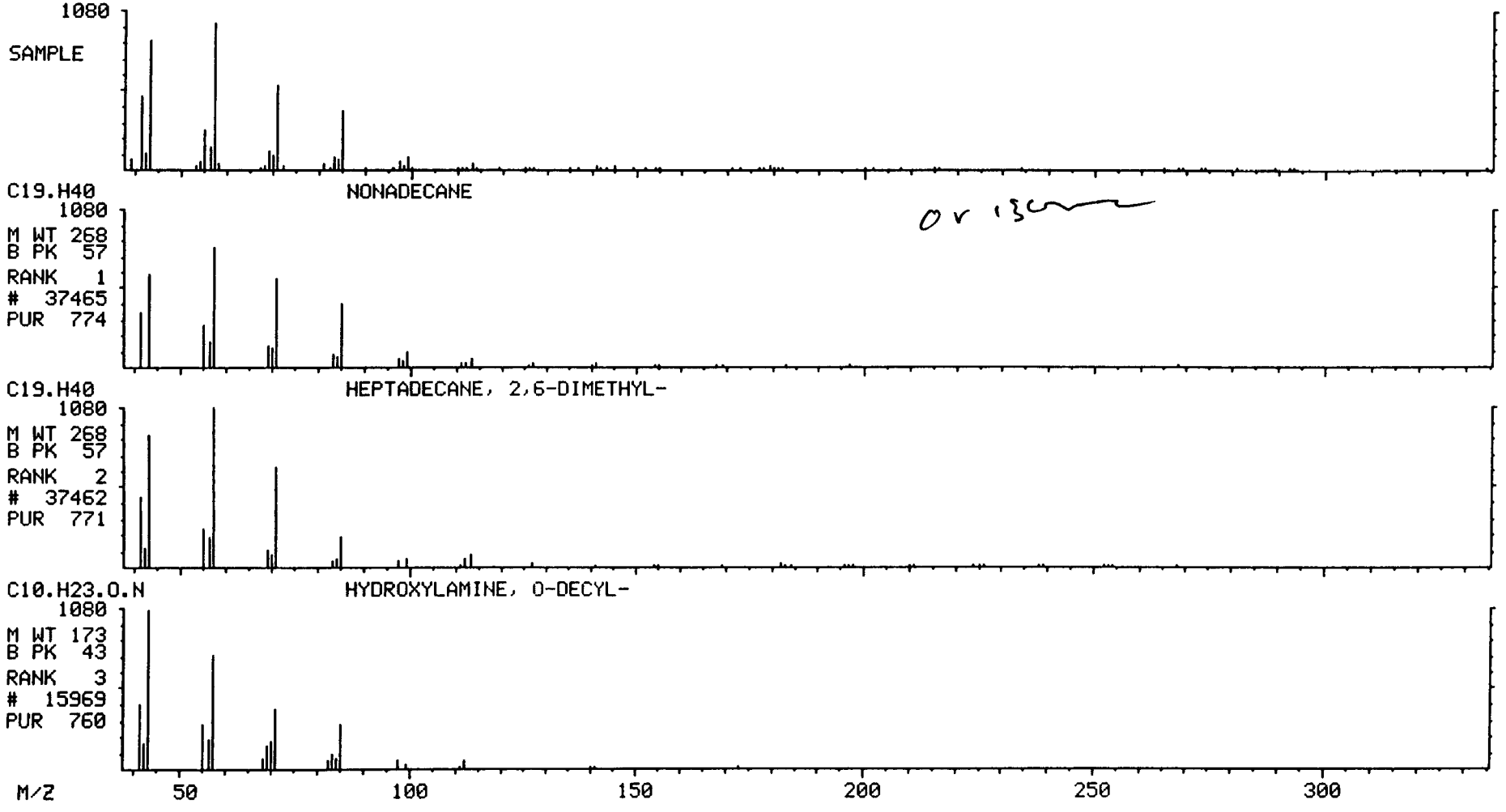
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	774	950	802
2	C19.H40	268	57	771	940	796
3	C10.H23.O.N	173	43	760	957	768
4	C13.H28	184	43	746	955	747
5	C21.H44	296	57	744	938	778
6	C15.H32	212	57	732	936	771
7	C12.H26.O	186	57	732	929	739
8	C12.H26	170	43	732	921	743
9	C14.H30	198	57	729	947	736

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	629-92-5
2	---	---	---	---	54105-67-8
3	---	---	---	---	29812-79-1
4	---	---	---	---	17301-32-5
5	---	---	---	---	18344-37-1
6	---	---	---	---	629-62-9
7	---	---	---	---	21078-65-9
8	---	---	---	---	13150-81-7
9	---	---	---	---	61141-72-8

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:30:00 + 13:16
SAMPLE: T-MM5-3 1/35A/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068106 #1192
CALI: 30068106 # 3

BASE M/Z: 57
RIC: 107648.



10(?)

Library Search Data: 30068106 #1336 Base m/z: 57
08/31/98 21:30:00 + 14:52 Cali: 30068106 # 3 RIC: 73216.
Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
429 matched at least 7 of the 16 largest peaks in the unknown

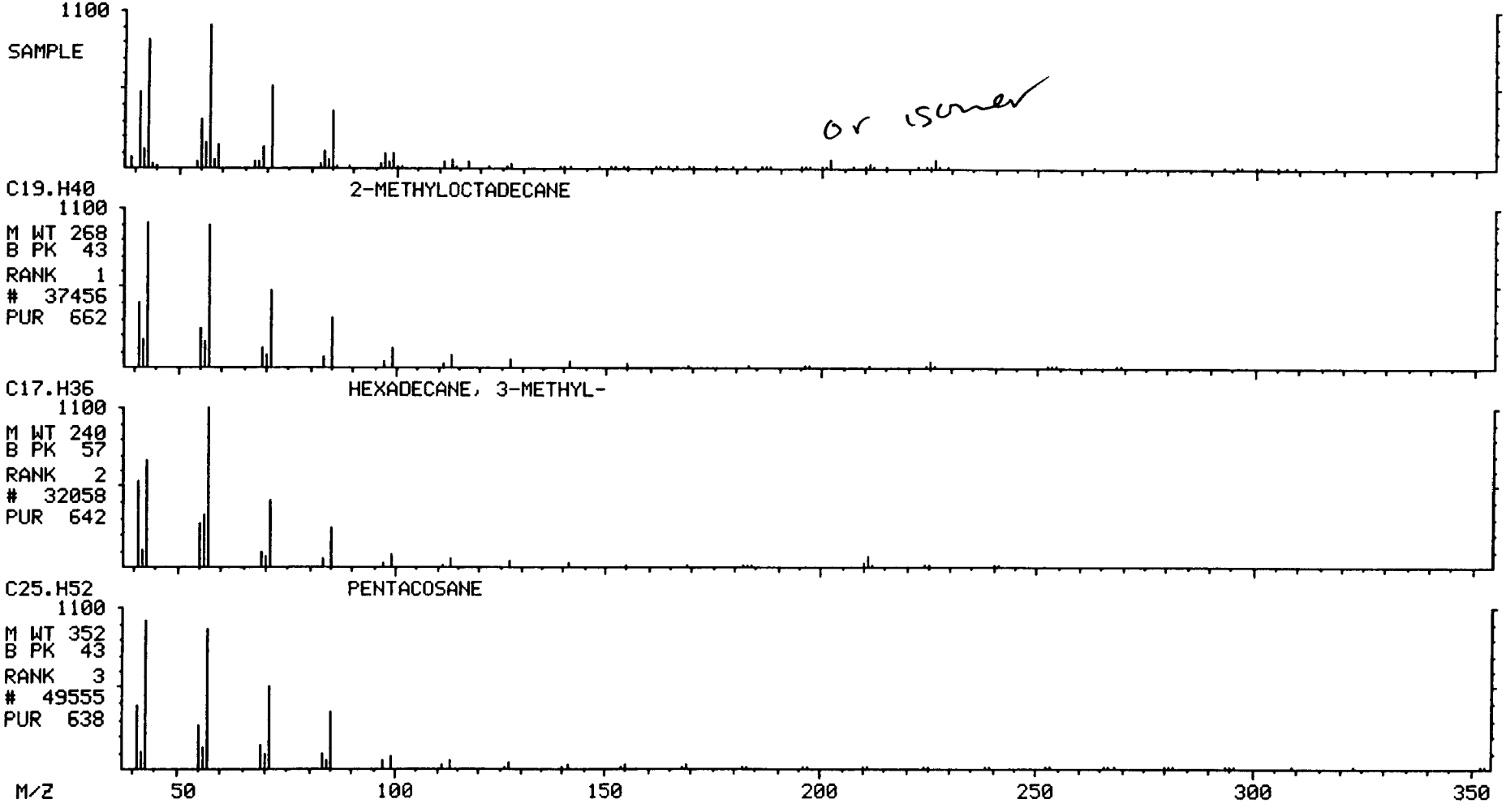
Rank	In.	Name
1	37456	2-METHYLOCTADECANE
2	32058	HEXADECANE, 3-METHYL-
3	49555	PENTACOSANE
4	37462	HEPTADECANE, 2,6-DIMETHYL-
5	46161	TRICOSANE
6	29263	HEXADECANE
7	42197	HENEICOSANE
8	37465	NONADECANE
9	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	43	662	908	690
2	C17.H36	240	57	642	922	661
3	C25.H52	352	43	638	877	716
4	C19.H40	268	57	637	850	682
5	C23.H48	324	43	632	888	703
6	C16.H34	226	57	629	904	672
7	C21.H44	296	57	629	894	668
8	C19.H40	268	57	627	917	675
9	C21.H44	296	57	626	861	671

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	- -
2	---	---	---	---	6418-43-5
3	---	---	---	---	629-99-2
4	---	---	---	---	54105-67-8
5	---	---	---	---	638-67-5
6	---	---	---	---	544-76-3
7	---	---	---	---	629-94-7
8	---	---	---	---	629-92-5
9	---	---	---	---	18344-37-1

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:30:00 + 14:52
SAMPLE: T-MM5-3 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068106 #1336 BASE M/Z: 57
CALI: 30068106 # 3 RIC: 73216.



Library Search Data: 30068106 #1531 Base m/z: 57
08/31/98 21:30:00 + 17:02 Cali: 30068106 # 3 RIC: 37056.
Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
238 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37465	NONADECANE
2	37462	HEPTADECANE, 2,6-DIMETHYL-
3	15969	HYDROXYLAMINE, O-DECYL-
4	22536	TRIDECANE, 3-METHYL-
5	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
6	19035	DODECANE, 2-METHYL-
7	19007	DODECANE, 3-METHYL-
8	46161	TRICOSANE
9	32058	HEXADECANE, 3-METHYL-

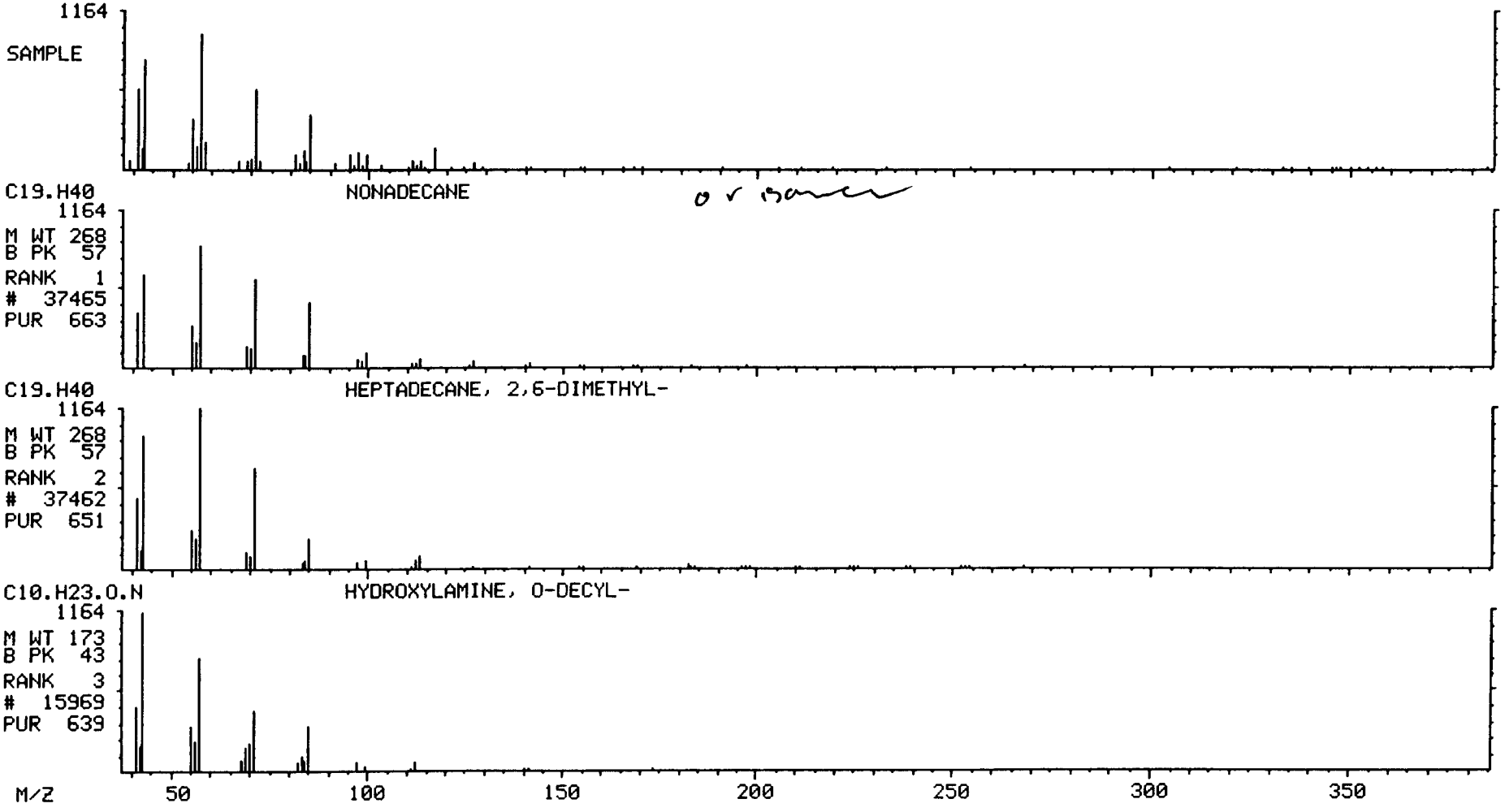
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	663	935	694
2	C19.H40	268	57	651	911	681
3	C10.H23.O.N	173	43	639	934	654
4	C14.H30	198	57	634	910	658
5	C21.H44	296	57	625	922	651
6	C13.H28	184	43	622	941	624
7	C13.H28	184	57	621	907	629
8	C23.H48	324	43	618	874	696
9	C17.H36	240	57	617	894	651

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	629-92-5
2	---	---	---	---	54105-67-8
3	---	---	---	---	29812-79-1
4	---	---	---	---	6418-41-3
5	---	---	---	---	18344-37-1
6	---	---	---	---	1560-97-0
7	---	---	---	---	17312-57-1
8	---	---	---	---	638-67-5
9	---	---	---	---	6418-43-5

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:30:00 + 17:02
SAMPLE: T-MM5-3 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068106 #1531
CALI: 30068106 # 3

BASE M/Z: 57
RIC: 37056.



T003

Library Search Data: 30068106 #1587 Base m/z: 43
08/31/98 21:30:00 + 17:39 Cali: 30068106 # 3 RIC: 106112.
Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
950 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	39515	9-EICOSENE, (E)-
2	34410	3-OCTADECENE, (E)-
3	39516	5-EICOSENE, (E)-
4	34418	9-OCTADECENE, (E)-
5	34411	5-OCTADECENE, (E)-
6	31653	1-HEPTADECENE
7	39517	3-EICOSENE, (E)-
8	26416	4-TETRADECANOL
9	32420	1-HEXADECANOL

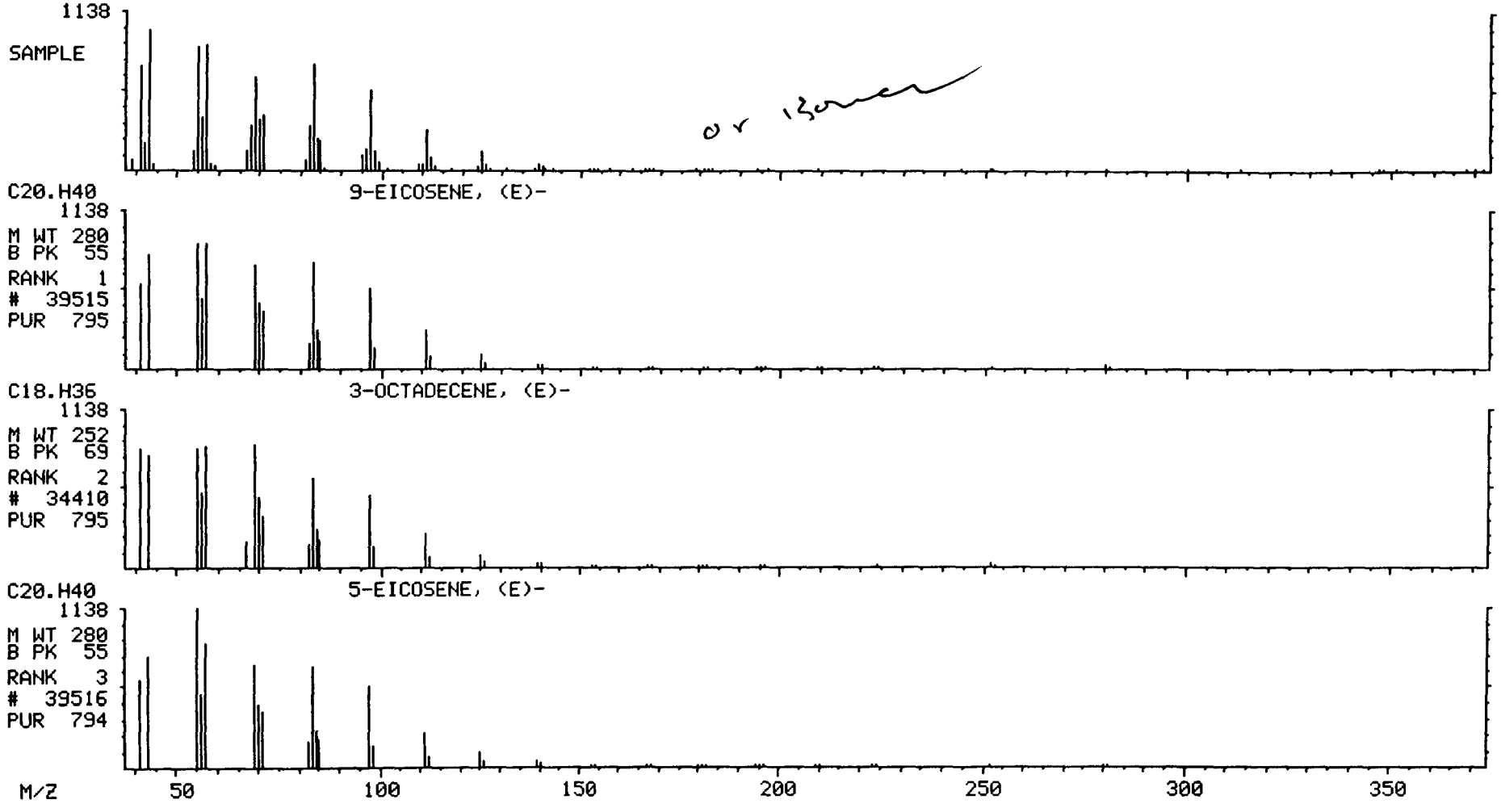
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C20.H40	280	55	795	984	799
2	C18.H36	252	69	795	975	800
3	C20.H40	280	55	794	983	799
4	C18.H36	252	55	794	974	797
5	C18.H36	252	55	792	971	796
6	C17.H34	238	55	781	973	794
7	C20.H40	280	57	781	984	786
8	C14.H30.O	214	43	781	986	788
9	C16.H34.O	242	55	777	975	788

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	74685-29-3
2	---	---	---	---	7206-19-1
3	---	---	---	---	74685-30-6
4	---	---	---	---	7206-25-9
5	---	---	---	---	7206-21-5
6	---	---	---	---	6765-39-5
7	---	---	---	---	74685-33-9
8	---	---	---	---	1653-33-4
9	---	---	---	---	36653-82-4

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:30:00 + 17:39
SAMPLE: T-MM5-3 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068106 #1587
CALI: 30068106 # 3

BASE M/Z: 43
RIC: 106112.



Library Search Data: 30068106 #1809 Base m/z: 57
08/31/98 21:30:00 + 20:07 Cali: 30068106 # 3 RIC: 18560.
Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
334 matched at least 6 of the 16 largest peaks in the unknown

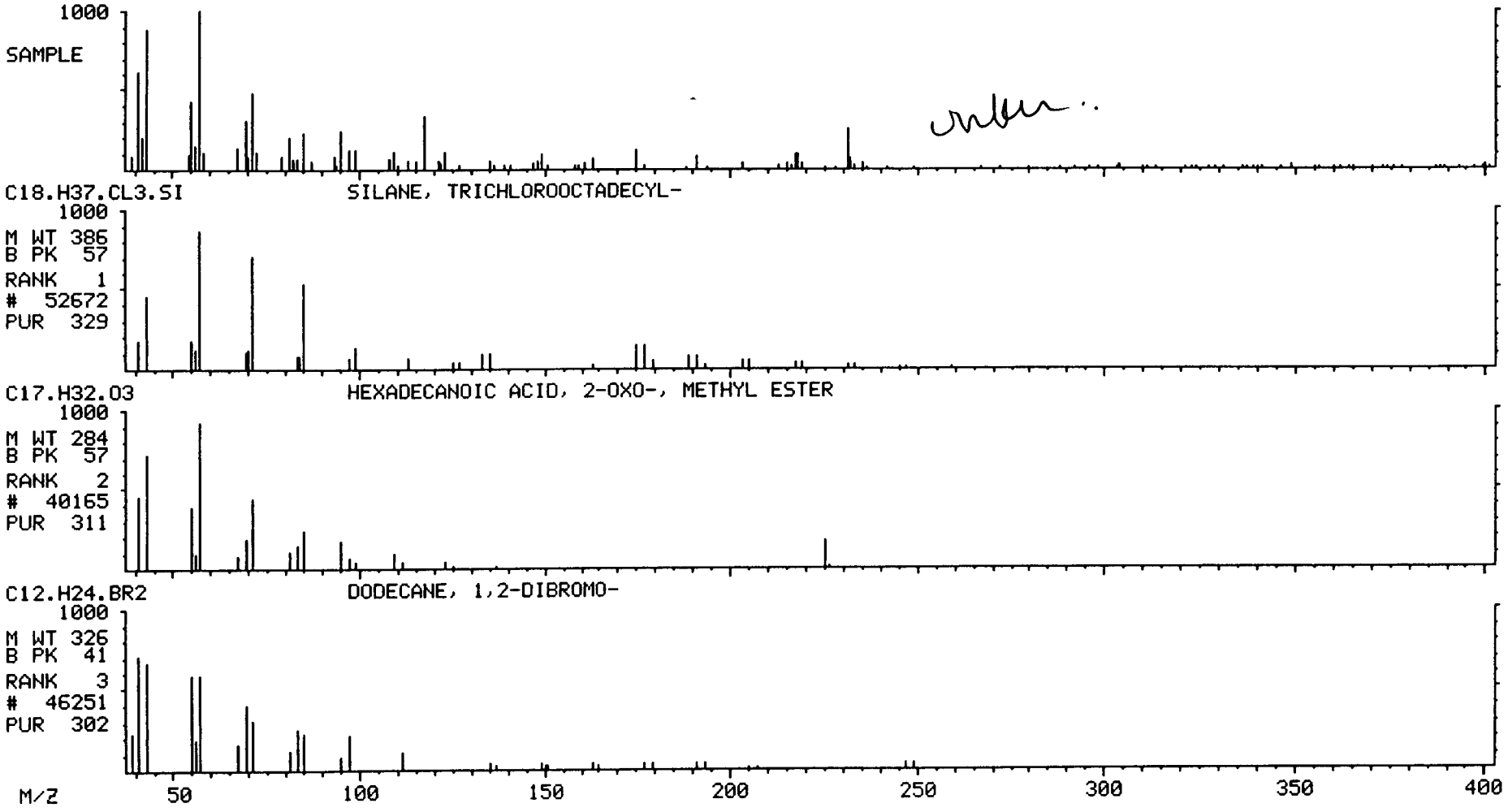
Rank	In.	Name
1	52672	SILANE, TRICHLOROOCTADECYL-
2	40165	HEXADECANOIC ACID, 2-OXO-, METHYL ESTER
3	46251	DODECANE, 1,2-DIBROMO-
4	31486	ACETAMIDE, N-METHYL-N-[4-[4-METHOXY-1-HEXAHYDROPYRIDYL]-2-BUTYNYL]-
5	5049	OXIRANE, (3,3-DIMETHYLBUTYL)-
6	27504	1-BROMO-3,7-DIMETHYLOCTANE
7	41993	1-IODO-2-METHYLUNDECANE
8	20601	2-BROMO-6-METHYLHEPTANE
9	40866	OCTADECANE, 1-CHLORO-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C18.H37.CL3.SI	386	57	329	706	393
2	C17.H32.O3	284	57	311	873	324
3	C12.H24.BR2	326	41	302	796	353
4	C13.H22.O2.N2	238	43	292	793	349
5	C8.H16.O	128	57	284	954	288
6	C10.H21.BR	220	57	283	856	299
7	C12.H25.I	296	57	281	872	306
8	C8.H17.BR	192	57	276	921	278
9	C18.H37.CL	288	57	275	649	340

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	112-04-9
2	---	---	---	---	55836-30-1
3	---	---	---	---	55334-42-4
4	---	---	---	---	- -
5	---	---	---	---	53907-77-0
6	---	---	---	---	3383-83-3
7	---	---	---	---	73105-67-6
8	---	---	---	---	4730-24-9
9	---	---	---	---	3386-33-2

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:30:00 + 20:07
SAMPLE: T-MM5-3 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068106 #1809 BASE M/Z: 57
CALI: 30068106 # 3 RIC: 18560.



TIC SELECTION REPORT

DATA FILE: 30068106

THE FOLLOWING PEAKS WERE REJECTED BECAUSE AT LEAST 40 % OF THEIR SIZE WAS ACCOUNTED FOR BY TARGET COMPOUNDS ELUTING WITHIN 4 SCANS OF THE PEAK TOP.

SCAN	SIZE	AMOUNT
198	280160.	30.806
341	222336.	24.448
422	289280.	31.809
531	426880.	46.939
830	363776.	40.000
1088	480256.	52.808
1386	389632.	50.148
1386	383744.	49.390
1553	310784.	40.000

TOTAL NUMBER OF UNIDENTIFIED PEAKS WITH SIZE GREATER THAN 10 % OF THE CLOSEST INTERNAL STANDARD THAT DOES NOT HAVE INTERFERENCES = 123

INTERNAL STANDARDS THAT HAVE RIC SIZE LESS THAN 50 % OR GREATER THAN 200 % OF THE ESTIMATED RIC SIZE ARE CONSIDERED TO HAVE INTERFERENCES AND WILL NOT BE USED FOR QUANTITATION.

#	INTERNAL STANDARD	RIC SIZE	PERCENT OF ESTIMATED RIC SIZE	SCAN
1	C140 NAPHTHALENE-D8	426880.	222 *	531
2	C150 ACENAPHTHENE-D10	363776.	163	830
3	C160 PHENANTHRENE-D10	480256.	207 *	1088
4	C170 CHRYSENE-D12	310784.	124	1553
5	C175 PERYLENE-D12	270816.	105	1784

* INDICATES INTERFERENCE

SIZE = AREA

QUANTERRA GC/MS
Target Compound Data Summary Sheet

Data File: 300681RI06
Std Id: ST16980902

Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Client: PACIFI Date Analyzed: 09/02/98 20:29
Analyst: DAT Instrument ID: F16 Run Factor: 3.00
Quan List Threshold: 0.95 Surrogate Vol.: 1.00

Surrogate Spike Recoveries
8270-G, LIMS 10/10/96

Surrogate	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured		QC limits
CS20 NITROBENZENE-D5	50.00	39.60	79.2		45 107
CS25 2-FLUOROBIPHENY	50.00	54.20	108.		62 110
CS30 TERPHENYL-D14	50.00	41.40	82.8		58 135
CS45 PHENOL-D5	100.0	63.90	63.9		43 130
CS50 2-FLUOROPHENOL	100.0	57.20	57.2		36 111
CS55 2,4,6-TRIBROMOP	100.0	49.30	49.3	*	58 131

confirms

Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
CS70 2-CHLOROPHENOL-D4		ND	UG/A	30.0
CS75 1,2-DICHLOROBNZN-D4	342	130.	UG/A	30.0
HEXACHLOROBENZENE-C13		ND	UG/A	30.0
C310 N-NITROSODIMETHYLAMINE		ND	UG/A	30.0
PYRIDINE		ND	UG/A	60.0
2-PICOLINE		ND	UG/A	30.0
N-NITROSOMETHYLETHYLAMINE		ND	UG/A	30.0
METHYLMETHANESULFONATE		ND	UG/A	30.0
N-NITROSODIETHYLAMINE		ND	UG/A	30.0
ETHYLMETHANE SULFONATE		ND	UG/A	30.0
PENTACHLOROETHANE		ND	UG/A	30.0
C320 ANILINE		ND	UG/A	30.0
C315 PHENOL	313	49.	UG/A	30.0
C325 BIS(2-CHLOROETHYL)ETHER		ND	UG/A	30.0
C330 2-CHLOROPHENOL		ND	UG/A	30.0
C335 1,3-DICHLOROBENZENE		ND	UG/A	30.0
C340 1,4-DICHLOROBENZENE		ND	UG/A	30.0
C345 BENZYL ALCOHOL		ND	UG/A	30.0
C350 1,2-DICHLOROBENZENE		ND	UG/A	30.0
C355 2-METHYLPHENOL		ND	UG/A	30.0
C360 2,2'-OXYBIS(1-CLPROPAN)		ND	UG/A	30.0
C361 ACETOPHENONE	401	30.	UG/A	30.0
N-NITROSOPYRROLIDINE		ND	UG/A	30.0
N-NITROSOMORPHOLINE		ND	UG/A	30.0
3-METHYL PHENOL		ND	UG/A	30.0
C365 4-METHYLPHENOL		ND	UG/A	30.0
C370 N-NITROSO-DI-N-PROPYLAM	423	31.	UG/A	30.0
O-TOLUIDINE		ND	UG/A	30.0
C375 HEXACHLOROETHANE		ND	UG/A	30.0

1088

Reviewed by: _____

QUANTERRA GC/MS
Target Compound Data Summary Sheet

Data File: 300681RI06
Std Id: ST16980902

Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Client: PACIFI Date Analyzed: 09/02/98 20:29
Analyst: DAT Instrument ID: F16 Run Factor: 3.00
Quan List Threshold: 0.95 Surrogate Vol.: 1.00

Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
C410 NITROBENZENE		ND	UG/A	30.0
N-NITROSOPIPERIDINE		ND	UG/A	30.0
C415 ISOPHORONE		ND	UG/A	30.0
C420 2-NITROPHENOL		ND	UG/A	30.0
C425 2,4-DIMETHYLPHENOL		ND	UG/A	30.0
C435 BIS(2-CHLOROETHOXY)METH		ND	UG/A	30.0
C440 2,4-DICHLOROPHENOL		ND	UG/A	30.0
C430 BENZOIC ACID		ND	UG/A	150.0
AA-DIMETHYLPHENETHYLAMINE		ND	UG/A	30.0
C445 1,2,4-TRICHLOROBENZENE		ND	UG/A	30.0
C450 NAPHTHALENE	535	42.	UG/A	30.0
C455 4-CHLOROANALINE		ND	UG/A	30.0
2,6-DICHLOROPHENOL		ND	UG/A	30.0
HEXACHLOROPROPENE		ND	UG/A	30.0
C460 HEXACHLOROBUTADIENE		ND	UG/A	30.0
P-PHENYLENE DIAMINE		ND	UG/A	30.0
N-NITROSODI-N-BUTYLAMINE		ND	UG/A	30.0
C465 4-CHLORO-3-METHYLPHENO		ND	UG/A	30.0
SAFROLE		ND	UG/A	30.0
C470 2-METHYLNAPHTHALENE	654	77.	UG/A	30.0
1,2,4,5-TETRACHLOROBENZENE		ND	UG/A	30.0
ISOSAFROLE (#1)		ND	UG/A	60.0
C510 HEXACHLOROCYCLOPENTADI		ND	UG/A	30.0
C515 2,4,6-TRICHLOROPHENOL		ND	UG/A	30.0
C520 2,4,5-TRICHLOROPHENOL		ND	UG/A	30.0
ISOSAFROLE (#2)		ND	UG/A	60.0
C525 2-CHLORONAPHTHALENE		ND	UG/A	30.0
1-CHLORONAPHTHALENE		ND	UG/A	15.0
C530 2-NITROANALINE		ND	UG/A	150.0
1,4-NAPHTHOQUINONE		ND	UG/A	30.0
C535 DIMETHYLPHTHALATE		ND	UG/A	30.0
1,3-DINITROBENZENE		ND	UG/A	30.0
C540 ACENAPHTHYLENE		ND	UG/A	30.0
C543 2,6-DINITROTOLUENE		ND	UG/A	30.0
C545 3-NITROANILINE		ND	UG/A	150.0
C550 ACENAPHTHENE		ND	UG/A	30.0
C555 2,4-DINITROPHENOL		ND	UG/A	150.0
C565 DIBENZOFURAN		ND	UG/A	30.0
C560 4-NITROPHENOL		ND	UG/A	150.0
PENTACHLOROBENZENE		ND	UG/A	30.0
C570 2,4-DINITROTOLUENE		ND	UG/A	30.0
1-NAPHTHYLAMINE		ND	UG/A	30.0
2-NAPHTHYLAMINE		ND	UG/A	30.0
2,3,4,6-TETRACHLOROPHENOL		ND	UG/A	60.0

QUANTERRA GC/MS
Target Compound Data Summary Sheet

Data File: 300681RI06
Std Id: ST16980902

Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Client: PACIFI Date Analyzed: 09/02/98 20:29
Analyst: DAT Instrument ID: F16 Run Factor: 3.00
Quan List Threshold: 0.95 Surrogate Vol.: 1.00

Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
C580 DIETHYLPHTHALATE		ND	UG/A	30.0
C590 FLUORENE		ND	UG/A	30.0
C585 4-CHLOROPHENYL-PHENYLE		ND	UG/A	30.0
5-NITRO-O-TOLUIDINE		ND	UG/A	30.0
C595 4-NITROANALINE		ND	UG/A	150.0
C610 4,6-DINITRO-2-METHYLPH		ND	UG/A	150.0
C615 N-NITROSODIPHENYLAMINE		ND	UG/A	30.0
C620 AZOBENZENE		ND	UG/A	30.0
SYM-TRINITROBENZENE		ND	UG/A	30.0
C625 4-BROMOPHENYL-PHENYLET		ND	UG/A	30.0
PHENACETIN		ND	UG/A	30.0
DIALLATE	234	ND	UG/A	30.0
C630 HEXACHLOROBENZENE		ND	UG/A	30.0
4-AMINOBIPHENYL		ND	UG/A	30.0
C635 PENTACHLOROPHENOL		ND	UG/A	150.0
PRONAMIDE		ND	UG/A	30.0
PENTACHLORONITROBENZENE		ND	UG/A	150.0
C640 PHENANTHRENE		ND	UG/A	30.0
C645 ANTHRACENE		ND	UG/A	30.0
2SECBUTYL-4,6-DINITROPHENOL		ND	UG/A	30.0
C647 CARBAZOLE		ND	UG/A	30.0
C650 DI-N-BUTYLPHTHALATE		ND	UG/A	30.0
4-NITROQUINOLINE-1-OXIDE		ND	UG/A	30.0
METHAPYRILENE		ND	UG/A	30.0
ISODRIN		ND	UG/A	30.0
C655 FLUORANTHENE		ND	UG/A	30.0
CHLOROBENZILATE		ND	UG/A	30.0
C710 BENZIDINE		ND	UG/A	300.0
C715 PYRENE		ND	UG/A	30.0
ARAMITE (#1)		ND	UG/A	30.0
ARAMITE (#2)		ND	UG/A	30.0
P-DIMETHYLAMINOAZOBENZENE		ND	UG/A	30.0
3,3'-DIMETHYLBENZIDINE		ND	UG/A	30.0
KEPONE		ND	UG/A	150.0
C720 BUTYLBENZYLPHTHALATE		ND	UG/A	30.0
2-ACETYLAMINOFLUORENE		ND	UG/A	30.0
C730 BENZO(A)ANTHRACENE		ND	UG/A	30.0
C725 3,3'-DICHLOROBENZIDINE		ND	UG/A	60.0
C740 CHRYSENE		ND	UG/A	30.0
C745 BIS(2-ETHYLHEXYL)PHTHA		ND	UG/A	30.0
3-METHYLCHOLANTHRENE		ND	UG/A	30.0
C760 DI-N-OCTYL PHTHALATE		ND	UG/A	30.0
C765 BENZO(B)FLUORANTHENE		ND	UG/A	30.0
7,12-DIMETHYLBENZANTHRACENE		ND	UG/A	30.0

QUANTERRA GC/MS
Target Compound Data Summary Sheet

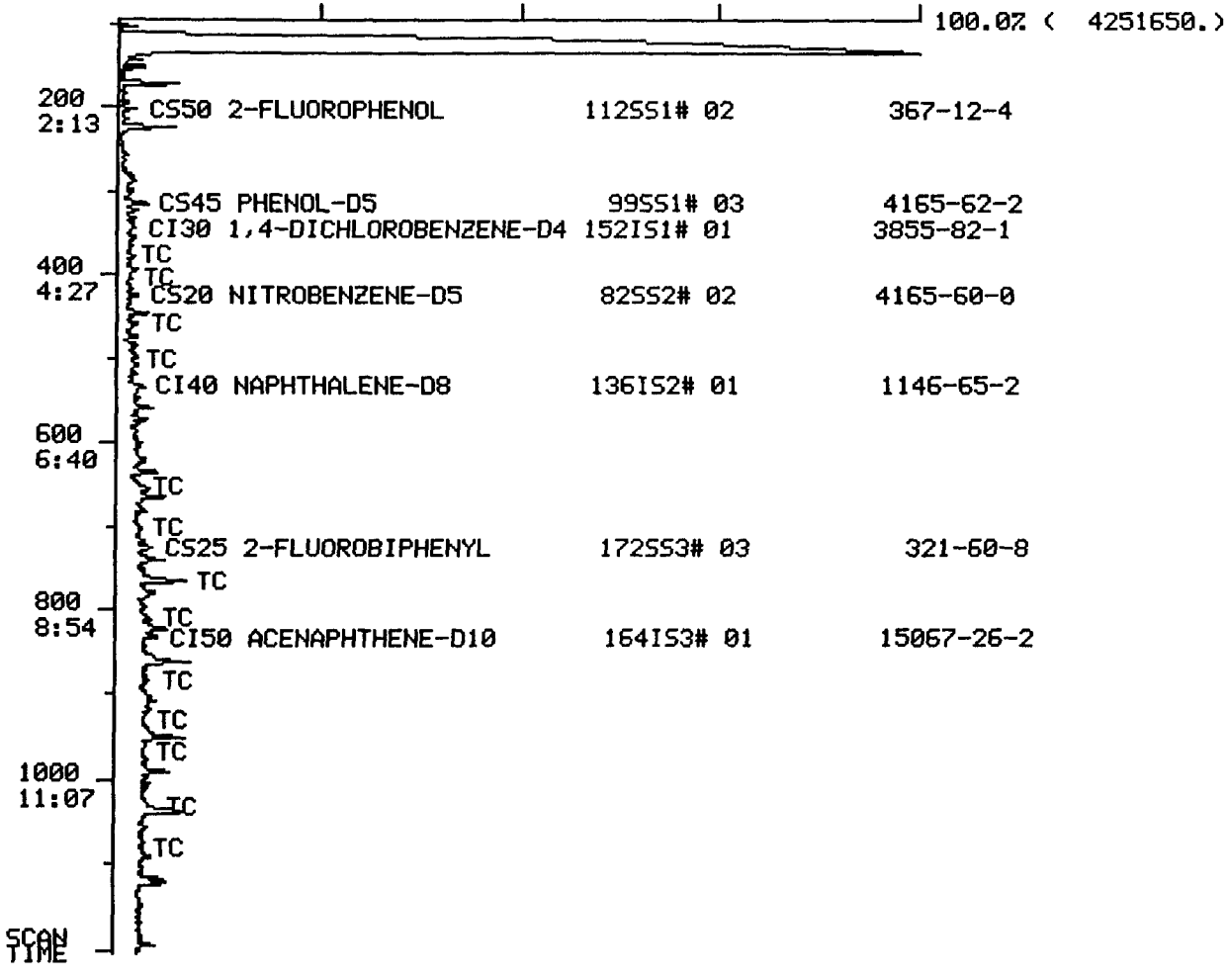
Data File: 300681RI06
Std Id: ST16980902

Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Client: PACIFI Date Analyzed: 09/02/98 20:29
Analyst: DAT Instrument ID: F16 Run Factor: 3.00
Quan List Threshold: 0.95 Surrogate Vol.: 1.00

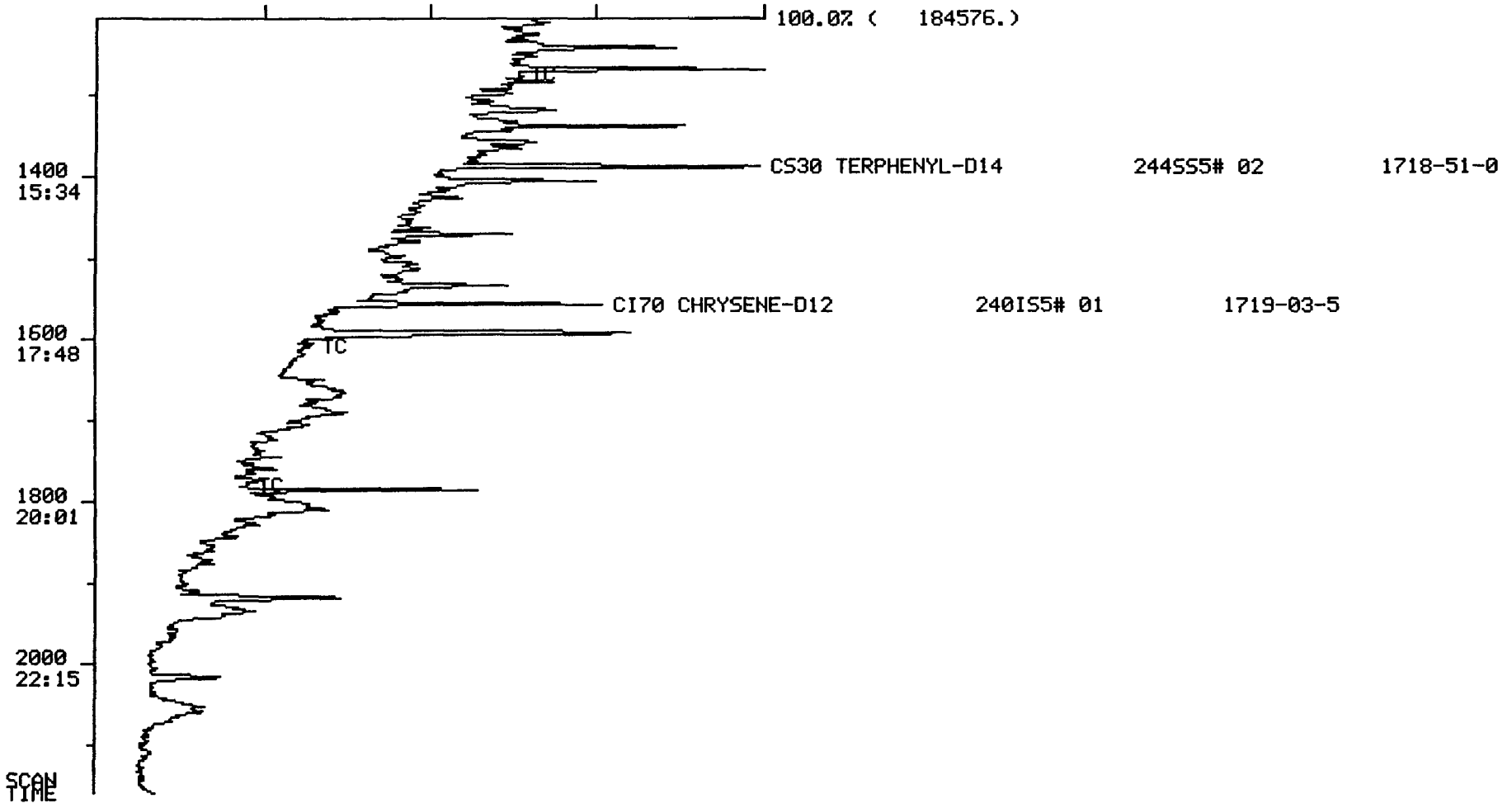
Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
C770 BENZO(K)FLUORANTHENE		ND	UG/A	30.0
HEXACHLOROPHENE	1777	40.	UG/A	30.0
C775 BENZO(A)PYRENE		ND	UG/A	30.0
C780 INDENO(1,2,3-CD)PYRENE		ND	UG/A	30.0
C785 DIBENZ(A,H)ANTHRACENE		ND	UG/A	30.0
C790 BENZO(G,H,I)PERYLENE		ND	UG/A	30.0

DATA FROM FILE: 300681RI06 SCANS 94 TO 1204 ACQUIRED: 09/02/98 20:29:00
CALI: 300681RI06 #3
SAMPLE: T-MM5-3 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M



DATA FROM FILE: 300681RI06 SCANS 1204 TO 2158 ACQUIRED: 09/02/98 20:29:00
CALI: 300681RI06 #3
SAMPLE: T-MM5-3 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M



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STANDARD USED FOR THIS REPORT IS ST16980902 REPORT PRINTED: 9/02/98 23:00:30

ADDITIONAL STANDARD USED FOR THIS REPORT IS: ST16980902A

QUANTERRA QUANTITATION SUMMARY File: 300681RI06

Sample: T-MM5-3 1/3SA/1ML INST. ID: F16
Analyst: DAT Instrument Id: F16 Analyzed: 09/02/98 20:29

Compounds with amounts less than 0.20 reported as NOT FOUND

No	Library Entry	Name	Mass	Meth	Scan	Ref	Area	RRF(L)	Units: UG/ML Amount
1	S1# 1	CI30 1,4-DICHLOROBENZENE	152	A BV	342	1	27901.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	A BB	531	2	94024.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	A BB	831	3	49022.	1.000	40.000
4	S4# 1	CI60 PHENANTHRENE-D10	188	A BB	1089	4	82021.	1.000	40.000
5	S5# 1	CI70 CHRYSENE-D12	240	A BB	1554	5	80400.	1.000	40.000
6	S6# 1	CI75 PERYLENE-D12	264	A VB	1785	6	74618.	1.000	40.000
7	S2# 2	CS20 NITROBENZENE-D5	82	A BV	423	2	43753.	0.470	39.640
8	S3# 3	CS25 2-FLUOROBIPHENYL	172	A BB	725	3	82055.	1.234	54.245
9	S5# 2	CS30 TERPHENYL-D14	244	A BB	1386	5	82840.	0.995	41.412
10	S1# 3	CS45 PHENOL-D5	99	A BB	312	1	90260.	2.025	63.885
11	S1# 2	CS50 2-FLUOROPHENOL	112	A BV	200	1	54614.	1.368	57.224
12	S3# 2	CS55 2,4,6-TRIBROMOPHENO	330	A BB	973	3	14231.	0.236	49.275
13	S1# 5	CS70 2-CHLOROPHENOL-D4	132		1	NOT FOUND			
14	S1# 6	CS75 1,2-DICHLOROBNZN-D4	152	A BV	342	1	27901.	0.920	43.476
15	S4# 4	HEXACHLOROBENZENE-C13	294		4	NOT FOUND			
16	S1# 15	C310 N-NITROSODIMETHYLAM	74		1	NOT FOUND			
17	S1# 20	PYRIDINE	79		1	NOT FOUND			
18	S1# 30	2-PICOLINE	93		1	NOT FOUND			
19	S1# 40	N-NITROSOMETHYLETHYLAMIN	42		1	NOT FOUND			
20	S1# 60	METHYLMETHANESULFONATE	80		1	NOT FOUND			
21	S1# 70	N-NITROSODIETHYLAMINE	102		1	NOT FOUND			
22	S1# 85	ETHYLMETHANE SULFONATE	79		1	NOT FOUND			
23	S1# 95	PENTACHLOROETHANE	117		1	NOT FOUND			
24	S1#100	C320 ANILINE	93		1	NOT FOUND			
25	S1#105	C315 PHENOL	94	A BB	313	1	22451.	1.968	16.356
26	S1#110	C325 BIS(2-CHLOROETHYL)E	93	A BB	320	1	3280.	1.368	3.438
27	S1#115	C330 2-CHLOROPHENOL	128	A VB	320	1	396.	1.497	0.379
28	S1#125	C335 1,3-DICHLOROBENZENE	146		1	NOT FOUND			
29	S1#130	C340 1,4-DICHLOROBENZENE	146	A BB	344	1	388.	1.617	0.344
30	S1#145	C345 BENZYL ALCOHOL	108	A VB	372	1	5339.	0.854	8.959
31	S1#150	C350 1,2-DICHLOROBENZENE	146		1	NOT FOUND			
32	S1#160	C355 2-METHYLPHENOL	108		1	NOT FOUND			
33	S1#165	C360 2,2'-OXYBIS(1-CLPRO	45		1	NOT FOUND			
34	S1#170	C361 ACETOPHENONE	105	A BB	401	1	13534.	1.934	10.033
35	S1#175	N-NITROSOPYRROLIDINE	100	A BB	404	1	120.	0.553	0.311
36	S1#180	N-NITROSOMORPHOLINE	56	A BV	411	1	4290.	0.821	7.494
37	S1#182	3-METHYL PHENOL	108		1	NOT FOUND			
38	S1#185	C365 4-METHYLPHENOL	108		1	NOT FOUND			
39	S1#190	C370 N-NITROSO-DI-N-PROP	70	A BV	423	1	6576.	0.906	10.407
40	S1#195	O-TOLUIDINE	106		1	NOT FOUND			
41	S1#200	C375 HEXACHLOROETHANE	117		1	NOT FOUND			
42	S2# 10	C410 NITROBENZENE	77		2	NOT FOUND			
43	S2# 15	N-NITROSOPIPERIDINE	42	A BB	457	2	1528.	0.320	2.028
44	S2# 20	C415 ISOPHORONE	82		2	NOT FOUND			
45	S2# 25	C420 2-NITROPHENOL	139		2	NOT FOUND			

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46	S2#	30	C425	2,4-DIMETHYLPHENOL	107	A	BB	501	2	1507.	0.330	1.943
47	S2#	35	C435	BIS(2-CHLOROETHOXY)	93			2	NOT FOUND			
48	S2#	40	C440	2,4-DICHLOROPHENOL	162	A	BB	520	2	560.	0.308	0.775
49	S2#	45	C430	BENZOIC ACID	122			2	NOT FOUND			

50	S2# 50	AA-DIMETHYLPHENETHYLAMIN	58	A	BB	707	2	2424.	1.285	0.803
51	S2# 55	C445 1,2,4-TRICHLOROBENZ	180	A	BV	525	2	185.	0.331	0.238
52	S2# 60	C450 NAPHTHALENE	128	A	BV	535	2	33489.	1.022	13.937
53	S2# 80	C455 4-CHLOROANALINE	127	A	BB	557	2	848.	0.454	0.795
54	S2# 85	2,6-DICHLOROPHENOL	162			2	NOT FOUND			
55	S2# 90	HEXACHLOROPROPENE	213			2	NOT FOUND			
56	S2# 95	C460 HEXACHLOROBUTADIENE	225			2	NOT FOUND			
57	S2#115	P-PHENYLENE DIAMINE	108			2	NOT FOUND			
58	S2#120	N-NITROSODI-N-BUTYLAMINE	84			2	NOT FOUND			
59	S2#130	C465 4-CHLORO-3-METHYLPH	107			2	NOT FOUND			
60	S2#140	SAFROLE	162	A	BB	650	2	1794.	0.248	3.081
61	S2#145	C470 2-METHYLNAPHTHALENE	142	A	BV	654	2	45517.	0.751	25.775
62	S3# 10	1,2,4,5-TETRACHLOROBENZE	214			3	NOT FOUND			
63	S3# 15	ISOSAFROLE (#1)	162	A	BB	699	3	296.	0.044	5.533
64	S3# 20	C510 HEXACHLOROCYCLOPENT	237			3	NOT FOUND			
65	S3# 25	C515 2,4,6-TRICHLOROPHEN	196			3	NOT FOUND			
66	S3# 30	C520 2,4,5-TRICHLOROPHEN	196			3	NOT FOUND			
67	S3# 35	ISOSAFROLE (#2)	104			3	NOT FOUND			
68	S3# 40	C525 2-CHLORONAPHTHALENE	162			3	NOT FOUND			
69	S3# 42	1-CHLORONAPHTHALEN	162			3	NOT FOUND			
70	S3# 45	C530 2-NITROANALINE	65	A	BB	766	3	721.	0.502	1.173
71	S3# 50	1,4-NAPHTHOQUINONE	158			3	NOT FOUND			
72	S3# 55	C535 DIMETHYLPHTHALATE	163	A	BB	806	3	905.	1.341	0.551
73	S3# 60	1,3-DINITROBENZENE	168	A	BB	809	3	261.	0.197	1.078
74	S3# 65	C540 ACENAPHTHYLENE	152			3	NOT FOUND			
75	S3# 70	C543 2,6-DINITROTOLUENE	165			3	NOT FOUND			
76	S3# 75	C545 3-NITROANILINE	138			3	NOT FOUND			
77	S3# 80	C550 ACENAPHTHENE	153	A	VB	836	3	1302.	1.159	0.917
78	S3# 85	C555 2,4-DINITROPHENOL	184	A	VB	860	3	150.	0.189	0.647
79	S3# 90	C565 DIBENZOFURAN	168	A	VB	868	3	1263.	1.669	0.617
80	S3# 95	C560 4-NITROPHENOL	109			3	NOT FOUND			
81	S3#100	PENTACHLOROBENZENE	250			3	NOT FOUND			
82	S3#105	C570 2,4-DINITROTOLUENE	165	A	VB	883	3	549.	0.397	1.127
83	S3#110	1-NAPHTHYLAMINE	143			3	NOT FOUND			
84	S3#115	2-NAPHTHYLAMINE	143			3	NOT FOUND			
85	S3#120	2,3,4,6-TETRACHLOROPHENO	232	A	VB	896	3	298.	0.297	0.818
86	S3#130	C580 DIETHYLPHTHALATE	149	A	VB	934	3	948.	1.369	0.565
87	S3#135	C590 FLUORENE	166	A	BB	928	3	4654.	1.298	2.926
88	S3#140	C585 4-CHLOROPHENYL-PHEN	204			3	NOT FOUND			
89	S3#145	5-NITRO-O-TOLUIDINE	152	A	BB	943	3	3609.	0.356	8.284
90	S3#150	C595 4-NITROANALINE	138			3	NOT FOUND			
91	S4# 10	C610 4,6-DINITRO-2-METHY	198			4	NOT FOUND			
92	S4# 15	C615 N-NITROSODIPHENYLAM	169	A	VB	965	4	4111.	0.551	3.641
93	S4# 20	C620 AZOBENZENE	77	A	VB	968	4	512.	1.171	0.213
94	S4# 25	SYM-TRINITROBENZENE	75	A	BV	1031	4	900.	0.162	2.718
95	S4# 30	C625 4-BROMOPHENYL-PHENY	248			4	NOT FOUND			
96	S4# 35	PHENACETIN	108			4	NOT FOUND			
97	S4# 37	DIALLATE	234			4	NOT FOUND			
98	S4# 40	C630 HEXACHLOROBENZENE	284			4	NOT FOUND			
99	S4# 45	4-AMINOBIPHENYL	169	A	BB	1078	4	2522.	0.609	2.020
100	S4# 50	C635 PENTACHLOROPHENOL	266			4	NOT FOUND			
101	S4# 55	PRONAMIDE	173			4	NOT FOUND			
102	S4# 60	PENTACHLORONITROBENZENE	237	A	VB	1063	4	53.	0.080	0.322
103	S4# 65	C640 PHENANTHRENE	178	A	BB	1093	4	14391.	1.033	6.797
104	S4# 70	C645 ANTHRACENE	178			4	NOT FOUND			
105	S4# 75	2SECBUTYL-4,6-DINITROPHE	211			4	NOT FOUND			
106	S4# 80	C647 CARBAZOLE	167			4	NOT FOUND			
107	S4# 85	C650 DI-N-BUTYLPHTHALATE	149			4	NOT FOUND			
108	S4#100	4-NITROQUINOLINE-1-OXIDE	190	A	BB	1241	4	114.	0.073	0.770
109	S4#105	METHAPYRILENE	58			4	NOT FOUND			
110	S4#106	ISODRIN	193	A	VV	1272	4	572.	0.127	2.201

