Contractor's Closeout Report

Underground Storage Tank Removals at Building 25 MCB Camp Lejeune Jacksonville, North Carolina

Contract No. N62470-93-D-3032
Delivery Order 0078

Volume IV of IV

Submitted to

Department of the Navy
Atlantic Division
Naval Facilities Engineering Command
Norfolk, VA

Submitted by

OHM Remediation Services Corp.
A Subsidiary of OHM Corporation

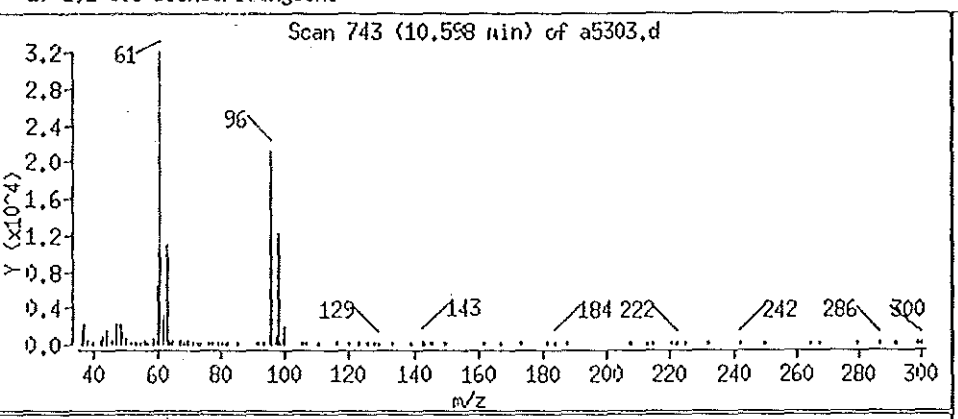
5335 Triangle Parkway, Suite 450
Norcross, GA 30092

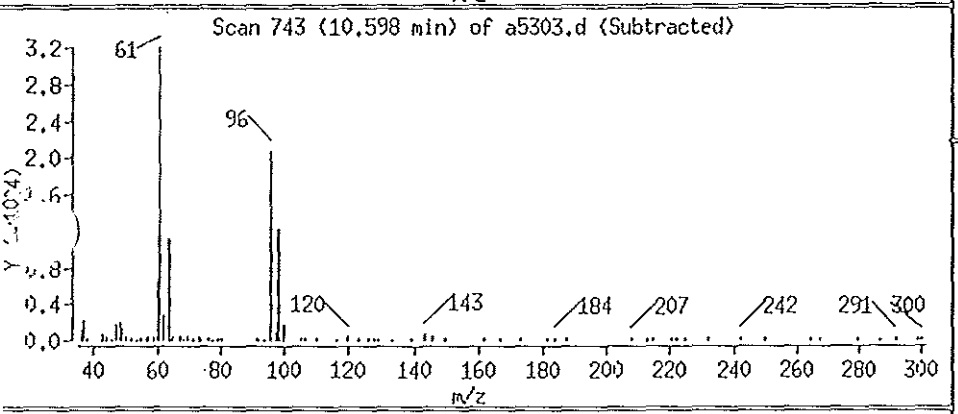
October 1996

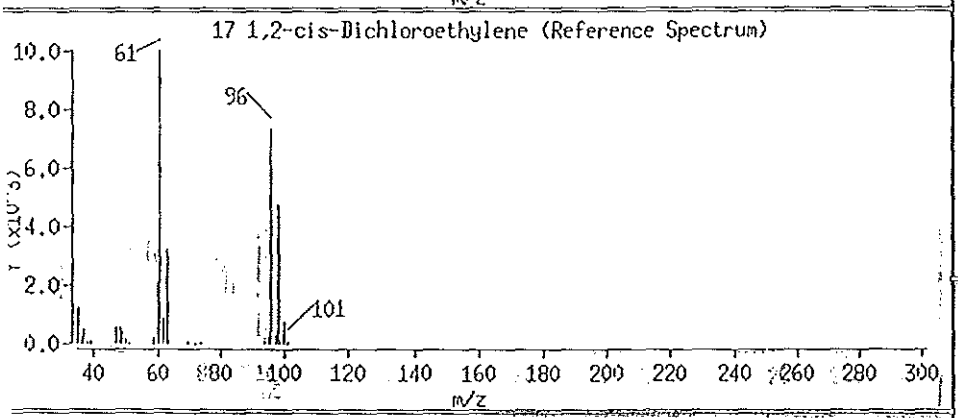
OHM Project No. 17418

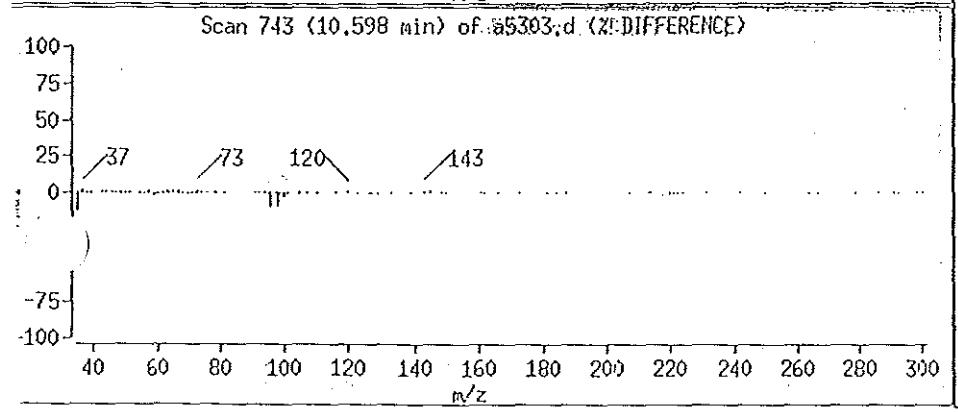
Data File: /chem/aux/msa.i/a111895.b/a5303.d
Date : 18-NOV-95 22:23
Client ID: 17418n clj78tw002 Instrument: msa.i
Sample Info: 17418n clj78tw002 10:c
Purge Volume: 1.0 Operator: jk
Column phase: J&W DB_624 Column diameter: 0.53

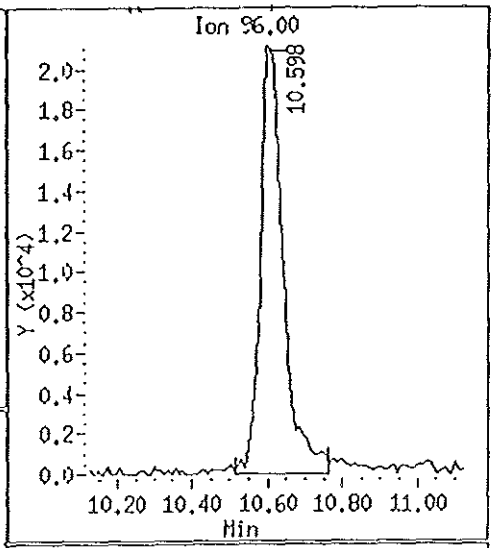
17 1,2-cis-Dichloroethylene

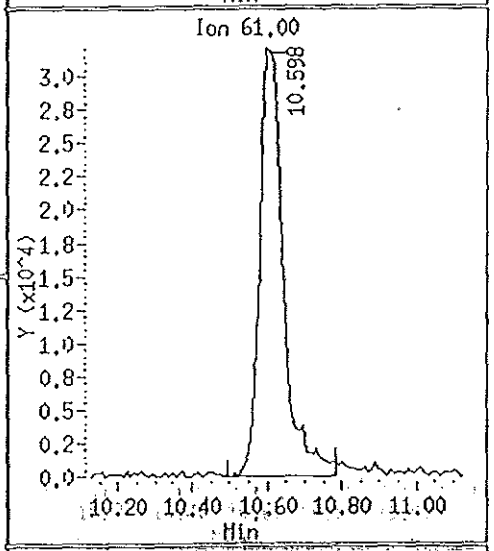


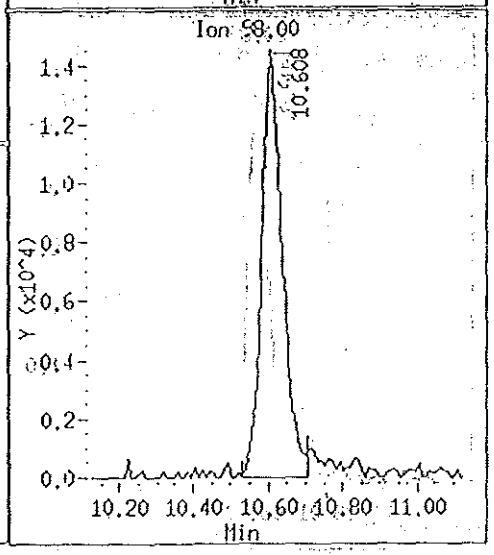












Data File: /chem/aux/msa.i/a111895.b/a5303.d

Date : 18-NOV-95 22:23

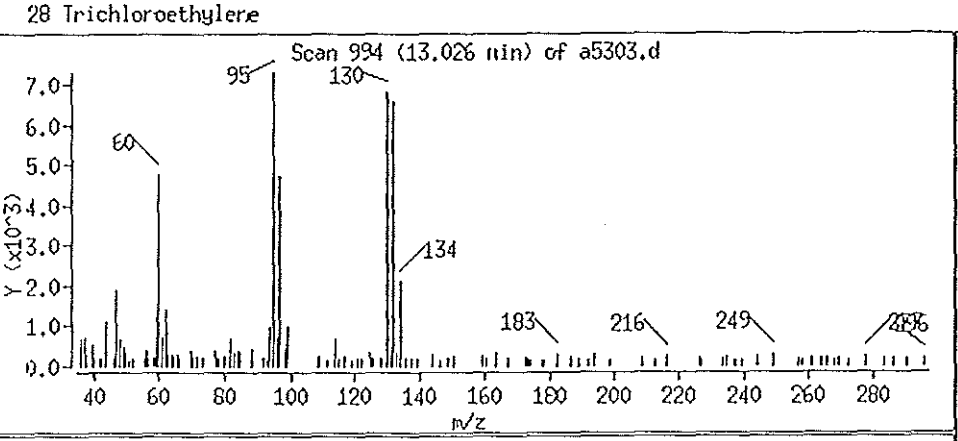
Client ID: 17418n clj78tw002 Instrument: msa.i

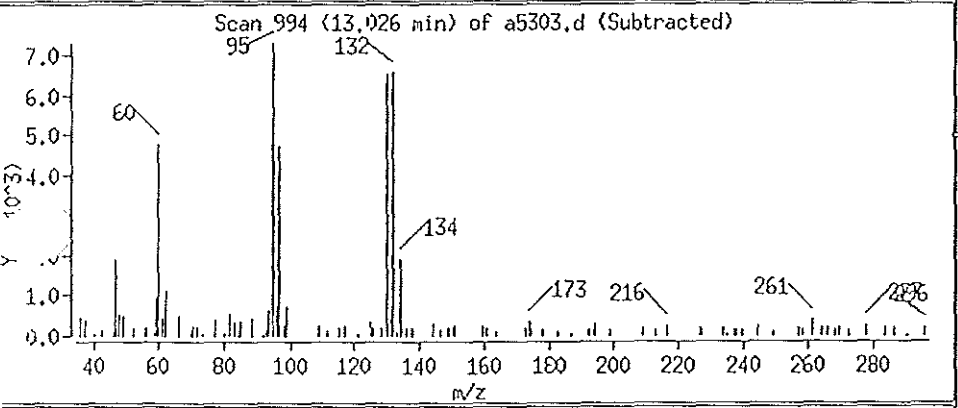
Sample Info: 17418n clj78tw002 10x

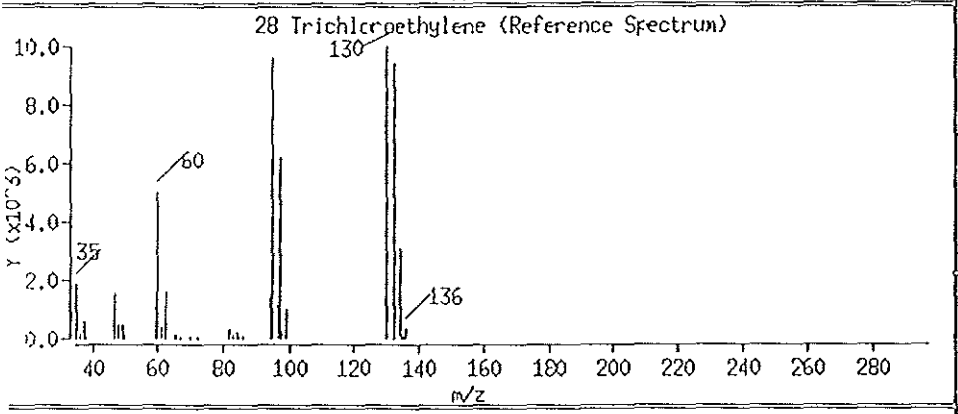
Purge Volume: 1.0 Operator: jk

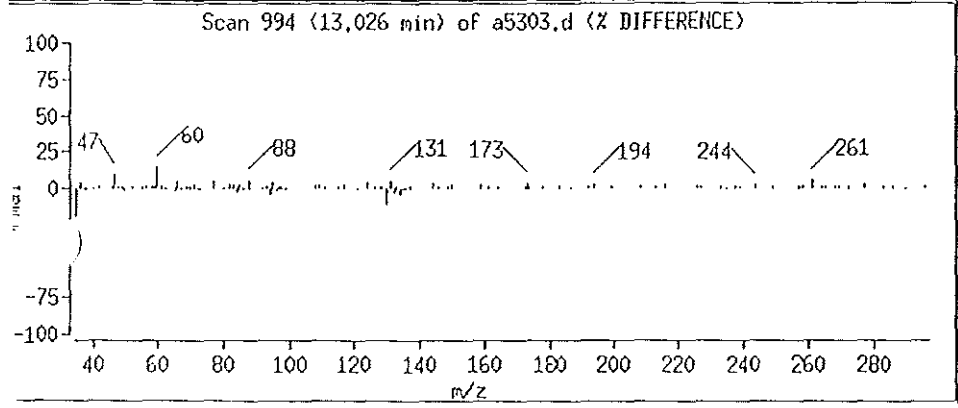
Column phase: J&W DB_624 Column diameter: 0.53

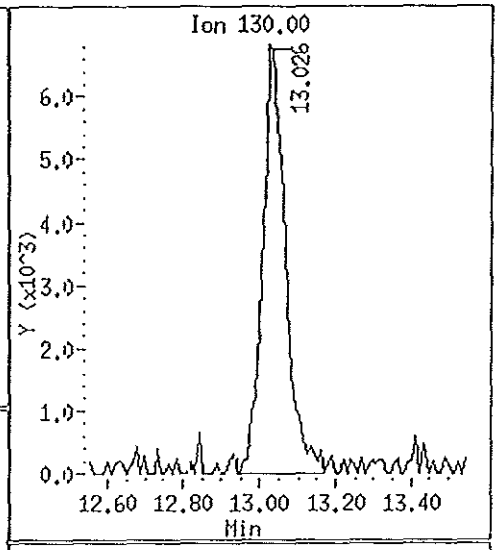
28 Trichloroethylene

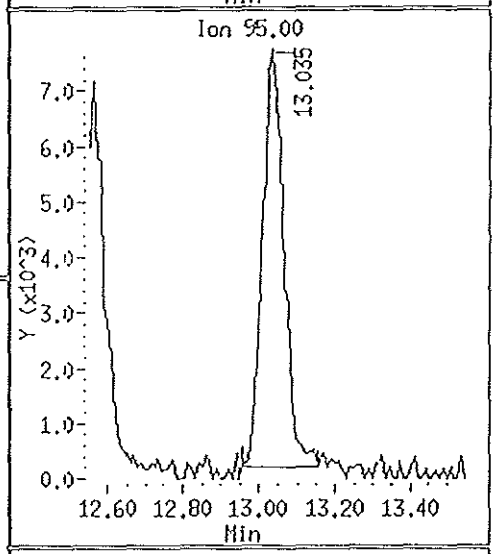


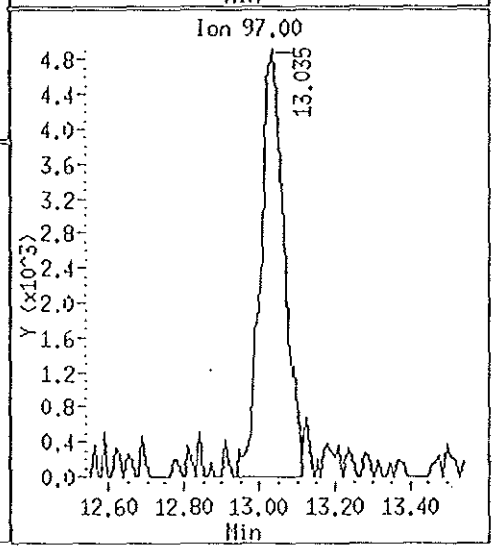












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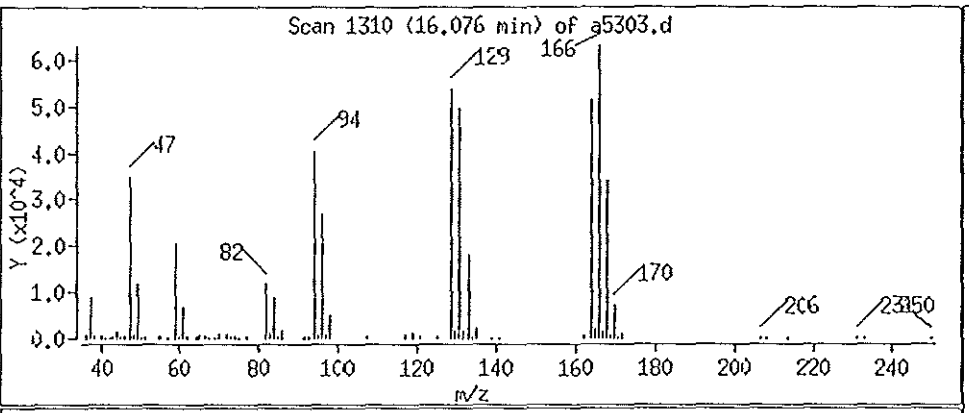
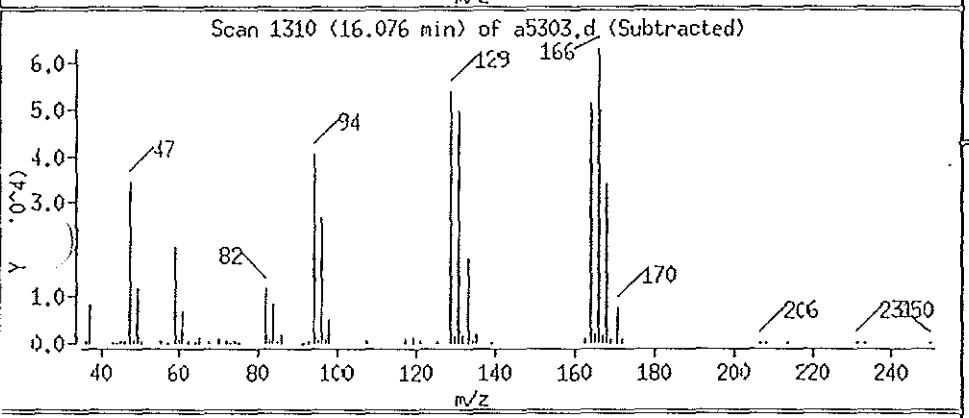
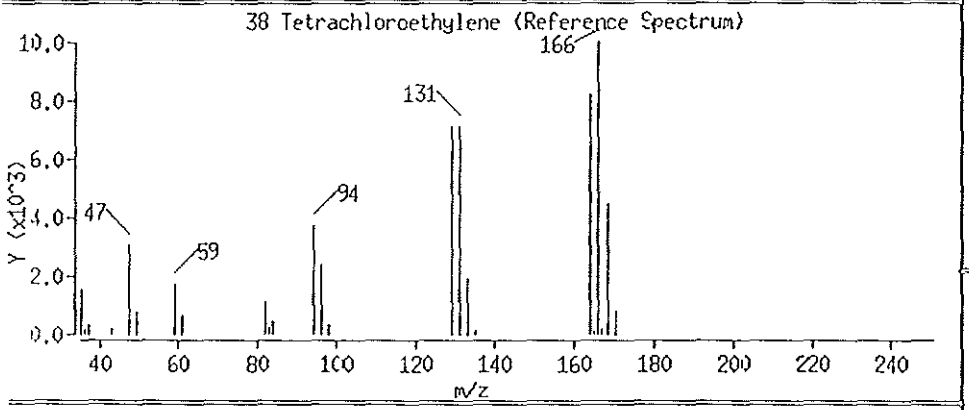
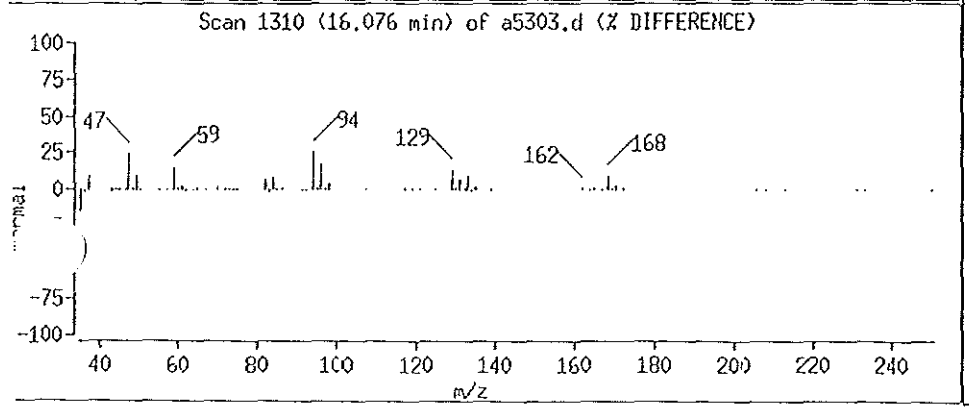
Date : 18-NOV-95 22:23
Client ID: 17418n clj78tw002 Instrument: msa.i
Sample Info: 17418n clj78tw002 10x
Purge Volume: 1.0 Operator: jk
Column phase: J&W DB_624 Column diameter: 0.53

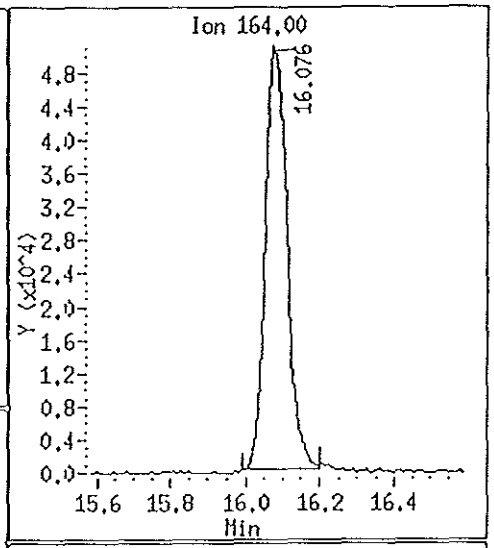
38 Tetrachloroethylene

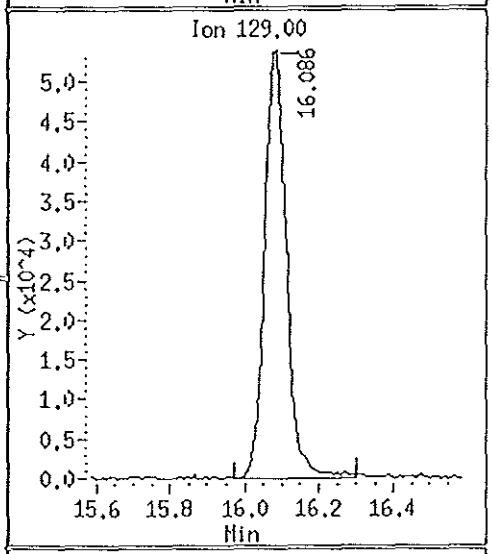


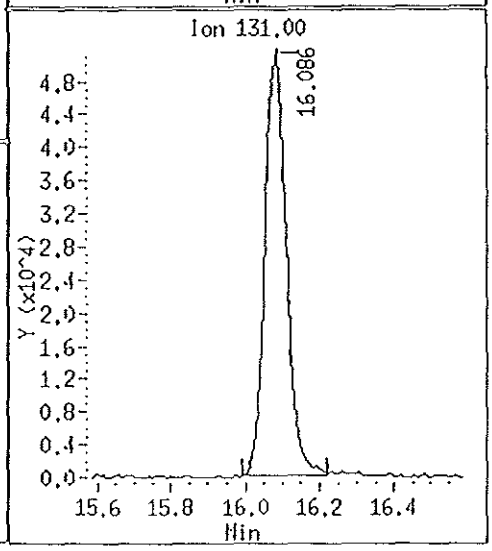












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Date : 18-NOV-95 22:23

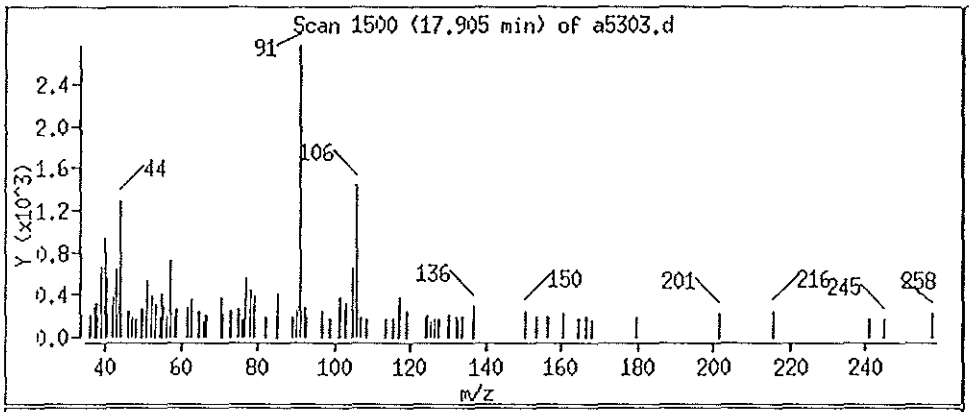
Client ID: 17418n clj78tw002 Instrument: msa.i

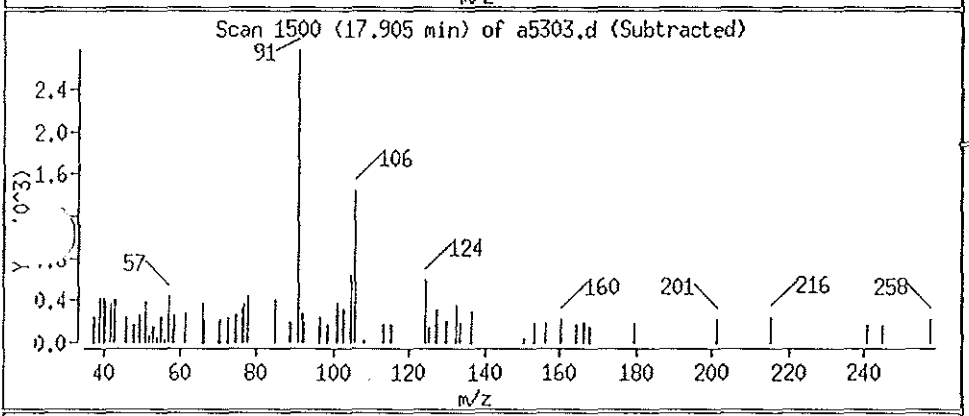
Sample Info: 17418n clj78tw002 10x

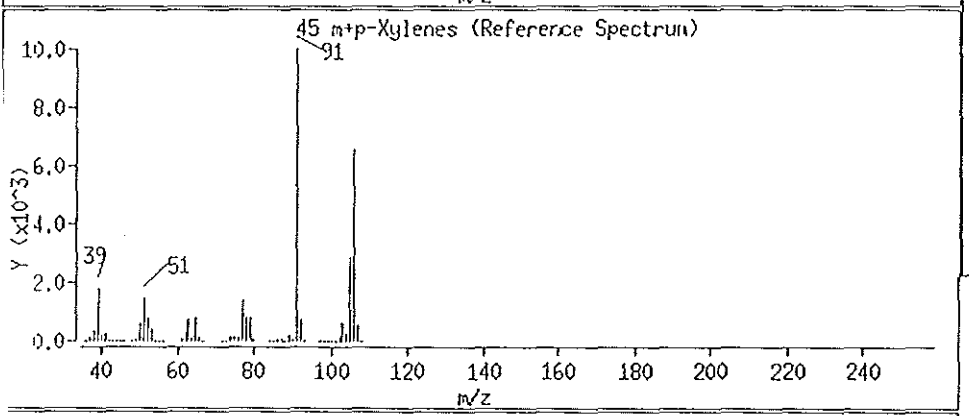
Purge Volume: 1.0 Operator: jk

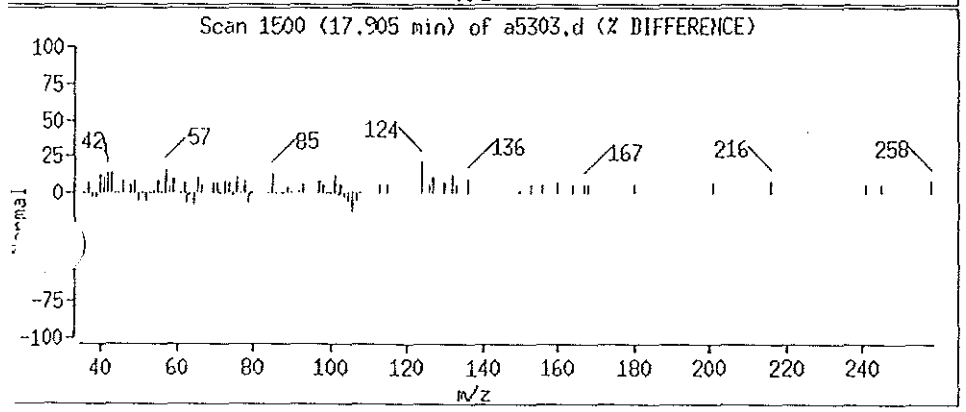
Column phase: J&W DB_624 Column diameter: 0.53

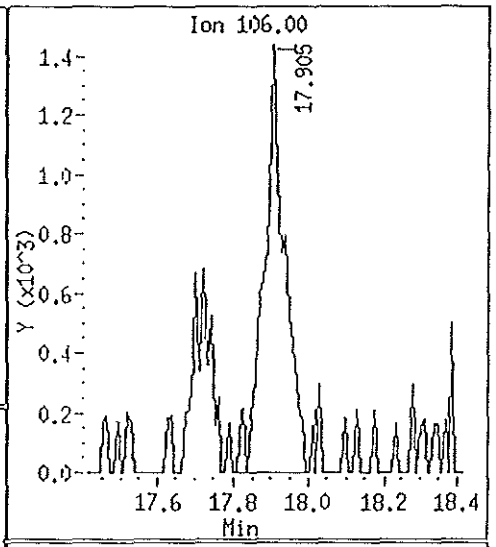
45 m+p-Xylenes

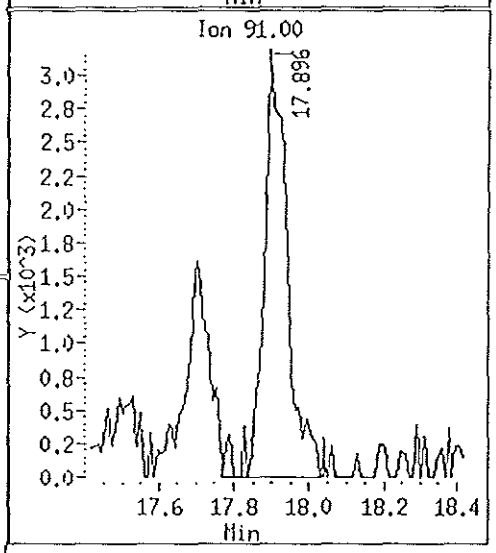












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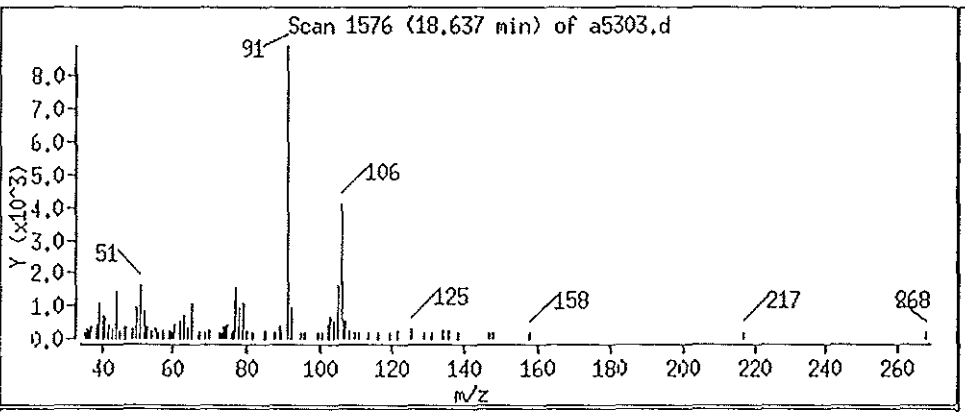
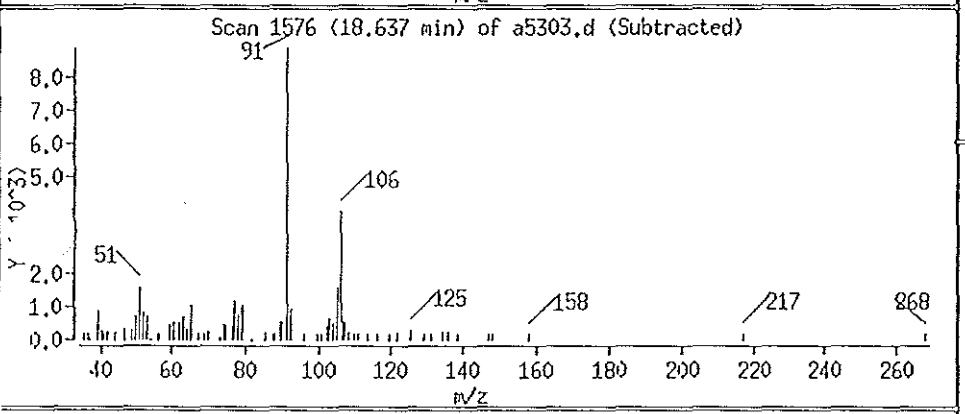
Sample Info: 17418n clj78tw002 10x

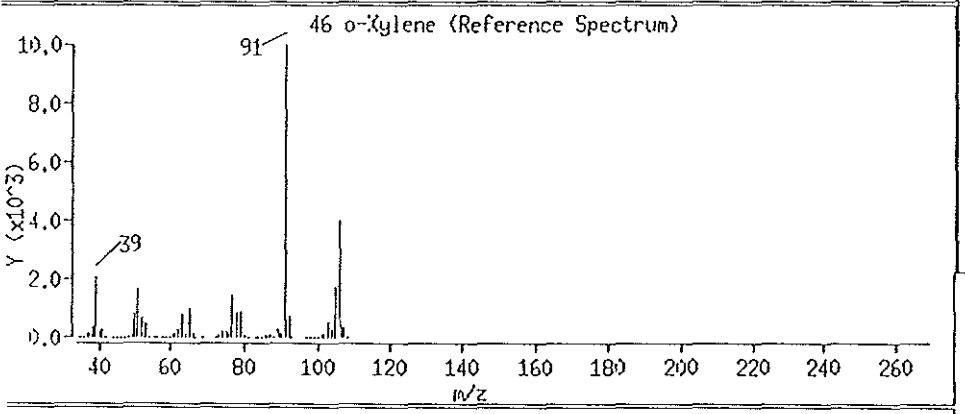
Purge Volume: 1.0 Operator: jk

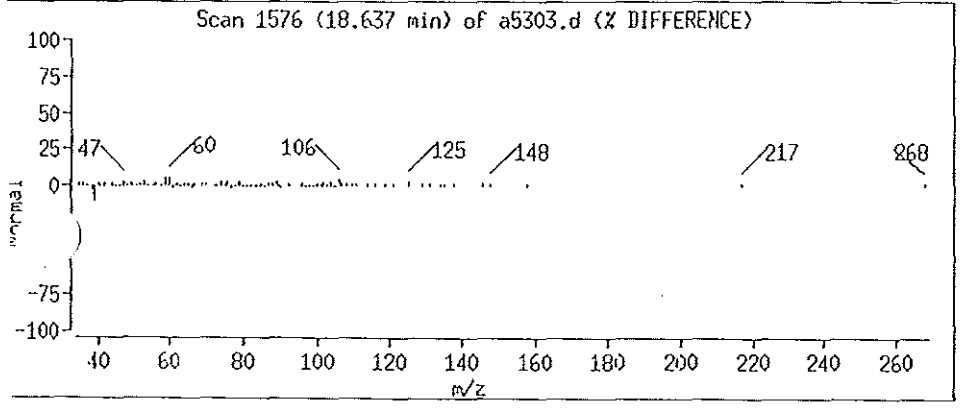
Column phase: J&W DB_624 Column diameter: 0.53

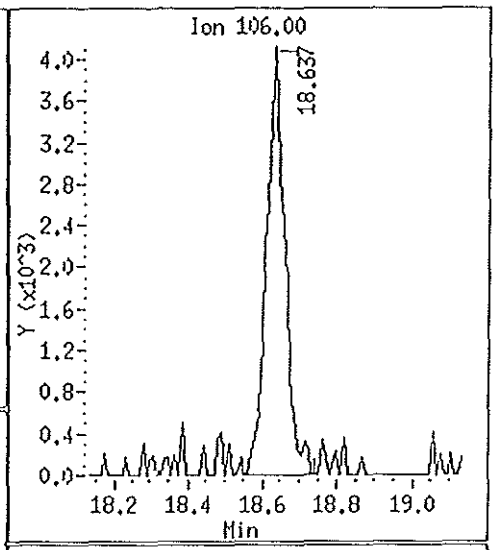
46 o-Xylene

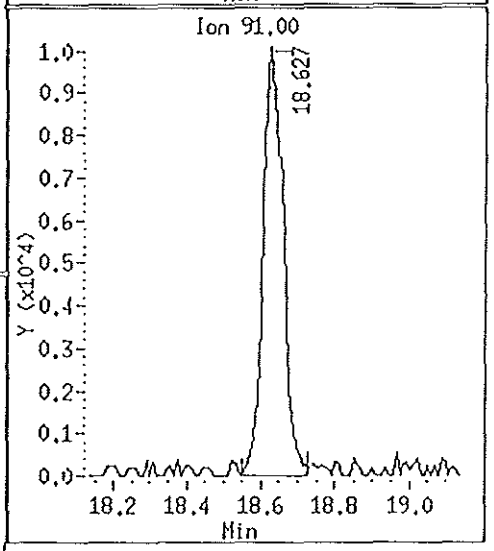












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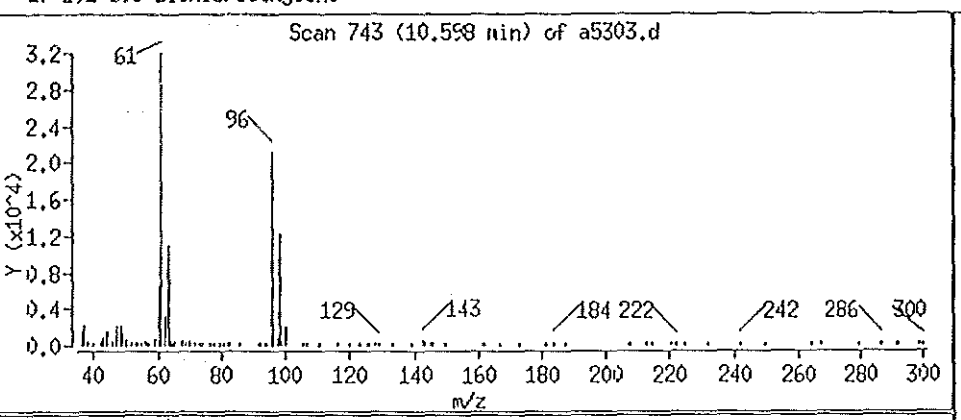
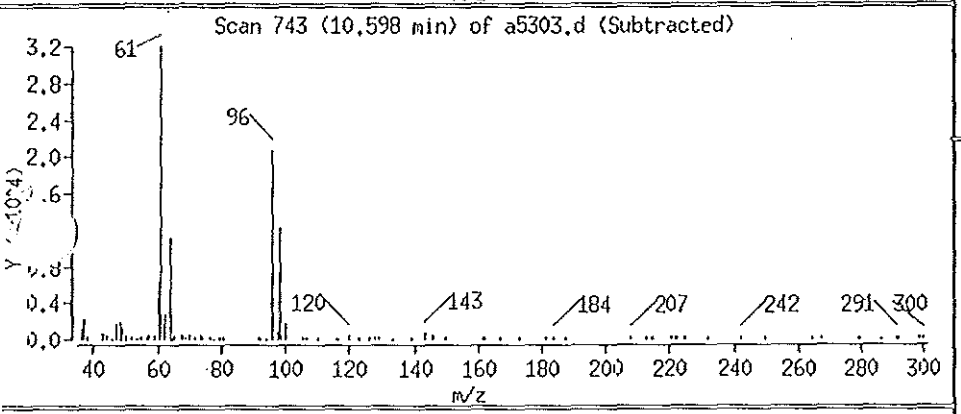
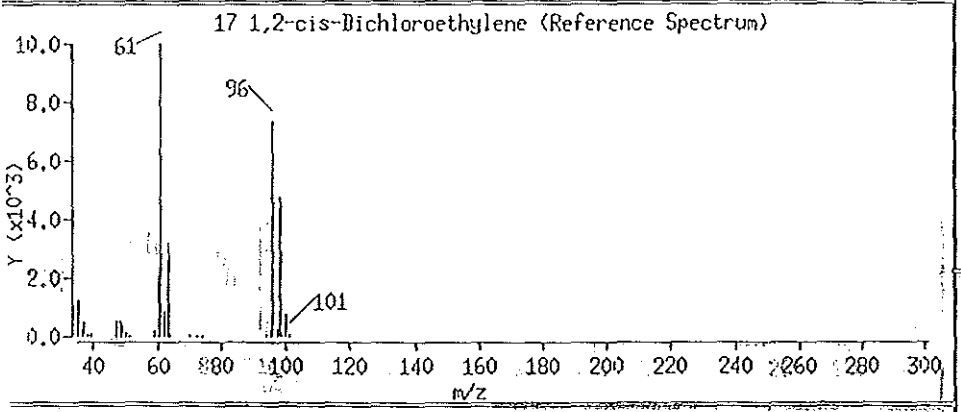
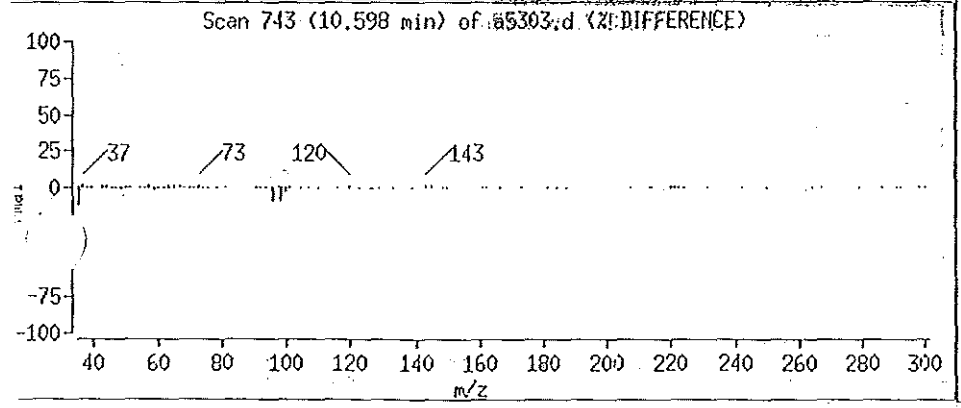
Sample Info: 17418n clj78tw002 10x
Purge Volume: 1.0 Operator: jk
Column phase: J&W DB_624 Column diameter: 0.53

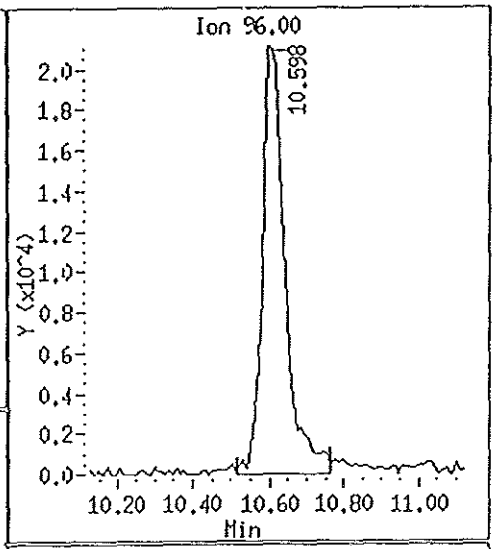
17 1,2-cis-Dichloroethylene

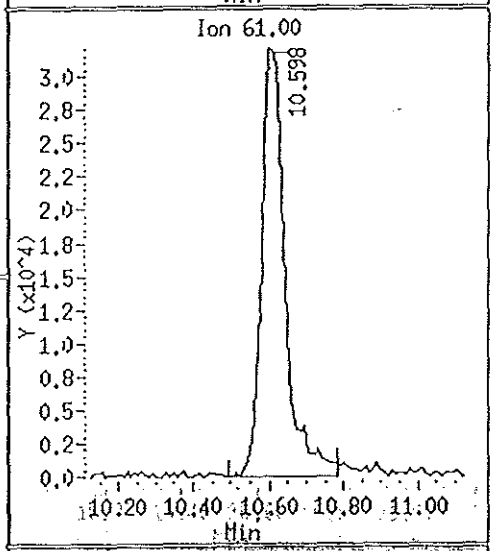


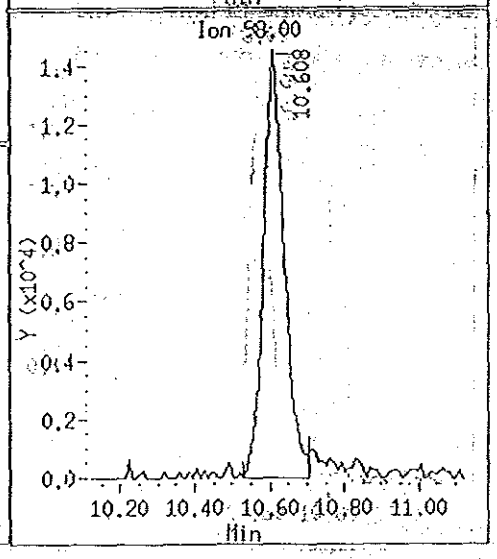












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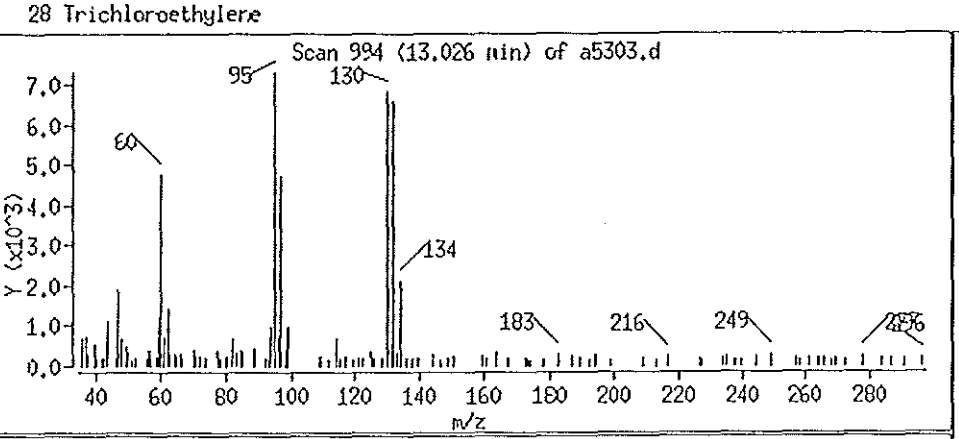
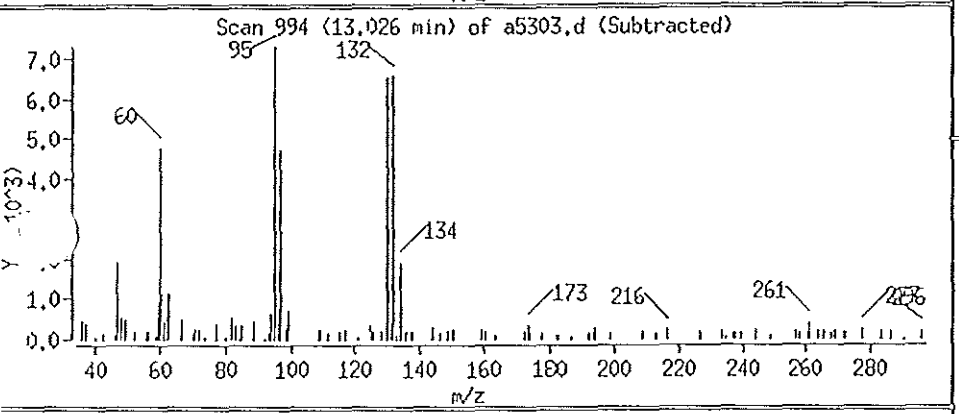
Sample Info: 17418n clj78tw002 10x

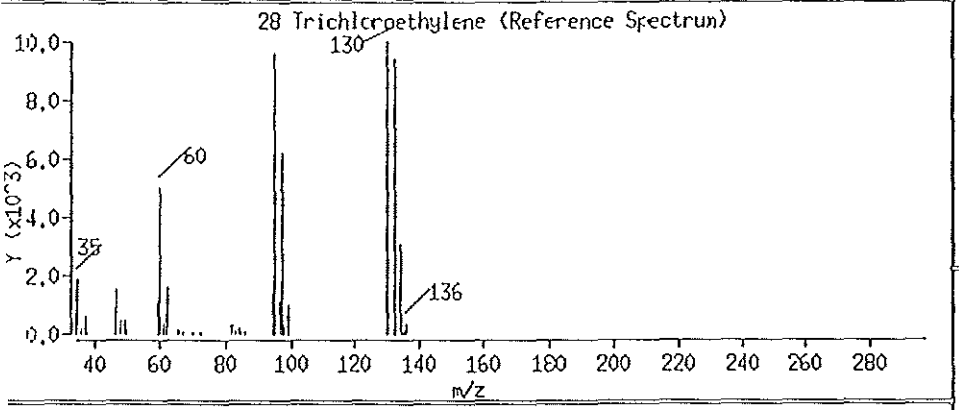
Purge Volume: 1.0 Operator: jk

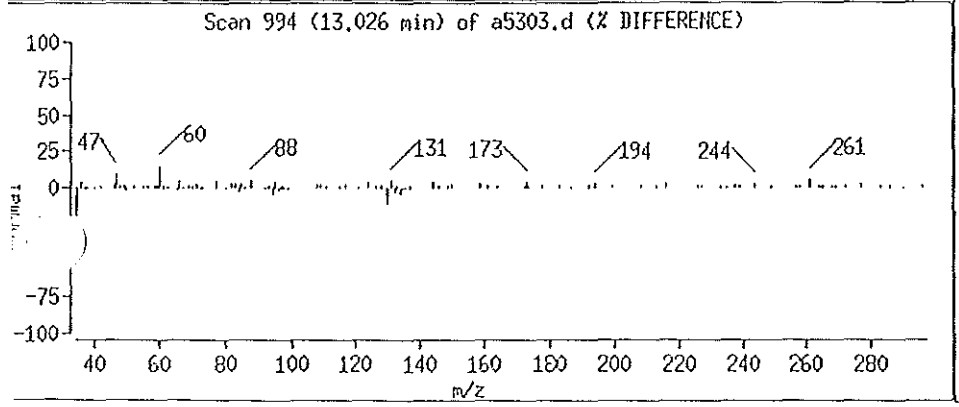
Column phase: J&W DB_624 Column diameter: 0.53

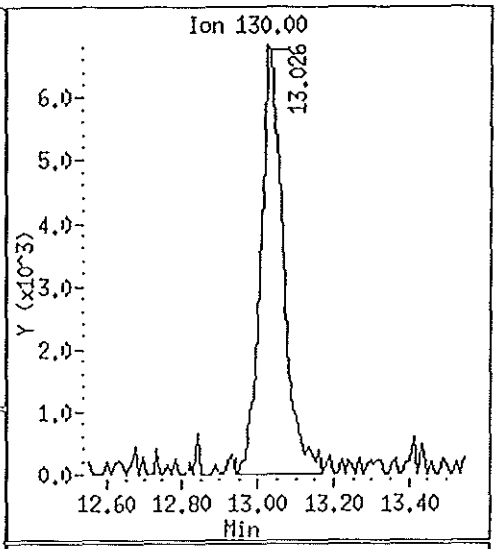
28 Trichloroethylene

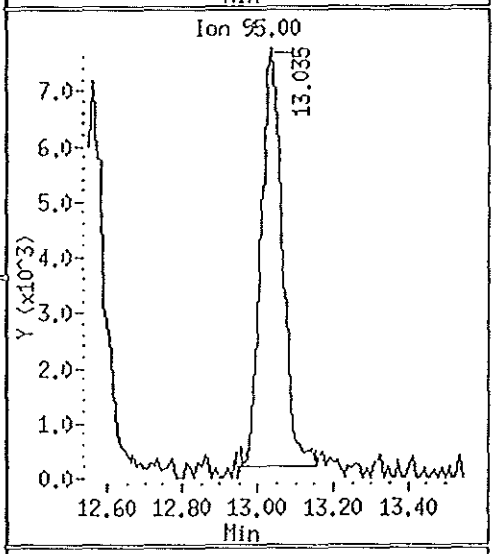


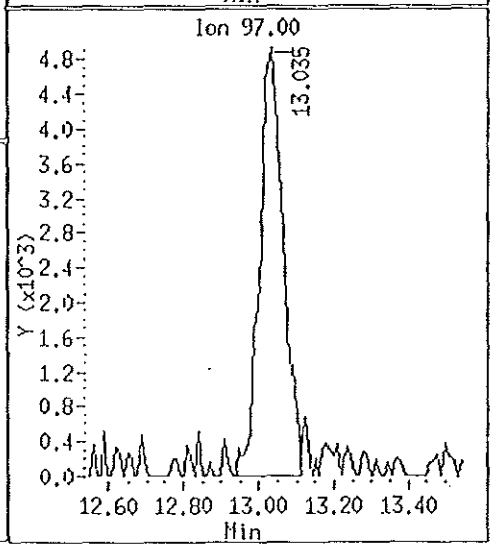












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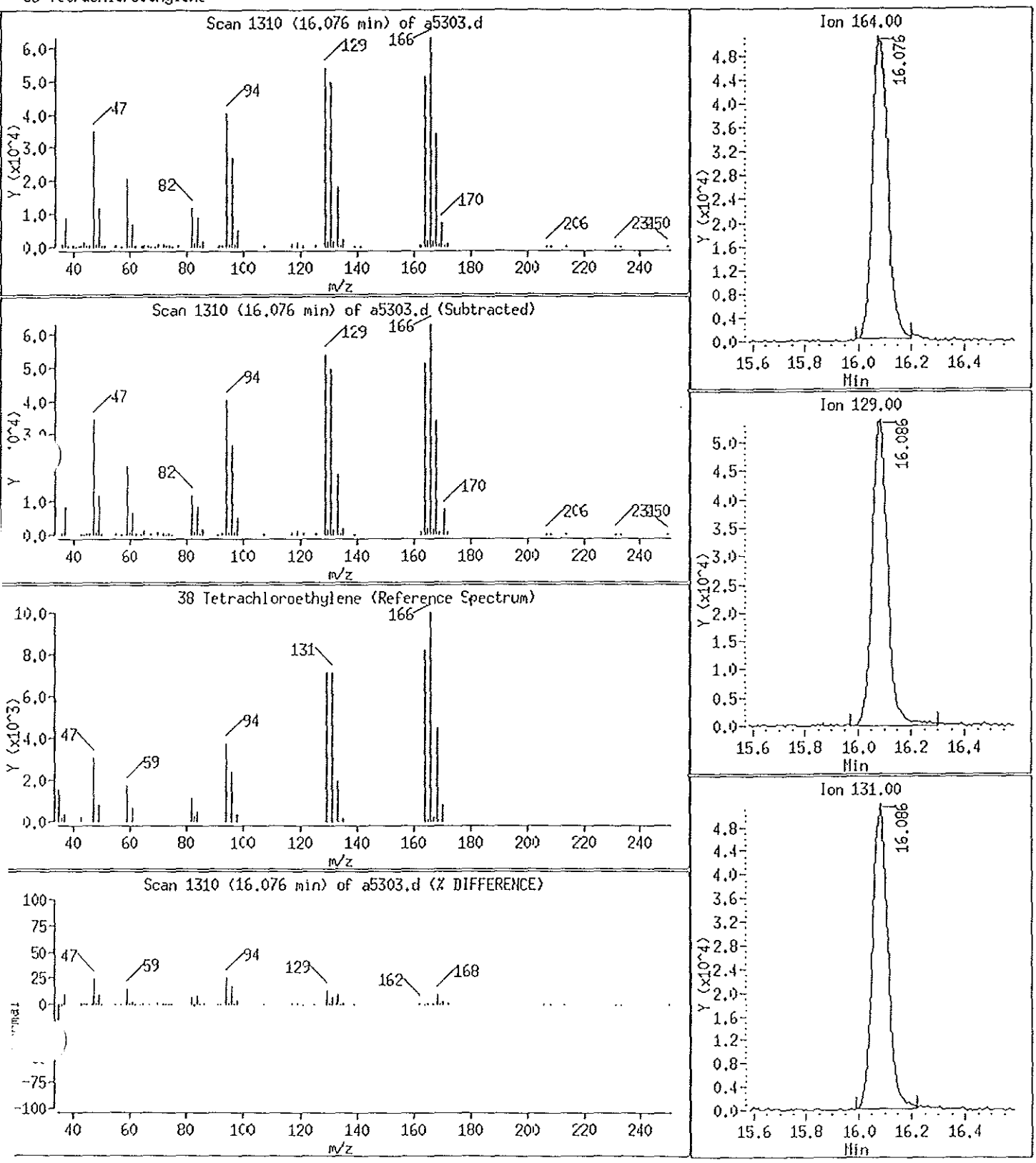
Sample Info: 17418n clj78tw002 10x

Purge Volume: 1.0 Operator: jk

Column phase: J&W DB_624 Column diameter: 0.53

38 Tetrachloroethylene



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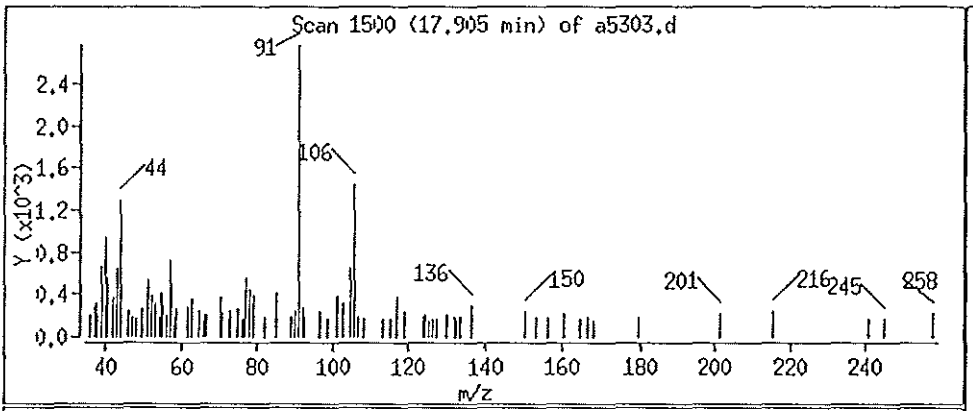
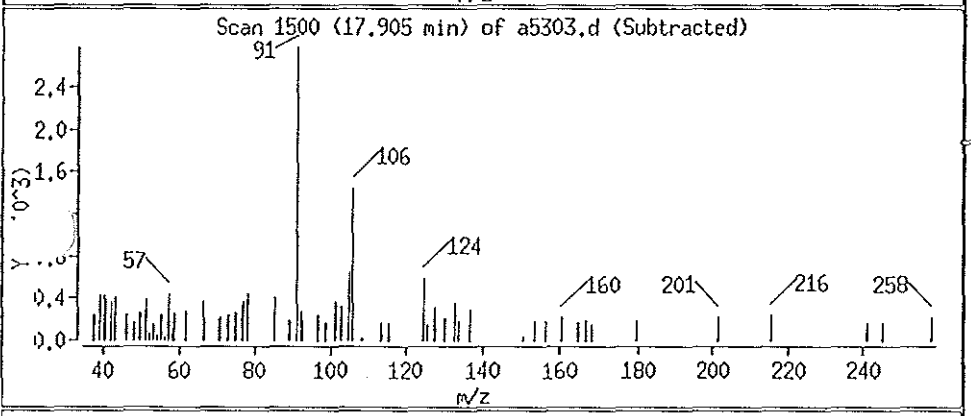
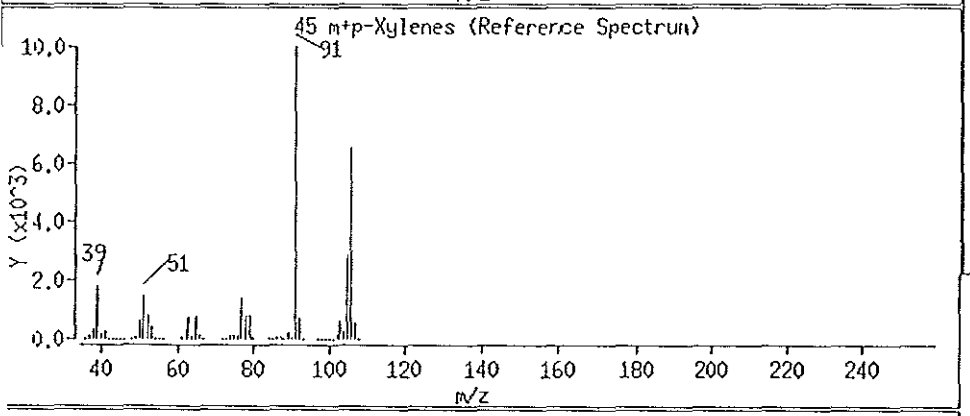
Purge Volume: 1.0 Operator: jk

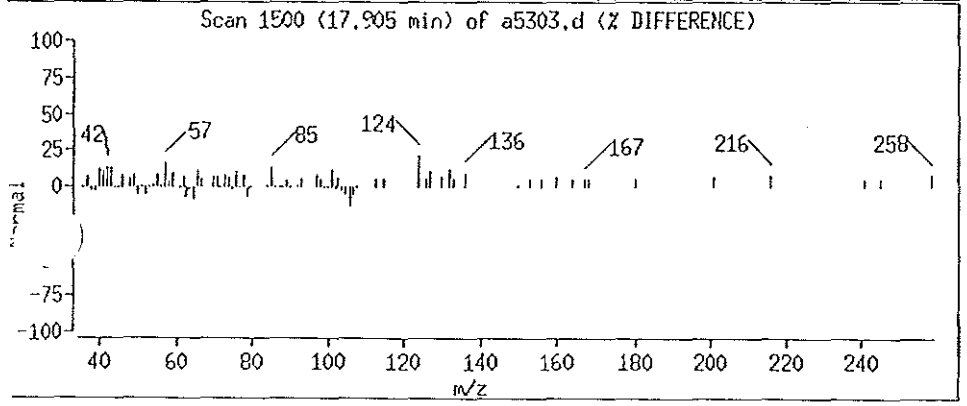
Column phase: J&W DB_624 Column diameter: 0.53

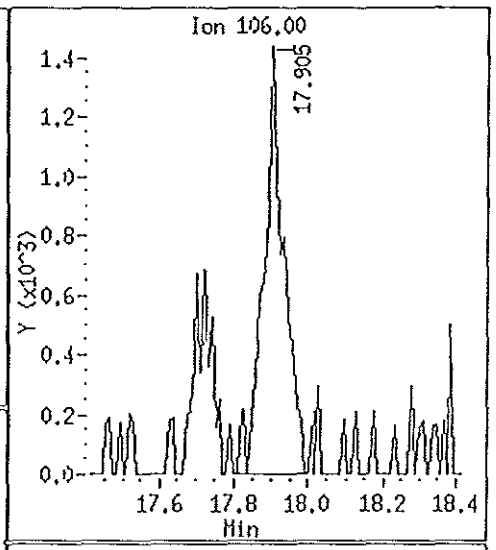
45 m+p-Xylenes

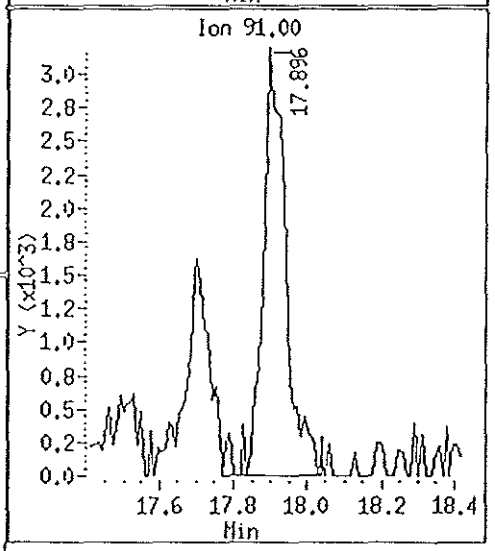












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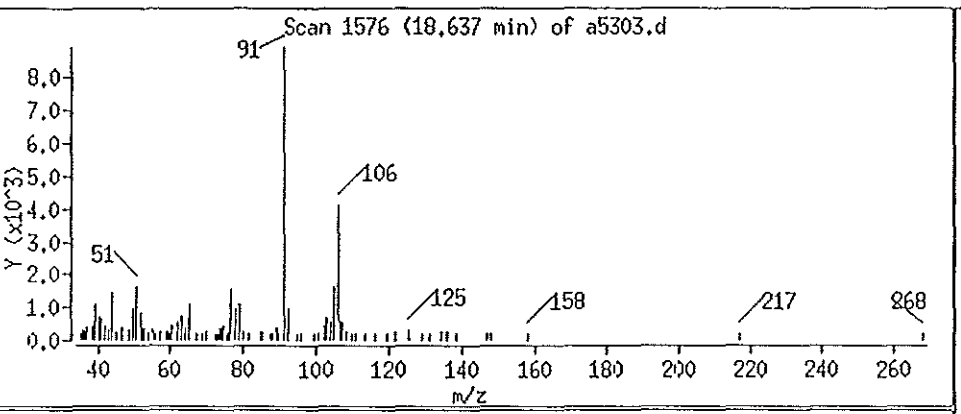
Client ID: 17418n clj78tw002 Instrument: msa.i

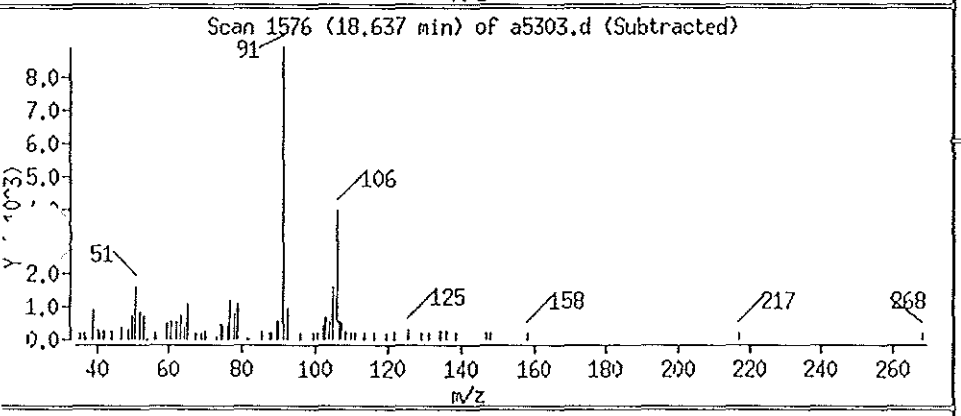
Sample Info: 17418n clj78tw002 10x

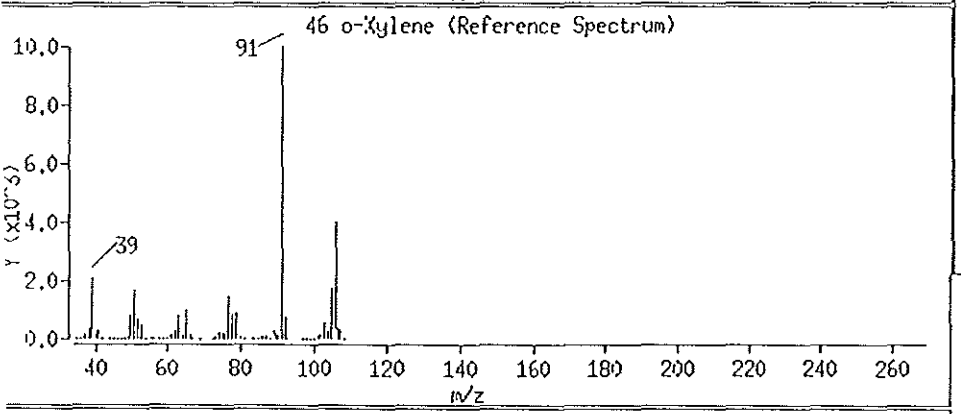
Purge Volume: 1.0 Operator: jk

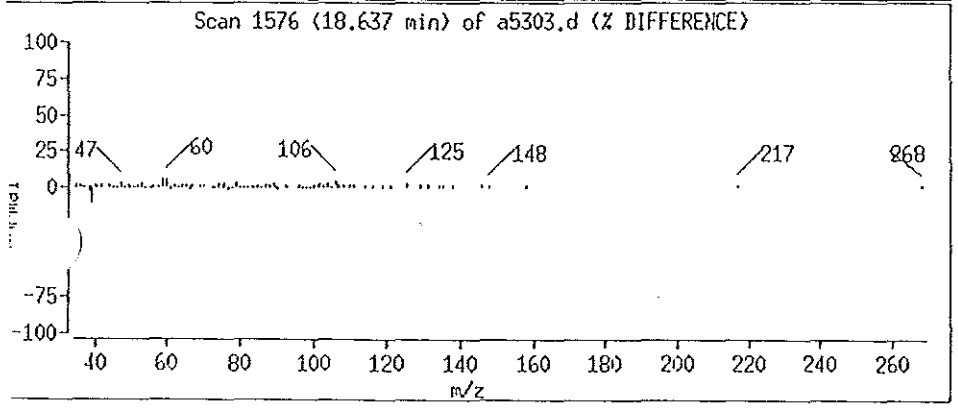
Column phase: J&W DB_624 Column diameter: 0.53

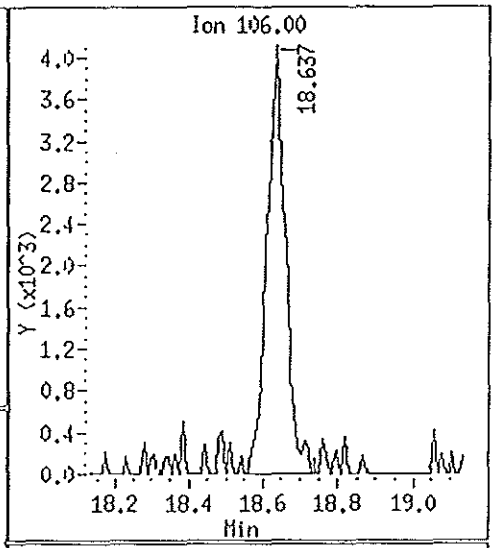
46 o-Xylene

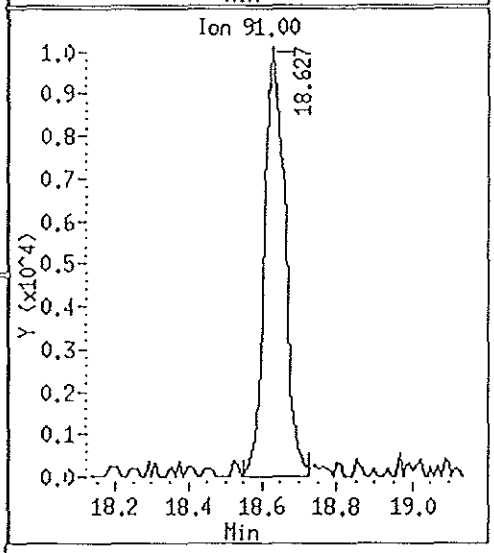












Data File: /chem/aux/msa.i/a111895.b/a5303.d

Date : 18-NOV-95 22:23

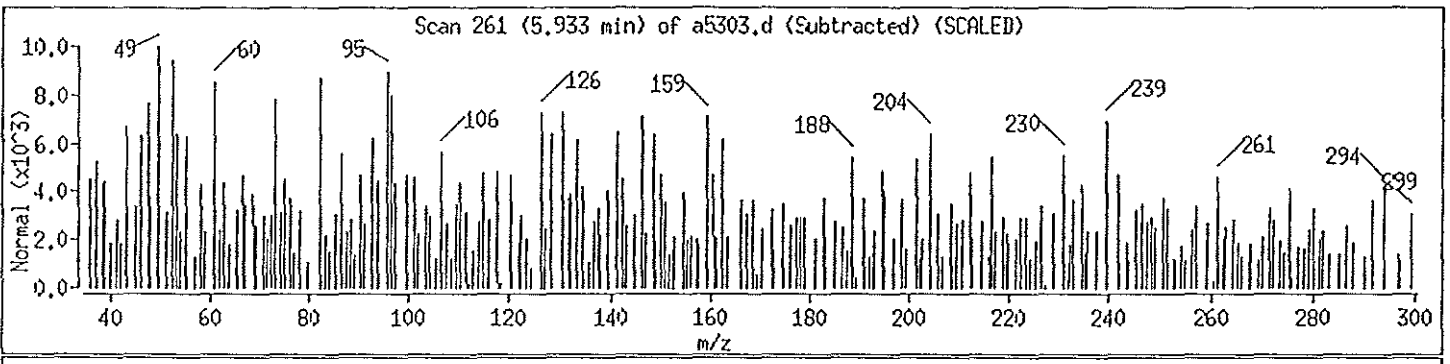
Client ID: 17418n clj78tw002 Instrument: msa.i

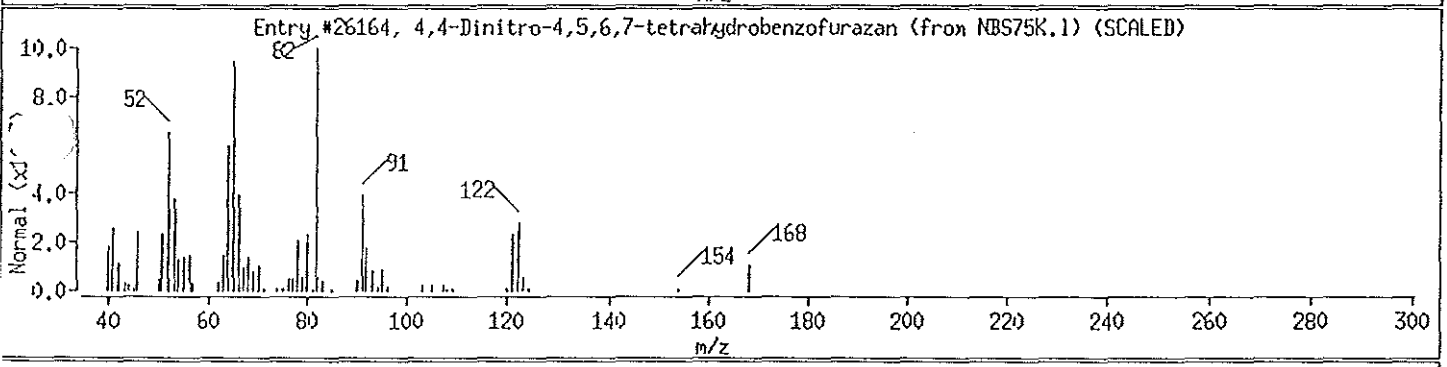
Sample Info: 17418n clj78tw002 10x

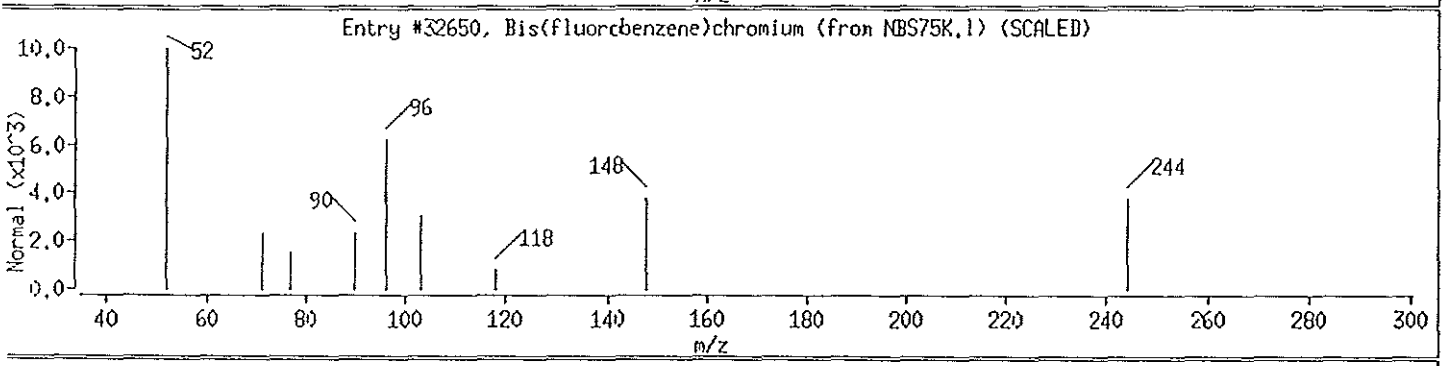
Purge Volume: 1.0 Operator: jk

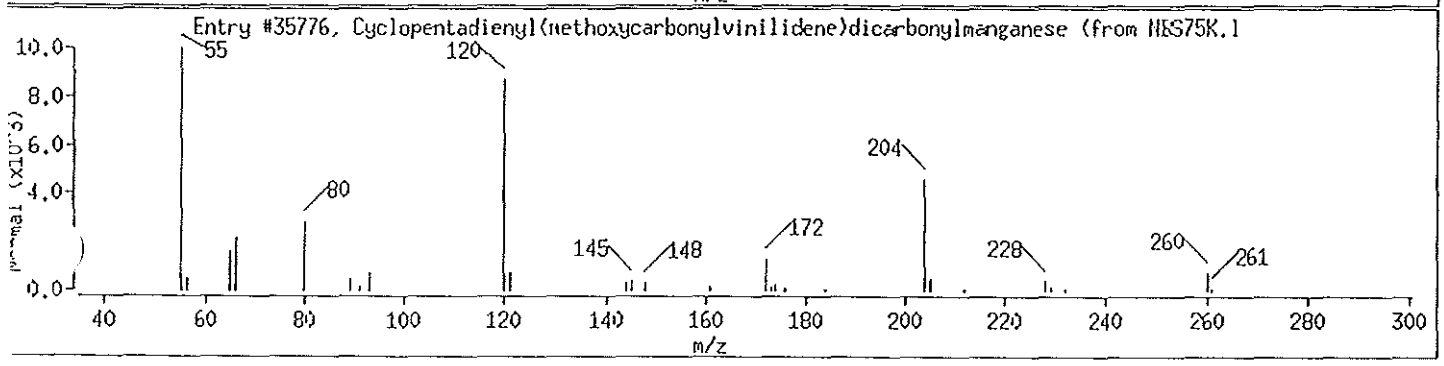
Column phase: J&W DB_624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
4,4-Dinitro-4,5,6,7-tetrahydrobenzofuraz	0-00-0	NBS75K.l	26164	25	C6H6N4O5	214
Bis(fluorobenzene)chromium	42087-90-1	NBS75K.l	32650	17	C12H10CrF2	244
Cyclopentadienyl(methoxycarbonylvinilide	73766-80-0	NBS75K.l	35776	17	C11H9MnO4	260









Data File: /chem/aux/msa.i/a111895.b/a5303.d

Date : 18-NOV-95 22:23

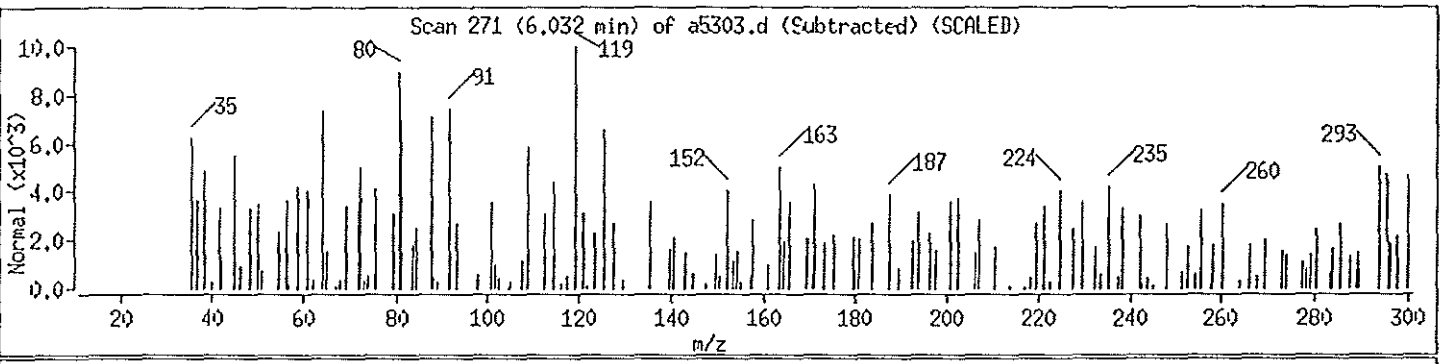
Client ID: 17418n clj78tw002 Instrument: msa.i

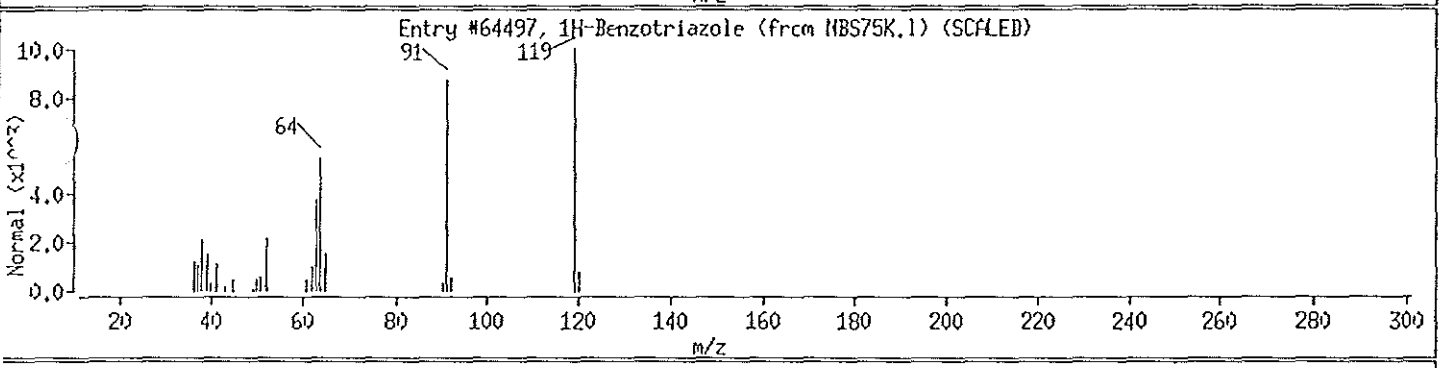
Sample Info: 17418n clj78tw002 10x

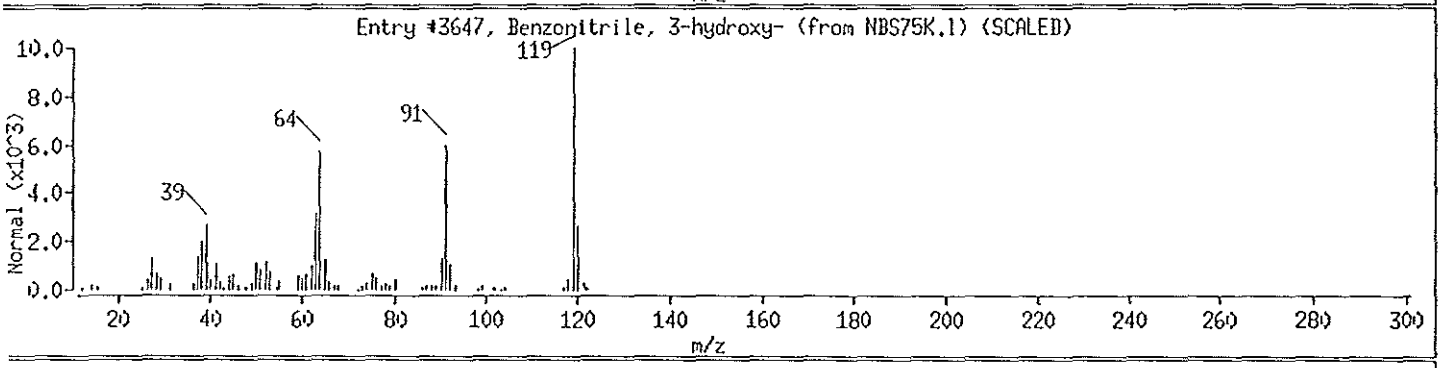
Purge Volume: 1.0 Operator: jk

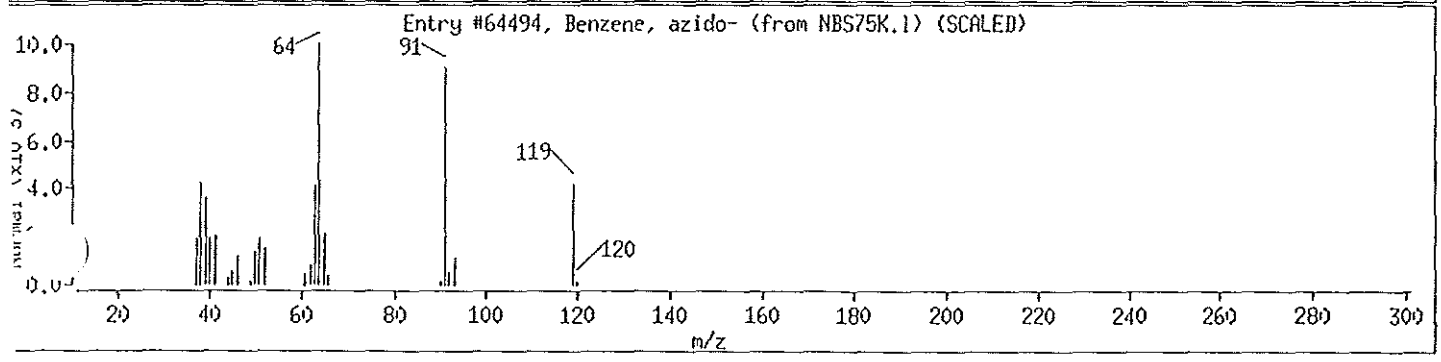
Column phase: J&W DB_624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1H-Benzotriazole	95-14-7	NBS75K.l	64497	37	C6H5N3	119
Benzonitrile, 3-hydroxy-	873-62-1	NBS75K.l	3647	35	C7H5NO	119
Benzene, azido-	622-37-7	NBS75K.l	64494	32	C6H5N3	119



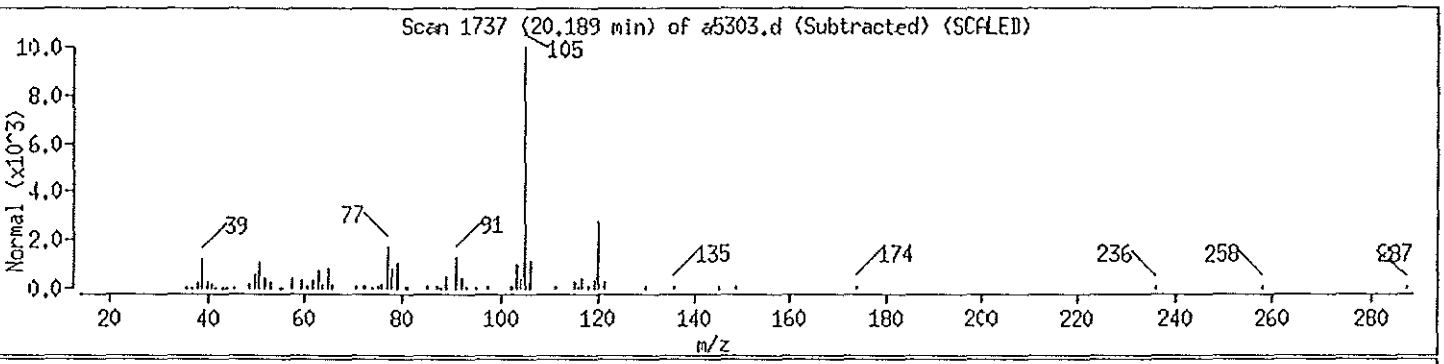


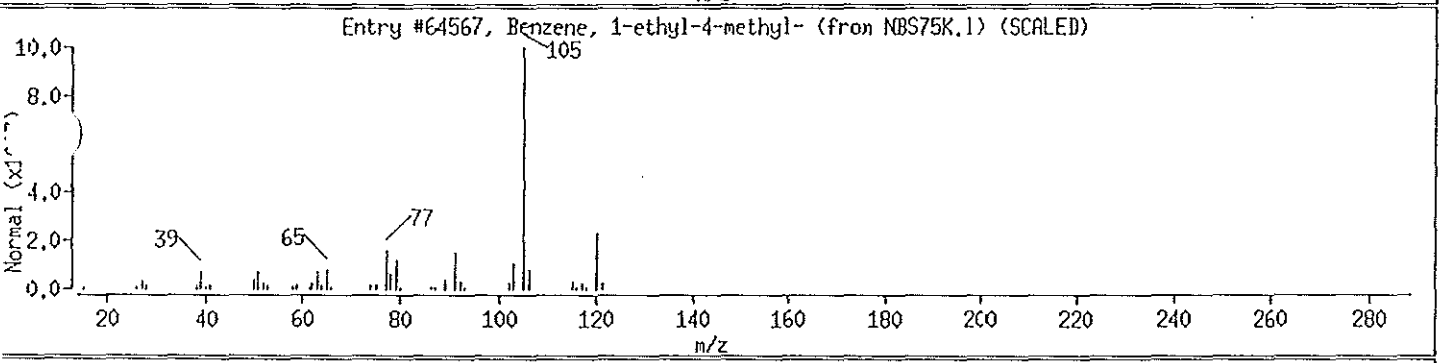


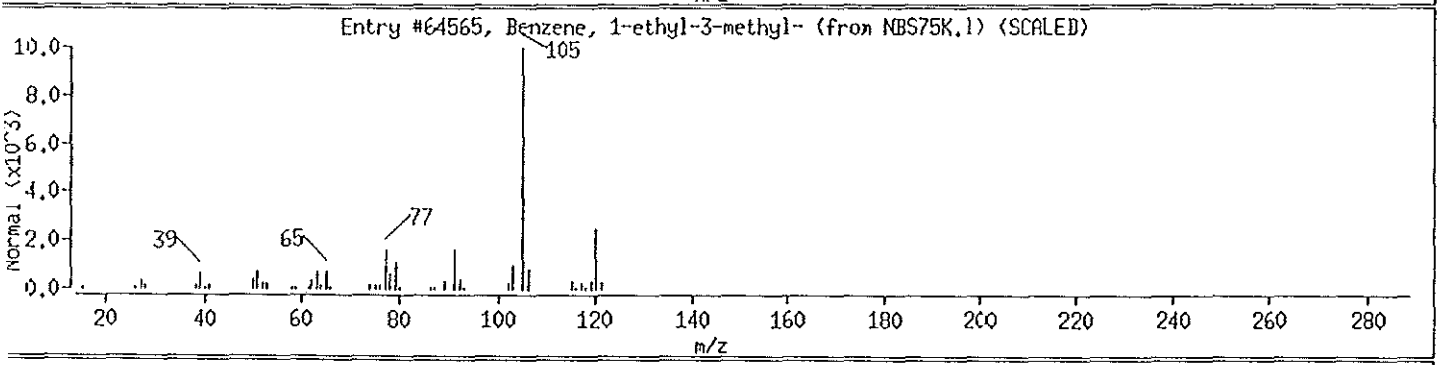


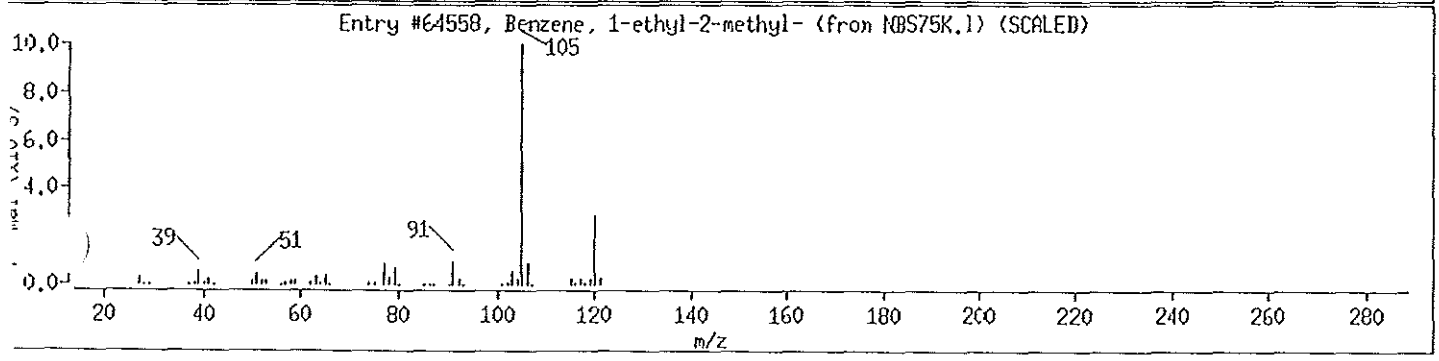
Data File: /chem/aux/msa.i/a111895.b/a5303.d
Date : 18-NOV-95 22:23
Client ID: 17418n clj78tw002 Instrument: msa.i
Sample Info: 17418n clj78tw002 10x
Purge Volume: 1.0 Operator: jk
Column phase: J&W DB_624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-ethyl-4-methyl-	622-96-8	NBS75K.l	64567	95	C9H12	120
Benzene, 1-ethyl-3-methyl-	620-14-4	NBS75K.l	64565	95	C9H12	120
Benzene, 1-ethyl-2-methyl-	611-14-3	NBS75K.l	64558	94	C9H12	120









Data File: /chem/aux/msa.i/a111895.b/a5303.d

Date : 18-NOV-95 22:23

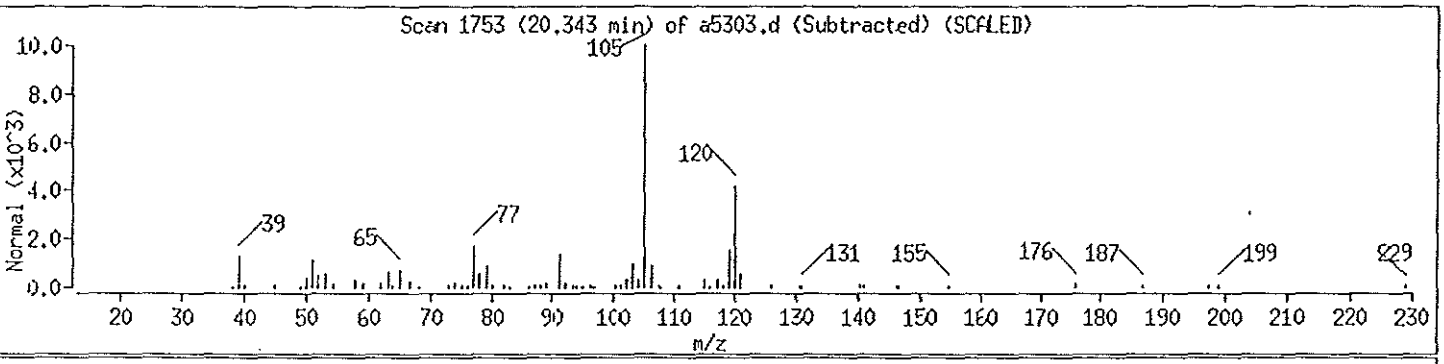
Client ID: 17418n clj78tw002 Instrument: msa.i

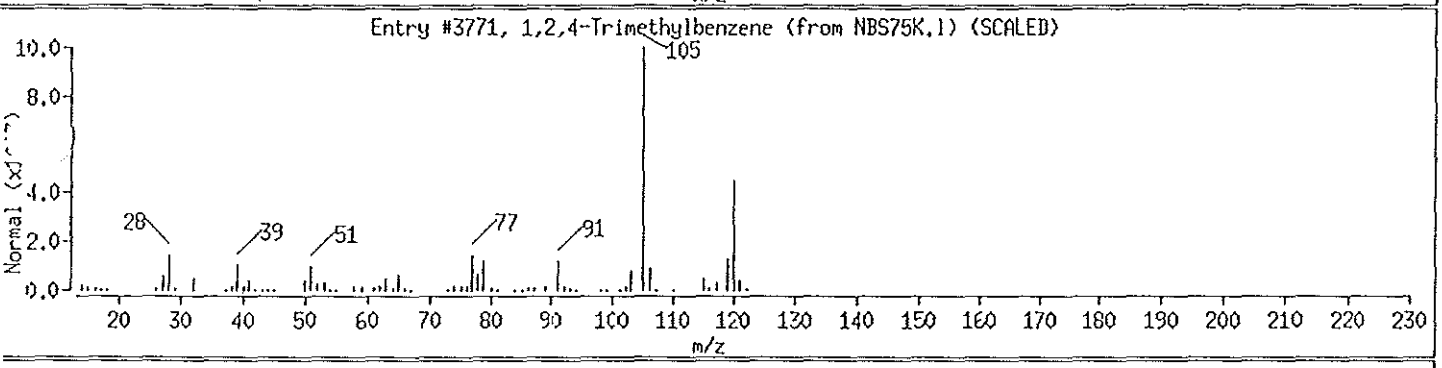
Sample Info: 17418n clj78tw002 10x

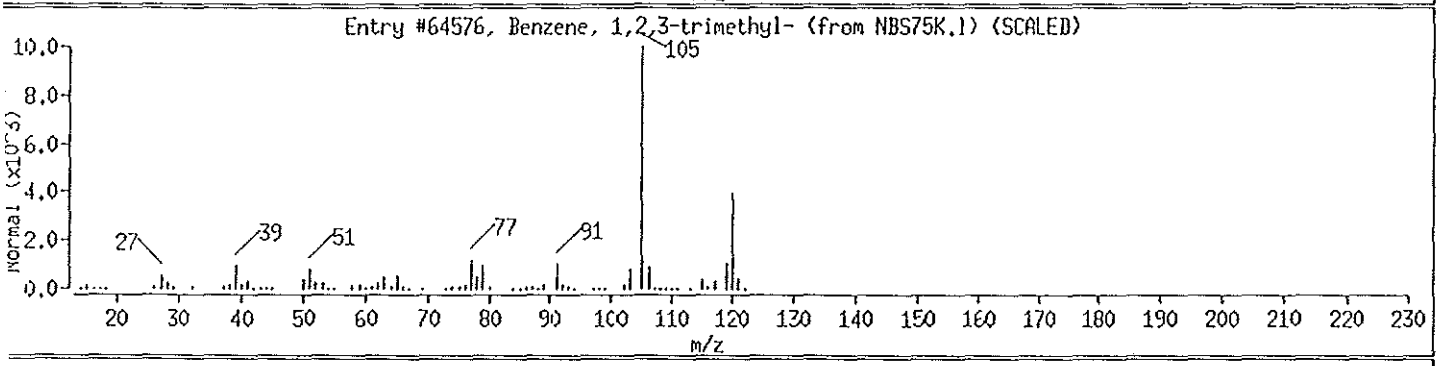
Purge Volume: 1.0 Operator: jk

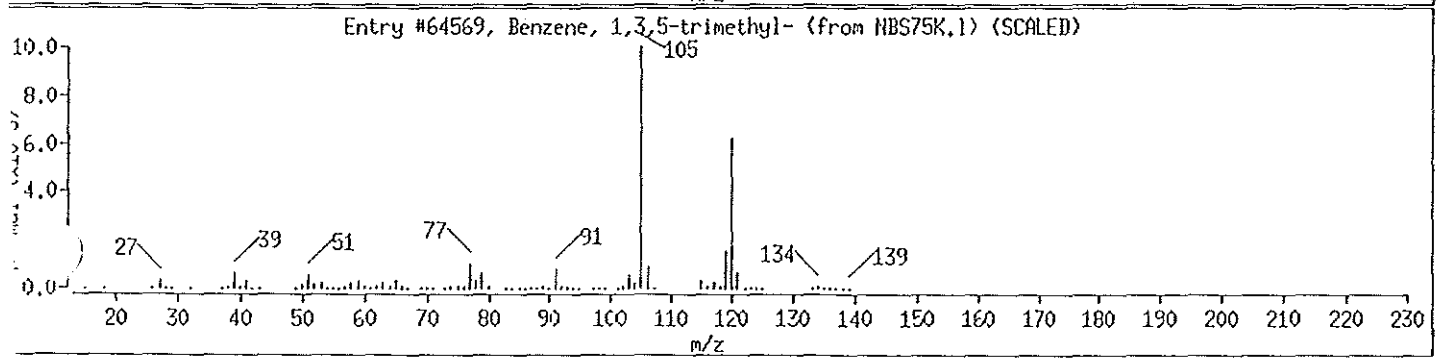
Column phase: J&W DB_624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,2,4-Trimethylbenzene	95-36-3	NBS75K.l	3771	94	C9H12	120
Benzene, 1,2,3-trimethyl-	526-73-8	NBS75K.l	64576	94	C9H12	120
Benzene, 1,3,5-trimethyl-	108-67-8	NBS75K.l	64569	94	C9H12	120









Data File: /chem/aux/msa.i/a111895.b/a5303.d

Date : 18-NOV-95 22:23

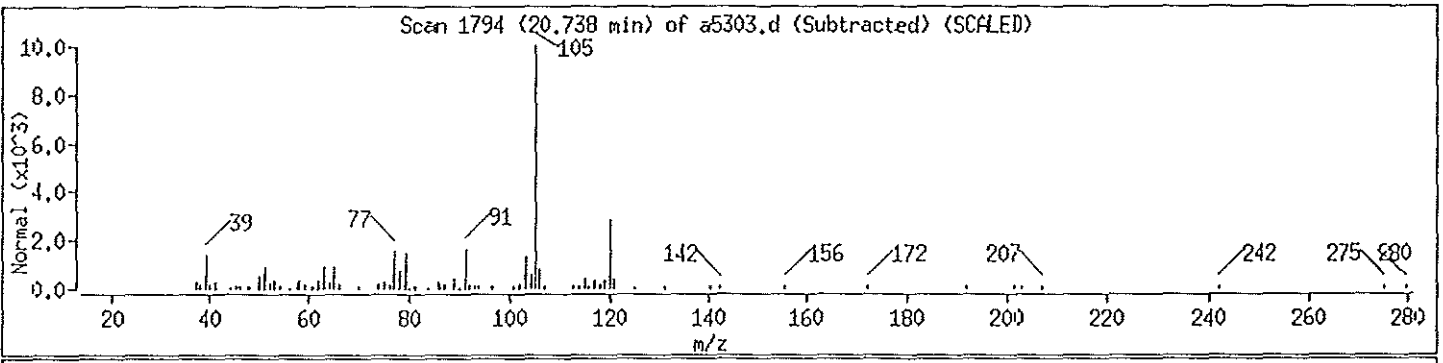
Client ID: 17418n clj78tw002 Instrument: msa.i

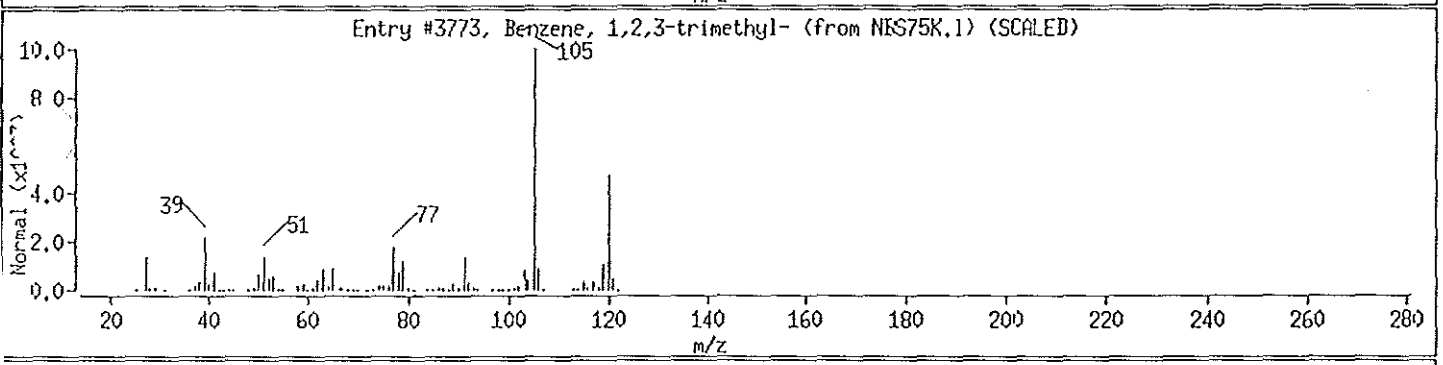
Sample Info: 17418n clj78tw002 10x

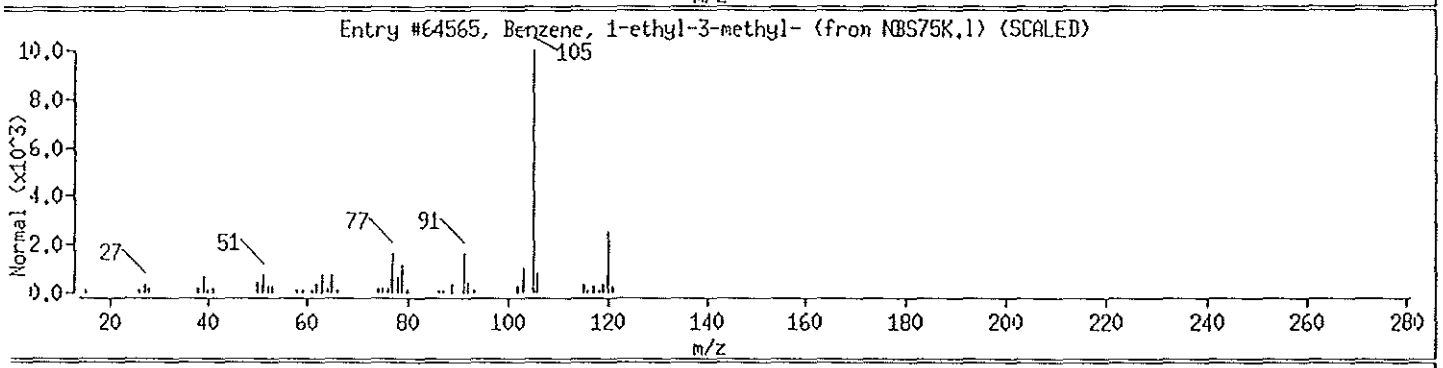
Purge Volume: 1.0 Operator: jk

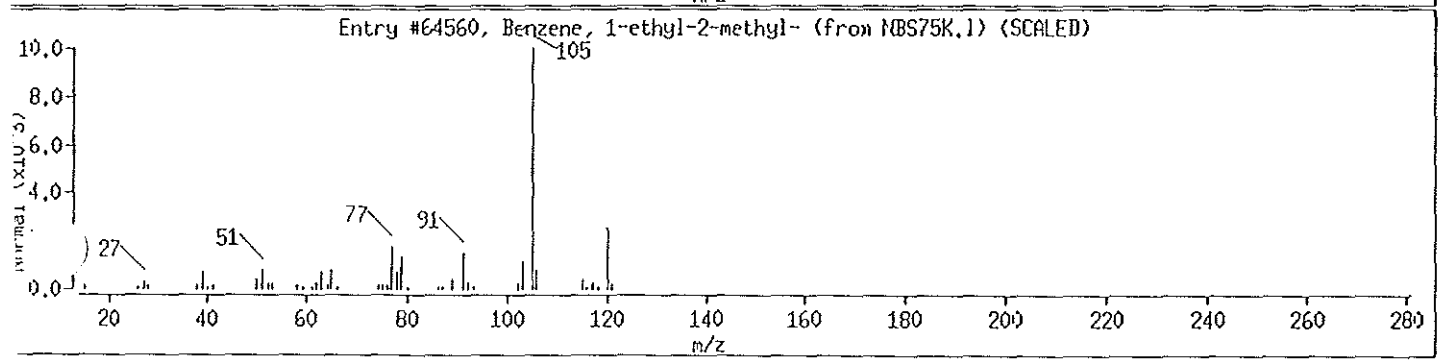
Column phase: J&W DB_624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1,2,3-trimethyl-	526-73-8	NBS75K.l	3773	94	C9H12	120
Benzene, 1-ethyl-3-methyl-	620-14-4	NBS75K.l	64565	91	C9H12	120
Benzene, 1-ethyl-2-methyl-	611-14-3	NBS75K.l	64560	91	C9H12	120









Data File: /chem/aux/msa.i/a111895.b/a5303.d

Date : 18-NOV-95 22:23

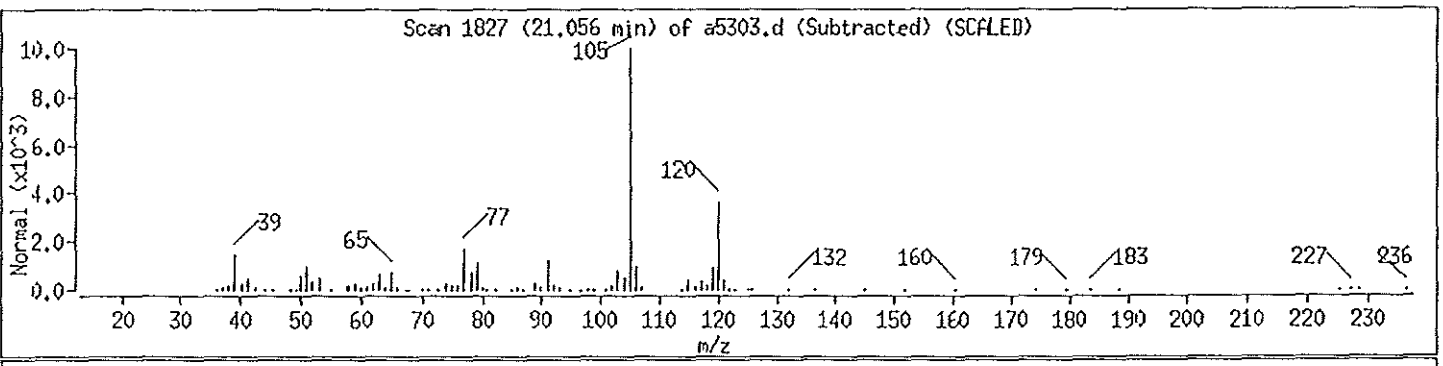
)ient ID: 17418n clj78tw002 Instrument: msa.i

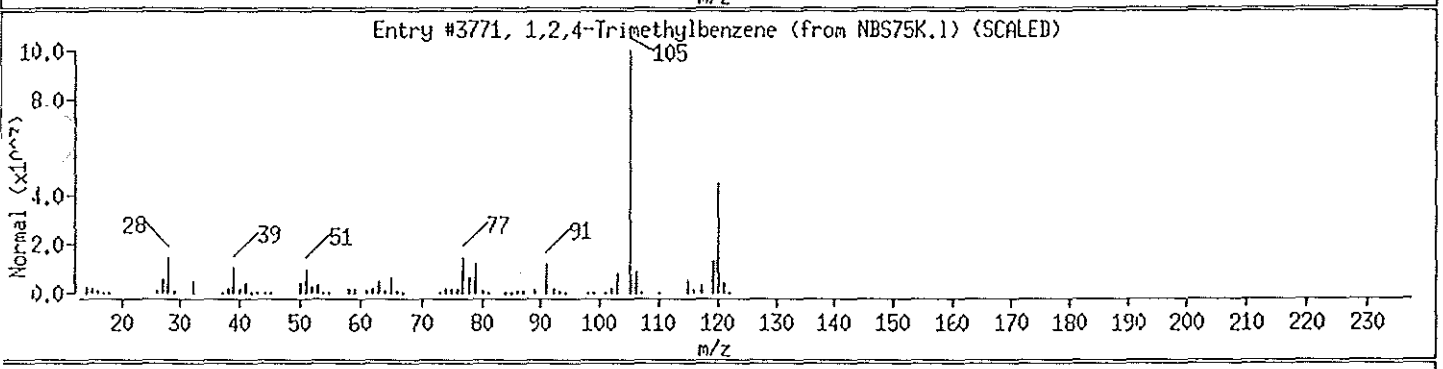
Sample Info: 17418n clj78tw002 10x

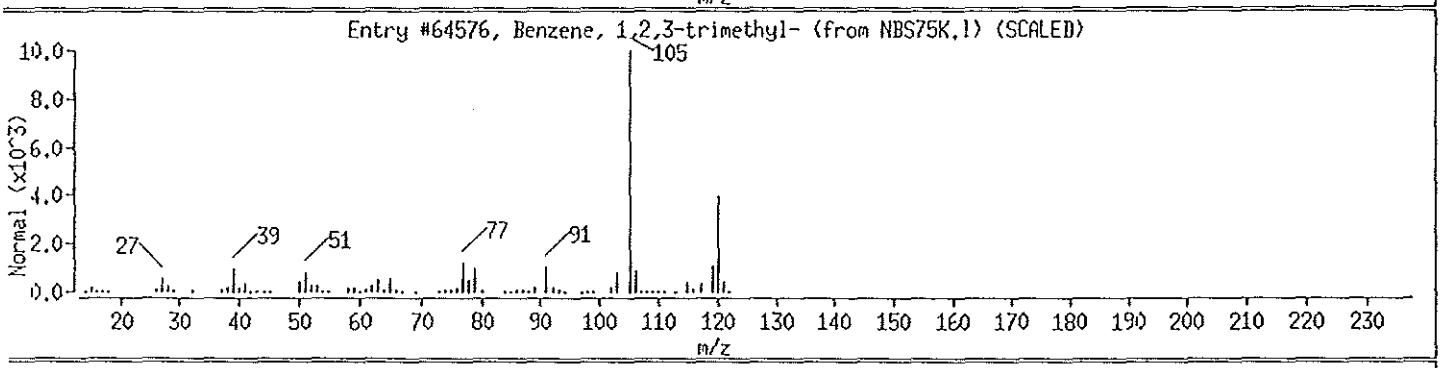
Purge Volume: 1.0 Operator: jk

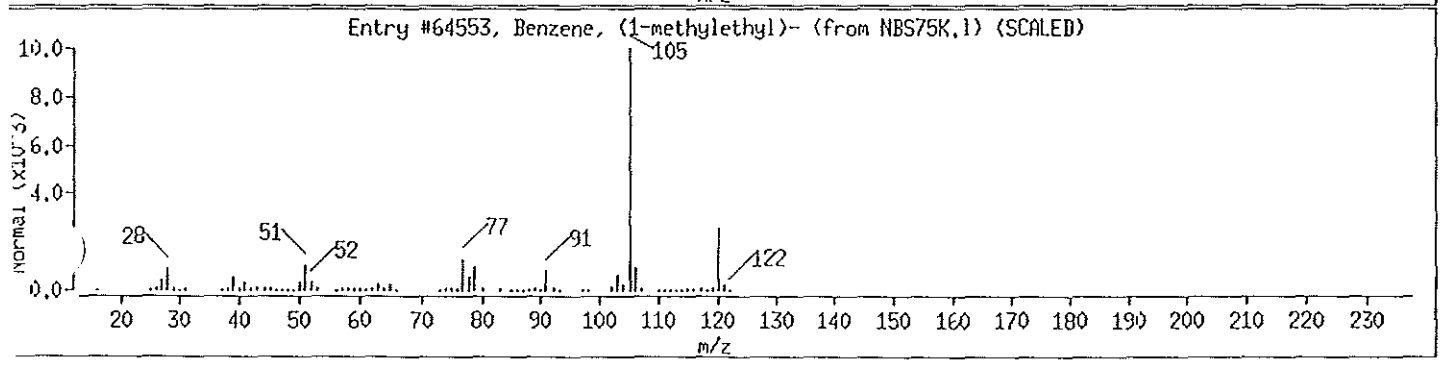
Column phase: J&W DB_624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,2,4-Trimethylbenzene	95-36-3	NBS75K.l	3771	95	C9H12	120
Benzene, 1,2,3-trimethyl-	526-73-8	NBS75K.l	64576	95	C9H12	120
Benzene, (1-methylethyl)-	98-82-8	NBS75K.l	64553	95	C9H12	120









Data File: /chem/aux/msa.i/a111895.b/a5303.d

Date : 18-NOV-95 22:23

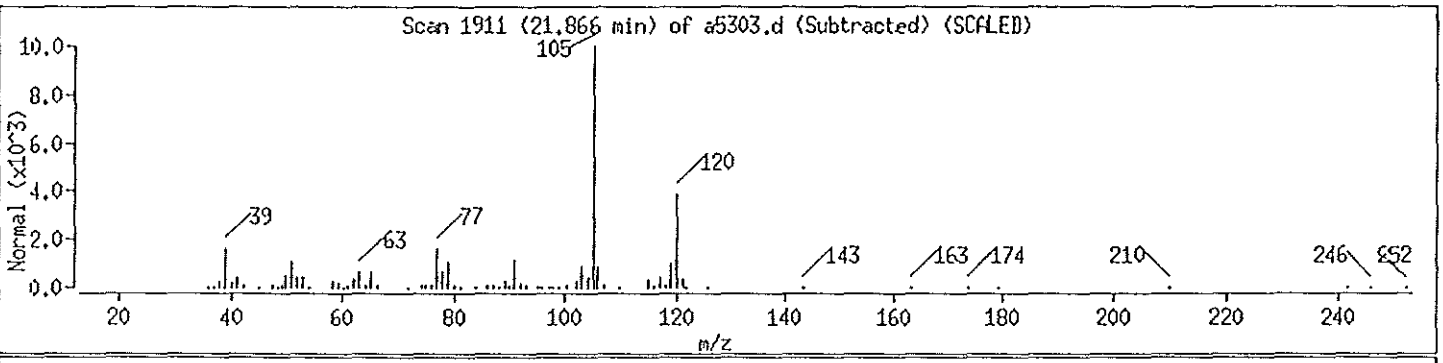
Client ID: 17418n clj78tw002 Instrument: msa.i

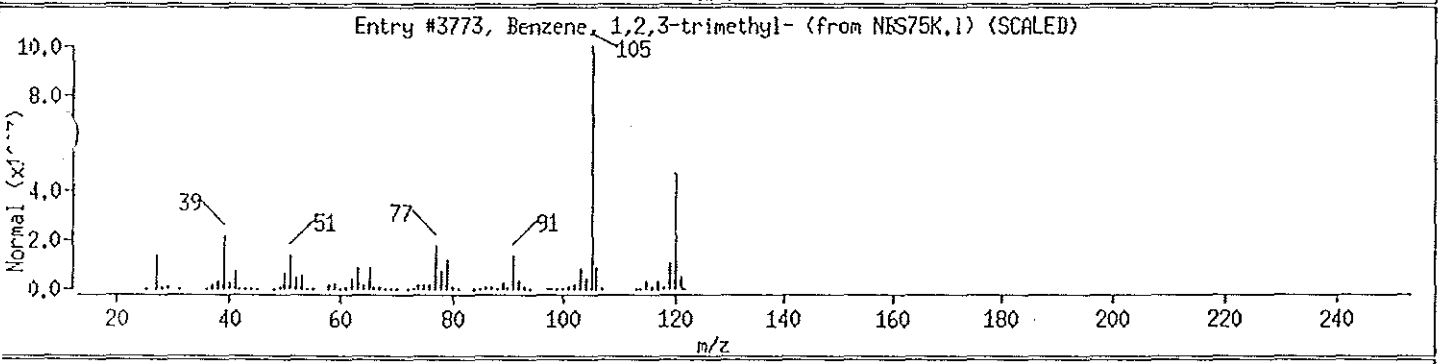
Sample Info: 17418n clj78tw002 10x

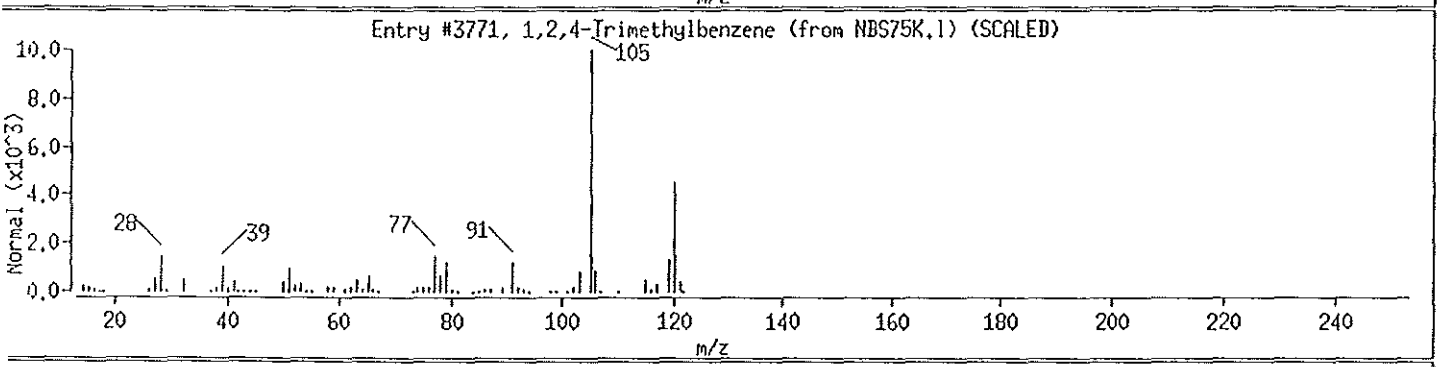
Purge Volume: 1.0 Operator: jk

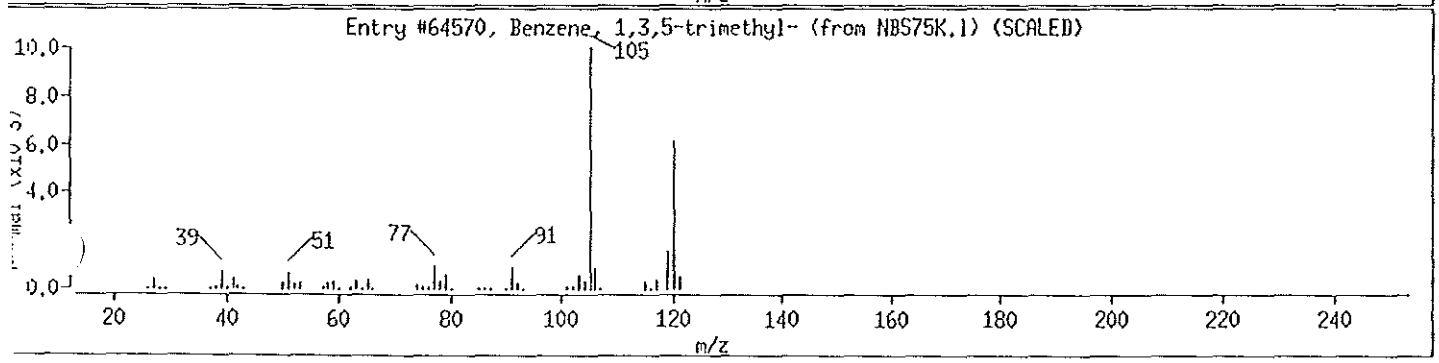
Column phase: J&W DB_624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1,2,3-trimethyl-	526-73-8	NBS75K.l	3773	97	C9H12	120
1,2,4-Trimethylbenzene	95-36-3	NBS75K.l	3771	96	C9H12	120
Benzene, 1,3,5-trimethyl-	108-67-8	NBS75K.l	64570	94	C9H12	120









Data File: /chem/aux/msa.i/a111895.b/a5303.d

Date : 18-NOV-95 22:23

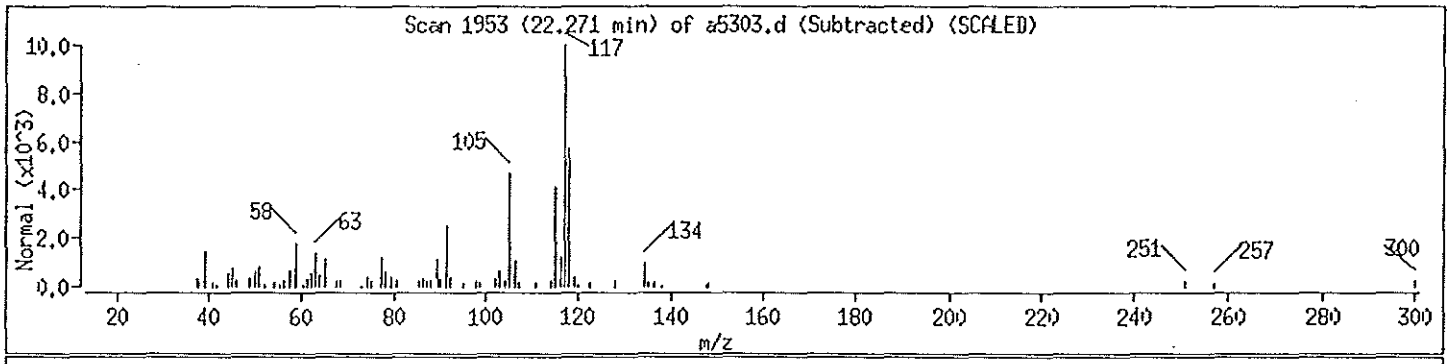
Client ID: 17418n clj78tw002 Instrument: msa.i

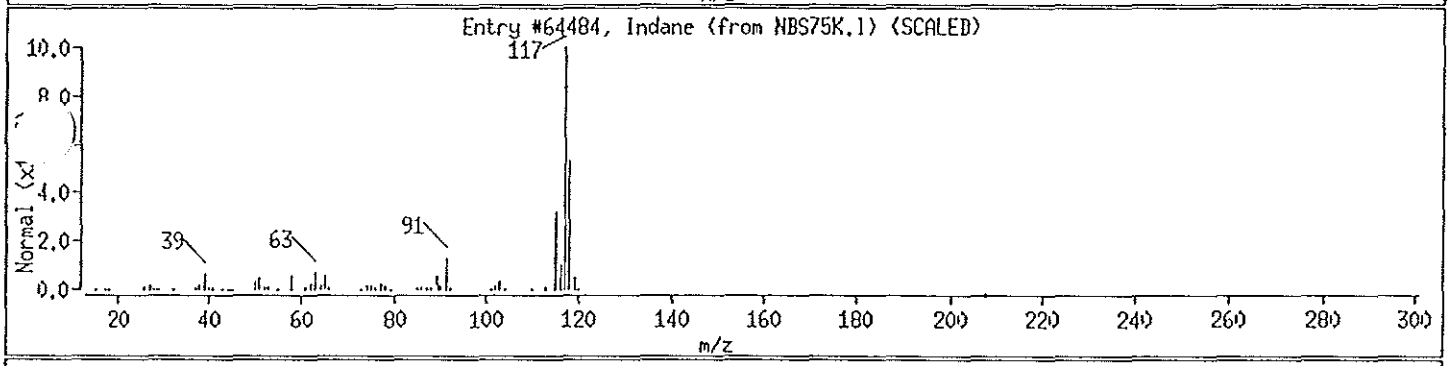
Sample Info: 17418n clj78tw002 10x

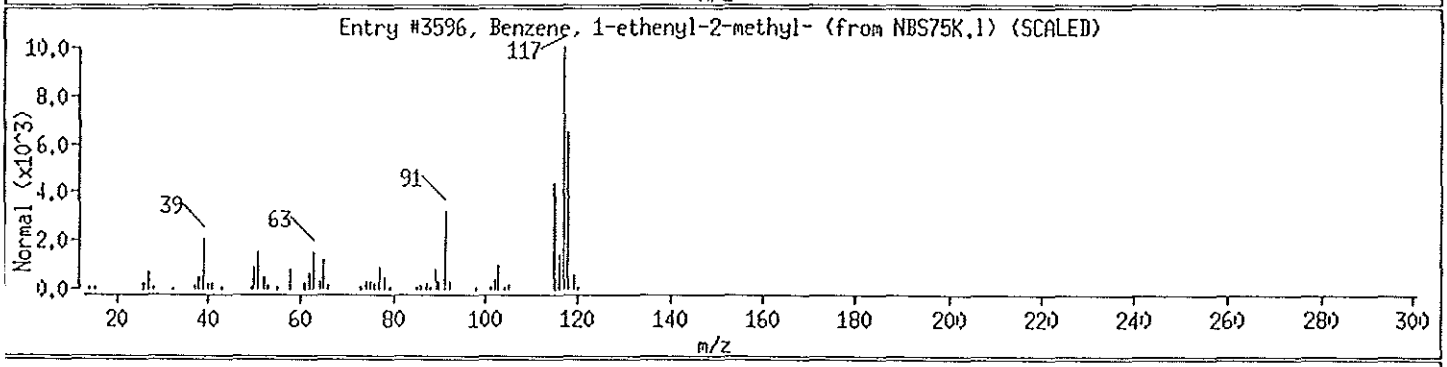
Purge Volume: 1.0 Operator: jk

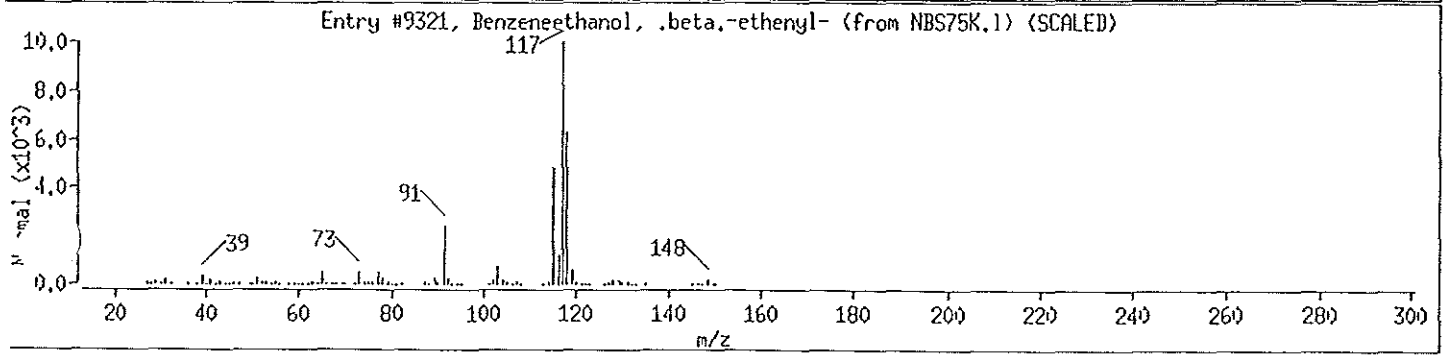
Column phase: J&W DB_624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Indane	496-11-7	NBS75K.l	64484	92	C9H10	118
Benzene, 1-ethenyl-2-methyl-	611-15-4	NBS75K.l	3596	83	C9H10	118
Benzeneethanol, .beta.-ethenyl-	6052-63-7	NBS75K.l	9321	81	C10H120	148









1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0157

CLJ78TW003

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: n/a SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0326V

Sample wt/vol: .05 (g/mL) ML Lab File ID: A5305

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: not dec. n/a Date Analyzed: 11/18/95

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

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

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	500	U
74-83-9	Bromomethane	500	U
75-01-4	Vinyl Chloride	500	U
75-00-3	Chloroethane	500	U
75-09-2	Methylene Chloride	400	BJ
67-64-1	Acetone	1000	U
75-15-0	Carbon Disulfide	500	U
75-35-4	1,1-Dichloroethene	500	U
75-34-3	1,1-Dichloroethane	500	U
540-59-0	1,2-Dichloroethene (total)	10000	
67-66-3	Chloroform	500	U
107-06-2	1,2-Dichloroethane	500	U
78-93-3	2-Butanone	500	U
71-55-6	1,1,1-Trichloroethane	500	U
56-23-5	Carbon Tetrachloride	500	U
75-27-4	Bromodichloromethane	500	U
78-87-5	1,2-Dichloropropane	500	U
10061-01-5	cis-1,3-Dichloropropene	500	U
79-01-6	Trichloroethene	2800	
124-48-1	Dibromochloromethane	500	U
79-00-5	1,1,2-Trichloroethane	500	U
71-43-2	Benzene	500	U
10061-02-6	trans-1,3-Dichloropropene	500	U
75-25-2	Bromoform	500	U
108-10-1	Methyl-iso-butyl ketone	1000	U
591-78-6	2-Hexanone	500	U
127-18-4	Tetrachloroethylene	4200	B
79-34-5	1,1,2,2-Tetrachloroethane	500	U
108-88-3	Toluene	500	U
108-90-7	Chlorobenzene	500	U
100-41-4	Ethylbenzene	500	U
100-42-5	Styrene	500	U
1330-20-7	Xylene (total)	500	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CLJ78TW003

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC 0158

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0326V

Sample wt/vol: .05 (g/mL) ML Lab File ID: A5305

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: not dec. N/A Date Analyzed: 11/18/95

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 2

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

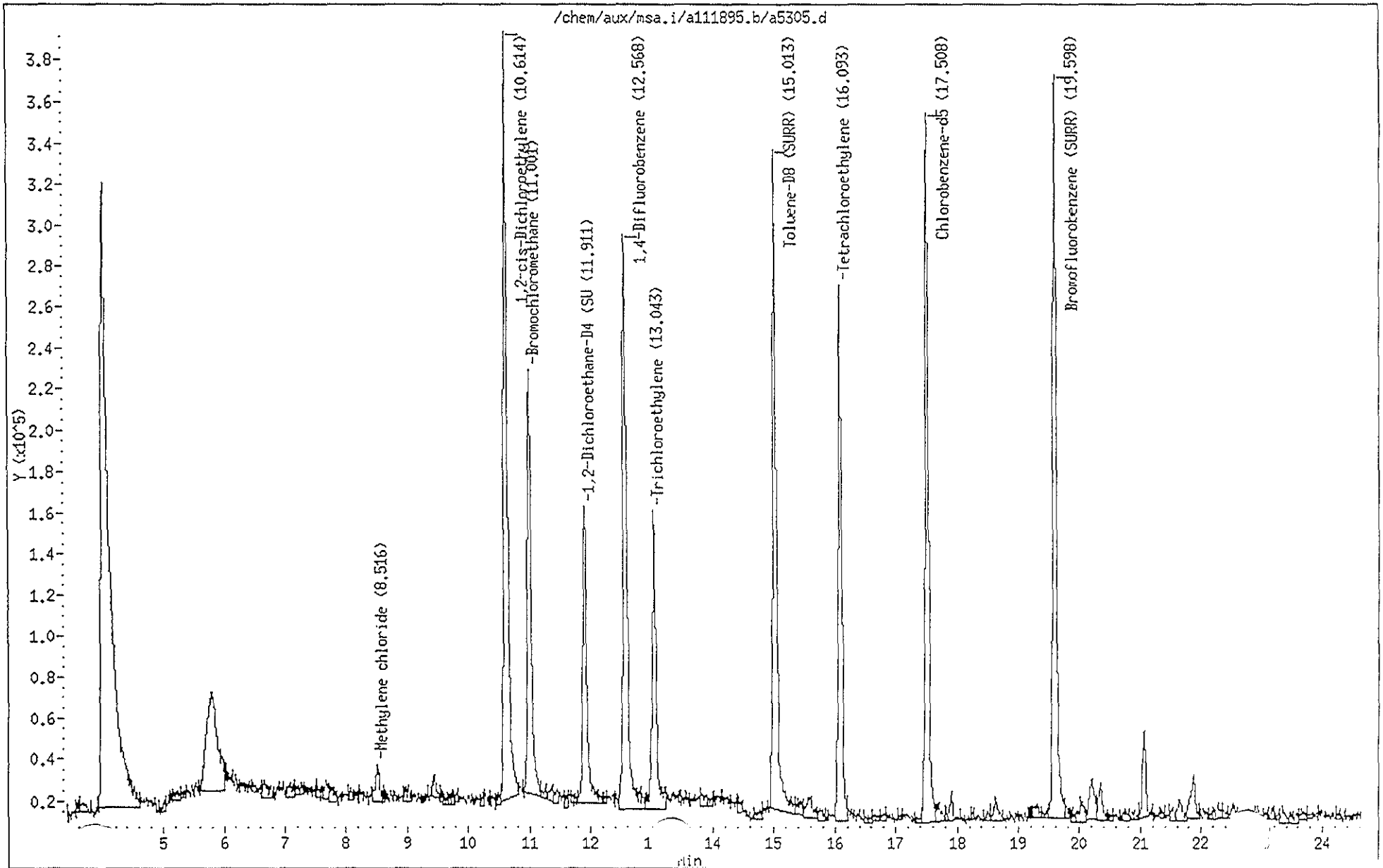
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	5.81	3400	J
2. 526-73-8	Benzene, 1,2,3-trimethyl-	21.06	590	JN

0159

Data File: /chem/aux/msa.i/a111895.b/a5305.d
Date : 18-NOV-95 23:30
Client ID: 17418n clj78tw003
Sample Info: 17418n clj78tw003 100x
Purge Volume: 1.0
Column phase: J&W DB_624

Instrument: msa.i

Operator: jk
Column diameter: 0.53



OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240 + Screen

Data file : /chem/aux/msa.i/a111895.b/a5305.d
Lab Smp Id: Client Smp ID: 17418n clj78tw003
Inj Date : 18-NOV-95 23:30
Operator : jk Inst ID: msa.i
Smp Info : 17418n clj78tw003 100x
Misc Info : jp0326v,n1v4782,m2,5000,1,0.050,5.0,951118,
Comment :
Method : /chem/aux/msa.i/a111895.b/111895_8240ambia.m
Meth Date : 22-Nov-1995 17:57 glenn Quant Type: ISTD
Cal Date : 18-NOV-95 17:03 Cal File: a5294.d
Als bottle: 5
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

MK 11/24/95

590

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	Methylene chloride	84.00	8.526	8.520	(0.775)	13935	4.00	4.00
	17 1,2-cis-Dichloroethylene	96.00	10.614	10.620	(0.965)	301809	100	100
*	20 Bromochloromethane	128.00	11.001	11.007	(1.000)	98348	50.0	
$	24 1,2-Dichloroethane-D4 (SURR)	65.00	11.911	11.916	(1.083)	222906	52.2	52.2
*	27 1,4-Difluorobenzene	114.00	12.568	12.573	(1.000)	384236	50.0	
	28 Trichloroethylene	130.00	13.043	13.047	(1.038)	85294	27.5	27.5
$	34 Toluene-D8 (SURR)	98.00	15.013	15.017	(0.857)	407408	55.2	55.2
	38 Tetrachloroethylene	164.00	16.093	16.089	(0.919)	111618	41.9	41.9
*	42 Chlorobenzene-d5	117.00	17.508	17.506	(1.000)	309468	50.0	
$	49 Bromofluorobenzene (SURR)	95.00	19.598	19.587	(1.119)	231350	52.7	52.7

Data File: /chem/aux/msa.i/a111895.b/a5305.d

Date : 18-NOV-95 23:30

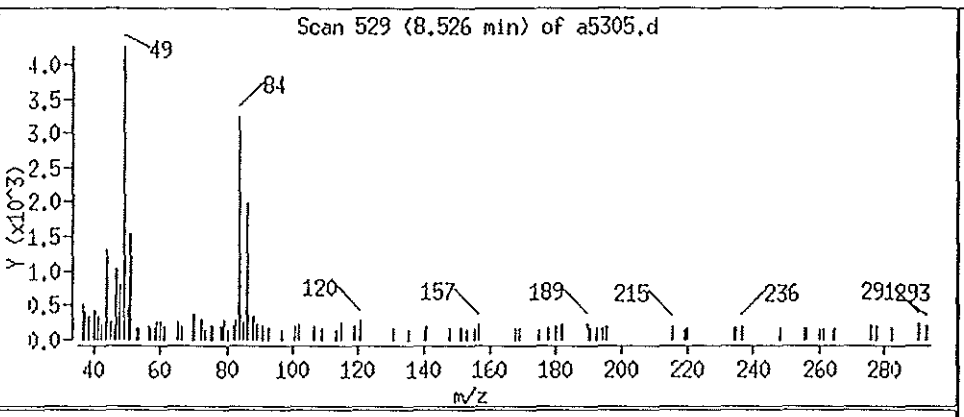
ient ID: 17418n clj78tw003 Instrument: msa.i

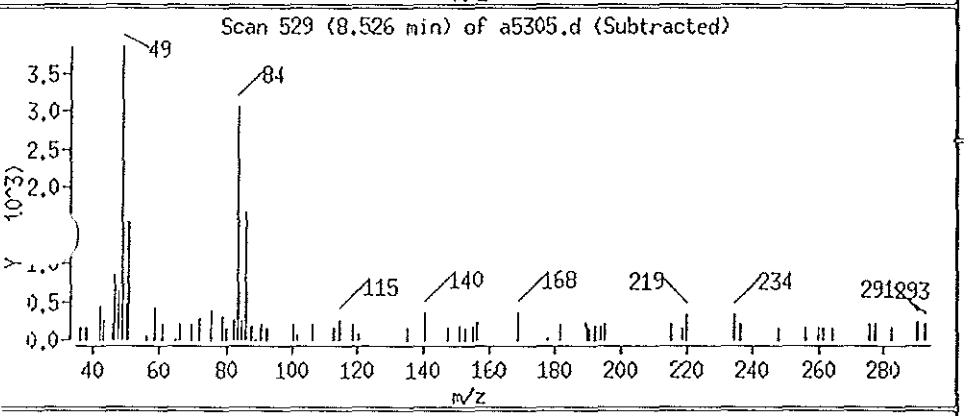
ample Info: 17418n clj78tw003 100x

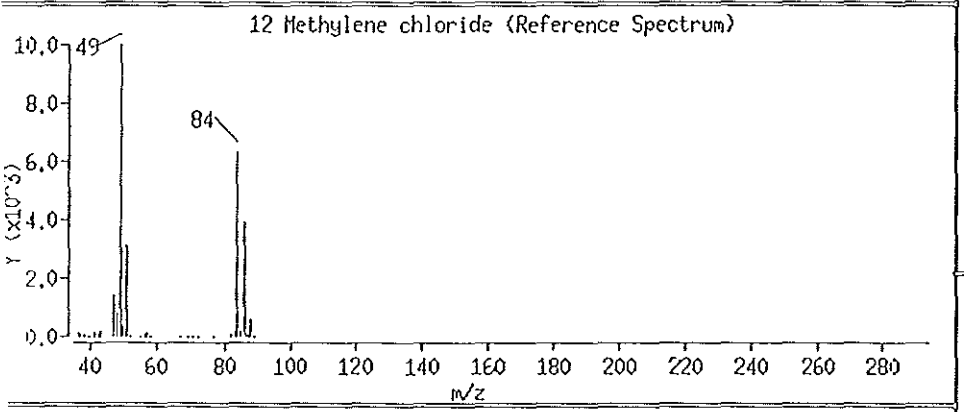
Purge Volume: 1.0 Operator: jk

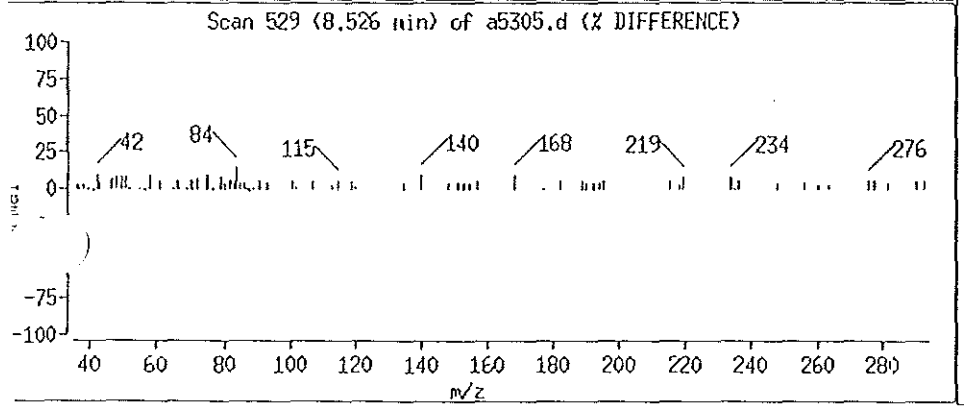
Column phase: J&W DB_624 Column diameter: 0.53

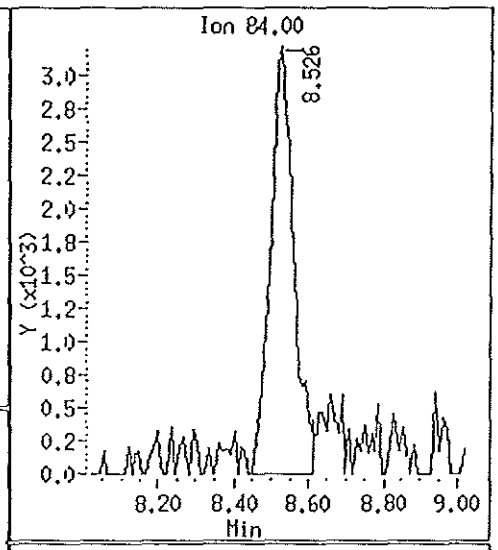
12 Methylene chloride

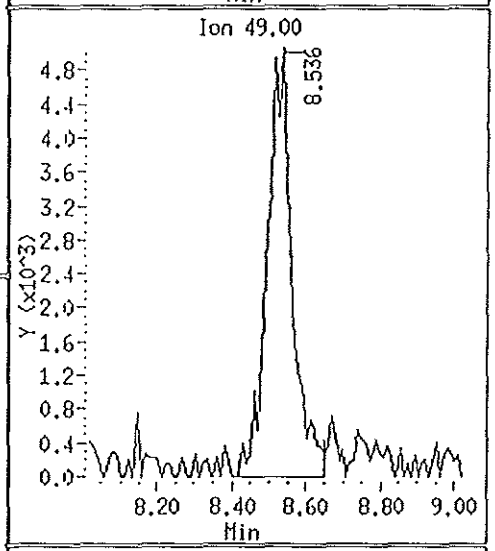


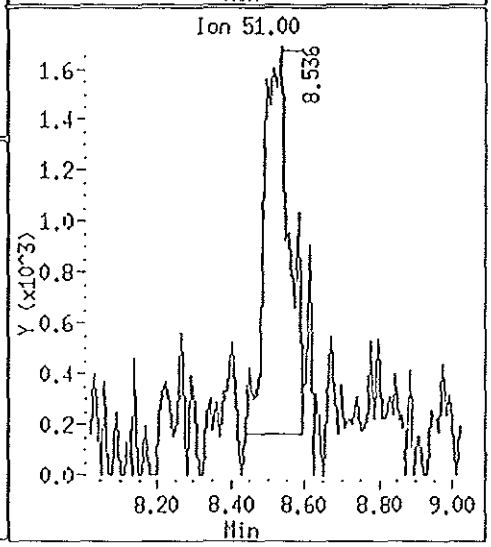












Data File: /chem/aux/msa.i/a111895.b/a5305.d

Date : 18-NOV-95 23:30

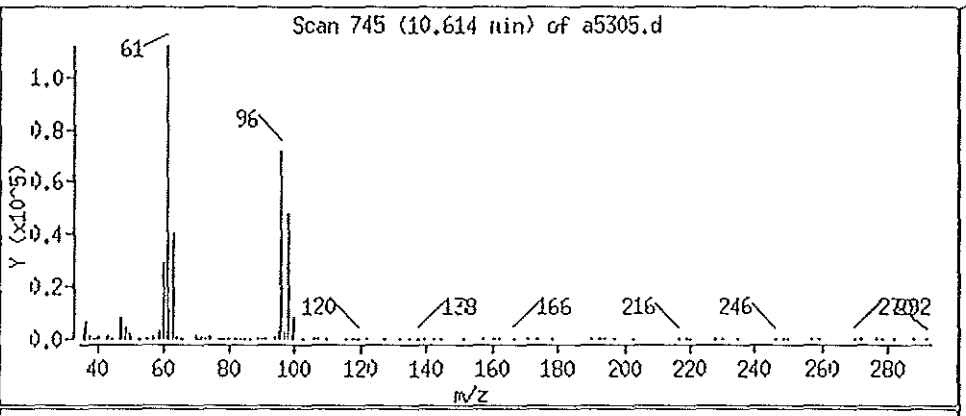
)ient ID: 17418n clj78tw003 Instrument: msa.i

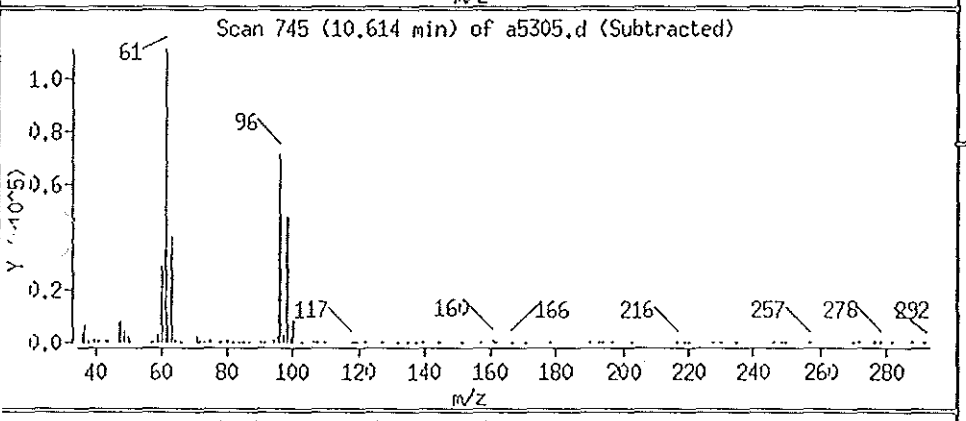
Sample Info: 17418n clj78tw003 100x

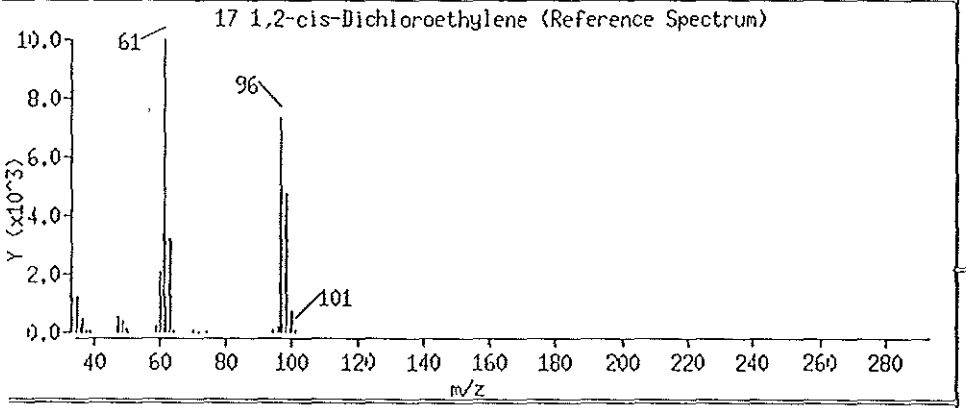
Purge Volume: 1.0 Operator: jk

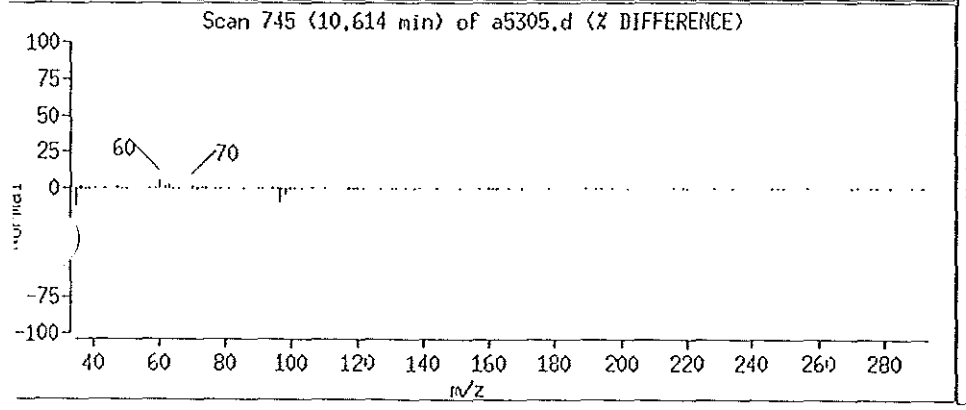
Column phase: J&W DB_624 Column diameter: 0.53

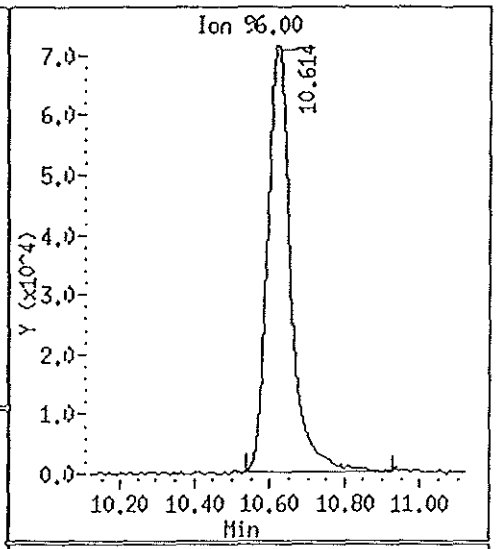
17 1,2-cis-Dichlorcethylene

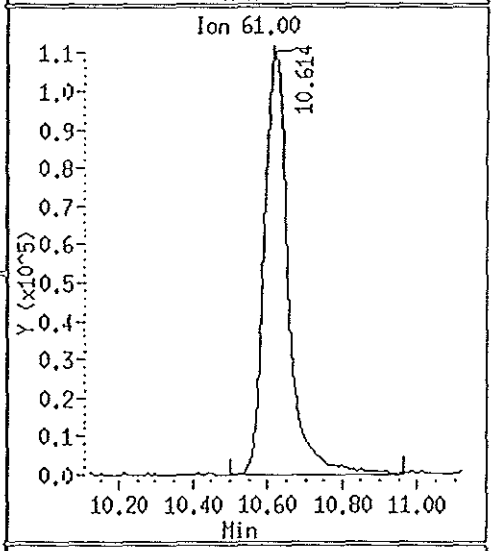


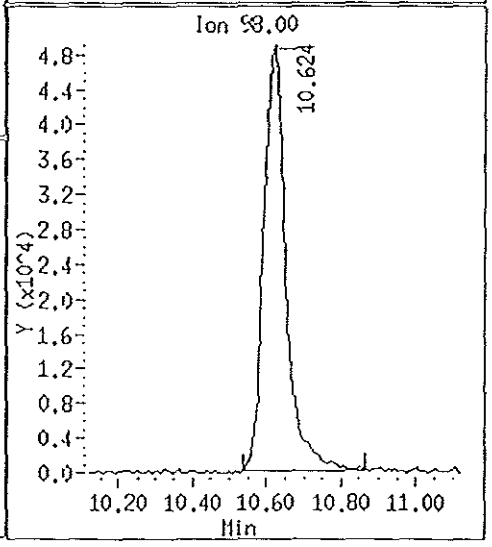












Data File: /chem/aux/msa.i/a111895.b/a5305.d

Date : 18-NOV-95 23:30

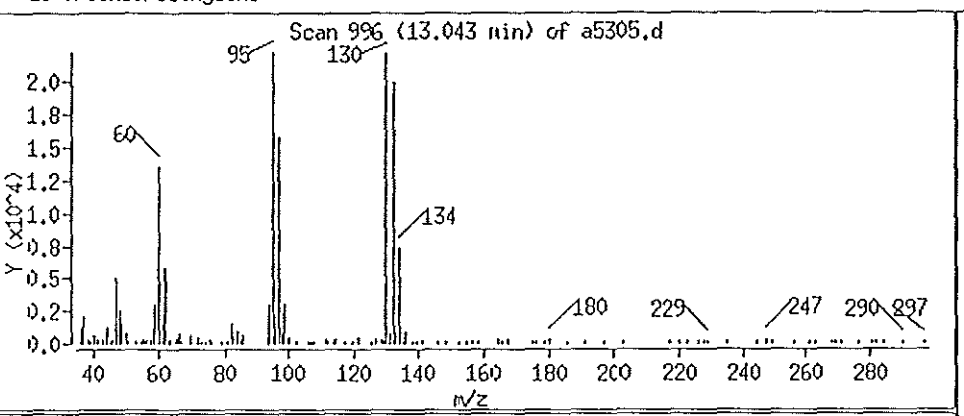
ient ID: 17418n clj78tw003 Instrument: msa.i

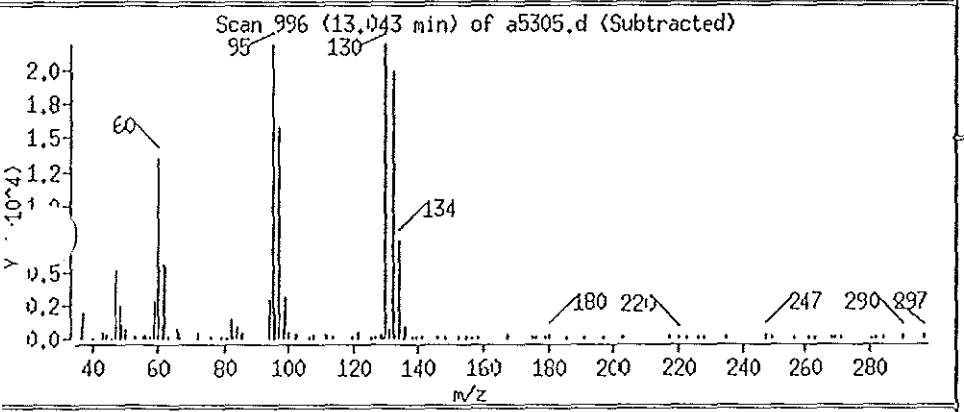
ample Info: 17418n clj78tw003 100x

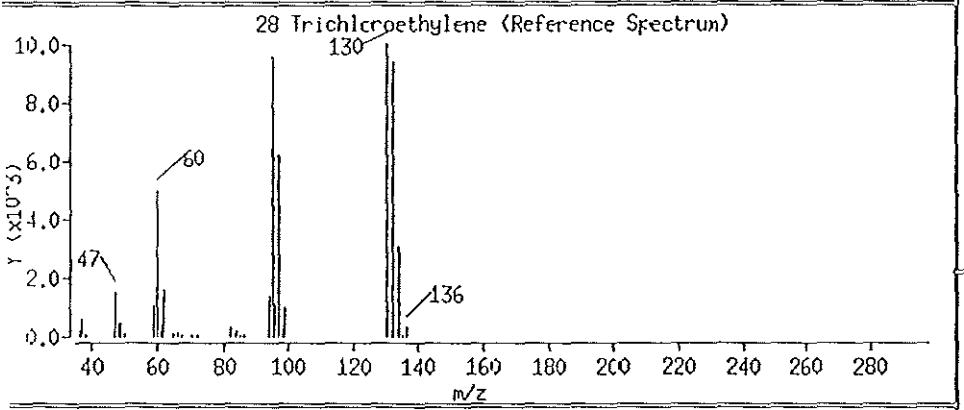
Purge Volume: 1.0 Operator: jk

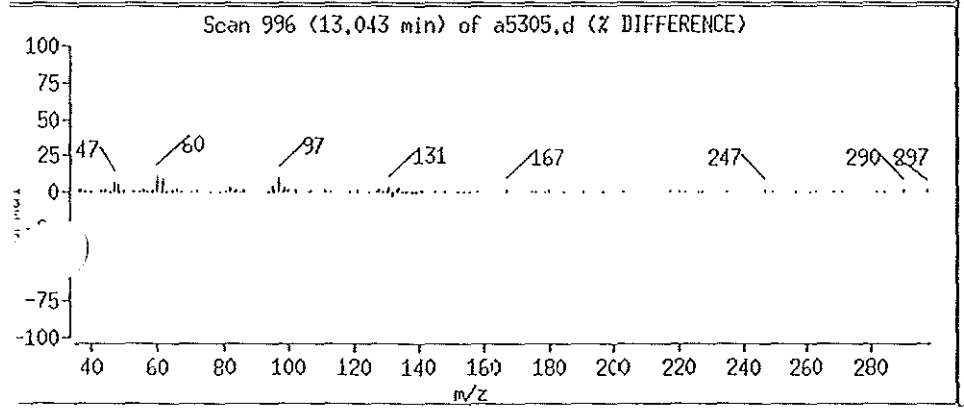
Column phase: J&W DB_624 Column diameter: 0.53

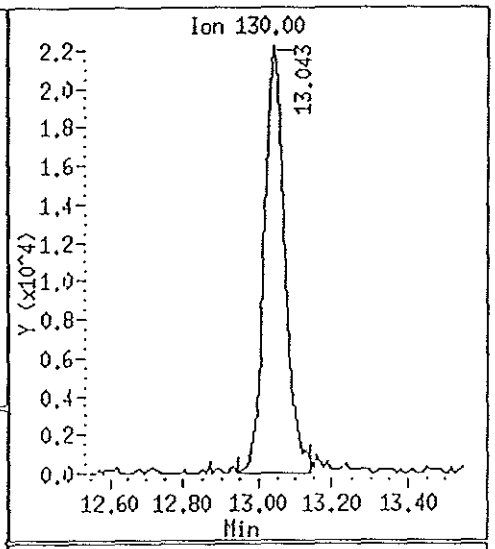
28 Trichloroethylene

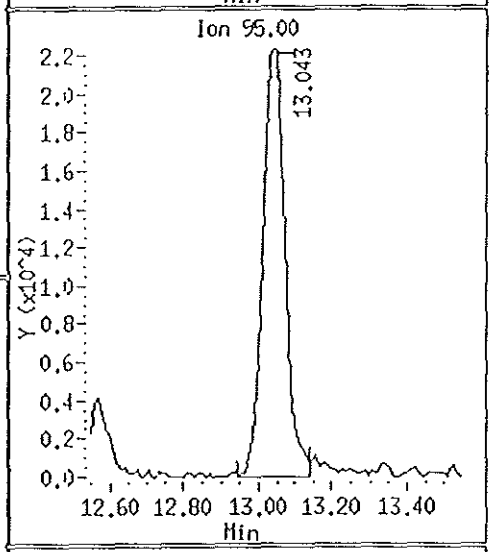


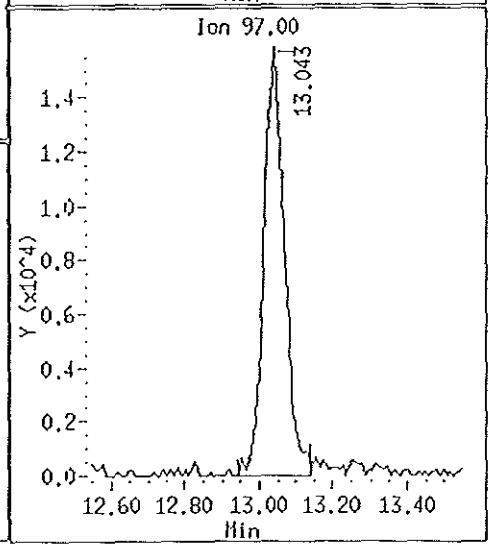












Data File: /chem/aux/msa.i/a111895.b/a5305.d

Date : 18-NOV-95 23:30

)ent ID: 17418n clj78tw003

Instrument: msa.i

Sample Info: 17418n clj78tw003 100x

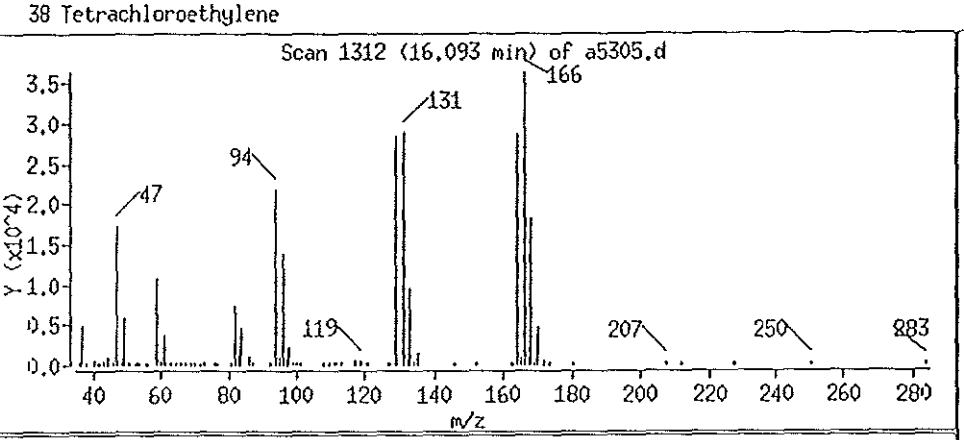
Purge Volume: 1.0

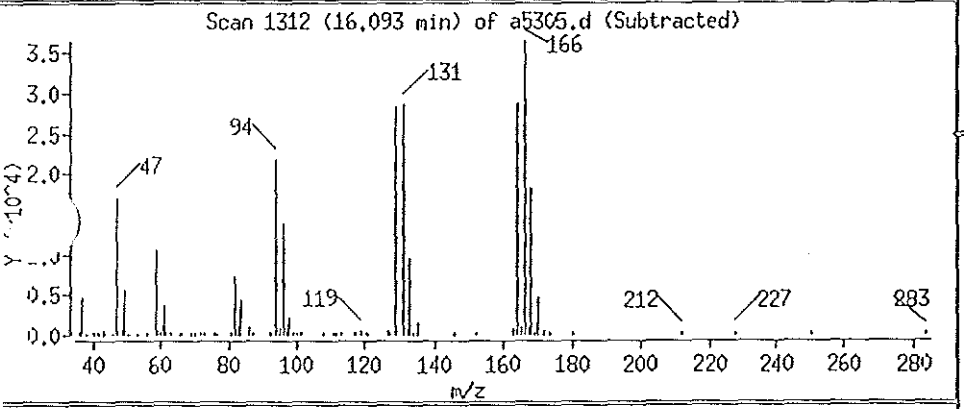
Operator: jk

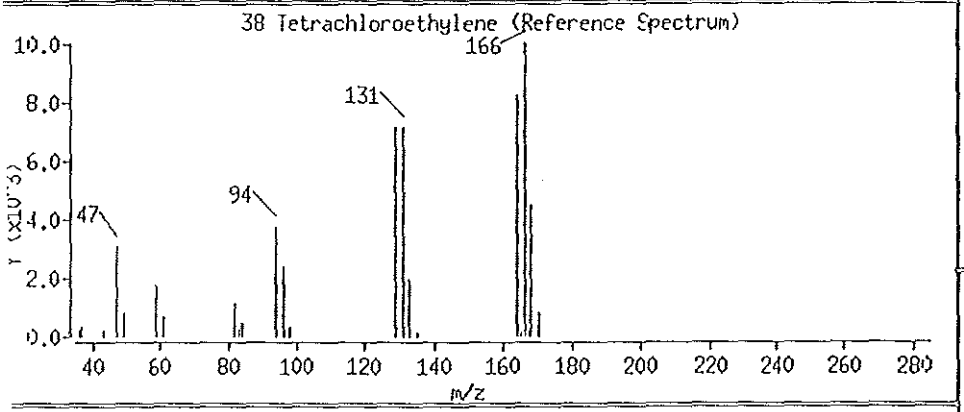
Column phase: J&W DB_624

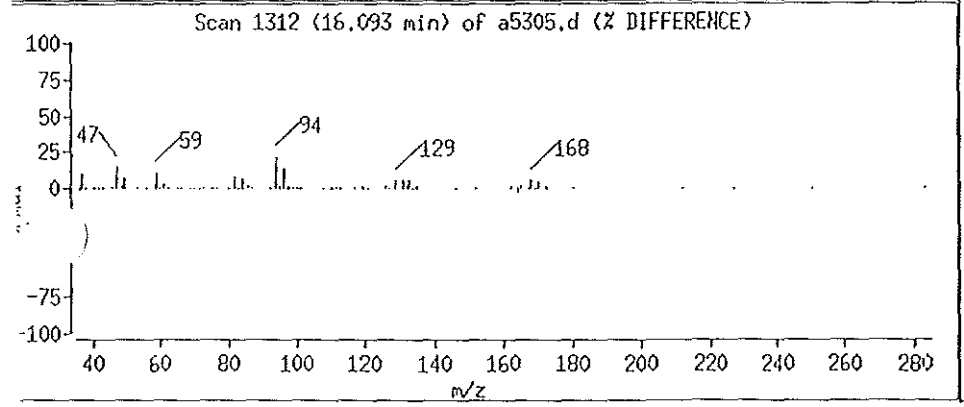
Column diameter: 0.53

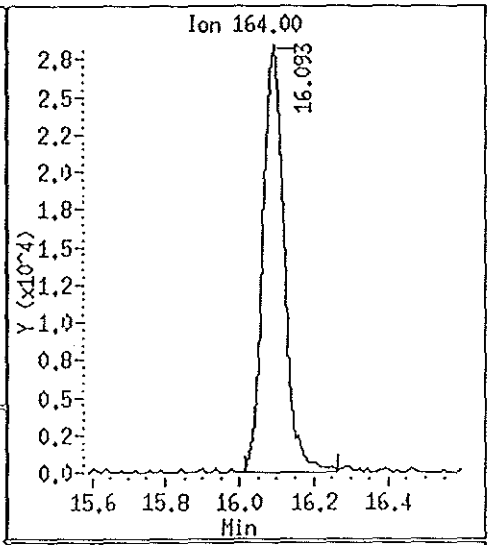
38 Tetrachloroethylene

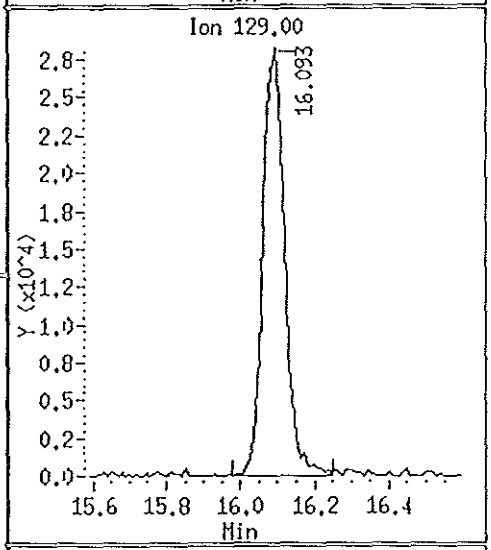


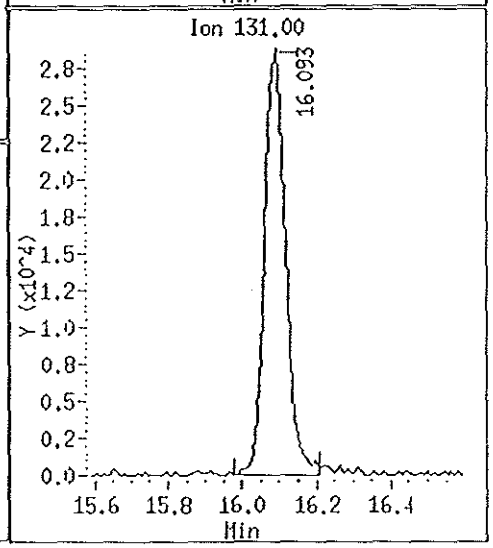












Data File: /chem/aux/msa.i/a111895.b/a5305.d

Date : 18-NOV-95 23:30

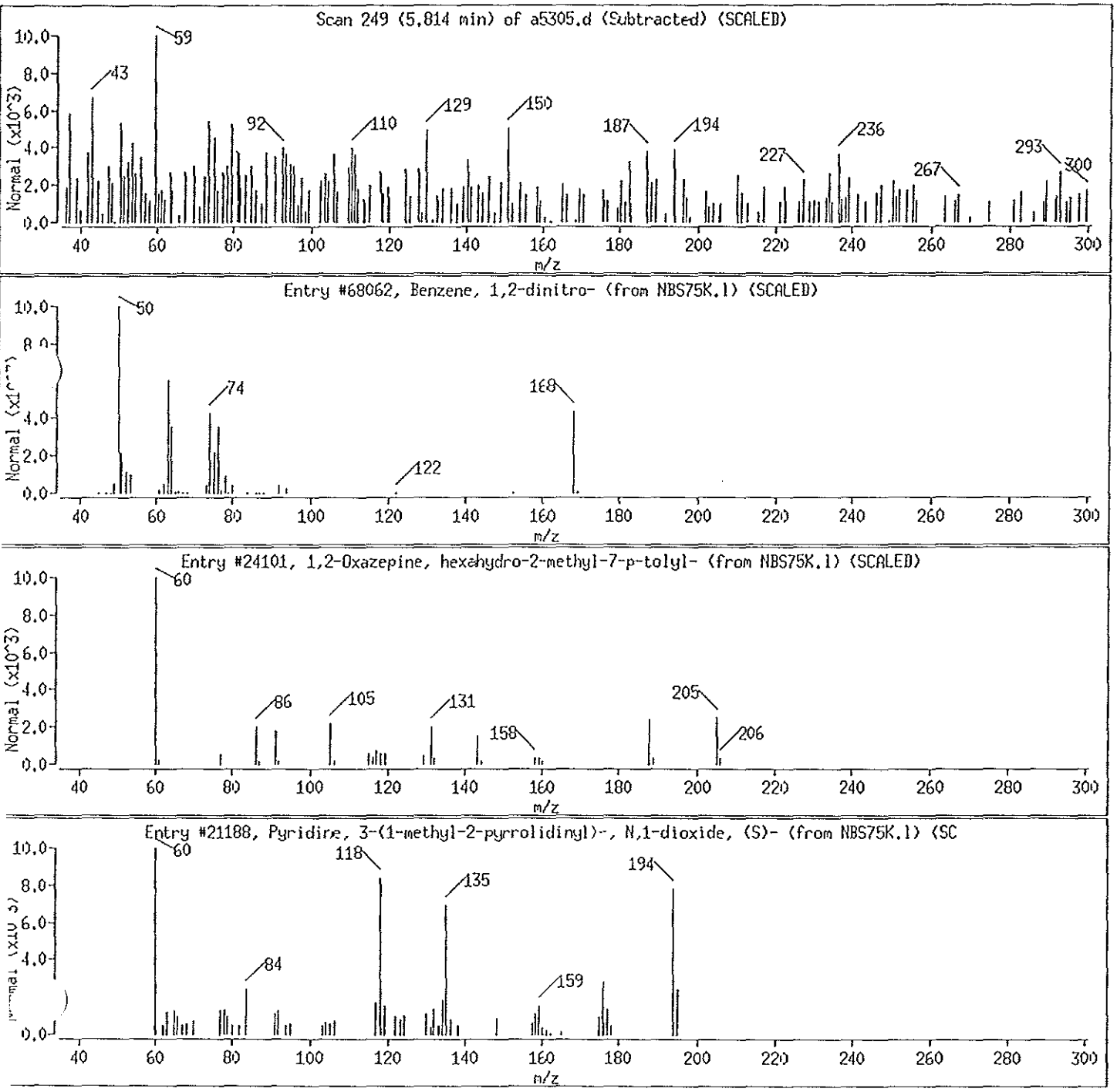
ient ID: 17418n clj78tw003 Instrument: msa.i

Sample Info: 17418n clj78tw003 100x

Purge Volume: 1.0 Operator: jk

Column phase: J&W DB_624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1,2-dinitro-	528-29-0	NBS75K.l	68062	14	C6H4N2O4	168
1,2-Oxazepine, hexahydro-2-methyl-7-p-to	3358-89-2	NBS75K.l	24101	12	C13H19NO	205
Pyridine, 3-(1-methyl-2-pyrrolidinyl)-,	2055-29-0	NBS75K.l	21188	12	C10H14N2O2	194



Data File: /chem/aux/msa.i/a111895.b/a5305.d

Date : 18-NOV-95 23:30

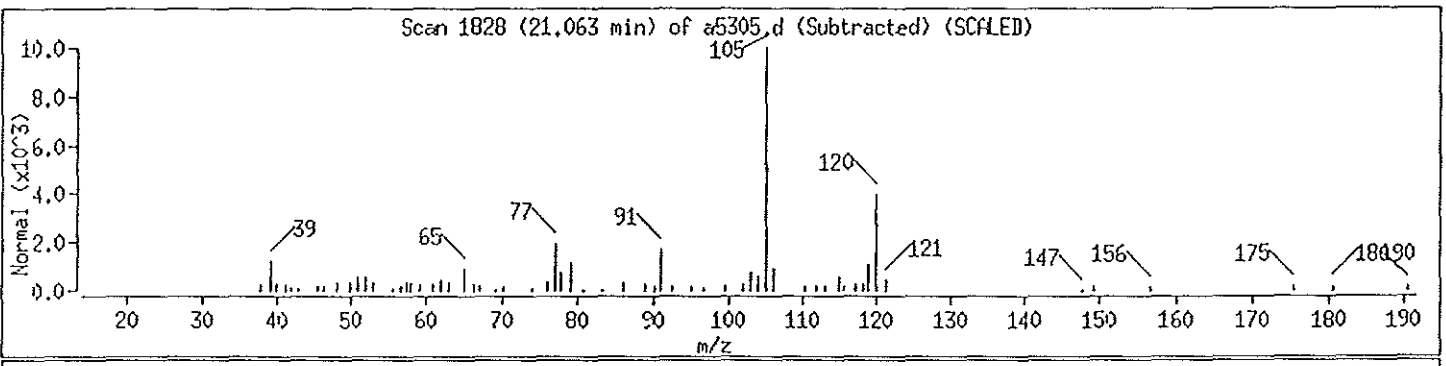
)ient ID: 17418n clj78tw003 Instrument: msa.i

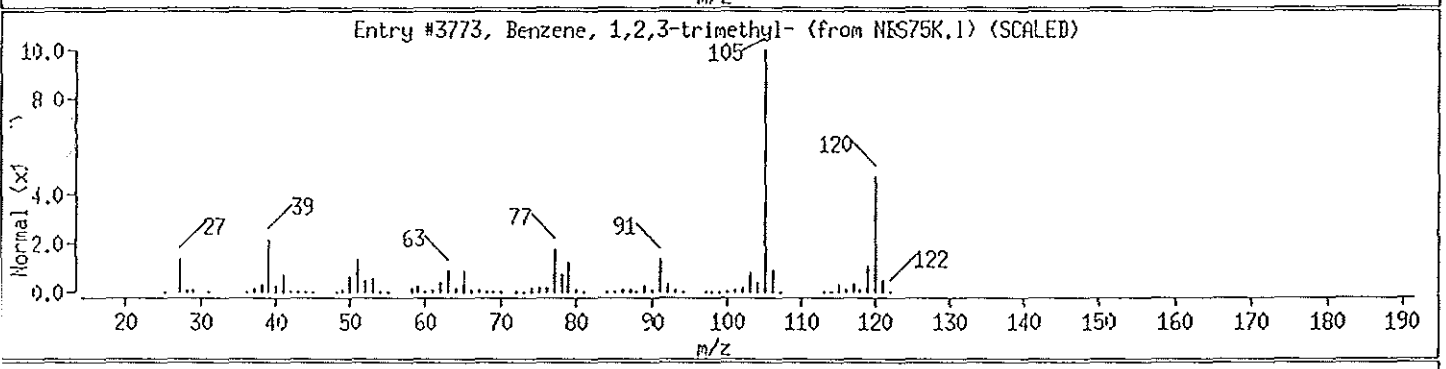
Sample Info: 17418n clj78tw003 100x

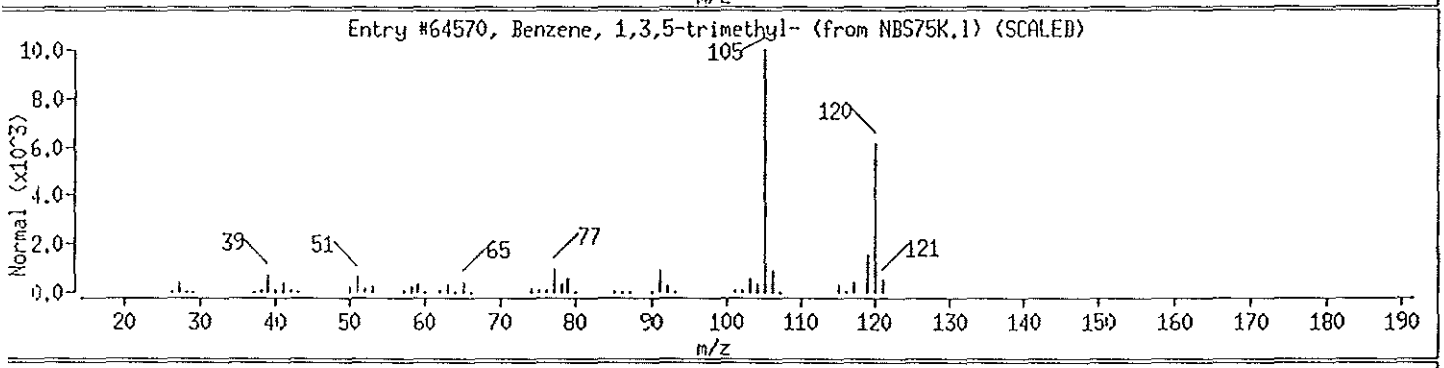
Purge Volume: 1.0 Operator: jk

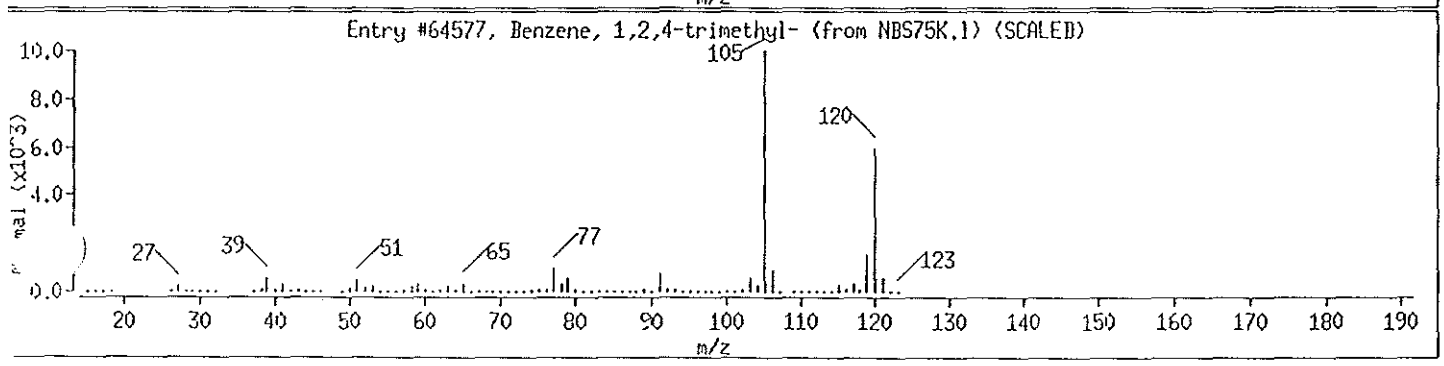
Column phase: J&W DB_624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1,2,3-trimethyl-	526-73-8	NBS75K.1	3773	94	C9H12	120
Benzene, 1,3,5-trimethyl-	108-67-8	NBS75K.1	64570	94	C9H12	120
Benzene, 1,2,4-trimethyl-	95-63-6	NBS75K.1	64577	91	C9H12	120









1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0167 CLJ78TW004

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0327V

Sample wt/vol: .02 (g/mL) ML Lab File ID: A5301

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: not dec. N/A Date Analyzed: 11/18/95

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

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

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	1300	U
74-83-9	Bromomethane	1300	U
75-01-4	Vinyl Chloride	1300	U
75-00-3	Chloroethane	1300	U
75-09-2	Methylene Chloride	1100	BJ
67-64-1	Acetone	2500	U
75-15-0	Carbon Disulfide	1300	U
75-35-4	1,1-Dichloroethene	1300	U
75-34-3	1,1-Dichloroethane	1300	U
540-59-0	1,2-Dichloroethene (total)	1300	U
67-66-3	Chloroform	1300	U
107-06-2	1,2-Dichloroethane	1300	U
78-93-3	2-Butanone	1300	U
71-55-6	1,1,1-Trichloroethane	1300	U
56-23-5	Carbon Tetrachloride	1300	U
75-27-4	Bromodichloromethane	1300	U
78-87-5	1,2-Dichloropropane	1300	U
10061-01-5	cis-1,3-Dichloropropene	1300	U
79-01-6	Trichloroethene	1300	U
124-48-1	Dibromochloromethane	1300	U
79-00-5	1,1,2-Trichloroethane	1300	U
71-43-2	Benzene	1300	U
10061-02-6	trans-1,3-Dichloropropene	1300	U
75-25-2	Bromoform	1300	U
108-10-1	Methyl-iso-butyl ketone	2500	U
591-78-6	2-Hexanone	1300	U
127-18-4	Tetrachloroethylene	29000	B
79-34-5	1,1,2,2-Tetrachloroethane	1300	U
108-88-3	Toluene	1300	U
108-90-7	Chlorobenzene	1300	U
100-41-4	Ethylbenzene	1300	U
100-42-5	Styrene	1300	U
1330-20-7	Xylene (total)	1300	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

0168 CLJ78TW004

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0327V

Sample wt/vol: .02 (g/mL) ML Lab File ID: A5301

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: not dec. N/A Date Analyzed: 11/18/95

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	5.85	8700	J

Data File: /chem/aux/msa.i/a111895.b/a5301.d

Date : 18-NOV-95 21:17

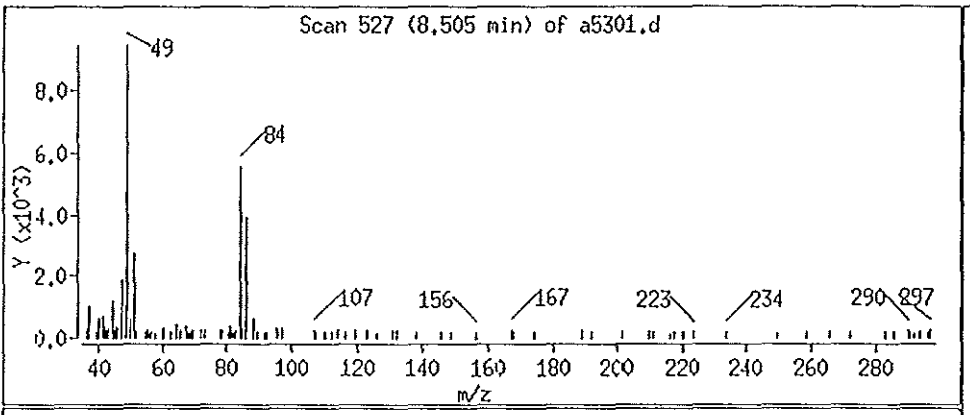
Client ID: 17418n clj78tw004 Instrument: msa.i

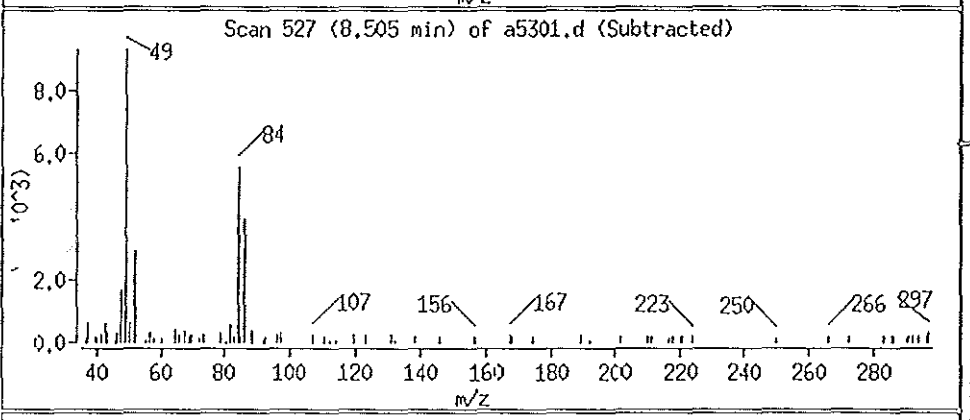
Sample Info: 17418n clj78tw004 500x

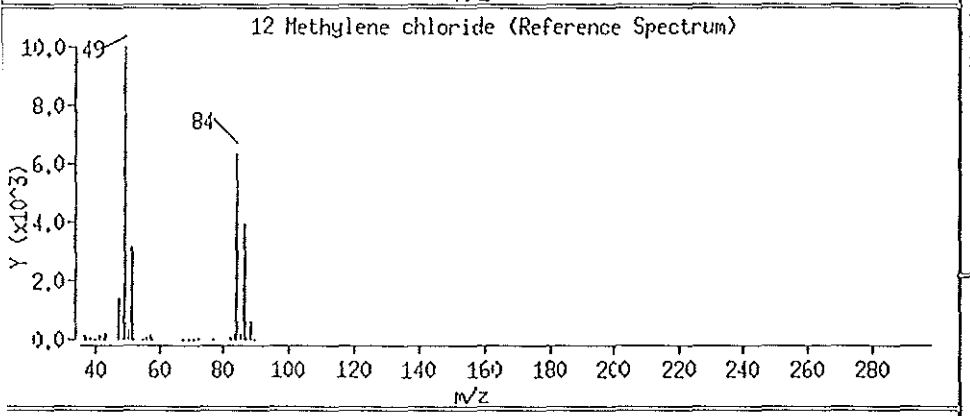
Purge Volume: 1.0 Operator: jk

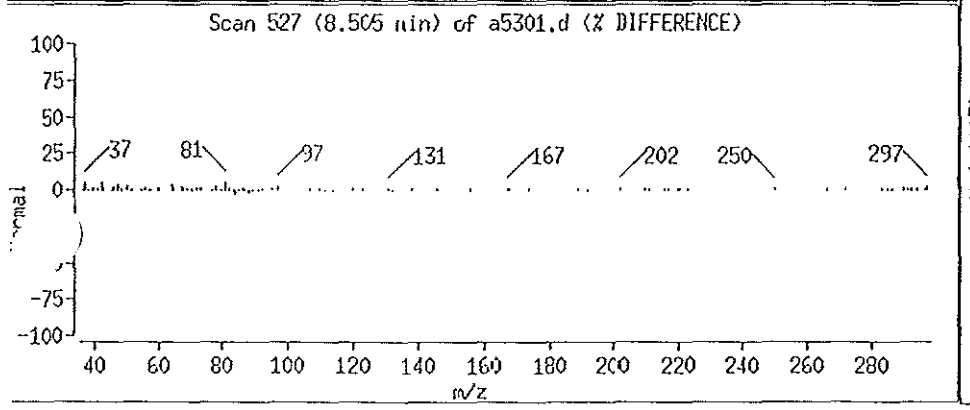
Column phase: J&W DB_624 Column diameter: 0.53

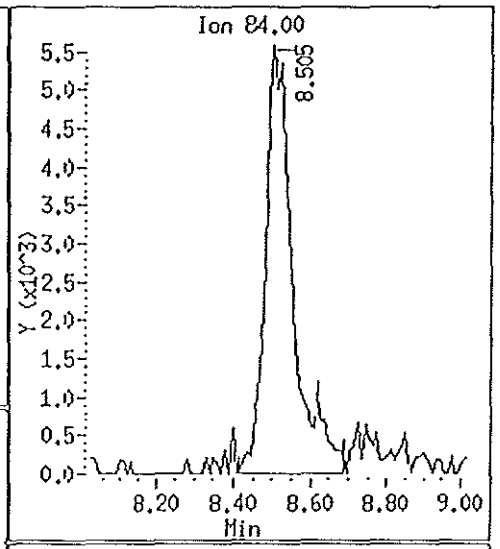
12 Methylene chloride

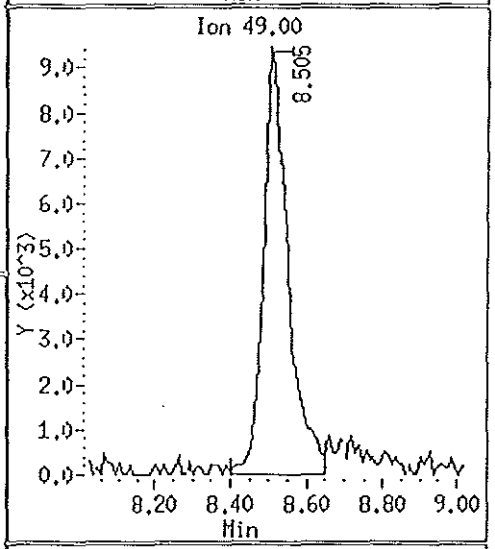


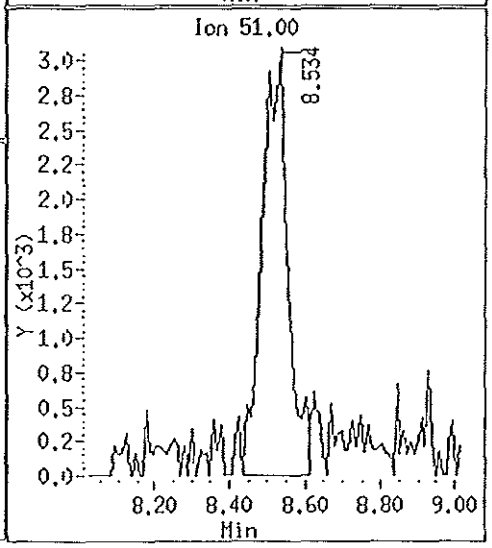










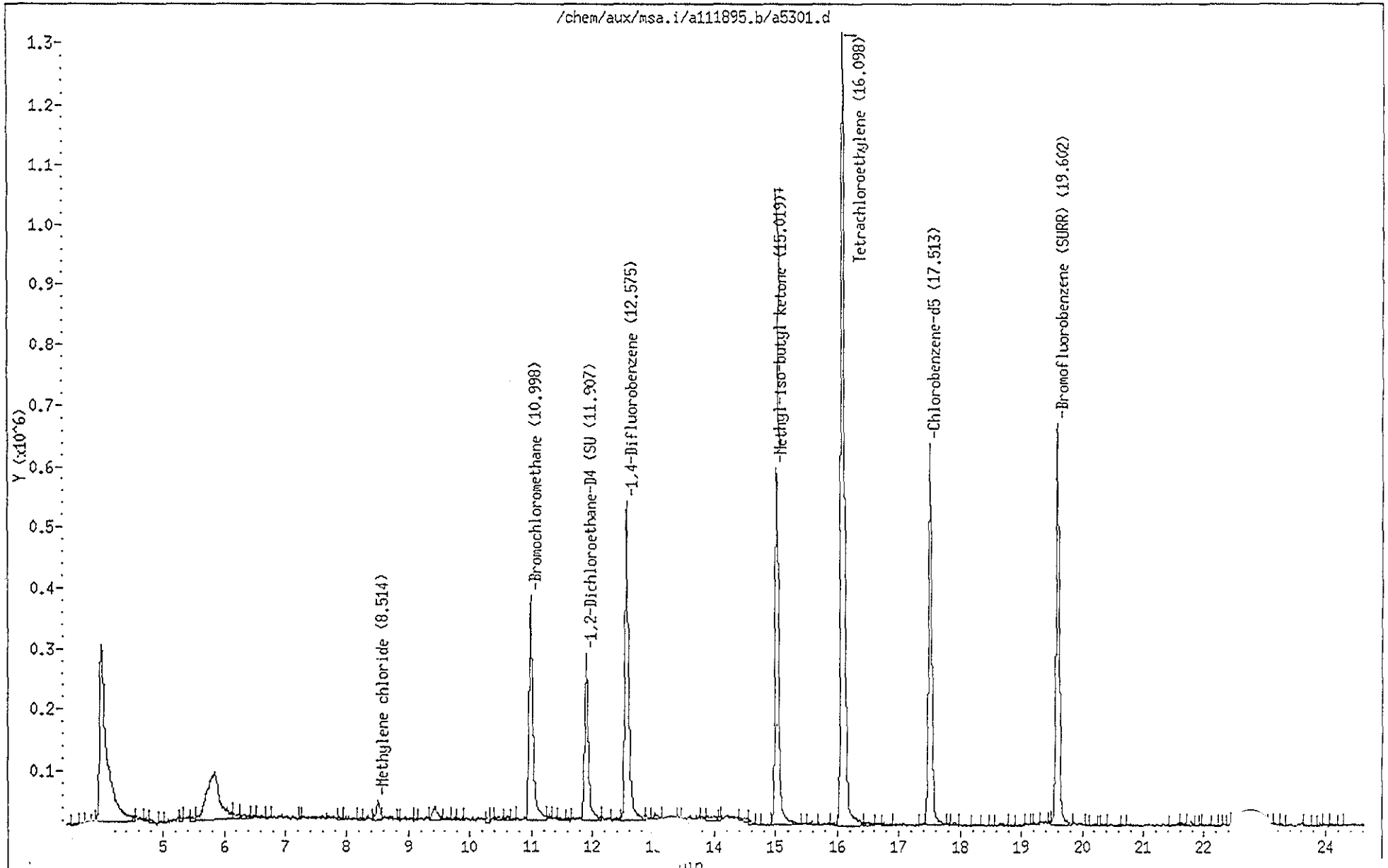


0169

Data File: /chem/aux/msa.i/a111895.b/a5301.d
Date : 18-NOV-95 21:17
Client ID: 17418n clj78tw004
Sample Info: 17418n clj78tw004 500x
Purge Volume: 1.0
Column phase: J&W DB_624

Instrument: msa.i

Operator: jk
Column diameter: 0.53



Data File: /chem/aux/msa.i/a111895.b/a5301.d Page 1
Report Date: 24-Nov-1995 09:03

OHM Analytical Division

+ Screen

VOLATILE REPORT SW-846 Method 8240

Data file : /chem/aux/msa.i/a111895.b/a5301.d
Lab Smp Id: Client Smp ID: 17418n clj78tw004
Inj Date : 18-NOV-95 21:17
Operator : jk Inst ID: msa.i
Smp Info : 17418n clj78tw004
Misc Info : jp0327v,n1v4782,m2,5000,1,0.02,5.0,951118,
Comment :
Method : /chem/aux/msa.i/a111895.b/111895_8240ambia.m
Meth Date : 24-Nov-1995 08:33 glenn Quant Type: ISTD
Cal Date : 18-NOV-95 17:03 Cal File: a5294.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

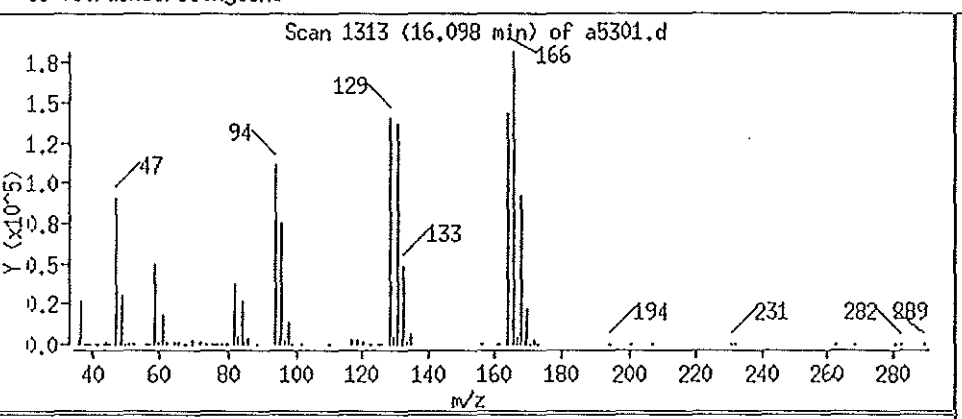
MK 11/24/95

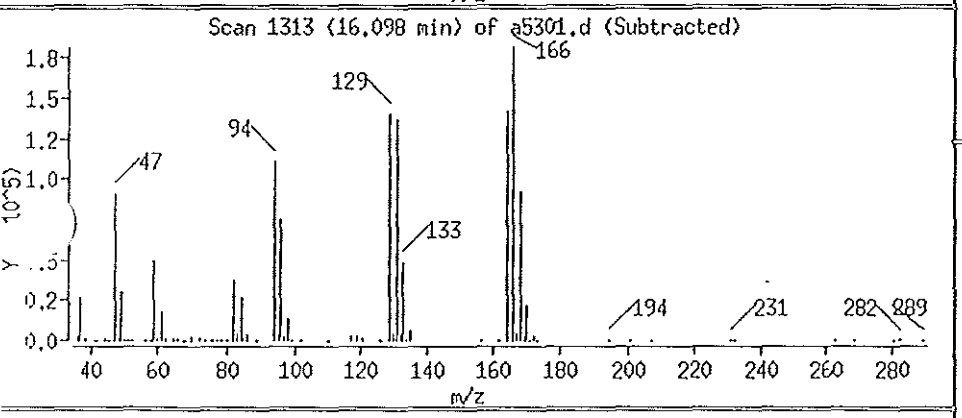
#590

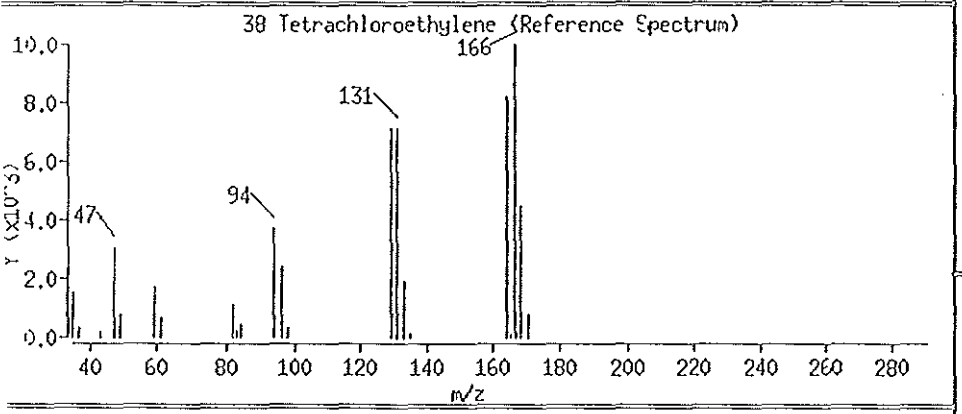
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
12 Methylene chloride	84.00	8.505	8.520	(0.773)	28414	4.37	4.37
20 Bromochloromethane	128.00	10.998	11.007	(1.000)	183475	50.0	
24 1,2-Dichloroethane-D4 (SURR)	65.00	11.907	11.916	(1.083)	406145	51.0	51.0
27 1,4-Difluorobenzene	114.00	12.575	12.573	(1.000)	727259	50.0	
34 Toluene-D8 (SURR)	98.00	15.019	15.017	(0.858)	748565	54.8	54.8
38 Tetrachloroethylene	164.00	16.098	16.089	(0.919)	576416	117	117
42 Chlorobenzene-d5	117.00	17.513	17.506	(1.000)	572768	50.0	
49 Bromofluorobenzene (SURR)	95.00	19.593	19.587	(1.119)	427672	52.6	52.6

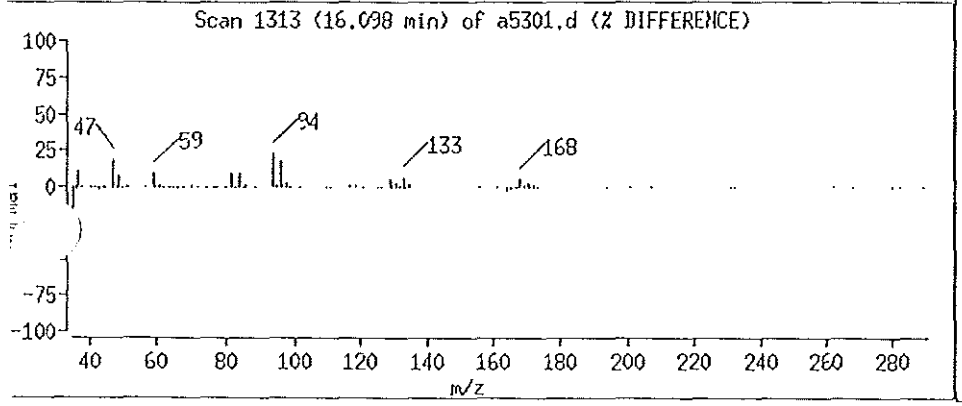
Data File: /chem/aux/msa.i/a111895.b/a5301.d
Date : 18-NOV-95 21:17
lent ID: 17418n clj78tw004 Instrument: msa.i
Sample Info: 17418n clj78tw004 500x
Purge Volume: 1.0 Operator: jk
Column phase: J&W DB_624 Column diameter: 0.53

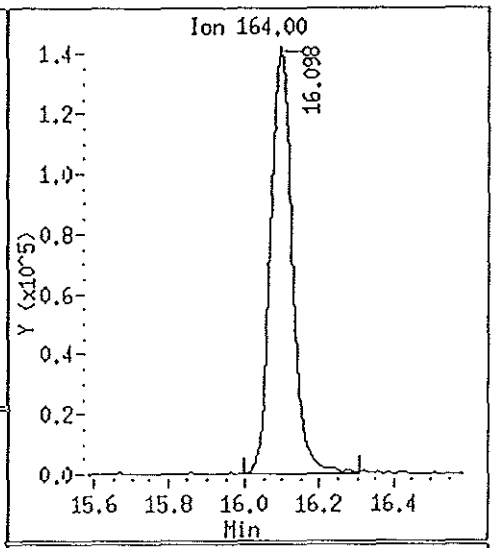
38 Tetrachloroethylene

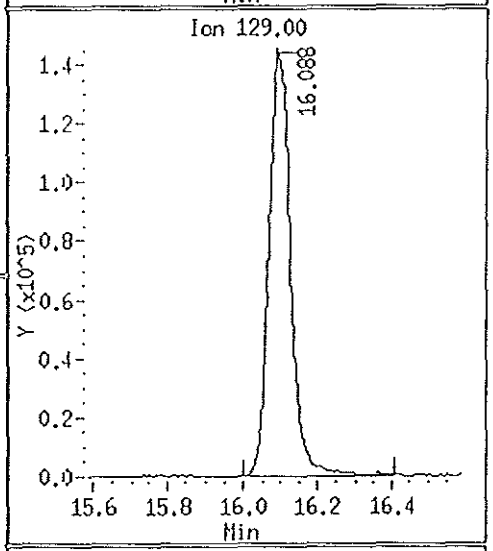


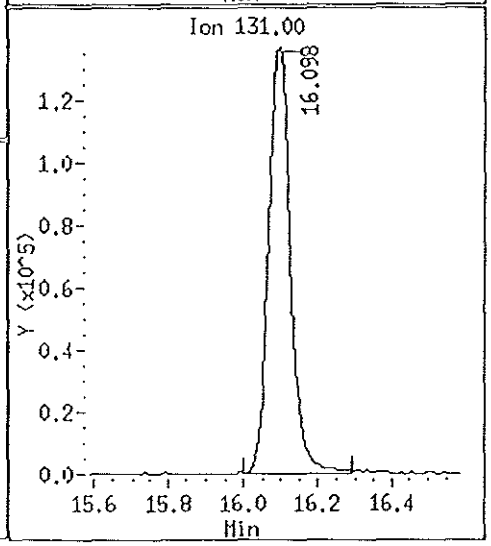












Data File: /chem/aux/msa.i/a111895.b/a5301.d

Date : 18-NOV-95 21:17

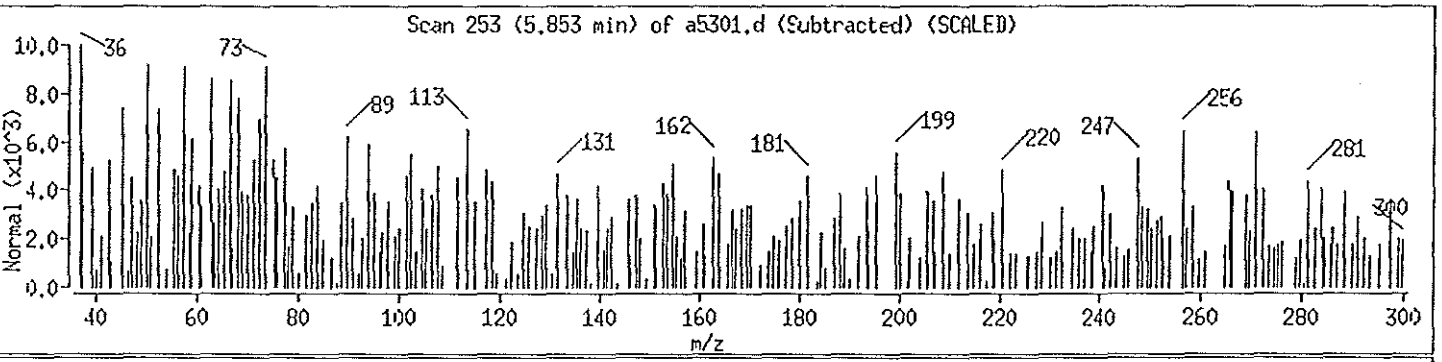
ient ID: 17418n clj78tw004 Instrument: msa.i

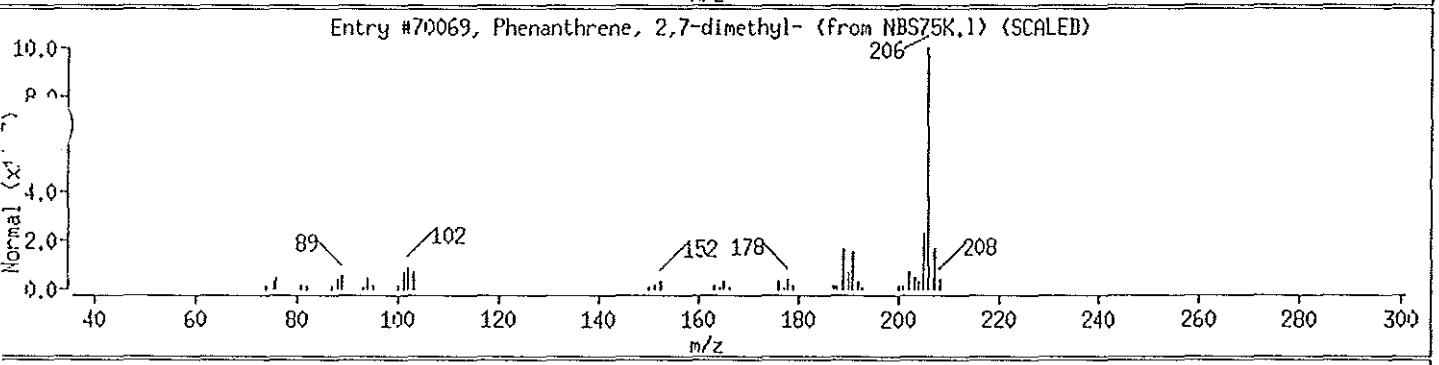
Sample Info: 17418n clj78tw004 500x

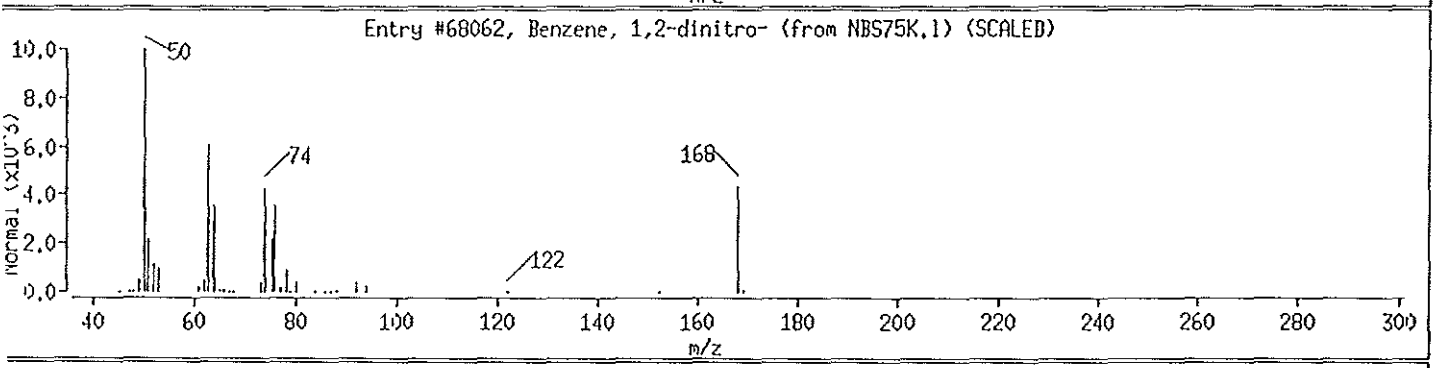
Purge Volume: 1.0 Operator: jk

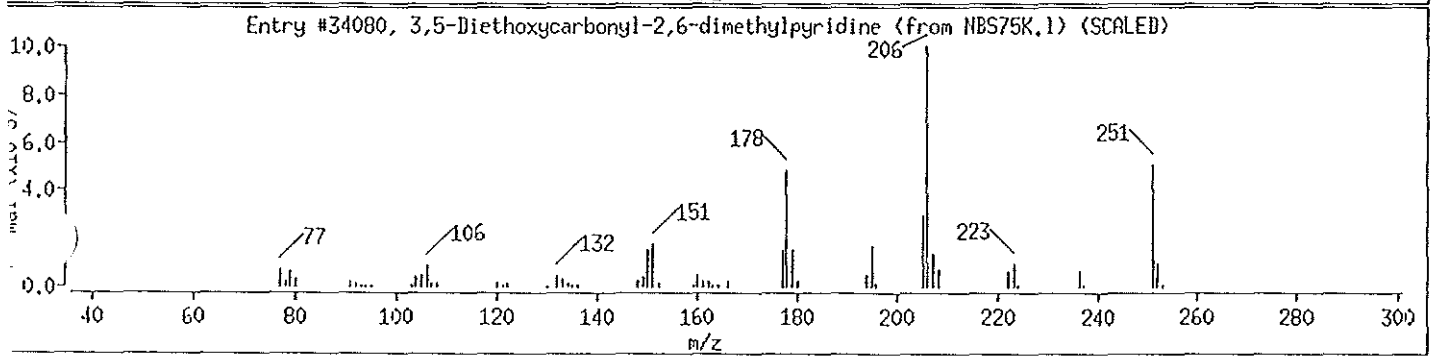
Column phase: J&W DB_624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Phenanthrene, 2,7-dimethyl-	1576-69-8	NBS75K.l	70069	27	C16H14	206
Benzene, 1,2-dinitro-	528-29-0	NBS75K.l	68062	27	C6H4N2O4	168
3,5-Diethoxycarbonyl-2,6-dimethylpyridin	1149-24-2	NBS75K.l	34080	27	C13H17NO4	251









1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0174 CLJ78TW02D

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0325V

Sample wt/vol: .50 (g/mL) ML Lab File ID: A5319

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: not dec. N/A Date Analyzed: 11/19/95

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

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

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	50	U
74-83-9	Bromomethane	50	U
75-01-4	Vinyl Chloride	50	U
75-00-3	Chloroethane	50	U
75-09-2	Methylene Chloride	42	BJ
67-64-1	Acetone	100	U
75-15-0	Carbon Disulfide	50	U
75-35-4	1,1-Dichloroethene	50	U
75-34-3	1,1-Dichloroethane	50	U
540-59-0	1,2-Dichloroethene (total)	130	
67-66-3	Chloroform	50	U
107-06-2	1,2-Dichloroethane	50	U
78-93-3	2-Butanone	50	U
71-55-6	1,1,1-Trichloroethane	50	U
56-23-5	Carbon Tetrachloride	50	U
75-27-4	Bromodichloromethane	50	U
78-87-5	1,2-Dichloropropane	50	U
10061-01-5	cis-1,3-Dichloropropene	50	U
79-01-6	Trichloroethene	47	J
124-48-1	Dibromochloromethane	50	U
79-00-5	1,1,2-Trichloroethane	50	U
71-43-2	Benzene	50	U
10061-02-6	trans-1,3-Dichloropropene	50	U
75-25-2	Bromoform	50	U
108-10-1	Methyl-iso-butyl ketone	100	U
591-78-6	2-Hexanone	50	U
127-18-4	Tetrachloroethylene	350	B
79-34-5	1,1,2,2-Tetrachloroethane	50	U
108-88-3	Toluene	50	U
108-90-7	Chlorobenzene	50	U
100-41-4	Ethylbenzene	50	U
100-42-5	Styrene	50	U
1330-20-7	Xylene (total)	16	J

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

0175 CLJ78TW02D

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0325V

Sample wt/vol: .50 (g/mL) ML Lab File ID: A5319

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: not dec. N/A Date Analyzed: 11/19/95

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 6

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

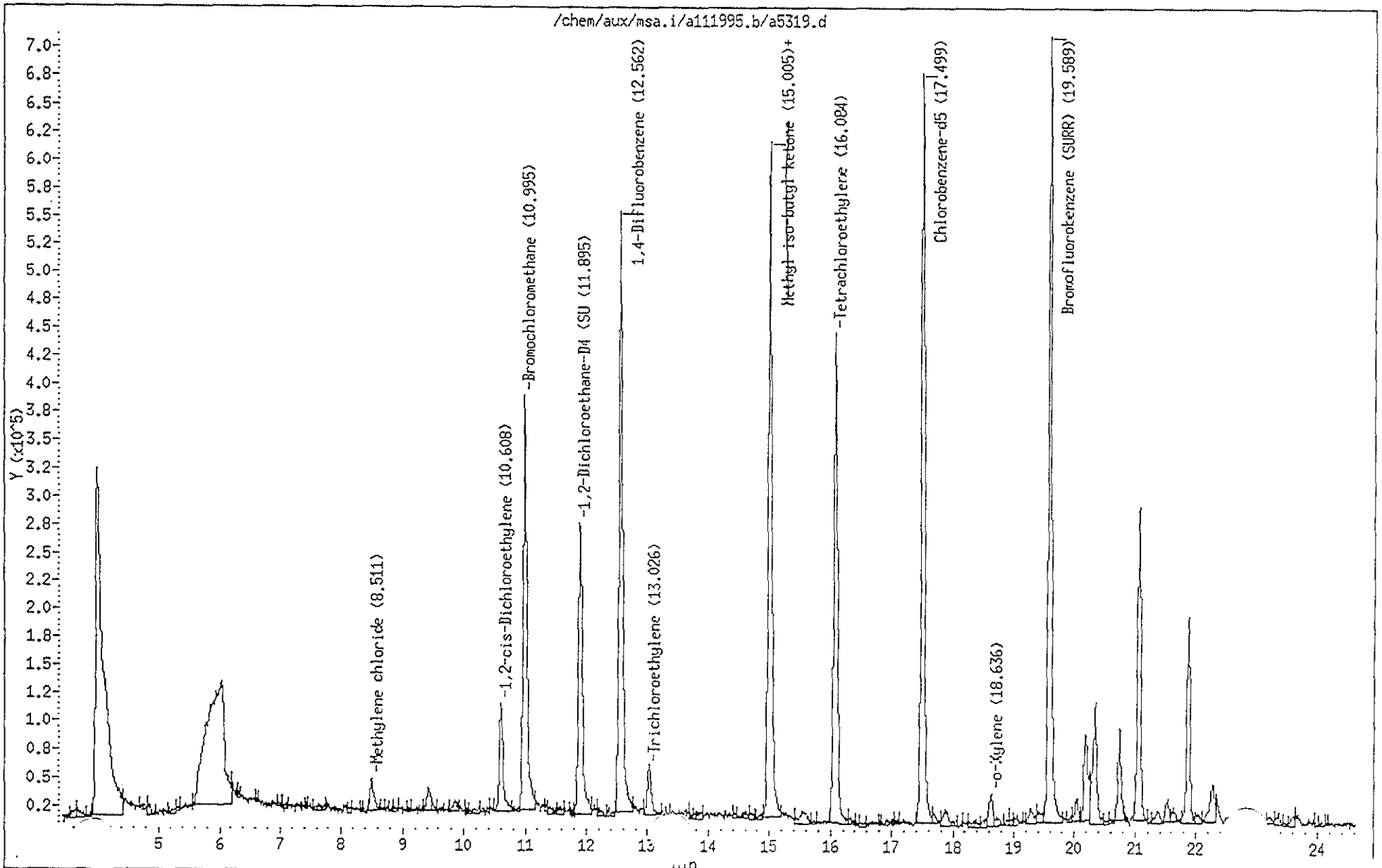
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	6.03	690	J
2. 622-96-8	Benzene, 1-ethyl-4-methyl is	20.18	73	JN
3. 95-36-3	Benzene, 1,2,4-trimethyl	20.34	110	JN
4. 622-96-8	Benzene, 1-ethyl-4-methyl is	20.74	60	JN
5. 526-73-8	1,2,3-Trimethylbenzene isome	21.07	210	JN
6. 526-73-8	1,2,3-Trimethylbenzene isome	21.88	140	JN

0176

Data File: /chem/aux/msa.i/a111995.b/a5319.d
Date : 19-NOV-95 18:40
Client ID: 17418n clj78tw02d
Sample Info: 17418n clj78tw02d 10x rerun
Purge Volume: 1.0
Column phase: J&W DB_624

Instrument: msa.i

Operator: jk
Column diameter: 0.53



OHM Analytical Division

+ Screen

VOLATILE REPORT SW-846 Method 8240

Data file : /chem/aux/msa.i/a111995.b/a5319.d
Lab Smp Id: Client Smp ID: 17418n clj78tw02d
Inj Date : 19-NOV-95 18:40
Operator : jk Inst ID: msa.i
Smp Info : 17418n clj78tw02d 10x rerun
Misc Info : jp0325v,n1v4782,m2,5000,1,0.50,5.0,951119
Comment :
Method : /chem/aux/msa.i/a111995.b/111895_8240ambia.m
Meth Date : 22-Nov-1995 12:08 glenn Quant Type: ISTD
Cal Date : 19-NOV-95 14:40 Cal File: a5312.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

MK 11/24/95

#590

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	2 Methylene chloride	84.00	8.501	8.509	(0.773)	26631	4.22	4.22
	17 1,2-cis-Dichloroethylene	96.00	10.618	10.611	(0.966)	76722	12.8	12.8
*	20 Bromochloromethane	128.00	10.995	10.998	(1.000)	193107	50.0	
$	24 1,2-Dichloroethane-D4 (SURR)	65.00	11.895	11.899	(1.082)	406117	49.6	49.6
*	27 1,4-Difluorobenzene	114.00	12.562	12.567	(1.000)	744266	50.0	
	28 Trichloroethylene	130.00	13.026	13.032	(1.037)	29447	4.67	4.67
	33 Methyl-iso-butyl ketone	43.00	15.005	14.746	(0.857)	7728	1.28	~~1.28 (Q)~~ MS
$	34 Toluene-D8 (SURR)	98.00	15.015	15.017	(0.858)	776979	51.3	51.3
	38 Tetrachloroethylene	164.00	16.084	16.089	(0.919)	188028	34.6	34.6
*	42 Chlorobenzene-d5	117.00	17.499	17.507	(1.000)	609254	50.0	
	46 o-Xylene	106.00	18.626	18.636	(1.064)	10995	1.60	1.60
$	49 Bromofluorobenzene (SURR)	95.00	19.589	19.591	(1.119)	456588	53.6	53.6

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/aux/msa.i/a111995.b/a5319.d

Date : 19-NOV-95 18:40

)ient ID: 17418n clj78tw02d

Instrument: msa.i

Sample Info: 17418n clj78tw02d 10x rerun

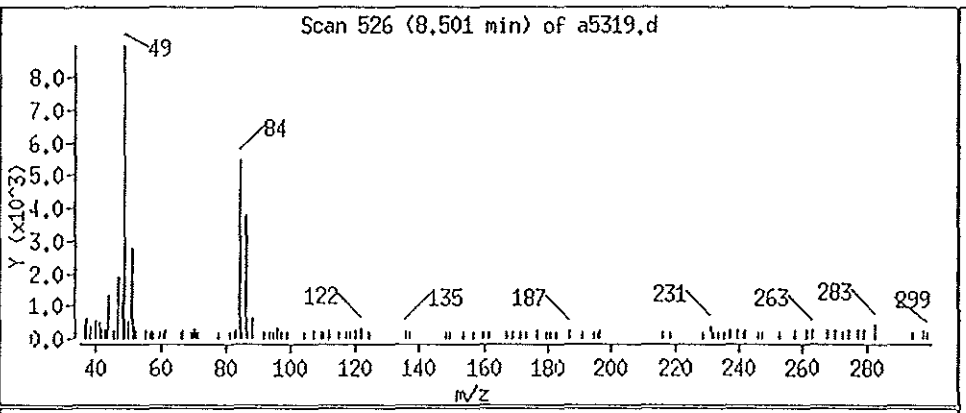
Purge Volume: 1.0

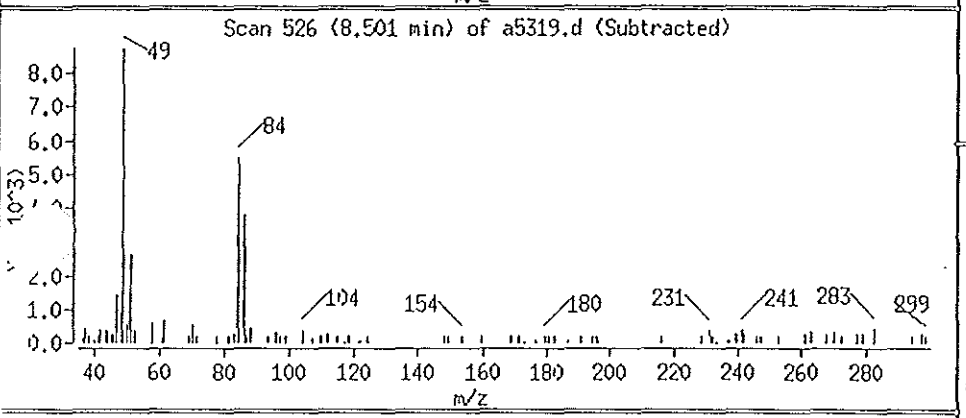
Operator: jk

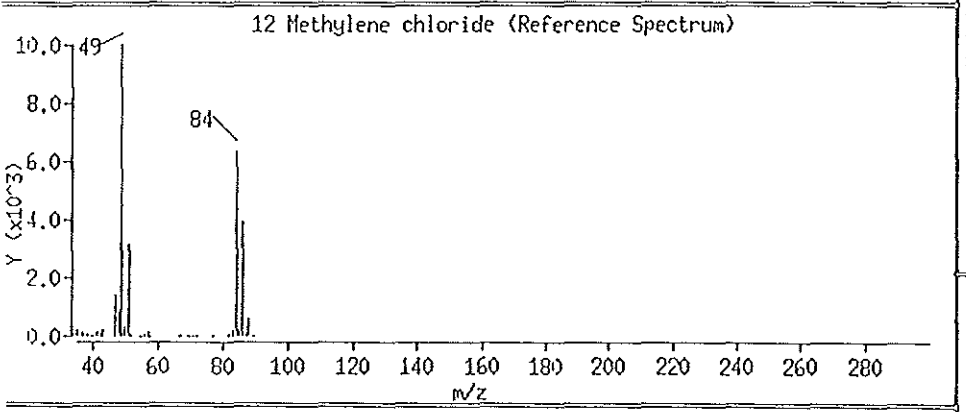
Column phase: J&W DB_624

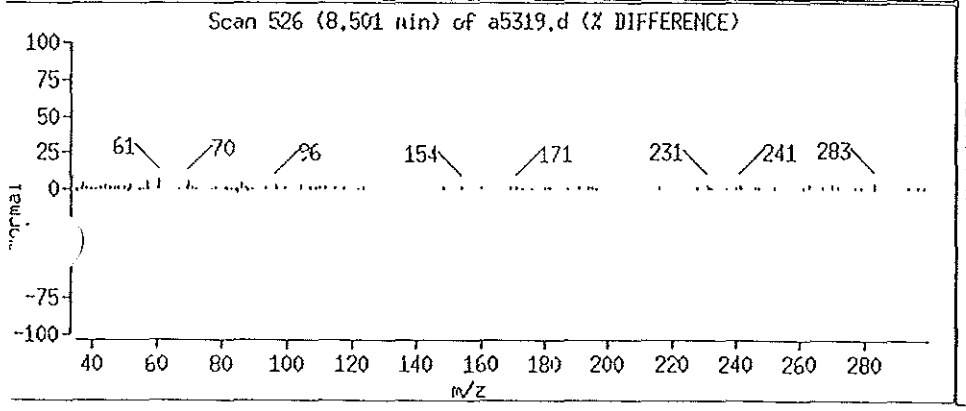
Column diameter: 0.53

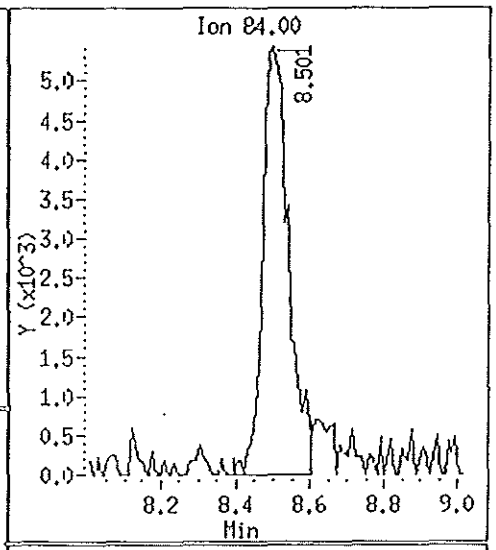
12 Methylene chloride

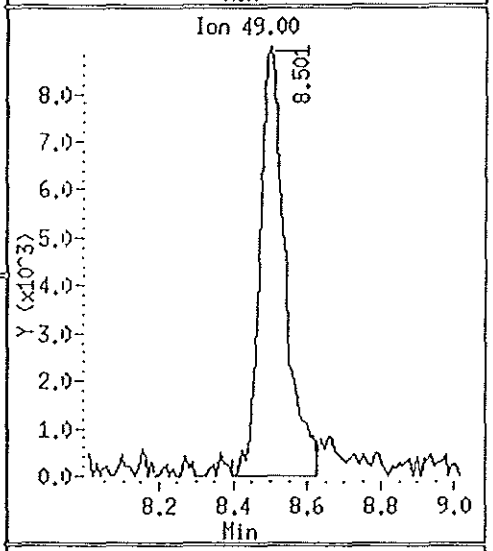


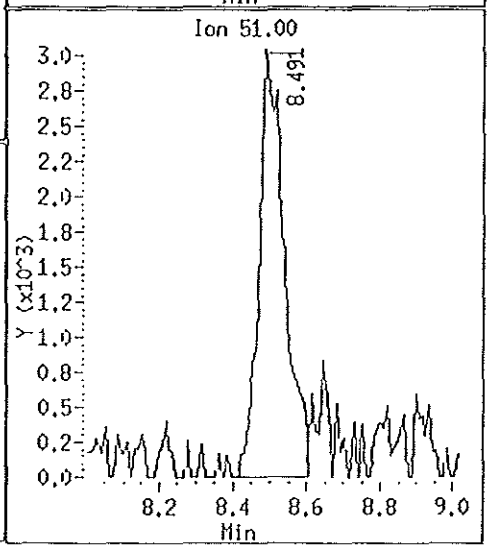






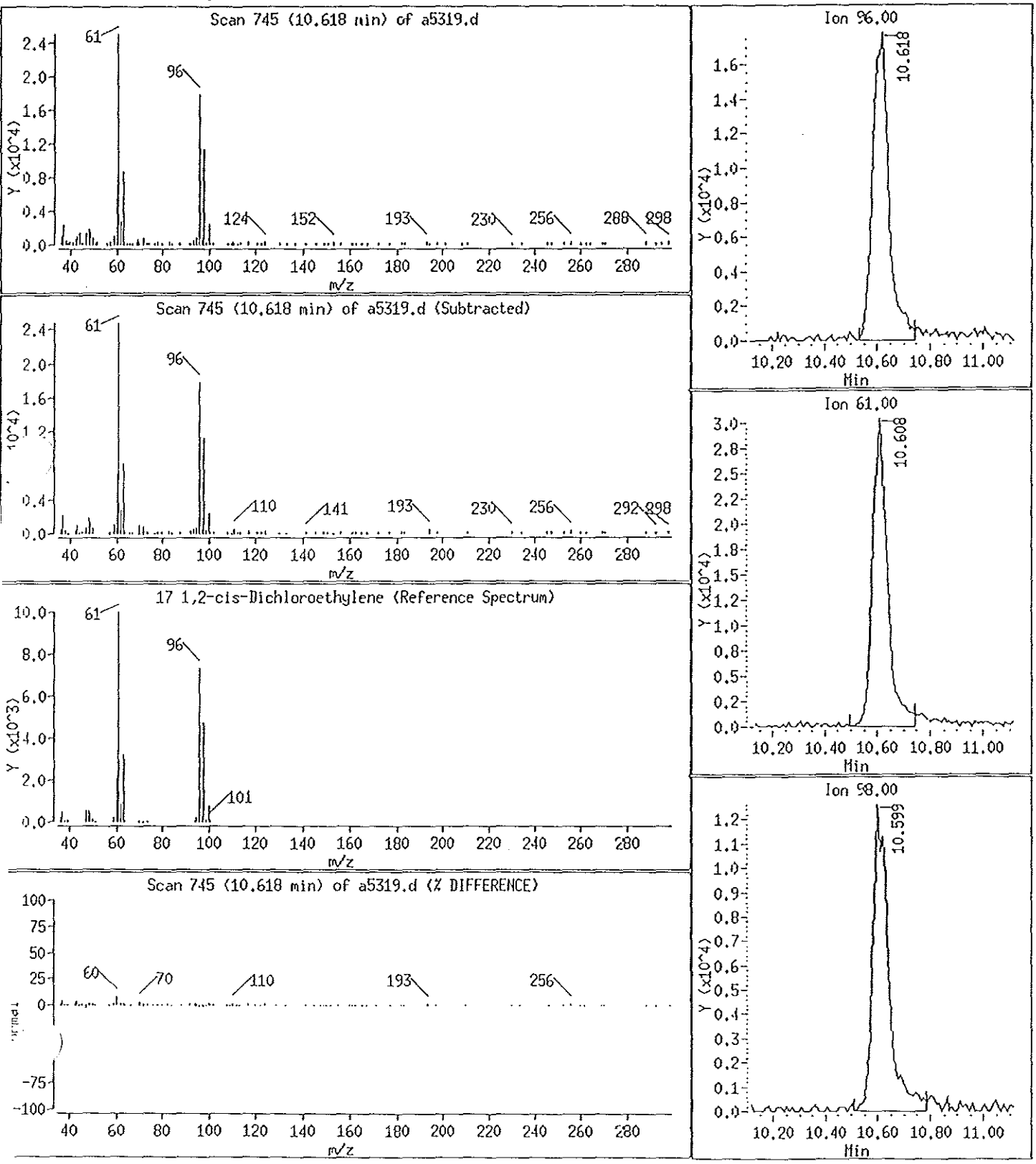






Data File: /chem/aux/msa.i/a111995.b/a5319.d
Date : 19-NOV-95 18:40
)ient ID: 17418n clj78tw02d
Instrument: msa.i
Sample Info: 17418n clj78tw02d 10x rerun
Purge Volume: 1.0
Operator: jk
Column phase: J&W DB_624
Column diameter: 0.53

17 1,2-cis-Dichlorcethylene



Data File: /chem/aux/msa.i/a111995.b/a5319.d

Date : 19-NOV-95 18:40

)ient ID: 17418n clj78tw02d

Instrument: msa.i

Sample Info: 17418n clj78tw02d 10x rerun

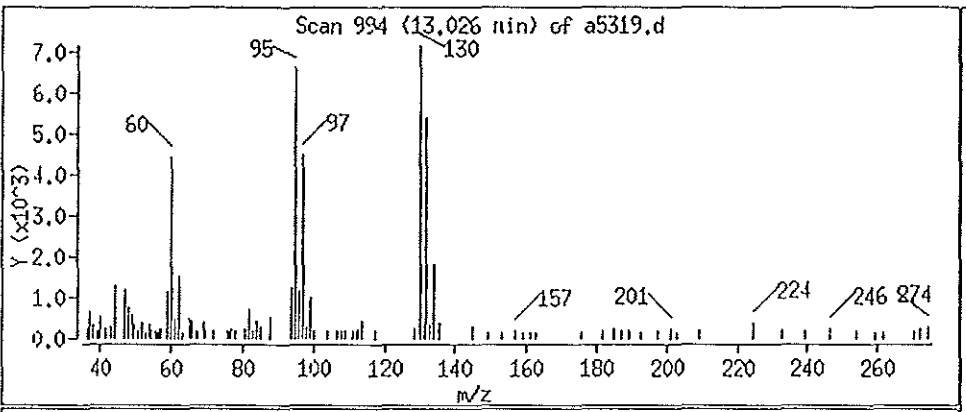
Purge Volume: 1.0

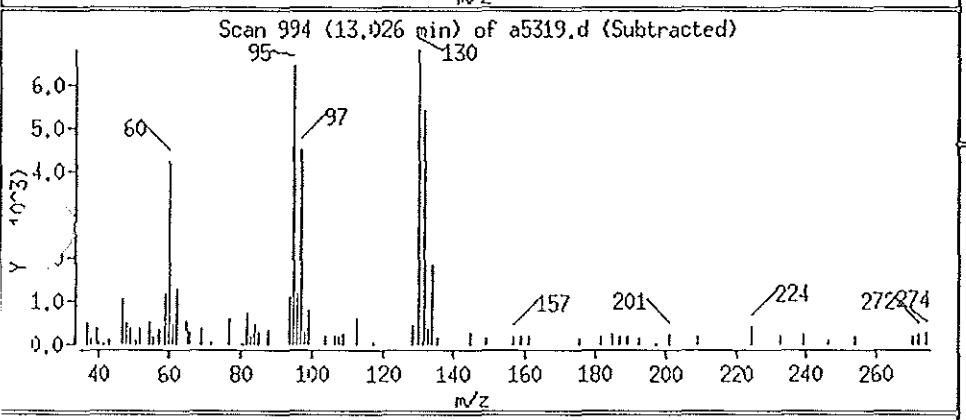
Operator: jk

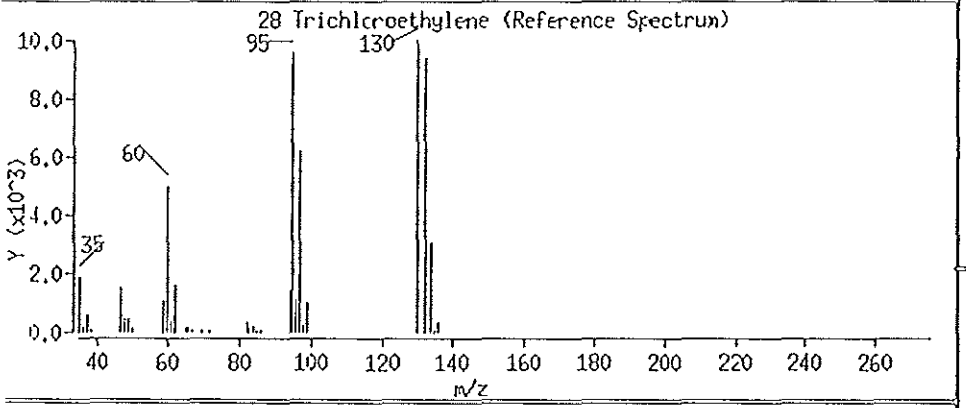
Column phase: J&W DB_624

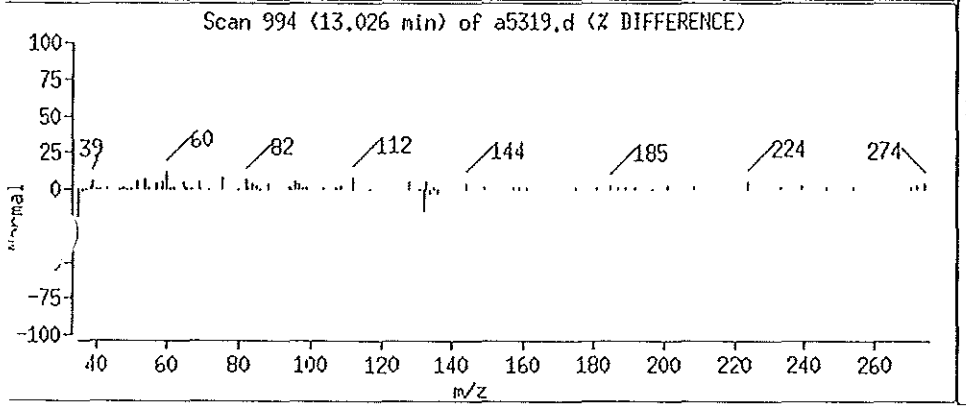
Column diameter: 0.53

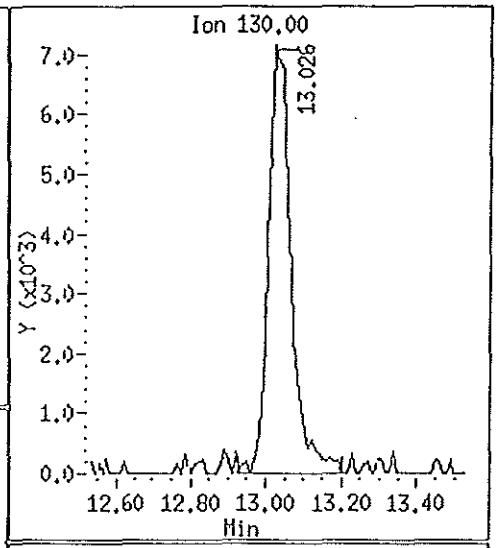
28 Trichloroethylene

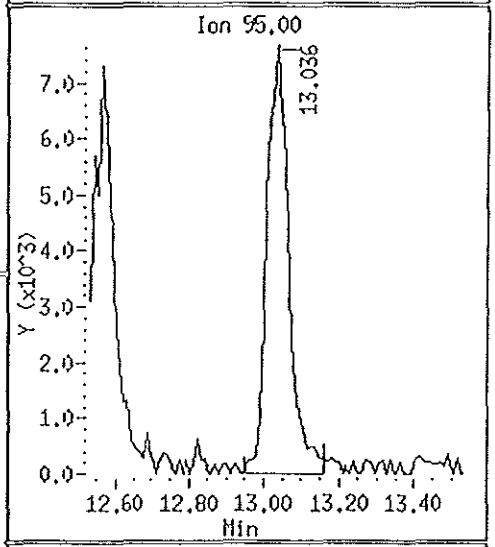


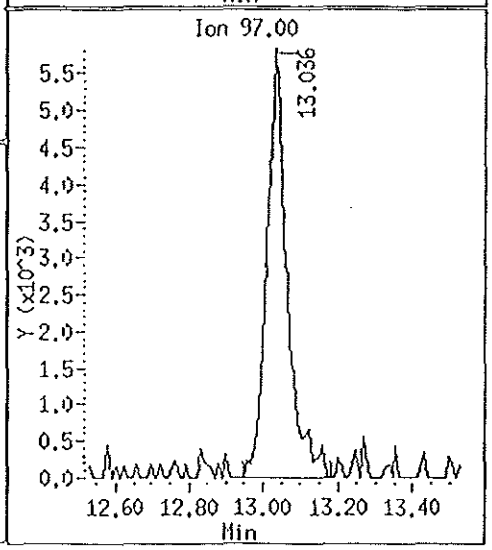












Data File: /chem/aux/msa.i/a111995.b/a5319.d

Date : 19-NOV-95 18:40

Client ID: 17418n clj78tw02d

Instrument: msa.i

Sample Info: 17418n clj78tw02d 10x rerun

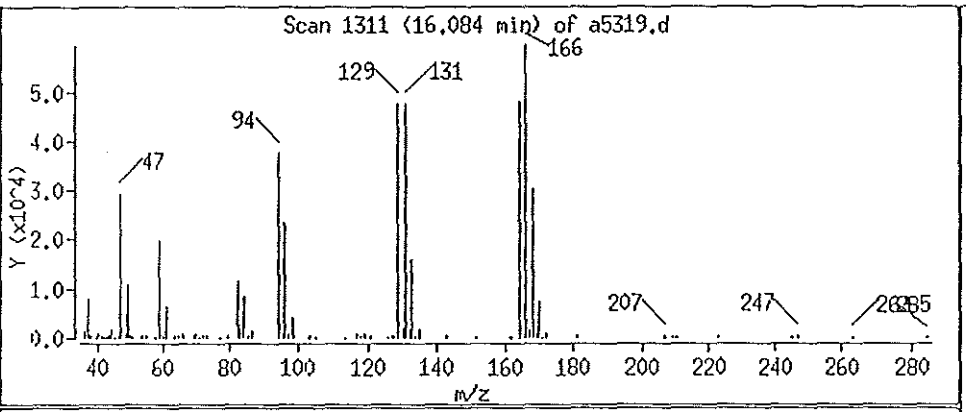
Purge Volume: 1.0

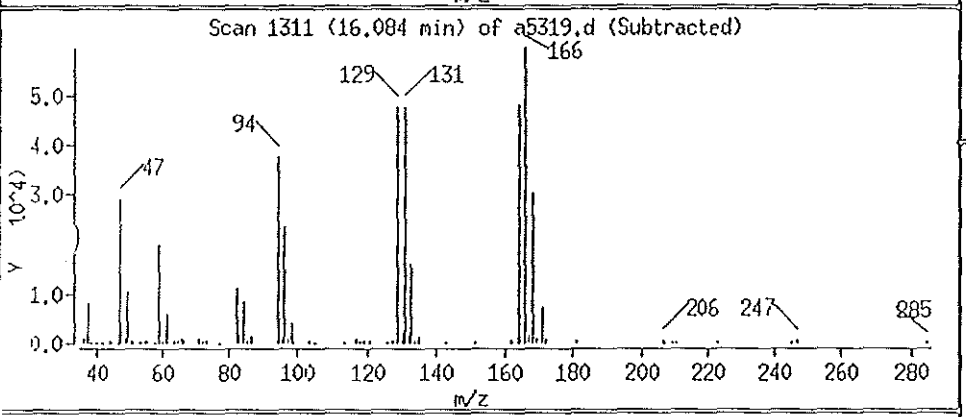
Operator: jk

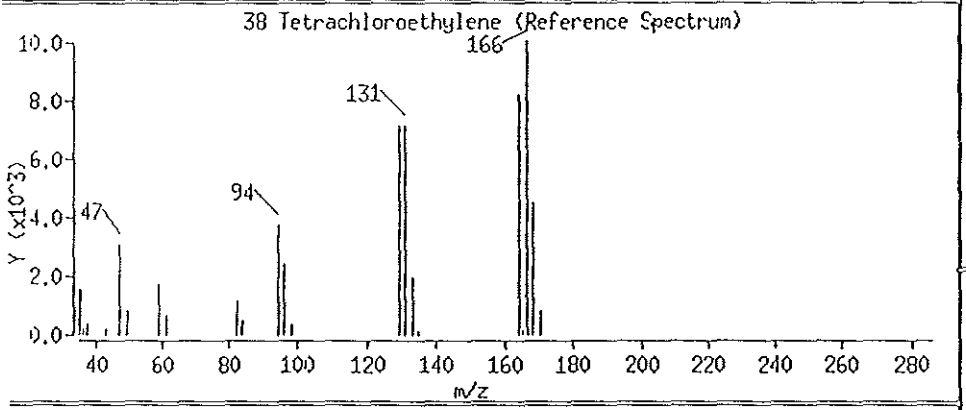
Column phase: J&W DB_624

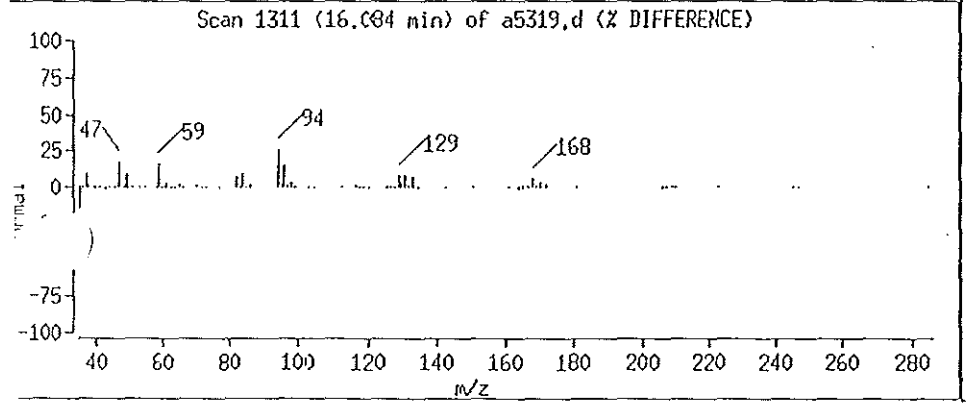
Column diameter: 0.53

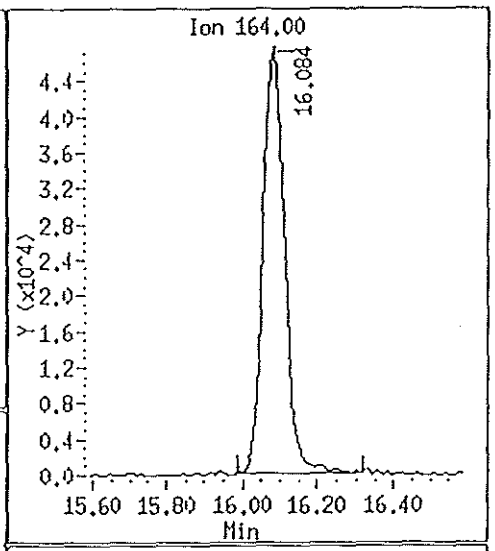
38 Tetrachloroethylene

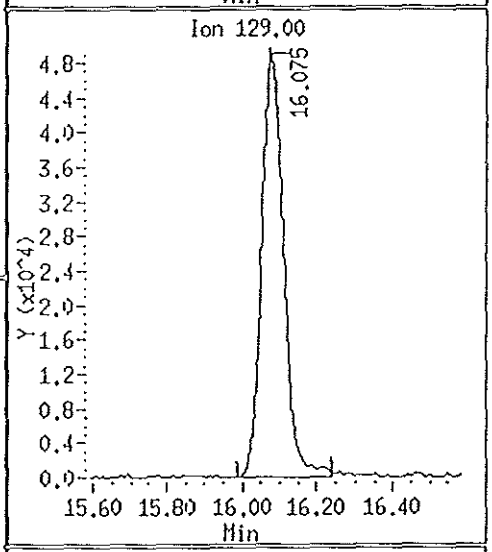


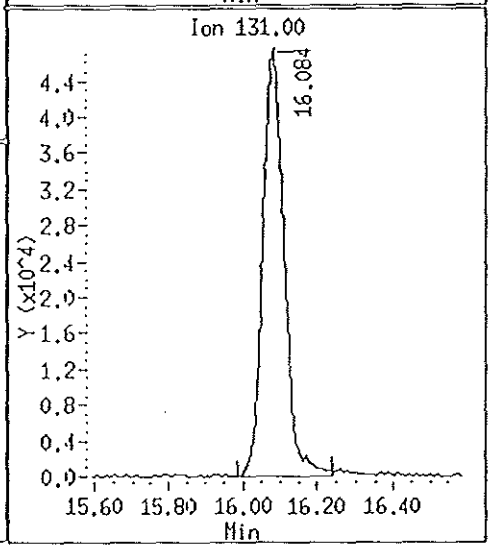






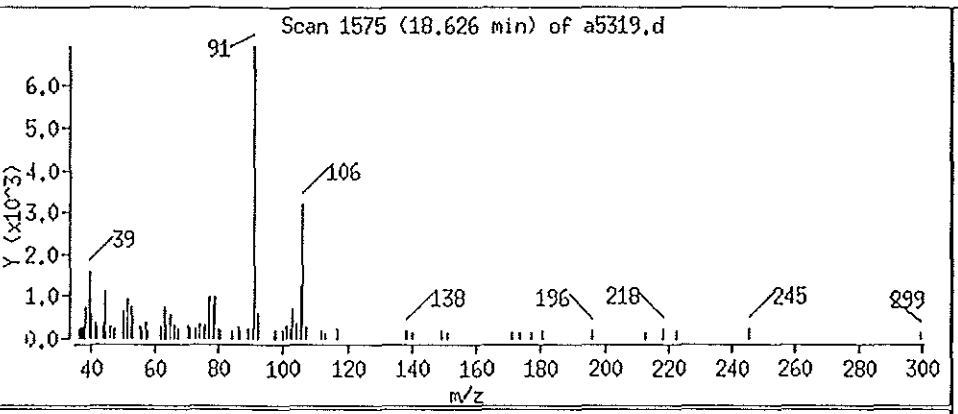


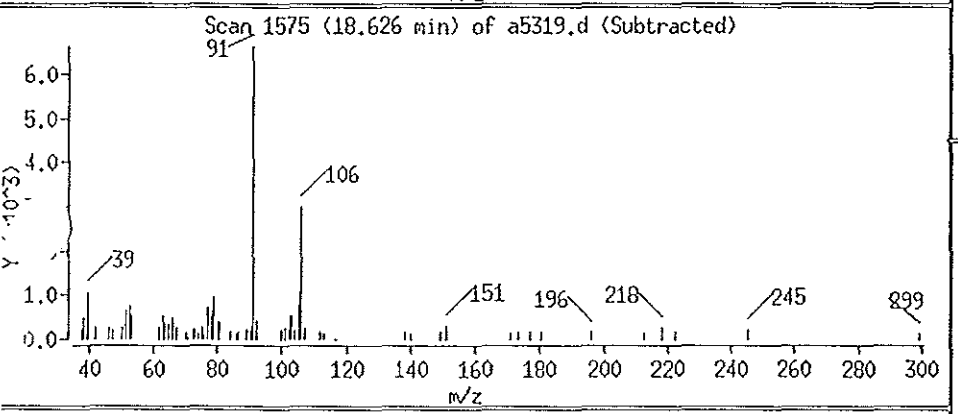


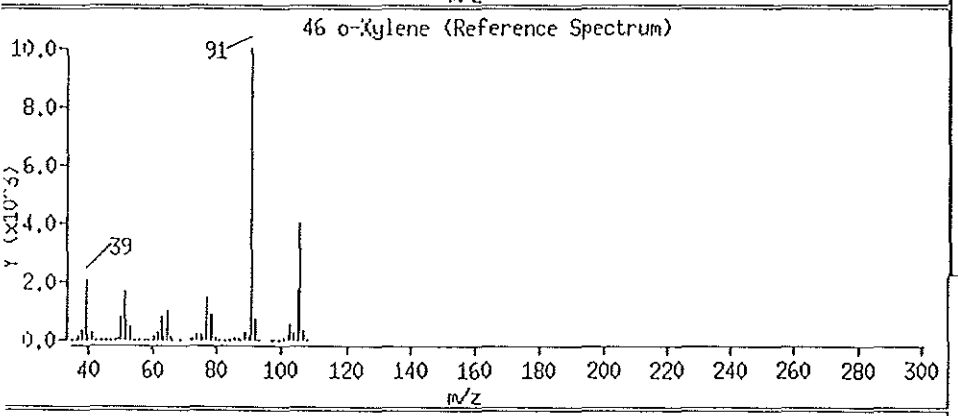


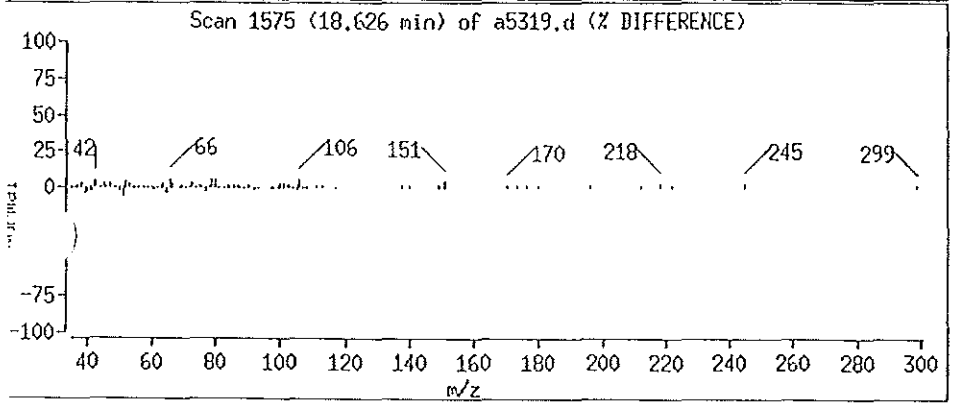
Data File: /chem/aux/msa.i/a111995.b/a5319.d
Date : 19-NOV-95 18:40
)ient ID: 17418n clj78tw02d
Instrument: msa.i
Sample Info: 17418n clj78tw02d 10x rerun
Purge Volume: 1.0
Operator: jk
Column phase: J&W DB_624
Column diameter: 0.53

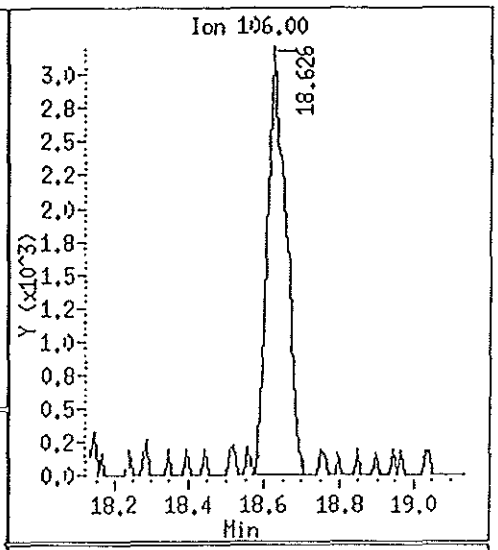
46 o-Xylene

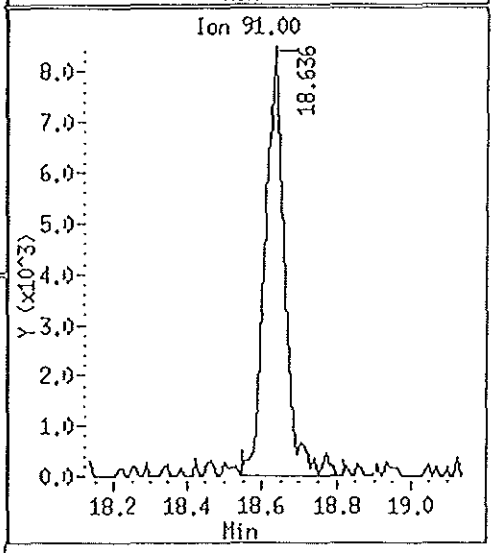












Data File: /chem/aux/msa.i/a111995.b/a5319.d

Date : 19-NOV-95 18:40

Client ID: 17418n clj78tw02d

Instrument: msa.i

Sample Info: 17418n clj78tw02d 10x rerun

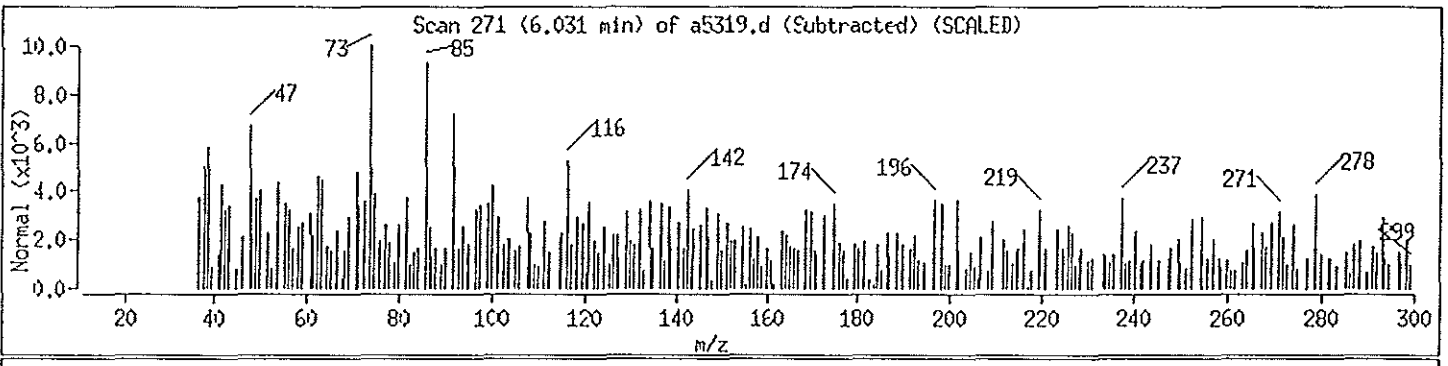
Purge Volume: 1.0

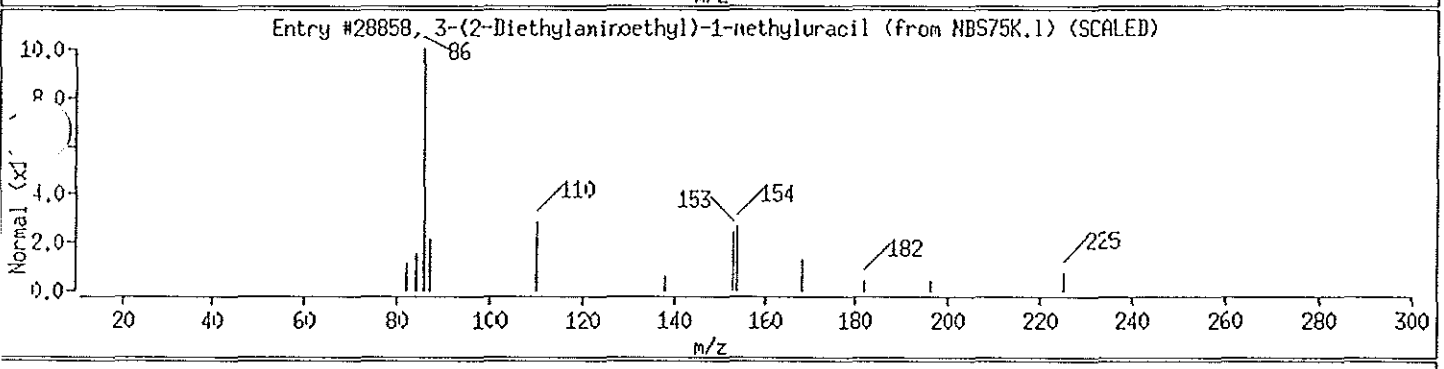
Operator: jk

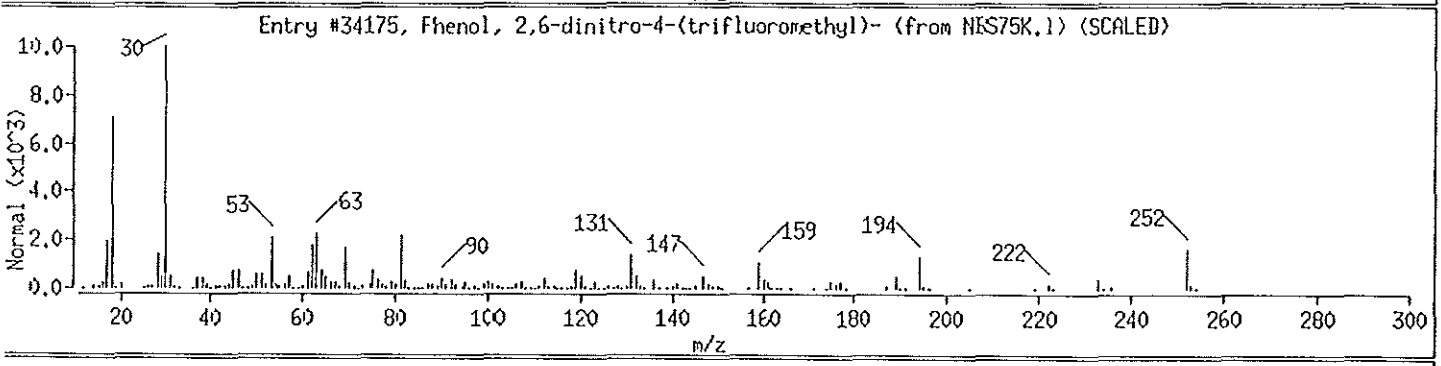
Column phase: J&W DB_624

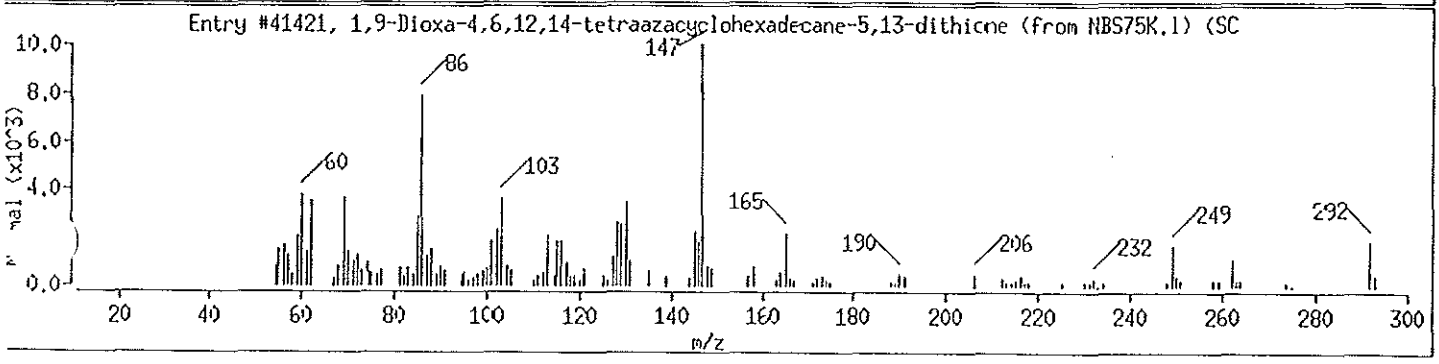
Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
3-(2-Diethylaminoethyl)-1-methyluracil	0-00-0	NBS75K.1	28858	40	C11H19N3O2	225
Phenol, 2,6-dinitro-4-(trifluoromethyl)-	393-77-1	NBS75K.1	34175	22	C7H3F3N2O5	252
1,9-Dioxa-4,6,12,14-tetraazacyclohexadec	74804-39-0	NBS75K.1	41421	15	C10H20N4O2S2	292