111	S4#110	C655 FLUORANTHENE	202	A	BB	1301	4		410.	0.900	0.222
112	S4#120	CHLOROBENZILATE	139				4	NOT FOUND			
113	S5# 10	C710 BENZIDINE	184				5	NOT FOUND			
114	S5# 15	C715 PYRENE	202	A	BB	1337	5		1903.	1.323	0.716
115	S5# 20	ARAMITE (#1)	185				5	NOT FOUND			
116	S5# 25	ARAMITE (#2)	185				5	NOT FOUND			
117	S5# 30	P-DIMETHYLAMINOAZOBENZEN	120				5	NOT FOUND			
118	S5# 35	3,3'-DIMETHYLBENZIDINE	212				5	NOT FOUND			
119	S5# 37	KEPONE	272	A	BB	1508	5		53.	0.082	0.322
120	S5# 40	C720 BUTYLBENZYLPHTHALAT	149				5	NOT FOUND			
121	S5# 45	2-ACETYLAMINOFLUORENE	181				5	NOT FOUND			
122	S5# 50	C730 BENZO(A)ANTHRACENE	228	A	BB	1557	5		1764.	1.125	0.780
123	S5# 55	C725 3,3'-DICHLOROBENZID	252				5	NOT FOUND			
124	S5# 60	C740 CHRYSENE	228	A	BB	1557	5		1764.	1.014	0.865
125	S5# 65	C745 BIS(2-ETHYLHEXYL)PH	149	A	BB	1605	5		5223.	0.980	2.652
126	S5# 85	3-METHYLCHOLANTHRENE	268	A	VV	1831	5		300.	0.548	0.273
127	S6# 10	C760 DI-N-OCTYL PHTHALAT	149				6	NOT FOUND			
128	S6# 15	C765 BENZO(B)FLUORANTHEN	252				6	NOT FOUND			
129	S6# 20	7,12-DIMETHYLBENZANTHRAC	256				6	NOT FOUND			
130	S6# 25	C770 BENZO(K)FLUORANTHEN	252				6	NOT FOUND			
131	S6# 30	HEXACHLOROPHENE	196	A	BB	1777	6		101.	0.004	13.492
132	S6# 35	C775 BENZO(A)PYRENE	252	A	VB	1775	6		519.	1.182	0.235
133	S6# 55	C780 INDENO(1,2,3-CD)PYR	276				6	NOT FOUND			
134	S6# 60	C785 DIBENZ(A,H)ANTHRACE	278				6	NOT FOUND			
135	S6# 65	C790 BENZO(G,H,I)PERYLEN	276				6	NOT FOUND			

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BNA, S LIBRARIES ANALYST: _____ DATE: _____

QUANTERRA Internal Standard Check

Standard Filename: ST16980902 Analyzed: 09/02/98 14:53

Standard	IS# 1 Area	%	RT	IS# 2 Area	%	RT	IS# 3 Area	%	RT
ST16980902	23319.		3.78	79260.		5.91	43605.		9.22
Upper Limit	46638.	+200	4.28	158519.	+200	6.41	87211.	+200	9.72
Lower Limit	11659.	+ 50	3.28	39630.	+ 50	5.41	21803.	+ 50	8.72
Filename									
1 300681RI06	27901.	119	3.80	94024.	118	5.91	49022.	112	9.24

IS# 1 = CI30 1,4-DICHLOROBENZENE-D4
IS# 2 = CI40 NAPHTHALENE-D8
IS# 3 = CI50 ACENAPHTHENE-D10

* - indicates an I.S. is outside QC limit(s)

Standard	IS# 4 Area	%	RT	IS# 5 Area	%	RT	IS# 6 Area	%	RT
ST16980902	76218.		12.09	51424.		17.27	44306.		19.84
Upper Limit	152436.	+200	12.59	102848.	+200	17.77	88612.	+200	20.34
Lower Limit	38109.	+ 50	11.59	25712.	+ 50	16.77	22153.	+ 50	19.34
Filename									
1 300681RI06	82021.	107	12.11	80400.	156	17.29	74618.	168	19.85

IS# 4 = CI60 PHENANTHRENE-D10
IS# 5 = CI70 CHRYSENE-D12
IS# 6 = CI75 PERYLENE-D12

* - indicates an I.S. is outside QC limit(s)

Semivolatile Organics
Method 0010/8270

Client Name: Pacific Environmental Services
Client ID: S-MM5-3-F,FH,XAD,COND,BH
LAB ID: 300681-0007-SA
Matrix: AIRTRAIN Sampled: 27 JUL 98 Received: 30 JUL 98
Authorized: 30 JUL 98 Prepared: 31 JUL 98 Analyzed: 31 AUG 98

Dilution Factor: 100

Parameter	Wet wt. Result	Units	Reporting Limit	Qualifier
Phenol	ND	ug/Sample	3000	GR
bis(2-Chloroethyl)ether	ND	ug/Sample	3000	
2-Chlorophenol	ND	ug/Sample	3000	
1,3-Dichlorobenzene	ND	ug/Sample	3000	
1,4-Dichlorobenzene	ND	ug/Sample	3000	
Benzyl alcohol	ND	ug/Sample	3000	
1,2-Dichlorobenzene	ND	ug/Sample	3000	
2-Methylphenol	ND	ug/Sample	3000	
2,2'-Oxybis(1-chloropropane)	ND	ug/Sample	3000	
3/4-Methylphenol	ND	ug/Sample	3000	
N-Nitroso-di-n-propylamine	ND	ug/Sample	3000	
Hexachloroethane	ND	ug/Sample	3000	
Nitrobenzene	ND	ug/Sample	3000	
Isophorone	ND	ug/Sample	3000	
2-Nitrophenol	ND	ug/Sample	3000	
2,4-Dimethylphenol	ND	ug/Sample	3000	
Benzoic acid	ND	ug/Sample	15000	
bis(2-Chloroethoxy)-methane	ND	ug/Sample	3000	
2,4-Dichlorophenol	ND	ug/Sample	3000	
1,2,4-Trichlorobenzene	ND	ug/Sample	3000	
Naphthalene	3200	ug/Sample	3000	
4-Chloroaniline	ND	ug/Sample	3000	
Hexachlorobutadiene	ND	ug/Sample	3000	
4-Chloro-3-methylphenol	ND	ug/Sample	3000	
2-Methylnaphthalene	6300	ug/Sample	3000	
Hexachlorocyclopentadiene	ND	ug/Sample	3000	
2,4,6-Trichlorophenol	ND	ug/Sample	3000	
2,4,5-Trichlorophenol	ND	ug/Sample	15000	
2-Chloronaphthalene	ND	ug/Sample	3000	
2-Nitroaniline	ND	ug/Sample	3000	
Dimethyl phthalate	ND	ug/Sample	3000	
Acenaphthylene	ND	ug/Sample	3000	
3-Nitroaniline	ND	ug/Sample	15000	
Acenaphthene	ND	ug/Sample	3000	
2,4-Dinitrophenol	ND	ug/Sample	15000	
4-Nitrophenol	ND	ug/Sample	15000	

Note G = Reporting limit(s) raised due to matrix interference.
Note R = Reporting limit(s) raised due to sample volume limitations.
ND = Not Detected

Reported By: Emily Uebelhoer Approved By: Mike Orbanosky

The cover letter is an integral part of this report.
Rev 230787

Client Name: Pacific Environmental Services
Client ID: S-MM5-3-F,FH,XAD,COND,BH
LAB ID: 300681-0007-SA
Matrix: AIRTRAIN Sampled: 27 JUL 98 Received: 30 JUL 98
Authorized: 30 JUL 98 Prepared: 31 JUL 98 Analyzed: 31 AUG 98

Dilution Factor: 100

Parameter	Wet wt. Result	Units	Reporting Limit	Qualifier
Dibenzofuran	ND	ug/Sample	3000	
2,4-Dinitrotoluene	ND	ug/Sample	3000	
2,6-Dinitrotoluene	ND	ug/Sample	3000	
Diethyl phthalate	ND	ug/Sample	3000	
4-Chlorophenyl phenyl ether	ND	ug/Sample	3000	
Fluorene	ND	ug/Sample	3000	
4-Nitroaniline	ND	ug/Sample	15000	
4,6-Dinitro-2-methylphenol	ND	ug/Sample	15000	
N-Nitrosodiphenylamine	ND	ug/Sample	3000	
4-Bromophenyl phenyl ether	ND	ug/Sample	3000	
Hexachlorobenzene	ND	ug/Sample	3000	
Pentachlorophenol	ND	ug/Sample	15000	
Phenanthrene	ND	ug/Sample	3000	
Anthracene	ND	ug/Sample	3000	
Di-n-butyl phthalate	ND	ug/Sample	3000	
Fluoranthene	ND	ug/Sample	3000	
Pyrene	ND	ug/Sample	3000	
Butyl benzyl phthalate	ND	ug/Sample	3000	
3,3'-Dichlorobenzidine	ND	ug/Sample	6000	
Benzo(a)anthracene	ND	ug/Sample	3000	
bis(2-Ethylhexyl)-phthalate	ND	ug/Sample	3000	
Chrysene	ND	ug/Sample	3000	
Di-n-octyl phthalate	ND	ug/Sample	3000	
Benzo(b)fluoranthene	ND	ug/Sample	3000	
Benzo(k)fluoranthene	ND	ug/Sample	3000	
Benzo(a)pyrene	ND	ug/Sample	3000	
Indeno(1,2,3-cd)pyrene	ND	ug/Sample	3000	
Dibenz(a,h)anthracene	ND	ug/Sample	3000	
Benzo(g,h,i)perylene	ND	ug/Sample	3000	
Acetophenone	ND	ug/Sample	3000	
4-Aminobiphenyl	ND	ug/Sample	15000	
Aniline	ND	ug/Sample	3000	
Benzidine	ND	ug/Sample	30000	
3,3'-Dimethylbenzidine	ND	ug/Sample	6000	
N-Nitrosodimethylamine	ND	ug/Sample	3000	
N-Nitrosomorpholine	ND	ug/Sample	3000	
Pentachloronitrobenzene (PCNB)	ND	ug/Sample	15000	
o-Toluidine	ND	ug/Sample	6000	

ND = Not Detected

Reported By: Emily Uebelhoer Approved By: Mike Orbanosky

Semivolatile Organics
Method 0010/8270 (cont.)

Client Name: Pacific Environmental Services
Client ID: S-MM5-3-F,FH,XAD,COND,BH
LAB ID: 300681-0007-SA
Matrix: AIRTRAIN Sampled: 27 JUL 98 Received: 30 JUL 98
Authorized: 30 JUL 98 Prepared: 31 JUL 98 Analyzed: 31 AUG 98

Dilution Factor: 100

Parameter	Wet wt. Result	Units	Reporting Limit	Qualifier
2-Methoxybenzenamine	ND	ug/Sample	--	
Biphenyl	ND	ug/Sample	--	
Chloroacetophenone	ND	ug/Sample	--	
Cumene	ND	ug/Sample	--	
DBCP (1,2-Dibromo-3-chloropropane)	ND	ug/Sample	--	
Benzo(e)pyrene	ND	ug/Sample	--	
N-N-Diethylaniline	ND	ug/Sample	--	
Dimethylaniline	ND	ug/Sample	--	
3,3'-Dimethoxybenzidine	ND	ug/Sample	--	
Hydroquinone	ND	ug/Sample	--	
4,4'-Methyl-bis(2-chloroaniline)	ND	ug/Sample	--	
4-Nitrodiphenyl	ND	ug/Sample	--	
Trifluralin	ND	ug/Sample	--	

Surrogate	Recovery	Acceptable Range	
Nitrobenzene-d5	ND %	45 - 107	H
2-Fluorobiphenyl	ND %	62 - 110	
Terphenyl-d14	ND %	58 - 135	
Phenol-d5	ND %	43 - 130	
2-Fluorophenol	ND %	36 - 111	
2,4,6-Tribromophenol	ND %	58 - 131	

Note H = Spiked analyte not detected because of required sample dilution.
ND = Not Detected

Reported By: Emily Uebelhoer Approved By: Mike Orbanosky

The cover letter is an integral part of this report.
Rev 230787

Semivolatiles Library Search (20 Compound TID)
Method 8270

Client Name: Pacific Environmental Services
Client ID: S-MM5-3-F,FH,XAD,COND,BH
LAB ID: 300681-0007-SA
Matrix: AIRTRAIN Sampled: 27 JUL 98 Received: 30 JUL 98
Authorized: 30 JUL 98 Prepared: NA Analyzed: 31 AUG 98

Dilution Factor: 100

Parameter	Result	Units	Reporting Limit	Qualifier
Undecane	10000	ug/Sample	--	0
Decane, 2,5,6-trimethyl-	12000	ug/Sample	--	0
Undecane, 2,6-dimethyl-	9900	ug/Sample	--	0
Unknown	11000	ug/Sample	--	
Heptadecane, 2,6-dimethyl-	19000	ug/Sample	--	0
Unknown	13000	ug/Sample	--	
Decane, 2,4-dimethyl	19000	ug/Sample	--	0
Unknown	9100	ug/Sample	--	
Unknown alkane	22000	ug/Sample	--	
Unknown alkane	36000	ug/Sample	--	
Naphthalene, 1,3-dimethyl-	16000	ug/Sample	--	0
Heptadecane, 2,6,10,14 -tetramethyl-	26000	ug/Sample	--	0
Dodecane, 3-methyl-	35000	ug/Sample	--	0
Unknown alkane	11000	ug/Sample	--	
Nonadecane	35000	ug/Sample	--	0
Nonadecane	22000	ug/Sample	--	0
Heptadecane, 2,6-dimethyl-	46000	ug/Sample	--	0
Unknown alkane	14000	ug/Sample	--	
Nonadecane	17000	ug/Sample	--	0
Heptadecane, 2,6-dimethyl-	10000	ug/Sample	--	0

Note O = Or structurally similar compound (isomer).
NA = Not Applicable

Reported By: Emily Uebelhoer Approved By: Mike Orbanosky

The cover letter is an integral part of this report.
Rev 230787

QUANTERRA GC/MS
Target Compound Data Summary Sheet

Data File: 30068107
Std Id: ST16980831

Sample: S-MM5-3 1/3SA/100M INST. ID: F16
Client: PACIFI Date Analyzed: 08/31/98 21:59
Analyst: DAT Instrument ID: F16 Run Factor: 300.
Quan List Threshold: 0.95 Surrogate Vol.: 100.

Surrogate Spike Recoveries
8270-G, LIMS 10/10/96

Surrogate	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured		QC limits	
CS20 NITROBENZENE-D5	50.0	BDL	0* H		45	107
CS25 2-FLUOROBIPHENY	50.00	95.10	190.	*	62	110
CS30 TERPHENYL-D14	50.00	101.0	202.	*	58	135
CS45 PHENOL-D5	100.	BDL	0*		43	130
CS50 2-FLUOROPHENOL	100.0	153.0	153.	*	36	111
CS55 2,4,6-TRIBROMOP	100.0	123.0	123.		58	131

Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
HEXACHLOROBENZENE-C13		ND	UG/A	3000.0
C310 N-NITROSODIMETHYLAMINE		ND	UG/A	3000.0
PYRIDINE		ND	UG/A	6000.0
2-PICOLINE		ND	UG/A	3000.0
N-NITROSOMETHYLETHYLAMINE		ND	UG/A	3000.0
METHYLMETHANESULFONATE		ND	UG/A	3000.0
N-NITROSODIETHYLAMINE		ND	UG/A	3000.0
ETHYLMETHANE SULFONATE		ND	UG/A	3000.0
PENTACHLOROETHANE		ND	UG/A	3000.0
C320 ANILINE		ND	UG/A	3000.0
C315 PHENOL		ND	UG/A	3000.0
C325 BIS(2-CHLOROETHYL)ETHER		ND	UG/A	3000.0
C330 2-CHLOROPHENOL		ND	UG/A	3000.0
C335 1,3-DICHLOROBENZENE		ND	UG/A	3000.0
C340 1,4-DICHLOROBENZENE		ND	UG/A	3000.0
C345 BENZYL ALCOHOL		ND	UG/A	3000.0
C350 1,2-DICHLOROBENZENE		ND	UG/A	3000.0
C355 2-METHYLPHENOL		ND	UG/A	3000.0
C360 2,2'-OXYBIS(1-CLPROPAN)		ND	UG/A	3000.0
C361 ACETOPHENONE		ND	UG/A	3000.0
N-NITROSOPYRROLIDINE		ND	UG/A	3000.0
N-NITROSOMORPHOLINE		ND	UG/A	3000.0
3-METHYL PHENOL		ND	UG/A	3000.0
C365 4-METHYLPHENOL		ND	UG/A	3000.0
C370 N-NITROSO-DI-N-PROPYLAM		ND	UG/A	3000.0
O-TOLUIDINE		ND	UG/A	3000.0
C375 HEXACHLOROETHANE		ND	UG/A	3000.0
C410 NITROBENZENE		ND	UG/A	3000.0
N-NITROSOPIPERIDINE		ND	UG/A	3000.0

Reviewed by: 9.18.98

QUANTERRA GC/MS

Target Compound Data Summary Sheet

Data File: 30068107
Std Id: ST16980831

Sample: S-MM5-3 1/3SA/100M INST. ID: F16
Client: PACIFI Date Analyzed: 08/31/98 21:59
Analyst: DAT Instrument ID: F16 Run Factor: 300.
Quan List Threshold: 0.95 Surrogate Vol.: 100.

Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
C415 ISOPHORONE		ND	UG/A	3000.0
C420 2-NITROPHENOL		ND	UG/A	3000.0
C425 2,4-DIMETHYLPHENOL		ND	UG/A	3000.0
C435 BIS(2-CHLOROETHOXY)METH		ND	UG/A	3000.0
C440 2,4-DICHLOROPHENOL		ND	UG/A	3000.0
C430 BENZOIC ACID		ND	UG/A	15000.0
AA-DIMETHYLPHENETHYLAMINE		ND	UG/A	3000.0
C445 1,2,4-TRICHLOROBENZENE		ND	UG/A	3000.0
C450 NAPHTHALENE	533	3200.	UG/A	3000.0
C455 4-CHLOROANALINE		ND	UG/A	3000.0
2,6-DICHLOROPHENOL		ND	UG/A	3000.0
HEXACHLOROPROPENE		ND	UG/A	3000.0
C460 HEXACHLOROBUTADIENE		ND	UG/A	3000.0
P-PHENYLENE DIAMINE		ND	UG/A	3000.0
N-NITROSODI-N-BUTYLAMINE		ND	UG/A	3000.0
C465 4-CHLORO-3-METHYLPHENO		ND	UG/A	3000.0
SAFROLE		ND	UG/A	3000.0
C470 2-METHYLNAPHTHALENE	652	6300.	UG/A	3000.0
1,2,4,5-TETRACHLOROBENZENE		ND	UG/A	3000.0
ISOSAFROLE (#1)		ND	UG/A	6000.0
C510 HEXACHLOROCYCLOPENTADI		ND	UG/A	3000.0
C515 2,4,6-TRICHLOROPHENOL		ND	UG/A	3000.0
C520 2,4,5-TRICHLOROPHENOL		ND	UG/A	3000.0
ISOSAFROLE (#2)		ND	UG/A	6000.0
C525 2-CHLORONAPHTHALENE		ND	UG/A	3000.0
1-CHLORONAPHTHALENE		ND	UG/A	1500.0
C530 2-NITROANALINE		ND	UG/A	15000.0
1,4-NAPHTHOQUINONE		ND	UG/A	3000.0
C535 DIMETHYLPHTHALATE		ND	UG/A	3000.0
1,3-DINITROBENZENE		ND	UG/A	3000.0
C540 ACENAPHTHYLENE		ND	UG/A	3000.0
C543 2,6-DINITROTOLUENE		ND	UG/A	3000.0
C545 3-NITROANILINE		ND	UG/A	15000.0
C550 ACENAPHTHENE		ND	UG/A	3000.0
C555 2,4-DINITROPHENOL		ND	UG/A	15000.0
C565 DIBENZOFURAN		ND	UG/A	3000.0
C560 4-NITROPHENOL		ND	UG/A	15000.0
PENTACHLOROBENZENE		ND	UG/A	3000.0
C570 2,4-DINITROTOLUENE		ND	UG/A	3000.0
1-NAPHTHYLAMINE		ND	UG/A	3000.0
2-NAPHTHYLAMINE		ND	UG/A	3000.0
2,3,4,6-TETRACHLOROPHENOL		ND	UG/A	6000.0
C580 DIETHYLPHTHALATE		ND	UG/A	3000.0
C590 FLUORENE		ND	UG/A	3000.0

QUANTERRA GC/MS

Target Compound Data Summary Sheet

Data File: 30068107
Std Id: ST16980831

Sample: S-MM5-3 1/3SA/100M INST. ID: F16
Client: PACIFI Date Analyzed: 08/31/98 21:59
Analyst: DAT Instrument ID: F16 Run Factor: 300.
Quan List Threshold: 0.95 Surrogate Vol.: 100.

Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
C585 4-CHLOROPHENYL-PHENYLE		ND	UG/A	3000.0
5-NITRO-O-TOLUIDINE		ND	UG/A	3000.0
C595 4-NITROANALINE		ND	UG/A	15000.0
C610 4,6-DINITRO-2-METHYLPH		ND	UG/A	15000.0
C615 N-NITROSODIPHENYLAMINE		ND	UG/A	3000.0
C620 AZOBENZENE		ND	UG/A	3000.0
SYM-TRINITROBENZENE		ND	UG/A	3000.0
C625 4-BROMOPHENYL-PHENYLET		ND	UG/A	3000.0
PHENACETIN		ND	UG/A	3000.0
DIALLATE	234	ND	UG/A	3000.0
C630 HEXACHLOROBENZENE		ND	UG/A	3000.0
4-AMINOBIPHENYL		ND	UG/A	3000.0
C635 PENTACHLOROPHENOL		ND	UG/A	15000.0
PRONAMIDE		ND	UG/A	3000.0
PENTACHLORONITROBENZENE		ND	UG/A	15000.0
C640 PHENANTHRENE		ND	UG/A	3000.0
C645 ANTHRACENE		ND	UG/A	3000.0
2SECBUTYL-4,6-DINITROPHENOL		ND	UG/A	3000.0
C647 CARBAZOLE		ND	UG/A	3000.0
C650 DI-N-BUTYLPHTHALATE		ND	UG/A	3000.0
4-NITROQUINOLINE-1-OXIDE		ND	UG/A	3000.0
METHAPYRILENE		ND	UG/A	3000.0
ISODRIN		ND	UG/A	3000.0
C655 FLUORANTHENE		ND	UG/A	3000.0
CHLOROBENZILATE		ND	UG/A	3000.0
C710 BENZIDINE		ND	UG/A	30000.0
C715 PYRENE		ND	UG/A	3000.0
ARAMITE (#1)		ND	UG/A	3000.0
ARAMITE (#2)		ND	UG/A	3000.0
P-DIMETHYLAMINOAZOBENZENE		ND	UG/A	3000.0
3,3'-DIMETHYLBENZIDINE		ND	UG/A	3000.0
KEPONE		ND	UG/A	15000.0
C720 BUTYLBENZYLPHTHALATE		ND	UG/A	3000.0
2-ACETYLAMINOFLUORENE		ND	UG/A	3000.0
C730 BENZO(A)ANTHRACENE		ND	UG/A	3000.0
C725 3,3'-DICHLOROBENZIDINE		ND	UG/A	6000.0
C740 CHRYSENE		ND	UG/A	3000.0
C745 BIS(2-ETHYLHEXYL)PHTHA		ND	UG/A	3000.0
3-METHYLCHOLANTHRENE		ND	UG/A	3000.0
C760 DI-N-OCTYL PHTHALATE		ND	UG/A	3000.0
C765 BENZO(B)FLUORANTHENE		ND	UG/A	3000.0
7,12-DIMETHYLBENZANTHRACENE		ND	UG/A	3000.0
C770 BENZO(K)FLUORANTHENE		ND	UG/A	3000.0
HEXACHLOROPHENE		ND	UG/A	3000.0

QUANTERRA GC/MS

Target Compound Data Summary Sheet

Data File: 30068107

Std Id: ST16980831

Sample: S-MM5-3 1/3SA/100M INST. ID: F16

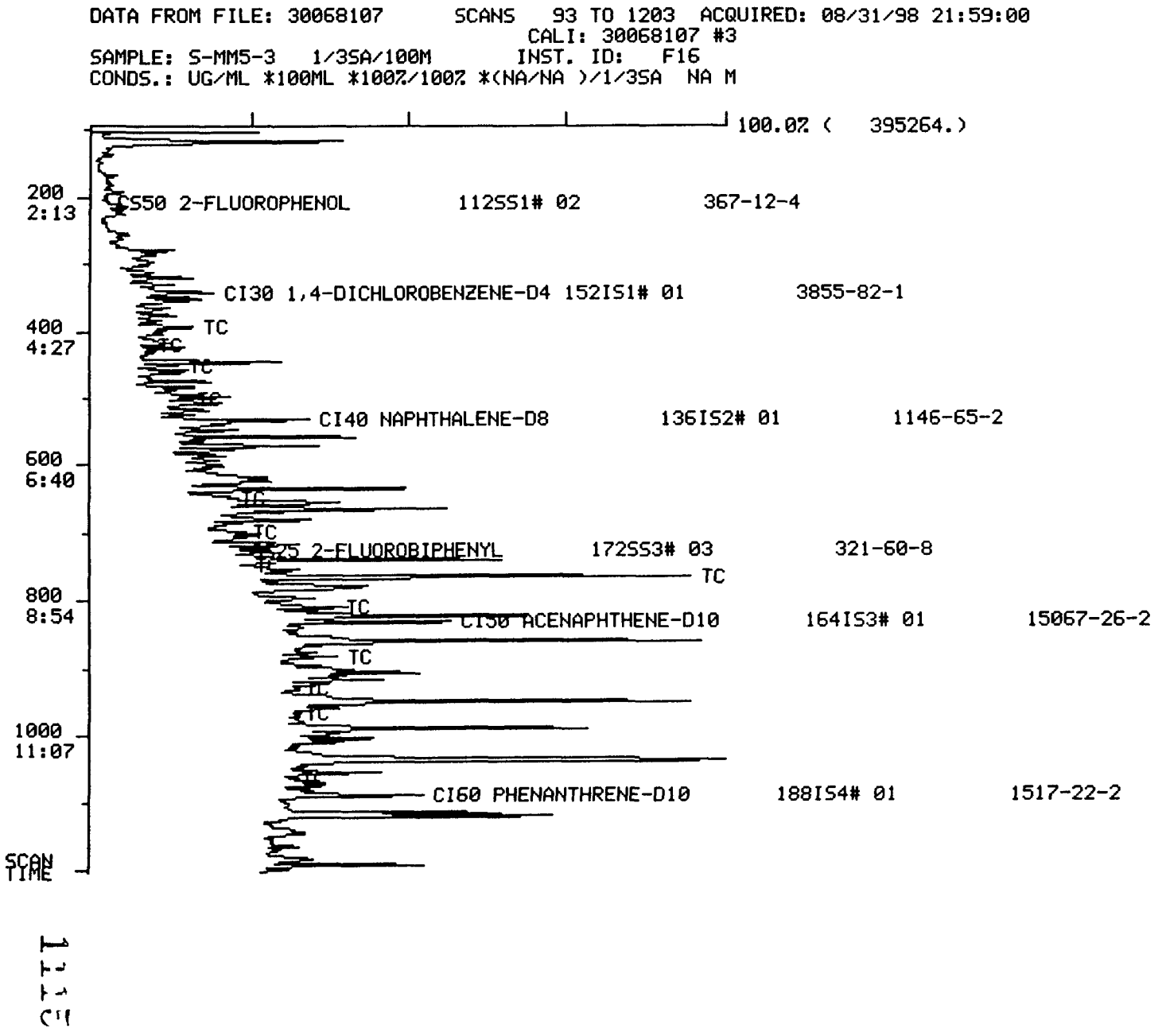
Client: PACIFI Date Analyzed: 08/31/98 21:59

Analyst: DAT Instrument ID: F16 Run Factor: 300.

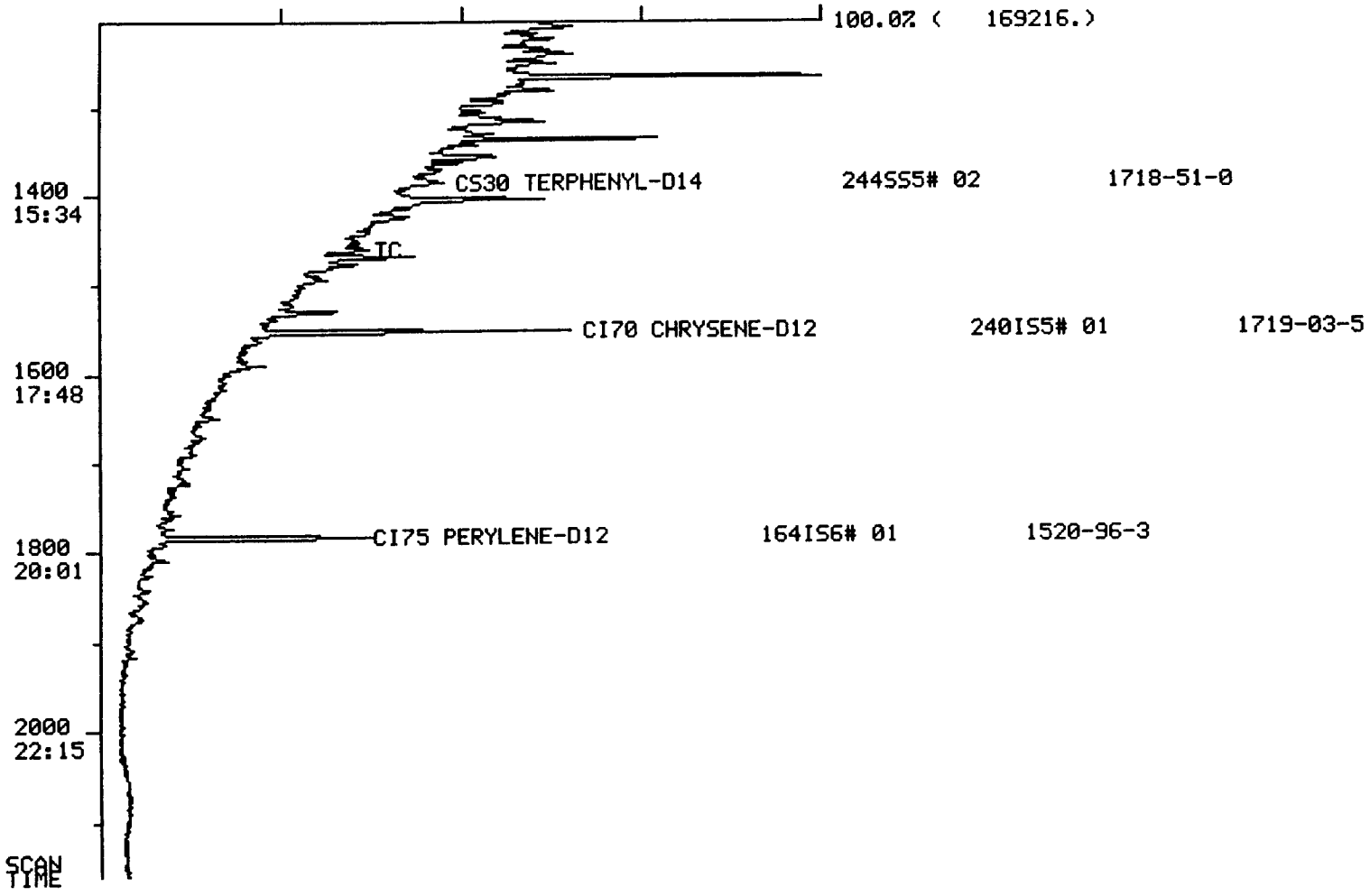
Quan List Threshold: 0.95 Surrogate Vol.: 100.

Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
C775 BENZO(A)PYRENE		ND	UG/A	3000.0
C780 INDENO(1,2,3-CD)PYRENE		ND	UG/A	3000.0
C785 DIBENZ(A,H)ANTHRACENE		ND	UG/A	3000.0
C790 BENZO(G,H,I)PERYLENE		ND	UG/A	3000.0


DATA FROM FILE: 30068107 SCANS 93 TO 1203 ACQUIRED: 08/31/98 21:59:00
CALI: 30068107 #3
SAMPLE: S-MM5-3 1/35A/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/35A NA M
100.0% (395264.)
200
2:13
S50 2-FLUOROPHENOL 112SS1# 02 367-12-4
CI30 1,4-DICHLOROBENZENE-D4 152IS1# 01 3855-82-1
400
4:27
TC
600
6:40
S25 2-FLUOROBIPHENYL 172SS3# 03 321-60-8
800
8:54
CI50 ACENAPHTHENE-D10 164IS3# 01 15067-26-2
1000
11:07
CI60 PHENANTHRENE-D10 188IS4# 01 1517-22-2
SCAN
TIME

DATA FROM FILE: 30068107 SCANS 1203 TO 2158 ACQUIRED: 08/31/98 21:59:00
CALI: 30068107 #3
SAMPLE: S-MM5-3 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M



1114

STANDARD USED FOR THIS REPORT IS ST16980831 REPORT PRINTED: 9/01/98 20:38:02

ADDITIONAL STANDARD USED FOR THIS REPORT IS: ST16980831A

QUANTERRA QUANTITATION SUMMARY File: 30068107

Sample: S-MM5-3 1/3SA/100M INST. ID: F16
Analyst: DAT Instrument Id: F16 Analyzed: 08/31/98 21:59

Compounds with amounts less than 0.20 reported as NOT FOUND

No	Library Entry	Name	Mass	Meth	Scan	Ref	Area	RRF(L)	Amount (Units: UG/ML)
1	S1# 1 CI30	1,4-DICHLOROBENZENE	152	A BB	340	1	30514.	1.000	40.000
2	S2# 1 CI40	NAPHTHALENE-D8	136	A BB	530	2	110082.	1.000	40.000
3	S3# 1 CI50	ACENAPHTHENE-D10	164	A BB	829	3	60039.	1.000	40.000
4	S4# 1 CI60	PHENANTHRENE-D10	188	A BB	1088	4	106261.	1.000	40.000
5	S5# 1 CI70	CHRYSENE-D12	240	A BB	1552	5	67833.	1.000	40.000
6	S6# 1 CI75	PERYLENE-D12	264	A BV	1782	6	51078.	1.000	40.000
7	S2# 2 CS20	NITROBENZENE-D5	82		2	NOT FOUND			
8	S3# 3 CS25	2-FLUOROBIPHENYL	172	A BB	723	3	1762.	1.234	0.951
9	S5# 2 CS30	TERPHENYL-D14	244	A BB	1384	5	1708.	0.995	1.012
10	S1# 3 CS45	PHENOL-D5	99		1	NOT FOUND			
11	S1# 2 CS50	2-FLUOROPHENOL	112	A VV	205	1	1595.	1.368	1.528
12	S3# 2 CS55	2,4,6-TRIBROMOPHENO	330	A BB	971	3	436.	0.236	1.233
13	S4# 4	HEXACHLOROBENZENE-C13	294		4	NOT FOUND			
14	S1# 15 C310	N-NITROSODIMETHYLAM	74		1	NOT FOUND			
15	S1# 20	PYRIDINE	79		1	NOT FOUND			
16	S1# 30	2-PICOLINE	93		1	NOT FOUND			
17	S1# 40	N-NITROSOMETHYLETHYLAMIN	42		1	NOT FOUND			
18	S1# 60	METHYLMETHANESULFONATE	80		1	NOT FOUND			
19	S1# 70	N-NITROSODIETHYLAMINE	102		1	NOT FOUND			
20	S1# 85	ETHYLMETHANE SULFONATE	79		1	NOT FOUND			
21	S1# 95	PENTACHLOROETHANE	117	A BB	305	1	157.	0.602	0.343
22	S1#100 C320	ANILINE	93		1	NOT FOUND			
23	S1#105 C315	PHENOL	94		1	NOT FOUND			
24	S1#110 C325	BIS(2-CHLOROETHYL)E	93		1	NOT FOUND			
25	S1#115 C330	2-CHLOROPHENOL	128		1	NOT FOUND			
26	S1#125 C335	1,3-DICHLOROBENZENE	146		1	NOT FOUND			
27	S1#130 C340	1,4-DICHLOROBENZENE	146		1	NOT FOUND			
28	S1#145 C345	BENZYL ALCOHOL	108		1	NOT FOUND			
29	S1#150 C350	1,2-DICHLOROBENZENE	146		1	NOT FOUND			
30	S1#160 C355	2-METHYLPHENOL	108	A BB	392	1	2412.	1.175	2.692
31	S1#165 C360	2,2'-OXYBIS(1-CLPRO	45	A BB	394	1	3276.	2.539	1.691
32	S1#170 C361	ACETOPHENONE	105	A BB	400	1	8775.	1.934	5.948
33	S1#175	N-NITROSOPYRROLIDINE	100		1	NOT FOUND			
34	S1#180	N-NITROSOMORPHOLINE	56		1	NOT FOUND			
35	S1#182	3-METHYL PHENOL	108	A BB	418	1	2022.	2.252	1.177
36	S1#185 C365	4-METHYLPHENOL	108	A BB	418	1	2003.	1.276	2.059
37	S1#190 C370	N-NITROSO-DI-N-PROP	70		1	NOT FOUND			
38	S1#195	O-TOLUIDINE	106		1	NOT FOUND			
39	S1#200 C375	HEXACHLOROETHANE	117		1	NOT FOUND			
40	S2# 10 C410	NITROBENZENE	77	A VB	422	2	2364.	0.445	1.930
41	S2# 15	N-NITROSOPIPERIDINE	42	A BB	449	2	1186.	0.320	1.345
42	S2# 20 C415	ISOPHORONE	82		2	NOT FOUND			
43	S2# 25 C420	2-NITROPHENOL	139		2	NOT FOUND			
44	S2# 30 C425	2,4-DIMETHYLPHENOL	107	A BB	500	2	3534.	0.330	3.893
45	S2# 35 C435	BIS(2-CHLOROETHOXY)	93		2	NOT FOUND			

46	S2#	40	C440	2,4-DICHLOROPHENOL	162	A	BB	519	2	256. 0.308 0.302
47	S2#	45	C430	BENZOIC ACID	122	A	BB	548	2	438. 0.276 0.577
48	S2#	50	AA-DIMETHYLPHENETHYLAMIN		58			2	NOT FOUND	
49	S2#	55	C445	1,2,4-TRICHLOROBENZ	180	A*BB		523	2	252. 0.331 0.277

50	S2# 60	C450 NAPHTHALENE	128	A	BV	533	2	29645.	1.022	10.538
51	S2# 80	C455 4-CHLOROANALINE	127	A	BB	556	2	677.	0.454	0.542
52	S2# 85	2,6-DICHLOROPHENOL	162			2	NOT FOUND			
53	S2# 90	HEXACHLOROPROPENE	213			2	NOT FOUND			
54	S2# 95	C460 HEXACHLOROBUTADIENE	225			2	NOT FOUND			
55	S2#115	P-PHENYLENE DIAMINE	108			2	NOT FOUND			
56	S2#120	N-NITROSODI-N-BUTYLAMINE	84			2	NOT FOUND			
57	S2#130	C465 4-CHLORO-3-METHYLPH	107			2	NOT FOUND			
58	S2#140	SAFROLE	162	A	BB	648	2	1458.	0.248	2.140
59	S2#145	C470 2-METHYLNAPHTHALENE	142	A	BB	652	2	43357.	0.751	20.970
60	S3# 10	1,2,4,5-TETRACHLOROBENZE	214			3	NOT FOUND			
61	S3# 15	ISOSAFROLE (#1)	162	A	BV	697	3	592.	0.044	9.033
62	S3# 20	C510 HEXACHLOROCYCLOPENT	237			3	NOT FOUND			
63	S3# 25	C515 2,4,6-TRICHLOROPHEN	196			3	NOT FOUND			
64	S3# 30	C520 2,4,5-TRICHLOROPHEN	196			3	NOT FOUND			
65	S3# 35	ISOSAFROLE (#2)	104	A	BB	746	3	1306.	0.195	4.467
66	S3# 40	C525 2-CHLORONAPHTHALENE	162			3	NOT FOUND			
67	S3# 42	1-CHLORONAPHTHALEN	162			3	NOT FOUND			
68	S3# 45	C530 2-NITROANALINE	65	A	BB	764	3	838.	0.502	1.112
69	S3# 50	1,4-NAPHTHOQUINONE	158			3	NOT FOUND			
70	S3# 55	C535 DIMETHYLPHTHALATE	163			3	NOT FOUND			
71	S3# 60	1,3-DINITROBENZENE	168	A	BB	807	3	340.	0.197	1.148
72	S3# 65	C540 ACENAPHTHYLENE	152			3	NOT FOUND			
73	S3# 70	C543 2,6-DINITROTOLUENE	165	A	BB	817	3	429.	0.324	0.883
74	S3# 75	C545 3-NITROANILINE	138			3	NOT FOUND			
75	S3# 80	C550 ACENAPHTHENE	153	A	BV	834	3	1539.	1.159	0.885
76	S3# 85	C555 2,4-DINITROPHENOL	184	A	BB	858	3	129.	0.189	0.456
77	S3# 90	C565 DIBENZOFURAN	168	A	BB	867	3	1304.	1.669	0.521
78	S3# 95	C560 4-NITROPHENOL	109			3	NOT FOUND			
79	S3#100	PENTACHLOROBENZENE	250			3	NOT FOUND			
80	S3#105	C570 2,4-DINITROTOLUENE	165	A	VB	881	3	770.	0.397	1.291
81	S3#110	1-NAPHTHYLAMINE	143	A	BV	882	3	547.	0.837	0.435
82	S3#115	2-NAPHTHYLAMINE	143	A	BB	902	3	425.	0.966	0.293
83	S3#120	2,3,4,6-TETRACHLOROPHENO	232			3	NOT FOUND			
84	S3#130	C580 DIETHYLPHTHALATE	149			3	NOT FOUND			
85	S3#135	C590 FLUORENE	166	A	BB	926	3	4384.	1.298	2.251
86	S3#140	C585 4-CHLOROPHENYL-PHEN	204			3	NOT FOUND			
87	S3#145	5-NITRO-O-TOLUIDINE	152	A	BB	942	3	4181.	0.356	7.835
88	S3#150	C595 4-NITROANALINE	138	A	VB	949	3	213.	0.307	0.463
89	S4# 10	C610 4,6-DINITRO-2-METHY	198			4	NOT FOUND			
90	S4# 15	C615 N-NITROSODIPHENYLAM	169	A	VB	964	4	5183.	0.551	3.543
91	S4# 20	C620 AZOBENZENE	77	A	VV	966	4	1221.	1.171	0.392
92	S4# 25	SYM-TRINITROBENZENE	75			4	NOT FOUND			
93	S4# 30	C625 4-BROMOPHENYL-PHENY	248			4	NOT FOUND			
94	S4# 35	PHENACETIN	108			4	NOT FOUND			
95	S4# 37	DIALLATE	234			4	NOT FOUND			
96	S4# 40	C630 HEXACHLOROBENZENE	284			4	NOT FOUND			
97	S4# 45	4-AMINOBIPHENYL	169			4	NOT FOUND			
98	S4# 50	C635 PENTACHLOROPHENOL	266			4	NOT FOUND			
99	S4# 55	PRONAMIDE	173			4	NOT FOUND			
100	S4# 60	PENTACHLORONITROBENZENE	237	A	BB	1062	4	250.	0.080	1.171
101	S4# 65	C640 PHENANTHRENE	178	A	BB	1091	4	13289.	1.033	4.845
102	S4# 70	C645 ANTHRACENE	178			4	NOT FOUND			
103	S4# 75	2SECBUTYL-4,6-DINITROPHE	211			4	NOT FOUND			
104	S4# 80	C647 CARBAZOLE	167	A	BB	1148	4	571.	0.764	0.281
105	S4# 85	C650 DI-N-BUTYLPHTHALATE	149			4	NOT FOUND			
106	S4#100	4-NITROQUINOLINE-1-OXIDE	190			4	NOT FOUND			
107	S4#105	METHAPYRILENE	58			4	NOT FOUND			
108	S4#106	ISODRIN	193			4	NOT FOUND			
109	S4#110	C655 FLUORANTHENE	202			4	NOT FOUND			
110	S4#120	CHLOROBENZILATE	139			4	NOT FOUND			

111	S5#	10	C710	BENZIDINE	184			5	NOT FOUND			
112	S5#	15	C715	PYRENE	202	A	BB	1335	5	1633.	1.323	0.728
113	S5#	20		ARAMITE (#1)	185			5	NOT FOUND			
114	S5#	25		ARAMITE (#2)	185			5	NOT FOUND			
115	S5#	30		P-DIMETHYLAMINOAZOBENZEN	120			5	NOT FOUND			
116	S5#	35		3,3'-DIMETHYLBENZIDINE	212			5	NOT FOUND			
117	S5#	37		KEPONE	272	A	BV	1460	5	234.	0.082	1.684
118	S5#	40	C720	BUTYLBENZYLPHTHALAT	149			5	NOT FOUND			
119	S5#	45		2-ACETYLAMINOFLUORENE	181			5	NOT FOUND			
120	S5#	50	C730	BENZO(A)ANTHRACENE	228			5	NOT FOUND			
121	S5#	55	C725	3,3'-DICHLOROBENZID	252			5	NOT FOUND			
122	S5#	60	C740	CHRYSENE	228	A	BB	1555	5	916.	1.014	0.533
123	S5#	65	C745	BIS(2-ETHYLHEXYL)PH	149			5	NOT FOUND			
124	S5#	85		3-METHYLCHOLANTHRENE	268			5	NOT FOUND			
125	S6#	10	C760	DI-N-OCTYL PHTHALAT	149			6	NOT FOUND			
126	S6#	15	C765	BENZO(B)FLUORANTHEN	252			6	NOT FOUND			
127	S6#	20		7,12-DIMETHYLBENZANTHRAC	256	A	BB	1741	6	218.	0.610	0.280
128	S6#	25	C770	BENZO(K)FLUORANTHEN	252			6	NOT FOUND			
129	S6#	30		HEXACHLOROPHENE	196			6	NOT FOUND			
130	S6#	35	C775	BENZO(A)PYRENE	252			6	NOT FOUND			
131	S6#	55	C780	INDENO(1,2,3-CD)PYR	276			6	NOT FOUND			
132	S6#	60	C785	DIBENZ(A,H)ANTHRACE	278			6	NOT FOUND			
133	S6#	65	C790	BENZO(G,H,I)PERYLEN	276			6	NOT FOUND			

BNA, S LIBRARIES ANALYST: _____ DATE: _____

QUANTERRA Internal Standard Check

Standard Filename: ST16980831 Analyzed: 08/31/98 12:31

Standard	IS# 1 Area	%	RT	IS# 2 Area	%	RT	IS# 3 Area	%	RT
ST16980831	28649.		3.78	100432.		5.90	54347.		9.21
Upper Limit	57297.	+200	4.28	200864.	+200	6.40	108695.	+200	9.71
Lower Limit	14324.	+ 50	3.28	50216.	+ 50	5.40	27174.	+ 50	8.71
Filename									
1 30068107	30514.	106	3.78	110082.	109	5.90	60039.	110	9.22

IS# 1 = CI30 1,4-DICHLOROBENZENE-D4
IS# 2 = CI40 NAPHTHALENE-D8
IS# 3 = CI50 ACENAPHTHENE-D10

* - indicates an I.S. is outside QC limit(s)

Standard	IS# 4 Area	%	RT	IS# 5 Area	%	RT	IS# 6 Area	%	RT
ST16980831	98520.		12.08	62289.		17.26	50750.		19.83
Upper Limit	197039.	+200	12.58	124578.	+200	17.76	101500.	+200	20.33
Lower Limit	49260.	+ 50	11.58	31145.	+ 50	16.76	25375.	+ 50	19.33
Filename									
1 30068107	106261.	107	12.10	67833.	108	17.26	51078.	100	19.82

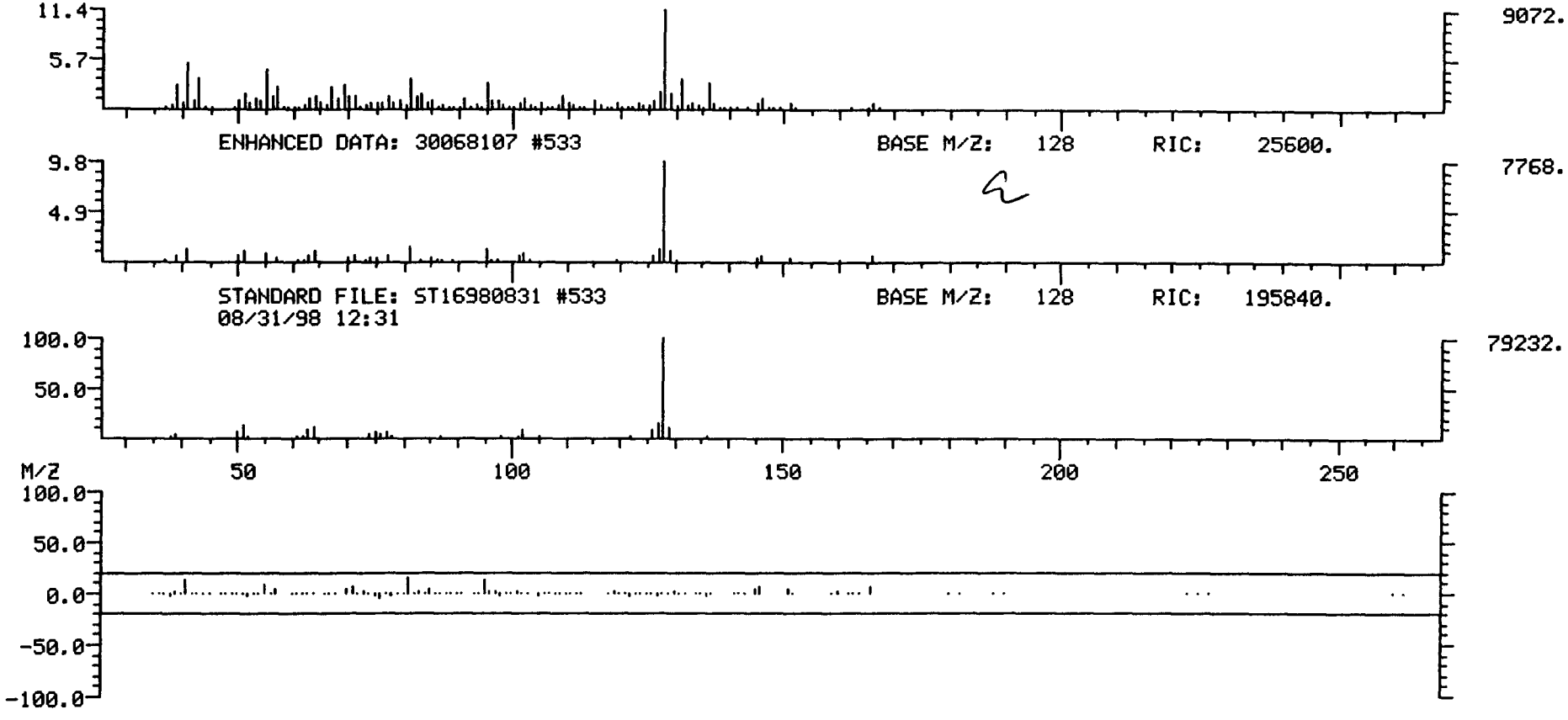
IS# 4 = CI60 PHENANTHRENE-D10
IS# 5 = CI70 CHRYSENE-D12
IS# 6 = CI75 PERYLENE-D12

* - indicates an I.S. is outside QC limit(s)

TARGET COMPOUND COMPARISON

COMPOUND: C450 NAPHTHALENE 128 S2# 60 91-20-3

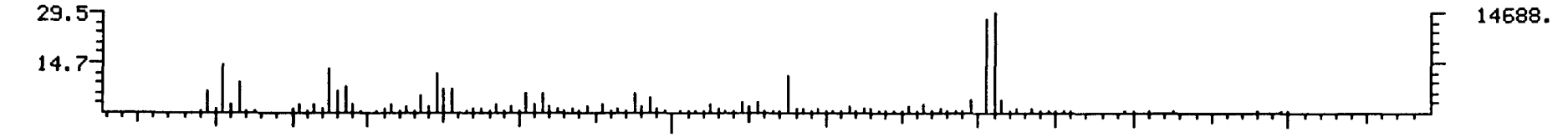
RAW DATA: 30068107 #533 BASE M/Z: 128 RIC: 88448.
08/31/98 21:59
SAMPLE: S-MM5-3 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M



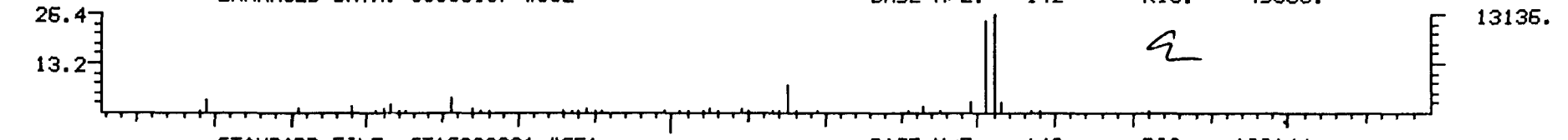
TARGET COMPOUND COMPARISON

COMPOUND: C470 2-METHYLNAPHTHALENE 142 S2#145 91-57-6

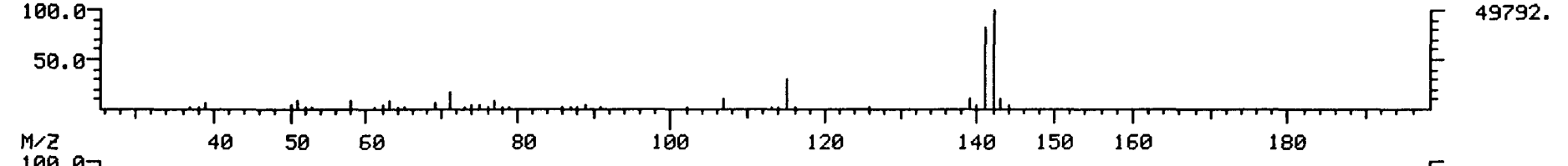
RAW DATA: 30068107 #652 BASE M/Z: 142 RIC: 144896.
08/31/98 21:59
SAMPLE: S-MM5-3 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M

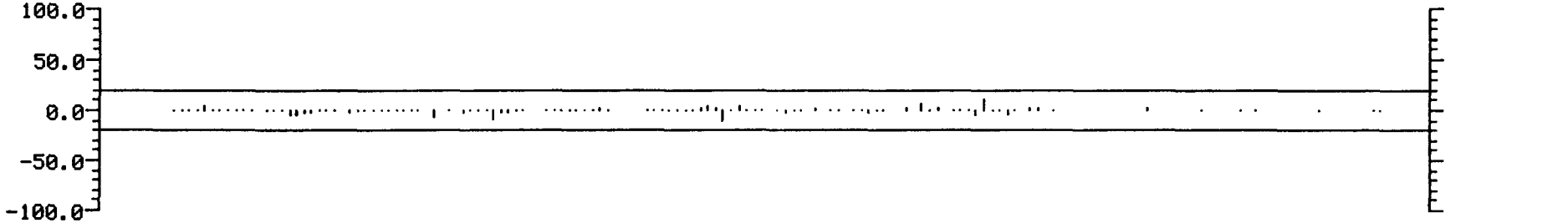


ENHANCED DATA: 30068107 #652 BASE M/Z: 142 RIC: 49600.



STANDARD FILE: ST16980831 #651 BASE M/Z: 142 RIC: 198144.
08/31/98 12:31





Data Reduced by: Q Date: 9/18/98 Data File: 30068107
Data Reviewed by: ___ Date: ___

QUANTERRA GC/MS TIC REPORT (Part 1)

Sample: S-MM5-3 1/3SA/100M INST. ID: F16
Analyst: DAT Date Analyzed: 08/31/98 21:59
Run Factor: 300.

#	SCAN	Concentration in Sample (UG/A)	CAS #	
1	444	10000.	1120-21-4	
	UNDECANE			or isomer
2	556	12000.	62108-23-0	
	DECANE, 2,5,6-TRIMETHYL-			or isomer
3	569	9900.	17301-23-4	
	UNDECANE, 2,6-DIMETHYL-			or isomer
4	616	11000.	00-00-0	E 700
	UNKNOWN			
X	621	7500.	2809-64-5	
	NAPHTHALENE, 1,2,3,4-TETRAHYDRO-5-METHYL-			or isomer
6	632	19000.	54105-67-8	
	HEPTADECANE, 2,6-DIMETHYL-			or isomer
7	653	13000.	~~69225-59-8~~	
	~~1,3-DIOXASPIRO[5.5]UNDECAN-9-ONE, 3,3-DIMETHYL-~~			Unknown 5700
8	663	19000.	2801-84-5	
	DECANE, 2,4-DIMETHYL-			or isomer
X	678	8100.	00-00-0	5700
	UNKNOWN			
10	700	9100.	00-00-0	
	UNKNOWN			

11 738 22000. ~~3891-98-3~~
~~DODECANE, 2,6,10-TRIMETHYL-~~ alkane 5746400

12 764 36000. ~~629-59-4~~
~~TETRADECANE~~

13 776 16000. 575-41-7
NAPHTHALENE, 1,3-DIMETHYL- or isomer

14 820 26000. 18344-37-1
HEPTADECANE, 2,6,10,14-TETRAMETHYL- or isomer

15 859 35000. 17312-57-1
DODECANE, 3-METHYL- or isomer

16 904 11000. ~~52783-43-4~~ 9/18/98
~~NONADECANOL~~ alkane

17 948 35000. 629-92-5
NONADECANE or isomer

18 988 22000. 629-92-5
NONADECANE

19 1036 46000. 54105-67-8
HEPTADECANE, 2,6-DIMETHYL-

~~20~~ 1054 7400. ~~34303-81-6~~
~~3-HEXADECENE, (Z)-~~ alkene 5720000

21 1114 14000. ~~29812-79-1~~
~~HYDROXYLAMINE, O-DECYL-~~ alkane

22 1119 17000. 629-92-5
NONADECANE or isomer

23 1191 9000. 629-92-5
NONADECANE or Isomer

24 1335 10000. 54105-67-8
HEPTADECANE, 2,6-DIMETHYL-

25 1402 8000. 629-92-5
NONADECANE

DATA FILE: 30068107

QUANTERRA GC/MS TIC REPORT (Part 2)

CONCENTRATION = AREA(TIC)*CONC(IS)/AREA(IS)

#	FIT	PURITY	INT. STD.	RT	RRT	AREA	HEIGHT	AMOUNT AS ANALYZED (UG/ML)	LIB	LIB #
1	990	746	2	4:56	0.536	283914.	85573.	33.684	NB	11607.
2	945	884	2	6:11	0.671	328256.	110848.	38.945	NB	19015.
3	979	888	2	6:19	0.686	277376.	87296.	32.908	NB	19054.
4	819	392	2	6:51	0.743	312896.	46976.	37.122	UK	1.
5	898	644	2	6:54	0.749	210688.	47232.	24.996	NB	8945.
6	945	794	2	7:01	0.762	538176.	133888.	63.850	NB	37462.
7	869	653	2	7:15	0.788	364315.	73034.	43.223	NB	22336.
8	966	848	2	7:22	0.800	544896.	138240.	64.647	NB	15356.
9	884	466	2	7:32	0.818	227072.	58419.	26.940	UK	1.
10	824	399	2	7:47	0.844	256768.	30080.	30.463	UK	1.
11	975	822	2	8:12	0.890	620928.	165376.	73.667	NB	25991.
12	951	723	2	8:29	0.922	1009280.	270848.	119.742	NB	22530.
13	958	638	2	8:37	0.936	451456.	64768.	53.561	NB	11625.
14	980	837	2	9:07	0.989	738048.	155392.	87.563	NB	42196.
15	960	803	2	9:33	1.036	993536.	249088.	117.874	NB	19007.
16	923	647	2	10:03	1.090	323072.	72192.	38.330	NB	40233.
17	948	843	2	10:32	1.144	969600.	241408.	115.034	NB	37465.
18	945	832	3	10:59	0.908	712448.	182016.	72.262	NB	37465.
19	976	875	3	11:31	0.952	1498370.	258304.	151.977	NB	37462.
20	914	722	3	11:43	0.969	243136.	57504.	24.661	NB	28768.
21	962	804	3	12:23	1.024	445568.	136192.	45.193	NB	15969.
22	964	839	3	12:26	1.028	572544.	170240.	58.072	NB	37465.
23	938	769	3	13:14	1.095	294144.	98688.	29.834	NB	37465.
24	890	720	4	14:50	0.860	194624.	47580.	33.353	NB	37462.
25	953	662	4	15:35	0.903	154880.	34688.	26.542	NB	37465.

Library Search Data: 30068107 # 444 Base m/z: 43
08/31/98 21:59:00 + 4:56 Cali: 30068107 # 3 RIC: 68608.
Sample: S-MM5-3 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
736 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	11607	UNDECANE
2	19015	DECANE, 2,5,6-TRIMETHYL-
3	8104	OCTANE, 3,5-DIMETHYL-
4	11602	OCTANE, 2,4,6-TRIMETHYL-
5	19016	UNDECANE, 4,7-DIMETHYL-
6	22530	TETRADECANE
7	14793	1-UNDECENE, 4-METHYL-
8	19013	DECANE, 2,5,9-TRIMETHYL-
9	5151	HEPTANE, 3,4-DIMETHYL-

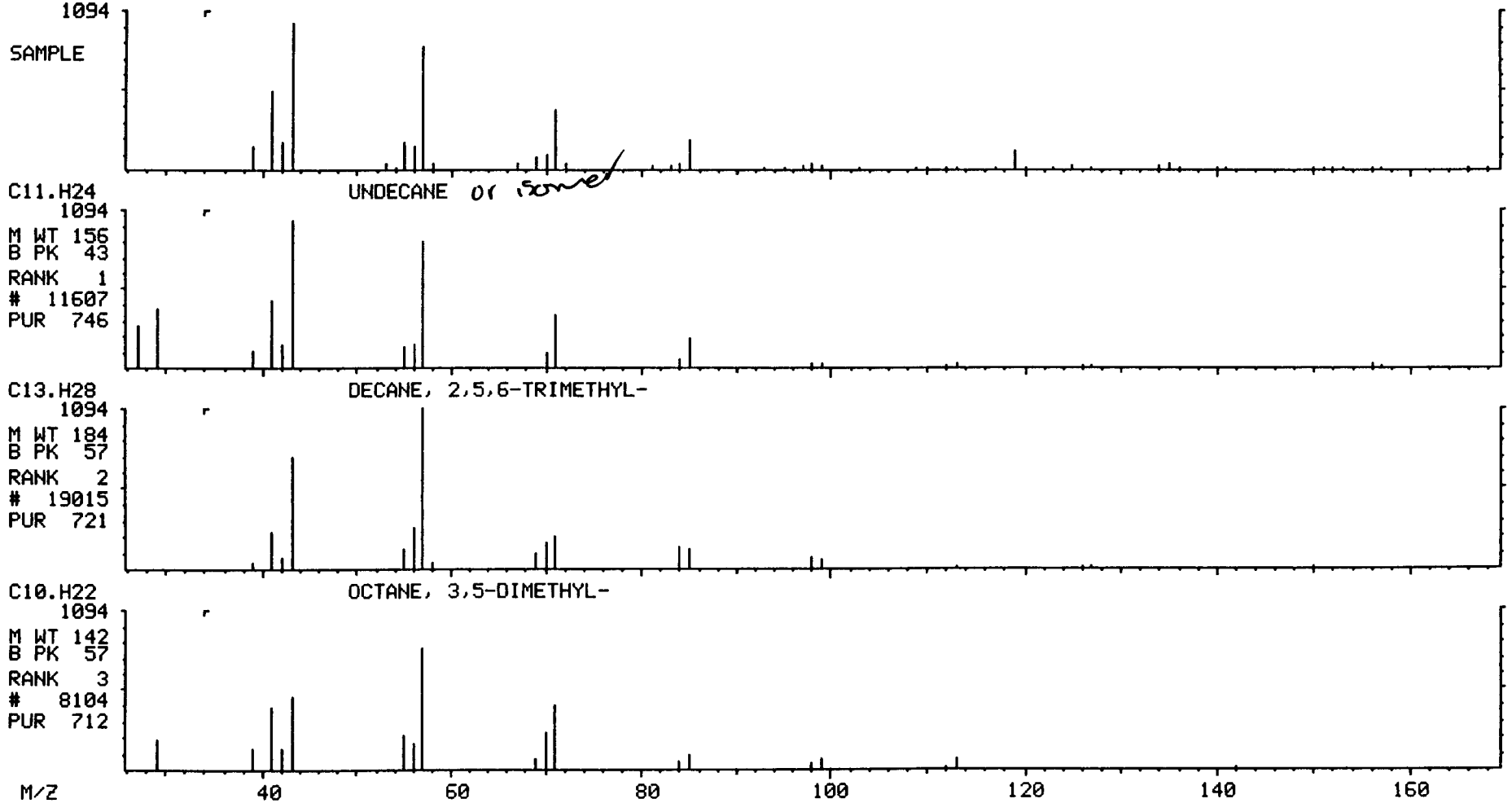
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C11.H24	156	43	746	990	749
2	C13.H28	184	57	721	933	723
3	C10.H22	142	57	712	938	718
4	C11.H24	156	57	708	958	708
5	C13.H28	184	43	704	942	710
6	C14.H30	198	43	702	913	755
7	C12.H24	168	43	699	921	735
8	C13.H28	184	57	697	924	697
9	C9.H20	128	43	695	915	697

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	1120-21-4
2	—	—	—	—	62108-23-0
3	—	—	—	—	15869-93-9
4	—	—	—	—	62016-37-9
5	—	—	—	—	17301-32-5
6	—	—	—	—	629-59-4
7	—	—	—	—	74630-39-0
8	—	—	—	—	62108-22-9
9	—	—	—	—	922-28-1

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:59:00 + 4:56
SAMPLE: S-MM5-3 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068107 # 444
CALI: 30068107 # 3

BASE M/Z: 43
RIC: 68608.



Library Search Data: 30068107 # 556 Base m/z: 43
08/31/98 21:59:00 + 6:11 Cali: 30068107 # 3 RIC: 96896.
Sample: S-MM5-3 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
206 matched at least 8 of the 16 largest peaks in the unknown

Rank	In.	Name
1	19015	DECANE, 2,5,6-TRIMETHYL-
2	11602	OCTANE, 2,4,6-TRIMETHYL-
3	19016	UNDECANE, 4,7-DIMETHYL-
4	8104	OCTANE, 3,5-DIMETHYL-
5	8089	NONANE, 2-METHYL-
6	5151	HEPTANE, 3,4-DIMETHYL-
7	19013	DECANE, 2,5,9-TRIMETHYL-
8	15353	2,6-DIMETHYLDECANE
9	8074	OCTANE, 2,7-DIMETHYL-

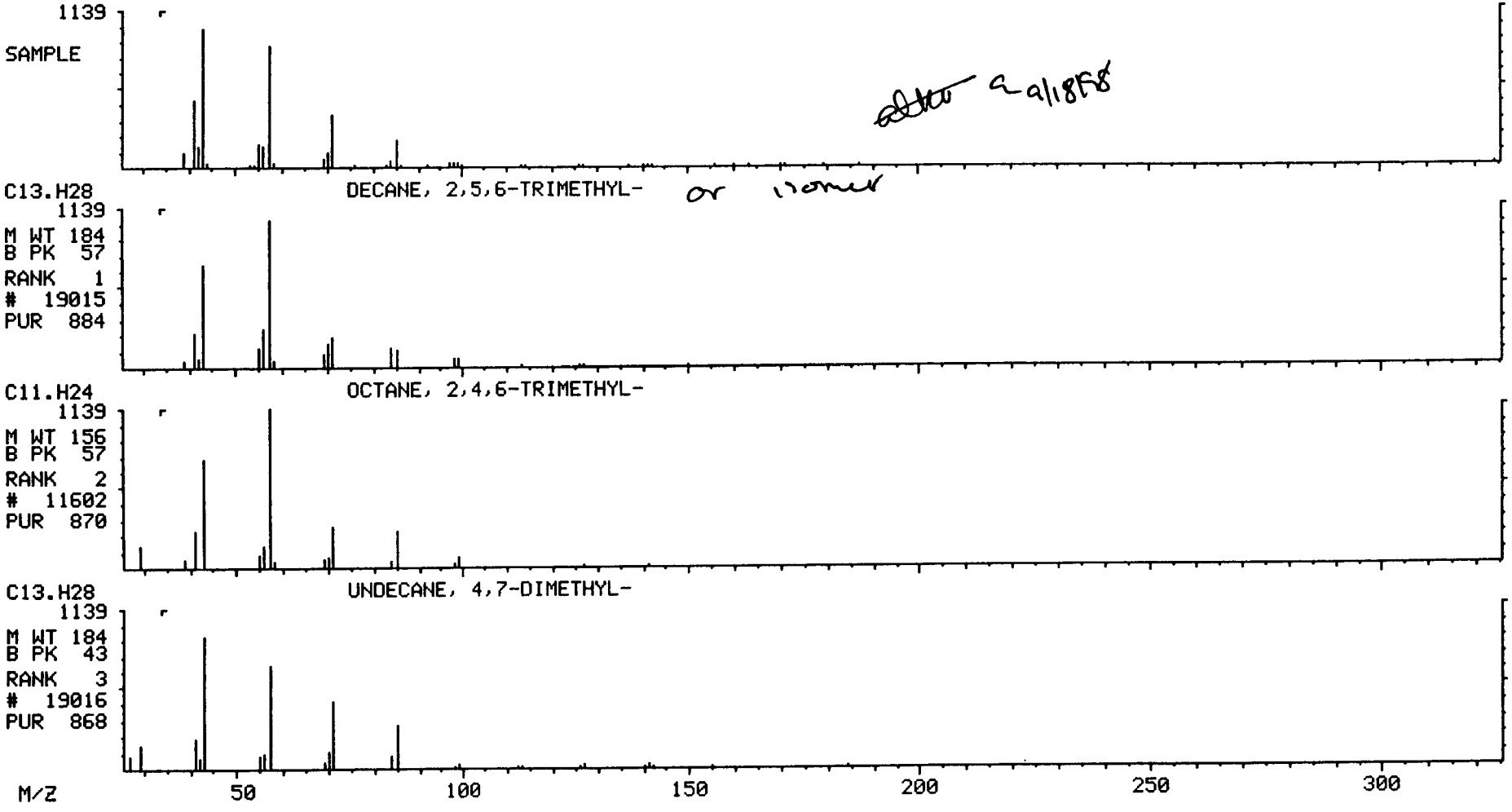
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C13.H28	184	57	884	945	885
2	C11.H24	156	57	870	971	870
3	C13.H28	184	43	868	952	874
4	C10.H22	142	57	858	934	866
5	C10.H22	142	43	853	951	856
6	C9.H20	128	43	845	923	848
7	C13.H28	184	57	840	926	850
8	C12.H26	170	43	837	893	878
9	C10.H22	142	43	836	923	836

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	62108-23-0
2	---	---	---	---	62016-37-9
3	---	---	---	---	17301-32-5
4	---	---	---	---	15869-93-9
5	---	---	---	---	871-83-0
6	---	---	---	---	922-28-1
7	---	---	---	---	62108-22-9
8	---	---	---	---	13150-81-7
9	---	---	---	---	1072-16-8

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:59:00 + 6:11
SAMPLE: S-MM5-3 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068107 # 556
CALI: 30068107 # 3

BASE M/Z: 43
RIC: 96896.



Library Search Data: 30068107 # 569 Base m/z: 57
08/31/98 21:59:00 + 6:20 Cali: 30068107 # 3 RIC: 76800.
Sample: S-MM5-3 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 158 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
860 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	19054	UNDECANE, 2,6-DIMETHYL-
2	19052	UNDECANE, 2,5-DIMETHYL-
3	19013	DECANE, 2,5,9-TRIMETHYL-
4	19002	DODECANE, 6-METHYL-
5	19026	DECANE, 2,6,8-TRIMETHYL-
6	8104	OCTANE, 3,5-DIMETHYL-
7	18996	UNDECANE, 3,6-DIMETHYL-
8	19004	UNDECANE, 4,6-DIMETHYL-
9	8099	OCTANE, 2,6-DIMETHYL-

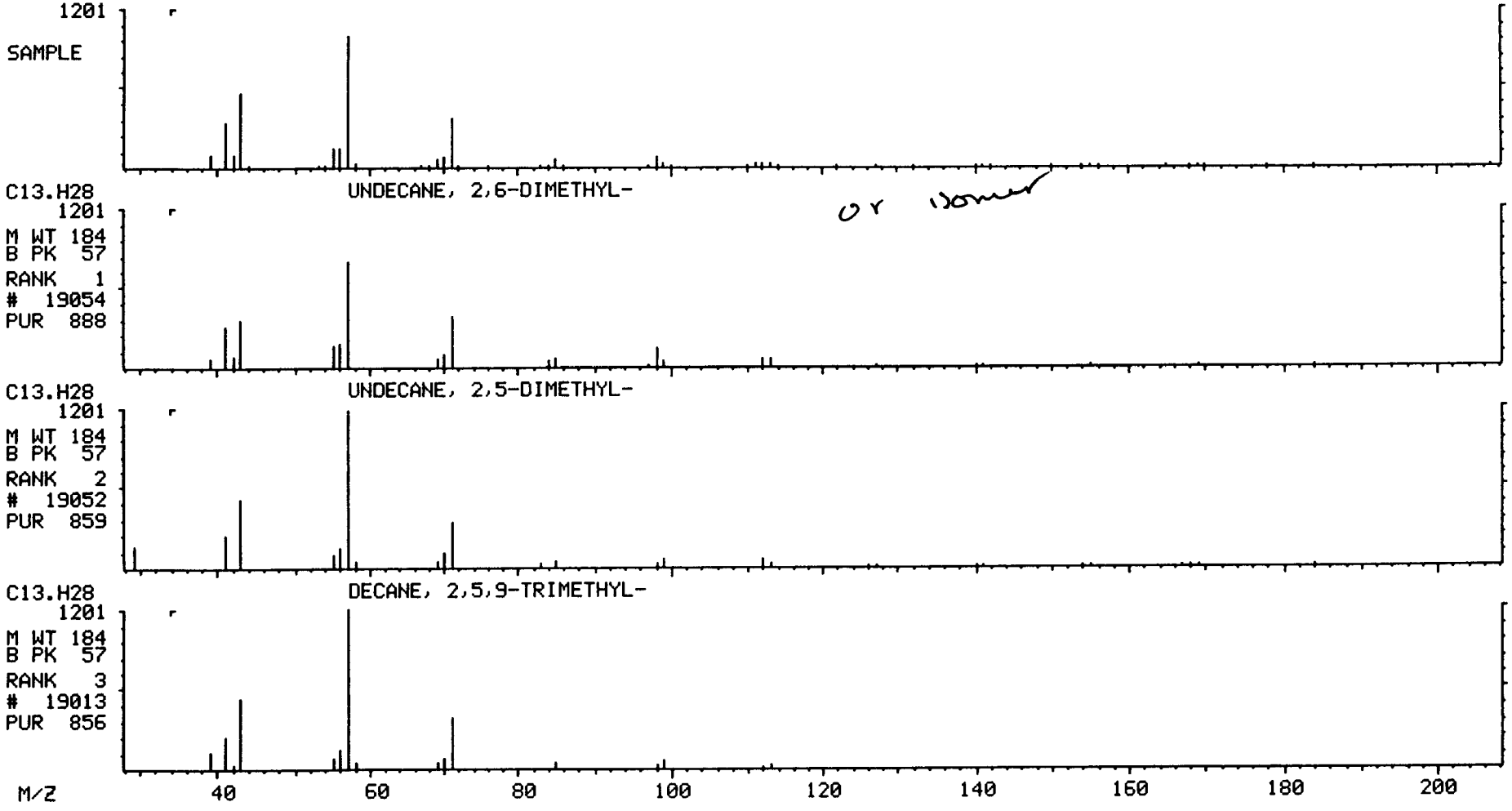
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C13.H28	184	57	888	979	888
2	C13.H28	184	57	859	975	862
3	C13.H28	184	57	856	975	856
4	C13.H28	184	57	854	972	857
5	C13.H28	184	57	850	968	855
6	C10.H22	142	57	842	960	842
7	C13.H28	184	57	831	967	834
8	C13.H28	184	57	824	959	824
9	C10.H22	142	57	823	946	829

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	17301-23-4
2	---	---	---	---	17301-22-3
3	---	---	---	---	62108-22-9
4	---	---	---	---	6044-71-9
5	---	---	---	---	62108-26-3
6	---	---	---	---	15869-93-9
7	---	---	---	---	17301-28-9
8	---	---	---	---	17312-82-2
9	---	---	---	---	2051-30-1

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:59:00 + 6:20
SAMPLE: S-MM5-3 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068107 # 569
CALI: 30068107 # 3

BASE M/Z: 57
RIC: 76800.



Library Search Data: 30068107 # 616 Base m/z: 131
08/31/98 21:59:00 + 6:51 Cali: 30068107 # 3 RIC: 35968.
Sample: S-MM5-3 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
789 matched at least 5 of the 16 largest peaks in the unknown

Rank	In.	Name
1	8953	7-ETHYLIDENEBICYCLO[4.2.1]NONA-2,4-DIENE
2	24994	1,1'-BICYCLOHEXYL, 2-(1-METHYLETHYL)-, TRANS-
3	8915	PROPANEDINITRILE, CYCLOHEXYLIDENE-
4	24993	1,1'-BICYCLOHEXYL, 2-(1-METHYLETHYL)-, CIS-
5	47544	BENZENE, 1,1'-[3-(3-CYCLOPENTYLPROPYL)-1,5-PENTANEDIYL]BIS-
6	8902	7,7-NORCARANEDICARBONITRILE, CIS-
7	33979	BORINIC ACID, DIETHYL-, 1-CYCLODODECEN-1-YL ESTER
8	24997	1,1'-BICYCLOHEXYL, 2-PROPYL-, TRANS-
9	16369	BENZENE, (3,3-DIMETHYL-4-PENTENYL)-

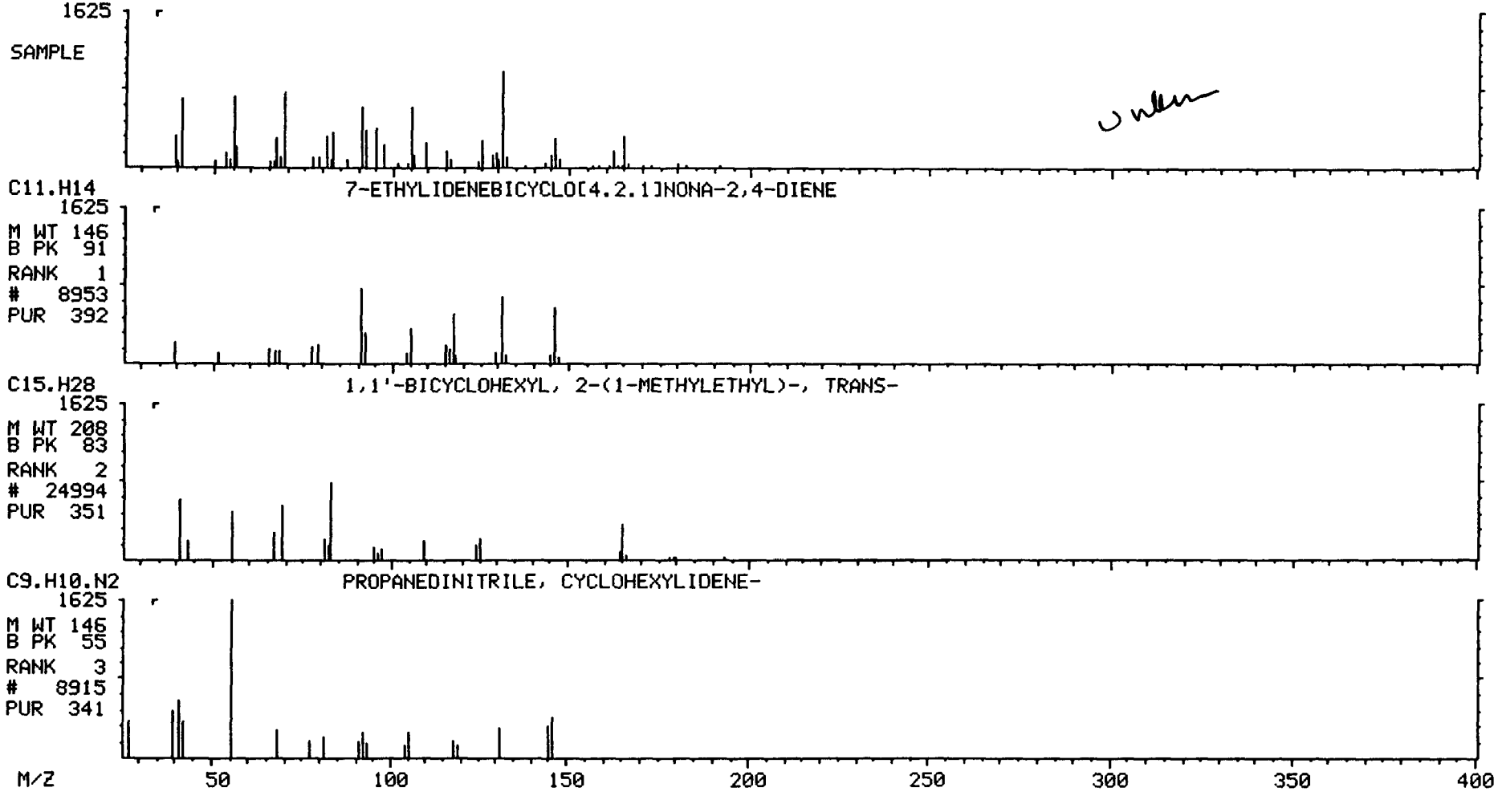
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C11.H14	146	91	392	819	456
2	C15.H28	208	83	351	876	365
3	C9.H10.N2	146	55	341	733	395
4	C15.H28	208	83	339	863	356
5	C25.H34	334	92	339	584	364
6	C9.H10.N2	146	55	335	722	388
7	C16.H31.O.B	250	83	327	845	365
8	C15.H28	208	41	313	765	332
9	C13.H18	174	104	312	647	334

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	94400-10-9
2	---	---	---	---	50991-16-7
3	---	---	---	---	4354-73-8
4	---	---	---	---	50991-15-6
5	---	---	---	---	55191-62-3
6	---	---	---	---	29782-28-3
7	---	---	---	---	61142-73-2
8	---	---	---	---	54934-89-3
9	---	---	---	---	61142-18-5

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:59:00 + 6:51
SAMPLE: S-MM5-3 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068107 # 616
CALI: 30068107 # 3

BASE M/Z: 131
RIC: 35968.



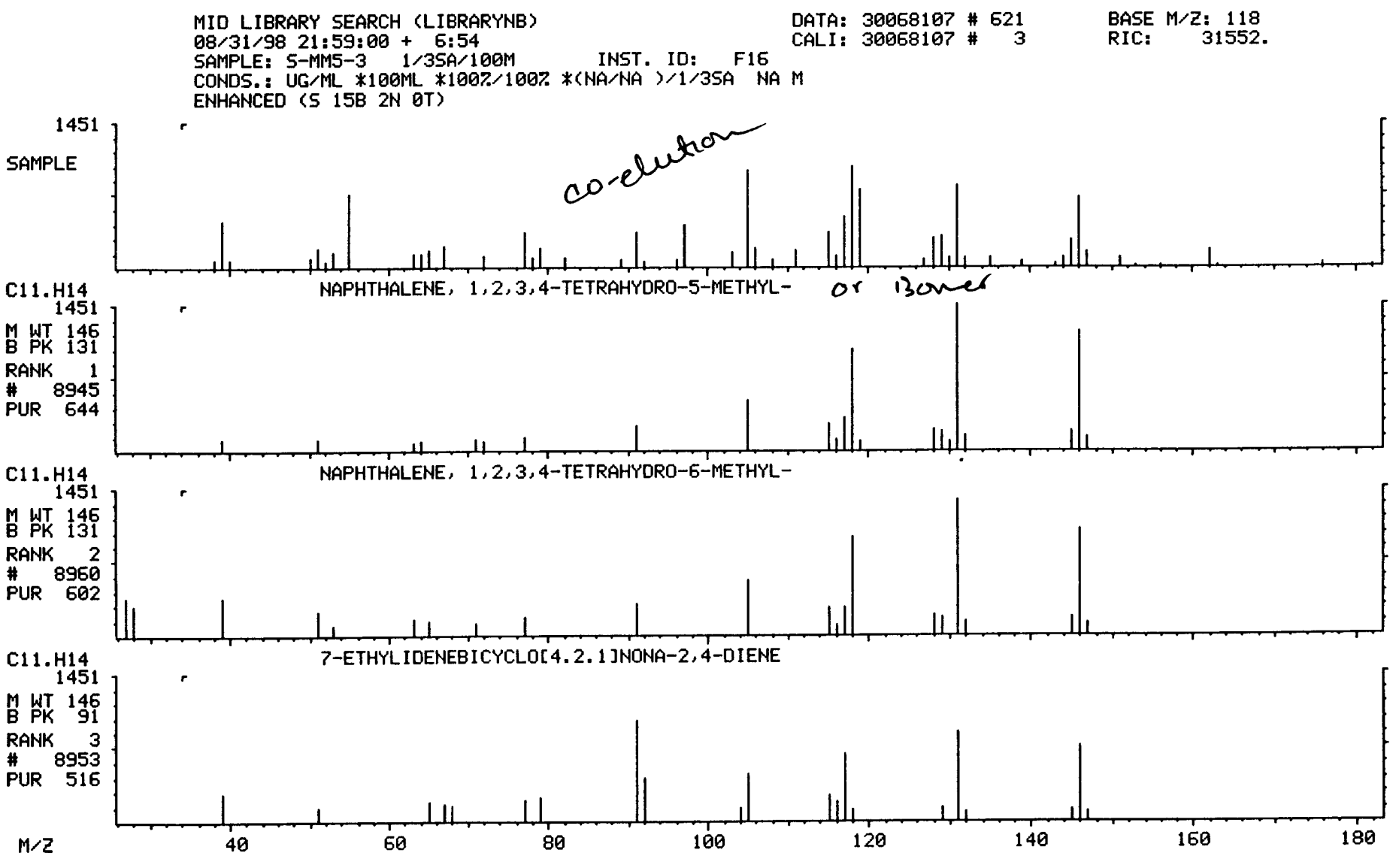
Library Search Data: 30068107 # 621 Base m/z: 118
08/31/98 21:59:00 + 6:54 Cali: 30068107 # 3 RIC: 31552.
Sample: S-MM5-3 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
740 matched at least 5 of the 16 largest peaks in the unknown

Rank	In.	Name
1	8945	NAPHTHALENE, 1,2,3,4-TETRAHYDRO-5-METHYL-
2	8960	NAPHTHALENE, 1,2,3,4-TETRAHYDRO-6-METHYL-
3	8953	7-ETHYLIDENEBICYCLO[4.2.1]NONA-2,4-DIENE
4	8929	NAPHTH[1,2-B]OXIRENE, 1A,2,3,7B-TETRAHYDRO-
5	8938	NAPHTHALENE, 1,2,3,4-TETRAHYDRO-1-METHYL-
6	8944	BENZENE, (1-METHYLENEBUTYL)-
7	8932	1(2H)-NAPHTHALENONE, 3,4-DIHYDRO-
8	8973	BENZENE, 2-ETHENYL-1,3,5-TRIMETHYL-
9	32808	BENZENE, (1-PROPYL-1-NONENYL)-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C11.H14	146	131	644	898	650
2	C11.H14	146	131	602	947	609
3	C11.H14	146	91	516	833	535
4	C10.H10.O	146	146	504	799	580
5	C11.H14	146	131	502	861	516
6	C11.H14	146	118	499	846	520
7	C10.H10.O	146	118	489	767	547
8	C11.H14	146	131	488	871	492
9	C18.H28	244	118	484	696	605

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	2809-64-5
2	—	—	—	—	1680-51-9
3	—	—	—	—	94400-10-9
4	—	—	—	—	2461-34-9
5	—	—	—	—	1559-81-5
6	—	—	—	—	5676-32-4
7	—	—	—	—	529-34-0
8	—	—	—	—	769-25-5
9	—	—	—	—	54986-39-9


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:59:00 + 6:54
SAMPLE: S-MM5-3 1/35A/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068107 # 621
CALI: 30068107 # 3
BASE M/Z: 118
RIC: 31552.
1451
SAMPLE
co-elution
C11.H14
NAPHTHALENE, 1,2,3,4-TETRAHYDRO-5-METHYL-
or Boner
1451
M WT 146
B PK 131
RANK 1
8945
PUR 644
C11.H14
NAPHTHALENE, 1,2,3,4-TETRAHYDRO-6-METHYL-
1451
M WT 146
B PK 131
RANK 2
8960
PUR 602
C11.H14
7-ETHYLIDENEBICYCLO[4.2.1]NONA-2,4-DIENE
1451
M WT 146
B PK 91
RANK 3
8953
PUR 516
M/Z
40
60
80
100
120
140
160
180

117

Library Search Data: 30068107 # 632 Base m/z: 57
08/31/98 21:59:00 + 7:02 Cali: 30068107 # 3 RIC: 116992.
Sample: S-MM5-3 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
323 matched at least 8 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37462	HEPTADECANE, 2,6-DIMETHYL-
2	22534	TRIDECANE, 7-METHYL-
3	14799	1-DECENE, 3,4-DIMETHYL-
4	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
5	22535	DODECANE, 4,6-DIMETHYL-
6	15353	2,6-DIMETHYLDECANE
7	19023	DECANE, 2,6,7-TRIMETHYL-
8	19523	1-DECANOL, 2-ETHYL-
9	25994	DODECANE, 2,6,11-TRIMETHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	794	945	819
2	C14.H30	198	57	787	937	790
3	C12.H24	168	57	769	948	770
4	C21.H44	296	57	766	928	787
5	C14.H30	198	57	763	945	765
6	C12.H26	170	43	762	927	762
7	C13.H28	184	57	762	969	762
8	C12.H26.O	186	57	760	935	764
9	C15.H32	212	57	758	956	760

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	54105-67-8
2	---	---	---	---	26730-14-3
3	---	---	---	---	50871-03-9
4	---	---	---	---	18344-37-1
5	---	---	---	---	61141-72-8
6	---	---	---	---	13150-81-7
7	---	---	---	---	62108-25-2
8	---	---	---	---	21078-65-9
9	---	---	---	---	31295-56-4

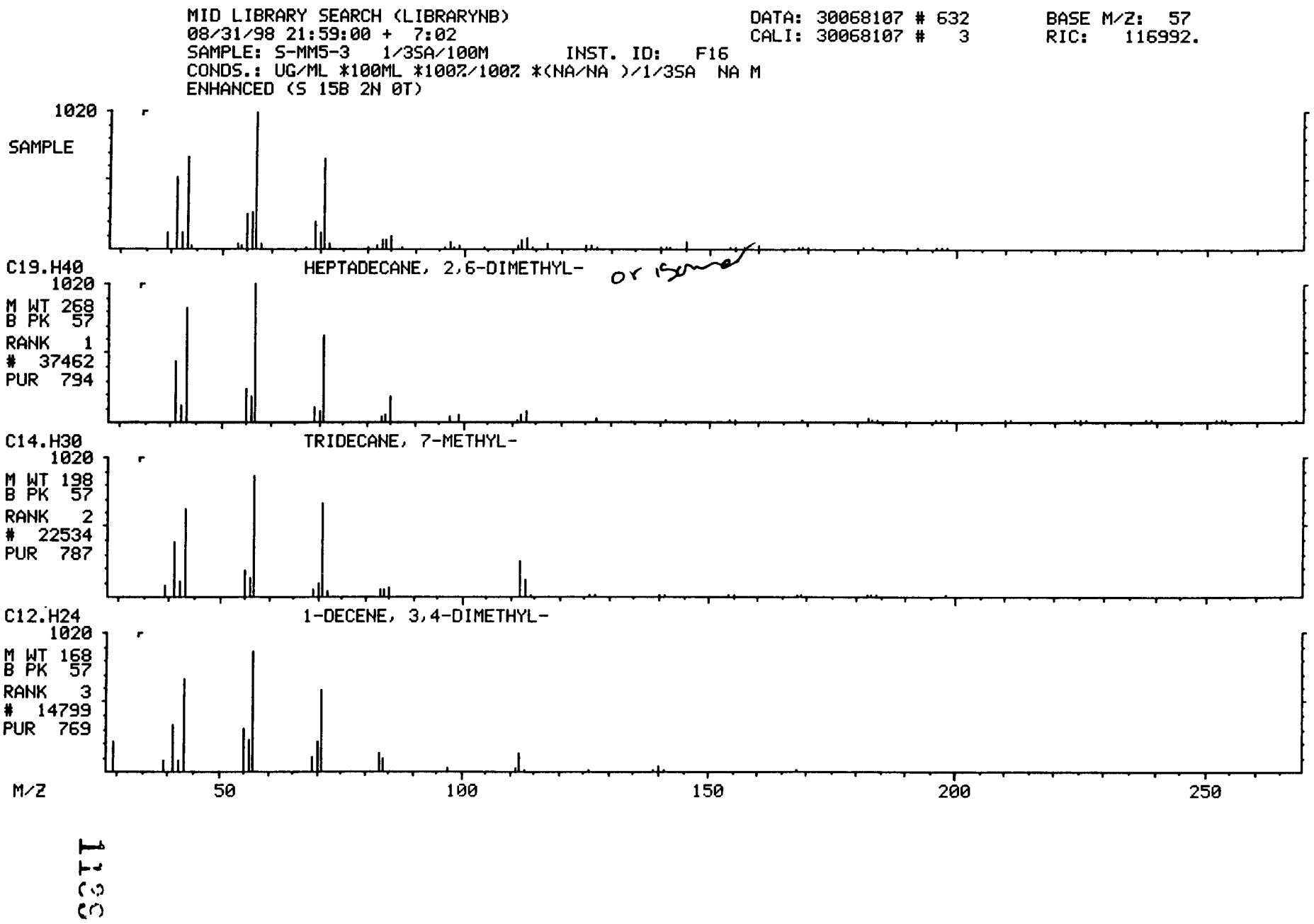

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:59:00 + 7:02
SAMPLE: S-MM5-3 1/3SA/100M
INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068107 # 632
CALI: 30068107 # 3
BASE M/Z: 57
RIC: 116992.
1020
SAMPLE
C19.H40
HEPTADECANE, 2,6-DIMETHYL-
or isomer
M WT 268
B PK 57
RANK 1
37462
PUR 794
C14.H30
TRIDECANE, 7-METHYL-
M WT 198
B PK 57
RANK 2
22534
PUR 787
C12.H24
1-DECENE, 3,4-DIMETHYL-
M WT 168
B PK 57
RANK 3
14799
PUR 769
M/Z
50
100
150
200
250

Fig 3

Library Search Data: 30068107 # 653 Base m/z: 142
08/31/98 21:59:00 + 7:16 Cali: 30068107 # 3 RIC: 73600.
Sample: S-MM5-3 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
439 matched at least 7 of the 16 largest peaks in the unknown

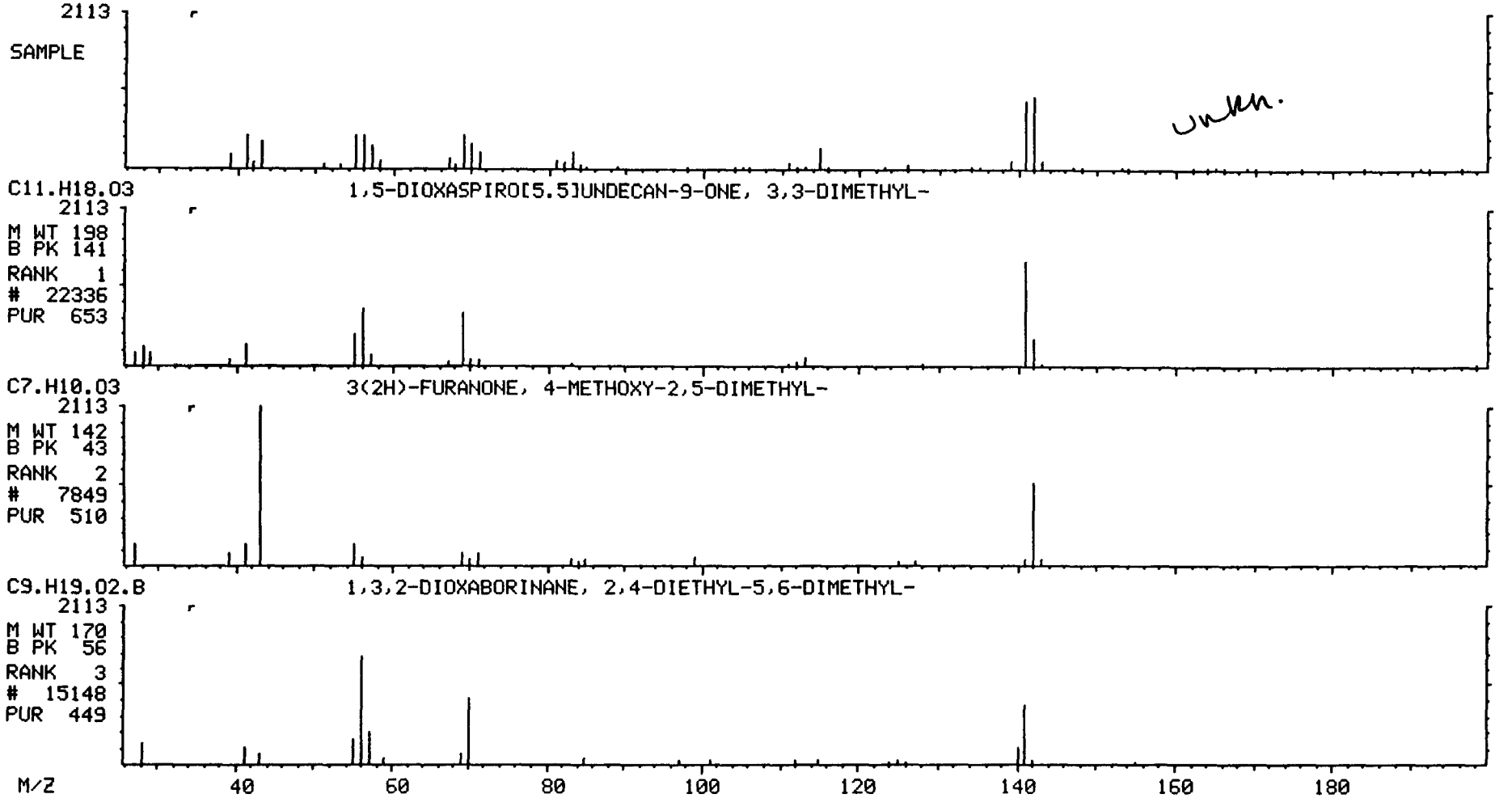
Rank	In.	Name
1	22336	1,5-DIOXASPIRO[5.5]UNDECAN-9-ONE, 3,3-DIMETHYL-
2	7849	3(2H)-FURANONE, 4-METHOXY-2,5-DIMETHYL-
3	15148	1,3,2-DIOXABORINANE, 2,4-DIETHYL-5,6-DIMETHYL-
4	27506	DECANE, 3-BROMO-
5	22434	CYCLOHEXANECARBOXYLIC ACID, 1-BUTYL-, METHYL ESTER
6	11522	HEPTANE, 3-[(ETHENYLOXY)METHYL]-
7	32423	HEPTANE, 3,3'-[OXYBIS(METHYLENE)]BIS-
8	14759	CYCLOPROPANE, 1-(2-METHYLBUTYL)-1-(1-METHYLPROPYL)-
9	42522	DECANE, 1,1'-OXYBIS-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C11.H18.O3	198	141	653	869	657
2	C7.H10.O3	142	43	510	706	544
3	C9.H19.O2.B	170	56	449	623	528
4	C10.H21.BR	220	57	434	600	444
5	C12.H22.O2	198	83	406	634	494
6	C10.H20.O	156	57	400	556	421
7	C16.H34.O	242	57	387	537	407
8	C12.H24	168	57	364	491	394
9	C20.H42.O	298	43	358	643	406

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	69225-59-8
2	—	—	—	—	4077-47-8
3	—	—	—	—	74744-56-2
4	—	—	—	—	30571-71-2
5	—	—	—	—	7362-81-4
6	—	—	—	—	103-44-6
7	—	—	—	—	10143-60-9
8	—	—	—	—	64723-36-0
9	—	—	—	—	2456-28-2

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:59:00 + 7:16
SAMPLE: S-MM5-3 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068107 # 653 BASE M/Z: 142
CALI: 30068107 # 3 RIC: 73600.



1143

Library Search Data: 30068107 # 663 Base m/z: 57
08/31/98 21:59:00 + 7:22 Cali: 30068107 # 3 RIC: 119168.
Sample: S-MM5-3 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
372 matched at least 8 of the 16 largest peaks in the unknown

Rank	In.	Name
1	15356	DECANE, 2,4-DIMETHYL-
2	19016	UNDECANE, 4,7-DIMETHYL-
3	19015	DECANE, 2,5,6-TRIMETHYL-
4	11602	OCTANE, 2,4,6-TRIMETHYL-
5	8104	OCTANE, 3,5-DIMETHYL-
6	15359	UNDECANE, 5-METHYL-
7	18985	TRIDECANE
8	19013	DECANE, 2,5,9-TRIMETHYL-
9	19026	DECANE, 2,6,8-TRIMETHYL-

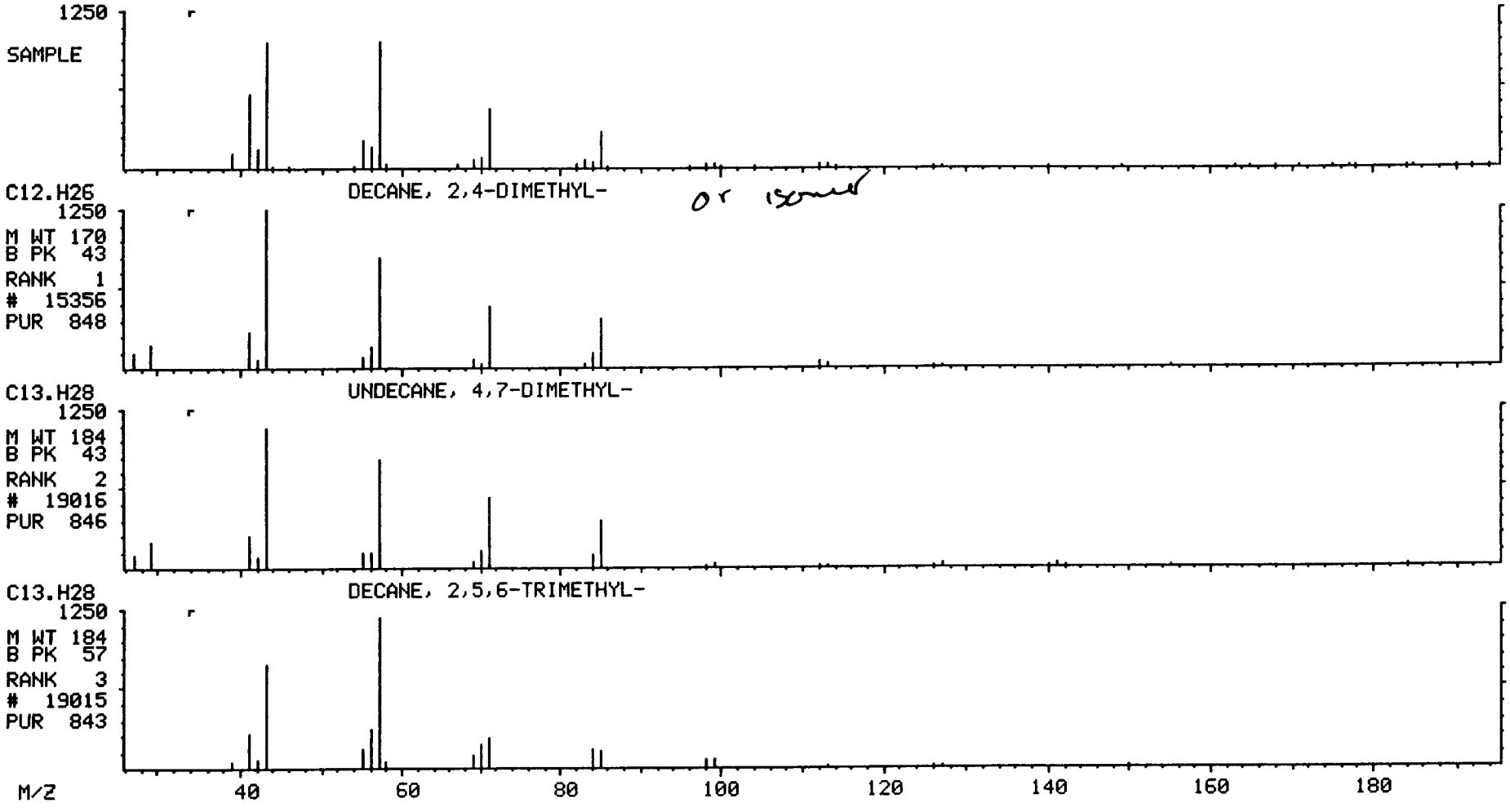
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C12.H26	170	43	848	966	849
2	C13.H28	184	43	846	941	861
3	C13.H28	184	57	843	937	843
4	C11.H24	156	57	836	971	837
5	C10.H22	142	57	836	938	844
6	C12.H26	170	43	835	953	840
7	C13.H28	184	57	831	950	846
8	C13.H28	184	57	826	935	826
9	C13.H28	184	57	824	930	841

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	2801-84-5
2	---	---	---	---	17301-32-5
3	---	---	---	---	62108-23-0
4	---	---	---	---	62016-37-9
5	---	---	---	---	15869-93-9
6	---	---	---	---	1632-70-8
7	---	---	---	---	629-50-5
8	---	---	---	---	62108-22-9
9	---	---	---	---	62108-26-3

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:59:00 + 7:22
SAMPLE: S-MM5-3 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068107 # 663
CALI: 30068107 # 3

BASE M/Z: 57
RIC: 119168.



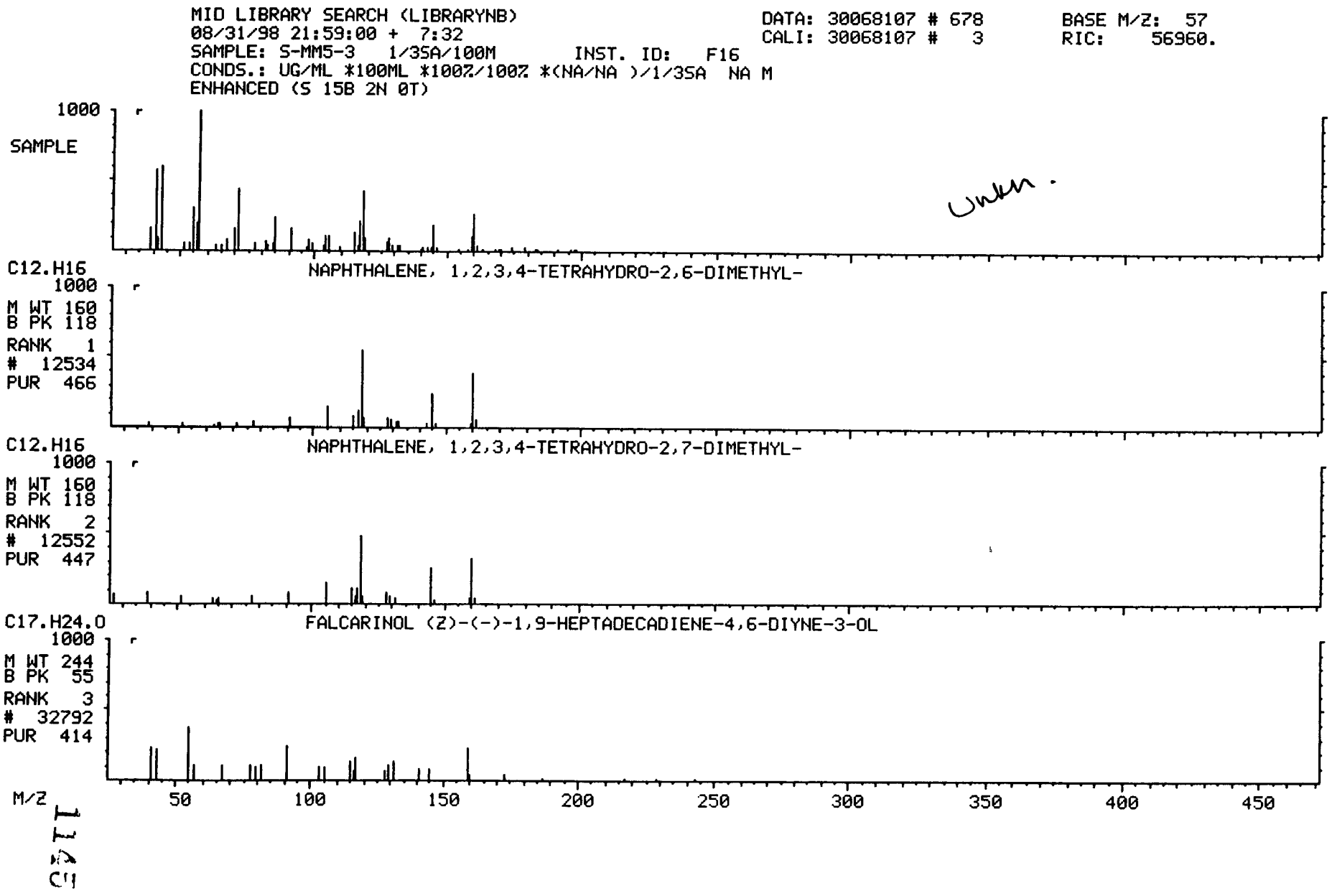
Library Search Data: 30068107 # 678 Base m/z: 57
08/31/98 21:59:00 + 7:32 Cali: 30068107 # 3 RIC: 56960.
Sample: S-MM5-3 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
427 matched at least 6 of the 16 largest peaks in the unknown

Rank	In.	Name
1	12534	NAPHTHALENE, 1,2,3,4-TETRAHYDRO-2,6-DIMETHYL-
2	12552	NAPHTHALENE, 1,2,3,4-TETRAHYDRO-2,7-DIMETHYL-
3	32792	FALCARINOL (Z)-(-)-1,9-HEPTADECADIENE-4,6-DIYNE-3-OL
4	12526	1,4-DIMETHYL-1,2,3,4-TETRAHYDRONAPHTHALENE
5	30843	4,4,6-TRIMETHYL-6-PHENYLTETRAHYDRO-1,3-OXAZINE-2-THIONE
6	5159	NONANE
7	30039	BENZENE, (4-METHYL-1-DECENYL)-
8	12576	1H-INDENE, 1-ETHYL-2,3-DIHYDRO-1-METHYL-
9	37251	1-IODO-2-METHYLNONANE

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C12.H16	160	118	466	884	468
2	C12.H16	160	118	447	959	450
3	C17.H24.O	244	55	414	733	449
4	C12.H16	160	118	400	914	418
5	C13.H17.O.N.S	235	118	398	744	492
6	C9.H20	128	43	394	945	394
7	C17.H26	230	104	389	615	444
8	C12.H16	160	131	387	669	387
9	C10.H21.I	268	43	385	923	401

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	7524-63-2
2	---	---	---	---	13065-07-1
3	---	---	---	---	- -
4	---	---	---	---	- -
5	---	---	---	---	- -
6	---	---	---	---	111-84-2
7	---	---	---	---	62337-88-6
8	---	---	---	---	56298-75-0
9	---	---	---	---	- -


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:59:00 + 7:32
SAMPLE: S-MM5-3 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068107 # 678
CALI: 30068107 # 3
BASE M/Z: 57
RIC: 56960.
1000
SAMPLE
Unkn.
C12.H16
NAPHTHALENE, 1,2,3,4-TETRAHYDRO-2,6-DIMETHYL-
1000
M WT 160
B PK 118
RANK 1
12534
PUR 466
C12.H16
NAPHTHALENE, 1,2,3,4-TETRAHYDRO-2,7-DIMETHYL-
1000
M WT 160
B PK 118
RANK 2
12552
PUR 447
C17.H24.O
FALCARINOL (Z)-(-)-1,9-HEPTADECADIENE-4,6-DIYNE-3-OL
1000
M WT 244
B PK 55
RANK 3
32792
PUR 414
M/Z
50
100
150
200
250
300
350
400
450

Library Search Data: 30068107 # 700 Base m/z: 81
08/31/98 21:59:00 + 7:47 Cali: 30068107 # 3 RIC: 28224.
Sample: S-MM5-3 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
897 matched at least 4 of the 16 largest peaks in the unknown

Rank	In.	Name
1	12534	NAPHTHALENE, 1,2,3,4-TETRAHYDRO-2,6-DIMETHYL-
2	12552	NAPHTHALENE, 1,2,3,4-TETRAHYDRO-2,7-DIMETHYL-
3	12536	BIPHENYLENE, 1,2,3,6,7,8,8A,8B-OCTAHYDRO-, TRANS-
4	41258	6,9-OCTADECADIYNOIC ACID, METHYL ESTER
5	12526	1,4-DIMETHYL-1,2,3,4-TETRAHYDRONAPHTHALENE
6	12577	BENZENE, 4-(2-BUTENYL)-1,2-DIMETHYL-, (E)-
7	12573	NAPHTHALENE, 1,2,3,4-TETRAHYDRO-1,5-DIMETHYL-
8	16368	BENZENE, (2,2-DIMETHYLCYCLOPENTYL)-
9	12557	NAPHTHALENE, 1,2,3,4-TETRAHYDRO-6,7-DIMETHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C12.H16	160	118	399	824	438
2	C12.H16	160	118	399	841	442
3	C12.H16	160	91	399	804	447
4	C19.H30.O2	290	91	371	638	516
5	C12.H16	160	118	363	839	413
6	C12.H16	160	145	352	703	417
7	C12.H16	160	145	349	734	383
8	C13.H18	174	104	335	688	399
9	C12.H16	160	145	329	738	369

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	7524-63-2
2	---	---	---	---	13065-07-1
3	---	---	---	---	28229-15-4
4	---	---	---	---	56847-03-1
5	---	---	---	---	- -
6	---	---	---	---	54340-86-2
7	---	---	---	---	21564-91-0
8	---	---	---	---	19960-99-7
9	---	---	---	---	1076-61-5

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:59:00 + 7:47
SAMPLE: S-MM5-3 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068107 # 700
CALI: 30068107 # 3

BASE M/Z: 81
RIC: 28224.