Data File: /chem/aux/msa.i/a111995.b/a5319.d

Date : 19-NOV-95 18:40

Client ID: 17418n clj78tw02d

Instrument: msa.i

Sample Info: 17418n clj78tw02d 10x rerun

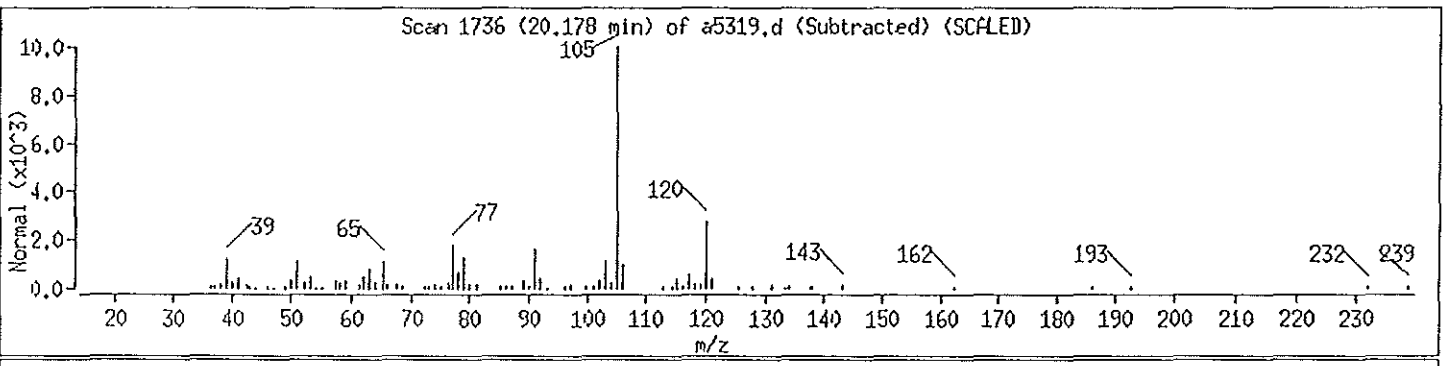
Purge Volume: 1.0

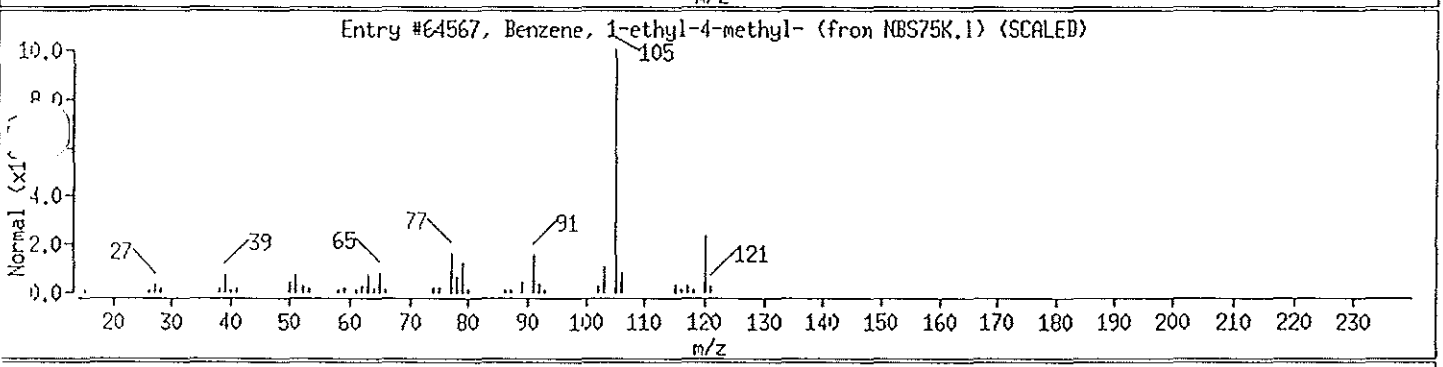
Operator: jk

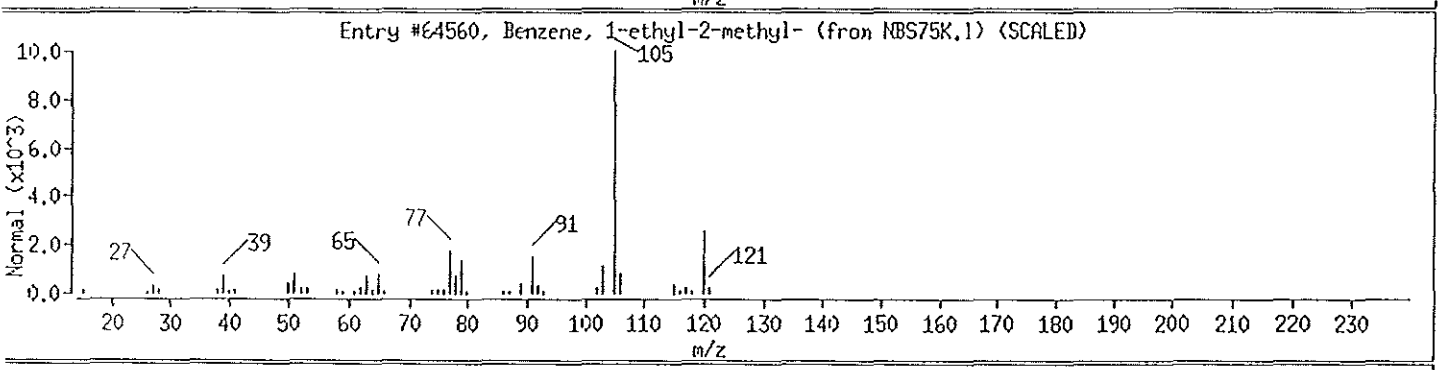
Column phase: J&W DB_624

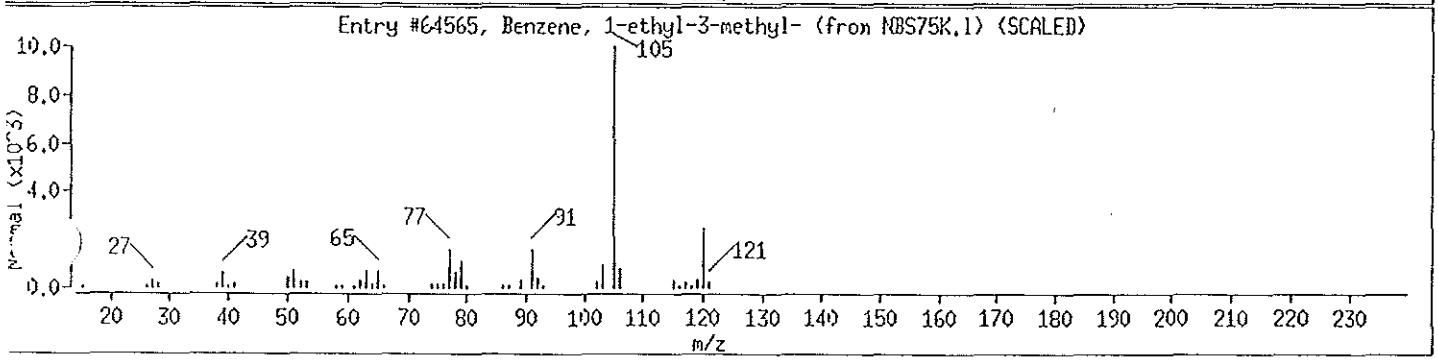
Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-ethyl-4-methyl-	622-96-8	NBS75K.1	64567	97	C9H12	120
Benzene, 1-ethyl-2-methyl-	611-14-3	NBS75K.1	64560	95	C9H12	120
Benzene, 1-ethyl-3-methyl-	620-14-4	NBS75K.1	64565	94	C9H12	120









Data File: /chem/aux/msa.i/a111995.b/a5319.d

Date : 19-NOV-95 18:40

Client ID: 17418n clj78tw02d

Instrument: msa.i

Sample Info: 17418n clj78tw02d 10x rerun

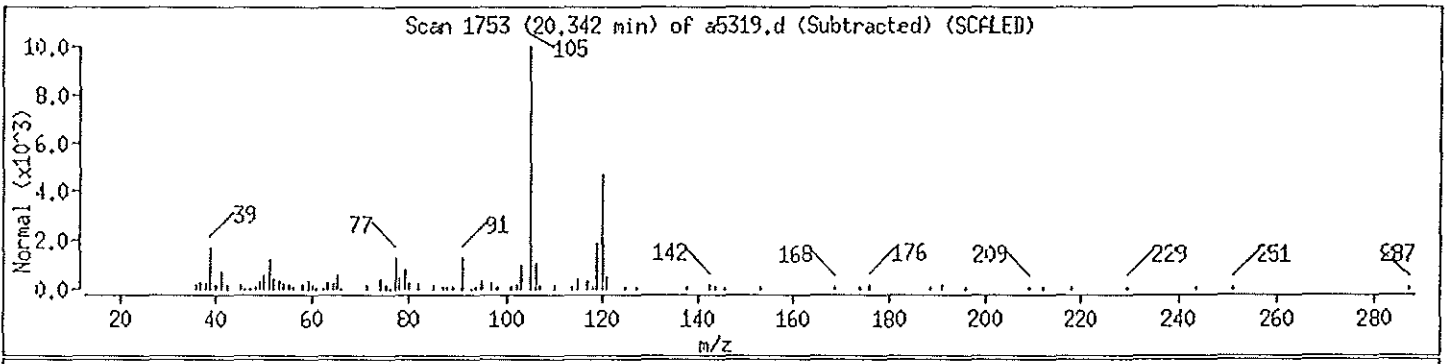
Purge Volume: 1.0

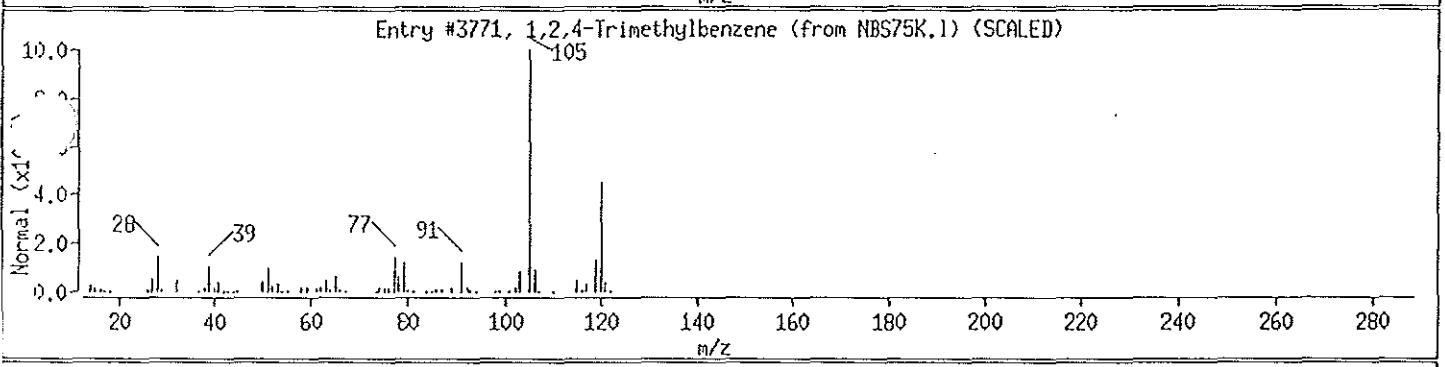
Operator: jk

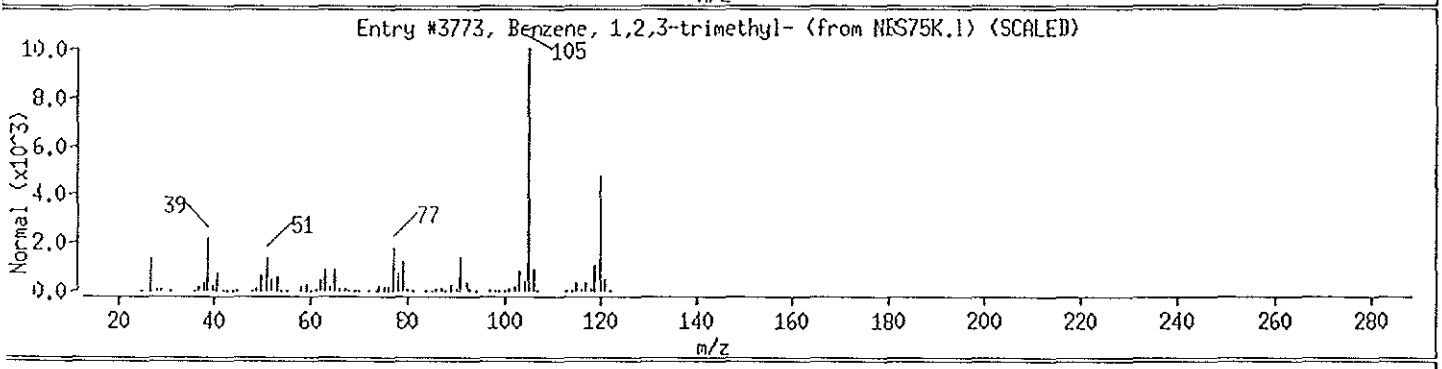
Column phase: J&W DB_624

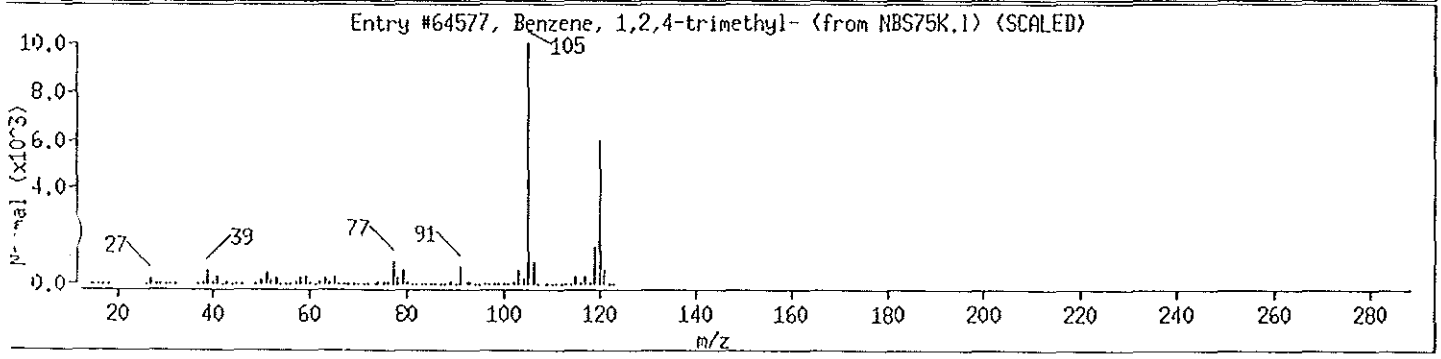
Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,2,4-Trimethylbenzene	95-36-3	NBS75K.l	3771	91	C9H12	120
Benzene, 1,2,3-trimethyl-	526-73-8	NBS75K.l	3773	91	C9H12	120
Benzene, 1,2,4-trimethyl-	95-63-6	NBS75K.l	64577	91	C9H12	120









Data File: /chem/aux/msa.i/a111995.b/a5319.d

Date : 19-NOV-95 18:40

)ient ID: 17418n clj78tw02d

Instrument: msa.i

Sample Info: 17418n clj78tw02d 10x rerun

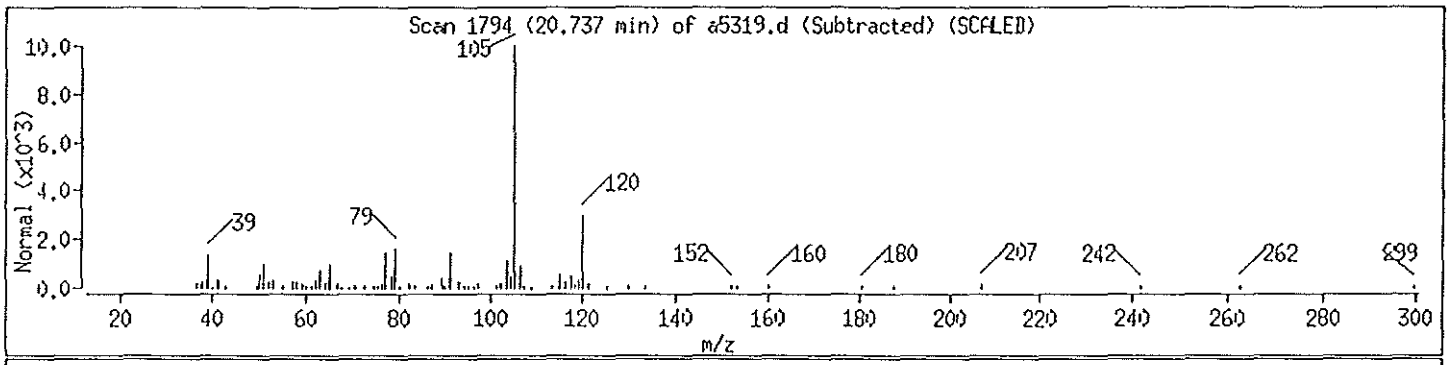
Purge Volume: 1.0

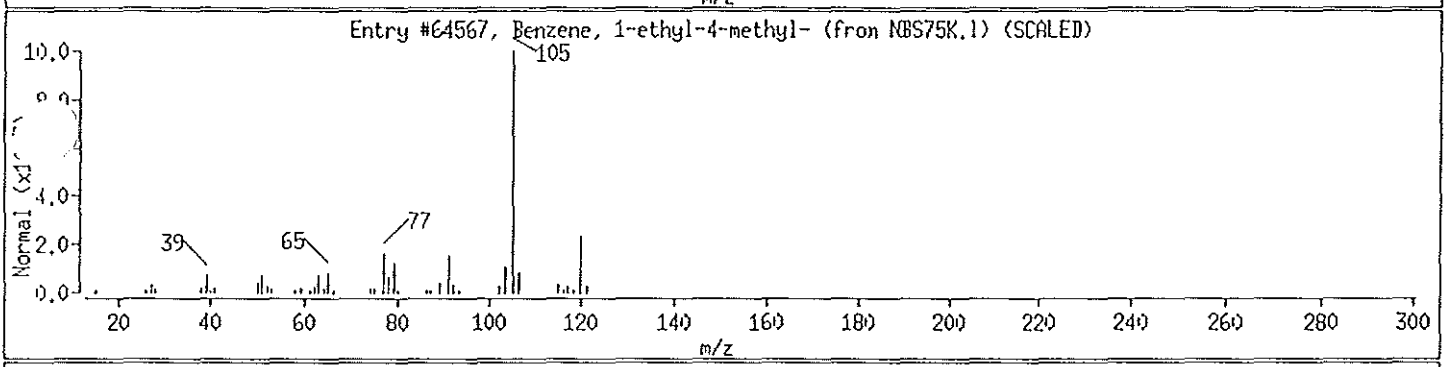
Operator: jk

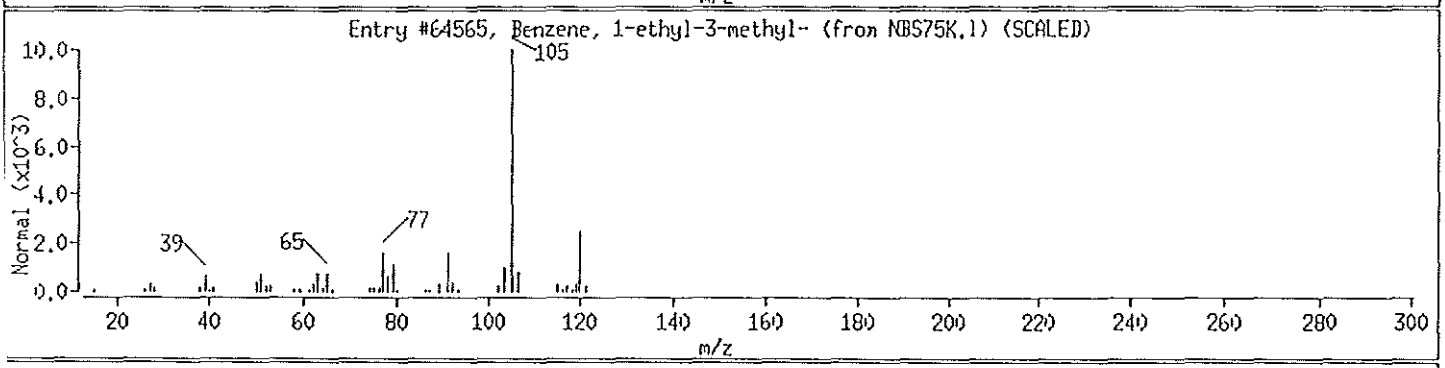
Column phase: J&W DB_624

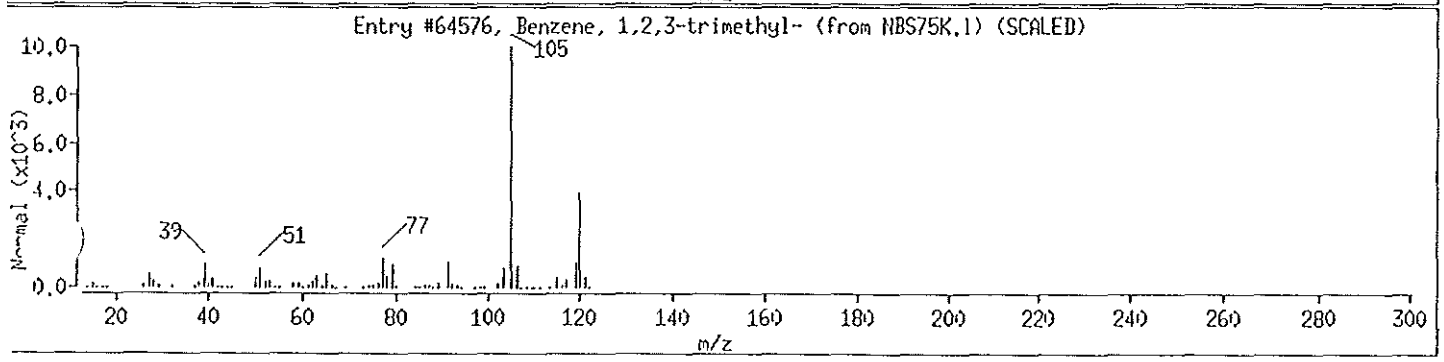
Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-ethyl-4-methyl-	622-96-8	NBS75K.l	64567	94	C9H12	120
Benzene, 1-ethyl-3-methyl-	620-14-4	NBS75K.l	64565	91	C9H12	120
Benzene, 1,2,3-trimethyl-	526-73-8	NBS75K.l	64576	91	C9H12	120









Data File: /chem/aux/msa.i/a111995.b/a5319.d

Date : 19-NOV-95 18:40

Client ID: 17418n clj78tw02d

Instrument: msa.i

Sample Info: 17418n clj78tw02d 10x rerun

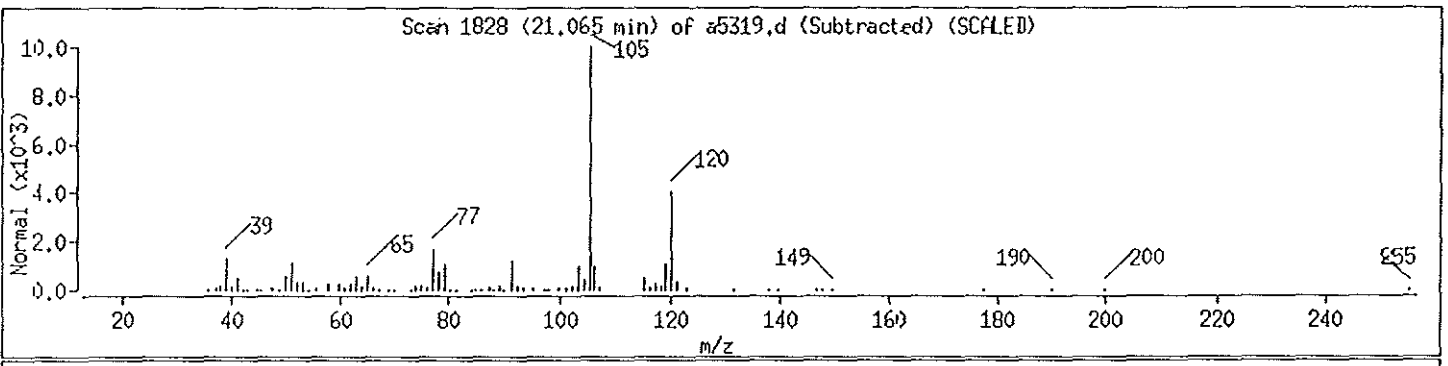
Purge Volume: 1.0

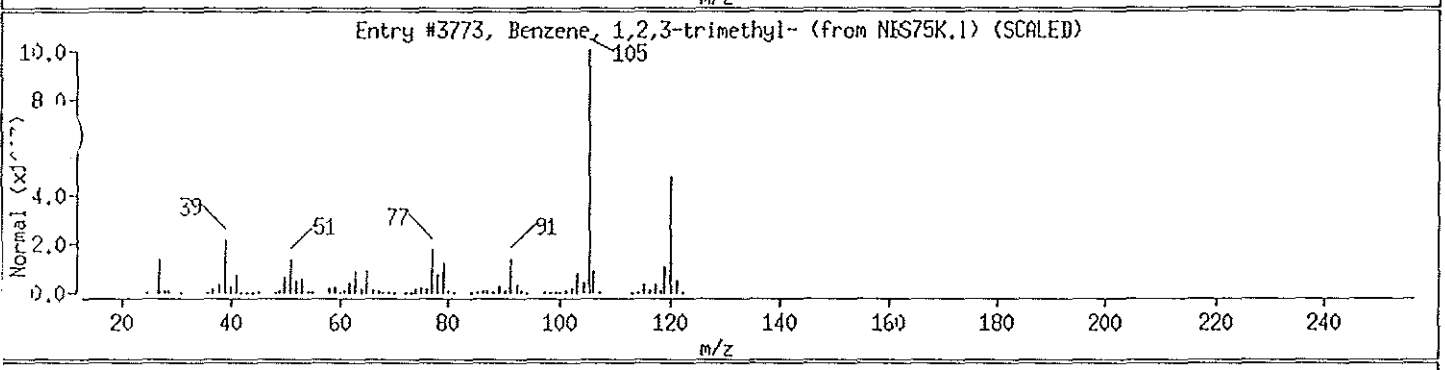
Operator: jk

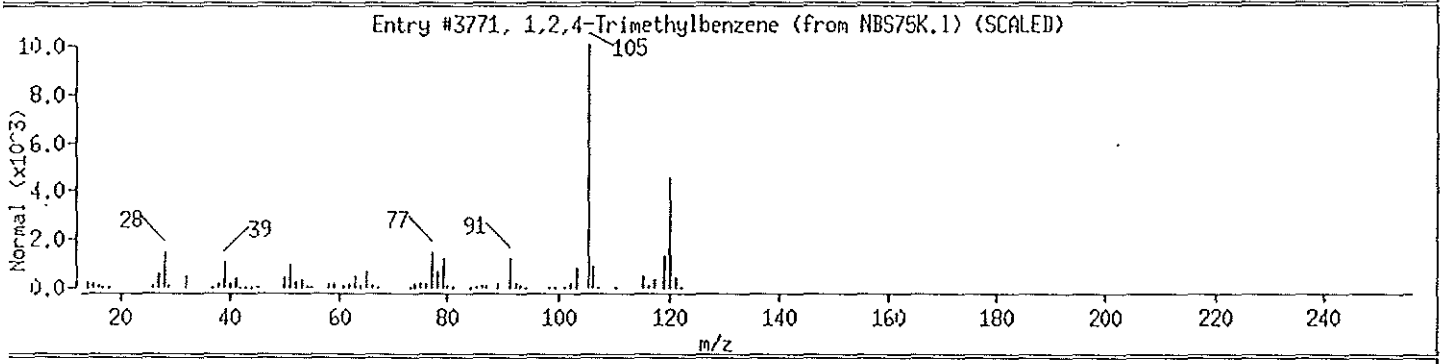
Column phase: J&W DB_624

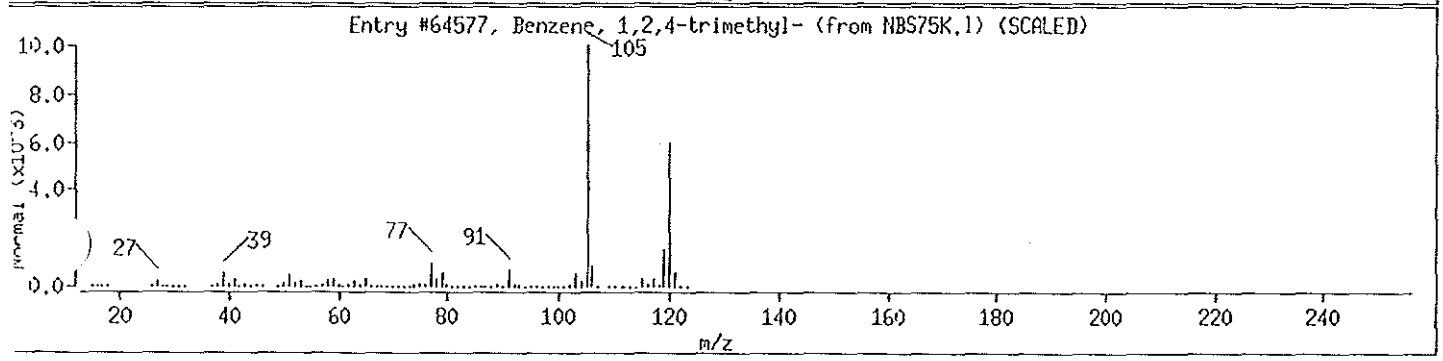
Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1,2,3-trimethyl-	526-73-8	NBS75K.1	3773	97	C9H12	120
1,2,4-Trimethylbenzene	95-36-3	NBS75K.1	3771	96	C9H12	120
Benzene, 1,2,4-trimethyl-	95-63-6	NBS75K.1	64577	94	C9H12	120









Data File: /chem/aux/msa.i/a111995.b/a5319.d

Date : 19-NOV-95 18:40

Client ID: 17418n clj78tw02d

Instrument: msa.i

Sample Info: 17418n clj78tw02d 10x rerun

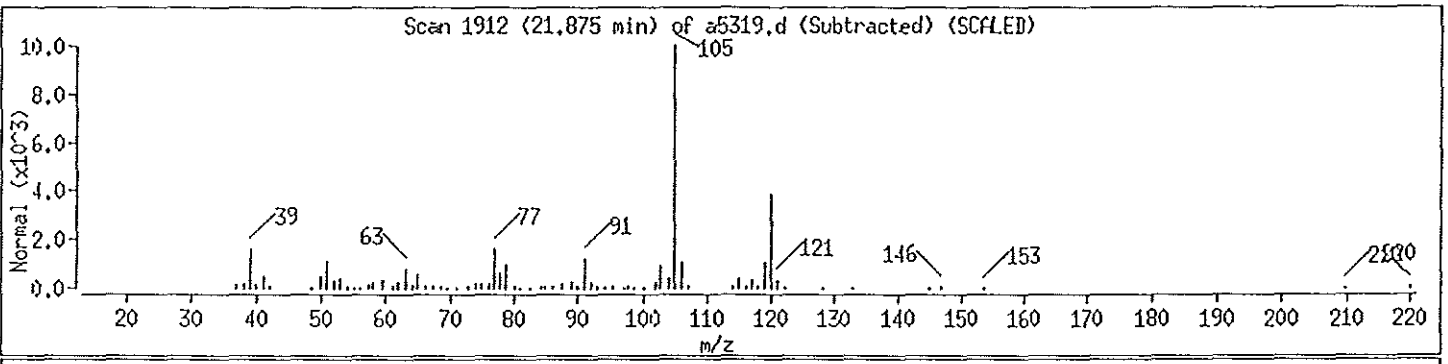
Purge Volume: 1.0

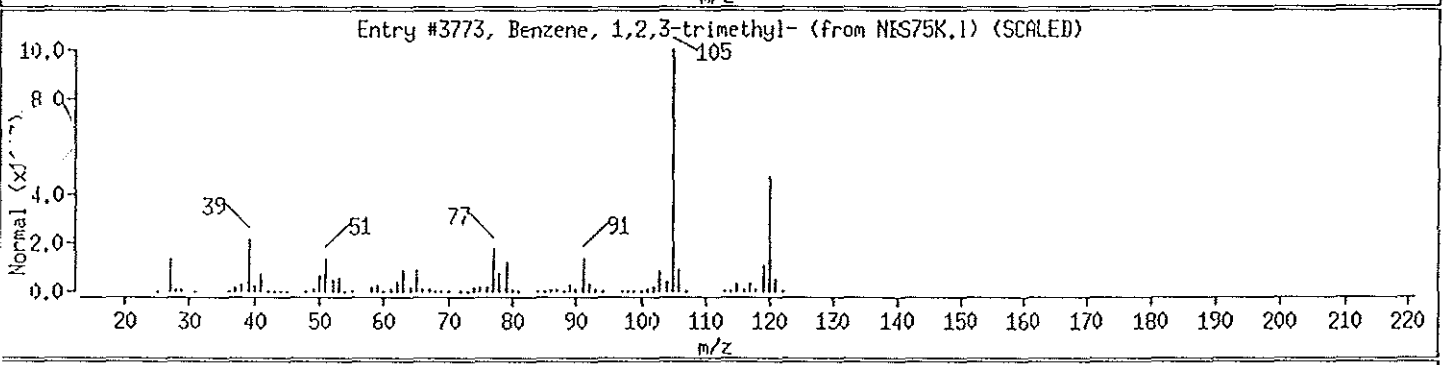
Operator: jk

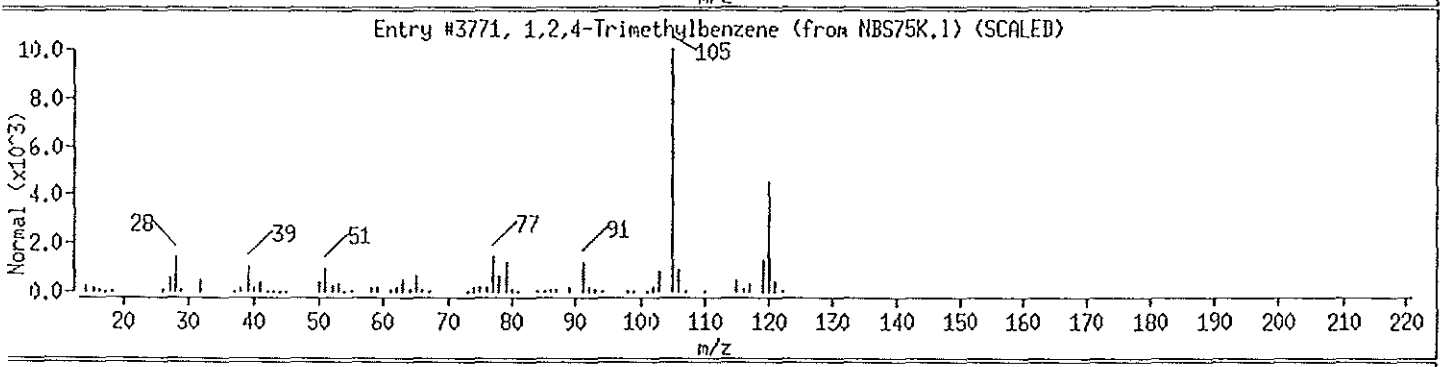
Column phase: J&W DB_624

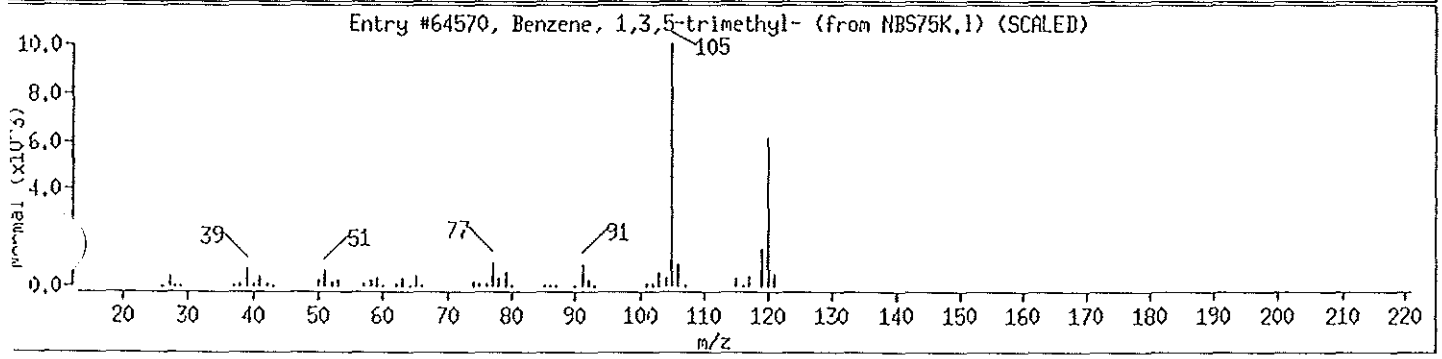
Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1,2,3-trimethyl-	526-73-8	NBS75K.l	3773	97	C9H12	120
1,2,4-Trimethylbenzene	95-36-3	NBS75K.l	3771	96	C9H12	120
Benzene, 1,3,5-trimethyl-	108-67-8	NBS75K.l	64570	95	C9H12	120









OHM Analytical Division

INITIAL CALIBRATION DATA

Start Cal Date : 18-NOV-95 15:57
End Cal Date : 18-NOV-95 16:30
Quant Method : ISTD
Target Version : 3.10
Integrator : HP RTE
Method file : /chem/aux/msa.i/a111895.b/111895_8240ambia.m
Cal Date : 22-Nov-1995 10:33 glenn
Curve Type : Average

NAESA-ok
MK

Calibration File Names:
Level 1: /chem/aux/msa.i/a111895.b/a5292.d
Level 2: /chem/aux/msa.i/a111895.b/a5293.d
Level 3: /chem/aux/msa.i/a111895.b/a5294.d
Level 4: /chem/aux/msa.i/a111895.b/a5295.d
Level 5: /chem/aux/msa.i/a111895.b/a5296.d

Compound	10 Level 1	20 Level 2	50 Level 3	100 Level 4	200 Level 5	RRF	% RSD
1 Methyl chloride	1.36822	1.87229	1.67861	1.65235	1.52452	1.61920	11.580
2 Vinyl chloride	1.53563	1.82856	1.66438	1.67536	1.51517	1.64402	7.686
3 Methyl bromide	1.05911	1.08832	0.96012	0.85535	0.77284	0.94715	14.110
4 Chloroethane	0.90251	0.90857	0.46698	0.42171	0.37390	0.61470	43.516 <-
5 Trichlorofluoromethane	2.42879	3.07945	2.52222	2.53727	1.34771	2.39509	26.600
6 Ethyl ether	1.16169	1.27732	1.12238	1.03355	1.03015	1.13602	8.148
7 Acrolein	0.22411	0.23522	0.25349	0.23289	0.21734	0.23260	5.880
8 1,1-Dichloroethylene	1.21374	1.43954	1.29166	1.24235	1.16944	1.27144	8.175
9 1,1,2-Trichlorotrifluoroethan	2.24314	2.49648	2.27153	2.13537	1.85827	2.20116	10.550
10 Acetone	0.70417	0.51149	0.48980	0.48912	0.46704	0.53232	18.287
11 Carbon disulfide	3.93746	4.73447	4.13398	4.19318	3.77550	4.15492	8.753
12 Methylene chloride	2.19762	2.10773	1.77254	1.61658	1.42708	1.82431	17.832
13 Acrylonitrile	0.50836	0.50262	0.61101	0.53522	0.51814	0.53507	8.263
14 1,2-Trans-dichloroethylene	1.31175	1.56418	1.46011	1.36003	1.28907	1.39703	8.178
15 Tert-Butyl Methyl Ether	3.67491	3.88657	3.64808	3.61308	3.43582	3.65169	4.412
16 1,1-Dichloroethane	2.90598	3.08980	2.81361	2.83486	2.55421	2.83969	6.800
18 Methyl ethyl ketone	0.04838	0.04985	0.04668	0.04094	0.04441	0.04603	7.694
17 1,2-cis-Dichloroethylene	1.51148	1.69690	1.53385	1.46200	1.35929	1.51671	7.992
19 Ethyl acetate	4.04297	4.48990	4.18098	3.95563	3.77499	4.09109	6.523
21 Chloroform	3.24775	3.64499	3.14602	3.13607	2.92550	3.22007	8.226
22 1,1,1-Trichloroethane	0.68276	0.76790	0.69961	0.69557	0.66186	0.70174	5.682
23 Carbon tetrachloride	0.62071	0.69932	0.62644	0.63104	0.60589	0.63668	5.698
26 1,2-Dichloroethane	2.56945	2.92703	2.54723	2.50030	2.25145	2.55909	9.446
25 Benzene	1.12400	1.27053	1.12606	1.07551	0.99322	1.11806	9.017
Trichloroethylene	0.39486	0.44731	0.40384	0.39713	0.36604	0.40184	7.281
27 1,2-Dichloropropane	0.41473	0.46081	0.41228	0.39313	0.38079	0.41335	7.205
30 Dichlorobromomethane	0.76851	0.79811	0.73710	0.71538	0.69456	0.74303	5.529

NONE in NAESA

Reprocessed on 11/22/95

OHM Analytical Division

INITIAL CALIBRATION DATA

Start Cal Date : 18-NOV-95 15:57
End Cal Date : 18-NOV-95 16:30
Quant Method : ISTD
Target Version : 3.10
Integrator : HP RTE
Method file : /chem/aux/msa.i/a111895.b/111895_8240ambia.m
Cal Date : 22-Nov-1995 10:33 glenn
Curve Type : Average

Compound	10 Level 1	20 Level 2	50 Level 3	100 Level 4	200 Level 5	RRF	% RSD
31 2-Chloroethylvinyl ether	0.24072	0.25671	0.20808	0.21686	0.22641	0.22976	8.412
32 cis-1,3-Dichloropropylene	0.62129	0.64286	0.58526	0.58708	0.56696	0.60069	5.106
33 Methyl-iso-butyl ketone	0.53735	0.56690	0.53403	0.50108	0.48060	0.52400	6.421
35 Toluene	0.81684	0.90084	0.76343	0.77455	0.72293	0.79572	8.497
36 trans-1,3-Dichloropropylene	0.51334	0.53364	0.49223	0.50590	0.49164	0.50735	3.420
37 1,1,2-Trichloroethane	0.37261	0.40443	0.35485	0.33892	0.33202	0.36057	8.068
)Tetrachloroethylene	0.41269	0.45889	0.43030	0.42144	0.37256	0.41918	7.469
39 2-Hexanone	0.34590	0.41152	0.36674	0.35428	0.34107	0.36390	7.789
40 Chlorodibromomethane	0.60064	0.66742	0.62875	0.60963	0.59546	0.62038	4.706
41 Ethylene dibromide	0.64062	0.66866	0.62563	0.61606	0.59455	0.62910	4.406
43 Chlorobenzene	1.02393	1.08744	0.95208	0.96160	0.88265	0.98154	7.901
44 Ethylbenzene	0.46448	0.52278	0.45119	0.45368	0.42493	0.46341	7.818
45 m+p-Xylenes	0.56594	0.61252	0.53848	0.53165	0.48865	0.54740	8.353
46 o-Xylene	0.57160	0.59529	0.52827	0.52918	0.47901	0.54067	8.286
47 Styrene	0.95540	1.07901	0.96007	0.95134	0.87891	0.96494	7.457
48 Bromoform	0.44604	0.50768	0.47711	0.46106	0.46672	0.47172	4.881
50 1,1,2,2-Tetrachloroethane	0.67651	0.75143	0.64479	0.64526	0.63055	0.66971	7.268
51 1,3-Dichlorobenzene	0.88059	0.92226	0.81049	0.84150	0.75008	0.84098	7.835
52 1,4-Dichlorobenzene	0.88881	0.94805	0.81945	0.84604	0.77557	0.85559	7.720
53 1,2-Dichlorobenzene	0.81445	0.84939	0.75137	0.76470	0.70519	0.77702	7.225
$ 24 1,2-Dichloroethane-D4 (SURR)	2.35446	2.36379	2.16904	2.11489	1.94432	2.18930	8.032
$ 34 Toluene-D8 (SURR)	1.26214	1.22590	1.19169	1.14333	1.07621	1.17985	6.157
$ 49 Bromofluorobenzene (SURR)	0.75289	0.74676	0.70964	0.69783	0.63401	0.70823	6.734

Data File: /chem/aux/msa.i/a111995.b/a5312.d
Report Date: 22-Nov-1995 11:05

OHM Analytical Division

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msa.i
Lab File ID: a5312.d
Analysis Type: WATER
Lab Sample ID:
Quant Type: ISTD

Injection Date: 19-NOV-95 14:40
Init. Calibration Date(s): 11/18/95 11/18/95
Init. Calibration Times: 15:57 16:30
Method File: /chem/aux/msa.i/a111995.b/111895_8240am

CLP-OK
MESA-OK
GMC

	COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D	
	1 Methyl chloride	1.619	1.452	0.300	10.3	25.0	
	2 Vinyl chloride	1.644	1.485	0.010	9.7	25.0	
	3 Methyl bromide	0.947	0.865	0.010	8.7	25.0	
	4 Chloroethane	0.615	0.459	0.010	25.3	25.0	<- Nonc
	5 Trichlorofluoromethane	2.395	2.680	0.010	11.9	25.0	
	6 Ethyl ether	1.136	1.088	0.010	4.2	25.0	
	7 Acrolein	0.233	0.217	0.010	6.6	25.0	
	8 1,1-Dichloroethylene	1.271	1.315	0.010	3.4	25.0	
	9 1,1,2-Trichlorotrifluoroetha	2.201	2.311	0.010	5.0	25.0	
	10 Acetone	0.532	0.503	0.010	5.4	25.0	
	11 Carbon disulfide	4.155	3.988	0.010	4.0	25.0	
	12 Methylene chloride	1.824	1.636	0.010	10.3	25.0	
	13 Acrylonitrile	0.535	0.501	0.010	6.3	25.0	
	14 1,2-Trans-dichloroethylene	1.397	1.440	0.010	3.0	25.0	
	15 Tert-Butyl Methyl Ether	3.652	3.627	0.010	0.7	25.0	
	16 1,1-Dichloroethane	2.840	2.895	0.300	1.9	25.0	
	18 Methyl ethyl ketone	0.046	0.043	0.010	6.4	25.0	
	17 1,2-cis-Dichloroethylene	1.517	1.557	0.010	2.7	25.0	
	19 Ethyl acetate	4.091	3.836	0.010	6.2	25.0	
	21 Chloroform	3.220	3.333	0.010	3.5	25.0	
	22 1,1,1-Trichloroethane	0.702	0.718	0.010	2.3	25.0	
	23 Carbon tetrachloride	0.637	0.637	0.010	0.0	25.0	
S	24 1,2-Dichloroethane-D4 (SURR)	2.189	2.121	0.010	3.1	25.0	
	26 1,2-Dichloroethane	2.559	2.498	0.010	2.4	25.0	
	25 Benzene	1.118	1.156	0.010	3.4	25.0	
	28 Trichloroethylene	0.402	0.423	0.010	5.3	25.0	
	29 1,2-Dichloropropane	0.413	0.431	0.010	4.2	25.0	
	30 Dichlorobromomethane	0.743	0.709	0.010	4.6	25.0	
	31 2-Chloroethylvinyl ether	0.230	0.234	0.010	1.7	25.0	
	32 cis-1,3-Dichloropropylene	0.601	0.611	0.010	1.7	25.0	
	33 Methyl-iso-butyl ketone	0.524	0.494	0.010	5.6	25.0	
S	34 Toluene-D8 (SURR)	1.180	1.242	0.010	5.3	25.0	
	35 Toluene	0.796	0.842	0.010	5.8	25.0	
	36 trans-1,3-Dichloropropylene	0.507	0.559	0.010	10.1	25.0	
	37 1,1,2-Trichloroethane	0.361	0.366	0.010	1.4	25.0	
	38 Tetrachloroethylene	0.419	0.446	0.010	6.3	25.0	
	39 2-Hexanone	0.364	0.336	0.010	7.5	25.0	
	40 Chlorodibromomethane	0.620	0.636	0.010	2.5	25.0	
	41 Ethylene dibromide	0.629	0.666	0.010	5.9	25.0	
	43 Chlorobenzene	0.982	1.025	0.300	4.4	25.0	

Reprocessed 11/22

OHM Analytical Division

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msa.i
Lab File ID: a5312.d
Analysis Type: WATER
Lab Sample ID:
Quant Type: ISTD

Injection Date: 19-NOV-95 14:40
Init. Calibration Date(s): 11/18/95 11/18/95
Init. Calibration Times: 15:57 16:30
Method File: /chem/aux/msa.i/a111995.b/111895_8240am

COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D
44 Ethylbenzene	0.463	0.487	0.010	5.1	25.0
45 m+p-Xylenes	0.547	0.578	0.010	5.5	25.0
46 o-Xylene	0.541	0.564	0.010	4.4	25.0
47 Styrene	0.965	1.011	0.010	4.8	25.0
48 Bromoform	0.472	0.464	0.250	1.7	25.0
$ 49 Bromofluorobenzene (SURR)	0.708	0.699	0.010	1.3	25.0
50 1,1,2,2-Tetrachloroethane	0.670	0.650	0.300	3.0	25.0
51 1,3-Dichlorobenzene	0.841	0.894	0.010	6.3	25.0
52 1,4-Dichlorobenzene	0.856	0.905	0.010	5.8	25.0
53 1,2-Dichlorobenzene	0.777	0.805	0.010	3.6	25.0

Data File: /chem/msa.i/a112495.b/a5392.d
Report Date: 24-Nov-1995 10:05

OHM Analytical Division

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msa.i
Lab File ID: a5392.d
Analysis Type: WATER
Lab Sample ID:
Quant Type: ISTD

Injection Date: 24-NOV-95 09:32
Init. Calibration Date(s): 11/18/95 11/18/95
Init. Calibration Times: 15:57 16:30
Method File: /chem/msa.i/a112495.b/111895_8240ambia.

NELSA-CLP ok

	COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D	
	1 Methyl chloride	1.619	1.264	0.300	21.9	25.0	
	2 Vinyl chloride	1.644	1.099	0.010	33.2	25.0	<-
	3 Methyl bromide	0.947	0.649	0.010	31.5	25.0	<- ~~NONE~~
	4 Chloroethane	0.615	0.370	0.010	39.7	25.0	<- NONE
	5 Trichlorofluoromethane	2.395	2.739	0.010	14.4	25.0	
	6 Ethyl ether	1.136	1.143	0.010	0.6	25.0	
	7 Acrolein	0.233	0.254	0.010	9.2	25.0	
	8 1,1-Dichloroethylene	1.271	1.096	0.010	13.8	25.0	
	9 1,1,2-Trichlorotrifluoroetha	2.201	2.511	0.010	14.1	25.0	
	10 Acetone	0.532	0.463	0.010	12.9	25.0	
	11 Carbon disulfide	4.155	3.545	0.010	14.7	25.0	
	12 Methylene chloride	1.824	1.236	0.010	32.3	25.0	<- NONE
	13 Acrylonitrile	0.535	0.520	0.010	2.8	25.0	
	14 1,2-Trans-dichloroethylene	1.397	1.210	0.010	13.4	25.0	
	15 Tert-Butyl Methyl Ether	3.652	3.784	0.010	3.6	25.0	
	16 1,1-Dichloroethane	2.840	2.786	0.300	1.9	25.0	
	18 Methyl ethyl ketone	0.046	0.046	0.010	0.4	25.0	
	17 1,2-cis-Dichloroethylene	1.517	1.323	0.010	12.8	25.0	
	19 Ethyl acetate	4.091	3.982	0.010	2.7	25.0	
	21 Chloroform	3.220	3.359	0.010	4.3	25.0	
	22 1,1,1-Trichloroethane	0.702	0.717	0.010	2.2	25.0	
	23 Carbon tetrachloride	0.637	0.646	0.010	1.4	25.0	
$	24 1,2-Dichloroethane-D4 (SURR)	2.189	2.008	0.010	8.3	25.0	
	26 1,2-Dichloroethane	2.559	2.470	0.010	3.5	25.0	
	25 Benzene	1.118	1.146	0.010	2.5	25.0	
	28 Trichloroethylene	0.402	0.438	0.010	8.9	25.0	
	29 1,2-Dichloropropane	0.413	0.415	0.010	0.3	25.0	
	30 Dichlorobromomethane	0.743	0.579	0.010	22.0	25.0	
	31 2-Chloroethylvinyl ether	0.230	0.234	0.010	1.8	25.0	
	32 cis-1,3-Dichloropropylene	0.601	0.627	0.010	4.4	25.0	
	33 Methyl-iso-butyl ketone	0.524	0.502	0.010	4.3	25.0	
$	34 Toluene-D8 (SURR)	1.180	1.256	0.010	6.4	25.0	
	35 Toluene	0.796	0.844	0.010	6.1	25.0	
	36 trans-1,3-Dichloropropylene	0.507	0.551	0.010	8.6	25.0	
	37 1,1,2-Trichloroethane	0.361	0.375	0.010	4.0	25.0	
	38 Tetrachloroethylene	0.419	0.451	0.010	7.5	25.0	
	39 2-Hexanone	0.364	0.344	0.010	5.5	25.0	
	40 Chlorodibromomethane	0.620	0.526	0.010	15.3	25.0	
	41 Ethylene dibromide	0.629	0.669	0.010	6.4	25.0	
	43 Chlorobenzene	0.982	1.031	0.300	5.1	25.0	

2 out - ok
< 40% D

OHM Analytical Division

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msa.i
Lab File ID: a5392.d
Analysis Type: WATER
Lab Sample ID:
Quant Type: ISTD

Injection Date: 24-NOV-95 09:32
Init. Calibration Date(s): 11/18/95 11/18/95
Init. Calibration Times: 15:57 16:30
Method File: /chem/msa.i/a112495.b/111895_8240ambia.

COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D
44 Ethylbenzene	0.463	0.505	0.010	9.0	25.0
45 m+p-Xylenes	0.547	0.602	0.010	9.9	25.0
46 o-Xylene	0.541	0.597	0.010	10.5	25.0
47 Styrene	0.965	1.047	0.010	8.5	25.0
48 Bromoform	0.472	0.488	0.250	3.4	25.0
$ 49 Bromofluorobenzene (SURR)	0.708	0.729	0.010	2.9	25.0
50 1,1,2,2-Tetrachloroethane	0.670	0.694	0.300	3.7	25.0
51 1,3-Dichlorobenzene	0.841	0.937	0.010	11.4	25.0
52 1,4-Dichlorobenzene	0.856	0.965	0.010	12.8	25.0
53 1,2-Dichlorobenzene	0.777	0.900	0.010	15.8	25.0

Data File: /chem/aux/msa.i/a111895.b/a5288.d

Date : 18-NOV-95 13:17

)b Sample ID:

Instrument: msa.i

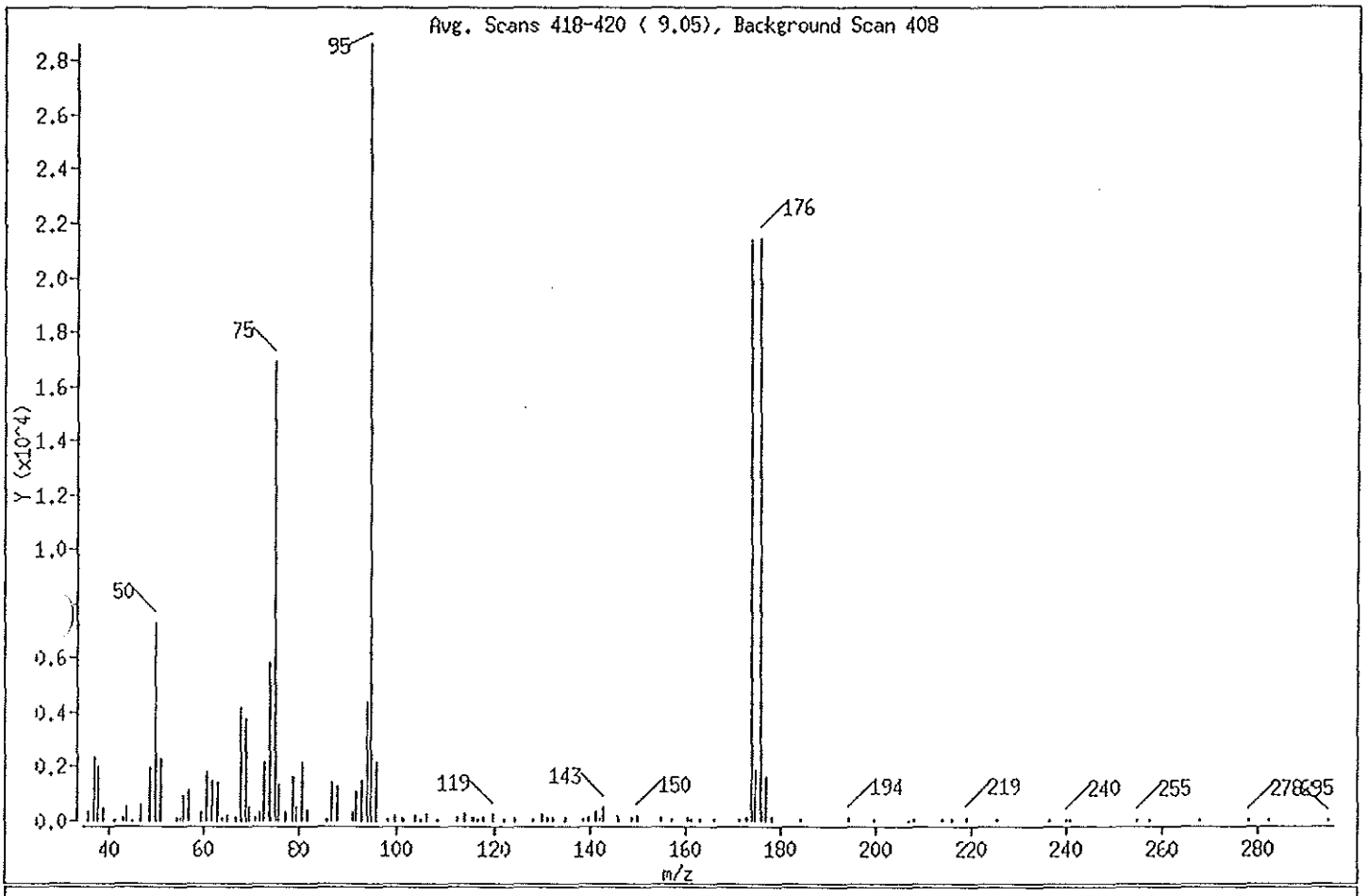
Sample Info: bfb tune

Operator: jk

Column phase: J&W DB-624

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	25.58
75	30.00 - 60.00% of mass 95	59.07
96	5.00 - 9.00% of mass 95	7.56
173	Less than 2.00% of mass 174	0.46 (0.61)
174	50.00 - 100.00% of mass 95	74.72
175	5.00 - 9.00% of mass 174	6.60 (8.83)
176	95.00 - 101.00% of mass 174	74.93 (100.29)
177	5.00 - 9.00% of mass 176	5.72 (7.63)

Data File: /chem/aux/msa.i/a111895.b/a5288.d

Date : 18-NOV-95 13:17

Lab Sample ID:

Instrument: msa.i

Sample Info: bfb tune

Operator: jk

Column phase: J&W DB-624

Column diameter: 0.53

Data File: a5288.d
Spectrum : Avg. Scans 418-420 (9.05), Background Scan 408
Largest m/z: 95.00
Number of peaks: 110

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.90	369	73.05	2137	114.00	265	165.90	56
37.00	2370	74.05	5853	115.60	131	171.20	82
38.00	2016	75.05	16912	115.80	129	172.90	131
39.10	442	76.05	1387	116.80	78	173.90	21392
41.20	50	77.65	328	117.90	163	174.90	1890
43.10	137	78.85	1604	119.60	304	175.90	21456
44.00	542	79.85	536	119.90	62	176.90	1637
45.00	9	80.85	2135	122.10	56	178.10	114
46.90	638	81.95	405	124.15	163	184.20	50
49.00	1973	85.85	50	127.85	53	194.50	138
50.00	7325	86.95	1414	129.85	290	199.55	67
51.00	2313	87.95	1269	130.85	102	206.75	26
54.45	106	90.90	320	132.05	135	208.05	53
55.15	148	91.90	1106	134.95	133	213.95	94
56.05	919	92.90	1504	138.55	54	215.95	55
57.05	1181	94.00	4429	139.85	131	218.95	117
59.85	319	95.00	28632	141.05	329	225.15	52
61.05	1845	96.10	2165	141.85	106	236.40	54
61.95	1516	98.10	79	142.85	544	239.90	62
63.05	1409	99.60	183	145.65	171	240.80	60
64.05	103	99.90	68	145.95	73	254.80	77
65.15	210	101.10	125	148.65	116	257.20	53
67.05	161	101.80	54	150.05	186	267.95	68
68.05	4192	103.90	170	154.85	120	277.95	65
69.05	3783	105.10	64	157.05	58	282.15	63
69.85	564	106.00	300	160.60	108	294.75	52
71.25	152	108.40	90	161.00	61		
72.05	354	112.60	115	163.10	64		

Data File: /chem/aux/msa.i/a111995.b/a5311.d

Date : 19-NOV-95 13:41

ient ID: bfb tune

Instrument: msa.i

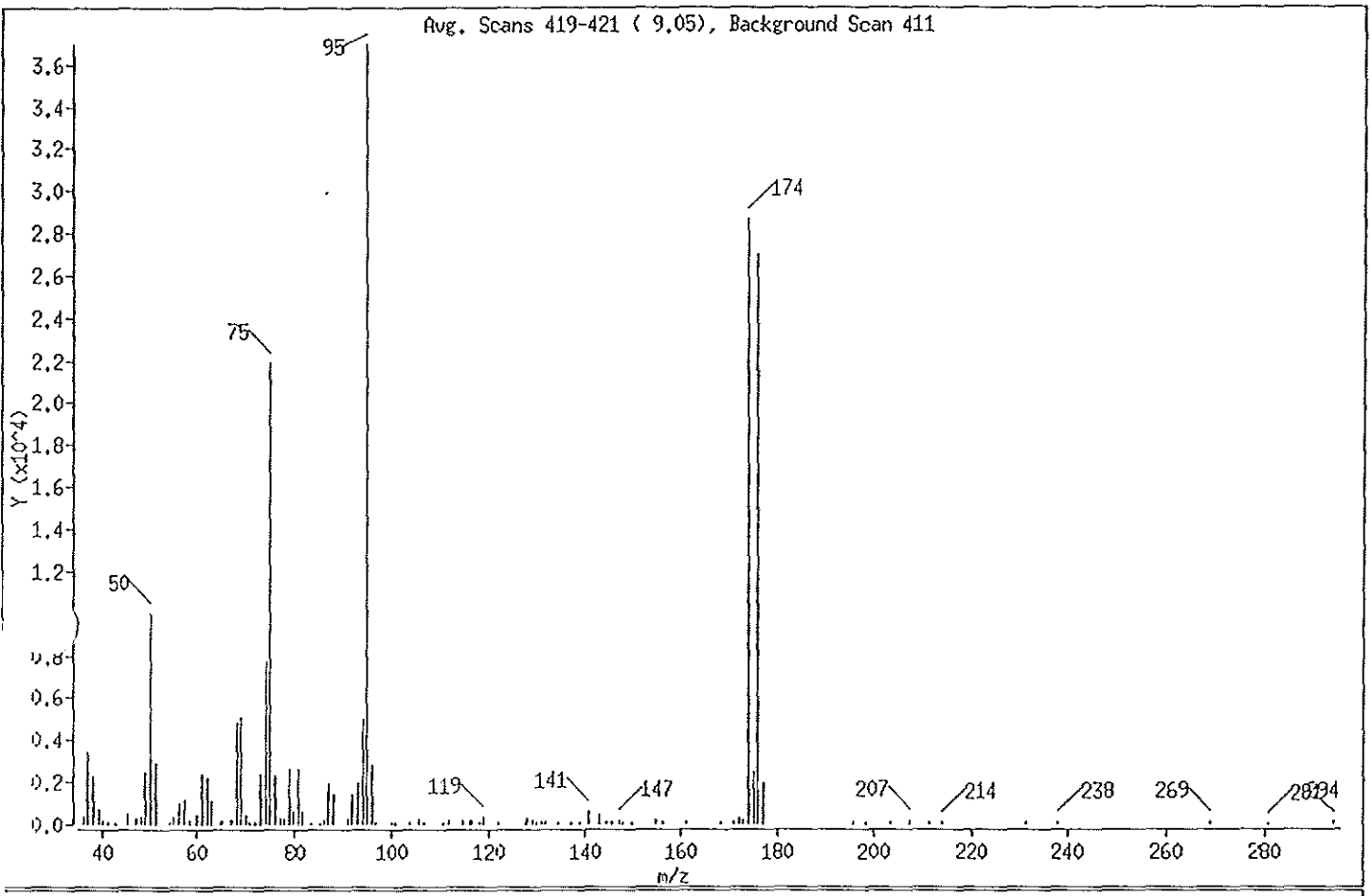
Sample Info: bfb tune

Operator: jk

Column phase: J&W DB-624

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	27.05
75	30.00 - 66.00% of mass 95	59.23
96	5.00 - 9.00% of mass 95	7.69
173	Less than 2.00% of mass 174	0.36 (0.46)
174	50.00 - 120.00% of mass 95	77.55
175	4.00 - 9.00% of mass 174	6.72 (8.66)
176	93.00 - 101.00% of mass 174	72.90 (94.00)
177	5.00 - 9.00% of mass 176	5.11 (7.01)

Data File: /chem/aux/msa.i/a111995.b/a5311.d
Date : 19-NOV-95 13:41
)ient ID: bfb tune
Sample Info: bfb tune

Instrument: msa.i

Operator: jk

Column phase: J&W DB-624

Column diameter: 0.53

Data File: a5311.d
Spectrum : Avg. Scans 419-421 (9.05), Background Scan 411
Largest m/z: 95.00
Number of peaks: 105

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	383	68.95	5068	100.70	79	147.75	65
37.00	3411	70.15	457	104.00	112	149.75	61
38.00	2316	70.75	50	105.60	179	154.85	160
39.10	743	72.05	103	105.90	252	156.15	113
40.00	199	73.05	2322	106.70	64	161.00	116
41.00	97	74.05	7685	110.60	55	168.10	50
42.40	99	74.95	21880	111.70	143	171.00	75
42.90	16	75.95	2258	114.80	168	171.90	245
45.00	542	77.15	261	115.80	202	172.70	132
47.00	300	77.75	281	116.70	218	173.90	28648
48.00	330	78.85	2660	118.00	126	174.90	2482
49.00	2488	79.95	570	118.80	384	175.90	26928
50.00	9991	80.85	2601	122.00	76	176.90	1888
51.00	2911	81.75	645	127.45	56	195.75	63
54.15	103	83.45	31	127.85	221	198.45	81
54.85	381	85.55	2	128.95	203	203.35	51
55.95	927	86.05	138	129.95	130	207.25	188
57.05	1162	86.85	1922	130.95	53	211.55	50
58.15	170	87.95	1388	131.85	56	214.15	57
59.95	471	91.10	264	134.25	60	231.40	53
60.95	2365	92.00	1397	137.15	75	238.40	54
61.95	2164	92.90	1921	139.05	51	268.95	63
62.95	1096	94.00	5000	140.85	592	280.85	23
64.55	100	95.00	36936	142.95	441	294.45	61
65.05	164	96.00	2841	144.55	54		
67.15	163	96.90	123	145.75	109		
68.05	4807	100.20	61	147.05	170		

Data File: /chem/msa.i/a112495.b/a5391.d

Date : 24-NOV-95 09:08

)ent ID: bfb tune

Sample Info: bfb tune (di)

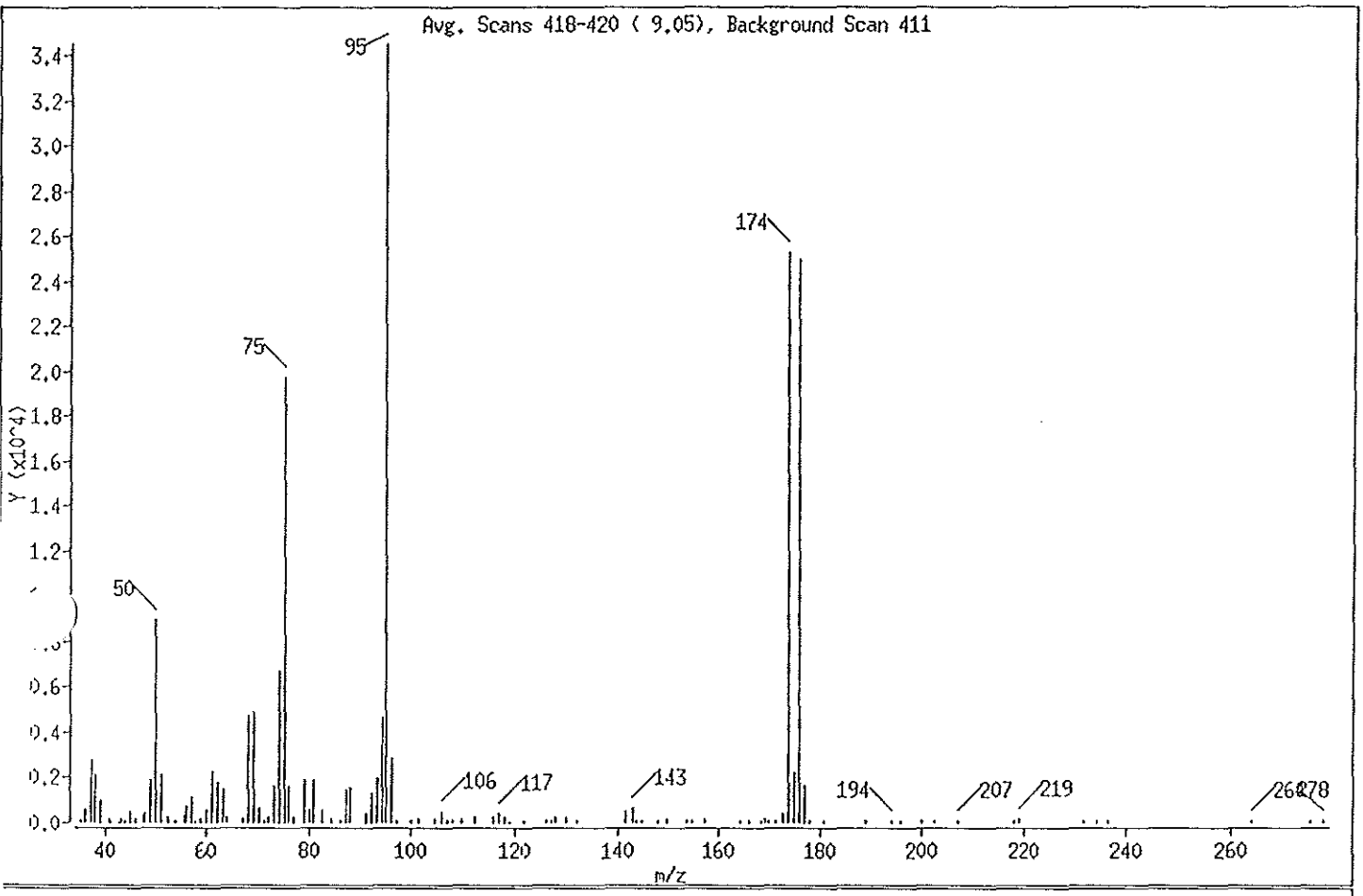
Column phase: J&W DB-624

1 bfb

Instrument: msa.i

Operator: jk

Column diameter: 0.53



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	25.90
75	30.00 - 60.00% of mass 95	57.26
96	5.00 - 9.00% of mass 95	8.16
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	73.27
175	5.00 - 9.00% of mass 174	6.37 (8.69)
176	95.00 - 101.00% of mass 174	72.31 (98.69)
177	5.00 - 9.00% of mass 176	4.83 (6.68)

Data File: /chem/msa.i/a112495.b/a5391.d
Date : 24-NOV-95 09:08
ient ID: bfb tune
Instrument: msa.i
Sample Info: bfb tune (di)
Operator: jk
Column phase: J&W DB-624
Column diameter: 0.53

Data File: a5391.d
Spectrum : Avg. Scans 418-420 (9.05), Background Scan 411
Largest m/z: 95.00
Number of peaks: 109

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.40	65	63.75	242	101.10	186	168.30	50
36.10	589	66.95	191	104.40	198	169.10	141
37.10	2782	68.05	4732	105.90	496	169.90	52
38.00	2140	68.95	4876	107.00	53	171.30	59
39.00	977	69.95	658	107.80	88	172.60	379
40.60	151	71.35	89	109.80	131	173.90	25272
41.10	63	71.85	279	112.30	214	174.90	2197
42.50	18	72.95	1607	115.80	235	175.80	24944
43.10	165	73.95	6725	116.90	413	176.80	1667
44.00	113	74.95	19752	117.80	228	178.00	50
45.10	497	75.95	1668	118.90	36	180.70	59
46.00	150	76.95	231	121.80	56	188.90	64
47.50	326	78.85	1874	126.05	60	193.90	98
48.00	367	79.95	554	127.05	60	195.55	67
49.00	1894	80.85	1864	127.85	205	200.05	57
50.00	8936	82.55	605	130.05	238	202.35	62
51.00	2120	84.25	136	131.95	51	206.95	101
52.40	273	85.95	50	141.65	507	217.85	53
53.85	52	86.95	1459	142.85	618	218.85	174
55.65	355	87.95	1575	143.75	55	231.60	74
56.05	762	91.00	387	144.85	117	234.20	68
56.95	1169	92.00	1341	147.95	117	236.30	58
57.85	69	93.00	1963	149.75	161	263.90	82
58.85	149	94.00	4657	153.75	95	275.75	58
59.95	584	95.00	34496	154.75	75	278.15	51
61.05	2273	96.00	2815	157.05	167		
62.15	1762	97.00	88	164.30	50		
63.05	1502	99.90	107	166.10	51		

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0201

VBLK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: N1V4782V

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: A5300

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: not dec. N/A Date Analyzed: 11/18/95

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

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

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	5	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	5	U
75-00-3	Chloroethane	5	U
75-09-2	Methylene Chloride	4	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	Methyl-iso-butyl ketone	10	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethylene	5	
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

0202

VBLK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: _____ SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: N1V4782V

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: A5300

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: not dec. N/A Date Analyzed: 11/18/95

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 1

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

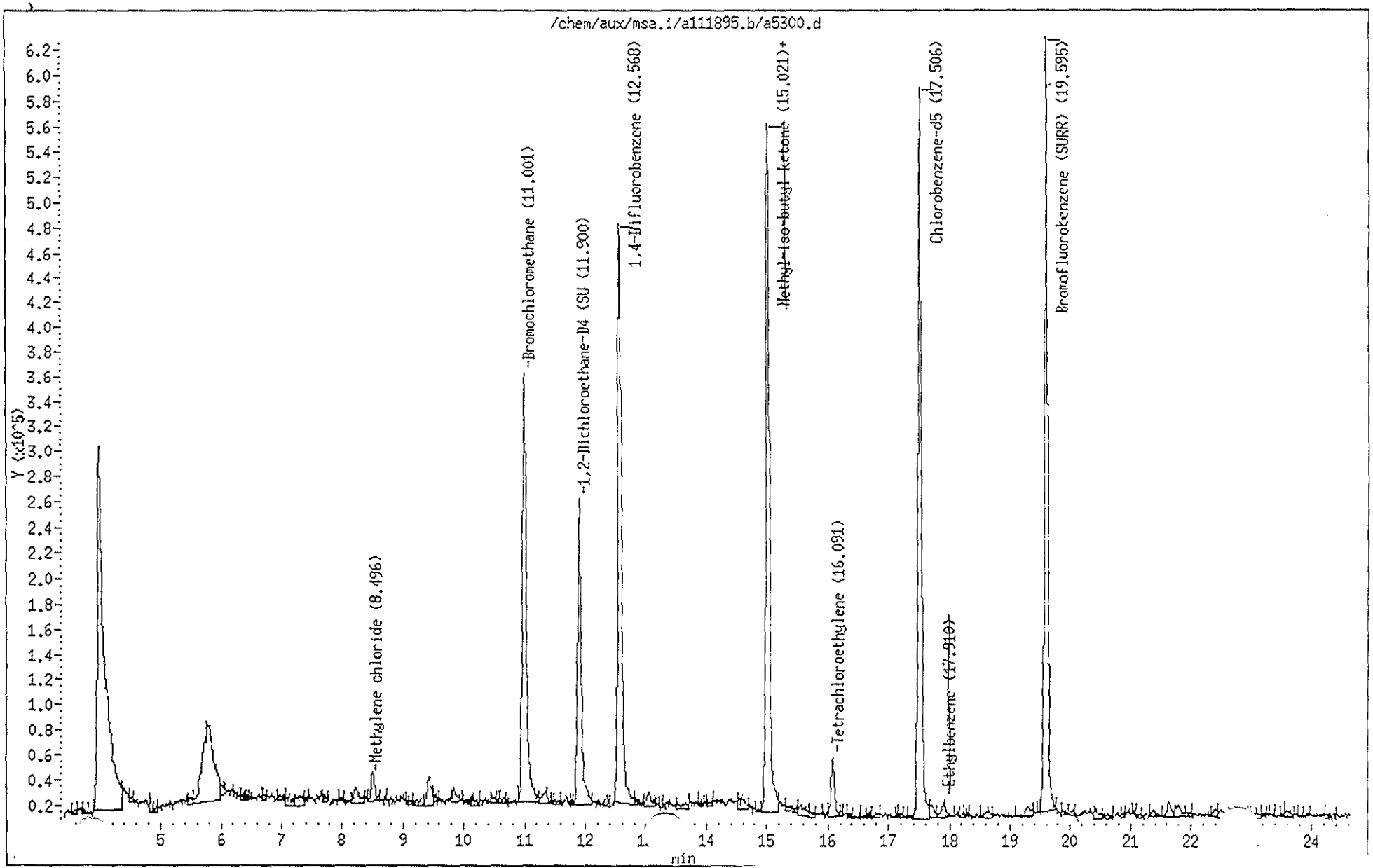
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	5.77	28	J

0203

Data File: /chem/aux/msa.i/a111895.b/a5300.d
Date : 18-NOV-95 20:27
Client ID: n1v4782 blk
Sample Info: n1v4782 blk
Purge Volume: 1.0
Column phase: J&W DB_624

Instrument: msa.i

Operator: jk
Column diameter: 0.53



Data File: /chem/aux/msa.i/a111895.b/a5300.d
Report Date: 24-Nov-1995 08:34

OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240

Data file : /chem/aux/msa.i/a111895.b/a5300.d
Lab Smp Id: Client Smp ID: n1v4782 blk
Inj Date : 18-NOV-95 20:27
Operator : jk Inst ID: msa.i
Smp Info : n1v4782 blk
Misc Info : n1v4782v,n1v4782,m2,5000,1,5.0,5.0,951118,
Comment :
Method : /chem/aux/msa.i/a111895.b/111895_8240ambia.m
Meth Date : 24-Nov-1995 08:33 glenn Quant Type: ISTD
Cal Date : 18-NOV-95 17:03 Cal File: a5294.d
Als bottle: 8
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
Methylene chloride	84.00	8.496	8.520	(0.772)	22398	3.67	3.67
* 20 Bromochloromethane	128.00	11.001	11.007	(1.000)	171991	50.0	
$ 24 1,2-Dichloroethane-D4 (SURR)	65.00	11.910	11.916	(1.083)	377825	50.6	50.6
* 27 1,4-Difluorobenzene	114.00	12.568	12.573	(1.000)	680169	50.0	
33 Methyl-iso-butyl ketone	43.00	15.012	14.737	(0.858)	7679	1.32	~~1.32(Q)~~ MS
$ 34 Toluene-D8 (SURR)	98.00	15.012	15.017	(0.858)	703416	54.0	54.0
38 Tetrachloroethylene	164.00	16.091	16.089	(0.919)	21423	4.56	4.56
* 42 Chlorobenzene-d5	117.00	17.506	17.506	(1.000)	546406	50.0	
44 Ethylbenzene	106.00	17.910	17.708	(1.023)	5281	1.07	~~1.07~~ RT
$ 49 Bromofluorobenzene (SURR)	95.00	19.595	19.587	(1.119)	403162	52.0	52.0

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/aux/msa.i/a111895.b/a5300.d

Date : 18-NOV-95 20:27

Client ID: n1v4782 blk

Instrument: msa.i

Sample Info: n1v4782 blk

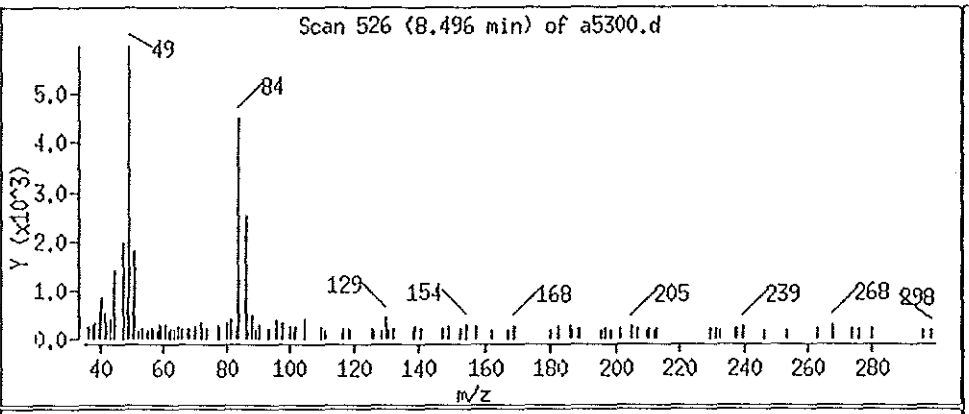
Purge Volume: 1.0

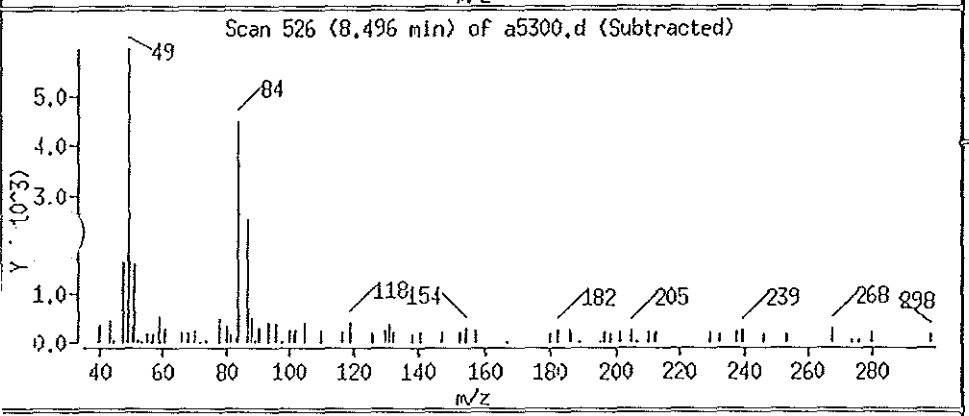
Operator: jk

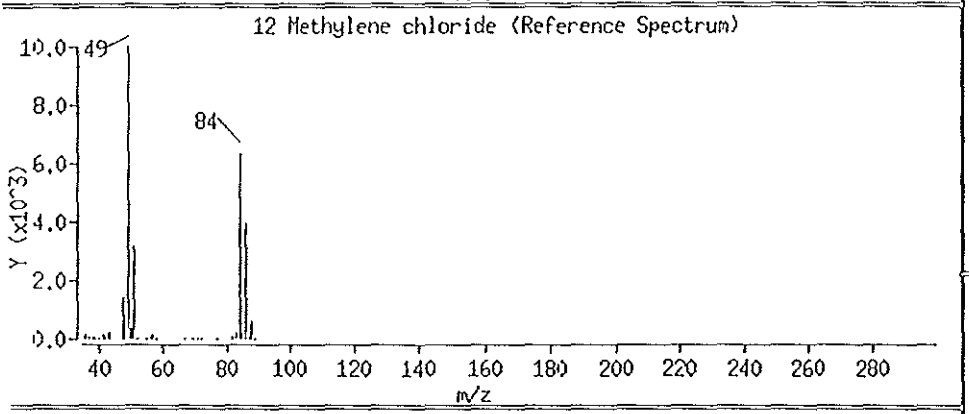
Column phase: J&W DB_624

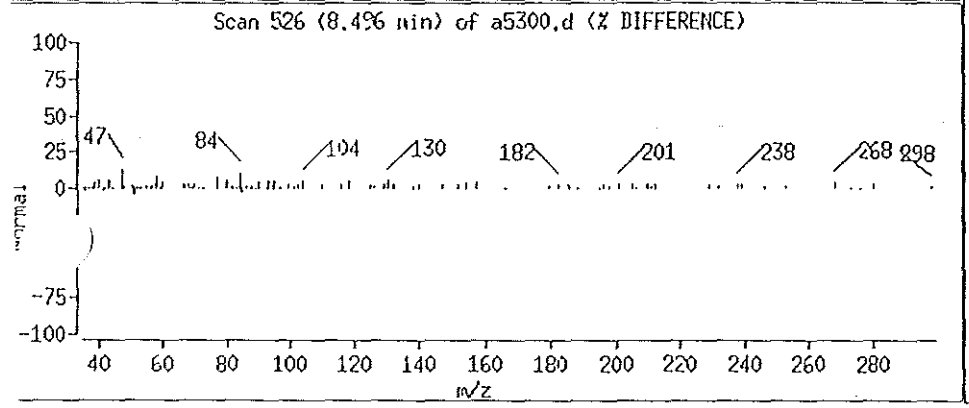
Column diameter: 0.53

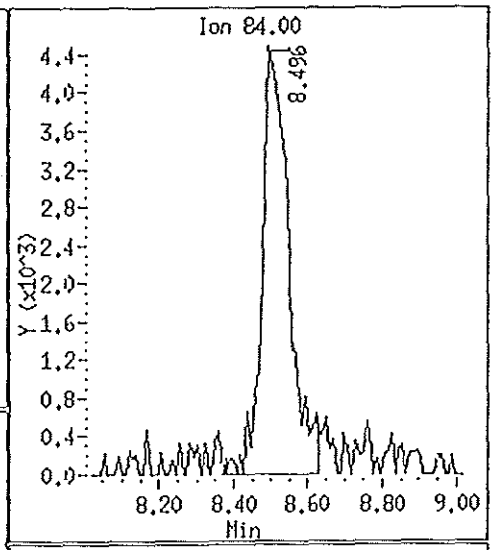
12 Methylene chloride

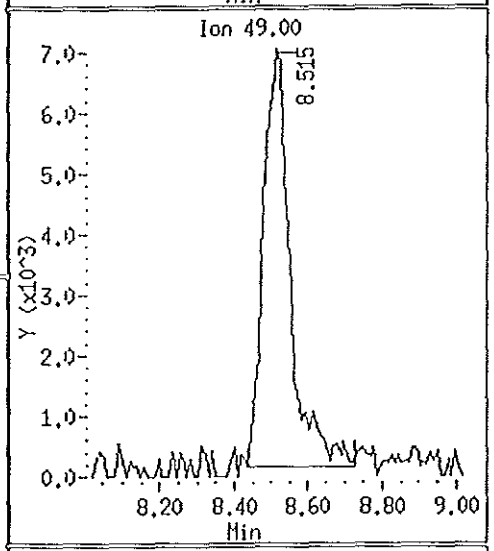


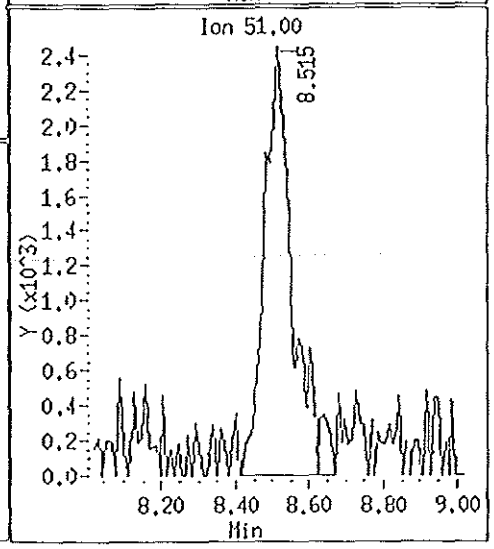












Data File: /chem/aux/msa.i/a111895.b/a5300.d

Date : 18-NOV-95 20:27

)ient ID: n1v4782 blk

Instrument: msa.i

Sample Info: n1v4782 blk

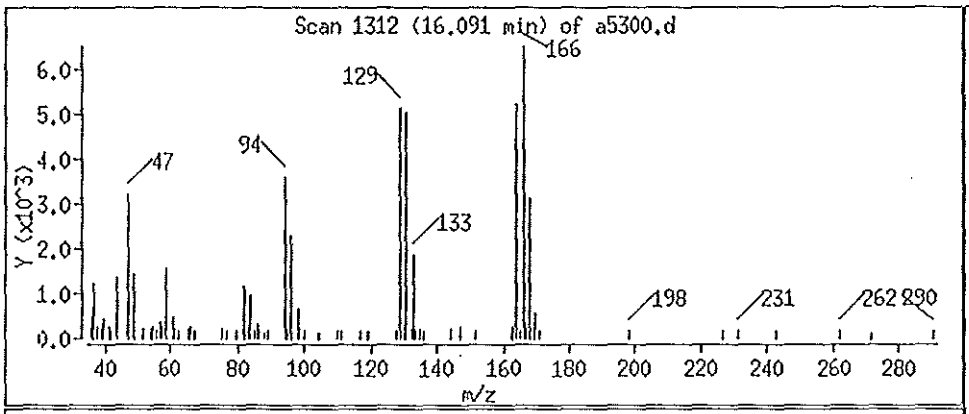
Purge Volume: 1.0

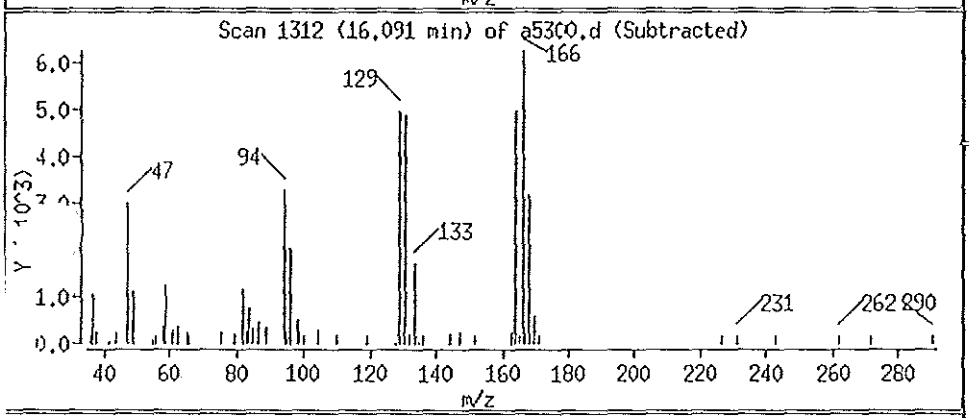
Operator: jk

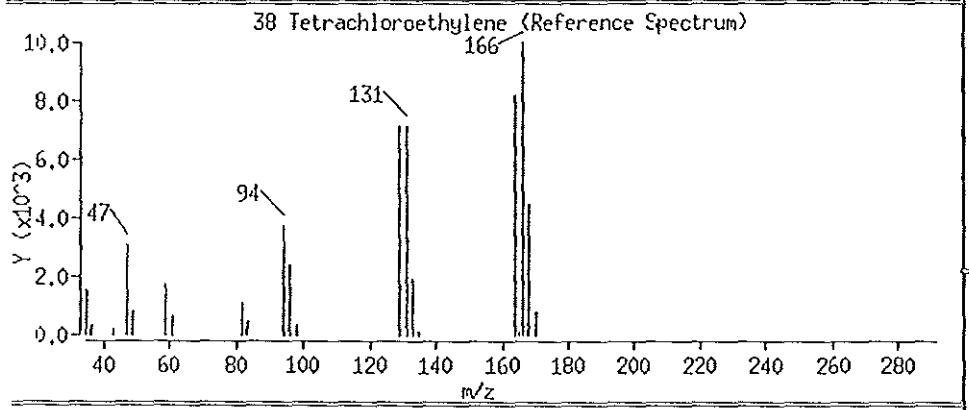
Column phase: J&W DB_624

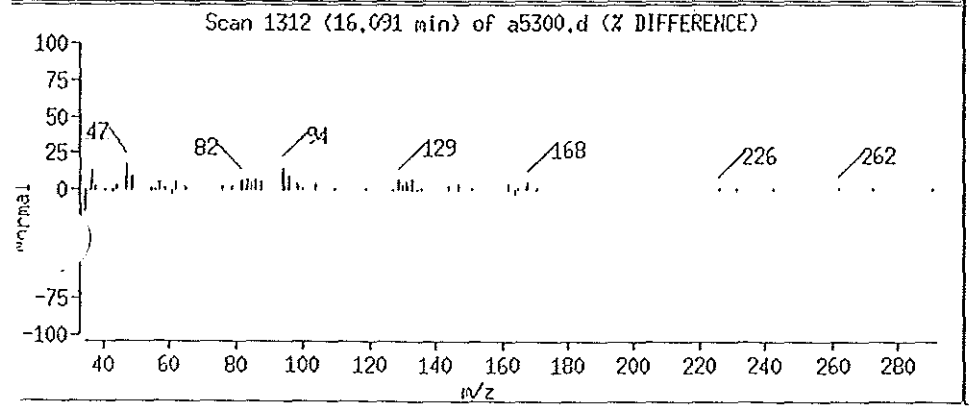
Column diameter: 0.53

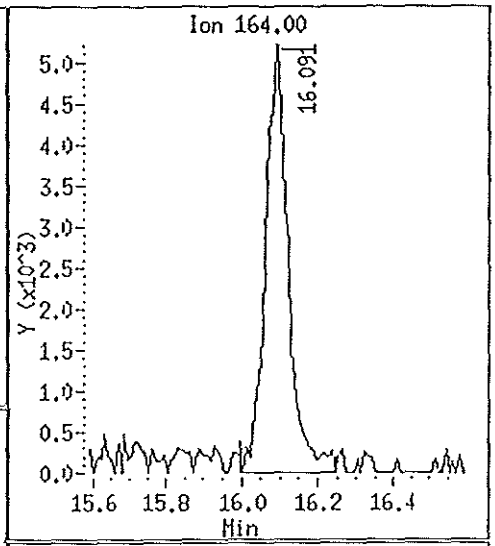
38 Tetrachloroethylene

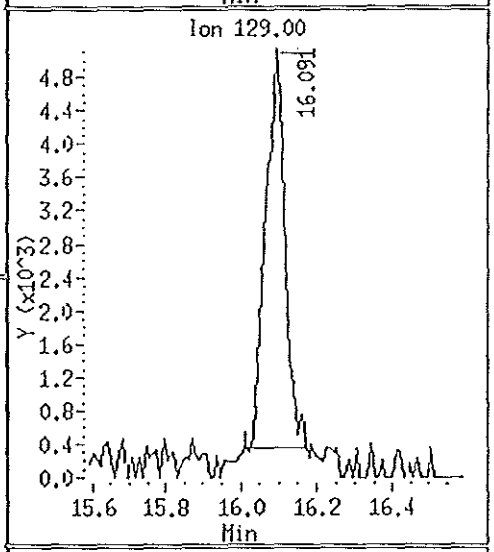


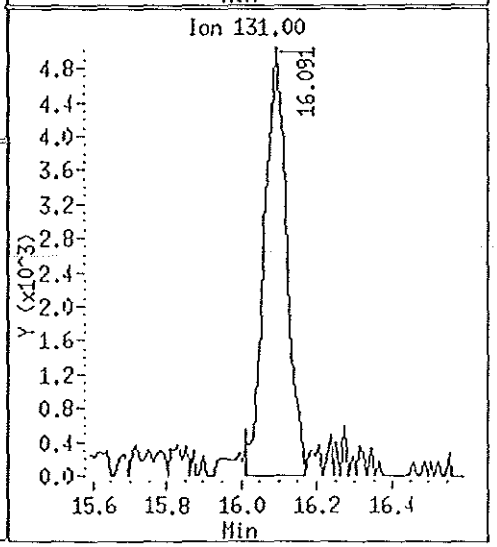












Data File: /chem/aux/msa.i/a111895.b/a5300.d

Date : 18-NOV-95 20:27

Client ID: n1v4782 blk

Instrument: msa.i

Sample Info: n1v4782 blk

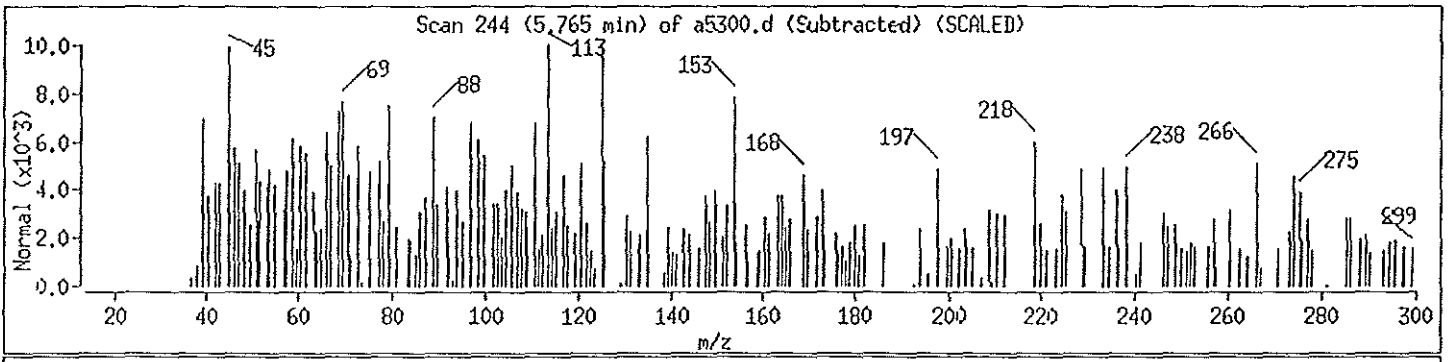
Purge Volume: 1.0

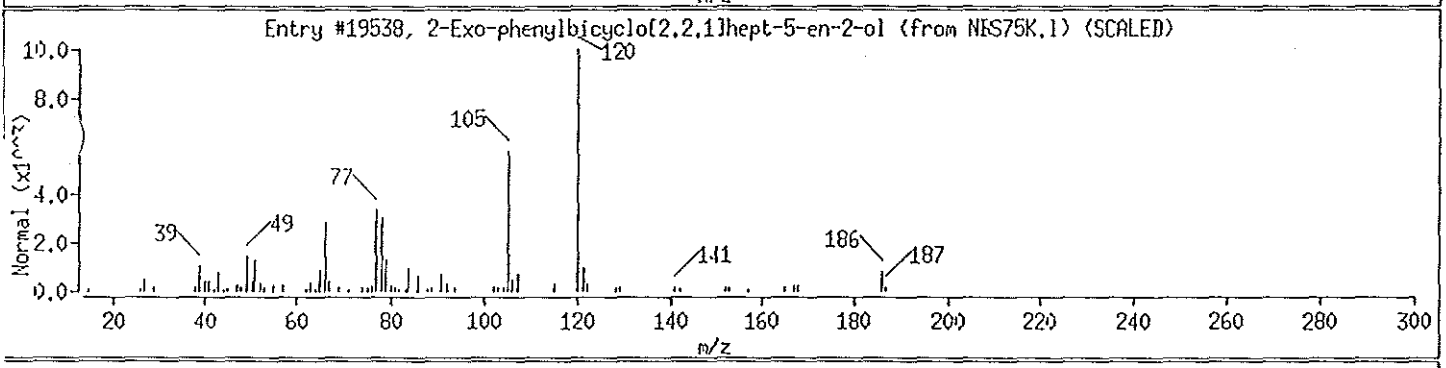
Operator: jk

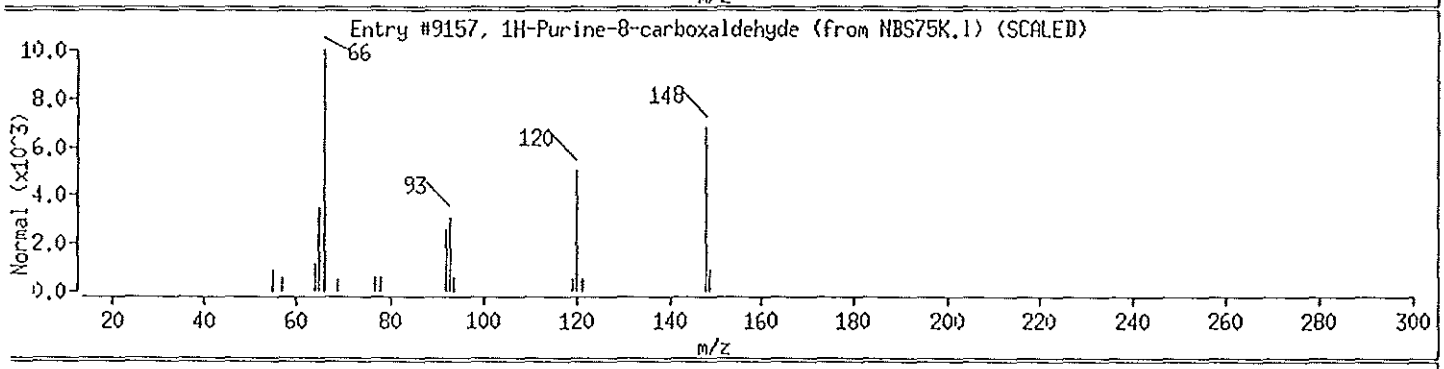
Column phase: J&W DB_624

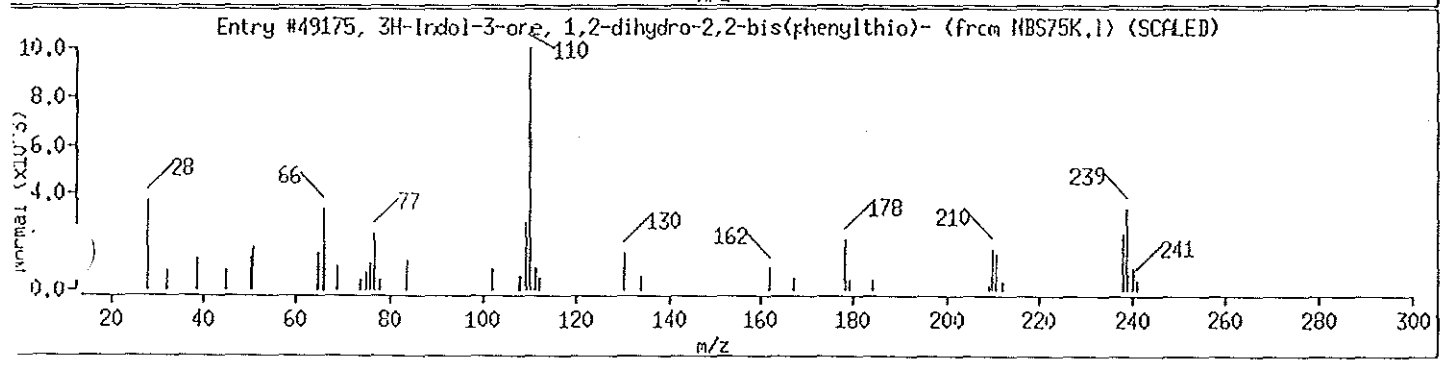
Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Exo-phenylbicyclo[2.2.1]hept-5-en-2-ol	0-00-0	NBS75K.l	19538	30	C13H14O	186
1H-Purine-8-carboxaldehyde	56805-26-6	NBS75K.l	9157	22	C6H4N4O	148
3H-Indol-3-one, 1,2-dihydro-2,2-bis(phen	28168-16-0	NBS75K.l	49175	22	C20H15NOS2	349









1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0208 CLJ78TW02DMS

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0325VS

Sample wt/vol: .50 (g/mL) ML Lab File ID: A5320

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: not dec. N/A Date Analyzed: 11/19/95

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

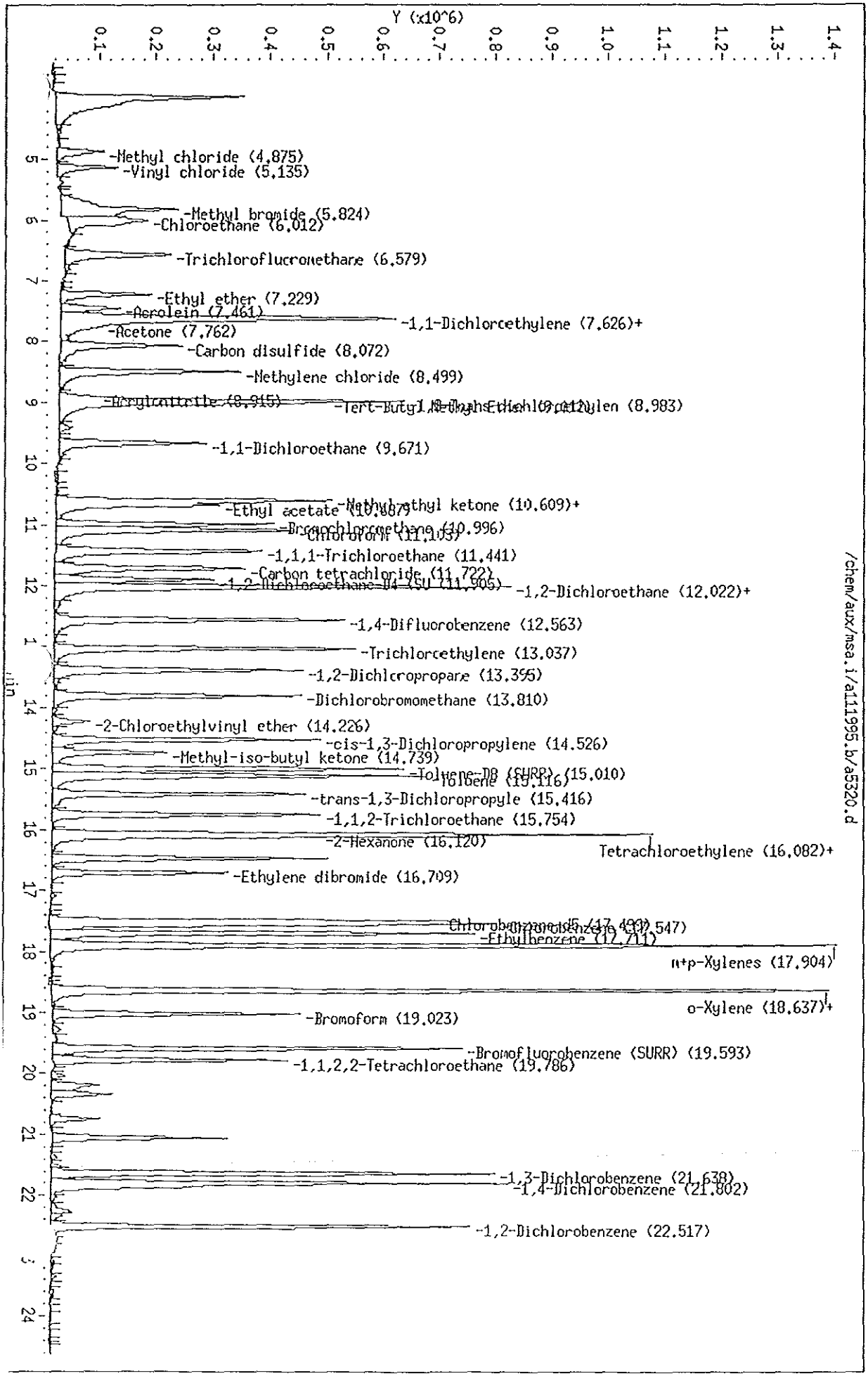
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	530	
74-83-9	Bromomethane	460	
75-01-4	Vinyl Chloride	480	
75-00-3	Chloroethane	590	
75-09-2	Methylene Chloride	540	B
67-64-1	Acetone	510	
75-15-0	Carbon Disulfide	520	
75-35-4	1,1-Dichloroethene	500	
75-34-3	1,1-Dichloroethane	520	
540-59-0	1,2-Dichloroethene (total)	1100	
67-66-3	Chloroform	490	
107-06-2	1,2-Dichloroethane	530	
78-93-3	2-Butanone	550	
71-55-6	1,1,1-Trichloroethane	500	
56-23-5	Carbon Tetrachloride	480	
75-27-4	Bromodichloromethane	500	
78-87-5	1,2-Dichloropropane	510	
10061-01-5	cis-1,3-Dichloropropene	510	
79-01-6	Trichloroethene	530	
124-48-1	Dibromochloromethane	500	
79-00-5	1,1,2-Trichloroethane	520	
71-43-2	Benzene	510	
10061-02-6	trans-1,3-Dichloropropene	500	
75-25-2	Bromoform	520	
108-10-1	Methyl-iso-butyl ketone	550	
591-78-6	2-Hexanone	550	
127-18-4	Tetrachloroethylene	840	B
79-34-5	1,1,2,2-Tetrachloroethane	540	
108-88-3	Toluene	500	
108-90-7	Chlorobenzene	510	
100-41-4	Ethylbenzene	510	
100-42-5	Styrene	510	
1330-20-7	Xylene (total)	1600	

0209

Data File: /chem/aux/msa.i/a111995.b/a5320.d
Date : 19-NOV-95 19:13
Client ID: n1v4782 mtx
Sample Info: n1v4782 mtx spk
Purge Volume: 1.0
Column phase: J&W DB_624

Instrument: msa.i
Operator: jk
Column diameter: 0.53



Data File: /chem/aux/msa.i/a111995.b/a5320.d
Report Date: 22-Nov-1995 12:02

OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240

Data file : /chem/aux/msa.i/a111995.b/a5320.d
Lab Smp Id: Client Smp ID: n1v4782 mtx
Inj Date : 19-NOV-95 19:13
Operator : jk Inst ID: msa.i
Smp Info : n1v4782 mtx spk
Misc Info : jp0325vs,n1v4782,m2,5000,1,0.50,5.0,951119
Comment :
Method : /chem/aux/msa.i/a111995.b/111895_8240ambia.m
Meth Date : 22-Nov-1995 12:01 glenn Quant Type: ISTD
Cal Date : 19-NOV-95 14:40 Cal File: a5312.d
Als bottle: 2
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

MK 11/24/95

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	1 Methyl chloride	50.00	4.875	4.886	(0.443)	293116	53.1	53.1
	2 Vinyl chloride	62.00	5.135	5.146	(0.467)	272170	48.2	48.2
	3 Methyl bromide	94.00	5.824	5.836	(0.529)	149631	45.5	45.5
	4 Chloroethane	64.00	6.003	6.024	(0.545)	103158	59.1	59.1
	5 Trichlorofluoromethane	101.00	6.579	6.589	(0.598)	497788	48.8	48.8
	6 Ethyl ether	59.00	7.229	7.239	(0.657)	223276	54.0	54.0
	7 Acrolein	56.00	7.452	7.472	(0.677)	229875	278	278(A)
	8 1,1-Dichloroethylene	96.00	7.636	7.646	(0.694)	250492	50.1	50.1
	9 1,1,2-Trichlorotrifluoroethan	101.00	7.626	7.636	(0.693)	444276	50.5	50.5
	10 Acetone	43.00	7.762	7.782	(0.705)	98367	51.4	51.4
	11 Carbon disulfide	76.00	8.072	8.083	(0.733)	786317	51.8	51.8
	12 Methylene chloride	84.00	8.499	8.509	(0.772)	334683	53.8	53.8
	13 Acrylonitrile	53.00	8.915	8.906	(0.810)	94434	49.6	49.6
	14 1,2-Trans-dichloroethylene	96.00	8.983	8.984	(0.816)	273689	50.0	50.0
	15 Tert-Butyl Methyl Ether	73.00	9.012	9.003	(0.819)	733347	53.2	53.2
	16 1,1-Dichloroethane	63.00	9.671	9.681	(0.879)	572529	52.0	52.0
	18 Methyl ethyl ketone	72.00	10.619	10.611	(0.845)	35804	55.2	55.2
	17 1,2-cis-Dichloroethylene	96.00	10.609	10.611	(0.964)	364415	61.6	61.6
	19 Ethyl acetate	43.00	10.687	10.688	(0.971)	831753	57.0	57.0
*	20 Bromochloromethane	128.00	11.006	10.998	(1.000)	190115	50.0	
	21 Chloroform	83.00	11.103	11.105	(1.009)	620335	49.0	49.0
	22 1,1,1-Trichloroethane	97.00	11.441	11.444	(0.911)	542116	50.2	50.2
	23 Carbon tetrachloride	117.00	11.722	11.725	(0.933)	458372	47.8	47.8
$	24 1,2-Dichloroethane-D4 (SURR)	65.00	11.905	11.899	(1.082)	448247	55.6	55.6
	),2-Dichloroethane	62.00	12.022	12.025	(1.092)	502452	52.9	52.9
	Benzene	78.00	12.031	12.025	(0.958)	880822	50.6	50.6
*	27 1,4-Difluorobenzene	114.00	12.563	12.567	(1.000)	752489	50.0	
	28 Trichloroethylene	130.00	13.037	13.032	(1.038)	339361	53.3	53.3
	29 1,2-Dichloropropane	63.00	13.395	13.401	(1.066)	329768	50.9	50.9

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	30 Dichlorobromomethane	83.00	13.810	13.817	(1.099)	536423	50.3	50.3
	31 2-Chloroethylvinyl ether	63.00	14.226	14.233	(1.132)	52001	14.8	14.8
	32 cis-1,3-Dichloropropylene	75.00	14.526	14.533	(1.156)	468748	51.0	51.0
	33 Methyl-iso-butyl ketone	43.00	14.739	14.746	(0.842)	333256	55.0	55.0
$	34 Toluene-D8 (SURR)	98.00	15.010	15.017	(0.858)	797756	52.4	52.4
	35 Toluene	92.00	15.116	15.133	(0.864)	514817	49.9	49.9
	36 trans-1,3-Dichloropropylene	75.00	15.416	15.432	(1.227)	422486	50.3	50.3
	37 1,1,2-Trichloroethane	97.00	15.754	15.760	(1.254)	284136	51.6	51.6
	38 Tetrachloroethylene	164.00	16.082	16.089	(0.919)	457716	83.8	83.8
	39 2-Hexanone	43.00	16.120	16.127	(0.921)	227512	55.2	55.2
	40 Chlorodibromomethane	129.00	16.082	16.475	(1.280)	482451	50.4	50.4
	41 Ethylene dibromide	107.00	16.709	16.716	(0.955)	405771	49.7	49.7
*	42 Chlorobenzene-d5	117.00	17.499	17.507	(1.000)	612408	50.0	
	43 Chlorobenzene	112.00	17.557	17.565	(1.003)	638108	50.8	50.8
	44 Ethylbenzene	106.00	17.711	17.710	(1.012)	305498	51.2	51.2
	45 m+p-Xylenes	106.00	17.904	17.913	(1.023)	728724	103	103
	46 o-Xylene	106.00	18.637	18.636	(1.065)	365895	52.9	52.9
	47 Styrene	104.00	18.647	18.645	(1.066)	636831	51.4	51.4
	48 Bromoform	173.00	19.023	19.031	(1.514)	365138	52.3	52.3
$	49 Bromofluorobenzene (SURR)	95.00	19.593	19.591	(1.120)	469698	54.9	54.9
	1,1,2,2-Tetrachloroethane	83.00	19.786	19.784	(1.131)	432793	54.4	54.4
	1,3-Dichlorobenzene	146.00	21.638	21.644	(1.237)	554474	50.6	50.6
	52 1,4-Dichlorobenzene	146.00	21.802	21.798	(1.246)	555992	50.1	50.1
	53 1,2-Dichlorobenzene	146.00	22.517	22.512	(1.287)	515087	52.2	52.2

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0212 CLJ78TW02DMSD

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0325VR

Sample wt/vol: .50 (g/mL) ML Lab File ID: A5321

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: not dec. N/A Date Analyzed: 11/19/95

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

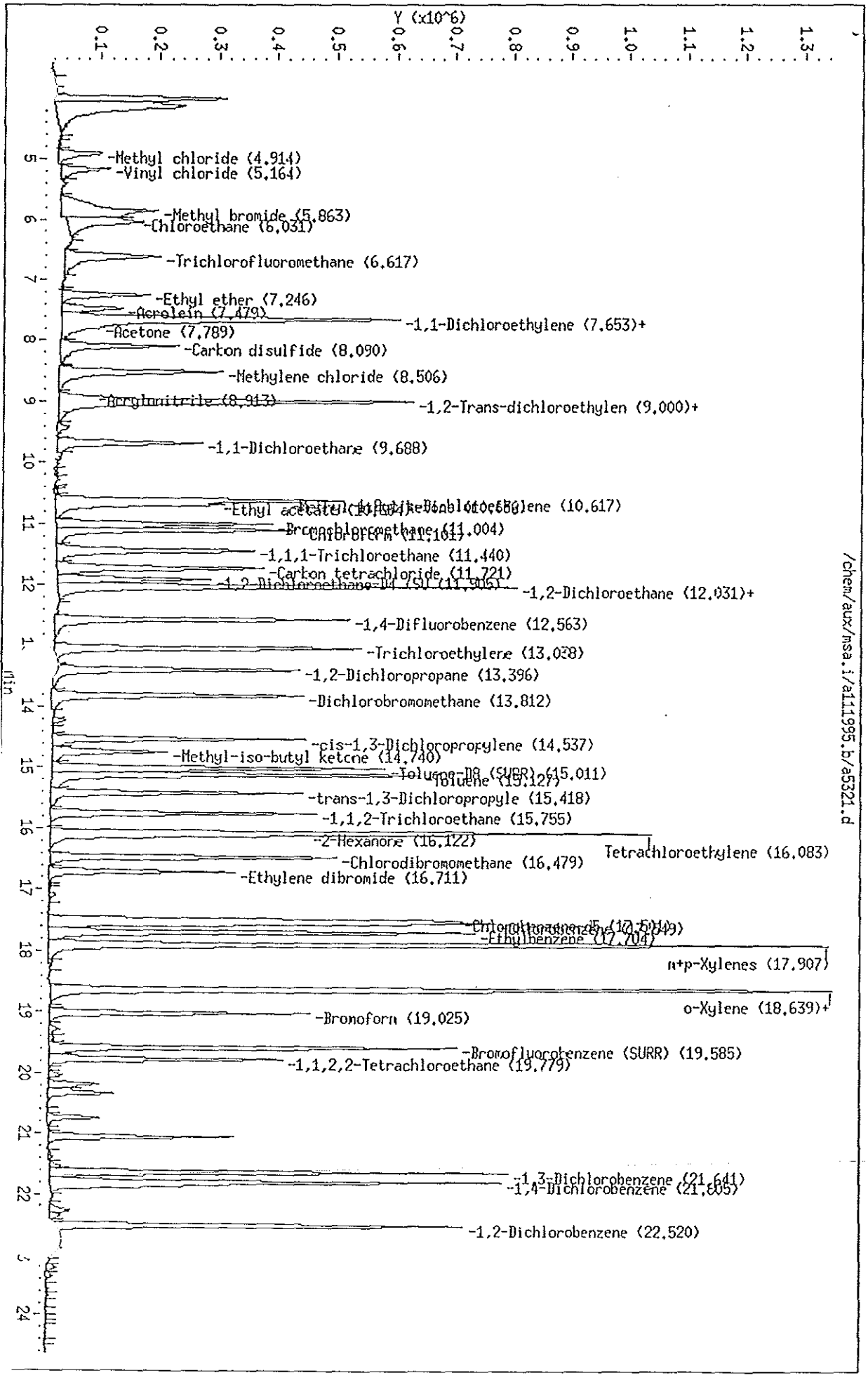
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	530	
74-83-9	Bromomethane	410	
75-01-4	Vinyl Chloride	510	
75-00-3	Chloroethane	550	
75-09-2	Methylene Chloride	510	B
67-64-1	Acetone	450	
75-15-0	Carbon Disulfide	490	
75-35-4	1,1-Dichloroethene	510	
75-34-3	1,1-Dichloroethane	500	
540-59-0	1,2-Dichloroethene (total)	1100	
67-66-3	Chloroform	500	
107-06-2	1,2-Dichloroethane	520	
78-93-3	2-Butanone	600	
71-55-6	1,1,1-Trichloroethane	500	
56-23-5	Carbon Tetrachloride	520	
75-27-4	Bromodichloromethane	500	
78-87-5	1,2-Dichloropropane	500	
10061-01-5	cis-1,3-Dichloropropene	490	
79-01-6	Trichloroethene	550	
124-48-1	Dibromochloromethane	510	
79-00-5	1,1,2-Trichloroethane	510	
71-43-2	Benzene	510	
10061-02-6	trans-1,3-Dichloropropene	490	
75-25-2	Bromoform	530	
108-10-1	Methyl-iso-butyl ketone	530	
591-78-6	2-Hexanone	590	
127-18-4	Tetrachloroethylene	830	B
79-34-5	1,1,2,2-Tetrachloroethane	540	
108-88-3	Toluene	490	
108-90-7	Chlorobenzene	500	
100-41-4	Ethylbenzene	500	
100-42-5	Styrene	510	
1330-20-7	Xylene (total)	1500	

0213

Data File: /chem/aux/msa.i/a111995.b/a5321.d
Date : 19-NOV-95 19:47
Client ID: n1v4782 mtx spk dup
Sample Info: n1v4782 mtx spk dup
Purge Volume: 1.0
Column phase: J&W DB_624

Instrument: msa.i
Operator: jk
Column diameter: 0.53



OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240

Data file : /chem/aux/msa.i/a111995.b/a5321.d
Lab Smp Id: Client Smp ID: n1v4782 mtx spk dup
Inj Date : 19-NOV-95 19:47
Operator : jk Inst ID: msa.i
Smp Info : n1v4782 mtx spk dup
Misc Info : jp0325vr,n1v4782,m2,5000,1,0.50,5.0,951119
Comment :
Method : /chem/aux/msa.i/a111995.b/111895_8240ambia.m
Meth Date : 22-Nov-1995 12:01 glenn Quant Type: ISTD
Cal Date : 19-NOV-95 14:40 Cal File: a5312.d
Als bottle: 3
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

MC 11/24/95

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
Methyl chloride	50.00	4.914	4.886	(0.447)	291336	53.4	53.4
2 Vinyl chloride	62.00	5.164	5.146	(0.469)	286185	51.3	51.3
3 Methyl bromide	94.00	5.853	5.836	(0.532)	134154	41.3	41.3
4 Chloroethane	64.00	6.031	6.024	(0.548)	94088	54.6	54.6
5 Trichlorofluoromethane	101.00	6.617	6.589	(0.601)	455976	45.3	45.3
6 Ethyl ether	59.00	7.246	7.239	(0.659)	213724	52.3	52.3
7 Acrolein	56.00	7.479	7.472	(0.680)	242540	297	297(A)
8 1,1-Dichloroethylene	96.00	7.653	7.646	(0.696)	253505	51.4	51.4
9 1,1,2-Trichlorotrifluoroethan	101.00	7.644	7.636	(0.695)	414786	47.8	47.8
10 Acetone	43.00	7.789	7.782	(0.708)	84749	44.8	44.8
11 Carbon disulfide	76.00	8.090	8.083	(0.735)	726523	48.5	48.5
12 Methylene chloride	84.00	8.506	8.509	(0.773)	313884	51.1	51.1
13 Acrylonitrile	53.00	8.913	8.906	(0.810)	102119	54.3	54.3
14 1,2-Trans-dichloroethylene	96.00	8.991	8.984	(0.817)	256743	47.5	47.5
15 Tert-Butyl Methyl Ether	73.00	9.010	9.003	(0.819)	672983	49.4	49.4
16 1,1-Dichloroethane	63.00	9.688	9.681	(0.880)	540779	49.8	49.8
18 Methyl ethyl ketone	72.00	10.636	10.611	(0.847)	37598	60.4	60.4
17 1,2-cis-Dichloroethylene	96.00	10.617	10.611	(0.965)	354450	60.6	60.6
19 Ethyl acetate	43.00	10.694	10.688	(0.972)	813057	56.4	56.4
* 20 Bromochloromethane	128.00	11.004	10.998	(1.000)	187694	50.0	
21 Chloroform	83.00	11.111	11.105	(1.010)	622296	49.7	49.7
22 1,1,1-Trichloroethane	97.00	11.440	11.444	(0.911)	518193	50.0	50.0
23 Carbon tetrachloride	117.00	11.721	11.725	(0.933)	473840	51.5	51.5
; 24 1,2-Dichloroethane-D4 (SURR)	65.00	11.905	11.899	(1.082)	425564	53.4	53.4
2-Dichloroethane	62.00	12.031	12.025	(1.093)	488915	52.1	52.1
enzene	78.00	12.031	12.025	(0.958)	851333	51.0	51.0
27 1,4-Difluorobenzene	114.00	12.563	12.567	(1.000)	721864	50.0	
28 Trichloroethylene	130.00	13.038	13.032	(1.038)	333400	54.6	54.6
29 1,2-Dichloropropane	63.00	13.405	13.401	(1.067)	311624	50.1	50.1

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	30 Dichlorobromomethane	83.00	13.812	13.817	(1.099)	516013	50.4	50.4
	32 cis-1,3-Dichloropropylene	75.00	14.537	14.533	(1.157)	433219	49.1	49.1
	33 Methyl-iso-butyl ketone	43.00	14.740	14.746	(0.842)	312468	53.1	53.1
$	34 Toluene-D8 (SURR)	98.00	15.011	15.017	(0.858)	735356	49.7	49.7
	35 Toluene	92.00	15.127	15.133	(0.864)	489821	48.8	48.8
	36 trans-1,3-Dichloropropylene	75.00	15.418	15.432	(1.227)	392633	48.7	48.7
	37 1,1,2-Trichloroethane	97.00	15.755	15.760	(1.254)	268326	50.8	50.8
	38 Tetrachloroethylene	164.00	16.083	16.089	(0.919)	439012	82.7	82.7
	39 2-Hexanone	43.00	16.122	16.127	(0.921)	235229	58.7	58.7
	40 Chlorodibromomethane	129.00	16.479	16.475	(1.312)	469869	51.2	51.2
	41 Ethylene dibromide	107.00	16.711	16.716	(0.955)	390994	49.3	49.3
*	42 Chlorobenzene-d5	117.00	17.501	17.507	(1.000)	595379	50.0	
	43 Chlorobenzene	112.00	17.549	17.565	(1.003)	607600	49.8	49.8
	44 Ethylbenzene	106.00	17.704	17.710	(1.012)	288073	49.7	49.7
	45 m+p-Xylenes	106.00	17.897	17.913	(1.023)	675088	98.2	98.2
	46 o-Xylene	106.00	18.630	18.636	(1.064)	348386	51.8	51.8
	47 Styrene	104.00	18.639	18.645	(1.065)	609608	50.6	50.6
	48 Bromoform	173.00	19.025	19.031	(1.514)	357275	53.4	53.4
$	49 Bromofluorobenzene (SURR)	95.00	19.585	19.591	(1.119)	450242	54.1	54.1
	50 1,1,2,2-Tetrachloroethane	83.00	19.779	19.784	(1.130)	419012	54.2	54.2
	),3-Dichlorobenzene	146.00	21.641	21.644	(1.237)	537782	50.5	50.5
	1,4-Dichlorobenzene	146.00	21.805	21.798	(1.246)	530018	49.2	49.2
	53 1,2-Dichlorobenzene	146.00	22.520	22.512	(1.287)	493028	51.4	51.4

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0216 VSPK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: N1V4782VS

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: A5394

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: not dec. N/A Date Analyzed: 11/24/95

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

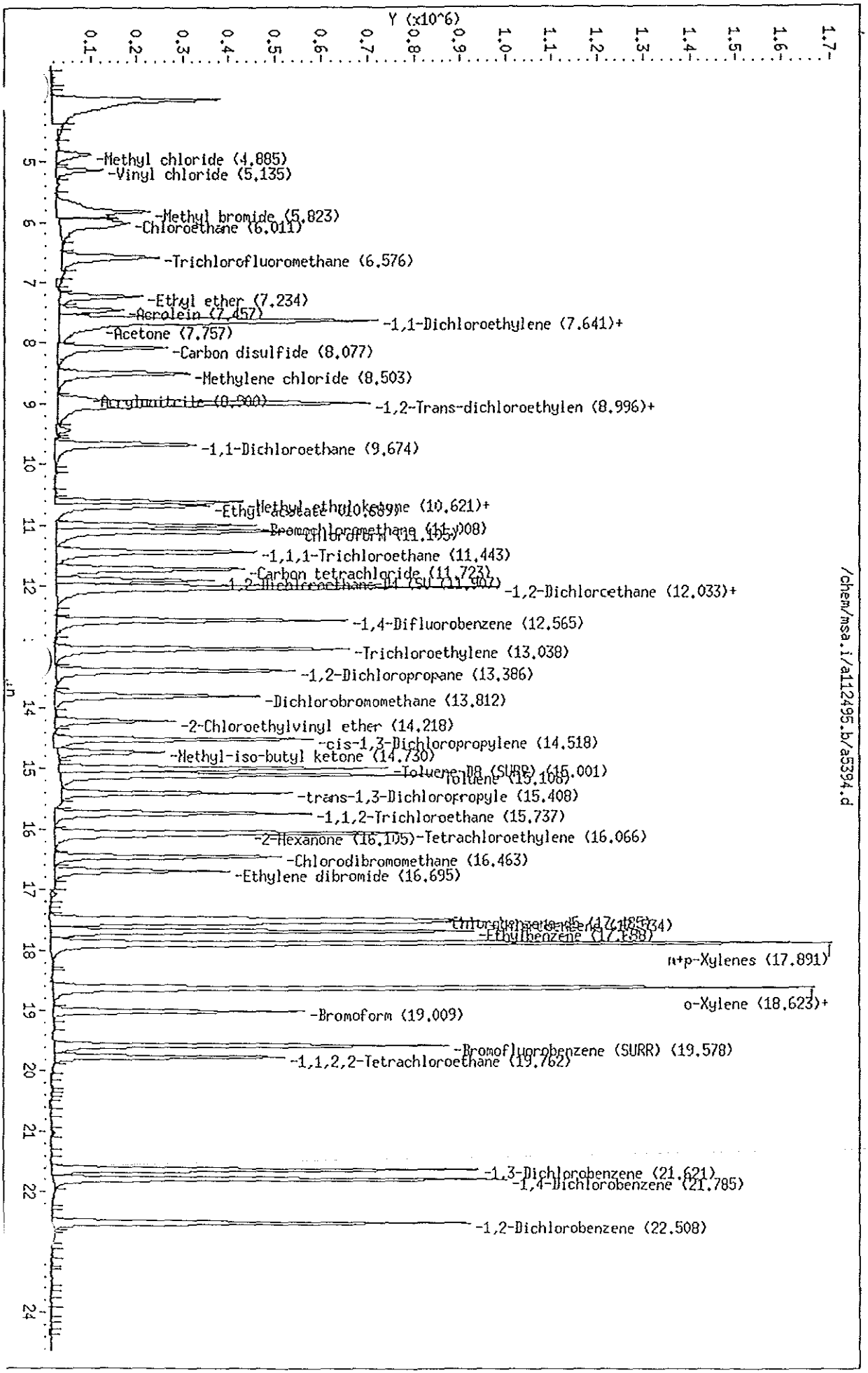
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	48	
74-83-9	Bromomethane	52	
75-01-4	Vinyl Chloride	52	
75-00-3	Chloroethane	54	
75-09-2	Methylene Chloride	52	B
67-64-1	Acetone	51	
75-15-0	Carbon Disulfide	51	
75-35-4	1,1-Dichloroethene	51	
75-34-3	1,1-Dichloroethane	49	
540-59-0	1,2-Dichloroethene (total)	97	
67-66-3	Chloroform	48	
107-06-2	1,2-Dichloroethane	50	
78-93-3	2-Butanone	45	
71-55-6	1,1,1-Trichloroethane	50	
56-23-5	Carbon Tetrachloride	47	
75-27-4	Bromodichloromethane	51	
78-87-5	1,2-Dichloropropane	50	
10061-01-5	cis-1,3-Dichloropropene	50	
79-01-6	Trichloroethene	50	
124-48-1	Dibromochloromethane	50	
79-00-5	1,1,2-Trichloroethane	49	
71-43-2	Benzene	50	
10061-02-6	trans-1,3-Dichloropropene	49	
75-25-2	Bromoform	49	
108-10-1	Methyl-iso-butyl ketone	52	
591-78-6	2-Hexanone	51	
127-18-4	Tetrachloroethylene	47	B
79-34-5	1,1,2,2-Tetrachloroethane	48	
108-88-3	Toluene	49	
108-90-7	Chlorobenzene	49	
100-41-4	Ethylbenzene	48	
100-42-5	Styrene	49	
1330-20-7	Xylene (total)	140	

Data File: /chem/msa.i/a112495.b/a5394.d
Date : 24-NOV-95 11:02
Client ID: n1v4782 blk spk red
Sample Info: n1v4782 blk spk
Purge Volume: 1.0
Column phase: J&W DB_624

0217

Instrument: msa.i
Operator: jk
Column diameter: 0.53



OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240

Data file : /chem/msa.i/a112495.b/a5394.d
Lab Smp Id: Client Smp ID: n1v4782 blk spk red
Inj Date : 24-NOV-95 11:02
Operator : jk Inst ID: msa.i
Smp Info : n1v4782 blk spk
Misc Info : n1v4782vs,n1v4782,m2,5000,1,5.0,5.0,951124,
Comment :
Method : /chem/msa.i/a112495.b/111895_8240ambia.m
Meth Date : 24-Nov-1995 10:02 Quant Type: ISTD
Cal Date : 24-NOV-95 09:32 Cal File: a5392.d
Als bottle: 3
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

MK 11/24/95

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
1 Methyl chloride	50.00	4.875	4.866	(0.443)	296333	47.8	47.8
2 Vinyl chloride	62.00	5.135	5.135	(0.466)	280949	52.1	52.1
3 Methyl bromide	94.00	5.823	5.815	(0.529)	165932	52.1	52.1
4 Chloroethane	64.00	6.011	6.002	(0.546)	97861	53.8	53.8
5 Trichlorofluoromethane	101.00	6.586	6.577	(0.598)	658734	49.0	49.0
6 Ethyl ether	59.00	7.234	7.225	(0.657)	279846	49.9	49.9
7 Acrolein	56.00	7.457	7.448	(0.677)	312097	250	250(A)
8 1,1-Dichloroethylene	96.00	7.641	7.632	(0.694)	275420	51.2	51.2
9 1,1,2-Trichlorotrifluoroethan	101.00	7.631	7.632	(0.693)	595552	48.3	48.3
10 Acetone	43.00	7.757	7.748	(0.705)	114925	50.5	50.5
11 Carbon disulfide	76.00	8.077	8.077	(0.734)	883072	50.8	50.8
12 Methylene chloride	84.00	8.503	8.503	(0.772)	315667	52.1	52.1
13 Acrylonitrile	53.00	8.900	8.899	(0.808)	125717	49.3	49.3
14 1,2-Trans-dichloroethylene	96.00	8.987	8.986	(0.816)	289809	48.8	48.8
15 Tert-Butyl Methyl Ether	73.00	9.006	9.005	(0.818)	902614	48.6	48.6
16 1,1-Dichloroethane	63.00	9.674	9.672	(0.879)	675310	49.4	49.4
18 Methyl ethyl ketone	72.00	10.621	10.619	(0.845)	39000	44.6	44.6
17 1,2-cis-Dichloroethylene	96.00	10.612	10.610	(0.964)	312375	48.1	48.1
19 Ethyl acetate	43.00	10.689	10.687	(0.971)	986444	50.5	50.5
20 Bromochloromethane	128.00	11.008	11.006	(1.000)	245339	50.0	
21 Chloroform	83.00	11.105	11.103	(1.009)	798732	48.4	48.4
22 1,1,1-Trichloroethane	97.00	11.443	11.441	(0.911)	680666	50.2	50.2
23 Carbon tetrachloride	117.00	11.733	11.722	(0.934)	578864	47.4	47.4
24 1,2-Dichloroethane-D4 (SURR)	65.00	11.907	11.906	(1.082)	535886	54.4	54.4
1,2-Dichloroethane	62.00	12.023	12.022	(1.092)	605851	50.0	50.0
Benzene	78.00	12.033	12.031	(0.958)	1080154	49.8	49.8
27 1,4-Difluorobenzene	114.00	12.565	12.573	(1.000)	946316	50.0	
28 Trichloroethylene	130.00	13.038	13.038	(1.038)	411520	49.7	49.7
29 1,2-Dichloropropane	63.00	13.386	13.395	(1.065)	393416	50.1	50.1

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	30 Dichlorobromomethane	83.00	13.802	13.811	(1.098)	554502	50.6	50.6
	31 2-Chloroethylvinyl ether	63.00	14.218	14.227	(1.132)	211431	47.8	47.8
	32 cis-1,3-Dichloropropylene	75.00	14.518	14.526	(1.155)	594053	50.0	50.0
	33 Methyl-iso-butyl ketone	43.00	14.721	14.729	(0.842)	402180	51.5	51.5
$	34 Toluene-D8 (SURR)	98.00	14.992	14.999	(0.857)	956442	48.9	48.9
	35 Toluene	92.00	15.108	15.116	(0.864)	645535	49.1	49.1
	36 trans-1,3-Dichloropropylene	75.00	15.408	15.415	(1.226)	509728	48.9	48.9
	37 1,1,2-Trichloroethane	97.00	15.737	15.744	(1.252)	348004	49.0	49.0
	38 Tetrachloroethylene	164.00	16.066	16.072	(0.919)	332850	47.4	47.4
	39 2-Hexanone	43.00	16.105	16.111	(0.921)	275199	51.4	51.4
	40 Chlorodibromomethane	129.00	16.463	16.469	(1.310)	501323	50.4	50.4
	41 Ethylene dibromide	107.00	16.695	16.701	(0.955)	491454	47.1	47.1
*	42 Chlorobenzene-d5	117.00	17.485	17.491	(1.000)	779081	50.0	
	43 Chlorobenzene	112.00	17.543	17.539	(1.003)	783219	48.7	48.7
	44 Ethylbenzene	106.00	17.688	17.694	(1.012)	376599	47.8	47.8
	45 m+p-Xylenes	106.00	17.891	17.896	(1.023)	892366	95.2	95.2
	46 o-Xylene	106.00	18.623	18.619	(1.065)	436490	46.9	46.9
	47 Styrene	104.00	18.633	18.639	(1.066)	797321	48.9	48.9
	48 Bromoform	173.00	19.009	19.015	(1.513)	452718	49.0	49.0
$	49 Bromofluorobenzene (SURR)	95.00	19.578	19.574	(1.120)	564633	49.7	49.7
	1,1,2,2-Tetrachloroethane	83.00	19.762	19.767	(1.130)	521621	48.2	48.2
	1,3-Dichlorobenzene	146.00	21.631	21.636	(1.237)	691627	47.4	47.4
	52 1,4-Dichlorobenzene	146.00	21.785	21.800	(1.246)	703070	46.7	46.7
	53 1,2-Dichlorobenzene	146.00	22.508	22.514	(1.287)	666863	47.6	47.6

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

OHM Remediation Services Corp.
A Subsidiary of OHM Corporation

ANALYTICAL DIVISION

Laboratory Analysis

Report(s) #619213 VOLUME II OF III

Client: OHM Remediation Services Corp.
Southern Region (Norcross, GA)

Attn: Jim Dunn

Project: 17418N - Camp Lejeune, North Carolina

Sample(s) Received: November 14, 1995 **Order Received:** November 14, 1995

This report is "PROPRIETARY AND CONFIDENTIAL" and delivered to, and intended for the exclusive use of the above named client only. OHM Remediation Services Corp., Analytical Division, assumes no responsibility or liability for the reliance hereon or use hereof by anyone other than the above named client.

Reviewed and Approved by: *Thomas E. Gran, Ph.D., Vice President* *Date:* *December 21, 1995*

16406 U.S. Route 224 East ▪ P.O. Box 551 ▪ Findlay, OH 45839-0551 ▪ 419-423-3526

ORGANICS

Soil Semi-volatile Organics by GC/MS

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

0221

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Level: (low/med) ____

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	S7 (2CP) #	S8 (DCB) #	TOT OUT
01	SBLK01	59	74	77	63	59	69			0
02	SSPK01	78	84	81	72	75	82			0
03	CLJ78TW001MS	71	76	79	65	68	80			0
04	CLJ78TW001MSD	84	88	81	76	81	91			0
05	CLJ78TW001	71	84	78	73	72	73			0
06	CLJ78TW01D	70	84	81	73	71	76			0
07	CLJ78TW002	69	81	77	73	74	71			0
08	CLJ78TW003	75	91	82	79	77	79			0
09	CLJ78TW004	73	89	78	75	72	77			0

		QC LIMITS	
S1 (NBZ)	= Nitrobenzene-d5	(23-120)	
S2 (FBP)	= 2-Fluorobiphenyl	(30-115)	
S3 (TPH)	= Terphenyl-d14	(18-137)	
S4 (PHL)	= Phenol-d5	(24-113)	
S5 (2FP)	= 2-Fluorophenol	(25-121)	
S6 (TBP)	= 2,4,6-Tribromophenol	(19-122)	
S7 (2CP)	= 2-Chlorophenol-d4		(advisory)
S8 (DCB)	= 1,2-Dichlorobenzene-d4		(advisory)

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

3C

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

0222

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix Spike - EPA Sample No.: CLJ78TW001 Level: (low/med) ____

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
Phenol	6700	0	4400	66	26- 90
2-Chlorophenol	6700	0	4500	67	25-102
1,4-Dichlorobenzene	4500	0	3100	69	28-104
N-Nitroso-di-n-propylami	4500	0	3100	69	41-126
1,2,4-Trichlorobenzene	4500	0	3300	73	38-107
4-Chloro-3-methylphenol	6700	0	4800	72	26-103
Acenaphthene	4500	0	3300	73	31-137
4-Nitrophenol	6700	0	5800	87	11-114
2,4-Dinitrotoluene	4500	0	3600	80	28- 89
Pentachlorophenol	6700	210	3300	46	17-109
Pyrene	4500	0	3700	82	35-142

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	6800	5200	76	15	35	26- 90
2-Chlorophenol	6800	5200	76	13	50	25-102
1,4-Dichlorobenzene	4500	3900	87	23	27	28-104
N-Nitroso-di-n-propylami	4500	3700	82	18	38	41-126
1,2,4-Trichlorobenzene	4500	3800	84	14	23	38-107
4-Chloro-3-methylphenol	6800	5500	81	12	33	26-103
Acenaphthene	4500	3800	84	14	19	31-137
4-Nitrophenol	6800	6300	93	7	50	11-114
2,4-Dinitrotoluene	4500	4100	91 *	13	47	28- 89
Pentachlorophenol	6800	3600	50	8	47	17-109
Pyrene	4500	3900	87	5	36	35-142

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

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

RPD: 0 out of 11 outside limits
Spike Recovery: 1 out of 22 outside limits

COMMENTS: _____

3C
SOIL SEMIVOLATILE BLANK SPIKE RECOVERY

0223

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix Spike - EPA Sample No.: SSPK01

COMPOUND	SPIKE ADDED (ug/Kg)	BLANK CONCENTRATION (ug/Kg)	BS CONCENTRATION (ug/Kg)	BS % REC #	QC LIMITS REC.
Phenol	5000	0	3500	70	26- 90
2-Chlorophenol	5000	0	3600	72	25-102
1,4-Dichlorobenzene	3300	0	2500	76	28-104
N-Nitroso-di-n-propylami	3300	0	2500	76	41-126
1,2,4-Trichlorobenzene	3300	0	2600	79	38-107
4-Chloro-3-methylphenol	5000	0	3800	76	26-103
Acenaphthene	3300	0	2700	82	31-137
4-Nitrophenol	5000	0	4000	80	11-114
2,4-Dinitrotoluene	3300	0	2700	82	28- 89
Pentachlorophenol	5000	0	1400	28	17-109
Pyrene	3300	0	2800	85	35-142

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

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

Spike Recovery: 0 out of 11 outside limits

MENTS:

4B
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

0224 SBLK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Lab File ID: B8845 Lab Sample ID: N2C51712C

Instrument ID: SB Date Extracted: 11/14/95

Matrix: (soil/water) SOIL Date Analyzed: 11/16/95

Level: (low/med) LOW Time Analyzed: 12:31

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	CLJ78TW001	JP0318C	B8849	11/16/95
02	CLJ78TW01D	JP0319C	B8850	11/16/95
03	CLJ78TW002	JP0320C	B8851	11/16/95
04	CLJ78TW003	JP0321C	B8852	11/16/95
05	CLJ78TW004	JP0322C	B8853	11/16/95
06	CLJ78TW001MSD	JP0318CR	B8848	11/16/95
07	SSPK01	N2C51712CS	B8846	11/16/95
08	CLJ78TW001MS	JP0318CS	B8847	11/16/95

COMMENTS:

5B
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

0225

Lab Name: OHM Analytical Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Lab File ID: b8731 DFTPP Injection Date: 11-8-95

Instrument ID: ms6.i DFTPP Injection Time: 1220

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	54.6
68	Less than 2.0% of mass 69	0.0 ( )1
69	Mass 69 relative abundance	74.8
70	Less than 2.0% of mass 69	0.5 ( )1
127	25.0 - 75.0% of mass 198	45.3
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	7.3
275	10.0 - 30.0% of mass 198	18.5
365	Greater than 0.75% of mass 198	1.8
441	Present, but less than mass 443	79.1
442	40.0 - 110.0% of mass 198	58.0
443	15.0 - 24.0% of mass 442	19.6 ( )2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD020	SSTD 020	b8733a	11-8-95	1344
02	SSTD050	SSTD 050	b8734a	11-8-95	1431
03	SSTD080	SSTD 080	b8735a	11-8-95	1525
04	SSTD120	SSTD 120	b8736a	11-8-95	1611
05	SSTD160	SSTD 160	b8737a	11-8-95	1657
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5B
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

0226

Lab Name: OHM Analytical Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Lab File ID: b8843 DFTPP Injection Date: 11-16-95

Instrument ID: msb.i DFTPP Injection Time: 1132

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	50.6
68	Less than 2.0% of mass 69	0.00 (0.00)1
69	Mass 69 relative abundance	67.5
70	Less than 2.0% of mass 69	0.28 (0.41)1
127	25.0 - 75.0% of mass 198	44.26
197	Less than 1.0% of mass 198	0.00
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	7.09
275	10.0 - 30.0% of mass 198	15.41
365	Greater than 0.75% of mass 198	1.82
441	Present, but less than mass 443	9.24
442	40.0 - 110.0% of mass 198	60.96
443	15.0 - 24.0% of mass 442	12.88 (21.13)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SBLK01	N2C51712C	b8845	11-16-95	1231
02	SSPK01	N2C51712CS	b8846	11-16-95	1319
03	CLJ78TW001 MS	JP0318CS	b8847	11-16-95	1400
04	CLJ78TW001MSD	JP0318CR	b8848	11-16-95	1441
05	CLJ78TW001	JP0318C	b8849	11-16-95	1522
06	CLJ78TW01D	JP0319C	b8850	11-16-95	1604
07	CLJ78TW002	JP0320C	b8851	11-16-95	1644
08	CLJ78TW003	JP0321C	b8852	11-16-95	1725
09	CLJ78TW004	JP0322C	b8853	11-16-95	1807
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page __ of __

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

0227

Lab Name: OHM Analytical Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Lab File ID (Standard): b8844 Date Analyzed: 11-16-95

Instrument ID: msb.i Time Analyzed: 11:50

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	2352954	7.02	7988337	8.76	4219512	11.90
	UPPER LIMIT	4705908	7.52	15976674	9.26	8439024	12.40
	LOWER LIMIT	1176477	6.52	3994168	8.26	2109756	11.40
	EPA SAMPLE NO.						
01	SB1K01	2395090	7.01	7836430	8.75	4153479	11.89
02	SSPK01	2463874	7.02	8495357	8.77	4646604	11.91
03	CLJ78TW001MS	2653585	7.01	9100568	8.76	4854261	11.91
04	CLJ78TW001MSD	2451835	7.01	8416339	8.75	4610127	11.90
05	CLJ78TW001	2476056	7.01	8297218	8.75	4283722	11.90
06	CLJ78TW01D	2608435	7.01	8609445	8.75	4355496	11.89
07	CLJ78TW002	2503489	7.01	8405284	8.75	4457054	11.89
08	CLJ78TW003	2212593	7.01	7296437	8.75	3925276	11.90
09	CLJ78TW004	2295493	7.01	7503690	8.75	3862604	11.90
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

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

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

Page ___ of ___

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

0228

Lab Name: OHM Analytical Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Lab File ID (Standard): b8844 Date Analyzed: 11-16-95

Instrument ID: msb.i Time Analyzed: 11:50

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	6577619	14.84	4707393	20.33	4939022	23.69
	UPPER LIMIT	13155238	15.34	9414786	20.83	9878044	24.19
	LOWER LIMIT	3288810	14.34	2353696	19.83	2469511	23.19
	EPA SAMPLE NO.						
01	SBLK01	6535358	14.83	5027491	20.31	5739854	23.67
02	SSPK01	7287529	14.85	5166659	20.35	5698022	23.70
03	CLJ78TW001 MS	7947196	14.85	5479002	20.33	5940973	23.70
04	CLJ78TW001MSD	7431455	14.84	5421669	20.33	5795927	23.68
05	CLJ78TW001	6728399	14.84	5534794	20.32	5649703	23.69
06	CLJ78TW01D	7160599	14.84	5492866	20.32	6159638	23.67
07	CLJ78TW002	7091643	14.83	5497635	20.32	6015953	23.67
08	CLJ78TW003	6092744	14.83	4778648	20.32	5100693	23.67
09	CLJ78TW004	6179921	14.83	5066872	20.32	4970753	23.67
10							
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12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

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

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

Page __ of __

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0229

CLJ78TW001

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: JP0318C

Sample wt/vol: 30.1 (g/mL) G Lab File ID: B8849

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: 26 decanted: (Y/N) N Date Extracted: 11/14/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	900	U
111-44-4	bis(2-Chloroethyl)ether	900	U
95-57-8	2-Chlorophenol	900	U
541-73-1	1,3-Dichlorobenzene	900	U
106-46-7	1,4-Dichlorobenzene	900	U
95-50-1	1,2-Dichlorobenzene	900	U
95-48-7	2-Methylphenol	900	U
108-60-1	2,2'-oxybis(1-Chloropropane)	900	U
106-44-5	4-Methylphenol	900	U
621-64-7	N-Nitroso-di-n-propylamine	900	U
67-72-1	Hexachloroethane	900	U
98-95-3	Nitrobenzene	900	U
78-59-1	Isophorone	900	U
88-75-5	2-Nitrophenol	900	U
105-67-9	2,4-Dimethylphenol	900	U
111-91-1	bis(2-Chloroethoxy)methane	900	U
120-83-2	2,4-Dichlorophenol	900	U
120-82-1	1,2,4-Trichlorobenzene	900	U
91-20-3	Naphthalene	900	U
106-47-8	4-Chloroaniline	900	U
87-68-3	Hexachlorobutadiene	900	U
59-50-7	4-Chloro-3-methylphenol	900	U
91-57-6	2-Methylnaphthalene	900	U
77-47-4	Hexachlorocyclopentadiene	900	U
88-06-2	2,4,6-Trichlorophenol	900	U
95-95-4	2,4,5-Trichlorophenol	900	U
91-58-7	2-Chloronaphthalene	900	U
88-74-4	2-Nitroaniline	900	U
131-11-3	Dimethylphthalate	900	U
208-96-8	Acenaphthylene	900	U
606-20-2	2,6-Dinitrotoluene	900	U
99-09-2	3-Nitroaniline	900	U
83-32-9	Acenaphthene	900	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0230 CLJ78TW001

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: JP0318C

Sample wt/vol: 30.1 (g/mL) G Lab File ID: B8849

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: 26 decanted: (Y/N) N Date Extracted: 11/14/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	4500	U
100-02-7	4-Nitrophenol	4500	U
132-64-9	Dibenzofuran	900	U
121-14-2	2,4-Dinitrotoluene	900	U
84-66-2	Diethylphthalate	900	U
7005-72-3	4-Chlorophenyl-phenylether	900	U
86-73-7	Fluorene	900	U
100-01-6	4-Nitroaniline	900	U
534-52-1	4,6-Dinitro-2-methylphenol	2300	U
101-55-3	4-Bromophenyl-phenylether	900	U
86-30-6	N-Nitrosodiphenylamine (1)	900	U
118-74-1	Hexachlorobenzene	900	U
87-86-5	Pentachlorophenol	210	J
85-01-8	Phenanthrene	900	U
120-12-7	Anthracene	900	U
86-74-8	Carbazole	900	U
84-74-2	Di-n-butylphthalate	900	U
206-44-0	Fluoranthene	900	U
129-00-0	Pyrene	900	U
85-68-2	Butylbenzylphthalate	900	U
91-94-1	3,3'-Dichlorobenzidine	900	U
56-55-3	Benzo(a)anthracene	900	U
218-01-9	Chrysene	900	U
117-81-7	bis(2-Ethylhexyl)phthalate	900	U
117-84-0	Di-n-octylphthalate	900	U
205-99-2	Benzo(b)fluoranthene	900	U
207-08-9	Benzo(k)fluoranthene	900	U
50-32-8	Benzo(a)pyrene	900	U
193-39-5	Indeno(1,2,3-cd)pyrene	900	U
53-70-3	Dibenz(a,h)anthracene	900	U
191-24-2	Benzo(g,h,i)perylene	900	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0231

EPA SAMPLE NO.

CLJ78TW001

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: JP0318C

Sample wt/vol: 30.1 (g/mL) G Lab File ID: B8849

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: 26 decanted: (Y/N) N Date Extracted: 11/14/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 5

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 123-42-2	2-Pentanone, 4-hydroxy-4-met	5.49	3400	JNA
2.	unknown	5.65	390	J
3. 6137-06-0	2-Heptanone, 4-methyl-	6.24	420	JN
4. 5171-84-6	Hexane, 3,3,4,4-tetramethyl-	6.44	920	JN
5. 1809-10-5	Pentane, 3-bromo-	6.47	1200	JN

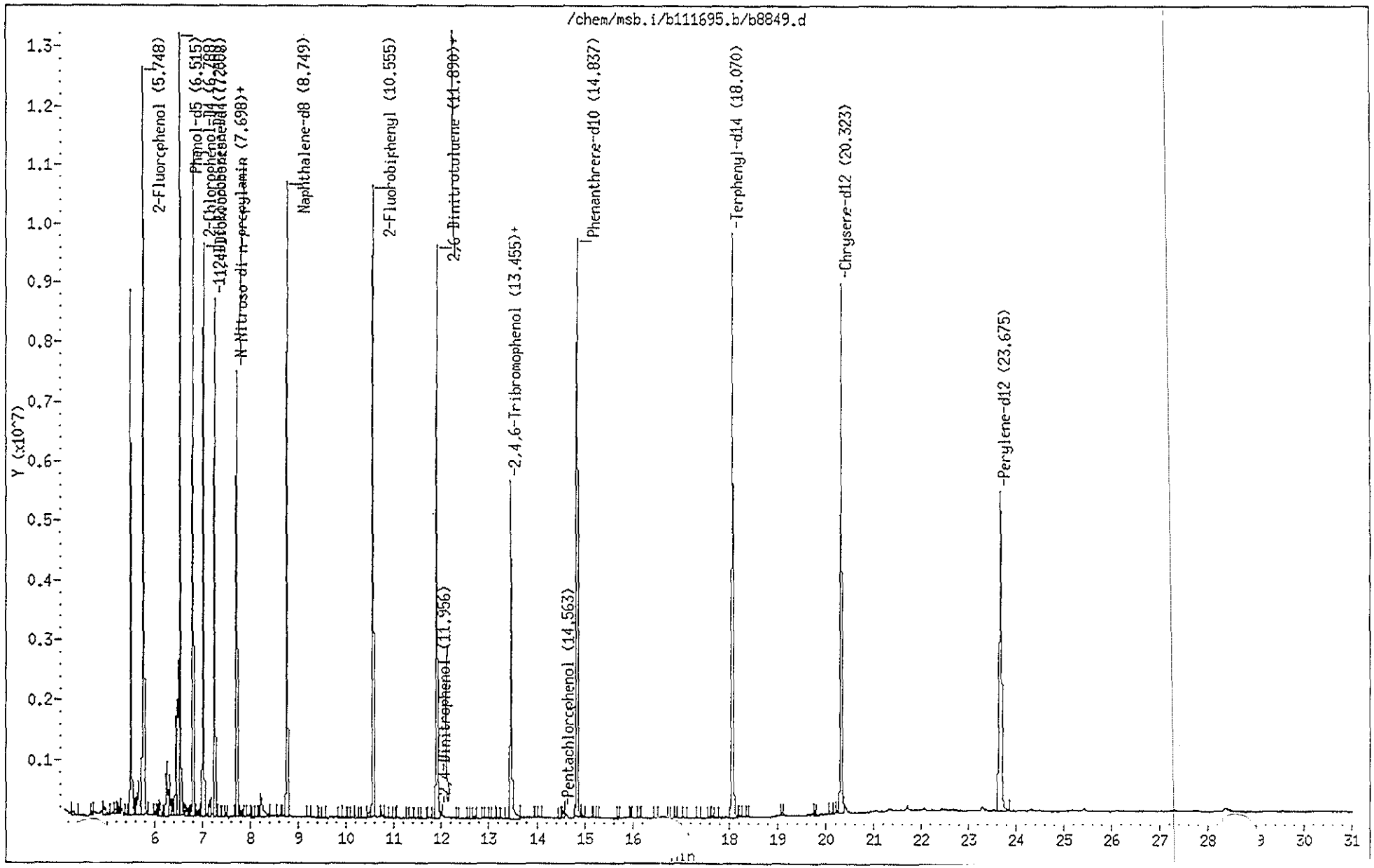
0232

Data File: /chem/msb.i/b111695.b/b8849.d
Date : 16-NOV-95 15:22
Client ID: jp0318c
Sample Info: 17418n clj78tw001

Column phase: J&W DB-5

Instrument: msb.i

Operator: J. Kelly
Column diameter: 0.25



OHM Analytical Division

BASE NEUTRAL QUANT AND RATIO REPORT

Data file : /chem/msb.i/b111695.b/b8849.d
Lab Smp Id: Client Smp ID: jp0318c
Inj Date : 16-NOV-95 15:22
Operator : J. Kelly Inst ID: msb.i
Smp Info : 17418n clj78tw001
Misc Info : jp0318c,n2c51712,m1,1,1
Comment :
Method : /chem/msb.i/b111695.b/110895bclp.m
Meth Date : 17-Nov-1995 10:26 kathryn Quant Type: ISTD
Cal Date : 16-NOV-95 11:50 Cal File: b8844.d
Als bottle: 7
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

KBeglow

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)	
$	2	2-Fluorophenol	112.00	5.748	5.746	(0.820)	4932995	53.9	53.9(R)	
$	4	Phenol-d5	99.00	6.515	6.523	(0.930)	6101086	54.9	54.9(R)	
$	7	2-Chlorophenol-D4	132.00	6.788	6.786	(0.969)	4985719	58.8	58.8(R)	
*	10	1,4-Dichlorobenzene-d4	152.00	7.008	7.016	(1.000)	2476056	40.0		
$	13	1,2-Dichlorobenzene-D4	152.00	7.238	7.246	(1.033)	2265880	41.9	41.9(R)	
	17	N-Nitroso-di-n-propylamine	70.00	7.698	7.466	(1.098)	578130	7.74	~~7.74(Q)~~	RT, MS, ND
$	19	Nitrobenzene-d5	82.00	7.698	7.707	(0.880)	3498192	35.7	35.7(R)	
*	27	Naphthalene-d8	136.00	8.749	8.759	(1.000)	8297218	40.0		
$	37	2-Fluorobiphenyl	172.00	10.555	10.560	(0.887)	5838369	41.9	41.9(R)	
	41	2,6-Dinitrotoluene	165.00	11.890	11.483	(0.999)	576138	12.9	~~12.9(Q)~~	ND, RT, MS
*	44	Acenaphthene-d10	164.00	11.901	11.900	(1.000)	4283722	40.0		
	45	2,4-Dinitrophenol	184.00	11.967	11.966	(1.006)	52426	6.48	~~6.48(Q)~~	ND, MS
	48	2,4-Dinitrotoluene	165.00	11.890	12.252	(0.999)	576138	10.4	~~10.4(Q)~~	ND, RT, MS
	56	2,4,6-Tribromophenol	330.00	13.455	13.463	(1.131)	1337889	55.0	55.0(R)	
	57	4-Bromophenyl-phenylether	248.00	13.455	13.870	(0.907)	97038	2.09	~~2.09(Q)~~	RT, MS, ND
	59	Pentachlorophenol	266.00	14.563	14.552	(0.981)	37107	2.29	2.29	
	60	Phenanthrene-d10	188.00	14.837	14.839	(1.000)	6728399	40.0		
	68	Terphenyl-d14	244.00	18.070	18.070	(0.889)	6006397	38.9	38.9(R)	
	73	Chrysene-d12	240.00	20.323	20.329	(1.000)	5534794	40.0		
	75	Perylene-d12	264.00	23.675	23.690	(1.000)	5649703	40.0		

)C Flag Legend

) Qualifier signal failed the ratio test.
. Spike/Surrogate failed recovery limits.

Data File: /chem/msb.i/b111695.b/b8849.d

Date : 16-NOV-95 15:22

Client ID: jp0318c

Instrument: msb.i

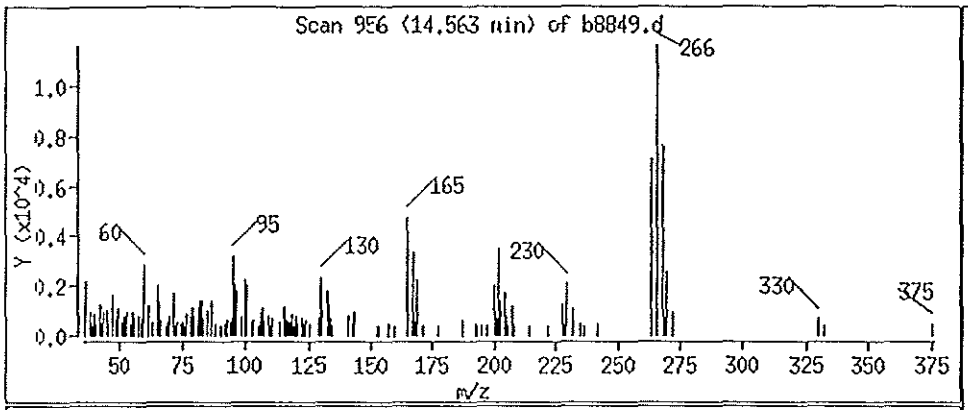
Sample Info: 17418n clj78tw001

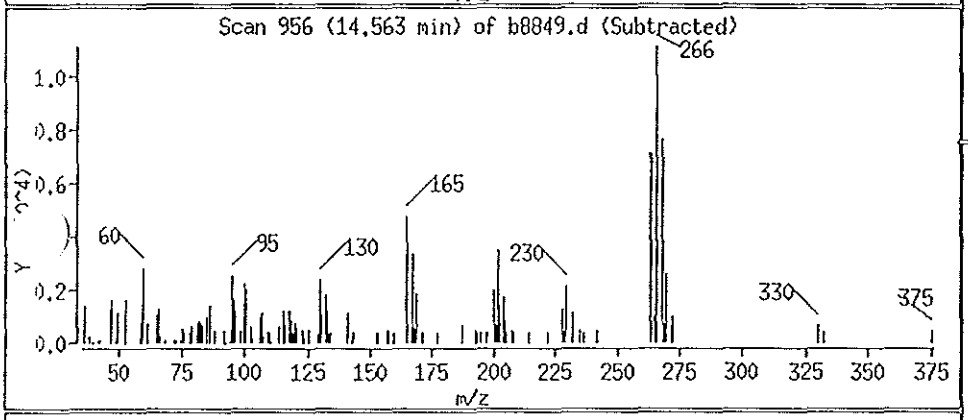
Operator: J. Kelly

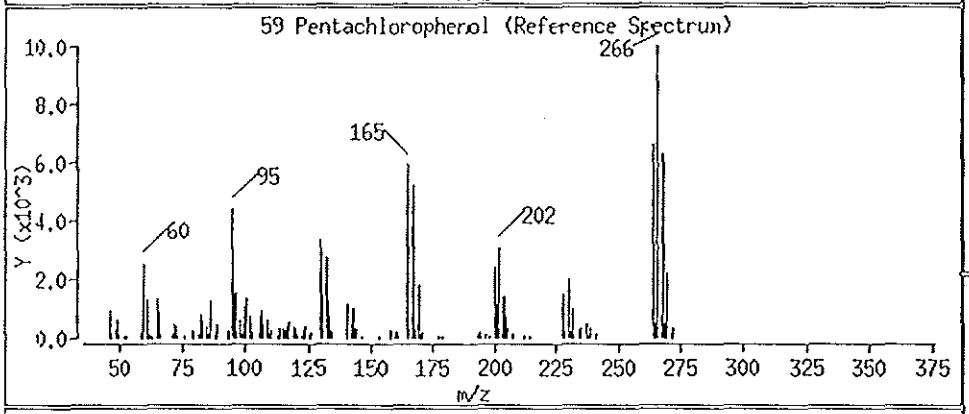
Column phase: J&W DB-5

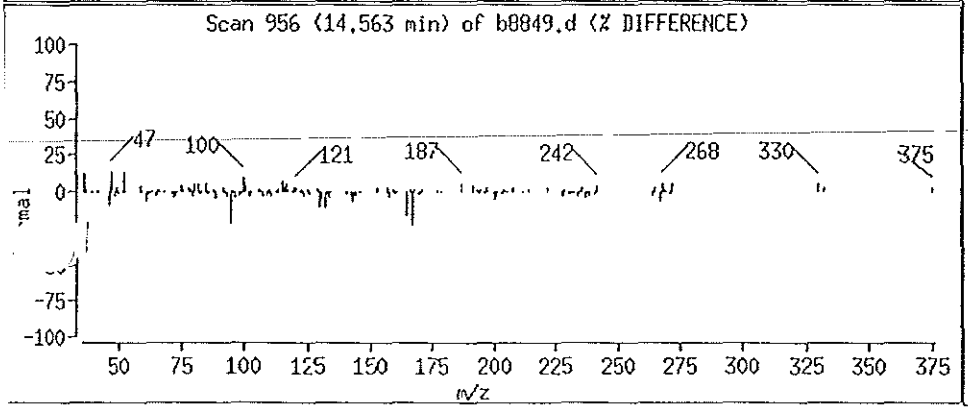
Column diameter: 0.25

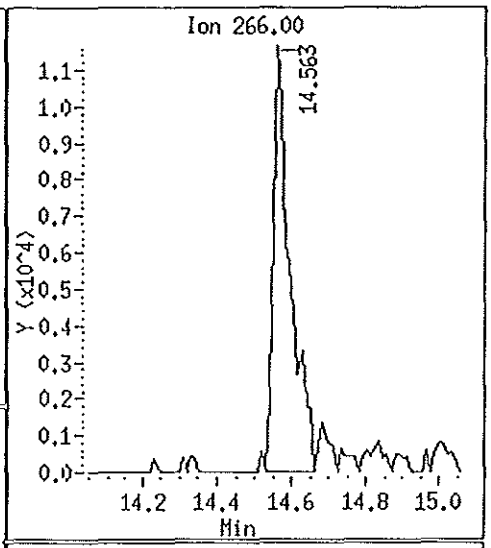
59 Pentachlorophenol

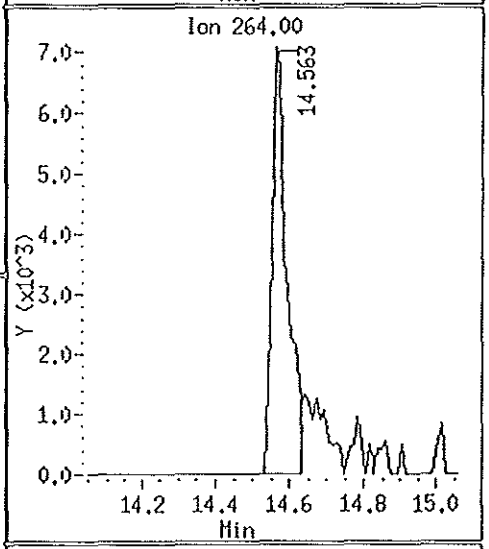


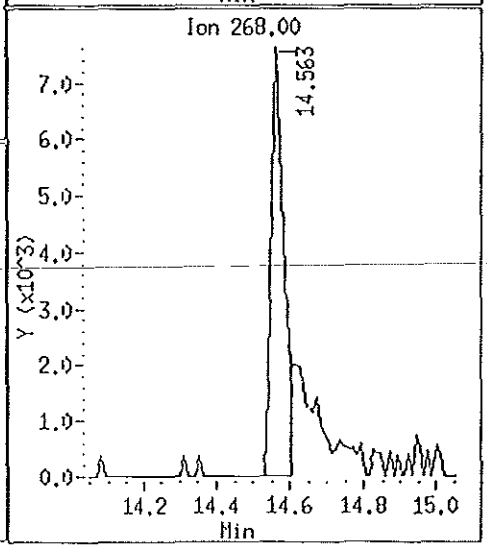












Data File: /chem/msb.i/b111695.b/b8849.d

Date : 16-NOV-95 15:22

Client ID: jp0318c

Instrument: msb.i

0235

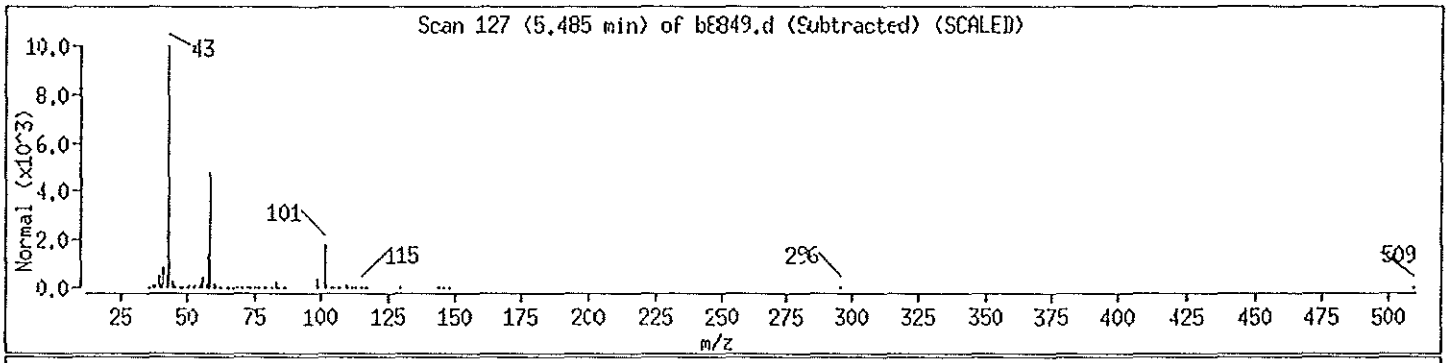
Sample Info: 17418n clj78tw001

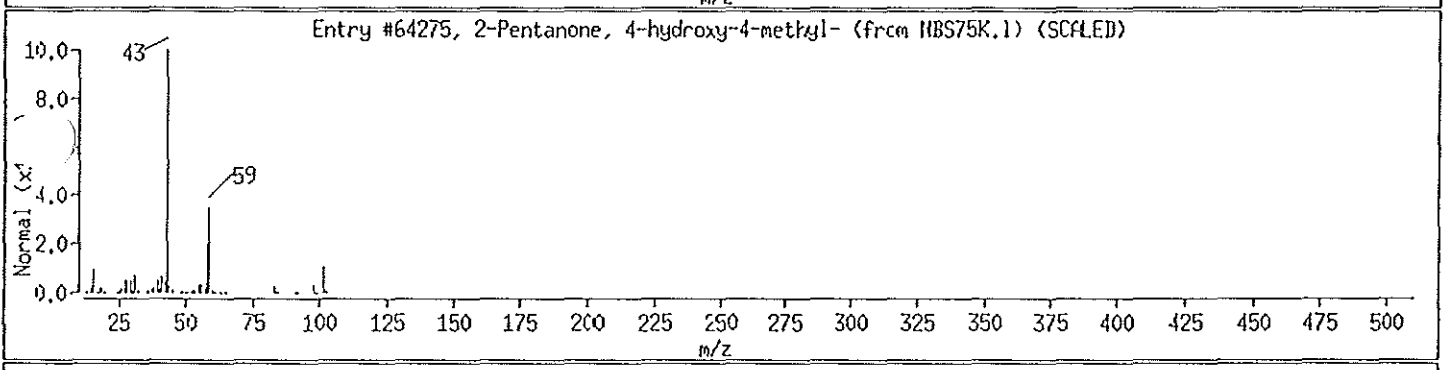
Operator: J. Kelly

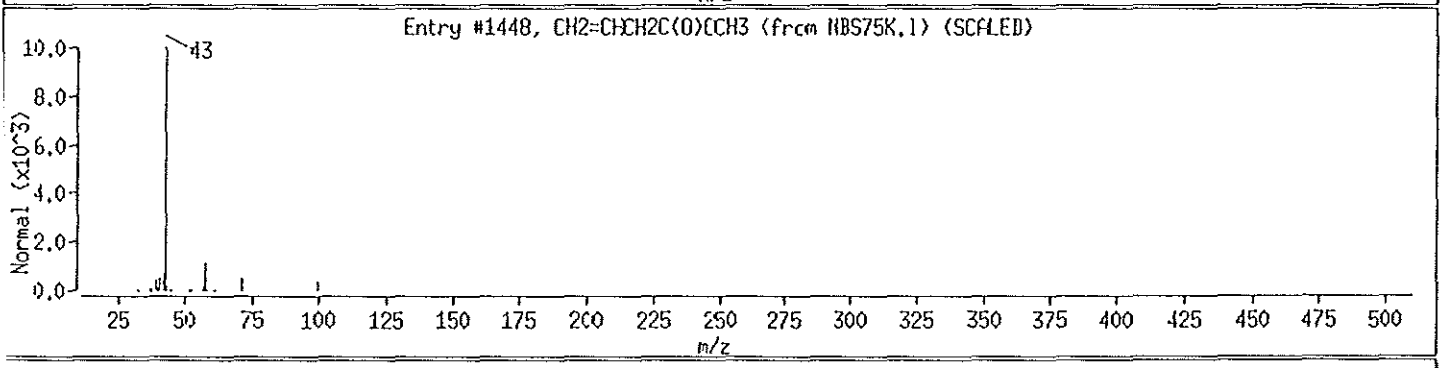
Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NBS75K.l	64275	50	C6H12O2	116
CH2=CHCH2C(O)OCH3	3724-55-8	NBS75K.l	1448	12	C5H8O2	100







Data File: /chem/msb.i/b111695.b/b8849.d

Date : 16-NOV-95 15:22

)ient ID: jp0318c

Instrument: msb.i

0236

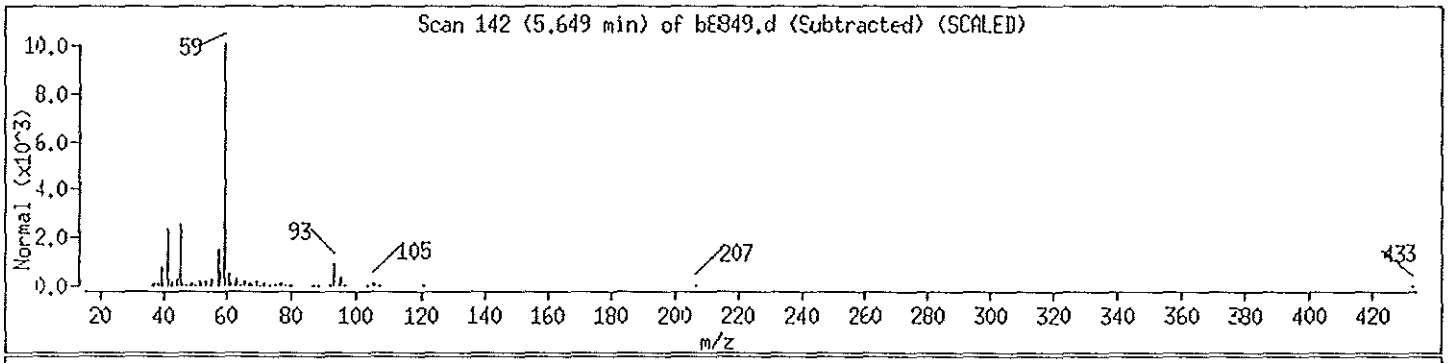
Sample Info: 17418n clj78tw001

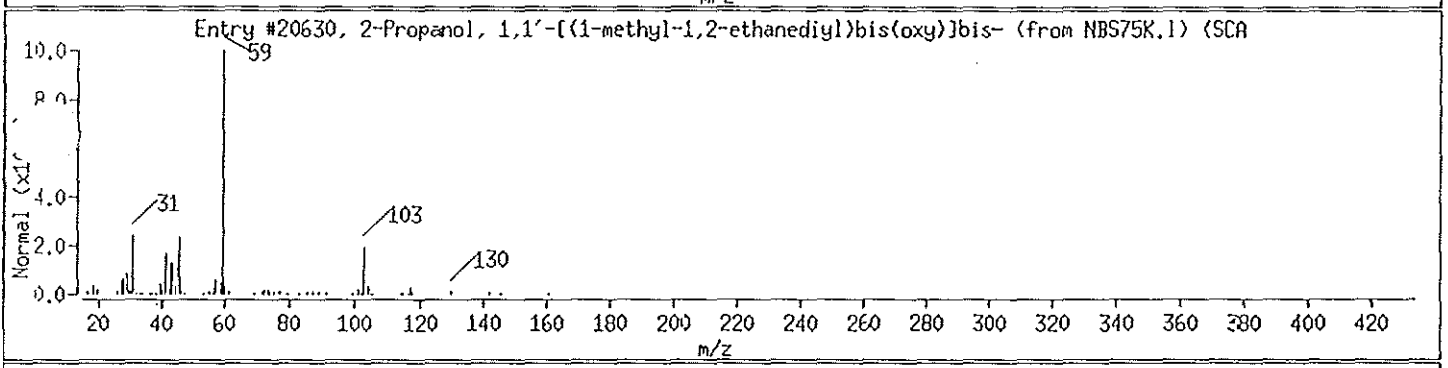
Operator: J. Kelly

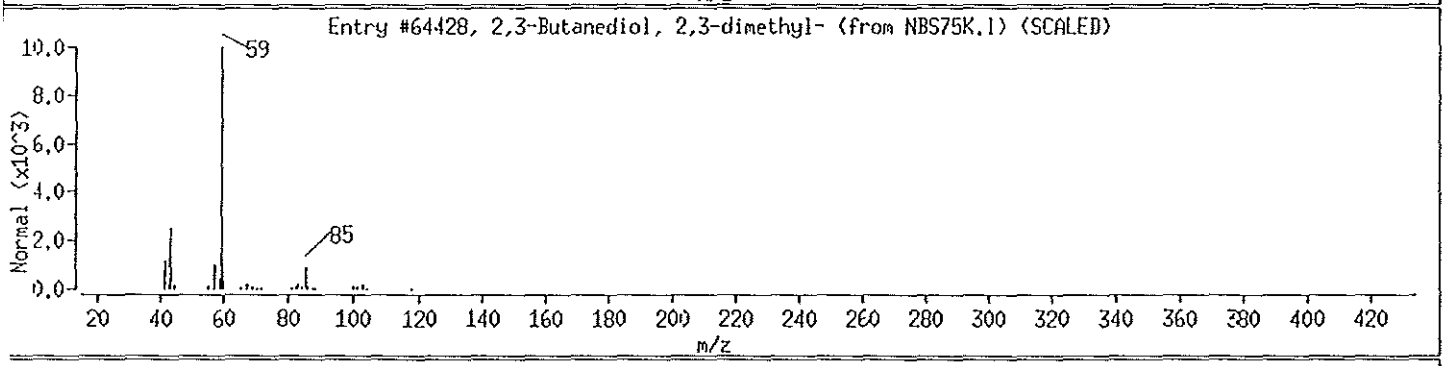
Column phase: J&W DB-5

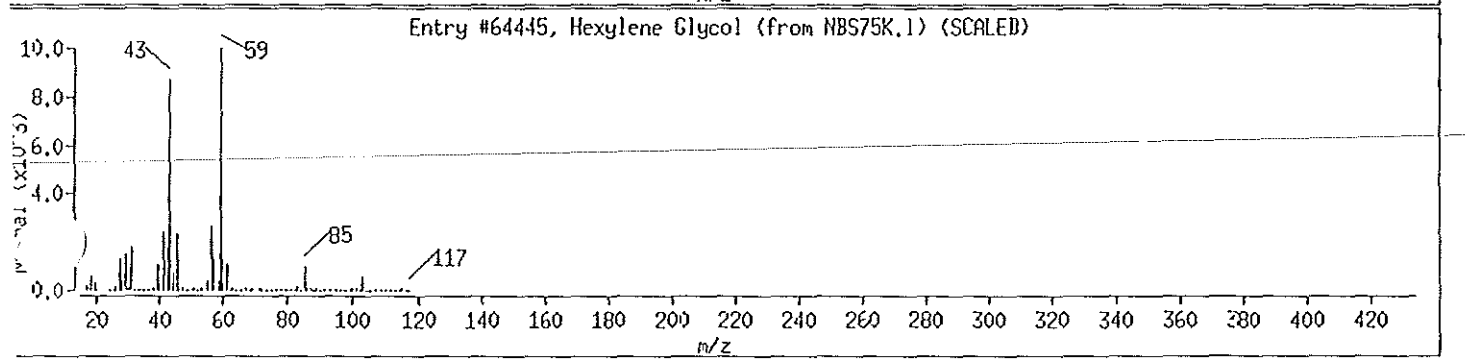
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Propanol, 1,1'-[(1-methyl-1,2-ethanedi	1638-16-0	NBS75K.l	20630	45	C9H2004	192
2,3-Butanediol, 2,3-dimethyl-	76-09-5	NBS75K.l	64428	42	C6H1402	118
Hexylene Glycol	107-41-5	NBS75K.l	64445	40	C6H1402	118









Data File: /chem/msb.i/b111695.b/b8849.d

Date : 16-NOV-95 15:22

lient ID: jp0318c

Instrument: msb.i

0237

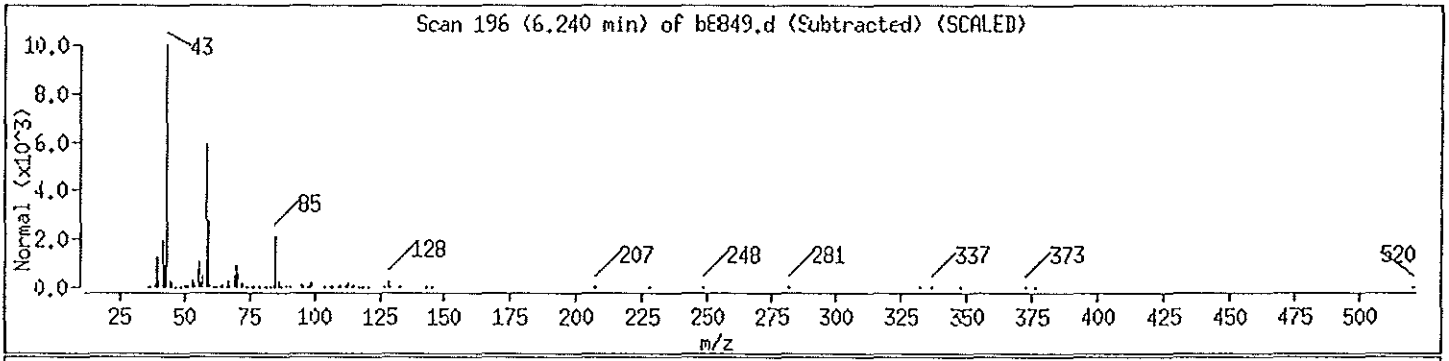
Sample Info: 17418n clj78tw001

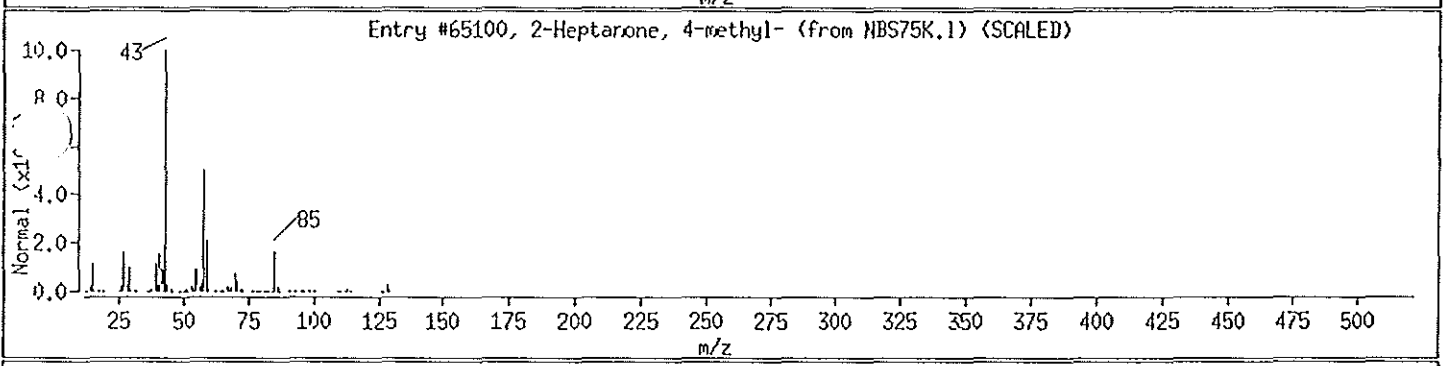
Operator: J. Kelly

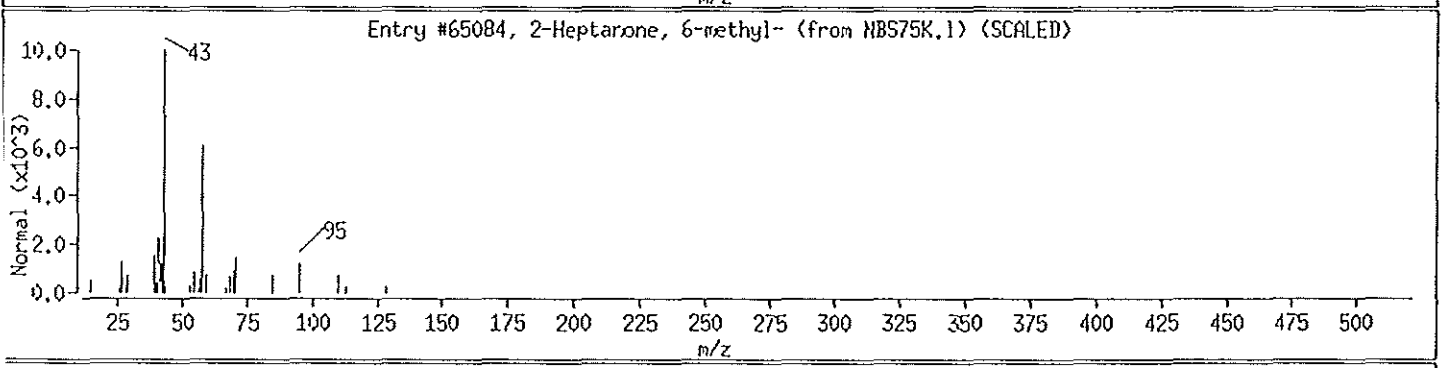
Column phase: J&W DB-5

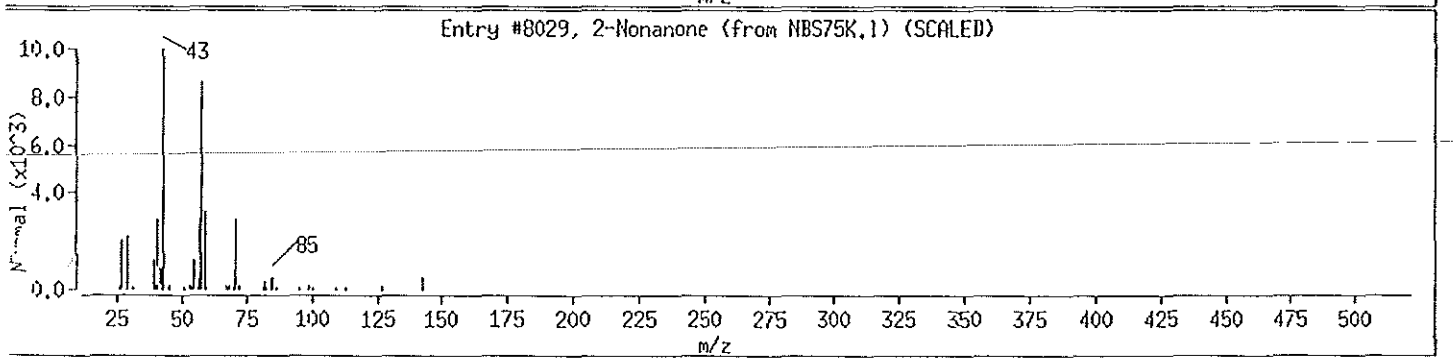
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Heptanone, 4-methyl-	6137-06-0	NBS75K.1	65100	91	C8H16O	128
2-Heptanone, 6-methyl-	928-68-7	NBS75K.1	65084	58	C8H16O	128
2-Nonanone	821-55-6	NBS75K.1	8029	42	C9H18O	142









Data File: /chem/msb.i/b111695.b/b8849.d

Date : 16-NOV-95 15:22

Client ID: jp0318c

Instrument: msb.i

0238

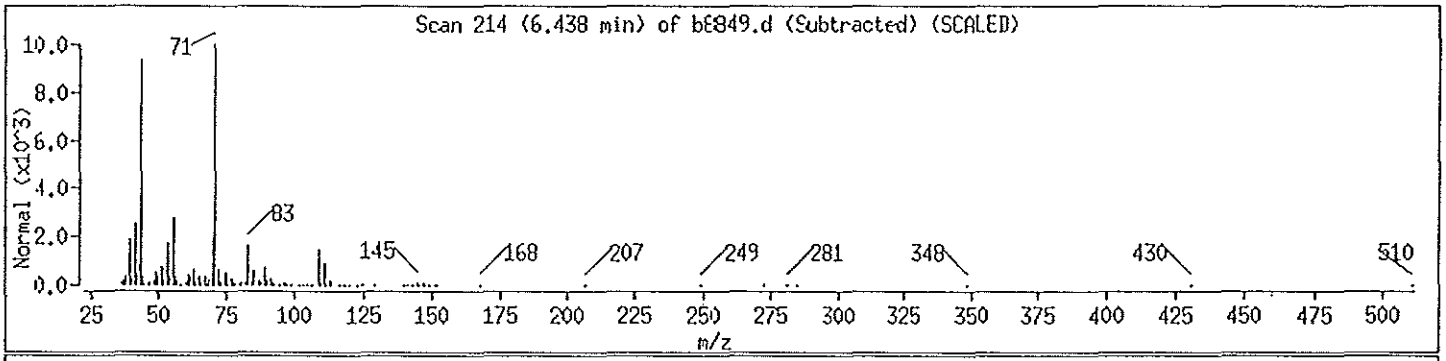
Sample Info: 17418n clj78tw001

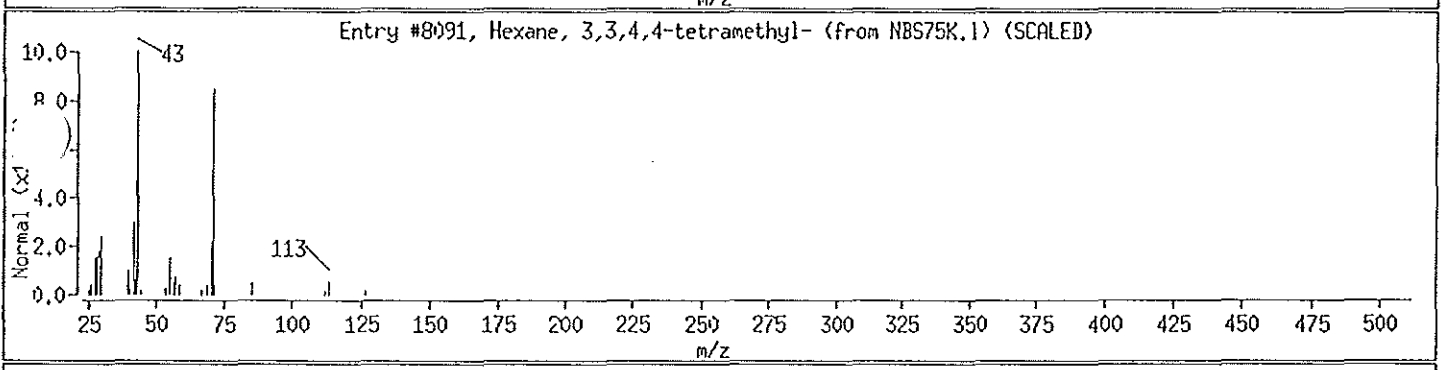
Operator: J. Kelly

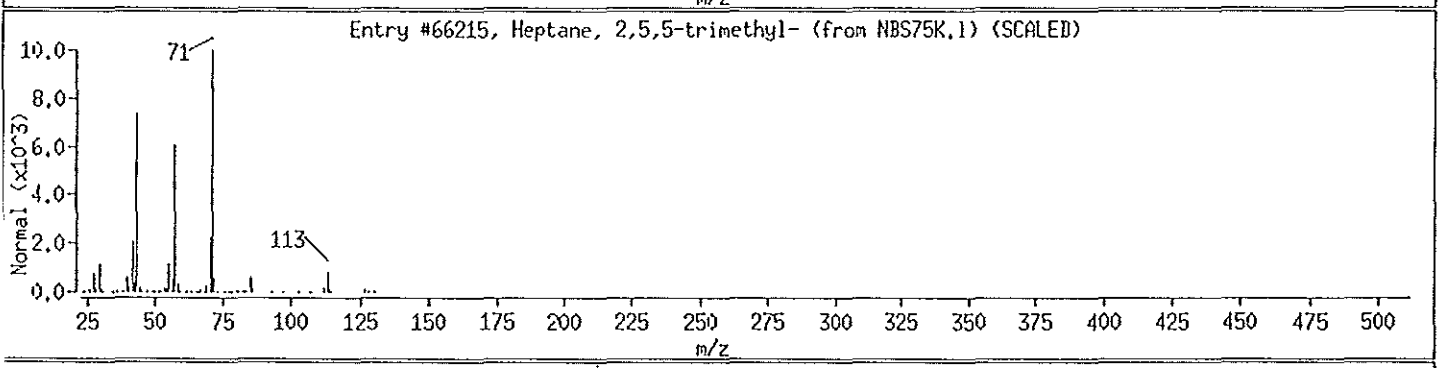
Column phase: J&W DB-5

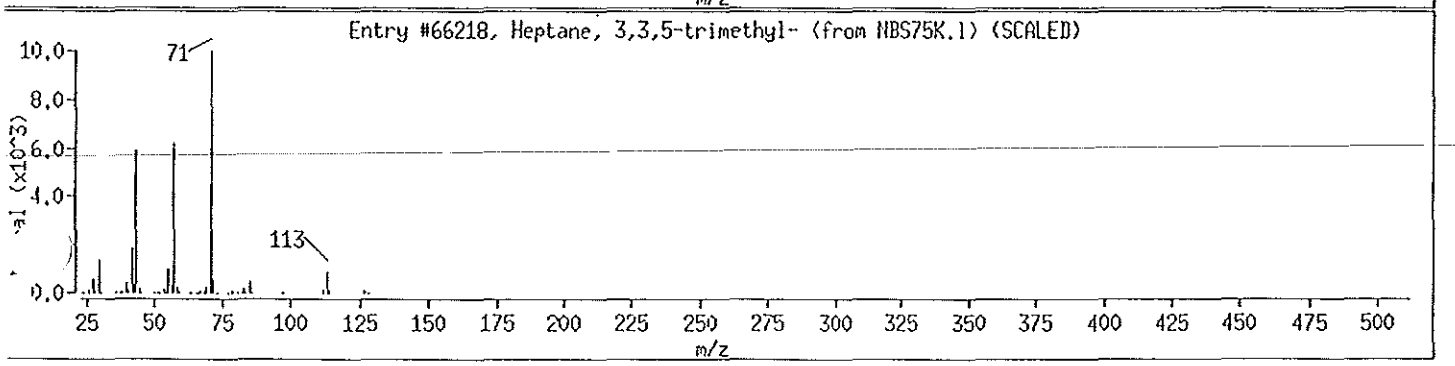
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Hexane, 3,3,4,4-tetramethyl-	5171-84-6	NBS75K.1	8091	45	C10H22	142
Heptane, 2,5,5-trimethyl-	1189-99-7	NBS75K.1	66215	45	C10H22	142
Heptane, 3,3,5-trimethyl-	7154-80-5	NBS75K.1	66218	45	C10H22	142









Data File: /chem/msb.i/b111695.b/b8849.d

Date : 16-NOV-95 15:22

Client ID: jp0318c

Sample Info: 17418n clj78tw001

Instrument: msb.i

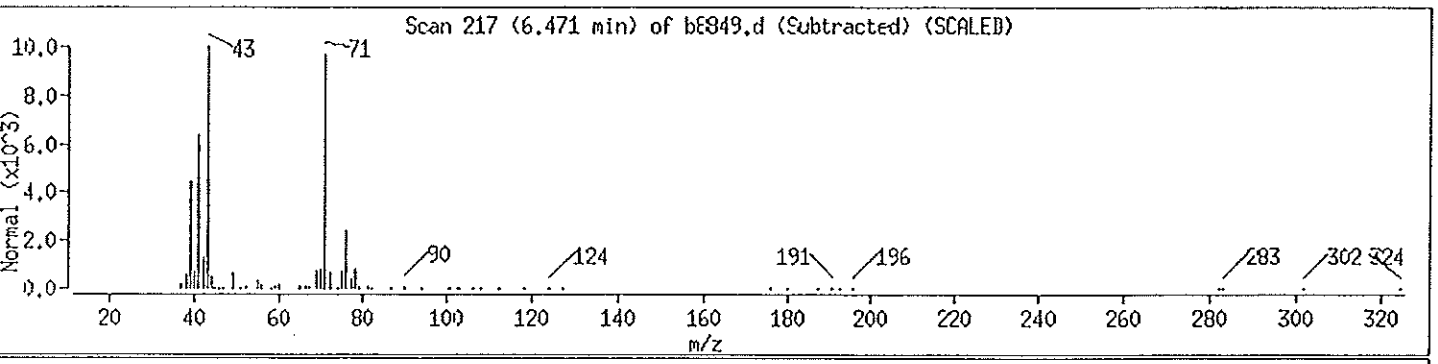
0239

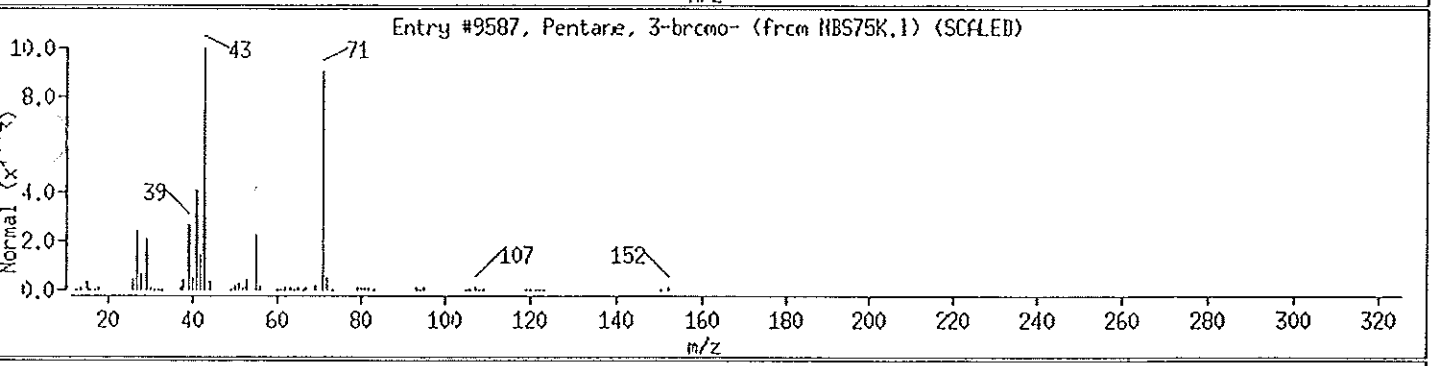
Operator: J. Kelly

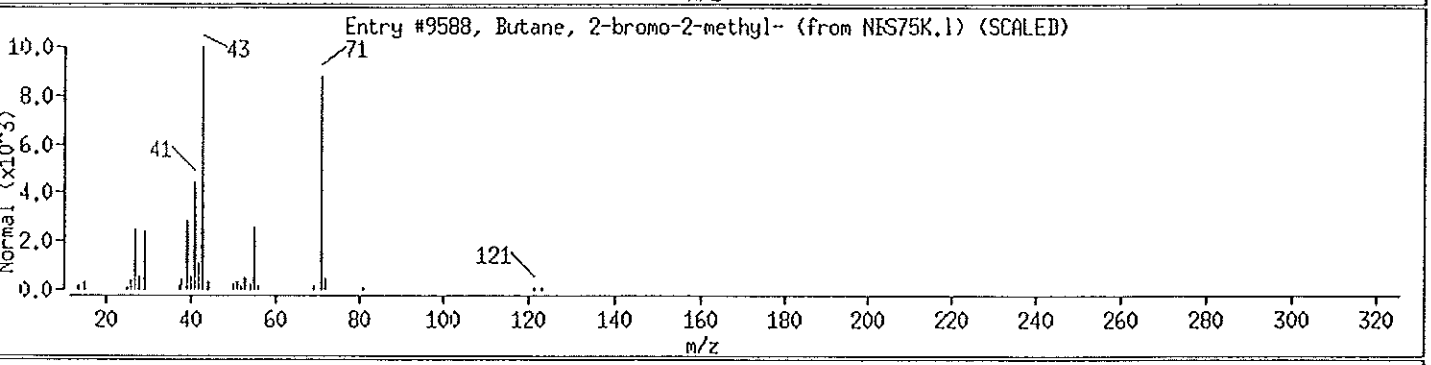
Column phase: J&W DB-5

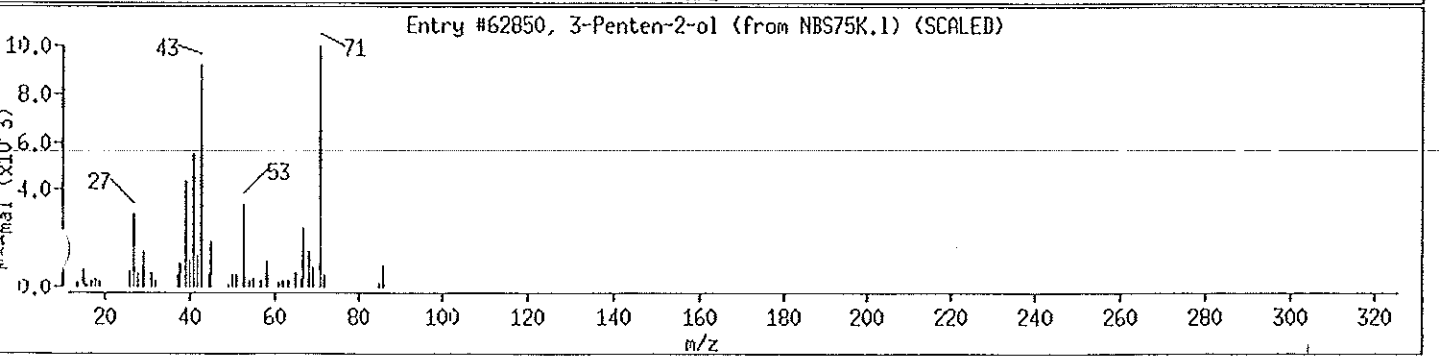
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Pentane, 3-bromo-	1809-10-5	NBS75K.l	9587	43	C5H11Br	150
Butane, 2-bromo-2-methyl-	507-36-8	NBS75K.l	9588	43	C5H11Br	150
3-Penten-2-ol	1569-50-2	NBS75K.l	62850	39	C5H10O	86









1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0240 CLJ78TW002

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: JP0320C

Sample wt/vol: 30.2 (g/mL) G Lab File ID: B8851

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: 19 decanted: (Y/N) N Date Extracted: 11/14/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	820	U
111-44-4	bis(2-Chloroethyl)ether	820	U
95-57-8	2-Chlorophenol	820	U
541-73-1	1,3-Dichlorobenzene	820	U
106-46-7	1,4-Dichlorobenzene	820	U
95-50-1	1,2-Dichlorobenzene	820	U
95-48-7	2-Methylphenol	820	U
108-60-1	2,2'-oxybis(1-Chloropropane)	820	U
106-44-5	4-Methylphenol	820	U
621-64-7	N-Nitroso-di-n-propylamine	820	U
67-72-1	Hexachloroethane	820	U
98-95-3	Nitrobenzene	820	U
78-59-1	Isophorone	820	U
88-75-5	2-Nitrophenol	820	U
105-67-9	2,4-Dimethylphenol	820	U
111-91-1	bis(2-Chloroethoxy)methane	820	U
120-83-2	2,4-Dichlorophenol	820	U
120-82-1	1,2,4-Trichlorobenzene	820	U
91-20-3	Naphthalene	820	U
106-47-8	4-Chloroaniline	820	U
87-68-3	Hexachlorobutadiene	820	U
59-50-7	4-Chloro-3-methylphenol	820	U
91-57-6	2-Methylnaphthalene	820	U
77-47-4	Hexachlorocyclopentadiene	820	U
88-06-2	2,4,6-Trichlorophenol	820	U
95-95-4	2,4,5-Trichlorophenol	820	U
91-58-7	2-Chloronaphthalene	820	U
88-74-4	2-Nitroaniline	820	U
131-11-3	Dimethylphthalate	820	U
208-96-8	Acenaphthylene	820	U
606-20-2	2,6-Dinitrotoluene	820	U
99-09-2	3-Nitroaniline	820	U
83-32-9	Acenaphthene	820	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0241 CLJ78TW002

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: JP0320C

Sample wt/vol: 30.2 (g/mL) G Lab File ID: B8851

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: 19 decanted: (Y/N) N Date Extracted: 11/14/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	4100	U
100-02-7	4-Nitrophenol	4100	U
132-64-9	Dibenzofuran	820	U
121-14-2	2,4-Dinitrotoluene	820	U
84-66-2	Diethylphthalate	820	U
7005-72-3	4-Chlorophenyl-phenylether	820	U
86-73-7	Fluorene	820	U
100-01-6	4-Nitroaniline	820	U
534-52-1	4,6-Dinitro-2-methylphenol	2000	U
101-55-3	4-Bromophenyl-phenylether	820	U
86-30-6	N-Nitrosodiphenylamine (1)	820	U
118-74-1	Hexachlorobenzene	820	U
87-86-5	Pentachlorophenol	820	U
85-01-8	Phenanthrene	820	U
120-12-7	Anthracene	820	U
86-74-8	Carbazole	820	U
84-74-2	Di-n-butylphthalate	820	U
206-44-0	Fluoranthene	820	U
129-00-0	Pyrene	820	U
85-68-2	Butylbenzylphthalate	820	U
91-94-1	3,3'-Dichlorobenzidine	820	U
56-55-3	Benzo(a)anthracene	820	U
218-01-9	Chrysene	820	U
117-81-7	bis(2-Ethylhexyl)phthalate	820	U
117-84-0	Di-n-octylphthalate	820	U
205-99-2	Benzo(b)fluoranthene	820	U
207-08-9	Benzo(k)fluoranthene	820	U
50-32-8	Benzo(a)pyrene	820	U
193-39-5	Indeno(1,2,3-cd)pyrene	820	U
53-70-3	Dibenz(a,h)anthracene	820	U
191-24-2	Benzo(g,h,i)perylene	820	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

0242 CLJ78TW002

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: JP0320C

Sample wt/vol: 30.2 (g/mL) G Lab File ID: B8851

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: 19 decanted: (Y/N) N Date Extracted: 11/14/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 7

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 123-42-2	2-Pentanone, 4-hydroxy-4-met	5.48	6600	JNA
2.	unknown	5.65	340	J
3. 6137-06-0	2-Heptanone, 4-methyl-	6.24	720	JN
4. 6137-06-0	2-Heptanone, 4-methyl-	6.30	370	JN
5.	unknown	6.44	560	J
6.	unknown	6.47	710	J
7. 124-18-5	Decane	6.73	330	JN

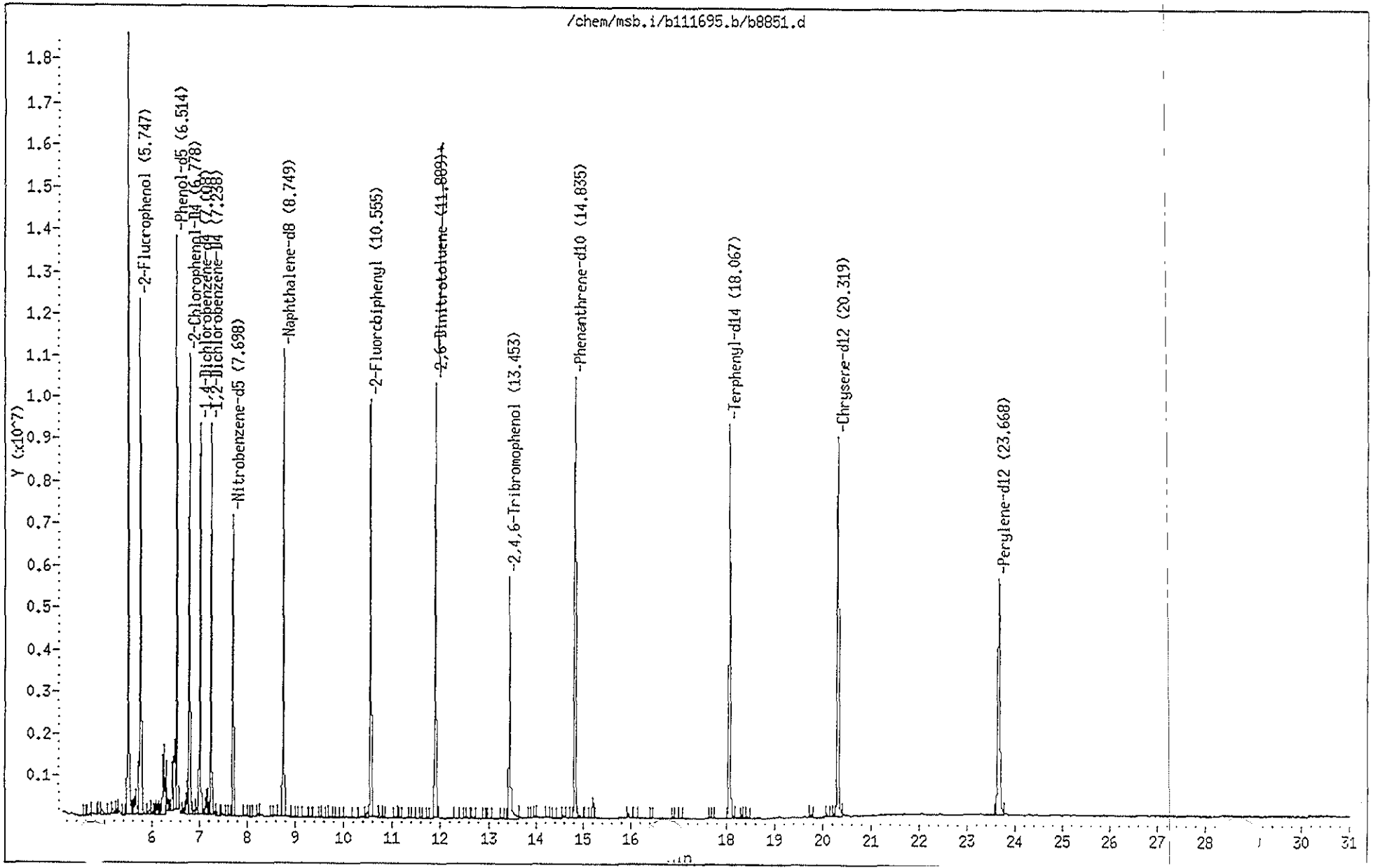
0243

Data File: /chem/msb.i/b111695.b/b8851.d
Date : 16-NOV-95 16:44
Client ID: jp0320c
Sample Info: 17418n clj78tw002

Column phase: J&W DB-5

Instrument: msb.i

Operator: J. Kelly
Column diameter: 0.25



OHM Analytical Division

BASE NEUTRAL QUANT AND RATIO REPORT

Data file : /chem/msb.i/b111695.b/b8851.d
Lab Smp Id: Client Smp ID: jp0320c
Inj Date : 16-NOV-95 16:44
Operator : J. Kelly Inst ID: msb.i
Smp Info : 17418n clj78tw002
Misc Info : jp0320c,n2c51712,m1,1,1
Comment :
Method : /chem/msb.i/b111695.b/110895bclp.m
Meth Date : 17-Nov-1995 10:10 kathryn Quant Type: ISTD
Cal Date : 16-NOV-95 11:50 Cal File: b8844.d
Als bottle: 9
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

K Bergdoll

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)	
$	3 2-Fluorophenol	112.00	5.747	5.746	(0.820)	5103346	55.2	55.2(R)	
$	4 Phenol-d5	99.00	6.514	6.523	(0.930)	6194685	55.1	55.1(R)	
$	7 2-Chlorophenol-D4	132.00	6.789	6.786	(0.969)	4935350	57.5	57.5(R)	
*	10 1,4-Dichlorobenzene-d4	152.00	7.008	7.016	(1.000)	2503489	40.0		
$	13 1,2-Dichlorobenzene-D4	152.00	7.238	7.246	(1.033)	2274732	41.6	41.6(R)	
$	19 Nitrobenzene-d5	82.00	7.698	7.707	(0.880)	3420084	34.4	34.4(R)	
*	27 Naphthalene-d8	136.00	8.749	8.759	(1.000)	8405284	40.0		
$	37 2-Fluorobiphenyl	172.00	10.555	10.560	(0.888)	5898323	40.7	40.7(R)	
	41 2,6-Dinitrotoluene	165.00	11.889	11.483	(1.000)	~~599662~~	~~12.9~~	~~12.9(Q)~~	ND, RT, MS
*	44 Acenaphthene-d10	164.00	11.889	11.900	(1.000)	4457054	40.0		
	48 2,4-Dinitrotoluene	165.00	11.889	12.252	(1.000)	~~599421~~	~~10.4~~	~~10.4(Q)~~	ND, RT, MS
$	56 2,4,6-Tribromophenol	330.00	13.453	13.463	(1.132)	1355323	53.5	53.5(R)	
*	60 Phenanthrene-d10	188.00	14.835	14.839	(1.000)	7091643	40.0		
$	68 Terphenyl-d14	244.00	18.067	18.070	(0.889)	5907416	38.5	38.5(R)	
*	73 Chrysene-d12	240.00	20.319	20.329	(1.000)	5497635	40.0		
*	79 Perylene-d12	264.00	23.668	23.690	(1.000)	6015953	40.0		

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

0245

Data File: /chem/msb.i/b111695.b/b8851.d

Date : 16-NOV-95 16:44

Client ID: jp0320c

Instrument: msb.i

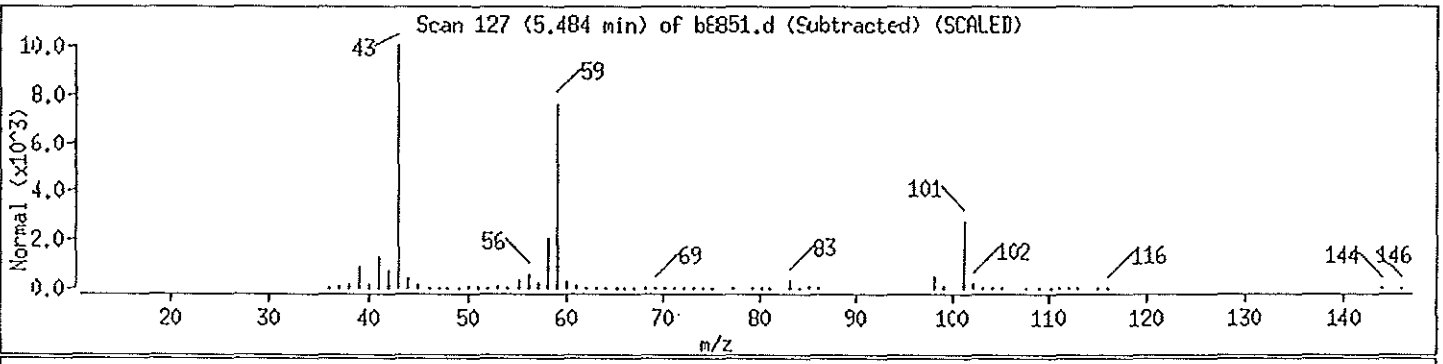
Sample Info: 17418n clj78tw002

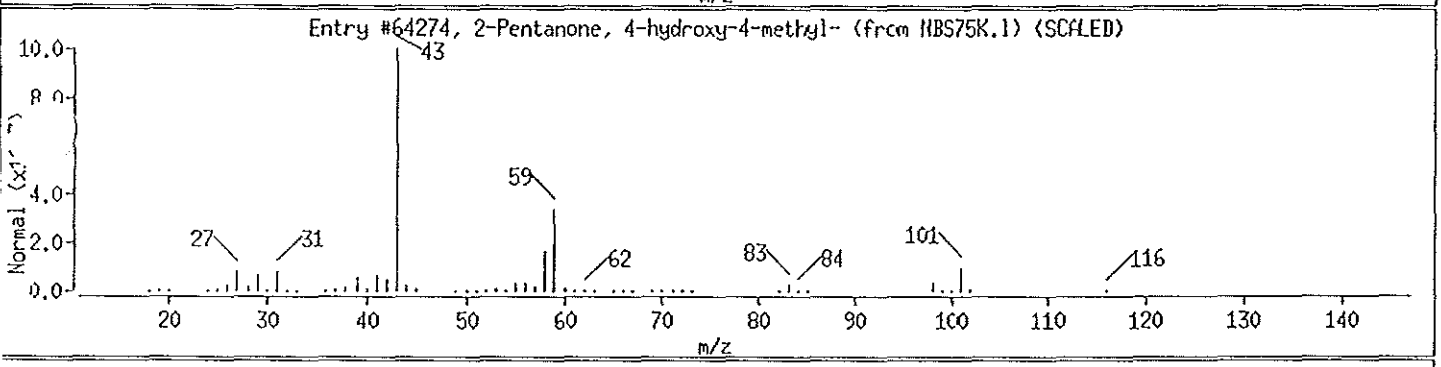
Operator: J. Kelly

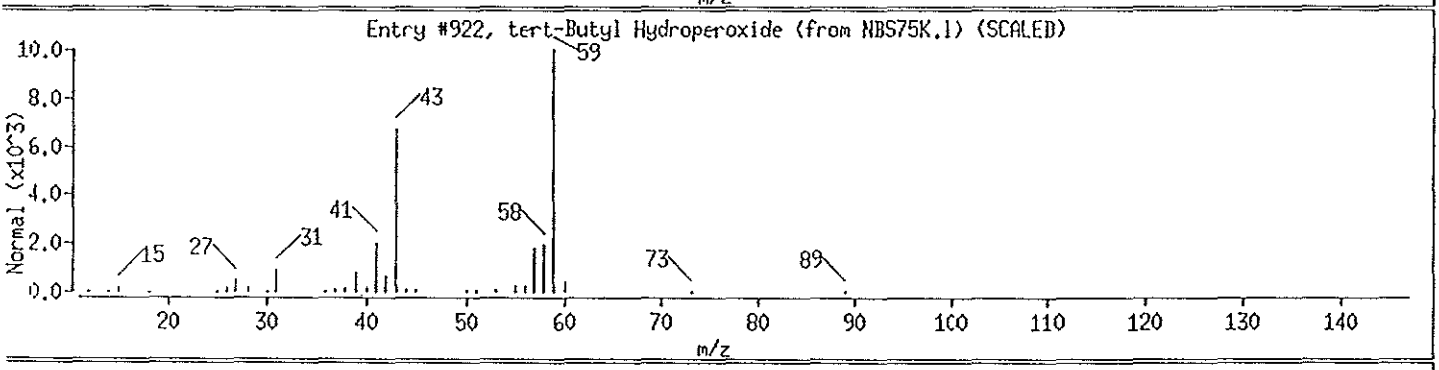
Column phase: J&W DB-5

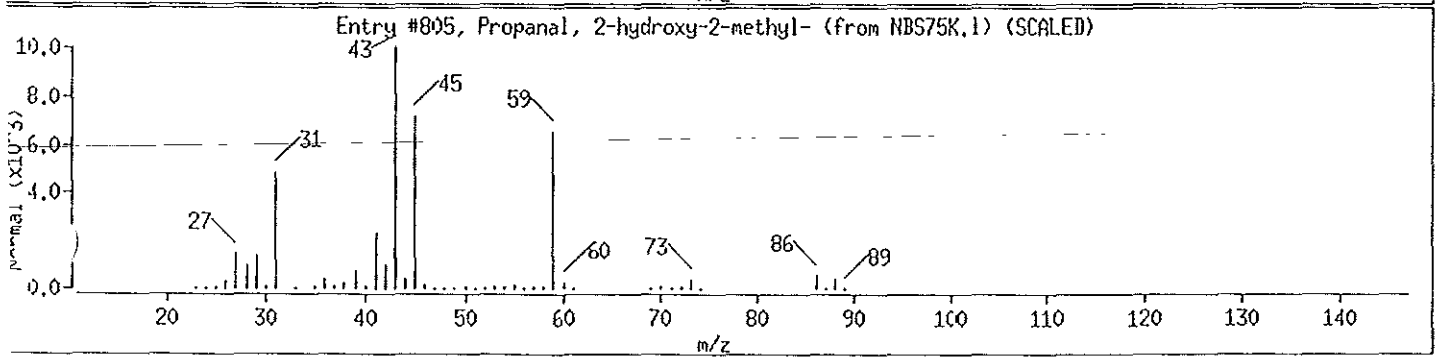
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NBS75K.l	64274	64	C6H12O2	116
tert-Butyl Hydroperoxide	75-91-2	NBS75K.l	922	50	C4H10O2	90
Propanal, 2-hydroxy-2-methyl-	20818-81-9	NBS75K.l	805	40	C4H8O2	88









Data File: /chem/msb.i/b111695.b/b8851.d

Date : 16-NOV-95 16:44

)ient ID: jp0320c

Sample Info: 17418n clj78tw002

Instrument: msb.i

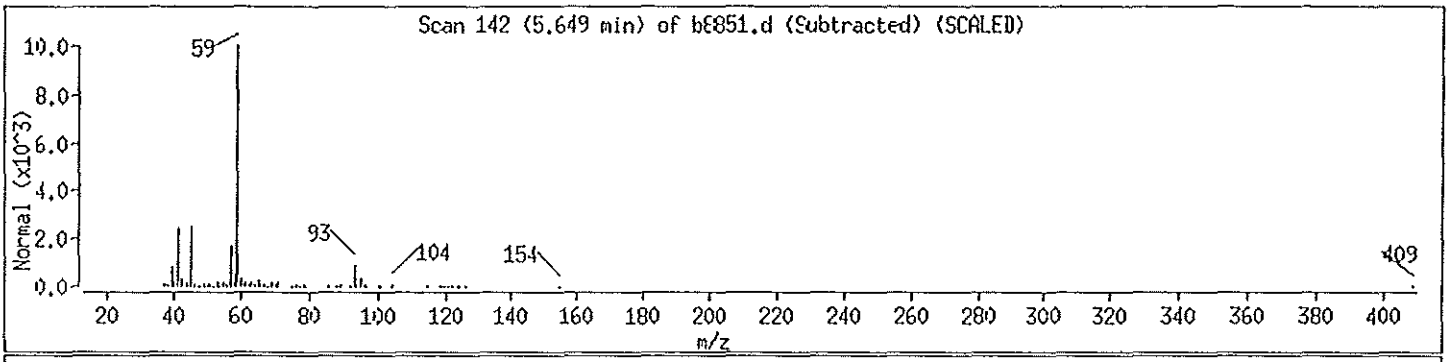
0246

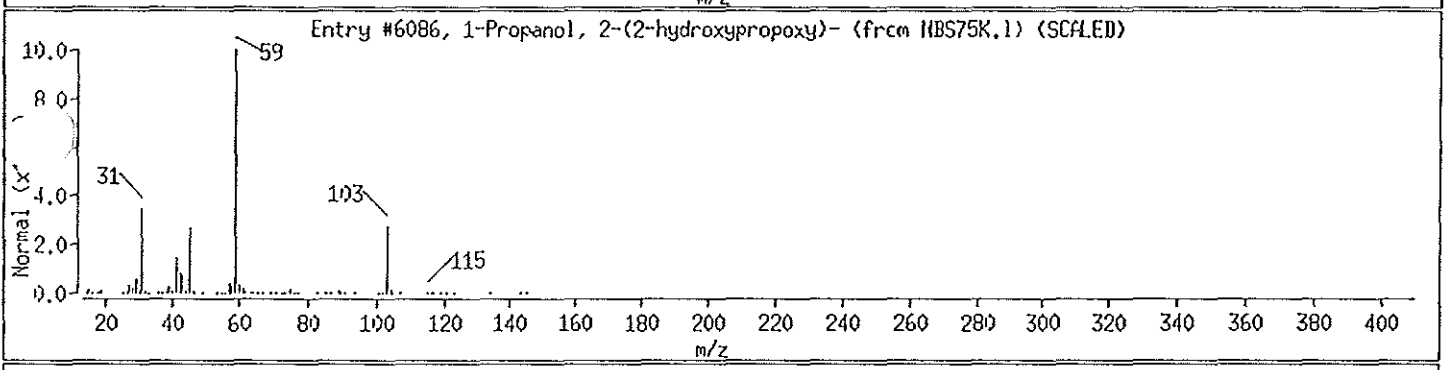
Operator: J. Kelly

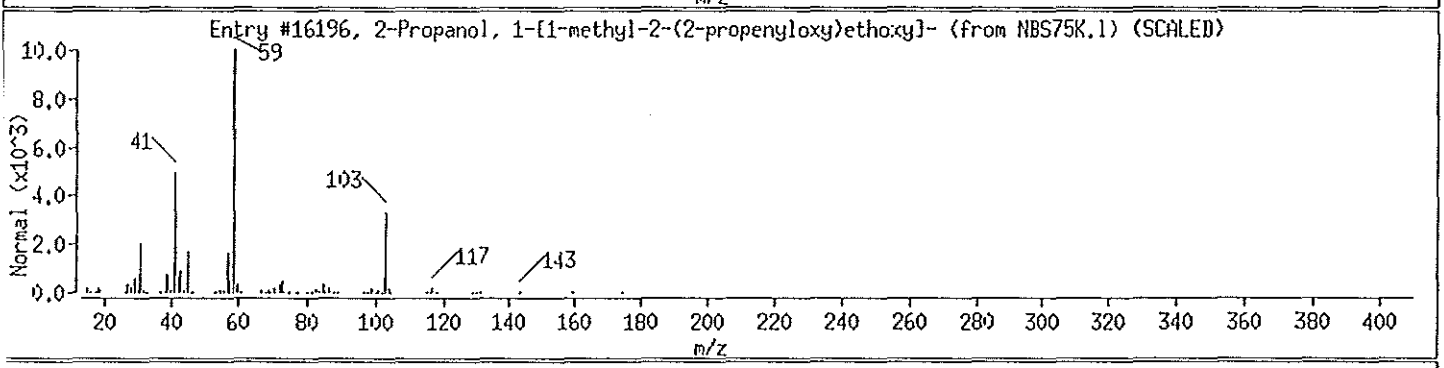
Column phase: J&W DB-5

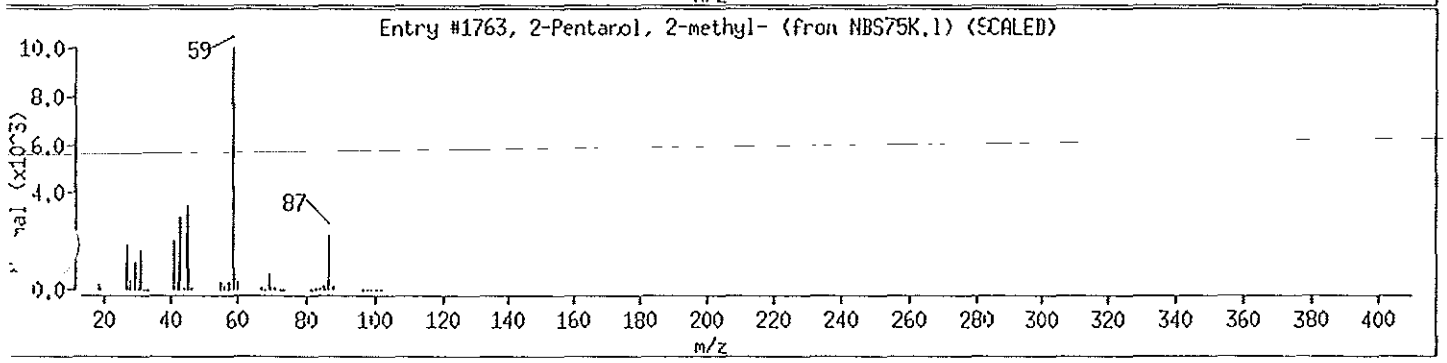
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Propanol, 2-(2-hydroxypropoxy)-	106-62-7	NBS75K.1	6086	39	C6H1403	134
2-Propanol, 1-[1-methyl-2-(2-propenyloxy	55956-25-7	NBS75K.1	16196	39	C9H1803	174
2-Pentanol, 2-methyl-	590-36-3	NBS75K.1	1763	38	C6H140	102









Data File: /chem/msb.i/b111695.b/b8851.d

Date : 16-NOV-95 16:44

)ient ID: jp0320c

Instrument: msb.i

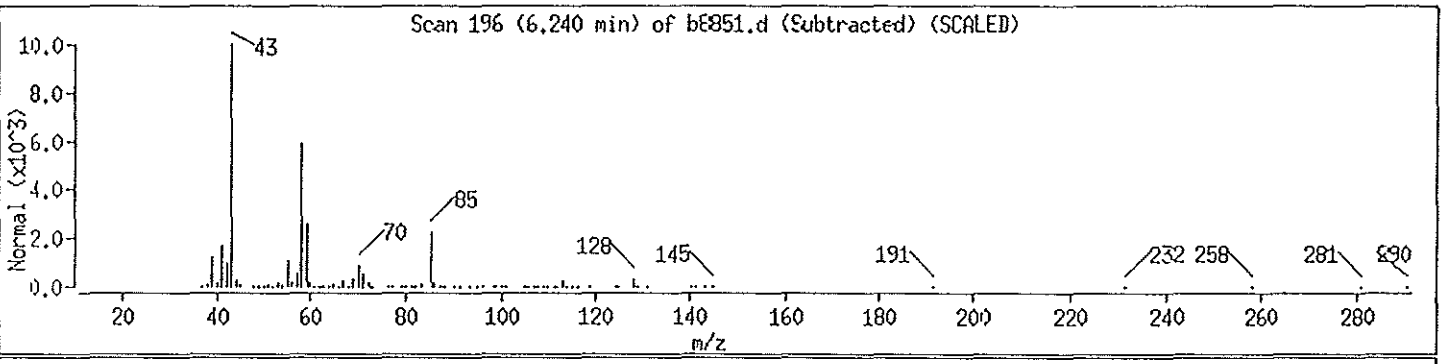
Sample Info: 17418n clj78tw002

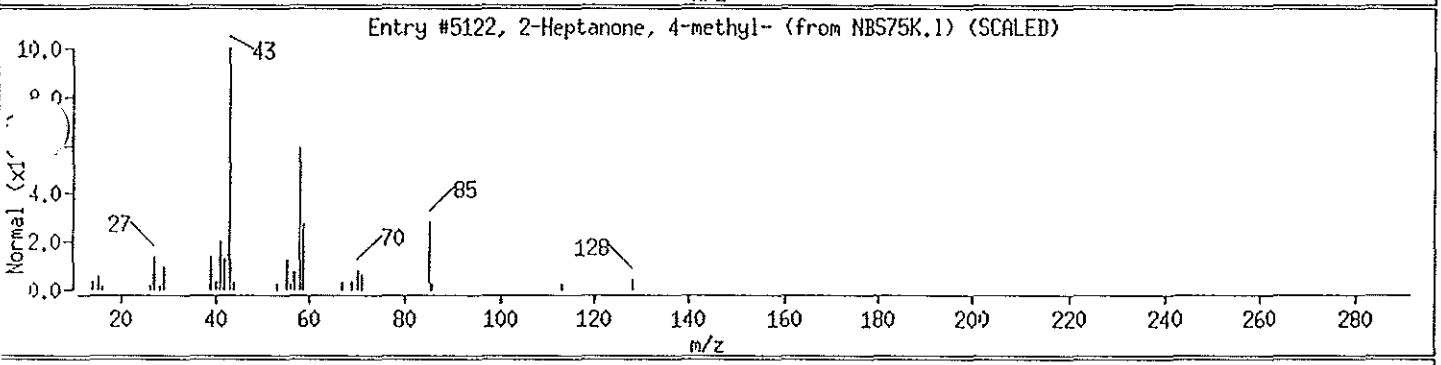
Operator: J. Kelly

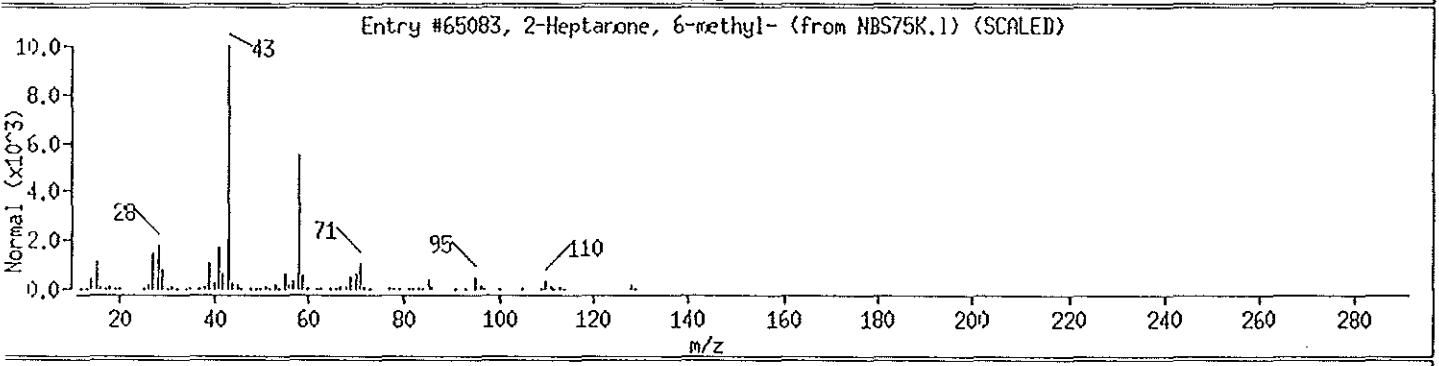
Column phase: J&W DB-5

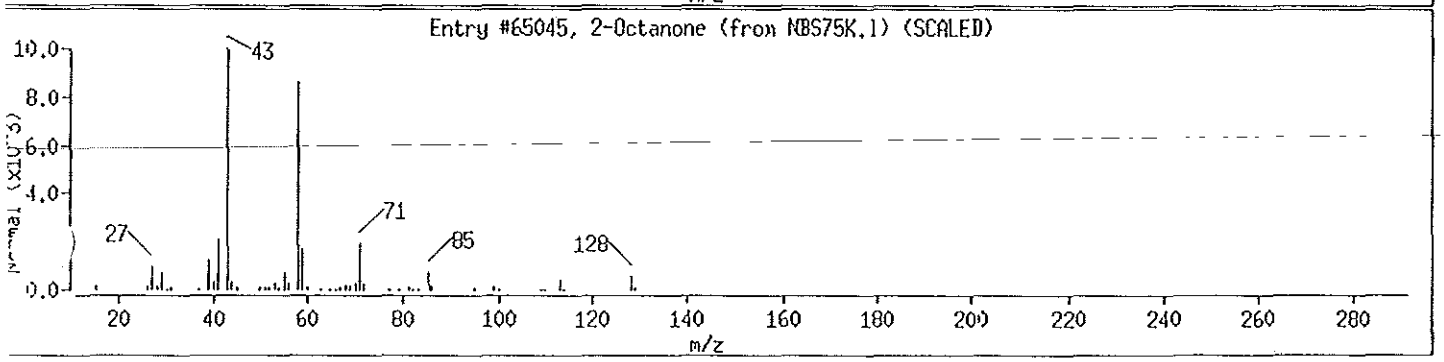
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Heptanone, 4-methyl-	6137-06-0	NBS75K.1	5122	94	C8H16O	128
2-Heptanone, 6-methyl-	928-68-7	NBS75K.1	65083	50	C8H16O	128
2-Octanone	111-13-7	NBS75K.1	65045	43	C8H16O	128









Data File: /chem/msb.i/b111695.b/b8851.d

Date : 16-NOV-95 16:44

Client ID: jp0320c

Instrument: msb.i

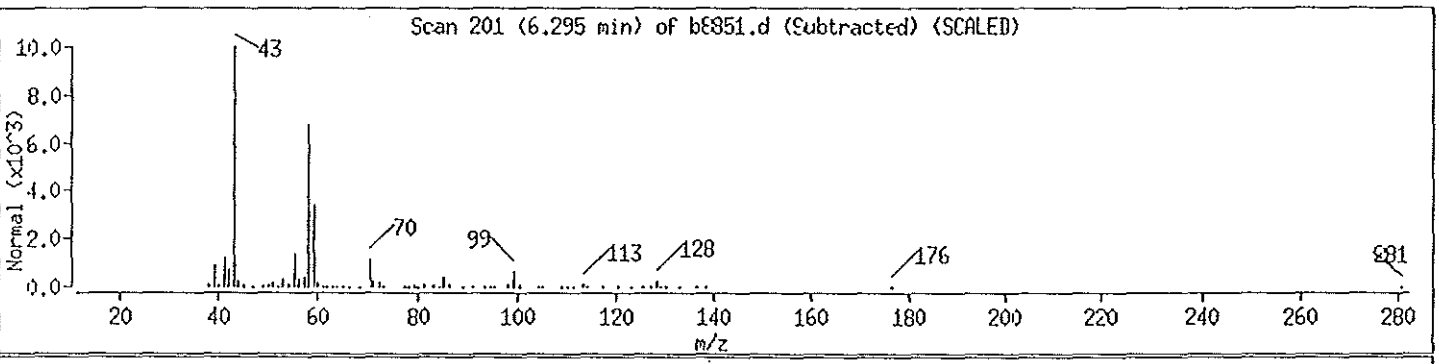
Sample Info: 17418n clj78tw002

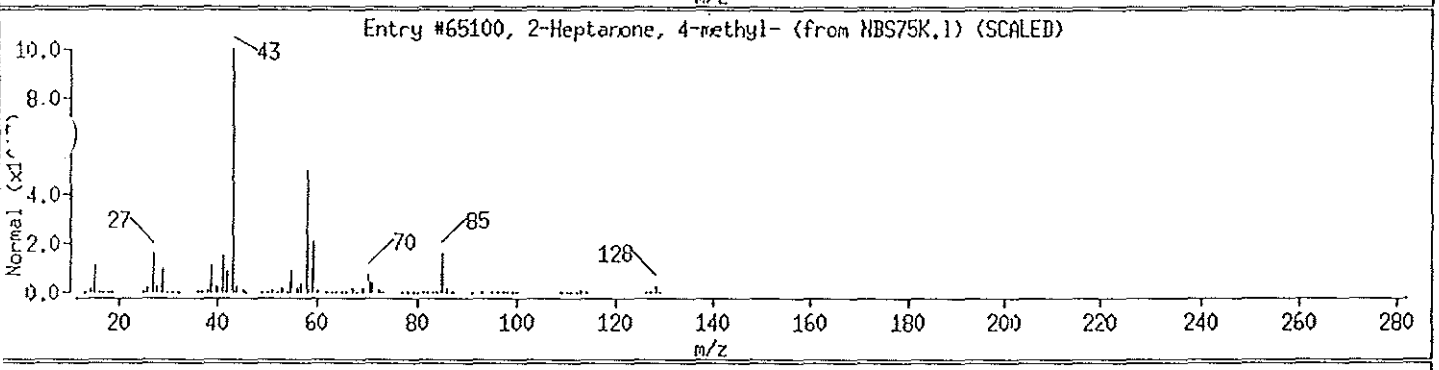
Operator: J. Kelly

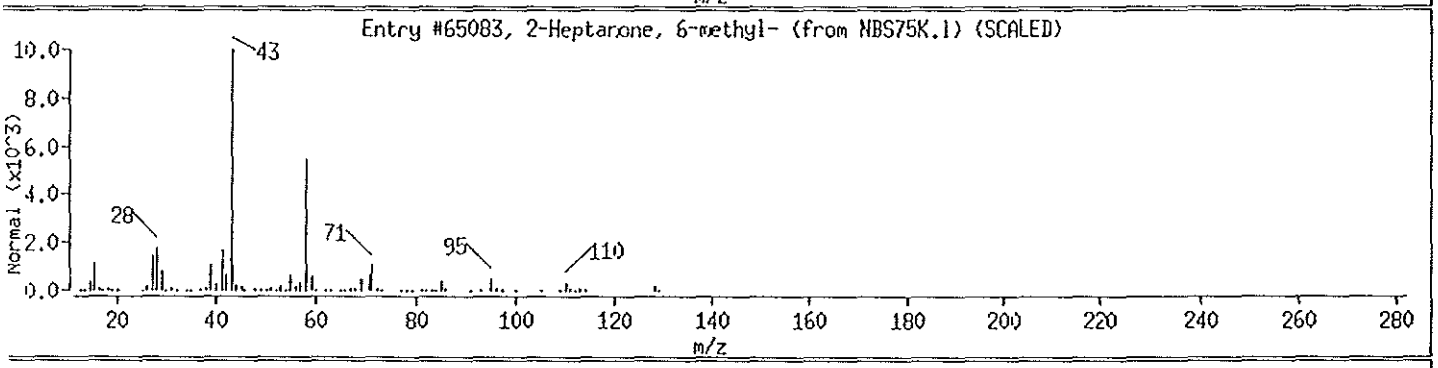
Column phase: J&W DB-5

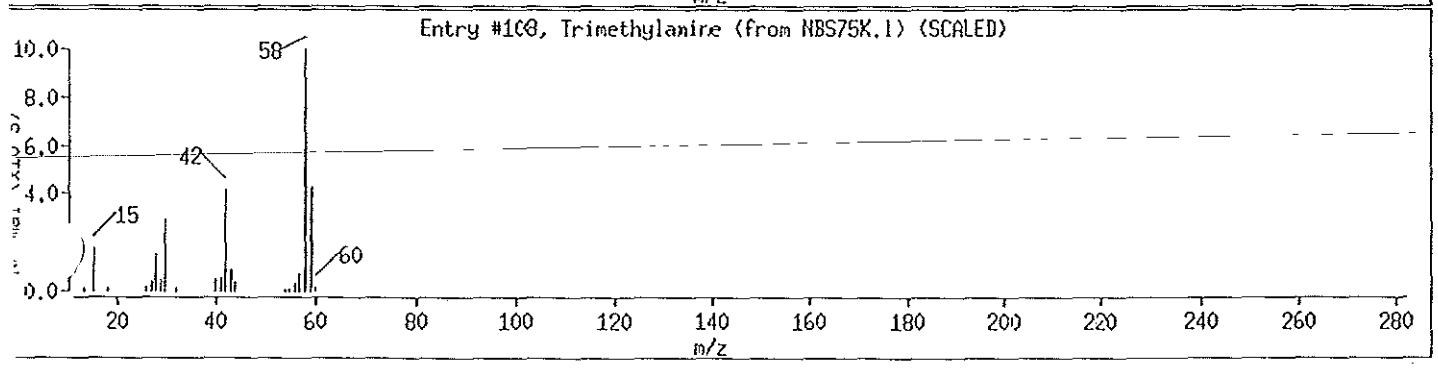
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Heptanone, 4-methyl-	6137-06-0	NBS75K.1	65100	72	C8H16O	128
2-Heptanone, 6-methyl-	928-68-7	NBS75K.1	65083	59	C8H16O	128
Trimethylamine	75-50-3	NBS75K.1	108	47	C3H9N	59









Data File: /chem/msb.i/b111695.b/b8851.d

Date : 16-NOV-95 16:44

Client ID: jp0320c

Instrument: msb.i

0249

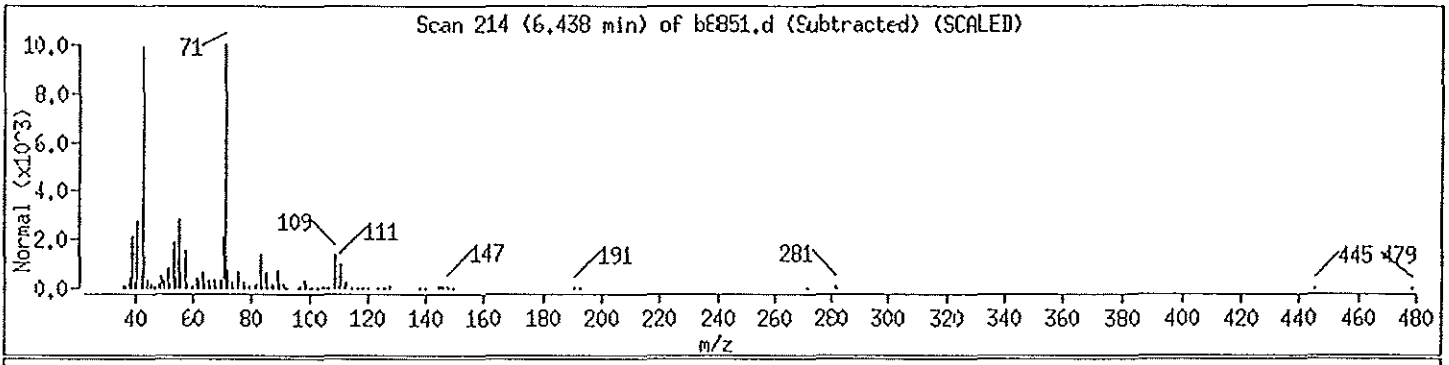
Sample Info: 17418n clj78tw002

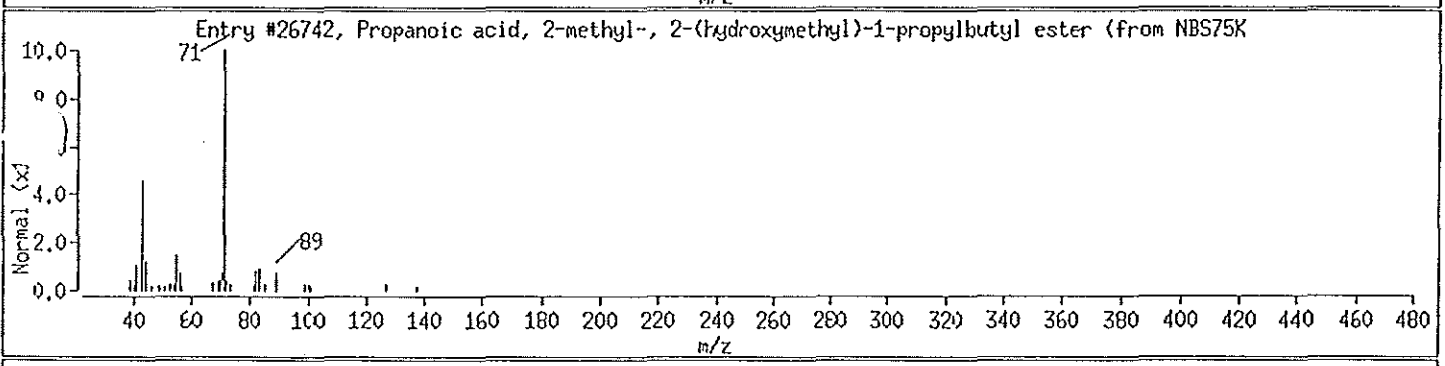
Operator: J. Kelly

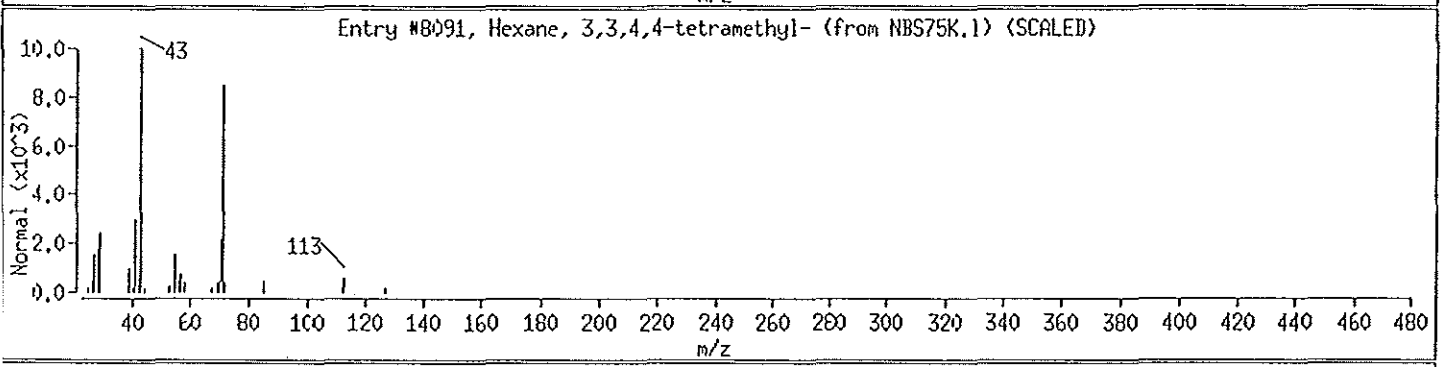
Column phase: J&W DB-5

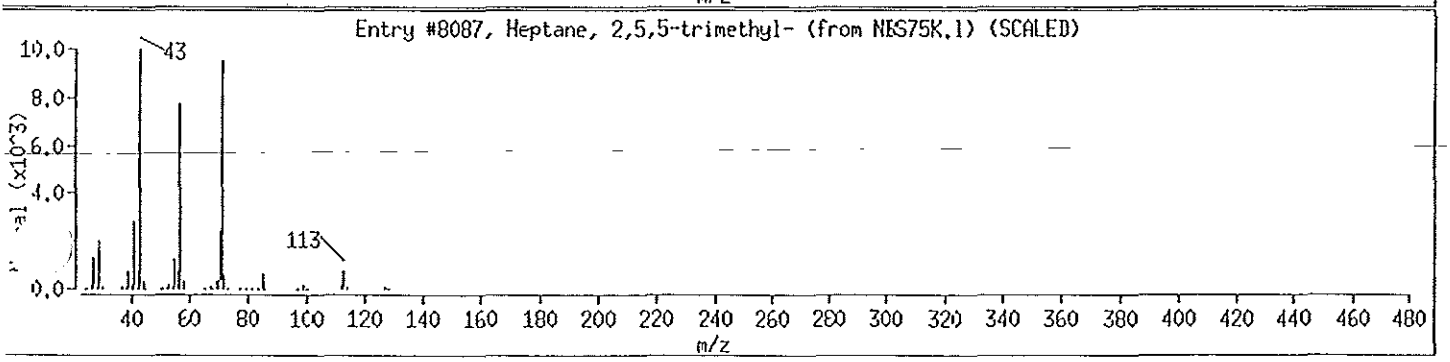
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Propanoic acid, 2-methyl-, 2-(hydroxymet	74367-32-1	NBS75K.l	26742	53	C12H2403	216
Hexane, 3,3,4,4-tetramethyl-	5171-84-6	NBS75K.l	8091	53	C10H22	142
Heptane, 2,5,5-trimethyl-	1189-99-7	NBS75K.l	8087	53	C10H22	142









Data File: /chem/msb.i/b111695.b/b8851.d

Date : 16-NOV-95 16:44

Client ID: jp0320c

Sample Info: 17418n clj78tw002

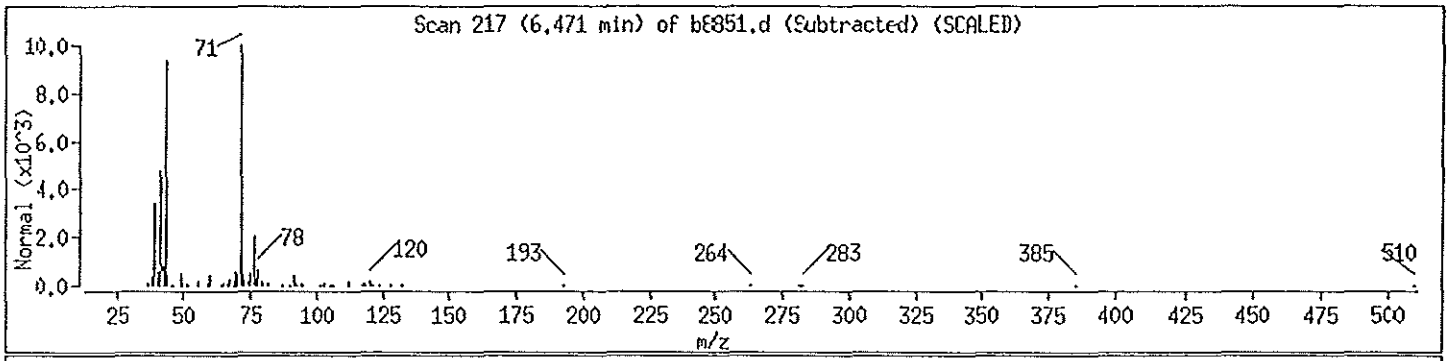
Instrument: msb.i

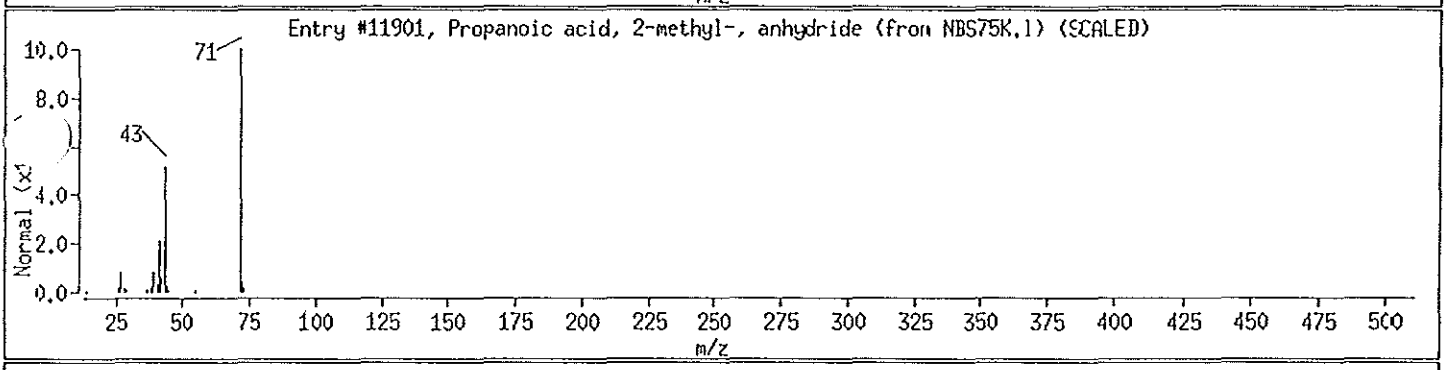
Operator: J. Kelly

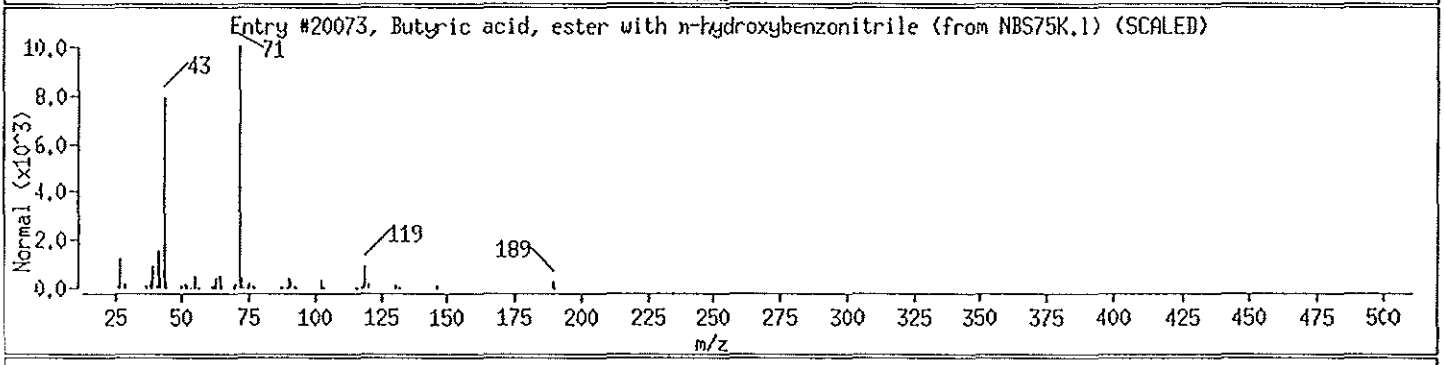
Column phase: J&W DB-5

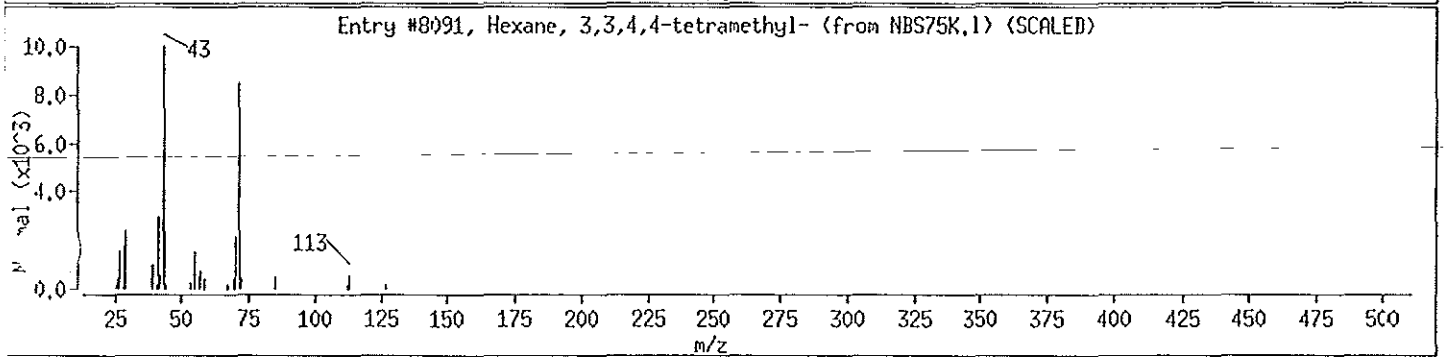
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Propanoic acid, 2-methyl-, anhydride	97-72-3	NBS75K.l	11901	53	C8H14O3	158
Butyric acid, ester with m-hydroxybenzon	29052-09-3	NBS75K.l	20073	38	C11H11NO2	189
Hexane, 3,3,4,4-tetramethyl-	5171-84-6	NBS75K.l	8091	38	C10H22	142