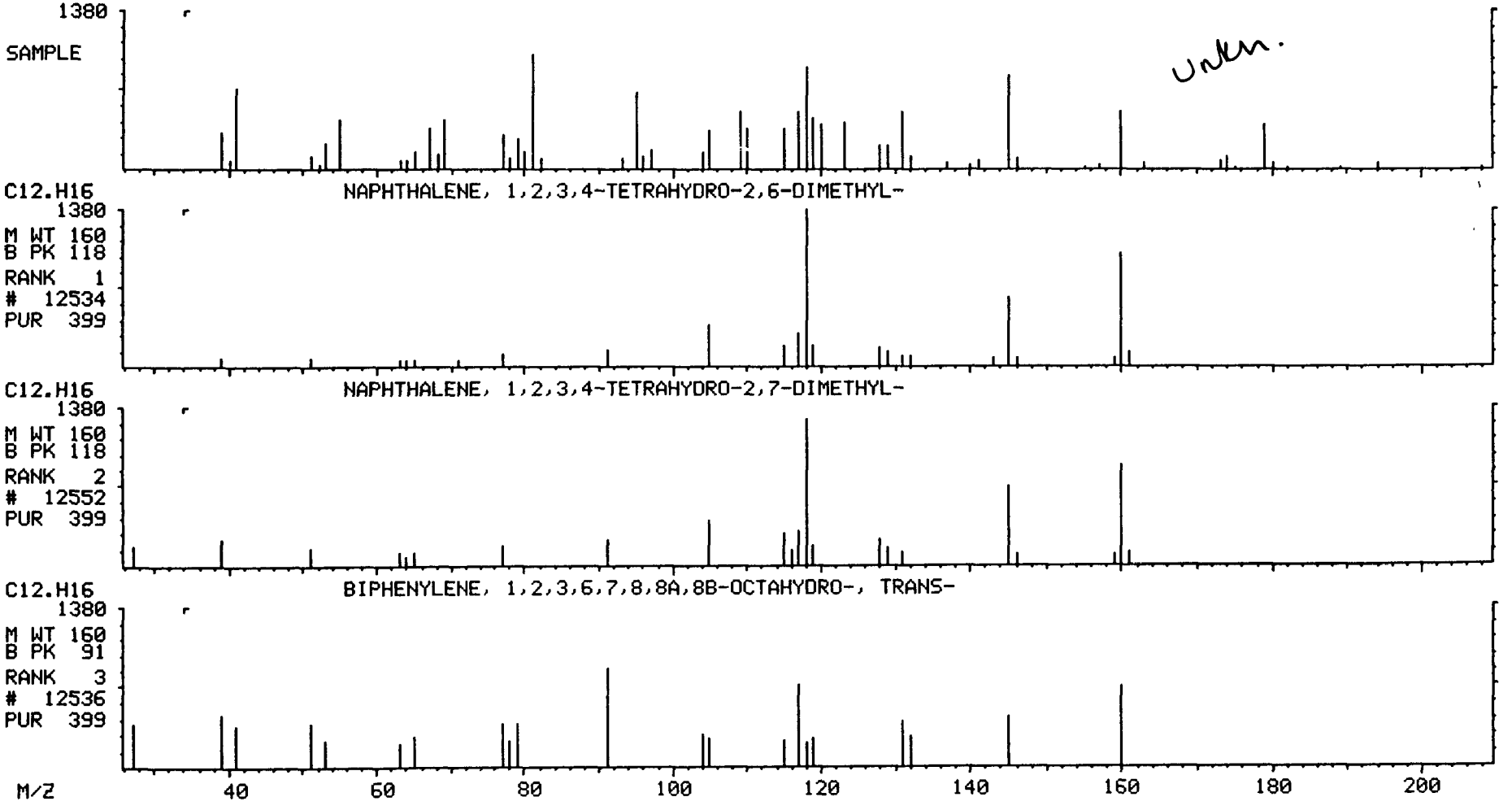


Fig 1

Library Search Data: 30068107 # 738 Base m/z: 57
08/31/98 21:59:00 + 8:13 Cali: 30068107 # 3 RIC: 147968.
Sample: S-MM5-3 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
712 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	25991	DODECANE, 2,6,10-TRIMETHYL-
2	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
3	26001	DODECANE, 2,7,10-TRIMETHYL-
4	37462	HEPTADECANE, 2,6-DIMETHYL-
5	22535	DODECANE, 4,6-DIMETHYL-
6	25997	PENTADECANE
7	25994	DODECANE, 2,6,11-TRIMETHYL-
8	22530	TETRADECANE
9	15352	UNDECANE, 2-METHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C15.H32	212	57	822	975	823
2	C21.H44	296	57	821	940	842
3	C15.H32	212	57	816	988	816
4	C19.H40	268	57	814	941	838
5	C14.H30	198	57	812	955	812
6	C15.H32	212	57	806	942	821
7	C15.H32	212	57	804	977	807
8	C14.H30	198	43	791	922	803
9	C12.H26	170	43	790	942	796

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	3891-98-3
2	---	---	---	---	18344-37-1
3	---	---	---	---	74645-98-0
4	---	---	---	---	54105-67-8
5	---	---	---	---	61141-72-8
6	---	---	---	---	629-62-9
7	---	---	---	---	31295-56-4
8	---	---	---	---	629-59-4
9	---	---	---	---	7045-71-8

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:59:00 + 8:13
SAMPLE: S-MM5-3 1/35A/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068107 # 738
CALI: 30068107 # 3

BASE M/Z: 57
RIC: 147968.

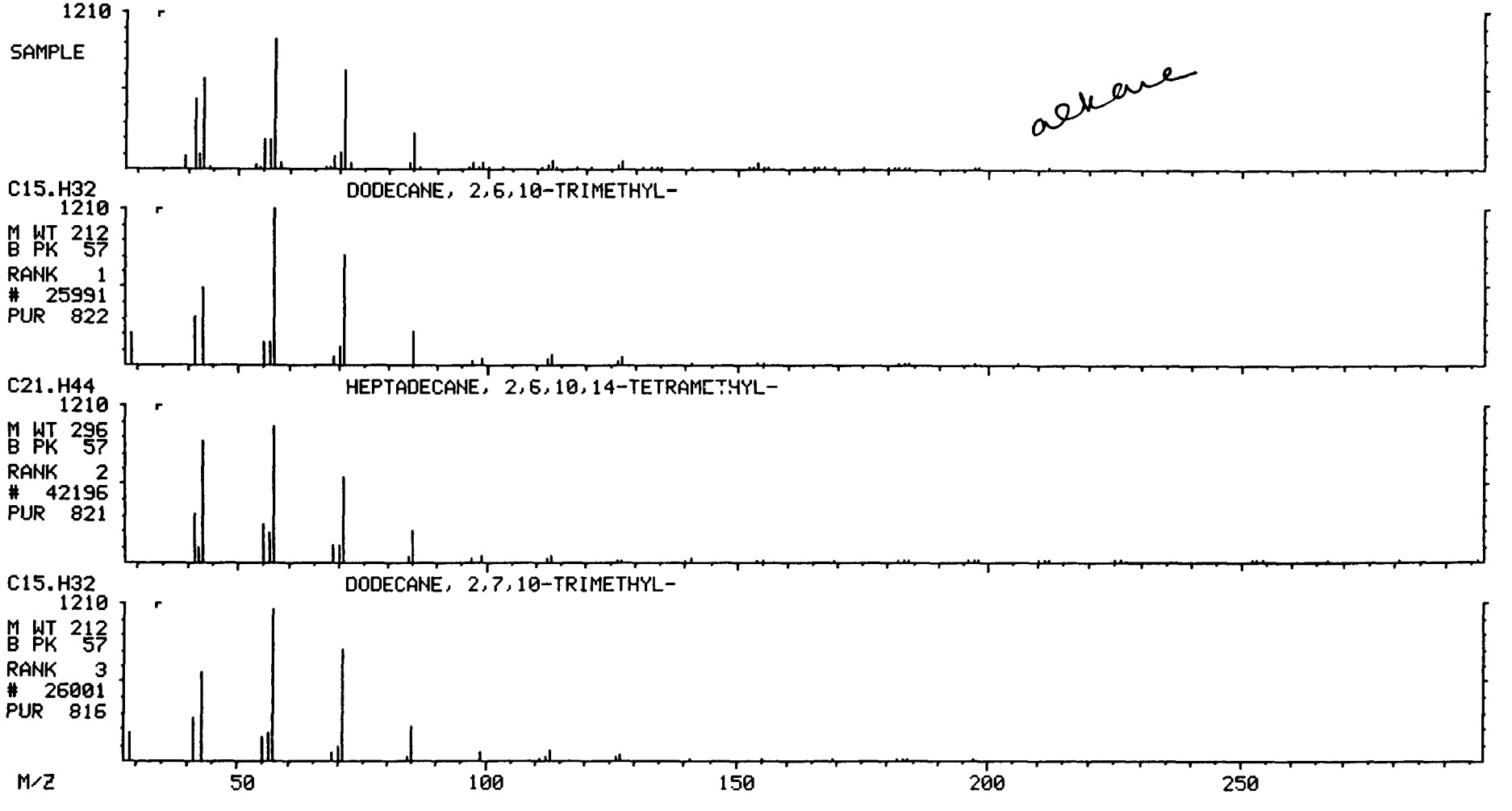


Fig. 7.4 (c)

Library Search Data: 30068107 # 764 Base m/z: 43
08/31/98 21:59:00 + 8:30 Cali: 30068107 # 3 RIC: 227584.
Sample: S-MM5-3 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
672 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	22530	TETRADECANE
2	19006	DECANE, 6-ETHYL-2-METHYL-
3	19007	DODECANE, 3-METHYL-
4	11612	NONANE, 2,5-DIMETHYL-
5	11607	UNDECANE
6	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
7	39681	1-IODOUNDECANE
8	18990	UNDECANE, 2,9-DIMETHYL-
9	37252	DECANE, 1-IODO-

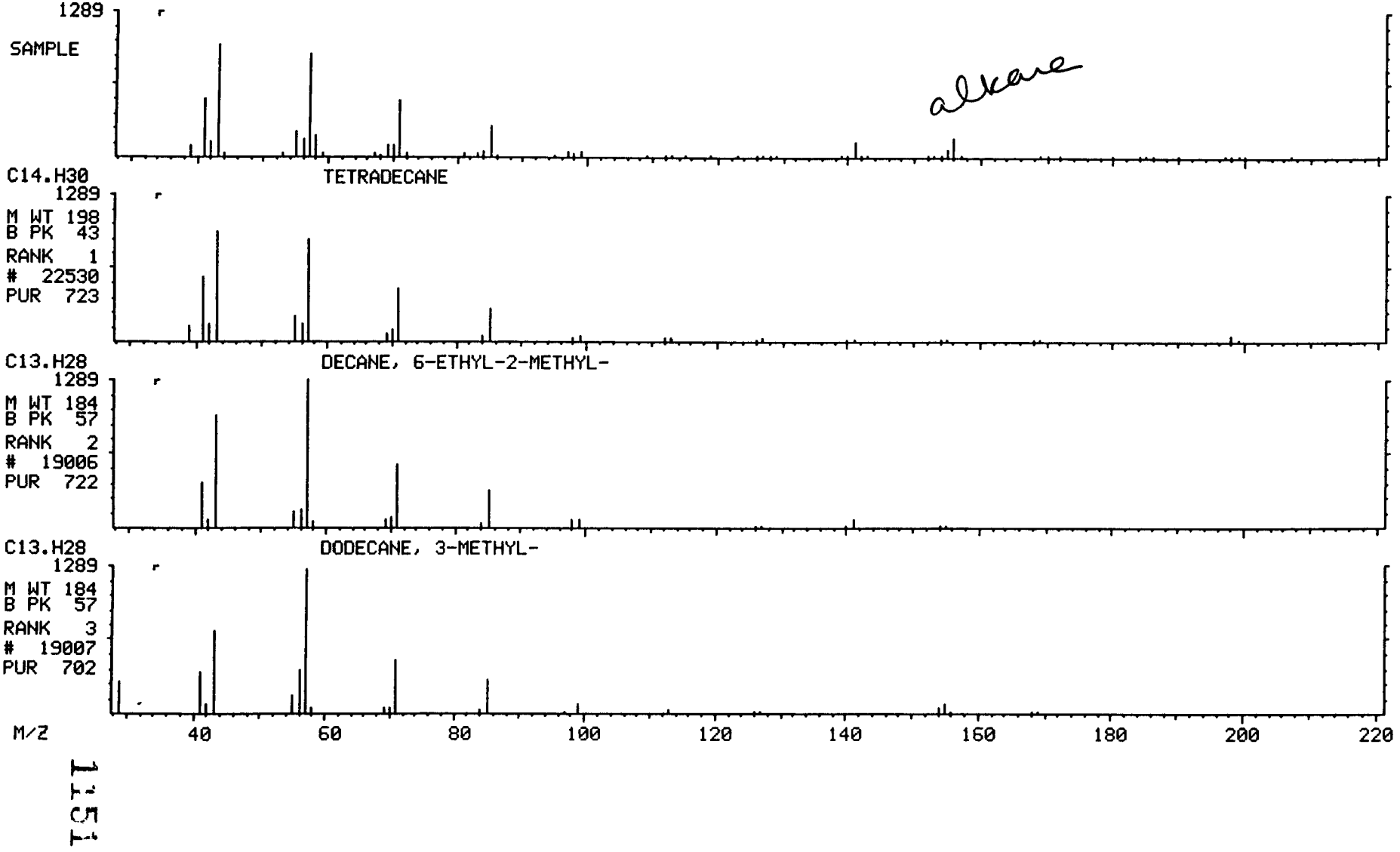
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C14.H30	198	43	723	951	726
2	C13.H28	184	57	722	956	722
3	C13.H28	184	57	702	896	702
4	C11.H24	156	57	701	861	701
5	C11.H24	156	43	698	966	698
6	C21.H44	296	57	688	915	715
7	C11.H23.I	282	57	688	860	694
8	C13.H28	184	57	688	867	688
9	C10.H21.I	268	57	686	883	691

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	629-59-4
2	---	---	---	---	62108-21-8
3	---	---	---	---	17312-57-1
4	---	---	---	---	17302-27-1
5	---	---	---	---	1120-21-4
6	---	---	---	---	18344-37-1
7	---	---	---	---	4282-44-4
8	---	---	---	---	17301-26-7
9	---	---	---	---	2050-77-3

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:59:00 + 8:30
SAMPLE: S-MM5-3 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068107 # 764
CALI: 30068107 # 3

BASE M/Z: 43
RIC: 227584.



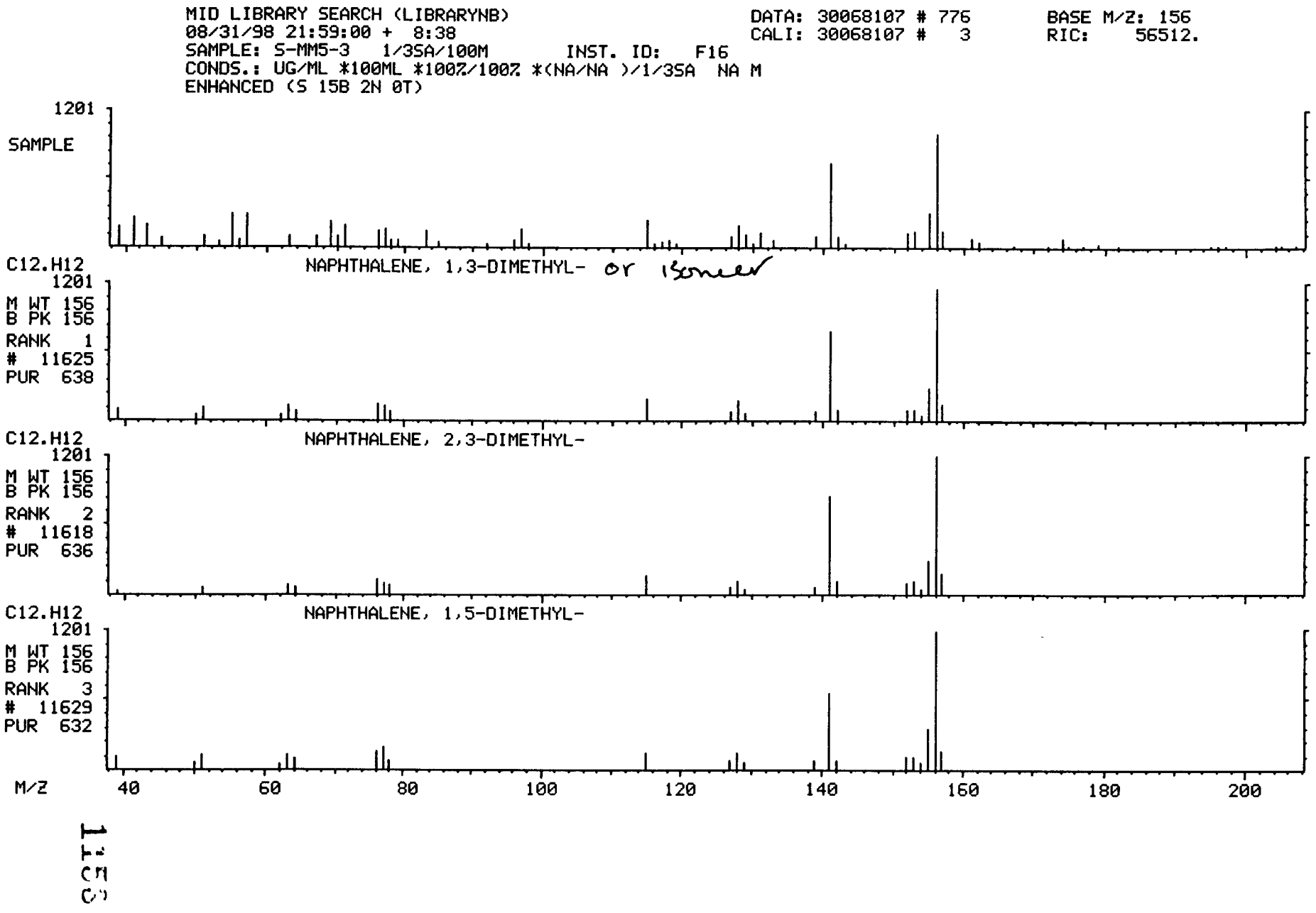
Library Search Data: 30068107 # 776 Base m/z: 156
08/31/98 21:59:00 + 8:38 Cali: 30068107 # 3 RIC: 56512.
Sample: S-MM5-3 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
277 matched at least 5 of the 16 largest peaks in the unknown

Rank	In.	Name
1	11625	NAPHTHALENE, 1,3-DIMETHYL-
2	11618	NAPHTHALENE, 2,3-DIMETHYL-
3	11629	NAPHTHALENE, 1,5-DIMETHYL-
4	11619	NAPHTHALENE, 1,2-DIMETHYL-
5	11615	NAPHTHALENE, 2,7-DIMETHYL-
6	11628	NAPHTHALENE, 1,6-DIMETHYL-
7	11621	NAPHTHALENE, 1,8-DIMETHYL-
8	11620	NAPHTHALENE, 2,6-DIMETHYL-
9	11624	NAPHTHALENE, 1,7-DIMETHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C12.H12	156	156	638	958	660
2	C12.H12	156	156	636	957	651
3	C12.H12	156	156	632	950	658
4	C12.H12	156	156	630	948	646
5	C12.H12	156	156	627	943	653
6	C12.H12	156	156	624	939	649
7	C12.H12	156	156	619	943	647
8	C12.H12	156	156	617	949	648
9	C12.H12	156	156	616	936	652

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	575-41-7
2	—	—	—	—	581-40-8
3	—	—	—	—	571-61-9
4	—	—	—	—	573-98-8
5	—	—	—	—	582-16-1
6	—	—	—	—	575-43-9
7	—	—	—	—	569-41-5
8	—	—	—	—	581-42-0
9	—	—	—	—	575-37-1


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:59:00 + 8:38
SAMPLE: S-MM5-3 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068107 # 776
CALI: 30068107 # 3
BASE M/Z: 156
RIC: 56512.
1201
SAMPLE
C12.H12
NAPHTHALENE, 1,3-DIMETHYL- or isomer
1201
M WT 156
B PK 156
RANK 1
11625
PUR 638
C12.H12
NAPHTHALENE, 2,3-DIMETHYL-
1201
M WT 156
B PK 156
RANK 2
11618
PUR 636
C12.H12
NAPHTHALENE, 1,5-DIMETHYL-
1201
M WT 156
B PK 156
RANK 3
11629
PUR 632
M/Z
40
60
80
100
120
140
160
180
200

Library Search Data: 30068107 # 820 Base m/z: 57
08/31/98 21:59:00 + 9:07 Cali: 30068107 # 3 RIC: 145408.
Sample: S-MM5-3 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
855 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
2	37462	HEPTADECANE, 2,6-DIMETHYL-
3	25997	PENTADECANE
4	25991	DODECANE, 2,6,10-TRIMETHYL-
5	22530	TETRADECANE
6	18987	UNDECANE, 2,8-DIMETHYL-
7	19016	UNDECANE, 4,7-DIMETHYL-
8	15353	2,6-DIMETHYLDECANE
9	37465	NONADECANE

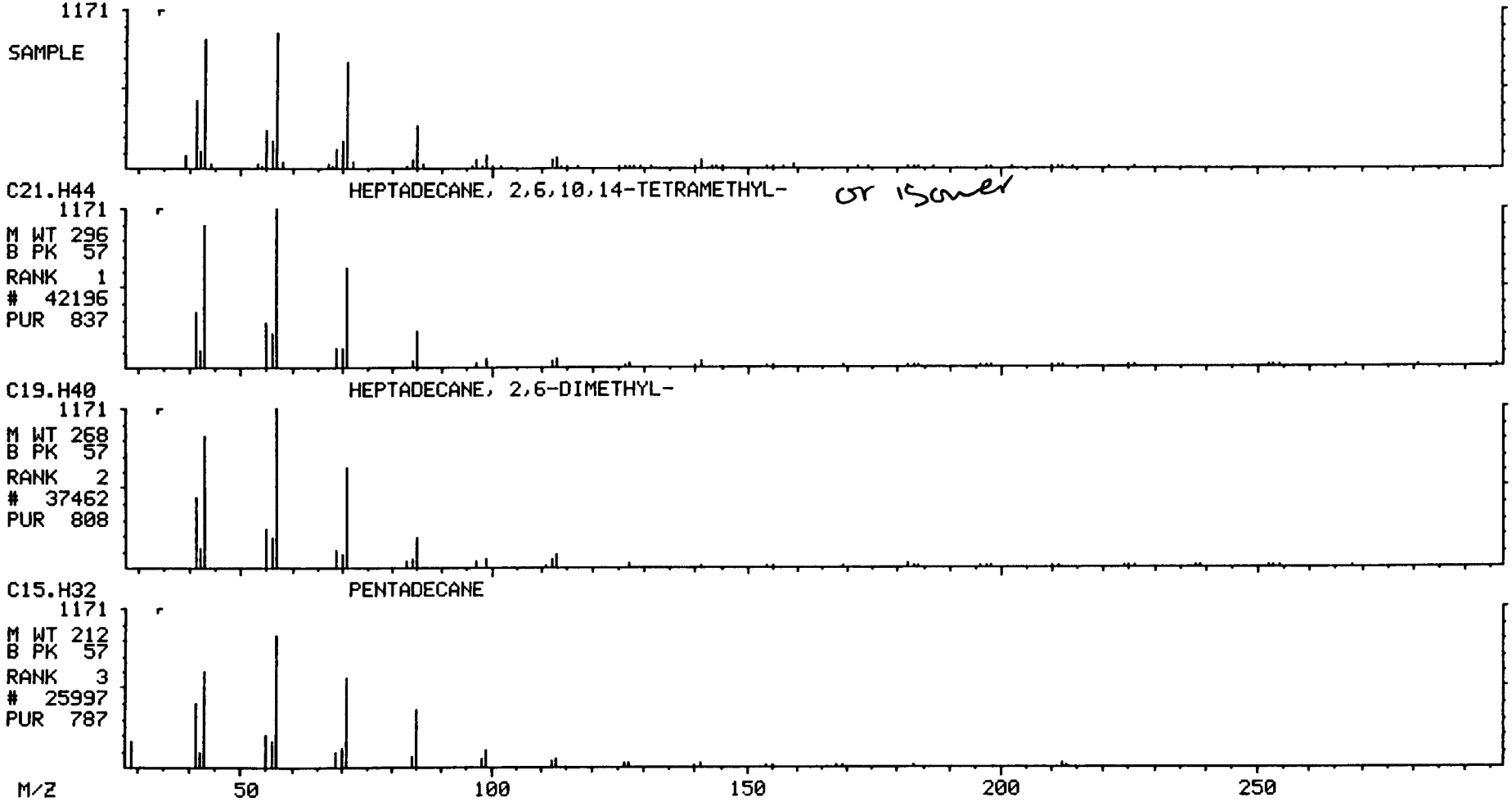
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C21.H44	296	57	837	980	844
2	C19.H40	268	57	808	952	824
3	C15.H32	212	57	787	946	799
4	C15.H32	212	57	782	964	783
5	C14.H30	198	43	782	938	793
6	C13.H28	184	43	782	964	785
7	C13.H28	184	43	780	950	781
8	C12.H26	170	43	779	925	788
9	C19.H40	268	57	778	928	810

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	18344-37-1
2	---	---	---	---	54105-67-8
3	---	---	---	---	629-62-9
4	---	---	---	---	3891-98-3
5	---	---	---	---	629-59-4
6	---	---	---	---	17301-25-6
7	---	---	---	---	17301-32-5
8	---	---	---	---	13150-81-7
9	---	---	---	---	629-92-5

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:59:00 + 9:07
SAMPLE: S-MM5-3 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068107 # 820
CALI: 30068107 # 3

BASE M/Z: 57
RIC: 145408.



or isomer

Library Search Data: 30068107 # 859 Base m/z: 57
08/31/98 21:59:00 + 9:33 Cali: 30068107 # 3 RIC: 195840.
Sample: S-MM5-3 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

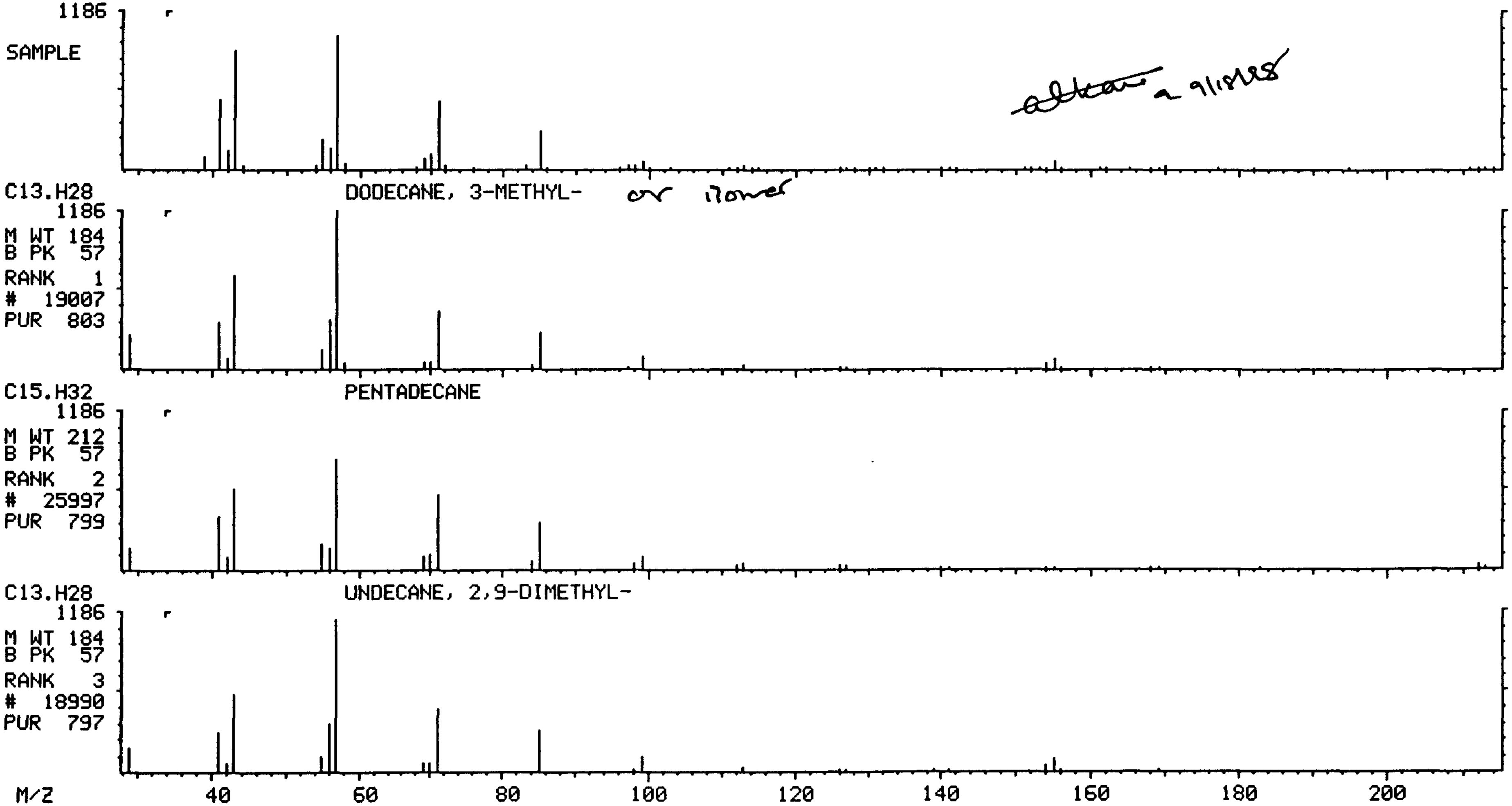
62231 spectra in LIBRARYNB searched for maximum PURITY
559 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	19007	DODECANE, 3-METHYL-
2	25997	PENTADECANE
3	18990	UNDECANE, 2,9-DIMETHYL-
4	19026	DECANE, 2,6,8-TRIMETHYL-
5	29249	TETRADECANE, 6,9-DIMETHYL-
6	39681	1-IODOUNDECANE
7	15352	UNDECANE, 2-METHYL-
8	19006	DECANE, 6-ETHYL-2-METHYL-
9	15357	DECANE, 2,9-DIMETHYL-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C13.H28	184	57	803	960	810
2	C15.H32	212	57	799	941	818
3	C13.H28	184	57	797	957	799
4	C13.H28	184	57	796	946	799
5	C16.H34	226	57	792	934	810
6	C11.H23.I	282	57	792	968	800
7	C12.H26	170	43	792	936	803
8	C13.H28	184	57	792	958	800
9	C12.H26	170	43	790	962	790

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	17312-57-1
2	---	---	---	---	629-62-9
3	---	---	---	---	17301-26-7
4	---	---	---	---	62108-26-3
5	---	---	---	---	55045-13-1
6	---	---	---	---	4282-44-4
7	---	---	---	---	7045-71-8
8	---	---	---	---	62108-21-8
9	---	---	---	---	1002-17-1

MID LIBRARY SEARCH (LIBRARYNB) DATA: 30068107 # 859 BASE M/Z: 57
08/31/98 21:59:00 + 9:33 CALI: 30068107 # 3 RIC: 195840.
SAMPLE: S-MM5-3 1/35A/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)



1157

Library Search Data: 30068107 # 904 Base m/z: 57
08/31/98 21:59:00 + 10:03 Cali: 30068107 # 3 RIC: 73344.
Sample: S-MM5-3 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
782 matched at least 7 of the 16 largest peaks in the unknown

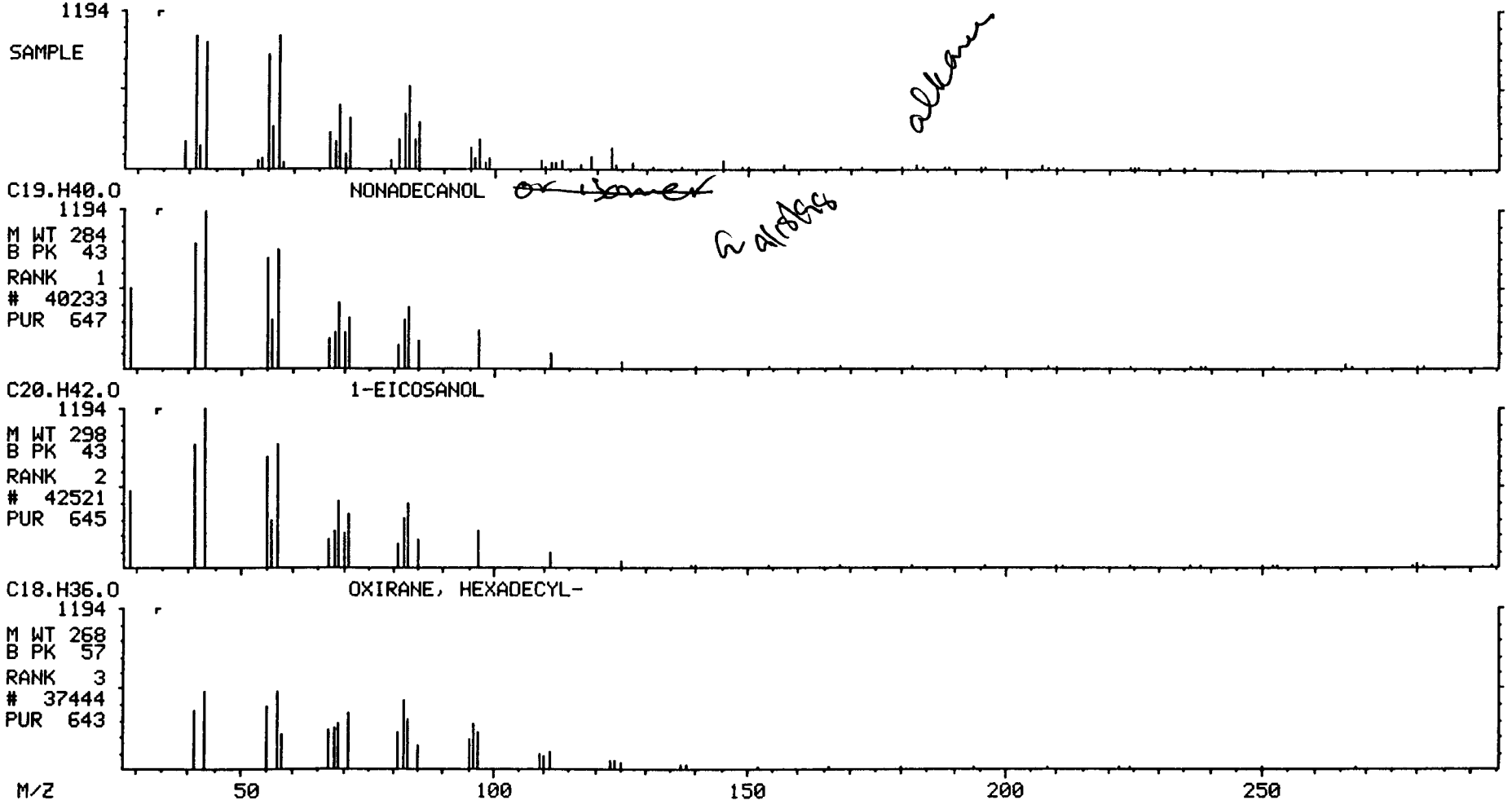
Rank	In.	Name
1	40233	NONADECANOL
2	42521	1-EICOSANOL
3	37444	OXIRANE, HEXADECYL-
4	37449	OCTADECANAL
5	22482	2-TRIDECEN-1-OL, (E)-
6	40193	CIS-9,10-EPOXYOCTADECAN-1-OL
7	25971	OXIRANE, DODECYL-
8	32052	OXIRANE, TETRADECYL-
9	42180	OCTADECANE, 1-(ETHENYLOXY)-

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40.O	284	43	647	923	686
2	C20.H42.O	298	43	645	919	688
3	C18.H36.O	268	57	643	867	672
4	C18.H36.O	268	43	640	873	683
5	C13.H26.O	198	57	637	923	648
6	C18.H36.O2	284	55	636	906	666
7	C14.H28.O	212	41	636	911	642
8	C16.H32.O	240	41	630	942	630
9	C20.H40.O	296	43	621	930	656

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	52783-43-4
2	---	---	---	---	629-96-9
3	---	---	---	---	7390-81-0
4	---	---	---	---	638-66-4
5	---	---	---	---	74962-98-4
6	---	---	---	---	13980-12-6
7	---	---	---	---	3234-28-4
8	---	---	---	---	7320-37-8
9	---	---	---	---	930-02-9

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:59:00 + 10:03
SAMPLE: S-MM5-3 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068107 # 904 BASE M/Z: 57
CALI: 30068107 # 3 RIC: 73344.



Library Search Data: 30068107 # 948 Base m/z: 57
08/31/98 21:59:00 + 10:33 Cali: 30068107 # 3 RIC: 229888.
Sample: S-MM5-3 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
360 matched at least 8 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37465	NONADECANE
2	37462	HEPTADECANE, 2,6-DIMETHYL-
3	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
4	15969	HYDROXYLAMINE, O-DECYL-
5	19016	UNDECANE, 4,7-DIMETHYL-
6	25997	PENTADECANE
7	25994	DODECANE, 2,6,11-TRIMETHYL-
8	26001	DODECANE, 2,7,10-TRIMETHYL-
9	19054	UNDECANE, 2,6-DIMETHYL-

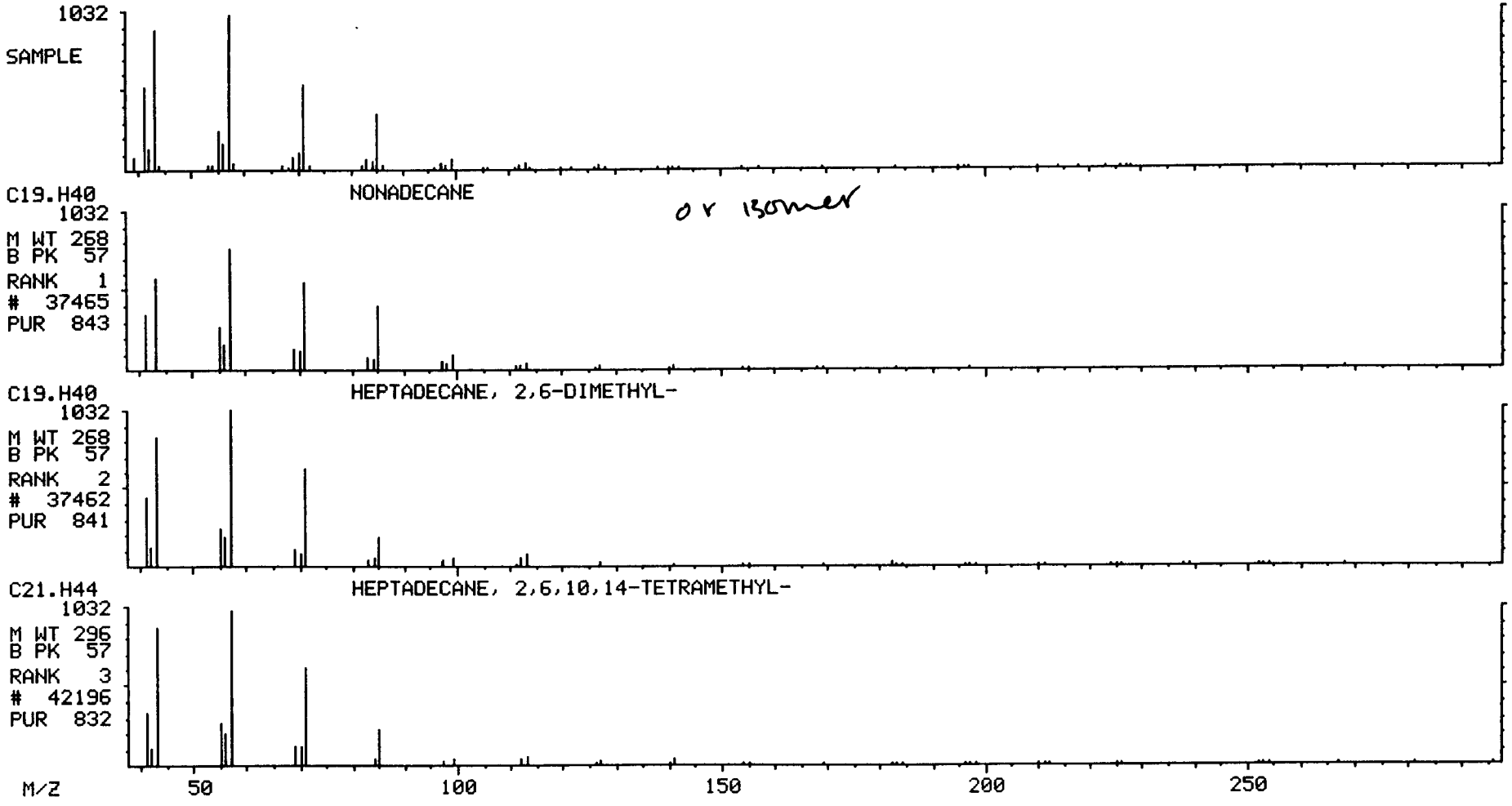
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	843	948	870
2	C19.H40	268	57	841	941	868
3	C21.H44	296	57	832	943	856
4	C10.H23.O.N	173	43	832	964	835
5	C13.H28	184	43	826	965	826
6	C15.H32	212	57	820	945	854
7	C15.H32	212	57	807	964	811
8	C15.H32	212	57	804	960	809
9	C13.H28	184	57	800	908	810

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	629-92-5
2	---	---	---	---	54105-67-8
3	---	---	---	---	18344-37-1
4	---	---	---	---	29812-79-1
5	---	---	---	---	17301-32-5
6	---	---	---	---	629-62-9
7	---	---	---	---	31295-56-4
8	---	---	---	---	74645-98-0
9	---	---	---	---	17301-23-4

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:59:00 + 10:33
SAMPLE: S-MM5-3 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068107 # 948
CALI: 30068107 # 3

BASE M/Z: 57
RIC: 229888.



Library Search Data: 30068107 # 988 Base m/z: 57
08/31/98 21:59:00 + 10:59 Cali: 30068107 # 3 RIC: 164608.
Sample: S-MM5-3 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
644 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37465	NONADECANE
2	37462	HEPTADECANE, 2,6-DIMETHYL-
3	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
4	32059	HEPTADECANE
5	25997	PENTADECANE
6	19054	UNDECANE, 2,6-DIMETHYL-
7	22530	TETRADECANE
8	25996	TRIDECANE, 4,8-DIMETHYL-
9	29263	HEXADECANE

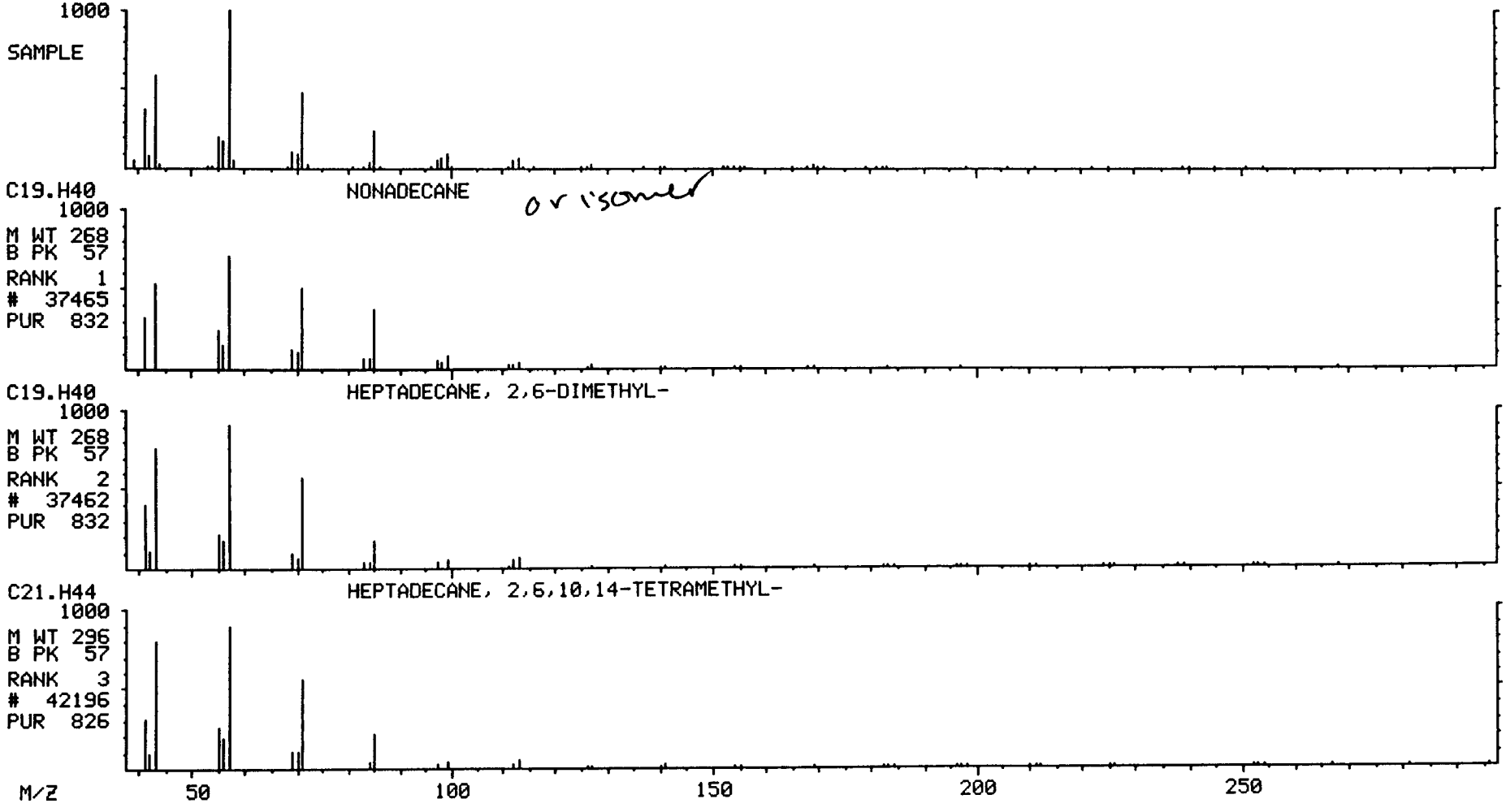
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	832	945	852
2	C19.H40	268	57	832	956	843
3	C21.H44	296	57	826	957	838
4	C17.H36	240	57	824	941	836
5	C15.H32	212	57	824	953	846
6	C13.H28	184	57	822	951	829
7	C14.H30	198	43	820	947	824
8	C15.H32	212	57	814	935	830
9	C16.H34	226	57	810	928	849

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	629-92-5
2	—	—	—	—	54105-67-8
3	—	—	—	—	18344-37-1
4	—	—	—	—	629-78-7
5	—	—	—	—	629-62-9
6	—	—	—	—	17301-23-4
7	—	—	—	—	629-59-4
8	—	—	—	—	55030-62-1
9	—	—	—	—	544-76-3

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:59:00 + 10:59
SAMPLE: S-MM5-3 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068107 # 988
CALI: 30068107 # 3

BASE M/Z: 57
RIC: 164608.



Library Search Data: 30068107 #1036 Base m/z: 57
08/31/98 21:59:00 + 11:31 Cali: 30068107 # 3 RIC: 240640.
Sample: S-MM5-3 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
713 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37462	HEPTADECANE, 2,6-DIMETHYL-
2	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
3	37465	NONADECANE
4	26001	DODECANE, 2,7,10-TRIMETHYL-
5	25991	DODECANE, 2,6,10-TRIMETHYL-
6	37466	PENTADECANE, 2,6,10,14-TETRAMETHYL-
7	22535	DODECANE, 4,6-DIMETHYL-
8	25994	DODECANE, 2,6,11-TRIMETHYL-
9	29264	TRIDECANE, 5-PROPYL-

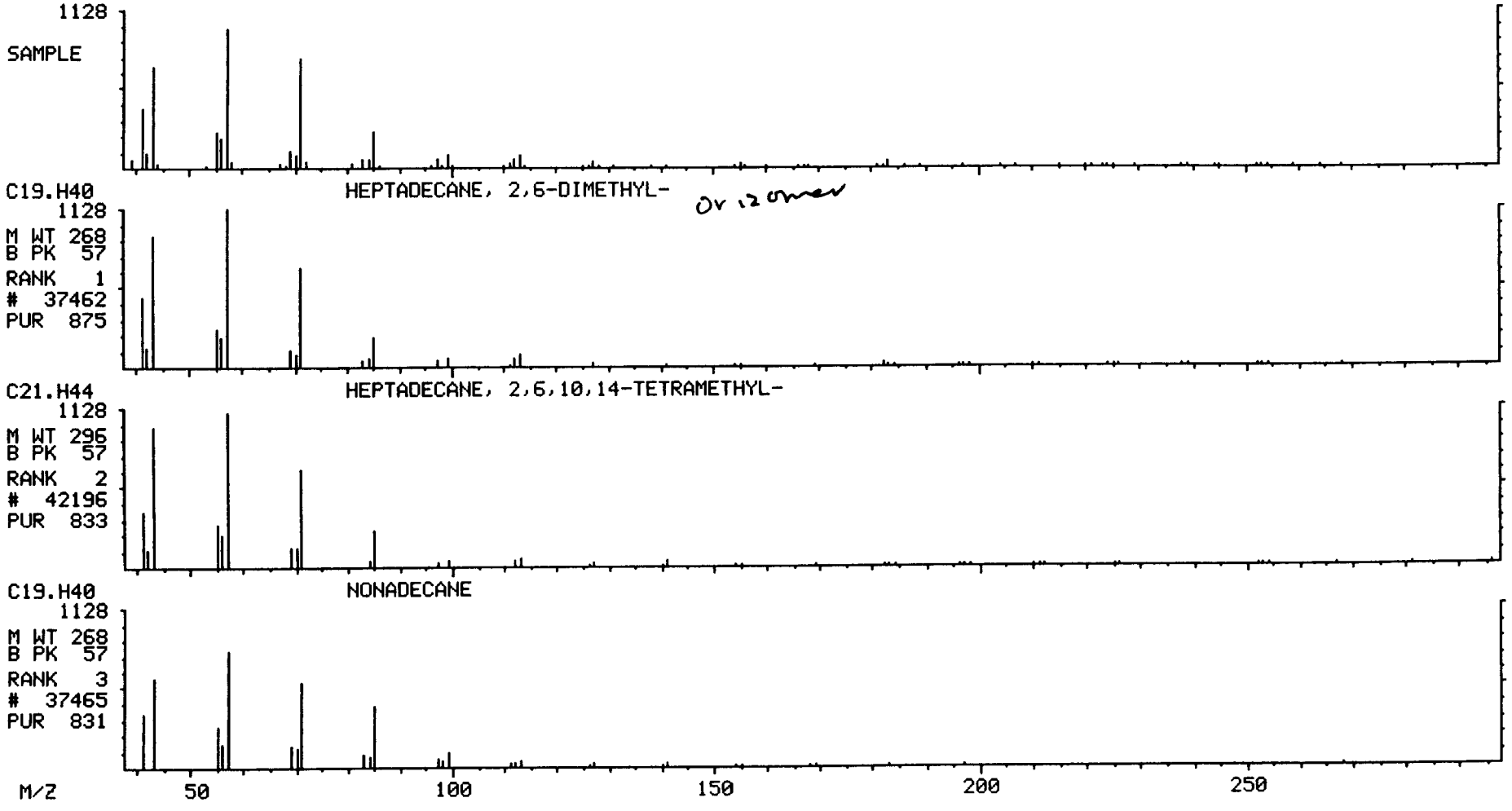
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	875	976	882
2	C21.H44	296	57	833	949	857
3	C19.H40	268	57	831	940	844
4	C15.H32	212	57	826	970	830
5	C15.H32	212	57	825	973	827
6	C19.H40	268	71	820	946	834
7	C14.H30	198	57	818	961	820
8	C15.H32	212	57	809	949	816
9	C16.H34	226	57	806	947	827

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	54105-67-8
2	---	---	---	---	18344-37-1
3	---	---	---	---	629-92-5
4	---	---	---	---	74645-98-0
5	---	---	---	---	3891-98-3
6	---	---	---	---	1921-70-6
7	---	---	---	---	61141-72-8
8	---	---	---	---	31295-56-4
9	---	---	---	---	55045-11-9

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:59:00 + 11:31
SAMPLE: S-MM5-3 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068107 #1036 CALI: 30068107 # 3

BASE M/Z: 57
RIC: 240640.



11.03
CH

Library Search Data: 30068107 #1054 Base m/z: 55
08/31/98 21:59:00 + 11:43 Cali: 30068107 # 3 RIC: 63616.
Sample: S-MM5-3 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
796 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	28768	3-HEXADECENE, (Z)-
2	21963	3-TETRADECENE, (E)-
3	28772	7-HEXADECENE, (Z)-
4	34411	5-OCTADECENE, (E)-
5	34410	3-OCTADECENE, (E)-
6	21962	3-TETRADECENE, (Z)-
7	26409	2-HEXYL-1-OCTANOL
8	34418	9-OCTADECENE, (E)-
9	21976	7-TETRADECENE, (E)-

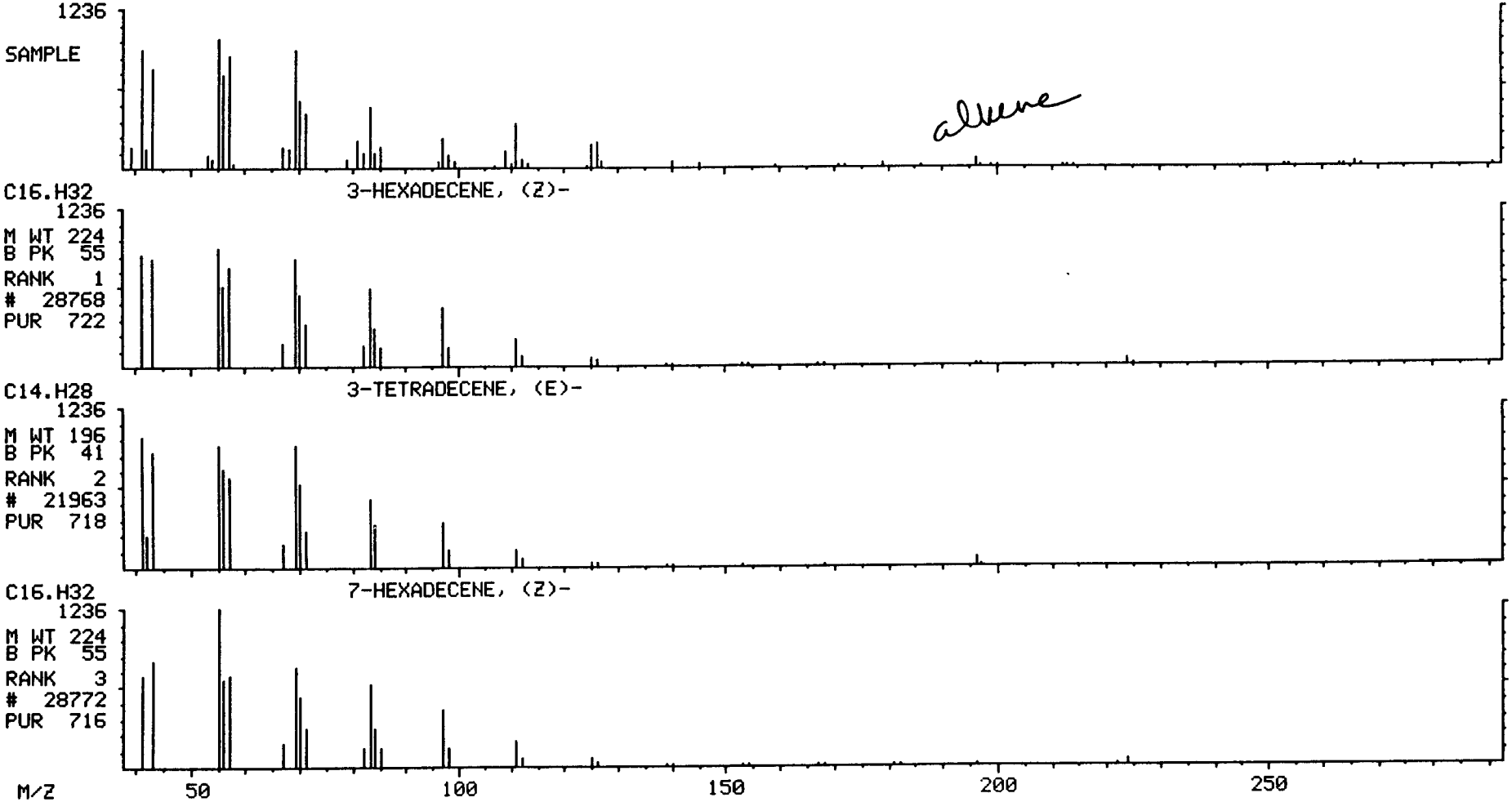
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C16.H32	224	55	722	914	749
2	C14.H28	196	41	718	936	723
3	C16.H32	224	55	716	909	739
4	C18.H36	252	55	716	908	741
5	C18.H36	252	69	716	909	744
6	C14.H28	196	41	716	933	719
7	C14.H30.O	214	57	714	928	726
8	C18.H36	252	55	713	905	738
9	C14.H28	196	55	709	929	712

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	34303-81-6
2	---	---	---	---	41446-68-8
3	---	---	---	---	35507-09-6
4	---	---	---	---	7206-21-5
5	---	---	---	---	7206-19-1
6	---	---	---	---	41446-67-7
7	---	---	---	---	- -
8	---	---	---	---	7206-25-9
9	---	---	---	---	41446-63-3

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:59:00 + 11:43
SAMPLE: S-MM5-3 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068107 #1054
CALI: 30068107 # 3

BASE M/Z: 55
RIC: 63616.



1167

Library Search Data: 30068107 #1114 Base m/z: 57
08/31/98 21:59:00 + 12:23 Cali: 30068107 # 3 RIC: 105344.
Sample: S-MM5-3 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
360 matched at least 8 of the 16 largest peaks in the unknown

Rank	In.	Name
1	15969	HYDROXYLAMINE, O-DECYL-
2	37465	NONADECANE
3	37462	HEPTADECANE, 2,6-DIMETHYL-
4	19016	UNDECANE, 4,7-DIMETHYL-
5	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
6	25997	PENTADECANE
7	19523	1-DECANOL, 2-ETHYL-
8	11602	OCTANE, 2,4,6-TRIMETHYL-
9	46161	TRICOSANE

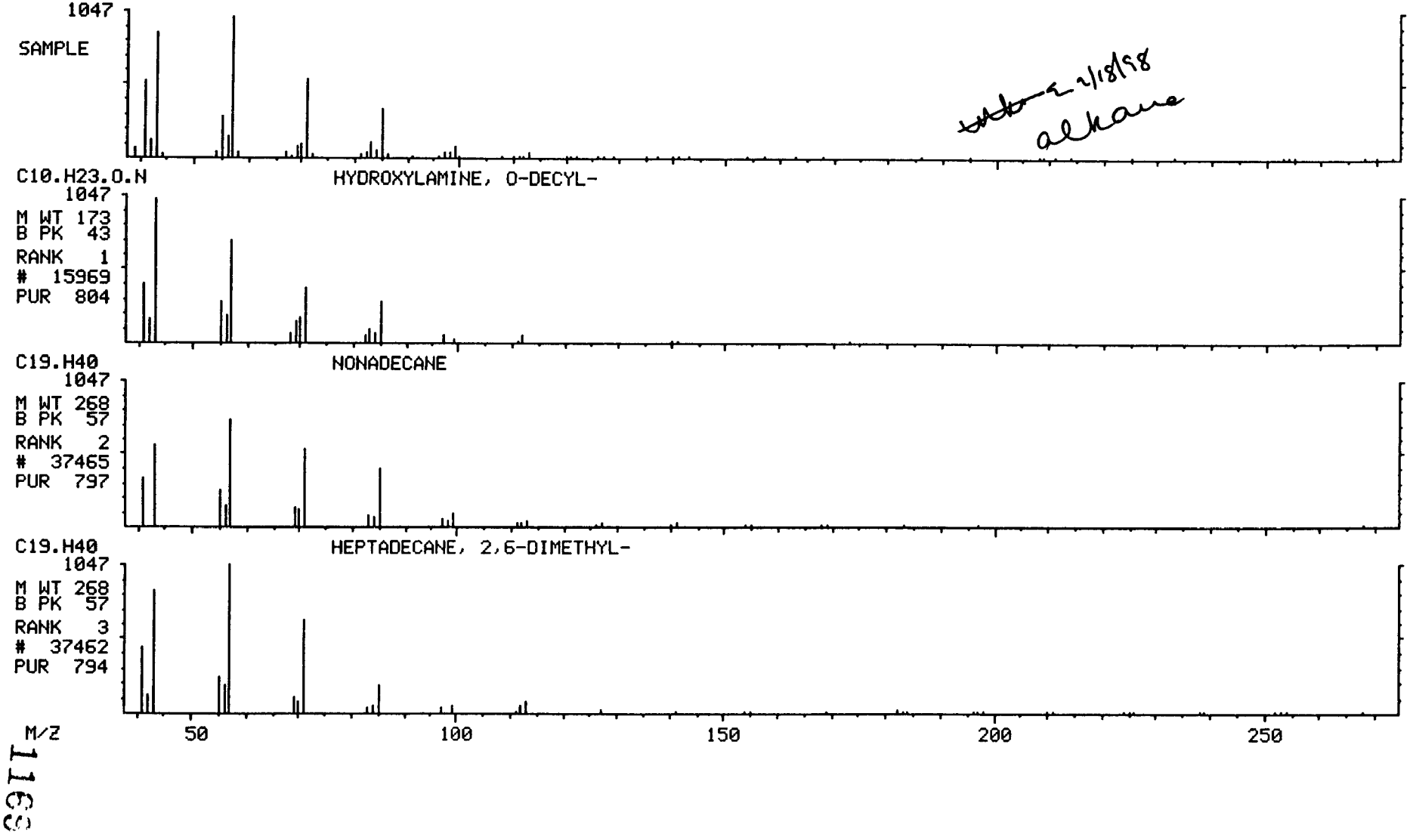
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C10.H23.O.N	173	43	804	962	806
2	C19.H40	268	57	797	940	820
3	C19.H40	268	57	794	930	828
4	C13.H28	184	43	781	963	782
5	C21.H44	296	57	780	939	811
6	C15.H32	212	57	767	937	805
7	C12.H26.O	186	57	763	921	776
8	C11.H24	156	57	760	968	760
9	C23.H48	324	43	758	886	842

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	29812-79-1
2	---	---	---	---	629-92-5
3	---	---	---	---	54105-67-8
4	---	---	---	---	17301-32-5
5	---	---	---	---	18344-37-1
6	---	---	---	---	629-62-9
7	---	---	---	---	21078-65-9
8	---	---	---	---	62016-37-9
9	---	---	---	---	638-67-5

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:59:00 + 12:23
SAMPLE: S-MM5-3 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068107 #1114
CALI: 30068107 # 3

BASE M/Z: 57
RIC: 105344.



Library Search Data: 30068107 #1119 Base m/z: 57
08/31/98 21:59:00 + 12:27 Cali: 30068107 # 3 RIC: 136704.
Sample: S-MM5-3 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N OT)

62231 spectra in LIBRARYNB searched for maximum PURITY
840 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37465	NONADECANE
2	37462	HEPTADECANE, 2,6-DIMETHYL-
3	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
4	46161	TRICOSANE
5	37466	PENTADECANE, 2,6,10,14-TETRAMETHYL-
6	25991	DODECANE, 2,6,10-TRIMETHYL-
7	32059	HEPTADECANE
8	39859	OCTADECANE, 2,6-DIMETHYL-
9	26001	DODECANE, 2,7,10-TRIMETHYL-

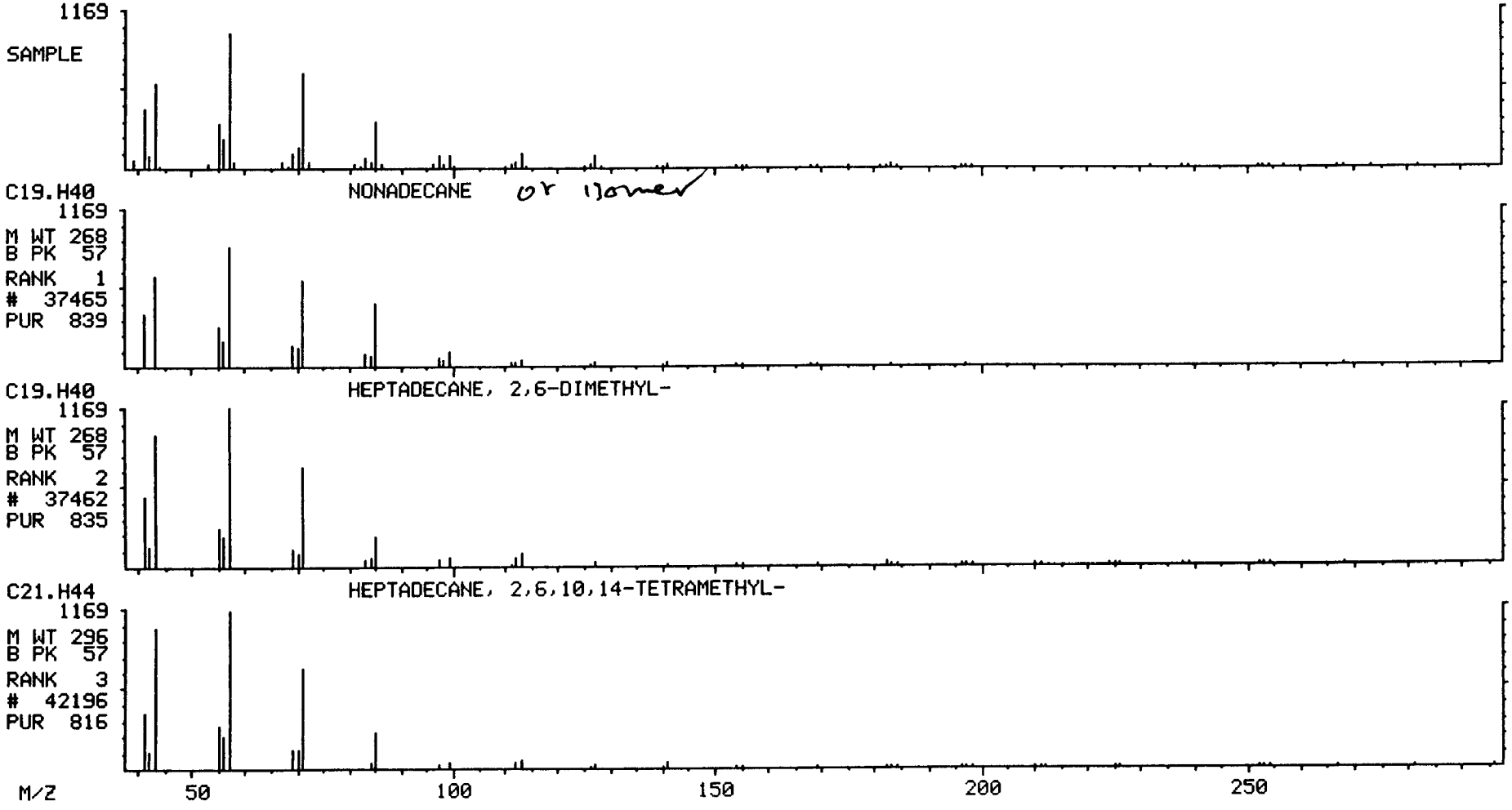
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	839	964	839
2	C19.H40	268	57	835	948	839
3	C21.H44	296	57	816	937	830
4	C23.H48	324	43	815	920	856
5	C19.H40	268	71	802	937	806
6	C15.H32	212	57	799	968	800
7	C17.H36	240	57	796	929	822
8	C20.H42	282	57	794	931	799
9	C15.H32	212	57	794	967	794

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	629-92-5
2	—	—	—	—	54105-67-8
3	—	—	—	—	18344-37-1
4	—	—	—	—	638-67-5
5	—	—	—	—	1921-70-6
6	—	—	—	—	3891-98-3
7	—	—	—	—	629-78-7
8	—	—	—	—	75163-97-2
9	—	—	—	—	74645-98-0

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:59:00 + 12:27
SAMPLE: S-MM5-3 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068107 #1119
CALI: 30068107 # 3

BASE M/Z: 57
RIC: 136704.



171

Library Search Data: 30068107 #1191 Base m/z: 57
08/31/98 21:59:00 + 13:15 Cali: 30068107 # 3 RIC: 91264.
Sample: S-MM5-3 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
294 matched at least 8 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37465	NONADECANE
2	15969	HYDROXYLAMINE, O-DECYL-
3	37462	HEPTADECANE, 2,6-DIMETHYL-
4	19016	UNDECANE, 4,7-DIMETHYL-
5	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
6	11602	OCTANE, 2,4,6-TRIMETHYL-
7	19015	DECANE, 2,5,6-TRIMETHYL-
8	12074	1-HEPTANOL, 2-PROPYL-
9	25997	PENTADECANE

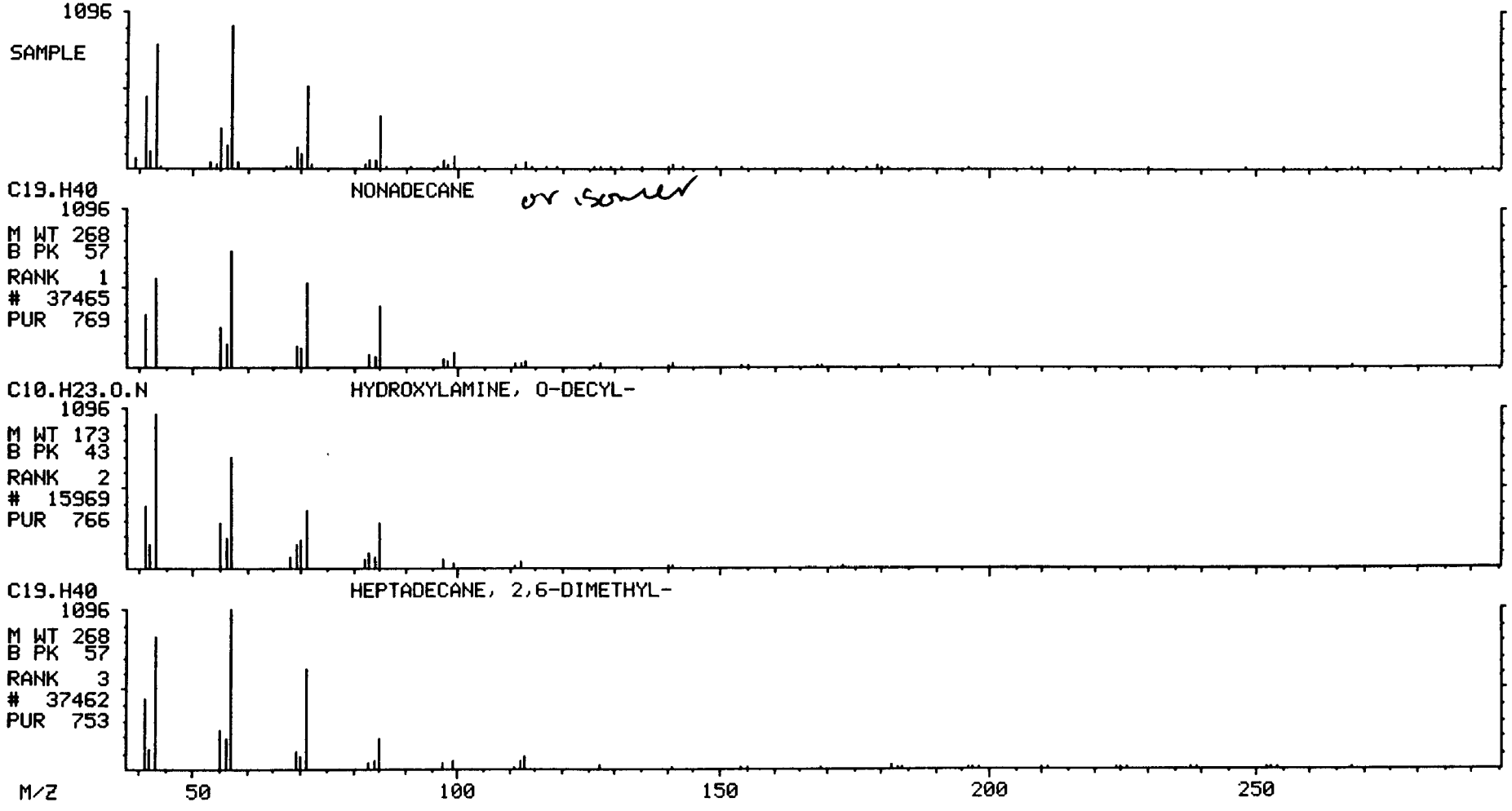
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	769	938	806
2	C10.H23.O.N	173	43	766	949	782
3	C19.H40	268	57	753	907	809
4	C13.H28	184	43	750	955	755
5	C21.H44	296	57	747	922	796
6	C11.H24	156	57	737	965	737
7	C13.H28	184	57	731	928	731
8	C10.H22.O	158	43	731	950	731
9	C15.H32	212	57	728	922	779

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	629-92-5
2	---	---	---	---	29812-79-1
3	---	---	---	---	54105-67-8
4	---	---	---	---	17301-32-5
5	---	---	---	---	18344-37-1
6	---	---	---	---	62016-37-9
7	---	---	---	---	62108-23-0
8	---	---	---	---	10042-59-8
9	---	---	---	---	629-62-9

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:59:00 + 13:15
SAMPLE: S-MM5-3 1/35A/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068107 #1191
CALI: 30068107 # 3

BASE M/Z: 57
RIC: 91264.



11-1
C)

Library Search Data: 30068107 #1335 Base m/z: 57
08/31/98 21:59:00 + 14:51 Cali: 30068107 # 3 RIC: 45504.
Sample: S-MM5-3 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
715 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37462	HEPTADECANE, 2,6-DIMETHYL-
2	37456	2-METHYLOCTADECANE
3	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
4	29263	HEXADECANE
5	32058	HEXADECANE, 3-METHYL-
6	37465	NONADECANE
7	46161	TRICOSANE
8	42192	HEPTADECANE, 2,6,10,15-TETRAMETHYL-
9	34816	HEPTADECANE, 4-METHYL-

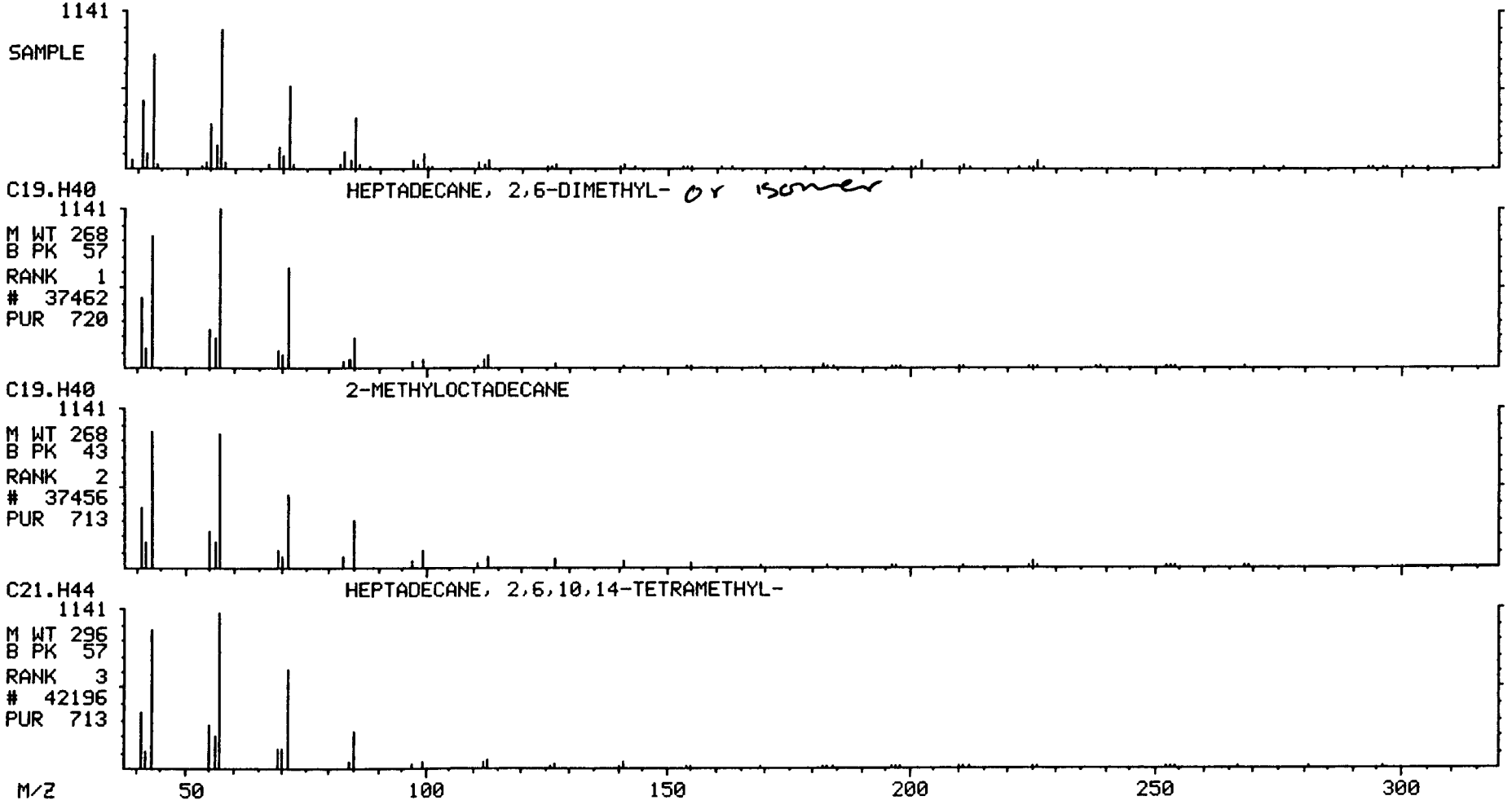
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	720	890	739
2	C19.H40	268	43	713	917	741
3	C21.H44	296	57	713	908	730
4	C16.H34	226	57	707	945	728
5	C17.H36	240	57	705	940	716
6	C19.H40	268	57	702	948	733
7	C23.H48	324	43	696	902	764
8	C21.H44	296	57	694	930	720
9	C18.H38	254	43	690	881	708

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	54105-67-8
2	---	---	---	---	- -
3	---	---	---	---	18344-37-1
4	---	---	---	---	544-76-3
5	---	---	---	---	6418-43-5
6	---	---	---	---	629-92-5
7	---	---	---	---	638-67-5
8	---	---	---	---	54833-48-6
9	---	---	---	---	26429-11-8

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:59:00 + 14:51
SAMPLE: S-MM5-3 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068107 #1335
CALI: 30068107 # 3

BASE M/Z: 57
RIC: 45504.



Library Search Data: 30068107 #1402 Base m/z: 57
08/31/98 21:59:00 + 15:36 Cali: 30068107 # 3 RIC: 34624.
Sample: S-MM5-3 1/3SA/100M INST. ID: F16
Conds.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
714 matched at least 7 of the 16 largest peaks in the unknown

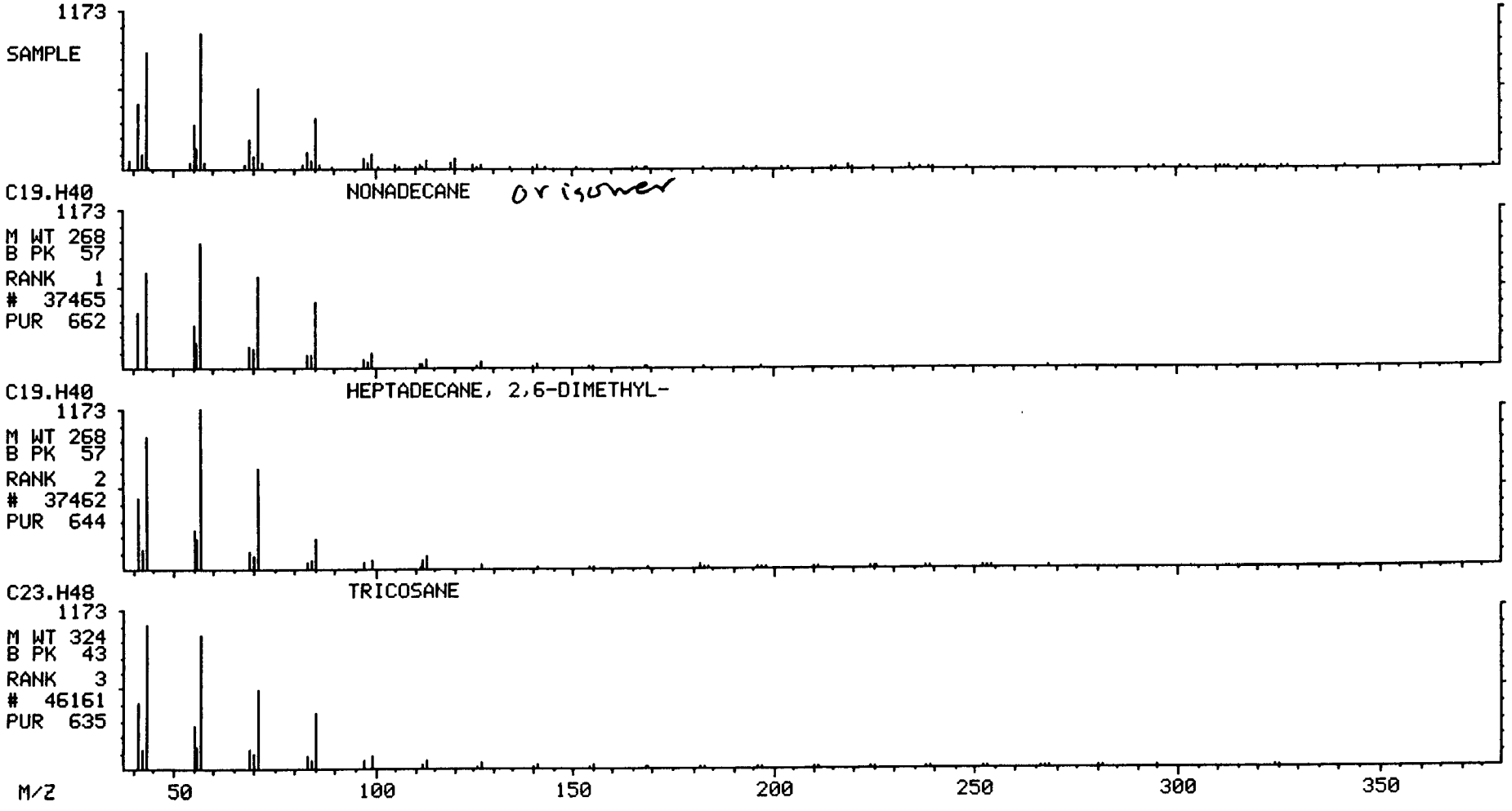
Rank	In.	Name
1	37465	NONADECANE
2	37462	HEPTADECANE, 2,6-DIMETHYL-
3	46161	TRICOSANE
4	15969	HYDROXYLAMINE, O-DECYL-
5	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
6	22536	TRIDECANE, 3-METHYL-
7	32059	HEPTADECANE
8	19523	1-DECANOL, 2-ETHYL-
9	37456	2-METHYLOCTADECANE

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	662	953	688
2	C19.H40	268	57	644	926	667
3	C23.H48	324	43	635	902	700
4	C10.H23.O.N	173	43	633	966	635
5	C21.H44	296	57	625	932	648
6	C14.H30	198	57	624	924	629
7	C17.H36	240	57	624	929	650
8	C12.H26.O	186	57	623	948	627
9	C19.H40	268	43	621	926	657

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	629-92-5
2	---	---	---	---	54105-67-8
3	---	---	---	---	638-67-5
4	---	---	---	---	29812-79-1
5	---	---	---	---	18344-37-1
6	---	---	---	---	6418-41-3
7	---	---	---	---	629-78-7
8	---	---	---	---	21078-65-9
9	---	---	---	---	- -

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 21:59:00 + 15:36
SAMPLE: S-MM5-3 1/3SA/100M INST. ID: F16
CONDS.: UG/ML *100ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068107 #1402 BASE M/Z: 57
CALI: 30068107 # 3 RIC: 34624.



11-17

TIC SELECTION REPORT

DATA FILE: 30068107

THE FOLLOWING PEAKS WERE REJECTED BECAUSE AT LEAST 40 % OF THEIR SIZE WAS ACCOUNTED FOR BY TARGET COMPOUNDS ELUTING WITHIN 4 SCANS OF THE PEAK TOP.

SCAN	SIZE	AMOUNT
340	178208.	21.143
530	370816.	43.994
829	337152.	40.000
1088	394368.	40.000
1552	233408.	40.000
1783	216272.	40.000

TOTAL NUMBER OF UNIDENTIFIED PEAKS WITH SIZE GREATER THAN 10 % OF THE CLOSEST INTERNAL STANDARD THAT DOES NOT HAVE INTERFERENCES = 103

INTERNAL STANDARDS THAT HAVE RIC SIZE LESS THAN 50 % OR GREATER THAN 200 % OF THE ESTIMATED RIC SIZE ARE CONSIDERED TO HAVE INTERFERENCES AND WILL NOT BE USED FOR QUANTITATION.

#	INTERNAL STANDARD	RIC SIZE	PERCENT OF ESTIMATED RIC SIZE	SCAN
1	C140 NAPHTHALENE-D8	370816.	211 *	530
2	C150 ACENAPHTHENE-D10	337152.	156	829
3	C160 PHENANTHRENE-D10	394368.	163	1088
4	C170 CHRYSENE-D12	233408.	140	1552
5	C175 PERYLENE-D12	216272.	158	1783

* INDICATES INTERFERENCE

SIZE = AREA

Semivolatile Organics
Method 0010/8270

Client Name: Pacific Environmental Services
Client ID: S-MM5-FB-F,FH,XAD,COND,BH
LAB ID: 300681-0008-SA
Matrix: AIRTRAIN Sampled: 26 JUL 98 Received: 30 JUL 98
Authorized: 30 JUL 98 Prepared: 31 JUL 98 Analyzed: 31 AUG 98

Dilution Factor: 1.0

Parameter	Wet wt. Result	Units	Reporting Limit	Qualifier
Phenol	ND	ug/Sample	30	R
bis(2-Chloroethyl)ether	ND	ug/Sample	30	
2-Chlorophenol	ND	ug/Sample	30	
1,3-Dichlorobenzene	ND	ug/Sample	30	
1,4-Dichlorobenzene	ND	ug/Sample	30	
Benzyl alcohol	ND	ug/Sample	30	
1,2-Dichlorobenzene	ND	ug/Sample	30	
2-Methylphenol	ND	ug/Sample	30	
2,2'-Oxybis(1-chloropropane)	ND	ug/Sample	30	
3/4-Methylphenol	ND	ug/Sample	30	
N-Nitroso-di-n-propylamine	ND	ug/Sample	30	
Hexachloroethane	ND	ug/Sample	30	
Nitrobenzene	ND	ug/Sample	30	
Isophorone	ND	ug/Sample	30	
2-Nitrophenol	ND	ug/Sample	30	
2,4-Dimethylphenol	ND	ug/Sample	30	
Benzoic acid	ND	ug/Sample	150	
bis(2-Chloroethoxy)-methane	ND	ug/Sample	30	
2,4-Dichlorophenol	ND	ug/Sample	30	
1,2,4-Trichlorobenzene	ND	ug/Sample	30	
Naphthalene	ND	ug/Sample	30	
4-Chloroaniline	ND	ug/Sample	30	
Hexachlorobutadiene	ND	ug/Sample	30	
4-Chloro-3-methylphenol	ND	ug/Sample	30	
2-Methylnaphthalene	ND	ug/Sample	30	
Hexachlorocyclopentadiene	ND	ug/Sample	30	
2,4,6-Trichlorophenol	ND	ug/Sample	30	
2,4,5-Trichlorophenol	ND	ug/Sample	150	
2-Chloronaphthalene	ND	ug/Sample	30	
2-Nitroaniline	ND	ug/Sample	30	
Dimethyl phthalate	ND	ug/Sample	30	
Acenaphthylene	ND	ug/Sample	30	
3-Nitroaniline	ND	ug/Sample	150	
Acenaphthene	ND	ug/Sample	30	
2,4-Dinitrophenol	ND	ug/Sample	150	
4-Nitrophenol	ND	ug/Sample	150	
Dibenzofuran	ND	ug/Sample	30	

Note R = Reporting limit(s) raised due to sample volume limitations.
ND = Not Detected

Reported By: Emily Uebelhoer Approved By: Karin Yee

117S

Semivolatile Organics
Method 0010/8270

(cont.)

Client Name: Pacific Environmental Services
Client ID: S-MM5-FB-F,FH,XAD,COND,BH
LAB ID: 300681-0008-SA
Matrix: AIRTRAIN Sampled: 26 JUL 98 Received: 30 JUL 98
Authorized: 30 JUL 98 Prepared: 31 JUL 98 Analyzed: 31 AUG 98

Dilution Factor: 1.0

Parameter	Wet wt. Result	Units	Reporting Limit	Qualifier
2,4-Dinitrotoluene	ND	ug/Sample	30	
2,6-Dinitrotoluene	ND	ug/Sample	30	
Diethyl phthalate	ND	ug/Sample	30	
4-Chlorophenyl phenyl ether	ND	ug/Sample	30	
Fluorene	ND	ug/Sample	30	
4-Nitroaniline	ND	ug/Sample	150	
4,6-Dinitro-2-methylphenol	ND	ug/Sample	150	
N-Nitrosodiphenylamine	ND	ug/Sample	30	
4-Bromophenyl phenyl ether	ND	ug/Sample	30	
Hexachlorobenzene	ND	ug/Sample	30	
Pentachlorophenol	ND	ug/Sample	150	
Phenanthrene	ND	ug/Sample	30	
Anthracene	ND	ug/Sample	30	
Di-n-butyl phthalate	ND	ug/Sample	30	
Fluoranthene	ND	ug/Sample	30	
Pyrene	ND	ug/Sample	30	
Butyl benzyl phthalate	ND	ug/Sample	30	
3,3'-Dichlorobenzidine	ND	ug/Sample	60	
Benzo(a)anthracene	ND	ug/Sample	30	
bis(2-Ethylhexyl)-phthalate	ND	ug/Sample	30	
Chrysene	ND	ug/Sample	30	
Di-n-octyl phthalate	ND	ug/Sample	30	
Benzo(b)fluoranthene	ND	ug/Sample	30	
Benzo(k)fluoranthene	ND	ug/Sample	30	
Benzo(a)pyrene	ND	ug/Sample	30	
Indeno(1,2,3-cd)pyrene	ND	ug/Sample	30	
Dibenz(a,h)anthracene	ND	ug/Sample	30	
Benzo(g,h,i)perylene	ND	ug/Sample	30	
Acetophenone	ND	ug/Sample	30	
4-Aminobiphenyl	ND	ug/Sample	150	
Aniline	ND	ug/Sample	30	
Benzidine	ND	ug/Sample	300	
3,3'-Dimethylbenzidine	ND	ug/Sample	60	
N-Nitrosodimethylamine	ND	ug/Sample	30	
N-Nitrosomorpholine	ND	ug/Sample	30	
Pentachloronitrobenzene (PCNB)	ND	ug/Sample	150	
o-Toluidine	ND	ug/Sample	60	

ND = Not Detected

Reported By: Emily Uebelhoer Approved By: Karin Yee

The cover letter is an integral part of this report.
Rev 230787

Semivolatile Organics
Method 0010/8270

(cont.)

Client Name: Pacific Environmental Services
Client ID: S-MM5-FB-F,FH,XAD,COND,BH
LAB ID: 300681-0008-SA
Matrix: AIRTRAIN Sampled: 26 JUL 98 Received: 30 JUL 98
Authorized: 30 JUL 98 Prepared: 31 JUL 98 Analyzed: 31 AUG 98

Dilution Factor: 1.0

Parameter	Wet wt. Result	Units	Reporting Limit	Qualifier
2-Methoxybenzenamine	ND	ug/Sample	--	K
Biphenyl	ND	ug/Sample	--	K
Chloroacetophenone	ND	ug/Sample	--	K
Cumene	ND	ug/Sample	--	K
DBCP (1,2-Dibromo-3-chloropropane)	ND	ug/Sample	--	K
Benzo(e)pyrene	ND	ug/Sample	--	K
N-N-Diethylaniline	ND	ug/Sample	--	K
Dimethylaniline	ND	ug/Sample	--	K
3,3'-Dimethoxybenzidine	ND	ug/Sample	--	K
Hydroquinone	ND	ug/Sample	--	K
4,4'-Methyl-bis(2-chloroaniline)	ND	ug/Sample	--	K
4-Nitrodiphenyl	ND	ug/Sample	--	K
Trifluralin	ND	ug/Sample	--	K

Surrogate	Recovery	Acceptable Range
Nitrobenzene-d5	58 %	45 - 107
2-Fluorobiphenyl	79 %	62 - 110
Terphenyl-d14	101 %	58 - 135
Phenol-d5	59 %	43 - 130
2-Fluorophenol	54 %	36 - 111
2,4,6-Tribromophenol	74 %	58 - 131

Note K = Identified by mass spectrum only; quantitation based on 1:1 response with internal standard.
ND = Not Detected

Reported By: Emily Uebelhoer Approved By: Karin Yee

The cover letter is an integral part of this report.
Rev 230787

Semivolatiles Library Search (20 Compound TID)
Method 8270

Client Name: Pacific Environmental Services
Client ID: S-MM5-FB-F,FH,XAD,COND,BH
LAB ID: 300681-0008-SA
Matrix: AIRTRAIN Sampled: 26 JUL 98 Received: 30 JUL 98
Authorized: 30 JUL 98 Prepared: NA Analyzed: 31 AUG 98

Dilution Factor: 1.0

Parameter	Result	Units	Reporting Limit	Qualifier
n-Nonane	360	ug/Sample	--	0
Benzaldehyde	29	ug/Sample	--	0
Heptadecane, 2,6-dimethyl-	52	ug/Sample	--	0
4-Hydroxy-4-methyl-2-pentanone	380	ug/Sample	--	0
Hexadecanoic acid	33	ug/Sample	--	0
Unknown alkane	51	ug/Sample	--	
Tricosane	31	ug/Sample	--	0
Unknown alkane	30	ug/Sample	--	
Unknown	36	ug/Sample	--	
Unknown alkane	45	ug/Sample	--	
5-Eiconsene,(E) -	150	ug/Sample	--	0
Unknown	49	ug/Sample	--	
Unknown	34	ug/Sample	--	
Unknown alkane	26	ug/Sample	--	
Unknown	57	ug/Sample	--	
Unknown	77	ug/Sample	--	
Unknown	58	ug/Sample	--	
Unknown	42	ug/Sample	--	
Unknown alkene	30	ug/Sample	--	
Unknown	27	ug/Sample	--	

Note O = Or structurally similar compound (isomer).
NA = Not Applicable

Reported By: Emily Uebelhoer Approved By: Karin Yee

The cover letter is an integral part of this report.
Rev 230787

QUANTERRA GC/MS

Target Compound Data Summary Sheet

Data File: 30068108
Std Id: ST16980831

Sample: S-MM5-FB 1/3SA/1ML INST. ID: F16
Client: PACIFI Date Analyzed: 08/31/98 22:29
Analyst: DAT Instrument ID: F16 Run Factor: 3.00
Quan List Threshold: 0.95 Surrogate Vol.: 1.00

Surrogate Spike Recoveries
8270-G, LIMS 10/10/96

Surrogate	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC limits
CS20 NITROBENZENE-D5	50.00	29.00	58.0	45 107
CS25 2-FLUOROBIPHENY	50.00	39.30	78.6	62 110
CS30 TERPHENYL-D14	50.00	50.70	101.	58 135
CS45 PHENOL-D5	100.0	58.80	58.8	43 130
CS50 2-FLUOROPHENOL	100.0	53.80	53.8	36 111
CS55 2,4,6-TRIBROMOP	100.0	74.20	74.2	58 131

Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
HEXACHLOROBENZENE-C13		ND	UG/A	30.0
C310 N-NITROSODIMETHYLAMINE		ND	UG/A	30.0
PYRIDINE		ND	UG/A	60.0
2-PICOLINE		ND	UG/A	30.0
N-NITROSOMETHYLETHYLAMINE		ND	UG/A	30.0
METHYLMETHANESULFONATE		ND	UG/A	30.0
N-NITROSODIETHYLAMINE		ND	UG/A	30.0
ETHYLMETHANE SULFONATE		ND	UG/A	30.0
PENTACHLOROETHANE		ND	UG/A	30.0
C320 ANILINE		ND	UG/A	30.0
C315 PHENOL		ND	UG/A	30.0
C325 BIS(2-CHLOROETHYL)ETHER		ND	UG/A	30.0
C330 2-CHLOROPHENOL		ND	UG/A	30.0
C335 1,3-DICHLOROBENZENE		ND	UG/A	30.0
C340 1,4-DICHLOROBENZENE		ND	UG/A	30.0
C345 BENZYL ALCOHOL		ND	UG/A	30.0
C350 1,2-DICHLOROBENZENE		ND	UG/A	30.0
C355 2-METHYLPHENOL		ND	UG/A	30.0
C360 2,2'-OXYBIS(1-CLPROPAN)		ND	UG/A	30.0
C361 ACETOPHENONE		ND	UG/A	30.0
N-NITROSOPYRROLIDINE		ND	UG/A	30.0
N-NITROSOMORPHOLINE		ND	UG/A	30.0
3-METHYL PHENOL		ND	UG/A	30.0
C365 4-METHYLPHENOL		ND	UG/A	30.0
C370 N-NITROSO-DI-N-PROPYLAM		ND	UG/A	30.0
O-TOLUIDINE		ND	UG/A	30.0
C375 HEXACHLOROETHANE		ND	UG/A	30.0
C410 NITROBENZENE		ND	UG/A	30.0
N-NITROSOPIPERIDINE		ND	UG/A	30.0

Reviewed by: 9/17/98

QUANTERRA GC/MS

Target Compound Data Summary Sheet

Data File: 30068108
Std Id: ST16980831

Sample: S-MM5-FB 1/3SA/1ML INST. ID: F16
Client: PACIFI Date Analyzed: 08/31/98 22:29
Analyst: DAT Instrument ID: F16 Run Factor: 3.00
Quan List Threshold: 0.95 Surrogate Vol.: 1.00

Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
C415 ISOPHORONE		ND	UG/A	30.0
C420 2-NITROPHENOL		ND	UG/A	30.0
C425 2,4-DIMETHYLPHENOL		ND	UG/A	30.0
C435 BIS(2-CHLOROETHOXY)METH		ND	UG/A	30.0
C440 2,4-DICHLOROPHENOL		ND	UG/A	30.0
C430 BENZOIC ACID		ND	UG/A	150.0
AA-DIMETHYLPHENETHYLAMINE		ND	UG/A	30.0
C445 1,2,4-TRICHLOROBENZENE		ND	UG/A	30.0
C450 NAPHTHALENE		ND	UG/A	30.0
C455 4-CHLOROANALINE		ND	UG/A	30.0
2,6-DICHLOROPHENOL		ND	UG/A	30.0
HEXACHLOROPROPENE		ND	UG/A	30.0
C460 HEXACHLOROBUTADIENE		ND	UG/A	30.0
P-PHENYLENE DIAMINE		ND	UG/A	30.0
N-NITROSODI-N-BUTYLAMINE		ND	UG/A	30.0
C465 4-CHLORO-3-METHYLPHENO		ND	UG/A	30.0
SAFROLE		ND	UG/A	30.0
C470 2-METHYLNAPHTHALENE		ND	UG/A	30.0
1,2,4,5-TETRACHLOROBENZENE		ND	UG/A	30.0
ISOSAFROLE (#1)		ND	UG/A	60.0
C510 HEXACHLOROCYCLOPENTADI		ND	UG/A	30.0
C515 2,4,6-TRICHLOROPHENOL		ND	UG/A	30.0
C520 2,4,5-TRICHLOROPHENOL		ND	UG/A	30.0
ISOSAFROLE (#2)		ND	UG/A	60.0
C525 2-CHLORONAPHTHALENE		ND	UG/A	30.0
1-CHLORONAPHTHALENE		ND	UG/A	15.0
C530 2-NITROANALINE		ND	UG/A	150.0
1,4-NAPHTHOQUINONE		ND	UG/A	30.0
C535 DIMETHYLPHTHALATE		ND	UG/A	30.0
1,3-DINITROBENZENE		ND	UG/A	30.0
C540 ACENAPHTHYLENE		ND	UG/A	30.0
C543 2,6-DINITROTOLUENE		ND	UG/A	30.0
C545 3-NITROANILINE		ND	UG/A	150.0
C550 ACENAPHTHENE		ND	UG/A	30.0
C555 2,4-DINITROPHENOL		ND	UG/A	150.0
C565 DIBENZOFURAN		ND	UG/A	30.0
C560 4-NITROPHENOL		ND	UG/A	150.0
PENTACHLOROBENZENE		ND	UG/A	30.0
C570 2,4-DINITROTOLUENE		ND	UG/A	30.0
1-NAPHTHYLAMINE		ND	UG/A	30.0
2-NAPHTHYLAMINE		ND	UG/A	30.0
2,3,4,6-TETRACHLOROPHENOL		ND	UG/A	60.0
C580 DIETHYLPHTHALATE		ND	UG/A	30.0
C590 FLUORENE		ND	UG/A	30.0

QUANTERRA GC/MS

Target Compound Data Summary Sheet

Data File: 30068108
Std Id: ST16980831

Sample: S-MM5-FB 1/3SA/1ML INST. ID: F16
Client: PACIFI Date Analyzed: 08/31/98 22:29
Analyst: DAT Instrument ID: F16 Run Factor: 3.00
Quan List Threshold: 0.95 Surrogate Vol.: 1.00

Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
C585 4-CHLOROPHENYL-PHENYLE		ND	UG/A	30.0
5-NITRO-O-TOLUIDINE		ND	UG/A	30.0
C595 4-NITROANALINE		ND	UG/A	150.0
C610 4,6-DINITRO-2-METHYLPH		ND	UG/A	150.0
C615 N-NITROSODIPHENYLAMINE		ND	UG/A	30.0
C620 AZOBENZENE		ND	UG/A	30.0
SYM-TRINITROBENZENE		ND	UG/A	30.0
C625 4-BROMOPHENYL-PHENYLET		ND	UG/A	30.0
PHENACETIN		ND	UG/A	30.0
DIALLATE	234	ND	UG/A	30.0
C630 HEXACHLOROBENZENE		ND	UG/A	30.0
4-AMINOBIPHENYL		ND	UG/A	30.0
C635 PENTACHLOROPHENOL		ND	UG/A	150.0
PRONAMIDE		ND	UG/A	30.0
PENTACHLORONITROBENZENE		ND	UG/A	150.0
C640 PHENANTHRENE		ND	UG/A	30.0
C645 ANTHRACENE		ND	UG/A	30.0
2SECBUTYL-4,6-DINITROPHENOL		ND	UG/A	30.0
C647 CARBAZOLE		ND	UG/A	30.0
C650 DI-N-BUTYLPHTHALATE		ND	UG/A	30.0
4-NITROQUINOLINE-1-OXIDE		ND	UG/A	30.0
METHAPYRILENE		ND	UG/A	30.0
ISODRIN		ND	UG/A	30.0
C655 FLUORANTHENE		ND	UG/A	30.0
CHLOROBENZILATE		ND	UG/A	30.0
C710 BENZIDINE		ND	UG/A	300.0
C715 PYRENE		ND	UG/A	30.0
ARAMITE (#1)		ND	UG/A	30.0
ARAMITE (#2)		ND	UG/A	30.0
P-DIMETHYLAMINOAZOBENZENE		ND	UG/A	30.0
3,3'-DIMETHYLBENZIDINE		ND	UG/A	30.0
KEPONE		ND	UG/A	150.0
C720 BUTYLBENZYLPHTHALATE		ND	UG/A	30.0
2-ACETYLAMINOFLUORENE		ND	UG/A	30.0
C730 BENZO(A)ANTHRACENE		ND	UG/A	30.0
C725 3,3'-DICHLOROBENZIDINE		ND	UG/A	60.0
C740 CHRYSENE		ND	UG/A	30.0
C745 BIS(2-ETHYLHEXYL)PHTHA		ND	UG/A	30.0
3-METHYLCHOLANTHRENE		ND	UG/A	30.0
C760 DI-N-OCTYL PHTHALATE		ND	UG/A	30.0
C765 BENZO(B)FLUORANTHENE		ND	UG/A	30.0
7,12-DIMETHYLBENZANTHRACENE		ND	UG/A	30.0
C770 BENZO(K)FLUORANTHENE		ND	UG/A	30.0
HEXACHLOROPHENE		ND	UG/A	30.0

QUANTERRA GC/MS

Target Compound Data Summary Sheet

Data File: 30068108

Std Id: ST16980831

Sample: S-MM5-FB 1/3SA/1ML INST. ID: F16

Client: PACIFI Date Analyzed: 08/31/98 22:29

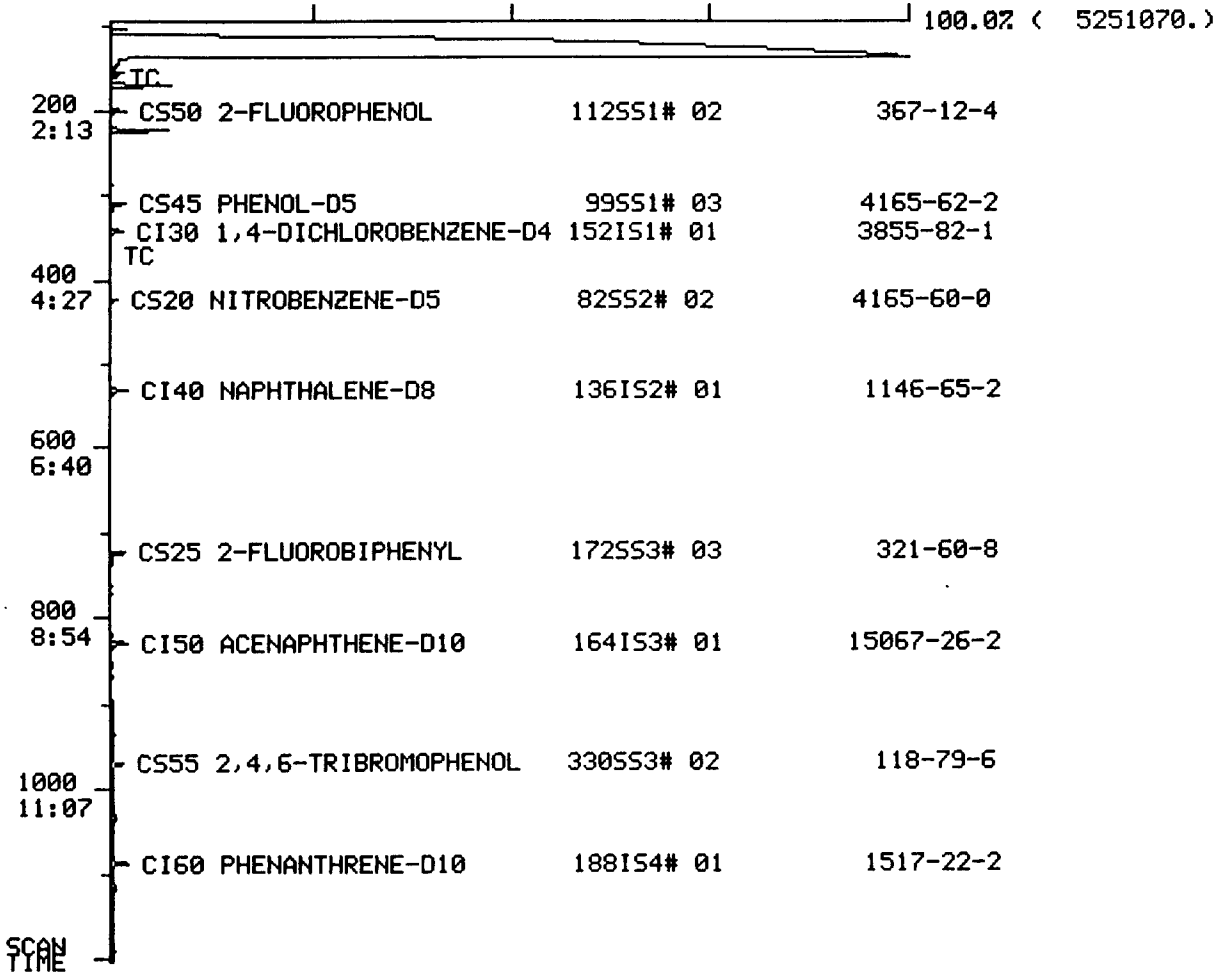
Analyst: DAT Instrument ID: F16 Run Factor: 3.00