Data File: /chem/msb.i/b111695.b/b8851.d

Date : 16-NOV-95 16:44

0251

lient ID: jp0320c

Instrument: msb.i

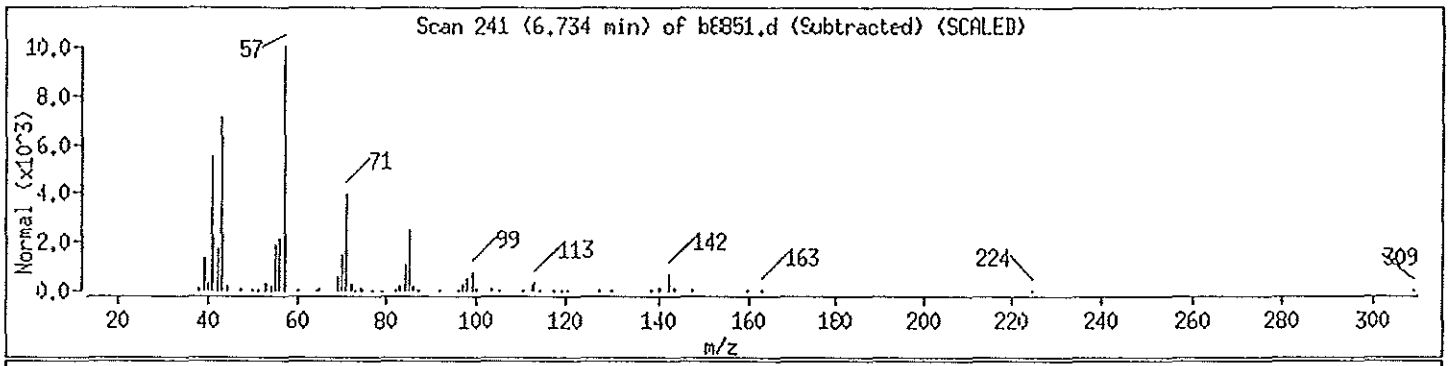
Sample Info: 17418n clj78tw002

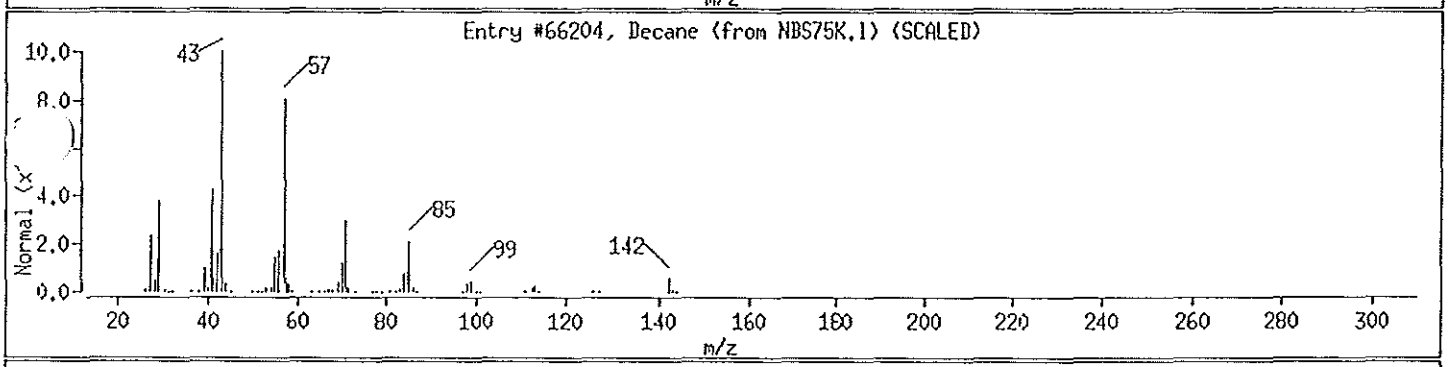
Operator: J. Kelly

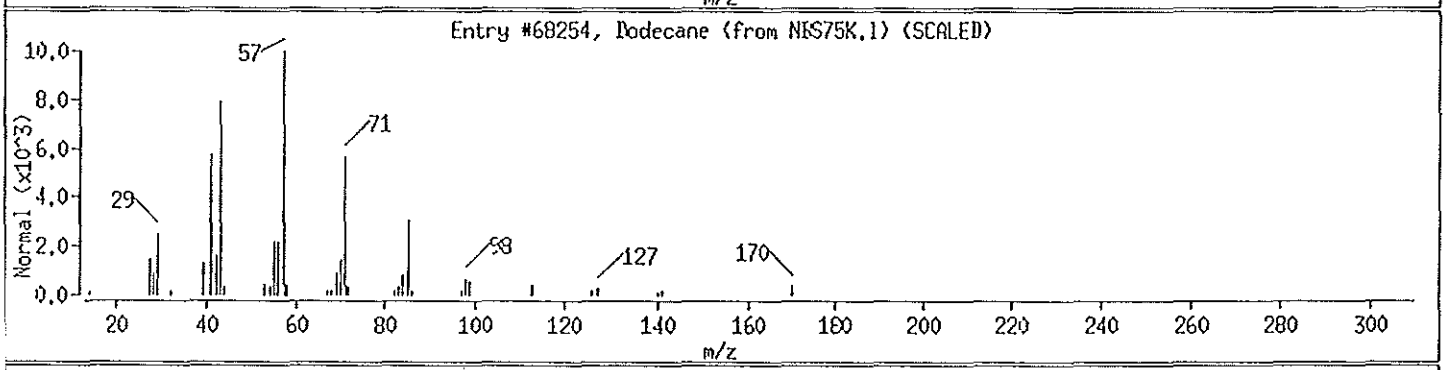
Column phase: J&W DB-5

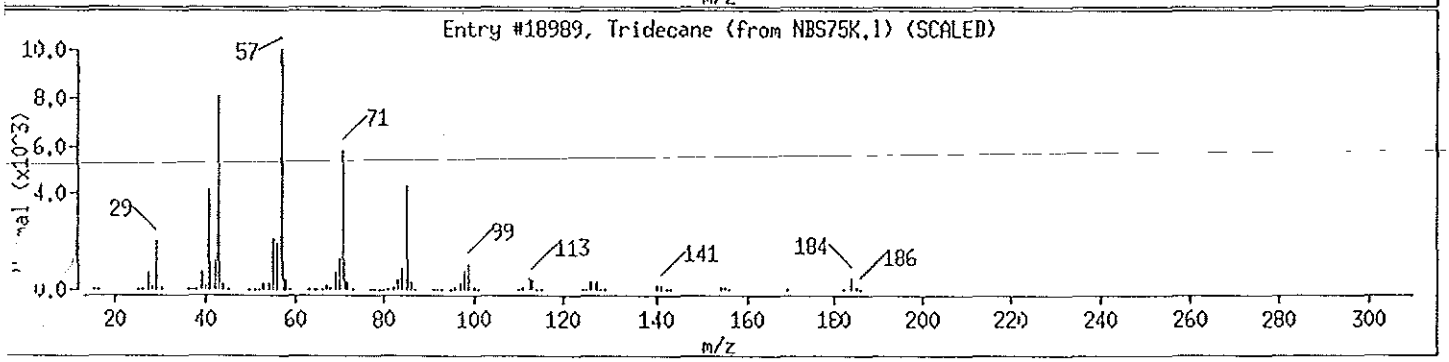
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Decane	124-18-5	NBS75K.l	66204	94	C10H22	142
Dodecane	112-40-3	NBS75K.l	68254	90	C12H26	170
Tridecane	629-50-5	NBS75K.l	18989	83	C13H28	184









1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0252

CLJ78TW003

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: JP0321C

Sample wt/vol: 30.6 (g/mL) G Lab File ID: B8852

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: 14 decanted: (Y/N) N Date Extracted: 11/14/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	760	U
111-44-4	bis(2-Chloroethyl)ether	760	U
95-57-8	2-Chlorophenol	760	U
541-73-1	1,3-Dichlorobenzene	760	U
106-46-7	1,4-Dichlorobenzene	760	U
95-50-1	1,2-Dichlorobenzene	760	U
95-48-7	2-Methylphenol	760	U
108-60-1	2,2'-oxybis(1-Chloropropane)	760	U
106-44-5	4-Methylphenol	760	U
621-64-7	N-Nitroso-di-n-propylamine	760	U
67-72-1	Hexachloroethane	760	U
98-95-3	Nitrobenzene	760	U
78-59-1	Isophorone	760	U
88-75-5	2-Nitrophenol	760	U
105-67-9	2,4-Dimethylphenol	760	U
111-91-1	bis(2-Chloroethoxy)methane	760	U
120-83-2	2,4-Dichlorophenol	760	U
120-82-1	1,2,4-Trichlorobenzene	760	U
91-20-3	Naphthalene	760	U
106-47-8	4-Chloroaniline	760	U
87-68-3	Hexachlorobutadiene	760	U
59-50-7	4-Chloro-3-methylphenol	760	U
91-57-6	2-Methylnaphthalene	760	U
77-47-4	Hexachlorocyclopentadiene	760	U
88-06-2	2,4,6-Trichlorophenol	760	U
95-95-4	2,4,5-Trichlorophenol	760	U
91-58-7	2-Chloronaphthalene	760	U
~~88-74-4~~	~~2-Nitroaniline~~	760	U
131-11-3	Dimethylphthalate	760	U
208-96-8	Acenaphthylene	760	U
606-20-2	2,6-Dinitrotoluene	760	U
99-09-2	3-Nitroaniline	760	U
83-32-9	Acenaphthene	760	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0253 CLJ78TW003

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: JP0321C

Sample wt/vol: 30.6 (g/mL) G Lab File ID: B8852

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: 14 decanted: (Y/N) N Date Extracted: 11/14/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	3800	U
100-02-7	4-Nitrophenol	3800	U
132-64-9	Dibenzofuran	760	U
121-14-2	2,4-Dinitrotoluene	760	U
84-66-2	Diethylphthalate	760	U
7005-72-3	4-Chlorophenyl-phenylether	760	U
86-73-7	Fluorene	760	U
100-01-6	4-Nitroaniline	760	U
534-52-1	4,6-Dinitro-2-methylphenol	1900	U
101-55-3	4-Bromophenyl-phenylether	760	U
86-30-6	N-Nitrosodiphenylamine (1)	760	U
118-74-1	Hexachlorobenzene	760	U
87-86-5	Pentachlorophenol	760	U
85-01-8	Phenanthrene	760	U
120-12-7	Anthracene	760	U
86-74-8	Carbazole	760	U
84-74-2	Di-n-butylphthalate	760	U
206-44-0	Fluoranthene	760	U
129-00-0	Pyrene	760	U
85-68-2	Butylbenzylphthalate	760	U
91-94-1	3,3'-Dichlorobenzidine	760	U
56-55-3	Benzo(a)anthracene	760	U
218-01-9	Chrysene	760	U
117-81-7	bis(2-Ethylhexyl)phthalate	760	U
117-84-0	Di-n-octylphthalate	760	U
205-99-2	Benzo(b)fluoranthene	760	U
207-08-9	Benzo(k)fluoranthene	760	U
50-32-8	Benzo(a)pyrene	760	U
193-39-5	Indeno(1,2,3-cd)pyrene	760	U
53-70-3	Dibenz(a,h)anthracene	760	U
191-24-2	Benzo(g,h,i)perylene	760	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

0254

CLJ78TW003

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: JP0321C

Sample wt/vol: 30.6 (g/mL) G Lab File ID: B8852

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: 14 decanted: (Y/N) N Date Extracted: 11/14/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 6

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

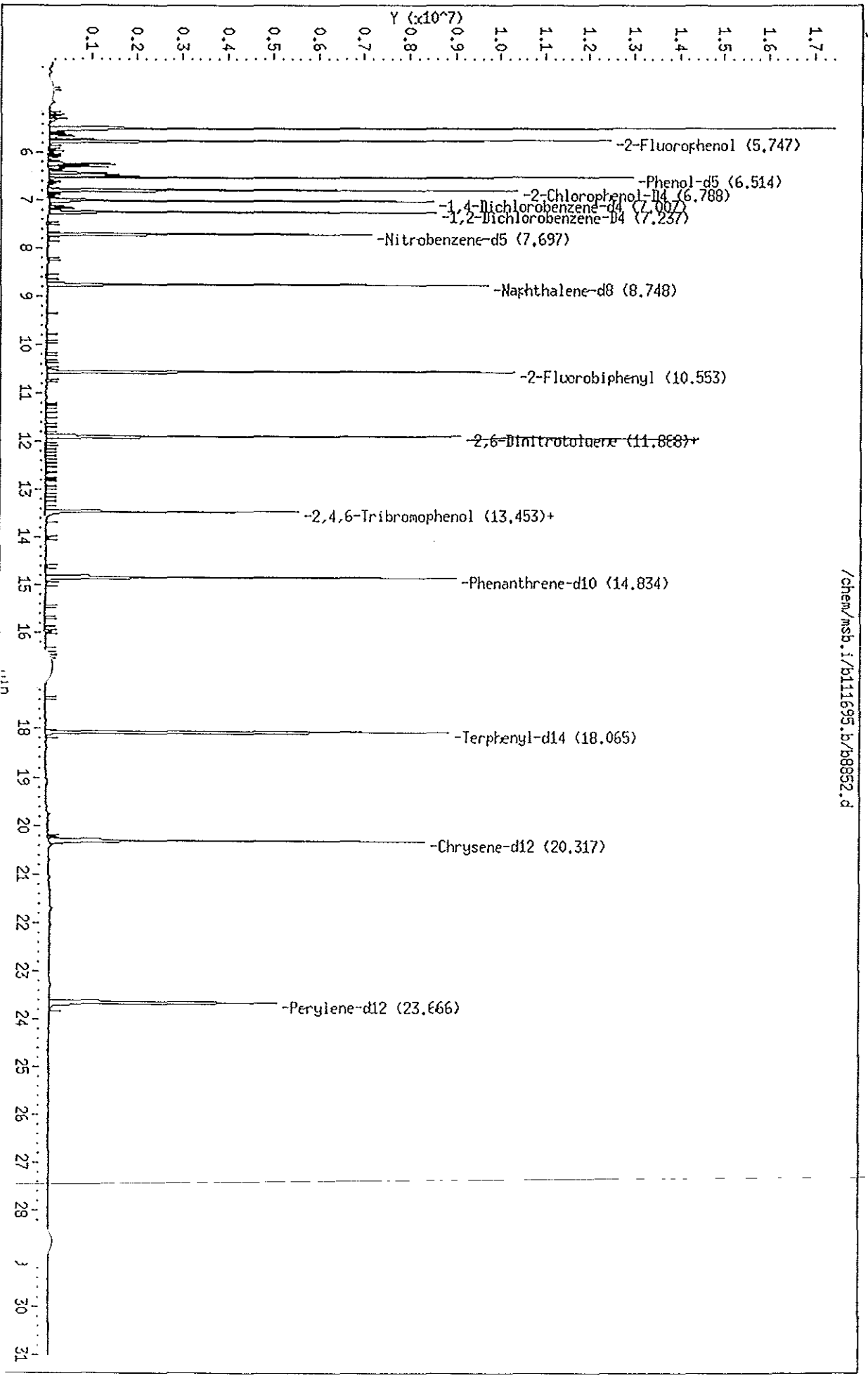
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 123-42-2	2-Pentanone, 4-hydroxy-4-met	5.48	6900	JNA
2. 10325-41-4	2-Butanol, 3-chloro-, (R@,S@	5.71	320	JN
3. 6137-06-0	2-Heptanone, 4-methyl-	6.24	680	JN
4. 928-68-7	2-Heptanone, 6-methyl-	6.30	450	JN
5. 1189-99-7	Heptane, 2,5,5-trimethyl-	6.44	680	JN
6. 2051-78-7	Butanoic acid, 2-propenyl es	6.47	890	JN

0255

Data File: /chem/msb.i/b111695.b/b8852.d
Date : 16-NOV-95 17:25
Client ID: jp0321c
Sample Info: 17418n clj78tw003

Column phase: J&W DB-5

Instrument: msb.i
Operator: J. Kelly
Column diameter: 0.25



OHM Analytical Division

BASE NEUTRAL QUANT AND RATIO REPORT

Data file : /chem/msb.i/b111695.b/b8852.d
Lab Smp Id: Client Smp ID: jp0321c
Inj Date : 16-NOV-95 17:25
Operator : J. Kelly Inst ID: msb.i
Smp Info : 17418n clj78tw003
Misc Info : jp0321c,n2c51712,ml,1,1
Comment :
Method : /chem/msb.i/b111695.b/110895bclp.m
Meth Date : 17-Nov-1995 10:10 kathryn Quant Type: ISTD
Cal Date : 16-NOV-95 11:50 Cal File: b8844.d
Als bottle: 10
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
$	3	2-Fluorophenol	112.00	5.747	5.746	(0.820)	4695941	57.4	57.4(R)
$	4	Phenol-d5	99.00	6.514	6.523	(0.930)	5851086	58.9	58.9(R)
$	7	2-Chlorophenol-D4	132.00	6.788	6.786	(0.969)	4695538	61.9	61.9(R)
*	10	1,4-Dichlorobenzene-d4	152.00	7.007	7.016	(1.000)	2212593	40.0	
$	13	1,2-Dichlorobenzene-D4	152.00	7.237	7.246	(1.033)	2188529	45.3	45.3(R)
$	19	Nitrobenzene-d5	82.00	7.697	7.707	(0.880)	3240665	37.6	37.6(R)
*	27	Naphthalene-d8	136.00	8.748	8.759	(1.000)	7296037	40.0	
$	37	2-Fluorobiphenyl	172.00	10.553	10.560	(0.887)	5795137	45.4	45.4(R)
	41	2,6-Dinitrotoluene	165.00	11.888	11.483	(0.999)	543164	13.3	~~13.3~~(Q) ND, RT, MS
*	44	Acenaphthene-d10	164.00	11.899	11.900	(1.000)	3925276	40.0	
	48	2,4-Dinitrotoluene	165.00	11.888	12.252	(0.999)	543164	10.7	~~10.7~~(Q) ND, Rt, MS
$	56	2,4,6-Tribromophenol	330.00	13.453	13.463	(1.131)	1323015	59.3	59.3(R)
	57	4-Bromophenyl-phenylether	248.00	13.453	13.870	(0.907)	96635	2.30	~~2.30~~(Q) ND, Rt, MS
*	60	Phenanthrene-d10	188.00	14.834	14.839	(1.000)	6092744	40.0	
$	68	Terphenyl-d14	244.00	18.065	18.070	(0.889)	5470475	41.0	41.0(R)
*	73	Chrysene-d12	240.00	20.317	20.329	(1.000)	4778648	40.0	
	79	Perylene-d12	264.00	23.666	23.690	(1.000)	5100693	40.0	

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/msb.i/b111695.b/b8852.d

Date : 16-NOV-95 17:25

)ient ID: jp0321c

Instrument: msb.i

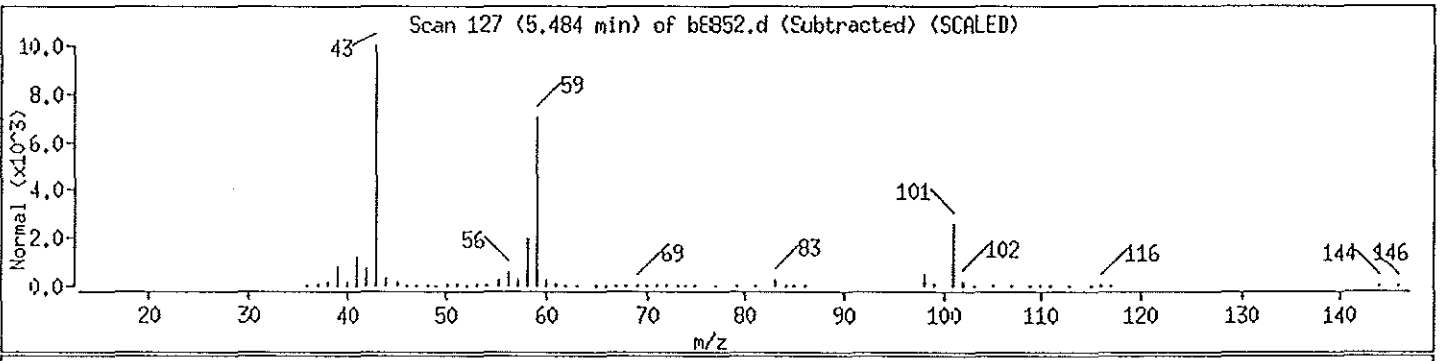
Sample Info: 17418n clj78tw003

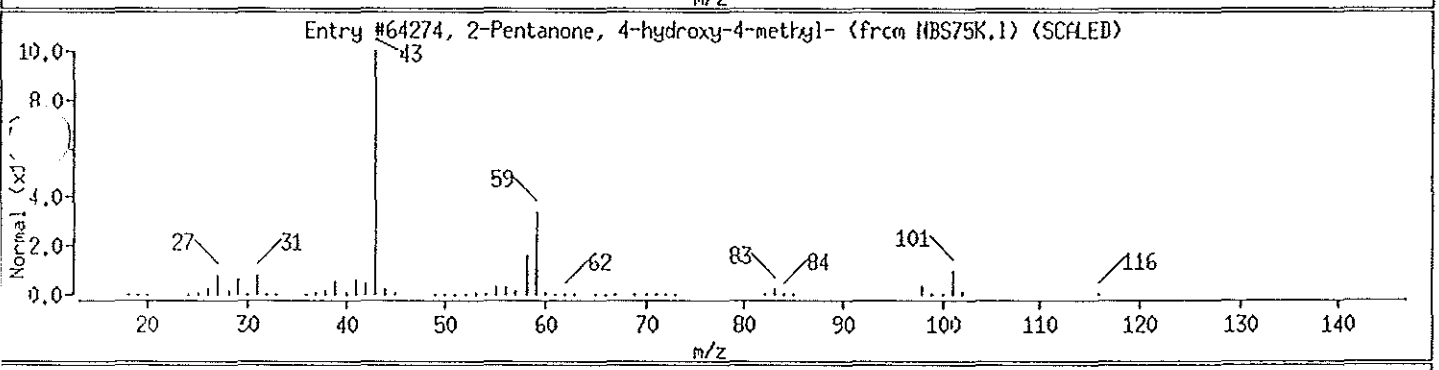
Operator: J. Kelly

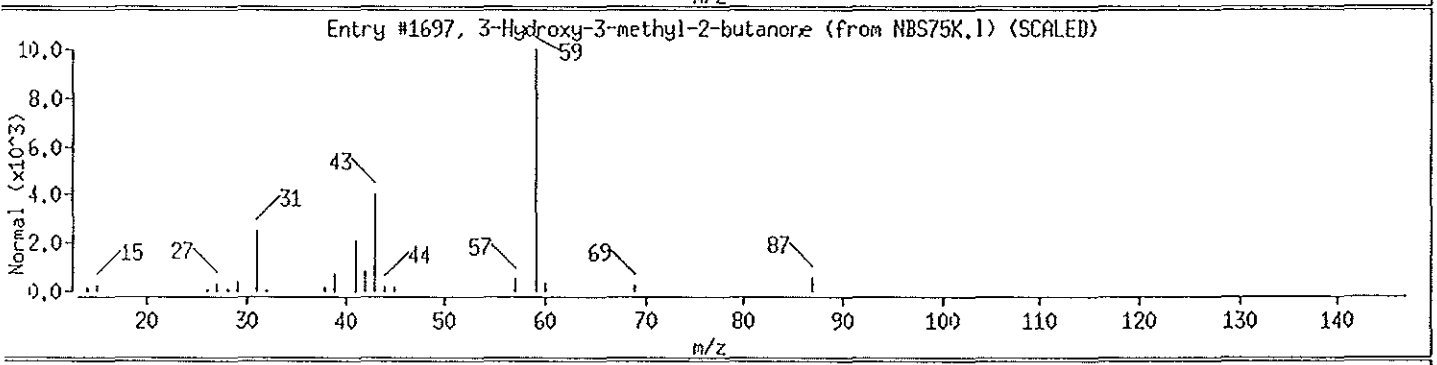
Column phase: J&W DB-5

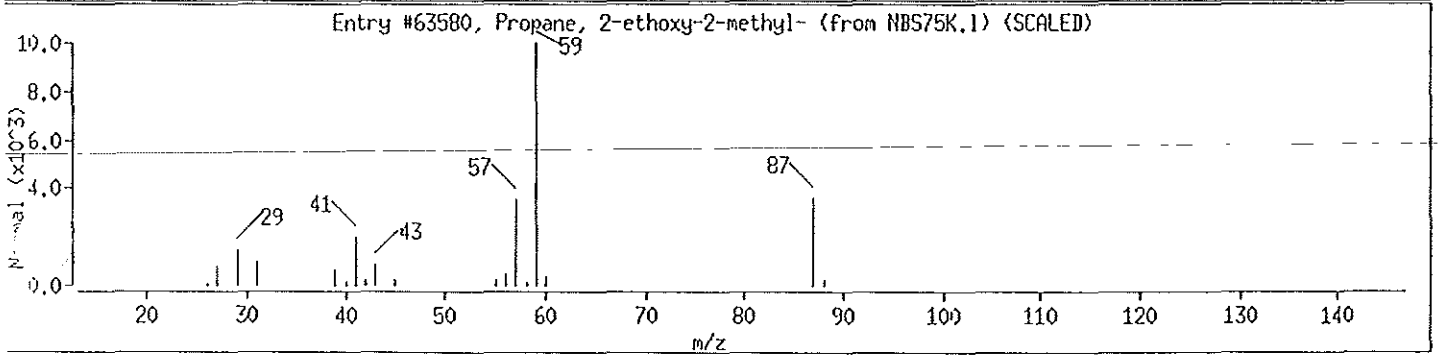
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NBS75K.l	64274	64	C6H12O2	116
3-Hydroxy-3-methyl-2-butanone	115-22-0	NBS75K.l	1697	25	C5H10O2	102
Propane, 2-ethoxy-2-methyl-	637-92-3	NBS75K.l	63580	23	C6H14O	102









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Date : 16-NOV-95 17:25

Client ID: jp0321c

Instrument: msb.i

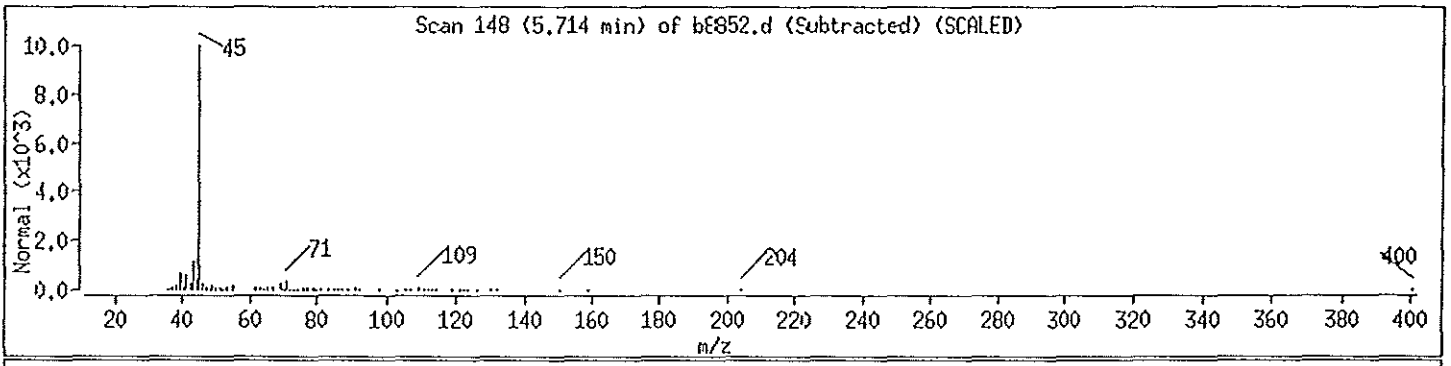
Sample Info: 17418n clj78tw003

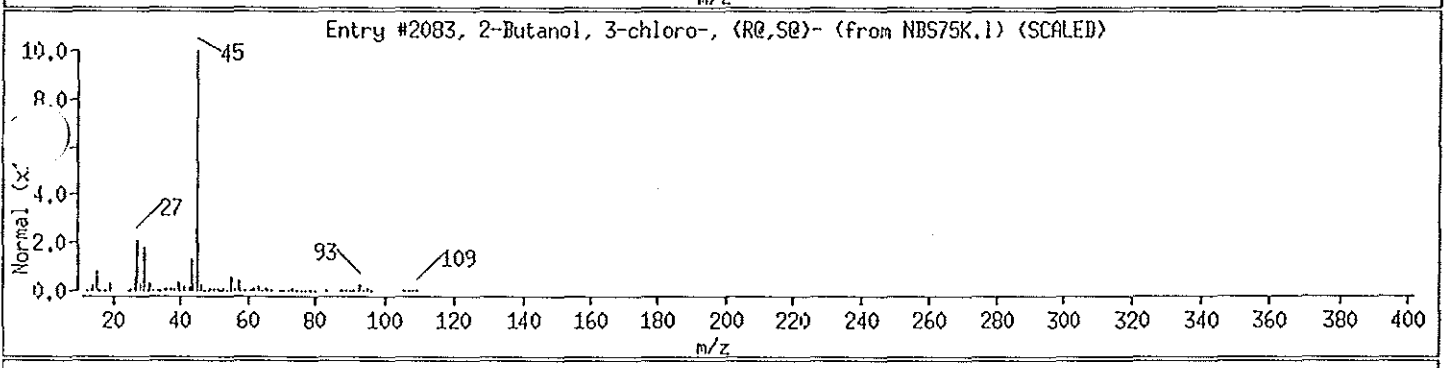
Operator: J. Kelly

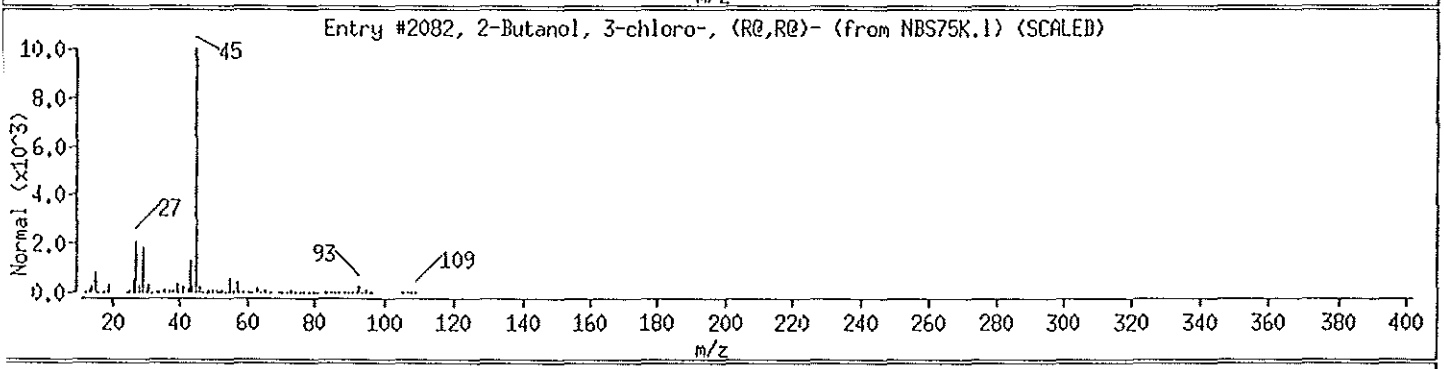
Column phase: J&W DB-5

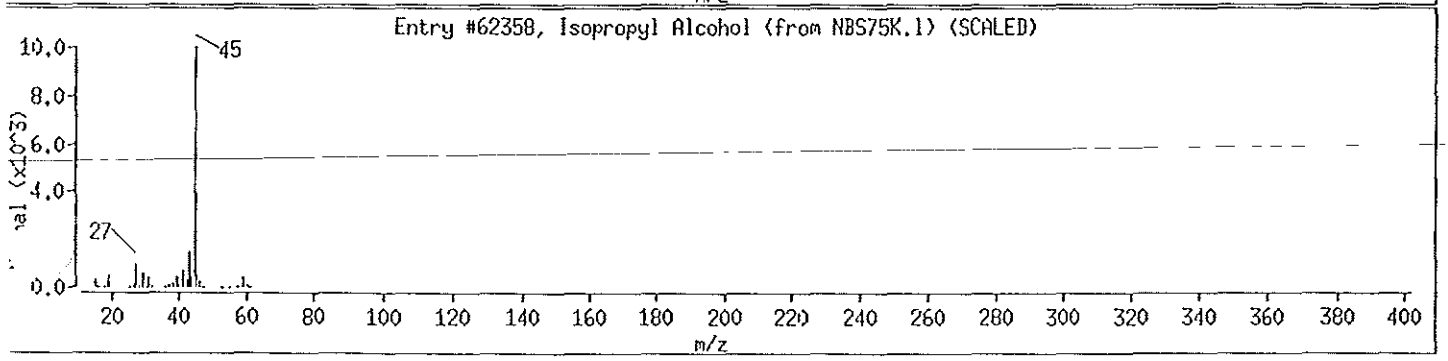
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Butanol, 3-chloro-, (R@,S@)-	10325-41-4	NBS75K.l	2083	40	C4H9ClO	108
2-Butanol, 3-chloro-, (R@,R@)-	10325-40-3	NBS75K.l	2082	40	C4H9ClO	108
Isopropyl Alcohol	67-63-0	NBS75K.l	62358	39	C3H8O	60









Data File: /chem/msb.i/b111695.b/b8852.d

Date : 16-NOV-95 17:25

)ient ID: jp0321c

Instrument: msb.i

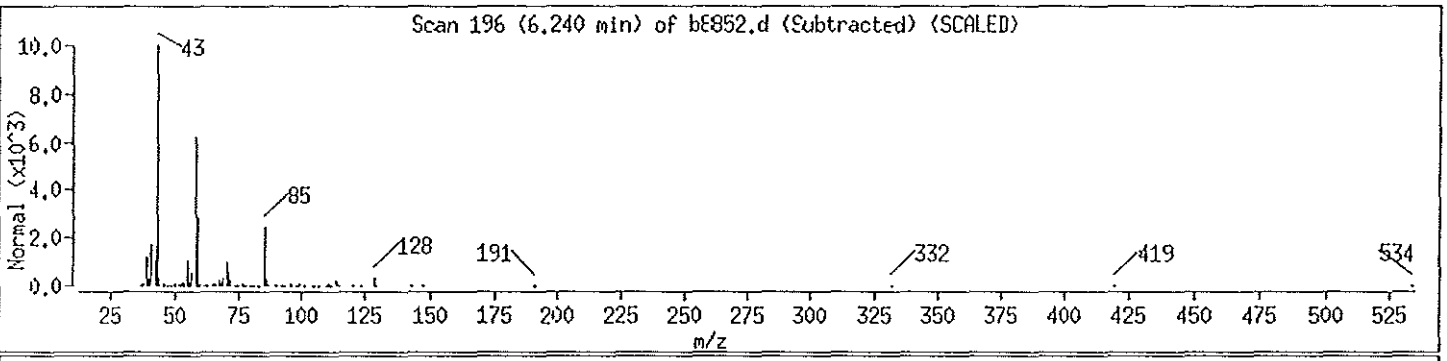
Sample Info: 17418n clj78tw003

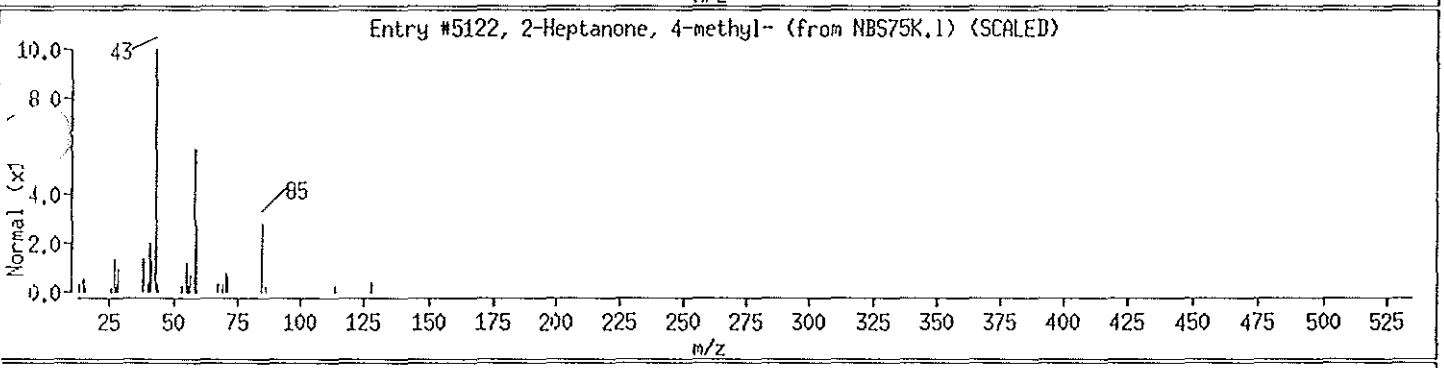
Operator: J. Kelly

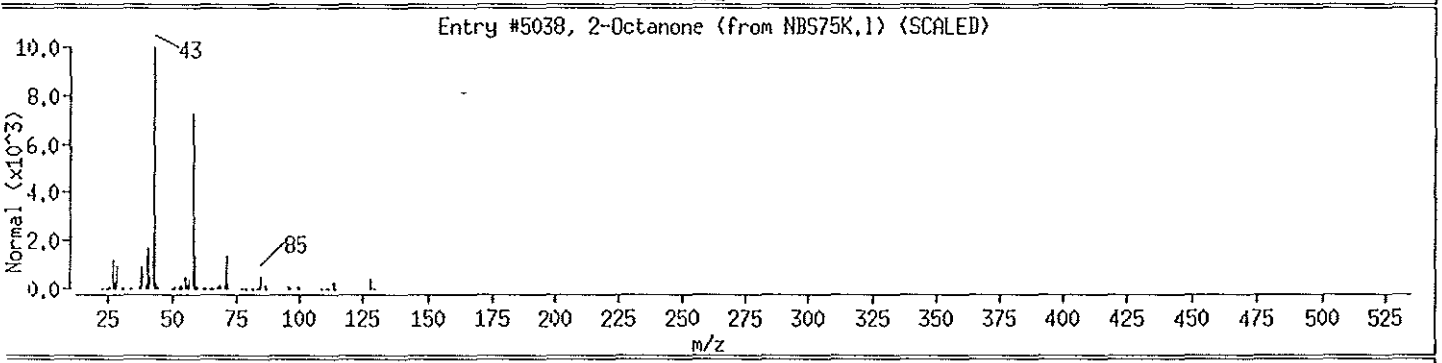
Column phase: J&W DB-5

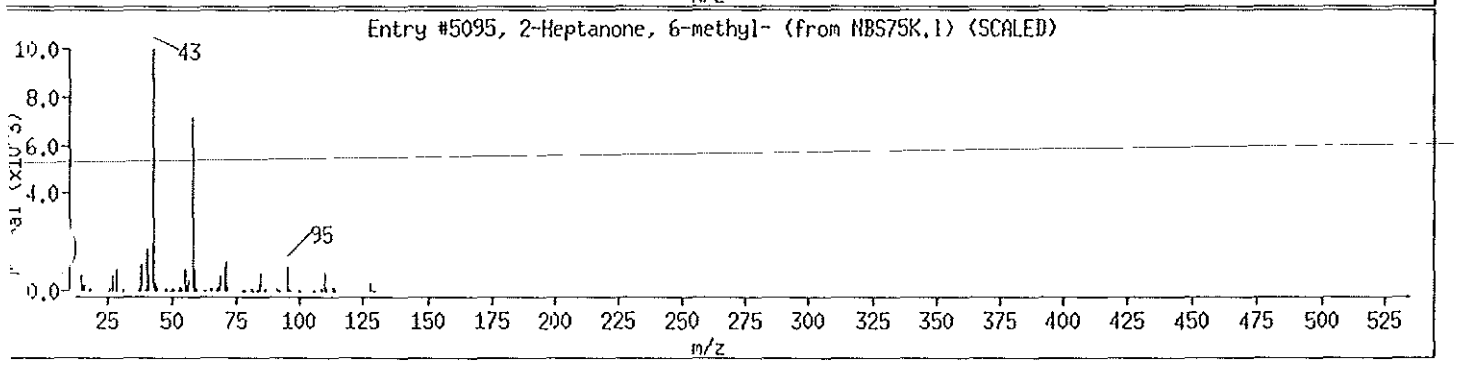
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Heptanone, 4-methyl-	6137-06-0	NBS75K.l	5122	94	C8H16O	128
2-Octanone	111-13-7	NBS75K.l	5038	53	C8H16O	128
2-Heptanone, 6-methyl-	928-68-7	NBS75K.l	5095	53	C8H16O	128









Data File: /chem/msb.i/b111695.b/b8852.d

Date : 16-NOV-95 17:25

Client ID: jp0321c

Instrument: msb.i

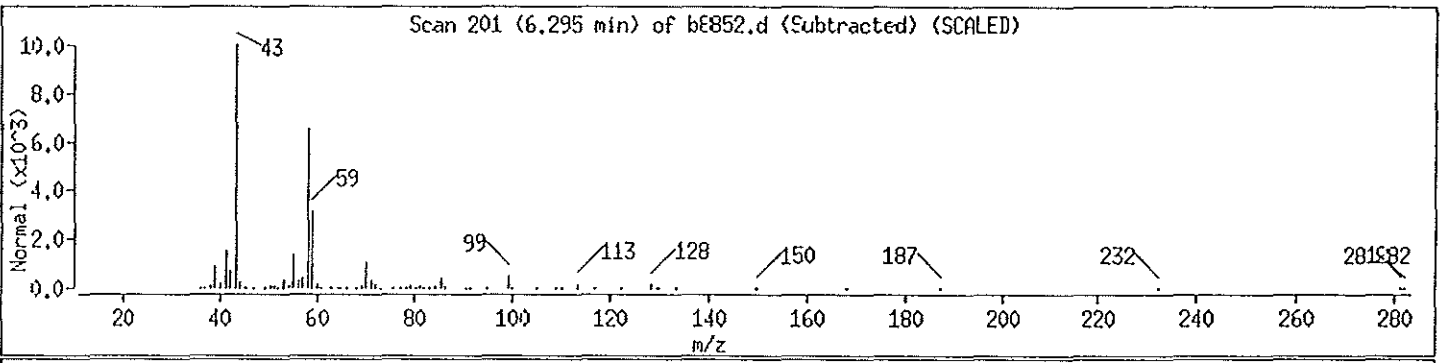
Sample Info: 17418n clj78tw003

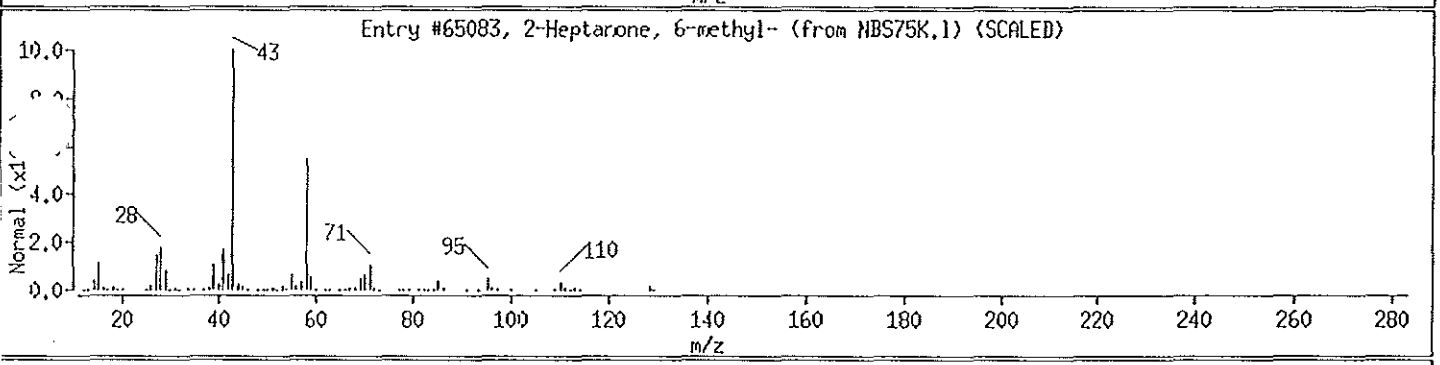
Operator: J. Kelly

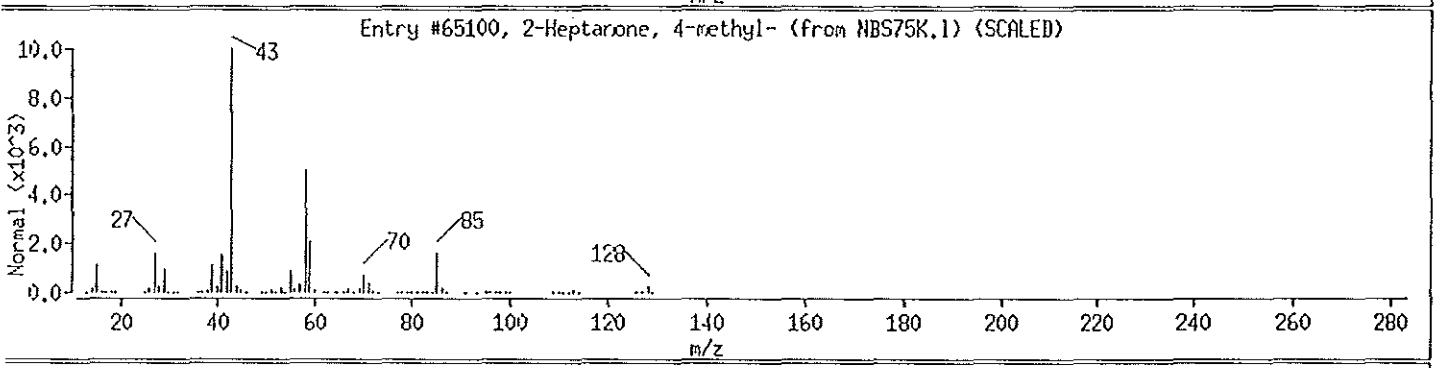
Column phase: J&W DB-5

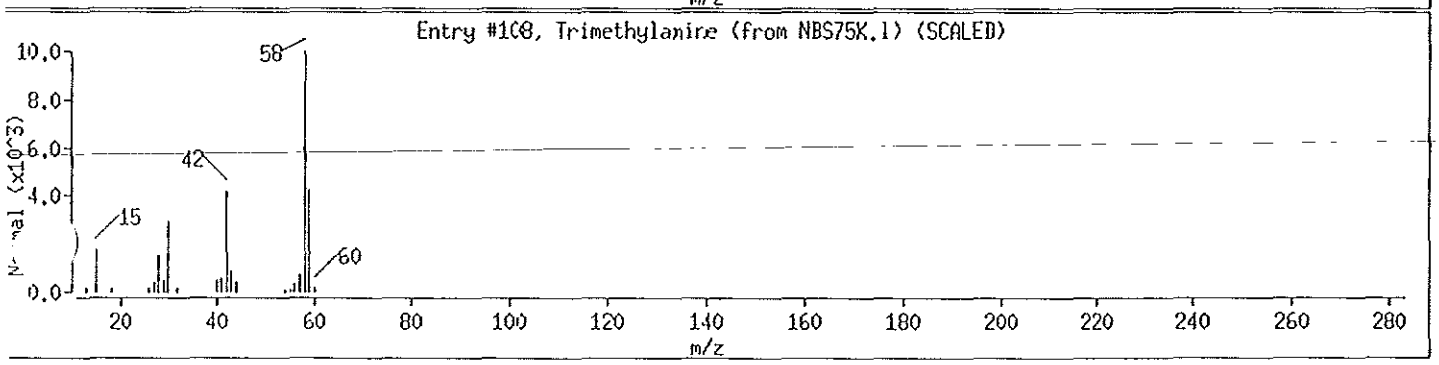
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Heptanone, 6-methyl-	928-68-7	NBS75K.1	65083	59	C8H16O	128
2-Heptanone, 4-methyl-	6137-06-0	NBS75K.1	65100	56	C8H16O	128
Trimethylamine	75-50-3	NBS75K.1	108	47	C3H9N	59









Data File: /chem/msb.i/b111695.b/b8852.d

Date : 16-NOV-95 17:25

Client ID: jp0321c

Instrument: msb.i

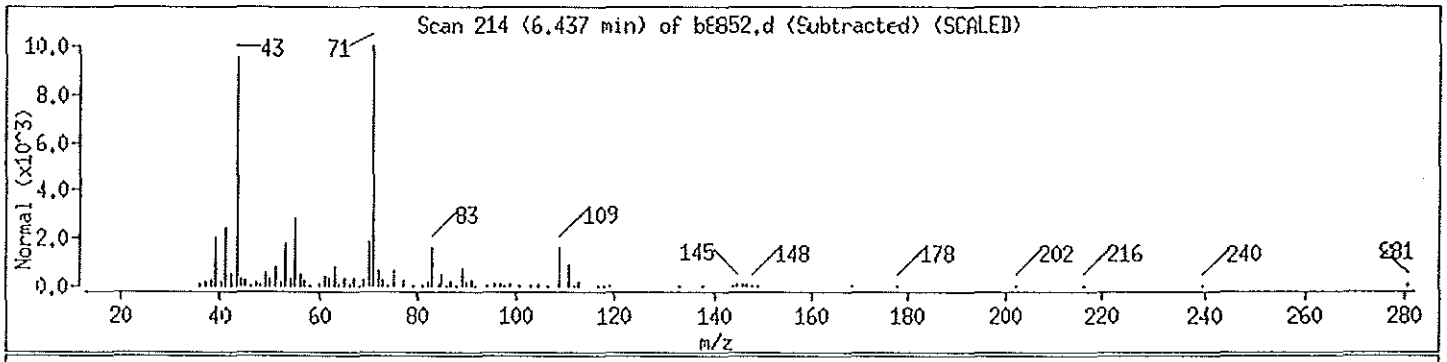
Sample Info: 17418n clj78tw003

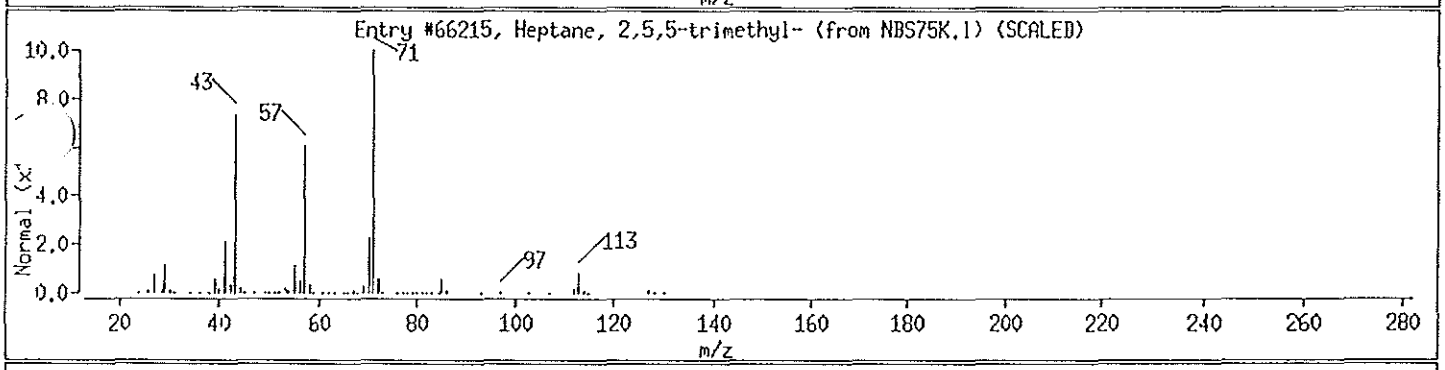
Operator: J. Kelly

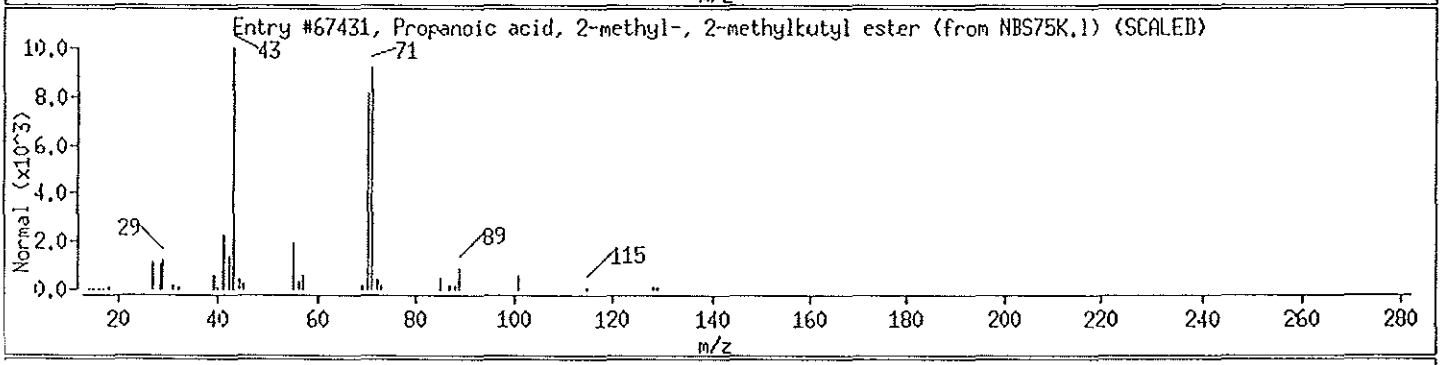
Column phase: J&W DB-5

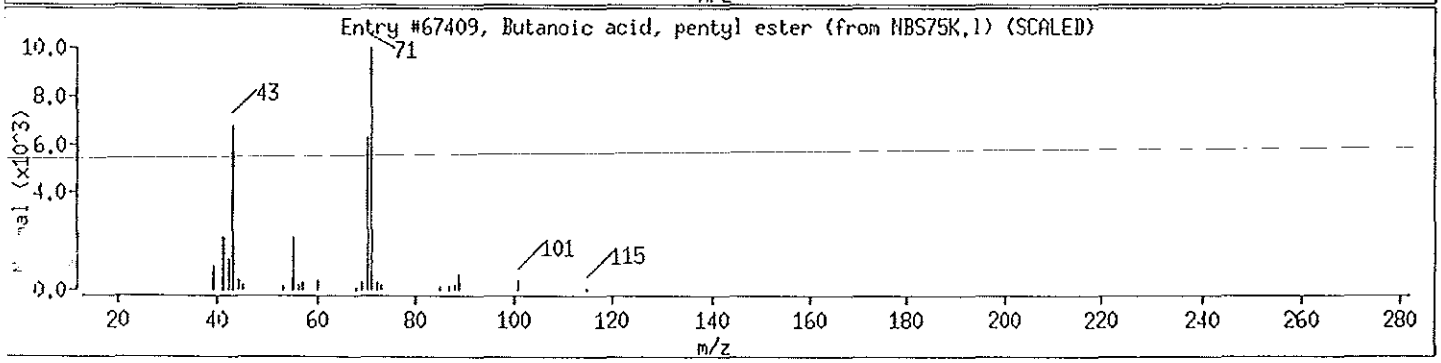
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Heptane, 2,5,5-trimethyl-	1189-99-7	NBS75K.l	66215	42	C10H22	142
Propanoic acid, 2-methyl-, 2-methylbutyl	2445-69-4	NBS75K.l	67431	40	C9H18O2	158
Butanoic acid, pentyl ester	540-18-1	NBS75K.l	67409	40	C9H18O2	158









Data File: /chem/msb.i/b111695.b/b8852.d

Date : 16-NOV-95 17:25

Client ID: jp0321c

Instrument: msb.i

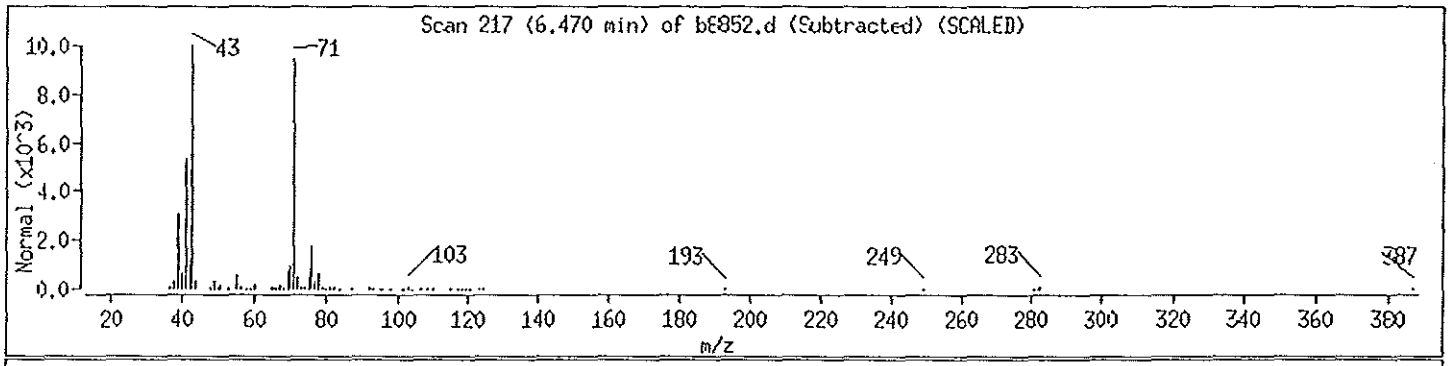
Sample Info: 17418n clj78tw003

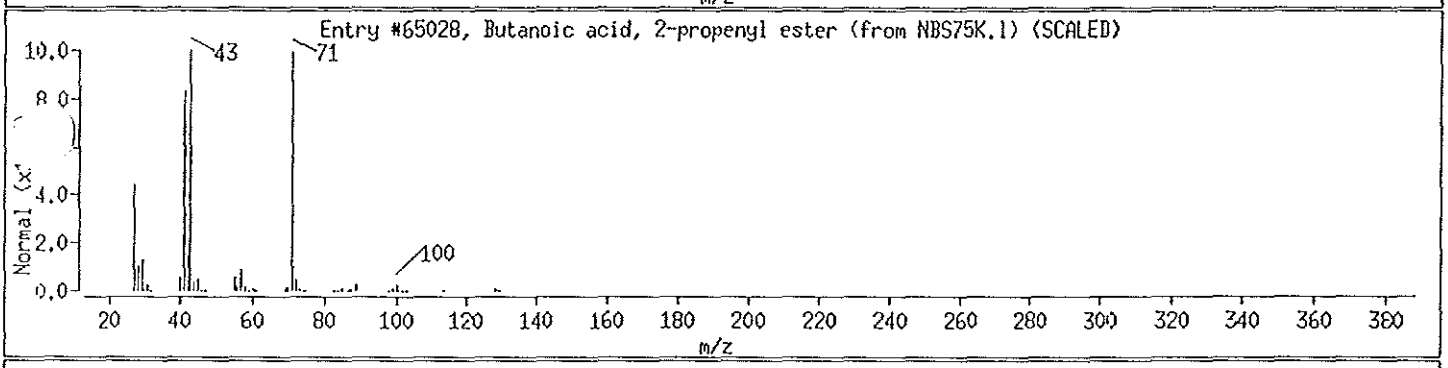
Operator: J. Kelly

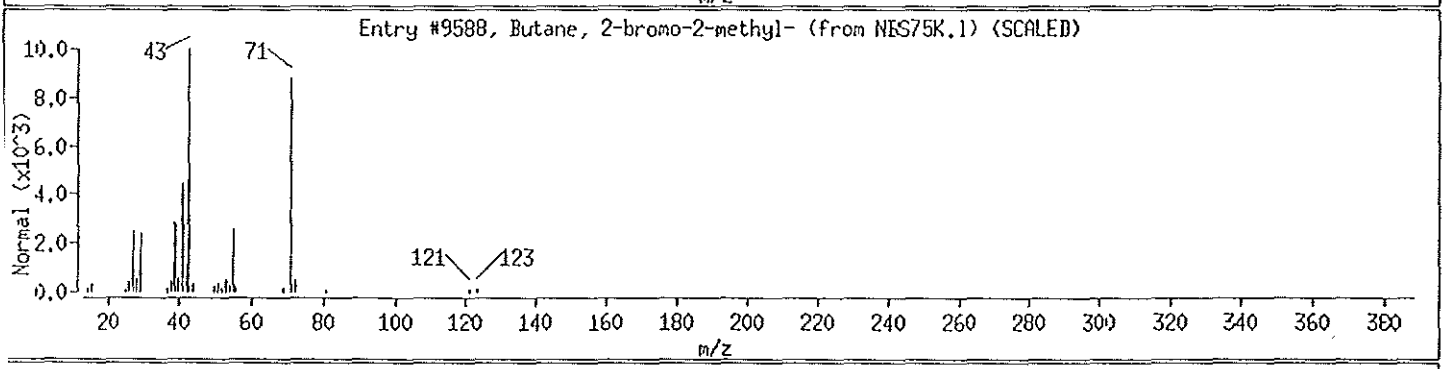
Column phase: J&W DB-5

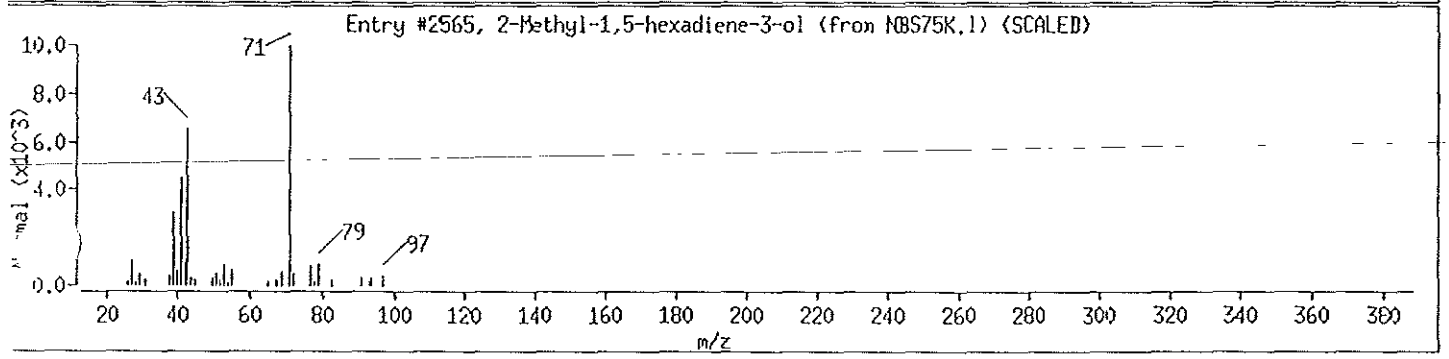
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Butanoic acid, 2-propenyl ester	2051-78-7	NBS75K.l	65028	50	C7H12O2	128
Butane, 2-bromo-2-methyl-	507-36-8	NBS75K.l	9588	50	C5H11Br	150
2-Methyl-1,5-hexadiene-3-ol	17123-60-3	NBS75K.l	2565	42	C7H12O	112









1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0263 CLJ78TW004

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: JP0322C

Sample wt/vol: 30.2 (g/mL) G Lab File ID: B8853

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: 16 decanted: (Y/N) N Date Extracted: 11/14/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	790	U
111-44-4	bis(2-Chloroethyl)ether	790	U
95-57-8	2-Chlorophenol	790	U
541-73-1	1,3-Dichlorobenzene	790	U
106-46-7	1,4-Dichlorobenzene	790	U
95-50-1	1,2-Dichlorobenzene	790	U
95-48-7	2-Methylphenol	790	U
108-60-1	2,2'-oxybis(1-Chloropropane)	790	U
106-44-5	4-Methylphenol	790	U
621-64-7	N-Nitroso-di-n-propylamine	790	U
67-72-1	Hexachloroethane	790	U
98-95-3	Nitrobenzene	790	U
78-59-1	Isophorone	790	U
88-75-5	2-Nitrophenol	790	U
105-67-9	2,4-Dimethylphenol	790	U
111-91-1	bis(2-Chloroethoxy)methane	790	U
120-83-2	2,4-Dichlorophenol	790	U
120-82-1	1,2,4-Trichlorobenzene	790	U
91-20-3	Naphthalene	790	U
106-47-8	4-Chloroaniline	790	U
87-68-3	Hexachlorobutadiene	790	U
59-50-7	4-Chloro-3-methylphenol	790	U
91-57-6	2-Methylnaphthalene	790	U
77-47-4	Hexachlorocyclopentadiene	790	U
88-06-2	2,4,6-Trichlorophenol	790	U
95-95-4	2,4,5-Trichlorophenol	790	U
91-58-7	2-Chloronaphthalene	790	U
88-74-4	2-Nitroaniline	790	U
131-11-3	Dimethylphthalate	790	U
208-96-8	Acenaphthylene	790	U
606-20-2	2,6-Dinitrotoluene	790	U
99-09-2	3-Nitroaniline	790	U
83-32-9	Acenaphthene	790	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0264 CLJ78TW004

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: _____ Case No.: 17418N SAS No.: _____ SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: JP0322C

Sample wt/vol: 30.2 (g/mL) G Lab File ID: B8853

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: 16 decanted: (Y/N) ___ Date Extracted: 11/14/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	4000	U
100-02-7	4-Nitrophenol	4000	U
132-64-9	Dibenzofuran	790	U
121-14-2	2,4-Dinitrotoluene	790	U
84-66-2	Diethylphthalate	790	U
7005-72-3	4-Chlorophenyl-phenylether	790	U
86-73-7	Fluorene	790	U
100-01-6	4-Nitroaniline	790	U
534-52-1	4,6-Dinitro-2-methylphenol	2000	U
101-55-3	4-Bromophenyl-phenylether	790	U
86-30-6	N-Nitrosodiphenylamine (1)	790	U
118-74-1	Hexachlorobenzene	790	U
87-86-5	Pentachlorophenol	790	U
85-01-8	Phenanthrene	790	U
120-12-7	Anthracene	790	U
86-74-8	Carbazole	790	U
84-74-2	Di-n-butylphthalate	790	U
206-44-0	Fluoranthene	790	U
129-00-0	Pyrene	790	U
85-68-2	Butylbenzylphthalate	790	U
91-94-1	3,3'-Dichlorobenzidine	790	U
56-55-3	Benzo(a)anthracene	790	U
218-01-9	Chrysene	790	U
117-81-7	bis(2-Ethylhexyl)phthalate	790	U
117-84-0	Di-n-octylphthalate	790	U
205-99-2	Benzo(b)fluoranthene	790	U
207-08-9	Benzo(k)fluoranthene	790	U
50-32-8	Benzo(a)pyrene	790	U
193-39-5	Indeno(1,2,3-cd)pyrene	790	U
53-70-3	Dibenz(a,h)anthracene	790	U
191-24-2	Benzo(g,h,i)perylene	790	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

0265

CLJ78TW004

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: Case No.: 17418N SAS No.: SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: JP0322C

Sample wt/vol: 30.2 (g/mL) G Lab File ID: B8853

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: 16 decanted: (Y/N) Date Extracted: 11/14/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 123-42-2	2-Pentanone, 4-hydroxy-4-met	5.47	4800	JNA
2. 6137-06-0	2-Heptanone, 4-methyl-	6.24	490	JN
3. 565-75-3	Pentane, 2,3,4-trimethyl-	6.44	730	JN
4. 2051-78-7	Butanoic acid, 2-propenyl es	6.47	930	JN

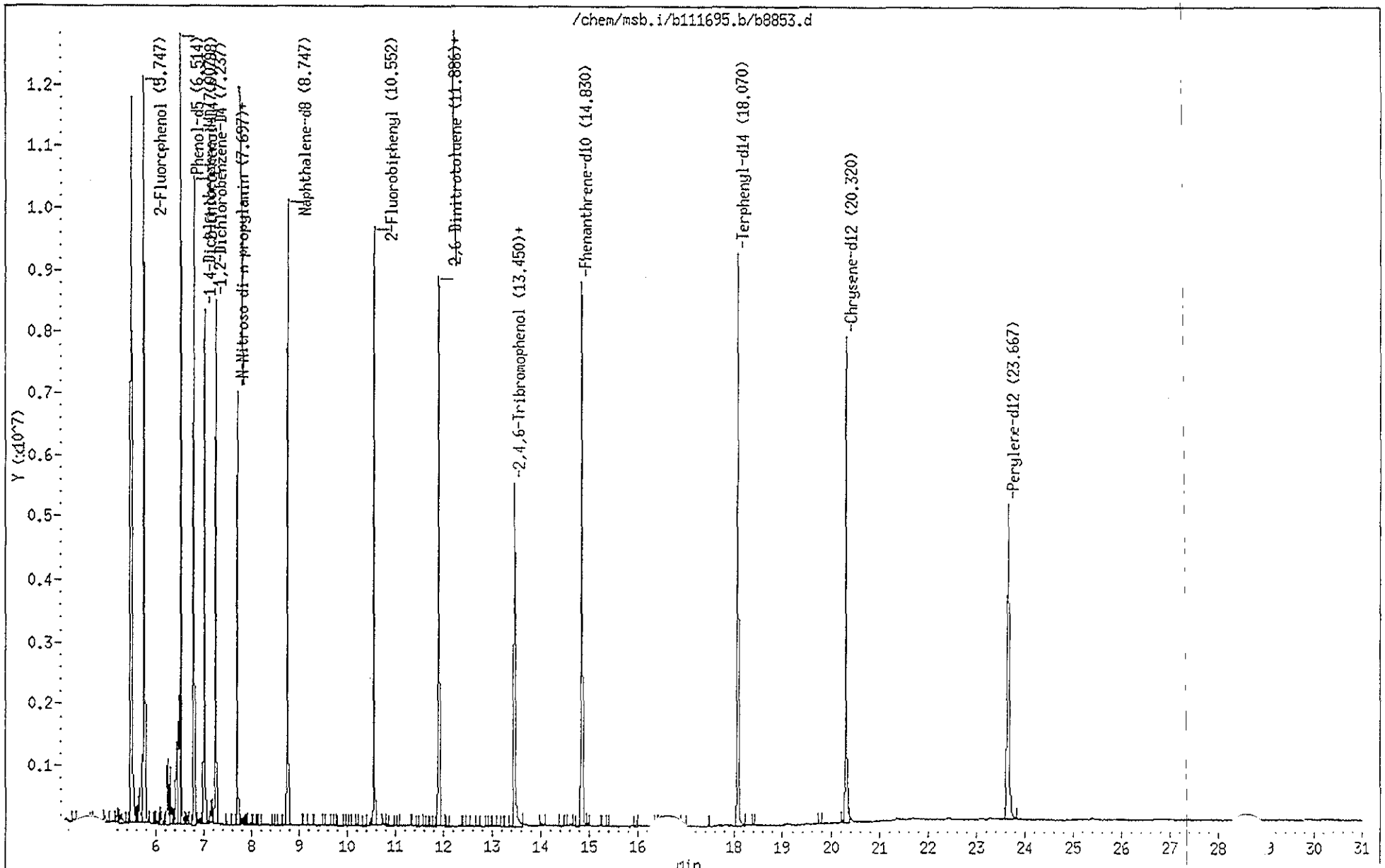
0266

Data File: /chem/msb.i/b111695.b/b8853.d
Date : 16-NOV-95 18:07
Client ID: jp0322c
Sample Info: 17418n clj78tw004

Column phase: J&W DB-5

Instrument: msb.i

Operator: J. Kelly
Column diameter: 0.25



OHM Analytical Division

BASE NEUTRAL QUANT AND RATIO REPORT

Data file : /chem/msb.i/b111695.b/b8853.d
Lab Smp Id: Client Smp ID: jp0322c
Inj Date : 16-NOV-95 18:07
Operator : J. Kelly Inst ID: msb.i
Smp Info : 17418n clj78tw004
Misc Info : jp0322c,n2c51712,m1,1,1
Comment :
Method : /chem/msb.i/b111695.b/110895bclp.m
Meth Date : 17-Nov-1995 10:10 kathryn Quant Type: ISTD
Cal Date : 16-NOV-95 11:50 Cal File: b8844.d
Als bottle: 11
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

KBryglow

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)	
$	2-Fluorophenol	112.00	5.747	5.746	(0.820)	4600205	54.2	54.2(R)	
$ 4	Phenol-d5	99.00	6.514	6.523	(0.930)	5786633	56.2	56.2(R)	
$ 7	2-Chlorophenol-D4	132.00	6.788	6.786	(0.969)	4743388	60.3	60.3(R)	
* 10	1,4-Dichlorobenzene-d4	152.00	7.007	7.016	(1.000)	2295493	40.0		
$ 13	1,2-Dichlorobenzene-D4	152.00	7.237	7.246	(1.033)	2194786	43.8	43.8(R)	
17	N-Nitroso-di-n-propylamine	70.00	7.697	7.466	(1.098)	~~543077~~	~~7.05~~	~~7.05(Q)~~	ND, RT, MS
$ 19	Nitrobenzene-d5	82.00	7.697	7.707	(0.880)	3227290	36.4	36.4(R)	
* 27	Naphthalene-d8	136.00	8.747	8.759	(1.000)	7503690	40.0		
$ 37	2-Fluorobiphenyl	172.00	10.552	10.560	(0.887)	5568592	44.4	44.4(R)	
41	2,6-Dinitrotoluene	165.00	11.886	11.483	(0.999)	~~523475~~	~~13.0~~	~~13.0(Q)~~	ND, RT, MS
* 44	Acenaphthene-d10	164.00	11.897	11.900	(1.000)	3862604	40.0		
48	2,4-Dinitrotoluene	165.00	11.886	12.252	(0.999)	~~523475~~	~~10.5~~	~~10.5(Q)~~	ND, RT, MS
$ 56	2,4,6-Tribromophenol	330.00	13.450	13.463	(1.130)	1266297	57.7	57.7(R)	
57	4-Bromophenyl-phenylether	248.00	13.450	13.870	(0.907)	~~94117~~	~~2.21~~	~~2.21(Q)~~	ND, RT, MS
* 60	Phenanthrene-d10	188.00	14.830	14.839	(1.000)	6179921	40.0		
$ 68	Terphenyl-d14	244.00	18.070	18.070	(0.889)	5546356	39.2	39.2(R)	
* 73	Chrysene-d12	240.00	20.320	20.329	(1.000)	5066872	40.0		
* 79	Perylene-d12	264.00	23.667	23.690	(1.000)	4970753	40.0		

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/msb.i/b111695.b/b8853.d

Date : 16-NOV-95 18:07

)ient ID: jp0322c

Instrument: msb.i

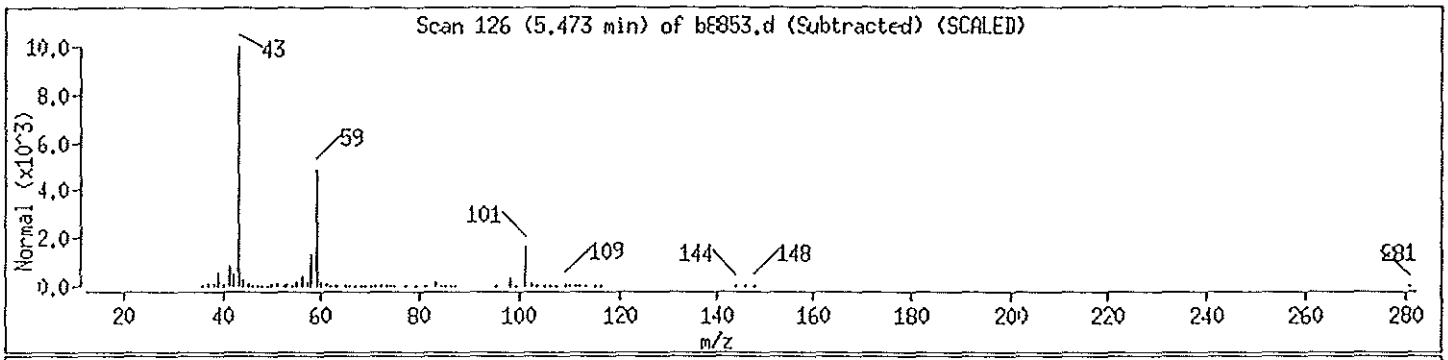
Sample Info: 17418n clj78tw004

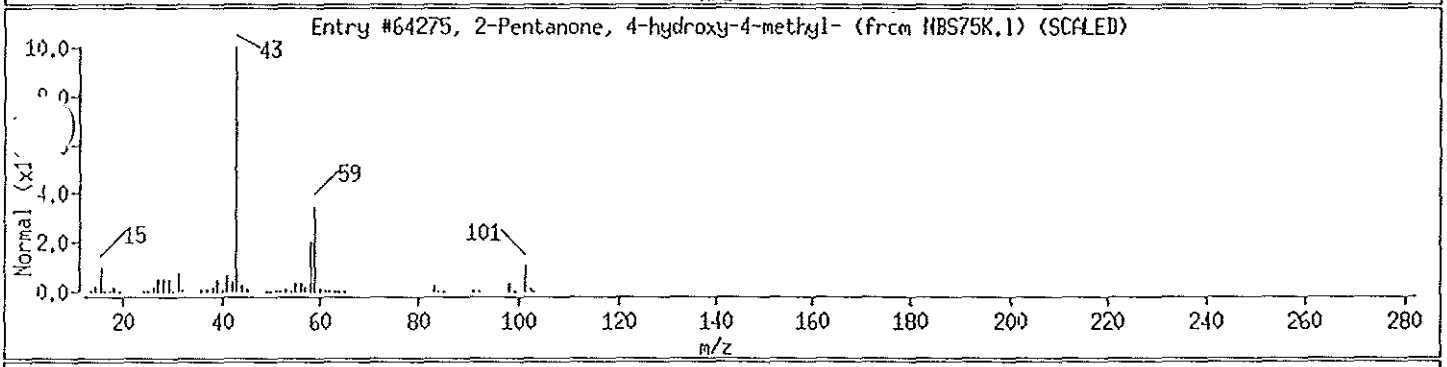
Operator: J. Kelly

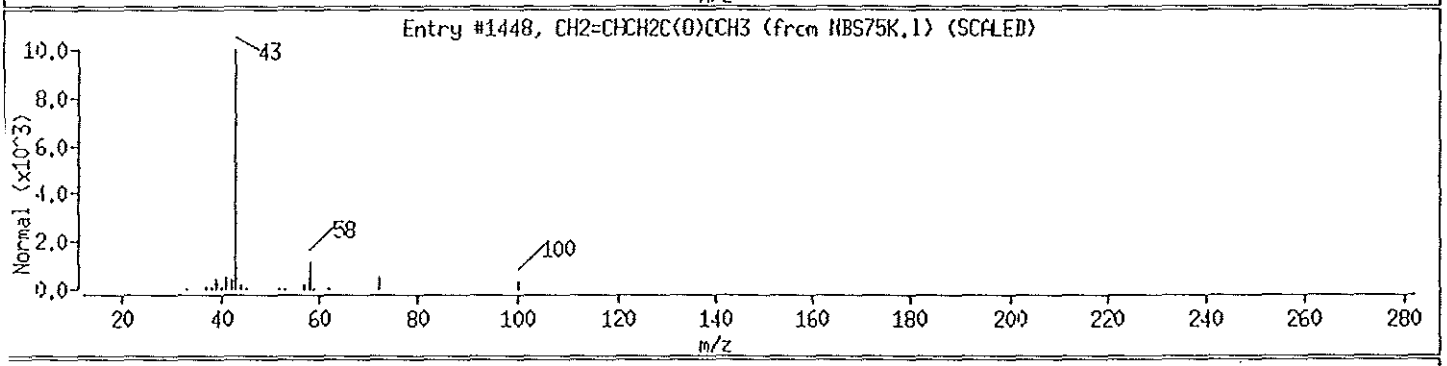
Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NBS75K.l	64275	50	C6H12O2	116
CH2=CHCH2C(O)OCH3	3724-55-8	NBS75K.l	1448	12	C5H8O2	100







Data File: /chem/msb.i/b111695.b/b8853.d

Date : 16-NOV-95 18:07

)ient ID: jp0322c

Instrument: msb.i

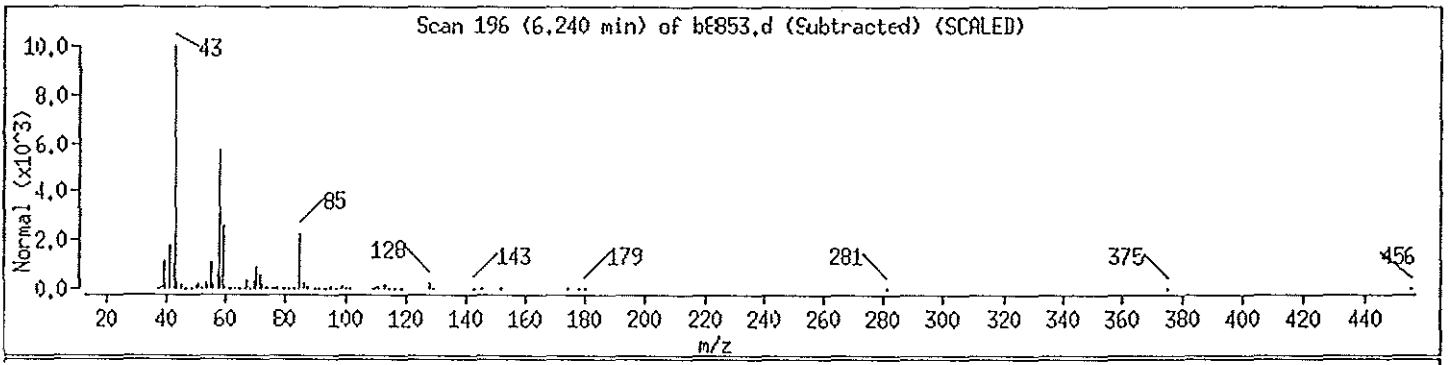
Sample Info: 17418n clj78tw004

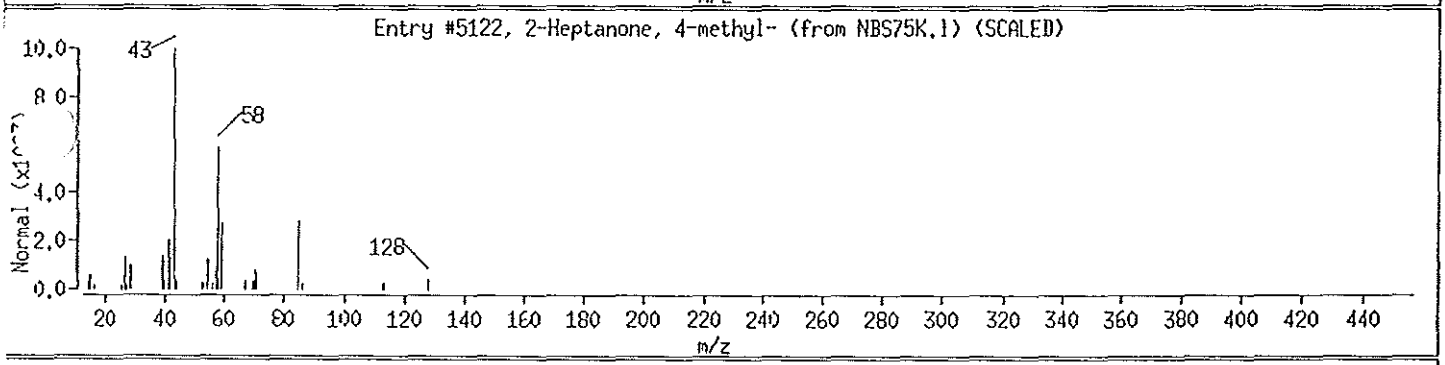
Operator: J. Kelly

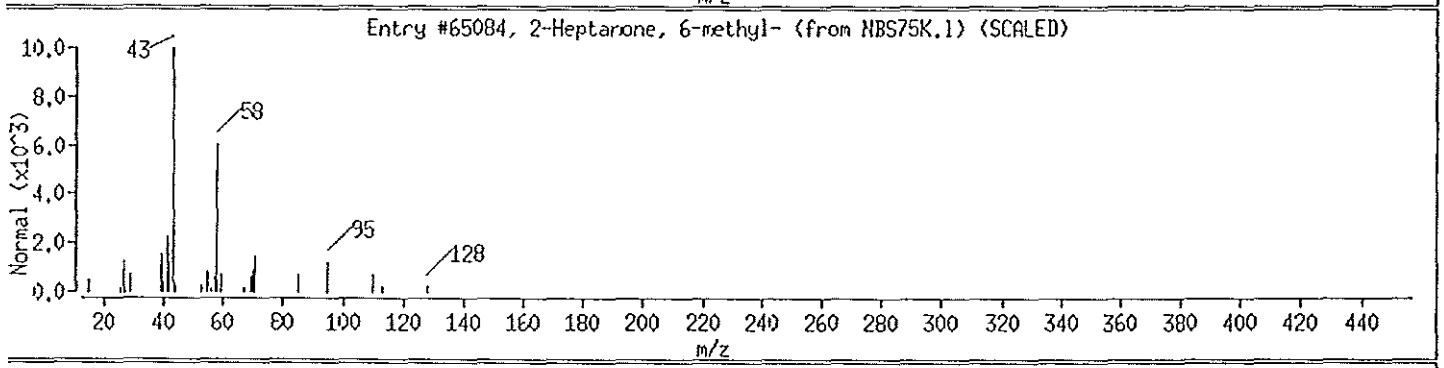
Column phase: J&W DB-5

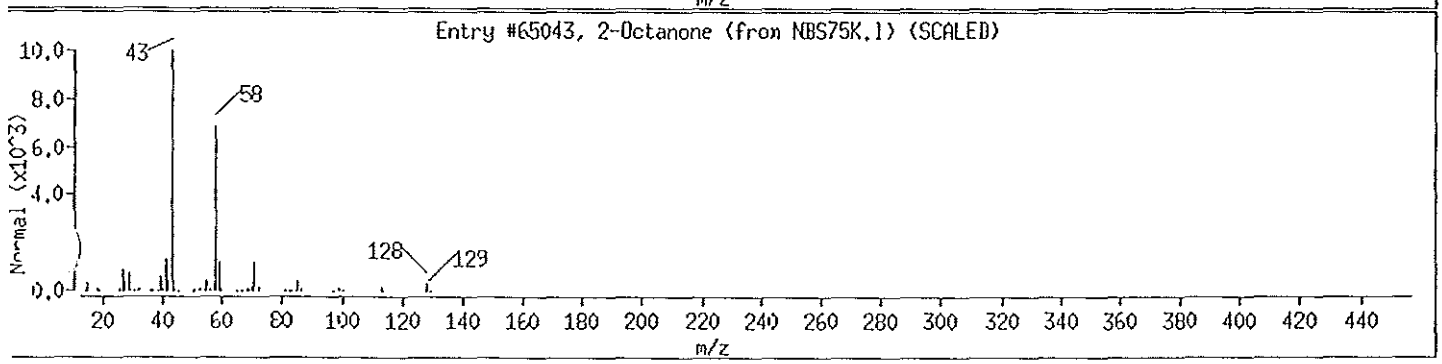
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Heptanone, 4-methyl-	6137-06-0	NBS75K.l	5122	94	C8H16O	128
2-Heptanone, 6-methyl-	928-68-7	NBS75K.l	65084	53	C8H16O	128
2-Octanone	111-13-7	NBS75K.l	65043	47	C8H16O	128









Data File: /chem/msb.i/b111695.b/b8853.d

Date : 16-NOV-95 18:07

Client ID: jp0322c

Instrument: msb.i

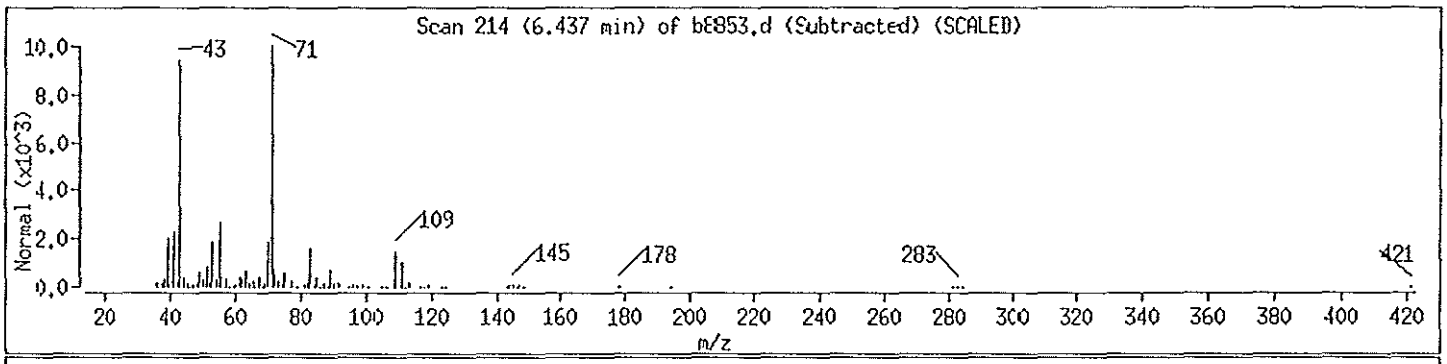
Sample Info: 17418n clj78tw004

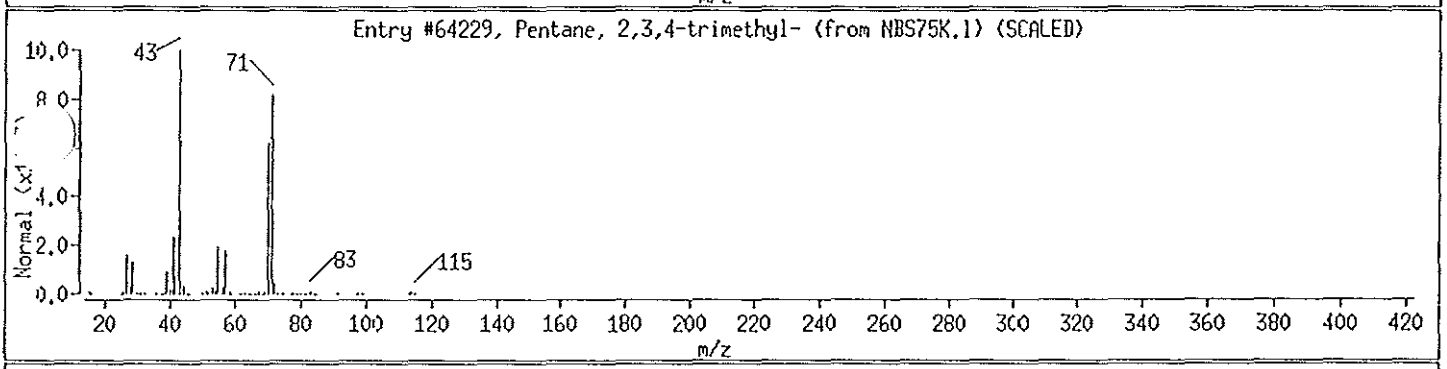
Operator: J. Kelly

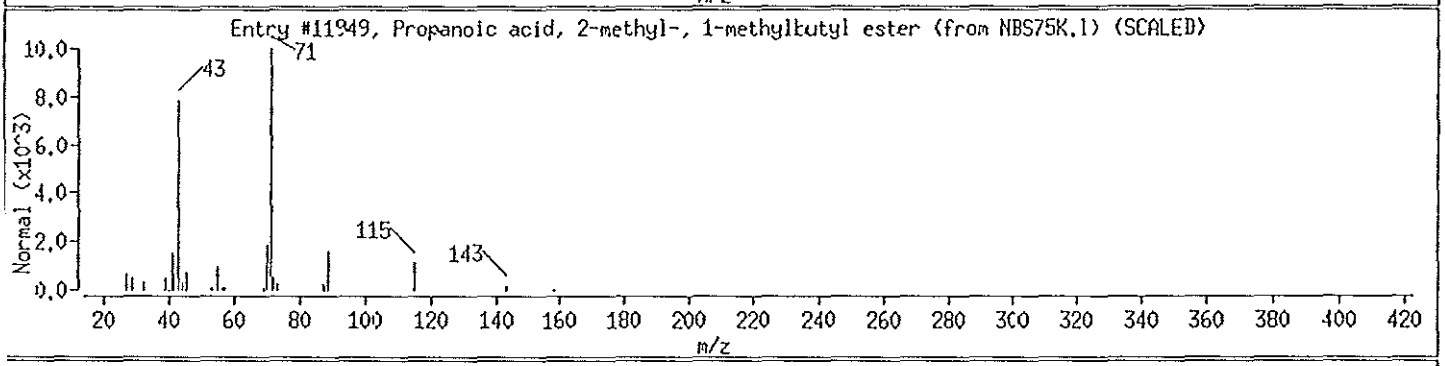
Column phase: J&W DB-5

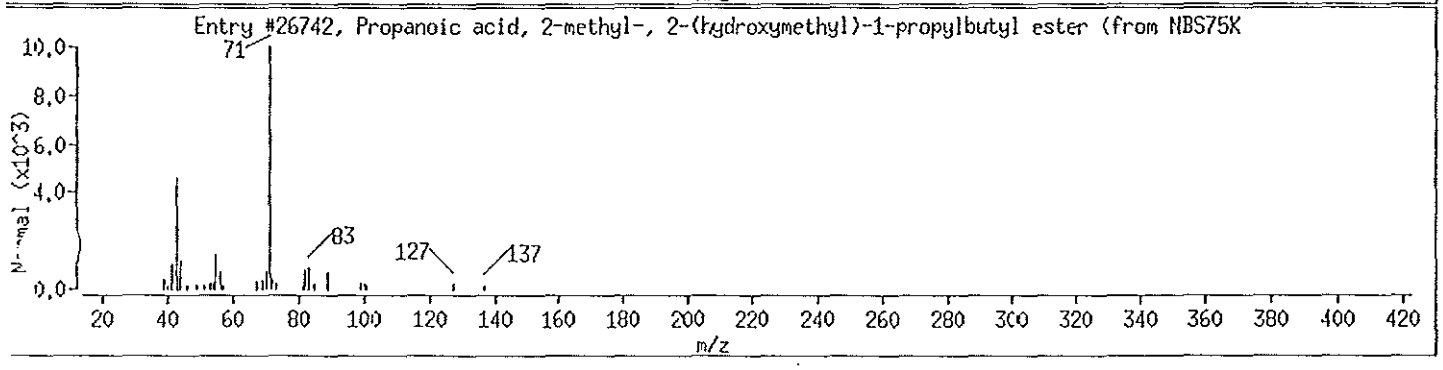
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Pentane, 2,3,4-trimethyl-	565-75-3	NBS75K.l	64229	43	C8H18	114
Propanoic acid, 2-methyl-, 1-methylbutyl	54340-93-1	NBS75K.l	11949	40	C9H1802	158
Propanoic acid, 2-methyl-, 2-(hydroxymet	74367-32-1	NBS75K.l	26742	38	C12H2403	216









Data File: /chem/msb.i/b111695.b/b8853.d

Date : 16-NOV-95 18:07

)ient ID: jp0322c

Sample Info: 17418n clj78tw004

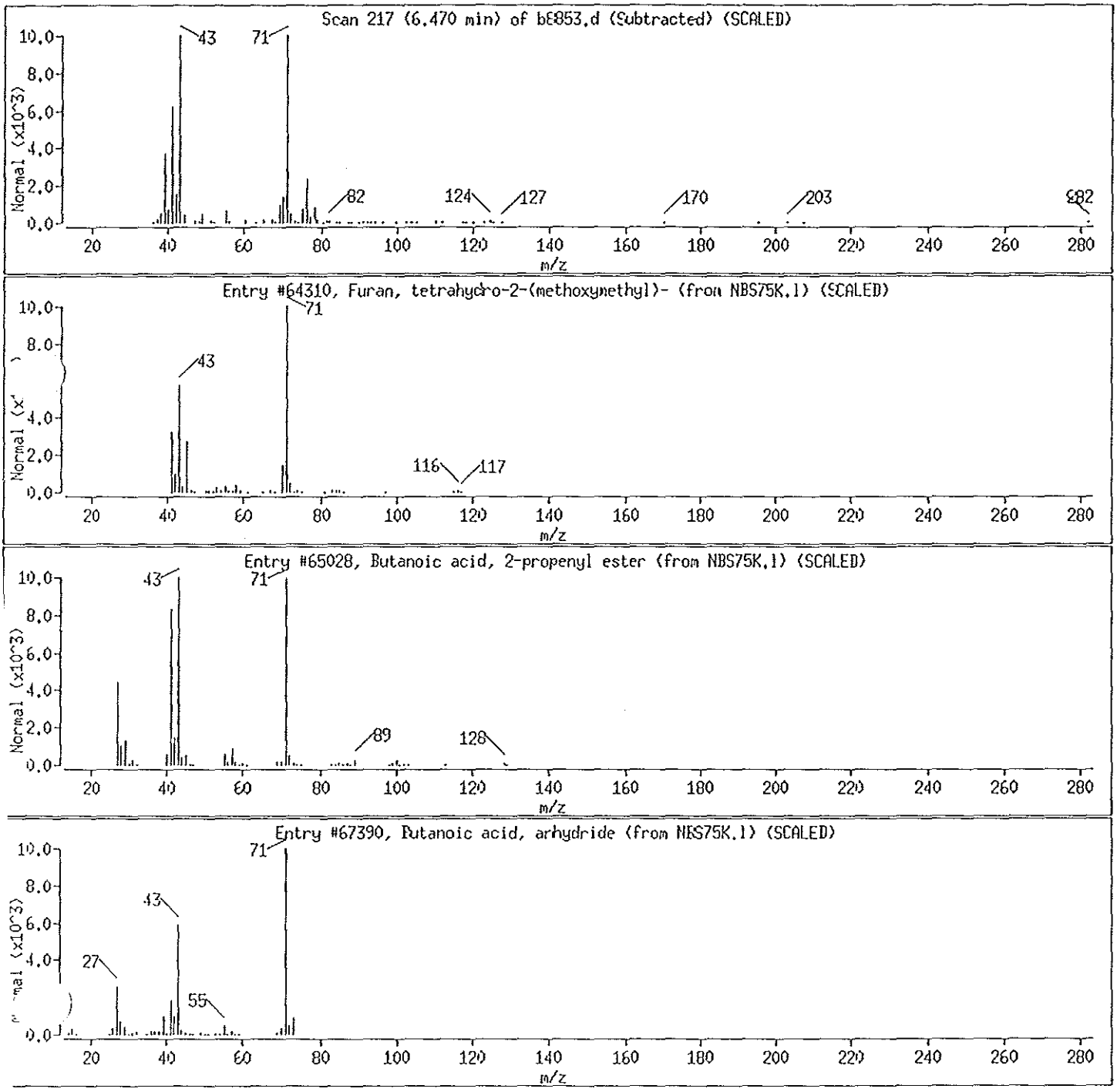
Instrument: msb.i

Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Furan, tetrahydro-2-(methoxymethyl)-	19354-27-9	NBS75K.l	64310	59	C6H12O2	116
Butanoic acid, 2-propenyl ester	2051-78-7	NBS75K.l	65028	53	C7H12O2	128
Butanoic acid, anhydride	106-31-0	NBS75K.l	67390	53	C8H14O3	158



1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0272 CLJ78TW01D

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: JP0319C

Sample wt/vol: 30.7 (g/mL) G Lab File ID: B8850

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: 18 decanted: (Y/N) N Date Extracted: 11/14/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	790	U
111-44-4	bis(2-Chloroethyl)ether	790	U
95-57-8	2-Chlorophenol	790	U
541-73-1	1,3-Dichlorobenzene	790	U
106-46-7	1,4-Dichlorobenzene	790	U
95-50-1	1,2-Dichlorobenzene	790	U
95-48-7	2-Methylphenol	790	U
108-60-1	2,2'-oxybis(1-Chloropropane)	790	U
106-44-5	4-Methylphenol	790	U
621-64-7	N-Nitroso-di-n-propylamine	790	U
67-72-1	Hexachloroethane	790	U
98-95-3	Nitrobenzene	790	U
78-59-1	Isophorone	790	U
88-75-5	2-Nitrophenol	790	U
105-67-9	2,4-Dimethylphenol	790	U
111-91-1	bis(2-Chloroethoxy)methane	790	U
120-83-2	2,4-Dichlorophenol	790	U
120-82-1	1,2,4-Trichlorobenzene	790	U
91-20-3	Naphthalene	790	U
106-47-8	4-Chloroaniline	790	U
87-68-3	Hexachlorobutadiene	790	U
59-50-7	4-Chloro-3-methylphenol	790	U
91-57-6	2-Methylnaphthalene	790	U
77-47-4	Hexachlorocyclopentadiene	790	U
88-06-2	2,4,6-Trichlorophenol	790	U
95-95-4	2,4,5-Trichlorophenol	790	U
91-58-7	2-Chloronaphthalene	790	U
88-74-4	2-Nitroaniline	790	U
131-11-3	Dimethylphthalate	790	U
208-96-8	Acenaphthylene	790	U
606-20-2	2,6-Dinitrotoluene	790	U
99-09-2	3-Nitroaniline	790	U
83-32-9	Acenaphthene	790	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0273 CLJ78TW01D

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: JP0319C

Sample wt/vol: 30.7 (g/mL) G Lab File ID: B8850

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: 18 decanted: (Y/N) N Date Extracted: 11/14/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	4000	U
100-02-7	4-Nitrophenol	4000	U
132-64-9	Dibenzofuran	790	U
121-14-2	2,4-Dinitrotoluene	790	U
84-66-2	Diethylphthalate	790	U
7005-72-3	4-Chlorophenyl-phenylether	790	U
86-73-7	Fluorene	790	U
100-01-6	4-Nitroaniline	790	U
534-52-1	4,6-Dinitro-2-methylphenol	2000	U
101-55-3	4-Bromophenyl-phenylether	790	U
86-30-6	N-Nitrosodiphenylamine (1)	790	U
118-74-1	Hexachlorobenzene	790	U
87-86-5	Pentachlorophenol	790	U
85-01-8	Phenanthrene	790	U
120-12-7	Anthracene	790	U
86-74-8	Carbazole	790	U
84-74-2	Di-n-butylphthalate	790	U
206-44-0	Fluoranthene	790	U
129-00-0	Pyrene	790	U
85-68-2	Butylbenzylphthalate	790	U
91-94-1	3,3'-Dichlorobenzidine	790	U
56-55-3	Benzo(a)anthracene	790	U
218-01-9	Chrysene	790	U
117-81-7	bis(2-Ethylhexyl)phthalate	790	U
117-84-0	Di-n-octylphthalate	790	U
205-99-2	Benzo(b)fluoranthene	790	U
207-08-9	Benzo(k)fluoranthene	790	U
50-32-8	Benzo(a)pyrene	790	U
193-39-5	Indeno(1,2,3-cd)pyrene	790	U
53-70-3	Dibenz(a,h)anthracene	790	U
191-24-2	Benzo(g,h,i)perylene	790	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

0274

CLJ78TW01D

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: JP0319C

Sample wt/vol: 30.7 (g/mL) G Lab File ID: B8850

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: 18 decanted: (Y/N) N Date Extracted: 11/14/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 5

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 123-42-2	2-Pentanone, 4-hydroxy-4-met	5.49	4500	JNA
2. 6137-06-0	2-Heptanone, 4-methyl-	6.24	550	JN
3. 928-68-7	2-Heptanone, 6-methyl-	6.30	340	JN
4. 1189-99-7	Heptane, 2,5,5-trimethyl-	6.44	840	JN
5. 2051-78-7	Butanoic acid, 2-propenyl es	6.47	1100	JN

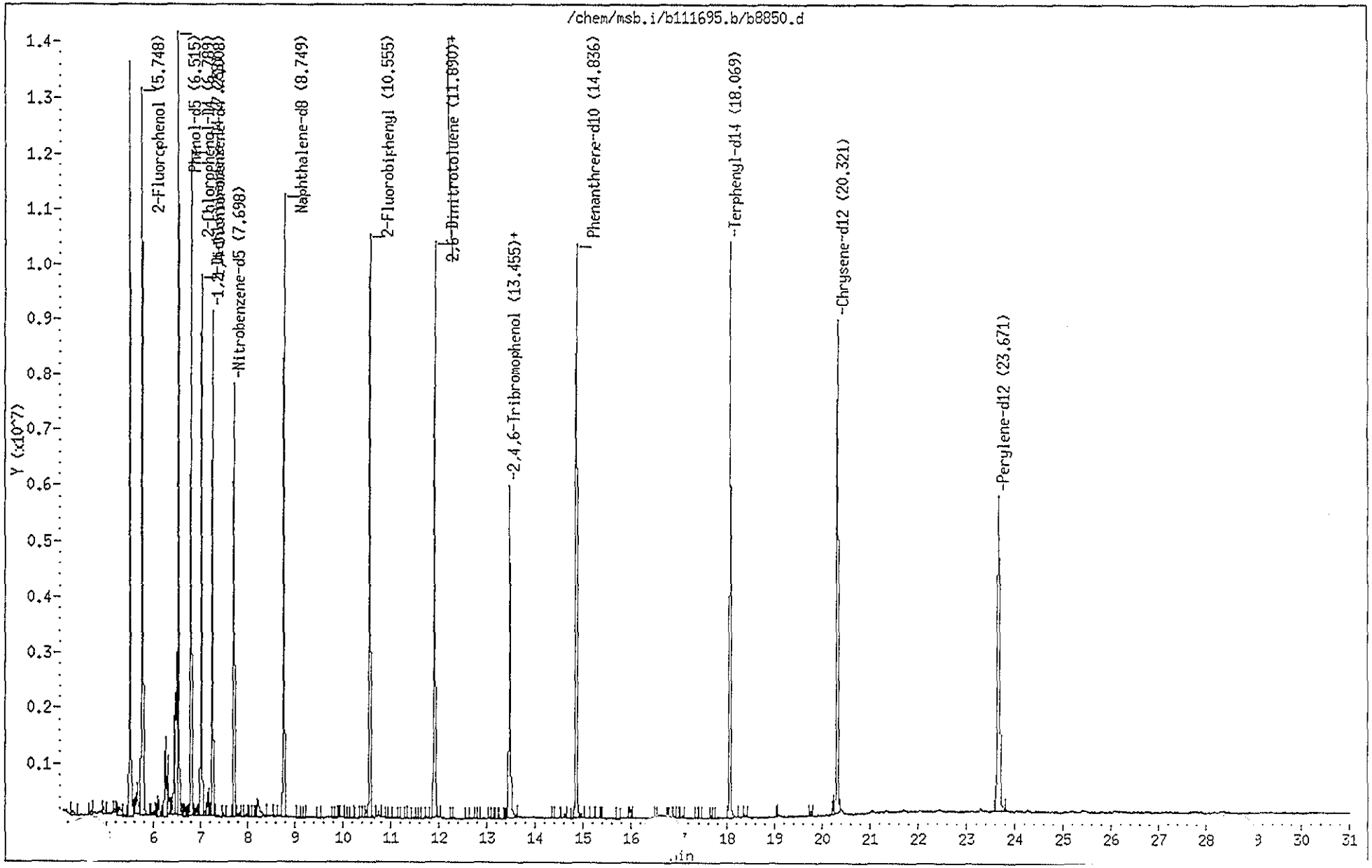
0275

Data File: /chem/msb.i/b111695.b/b8850.d
Date : 16-NOV-95 16:04
Client ID: jp0319c
Sample Info: 17418n clj78tw01d

Column phase: J&W DB-5

Instrument: msb.i

Operator: J. Kelly
Column diameter: 0.25



Data File: /chem/msb.i/b111695.b/b8850.d
Report Date: 17-Nov-1995 10:14

OHM Analytical Division

BASE NEUTRAL QUANT AND RATIO REPORT

Data file : /chem/msb.i/b111695.b/b8850.d
Lab Smp Id: Client Smp ID: jp0319c
Inj Date : 16-NOV-95 16:04
Operator : J. Kelly Inst ID: msb.i
Smp Info : 17418n clj78tw01d
Misc Info : jp0319c,n2c51712,m1,1,1
Comment :
Method : /chem/msb.i/b111695.b/110895bclp.m
Meth Date : 17-Nov-1995 10:10 kathryn Quant Type: ISTD
Cal Date : 16-NOV-95 11:50 Cal File: b8844.d
Als bottle: 8
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

RBaylow

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)	
Compounds									
$	2 2-Fluorophenol	112.00	5.748	5.746	(0.820)	5097201	52.9	52.9(R)	
$	4 Phenol-d5	99.00	6.515	6.523	(0.930)	6388494	54.6	54.6(R)	
$	7 2-Chlorophenol-D4	132.00	6.789	6.786	(0.969)	5091632	57.0	57.0(R)	
*	10 1,4-Dichlorobenzene-d4	152.00	7.008	7.016	(1.000)	2608435	40.0		
$	13 1,2-Dichlorobenzene-D4	152.00	7.238	7.246	(1.033)	2419532	42.5	42.5(R)	
$	19 Nitrobenzene-d5	82.00	7.698	7.707	(0.880)	3541789	34.8	34.8(R)	
*	27 Naphthalene-d8	136.00	8.749	8.759	(1.000)	8609445	40.0		
$	37 2-Fluorobiphenyl	172.00	10.555	10.560	(0.888)	5975633	42.2	42.2(R)	
	41 2,6-Dinitrotoluene	165.00	11.890	11.483	(1.000)	589291	13.0	~~13.0~~(Q)	ND, RT, MS
*	44 Acenaphthene-d10	164.00	11.890	11.900	(1.000)	4355496	40.0		
	48 2,4-Dinitrotoluene	165.00	11.890	12.252	(1.000)	589172	10.5	~~10.5~~(Q)	ND, RT, MS
$	56 2,4,6-Tribromophenol	330.00	13.455	13.463	(1.132)	1411941	57.1	57.1(R)	
	57 4-Bromophenyl-phenylether	248.00	13.455	13.870	(0.907)	106512	2.15	~~2.15~~(Q)	ND, RT, MS
*	60 Phenanthrene-d10	188.00	14.836	14.839	(1.000)	7160599	40.0		
$	68 Terphenyl-d14	244.00	18.069	18.070	(0.889)	6170037	40.3	40.3(R)	
*	73 Chrysene-d12	240.00	20.321	20.329	(1.000)	5492866	40.0		
*	79 Perylene-d12	264.00	23.671	23.690	(1.000)	6159638	40.0		

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/msb.i/b111695.b/b8850.d

Date : 16-NOV-95 16:04

Client ID: jp0319c

Instrument: msb.i

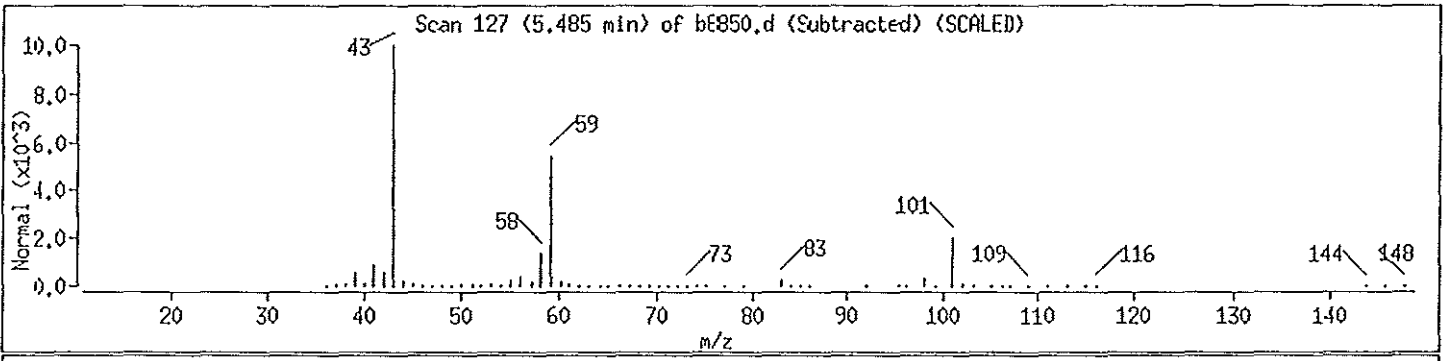
Sample Info: 17418n clj78tw01d

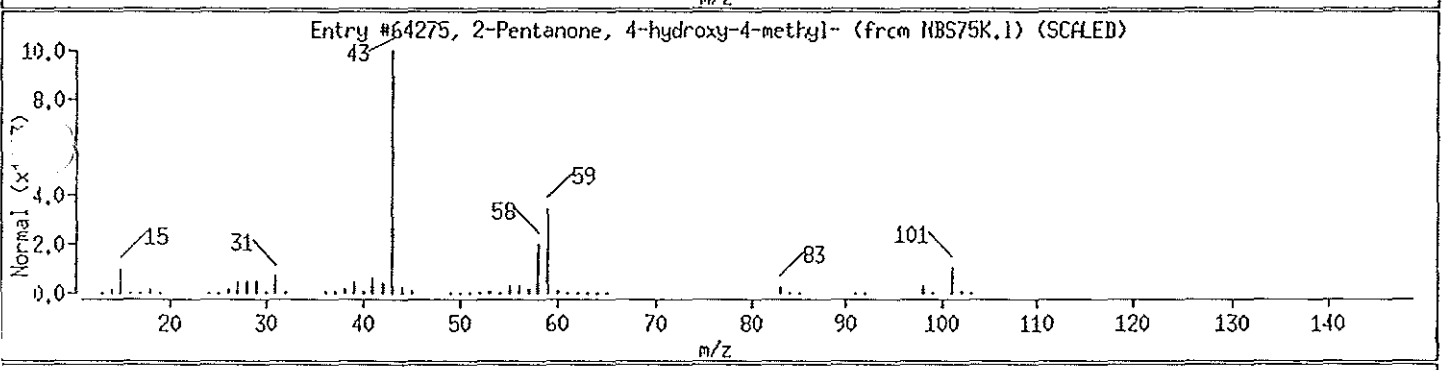
Operator: J. Kelly

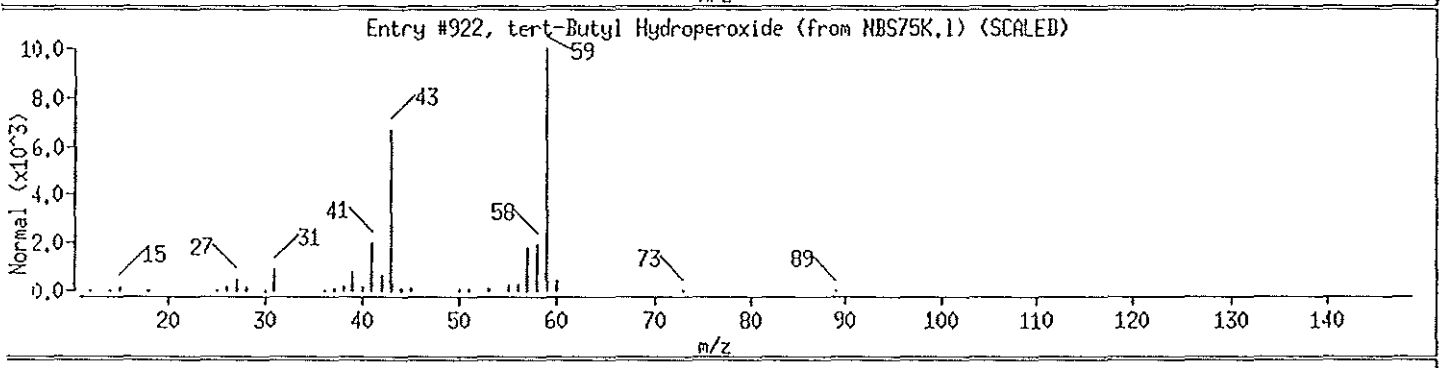
Column phase: J&W DB-5

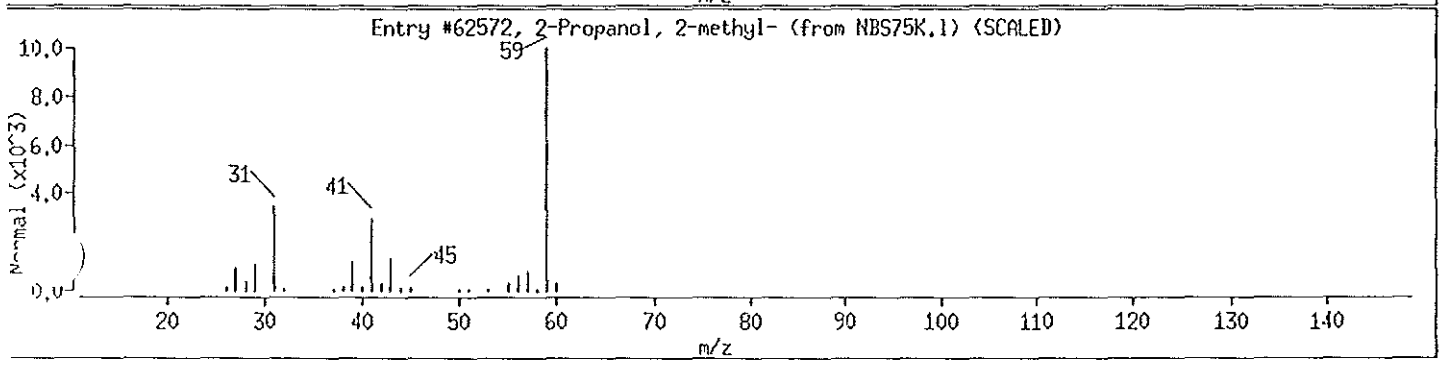
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NBS75K.l	64275	50	C6H12O2	116
tert-Butyl Hydroperoxide	75-91-2	NBS75K.l	922	25	C4H10O2	90
2-Propanol, 2-methyl-	75-65-0	NBS75K.l	62572	17	C4H10O	74









Data File: /chem/msb.i/b111695.b/b8850.d

Date : 16-NOV-95 16:04

Client ID: jp0319c

Instrument: msb.i

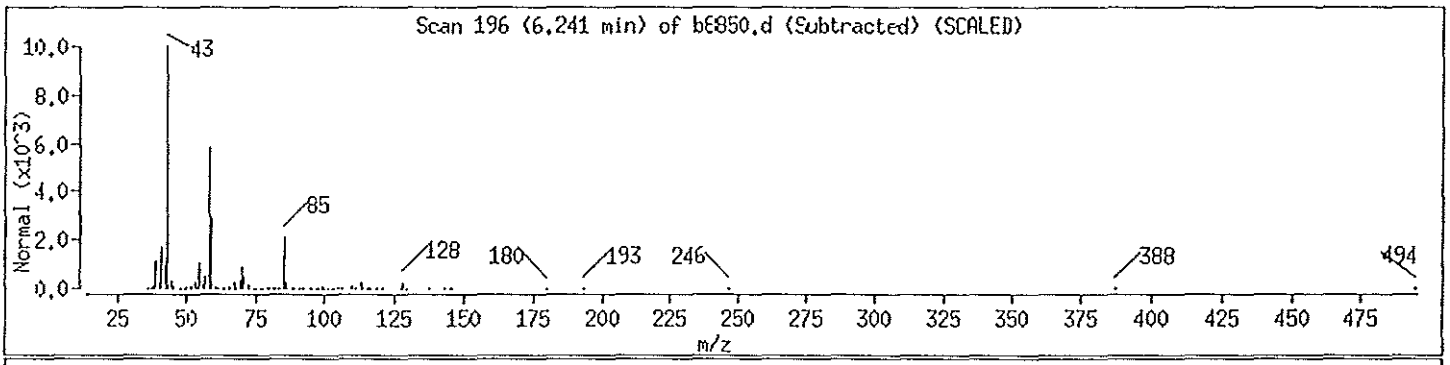
Sample Info: 17418n clj78tw01d

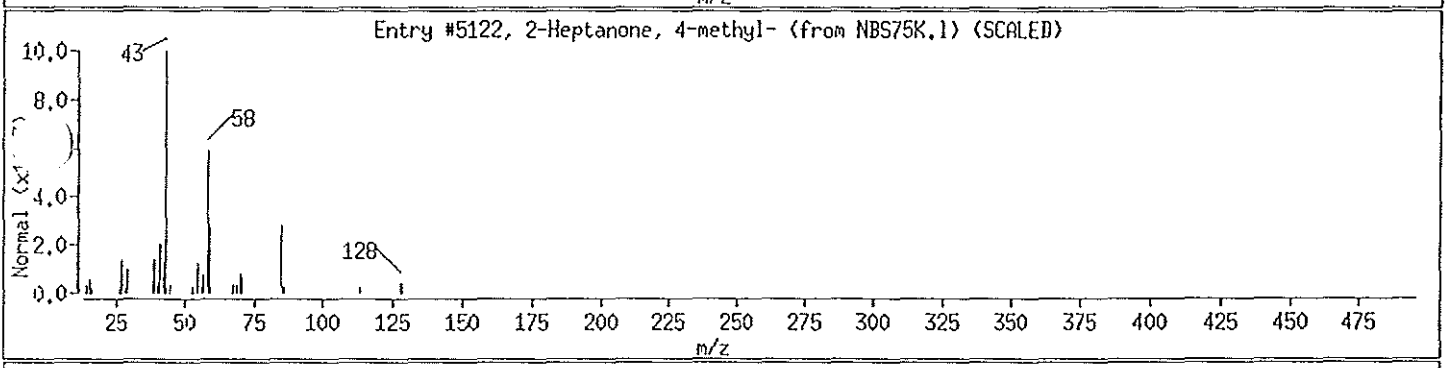
Operator: J. Kelly

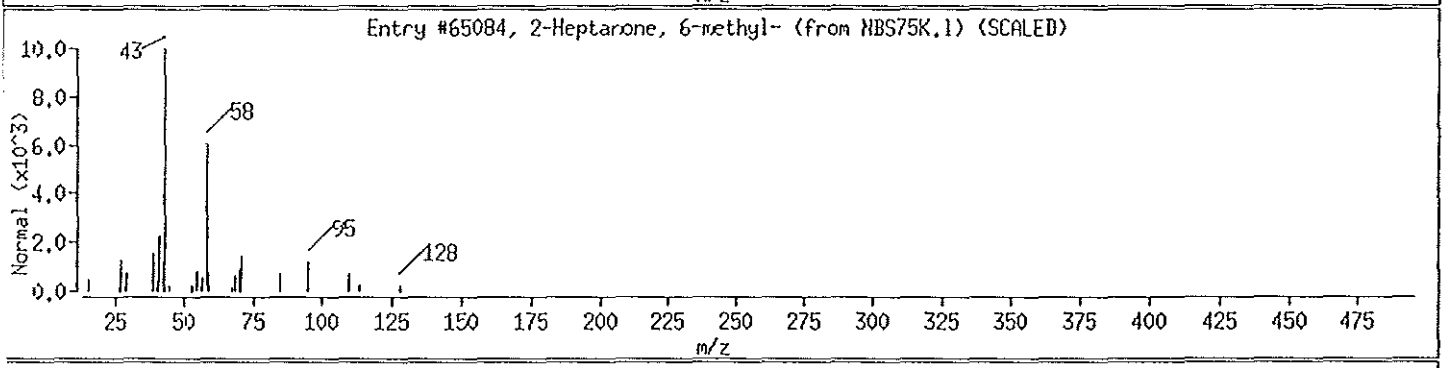
Column phase: J&W DB-5

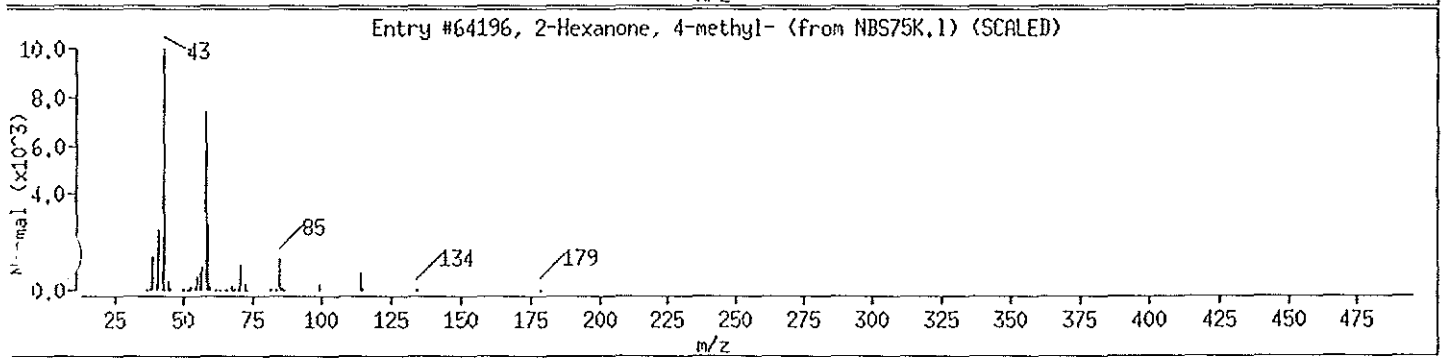
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Heptanone, 4-methyl-	6137-06-0	NBS75K.l	5122	94	C8H16O	128
2-Heptanone, 6-methyl-	928-68-7	NBS75K.l	65084	52	C8H16O	128
2-Hexanone, 4-methyl-	105-42-0	NBS75K.l	64196	50	C7H14O	114









Data File: /chem/msb.i/b111695.b/b8850.d

Date : 16-NOV-95 16:04

Client ID: jp0319c

Instrument: msb.i

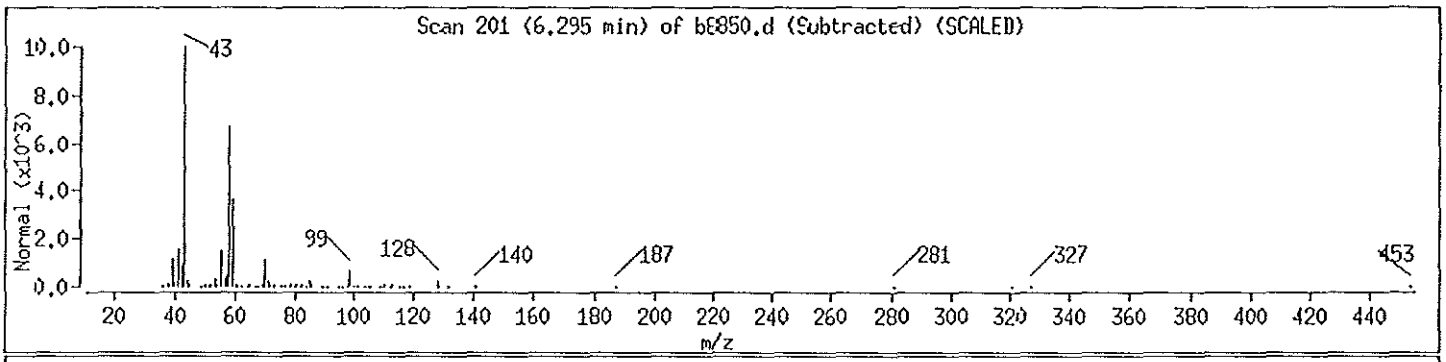
Sample Info: 17418n clj78tw01d

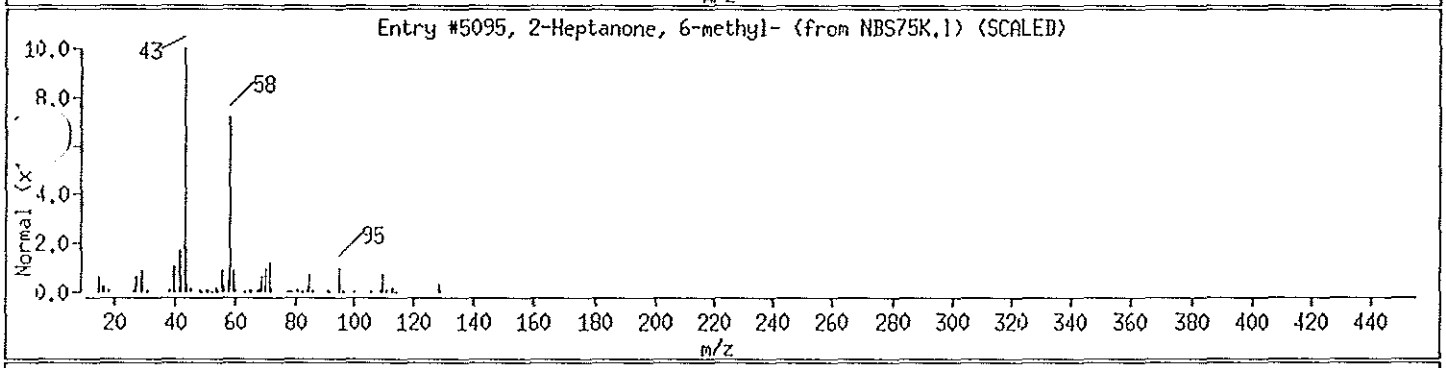
Operator: J. Kelly

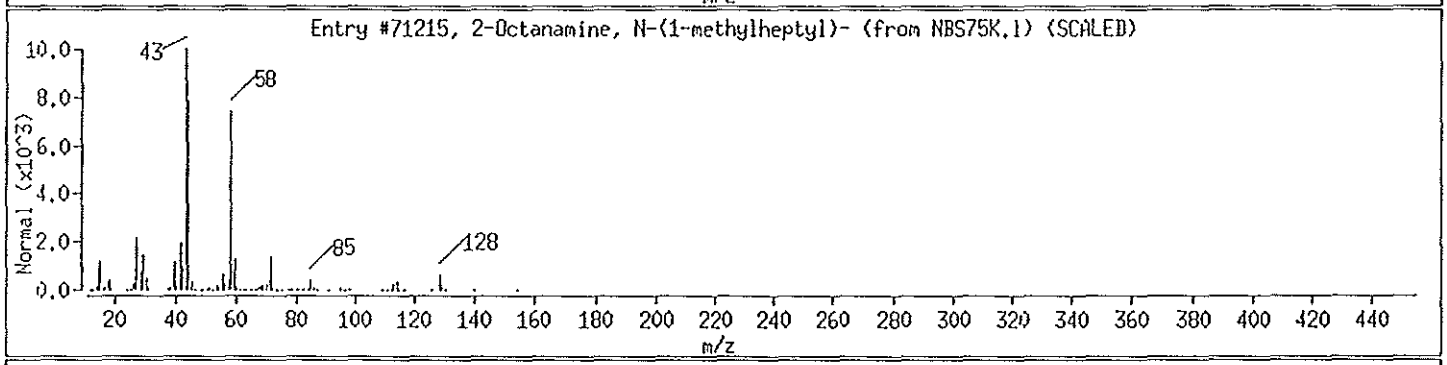
Column phase: J&W DB-5

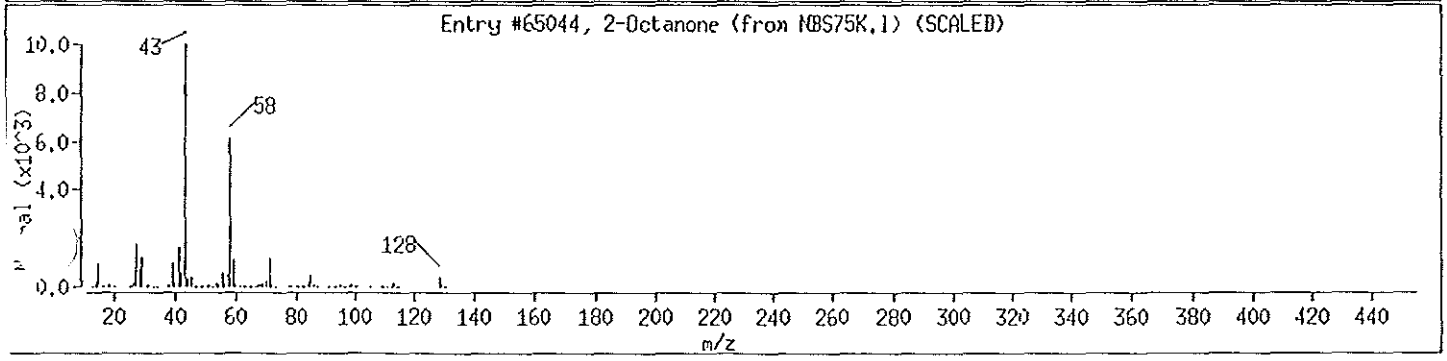
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Heptanone, 6-methyl-	928-68-7	NBS75K.l	5095	59	C8H16O	128
2-Octanamine, N-(1-methylheptyl)-	5412-92-0	NBS75K.l	71215	33	C16H35N	241
2-Octanone	111-13-7	NBS75K.l	65044	33	C8H16O	128





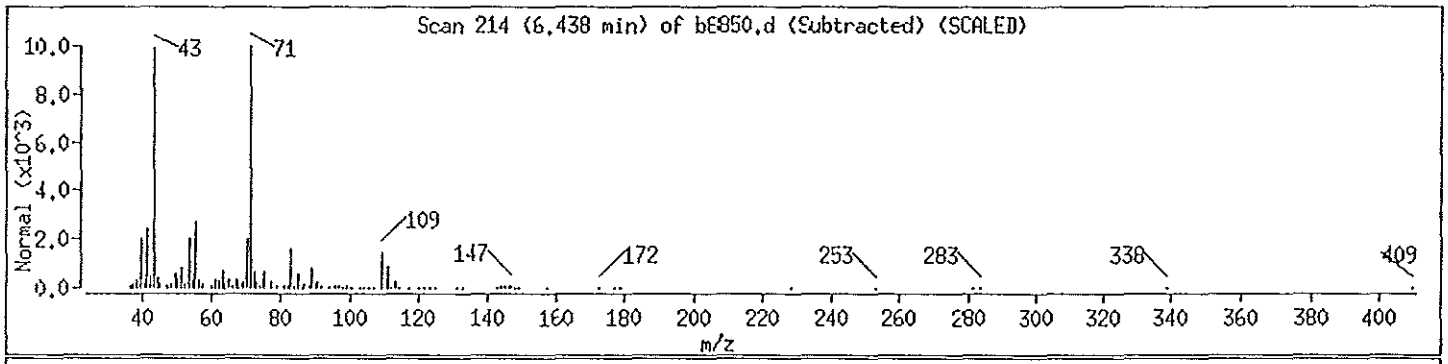


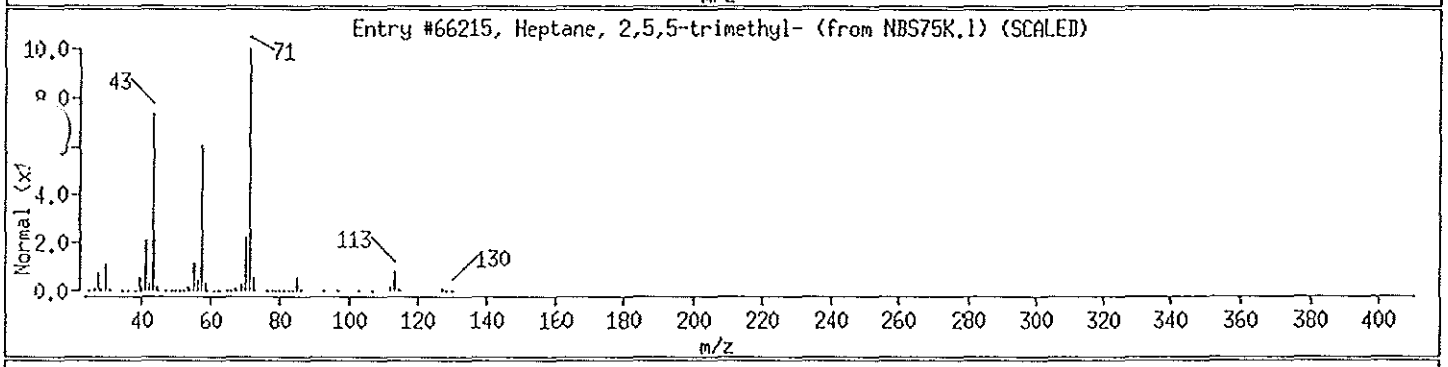


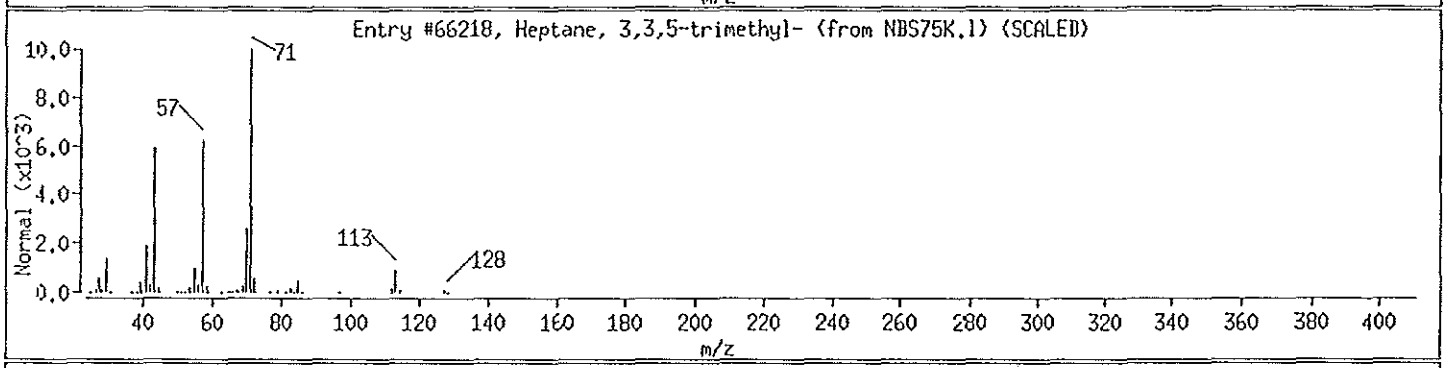
Data File: /chem/msb.i/b111695.b/b8850.d
Date : 16-NOV-95 16:04
Client ID: jp0319c
Sample Info: 17418n clj78tw01d

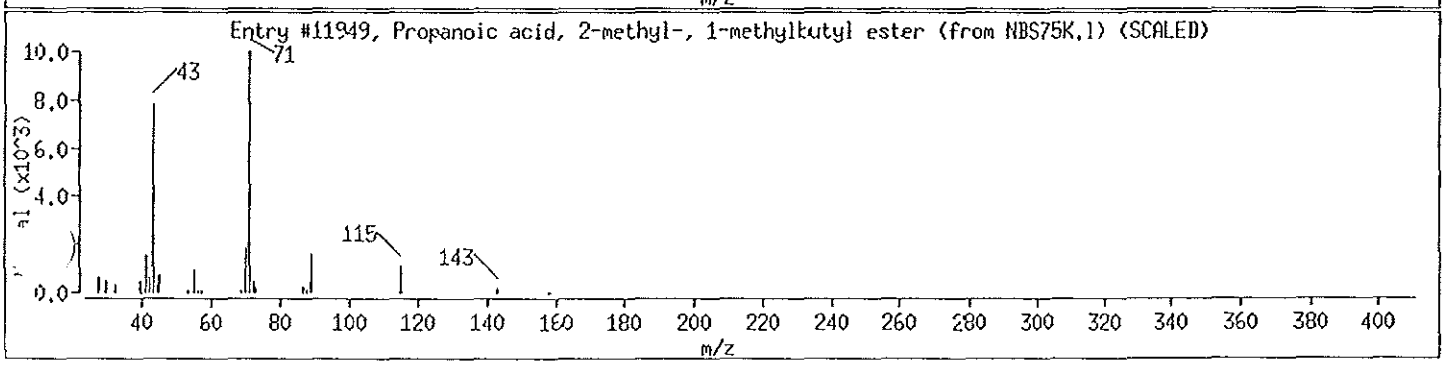
Instrument: msb.i
Operator: J. Kelly
Column phase: J&W DB-5
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Heptane, 2,5,5-trimethyl-	1189-99-7	NBS75K.l	66215	40	C10H22	142
Heptane, 3,3,5-trimethyl-	7154-80-5	NBS75K.l	66218	40	C10H22	142
Propanoic acid, 2-methyl-, 1-methylbutyl	54340-93-1	NBS75K.l	11949	40	C9H1802	158









Data File: /chem/msb.i/b111695.b/b8850.d

Date : 16-NOV-95 16:04

ient ID: jp0319c

Instrument: msb.i

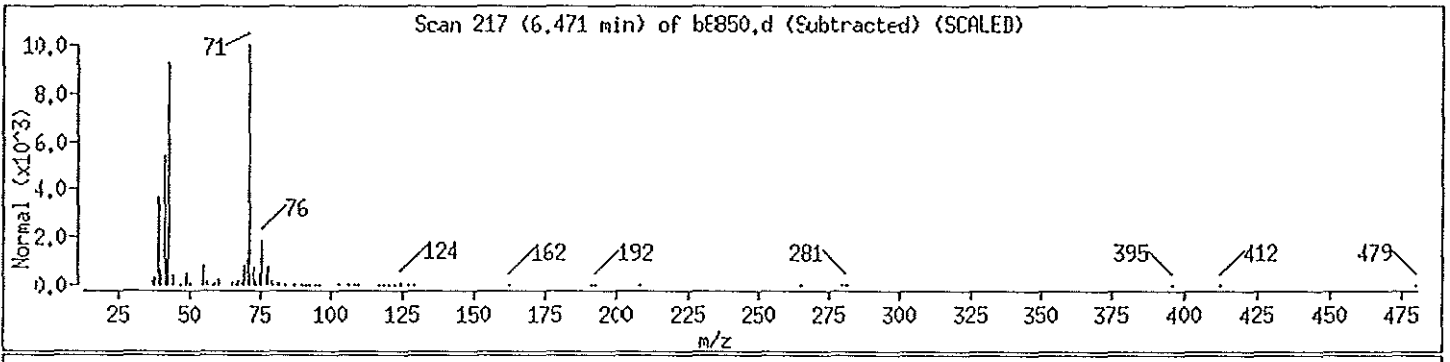
Sample Info: 17418n clj78tw01d

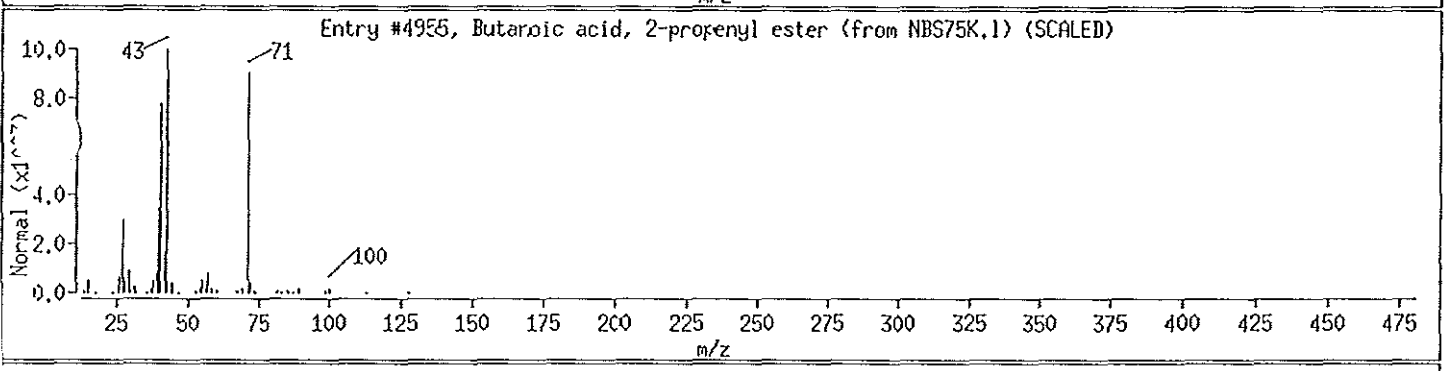
Operator: J. Kelly

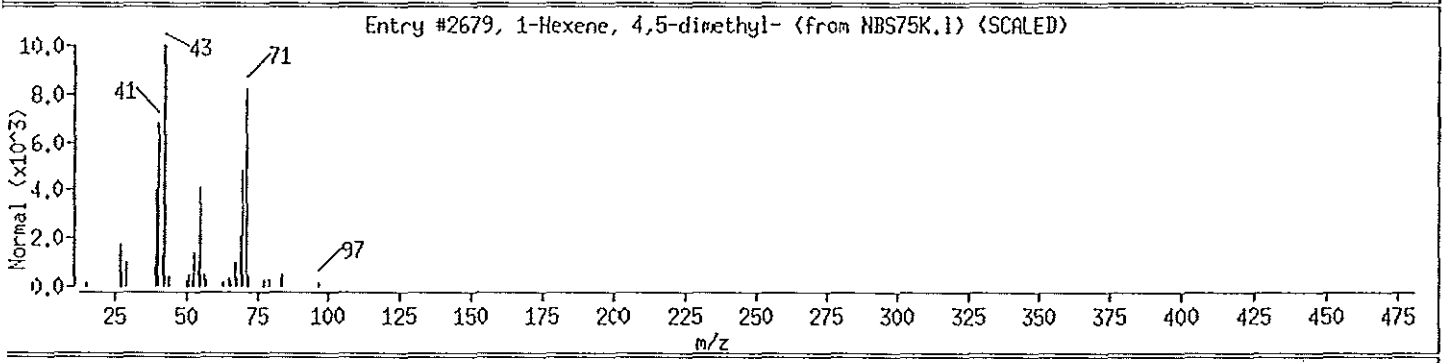
Column phase: J&W DB-5

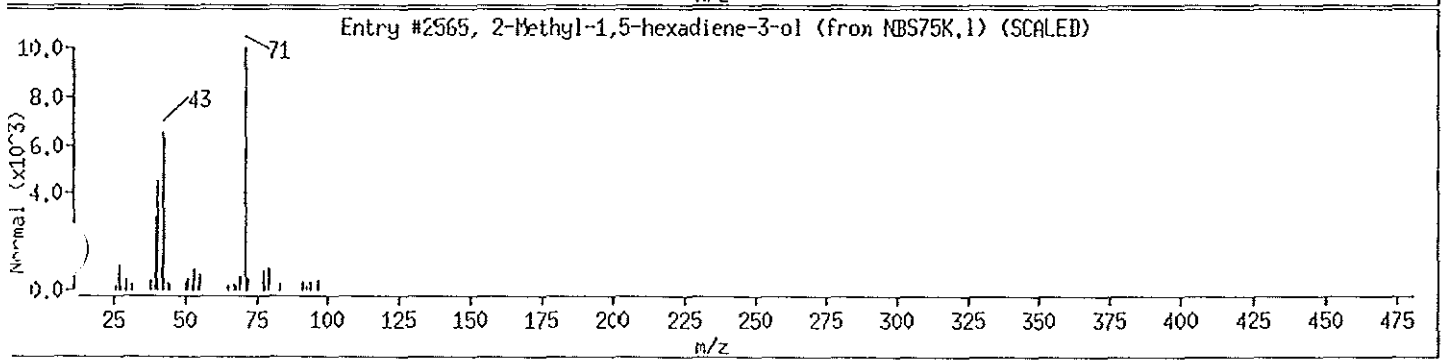
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Butanoic acid, 2-propenyl ester	2051-78-7	NBS75K.l	4955	59	C7H1202	128
1-Hexene, 4,5-dimethyl-	16106-59-5	NBS75K.l	2679	45	C8H16	112
2-Methyl-1,5-hexadiene-3-ol	17123-60-3	NBS75K.l	2565	45	C7H120	112









OHM Analytical Division

INITIAL CALIBRATION DATA

Start Cal Date : 08-NOV-95 16:57
End Cal Date : 08-NOV-95 16:57
Quant Method : ISTD
Cal Curve Type : Averaged
Target Version : Target 3.00
Integrator : HP RTE
Method file : /chem/msb.i/b110895.b/110895bclp.m
Cal Date : 09-Nov-1995 18:00

Calibration File Names:
Level 1: /chem/msb.i/b110895.b/b8733a.d
Level 2: /chem/msb.i/b110895.b/b8734a.d
Level 3: /chem/msb.i/b110895.b/b8735a.d
Level 4: /chem/msb.i/b110895.b/b8736a.d
Level 5: /chem/msb.i/b110895.b/b8737a.d

	Compound	20 Level 1	50 Level 2	80 Level 3	120 Level 4	160 Level 5	___ RRF	% RSD/R^2	
	N-Nitrosodimethylamine	0.84817	0.92898	0.95819	1.01837	1.04546	0.95984	8.101	
2	Pyridine	1.39893	1.54098	1.57956	1.63932	1.69785	1.57133	7.210	
5	Phenol	1.58232	1.74684	1.70850	1.72265	1.58243	1.66855	4.786	
6	bis(2-Chloroethyl)ether	3.24193	3.60517	3.42424	3.01065	2.53451	3.16330	13.113	
8	2-Chlorophenol	1.30999	1.45368	1.39317	1.38040	1.33812	1.37507	4.006	
9	1,3-Dichlorobenzene	1.42996	1.58153	1.54854	1.53733	1.47391	1.51425	4.039	
11	1,4-Dichlorobenzene	1.43990	1.58890	1.48349	1.50295	1.44609	1.49226	4.021	
12	2-Methylphenol	1.07753	1.20097	1.19078	1.19759	1.20449	1.17427	4.626	
14	1,2-Dichlorobenzene	1.33068	1.41979	1.28045	1.21965	1.09350	1.26881	9.645	
15	2,2'-oxybis(1-Chloropropene)	2.01184	2.19745	2.15288	2.20171	2.14163	2.14110	3.595	
16	4-Methylphenol	1.10878	1.28551	1.25409	1.29233	1.30233	1.24861	6.425	
17	N-Nitroso-di-n-propylamine	1.09805	1.23124	1.23604	1.26981	1.30287	1.22760	6.351	
18	Hexachloroethane	0.58723	0.69670	0.66815	0.67987	0.68337	0.66306	6.575	
20	Nitrobenzene	0.40150	0.46710	0.44725	0.45154	0.39860	0.43320	7.195	
21	Isophorone	0.91102	1.05660	0.98543	0.84317	0.69682	0.89861	15.384	
22	2,4-Dimethylphenol	0.39015	0.43300	0.41368	0.40875	0.38074	0.40527	5.060	
23	2-Nitrophenol	0.19424	0.24358	0.23440	0.22952	0.22512	0.22537	8.299	
24	bis(2-Chloroethoxy)methane	0.54307	0.60612	0.57903	0.55006	0.46047	0.54775	10.012	
25	2,4-Dichlorophenol	0.29578	0.33798	0.31974	0.31904	0.29802	0.31411	5.561	
26	1,2,4-Trichlorobenzene	0.33373	0.38271	0.34772	0.33743	0.30800	0.34192	7.923	
28	Naphthalene	0.97360	1.05877	0.95374	0.75157	0.57490	0.86252	22.764	<-
29	4-Chloroaniline	0.59571	0.65407	0.60503	0.56482	0.47980	0.57988	11.120	
30	Hexachlorobutadiene	0.20569	0.20834	0.20313	0.19392	0.16947	0.19611	8.082	
31	4-Chloro-3-methylphenol	0.33173	0.38419	0.37410	0.37830	0.35037	0.36374	6.056	
[illegible]	2-Methylnaphthalene	0.62248	0.67690	0.64265	0.60106	0.49857	0.60833	11.082	
	1-Methylnapthalene	0.62740	0.67716	0.65147	0.60539	0.50465	0.61321	10.818	
34	Hexachlorocyclopentadiene	0.00998	0.06841	0.10882	0.15263	0.17796	0.10356	64.708	

OHM Analytical Division

INITIAL CALIBRATION DATA

Start Cal Date : 08-NOV-95 16:57
End Cal Date : 08-NOV-95 16:57
Quant Method : ISTD
Cal Curve Type : Averaged
Target Version : Target 3.00
Integrator : HP RTE
Method file : /chem/msb.i/b110895.b/110895bclp.m
Cal Date : 09-Nov-1995 18:00

	Compound	20 Level 1	50 Level 2	80 Level 3	120 Level 4	160 Level 5	RRF	% RSD/R^2
35	2,4,6-Trichlorophenol	0.36298	0.44731	0.42598	0.42295	0.40282	0.41241	7.714
36	2,4,5-Trichlorophenol	0.38196	0.47016	0.45102	0.43977	0.41622	0.43183	7.880
38	2-Chloronaphthalene	1.12075	1.28342	1.17395	1.12713	0.93487	1.12802	11.180
39	2-Nitroaniline	0.40359	0.51714	0.50588	0.53230	0.52181	0.49614	10.602
40	Dimethylphthalate	1.53175	1.72223	1.63372	1.43773	1.13230	1.49155	15.252
41	2,6-Dinitrotoluene	0.33060	0.42112	0.40425	0.41474	0.40158	0.39446	9.269
	Acenaphthylene	1.80589	2.05683	1.88289	1.56224	1.21793	1.70516	19.076
	3-Nitroaniline	0.34237	0.41074	0.40351	0.43114	0.41870	0.40129	8.597
45	2,4-Dinitrophenol	+++++	0.07335	0.10158	0.13246	0.13405	0.11036	26.140
46	Acenaphthene	1.12661	1.23688	1.10547	1.02508	0.85056	1.06892	13.434
47	4-Nitrophenol	0.10841	0.15321	0.15175	0.16122	0.14744	0.14440	14.357
48	2,4-Dinitrotoluene	0.43660	0.56077	0.55757	0.57706	0.54061	0.53452	10.523
49	Dibenzofuran	1.63157	1.82323	1.70745	1.49529	1.13384	1.55828	17.037
50	Diethylphthalate	1.64864	1.88572	1.75040	1.50116	1.16898	1.59098	17.264
51	4-Chlorophenyl-phenylether	0.67161	0.74096	0.67784	0.64357	0.57707	0.66221	8.975
52	Fluorene	1.22243	1.31765	1.19152	1.15242	0.99082	1.17497	10.187
53	4-Nitroaniline	0.35157	0.37512	0.34739	0.36813	0.36582	0.36161	3.231
54	4,6-Dinitro-2-methylphenol	0.08425	0.14518	0.16960	0.18439	0.17279	0.15124	26.498
55	N-Nitrosodiphenylamine	0.57111	0.61114	0.59587	0.56043	0.47489	0.56269	9.418
57	4-Bromophenyl-phenylether	0.23822	0.25903	0.24768	0.22792	0.20328	0.23522	9.030
58	Hexachlorobenzene	0.33601	0.36914	0.33686	0.31629	0.27993	0.32765	9.987
59	Pentachlorophenol	+++++	0.09390	0.10879	0.12091	0.12719	0.11270	13.024
61	Phenanthrene	1.14070	1.21004	1.10417	0.94059	0.72415	1.02393	19.008
62	Anthracene	1.10203	1.17772	1.08827	0.90991	0.69286	0.99416	19.613
63	Carbazole	1.00982	1.07806	0.99853	0.90627	0.72677	0.94389	14.399
64	Di-n-butylphthalate	1.72291	1.96241	1.47167	1.05140	0.77672	1.39702	34.620
65	Fluoranthene	1.17356	1.34023	1.17305	0.98579	0.76467	1.08746	20.208
66	Benzidine	0.57642	0.65336	0.62643	0.62505	0.61752	0.61976	4.481
67	Pyrene	1.60326	1.81666	1.68808	1.52006	1.28743	1.58310	12.529
69	Butylbenzylphthalate	1.07876	1.22284	1.20881	1.17807	1.04771	1.14724	6.899
70	bis(2-Ethylhexyl)phthalate	1.37701	1.51101	1.44864	1.29034	1.10059	1.34552	11.871
71	3,3'-Dichlorobenzidine	0.45628	0.53466	0.48711	0.48055	0.46183	0.48409	6.407
	Benzo(a)anthracene	1.17736	1.35528	1.29278	1.33080	1.18248	1.26774	6.565
74	Chrysene	0.96418	1.01317	0.98156	0.99490	0.93330	0.97742	3.121

OHM Analytical Division

INITIAL CALIBRATION DATA

Start Cal Date : 08-NOV-95 16:57
End Cal Date : 08-NOV-95 16:57
Quant Method : ISTD
Cal Curve Type : Averaged
Target Version : Target 3.00
Integrator : HP RTE
Method file : /chem/msb.i/b110895.b/110895bclp.m
Cal Date : 09-Nov-1995 18:00

	Compound	20 Level 1	50 Level 2	80 Level 3	120 Level 4	160 Level 5	RRF	% RSD/R^2
	75 Di-n-octylphthalate	2.27967	2.57556	2.57796	2.03993	1.65081	2.22479	17.616
	76 Benzo(b)fluoranthene	1.18462	1.38135	1.32237	1.31386	1.27214	1.29487	5.631
	77 Benzo(k)fluoranthene	1.17689	1.23373	1.30442	1.32941	1.18848	1.24659	5.471
	78 Benzo(a)pyrene	0.98726	1.17940	1.12060	1.15048	1.03430	1.09441	7.388
	80 Dibenzo(a,h)anthracene	0.71356	0.89144	0.77763	0.76204	0.69123	0.76718	10.143
	81 Indeno(1,2,3-cd)pyrene	0.96399	1.06029	1.02429	1.04522	0.93126	1.00501	5.487
	Benzo(g,h,i)perylene	0.78725	0.97385	0.92141	0.91417	0.79279	0.87789	9.509
$	3 2-Fluorophenol	1.23707	1.39494	1.40233	1.48681	1.51297	1.40683	7.676
$	4 Phenol-d5	1.52740	1.73815	1.70754	1.72942	1.60368	1.66124	5.544
$	7 2-Chlorophenol-D4	1.25016	1.38735	1.33781	1.32736	1.29722	1.31998	3.845
$	13 1,2-Dichlorobenzene-D4	0.82191	0.87868	0.81979	0.78608	0.74623	0.81054	6.042
$	19 Nitrobenzene-d5	0.41214	0.48004	0.46062	0.46274	0.44627	0.45236	5.633
$	37 2-Fluorobiphenyl	1.27956	1.43658	1.30383	1.18639	0.94678	1.23063	14.800
$	56 2,4,6-Tribromophenol	0.20517	0.25097	0.23831	0.25259	0.24632	0.23867	8.183
$	68 Terphenyl-d14	1.08772	1.17102	1.08088	1.06635	0.98325	1.07784	6.201

Data File: /chem/msb.i/b111695.b/b8844.d
Report Date: 16-Nov-1995 13:17

OHM Analytical Division

CONTINUING CALIBRATION COMPOUNDS

KBeglou clp ox

Instrument ID: msb.i
Lab File ID: b8844.d
Analysis Type:
Lab Sample ID:
Quant Type: ISTD

Injection Date: 16-NOV-95 11:50
Init. Calibration Date(s): 11/08/95 11/08/95
Init. Calibration Times: 16:57 16:57
Method File: /chem/msb.i/b111695.b/110895bclp.m

	COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D
	1 N-Nitrosodimethylamine	0.960	1.006	0.010	4.8	100.0
	2 Pyridine	1.571	1.803	0.010	14.7	100.0
$	3 2-Fluorophenol	1.407	1.478	0.600	5.1	25.0
$	4 Phenol-d5	1.661	1.795	0.800	8.1	25.0
	5 Phenol	1.669	1.814	0.800	8.7	25.0
	6 bis(2-Chloroethyl)ether	3.163	3.527	0.700	11.5	25.0
$	7 2-Chlorophenol-D4	1.320	1.371	0.700	3.9	25.0
	8 2-Chlorophenol	1.375	1.476	0.800	7.4	25.0
	9 1,3-Dichlorobenzene	1.514	1.500	0.600	0.9	25.0
	11 1,4-Dichlorobenzene	1.492	1.581	0.500	5.9	25.0
	12 2-Methylphenol	1.174	1.212	0.700	3.2	25.0
$	13 1,2-Dichlorobenzene-D4	0.811	0.873	0.700	7.7	25.0
	14 1,2-Dichlorobenzene	1.269	1.383	0.400	9.0	25.0
	15 2,2'-oxybis(1-Chloropropene)	2.141	2.221	0.010	3.7	100.0
	16 4-Methylphenol	1.249	1.300	0.600	4.1	25.0
	17 N-Nitroso-di-n-propylamine	1.228	1.207	0.500	1.7	25.0
	18 Hexachloroethane	0.663	0.679	0.300	2.4	25.0
$	19 Nitrobenzene-d5	0.452	0.472	0.200	4.4	25.0
	20 Nitrobenzene	0.433	0.455	0.200	5.1	25.0
	21 Isophorone	0.899	0.937	0.400	4.3	25.0
	22 2,4-Dimethylphenol	0.405	0.409	0.200	1.0	25.0
	23 2-Nitrophenol	0.225	0.261	0.100	15.7	25.0
	24 bis(2-Chloroethoxy)methane	0.548	0.544	0.300	0.6	25.0
	25 2,4-Dichlorophenol	0.314	0.343	0.200	9.1	25.0
	26 1,2,4-Trichlorobenzene	0.342	0.344	0.200	0.7	25.0
	28 Naphthalene	0.863	0.999	0.700	15.9	25.0
	29 4-Chloroaniline	0.580	0.630	0.010	8.6	100.0
	30 Hexachlorobutadiene	0.196	0.169	0.010	13.8	100.0
	31 4-Chloro-3-methylphenol	0.364	0.367	0.200	0.9	25.0
	32 2-Methylnaphthalene	0.608	0.657	0.400	8.0	25.0
	33 1-Methylnapthalene	0.613	0.584	0.400	4.7	25.0
	34 Hexachlorocyclopentadiene	0.104	0.110	0.010	6.7	100.0
	35 2,4,6-Trichlorophenol	0.412	0.432	0.200	4.9	25.0
	36 2,4,5-Trichlorophenol	0.432	0.453	0.200	4.8	25.0
$	37 2-Fluorobiphenyl	1.231	1.300	0.700	5.6	25.0
	38 2-Chloronaphthalene	1.128	1.237	0.800	9.6	25.0
	39 2-Nitroaniline	0.496	0.512	0.010	3.2	100.0
	40 Dimethylphthalate	1.492	1.637	0.010	9.8	100.0
	41 2,6-Dinitrotoluene	0.394	0.416	0.200	5.4	25.0
	42 Acenaphthylene	1.705	1.948	1.300	14.2	25.0

OHM Analytical Division

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msb.i
Lab File ID: b8844.d
Analysis Type:
Lab Sample ID:
Quant Type: ISTD

Injection Date: 16-NOV-95 11:50
Init. Calibration Date(s): 11/08/95 11/08/95
Init. Calibration Times: 16:57 16:57
Method File: /chem/msb.i/b111695.b/110895bclp.m

	COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D	
	43 3-Nitroaniline	0.401	0.459	0.010	14.3	100.0	
	45 2,4-Dinitrophenol	0.110	0.076	0.010	31.5	100.0	
	46 Acenaphthene	1.069	1.128	0.800	5.6	25.0	
	47 4-Nitrophenol	0.144	0.146	0.010	0.9	100.0	
	48 2,4-Dinitrotoluene	0.535	0.517	0.200	3.3	25.0	
	49 Dibenzofuran	1.558	1.660	0.800	6.6	25.0	
	50 Diethylphthalate	1.591	1.647	0.010	3.5	100.0	
	51 4-Chlorophenyl-phenylether	0.662	0.687	0.400	3.7	25.0	
	52 Fluorene	1.175	1.254	0.900	6.7	25.0	
	53 4-Nitroaniline	0.362	0.419	0.010	15.8	100.0	
	54 4,6-Dinitro-2-methylphenol	0.151	0.169	0.010	11.5	100.0	
	55 N-Nitrosodiphenylamine	0.563	0.610	0.010	8.4	100.0	
$	56 2,4,6-Tribromophenol	0.239	0.227	0.010	4.8	100.0	
	57 4-Bromophenyl-phenylether	0.235	0.276	0.100	17.4	25.0	
	58 Hexachlorobenzene	0.328	0.327	0.100	0.2	25.0	
	59 Pentachlorophenol	0.113	0.096	0.050	14.4	25.0	
	61 Phenanthrene	1.024	1.147	0.700	12.0	25.0	
	62 Anthracene	0.994	1.144	0.700	15.0	25.0	
	63 Carbazole	0.944	1.078	0.010	14.2	100.0	
	64 Di-n-butylphthalate	1.397	1.599	0.010	14.5	100.0	
	65 Fluoranthene	1.087	1.189	0.600	9.3	25.0	
	66 Benzidine	0.620	0.565	0.010	8.8	100.0	
	67 Pyrene	1.583	1.671	0.600	5.5	25.0	
$	68 Terphenyl-d14	1.078	1.116	0.500	3.5	25.0	
	69 Butylbenzylphthalate	1.147	1.027	0.010	10.4	100.0	
	70 bis(2-Ethylhexyl)phthalate	1.346	1.413	0.010	5.0	100.0	
	71 3,3'-Dichlorobenzidine	0.484	0.572	0.010	18.2	100.0	
	72 Benzo(a)anthracene	1.268	1.231	0.800	2.9	25.0	
	74 Chrysene	0.977	1.165	0.700	19.2	25.0	
	75 Di-n-octylphthalate	2.225	2.251	0.010	1.2	100.0	
	76 Benzo(b)fluoranthene	1.295	1.216	0.700	6.1	25.0	
	77 Benzo(k)fluoranthene	1.247	1.353	0.700	8.6	25.0	
	78 Benzo(a)pyrene	1.094	1.196	0.700	9.3	25.0	
	80 Dibenzo(a,h)anthracene	0.767	1.050	0.400	36.9	25.0	<-
	81 Indeno(1,2,3-cd)pyrene	1.005	1.216	0.500	21.0	25.0	
	82 Benzo(g,h,i)perylene	0.878	1.014	0.500	15.5	25.0	

OK for clp
KB

Data File: /chem/msb.i/b110895.b/b8731.d

Date : 08-NOV-95 12:20

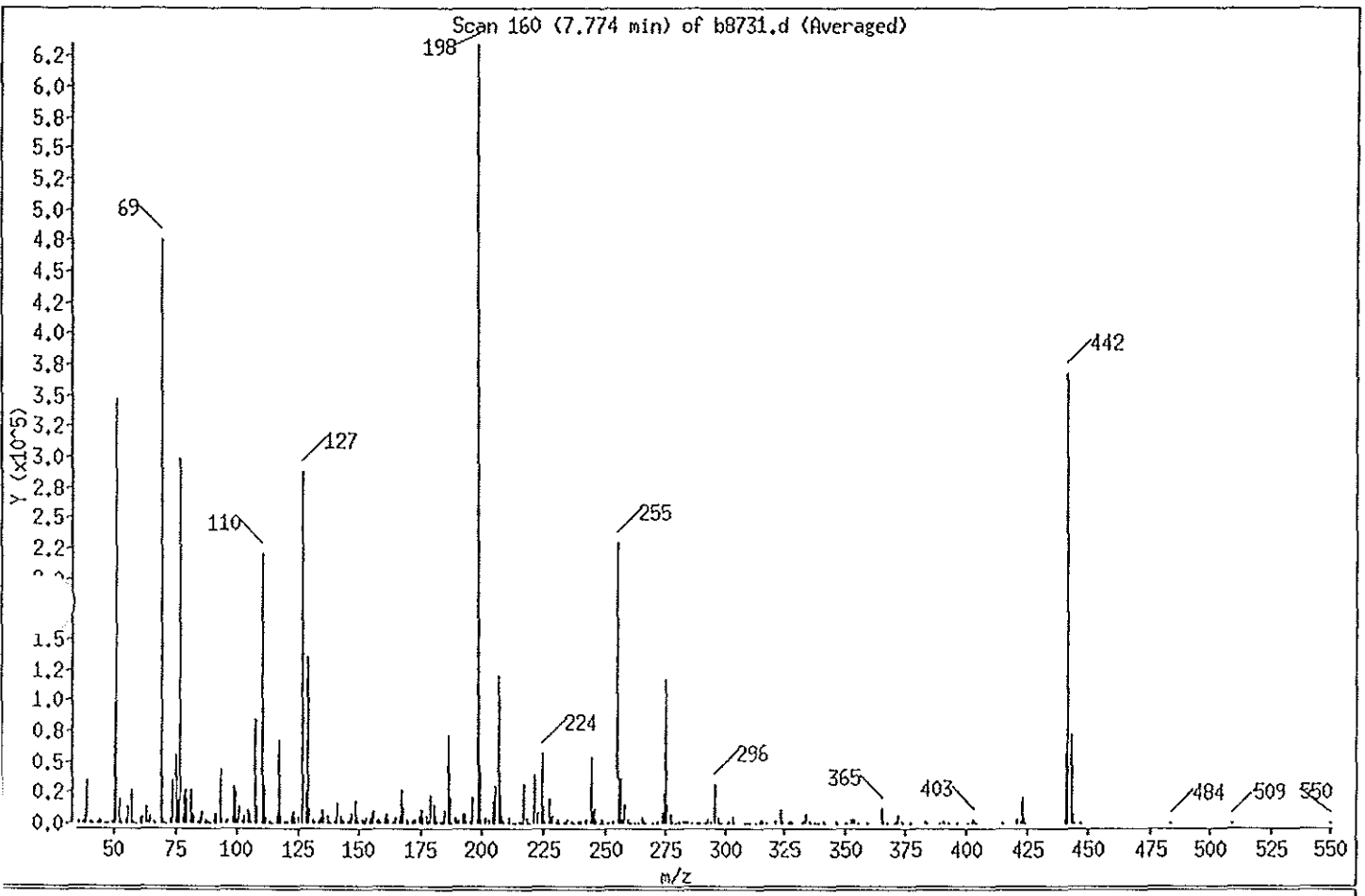
Instrument : msb.i

Sample ID : dftpp tune

Column phase : Column diameter : 2.00

Volume Injected (uL) : 1.0

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.0
51	30.00 - 80.00% of mass 198	54.6
68	Less than 2.00% of mass 69	0.0
69	Mass 69 relative abundance	74.8
70	Less than 2.00% of mass 69	0.5
127	25.00 - 75.00% of mass 198	45.3
197	Less than 1.00% of mass 198	0.0
199	5.00 - 9.00% of mass 198	7.3
275	10.00 - 30.00% of mass 198	18.5
365	Greater than 0.75% of mass 198	1.8
441	Present, but less than mass 443	79.1
442	40.00 - 110.00% of mass 198	58.0
443	15.00 - 24.00% of mass 442	19.6

Data File: /chem/msb.i/b110895.b/b8731.d
Date : 08-NOV-95 12:20
Instrument : msb.i
Sample ID : dftpp tune
Column phase : Column diameter : 2.00
Volume Injected (uL) : 1.0

Spectrum: Scans 160-162 (7.774 min), Subtraction Scan 157
Location of Maximum: 198.00
Number of points: 318

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	218	125.00	4041	207.00	16356	296.00	31301
37.00	1482	127.00	287381	208.00	4111	297.00	3905
38.00	6415	128.00	25507	209.00	1021	298.00	397
39.00	33316	129.00	135533	211.00	4327	299.00	118
40.00	1440	130.00	12674	212.00	208	301.00	552
41.00	913	131.00	1836	213.00	534	302.00	946
42.00	700	132.00	1570	214.00	268	303.00	3843
45.00	640	133.00	218	215.00	1317	304.00	698
48.00	461	134.00	3757	216.00	168	308.00	494
49.00	1273	135.00	10468	217.00	32001	309.00	448
50.00	97167	136.00	3756	218.00	4616	310.00	563
51.00	346350	137.00	5393	219.00	585	311.00	120
52.00	19263	138.00	1178	220.00	252	313.00	306
53.00	827	139.00	288	221.00	39302	314.00	1736
54.00	205	140.00	1719	223.00	8714	315.00	3010
55.00	1923	141.00	16237	224.00	56496	316.00	1294
56.00	13056	142.00	5416	225.00	14055	317.00	118
57.00	27618	143.00	3743	226.00	1401	321.00	1398
58.00	1454	144.00	678	227.00	19999	323.00	10217
59.00	121	145.00	1138	228.00	4090	324.00	1934
61.00	5197	146.00	2799	229.00	5622	326.00	147
62.00	5242	147.00	7707	230.00	823	327.00	1816
63.00	14103	148.00	17382	231.00	2595	328.00	1193
64.00	1133	149.00	3866	232.00	501	329.00	121
65.00	6109	150.00	1075	233.00	516	332.00	753
66.00	536	151.00	2441	234.00	1742	333.00	1128
69.00	474600	152.00	1518	235.00	2575	334.00	7104
70.00	2407	153.00	5167	236.00	1258	335.00	1848
71.00	656	154.00	3857	237.00	1816	336.00	123
72.00	505	155.00	8857	238.00	214	337.00	159
73.00	2275	156.00	10998	239.00	1248	339.00	117
74.00	34185	157.00	3195	240.00	1154	341.00	1469
75.00	55344	158.00	3219	241.00	1284	342.00	423
76.00	17686	159.00	2182	242.00	3495	346.00	1738
77.00	298328	160.00	4607	243.00	3726	347.00	380

Data File: /chem/msb.i/b110895.b/b8731.d

Date : 08-NOV-95 12:20

Instrument : msb.i

Sample ID : dftpp tune

Column phase : Column diameter : 2.00

Volume Injected (uL) : 1.0

Spectrum: Scans 160-162 (7.774 min), Subtraction Scan 157
Location of Maximum: 198.00
Number of points: 318

m/z	Y	m/z	Y	m/z	Y	m/z	Y
78.00	21892	161.00	7133	244.00	54672	350.00	118
79.00	26412	162.00	2307	245.00	8109	351.00	254
80.00	19089	163.00	352	246.00	11320	352.00	2925
81.00	26560	164.00	1101	247.00	2668	353.00	1920
82.00	6947	165.00	4410	248.00	163	354.00	2618
83.00	6388	166.00	5261	249.00	2335	355.00	376
84.00	595	167.00	27371	250.00	536	359.00	418
85.00	4078	168.00	11630	251.00	226	365.00	11341
86.00	7493	169.00	2377	252.00	564	366.00	1367
87.00	3687	170.00	1157	253.00	1065	367.00	128
88.00	1731	171.00	1355	255.00	229445	370.00	370
89.00	581	172.00	3129	256.00	35956	371.00	792
90.00	165	173.00	3446	257.00	3352	372.00	5934
91.00	6511	174.00	5945	258.00	14727	373.00	1657
92.00	6932	175.00	9651	259.00	2609	374.00	158
93.00	43181	176.00	3893	260.00	733	377.00	134
94.00	3015	177.00	6962	261.00	596	383.00	1534
95.00	494	178.00	2060	262.00	130	384.00	80
96.00	1535	179.00	23178	264.00	328	389.00	123
98.00	30288	180.00	14476	265.00	4749	390.00	1078
99.00	24839	181.00	6485	266.00	886	391.00	500
100.00	2635	182.00	1309	267.00	218	392.00	345
101.00	13484	183.00	795	270.00	351	397.00	131
102.00	1043	184.00	2089	271.00	637	401.00	485
103.00	5368	185.00	10555	272.00	943	402.00	2234
104.00	9391	186.00	71773	273.00	8620	403.00	3337
105.00	8201	187.00	21414	274.00	23827	404.00	1041
106.00	1164	188.00	2215	275.00	117405	405.00	118
107.00	83343	189.00	4809	276.00	14988	415.00	145
108.00	12856	190.00	980	277.00	8077	421.00	2960
110.00	220061	191.00	2386	278.00	1646	422.00	2131
111.00	30432	192.00	6761	279.00	534	423.00	21019
112.00	4163	193.00	7155	281.00	490	424.00	4695
113.00	536	194.00	1557	282.00	829	425.00	502
114.00	201	195.00	1880	283.00	1205	441.00	57083

Data File: /chem/msb.i/b110895.b/b8731.d

Date : 08-NOV-95 12:20

Instrument : msb.i

Sample ID : dftpp tune

Column phase : Column diameter : 2.00

Volume Injected (uL) : 1.0

Spectrum: Scans 160-162 (7.774 min), Subtraction Scan 157
Location of Maximum: 198.00
Number of points: 318

m/z	Y	m/z	Y	m/z	Y	m/z	Y
115.00	78	196.00	21084	284.00	800	442.00	367869
116.00	6106	198.00	634474	285.00	2055	443.00	72125
117.00	67210	199.00	46538	286.00	184	444.00	7410
118.00	5784	200.00	3353	288.00	248	445.00	580
119.00	835	201.00	441	289.00	330	447.00	118
120.00	864	202.00	3868	290.00	526	484.00	118
121.00	815	203.00	3708	291.00	131	509.00	145
122.00	6510	204.00	18567	292.00	202	550.00	129
123.00	9318	205.00	29285	293.00	2457		
124.00	4801	206.00	120360	294.00	777		

Data File: /chem/msb.i/b111695.b/b8843.d

Date : 16-NOV-95 11:32

ient ID: dftpp tune

Instrument: msb.i

Sample Info: dftpp tune

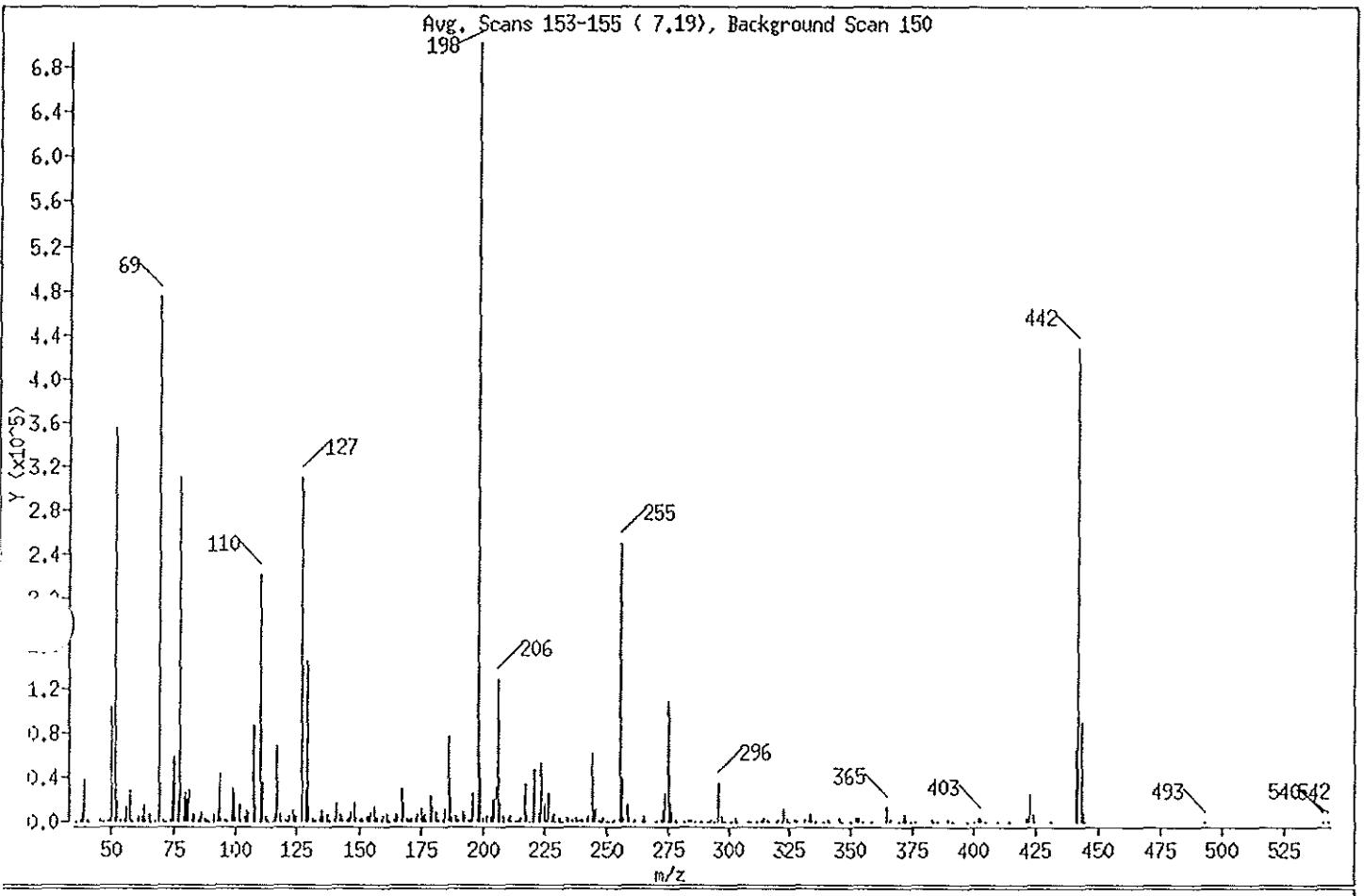
Volume Injected (uL): 1.0

Operator: tom

Column phase:

Column diameter: 2.00

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 80.00% of mass 198	50.60
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	67.50
70	Less than 2.00% of mass 69	0.28 (0.41)
127	25.00 - 75.00% of mass 198	44.26
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.09
275	10.00 - 30.00% of mass 198	15.41
365	Greater than 0.75% of mass 198	1.82
441	Present, but less than mass 443	9.24
442	40.00 - 110.00% of mass 198	60.96
443	15.00 - 24.00% of mass 442	12.88 (21.13)

Data File: /chem/msb.i/b111695.b/b8843.d
Date : 16-NOV-95 11:32
Client ID: dftpp tune
Instrument: msb.i
Sample Info: dftpp tune
Volume Injected (uL): 1.0
Operator: tom
Column phase:
Column diameter: 2.00

Data File: b8843.d
Spectrum : Avg. Scans 153-155 (7.19), Background Scan 150
Largest m/z: 197.95
Number of peaks: 317

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	5	124.95	4441	208.00	5252	301.95	552
37.00	2173	127.00	310528	208.95	1829	302.95	3684
38.10	6295	128.00	27568	210.65	3293	303.95	721
39.10	37816	129.00	144576	211.05	4651	307.95	412
40.00	1524	130.00	12839	212.05	614	308.95	524
41.10	337	131.00	2688	213.15	579	309.95	528
45.05	1634	132.10	2139	214.05	138	311.90	137
47.15	60	132.80	998	215.05	1563	313.00	638
48.35	746	134.00	4523	216.05	3476	314.00	1927
49.05	1693	134.95	10547	216.95	32352	315.00	3207
50.05	103512	135.95	4562	218.00	5271	316.00	2025
51.15	355072	137.05	5908	219.10	535	316.90	166
52.00	18008	137.85	1033	221.00	46280	319.95	198
53.10	1289	138.95	992	223.00	9057	321.05	1483
55.00	1901	140.05	1683	224.00	53664	322.05	661
56.00	13448	140.95	16296	225.10	16382	323.05	12302
57.00	27416	142.05	7180	226.10	1986	324.05	2758
58.00	867	142.95	4345	226.95	25112	325.05	218
58.90	659	144.00	922	227.95	4769	325.95	418
61.05	5597	145.00	1192	228.95	6514	326.95	2134
62.05	5672	146.00	3496	229.95	809	328.05	1201
63.05	15196	147.00	9052	231.05	3265	329.00	144
63.95	1567	148.00	16976	231.95	669	332.00	1197
65.05	6581	149.00	3712	232.95	619	333.00	1741
66.15	693	150.00	1273	233.95	2676	334.00	7322
67.05	1314	151.00	3002	235.05	2166	335.00	2100
69.05	473664	151.80	1400	236.05	1705	336.10	178
70.00	1948	153.00	5561	237.60	2732	338.95	206
70.90	240	154.05	4565	238.10	685	340.05	148
71.80	390	155.05	8544	239.00	1325	340.95	1131
73.10	1754	156.05	12504	240.10	882	341.95	262
74.10	35040	157.05	3223	241.00	2027	345.95	2969
75.00	58512	157.95	3269	242.10	3934	346.95	514
76.10	17456	159.05	2252	243.00	4567	349.90	125
77.10	310912	160.05	5611	244.00	61624	351.00	386

Data File: /chem/msb.i/b111695.b/b8843.d
Date : 16-NOV-95 11:32
Client ID: dftpp tune
Instrument: msb.i
Sample Info: dftpp tune
Volume Injected (uL): 1.0
Operator: tom
Column phase:
Column diameter: 2.00

Data File: b8843.d
Spectrum : Avg. Scans 153-155 (7,19), Background Scan 150
Largest m/z: 197.95
Number of peaks: 317

m/z	Y	m/z	Y	m/z	Y	m/z	Y
78.10	21680	161.05	7355	245.00	9343	352.00	3531
79.00	26440	162.05	2027	245.95	12294	353.00	2499
80.05	19400	163.00	763	246.95	2241	354.00	3979
80.95	28104	164.00	1327	247.95	361	355.10	582
82.05	6412	165.00	5916	248.95	2806	359.15	375
83.05	6598	166.00	4949	249.95	357	365.05	12802
84.15	1017	167.00	29264	250.95	653	366.00	1877
85.05	4445	168.00	15764	252.05	726	370.00	288
86.05	8725	169.10	3689	253.05	1452	371.00	1152
87.05	3905	170.10	1152	255.00	250176	372.00	6385
88.05	1500	171.00	1694	256.00	38544	373.00	1903
88.90	1079	171.95	3950	257.00	3877	374.10	132
89.70	155	172.95	3826	258.00	15197	375.15	125
91.00	7160	173.95	6475	259.00	2626	376.85	131
92.00	7478	175.05	11228	260.20	474	383.05	1784
93.00	43176	176.05	4459	260.90	907	384.00	481
94.10	3004	176.95	6117	264.05	166	385.00	120
95.00	1073	177.85	1881	264.95	5623	390.00	1151
96.10	2036	178.95	23624	265.85	715	391.00	612
96.80	231	180.05	13802	269.95	589	392.00	448
97.95	29576	181.00	8201	270.95	631	398.05	117
98.95	25312	182.00	1222	272.05	860	400.95	428
99.95	3066	183.00	868	273.05	9812	401.95	2502
101.05	14804	183.90	1861	274.00	25680	403.00	3528
102.05	865	185.00	11666	275.00	108112	404.00	1445
103.05	4898	186.00	76304	276.00	16148	404.80	119
104.05	9470	187.00	22272	277.00	8565	410.10	275
105.05	8338	188.10	2513	278.00	1764	414.85	204
107.00	86288	189.00	5163	279.10	168	421.00	3561
108.00	14241	189.90	929	282.00	526	422.00	3252
110.00	223104	190.95	2465	282.95	1053	423.00	24520
111.00	34296	191.95	7813	283.95	945	424.00	6182
112.00	4564	192.95	5805	285.05	2456	425.00	570
113.00	1641	194.05	1852	285.95	177	431.55	122
113.90	588	195.05	1603	288.05	193	441.00	64856

Data File: /chem/msb.i/b111695.b/b8843.d
Date : 16-NOV-95 11:32
t ID: dftpp tune
Instrument: msb.i
Sample Info: dftpp tune
Volume Injected (uL): 1.0
Operator: tom
Column phase:
Column diameter: 2.00

Data File: b8843.d
Spectrum : Avg. Scans 153-155 (7.19), Background Scan 150
Largest m/z: 197.95
Number of peaks: 317

m/z	Y	m/z	Y	m/z	Y	m/z	Y
115.20	412	196.05	25520	288.95	508	442.00	427776
116.10	6315	197.95	701696	291.05	419	443.00	90384
116.95	67600	198.95	49760	291.90	584	444.00	8750
117.95	6133	200.00	3551	293.00	2149	445.00	719
119.05	488	201.50	4352	293.90	635	493.05	122
120.05	1420	203.00	4186	296.00	35376	540.00	124
120.95	715	204.00	20096	297.00	5015	542.15	120
121.95	5550	205.00	31008	297.90	403		
123.05	10560	206.00	127048	298.80	142		
123.95	5299	207.00	17016	301.05	459		

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0295 SBLK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: N2C51712C

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B8845

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/14/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	670	U
111-44-4	bis(2-Chloroethyl)ether	670	U
95-57-8	2-Chlorophenol	670	U
541-73-1	1,3-Dichlorobenzene	670	U
106-46-7	1,4-Dichlorobenzene	670	U
95-50-1	1,2-Dichlorobenzene	670	U
95-48-7	2-Methylphenol	670	U
108-60-1	2,2'-oxybis(1-Chloropropane)	670	U
106-44-5	4-Methylphenol	670	U
621-64-7	N-Nitroso-di-n-propylamine	670	U
67-72-1	Hexachloroethane	670	U
98-95-3	Nitrobenzene	670	U
78-59-1	Isophorone	670	U
88-75-5	2-Nitrophenol	670	U
105-67-9	2,4-Dimethylphenol	670	U
111-91-1	bis(2-Chloroethoxy)methane	670	U
120-83-2	2,4-Dichlorophenol	670	U
120-82-1	1,2,4-Trichlorobenzene	670	U
91-20-3	Naphthalene	670	U
106-47-8	4-Chloroaniline	670	U
87-68-3	Hexachlorobutadiene	670	U
59-50-7	4-Chloro-3-methylphenol	670	U
91-57-6	2-Methylnaphthalene	670	U
77-47-4	Hexachlorocyclopentadiene	670	U
88-06-2	2,4,6-Trichlorophenol	670	U
95-95-4	2,4,5-Trichlorophenol	670	U
91-58-7	2-Chloronaphthalene	670	U
88-74-4	2-Nitroaniline	670	U
131-11-3	Dimethylphthalate	670	U
208-96-8	Acenaphthylene	670	U
606-20-2	2,6-Dinitrotoluene	670	U
99-09-2	3-Nitroaniline	670	U
83-32-9	Acenaphthene	670	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0296

SBLK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: N2C51712C

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B8845

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/14/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	3300	U
100-02-7	4-Nitrophenol	3300	U
132-64-9	Dibenzofuran	670	U
121-14-2	2,4-Dinitrotoluene	670	U
84-66-2	Diethylphthalate	670	U
7005-72-3	4-Chlorophenyl-phenylether	670	U
86-73-7	Fluorene	670	U
100-01-6	4-Nitroaniline	670	U
534-52-1	4,6-Dinitro-2-methylphenol	1700	U
101-55-3	4-Bromophenyl-phenylether	670	U
86-30-6	N-Nitrosodiphenylamine (1)	670	U
118-74-1	Hexachlorobenzene	670	U
87-86-5	Pentachlorophenol	670	U
85-01-8	Phenanthrene	670	U
120-12-7	Anthracene	670	U
86-74-8	Carbazole	670	U
84-74-2	Di-n-butylphthalate	670	U
206-44-0	Fluoranthene	670	U
129-00-0	Pyrene	670	U
85-68-2	Butylbenzylphthalate	670	U
91-94-1	3,3'-Dichlorobenzidine	670	U
56-55-3	Benzo(a)anthracene	670	U
218-01-9	Chrysene	670	U
117-81-7	bis(2-Ethylhexyl)phthalate	670	U
117-84-0	Di-n-octylphthalate	670	U
205-99-2	Benzo(b)fluoranthene	670	U
207-08-9	Benzo(k)fluoranthene	670	U
50-32-8	Benzo(a)pyrene	670	U
193-39-5	Indeno(1,2,3-cd)pyrene	670	U
53-70-3	Dibenz(a,h)anthracene	670	U
191-24-2	Benzo(g,h,i)perylene	670	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

0297

SBLK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: N2C51712C

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B8845

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/14/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 123-42-2	2-Pentanone, 4-hydroxy-4-met	5.48	590	JNA
2.	unknown	6.44	660	J
3.	unknown	6.47	680	J

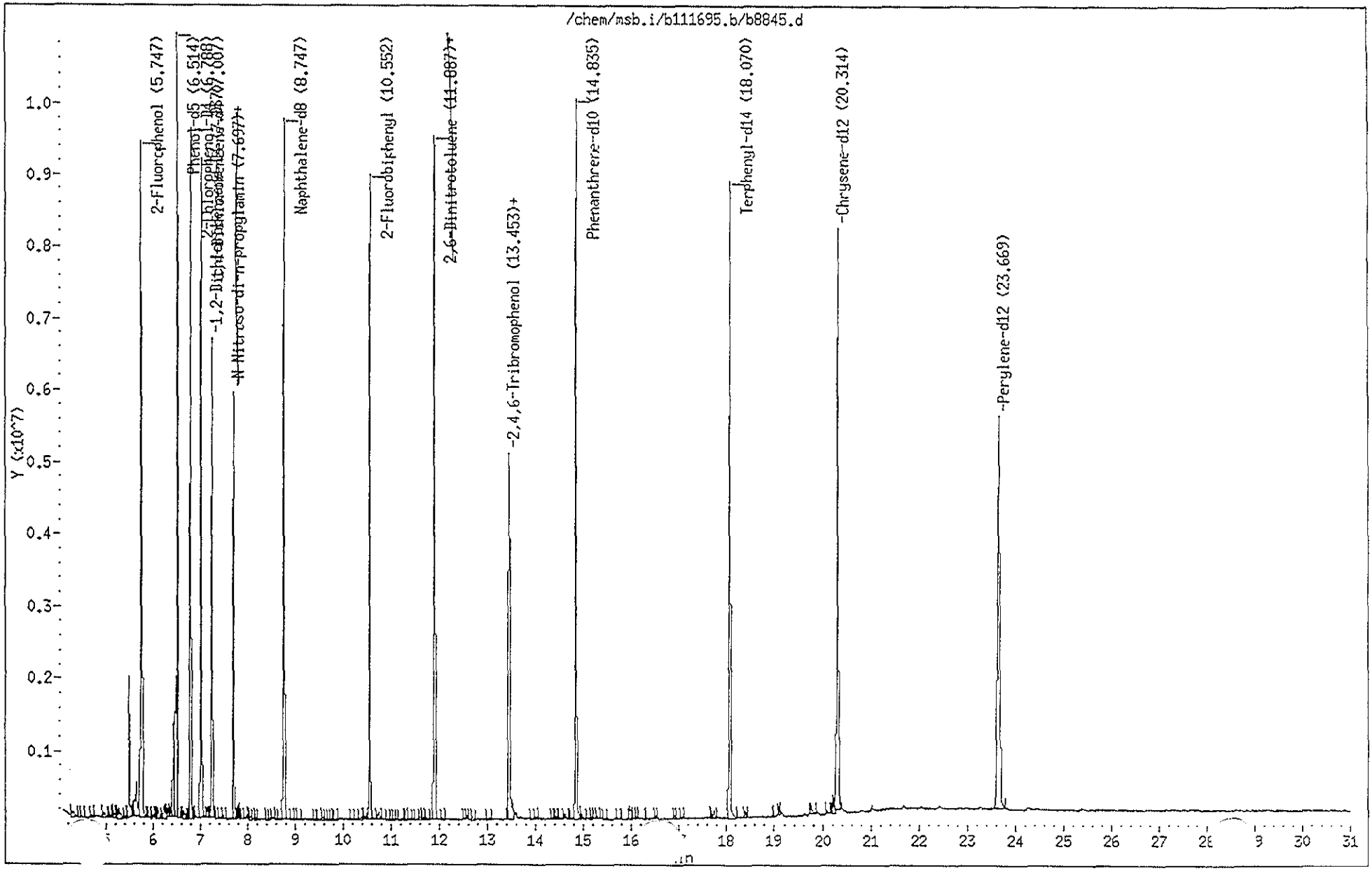
0298

Data File: /chem/msb.i/b111695.b/b8845.d
Date : 16-NOV-95 12:31
Client ID: n2c51712c
Sample Info: method blank

Column phase: J&W DB-5

Instrument: msb.i

Operator: J. Kelly
Column diameter: 0.25



OHM Analytical Division

BASE NEUTRAL QUANT AND RATIO REPORT

Data file : /chem/msb.i/b111695.b/b8845.d
Lab Smp Id: Client Smp ID: n2c51712c
Inj Date : 16-NOV-95 12:31
Operator : J. Kelly Inst ID: msb.i
Smp Info : method blank
Misc Info : n2c51712c,n2c51712,ml,1,1
Comment :
Method : /chem/msb.i/b111695.b/110895bclp.m
Meth Date : 17-Nov-1995 10:10 kathryn Quant Type: ISTD
Cal Date : 16-NOV-95 11:50 Cal File: b8844.d
Als bottle: 3
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

KBeglau

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)	
$	2-Fluorophenol	112.00	5.747	5.746	(0.820)	3945725	44.6	44.6(R)	
$	4 Phenol-d5	99.00	6.514	6.523	(0.930)	5067467	47.1	47.1(R)	
$	7 2-Chlorophenol-D4	132.00	6.788	6.786	(0.969)	4012904	48.9	48.9(R)	
*	10 1,4-Dichlorobenzene-d4	152.00	7.007	7.016	(1.000)	2395080	40.0		
$	13 1,2-Dichlorobenzene-D4	152.00	7.248	7.246	(1.034)	1904046	36.4	36.4(R)	
	17 N-Nitroso-di-n-propylamine	70.00	7.697	7.466	(1.098)	463400	6.41	~~6.41(Q)~~	ND, RT, MS
$	19 Nitrobenzene-d5	82.00	7.697	7.707	(0.880)	2752061	29.7	29.7(R)	
*	27 Naphthalene-d8	136.00	8.747	8.759	(1.000)	7836430	40.0		
$	37 2-Fluorobiphenyl	172.00	10.552	10.560	(0.888)	4999307	37.0	37.0(R)	
	41 2,6-Dinitrotoluene	165.00	11.887	11.483	(1.000)	567639	13.2	~~13.2(Q)~~	ND, RT, MS
*	44 Acenaphthene-d10	164.00	11.887	11.900	(1.000)	4153479	40.0		
	48 2,4-Dinitrotoluene	165.00	11.887	12.252	(1.000)	567465	10.6	~~10.6(Q)~~	ND, RT, MS
$	56 2,4,6-Tribromophenol	330.00	13.453	13.463	(1.132)	1226030	52.0	52.0(R)	
	57 4-Bromophenyl-phenylether	248.00	13.453	13.870	(0.907)	90973	2.02	~~2.02(Q)~~	ND, RT, MS
*	60 Phenanthrene-d10	188.00	14.835	14.839	(1.000)	6535358	40.0		
$	68 Terphenyl-d14	244.00	18.070	18.070	(0.890)	5384559	38.4	38.4(R)	
*	73 Chrysene-d12	240.00	20.314	20.329	(1.000)	5027491	40.0		
*	79 Perylene-d12	264.00	23.669	23.690	(1.000)	5739854	40.0		

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/msb.i/b111695.b/b8845.d
Date : 16-NOV-95 12:31
Client ID: n2c51712c
Sample Info: method blank

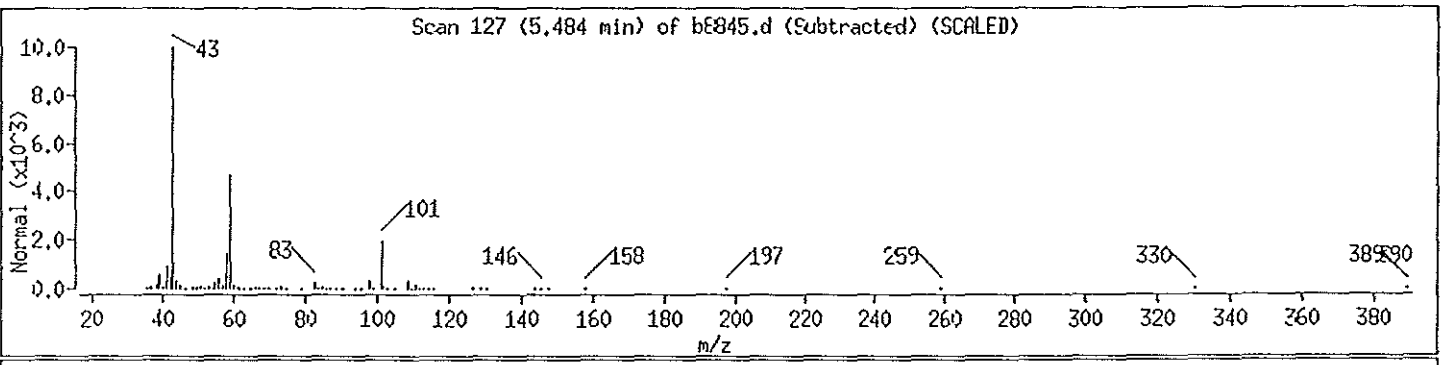
Instrument: msb.i

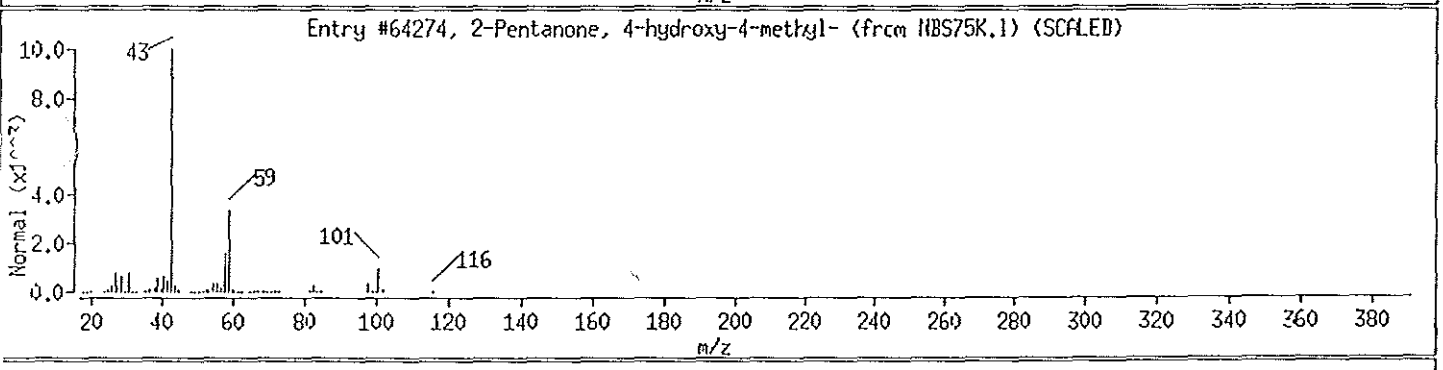
Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NBS75K.l	64274	42	C6H12O2	116





Data File: /chem/msb.i/b111695.b/b8845.d
Date : 16-NOV-95 12:31
Client ID: n2c51712c
Sample Info: method blank

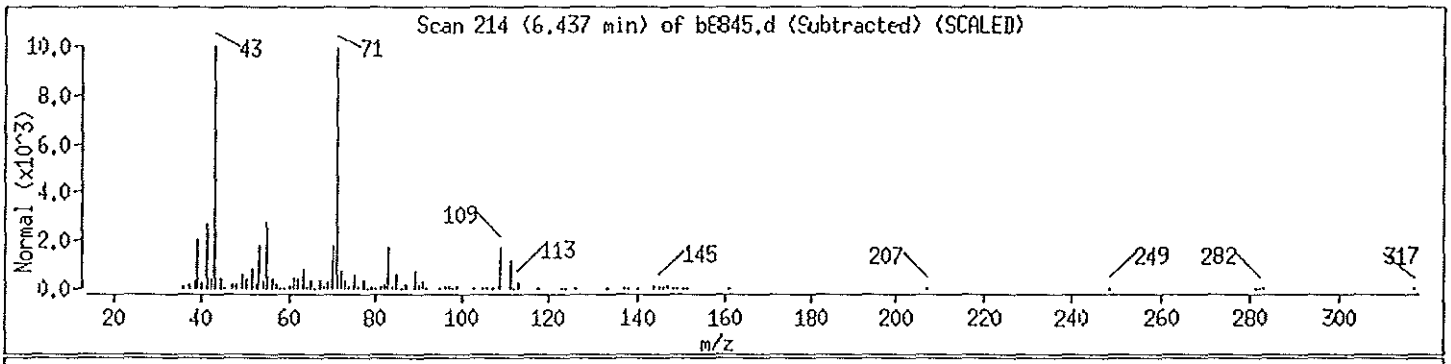
Instrument: msb.i

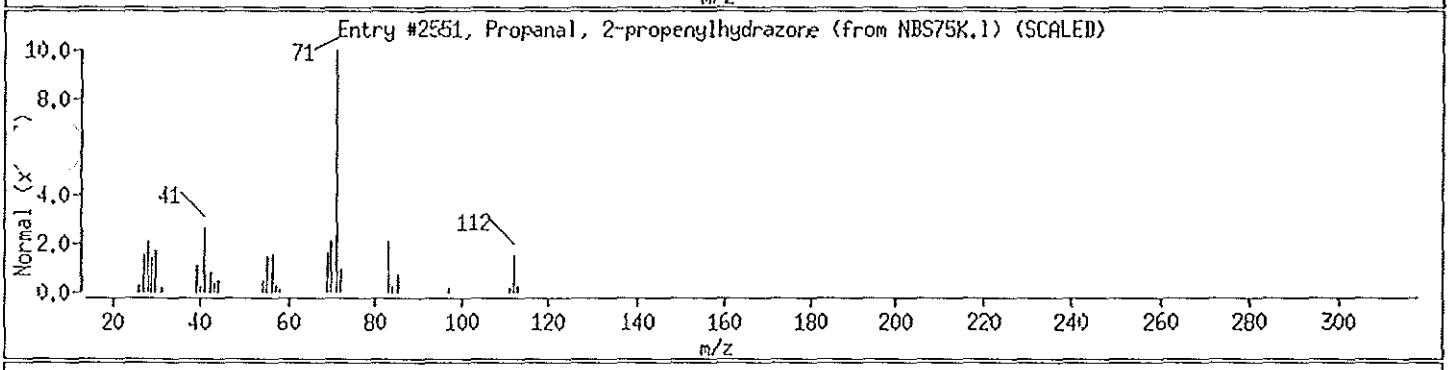
Operator: J. Kelly

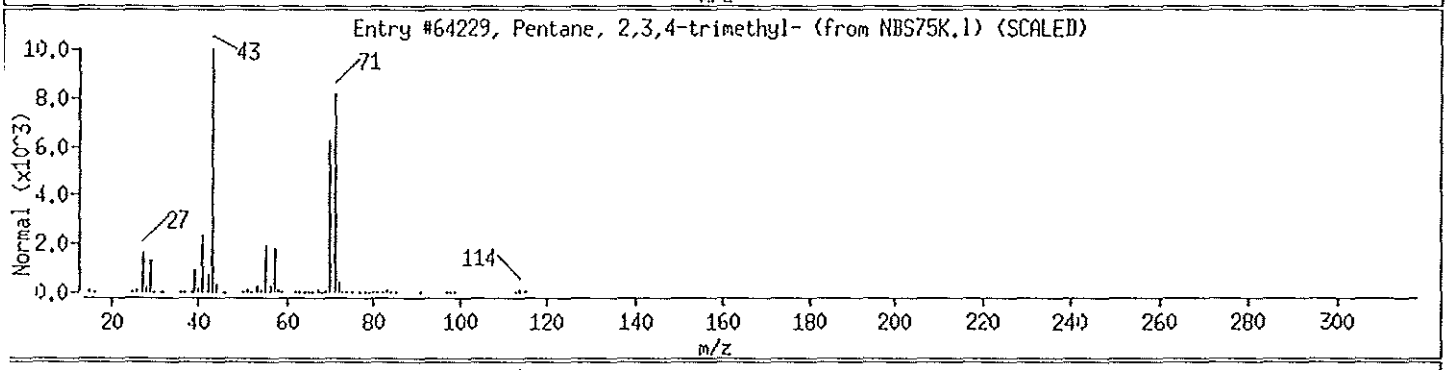
Column phase: J&W DB-5

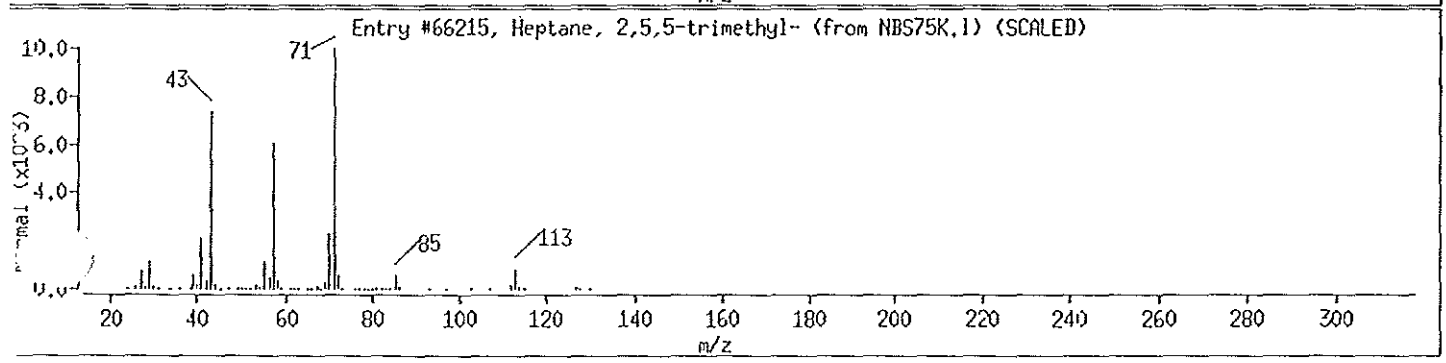
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Propanal, 2-propenylhydrazone	19031-78-8	NBS75K.l	2551	59	C6H12N2	112
Pentane, 2,3,4-trimethyl-	565-75-3	NBS75K.l	64229	47	C8H18	114
Heptane, 2,5,5-trimethyl-	1189-99-7	NBS75K.l	66215	42	C10H22	142









Data File: /chem/msb.i/b111695.b/b8845.d

Date : 16-NOV-95 12:31

Client ID: n2c51712c

Instrument: msb.i

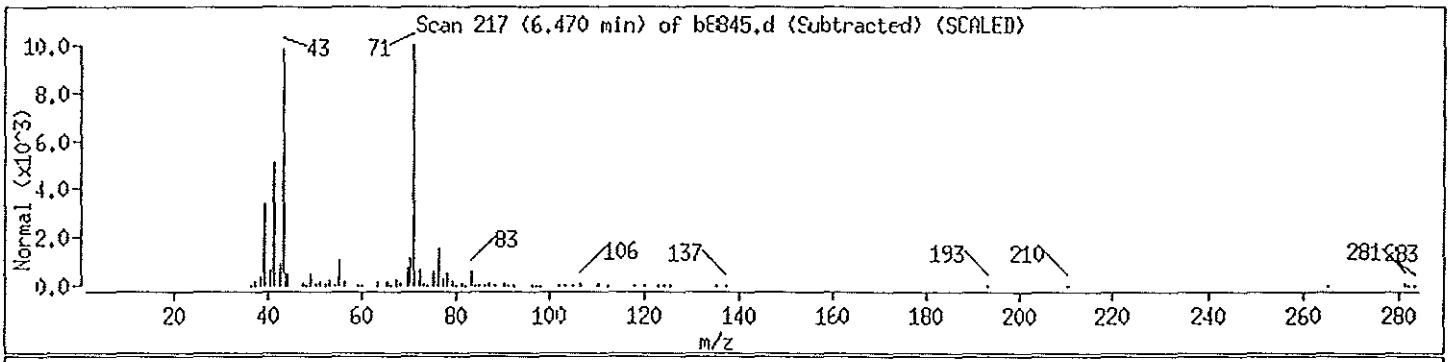
Sample Info: method blank

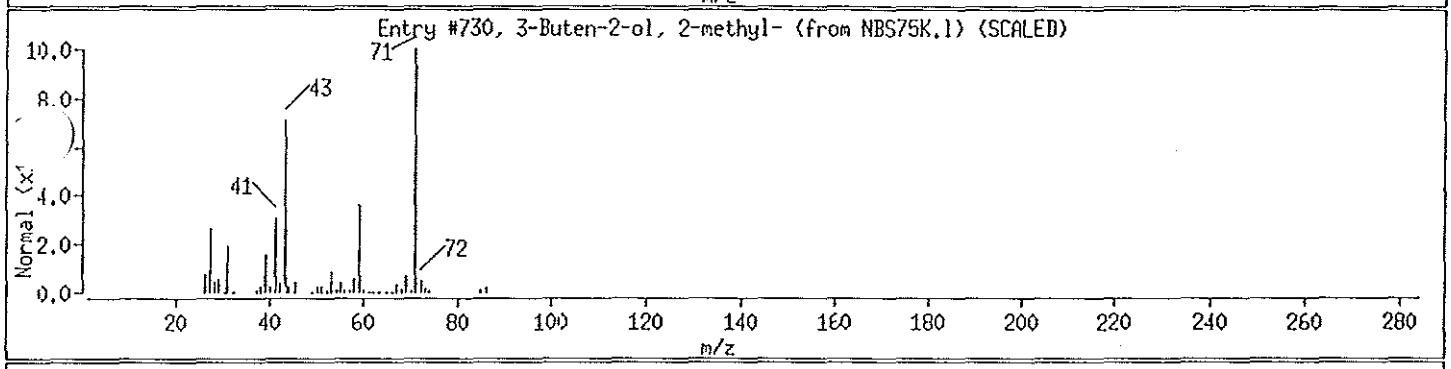
Operator: J. Kelly

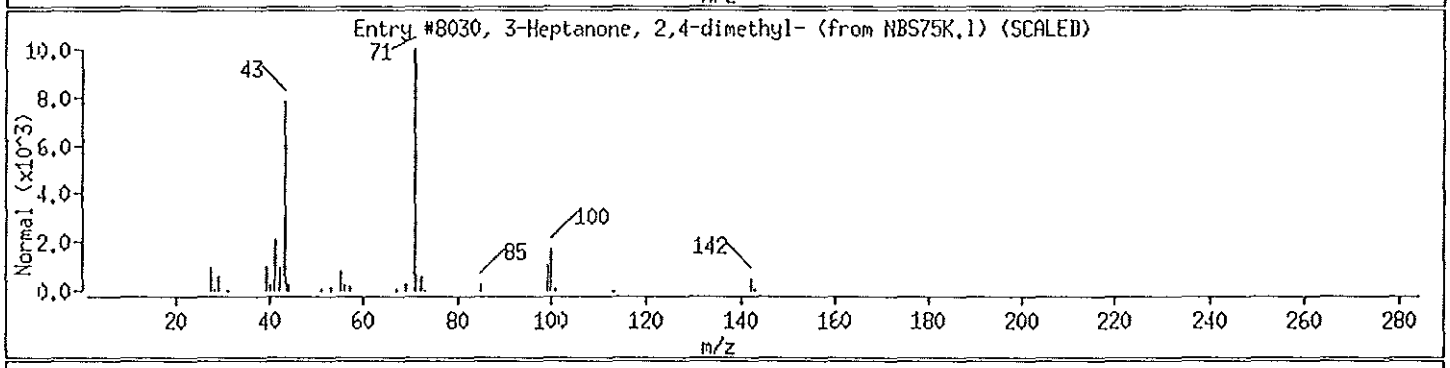
Column phase: J&W DB-5

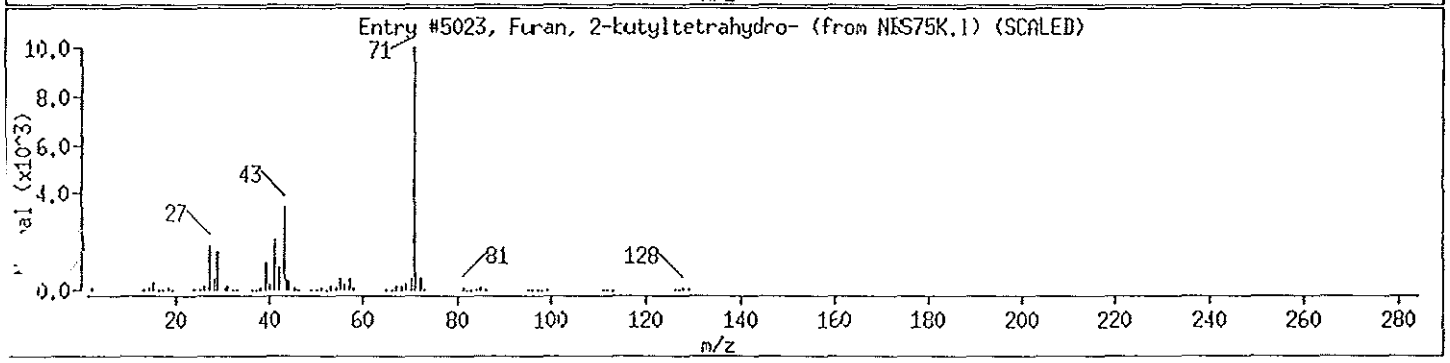
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
3-Buten-2-ol, 2-methyl-	115-18-4	NBS75K.l	730	45	C5H10O	86
3-Heptanone, 2,4-dimethyl-	18641-71-9	NBS75K.l	8030	45	C9H18O	142
Furan, 2-butyltetrahydro-	1004-29-1	NBS75K.l	5023	40	C8H16O	128









1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0303 CLJ78TW001MS

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: JP0318CS

Sample wt/vol: 30.2 (g/mL) G Lab File ID: B8847

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: 26 decanted: (Y/N) N Date Extracted: 11/14/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	4400	
111-44-4	bis(2-Chloroethyl)ether	2500	
95-57-8	2-Chlorophenol	4500	
541-73-1	1,3-Dichlorobenzene	3400	
106-46-7	1,4-Dichlorobenzene	3100	
95-50-1	1,2-Dichlorobenzene	3300	
95-48-7	2-Methylphenol	3100	
108-60-1	2,2'-oxybis(1-Chloropropane)	3100	
106-44-5	4-Methylphenol	3100	
621-64-7	N-Nitroso-di-n-propylamine	3100	
67-72-1	Hexachloroethane	3100	
98-95-3	Nitrobenzene	3200	
78-59-1	Isophorone	3100	
88-75-5	2-Nitrophenol	4500	
105-67-9	2,4-Dimethylphenol	3700	
111-91-1	bis(2-Chloroethoxy)methane	3100	
120-83-2	2,4-Dichlorophenol	4500	
120-82-1	1,2,4-Trichlorobenzene	3300	
91-20-3	Naphthalene	3400	
106-47-8	4-Chloroaniline	2200	
87-68-3	Hexachlorobutadiene	3600	
59-50-7	4-Chloro-3-methylphenol	4800	
91-57-6	2-Methylnaphthalene	3100	
77-47-4	Hexachlorocyclopentadiene	160	J
88-06-2	2,4,6-Trichlorophenol	4800	
95-95-4	2,4,5-Trichlorophenol	3400	
91-58-7	2-Chloronaphthalene	3200	
88-74-4	2-Nitroaniline	3300	
131-11-3	Dimethylphthalate	3500	
208-96-8	Acenaphthylene	3300	
606-20-2	2,6-Dinitrotoluene	3400	
99-09-2	3-Nitroaniline	2300	
83-32-9	Acenaphthene	3300	

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0304 CLJ78TW001MS

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: JP0318CS

Sample wt/vol: 30.2 (g/mL) G Lab File ID: B8847

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: 26 decanted: (Y/N) N Date Extracted: 11/14/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	6700	
100-02-7	4-Nitrophenol	5800	
132-64-9	Dibenzofuran	3300	
121-14-2	2,4-Dinitrotoluene	3600	
84-66-2	Diethylphthalate	3600	
7005-72-3	4-Chlorophenyl-phenylether	3400	
86-73-7	Fluorene	3500	
100-01-6	4-Nitroaniline	3300	
534-52-1	4,6-Dinitro-2-methylphenol	5200	
101-55-3	4-Bromophenyl-phenylether	3300	
86-30-6	N-Nitrosodiphenylamine (1)	3300	
118-74-1	Hexachlorobenzene	3600	
87-86-5	Pentachlorophenol	3300	
85-01-8	Phenanthrene	3400	
120-12-7	Anthracene	3400	
86-74-8	Carbazole	3600	
84-74-2	Di-n-butylphthalate	3600	
206-44-0	Fluoranthene	3600	
129-00-0	Pyrene	3700	
85-68-2	Butylbenzylphthalate	3700	
91-94-1	3,3'-Dichlorobenzidine	2500	
56-55-3	Benzo(a)anthracene	3600	
218-01-9	Chrysene	3500	
117-81-7	bis(2-Ethylhexyl)phthalate	3700	
117-84-0	Di-n-octylphthalate	3500	
205-99-2	Benzo(b)fluoranthene	3700	
207-08-9	Benzo(k)fluoranthene	3300	
50-32-8	Benzo(a)pyrene	3400	
193-39-5	Indeno(1,2,3-cd)pyrene	3600	
53-70-3	Dibenz(a,h)anthracene	3500	
191-24-2	Benzo(g,h,i)perylene	3500	

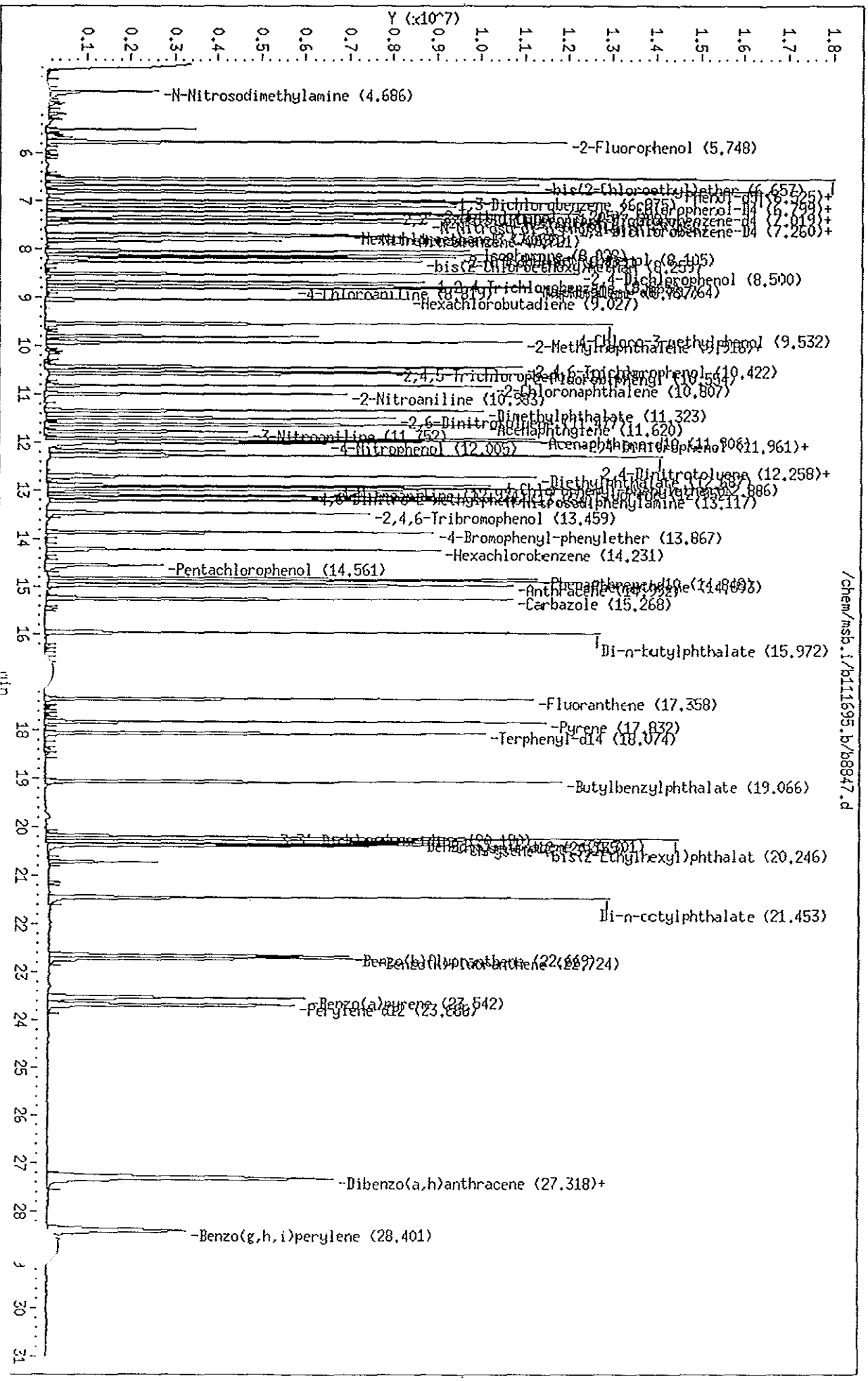
(1) - Cannot be separated from Diphenylamine

Data File: /chem/msb.i/b111695.b/b8847.d
Date : 16-NOV-95 14:00
Client ID: Jp0318cs
Sample Info: 17418n clj78tw001 MS

Column phase: J&W DB-5

Instrument: msb.1

Operator: J. Kelly
Column diameter: 0.25



OHM Analytical Division

BASE NEUTRAL QUANT AND RATIO REPORT

Data file : /chem/msb.i/b111695.b/b8847.d
Lab Smp Id: Client Smp ID: jp0318cs
Inj Date : 16-NOV-95 14:00
Operator : J. Kelly Inst ID: msb.i
Smp Info : 17418n clj78tw001 MS
Misc Info : jp0318cs,n2c51712,m1,1,1
Comment :
Method : /chem/msb.i/b111695.b/110895bclp.m
Meth Date : 17-Nov-1995 10:19 kathryn Quant Type: ISTD
Cal Date : 16-NOV-95 11:50 Cal File: b8844.d
Als bottle: 5
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

KBzgdow

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
		N-Nitrosodimethylamine	42.00	4.686	4.696	(0.669)	2203259	33.0	33.0
$	3	2-Fluorophenol	112.00	5.748	5.746	(0.820)	5020837	51.2	51.2(R)
$	4	Phenol-d5	99.00	6.525	6.523	(0.931)	5853662	49.1	49.1(R)
	5	Phenol	94.00	6.536	6.534	(0.933)	5911944	49.1	49.1
	6	bis(2-Chloroethyl)ether	93.00	6.657	6.665	(0.950)	6501317	27.8	27.8(Q)
$	7	2-Chlorophenol-D4	132.00	6.788	6.786	(0.969)	4750402	52.2	52.2(R)
	8	2-Chlorophenol	128.00	6.810	6.808	(0.972)	4862113	49.6	49.6
	9	1,3-Dichlorobenzene	146.00	6.975	6.983	(0.995)	3797254	38.2	38.2
*	10	1,4-Dichlorobenzene-d4	152.00	7.008	7.016	(1.000)	2653585	40.0	
	11	1,4-Dichlorobenzene	146.00	7.030	7.038	(1.003)	3638984	34.7	34.7
	12	2-Methylphenol	108.00	7.216	7.213	(1.030)	2776761	34.5	34.5
$	13	1,2-Dichlorobenzene-D4	152.00	7.249	7.246	(1.034)	2198739	38.0	38.0(R)
	14	1,2-Dichlorobenzene	146.00	7.260	7.268	(1.036)	3319696	36.2	36.2
	15	2,2'-oxybis(1-Chloropropene)	45.00	7.282	7.290	(1.039)	5009689	34.0	34.0
	16	4-Methylphenol	108.00	7.370	7.378	(1.052)	2989220	34.6	34.6
	17	N-Nitroso-di-n-propylamine	70.00	7.458	7.466	(1.064)	2804689	35.0	35.0
	18	Hexachloroethane	117.00	7.666	7.674	(1.094)	1571237	34.9	34.9
$	19	Nitrobenzene-d5	82.00	7.699	7.707	(0.879)	3835947	35.7	35.7(R)
	20	Nitrobenzene	77.00	7.732	7.729	(0.882)	3635984	35.1	35.1
	21	Isophorone	82.00	8.028	8.024	(0.916)	7352801	34.5	34.5
	22	2,4-Dimethylphenol	107.00	8.116	8.112	(0.926)	3809812	40.9	40.9
	23	2-Nitrophenol	139.00	8.171	8.178	(0.932)	2959302	49.9	49.9
	24	bis(2-Chloroethoxy)methane	93.00	8.259	8.255	(0.942)	4313007	34.8	34.8
	25	2,4-Dichlorophenol	162.00	8.500	8.507	(0.970)	3898412	50.0	50.0
		2,4-Trichlorobenzene	180.00	8.676	8.672	(0.990)	2878201	36.7	36.7
		Naphthalene-d8	136.00	8.764	8.759	(1.000)	9100568	40.0	
	28	Naphthalene	128.00	8.797	8.792	(1.004)	8512023	37.4	37.4
	29	4-Chloroaniline	127.00	8.819	8.814	(1.006)	3440239	24.0	24.0
	30	Hexachlorobutadiene	225.00	9.027	9.034	(1.030)	1550396	40.3	40.3

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
	31 4-Chloro-3-methylphenol	107.00	9.532	9.538	(1.088)	4471049	53.6	53.6
	32 2-Methylnaphthalene	142.00	9.916	9.922	(1.132)	5237210	35.0	35.0
	33 1-Methylnapthalene	142.00	9.916	10.120	(1.132)	5237210	39.4	~~39.4~~ ND, Rt
	35 2,4,6-Trichlorophenol	196.00	10.422	10.428	(0.875)	2773132	52.8	52.8
	36 2,4,5-Trichlorophenol	196.00	10.499	10.505	(0.882)	2096969	38.2	38.2
$	37 2-Fluorobiphenyl	172.00	10.554	10.560	(0.886)	5981601	37.9	37.9(R)
	38 2-Chloronaphthalene	162.00	10.807	10.802	(0.908)	5330030	35.5	35.5
	39 2-Nitroaniline	65.00	10.983	10.978	(0.922)	2266080	36.5	36.5
	40 Dimethylphthalate	163.00	11.323	11.318	(0.951)	7786753	39.2	39.2
	41 2,6-Dinitrotoluene	165.00	11.477	11.483	(0.964)	1929180	38.2	38.2
	42 Acenaphthylene	152.00	11.620	11.615	(0.976)	8690540	36.8	36.8
	43 3-Nitroaniline	138.00	11.752	11.757	(0.987)	1423766	25.6	25.6
*	44 Acenaphthene-d10	164.00	11.906	11.900	(1.000)	4854261	40.0	
	45 2,4-Dinitrophenol	184.00	11.961	11.966	(1.005)	687202	74.9	74.9(Q)
	46 Acenaphthene	153.00	11.961	11.966	(1.005)	5049255	36.9	36.9
	47 4-Nitrophenol	109.00	12.005	11.999	(1.008)	1132797	64.1	64.1
	48 2,4-Dinitrotoluene	165.00	12.247	12.252	(1.029)	2523840	40.2	40.2
	49 Dibenzofuran	168.00	12.269	12.263	(1.031)	7401039	36.7	36.7
	50 Diethylphthalate	149.00	12.687	12.692	(1.066)	8035704	40.2	40.2
	51 4-Chlorophenyl-phenylether	204.00	12.886	12.890	(1.082)	3131315	37.6	37.6
	luorene	166.00	12.952	12.945	(1.088)	5895732	38.8	38.8
	-Nitroaniline	138.00	12.974	12.978	(1.090)	1877004	36.9	36.9
	54 4,6-Dinitro-2-methylphenol	198.00	13.084	13.077	(0.881)	1933162	57.7	57.7(Q)
	55 N-Nitrosodiphenylamine	169.00	13.117	13.111	(0.883)	4454633	36.8	36.8
$	56 2,4,6-Tribromophenol	330.00	13.459	13.463	(1.130)	1654736	60.0	60.0(R)
	57 4-Bromophenyl-phenylether	248.00	13.867	13.870	(0.934)	2037575	37.1	37.1
	58 Hexachlorobenzene	284.00	14.231	14.233	(0.958)	2618122	40.3	40.3
	59 Pentachlorophenol	266.00	14.561	14.552	(0.981)	712706	37.2	37.2
*	60 Phenanthrene-d10	188.00	14.848	14.839	(1.000)	7947196	40.0	
	61 Phenanthrene	178.00	14.893	14.894	(1.003)	8670576	38.0	38.0
	62 Anthracene	178.00	14.992	14.983	(1.010)	8663397	38.1	38.1
	63 Carbazole	167.00	15.268	15.269	(1.028)	8552857	39.9	39.9
	64 Di-n-butylphthalate	149.00	15.972	15.972	(1.076)	12766601	40.2	40.2
	65 Fluoranthene	202.00	17.358	17.354	(1.169)	9557533	40.5	40.5
	67 Pyrene	202.00	17.832	17.828	(0.877)	9531900	41.6	41.6
:	68 Terphenyl-d14	244.00	18.074	18.070	(0.889)	6057518	39.6	39.6(R)
	69 Butylbenzylphthalate	149.00	19.066	19.072	(0.938)	5745289	40.8	40.8
	70 bis(2-Ethylhexyl)phthalate	149.00	20.246	20.240	(0.996)	7947654	41.1	41.1
	71 3,3'-Dichlorobenzidine	252.00	20.190	20.185	(0.993)	2149485	27.4	27.4
	72 Benzo(a)anthracene	228.00	20.301	20.296	(0.998)	6757782	40.1	40.1
	73 Chrysene-d12	240.00	20.335	20.329	(1.000)	5479002	40.0	
	74 Chrysene	228.00	20.390	20.385	(1.003)	6209616	38.9	38.9
	75 Di-n-octylphthalate	149.00	21.453	21.446	(0.905)	13186855	39.4	39.4
	76 Benzo(b)fluoranthene	252.00	22.669	22.661	(0.957)	7376545	40.8	40.8
	77 Benzo(k)fluoranthene	252.00	22.724	22.717	(0.959)	7339243	36.5	36.5
	nzo(a)pyrene	252.00	23.542	23.535	(0.993)	6620469	37.3	37.3
	rylene-d12	264.00	23.698	23.690	(1.000)	5940973	40.0	
	80 Dibenzo(a,h)anthracene	278.00	27.307	27.309	(1.152)	6011354	38.5	38.5
	81 Indeno(1,2,3-cd)pyrene	276.00	27.307	27.332	(1.152)	7278380	40.3	40.3

34 Hexachlorocyclopentadiene 10.312 1.8
17 Benzidine 17.524 1.1

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0309 CLJ78TW001MSD

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: JP0318CR

Sample wt/vol: 30.2 (g/mL) G Lab File ID: B8848

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: 26 decanted: (Y/N) N Date Extracted: 11/14/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	5200	
111-44-4	bis(2-Chloroethyl)ether	3000	
95-57-8	2-Chlorophenol	5200	
541-73-1	1,3-Dichlorobenzene	3800	
106-46-7	1,4-Dichlorobenzene	3900	
95-50-1	1,2-Dichlorobenzene	3800	
95-48-7	2-Methylphenol	3700	
108-60-1	2,2'-oxybis(1-Chloropropane)	3700	
106-44-5	4-Methylphenol	3700	
621-64-7	N-Nitroso-di-n-propylamine	3700	
67-72-1	Hexachloroethane	3700	
98-95-3	Nitrobenzene	3800	
78-59-1	Isophorone	3800	
88-75-5	2-Nitrophenol	5300	
105-67-9	2,4-Dimethylphenol	4100	
111-91-1	bis(2-Chloroethoxy)methane	3700	
120-83-2	2,4-Dichlorophenol	5300	
120-82-1	1,2,4-Trichlorobenzene	3800	
91-20-3	Naphthalene	3800	
106-47-8	4-Chloroaniline	2200	
87-68-3	Hexachlorobutadiene	3800	
59-50-7	4-Chloro-3-methylphenol	5500	
91-57-6	2-Methylnaphthalene	3800	
77-47-4	Hexachlorocyclopentadiene	190	J
88-06-2	2,4,6-Trichlorophenol	5500	
95-95-4	2,4,5-Trichlorophenol	4000	
91-58-7	2-Chloronaphthalene	3700	
~~88-74-4~~	~~2-Nitroaniline~~	~~3700~~	
131-11-3	Dimethylphthalate	3900	
208-96-8	Acenaphthylene	3900	
606-20-2	2,6-Dinitrotoluene	3800	
99-09-2	3-Nitroaniline	2300	
83-32-9	Acenaphthene	3800	

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0310 CLJ78TW001MSD

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: JP0318CR

Sample wt/vol: 30.2 (g/mL) G Lab File ID: B8848

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: 26 decanted: (Y/N) N Date Extracted: 11/14/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	9500	
100-02-7	4-Nitrophenol	6300	
132-64-9	Dibenzofuran	3900	
121-14-2	2,4-Dinitrotoluene	4100	
84-66-2	Diethylphthalate	4000	
7005-72-3	4-Chlorophenyl-phenylether	3900	
86-73-7	Fluorene	4000	
100-01-6	4-Nitroaniline	3600	
534-52-1	4,6-Dinitro-2-methylphenol	5900	
101-55-3	4-Bromophenyl-phenylether	3800	
86-30-6	N-Nitrosodiphenylamine (1)	3800	
118-74-1	Hexachlorobenzene	4100	
87-86-5	Pentachlorophenol	3600	
85-01-8	Phenanthrene	3900	
120-12-7	Anthracene	3900	
86-74-8	Carbazole	4000	
84-74-2	Di-n-butylphthalate	3900	
206-44-0	Fluoranthene	4000	
129-00-0	Pyrene	3900	
85-68-2	Butylbenzylphthalate	3900	
91-94-1	3,3'-Dichlorobenzidine	2400	
56-55-3	Benzo(a)anthracene	4000	
218-01-9	Chrysene	4000	
117-81-7	bis(2-Ethylhexyl)phthalate	4000	
117-84-0	Di-n-octylphthalate	3800	
205-99-2	Benzo(b)fluoranthene	4100	
207-08-9	Benzo(k)fluoranthene	4000	
50-32-8	Benzo(a)pyrene	3800	
193-39-5	Indeno(1,2,3-cd)pyrene	4000	
53-70-3	Dibenz(a,h)anthracene	3700	
191-24-2	Benzo(g,h,i)perylene	3600	

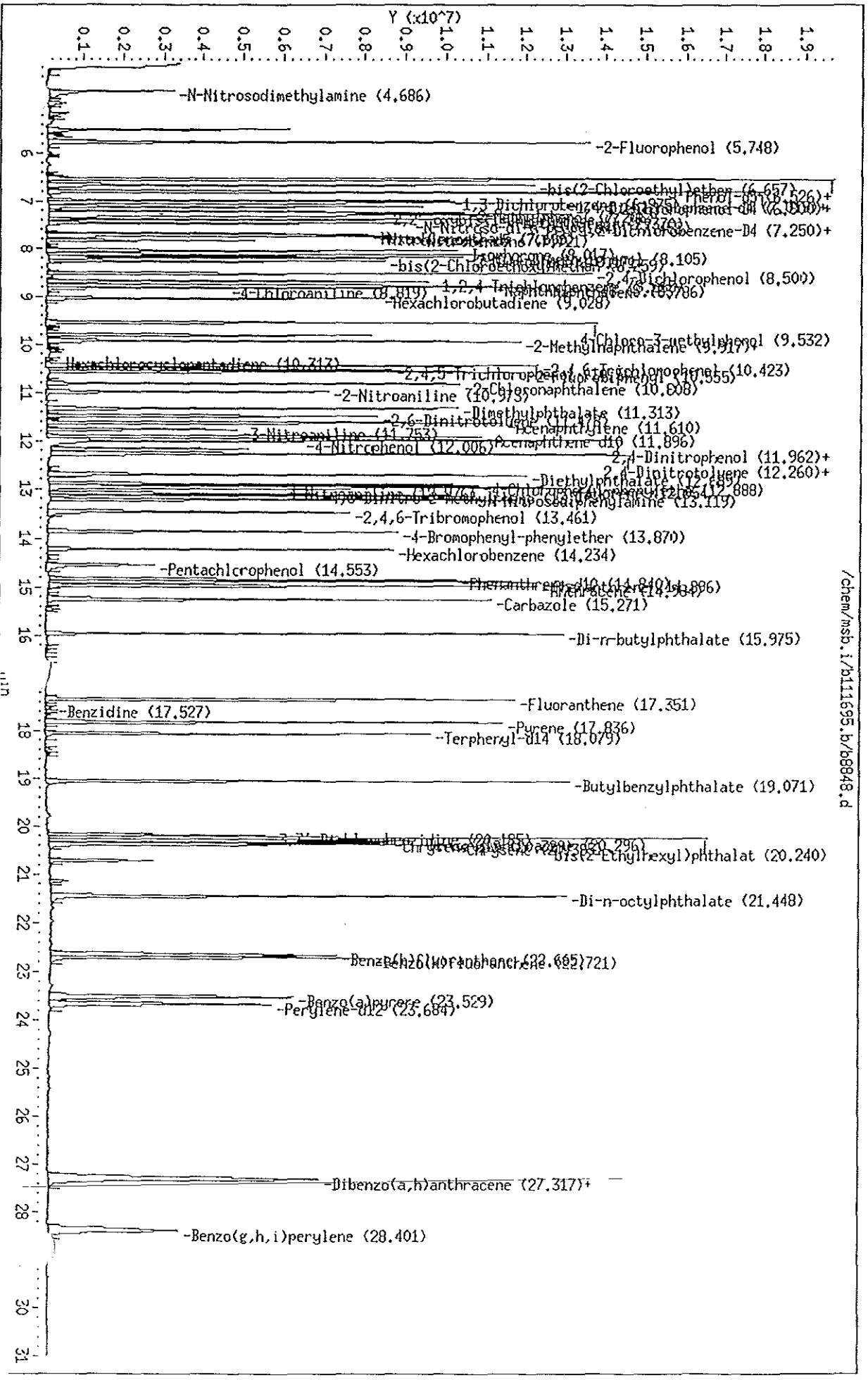
(1) - Cannot be separated from Diphenylamine

0311

Data File: /chem/msb.i/b111695.b/b8848.d
Date : 16-NOV-95 14:41
Client ID: JP0318cr
Sample Info: 17418n cl78w001 MSD

Column phase: J&W DB-5

Instrument: msb.i
Operator: J. Kelly
Column diameter: 0.25



OHM Analytical Division

BASE NEUTRAL QUANT AND RATIO REPORT

Data file : /chem/msb.i/b111695.b/b8848.d
Lab Smp Id: Client Smp ID: jp0318cr
Inj Date : 16-NOV-95 14:41
Operator : J. Kelly Inst ID: msb.i
Smp Info : 17418n clj78tw001 MSD
Misc Info : jp0318cr,n2c51712,m1,1,1
Comment :
Method : /chem/msb.i/b111695.b/110895bclp.m
Meth Date : 17-Nov-1995 10:19 kathryn Quant Type: ISTD
Cal Date : 16-NOV-95 11:50 Cal File: b8844.d
Als bottle: 6
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

KBzelow

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
		N-Nitrosodimethylamine	42.00	4.686	4.696	(0.669)	2420458	39.3	39.3
$	3	2-Fluorophenol	112.00	5.748	5.746	(0.820)	5505167	60.8	60.8(R)
$	4	Phenol-d5	99.00	6.515	6.523	(0.930)	6271724	57.0	57.0(R)
	5	Phenol	94.00	6.537	6.534	(0.933)	6382144	57.4	57.4
	6	bis(2-Chloroethyl)ether	93.00	6.657	6.665	(0.950)	7297010	33.7	33.7(Q)
$	7	2-Chlorophenol-D4	132.00	6.789	6.786	(0.969)	5086397	60.5	60.5(R)
	8	2-Chlorophenol	128.00	6.811	6.808	(0.972)	5266321	58.2	58.2
	9	1,3-Dichlorobenzene	146.00	6.975	6.983	(0.995)	3917592	42.6	42.6
*	10	1,4-Dichlorobenzene-d4	152.00	7.008	7.016	(1.000)	2451835	40.0	
	11	1,4-Dichlorobenzene	146.00	7.030	7.038	(1.003)	4210095	43.4	43.4
	12	2-Methylphenol	108.00	7.206	7.213	(1.028)	3054671	41.1	41.1
$	13	1,2-Dichlorobenzene-D4	152.00	7.239	7.246	(1.033)	2339031	43.7	43.7(R)
	14	1,2-Dichlorobenzene	146.00	7.261	7.268	(1.036)	3588547	42.3	42.3
	15	2,2'-oxybis(1-Chloropropene)	45.00	7.283	7.290	(1.039)	5569939	40.9	40.9
	16	4-Methylphenol	108.00	7.370	7.378	(1.052)	3290911	41.3	41.3
	17	N-Nitroso-di-n-propylamine	70.00	7.458	7.466	(1.064)	3047764	41.2	41.2
	18	Hexachloroethane	117.00	7.666	7.674	(1.094)	1699962	40.8	40.8
	19	Nitrobenzene-d5	82.00	7.699	7.707	(0.880)	4165375	41.9	41.9(R)
	20	Nitrobenzene	77.00	7.721	7.729	(0.882)	4022918	42.0	42.0
	21	Isophorone	82.00	8.028	8.024	(0.917)	8239419	41.8	41.8
	22	2,4-Dimethylphenol	107.00	8.105	8.112	(0.926)	3924493	45.6	45.6
	23	2-Nitrophenol	139.00	8.171	8.178	(0.934)	3240387	59.0	59.0
	~~24~~	~~bis(2-Chloroethoxy)methane~~	~~93.00~~	~~8.259~~	~~8.255~~	~~(0.944)~~	~~4709879~~	~~41.1~~	~~41.1~~
	25	2,4-Dichlorophenol	162.00	8.500	8.507	(0.971)	4260047	59.0	59.0
		1,2,4-Trichlorobenzene	180.00	8.665	8.672	(0.990)	3094467	42.7	42.7
		Naphthalene-d8	136.00	8.753	8.759	(1.000)	8416339	40.0	
	28	Naphthalene	128.00	8.786	8.792	(1.004)	8929585	42.5	42.5
	29	4-Chloroaniline	127.00	8.819	8.814	(1.008)	3205609	24.2	24.2
	30	Hexachlorobutadiene	225.00	9.028	9.034	(1.031)	1516780	42.6	42.6

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/ml)
31	4-Chloro-3-methylphenol	107.00	9.532	9.538	(1.089)	4751776	61.6	61.6
32	2-Methylnaphthalene	142.00	9.917	9.922	(1.133)	5786067	41.8	41.8
33	1-Methylnapthalene	142.00	9.917	10.120	(1.133)	5786067	47.0	~~47.0~~ ND, RT
34	Hexachlorocyclopentadiene	237.00	10.313	10.318	(0.867)	27249	2.14	2.14
35	2,4,6-Trichlorophenol	196.00	10.423	10.428	(0.876)	3064997	61.5	61.5
36	2,4,5-Trichlorophenol	196.00	10.500	10.505	(0.883)	2303180	44.2	44.2
$ 37	2-Fluorobiphenyl	172.00	10.555	10.560	(0.887)	6622861	44.2	44.2(R)
38	2-Chloronaphthalene	162.00	10.808	10.802	(0.909)	5898566	41.4	41.4
39	2-Nitroaniline	65.00	10.973	10.978	(0.922)	2420218	41.0	41.0
40	Dimethylphthalate	163.00	11.313	11.318	(0.951)	8090039	42.9	42.9
41	2,6-Dinitrotoluene	165.00	11.478	11.483	(0.965)	2046529	42.7	42.7
42	Acenaphthylene	152.00	11.610	11.615	(0.976)	9686214	43.1	43.1
43	3-Nitroaniline	138.00	11.753	11.757	(0.988)	1373919	26.0	26.0
* 44	Acenaphthene-d10	164.00	11.896	11.900	(1.000)	4610127	40.0	
45	2,4-Dinitrophenol	184.00	11.962	11.966	(1.006)	928246	106	106(Q)
46	Acenaphthene	153.00	11.962	11.966	(1.006)	5556545	42.7	42.7
47	4-Nitrophenol	109.00	12.006	11.999	(1.009)	1183131	70.5	70.5
48	2,4-Dinitrotoluene	165.00	12.249	12.252	(1.030)	2679738	45.0	45.0
49	Dibenzofuran	168.00	12.260	12.263	(1.031)	8221438	43.0	43.0
50	Diethylphthalate	149.00	12.689	12.692	(1.067)	8517959	44.9	44.9
	4-Chlorophenyl-phenylether	204.00	12.888	12.890	(1.083)	3440413	43.4	43.4
	Fluorene	166.00	12.954	12.945	(1.089)	6374359	44.1	44.1
53	4-Nitroaniline	138.00	12.976	12.978	(1.091)	1951746	40.4	40.4
54	4,6-Dinitro-2-methylphenol	198.00	13.075	13.077	(0.881)	2062570	65.8	65.8
55	N-Nitrosodiphenylamine	169.00	13.119	13.111	(0.884)	4737788	41.8	41.8
$ 56	2,4,6-Tribromophenol	330.00	13.461	13.463	(1.132)	1791603	68.4	68.4(R)
57	4-Bromophenyl-phenylether	248.00	13.870	13.870	(0.935)	2142400	41.8	41.8
58	Hexachlorobenzene	284.00	14.234	14.233	(0.959)	2733414	45.0	45.0
59	Pentachlorophenol	266.00	14.553	14.552	(0.981)	715207	39.9	39.9
60	Phenanthrene-d10	188.00	14.840	14.839	(1.000)	7431455	40.0	
61	Phenanthrene	178.00	14.896	14.894	(1.004)	9192947	43.1	43.1
62	Anthracene	178.00	14.984	14.983	(1.010)	9172167	43.2	43.2
63	Carbazole	167.00	15.271	15.269	(1.029)	8803140	44.0	44.0
64	Di-n-butylphthalate	149.00	15.975	15.972	(1.076)	12972628	43.7	43.7
65	Fluoranthene	202.00	17.351	17.354	(1.169)	9923920	44.9	44.9
66	Benzidine	184.00	17.527	17.531	(0.862)	159732	2.08	2.08
67	Pyrene	202.00	17.836	17.828	(0.877)	9790098	43.2	43.2
68	Terphenyl-d14	244.00	18.079	18.070	(0.889)	6101908	40.4	40.4(R)
69	Butylbenzylphthalate	149.00	19.071	19.072	(0.938)	6078503	43.6	43.6
70	bis(2-Ethylhexyl)phthalate	149.00	20.240	20.240	(0.996)	8437634	44.1	44.1
71	3,3'-Dichlorobenzidine	252.00	20.185	20.185	(0.993)	2057617	26.5	26.5
72	Benzo(a)anthracene	228.00	20.296	20.296	(0.998)	7404205	44.4	44.4
73	Chrysene-d12	240.00	20.329	20.329	(1.000)	5421669	40.0	
74	Chrysene	~~228.00~~	~~20.385~~	20.385	(1.003)	6956746	44.1	44.1
75	Di-n-octylphthalate	149.00	21.459	21.446	(0.906)	13745422	42.1	42.1
	Benzo(b)fluoranthene	252.00	22.665	22.661	(0.957)	8013538	45.5	45.5
	Benzo(k)fluoranthene	252.00	22.721	22.717	(0.959)	8648624	44.1	44.1
78	Benzo(a)pyrene	252.00	23.540	23.535	(0.994)	7293085	42.1	42.1
79	Perylene-d12	264.00	23.684	23.690	(1.000)	5795927	40.0	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
80 Dibenzo(a,h)anthracene	278.00	27.317	27.309	(1.153)	6256501	41.1	41.1
81 Indeno(1,2,3-cd)pyrene	276.00	27.328	27.332	(1.154)	7869809	44.7	44.7
82 Benzo(g,h,i)perylene	276.00	28.401	28.392	(1.199)	5836605	39.7	39.7

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0315 SSPK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: N2C51712CS

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B8846

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/14/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	3500	
111-44-4	bis(2-Chloroethyl)ether	2100	
95-57-8	2-Chlorophenol	3600	
541-73-1	1,3-Dichlorobenzene	2800	
106-46-7	1,4-Dichlorobenzene	2500	
95-50-1	1,2-Dichlorobenzene	2600	
95-48-7	2-Methylphenol	2400	
108-60-1	2,2'-oxybis(1-Chloropropane)	2400	
106-44-5	4-Methylphenol	2400	
621-64-7	N-Nitroso-di-n-propylamine	2500	
67-72-1	Hexachloroethane	2500	
98-95-3	Nitrobenzene	2500	
78-59-1	Isophorone	2500	
88-75-5	2-Nitrophenol	3500	
105-67-9	2,4-Dimethylphenol	2600	
111-91-1	bis(2-Chloroethoxy)methane	2500	
120-83-2	2,4-Dichlorophenol	3500	
120-82-1	1,2,4-Trichlorobenzene	2600	
91-20-3	Naphthalene	2700	
106-47-8	4-Chloroaniline	1800	
87-68-3	Hexachlorobutadiene	2800	
59-50-7	4-Chloro-3-methylphenol	3800	
91-57-6	2-Methylnaphthalene	2500	
77-47-4	Hexachlorocyclopentadiene	110	J
88-06-2	2,4,6-Trichlorophenol	3600	
95-95-4	2,4,5-Trichlorophenol	2700	
91-58-7	2-Chloronaphthalene	2600	
88-74-4	2-Nitroaniline	2500	
131-11-3	Dimethylphthalate	2700	
208-96-8	Acenaphthylene	2700	
606-20-2	2,6-Dinitrotoluene	2700	
99-09-2	3-Nitroaniline	1800	
83-32-9	Acenaphthene	2700	

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0316 SSPK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: N2C51712CS

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B8846

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/14/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

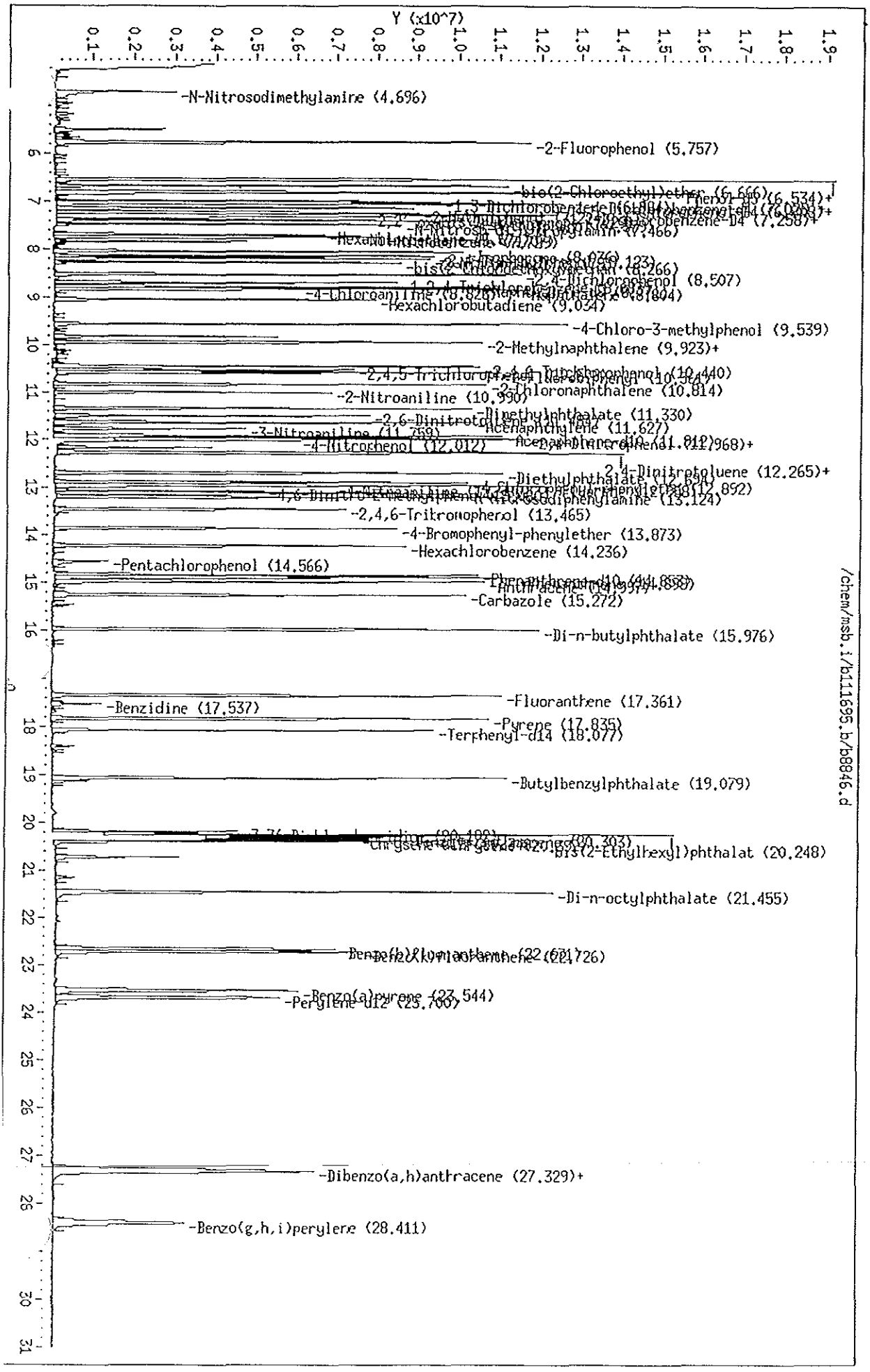
Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1900	J
100-02-7	4-Nitrophenol	4000	
132-64-9	Dibenzofuran	2600	
121-14-2	2,4-Dinitrotoluene	2700	
84-66-2	Diethylphthalate	2800	
7005-72-3	4-Chlorophenyl-phenylether	2700	
86-73-7	Fluorene	2700	
100-01-6	4-Nitroaniline	2500	
534-52-1	4,6-Dinitro-2-methylphenol	3600	
101-55-3	4-Bromophenyl-phenylether	2700	
86-30-6	N-Nitrosodiphenylamine (1)	2700	
118-74-1	Hexachlorobenzene	2900	
87-86-5	Pentachlorophenol	1400	
85-01-8	Phenanthrene	2700	
120-12-7	Anthracene	2700	
86-74-8	Carbazole	2800	
84-74-2	Di-n-butylphthalate	2800	
206-44-0	Fluoranthene	2800	
129-00-0	Pyrene	2800	
85-68-2	Butylbenzylphthalate	2800	
91-94-1	3,3'-Dichlorobenzidine	1600	
56-55-3	Benzo(a)anthracene	2800	
218-01-9	Chrysene	2900	
117-81-7	bis(2-Ethylhexyl)phthalate	2800	
117-84-0	Di-n-octylphthalate	2800	
205-99-2	Benzo(b)fluoranthene	3200	
207-08-9	Benzo(k)fluoranthene	2500	
50-32-8	Benzo(a)pyrene	2600	
193-39-5	Indeno(1,2,3-cd)pyrene	2700	
53-70-3	Dibenz(a,h)anthracene	2600	
191-24-2	Benzo(g,h,i)perylene	2600	

(1) - Cannot be separated from Diphenylamine

Data File: /chem/msb.i/b111695.b/b8846.d
Date : 16-NOV-95 13:19
Client ID: n2c51712cs
Sample Info: method spike
Column phase: J&W DB-5



Instrument: msb.i
Operator: J. Kelly
Column diameter: 0.25

OHM Analytical Division

BASE NEUTRAL QUANT AND RATIO REPORT

Data file : /chem/msb.i/b111695.b/b8846.d
Lab Smp Id: Client Smp ID: n2c51712cs
Inj Date : 16-NOV-95 13:19
Operator : J. Kelly Inst ID: msb.i
Smp Info : method spike
Misc Info : n2c51712cs,n2c51712,m1,1,1
Comment :
Method : /chem/msb.i/b111695.b/110895bclp.m
Meth Date : 17-Nov-1995 10:19 kathryn Quant Type: ISTD
Cal Date : 16-NOV-95 11:50 Cal File: b8844.d
Als bottle: 4
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

KBeglow

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
	N-Nitrosodimethylamine	42.00	4.696	4.696	(0.669)	2237469	36.1	36.1
$ 3	2-Fluorophenol	112.00	5.757	5.746	(0.821)	5122649	56.2	56.2(R)
$ 4	Phenol-d5	99.00	6.523	6.523	(0.930)	6006733	54.3	54.3(R)
5	Phenol	94.00	6.545	6.534	(0.933)	5933829	53.1	53.1
6	bis(2-Chloroethyl)ether	93.00	6.666	6.665	(0.950)	6681900	30.8	30.8(Q)
$ 7	2-Chlorophenol-D4	132.00	6.797	6.786	(0.969)	4833710	57.2	57.2(R)
8	2-Chlorophenol	128.00	6.819	6.808	(0.972)	4862274	53.5	53.5
9	1,3-Dichlorobenzene	146.00	6.984	6.983	(0.995)	3838114	41.5	41.5
* 10	1,4-Dichlorobenzene-d4	152.00	7.017	7.016	(1.000)	2463874	40.0	
11	1,4-Dichlorobenzene	146.00	7.039	7.038	(1.003)	3689793	37.9	37.9
12	2-Methylphenol	108.00	7.214	7.213	(1.028)	2739506	36.7	36.7
13	1,2-Dichlorobenzene-D4	152.00	7.258	7.246	(1.034)	2221804	41.3	41.3(R)
14	1,2-Dichlorobenzene	146.00	7.269	7.268	(1.036)	3325260	39.0	39.0
15	2,2'-oxybis(1-Chloropropene)	45.00	7.291	7.290	(1.039)	4984837	36.4	36.4
16	4-Methylphenol	108.00	7.379	7.378	(1.052)	2932715	36.6	36.6
17	N-Nitroso-di-n-propylamine	70.00	7.466	7.466	(1.064)	2777861	37.4	37.4
18	Hexachloroethane	117.00	7.674	7.674	(1.094)	1561013	37.3	37.3
19	Nitrobenzene-d5	82.00	7.707	7.707	(0.879)	3894597	38.8	38.8(R)
20	Nitrobenzene	77.00	7.740	7.729	(0.882)	3666891	37.9	37.9
21	Isophorone	82.00	8.036	8.024	(0.916)	7533497	37.8	37.8
22	2,4-Dimethylphenol	107.00	8.123	8.112	(0.926)	3391086	39.0	39.0
23	2-Nitrophenol	139.00	8.178	8.178	(0.932)	2911992	52.6	52.6
24	bis(2-Chloroethoxy)methane	93.00	8.266	8.255	(0.942)	4328350	37.4	37.4
25	2,4-Dichlorophenol	162.00	8.518	8.507	(0.971)	3853161	52.9	52.9
	2,4-Trichlorobenzene	180.00	8.683	8.672	(0.990)	2866403	39.2	39.2
	aphthalene-d8	136.00	8.771	8.759	(1.000)	8495357	40.0	
28	Naphthalene	128.00	8.804	8.792	(1.004)	8633594	40.7	40.7
29	4-Chloroaniline	127.00	8.826	8.814	(1.006)	3525509	26.4	26.4
30	Hexachlorobutadiene	225.00	9.034	9.034	(1.030)	1507520	42.0	42.0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/ml)
31 4-Chloro-3-methylphenol	107.00	9.539	9.538	(1.088)	4421113	56.7	56.7
32 2-Methylnaphthalene	142.00	9.923	9.922	(1.131)	5328488	38.2	38.2
33 1-Methylnapthalene	142.00	9.923	10.120	(1.131)	5328488	42.9	~~42.9~~ ND, Rt
35 2,4,6-Trichlorophenol	196.00	10.440	10.428	(0.876)	2730638	54.4	54.4
36 2,4,5-Trichlorophenol	196.00	10.506	10.505	(0.882)	2123172	40.4	40.4
37 2-Fluorobiphenyl	172.00	10.561	10.560	(0.887)	6315883	41.8	41.8(R)
38 2-Chloronaphthalene	162.00	10.814	10.802	(0.908)	5508422	38.3	38.3
39 2-Nitroaniline	65.00	10.990	10.978	(0.923)	2221566	37.3	37.3
40 Dimethylphthalate	163.00	11.330	11.318	(0.951)	7733528	40.6	40.6
41 2,6-Dinitrotoluene	165.00	11.484	11.483	(0.964)	1930079	40.0	40.0
42 Acenaphthylene	152.00	11.627	11.615	(0.976)	9075422	40.1	40.1
43 3-Nitroaniline	138.00	11.759	11.757	(0.987)	1421513	26.7	26.7
44 Acenaphthene-d10	164.00	11.912	11.900	(1.000)	4646604	40.0	
45 2,4-Dinitrophenol	184.00	11.968	11.966	(1.005)	248532	28.3	28.3(Q)
46 Acenaphthene	153.00	11.968	11.966	(1.005)	5283153	40.3	40.3
47 4-Nitrophenol	109.00	12.012	11.999	(1.008)	1027735	60.7	60.7
48 2,4-Dinitrotoluene	165.00	12.254	12.252	(1.029)	2445283	40.7	40.7
49 Dibenzofuran	168.00	12.276	12.263	(1.030)	7580677	39.3	39.3
50 Diethylphthalate	149.00	12.694	12.692	(1.066)	7946658	41.5	41.5
51 4-Chlorophenyl-phenylether	204.00	12.892	12.890	(1.082)	3188215	40.0	40.0
luorene	166.00	12.958	12.945	(1.088)	5944548	40.8	40.8
-Nitroaniline	138.00	12.980	12.978	(1.090)	1860722	38.2	38.2
54 4,6-Dinitro-2-methylphenol	198.00	13.091	13.077	(0.881)	1665392	54.2	54.2
55 N-Nitrosodiphenylamine	169.00	13.124	13.111	(0.884)	4428482	39.9	39.9
56 2,4,6-Tribromophenol	330.00	13.465	13.463	(1.130)	1619223	61.4	61.4(R)
57 4-Bromophenyl-phenylether	248.00	13.873	13.870	(0.934)	2003806	39.8	39.8
58 Hexachlorobenzene	284.00	14.236	14.233	(0.958)	2558871	43.0	43.0
59 Pentachlorophenol	266.00	14.566	14.552	(0.981)	362698	20.6	20.6
60 Phenanthrene-d10	188.00	14.853	14.839	(1.000)	7287529	40.0	
61 Phenanthrene	178.00	14.898	14.894	(1.003)	8457628	40.5	40.5
62 Anthracene	178.00	14.997	14.983	(1.010)	8385599	40.2	40.2
63 Carbazole	167.00	15.272	15.269	(1.028)	8132914	41.4	41.4
64 Di-n-butylphthalate	149.00	15.976	15.972	(1.076)	12298316	42.2	42.2
65 Fluoranthene	202.00	17.361	17.354	(1.169)	8979736	41.4	41.4
66 Benzidine	184.00	17.537	17.531	(0.862)	904221	12.4	12.4
67 Pyrene	202.00	17.835	17.828	(0.876)	9107234	42.2	42.2
68 Terphenyl-d14	244.00	18.077	18.070	(0.888)	5857692	40.6	40.6(R)
69 Butylbenzylphthalate	149.00	19.079	19.072	(0.938)	5660411	42.6	42.6
70 bis(2-Ethylhexyl)phthalate	149.00	20.248	20.240	(0.995)	7618224	41.7	41.7
71 3,3'-Dichlorobenzidine	252.00	20.192	20.185	(0.992)	1778008	24.0	24.0
72 Benzo(a)anthracene	228.00	20.303	20.296	(0.998)	6574421	41.3	41.3
73 Chrysene-d12	240.00	20.348	20.329	(1.000)	5166659	40.0	
74 Chrysene	228.00	20.392	20.385	(1.002)	6506599	43.2	~~43.2~~
75 Di-n-octylphthalate	149.00	21.455	21.446	(0.905)	13361232	41.7	41.7
76 Benzo(b)fluoranthene	252.00	22.671	22.661	(0.957)	8205491	47.4	47.4
nzo(k)fluoranthene	252.00	22.726	22.717	(0.959)	7104842	36.8	36.8
nzo(a)pyrene	252.00	23.544	23.535	(0.993)	6558069	38.5	38.5
79 Perylene-d12	264.00	23.700	23.690	(1.000)	5698022	40.0	
80 Dibenzo(a,h)anthracene	278.00	27.329	27.309	(1.153)	5871176	39.2	39.2

34 Hexachlorocyclopentadiene 10.319 1.6

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
81 Indeno(1,2,3-cd)pyrene	276.00	27.329	27.332	(1.153)	6962158	40.2	40.2
82 Benzo(g,h,i)perylene	276.00	28.411	28.392	(1.199)	5590531	38.7	38.7

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

ORGANICS

Water Semi-volatile Organics by GC/MS

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

0322

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	S7 (2CP) #	S8 (DCB) #	TOT OUT
01	SBLK01	62	63	79	51	61	76			0
02	SSPK01	82	79	79	57	77	92			0
03	CLJ78TW001MS	76	75	71	53	71	88			0
04	CLJ78TW001MSD	75	75	71	53	71	88			0
05	CLJ78TW001	63	65	69	39	51	80			0
06	CLJ78TW002	61	64	71	38	49	83			0
07	CLJ78TW02D	65	68	69	44	54	82			0
08	CLJ78TW003	65	67	70	41	54	84			0
09	CLJ78TW004	71	70	76	49	63	86			0
10	CLJ78-FB	72	71	77	40	59	81			0
11	CLJ78-RB	70	72	76	41	58	78			0

		QC LIMITS	
S1 (NBZ)	= Nitrobenzene-d5	(35-114)	
S2 (FBP)	= 2-Fluorobiphenyl	(43-116)	
S3 (TPH)	= Terphenyl-d14	(33-141)	
S4 (PHL)	= Phenol-d5	(10-110)	
S5 (2FP)	= 2-Fluorophenol	(21-110)	
S6 (TBP)	= 2,4,6-Tribromophenol	(10-123)	
S7 (2CP)	= 2-Chlorophenol-d4		(advisory)
S8 (DCB)	= 1,2-Dichlorobenzene-d4		(advisory)

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

3D
WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

0323

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix Spike - EPA Sample No.: CLJ78TW001

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
Phenol	300	0	150	50	12-110
2-Chlorophenol	300	0	190	63	27-123
1,4-Dichlorobenzene	200	0	110	55	36- 97
N-Nitroso-di-n-propylami	200	0	160	80	41-116
1,2,4-Trichlorobenzene	200	0	120	60	39- 98
4-Chloro-3-methylphenol	300	0	220	73	23- 97
Acenaphthene	200	0	140	70	46-118
4-Nitrophenol	300	0	200	67	10- 80
2,4-Dinitrotoluene	200	0	180	90	24- 96
Pentachlorophenol	300	0	290	97	9-103
Pyrene	200	0	160	80	26-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	300	150	50	0	42	12-110
2-Chlorophenol	300	190	63	0	40	27-123
1,4-Dichlorobenzene	200	100	50	10	28	36- 97
N-Nitroso-di-n-propylami	200	150	75	6	38	41-116
1,2,4-Trichlorobenzene	200	120	60	0	28	39- 98
4-Chloro-3-methylphenol	300	220	73	0	42	23- 97
Acenaphthene	200	140	70	0	31	46-118
4-Nitrophenol	300	200	67	0	50	10- 80
2,4-Dinitrotoluene	200	180	90	0	38	24- 96
Pentachlorophenol	300	290	97	0	50	9-103
Pyrene	200	160	80	0	31	26-127

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

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

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

COMMENTS:

3D
WATER SEMIVOLATILE BLANK SPIKE RECOVERY

0324

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

b Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix Spike - EPA Sample No.: SSPK01

COMPOUND	SPIKE ADDED (ug/L)	BLANK CONCENTRATION (ug/L)	BS CONCENTRATION (ug/L)	BS % REC #	QC LIMITS REC.
Phenol	150	0	82	55	12-110
2-Chlorophenol	150	0	100	67	27-123
1,4-Dichlorobenzene	100	0	55	55	36- 97
N-Nitroso-di-n-propylami	100	0	85	85	41-116
1,2,4-Trichlorobenzene	100	0	59	59	39- 98
4-Chloro-3-methylphenol	150	0	110	73	23- 97
Acenaphthene	100	0	72	72	46-118
4-Nitrophenol	150	0	100	67	10- 80
2,4-Dinitrotoluene	100	0	95	95	24- 96
Pentachlorophenol	150	0	150	100	9-103
Pyrene	100	0	85	85	26-127

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

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

Spike Recovery: 0 out of 11 outside limits

MENTS:

4B
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

0325

SBLK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Lab File ID: E8070 Lab Sample ID: N1C51710C

Instrument ID: SE Date Extracted: 11/15/95

Matrix: (soil/water) WATER Date Analyzed: 11/16/95

Level: (low/med) LOW Time Analyzed: 15:40

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	CLJ78TW001	JP0323C	E8074	11/16/95
02	CLJ78TW002	JP0324C	E8075	11/16/95
03	CLJ78TW02D	JP0325C	E8076	11/16/95
04	CLJ78TW003	JP0326C	E8077	11/16/95
05	CLJ78TW003	JP0326C	B8901	11/19/95
06	CLJ78TW004	JP0327C	E8078	11/16/95
07	CLJ78-FB	JP0328C	E8079	11/16/95
08	CLJ78-RB	JP0329C	E8080	11/16/95
09	CLJ78TW001MSD	JP0323CR	E8073	11/16/95
10	SSPK01	N1C51710CS	E8071	11/16/95
11	CLJ78TW001MS	JP0323CS	E8072	11/16/95

COMMENTS:

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

0326

Lab Name: OHM Analytical Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Lab File ID: b8731 DFTPP Injection Date: 11-8-95

Instrument ID: msb.i DFTPP Injection Time: 1220

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	54.6
68	Less than 2.0% of mass 69	0.0 ( )1
69	Mass 69 relative abundance	74.8
70	Less than 2.0% of mass 69	0.5 ( )1
127	25.0 - 75.0% of mass 198	45.3
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	7.3
275	10.0 - 30.0% of mass 198	18.5
365	Greater than 0.75% of mass 198	1.8
441	Present, but less than mass 443	79.1
442	40.0 - 110.0% of mass 198	58.0
443	15.0 - 24.0% of mass 442	19.6 ( )2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD020	SSTD020	b8733a	11-8-95	1344
02	SSTD050	SSTD050	b8734a	11-8-95	1431
03	SSTD080	SSTD080	b8735a	11-8-95	1525
04	SSTD120	SSTD120	b8736a	11-8-95	1611
05	SSTD160	SSTD160	b8737a	11-8-95	1657
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5B
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

0327

Lab Name: OHM Analytical Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Lab File ID: e8053a.d DFTPP Injection Date: 11-14-95

Instrument ID: mse.i DFTPP Injection Time: 1053

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	48.0
68	Less than 2.0% of mass 69	0.0 ( )1
69	Mass 69 relative abundance	62.1
70	Less than 2.0% of mass 69	0.6 ( )1
127	25.0 - 75.0% of mass 198	46.1
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 30.0% of mass 198	20.2
365	Greater than 0.75% of mass 198	2.0
441	Present, but less than mass 443	89.3
442	40.0 - 110.0% of mass 198	47.6
443	15.0 - 24.0% of mass 442	18.7 ( )2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD020	SSTD020	e8055a.d	11-14-95	1159
02	SSTD050	SSTD050	e8056a.d	11-14-95	1244
03	SSTD080	SSTD080	e8057a.d	11-14-95	1329
04	SSTD120	SSTD120	e8058a.d	11-14-95	1415
05	SSTD160	SSTD160	e8059a.d	11-14-95	1501
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5B
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

0328

Lab Name: OHM Analytical Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Lab File ID: b8899 DFTPP Injection Date: 11-19-95

Instrument ID: msb.i DFTPP Injection Time: 1214

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	55.11
68	Less than 2.0% of mass 69	0.00 (0.00)1
69	Mass 69 relative abundance	70.50
70	Less than 2.0% of mass 69	0.31 (0.44)1
127	25.0 - 75.0% of mass 198	43.69
197	Less than 1.0% of mass 198	0.00
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	7.33
275	10.0 - 30.0% of mass 198	15.98
365	Greater than 0.75% of mass 198	1.88
441	Present, but less than mass 443	10.57
442	40.0 - 110.0% of mass 198	68.27
443	15.0 - 24.0% of mass 442	13.43 (19.68)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CLJ78TW003	JP0326C	b8901	11-19-95	1320
02					
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5B
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

0329

Lab Name: OHM Analytical Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Lab File ID: e8068 DFTPP Injection Date: 11-16-95

Instrument ID: mse.1 DFTPP Injection Time: 1415

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	57.82
68	Less than 2.0% of mass 69	0.00 (0.00)1
69	Mass 69 relative abundance	72.32
70	Less than 2.0% of mass 69	0.39 (0.53)1
127	25.0 - 75.0% of mass 198	50.94
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.71
275	10.0 - 30.0% of mass 198	19.58
365	Greater than 0.75% of mass 198	2.13
441	Present, but less than mass 443	8.63
442	40.0 - 110.0% of mass 198	51.28
443	15.0 - 24.0% of mass 442	9.39 (18.31)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SB1K01	N1C51710C	e8070	11-16-95	1540
02	SSPK01	N1C51710CS	e8071	11-16-95	1625
03	CLJ78TW001MS	JP0323CS	e8072	11-16-95	1711
04	CLJ78TW001MSD	JP0323CR	e8073	11-16-95	1756
05	CLJ78TW001	JP0323C	e8074	11-16-95	1841
06	CLJ78TW002	JP0324C	e8075	11-16-95	1926
07	CLJ78TW002d	JP0325C	e8076	11-16-95	2012
08	CLJ78TW003	JP0326C	e8077	11-16-95	2057
09	CLJ78TW004	JP0327C	e8078	11-16-95	2142
10	CLJ78-FB	JP0328C	e8079	11-16-95	2227
11	CLJ78-RB	JP0329C	e8080	11-16-95	2312
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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

0330

Lab Name: OHM Analytical Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Lab File ID (Standard): b8900 Date Analyzed: 11-19-95

Instrument ID: msb.i Time Analyzed: 1236

	IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
12 HOUR STD	2490508	7.00	8451213	8.75	4763610	11.89
UPPER LIMIT	4981016	7.50	16902426	9.25	9527220	12.39
LOWER LIMIT	1245254	6.50	4225606	8.25	2381805	11.39
EPA SAMPLE NO.						
01 CLJ78TW003	2761064	7.00	9021146	8.75	4981412	11.89
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

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8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

0331

Lab Name: OHM Analytical Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Lab File ID (Standard): b8900 Date Analyzed: 11-19-95

Instrument ID: ms6,1 Time Analyzed: 1236

	IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
12 HOUR STD	7404826	14.84	5153768	20.32	5854368	23.66
UPPER LIMIT	14809652	15.34	10307536	20.82	11708736	24.16
LOWER LIMIT	3702413	14.34	2576884	19.82	2927184	23.16
EPA SAMPLE NO.						
01 CLJ78TW003	7601298	14.83	6130089	20.31	6750336	23.66
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

0332

Lab Name: OHM Analytical Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Lab File ID (Standard): e8069 Date Analyzed: 11-16-95

Instrument ID: mse.i Time Analyzed: 1453

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	176097	7.64	724559	9.51	363216	12.76
	UPPER LIMIT	352194	8.14	1449118	10.01	726432	13.26
	LOWER LIMIT	88048	7.14	362280	9.01	181608	12.26
	EPA SAMPLE NO.						
01	SB1K01	198091	7.64	792374	9.51	406910	12.76
02	SSPK01	186806	7.64	770466	9.51	391492	12.76
03	CLJ78TW001MS	193205	7.64	781054	9.51	398674	12.75
04	CLJ78TW001MSD	203681	7.64	827926	9.51	421954	12.76
05	CLJ78TW001	199461	7.63	799721	9.50	406752	12.75
06	CLJ78TW002	199910	7.64	796268	9.50	407423	12.75
07	CLJ78TW02D	192345	7.63	781097	9.50	400404	12.75
08	CLJ78TW003	185132	7.63	762371	9.50	398395	12.75
09	CLJ78TW004	191791	7.64	784226	9.50	403744	12.75
10	CLJ78-FB	194436	7.63	785404	9.50	400396	12.75
11	CLJ78-RB	174752	7.63	734367	9.50	376786	12.74
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
~~RT LOWER LIMIT = -0.50~~ minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

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8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

0333

Lab Name: OHM Analytical Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Lab File ID (Standard): e8069 Date Analyzed: 11-16-95

Instrument ID: mse.1 Time Analyzed: 1453

	IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
12 HOUR STD	533822	15.75	465109	21.29	414314	25.30
UPPER LIMIT	1067644	16.25	930218	21.79	828628	25.80
LOWER LIMIT	266911	15.25	232554	20.79	207157	24.80
EPA SAMPLE NO.						
01 SB1K01	597786	15.74	504251	21.28	469933	25.29
02 SSPK01	572538	15.75	501834	21.29	449836	25.30
03 CLJ78TW001MS	580703	15.75	513804	21.29	456715	25.30
04 CLJ78TW001MSD	610380	15.75	531493	21.28	474872	25.30
05 CLJ78TW001	597573	15.74	517296	21.27	470399	25.28
06 CLJ78TW002	604030	15.74	508833	21.27	463794	25.29
07 CLJ78TW02D	590733	15.74	501536	21.26	453393	25.28
08 CLJ78TW003	581979	15.74	500126	21.27	445661	25.27
09 CLJ78TW004	593973	15.74	506773	21.27	448315	25.28
10 CLJ78-FB	591689	15.74	499254	21.26	430861	25.28
11 CLJ78-RB	544807	15.74	461062	21.26	401048	25.27
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0334

CLJ78-FB

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0328C

Sample wt/vol: 990 (g/mL) ML Lab File ID: E8079

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0335 CLJ78-FB

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0328C

Sample wt/vol: 990 (g/mL) ML Lab File ID: E8079

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	51	U
100-02-7	4-Nitrophenol	51	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
101-55-3	4-Bromophenyl-phenylether	10	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-2	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0336

EPA SAMPLE NO.