Quan List Threshold: 0.95 Surrogate Vol.: 1.00

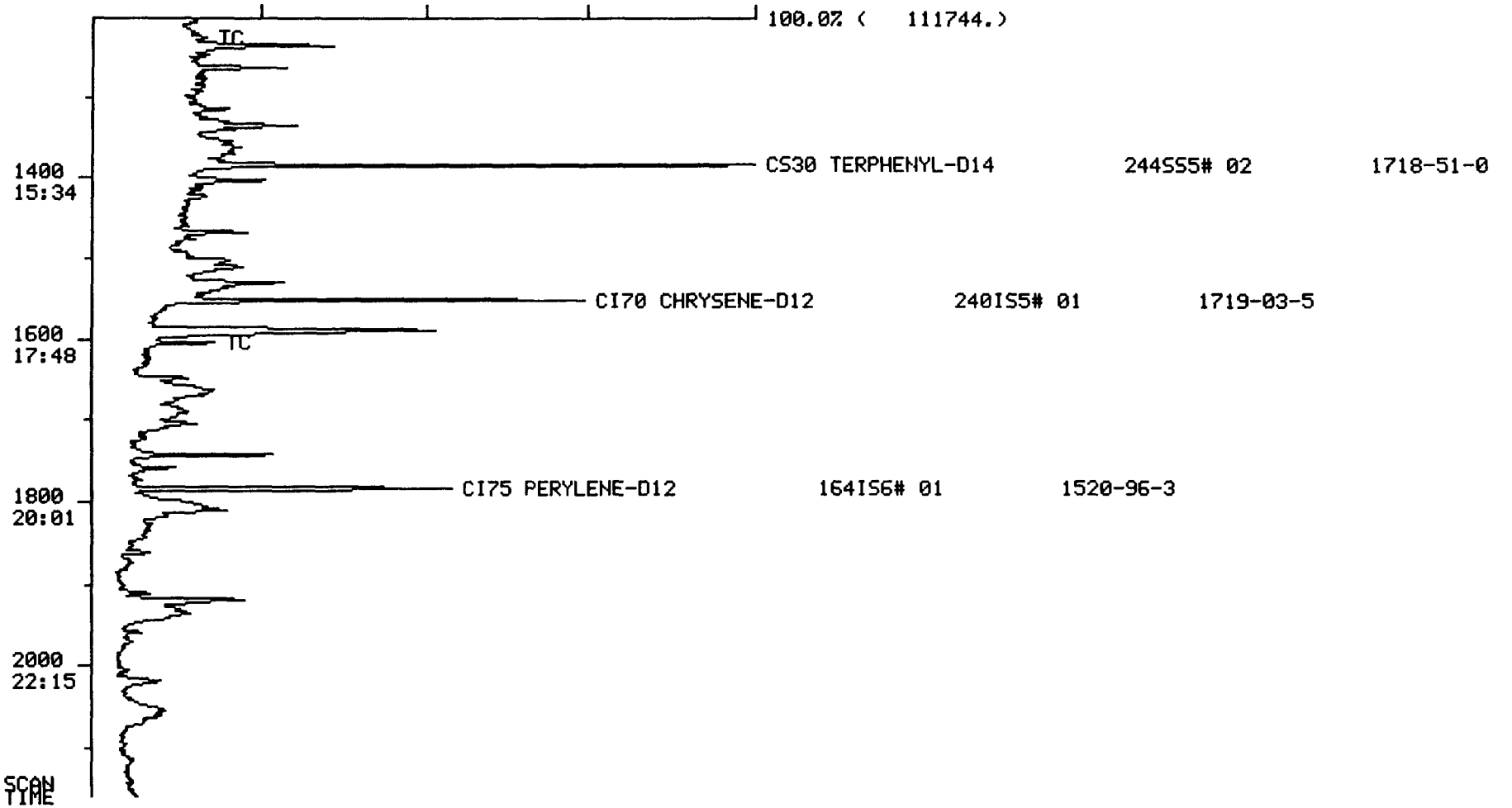
Target Compounds: SAP9

Parameter	Scan	Result	Units	Reporting Limit
C775 BENZO(A)PYRENE		ND	UG/A	30.0
C780 INDENO(1,2,3-CD)PYRENE		ND	UG/A	30.0
C785 DIBENZ(A,H)ANTHRACENE		ND	UG/A	30.0
C790 BENZO(G,H,I)PERYLENE		ND	UG/A	30.0

DATA FROM FILE: 30068108 SCANS 93 TO 1203 ACQUIRED: 08/31/98 22:29:00
CALI: 30068108 #3
SAMPLE: S-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M



DATA FROM FILE: 30068108 SCANS 1203 TO 2158 ACQUIRED: 08/31/98 22:29:00
CALI: 30068108 #3
SAMPLE: S-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M



STANDARD USED FOR THIS REPORT IS ST16980831 REPORT PRINTED: 9/01/98 22:17:16

ADDITIONAL STANDARD USED FOR THIS REPORT IS: ST16980831A

QUANTERRA QUANTITATION SUMMARY File: 30068108

Sample: S-MM5-FB 1/3SA/1ML INST. ID: F16
Analyst: DAT Instrument Id: F16 Analyzed: 08/31/98 22:29

Compounds with amounts less than 0.20 reported as NOT FOUND

No	Library Entry	Name	Mass	Meth	Scan	Ref	Area	RRF(L)	Units: UG/ML Amount
1	S1# 1	C130 1,4-DICHLOROBENZENE	152	A BB	340	1	36214.	1.000	40.000
2	S2# 1	C140 NAPHTHALENE-D8	136	A BB	529	2	139245.	1.000	40.000
3	S3# 1	C150 ACENAPHTHENE-D10	164	A BB	827	3	74547.	1.000	40.000
4	S4# 1	C160 PHENANTHRENE-D10	188	A BB	1086	4	121683.	1.000	40.000
5	S5# 1	C170 CHRYSENE-D12	240	A BB	1551	5	65622.	1.000	40.000
6	S6# 1	C175 PERYLENE-D12	264	A BV	1782	6	53016.	1.000	40.000
7	S2# 2	CS20 NITROBENZENE-D5	82	A BB	421	2	47363.	0.470	28.975
8	S3# 3	CS25 2-FLUOROBIPHENYL	172	A BB	722	3	90468.	1.234	39.328
9	S5# 2	CS30 TERPHENYL-D14	244	A BB	1383	5	82729.	0.995	50.670
10	S1# 3	CS45 PHENOL-D5	99	A BB	308	1	107781.	2.025	58.774
11	S1# 2	CS50 2-FLUOROPHENOL	112	A BB	198	1	66619.	1.368	53.779
12	S3# 2	CS55 2,4,6-TRIBROMOPHENO	330	A BB	968	3	32579.	0.236	74.180
13	S4# 4	HEXACHLOROBENZENE-C13	294		4	NOT FOUND			
14	S1# 15	C310 N-NITROSODIMETHYLAM	74		1	NOT FOUND			
15	S1# 20	PYRIDINE	79		1	NOT FOUND			
16	S1# 30	2-PICOLINE	93		1	NOT FOUND			
17	S1# 40	N-NITROSOMETHYLETHYLAMIN	42	A VV	159	1	5080.	0.811	6.918
18	S1# 60	METHYLMETHANESULFONATE	80		1	NOT FOUND			
19	S1# 70	N-NITROSODIETHYLAMINE	102		1	NOT FOUND			
20	S1# 85	ETHYLMETHANE SULFONATE	79		1	NOT FOUND			
21	S1# 95	PENTACHLOROETHANE	117		1	NOT FOUND			
22	S1#100	C320 ANILINE	93		1	NOT FOUND			
23	S1#105	C315 PHENOL	94	A BB	309	1	604.	1.968	0.339
24	S1#110	C325 BIS(2-CHLOROETHYL)E	93		1	NOT FOUND			
25	S1#115	C330 2-CHLOROPHENOL	128		1	NOT FOUND			
26	S1#125	C335 1,3-DICHLOROBENZENE	146		1	NOT FOUND			
27	S1#130	C340 1,4-DICHLOROBENZENE	146		1	NOT FOUND			
28	S1#145	C345 BENZYL ALCOHOL	108	A BB	370	1	2842.	0.854	3.674
29	S1#150	C350 1,2-DICHLOROBENZENE	146		1	NOT FOUND			
30	S1#160	C355 2-METHYLPHENOL	108		1	NOT FOUND			
31	S1#165	C360 2,2'-OXYBIS(1-CLPRO	45		1	NOT FOUND			
32	S1#170	C361 ACETOPHENONE	105		1	NOT FOUND			
33	S1#175	N-NITROSOPYRROLIDINE	100		1	NOT FOUND			
34	S1#180	N-NITROSOMORPHOLINE	56		1	NOT FOUND			
35	S1#182	3-METHYL PHENOL	108		1	NOT FOUND			
36	S1#185	C365 4-METHYLPHENOL	108		1	NOT FOUND			
37	S1#190	C370 N-NITROSO-DI-N-PROP	70		1	NOT FOUND			
38	S1#195	O-TOLUIDINE	106		1	NOT FOUND			
39	S1#200	C375 HEXACHLOROETHANE	117		1	NOT FOUND			
40	S2# 10	C410 NITROBENZENE	77		2	NOT FOUND			
41	S2# 15	N-NITROSOPIPERIDINE	42		2	NOT FOUND			
42	S2# 20	C415 ISOPHORONE	82		2	NOT FOUND			
43	S2# 25	C420 2-NITROPHENOL	139		2	NOT FOUND			
44	S2# 30	C425 2,4-DIMETHYLPHENOL	107		2	NOT FOUND			
45	S2# 35	C435 BIS(2-CHLOROETHOXY)	93		2	NOT FOUND			

46	S2#	40	C440	2,4-DICHLOROPHENOL	162	2 NOT FOUND
47	S2#	45	C430	BENZOIC ACID	122	2 NOT FOUND
48	S2#	50		AA-DIMETHYLPHENETHYLAMIN	58	2 NOT FOUND
49	S2#	55	C445	1,2,4-TRICHLOROBENZ	180	2 NOT FOUND

50	S2# 60	C450 NAPHTHALENE	128			2	NOT FOUND					
51	S2# 80	C455 4-CHLOROANALINE	127			2	NOT FOUND					
52	S2# 85	2,6-DICHLOROPHENOL	162			2	NOT FOUND					
53	S2# 90	HEXACHLOROPROPENE	213			2	NOT FOUND					
54	S2# 95	C460 HEXACHLOROBUTADIENE	225			2	NOT FOUND					
55	S2#115	P-PHENYLENE DIAMINE	108			2	NOT FOUND					
56	S2#120	N-NITROSODI-N-BUTYLAMINE	84			2	NOT FOUND					
57	S2#130	C465 4-CHLORO-3-METHYLPH	107			2	NOT FOUND					
58	S2#140	SAFROLE	162			2	NOT FOUND					
59	S2#145	C470 2-METHYLNAPHTHALENE	142			2	NOT FOUND					
60	S3# 10	1,2,4,5-TETRACHLOROBENZE	214			3	NOT FOUND					
61	S3# 15	ISOSAFROLE (#1)	162			3	NOT FOUND					
62	S3# 20	C510 HEXACHLOROCYCLOPENT	237			3	NOT FOUND					
63	S3# 25	C515 2,4,6-TRICHLOROPHEN	196			3	NOT FOUND					
64	S3# 30	C520 2,4,5-TRICHLOROPHEN	196			3	NOT FOUND					
65	S3# 35	ISOSAFROLE (#2)	104			3	NOT FOUND					
66	S3# 40	C525 2-CHLORONAPHTHALENE	162			3	NOT FOUND					
67	S3# 42	1-CHLORONAPHTHALEN	162			3	NOT FOUND					
68	S3# 45	C530 2-NITROANALINE	65	A	VB	761	3	298.	0.502	0.319		
69	S3# 50	1,4-NAPHTHOQUINONE	158			3	NOT FOUND					
70	S3# 55	C535 DIMETHYLPHTHALATE	163			3	NOT FOUND					
71	S3# 60	1,3-DINITROBENZENE	168			3	NOT FOUND					
72	S3# 65	C540 ACENAPHTHYLENE	152			3	NOT FOUND					
73	S3# 70	C543 2,6-DINITROTOLUENE	165	A	BB	814	3	460.	0.324	0.762		
74	S3# 75	C545 3-NITROANILINE	138			3	NOT FOUND					
75	S3# 80	C550 ACENAPHTHENE	153			3	NOT FOUND					
76	S3# 85	C555 2,4-DINITROPHENOL	184			3	NOT FOUND					
77	S3# 90	C565 DIBENZOFURAN	168			3	NOT FOUND					
78	S3# 95	C560 4-NITROPHENOL	109			3	NOT FOUND					
79	S3#100	PENTACHLOROBENZENE	250			3	NOT FOUND					
80	S3#105	C570 2,4-DINITROTOLUENE	165	A	BB	879	3	222.	0.397	0.300		
81	S3#110	1-NAPHTHYLAMINE	143			3	NOT FOUND					
82	S3#115	2-NAPHTHYLAMINE	143			3	NOT FOUND					
83	S3#120	2,3,4,6-TETRACHLOROPHENO	232			3	NOT FOUND					
84	S3#130	C580 DIETHYLPHTHALATE	149	A	VB	931	3	1395.	1.369	0.547		
85	S3#135	C590 FLUORENE	166			3	NOT FOUND					
86	S3#140	C585 4-CHLOROPHENYL-PHEN	204			3	NOT FOUND					
87	S3#145	5-NITRO-O-TOLUIDINE	152	A	VB	939	3	208.	0.356	0.314		
88	S3#150	C595 4-NITROANALINE	138	A	BB	948	3	118.	0.307	0.206		
89	S4# 10	C610 4,6-DINITRO-2-METHY	198			4	NOT FOUND					
90	S4# 15	C615 N-NITROSODIPHENYLAM	169			4	NOT FOUND					
91	S4# 20	C620 AZOBENZENE	77	A	BB	966	4	1071.	1.171	0.301		
92	S4# 25	SYM-TRINITROBENZENE	75			4	NOT FOUND					
93	S4# 30	C625 4-BROMOPHENYL-PHENY	248			4	NOT FOUND					
94	S4# 35	PHENACETIN	108	A	VV	1035	4	320.	0.317	0.332		
95	S4# 37	DIALLATE	234			4	NOT FOUND					
96	S4# 40	C630 HEXACHLOROBENZENE	284			4	NOT FOUND					
97	S4# 45	4-AMINOBIPHENYL	169			4	NOT FOUND					
98	S4# 50	C635 PENTACHLOROPHENOL	266			4	NOT FOUND					
99	S4# 55	PRONAMIDE	173			4	NOT FOUND					
100	S4# 60	PENTACHLORONITROBENZENE	237			4	NOT FOUND					
101	S4# 65	C640 PHENANTHRENE	178	A	BB	1089	4	1753.	1.033	0.558		
102	S4# 70	C645 ANTHRACENE	178			4	NOT FOUND					
103	S4# 75	2SECBUTYL-4,6-DINITROPHE	211			4	NOT FOUND					
104	S4# 80	C647 CARBAZOLE	167			4	NOT FOUND					
105	S4# 85	C650 DI-N-BUTYLPHTHALATE	149	A	BB	1226	4	4322.	1.247	1.140		
106	S4#100	4-NITROQUINOLINE-1-OXIDE	190	A	BB	1237	4	272.	0.073	1.233		
107	S4#105	METHAPYRILENE	58	A	BB	1263	4	803.	0.305	0.867		
108	S4#106	ISODRIN	193			4	NOT FOUND					
109	S4#110	C655 FLUORANTHENE	202			4	NOT FOUND					
110	S4#120	CHLOROBENZILATE	139			4	NOT FOUND					

111	S5#	10	C710	BENZIDINE	184			5	NOT FOUND				
112	S5#	15	C715	PYRENE	202			5	NOT FOUND				
113	S5#	20		ARAMITE (#1)	185			5	NOT FOUND				
114	S5#	25		ARAMITE (#2)	185			5	NOT FOUND				
115	S5#	30		P-DIMETHYLAMINOAZOBENZEN	120			5	NOT FOUND				
116	S5#	35		3,3'-DIMETHYLBENZIDINE	212			5	NOT FOUND				
117	S5#	37		KEPONE	272			5	NOT FOUND				
118	S5#	40	C720	BUTYLBENZYLPHTHALAT	149			5	NOT FOUND				
119	S5#	45		2-ACETYLAMINOFLUORENE	181	A	VV	1516	5	330.	0.432	0.465	
120	S5#	50	C730	BENZO(A)ANTHRACENE	228	A	BB	1551	5	574.	1.125	0.311	
121	S5#	55	C725	3,3'-DICHLOROBENZID	252			5	NOT FOUND				
122	S5#	60	C740	CHRYSENE	228			5	NOT FOUND				
123	S5#	65	C745	BIS(2-ETHYLHEXYL)PH	149	A	BB	1603	5	9579.	0.980	5.959	
124	S5#	85		3-METHYLCHOLANTHRENE	268			5	NOT FOUND				
125	S6#	10	C760	DI-N-OCTYL PHTHALAT	149			6	NOT FOUND				
126	S6#	15	C765	BENZO(B)FLUORANTHEN	252			6	NOT FOUND				
127	S6#	20		7,12-DIMETHYLBENZANTHRAC	256			6	NOT FOUND				
128	S6#	25	C770	BENZO(K)FLUORANTHEN	252			6	NOT FOUND				
129	S6#	30		HEXACHLOROPHENE	196			6	NOT FOUND				
130	S6#	35	C775	BENZO(A)PYRENE	252			6	NOT FOUND				
131	S6#	55	C780	INDENO(1,2,3-CD)PYR	276			6	NOT FOUND				
132	S6#	60	C785	DIBENZ(A,H)ANTHRACE	278			6	NOT FOUND				
133	S6#	65	C790	BENZO(G,H,I)PERYLEN	276			6	NOT FOUND				

BNA, S LIBRARIES ANALYST: _____ DATE: _____

QUANTERRA Internal Standard Check

Standard Filename: ST16980831 Analyzed: 08/31/98 12:31

Standard	IS# 1 Area	%	RT	IS# 2 Area	%	RT	IS# 3 Area	%	RT
ST16980831	28649.		3.78	100432.		5.90	54347.		9.21
Upper Limit	57297.=+200		4.28	200864.=+200		6.40	108695.=+200		9.71
Lower Limit	14324.=+ 50		3.28	50216.=+ 50		5.40	27174.=+ 50		8.71
Filename									
1 30068108	36214.= 126		3.78	139245.= 138		5.88	74547.= 137		9.20

IS# 1 = CI30 1,4-DICHLOROBENZENE-D4
IS# 2 = CI40 NAPHTHALENE-D8
IS# 3 = CI50 ACENAPHTHENE-D10

* - indicates an I.S. is outside QC limit(s)

Standard	IS# 4 Area	%	RT	IS# 5 Area	%	RT	IS# 6 Area	%	RT
ST16980831	98520.		12.08	62289.		17.26	50750.		19.83
Upper Limit	197039.=+200		12.58	124578.=+200		17.76	101500.=+200		20.33
Lower Limit	49260.=+ 50		11.58	31145.=+ 50		16.76	25375.=+ 50		19.33
Filename									
1 30068108	121683.= 123		12.08	65622.= 105		17.25	53016.= 104		19.82

IS# 4 = CI60 PHENANTHRENE-D10
IS# 5 = CI70 CHRYSENE-D12
IS# 6 = CI75 PERYLENE-D12

* - indicates an I.S. is outside QC limit(s)

Data Reduced by: [illegible] Date: 9/17/98
Data Reviewed by: [illegible] Date: 9/17/98

Data File: 30068108

QUANTERRA GC/MS TIC REPORT (Part 1)

Sample: S-MM5-FB 1/3SA/1ML INST. ID: F16
Analyst: DAT Date Analyzed: 08/31/98 22:29
Run Factor: 3.00

#	SCAN	Concentration in Sample (UG/A)	CAS #	
	170	380.	123-42-2	VOA Yes
	2-PENTANONE, 4-HYDROXY-4-METHYL-			
2	222	360.	111-84-2	
	NONANE			or isomer
3	285	29.	100-52-7	
	BENZALDEHYDE			
X	932	22.	~~74381-40-1~~	
	~~PROPANOIC ACID, 2-METHYL-, 1-(1,1-DIMETHYLETHYL) 2-METHYL-1,3-PROPANE!~~			Unknown 5700
X	985	20.	629-92-5	
	NONADECANE			or isomer
6	1033	52.	54105-67-8	
	HEPTADECANE, 2,6-DIMETHYL-			
7	1116	24.	629-92-5	
	NONADECANE			
8	1235	33.	57-10-3	
	HEXADECANOIC ACID			
9	1334	51.	~~54105-67-8~~	5746400
	~~HEPTADECANE, 2,6-DIMETHYL-~~			alkane
X	1361	20.	00-00-0	5700
	UNKNOWN			

11 1401 31. 638-67-5
TRICOSANE or isomer

12 1467 30. ~~638-67-5~~
~~TRICOSANE~~ alkane 5746400

~~13~~ 1501 24. 00-00-0
~~UNKNOWN~~ 5700

14 1509 36. 00-00-0
UNKNOWN

15 1529 45. ~~629-92-5~~
~~NONADECANE~~ alkane 5746400

16 1588 150. 74685-30-6
5-EICOSENE, (E)- or isomer

17 1661 49. 00-00-0
UNKNOWN 5700

18 1688 34. 00-00-0
UNKNOWN

19 1703 26. ~~629-92-5~~
~~NONADECANE~~ alkane 5746400

20 1741 57. 00-00-0
UNKNOWN 5700

21 1809 77. 00-00-0
UNKNOWN

22 1917 58. ~~6553-33-4~~
~~4-TETRADECANOL~~ unknown 5700

23	1934 UNKNOWN	42.	00-00-0	5700
24	2016 ~~3-OCTADECENE, (E)-~~	30.	~~7206-19-1~~	alkene 5 720000
25	2052 UNKNOWN	27.	00-00-0	570

DATA FILE: 30068108

QUANTERRA GC/MS TIC REPORT (Part 2)

CONCENTRATION = AREA(TIC)*CONC(IS)/AREA(IS)

#	FIT	PURITY	INT. STD.	RT	RRT	AREA	HEIGHT	AMOUNT AS ANALYZED (UG/ML)	LIB	LIB #
1	955	916	1	1:53	0.321	906380.	388608.	126.768	NB	3241.
2	986	935	1	2:28	0.420	859436.	372736.	120.203	NB	5159.
3	967	923	1	3:10	0.539	69204.	17724.	9.679	NB	2017.
4	915	728	2	10:21	1.127	63056.	21101.	7.252	NB	40501.
5	926	763	3	10:57	0.907	58112.	13152.	6.546	NB	37465.
6	939	746	3	11:29	0.951	152832.	27072.	17.215	NB	37462.
7	955	779	3	12:24	1.028	72432.	21408.	8.159	NB	37465.
8	977	722	3	13:44	1.137	97728.	22656.	11.008	NB	35182.
9	892	621	4	14:50	0.860	92576.	15968.	17.096	NB	37462.
10	664	194	4	15:08	0.877	36800.	6272.	6.796	UK	1.
11	903	624	4	15:34	0.903	56608.	12576.	10.454	NB	46161.
12	900	695	4	16:19	0.946	54816.	11600.	10.123	NB	46161.
13	696	200	4	16:41	0.968	43920.	7152.	8.111	UK	1.
14	816	451	4	16:47	0.973	64912.	9296.	11.987	UK	1.
15	955	643	4	17:00	0.986	80832.	15072.	14.927	NB	37465.
16	975	742	4	17:39	1.024	263344.	45632.	48.631	NB	39516.
17	800	345	4	18:28	1.071	88976.	7792.	16.431	UK	1.
18	687	232	5	18:46	0.947	49792.	4368.	11.377	UK	1.
19	941	723	5	18:56	0.956	37936.	6944.	8.668	NB	37465.
20	895	502	5	19:21	0.977	83508.	23117.	19.081	UK	1.
21	904	537	5	20:07	1.015	112176.	10848.	25.631	UK	1.
22	966	729	5	21:19	1.076	85264.	16481.	19.482	NB	26416.
23	722	399	5	21:30	1.085	61840.	5968.	14.130	UK	1.
24	927	696	5	22:25	1.131	44000.	6658.	10.053	NB	34410.
25	839	412	5	22:49	1.152	39200.	3904.	8.957	UK	1.

Library Search Data: 30068108 # 170 Base m/z: 43
08/31/98 22:29:00 + 1:53 Cali: 30068108 # 3 RIC: 278528.
Sample: S-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
630 matched at least 6 of the 16 largest peaks in the unknown

Rank	In.	Name
1	3241	2-PENTANONE, 4-HYDROXY-4-METHYL-
2	5791	1,3-DIOXOLANE-2-METHANOL, 2,4-DIMETHYL-
3	3366	2-PENTANOL, 2,4-DIMETHYL-
4	3288	ACETIC ACID, 1,1-DIMETHYLETHYL ESTER
5	5594	2-PROPANOL, 2-NITROSO-, ACETATE (ESTER)
6	919	TERT-BUTYL HYDROPEROXIDE
7	3349	2-HEXANOL, 2-METHYL-
8	8432	2-HEXANONE, 3-HYDROXY-3,5-DIMETHYL-
9	8425	2-HEPTANONE, 3-HYDROXY-3-METHYL-

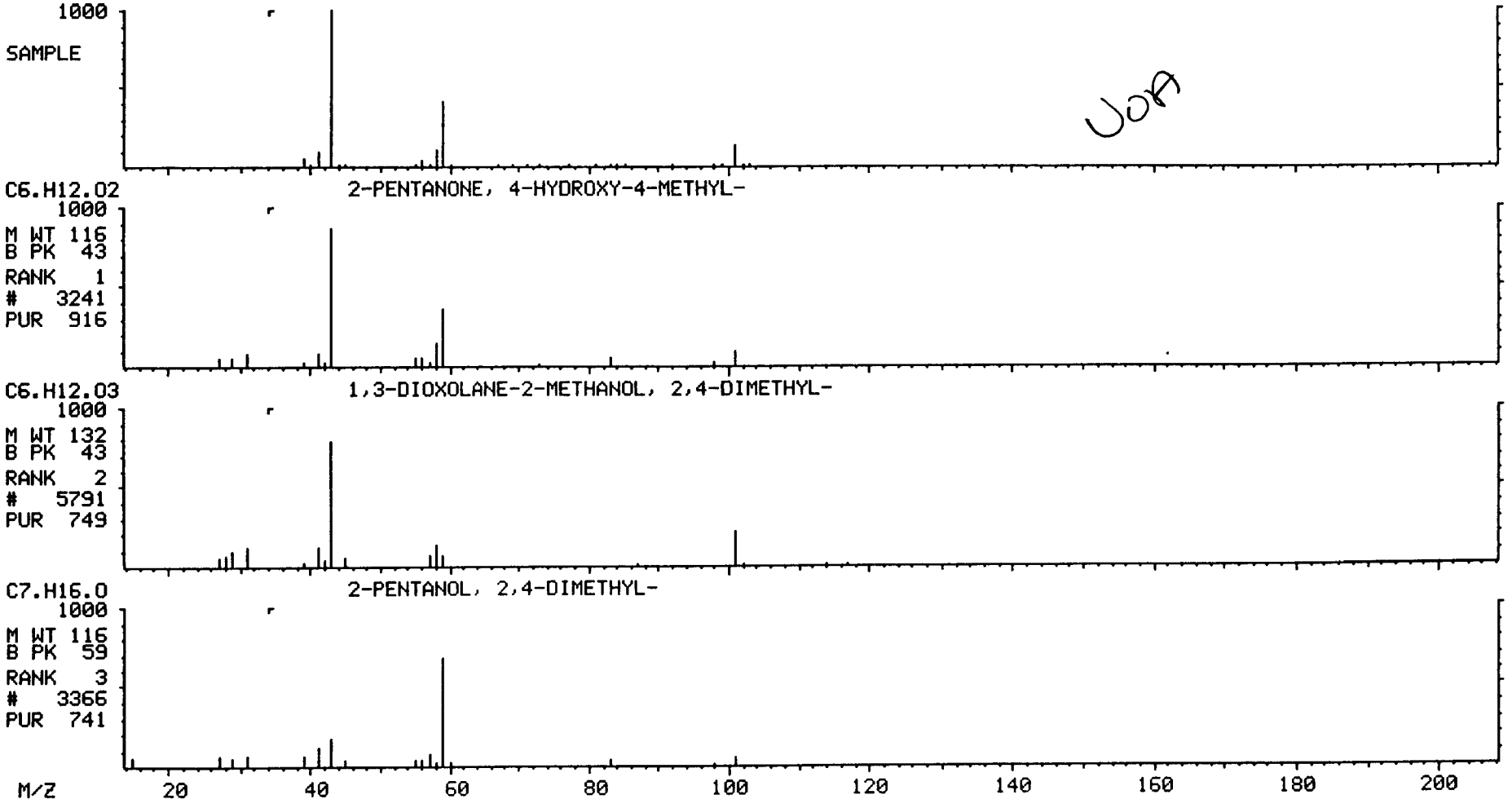
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C6.H12.O2	116	43	916	955	929
2	C6.H12.O3	132	43	749	823	793
3	C7.H16.O	116	59	741	764	741
4	C6.H12.O2	116	43	725	774	739
5	C5.H9.O3.N	131	43	718	821	810
6	C4.H10.O2	90	59	705	856	727
7	C7.H16.O	116	59	704	738	704
8	C8.H16.O2	144	59	662	725	688
9	C8.H16.O2	144	59	659	715	675

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	123-42-2
2	---	---	---	---	53951-43-2
3	---	---	---	---	625-06-9
4	---	---	---	---	540-88-5
5	---	---	---	---	6931-04-0
6	---	---	---	---	75-91-2
7	---	---	---	---	625-23-0
8	---	---	---	---	6321-14-8
9	---	---	---	---	13757-91-0

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 22:29:00 + 1:53
SAMPLE: S-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068108 # 170
CALI: 30068108 # 3

BASE M/Z: 43
RIC: 278528.



JOR

11 C3

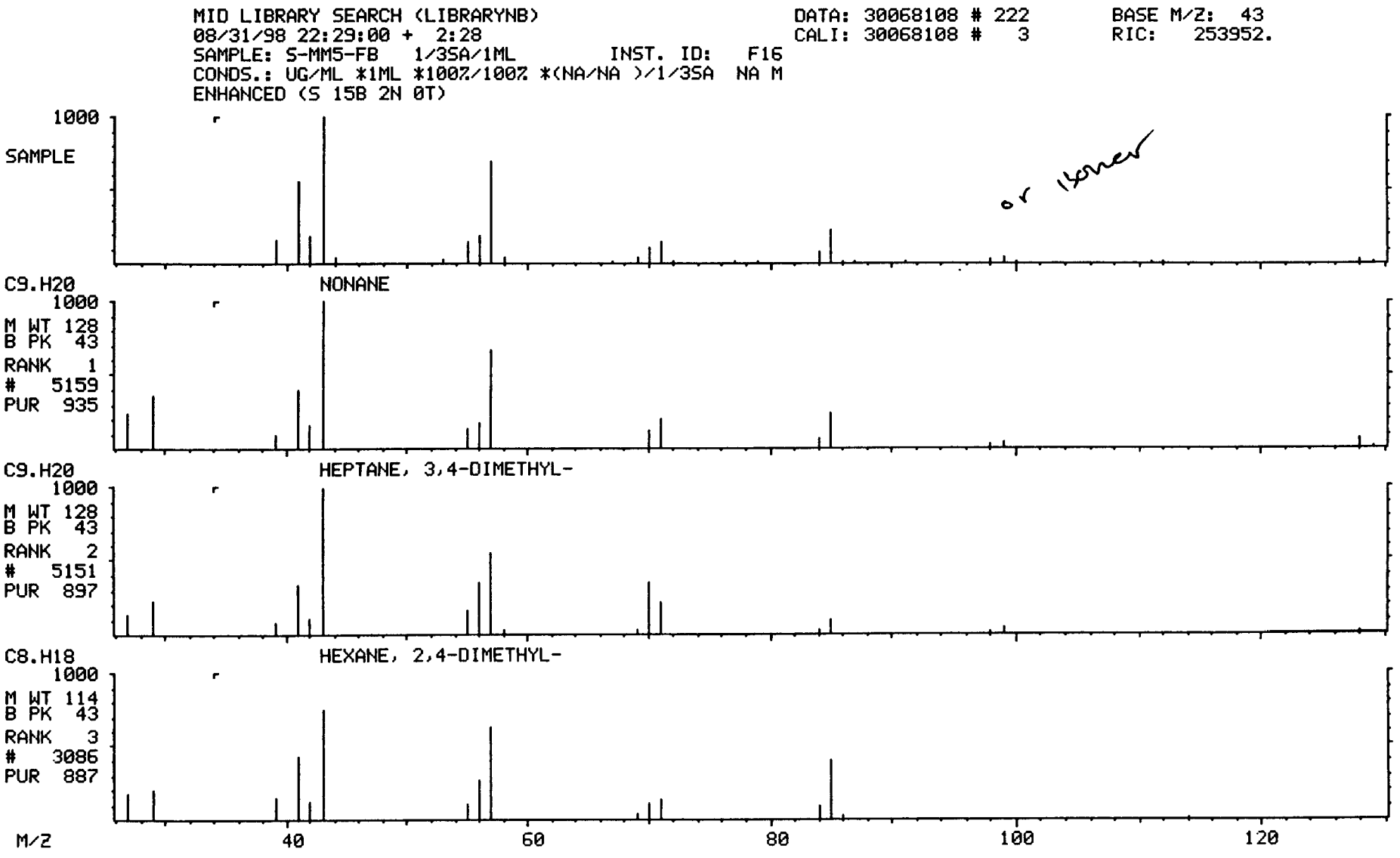
Library Search Data: 30068108 # 222 Base m/z: 43
08/31/98 22:29:00 + 2:28 Cali: 30068108 # 3 RIC: 253952.
Sample: S-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
921 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	5159	NONANE
2	5151	HEPTANE, 3,4-DIMETHYL-
3	3086	HEXANE, 2,4-DIMETHYL-
4	5141	HEPTANE, 2,4-DIMETHYL-
5	19015	DECANE, 2,5,6-TRIMETHYL-
6	8085	HEPTANE, 2,4,6-TRIMETHYL-
7	5144	HEPTANE, 4-ETHYL-
8	11607	UNDECANE
9	3081	OCTANE

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C9.H20	128	43	935	986	935
2	C9.H20	128	43	897	926	897
3	C8.H18	114	43	887	963	898
4	C9.H20	128	43	885	938	890
5	C13.H28	184	57	868	910	887
6	C10.H22	142	43	864	909	879
7	C9.H20	128	43	863	914	871
8	C11.H24	156	43	859	921	908
9	C8.H18	114	43	857	935	878

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	111-84-2
2	—	—	—	—	922-28-1
3	—	—	—	—	589-43-5
4	—	—	—	—	2213-23-2
5	—	—	—	—	62108-23-0
6	—	—	—	—	2613-61-8
7	—	—	—	—	2216-32-2
8	—	—	—	—	1120-21-4
9	—	—	—	—	111-65-9


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 22:29:00 + 2:28
SAMPLE: S-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068108 # 222
CALI: 30068108 # 3
BASE M/Z: 43
RIC: 253952.
1000
SAMPLE
or lower
C9.H20
NONANE
M WT 128
B PK 43
RANK 1
5159
PUR 935
C9.H20
HEPTANE, 3,4-DIMETHYL-
M WT 128
B PK 43
RANK 2
5151
PUR 897
C8.H18
HEXANE, 2,4-DIMETHYL-
M WT 114
B PK 43
RANK 3
3086
PUR 887
M/Z
40
60
80
100
120

120:1

Library Search Data: 30068108 # 285 Base m/z: 77
08/31/98 22:29:00 + 3:10 Cali: 30068108 # 3 RIC: 13744.
Sample: S-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
366 matched at least 5 of the 16 largest peaks in the unknown

Rank	In.	Name
1	2017	BENZALDEHYDE
2	7284	BENZOYL CHLORIDE
3	6466	ETHANONE, 2-HYDROXY-1-PHENYL-
4	2014	2,4-HEPTADIEN-6-YNAL, (E,E)-
5	9645	BENZOYLFORMIC ACID
6	13112	BENZOYL ISOTHIOCYANATE
7	6857	BENZENECARBOTHIOIC ACID
8	13359	BENZENEACETIC ACID, .ALPHA.-OXO-, METHYL ESTER
9	6111	1,2-BENZENEDICARBOXALDEHYDE

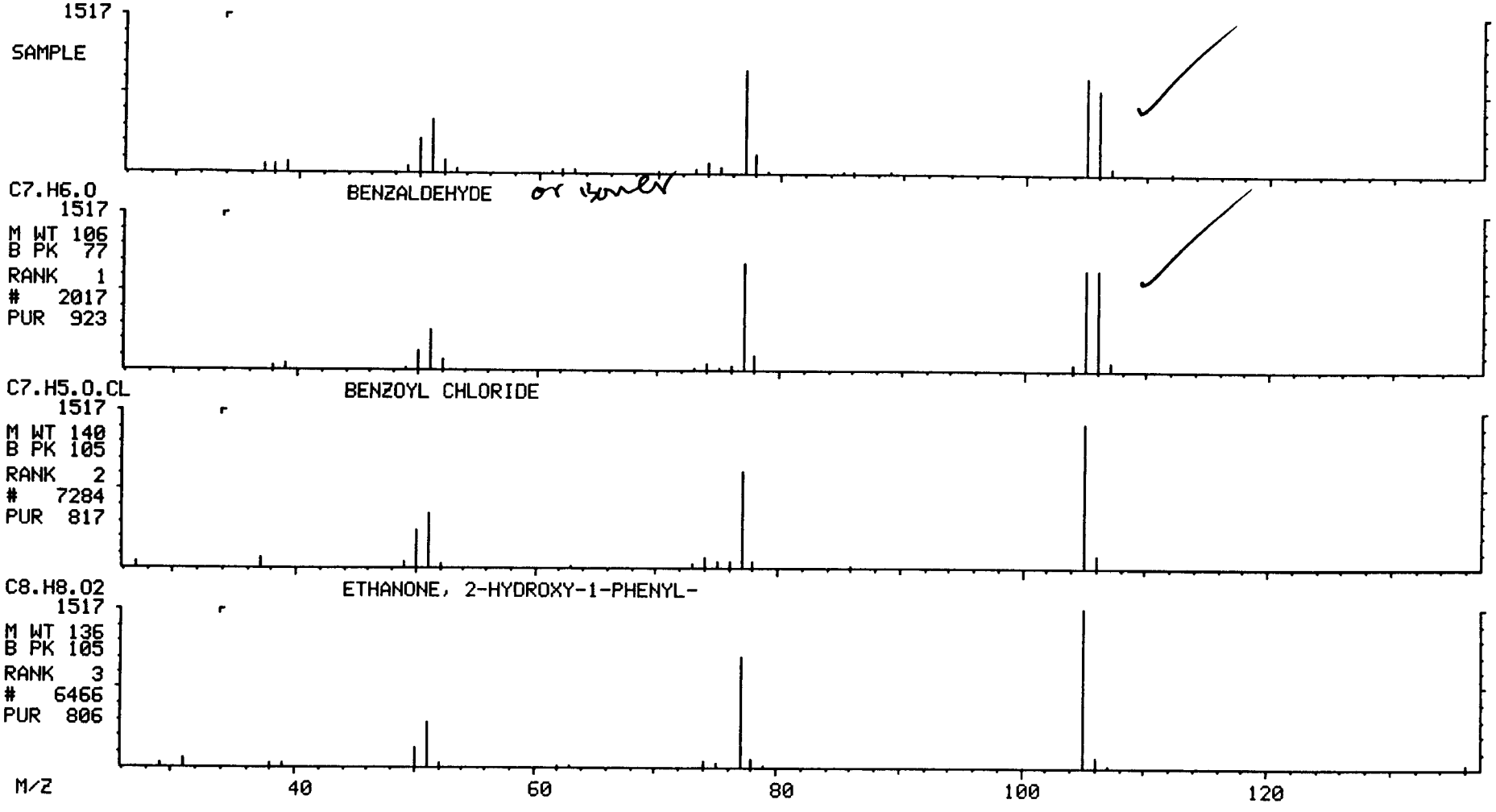
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C7.H6.O	106	77	923	967	944
2	C7.H5.O.CL	140	105	817	874	830
3	C8.H8.O2	136	105	806	842	822
4	C7.H6.O	106	105	805	846	810
5	C8.H6.O3	150	105	779	846	804
6	C8.H5.O.N.S	163	105	773	820	788
7	C7.H6.O.S	138	77	763	845	810
8	C9.H8.O3	164	105	759	832	787
9	C8.H6.O2	134	105	758	807	915

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	100-52-7
2	—	—	—	—	98-88-4
3	—	—	—	—	582-24-1
4	—	—	—	—	7200-04-6
5	—	—	—	—	611-73-4
6	—	—	—	—	532-55-8
7	—	—	—	—	98-91-9
8	—	—	—	—	15206-55-0
9	—	—	—	—	643-79-8

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 22:29:00 + 3:10
SAMPLE: S-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068108 # 285
CALI: 30068108 # 3

BASE M/Z: 77
RIC: 13744.



1203

Library Search Data: 30068108 # 932 Base m/z: 71
08/31/98 22:29:00 + 10:22 Cali: 30068108 # 3 RIC: 18880.
Sample: S-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
540 matched at least 6 of the 16 largest peaks in the unknown

Rank	In.	Name
1	40501	PROPANOIC ACID, 2-METHYL-, 1-(1,1-DIMETHYLETHYL)-2-METHYL-1,3-PROPA*
2	40500	PROPANOIC ACID, 2-METHYL-, 2-ETHYL-1-PROPYL-1,3-PROPANEDIYL ESTER
3	26739	PROPANOIC ACID, 2-METHYL-, 2,2-DIMETHYL-1-(2-HYDROXY-1-METHYLETHYL)*
4	26740	PROPANOIC ACID, 2-METHYL-, 3-HYDROXY-2,4,4-TRIMETHYLPENTYL ESTER
5	4625	1-HEXENE, 3,4,5-TRIMETHYL-
6	2720	4,4-DIMETHYL-1-HEXENE
7	4556	ETHANONE, 1-(3-ETHYLCYCLOBUTYL)-
8	4677	2,4,4-TRIMETHYL-1-HEXENE
9	26737	PROPANOIC ACID, 2-METHYL-, 2-ETHYL-3-HYDROXYHEXYL ESTER

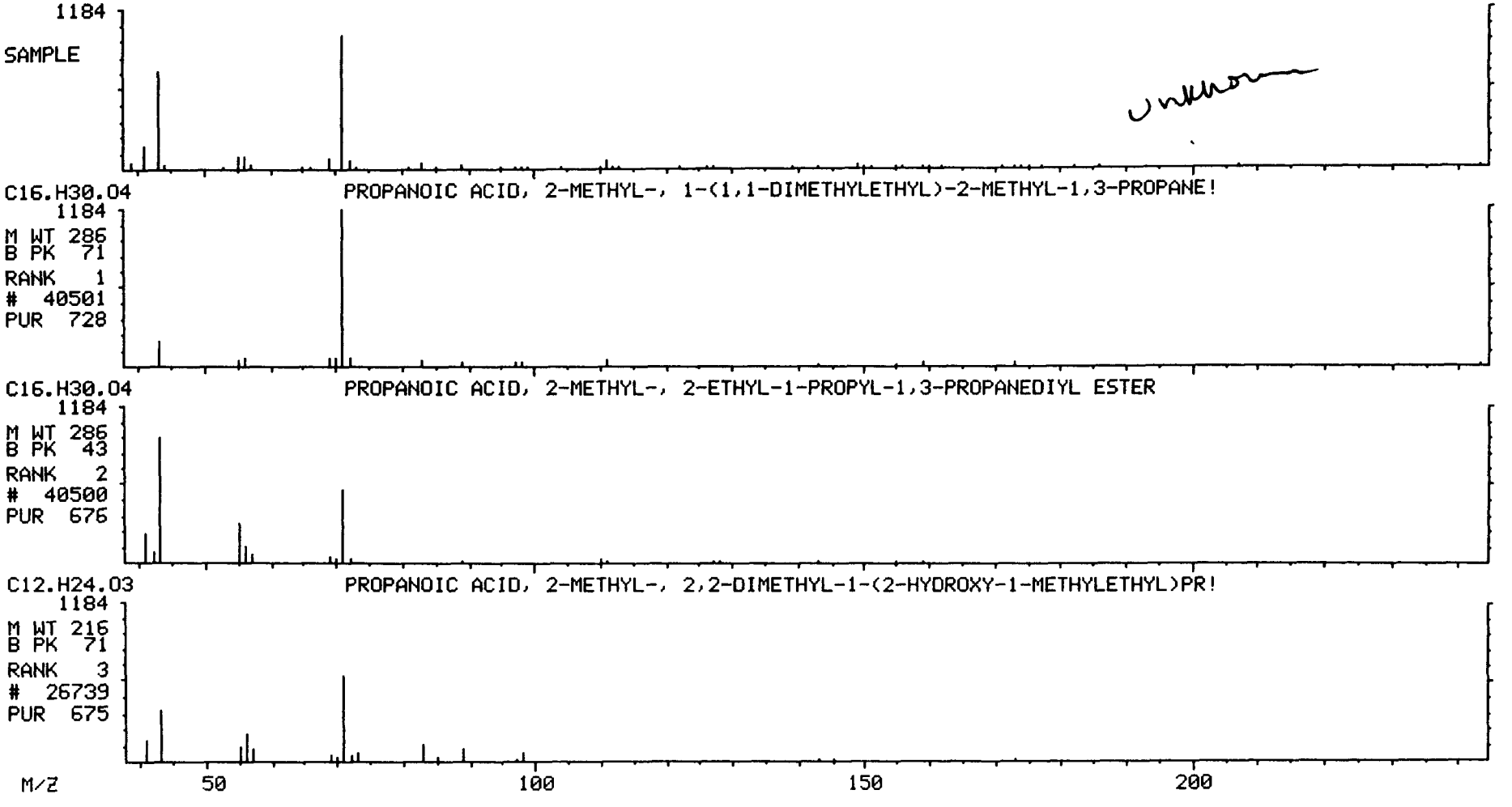
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C16.H30.O4	286	71	728	915	748
2	C16.H30.O4	286	43	676	875	712
3	C12.H24.O3	216	71	675	888	693
4	C12.H24.O3	216	71	626	800	631
5	C9.H18	126	43	557	798	652
6	C8.H16	112	71	552	788	617
7	C8.H14.O	126	43	546	735	625
8	C9.H18	126	71	527	721	637
9	C12.H24.O3	216	71	514	694	538

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	74381-40-1
2	—	—	—	—	74367-30-9
3	—	—	—	—	74367-33-2
4	—	—	—	—	74367-34-3
5	—	—	—	—	56728-10-0
6	—	—	—	—	1647-08-1
7	—	—	—	—	56335-71-8
8	—	—	—	—	51174-12-0
9	—	—	—	—	74367-31-0

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 22:29:00 + 10:22
SAMPLE: S-MM5-FB 1/35A/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068108 # 932
CALI: 30068108 # 3

BASE M/Z: 71
RIC: 18880.



Library Search Data: 30068108 # 985 Base m/z: 57
08/31/98 22:29:00 + 10:57 Cali: 30068108 # 3 RIC: 12368.
Sample: S-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
548 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37465	NONADECANE
2	22527	DODECANE, 2,5-DIMETHYL-
3	22530	TETRADECANE
4	29264	TRIDECANE, 5-PROPYL-
5	25997	PENTADECANE
6	29263	HEXADECANE
7	32059	HEPTADECANE
8	37462	HEPTADECANE, 2,6-DIMETHYL-
9	19054	UNDECANE, 2,6-DIMETHYL-

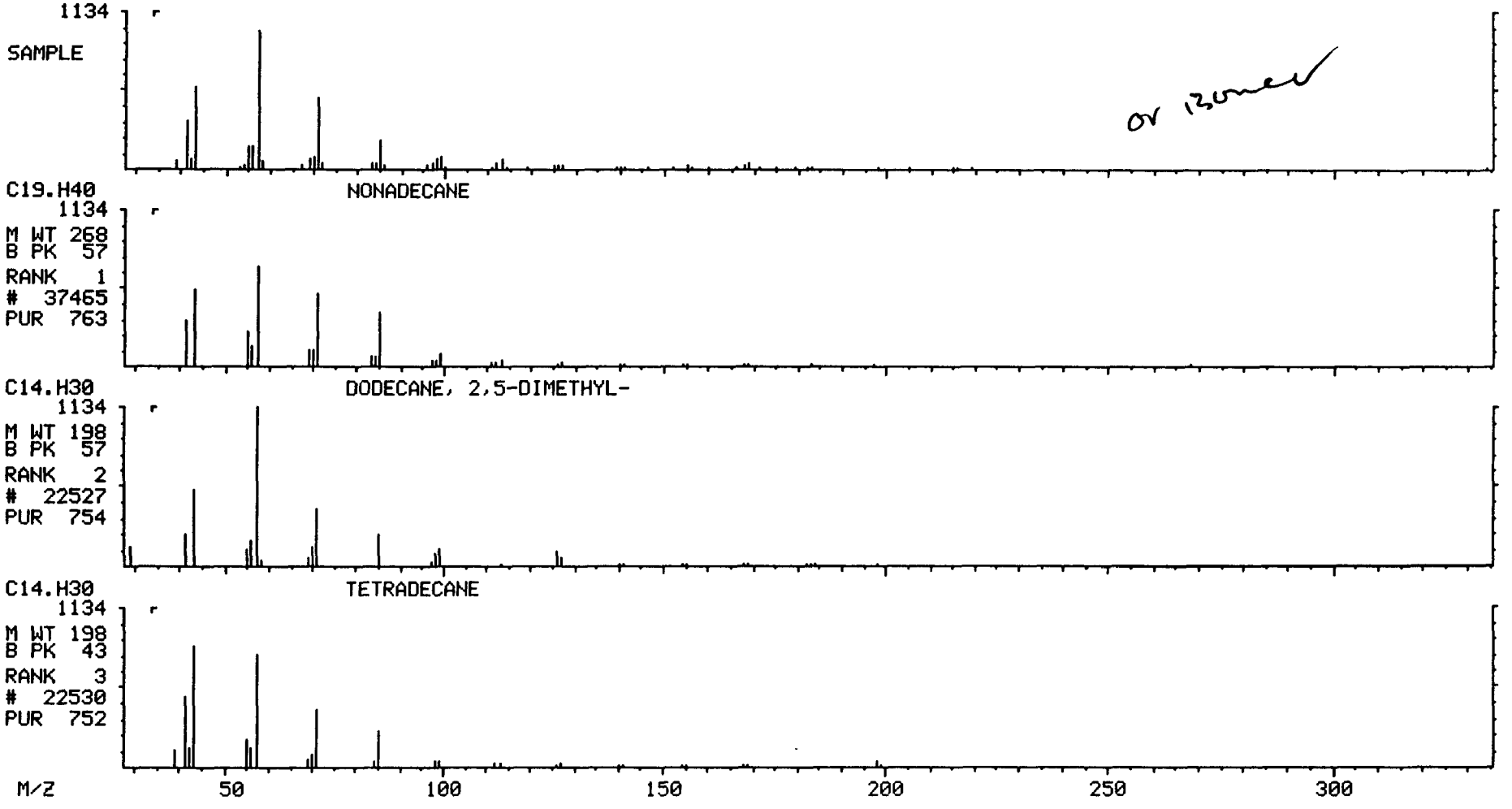
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	763	926	787
2	C14.H30	198	57	754	934	759
3	C14.H30	198	43	752	933	759
4	C16.H34	226	57	750	977	757
5	C15.H32	212	57	750	934	775
6	C16.H34	226	57	749	916	793
7	C17.H36	240	57	749	915	787
8	C19.H40	268	57	747	936	763
9	C13.H28	184	57	740	943	746

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	629-92-5
2	---	---	---	---	56292-65-0
3	---	---	---	---	629-59-4
4	---	---	---	---	55045-11-9
5	---	---	---	---	629-62-9
6	---	---	---	---	544-76-3
7	---	---	---	---	629-78-7
8	---	---	---	---	54105-67-8
9	---	---	---	---	17301-23-4

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 22:29:00 + 10:57
SAMPLE: S-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068108 # 985
CALI: 30068108 # 3

BASE M/Z: 57
RIC: 12368.



1207

Library Search Data: 30068108 #1033 Base m/z: 57
08/31/98 22:29:00 + 11:29 Cali: 30068108 # 3 RIC: 23872.
Sample: S-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
450 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37462	HEPTADECANE, 2,6-DIMETHYL-
2	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
3	29253	PENTADECANE, 2-METHYL-
4	32058	HEXADECANE, 3-METHYL-
5	37466	PENTADECANE, 2,6,10,14-TETRAMETHYL-
6	37465	NONADECANE
7	25991	DODECANE, 2,6,10-TRIMETHYL-
8	22535	DODECANE, 4,6-DIMETHYL-
9	42192	HEPTADECANE, 2,6,10,15-TETRAMETHYL-

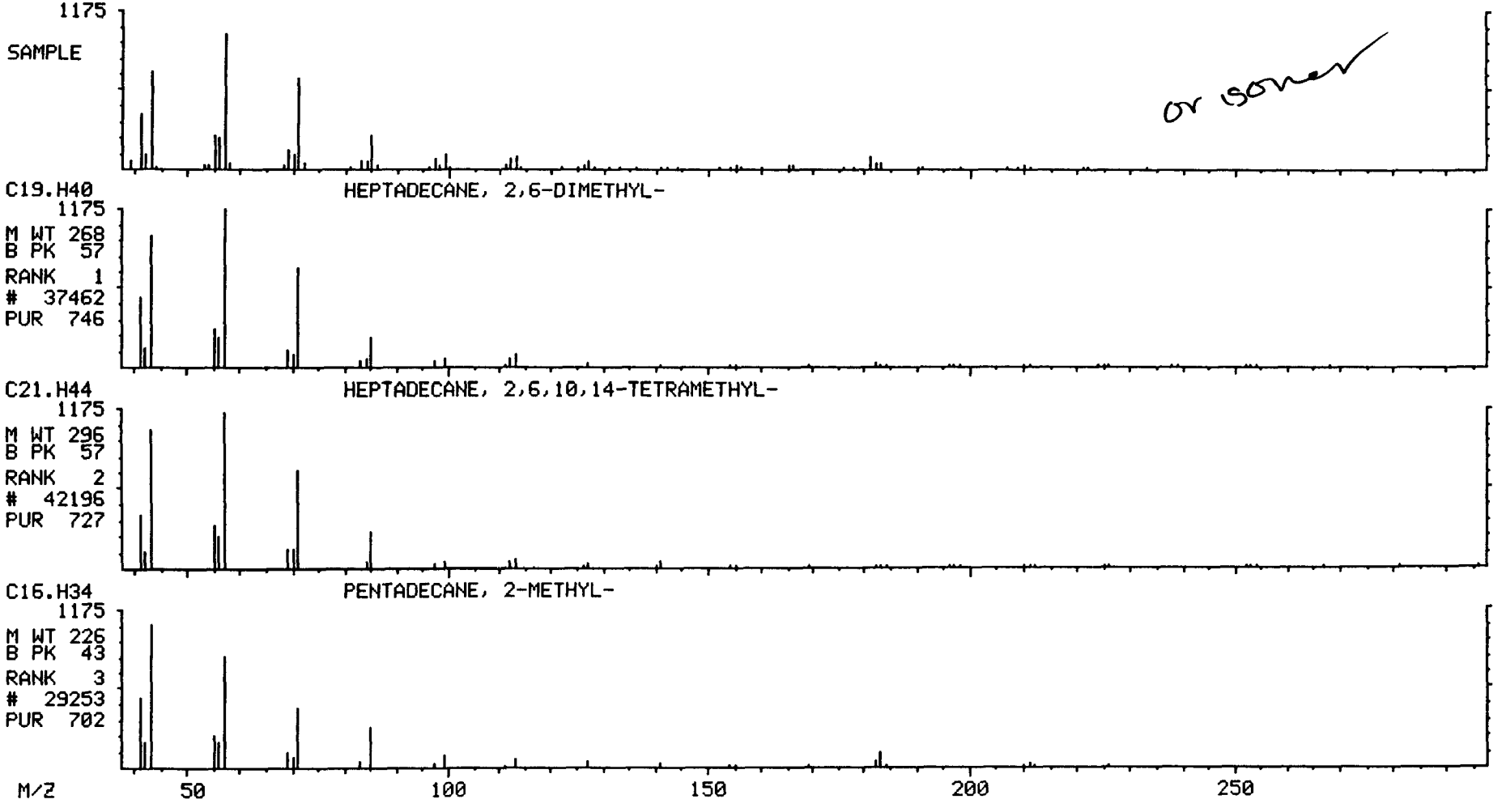
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	746	939	758
2	C21.H44	296	57	727	932	744
3	C16.H34	226	43	702	925	723
4	C17.H36	240	57	701	932	714
5	C19.H40	268	71	697	933	721
6	C19.H40	268	57	697	930	730
7	C15.H32	212	57	692	950	696
8	C14.H30	198	57	690	952	690
9	C21.H44	296	57	687	915	720

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	54105-67-8
2	---	---	---	---	18344-37-1
3	---	---	---	---	1560-93-6
4	---	---	---	---	6418-43-5
5	---	---	---	---	1921-70-6
6	---	---	---	---	629-92-5
7	---	---	---	---	3891-98-3
8	---	---	---	---	61141-72-8
9	---	---	---	---	54833-48-6

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 22:29:00 + 11:29
SAMPLE: S-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068108 #1033
CALI: 30068108 # 3

BASE M/Z: 57
RIC: 23872.