CLJ78-FB

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0328C

Sample wt/vol: 990 (g/mL) ML Lab File ID: E8079

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 7

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 123-42-2	2-Pentanone, 4-hydroxy-4-met	5.97	6	JNA
2. 111-76-2	Ethanol, 2-butoxy-	6.51	10	JN
3. 104-76-7	1-Hexanol, 2-ethyl-	7.57	7	JN
4. 90-05-1	Phenol, 2-methoxy-	8.31	13	JN
5. 13679-75-9	1-(2-Thienyl)-1-propanone	9.35	5	JN
6. 121-33-5	Vanillin	11.61	4	JN
7. 10546-70-0	Benzamide, N-propyl-	13.18	7	JN

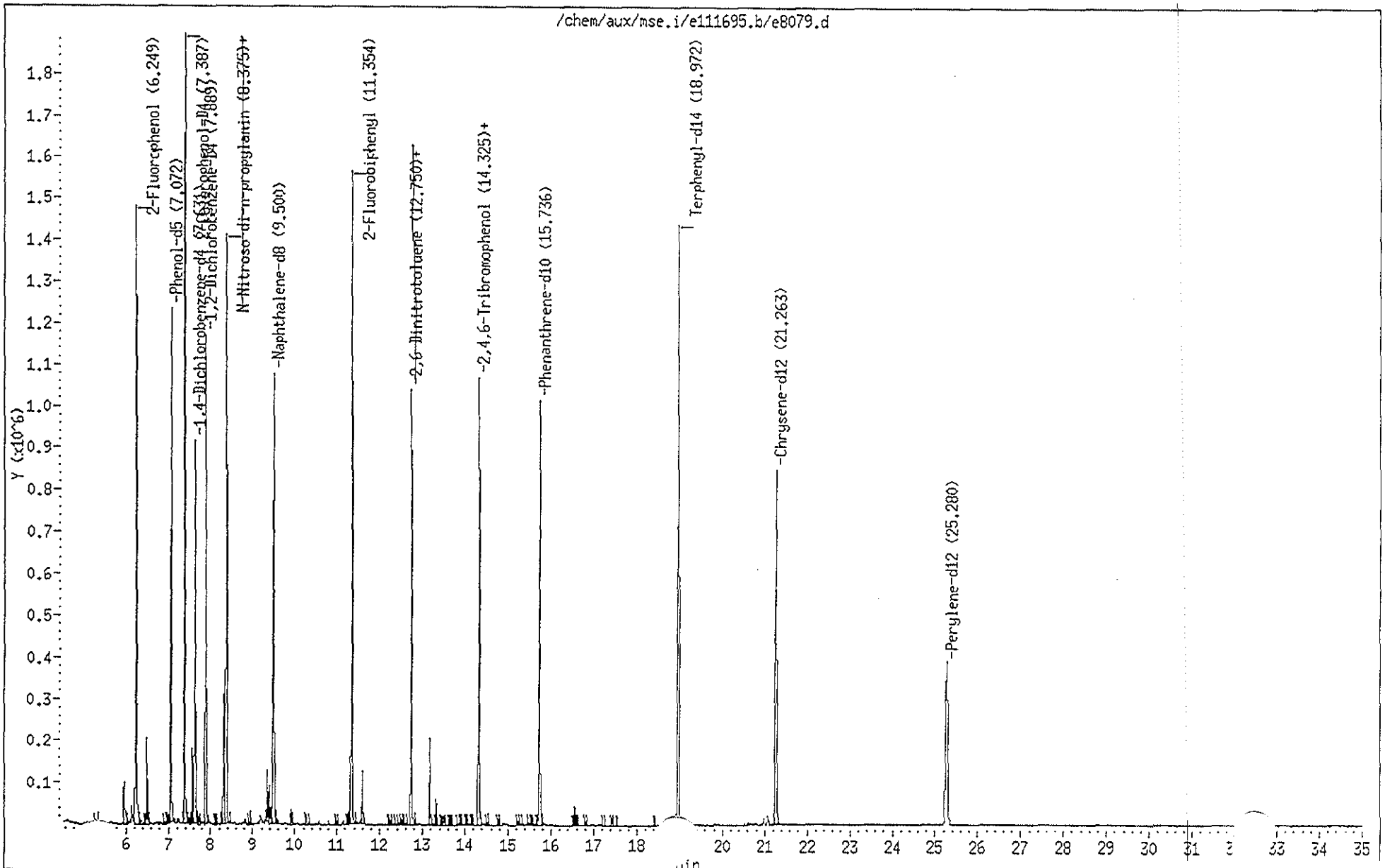
0337

Data File: /chem/aux/mse.i/e111695.b/e8079.d
Date : 16-NOV-95 22:27
Client ID: jp0328c
Sample Info: 17418n clj78-fb

Column phase: J&W DB-5

Instrument: mse.i

Operator: J. Kelly
Column diameter: 0.25



OHM Analytical Division

BASE NEUTRAL QUANT AND RATIO REPORT

Data file : /chem/aux/mse.i/e111695.b/e8079.d
Lab Smp Id: Client Smp ID: jp0328c
Inj Date : 16-NOV-95 22:27
Operator : J. Kelly Inst ID: mse.i
Smp Info : 17418n clj78-fb
Misc Info : jp0328c,n1c51710,m1,1,1
Comment :
Method : /chem/aux/mse.i/e111695.b/111495eclp.m
Meth Date : 17-Nov-1995 13:45 kathryn Quant Type: ISTD
Cal Date : 16-NOV-95 14:53 Cal File: e8069.d
Als bottle: 12
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

KBuyler

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)	
$	2	2-Fluorophenol	112.00	6.249	6.252	(0.819)	639688	88.0	88.0(R)	
$	4	Phenol-d5	99.00	7.072	7.083	(0.927)	597192	60.0	60.0(R)	
$	7	2-Chlorophenol-D4	132.00	7.387	7.398	(0.968)	788576	112	112(R)	
*	10	1,4-Dichlorobenzene-d4	152.00	7.631	7.641	(1.000)	194436	40.0		
$	13	1,2-Dichlorobenzene-D4	152.00	7.889	7.899	(1.034)	265211	65.0	65.0(R)	
	17	N-Nitroso-di-n-propylamine	70.00	8.375	8.114	(1.098)	103921	14.0	~~14.0(Q)~~	ND Rt MS
$	19	Nitrobenzene-d5	82.00	8.375	8.386	(0.882)	727036	72.0	72.0(R)	
*	27	Naphthalene-d8	136.00	9.500	9.510	(1.000)	785404	40.0		
$	37	2-Fluorobiphenyl	172.00	11.354	11.364	(0.890)	818083	70.6	70.6(R)	
	41	2,6-Dinitrotoluene	165.00	12.750	12.295	(1.000)	46610	13.8	~~13.8(Q)~~	ND Rt MS
*	44	Acenaphthene-d10	164.00	12.750	12.761	(1.000)	400396	40.0		
$	56	2,4,6-Tribromophenol	330.00	14.333	14.343	(1.124)	217988	121	121(R)	
	57	4-Bromophenyl-phenylether	248.00	14.333	14.744	(0.911)	13547	4.11	~~4.11(Q)~~	ND Rt MS
*	60	Phenanthrene-d10	188.00	15.736	15.754	(1.000)	591689	40.0		
$	68	Terphenyl-d14	244.00	18.972	18.983	(0.892)	861022	76.5	76.5(R)	
*	73	Chrysene-d12	240.00	21.263	21.288	(1.000)	499254	40.0		
*	79	Perylene-d12	264.00	25.280	25.305	(1.000)	430861	40.0		

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/aux/mse.i/e111695.b/e8079.d
Date : 16-NOV-95 22:27
Client ID: jp0328c
Sample Info: 17418n clj78-fb

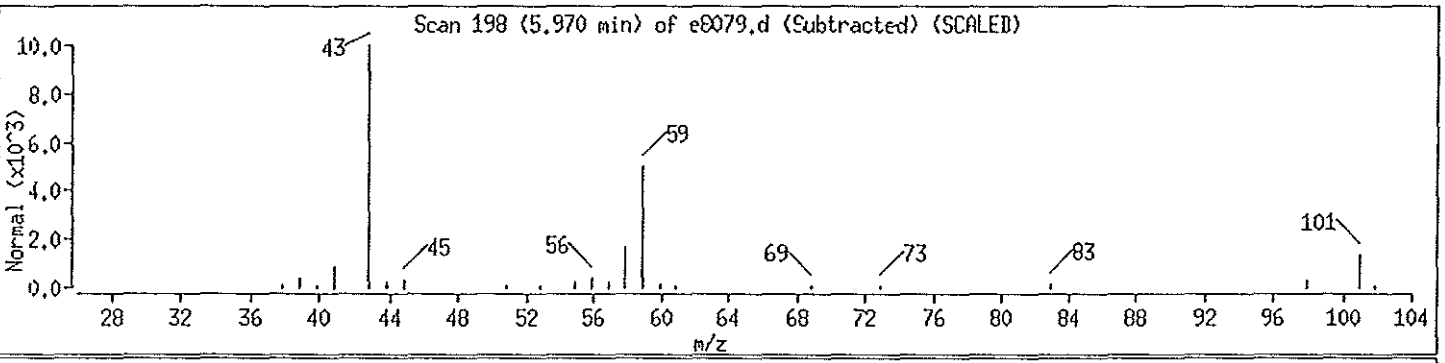
Instrument: mse.i

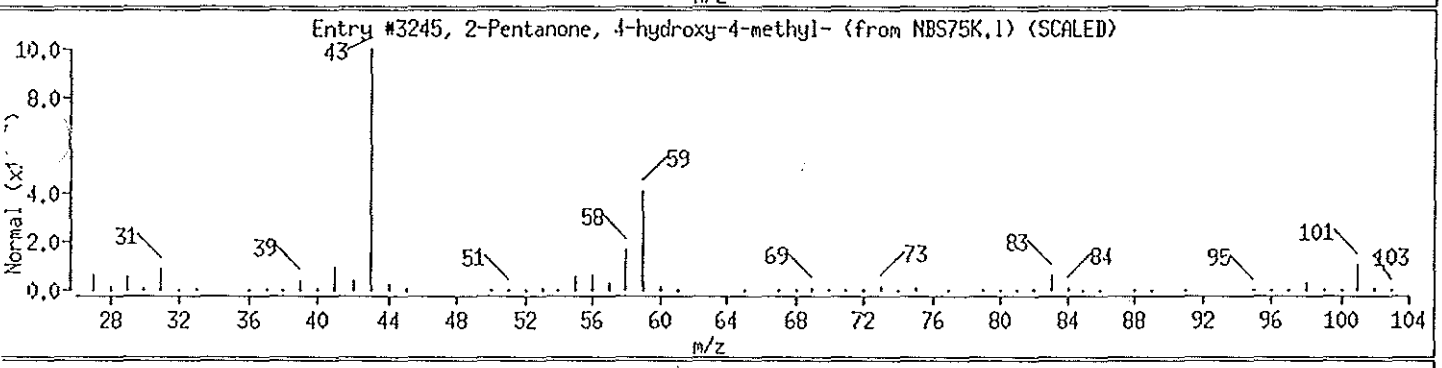
Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NBS75K.l	3245	56	C6H12O2	116





Data File: /chem/aux/mse.i/e111695.b/e8079.d

Date : 16-NOV-95 22:27

Client ID: jp0328c

Instrument: mse.i

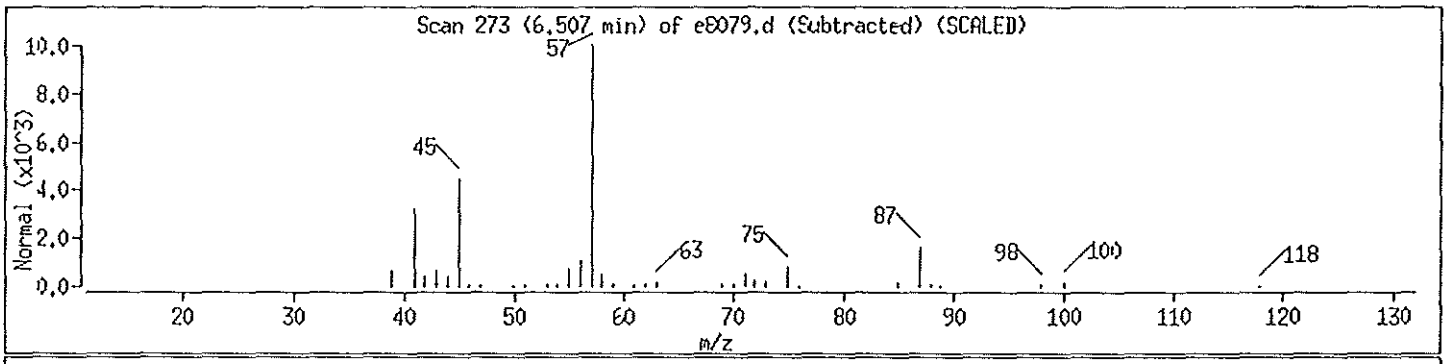
Sample Info: 17418n clj78-fb

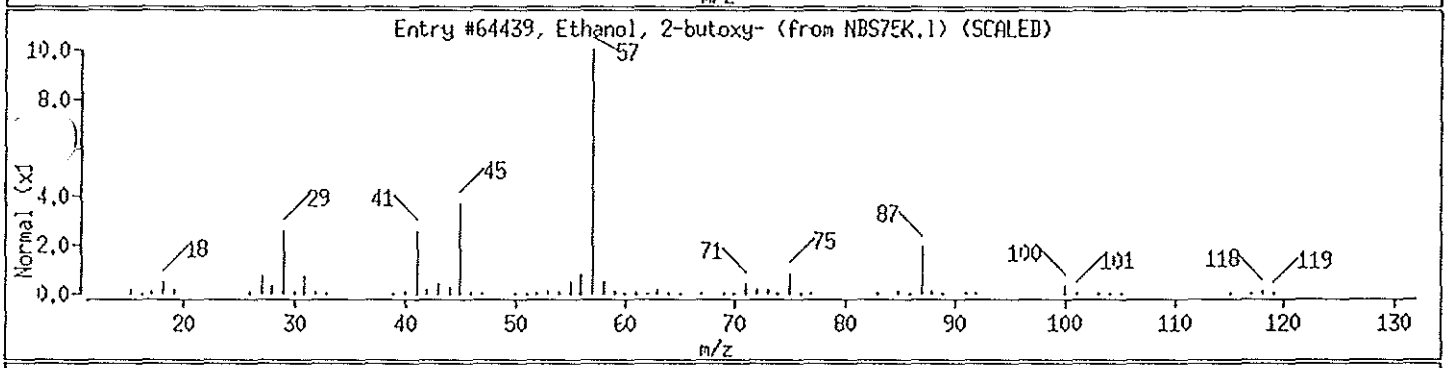
Operator: J. Kelly

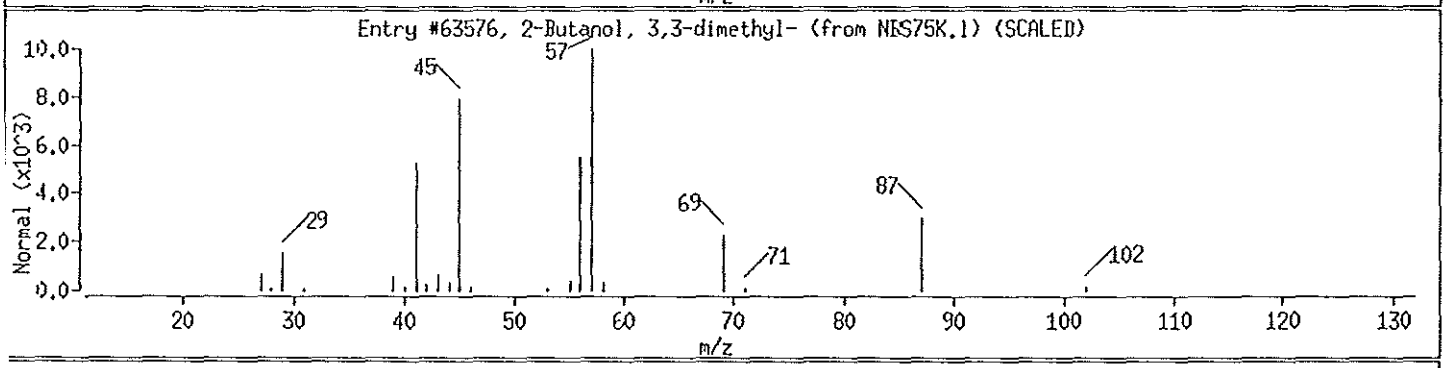
Column phase: J&W DB-5

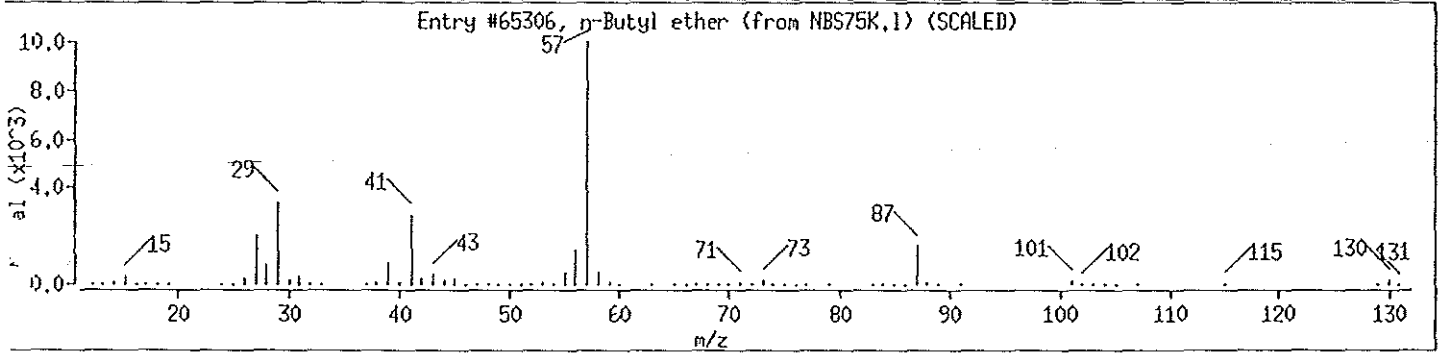
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethanol, 2-butoxy-	111-76-2	NBS75K.1	64439	74	C6H14O2	118
2-Butanol, 3,3-dimethyl-	464-07-3	NBS75K.1	63576	59	C6H14O	102
n-Butyl ether	142-96-1	NBS75K.1	65306	35	C8H18O	130









Data File: /chem/aux/mse.i/e111695.b/e8079.d

Date : 16-NOV-95 22:27

Client ID: jp0328c

Instrument: mse.i

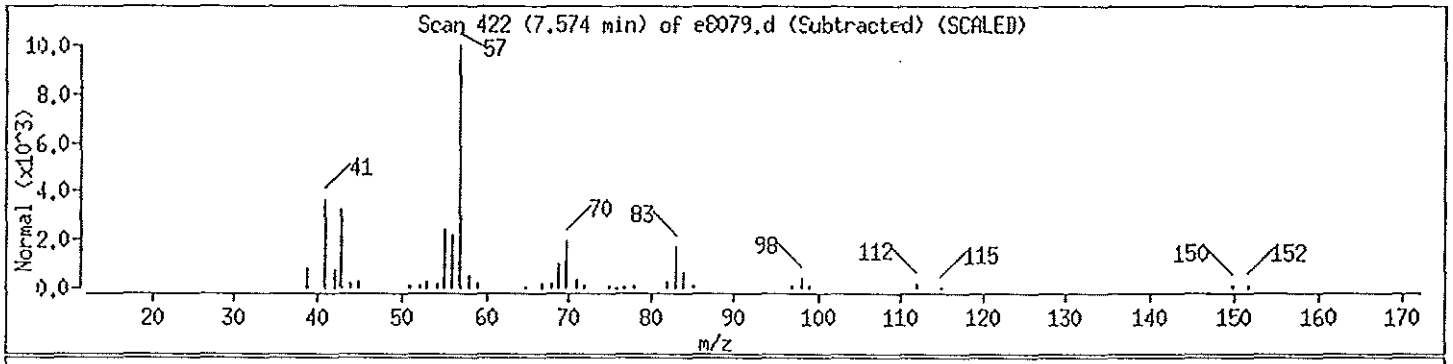
Sample Info: 17418n clj78-fb

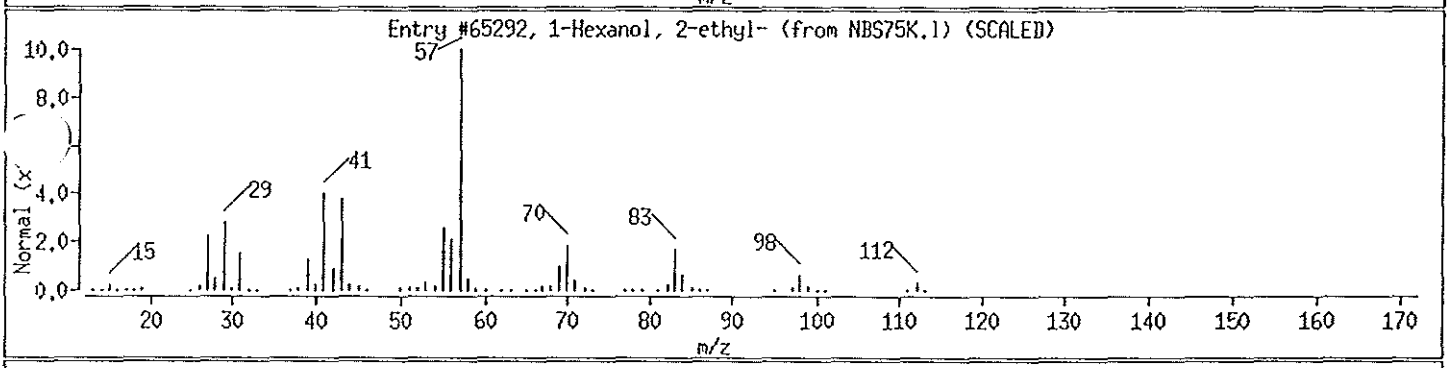
Operator: J. Kelly

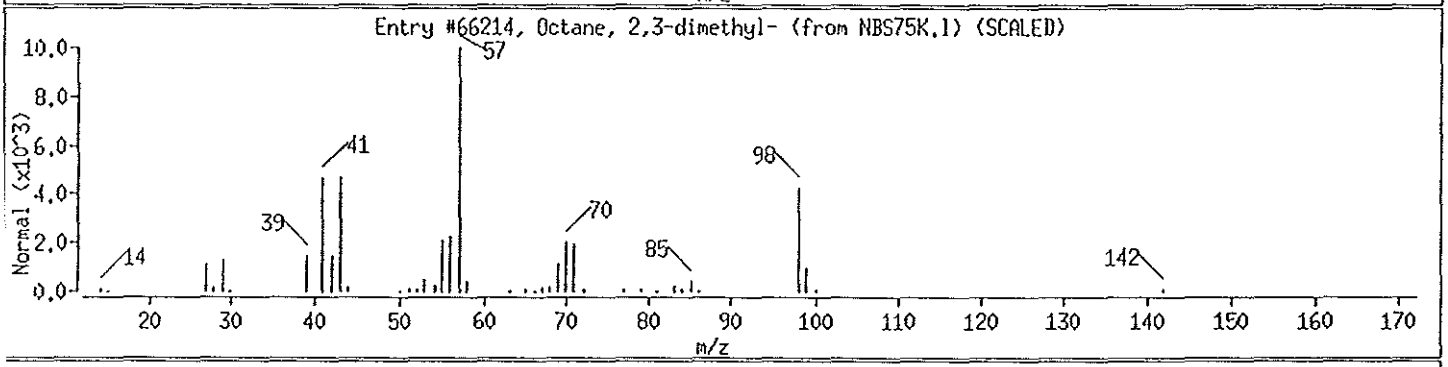
Column phase: J&W DB-5

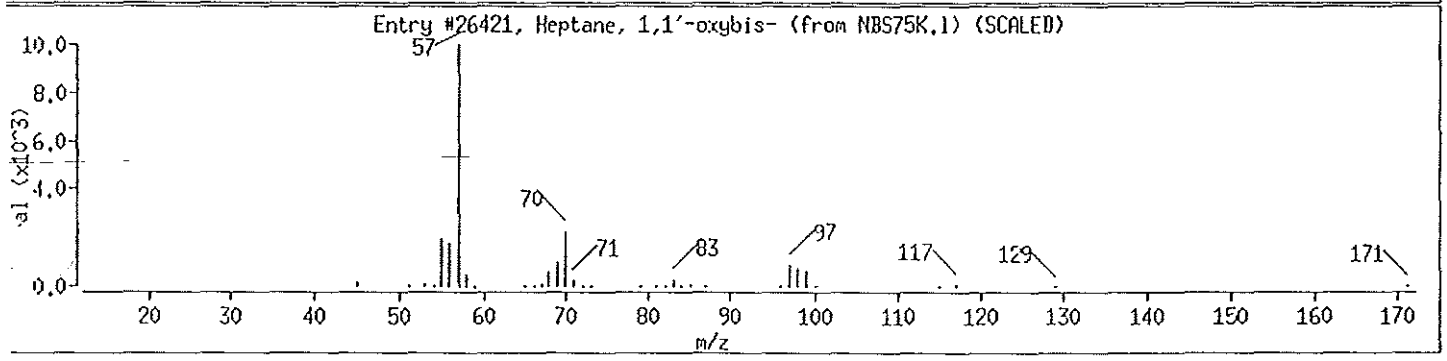
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Hexanol, 2-ethyl-	104-76-7	NBS75K.l	65292	83	C6H180	130
Octane, 2,3-dimethyl-	7146-60-3	NBS75K.l	66214	53	C10H22	142
Heptane, 1,1'-oxybis-	629-64-1	NBS75K.l	26421	50	C14H300	214









Data File: /chem/aux/mse.i/e111695.b/e8079.d

Date : 16-NOV-95 22:27

)ient ID: jp0328c

Instrument: mse.i

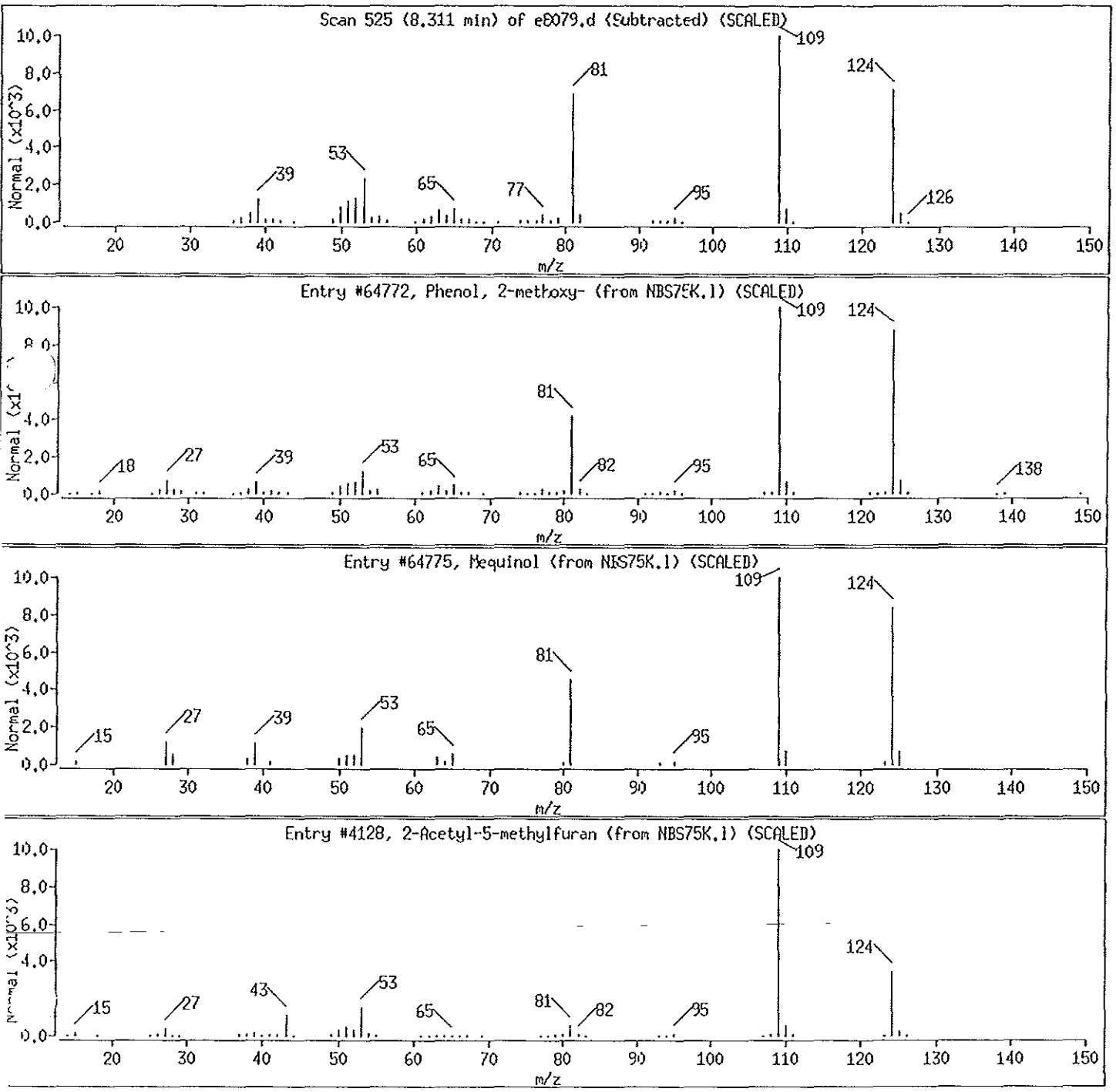
Sample Info: 17418n clj78-fb

Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Phenol, 2-methoxy-	90-05-1	NBS75K.l	64772	94	C7H8O2	124
Mequinol	150-76-5	NBS75K.l	64775	87	C7H8O2	124
2-Acetyl-5-methylfuran	1193-79-9	NBS75K.l	4128	78	C7H8O2	124



Data File: /chem/aux/mse.i/e111695.b/e8079.d
Date : 16-NOV-95 22:27
Client ID: jp0328c
Sample Info: 17418n clj78-fb

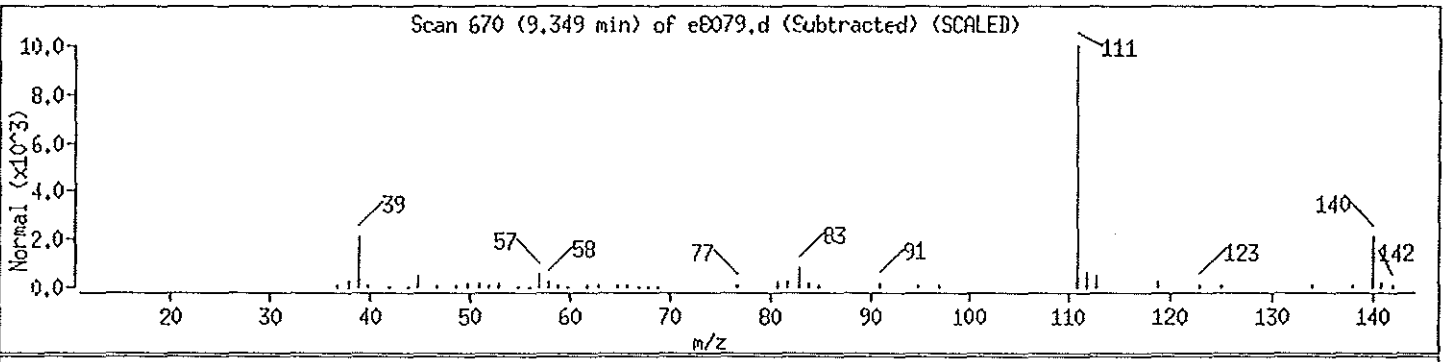
Instrument: mse.i

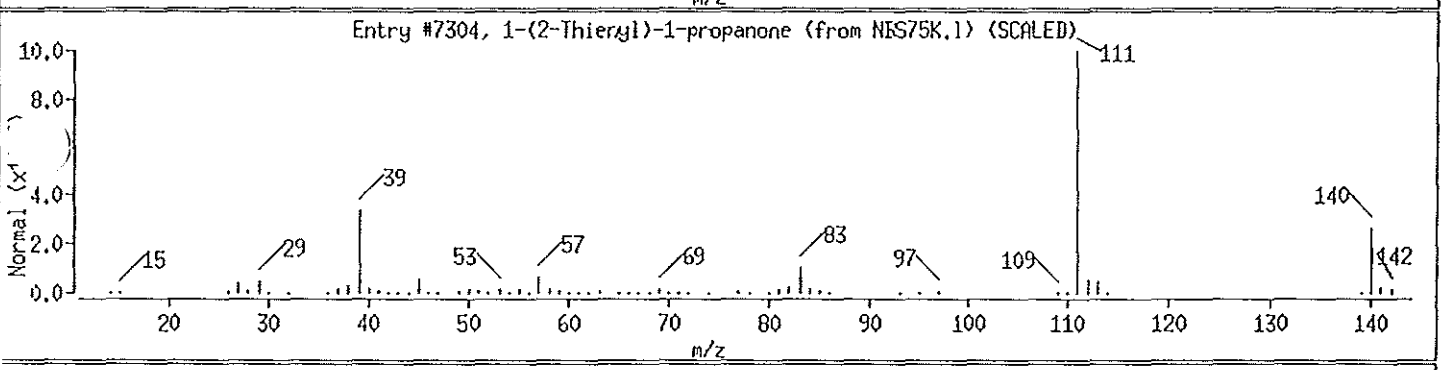
Operator: J. Kelly

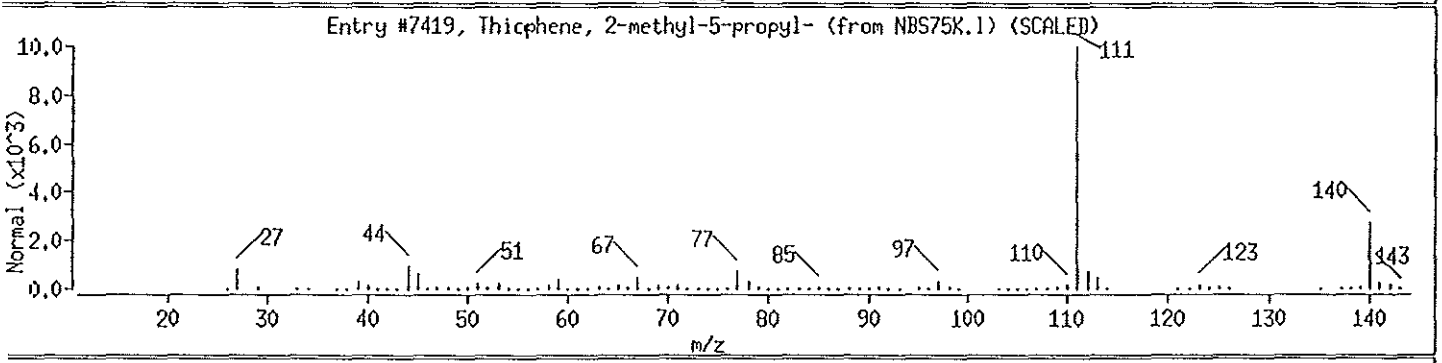
Column phase: J&W DB-5

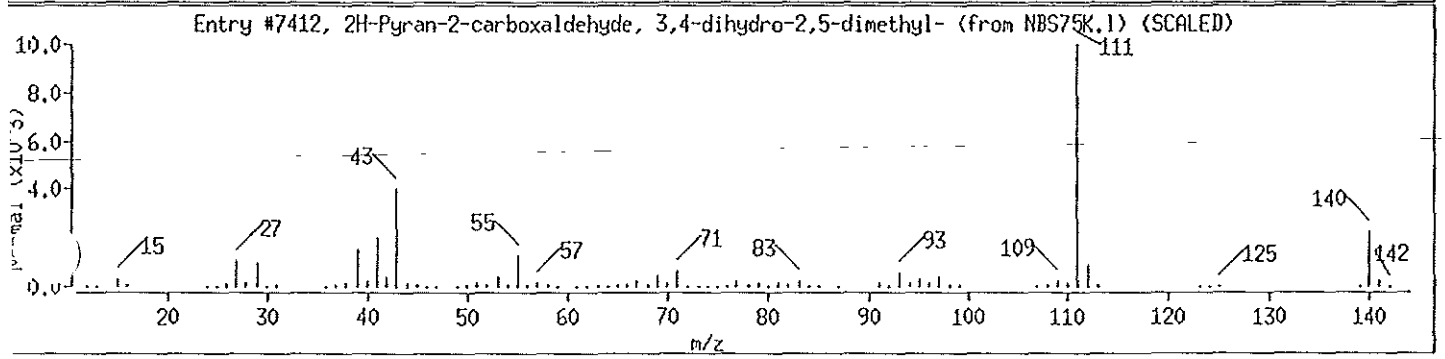
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-(2-Thienyl)-1-propanone	13679-75-9	NBS75K.l	7304	93	C7H8OS	140
Thiophene, 2-methyl-5-propyl-	33933-73-2	NBS75K.l	7419	86	C8H12S	140
2H-Pyran-2-carboxaldehyde, 3,4-dihydro-2	1920-21-4	NBS75K.l	7412	56	C8H12O2	140









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Date : 16-NOV-95 22:27

)ient ID: jp0328c

Instrument: mse.i

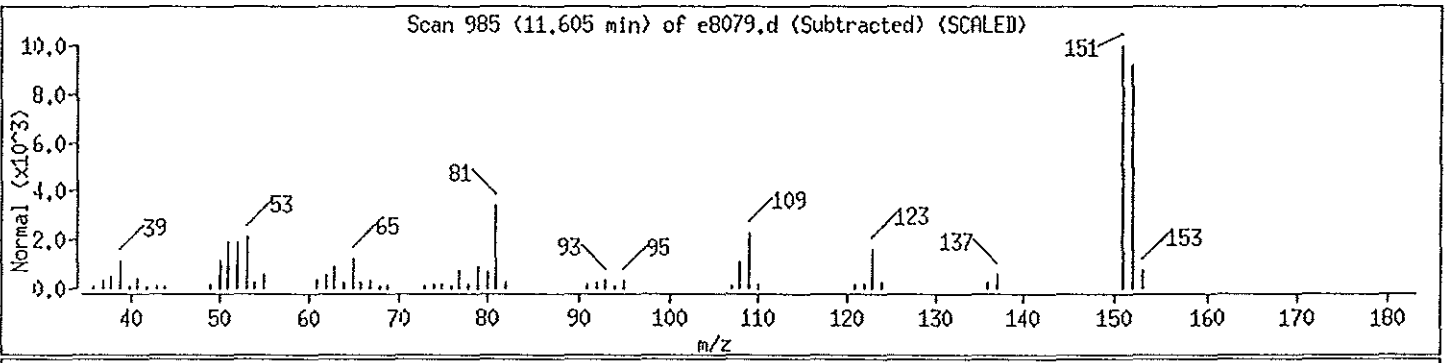
Sample Info: 17418n clj78-fb

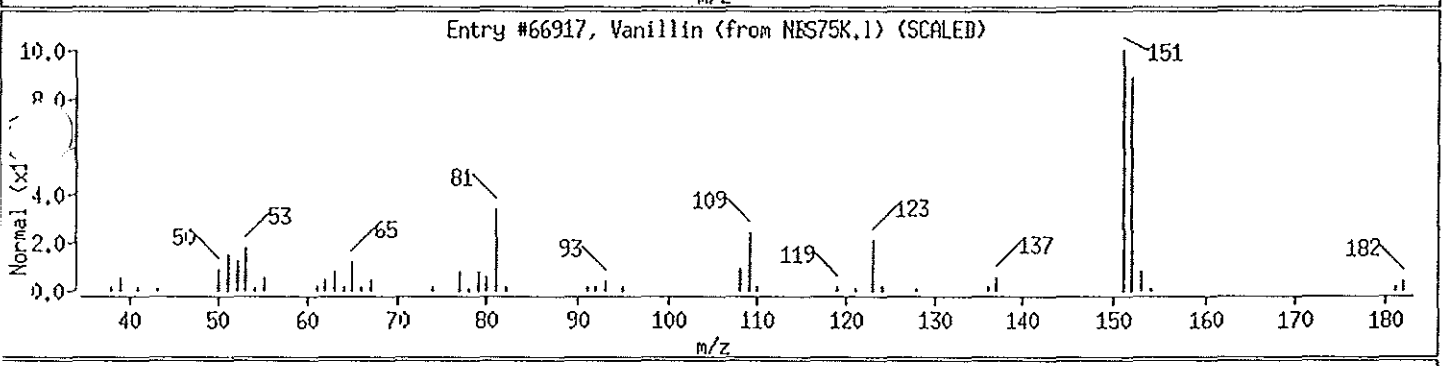
Operator: J. Kelly

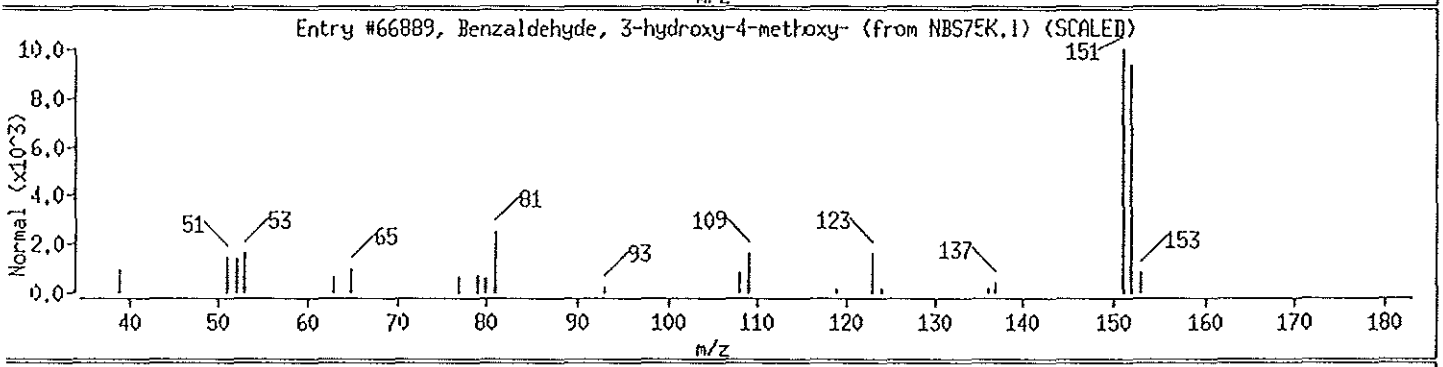
Column phase: J&W DB-5

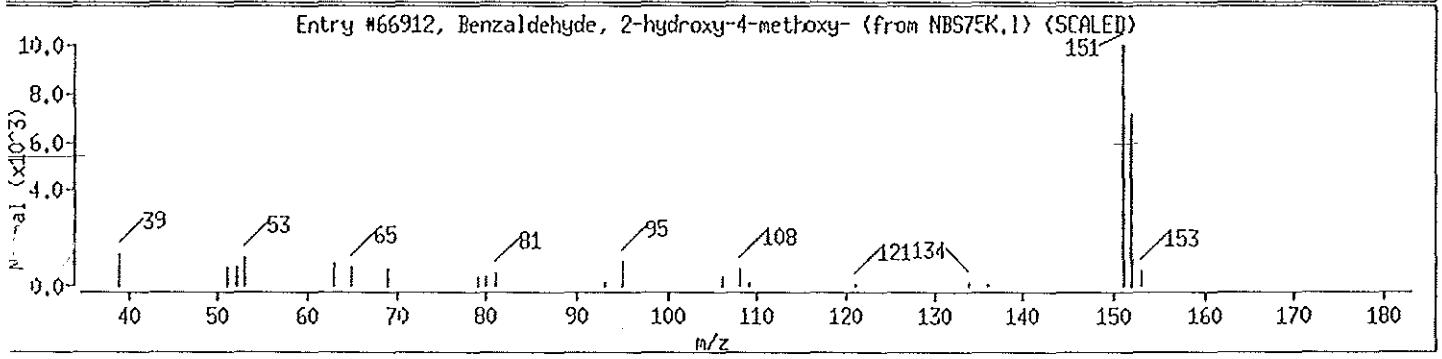
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Vanillin	121-33-5	NBS75K.l	66917	97	C8H8O3	152
Benzaldehyde, 3-hydroxy-4-methoxy-	621-59-0	NBS75K.l	66889	96	C8H8O3	152
Benzaldehyde, 2-hydroxy-4-methoxy-	673-22-3	NBS75K.l	66912	64	C8H8O3	152









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Date : 16-NOV-95 22:27
)ient ID: jp0328c
Sample Info: 17418n clj78-fb

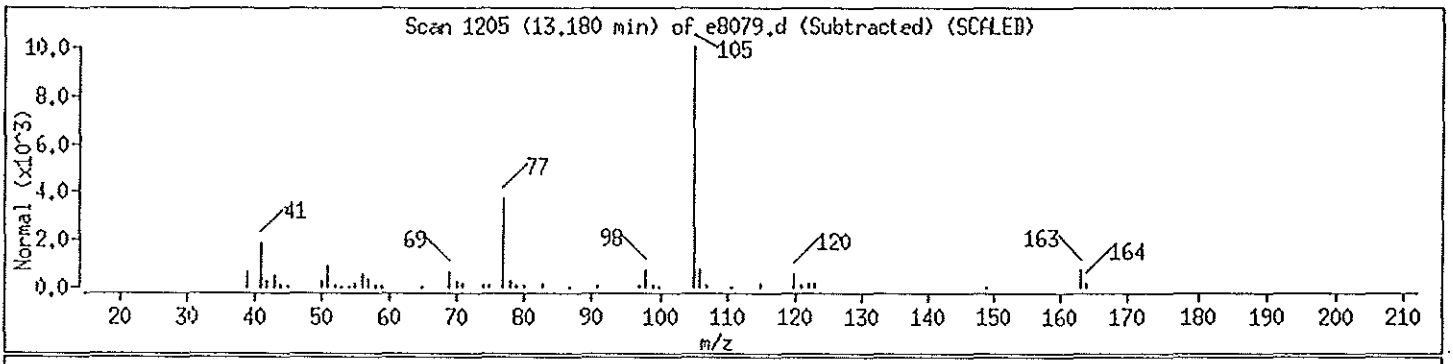
Instrument: mse.i

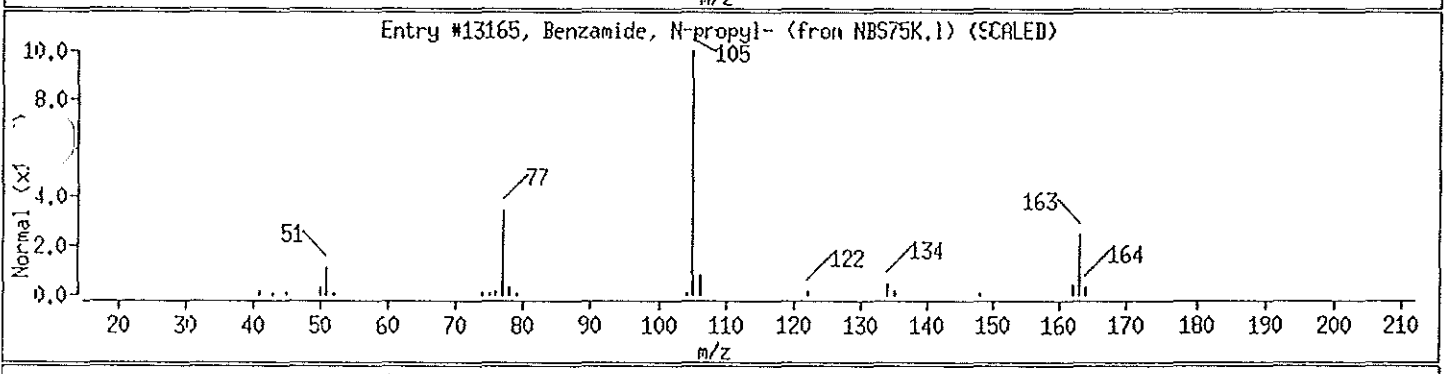
Operator: J. Kelly

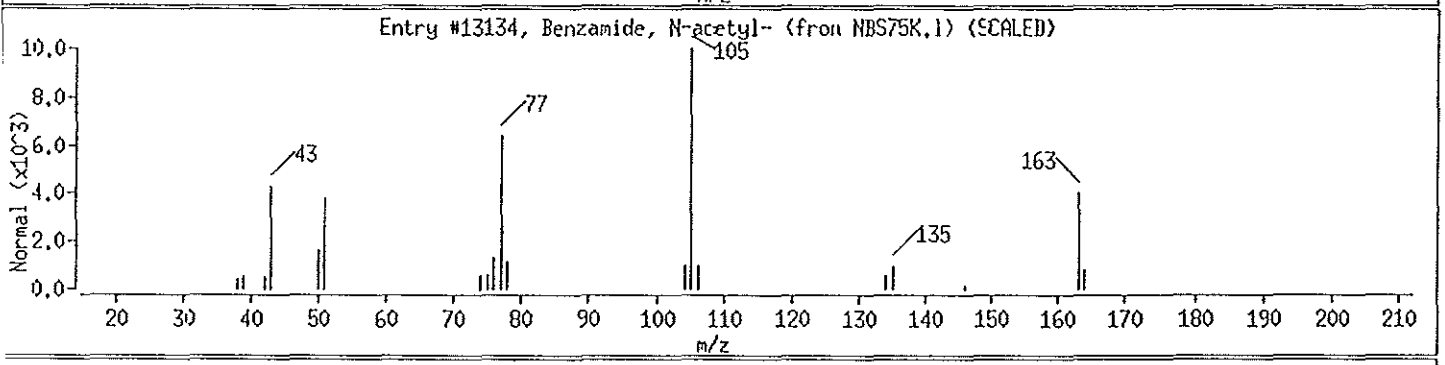
Column phase: J&W DB-5

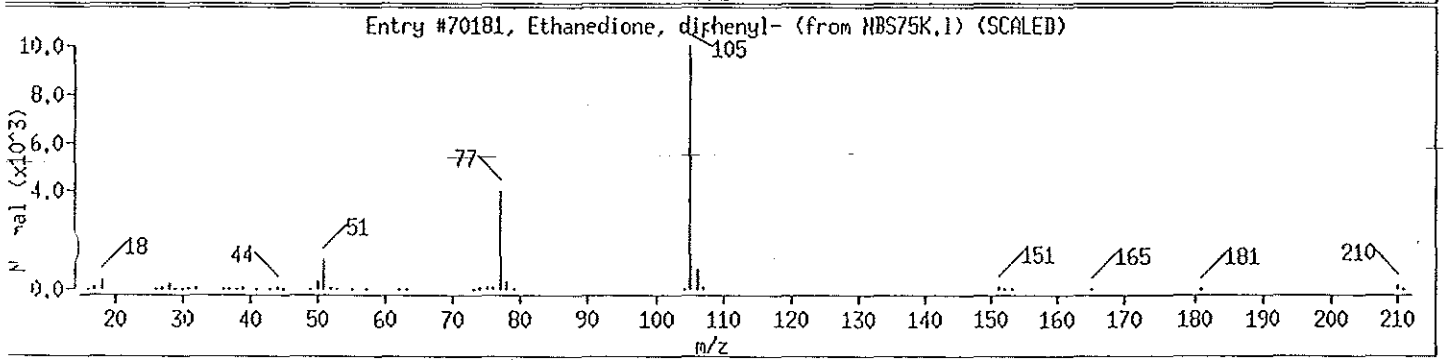
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzamide, N-propyl-	10546-70-0	NBS75K.l	13165	64	C10H13NO	163
Benzamide, N-acetyl-	1575-95-7	NBS75K.l	13134	58	C9H9NO2	163
Ethanedione, diphenyl-	134-81-6	NBS75K.l	70181	53	C14H10O2	210









1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0346

CLJ78-RB

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0329C

Sample wt/vol: 980 (g/mL) ML Lab File ID: E8080

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0347

CLJ78-RB

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0329C

Sample wt/vol: 980 (g/mL) ML Lab File ID: E8080

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	51	U
100-02-7	4-Nitrophenol	51	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	26	U
101-55-3	4-Bromophenyl-phenylether	10	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-2	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS 0348

EPA SAMPLE NO.

CLJ78-RB

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0329C

Sample wt/vol: 980 (g/mL) ML Lab File ID: E8080

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 7

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 123-42-2	2-Pentanone, 4-hydroxy-4-met	5.97	5	JNA
2. 111-76-2	Ethanol, 2-butoxy-	6.51	10	JN
3. 104-76-7	1-Hexanol, 2-ethyl-	7.57	7	JN
4. 90-05-1	Phenol, 2-methoxy-	8.31	13	JN
5. 13679-75-9	1-(2-Thienyl)-1-propanone	9.35	5	JN
6. 121-33-5	Vanillin	11.61	4	JN
7. 10546-70-0	Benzamide, N-propyl-	13.18	7	JN

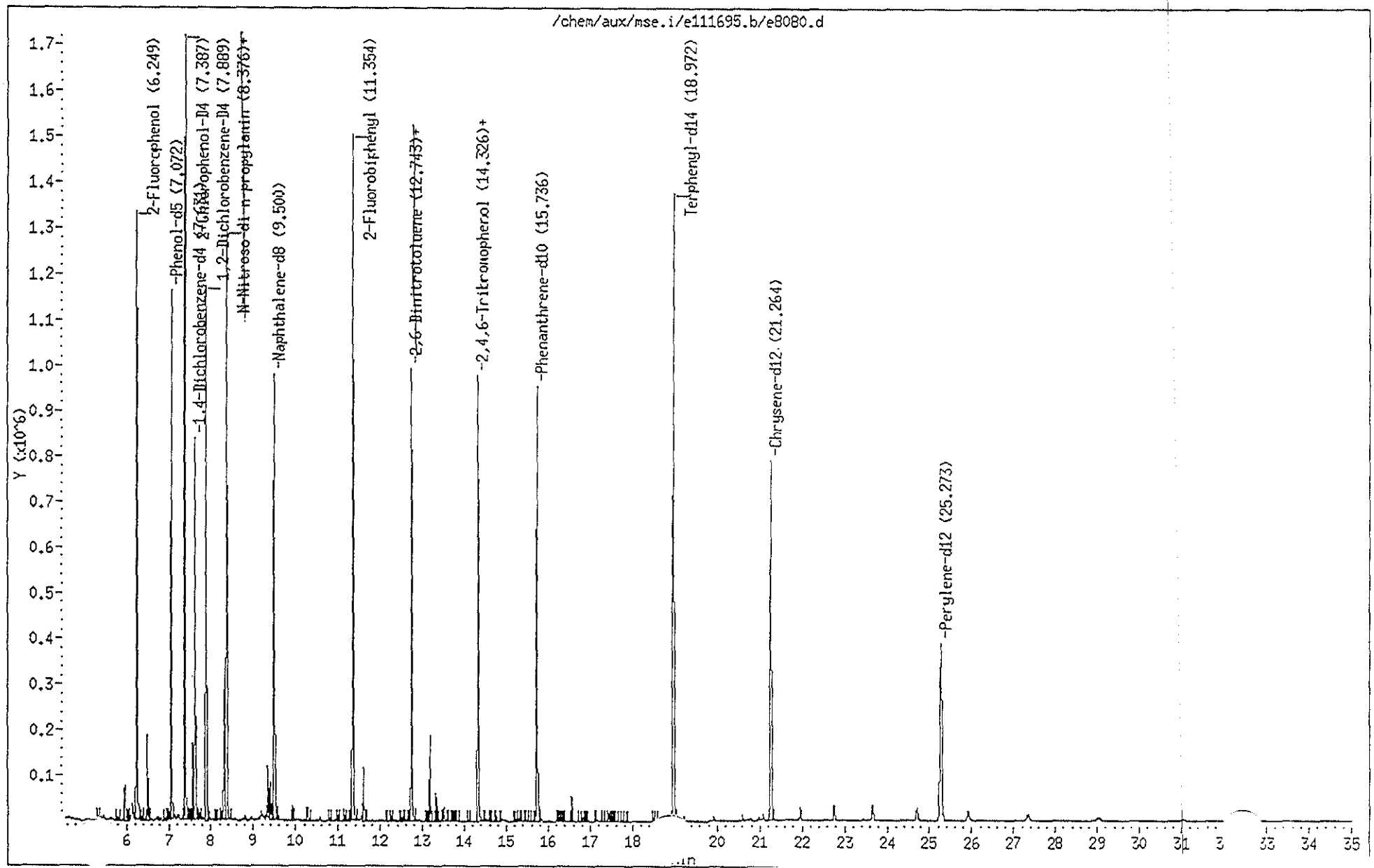
0349

Data File: /chem/aux/mse.i/e111695.b/e8080.d
Date : 16-NOV-95 23:12
Client ID: jp0329c
Sample Info: 17418n clj78-rb

Column phase: J&W DB-5

Instrument: mse.i

Operator: J. Kelly
Column diameter: 0.25



OHM Analytical Division

BASE NEUTRAL QUANT AND RATIO REPORT

Data file : /chem/aux/mse.i/e111695.b/e8080.d
Lab Smp Id: Client Smp ID: jp0329c
Inj Date : 16-NOV-95 23:12
Operator : J. Kelly Inst ID: mse.i
Smp Info : 17418n clj78-rb
Misc Info : jp0329c,n1c51710,m1,1,1
Comment :
Method : /chem/aux/mse.i/e111695.b/111495eclp.m
Meth Date : 17-Nov-1995 13:45 kathryn Quant Type: ISTD
Cal Date : 16-NOV-95 14:53 Cal File: e8069.d
Als bottle: 13
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
2-Fluorophenol	112.00	6.249	6.252	(0.819)	567937	87.0	87.0(R)
4 Phenol-d5	99.00	7.072	7.083	(0.927)	545470	60.9	60.9(R)
7 2-Chlorophenol-D4	132.00	7.387	7.398	(0.968)	698787	111	111(R)
10 1,4-Dichlorobenzene-d4	152.00	7.631	7.641	(1.000)	174752	40.0	
13 1,2-Dichlorobenzene-D4	152.00	7.889	7.899	(1.034)	259937	70.8	70.8(R)
17 N-Nitroso-di-n-propylamine	70.00	8.376	8.114	(1.098)	93245	14.0	~~14.0(Q)~~ ND RT MS
19 Nitrobenzene-d5	82.00	8.376	8.386	(0.882)	651990	70.0	70.0(R)
27 Naphthalene-d8	136.00	9.500	9.510	(1.000)	724367	40.0	
37 2-Fluorobiphenyl	172.00	11.354	11.364	(0.891)	779776	71.5	71.5(R)
41 2,6-Dinitrotoluene	165.00	12.743	12.295	(1.000)	36987	11.7	~~11.7(Q)~~ ND RT MS
44 Acenaphthene-d10	164.00	12.743	12.761	(1.000)	376786	40.0	
56 2,4,6-Tribromophenol	330.00	14.333	14.343	(1.125)	198155	117	117(R)
57 4-Bromophenyl-phenylether	248.00	14.326	14.744	(0.910)	12654	4.17	~~4.17(Q)~~ ND RT MS
60 Phenanthrene-d10	188.00	15.736	15.754	(1.000)	544807	40.0	
68 Terphenyl-d14	244.00	18.972	18.983	(0.892)	791827	76.2	76.2(R)
73 Chrysene-d12	240.00	21.264	21.288	(1.000)	461062	40.0	
79 Perylene-d12	264.00	25.273	25.305	(1.000)	401048	40.0	

C Flag Legend

- Qualifier signal failed the ratio test.
- Spike/Surrogate failed recovery limits.

Data File: /chem/aux/mse.i/e111695.b/e8080.d

Date : 16-NOV-95 23:12

ient ID: jp0329c

Instrument: mse.i

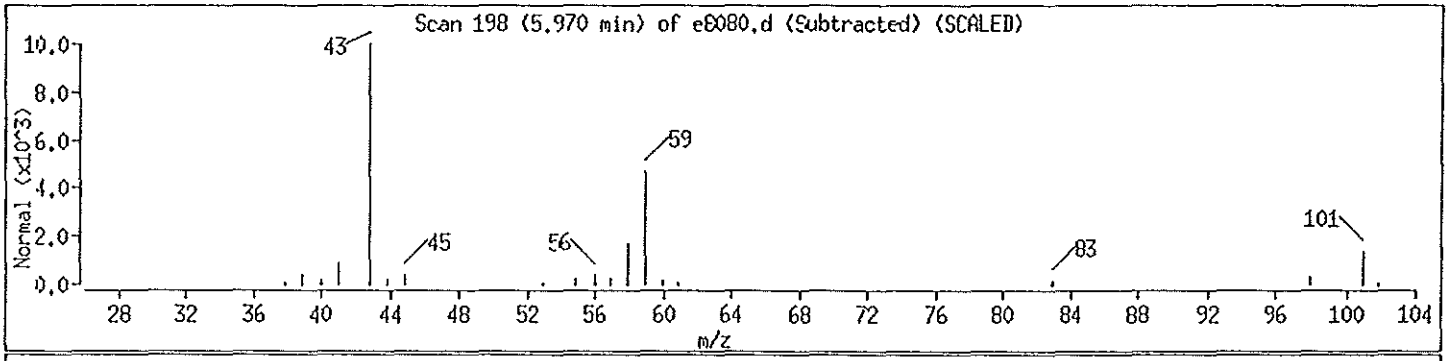
Sample Info: 17418n clj78-rb

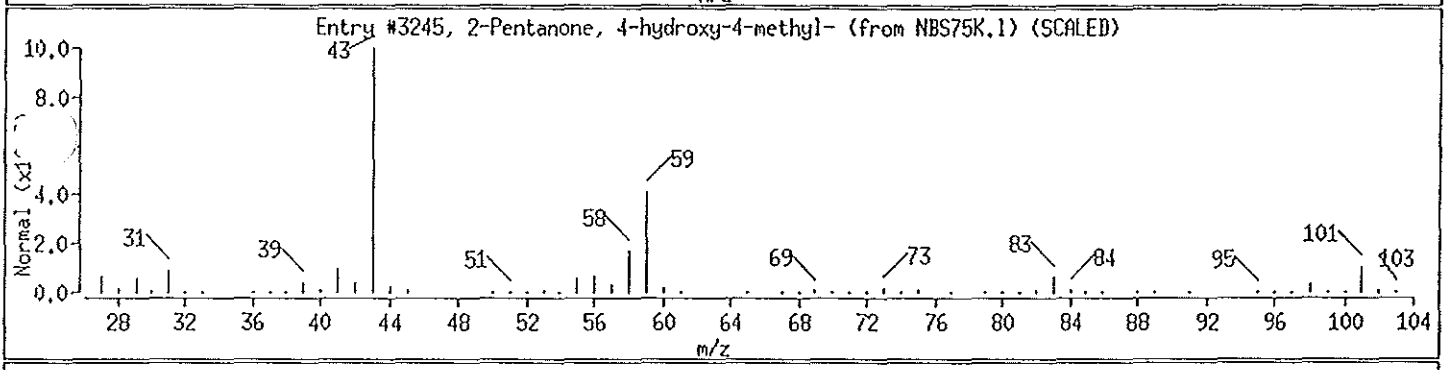
Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NBS75K.l	3245	72	C6H12O2	116





Data File: /chem/aux/mse.i/e111695.b/e8080.d

Date : 16-NOV-95 23:12

Client ID: jp0329c

Instrument: mse.i

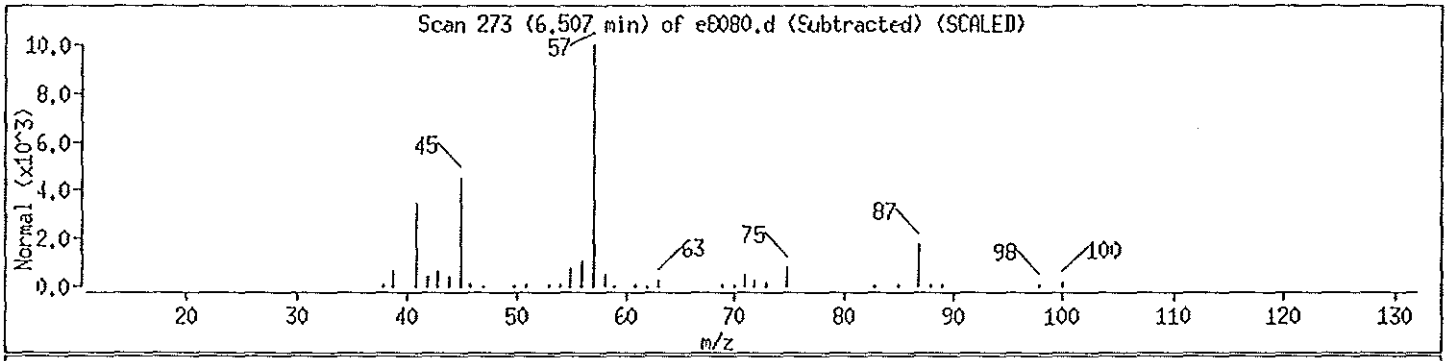
Sample Info: 17418n clj78-rb

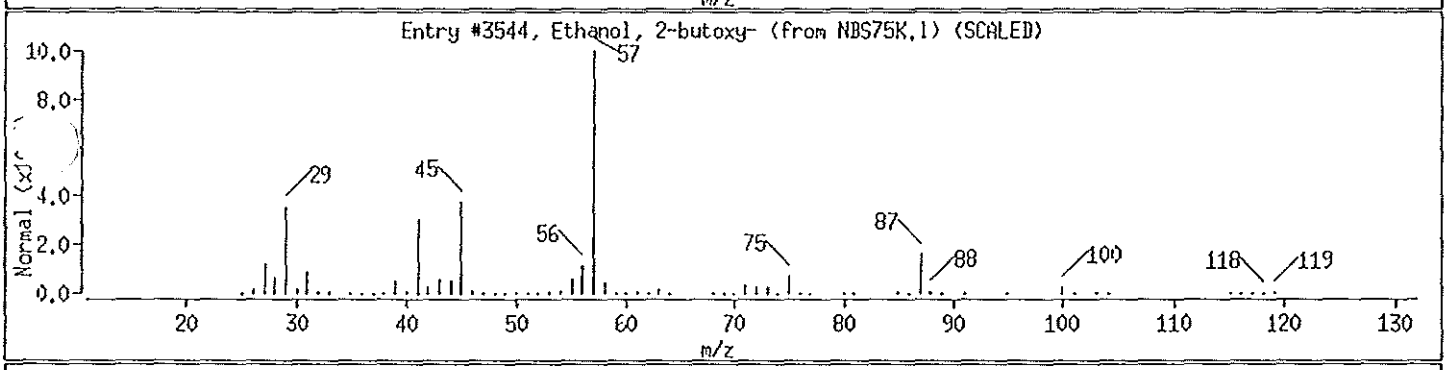
Operator: J. Kelly

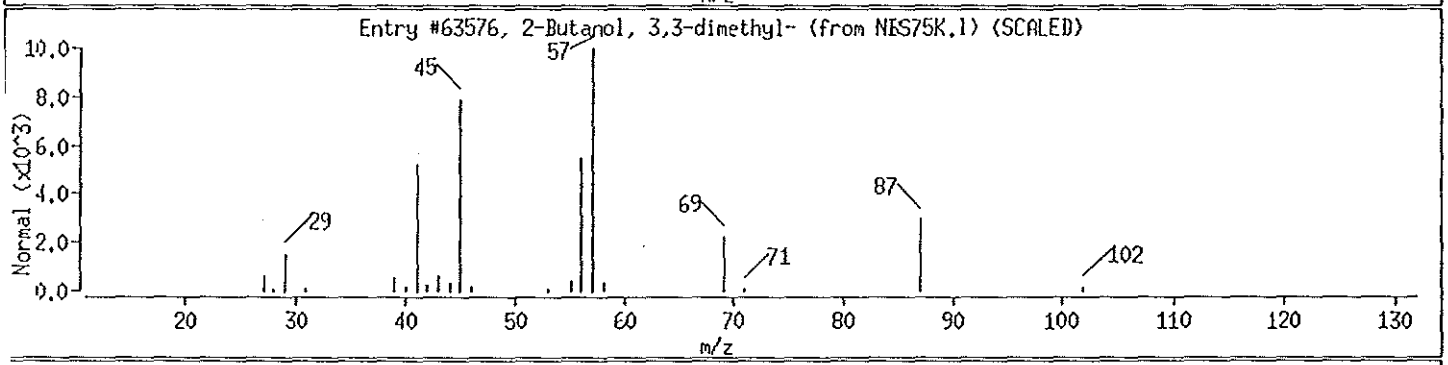
Column phase: J&W DB-5

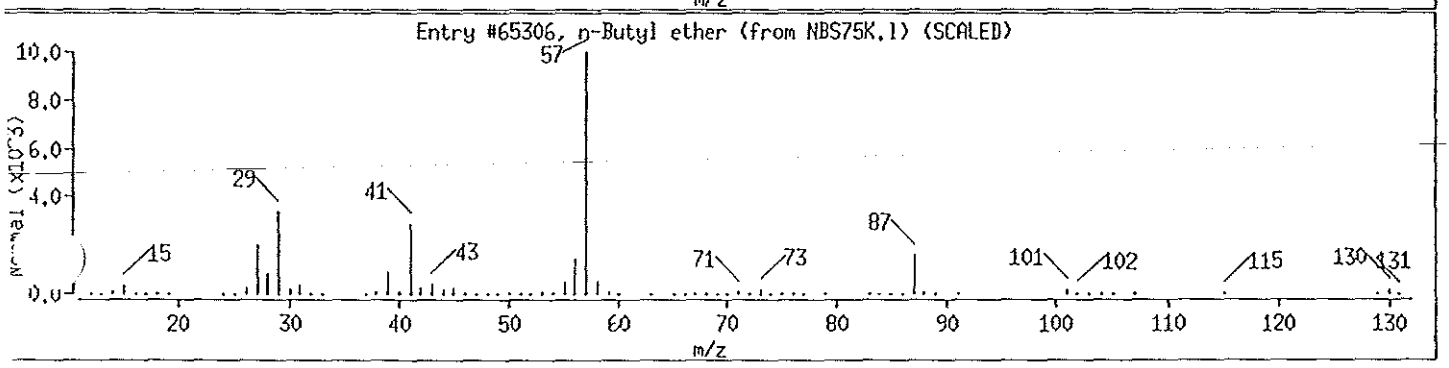
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethanol, 2-butoxy-	111-76-2	NBS75K.l	3544	78	C6H1402	118
2-Butanol, 3,3-dimethyl-	464-07-3	NBS75K.l	63576	59	C6H140	102
n-Butyl ether	142-96-1	NBS75K.l	65306	25	C8H180	130









Data File: /chem/aux/mse.i/e111695.b/e8080.d

Date : 16-NOV-95 23:12

)ient ID: jp0329c

Instrument: mse.i

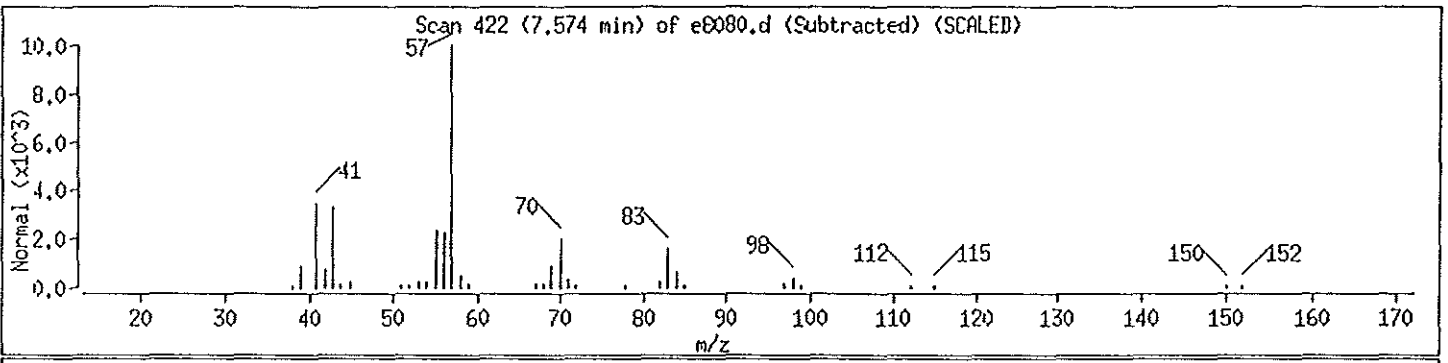
Sample Info: 17418n clj78-rb

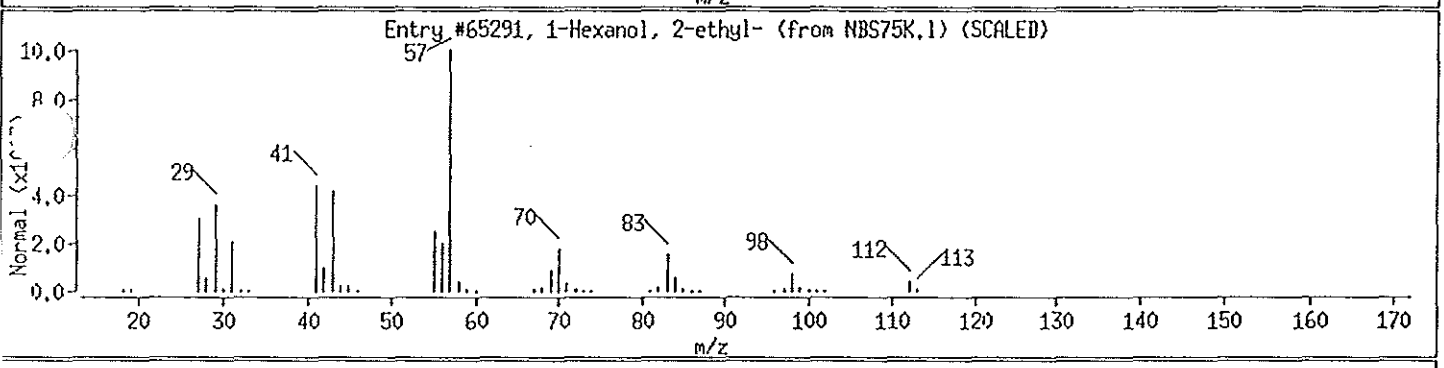
Operator: J. Kelly

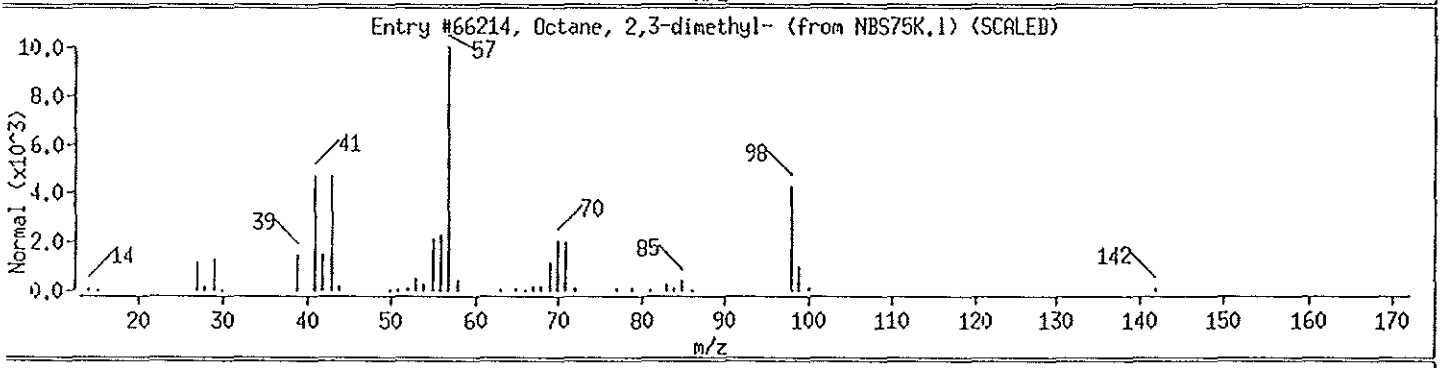
Column phase: J&W DB-5

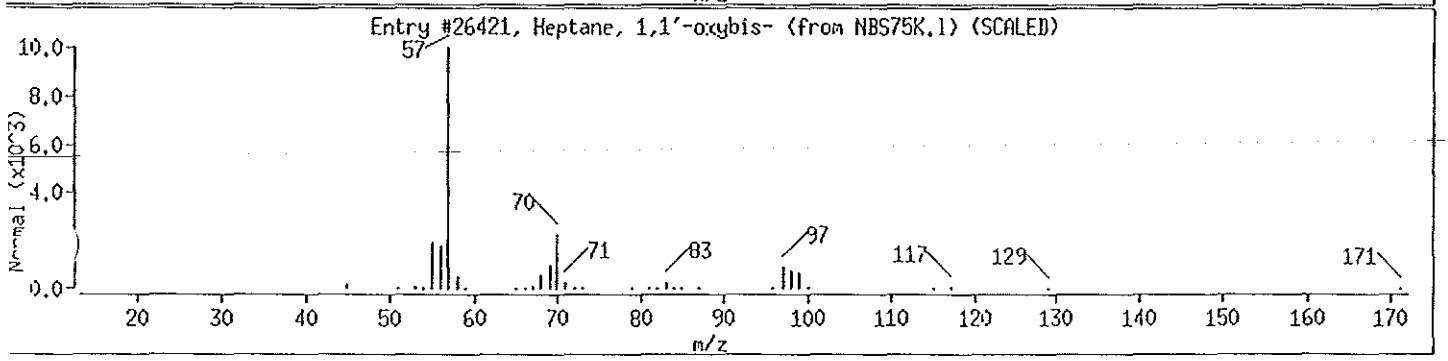
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Hexanol, 2-ethyl-	104-76-7	NBS75K.l	65291	83	C8H18O	130
Octane, 2,3-dimethyl-	7146-60-3	NBS75K.l	66214	59	C10H22	142
Heptane, 1,1'-oxybis-	629-64-1	NBS75K.l	26421	45	C14H30O	214









Data File: /chem/aux/mse.i/e111695.b/e8080.d

Date : 16-NOV-95 23:12

Client ID: jp0329c

Instrument: mse.i

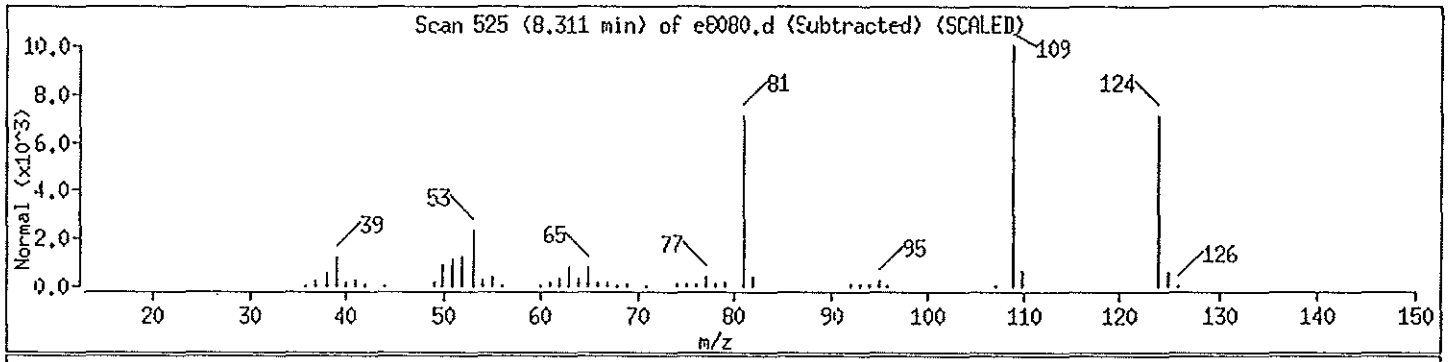
Sample Info: 17418n clj78-rb

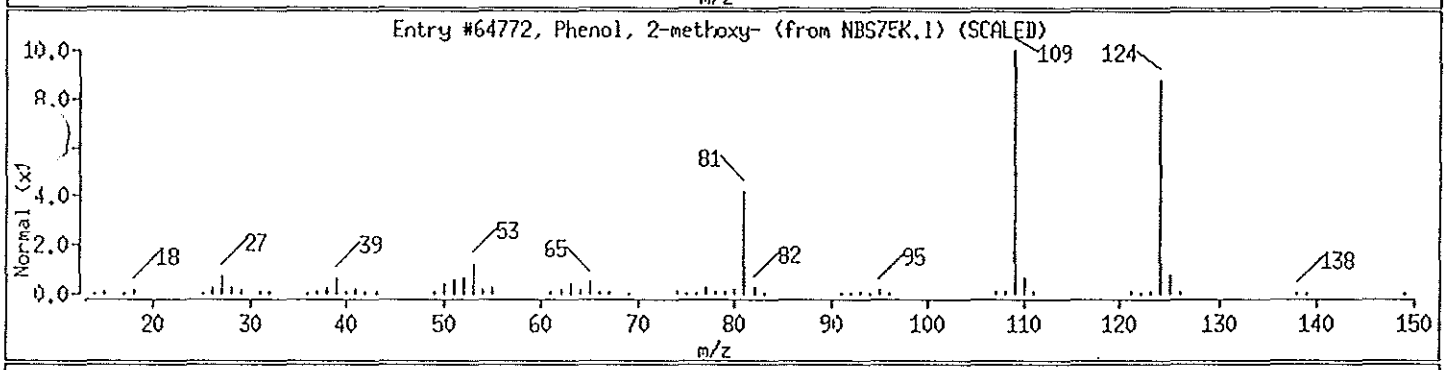
Operator: J. Kelly

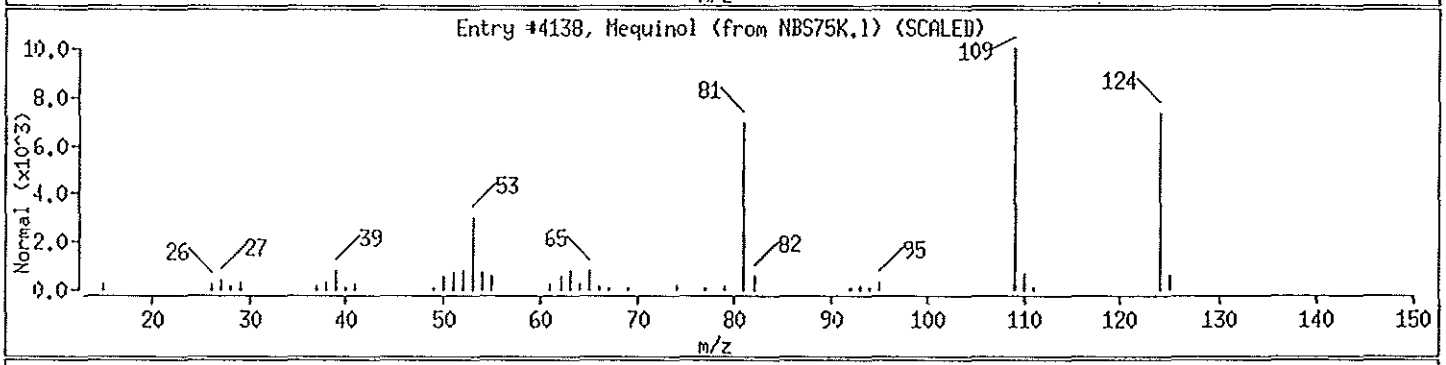
Column phase: J&W DB-5

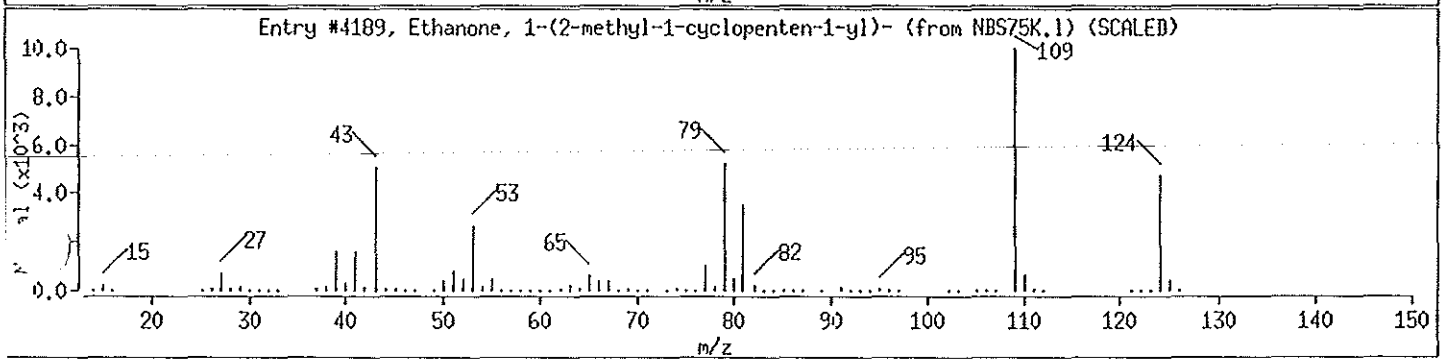
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Phenol, 2-methoxy-	90-05-1	NBS75K.1	64772	95	C7H8O2	124
Mequinol	150-76-5	NBS75K.1	4138	91	C7H8O2	124
Ethanone, 1-(2-methyl-1-cyclopenten-1-yl	3168-90-9	NBS75K.1	4189	86	C8H12O	124









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Date : 16-NOV-95 23:12

ient ID: jp0329c

Instrument: mse.i

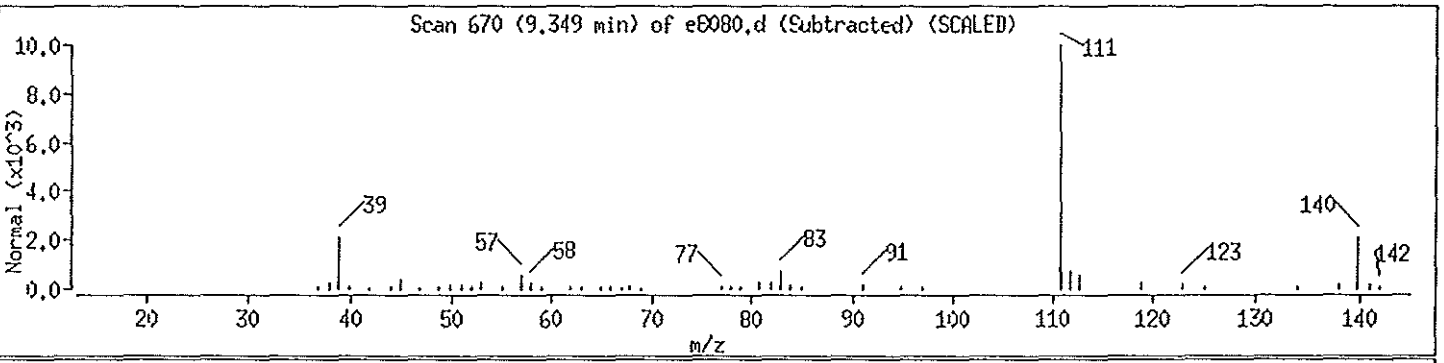
ample Info: 17418n clj78-rb

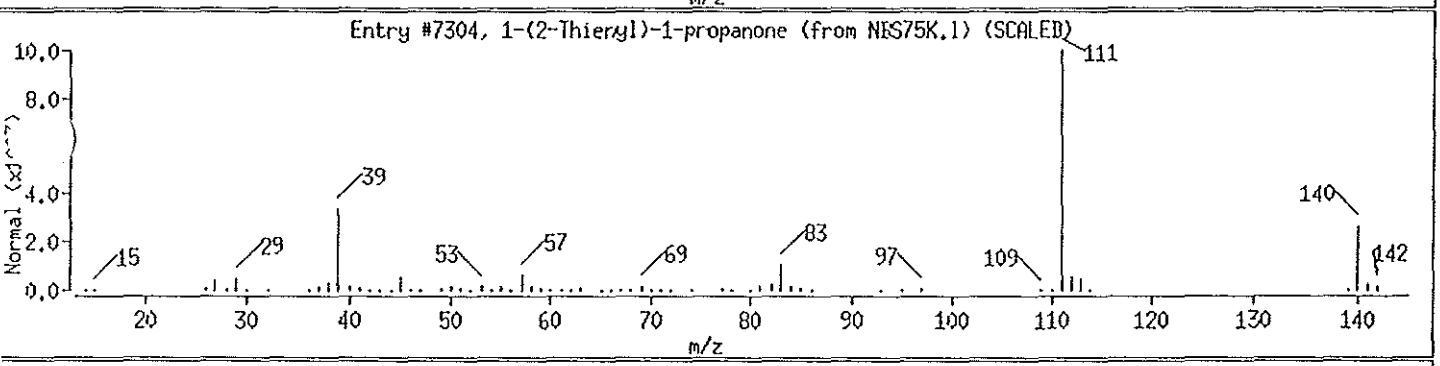
Operator: J. Kelly

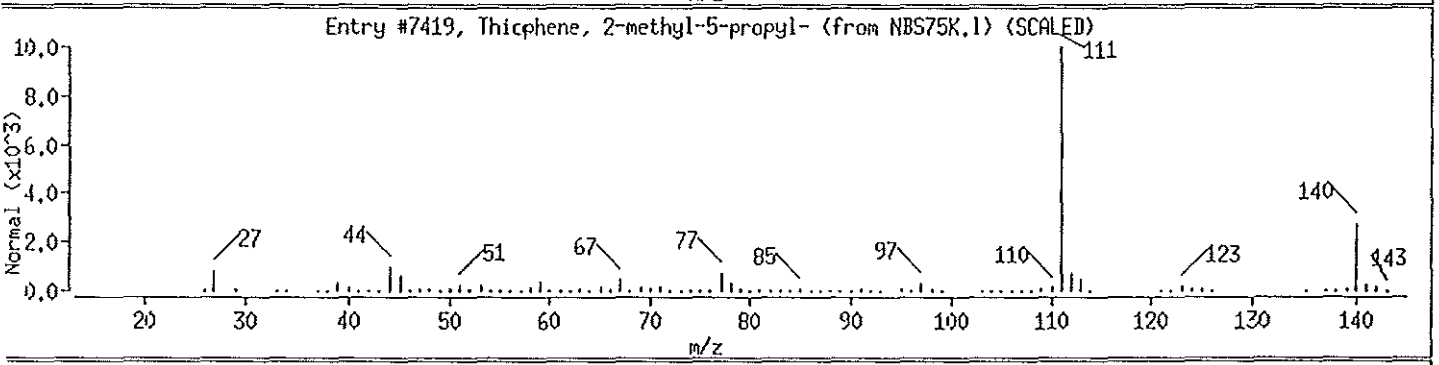
Column phase: J&W DB-5

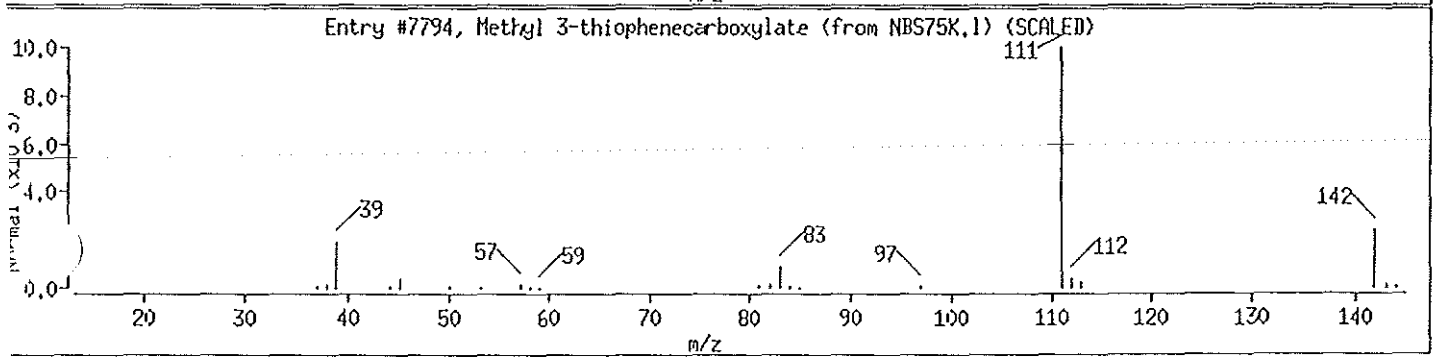
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-(2-Thienyl)-1-propanone	13679-75-9	NBS75K.l	7304	93	C7H8OS	140
Thiophene, 2-methyl-5-propyl-	33933-73-2	NBS75K.l	7419	86	C8H12S	140
Methyl 3-thiophenecarboxylate	0-00-0	NBS75K.l	7794	50	C6H6O2S	142









Data File: /chem/aux/mse.i/e111695.b/e8080.d

Date : 16-NOV-95 23:12

Client ID: jp0329c

Sample Info: 17418n clj78-rb

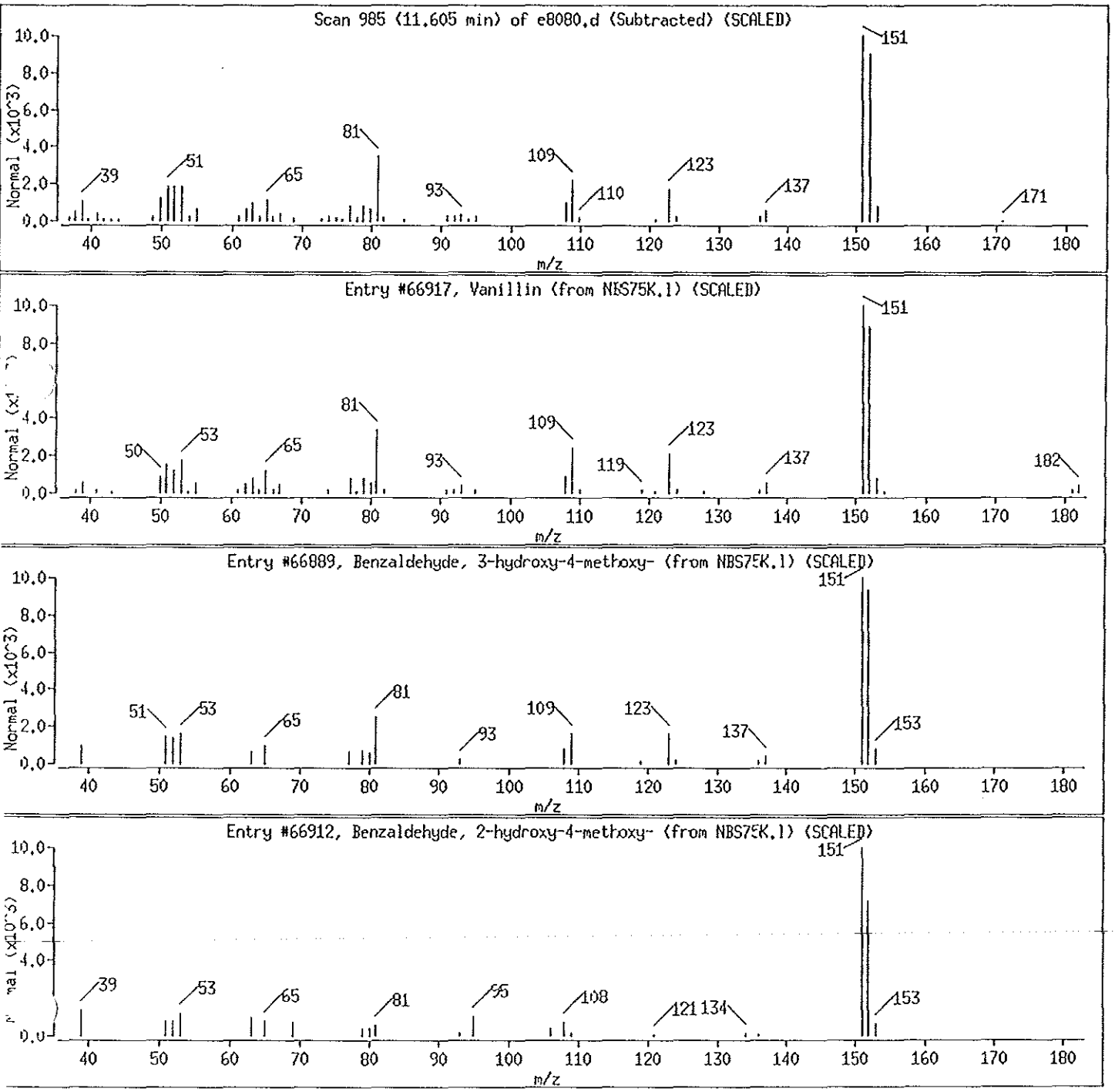
Instrument: mse.i

Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Vanillin	121-33-5	NBS75K.l	66917	97	C8H8O3	152
Benzaldehyde, 3-hydroxy-4-methoxy-	621-59-0	NBS75K.l	66889	96	C8H8O3	152
Benzaldehyde, 2-hydroxy-4-methoxy-	673-22-3	NBS75K.l	66912	80	C8H8O3	152



Data File: /chem/aux/mse.i/e111695.b/e8080.d

Date : 16-NOV-95 23:12

Client ID: jp0329c

Instrument: mse.i

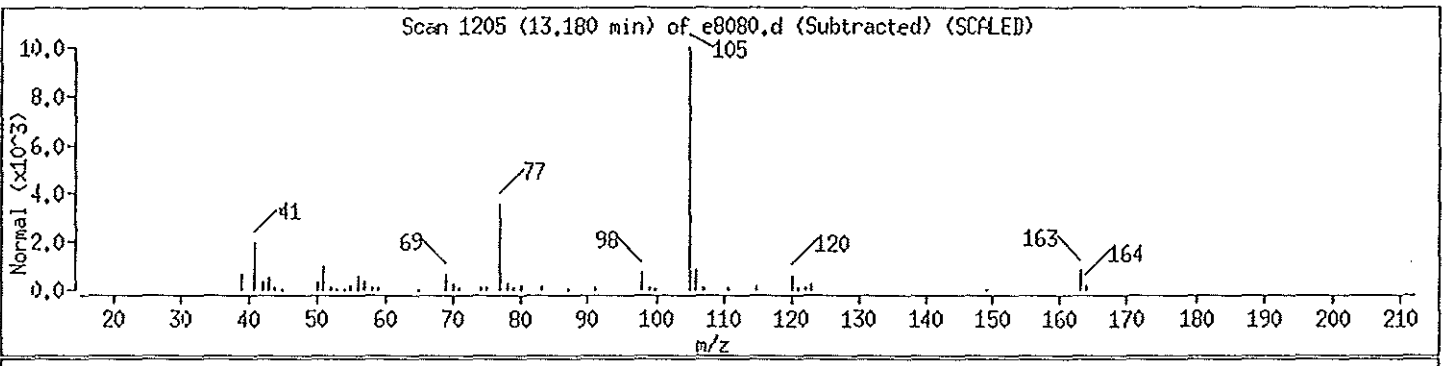
Sample Info: 17418n clj78-rb

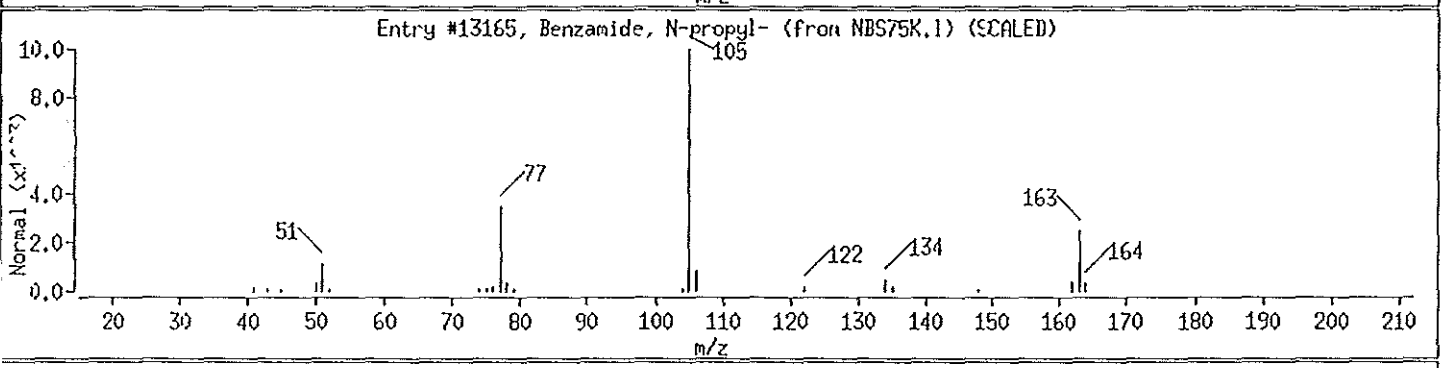
Operator: J. Kelly

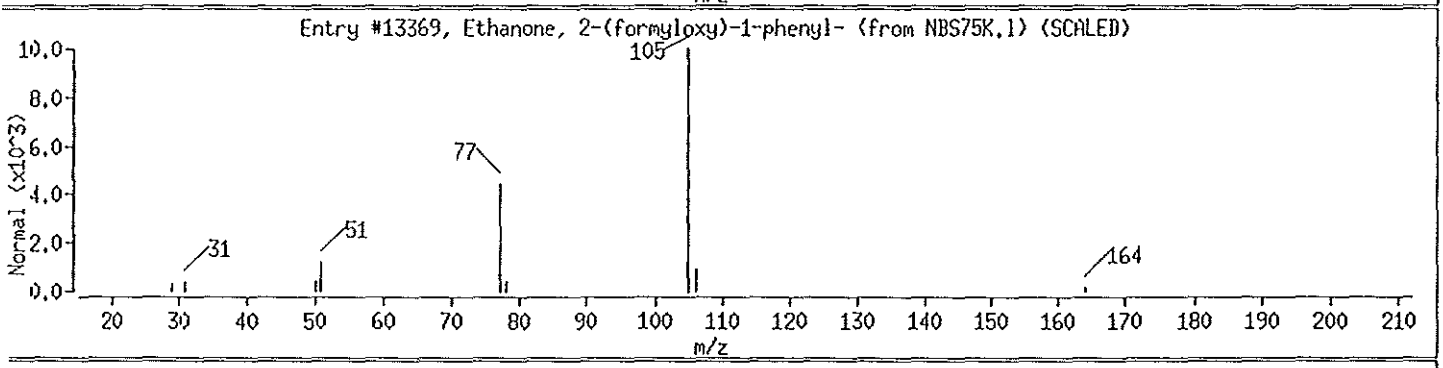
Column phase: J&W DB-5

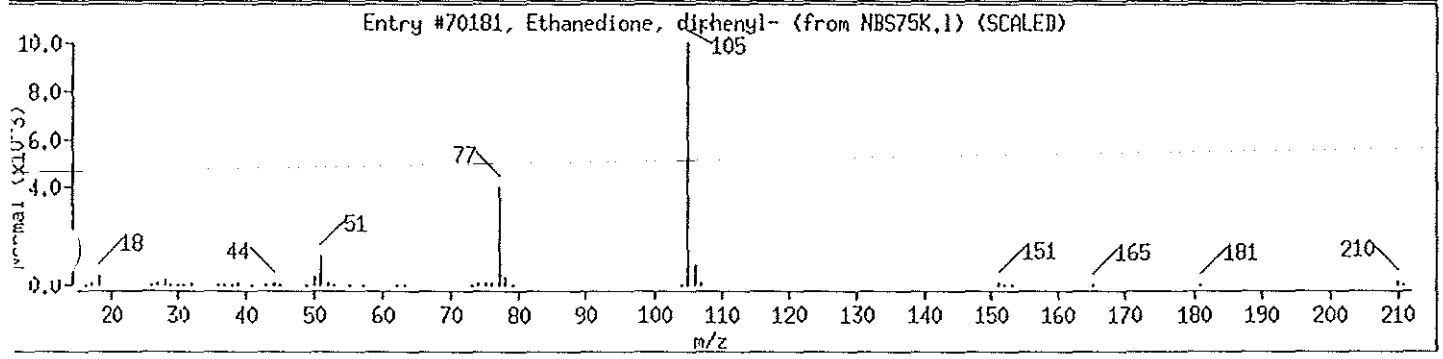
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzamide, N-propyl-	10546-70-0	NBS75K.l	13165	64	C10H13NO	163
Ethanone, 2-(formyloxy)-1-phenyl-	55153-12-3	NBS75K.l	13369	59	C9H8O3	164
Ethanedione, diphenyl-	134-81-6	NBS75K.l	70181	53	C14H10O2	210









1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0358

CLJ78TW001

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0323C

Sample wt/vol: 930 (g/mL) ML Lab File ID: E8074

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

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

CAS NO.	COMPOUND		Q
108-95-2	Phenol	11	U
111-44-4	bis(2-Chloroethyl)ether	11	U
95-57-8	2-Chlorophenol	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
95-48-7	2-Methylphenol	11	U
108-60-1	2,2'-oxybis(1-Chloropropane)	11	U
106-44-5	4-Methylphenol	11	U
621-64-7	N-Nitroso-di-n-propylamine	11	U
67-72-1	Hexachloroethane	11	U
98-95-3	Nitrobenzene	11	U
78-59-1	Isophorone	11	U
88-75-5	2-Nitrophenol	11	U
105-67-9	2,4-Dimethylphenol	11	U
111-91-1	bis(2-Chloroethoxy)methane	11	U
120-83-2	2,4-Dichlorophenol	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
91-20-3	Naphthalene	11	U
106-47-8	4-Chloroaniline	11	U
87-68-3	Hexachlorobutadiene	11	U
59-50-7	4-Chloro-3-methylphenol	11	U
91-57-6	2-Methylnaphthalene	11	U
77-47-4	Hexachlorocyclopentadiene	11	U
88-06-2	2,4,6-Trichlorophenol	11	U
95-95-4	2,4,5-Trichlorophenol	11	U
91-58-7	2-Chloronaphthalene	11	U
88-74-4	2-Nitroaniline	11	U
131-11-3	Dimethylphthalate	11	U
208-96-8	Acenaphthylene	11	U
606-20-2	2,6-Dinitrotoluene	11	U
99-09-2	3-Nitroaniline	11	U
83-32-9	Acenaphthene	11	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0359 CLJ78TW001

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0323C

Sample wt/vol: 930 (g/mL) ML Lab File ID: E8074

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	54	U
100-02-7	4-Nitrophenol	54	U
132-64-9	Dibenzofuran	11	U
121-14-2	2,4-Dinitrotoluene	11	U
84-66-2	Diethylphthalate	11	U
7005-72-3	4-Chlorophenyl-phenylether	11	U
86-73-7	Fluorene	11	U
100-01-6	4-Nitroaniline	11	U
534-52-1	4,6-Dinitro-2-methylphenol	27	U
101-55-3	4-Bromophenyl-phenylether	11	U
86-30-6	N-Nitrosodiphenylamine (1)	11	U
118-74-1	Hexachlorobenzene	11	U
87-86-5	Pentachlorophenol	11	U
85-01-8	Phenanthrene	11	U
120-12-7	Anthracene	11	U
86-74-8	Carbazole	11	U
84-74-2	Di-n-butylphthalate	11	U
206-44-0	Fluoranthene	11	U
129-00-0	Pyrene	11	U
85-68-2	Butylbenzylphthalate	11	U
91-94-1	3,3'-Dichlorobenzidine	11	U
56-55-3	Benzo(a)anthracene	11	U
218-01-9	Chrysene	11	U
117-81-7	bis(2-Ethylhexyl)phthalate	20	
117-84-0	Di-n-octylphthalate	11	U
205-99-2	Benzo(b)fluoranthene	11	U
207-08-9	Benzo(k)fluoranthene	11	U
~~50-32-8~~	~~Benzo(a)pyrene~~	~~11~~	~~U~~
193-39-5	Indeno(1,2,3-cd)pyrene	11	U
53-70-3	Dibenz(a,h)anthracene	11	U
191-24-2	Benzo(g,h,i)perylene	11	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

0360

CLJ78TW001

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0323C

Sample wt/vol: 930 (g/mL) ML Lab File ID: E8074

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 4

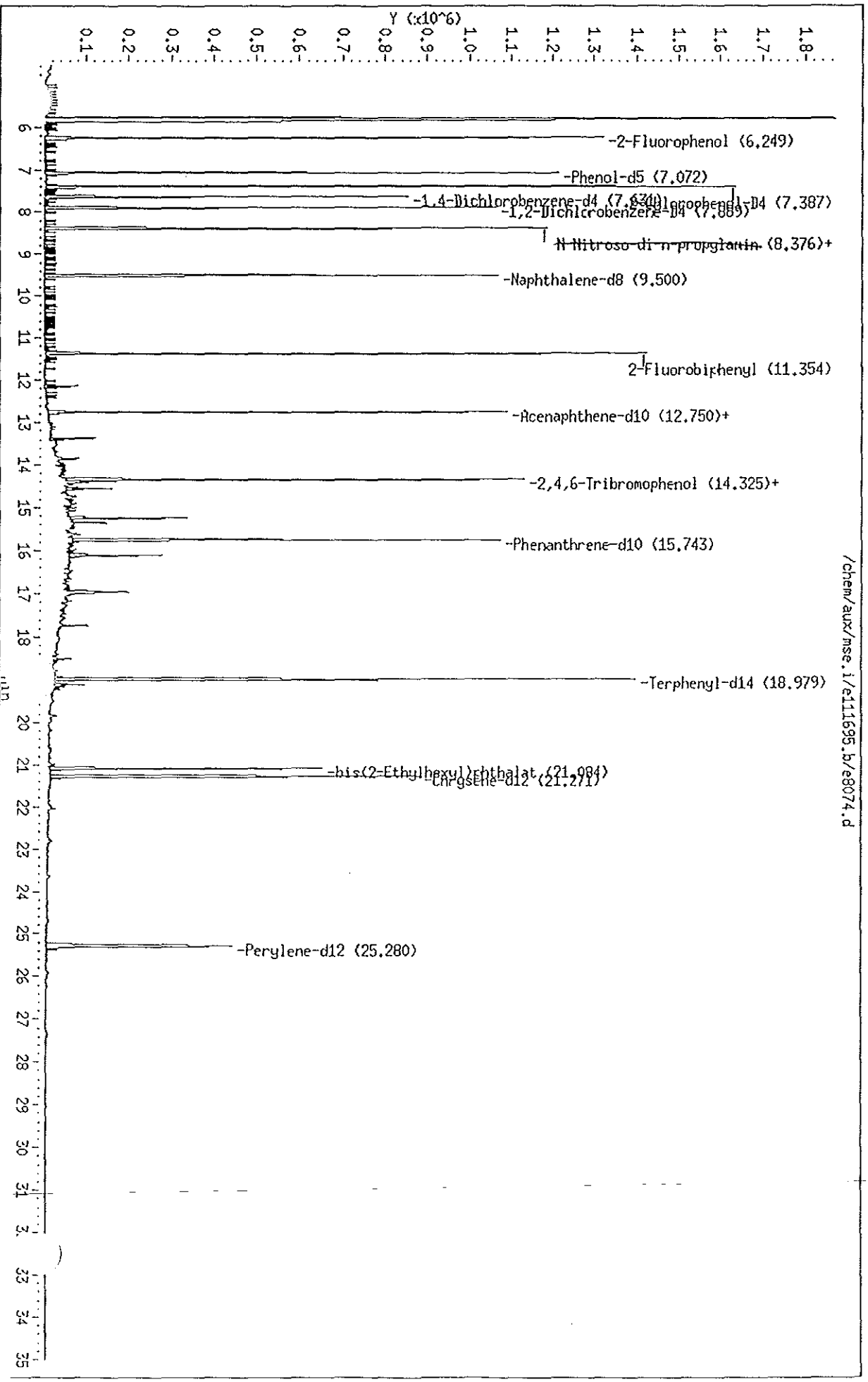
CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 127-18-4	Tetrachloroethylene	5.79	91	JN
2. 593-45-3	Octadecane	15.24	10	JN
3. 629-78-7	Heptadecane	16.10	8	JN
4. 112-95-8	Eicosane	16.94	5	JN

Data File: /chem/aux/mse.i/e111695.b/e8074.d
Date : 16-NOV-95 18:41
Client ID: jp0323c
Sample Info: 17418n clj78tw001

Column phase: J&W DB-5

Instrument: mse.i
Operator: J. Kelly
Column diameter: 0.25



OHM Analytical Division

BASE NEUTRAL QUANT AND RATIO REPORT

Data file : /chem/aux/mse.i/e111695.b/e8074.d
Lab Smp Id: Client Smp ID: jp0323c
Inj Date : 16-NOV-95 18:41
Operator : J. Kelly Inst ID: mse.i
Smp Info : 17418n clj78tw001
Misc Info : jp0323c,n1c51710,m1,1,1
Comment :
Method : /chem/aux/mse.i/e111695.b/111495eclp.m
Meth Date : 17-Nov-1995 13:45 kathryn Quant Type: ISTD
Cal Date : 16-NOV-95 14:53 Cal File: e8069.d
Als bottle: 7
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
	2-Fluorophenol	112.00	6.249	6.252	(0.819)	572803	76.8	76.8(R)
4	Phenol-d5	99.00	7.072	7.083	(0.927)	593201	58.0	58.0(R)
7	2-Chlorophenol-D4	132.00	7.395	7.398	(0.969)	692351	96.0	96.0(R)
10	1,4-Dichlorobenzene-d4	152.00	7.631	7.641	(1.000)	199461	40.0	
13	1,2-Dichlorobenzene-D4	152.00	7.889	7.899	(1.034)	250740	59.9	59.9(R)
17	N-Nitroso-di-n-propylamine	70.00	8.376	8.114	(1.098)	91331	12.0	~~12.0(Q)~~ ND, Rt, MS
19	Nitrobenzene-d5	82.00	8.376	8.386	(0.882)	647198	63.1	63.1(R)
27	Naphthalene-d8	136.00	9.500	9.510	(1.000)	797721	40.0	
37	2-Fluorobiphenyl	172.00	11.361	11.364	(0.891)	765677	65.0	65.0(R)
44	Acenaphthene-d10	164.00	12.750	12.761	(1.000)	406752	40.0	
48	2,4-Dinitrotoluene	165.00	12.750	13.090	(1.000)	52980	12.2	~~12.2(Q)~~ ND, Rt, MS
56	2,4,6-Tribromophenol	330.00	14.333	14.343	(1.124)	218336	120	120(R)
57	4-Bromophenyl-phenylether	248.00	14.333	14.744	(0.910)	13852	4.16	~~4.16(Q)~~ ND, Rt, MS
60	Phenanthrene-d10	188.00	15.743	15.754	(1.000)	597573	40.0	
68	Terphenyl-d14	244.00	18.979	18.983	(0.892)	808766	69.4	69.4(R)
70	bis(2-Ethylhexyl)phthalate	149.00	21.084	21.095	(0.991)	291454	18.6	18.6
73	Chrysene-d12	240.00	21.271	21.288	(1.000)	517296	40.0	
79	Perylene-d12	264.00	25.280	25.305	(1.000)	470399	40.0	

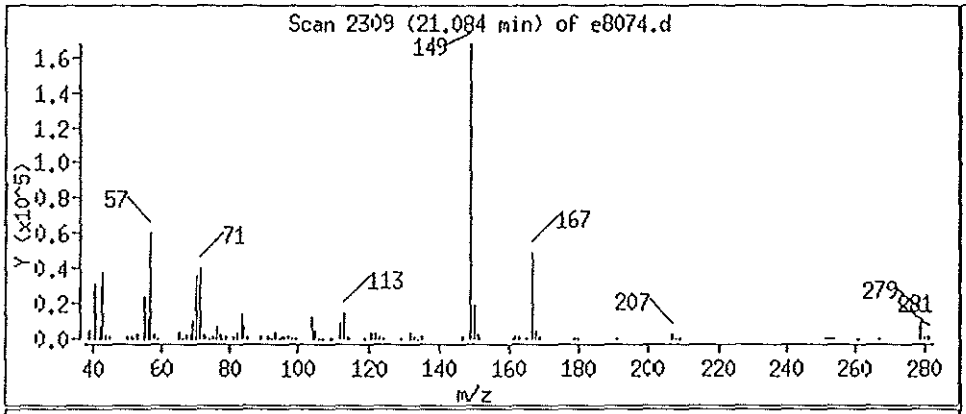
C Flag Legend

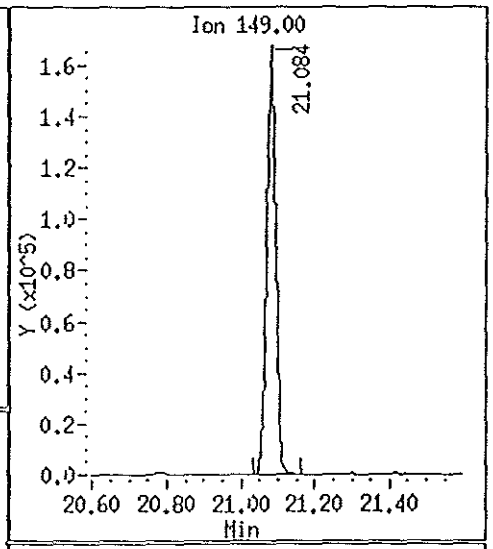
- Qualifier signal failed the ratio test.
- Spike/Surrogate failed recovery limits.

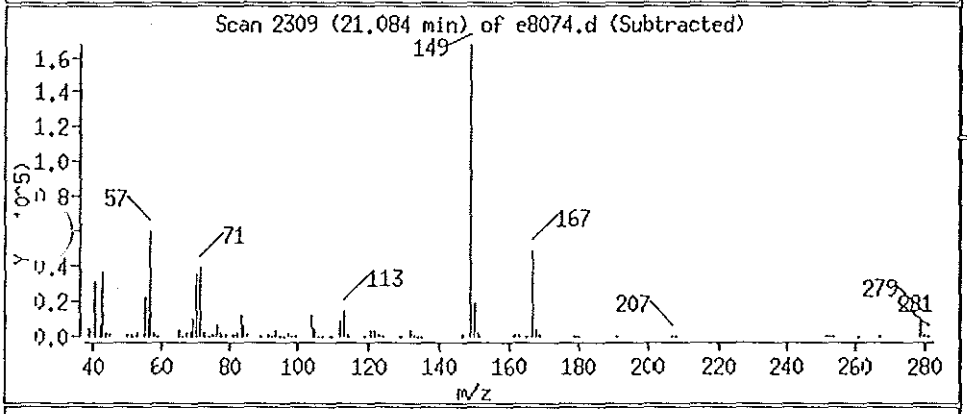
Data File: /chem/aux/mse.i/e111695.b/e8074.d
Date : 16-NOV-95 18:41
Client ID: jp0323c
Sample Info: 17418n clj78tw001

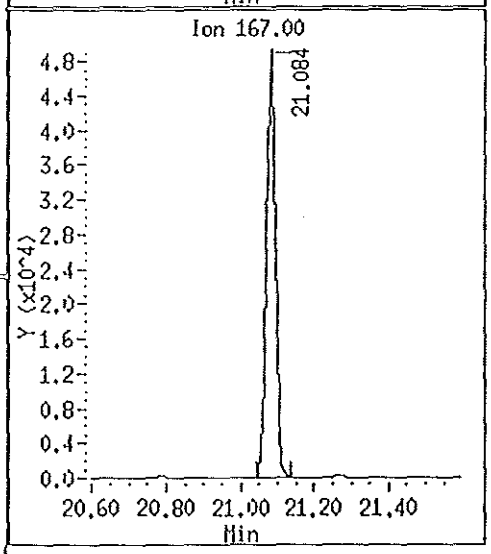
Instrument: mse.i
Operator: J. Kelly
Column phase: J&W DB-5
Column diameter: 0.25

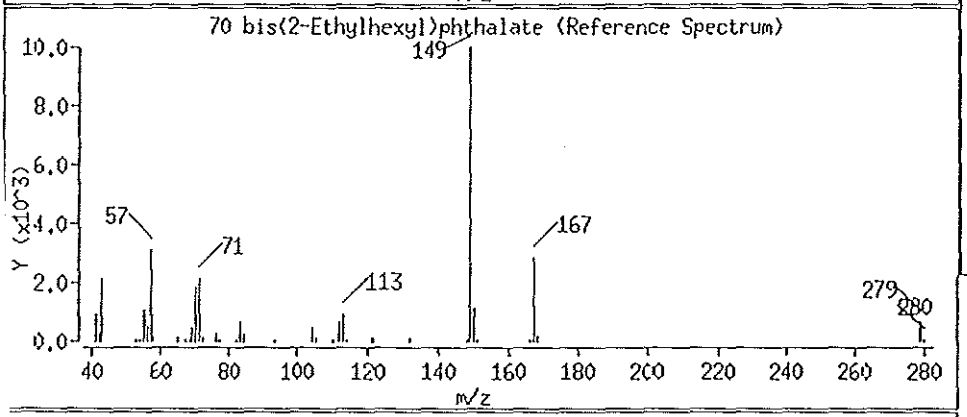
70 bis(2-Ethylhexyl)phthalate

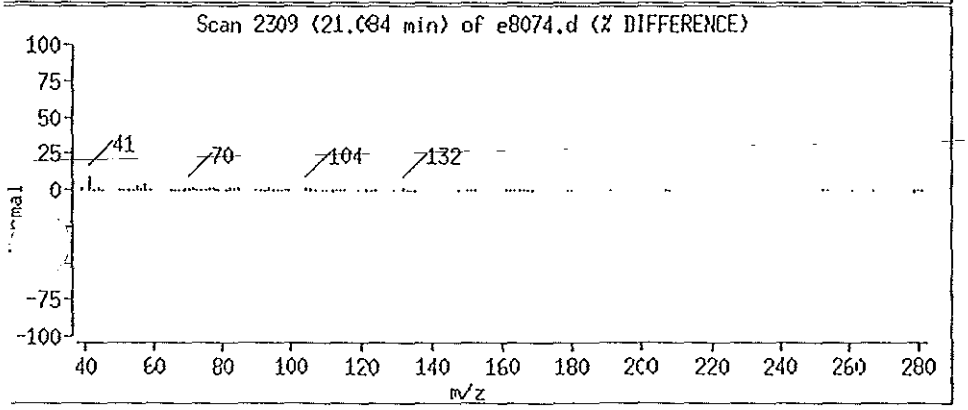












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Date : 16-NOV-95 18:41

)ient ID: jp0323c

Instrument: mse.i

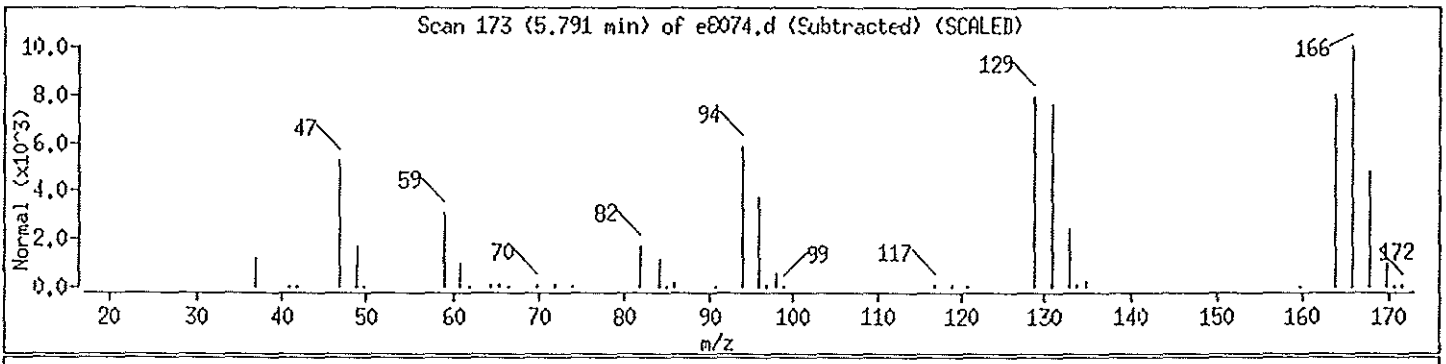
Sample Info: 17418n clj78tw001

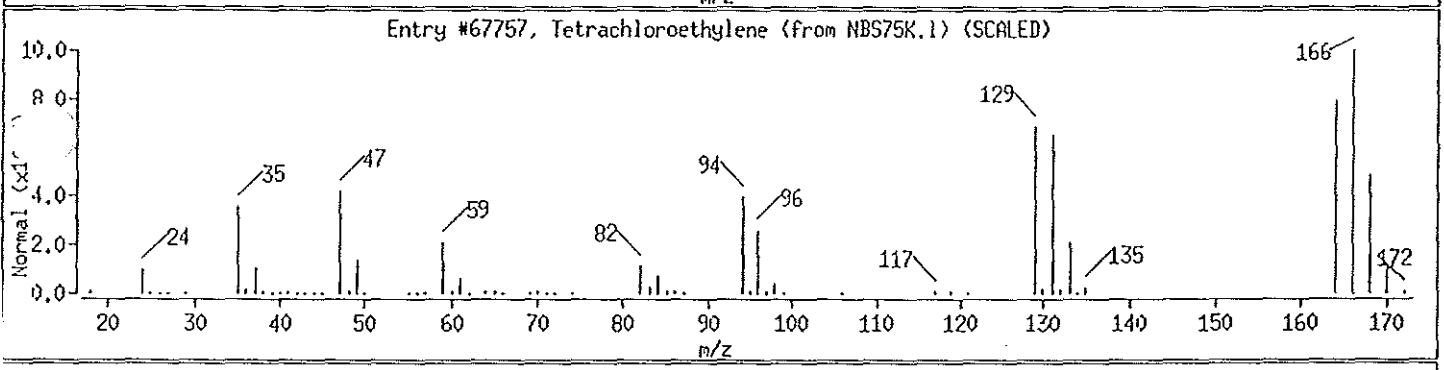
Operator: J. Kelly

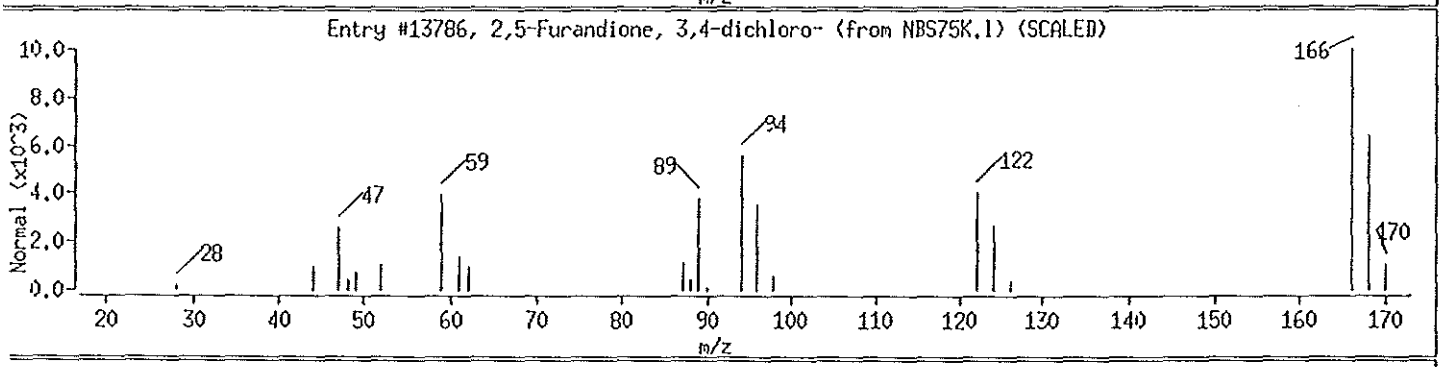
Column phase: J&W DB-5

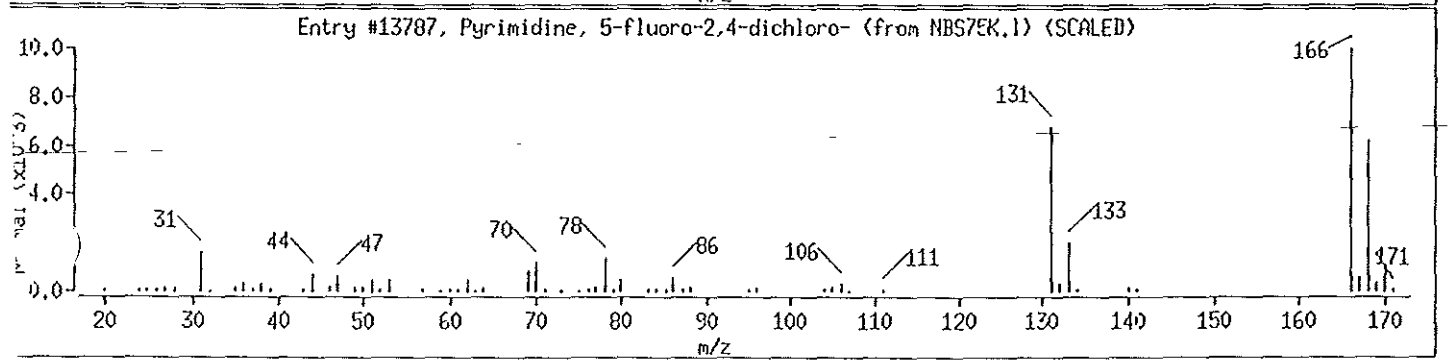
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Tetrachloroethylene	127-18-4	NBS75K.l	67757	99	C2Cl4	164
2,5-Furandione, 3,4-dichloro-	1122-17-4	NBS75K.l	13786	38	C4Cl2O3	166
Pyrimidine, 5-fluoro-2,4-dichloro-	2927-71-1	NBS75K.l	13787	35	C4HCl2FN2	166





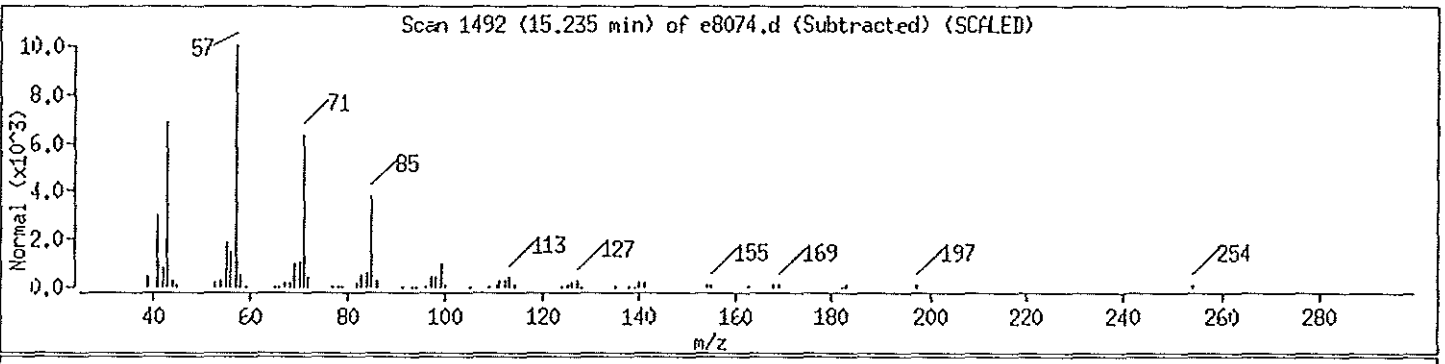


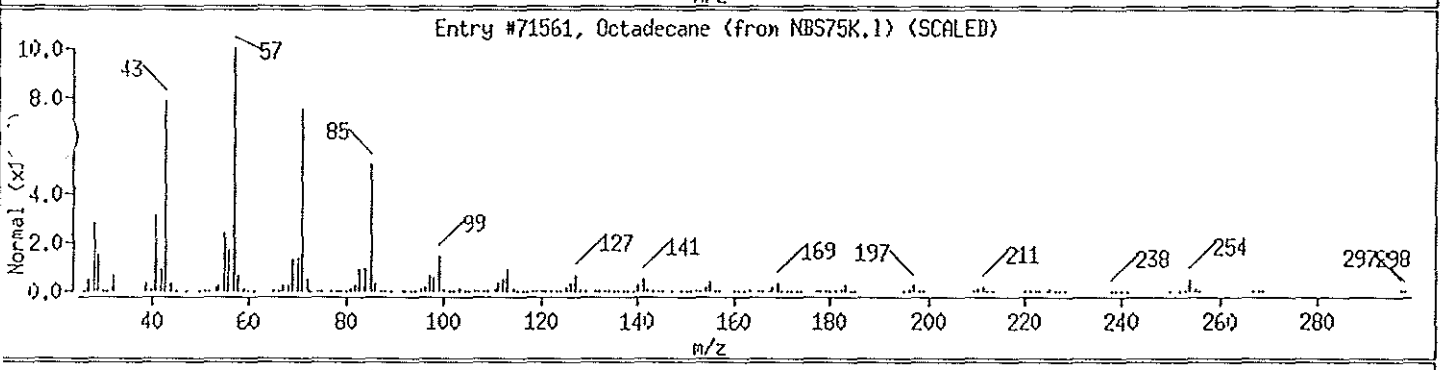


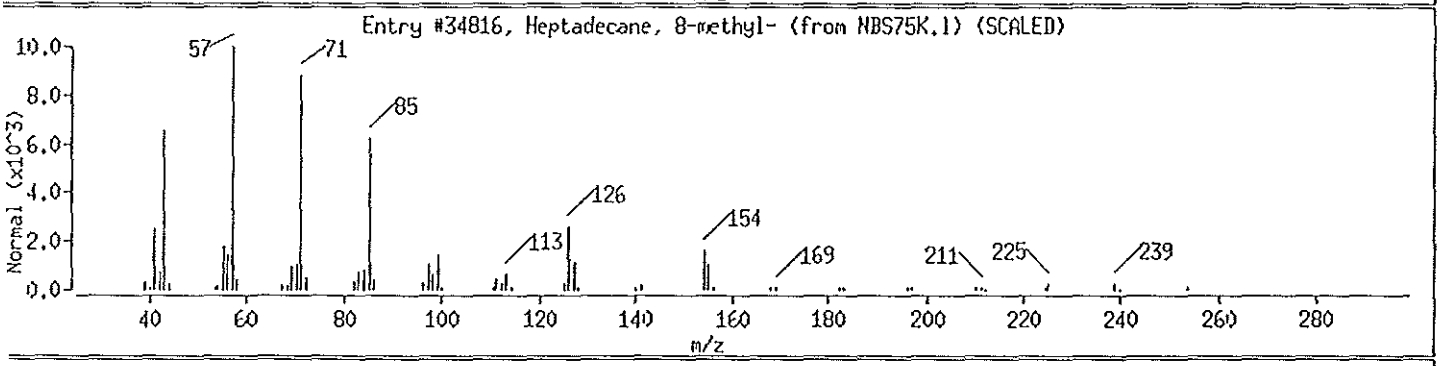
Data File: /chem/aux/mse.i/e111695.b/e8074.d
Date : 16-NOV-95 18:41
Client ID: jp0323c
Sample Info: 17418n clj78tw001

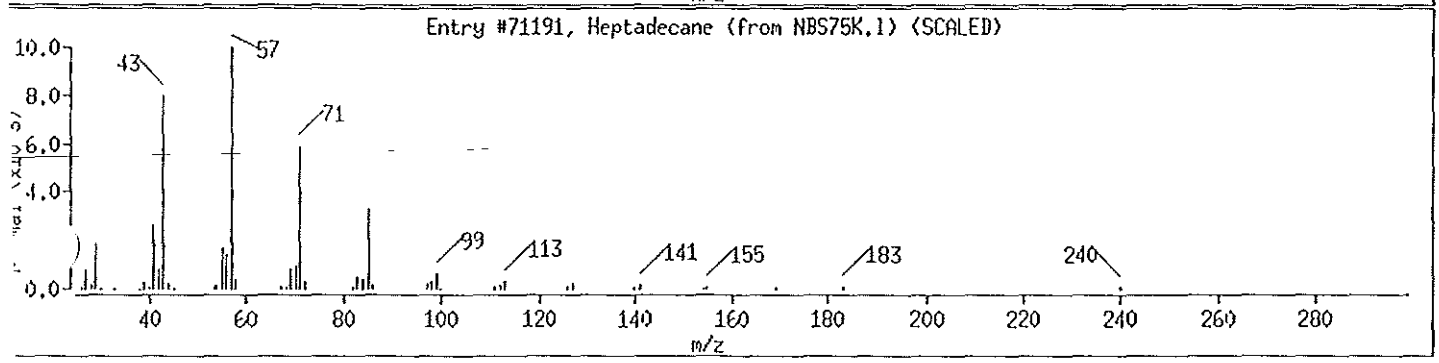
Instrument: mse.i
Operator: J. Kelly
Column phase: J&W DB-5
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Octadecane	593-45-3	NBS75K.l	71561	97	C18H38	254
Heptadecane, 8-methyl-	13287-23-5	NBS75K.l	34816	94	C18H38	254
Heptadecane	629-78-7	NBS75K.l	71191	91	C17H36	240









Data File: /chem/aux/mse.i/e111695.b/e8074.d

Date : 16-NOV-95 18:41

)ient ID: jp0323c

Instrument: mse.i

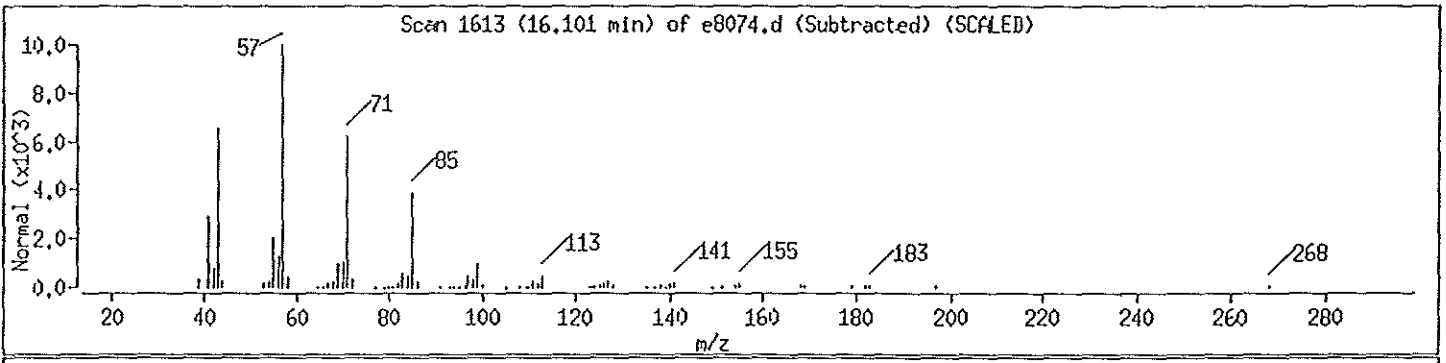
ɔample Info: 17418n clj78tw001

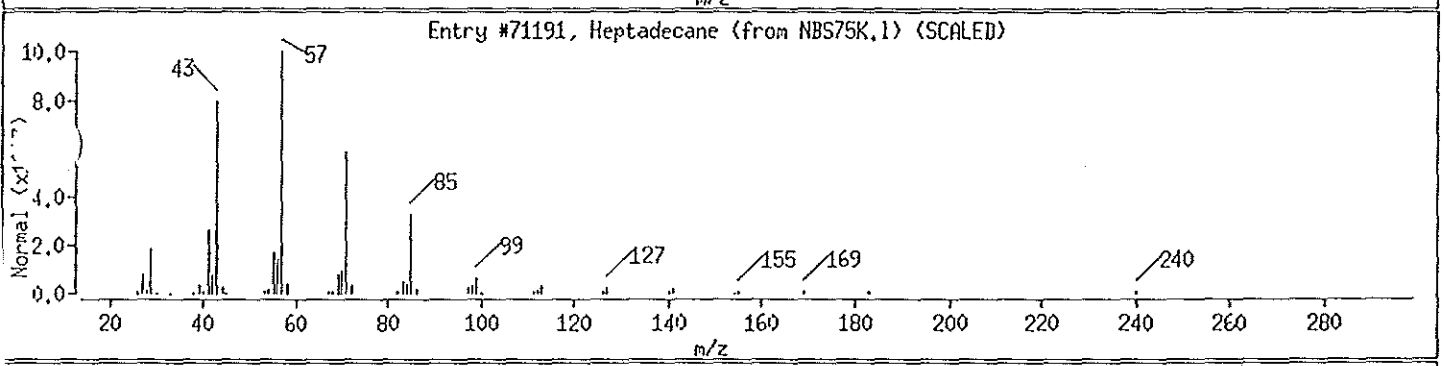
Operator: J. Kelly

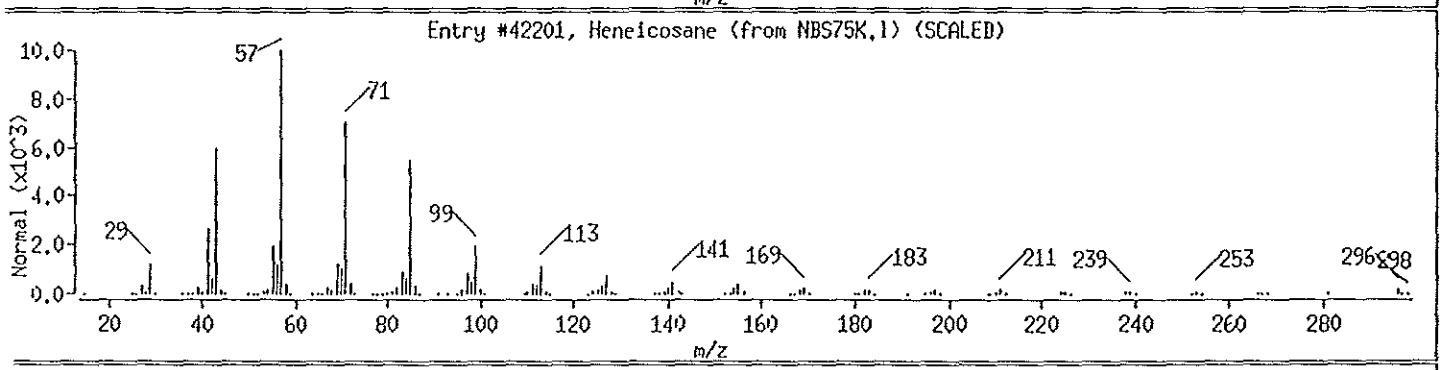
Column phase: J&W DB-5

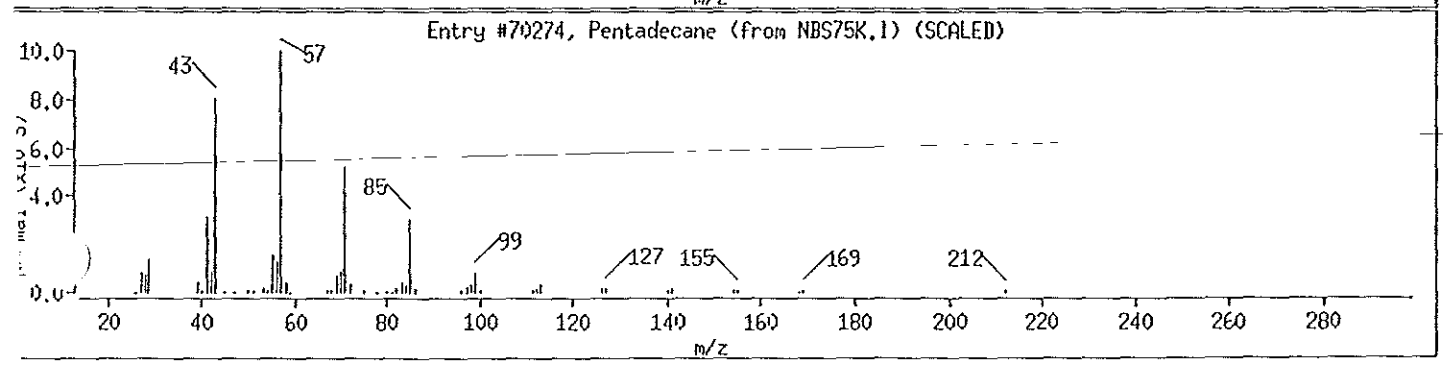
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Heptadecane	629-78-7	NBS75K.l	71191	91	C17H36	240
Heneicosane	629-94-7	NBS75K.l	42201	90	C21H44	296
Pentadecane	629-62-9	NBS75K.l	70274	90	C15H32	212









Data File: /chem/aux/mse.i/e111695.b/e8074.d
Date : 16-NOV-95 18:41
Client ID: jp0323c
Sample Info: 17418n clj78tw001

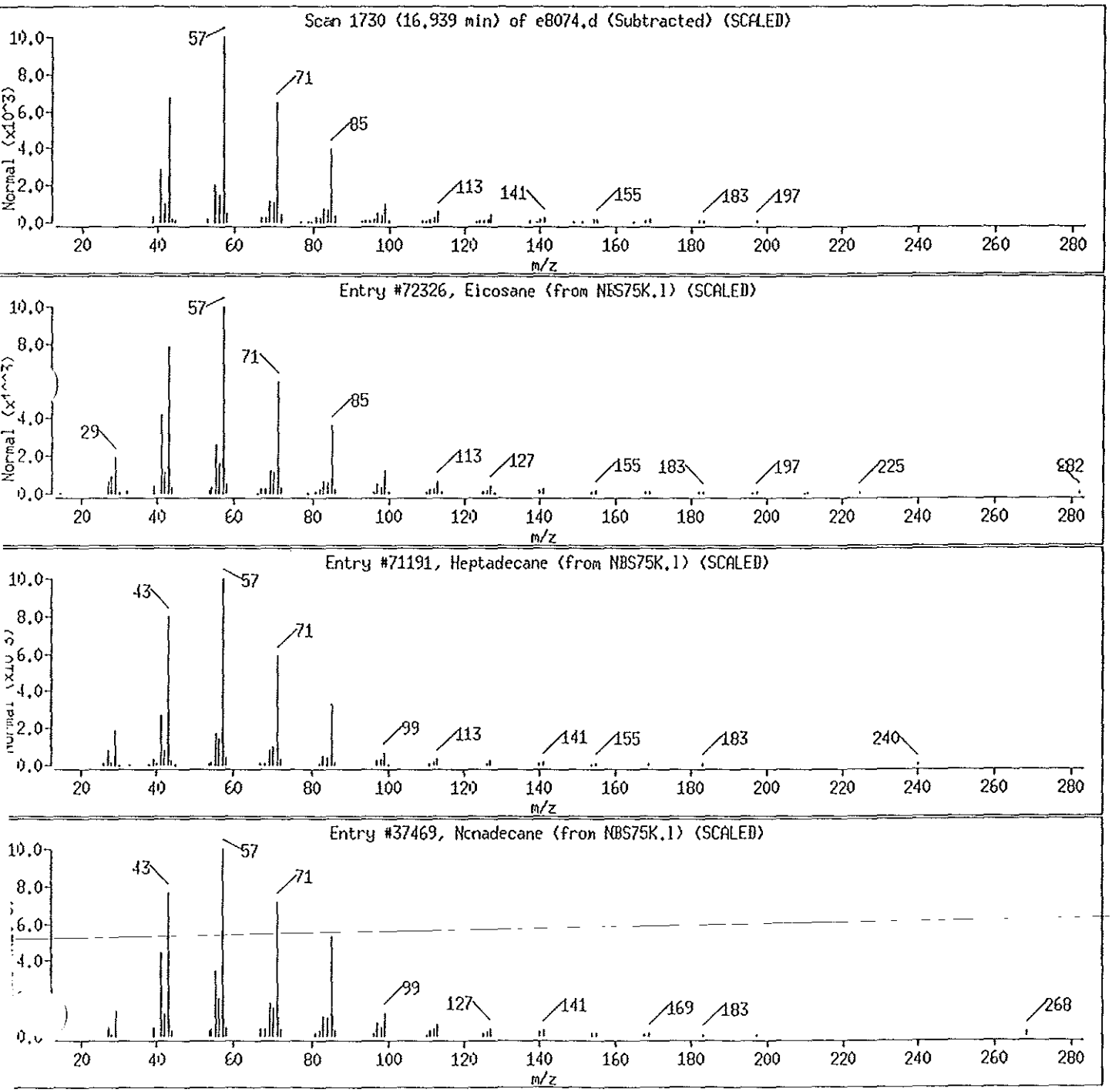
Instrument: mse.i

Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NBS75K.l	72326	91	C20H42	282
Heptadecane	629-78-7	NBS75K.l	71191	91	C17H36	240
Nonadecane	629-92-5	NBS75K.l	37469	90	C19H40	268



1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0368

CLJ78TW002

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

b Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0324C

Sample wt/vol: 960 (g/mL) ML Lab File ID: E8075

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0369

CLJ78TW002

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0324C

Sample wt/vol: 960 (g/mL) ML Lab File ID: E8075

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	52	U
100-02-7	4-Nitrophenol	52	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	26	U
101-55-3	4-Bromophenyl-phenylether	10	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-2	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS 0370

EPA SAMPLE NO.

CLJ78TW002

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0324C

Sample wt/vol: 960 (g/mL) ML Lab File ID: E8075

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 27

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 127-18-4	Tetrachloroethylene	5.80	94	JN
2. 95-47-6	Benzene, 1,2-dimethyl-	6.52	11	JN
3. 98-82-8	Benzene, (1-methylethyl)-	6.78	5	JN
4. 622-96-8	Benzene, 1-ethyl-4-methyl-	7.11	61	JN
5. 526-73-8	Benzene, 1,2,3-trimethyl-	7.17	56	JN
6. 611-14-3	Benzene, 1-ethyl-2-methyl-	7.30	48	JN
7. 95-36-3	1,2,4-Trimethylbenzene	7.43	110	JN
8. 93-53-8	Benzeneacetaldehyde, .alpha.	7.59	5	JN
9. 95-36-3	1,2,4-Trimethylbenzene	7.74	81	JN
10. 934-74-7	Benzene, 1-ethyl-3,5-dimethy	8.00	14	JN
11. 1074-17-5	Benzene, 1-methyl-2-propyl-	8.14	6	JN
12. 933-98-2	Benzene, 1-ethyl-2,3-dimethy	8.22	6	JN
13. 122-00-9	Ethanone, 1-(4-methylphenyl)	9.21	4	JN
14. 122-72-5	Benzenepropanol, acetate	9.89	5	JN
15. 611-01-8	Benzoic acid, 2,4-dimethyl-	10.87	7	JN
16. 499-06-9	Benzoic acid, 3,5-dimethyl-	10.97	5	JN
17. 499-06-9	Benzoic acid, 3,5-dimethyl-	11.43	12	JN
18. 544-76-3	Hexadecane	13.37	7	JN
19. 74645-98-0	Dodecane, 2,7,10-trimethyl-	14.39	8	JN
20. 4536-30-5	Ethanol, 2-(dodecyloxy)-	14.55	7	JN
21. 13287-23-5	Heptadecane, 8-methyl-	15.24	16	JN
22. 54833-48-6	Heptadecane, 2,6,10,15-tetra	15.34	5	JN
23. 629-78-7	Heptadecane	16.10	14	JN
24. 112-95-8	Eicosane	16.94	9	JN
25.	unknown	16.97	9	J
26. 629-94-7	Heneicosane	17.73	4	JN
27.	unknown	19.10	6	J

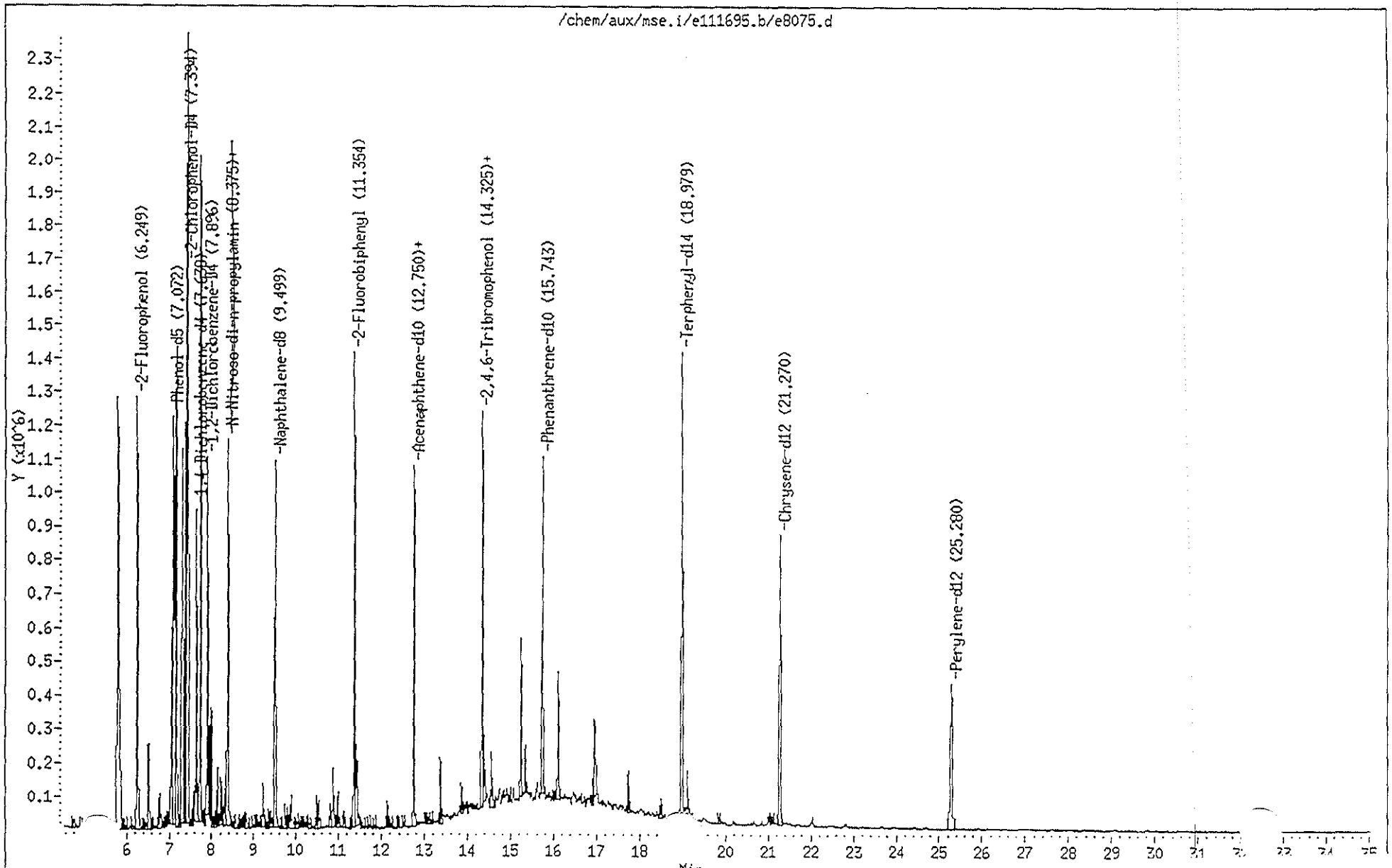
0371

Data File: /chem/aux/mse.i/e111695.b/e8075.d
Date : 16-NOV-95 19:26
Client ID: jp0324c
Sample Info: 17418n clj78tw002

Column phase: J&W DB-5

Instrument: mse.i

Operator: J. Kelly
Column diameter: 0.25



Data File: /chem/aux/mse.i/e111695.b/e8075.d
Report Date: 17-Nov-1995 13:49

OHM Analytical Division

BASE NEUTRAL QUANT AND RATIO REPORT

Data file : /chem/aux/mse.i/e111695.b/e8075.d
Lab Smp Id: Client Smp ID: jp0324c
Inj Date : 16-NOV-95 19:26
Operator : J. Kelly Inst ID: mse.i
Smp Info : 17418n clj78tw002
Misc Info : jp0324c,n1c51710,m1,1,1
Comment :
Method : /chem/aux/mse.i/e111695.b/111495eclp.m
Meth Date : 17-Nov-1995 13:45 kathryn Quant Type: ISTD
Cal Date : 16-NOV-95 14:53 Cal File: e8069.d
Als bottle: 8
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

KBrylar

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)	
$	2	2-Fluorophenol	112.00	6.249	6.252	(0.818)	552930	74.0	74.0(R)	
$	4	Phenol-d5	99.00	7.072	7.083	(0.926)	579871	56.6	56.6(R)	
$	7	2-Chlorophenol-D4	132.00	7.394	7.398	(0.968)	679981	94.1	94.1(R)	
*	10	1,4-Dichlorobenzene-d4	152.00	7.638	7.641	(1.000)	199910	40.0		
$	13	1,2-Dichlorobenzene-D4	152.00	7.896	7.899	(1.034)	245756	58.5	58.5(R)	
	17	N-Nitroso-di-n-propylamine	70.00	8.375	8.114	(1.097)	100531	13.2	~~13.2(Q)~~	ND, et, ms
$	19	Nitrobenzene-d5	82.00	8.375	8.386	(0.882)	623723	60.9	60.9(R)	
*	27	Naphthalene-d8	136.00	9.499	9.510	(1.000)	796268	40.0		
$	37	2-Fluorobiphenyl	172.00	11.361	11.364	(0.891)	758783	64.3	64.3(R)	
*	44	Acenaphthene-d10	164.00	12.750	12.761	(1.000)	407423	40.0		
	48	2,4-Dinitrotoluene	165.00	12.750	13.090	(1.000)	52471	12.1	~~12.1(Q)~~	ND, et, ms
$	56	2,4,6-Tribromophenol	330.00	14.332	14.343	(1.124)	228834	125	125(R)	
	57	4-Bromophenyl-phenylether	248.00	14.332	14.744	(0.910)	14502	4.31	~~4.31(Q)~~	ND, et, ms
	60	Phenanthrene-d10	188.00	15.743	15.754	(1.000)	604030	40.0		
	68	Terphenyl-d14	244.00	18.979	18.983	(0.892)	816885	71.2	71.2(R)	
	73	Chrysene-d12	240.00	21.270	21.288	(1.000)	508833	40.0		
	79	Perylene-d12	264.00	25.287	25.305	(1.000)	463794	40.0		

QC Flag Legend

Q - Qualifier signal failed the ratio test.
$ - Spike/Surrogate failed recovery limits.

Data File: /chem/aux/mse.i/e111695.b/e8075.d

Date : 16-NOV-95 19:26

ient ID: jp0324c

Instrument: mse.i

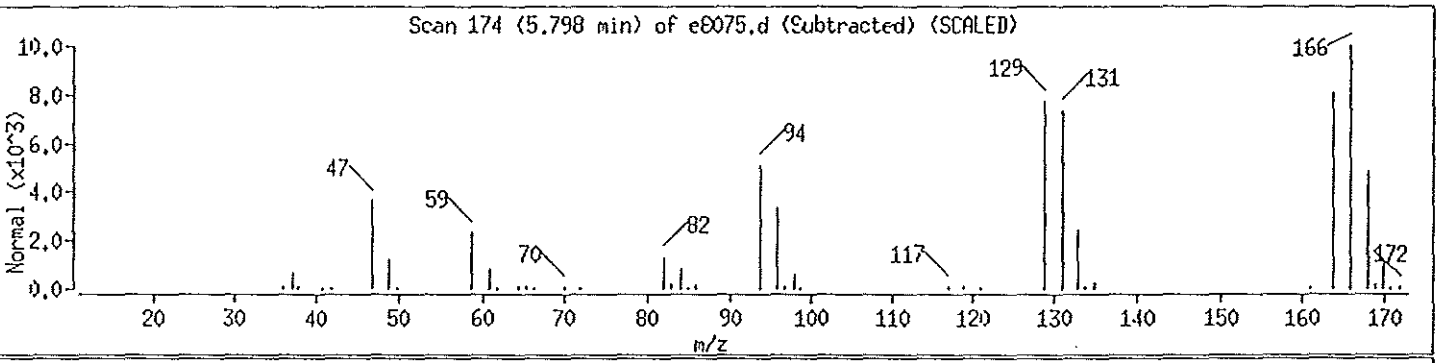
ample Info: 17418n clj78tw002

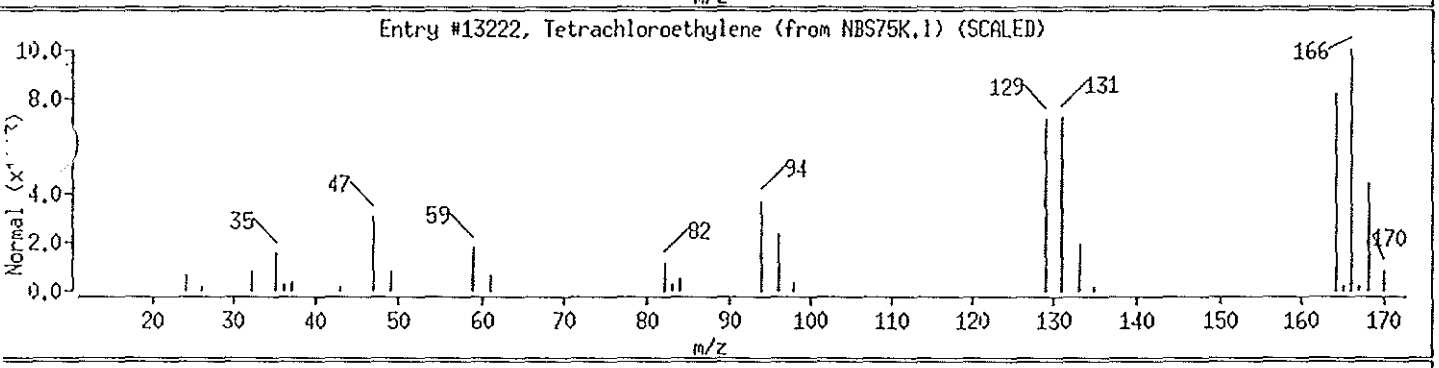
Operator: J. Kelly

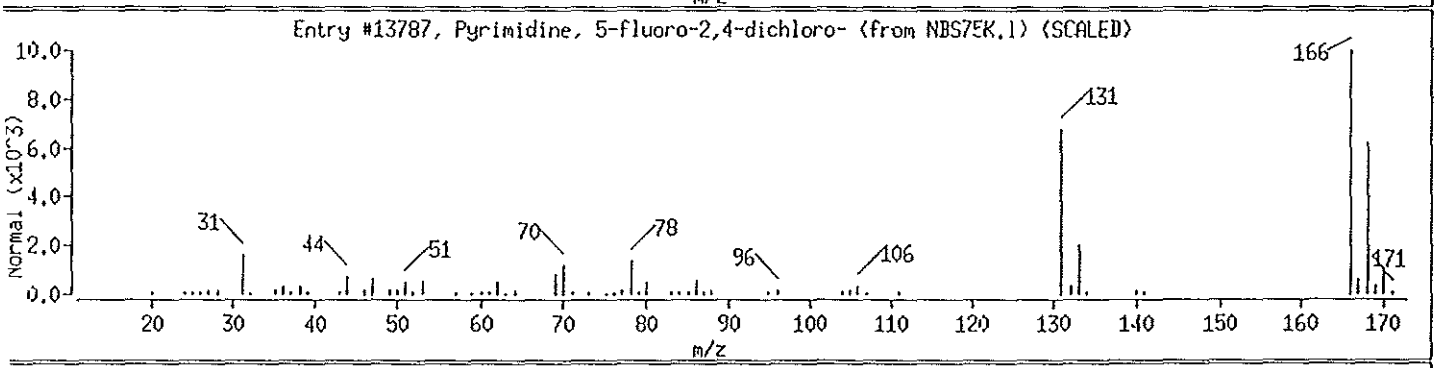
Column phase: J&W DB-5

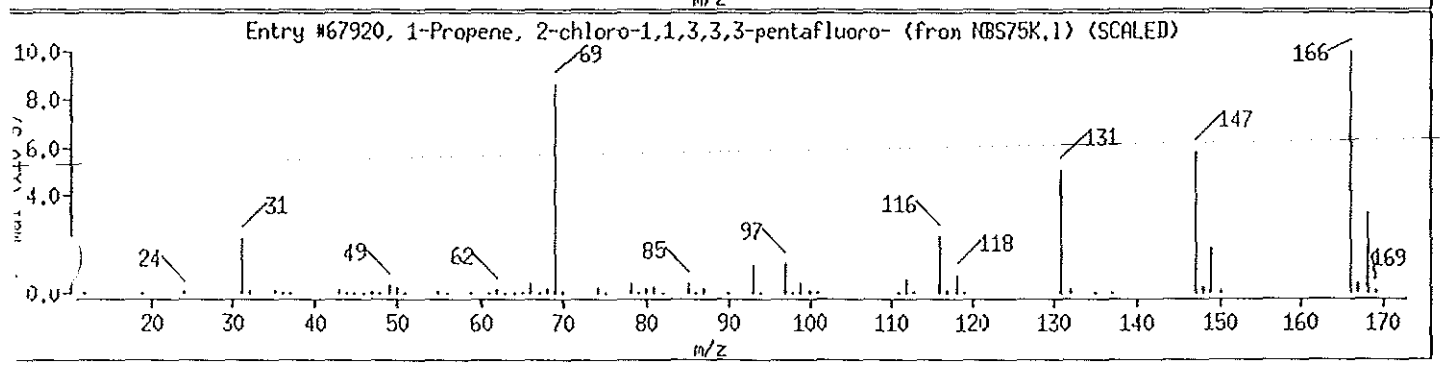
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Tetrachloroethylene	127-18-4	NBS75K.l	13222	98	C2Cl4	164
Pyrimidine, 5-fluoro-2,4-dichloro-	2927-71-1	NBS75K.l	13787	38	C4HCl2FN2	166
1-Propene, 2-chloro-1,1,3,3,3-pentafluor	2804-50-4	NBS75K.l	67920	16	C3ClF5	166









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Date : 16-NOV-95 19:26

ent ID: jp0324c

Instrument: mse.i

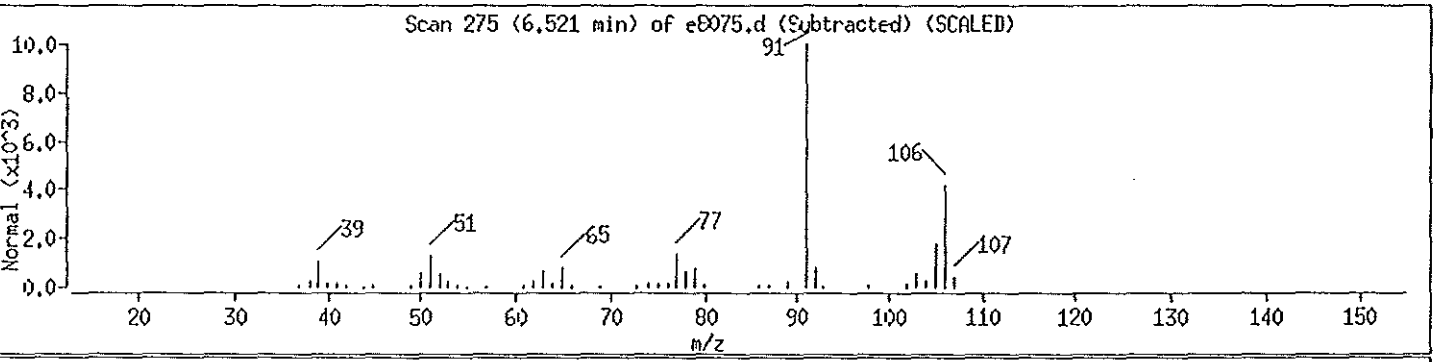
ample Info: 17418n clj78tw002

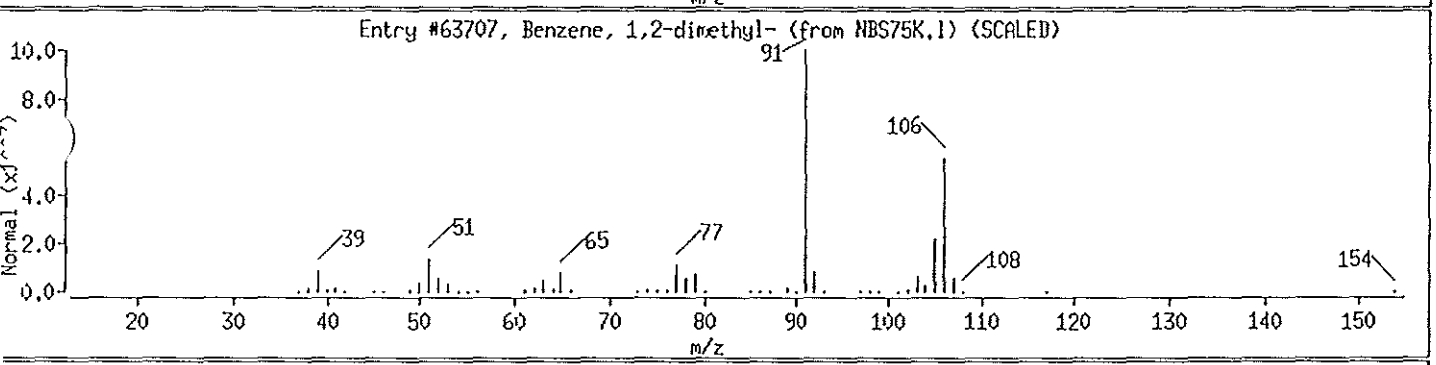
Operator: J. Kelly

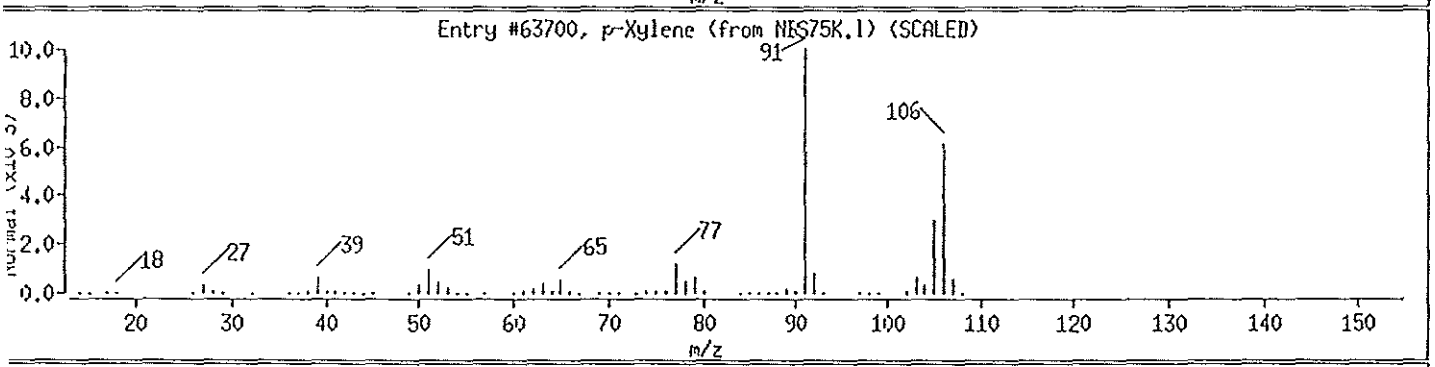
Column phase: J&W DB-5

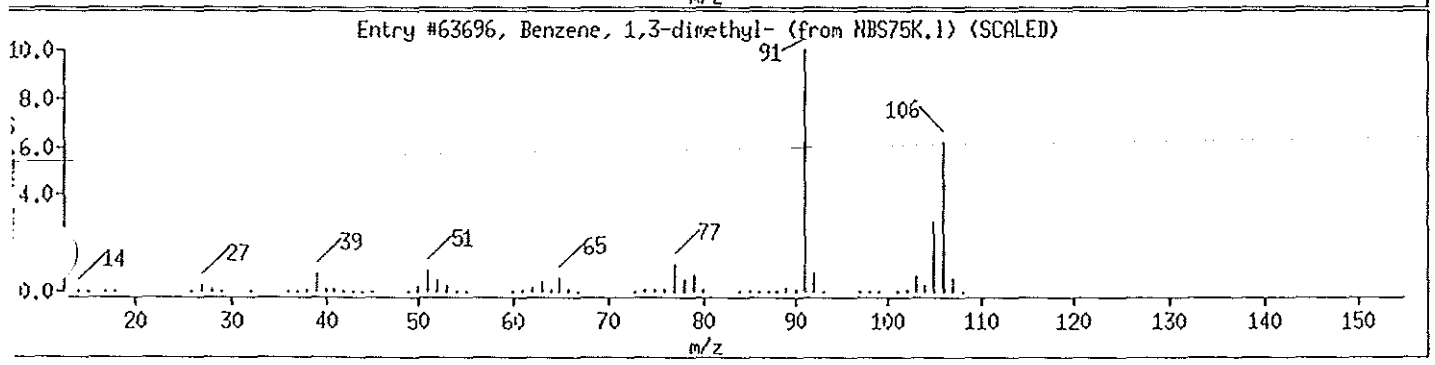
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1,2-dimethyl-	95-47-6	NBS75K.l	63707	97	C8H10	106
p-Xylene	106-42-3	NBS75K.l	63700	95	C8H10	106
Benzene, 1,3-dimethyl-	108-38-3	NBS75K.l	63696	95	C8H10	106









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Date : 16-NOV-95 19:26

ient ID: jp0324c

Instrument: mse.i

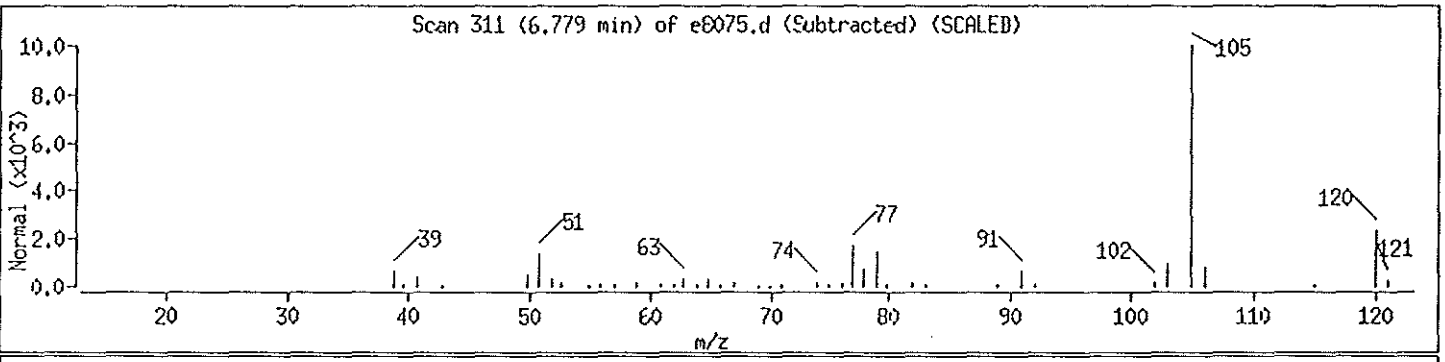
Sample Info: 17418n clj78tw002

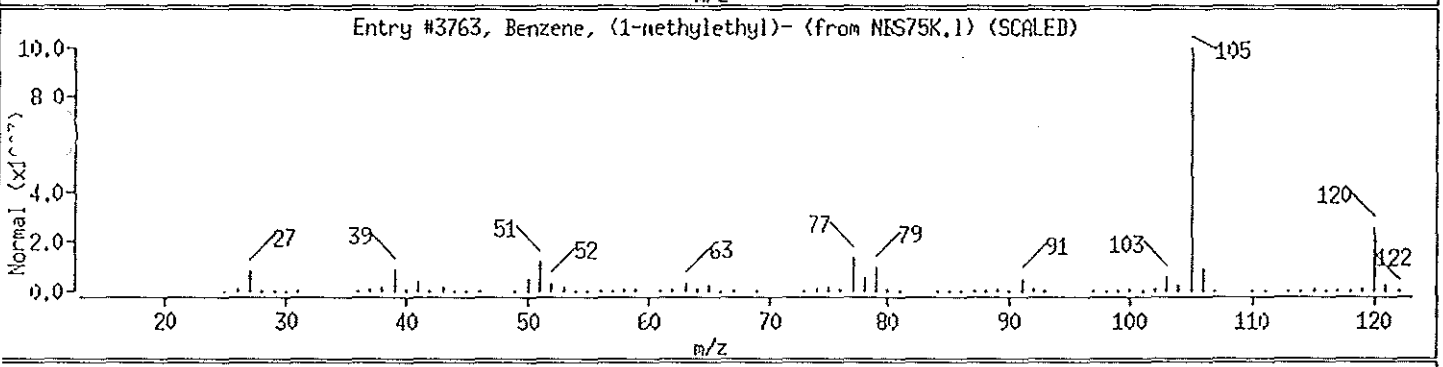
Operator: J. Kelly

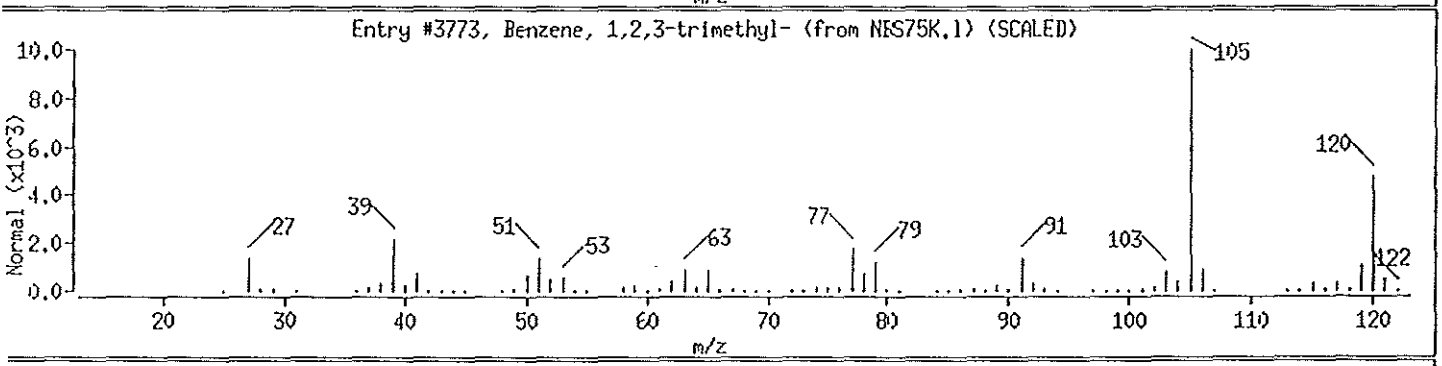
Column phase: J&W DB-5

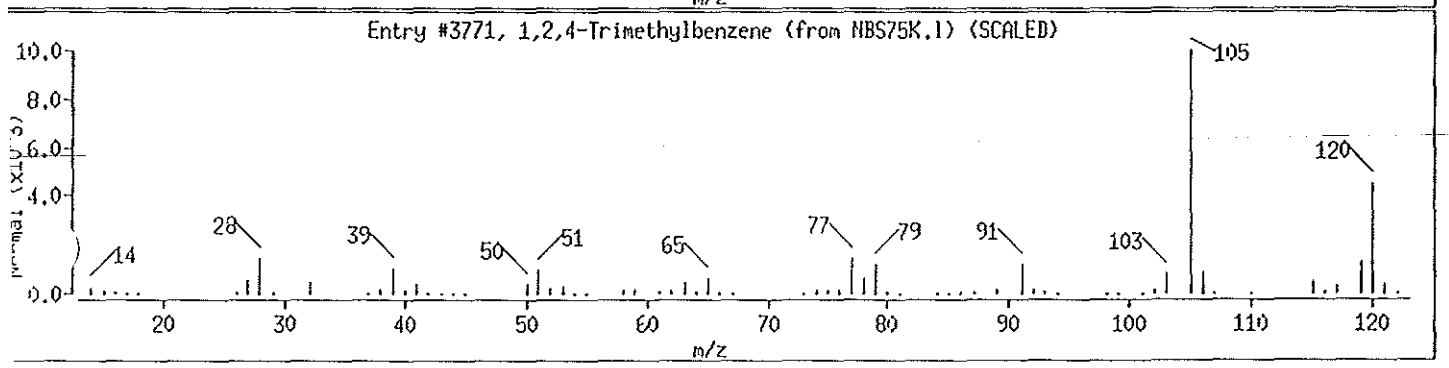
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, (1-methylethyl)-	98-82-8	NBS75K.l	3763	94	C9H12	120
Benzene, 1,2,3-trimethyl-	526-73-8	NBS75K.l	3773	90	C9H12	120
1,2,4-Trimethylbenzene	95-36-3	NBS75K.l	3771	90	C9H12	120









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Date : 16-NOV-95 19:26

)ient ID: jp0324c

Sample Info: 17418n clj78tw002

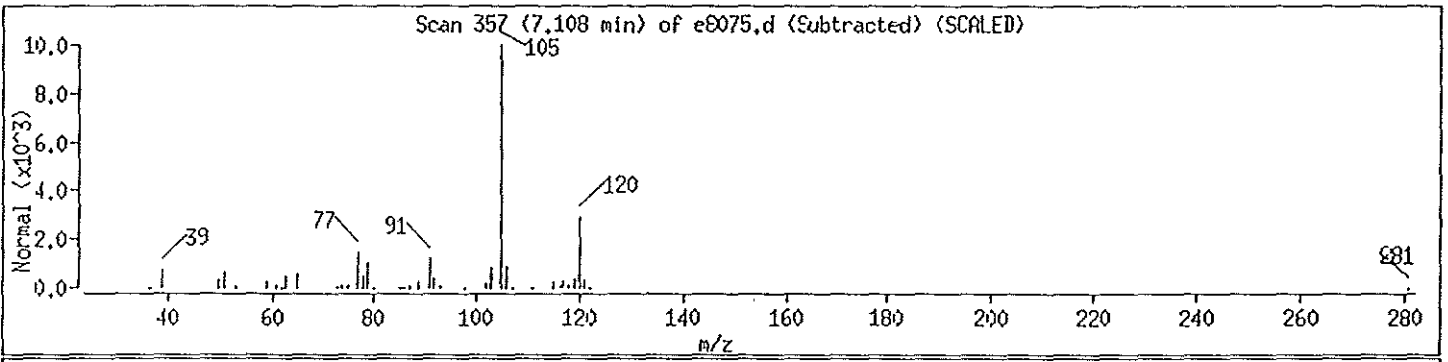
Instrument: mse.i

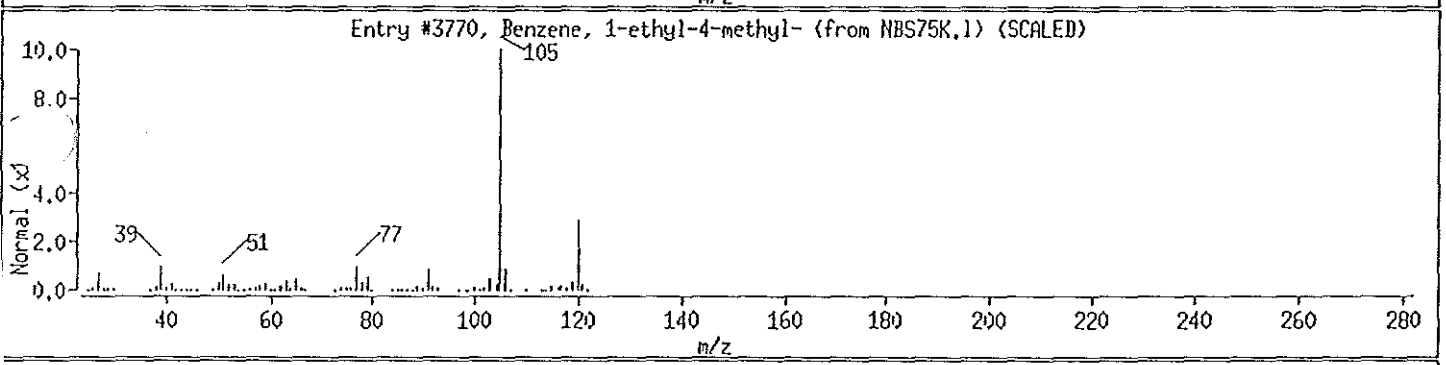
Operator: J. Kelly

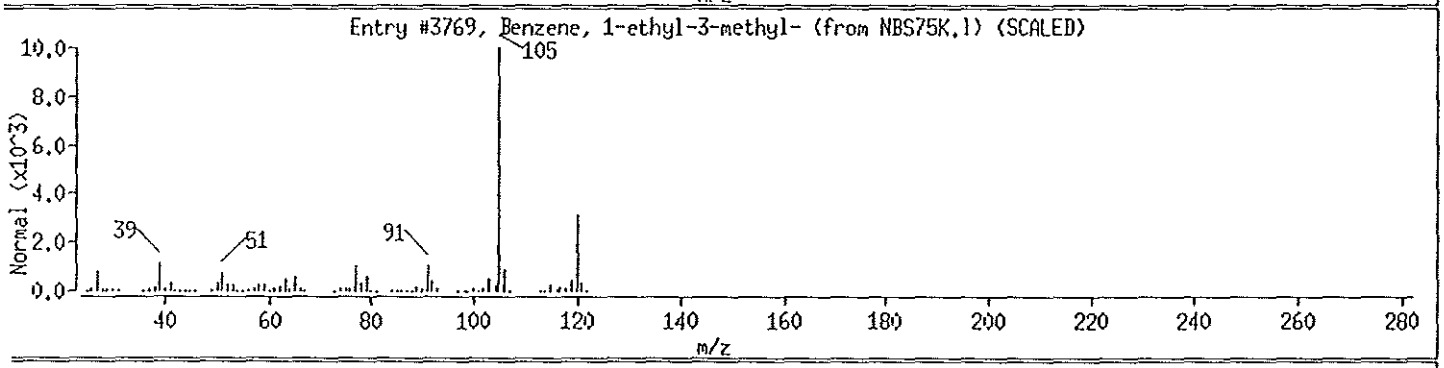
Column phase: J&W DB-5

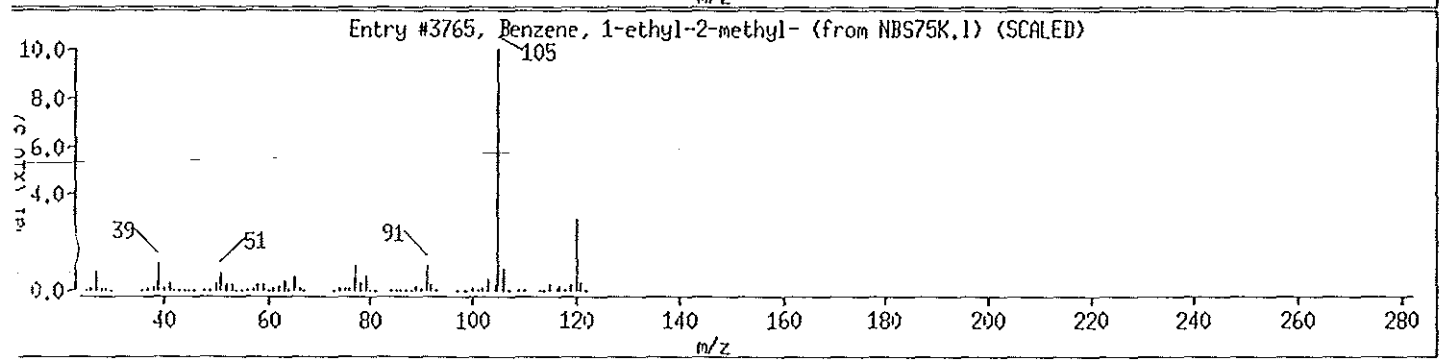
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-ethyl-4-methyl-	622-96-8	NBS75K.1	3770	94	C9H12	120
Benzene, 1-ethyl-3-methyl-	620-14-4	NBS75K.1	3769	94	C9H12	120
Benzene, 1-ethyl-2-methyl-	611-14-3	NBS75K.1	3765	94	C9H12	120









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Date : 16-NOV-95 19:26
Client ID: jp0324c
Sample Info: 17418n clj78tw002

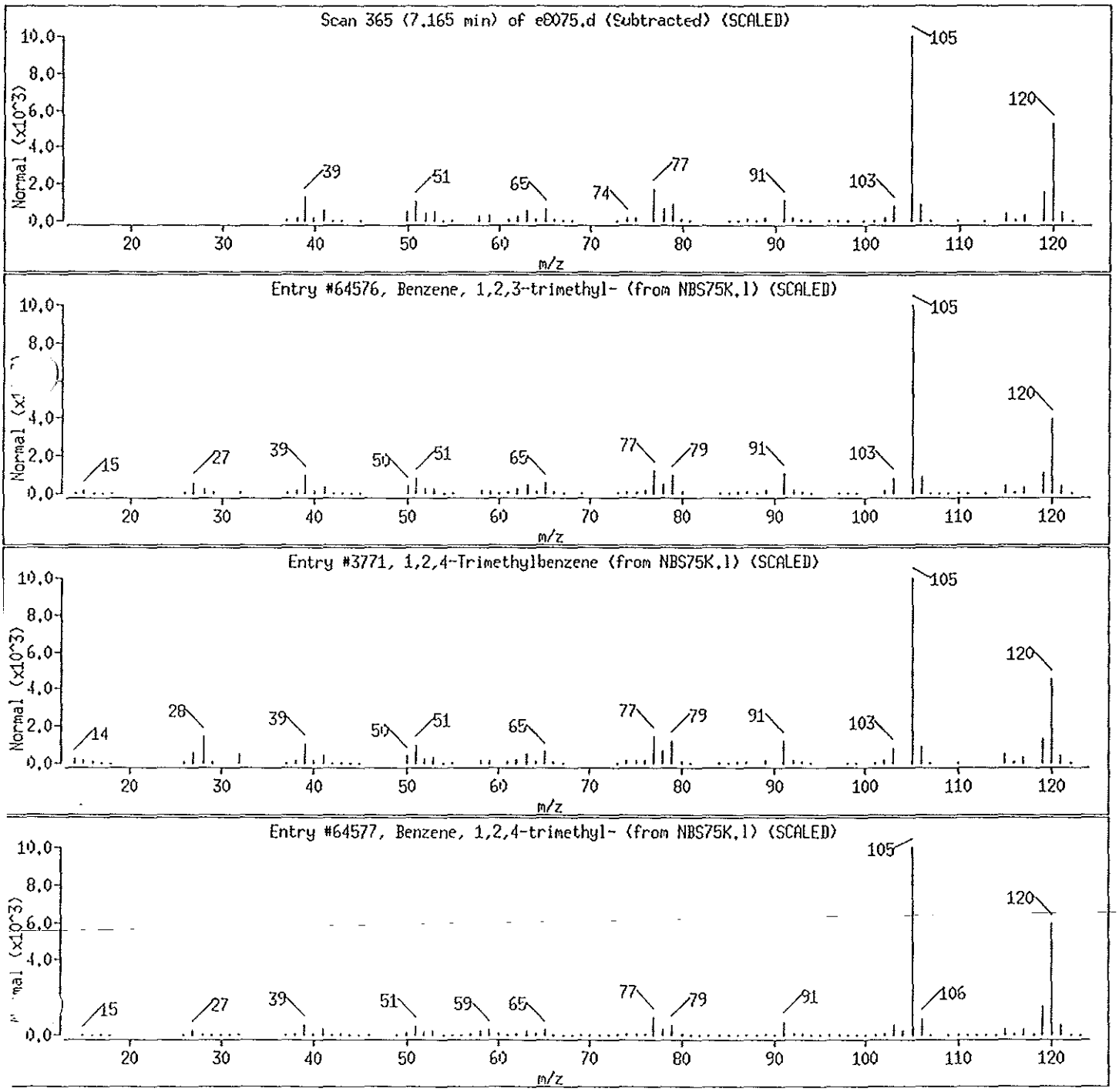
Instrument: mse.i

Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1,2,3-trimethyl-	526-73-8	NBS75K.l	64576	93	C9H12	120
1,2,4-Trimethylbenzene	95-36-3	NBS75K.l	3771	93	C9H12	120
Benzene, 1,2,4-trimethyl-	95-63-6	NBS75K.l	64577	91	C9H12	120



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Date : 16-NOV-95 19:26

Client ID: jp0324c

Sample Info: 17418n clj78tw002

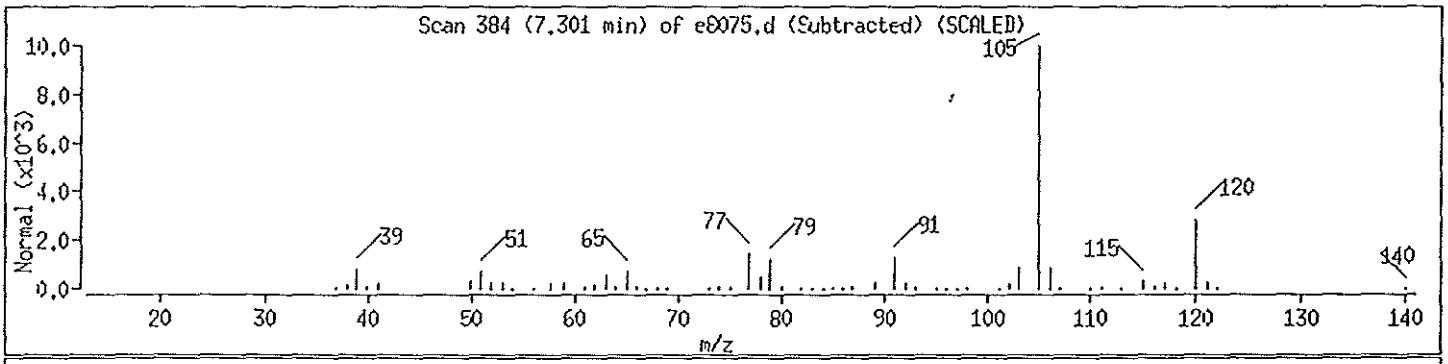
Instrument: mse.i

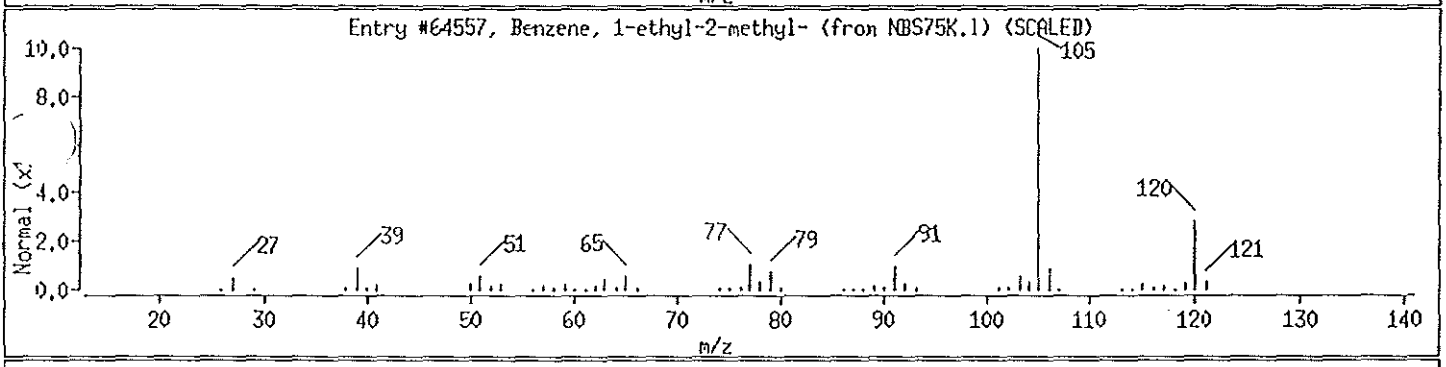
Operator: J. Kelly

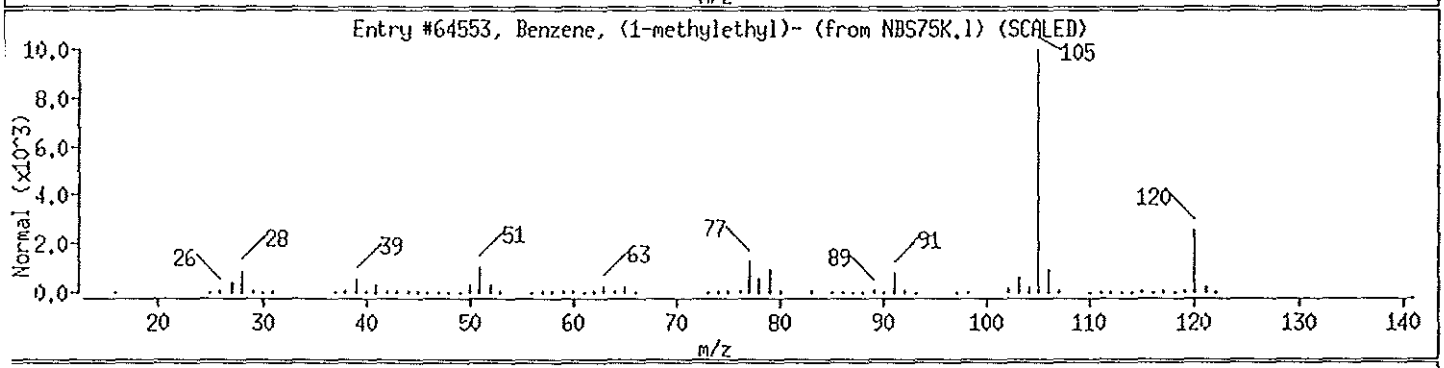
Column phase: J&W DB-5

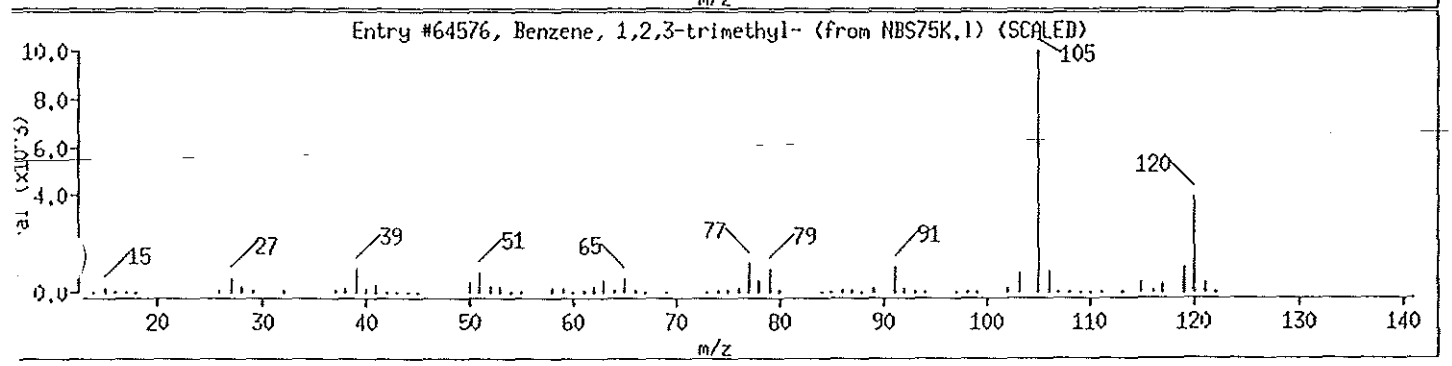
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-ethyl-2-methyl-	611-14-3	NBS75K.l	64557	91	C9H12	120
Benzene, (1-methylethyl)-	98-82-8	NBS75K.l	64553	91	C9H12	120
Benzene, 1,2,3-trimethyl-	526-73-8	NBS75K.l	64576	91	C9H12	120









Data File: /chem/aux/mse.i/e111695.b/e8075.d

Date : 16-NOV-95 19:26

Client ID: jp0324c

Instrument: mse.i

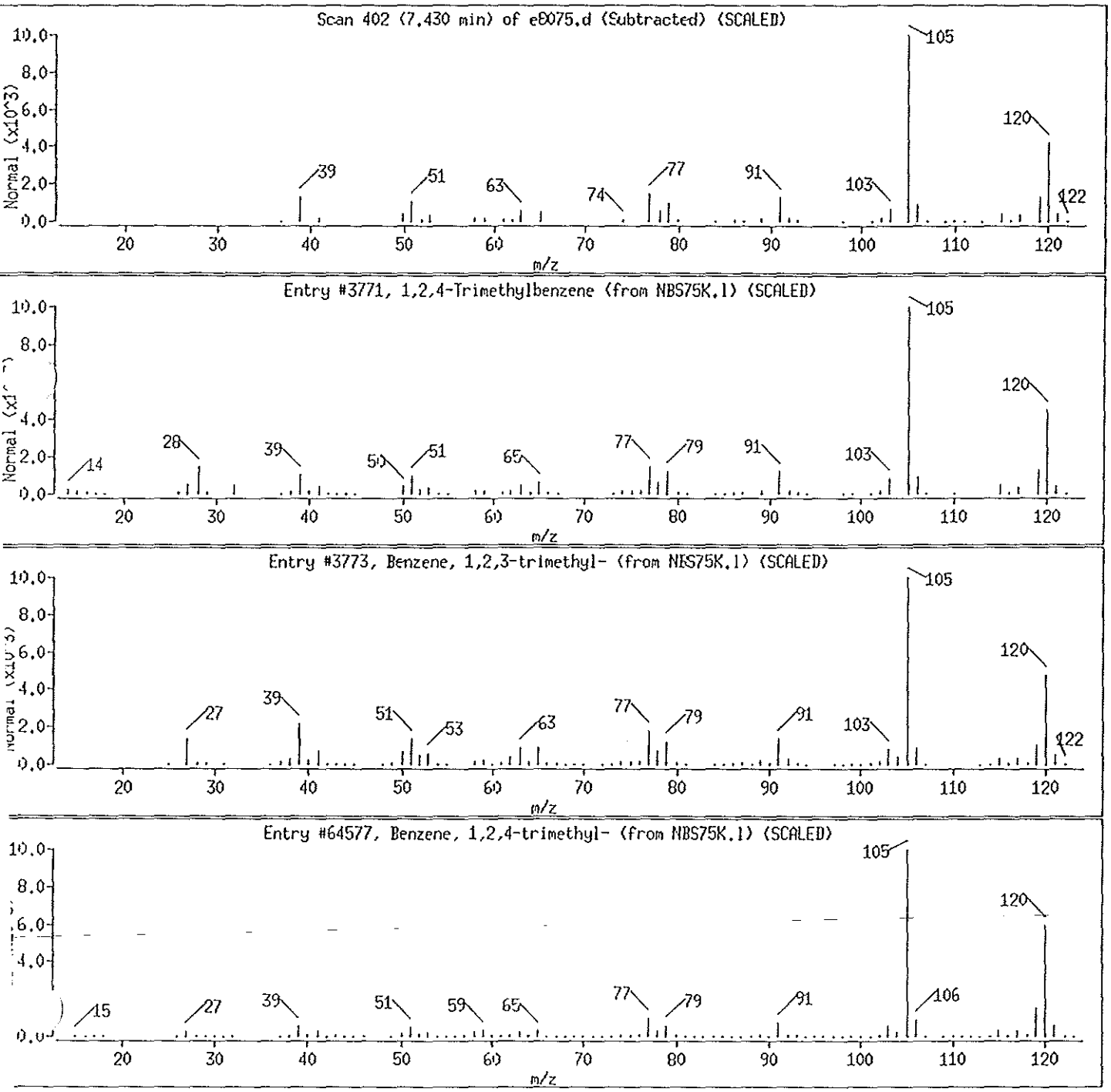
Sample Info: 17418n clj78tw002

Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,2,4-Trimethylbenzene	95-36-3	NBS75K.l	3771	96	C9H12	120
Benzene, 1,2,3-trimethyl-	526-73-8	NBS75K.l	3773	94	C9H12	120
Benzene, 1,2,4-trimethyl-	95-63-6	NBS75K.l	64577	91	C9H12	120



Data File: /chem/aux/mse.i/e111695.b/e8075.d

Date : 16-NOV-95 19:26

Client ID: jp0324c

Instrument: mse.i

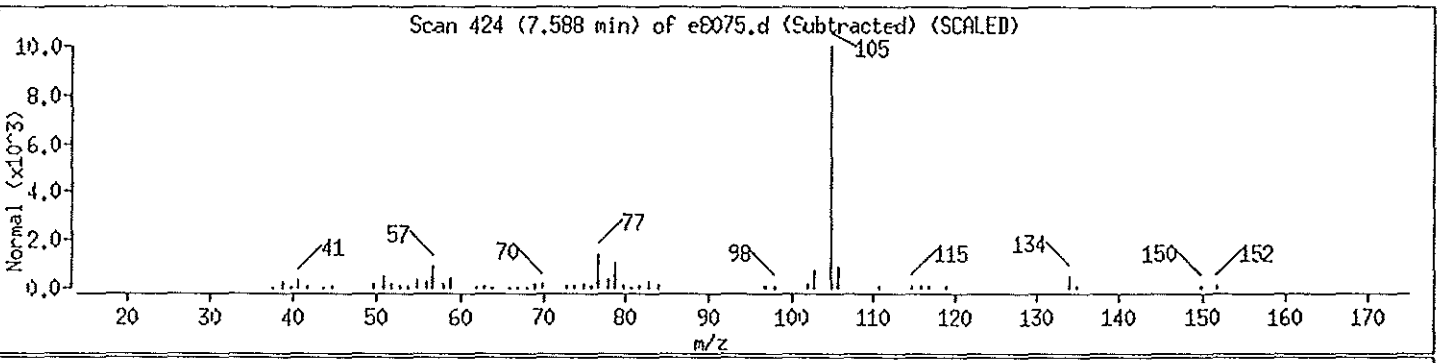
Sample Info: 17418n clj78tw002

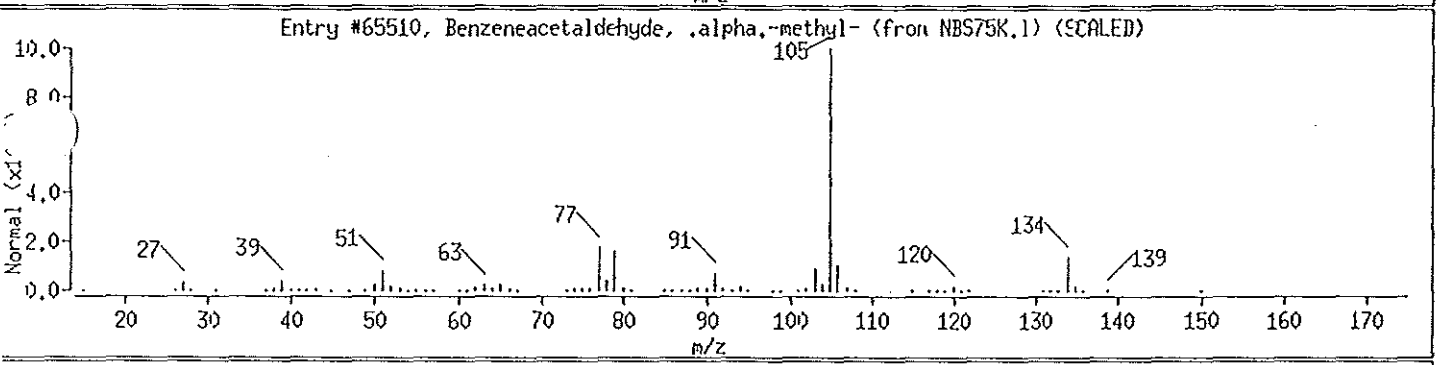
Operator: J. Kelly

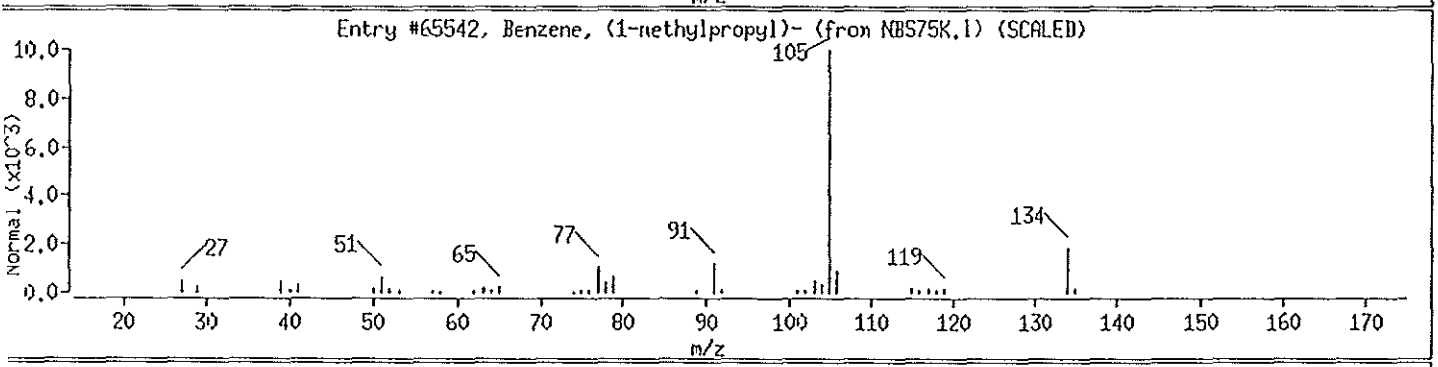
Column phase: J&W DB-5

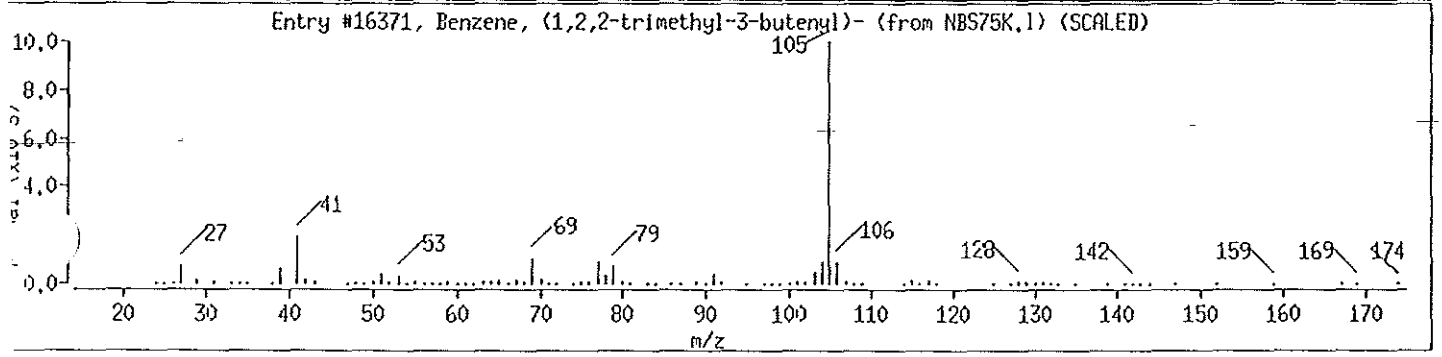
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzeneacetaldehyde, .alpha.-methyl-	93-53-8	NBS75K.l	65510	58	C9H10O	134
Benzene, (1-methylpropyl)-	135-98-8	NBS75K.l	65542	53	C10H14	134
Benzene, (1,2,2-trimethyl-3-butenyl)-	61142-17-4	NBS75K.l	16371	53	C13H18	174









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)ient ID: jp0324c

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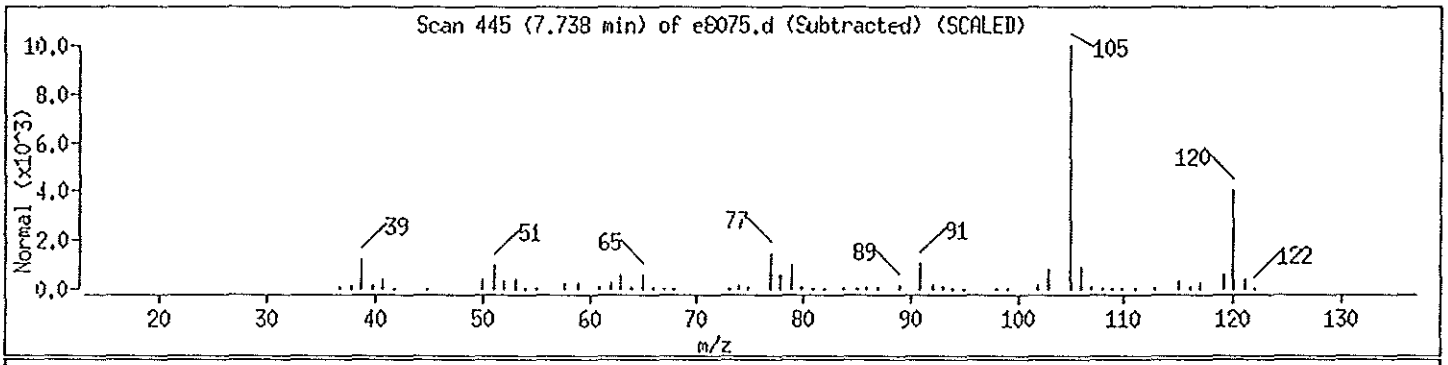
Sample Info: 17418n clj78tw002

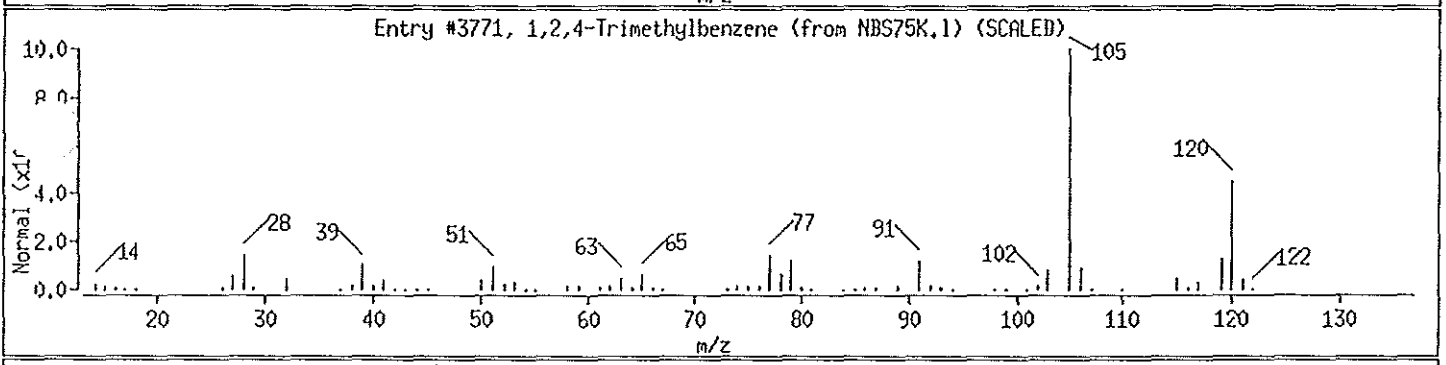
Operator: J. Kelly

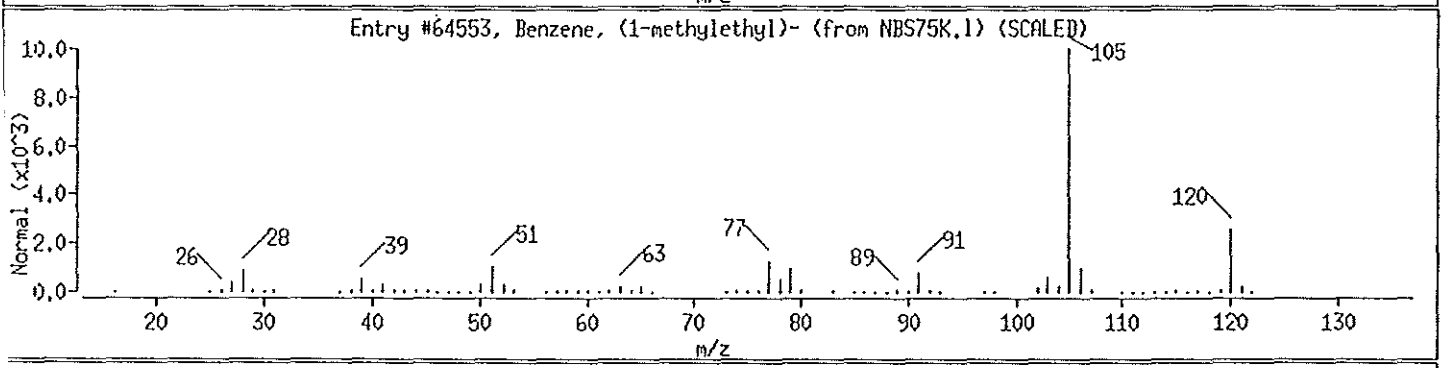
Column phase: J&W DB-5

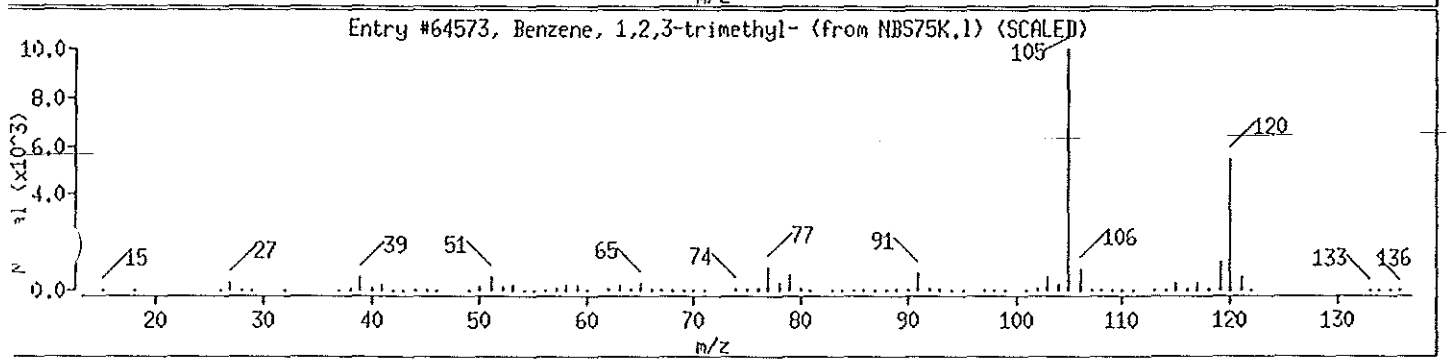
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,2,4-Trimethylbenzene	95-36-3	NBS75K.l	3771	94	C9H12	120
Benzene, (1-methylethyl)-	98-82-8	NBS75K.l	64553	91	C9H12	120
Benzene, 1,2,3-trimethyl-	526-73-8	NBS75K.l	64573	91	C9H12	120









Data File: /chem/aux/mse.i/e111695.b/e8075.d

Date : 16-NOV-95 19:26

Client ID: jp0324c

Instrument: mse.i

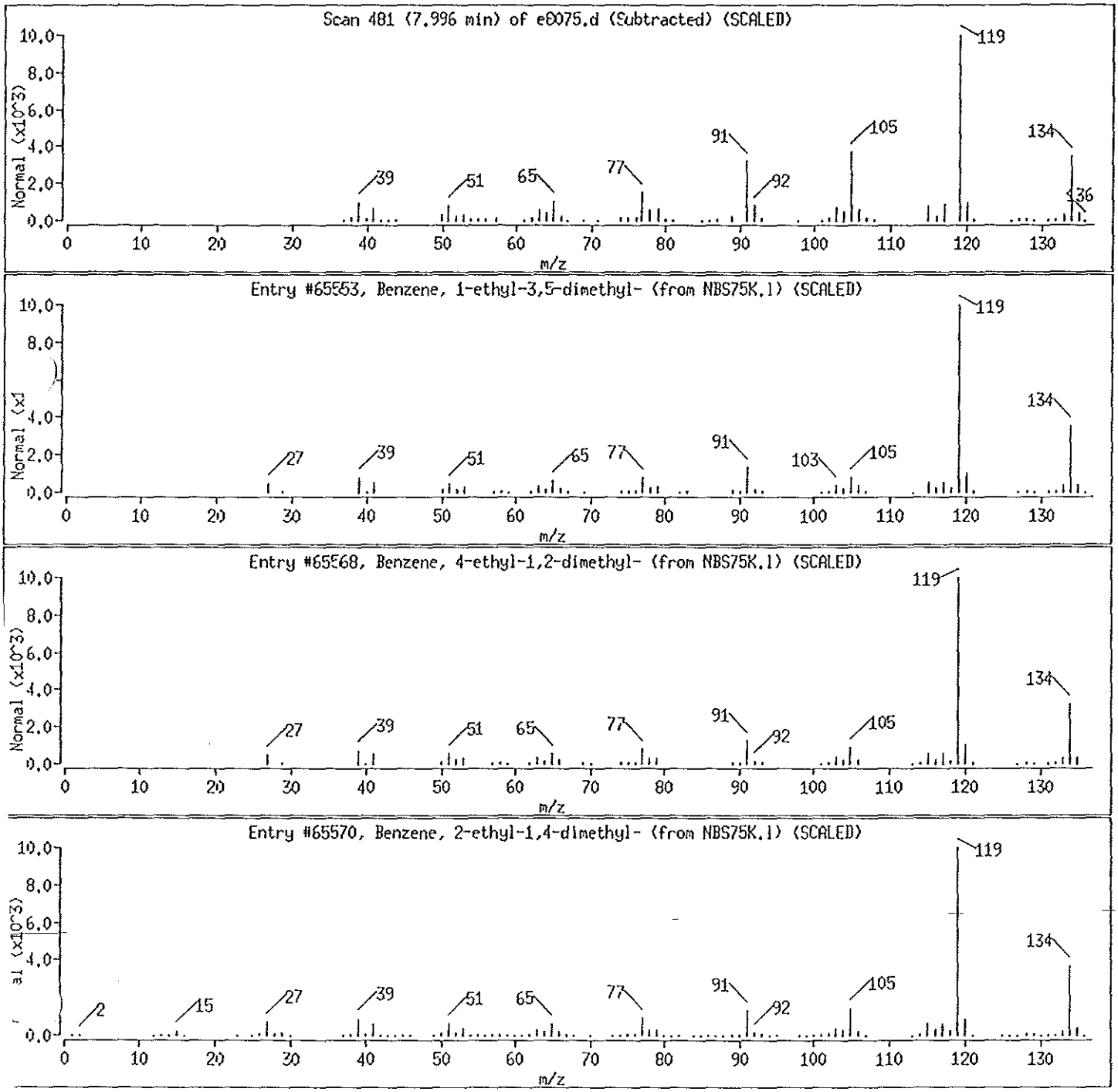
Sample Info: 17418n clj78tw002

Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

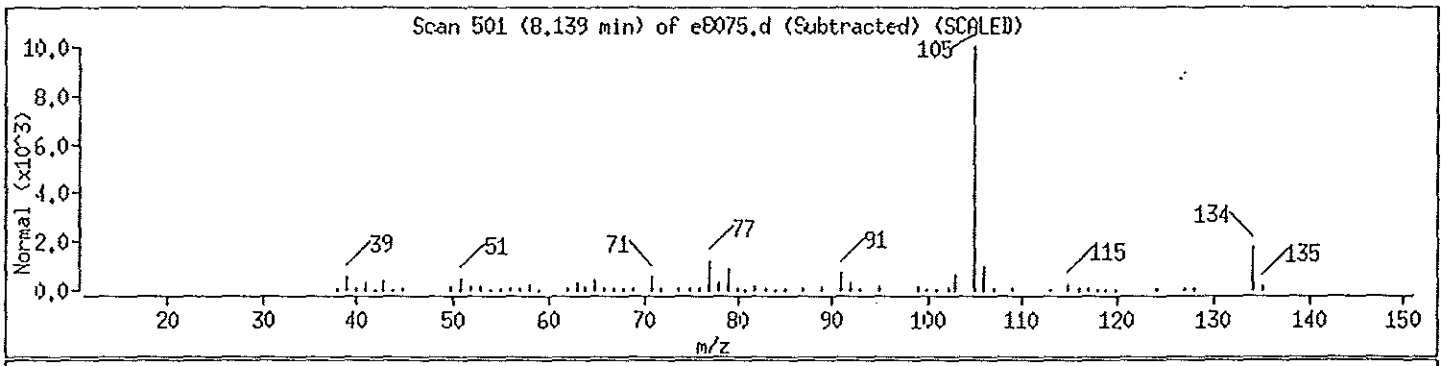
Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-ethyl-3,5-dimethyl-	934-74-7	NBS75K.l	65553	93	C10H14	134
Benzene, 4-ethyl-1,2-dimethyl-	934-80-5	NBS75K.l	65568	93	C10H14	134
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	NBS75K.l	65570	90	C10H14	134

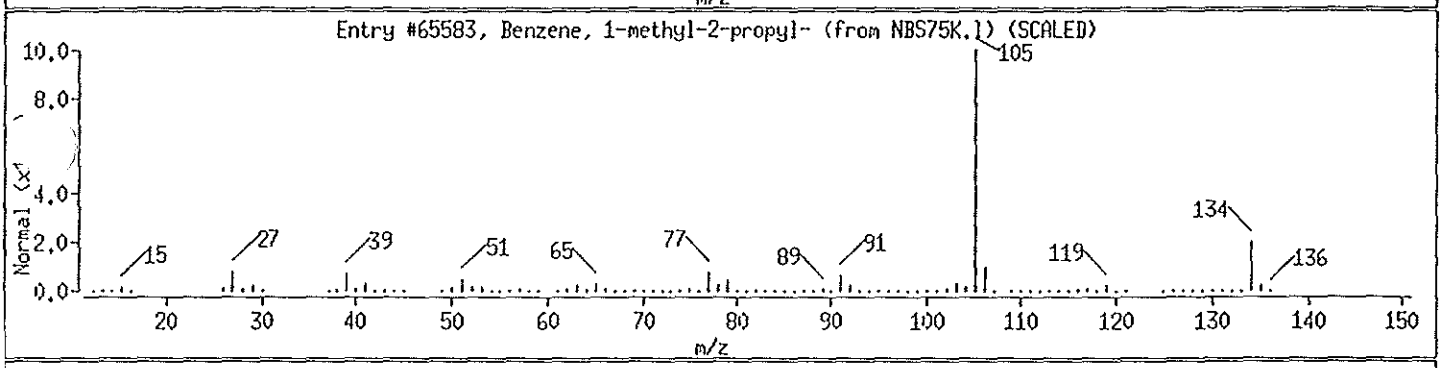


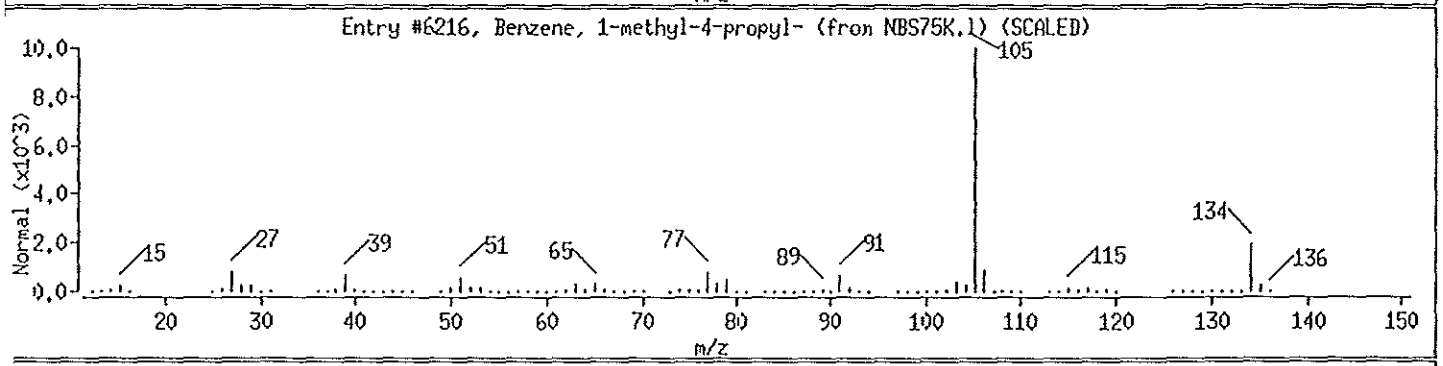
Data File: /chem/aux/mse.i/e111695.b/e8075.d
Date : 16-NOV-95 19:26
Client ID: jp0324c
Sample Info: 17418n clj78tw002

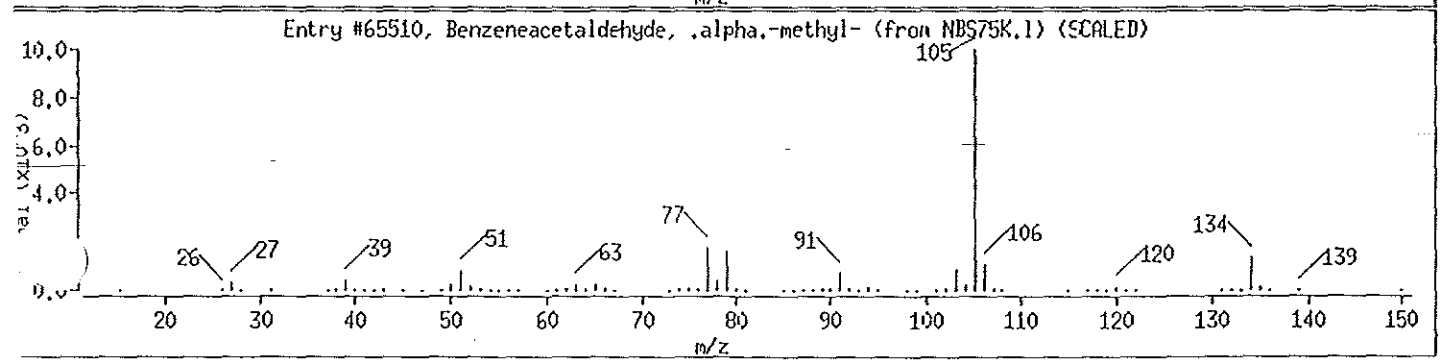
Instrument: mse.i
Operator: J. Kelly
Column phase: J&W DB-5
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-methyl-2-propyl-	1074-17-5	NBS75K.l	65583	90	C10H14	134
Benzene, 1-methyl-4-propyl-	1074-55-1	NBS75K.l	6216	87	C10H14	134
Benzeneacetaldehyde, .alpha.-methyl-	93-53-8	NBS75K.l	65510	86	C9H10O	134









Data File: /chem/aux/mse.i/e111695.b/e8075.d

Date : 16-NOV-95 19:26

Client ID: jp0324c

Sample Info: 17418n clj78tw002

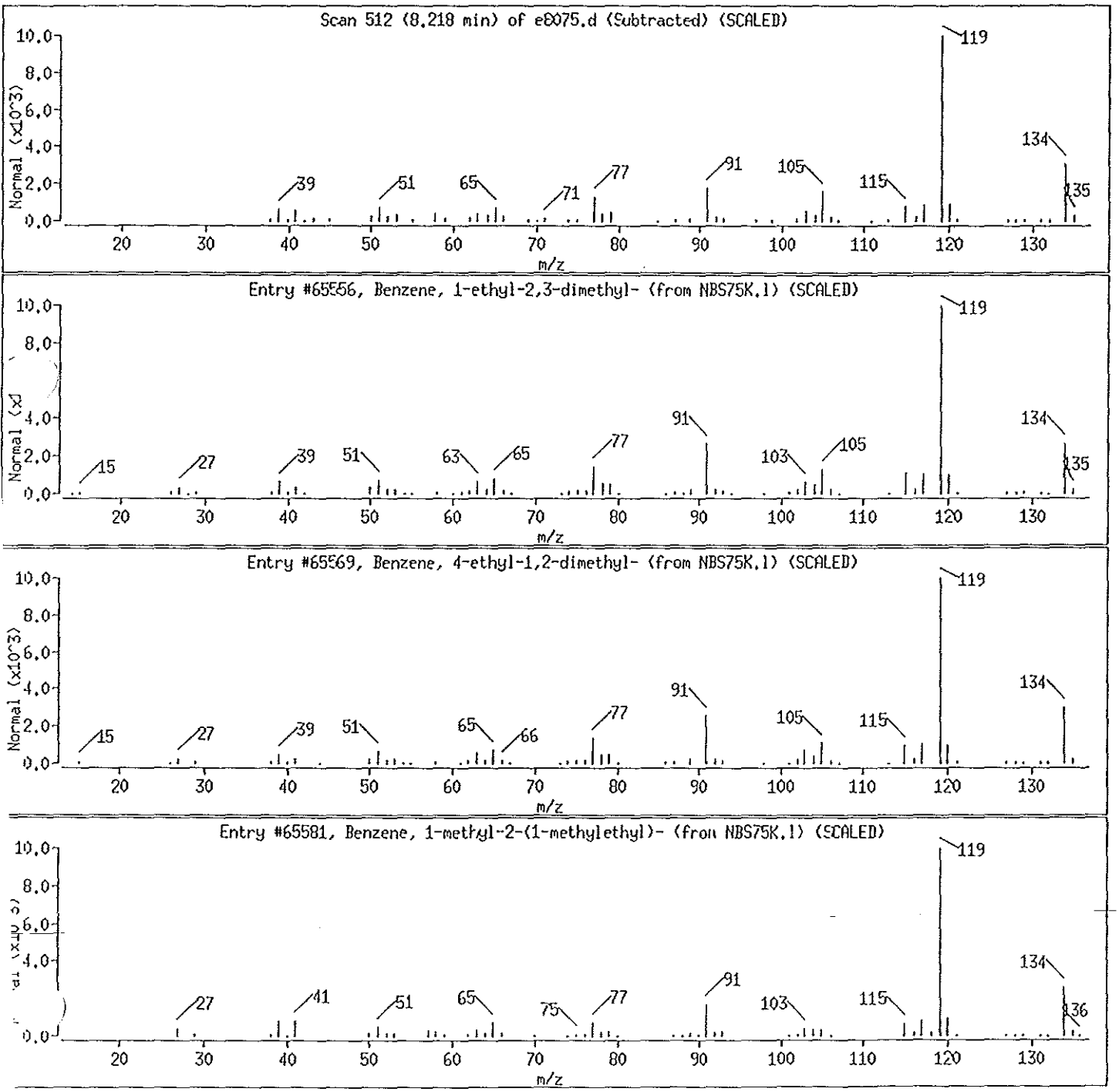
Instrument: mse.i

Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-ethyl-2,3-dimethyl-	933-98-2	NBS75K.l	65556	96	C10H14	134
Benzene, 4-ethyl-1,2-dimethyl-	934-80-5	NBS75K.l	65569	96	C10H14	134
Benzene, 1-methyl-2-(1-methylethyl)-	527-84-4	NBS75K.l	65581	94	C10H14	134



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Date : 16-NOV-95 19:26

)ient ID: jp0324c

Instrument: mse.i

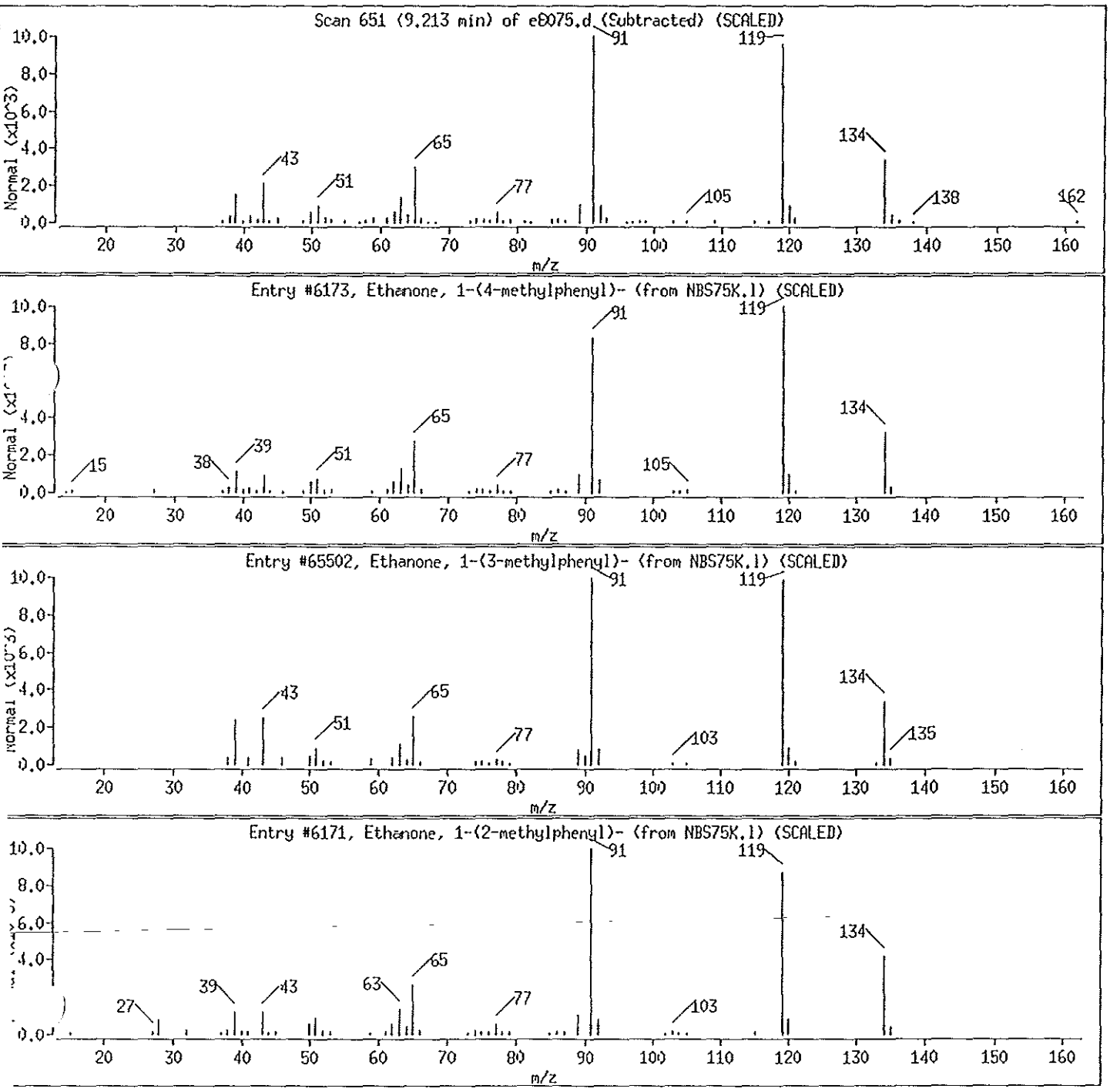
ɔample Info: 17418n clj78tw002

Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethanone, 1-(4-methylphenyl)-	122-00-9	NBS75K.l	6173	96	C9H10O	134
Ethanone, 1-(3-methylphenyl)-	585-74-0	NBS75K.l	65502	95	C9H10O	134
Ethanone, 1-(2-methylphenyl)-	577-16-2	NBS75K.l	6171	93	C9H10O	134



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Date : 16-NOV-95 19:26

Client ID: jp0324c

Instrument: mse.i

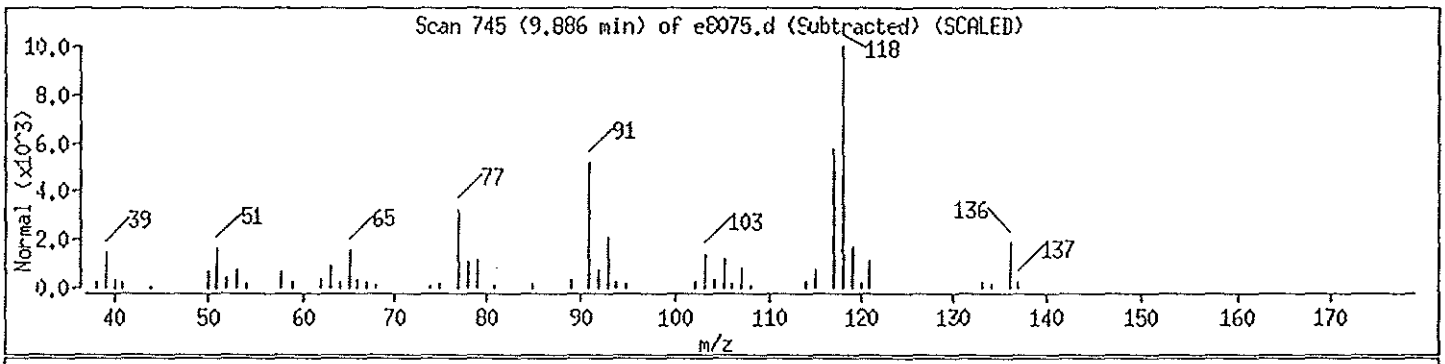
Sample Info: 17418n clj78tw002

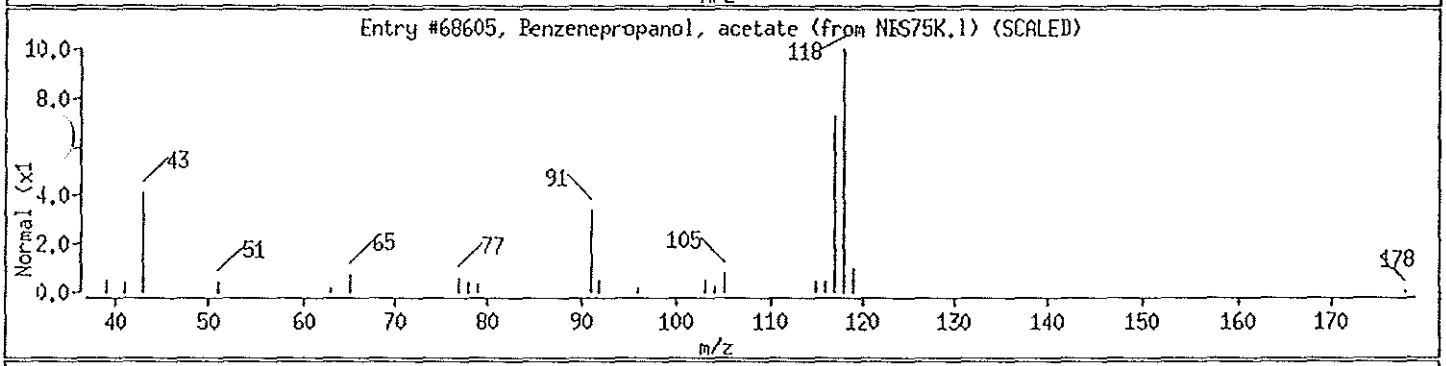
Operator: J. Kelly

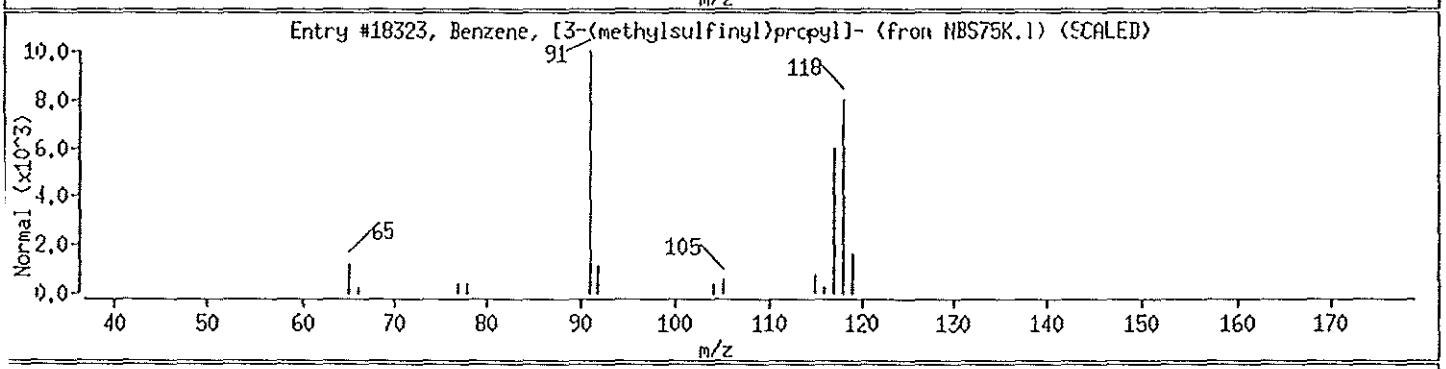
Column phase: J&W DB-5

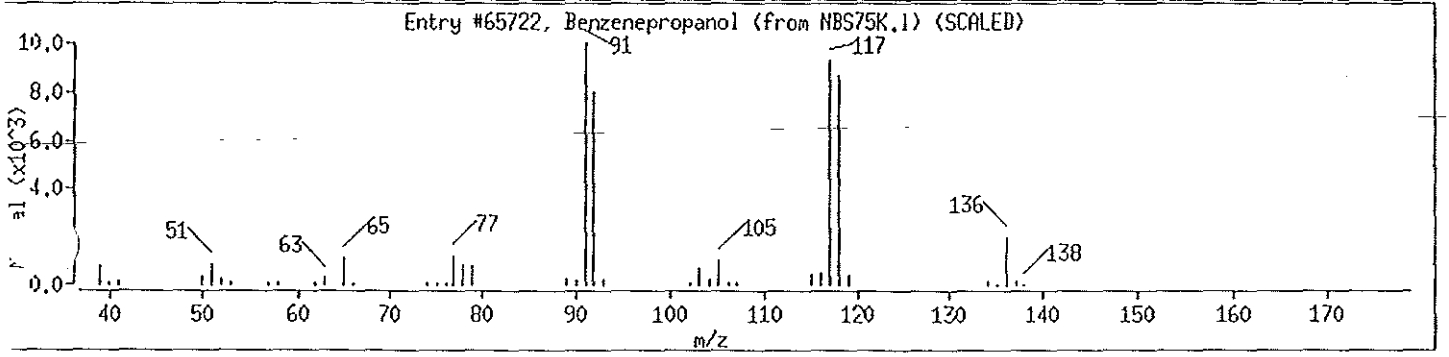
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzenepropanol, acetate	122-72-5	NBS75K.l	68605	50	C11H14O2	178
Benzene, [3-(methylsulfinyl)propyl]-	14198-13-1	NBS75K.l	18323	47	C10H14OS	182
Benzenepropanol	122-97-4	NBS75K.l	65722	46	C9H12O	136









Data File: /chem/aux/mse.i/e111695.b/e8075.d

Date : 16-NOV-95 19:26

)ient ID: jp0324c

Instrument: mse.i

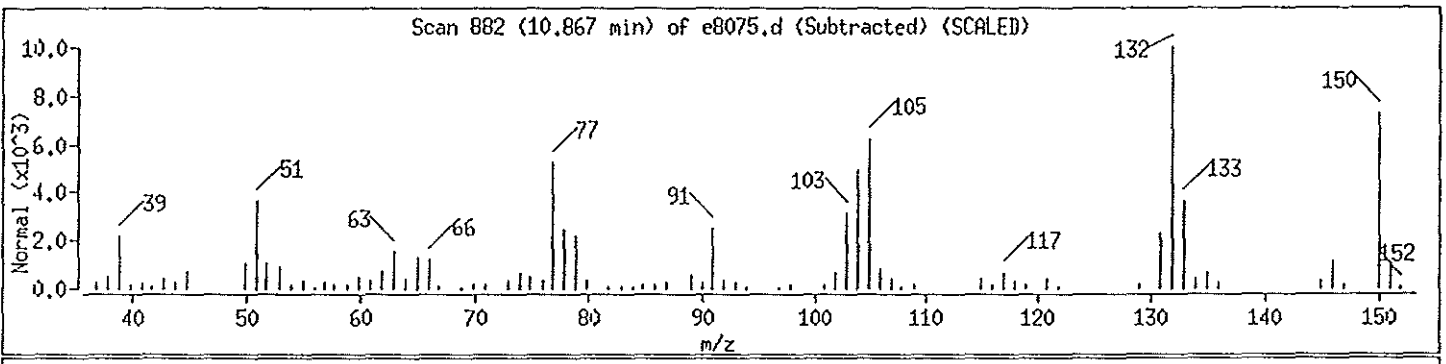
Sample Info: 17418n clj78tw002

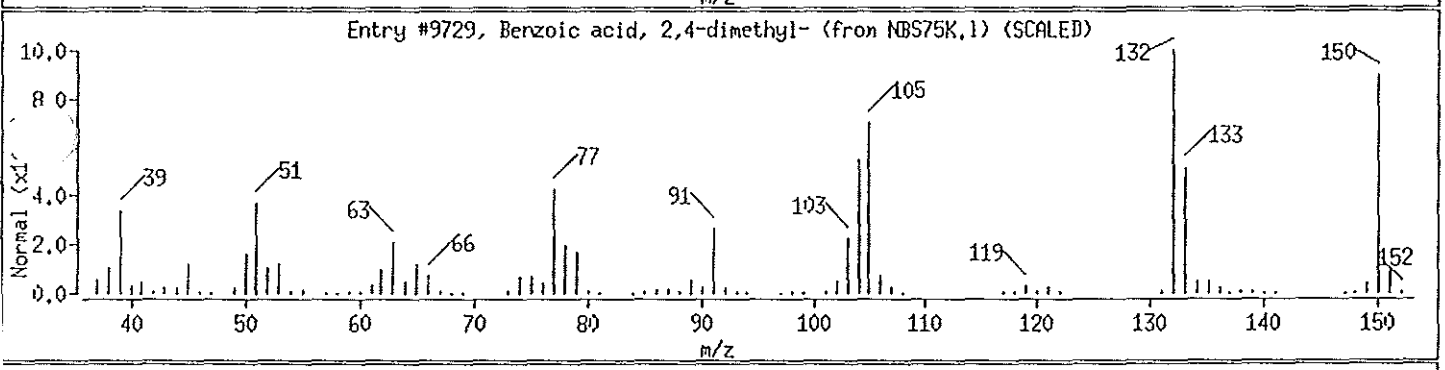
Operator: J. Kelly

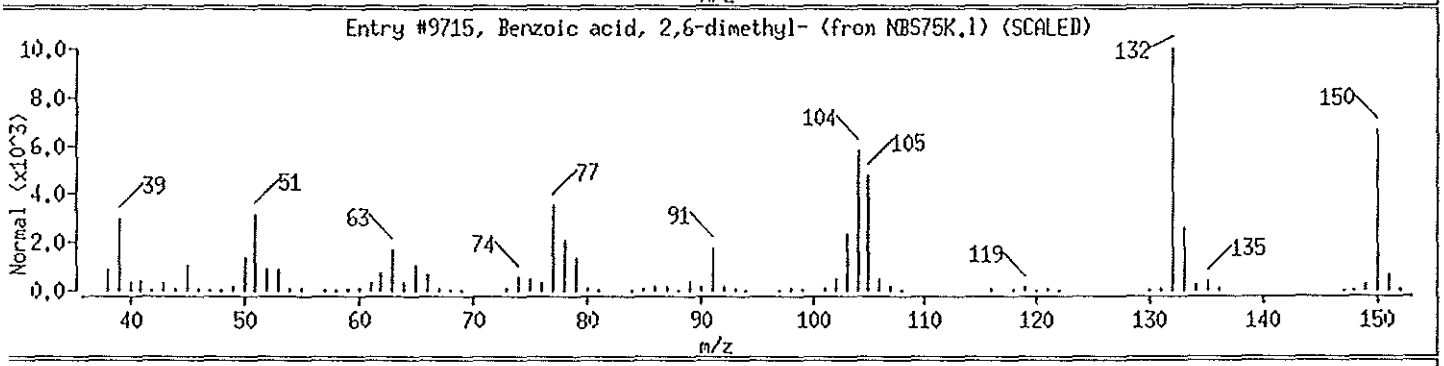
Column phase: J&W DB-5

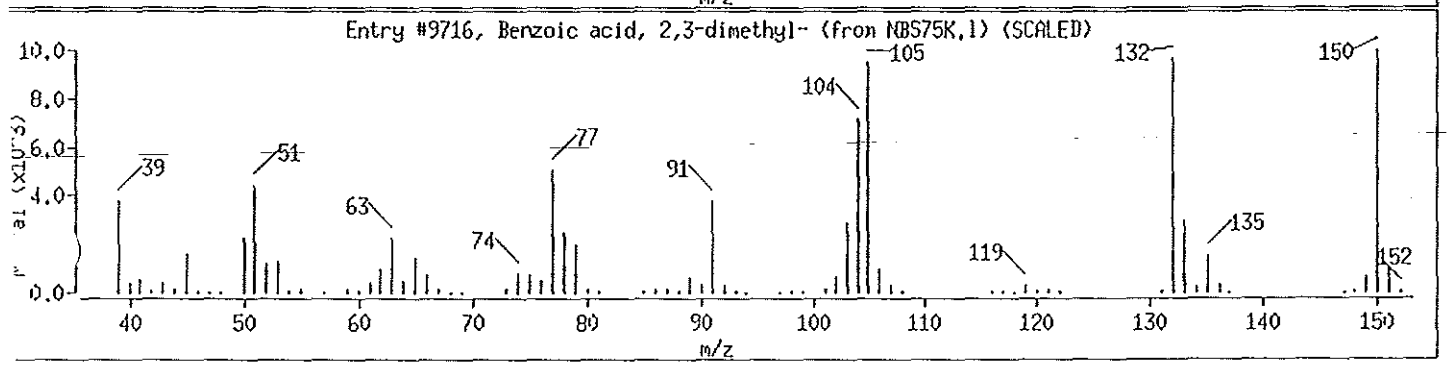
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzoic acid, 2,4-dimethyl-	611-01-8	NBS75K.1	9729	95	C9H10O2	150
Benzoic acid, 2,6-dimethyl-	632-46-2	NBS75K.1	9715	93	C9H10O2	150
Benzoic acid, 2,3-dimethyl-	603-79-2	NBS75K.1	9716	58	C9H10O2	150









Data File: /chem/aux/mse.i/e111695.b/e8075.d

Date : 16-NOV-95 19:26

lient ID: jp0324c

Instrument: mse.i

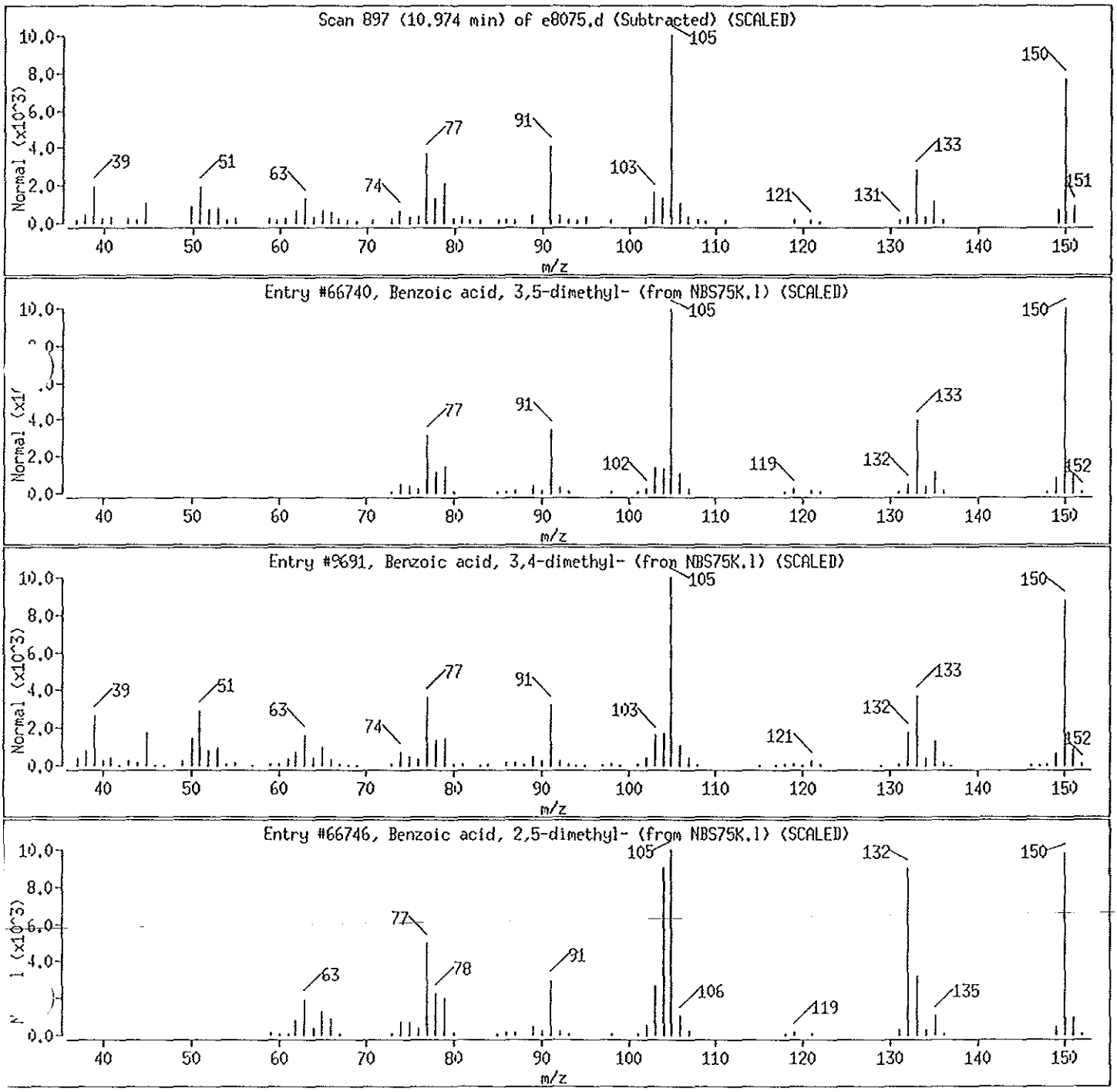
Sample Info: 17418n clj78tw002

Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzoic acid, 3,5-dimethyl-	499-06-9	NBS75K.l	66740	97	C9H10O2	150
Benzoic acid, 3,4-dimethyl-	619-04-5	NBS75K.l	9691	93	C9H10O2	150
Benzoic acid, 2,5-dimethyl-	610-72-0	NBS75K.l	66746	87	C9H10O2	150



Data File: /chem/aux/mse.i/e111695.b/e8075.d

Date : 16-NOV-95 19:26

ient ID: jp0324c

Instrument: mse.i

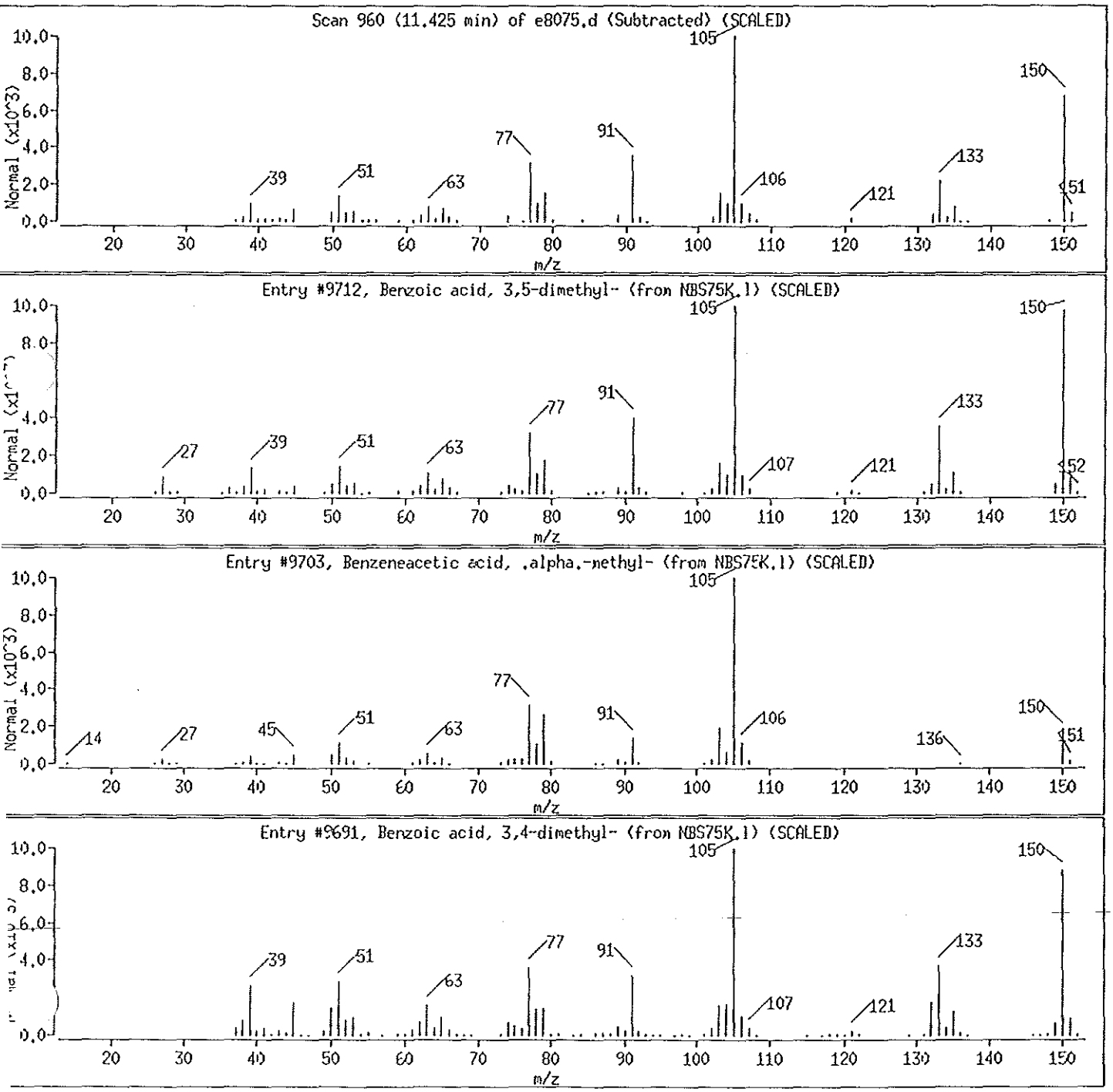
Sample Info: 17418n clj78tw002

Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzoic acid, 3,5-dimethyl-	499-06-9	NBS75K.l	9712	93	C9H10O2	150
Benzeneacetic acid, .alpha.-methyl-	492-37-5	NBS75K.l	9703	70	C9H10O2	150
Benzoic acid, 3,4-dimethyl-	619-04-5	NBS75K.l	9691	50	C9H10O2	150



Data File: /chem/aux/mse.i/e111695.b/e8075.d
Date : 16-NOV-95 19:26
Client ID: jp0324c
Sample Info: 17418n clj78tw002

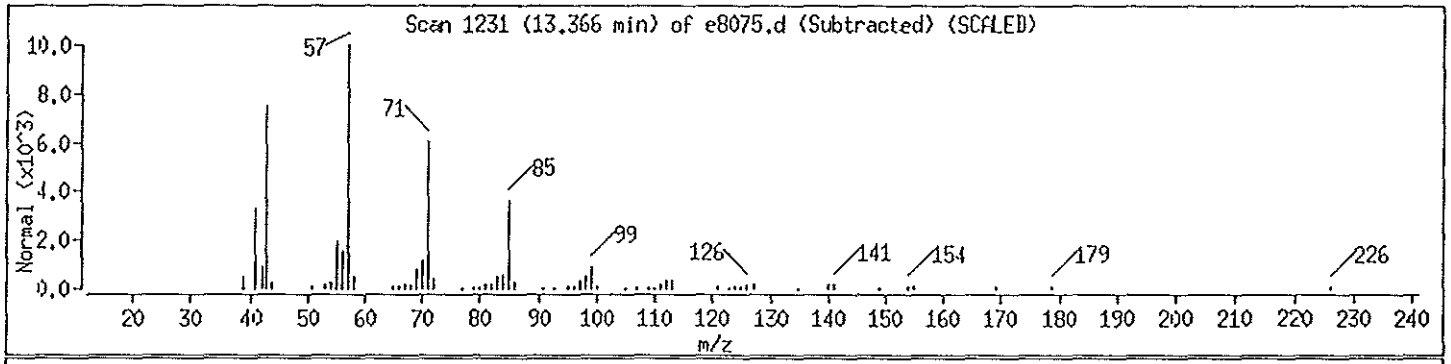
Instrument: mse.i

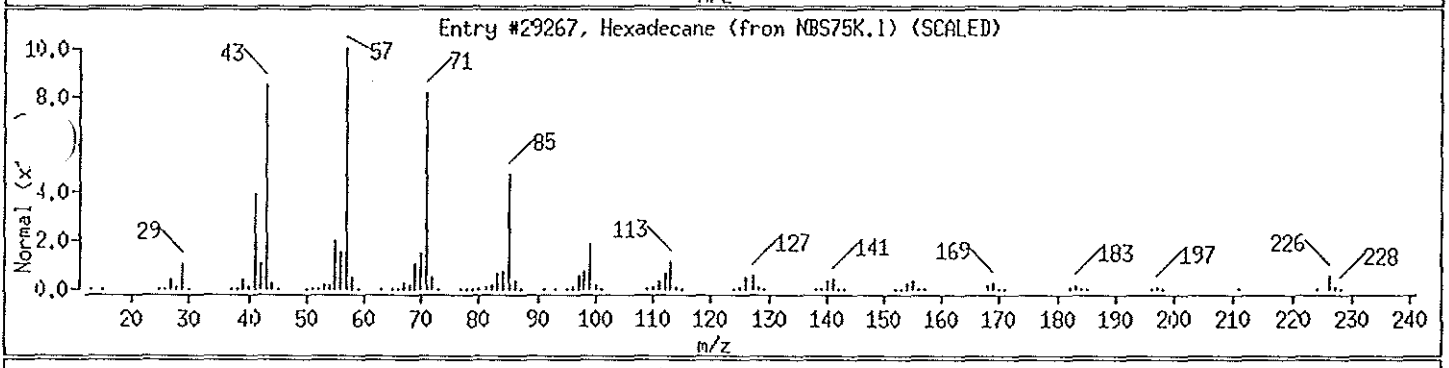
Operator: J. Kelly

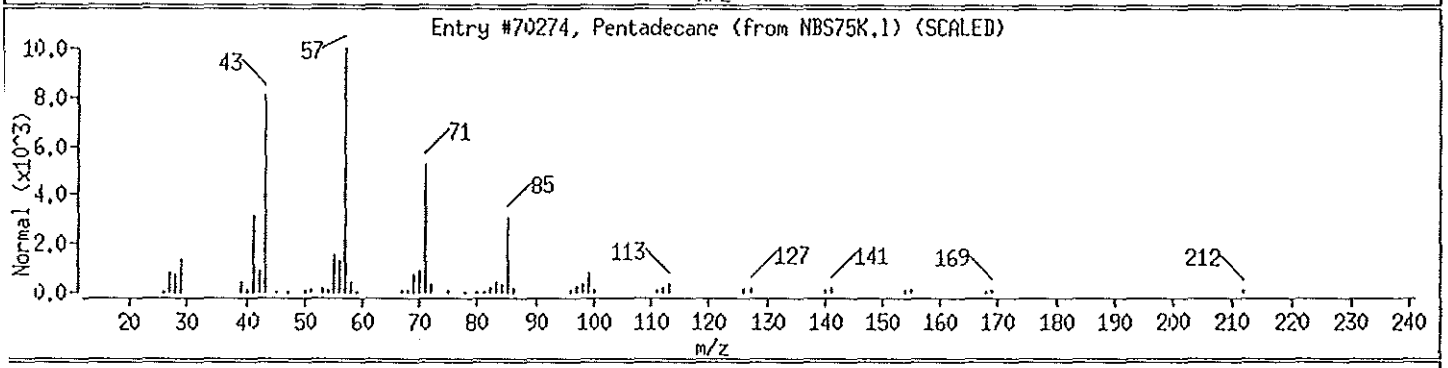
Column phase: J&W DB-5

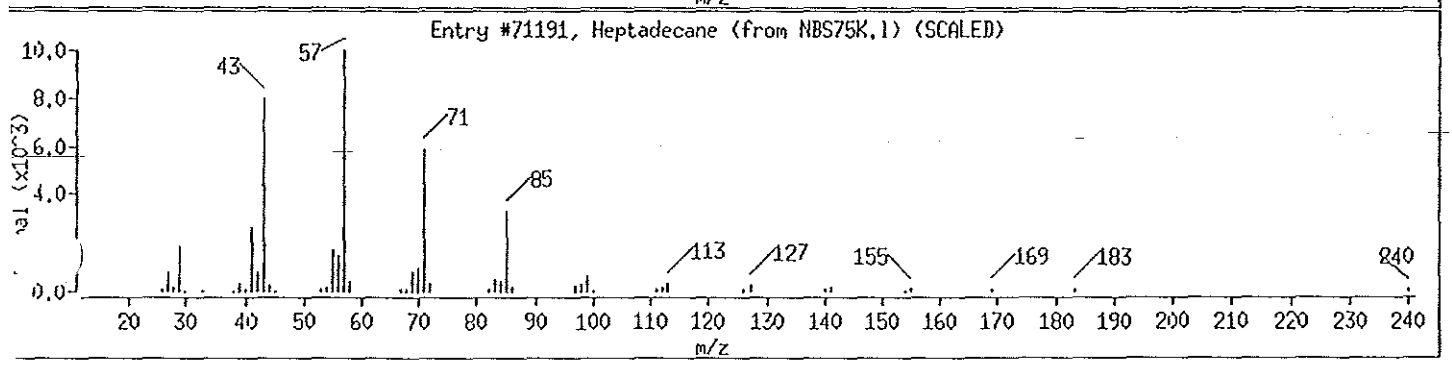
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Hexadecane	544-76-3	NBS75K.l	29267	97	C16H34	226
Pentadecane	629-62-9	NBS75K.l	70274	91	C15H32	212
Heptadecane	629-78-7	NBS75K.l	71191	91	C17H36	240









Data File: /chem/aux/mse.i/e111695.b/e8075.d
Date : 16-NOV-95 19:26
Client ID: jp0324c
Sample Info: 17418n clj78tw002

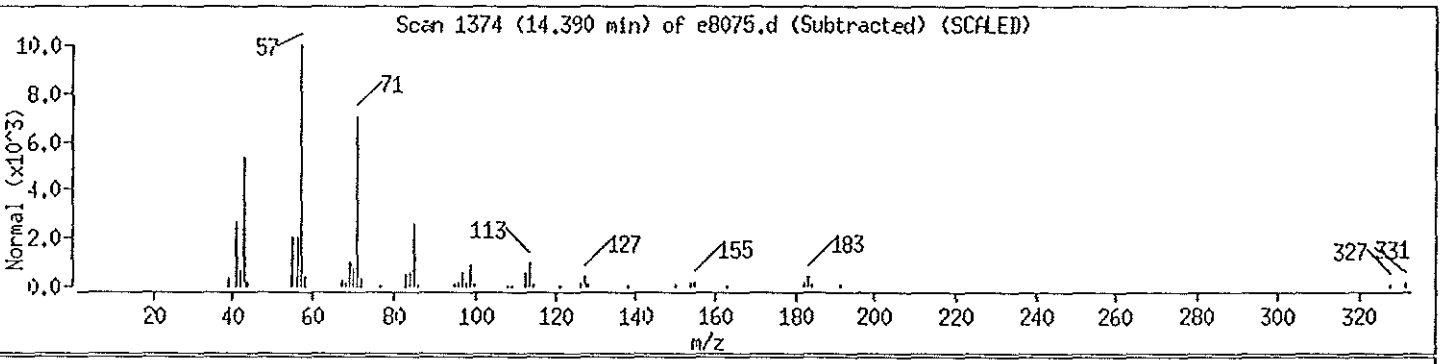
Instrument: mse.i

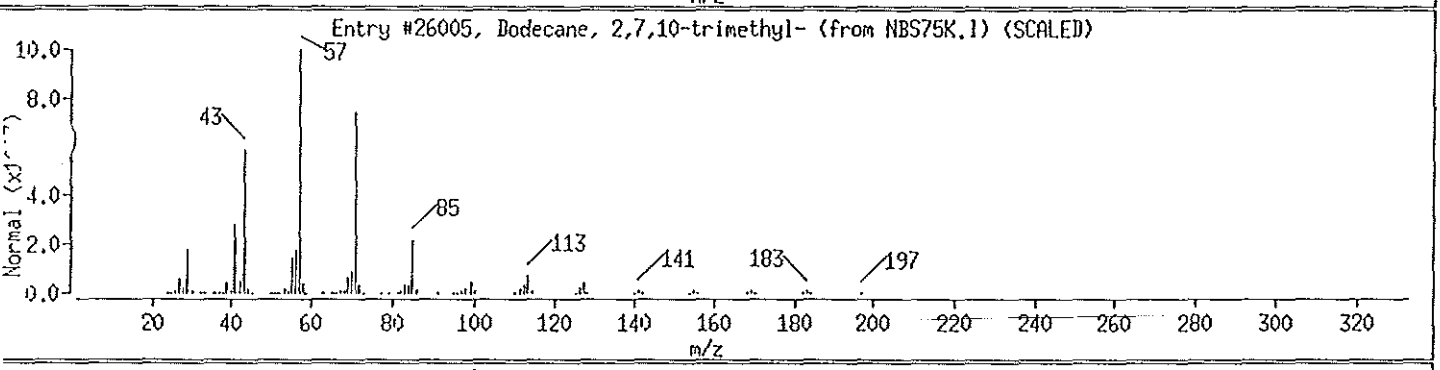
Operator: J. Kelly

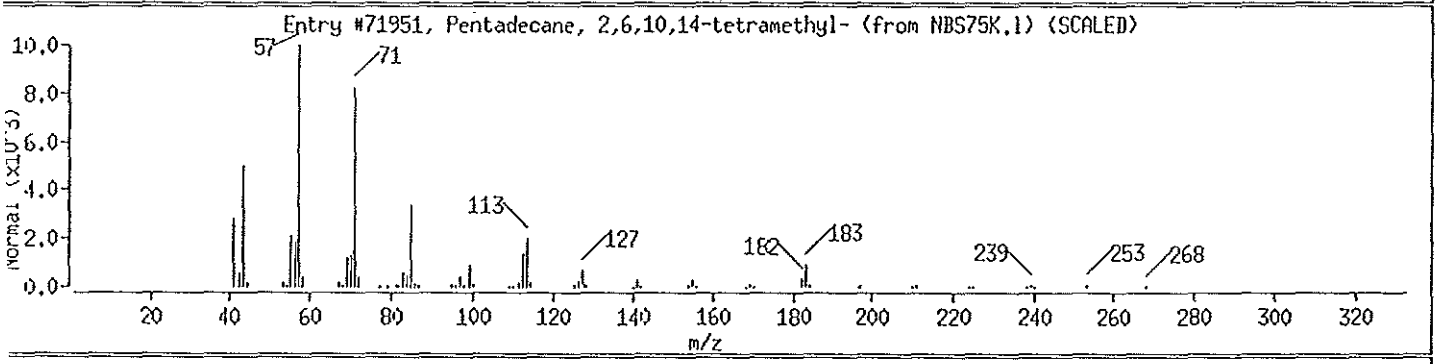
Column phase: J&W DB-5

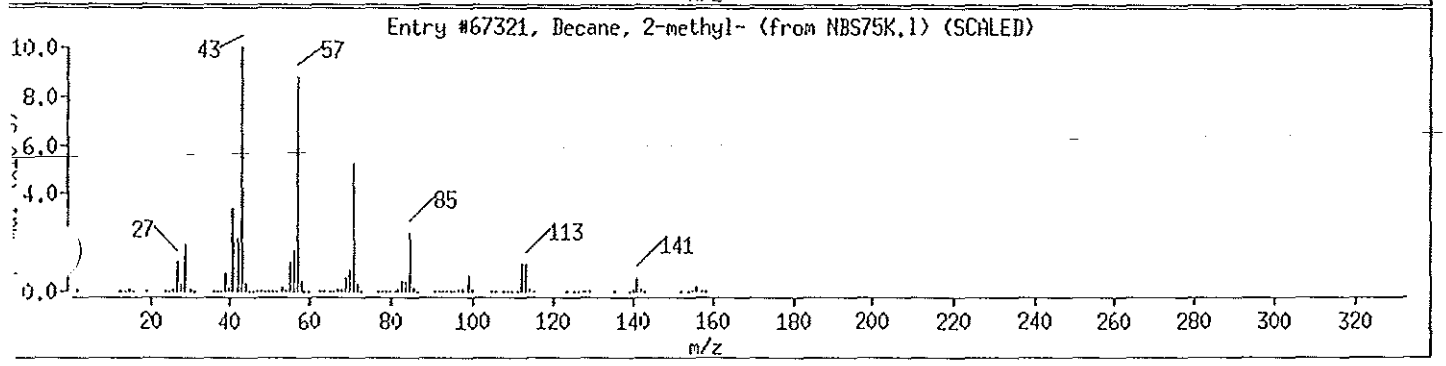
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Dodecane, 2,7,10-trimethyl-	74645-98-0	NBS75K.l	26005	83	C15H32	212
Pentadecane, 2,6,10,14-tetramethyl-	1921-70-6	NBS75K.l	71951	78	C19H40	268
Decane, 2-methyl-	6975-98-0	NBS75K.l	67321	59	C11H24	156









Data File: /chem/aux/mse.i/e111695.b/e8075.d

Date : 16-NOV-95 19:26

Client ID: jp0324c

Instrument: mse.i

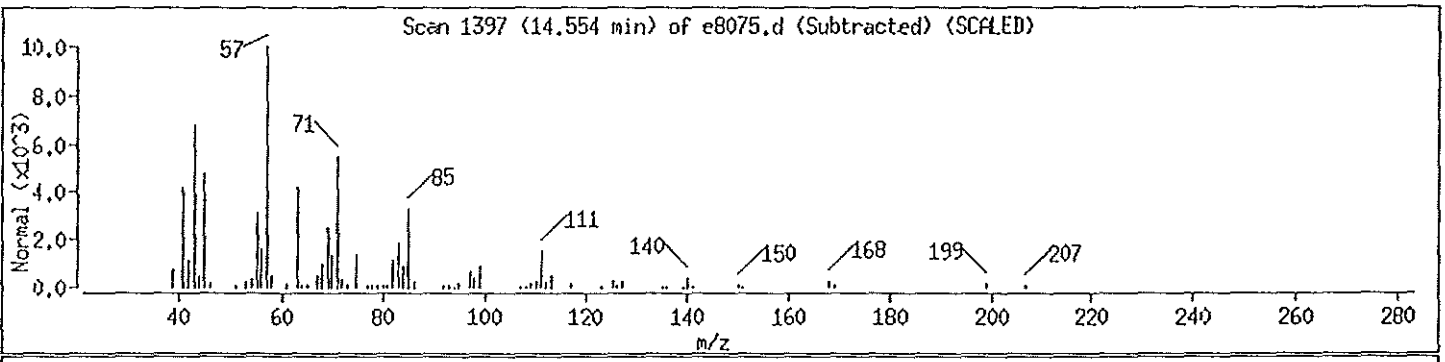
Sample Info: 17418n clj78tw002

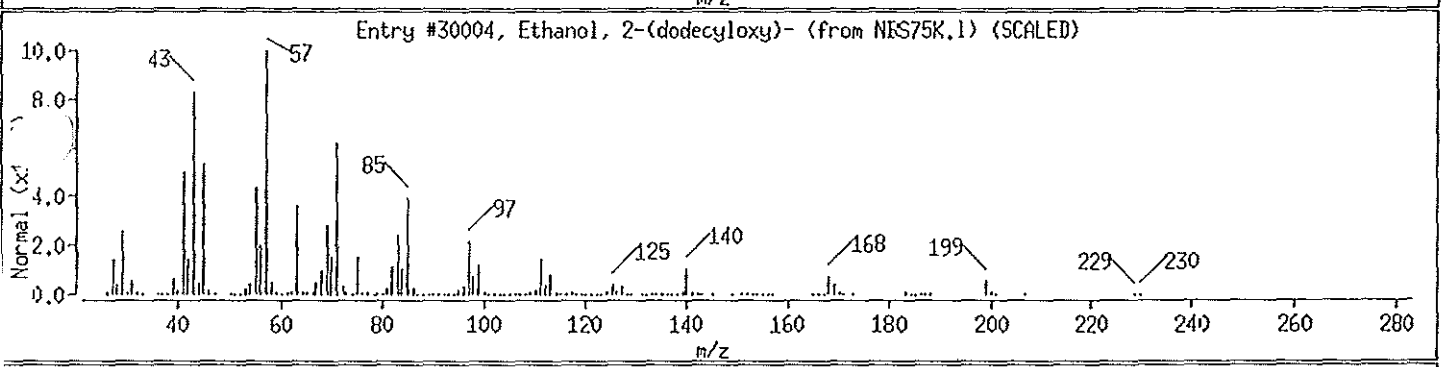
Operator: J. Kelly

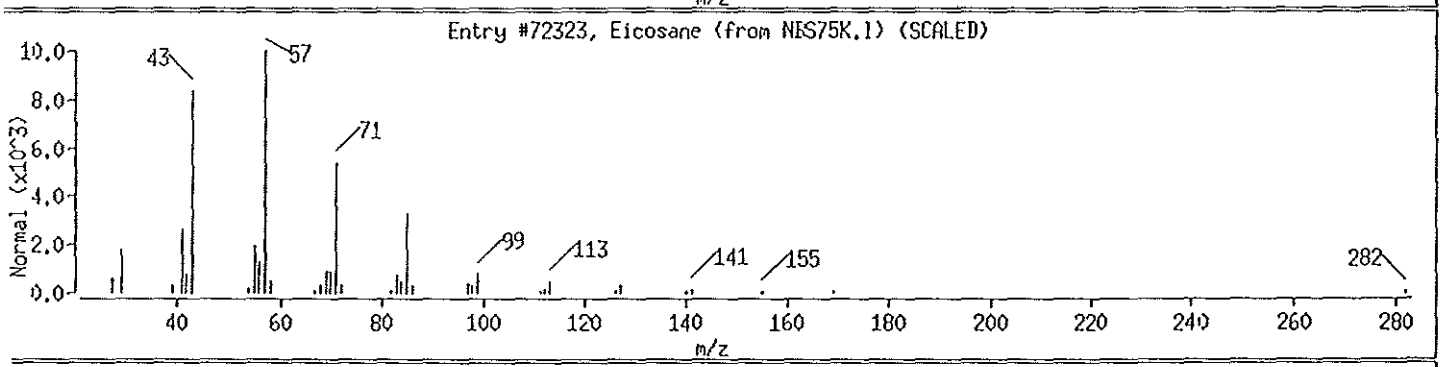
Column phase: J&W DB-5

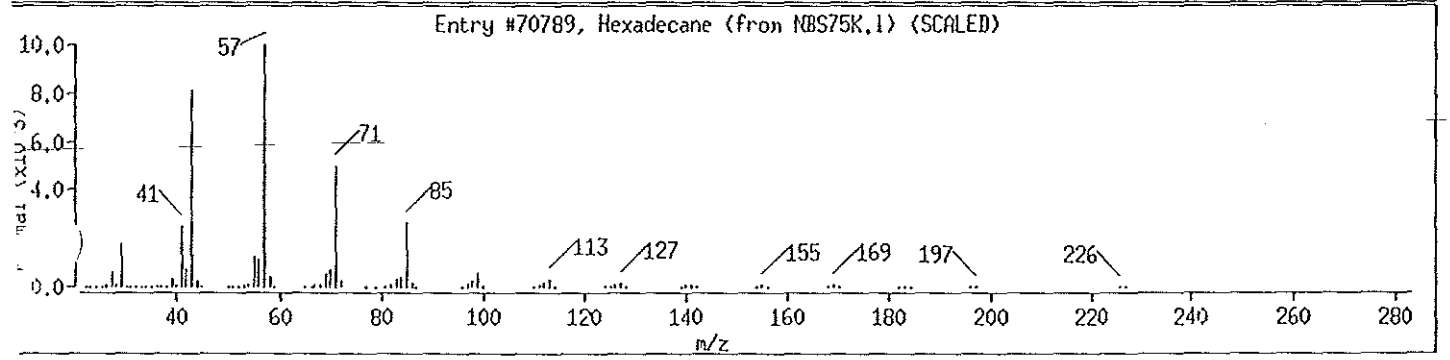
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethanol, 2-(dodecyloxy)-	4536-30-5	NBS75K.l	30004	43	C14H3002	230
Eicosane	112-95-8	NBS75K.l	72323	18	C20H42	282
Hexadecane	544-76-3	NBS75K.l	70789	18	C16H34	226









Data File: /chem/aux/mse.i/e111695.b/e8075.d

Date : 16-NOV-95 19:26

Client ID: jp0324c

Instrument: mse.i

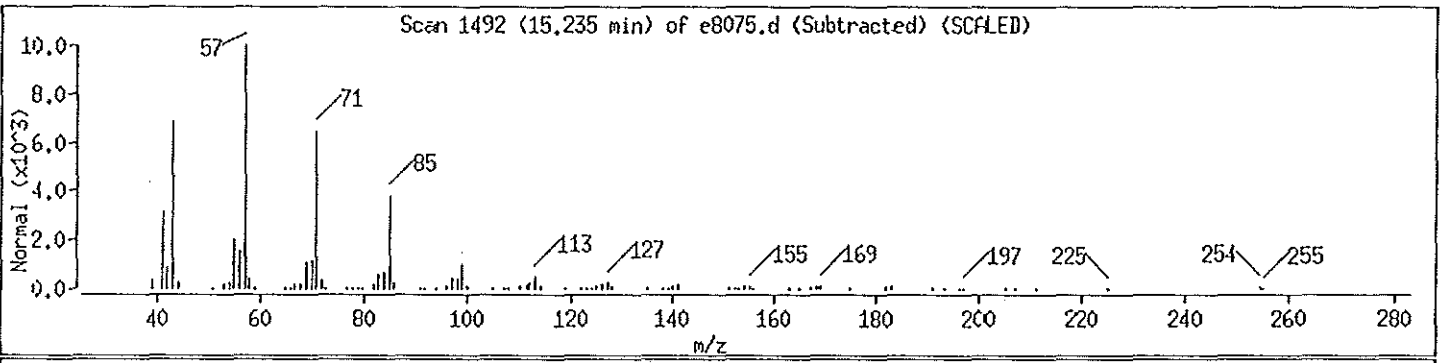
Sample Info: 17418n clj78tw002

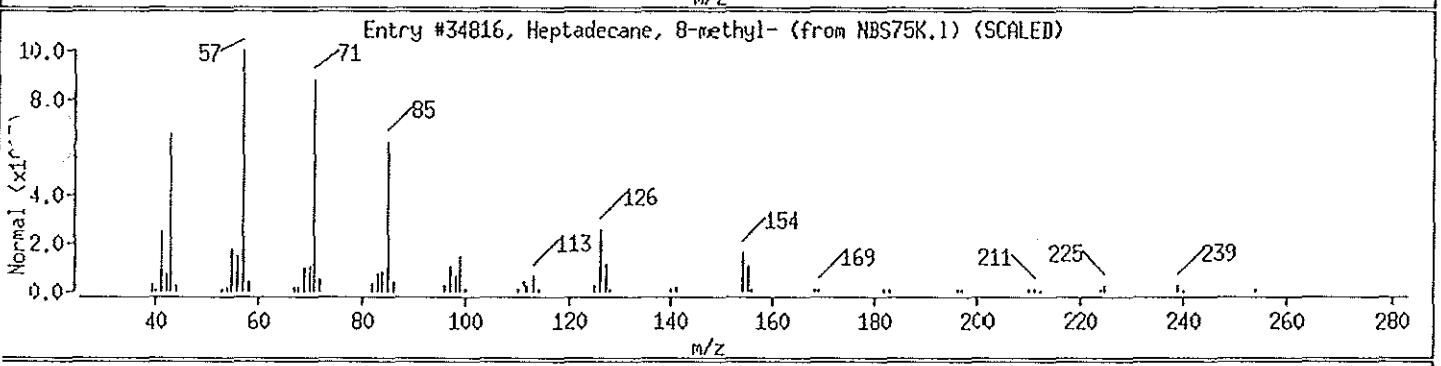
Operator: J. Kelly

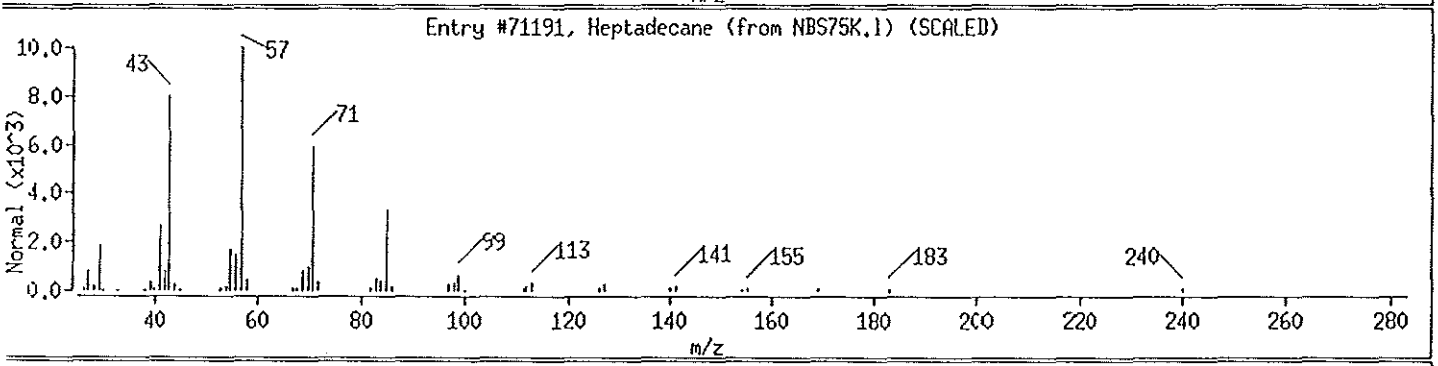
Column phase: J&W DB-5

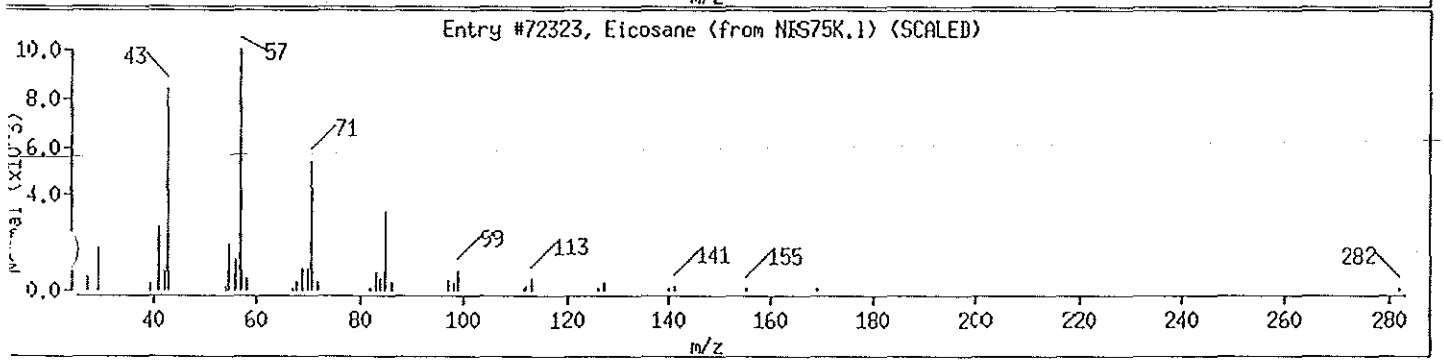
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Heptadecane, 8-methyl-	13287-23-5	NBS75K.l	34816	91	C18H38	254
Heptadecane	629-78-7	NBS75K.l	71191	91	C17H36	240
Eicosane	112-95-8	NBS75K.l	72323	91	C20H42	282









Data File: /chem/aux/mse.i/e111695.b/e8075.d

Date : 16-NOV-95 19:26

Client ID: jp0324c

Instrument: mse.i

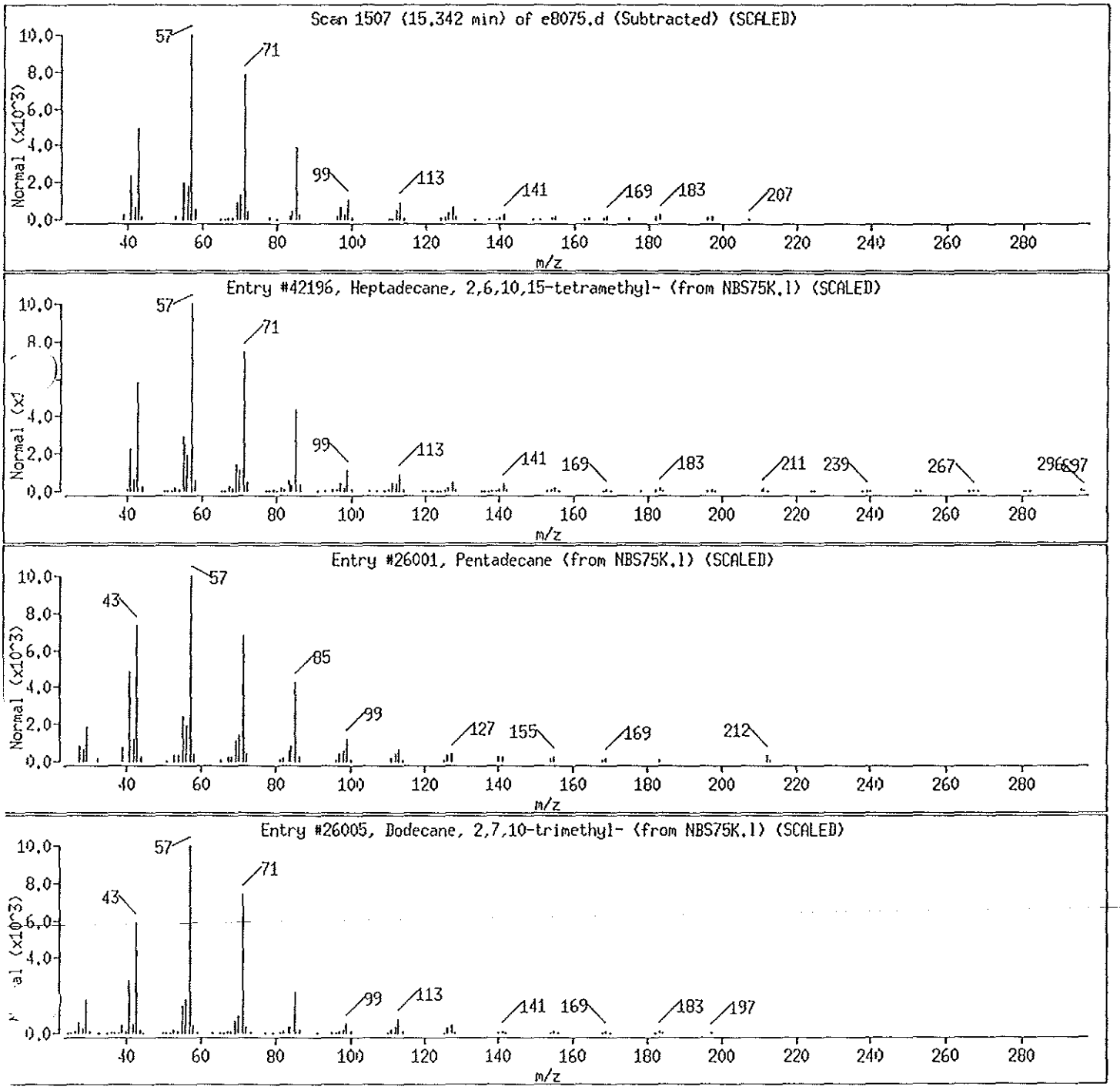
Sample Info: 17418n clj78tw002

Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Heptadecane, 2,6,10,15-tetramethyl-	54833-48-6	NBS75K.l	42196	91	C21H44	296
Pentadecane	629-62-9	NBS75K.l	26001	83	C15H32	212
Dodecane, 2,7,10-trimethyl-	74645-98-0	NBS75K.l	26005	80	C15H32	212



Data File: /chem/aux/mse.i/e111695.b/e8075.d

Date : 16-NOV-95 19:26

Client ID: jp0324c

Sample Info: 17418n clj78tw002

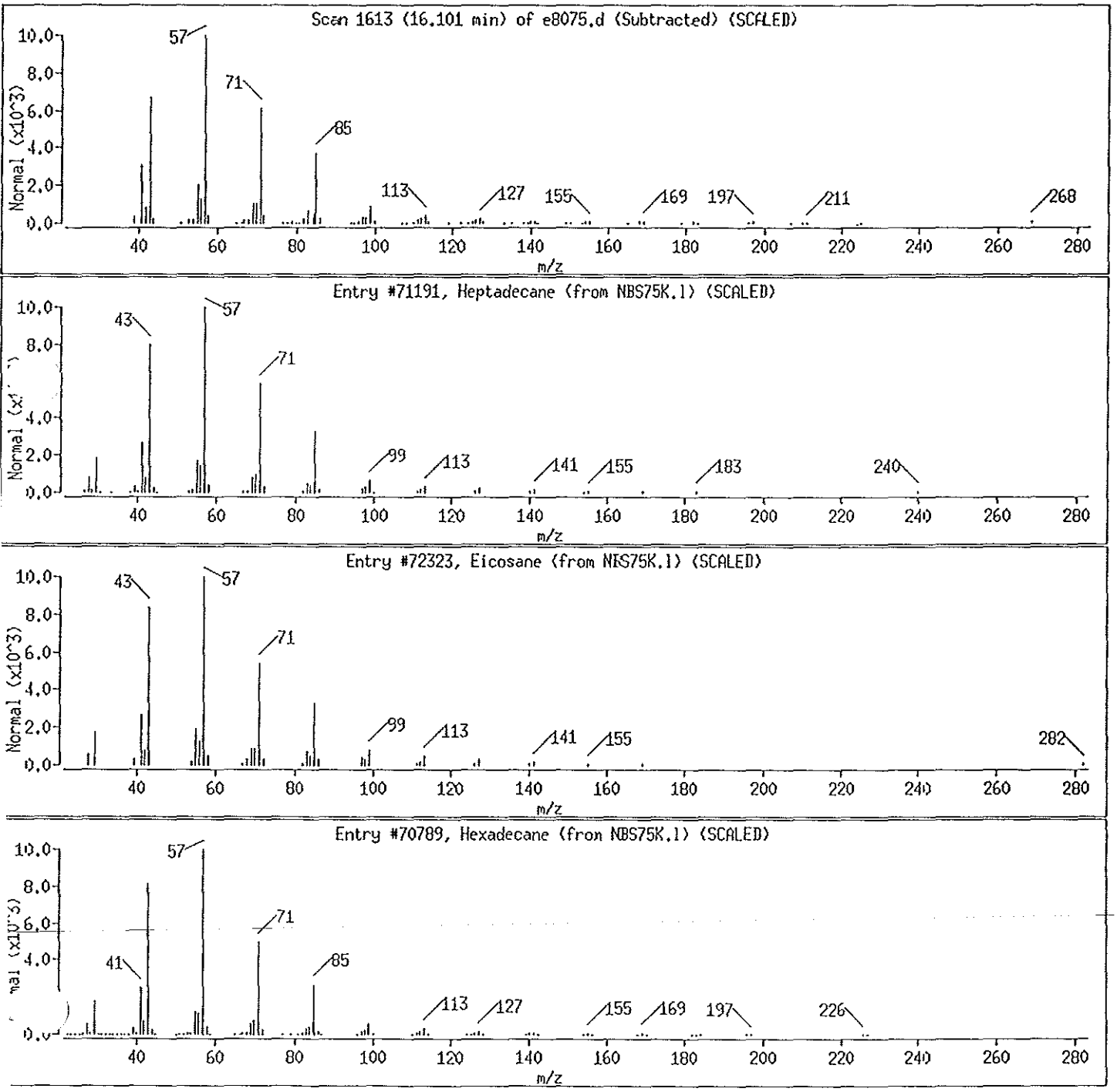
Instrument: mse.i

Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Heptadecane	629-78-7	NBS75K.l	71191	91	C17H36	240
Eicosane	112-95-8	NBS75K.l	72323	91	C20H42	282
Hexadecane	544-76-3	NBS75K.l	70789	91	C16H34	226



Data File: /chem/aux/mse.i/e111695.b/e8075.d
Date : 16-NOV-95 19:26
Client ID: jp0324c
Sample Info: 17418n clj78tw002

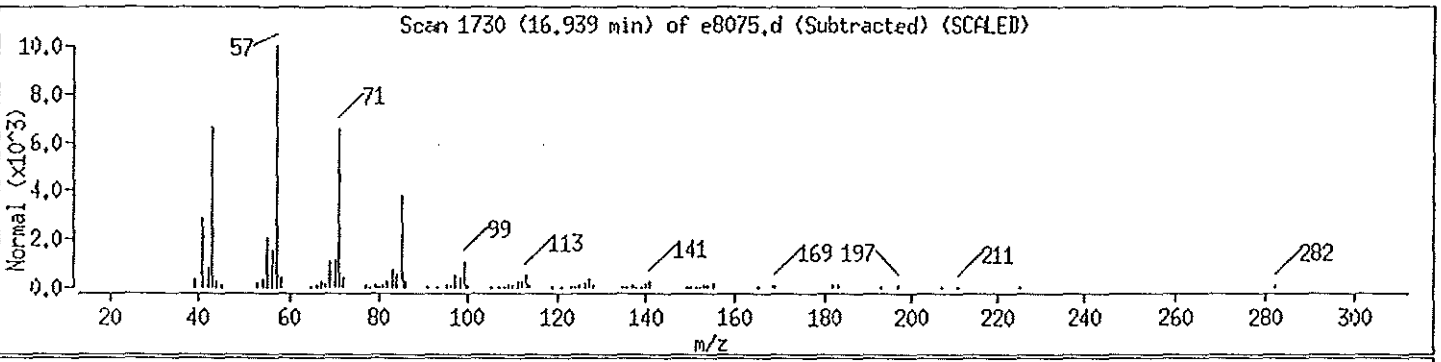
Instrument: mse.i

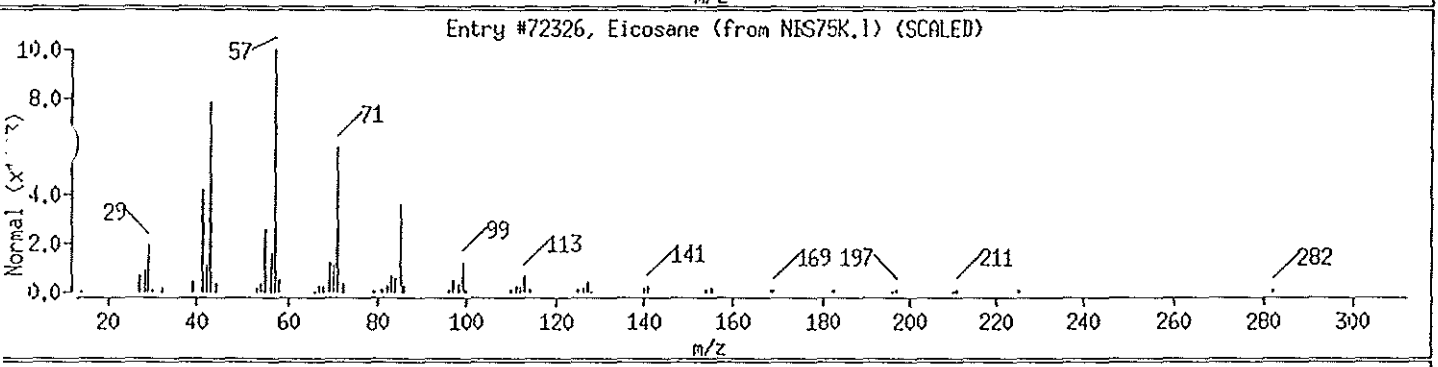
Operator: J. Kelly

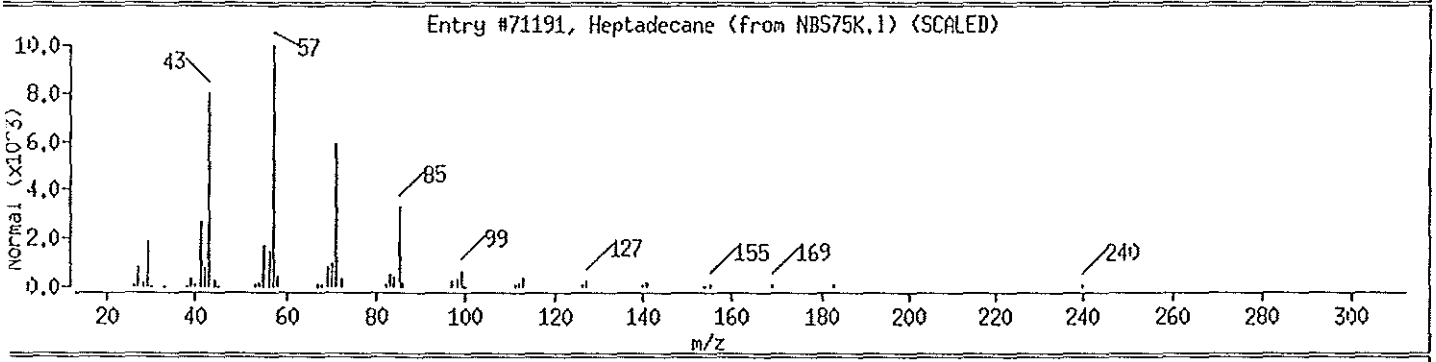
Column phase: J&W DB-5

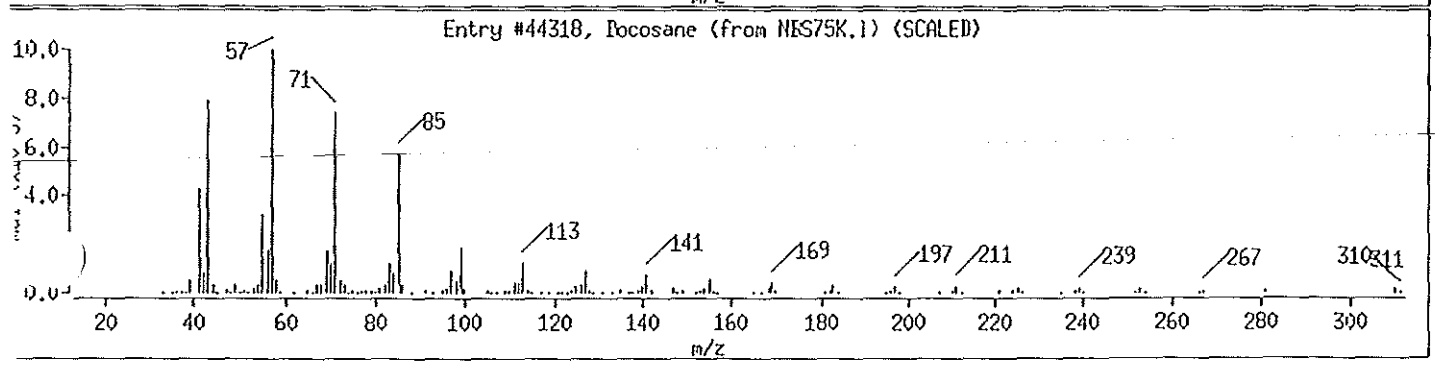
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NBS75K.l	72326	98	C20H42	282
Heptadecane	629-78-7	NBS75K.l	71191	91	C17H36	240
Docosane	629-97-0	NBS75K.l	44318	91	C22H46	310









Data File: /chem/aux/mse.i/e111695.b/e8075.d

Date : 16-NOV-95 19:26

Client ID: jp0324c

Sample Info: 17418n clj78tw002

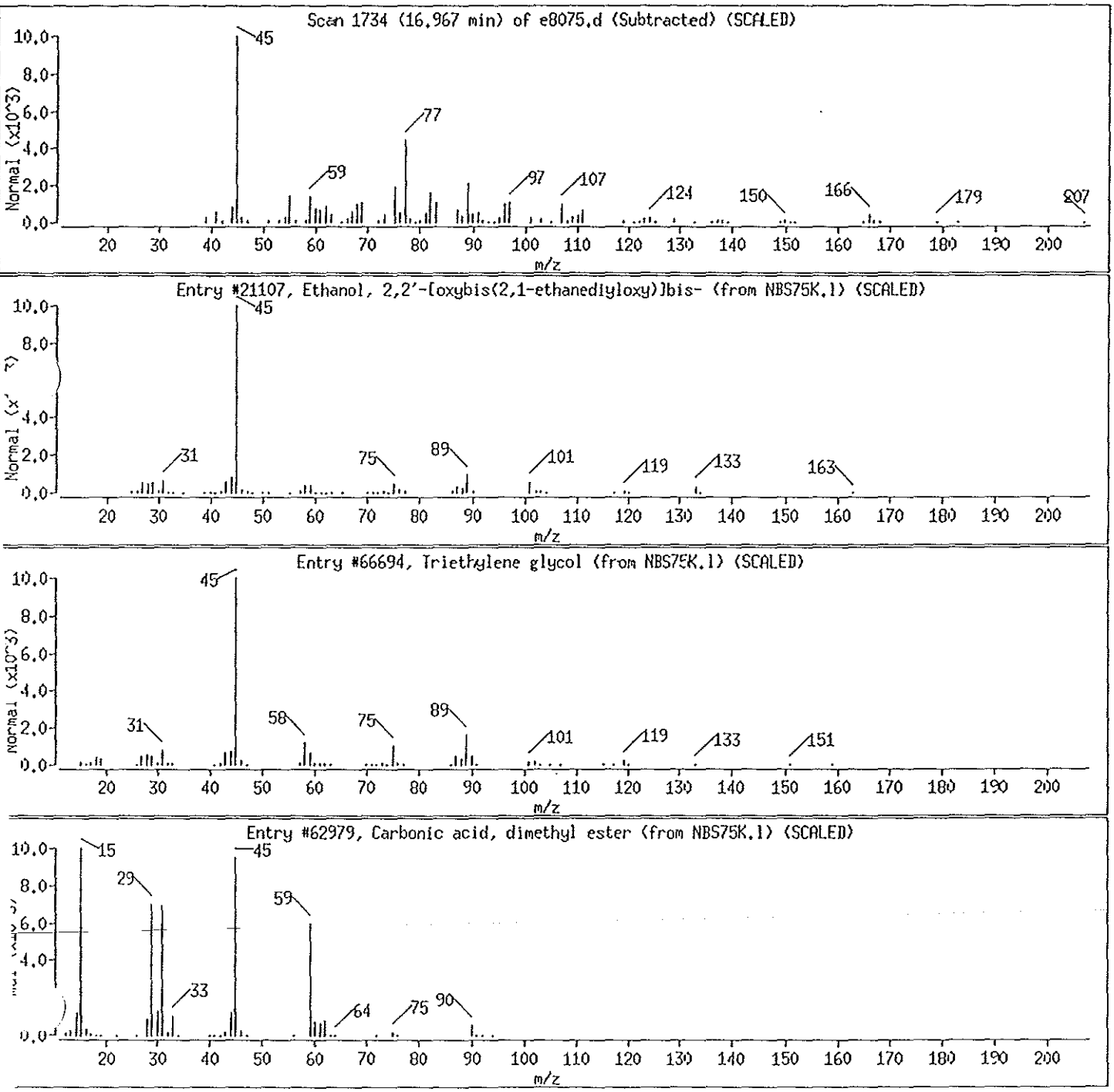
Instrument: mse.i

Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethanol, 2,2'-[oxybis(2,1-ethanediyloxy)	112-60-7	NBS75K.l	21107	43	C6H1805	194
Triethylene glycol	112-27-6	NBS75K.l	66694	38	C6H1404	150
Carbonic acid, dimethyl ester	616-38-6	NBS75K.l	62979	27	C3H603	90



Data File: /chem/aux/mse.i/e111695.b/e8075.d

Date : 16-NOV-95 19:26

ient ID: jp0324c

Instrument: mse.i

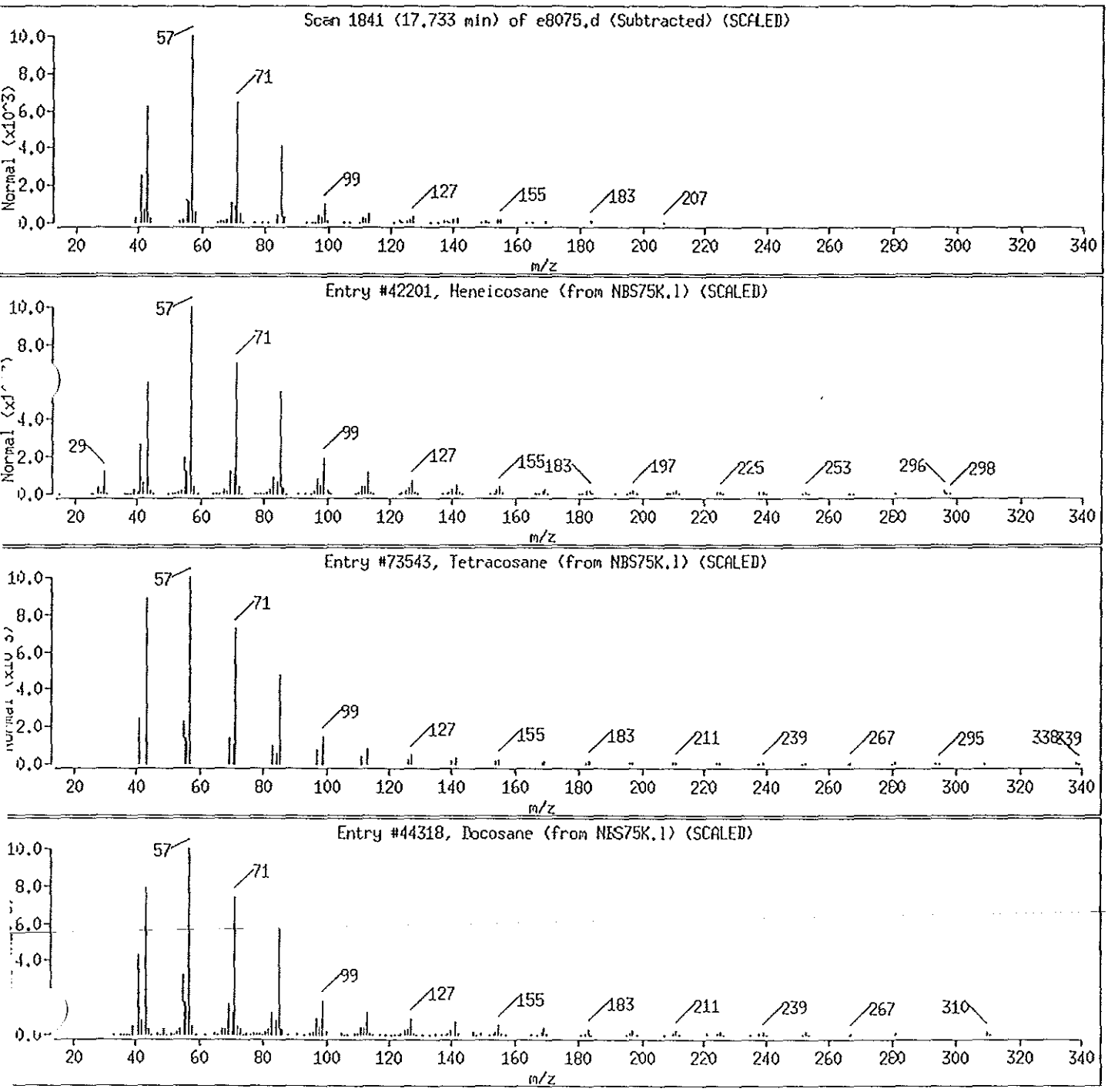
ample Info: 17418n clj78tw002

Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Heneicosane	629-94-7	NBS75K.l	42201	90	C21H44	296
Tetracosane	646-31-1	NBS75K.l	73543	86	C24H50	338
Docosane	629-97-0	NBS75K.l	44318	83	C22H46	310



Data File: /chem/aux/mse.i/e111695.b/e8075.d

Date : 16-NOV-95 19:26

Client ID: jp0324c

Sample Info: 17418n clj78tw002

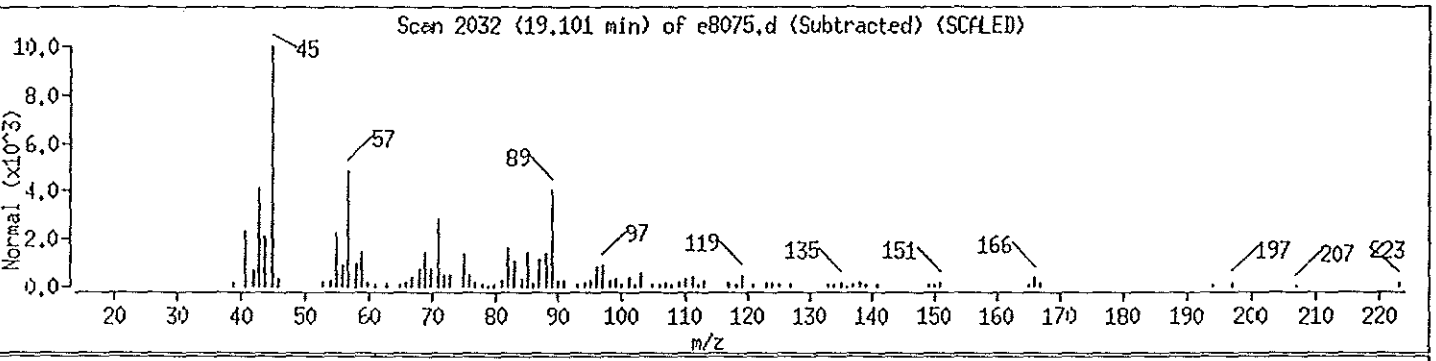
Instrument: mse.i

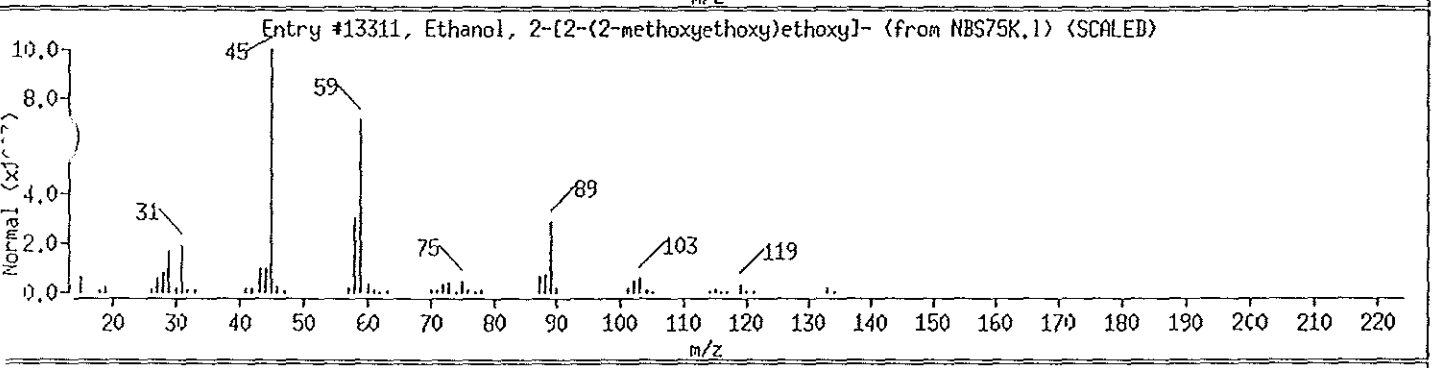
Operator: J. Kelly

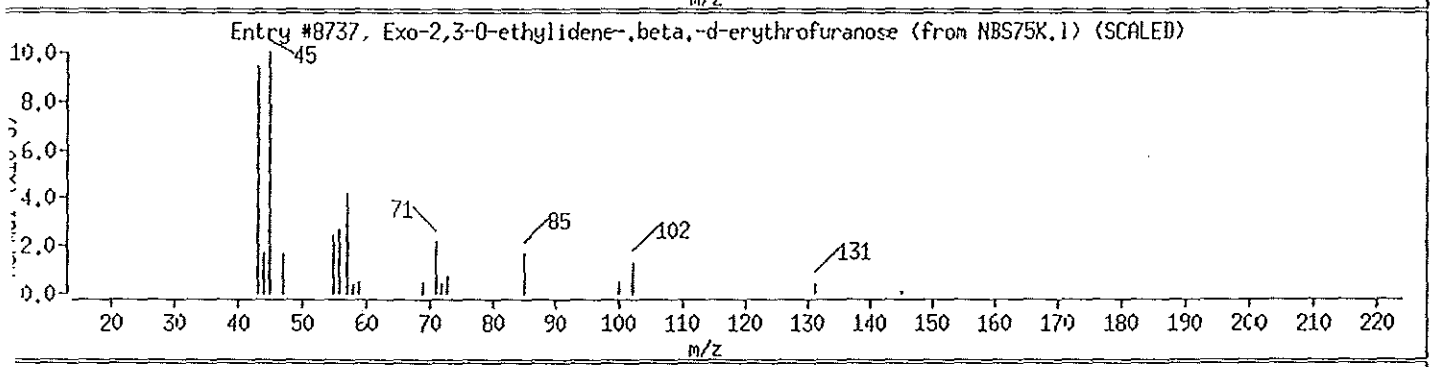
Column phase: J&W DB-5

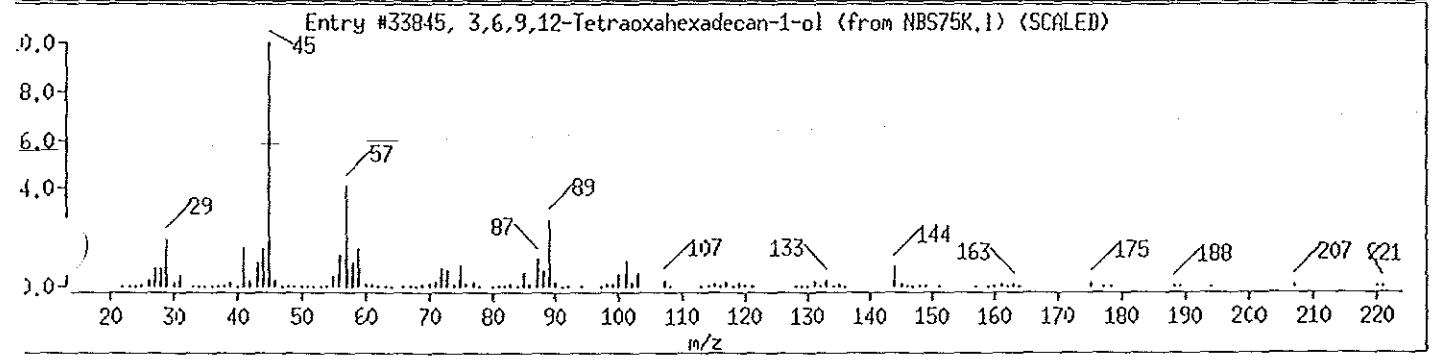
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethanol, 2-[2-(2-methoxyethoxy)ethoxy]-	112-35-6	NBS75K.l	13311	53	C7H16O4	164
Exo-2,3-O-ethylidene-,beta,-d-erythrofur	0-00-0	NBS75K.l	8737	40	C6H10O4	146
3,6,9,12-Tetraoxahexadecan-1-ol	1559-34-8	NBS75K.l	33845	38	C12H26O5	250









1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

- 0400 ~~0400~~

CLJ78TW003

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0326C

Sample wt/vol: 970 (g/mL) ML Lab File ID: E8077

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	53	
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0401 CLJ78TW003

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0326C

Sample wt/vol: 970 (g/mL) ML Lab File ID: E8077

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	52	U
100-02-7	4-Nitrophenol	52	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	26	U
101-55-3	4-Bromophenyl-phenylether	10	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-2	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	190	E
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

0402 CLJ78TW003

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0326C

Sample wt/vol: 970 (g/mL) ML Lab File ID: E8077

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 30

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 79-01-6	Trichloroethylene	4.77	110	JN
2. 127-18-4	Tetrachloroethylene	5.78	40	JN
3. 98-82-8	Benzene, (1-methylethyl)-	6.78	20	JN
4. 103-65-1	Benzene, propyl-	7.05	44	JN
5. 620-14-4	Benzene, 1-ethyl-3-methyl-	7.11	130	JN
6. 95-63-6	Benzene, 1,2,4-trimethyl-	7.17	94	JN
7. 526-73-8	Benzene, 1,2,3-trimethyl-	7.30	23	JN
8. 95-36-3	1,2,4-Trimethylbenzene	7.44	130	JN
9. 538-93-2	Benzene, (2-methylpropyl)-	7.55	6	JN
10. 93-53-8	Benzeneacetaldehyde, .alpha.	7.59	13	JN
11. 535-77-3	Benzene, 1-methyl-3-(1-methy	7.70	7	JN
12. 95-36-3	1,2,4-Trimethylbenzene	7.74	91	JN
13. 488-23-3	Benzene, 1,2,3,4-tetramethyl	8.00	32	JN
14.	unknown	8.08	11	J
15. 1074-55-1	Benzene, 1-methyl-4-propyl-	8.14	14	JN
16. 934-80-5	Benzene, 4-ethyl-1,2-dimethy	8.21	9	JN
17.	unknown	8.24	10	J
18. 934-80-5	Benzene, 4-ethyl-1,2-dimethy	8.56	11	JN
19. 933-98-2	Benzene, 1-ethyl-2,3-dimethy	8.64	14	JN
20. 95-93-2	Benzene, 1,2,4,5-tetramethyl	8.69	11	JN
21. 933-98-2	Benzene, 1-ethyl-2,3-dimethy	9.07	24	JN
22. 119-64-2	Naphthalene, 1,2,3,4-tetrahy	9.24	9	JN
23.	unknown	10.51	7	J
24. 632-46-2	Benzoic acid, 2,6-dimethyl-	10.57	23	JN
25.	unknown	11.03	21	J
~~26. 610-72-0~~	Benzoic acid, 2,5-dimethyl-	11.17	12	JN
27.	unknown	11.65	7	J
28. 1758-88-9	Benzene, 2-ethyl-1,4-dimethy	11.73	16	JN
29.	unknown	13.30	7	J
30. 115-86-6	Phosphoric acid, triphenyl e	20.37	7	JN

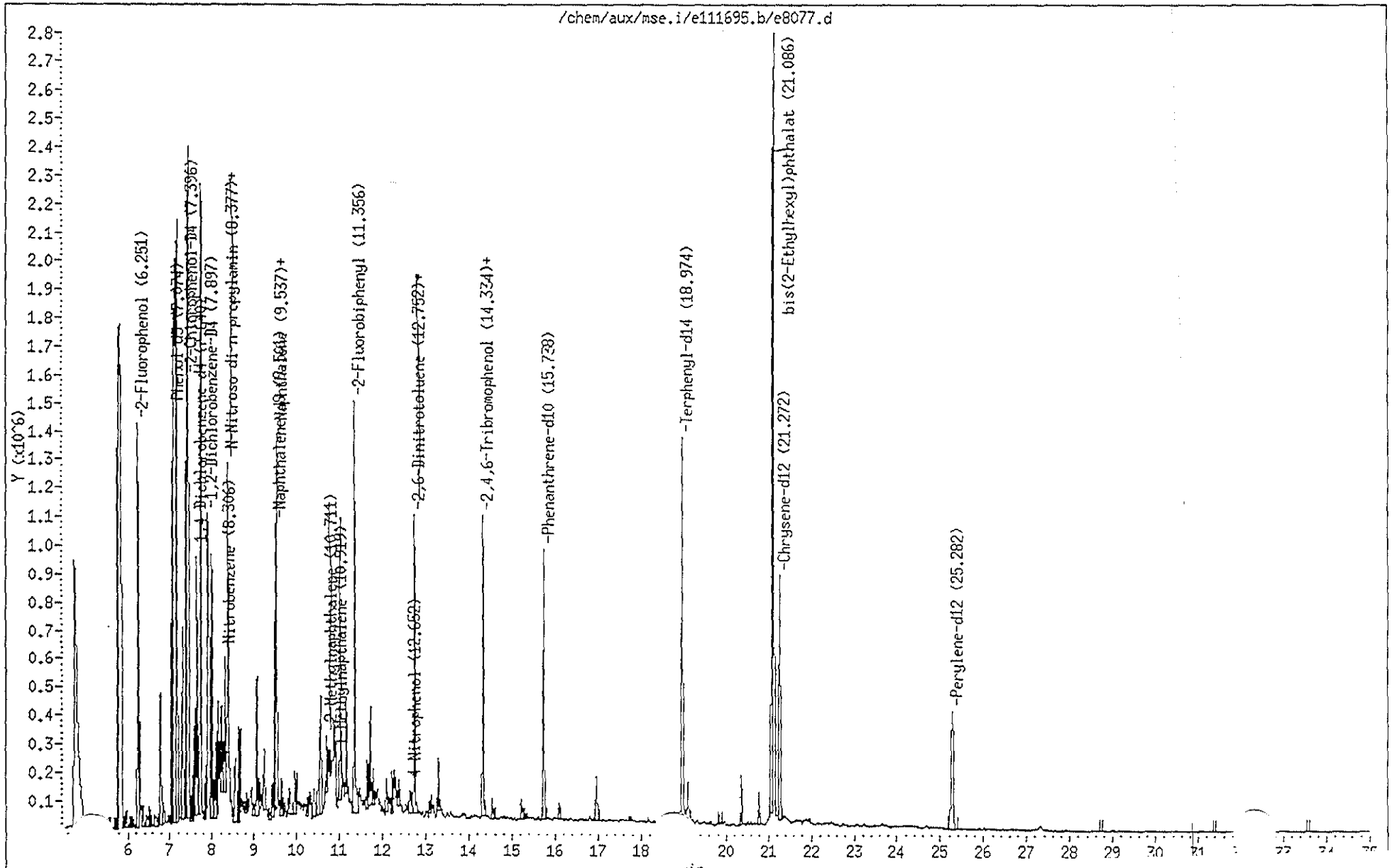
0403

Data File: /chem/aux/mse.i/e111695.b/e8077.d
Date : 16-NOV-95 20:57
Client ID: jp0326c
Sample Info: 17418n clj78tw003

Instrument: mse.i

Operator: J. Kelly
Column diameter: 0.25

Column phase: J&W DB-5



Data File: /chem/aux/mse.i/e111695.b/e8077.d
Report Date: 17-Nov-1995 13:51

Dilute for #70

OHM Analytical Division

BASE NEUTRAL QUANT AND RATIO REPORT

Data file : /chem/aux/mse.i/e111695.b/e8077.d
Lab Smp Id: Client Smp ID: jp0326c
Inj Date : 16-NOV-95 20:57
Operator : J. Kelly Inst ID: mse.i
Smp Info : 17418n clj78tw003
Misc Info : jp0326c,n1c51710,m1,1,1
Comment :
Method : /chem/aux/mse.i/e111695.b/111495eclp.m
Meth Date : 17-Nov-1995 13:45 kathryn Quant Type: ISTD
Cal Date : 16-NOV-95 14:53 Cal File: e8069.d
Als bottle: 10
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

KBaylow

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
$	2	2-Fluorophenol	112.00	6.251	6.252	(0.819)	559226	80.8	80.8(R)
$	4	Phenol-d5	99.00	7.074	7.083	(0.927)	579821	61.1	61.1(R)
$	7	2-Chlorophenol-D4	132.00	7.396	7.398	(0.969)	642553	96.0	96.0(R)
*	10	1,4-Dichlorobenzene-d4	152.00	7.632	7.641	(1.000)	185132	40.0	
$	13	1,2-Dichlorobenzene-D4	152.00	7.890	7.899	(1.034)	236247	60.8	60.8(QR)
	17	N-Nitroso-di-n-propylamine	70.00	8.377	8.114	(1.098)	107652	15.2	~~15.2~~(Q) ND, RT, MS
$	19	Nitrobenzene-d5	82.00	8.377	8.386	(0.882)	632997	64.6	64.6(R)
	20	Nitrobenzene	77.00	8.306	8.415	(0.874)	29288	3.15	~~3.15~~(Q) ND RT, MS
*	27	Naphthalene-d8	136.00	9.501	9.510	(1.000)	762371	40.0	
	28	Naphthalene	128.00	9.537	9.546	(1.004)	917379	51.4	51.4
	29	4-Chloroaniline	127.00	9.537	9.560	(1.004)	138950	13.1	~~13.1~~(Q) ND, MS
	32	2-Methylnaphthalene	142.00	10.704	10.720	(1.127)	44545	3.74	~~3.74~~ ND, MS
	33	1-Methylnapthalene	142.00	10.919	10.935	(1.149)	22541	2.12	~~2.12~~ ND, MS
	37	2-Fluorobiphenyl	172.00	11.356	11.364	(0.890)	766956	66.5	66.5(R)
	41	2,6-Dinitrotoluene	165.00	12.752	12.295	(1.000)	46306	13.8	~~13.8~~(Q) ND, RT, MS
	44	Acenaphthene-d10	164.00	12.752	12.761	(1.000)	398395	40.0	
	47	4-Nitrophenol	109.00	12.666	12.789	(0.993)	5312	3.11	~~3.11~~(Q) ND RT MS
	48	2,4-Dinitrotoluene	165.00	12.752	13.090	(1.000)	52507	12.4	~~12.4~~(Q) ND, RT, MS
	56	2,4,6-Tribromophenol	330.00	14.334	14.343	(1.124)	226339	126	126(R)
	57	4-Bromophenyl-phenylether	248.00	14.334	14.744	(0.911)	14451	4.46	~~4.46~~(Q) ND, RT, MS
	60	Phenanthrene-d10	188.00	15.738	15.754	(1.000)	581979	40.0	
	68	Terphenyl-d14	244.00	18.974	18.983	~~(0.892)~~	~~786816~~	~~69.8~~	~~69.8(R)~~
	70	bis(2-Ethylhexyl)phthalate	149.00	21.086	21.095	(0.991)	1453529	96.2	~~96.2~~ 186.5
	73	Chrysene-d12	240.00	21.272	21.288	(1.000)	500126	40.0	
		erylene-d12	264.00	25.275	25.305	(1.000)	445661	40.0	

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/aux/mse.i/e111695.b/e8077.d

Date : 16-NOV-95 20:57

ient ID: jp0326c

Instrument: mse.i

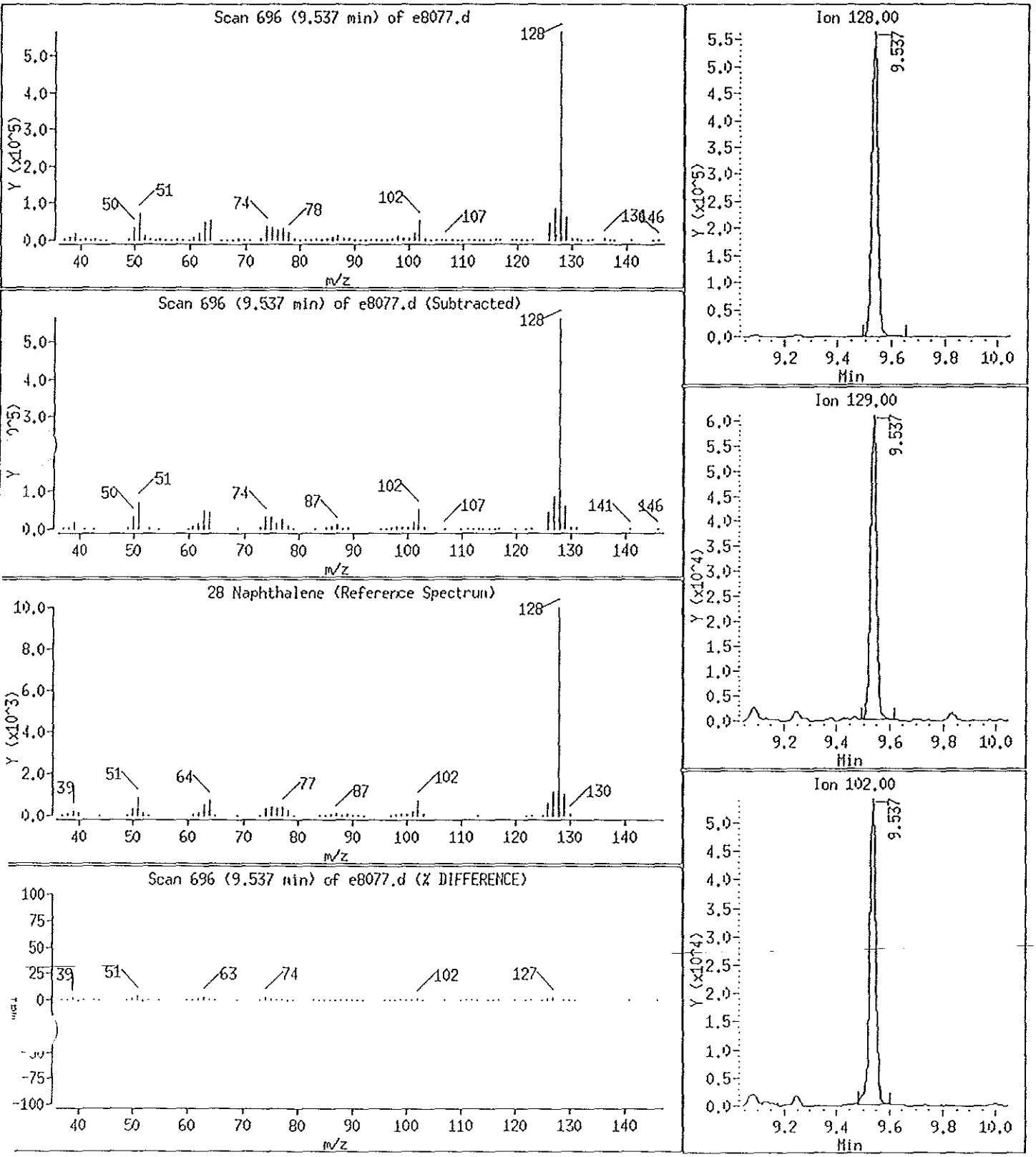
Sample Info: 17418n clj78tw003

Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

28 Naphthalene



Data File: /chem/aux/mse.i/e111695.b/e8077.d

Date : 16-NOV-95 20:57

Client ID: jp0326c

Sample Info: 17418n clj78tw003

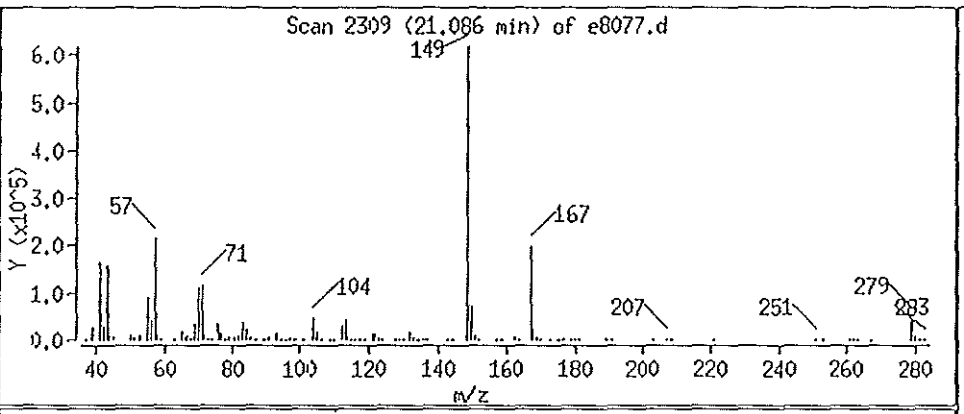
Instrument: mse.i

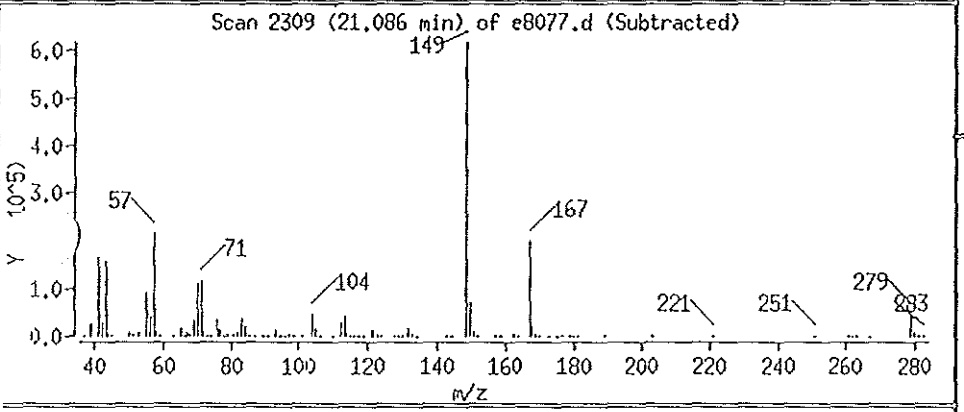
Operator: J. Kelly

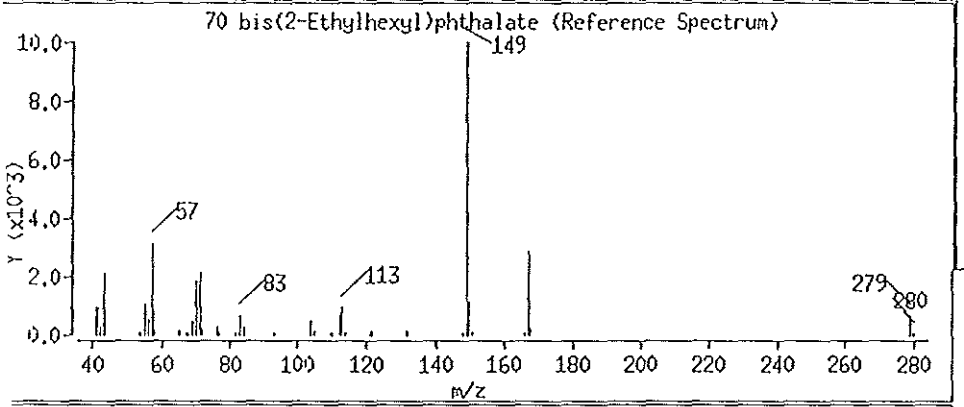
Column phase: J&W DB-5

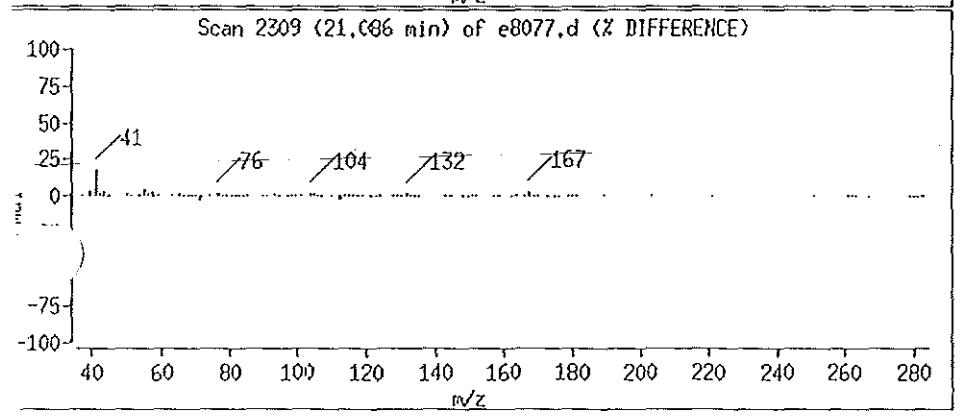
Column diameter: 0.25

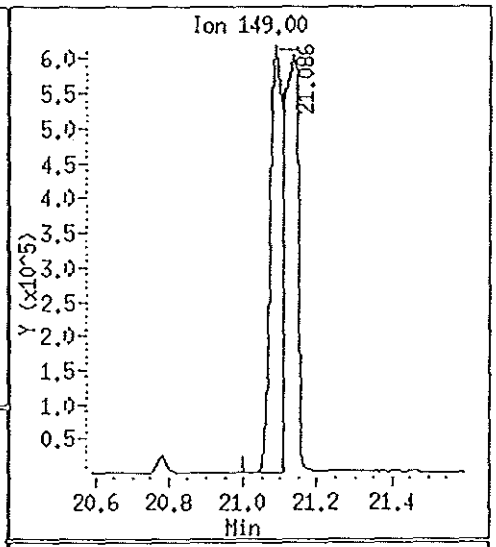
70 bis(2-Ethylhexyl)phthalate

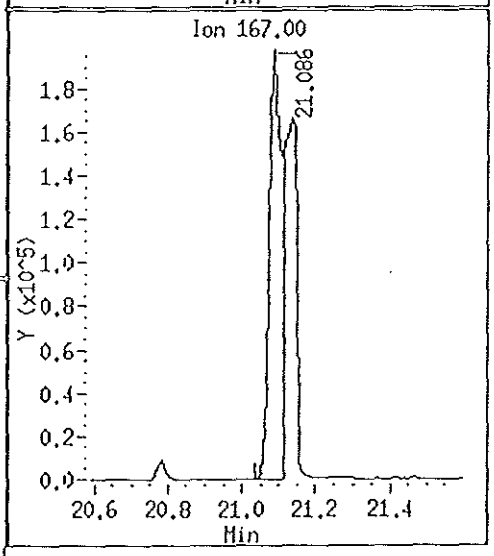












Data File: /chem/aux/mse.i/e111695.b/e8077.d

Date : 16-NOV-95 20:57

)ient ID: jp0326c

Instrument: mse.i

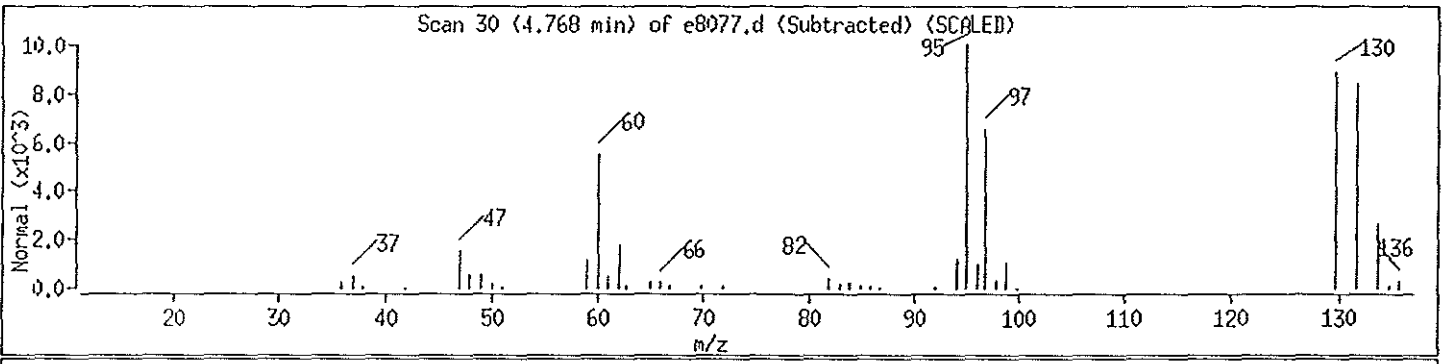
Sample Info: 17418n clj78tw003

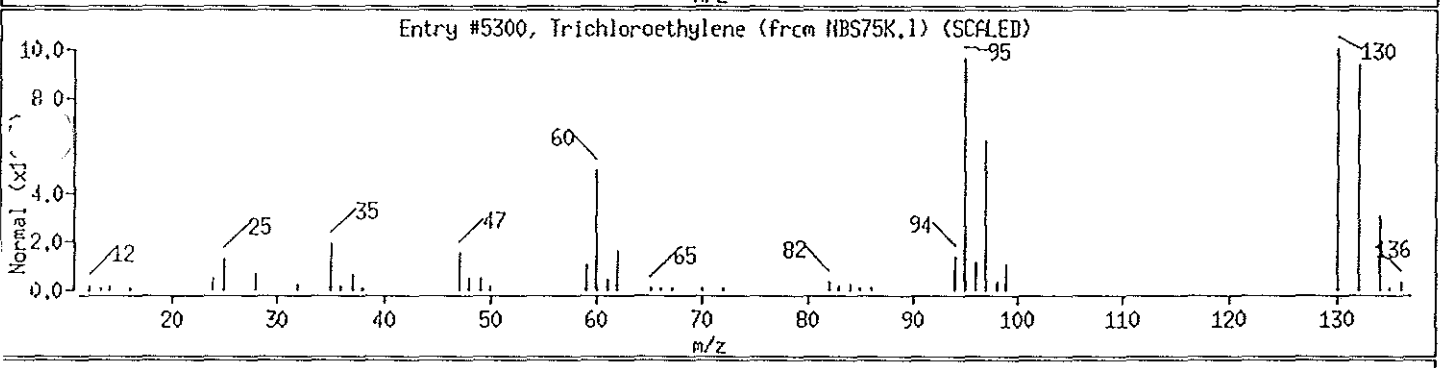
Operator: J. Kelly

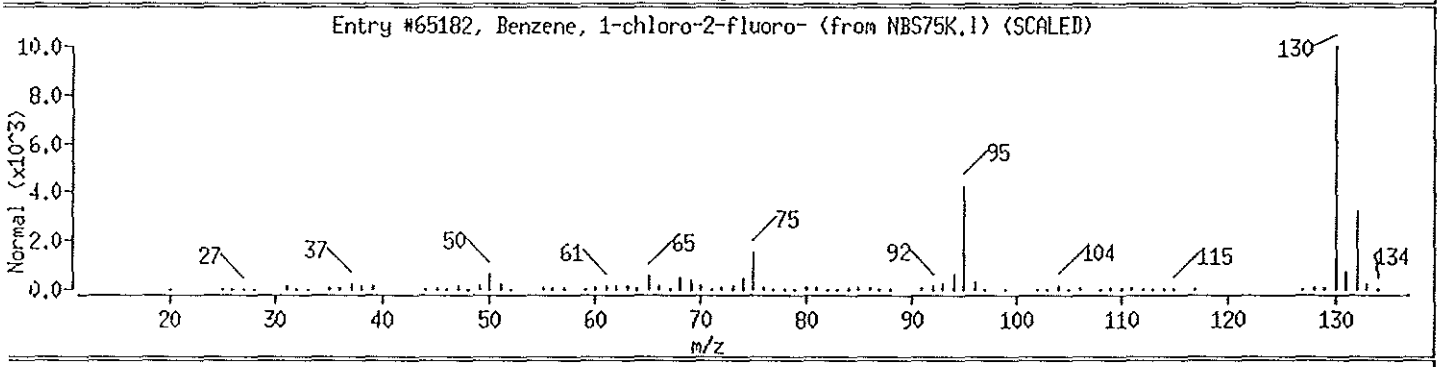
Column phase: J&W DB-5

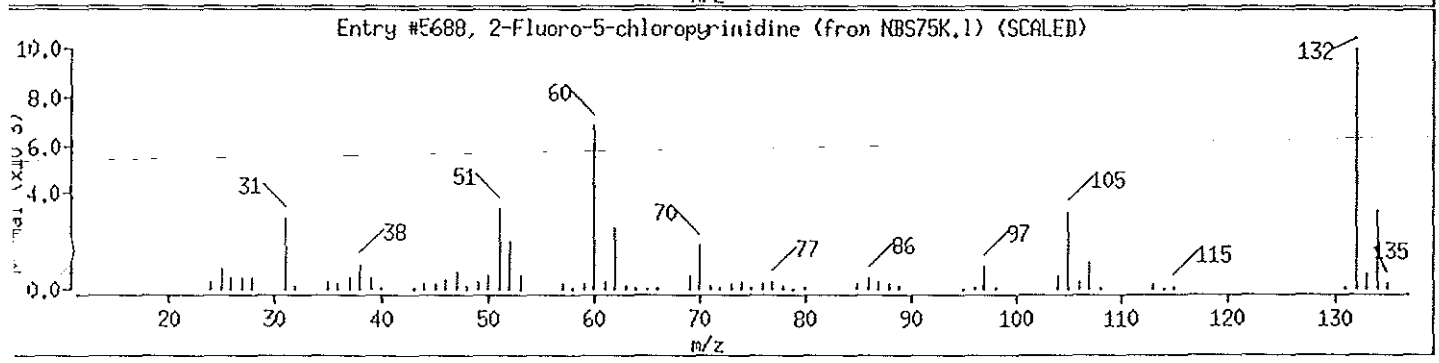
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Trichloroethylene	79-01-6	NBS75K.l	5300	99	C2HCl3	130
Benzene, 1-chloro-2-fluoro-	348-51-6	NBS75K.l	65182	35	C6H4ClF	130
2-Fluoro-5-chloropyrimidine	62802-37-3	NBS75K.l	5688	35	C4H2ClFN2	132









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Date : 16-NOV-95 20:57

ient ID: jp0326c

Instrument: mse.i

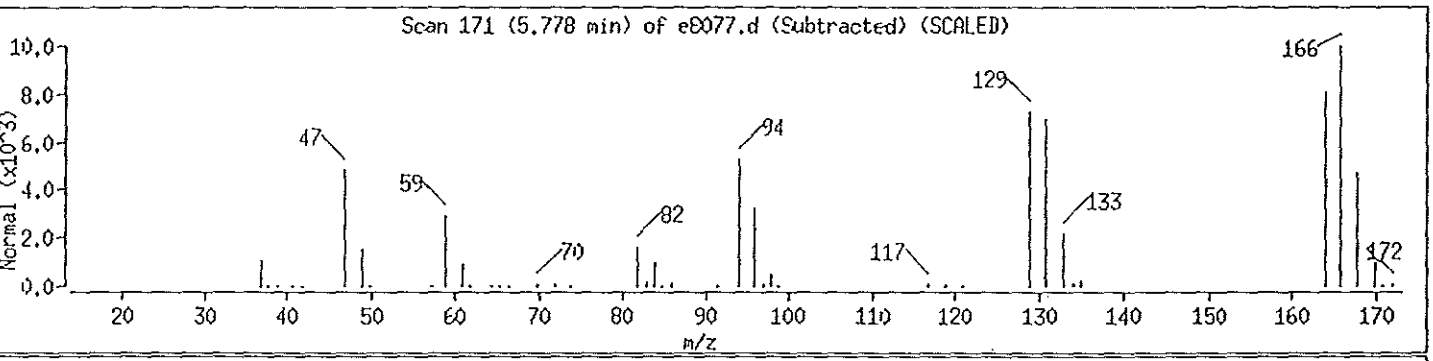
Sample Info: 17418n clj78tw003

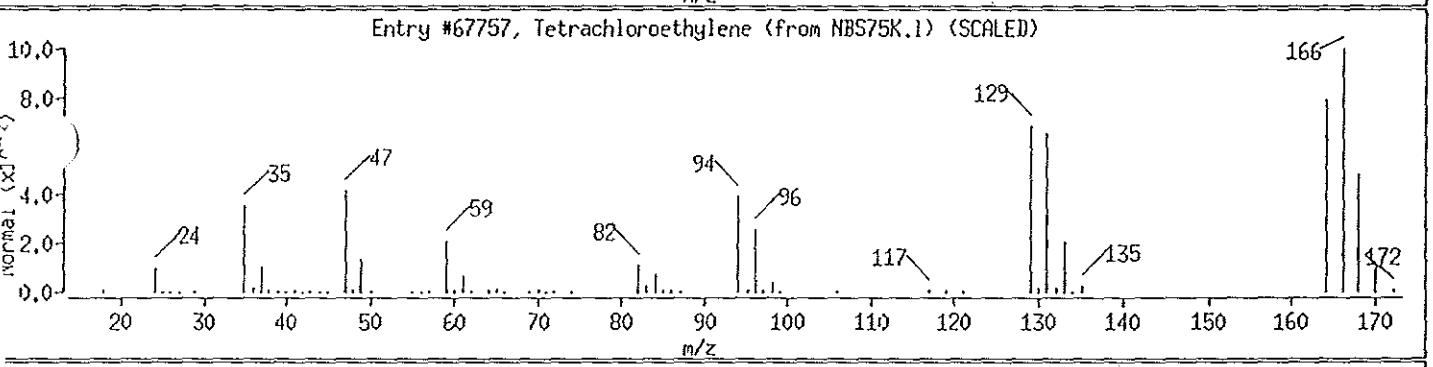
Operator: J. Kelly

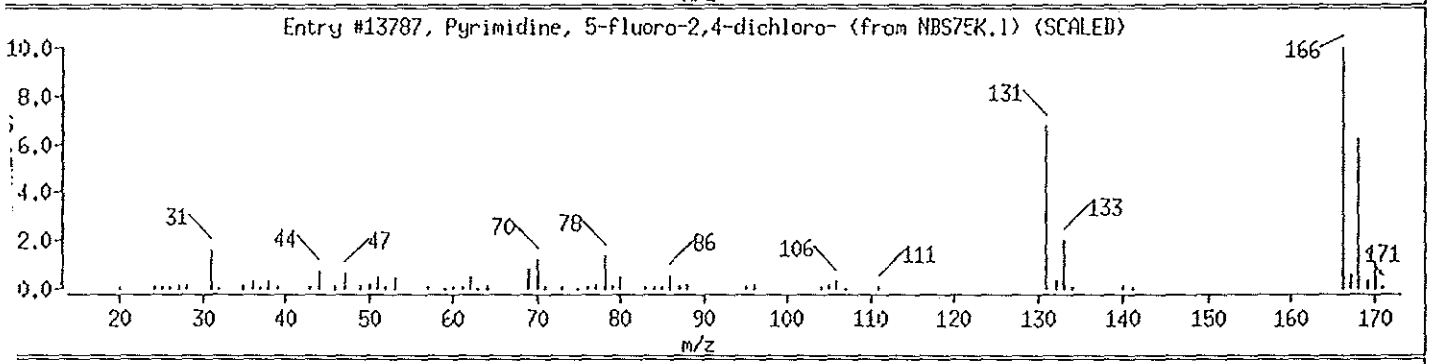
Column phase: J&W DB-5

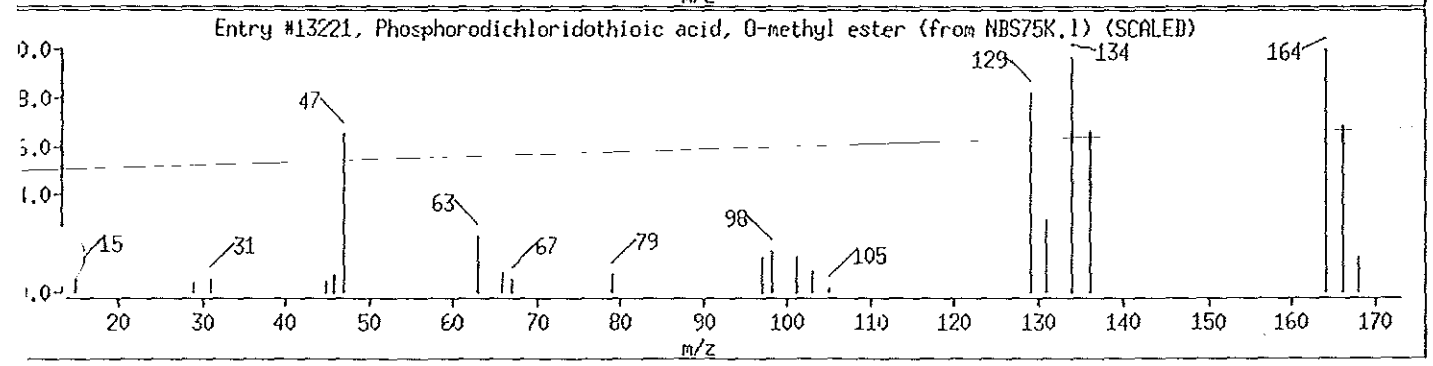
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Tetrachloroethylene	127-18-4	NBS75K.l	67757	99	C2Cl4	164
Pyrimidine, 5-fluoro-2,4-dichloro-	2927-71-1	NBS75K.l	13787	35	C4HCl2FN2	166
Phosphorodichloridothioic acid, O-methyl	2523-94-6	NBS75K.l	13221	23	CH3Cl2OPS	164









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Date : 16-NOV-95 20:57

ient ID: jp0326c

Instrument: mse.i

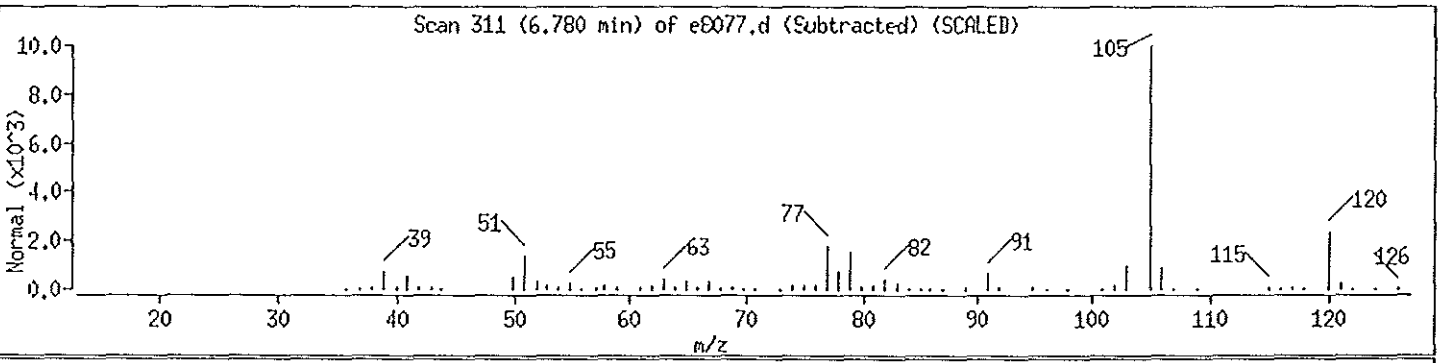
ample Info: 17418n clj78tw003

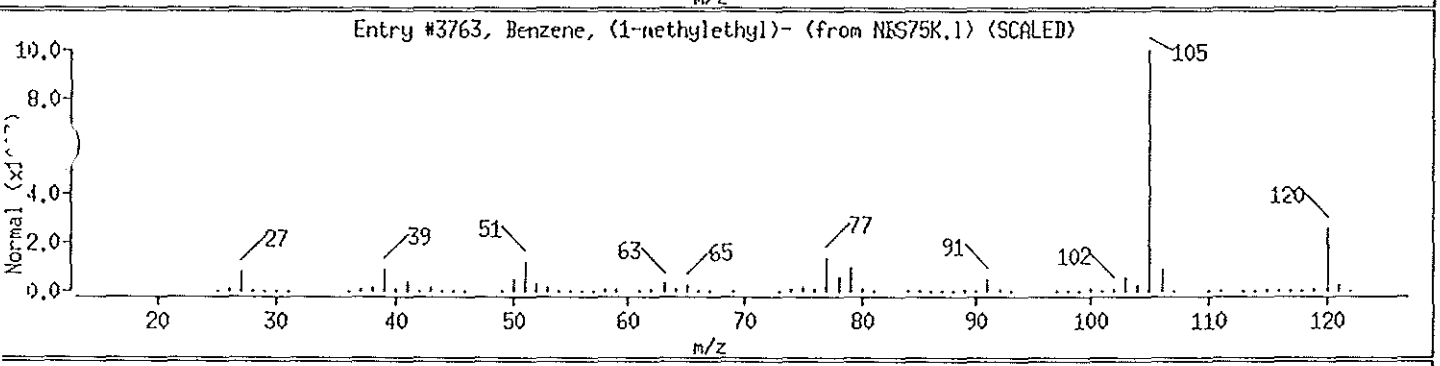
Operator: J. Kelly

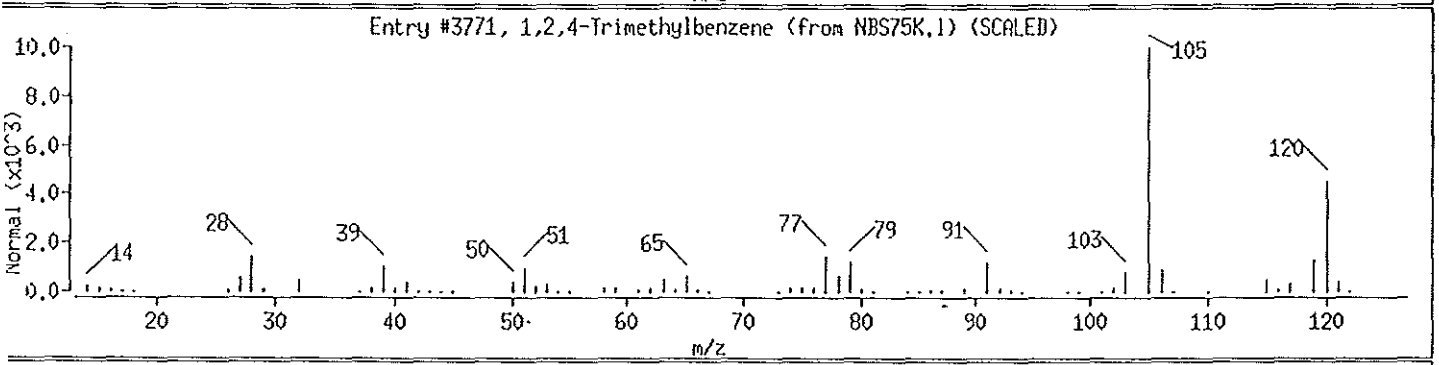
Column phase: J&W DB-5

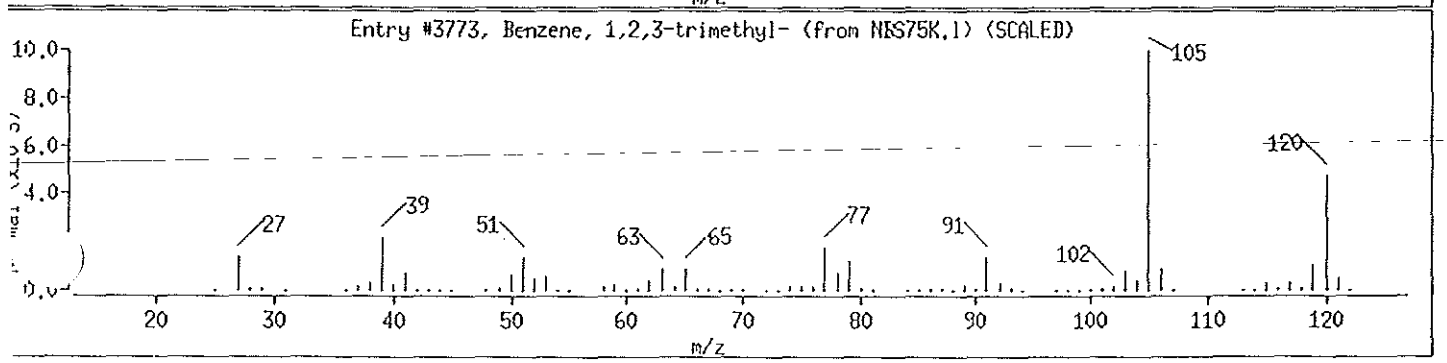
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, (1-methylethyl)-	98-82-8	NBS75K.1	3763	94	C9H12	120
1,2,4-Trimethylbenzene	95-36-3	NBS75K.1	3771	90	C9H12	120
Benzene, 1,2,3-trimethyl-	526-73-8	NBS75K.1	3773	90	C9H12	120









Data File: /chem/aux/mse.i/e111695.b/e8077.d

Date : 16-NOV-95 20:57

Client ID: jp0326c

Sample Info: 17418n clj78tw003

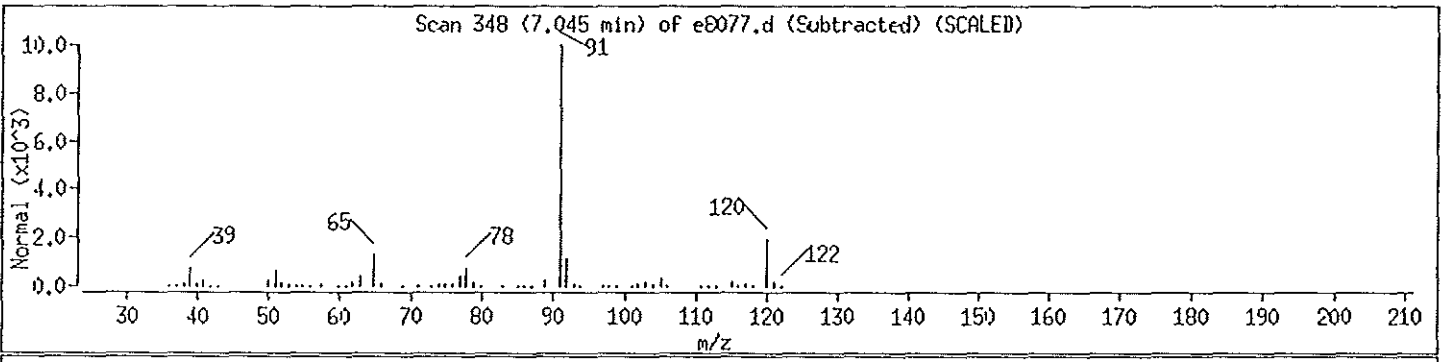
Instrument: mse.i

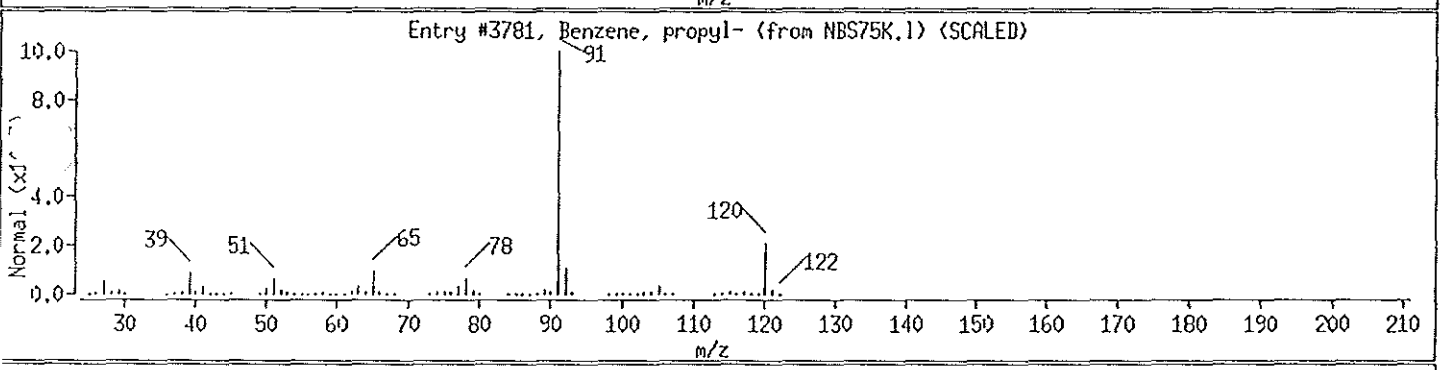
Operator: J. Kelly

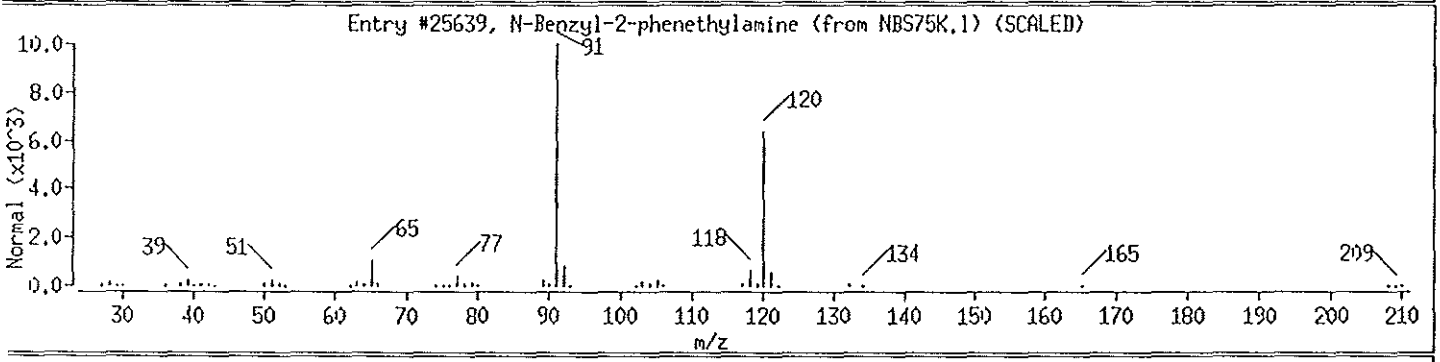
Column phase: J&W DB-5

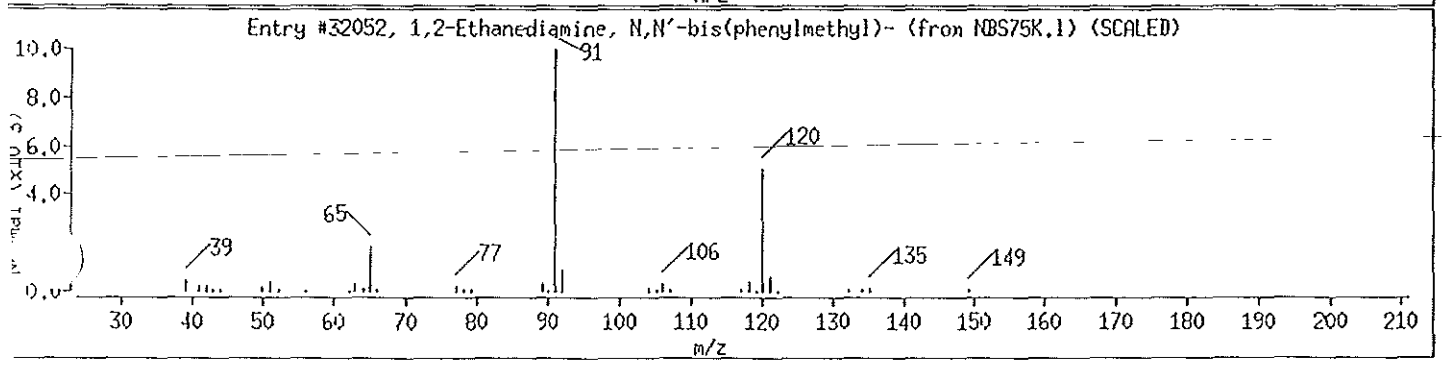
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, propyl-	103-65-1	NBS75K.l	3781	91	C9H12	120
N-Benzyl-2-phenethylamine	3647-71-0	NBS75K.l	25639	78	C15H17N	211
1,2-Ethanediamine, N,N'-bis(phenylmethyl	140-28-3	NBS75K.l	32052	64	C16H20N2	240









Data File: /chem/aux/mse.i/e111695.b/e8077.d

Date : 16-NOV-95 20:57

)ent ID: jp0326c

Instrument: mse.i

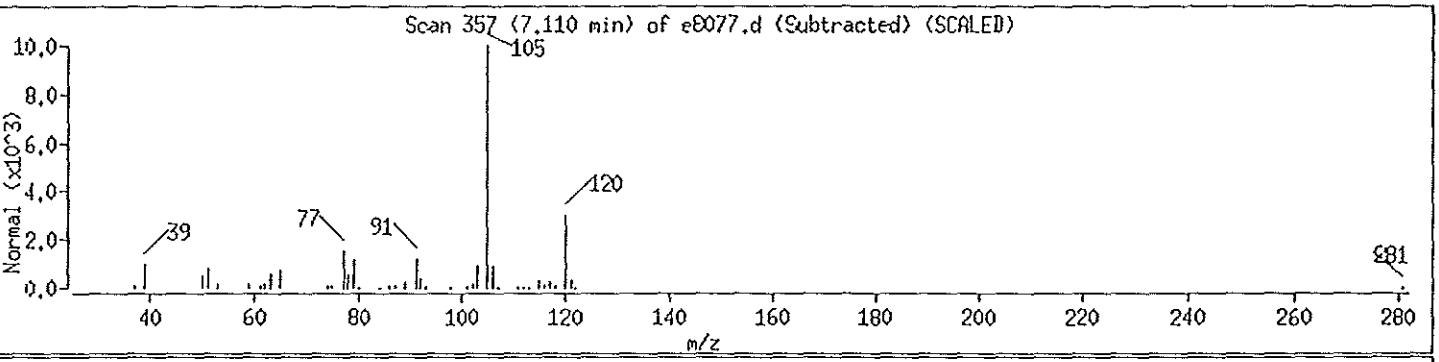
Sample Info: 17418n clj78tw003

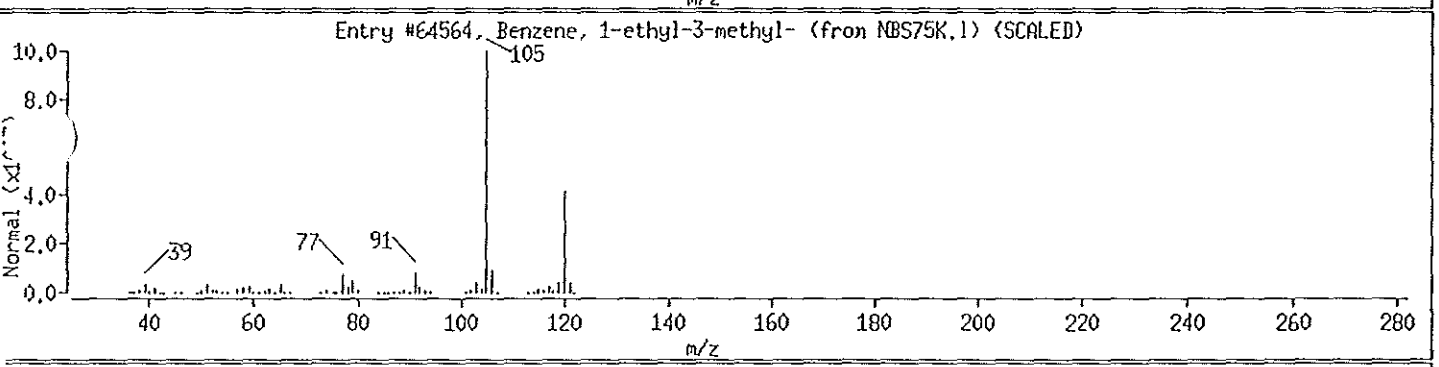
Operator: J. Kelly

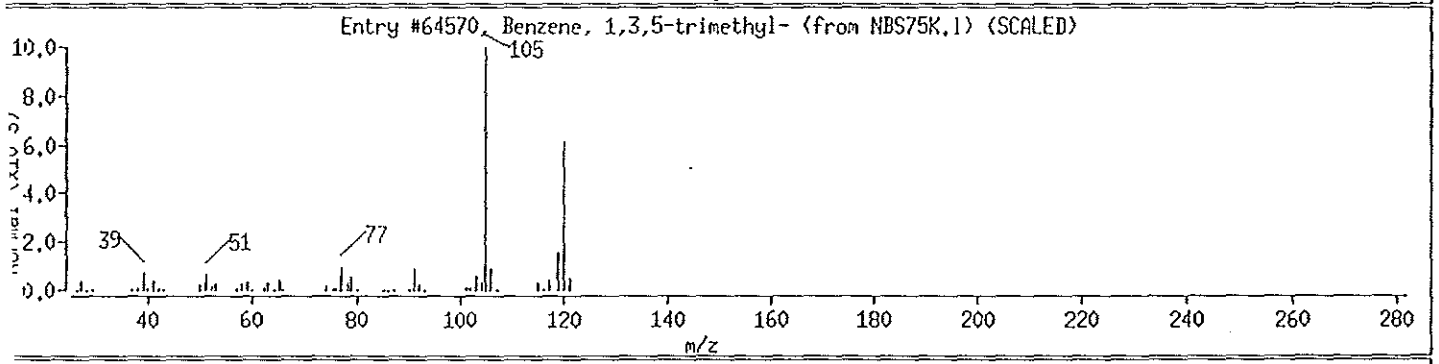
Column phase: J&W DB-5

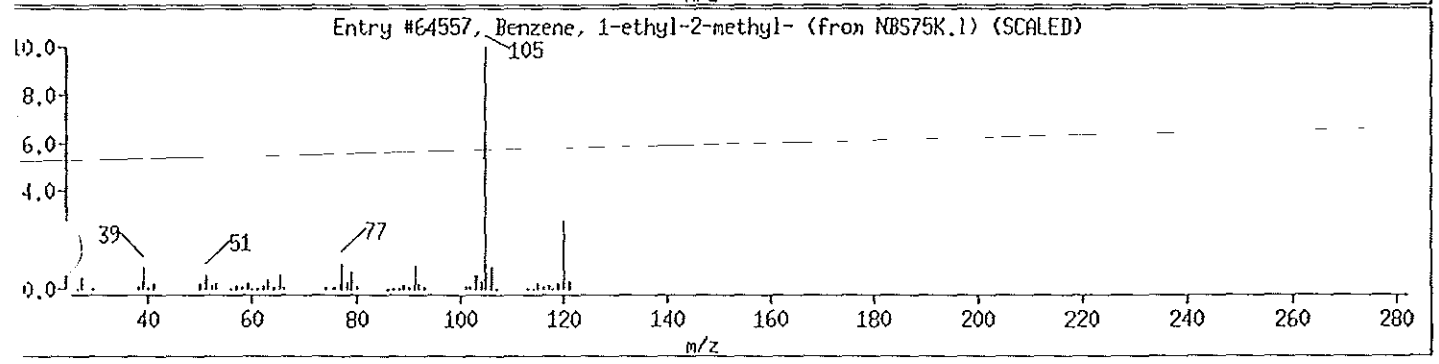
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-ethyl-3-methyl-	620-14-4	NBS75K.l	64564	91	C9H12	120
Benzene, 1,3,5-trimethyl-	108-67-8	NBS75K.l	64570	91	C9H12	120
Benzene, 1-ethyl-2-methyl-	611-14-3	NBS75K.l	64557	91	C9H12	120









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Date : 16-NOV-95 20:57

ient ID: jp0326c

Instrument: mse.i

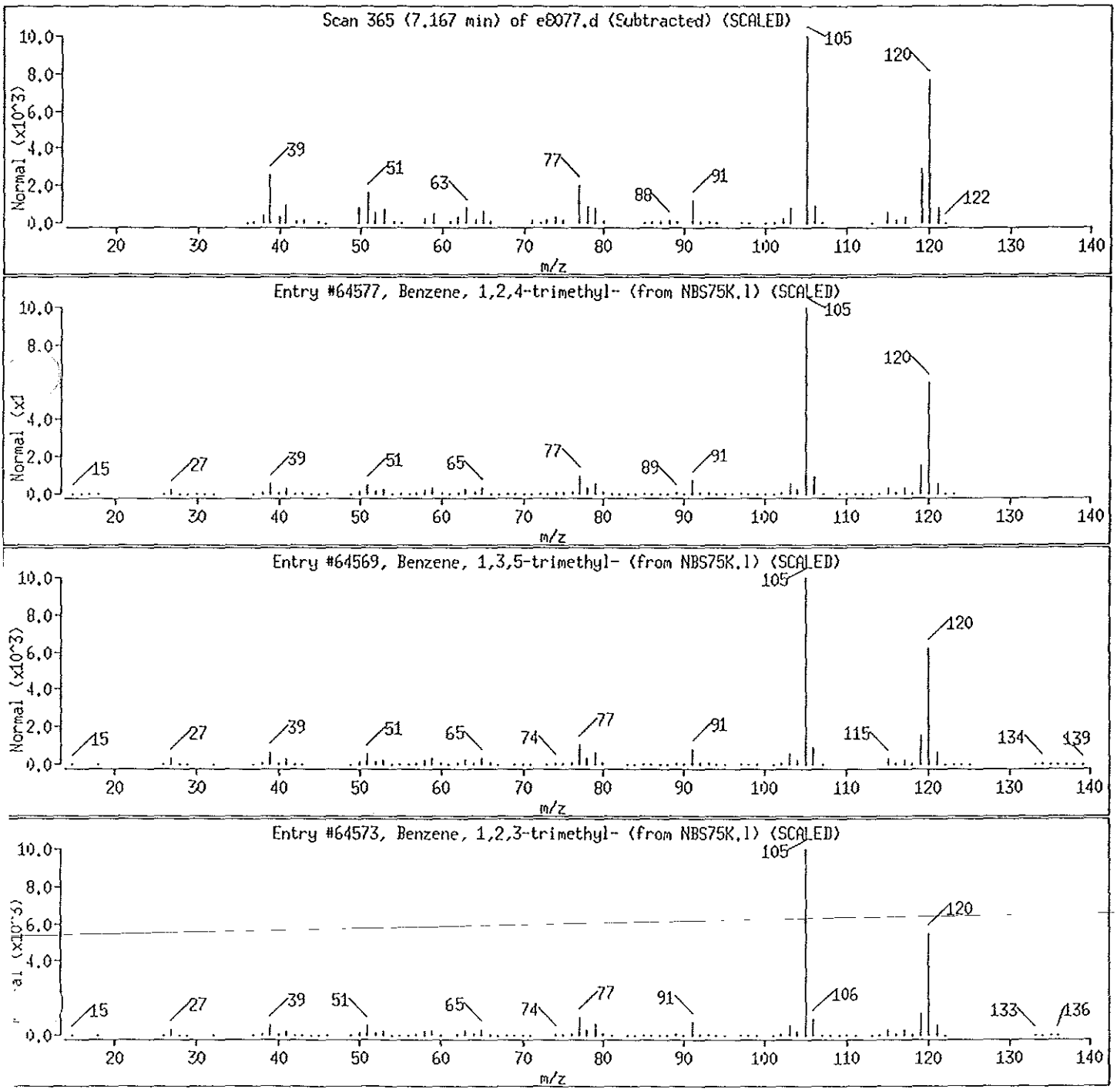
Sample Info: 17418n clj78tw003

Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1,2,4-trimethyl-	95-63-6	NBS75K.l	64577	90	C9H12	120
Benzene, 1,3,5-trimethyl-	108-67-8	NBS75K.l	64569	87	C9H12	120
Benzene, 1,2,3-trimethyl-	526-73-8	NBS75K.l	64573	87	C9H12	120



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Date : 16-NOV-95 20:57

ient ID: jp0326c

Instrument: mse.i

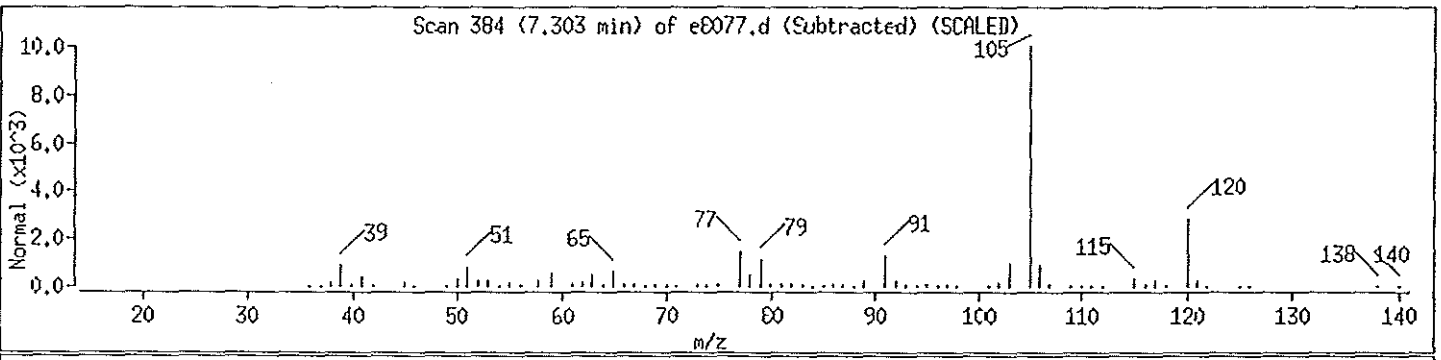
ample Info: 17418n clj78tw003

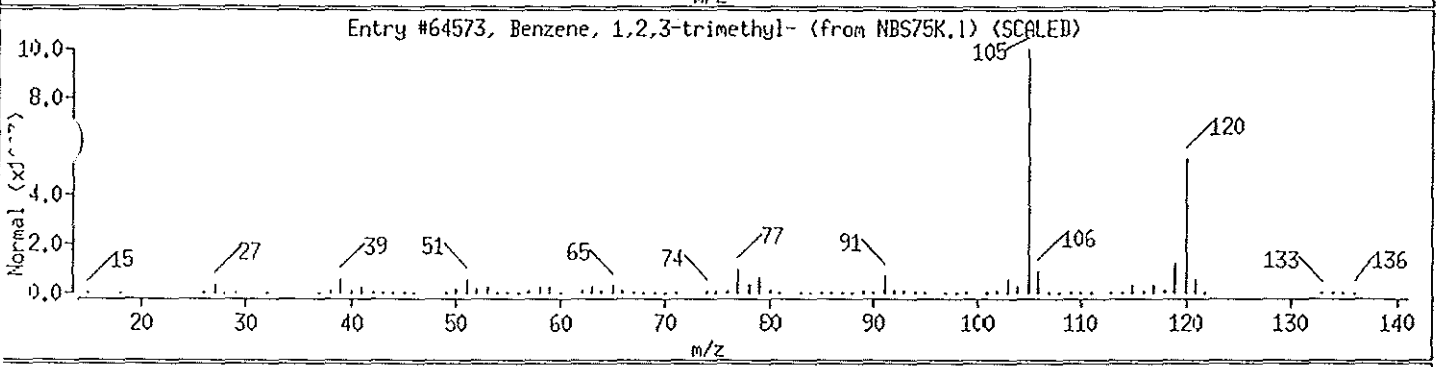
Operator: J. Kelly

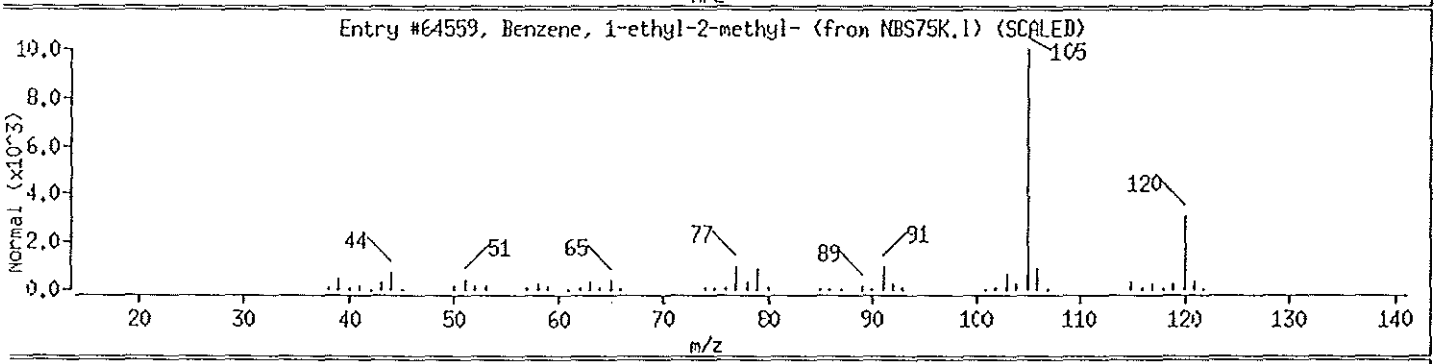
Column phase: J&W DB-5

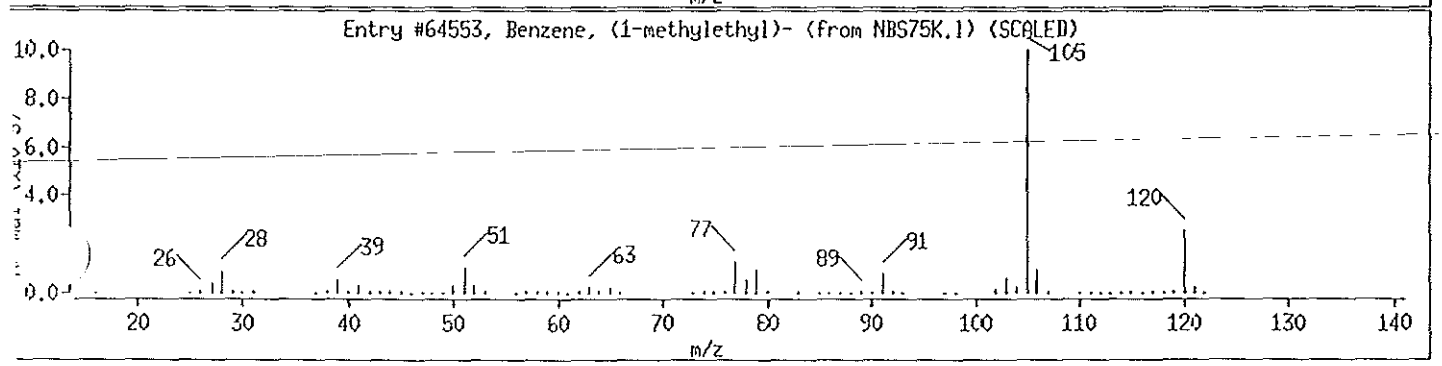
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1,2,3-trimethyl-	526-73-8	NBS75K.l	64573	91	C9H12	120
Benzene, 1-ethyl-2-methyl-	611-14-3	NBS75K.l	64559	91	C9H12	120
Benzene, (1-methylethyl)-	98-82-8	NBS75K.l	64553	91	C9H12	120









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Date : 16-NOV-95 20:57

ient ID: jp0326c

Instrument: mse.i

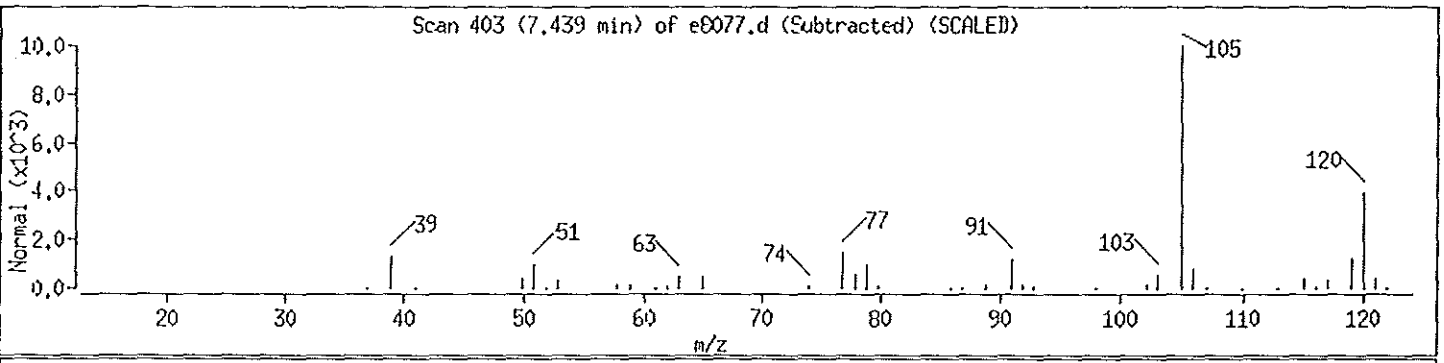
ample Info: 17418n clj78tw003

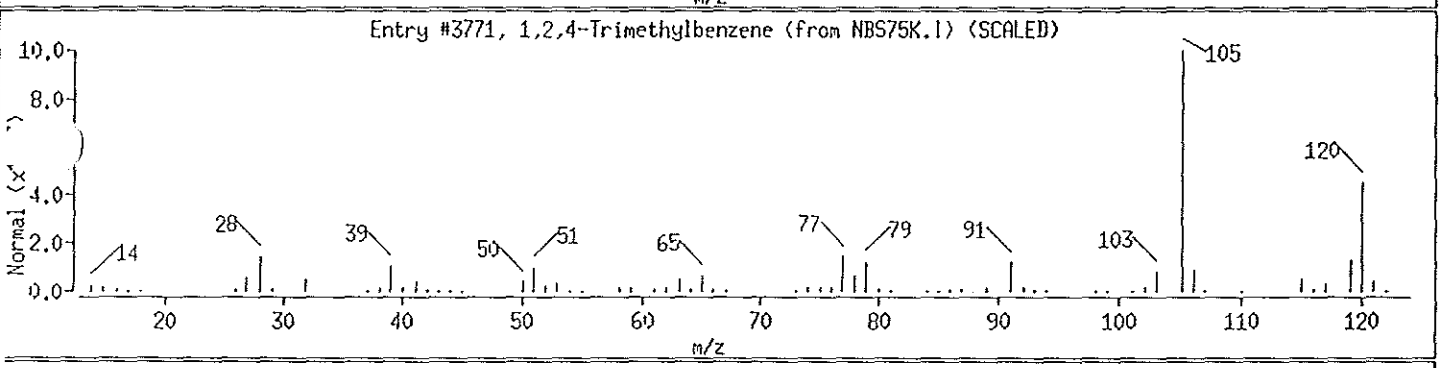
Operator: J. Kelly

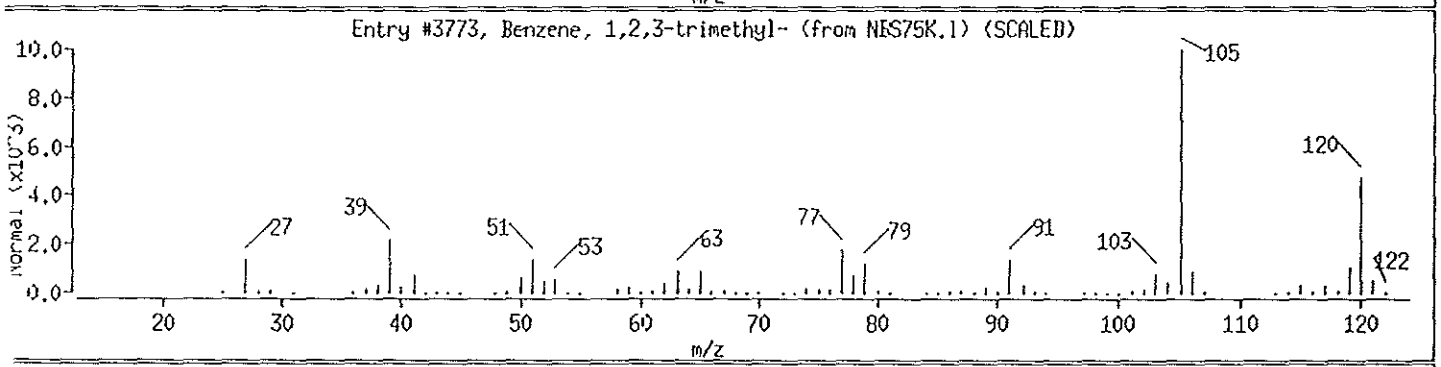
Column phase: J&W DB-5

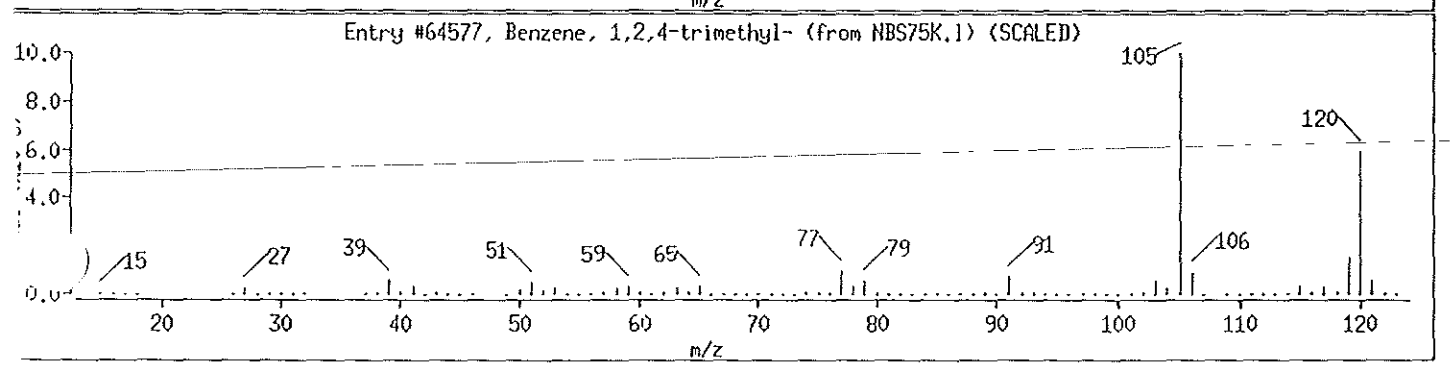
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,2,4-Trimethylbenzene	95-36-3	NBS75K.l	3771	96	C9H12	120
Benzene, 1,2,3-trimethyl-	526-73-8	NBS75K.l	3773	94	C9H12	120
Benzene, 1,2,4-trimethyl-	95-63-6	NBS75K.l	64577	91	C9H12	120









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Date : 16-NOV-95 20:57

Client ID: jp0326c

Sample Info: 17418n clj78tw003

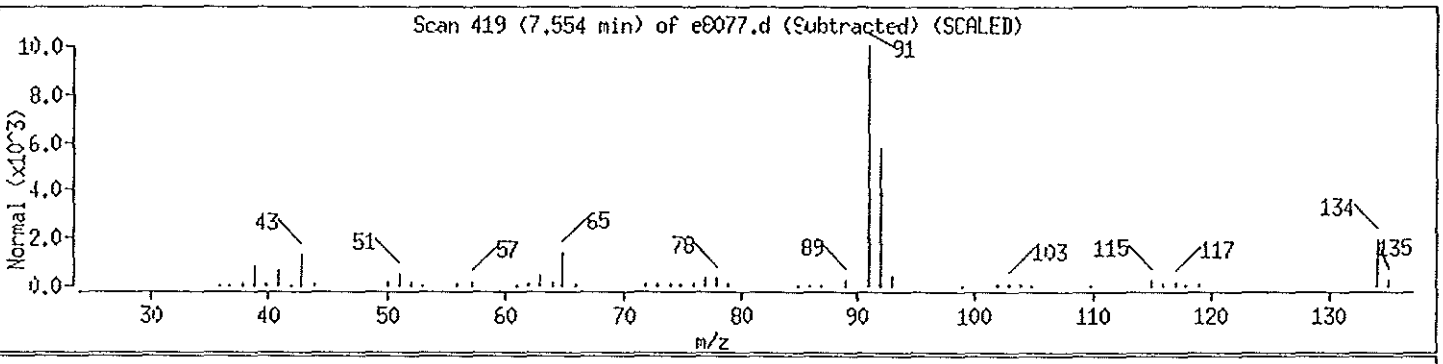
Instrument: mse.i

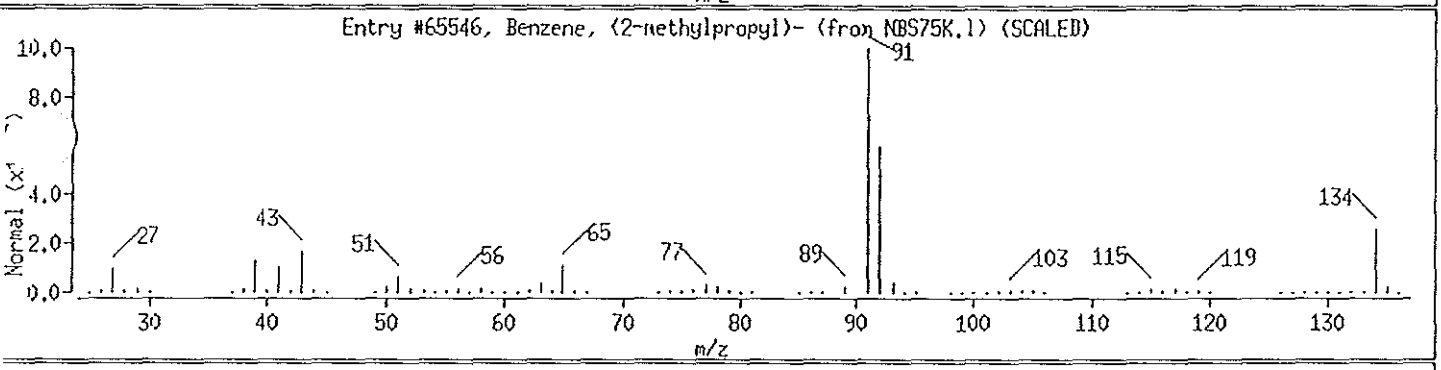
Operator: J. Kelly

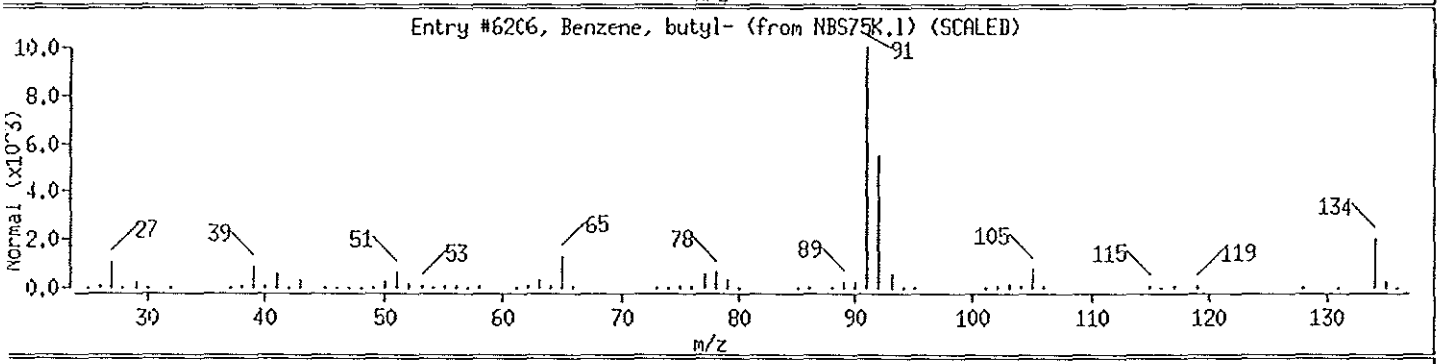
Column phase: J&W DB-5

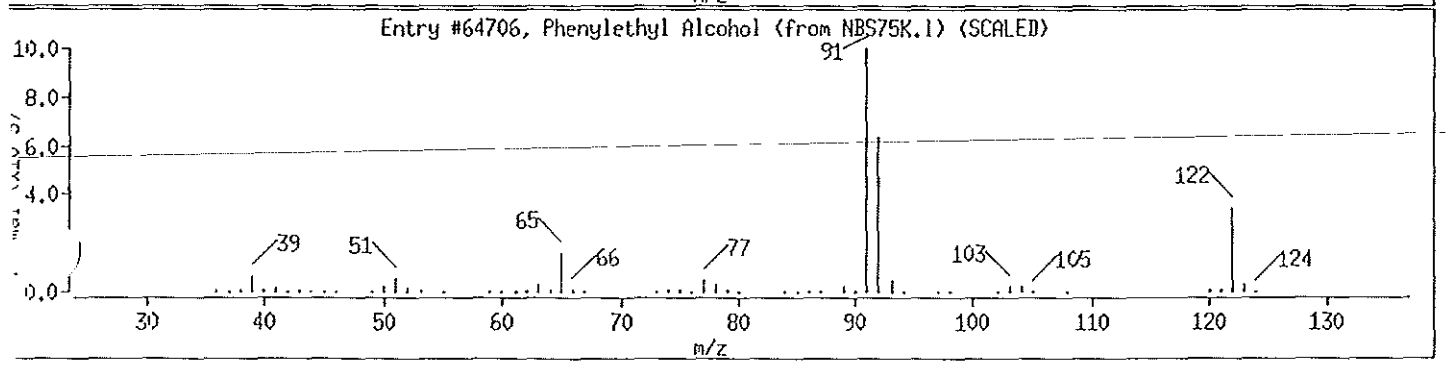
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, (2-methylpropyl)-	538-93-2	NBS75K.l	65546	94	C10H14	134
Benzene, butyl-	104-51-8	NBS75K.l	6206	86	C10H14	134
Phenylethyl Alcohol	60-12-8	NBS75K.l	64706	53	C8H10O	122









Data File: /chem/aux/mse.i/e111695.b/e8077.d

Date : 16-NOV-95 20:57

Client ID: jp0326c

Sample Info: 17418n clj78tw003

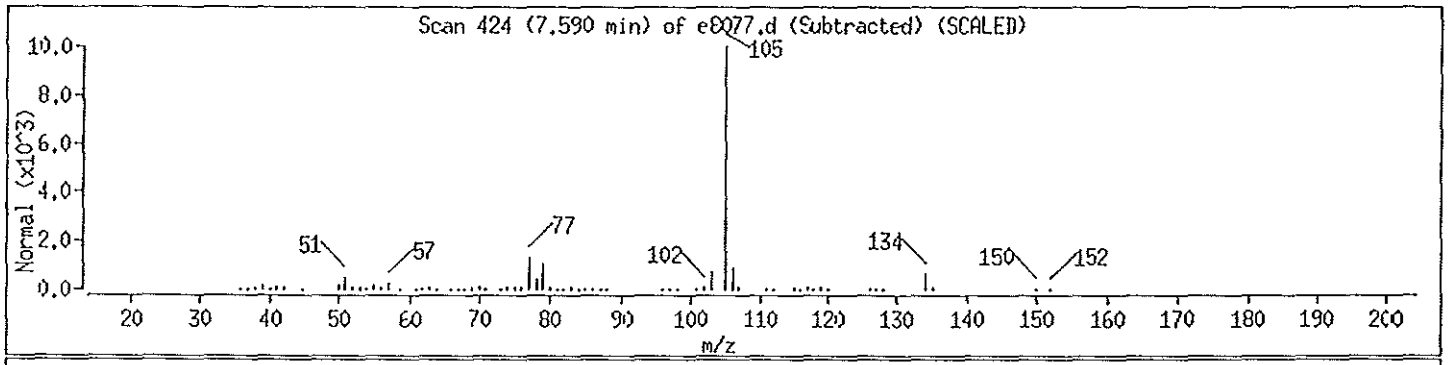
Instrument: mse.i

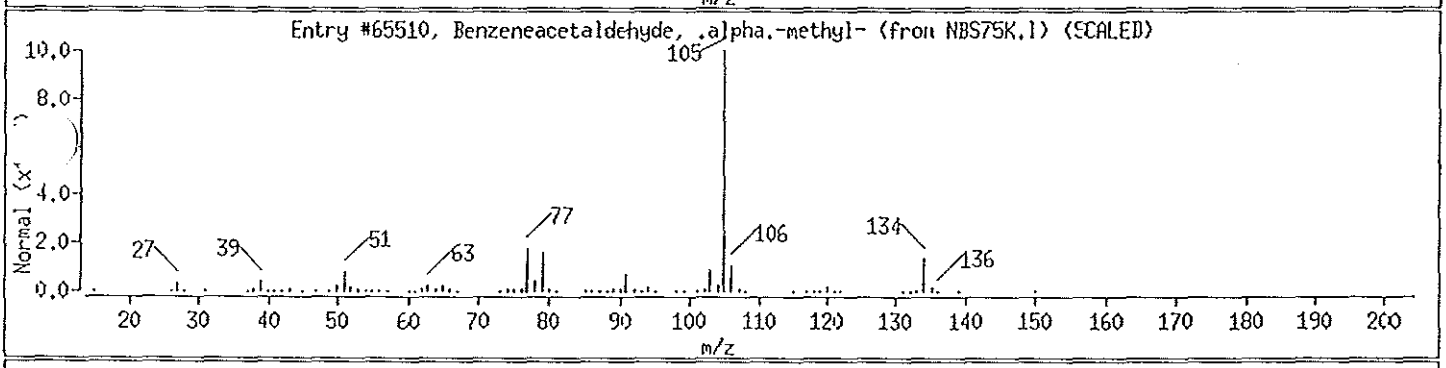
Operator: J. Kelly

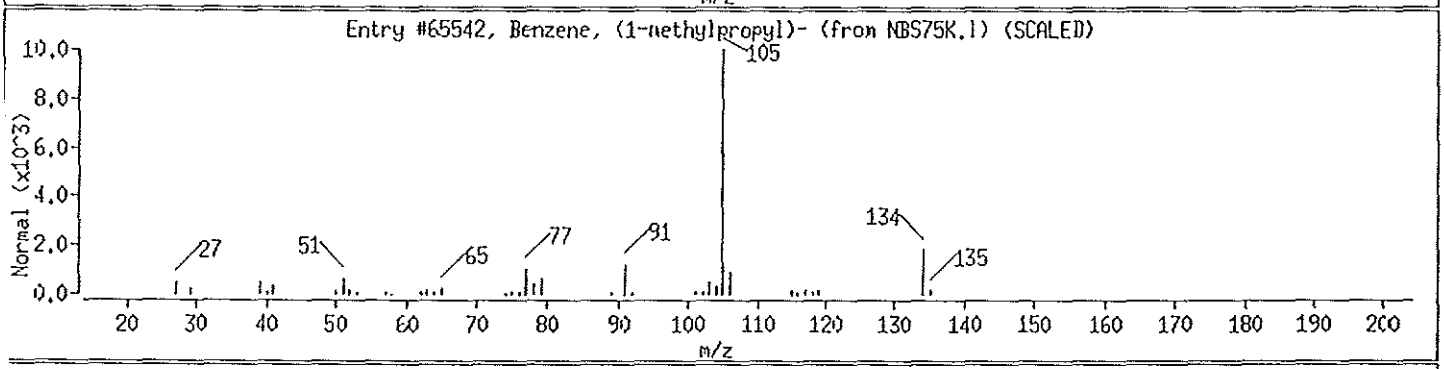
Column phase: J&W DB-5

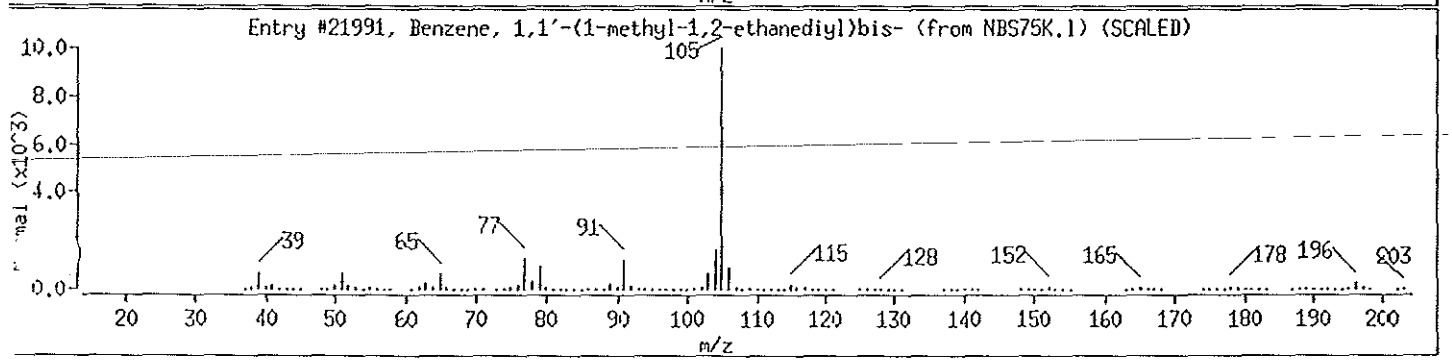
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzeneacetaldehyde, .alpha.-methyl-	93-53-8	NBS75K.1	65510	80	C9H10O	134
Benzene, (1-methylpropyl)-	135-98-8	NBS75K.1	65542	78	C10H14	134
Benzene, 1,1'-(1-methyl-1,2-ethanediyl)b	5814-85-7	NBS75K.1	21991	78	C15H16	196









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Date : 16-NOV-95 20:57

Client ID: jp0326c

Instrument: mse.i

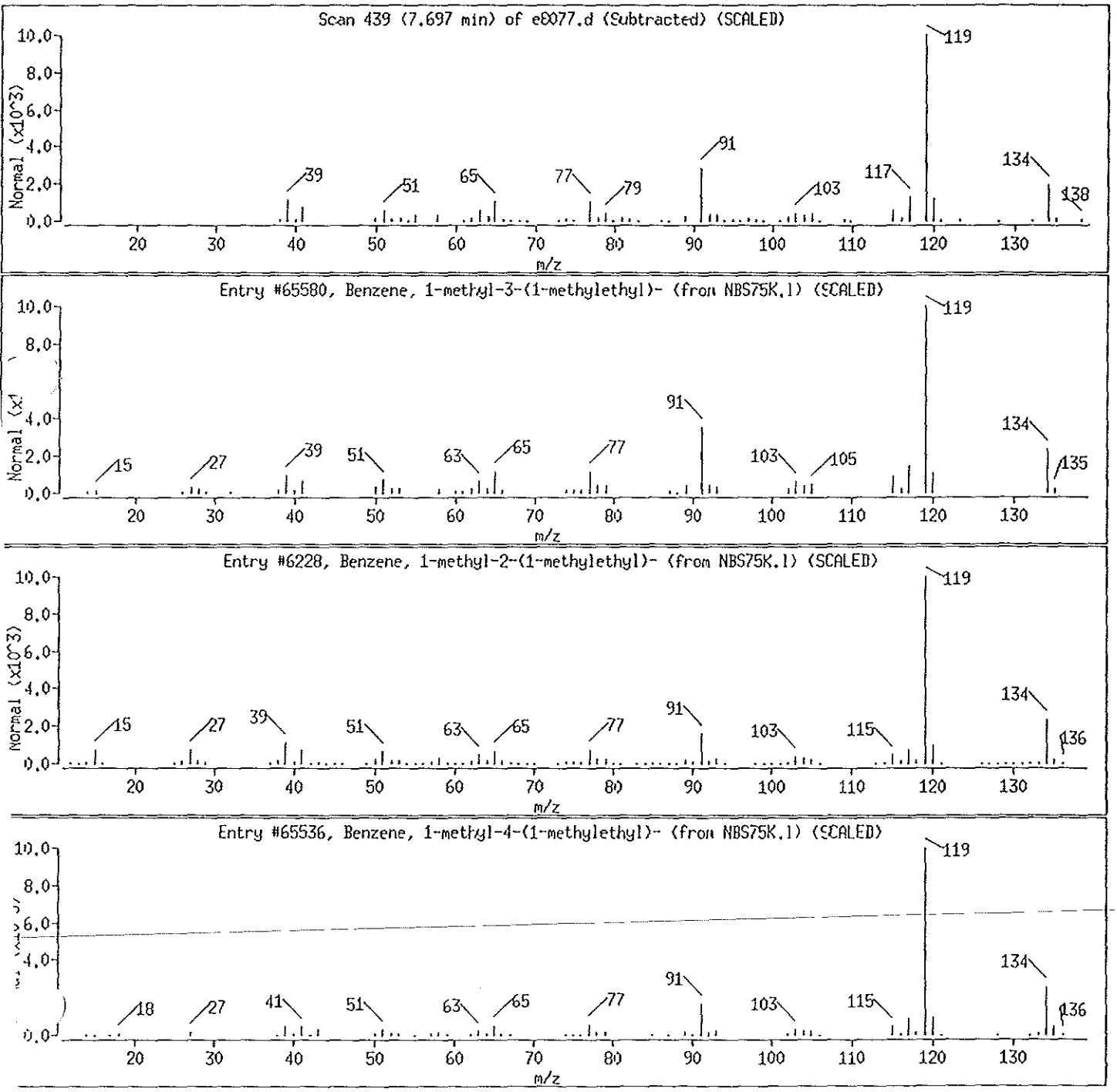
Sample Info: 17418n clj78tw003

Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NBS75K.l	65580	93	C10H14	134
Benzene, 1-methyl-2-(1-methylethyl)-	527-84-4	NBS75K.l	6228	90	C10H14	134
Benzene, 1-methyl-4-(1-methylethyl)-	99-87-6	NBS75K.l	65536	90	C10H14	134



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Date : 16-NOV-95 20:57

ient ID: jp0326c

Instrument: mse.i

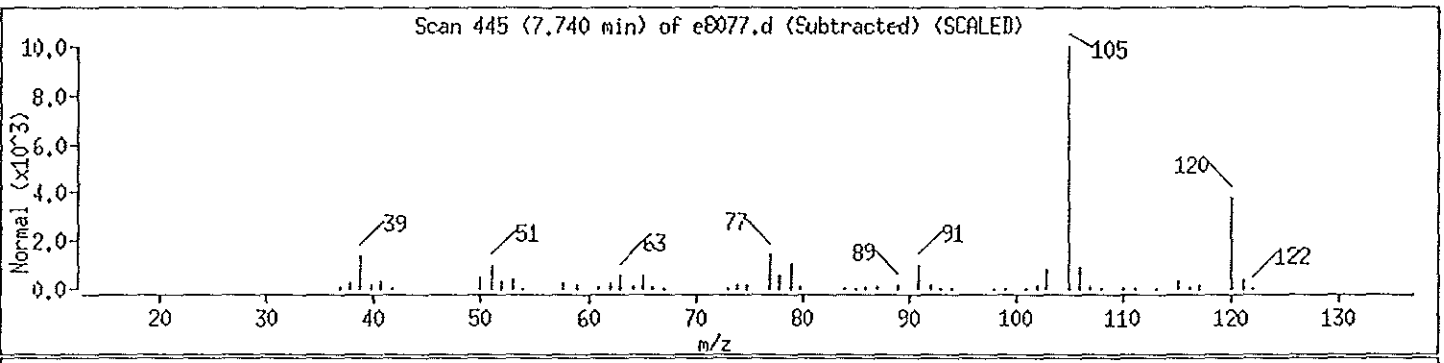
ample Info: 17418n clj78tw003

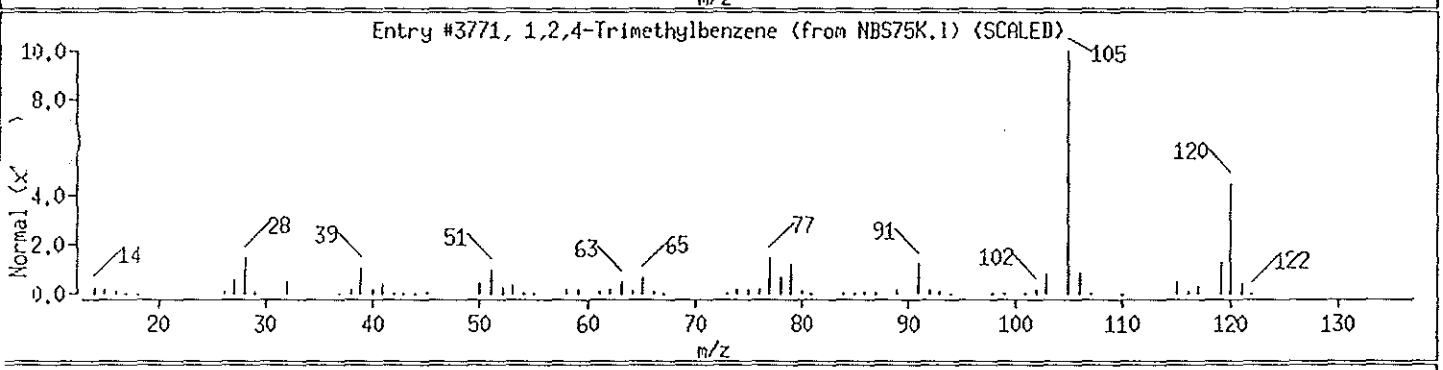
Operator: J. Kelly

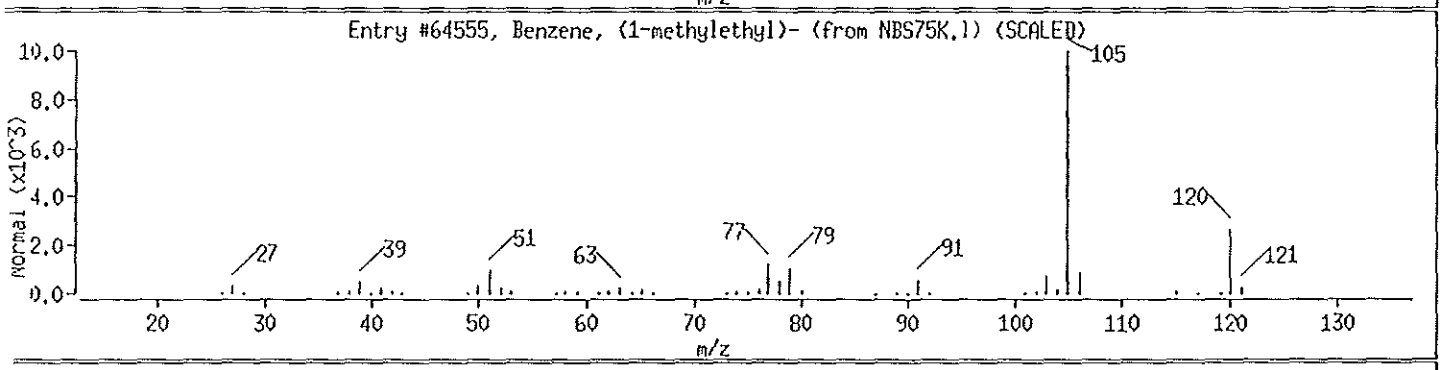
Column phase: J&W DB-5

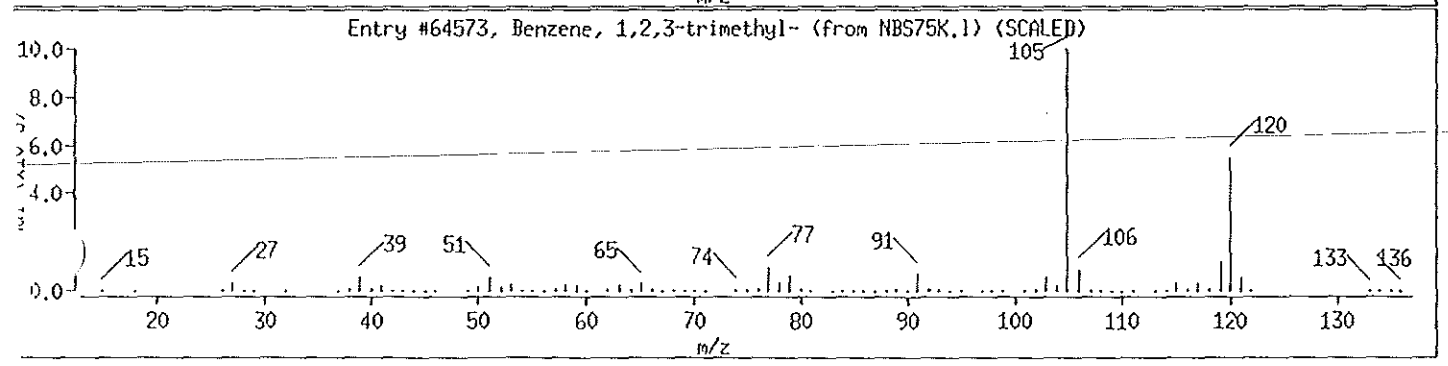
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,2,4-Trimethylbenzene	95-36-3	NBS75K.1	3771	94	C9H12	120
Benzene, (1-methylethyl)-	98-82-8	NBS75K.1	64555	91	C9H12	120
Benzene, 1,2,3-trimethyl-	526-73-8	NBS75K.1	64573	91	C9H12	120









Data File: /chem/aux/mse.i/e111695.b/e8077.d

Date : 16-NOV-95 20:57

ient ID: jp0326c

Instrument: mse.i

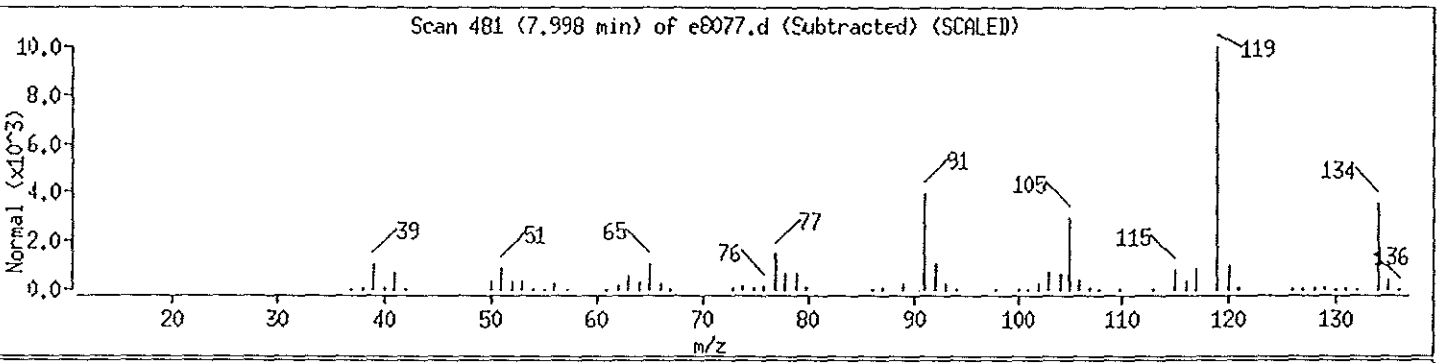
Sample Info: 17418n clj78tw003

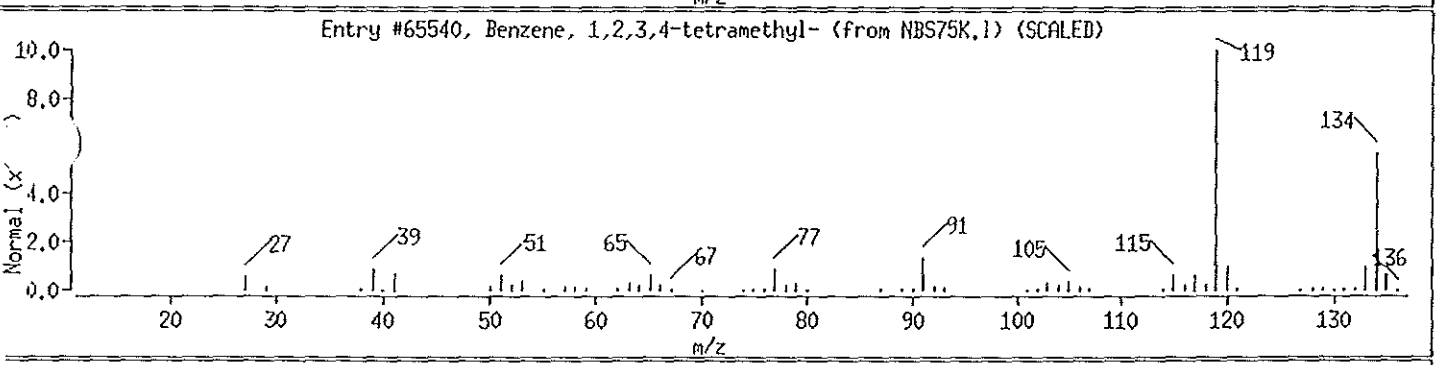
Operator: J. Kelly

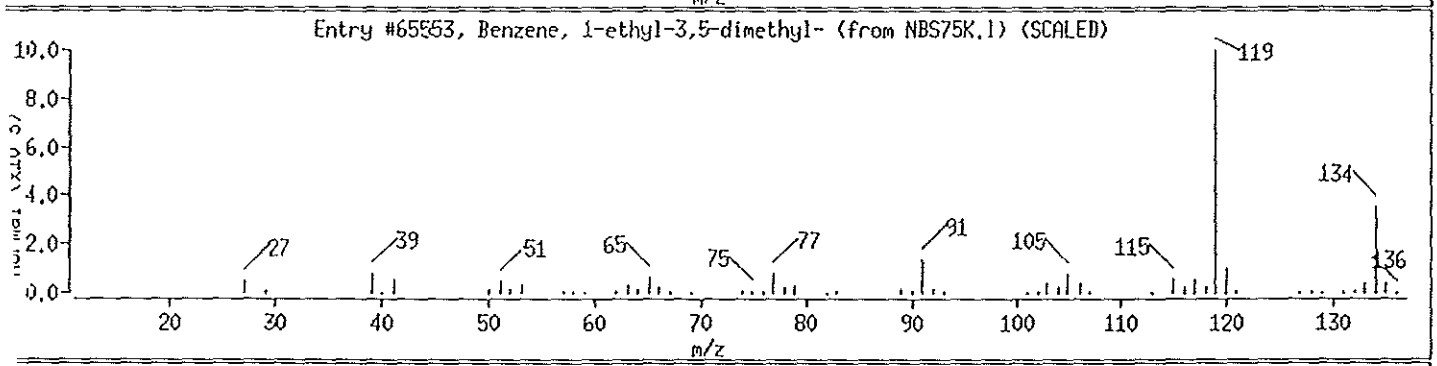
Column phase: J&W DB-5

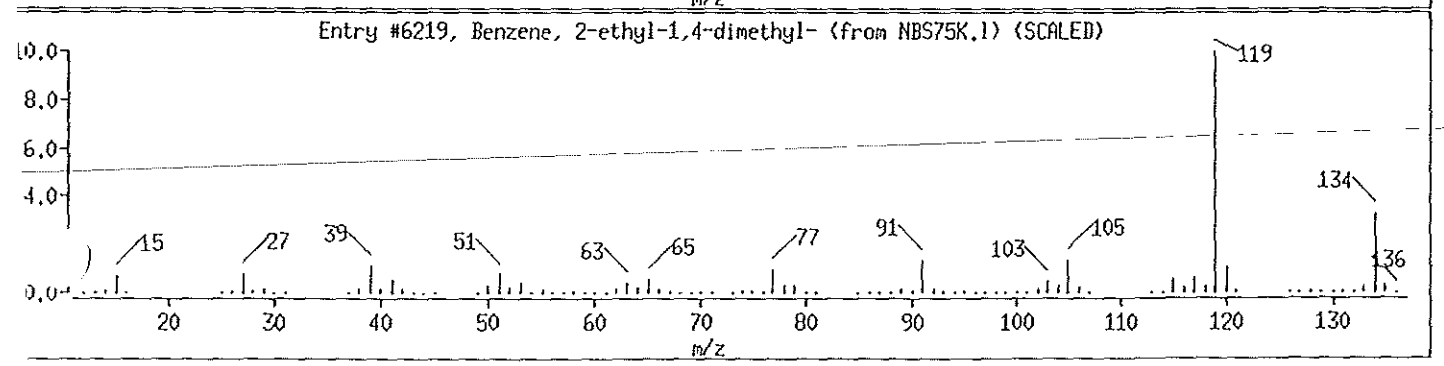
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1,2,3,4-tetramethyl-	488-23-3	NBS75K.l	65540	93	C10H14	134
Benzene, 1-ethyl-3,5-dimethyl-	934-74-7	NBS75K.l	65553	87	C10H14	134
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	NBS75K.l	6219	87	C10H14	134









Data File: /chem/aux/mse.i/e111695.b/e8077.d

Date : 16-NOV-95 20:57

Client ID: jp0326c

Sample Info: 17418n clj78tw003

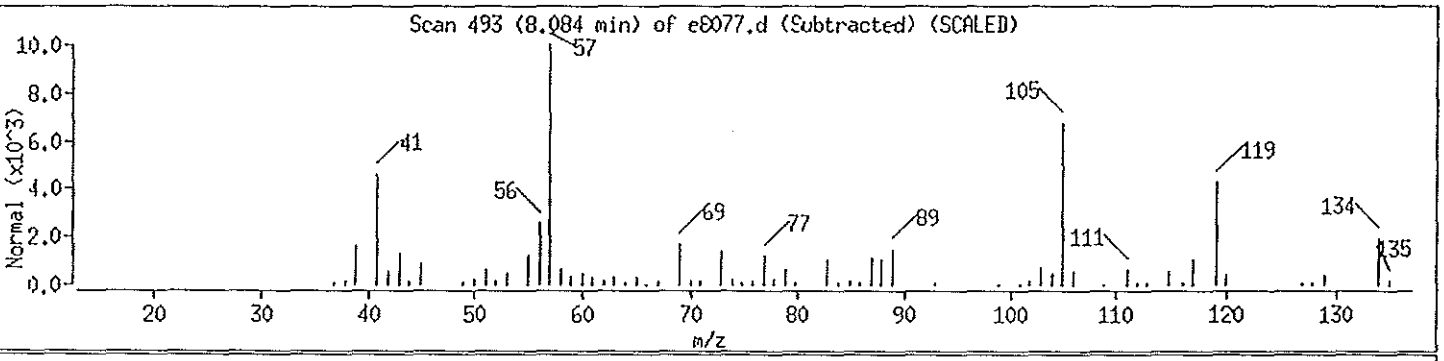
Instrument: mse.i

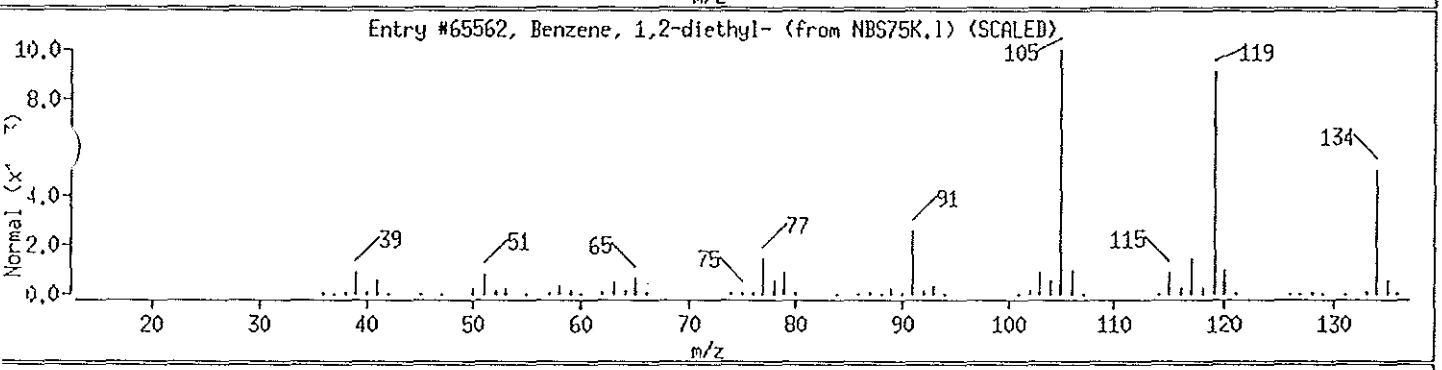
Operator: J. Kelly

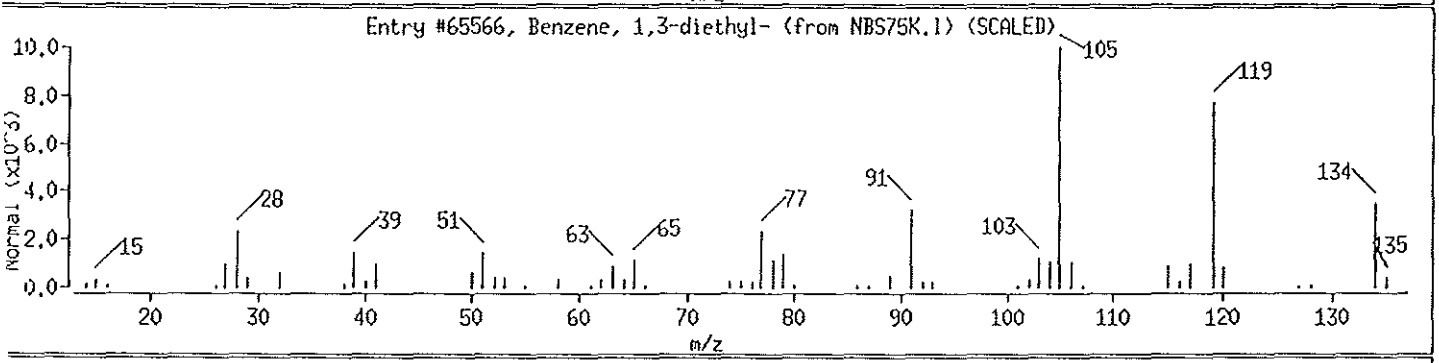
Column phase: J&W DB-5

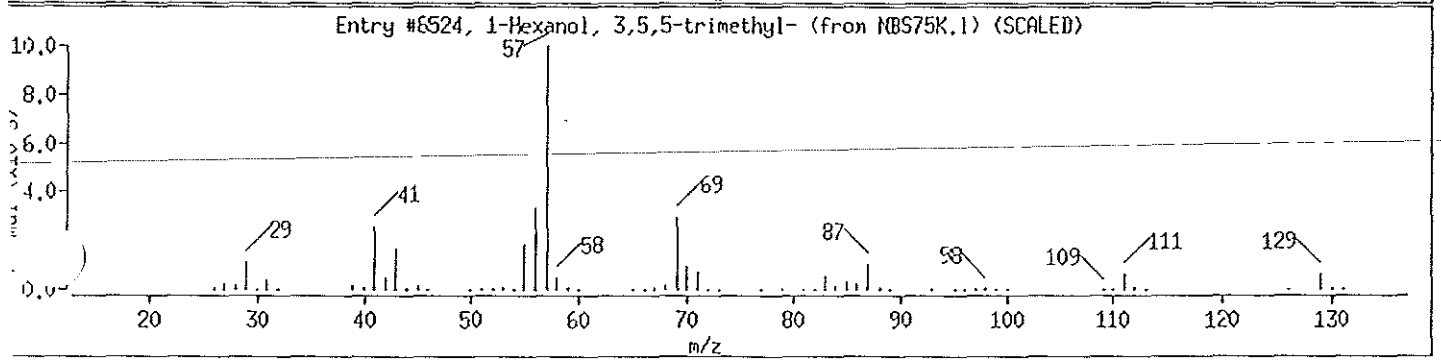
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1,2-diethyl-	135-01-3	NBS75K.1	65562	46	C10H14	134
Benzene, 1,3-diethyl-	141-93-5	NBS75K.1	65566	38	C10H14	134
1-Hexanol, 3,5,5-trimethyl-	3452-97-9	NBS75K.1	8524	10	C9H20O	144









Data File: /chem/aux/mse.i/e111695.b/e8077.d

Date : 16-NOV-95 20:57

Client ID: jp0326c

Sample Info: 17418n clj78tw003

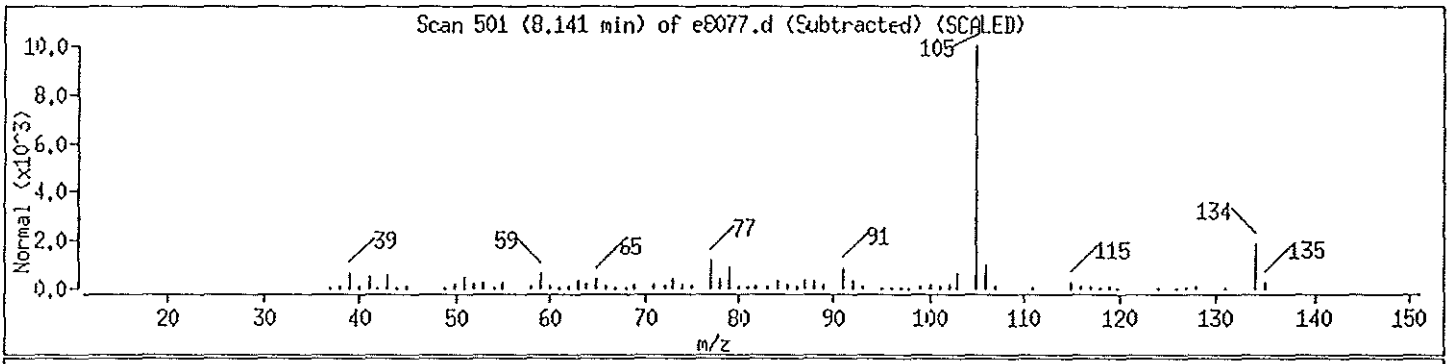
Instrument: mse.i

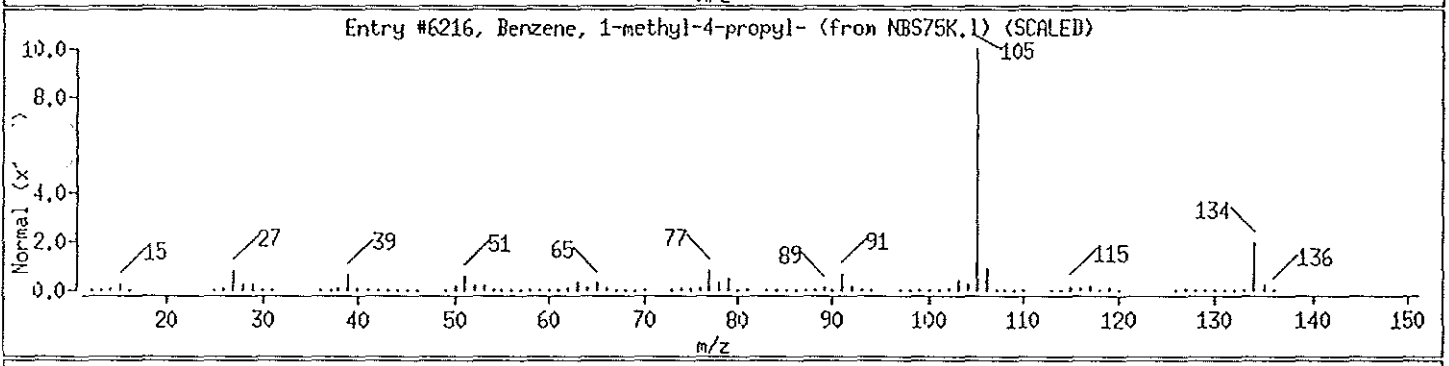
Operator: J. Kelly

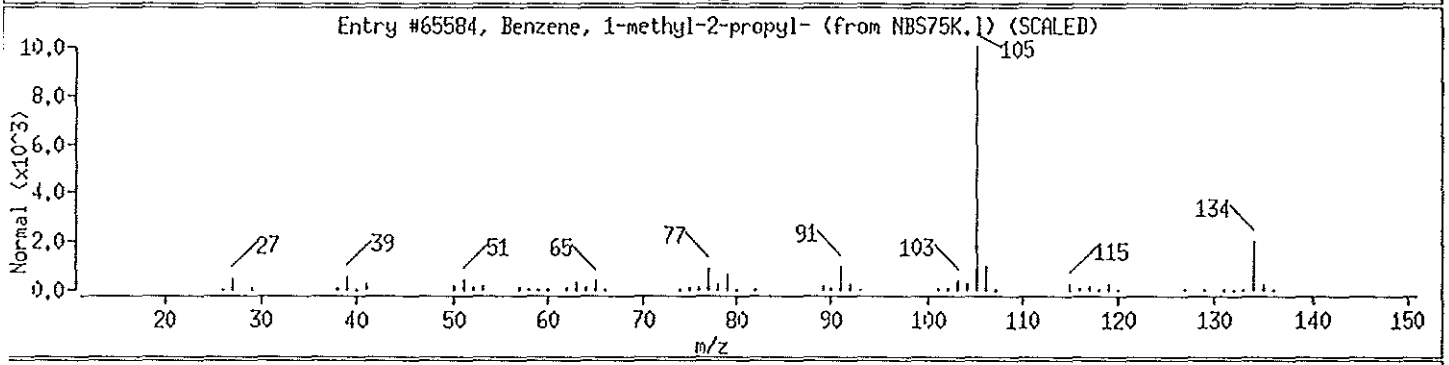
Column phase: J&W DB-5

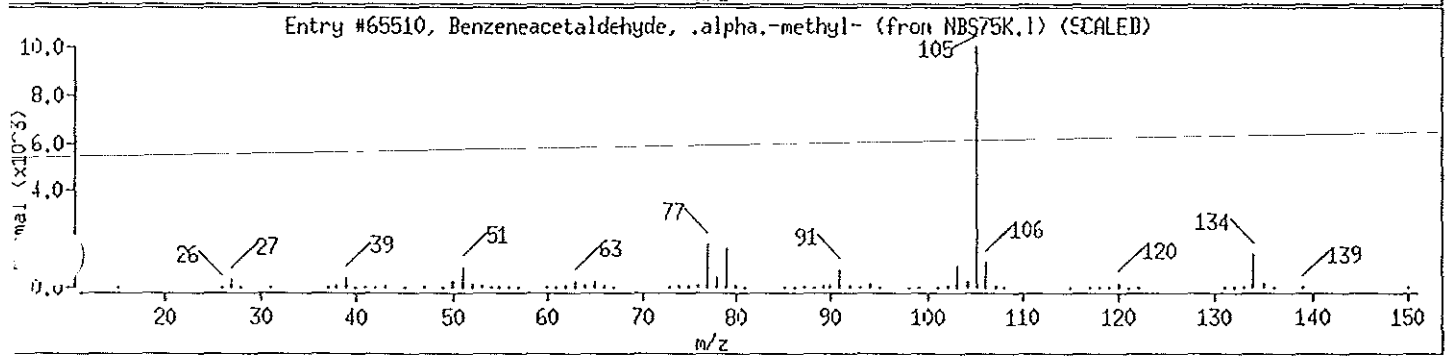
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-methyl-4-propyl-	1074-55-1	NBS75K.l	6216	81	C10H14	134
Benzene, 1-methyl-2-propyl-	1074-17-5	NBS75K.l	65584	76	C10H14	134
Benzeneacetaldehyde, .alpha.-methyl-	93-53-8	NBS75K.l	65510	68	C9H10O	134









Data File: /chem/aux/mse.i/e111695.b/e8077.d
Date : 16-NOV-95 20:57
ent ID: jp0326c
Sample Info: 17418n clj78tw003

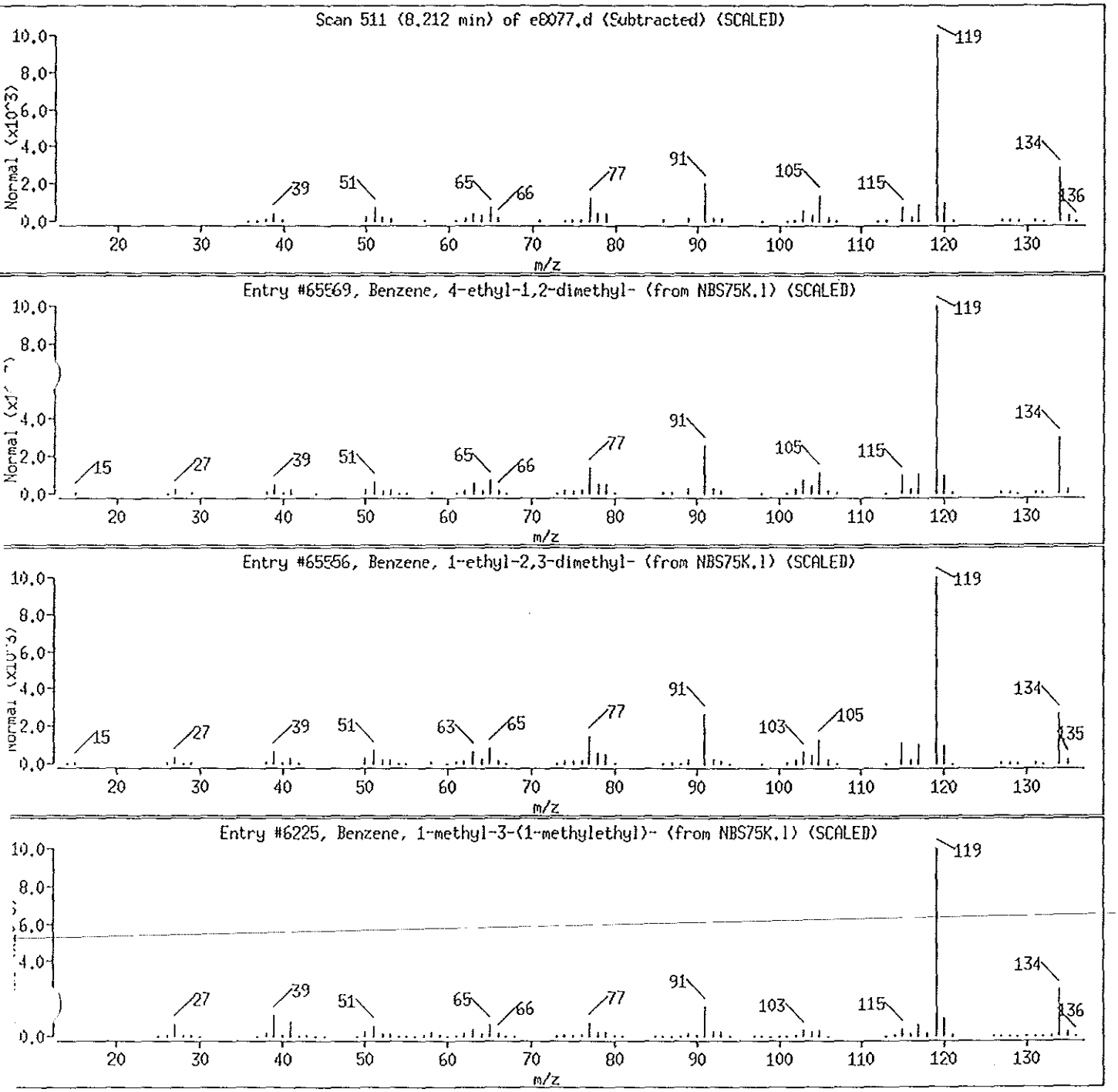
Instrument: mse.i

Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 4-ethyl-1,2-dimethyl-	934-80-5	NBS75K.l	65569	97	C10H14	134
Benzene, 1-ethyl-2,3-dimethyl-	933-98-2	NBS75K.l	65556	95	C10H14	134
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NBS75K.l	6225	93	C10H14	134



Data File: /chem/aux/mse.i/e111695.b/e8077.d

Date : 16-NOV-95 20:57

ent ID: jp0326c

Instrument: mse.i

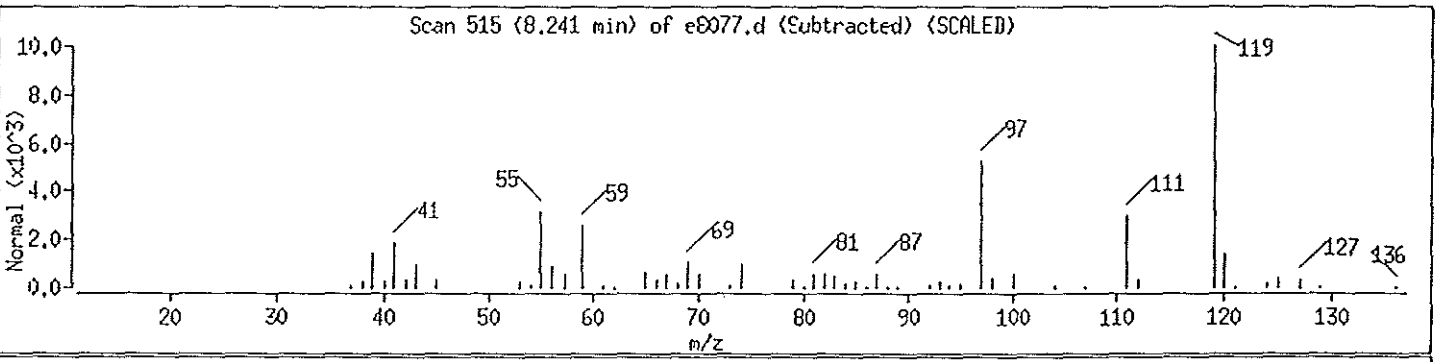
Sample Info: 17418n clj78tw003

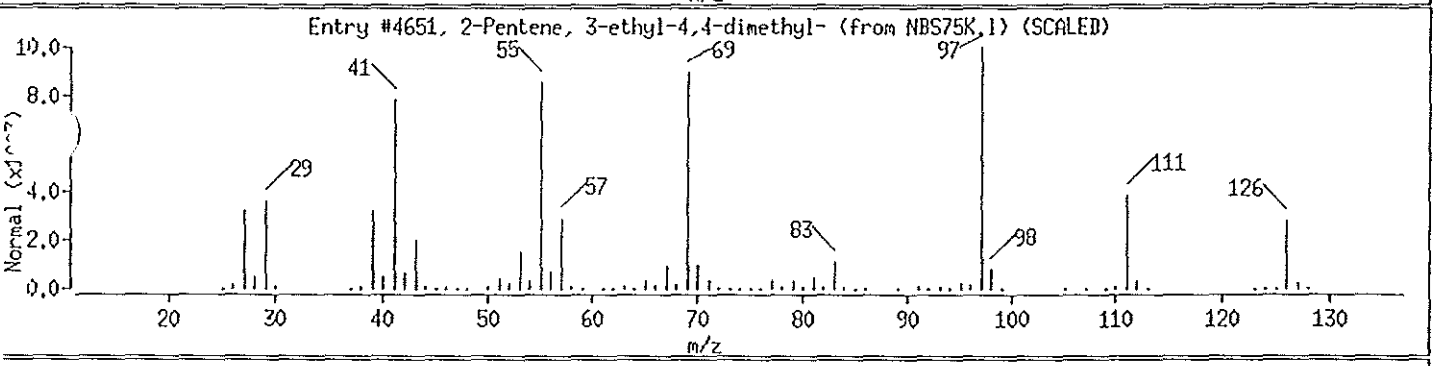
Operator: J. Kelly

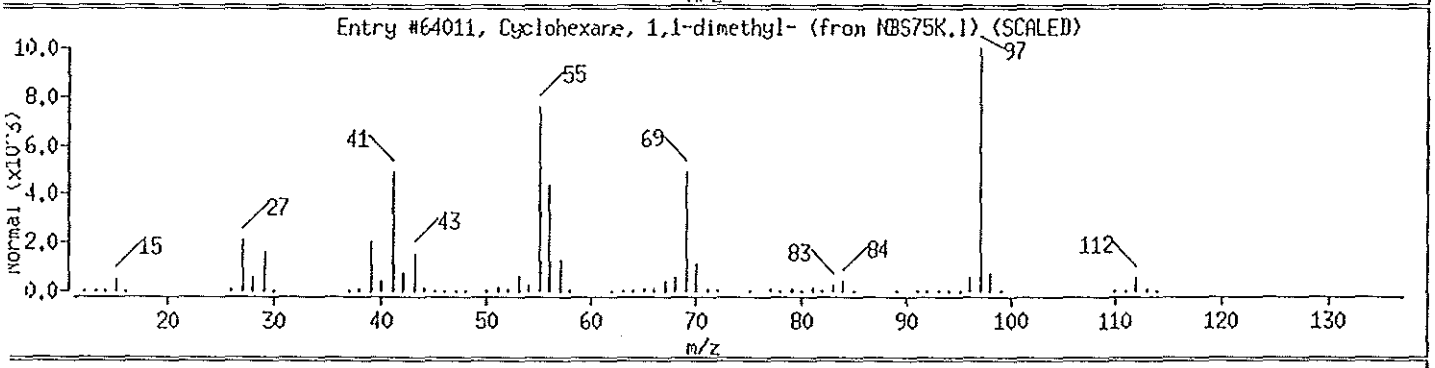
Column phase: J&W DB-5

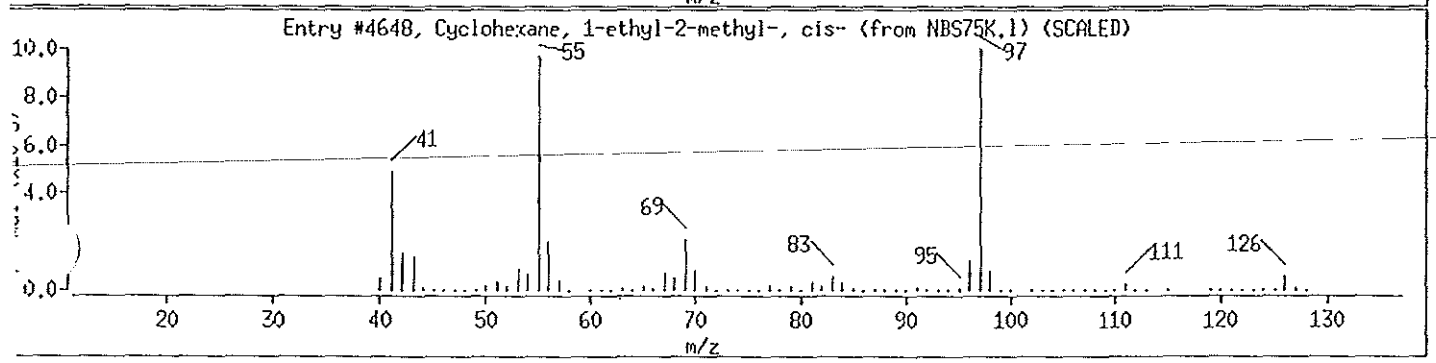
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Pentene, 3-ethyl-4,4-dimethyl-	53907-59-8	NBS75K.l	4651	14	C9H18	126
Cyclohexane, 1,1-dimethyl-	590-66-9	NBS75K.l	64011	10	C8H16	112
Cyclohexane, 1-ethyl-2-methyl-, cis-	4923-77-7	NBS75K.l	4648	10	C9H18	126









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Date : 16-NOV-95 20:57

ent ID: jp0326c

Instrument: mse.i

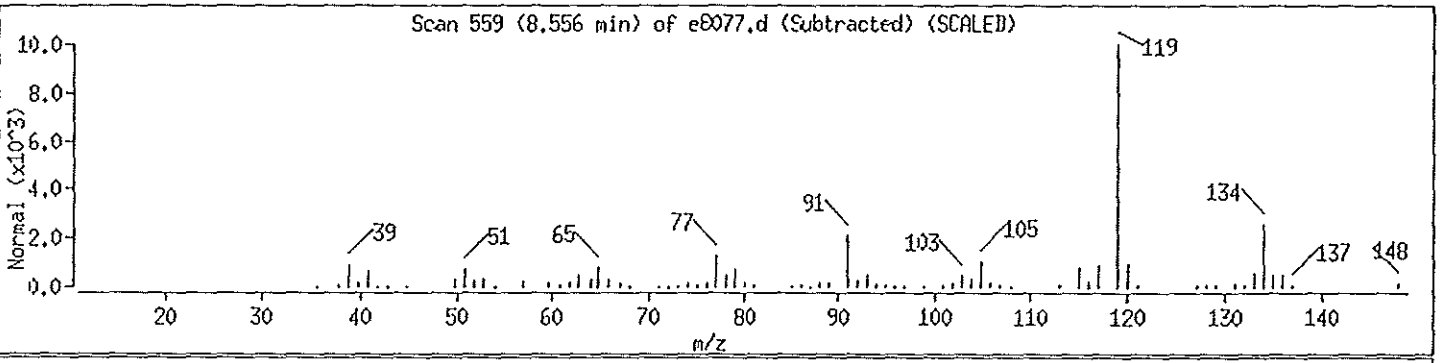
ample Info: 17418n clj78tw003

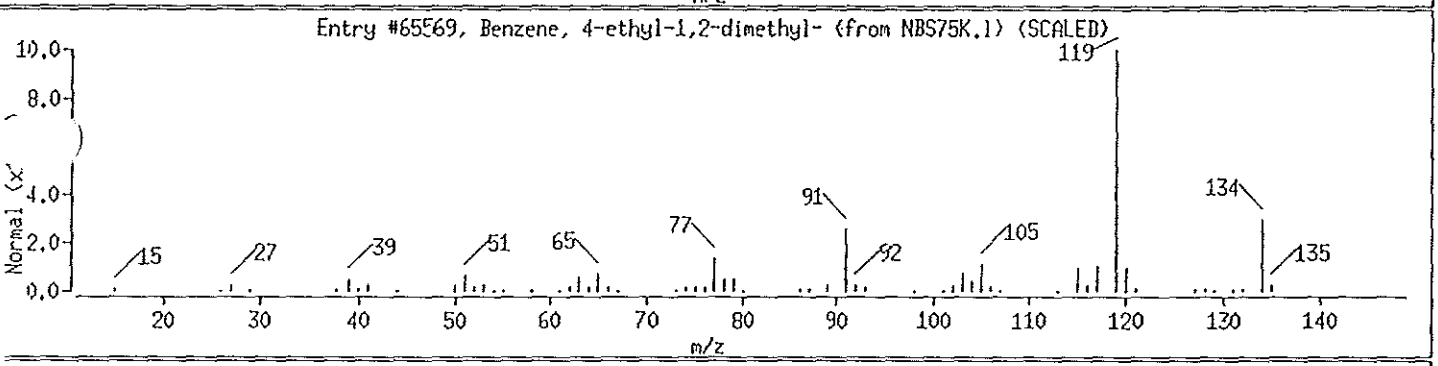
Operator: J. Kelly

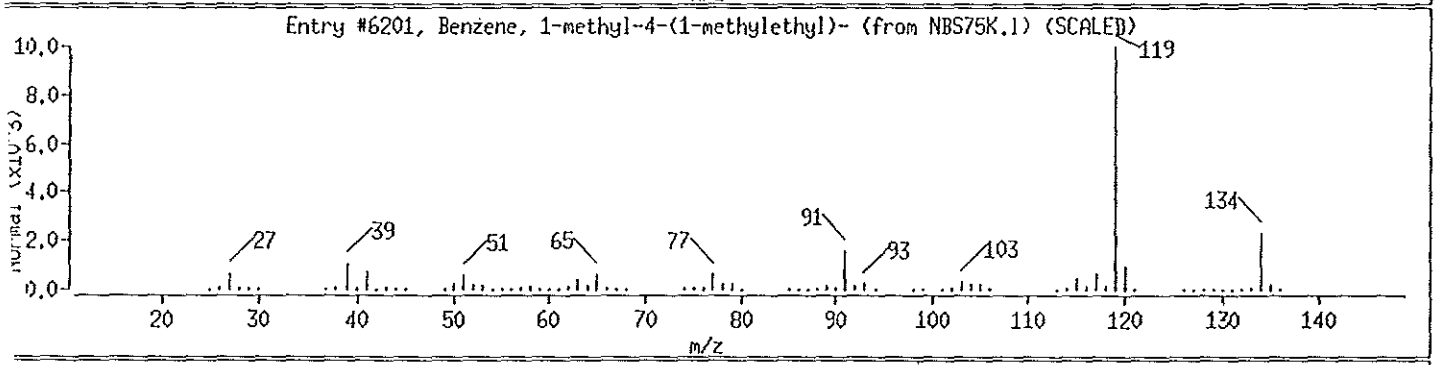
Column phase: J&W DB-5

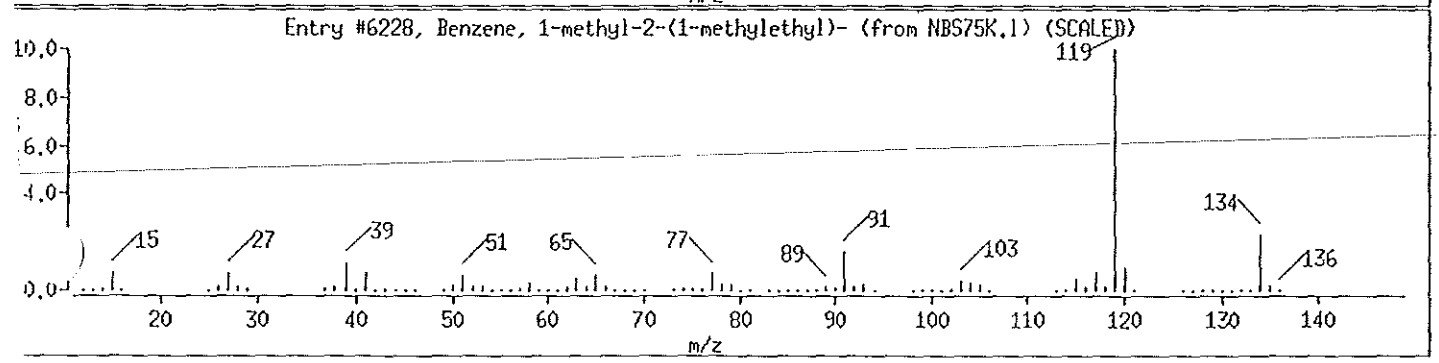
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 4-ethyl-1,2-dimethyl-	934-80-5	NBS75K.l	65569	95	C10H14	134
Benzene, 1-methyl-4-(1-methylethyl)-	99-87-6	NBS75K.l	6201	94	C10H14	134
Benzene, 1-methyl-2-(1-methylethyl)-	527-84-4	NBS75K.l	6228	94	C10H14	134









Data File: /chem/aux/mse.i/e111695.b/e8077.d

Date : 16-NOV-95 20:57

ient ID: jp0326c

Instrument: mse.i

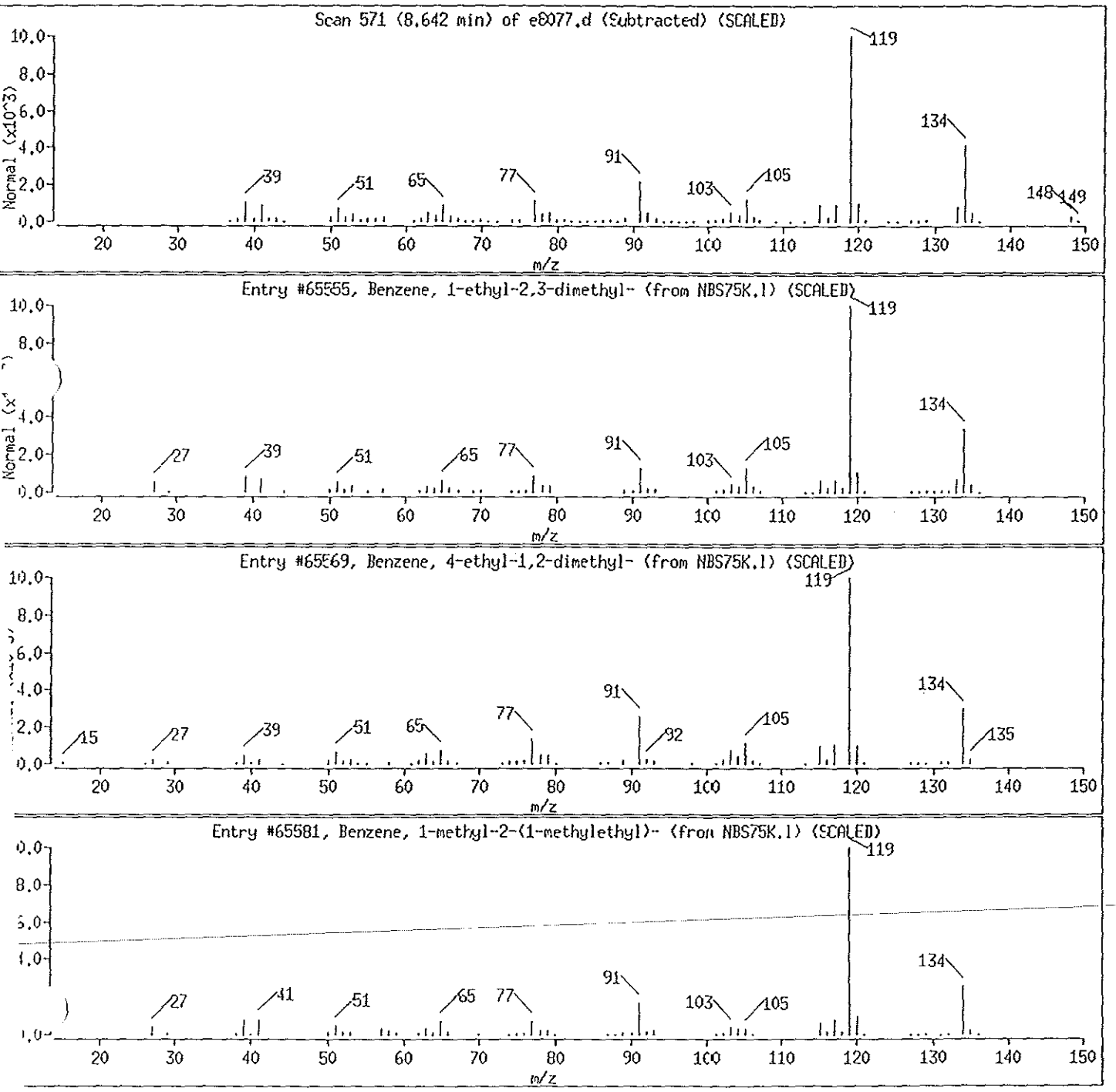
ample Info: 17418n clj78tw003

Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-ethyl-2,3-dimethyl-	933-98-2	NBS75K.l	65555	95	C10H14	134
Benzene, 4-ethyl-1,2-dimethyl-	934-80-5	NBS75K.l	65569	95	C10H14	134
Benzene, 1-methyl-2-(1-methylethyl)-	527-84-4	NBS75K.l	65581	93	C10H14	134



Data File: /chem/aux/mse.i/e111695.b/e8077.d

Date : 16-NOV-95 20:57

Client ID: jp0326c

Sample Info: 17418n clj78tw003

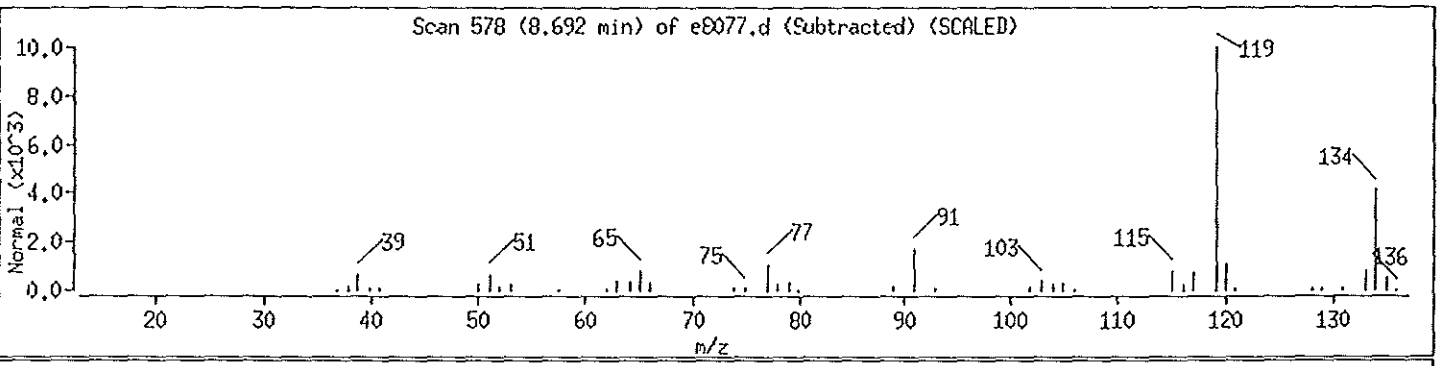
Instrument: mse.i

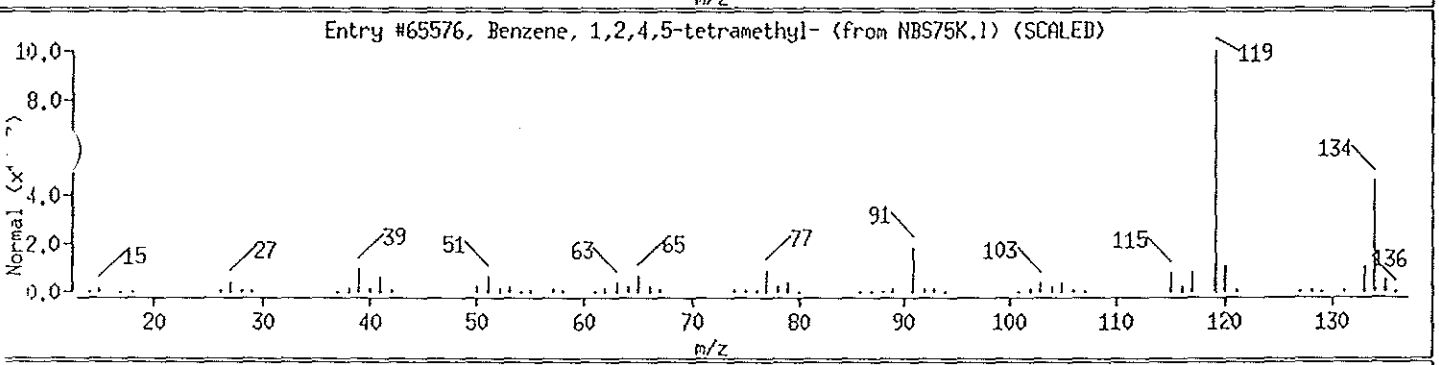
Operator: J. Kelly

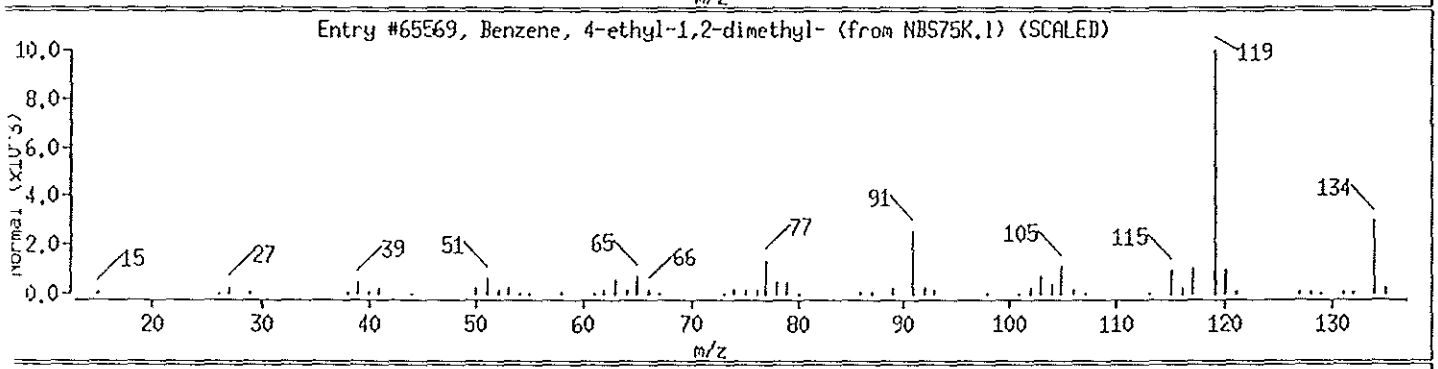
Column phase: J&W DB-5

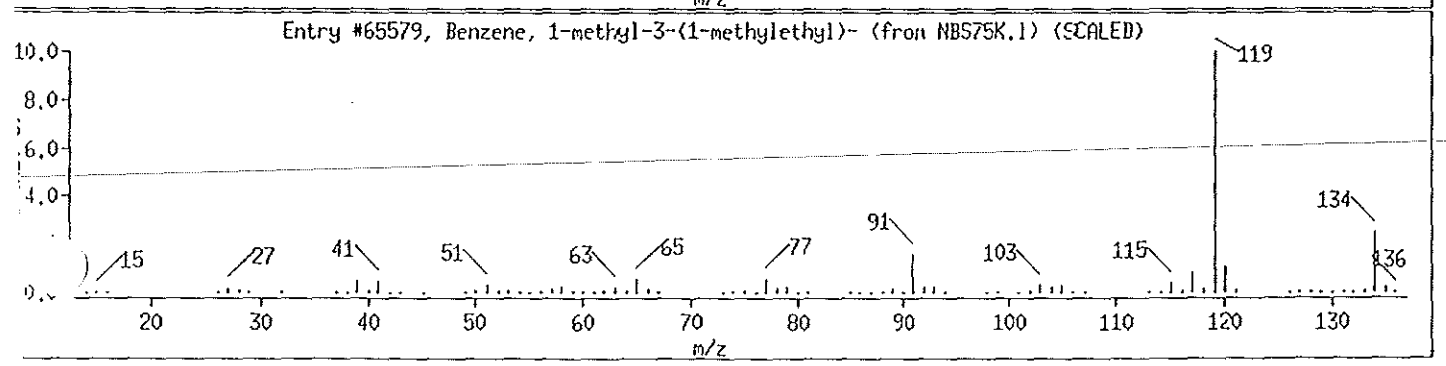
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1,2,4,5-tetramethyl-	95-93-2	NBS75K.1	65576	97	C10H14	134
Benzene, 4-ethyl-1,2-dimethyl-	934-80-5	NBS75K.1	65569	94	C10H14	134
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NBS75K.1	65579	91	C10H14	134









Data File: /chem/aux/mse.i/e111695.b/e8077.d

Date : 16-NOV-95 20:57

Client ID: jp0326c

Instrument: mse.i

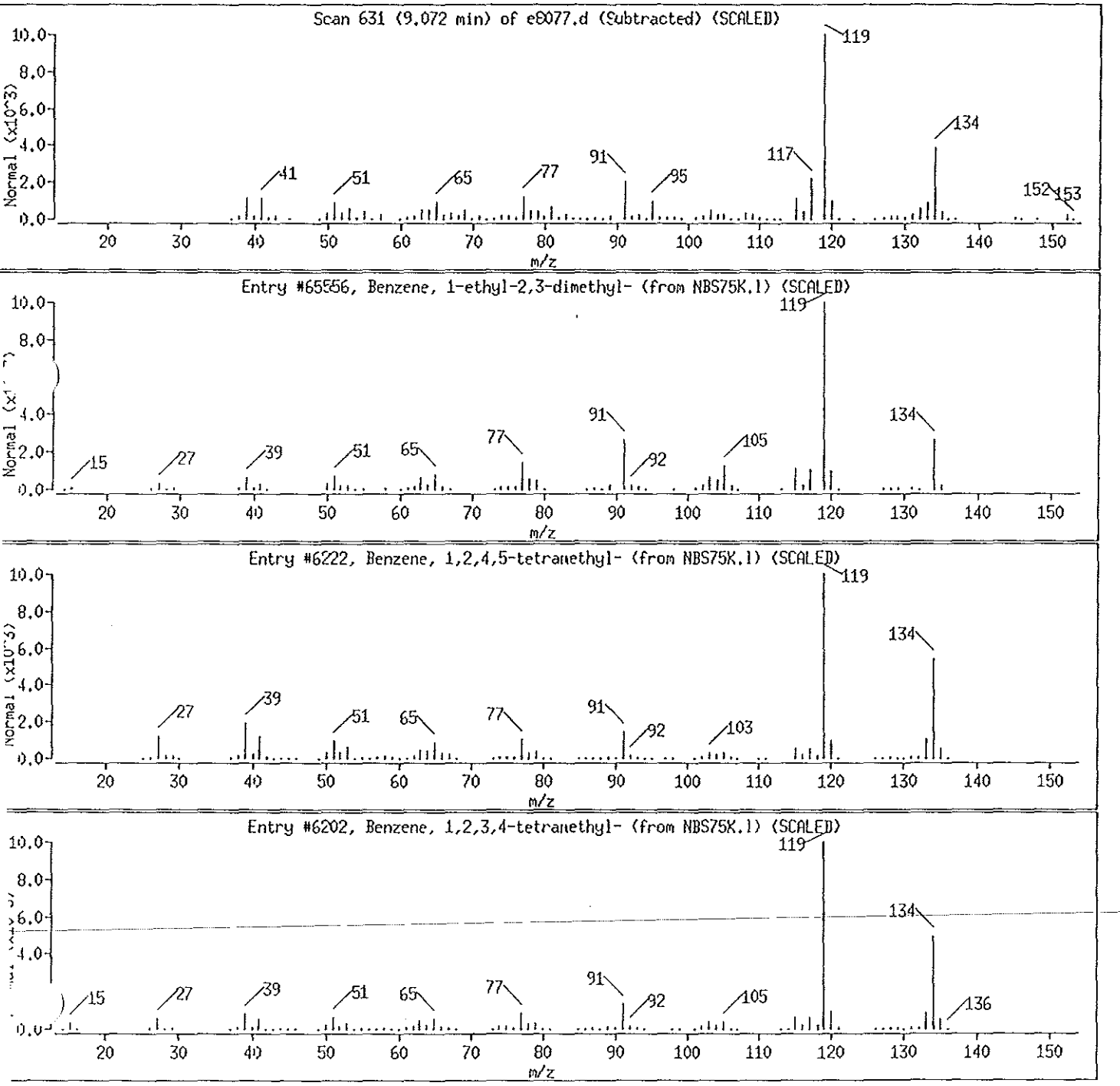
Sample Info: 17418n clj78tw003

Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-ethyl-2,3-dimethyl-	933-98-2	NBS75K.l	65556	93	C10H14	134
Benzene, 1,2,4,5-tetramethyl-	95-93-2	NBS75K.l	6222	87	C10H14	134
Benzene, 1,2,3,4-tetramethyl-	488-23-3	NBS75K.l	6202	87	C10H14	134



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Date : 16-NOV-95 20:57

ient ID: jp0326c

Instrument: mse.i

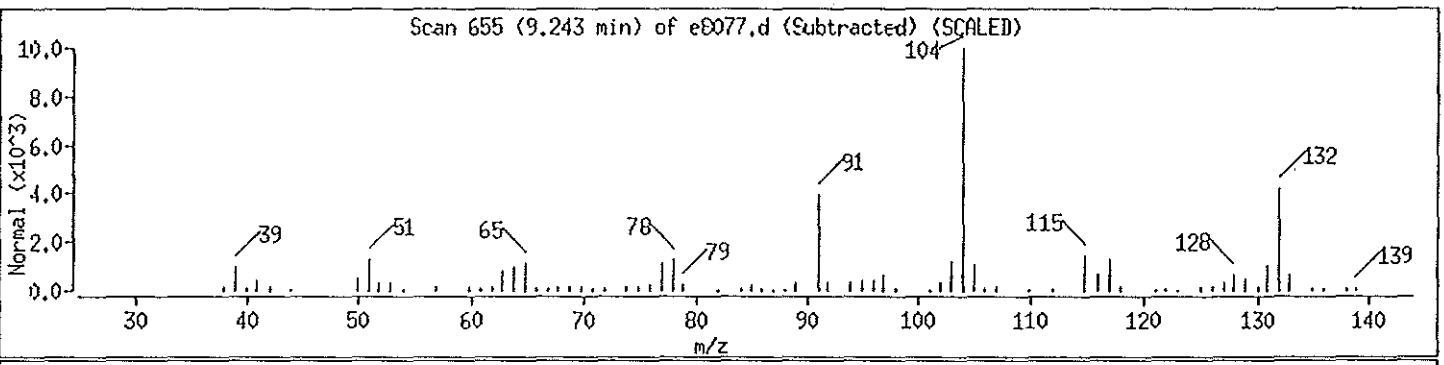
Sample Info: 17418n clj78tw003

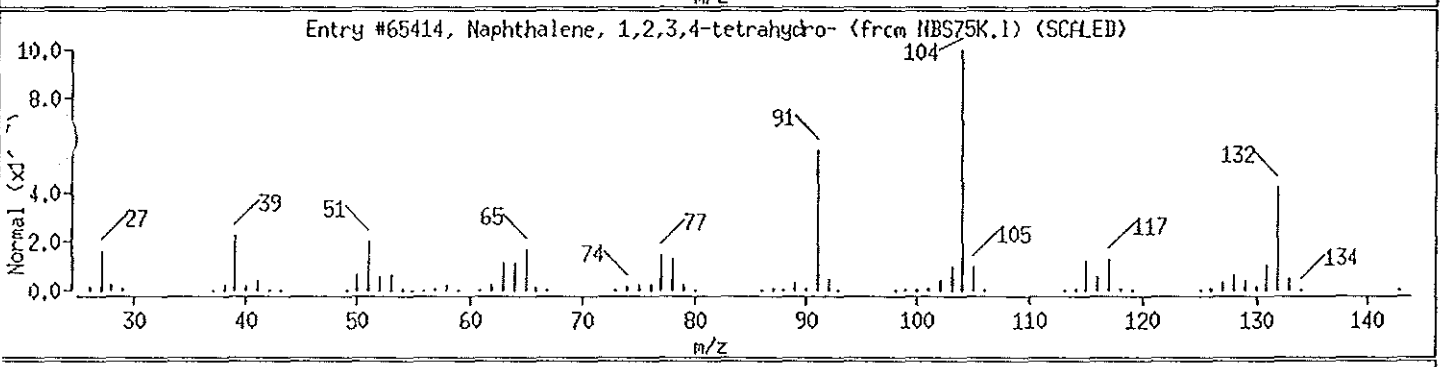
Operator: J. Kelly

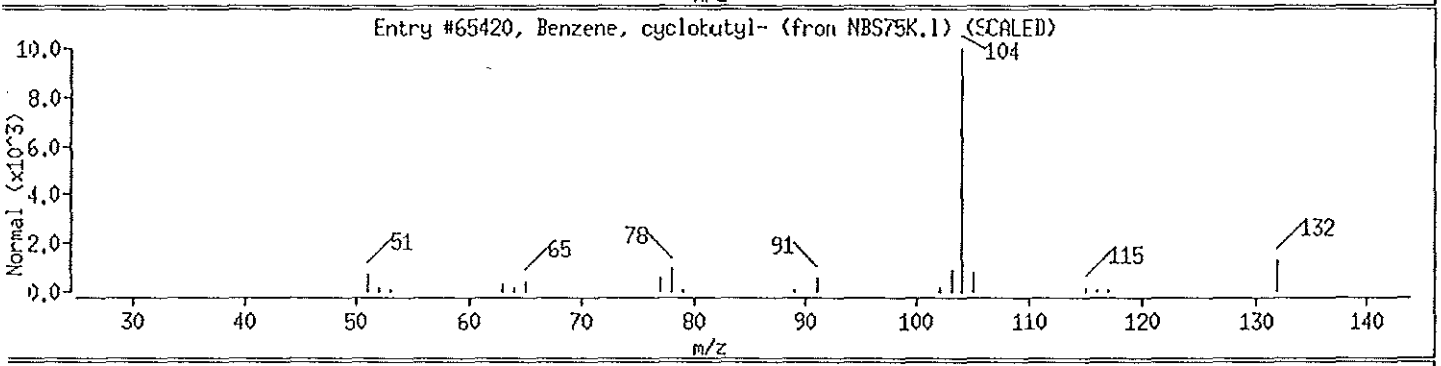
Column phase: J&W DB-5

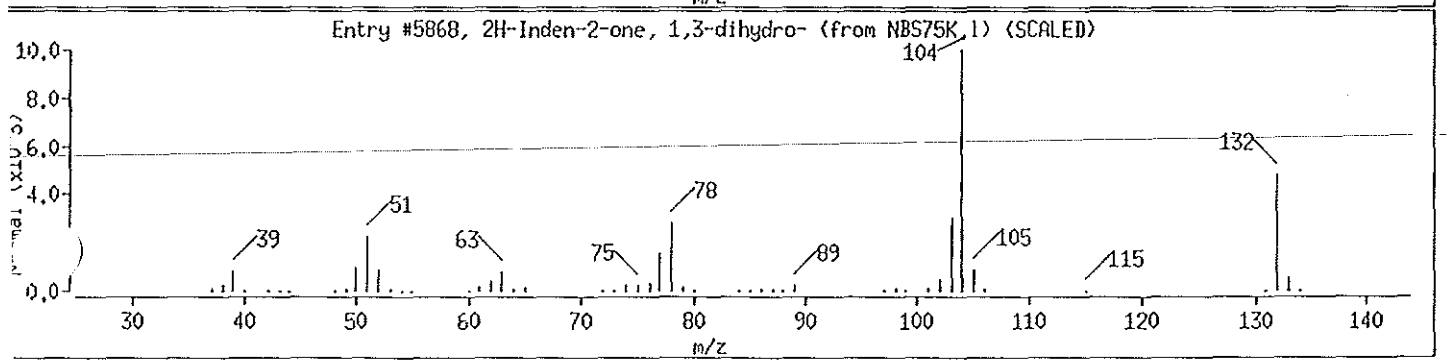
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Naphthalene, 1,2,3,4-tetrahydro-	119-64-2	NBS75K.l	65414	97	C10H12	132
Benzene, cyclobutyl-	4392-30-7	NBS75K.l	65420	64	C10H12	132
2H-Inden-2-one, 1,3-dihydro-	615-13-4	NBS75K.l	5868	62	C9H8O	132









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Date : 16-NOV-95 20:57

ient ID: jp0326c

Instrument: mse.i

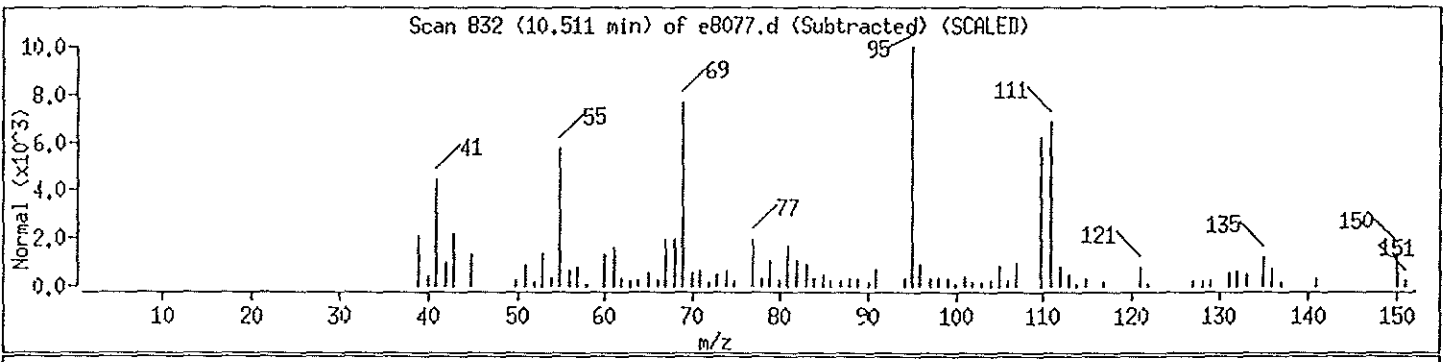
ample Info: 17418n clj78tw003

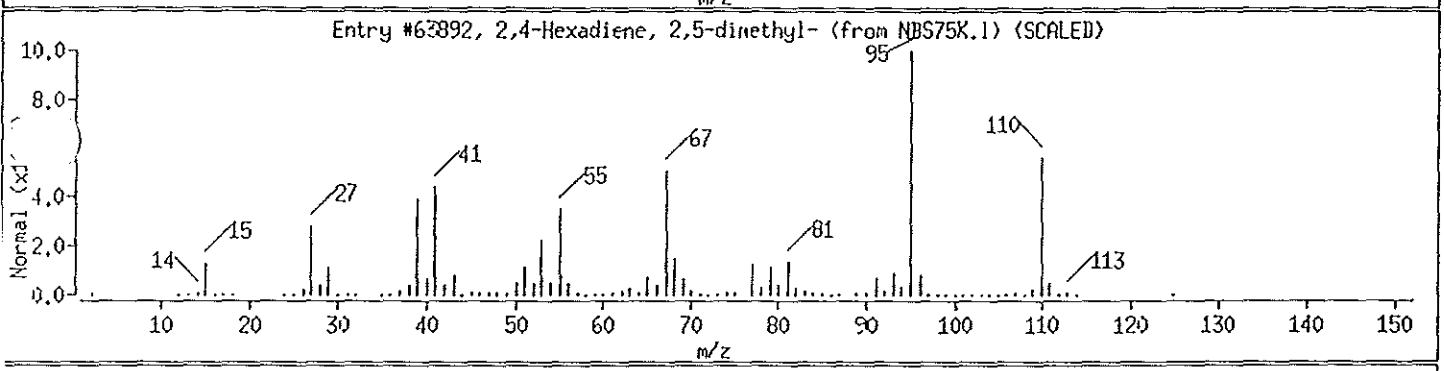
Operator: J. Kelly

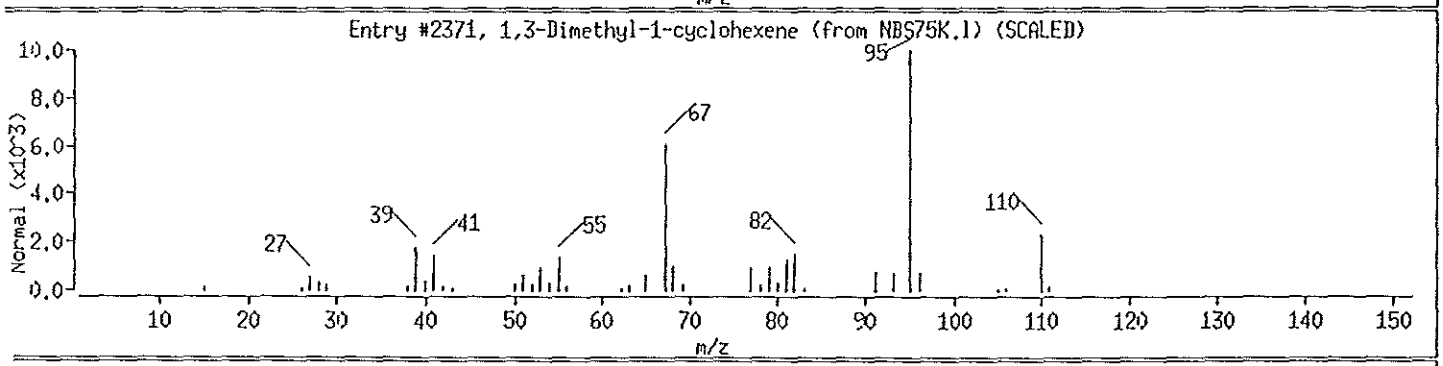
Column phase: J&W DB-5

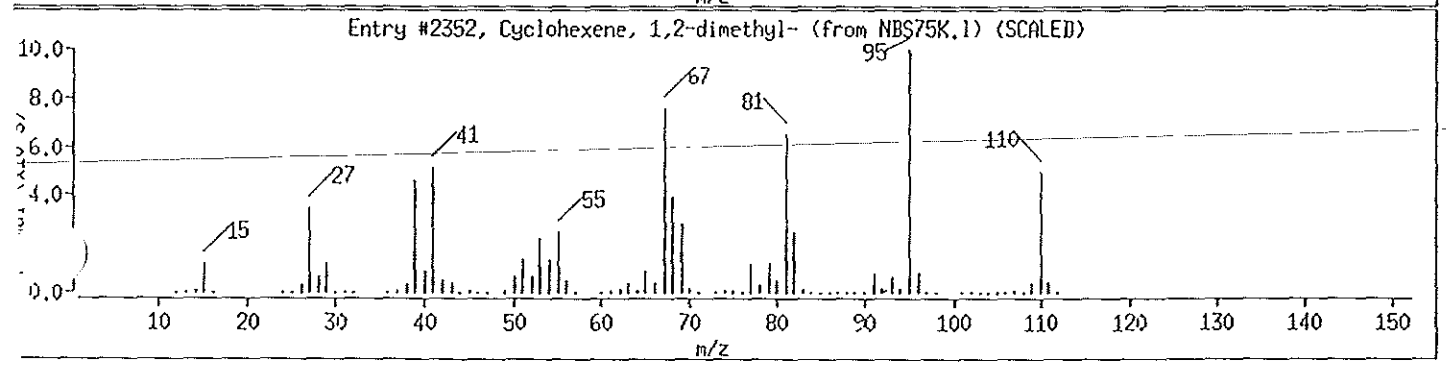
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2,4-Hexadiene, 2,5-dimethyl-	764-13-6	NBS75K.l	63892	35	C6H14	110
1,3-Dimethyl-1-cyclohexene	2808-76-6	NBS75K.l	2371	35	C6H14	110
Cyclohexene, 1,2-dimethyl-	1674-10-8	NBS75K.l	2352	35	C6H14	110









Data File: /chem/aux/mse.i/e111695.b/e8077.d

Date : 16-NOV-95 20:57

Client ID: jp0326c

Sample Info: 17418n clj78tw003

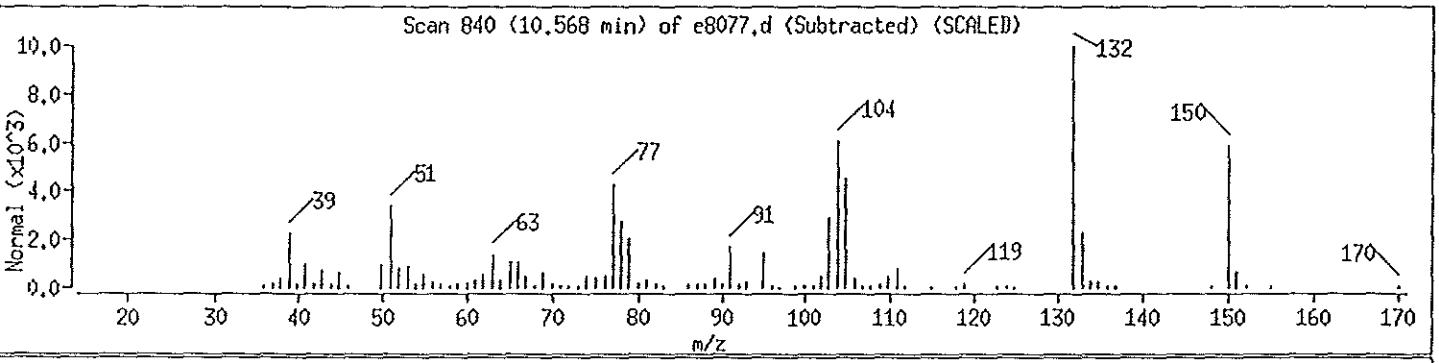
Instrument: mse.i

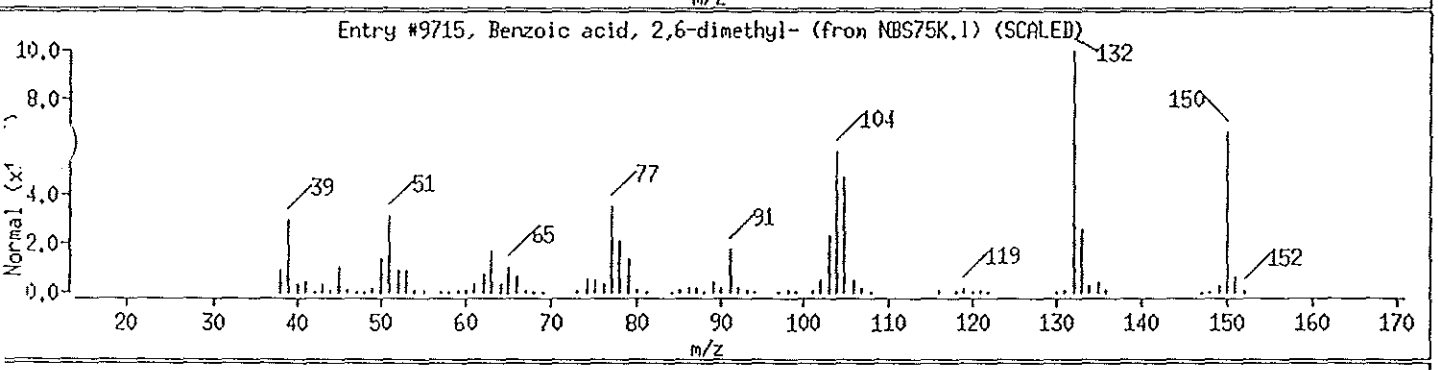
Operator: J. Kelly

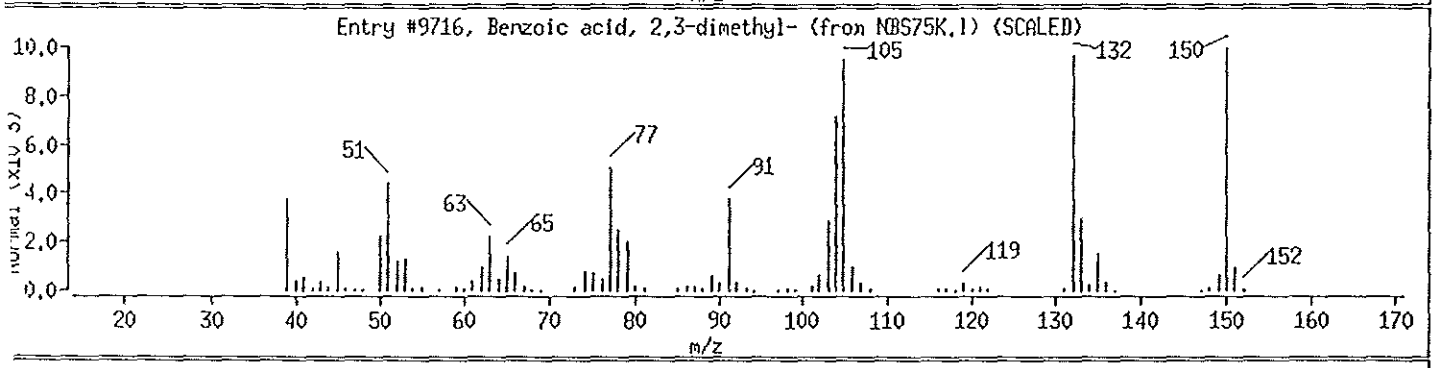
Column phase: J&W DB-5

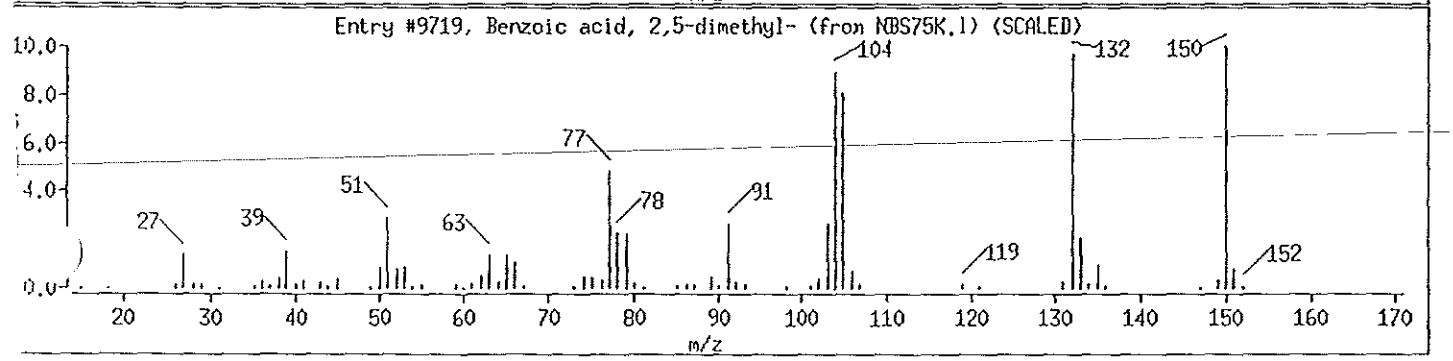
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzoic acid, 2,6-dimethyl-	632-46-2	NBS75K.1	9715	90	C9H10O2	150
Benzoic acid, 2,3-dimethyl-	603-79-2	NBS75K.1	9716	62	C9H10O2	150
Benzoic acid, 2,5-dimethyl-	610-72-0	NBS75K.1	9719	58	C9H10O2	150









Data File: /chem/aux/mse.i/e111695.b/e8077.d

Date : 16-NOV-95 20:57

Client ID: jp0326c

Instrument: mse.i

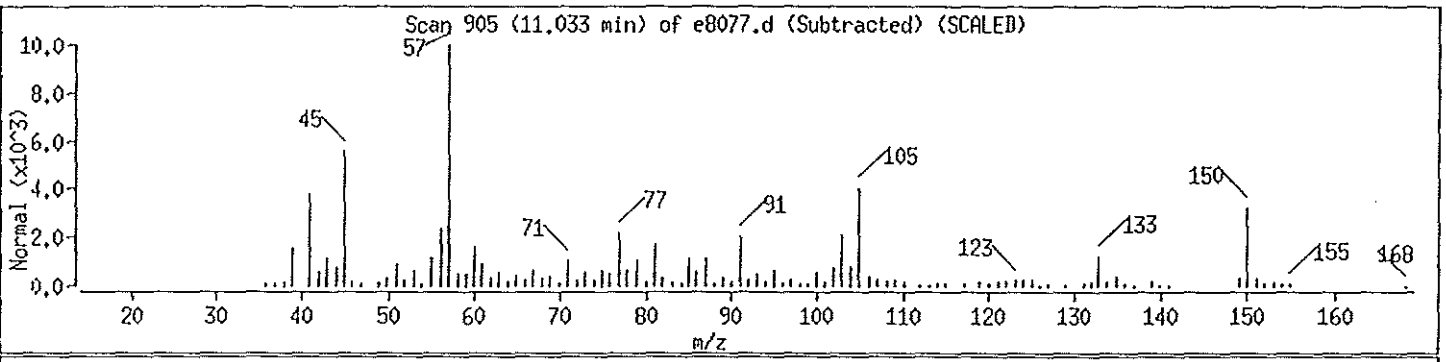
Sample Info: 17418n clj78tw003

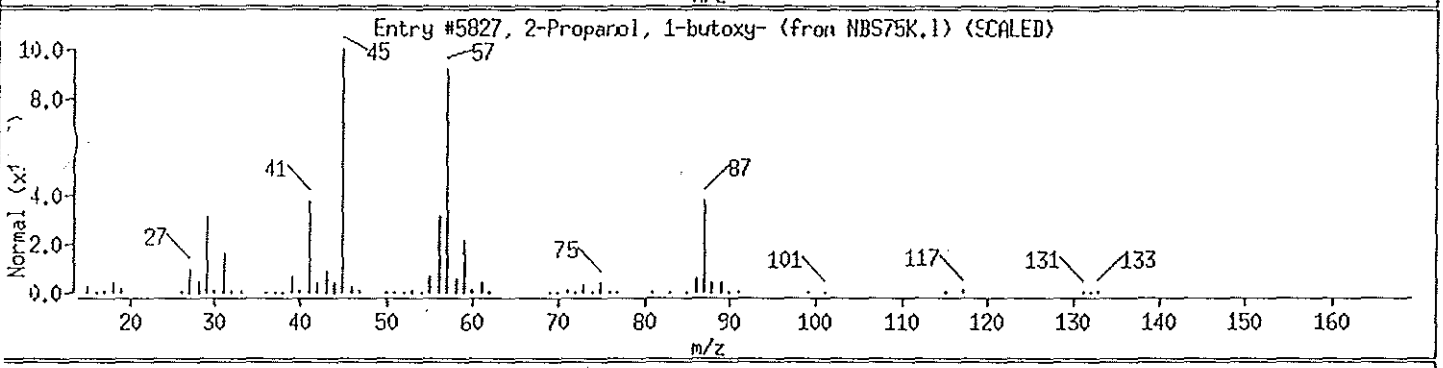
Operator: J. Kelly

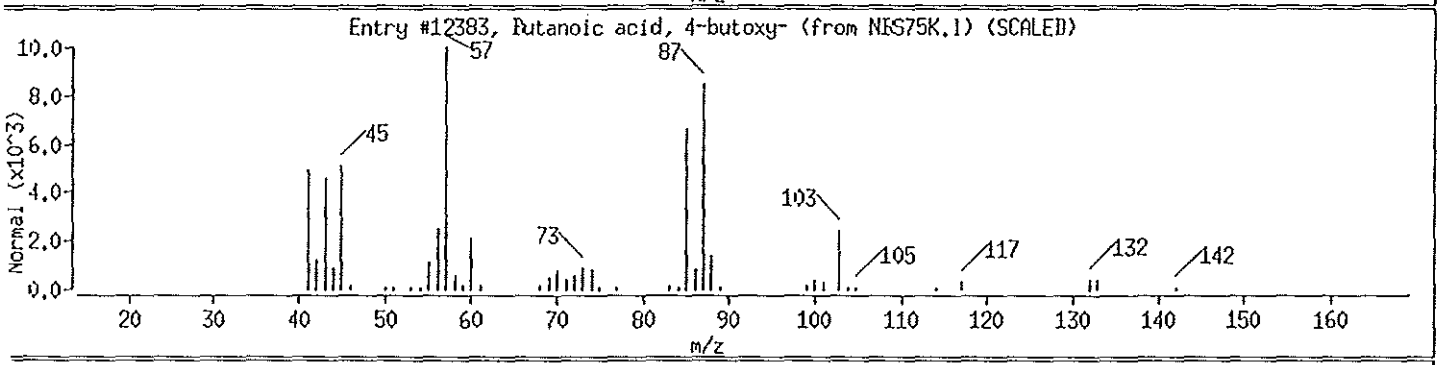
Column phase: J&W DB-5

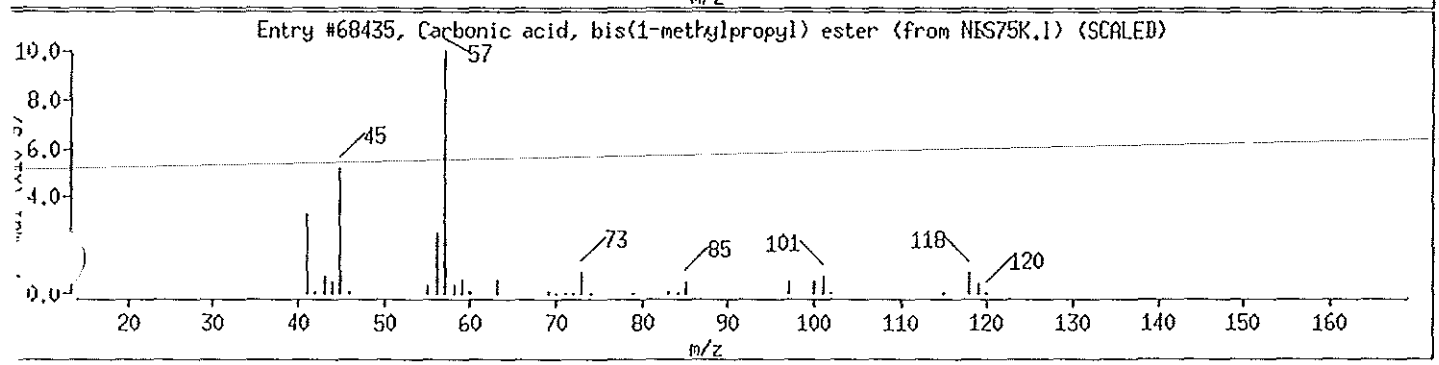
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Propanol, 1-butoxy-	5131-66-8	NBS75K.l	5827	38	C7H16O2	132
Butanoic acid, 4-butoxy-	55724-73-7	NBS75K.l	12383	37	C8H16O3	160
Carbonic acid, bis(1-methylpropyl) ester	623-63-2	NBS75K.l	68435	35	C9H18O3	174









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Date : 16-NOV-95 20:57

ient ID: jp0326c

Instrument: mse.i

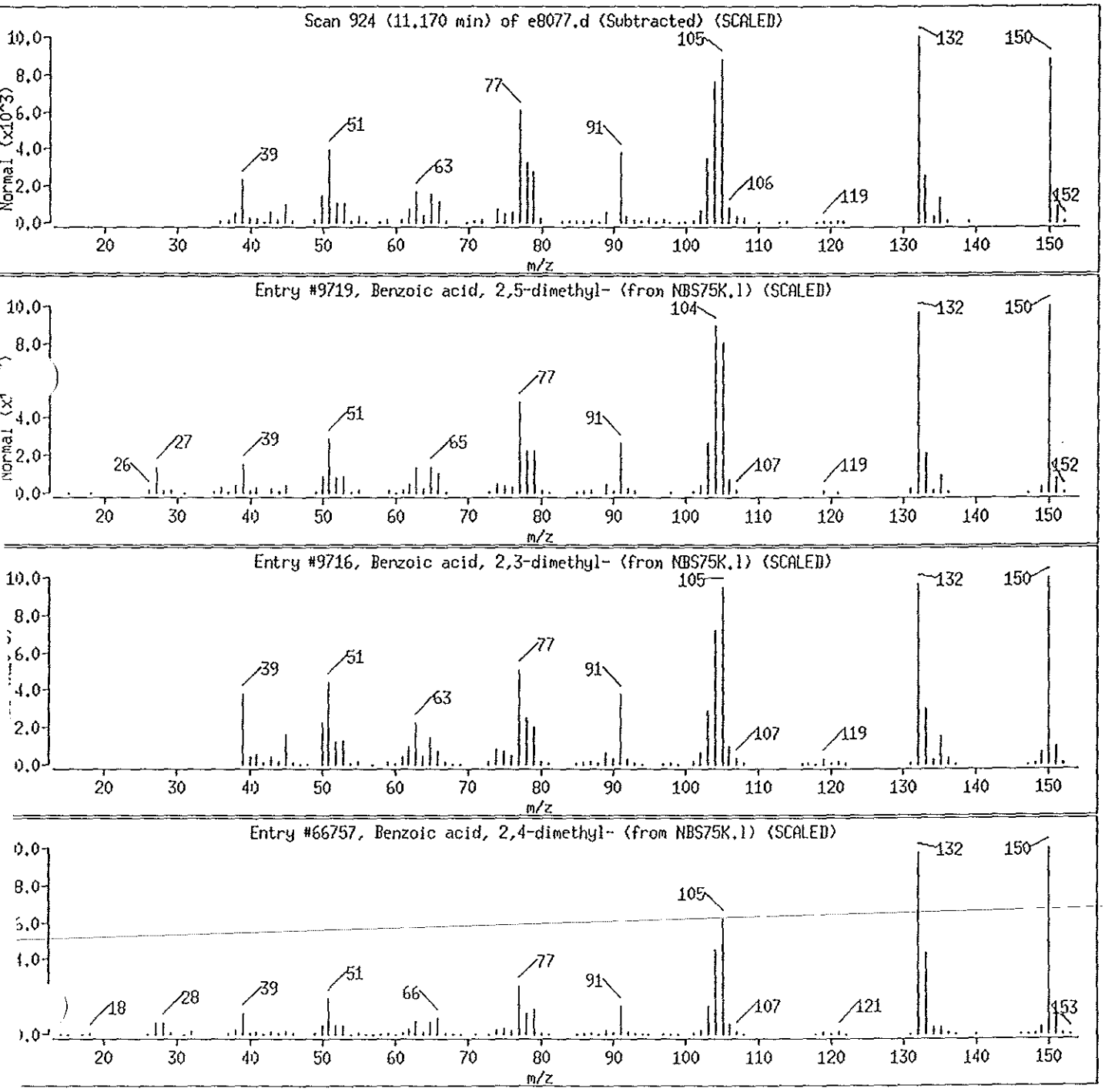
ample Info: 17418n clj78tw003

Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzoic acid, 2,5-dimethyl-	610-72-0	NBS75K.l	9719	96	C9H10O2	150
Benzoic acid, 2,3-dimethyl-	603-79-2	NBS75K.l	9716	96	C9H10O2	150
Benzoic acid, 2,4-dimethyl-	611-01-8	NBS75K.l	66757	80	C9H10O2	150



Data File: /chem/aux/mse.i/e111695.b/e8077.d

Date : 16-NOV-95 20:57

Client ID: jp0326c

Instrument: mse.i

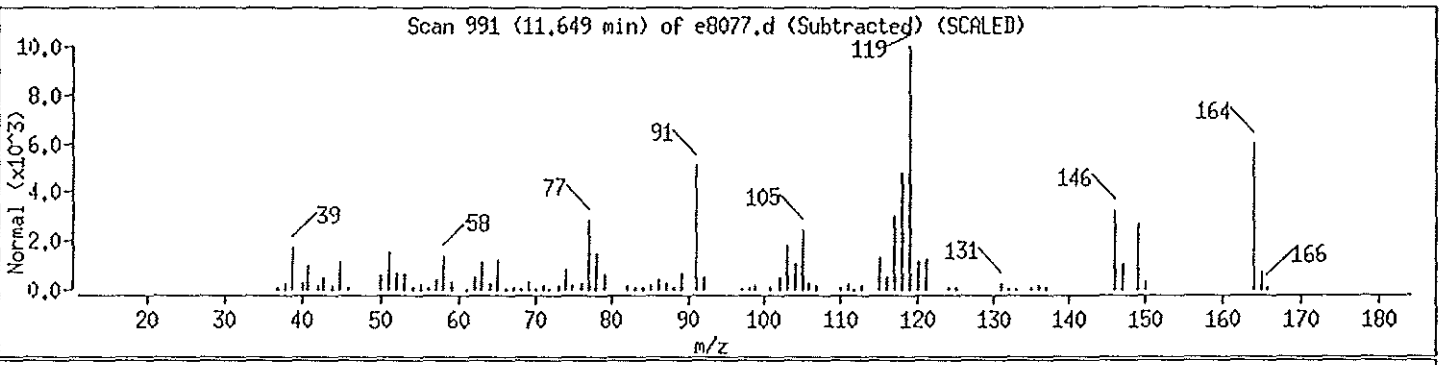
Sample Info: 17418n clj78tw003

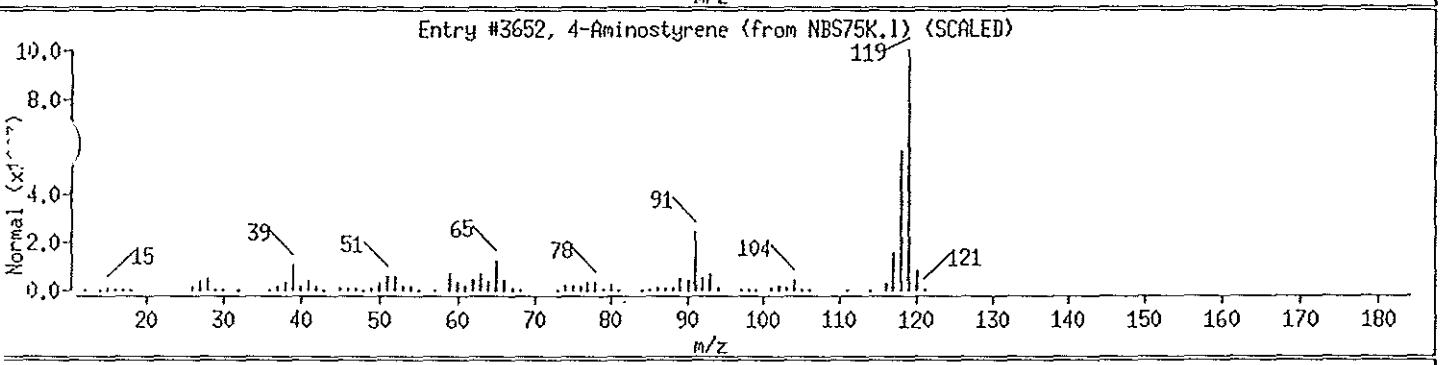
Operator: J. Kelly

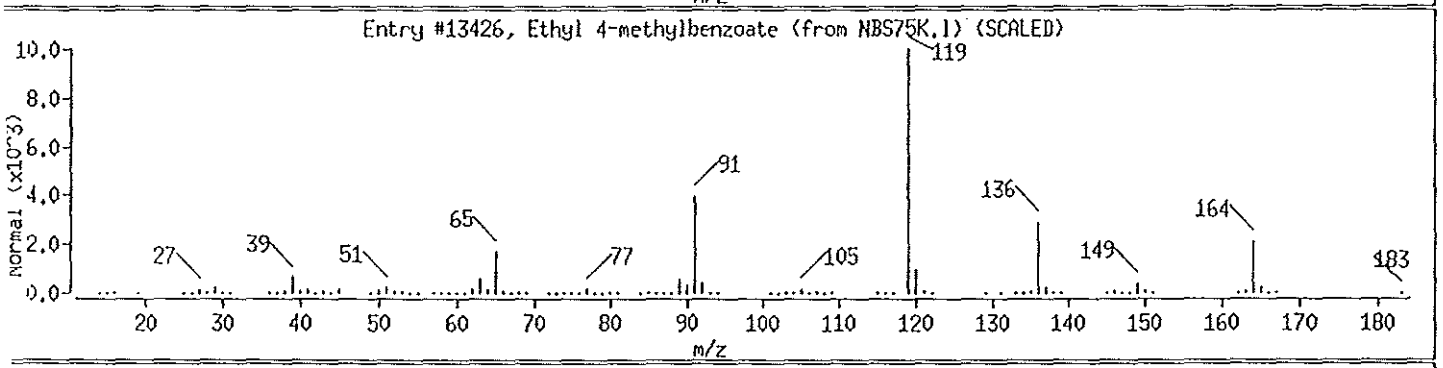
Column phase: J&W DB-5

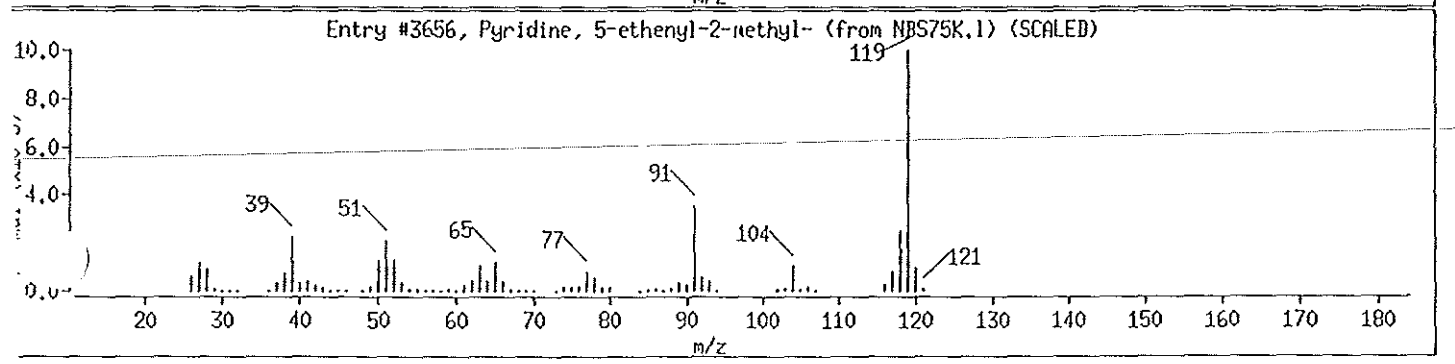
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
4-Aminostyrene	1520-21-4	NBS75K.l	3652	43	C8H9N	119
Ethyl 4-methylbenzoate	94-08-6	NBS75K.l	13426	43	C10H12O2	164
Pyridine, 5-ethenyl-2-methyl-	140-76-1	NBS75K.l	3656	38	C8H9N	119









Data File: /chem/aux/mse.i/e111695.b/e8077.d

Date : 16-NOV-95 20:57

ient ID: jp0326c

Instrument: mse.i

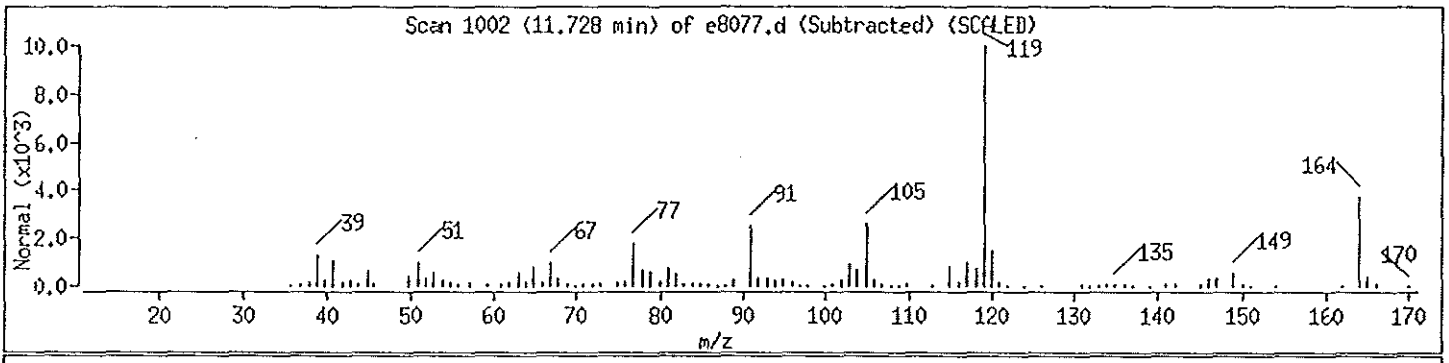
ample Info: 17418n clj78tw003

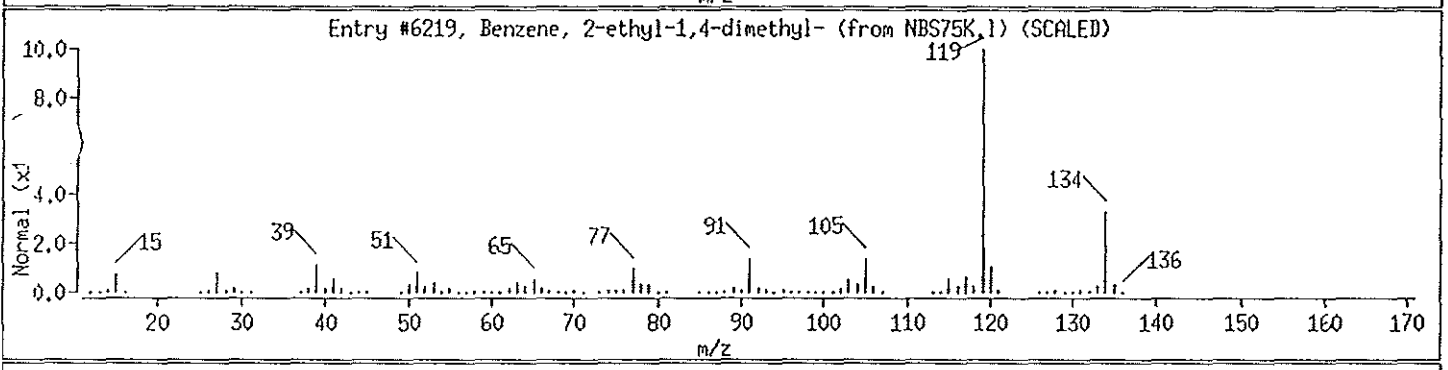
Operator: J. Kelly

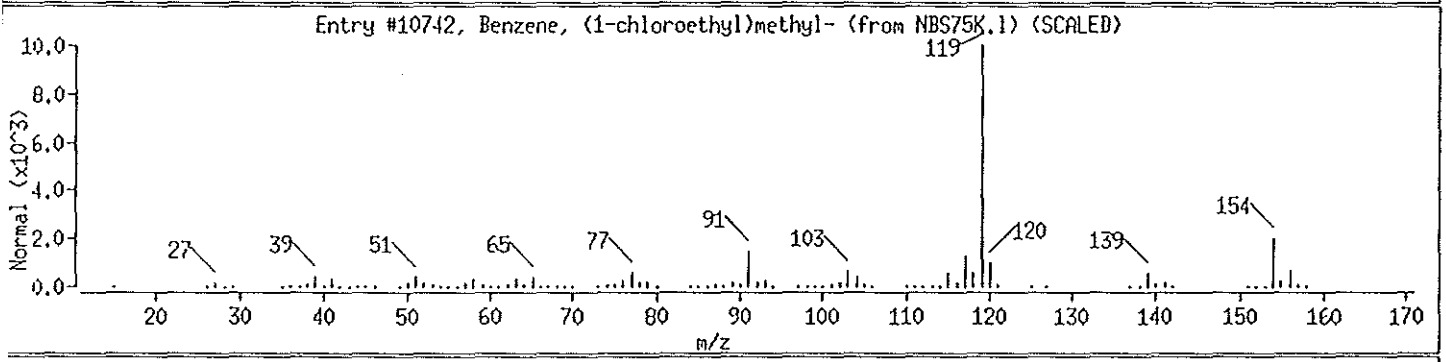
Column phase: J&W DB-5

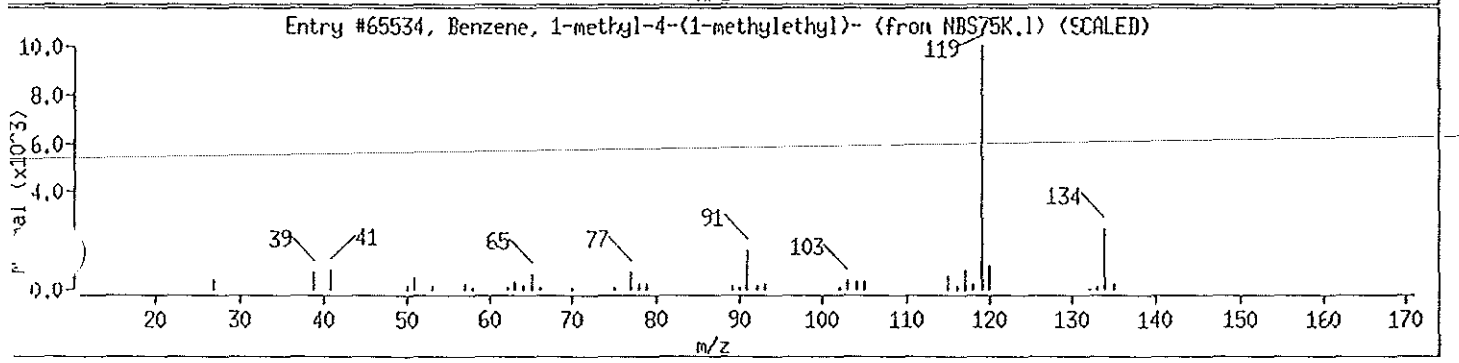
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	NBS75K.l	6219	70	C10H14	134
Benzene, (1-chloroethyl)methyl-	72403-15-7	NBS75K.l	10742	64	C9H11Cl	154
Benzene, 1-methyl-4-(1-methylethyl)-	99-87-6	NBS75K.l	65534	64	C10H14	134





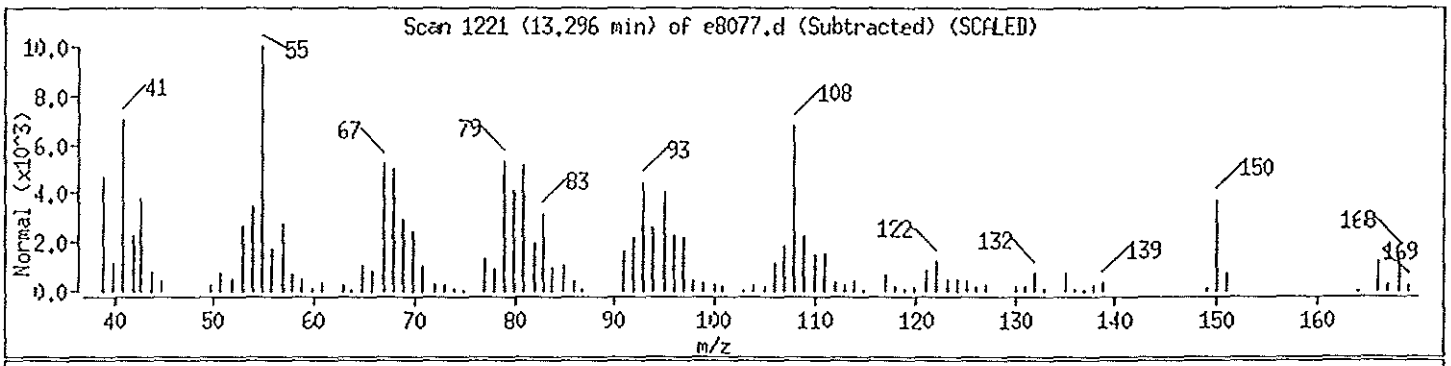


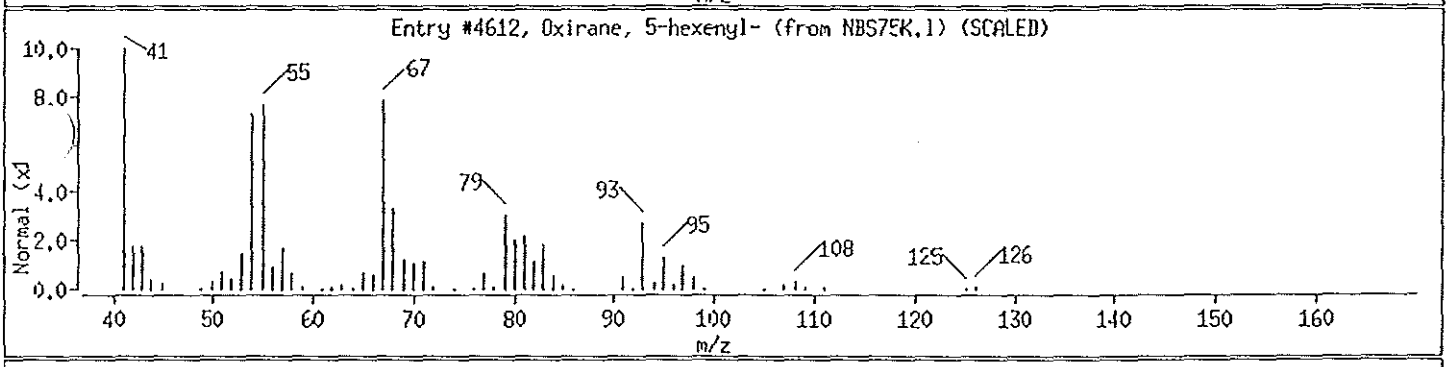


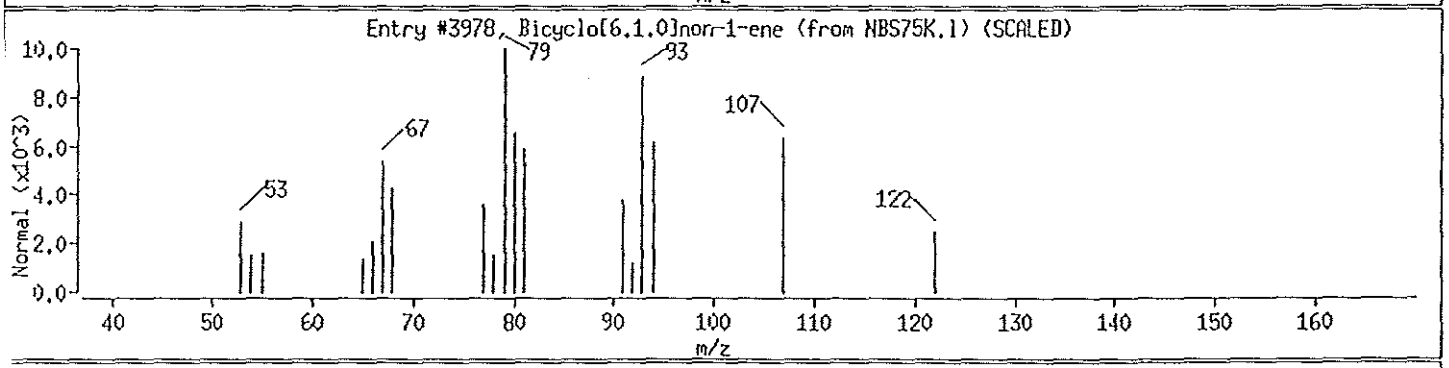
Data File: /chem/aux/mse.i/e111695.b/e8077.d
Date : 16-NOV-95 20:57
Client ID: jp0326c
Sample Info: 17418n clj78tw003

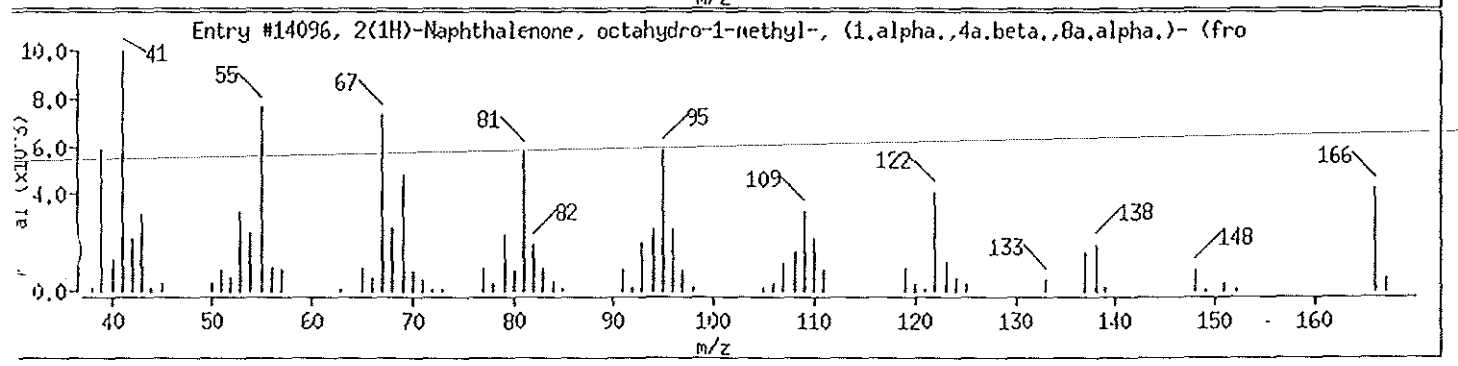
Instrument: mse.i
Operator: J. Kelly
Column phase: J&W DB-5
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Oxirane, 5-hexenyl-	19600-63-6	NBS75K.l	4612	38	C8H14O	126
Bicyclo[6.1.0]non-1-ene	2570-06-1	NBS75K.l	3978	30	C9H14	122
2(1H)-Naphthalenone, octahydro-1-methyl-	21102-88-5	NBS75K.l	14096	30	C11H18O	166









Data File: /chem/aux/mse.i/e111695.b/e8077.d

Date : 16-NOV-95 20:57

ient ID: jp0326c

Instrument: mse.i

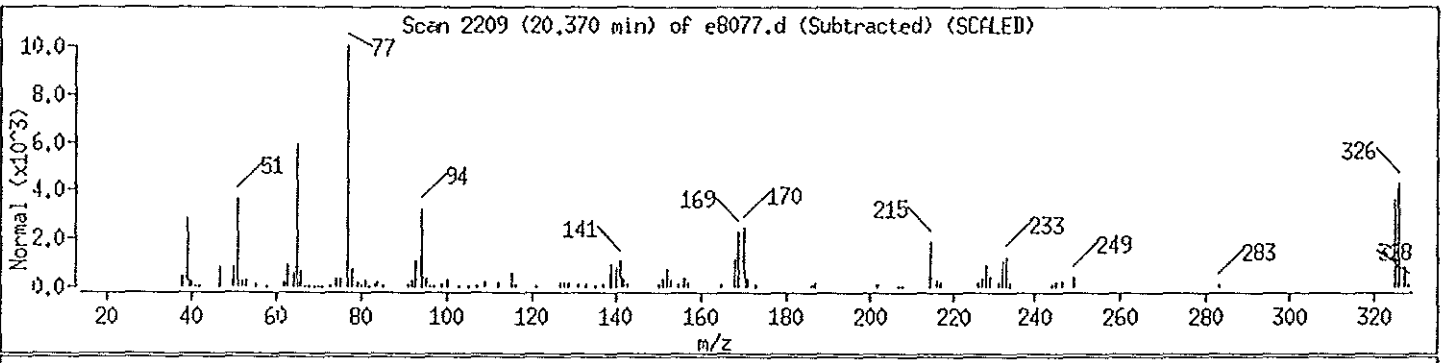
ample Info: 17418n clj78tw003

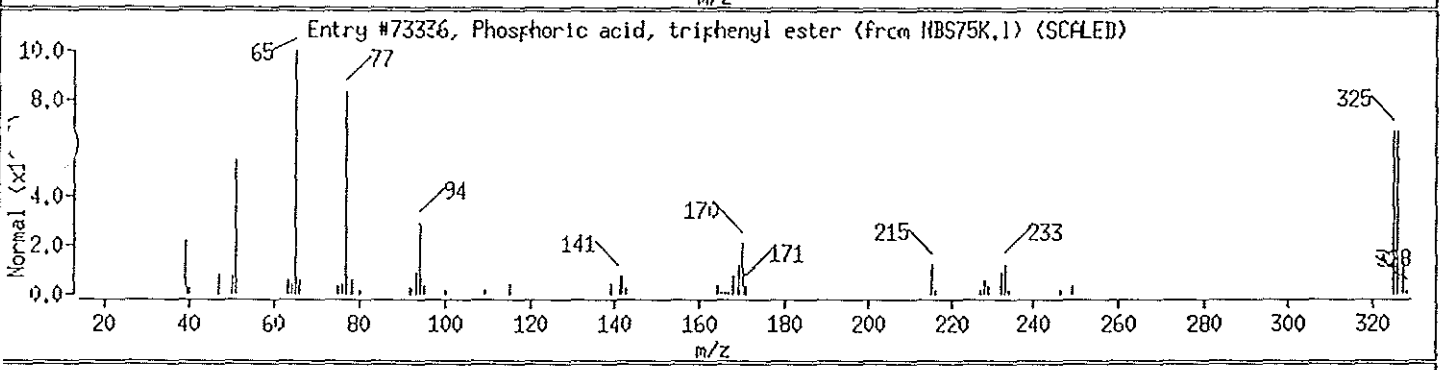
Operator: J. Kelly

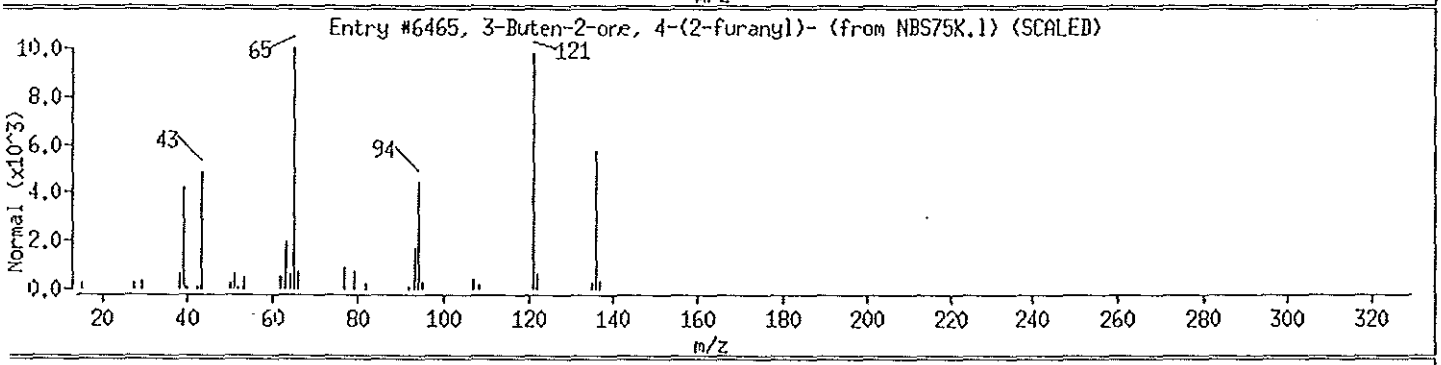
Column phase: J&W DB-5

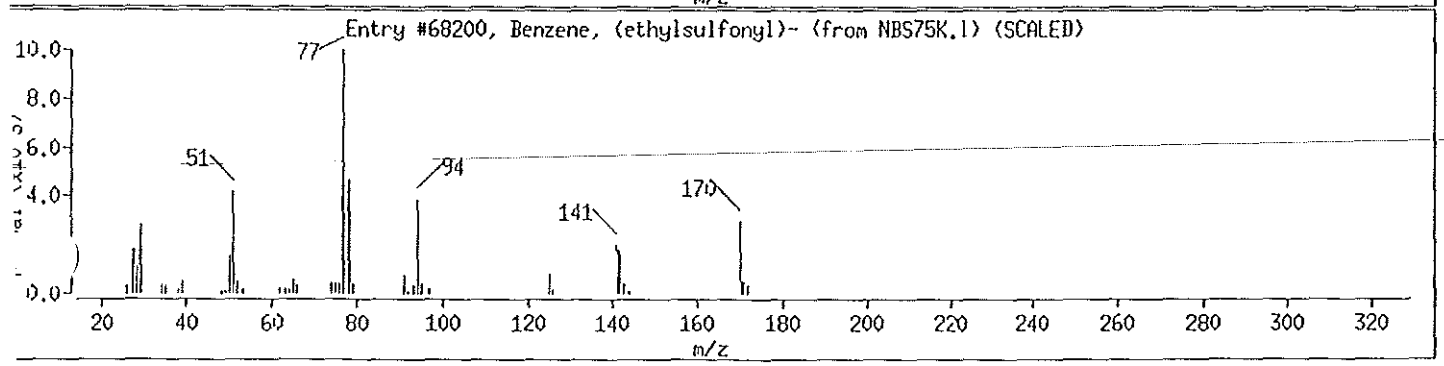
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Phosphoric acid, triphenyl ester	115-86-6	NBS75K.l	73336	81	C18H15O4P	326
3-Buten-2-one, 4-(2-furanyl)-	623-15-4	NBS75K.l	6465	17	C8H8O2	136
Benzene, (ethylsulfonyl)-	599-70-2	NBS75K.l	68200	14	C8H10O2S	170









1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0438 CLJ78TW003DL

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0326C

Sample wt/vol: 970 (g/mL) ML Lab File ID: B8901

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/19/95

Injection Volume: 1.00 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	100	U
111-44-4	bis(2-Chloroethyl)ether	100	U
95-57-8	2-Chlorophenol	100	U
541-73-1	1,3-Dichlorobenzene	100	U
106-46-7	1,4-Dichlorobenzene	100	U
95-50-1	1,2-Dichlorobenzene	100	U
95-48-7	2-Methylphenol	100	U
108-60-1	2,2'-oxybis(1-Chloropropane)	100	U
106-44-5	4-Methylphenol	100	U
621-64-7	N-Nitroso-di-n-propylamine	100	U
67-72-1	Hexachloroethane	100	U
98-95-3	Nitrobenzene	100	U
78-59-1	Isophorone	100	U
88-75-5	2-Nitrophenol	100	U
105-67-9	2,4-Dimethylphenol	100	U
111-91-1	bis(2-Chloroethoxy)methane	100	U
120-83-2	2,4-Dichlorophenol	100	U
120-82-1	1,2,4-Trichlorobenzene	100	U
91-20-3	Naphthalene	100	U
106-47-8	4-Chloroaniline	100	U
87-68-3	Hexachlorobutadiene	100	U
59-50-7	4-Chloro-3-methylphenol	100	U
91-57-6	2-Methylnaphthalene	100	U
77-47-4	Hexachlorocyclopentadiene	100	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	100	U
91-58-7	2-Chloronaphthalene	100	U
88-74-4	2-Nitroaniline	100	U
131-11-3	Dimethylphthalate	100	U
208-96-8	Acenaphthylene	100	U
606-20-2	2,6-Dinitrotoluene	100	U
99-09-2	3-Nitroaniline	100	U
83-32-9	Acenaphthene	100	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

0439

EPA SAMPLE NO.