1203

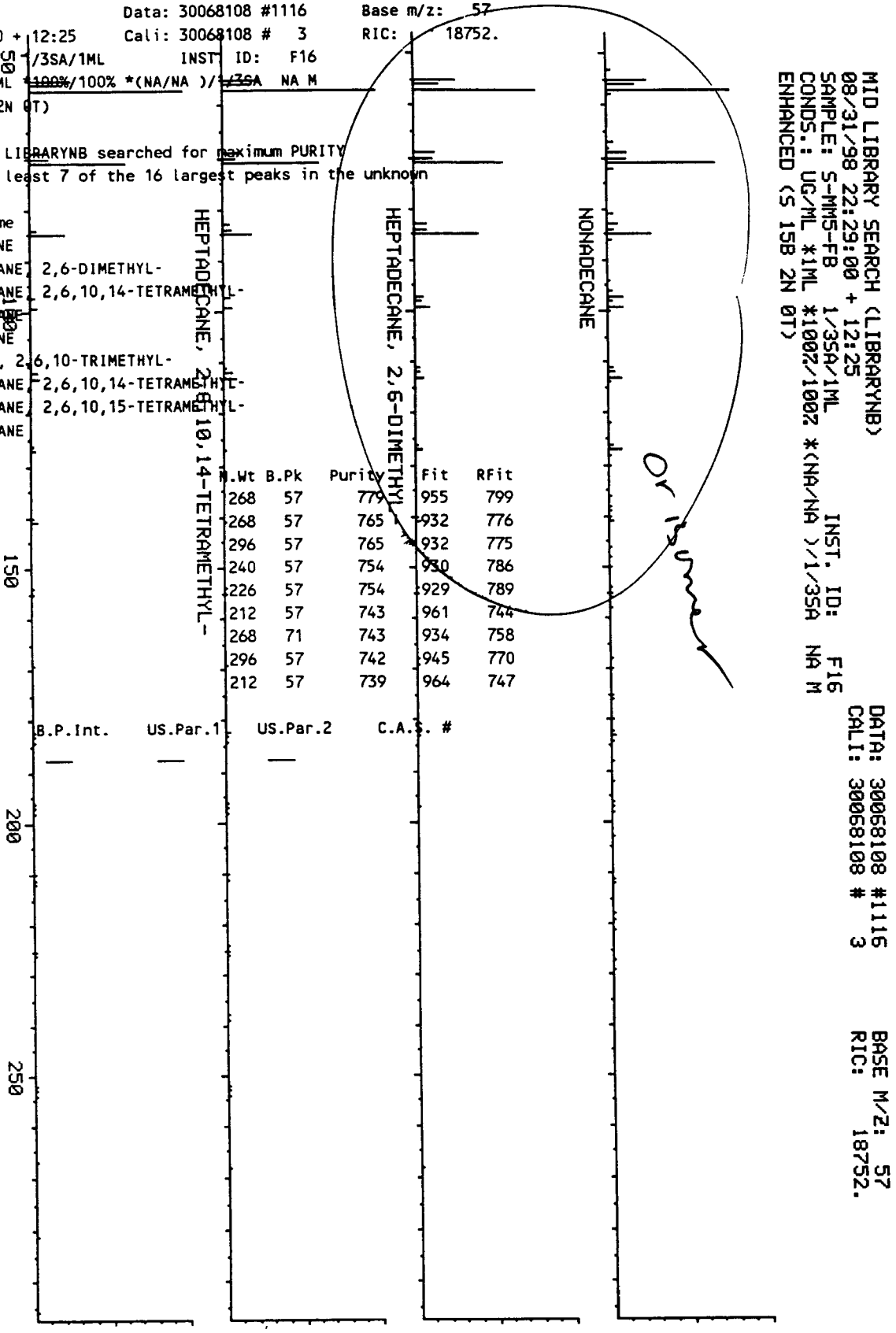
Library Search Data: 30068108 #1116 Base m/z: 57
08/31/98 22:29:00 + 12:25 Cali: 30068108 # 3 RIC: 18752.
Sample: S-MM5-FB /3SA/1ML INST ID: F16
Conds.: UG/ML *1ML ~~*100%~~/100% *(NA/NA)/~~3SA~~ NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
848 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37465	NONADECANE
2	37462	HEPTADECANE, 2,6-DIMETHYL-
3	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
4	32059	HEPTADECANE
5	29263	HEXADECANE
6	25991	DODECANE, 2,6,10-TRIMETHYL-
7	37466	PENTADECANE, 2,6,10,14-TETRAMETHYL-
8	42192	HEPTADECANE, 2,6,10,15-TETRAMETHYL-
9	25997	PENTADECANE

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	779	955	799
2	C19.H40	268	57	765	932	776
3	C21.H44	296	57	765	932	775
4	C17.H36	240	57	754	930	786
5	C16.H34	226	57	754	929	789
6	C15.H32	212	57	743	961	744
7	C19.H40	268	71	743	934	758
8	C21.H44	296	57	742	945	770
9	C15.H32	212	57	739	964	747

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	



MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 22:29:00 + 12:25 INST. ID: F16
SAMPLE: S-MM5-FB 1/3SA/1ML NA M
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA
ENHANCED (S 15B 2N 0T)

DATA: 30068108 #1116 BASE M/Z: 57
CALI: 30068108 # 3 RIC: 18752.

1210

Library Search Data: 30068108 #1235 Base m/z: 43
08/31/98 22:29:00 + 13:44 Cali: 30068108 # 3 RIC: 19456.
Sample: S-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
912 matched at least 6 of the 16 largest peaks in the unknown

Rank	In.	Name
1	35182	HEXADECANOIC ACID
2	29642	TETRADECANOIC ACID
3	37913	GLYCINE, N-METHYL-N-(1-OXODODECYL)-
4	40669	DODECANAMIDE, N,N-BIS(2-HYDROXYETHYL)-
5	22949	DODECANOIC ACID
6	40184	OCTADECANOIC ACID
7	26351	TRIDECANOIC ACID
8	19469	UNDECANOIC ACID
9	32392	PENTADECANOIC ACID

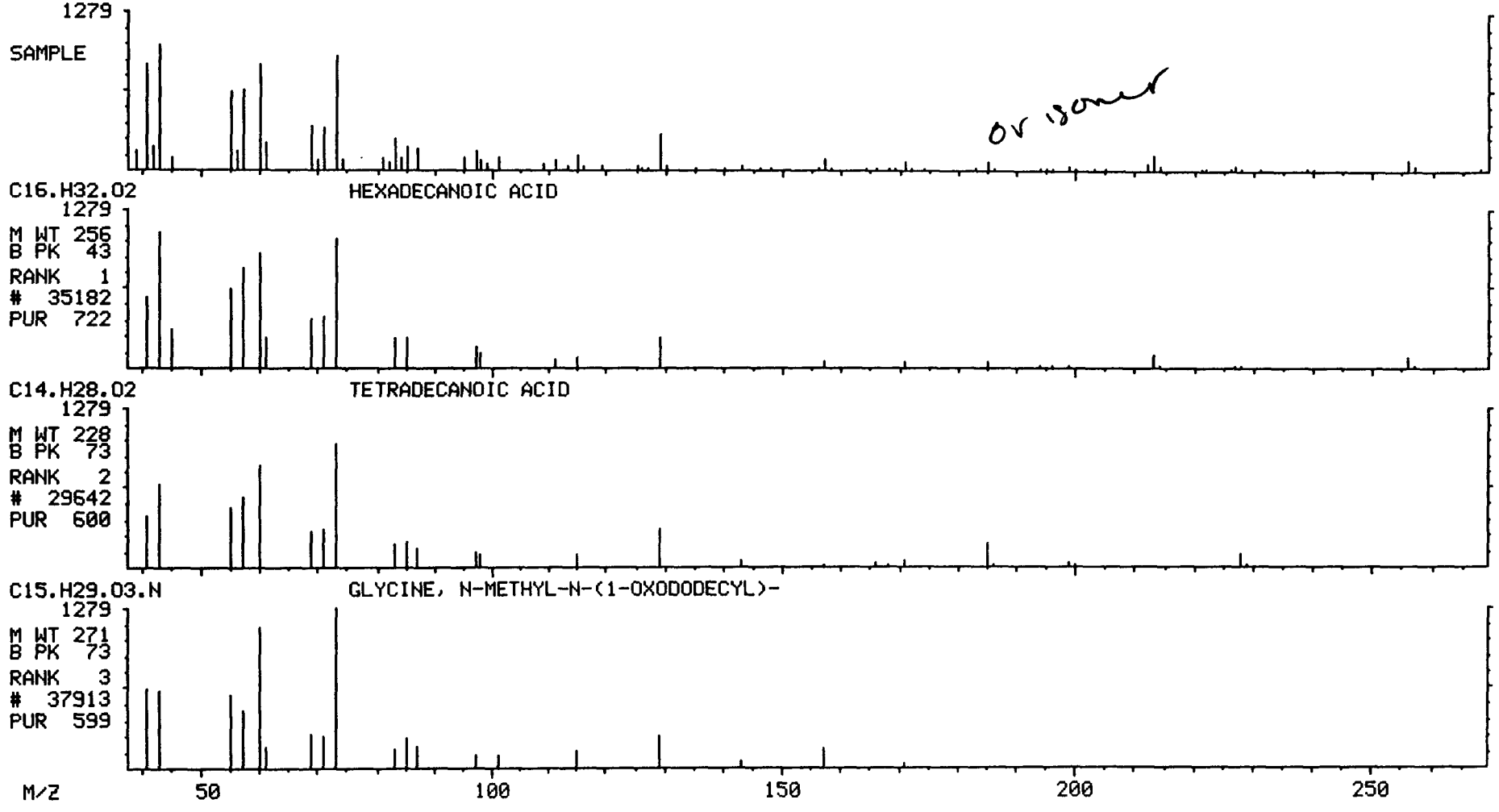
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C16.H32.O2	256	43	722	977	722
2	C14.H28.O2	228	73	600	936	607
3	C15.H29.O3.N	271	73	599	975	599
4	C16.H33.O3.N	287	73	585	967	589
5	C12.H24.O2	200	60	579	941	590
6	C18.H36.O2	284	43	561	776	707
7	C13.H26.O2	214	73	550	885	568
8	C11.H22.O2	186	60	539	940	548
9	C15.H30.O2	242	43	525	810	626

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	57-10-3
2	—	—	—	—	544-63-8
3	—	—	—	—	97-78-9
4	—	—	—	—	120-40-1
5	—	—	—	—	143-07-7
6	—	—	—	—	57-11-4
7	—	—	—	—	638-53-9
8	—	—	—	—	112-37-8
9	—	—	—	—	1002-84-2

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 22:29:00 + 13:44
SAMPLE: S-MM5-FB 1/35A/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068108 #1235
CALI: 30068108 # 3

BASE M/Z: 43
RIC: 19456.



12123

Library Search Data: 30068108 #1334 Base m/z: 57
08/31/98 22:29:00 + 14:50 Cali: 30068108 # 3 RIC: 13856.
Sample: S-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
416 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37462	HEPTADECANE, 2,6-DIMETHYL-
2	37465	NONADECANE
3	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
4	15969	HYDROXYLAMINE, O-DECYL-
5	46161	TRICOSANE
6	32058	HEXADECANE, 3-METHYL-
7	39858	EICOSANE
8	37456	2-METHYLOCTADECANE
9	49555	PENTACOSANE

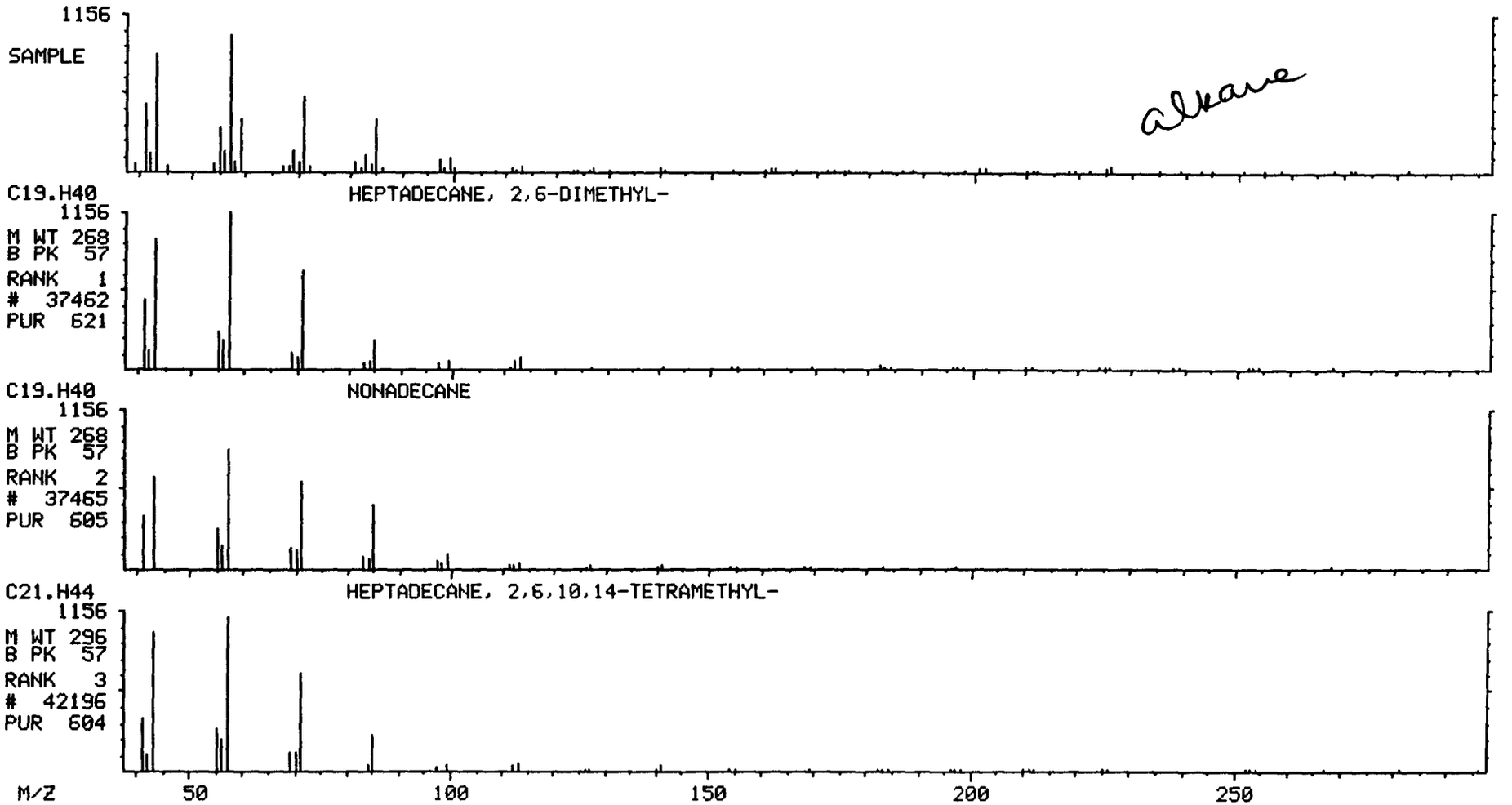
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	621	892	637
2	C19.H40	268	57	605	954	627
3	C21.H44	296	57	604	898	622
4	C10.H23.O.N	173	43	598	968	598
5	C23.H48	324	43	598	885	664
6	C17.H36	240	57	594	922	610
7	C20.H42	282	57	594	867	653
8	C19.H40	268	43	591	903	633
9	C25.H52	352	43	589	864	672

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	54105-67-8
2	—	—	—	—	629-92-5
3	—	—	—	—	18344-37-1
4	—	—	—	—	29812-79-1
5	—	—	—	—	638-67-5
6	—	—	—	—	6418-43-5
7	—	—	—	—	112-95-8
8	—	—	—	—	- -
9	—	—	—	—	629-99-2

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 22:29:00 + 14:50
SAMPLE: S-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068108 #1334
CALI: 30068108 # 3

BASE M/Z: 57
RIC: 13856.



12144

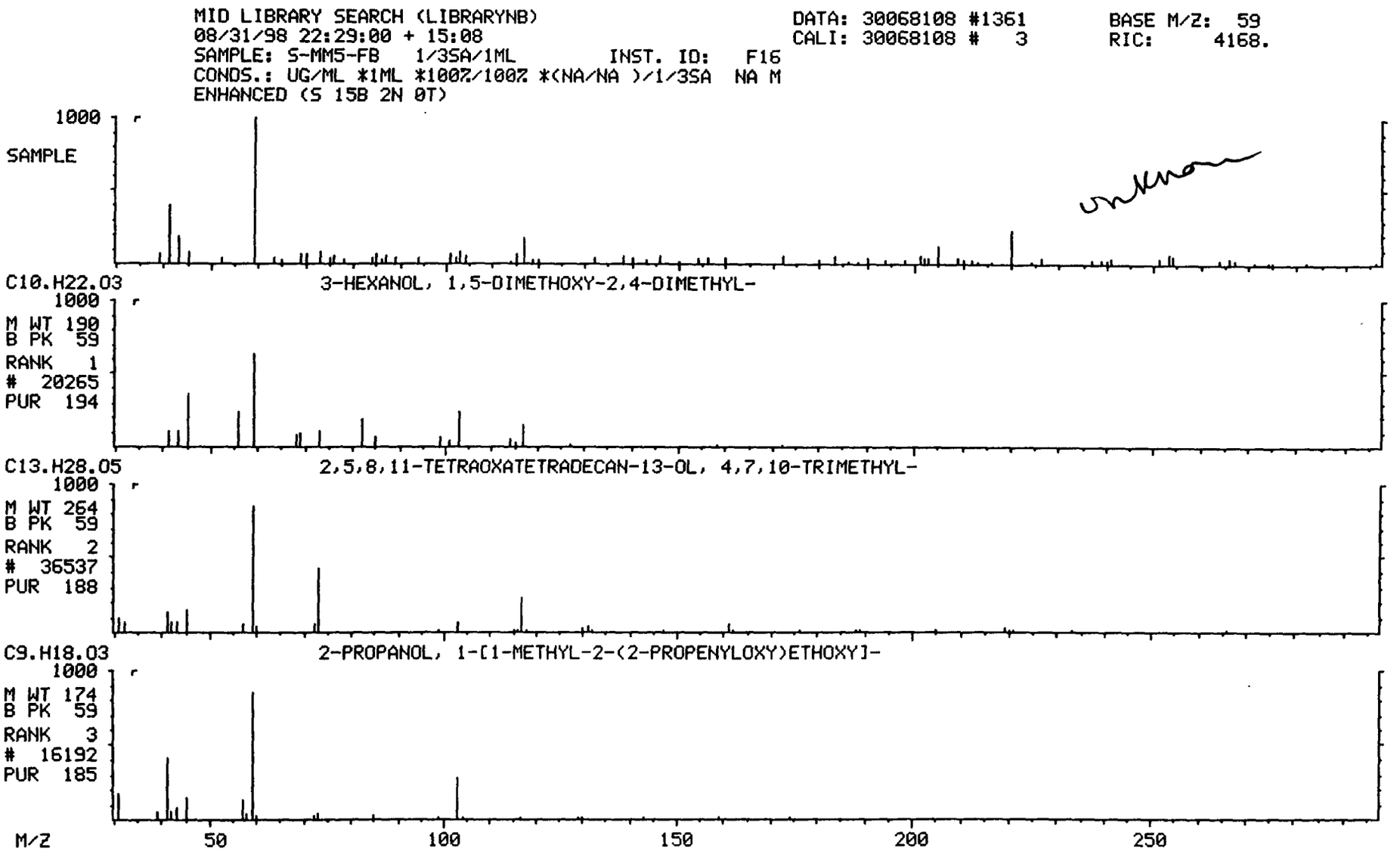
Library Search Data: 30068108 #1361 Base m/z: 59
08/31/98 22:29:00 + 15:08 Cali: 30068108 # 3 RIC: 4168.
Sample: S-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
483 matched at least 3 of the 16 largest peaks in the unknown

Rank	In.	Name
1	20265	3-HEXANOL, 1,5-DIMETHOXY-2,4-DIMETHYL-
2	36537	2,5,8,11-TETRAOXATETRADECAN-13-OL, 4,7,10-TRIMETHYL-
3	16192	2-PROPANOL, 1-[1-METHYL-2-(2-PROPENYLOXY)ETHOXY]-
4	20626	2-PROPANOL, 1,1'-[(1-METHYL-1,2-ETHANEDIYL)BIS(OXY)]BIS-
5	9235	1-PROPANOL, 2-(2-METHOXY-1-METHYLETHOXY)-
6	5826	2-PROPANOL, 1-ISOPROPOXY-2-METHYL-
7	5786	PROPANOIC ACID, 2-HYDROXY-2-METHYL-, ETHYL ESTER
8	12385	BUTYRIC ACID, 4-ISOPROPOXY-, METHYL ESTER
9	5790	BUTANOIC ACID, 2-HYDROXY-, ETHYL ESTER

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C10.H22.O3	190	59	194	664	256
2	C13.H28.O5	264	59	188	462	250
3	C9.H18.O3	174	59	185	715	214
4	C9.H20.O4	192	59	184	763	211
5	C7.H16.O3	148	59	182	756	189
6	C7.H16.O2	132	59	178	717	197
7	C6.H12.O3	132	59	174	778	192
8	C8.H16.O3	160	85	173	663	199
9	C6.H12.O3	132	59	172	797	193

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	13897-22-8
2	---	---	---	---	20324-34-9
3	---	---	---	---	55956-25-7
4	---	---	---	---	1638-16-0
5	---	---	---	---	55956-21-3
6	---	---	---	---	3587-75-5
7	---	---	---	---	80-55-7
8	---	---	---	---	29006-05-1
9	---	---	---	---	52089-54-0


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 22:29:00 + 15:08
SAMPLE: S-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068108 #1361
CALI: 30068108 # 3
BASE M/Z: 59
RIC: 4168.
1000
SAMPLE
unknown
C10.H22.03
3-HEXANOL, 1,5-DIMETHOXY-2,4-DIMETHYL-
1000
M WT 190
B PK 59
RANK 1
20265
PUR 194
C13.H28.05
2,5,8,11-TETRAOXATETRADECAN-13-OL, 4,7,10-TRIMETHYL-
1000
M WT 264
B PK 59
RANK 2
36537
PUR 188
C9.H18.03
2-PROPANOL, 1-[1-METHYL-2-(2-PROPENYLOXY)ETHOXY]-
1000
M WT 174
B PK 59
RANK 3
16192
PUR 185
M/Z
50
100
150
200
250

1216

Library Search Data: 30068108 #1401 Base m/z: 57
08/31/98 22:29:00 + 15:35 Cali: 30068108 # 3 RIC: 11632.
Sample: S-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
743 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	46161	TRICOSANE
2	49555	PENTACOSANE
3	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
4	37462	HEPTADECANE, 2,6-DIMETHYL-
5	37465	NONADECANE
6	58739	PENTATRIACONTANE
7	42197	HENEICOSANE
8	42193	EICOSANE, 10-METHYL-
9	44314	DOCOSANE

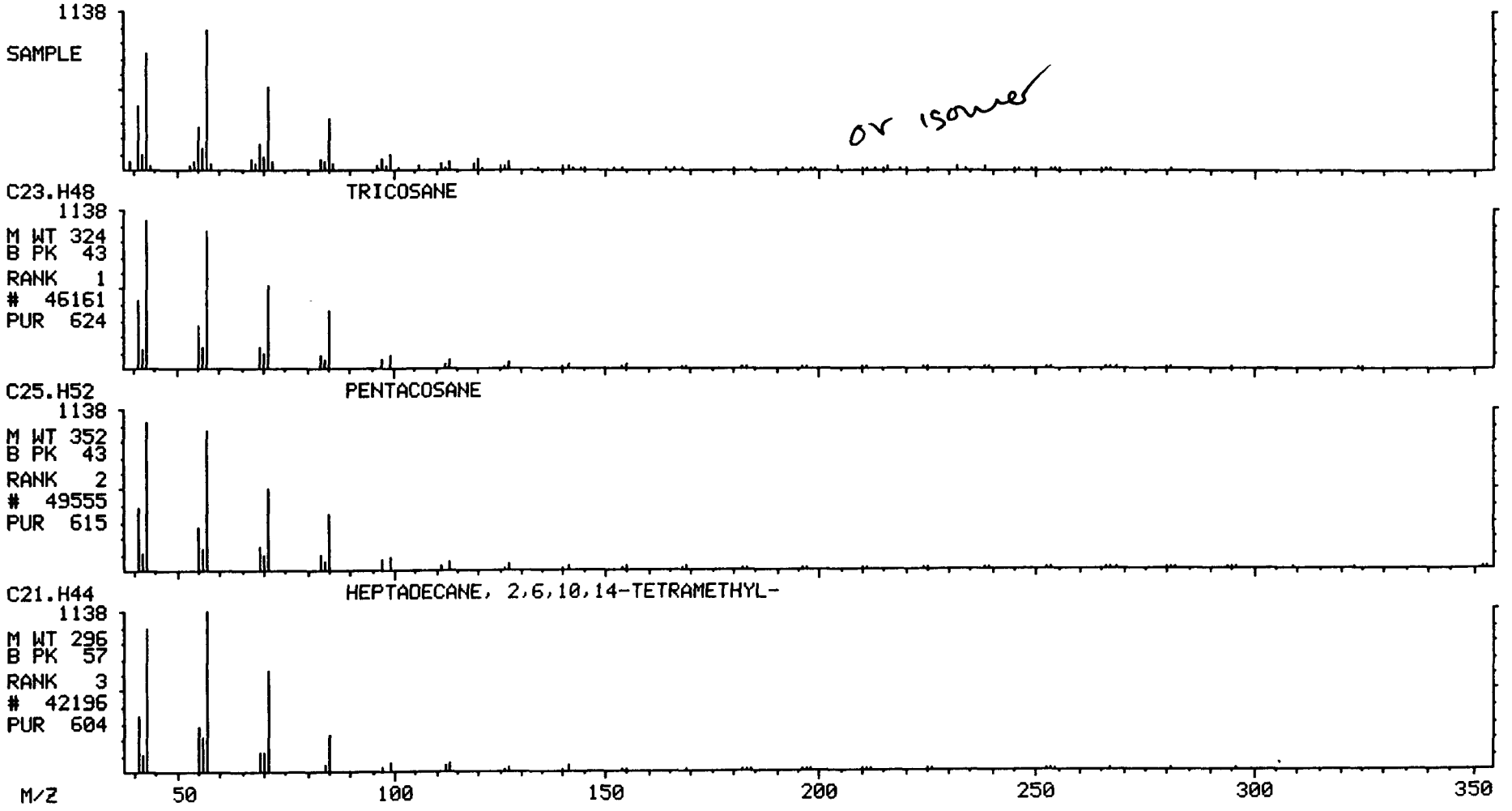
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C23.H48	324	43	624	903	676
2	C25.H52	352	43	615	883	684
3	C21.H44	296	57	604	915	623
4	C19.H40	268	57	603	896	627
5	C19.H40	268	57	601	944	630
6	C35.H72	492	57	596	891	654
7	C21.H44	296	57	591	877	646
8	C21.H44	296	57	589	878	636
9	C22.H46	310	57	588	869	659

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	638-67-5
2	---	---	---	---	629-99-2
3	---	---	---	---	18344-37-1
4	---	---	---	---	54105-67-8
5	---	---	---	---	629-92-5
6	---	---	---	---	630-07-9
7	---	---	---	---	629-94-7
8	---	---	---	---	54833-23-7
9	---	---	---	---	629-97-0

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 22:29:00 + 15:35
SAMPLE: S-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068108 #1401
CALI: 30068108 # 3

BASE M/Z: 57
RIC: 11632.



1210

Library Search Data: 30068108 #1467 Base m/z: 57
08/31/98 22:29:00 + 16:19 Cali: 30068108 # 3 RIC: 10384.
Sample: S-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
928 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	46161	TRICOSANE
2	37465	NONADECANE
3	49555	PENTACOSANE
4	39858	EICOSANE
5	42193	EICOSANE, 10-METHYL-
6	37462	HEPTADECANE, 2,6-DIMETHYL-
7	42197	HENEICOSANE
8	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
9	58739	PENTATRIACONTANE

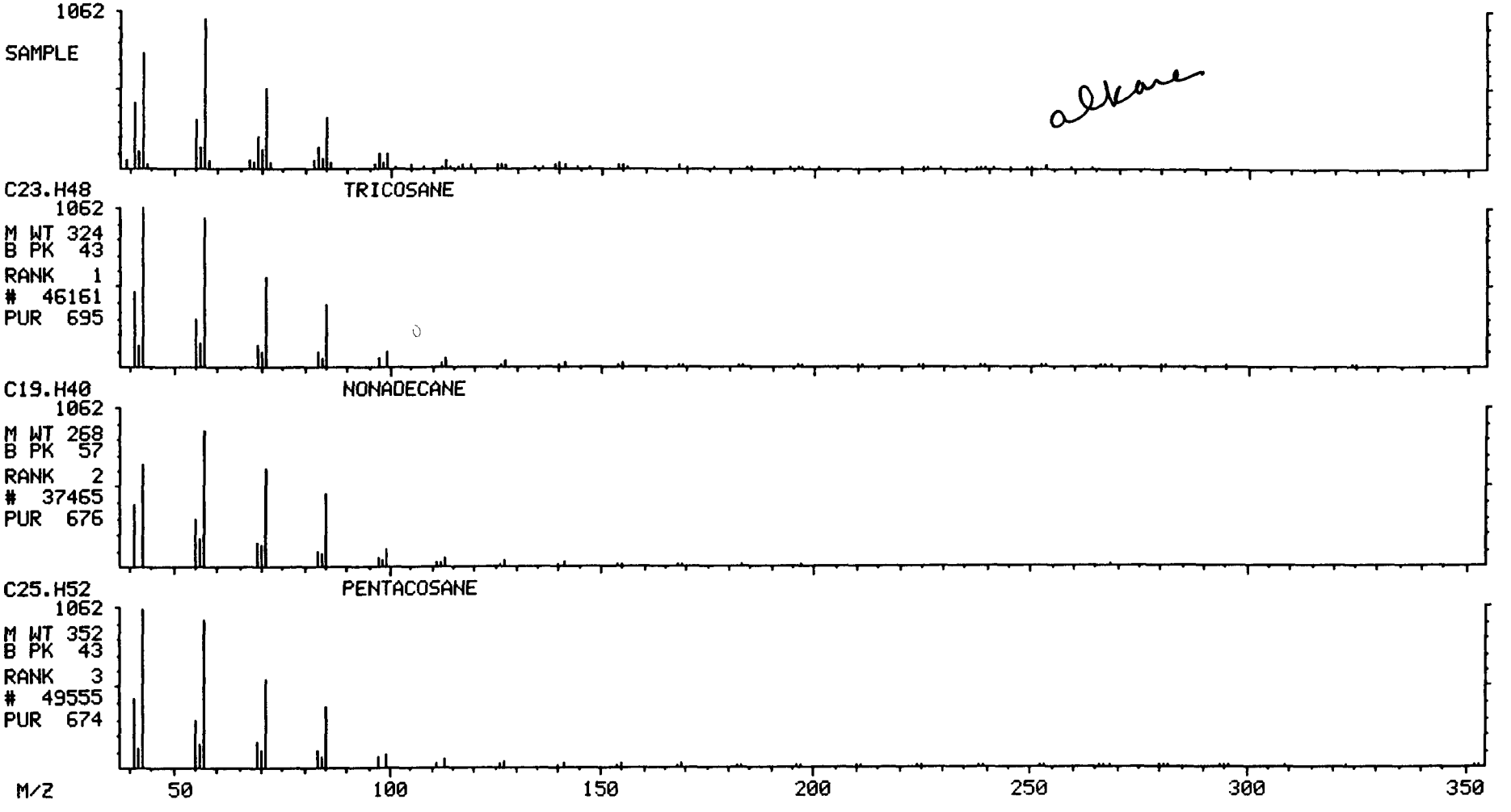
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C23.H48	324	43	695	900	753
2	C19.H40	268	57	676	941	705
3	C25.H52	352	43	674	875	757
4	C20.H42	282	57	665	870	745
5	C21.H44	296	57	661	877	706
6	C19.H40	268	57	659	883	687
7	C21.H44	296	57	657	882	704
8	C21.H44	296	57	649	895	673
9	C35.H72	492	57	647	879	722

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	638-67-5
2	---	---	---	---	629-92-5
3	---	---	---	---	629-99-2
4	---	---	---	---	112-95-8
5	---	---	---	---	54833-23-7
6	---	---	---	---	54105-67-8
7	---	---	---	---	629-94-7
8	---	---	---	---	18344-37-1
9	---	---	---	---	630-07-9

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 22:29:00 + 16:19
SAMPLE: S-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068108 #1467
CALI: 30068108 # 3

BASE M/Z: 57
RIC: 10384.



1223

Library Search Data: 30068108 #1501 Base m/z: 55
08/31/98 22:29:00 + 16:42 Cali: 30068108 # 3 RIC: 4408.
Sample: S-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
742 matched at least 5 of the 16 largest peaks in the unknown

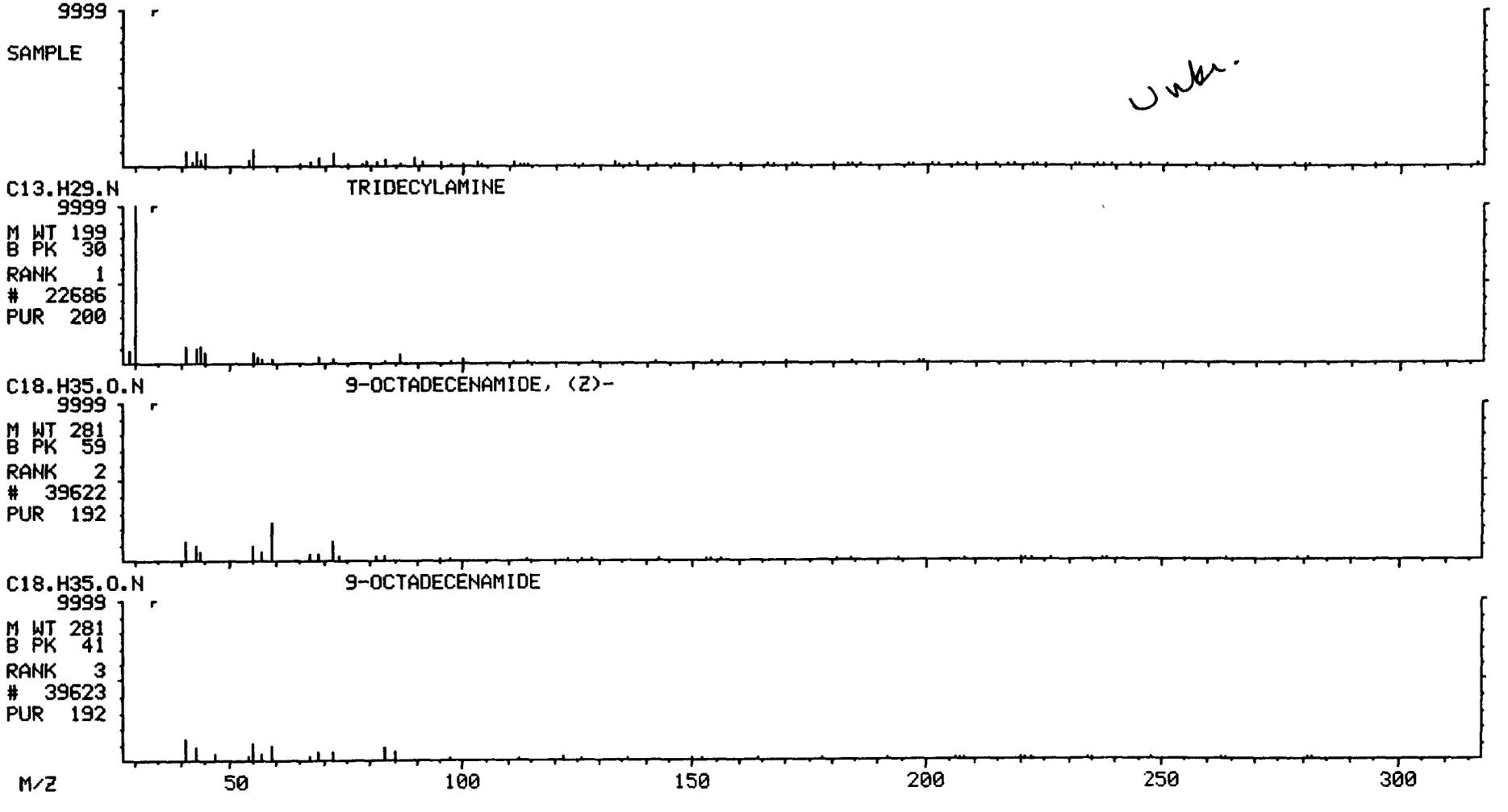
Rank	In.	Name
1	22686	TRIDECYLAMINE
2	39622	9-OCTADECENAMIDE, (Z)-
3	39623	9-OCTADECENAMIDE
4	29380	PENTADECYLAMINE
5	58185	9-HEXADECENOIC ACID, 9-HEXADECENYL ESTER, (Z,Z)-
6	36536	PHOSPHONOCHLORIDOUS ACID, (1-METHYLETHYL)-, 5-METHYL-2-(1-METHYLETH*
7	38358	HEXANAL, 4-BROMO-6,6-DICHLORO-2,2-DIMETHYL-
8	8851	CYCLOPROPANE, 1-CHLORO-1-ETHYL-2,2,3-TRIMETHYL-
9	48422	1,22-DOCOSANEDIOL

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C13.H29.N	199	30	200	696	256
2	C18.H35.O.N	281	59	192	586	308
3	C18.H35.O.N	281	41	192	594	296
4	C15.H33.N	227	30	189	683	243
5	C32.H60.O2	476	55	184	656	260
6	C13.H26.O.CL.P	264	83	181	687	228
7	C8.H13.O.CL2.BR	274	72	176	621	249
8	C8.H15.CL	146	41	171	744	210
9	C22.H46.O2	342	55	169	587	272

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	2869-34-3
2	---	---	---	---	301-02-0
3	---	---	---	---	3322-62-1
4	---	---	---	---	2570-26-5
5	---	---	---	---	22393-97-1
6	---	---	---	---	74630-89-0
7	---	---	---	---	- -
8	---	---	---	---	61142-56-1
9	---	---	---	---	22513-81-1

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 22:29:00 + 16:42
SAMPLE: S-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068108 #1501 BASE M/Z: 55
CALI: 30068108 # 3 RIC: 4408.



Library Search Data: 30068108 #1509 Base m/z: 59
08/31/98 22:29:00 + 16:47 Cali: 30068108 # 3 RIC: 6432.
Sample: S-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
388 matched at least 6 of the 16 largest peaks in the unknown

Rank	In.	Name
1	20626	2-PROPANOL, 1,1'-[(1-METHYL-1,2-ETHANEDIYL)BIS(OXY)]BIS-
2	16192	2-PROPANOL, 1-[1-METHYL-2-(2-PROPENYLOXY)ETHOXY]-
3	5810	2-PENTANOL, 5-METHOXY-2-METHYL-
4	3502	BUTANOIC ACID, 3-HYDROXY-3-METHYL-
5	3522	2,3-BUTANEDIOL, 2,3-DIMETHYL-
6	8432	2-HEXANONE, 3-HYDROXY-3,5-DIMETHYL-
7	5832	2-PROPANOL, 1-(1-METHYLPROPOXY)-
8	5809	1-ETHOXYPENTAN-3-OL
9	8805	1,3-DIOXAN-5-OL, 4,4,5-TRIMETHYL-

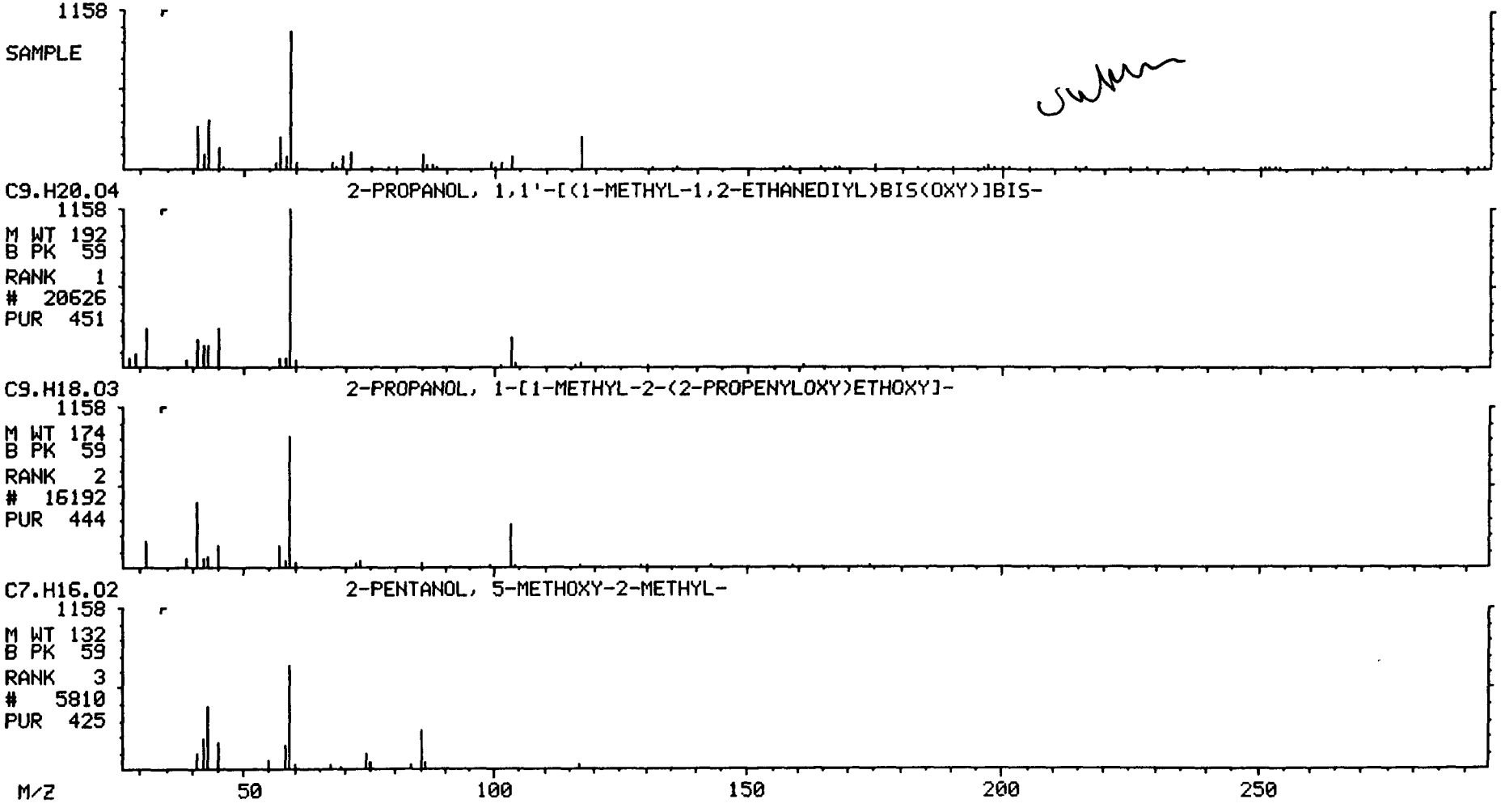
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C9.H20.O4	192	59	451	816	477
2	C9.H18.O3	174	59	444	753	478
3	C7.H16.O2	132	59	425	784	466
4	C5.H10.O3	118	59	423	778	489
5	C6.H14.O2	118	59	419	893	434
6	C8.H16.O2	144	59	415	899	432
7	C7.H16.O2	132	43	414	722	440
8	C7.H16.O2	132	59	408	802	449
9	C7.H14.O3	146	59	407	866	442

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	1638-16-0
2	---	---	---	---	55956-25-7
3	---	---	---	---	55724-04-4
4	---	---	---	---	625-08-1
5	---	---	---	---	76-09-5
6	---	---	---	---	6321-14-8
7	---	---	---	---	53907-95-2
8	---	---	---	---	- -
9	---	---	---	---	54063-14-8

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 22:29:00 + 16:47
SAMPLE: S-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068108 #1509
CALI: 30068108 # 3

BASE M/Z: 59
RIC: 6432.



1224

Library Search Data: 30068108 #1529 Base m/z: 57
08/31/98 22:29:00 + 17:00 Cali: 30068108 # 3 RIC: 10960.
Sample: S-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
867 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37465	NONADECANE
2	37462	HEPTADECANE, 2,6-DIMETHYL-
3	46161	TRICOSANE
4	42193	EICOSANE, 10-METHYL-
5	49555	PENTACOSANE
6	32059	HEPTADECANE
7	29263	HEXADECANE
8	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
9	39858	EICOSANE

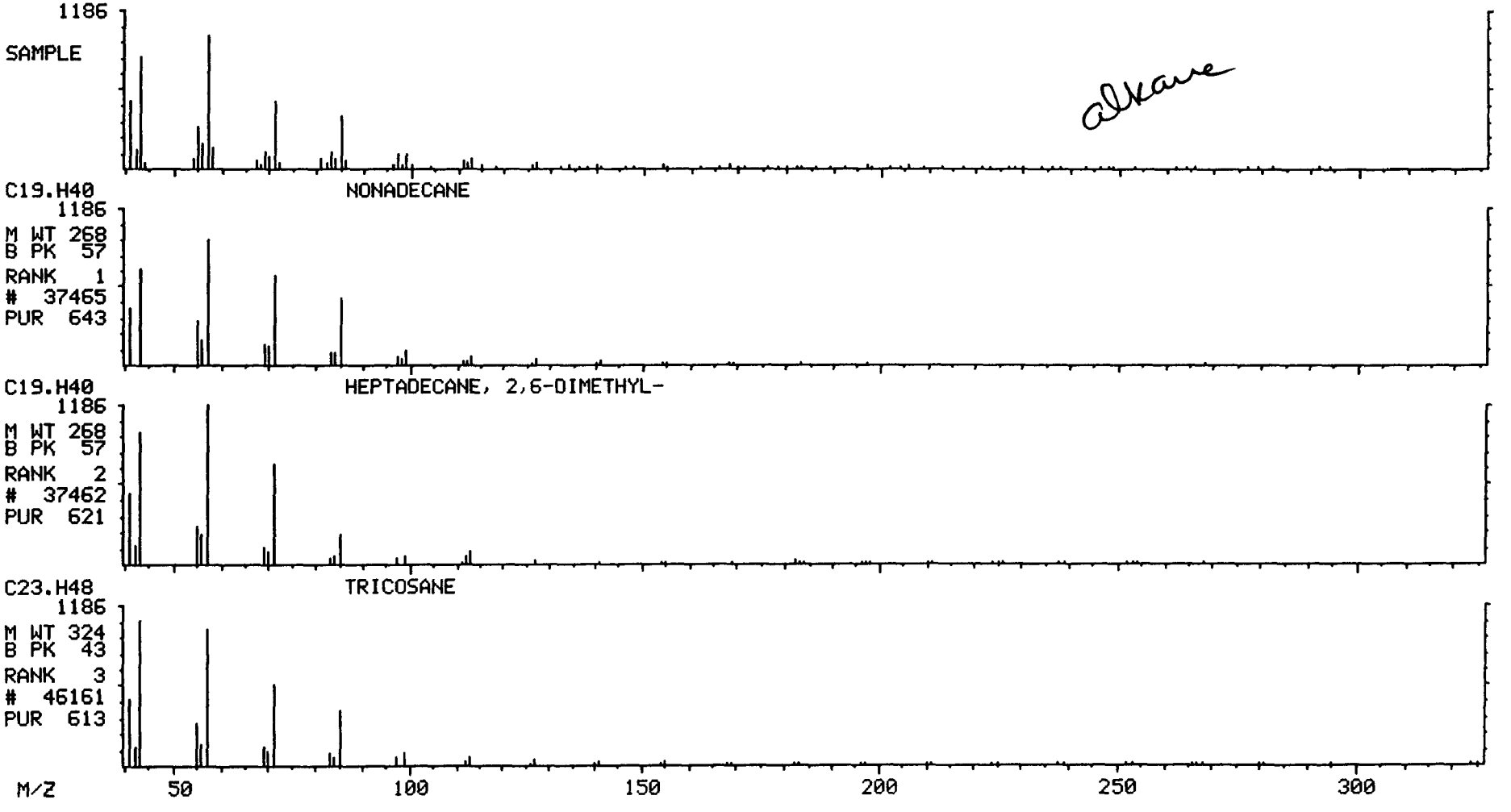
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	643	955	659
2	C19.H40	268	57	621	934	630
3	C23.H48	324	43	613	904	664
4	C21.H44	296	57	611	909	643
5	C25.H52	352	43	606	880	675
6	C17.H36	240	57	597	928	626
7	C16.H34	226	57	597	924	627
8	C21.H44	296	57	596	929	610
9	C20.H42	282	57	593	893	643

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	629-92-5
2	—	—	—	—	54105-67-8
3	—	—	—	—	638-67-5
4	—	—	—	—	54833-23-7
5	—	—	—	—	629-99-2
6	—	—	—	—	629-78-7
7	—	—	—	—	544-76-3
8	—	—	—	—	18344-37-1
9	—	—	—	—	112-95-8

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 22:29:00 + 17:00
SAMPLE: S-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068108 #1529
CALI: 30068108 # 3

BASE M/Z: 57
RIC: 10960.



9321.6

Library Search Data: 30068108 #1588 Base m/z: 43
08/31/98 22:29:00 + 17:40 Cali: 30068108 # 3 RIC: 39616.
Sample: S-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
950 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	39516	5-EICOSENE, (E)-
2	39515	9-EICOSENE, (E)-
3	46402	1-DOCOSANOL
4	58701	17-PENTATRIACONTENE
5	34410	3-OCTADECENE, (E)-
6	31653	1-HEPTADECENE
7	35209	1-HEXADECANOL, 2-METHYL-
8	39517	3-EICOSENE, (E)-
9	34411	5-OCTADECENE, (E)-

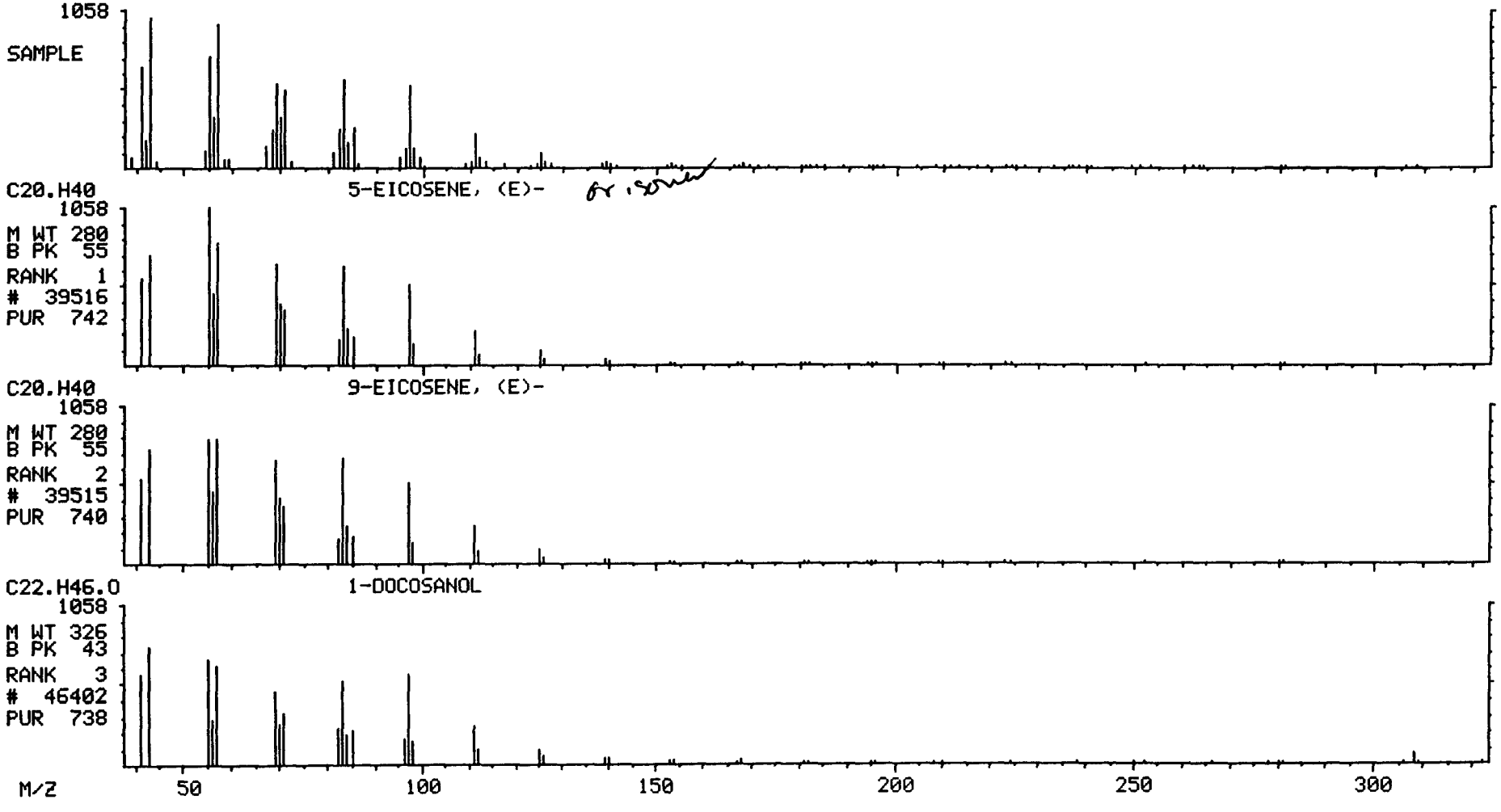
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C20.H40	280	55	742	975	743
2	C20.H40	280	55	740	973	741
3	C22.H46.O	326	43	738	942	755
4	C35.H70	490	43	738	959	765
5	C18.H36	252	69	736	962	747
6	C17.H34	238	55	736	974	738
7	C17.H36.O	256	57	736	977	741
8	C20.H40	280	57	731	979	733
9	C18.H36	252	55	731	956	741

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	74685-30-6
2	—	—	—	—	74685-29-3
3	—	—	—	—	661-19-8
4	—	—	—	—	6971-40-0
5	—	—	—	—	7206-19-1
6	—	—	—	—	6765-39-5
7	—	—	—	—	2490-48-4
8	—	—	—	—	74685-33-9
9	—	—	—	—	7206-21-5

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 22:29:00 + 17:40
SAMPLE: S-MM5-FB 1/35A/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/35A NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068108 #1588
CALI: 30068108 # 3

BASE M/Z: 43
RIC: 39616.