CLJ78TW003DL

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0326C

Sample wt/vol: 970 (g/mL) ML Lab File ID: B8901

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) ___ Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/19/95

Injection Volume: 1.00 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	520	U
100-02-7	4-Nitrophenol	520	U
132-64-9	Dibenzofuran	100	U
121-14-2	2,4-Dinitrotoluene	100	U
84-66-2	Diethylphthalate	100	U
7005-72-3	4-Chlorophenyl-phenylether	100	U
86-73-7	Fluorene	100	U
100-01-6	4-Nitroaniline	100	U
534-52-1	4,6-Dinitro-2-methylphenol	260	U
101-55-3	4-Bromophenyl-phenylether	100	U
86-30-6	N-Nitrosodiphenylamine (1)	100	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	100	U
85-01-8	Phenanthrene	100	U
120-12-7	Anthracene	100	U
86-74-8	Carbazole	100	U
84-74-2	Di-n-butylphthalate	100	U
206-44-0	Fluoranthene	100	U
129-00-0	Pyrene	100	U
85-68-2	Butylbenzylphthalate	100	U
91-94-1	3,3'-Dichlorobenzidine	100	U
56-55-3	Benzo(a)anthracene	100	U
218-01-9	Chrysene	100	U
117-81-7	bis(2-Ethylhexyl)phthalate	620	D
117-84-0	Di-n-octylphthalate	100	U
205-99-2	Benzo(b)fluoranthene	100	U
207-08-9	Benzo(k)fluoranthene	100	U
50-32-8	Benzo(a)pyrene	100	U
193-39-5	Indeno(1,2,3-cd)pyrene	100	U
53-70-3	Dibenz(a,h)anthracene	100	U
191-24-2	Benzo(g,h,i)perylene	100	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS 0440

EPA SAMPLE NO.

CLJ78TW003DL

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0326C

Sample wt/vol: 970 (g/mL) ML Lab File ID: B8901

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/19/95

Injection Volume: 1.00 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: _____

Number TICs found: N/A, 0/N/A

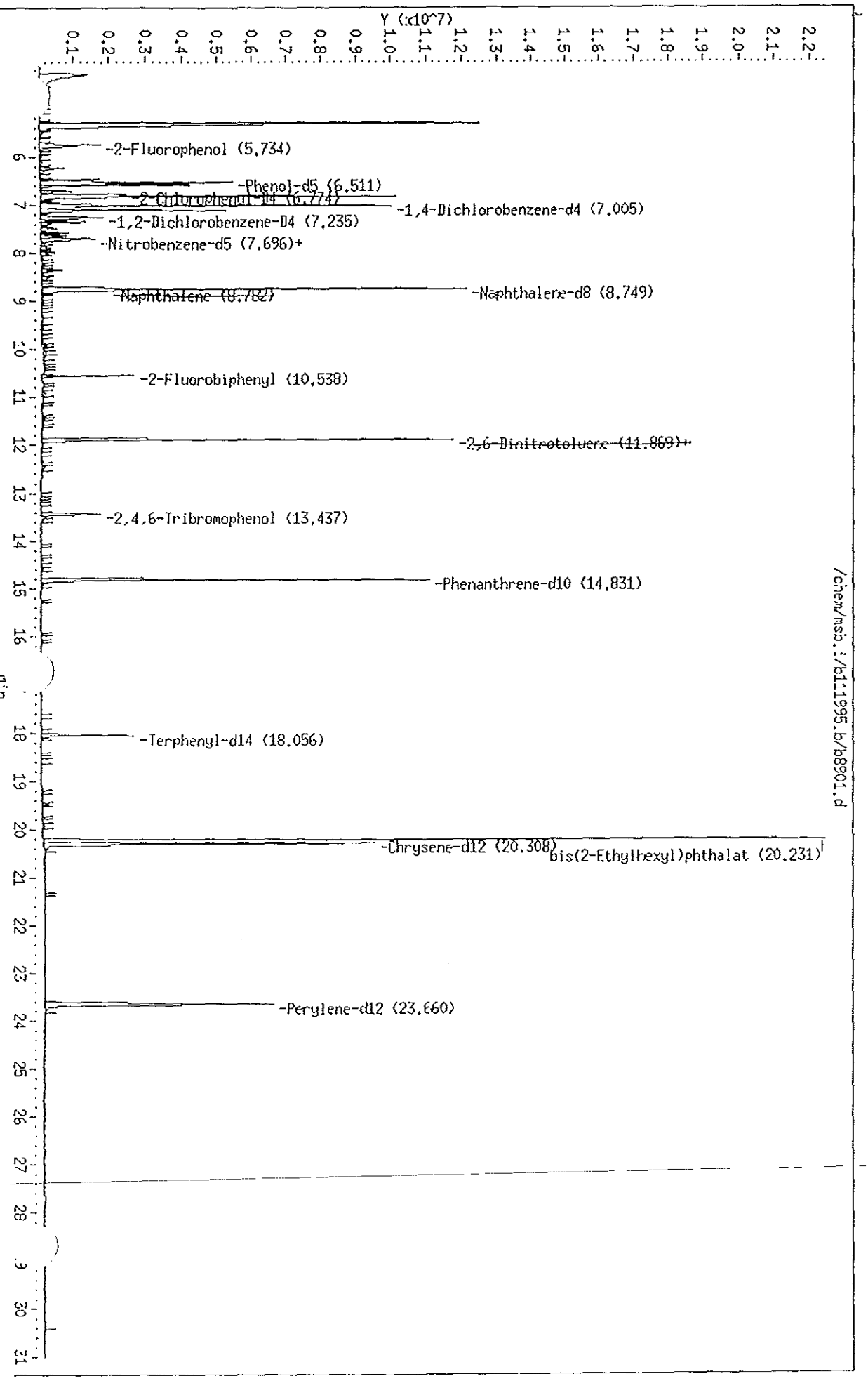
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

0441

Data File: /chem/msb.i/b111995.b/b8901.d
Date : 19-NOV-95 13:20
Client ID: jp0326c
Sample Info: 17418n clj78tw003
Column phase: J&W DB-5

Instrument: msb.i
Operator: J. Kelly
Column diameter: 0.25



OHM Analytical Division

BASE NEUTRAL QUANT AND RATIO REPORT

Data file : /chem/msb.i/b111995.b/b8901.d
Lab Smp Id: Client Smp ID: jp0326c
Inj Date : 19-NOV-95 13:20
Operator : J. Kelly Inst ID: msb.i
Smp Info : 17418n clj78tw003
Misc Info : jp0326c,n1c51710,m1,1,10
Comment :
Method : /chem/msb.i/b111995.b/110895bclp.m
Meth Date : 19-Nov-1995 14:05 kathryn Quant Type: ISTD
Cal Date : 19-NOV-95 12:36 Cal File: b8900.d
Als bottle: 3
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

Report x 10 for cpd #70
KBeyelow

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
$	1	2-Fluorophenol	112.00	5.734	5.734	(0.819)	821240	8.42	8.42(R)
$	4	Phenol-d5	99.00	6.511	6.510	(0.930)	797917	6.85	6.85(R)
$	7	2-Chlorophenol-D4	132.00	6.774	6.784	(0.967)	1018106	11.3	11.3(R)
*	10	1,4-Dichlorobenzene-d4	152.00	7.005	7.003	(1.000)	2761064	40.0	
$	13	1,2-Dichlorobenzene-D4	152.00	7.235	7.234	(1.033)	427761	7.54	7.54(QR)
$	19	Nitrobenzene-d5	82.00	7.696	7.694	(0.880)	668825	6.46	6.46(R)
	21	Isophorone	82.00	7.696	8.023	(0.880)	668825	~~3.30~~	~~3.30~~
*	27	Naphthalene-d8	136.00	8.749	8.746	(1.000)	9021146	40.0	
	28	Naphthalene	128.00	8.782	8.780	(1.004)	1306255	~~6.07~~	~~6.07~~
$	37	2-Fluorobiphenyl	172.00	10.538	10.547	(0.886)	1329444	8.72	8.72(R)
	41	2,6-Dinitrotoluene	165.00	11.889	11.469	(1.000)	669122	~~13.0~~	~~13.0(Q)~~
*	44	Acenaphthene-d10	164.00	11.889	11.886	(1.000)	4981412	40.0	
	48	2,4-Dinitrotoluene	165.00	11.889	12.238	(1.000)	669122	~~11.1~~	~~11.1(Q)~~
$	56	2,4,6-Tribromophenol	330.00	13.437	13.449	(1.130)	391715	14.6	14.6(R)
*	60	Phenanthrene-d10	188.00	14.831	14.836	(1.000)	7601298	40.0	
$	68	Terphenyl-d14	244.00	18.056	18.056	(0.889)	1565431	9.40	9.40(R)
	70	bis(2-Ethylhexyl)phthalate	149.00	20.231	20.223	(0.996)	12449400	60.5	60.5
*	73	Chrysene-d12	240.00	20.308	20.323	(1.000)	6130089	40.0	
*	79	Perylene-d12	264.00	23.660	23.659	(1.000)	6750336	40.0	

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R Spike/Surrogate failed recovery limits.

Data File: /chem/msb.i/b111995.b/b8901.d

Date : 19-NOV-95 13:20

ent ID: jp0326c

Instrument: msb.i

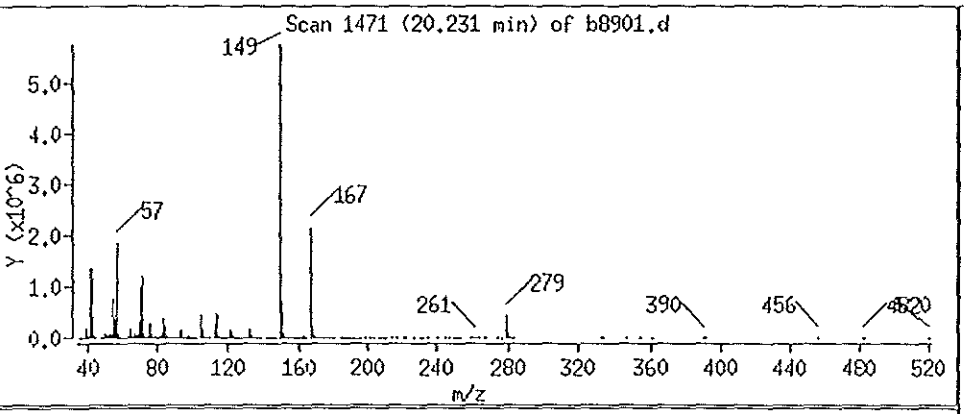
ample Info: 17418n clj78tw003

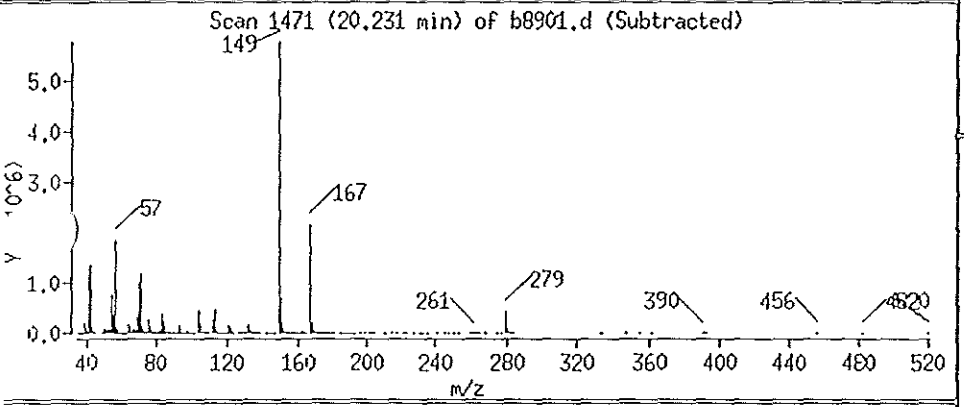
Operator: J. Kelly

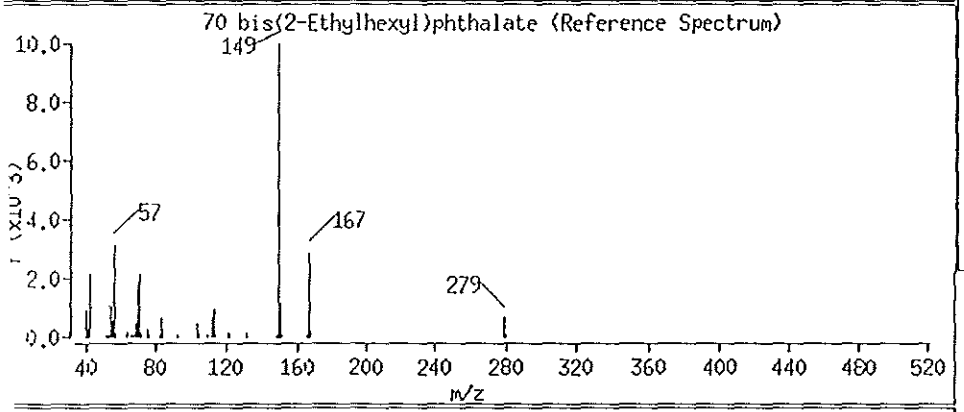
Column phase: J&W DB-5

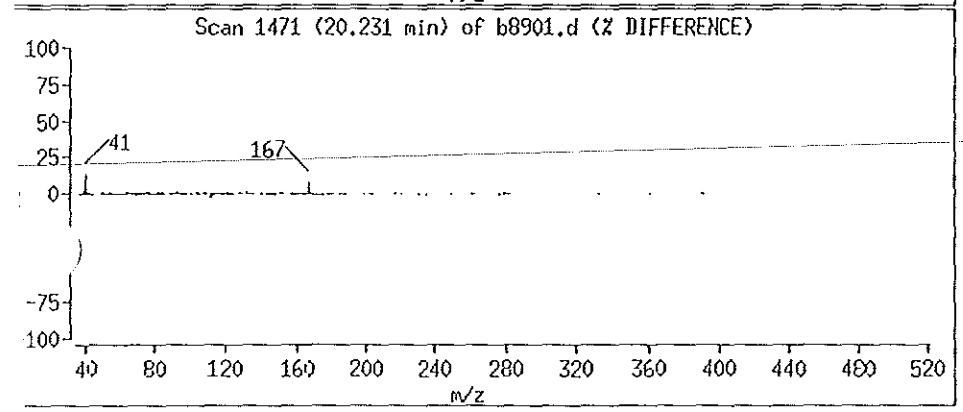
Column diameter: 0.25

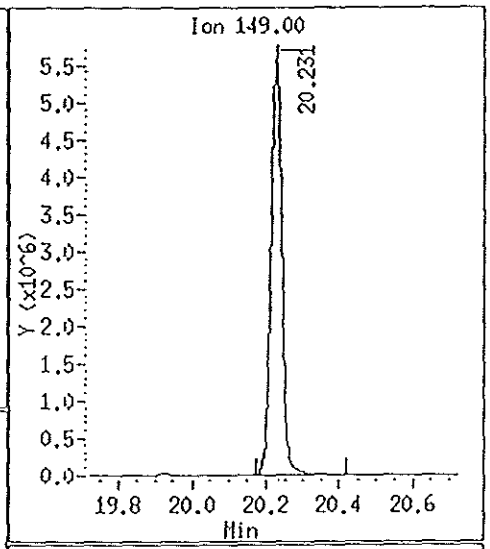
70 bis(2-Ethylhexyl)phthalate

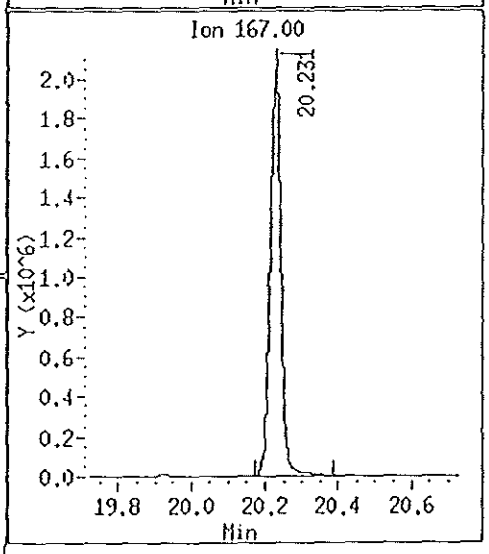












1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0444 CLJ78TW004

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0327C

Sample wt/vol: 820 (g/mL) ML Lab File ID: E8078

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

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

CAS NO.	COMPOUND		Q
108-95-2	Phenol	12	U
111-44-4	bis(2-Chloroethyl)ether	12	U
95-57-8	2-Chlorophenol	12	U
541-73-1	1,3-Dichlorobenzene	12	U
106-46-7	1,4-Dichlorobenzene	12	U
95-50-1	1,2-Dichlorobenzene	12	U
95-48-7	2-Methylphenol	12	U
108-60-1	2,2'-oxybis(1-Chloropropane)	12	U
106-44-5	4-Methylphenol	12	U
621-64-7	N-Nitroso-di-n-propylamine	12	U
67-72-1	Hexachloroethane	12	U
98-95-3	Nitrobenzene	12	U
78-59-1	Isophorone	12	U
88-75-5	2-Nitrophenol	12	U
105-67-9	2,4-Dimethylphenol	12	U
111-91-1	bis(2-Chloroethoxy)methane	12	U
120-83-2	2,4-Dichlorophenol	12	U
120-82-1	1,2,4-Trichlorobenzene	12	U
91-20-3	Naphthalene	12	U
106-47-8	4-Chloroaniline	12	U
87-68-3	Hexachlorobutadiene	12	U
59-50-7	4-Chloro-3-methylphenol	12	U
91-57-6	2-Methylnaphthalene	12	U
77-47-4	Hexachlorocyclopentadiene	12	U
88-06-2	2,4,6-Trichlorophenol	12	U
95-95-4	2,4,5-Trichlorophenol	12	U
91-58-7	2-Chloronaphthalene	12	U
88-74-4	2-Nitroaniline	12	U
131-11-3	Dimethylphthalate	12	U
208-96-8	Acenaphthylene	12	U
606-20-2	2,6-Dinitrotoluene	12	U
99-09-2	3-Nitroaniline	12	U
83-32-9	Acenaphthene	12	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0445 CLJ78TW004

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0327C

Sample wt/vol: 820 (g/mL) ML Lab File ID: E8078

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	61	U
100-02-7	4-Nitrophenol	61	U
132-64-9	Dibenzofuran	12	U
121-14-2	2,4-Dinitrotoluene	12	U
84-66-2	Diethylphthalate	12	U
7005-72-3	4-Chlorophenyl-phenylether	12	U
86-73-7	Fluorene	12	U
100-01-6	4-Nitroaniline	12	U
534-52-1	4,6-Dinitro-2-methylphenol	30	U
101-55-3	4-Bromophenyl-phenylether	12	U
86-30-6	N-Nitrosodiphenylamine (1)	12	U
118-74-1	Hexachlorobenzene	12	U
87-86-5	Pentachlorophenol	12	U
85-01-8	Phenanthrene	12	U
120-12-7	Anthracene	12	U
86-74-8	Carbazole	12	U
84-74-2	Di-n-butylphthalate	12	U
206-44-0	Fluoranthene	12	U
129-00-0	Pyrene	12	U
85-68-2	Butylbenzylphthalate	12	U
91-94-1	3,3'-Dichlorobenzidine	12	U
56-55-3	Benzo(a)anthracene	12	U
218-01-9	Chrysene	12	U
117-81-7	bis(2-Ethylhexyl)phthalate	12	U
117-84-0	Di-n-octylphthalate	12	U
205-99-2	Benzo(b)fluoranthene	12	U
207-08-9	Benzo(k)fluoranthene	12	U
50-32-8	Benzo(a)pyrene	12	U
193-39-5	Indeno(1,2,3-cd)pyrene	12	U
53-70-3	Dibenz(a,h)anthracene	12	U
191-24-2	Benzo(g,h,i)perylene	12	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

0446

CLJ78TW004

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0327C

Sample wt/vol: 820 (g/mL) ML Lab File ID: E8078

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 7

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 79-01-6	Trichloroethylene	4.77	23	JN
2. 108-88-3	Toluene	5.41	22	JN
3. 127-18-4	Tetrachloroethylene	5.83	1200	JN
4. 123-42-2	2-Pentanone, 4-hydroxy-4-met	5.98	10	JNA
5.	unknown	6.12	5	J
6.	unknown	7.72	6	J
7. 98-86-2	Acetophenone	8.12	6	JN

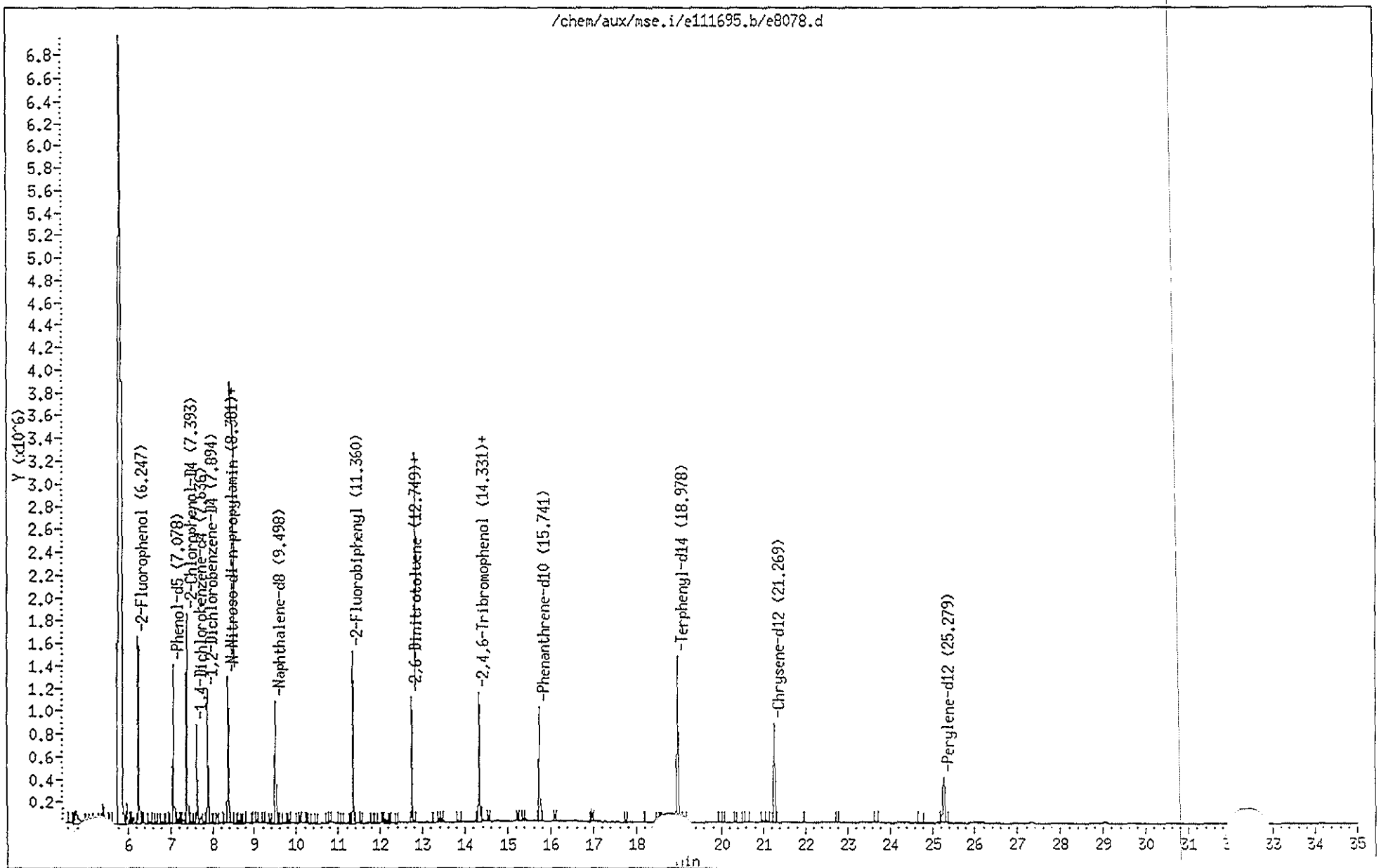
0447

Data File: /chem/aux/mse.i/e111695.b/e8078.d
Date : 16-NOV-95 21:42
Client ID: jp0327c
Sample Info: 17418n clj78tw004

Column phase: J&W DB-5

Instrument: mse.i

Operator: J. Kelly
Column diameter: 0.25



OHM Analytical Division

BASE NEUTRAL QUANT AND RATIO REPORT

Data file : /chem/aux/mse.i/e111695.b/e8078.d
Lab Smp Id: Client Smp ID: jp0327c
Inj Date : 16-NOV-95 21:42
Operator : J. Kelly Inst ID: mse.i
Smp Info : 17418n clj78tw004
Misc Info : jp0327c,nlc51710,ml,1,1
Comment :
Method : /chem/aux/mse.i/e111695.b/111495eclp.m
Meth Date : 17-Nov-1995 13:45 kathryn Quant Type: ISTD
Cal Date : 16-NOV-95 14:53 Cal File: e8069.d
Als bottle: 11
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)	
$	2-Fluorophenol	112.00	6.247	6.252	(0.818)	675604	94.2	94.2(R)	
$ 4	Phenol-d5	99.00	7.078	7.083	(0.927)	719694	73.2	73.2(R)	
$ 7	2-Chlorophenol-D4	132.00	7.393	7.398	(0.968)	764232	110	110(R)	
* 10	1,4-Dichlorobenzene-d4	152.00	7.636	7.641	(1.000)	191791	40.0		
$ 13	1,2-Dichlorobenzene-D4	152.00	7.894	7.899	(1.034)	270320	67.1	67.1(R)	
17	N-Nitroso-di-n-propylamine	70.00	8.374	8.114	(1.097)	101943	13.9	~~13.9(Q)~~	ND, RT, MS
$ 19	Nitrobenzene-d5	82.00	8.381	8.386	(0.882)	716870	71.1	71.1(R)	
* 27	Naphthalene-d8	136.00	9.498	9.510	(1.000)	784226	40.0		
$ 37	2-Fluorobiphenyl	172.00	11.360	11.364	(0.891)	818478	70.0	70.0(R)	
41	2,6-Dinitrotoluene	165.00	12.749	12.295	(1.000)	45480	13.4	~~13.4(Q)~~	ND, RT, MS
* 44	Acenaphthene-d10	164.00	12.749	12.761	(1.000)	403744	40.0		
$ 56	2,4,6-Tribromophenol	330.00	14.331	14.343	(1.124)	234615	129	129(R)	
57	4-Bromophenyl-phenylether	248.00	14.331	14.744	(0.910)	14583	4.40	~~4.40(Q)~~	ND, RT, MS
* 60	Phenanthrene-d10	188.00	15.741	15.754	(1.000)	593973	40.0		
$ 68	Terphenyl-d14	244.00	18.978	18.983	(0.892)	870663	76.2	76.2(R)	
73	Chrysene-d12	240.00	21.269	21.288	(1.000)	506773	40.0		
79	Perylene-d12	264.00	25.279	25.305	(1.000)	448315	40.0		

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/aux/mse.i/e111695.b/e8078.d

Date : 16-NOV-95 21:42

ent ID: jp0327c

Instrument: mse.i

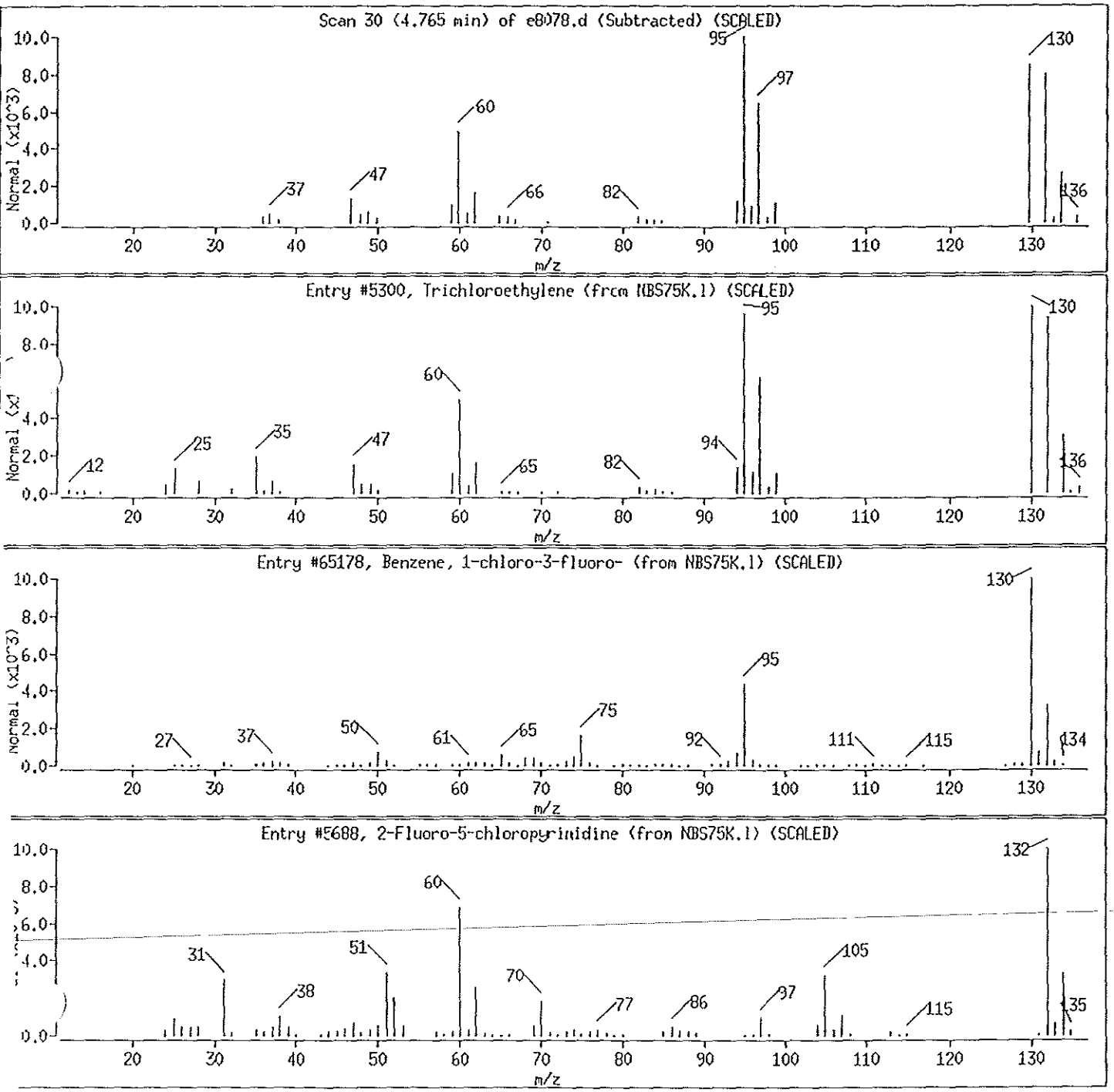
Sample Info: 17418n clj78tw004

Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Trichloroethylene	79-01-6	NBS75K.1	5300	99	C2HCl3	130
Benzene, 1-chloro-3-fluoro-	625-98-9	NBS75K.1	65178	35	C6H4ClF	130
2-Fluoro-5-chloropyrimidine	62802-37-3	NBS75K.1	5688	25	C4H2ClFN2	132



Data File: /chem/aux/mse.i/e111695.b/e8078.d

Date : 16-NOV-95 21:42

ient ID: jp0327c

Instrument: mse.i

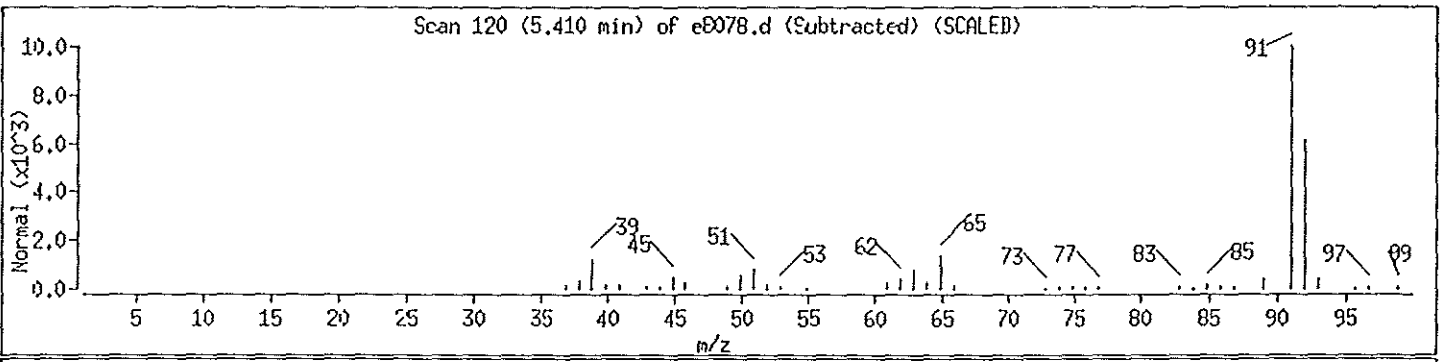
Sample Info: 17418n clj78tw004

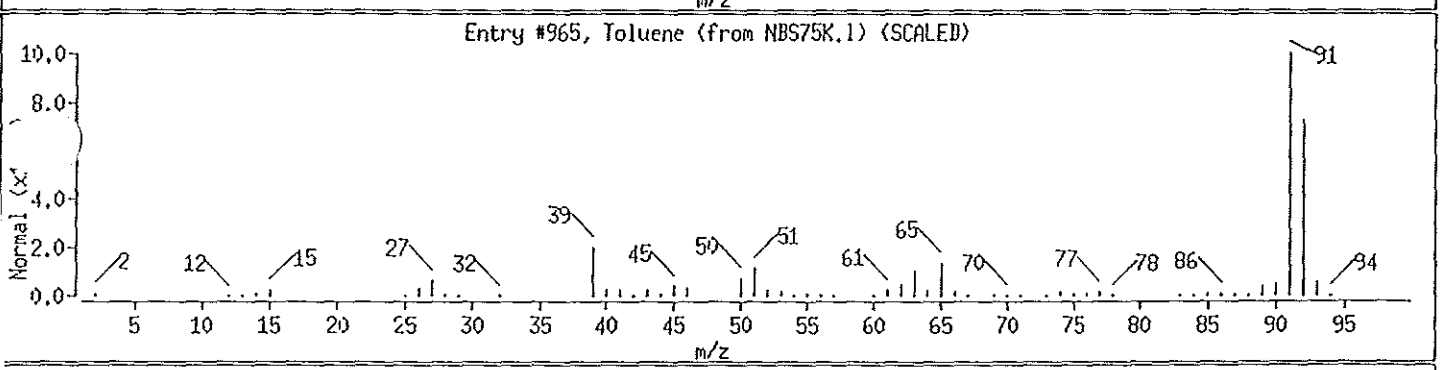
Operator: J. Kelly

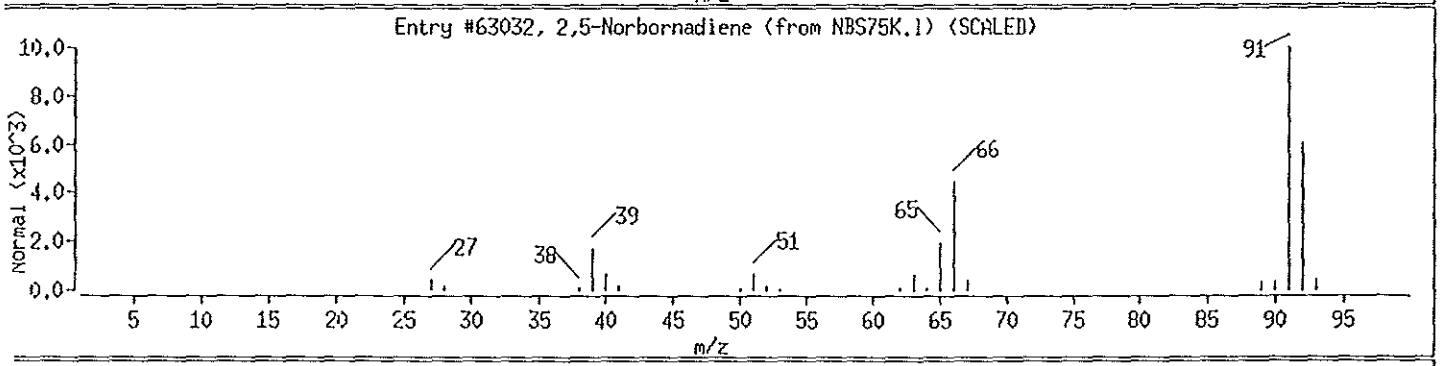
Column phase: J&W DB-5

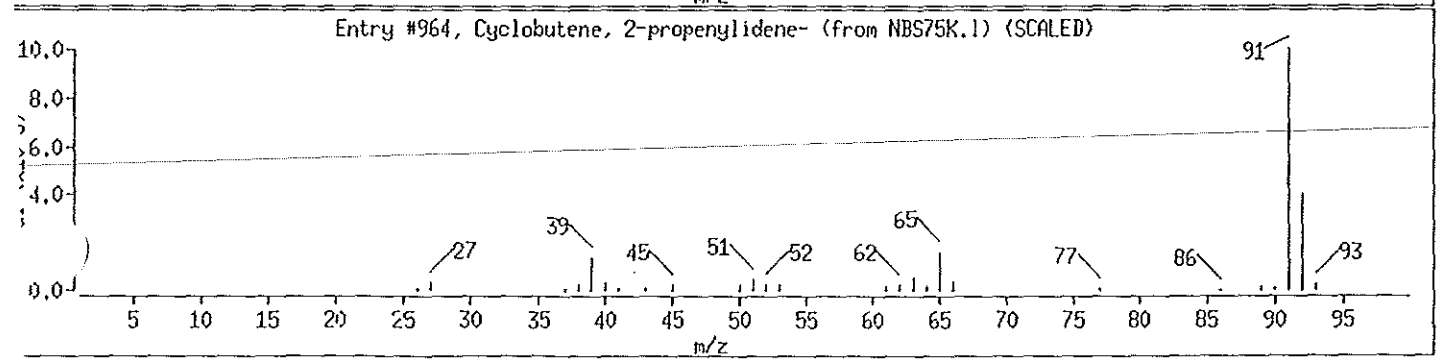
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Toluene	108-88-3	NBS75K.l	965	94	C7H8	92
2,5-Norbornadiene	121-46-0	NBS75K.l	63032	80	C7H8	92
Cyclobutene, 2-propenylidene-	52097-85-5	NBS75K.l	964	72	C7H8	92









Data File: /chem/aux/mse.i/e111695.b/e8078.d

Date : 16-NOV-95 21:42

Client ID: jp0327c

Sample Info: 17418n clj78tw004

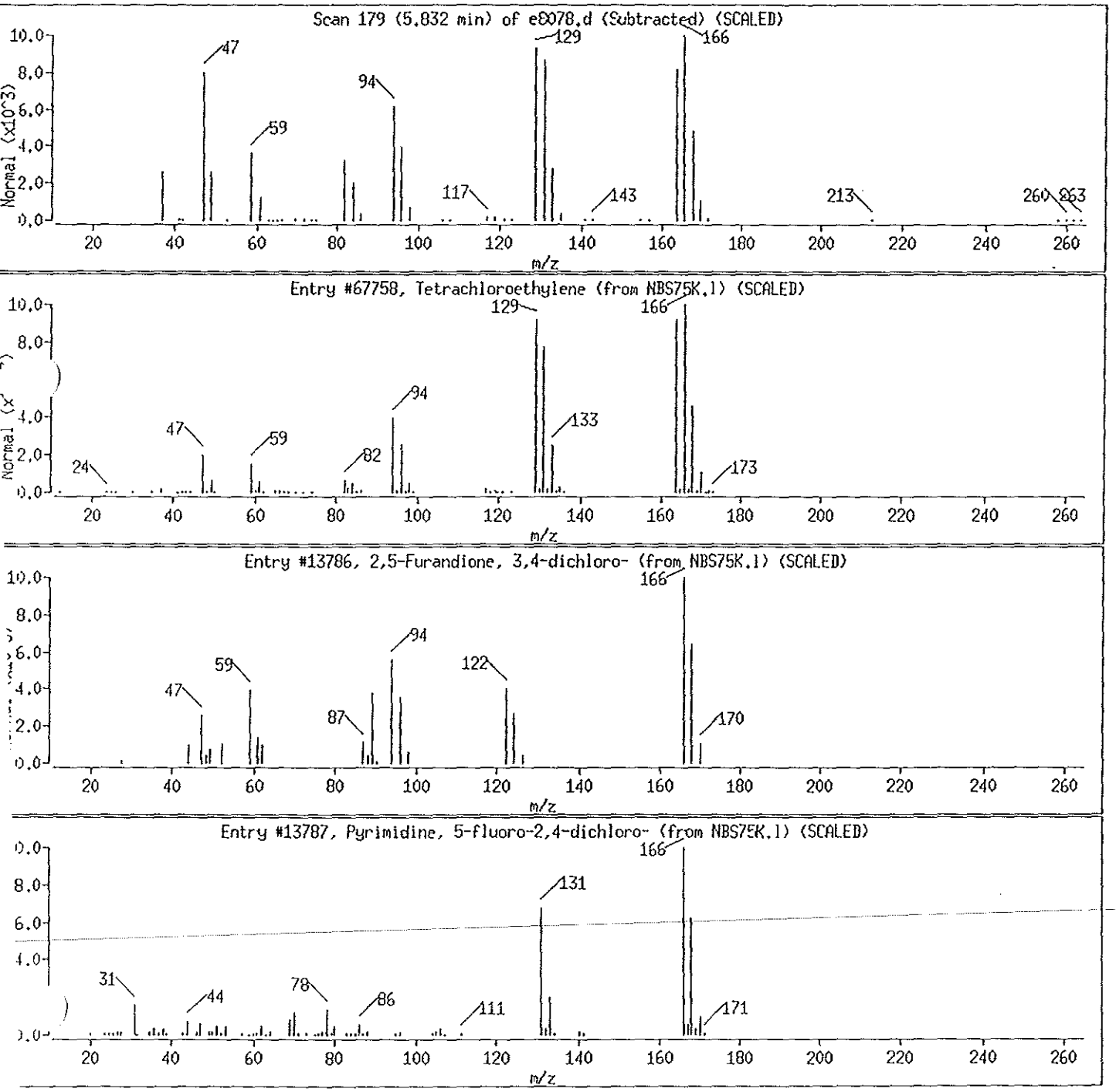
Instrument: mse.i

Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Tetrachloroethylene	127-18-4	NBS75K.l	67758	97	C2Cl4	164
2,5-Furandione, 3,4-dichloro-	1122-17-4	NBS75K.l	13786	38	C4Cl2O3	166
Pyrimidine, 5-fluoro-2,4-dichloro-	2927-71-1	NBS75K.l	13787	10	C4HCl2FN2	166



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Date : 16-NOV-95 21:42

Client ID: jp0327c

Sample Info: 17418n clj78tw004

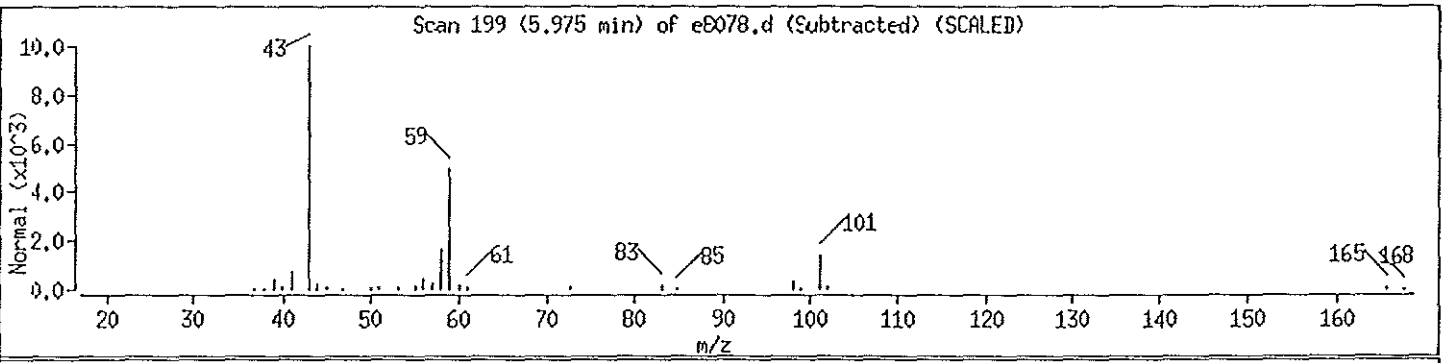
Instrument: mse.i

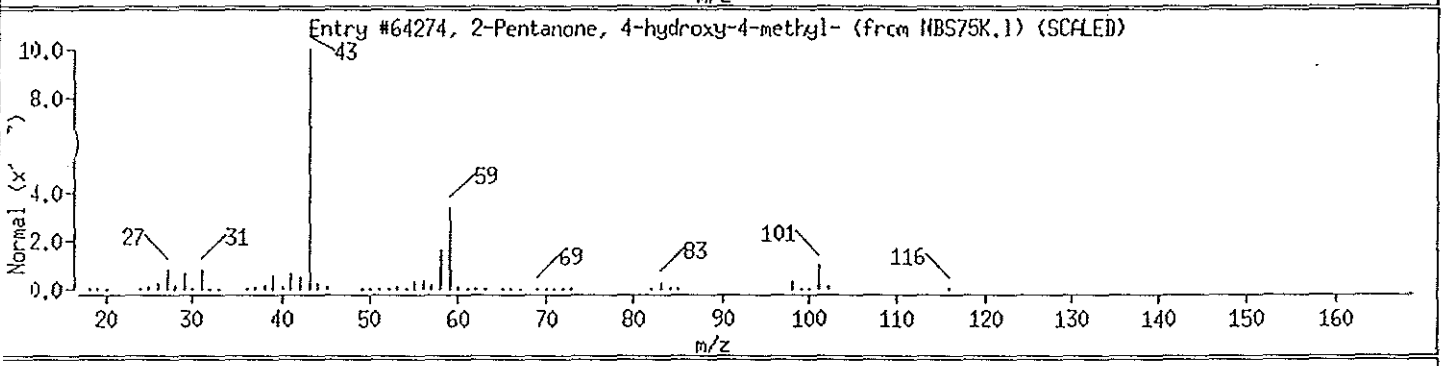
Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NBS75K.l	64274	42	C6H12O2	116





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Date : 16-NOV-95 21:42

)ient ID: jp0327c

Sample Info: 17418n clj78tw004

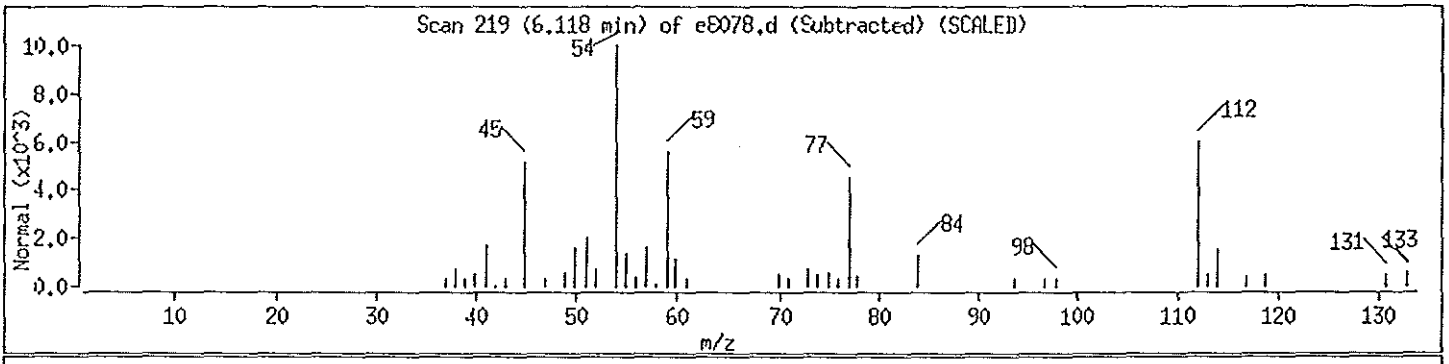
Instrument: mse.i

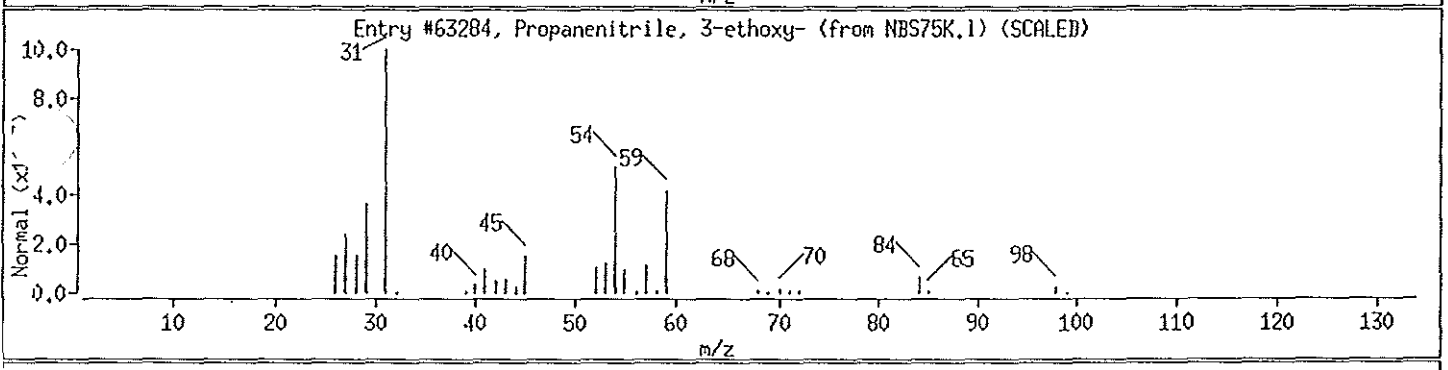
Operator: J. Kelly

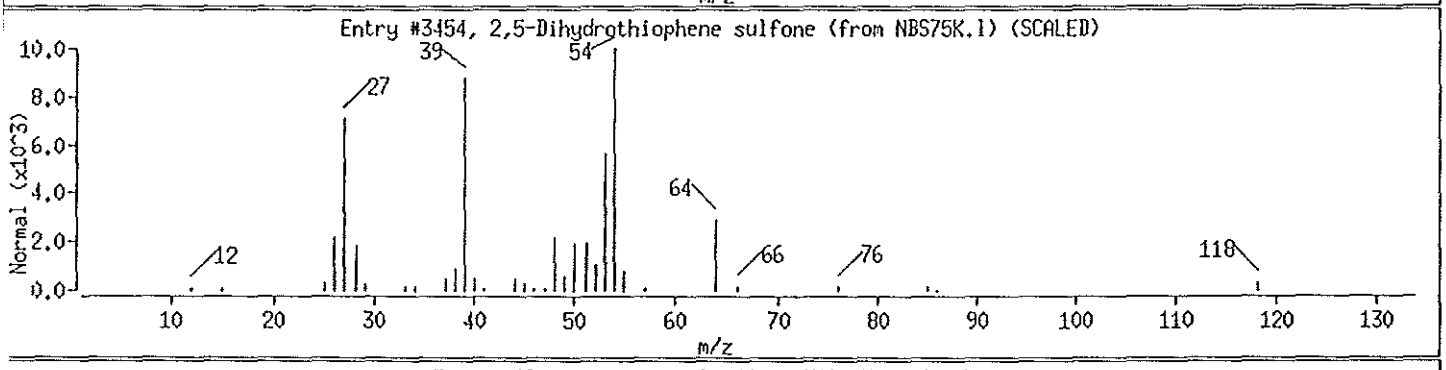
Column phase: J&W DB-5

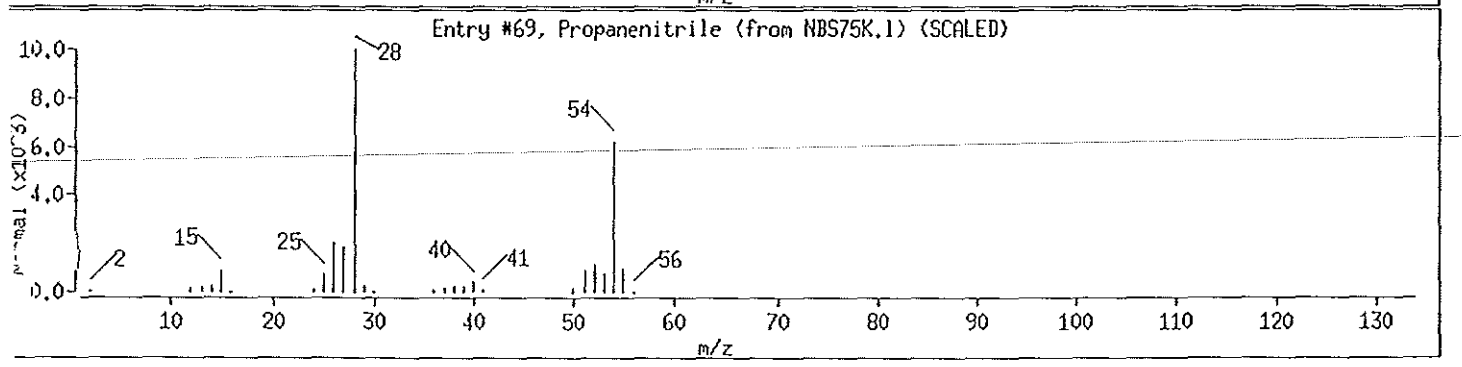
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Propanenitrile, 3-ethoxy-	2141-62-0	NBS75K.1	63284	42	C5H9NO	99
2,5-Dihydrothiophene sulfone	77-79-2	NBS75K.1	3454	40	C4H6O2S	118
Propanenitrile	107-12-0	NBS75K.1	69	38	C3H5N	55









Data File: /chem/aux/mse.i/e111695.b/e8078.d

Date : 16-NOV-95 21:42

ient ID: jp0327c

Instrument: mse.i

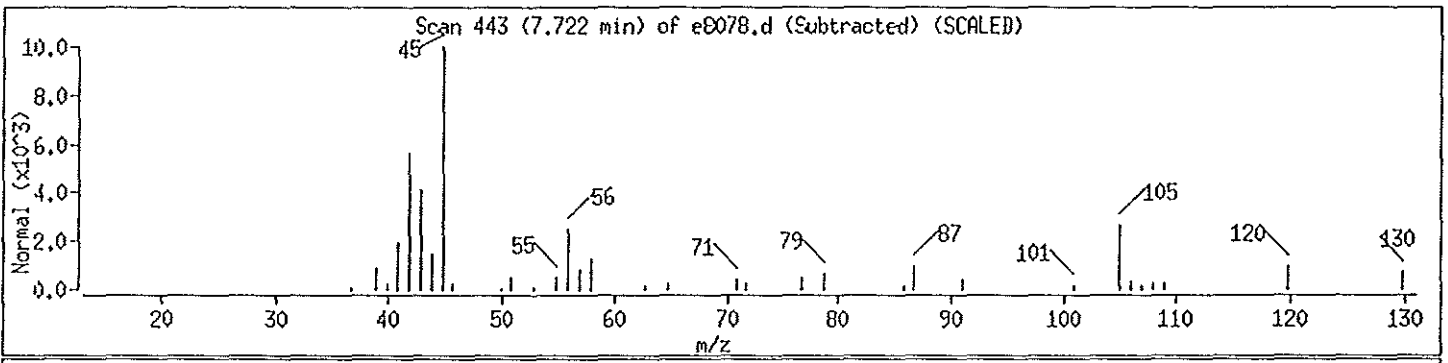
ample Info: 17418n clj78tw004

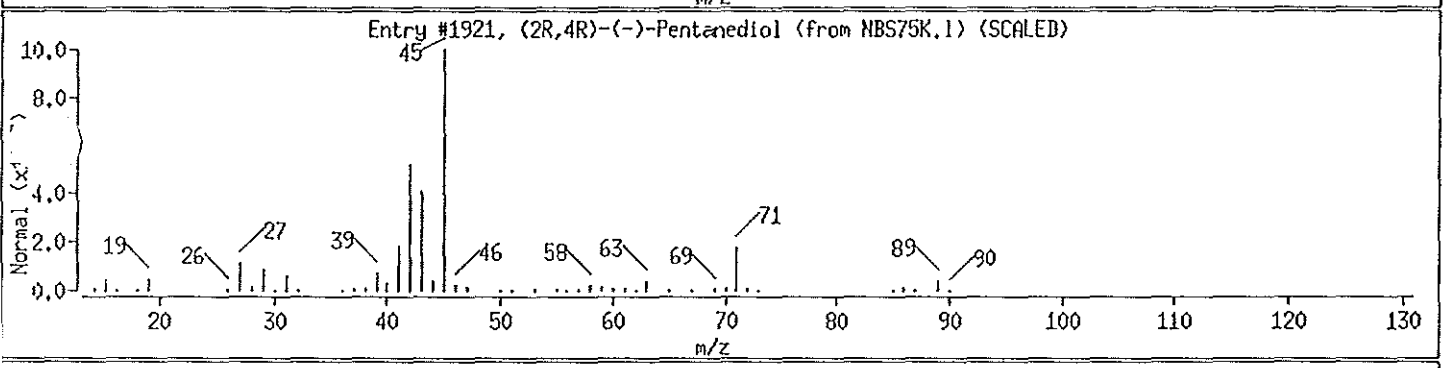
Operator: J. Kelly

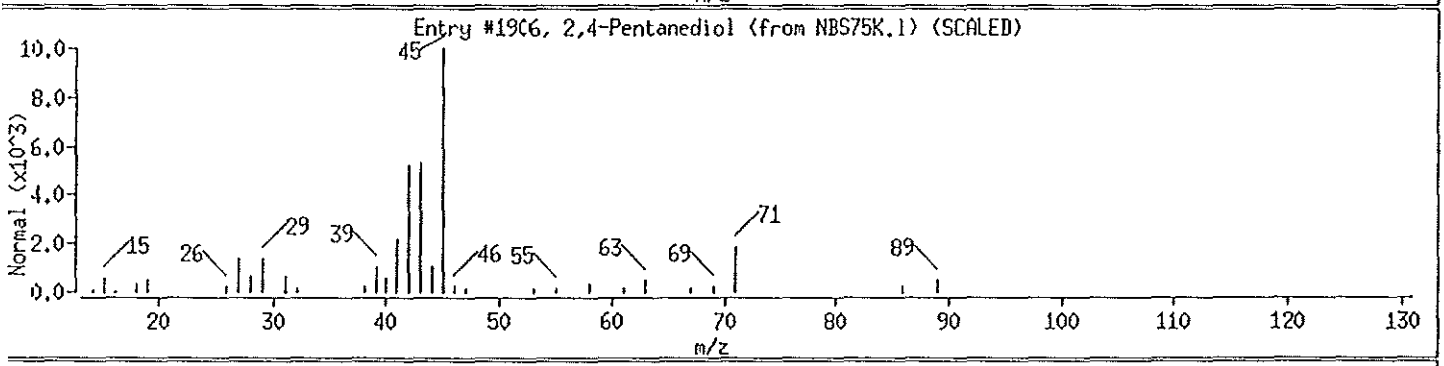
Column phase: J&W DB-5

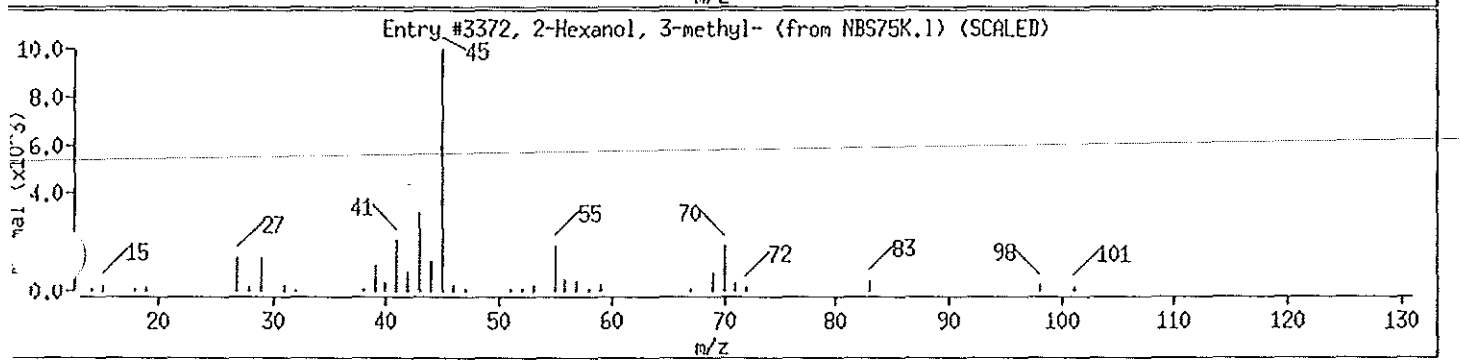
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
(2R,4R)-(-)-Pentanediol	42075-32-1	NBS75K.l	1921	38	C5H12O2	104
2,4-Pentanediol	625-69-4	NBS75K.l	1906	38	C5H12O2	104
2-Hexanol, 3-methyl-	2313-65-7	NBS75K.l	3372	32	C7H16O	116









Data File: /chem/aux/mse.i/e111695.b/e8078.d

Date : 16-NOV-95 21:42

Client ID: jp0327c

Instrument: mse.i

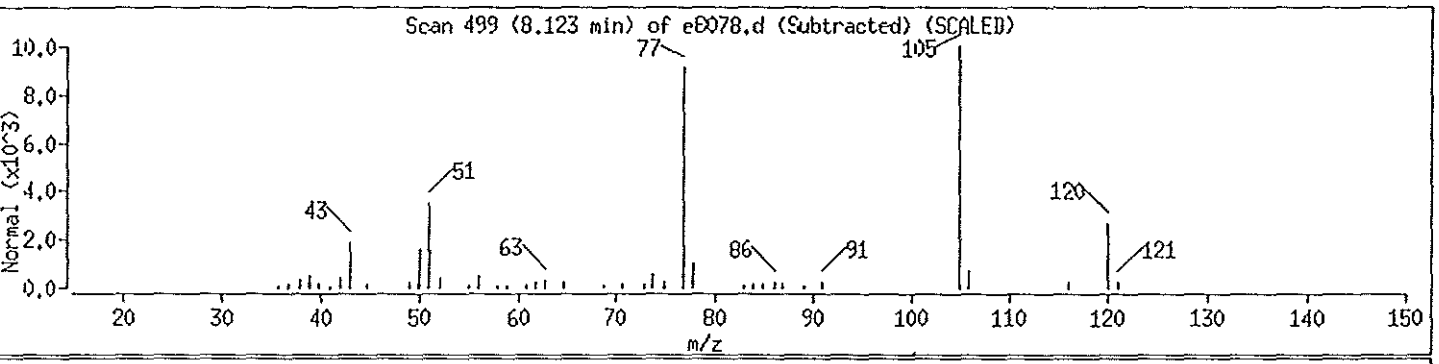
Sample Info: 17418n clj78tw004

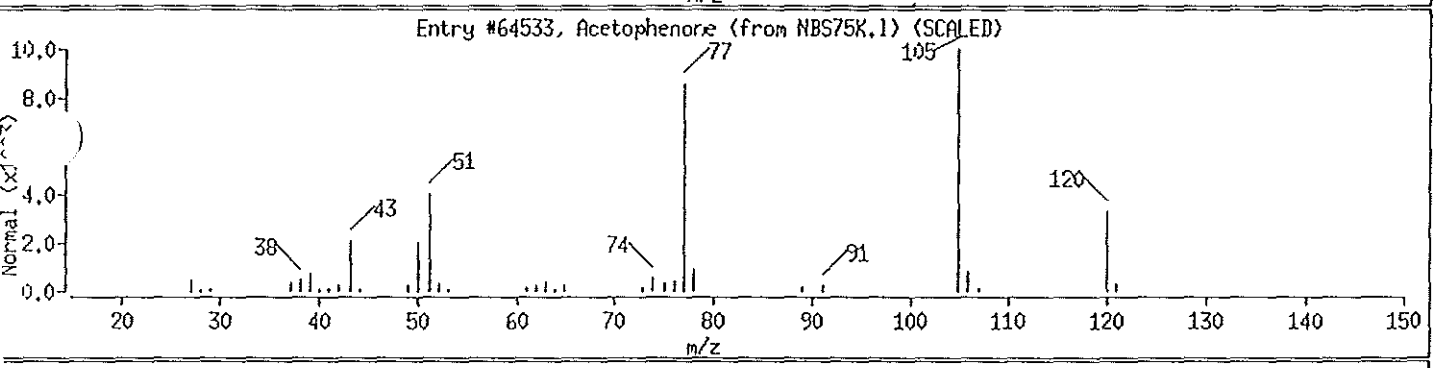
Operator: J. Kelly

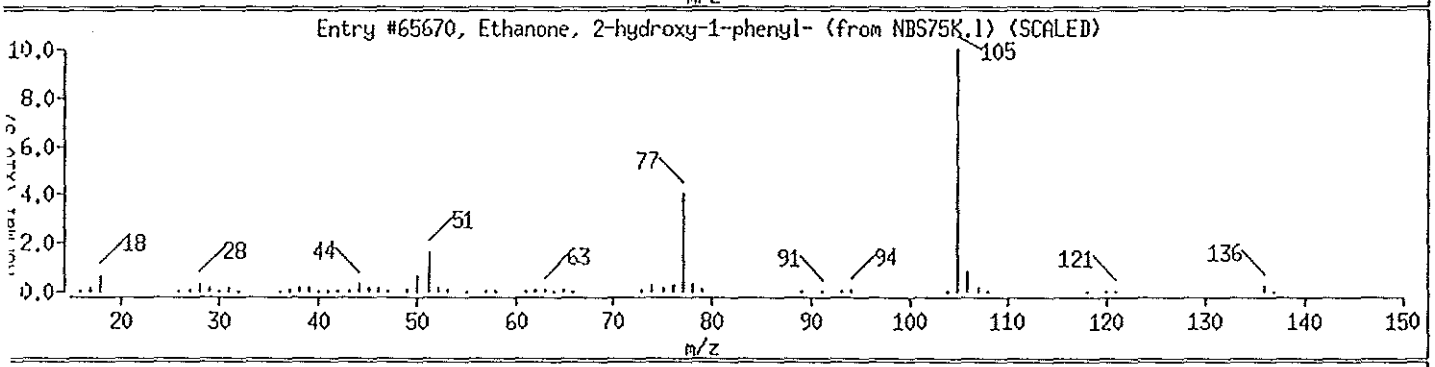
Column phase: J&W DB-5

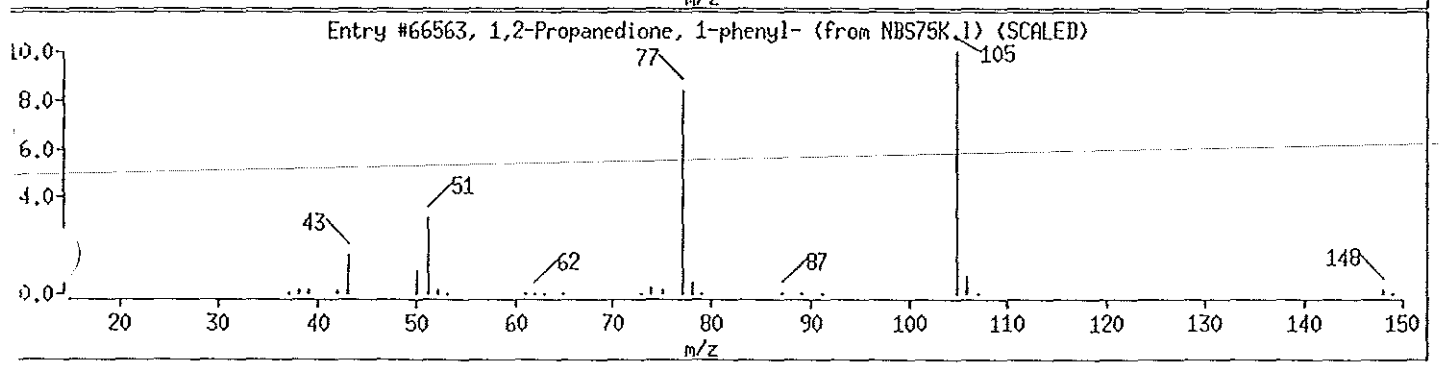
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Acetophenone	98-86-2	NBS75K.l	64533	97	C8H8O	120
Ethanone, 2-hydroxy-1-phenyl-	582-24-1	NBS75K.l	65670	72	C8H8O2	136
1,2-Propanedione, 1-phenyl-	579-07-7	NBS75K.l	66563	72	C9H8O2	148









1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0456

CLJ78TW02D

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0325C

Sample wt/vol: 970 (g/mL) ML Lab File ID: E8076

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0457 CLJ78TW02D

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0325C

Sample wt/vol: 970 (g/mL) ML Lab File ID: E8076

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	52	U
100-02-7	4-Nitrophenol	52	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	26	U
101-55-3	4-Bromophenyl-phenylether	10	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-2	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

0458

CLJ78TW02D

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0325C

Sample wt/vol: 970 (g/mL) ML Lab File ID: E8076

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 30

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 127-18-4	Tetrachloroethylene	5.79	87	JN
2. 106-42-3	p-Xylene	6.52	13	JN
3. 98-82-8	Benzene, (1-methylethyl)-	6.78	7	JN
4. 871-83-0	Nonane, 2-methyl-	7.00	6	JN
5. 103-65-1	Benzene, propyl-	7.05	9	JN
6. 95-63-6	Benzene, 1,2,4-trimethyl-	7.17	65	JN
7. 622-96-8	Benzene, 1-ethyl-4-methyl-	7.30	63	JN
8. 95-36-3	1,2,4-Trimethylbenzene	7.43	120	JN
9. 95-36-3	1,2,4-Trimethylbenzene	7.74	86	JN
10. 1758-88-9	Benzene, 2-ethyl-1,4-dimethy	8.00	16	JN
11. 1074-55-1	Benzene, 1-methyl-4-propyl-	8.14	7	JN
12. 874-41-9	Benzene, 1-ethyl-2,4-dimethy	8.21	6	JN
13.	unknown	8.24	7	J
14. 122-00-9	Ethanone, 1-(4-methylphenyl)	9.21	6	JN
15. 622-97-9	Benzene, 1-ethenyl-4-methyl-	9.89	6	JN
16. 611-01-8	Benzoic acid, 2,4-dimethyl-	10.87	9	JN
17. 499-06-9	Benzoic acid, 3,5-dimethyl-	10.98	6	JN
18. 499-06-9	Benzoic acid, 3,5-dimethyl-	11.43	15	JN
19. 544-76-3	Hexadecane	13.37	17	JN
20. 54105-67-8	Heptadecane, 2,6-dimethyl-	13.85	9	JN
21. 1921-70-6	Pentadecane, 2,6,10,14-tetra	14.39	19	JN
22.	Unk hydrocarbon	14.55	9	J
23. 593-45-3	Octadecane	15.24	38	JN
24. 629-50-5	Tridecane	15.34	13	JN
25. 629-62-9	Pentadecane	16.11	34	JN
~~26. 112-95-8~~	~~Eicosane~~	16.94	23	JN
27.	unknown	16.97	16	J
28. 629-94-7	Heneicosane	17.74	11	JN
29. 629-92-5	Nonadecane	18.49	6	JN
30.	unknown	19.10	13	J

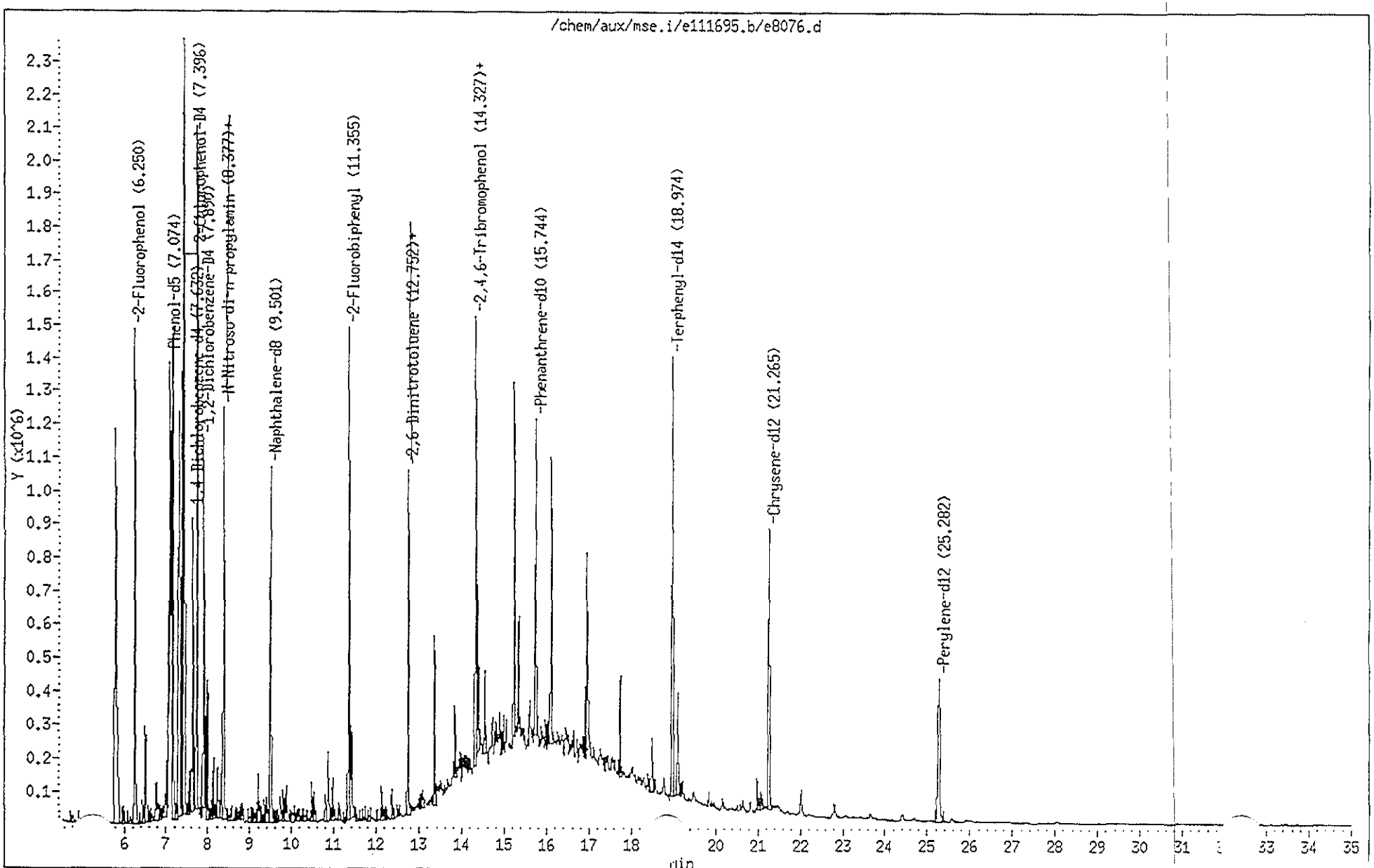
0459

Data File: /chem/aux/mse.i/e111695.b/e8076.d
Date : 16-NOV-95 20:12
Client ID: jp0325c
Sample Info: 17418n clj78tw02d

Instrument: mse.i

Operator: J. Kelly
Column diameter: 0.25

Column phase: J&W DB-5



OHM Analytical Division

BASE NEUTRAL QUANT AND RATIO REPORT

Data file : /chem/aux/mse.i/e111695.b/e8076.d
Lab Smp Id: Client Smp ID: jp0325c
Inj Date : 16-NOV-95 20:12
Operator : J. Kelly Inst ID: mse.i
Smp Info : 17418n clj78tw02d
Misc Info : jp0325c,n1c51710,m1,1,1
Comment :
Method : /chem/aux/mse.i/e111695.b/111495eclp.m
Meth Date : 17-Nov-1995 13:45 kathryn Quant Type: ISTD
Cal Date : 16-NOV-95 14:53 Cal File: e8069.d
Als bottle: 9
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

KBaylow

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)	
	2-Fluorophenol	112.00	6.250	6.252	(0.819)	584336	81.3	81.3(R)	
4	Phenol-d5	99.00	7.074	7.083	(0.927)	643324	65.3	65.3(R)	
7	2-Chlorophenol-D4	132.00	7.396	7.398	(0.969)	692216	99.6	99.6(R)	
10	1,4-Dichlorobenzene-d4	152.00	7.632	7.641	(1.000)	192345	40.0		
13	1,2-Dichlorobenzene-D4	152.00	7.890	7.899	(1.034)	250670	62.1	62.1(R)	
17	N-Nitroso-di-n-propylamine	70.00	8.377	8.114	(1.098)	104274	14.2	~~14.2(Q)~~	ND, RT, MS
19	Nitrobenzene-d5	82.00	8.377	8.386	(0.882)	652393	64.9	64.9(R)	
27	Naphthalene-d8	136.00	9.501	9.510	(1.000)	781097	40.0		
37	2-Fluorobiphenyl	172.00	11.355	11.364	(0.890)	783458	67.6	67.6(R)	
41	2,6-Dinitrotoluene	165.00	12.744	12.295	(0.999)	46351	13.8	~~13.0(Q)~~	ND, RT, MS
44	Acenaphthene-d10	164.00	12.752	12.761	(1.000)	400404	40.0		
48	2,4-Dinitrotoluene	165.00	12.744	13.090	(0.999)	51783	12.1	~~12.1(Q)~~	ND, RT, MS
56	2,4,6-Tribromophenol	330.00	14.334	14.343	(1.124)	221971	123	123(R)	
57	4-Bromophenyl-phenylether	248.00	14.334	14.744	(0.910)	14106	4.28	~~4.28(Q)~~	ND, RT, MS
60	Phenanthrene-d10	188.00	15.744	15.754	(1.000)	590733	40.0		
68	Terphenyl-d14	244.00	18.974	18.983	(0.892)	781902	69.2	69.2(R)	
73	Chrysene-d12	240.00	21.265	21.288	(1.000)	501536	40.0		
79	Perylene-d12	264.00	25.282	25.305	(1.000)	453393	40.0		

C Flag Legend

- Qualifier signal failed the ratio test.
- Spike/Surrogate failed recovery limits.

Data File: /chem/aux/mse.i/e111695.b/e8076.d

Date : 16-NOV-95 20:12

ent ID: jp0325c

Instrument: mse.i

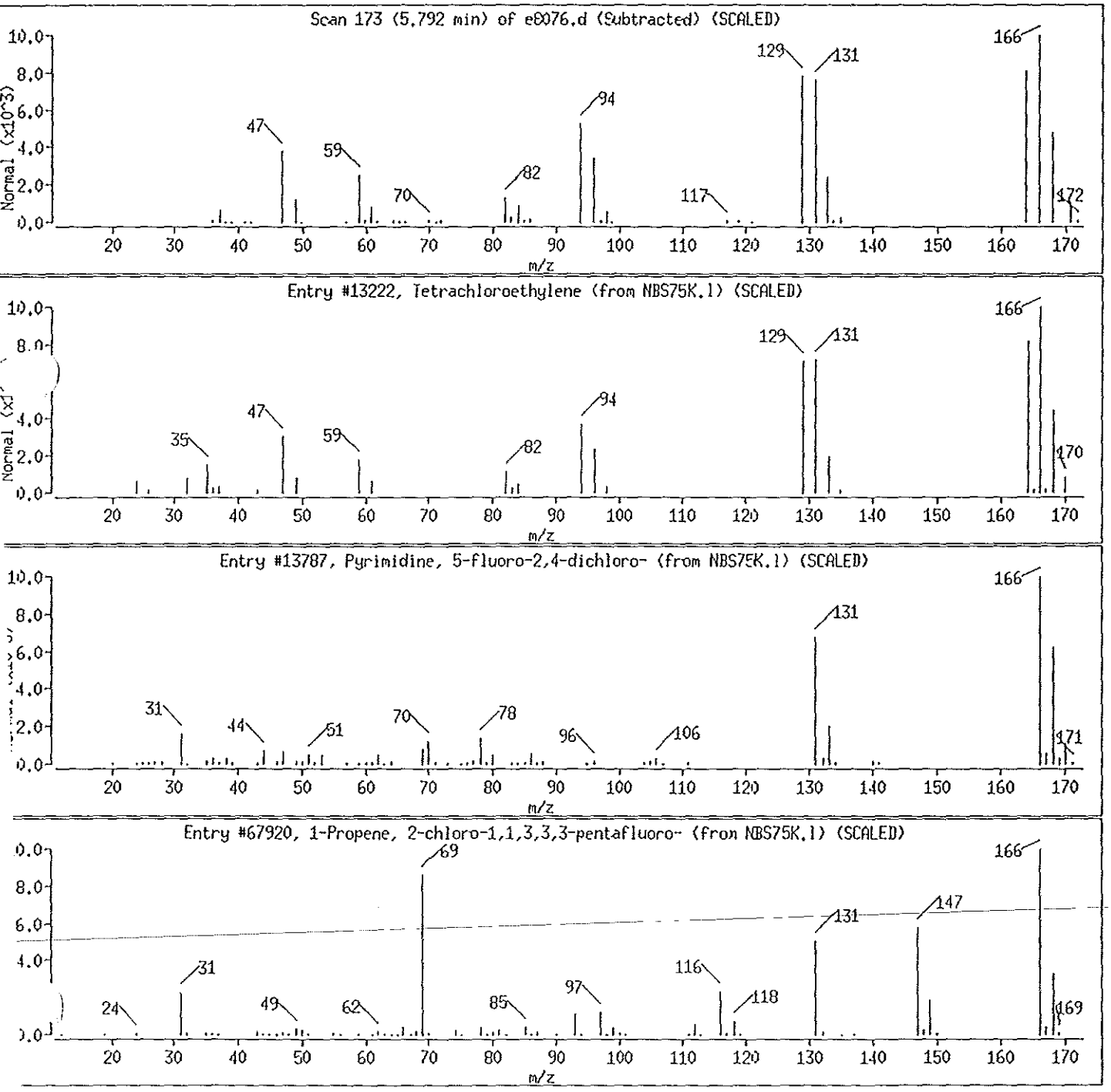
Sample Info: 17418n clj78tw02d

Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Tetrachloroethylene	127-18-4	NBS75K.l	13222	98	C2Cl4	164
Pyrimidine, 5-fluoro-2,4-dichloro-	2927-71-1	NBS75K.l	13787	25	C4HCl2FN2	166
1-Propene, 2-chloro-1,1,3,3,3-pentafluor	2804-50-4	NBS75K.l	67920	16	C3ClF5	166



Data File: /chem/aux/mse.i/e111695.b/e8076.d

Date : 16-NOV-95 20:12

ient ID: jp0325c

Instrument: mse.i

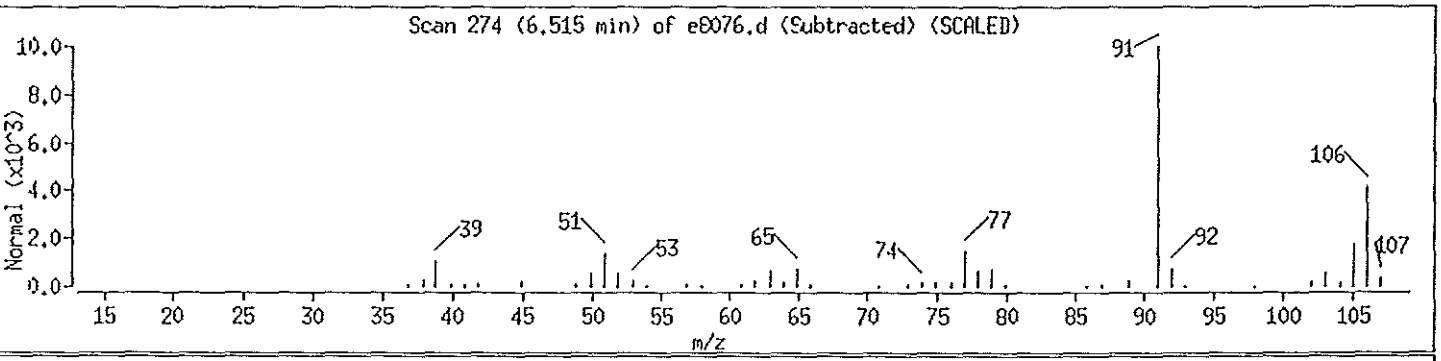
ample Info: 17418n clj78tw02d

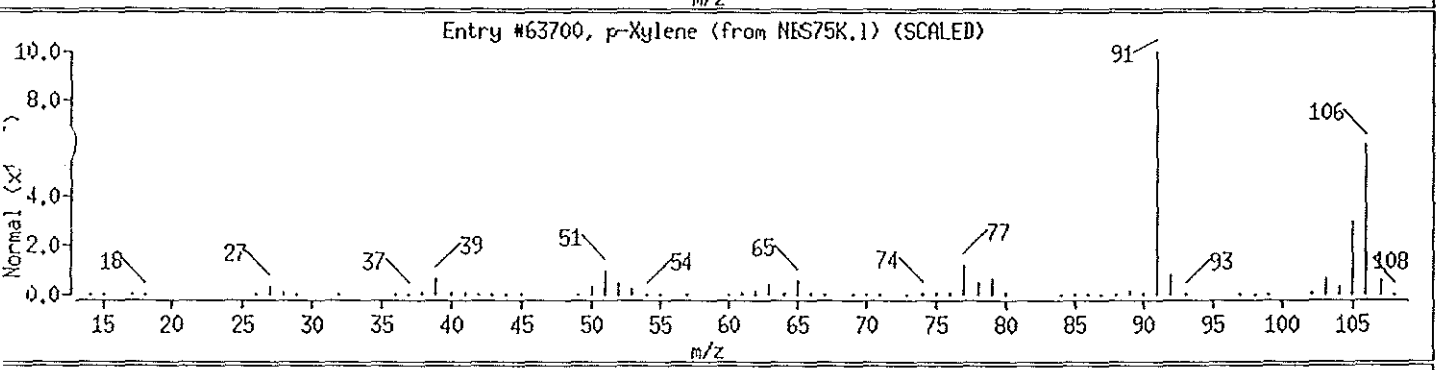
Operator: J. Kelly

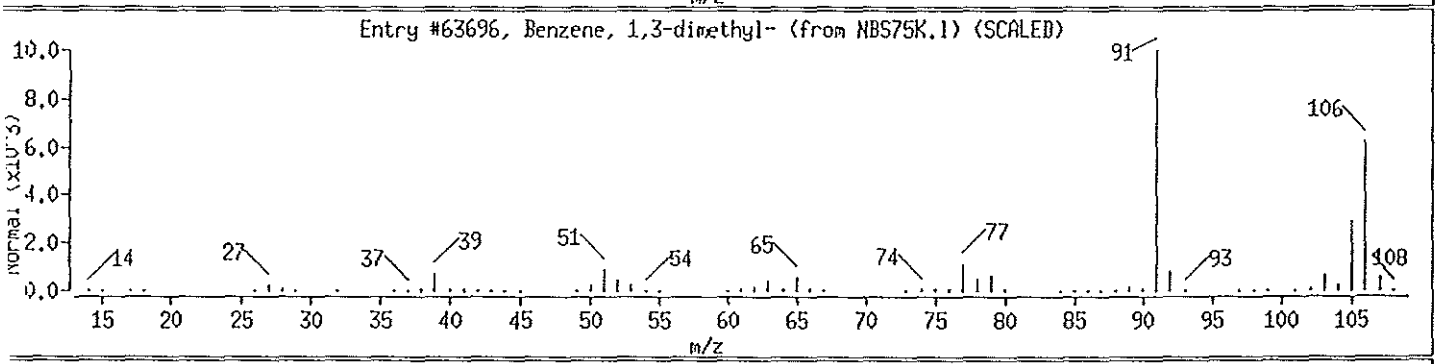
Column phase: J&W DB-5

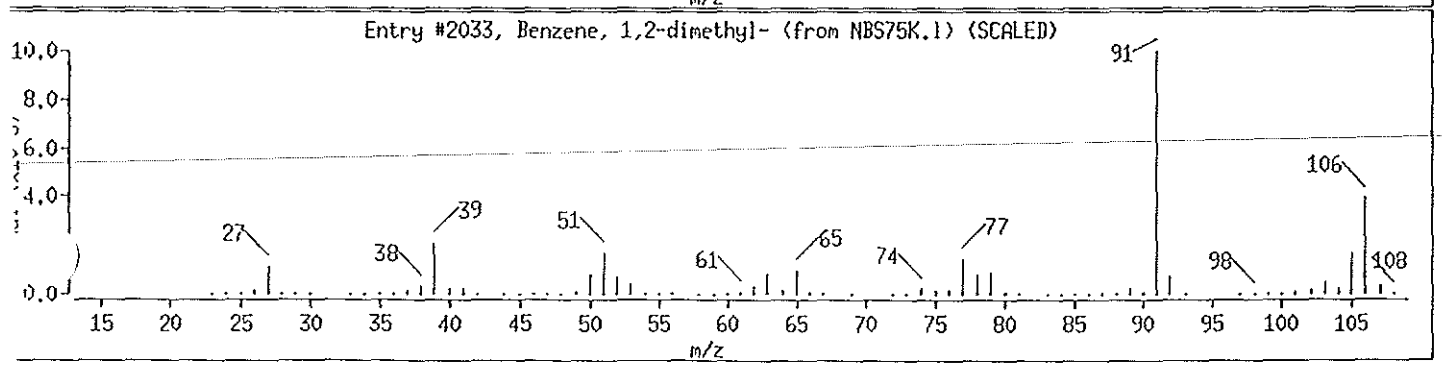
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
p-Xylene	106-42-3	NBS75K.l	63700	95	C8H10	106
Benzene, 1,3-dimethyl-	108-38-3	NBS75K.l	63696	95	C8H10	106
Benzene, 1,2-dimethyl-	95-47-6	NBS75K.l	2033	94	C8H10	106









Data File: /chem/aux/mse.i/e111695.b/e8076.d

Date : 16-NOV-95 20:12

Client ID: jp0325c

Instrument: mse.i

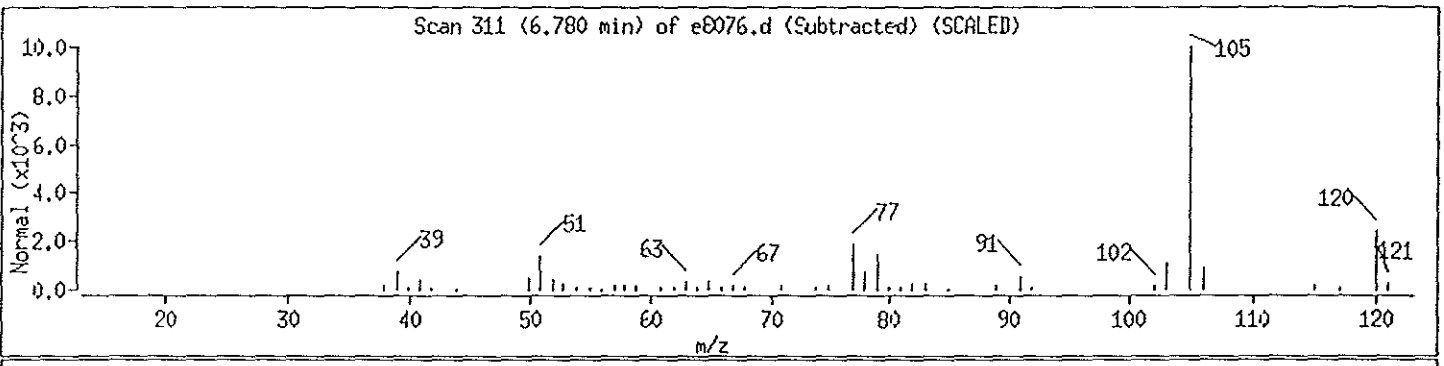
Sample Info: 17418n clj78tw02d

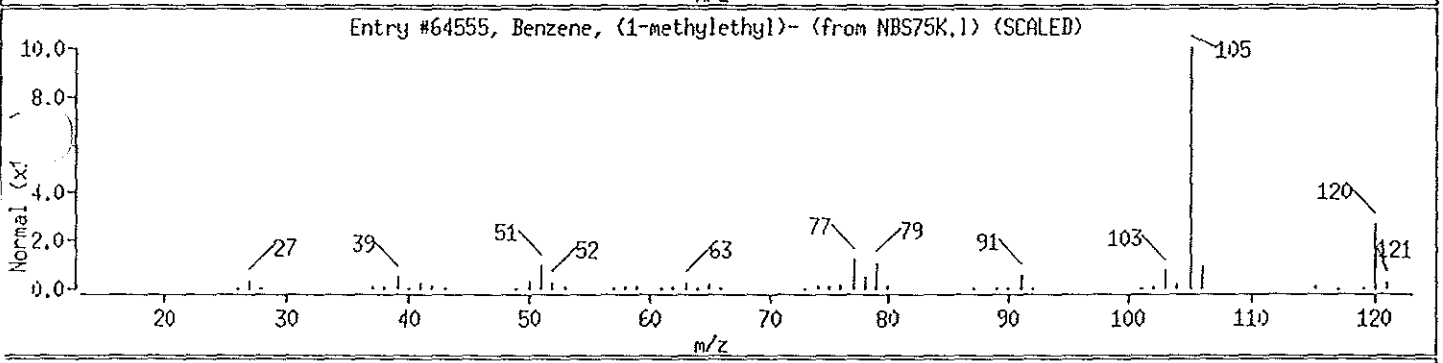
Operator: J. Kelly

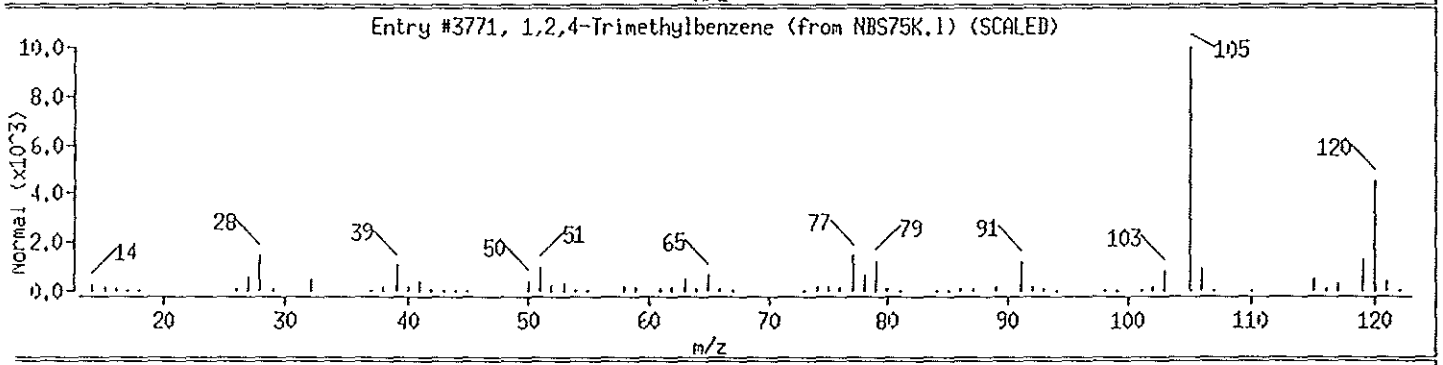
Column phase: J&W DB-5

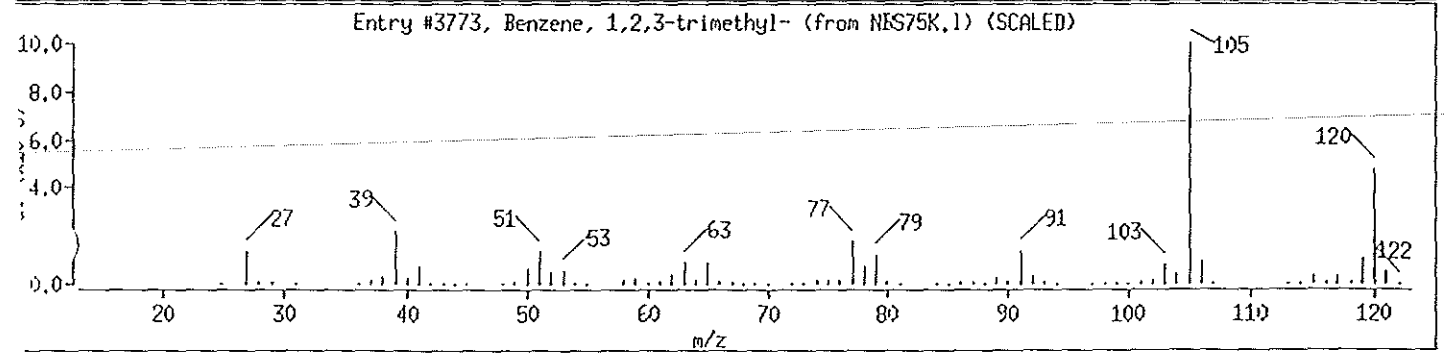
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, (1-methylethyl)-	98-82-8	NBS75K.l	64555	91	C9H12	120
1,2,4-Trimethylbenzene	95-36-3	NBS75K.l	3771	91	C9H12	120
Benzene, 1,2,3-trimethyl-	526-73-8	NBS75K.l	3773	90	C9H12	120









Data File: /chem/aux/mse.i/e111695.b/e8076.d
Date : 16-NOV-95 20:12
)ient ID: jp0325c
Sample Info: 17418n clj78tw02d

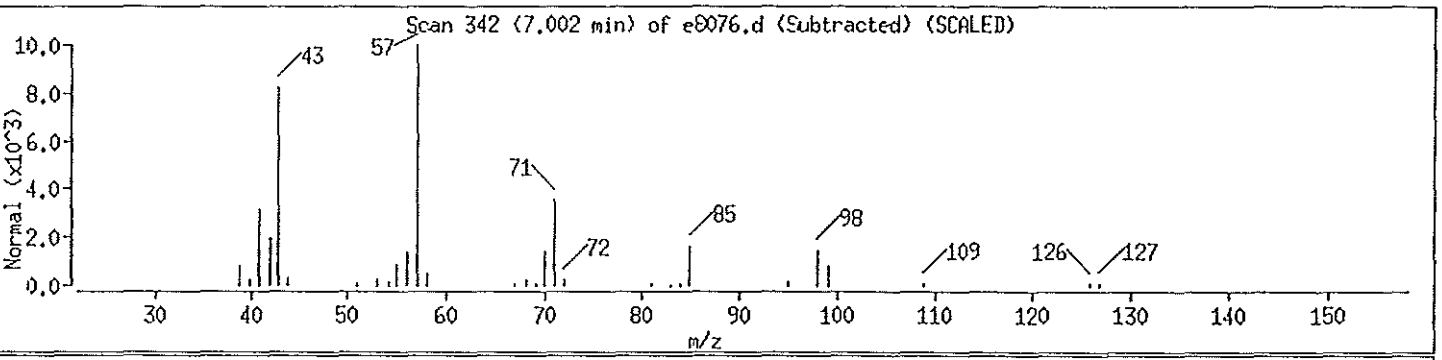
Instrument: mse.i

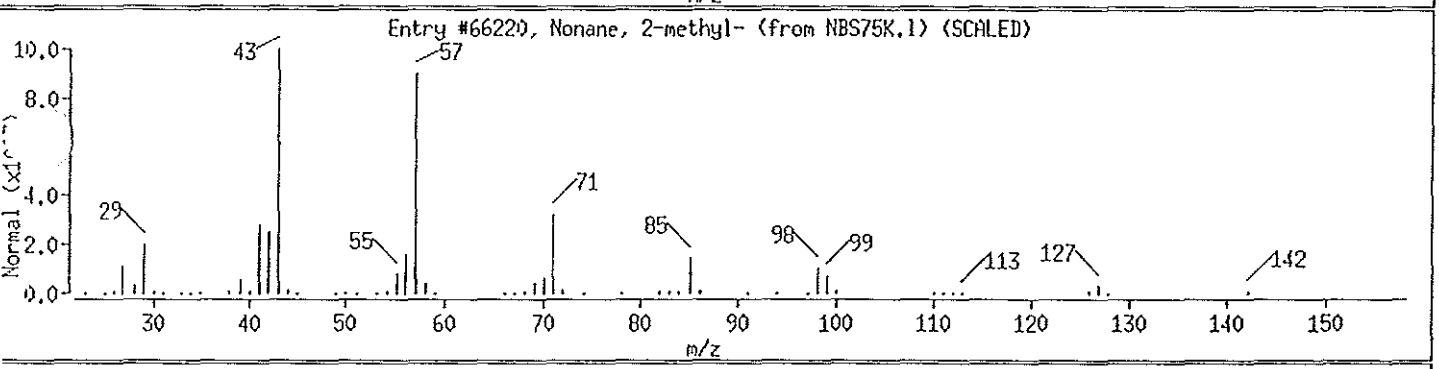
Operator: J. Kelly

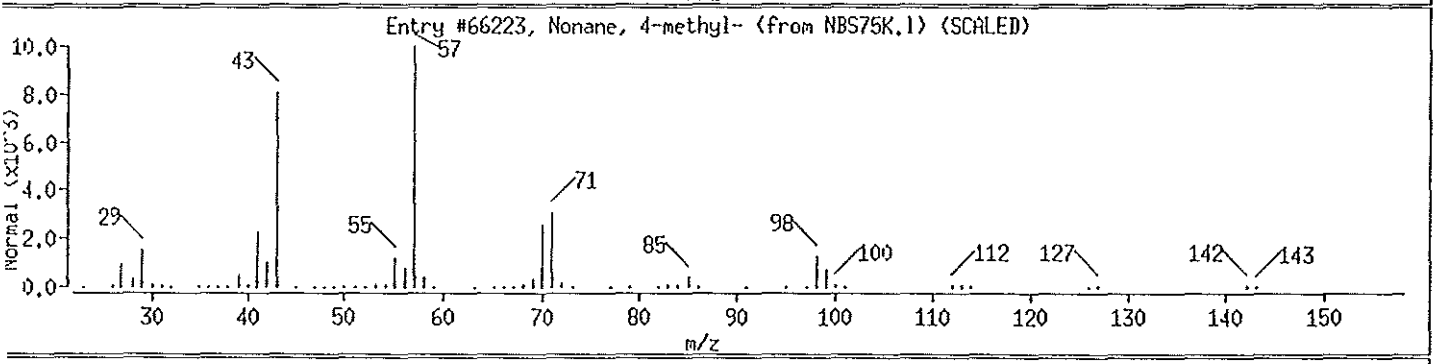
Column phase: J&W DB-5

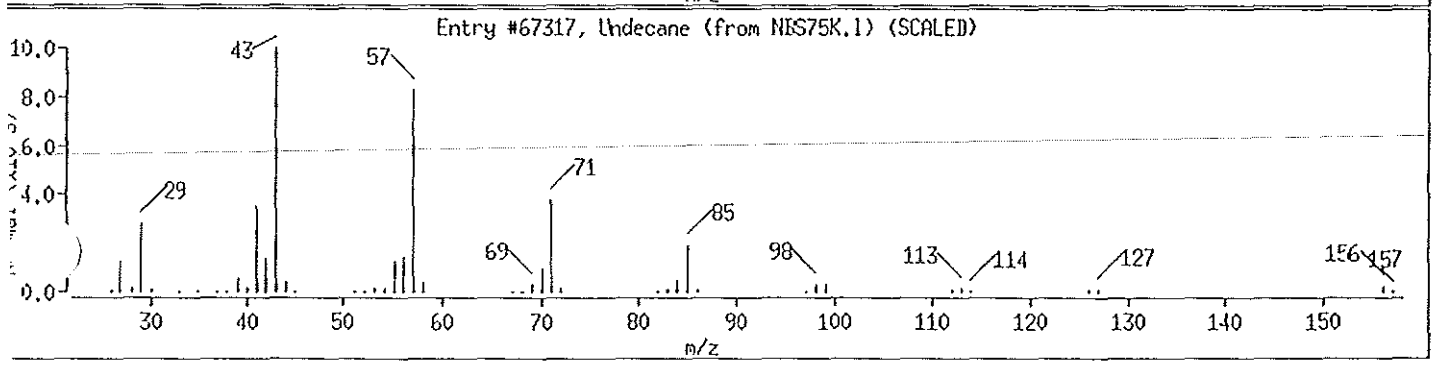
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Nonane, 2-methyl-	871-83-0	NBS75K.l	66220	83	C10H22	142
Nonane, 4-methyl-	17301-94-9	NBS75K.l	66223	59	C10H22	142
Undecane	1120-21-4	NBS75K.l	67317	59	C11H24	156









Data File: /chem/aux/mse.i/e111695.b/e8076.d

Date : 16-NOV-95 20:12

)ient ID: jp0325c

Sample Info: 17418n clj78tw02d

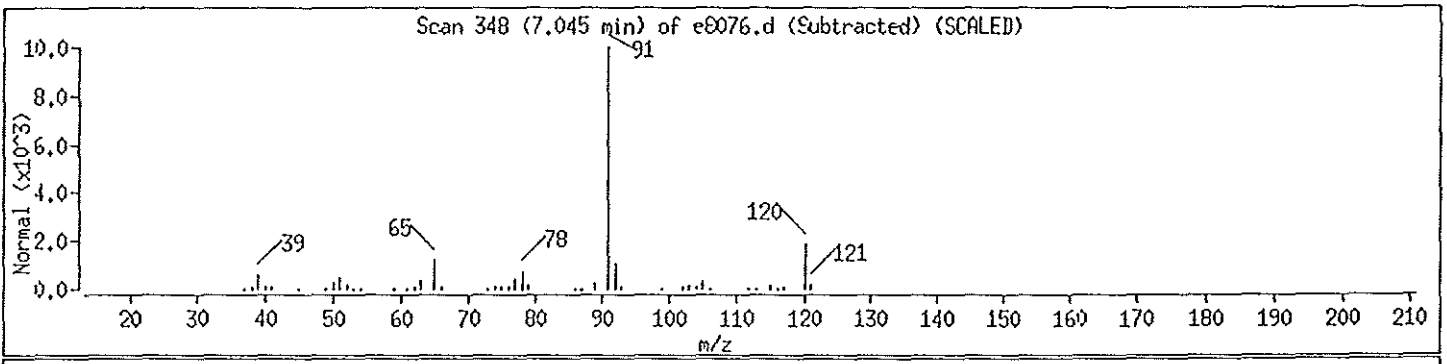
Instrument: mse.i

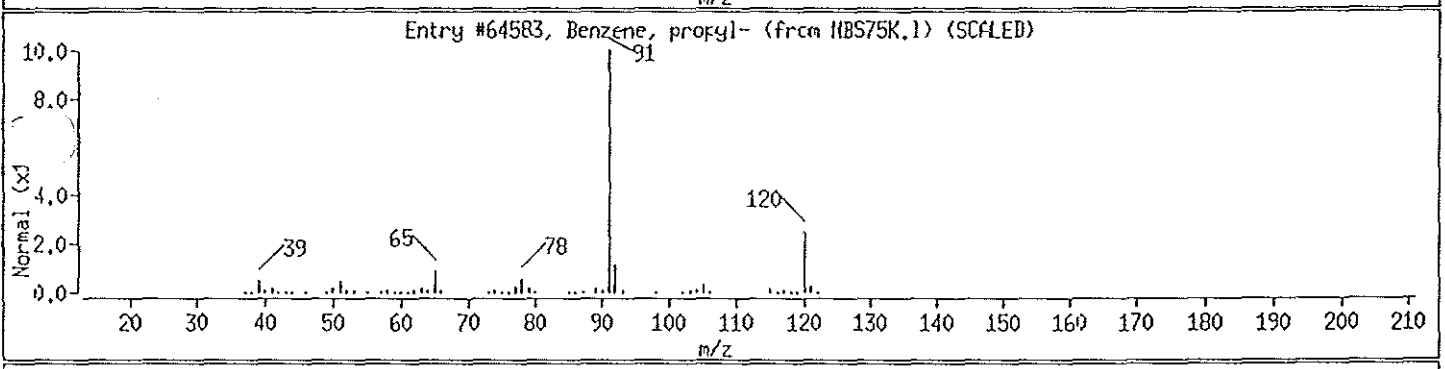
Operator: J. Kelly

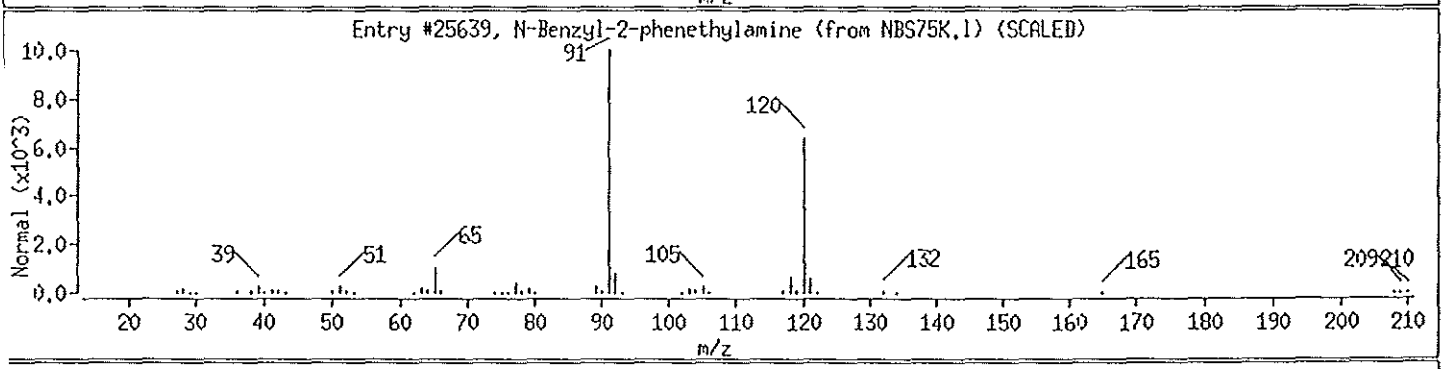
Column phase: J&W DB-5

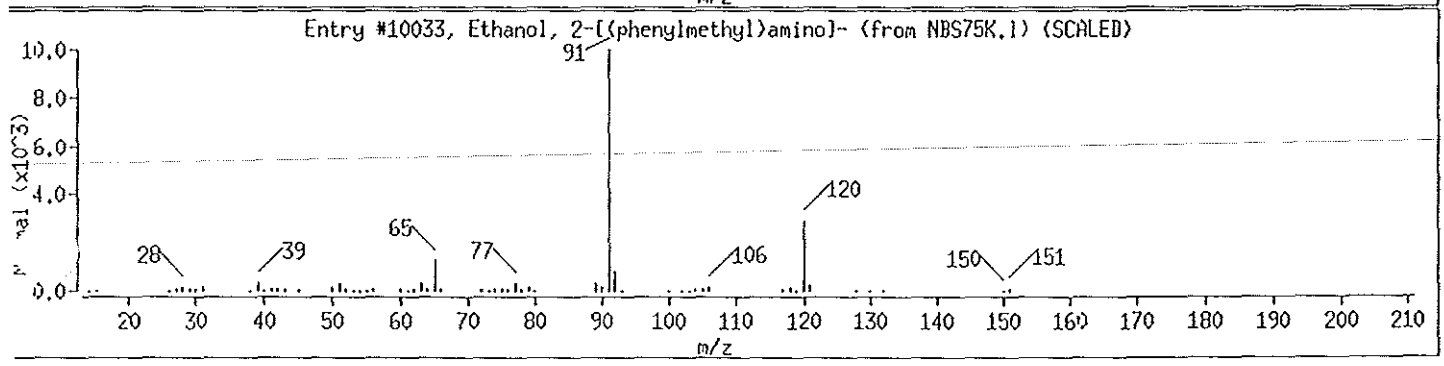
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, propyl-	103-65-1	NBS75K.1	64583	91	C9H12	120
N-Benzyl-2-phenethylamine	3647-71-0	NBS75K.1	25639	74	C15H17N	211
Ethanol, 2-[(phenylmethyl)amino]-	104-63-2	NBS75K.1	10033	64	C9H13NO	151









Data File: /chem/aux/mse.i/e111695.b/e8076.d

Date : 16-NOV-95 20:12

)ient ID: jp0325c

Instrument: mse.i

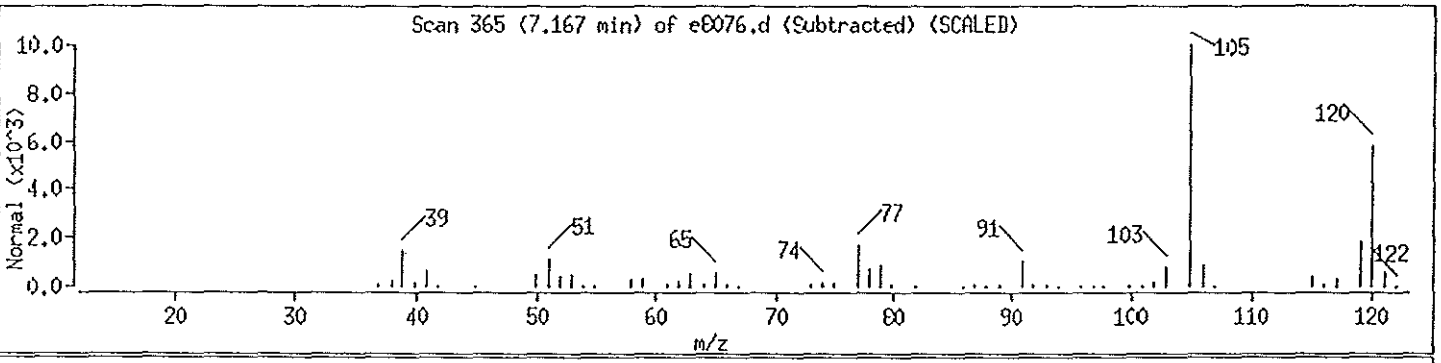
Sample Info: 17418n clj78tw02d

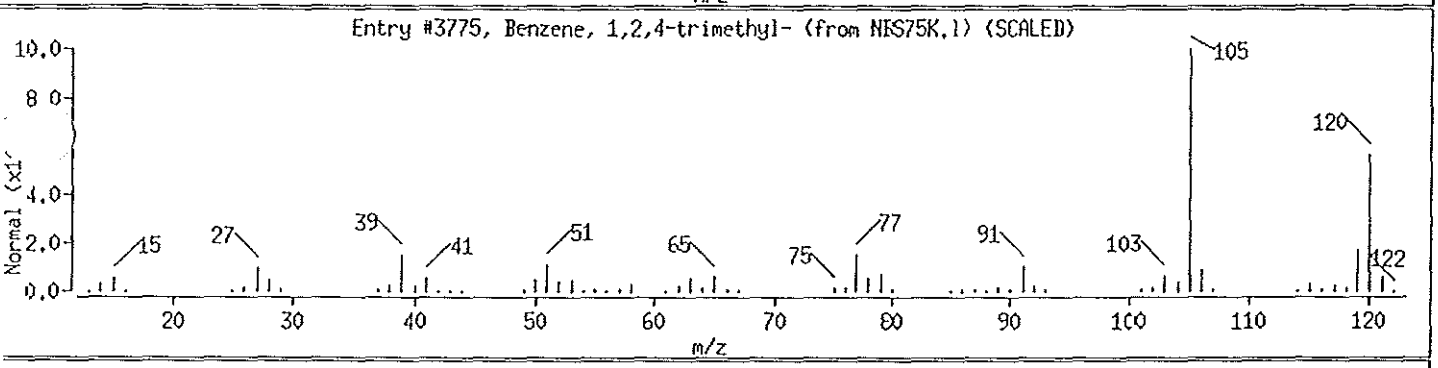
Operator: J. Kelly

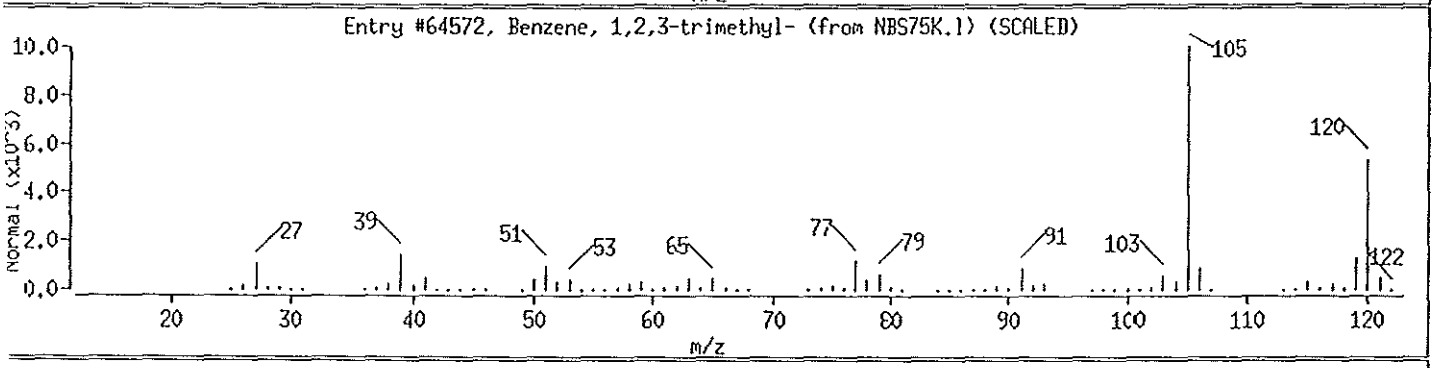
Column phase: J&W DB-5

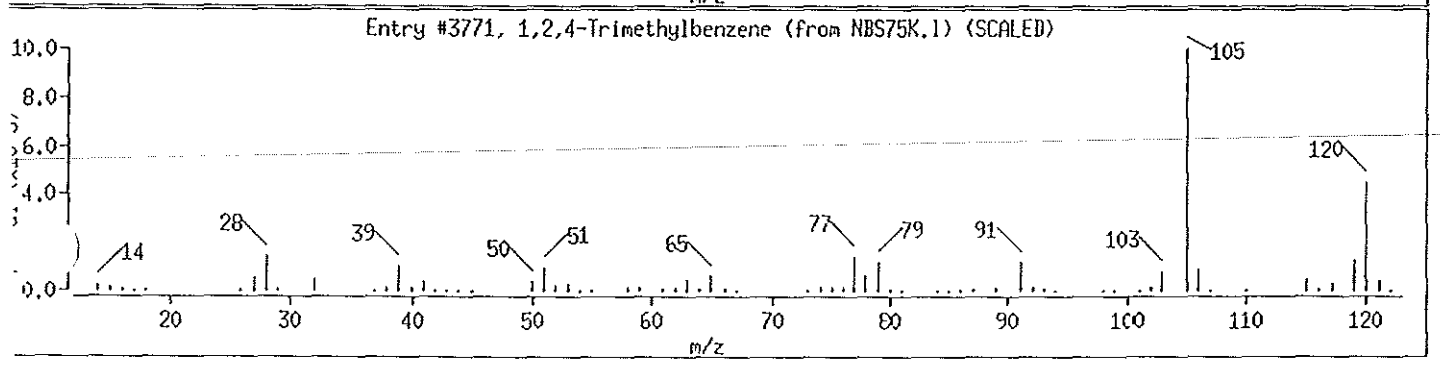
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1,2,4-trimethyl-	95-63-6	NBS75K.l	3775	94	C9H12	120
Benzene, 1,2,3-trimethyl-	526-73-8	NBS75K.l	64572	91	C9H12	120
1,2,4-Trimethylbenzene	95-36-3	NBS75K.l	3771	91	C9H12	120









Data File: /chem/aux/mse.i/e111695.b/e8076.d
Date : 16-NOV-95 20:12
Client ID: jp0325c
Sample Info: 17418n clj78tw02d

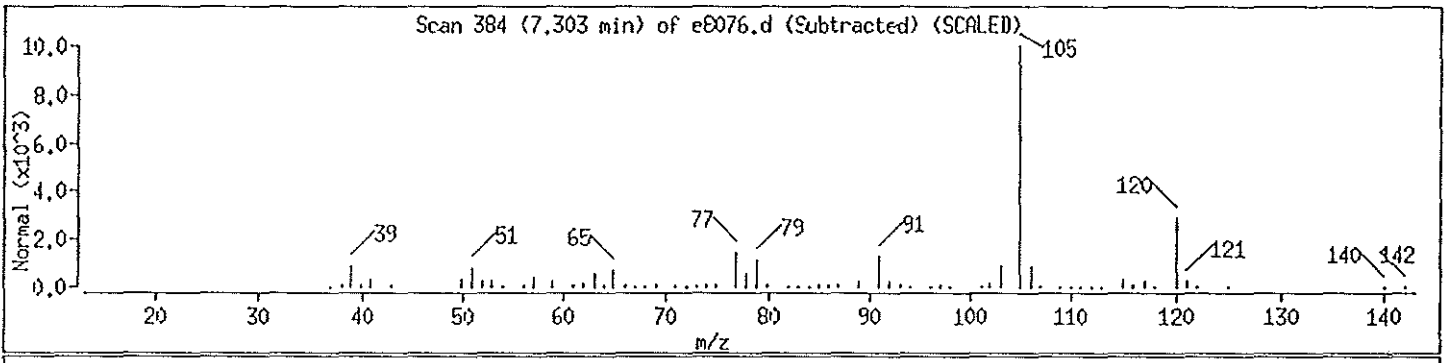
Instrument: mse.i

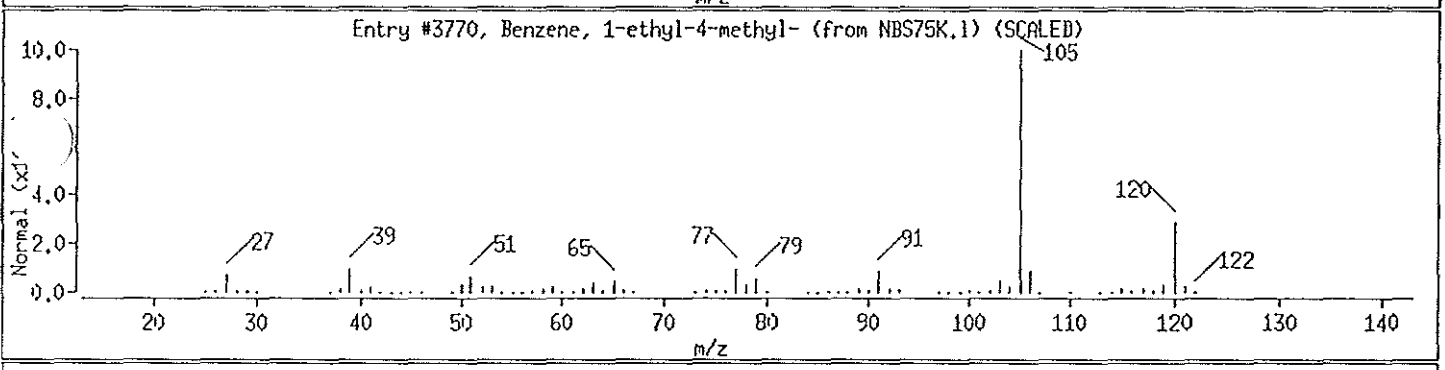
Operator: J. Kelly

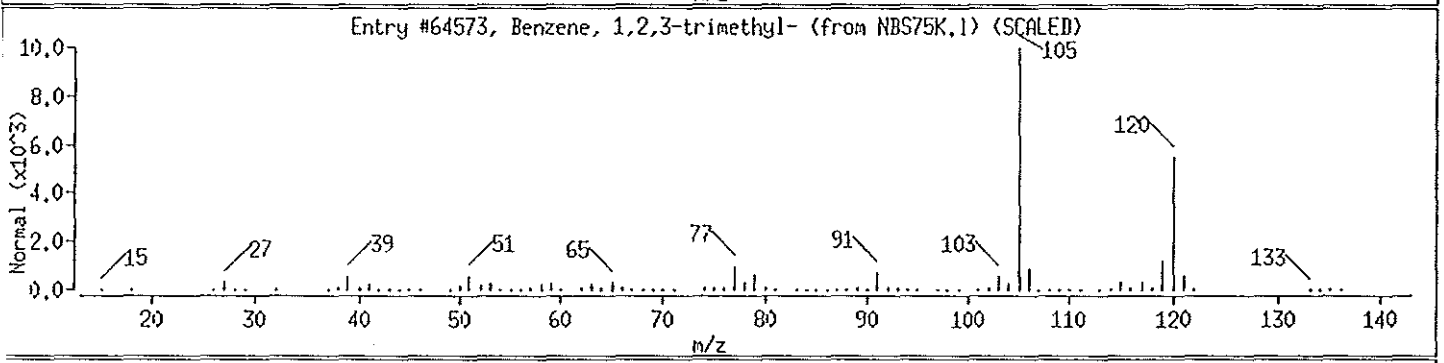
Column phase: J&W DB-5

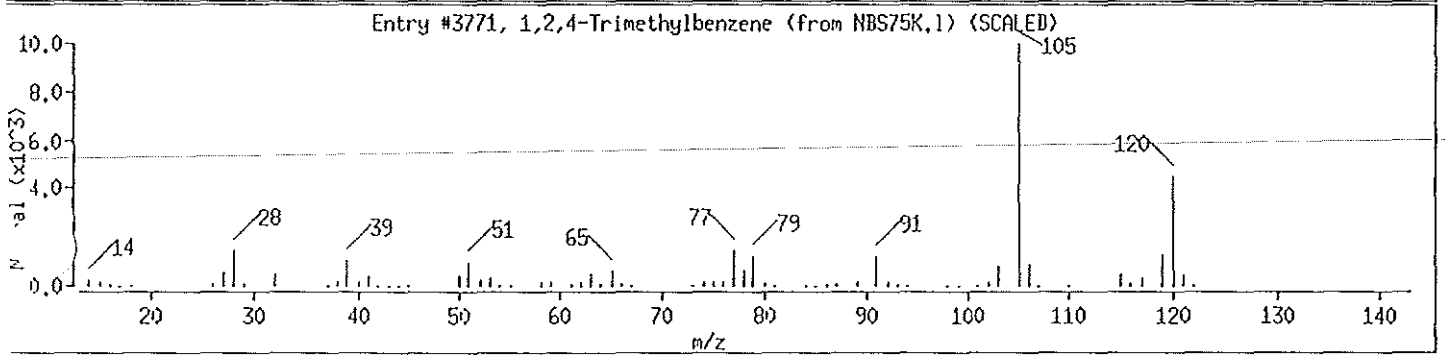
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-ethyl-4-methyl-	622-96-8	NBS75K.l	3770	91	C9H12	120
Benzene, 1,2,3-trimethyl-	526-73-8	NBS75K.l	64573	91	C9H12	120
1,2,4-Trimethylbenzene	95-36-3	NBS75K.l	3771	91	C9H12	120









Data File: /chem/aux/mse.i/e111695.b/e8076.d

Date : 16-NOV-95 20:12

ent ID: jp0325c

Instrument: mse.i

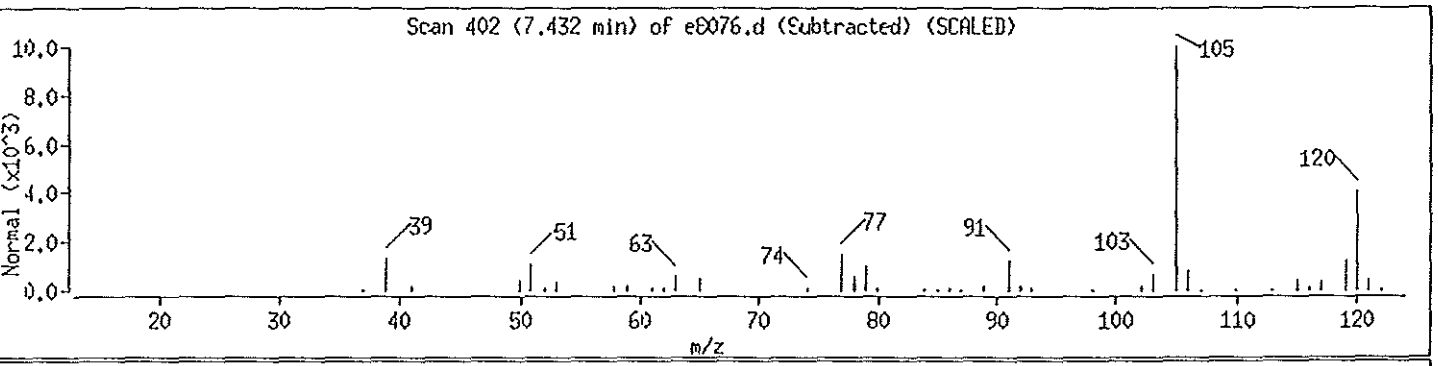
ample Info: 17418n clj78tw02d

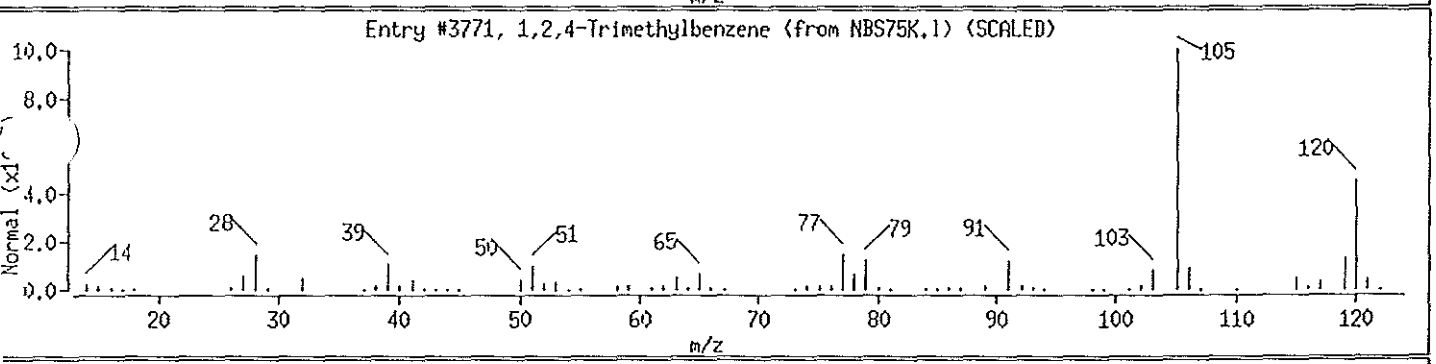
Operator: J. Kelly

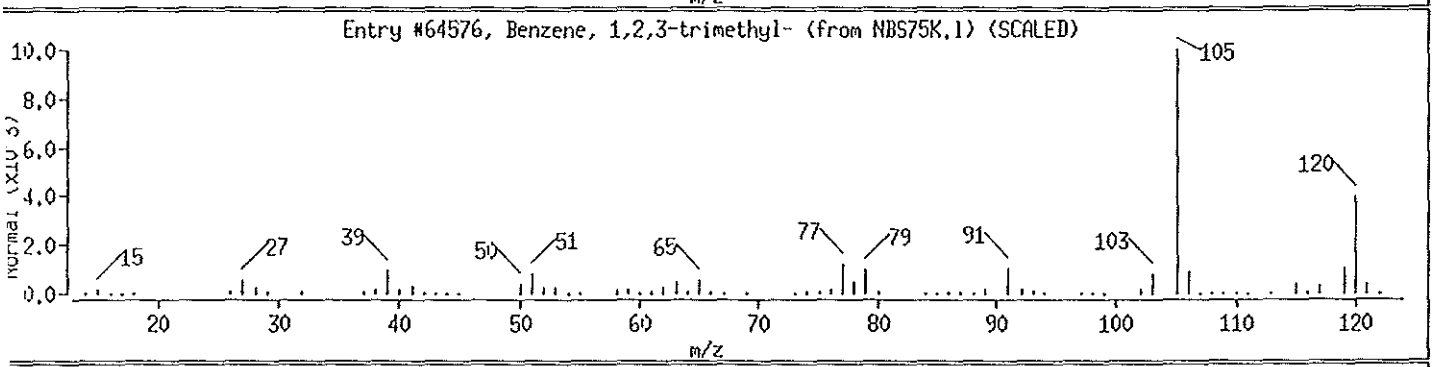
Column phase: J&W DB-5

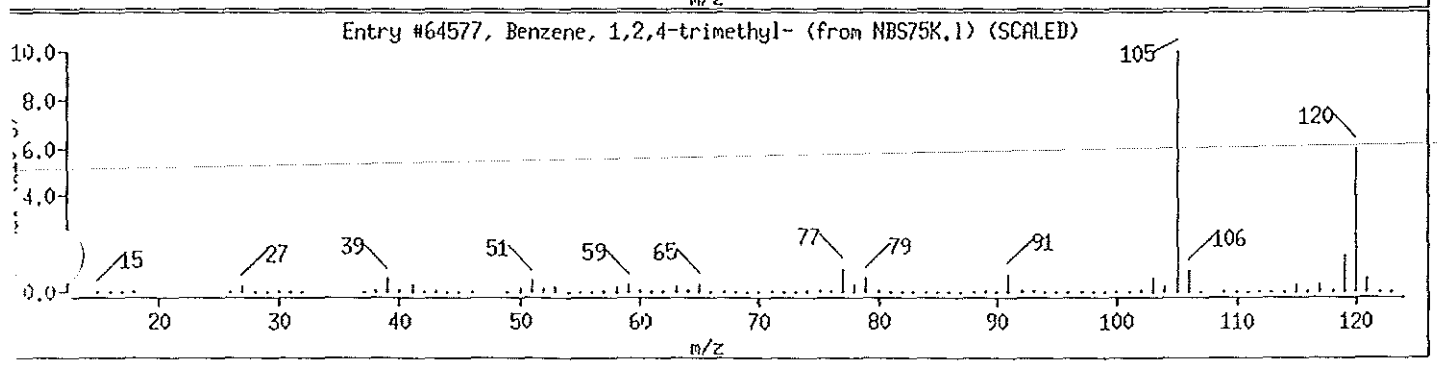
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,2,4-Trimethylbenzene	95-36-3	NBS75K.l	3771	96	C9H12	120
Benzene, 1,2,3-trimethyl-	526-73-8	NBS75K.l	64576	94	C9H12	120
Benzene, 1,2,4-trimethyl-	95-63-6	NBS75K.l	64577	91	C9H12	120









Data File: /chem/aux/mse.i/e111695.b/e8076.d
Date : 16-NOV-95 20:12
Client ID: jp0325c
Sample Info: 17418n clj78tw02d

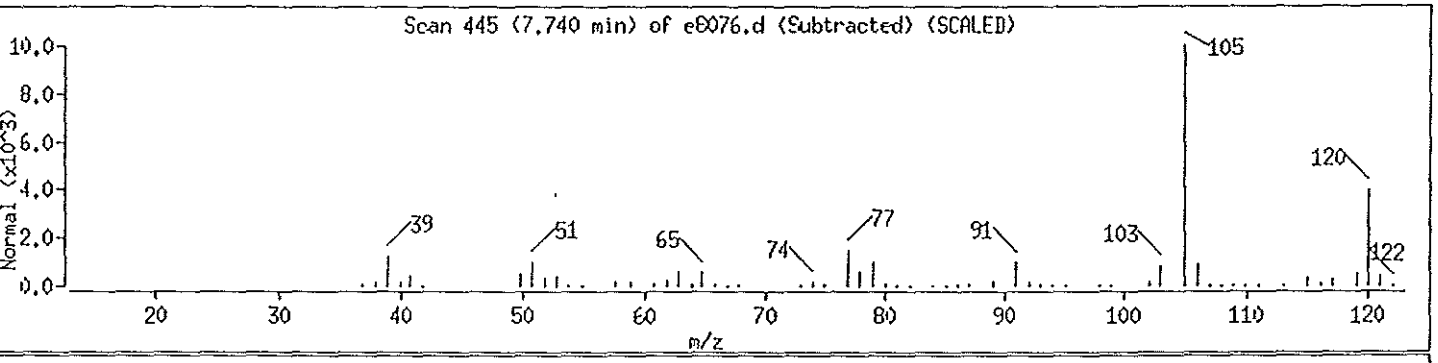
Instrument: mse.i

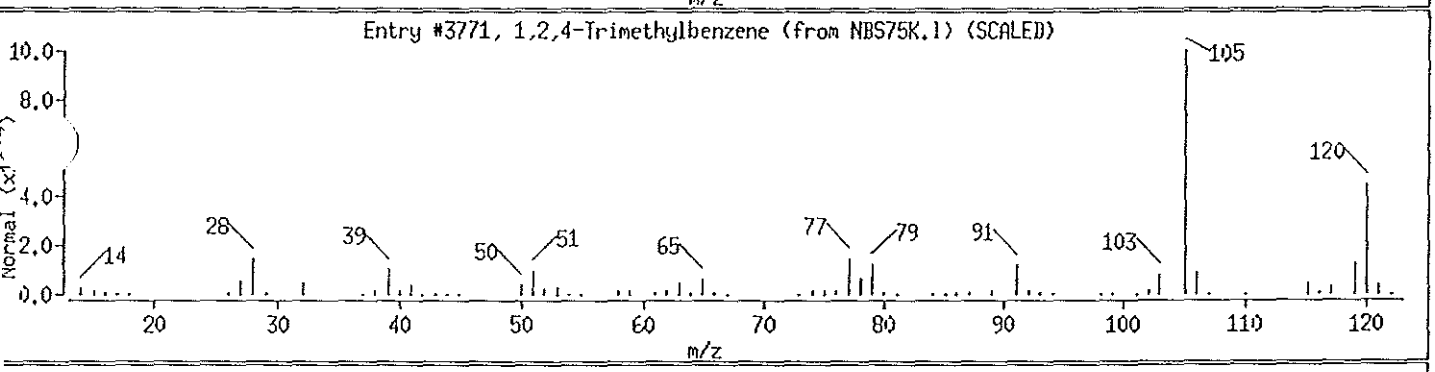
Operator: J. Kelly

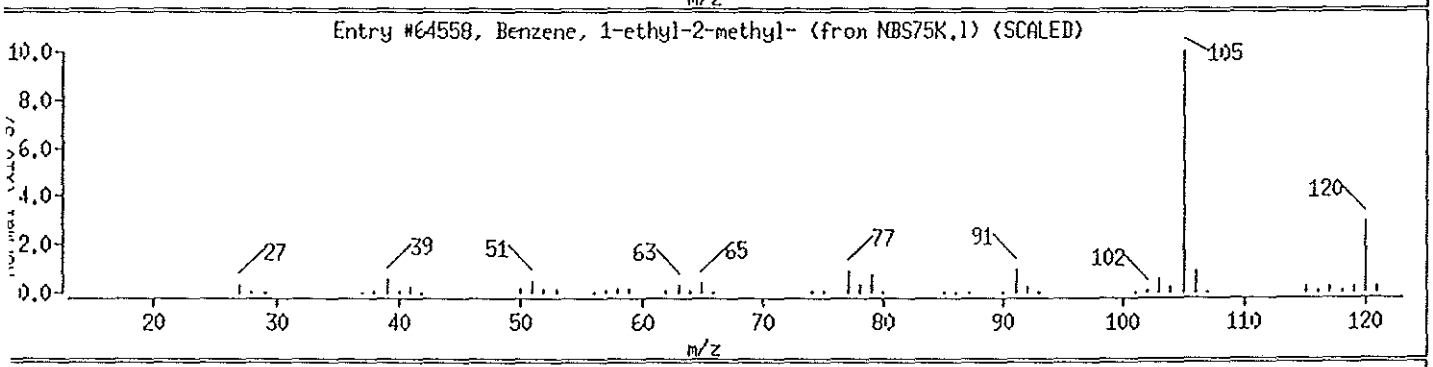
Column phase: J&W DB-5

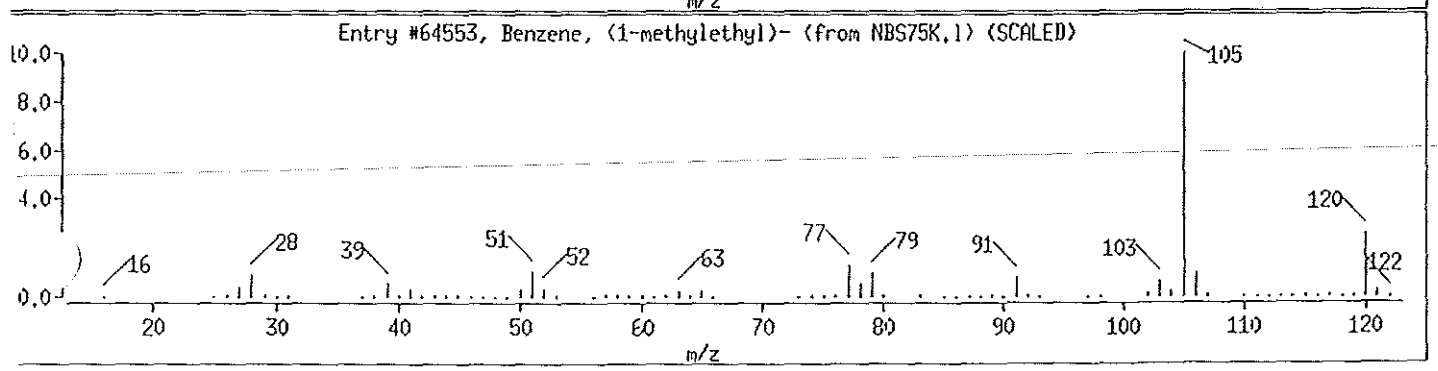
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,2,4-Trimethylbenzene	95-36-3	NBS75K.l	3771	94	C9H12	120
Benzene, 1-ethyl-2-methyl-	611-14-3	NBS75K.l	64558	91	C9H12	120
Benzene, (1-methylethyl)-	98-82-8	NBS75K.l	64553	91	C9H12	120









Data File: /chem/aux/mse.i/e111695.b/e8076.d

Date : 16-NOV-95 20:12

ent ID: jp0325c

Instrument: mse.i

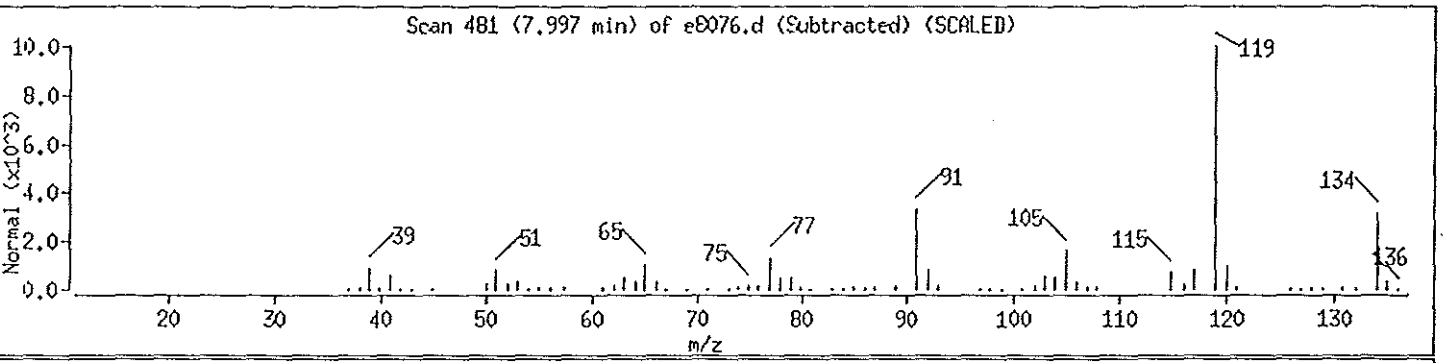
Sample Info: 17418n clj78tw02d

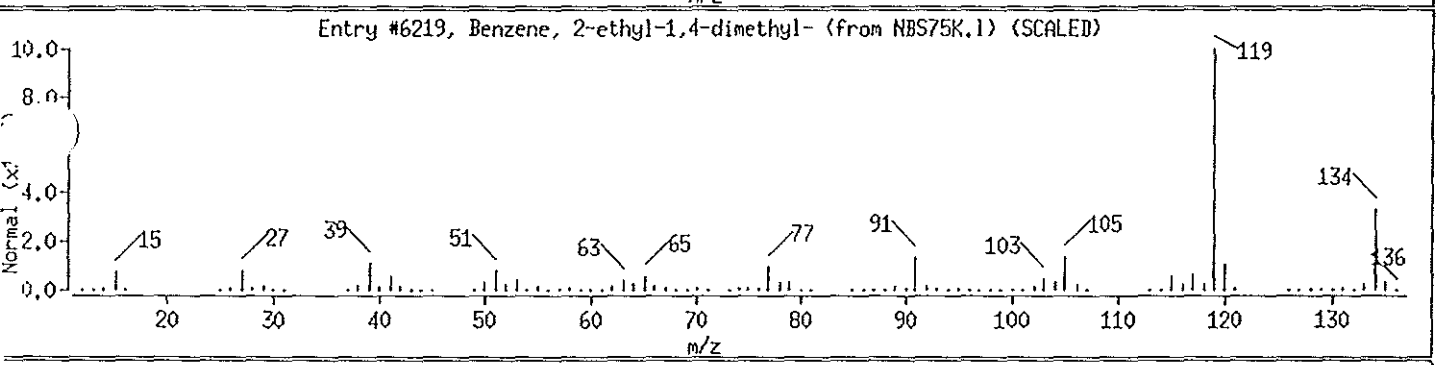
Operator: J. Kelly

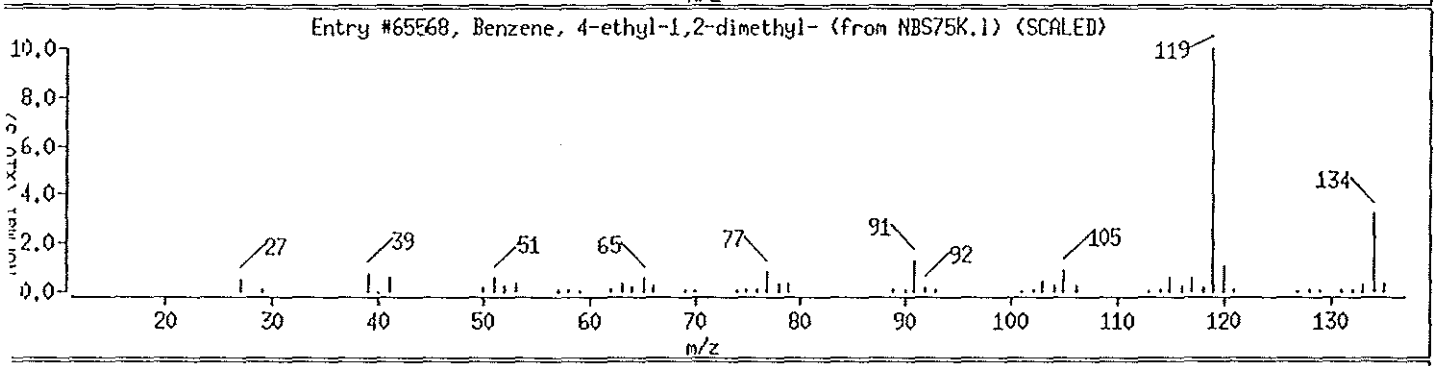
Column phase: J&W DB-5

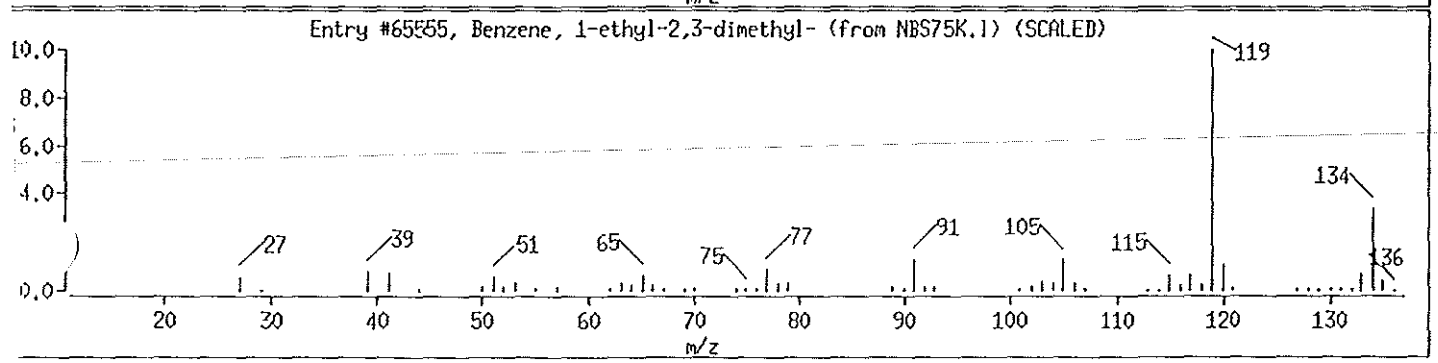
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	NBS75K.l	6219	94	C10H14	134
Benzene, 4-ethyl-1,2-dimethyl-	934-80-5	NBS75K.l	65568	93	C10H14	134
Benzene, 1-ethyl-2,3-dimethyl-	933-98-2	NBS75K.l	65555	91	C10H14	134









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Date : 16-NOV-95 20:12

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Instrument: mse.i

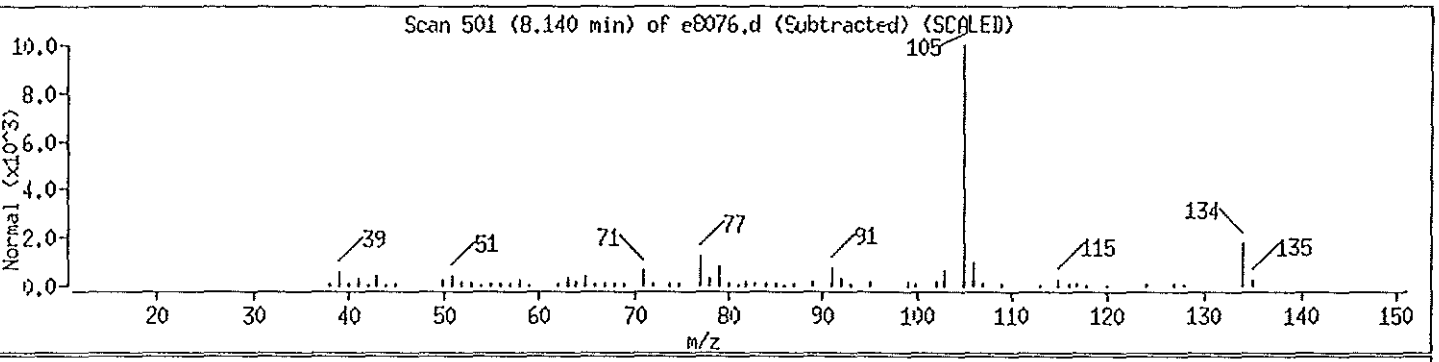
Sample Info: 17418n clj78tw02d

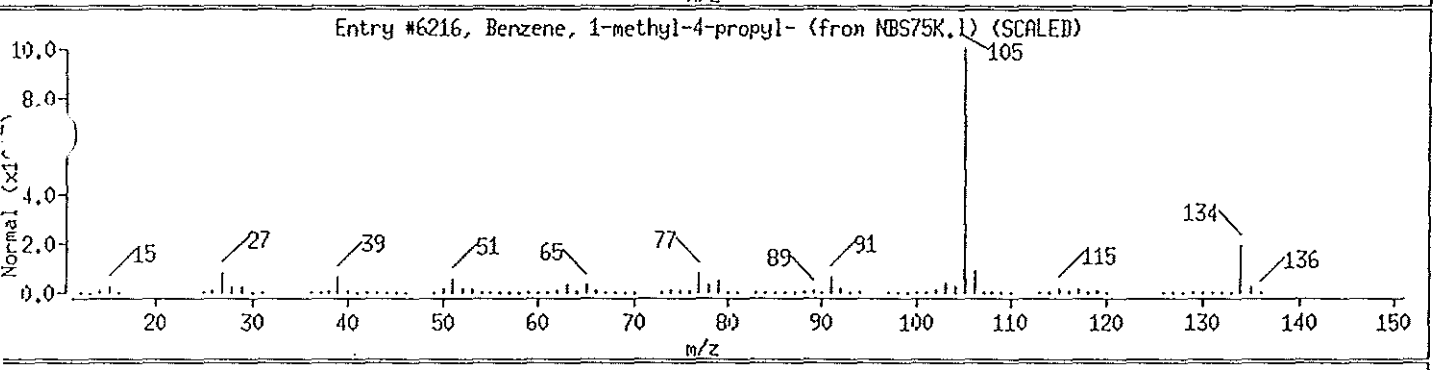
Operator: J. Kelly

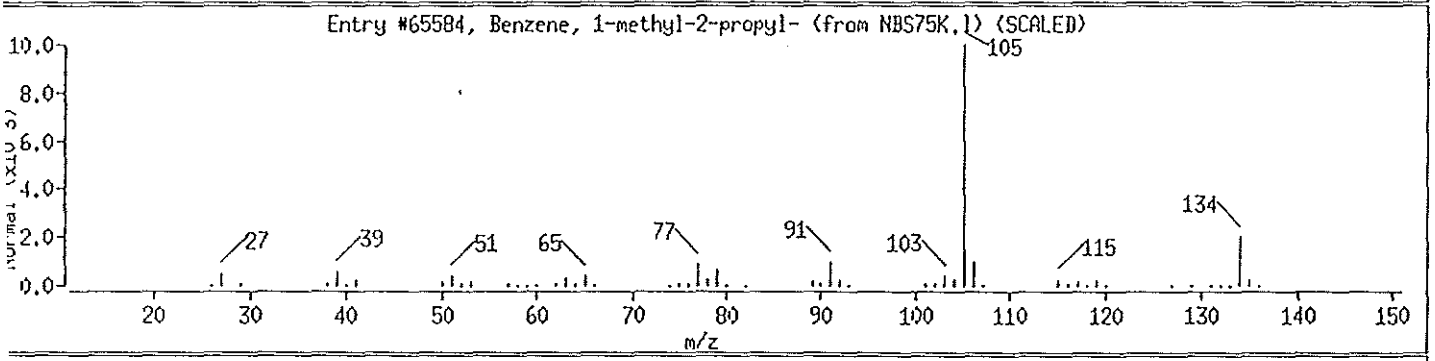
Column phase: J&W DB-5

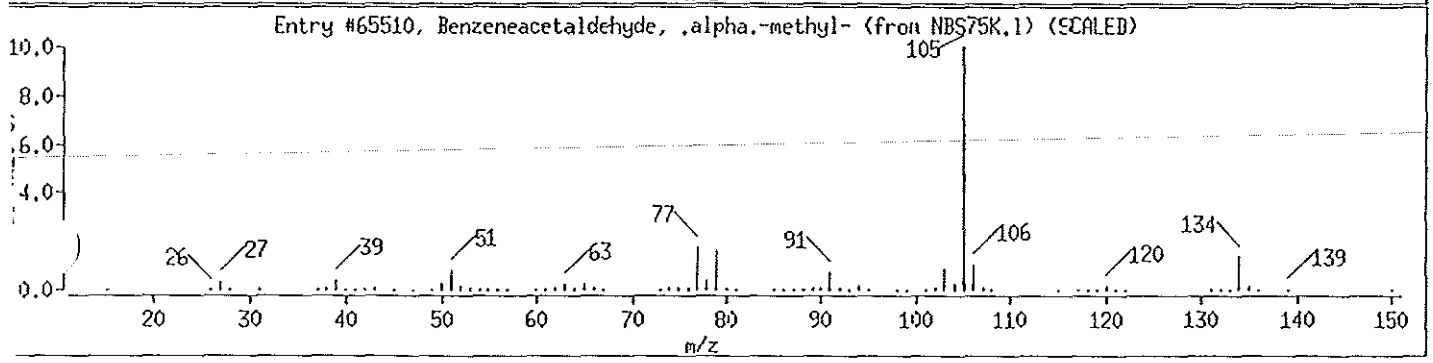
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-methyl-4-propyl-	1074-55-1	NBS75K.l	6216	87	C10H14	134
Benzene, 1-methyl-2-propyl-	1074-17-5	NBS75K.l	65584	87	C10H14	134
Benzeneacetaldehyde, .alpha.-methyl-	93-53-8	NBS75K.l	65510	80	C9H10O	134









Data File: /chem/aux/mse.i/e111695.b/e8076.d

Date : 16-NOV-95 20:12

ent ID: jp0325c

Instrument: mse.i

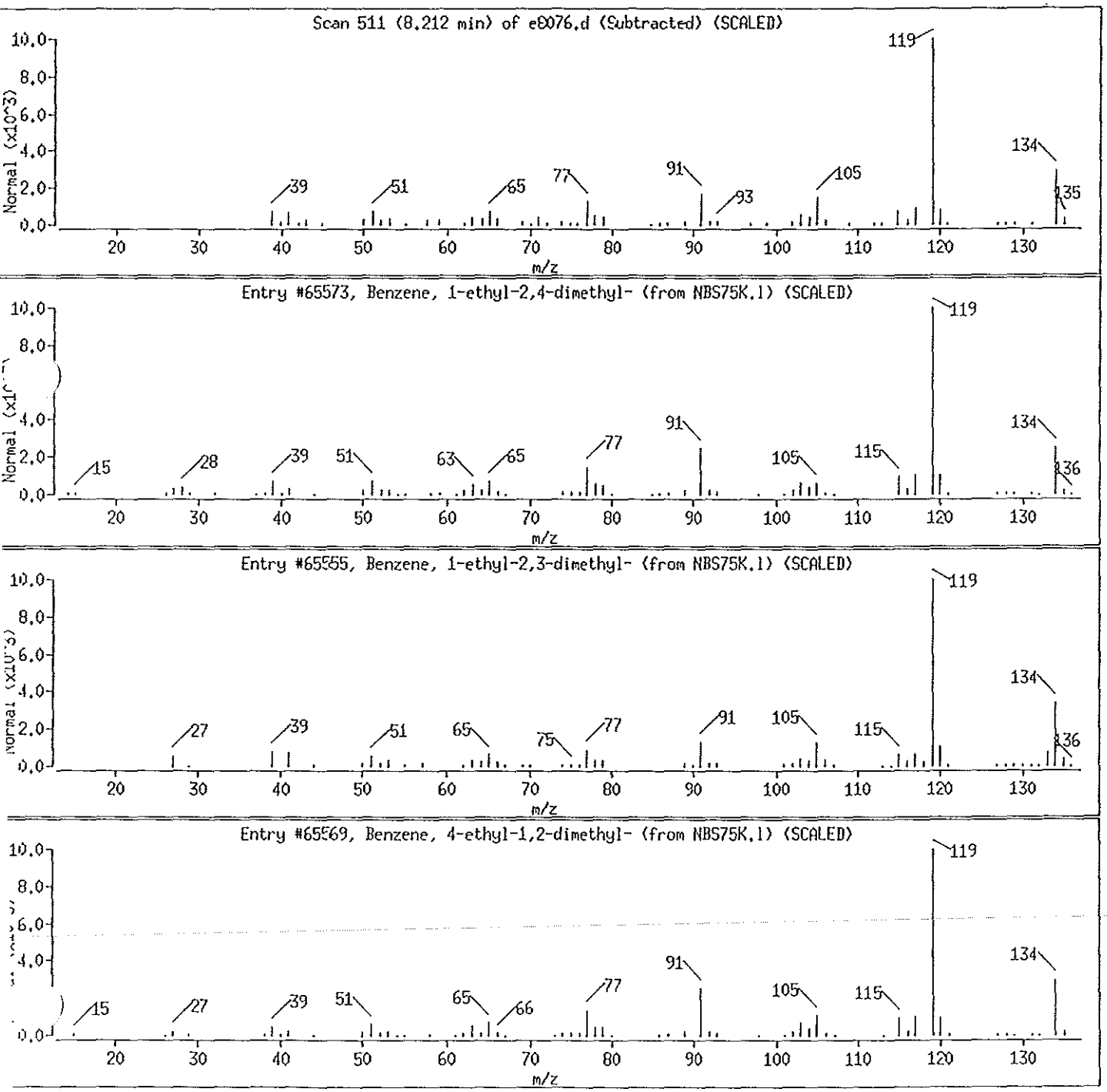
ample Info: 17418n clj78tw02d

Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	NBS75K.1	65573	94	C10H14	134
Benzene, 1-ethyl-2,3-dimethyl-	933-98-2	NBS75K.1	65555	94	C10H14	134
Benzene, 4-ethyl-1,2-dimethyl-	934-80-5	NBS75K.1	65569	94	C10H14	134



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Date : 16-NOV-95 20:12

Client ID: jp0325c

Instrument: mse.i

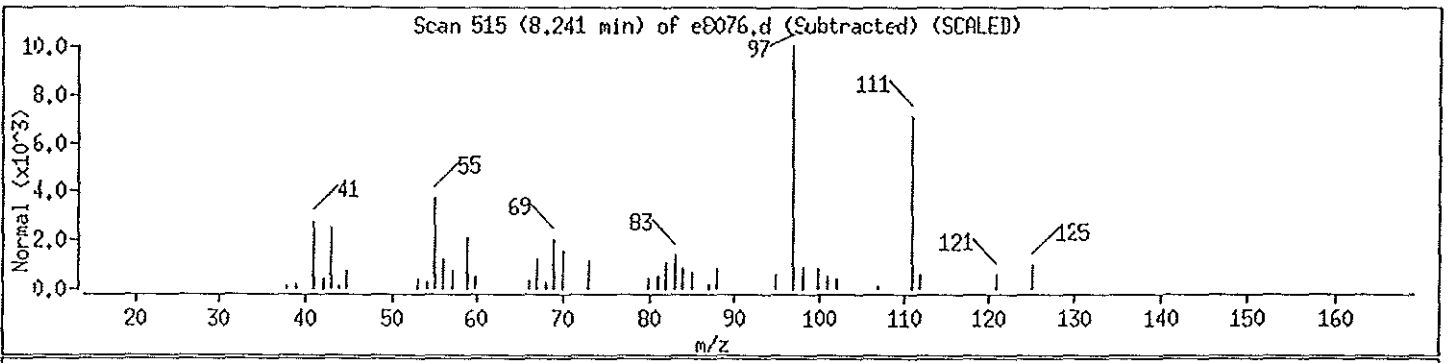
Sample Info: 17418n clj78tw02d

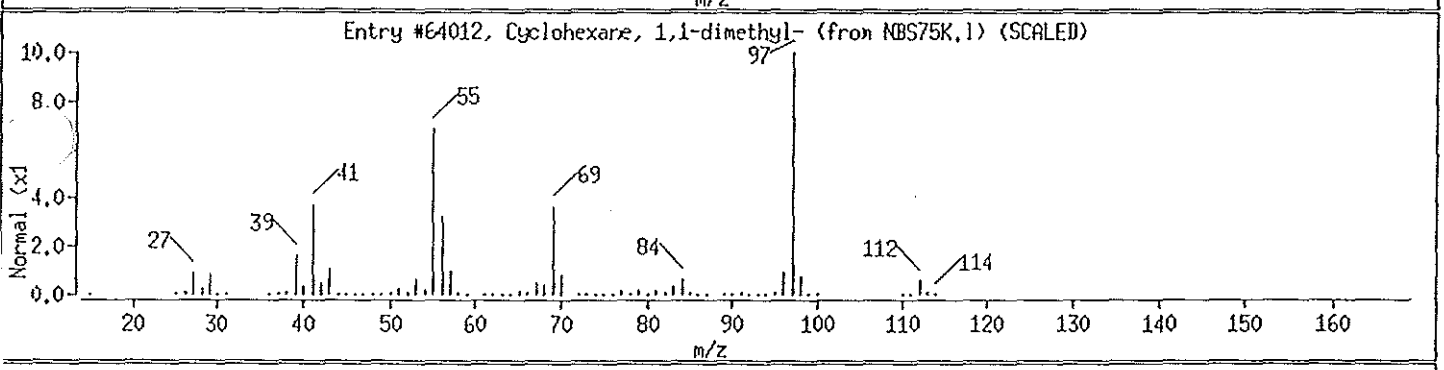
Operator: J. Kelly

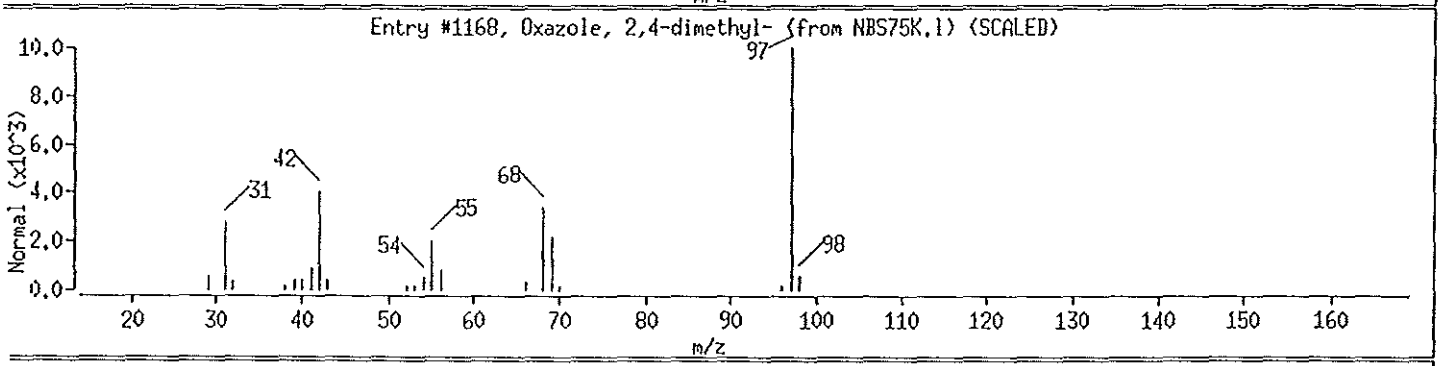
Column phase: J&W DB-5

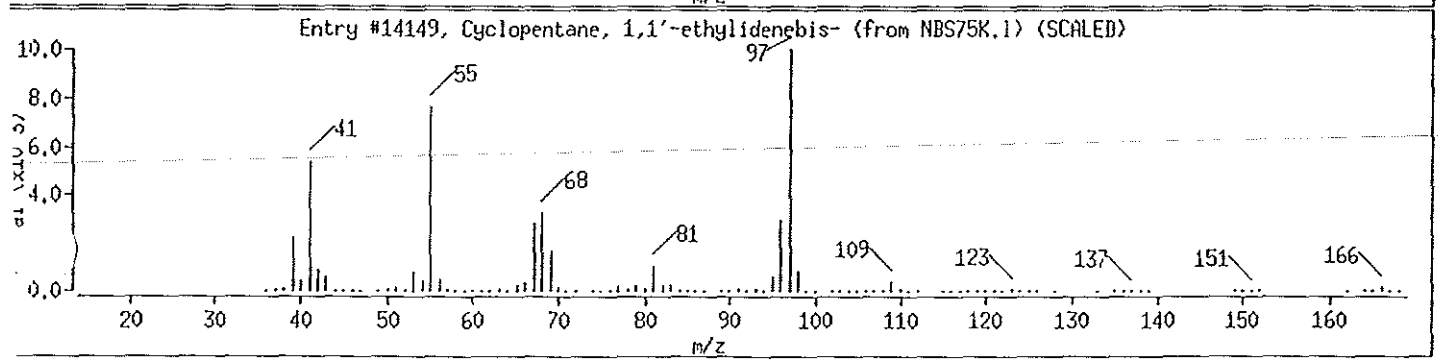
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclohexane, 1,1-dimethyl-	590-66-9	NBS75K.l	64012	38	C8H16	112
Oxazole, 2,4-dimethyl-	7208-05-1	NBS75K.l	1168	35	C5H7NO	97
Cyclopentane, 1,1'-ethylidenebis-	4413-21-2	NBS75K.l	14149	35	C12H22	166









Data File: /chem/aux/mse.i/e111695.b/e8076.d

Date : 16-NOV-95 20:12

ient ID: jp0325c

Instrument: mse.i

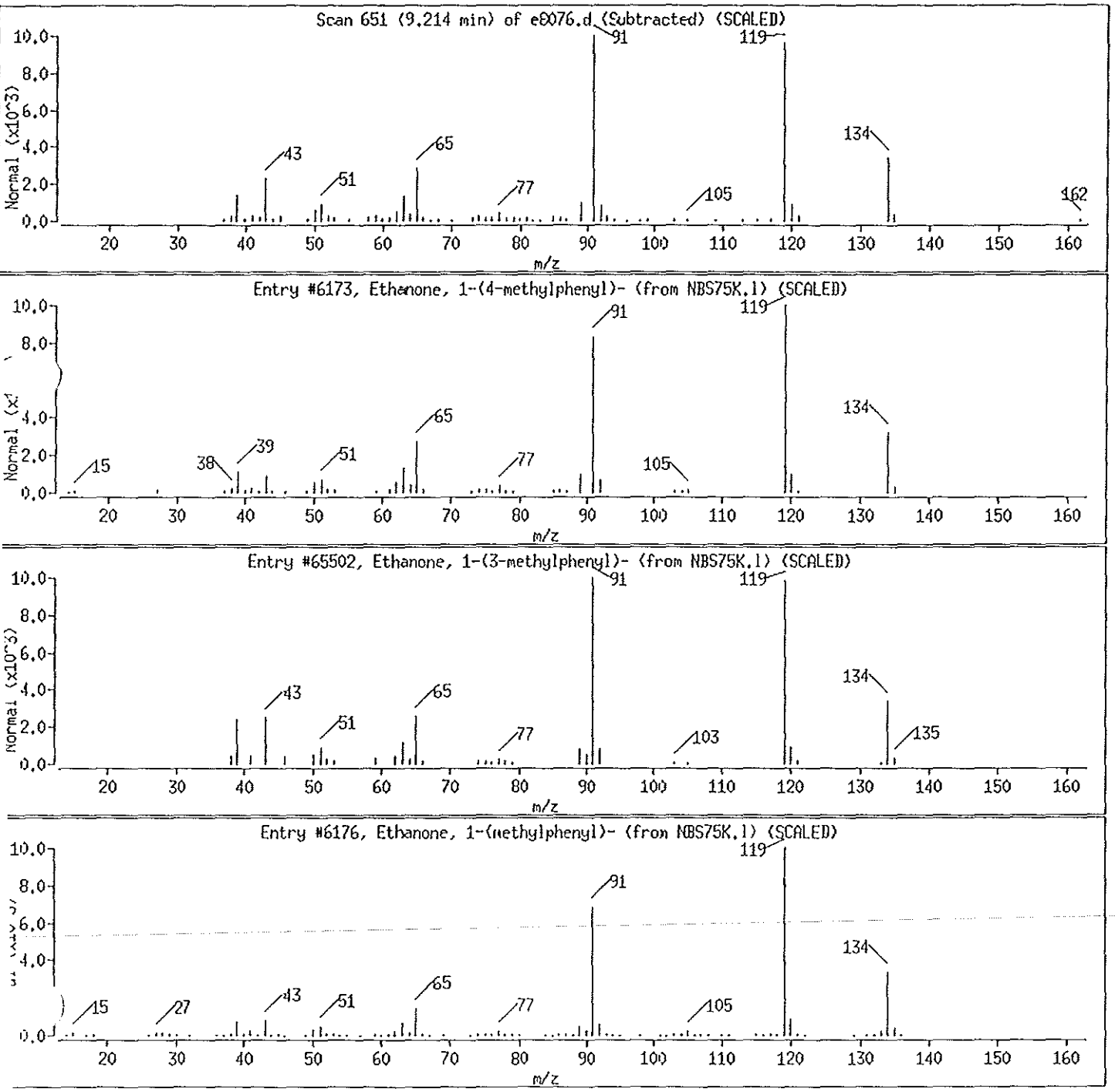
ample Info: 17418n clj78tw02d

Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethanone, 1-(4-methylphenyl)-	122-00-9	NBS75K.l	6173	96	C9H10O	134
Ethanone, 1-(3-methylphenyl)-	585-74-0	NBS75K.l	65502	95	C9H10O	134
Ethanone, 1-(methylphenyl)-	26444-19-9	NBS75K.l	6176	91	C9H10O	134



Data File: /chem/aux/mse.i/e111695.b/e8076.d

Date : 16-NOV-95 20:12

ent ID: jp0325c

Instrument: mse.i

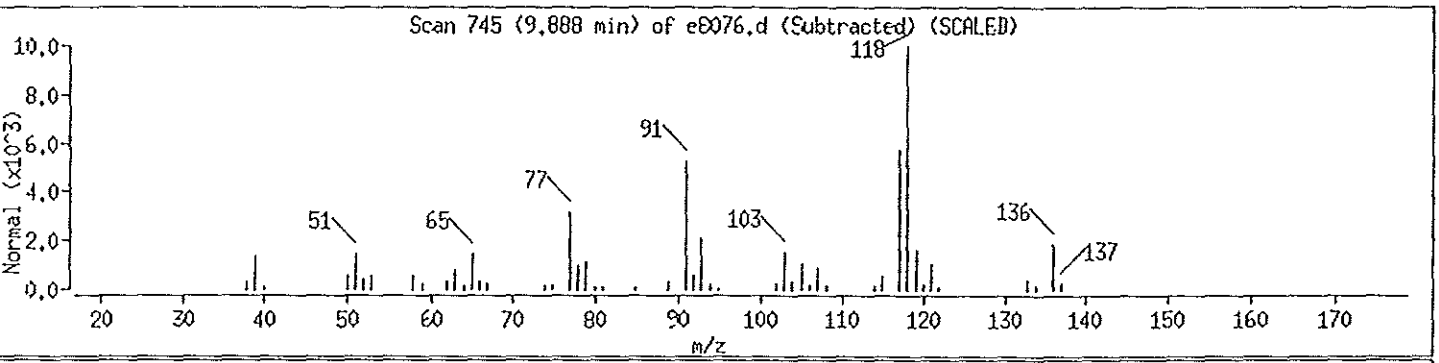
ample Info: 17418n clj78tw02d

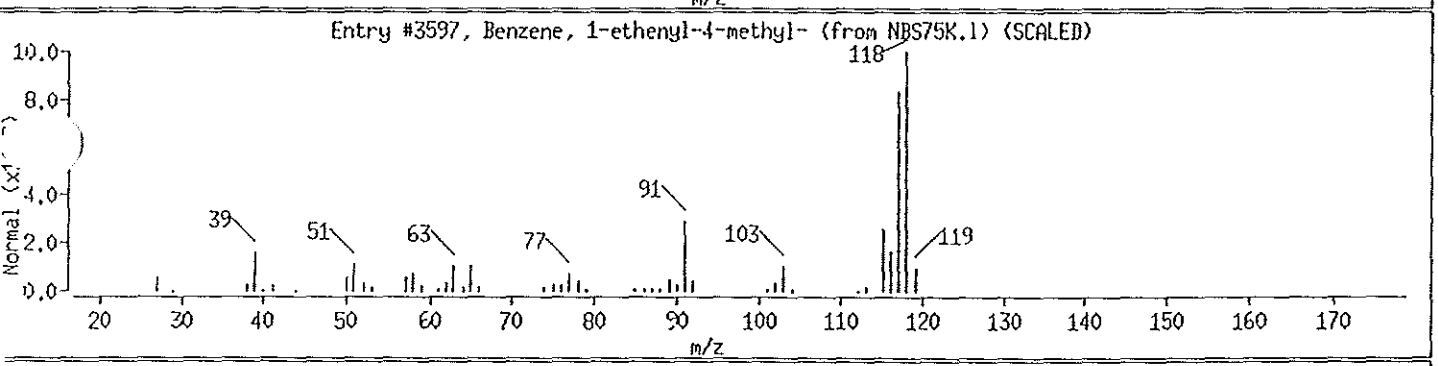
Operator: J. Kelly

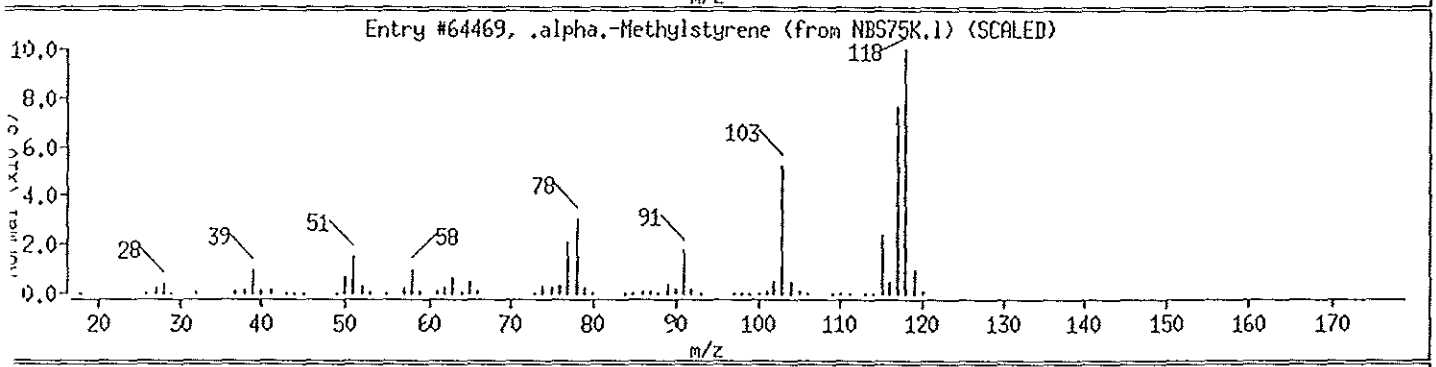
Column phase: J&W DB-5

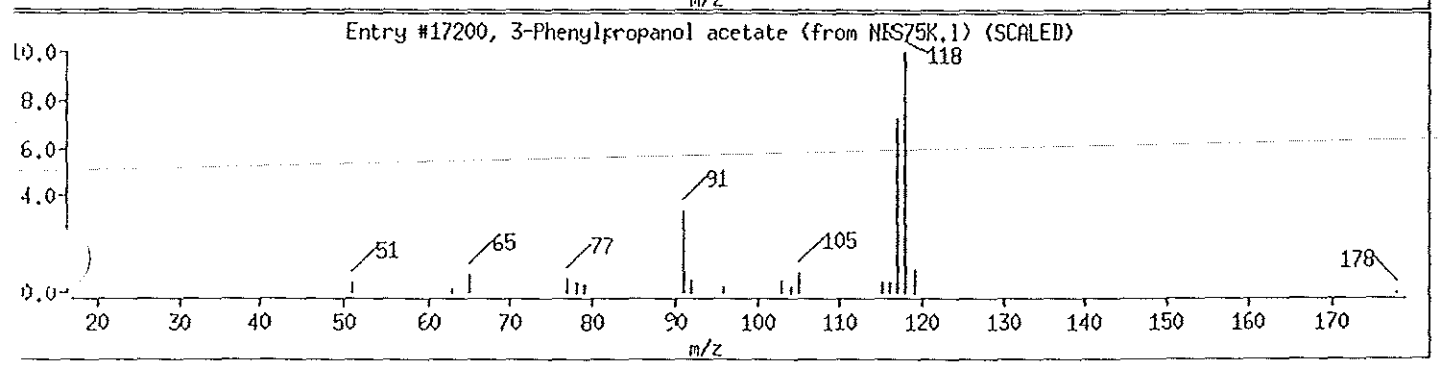
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-ethenyl-4-methyl-	622-97-9	NBS75K.l	3597	64	C9H10	118
.alpha.-Methylstyrene	98-83-9	NBS75K.l	64469	50	C9H10	118
3-Phenylpropanol acetate	0-00-0	NBS75K.l	17200	50	C11H14O2	178









Data File: /chem/aux/mse.i/e111695.b/e8076.d

Date : 16-NOV-95 20:12

ent ID: jp0325c

Instrument: mse.i

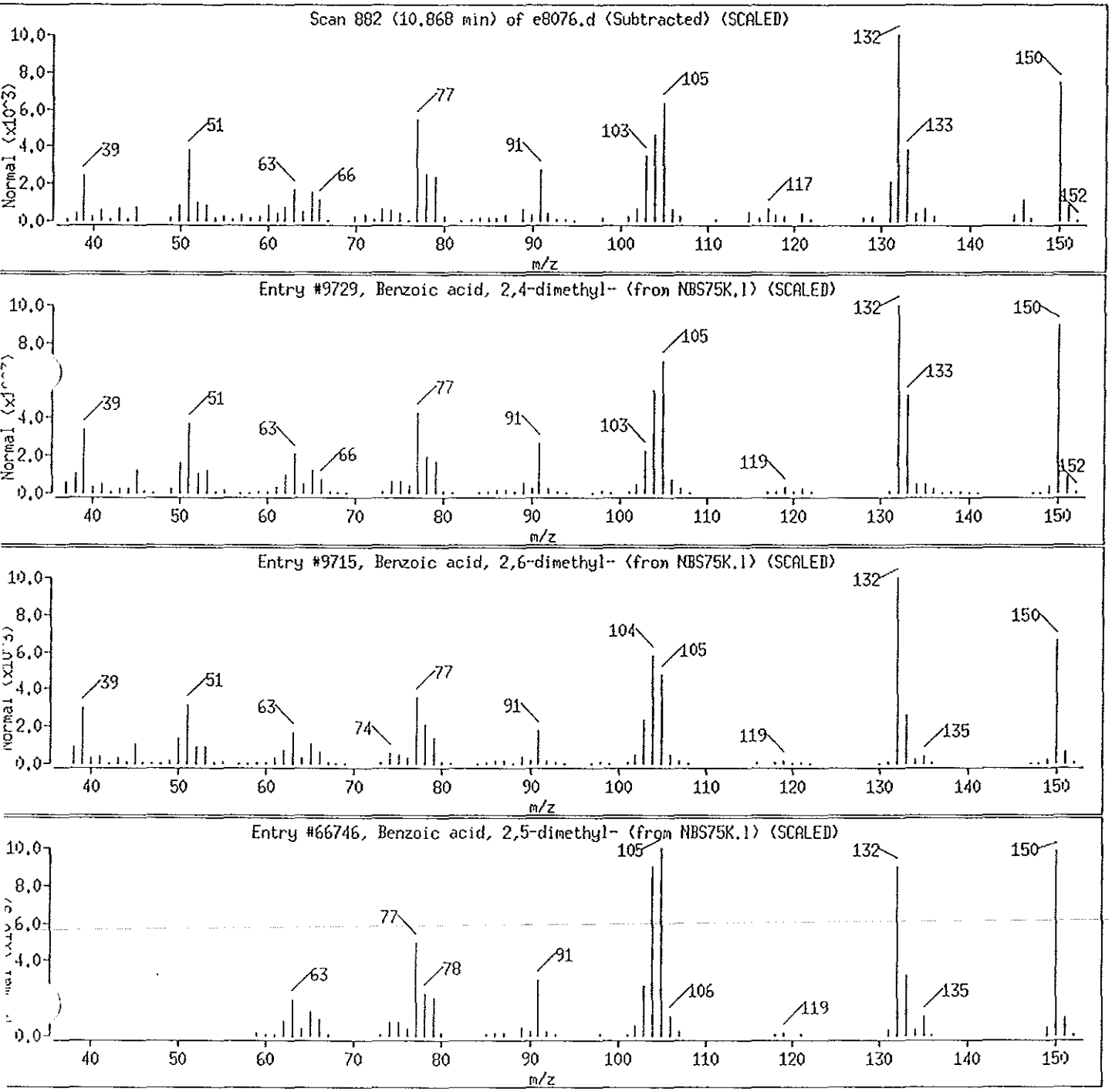
ample Info: 17418n clj78tw02d

Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzoic acid, 2,4-dimethyl-	611-01-8	NBS75K.1	9729	95	C9H10O2	150
Benzoic acid, 2,6-dimethyl-	632-46-2	NBS75K.1	9715	86	C9H10O2	150
Benzoic acid, 2,5-dimethyl-	610-72-0	NBS75K.1	66746	52	C9H10O2	150



Data File: /chem/aux/mse.i/e111695.b/e8076.d

Date : 16-NOV-95 20:12

Client ID: jp0325c

Instrument: mse.i

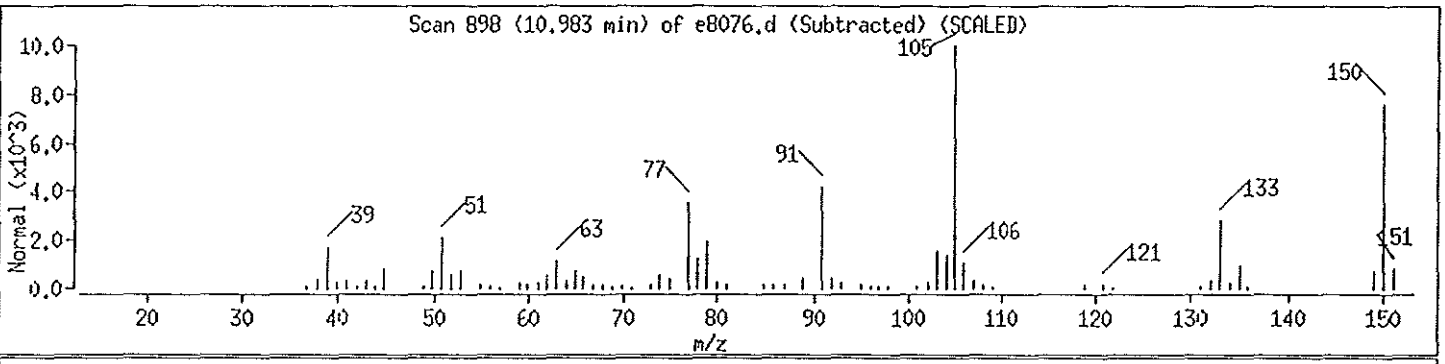
Sample Info: 17418n clj78tw02d

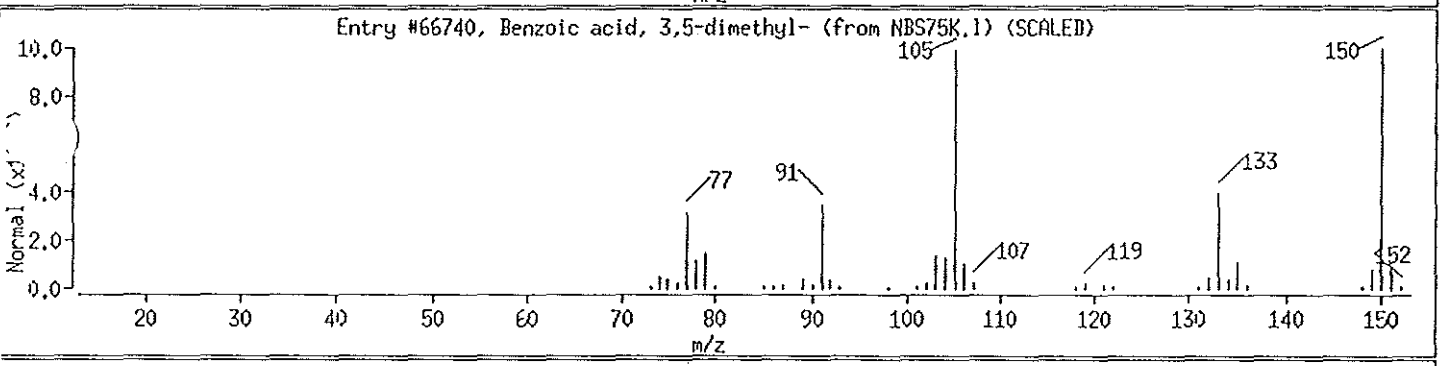
Operator: J. Kelly

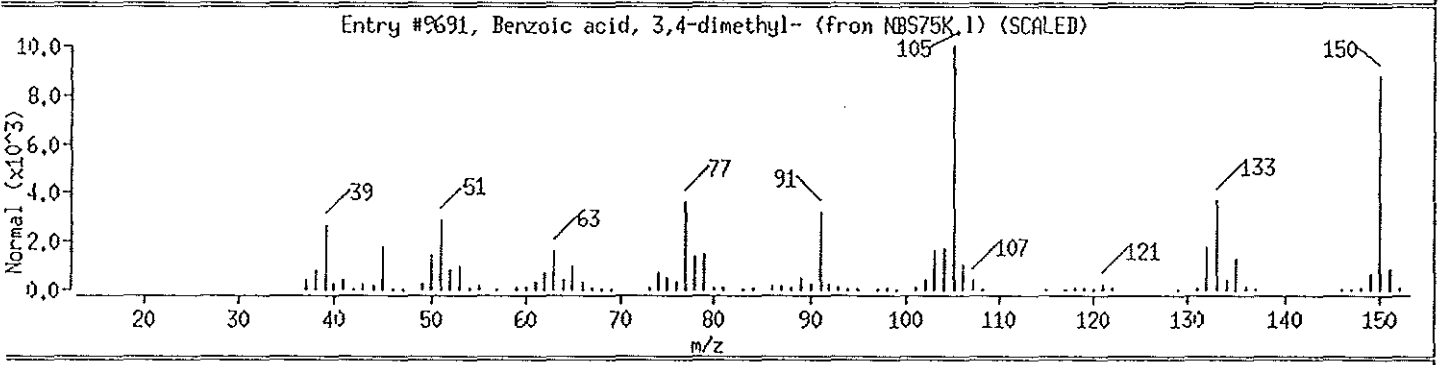
Column phase: J&W DB-5

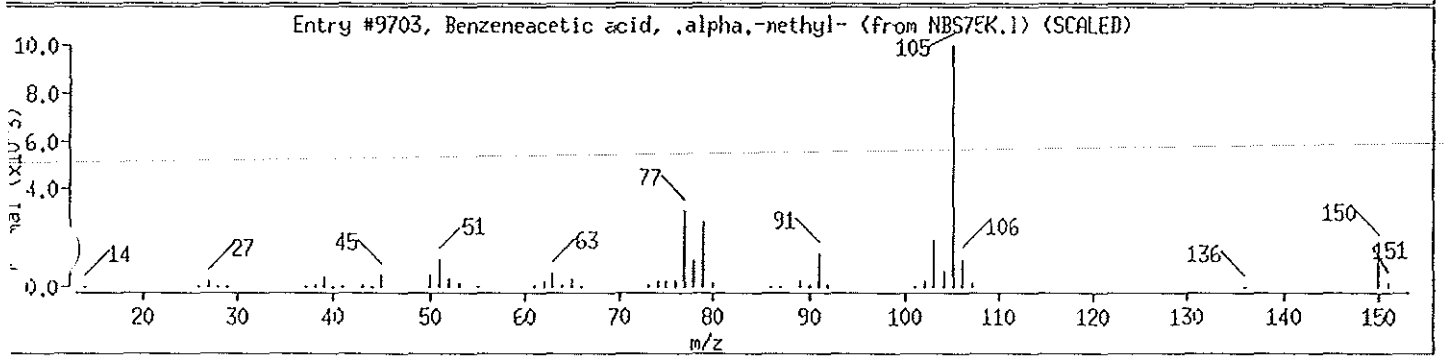
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzoic acid, 3,5-dimethyl-	499-06-9	NBS75K.l	66740	95	C9H10O2	150
Benzoic acid, 3,4-dimethyl-	619-04-5	NBS75K.l	9691	93	C9H10O2	150
Benzeneacetic acid, .alpha.-methyl-	492-37-5	NBS75K.l	9703	87	C9H10O2	150









Data File: /chem/aux/mse.i/e111695.b/e8076.d

Date : 16-NOV-95 20:12

Client ID: jp0325c

Instrument: mse.i

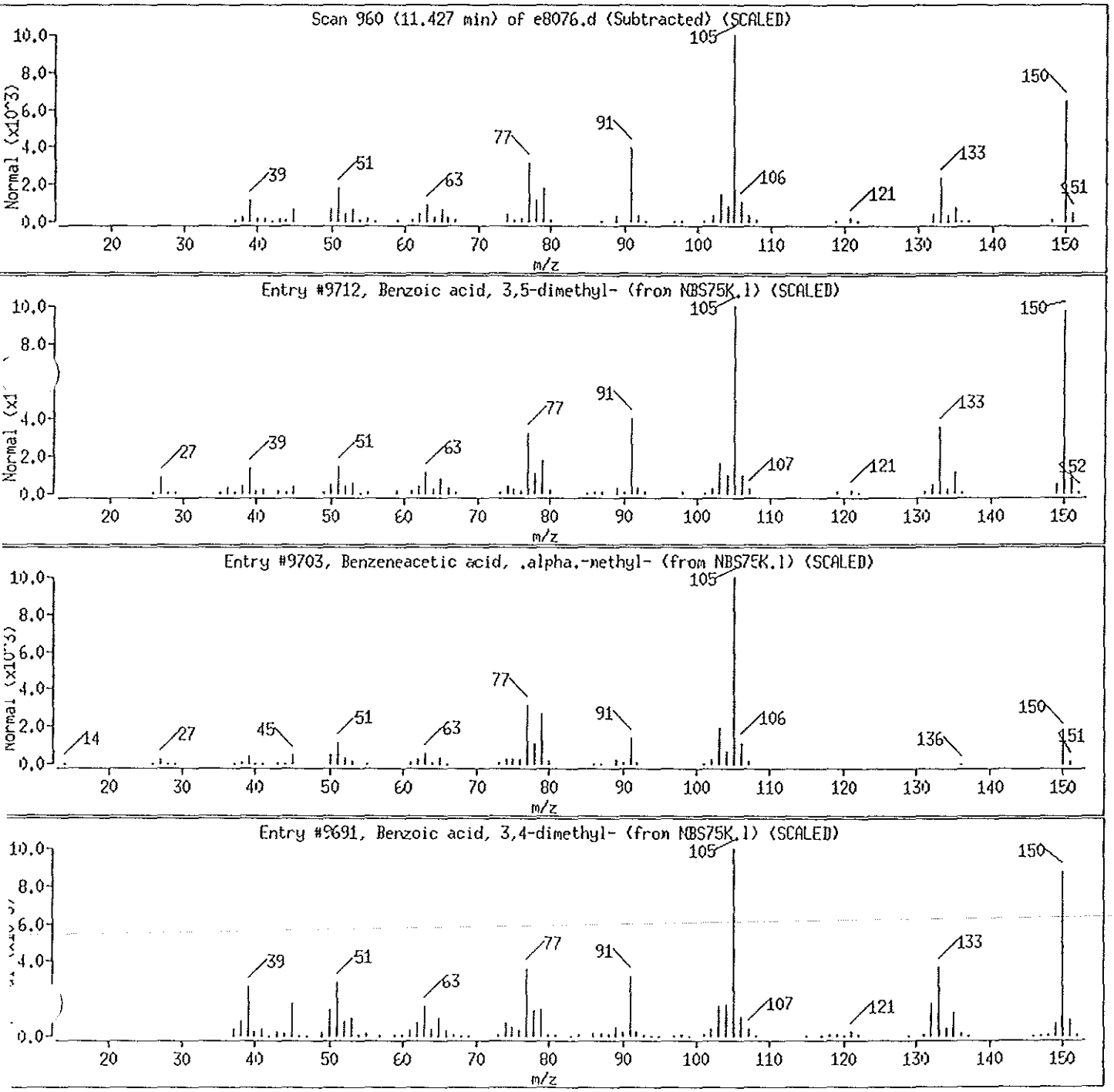
Sample Info: 17418n clj78tw02d

Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzoic acid, 3,5-dimethyl-	499-06-9	NBS75K.l	9712	97	C9H10O2	150
Benzeneacetic acid, .alpha.-methyl-	492-37-5	NBS75K.l	9703	89	C9H10O2	150
Benzoic acid, 3,4-dimethyl-	619-04-5	NBS75K.l	9691	87	C9H10O2	150



Data File: /chem/aux/mse.i/e111695.b/e8076.d

Date : 16-NOV-95 20:12

)ent ID: jp0325c

Instrument: mse.i

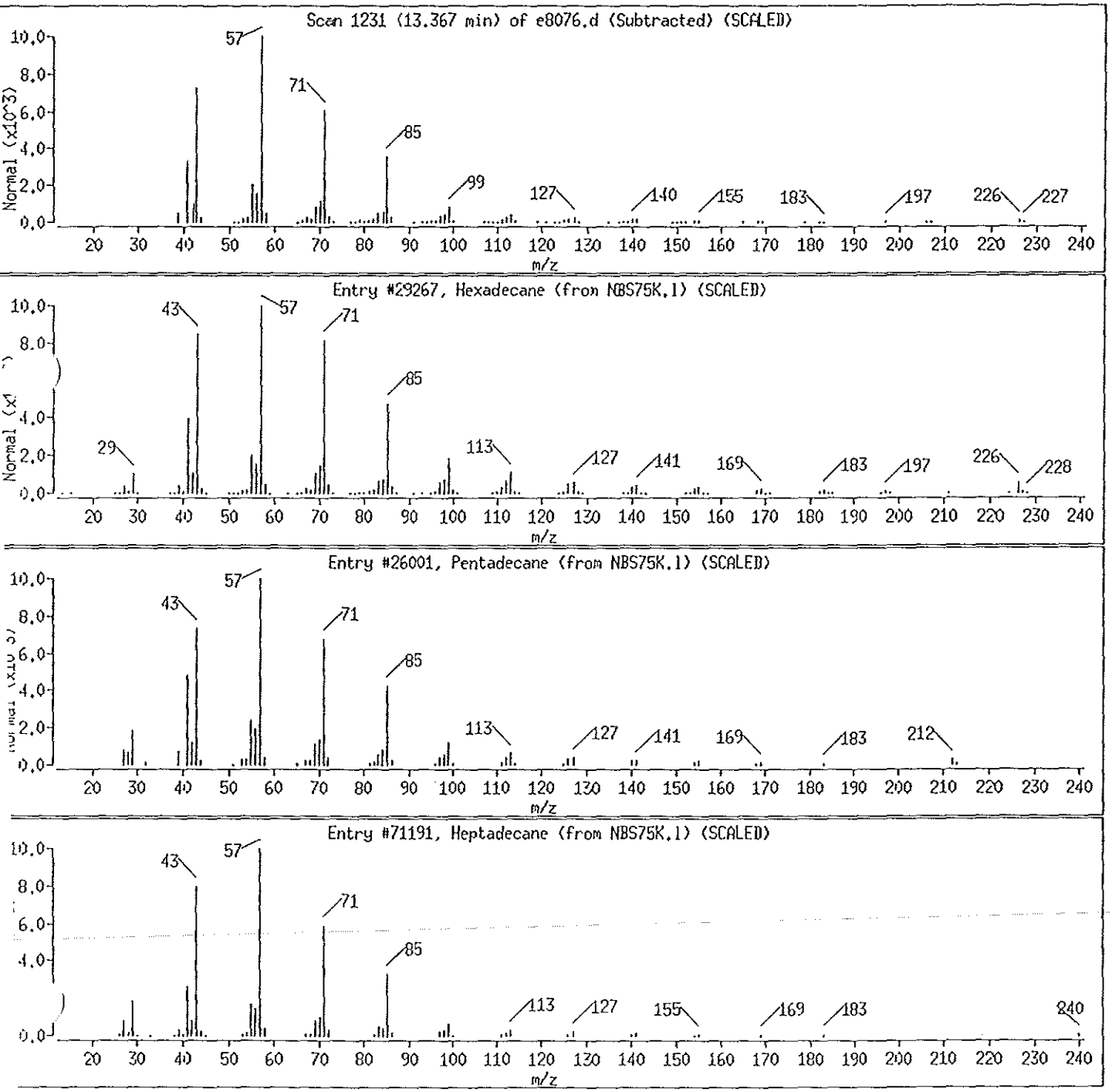
Sample Info: 17418n clj78tw02d

Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Hexadecane	544-76-3	NBS75K.1	29267	95	C16H34	226
Pentadecane	629-62-9	NBS75K.1	26001	91	C15H32	212
Heptadecane	629-78-7	NBS75K.1	71191	91	C17H36	240



Data File: /chem/aux/mse.i/e111695.b/e8076.d

Date : 16-NOV-95 20:12

ient ID: jp0325c

Instrument: mse.i

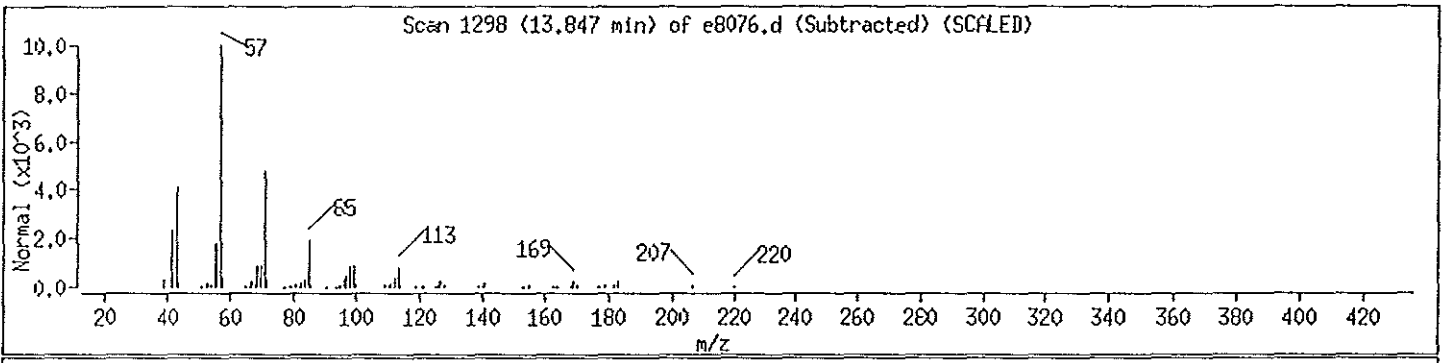
Sample Info: 17418n clj78tw02d

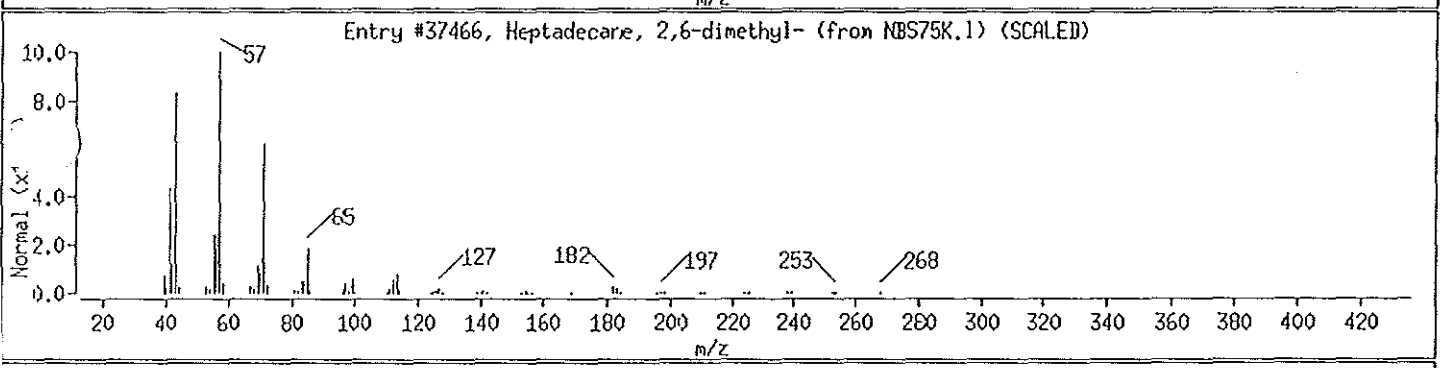
Operator: J. Kelly

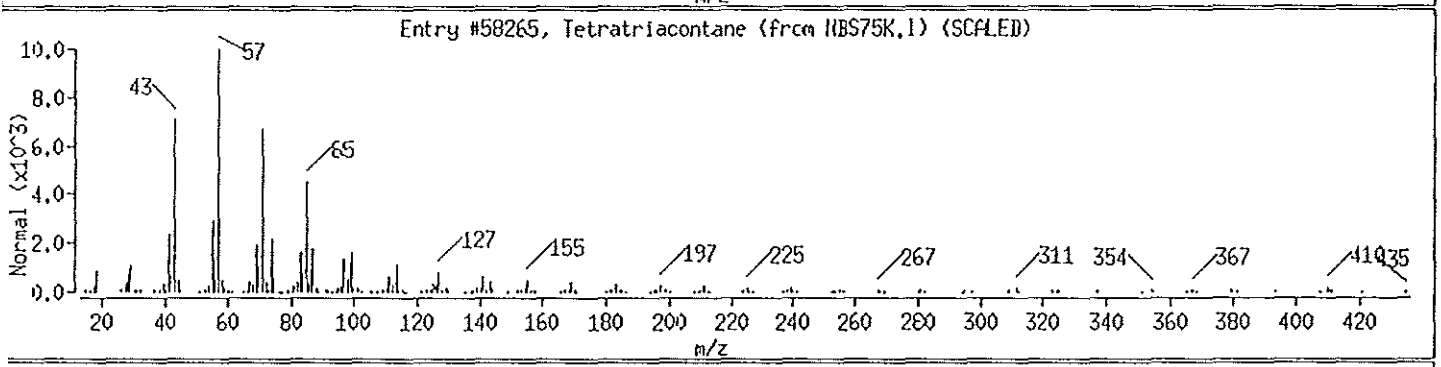
Column phase: J&W DB-5

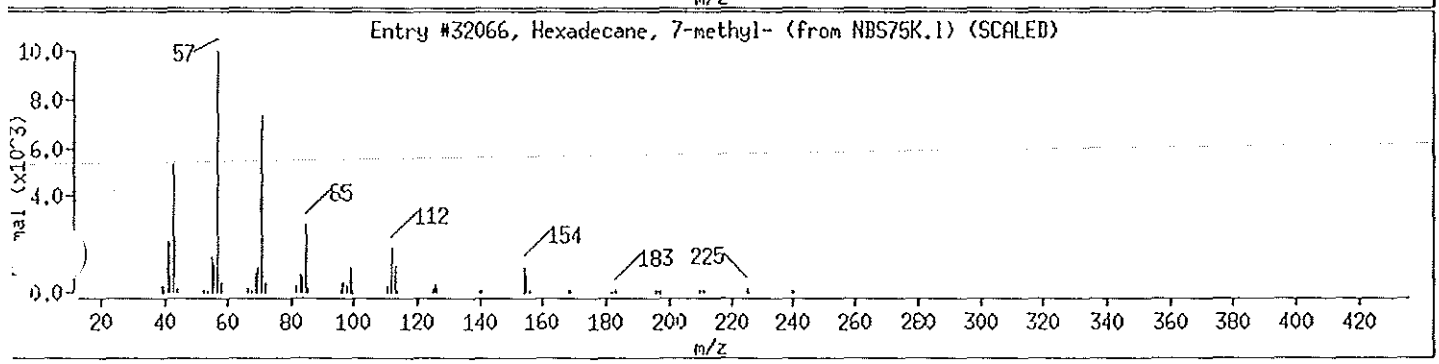
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Heptadecane, 2,6-dimethyl-	54105-67-8	NBS75K.1	37466	64	C19H40	268
Tetratriacontane	14167-59-0	NBS75K.1	58265	59	C34H70	479
Hexadecane, 7-methyl-	26730-20-1	NBS75K.1	32066	59	C17H36	240









Data File: /chem/aux/mse.i/e111695.b/e8076.d

Date : 16-NOV-95 20:12

ient ID: jp0325c

Instrument: mse.i

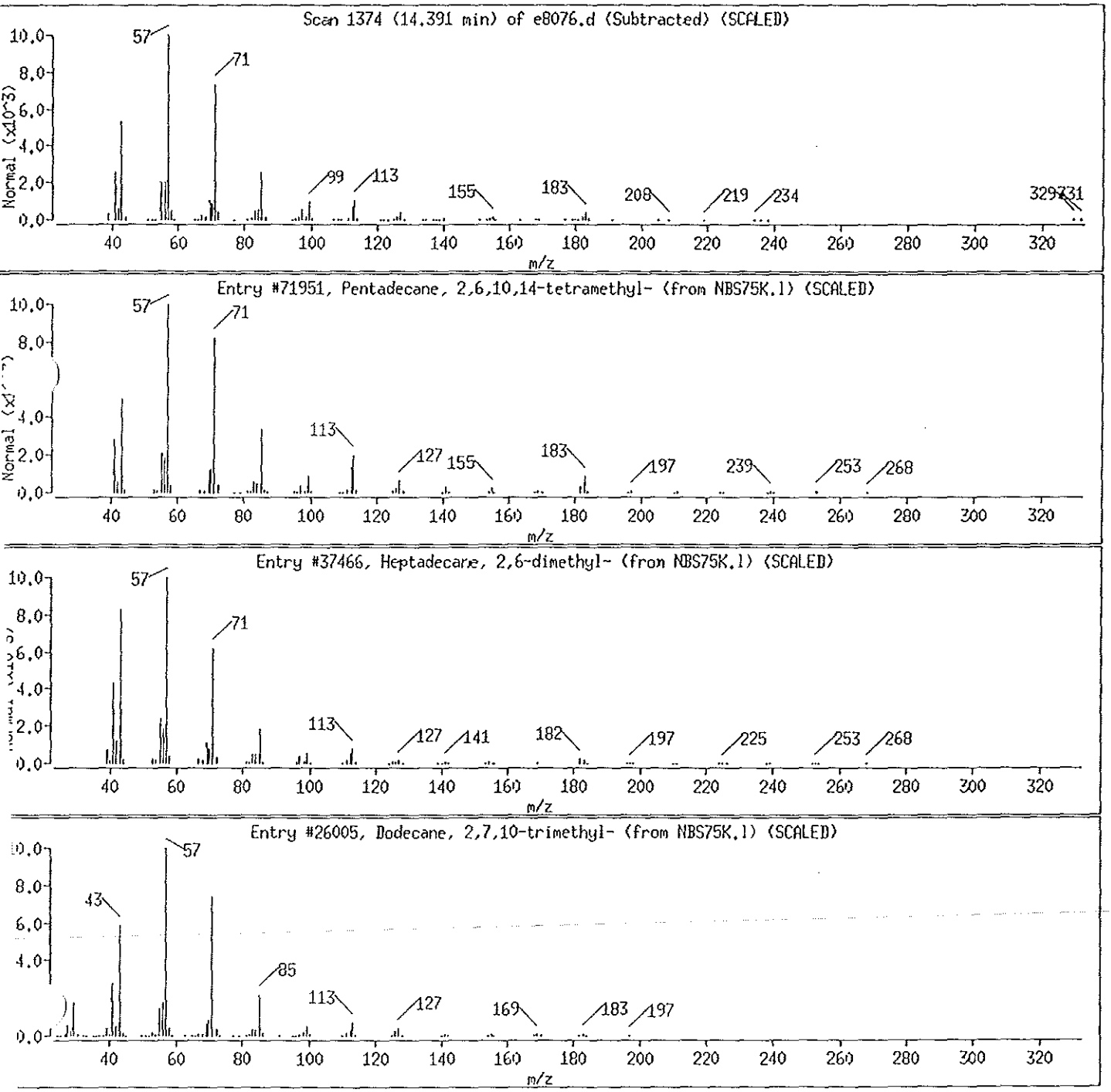
ample Info: 17418n clj78tw02d

Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Pentadecane, 2,6,10,14-tetramethyl-	1921-70-6	NBS75K.l	71951	90	C19H40	268
Heptadecane, 2,6-dimethyl-	54105-67-8	NBS75K.l	37466	90	C19H40	268
Dodecane, 2,7,10-trimethyl-	74645-98-0	NBS75K.l	26005	86	C15H32	212



Data File: /chem/aux/mse.i/e111695.b/e8076.d

Date : 16-NOV-95 20:12

Client ID: jp0325c

Instrument: mse.i

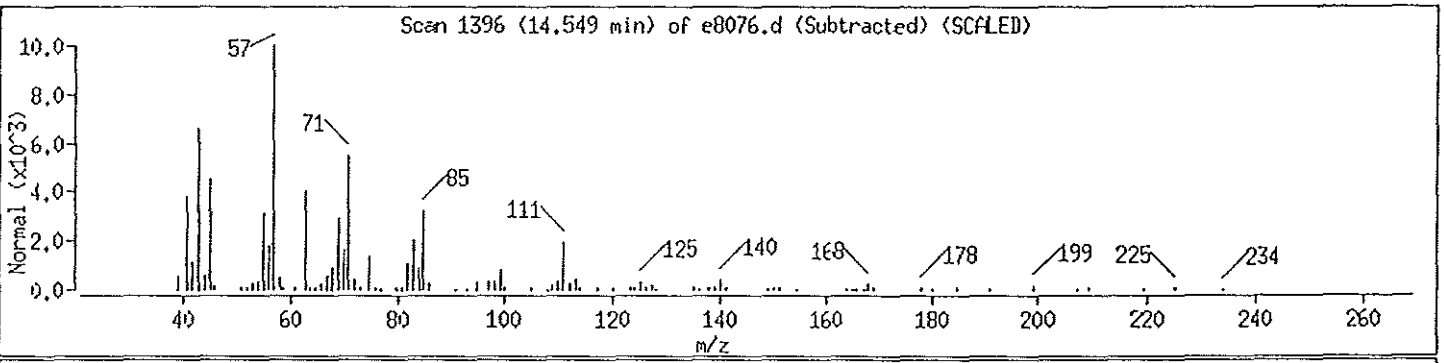
Sample Info: 17418n clj78tw02d

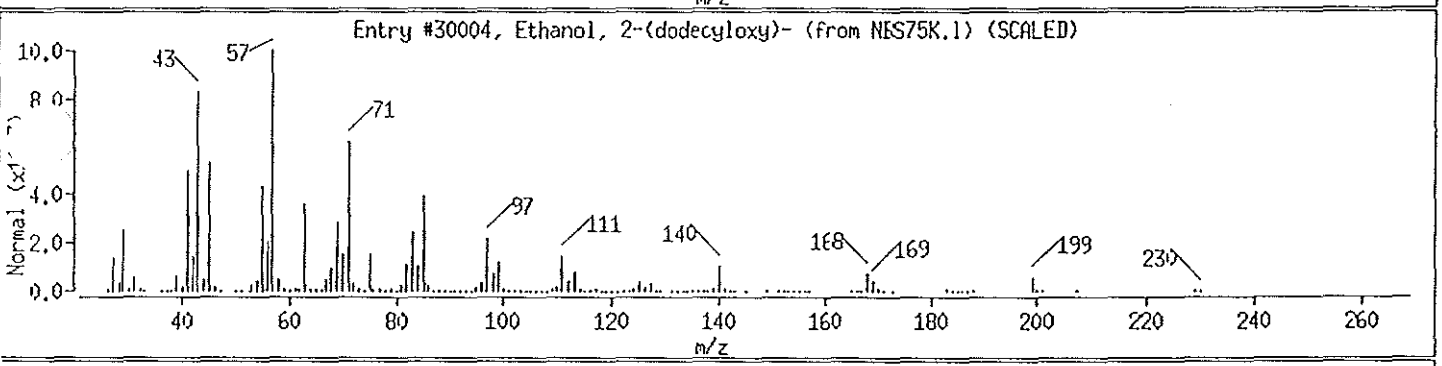
Operator: J. Kelly

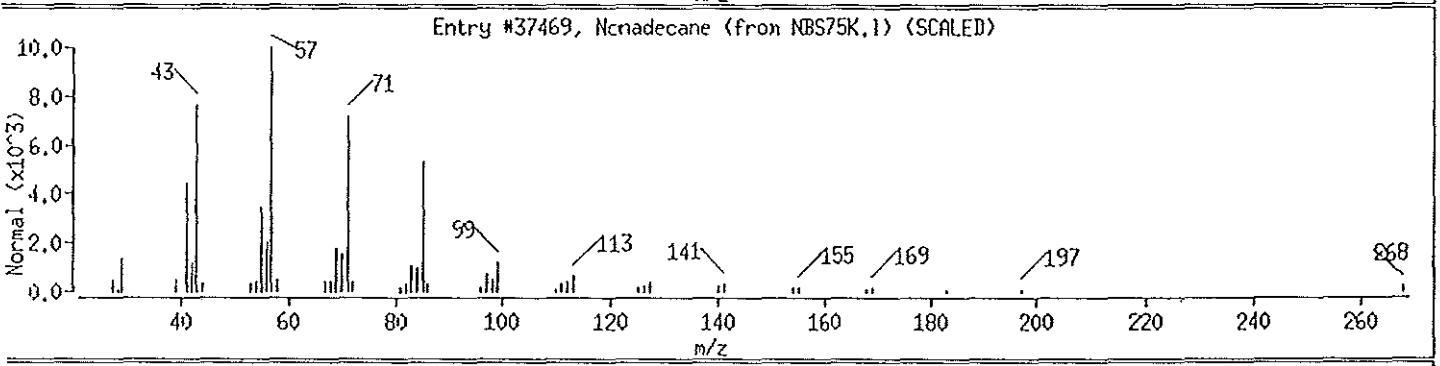
Column phase: J&W DB-5

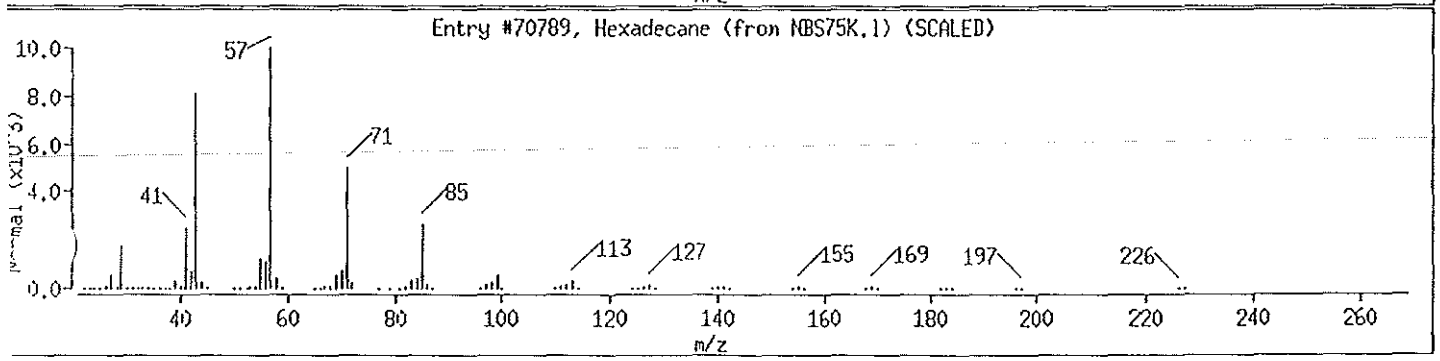
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethanol, 2-(dodecyloxy)-	4536-30-5	NBS75K.l	30004	38	C14H30O2	230
Nonadecane	629-92-5	NBS75K.l	37469	11	C19H40	268
Hexadecane	544-76-3	NBS75K.l	70789	11	C16H34	226









Data File: /chem/aux/mse.i/e111695.b/e8076.d

Date : 16-NOV-95 20:12

)ient ID: jp0325c

Instrument: mse.i

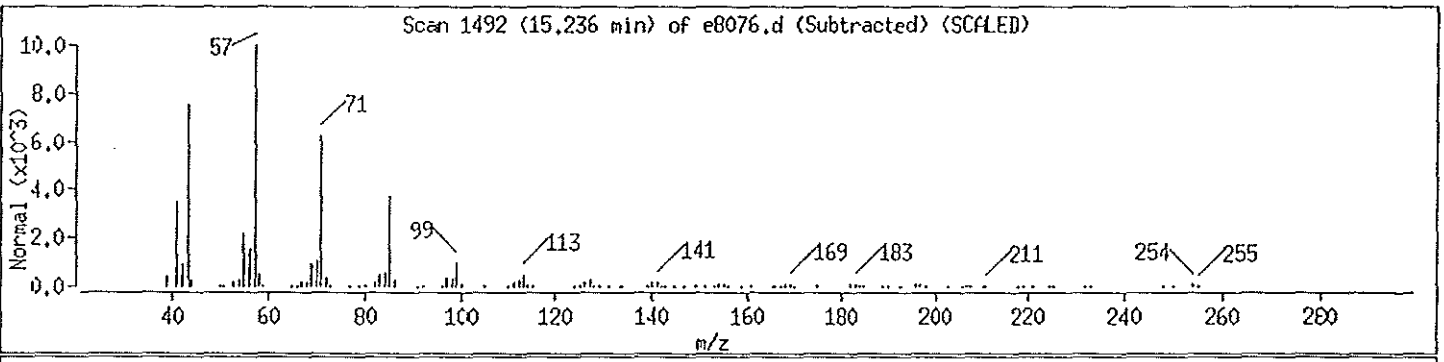
Sample Info: 17418n clj78tw02d

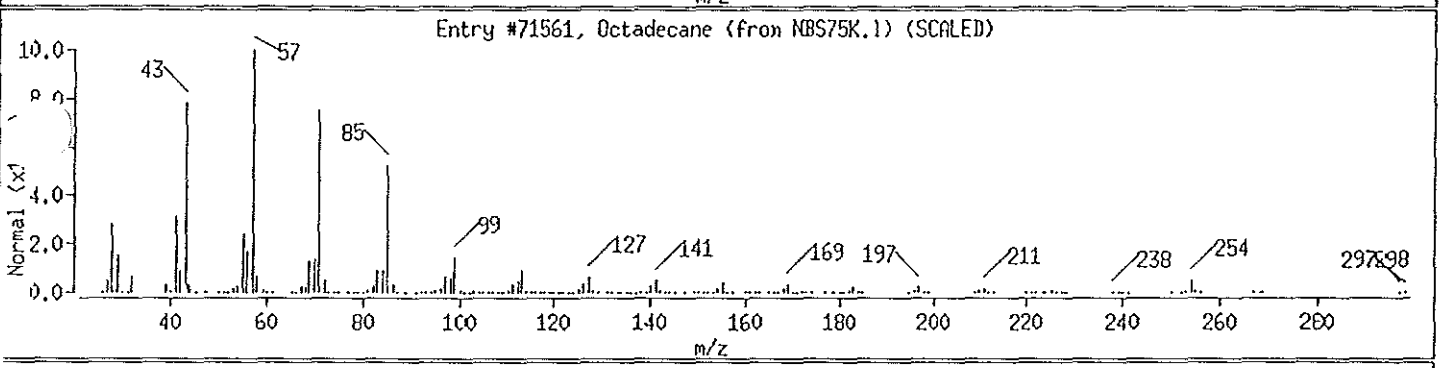
Operator: J. Kelly

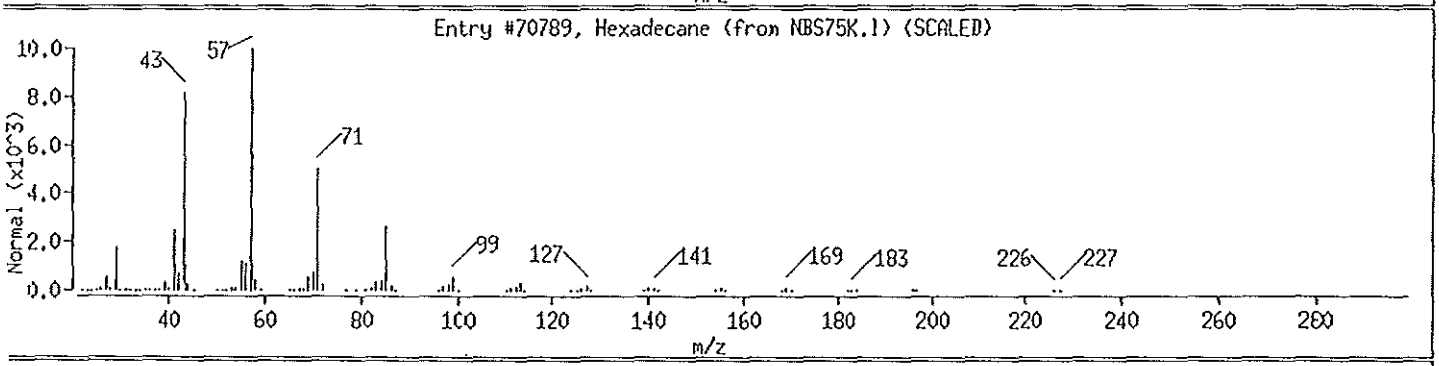
Column phase: J&W DB-5

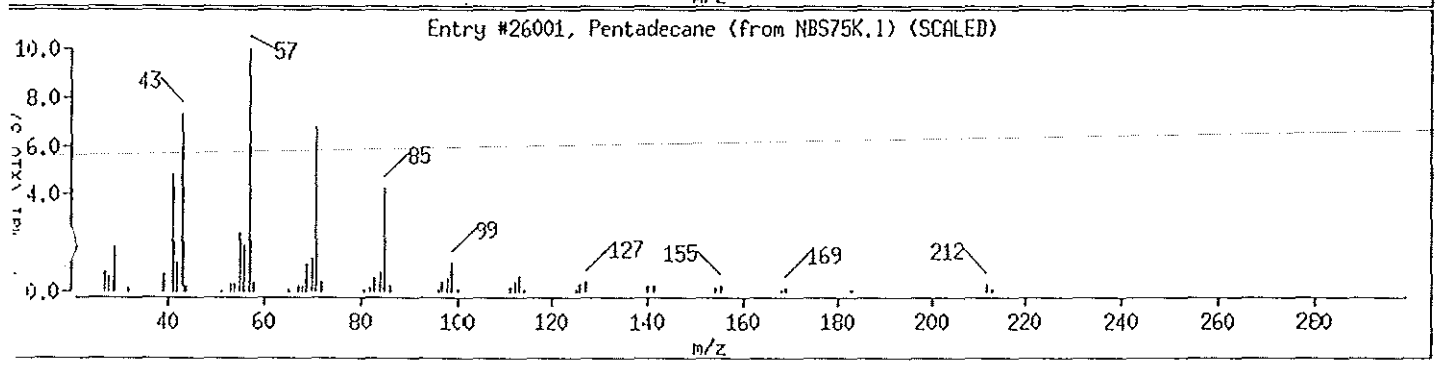
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Octadecane	593-45-3	NBS75K.l	71561	97	C18H38	254
Hexadecane	544-76-3	NBS75K.l	70789	91	C16H34	226
Pentadecane	629-62-9	NBS75K.l	26001	90	C15H32	212









Data File: /chem/aux/mse.i/e111695.b/e8076.d

Date : 16-NOV-95 20:12

)ent ID: jp0325c

Instrument: mse.i

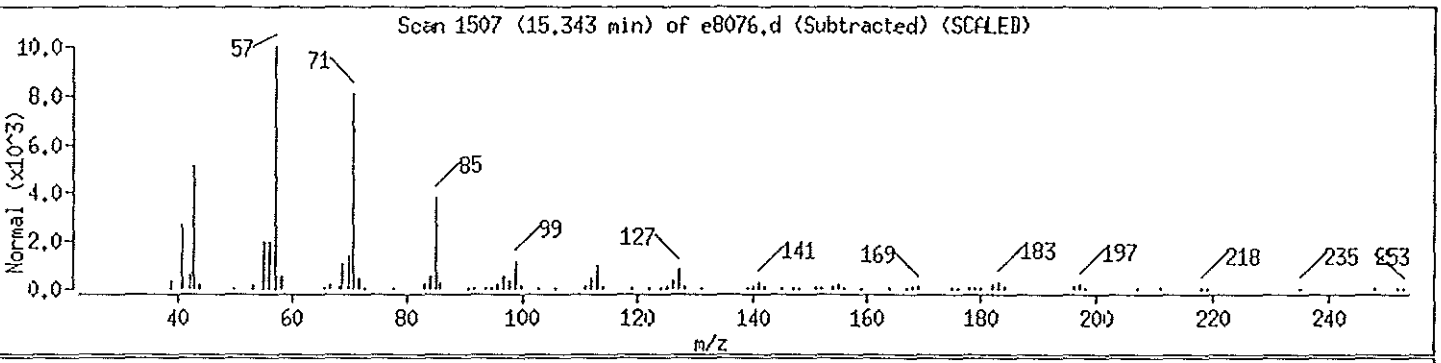
Sample Info: 17418n clj78tw02d

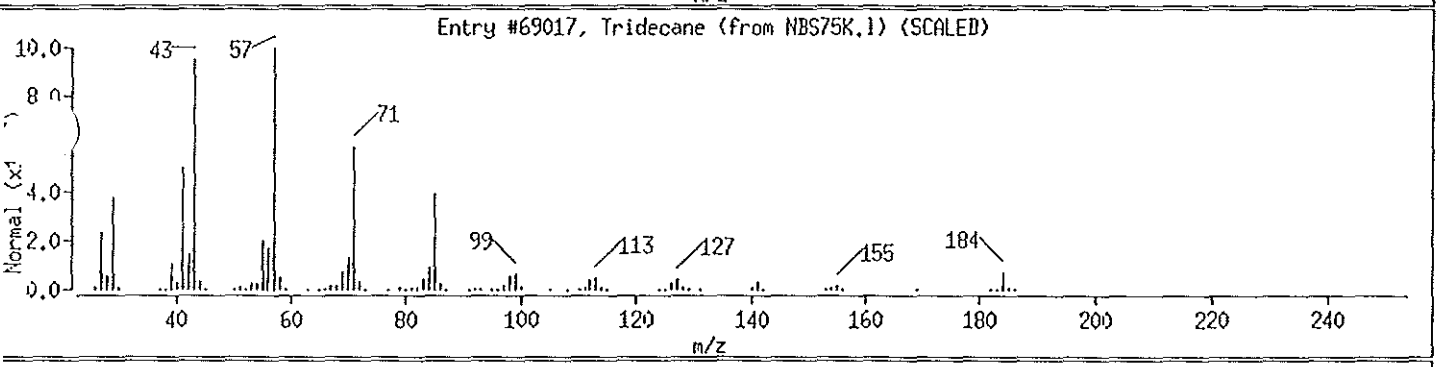
Operator: J. Kelly

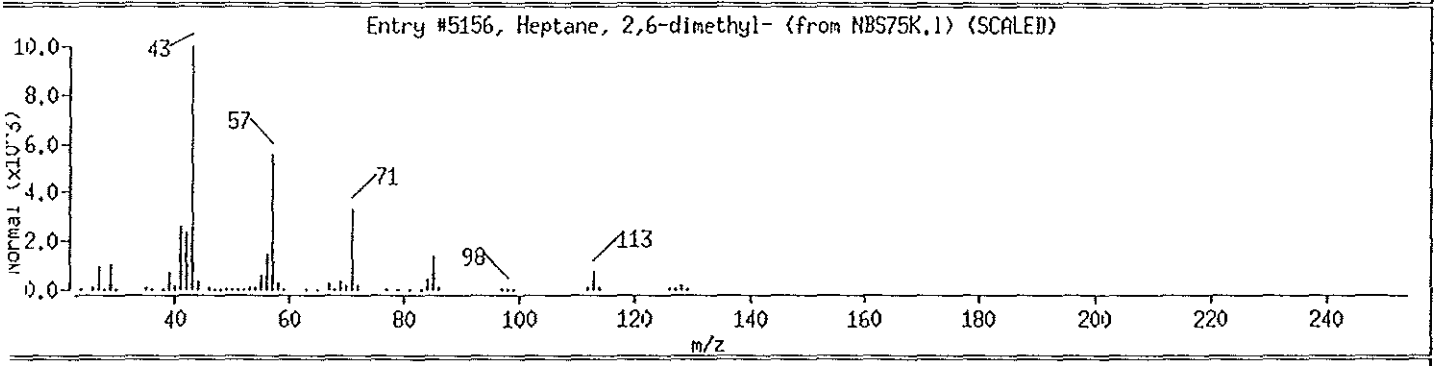
Column phase: J&W DB-5

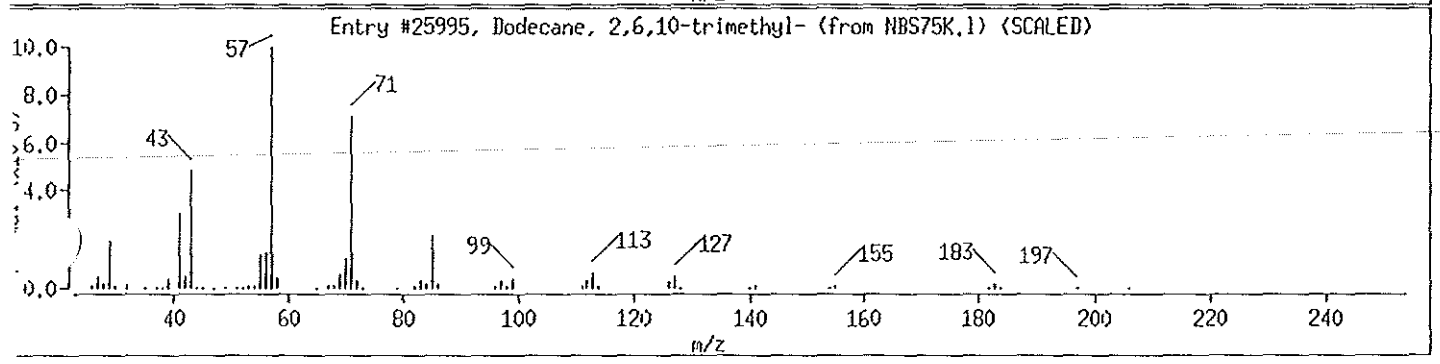
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Tridecane	629-50-5	NBS75K.l	69017	83	C13H28	184
Heptane, 2,6-dimethyl-	1072-05-5	NBS75K.l	5156	80	C9H20	128
Dodecane, 2,6,10-trimethyl-	3891-98-3	NBS75K.l	25995	80	C15H32	212









Data File: /chem/aux/mse.i/e111695.b/e8076.d

Date : 16-NOV-95 20:12

ent ID: jp0325c

Instrument: mse.i

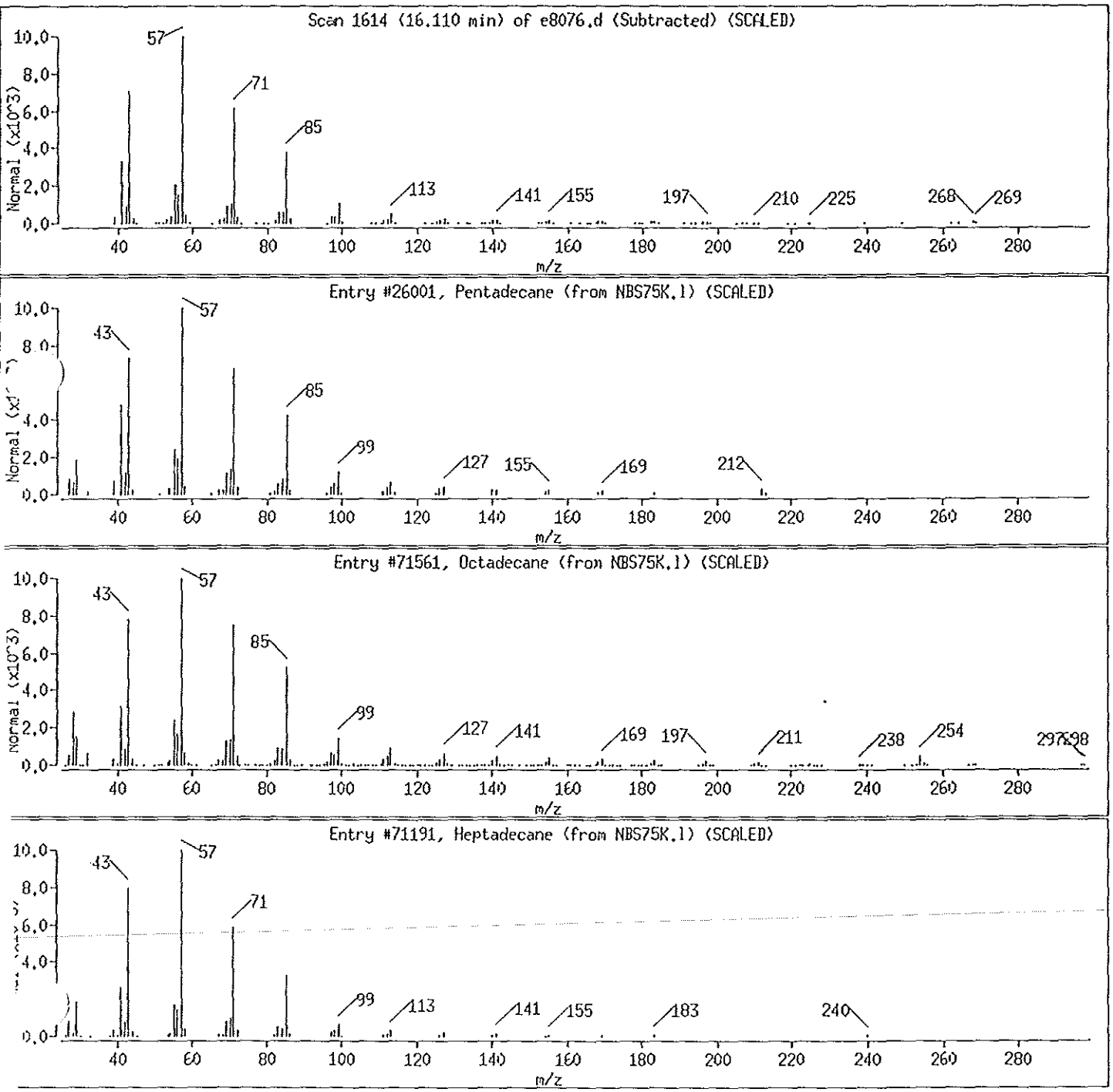
Sample Info: 17418n clj78tw02d

Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Pentadecane	629-62-9	NBS75K.l	26001	91	C15H32	212
Octadecane	593-45-3	NBS75K.l	71561	91	C18H38	254
Heptadecane	629-78-7	NBS75K.l	71191	91	C17H36	240



Data File: /chem/aux/mse.i/e111695.b/e8076.d

Date : 16-NOV-95 20:12

Client ID: jp0325c

Instrument: mse.i

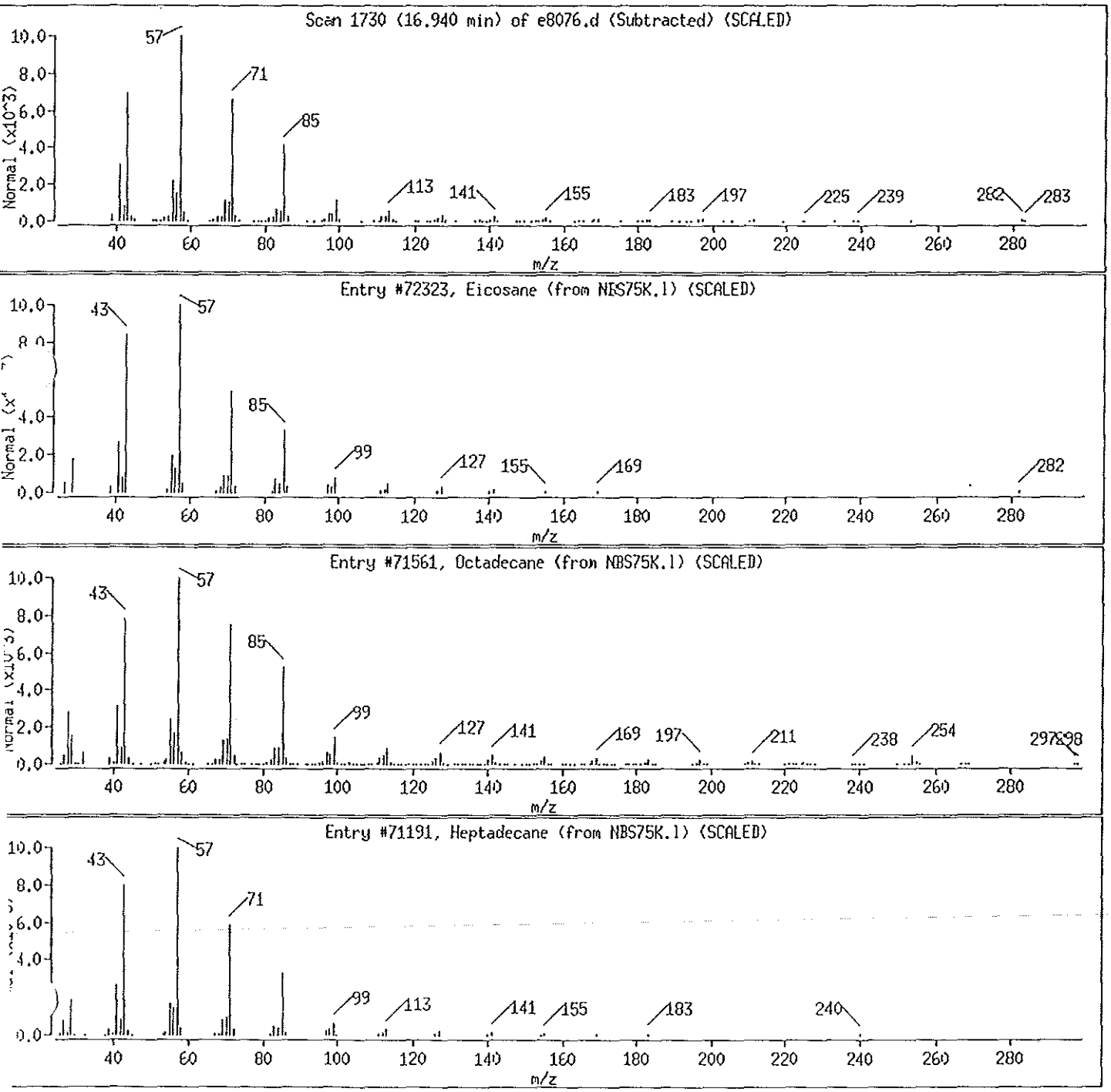
Sample Info: 17418n clj78tw02d

Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NBS75K.1	72323	98	C20H42	282
Octadecane	593-45-3	NBS75K.1	71561	91	C18H38	254
Heptadecane	629-78-7	NBS75K.1	71191	91	C17H36	240



Data File: /chem/aux/mse.i/e111695.b/e8076.d

Date : 16-NOV-95 20:12

Client ID: jp0325c

Sample Info: 17418n clj78tw02d

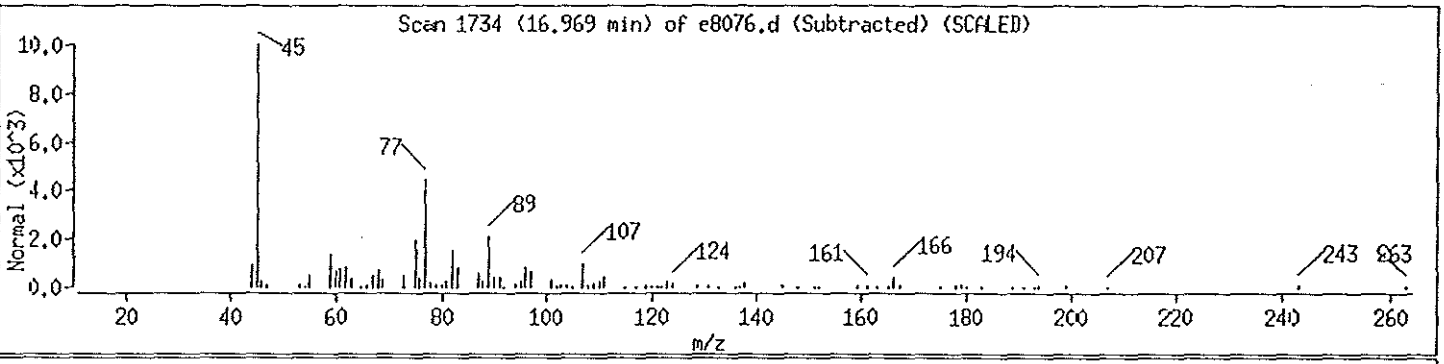
Instrument: mse.i

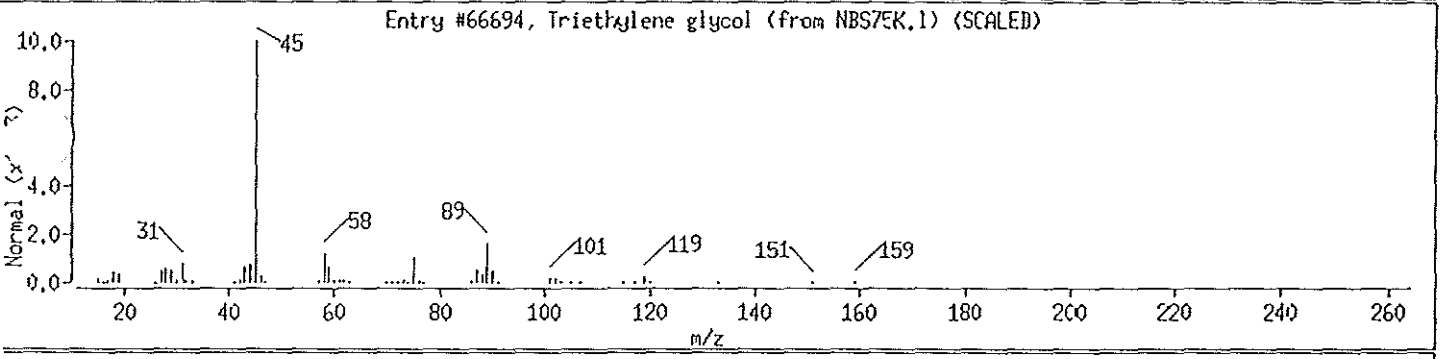
Operator: J. Kelly

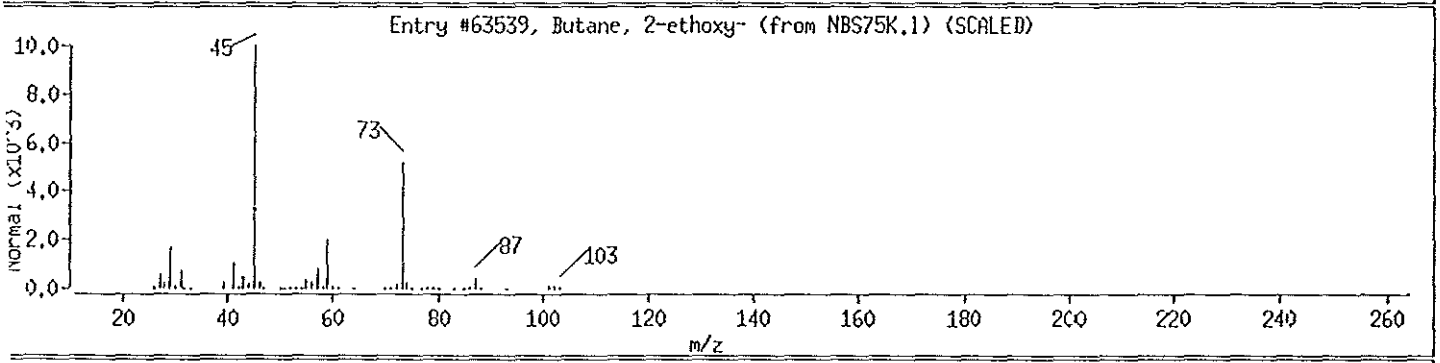
Column phase: J&W DB-5

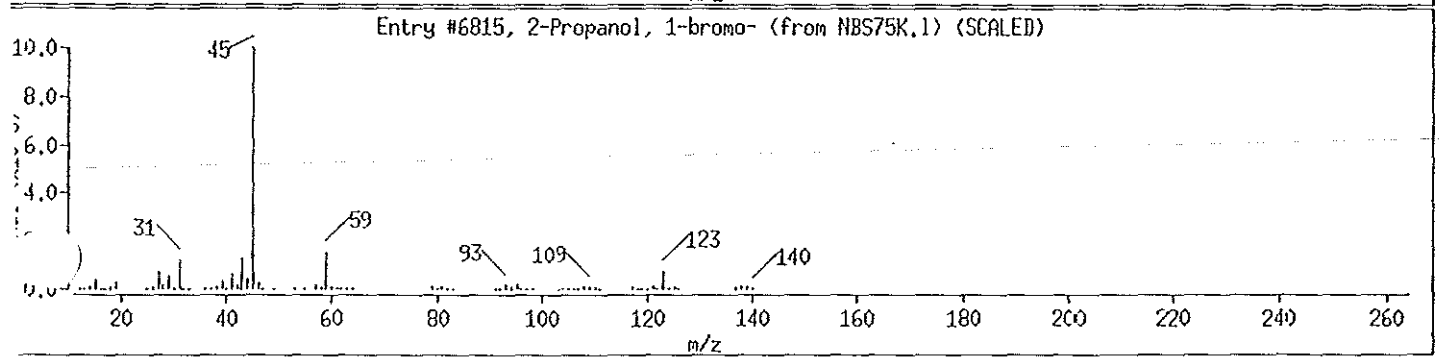
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Triethylene glycol	112-27-6	NBS75K.l	66694	38	C6H14O4	150
Butane, 2-ethoxy-	2679-87-0	NBS75K.l	63539	35	C6H14O	102
2-Propanol, 1-bromo-	19686-73-8	NBS75K.l	6815	35	C3H7BrO	138









Data File: /chem/aux/mse.i/e111695.b/e8076.d

Date : 16-NOV-95 20:12

Client ID: jp0325c

Sample Info: 17418n clj78tw02d

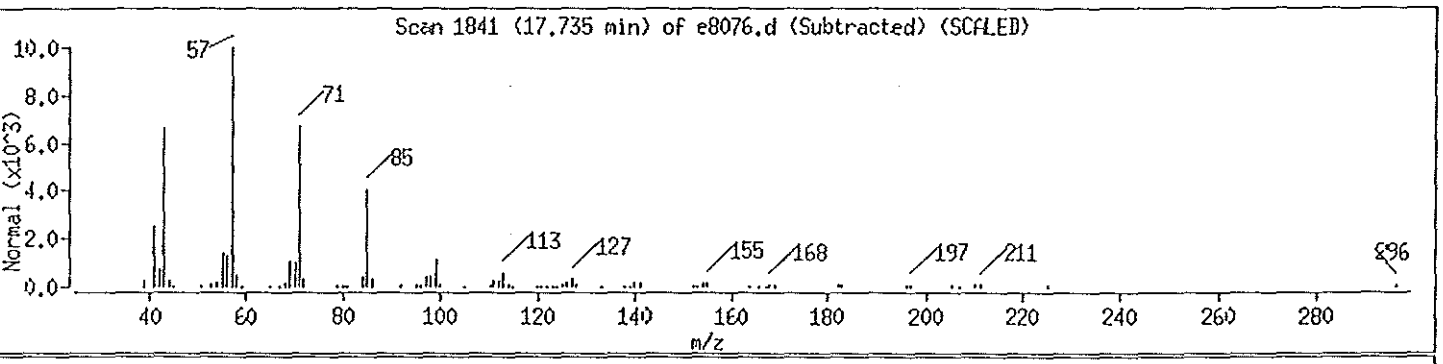
Instrument: mse.i

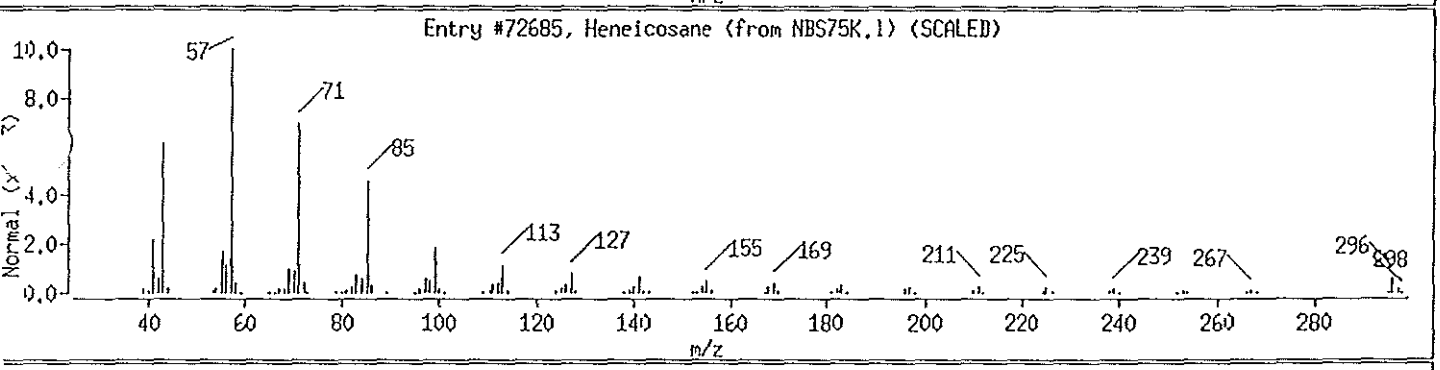
Operator: J. Kelly

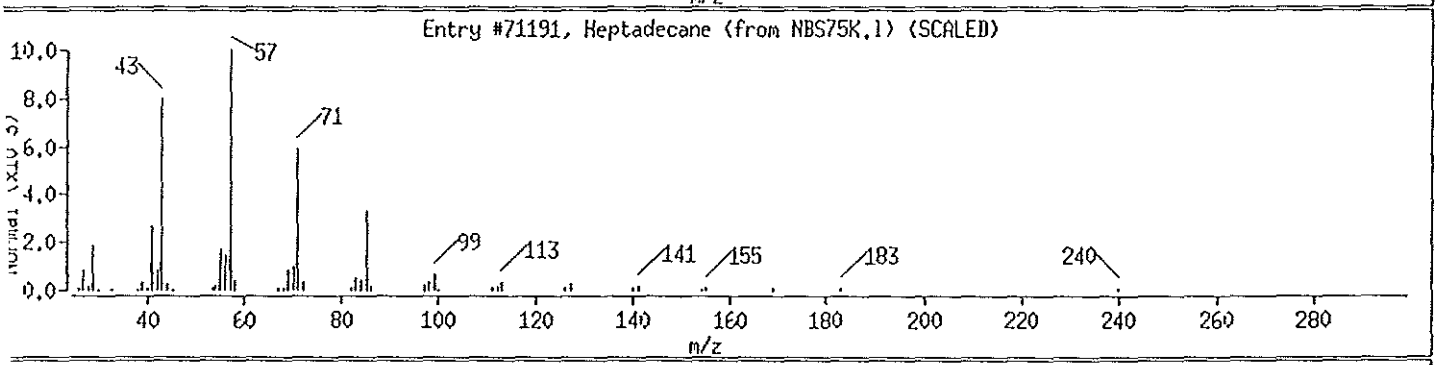
Column phase: J&W DB-5

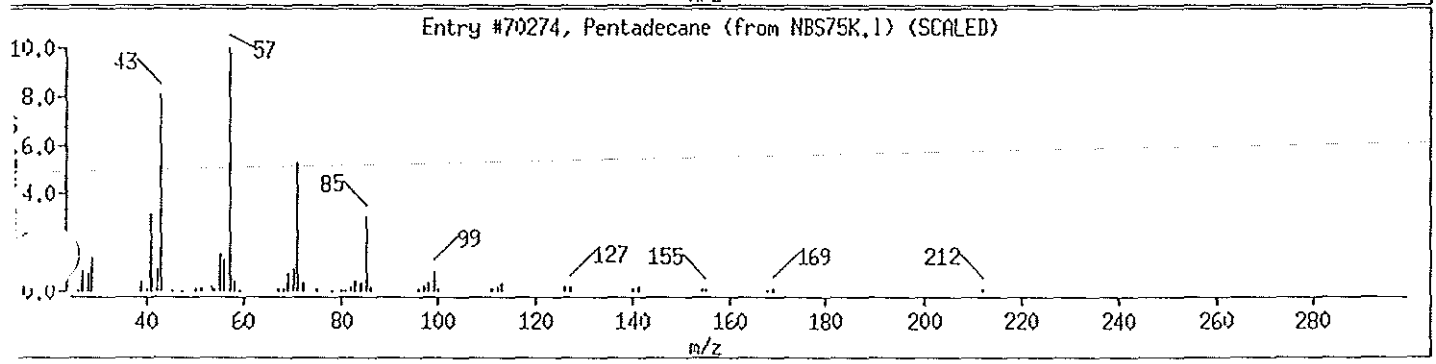
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Heneicosane	629-94-7	NBS75K.l	72685	95	C21H44	296
Heptadecane	629-78-7	NBS75K.l	71191	91	C17H36	240
Pentadecane	629-62-9	NBS75K.l	70274	90	C15H32	212









Data File: /chem/aux/mse.i/e111695.b/e8076.d

Date : 16-NOV-95 20:12

Client ID: jp0325c

Sample Info: 17418n clj78tw02d

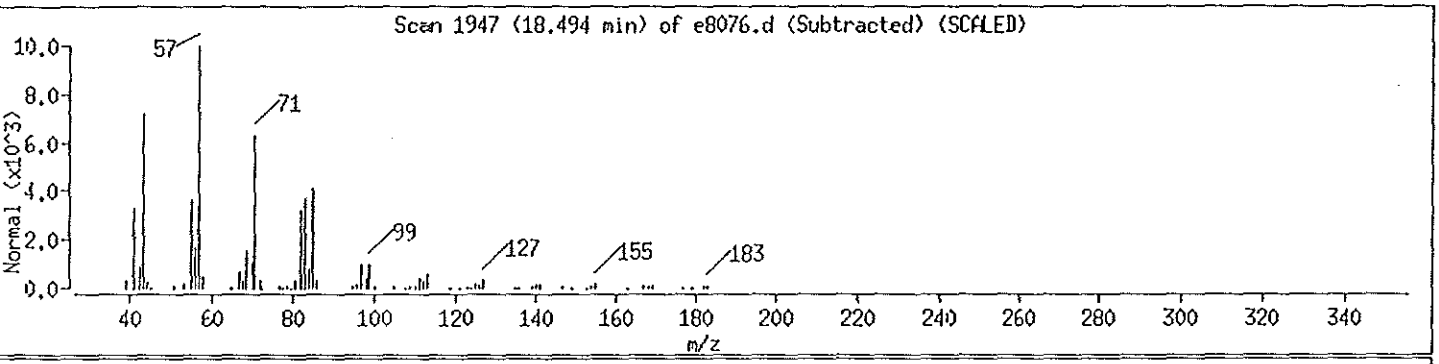
Instrument: mse.i

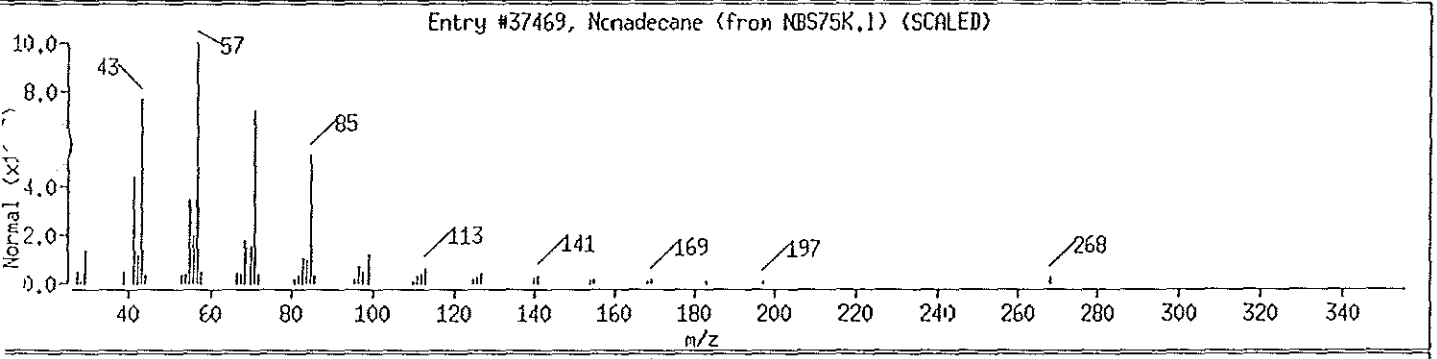
Operator: J. Kelly

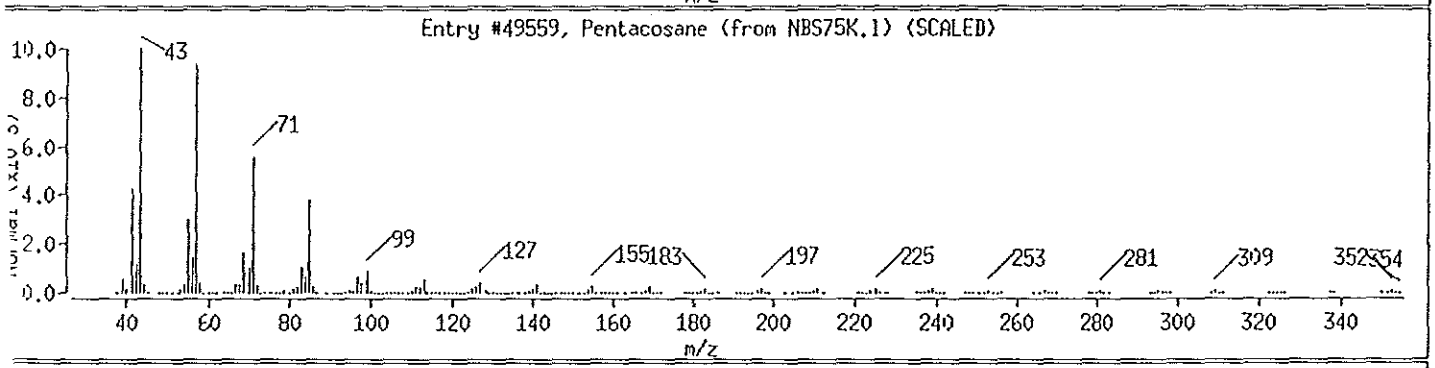
Column phase: J&W DB-5

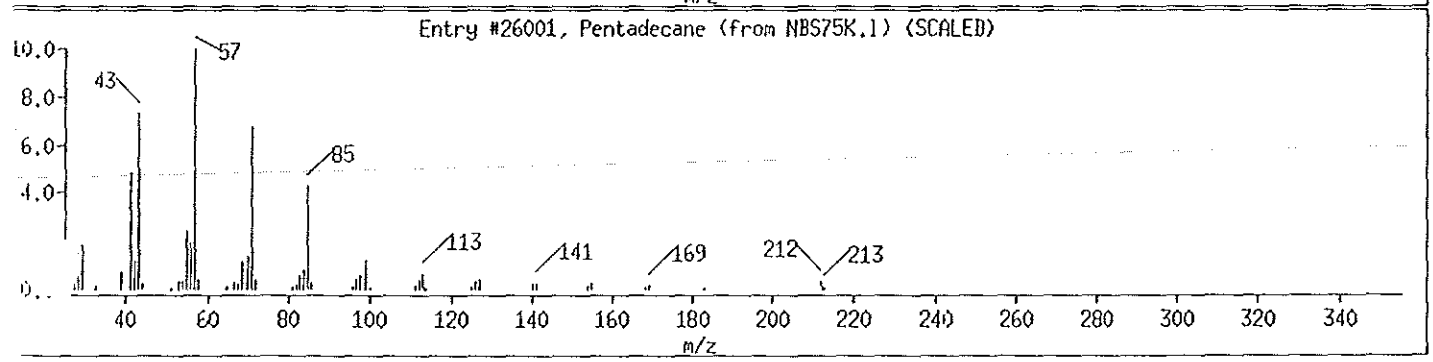
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Nonadecane	629-92-5	NBS75K.1	37469	76	C19H40	268
Pentacosane	629-99-2	NBS75K.1	49559	64	C25H52	352
Pentadecane	629-62-9	NBS75K.1	26001	62	C15H32	212









Data File: /chem/aux/mse.i/e111695.b/e8076.d

Date : 16-NOV-95 20:12

Client ID: jp0325c

Instrument: mse.i

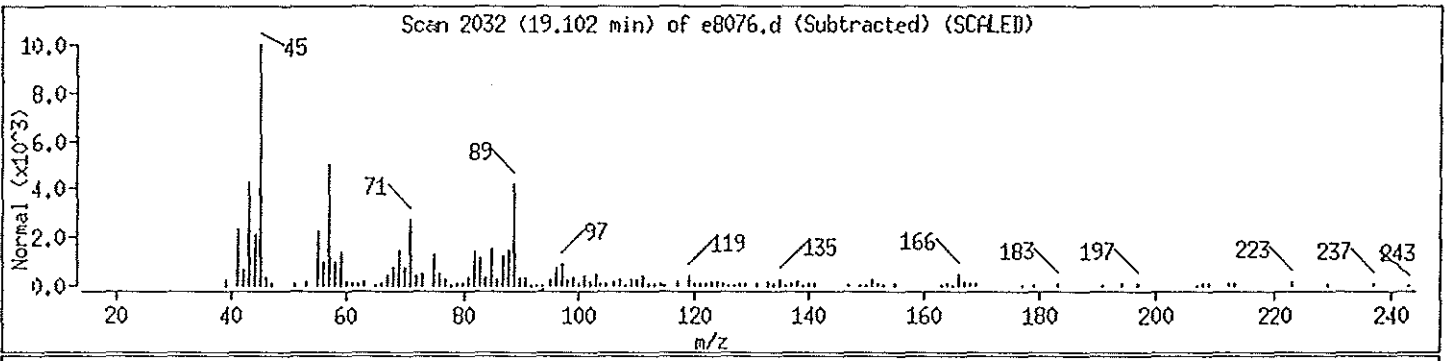
Sample Info: 17418n clj78tw02d

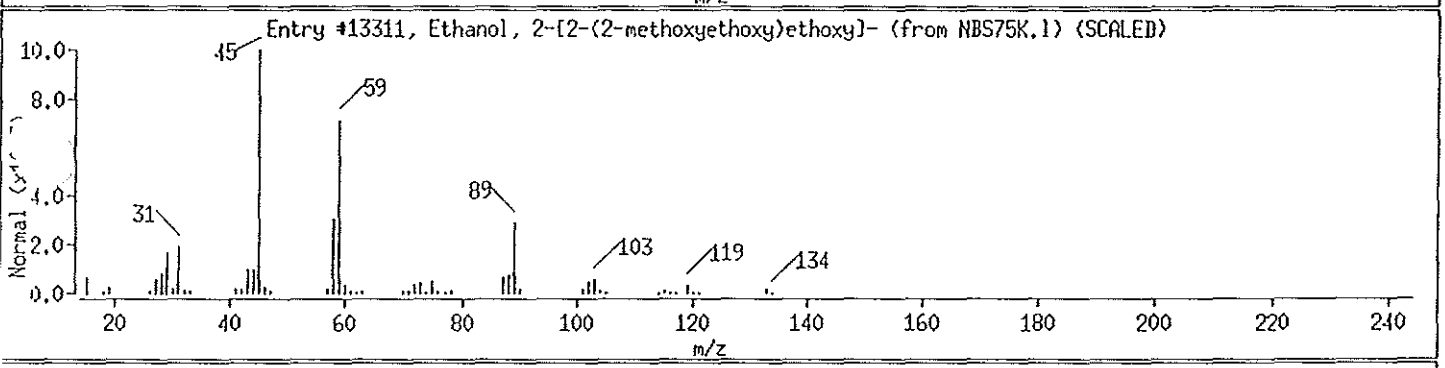
Operator: J. Kelly

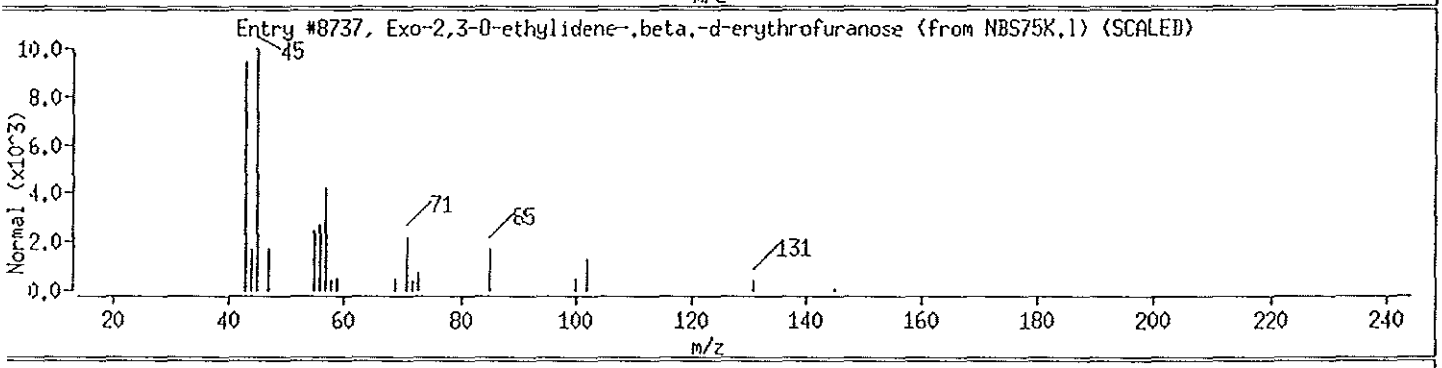
Column phase: J&W DB-5

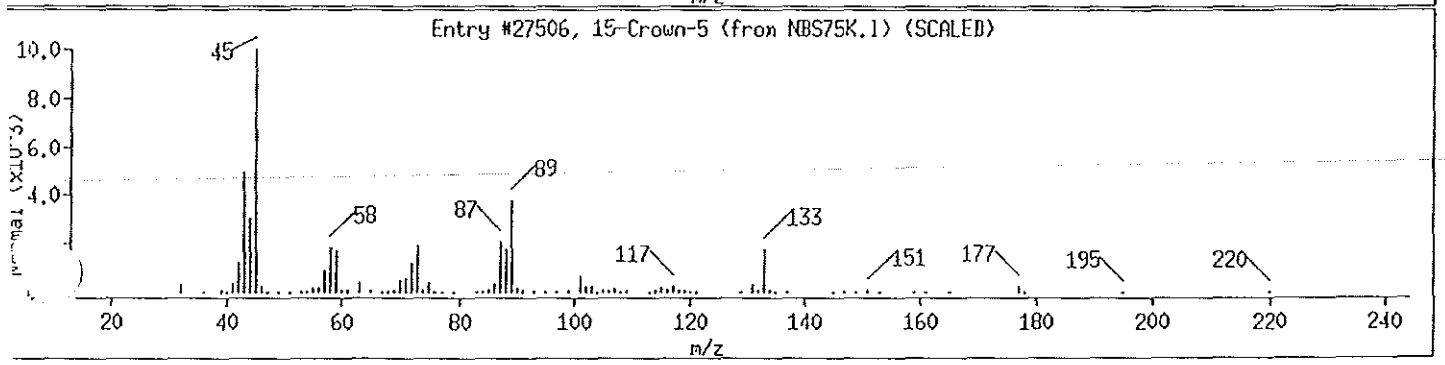
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethanol, 2-[2-(2-methoxyethoxy)ethoxy]-	112-35-6	NBS75K.l	13311	53	C7H16O4	164
Exo-2,3-O-ethylidene-.beta.-d-erythrofur	0-00-0	NBS75K.l	8737	40	C6H10O4	146
15-Crown-5	33100-27-5	NBS75K.l	27506	38	C10H20O5	220









OHM Analytical Division

INITIAL CALIBRATION DATA

Start Cal Date : 08-NOV-95 16:57
End Cal Date : 08-NOV-95 16:57
Quant Method : ISTD
Cal Curve Type : Averaged
Target Version : Target 3.00
Integrator : HP RTE
Method file : /chem/msb.i/b110895.b/110895bclp.m
Cal Date : 09-Nov-1995 18:00

Calibration File Names:
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Level 2: /chem/msb.i/b110895.b/b8734a.d
Level 3: /chem/msb.i/b110895.b/b8735a.d
Level 4: /chem/msb.i/b110895.b/b8736a.d
Level 5: /chem/msb.i/b110895.b/b8737a.d

Compound	20 Level 1	50 Level 2	80 Level 3	120 Level 4	160 Level 5	RRF	% RSD/R^2	
N-Nitrosodimethylamine	0.84817	0.92898	0.95819	1.01837	1.04546	0.95984	8.101	
Pyridine	1.39893	1.54098	1.57956	1.63932	1.69785	1.57133	7.210	
5 Phenol	1.58232	1.74684	1.70850	1.72265	1.58243	1.66855	4.786	
6 bis(2-Chloroethyl)ether	3.24193	3.60517	3.42424	3.01065	2.53451	3.16330	13.113	
8 2-Chlorophenol	1.30999	1.45368	1.39317	1.38040	1.33812	1.37507	4.006	
9 1,3-Dichlorobenzene	1.42996	1.58153	1.54854	1.53733	1.47391	1.51425	4.039	
11 1,4-Dichlorobenzene	1.43990	1.58890	1.48349	1.50295	1.44609	1.49226	4.021	
12 2-Methylphenol	1.07753	1.20097	1.19078	1.19759	1.20449	1.17427	4.626	
14 1,2-Dichlorobenzene	1.33068	1.41979	1.28045	1.21965	1.09350	1.26881	9.645	
15 2,2'-oxybis(1-Chloropropene)	2.01184	2.19745	2.15288	2.20171	2.14163	2.14110	3.595	
16 4-Methylphenol	1.10878	1.28551	1.25409	1.29233	1.30233	1.24861	6.425	
17 N-Nitroso-di-n-propylamine	1.09805	1.23124	1.23604	1.26981	1.30287	1.22760	6.351	
18 Hexachloroethane	0.58723	0.69670	0.66815	0.67987	0.68337	0.66306	6.575	
20 Nitrobenzene	0.40150	0.46710	0.44725	0.45154	0.39860	0.43320	7.195	
21 Isophorone	0.91102	1.05660	0.98543	0.84317	0.69682	0.89861	15.384	
22 2,4-Dimethylphenol	0.39015	0.43300	0.41368	0.40875	0.38074	0.40527	5.060	
23 2-Nitrophenol	0.19424	0.24358	0.23440	0.22952	0.22512	0.22537	8.299	
24 bis(2-Chloroethoxy)methane	0.54307	0.60612	0.57903	0.55006	0.46047	0.54775	10.012	
25 2,4-Dichlorophenol	0.29578	0.33798	0.31974	0.31904	0.29802	0.31411	5.561	
26 1,2,4-Trichlorobenzene	0.33373	0.38271	0.34772	0.33743	0.30800	0.34192	7.923	
28 Naphthalene	0.97360	1.05877	0.95374	0.75157	0.57490	0.86252	22.764	<-
29 4-Chloroaniline	0.59571	0.65407	0.60503	0.56482	0.47980	0.57988	11.120	
30 Hexachlorobutadiene	0.20569	0.20834	0.20313	0.19392	0.16947	0.19611	8.082	
31 4-Chloro-3-methylphenol	0.33173	0.38419	0.37410	0.37830	0.35037	0.36374	6.056	
32 2-Methylnaphthalene	0.62248	0.67690	0.64265	0.60106	0.49857	0.60833	11.082	
1-Methylnapthalene	0.62740	0.67716	0.65147	0.60539	0.50465	0.61321	10.818	
Hexachlorocyclopentadiene	0.00998	0.06841	0.10882	0.15263	0.17796	0.10356	64.708	

OHM Analytical Division

INITIAL CALIBRATION DATA

Start Cal Date : 08-NOV-95 16:57
End Cal Date : 08-NOV-95 16:57
Quant Method : ISTD
Cal Curve Type : Averaged
Target Version : Target 3.00
Integrator : HP RTE
Method file : /chem/msb.i/b110895.b/110895bclp.m
Cal Date : 09-Nov-1995 18:00

Compound	20 Level 1	50 Level 2	80 Level 3	120 Level 4	160 Level 5	RRF	% RSD/R^2
35 2,4,6-Trichlorophenol	0.36298	0.44731	0.42598	0.42295	0.40282	0.41241	7.714
36 2,4,5-Trichlorophenol	0.38196	0.47016	0.45102	0.43977	0.41622	0.43183	7.880
38 2-Chloronaphthalene	1.12075	1.28342	1.17395	1.12713	0.93487	1.12802	11.180
39 2-Nitroaniline	0.40359	0.51714	0.50588	0.53230	0.52181	0.49614	10.602
40 Dimethylphthalate	1.53175	1.72223	1.63372	1.43773	1.13230	1.49155	15.252
41 2,6-Dinitrotoluene	0.33060	0.42112	0.40425	0.41474	0.40158	0.39446	9.269
42 Acenaphthylene	1.80589	2.05683	1.88289	1.56224	1.21793	1.70516	19.076
3-Nitroaniline	0.34237	0.41074	0.40351	0.43114	0.41870	0.40129	8.597
2,4-Dinitrophenol	+++++	0.07335	0.10158	0.13246	0.13405	0.11036	26.140
46 Acenaphthene	1.12661	1.23688	1.10547	1.02508	0.85056	1.06892	13.434
47 4-Nitrophenol	0.10841	0.15321	0.15175	0.16122	0.14744	0.14440	14.357
48 2,4-Dinitrotoluene	0.43660	0.56077	0.55757	0.57706	0.54061	0.53452	10.523
49 Dibenzofuran	1.63157	1.82323	1.70745	1.49529	1.13384	1.55828	17.037
50 Diethylphthalate	1.64864	1.88572	1.75040	1.50116	1.16898	1.59098	17.264
51 4-Chlorophenyl-phenylether	0.67161	0.74096	0.67784	0.64357	0.57707	0.66221	8.975
52 Fluorene	1.22243	1.31765	1.19152	1.15242	0.99082	1.17497	10.187
53 4-Nitroaniline	0.35157	0.37512	0.34739	0.36813	0.36582	0.36161	3.231
54 4,6-Dinitro-2-methylphenol	0.08425	0.14518	0.16960	0.18439	0.17279	0.15124	26.498
55 N-Nitrosodiphenylamine	0.57111	0.61114	0.59587	0.56043	0.47489	0.56269	9.418
57 4-Bromophenyl-phenylether	0.23822	0.25903	0.24768	0.22792	0.20328	0.23522	9.030
58 Hexachlorobenzene	0.33601	0.36914	0.33686	0.31629	0.27993	0.32765	9.987
59 Pentachlorophenol	+++++	0.09390	0.10879	0.12091	0.12719	0.11270	13.024
61 Phenanthrene	1.14070	1.21004	1.10417	0.94059	0.72415	1.02393	19.008
62 Anthracene	1.10203	1.17772	1.08827	0.90991	0.69286	0.99416	19.613
63 Carbazole	1.00982	1.07806	0.99853	0.90627	0.72677	0.94389	14.399
64 Di-n-butylphthalate	1.72291	1.96241	1.47167	1.05140	0.77672	1.39702	34.620
65 Fluoranthene	1.17356	1.34023	1.17305	0.98579	0.76467	1.08746	20.208
66 Benzidine	0.57642	0.65336	0.62643	0.62505	0.61752	0.61976	4.481
67 Pyrene	1.60326	1.81666	1.68808	1.52006	1.28743	1.58310	12.529
69 Butylbenzylphthalate	1.07876	1.22284	1.20881	1.17807	1.04771	1.14724	6.899
70 bis(2-Ethylhexyl)phthalate	1.37701	1.51101	1.44864	1.29034	1.10059	1.34552	11.871
71 3,3'-Dichlorobenzidine	0.45628	0.53466	0.48711	0.48055	0.46183	0.48409	6.407
enzo(a)anthracene	1.17736	1.35528	1.29278	1.33080	1.18248	1.26774	6.565
hrysene	0.96418	1.01317	0.98156	0.99490	0.93330	0.97742	3.121

* Only compound evaluated

OHM Analytical Division

INITIAL CALIBRATION DATA

Start Cal Date : 08-NOV-95 16:57
End Cal Date : 08-NOV-95 16:57
Quant Method : ISTD
Cal Curve Type : Averaged
Target Version : Target 3.00
Integrator : HP RTE
Method file : /chem/msb.i/b110895.b/110895bclp.m
Cal Date : 09-Nov-1995 18:00

	Compound	20 Level 1	50 Level 2	80 Level 3	120 Level 4	160 Level 5	RRF	% RSD/R^2
75	Di-n-octylphthalate	2.27967	2.57556	2.57796	2.03993	1.65081	2.22479	17.616
76	Benzo(b)fluoranthene	1.18462	1.38135	1.32237	1.31386	1.27214	1.29487	5.631
77	Benzo(k)fluoranthene	1.17689	1.23373	1.30442	1.32941	1.18848	1.24659	5.471
78	Benzo(a)pyrene	0.98726	1.17940	1.12060	1.15048	1.03430	1.09441	7.388
80	Dibenzo(a,h)anthracene	0.71356	0.89144	0.77763	0.76204	0.69123	0.76718	10.143
81	Indeno(1,2,3-cd)pyrene	0.96399	1.06029	1.02429	1.04522	0.93126	1.00501	5.487
82	Benzo(g,h,i)perylene	0.78725	0.97385	0.92141	0.91417	0.79279	0.87789	9.509
$	2-Fluorophenol	1.23707	1.39494	1.40233	1.48681	1.51297	1.40683	7.676
$ 4	Phenol-d5	1.52740	1.73815	1.70754	1.72942	1.60368	1.66124	5.544
$ 7	2-Chlorophenol-D4	1.25016	1.38735	1.33781	1.32736	1.29722	1.31998	3.845
$ 13	1,2-Dichlorobenzene-D4	0.82191	0.87868	0.81979	0.78608	0.74623	0.81054	6.042
$ 19	Nitrobenzene-d5	0.41214	0.48004	0.46062	0.46274	0.44627	0.45236	5.633
$ 37	2-Fluorobiphenyl	1.27956	1.43658	1.30383	1.18639	0.94678	1.23063	14.800
$ 56	2,4,6-Tribromophenol	0.20517	0.25097	0.23831	0.25259	0.24632	0.23867	8.183
$ 68	Terphenyl-d14	1.08772	1.17102	1.08088	1.06635	0.98325	1.07784	6.201

OHM Analytical Division

INITIAL CALIBRATION DATA

Start Cal Date : 14-NOV-95 11:59
End Cal Date : 14-NOV-95 15:01
Quant Method : ISTD
Cal Curve Type : Averaged
Target Version : Target 3.00
Integrator : HP RTE
Method file : /chem/aux/mse.i/e111495.b/111495eclp.m
Cal Date : 14-Nov-1995 16:00

Calibration File Names:
Level 1: /chem/aux/mse.i/e111495.b/e8055a.d
Level 2: /chem/aux/mse.i/e111495.b/e8056a.d
Level 3: /chem/aux/mse.i/e111495.b/e8057a.d
Level 4: /chem/aux/mse.i/e111495.b/e8058a.d
Level 5: /chem/aux/mse.i/e111495.b/e8059a.d

	Compound	20 Level 1	50 Level 2	80 Level 3	120 Level 4	160 Level 5	RRF	% RSD/R^2	
	N-Nitrosodimethylamine	0.85560	0.93431	1.00887	1.00438	1.04532	0.96969	7.773	
	Pyridine	1.88676	1.93788	2.07352	2.24993	2.19526	2.06867	7.609	
5	Phenol	2.01230	2.02811	1.92033	1.71583	1.51442	1.83820	11.948	
6	bis(2-Chloroethyl)ether	4.17887	3.93502	3.60724	3.19920	2.86306	3.55668	15.021	
8	2-Chlorophenol	1.39104	1.42029	1.39798	1.30971	1.15539	1.33488	8.145	
9	1,3-Dichlorobenzene	1.44216	1.44489	1.46507	1.38947	1.28271	1.40486	5.252	
11	1,4-Dichlorobenzene	1.45541	1.44965	1.43748	1.35451	1.24389	1.38819	6.511	
12	2-Methylphenol	1.34258	1.37614	1.36285	1.28279	1.14414	1.30170	7.302	
14	1,2-Dichlorobenzene	1.38420	1.32411	1.24755	1.06430	0.88379	1.18079	17.364	
15	2,2'-oxybis(1-Chloropropene)	2.89607	2.96109	2.88968	2.38473	2.16863	2.66004	13.507	
16	4-Methylphenol	1.41890	1.46496	1.45206	1.40046	1.32258	1.41179	3.973	
17	N-Nitroso-di-n-propylamine	1.35008	1.44483	1.47093	1.35401	1.28621	1.38121	5.470	
18	Hexachloroethane	0.65861	0.67658	0.66386	0.62094	0.56433	0.63686	7.150	
20	Nitrobenzene	0.44415	0.45857	0.45527	0.41456	0.37823	0.43015	7.861	
21	Isophorone	0.99480	1.00098	0.97437	0.89516	0.83689	0.94044	7.621	
22	2,4-Dimethylphenol	0.36998	0.37397	0.36434	0.32372	0.30059	0.34652	9.407	
23	2-Nitrophenol	0.18840	0.20783	0.20407	0.19474	0.18276	0.19556	5.354	
24	bis(2-Chloroethoxy)methane	0.55899	0.56414	0.55215	0.47078	0.43066	0.51534	11.803	
25	2,4-Dichlorophenol	0.24527	0.26004	0.25942	0.25027	0.23638	0.25027	3.981	
26	1,2,4-Trichlorobenzene	0.26394	0.26748	0.27253	0.24812	0.23794	0.25800	5.605	
28	Naphthalene	0.96221	0.90906	0.81572	0.55517	0.57199	0.78283	21.178	<-
29	4-Chloroaniline	0.56215	0.53364	0.49871	0.41080	0.37070	0.47520	17.159	
30	Hexachlorobutadiene	0.15349	0.15866	0.16277	0.15136	0.13627	0.15251	6.631	
31	4-Chloro-3-methylphenol	0.30192	0.32124	0.32146	0.28379	0.27197	0.30008	7.385	
32	2-Methylnaphthalene	0.57722	0.57925	0.56500	0.48416	0.44505	0.53014	11.627	
	-Methylnapthalene	0.58068	0.58094	0.56716	0.47910	0.44388	0.53035	12.129	
	Hexachlorocyclopentadiene	0.20104	0.24039	0.25347	0.26061	0.25174	0.24145	9.826	

OHM Analytical Division

INITIAL CALIBRATION DATA

Start Cal Date : 14-NOV-95 11:59
End Cal Date : 14-NOV-95 15:01
Quant Method : ISTD
Cal Curve Type : Averaged
Target Version : Target 3.00
Integrator : HP RTE
Method file : /chem/aux/mse.i/e111495.b/111495eclp.m
Cal Date : 14-Nov-1995 16:00

Compound	20 Level 1	50 Level 2	80 Level 3	120 Level 4	160 Level 5	RRF	% RSD/R^2
35 2,4,6-Trichlorophenol	0.32131	0.33433	0.34015	0.34016	0.31986	0.33116	3.006
36 2,4,5-Trichlorophenol	0.33863	0.35450	0.36372	0.35897	0.33788	0.35074	3.381
38 2-Chloronaphthalene	1.01637	1.02800	0.99937	0.91169	0.83641	0.95837	8.564
39 2-Nitroaniline	0.48333	0.52379	0.53037	0.49281	0.48306	0.50267	4.525
40 Dimethylphthalate	1.32493	1.34195	1.30903	1.21383	1.15405	1.26876	6.392
41 2,6-Dinitrotoluene	0.31811	0.34264	0.34917	0.33438	0.33166	0.33519	3.516
42 Acenaphthylene	1.77151	1.73161	1.63072	1.47514	1.36301	1.59440	10.831
43 3-Nitroaniline	0.34876	0.36954	0.37670	0.37708	0.36437	0.36729	3.167
44 2,4-Dinitrophenol	0.11420	0.16315	0.18476	0.18998	0.18231	0.16688	18.666
46 Acenaphthene	1.07191	1.03551	0.99089	0.84913	0.74162	0.93781	14.766
47 4-Nitrophenol	0.15378	0.17701	0.17749	0.16361	0.14616	0.16361	8.497
48 2,4-Dinitrotoluene	0.40723	0.44615	0.44534	0.42601	0.41230	0.42740	4.234
49 Dibenzofuran	1.47042	1.46395	1.42172	1.27662	1.17147	1.36084	9.672
50 Diethylphthalate	1.49859	1.48820	1.43106	1.25616	1.17195	1.36919	10.735
51 4-Chlorophenyl-phenylether	0.52787	0.54451	0.54076	0.50533	0.45651	0.51500	7.011
52 Fluorene	1.15829	1.12493	1.03658	0.89975	0.80448	1.00481	14.942
53 4-Nitroaniline	0.36270	0.33026	0.30598	0.27987	0.27961	0.31169	11.366
54 4,6-Dinitro-2-methylphenol	0.12988	0.16045	0.17510	0.18803	0.18849	0.16839	14.488
55 N-Nitrosodiphenylamine	0.55520	0.54932	0.53924	0.51031	0.46762	0.52434	6.884
57 4-Bromophenyl-phenylether	0.17611	0.18558	0.19208	0.19320	0.17829	0.18505	4.202
58 Hexachlorobenzene	0.22240	0.23219	0.22963	0.21523	0.19351	0.21859	7.092
59 Pentachlorophenol	0.10659	0.12485	0.13373	0.13948	0.13922	0.12877	10.676
61 Phenanthrene	1.09758	1.06313	1.02488	0.93141	0.85026	0.99345	10.196
62 Anthracene	1.11519	1.09093	1.05761	0.95460	0.87418	1.01850	9.944
63 Carbazole	1.04566	0.97529	0.91956	0.88338	0.84769	0.93432	8.358
64 Di-n-butylphthalate	1.80052	1.71996	1.63857	1.38575	1.24765	1.55849	14.963
65 Fluoranthene	1.10057	1.12673	1.09289	0.99396	0.91489	1.04581	8.498
66 Benzidine	0.51477	0.50369	0.53767	0.55130	0.53337	0.52816	3.581
67 Pyrene	1.23758	1.26616	1.23139	1.12103	1.05225	1.18168	7.705
69 Butylbenzylphthalate	0.97724	0.95435	0.90302	0.78569	0.70625	0.86531	13.367
70 bis(2-Ethylhexyl)phthalate	1.27104	1.13472	0.97433	0.75501	0.65176	0.95737	26.858
71 3,3'-Dichlorobenzidine	0.38813	0.32401	0.29689	0.25865	0.25118	0.30377	18.310
72 Benzo(a)anthracene	1.08317	1.11143	1.11909	1.03371	0.97422	1.06432	5.682
73 Chrysene	0.83091	0.85817	0.86298	0.79486	0.75238	0.81986	5.665

OHM Analytical Division

INITIAL CALIBRATION DATA

Start Cal Date : 14-NOV-95 11:59
End Cal Date : 14-NOV-95 15:01
Quant Method : ISTD
Cal Curve Type : Averaged
Target Version : Target 3.00
Integrator : HP RTE
Method file : /chem/aux/mse.i/e111495.b/111495eclp.m
Cal Date : 14-Nov-1995 16:00

Compound	20 Level 1	50 Level 2	80 Level 3	120 Level 4	160 Level 5	RRF	% RSD/R^2
75 Di-n-octylphthalate	2.47080	2.40385	2.26702	1.99707	1.77541	2.18283	13.344
76 Benzo(b)fluoranthene	1.02160	1.09161	1.13673	1.13591	1.18366	1.11390	5.477
77 Benzo(k)fluoranthene	1.04712	1.06308	1.07633	0.97447	0.88319	1.00884	7.981
78 Benzo(a)pyrene	0.93456	0.98002	1.00546	1.00263	0.97120	0.97877	2.932
80 Dibenzo(a,h)anthracene	0.74523	0.80677	0.82680	0.80212	0.78410	0.79300	3.875
81 Indeno(1,2,3-cd)pyrene	0.99608	1.08497	1.13026	1.10140	1.09140	1.08082	4.667
[illegible] Benzo(g,h,i)perylene	0.80313	0.86134	0.90190	0.88382	0.88554	0.86715	4.450
$ 3 2-Fluorophenol	1.36407	1.43836	1.50347	1.50909	1.45300	1.45360	4.043
$ 4 Phenol-d5	1.91007	1.89672	1.81888	1.68322	1.50031	1.76184	9.749
$ 7 2-Chlorophenol-D4	1.36608	1.37456	1.35079	1.30074	1.15579	1.30959	6.919
$ 13 1,2-Dichlorobenzene-D4	0.79328	0.78594	0.77226	0.70403	0.62593	0.73629	9.658
$ 19 Nitrobenzene-d5	0.46118	0.47136	0.46989	0.42798	0.40462	0.44701	6.595
$ 37 2-Fluorobiphenyl	1.15667	1.13269	1.07941	0.97342	0.87621	1.04368	11.230
$ 56 2,4,6-Tribromophenol	0.14590	0.16593	0.17325	0.17409	0.16916	0.16567	6.957
$ 68 Terphenyl-d14	0.78669	0.79145	0.75752	0.66639	0.58045	0.71650	12.724

Data File: /chem/msb.i/b111995.b/b8900.d
Report Date: 19-Nov-1995 13:15

OHM Analytical Division

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msb.i
Lab File ID: b8900.d
Analysis Type:
Lab Sample ID:
Quant Type: ISTD

Injection Date: 19-NOV-95 12:36
Init. Calibration Date(s): 11/08/95 11/08/95
Init. Calibration Times: 16:57 16:57
Method File: /chem/msb.i/b111995.b/110895bclp.m

	COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D
	1 N-Nitrosodimethylamine	0.960	0.987	0.010	2.8	100.0
	2 Pyridine	1.571	1.704	0.010	8.4	100.0
$	3 2-Fluorophenol	1.407	1.412	0.600	0.4	25.0
$	4 Phenol-d5	1.661	1.686	0.800	1.5	25.0
	5 Phenol	1.669	1.718	0.800	3.0	25.0
	6 bis(2-Chloroethyl)ether	3.163	3.319	0.700	4.9	25.0
$	7 2-Chlorophenol-D4	1.320	1.303	0.700	1.3	25.0
	8 2-Chlorophenol	1.375	1.389	0.800	1.0	25.0
	9 1,3-Dichlorobenzene	1.514	1.515	0.600	0.0	25.0
	11 1,4-Dichlorobenzene	1.492	1.446	0.500	3.1	25.0
	12 2-Methylphenol	1.174	1.142	0.700	2.7	25.0
$	13 1,2-Dichlorobenzene-D4	0.811	0.822	0.700	1.4	25.0
	14 1,2-Dichlorobenzene	1.269	1.280	0.400	0.8	25.0
	15 2,2'-oxybis(1-Chloropropene)	2.141	2.177	0.010	1.7	100.0
	16 4-Methylphenol	1.249	1.230	0.600	1.5	25.0
	17 N-Nitroso-di-n-propylamine	1.228	1.185	0.500	3.5	25.0
	18 Hexachloroethane	0.663	0.648	0.300	2.3	25.0
$	19 Nitrobenzene-d5	0.452	0.459	0.200	1.5	25.0
	20 Nitrobenzene	0.433	0.444	0.200	2.5	25.0
	21 Isophorone	0.899	0.899	0.400	0.1	25.0
	22 2,4-Dimethylphenol	0.405	0.387	0.200	4.6	25.0
	23 2-Nitrophenol	0.225	0.249	0.100	10.5	25.0
	24 bis(2-Chloroethoxy)methane	0.548	0.524	0.300	4.3	25.0
	25 2,4-Dichlorophenol	0.314	0.327	0.200	4.2	25.0
	26 1,2,4-Trichlorobenzene	0.342	0.331	0.200	3.2	25.0
	28 Naphthalene	0.863	0.954	0.700	10.7	25.0
	29 4-Chloroaniline	0.580	0.607	0.010	4.7	100.0
	30 Hexachlorobutadiene	0.196	0.164	0.010	16.5	100.0
	31 4-Chloro-3-methylphenol	0.364	0.361	0.200	0.7	25.0
	32 2-Methylnaphthalene	0.608	0.634	0.400	4.2	25.0
	33 1-Methylnapthalene	0.613	0.574	0.400	6.4	25.0
	34 Hexachlorocyclopentadiene	0.104	0.107	0.010	3.3	100.0
	35 2,4,6-Trichlorophenol	0.412	0.394	0.200	4.4	25.0
	36 2,4,5-Trichlorophenol	0.432	0.414	0.200	4.1	25.0
$	37 2-Fluorobiphenyl	1.231	1.224	0.700	0.5	25.0
	38 2-Chloronaphthalene	1.128	1.130	0.800	0.2	25.0
	39 2-Nitroaniline	0.496	0.481	0.010	3.0	100.0
	40 Dimethylphthalate	1.492	1.531	0.010	2.7	100.0
	41 2,6-Dinitrotoluene	0.394	0.390	0.200	1.0	25.0
	42 Acenaphthylene	1.705	1.807	1.300	5.9	25.0

OHM Analytical Division

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msb.i
Lab File ID: b8900.d
Analysis Type:
Lab Sample ID:
Quant Type: ISTD

Injection Date: 19-NOV-95 12:36
Init. Calibration Date(s): 11/08/95 11/08/95
Init. Calibration Times: 16:57 16:57
Method File: /chem/msb.i/b111995.b/110895bclp.m

	COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D	
	43 3-Nitroaniline	0.401	0.431	0.010	7.3	100.0	
	45 2,4-Dinitrophenol	0.110	0.051	0.010	53.7	100.0	
	46 Acenaphthene	1.069	1.041	0.800	2.6	25.0	
	47 4-Nitrophenol	0.144	0.135	0.010	6.7	100.0	
	48 2,4-Dinitrotoluene	0.535	0.484	0.200	9.5	25.0	
	49 Dibenzofuran	1.558	1.523	0.800	2.3	25.0	
	50 Diethylphthalate	1.591	1.540	0.010	3.2	100.0	
	51 4-Chlorophenyl-phenylether	0.662	0.642	0.400	3.1	25.0	
	52 Fluorene	1.175	1.167	0.900	0.7	25.0	
	53 4-Nitroaniline	0.362	0.399	0.010	10.5	100.0	
	54 4,6-Dinitro-2-methylphenol	0.151	0.157	0.010	3.7	100.0	
	55 N-Nitrosodiphenylamine	0.563	0.570	0.010	1.3	100.0	
$	56 2,4,6-Tribromophenol	0.239	0.216	0.010	9.5	100.0	
	57 4-Bromophenyl-phenylether	0.235	0.260	0.100	10.4	25.0	
	58 Hexachlorobenzene	0.328	0.320	0.100	2.4	25.0	
	59 Pentachlorophenol	0.113	0.075	0.050	33.0	25.0	<- OK for clp
	61 Phenanthrene	1.024	1.084	0.700	5.9	25.0	
	62 Anthracene	0.994	1.065	0.700	7.1	25.0	
	63 Carbazole	0.944	1.013	0.010	7.4	100.0	
	64 Di-n-butylphthalate	1.397	1.508	0.010	7.9	100.0	
	65 Fluoranthene	1.087	1.123	0.600	3.3	25.0	
	66 Benzidine	0.620	0.602	0.010	2.9	100.0	
	67 Pyrene	1.583	1.615	0.600	2.0	25.0	
$	68 Terphenyl-d14	1.078	1.086	0.500	0.8	25.0	
	69 Butylbenzylphthalate	1.147	0.994	0.010	13.3	100.0	
	70 bis(2-Ethylhexyl)phthalate	1.346	1.343	0.010	0.2	100.0	
	71 3,3'-Dichlorobenzidine	0.484	0.547	0.010	13.1	100.0	
	72 Benzo(a)anthracene	1.268	1.193	0.800	5.9	25.0	
	74 Chrysene	0.977	1.055	0.700	7.9	25.0	
	75 Di-n-octylphthalate	2.225	1.960	0.010	11.9	100.0	
	76 Benzo(b)fluoranthene	1.295	1.183	0.700	8.6	25.0	
	77 Benzo(k)fluoranthene	1.247	1.080	0.700	13.3	25.0	
	78 Benzo(a)pyrene	1.094	1.045	0.700	4.5	25.0	
	80 Dibenzo(a,h)anthracene	0.767	0.929	0.400	21.0	25.0	
	81 Indeno(1,2,3-cd)pyrene	1.005	1.102	0.500	9.6	25.0	
	82 Benzo(g,h,i)perylene	0.878	0.938	0.500	6.9	25.0	

KB

Data File: /chem/aux/mse.i/e111695.b/e8069.d
Report Date: 16-Nov-1995 15:36

OHM Analytical Division

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: mse.i
Lab File ID: e8069.d
Analysis Type:
Lab Sample ID:
Quant Type: ISTD

Injection Date: 16-NOV-95 14:53
Init. Calibration Date(s): 11/14/95 11/14/95
Init. Calibration Times: 11:59 15:01
Method File: /chem/aux/mse.i/e111695.b/111495eclp.m

	COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D
	1 N-Nitrosodimethylamine	0.970	0.953	0.010	1.7	100.0
	2 Pyridine	2.069	2.124	0.010	2.7	100.0
$	3 2-Fluorophenol	1.454	1.495	0.600	2.8	25.0
$	4 Phenol-d5	1.762	2.049	0.800	16.3	25.0
	5 Phenol	1.838	2.164	0.800	17.7	25.0
	6 bis(2-Chloroethyl)ether	3.557	4.247	0.700	19.4	25.0
$	7 2-Chlorophenol-D4	1.310	1.445	0.700	10.4	25.0
	8 2-Chlorophenol	1.335	1.536	0.800	15.1	25.0
	9 1,3-Dichlorobenzene	1.405	1.525	0.600	8.6	25.0
	11 1,4-Dichlorobenzene	1.388	1.524	0.500	9.8	25.0
	12 2-Methylphenol	1.302	1.446	0.700	11.1	25.0
$	13 1,2-Dichlorobenzene-D4	0.736	0.840	0.700	14.1	25.0
	14 1,2-Dichlorobenzene	1.181	1.377	0.400	16.6	25.0
	15 2,2'-oxybis(1-Chloropropene)	2.660	3.044	0.010	14.4	100.0
	16 4-Methylphenol	1.412	1.542	0.600	9.2	25.0
	17 N-Nitroso-di-n-propylamine	1.381	1.525	0.500	10.4	25.0
	18 Hexachloroethane	0.637	0.702	0.300	10.2	25.0
$	19 Nitrobenzene-d5	0.447	0.514	0.200	15.1	25.0
	20 Nitrobenzene	0.430	0.488	0.200	13.4	25.0
	21 Isophorone	0.940	1.009	0.400	7.3	25.0
	22 2,4-Dimethylphenol	0.347	0.389	0.200	12.2	25.0
	23 2-Nitrophenol	0.196	0.203	0.100	4.1	25.0
	24 bis(2-Chloroethoxy)methane	0.515	0.564	0.300	9.5	25.0
	25 2,4-Dichlorophenol	0.250	0.273	0.200	8.9	25.0
	26 1,2,4-Trichlorobenzene	0.258	0.272	0.200	5.3	25.0
	28 Naphthalene	0.783	0.936	0.700	19.5	25.0
	29 4-Chloroaniline	0.475	0.557	0.010	17.2	100.0
	30 Hexachlorobutadiene	0.153	0.149	0.010	2.3	100.0
	31 4-Chloro-3-methylphenol	0.300	0.332	0.200	10.6	25.0
	32 2-Methylnaphthalene	0.530	0.624	0.400	17.8	25.0
	33 1-Methylnapthalene	0.530	0.559	0.400	5.3	25.0
	34 Hexachlorocyclopentadiene	0.241	0.199	0.010	17.4	100.0
	35 2,4,6-Trichlorophenol	0.331	0.361	0.200	9.1	25.0
	36 2,4,5-Trichlorophenol	0.351	0.371	0.200	5.9	25.0
$	37 2-Fluorobiphenyl	1.044	1.158	0.700	10.9	25.0
	38 2-Chloronaphthalene	0.958	1.061	0.800	10.7	25.0
	39 2-Nitroaniline	0.503	0.564	0.010	12.3	100.0
	40 Dimethylphthalate	1.269	1.402	0.010	10.5	100.0
	41 2,6-Dinitrotoluene	0.335	0.337	0.200	0.4	25.0
	42 Acenaphthylene	1.594	1.829	1.300	14.7	25.0

OHM Analytical Division

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: mse.i
Lab File ID: e8069.d
Analysis Type:
Lab Sample ID:
Quant Type: ISTD

Injection Date: 16-NOV-95 14:53
Init. Calibration Date(s): 11/14/95 11/14/95
Init. Calibration Times: 11:59 15:01
Method File: /chem/aux/mse.i/e111695.b/111495eclp.m

	COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D	
	43 3-Nitroaniline	0.367	0.406	0.010	10.4	100.0	
	45 2,4-Dinitrophenol	0.167	0.068	0.010	59.5	100.0	
	46 Acenaphthene	0.938	1.109	0.800	18.2	25.0	
	47 4-Nitrophenol	0.164	0.172	0.010	4.8	100.0	
	48 2,4-Dinitrotoluene	0.427	0.427	0.200	0.1	25.0	
	49 Dibenzofuran	1.361	1.524	0.800	12.0	25.0	
	50 Diethylphthalate	1.369	1.507	0.010	10.0	100.0	
	51 4-Chlorophenyl-phenylether	0.515	0.569	0.400	10.5	25.0	
	52 Fluorene	1.005	1.188	0.900	18.2	25.0	
	53 4-Nitroaniline	0.312	0.368	0.010	18.1	100.0	
	54 4,6-Dinitro-2-methylphenol	0.168	0.083	0.010	50.6	100.0	
	55 N-Nitrosodiphenylamine	0.524	0.574	0.010	9.4	100.0	
$	56 2,4,6-Tribromophenol	0.166	0.180	0.010	8.4	100.0	
	57 4-Bromophenyl-phenylether	0.185	0.223	0.100	20.5	25.0	
	58 Hexachlorobenzene	0.219	0.240	0.100	9.8	25.0	
	59 Pentachlorophenol	0.129	0.132	0.050	2.5	25.0	
	61 Phenanthrene	0.993	1.125	0.700	13.2	25.0	
	62 Anthracene	1.019	1.167	0.700	14.6	25.0	
	63 Carbazole	0.934	1.065	0.010	14.0	100.0	
	64 Di-n-butylphthalate	1.558	1.848	0.010	18.6	100.0	
	65 Fluoranthene	1.046	1.124	0.600	7.5	25.0	
	66 Benzidine	0.528	0.323	0.010	38.8	100.0	
	67 Pyrene	1.182	1.333	0.600	12.8	25.0	
$	68 Terphenyl-d14	0.717	0.902	0.500	25.8	25.0	<-
	69 Butylbenzylphthalate	0.865	0.948	0.010	9.5	100.0	
	70 bis(2-Ethylhexyl)phthalate	0.957	1.208	0.010	26.2	100.0	
	71 3,3'-Dichlorobenzidine	0.304	0.450	0.010	48.0	100.0	
	72 Benzo(a)anthracene	1.064	1.181	0.800	11.0	25.0	
	74 Chrysene	0.820	1.091	0.700	33.1	25.0	<-
	75 Di-n-octylphthalate	2.183	2.634	0.010	20.7	100.0	
	76 Benzo(b)fluoranthene	1.114	1.168	0.700	4.9	25.0	
	77 Benzo(k)fluoranthene	1.009	1.242	0.700	23.1	25.0	
	78 Benzo(a)pyrene	0.979	1.060	0.700	8.3	25.0	
	80 Dibenzo(a,h)anthracene	0.793	0.856	0.400	7.9	25.0	
	81 Indeno(1,2,3-cd)pyrene	1.081	1.023	0.500	5.4	25.0	
	82 Benzo(g,h,i)perylene	0.867	0.734	0.500	15.4	25.0	

OK clp

OK clp

Data File: /chem/msb.i/b110895.b/b8731.d

Date : 08-NOV-95 12:20

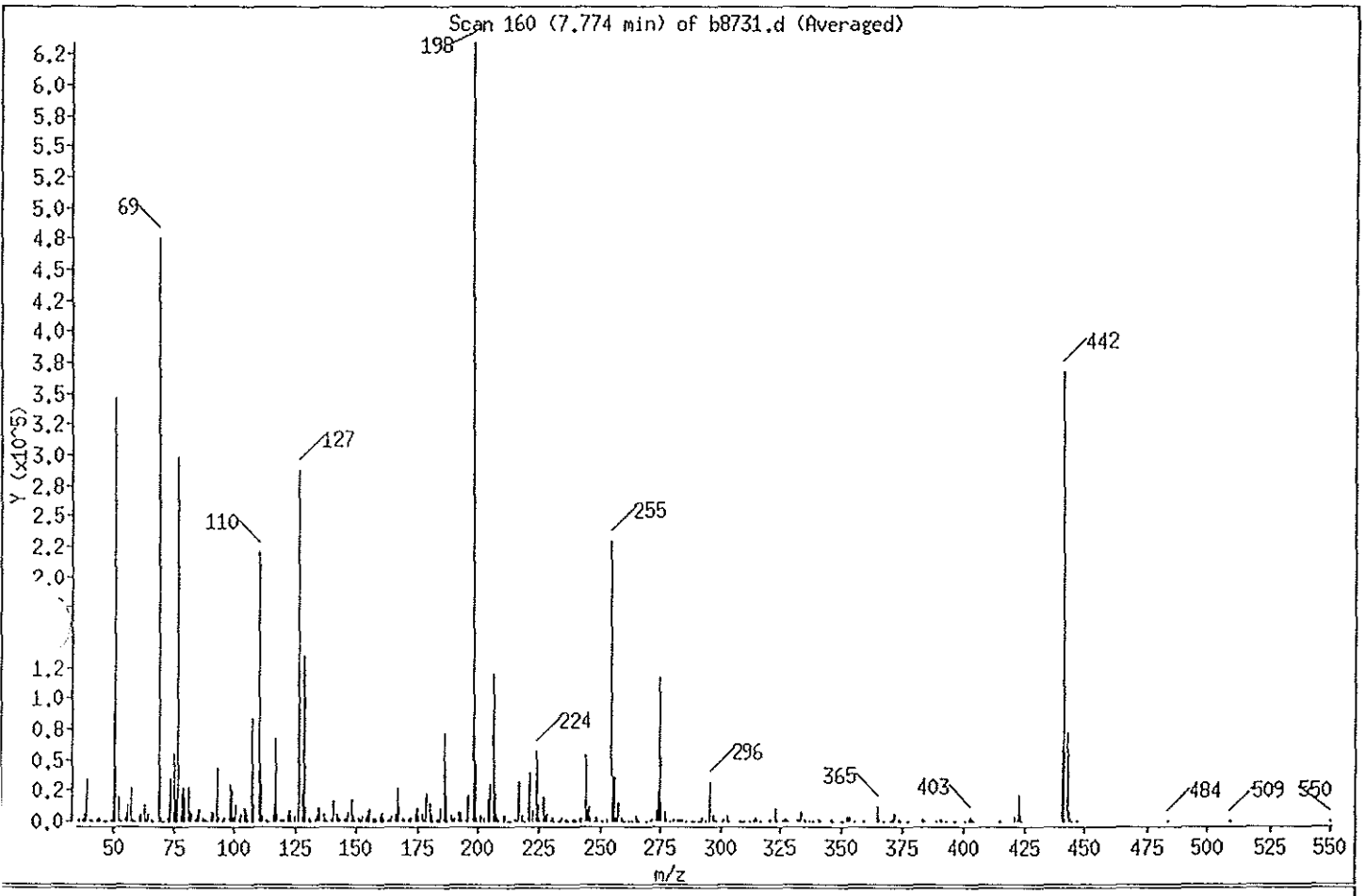
Instrument : msb.i

Sample ID : dftpp tune

Column phase : Column diameter : 2.00

Volume Injected (uL) : 1.0

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.0
51	30.00 - 80.00% of mass 198	54.6
68	Less than 2.00% of mass 69	0.0
69	Mass 69 relative abundance	74.8
70	Less than 2.00% of mass 69	0.5
127	25.00 - 75.00% of mass 198	45.3
197	Less than 1.00% of mass 198	0.0
199	5.00 - 9.00% of mass 198	7.3
275	10.00 - 30.00% of mass 198	18.5
365	Greater than 0.75% of mass 198	1.8
441	Present, but less than mass 443	79.1
442	40.00 - 110.00% of mass 198	58.0
443	15.00 - 24.00% of mass 442	19.6

Data File: /chem/msb.i/b110895.b/b8731.d

Date : 08-NOV-95 12:20

Instrument : msb.i

)mple ID : dftpp tune

Column phase : Column diameter : 2.00

Volume Injected (uL) : 1.0

Spectrum: Scans 160-162 (7.774 min), Subtraction Scan 157
Location of Maximum: 198.00
Number of points: 318

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	218	125.00	4041	207.00	16356	296.00	31301
37.00	1482	127.00	287381	208.00	4111	297.00	3905
38.00	6415	128.00	25507	209.00	1021	298.00	397
39.00	33316	129.00	135533	211.00	4327	299.00	118
40.00	1440	130.00	12674	212.00	208	301.00	552
41.00	913	131.00	1836	213.00	534	302.00	946
42.00	700	132.00	1570	214.00	268	303.00	3843
45.00	640	133.00	218	215.00	1317	304.00	698
48.00	461	134.00	3757	216.00	168	308.00	494
49.00	1273	135.00	10468	217.00	32001	309.00	448
50.00	97167	136.00	3756	218.00	4616	310.00	563
51.00	346350	137.00	5393	219.00	585	311.00	120
52.00	19263	138.00	1178	220.00	252	313.00	306
53.00	827	139.00	288	221.00	39302	314.00	1736
54.00	205	140.00	1719	223.00	8714	315.00	3010
55.00	1923	141.00	16237	224.00	56496	316.00	1294
56.00	13056	142.00	5416	225.00	14055	317.00	118
57.00	27618	143.00	3743	226.00	1401	321.00	1398
58.00	1454	144.00	678	227.00	19999	323.00	10217
59.00	121	145.00	1138	228.00	4090	324.00	1934
61.00	5197	146.00	2799	229.00	5622	326.00	147
62.00	5242	147.00	7707	230.00	823	327.00	1816
63.00	14103	148.00	17382	231.00	2595	328.00	1193
64.00	1133	149.00	3866	232.00	501	329.00	121
65.00	6109	150.00	1075	233.00	516	332.00	753
66.00	536	151.00	2441	234.00	1742	333.00	1128
69.00	474600	152.00	1518	235.00	2575	334.00	7104
70.00	2407	153.00	5167	236.00	1258	335.00	1848
71.00	656	154.00	3857	237.00	1816	336.00	123
72.00	505	155.00	8857	238.00	214	337.00	159
73.00	2275	156.00	10998	239.00	1248	339.00	117
74.00	34185	157.00	3195	240.00	1154	341.00	1469
75.00	55344	158.00	3219	241.00	1284	342.00	423
76.00	17686	159.00	2182	242.00	3495	346.00	1738
77.00	298328	160.00	4607	243.00	3726	347.00	380

Data File: /chem/msb.i/b110895.b/b8731.d

Date : 08-NOV-95 12:20

Instrument : msb.i

Sample ID : dftpp tune

Column phase : Column diameter : 2.00

Volume Injected (uL) : 1.0

Spectrum: Scans 160-162 (7.774 min), Subtraction Scan 157
Location of Maximum: 198.00
Number of points: 318

m/z	Y	m/z	Y	m/z	Y	m/z	Y
78.00	21892	161.00	7133	244.00	54672	350.00	118
79.00	26412	162.00	2307	245.00	8109	351.00	254
80.00	19089	163.00	352	246.00	11320	352.00	2925
81.00	26560	164.00	1101	247.00	2668	353.00	1920
82.00	6947	165.00	4410	248.00	163	354.00	2618
83.00	6388	166.00	5261	249.00	2335	355.00	376
84.00	595	167.00	27371	250.00	536	359.00	418
85.00	4078	168.00	11630	251.00	226	365.00	11341
86.00	7493	169.00	2377	252.00	564	366.00	1367
87.00	3687	170.00	1157	253.00	1065	367.00	128
88.00	1731	171.00	1355	255.00	229445	370.00	370
89.00	581	172.00	3129	256.00	35956	371.00	792
90.00	165	173.00	3446	257.00	3352	372.00	5934
91.00	6511	174.00	5945	258.00	14727	373.00	1657
92.00	6932	175.00	9651	259.00	2609	374.00	158
93.00	43181	176.00	3893	260.00	733	377.00	134
94.00	3015	177.00	6062	261.00	596	383.00	1534
95.00	494	178.00	2060	262.00	130	384.00	80
96.00	1535	179.00	23178	264.00	328	389.00	123
98.00	30288	180.00	14476	265.00	4749	390.00	1078
99.00	24839	181.00	6485	266.00	886	391.00	500
100.00	2635	182.00	1309	267.00	218	392.00	345
101.00	13484	183.00	795	270.00	351	397.00	131
102.00	1043	184.00	2089	271.00	637	401.00	485
103.00	5368	185.00	10555	272.00	943	402.00	2234
104.00	9391	186.00	71773	273.00	8620	403.00	3337
105.00	8201	187.00	21414	274.00	23827	404.00	1041
106.00	1164	188.00	2215	275.00	117405	405.00	118
107.00	83343	189.00	4809	276.00	14988	415.00	145
108.00	12856	190.00	980	277.00	8077	421.00	2960
110.00	220061	191.00	2386	278.00	1646	422.00	2131
111.00	30432	192.00	6761	279.00	534	423.00	21019
112.00	4163	193.00	7155	281.00	490	424.00	4695
113.00	536	194.00	1557	282.00	829	425.00	502
114.00	201	195.00	1880	283.00	1205	441.00	57083

Data File: /chem/msb.i/b110895.b/b8731.d

Date : 08-NOV-95 12:20

Instrument : msb.i

Sample ID : dftpp tune

Column phase : Column diameter : 2.00

Volume Injected (uL) : 1.0

Spectrum: Scans 160-162 (7.774 min), Subtraction Scan 157

Location of Maximum: 198.00

Number of points: 318

m/z	Y	m/z	Y	m/z	Y	m/z	Y
115.00	78	196.00	21084	284.00	800	442.00	367869
116.00	6106	198.00	634474	285.00	2055	443.00	72125
117.00	67210	199.00	46538	286.00	184	444.00	7410
118.00	5784	200.00	3353	288.00	248	445.00	580
119.00	835	201.00	441	289.00	330	447.00	118
120.00	864	202.00	3868	290.00	526	484.00	118
121.00	815	203.00	3708	291.00	131	509.00	145
122.00	6510	204.00	18567	292.00	202	550.00	129
123.00	9318	205.00	29285	293.00	2457		
124.00	4801	206.00	120360	294.00	777		

Data File: /chem/msb.i/b111995.b/b8899.d

Date : 19-NOV-95 12:14

Client ID: dftpp tune

Instrument: msb.i

Sample Info: dftpp tune

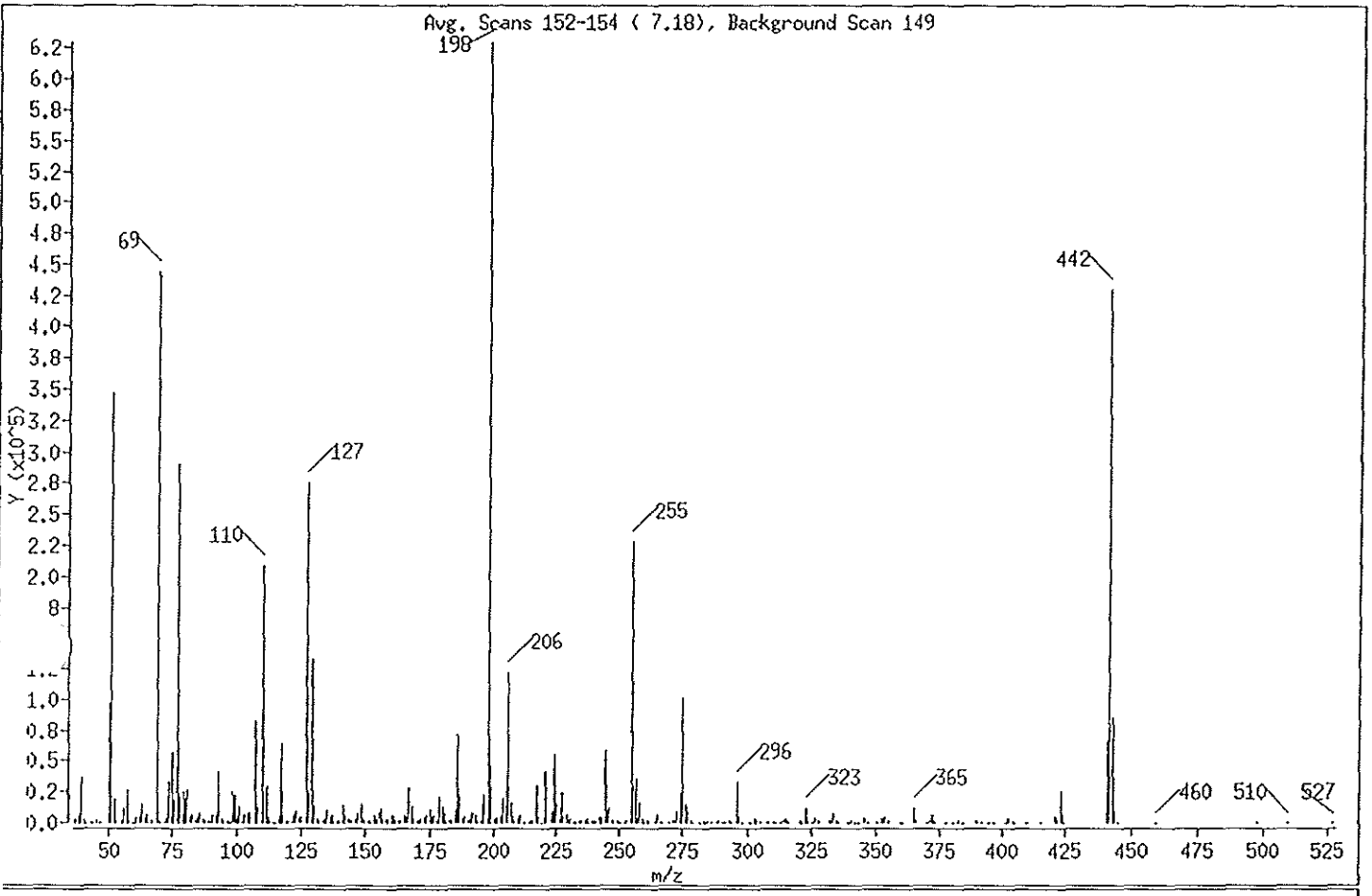
Volume Injected (uL): 1.0

Operator: tom

Column phase:

Column diameter: 2.00

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 80.00% of mass 198	55.11
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	70.50
70	Less than 2.00% of mass 69	0.31 (0.44)
127	25.00 - 75.00% of mass 198	43.69
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.33
275	10.00 - 30.00% of mass 198	15.98
365	Greater than 0.75% of mass 198	1.88
441	Present, but less than mass 443	10.57
442	40.00 - 110.00% of mass 198	68.27
443	15.00 - 24.00% of mass 442	13.43 (19.68)

Data File: /chem/msb.i/b111995.b/b8899.d
Date : 19-NOV-95 12:14
Client ID: dftpp tune
Instrument: msb.i
Sample Info: dftpp tune
Volume Injected (uL): 1.0
Operator: tom
Column phase:
Column diameter: 2.00

Data File: b8899.d
Spectrum : Avg. Scans 152-154 (7.18), Background Scan 149
Largest m/z: 197.95
Number of peaks: 320

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	2655	127.00	275264	210.15	2862	304.05	840
38.10	6348	128.00	23104	210.95	5452	305.15	146
39.10	37168	129.00	132352	211.95	226	307.95	254
40.10	2238	130.00	13065	212.95	583	309.05	203
41.10	735	131.00	2304	214.05	277	310.00	457
43.05	114	132.10	1739	215.05	1437	311.10	181
44.05	657	133.20	1328	216.05	1303	311.90	166
44.95	1229	134.00	3714	216.95	30280	312.80	254
46.95	313	134.95	9787	218.00	4321	313.90	1739
50.05	97024	135.95	3958	219.00	396	315.00	3182
51.05	347200	137.05	5429	221.00	42160	316.00	2119
52.00	20032	137.95	1545	223.00	9236	317.00	305
53.10	832	138.95	1058	224.00	54720	320.95	1267
55.00	1748	140.05	1814	225.10	15508	321.95	420
56.00	11519	140.95	14869	226.10	2303	322.95	11716
57.00	26576	142.05	5411	226.95	23248	324.05	2006
58.10	1168	142.95	3487	227.95	3850	325.05	260
59.10	492	144.00	1049	228.95	5551	326.25	188
60.20	416	145.00	981	230.05	1000	326.95	2368
61.05	5150	146.00	2798	230.95	2606	328.05	1087
62.05	4747	147.00	7219	232.15	306	332.00	903
63.05	14876	148.00	15594	233.05	651	333.00	1244
64.15	2345	148.90	3377	233.95	2097	334.00	7923
65.05	6377	150.00	1150	235.05	2018	335.00	1901
66.15	324	151.10	2186	236.05	1387	335.90	288
67.15	1179	151.80	1128	237.00	2240	339.35	148
69.05	444224	153.00	5403	238.00	294	339.85	130
70.00	1955	153.95	3442	239.00	1265	341.05	1416
71.00	622	154.95	8340	240.00	896	341.95	374
72.10	178	156.05	11887	241.00	1786	343.95	119
73.10	2615	157.05	3192	242.00	3871	345.95	2486
74.00	32392	157.95	3110	243.10	4059	346.95	647
75.00	56920	159.05	2251	244.00	57432	351.00	370
76.10	17712	160.05	5673	245.00	8840	352.00	3113
77.10	291008	161.05	6479	245.95	11479	353.00	2703

Data File: /chem/msb.i/b111995.b/b8899.d
Date : 19-NOV-95 12:14
Client ID: dftpp tune
Sample Info: dftpp tune
Volume Injected (uL): 1.0
Column phase:

Instrument: msb.i
Operator: tom
Column diameter: 2.00

Data File: b8899.d
Spectrum : Avg. Scans 152-154 (7.18), Background Scan 149
Largest m/z: 197.95
Number of peaks: 320

m/z	Y	m/z	Y	m/z	Y	m/z	Y
78.10	20864	162.05	2457	246.95	2185	354.00	3830
79.00	25352	163.00	778	247.95	909	355.00	852
79.95	20024	164.10	1016	248.95	2082	359.05	257
81.05	26304	165.00	5519	249.85	373	360.45	116
82.05	5020	166.10	4848	250.95	356	364.95	11816
83.05	5892	167.00	27936	251.95	699	365.90	1932
84.05	1050	168.00	13879	253.05	1332	370.00	235
85.05	3890	169.00	3566	254.90	228544	371.00	943
86.05	6768	170.00	1635	256.00	36024	372.00	6391
87.05	2963	171.00	1639	257.00	3412	373.00	1609
88.05	863	171.95	2813	258.00	15686	373.90	309
89.00	885	173.05	3870	259.00	2568	378.05	188
90.10	437	173.95	5828	260.10	498	380.55	120
91.00	5864	175.05	10162	261.00	1007	383.05	1747
92.00	5740	175.95	4505	263.95	467	384.00	438
93.00	41184	176.95	5676	264.95	5434	384.90	139
94.00	2624	178.05	1565	265.95	690	390.00	858
95.00	1116	178.95	20528	266.85	241	390.90	638
96.10	1345	180.05	13803	270.05	263	391.90	447
96.90	32	181.00	7134	271.55	959	394.95	150
98.05	25216	182.00	1138	271.95	983	396.65	139
98.95	22728	183.00	1051	272.95	9232	400.95	648
100.05	2311	184.00	2038	274.00	24128	402.05	2654
100.95	12987	185.00	10941	275.00	100672	402.90	3711
102.05	582	186.00	72152	276.00	14338	404.00	1285
102.95	5388	187.00	21504	277.00	8617	404.80	338
104.05	7628	188.10	2471	278.00	1776	410.10	119
105.05	8071	189.00	5180	279.00	355	415.15	117
107.00	81608	189.90	931	282.20	244	421.00	3883
108.00	12629	190.95	2555	282.95	1369	422.00	3390
110.00	208832	191.95	6711	283.95	567	423.00	25984
111.00	29112	192.95	6292	284.95	1927	424.00	5670
112.00	3867	193.95	1569	285.95	303	425.00	644
113.10	1399	195.05	800	288.35	342	441.00	66608
114.10	263	195.95	22264	289.15	789	442.00	430144

Data File: /chem/msb.i/b111995.b/b8899.d
Date : 19-NOV-95 12:14
Client ID: dftpp tune
Instrument: msb.i
Sample Info: dftpp tune
Volume Injected (uL): 1.0
Operator: tom
Column phase:
Column diameter: 2.00

Data File: b8899.d
Spectrum : Avg. Scans 152-154 (7.18), Background Scan 149
Largest m/z: 197.95
Number of peaks: 320

m/z	Y	m/z	Y	m/z	Y	m/z	Y
114.90	559	197.95	630080	290.05	376	443.00	84632
116.15	6171	198.95	46192	290.95	323	444.00	8420
116.95	64704	200.00	3384	292.10	468	445.00	313
117.95	5460	201.50	4129	293.00	1996	459.70	173
119.05	1229	203.00	4090	294.00	708	497.70	123
120.05	1455	204.00	19752	296.00	32624	510.15	170
120.95	92	205.00	28688	297.00	4595	526.75	142
122.05	6327	206.00	122416	298.00	247		
123.05	9620	207.00	16904	301.05	423		
124.05	4865	208.00	4458	302.05	502		
125.05	3898	208.95	1644	303.05	3165		

Data File: /chem/aux/mse.i/e111495.b/e8053a.d

Date : 14-NOV-95 10:53

Instrument : mse.i

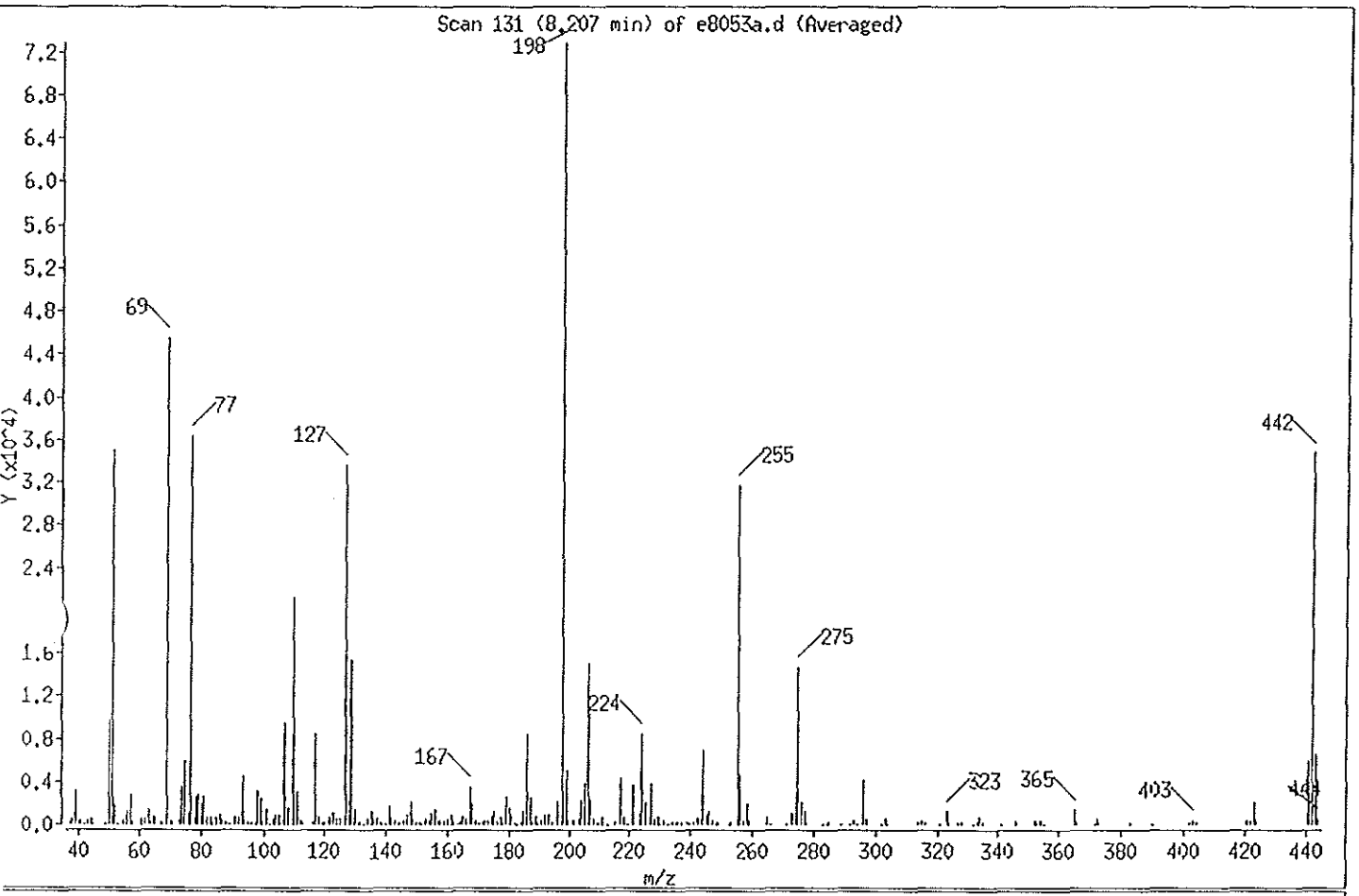
mple ID : dftpp tune

Column phase :

Column diameter : 2.00

Volume Injected (uL) : 1.0

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.0
51	30.00 - 80.00% of mass 198	48.0
68	Less than 2.00% of mass 69	0.0
69	Mass 69 relative abundance	62.1
70	Less than 2.00% of mass 69	0.6
127	25.00 - 75.00% of mass 198	46.1
197	Less than 1.00% of mass 198	0.0
199	5.00 - 9.00% of mass 198	6.8
275	10.00 - 30.00% of mass 198	20.2
365	Greater than 0.75% of mass 198	2.0
441	Present, but less than mass 443	89.3
442	40.00 - 110.00% of mass 198	47.6
443	15.00 - 24.00% of mass 442	18.7

Data File: /chem/aux/mse.i/e111495.b/e8053a.d

Date : 14-NOV-95 10:53

Instrument : mse.i

Sample ID : dftpp tune

Column phase :

Column diameter : 2.00

Volume Injected (uL) : 1.0

0510

Spectrum: Scans 131-133 (8.207 min), Subtraction Scan 128

Location of Maximum: 198.00

Number of points: 247

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	170	116.00	93	180.00	1609	256.00	4626
38.00	544	117.00	8457	181.00	804	257.00	405
39.00	3046	118.00	631	182.00	114	258.00	1935
40.00	226	119.00	97	183.00	34	259.00	305
41.00	60	120.00	168	184.00	235	265.00	757
42.00	34	122.00	666	185.00	1231	266.00	57
43.00	67	123.00	1058	186.00	8460	271.00	34
45.00	54	124.00	588	187.00	2428	273.00	1047
49.00	49	125.00	534	188.00	186	274.00	2886
50.00	9576	127.00	33544	189.00	618	275.00	14681
51.00	34963	128.00	2761	190.00	59	276.00	2057
52.00	1781	129.00	15405	191.00	312	277.00	1151
53.00	82	130.00	1323	192.00	814	278.00	206
55.00	255	131.00	254	193.00	823	283.00	70
56.00	1210	132.00	104	194.00	153	284.00	52
57.00	2432	133.00	77	196.00	2070	285.00	193
58.00	98	134.00	441	198.00	72824	289.00	35
61.00	468	135.00	1169	199.00	4925	292.00	47
62.00	468	136.00	452	200.00	393	293.00	294
63.00	1386	137.00	590	202.00	339	294.00	47
64.00	172	138.00	108	203.00	491	296.00	4051
65.00	702	139.00	43	204.00	2238	297.00	569
67.00	128	140.00	35	205.00	3720	302.00	47
69.00	45196	141.00	1747	206.00	14942	303.00	486
70.00	284	142.00	601	207.00	1997	304.00	63
73.00	217	143.00	361	208.00	584	314.00	203
74.00	3502	144.00	93	209.00	181	315.00	414
75.00	5803	145.00	99	210.00	131	316.00	256
76.00	1024	146.00	359	211.00	647	321.00	74
77.00	36408	147.00	851	213.00	35	323.00	1257
78.00	2576	148.00	2121	215.00	221	324.00	248
79.00	2728	149.00	474	217.00	4358	327.00	255
80.00	1919	150.00	103	218.00	625	328.00	109
81.00	2528	151.00	237	219.00	39	332.00	80
82.00	636	152.00	50	221.00	3609	333.00	115

0511

Data File: /chem/aux/mse.i/e111495.b/e8053a.d

Date : 14-NOV-95 10:53

Instrument : mse.i

Sample ID : dftpp tune

Column phase : Column diameter : 2.00

Volume Injected (uL) : 1.0

Spectrum: Scans 131-133 (8.207 min), Subtraction Scan 128

Location of Maximum: 198.00

Number of points: 247

m/z	Y	m/z	Y	m/z	Y	m/z	Y
83.00	585	153.00	566	223.00	1011	334.00	746
84.00	147	154.00	393	224.00	8460	335.00	153
85.00	630	155.00	963	225.00	2021	341.00	76
86.00	786	156.00	1349	227.00	3724	346.00	278
87.00	352	157.00	293	228.00	501	352.00	355
88.00	137	158.00	333	229.00	772	353.00	257
89.00	45	159.00	265	230.00	60	354.00	378
91.00	689	160.00	564	231.00	308	355.00	34
92.00	667	161.00	783	232.00	38	365.00	1428
93.00	4423	162.00	260	233.00	37	366.00	206
94.00	317	163.00	37	234.00	241	371.00	61
95.00	31	164.00	105	235.00	254	372.00	589
96.00	126	165.00	659	236.00	129	373.00	135
98.00	3152	166.00	589	237.00	253	383.00	142
99.00	2492	167.00	3359	239.00	157	390.00	62
100.00	231	168.00	1944	240.00	85	402.00	224
101.00	1321	169.00	306	241.00	215	403.00	281
102.00	37	170.00	104	242.00	477	404.00	109
103.00	496	171.00	153	244.00	6819	421.00	293
104.00	875	172.00	322	245.00	931	422.00	270
105.00	832	173.00	408	246.00	1280	423.00	2017
107.00	9475	174.00	703	247.00	267	424.00	410
108.00	1517	175.00	1212	248.00	33	441.00	5807
110.00	21259	176.00	388	249.00	235	442.00	34696
111.00	3060	177.00	612	252.00	35	443.00	6505
112.00	400	178.00	201	253.00	149	444.00	600
113.00	130	179.00	2560	255.00	31597		

Data File: /chem/aux/mse.i/e111695.b/e8068.d

Date : 16-NOV-95 14:15

Client ID: dftpp tune

Sample Info: dftpp tune

Volume Injected (uL): 1.0

Column phase:

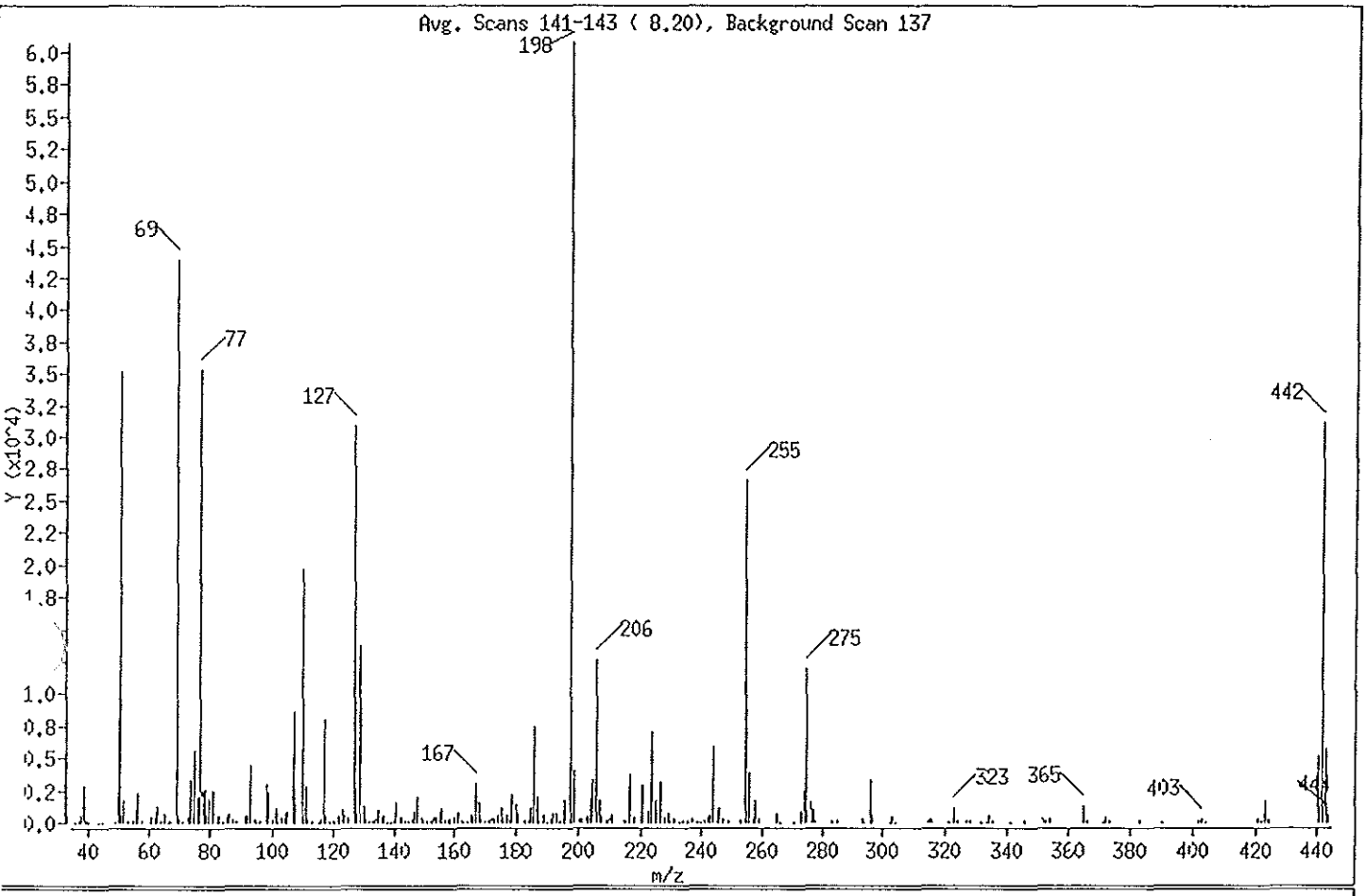
1 dftpp

0512

Instrument: mse.i

Operator: tom

Column diameter: 2.00



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 80.00% of mass 198	57.82
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	72.32
70	Less than 2.00% of mass 69	0.39 (0.53)
127	25.00 - 75.00% of mass 198	50.94
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.71
275	10.00 - 30.00% of mass 198	19.58
365	Greater than 0.75% of mass 198	2.13
441	Present, but less than mass 443	8.63
442	40.00 - 110.00% of mass 198	51.28
443	15.00 - 24.00% of mass 442	9.39 (18.31)

Data File: /chem/aux/mse.i/e111695.b/e8068.d
Date : 16-NOV-95 14:15
Client ID: dftpp tune
Sample Info: dftpp tune
Volume Injected (uL): 1.0
Column phase:

Instrument: mse.i
Operator: tom
Column diameter: 2.00

Data File: e8068.d
Spectrum : Avg. Scans 141-143 (8.20), Background Scan 137
Largest m/z: 197.90
Number of peaks: 242

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.75	46	111.95	300	174.95	1095	254.95	26536
36.95	170	112.85	109	175.95	302	255.95	3817
37.95	510	114.85	41	176.85	553	256.95	282
38.95	2826	115.95	306	177.95	116	257.85	1662
39.95	194	116.95	8111	178.85	2191	258.90	276
40.85	15	117.85	610	179.95	1450	264.90	659
43.85	19	118.85	138	180.85	661	265.90	43
44.85	52	119.95	100	182.65	92	270.90	37
48.95	63	120.95	76	183.85	213	273.00	830
49.95	9612	121.95	634	184.95	1092	274.00	2372
50.95	35112	122.95	995	185.95	7412	274.90	11893
51.95	1790	123.85	512	186.95	2034	275.90	1590
52.95	89	124.85	446	187.85	200	276.90	1010
54.85	150	126.95	30936	188.85	526	277.90	172
55.85	962	128.00	2573	189.85	51	282.90	103
56.85	2289	129.00	13777	190.95	252	283.90	38
57.85	127	129.90	1262	191.95	727	284.90	91
60.85	470	130.90	232	192.95	711	292.95	255
61.85	480	131.90	104	194.00	171	293.85	34
62.90	1333	133.00	75	196.00	1704	295.95	3281
63.90	182	133.90	346	197.90	60728	296.95	479
64.90	651	134.90	1032	198.90	4077	301.95	35
65.90	38	135.90	444	199.90	309	302.95	372
67.00	142	137.00	575	201.50	249	303.95	40
68.90	43920	138.00	49	202.90	481	313.95	122
69.90	234	138.90	38	204.00	1888	314.85	349
70.90	77	140.00	186	205.00	3320	315.95	159
73.00	411	140.90	1562	206.00	12602	320.95	46
73.90	3324	141.90	498	207.00	1679	322.95	1101
74.90	5546	142.90	362	207.90	502	323.95	183
76.00	1966	143.90	82	208.90	195	326.90	158
77.00	35280	144.90	84	209.90	243	327.90	75
78.00	2463	145.90	298	210.90	524	331.90	37
78.90	2564	146.90	803	214.90	184	333.00	52
79.90	1861	147.90	1987	216.90	3785	334.00	642

Data File: /chem/aux/mse.i/e111695.b/e8068.d
Date : 16-NOV-95 14:15
Client ID: dftpp tune
Sample Info: dftpp tune
Volume Injected (uL): 1.0
Column phase:

Instrument: mse.i
Operator: tom
Column diameter: 2.00

Data File: e8068.d
Spectrum : Avg. Scans 141-143 (8.20), Background Scan 137
Largest m/z: 197.90
Number of peaks: 242

m/z	Y	m/z	Y	m/z	Y	m/z	Y
80.90	2396	148.90	412	217.90	455	335.00	118
81.90	624	149.90	103	220.90	2853	341.00	69
82.90	579	151.00	209	222.90	915	345.90	205
83.90	133	151.90	100	223.90	7094	351.90	320
84.90	472	152.90	467	224.90	1794	353.00	192
85.90	738	153.90	362	226.95	3118	354.00	274
86.90	355	154.90	844	227.95	418	364.95	1293
87.90	118	155.90	1176	228.95	675	365.95	173
90.90	636	156.90	285	229.95	82	370.95	44
91.90	583	157.80	289	230.95	244	371.95	494
92.90	4385	158.90	264	232.85	38	372.95	135
93.90	266	159.90	482	233.85	186	382.95	110
94.85	145	160.95	712	234.85	212	389.85	34
95.95	195	161.95	187	235.85	132	401.90	169
97.95	2996	162.95	34	236.85	232	403.00	279
98.95	2265	163.95	40	238.85	68	403.90	43
99.95	264	164.95	613	239.95	41	420.90	230
100.95	1198	165.95	464	240.85	194	422.00	215
101.85	46	166.95	3040	241.95	429	423.05	1760
102.95	498	167.95	1640	243.05	505	423.95	341
103.95	771	168.95	235	243.95	5865	441.05	5240
104.95	800	169.95	91	244.95	862	442.05	31136
106.95	8678	170.95	107	245.85	1100	443.05	5702
107.95	1449	171.85	288	246.85	242	443.95	561
109.95	19616	172.95	331	248.85	141		
110.95	2860	173.95	602	252.95	141		

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0515

SBLK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: N1C51710C

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E8070

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

0516

EPA SAMPLE NO.

SBLK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: N1C51710C

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E8070

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
101-55-3	4-Bromophenyl-phenylether	10	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-2	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

0517 SBLK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: N1C51710C

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E8070

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 123-42-2	2-Pentanone, 4-hydroxy-4-met	5.97	11	JNA

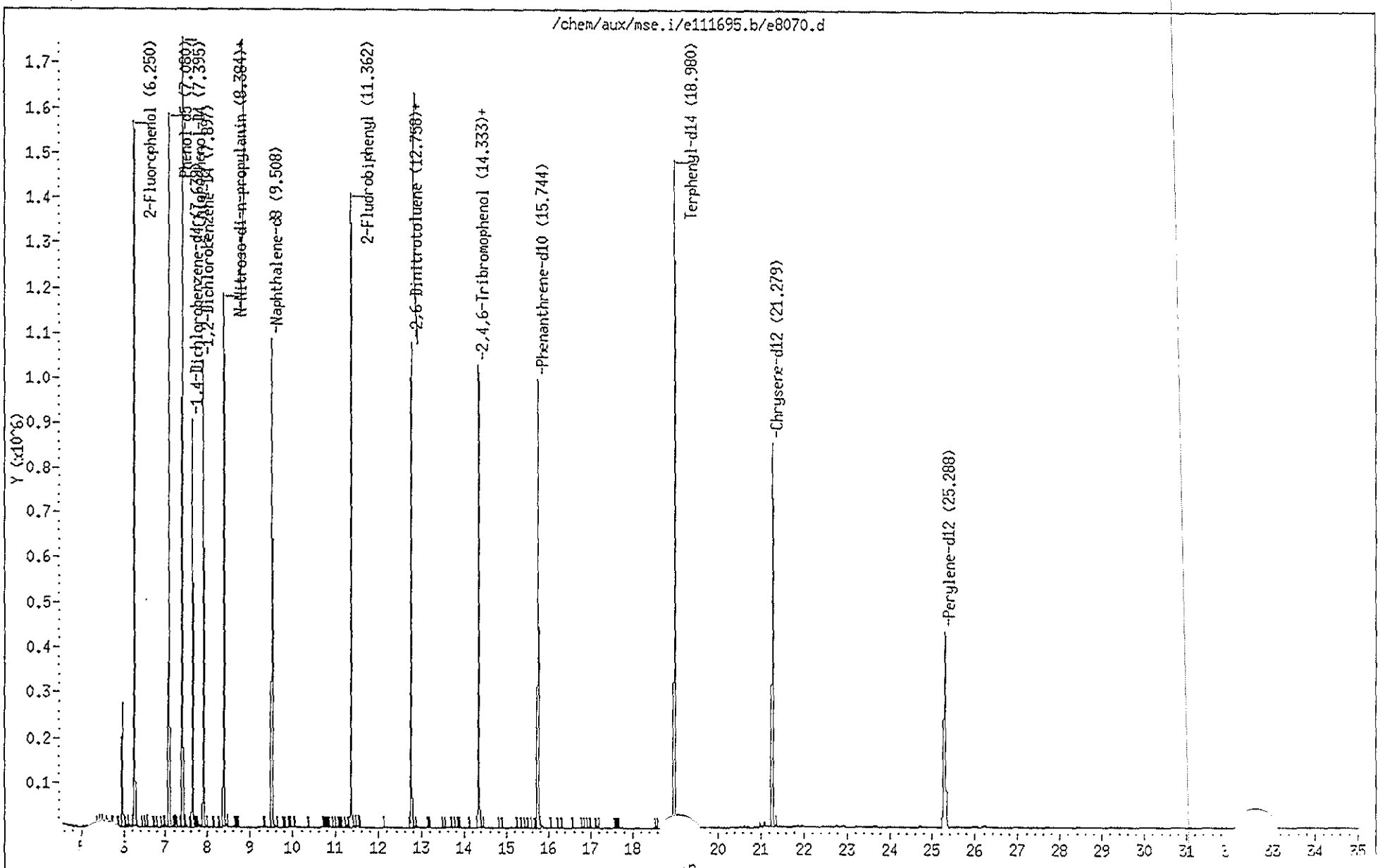
0518

Data File: /chem/aux/mse.i/e111695.b/e8070.d
Date : 16-NOV-95 15:40
Client ID: n1c51710c
Sample Info: method blank

Column phase: J&W DB-5

Instrument: mse.i

Operator: J. Kelly
Column diameter: 0.25



Data File: /chem/aux/mse.i/e111695.b/e8070.d
Report Date: 17-Nov-1995 13:45

OHM Analytical Division

BASE NEUTRAL QUANT AND RATIO REPORT

Data file : /chem/aux/mse.i/e111695.b/e8070.d
Lab Smp Id: Client Smp ID: n1c51710c
Inj Date : 16-NOV-95 15:40
Operator : J. Kelly Inst ID: mse.i
Smp Info : method blank
Misc Info : n1c51710c,n1c51710,ml,1,1
Comment :
Method : /chem/aux/mse.i/e111695.b/111495eclp.m
Meth Date : 17-Nov-1995 13:45 kathryn Quant Type: ISTD
Cal Date : 16-NOV-95 14:53 Cal File: e8069.d
Als bottle: 3
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

KBrydon

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
)-Fluorophenol	112.00	6.250	6.252	(0.818)	679311	91.8	91.8(R)
$ 4 Phenol-d5	99.00	7.080	7.083	(0.927)	771067	76.0	76.0(R)
$ 7 2-Chlorophenol-D4	132.00	7.395	7.398	(0.968)	708554	99.0	99.0(R)
* 10 1,4-Dichlorobenzene-d4	152.00	7.639	7.641	(1.000)	198091	40.0	
$ 13 1,2-Dichlorobenzene-D4	152.00	7.897	7.899	(1.034)	233357	56.1	56.1(R)
17 N-Nitroso-di-n-propylamine	70.00	8.384	8.114	(1.097)	88721	11.8	~~11.8(Q)~~ ND, RT, MS
$ 19 Nitrobenzene-d5	82.00	8.384	8.386	(0.882)	631007	61.9	61.9(R)
* 27 Naphthalene-d8	136.00	9.508	9.510	(1.000)	792374	40.0	
$ 37 2-Fluorobiphenyl	172.00	11.362	11.364	(0.891)	736795	62.6	62.6(R)
41 2,6-Dinitrotoluene	165.00	12.758	12.295	(1.000)	46598	13.6	~~13.6(Q)~~ ND, RT, MS
* 44 Acenaphthene-d10	164.00	12.758	12.761	(1.000)	406910	40.0	
$ 56 2,4,6-Tribromophenol	330.00	14.341	14.343	(1.124)	207803	114	114(R)
57 4-Bromophenyl-phenylether	248.00	14.341	14.744	(0.911)	12575	3.77	~~3.77(Q)~~ ND, RT, MS
60 Phenanthrene-d10	188.00	15.744	15.754	(1.000)	597786	40.0	
68 Terphenyl-d14	244.00	18.980	18.983	(0.892)	894800	78.7	78.7(R)
73 Chrysene-d12	240.00	21.279	21.288	(1.000)	504251	40.0	
79 Perylene-d12	264.00	25.288	25.305	(1.000)	469933	40.0	

)C Flag Legend

) - Qualifier signal failed the ratio test.
! - Spike/Surrogate failed recovery limits.

Data File: /chem/aux/mse.i/e111695.b/e8070.d

Date : 16-NOV-95 15:40

Client ID: n1c51710c

Sample Info: method blank

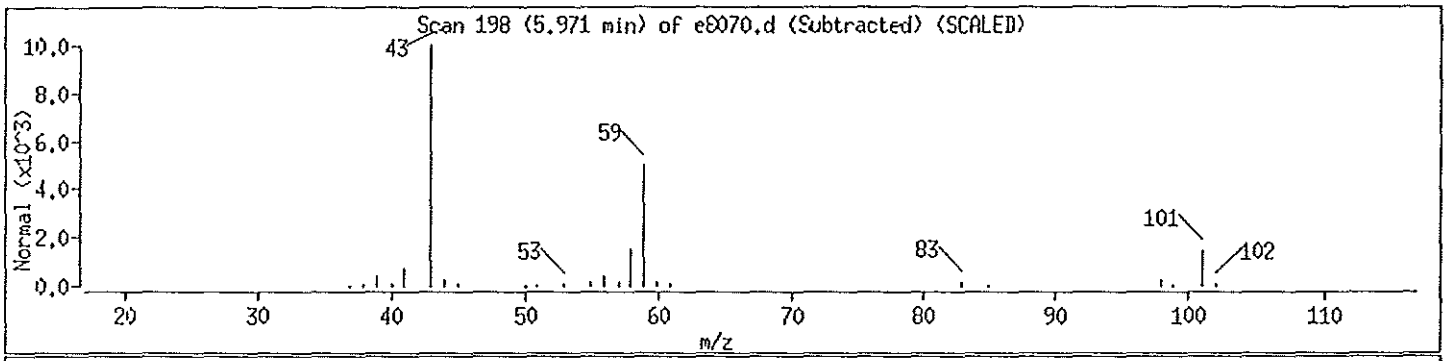
Instrument: mse.i

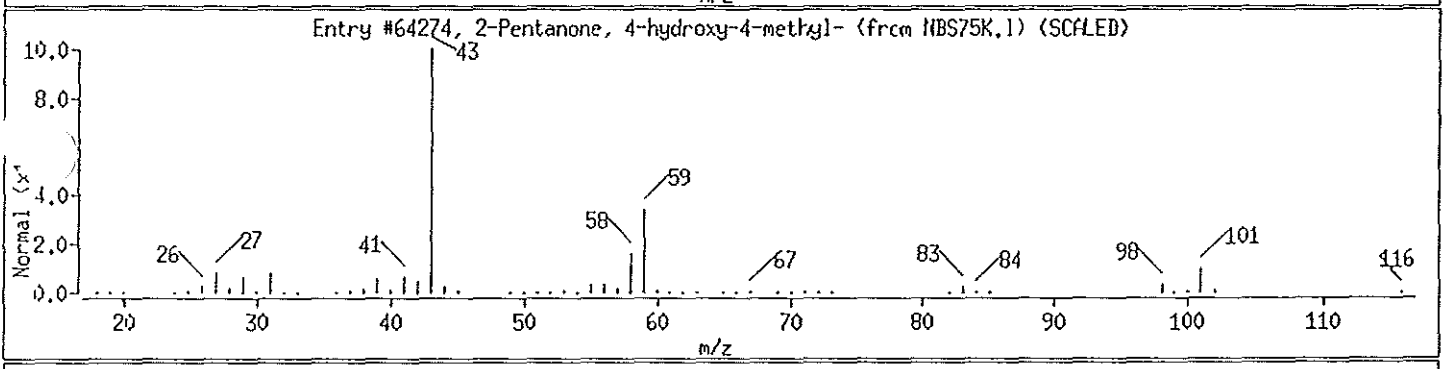
Operator: J. Kelly

Column phase: J&W DB-5

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NBS75K.l	64274	42	C6H12O2	116





1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0521 CLJ78TW001MS

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0323CS

Sample wt/vol: 500 (g/mL) ML Lab File ID: E8072

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	150	
111-44-4	bis(2-Chloroethyl)ether	86	
95-57-8	2-Chlorophenol	190	
541-73-1	1,3-Dichlorobenzene	100	
106-46-7	1,4-Dichlorobenzene	110	
95-50-1	1,2-Dichlorobenzene	110	
95-48-7	2-Methylphenol	150	
108-60-1	2,2'-oxybis(1-Chloropropane)	150	
106-44-5	4-Methylphenol	150	
621-64-7	N-Nitroso-di-n-propylamine	160	
67-72-1	Hexachloroethane	94	
98-95-3	Nitrobenzene	160	
78-59-1	Isophorone	160	
88-75-5	2-Nitrophenol	250	
105-67-9	2,4-Dimethylphenol	190	
111-91-1	bis(2-Chloroethoxy)methane	150	
120-83-2	2,4-Dichlorophenol	230	
120-82-1	1,2,4-Trichlorobenzene	120	
91-20-3	Naphthalene	130	
106-47-8	4-Chloroaniline	87	
87-68-3	Hexachlorobutadiene	110	
59-50-7	4-Chloro-3-methylphenol	220	
91-57-6	2-Methylnaphthalene	130	
77-47-4	Hexachlorocyclopentadiene	37	
88-06-2	2,4,6-Trichlorophenol	240	
95-95-4	2,4,5-Trichlorophenol	180	
91-58-7	2-Chloronaphthalene	140	
88-74-4	2-Nitroaniline	160	
131-11-3	Dimethylphthalate	43	
208-96-8	Acenaphthylene	150	
606-20-2	2,6-Dinitrotoluene	180	
99-09-2	3-Nitroaniline	120	
83-32-9	Acenaphthene	140	

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0522

CLJ78TW001MS

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0323CS

Sample wt/vol: 500 (g/mL) ML Lab File ID: E8072

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

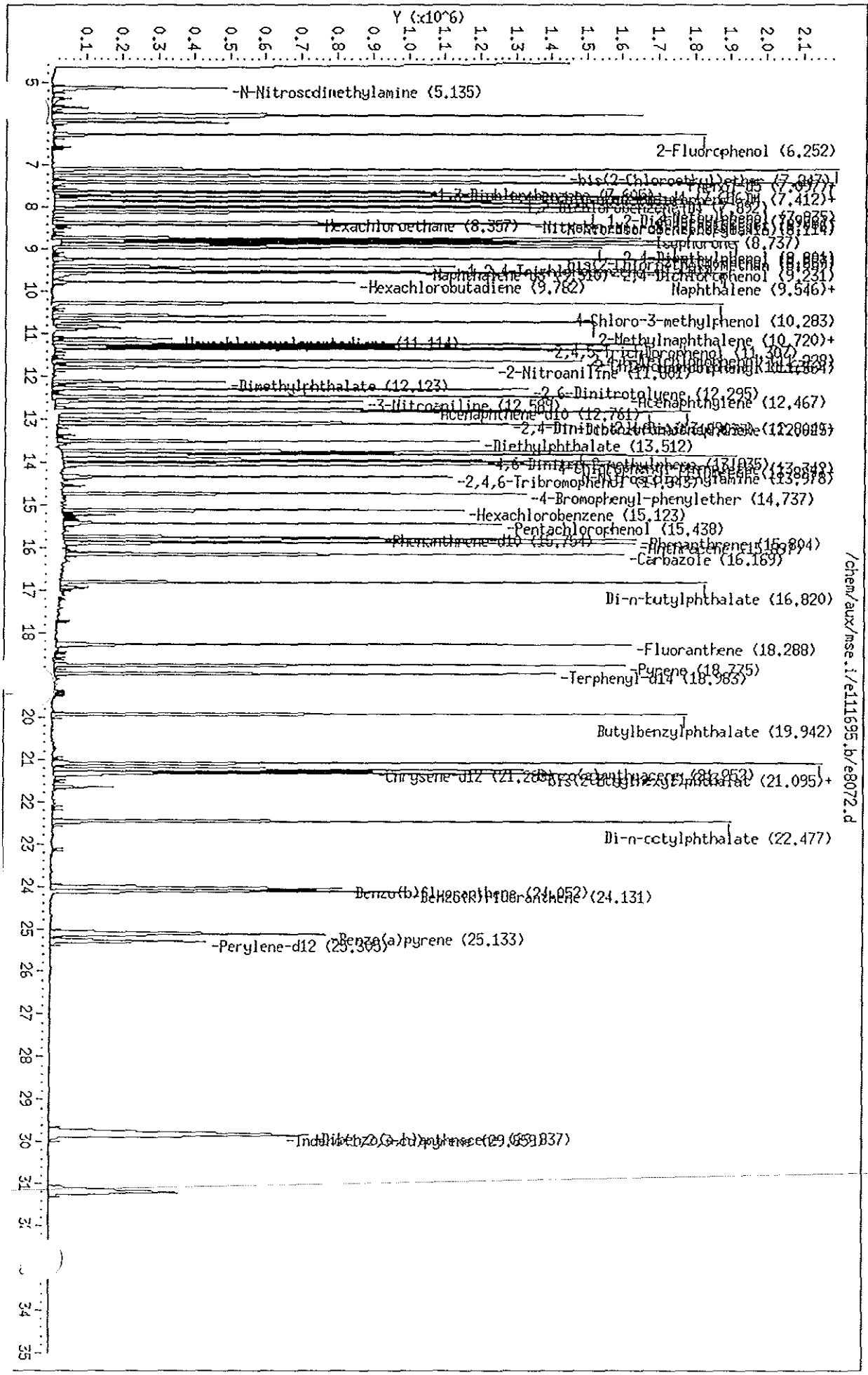
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	630	
100-02-7	4-Nitrophenol	200	
132-64-9	Dibenzofuran	150	
121-14-2	2,4-Dinitrotoluene	180	
84-66-2	Diethylphthalate	110	
7005-72-3	4-Chlorophenyl-phenylether	160	
86-73-7	Fluorene	140	
100-01-6	4-Nitroaniline	150	
534-52-1	4,6-Dinitro-2-methylphenol	510	
101-55-3	4-Bromophenyl-phenylether	170	
86-30-6	N-Nitrosodiphenylamine (1)	170	
118-74-1	Hexachlorobenzene	170	
87-86-5	Pentachlorophenol	290	
85-01-8	Phenanthrene	160	
120-12-7	Anthracene	160	
86-74-8	Carbazole	170	
84-74-2	Di-n-butylphthalate	140	
206-44-0	Fluoranthene	170	
129-00-0	Pyrene	160	
85-68-2	Butylbenzylphthalate	140	
91-94-1	3,3'-Dichlorobenzidine	96	
56-55-3	Benzo(a)anthracene	160	
218-01-9	Chrysene	160	
117-81-7	bis(2-Ethylhexyl)phthalate	130	
117-84-0	Di-n-octylphthalate	150	
205-99-2	Benzo(b)fluoranthene	180	
207-08-9	Benzo(k)fluoranthene	160	
50-32-8	Benzo(a)pyrene	170	
193-39-5	Indeno(1,2,3-cd)pyrene	170	
53-70-3	Dibenz(a,h)anthracene	170	
191-24-2	Benzo(g,h,i)perylene	170	

(1) - Cannot be separated from Diphenylamine

Data File: /chem/aux/mse.i/e111695.b/e8072.d
Date : 16-NOV-95 17:11
Client ID: jp0323cs
Sample Info: 17418n cl78tw001 MS

Column phase: J&W DB-5

Instrument: mse.i
Operator: J. Kelly
Column diameter: 0.25



OHM Analytical Division

BASE NEUTRAL QUANT AND RATIO REPORT

Data file : /chem/aux/mse.i/e111695.b/e8072.d
Lab Smp Id: Client Smp ID: jp0323cs
Inj Date : 16-NOV-95 17:11
Operator : J. Kelly Inst ID: mse.i
Smp Info : 17418n clj78tw001 MS
Misc Info : jp0323cs,n1c51710,m1,1,1
Comment :
Method : /chem/aux/mse.i/e111695.b/111495eclp.m
Meth Date : 17-Nov-1995 13:23 kathryn Quant Type: ISTD
Cal Date : 16-NOV-95 14:53 Cal File: e8069.d
Als bottle: 5
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
	N-Nitrosodimethylamine	42.00	5.135	5.142	(0.672)	330672	71.8	71.8
$	2-Fluorophenol	112.00	6.252	6.252	(0.818)	773898	107	107(R)
$ 4	Phenol-d5	99.00	7.083	7.083	(0.927)	781896	79.0	79.0(R)
5	Phenol	94.00	7.104	7.097	(0.930)	805997	77.1	77.1
6	bis(2-Chloroethyl)ether	93.00	7.247	7.247	(0.948)	885213	43.2	43.2(Q)
$ 7	2-Chlorophenol-D4	132.00	7.398	7.398	(0.968)	727369	104	104(R)
8	2-Chlorophenol	128.00	7.419	7.419	(0.971)	706530	95.2	95.2
9	1,3-Dichlorobenzene	146.00	7.605	7.613	(0.995)	379886	51.6	51.6
* 10	1,4-Dichlorobenzene-d4	152.00	7.641	7.641	(1.000)	193205	40.0	
11	1,4-Dichlorobenzene	146.00	7.663	7.663	(1.003)	397204	53.9	53.9
12	2-Methylphenol	108.00	7.835	7.835	(1.025)	530355	75.9	75.9
$ 13	1,2-Dichlorobenzene-D4	152.00	7.892	7.899	(1.033)	286887	70.7	70.7(R)
14	1,2-Dichlorobenzene	146.00	7.913	7.921	(1.036)	354535	53.3	53.3
15	2,2'-oxybis(1-Chloropropene)	45.00	7.928	7.928	(1.037)	1074492	73.1	73.1
16	4-Methylphenol	108.00	8.006	8.006	(1.048)	563166	75.6	75.6
17	N-Nitroso-di-n-propylamine	70.00	8.121	8.114	(1.063)	575726	78.2	78.2
18	Hexachloroethane	117.00	8.357	8.364	(1.094)	160057	47.2	47.2
$ 19	Nitrobenzene-d5	82.00	8.386	8.386	(0.882)	767984	76.4	76.4(R)
20	Nitrobenzene	77.00	8.415	8.415	(0.885)	743369	78.1	78.1
21	Isophorone	82.00	8.737	8.730	(0.919)	1590515	80.7	80.7
22	2,4-Dimethylphenol	107.00	8.801	8.801	(0.925)	738158	97.2	97.2
23	2-Nitrophenol	139.00	8.887	8.887	(0.934)	492772	124	124
24	bis(2-Chloroethoxy)methane	93.00	8.959	8.959	(0.942)	841672	76.4	76.4
25	2,4-Dichlorophenol	162.00	9.231	9.231	(0.971)	616752	116	116
26	1,2,4-Trichlorobenzene	180.00	9.410	9.417	(0.989)	330743	62.3	62.3
	Naphthalene-d8	136.00	9.510	9.510	(1.000)	781054	40.0	
	Naphthalene	128.00	9.546	9.546	(1.004)	1213853	66.4	66.4
29	4-Chloroaniline	127.00	9.553	9.560	(1.005)	470435	43.3	43.3
30	Hexachlorobutadiene	225.00	9.782	9.789	(1.029)	153551	52.8	52.8

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
	31 4-Chloro-3-methylphenol	107.00	10.283	10.283	(1.081)	711073	110	110
	32 2-Methylnaphthalene	142.00	10.720	10.720	(1.127)	791601	64.9	64.9
	33 1-Methylnapthalene	142.00	10.720	10.935	(1.127)	791601	72.6	~~72.6~~ ND, Rt
	34 Hexachlorocyclopentadiene	237.00	11.114	11.121	(0.871)	37222	18.7	18.7
	35 2,4,6-Trichlorophenol	196.00	11.228	11.228	(0.880)	440655	122	122
	36 2,4,5-Trichlorophenol	196.00	11.307	11.307	(0.887)	330451	89.3	89.3
$	37 2-Fluorobiphenyl	172.00	11.364	11.364	(0.891)	870620	75.4	75.4(R)
	38 2-Chloronaphthalene	162.00	11.636	11.644	(0.912)	750527	71.0	71.0
	39 2-Nitroaniline	65.00	11.801	11.801	(0.925)	453889	80.7	80.7
	40 Dimethylphthalate	163.00	12.123	12.131	(0.951)	300695	21.5	21.5
	41 2,6-Dinitrotoluene	165.00	12.295	12.295	(0.964)	297238	88.6	88.6
	42 Acenaphthylene	152.00	12.467	12.474	(0.978)	1324128	72.6	72.6
	43 3-Nitroaniline	138.00	12.589	12.589	(0.987)	252847	62.5	62.5
*	44 Acenaphthene-d10	164.00	12.753	12.761	(1.000)	398674	40.0	
	45 2,4-Dinitrophenol	184.00	12.796	12.789	(1.003)	212499	316	316(AQ)
	46 Acenaphthene	153.00	12.825	12.825	(1.006)	761394	68.9	68.9
	47 4-Nitrophenol	109.00	12.804	12.789	(1.004)	170144	99.5	99.5
	48 2,4-Dinitrotoluene	165.00	13.090	13.090	(1.026)	384230	90.3	90.3
	49 Dibenzofuran	168.00	13.133	13.133	(1.030)	1135072	74.7	74.7
	50 Diethylphthalate	149.00	13.512	13.512	(1.060)	842343	56.1	56.1
	51 4-Chlorophenyl-phenylether	204.00	13.742	13.742	(1.077)	452368	79.8	79.8
	Fluorene	166.00	13.827	13.828	(1.084)	845414	71.4	71.4
	4-Nitroaniline	138.00	13.842	13.820	(1.085)	270242	73.6	73.6
	54 4,6-Dinitro-2-methylphenol	198.00	13.935	13.928	(0.885)	306179	253	253(AQ)
	55 N-Nitrosodiphenylamine	169.00	13.978	13.971	(0.887)	688554	82.7	82.7
$	56 2,4,6-Tribromophenol	330.00	14.343	14.343	(1.125)	235521	132	132(R)
	57 4-Bromophenyl-phenylether	248.00	14.737	14.744	(0.935)	274623	84.8	84.8
	58 Hexachlorobenzene	284.00	15.123	15.131	(0.960)	287488	82.5	82.5
	59 Pentachlorophenol	266.00	15.438	15.439	(0.980)	274347	143	143
*	60 Phenanthrene-d10	188.00	15.754	15.754	(1.000)	580703	40.0	
	61 Phenanthrene	178.00	15.804	15.804	(1.003)	1296014	79.4	79.4
	62 Anthracene	178.00	15.897	15.897	(1.009)	1346969	79.5	79.5
	63 Carbazole	167.00	16.169	16.162	(1.026)	1312870	84.9	84.9
	64 Di-n-butylphthalate	149.00	16.820	16.828	(1.068)	1933437	72.0	72.0
	65 Fluoranthene	202.00	18.288	18.288	(1.161)	1358895	83.2	83.2
	67 Pyrene	202.00	18.775	18.775	(0.882)	1379423	80.6	80.6
$	68 Terphenyl-d14	244.00	18.983	18.983	(0.892)	822506	71.0	71.0(R)
	69 Butylbenzylphthalate	149.00	19.942	19.949	(0.937)	849072	69.7	69.7
	70 bis(2-Ethylhexyl)phthalate	149.00	21.088	21.095	(0.991)	1044500	67.3	67.3
	71 3,3'-Dichlorobenzidine	252.00	21.109	21.102	(0.992)	277040	48.0	48.0
	72 Benzo(a)anthracene	228.00	21.252	21.245	(0.998)	1232840	81.2	81.2
	73 Chrysene-d12	240.00	21.288	21.288	(1.000)	513804	40.0	
	74 Chrysene	228.00	21.353	21.346	(1.003)	1102460	78.7	78.7
	75 Di-n-octylphthalate	149.00	22.477	22.470	(0.888)	2276442	75.7	75.7
	76 Benzo(b)fluoranthene	252.00	24.052	24.045	(0.950)	1215968	91.2	91.2
	77 Benzo(k)fluoranthene	252.00	24.131	24.116	(0.954)	1137742	80.2	80.2
	Benzo(a)pyrene	252.00	25.133	25.126	(0.993)	1038282	85.8	85.8
	Perylene-d12	264.00	25.305	25.305	(1.000)	456715	40.0	
	80 Dibenzo(a,h)anthracene	278.00	29.837	29.809	(1.179)	830150	85.0	85.0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
81 Indeno(1,2,3-cd)pyrene	276.00	29.859	29.816	(1.180)	1004600	86.0	86.0
82 Benzo (g,hi) perylene		31.205				86.7	

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLJ78TW001MSD

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC 0527

p Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0323CR

Sample wt/vol: 500 (g/mL) ML Lab File ID: E8073

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	150	
111-44-4	bis(2-Chloroethyl)ether	84	
95-57-8	2-Chlorophenol	190	
541-73-1	1,3-Dichlorobenzene	94	
106-46-7	1,4-Dichlorobenzene	100	
95-50-1	1,2-Dichlorobenzene	98	
95-48-7	2-Methylphenol	150	
108-60-1	2,2'-oxybis(1-Chloropropane)	140	
106-44-5	4-Methylphenol	150	
621-64-7	N-Nitroso-di-n-propylamine	150	
67-72-1	Hexachloroethane	88	
98-95-3	Nitrobenzene	150	
78-59-1	Isophorone	160	
88-75-5	2-Nitrophenol	250	
105-67-9	2,4-Dimethylphenol	190	
111-91-1	bis(2-Chloroethoxy)methane	150	
120-83-2	2,4-Dichlorophenol	230	
120-82-1	1,2,4-Trichlorobenzene	120	
91-20-3	Naphthalene	130	
106-47-8	4-Chloroaniline	89	
87-68-3	Hexachlorobutadiene	110	
59-50-7	4-Chloro-3-methylphenol	220	
91-57-6	2-Methylnaphthalene	130	
77-47-4	Hexachlorocyclopentadiene	84	
88-06-2	2,4,6-Trichlorophenol	240	
95-95-4	2,4,5-Trichlorophenol	180	
91-58-7	2-Chloronaphthalene	150	
88-74-4	2-Nitroaniline	160	
131-11-3	Dimethylphthalate	43	
208-96-8	Acenaphthylene	150	
606-20-2	2,6-Dinitrotoluene	170	
99-09-2	3-Nitroaniline	130	
83-32-9	Acenaphthene	140	

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0528 CLJ78TW001MSD

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0323CR

Sample wt/vol: 500 (g/mL) ML Lab File ID: E8073

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

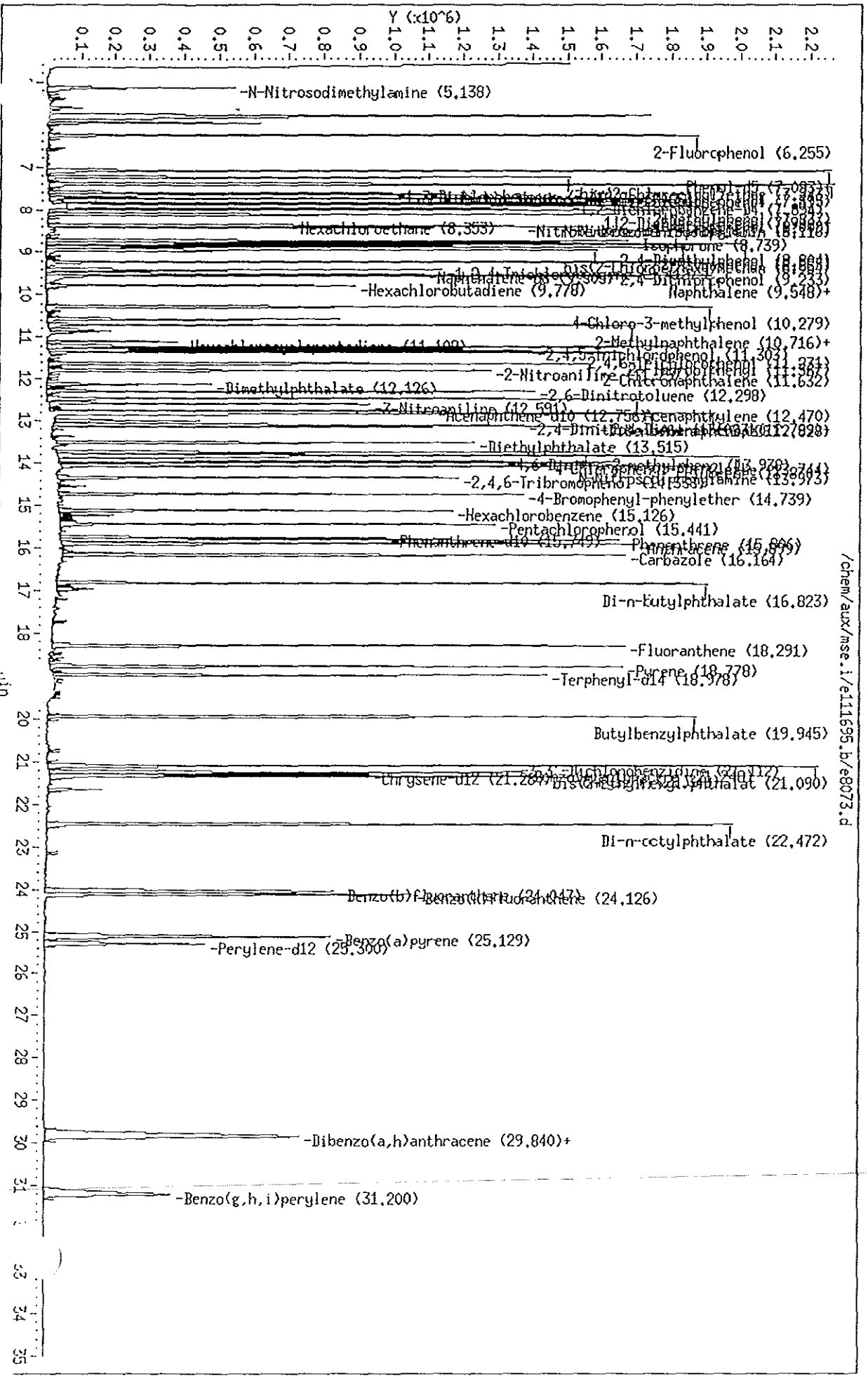
GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	660	
100-02-7	4-Nitrophenol	200	
132-64-9	Dibenzofuran	150	
121-14-2	2,4-Dinitrotoluene	180	
84-66-2	Diethylphthalate	110	
7005-72-3	4-Chlorophenyl-phenylether	160	
86-73-7	Fluorene	140	
100-01-6	4-Nitroaniline	140	
534-52-1	4,6-Dinitro-2-methylphenol	530	
101-55-3	4-Bromophenyl-phenylether	170	
86-30-6	N-Nitrosodiphenylamine (1)	170	
118-74-1	Hexachlorobenzene	160	
87-86-5	Pentachlorophenol	290	
85-01-8	Phenanthrene	160	
120-12-7	Anthracene	160	
86-74-8	Carbazole	170	
84-74-2	Di-n-butylphthalate	140	
206-44-0	Fluoranthene	160	
129-00-0	Pyrene	160	
85-68-2	Butylbenzylphthalate	140	
91-94-1	3,3'-Dichlorobenzidine	99	
56-55-3	Benzo(a)anthracene	160	
218-01-9	Chrysene	160	
117-81-7	bis(2-Ethylhexyl)phthalate	130	
117-84-0	Di-n-octylphthalate	150	
205-99-2	Benzo(b)fluoranthene	180	
207-08-9	Benzo(k)fluoranthene	160	
50-32-8	Benzo(a)pyrene	170	
193-39-5	Indeno(1,2,3-cd)pyrene	170	
53-70-3	Dibenz(a,h)anthracene	170	
191-24-2	Benzo(g,h,i)perylene	170	

(1) - Cannot be separated from Diphenylamine

Data File: /chem/aux/mse.i/e111695.b/e8073.d
Date : 16-NOV-95 17:56
Client ID: jp0323cr
Sample Info: 17418n cl78tw001 MSD
Column phase: J&W DB-5

0529



Instrument: mse.i
Operator: J. Kelly
Column diameter: 0.25

OHM Analytical Division

BASE NEUTRAL QUANT AND RATIO REPORT

Data file : /chem/aux/mse.i/e111695.b/e8073.d
Lab Smp Id: Client Smp ID: jp0323cr
Inj Date : 16-NOV-95 17:56
Operator : J. Kelly Inst ID: mse.i
Smp Info : 17418n clj78tw001 MSD
Misc Info : jp0323cr,n1c51710,m1,1,1
Comment :
Method : /chem/aux/mse.i/e111695.b/111495eclp.m
Meth Date : 17-Nov-1995 13:23 kathryn Quant Type: ISTD
Cal Date : 16-NOV-95 14:53 Cal File: e8069.d
Als bottle: 6
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
Nitrosodimethylamine	42.00	5.138	5.142	(0.673)	351610	72.4	72.4
3 2-Fluorophenol	112.00	6.255	6.252	(0.819)	808919	106	106(R)
4 Phenol-d5	99.00	7.078	7.083	(0.927)	823220	78.9	78.9(R)
5 Phenol	94.00	7.100	7.097	(0.930)	839405	76.2	76.2
6 bis(2-Chloroethyl)ether	93.00	7.243	7.247	(0.948)	912826	42.2	42.2(Q)
7 2-Chlorophenol-D4	132.00	7.393	7.398	(0.968)	752151	102	102(R)
8 2-Chlorophenol	128.00	7.422	7.419	(0.972)	735946	94.1	94.1
9 1,3-Dichlorobenzene	146.00	7.601	7.613	(0.995)	364873	47.0	47.0
10 1,4-Dichlorobenzene-d4	152.00	7.637	7.641	(1.000)	203681	40.0	
11 1,4-Dichlorobenzene	146.00	7.658	7.663	(1.003)	387016	49.8	49.8
12 2-Methylphenol	108.00	7.837	7.835	(1.026)	555870	75.5	75.5
13 1,2-Dichlorobenzene-D4	152.00	7.894	7.899	(1.034)	300666	70.3	70.3(R)
14 1,2-Dichlorobenzene	146.00	7.916	7.921	(1.037)	344801	49.2	49.2
15 2,2'-oxybis(1-Chloropropene)	45.00	7.923	7.928	(1.038)	1085117	70.0	70.0
16 4-Methylphenol	108.00	8.009	8.006	(1.049)	597893	76.2	76.2
17 N-Nitroso-di-n-propylamine	70.00	8.116	8.114	(1.063)	596907	76.9	76.9
18 Hexachloroethane	117.00	8.353	8.364	(1.094)	157258	44.0	44.0
19 Nitrobenzene-d5	82.00	8.389	8.386	(0.882)	800306	75.2	75.2(R)
20 Nitrobenzene	77.00	8.410	8.415	(0.885)	763832	75.7	75.7
21 Isophorone	82.00	8.739	8.730	(0.919)	1654667	79.2	79.2
22 2,4-Dimethylphenol	107.00	8.804	8.801	(0.926)	762048	94.7	94.7
23 2-Nitrophenol	139.00	8.890	8.887	(0.935)	519164	123	123
24 bis(2-Chloroethoxy)methane	93.00	8.954	8.959	(0.942)	881481	75.5	75.5
25 2,4-Dichlorophenol	162.00	9.233	9.231	(0.971)	650012	115	115
2,4-Trichlorobenzene	180.00	9.412	9.417	(0.990)	346597	61.6	61.6
phthalene-d8	136.00	9.505	9.510	(1.000)	827926	40.0	
28 Naphthalene	128.00	9.541	9.546	(1.004)	1214402	62.7	62.7
29 4-Chloroaniline	127.00	9.556	9.560	(1.005)	513844	44.6	44.6
30 Hexachlorobutadiene	225.00	9.778	9.789	(1.029)	165115	53.5	53.5

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
	31 4-Chloro-3-methylphenol	107.00	10.279	10.283	(1.081)	738745	108	108
	32 2-Methylnaphthalene	142.00	10.716	10.720	(1.127)	863453	66.8	66.8
	33 1-Methylnapthalene	142.00	10.716	10.935	(1.127)	863453	74.7	~~74.7~~ ND, Rt
	34 Hexachlorocyclopentadiene	237.00	11.109	11.121	(0.871)	88548	42.1	42.1
	35 2,4,6-Trichlorophenol	196.00	11.231	11.228	(0.880)	461656	121	121
	36 2,4,5-Trichlorophenol	196.00	11.303	11.307	(0.886)	350772	89.6	89.6
$	37 2-Fluorobiphenyl	172.00	11.367	11.364	(0.891)	919852	75.3	75.3(R)
	38 2-Chloronaphthalene	162.00	11.639	11.644	(0.912)	827007	73.9	73.9
	39 2-Nitroaniline	65.00	11.797	11.801	(0.925)	474185	79.6	79.6
	40 Dimethylphthalate	163.00	12.126	12.131	(0.951)	315872	21.4	21.4
	41 2,6-Dinitrotoluene	165.00	12.298	12.295	(0.964)	309538	87.2	87.2
	42 Acenaphthylene	152.00	12.470	12.474	(0.978)	1421229	73.7	73.7
	43 3-Nitroaniline	138.00	12.591	12.589	(0.987)	276459	64.6	64.6
*	44 Acenaphthene-d10	164.00	12.756	12.761	(1.000)	421954	40.0	
	45 2,4-Dinitrophenol	184.00	12.792	12.789	(1.003)	233921	328	328(AQ)
	46 Acenaphthene	153.00	12.828	12.825	(1.006)	821113	70.2	70.2
	47 4-Nitrophenol	109.00	12.806	12.789	(1.004)	179095	99.0	99.0
	48 2,4-Dinitrotoluene	165.00	13.093	13.090	(1.026)	408391	90.7	90.7
	49 Dibenzofuran	168.00	13.128	13.133	(1.029)	1206804	75.1	75.1
	50 Diethylphthalate	149.00	13.515	13.512	(1.059)	877077	55.2	55.2
	4-Chlorophenyl-phenylether	204.00	13.744	13.742	(1.077)	482094	80.3	80.3
	)luorene	166.00	13.830	13.828	(1.084)	891690	71.2	71.2
	53 4-Nitroaniline	138.00	13.837	13.820	(1.085)	278721	71.8	71.8
	54 4,6-Dinitro-2-methylphenol	198.00	13.938	13.928	(0.885)	334443	263	263(AQ)
	55 N-Nitrosodiphenylamine	169.00	13.973	13.971	(0.887)	727351	83.1	83.1
$	56 2,4,6-Tribromophenol	330.00	14.346	14.343	(1.125)	249631	132	132(R)
	57 4-Bromophenyl-phenylether	248.00	14.739	14.744	(0.936)	292361	85.9	85.9
	58 Hexachlorobenzene	284.00	15.126	15.131	(0.960)	300359	82.0	82.0
	59 Pentachlorophenol	266.00	15.441	15.439	(0.980)	290428	144	144
*	60 Phenanthrene-d10	188.00	15.749	15.754	(1.000)	610380	40.0	
	61 Phenanthrene	178.00	15.806	15.804	(1.004)	1346819	78.5	78.5
	62 Anthracene	178.00	15.899	15.897	(1.010)	1390139	78.0	78.0
	63 Carbazole	167.00	16.164	16.162	(1.026)	1355853	83.4	83.4
	64 Di-n-butylphthalate	149.00	16.823	16.828	(1.068)	2005785	71.1	71.1
	65 Fluoranthene	202.00	18.291	18.288	(1.161)	1409527	82.2	82.2
	67 Pyrene	202.00	18.778	18.775	(0.882)	1410312	79.6	79.6
	68 Terphenyl-d14	244.00	18.978	18.983	(0.892)	847439	70.7	70.7(R)
	69 Butylbenzylphthalate	149.00	19.945	19.949	(0.937)	876993	69.6	69.6
	70 bis(2-Ethylhexyl)phthalate	149.00	21.090	21.095	(0.991)	1063830	66.3	66.3
	71 3,3'-Dichlorobenzidine	252.00	21.112	21.102	(0.992)	295455	49.4	49.4
	72 Benzo(a)anthracene	228.00	21.248	21.245	(0.998)	1284941	81.9	81.9
	73 Chrysene-d12	240.00	21.284	21.288	(1.000)	531493	40.0	
	74 Chrysene	228.00	21.348	21.346	(1.003)	1139411	78.6	78.6
	75 Di-n-octylphthalate	149.00	22.472	22.470	(0.888)	2381092	76.2	76.2
	76 Benzo(b)fluoranthene	252.00	24.055	24.045	(0.951)	1232939	88.9	88.9
	Benzo(k)fluoranthene	252.00	24.126	24.116	(0.954)	1205759	81.8	81.8
	)nzo(a)pyrene	252.00	25.129	25.126	(0.993)	1068513	84.9	84.9
	79 Perylene-d12	264.00	25.300	25.305	(1.000)	474872	40.0	
	80 Dibenzo(a,h)anthracene	278.00	29.840	29.809	(1.179)	861726	84.8	84.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
81 Indeno(1,2,3-cd)pyrene	276.00	29.854	29.816	(1.180)	1039293	85.6	85.6
82 Benzo(g,h,i)perylene	276.00	31.200	31.176	(1.233)	738010	84.7	84.7

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0533 SSPK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

b Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: N1C51710CS

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E8071

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	82	
111-44-4	bis(2-Chloroethyl)ether	67	
95-57-8	2-Chlorophenol	100	
541-73-1	1,3-Dichlorobenzene	51	
106-46-7	1,4-Dichlorobenzene	55	
95-50-1	1,2-Dichlorobenzene	55	
95-48-7	2-Methylphenol	81	
108-60-1	2,2'-oxybis(1-Chloropropane)	80	
106-44-5	4-Methylphenol	82	
621-64-7	N-Nitroso-di-n-propylamine	85	
67-72-1	Hexachloroethane	46	
98-95-3	Nitrobenzene	81	
78-59-1	Isophorone	86	
88-75-5	2-Nitrophenol	130	
105-67-9	2,4-Dimethylphenol	100	
111-91-1	bis(2-Chloroethoxy)methane	81	
120-83-2	2,4-Dichlorophenol	120	
120-82-1	1,2,4-Trichlorobenzene	59	
91-20-3	Naphthalene	65	
106-47-8	4-Chloroaniline	51	
87-68-3	Hexachlorobutadiene	49	
59-50-7	4-Chloro-3-methylphenol	110	
91-57-6	2-Methylnaphthalene	65	
77-47-4	Hexachlorocyclopentadiene	44	
88-06-2	2,4,6-Trichlorophenol	130	
95-95-4	2,4,5-Trichlorophenol	94	
91-58-7	2-Chloronaphthalene	71	
88-74-4	2-Nitroaniline	85	
131-11-3	Dimethylphthalate	11	
208-96-8	Acenaphthylene	75	
606-20-2	2,6-Dinitrotoluene	92	
99-09-2	3-Nitroaniline	70	
83-32-9	Acenaphthene	72	

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0534 SSPK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: N1C51710CS

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E8071

Level: (low/med) LOW Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	300	
100-02-7	4-Nitrophenol	100	
132-64-9	Dibenzofuran	76	
121-14-2	2,4-Dinitrotoluene	95	
84-66-2	Diethylphthalate	41	
7005-72-3	4-Chlorophenyl-phenylether	81	
86-73-7	Fluorene	74	
100-01-6	4-Nitroaniline	77	
534-52-1	4,6-Dinitro-2-methylphenol	250	
101-55-3	4-Bromophenyl-phenylether	88	
86-30-6	N-Nitrosodiphenylamine (1)	86	
118-74-1	Hexachlorobenzene	85	
87-86-5	Pentachlorophenol	150	
85-01-8	Phenanthrene	82	
120-12-7	Anthracene	82	
86-74-8	Carbazole	88	
84-74-2	Di-n-butylphthalate	71	
206-44-0	Fluoranthene	87	
129-00-0	Pyrene	85	
85-68-2	Butylbenzylphthalate	64	
91-94-1	3,3'-Dichlorobenzidine	55	
56-55-3	Benzo(a)anthracene	85	
218-01-9	Chrysene	84	
117-81-7	bis(2-Ethylhexyl)phthalate	70	
117-84-0	Di-n-octylphthalate	81	
205-99-2	Benzo(b)fluoranthene	98	
207-08-9	Benzo(k)fluoranthene	84	
50-32-8	Benzo(a)pyrene	90	
193-39-5	Indeno(1,2,3-cd)pyrene	92	
53-70-3	Dibenz(a,h)anthracene	91	
191-24-2	Benzo(g,h,i)perylene	93	

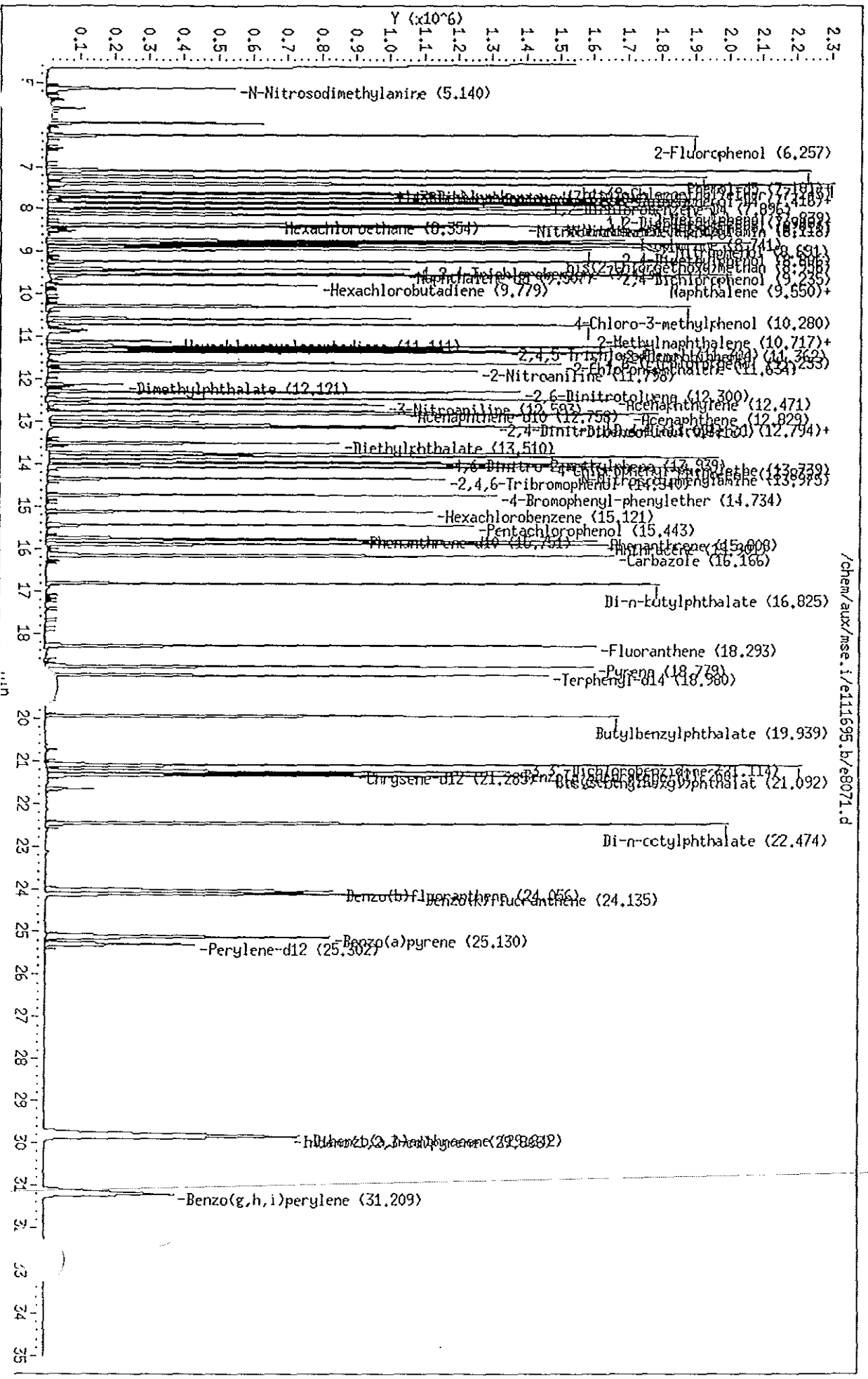
(1) - Cannot be separated from Diphenylamine

Data File: /chem/aux/mse.i/e111695.b/e8071.d
Date : 16-NOV-95 16:25
Client ID: n1c51710cs
Sample Info: method spike

0535

Column phase: J&W DB-5

Instrument: mse.i
Operator: J. Kelly
Column diameter: 0.25



OHM Analytical Division

BASE NEUTRAL QUANT AND RATIO REPORT

Data file : /chem/aux/mse.i/e111695.b/e8071.d
Lab Smp Id: Client Smp ID: n1c51710cs
Inj Date : 16-NOV-95 16:25
Operator : J. Kelly Inst ID: mse.i
Smp Info : method spike
Misc Info : n1c51710cs,n1c51710,m1,1,1
Comment :
Method : /chem/aux/mse.i/e111695.b/111495eclp.m
Meth Date : 17-Nov-1995 13:23 kathryn Quant Type: ISTD
Cal Date : 16-NOV-95 14:53 Cal File: e8069.d
Als bottle: 4
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

KBeglow

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
		-Nitrosodimethylamine	42.00	5.140	5.142	(0.673)	349288	78.5	78.5
$	3	2-Fluorophenol	112.00	6.257	6.252	(0.819)	805762	115	115(R)
$	4	Phenol-d5	99.00	7.087	7.083	(0.928)	816743	85.4	85.4(R)
	5	Phenol	94.00	7.101	7.097	(0.930)	824559	81.6	81.6
	6	bis(2-Chloroethyl)ether	93.00	7.252	7.247	(0.949)	1329383	67.0	67.0(Q)
$	7	2-Chlorophenol-D4	132.00	7.402	7.398	(0.969)	767416	114	114(R)
	8	2-Chlorophenol	128.00	7.424	7.419	(0.972)	740705	103	103
	9	1,3-Dichlorobenzene	146.00	7.610	7.613	(0.996)	363786	51.1	51.1
*	10	1,4-Dichlorobenzene-d4	152.00	7.638	7.641	(1.000)	186806	40.0	
	11	1,4-Dichlorobenzene	146.00	7.660	7.663	(1.003)	391525	55.0	55.0
	12	2-Methylphenol	108.00	7.839	7.835	(1.026)	546304	80.9	80.9
$	13	1,2-Dichlorobenzene-D4	152.00	7.896	7.899	(1.034)	287689	73.3	73.3(R)
	14	1,2-Dichlorobenzene	146.00	7.918	7.921	(1.037)	352007	54.7	54.7
	15	2,2'-oxybis(1-Chloropropene)	45.00	7.925	7.928	(1.037)	1132775	79.7	79.7
	16	4-Methylphenol	108.00	8.011	8.006	(1.049)	586780	81.5	81.5
	17	N-Nitroso-di-n-propylamine	70.00	8.118	8.114	(1.063)	605550	85.0	85.0
	18	Hexachloroethane	117.00	8.354	8.364	(1.094)	151881	46.3	46.3
	19	Nitrobenzene-d5	82.00	8.390	8.386	(0.882)	812567	82.0	82.0(R)
	20	Nitrobenzene	77.00	8.419	8.415	(0.886)	764335	81.4	81.4
	21	Isophorone	82.00	8.741	8.730	(0.919)	1664074	85.6	85.6
	22	2,4-Dimethylphenol	107.00	8.806	8.801	(0.926)	762327	102	102
	23	2-Nitrophenol	139.00	8.891	8.887	(0.935)	512080	131	131
	24	bis(2-Chloroethoxy)methane	93.00	8.956	8.959	(0.942)	884997	81.4	81.4
	25	2,4-Dichlorophenol	162.00	9.235	9.231	(0.971)	645640	123	123
		1,2,4-Trichlorobenzene	180.00	9.414	9.417	(0.990)	308889	59.0	59.0
		phthalene-d8	136.00	9.507	9.510	(1.000)	770466	40.0	
	28	Naphthalene	128.00	9.543	9.546	(1.004)	1174193	65.1	65.1
	29	4-Chloroaniline	127.00	9.557	9.560	(1.005)	542956	50.6	50.6
	30	Hexachlorobutadiene	225.00	9.779	9.789	(1.029)	140204	48.8	48.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
31 4-Chloro-3-methylphenol	107.00	10.288	10.283	(1.082)	725621	114	114
32 2-Methylnaphthalene	142.00	10.717	10.720	(1.127)	786148	65.4	65.4
33 1-Methylnapthalene	142.00	10.717	10.935	(1.127)	786148	73.1	~~23.1~~ ND, Rt
34 Hexachlorocyclopentadiene	237.00	11.111	11.121	(0.871)	85074	43.6	43.6
35 2,4,6-Trichlorophenol	196.00	11.233	11.228	(0.880)	451837	128	128
36 2,4,5-Trichlorophenol	196.00	11.312	11.307	(0.887)	342142	94.2	94.2
$ 37 2-Fluorobiphenyl	172.00	11.362	11.364	(0.891)	896486	79.1	79.1(R)
38 2-Chloronaphthalene	162.00	11.634	11.644	(0.912)	741602	71.4	71.4
39 2-Nitroaniline	65.00	11.798	11.801	(0.925)	469467	85.0	85.0
40 Dimethylphthalate	163.00	12.121	12.131	(0.950)	145008	10.6	10.6
41 2,6-Dinitrotoluene	165.00	12.300	12.295	(0.964)	301908	91.6	91.6
42 Acenaphthylene	152.00	12.471	12.474	(0.978)	1345706	75.2	75.2
43 3-Nitroaniline	138.00	12.593	12.589	(0.987)	277447	69.9	69.9
* 44 Acenaphthene-d10	164.00	12.758	12.761	(1.000)	391492	40.0	
45 2,4-Dinitrophenol	184.00	12.794	12.789	(1.003)	196180	297	297(AQ)
46 Acenaphthene	153.00	12.829	12.825	(1.006)	783593	72.2	72.2
47 4-Nitrophenol	109.00	12.801	12.789	(1.003)	168496	100	100
48 2,4-Dinitrotoluene	165.00	13.094	13.090	(1.026)	394999	94.6	94.6
49 Dibenzofuran	168.00	13.130	13.133	(1.029)	1137868	76.3	76.3
50 Diethylphthalate	149.00	13.517	13.512	(1.059)	610348	41.4	41.4
4-Chlorophenyl-phenylether	204.00	13.746	13.742	(1.077)	448278	80.5	80.5
luorene	166.00	13.825	13.828	(1.084)	858255	73.8	73.8
53 4-Nitroaniline	138.00	13.839	13.820	(1.085)	277710	77.1	77.1
54 4,6-Dinitro-2-methylphenol	198.00	13.939	13.928	(0.885)	294622	247	247(AQ)
55 N-Nitrosodiphenylamine	169.00	13.975	13.971	(0.887)	704126	85.7	85.7
; 56 2,4,6-Tribromophenol	330.00	14.340	14.343	(1.124)	242600	138	138(R)
57 4-Bromophenyl-phenylether	248.00	14.741	14.744	(0.936)	279931	87.7	87.7
58 Hexachlorobenzene	284.00	15.128	15.131	(0.960)	293141	85.3	85.3
59 Pentachlorophenol	266.00	15.443	15.439	(0.980)	277032	147	147
60 Phenanthrene-d10	188.00	15.751	15.754	(1.000)	572538	40.0	
61 Phenanthrene	178.00	15.808	15.804	(1.004)	1319637	82.0	82.0
62 Anthracene	178.00	15.901	15.897	(1.010)	1368502	81.9	81.9
63 Carbazole	167.00	16.166	16.162	(1.026)	1334742	87.5	87.5
64 Di-n-butylphthalate	149.00	16.825	16.828	(1.068)	1871933	70.8	70.8
65 Fluoranthene	202.00	18.293	18.288	(1.161)	1391453	86.5	86.5
67 Pyrene	202.00	18.779	18.775	(0.882)	1424376	85.2	85.2
68 Terphenyl-d14	244.00	18.980	18.983	(0.892)	889179	78.6	78.6(R)
69 Butylbenzylphthalate	149.00	19.939	19.949	(0.937)	765827	64.4	64.4
70 bis(2-Ethylhexyl)phthalate	149.00	21.092	21.095	(0.991)	1052945	69.5	69.5
71 3,3'-Dichlorobenzidine	252.00	21.114	21.102	(0.992)	309368	54.8	54.8
72 Benzo(a)anthracene	228.00	21.250	21.245	(0.998)	1264696	85.3	85.3
73 Chrysene-d12	240.00	21.285	21.288	(1.000)	501834	40.0	
74 Chrysene	228.00	21.350	21.346	(1.003)	1153344	84.3	84.3
75 Di-n-octylphthalate	149.00	22.474	22.470	(0.888)	2388934	80.6	80.6
76 Benzo(b)fluoranthene	252.00	24.056	24.045	(0.951)	1292993	98.4	98.4
Benzo(k)fluoranthene	252.00	24.135	24.116	(0.954)	1166937	83.6	83.6
)nzo(a)pyrene	252.00	25.130	25.126	(0.993)	1077027	90.3	90.3
79 Perylene-d12	264.00	25.302	25.305	(1.000)	449836	40.0	
80 Dibenzo(a,h)anthracene	278.00	29.842	29.809	(1.179)	877491	91.2	91.2

66 Benzidine 18.429 0.6

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
81 Indeno(1,2,3-cd)pyrene	276.00	29.863	29.816	(1.180)	1062159	92.3	92.3
82 Benzo(g,h,i)perylene	276.00	31.209	31.176	(1.233)	764595	92.6	92.6

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

OHM Remediation Services Corp.
A Subsidiary of OHM Corporation

ANALYTICAL DIVISION

Laboratory Analysis

Report(s) #619213 VOLUME III OF III

Client: OHM Remediation Services Corp.
Southern Region (Norcross, GA)

Attn: Jim Dunn

Project: 17418N - Camp Lejeune, North Carolina

Sample(s) Received: November 14, 1995 **Order Received:** November 14, 1995

This report is "PROPRIETARY AND CONFIDENTIAL" and delivered to, and intended for the exclusive use of the above named client only. OHM Remediation Services Corp., Analytical Division, assumes no responsibility or liability for the reliance hereon or use hereof by anyone other than the above named client.

Reviewed and Approved by: T E Gran *Date:* December 21, 1995
Thomas E. Gran, Ph.D., Vice President

16406 U.S. Route 224 East ▪ P.O. Box 551 ▪ Findlay, OH 45839-0551 ▪ 419-423-3526

ORGANICS

Soil Pesticide/PCBs by GC

2F
SOIL PESTICIDE SURROGATE RECOVERY

0540

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

GC Column(1): DB1701 ID: 0.53 (mm) GC Column(2): DB5 ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	PBLK01	75		97				0
02	PSPK01	75		103				0
03	CLJ78TW001MS	84		122				0
04	CLJ78TW001MSD	68		120				0
05	CLJ78TW001	80		124				0
06	CLJ78TW01D	82		122				0
07	CLJ78TW002	84		120				0
08	CLJ78TW003	82		122				0
09	CLJ78TW004	80		122				0

	ADVISORY QC LIMITS
TCX = Tetrachloro-m-xylene	(30-150)
DCB = Decachlorobiphenyl	(30-150)

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

3F
SOIL PESTICIDE MATRIX SPIKE RECOVERY

0541

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix Spike - EPA Sample No.: CLJ78TW001

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
Alpha-BHC	220	0	220	100	30-130
Beta-BHC	220	0	230	105	30-130
Delta-BHC	220	0	220	100	30-130
Heptachlor	220	0	220	100	35-130
Aldrin	220	0	220	100	34-132
Heptachlor epoxide	220	0	240	109	30-130
Endosulfan I	220	0	230	105	30-130
Dieldrin	220	0	190	86	31-134
4,4'-DDE	220	0	230	105	30-130
Endrin	220	0	200	91	42-139
Endosulfan II	220	0	130	59	30-130
4,4'-DDD	220	0	230	105	30-130
Endosulfan sulfate	220	0	130	59	30-130
4,4'-DDT	220	0	190	86	23-134
Methoxychlor	220	0	250	114	30-130
Endrin ketone	220	0	210	95	30-130
Endrin aldehyde	220	0	78	35	30-130
alpha-Chlordane	220	0	250	114	30-130
gamma-Chlordane	220	0	230	105	30-130
Gamma-BHC (Lindane)	220	0	230	105	46-127
Chlordane	450	0	480	107	30-130

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

* Values outside of QC limits

Spike Recovery: 0 out of 21 outside limits

COMMENTS:

3F

SOIL PESTICIDE MATRIX SPIKE DUPLICATE RECOVERY

0542

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix Spike - EPA Sample No.: CLJ78TW001

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Alpha-BHC	220	180	82	20	20	30-130
Beta-BHC	220	220	100	4	20	30-130
Delta-BHC	220	210	95	5	20	30-130
Heptachlor	220	180	82	20	31	35-130
Aldrin	220	190	86	15	43	34-132
Heptachlor epoxide	220	220	100	9	20	30-130
Endosulfan I	220	220	100	4	20	30-130
Dieldrin	220	160	73	17	38	31-134
4,4'-DDE	220	220	100	4	20	30-130
Endrin	220	180	82	11	45	42-139
Endosulfan II	220	76	35	52 *	20	30-130
4,4'-DDD	220	220	100	4	20	30-130
Endosulfan sulfate	220	89	40	37 *	20	30-130
4,4'-DDT	220	180	82	5	50	23-134
Methoxychlor	220	240	109	4	20	30-130
Endrin ketone	220	140	64	40 *	20	30-130
Endrin aldehyde	220	42	19 *	60 *	20	30-130
alpha-Chlordane	220	230	105	8	20	30-130
gamma-Chlordane	220	220	100	4	20	30-130
Gamma-BHC (Lindane)	220	200	91	14	50	46-127
Chlordane	450	460	102	4	20	30-130

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

* Values outside of QC limits

RPD: 4 out of 21 outside limits
Spike Recovery: 1 out of 21 outside limits

COMMENTS:

3F
SOIL PESTICIDE BLANK SPIKE RECOVERY

0543

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix Spike - EPA Sample No.: PSPK01

COMPOUND	SPIKE ADDED (ug/Kg)	BLANK CONCENTRATION (ug/Kg)	BS CONCENTRATION (ug/Kg)	BS % REC #	QC LIMITS REC.
Alpha-BHC	170	0	150	88	30-130
Beta-BHC	170	0	150	88	30-130
Delta-BHC	170	0	160	94	30-130
Heptachlor	170	0	130	76	35-130
Aldrin	170	0	150	88	34-132
Heptachlor epoxide	170	0	150	88	30-130
Endosulfan I	170	0	150	88	30-130
Dieldrin	170	0	110	65	31-134
4,4'-DDE	170	0	160	94	30-130
Endrin	170	0	140	82	42-139
Endosulfan II	170	0	57	34	30-130
4,4'-DDD	170	0	160	94	30-130
Endosulfan sulfate	170	0	71	42	30-130
4,4'-DDT	170	0	160	94	23-134
Methoxychlor	170	0	190	112	30-130
Endrin ketone	170	0	100	59	30-130
Endrin aldehyde	170	0	31	18 *	30-130
alpha-Chlordane	170	0	160	94	30-130
gamma-Chlordane	170	0	150	88	30-130
Gamma-BHC (Lindane)	170	0	150	88	46-127
Chlordane	330	0	310	94	30-130

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

* Values outside of QC limits

Spike Recovery: 1 out of 21 outside limits

COMMENTS:

4B
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

0544 PBLK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Lab File ID: ZF1359 Lab Sample ID: N2P51713P

Instrument ID: CZ Date Extracted: 11/14/95

Matrix: (soil/water) SOIL Date Analyzed: 11/17/95

Level: (low/med) _____ Time Analyzed: 23:31

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	CLJ78TW001	JP0318P	ZF1363	11/18/95
02	CLJ78TW01D	JP0319P	ZF1364	11/18/95
03	CLJ78TW002	JP0320P	ZF1365	11/18/95
04	CLJ78TW003	JP0321P	ZF1366	11/18/95
05	CLJ78TW004	JP0322P	ZF1367	11/18/95
06	CLJ78TW001MSD	JP0318PR	ZF1362	11/18/95
07	PSPK01	N2P51713PS	ZF1360	11/18/95
08	CLJ78TW001MS	JP0318PS	ZF1361	11/18/95

COMMENTS:

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0545

CLJ78TW001

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: JP0318P

Sample wt/vol: 30.6 (g/mL) G Lab File ID: ZF1363

% Moisture: 26 decanted: (Y/N) N Date Received: 11/14/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 11/14/95

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/18/95

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

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

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	22	U
319-85-7	beta-BHC	22	U
319-86-8	delta-BHC	22	U
76-44-8	Heptachlor	22	U
309-00-2	Aldrin	22	U
1024-57-3	Heptachlor epoxide	22	U
959-98-8	Endosulfan I	22	U
60-57-1	Dieldrin	22	U
72-55-9	4,4'-DDE	22	U
72-20-8	Endrin	22	U
33213-65-9	Endosulfan II	22	U
72-54-8	4,4'-DDD	22	U
1031-07-8	Endosulfan sulfate	22	U
50-29-3	4,4'-DDT	22	U
72-43-5	Methoxychlor	22	U
53494-70-5	Endrin ketone	22	U
7421-93-4	Endrin aldehyde	22	U
8001-35-2	Toxaphene	440	U
12674-11-2	Aroclor-1016	220	U
11104-28-2	Aroclor-1221	220	U
11141-16-5	Aroclor-1232	220	U
53469-21-9	Aroclor-1242	220	U
12672-29-6	Aroclor-1248	220	U
11097-69-1	Aroclor-1254	220	U
11096-82-5	Aroclor-1260	220	U
58-89-9	Gamma-BHC (Lindane)	22	U
57-74-9	Chlordane	220	U

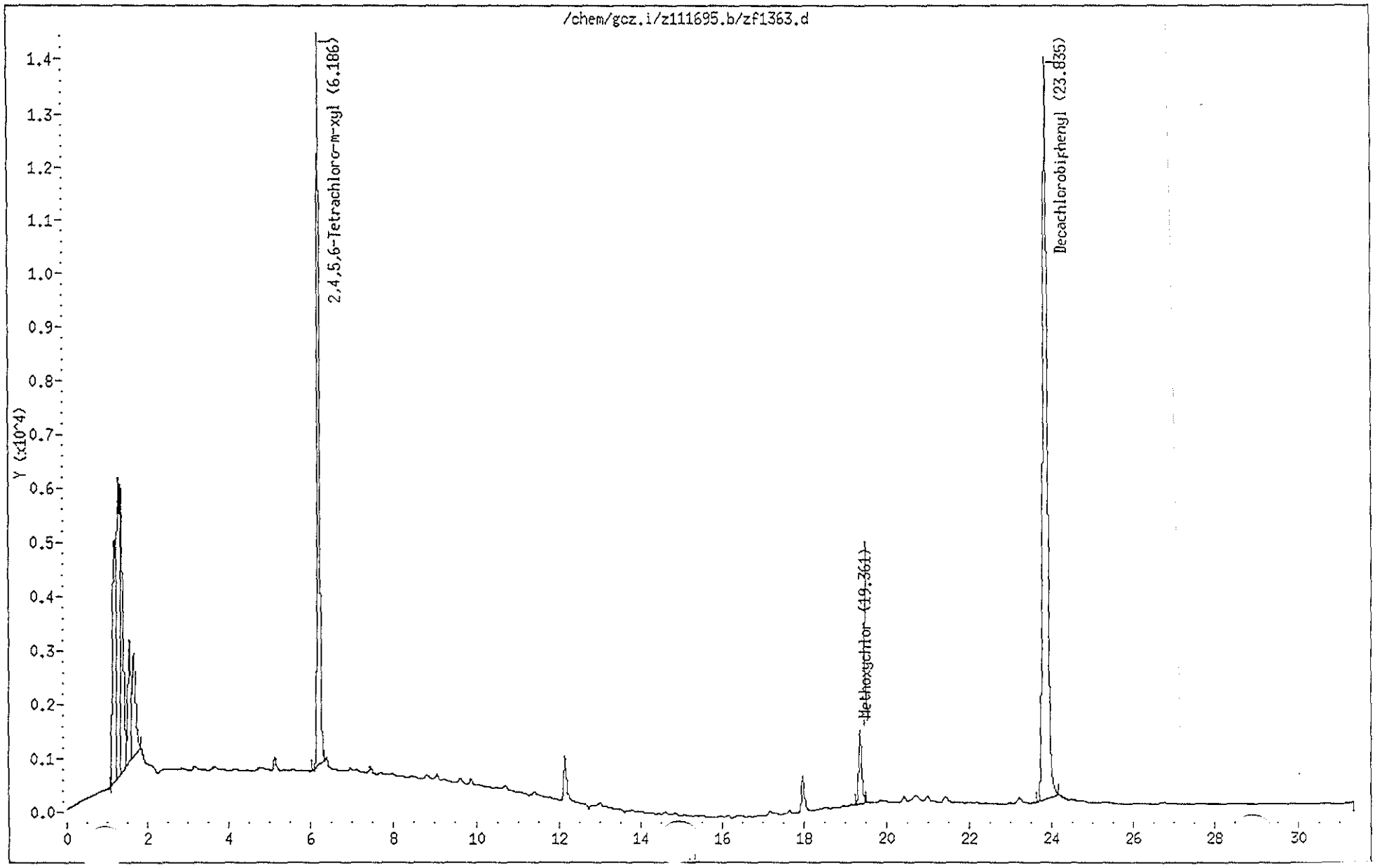
0546

Data File: /chem/gcz.i/z111695.b/zf1363.d
Date : 18-NOV-95 01:50
Client ID:
Sample Info: jp0318p,n2p51713

Column phase: DB-1701

Instrument: gcz.i

Operator: art
Column diameter: 0.53



OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zf1363.d
Lab Smp Id:
Inj Date : 18-NOV-95 01:50
Operator : art Inst ID: gcz.i
Smp Info : jp0318p,n2p51713
Misc Info : jp0318p,n2p51713,g2,1,10
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_1701.m
Meth Date : 18-Nov-1995 08:49 Quant Type: ESTD
Cal Date : 08-NOV-95 21:21 Cal File: zf1127.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
$ 2,4,5,6-Tetrachloro-m-xylene	6.186	6.216	-0.030	277336	0.0398	0.0398(R)
19 Methoxychlor	19.361	19.411	-0.050	37001	0.0149	~~0.0149~~
$ 22 Decachlorobiphenyl	23.835	23.887	-0.052	532019	0.0623	0.0623(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ak
11/28/95

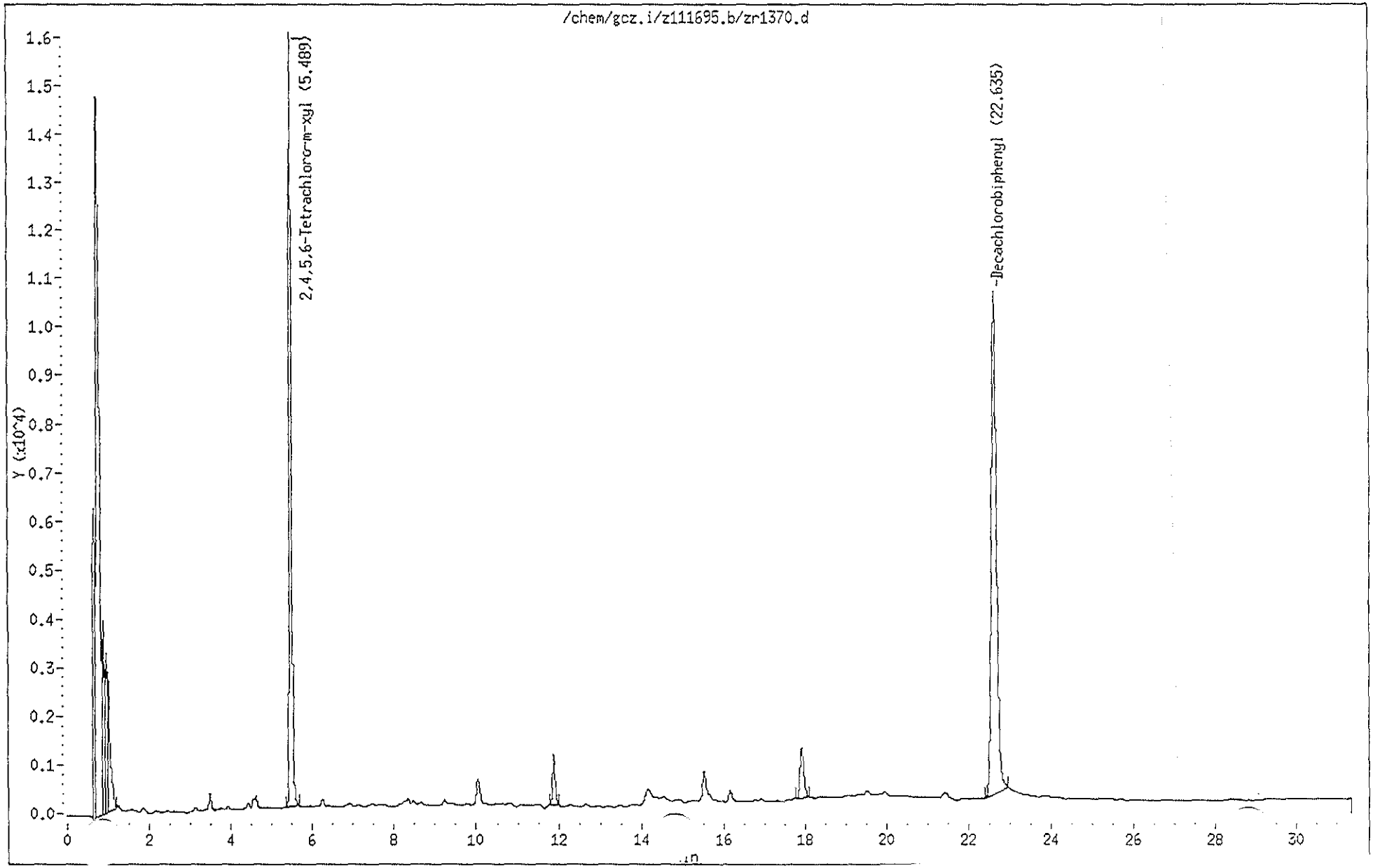
0548

Data File: /chem/gcz.i/z111695.b/zr1370.d
Date : 18-NOV-95 02:25
Client ID:
Sample Info: jp0318p,n2p51713

Column phase: DB-5

Instrument: gcz.i

Operator: art
Column diameter: 0.53



OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zr1370.d
Lab Smp Id:
Inj Date : 18-NOV-95 02:25
Operator : art Inst ID: gcz.i
Smp Info : jp0318p,n2p51713
Misc Info : jp0318p,n2p51713
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_db5.m
Meth Date : 18-Nov-1995 08:50 Quant Type: ESTD
Cal Date : 08-NOV-95 21:56 Cal File: zr1128.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/ml)
	2,4,5,6-Tetrachloro-m-xylene	5.489	5.504	-0.015	318359	0.0418	0.0418(R)
2	Alpha-BHC	Compound Not Detected.					
3	Beta-BHC	Compound Not Detected.					
4	Gamma-BHC (Lindane)	Compound Not Detected.					
5	Delta-BHC	Compound Not Detected.					
6	Heptachlor	Compound Not Detected.					
7	Aldrin	Compound Not Detected.					
8	Heptachlor epoxide	Compound Not Detected.					
9	gamma-Chlordane	Compound Not Detected.					
10	Endosulfan I	Compound Not Detected.					
M 11	alpha-Chlordane	Compound Not Detected.					
12	4,4'-DDE	Compound Not Detected.					
13	Dieldrin	Compound Not Detected.					
14	Endrin	Compound Not Detected.					
15	Endosulfan II	Compound Not Detected.					
16	4,4'-DDD	Compound Not Detected.					
17	Endrin aldehyde	Compound Not Detected.					
18	Endosulfan sulfate	Compound Not Detected.					
19	4,4'-DDT	Compound Not Detected.					
20	Endrin ketone	Compound Not Detected.					
21	Methoxychlor	Compound Not Detected.					
22	Decachlorobiphenyl	22.635	22.691	-0.056	465948	0.0546	0.0546(R)

Flag Legend

R - Spike/Surrogate failed recovery limits.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0550

CLJ78TW002

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: JP0320P

Sample wt/vol: 30.5 (g/mL) G Lab File ID: ZF1365

% Moisture: 19 decanted: (Y/N) N Date Received: 11/14/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 11/14/95

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/18/95

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	20	U
319-85-7	beta-BHC	20	U
319-86-8	delta-BHC	20	U
76-44-8	Heptachlor	20	U
309-00-2	Aldrin	20	U
1024-57-3	Heptachlor epoxide	20	U
959-98-8	Endosulfan I	20	U
60-57-1	Dieldrin	20	U
72-55-9	4,4'-DDE	20	U
72-20-8	Endrin	20	U
33213-65-9	Endosulfan II	20	U
72-54-8	4,4'-DDD	20	U
1031-07-8	Endosulfan sulfate	20	U
50-29-3	4,4'-DDT	20	U
72-43-5	Methoxychlor	20	U
53494-70-5	Endrin ketone	20	U
7421-93-4	Endrin aldehyde	20	U
8001-35-2	Toxaphene	400	U
12674-11-2	Aroclor-1016	200	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	200	U
53469-21-9	Aroclor-1242	200	U
12672-29-6	Aroclor-1248	200	U
11097-69-1	Aroclor-1254	200	U
11096-82-5	Aroclor-1260	200	U
58-89-9	Gamma-BHC (Lindane)	20	U
57-74-9	Chlordane	200	U

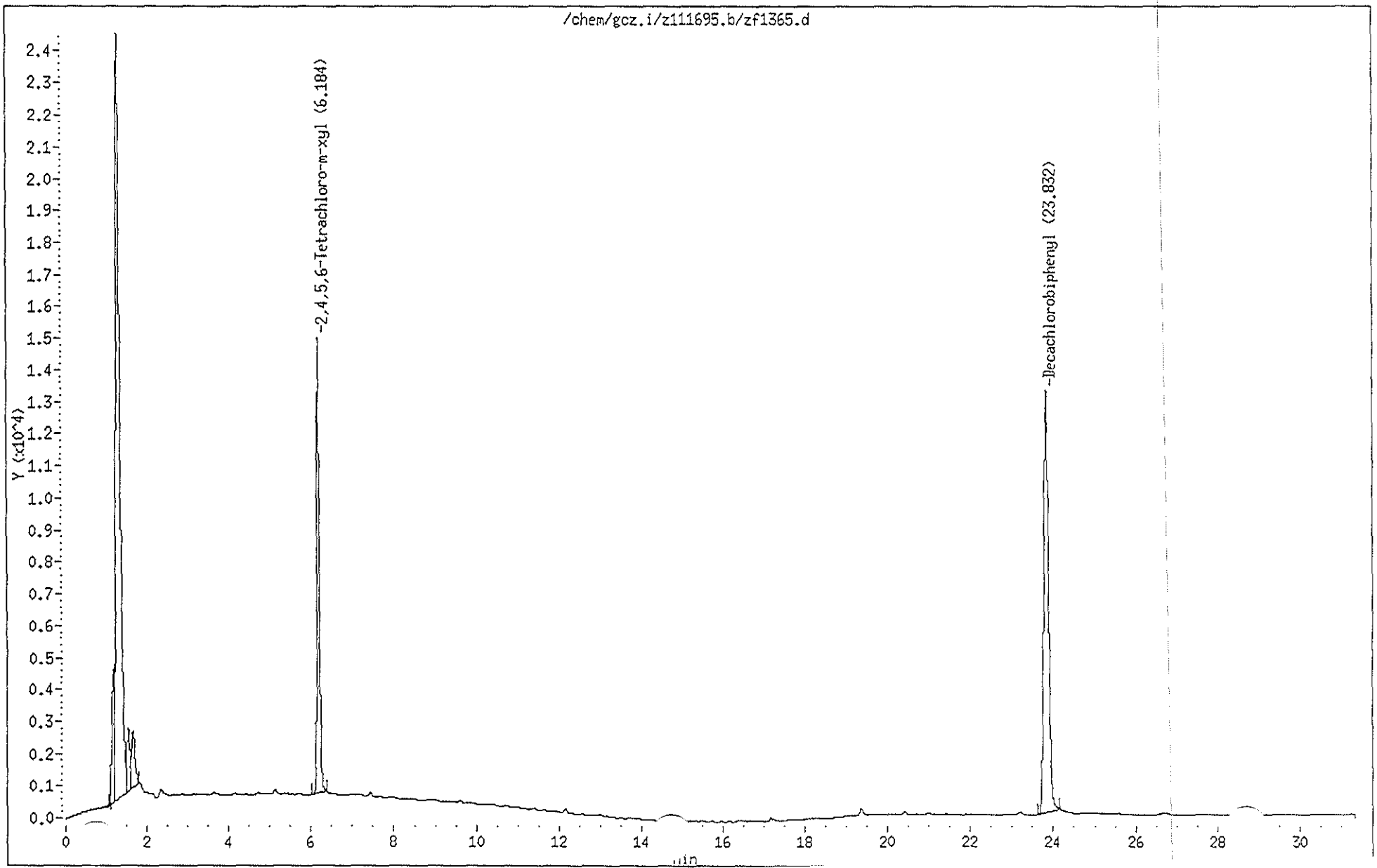
0551

Data File: /chem/gcz.i/z111695.b/zf1365.d
Date : 18-NOV-95 03:00
Client ID:
Sample Info: jp0320p,n2p51713

Column phase: DB-1701

Instrument: gcz.i

Operator: art
Column diameter: 0.53



OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zf1365.d
Lab Smp Id:
Inj Date : 18-NOV-95 03:00
Operator : art Inst ID: gcz.i
Smp Info : jp0320p,n2p51713
Misc Info : jp0320p,n2p51713,g2,1,10
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_1701.m
Meth Date : 18-Nov-1995 08:49 Quant Type: ESTD
Cal Date : 08-NOV-95 21:21 Cal File: zf1127.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
$ 2,4,5,6-Tetrachloro-m-xylene	6.184	6.216	-0.032	293367	0.0421	0.0421(R)
$ 22 Decachlorobiphenyl	23.832	23.887	-0.055	515867	0.0604	0.0604(R)

QC Flag Legend

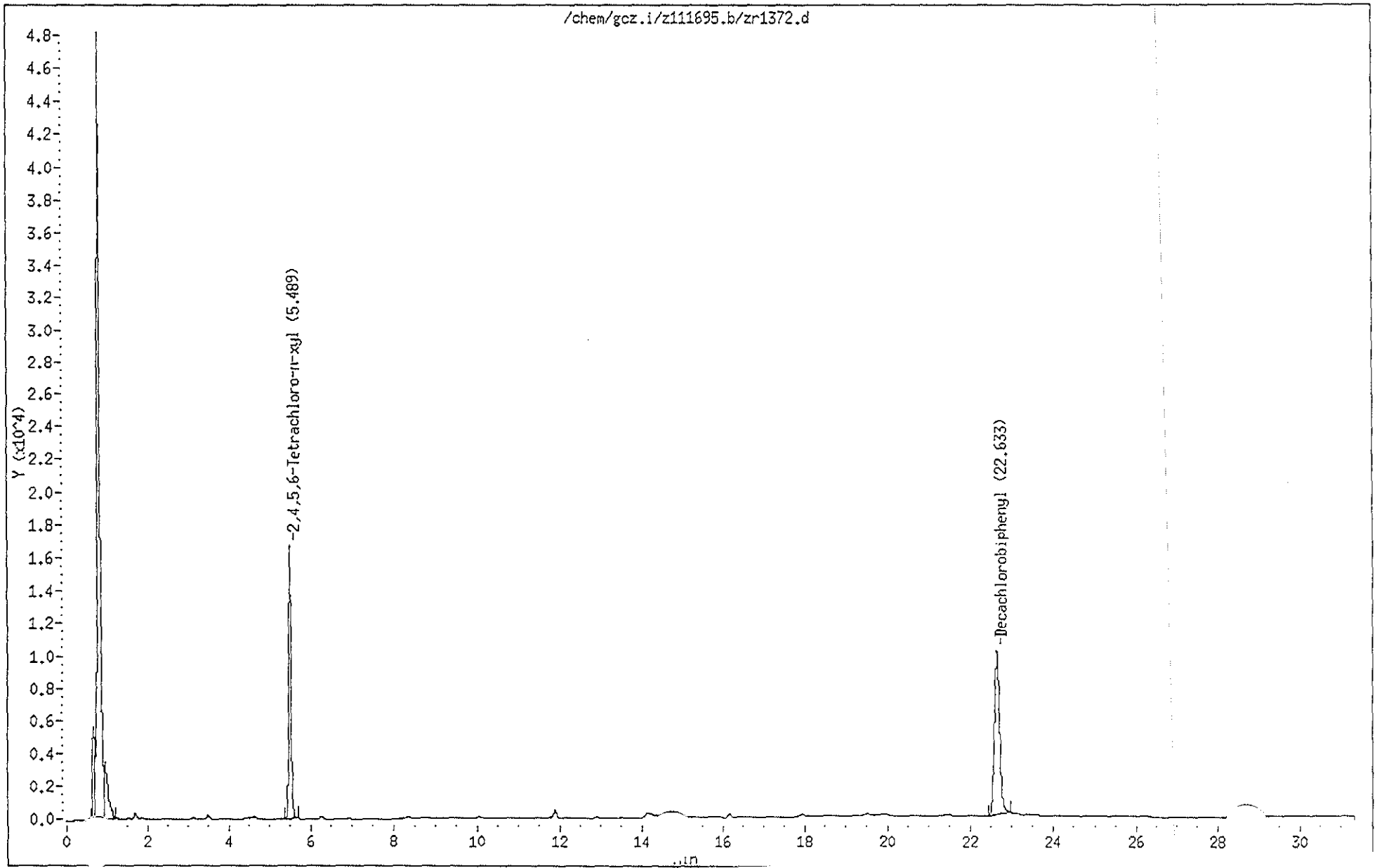
R - Spike/Surrogate failed recovery limits.

11/28/95

Data File: /chem/gcz.i/z111695.b/zr1372.d
Date : 18-NOV-95 03:35
Client ID:
Sample Info: jp0320p,n2p51713

Instrument: gcz.i

Operator: art
Column phase: DB-5
Column diameter: 0.53



OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zr1372.d
Lab Smp Id:
Inj Date : 18-NOV-95 03:35
Operator : art Inst ID: gcz.i
Smp Info : jp0320p,n2p51713
Misc Info : jp0320p,n2p51713
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_db5.m
Meth Date : 18-Nov-1995 08:50 Quant Type: ESTD
Cal Date : 08-NOV-95 21:56 Cal File: zr1128.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
$	2,4,5,6-Tetrachloro-m-xylene	5.489	5.504	-0.015	330731	0.0434	0.0434(R)
	2 Alpha-BHC	Compound Not Detected.					
	3 Beta-BHC	Compound Not Detected.					
	4 Gamma-BHC (Lindane)	Compound Not Detected.					
	5 Delta-BHC	Compound Not Detected.					
	6 Heptachlor	Compound Not Detected.					
	7 Aldrin	Compound Not Detected.					
	8 Heptachlor epoxide	Compound Not Detected.					
	9 gamma-Chlordane	Compound Not Detected.					
	10 Endosulfan I	Compound Not Detected.					
M	11 alpha-Chlordane	Compound Not Detected.					
	12 4,4'-DDE	Compound Not Detected.					
	13 Dieldrin	Compound Not Detected.					
	14 Endrin	Compound Not Detected.					
	15 Endosulfan II	Compound Not Detected.					
	16 4,4'-DDD	Compound Not Detected.					
	17 Endrin aldehyde	Compound Not Detected.					
	18 Endosulfan sulfate	Compound Not Detected.					
	19 4,4'-DDT	Compound Not Detected.					
	20 Endrin ketone	Compound Not Detected.					
	21 Methoxychlor	Compound Not Detected.					
	22 Decachlorobiphenyl	22.633	22.691	-0.058	449690	0.0527	0.0527(R)

QC Flag Legend

$ - Spike/Surrogate failed recovery limits.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0555 CLJ78TW003

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: JP0321P

Sample wt/vol: 30.5 (g/mL) G Lab File ID: ZF1366

% Moisture: 14 decanted: (Y/N) N Date Received: 11/14/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 11/14/95

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/18/95

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	19	U
319-85-7	beta-BHC	19	U
319-86-8	delta-BHC	19	U
76-44-8	Heptachlor	19	U
309-00-2	Aldrin	19	U
1024-57-3	Heptachlor epoxide	19	U
959-98-8	Endosulfan I	19	U
60-57-1	Dieldrin	19	U
72-55-9	4,4'-DDE	9.5	J
72-20-8	Endrin	19	U
33213-65-9	Endosulfan II	19	U
72-54-8	4,4'-DDD	19	U
1031-07-8	Endosulfan sulfate	19	U
50-29-3	4,4'-DDT	7.6	J
72-43-5	Methoxychlor	19	U
53494-70-5	Endrin ketone	19	U
7421-93-4	Endrin aldehyde	19	U
8001-35-2	Toxaphene	380	U
12674-11-2	Aroclor-1016	190	U
11104-28-2	Aroclor-1221	190	U
11141-16-5	Aroclor-1232	190	U
53469-21-9	Aroclor-1242	190	U
12672-29-6	Aroclor-1248	190	U
11097-69-1	Aroclor-1254	190	U
11096-82-5	Aroclor-1260	190	U
58-89-9	Gamma-BHC (Lindane)	19	U
57-74-9	Chlordane	190	U

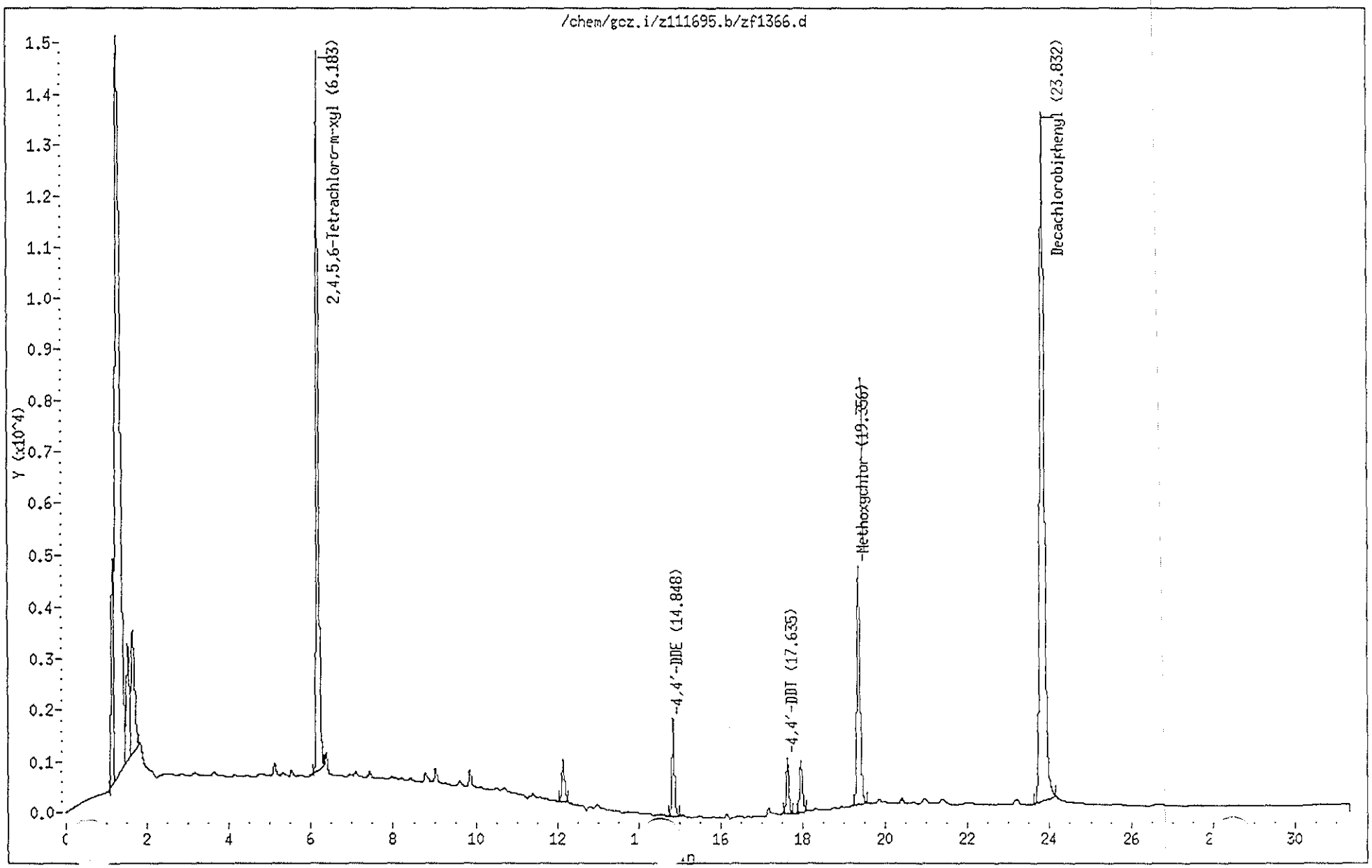
056

Data File: /chem/gcz.i/z111695.b/zf1366.d
Date : 18-NOV-95 03:35
Client ID:
Sample Info: jp0321p,n2p51713

Instrument: gcz.i

Operator: art
Column diameter: 0.53

Column phase: DB-1701



OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zf1366.d
Lab Smp Id:
Inj Date : 18-NOV-95 03:35
Operator : art Inst ID: gcz.i
Smp Info : jp0321p,n2p51713
Misc Info : jp0321p,n2p51713,g2,1,10
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_1701.m
Meth Date : 18-Nov-1995 08:49 Quant Type: ESTD
Cal Date : 08-NOV-95 21:21 Cal File: zf1127.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/ml)
$	2,4,5,6-Tetrachloro-m-xylene	6.183	6.216	-0.033	285141	0.0409	0.0409(R)
	12 4,4'-DDE	14.848	14.881	-0.033	39975	0.00501	0.00501
	17 4,4'-DDT	17.635	17.670	-0.035	23347	0.00379	0.00379
	19 Methoxychlor	19.356	19.411	-0.055	127875	~~0.0514~~	~~0.0514~~
$	22 Decachlorobiphenyl	23.832	23.887	-0.055	520274	0.0610	0.0610(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ak 11/20/95

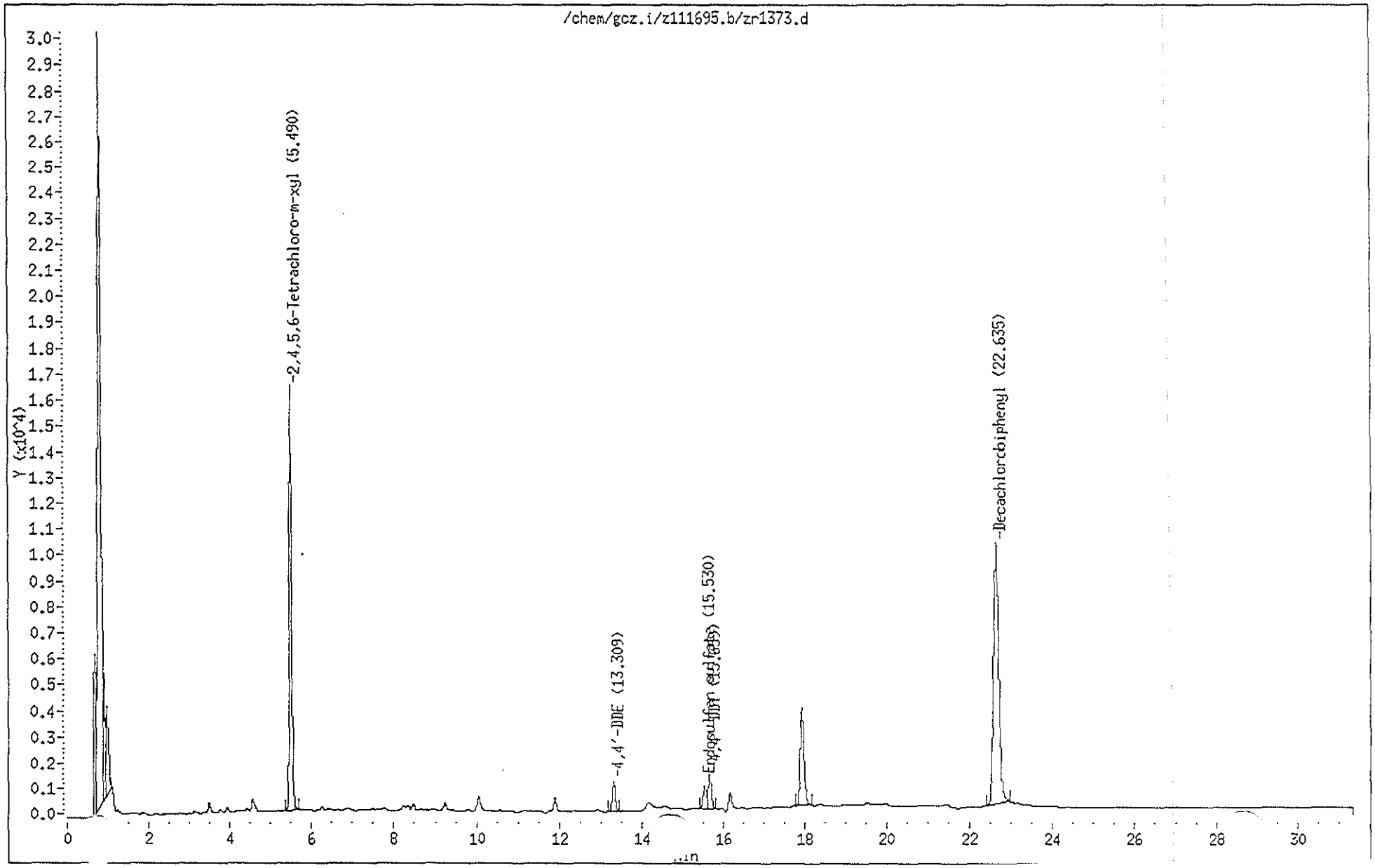
0558

Data File: /chem/gcz.i/z111695.b/zr1373.d
Date : 18-NOV-95 04:10
Client ID:
Sample Info: jp0321p,n2p51713

Instrument: gcz.i

Operator: art
Column diameter: 0.53

Column phase: DB-5



OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zr1373.d
Lab Smp Id:
Inj Date : 18-NOV-95 04:10
Operator : art Inst ID: gcz.i
Smp Info : jp0321p,n2p51713
Misc Info : jp0321p,n2p51713
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_db5.m
Meth Date : 18-Nov-1995 08:50 Quant Type: ESTD
Cal Date : 08-NOV-95 21:56 Cal File: zr1128.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
$	1,4,5,6-Tetrachloro-m-xylene	5.490	5.504	-0.014	327057	0.0430	0.0430(R)
2	Alpha-BHC	Compound Not Detected.					
3	Beta-BHC	Compound Not Detected.					
4	Gamma-BHC (Lindane)	Compound Not Detected.					
5	Delta-BHC	Compound Not Detected.					
6	Heptachlor	Compound Not Detected.					
7	Aldrin	Compound Not Detected.					
8	Heptachlor epoxide	Compound Not Detected.					
9	gamma-Chlordane	Compound Not Detected.					
10	Endosulfan I	Compound Not Detected.					
11	alpha-Chlordane	Compound Not Detected.					
12	4,4'-DDE	13.309	13.318	-0.009	28583	0.00354	0.00354
13	Dieldrin	Compound Not Detected.					
14	Endrin	Compound Not Detected.					
15	Endosulfan II	Compound Not Detected.					
16	4,4'-DDD	Compound Not Detected.					
17	Endrin aldehyde	Compound Not Detected.					
18	Endosulfan sulfate	15.530	15.563	-0.033	~~24859~~	~~0.00406~~	~~0.00406~~
19	4,4'-DDT	15.659	15.690	-0.031	38024	0.00600	0.00600
20	Endrin ketone	Compound Not Detected.					
21	Methoxychlor	Compound Not Detected.					
22	Decachlorobiphenyl	22.635	22.691	-0.056	449856	0.0527	0.0527(R)

Flag Legend

- Spike/Surrogate failed recovery limits.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0560 CLJ78TW004

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: JP0322P

Sample wt/vol: 30.3 (g/mL) G Lab File ID: ZF1367

% Moisture: 16 decanted: (Y/N) N Date Received: 11/14/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 11/14/95

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/18/95

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	20	U
319-85-7	beta-BHC	20	U
319-86-8	delta-BHC	20	U
76-44-8	Heptachlor	20	U
309-00-2	Aldrin	20	U
1024-57-3	Heptachlor epoxide	20	U
959-98-8	Endosulfan I	20	U
60-57-1	Dieldrin	20	U
72-55-9	4,4'-DDE	20	U
72-20-8	Endrin	20	U
33213-65-9	Endosulfan II	20	U
72-54-8	4,4'-DDD	20	U
1031-07-8	Endosulfan sulfate	20	U
50-29-3	4,4'-DDT	20	U
72-43-5	Methoxychlor	20	U
53494-70-5	Endrin ketone	20	U
7421-93-4	Endrin aldehyde	20	U
8001-35-2	Toxaphene	400	U
12674-11-2	Aroclor-1016	200	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	200	U
53469-21-9	Aroclor-1242	200	U
12672-29-6	Aroclor-1248	200	U
11097-69-1	Aroclor-1254	200	U
11096-82-5	Aroclor-1260	200	U
58-89-9	Gamma-BHC (Lindane)	20	U
57-74-9	Chlordane	200	U

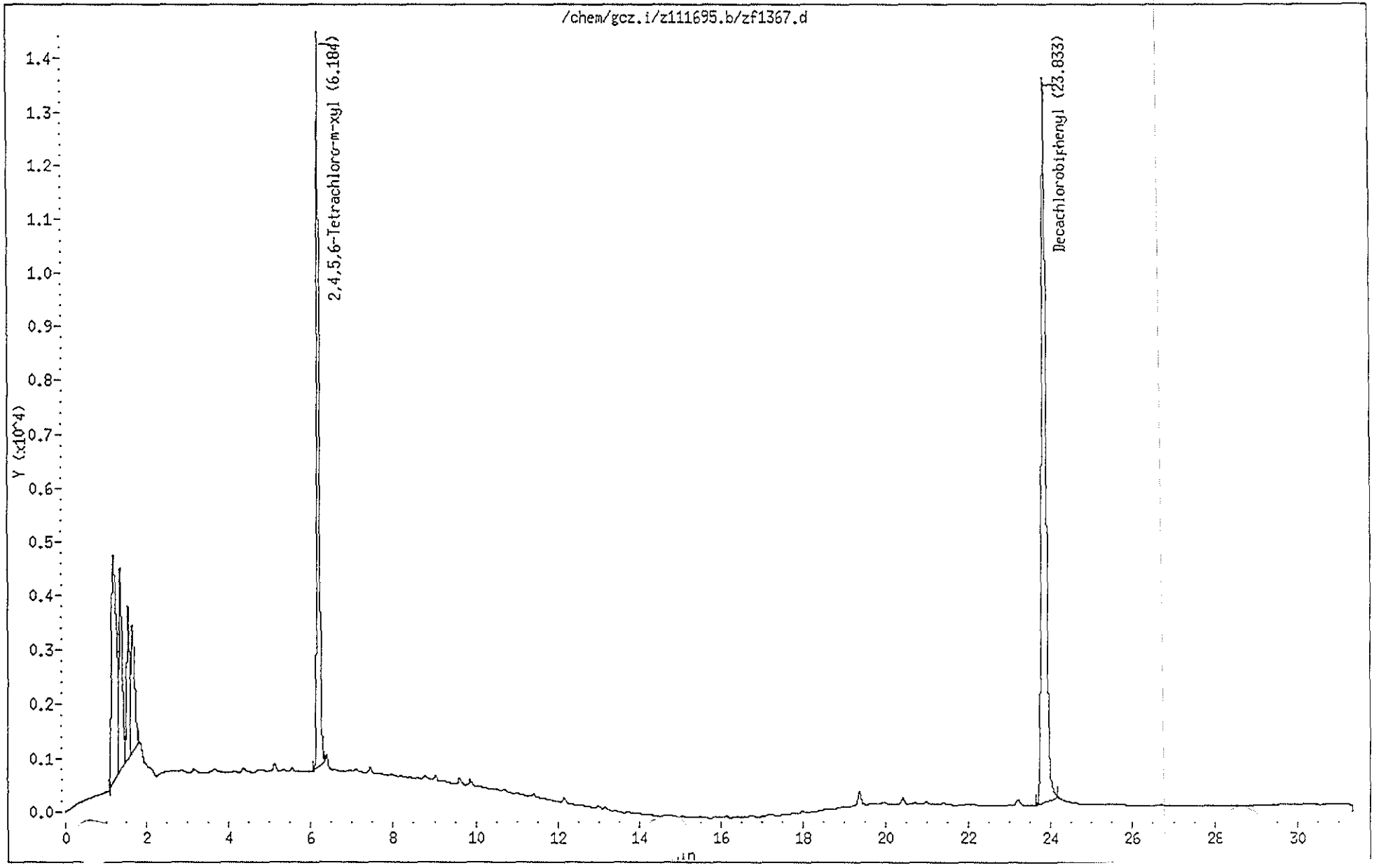
0561

Data File: /chem/gcz.i/z111695.b/zf1367.d
Date : 18-NOV-95 04:10
Client ID:
Sample Info: jp0322p,n2p51713

Column phase: DB-1701

Instrument: gcz.i

Operator: art
Column diameter: 0.53



OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zf1367.d
Lab Smp Id:
Inj Date : 18-NOV-95 04:10
Operator : art Inst ID: gcz.i
Smp Info : jp0322p,n2p51713
Misc Info : jp0322p,n2p51713,g2,1,10
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_1701.m
Meth Date : 18-Nov-1995 08:49 Quant Type: ESTD
Cal Date : 08-NOV-95 21:21 Cal File: zf1127.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/ml)
$ 1 2,4,5,6-Tetrachloro-m-xylene	6.184	6.216	-0.032	276506	0.0397	0.0397(R)
$ 22 Decachlorobiphenyl	23.833	23.887	-0.054	524302	0.0614	0.0614(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ak
11/20/95

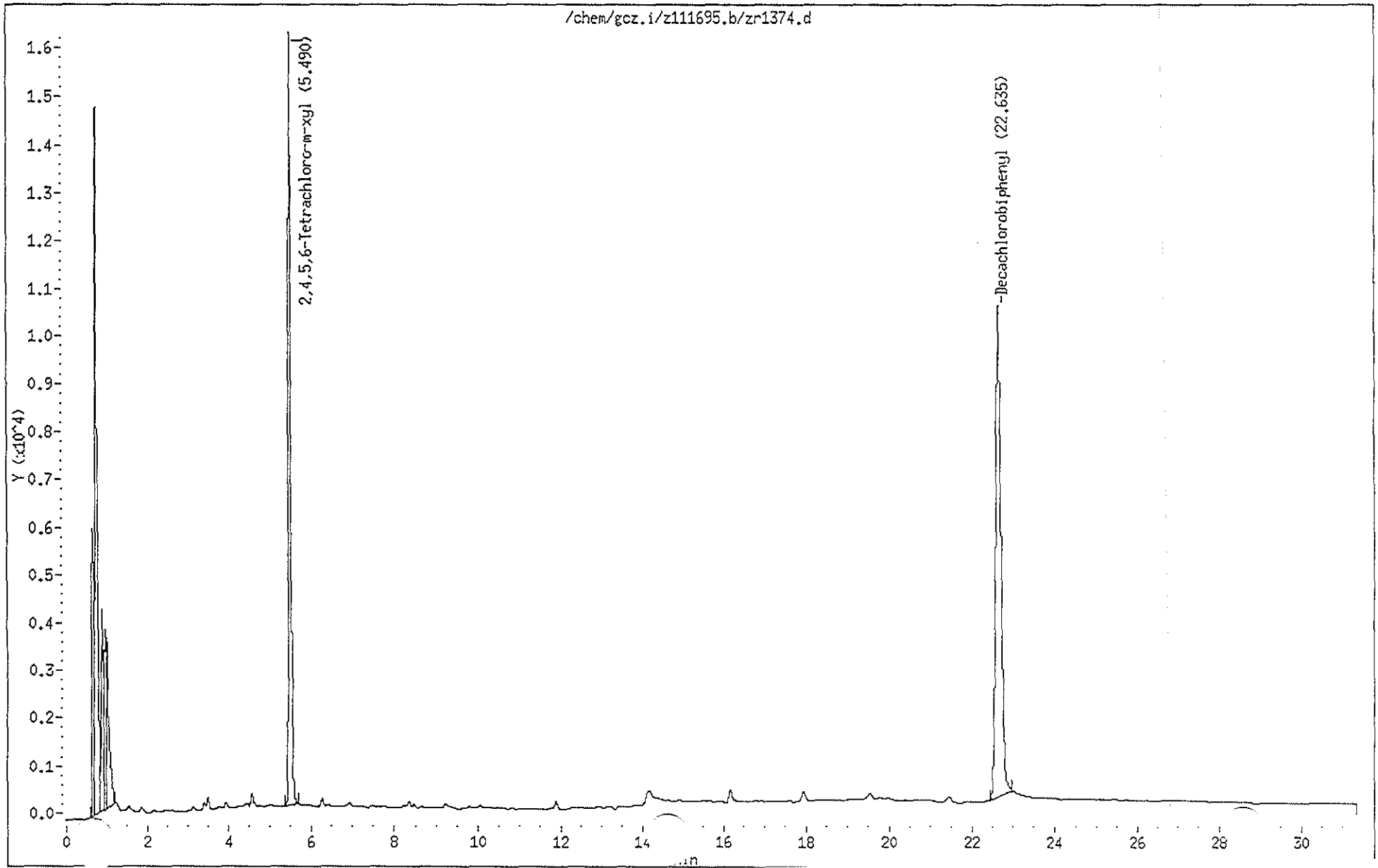
0563

Data File: /chem/gcz.i/z111695.b/zr1374.d
Date : 18-NOV-95 04:44
Client ID:
Sample Info: jp0322p,n2p51713

Instrument: gcz.i

Operator: art
Column diameter: 0.53

Column phase: DB-5



OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zr1374.d
Lab Smp Id:
Inj Date : 18-NOV-95 04:44
Operator : art Inst ID: gcz.i
Smp Info : jp0322p,n2p51713
Misc Info : jp0322p,n2p51713
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_db5.m
Meth Date : 18-Nov-1995 08:50 Quant Type: ESTD
Cal Date : 08-NOV-95 21:56 Cal File: zr1128.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

		Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
S		2,4,5,6-Tetrachloro-m-xylene	5.490	5.504	-0.014	320368	0.0421	0.0421(R)
	2	Alpha-BHC	Compound Not Detected.					
	3	Beta-BHC	Compound Not Detected.					
	4	Gamma-BHC (Lindane)	Compound Not Detected.					
	5	Delta-BHC	Compound Not Detected.					
	6	Heptachlor	Compound Not Detected.					
	7	Aldrin	Compound Not Detected.					
	8	Heptachlor epoxide	Compound Not Detected.					
	9	gamma-Chlordane	Compound Not Detected.					
	10	Endosulfan I	Compound Not Detected.					
M	11	alpha-Chlordane	Compound Not Detected.					
	12	4,4'-DDE	Compound Not Detected.					
	13	Dieldrin	Compound Not Detected.					
	14	Endrin	Compound Not Detected.					
	15	Endosulfan II	Compound Not Detected.					
	16	4,4'-DDD	Compound Not Detected.					
	17	Endrin aldehyde	Compound Not Detected.					
	18	Endosulfan sulfate	Compound Not Detected.					
	19	4,4'-DDT	Compound Not Detected.					
	20	Endrin ketone	Compound Not Detected.					
	21	Methoxychlor	Compound Not Detected.					
S	22	Decachlorobiphenyl	22.635	22.691	-0.056	461002	0.0540	0.0540(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

0564A EPA SAMPLE NO.

CLJ78TW01D

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: JP0319P

Sample wt/vol: 30.5 (g/mL) G Lab File ID: ZF1364

% Moisture: 18 decanted: (Y/N) N Date Received: 11/14/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 11/14/95

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/18/95

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

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

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	20	U
319-85-7	beta-BHC	20	U
319-86-8	delta-BHC	20	U
76-44-8	Heptachlor	20	U
309-00-2	Aldrin	20	U
1024-57-3	Heptachlor epoxide	20	U
959-98-8	Endosulfan I	20	U
60-57-1	Dieldrin	20	U
72-55-9	4,4'-DDE	20	U
72-20-8	Endrin	20	U
33213-65-9	Endosulfan II	20	U
72-54-8	4,4'-DDD	20	U
1031-07-8	Endosulfan sulfate	20	U
50-29-3	4,4'-DDT	20	U
72-43-5	Methoxychlor	20	U
53494-70-5	Endrin ketone	20	U
7421-93-4	Endrin aldehyde	20	U
8001-35-2	Toxaphene	400	U
12674-11-2	Aroclor-1016	200	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	200	U
53469-21-9	Aroclor-1242	200	U
12672-29-6	Aroclor-1248	200	U
11097-69-1	Aroclor-1254	200	U
11096-82-5	Aroclor-1260	200	U
58-89-9	Gamma-BHC (Lindane)	20	U
57-74-9	Chlordane	200	U

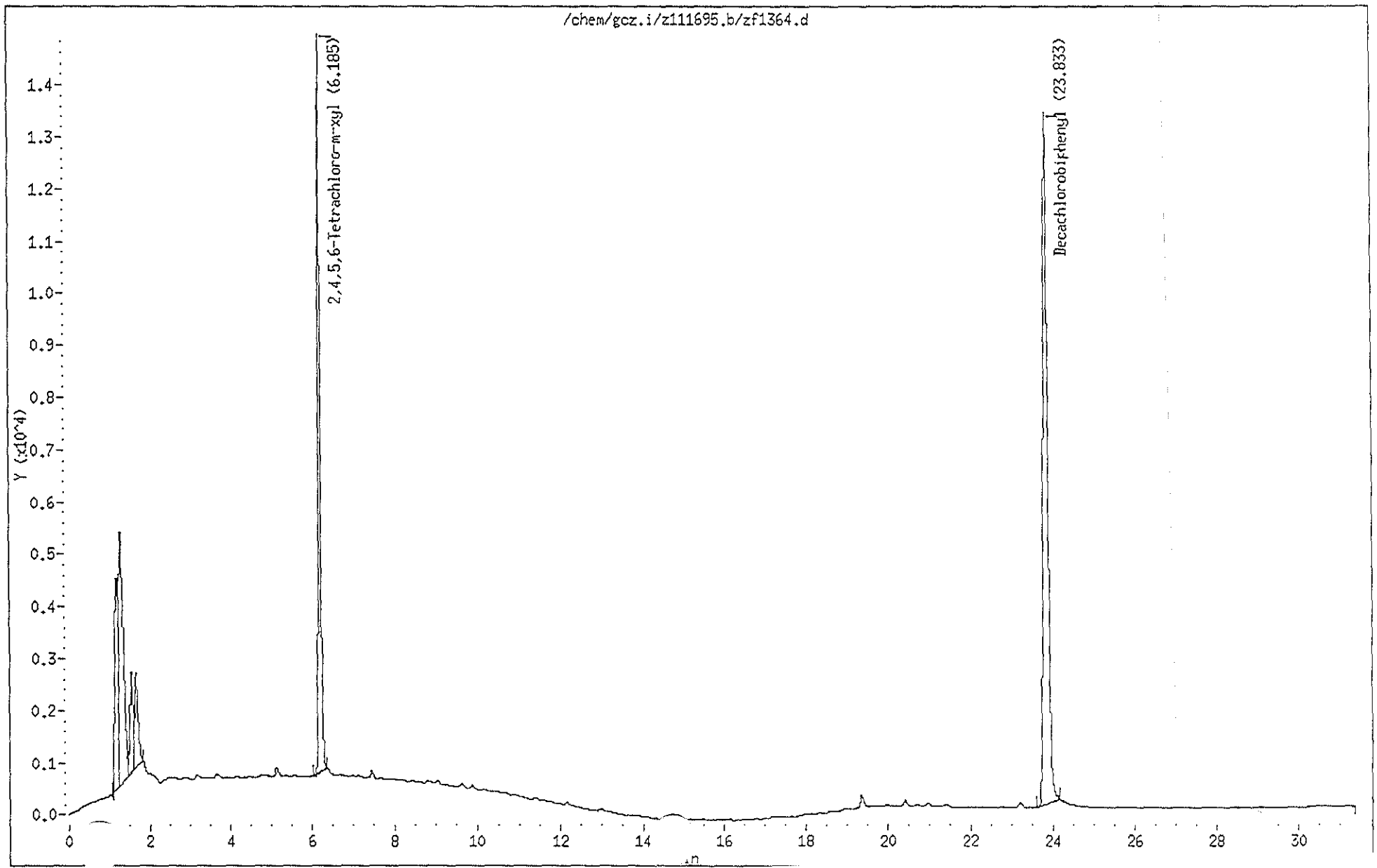
0565

Data File: /chem/gcz.i/z111695.b/zf1364.d
Date : 18-NOV-95 02:25
Client ID:
Sample Info: jp0319p,n2p51713

Instrument: gcz.i

Operator: art
Column diameter: 0.53

Column phase: DB-1701



OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zf1364.d
Lab Smp Id:
Inj Date : 18-NOV-95 02:25
Operator : art Inst ID: gcz.i
Smp Info : jp0319p,n2p51713
Misc Info : jp0319p,n2p51713,g2,1,10
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_1701.m
Meth Date : 18-Nov-1995 08:49 Quant Type: ESTD
Cal Date : 08-NOV-95 21:21 Cal File: zf1127.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/ml)
$ 2,4,5,6-Tetrachloro-m-xylene	6.185	6.216	-0.031	287876	0.0413	0.0413(R)
$ 22 Decachlorobiphenyl	23.833	23.887	-0.054	516941	0.0606	0.0606(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ak
11/20/95

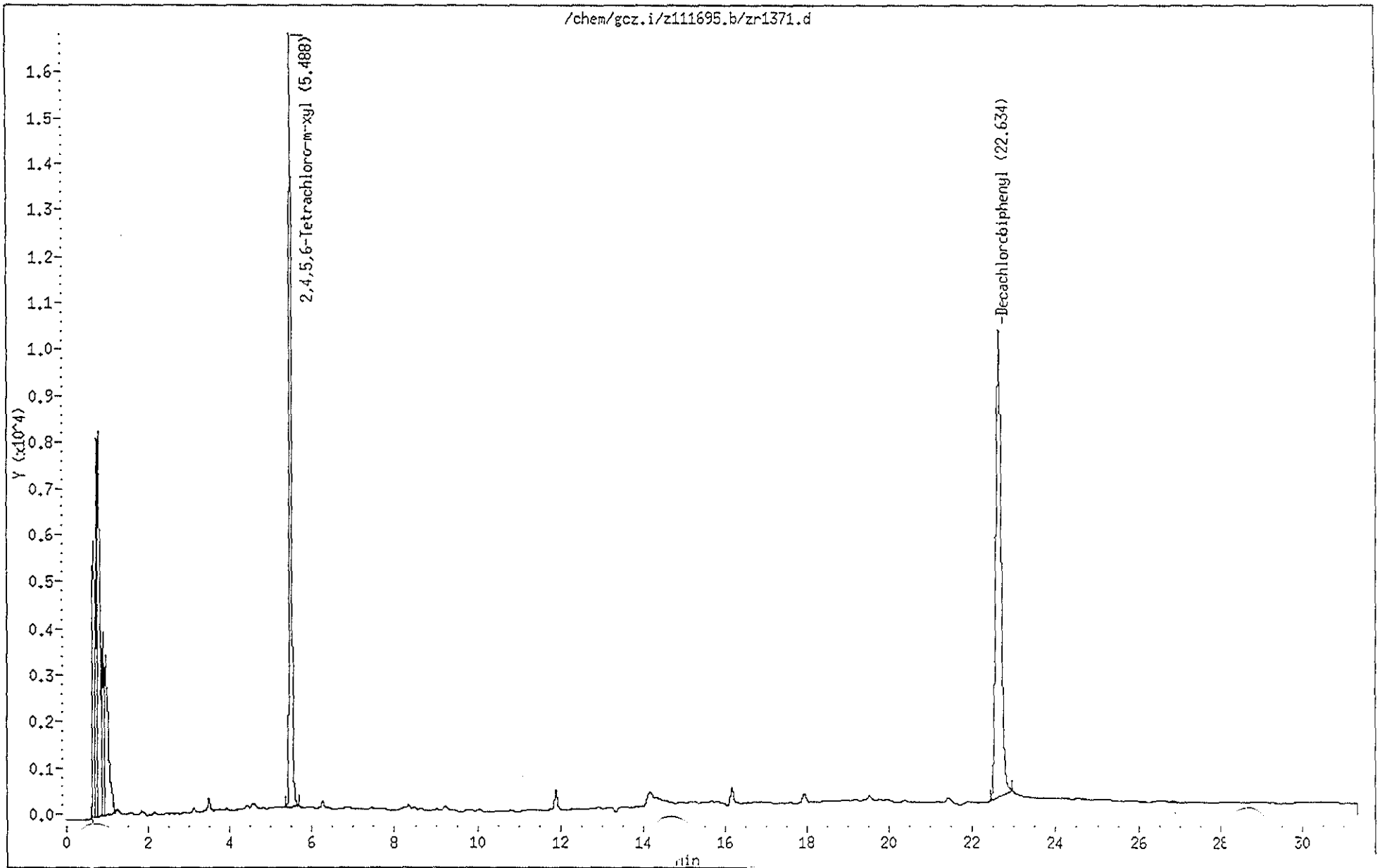
0567

Data File: /chem/gcz.i/z111695.b/zr1371.d
Date : 18-NOV-95 03:00
Client ID:
Sample Info: jp0319p,n2p51713

Column phase: DB-5

Instrument: gcz.i

Operator: art
Column diameter: 0.53



OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zr1371.d
Lab Smp Id:
Inj Date : 18-NOV-95 03:00
Operator : art Inst ID: gcz.i
Smp Info : jp0319p,n2p51713
Misc Info : jp0319p,n2p51713
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_db5.m
Meth Date : 18-Nov-1995 08:50 Quant Type: ESTD
Cal Date : 08-NOV-95 21:56 Cal File: zr1128.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

		Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/ml)
$		2,4,5,6-Tetrachloro-m-xylene	5.488	5.504	-0.016	330406	0.0434	0.0434(R)
	2	Alpha-BHC	Compound Not Detected.					
	3	Beta-BHC	Compound Not Detected.					
	4	Gamma-BHC (Lindane)	Compound Not Detected.					
	5	Delta-BHC	Compound Not Detected.					
	6	Heptachlor	Compound Not Detected.					
	7	Aldrin	Compound Not Detected.					
	8	Heptachlor epoxide	Compound Not Detected.					
	9	gamma-Chlordane	Compound Not Detected.					
	10	Endosulfan I	Compound Not Detected.					
M	11	alpha-Chlordane	Compound Not Detected.					
	12	4,4'-DDE	Compound Not Detected.					
	13	Dieldrin	Compound Not Detected.					
	14	Endrin	Compound Not Detected.					
	15	Endosulfan II	Compound Not Detected.					
	16	4,4'-DDD	Compound Not Detected.					
	17	Endrin aldehyde	Compound Not Detected.					
	18	Endosulfan sulfate	Compound Not Detected.					
	19	4,4'-DDT	Compound Not Detected.					
	20	Endrin ketone	Compound Not Detected.					
	21	Methoxychlor	Compound Not Detected.					
	22	Decachlorobiphenyl	22.634	22.691	-0.057	453093	0.0531	0.0531(R)

)C Flag Legend

R - Spike/Surrogate failed recovery limits.

OHM Analytical Division

INITIAL CALIBRATION DATA

Start Cal Date : 08-NOV-95 19:02
End Cal Date : 08-NOV-95 21:21
Quant Method : ESTD
Origin : Included
Target Version : 3.10
Integrator : HP Genie
Method file : /chem/gcz.i/z110895.b/110895_8080_1701.m
Cal Date : 09-Nov-1995 08:01
Curve Type : Average

Calibration File Names:
Level 1: /chem/gcz.i/z110895.b/zf1123.d
Level 2: /chem/gcz.i/z110895.b/zf1124.d
Level 3: /chem/gcz.i/z110895.b/zf1125.d
Level 4: /chem/gcz.i/z110895.b/zf1126.d
Level 5: /chem/gcz.i/z110895.b/zf1127.d

	Compound	0.0200 Level 1	0.1000 Level 2	0.5000 Level 3	1 Level 4	2 Level 5	RRF	% RSD	
2	Alpha-BHC	6274800	9962840	10595716	9787449	8980455	9120252	18.550	
3	Gamma-BHC (Lindane)	6664900	9761850	9876682	9134431	8394946	8766562	14.996	
4	Heptachlor	8607050	9692340	8930436	8254689	7543515	8605606	9.256	
5	Aldrin	6859400	9156080	9165064	8409987	7662640	8250634	12.064	
6	Beta-BHC	4454400	5050580	4837690	4441157	4084582	4573682	8.240	
7	Delta-BHC	4835800	7817640	8728452	8144750	7587170	7422762	20.322	<-
8	Heptachlor epoxide	7507450	8559500	8124588	7329159	6731570	7650453	9.287	
9	Endosulfan I	6951400	8197000	7827368	7126986	6488054	7318162	9.397	
10	gamma-Chlordane	8215900	9357380	8744286	8323850	7599667	8448217	7.725	
11	alpha-Chlordane	8163400	9139500	8567766	8009988	7317478	8239626	8.201	
12	4,4'-DDE	7501850	8860260	8529142	7853713	7145914	7978176	8.900	
13	Dieldrin	9788750	8214250	8249252	7644863	7023294	8184082	12.548	
14	Endrin	6160100	6744010	6507714	6033536	5614564	6211985	7.026	
15	4,4'-DDD	5314900	6227270	6519196	6121226	5590813	5954681	8.238	
16	Endosulfan II	7091450	7616170	7342990	6815214	6264216	7026008	7.388	
17	4,4'-DDT	6443100	6464180	6010970	6189645	5700539	6161687	5.176	
18	Endrin aldehyde	4114200	5393930	5874874	5736383	5347367	5293351	13.149	
19	Methoxychlor	2639000	2683430	2569548	2319666	2239546	2490238	7.973	
20	Endosulfan sulfate	5553700	6496310	6581886	6633425	6024976	6258060	7.379	
21	Endrin ketone	5663100	6808620	6946640	6575823	6106178	6420072	8.257	
1	2,4,5,6-Tetrachloro-m-xylene	7338000	7780930	7184288	6561639	5973570	6967686	10.145	
22	Decachlorobiphenyl	10397650	9649910	8333290	7461922	6831350	8534824	17.386	

OHM Analytical Division

INITIAL CALIBRATION DATA

Start Cal Date : 08-NOV-95 19:02
End Cal Date : 08-NOV-95 21:21
Quant Method : ESTD
Origin : Included
Target Version : 3.10
Integrator : HP Genie
Method file : /chem/gcz.i/z110895.b/110895_8080_1701.m
Cal Date : 09-Nov-1995 08:37

Calibration File Names:
Level 1: /chem/gcz.i/z110895.b/zf1123.d
Level 2: /chem/gcz.i/z110895.b/zf1124.d
Level 3: /chem/gcz.i/z110895.b/zf1125.d
Level 4: /chem/gcz.i/z110895.b/zf1126.d
Level 5: /chem/gcz.i/z110895.b/zf1127.d

Compound	0.0200 Level 1	0.1000 Level 2	0.5000 Level 3	1 Level 4	2 Level 5	Curve	Coefficients a0	a1	a2	%RSD or R^2
2 Alpha-BHC	6274800	9962840	10595716	9787449	8980455	AVRG		9120252		18.54951
3 Gamma-BHC (Lindane)	6664900	9761850	9876682	9134431	8394946	AVRG		8766562		14.99635
4 Heptachlor	8607050	9692340	8930436	8254689	7543515	AVRG		8605606		9.25566
5 Aldrin	6859400	9156080	9165064	8409987	7662640	AVRG		8250634		12.06360
6 Beta-BHC	4454400	5050580	4837690	4441157	4084582	AVRG		4573682		8.24010
7 Delta-BHC	96716	781764	4364226	8144750	15174341	LINR	0.00000	7760000		0.99671
8 Heptachlor epoxide	7507450	8559500	8124588	7485739	6858821	AVRG		7707220		8.48172
9 Endosulfan I	6951400	8196060	7827416	7125063	6486820	AVRG		7317352		9.40131
10 gamma-Chlordane	8215900	9356880	8744322	8314020	7591928	AVRG		8444610		7.76183
11 alpha-Chlordane	8163400	9139020	8567800	7993416	7306934	AVRG		8234114		8.26546

0570

OHM Analytical Division

INITIAL CALIBRATION DATA

Start Cal Date : 08-NOV-95 19:36
End Cal Date : 08-NOV-95 21:56
Quant Method : ESTD
Origin : Included
Target Version : 3.10
Integrator : HP Genie
Method file : /chem/gcz.i/z110895.b/110895_8080_db5.m
Cal Date : 09-Nov-1995 09:51

Calibration File Names:
Level 1: /chem/gcz.i/z110895.b/zr1124.d
Level 2: /chem/gcz.i/z110895.b/zr1125.d
Level 3: /chem/gcz.i/z110895.b/zr1126.d
Level 4: /chem/gcz.i/z110895.b/zr1127.d
Level 5: /chem/gcz.i/z110895.b/zr1128.d

	Compound	0.0200 Level 1	0.1000 Level 2	0.5000 Level 3	1 Level 4	2 Level 5	Curve	Coefficients a0	a1	a2	%RSD or R^2
	2 Alpha-BHC	7092350	11284040	12591428	11744623	11021630	AVRG		10746814		19.80337
	3 Beta-BHC	4902800	5601960	5620618	5183556	4815962	AVRG		5224979		7.23396
	4 Gamma-BHC (Lindane)	7300000	10665910	11577832	10791586	10053743	AVRG		10077814		16.32156
	5 Delta-BHC	119999	940941	5505163	10233412	19299709	LINR	0.00000	9837255		0.99739
	6 Heptachlor	7521500	8540340	8893932	8459279	7990844	AVRG		8281179		6.43459
	7 Aldrin	6672200	8984290	10113090	9447348	8764418	AVRG		8796269		14.71980
	8 Heptachlor epoxide	6896650	8230060	8815086	8281082	7785585	AVRG		8001693		8.96776
	9 gamma-Chlordane	7908600	9465620	10021492	9732396	9069788	AVRG		9239579		8.90136
	10 Endosulfan I	7609125	9020400	8559962	7835894	7178301	AVRG		8040736		9.22617
M	11 alpha-Chlordane	7609125	9020400	8559962	7835894	7178301	AVRG		8040736		9.22617

0571

OHM Analytical Division

INITIAL CALIBRATION DATA

Start Cal Date : 08-NOV-95 19:36
End Cal Date : 08-NOV-95 21:56
Quant Method : ESTD
Origin : Included
Target Version : 3.10
Integrator : HP Genie
Method file : /chem/gcz.i/z110895.b/110895_8080_db5.m
Cal Date : 09-Nov-1995 09:51

Compound	0.0200 Level 1	0.1000 Level 2	0.5000 Level 3	1 Level 4	2 Level 5	Curve	Coefficients a0	a1	a2	%RSD or R^2
12 4,4'-DDE	5905350	8048850	9429482	8855127	8174720	AVRG		8082706		16.55381
13 Dieldrin	9672300	8981400	9167990	8732012	8255574	AVRG		8961855		5.84956
14 Endrin	5629450	6853470	7303522	6845754	6515290	AVRG		6629497		9.43323
15 Endosulfan II	6261300	7426220	7937130	7361579	6733094	AVRG		7143865		9.13645
16 4,4'-DDD	5143600	6600700	7500500	6987402	6671156	AVRG		6580672		13.34587
17 Endrin aldehyde	6261850	6738190	6781298	6217518	5820160	AVRG		6363803		6.29443
18 Endosulfan sulfate	5274900	6172110	6822276	6423333	5924516	AVRG		6123427		9.45303
19 4,4'-DDT	4989450	6003350	6897894	6922763	6858690	AVRG		6334429		13.34204
20 Endrin ketone	7181550	8541470	8655020	7958968	7496550	AVRG		7966712		8.04153
21 Methoxychlor	3325700	3469020	3336812	3205955	3086546	AVRG		3284807		4.40733
$ 1 2,4,5,6-Tetrachloro-m-xylene	7453150	8449890	8070328	7349668	6732290	AVRG		7611065		8.76480
$ 22 Decachlorobiphenyl	8915300	9006020	8980840	8193747	7577400	AVRG		8534661		7.40745

0572

Data File: /chem/gcz.i/z111695.b/zf1318.d
Report Date: 16-Nov-1995 13:27

OHM Analytical Division

CONTINUING CALIBRATION COMPOUNDS

0573

Instrument ID: gcz.i
Lab File ID: zf1318.d
Analysis Type:
Lab Sample ID:
Quant Type: ESTD

Injection Date: 16-NOV-95 12:27
Init. Calibration Date(s): 11/08/95 11/08/95
Init. Calibration Times: 19:02 21:21
Method File: /chem/gcz.i/z111695.b/110895_8080_1701.

	COMPOUND	RRF	RF0	MIN RRF	%D	MAX %D
$ 1	2,4,5,6-Tetrachloro-m-xylene	6968000.000	6982559.994	0.010	0.2	15.0
2	Alpha-BHC	9120000.000	9231373.296	0.010	1.2	15.0
3	Gamma-BHC (Lindane)	8767000.000	8964627.240	0.010	2.3	15.0
4	Heptachlor	8606000.000	8764618.162	0.010	1.8	15.0
5	Aldrin	8251000.000	8531458.333	0.010	3.4	15.0
6	Beta-BHC	4574000.000	4684481.303	0.010	2.4	15.0
7	Delta-BHC	7760000.000	8325048.882	0.010	N/A	N/A
8	Heptachlor epoxide	7707000.000	7937698.283	0.010	3.0	15.0
9	Endosulfan I	7317000.000	7588915.852	0.010	3.7	15.0
10	gamma-Chlordane	8445000.000	8865763.728	0.010	5.0	15.0
11	alpha-Chlordane	8234000.000	8774242.013	0.010	6.6	15.0
12	4,4'-DDE	7974000.000	8304875.895	0.010	4.1	15.0
13	Dieldrin	8184000.000	8420880.806	0.010	2.9	15.0
14	Endrin	6212000.000	6094338.619	0.010	1.9	15.0
15	4,4'-DDD	5955000.000	6396043.466	0.010	7.4	15.0
16	Endosulfan II	7026000.000	7210703.545	0.010	2.6	15.0
17	4,4'-DDT	6152000.000	5339417.549	0.010	5.2	15.0
18	Endrin aldehyde	5294000.000	5353720.157	0.010	1.1	15.0
19	Methoxychlor	2490000.000	2289165.336	0.010	8.1	15.0
20	Endosulfan sulfate	6258000.000	6853280.615	0.010	9.5	15.0
21	Endrin ketone	6420000.000	6766564.839	0.010	5.4	15.0
$ 22	Decachlorobiphenyl	8535000.000	9336701.863	0.010	9.4	15.0

720

Data File: /chem/gcz.i/z111695.b/zf1357.d
Report Date: 18-Nov-1995 08:45

OHM Analytical Division

CONTINUING CALIBRATION COMPOUNDS

0574

Instrument ID: gcz.i
Lab File ID: zf1357.d
Analysis Type:
Lab Sample ID:
Quant Type: ESTD

Injection Date: 17-NOV-95 22:21
Init. Calibration Date(s): 11/08/95 11/08/95
Init. Calibration Times: 19:02 21:21
Method File: /chem/gcz.i/z111695.b/110895_8080_1701.

	COMPOUND	RRF	RF0	MIN RRF	%D	MAX %D	
$	1 2,4,5,6-Tetrachloro-m-xylene	6968000.000	6962954.496	0.010	0.1	15.0	
	2 Alpha-BHC	9120000.000	9256188.779	0.010	1.5	15.0	
	3 Gamma-BHC (Lindane)	8767000.000	8981204.898	0.010	2.4	15.0	
	4 Heptachlor	8606000.000	8771023.057	0.010	1.9	15.0	
	5 Aldrin	8251000.000	8585406.481	0.010	4.1	15.0	
	6 Beta-BHC	4574000.000	4700044.964	0.010	2.8	15.0	
	7 Delta-BHC	7760000.000	8380959.661	0.010	~~NFA~~	~~NFA~~	8% D
	8 Heptachlor epoxide	7707000.000	7988771.497	0.010	3.7	15.0	
	9 Endosulfan I	7317000.000	7638568.414	0.010	4.4	15.0	
	10 gamma-Chlordane	8445000.000	8908483.860	0.010	5.5	15.0	
	11 alpha-Chlordane	8234000.000	8309064.331	0.010	7.0	15.0	
	12 4,4'-DDE	7974000.000	8338611.742	0.010	4.6	15.0	
	13 Dieldrin	8184000.000	8479722.174	0.010	3.6	15.0	
	14 Endrin	6212000.000	6186234.213	0.010	0.4	15.0	
	15 4,4'-DDD	5955000.000	6420799.775	0.010	7.8	15.0	
	16 Endosulfan II	7026000.000	7281046.296	0.010	3.6	15.0	
	17 4,4'-DDT	6162000.000	6029801.091	0.010	2.1	15.0	
	18 Endrin aldehyde	5294000.000	5276910.201	0.010	0.3	15.0	
	19 Methoxychlor	2490000.000	2321036.556	0.010	6.8	15.0	
	20 Endosulfan sulfate	6258000.000	6955625.650	0.010	11.3	15.0	
	21 Endrin ketone	6420000.000	6819009.386	0.010	6.2	15.0	
$	22 Decachlorobiphenyl	8535000.000	9482691.835	0.010	11.1	15.0	
M	23 Chlordane	++++	++++	0.010	++++	40.0	<-
	24 Toxaphene	++++	++++	0.010	++++	40.0	<-
	25 Aroclor 1016	++++	++++	0.010	++++	40.0	<-
	26 Aroclor 1221	++++	++++	0.010	++++	40.0	<-
	27 Aroclor 1232	++++	++++	0.010	++++	40.0	<-
	28 Aroclor 1242	++++	++++	0.010	++++	40.0	<-
	29 Aroclor 1248	++++	++++	0.010	++++	40.0	<-
	30 Aroclor 1254	++++	++++	0.010	++++	40.0	<-
	31 Aroclor 1260	++++	++++	0.010	++++	40.0	<-
	32 Hexachlorobenzene	++++	++++	0.010	++++	40.0	<-

Data File: /chem/gcz.i/z111695.b/zf1369.d
Report Date: 18-Nov-1995 08:54

OHM Analytical Division

CONTINUING CALIBRATION COMPOUNDS

0575

Instrument ID: gcz.i
Lab File ID: zf1369.d
Analysis Type:
Lab Sample ID:
Quant Type: ESTD

Injection Date: 18-NOV-95 05:19
Init. Calibration Date(s): 11/08/95 11/08/95
Init. Calibration Times: 19:02 21:21
Method File: /chem/gcz.i/z111695.b/110895_8080_1701.