F12

Library Search Data: 30068108 #1661 Base m/z: 59
08/31/98 22:29:00 + 18:29 Cali: 30068108 # 3 RIC: 5184.
Sample: S-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
894 matched at least 5 of the 16 largest peaks in the unknown

Rank	In.	Name
1	9235	1-PROPANOL, 2-(2-METHOXY-1-METHYLETHOXY)-
2	16192	2-PROPANOL, 1-[1-METHYL-2-(2-PROPENYLOXY)ETHOXY]-
3	20626	2-PROPANOL, 1,1'-[(1-METHYL-1,2-ETHANEDIYL)BIS(OXY)]BIS-
4	5832	2-PROPANOL, 1-(1-METHYLPROPOXY)-
5	31381	6-O-METHYL-2,4-METHYLENE-.BETA.-SEDOHEPTITOL
6	24247	2-PROPANOL, 1-[2-(2-METHOXY-1-METHYLETHOXY)-1-METHYLETHOXY]-
7	9227	1,3,3-TRIMETHOXYBUTANE
8	6083	2-PROPANOL, 1,1'-OXYBIS-
9	9228	1-PROPANOL, 2-(2-METHOXYPROPOXY)-

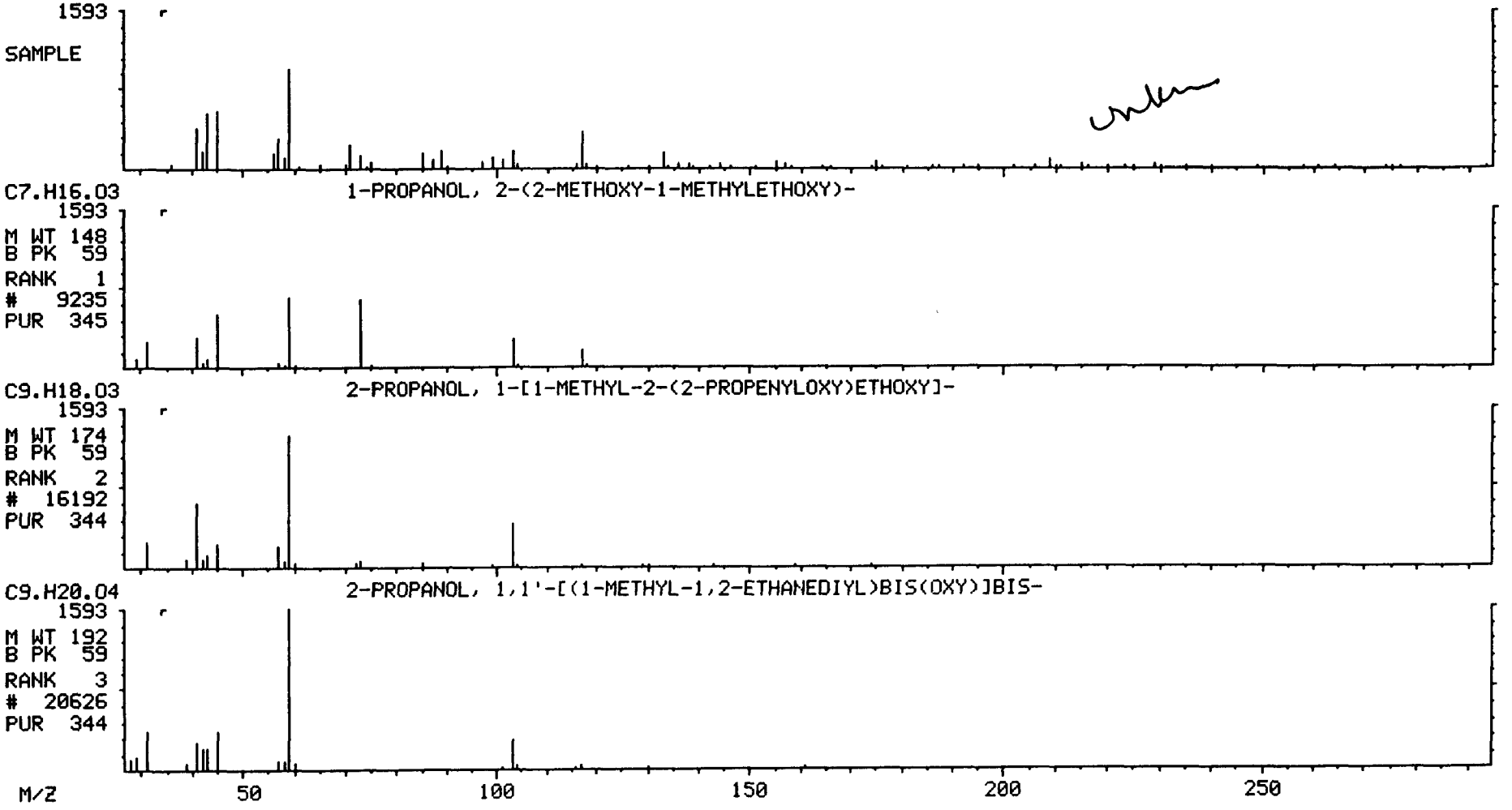
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C7.H16.O3	148	59	345	800	348
2	C9.H18.O3	174	59	344	745	361
3	C9.H20.O4	192	59	344	806	355
4	C7.H16.O2	132	43	344	770	367
5	C9.H18.O7	238	58	340	661	388
6	C10.H22.O4	206	59	339	724	383
7	C7.H16.O3	148	45	325	689	340
8	C6.H14.O3	134	59	319	905	324
9	C7.H16.O3	148	59	318	800	328

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	55956-21-3
2	---	---	---	---	55956-25-7
3	---	---	---	---	1638-16-0
4	---	---	---	---	53907-95-2
5	---	---	---	---	- -
6	---	---	---	---	20324-33-8
7	---	---	---	---	6607-66-5
8	---	---	---	---	110-98-5
9	---	---	---	---	13588-28-8

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 22:29:00 + 18:29
SAMPLE: S-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068108 #1661
CALI: 30068108 # 3

BASE M/Z: 59
RIC: 5184.



1223

Library Search Data: 30068108 #1688 Base m/z: 41
08/31/98 22:29:00 + 18:47 Cali: 30068108 # 3 RIC: 2660.
Sample: S-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
259 matched at least 5 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37446	3-OCTADECANONE
2	54746	1,3-DIOXOLANE, 4-[[(2-METHOXY-4-OCTADECENYL)OXY]METHYL]-2,2-DIMETHY*
3	33330	1,3:2,5:4,6-TRIMETHYLENE-D-GLYCERO-D-MANNOHEPTITOL
4	19529	4-DODECANOL
5	19875	2-BUTANOL, 3-(1,3,3-TRIMETHYLBUTOXY)-
6	33472	PHOSPHINOUS CHLORIDE, (1-METHYLETHYL)[METHYL(1-METHYLETHYL)CYCLOHEX*
7	5555	2,2,4-TRIMETHYL-3-PENTANOL
8	29673	3-DODECANOL, 3,7,11-TRIMETHYL-
9	5557	3-HEXANOL, 2,2-DIMETHYL-

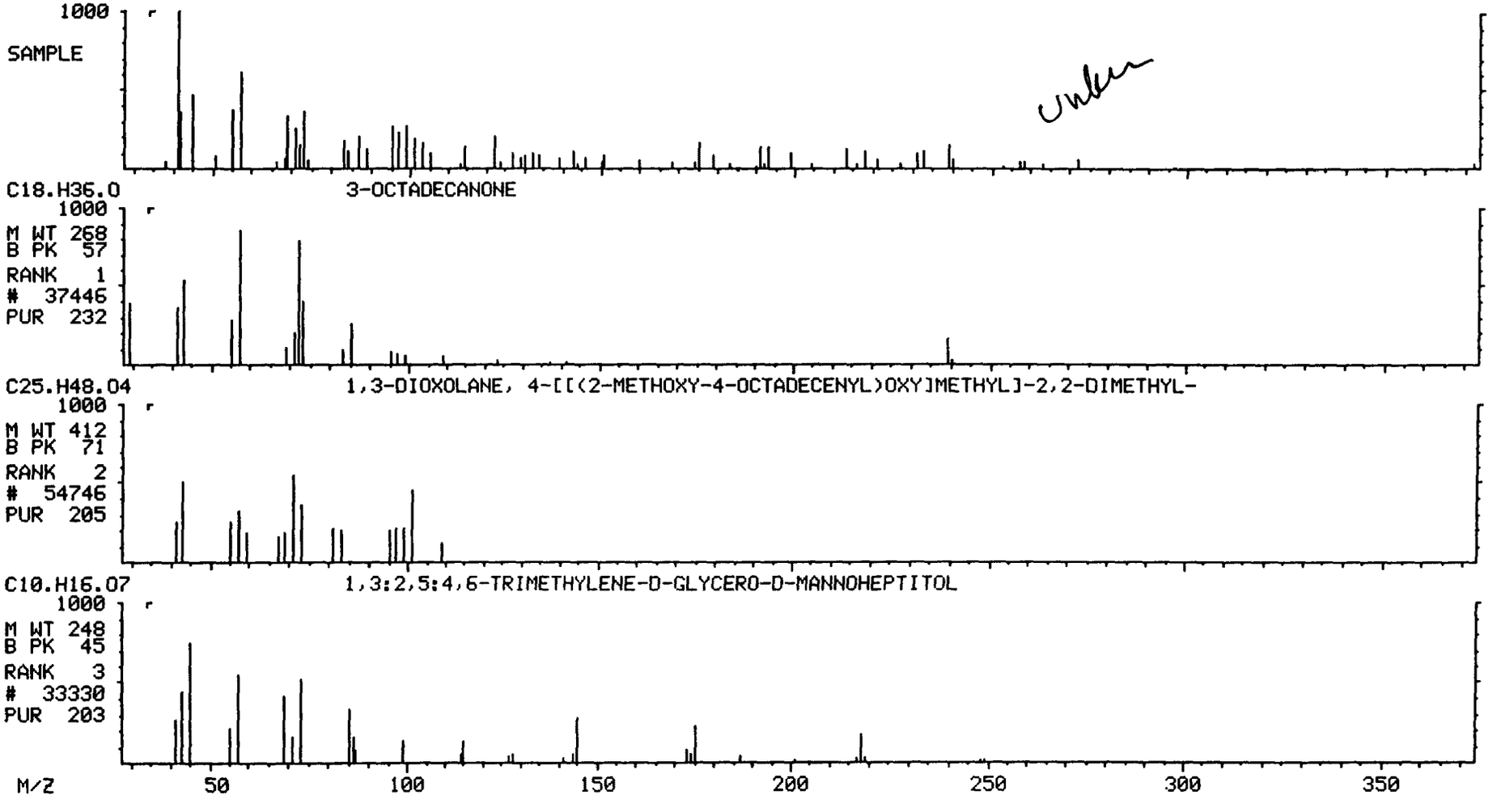
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C18.H36.O	268	57	232	687	283
2	C25.H48.O4	412	71	205	692	268
3	C10.H16.O7	248	45	203	585	319
4	C12.H26.O	186	55	193	694	226
5	C11.H24.O2	188	57	192	715	219
6	C13.H26.CL.P	248	83	188	535	260
7	C8.H18.O	130	73	185	792	212
8	C15.H32.O	228	73	181	595	214
9	C8.H18.O	130	55	179	717	234

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	18261-92-2
2	---	---	---	---	16725-41-0
3	---	---	---	---	- -
4	---	---	---	---	10203-32-4
5	---	---	---	---	74810-44-9
6	---	---	---	---	74710-02-4
7	---	---	---	---	5162-48-1
8	---	---	---	---	7278-65-1
9	---	---	---	---	4209-90-9

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 22:29:00 + 18:47
SAMPLE: S-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068108 #1688
CALI: 30068108 # 3

BASE M/Z: 41
RIC: 2660.



12

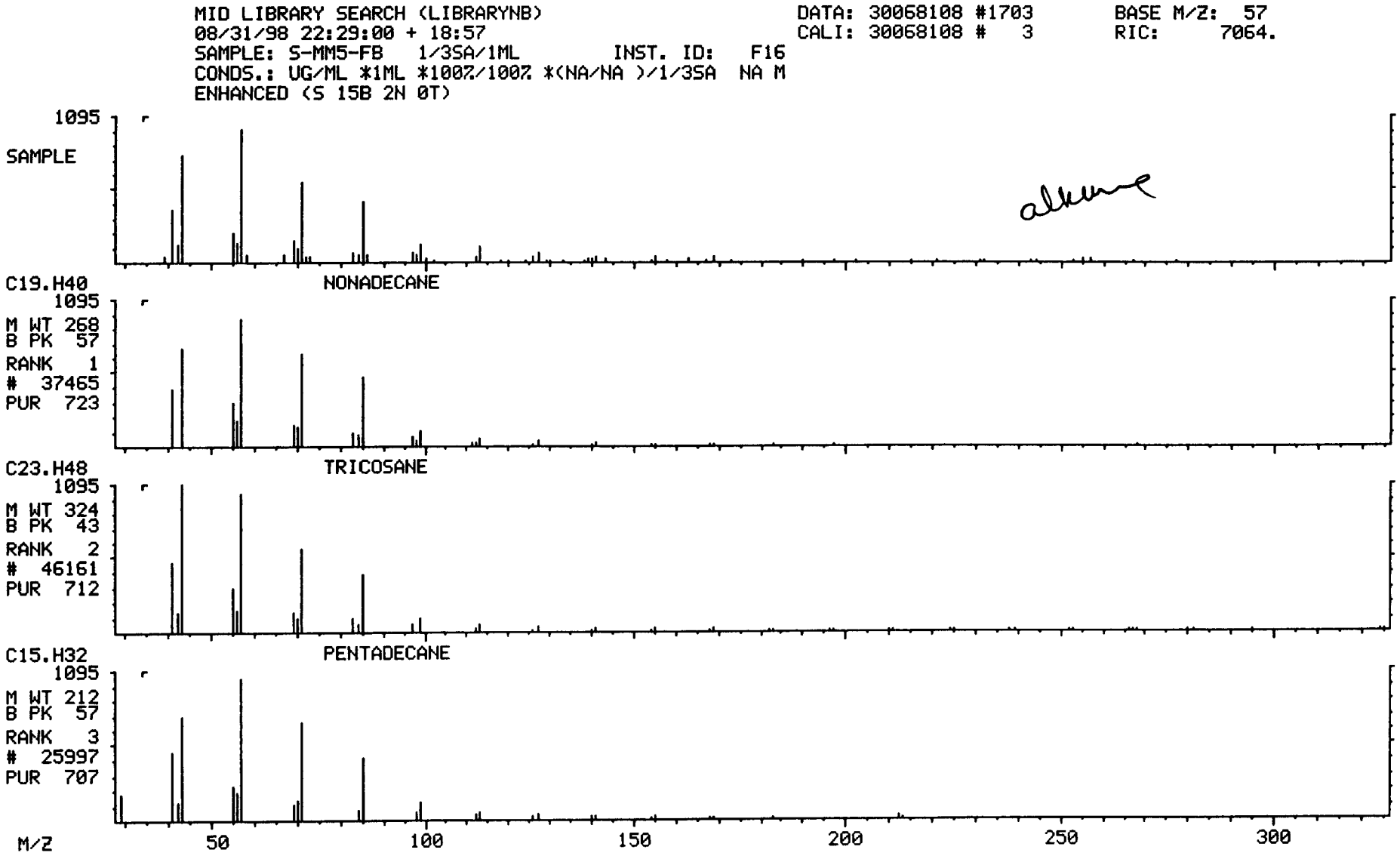
Library Search Data: 30068108 #1703 Base m/z: 57
08/31/98 22:29:00 + 18:57 Cali: 30068108 # 3 RIC: 7064.
Sample: S-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
538 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	37465	NONADECANE
2	46161	TRICOSANE
3	25997	PENTADECANE
4	32059	HEPTADECANE
5	29263	HEXADECANE
6	42196	HEPTADECANE, 2,6,10,14-TETRAMETHYL-
7	22530	TETRADECANE
8	29249	TETRADECANE, 6,9-DIMETHYL-
9	34810	OCTADECANE

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	723	941	753
2	C23.H48	324	43	712	901	776
3	C15.H32	212	57	707	950	731
4	C17.H36	240	57	701	931	744
5	C16.H34	226	57	700	929	745
6	C21.H44	296	57	695	897	721
7	C14.H30	198	43	687	917	718
8	C16.H34	226	57	678	906	702
9	C18.H38	254	57	677	867	773

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	629-92-5
2	---	---	---	---	638-67-5
3	---	---	---	---	629-62-9
4	---	---	---	---	629-78-7
5	---	---	---	---	544-76-3
6	---	---	---	---	18344-37-1
7	---	---	---	---	629-59-4
8	---	---	---	---	55045-13-1
9	---	---	---	---	593-45-3


MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 22:29:00 + 18:57
SAMPLE: S-MM5-FB 1/3SA/1ML
INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)
DATA: 30068108 #1703
CALI: 30068108 # 3
BASE M/Z: 57
RIC: 7064.
1095
SAMPLE
alkane
C19.H40
NONADECANE
M WT 268
B PK 57
RANK 1
37465
PUR 723
C23.H48
TRICOSANE
M WT 324
B PK 43
RANK 2
46161
PUR 712
C15.H32
PENTADECANE
M WT 212
B PK 57
RANK 3
25997
PUR 707
M/Z
50
100
150
200
250
300

1234

Library Search Data: 30068108 #1741 Base m/z: 59
08/31/98 22:29:00 + 19:22 Cali: 30068108 # 3 RIC: 19520.
Sample: S-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
483 matched at least 6 of the 16 largest peaks in the unknown

Rank	In.	Name
1	39622	9-OCTADECENAMIDE, (Z)-
2	22656	DODECANAMIDE
3	11721	NONANAMIDE
4	19516	1-DECANOL, 5,9-DIMETHYL-
5	34956	HEXADECANAMIDE
6	15482	HEPTANAMIDE, 4-ETHYL-5-METHYL-
7	7998	TRANS-3,4-EPOXYNONANE
8	3133	PENTANAMIDE, 4-METHYL-
9	1617	PENTANAMIDE

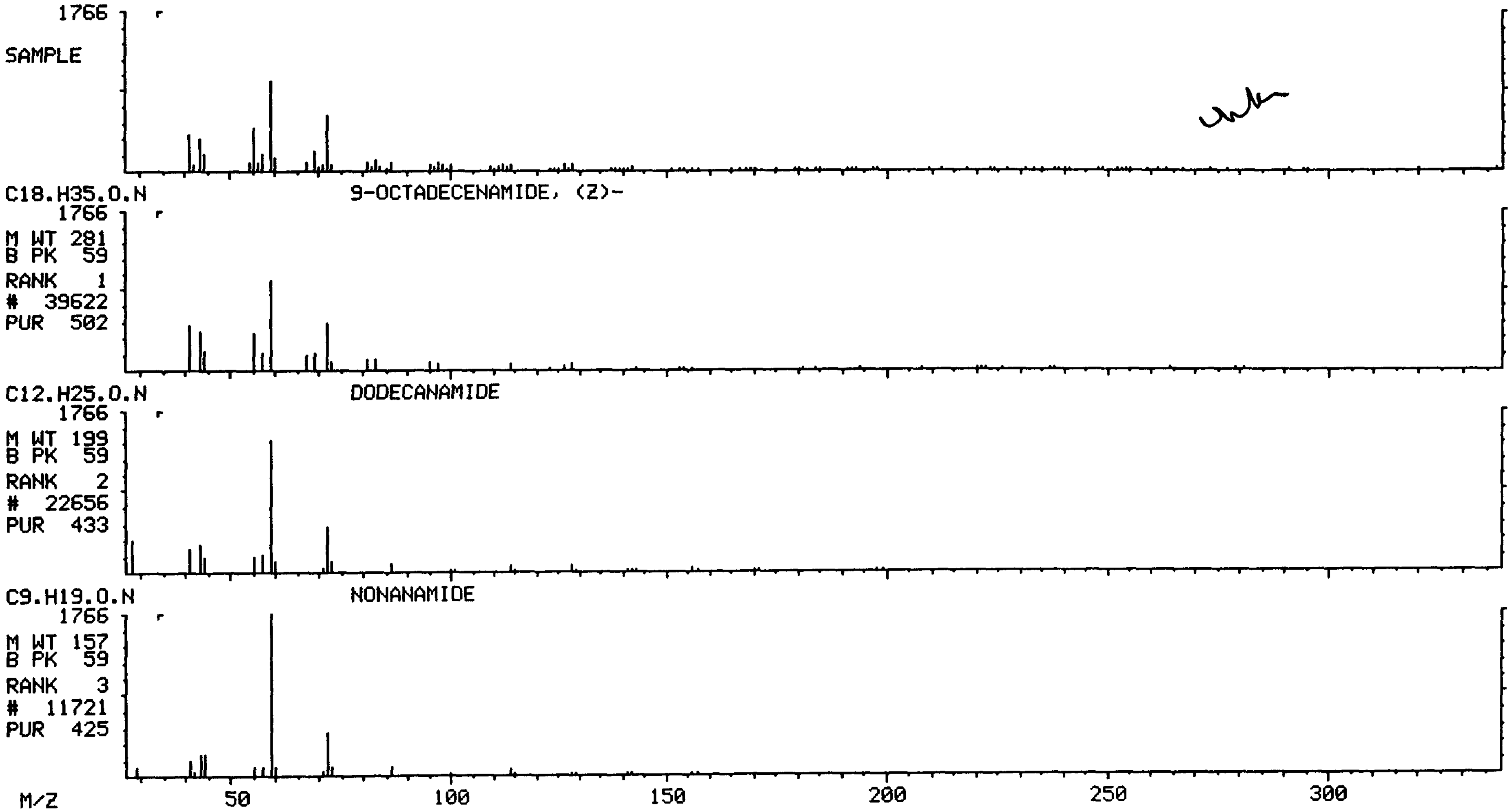
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C18.H35.O.N	281	59	502	895	556
2	C12.H25.O.N	199	59	433	896	461
3	C9.H19.O.N	157	59	425	882	428
4	C12.H26.O	186	41	415	819	419
5	C16.H33.O.N	255	59	406	846	439
6	C10.H21.O.N	171	59	406	865	419
7	C9.H18.O	142	41	397	807	414
8	C6.H13.O.N	115	59	392	910	397
9	C5.H11.O.N	101	59	363	872	363

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	301-02-0
2	—	—	—	—	1120-16-7
3	—	—	—	—	1120-07-6
4	—	—	—	—	91482-38-1
5	—	—	—	—	629-54-9
6	—	—	—	—	54789-40-1
7	—	—	—	—	- -
8	—	—	—	—	1119-29-5
9	—	—	—	—	626-97-1

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 22:29:00 + 19:22
SAMPLE: S-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068108 #1741
CALI: 30068108 # 3

BASE M/Z: 59
RIC: 19520.



1236

Library Search Data: 30068108 #1809 Base m/z: 57
08/31/98 22:29:00 + 20:07 Cali: 30068108 # 3 RIC: 9184.
Sample: S-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
249 matched at least 7 of the 16 largest peaks in the unknown

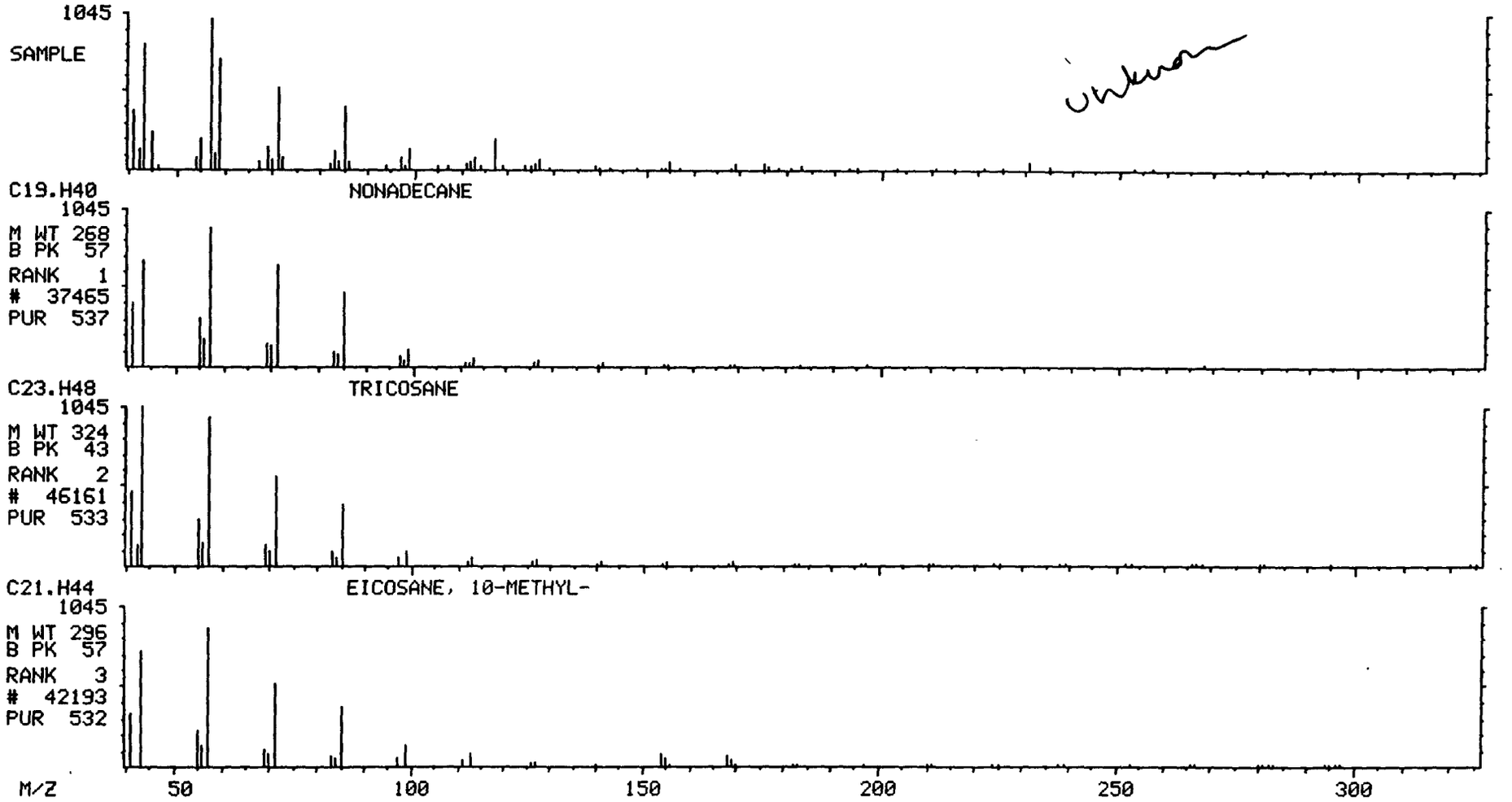
Rank	In.	Name
1	37465	NONADECANE
2	46161	TRICOSANE
3	42193	EICOSANE, 10-METHYL-
4	49555	PENTACOSANE
5	37462	HEPTADECANE, 2,6-DIMETHYL-
6	32059	HEPTADECANE
7	44314	DOCOSANE
8	37456	2-METHYLOCTADECANE
9	25997	PENTADECANE

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C19.H40	268	57	537	904	576
2	C23.H48	324	43	533	875	595
3	C21.H44	296	57	532	898	561
4	C25.H52	352	43	517	856	592
5	C19.H40	268	57	517	872	557
6	C17.H36	240	57	510	897	555
7	C22.H46	310	57	510	866	578
8	C19.H40	268	43	507	891	551
9	C15.H32	212	57	506	899	546

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	629-92-5
2	—	—	—	—	638-67-5
3	—	—	—	—	54833-23-7
4	—	—	—	—	629-99-2
5	—	—	—	—	54105-67-8
6	—	—	—	—	629-78-7
7	—	—	—	—	629-97-0
8	—	—	—	—	- -
9	—	—	—	—	629-62-9

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 22:29:00 + 20:07
SAMPLE: S-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068108 #1809 BASE M/Z: 57
CALI: 30068108 # 3 RIC: 9184.



1220

Library Search Data: 30068108 #1917 Base m/z: 43
08/31/98 22:29:00 + 21:19 Cali: 30068108 # 3 RIC: 15024.
Sample: S-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
818 matched at least 7 of the 16 largest peaks in the unknown

Rank	In.	Name
1	26416	4-TETRADECANOL
2	37062	1-NONADECENE
3	39516	5-EICOSENE, (E)-
4	34410	3-OCTADECENE, (E)-
5	39515	9-EICOSENE, (E)-
6	31653	1-HEPTADECENE
7	34418	9-OCTADECENE, (E)-
8	34411	5-OCTADECENE, (E)-
9	48203	1-HENEICOSYL FORMATE

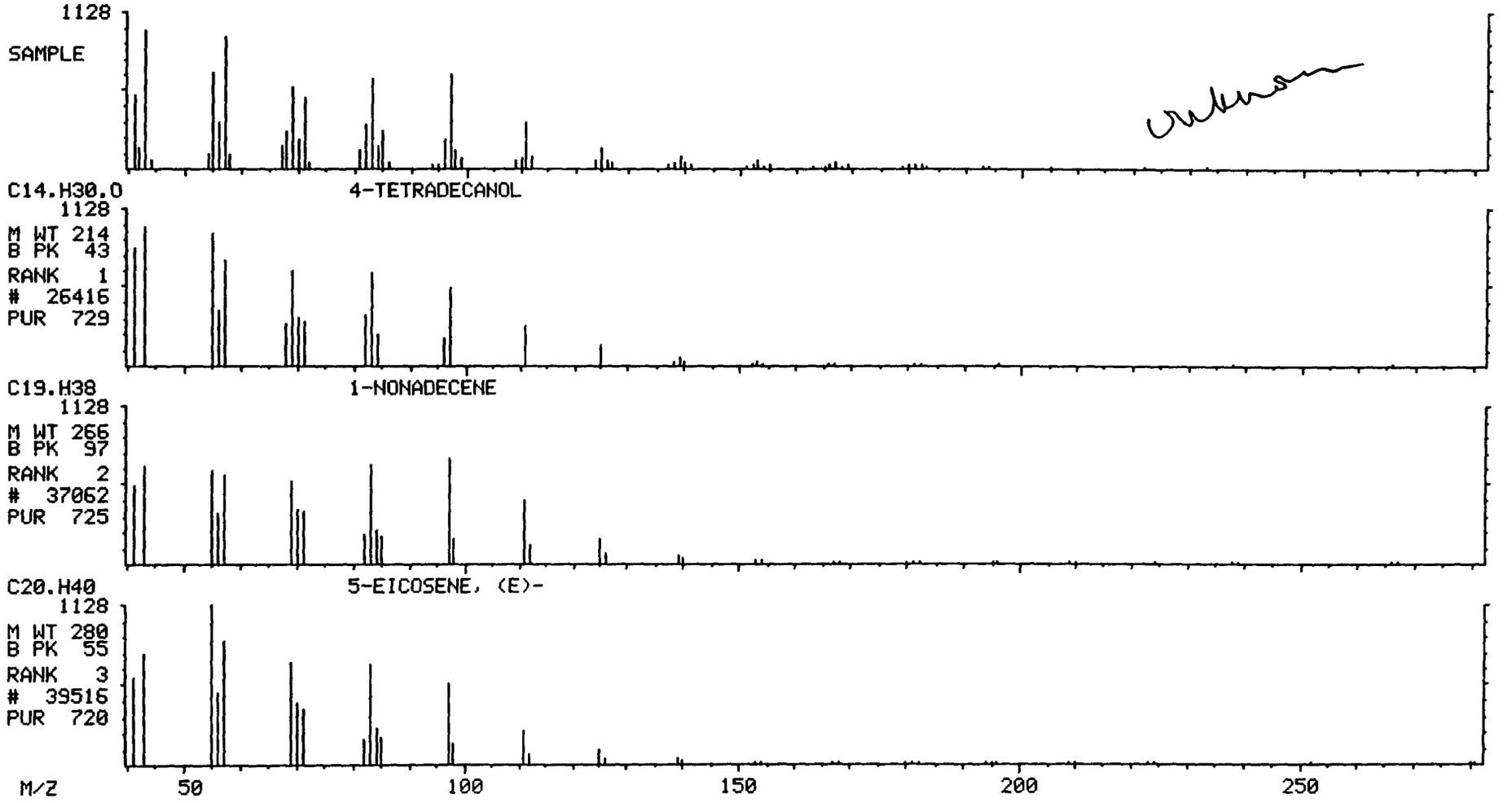
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C14.H30.O	214	43	729	966	736
2	C19.H38	266	97	725	951	741
3	C20.H40	280	55	720	942	733
4	C18.H36	252	69	720	927	734
5	C20.H40	280	55	718	947	730
6	C17.H34	238	55	714	937	726
7	C18.H36	252	55	714	925	727
8	C18.H36	252	55	712	923	726
9	C22.H44.O2	340	57	711	937	749

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	1653-33-4
2	---	---	---	---	18435-45-5
3	---	---	---	---	74685-30-6
4	---	---	---	---	7206-19-1
5	---	---	---	---	74685-29-3
6	---	---	---	---	6765-39-5
7	---	---	---	---	7206-25-9
8	---	---	---	---	7206-21-5
9	---	---	---	---	77899-03-7

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 22:29:00 + 21:19
SAMPLE: S-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068108 #1917
CALI: 30068108 # 3

BASE M/Z: 43
RIC: 15024.



1,2,3

Library Search Data: 30068108 #1934 Base m/z: 45
08/31/98 22:29:00 + 21:31 Cali: 30068108 # 3 RIC: 4880.
Sample: S-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
226 matched at least 6 of the 16 largest peaks in the unknown

Rank	In.	Name
1	9227	1,3,3-TRIMETHOXYBUTANE
2	24247	2-PROPANOL, 1-[2-(2-METHOXY-1-METHYLETHOXY)-1-METHYLETHOXY]-
3	16192	2-PROPANOL, 1-[1-METHYL-2-(2-PROPENYLOXY)ETHOXY]-
4	9235	1-PROPANOL, 2-(2-METHOXY-1-METHYLETHOXY)-
5	3528	2-METHYL-2,3-PENTANEDIOL
6	36510	1,4,7,10,13,16-HEXAOXACYCLOOCTADECANE
7	9228	1-PROPANOL, 2-(2-METHOXYPROPOXY)-
8	5809	1-ETHOXYPENTAN-3-OL
9	5810	2-PENTANOL, 5-METHOXY-2-METHYL-

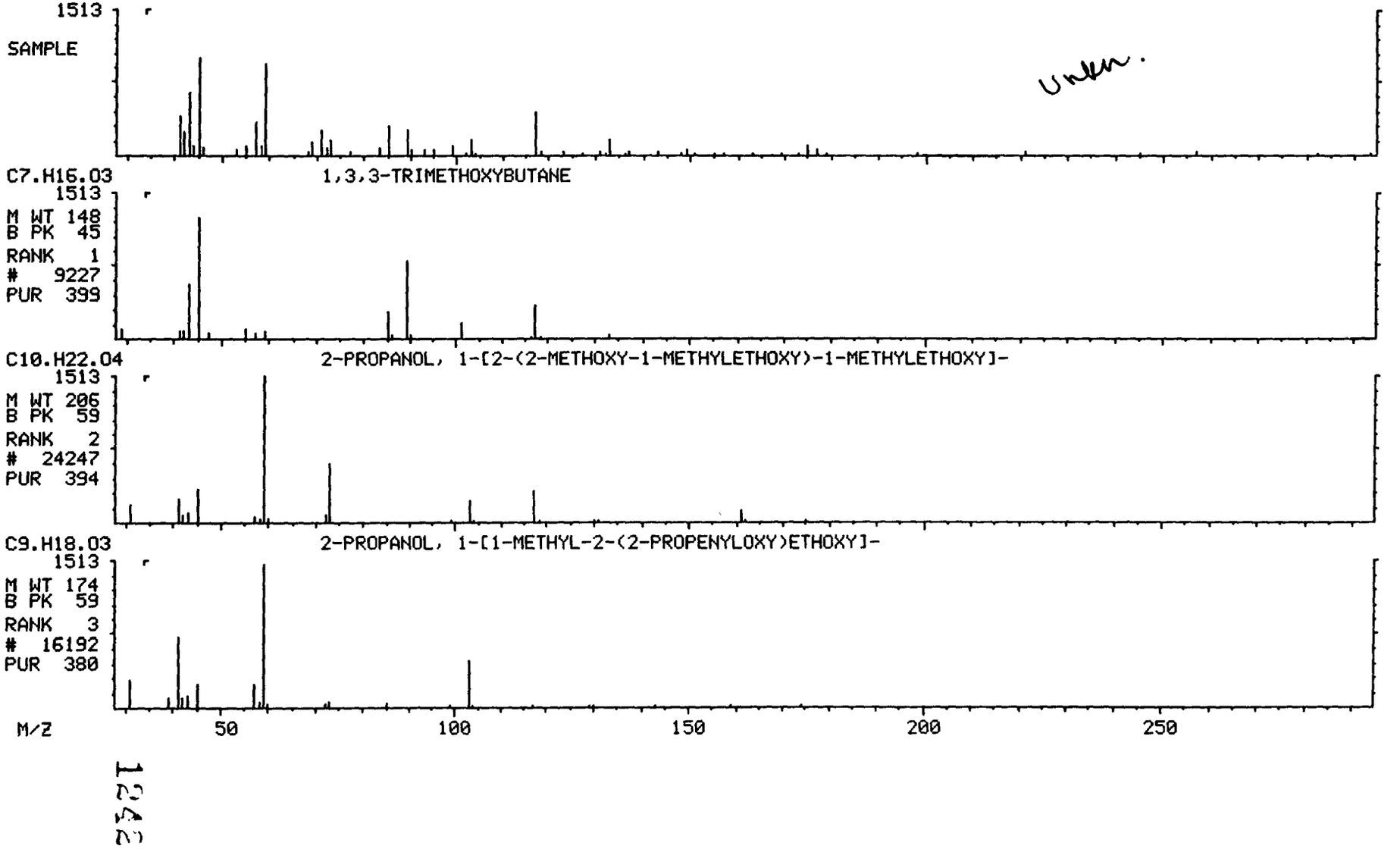
Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C7.H16.O3	148	45	399	722	437
2	C10.H22.O4	206	59	394	725	434
3	C9.H18.O3	174	59	380	693	394
4	C7.H16.O3	148	59	375	794	382
5	C6.H14.O2	118	59	360	824	374
6	C12.H24.O6	264	45	357	653	422
7	C7.H16.O3	148	59	353	767	365
8	C7.H16.O2	132	59	341	813	381
9	C7.H16.O2	132	59	334	728	383

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	6607-66-5
2	---	---	---	---	20324-33-8
3	---	---	---	---	55956-25-7
4	---	---	---	---	55956-21-3
5	---	---	---	---	7795-80-4
6	---	---	---	---	17455-13-9
7	---	---	---	---	13588-28-8
8	---	---	---	---	- -
9	---	---	---	---	55724-04-4

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 22:29:00 + 21:31
SAMPLE: S-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068108 #1934
CALI: 30068108 # 3

BASE M/Z: 45
RIC: 4880.



Library Search Data: 30068108 #2016 Base m/z: 57
08/31/98 22:29:00 + 22:25 Cali: 30068108 # 3 RIC: 5768.
Sample: S-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
818 matched at least 7 of the 16 largest peaks in the unknown

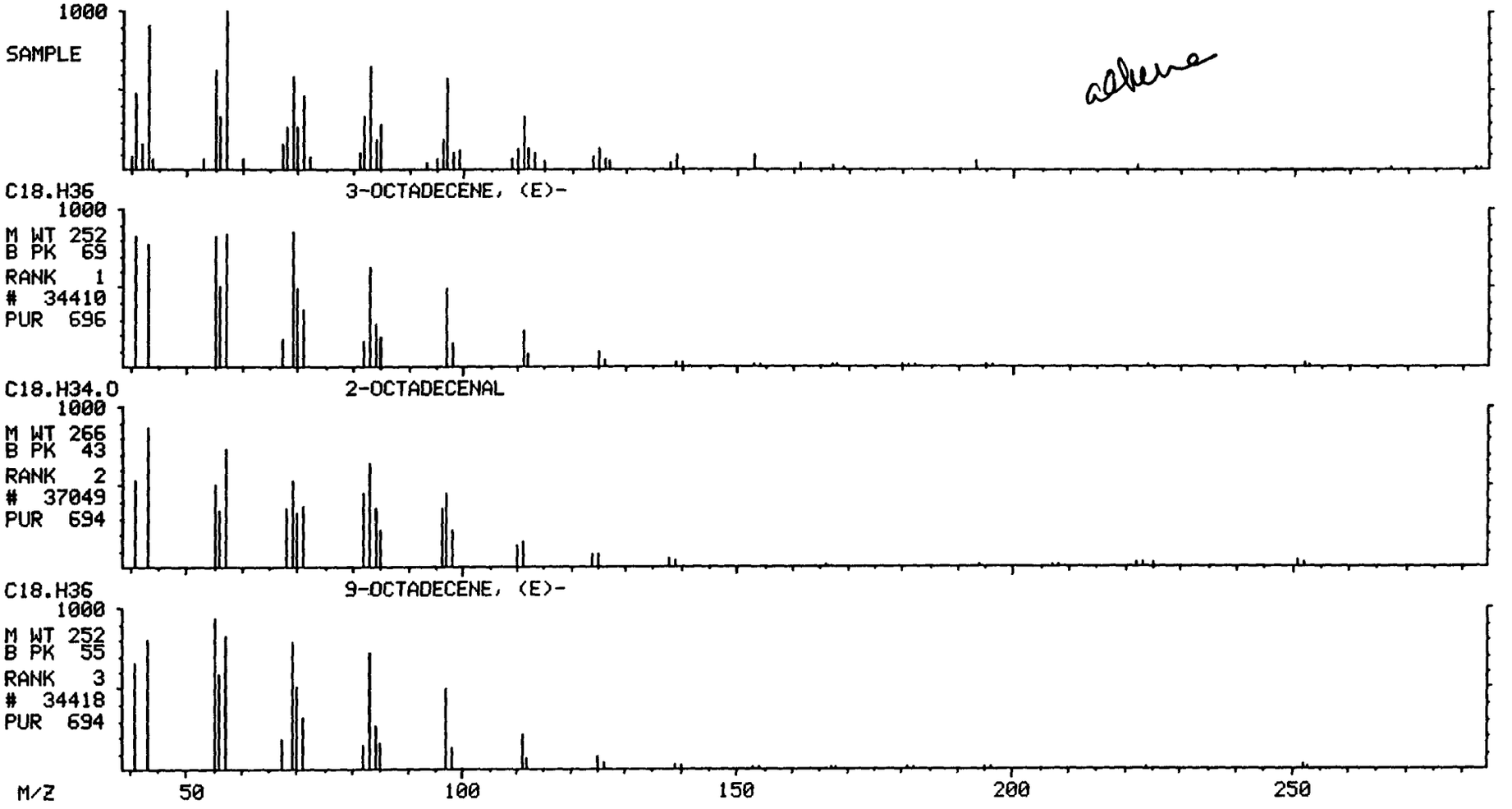
Rank	In.	Name
1	34410	3-OCTADECENE, (E)-
2	37049	2-OCTADECENAL
3	34418	9-OCTADECENE, (E)-
4	39515	9-EICOSENE, (E)-
5	34411	5-OCTADECENE, (E)-
6	37062	1-NONADECENE
7	39516	5-EICOSENE, (E)-
8	40232	1-NONADECANOL
9	58701	17-PENTATRIACONTENE

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C18.H36	252	69	696	927	716
2	C18.H34.O	266	43	694	900	747
3	C18.H36	252	55	694	925	712
4	C20.H40	280	55	691	940	712
5	C18.H36	252	55	691	921	709
6	C19.H38	266	97	690	932	720
7	C20.H40	280	55	688	934	710
8	C19.H40.O	284	55	688	966	700
9	C35.H70	490	43	683	905	738

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	---	---	---	---	7206-19-1
2	---	---	---	---	56554-96-2
3	---	---	---	---	7206-25-9
4	---	---	---	---	74685-29-3
5	---	---	---	---	7206-21-5
6	---	---	---	---	18435-45-5
7	---	---	---	---	74685-30-6
8	---	---	---	---	1454-84-8
9	---	---	---	---	6971-40-0

MID LIBRARY SEARCH (LIBRARYNB)
08/31/98 22:29:00 + 22:25
SAMPLE: S-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068108 #2016 BASE M/Z: 57
CALI: 30068108 # 3 RIC: 5768.



12549

Library Search Data: 30068108 #2052 Base m/z: 59
08/31/98 22:29:00 + 22:49 Cali: 30068108 # 3 RIC: 3200.
Sample: S-MM5-FB 1/3SA/1ML INST. ID: F16
Conds.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYNB searched for maximum PURITY
214 matched at least 5 of the 16 largest peaks in the unknown

Rank	In.	Name
1	8822	BUTANOIC ACID, 4-ETHOXY-, METHYL ESTER
2	12385	BUTYRIC ACID, 4-ISOPROPOXY-, METHYL ESTER
3	24247	2-PROPANOL, 1-[2-(2-METHOXY-1-METHYLETHOXY)-1-METHYLETHOXY]-
4	36537	2,5,8,11-TETRAOXATETRADECAN-13-OL, 4,7,10-TRIMETHYL-
5	16199	BUTYRIC ACID, 4-BUTOXY-, METHYL ESTER
6	9228	1-PROPANOL, 2-(2-METHOXYPROPOXY)-
7	16192	2-PROPANOL, 1-[1-METHYL-2-(2-PROPENYLOXY)ETHOXY]-
8	27502	15-CROWN-5
9	9227	1,3,3-TRIMETHOXYBUTANE

Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	C7.H14.O3	146	59	412	839	435
2	C8.H16.O3	160	101	401	795	417
3	C10.H22.O4	206	59	389	823	405
4	C13.H28.O5	264	59	383	752	436
5	C9.H18.O3	174	57	361	748	398
6	C7.H16.O3	148	59	350	829	360
7	C9.H18.O3	174	59	335	664	352
8	C10.H20.O5	220	45	334	650	389
9	C7.H16.O3	148	45	333	673	351

Rank	Ret.Time	B.P.Int.	US.Par.1	US.Par.2	C.A.S. #
1	—	—	—	—	29006-04-0
2	—	—	—	—	29006-05-1
3	—	—	—	—	20324-33-8
4	—	—	—	—	20324-34-9
5	—	—	—	—	29006-06-2
6	—	—	—	—	13588-28-8
7	—	—	—	—	55956-25-7
8	—	—	—	—	33100-27-5
9	—	—	—	—	6607-66-5

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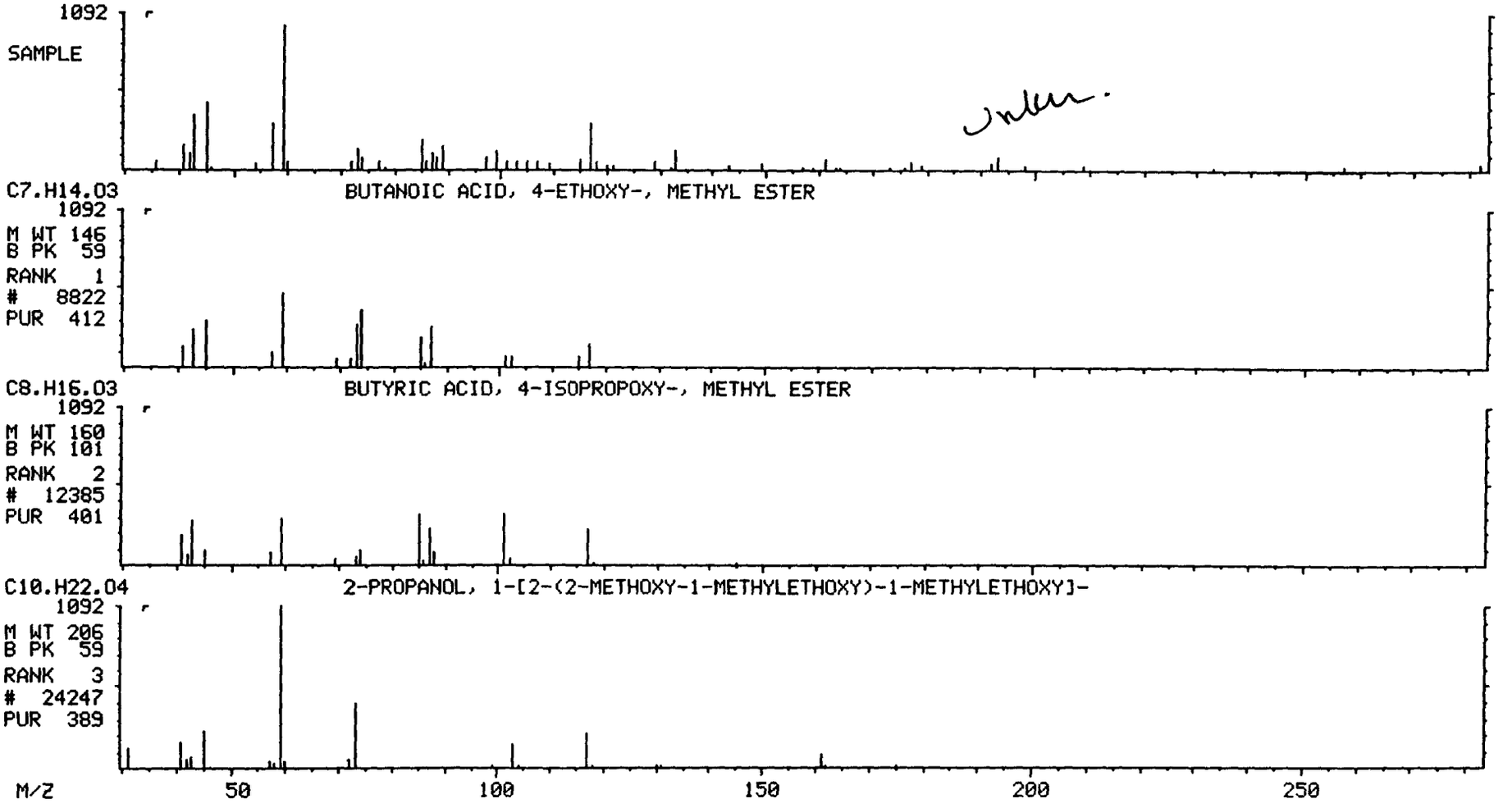
SAMPLE: S-MM5-FB 1/3SA/1ML INST. ID: F16
CONDS.: UG/ML *1ML *100%/100% *(NA/NA)/1/3SA NA M
ENHANCED (S 15B 2N 0T)

DATA: 30068108 #2052
CALI: 30068108 # 3

BASE M/Z: 59
RIC: 3200.



12.6

TIC SELECTION REPORT

DATA FILE: 30068108

THE FOLLOWING PEAKS WERE REJECTED BECAUSE
AT LEAST 40 % OF THEIR SIZE WAS ACCOUNTED FOR BY
TARGET COMPOUNDS ELUTING WITHIN 4 SCANS OF THE
PEAK TOP.

SCAN	SIZE	AMOUNT
198	230232.	32.201
308	286752.	40.106
340	226092.	31.622
421	132760.	18.568
529	285996.	40.000
722	314784.	36.205
827	347784.	40.000
968	289424.	32.602
1086	355104.	40.000
1383	311936.	57.604
1383	311936.	57.604
1551	216608.	40.000
1603	32336.	5.971
1782	175064.	40.000

TOTAL NUMBER OF UNIDENTIFIED PEAKS WITH SIZE
GREATER THAN 10 % OF THE CLOSEST INTERNAL STANDARD
THAT DOES NOT HAVE INTERFERENCES = 32

INTERNAL STANDARDS THAT HAVE RIC SIZE LESS THAN
50 % OR GREATER THAN 200 % OF THE ESTIMATED RIC SIZE
ARE CONSIDERED TO HAVE INTERFERENCES AND WILL NOT BE USED
FOR QUANTITATION.

#	INTERNAL STANDARD	RIC SIZE	PERCENT OF ESTIMATED RIC SIZE	SCAN
1	C140 NAPHTHALENE-D8	285996.	129	529
2	C150 ACENAPHTHENE-D10	347784.	129	827
3	C160 PHENANTHRENE-D10	355104.	128	1086
4	C170 CHRYSENE-D12	216608.	134	1551
5	C175 PERYLENE-D12	175064.	123	1782

* INDICATES INTERFERENCE

SIZE = AREA

TECHNICAL REPORT DATA

Please read instructions on the reverse before completing

1. REPORT NO. EPA-454/R-00-025E	2.	3. RECIPIENT'S ACCESSION NO.
4. TITLE AND SUBTITLE Final Report Hot Mix Asphalt Plants, Truck Loading and Silo Filling, Manual Methods Testing, Asphalt Plant C, Los Angeles, California Volume 5 of 8		5. REPORT DATE May 2000 6. PERFORMING ORGANIZATION CODE
7. AUTHOR(S) Frank J. Phoenix		8. PERFORMING ORGANIZATION REPORT NO.
9. PERFORMING ORGANIZATION NAME AND ADDRESS Pacific Environmental Services, Inc. Post Office Box 12077 Research Triangle Park, North Carolina 27709-2077		10. PROGRAM ELEMENT NO. 11. CONTRACT/GRANT NO. 68-D-98004
12. SPONSORING AGENCY NAME AND ADDRESS U.S. Environmental Protection Agency Office of Air Quality Planning and Standards Emissions, Monitoring and Analysis Division Research Triangle Park, North Carolina 27711		13. TYPE OF REPORT AND PERIOD COVERED Final 14. SPONSORING AGENCY CODE EPA/200/04

15. SUPPLEMENTARY NOTES

16. ABSTRACT

The United States Environmental Protection Agency (EPA) Office of Air Quality Planning and Standards (OAQPS) is investigating hot mix asphalt plants to identify and quantify particulate matter (PM), methylene chloride extractable matter (MCEM), and organic hazardous air pollutant (HAP) emissions during asphalt concrete loading operations. In . upport of this investigation, the OAQPS issued Pacific Environmental Services, Inc. (PES) a series of work assignments to conduct emissions testing at a hot mix asphalt plant during load-out operations.

The primary objective of the emissions testing was to characterize the uncontrolled emissions of PM, MCEM, polynuclear aromatic hydrocarbons (PAHs), semi-volatile organic hazardous air pollutants (SVOHAPS), and volatile organic hazardous air pollutants (VOHAPS) from a hox mix production plant during loading operations. An asphalt plant south of Los Angeles, California was selected by EPA as the host facility. Testing was performed over five consecutive days beginning on July 24, 1998. Testing was performed under two conditions. Under normal operations, testing was performed to characterize load-out emissions from the tunnel exhaust and load-in emissions from the asphalt concrete storage silo. Under background conditions, testing was performed to characterize emissions from the combustion of diesel fuel in transport trucks.

The entire report consists of eight volumes totaling 4,234 pages, Vol. 1 (388 pages), Vol. 2 (308 pages), Vol. 3 (573 pages), Vol. 4 (694 pages), Vol. 5 (606 pages), Vol. 6 (564 pages), Vol. 7 (570 pages), and Vol. 8 (531 pages).

17. KEY WORDS AND DOCUMENT ANALYSIS

a. DESCRIPTIONS	b. IDENTIFIERS/OPEN ENDED TERMS	c. COASTI Field/Group
Hazardous Air Pollutants Methylene Chloride Extractable Matter Particulate Matter Polynuclear Aromatic Hydrocarbons Semi-volatile Organic Hazardous Air Pollutants Volatile Organic Hazardous Air Pollutants		

18. DISTRIBUTION STATEMENT	19. SECURITY CLASS *(This Report)*	21. NO. OF PAGES
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