	COMPOUND	RRF	RF0	MIN RRF	%D	MAX %D	
$	1 2,4,5,6-Tetrachloro-m-xylene	6968000.000	7023083.647	0.010	0.8	15.0	
	2 Alpha-BHC	9120000.000	9349586.566	0.010	2.5	15.0	
	3 Gamma-BHC (Lindane)	8767000.000	9067477.897	0.010	3.4	15.0	
	4 Heptachlor	8606000.000	8933466.223	0.010	3.8	15.0	
	5 Aldrin	8251000.000	8661037.346	0.010	5.0	15.0	
	6 Beta-BHC	4574000.000	4750381.308	0.010	3.9	15.0	
	7 Delta-BHC	7760000.000	8447375.578	0.010	N/A	N/A	9% D
	8 Heptachlor epoxide	7707000.000	8046363.187	0.010	4.4	15.0	
	9 Endosulfan I	7317000.000	7691087.176	0.010	5.1	15.0	
	10 gamma-Chlordane	8445000.000	8971935.090	0.010	6.2	15.0	
	11 alpha-Chlordane	8234000.000	8864976.247	0.010	7.7	15.0	
	12 4,4'-DDE	7974000.000	8393033.643	0.010	5.3	15.0	
	13 Dieldrin	8184000.000	8533542.287	0.010	4.3	15.0	
	14 Endrin	6212000.000	6091599.723	0.010	1.9	15.0	
	15 4,4'-DDD	5955000.000	6476222.351	0.010	8.8	15.0	
	16 Endosulfan II	7026000.000	7338363.602	0.010	4.4	15.0	
	17 4,4'-DDT	6162000.000	6121692.280	0.010	0.7	15.0	
	18 Endrin aldehyde	5294000.000	5392774.124	0.010	1.9	15.0	
	19 Methoxychlor	2490000.000	2353020.588	0.010	5.5	15.0	
	20 Endosulfan sulfate	6258000.000	7016297.581	0.010	12.1	15.0	
	21 Endrin ketone	6420000.000	6955382.756	0.010	8.3	15.0	
$	22 Decachlorobiphenyl	8535000.000	9551347.955	0.010	11.9	15.0	
M	23 Chlordane	++++	++++	0.010	++++	40.0	<-
	24 Toxaphene	++++	++++	0.010	++++	40.0	<-
	25 Aroclor 1016	++++	++++	0.010	++++	40.0	<-
	26 Aroclor 1221	++++	++++	0.010	++++	40.0	<-
	27 Aroclor 1232	++++	++++	0.010	++++	40.0	<-
	28 Aroclor 1242	++++	++++	0.010	++++	40.0	<-
	29 Aroclor 1248	++++	++++	0.010	++++	40.0	<-
	30 Aroclor 1254	++++	++++	0.010	++++	40.0	<-
	31 Aroclor 1260	++++	++++	0.010	++++	40.0	<-
	32 Hexachlorobenzene	++++	++++	0.010	++++	40.0	<-

Data File: /chem/gcz.i/z111695.b/zr1323.d
Report Date: 16-Nov-1995 13:28

OHM Analytical Division

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gcz.i
Lab File ID: zr1323.d
Analysis Type:
Lab Sample ID:
Quant Type: ESTD

Injection Date: 16-NOV-95 12:27
Init. Calibration Date(s): 11/08/95 11/08/95
Init. Calibration Times: 19:36 21:56
Method File: /chem/gcz.i/z111695.b/110895_8080_db5.m

	COMPOUND	RRF	RF0	MIN RRF	%D	MAX %D
S	1 2,4,5,6-Tetrachloro-m-xylene	7611000.000	7793063.440	0.010	2.4	15.0
	2 Alpha-BHC	10750000.000	10859097.198	0.010	1.0	15.0
	3 Beta-BHC	5225000.000	5242674.611	0.010	0.3	15.0
	4 Gamma-BHC (Lindane)	10080000.000	10324945.116	0.010	2.4	15.0
	5 Delta-BHC	9837000.000	10050733.278	0.010	N/A	N/A
	6 Heptachlor	8281000.000	8337006.606	0.010	1.3	15.0
	7 Aldrin	8796000.000	9027852.381	0.010	2.6	15.0
	8 Heptachlor epoxide	8002000.000	8277681.561	0.010	3.4	15.0
	9 gamma-Chlordane	9240000.000	9647389.895	0.010	4.4	15.0
	10 Endosulfan I	8041000.000	8025357.309	0.010	0.2	15.0
M	11 alpha-Chlordane	8041000.000	8025357.309	0.010	0.2	15.0
	12 4,4'-DDE	8083000.000	8739807.792	0.010	8.1	15.0
	13 Dieldrin	8962000.000	9009323.070	0.010	0.5	15.0
	14 Endrin	6629000.000	6953674.275	0.010	5.0	15.0
	15 Endosulfan II	7144000.000	7561332.339	0.010	5.8	15.0
	16 4,4'-DDD	6581000.000	6943527.950	0.010	5.6	15.0
	17 Endrin aldehyde	6364000.000	6243758.060	0.010	1.8	15.0
	18 Endosulfan sulfate	6123000.000	6765363.312	0.010	10.5	15.0
	19 4,4'-DDT	6334000.000	6352584.744	0.010	8.2	15.0
	20 Endrin ketone	7967000.000	7914784.515	0.010	0.7	15.0
	21 Methoxychlor	3285000.000	3211536.382	0.010	2.2	15.0
S	22 Decachlorobiphenyl	8535000.000	9113360.663	0.010	6.8	15.0

220

Data File: /chem/gcz.i/z111695.b/zr1364.d
Report Date: 18-Nov-1995 08:47

OHM Analytical Division

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gcz.i
Lab File ID: zr1364.d
Analysis Type:
Lab Sample ID:
Quant Type: ESTD

Injection Date: 17-NOV-95 22:56
Init. Calibration Date(s): 11/08/95 11/08/95
Init. Calibration Times: 19:36 21:56
Method File: /chem/gcz.i/z111695.b/110895_8080_db5.m

	COMPOUND	RRF	RF0	MIN RRF	%D	MAX %D	
$	1 2,4,5,6-Tetrachloro-m-xylene	7611000.000	7757747.415	0.010	1.9	15.0	
	2 Alpha-BHC	10750000.000	10806518.389	0.010	0.5	15.0	
	3 Beta-BHC	5225000.000	5227004.590	0.010	0.0	15.0	
	4 Gamma-BHC (Lindane)	10080000.000	10296664.058	0.010	2.1	15.0	
	5 Delta-BHC	9837000.000	10015283.140	0.010	N/A	N/A	2% D
	6 Heptachlor	8281000.000	8252826.590	0.010	0.3	15.0	
	7 Aldrin	8796000.000	9079010.301	0.010	3.2	15.0	
	8 Heptachlor epoxide	8002000.000	8279728.846	0.010	3.5	15.0	
	9 gamma-Chlordane	9240000.000	9667288.351	0.010	4.6	15.0	
	10 Endosulfan I	8041000.000	8048957.099	0.010	0.1	15.0	
M	11 alpha-Chlordane	8041000.000	8048957.099	0.010	0.1	15.0	
	12 4,4'-DDE	8083000.000	8738932.796	0.010	8.1	15.0	
	13 Dieldrin	8962000.000	9016956.089	0.010	0.6	15.0	
	14 Endrin	6629000.000	6994950.705	0.010	5.5	15.0	
	15 Endosulfan II	7144000.000	7586021.607	0.010	6.2	15.0	
	16 4,4'-DDD	6581000.000	6966921.706	0.010	5.9	15.0	
	17 Endrin aldehyde	6364000.000	6247044.047	0.010	1.8	15.0	
	18 Endosulfan sulfate	6123000.000	6796472.305	0.010	11.0	15.0	
	19 4,4'-DDT	6334000.000	6741291.002	0.010	6.4	15.0	
	20 Endrin ketone	7967000.000	7946746.394	0.010	0.3	15.0	
	21 Methoxychlor	3285000.000	3227017.973	0.010	1.8	15.0	
$	22 Decachlorobiphenyl	8535000.000	9104576.144	0.010	6.7	15.0	

Data File: /chem/gcz.i/z111695.b/zr1376.d
Report Date: 18-Nov-1995 08:55

OHM Analytical Division

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gcz.i
Lab File ID: zr1376.d
Analysis Type:
Lab Sample ID:
Quant Type: ESTD

Injection Date: 18-NOV-95 05:54
Init. Calibration Date(s): 11/08/95 11/08/95
Init. Calibration Times: 19:36 21:56
Method File: /chem/gcz.i/z111695.b/110895_8080_db5.m

	COMPOUND	RRF	RF0	MIN RRF	%D	MAX %D	
$	1 2,4,5,6-Tetrachloro-m-xylene	7611000.000	7792695.489	0.010	2.4	15.0	
	2 Alpha-BHC	10750000.000	10878774.956	0.010	1.2	15.0	
	3 Beta-BHC	5225000.000	5266281.157	0.010	0.8	15.0	
	4 Gamma-BHC (Lindane)	10080000.000	10360294.052	0.010	2.8	15.0	
	5 Delta-BHC	9837000.000	10088464.447	0.010	N/A	N/A	3 % D
	6 Heptachlor	8281000.000	8510734.723	0.010	2.8	15.0	
	7 Aldrin	8796000.000	9097548.413	0.010	3.4	15.0	
	8 Heptachlor epoxide	8002000.000	8309243.772	0.010	3.8	15.0	
	9 gamma-Chlordane	9240000.000	9714832.163	0.010	5.1	15.0	
	10 Endosulfan I	8041000.000	8055779.574	0.010	0.2	15.0	
M	11 alpha-Chlordane	8041000.000	8055779.574	0.010	0.2	15.0	
	12 4,4'-DDE	8083000.000	8763496.599	0.010	8.4	15.0	
	13 Dieldrin	8962000.000	9046568.339	0.010	0.9	15.0	
	14 Endrin	6629000.000	6885232.288	0.010	3.9	15.0	
	15 Endosulfan II	7144000.000	7600808.288	0.010	6.4	15.0	
	16 4,4'-DDD	6581000.000	7019956.988	0.010	6.7	15.0	
	17 Endrin aldehyde	6364000.000	6297673.323	0.010	1.0	15.0	
	18 Endosulfan sulfate	6123000.000	6765649.130	0.010	10.5	15.0	
	19 4,4'-DDT	6334000.000	6972924.892	0.010	10.1	15.0	
	20 Endrin ketone	7967000.000	8000452.753	0.010	0.4	15.0	
	21 Methoxychlor	3285000.000	3223979.553	0.010	1.9	15.0	
$	22 Decachlorobiphenyl	8535000.000	9204721.647	0.010	7.8	15.0	

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0579 PBLK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: N2P51713P

Sample wt/vol: 30.0 (g/mL) G Lab File ID: ZF1359

% Moisture: N/A decanted: (Y/N) N Date Received: 11/14/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 11/14/95

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/17/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.7	U
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
76-44-8	Heptachlor	1.7	U
309-00-2	Aldrin	1.7	U
1024-57-3	Heptachlor epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U
60-57-1	Dieldrin	1.7	U
72-55-9	4,4'-DDE	1.7	U
72-20-8	Endrin	1.7	U
33213-65-9	Endosulfan II	1.7	U
72-54-8	4,4'-DDD	1.7	U
1031-07-8	Endosulfan sulfate	1.7	U
50-29-3	4,4'-DDT	1.7	U
72-43-5	Methoxychlor	1.7	U
53494-70-5	Endrin ketone	1.7	U
7421-93-4	Endrin aldehyde	1.7	U
8001-35-2	Toxaphene	33	U
12674-11-2	Aroclor-1016	17	U
11104-28-2	Aroclor-1221	17	U
11141-16-5	Aroclor-1232	17	U
53469-21-9	Aroclor-1242	17	U
12672-29-6	Aroclor-1248	17	U
11097-69-1	Aroclor-1254	17	U
11096-82-5	Aroclor-1260	17	U
58-89-9	Gamma-BHC (Lindane)	1.7	U
57-74-9	Chlordane	17	U

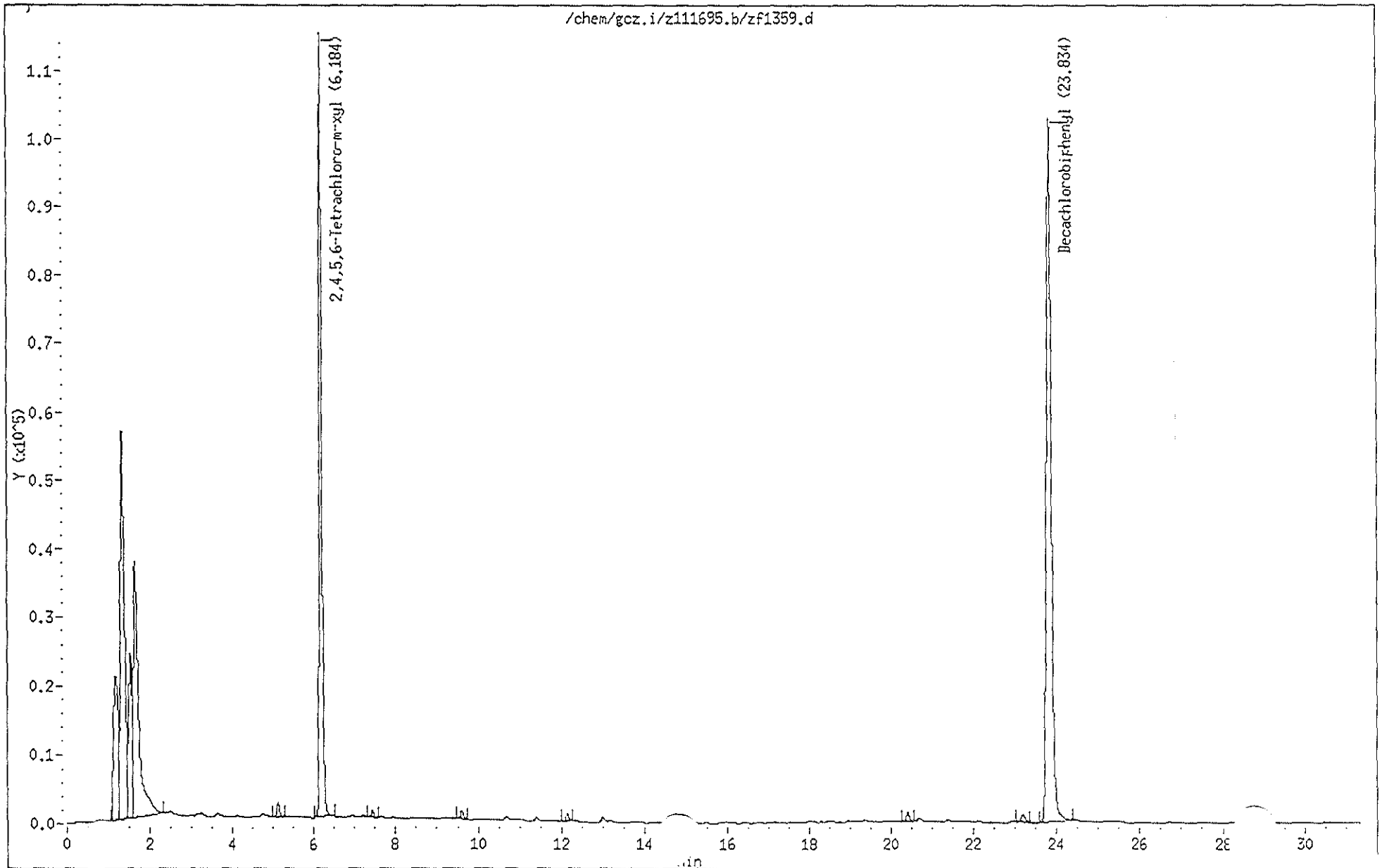
0580

Data File: /chem/gcz.i/z111695.b/zf1359.d
Date : 17-NOV-95 23:31
Client ID:
Sample Info: n2p51713p,n2p517

Column phase: DB-1701

Instrument: gcz.i

Operator: art
Column diameter: 0.53



OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zf1359.d
Lab Smp Id:
Inj Date : 17-NOV-95 23:31
Operator : art Inst ID: gcz.i
Smp Info : n2p51713p,n2p517
Misc Info : n2p51713p,n2p51713,g2,1,1
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_1701.m
Meth Date : 18-Nov-1995 08:49 Quant Type: ESTD
Cal Date : 08-NOV-95 21:21 Cal File: zf1127.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/ml)
$ 2,4,5,6-Tetrachloro-m-xylene	6.184	6.216	-0.032	2597731	0.373	0.373(R)
$ 22 Decachlorobiphenyl	23.834	23.887	-0.053	4140987	0.485	0.485(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

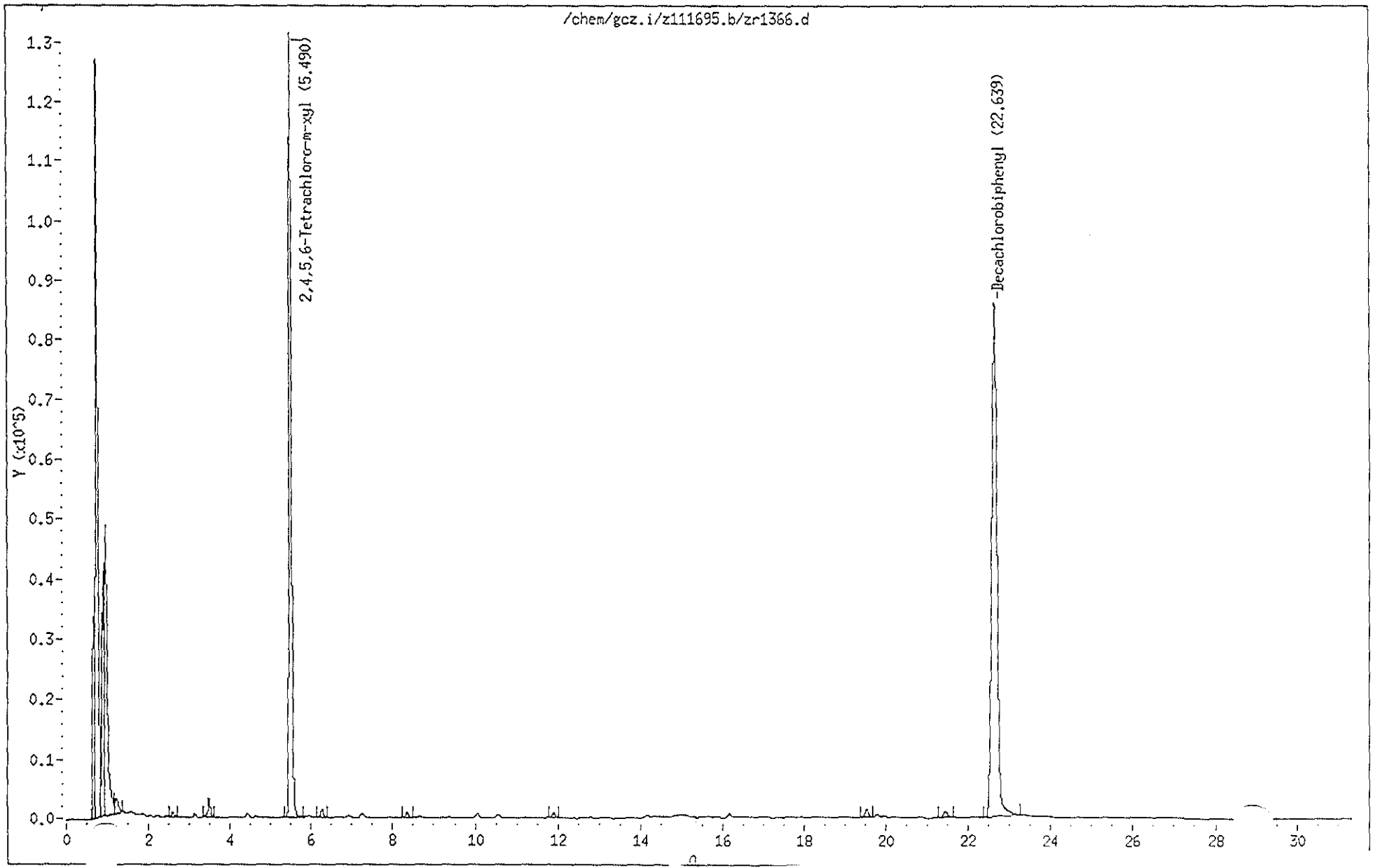
ak
11/20/95

Data File: /chem/gcz.i/z111695.b/zr1366.d
Date : 18-NOV-95 00:06
Client ID:
Sample Info: n2p51713p,n2p517

Instrument: gcz.i

Operator: art
Column diameter: 0.53

Column phase: DB-5



OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zr1366.d
Lab Smp Id:
Inj Date : 18-NOV-95 00:06
Operator : art Inst ID: gcz.i
Smp Info : n2p51713p,n2p517
Misc Info : n2p51713p,n2p517
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_db5.m
Meth Date : 18-Nov-1995 08:50 Quant Type: ESTD
Cal Date : 08-NOV-95 21:56 Cal File: zr1128.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
	2,4,5,6-Tetrachloro-m-xylene	5.490	5.504	-0.014	2849964	0.374	0.374(R)
2	Alpha-BHC	Compound Not Detected.					
3	Beta-BHC	Compound Not Detected.					
4	Gamma-BHC (Lindane)	Compound Not Detected.					
5	Delta-BHC	Compound Not Detected.					
6	Heptachlor	Compound Not Detected.					
7	Aldrin	Compound Not Detected.					
8	Heptachlor epoxide	Compound Not Detected.					
9	gamma-Chlordane	Compound Not Detected.					
10	Endosulfan I	Compound Not Detected.					
M 11	alpha-Chlordane	Compound Not Detected.					
12	4,4'-DDE	Compound Not Detected.					
13	Dieldrin	Compound Not Detected.					
14	Endrin	Compound Not Detected.					
15	Endosulfan II	Compound Not Detected.					
16	4,4'-DDD	Compound Not Detected.					
17	Endrin aldehyde	Compound Not Detected.					
18	Endosulfan sulfate	Compound Not Detected.					
19	4,4'-DDT	Compound Not Detected.					
20	Endrin ketone	Compound Not Detected.					
21	Methoxychlor	Compound Not Detected.					
22	Decachlorobiphenyl	22.639	22.691	-0.052	3962421	0.464	0.464(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

EPA SAMPLE NO.

PESTICIDE ORGANICS ANALYSIS DATA SHEET

0584 | CLJ78TW001MS

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: JP0318PS

Sample wt/vol: 30.4 (g/mL) G Lab File ID: ZF1361

% Moisture: 26 decanted: (Y/N) N Date Received: 11/14/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 11/14/95

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/18/95

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

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

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	220	
319-85-7	beta-BHC	230	
319-86-8	delta-BHC	220	
76-44-8	Heptachlor	220	
309-00-2	Aldrin	220	
1024-57-3	Heptachlor epoxide	240	
959-98-8	Endosulfan I	230	
60-57-1	Dieldrin	190	
72-55-9	4,4'-DDE	230	
72-20-8	Endrin	200	
33213-65-9	Endosulfan II	130	
72-54-8	4,4'-DDD	230	
1031-07-8	Endosulfan sulfate	130	
50-29-3	4,4'-DDT	190	
72-43-5	Methoxychlor	250	
53494-70-5	Endrin ketone	210	
7421-93-4	Endrin aldehyde	78	
8001-35-2	Toxaphene	450	U
12674-11-2	Aroclor-1016	220	U
11104-28-2	Aroclor-1221	220	U
11141-16-5	Aroclor-1232	220	U
53469-21-9	Aroclor-1242	220	U
12672-29-6	Aroclor-1248	220	U
11097-69-1	Aroclor-1254	220	U
11096-82-5	Aroclor-1260	220	U
58-89-9	Gamma-BHC (Lindane)	230	
57-74-9	Chlordane	480	

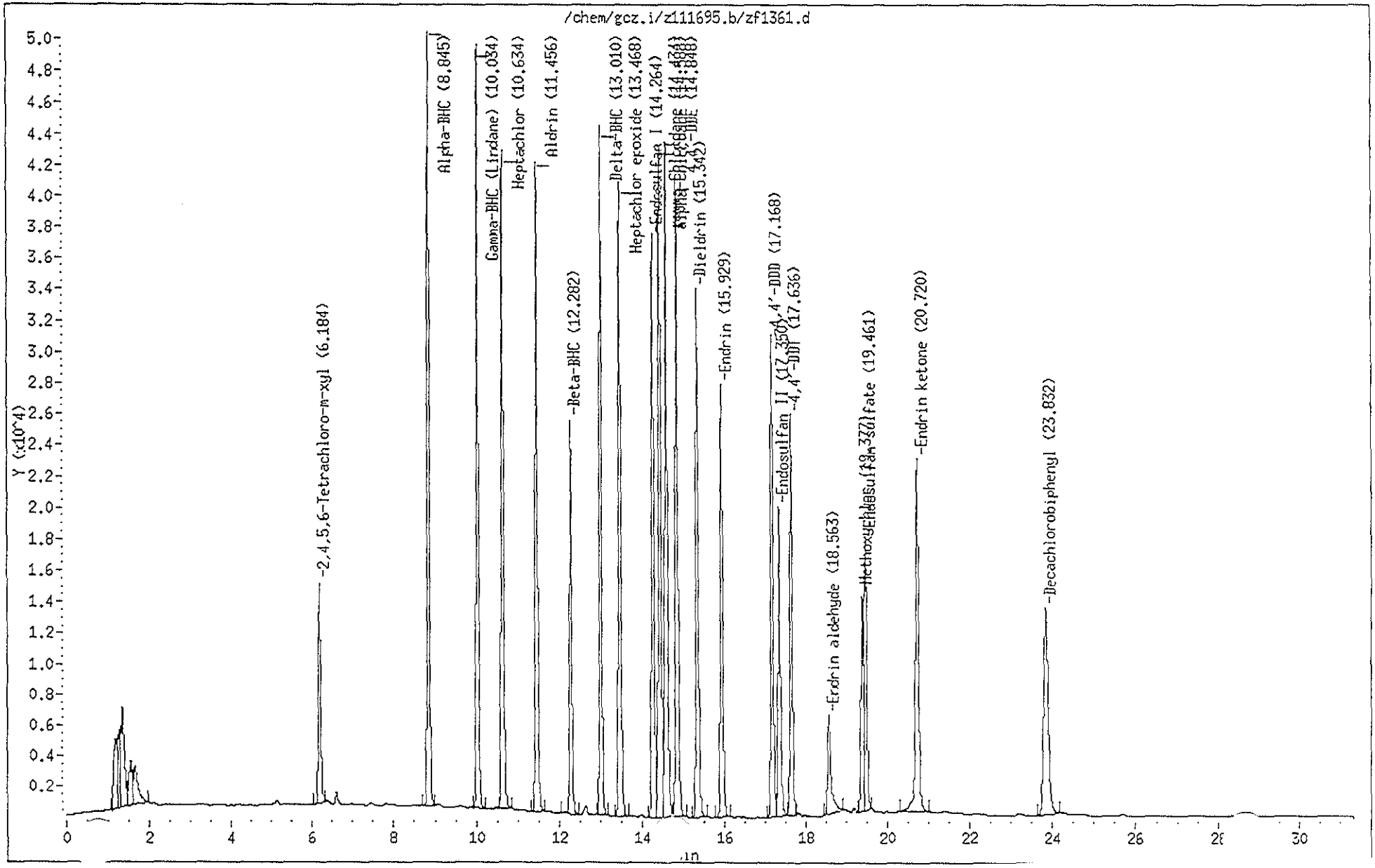
0585

Data File: /chem/gcz.i/z111695.b/zf1361.d
Date : 18-NOV-95 00:41
Client ID:
Sample Info: jp0318ps,n2p5171

Column phase: DB-1701

Instrument: gcz.i

Operator: art
Column diameter: 0.53



Data File: /chem/gcz.i/z111695.b/zf1361.d
Report Date: 18-Nov-1995 09:19

OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zf1361.d
Lab Smp Id:
Inj Date : 18-NOV-95 00:41
Operator : art Inst ID: gcz.i
Smp Info : jp0318ps,n2p5171
Misc Info : jp0318ps,n2p51713,g2,1,10
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_1701.m
Meth Date : 18-Nov-1995 08:49 Quant Type: ESTD
Cal Date : 08-NOV-95 21:21 Cal File: zf1127.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

		Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/ml)
		2,4,5,6-Tetrachloro-m-xylene	6.184	6.216	-0.032	289315	0.0415	0.0415(R)
	2	Alpha-BHC	8.845	8.850	-0.005	886511	0.0972	0.0972
	3	Gamma-BHC (Lindane)	10.034	10.068	-0.034	885754	0.101	0.101
	4	Heptachlor	10.634	10.669	-0.035	849897	0.0988	0.0988
	5	Aldrin	11.456	11.490	-0.034	822968	0.0997	0.0997
	6	Beta-BHC	12.282	12.315	-0.033	477082	0.104	0.104
	7	Delta-BHC	13.010	13.043	-0.033	768420	0.0990	0.0990
	8	Heptachlor epoxide	13.468	13.502	-0.034	826832	0.107	0.107
	9	Endosulfan I	14.264	14.298	-0.034	771366	0.105	0.105
	10	gamma-Chlordane	14.434	14.467	-0.033	888539	0.105	0.105
	11	alpha-Chlordane	14.588	14.622	-0.034	913964	0.111	0.111
	12	4,4'-DDE	14.848	14.881	-0.033	829357	0.104	0.104
	13	Dieldrin	15.342	15.376	-0.034	681573	0.0833	0.0833
	14	Endrin	15.929	15.962	-0.033	567652	0.0914	0.0914
	15	4,4'-DDD	17.168	17.201	-0.033	608233	0.102	0.102
	16	Endosulfan II	17.350	17.384	-0.034	413472	0.0588	0.0588
	17	4,4'-DDT	17.636	17.670	-0.034	517050	0.0839	0.0839
	18	Endrin aldehyde	18.563	18.595	-0.032	185899	0.0351	0.0351
	19	Methoxychlor	19.377	19.411	-0.034	276058	0.111	0.111
	20	Endosulfan sulfate	19.461	19.497	-0.036	377715	0.0604	0.0604
	21	Endrin ketone	20.720	20.760	-0.040	609834	0.0950	0.0950
S	22	Decachlorobiphenyl	23.832	23.887	-0.055	521557	0.0611	0.0611(R)
M	23	Chlordane				1802503		

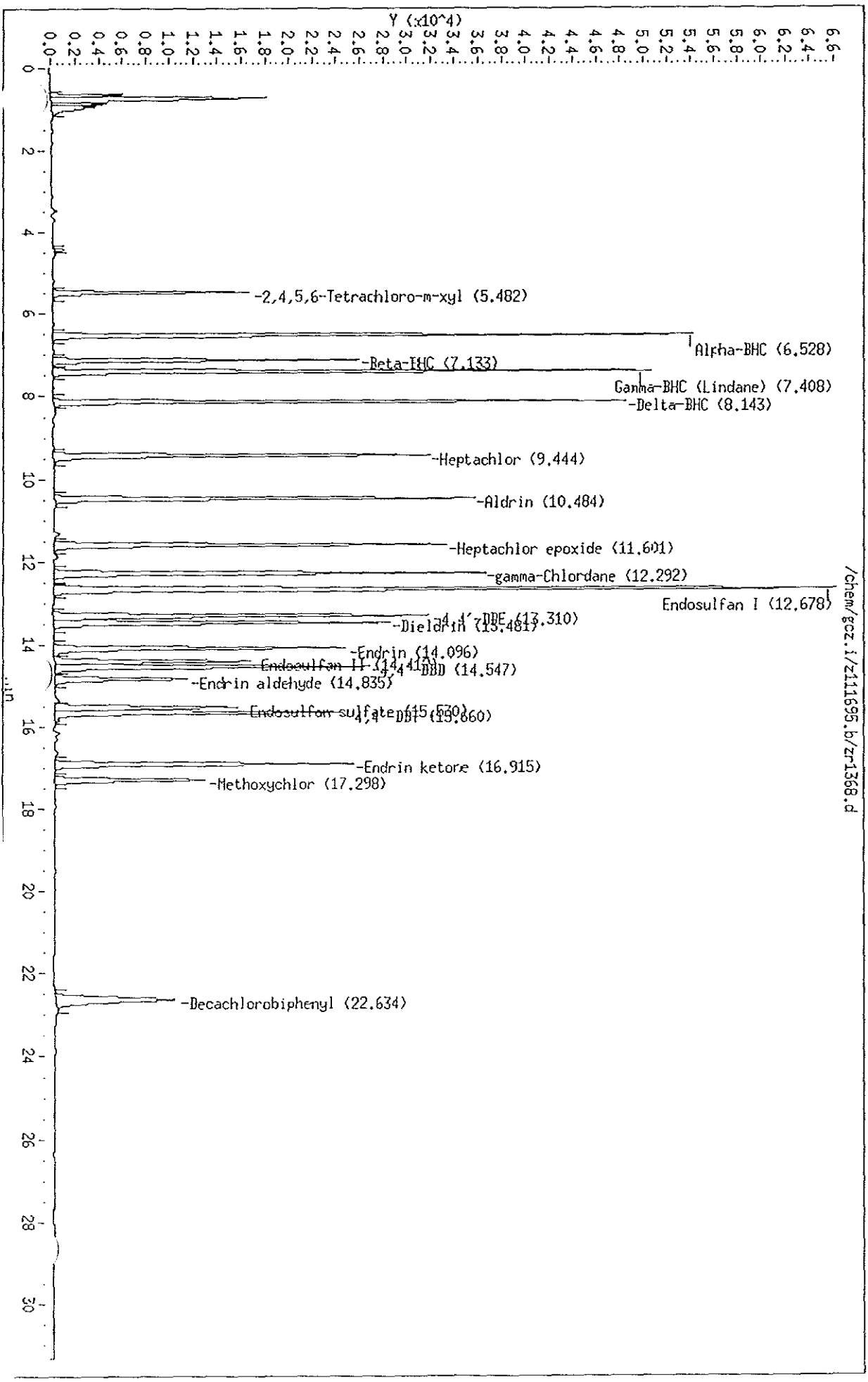
Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/gcz.i/z111695.b/zr1368.d
Date : 18-NOV-95 01:15
Client ID:
Sample Info: jp0318ps,n2p5171

Column phase: DB-5

Instrument: gcz.i
Operator: art
Column diameter: 0.53



Data File: /chem/gcz.i/z111695.b/zr1368.d
Report Date: 18-Nov-1995 09:21

OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zr1368.d
Lab Smp Id:
Inj Date : 18-NOV-95 01:15
Operator : art Inst ID: gcz.i
Smp Info : jp0318ps,n2p5171
Misc Info : jp0318ps,n2p5171
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_db5.m
Meth Date : 18-Nov-1995 08:50 Quant Type: ESTD
Cal Date : 08-NOV-95 21:56 Cal File: zr1128.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
$	2,4,5,6-Tetrachloro-m-xylene	5.482	5.504	-0.022	330882	0.0435	0.0435(R)
2	Alpha-BHC	6.528	6.551	-0.023	1038069	0.0966	0.0966
3	Beta-BHC	7.133	7.154	-0.021	543572	0.104	0.104
4	Gamma-BHC (Lindane)	7.408	7.431	-0.023	1016753	0.101	0.101
5	Delta-BHC	8.143	8.163	-0.020	948154	0.0964	0.0964
6	Heptachlor	9.444	9.472	-0.028	747028	0.0902	0.0902
7	Aldrin	10.484	10.512	-0.028	818317	0.0930	0.0930
8	Heptachlor epoxide	11.601	11.630	-0.029	790188	0.0987	0.0987
9	gamma-Chlordane	12.292	12.321	-0.029	901007	0.0975	0.0975
10	Endosulfan I	12.678	12.706	-0.028	1728398	0.215	0.215
11	alpha-Chlordane				1728398	0.215	0.215
12	4,4'-DDE	13.310	13.318	-0.008	752711	0.0931	0.0931
13	Dieldrin	13.481	13.488	-0.007	688737	0.0768	0.0768
14	Endrin	14.096	14.126	-0.030	628234	0.0948	0.0948
15	Endosulfan II	14.412	14.443	-0.031	406678	0.0569	0.0569
16	4,4'-DDD	14.547	14.576	-0.029	656625	0.0998	0.0998
17	Endrin aldehyde	14.835	14.867	-0.032	293060	0.0460	0.0460
18	Endosulfan sulfate	15.530	15.563	-0.033	378889	0.0619	0.0619
19	4,4'-DDT	15.660	15.690	-0.030	631102	0.0996	0.0996
20	Endrin ketone	16.915	16.947	-0.032	645616	0.0810	0.0810
21	Methoxychlor	17.298	17.335	-0.037	341540	0.104	0.104
22	Decachlorobiphenyl	22.634	22.691	-0.057	455668	0.0534	0.0534(R)

Flag Legend

- Spike/Surrogate failed recovery limits.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

0589 EPA SAMPLE NO.

CLJ78TW001MSD

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: JP0318PR

Sample wt/vol: 30.5 (g/mL) G Lab File ID: ZF1362

% Moisture: 26 decanted: (Y/N) N Date Received: 11/14/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 11/14/95

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/18/95

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

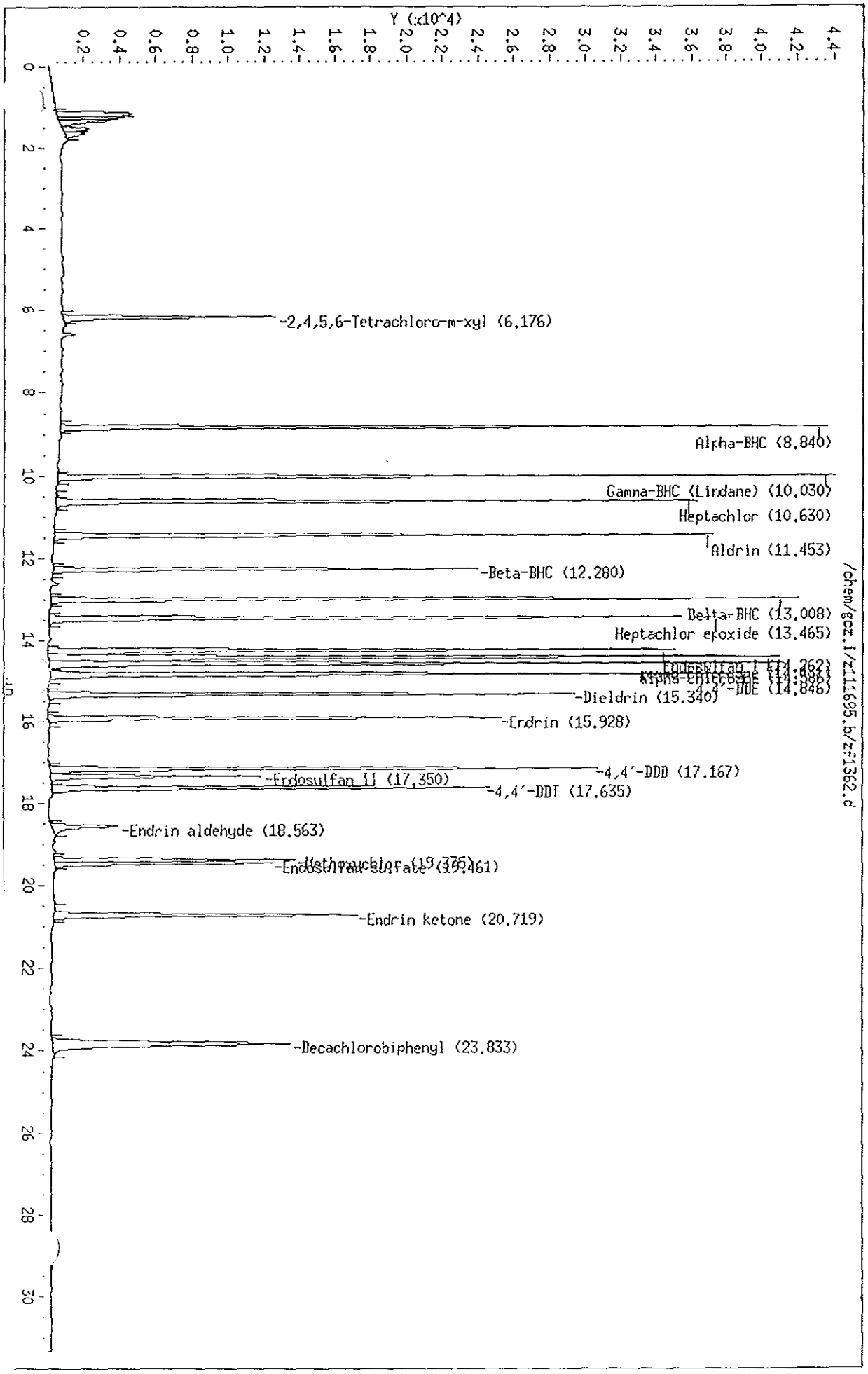
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	180	
319-85-7	beta-BHC	220	
319-86-8	delta-BHC	210	
76-44-8	Heptachlor	180	
309-00-2	Aldrin	190	
1024-57-3	Heptachlor epoxide	220	
959-98-8	Endosulfan I	220	
60-57-1	Dieldrin	160	
72-55-9	4,4'-DDE	220	
72-20-8	Endrin	180	
33213-65-9	Endosulfan II	76	
72-54-8	4,4'-DDD	220	
1031-07-8	Endosulfan sulfate	89	
50-29-3	4,4'-DDT	180	
72-43-5	Methoxychlor	240	
53494-70-5	Endrin ketone	140	
7421-93-4	Endrin aldehyde	42	
8001-35-2	Toxaphene	450	U
12674-11-2	Aroclor-1016	220	U
11104-28-2	Aroclor-1221	220	U
11141-16-5	Aroclor-1232	220	U
53469-21-9	Aroclor-1242	220	U
12672-29-6	Aroclor-1248	220	U
11097-69-1	Aroclor-1254	220	U
11096-82-5	Aroclor-1260	220	U
58-89-9	Gamma-BHC (Lindane)	200	
57-74-9	Chlordane	460	

Data File: /chem/gcz.i/z111695.b/zf1362.d
Date : 18-NOV-95 01:15
Client ID:
Sample Info: jp0318pr,n2p5171

Column phase: DB-1701

Instrument: gcz.i
Operator: art
Column diameter: 0.53



Data File: /chem/gcz.i/z111695.b/zf1362.d
Report Date: 18-Nov-1995 09:19

OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zf1362.d
Lab Smp Id:
Inj Date : 18-NOV-95 01:15
Operator : art Inst ID: gcz.i
Smp Info : jp0318pr,n2p5171
Misc Info : jp0318pr,n2p51713,g2,1,10
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_1701.m
Meth Date : 18-Nov-1995 08:49 Quant Type: ESTD
Cal Date : 08-NOV-95 21:21 Cal File: zf1127.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
$	2,4,5,6-Tetrachloro-m-xylene	6.176	6.216	-0.040	238733	0.0343	0.0343(R)
2	Alpha-BHC	8.840	8.850	-0.010	754505	0.0827	0.0827
3	Gamma-BHC (Lindane)	10.030	10.068	-0.038	779963	0.0890	0.0890
4	Heptachlor	10.630	10.669	-0.039	716565	0.0833	0.0833
5	Aldrin	11.453	11.490	-0.037	712826	0.0864	0.0864
6	Beta-BHC	12.280	12.315	-0.035	443025	0.0968	0.0968
7	Delta-BHC	13.008	13.043	-0.035	724493	0.0934	0.0934
8	Heptachlor epoxide	13.465	13.502	-0.037	774932	0.100	0.100
9	Endosulfan I	14.262	14.298	-0.036	718313	0.0982	0.0982
10	gamma-Chlordane	14.431	14.467	-0.036	840678	0.0995	0.0995
11	alpha-Chlordane	14.586	14.622	-0.036	864648	0.105	0.105
12	4,4'-DDE	14.846	14.881	-0.035	791758	0.0993	0.0993
13	Dieldrin	15.340	15.376	-0.036	583059	0.0712	0.0712
14	Endrin	15.928	15.962	-0.034	513944	0.0827	0.0827
15	4,4'-DDD	17.167	17.201	-0.034	595390	0.1000	0.1000
16	Endosulfan II	17.350	17.384	-0.034	239980	0.0342	0.0342
17	4,4'-DDT	17.635	17.670	-0.035	486812	0.0790	0.0790
18	Endrin aldehyde	18.563	18.595	-0.032	103332	0.0195	0.0195
19	Methoxychlor	19.375	19.411	-0.036	272308	0.109	0.109
20	Endosulfan sulfate	19.461	19.497	-0.036	252816	0.0404	0.0404
21	Endrin ketone	20.719	20.760	-0.041	411935	0.0642	0.0642
22	Decachlorobiphenyl	23.833	23.887	-0.054	511516	0.0599	0.0599(R)
23	Chlordane				1705327		

au 11/20/95

lag Legend

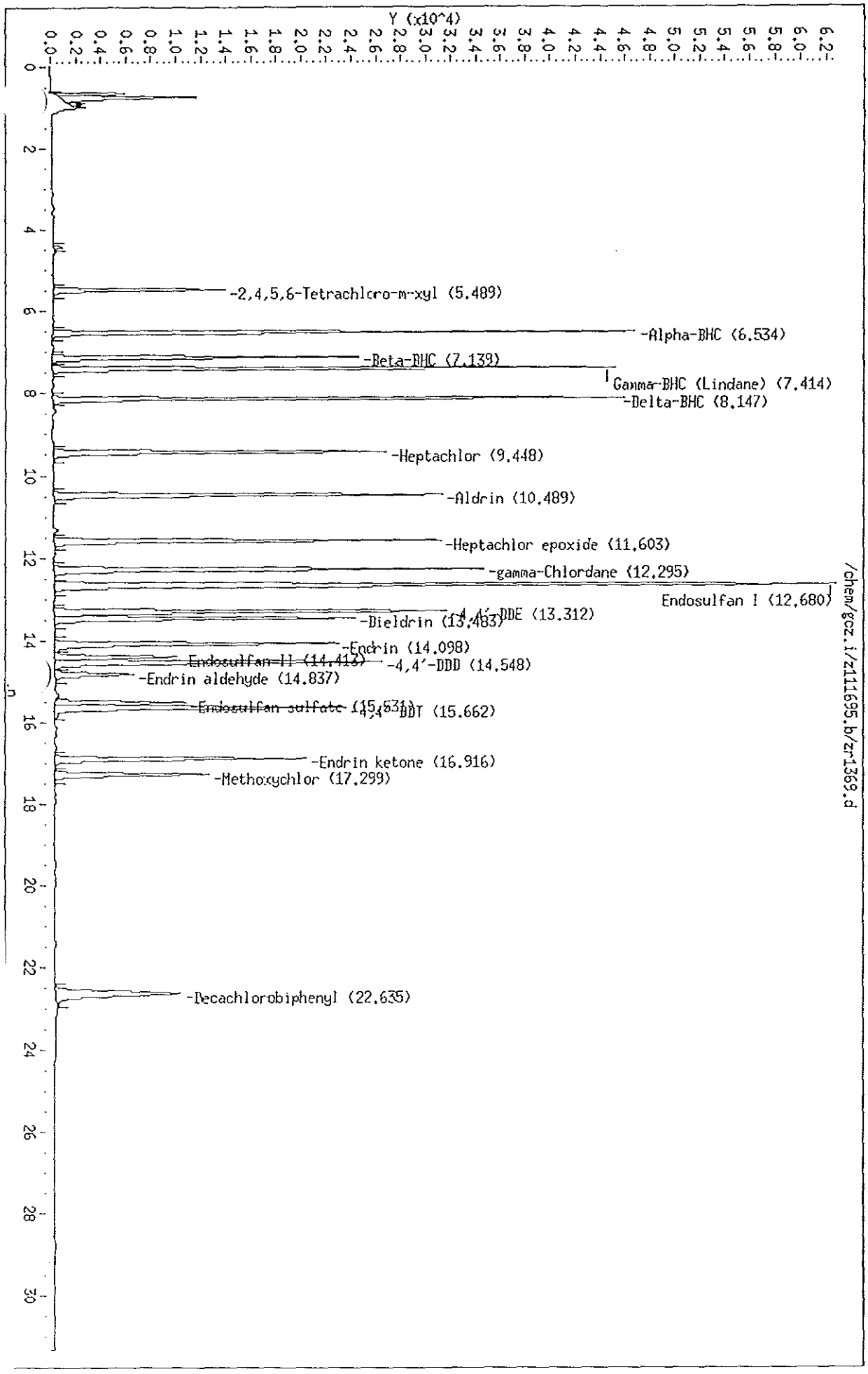
- Spike/Surrogate failed recovery limits.

Data File: /chem/gcz.i/z111695.b/zr1369.d
Date : 18-NOV-95 01:50
Client ID:
Sample Info: jp0318pr,n2p5171

Column phase: DB-5

Instrument: gcz.i

Operator: art
Column diameter: 0.53



Data File: /chem/gcz.i/z111695.b/zr1369.d
Report Date: 18-Nov-1995 09:21

OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zr1369.d
Lab Smp Id:
Inj Date : 18-NOV-95 01:50
Operator : art Inst ID: gcz.i
Smp Info : jp0318pr,n2p5171
Misc Info : jp0318pr,n2p5171
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_db5.m
Meth Date : 18-Nov-1995 08:50 Quant Type: ESTD
Cal Date : 08-NOV-95 21:56 Cal File: zr1128.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
$	1,4,5,6-Tetrachloro-m-xylene	5.489	5.504	-0.015	274831	0.0361	0.0361(R)
2	Alpha-BHC	6.534	6.551	-0.017	890249	0.0828	0.0828
3	Beta-BHC	7.139	7.154	-0.015	513076	0.0982	0.0982
4	Gamma-BHC (Lindane)	7.414	7.431	-0.017	900895	0.0894	0.0894
5	Delta-BHC	8.147	8.163	-0.016	897658	0.0912	0.0912
6	Heptachlor	9.448	9.472	-0.024	629315	0.0760	0.0760
7	Aldrin	10.489	10.512	-0.023	711237	0.0808	0.0808
8	Heptachlor epoxide	11.603	11.630	-0.027	739324	0.0924	0.0924
9	gamma-Chlordane	12.295	12.321	-0.026	854117	0.0924	0.0924
10	Endosulfan I	12.680	12.706	-0.026	1639869	0.204	0.204
4 11	alpha-Chlordane				1639869	0.204	0.204
12	4,4'-DDE	13.312	13.318	-0.006	747598	0.0925	0.0925
13	Dieldrin	13.483	13.488	-0.005	592895	0.0662	0.0662
14	Endrin	14.098	14.126	-0.028	577859	0.0872	0.0872
15	Endosulfan II	14.413	14.443	-0.030	241246	0.0338	0.0338
16	4,4'-DDD	14.548	14.576	-0.028	644357	0.0979	0.0979
17	Endrin aldehyde	14.837	14.867	-0.030	167685	0.0263	0.0263
18	Endosulfan sulfate	15.531	15.563	-0.032	257450	0.0420	0.0420
19	4,4'-DDT	15.662	15.690	-0.028	609656	0.0962	0.0962
20	Endrin ketone	16.916	16.947	-0.031	507169	0.0636	0.0636
21	Methoxychlor	17.299	17.335	-0.036	331479	0.101	0.101
22	Decachlorobiphenyl	22.635	22.691	-0.056	448461	0.0525	0.0525(R)

QC Flag Legend

$ - Spike/Surrogate failed recovery limits.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PSPK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: N2P51713PS

Sample wt/vol: 30.0 (g/mL) G Lab File ID: ZF1360

% Moisture: N/A decanted: (Y/N) N Date Received: 11/14/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 11/14/95

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/18/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

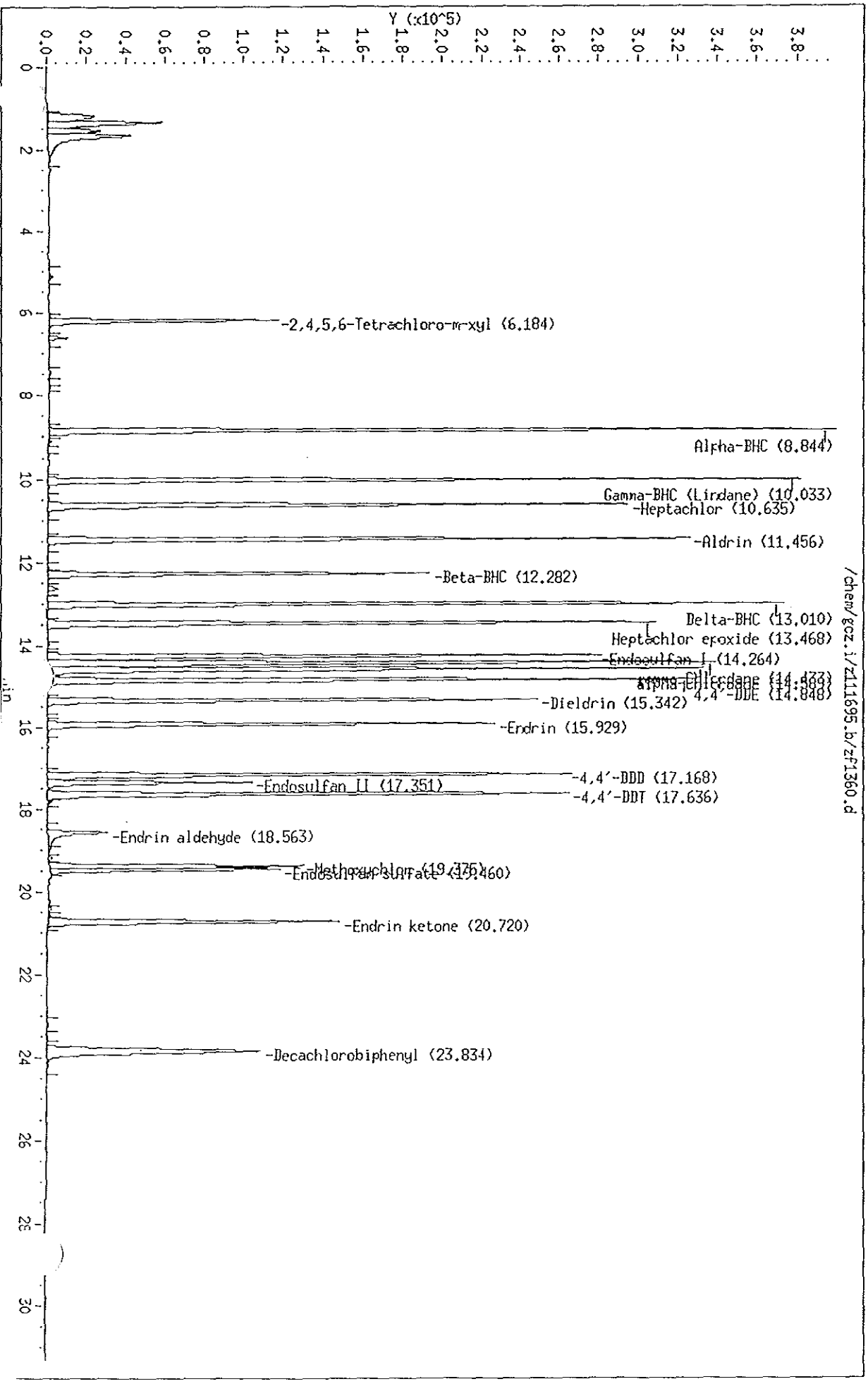
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	150	
319-85-7	beta-BHC	150	
319-86-8	delta-BHC	160	
76-44-8	Heptachlor	130	
309-00-2	Aldrin	150	
1024-57-3	Heptachlor epoxide	150	
959-98-8	Endosulfan I	150	
60-57-1	Dieldrin	110	
72-55-9	4,4'-DDE	160	
72-20-8	Endrin	140	
33213-65-9	Endosulfan II	57	
72-54-8	4,4'-DDD	160	
1031-07-8	Endosulfan sulfate	71	
50-29-3	4,4'-DDT	160	
72-43-5	Methoxychlor	190	
53494-70-5	Endrin ketone	100	
7421-93-4	Endrin aldehyde	31	
8001-35-2	Toxaphene	33	U
12674-11-2	Aroclor-1016	17	U
11104-28-2	Aroclor-1221	17	U
11141-16-5	Aroclor-1232	17	U
53469-21-9	Aroclor-1242	17	U
12672-29-6	Aroclor-1248	17	U
11097-69-1	Aroclor-1254	17	U
11096-82-5	Aroclor-1260	17	U
58-89-9	Gamma-BHC (Lindane)	150	
57-74-9	Chlordane	310	

Data File: /chem/gcz.i/z111695.b/zf1360.d
Date : 18-NOV-95 00:06
Client ID:
Sample Info: n2p51713ps,n2p51

Column phase: DB-1701

Instrument: gcz.i
Operator: art
Column diameter: 0.53



Data File: /chem/gcz.i/z111695.b/zf1360.d
Report Date: 18-Nov-1995 09:19

OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zf1360.d
Lab Smp Id:
Inj Date : 18-NOV-95 00:06
Operator : art Inst ID: gcz.i
Smp Info : n2p51713ps,n2p51
Misc Info : n2p51713ps,n2p51713,g2,1,1
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_1701.m
Meth Date : 18-Nov-1995 08:49 Quant Type: ESTD
Cal Date : 08-NOV-95 21:21 Cal File: zf1127.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
$	2,4,5,6-Tetrachloro-m-xylene	6.184	6.216	-0.032	2600736	0.373	0.373(R)
2	Alpha-BHC	8.844	8.850	-0.006	8190463	0.898	0.898
3	Gamma-BHC (Lindane)	10.033	10.068	-0.035	7847094	0.895	0.895
4	Heptachlor	10.635	10.669	-0.034	6539190	0.760	0.760
5	Aldrin	11.456	11.490	-0.034	7240349	0.878	0.878
6	Beta-BHC	12.282	12.315	-0.033	3996277	0.874	0.874
7	Delta-BHC	13.010	13.043	-0.033	7537932	0.971	0.971
8	Heptachlor epoxide	13.468	13.502	-0.034	6991059	0.907	0.907
9	Endosulfan I	14.264	14.298	-0.034	6378427	0.872	0.872
10	gamma-Chlordane	14.433	14.467	-0.034	7620778	0.902	0.902
11	alpha-Chlordane	14.589	14.622	-0.033	7794305	0.947	0.947
12	4,4'-DDE	14.848	14.881	-0.033	7442535	0.933	0.933
13	Dieldrin	15.342	15.376	-0.034	5594252	0.684	0.684
14	Endrin	15.929	15.962	-0.033	5129679	0.826	0.826
15	4,4'-DDD	17.168	17.201	-0.033	5862529	0.984	0.984
16	Endosulfan II	17.351	17.384	-0.033	2394097	0.341	0.341
17	4,4'-DDT	17.636	17.670	-0.034	5990096	0.972	0.972
18	Endrin aldehyde	18.563	18.595	-0.032	970768	0.183	0.183
19	Methoxychlor	19.375	19.411	-0.036	2758449	1.11	1.11
20	Endosulfan sulfate	19.460	19.497	-0.037	2669969	0.427	0.427
21	Endrin ketone	20.720	20.760	-0.040	3955810	0.616	0.616
22	Decachlorobiphenyl	23.834	23.887	-0.053	4396145	0.515	0.515(R)
23	Chlordane				15415083		

ab
11/10/95

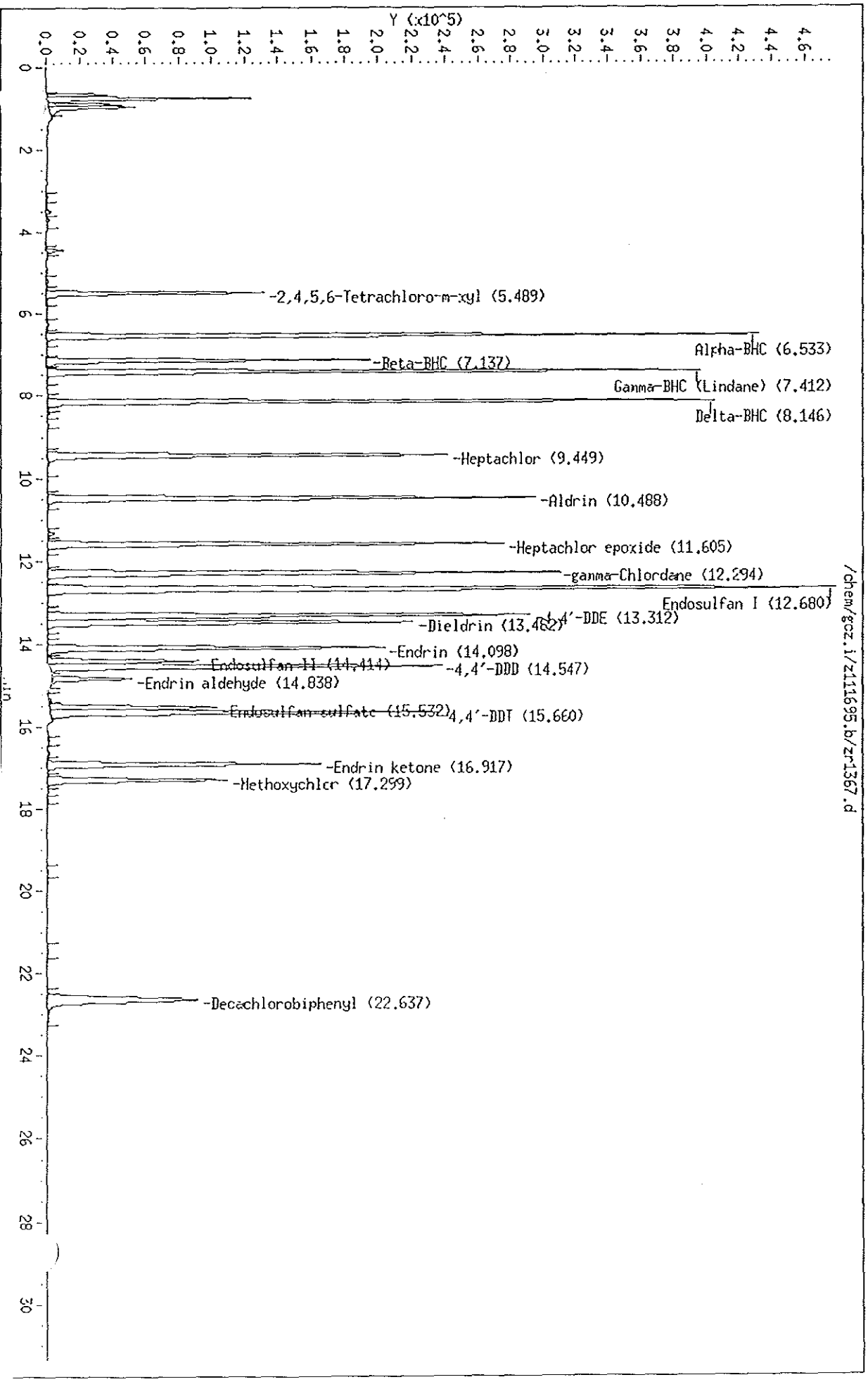
Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/gcz.i/z111695.b/zr1367.d
Date : 18-NOV-95 00:41
Client ID:
Sample Info: n2p51713ps,n2p51

Column phase: DB-5

Instrument: gcz.i
Operator: art
Column diameter: 0.53



Data File: /chem/gcz.i/z111695.b/zr1367.d
Report Date: 18-Nov-1995 09:21

OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zr1367.d
Lab Smp Id:
Inj Date : 18-NOV-95 00:41
Operator : art Inst ID: gcz.i
Smp Info : n2p51713ps,n2p51
Misc Info : n2p51713ps,n2p51
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_db5.m
Meth Date : 18-Nov-1995 08:50 Quant Type: ESTD
Cal Date : 08-NOV-95 21:56 Cal File: zr1128.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

		Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/ml)
		2,4,5,6-Tetrachloro-m-xylene	5.489	5.504	-0.015	2858594	0.376	0.376(R)
	2	Alpha-BHC	6.533	6.551	-0.018	9568986	0.890	0.890
	3	Beta-BHC	7.137	7.154	-0.017	4488089	0.859	0.859
	4	Gamma-BHC (Lindane)	7.412	7.431	-0.019	9017282	0.894	0.894
	5	Delta-BHC	8.146	8.163	-0.017	9111421	0.926	0.926
	6	Heptachlor	9.449	9.472	-0.023	6219577	0.751	0.751
	7	Aldrin	10.488	10.512	-0.024	7738326	0.880	0.880
	8	Heptachlor epoxide	11.605	11.630	-0.025	7309749	0.913	0.913
	9	gamma-Chlordane	12.294	12.321	-0.027	8489983	0.919	0.919
	10	Endosulfan I	12.680	12.706	-0.026	13769003	1.71	1.71
M	11	alpha-Chlordane				13769003	1.71	1.71
	12	4,4'-DDE	13.312	13.318	-0.006	7883642	0.975	0.975
	13	Dieldrin	13.482	13.488	-0.006	5969954	0.666	0.666
	14	Endrin	14.098	14.126	-0.028	5638130	0.850	0.850
	15	Endosulfan II	14.414	14.443	-0.029	2334051	0.327	0.327
	16	4,4'-DDD	14.547	14.576	-0.029	6610304	1.00	1.00
	17	Endrin aldehyde	14.838	14.867	-0.029	1372995	0.216	0.216
	18	Endosulfan sulfate	15.532	15.563	-0.031	2564741	0.419	0.419
	19	4,4'-DDT	15.660	15.690	-0.030	6474305	1.02	1.02
	20	Endrin ketone	16.917	16.947	-0.030	4601002	0.578	0.578
	21	Methoxychlor	17.299	17.335	-0.036	3077941	0.937	0.937
$	22	Decachlorobiphenyl	22.637	22.691	-0.054	4197924	0.492	0.492(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ORGANICS

Water Pesticide/PCBs by GC

2E
WATER PESTICIDE SURROGATE RECOVERY

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

b Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

GC Column(1): DB 1701 ID: 0.53 (mm) GC Column(2): DB5 ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	PBLK01	83		88				0
02	PSPK01	85		93				0
03	CLJ78-RBMS	80		98				0
04	CLJ78-RBMSD	74		88				0
05	CLJ78TW001	114		42				0
06	CLJ78TW002	98		32				0
07	CLJ78TW02D	112		36				0
08	CLJ78TW003	176 *		148				1
09	CLJ78TW004	40		52				0
10	CLJ78-FB	76		108				0
11	CLJ78-RB	74		108				0

	ADVISORY QC LIMITS
TCX = Tetrachloro-m-xylene	(30-150)
DCB = Decachlorobiphenyl	(30-150)

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

3E
WATER PESTICIDE MATRIX SPIKE RECOVERY

0601

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix Spike - EPA Sample No.: CLJ78-RB

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
Alpha-BHC	2.0	0	1.9	95	30-130
Beta-BHC	2.0	0	2.0	100	30-130
Delta-BHC	2.0	0	1.9	95	30-130
Heptachlor	2.0	0	1.9	95	40-131
Aldrin	2.0	0	1.8	90	40-120
Heptachlor epoxide	2.0	0	2.0	100	30-130
Endosulfan I	2.0	0	2.0	100	30-130
Dieldrin	2.0	0	1.8	90	52-126
4,4'-DDE	2.0	0	2.0	100	30-130
Endrin	2.0	0	1.9	95	56-121
Endosulfan II	2.0	0	2.1	105	30-130
4,4'-DDD	2.0	0	2.0	100	30-130
Endosulfan sulfate	2.0	0	2.1	105	30-130
4,4'-DDT	2.0	0	1.5	75	38-127
Methoxychlor	2.0	0	1.9	95	30-130
Endrin ketone	2.0	0	2.4	120	30-130
Endrin aldehyde	2.0	0	1.6	80	30-130
alpha-Chlordane	2.0	0	2.1	105	30-130
gamma-Chlordane	2.0	0	2.0	100	30-130
Gamma-BHC (Lindane)	2.0	0	1.9	95	56-120
Chlordane	4.0	0	4.1	102	30-130

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

* Values outside of QC limits

Spike Recovery: 0 out of 21 outside limits

COMMENTS: _____

3E
WATER PESTICIDE MATRIX SPIKE DUPLICATE RECOVERY

0602

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix Spike - EPA Sample No.: CLJ78-RB

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Alpha-BHC	2.0	1.8	90	5	20	30-130
Beta-BHC	2.0	2.0	100	0	20	30-130
Delta-BHC	2.0	1.9	95	0	20	30-130
Heptachlor	2.0	1.8	90	5	20	40-131
Aldrin	2.0	1.6	80	12	22	40-120
Heptachlor epoxide	2.0	2.0	100	0	20	30-130
Endosulfan I	2.0	2.0	100	0	20	30-130
Dieldrin	2.0	1.7	85	6	18	52-126
4,4'-DDE	2.0	1.9	95	5	20	30-130
Endrin	2.0	1.8	90	5	21	56-121
Endosulfan II	2.0	2.1	105	0	20	30-130
4,4'-DDD	2.0	2.0	100	0	20	30-130
Endosulfan sulfate	2.0	2.1	105	0	20	30-130
4,4'-DDT	2.0	1.5	75	0	27	38-127
Methoxychlor	2.0	2.0	100	5	20	30-130
Endrin ketone	2.0	2.2	110	9	20	30-130
Endrin aldehyde	2.0	1.6	80	0	20	30-130
alpha-Chlordane	2.0	2.1	105	0	20	30-130
gamma-Chlordane	2.0	1.9	95	5	20	30-130
Gamma-BHC (Lindane)	2.0	1.9	95	0	15	56-120
Chlordane	4.0	4.1	102	0	20	30-130

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

* Values outside of QC limits

RPD: 0 out of 21 outside limits
Spike Recovery: 0 out of 21 outside limits

COMMENTS:

3E
WATER PESTICIDE BLANK SPIKE RECOVERY

0603

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix Spike - EPA Sample No.: PSPK01

COMPOUND	SPIKE ADDED (ug/L)	BLANK CONCENTRATION (ug/L)	BS CONCENTRATION (ug/L)	BS % REC #	QC LIMITS REC.
Alpha-BHC	1.0	0	.96	96	30-130
Beta-BHC	1.0	0	.89	89	30-130
Delta-BHC	1.0	0	.98	98	30-130
Heptachlor	1.0	0	.81	81	40-131
Aldrin	1.0	0	.82	82	40-120
Heptachlor epoxide	1.0	0	.88	88	30-130
Endosulfan I	1.0	0	.89	89	30-130
Dieldrin	1.0	0	.83	83	52-126
4,4'-DDE	1.0	0	.90	90	30-130
Endrin	1.0	0	.88	88	56-121
Endosulfan II	1.0	0	.91	91	30-130
4,4'-DDD	1.0	0	.91	91	30-130
Endosulfan sulfate	1.0	0	.98	98	30-130
4,4'-DDT	1.0	0	.93	93	38-127
Methoxychlor	1.0	0	.89	89	30-130
Endrin ketone	1.0	0	.99	99	30-130
Endrin aldehyde	1.0	0	.84	84	30-130
alpha-Chlordane	1.0	0	.93	93	30-130
gamma-Chlordane	1.0	0	.89	89	30-130
Gamma-BHC (Lindane)	1.0	0	.93	93	56-120
Chlordane	2.0	0	1.8	90	30-130

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

* Values outside of QC limits

Spike Recovery: 0 out of 21 outside limits

COMMENTS:

4B
SEMIVOLATILE METHOD BLANK SUMMARY

0604 EPA SAMPLE NO.

PBLK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

b Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Lab File ID: ZF1346 Lab Sample ID: N1P51711P

Instrument ID: CZ Date Extracted: 11/15/95

Matrix: (soil/water) WATER Date Analyzed: 11/17/95

Level: (low/med) _____ Time Analyzed: 15:59

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	CLJ78TW001	JP0323P	ZF1350	11/17/95
02	CLJ78TW002	JP0324P	ZF1351	11/17/95
03	CLJ78TW02D	JP0325P	ZF1352	11/17/95
04	CLJ78TW003	JP0326P	ZF1353	11/17/95
05	CLJ78TW004	JP0327P	ZF1354	11/17/95
06	CLJ78-FB	JP0328P	ZF1355	11/17/95
07	CLJ78-RB	JP0329P	ZF1358	11/17/95
08	CLJ78-RBMSD	JP0329PR	ZF1349	11/17/95
09	PSPK01	N1P51711PS	ZF1347	11/17/95
10	CLJ78-RBMS	JP0329PS	ZF1348	11/17/95

COMMENTS:

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

0605 EPA SAMPLE NO.

CLJ78-FB

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0328P

Sample wt/vol: 950 (g/mL) ML Lab File ID: ZF1355

% Moisture: N/A decanted: (Y/N) N Date Received: 11/14/95

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/17/95

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	.11	U
319-85-7	beta-BHC	.11	U
319-86-8	delta-BHC	.11	U
76-44-8	Heptachlor	.11	U
309-00-2	Aldrin	.11	U
1024-57-3	Heptachlor epoxide	.11	U
959-98-8	Endosulfan I	.11	U
60-57-1	Dieldrin	.11	U
72-55-9	4,4'-DDE	.11	U
72-20-8	Endrin	.11	U
33213-65-9	Endosulfan II	.11	U
72-54-8	4,4'-DDD	.11	U
1031-07-8	Endosulfan sulfate	.11	U
50-29-3	4,4'-DDT	.11	U
72-43-5	Methoxychlor	.11	U
53494-70-5	Endrin ketone	.11	U
7421-93-4	Endrin aldehyde	.11	U
8001-35-2	Toxaphene	2.1	U
12674-11-2	Aroclor-1016	1.1	U
11104-28-2	Aroclor-1221	1.1	U
11141-16-5	Aroclor-1232	1.1	U
53469-21-9	Aroclor-1242	1.1	U
12672-29-6	Aroclor-1248	1.1	U
11097-69-1	Aroclor-1254	1.1	U
11096-82-5	Aroclor-1260	1.1	U
58-89-9	Gamma-BHC (Lindane)	.11	U
57-74-9	Chlordane	1.1	U

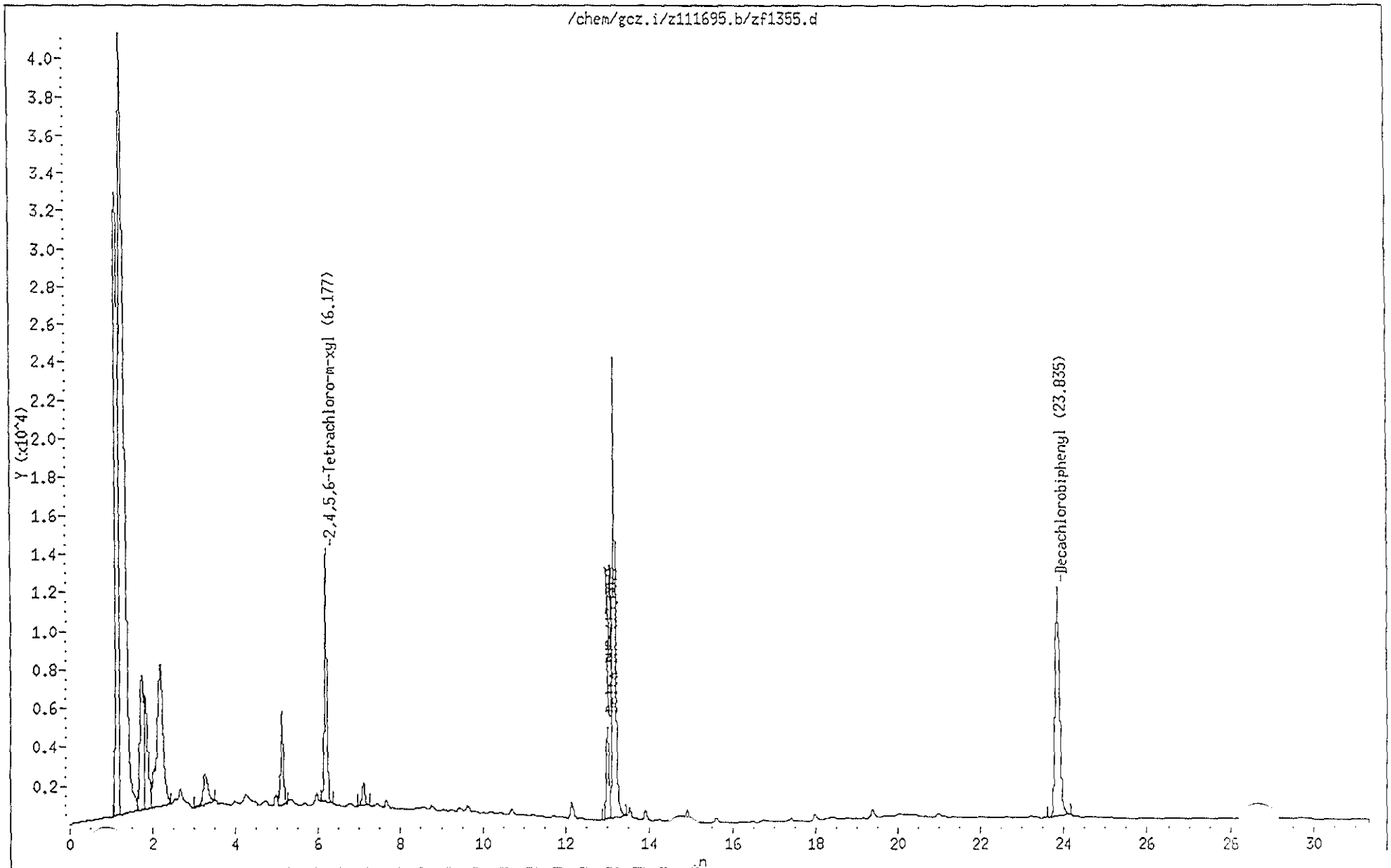
0606

Data File: /chem/gcz.i/z111695.b/zf1355.d
Date : 17-NOV-95 21:12
Client ID:
Sample Info: jp0328p,n1p51711

Column phase: DB-1701

Instrument: gcz.i

Operator: art
Column diameter: 0.53



Data File: /chem/gcz.i/z111695.b/zf1355.d
Report Date: 18-Nov-1995 09:04

OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zf1355.d
Lab Smp Id:
Inj Date : 17-NOV-95 21:12
Operator : art Inst ID: gcz.i
Smp Info : jp0328p,n1p51711
Misc Info : jp0328p,n1p51711,g2,1,10
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_1701.m
Meth Date : 18-Nov-1995 08:49 Quant Type: ESTD
Cal Date : 08-NOV-95 21:21 Cal File: zf1127.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
2,4,5,6-Tetrachloro-m-xylene	6.177	6.216	-0.039	263195	0.0378	0.0378(R)
7 Delta-BHC	13.007	13.043	-0.036	106042	0.0137	~~0.0137~~
S 22 Decachlorobiphenyl	23.835	23.887	-0.052	464691	0.0544	0.0544(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ak
11/20/95

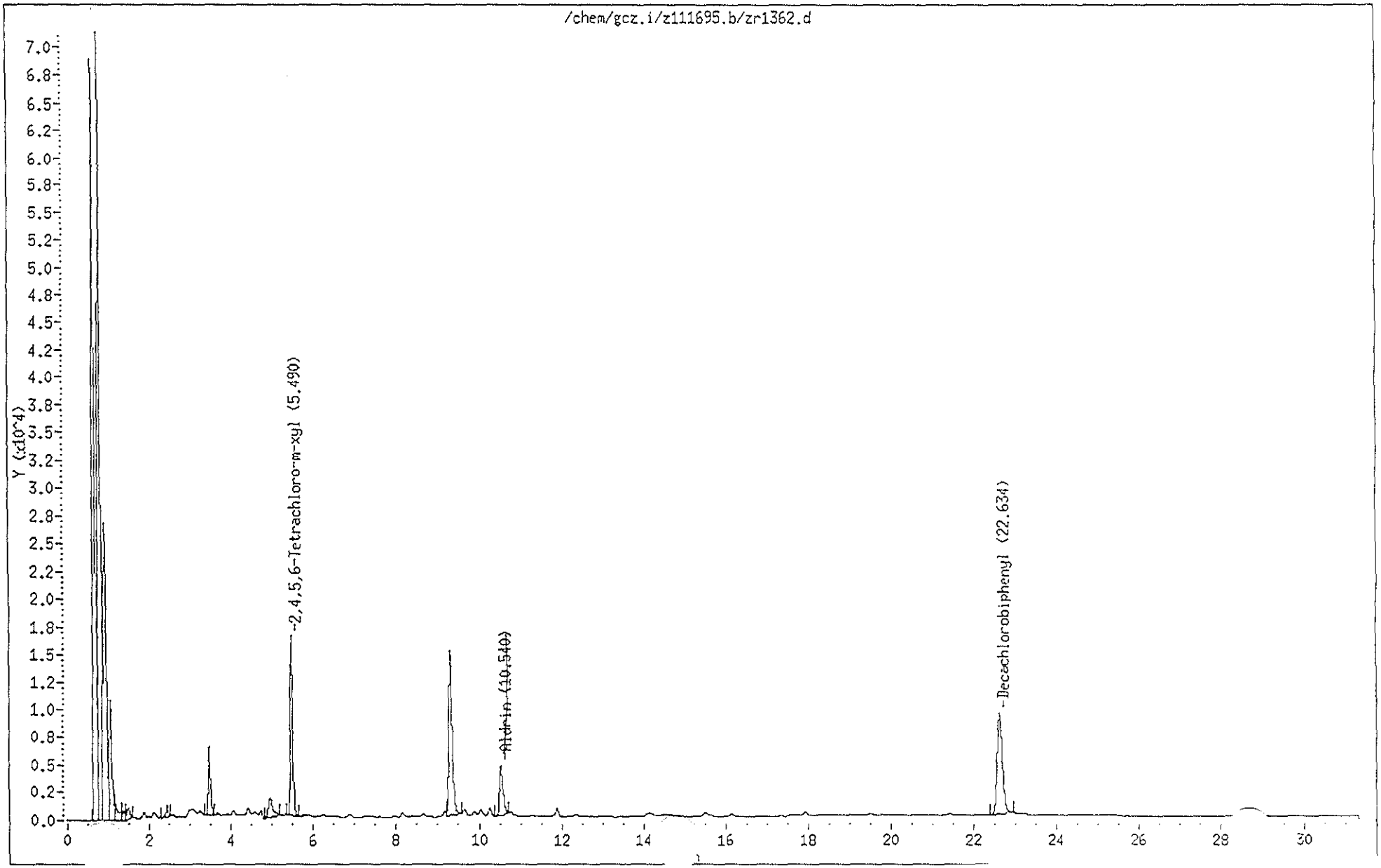
0608

Data File: /chem/gcz.i/z111695.b/zr1362.d
Date : 17-NOV-95 21:47
Client ID:
Sample Info: jp0328p,n1p51711

Column phase: DB-5

Instrument: gcz.i

Operator: art
Column diameter: 0.53



Data File: /chem/gcz.i/z111695.b/zr1362.d
Report Date: 18-Nov-1995 09:09

OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zr1362.d
Lab Smp Id:
Inj Date : 17-NOV-95 21:47
Operator : art Inst ID: gcz.i
Smp Info : jp0328p,n1p51711
Misc Info : jp0328p,n1p51711
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_db5.m
Meth Date : 18-Nov-1995 08:50 Quant Type: ESTD
Cal Date : 08-NOV-95 21:56 Cal File: zr1128.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
	1 2,4,5,6-Tetrachloro-m-xylene	5.490	5.504	-0.014	324713	0.0427	0.0427(R)
	2 Alpha-BHC	Compound Not Detected.					
	3 Beta-BHC	Compound Not Detected.					
	4 Gamma-BHC (Lindane)	Compound Not Detected.					
	5 Delta-BHC	Compound Not Detected.					
	6 Heptachlor	Compound Not Detected.					
	7 Aldrin	10.540	10.512	0.028	~~130519~~	~~0.0148~~	~~0.0148~~
	8 Heptachlor epoxide	Compound Not Detected.					
	9 gamma-Chlordane	Compound Not Detected.					
	10 Endosulfan I	Compound Not Detected.					
M	11 alpha-Chlordane	Compound Not Detected.					
	12 4,4'-DDE	Compound Not Detected.					
	13 Dieldrin	Compound Not Detected.					
	14 Endrin	Compound Not Detected.					
	15 Endosulfan II	Compound Not Detected.					
	16 4,4'-DDD	Compound Not Detected.					
	17 Endrin aldehyde	Compound Not Detected.					
	18 Endosulfan sulfate	Compound Not Detected.					
	19 4,4'-DDT	Compound Not Detected.					
	20 Endrin ketone	Compound Not Detected.					
	21 Methoxychlor	Compound Not Detected.					
	22 Decachlorobiphenyl	22.634	22.691	-0.057	412143	0.0483	0.0483(R)

Flag Legend

R - Spike/Surrogate failed recovery limits.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

0610 EPA SAMPLE NO.

CLJ78-RB

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0329P

Sample wt/vol: 850 (g/mL) ML Lab File ID: ZF1358

% Moisture: N/A decanted: (Y/N) N Date Received: 11/14/95

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/17/95

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	.12	U
319-85-7	beta-BHC	.12	U
319-86-8	delta-BHC	.12	U
76-44-8	Heptachlor	.12	U
309-00-2	Aldrin	.12	U
1024-57-3	Heptachlor epoxide	.12	U
959-98-8	Endosulfan I	.12	U
60-57-1	Dieldrin	.12	U
72-55-9	4,4'-DDE	.12	U
72-20-8	Endrin	.12	U
33213-65-9	Endosulfan II	.12	U
72-54-8	4,4'-DDD	.12	U
1031-07-8	Endosulfan sulfate	.12	U
50-29-3	4,4'-DDT	.12	U
72-43-5	Methoxychlor	.12	U
53494-70-5	Endrin ketone	.12	U
7421-93-4	Endrin aldehyde	.12	U
8001-35-2	Toxaphene	2.4	U
12674-11-2	Aroclor-1016	1.2	U
11104-28-2	Aroclor-1221	1.2	U
11141-16-5	Aroclor-1232	1.2	U
53469-21-9	Aroclor-1242	1.2	U
12672-29-6	Aroclor-1248	1.2	U
11097-69-1	Aroclor-1254	1.2	U
11096-82-5	Aroclor-1260	1.2	U
58-89-9	Gamma-BHC (Lindane)	.12	U
57-74-9	Chlordane	1.2	U

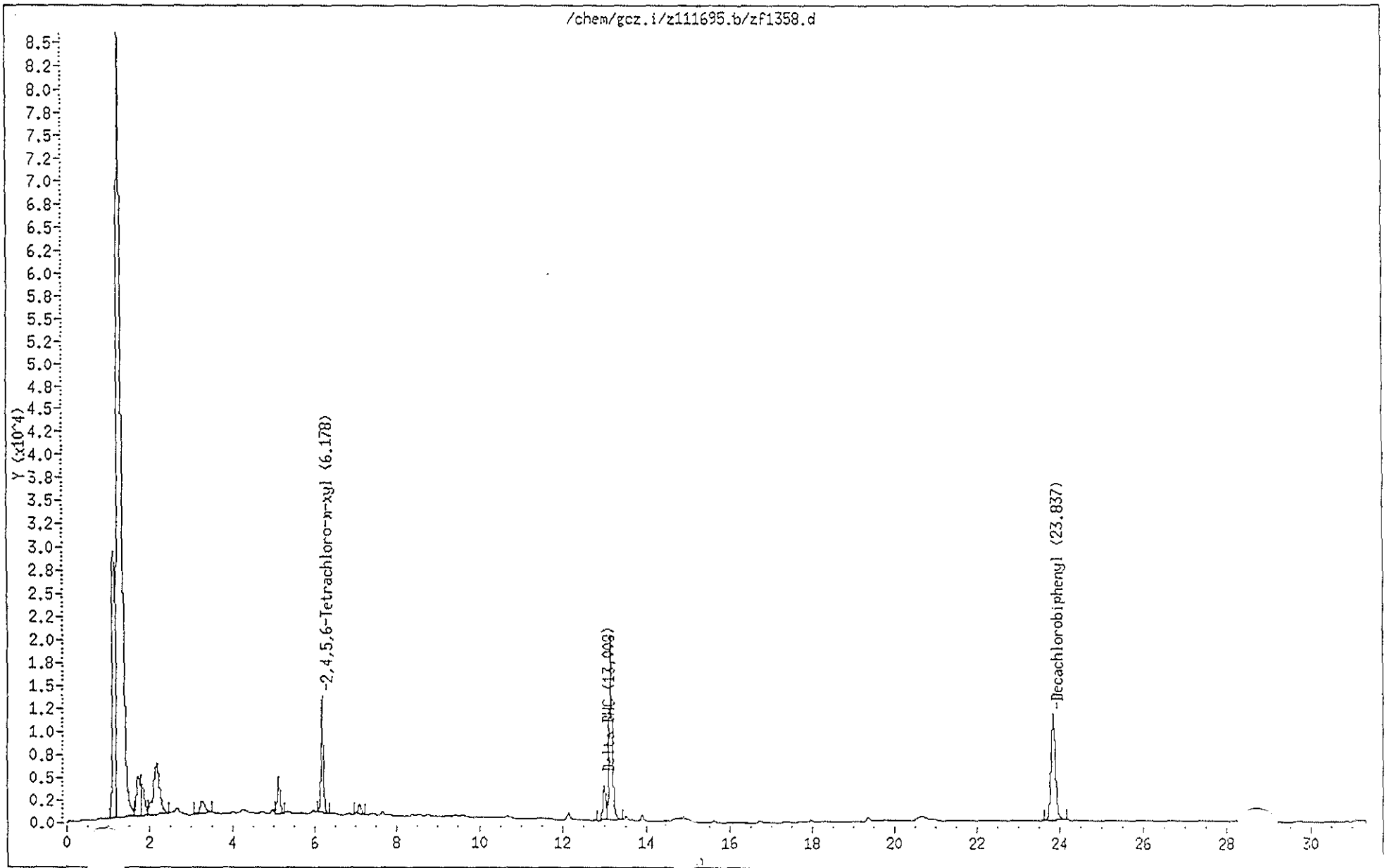
0611

Data File: /chem/gcz.i/z111695.b/zf1358.d
Date : 17-NOV-95 22:56
Client ID:
Sample Info: jp0329p,n1p51711

Column phase: DB-1701

Instrument: gcz.i

Operator: art
Column diameter: 0.53



Data File: /chem/gcz.i/z111695.b/zf1358.d
Report Date: 18-Nov-1995 09:19

OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zf1358.d
Lab Smp Id:
Inj Date : 17-NOV-95 22:56
Operator : art Inst ID: gcz.i
Smp Info : jp0329p,n1p51711
Misc Info : jp0329p,n1p51711,g2,1,10
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_1701.m
Meth Date : 18-Nov-1995 08:49 Quant Type: ESTD
Cal Date : 08-NOV-95 21:21 Cal File: zf1127.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/ml)
2,4,5,6-Tetrachloro-m-xylene	6.178	6.216	-0.038	257386	0.0369	0.0369(R)
7 Delta-BHC	13.008	13.043	-0.035	87318	0.0112	~~0.0112~~
$ 22 Decachlorobiphenyl	23.837	23.887	-0.050	458098	0.0537	0.0537(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ak
11/20/95

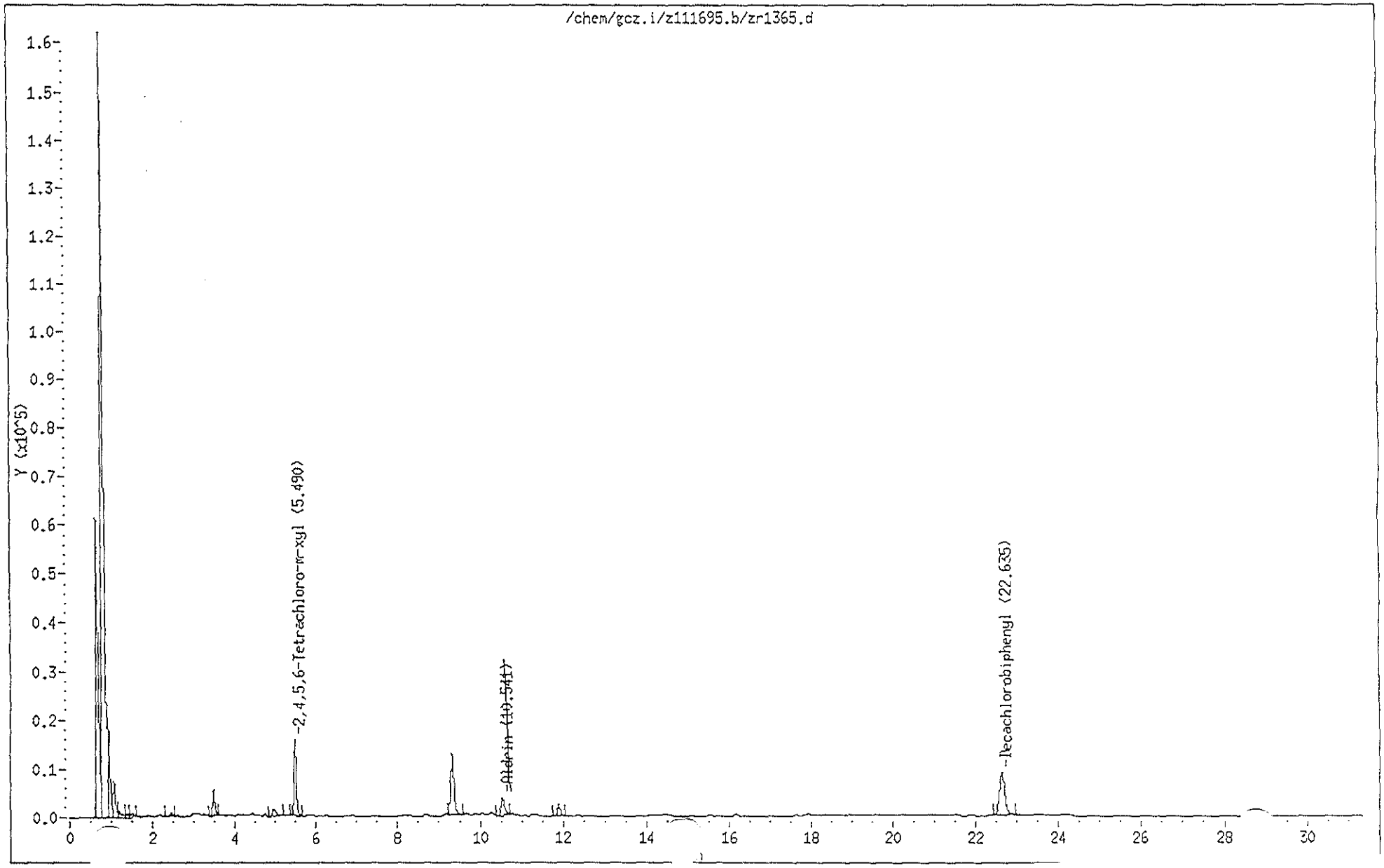
0613

Data File: /chem/gcz.i/z111695.b/zr1365.d
Date : 17-NOV-95 23:31
Client ID:
Sample Info: jp0329p,n1p51711

Column phase: DB-5

Instrument: gcz.i

Operator: art
Column diameter: 0.53



Data File: /chem/gcz.i/z111695.b/zr1365.d
Report Date: 18-Nov-1995 09:21

OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zr1365.d
Lab Smp Id:
Inj Date : 17-NOV-95 23:31
Operator : art Inst ID: gcz.i
Smp Info : jp0329p,nlp51711
Misc Info : jp0329p,nlp51711
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_db5.m
Meth Date : 18-Nov-1995 08:50 Quant Type: ESTD
Cal Date : 08-NOV-95 21:56 Cal File: zr1128.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
S	2,4,5,6-Tetrachloro-m-xylene	5.490	5.504	-0.014	312955	0.0411	0.0411(R)
2	Alpha-BHC	Compound Not Detected.					
3	Beta-BHC	Compound Not Detected.					
4	Gamma-BHC (Lindane)	Compound Not Detected.					
5	Delta-BHC	Compound Not Detected.					
6	Heptachlor	Compound Not Detected.					
7	Aldrin	10.541	10.512	0.029	~~307070~~	~~0.0122~~	~~0.0122~~
8	Heptachlor epoxide	Compound Not Detected.					
9	gamma-Chlordane	Compound Not Detected.					
10	Endosulfan I	Compound Not Detected.					
M 11	alpha-Chlordane	Compound Not Detected.					
12	4,4'-DDE	Compound Not Detected.					
13	Dieldrin	Compound Not Detected.					
14	Endrin	Compound Not Detected.					
15	Endosulfan II	Compound Not Detected.					
16	4,4'-DDD	Compound Not Detected.					
17	Endrin aldehyde	Compound Not Detected.					
18	Endosulfan sulfate	Compound Not Detected.					
19	4,4'-DDT	Compound Not Detected.					
20	Endrin ketone	Compound Not Detected.					
21	Methoxychlor	Compound Not Detected.					
22	Decachlorobiphenyl	22.635	22.691	-0.056	400327	0.0469	0.0469(R)

Flag Legend

R - Spike/Surrogate failed recovery limits.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET **0615** EPA SAMPLE NO.

CLJ78TW001

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0323P

Sample wt/vol: 960 (g/mL) ML Lab File ID: ZF1350

% Moisture: N/A decanted: (Y/N) N Date Received: 11/14/95

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/17/95

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	.10	U
319-85-7	beta-BHC	.10	U
319-86-8	delta-BHC	.10	U
76-44-8	Heptachlor	.10	U
309-00-2	Aldrin	.10	U
1024-57-3	Heptachlor epoxide	.10	U
959-98-8	Endosulfan I	.10	U
60-57-1	Dieldrin	.10	U
72-55-9	4,4'-DDE	.10	U
72-20-8	Endrin	.10	U
33213-65-9	Endosulfan II	.10	U
72-54-8	4,4'-DDD	.10	U
1031-07-8	Endosulfan sulfate	.10	U
50-29-3	4,4'-DDT	.10	U
72-43-5	Methoxychlor	.10	U
53494-70-5	Endrin ketone	.10	U
7421-93-4	Endrin aldehyde	.10	U
8001-35-2	Toxaphene	2.1	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U
58-89-9	Gamma-BHC (Lindane)	.10	U
57-74-9	Chlordane	1.0	U

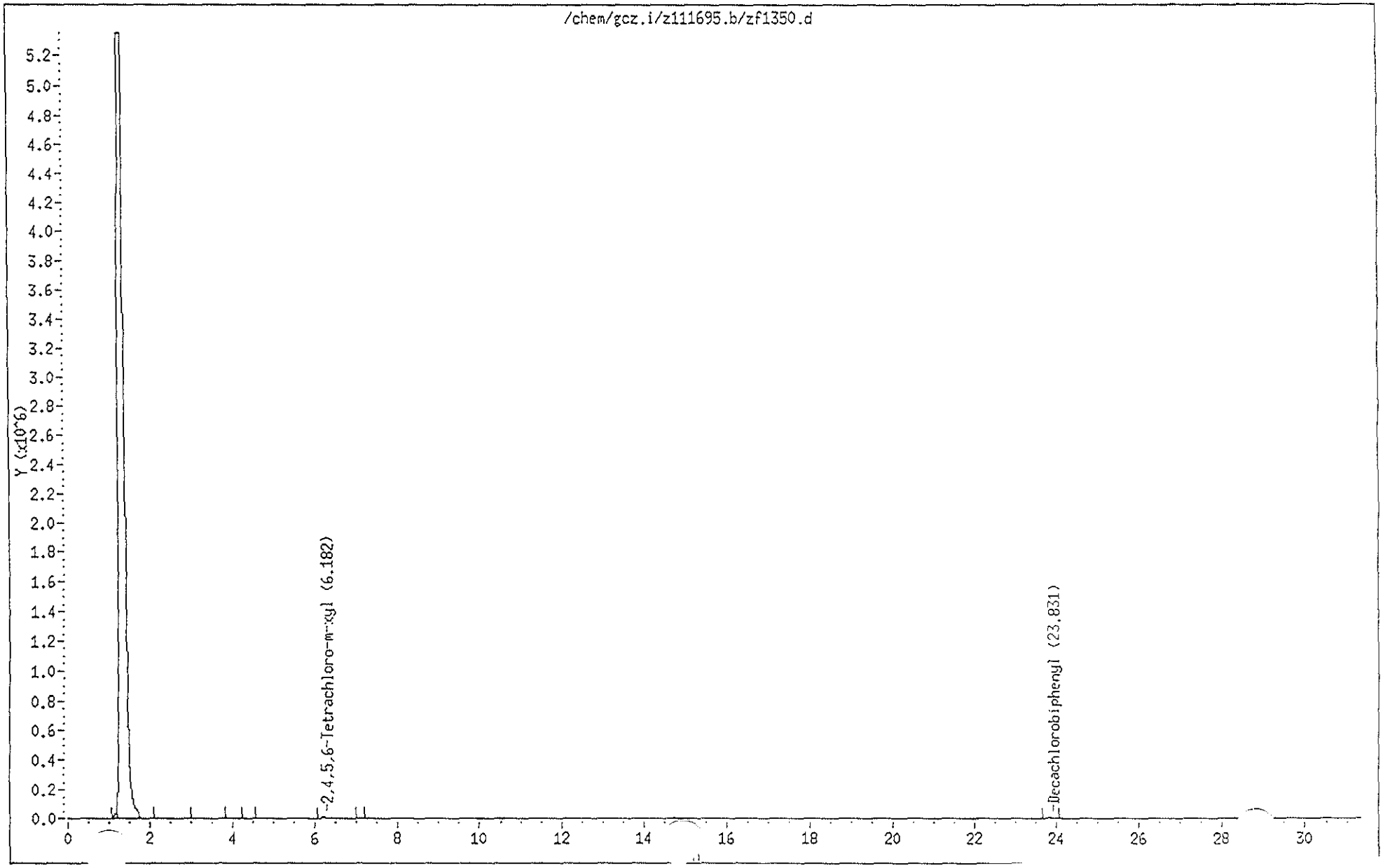
0616

Data File: /chem/gcz.i/z111695.b/zf1350.d
Date : 17-NOV-95 18:17
Client ID:
Sample Info: jp0323p,n1p51711

Column phase: DB-1701

Instrument: gcz.i

Operator: art
Column diameter: 0.53



Data File: /chem/gcz.i/z111695.b/zf1350.d
Report Date: 18-Nov-1995 09:04

OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zf1350.d
Lab Smp Id:
Inj Date : 17-NOV-95 18:17
Operator : art Inst ID: gcz.i
Smp Info : jp0323p,n1p51711
Misc Info : jp0323p,n1p51711,g2,1,10
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_1701.m
Meth Date : 18-Nov-1995 08:49 Quant Type: ESTD
Cal Date : 08-NOV-95 21:21 Cal File: zf1127.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/ml)
2,4,5,6-Tetrachloro-m-xylene	6.182	6.216	-0.034	399990	0.0574	0.0574 (R)
S 22 Decachlorobiphenyl	23.831	23.887	-0.056	182984	0.0214	0.0214 (R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ap
11/20/95

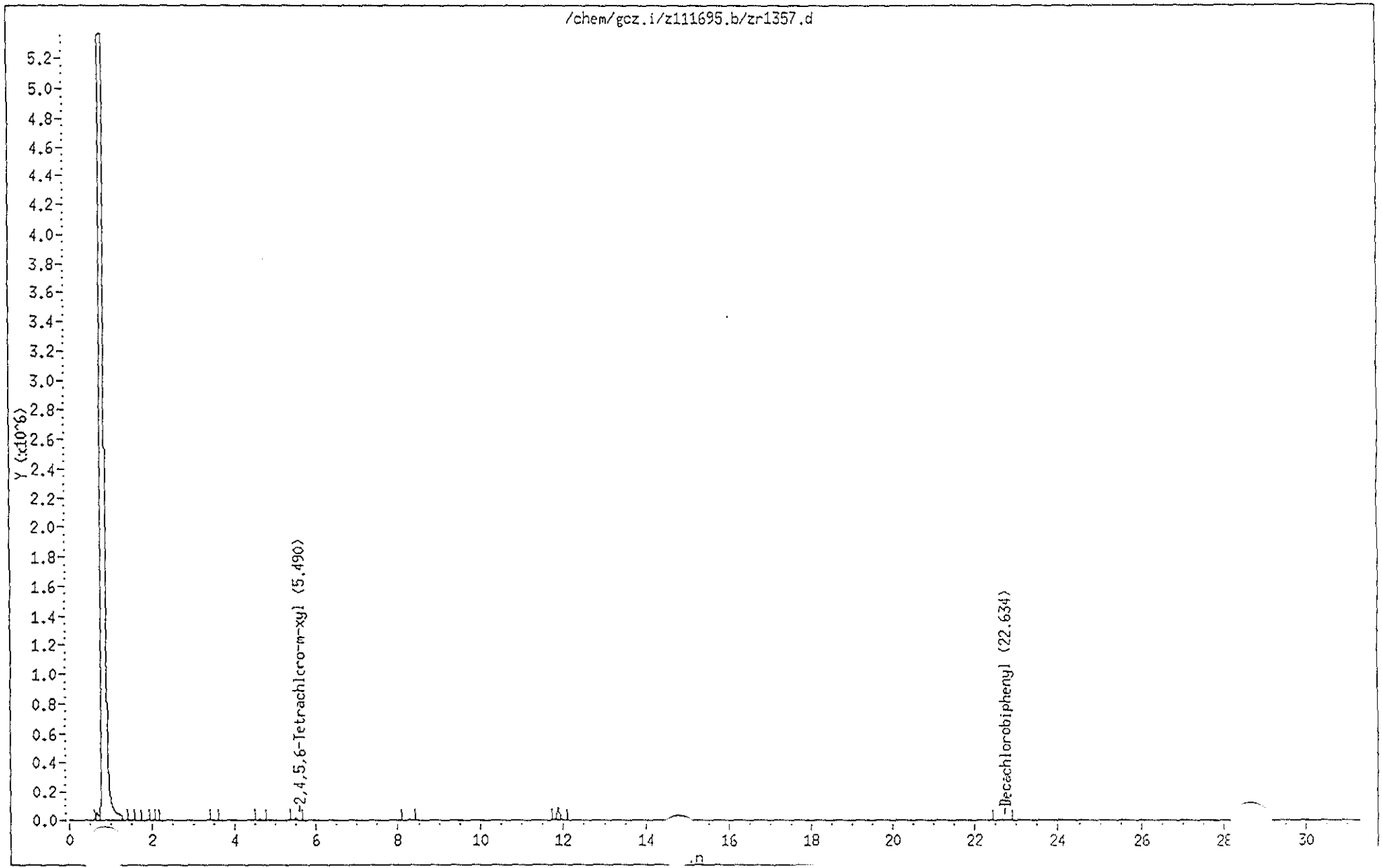
0618

Data File: /chem/gcz.i/z111695.b/zr1357.d
Date : 17-NOV-95 18:52
Client ID:
Sample Info: jp0323p,n1p51711

Instrument: gcz.i

Operator: art
Column diameter: 0.53

Column phase: DB-5



Data File: /chem/gcz.i/z111695.b/zr1357.d
Report Date: 18-Nov-1995 09:08

OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zr1357.d
Lab Smp Id:
Inj Date : 17-NOV-95 18:52
Operator : art Inst ID: gcz.i
Smp Info : jp0323p,n1p51711
Misc Info : jp0323p,n1p51711
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_db5.m
Meth Date : 18-Nov-1995 08:50 Quant Type: ESTD
Cal Date : 08-NOV-95 21:56 Cal File: zr1128.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
	2,4,5,6-Tetrachloro-m-xylene	5.490	5.504	-0.014	274411	0.0360	0.0360(R)
	2 Alpha-BHC	Compound Not Detected.					
	3 Beta-BHC	Compound Not Detected.					
	4 Gamma-BHC (Lindane)	Compound Not Detected.					
	5 Delta-BHC	Compound Not Detected.					
	6 Heptachlor	Compound Not Detected.					
	7 Aldrin	Compound Not Detected.					
	8 Heptachlor epoxide	Compound Not Detected.					
	9 gamma-Chlordane	Compound Not Detected.					
	10 Endosulfan I	Compound Not Detected.					
M	11 alpha-Chlordane	Compound Not Detected.					
	12 4,4'-DDE	Compound Not Detected.					
	13 Dieldrin	Compound Not Detected.					
	14 Endrin	Compound Not Detected.					
	15 Endosulfan II	Compound Not Detected.					
	16 4,4'-DDD	Compound Not Detected.					
	17 Endrin aldehyde	Compound Not Detected.					
	18 Endosulfan sulfate	Compound Not Detected.					
	19 4,4'-DDT	Compound Not Detected.					
	20 Endrin ketone	Compound Not Detected.					
	21 Methoxychlor	Compound Not Detected.					
S	22 Decachlorobiphenyl	22.634	22.691	-0.057	165351	0.0194	0.0194(R)

Flag Legend

R - Spike/Surrogate failed recovery limits.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

0620 EPA SAMPLE NO.

CLJ78TW002

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0324P

Sample wt/vol: 950 (g/mL) ML Lab File ID: ZF1351

% Moisture: N/A decanted: (Y/N) N Date Received: 11/14/95

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/17/95

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

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

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	.11	U
319-85-7	beta-BHC	.11	U
319-86-8	delta-BHC	.11	U
76-44-8	Heptachlor	.11	U
309-00-2	Aldrin	.11	U
1024-57-3	Heptachlor epoxide	.11	U
959-98-8	Endosulfan I	.11	U
60-57-1	Dieldrin	.11	U
72-55-9	4,4'-DDE	.11	U
72-20-8	Endrin	.11	U
33213-65-9	Endosulfan II	.11	U
72-54-8	4,4'-DDD	.11	U
1031-07-8	Endosulfan sulfate	.11	U
50-29-3	4,4'-DDT	.11	U
72-43-5	Methoxychlor	.11	U
53494-70-5	Endrin ketone	.11	U
7421-93-4	Endrin aldehyde	.11	U
8001-35-2	Toxaphene	2.1	U
12674-11-2	Aroclor-1016	1.1	U
11104-28-2	Aroclor-1221	1.1	U
11141-16-5	Aroclor-1232	1.1	U
53469-21-9	Aroclor-1242	1.1	U
12672-29-6	Aroclor-1248	1.1	U
11097-69-1	Aroclor-1254	1.1	U
11096-82-5	Aroclor-1260	1.1	U
58-89-9	Gamma-BHC (Lindane)	.11	U
57-74-9	Chlordane	1.1	U

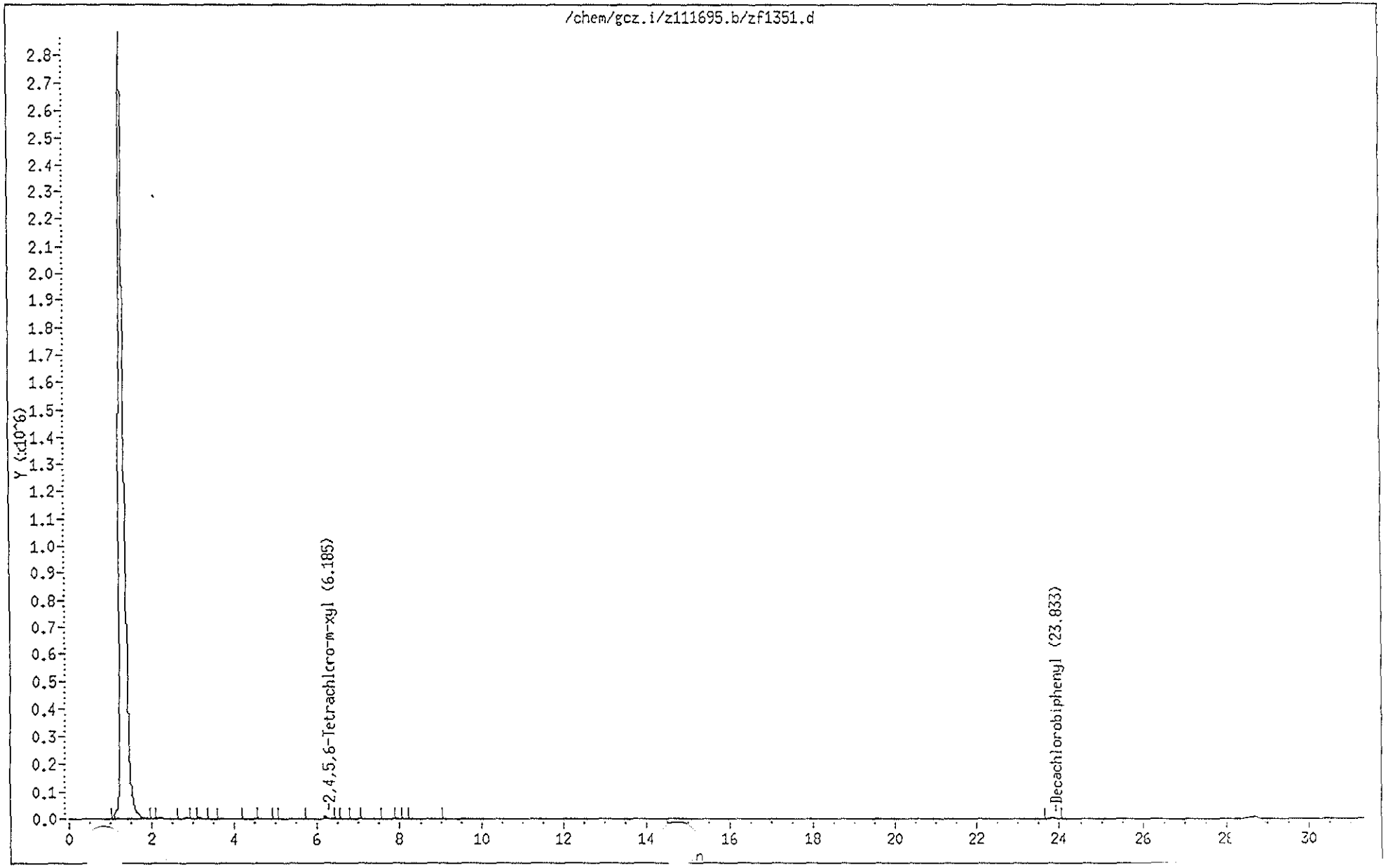
0621

Data File: /chem/gcz.i/z111695.b/zf1351.d
Date : 17-NOV-95 18:52
Client ID:
Sample Info: jp0324p,n1p51711

Column phase: DB-1701

Instrument: gcz.i

Operator: art
Column diameter: 0.53



Data File: /chem/gcz.i/z111695.b/zf1351.d
Report Date: 18-Nov-1995 09:04

OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zf1351.d
Lab Smp Id:
Inj Date : 17-NOV-95 18:52
Operator : art Inst ID: gcz.i
Smp Info : jp0324p,n1p51711
Misc Info : jp0324p,n1p51711,g2,1,10
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_1701.m
Meth Date : 18-Nov-1995 08:49 Quant Type: ESTD
Cal Date : 08-NOV-95 21:21 Cal File: zf1127.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/ml)
$	1,4,5,6-Tetrachloro-m-xylene	6.185	6.216	-0.031	340967	0.0489	0.0489(R)
$	22 Decachlorobiphenyl	23.833	23.887	-0.054	132876	0.0156	0.0156(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ac
11/20/95

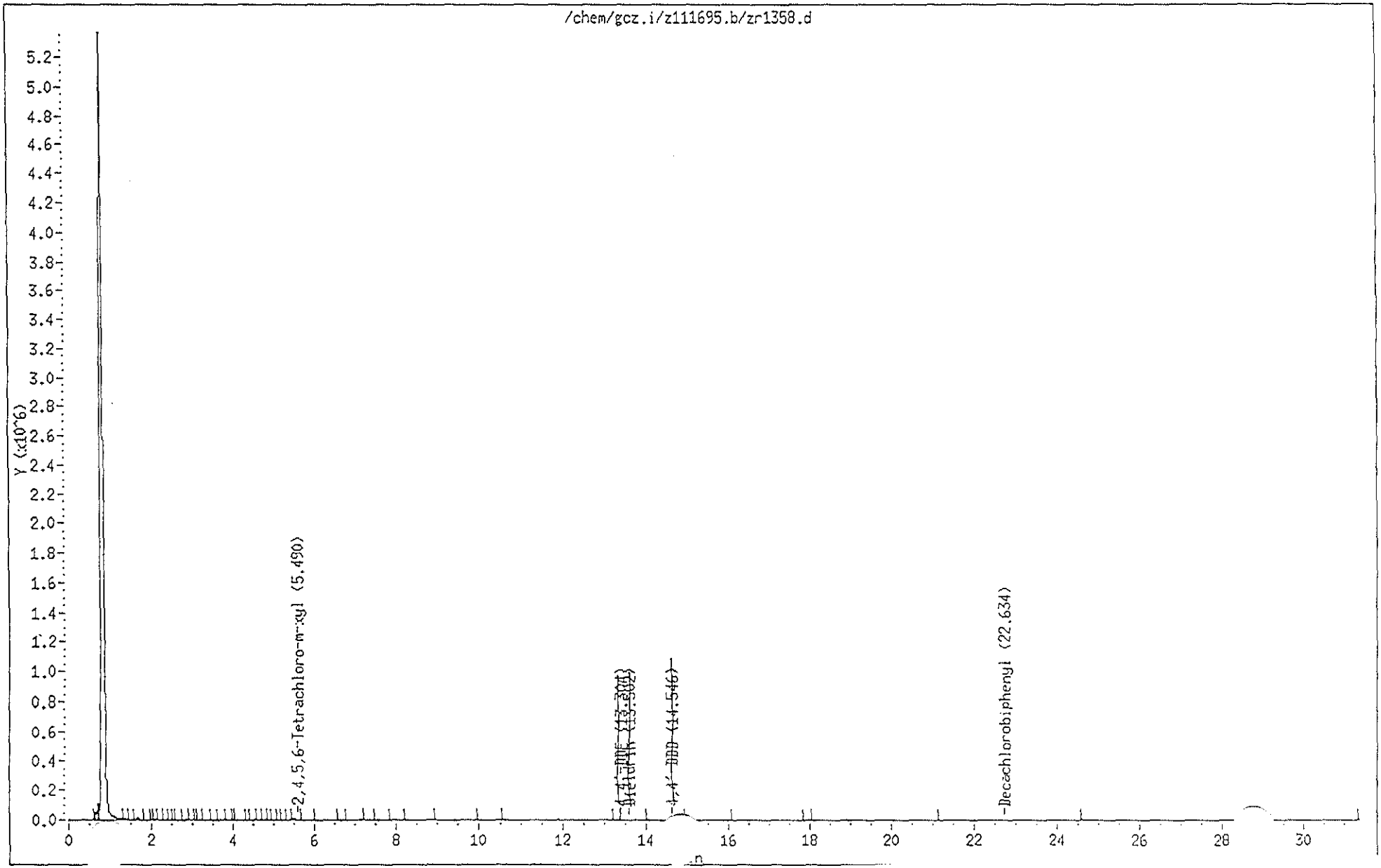
0623

Data File: /chem/gcz.i/z111695.b/zr1358.d
Date : 17-NOV-95 19:27
Client ID:
Sample Info: jp0324p,n1p51711

Column phase: DB-5

Instrument: gcz.i

Operator: art
Column diameter: 0.53



Data File: /chem/gcz.i/z111695.b/zr1358.d
Report Date: 18-Nov-1995 09:08

OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zr1358.d
Lab Smp Id:
Inj Date : 17-NOV-95 19:27
Operator : art Inst ID: gcz.i
Smp Info : jp0324p,n1p51711
Misc Info : jp0324p,n1p51711
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_db5.m
Meth Date : 18-Nov-1995 08:50 Quant Type: ESTD
Cal Date : 08-NOV-95 21:56 Cal File: zr1128.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
	2,4,5,6-Tetrachloro-m-xylene	5.490	5.504	-0.014	271016	0.0356	0.0356(R)
2	Alpha-BHC	Compound Not Detected.					
3	Beta-BHC	Compound Not Detected.					
4	Gamma-BHC (Lindane)	Compound Not Detected.					
5	Delta-BHC	Compound Not Detected.					
6	Heptachlor	Compound Not Detected.					
7	Aldrin	Compound Not Detected.					
8	Heptachlor epoxide	Compound Not Detected.					
9	gamma-Chlordane	Compound Not Detected.					
10	Endosulfan I	Compound Not Detected.					
M 11	alpha-Chlordane	Compound Not Detected.					
12	4,4'-DDE	13.304	13.318	-0.014	~~53435~~	~~0.00649~~	~~0.00649~~
13	Dieldrin	13.502	13.488	0.014	~~181627~~	~~0.0203~~	~~0.0203~~
14	Endrin	Compound Not Detected.					
15	Endosulfan II	Compound Not Detected.					
16	4,4'-DDD	14.546	14.576	-0.030	~~374130~~	~~0.0568~~	~~0.0568~~
17	Endrin aldehyde	Compound Not Detected.					
18	Endosulfan sulfate	Compound Not Detected.					
19	4,4'-DDT	Compound Not Detected.					
20	Endrin ketone	Compound Not Detected.					
21	Methoxychlor	Compound Not Detected.					
S 22	Decachlorobiphenyl	22.634	22.691	-0.057	1261025	0.148	0.148(R)

Flag Legend

R - Spike/Surrogate failed recovery limits.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET 0625

EPA SAMPLE NO.

CLJ78TW003

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0326P

Sample wt/vol: 970 (g/mL) ML Lab File ID: ZF1353

% Moisture: N/A decanted: (Y/N) N Date Received: 11/14/95

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/17/95

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	.10	U
319-85-7	beta-BHC	.10	U
319-86-8	delta-BHC	.10	U
76-44-8	Heptachlor	.10	U
309-00-2	Aldrin	.10	U
1024-57-3	Heptachlor epoxide	.10	U
959-98-8	Endosulfan I	.10	U
60-57-1	Dieldrin	.10	U
72-55-9	4,4'-DDE	.10	U
72-20-8	Endrin	.10	U
33213-65-9	Endosulfan II	.10	U
72-54-8	4,4'-DDD	.10	U
1031-07-8	Endosulfan sulfate	.10	U
50-29-3	4,4'-DDT	.10	U
72-43-5	Methoxychlor	.10	U
53494-70-5	Endrin ketone	.10	U
7421-93-4	Endrin aldehyde	.10	U
8001-35-2	Toxaphene	2.1	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U
58-89-9	Gamma-BHC (Lindane)	.10	U
57-74-9	Chlordane	1.0	U

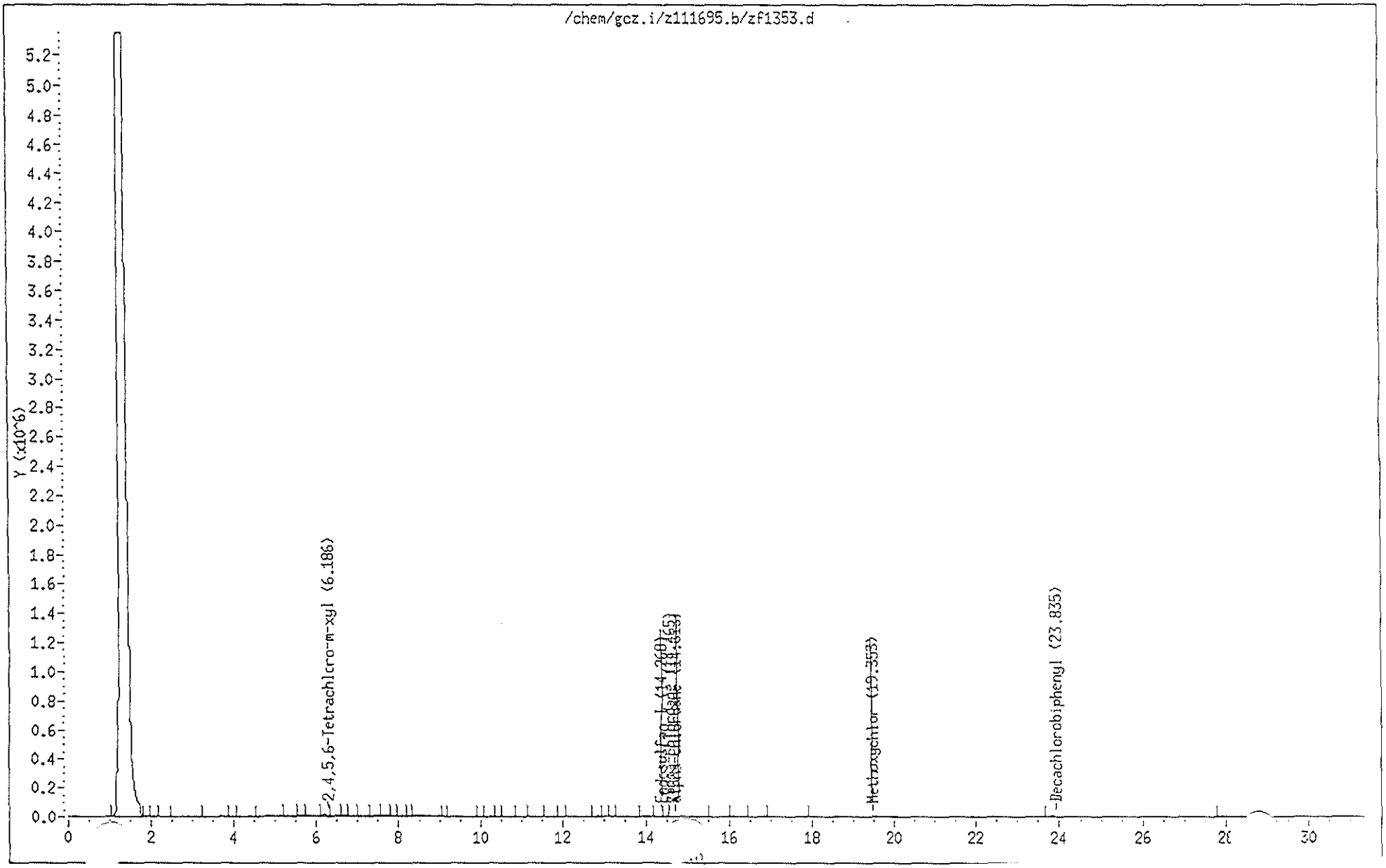
0626

Data File: /chem/gcz.i/z111695.b/zf1353.d
Date : 17-NOV-95 20:02
Client ID:
Sample Info: jp0326p,n1p51711

Column phase: DB-1701

Instrument: gcz.i

Operator: art
Column diameter: 0.53



Data File: /chem/gcz.i/z111695.b/zf1353.d
Report Date: 18-Nov-1995 09:04

OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zf1353.d
Lab Smp Id:
Inj Date : 17-NOV-95 20:02
Operator : art Inst ID: gcz.i
Smp Info : jp0326p,n1p51711
Misc Info : jp0326p,n1p51711,g2,1,10
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_1701.m
Meth Date : 18-Nov-1995 08:49 Quant Type: ESTD
Cal Date : 08-NOV-95 21:21 Cal File: zf1127.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

			RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)	
		Compounds							
S		2,4,5,6-Tetrachloro-m-xylene	6.186	6.216	-0.030	613549	0.0880	0.0880(R)	
	9	Endosulfan I	14.268	14.298	-0.030	129010	0.0176	~~0.0176~~	
	10	gamma-Chlordane	14.465	14.467	-0.002	69433	0.00822	~~0.00822~~	
	11	alpha-Chlordane	14.613	14.622	-0.009	435391	0.0529	~~0.0529~~	
	19	Methoxychlor	19.353	19.411	-0.058	1648011	0.662	~~0.662~~	
S	22	Decachlorobiphenyl	23.835	23.887	-0.052	630466	0.0739	0.0739(R)	
M	23	Chlordane				504830			

QC Flag Legend

11/20/95

R - Spike/Surrogate failed recovery limits.

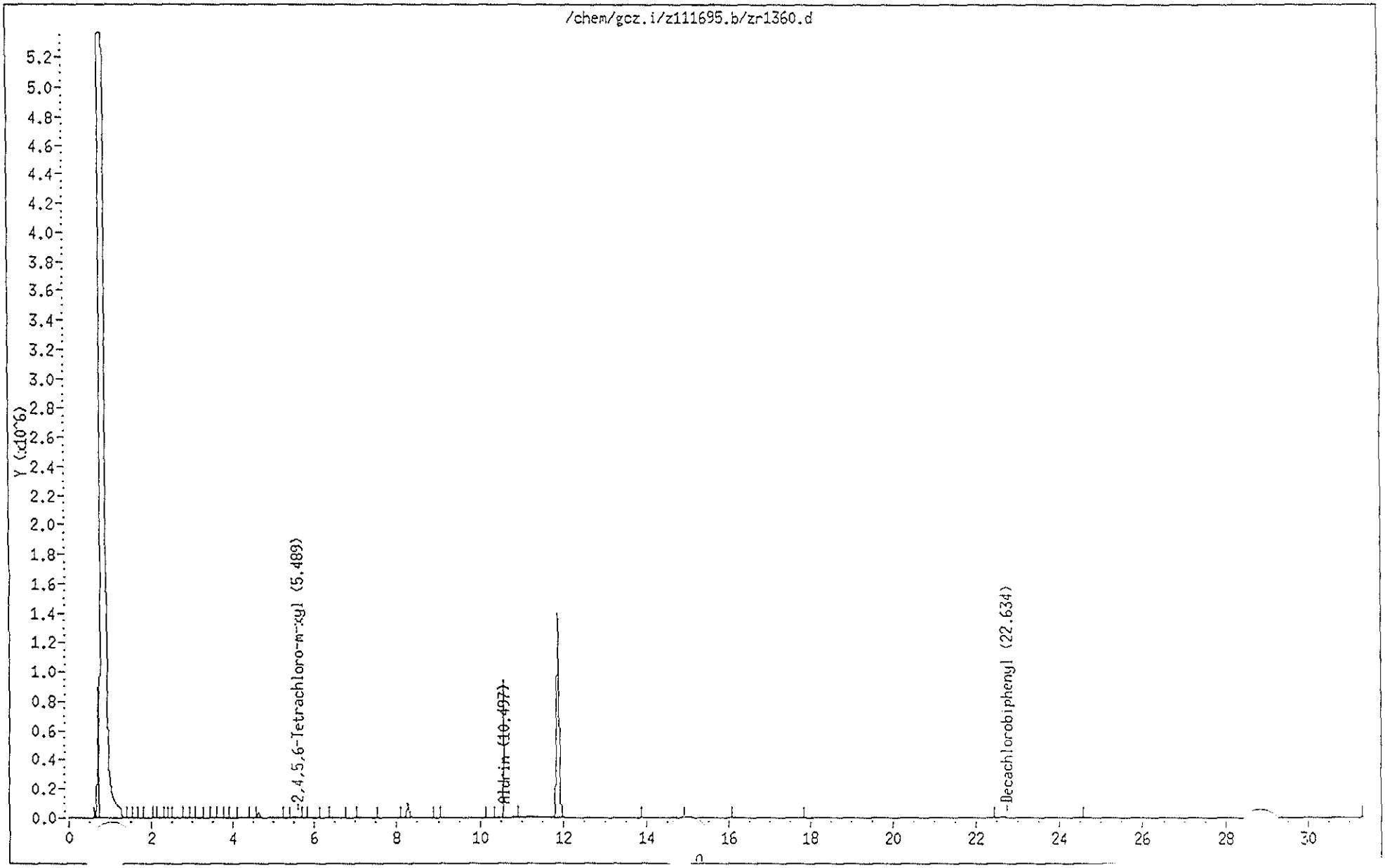
0628

Data File: /chem/gcz.i/z111695.b/zr1360.d
Date : 17-NOV-95 20:37
Client ID:
Sample Info: jp0326p,n1p51711

Column phase: DB-5

Instrument: gcz.i

Operator: art
Column diameter: 0.53



Data File: /chem/gcz.i/z111695.b/zr1360.d
Report Date: 18-Nov-1995 09:08

OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zr1360.d
Lab Smp Id:
Inj Date : 17-NOV-95 20:37
Operator : art Inst ID: gcz.i
Smp Info : jp0326p,n1p51711
Misc Info : jp0326p,n1p51711
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_db5.m
Meth Date : 18-Nov-1995 08:50 Quant Type: ESTD
Cal Date : 08-NOV-95 21:56 Cal File: zr1128.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
	2,4,5,6-Tetrachloro-m-xylene	5.489	5.504	-0.015	324159	0.0426	0.0426(R)
2	Alpha-BHC	Compound Not Detected.					
3	Beta-BHC	Compound Not Detected.					
4	Gamma-BHC (Lindane)	Compound Not Detected.					
5	Delta-BHC	Compound Not Detected.					
6	Heptachlor	Compound Not Detected.					
7	Aldrin	10.497	10.512	-0.015	~~227136~~	~~0.0258~~	~~0.0258~~
8	Heptachlor epoxide	Compound Not Detected.					
9	gamma-Chlordane	Compound Not Detected.					
10	Endosulfan I	Compound Not Detected.					
M 11	alpha-Chlordane	Compound Not Detected.					
12	4,4'-DDE	Compound Not Detected.					
13	Dieldrin	Compound Not Detected.					
14	Endrin	Compound Not Detected.					
15	Endosulfan II	Compound Not Detected.					
16	4,4'-DDD	Compound Not Detected.					
17	Endrin aldehyde	Compound Not Detected.					
18	Endosulfan sulfate	Compound Not Detected.					
19	4,4'-DDT	Compound Not Detected.					
20	Endrin ketone	Compound Not Detected.					
21	Methoxychlor	Compound Not Detected.					
$ 22	Decachlorobiphenyl	22.634	22.691	-0.057	965439	0.113	0.113(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET 0630

EPA SAMPLE NO.

CLJ78TW004

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0327P

Sample wt/vol: 870 (g/mL) ML Lab File ID: ZF1354

% Moisture: N/A decanted: (Y/N) N Date Received: 11/14/95

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/17/95

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	.11	U
319-85-7	beta-BHC	.11	U
319-86-8	delta-BHC	.11	U
76-44-8	Heptachlor	.11	U
309-00-2	Aldrin	.11	U
1024-57-3	Heptachlor epoxide	.11	U
959-98-8	Endosulfan I	.11	U
60-57-1	Dieldrin	.11	U
72-55-9	4,4'-DDE	.11	U
72-20-8	Endrin	.11	U
33213-65-9	Endosulfan II	.11	U
72-54-8	4,4'-DDD	.11	U
1031-07-8	Endosulfan sulfate	.11	U
50-29-3	4,4'-DDT	.11	U
72-43-5	Methoxychlor	.11	U
53494-70-5	Endrin ketone	.11	U
7421-93-4	Endrin aldehyde	.11	U
8001-35-2	Toxaphene	2.3	U
12674-11-2	Aroclor-1016	1.1	U
11104-28-2	Aroclor-1221	1.1	U
11141-16-5	Aroclor-1232	1.1	U
53469-21-9	Aroclor-1242	1.1	U
12672-29-6	Aroclor-1248	1.1	U
11097-69-1	Aroclor-1254	1.1	U
11096-82-5	Aroclor-1260	1.1	U
58-89-9	Gamma-BHC (Lindane)	.11	U
57-74-9	Chlordane	1.1	U

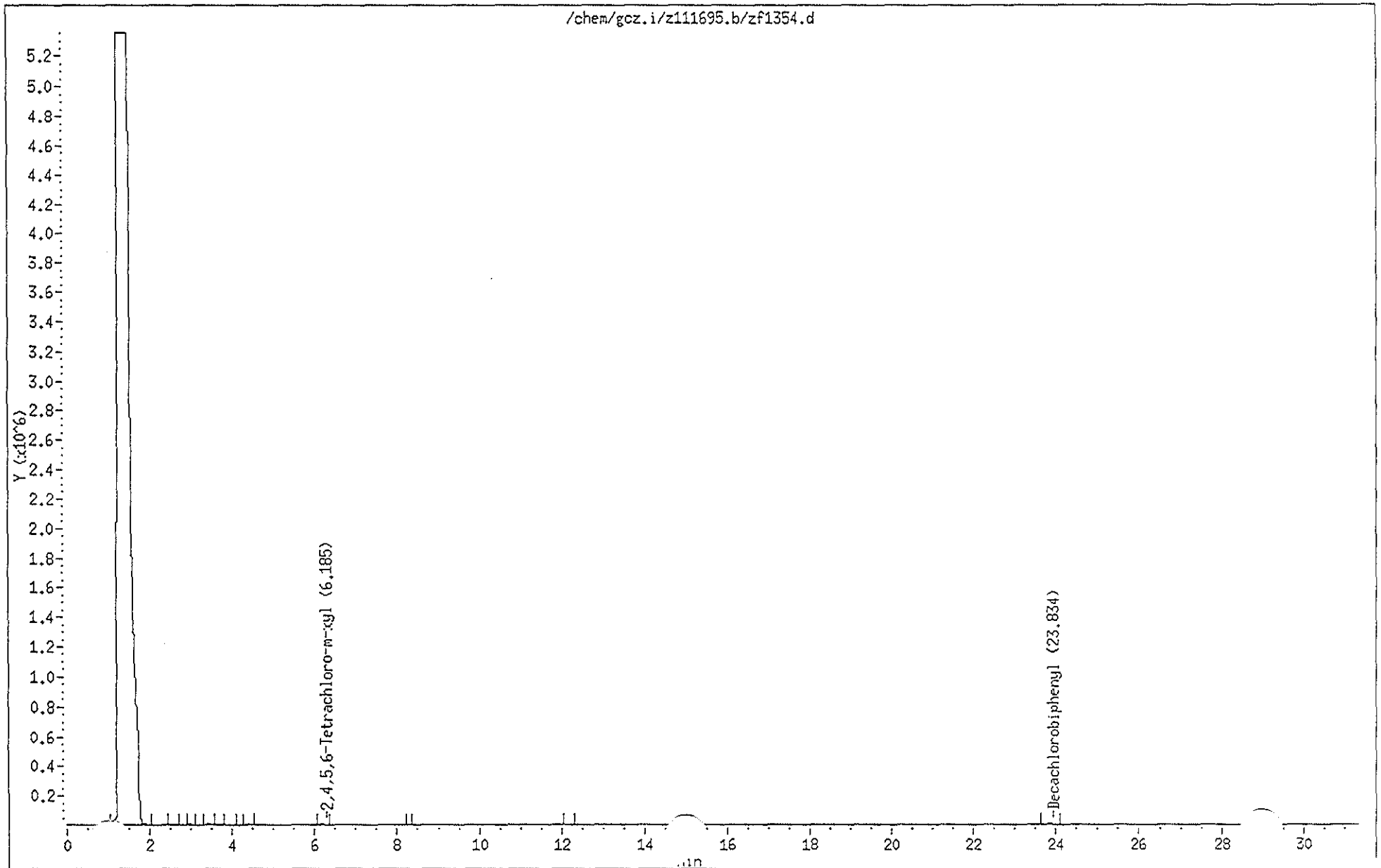
0631

Data File: /chem/gcz.i/z111695.b/zf1354.d
Date : 17-NOV-95 20:37
Client ID:
Sample Info: jp0327p,n1p51711

Column phase: DB-1701

Instrument: gcz.i

Operator: art
Column diameter: 0.53



Data File: /chem/gcz.i/z111695.b/zf1354.d
Report Date: 04-Dec-1995 13:18

OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zf1354.d
Lab Smp Id:
Inj Date : 17-NOV-95 20:37
Operator : art Inst ID: gcz.i
Smp Info : jp0327p,n1p51711
Misc Info : jp0327p,n1p51711,g2,1,10
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_1701.m
Meth Date : 18-Nov-1995 08:49 Quant Type: ESTD
Cal Date : 08-NOV-95 21:21 Cal File: zf1127.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/ml)
$ 1,4,5,6-Tetrachloro-m-xylene	6.185	6.216	-0.031	140371	0.0201	0.0201(R)
$ 22 Decachlorobiphenyl	23.834	23.887	-0.053	220907	0.0259	0.0259(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ak
12/4/95

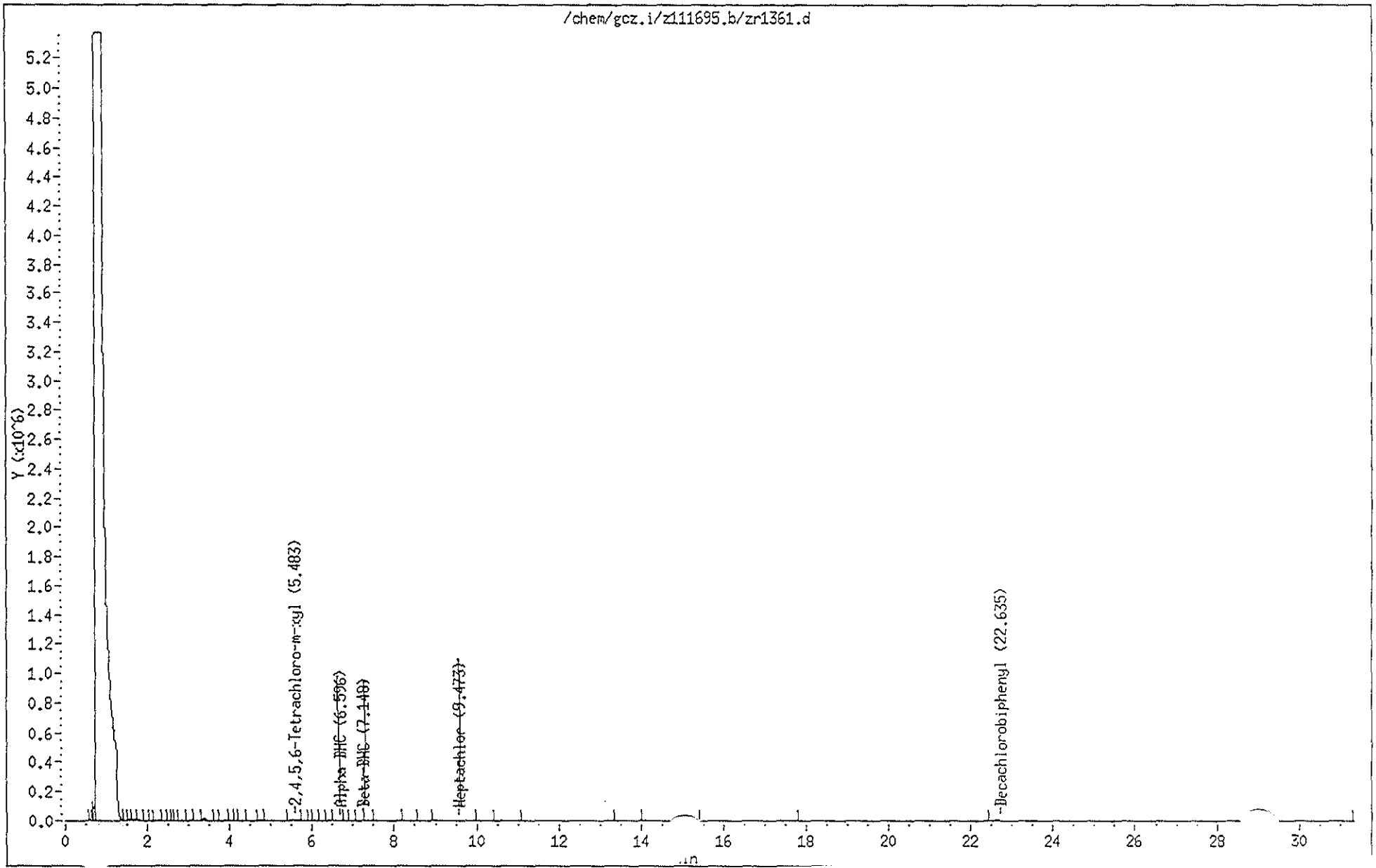
0633

Data File: /chem/gcz.i/z111695.b/zr1361.d
Date : 17-NOV-95 21:12
Client ID:
Sample Info: jp0327p,n1p51711

Column phase: DB-5

Instrument: gcz.i

Operator: art
Column diameter: 0.53



Data File: /chem/gcz.i/z111695.b/zr1361.d
Report Date: 04-Dec-1995 13:21

OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zr1361.d
Lab Smp Id:
Inj Date : 17-NOV-95 21:12
Operator : art Inst ID: gcz.i
Smp Info : jp0327p,n1p51711
Misc Info : jp0327p,n1p51711
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_db5.m
Meth Date : 18-Nov-1995 08:50 Quant Type: ESTD
Cal Date : 08-NOV-95 21:56 Cal File: zr1128.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

		Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/ml)
$	1	2,4,5,6-Tetrachloro-m-xylene	5.483	5.504	-0.021	279424	0.0367	0.0367(R)
	2	Alpha-BHC	6.596	6.551	0.045	~~108275~~	~~0.0101~~	~~0.0101~~
	3	Beta-BHC	7.148	7.154	-0.006	~~57669~~	~~0.0110~~	~~0.0110~~
	4	Gamma-BHC (Lindane)	Compound Not Detected.					
	5	Delta-BHC	Compound Not Detected.					
	6	Heptachlor	9.473	9.472	0.001	~~361388~~	~~0.0436~~	~~0.0436~~
	7	Aldrin	Compound Not Detected.					
	8	Heptachlor epoxide	Compound Not Detected.					
	9	gamma-Chlordane	Compound Not Detected.					
	10	Endosulfan I	Compound Not Detected.					
M	11	alpha-Chlordane	Compound Not Detected.					
	12	4,4'-DDE	Compound Not Detected.					
	13	Dieldrin	Compound Not Detected.					
	14	Endrin	Compound Not Detected.					
	15	Endosulfan II	Compound Not Detected.					
	16	4,4'-DDD	Compound Not Detected.					
	17	Endrin aldehyde	Compound Not Detected.					
	18	Endosulfan sulfate	Compound Not Detected.					
	19	4,4'-DDT	Compound Not Detected.					
	20	Endrin ketone	Compound Not Detected.					
	21	Methoxychlor	Compound Not Detected.					
	22	Decachlorobiphenyl	22.635	22.691	-0.056	1316166	0.154	0.154(R)

Flag Legend

Spike/Surrogate failed recovery limits.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

0635 EPA SAMPLE NO.

CLJ78TW02D

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0325P

Sample wt/vol: 940 (g/mL) ML Lab File ID: ZF1352

% Moisture: N/A decanted: (Y/N) N Date Received: 11/14/95

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/17/95

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	.11	U
319-85-7	beta-BHC	.11	U
319-86-8	delta-BHC	.11	U
76-44-8	Heptachlor	.11	U
309-00-2	Aldrin	.11	U
1024-57-3	Heptachlor epoxide	.11	U
959-98-8	Endosulfan I	.11	U
60-57-1	Dieldrin	.11	U
72-55-9	4,4'-DDE	.11	U
72-20-8	Endrin	.11	U
33213-65-9	Endosulfan II	.11	U
72-54-8	4,4'-DDD	.11	U
1031-07-8	Endosulfan sulfate	.11	U
50-29-3	4,4'-DDT	.11	U
72-43-5	Methoxychlor	.11	U
53494-70-5	Endrin ketone	.11	U
7421-93-4	Endrin aldehyde	.11	U
8001-35-2	Toxaphene	2.1	U
12674-11-2	Aroclor-1016	1.1	U
11104-28-2	Aroclor-1221	1.1	U
11141-16-5	Aroclor-1232	1.1	U
53469-21-9	Aroclor-1242	1.1	U
12672-29-6	Aroclor-1248	1.1	U
11097-69-1	Aroclor-1254	1.1	U
11096-82-5	Aroclor-1260	1.1	U
58-89-9	Gamma-BHC (Lindane)	.11	U
57-74-9	Chlordane	1.1	U

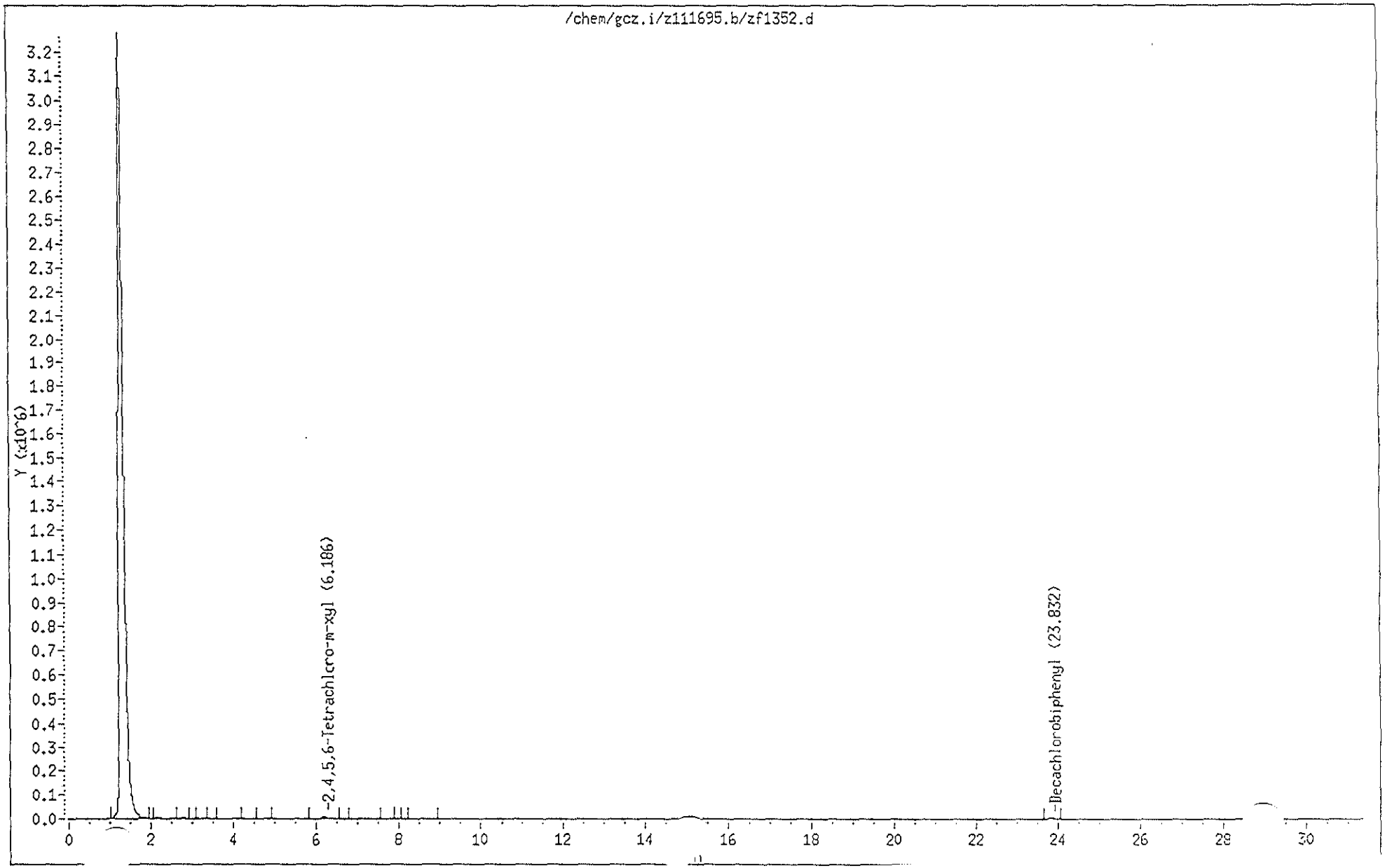
0636

Data File: /chem/gcz.i/z111695.b/zf1352.d
Date : 17-NOV-95 19:27
Client ID:
Sample Info: jp0325p,n1p51711

Column phase: DB-1701

Instrument: gcz.i

Operator: art
Column diameter: 0.53



Data File: /chem/gcz.i/z111695.b/zf1352.d
Report Date: 18-Nov-1995 09:04

OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zf1352.d
Lab Smp Id:
Inj Date : 17-NOV-95 19:27
Operator : art Inst ID: gcz.i
Smp Info : jp0325p,n1p51711
Misc Info : jp0325p,n1p51711,g2,1,10
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_1701.m
Meth Date : 18-Nov-1995 08:49 Quant Type: ESTD
Cal Date : 08-NOV-95 21:21 Cal File: zf1127.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/ml)
2,4,5,6-Tetrachloro-m-xylene	6.186	6.216	-0.030	388707	0.0558	0.0558(R)
S 22 Decachlorobiphenyl	23.832	23.887	-0.055	149951	0.0176	0.0176(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

AL
11/21/95

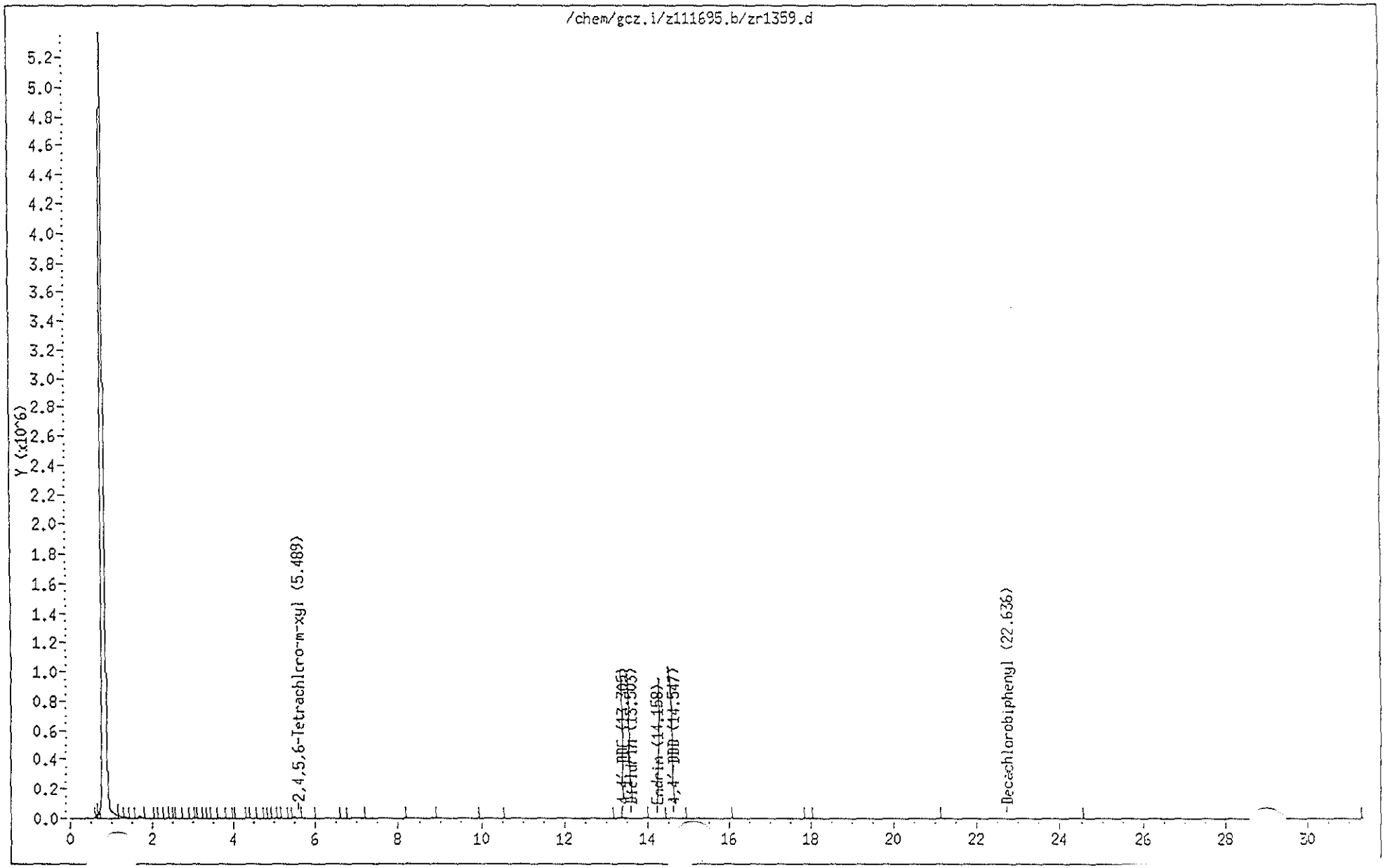
0638

Data File: /chem/gcz.i/z111695.b/zr1359.d
Date : 17-NOV-95 20:02
Client ID:
Sample Info: jp0325p,n1p51711

Column phase: DB-5

Instrument: gcz.i

Operator: art
Column diameter: 0.53



Data File: /chem/gcz.i/z111695.b/zr1359.d
Report Date: 18-Nov-1995 09:08

OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zr1359.d
Lab Smp Id:
Inj Date : 17-NOV-95 20:02
Operator : art Inst ID: gcz.i
Smp Info : jp0325p,n1p51711
Misc Info : jp0325p,n1p51711
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_db5.m
Meth Date : 18-Nov-1995 08:50 Quant Type: ESTD
Cal Date : 08-NOV-95 21:56 Cal File: zr1128.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
	1 2,4,5,6-Tetrachloro-m-xylene	5.489	5.504	-0.015	332698	0.0437	0.0437(R)
	2 Alpha-BHC	Compound Not Detected.					
	3 Beta-BHC	Compound Not Detected.					
	4 Gamma-BHC (Lindane)	Compound Not Detected.					
	5 Delta-BHC	Compound Not Detected.					
	6 Heptachlor	Compound Not Detected.					
	7 Aldrin	Compound Not Detected.					
	8 Heptachlor epoxide	Compound Not Detected.					
	9 gamma-Chlordane	Compound Not Detected.					
	10 Endosulfan I	Compound Not Detected.					
M	11 alpha-Chlordane	Compound Not Detected.					
	12 4,4'-DDE	13.305	13.318	-0.013	61849	~~0.00765~~	~~0.00765~~
	13 Dieldrin	13.503	13.488	0.015	182090	~~0.0203~~	~~0.0203~~
	14 Endrin	14.158	14.126	0.032	180831	~~0.0273~~	~~0.0273~~
	15 Endosulfan II	Compound Not Detected.					
	16 4,4'-DDD	14.547	14.576	-0.029	228823	~~0.0310~~	~~0.0318~~
	17 Endrin aldehyde	Compound Not Detected.					
	18 Endosulfan sulfate	Compound Not Detected.					
	19 4,4'-DDT	Compound Not Detected.					
	20 Endrin ketone	Compound Not Detected.					
	21 Methoxychlor	Compound Not Detected.					
S	22 Decachlorobiphenyl	22.636	22.691	-0.055	1376277	0.161	0.161(R)

Flag Legend

R - Spike/Surrogate failed recovery limits.

OHM Analytical Division

INITIAL CALIBRATION DATA

Start Cal Date : 08-NOV-95 19:02
End Cal Date : 08-NOV-95 21:21
Quant Method : ESTD
Origin : Included
Target Version : 3.10
Integrator : HP Genie
Method file : /chem/gcz.i/z110895.b/110895_8080_1701.m
Cal Date : 09-Nov-1995 08:01
Curve Type : Average

Calibration File Names:
Level 1: /chem/gcz.i/z110895.b/zf1123.d
Level 2: /chem/gcz.i/z110895.b/zf1124.d
Level 3: /chem/gcz.i/z110895.b/zf1125.d
Level 4: /chem/gcz.i/z110895.b/zf1126.d
Level 5: /chem/gcz.i/z110895.b/zf1127.d

	Compound	0.0200 Level 1	0.1000 Level 2	0.5000 Level 3	1 Level 4	2 Level 5	___ RRF	% RSD	
2	Alpha-BHC	6274800	9562840	10595716	9787449	8980455	9120252	18.550	
3	Gamma-BHC (Lindane)	6664900	9761850	9876682	9134431	8394946	8766562	14.996	
4	Heptachlor	8607050	9692340	8930436	8254689	7543515	8605606	9.256	
5	Aldrin	6859400	9156080	9165064	8409987	7662640	8250634	12.064	
6	Beta-BHC	4454400	5050580	4837690	4441157	4084582	4573682	8.240	
7	Delta-BHC	4835800	7817640	8728452	8144750	7567170	7422762	20.322	<-
8	Heptachlor epoxide	7507450	8559500	8124588	7329159	6731570	7650453	9.287	
9	Endosulfan I	6951400	8197000	7827368	7126986	6488054	7318162	9.397	
10	gamma-Chlordane	8215900	9357380	8744266	8323850	7599667	8448217	7.725	
11	alpha-Chlordane	8163400	9139500	8567766	8009988	7317478	8239626	8.201	
12	4,4'-DDE	7501850	8860260	8529142	7853713	7145914	7978176	8.900	
13	Dieldrin	9788750	8214250	8249252	7644863	7023294	8184082	12.548	
14	Endrin	6160100	6744010	6507714	6033536	5614564	6211985	7.026	
15	4,4'-DDD	5314900	6227270	6519196	6121226	5590813	5954681	8.238	
16	Endosulfan II	7091450	7616170	7342990	6815214	6264216	7026008	7.388	
17	4,4'-DDT	6443100	6464180	6010970	6189645	5700539	6161687	5.176	
18	Endrin aldehyde	4114200	5393930	5874874	5736383	5347367	5293351	13.149	
19	Methoxychlor	2639000	2683430	2569548	2319666	2239546	2490238	7.973	
20	Endosulfan sulfate	5553700	6496310	6581886	6633425	6024976	6258060	7.379	
21	Endrin ketone	5663100	6808620	6946640	6575823	6106178	6420072	8.257	
1	2,4,5,6-Tetrachloro-m-xylene	7338000	7780930	7184288	6561639	5973570	6967686	10.145	
22	Decachlorobiphenyl	10397650	9649910	8333290	7461922	6831350	8534824	17.386	

OHM Analytical Division

INITIAL CALIBRATION DATA

Start Cal Date : 08-NOV-95 19:02
End Cal Date : 08-NOV-95 21:21
Quant Method : ESTD
Origin : Included
Target Version : 3.10
Integrator : HP Genie
Method file : /chem/gcz.i/z110895.b/110895_8080_1701.m
Cal Date : 09-Nov-1995 08:37

Calibration File Names:
Level 1: /chem/gcz.i/z110895.b/zf1123.d
Level 2: /chem/gcz.i/z110895.b/zf1124.d
Level 3: /chem/gcz.i/z110895.b/zf1125.d
Level 4: /chem/gcz.i/z110895.b/zf1126.d
Level 5: /chem/gcz.i/z110895.b/zf1127.d

Compound	0.0200 Level 1	0.1000 Level 2	0.5000 Level 3	1 Level 4	2 Level 5	Curve	Coefficients a0	a1	a2	%RSD or R^2
2 Alpha-BHC	6274800	9962840	10595716	9787449	8980455	AVRG		9120252		18.54951
3 Gamma-BHC (Lindane)	6664900	9761850	9876682	9134431	8394946	AVRG		8766562		14.99635
4 Heptachlor	8607050	9692340	8930436	8254689	7543515	AVRG		8605606		9.25566
5 Aldrin	6859400	9156080	9165064	8409987	7662640	AVRG		8250634		12.06360
6 Beta-BHC	4454400	5050580	4837690	4441157	4084582	AVRG		4573682		8.24010
7 Delta-BHC	96716	781764	4364226	8144750	15174341	LINR	0.00000	7760000		0.99671
8 Heptachlor epoxide	7507450	8559500	8124588	7485739	6858821	AVRG		7707220		8.48172
9 Endosulfan I	6951400	8196060	7827416	7125063	6486820	AVRG		7317352		9.40131
10 gamma-Chlordane	8215900	9356880	8744322	8314020	7591928	AVRG		8444610		7.76183
11 alpha-Chlordane	8163400	9139020	8567800	7993416	7306934	AVRG		8234114		8.26546

0641

OHM Analytical Division

INITIAL CALIBRATION DATA

Start Cal Date : 08-NOV-95 19:36
End Cal Date : 08-NOV-95 21:56
Quant Method : ESTD
Origin : Included
Target Version : 3.10
Integrator : HP Genie
Method file : /chem/gcz.i/z110895.b/110895_8080_db5.m
Cal Date : 09-Nov-1995 09:51

Calibration File Names:
Level 1: /chem/gcz.i/z110895.b/zr1124.d
Level 2: /chem/gcz.i/z110895.b/zr1125.d
Level 3: /chem/gcz.i/z110895.b/zr1126.d
Level 4: /chem/gcz.i/z110895.b/zr1127.d
Level 5: /chem/gcz.i/z110895.b/zr1128.d

	Compound	0.0200 Level 1	0.1000 Level 2	0.5000 Level 3	1 Level 4	2 Level 5	Curve	Coefficients a0	a1	a2	%RSD or R^2
	2 Alpha-BHC	7092350	11284040	12591428	11744623	11021630	AVRG		10746814		19.80337
	3 Beta-BHC	4902800	5601960	5620618	5183556	4815962	AVRG		5224979		7.23396
	4 Gamma-BHC (Lindane)	7300000	10665910	11577832	10791586	10053743	AVRG		10077814		16.32156
	5 Delta-BHC	119999	940941	5505163	10233412	19299709	LINR	0.00000	9837255		0.99739
	6 Heptachlor	7521500	8540340	8893932	8459279	7990844	AVRG		8281179		6.43459
	7 Aldrin	6672200	8984290	10113090	9447348	8764418	AVRG		8796269		14.71980
	8 Heptachlor epoxide	6896650	8230060	8815086	8281082	7785585	AVRG		8001693		8.96776
	9 gamma-Chlordane	7908600	9465620	10021492	9732396	9069788	AVRG		9239579		8.90136
	10 Endosulfan I	7609125	9020400	8559962	7835894	7178301	AVRG		8040736		9.22617
M	11 alpha-Chlordane	7609125	9020400	8559962	7835894	7178301	AVRG		8040736		9.22617

0642

OHM Analytical Division

INITIAL CALIBRATION DATA

Start Cal Date : 08-NOV-95 19:36
End Cal Date : 08-NOV-95 21:56
Quant Method : ESTD
Origin : Included
Target Version : 3.10
Integrator : HP Genie
Method file : /chem/gcz.i/z110895.b/110895_8080_db5.m
Cal Date : 09-Nov-1995 09:51

Compound	0.0200 Level 1	0.1000 Level 2	0.5000 Level 3	1 Level 4	2 Level 5	Curve	Coefficients a0	a1	a2	%RSD or R^2
12 4,4'-DDE	5905350	8048850	9429482	8855127	8174720	AVRG		8082706		16.55381
13 Dieldrin	9672300	8981400	9167990	8732012	8255574	AVRG		8961855		5.84956
14 Endrin	5629450	6853470	7303522	6845754	6515290	AVRG		6629497		9.43323
15 Endosulfan II	6261300	7426220	7937130	7361579	6733094	AVRG		7143865		9.13645
16 4,4'-DDD	5143600	6600700	7500500	6987402	6671156	AVRG		6580672		13.34587
17 Endrin aldehyde	6261850	6738190	6781298	6217518	5820160	AVRG		6363803		6.29443
18 Endosulfan sulfate	5274900	6172110	6822276	6423333	5924516	AVRG		6123427		9.45303
19 4,4'-DDT	4989450	6003350	6897894	6922763	6858690	AVRG		6334429		13.34204
20 Endrin ketone	7181550	8541470	8655020	7958968	7496550	AVRG		7966712		8.04153
21 Methoxychlor	3325700	3469020	3336812	3205955	3086546	AVRG		3284807		4.40733
$ 1 2,4,5,6-Tetrachloro-m-xylene	7453150	8449890	8070328	7349668	6732290	AVRG		7611065		8.76480
$ 22 Decachlorobiphenyl	8915300	9006020	8980840	8193747	7577400	AVRG		8534661		7.40745

0643

Data File: /chem/gcz.i/z111695.b/zf1318.d
Report Date: 16-Nov-1995 13:27

OHM Analytical Division

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gcz.i
Lab File ID: zf1318.d
Analysis Type:
Lab Sample ID:
Quant Type: ESTD

Injection Date: 16-NOV-95 12:27
Init. Calibration Date(s): 11/08/95 11/08/95
Init. Calibration Times: 19:02 21:21
Method File: /chem/gcz.i/z111695.b/110895_8080_1701.

COMPOUND	RRF	RF0	MIN RRF	%D	MAX %D
$ 1 2,4,5,6-Tetrachloro-m-xylene	6968000.000	6982559.994	0.010	0.2	15.0
2 Alpha-BHC	9120000.000	9231373.296	0.010	1.2	15.0
3 Gamma-BHC (Lindane)	8767000.000	8964627.240	0.010	2.3	15.0
4 Heptachlor	8606000.000	8764618.162	0.010	1.8	15.0
5 Aldrin	8251000.000	8531458.333	0.010	3.4	15.0
6 Beta-BHC	4574000.000	4684481.303	0.010	2.4	15.0
7 Delta-BHC	7760000.000	8325048.882	0.010	N/A	N/A
8 Heptachlor epoxide	7707000.000	7937698.283	0.010	3.0	15.0
9 Endosulfan I	7317000.000	7588915.852	0.010	3.7	15.0
10 gamma-Chlordane	8445000.000	8865763.728	0.010	5.0	15.0
11 alpha-Chlordane	8234000.000	8774242.013	0.010	6.6	15.0
12 4,4'-DDE	7974000.000	8304875.895	0.010	4.1	15.0
13 Dieldrin	8184000.000	8420880.806	0.010	2.9	15.0
14 Endrin	6212000.000	6094338.619	0.010	1.9	15.0
15 4,4'-DDD	5955000.000	6396048.466	0.010	7.4	15.0
16 Endosulfan II	7026000.000	7210703.545	0.010	2.6	15.0
17 4,4'-DDT	6162000.000	5839417.549	0.010	5.2	15.0
18 Endrin aldehyde	5294000.000	5353720.157	0.010	1.1	15.0
19 Methoxychlor	2490000.000	2289165.336	0.010	8.1	15.0
20 Endosulfan sulfate	6258000.000	6853280.615	0.010	9.5	15.0
21 Endrin ketone	6420000.000	6766564.839	0.010	5.4	15.0
$ 22 Decachlorobiphenyl	8535000.000	9336701.863	0.010	9.4	15.0

-72.0

Data File: /chem/gcz.i/z111695.b/zf1345.d
Report Date: 17-Nov-1995 10:04

OHM Analytical Division

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gcz.i
Lab File ID: zf1345.d
Analysis Type:
Lab Sample ID:
Quant Type: ESTD

Injection Date: 17-NOV-95 08:21
Init. Calibration Date(s): 11/08/95 11/08/95
Init. Calibration Times: 19:02 21:21
Method File: /chem/gcz.i/z111695.b/110895_8080_1701.

	COMPOUND	RRF	RF0	MIN RRF	%D	MAX %D	
$	1 2,4,5,6-Tetrachloro-m-xylene	6968000.000	6936300.282	0.010	0.3	15.0	
	2 Alpha-BHC	9120000.000	9250729.579	0.010	1.4	15.0	
	3 Gamma-BHC (Lindane)	8767000.000	8995263.516	0.010	2.6	15.0	
	4 Heptachlor	8606000.000	8855942.870	0.010	3.0	15.0	
	5 Aldrin	8251000.000	8540322.685	0.010	3.5	15.0	
	6 Beta-BHC	4574000.000	4691335.915	0.010	2.6	15.0	
	7 Delta-BHC	7760000.000	8352965.313	0.010	N/A	N/A	8%D
	8 Heptachlor epoxide	7707000.000	7971206.181	0.010	3.4	15.0	
	9 Endosulfan I	7317000.000	7612608.531	0.010	4.0	15.0	
	10 gamma-Chlordane	8445000.000	8904555.671	0.010	5.4	15.0	
	11 alpha-Chlordane	8234000.000	8794425.896	0.010	6.8	15.0	
	12 4,4'-DDE	7974000.000	8313314.736	0.010	4.3	15.0	
	13 Dieldrin	8184000.000	8463161.554	0.010	3.5	15.0	
	14 Endrin	6212000.000	6057371.597	0.010	2.3	15.0	
	15 4,4'-DDD	5955000.000	6353716.075	0.010	7.2	15.0	
	16 Endosulfan II	7026000.000	7252244.137	0.010	3.4	15.0	
	17 4,4'-DDT	6162000.000	6104381.331	0.010	0.9	15.0	
	18 Endrin aldehyde	5294000.000	5333377.805	0.010	0.7	15.0	
	19 Methoxychlor	2490000.000	2403779.009	0.010	3.3	15.0	
	20 Endosulfan sulfate	6258000.000	6959457.209	0.010	11.4	15.0	
	21 Endrin ketone	6420000.000	6906664.526	0.010	7.6	15.0	
$	22 Decachlorobiphenyl	8535000.000	9464371.312	0.010	10.9	15.0	

Data File: /chem/gcz.i/z111695.b/zf1357.d
Report Date: 18-Nov-1995 08:45

OHM Analytical Division

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gcz.i
Lab File ID: zf1357.d
Analysis Type:
Lab Sample ID:
Quant Type: ESTD

Injection Date: 17-NOV-95 22:21
Init. Calibration Date(s): 11/08/95 11/08/95
Init. Calibration Times: 19:02 21:21
Method File: /chem/gcz.i/z111695.b/110895_8080_1701.

	COMPOUND	RRF	RF0	MIN RRF	%D	MAX %D	
S	1 2,4,5,6-Tetrachloro-m-xylene	6968000.000	6962954.496	0.010	0.1	15.0	
	2 Alpha-BHC	9120000.000	9256188.779	0.010	1.5	15.0	
	3 Gamma-BHC (Lindane)	8767000.000	8981204.898	0.010	2.4	15.0	
	4 Heptachlor	8606000.000	8771023.057	0.010	1.9	15.0	
	5 Aldrin	8251000.000	8585406.481	0.010	4.1	15.0	
	6 Beta-BHC	4574000.000	4700044.964	0.010	2.8	15.0	
	7 Delta-BHC	7760000.000	8380959.661	0.010	N/A	N/A	8%D
	8 Heptachlor epoxide	7707000.000	7988771.497	0.010	3.7	15.0	
	9 Endosulfan I	7317000.000	7638568.414	0.010	4.4	15.0	
	10 gamma-Chlordane	8445000.000	8908483.860	0.010	5.5	15.0	
	11 alpha-Chlordane	8234000.000	8809064.331	0.010	7.0	15.0	
	12 4,4'-DDE	7974000.000	8338611.742	0.010	4.6	15.0	
	13 Dieldrin	8184000.000	8479722.174	0.010	3.6	15.0	
	14 Endrin	6212000.000	6186234.213	0.010	0.4	15.0	
	15 4,4'-DDD	5955000.000	6420799.775	0.010	7.8	15.0	
	16 Endosulfan II	7026000.000	7281046.296	0.010	3.6	15.0	
	17 4,4'-DDT	6162000.000	6029801.091	0.010	2.1	15.0	
	18 Endrin aldehyde	5294000.000	5276910.201	0.010	0.3	15.0	
	19 Methoxychlor	2490000.000	2321036.556	0.010	6.8	15.0	
	20 Endosulfan sulfate	6258000.000	6965625.650	0.010	11.3	15.0	
	21 Endrin ketone	6420000.000	6819009.386	0.010	6.2	15.0	
S	22 Decachlorobiphenyl	8535000.000	9482691.835	0.010	11.1	15.0	
M	23 Chlordane	****	****	0.010	****	40.0	<-
	24 Toxaphene	****	****	0.010	****	40.0	<-
	25 Aroclor 1016	****	****	0.010	****	40.0	<-
	26 Aroclor 1221	****	****	0.010	****	40.0	<-
	27 Aroclor 1232	****	****	0.010	****	40.0	<-
	28 Aroclor 1242	****	****	0.010	****	40.0	<-
	29 Aroclor 1248	****	****	0.010	****	40.0	<-
	30 Aroclor 1254	****	****	0.010	****	40.0	<-
	31 Aroclor 1260	****	****	0.010	****	40.0	<-
	32 Hexachlorobenzene	****	****	0.010	****	40.0	<-

Data File: /chem/gcz.i/z111695.b/zf1369.d
Report Date: 18-Nov-1995 08:54

OHM Analytical Division

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gcz.i
Lab File ID: zf1369.d
Analysis Type:
Lab Sample ID:
Quant Type: ESTD

Injection Date: 18-NOV-95 05:19
Init. Calibration Date(s): 11/08/95 11/08/95
Init. Calibration Times: 19:02 21:21
Method File: /chem/gcz.i/z111695.b/110895_8080_1701.

	COMPOUND	RRF	RF0	MIN RRF	%D	MAX %D	
$	1 2,4,5,6-Tetrachloro-m-xylene	6968000.000	7023083.647	0.010	0.8	15.0	
	2 Alpha-BHC	9120000.000	9349586.566	0.010	2.5	15.0	
	3 Gamma-BHC (Lindane)	8767000.000	9067477.897	0.010	3.4	15.0	
	4 Heptachlor	8606000.000	8933466.223	0.010	3.8	15.0	
	5 Aldrin	8251000.000	8661037.346	0.010	5.0	15.0	
	6 Beta-BHC	4574000.000	4750381.308	0.010	3.9	15.0	
	7 Delta-BHC	7760000.000	8447375.578	0.010	N/A	N/A	9% D
	8 Heptachlor epoxide	7707000.000	8046363.187	0.010	4.4	15.0	
	9 Endosulfan I	7317000.000	7691087.176	0.010	5.1	15.0	
	10 gamma-Chlordane	8445000.000	8971935.090	0.010	6.2	15.0	
	11 alpha-Chlordane	8234000.000	8854976.247	0.010	7.7	15.0	
	12 4,4'-DDE	7974000.000	8393033.643	0.010	5.3	15.0	
	13 Dieldrin	8184000.000	8533542.287	0.010	4.3	15.0	
	14 Endrin	6212000.000	6091598.723	0.010	1.9	15.0	
	15 4,4'-DDD	5955000.000	6476222.351	0.010	8.8	15.0	
	16 Endosulfan II	7026000.000	7338363.602	0.010	4.4	15.0	
	17 4,4'-DDT	6162000.000	6121692.280	0.010	0.7	15.0	
	18 Endrin aldehyde	5294000.000	5392774.124	0.010	1.9	15.0	
	19 Methoxychlor	2490000.000	2353020.588	0.010	5.5	15.0	
	20 Endosulfan sulfate	6258000.000	7016297.581	0.010	12.1	15.0	
	21 Endrin ketone	6420000.000	6955382.756	0.010	8.3	15.0	
$	22 Decachlorobiphenyl	8535000.000	9551347.955	0.010	11.9	15.0	
M	23 Chlordane	++++	++++	0.010	++++	40.0	<-
	24 Toxaphene	++++	++++	0.010	++++	40.0	<-
	25 Aroclor 1016	++++	++++	0.010	++++	40.0	<-
	26 Aroclor 1221	++++	++++	0.010	++++	40.0	<-
	27 Aroclor 1232	++++	++++	0.010	++++	40.0	<-
	28 Aroclor 1242	++++	++++	0.010	++++	40.0	<-
	29 Aroclor 1248	++++	++++	0.010	++++	40.0	<-
	30 Aroclor 1254	++++	++++	0.010	++++	40.0	<-
	31 Aroclor 1260	++++	++++	0.010	++++	40.0	<-
	32 Hexachlorobenzene	++++	++++	0.010	++++	40.0	<-

Data File: /chem/gcz.i/z111695.b/zr1323.d
Report Date: 16-Nov-1995 13:28

OHM Analytical Division

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gcz.i
Lab File ID: zr1323.d
Analysis Type:
Lab Sample ID:
Quant Type: ESTD

Injection Date: 16-NOV-95 12:27
Init. Calibration Date(s): 11/08/95 11/08/95
Init. Calibration Times: 19:36 21:56
Method File: /chem/gcz.i/z111695.b/110895_8080_db5.m

	COMPOUND	RRF	RF0	MIN RRF	%D	MAX %D
S	1 2,4,5,6-Tetrachloro-m-xylene	7611000.000	7793063.440	0.010	2.4	15.0
	2 Alpha-BHC	10750000.000	10859097.198	0.010	1.0	15.0
	3 Beta-BHC	5225000.000	5242674.611	0.010	0.3	15.0
	4 Gamma-BHC (Lindane)	10080000.000	10324945.116	0.010	2.4	15.0
	5 Delta-BHC	9837000.000	10050733.278	0.010	N/A	N/A
	6 Heptachlor	8281000.000	8337006.606	0.010	1.3	15.0
	7 Aldrin	8796000.000	9027852.381	0.010	2.6	15.0
	8 Heptachlor epoxide	8002000.000	8277681.561	0.010	3.4	15.0
	9 gamma-Chlordane	9240000.000	9547389.895	0.010	3.4	15.0
	10 Endosulfan I	8041000.000	8025357.309	0.010	0.2	15.0
M	11 alpha-Chlordane	8041000.000	8025357.309	0.010	0.2	15.0
	12 4,4'-DDE	8083000.000	8739807.792	0.010	8.1	15.0
	13 Dieldrin	8952000.000	9009823.070	0.010	0.5	15.0
	14 Endrin	6629000.000	6958674.275	0.010	5.0	15.0
	15 Endosulfan II	7144000.000	7551332.339	0.010	5.8	15.0
	16 4,4'-DDD	6581000.000	6948527.950	0.010	5.6	15.0
	17 Endrin aldehyde	6364000.000	6249758.060	0.010	1.8	15.0
	18 Endosulfan sulfate	6123000.000	6755363.312	0.010	10.5	15.0
	19 4,4'-DDT	6334000.000	6352584.744	0.010	8.2	15.0
	20 Endrin ketone	7967000.000	7914784.515	0.010	0.7	15.0
	21 Methoxychlor	3285000.000	3211536.382	0.010	2.2	15.0
S	22 Decachlorobiphenyl	8535000.000	9113360.663	0.010	6.8	15.0

220

Data File: /chem/gcz.i/z111695.b/zr1351.d
Report Date: 17-Nov-1995 10:04

OHM Analytical Division

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gcz.i
Lab File ID: zr1351.d
Analysis Type:
Lab Sample ID:
Quant Type: ESTD

Injection Date: 17-NOV-95 08:56
Init. Calibration Date(s): 11/08/95 11/08/95
Init. Calibration Times: 19:36 21:56
Method File: /chem/gcz.i/z111695.b/110895_8080_db5.m

	COMPOUND	RRF	RF0	MIN RRF	%D	MAX %D	
$	1 2,4,5,6-Tetrachloro-m-xylene	7611000.000	7805007.049	0.010	2.5	15.0	
	2 Alpha-BHC	10750000.000	10926735.552	0.010	1.6	15.0	
	3 Beta-BHC	5225000.000	5296295.833	0.010	1.4	15.0	
	4 Gamma-BHC (Lindane)	10080000.000	10401382.654	0.010	3.2	15.0	
	5 Delta-BHC	9837000.000	10127336.590	0.010	N/A	N/A	3% D
	6 Heptachlor	8281000.000	8597558.973	0.010	3.8	15.0	
	7 Aldrin	8796000.000	8993789.418	0.010	2.3	15.0	
	8 Heptachlor epoxide	8002000.000	8284634.700	0.010	3.5	15.0	
	9 gamma-Chlordane	9240000.000	9591724.524	0.010	4.9	15.0	
	10 Endosulfan I	8041000.000	8034809.062	0.010	0.1	15.0	
M	11 alpha-Chlordane	8041000.000	8034809.062	0.010	0.1	15.0	
	12 4,4'-DDE	8083000.000	8714648.964	0.010	7.8	15.0	
	13 Dieldrin	8952000.000	9030365.136	0.010	0.9	15.0	
	14 Endrin	6629000.000	6931664.938	0.010	4.6	15.0	
	15 Endosulfan II	7144000.000	7565405.507	0.010	5.9	15.0	
	16 4,4'-DDD	6581000.000	6992308.343	0.010	6.2	15.0	
	17 Endrin aldehyde	6364000.000	6230465.057	0.010	1.3	15.0	
	18 Endosulfan sulfate	6123000.000	5733803.091	0.010	10.1	15.0	
	19 4,4'-DDT	6334000.000	7023013.370	0.010	11.0	15.0	
	20 Endrin ketone	7967000.000	7934516.850	0.010	0.2	15.0	
	21 Methoxychlor	3285000.000	3357230.060	0.010	2.2	15.0	
$	22 Decachlorobiphenyl	8535000.000	9195242.495	0.010	7.7	15.0	

Data File: /chem/gcz.i/z111695.b/zr1364.d
Report Date: 18-Nov-1995 08:47

OHM Analytical Division

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gcz.i
Lab File ID: zr1364.d
Analysis Type:
Lab Sample ID:
Quant Type: ESTD

Injection Date: 17-NOV-95 22:56
Init. Calibration Date(s): 11/08/95 11/08/95
Init. Calibration Times: 19:36 21:56
Method File: /chem/gcz.i/z111695.b/110895_8080_db5.m

	COMPOUND	RRF	RF0	MIN RRF	%D	MAX %D	
$	1 2,4,5,6-Tetrachloro-m-xylene	7611000.000	7757747.415	0.010	1.9	15.0	
	2 Alpha-BHC	10750000.000	10806518.389	0.010	0.5	15.0	
	3 Beta-BHC	5225000.000	5227004.590	0.010	0.0	15.0	
	4 Gamma-BHC (Lindane)	10080000.000	10296664.058	0.010	2.1	15.0	
	5 Delta-BHC	9837000.000	10015283.140	0.010	N/A	N/A	2% D
	6 Heptachlor	8281000.000	8252826.590	0.010	0.3	15.0	
	7 Aldrin	8796000.000	9079010.301	0.010	3.2	15.0	
	8 Heptachlor epoxide	8002000.000	8279728.846	0.010	3.5	15.0	
	9 gamma-Chlordane	9240000.000	9667288.351	0.010	4.6	15.0	
	10 Endosulfan I	8041000.000	8048957.099	0.010	0.1	15.0	
M	11 alpha-Chlordane	8041000.000	8048957.099	0.010	0.1	15.0	
	12 4,4'-DDE	8083000.000	8738932.796	0.010	8.1	15.0	
	13 Dieldrin	8962000.000	9016956.089	0.010	0.6	15.0	
	14 Endrin	6629000.000	6994950.705	0.010	5.5	15.0	
	15 Endosulfan II	7144000.000	7586021.607	0.010	6.2	15.0	
	16 4,4'-DDD	6581000.000	6966921.706	0.010	5.9	15.0	
	17 Endrin aldehyde	6364000.000	6247044.047	0.010	1.8	15.0	
	18 Endosulfan sulfate	6123000.000	6796472.305	0.010	11.0	15.0	
	19 4,4'-DDT	6334000.000	6741291.002	0.010	6.4	15.0	
	20 Endrin ketone	7967000.000	7946746.394	0.010	0.3	15.0	
	21 Methoxychlor	3285000.000	3227017.973	0.010	1.8	15.0	
$	22 Decachlorobiphenyl	8535000.000	9104576.144	0.010	6.7	15.0	

Data File: /chem/gcz.i/z111695.b/zr1376.d
Report Date: 18-Nov-1995 08:55

OHM Analytical Division

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gcz.i
Lab File ID: zr1376.d
Analysis Type:
Lab Sample ID:
Quant Type: ESTD

Injection Date: 18-NOV-95 05:54
Init. Calibration Date(s): 11/08/95 11/08/95
Init. Calibration Times: 19:36 21:56
Method File: /chem/gcz.i/z111695.b/110895_8080_db5.m

	COMPOUND	RRF	RF0	MIN RRF	%D	MAX %D	
$	1 2,4,5,6-Tetrachloro-m-xylene	7611000.000	7792695.489	0.010	2.4	15.0	
	2 Alpha-BHC	10750000.000	10378774.956	0.010	1.2	15.0	
	3 Beta-BHC	5225000.000	5266281.157	0.010	0.8	15.0	
	4 Gamma-BHC (Lindane)	10080000.000	10360294.052	0.010	2.8	15.0	
	5 Delta-BHC	9837000.000	10088464.447	0.010	N/A	N/A	37%D
	6 Heptachlor	8281000.000	8510734.723	0.010	2.8	15.0	
	7 Aldrin	8796000.000	9097548.413	0.010	3.4	15.0	
	8 Heptachlor epoxide	8002000.000	8309243.772	0.010	3.8	15.0	
	9 gamma-Chlordane	9240000.000	9714832.163	0.010	5.1	15.0	
	10 Endosulfan I	8041000.000	8055779.574	0.010	0.2	15.0	
M	11 alpha-Chlordane	8041000.000	8055779.574	0.010	0.2	15.0	
	12 4,4'-DDE	8083000.000	8763496.599	0.010	8.4	15.0	
	13 Dieldrin	8962000.000	9046568.339	0.010	0.9	15.0	
	14 Endrin	6629000.000	6885232.288	0.010	3.9	15.0	
	15 Endosulfan II	7144000.000	7600808.288	0.010	6.4	15.0	
	16 4,4'-DDD	6581000.000	7019956.988	0.010	6.7	15.0	
	17 Endrin aldehyde	6364000.000	6297673.323	0.010	1.0	15.0	
	18 Endosulfan sulfate	6123000.000	6765649.130	0.010	10.5	15.0	
	19 4,4'-DDT	6334000.000	6972924.892	0.010	10.1	15.0	
	20 Endrin ketone	7967000.000	8000452.753	0.010	0.4	15.0	
	21 Methoxychlor	3285000.000	3223979.553	0.010	1.9	15.0	
$	22 Decachlorobiphenyl	8535000.000	9204721.647	0.010	7.8	15.0	

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

0652 EPA SAMPLE NO.

PBLK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: N1P51711P

Sample wt/vol: 1000 (g/mL) ML Lab File ID: ZF1346

% Moisture: N/A decanted: (Y/N) N Date Received: 11/14/95

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/17/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

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

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	.010	U
319-85-7	beta-BHC	.010	U
319-86-8	delta-BHC	.010	U
76-44-8	Heptachlor	.010	U
309-00-2	Aldrin	.010	U
1024-57-3	Heptachlor epoxide	.010	U
959-98-8	Endosulfan I	.010	U
60-57-1	Dieldrin	.010	U
72-55-9	4,4'-DDE	.010	U
72-20-8	Endrin	.010	U
33213-65-9	Endosulfan II	.010	U
72-54-8	4,4'-DDD	.010	U
1031-07-8	Endosulfan sulfate	.010	U
50-29-3	4,4'-DDT	.010	U
72-43-5	Methoxychlor	.010	U
53494-70-5	Endrin ketone	.010	U
7421-93-4	Endrin aldehyde	.010	U
8001-35-2	Toxaphene	.20	U
12674-11-2	Aroclor-1016	.10	U
11104-28-2	Aroclor-1221	.10	U
11141-16-5	Aroclor-1232	.10	U
53469-21-9	Aroclor-1242	.10	U
12672-29-6	Aroclor-1248	.10	U
11097-69-1	Aroclor-1254	.10	U
11096-82-5	Aroclor-1260	.10	U
58-89-9	Gamma-BHC (Lindane)	.010	U
57-74-9	Chlordane	.10	U

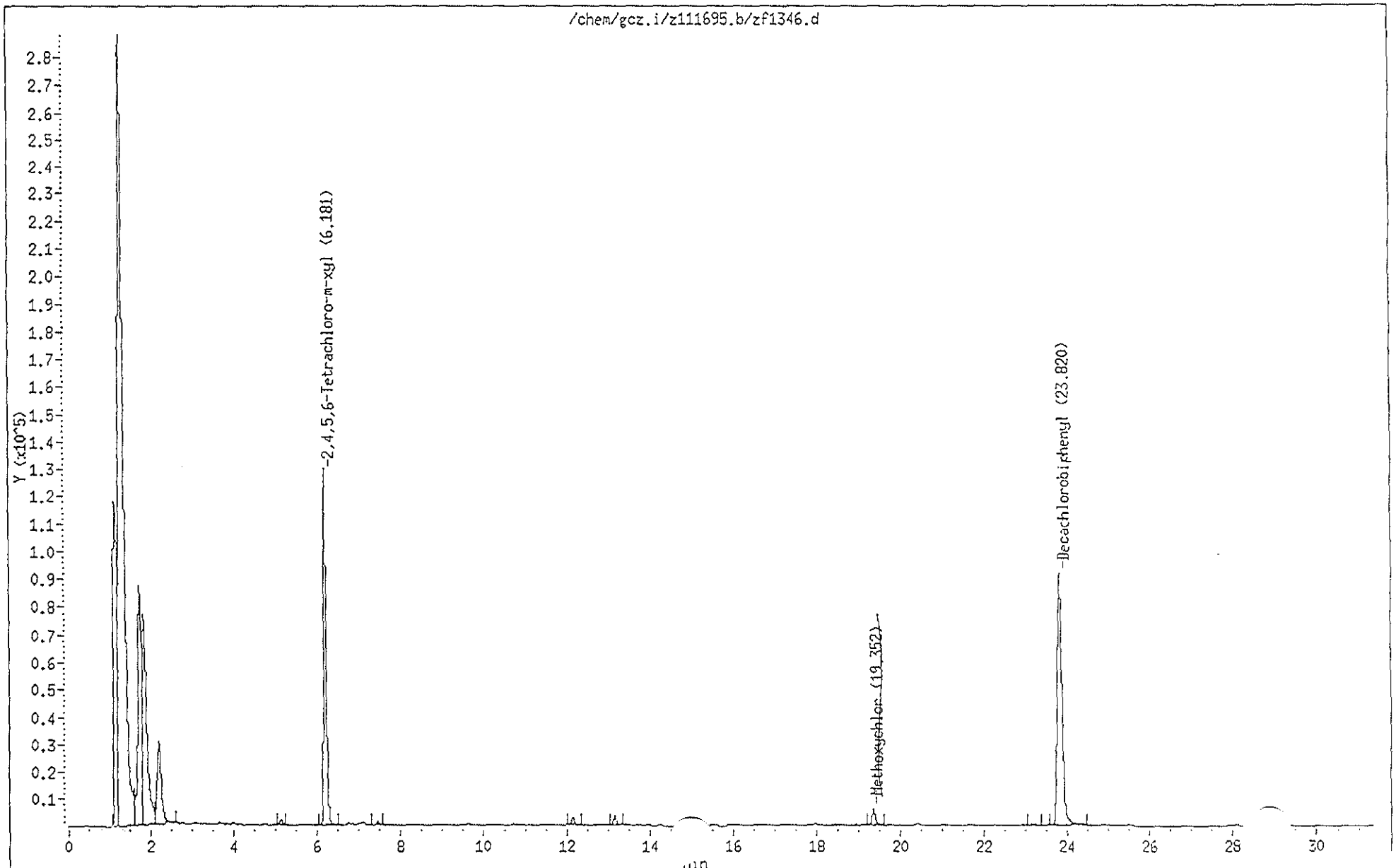
0653

Data File: /chem/gcz.i/z111695.b/zf1346.d
Date : 17-NOV-95 15:59
Client ID:
Sample Info: n1p51711p,n1p517

Column phase: DB-1701

Instrument: gcz.i

Operator: art
Column diameter: 0.53



Data File: /chem/gcz.i/z111695.b/zf1346.d
Report Date: 18-Nov-1995 09:03

OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zf1346.d
Lab Smp Id:
Inj Date : 17-NOV-95 15:59
Operator : art Inst ID: gcz.i
Smp Info : n1p51711p,n1p517
Misc Info : n1p51711p,n1p51711,g2,1,1
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_1701.m
Meth Date : 18-Nov-1995 08:49 Quant Type: ESTD
Cal Date : 08-NOV-95 21:21 Cal File: zf1127.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
$	2,4,5,6-Tetrachloro-m-xylene	6.181	6.216	-0.035	2895644	0.416	0.416(R)
	19 Methoxychlor	19.352	19.411	-0.059	165882	~~0.0666~~	0.0666
$	22 Decachlorobiphenyl	23.820	23.887	-0.067	3752365	0.440	0.440(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

gk
11/20/95

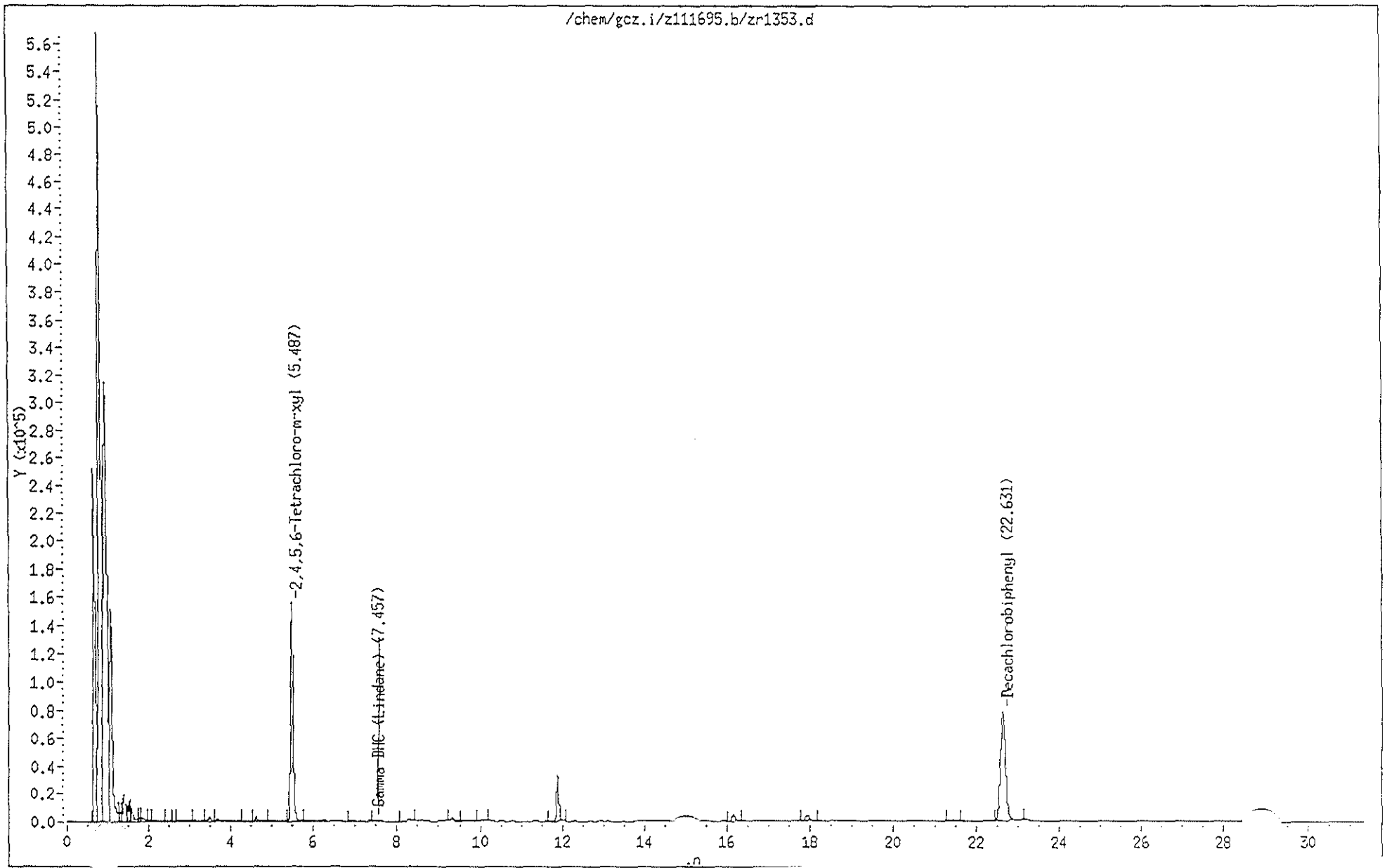
0655

Data File: /chem/gcz.i/z111695.b/zr1353.d
Date : 17-NOV-95 16:33
Client ID:
Sample Info: n1p51711p,n1p517

Column phase: DB-5

Instrument: gcz.i

Operator: art
Column diameter: 0.53



Data File: /chem/gcz.i/z111695.b/zr1353.d
Report Date: 18-Nov-1995 09:08

OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zr1353.d
Lab Smp Id:
Inj Date : 17-NOV-95 16:33
Operator : art Inst ID: gcz.i
Smp Info : n1p51711p,n1p517
Misc Info : n1p51711p,n1p517
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_db5.m
Meth Date : 18-Nov-1995 08:50 Quant Type: ESTD
Cal Date : 08-NOV-95 21:56 Cal File: zr1128.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
	2,4,5,6-Tetrachloro-m-xylene	5.487	5.504	-0.017	3463739	0.455	0.455(R)
2	Alpha-BHC	Compound Not Detected.					
3	Beta-BHC	Compound Not Detected.					
4	Gamma-BHC (Lindane)	7.457	7.431	0.026	57248	~~0.00568~~	~~0.00568~~
5	Delta-BHC	Compound Not Detected.					
6	Heptachlor	Compound Not Detected.					
7	Aldrin	Compound Not Detected.					
8	Heptachlor epoxide	Compound Not Detected.					
9	gamma-Chlordane	Compound Not Detected.					
10	Endosulfan I	Compound Not Detected.					
M 11	alpha-Chlordane	Compound Not Detected.					
12	4,4'-DDE	Compound Not Detected.					
13	Dieldrin	Compound Not Detected.					
14	Endrin	Compound Not Detected.					
15	Endosulfan II	Compound Not Detected.					
16	4,4'-DDD	Compound Not Detected.					
17	Endrin aldehyde	Compound Not Detected.					
18	Endosulfan sulfate	Compound Not Detected.					
19	4,4'-DDT	Compound Not Detected.					
20	Endrin ketone	Compound Not Detected.					
21	Methoxychlor	Compound Not Detected.					
22	Decachlorobiphenyl	22.631	22.691	-0.060	3558124	0.417	0.417(R)

Flag Legend

R - Spike/Surrogate failed recovery limits.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

0657 EPA SAMPLE NO.

CLJ78-RBMS

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0329PS

Sample wt/vol: 500 (g/mL) ML Lab File ID: ZF1348

% Moisture: N/A decanted: (Y/N) N Date Received: 11/14/95

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/17/95

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

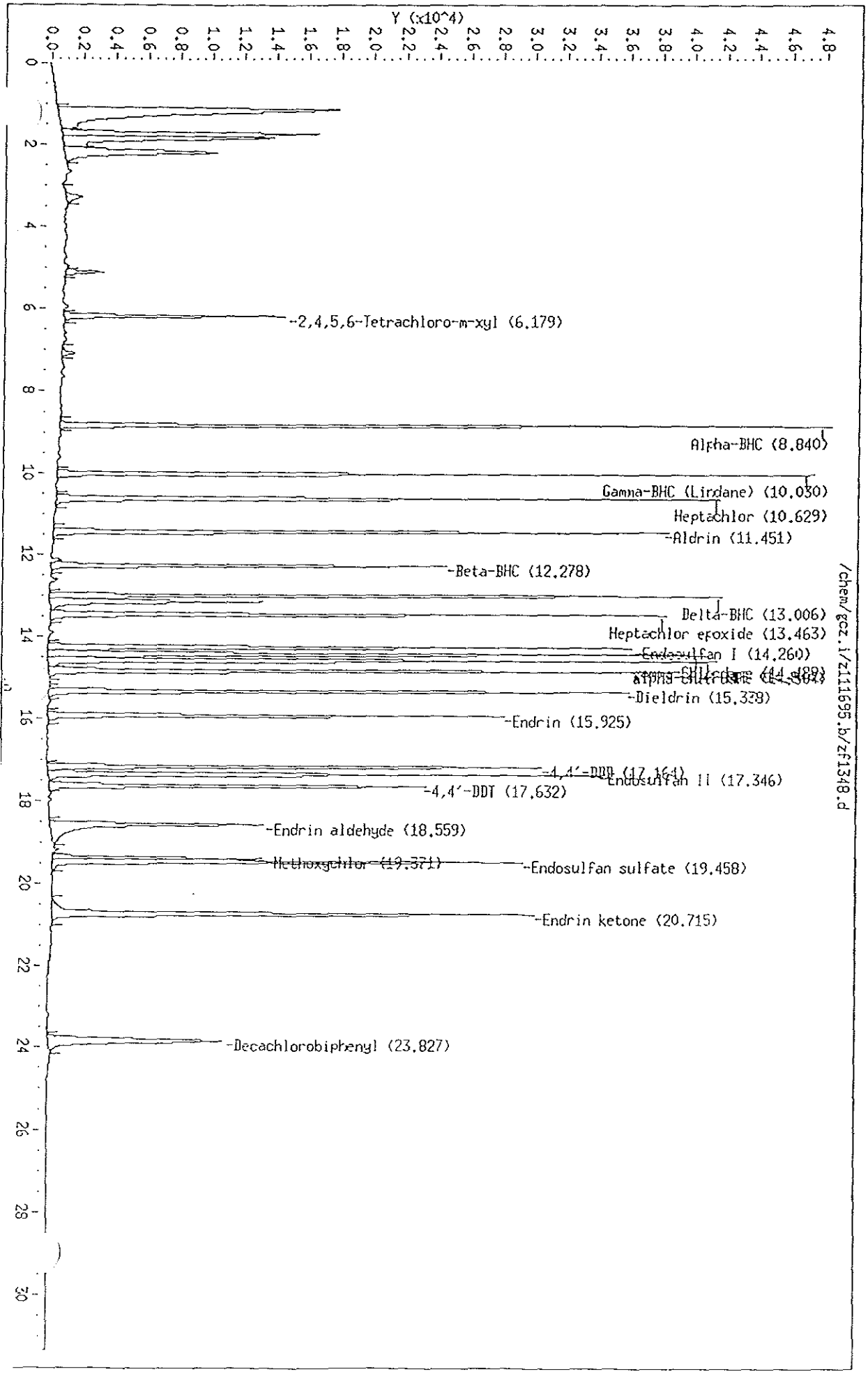
GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	1.9	
319-85-7	beta-BHC	2.0	
319-86-8	delta-BHC	1.9	
76-44-8	Heptachlor	1.9	
309-00-2	Aldrin	1.8	
1024-57-3	Heptachlor epoxide	2.0	
959-98-8	Endosulfan I	2.0	
60-57-1	Dieldrin	1.8	
72-55-9	4,4'-DDE	2.0	
72-20-8	Endrin	1.9	
33213-65-9	Endosulfan II	2.1	
72-54-8	4,4'-DDD	2.0	
1031-07-8	Endosulfan sulfate	2.1	
50-29-3	4,4'-DDT	1.5	
72-43-5	Methoxychlor	1.9	
53494-70-5	Endrin ketone	2.4	
7421-93-4	Endrin aldehyde	1.6	
8001-35-2	Toxaphene	4.0	U
12674-11-2	Aroclor-1016	2.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	2.0	U
53469-21-9	Aroclor-1242	2.0	U
12672-29-6	Aroclor-1248	2.0	U
11097-69-1	Aroclor-1254	2.0	U
11096-82-5	Aroclor-1260	2.0	U
58-89-9	Gamma-BHC (Lindane)	1.9	
57-74-9	Chlordane	4.1	

Data File: /chem/gcz.i/z111695.b/zf1348.d
Date : 17-NOV-95 17:08
Client ID:
Sample Info: jp0329ps,n1p5171

Column phase: DB-1701

Instrument: gcz.i
Operator: art
Column diameter: 0.53



Data File: /chem/gcz.i/z111695.b/zf1348.d
Report Date: 18-Nov-1995 09:04

OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zf1348.d
Lab Smp Id:
Inj Date : 17-NOV-95 17:08
Operator : art Inst ID: gcz.i
Smp Info : jp0329ps,n1p5171
Misc Info : jp0329ps,n1p51711,g2,1,10
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_1701.m
Meth Date : 18-Nov-1995 08:49 Quant Type: ESTD
Cal Date : 08-NOV-95 21:21 Cal File: zf1127.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
	2,4,5,6-Tetrachloro-m-xylene	6.179	6.216	-0.037	275527	0.0395	0.0395(R)
	Alpha-BHC	8.840	8.850	-0.010	845744	0.0927	0.0927
3	Gamma-BHC (Lindane)	10.030	10.068	-0.038	842526	0.0961	0.0961
4	Heptachlor	10.629	10.669	-0.040	831445	0.0966	0.0966
5	Aldrin	11.451	11.490	-0.039	740096	0.0897	0.0897
6	Beta-BHC	12.278	12.315	-0.037	461666	0.101	0.101
7	Delta-BHC	13.006	13.043	-0.037	754236	0.0972	0.0972
8	Heptachlor epoxide	13.463	13.502	-0.039	778102	0.101	0.101
9	Endosulfan I	14.260	14.298	-0.038	743139	0.102	0.102
10	gamma-Chlordane	14.429	14.467	-0.038	849048	0.100	0.100
11	alpha-Chlordane	14.584	14.622	-0.038	877659	0.106	0.106
12	4,4'-DDE	14.844	14.881	-0.037	791321	0.0992	0.0992
13	Dieldrin	15.338	15.376	-0.038	719567	0.0879	0.0879
14	Endrin	15.925	15.962	-0.037	581390	0.0936	0.0936
15	4,4'-DDD	17.164	17.201	-0.037	594951	0.0999	0.0999
16	Endosulfan II	17.346	17.384	-0.038	725886	0.103	0.103
17	4,4'-DDT	17.632	17.670	-0.038	470263	0.0763	0.0763
18	Endrin aldehyde	18.559	18.595	-0.036	427476	0.0807	0.0807
19	Methoxychlor	19.371	19.411	-0.040	236215	0.0949	0.0949
20	Endosulfan sulfate	19.458	19.497	-0.039	664389	0.106	0.106
21	Endrin ketone	20.715	20.760	-0.045	781957	0.122	0.122
22	Decachlorobiphenyl	23.827	23.887	-0.060	417093	0.0489	0.0489(R)
23	Chlordane				1726707		

GC
11/14/95

Flag Legend

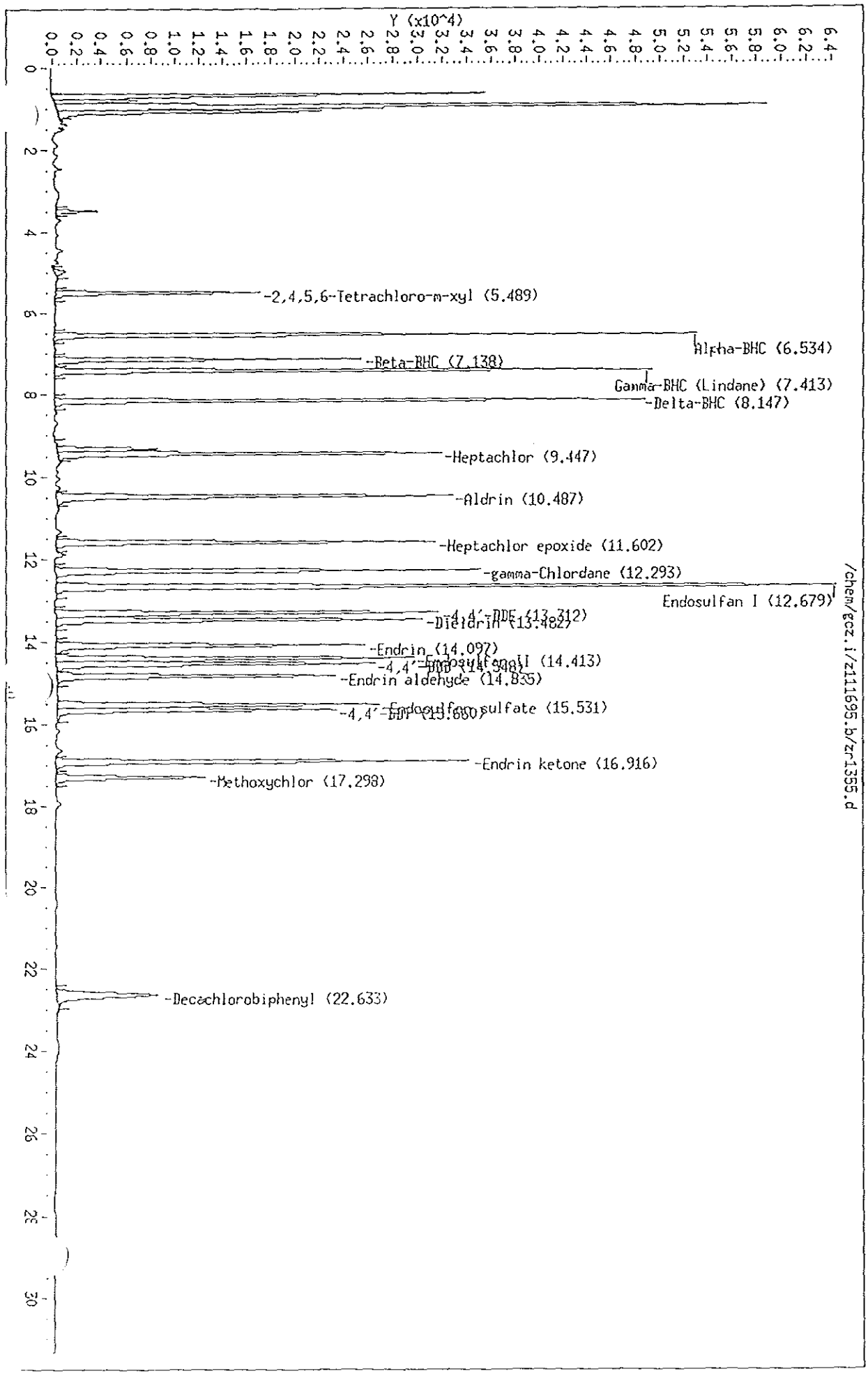
R - Spike/Surrogate failed recovery limits.

Data File: /chem/gcz.i/z111695.b/zr1355.d
Date : 17-NOV-95 17:43
Client ID:
Sample Info: jp0329ps,n1p5171

Column phase: DB-5

Instrument: gcz.i

Operator: art
Column diameter: 0.53



Data File: /chem/gcz.i/z111695.b/zr1355.d
Report Date: 18-Nov-1995 09:08

OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zr1355.d
Lab Smp Id:
Inj Date : 17-NOV-95 17:43
Operator : art Inst ID: gcz.i
Smp Info : jp0329ps,n1p5171
Misc Info : jp0329ps,n1p5171
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_db5.m
Meth Date : 18-Nov-1995 08:50 Quant Type: ESTD
Cal Date : 08-NOV-95 21:56 Cal File: zr1128.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

		Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
$		2,4,5,6-Tetrachloro-m-xylene	5.489	5.504	-0.015	334777	0.0440	0.0440(R)
	2	Alpha-BHC	6.534	6.551	-0.017	1019390	0.0948	0.0948
	3	Beta-BHC	7.138	7.154	-0.016	521626	0.0998	0.0998
	4	Gamma-BHC (Lindane)	7.413	7.431	-0.018	988696	0.0981	0.0981
	5	Delta-BHC	8.147	8.163	-0.016	956268	0.0972	0.0972
	6	Heptachlor	9.447	9.472	-0.025	770508	0.0930	0.0930
	7	Aldrin	10.487	10.512	-0.025	794287	0.0903	0.0903
	8	Heptachlor epoxide	11.602	11.630	-0.028	740994	0.0926	0.0926
	9	gamma-Chlordane	12.293	12.321	-0.028	874287	0.0946	0.0946
	10	Endosulfan I	12.679	12.706	-0.027	1686728	0.210	0.210
4	11	alpha-Chlordane				1686728	0.210	0.210
	12	4,4'-DDE	13.312	13.318	-0.006	740418	0.0916	0.0916
	13	Dieldrin	13.482	13.488	-0.006	739894	0.0826	0.0826
	14	Endrin	14.097	14.126	-0.029	648682	0.0978	0.0978
	15	Endosulfan II	14.413	14.443	-0.030	729195	0.102	0.102
	16	4,4'-DDD	14.548	14.576	-0.028	649190	0.0986	0.0986
	17	Endrin aldehyde	14.835	14.867	-0.032	599986	0.0943	0.0943
	18	Endosulfan sulfate	15.531	15.563	-0.032	662291	0.108	0.108
	19	4,4'-DDT	15.660	15.690	-0.030	593436	0.0937	0.0937
	20	Endrin ketone	16.916	16.947	-0.031	872955	0.110	0.110
	21	Methoxychlor	17.298	17.335	-0.037	328409	0.1000	0.1000
	22	Decachlorobiphenyl	22.633	22.691	-0.058	371565	0.0435	0.0435(R)

Flag Legend

- Spike/Surrogate failed recovery limits.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

0662 EPA SAMPLE NO.

CLJ78-RBMSD

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0329PR

Sample wt/vol: 500 (g/mL) ML Lab File ID: ZF1349

% Moisture: N/A decanted: (Y/N) N Date Received: 11/14/95

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/17/95

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	1.8	
319-85-7	beta-BHC	2.0	
319-86-8	delta-BHC	1.9	
76-44-8	Heptachlor	1.8	
309-00-2	Aldrin	1.6	
1024-57-3	Heptachlor epoxide	2.0	
959-98-8	Endosulfan I	2.0	
60-57-1	Dieldrin	1.7	
72-55-9	4,4'-DDE	1.9	
72-20-8	Endrin	1.8	
33213-65-9	Endosulfan II	2.1	
72-54-8	4,4'-DDD	2.0	
1031-07-8	Endosulfan sulfate	2.1	
50-29-3	4,4'-DDT	1.5	
72-43-5	Methoxychlor	2.0	
53494-70-5	Endrin ketone	2.2	
7421-93-4	Endrin aldehyde	1.6	
8001-35-2	Toxaphene	4.0	U
12674-11-2	Aroclor-1016	2.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	2.0	U
53469-21-9	Aroclor-1242	2.0	U
12672-29-6	Aroclor-1248	2.0	U
11097-69-1	Aroclor-1254	2.0	U
11096-82-5	Aroclor-1260	2.0	U
58-89-9	Gamma-BHC (Lindane)	1.9	
57-74-9	Chlordane	4.1	

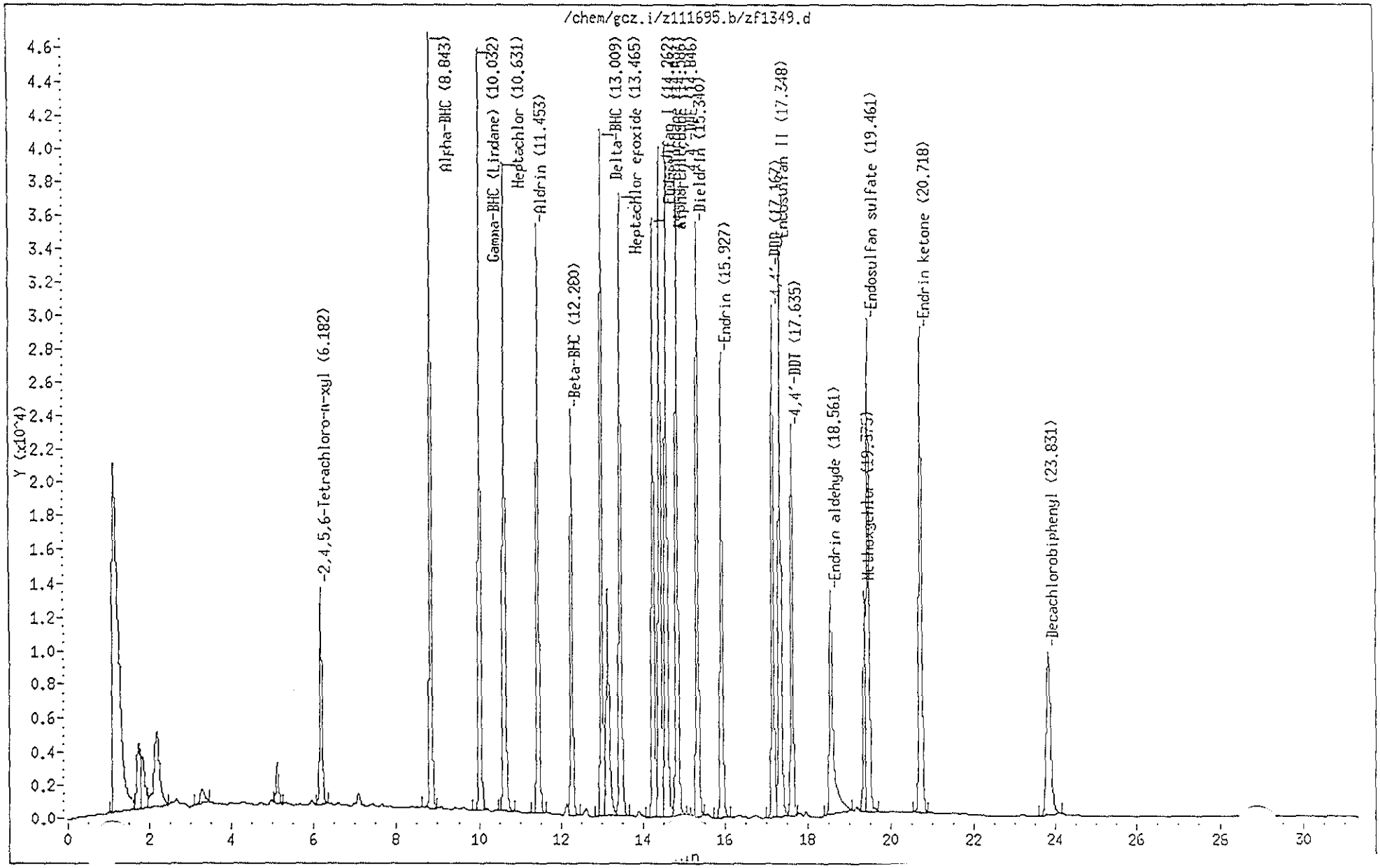
0663

Data File: /chem/gcz.i/z111695.b/zf1349.d
Date : 17-NOV-95 17:43
Client ID:
Sample Info: jp0329pr,n1p5171

Column phase: DB-1701

Instrument: gcz.i

Operator: art
Column diameter: 0.53



Data File: /chem/gcz.i/z111695.b/zf1349.d
Report Date: 18-Nov-1995 09:04

OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zf1349.d
Lab Smp Id:
Inj Date : 17-NOV-95 17:43
Operator : art Inst ID: gcz.i
Smp Info : jp0329pr,n1p5171
Misc Info : jp0329pr,n1p51711,g2,1,10
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_1701.m
Meth Date : 18-Nov-1995 08:49 Quant Type: ESTD
Cal Date : 08-NOV-95 21:21 Cal File: zf1127.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
S	2,4,5,6-Tetrachloro-m-xylene	6.182	6.216	-0.034	260102	0.0373	0.0373(R)
2	Alpha-BHC	8.843	8.850	-0.007	818143	0.0897	0.0897
3	Gamma-BHC (Lindane)	10.032	10.068	-0.036	818143	0.0933	0.0933
4	Heptachlor	10.631	10.669	-0.038	783575	0.0910	0.0910
5	Aldrin	11.453	11.490	-0.037	679447	0.0823	0.0823
6	Beta-BHC	12.280	12.315	-0.035	452450	0.0989	0.0989
7	Delta-BHC	13.009	13.043	-0.034	731740	0.0943	0.0943
8	Heptachlor epoxide	13.465	13.502	-0.037	760977	0.0987	0.0987
9	Endosulfan I	14.262	14.298	-0.036	726975	0.0994	0.0994
10	gamma-Chlordane	14.431	14.467	-0.036	822537	0.0974	0.0974
11	alpha-Chlordane	14.586	14.622	-0.036	853173	0.104	0.104
12	4,4'-DDE	14.846	14.881	-0.035	775365	0.0972	0.0972
13	Dieldrin	15.340	15.376	-0.036	704655	0.0861	0.0861
14	Endrin	15.927	15.962	-0.035	569942	0.0917	0.0917
15	4,4'-DDD	17.167	17.201	-0.034	598261	0.100	0.100
16	Endosulfan II	17.348	17.384	-0.036	723030	0.103	0.103
17	4,4'-DDT	17.635	17.670	-0.035	464595	0.0754	0.0754
18	Endrin aldehyde	18.561	18.595	-0.034	431408	0.0815	0.0815
19	Methoxychlor	19.375	19.411	-0.036	245725	0.0987	0.0987
20	Endosulfan sulfate	19.461	19.497	-0.036	664545	0.106	0.106
21	Endrin ketone	20.718	20.760	-0.042	712328	0.111	0.111
22	Decachlorobiphenyl	23.831	23.887	-0.056	378533	0.0444	0.0444(R)
23	Chlordane				1675710		

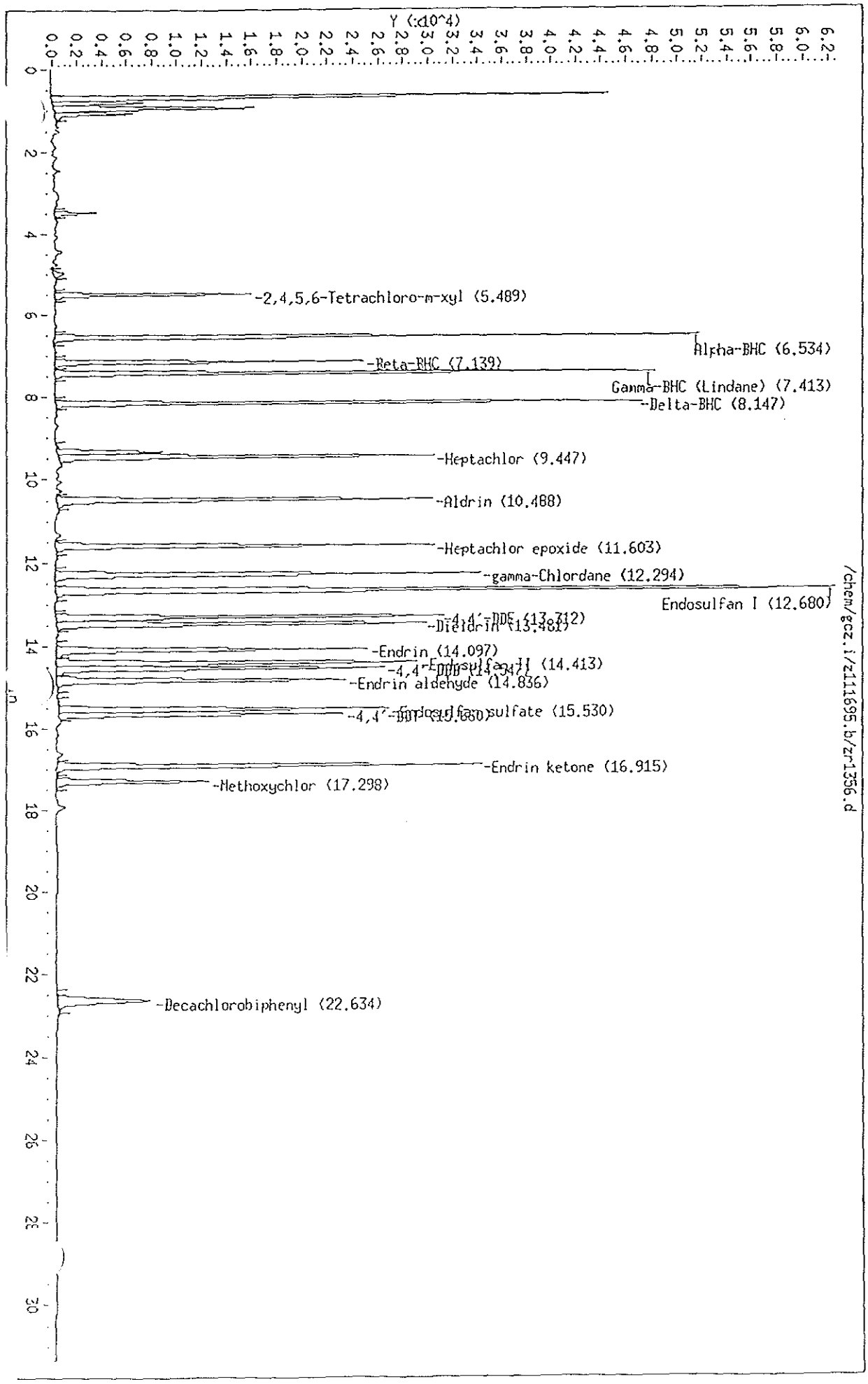
QC
11/16/95

Flag Legend

- Spike/Surrogate failed recovery limits.

Data File: /chem/gcz.i/z111695.b/zr1356.d
Date : 17-NOV-95 18:17
Client ID:
Sample Info: jp0329pr,n1p5171

Column phase: DB-5



/chem/gcz.i/z111695.b/zr1356.d

Instrument: gcz.i

Operator: art
Column diameter: 0.53

Data File: /chem/gcz.i/z111695.b/zr1356.d
Report Date: 18-Nov-1995 09:08

OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zr1356.d
Lab Smp Id:
Inj Date : 17-NOV-95 18:17
Operator : art Inst ID: gcz.i
Smp Info : jp0329pr,n1p5171
Misc Info : jp0329pr,n1p5171
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_db5.m
Meth Date : 18-Nov-1995 08:50 Quant Type: ESTD
Cal Date : 08-NOV-95 21:56 Cal File: zr1128.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
$	1,4,5,6-Tetrachloro-m-xylene	5.489	5.504	-0.015	312582	0.0411	0.0411(R)
2	Alpha-BHC	6.534	6.551	-0.017	986481	0.0918	0.0918
3	Beta-BHC	7.139	7.154	-0.015	511556	0.0979	0.0979
4	Gamma-BHC (Lindane)	7.413	7.431	-0.018	960329	0.0953	0.0953
5	Delta-BHC	8.147	8.163	-0.016	925606	0.0941	0.0941
6	Heptachlor	9.447	9.472	-0.025	726350	0.0877	0.0877
7	Aldrin	10.488	10.512	-0.024	731443	0.0832	0.0832
8	Heptachlor epoxide	11.603	11.630	-0.027	721431	0.0902	0.0902
9	gamma-Chlordane	12.294	12.321	-0.027	844887	0.0914	0.0914
10	Endosulfan I	12.680	12.706	-0.026	1643341	0.204	0.204
11	alpha-Chlordane				1643341	0.204	0.204
12	4,4'-DDE	13.312	13.318	-0.006	733309	0.0907	0.0907
13	Dieldrin	13.481	13.488	-0.007	720013	0.0803	0.0803
14	Endrin	14.097	14.126	-0.029	635852	0.0959	0.0959
15	Endosulfan II	14.413	14.443	-0.030	725033	0.101	0.101
16	4,4'-DDD	14.547	14.576	-0.029	652608	0.0992	0.0992
17	Endrin aldehyde	14.836	14.867	-0.031	610640	0.0960	0.0960
18	Endosulfan sulfate	15.530	15.563	-0.033	662957	0.108	0.108
19	4,4'-DDT	15.660	15.690	-0.030	576591	0.0910	0.0910
20	Endrin ketone	16.915	16.947	-0.032	874955	0.110	0.110
21	Methoxychlor	17.298	17.335	-0.037	330064	0.100	0.100
22	Decachlorobiphenyl	22.634	22.691	-0.057	335470	0.0393	0.0393(R)

Flag Legend

- Spike/Surrogate failed recovery limits.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

0667 EPA SAMPLE NO.

PSPK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: N1P51711PS

Sample wt/vol: 1000 (g/mL) ML Lab File ID: ZF1347

% Moisture: N/A decanted: (Y/N) N Date Received: 11/14/95

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 11/15/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/17/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

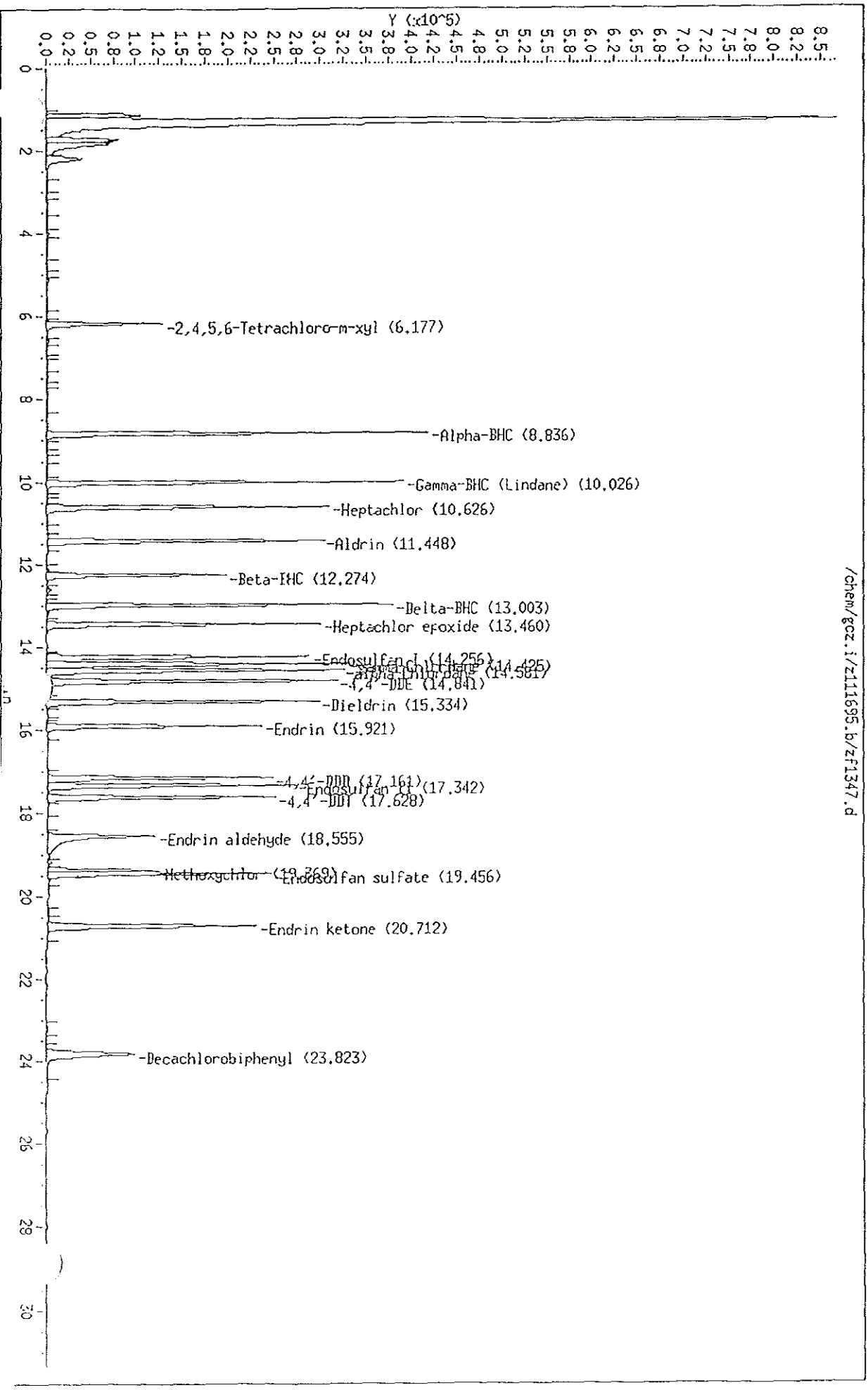
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	.96	
319-85-7	beta-BHC	.89	
319-86-8	delta-BHC	.98	
76-44-8	Heptachlor	.81	
309-00-2	Aldrin	.82	
1024-57-3	Heptachlor epoxide	.88	
959-98-8	Endosulfan I	.89	
60-57-1	Dieldrin	.83	
72-55-9	4,4'-DDE	.90	
72-20-8	Endrin	.88	
33213-65-9	Endosulfan II	.91	
72-54-8	4,4'-DDD	.91	
1031-07-8	Endosulfan sulfate	.98	
50-29-3	4,4'-DDT	.93	
72-43-5	Methoxychlor	.89	
53494-70-5	Endrin ketone	.99	
7421-93-4	Endrin aldehyde	.84	
8001-35-2	Toxaphene	.20	U
12674-11-2	Aroclor-1016	.10	U
11104-28-2	Aroclor-1221	.10	U
11141-16-5	Aroclor-1232	.10	U
53469-21-9	Aroclor-1242	.10	U
12672-29-6	Aroclor-1248	.10	U
11097-69-1	Aroclor-1254	.10	U
11096-82-5	Aroclor-1260	.10	U
58-89-9	Gamma-BHC (Lindane)	.93	
57-74-9	Chlordane	1.8	

Data File: /chem/gcz.i/z111695.b/zf1347.d
Date : 17-NOV-95 16:33
Client ID:
Sample Info: n1p51711ps,n1p51

Column phase: DB-1701

Instrument: gcz.i
Operator: art
Column diameter: 0.53



Data File: /chem/gcz.i/z111695.b/zf1347.d
Report Date: 18-Nov-1995 09:03

OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zf1347.d
Lab Smp Id:
Inj Date : 17-NOV-95 16:33
Operator : art Inst ID: gcz.i
Smp Info : n1p51711ps,n1p51
Misc Info : n1p51711ps,n1p51711,g2,1,1
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_1701.m
Meth Date : 18-Nov-1995 08:49 Quant Type: ESTD
Cal Date : 08-NOV-95 21:21 Cal File: zf1127.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
$	2,4,5,6-Tetrachloro-m-xylene	6.177	6.216	-0.039	2970360	0.426	0.426(R)
2	Alpha-BHC	8.836	8.850	-0.014	8796815	0.964	0.964
3	Gamma-BHC (Lindane)	10.026	10.068	-0.042	8161717	0.931	0.931
4	Heptachlor	10.626	10.669	-0.043	6984870	0.812	0.812
5	Aldrin	11.448	11.490	-0.042	6800904	0.824	0.824
6	Beta-BHC	12.274	12.315	-0.041	4090141	0.894	0.894
7	Delta-BHC	13.003	13.043	-0.040	7623901	0.982	0.982
8	Heptachlor epoxide	13.460	13.502	-0.042	6797406	0.882	0.882
9	Endosulfan I	14.256	14.298	-0.042	6530240	0.892	0.892
10	gamma-Chlordane	14.425	14.467	-0.042	7532161	0.892	0.892
11	alpha-Chlordane	14.581	14.622	-0.041	7636941	0.927	0.927
12	4,4'-DDE	14.841	14.881	-0.040	7186031	0.901	0.901
13	Dieldrin	15.334	15.376	-0.042	6808722	0.832	0.832
14	Endrin	15.921	15.962	-0.041	5443017	0.876	0.876
15	4,4'-DDD	17.161	17.201	-0.040	5443980	0.914	0.914
16	Endosulfan II	17.342	17.384	-0.042	6375625	0.907	0.907
17	4,4'-DDT	17.628	17.670	-0.042	5736955	0.931	0.931
18	Endrin aldehyde	18.555	18.595	-0.040	4447485	0.840	0.840
19	Methoxychlor	19.369	19.411	-0.042	2216769	0.890	0.890
20	Endosulfan sulfate	19.456	19.497	-0.041	6122114	0.978	0.978
21	Endrin ketone	20.712	20.760	-0.048	6351022	0.989	0.989
22	Decachlorobiphenyl	23.823	23.887	-0.064	3953433	0.463	0.463(R)
23	Chlordane				15169103		

ak 11/20/95

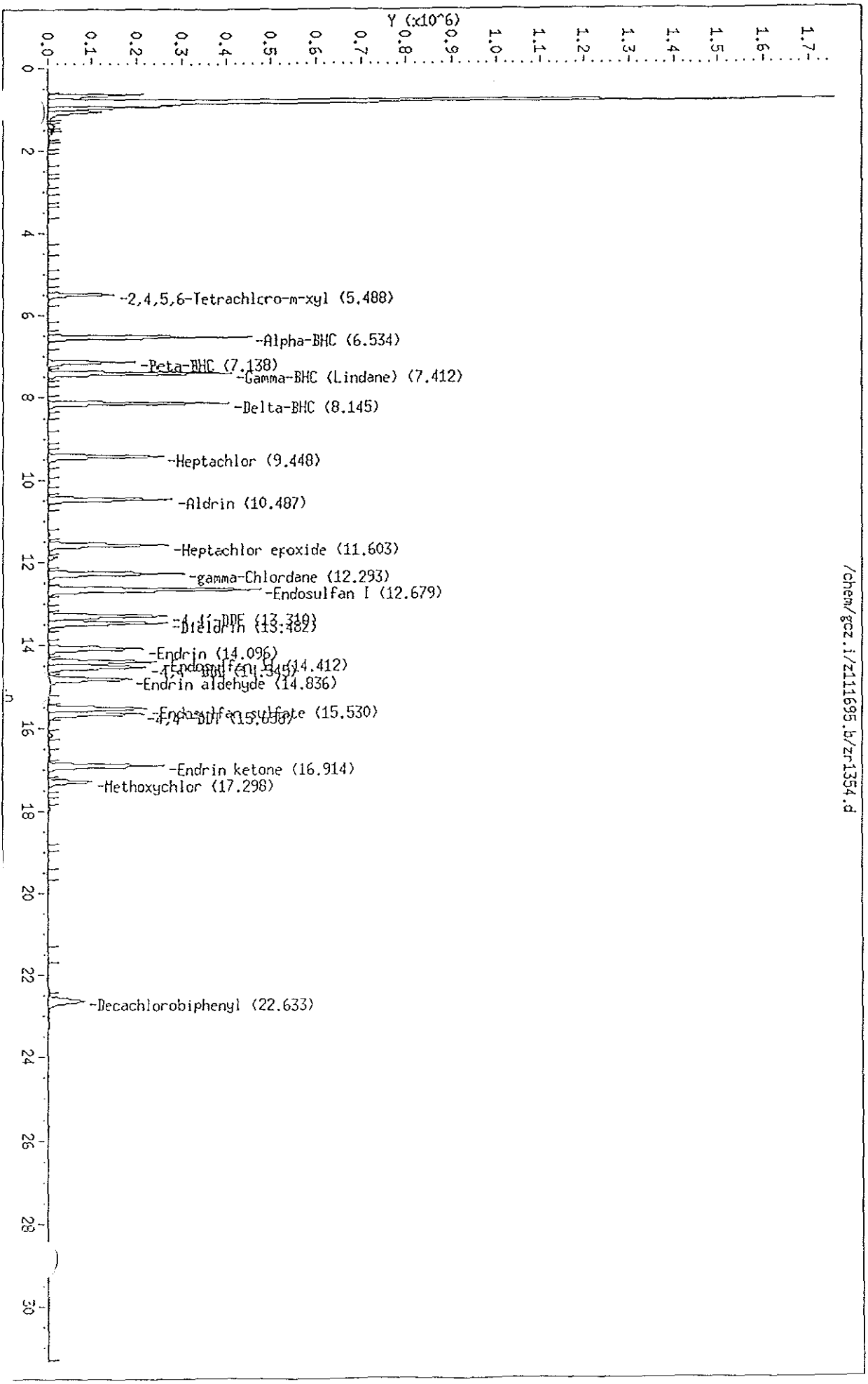
) lag Legend

? - Spike/Surrogate failed recovery limits.

Data File: /chem/gcz.i/z111695.b/zr1354.d
Date : 17-NOV-95 17:08
Client ID:
Sample Info: n1p51711ps,n1p51

Column phase: DB-5

Instrument: gcz.i
Operator: art
Column diameter: 0.53



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Data File: /chem/gcz.i/z111695.b/zr1354.d
Report Date: 18-Nov-1995 09:08

OHM Analytical Division

Data file : /chem/gcz.i/z111695.b/zr1354.d
Lab Smp Id:
Inj Date : 17-NOV-95 17:08
Operator : art Inst ID: gcz.i
Smp Info : n1p51711ps,n1p51
Misc Info : n1p51711ps,n1p51
Comment :
Method : /chem/gcz.i/z111695.b/110895_8080_db5.m
Meth Date : 18-Nov-1995 08:50 Quant Type: ESTD
Cal Date : 08-NOV-95 21:56 Cal File: zr1128.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
	2,4,5,6-Tetrachloro-m-xylene	5.488	5.504	-0.016	3308644	0.435	0.435(R)
2	Alpha-BHC	6.534	6.551	-0.017	10196418	0.948	0.948
3	Beta-BHC	7.138	7.154	-0.016	4594059	0.879	0.879
4	Gamma-BHC (Lindane)	7.412	7.431	-0.019	9420173	0.934	0.934
5	Delta-BHC	8.145	8.163	-0.018	9273965	0.943	0.943
6	Heptachlor	9.448	9.472	-0.024	6809290	0.822	0.822
7	Aldrin	10.487	10.512	-0.025	7325021	0.833	0.833
8	Heptachlor epoxide	11.603	11.630	-0.027	7200176	0.900	0.900
9	gamma-Chlordane	12.293	12.321	-0.028	8383931	0.907	0.907
10	Endosulfan I	12.679	12.706	-0.027	13818301	1.72	1.72
M 11	alpha-Chlordane				13818301	1.72	1.72
12	4,4'-DDE	13.310	13.318	-0.008	7195816	0.890	0.890
13	Dieldrin	13.482	13.488	-0.006	7465323	0.833	0.833
14	Endrin	14.096	14.126	-0.030	6114491	0.922	0.922
15	Endosulfan II	14.412	14.443	-0.031	6714127	0.940	0.940
16	4,4'-DDD	14.545	14.576	-0.031	6225638	0.946	0.946
17	Endrin aldehyde	14.836	14.867	-0.031	5491379	0.863	0.863
18	Endosulfan sulfate	15.530	15.563	-0.033	6080653	0.993	0.993
19	4,4'-DDT	15.658	15.690	-0.032	6159808	0.972	0.972
20	Endrin ketone	16.914	16.947	-0.033	7496422	0.941	0.941
21	Methoxychlor	17.298	17.335	-0.037	2920064	0.889	0.889
22	Decachlorobiphenyl	22.633	22.691	-0.058	4911333	0.575	0.575(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ORGANICS

Soil Total Petroleum Hydrocarbons by IR

3C (IR)
SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

0673

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

) Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix Spike - EPA Sample No.: CLJ78TW01D Level: (low/med) ____

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
Petroleum Hydrocarbons (	80000	2100	87000	106	30-130

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Petroleum Hydrocarbons (	82000	88000	105	1	20	30-130

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

* Values outside of QC limits

RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

COMMENTS: _____

)

3C (IR)
SOIL SEMIVOLATILE BLANK SPIKE RECOVERY

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix Spike - EPA Sample No.: TSPK01

COMPOUND	SPIKE ADDED (ug/Kg)	BLANK CONCENTRATION (ug/Kg)	BS CONCENTRATION (ug/Kg)	BS % REC #	QC LIMITS REC.
Petroleum Hydrocarbons ( )	67000	0	70000	104	30-130

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

* Values outside of QC limits

Spike Recovery: 0 out of 1 outside limits

MENTS:

4B (GC)
SEMIVOLATILE METHOD BLANK SUMMARY

0675 EPA SAMPLE NO.

TBLK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Lab File ID: IR8011 Lab Sample ID: N2T51714T

Instrument ID: ~~PK~~ FTIR Date Extracted: 11/15/95

Matrix: (soil/water) SOIL Date Analyzed: 11/15/95

Level: (low/med) _____ Time Analyzed: 18:10

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	CLJ78TW001	JP0318T	IR8015	11/15/95
02	CLJ78TW01D	JP0319T	IR8016	11/15/95
03	CLJ78TW002	JP0320T	IR8017	11/15/95
04	CLJ78TW003	JP0321T	IR8018	11/15/95
05	CLJ78TW004	JP0322T	IR8019	11/15/95
06	CLJ78TW01DMSD	JP0319TR	IR8014	11/15/95
07	TSPK01	N2T51714TS	IR8012	11/15/95
08	CLJ78TW01DMS	JP0319TS	IR8013	11/15/95

COMMENTS:

1B (GC)
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

0676 EPA SAMPLE NO.

CLJ78TW001

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: JP0318T

Sample wt/vol: 30.7 (g/mL) G Lab File ID: IR8015

Level: (low/med) Date Received: 11/14/95

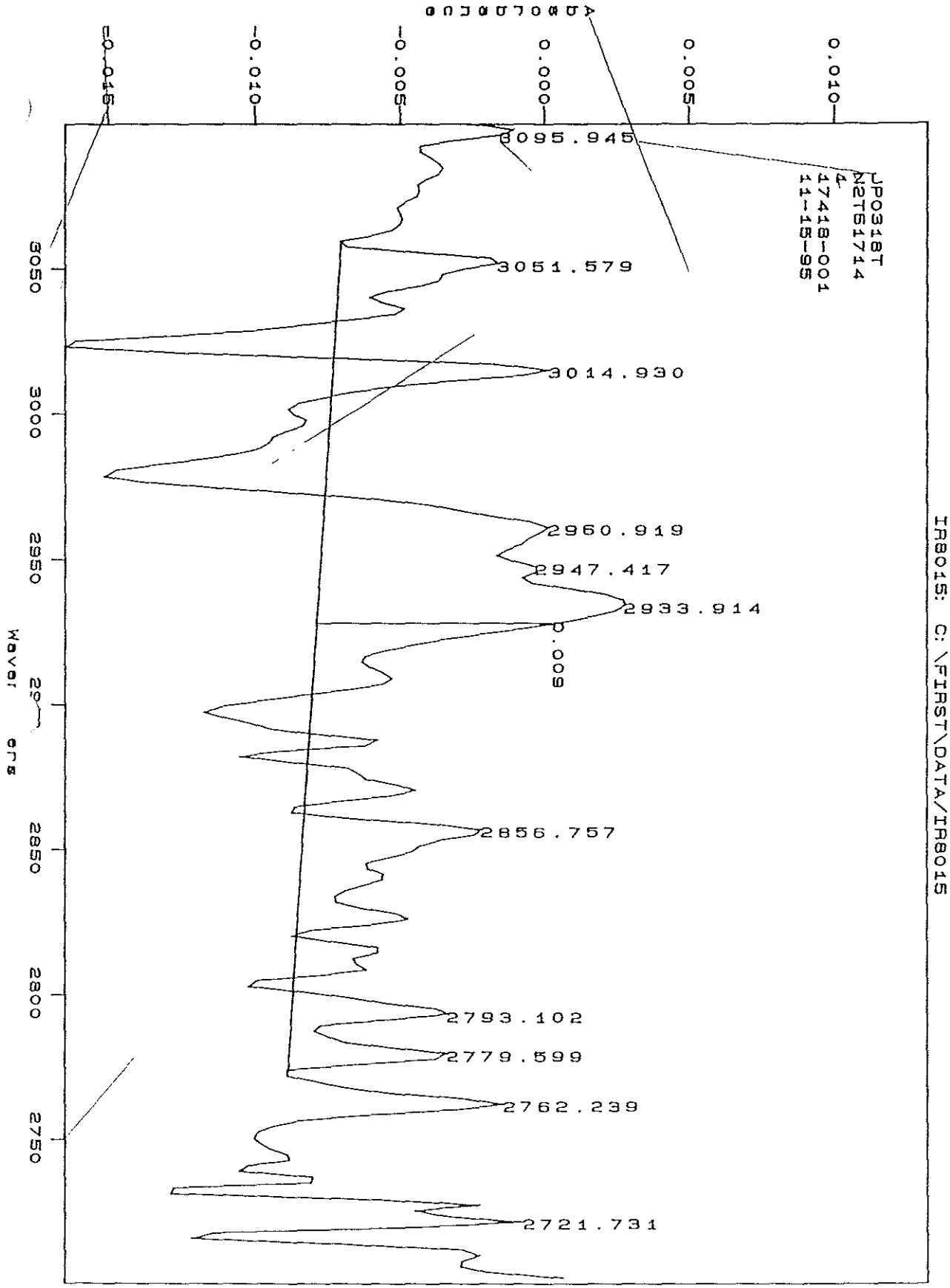
% Moisture: 26 decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 200000 (uL) Date Analyzed: 11/15/95

Injection Volume: (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ~~0.0~~ N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	Petroleum Hydrocarbons (IR)	4300	J


LP0318T
N2T51714
4
17418-001
11-15-95
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2947.417
2933.914
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2793.102
2779.599
2762.239
2721.731
0.009
3050
3000
2950
2900
2850
2800
2750
Wavenumbers

1B (GC)
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

0678 EPA SAMPLE NO.

CLJ78TW002

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: JP0320T

Sample wt/vol: 30.3 (g/mL) G Lab File ID: IR8017

Level: (low/med) ____ Date Received: 11/14/95

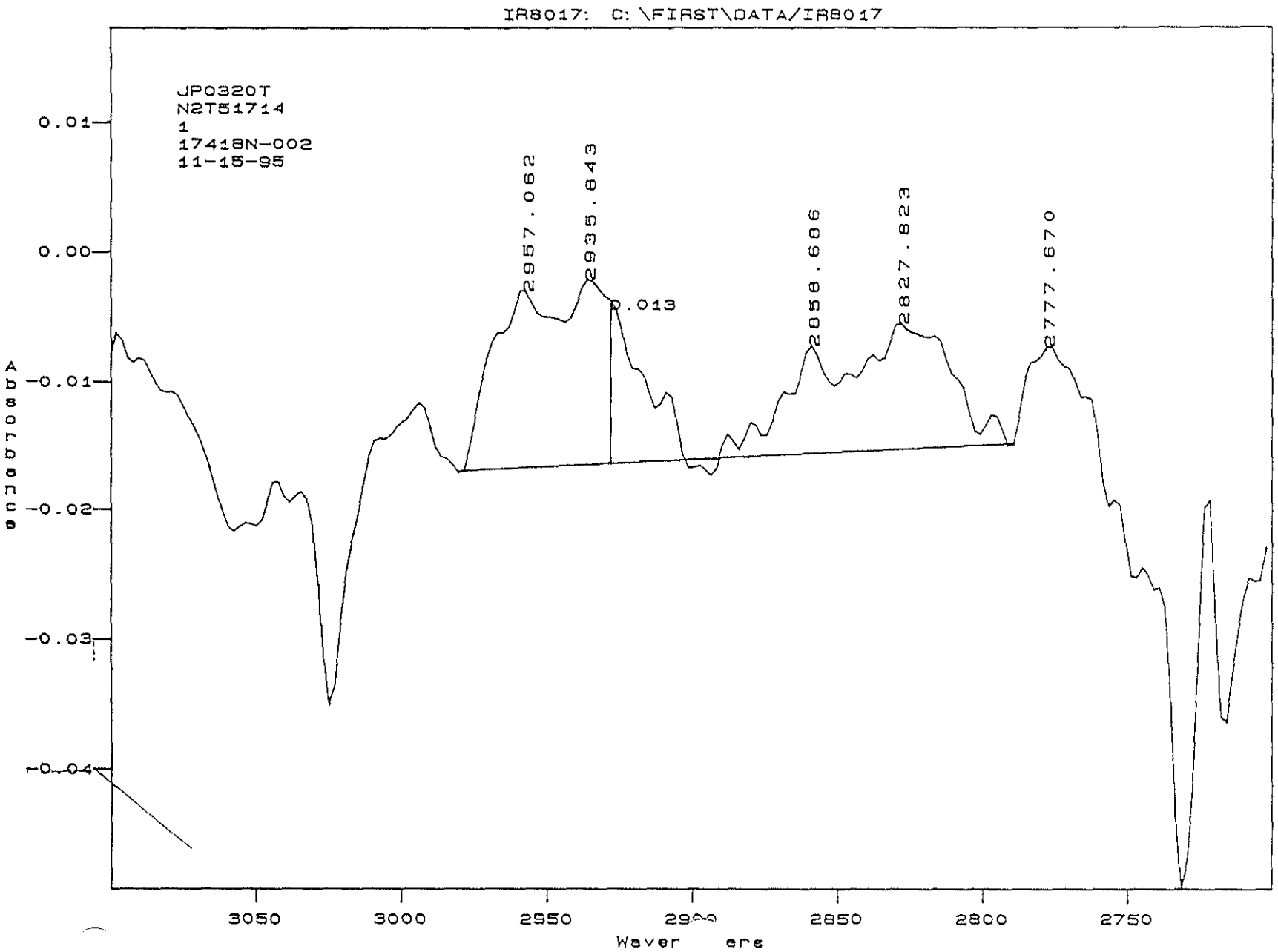
% Moisture: 19 decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 200000 (uL) Date Analyzed: 11/15/95

Injection Volume: ____ (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ~~0.0~~ N/A

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	Petroleum Hydrocarbons (IR)	5700	J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17418N-002
11-15-95
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0.00
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-0.02
-0.03
-0.04
Absorbance
3050
3000
2950
2850
2800
2750
Wavenumbers

1B (GC)
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

0680 EPA SAMPLE NO.

CLJ78TW003

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: JP0321T

Sample wt/vol: 30.3 (g/mL) G Lab File ID: IR8018

Level: (low/med) Date Received: 11/14/95

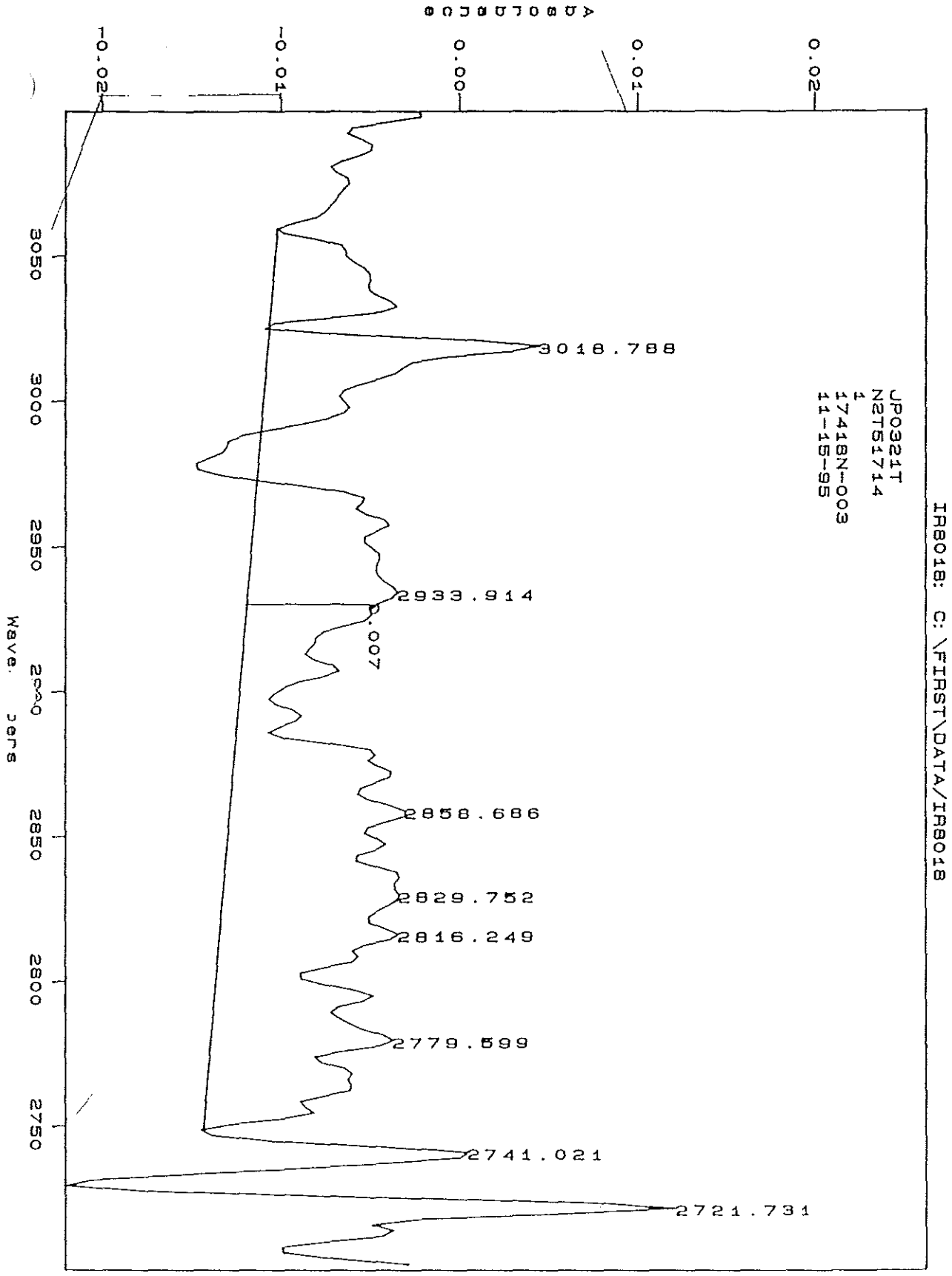
% Moisture: 14 decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 200000 (uL) Date Analyzed: 11/15/95

Injection Volume: (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ~~0.0~~ NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	Petroleum Hydrocarbons (IR)	2900	J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0.01
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N2T51714
1
17418N-003
11-15-95
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1B (GC) 0682 EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLJ78TW004

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

) Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: JP0322T

Sample wt/vol: 30.8 (g/mL) G Lab File ID: IR8019

Level: (low/med) _____ Date Received: 11/14/95

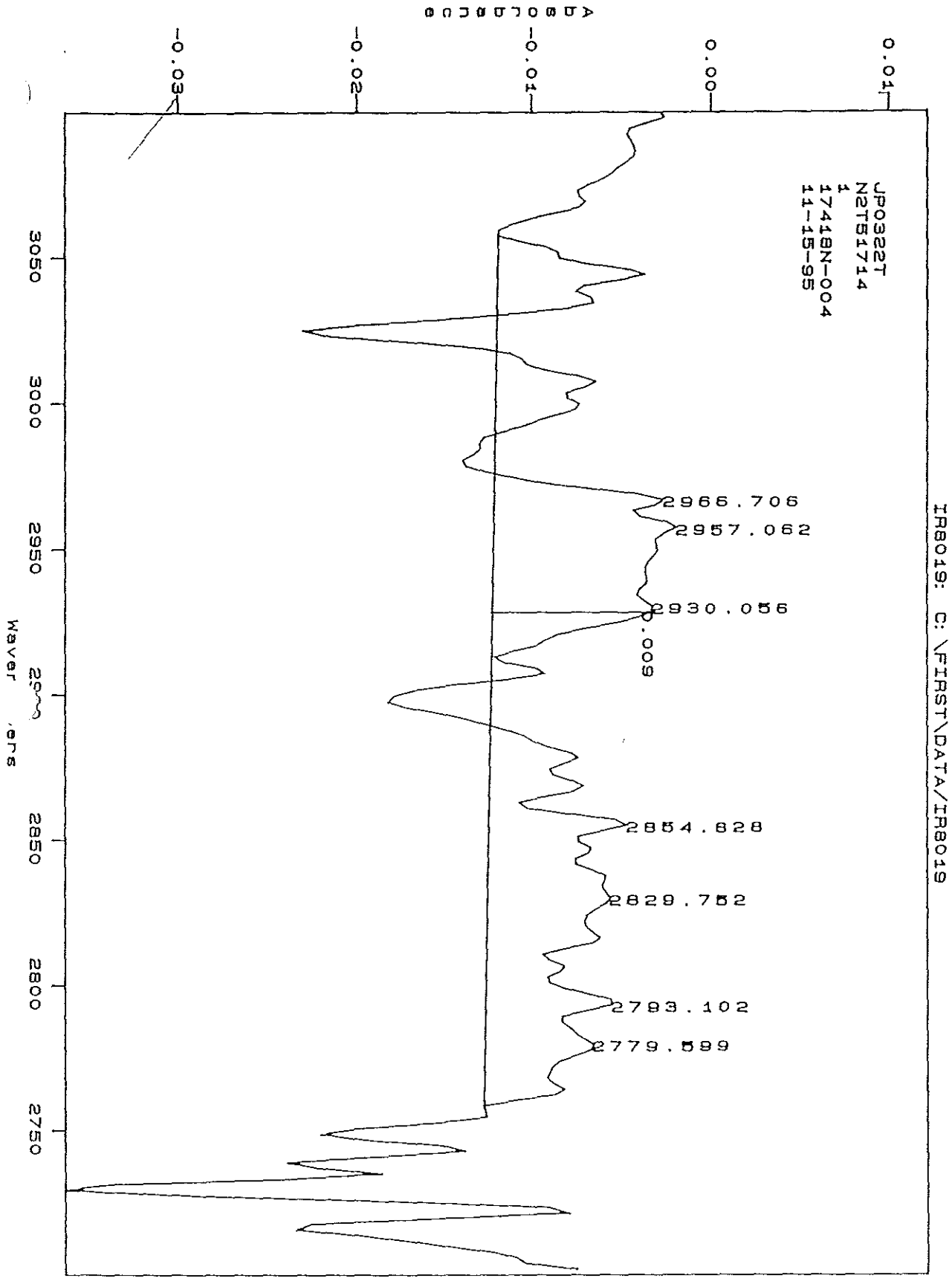
% Moisture: 16 decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 200000 (uL) Date Analyzed: 11/15/95

Injection Volume: _____ (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ~~0.0~~ NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	Petroleum Hydrocarbons (IR)	3800	J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N2T51714
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17418N-004
11-15-95
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0.00
-0.01
-0.02
-0.03
3050
3000
2950
2850
2800
2750
Wave

1B (GC)
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

0684 EPA SAMPLE NO.

CLJ78TW01D

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: JP0319T

Sample wt/vol: 30.9 (g/mL) G Lab File ID: IR8016

Level: (low/med) Date Received: 11/14/95

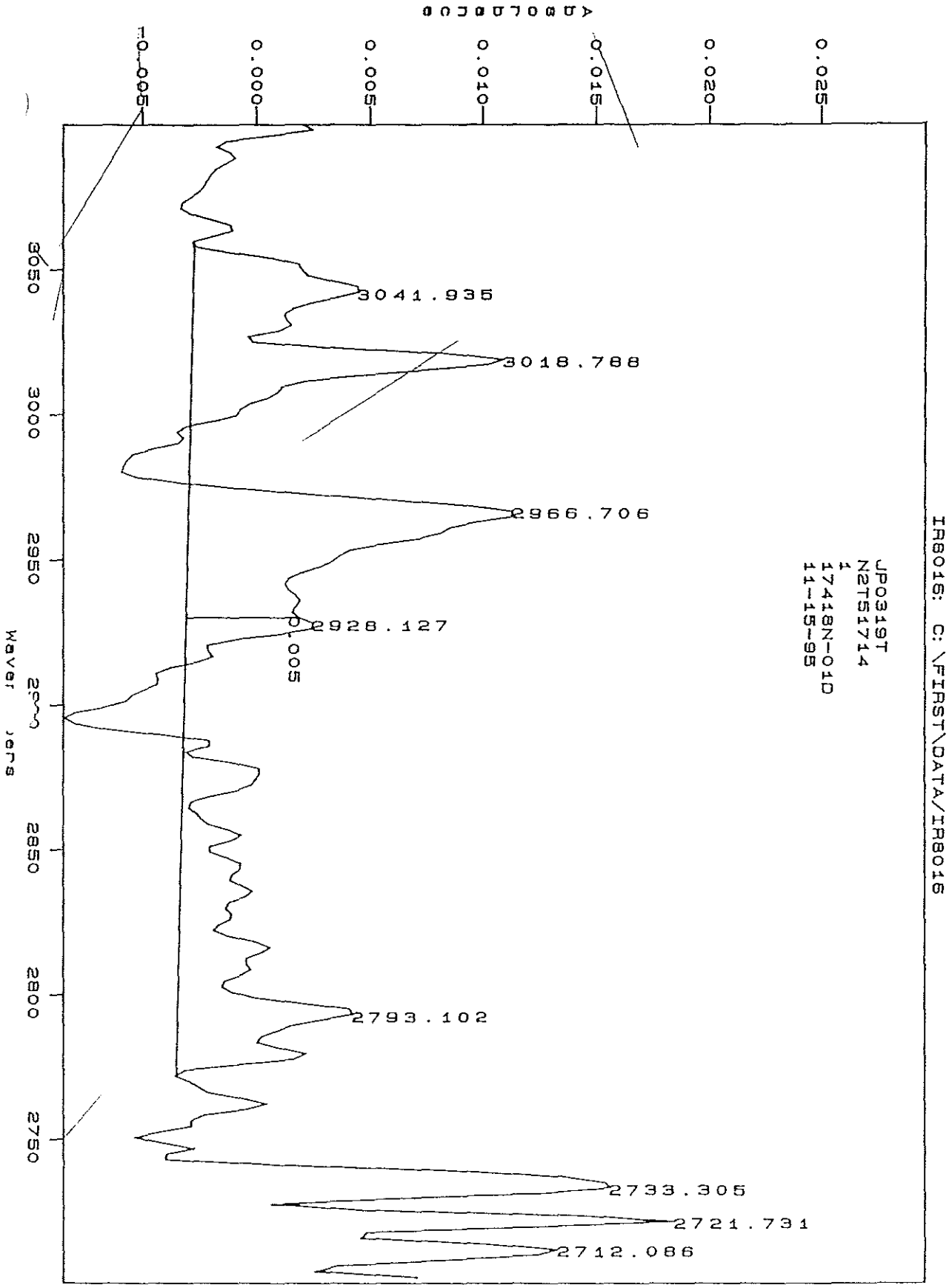
% Moisture: 18 decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 200000 (uL) Date Analyzed: 11/15/95

Injection Volume: (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ~~0.0~~ N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	Petroleum Hydrocarbons (IR)	2100	J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11-15-95
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Wavenumbers
3050
3000
2950
2850
2800
2750
-0.005
0.000
0.005
0.010
0.015
0.020
0.025
Absorbance

Initial C tion Data

Curve ID: Pxvo13A# Units: ug/ml

Compound	TV	STD # 1 1.31	STD # 2 5.05	STD # 3 10.1	STD # 4 15.2	STD # 5 30.3	AVG RF	CORR1	SLOPE	Y-INT	% RSD	Type
Petroleum Hydrocarbons (IR)	RF	.0229	.0198	.0193	.0184	.0186	.0198	1.00	54.6	-.346	9.26	R
	CV	1.29	5.11	10.3	14.9	30.4						

TV = True Value, RF = Response Factor, CV = Calc Value

Continuing Calibration Check

0687

Curve ID: IR0807# Units: ug/ml Check Std. Date 95/11/15

Pnum	Compound	Cont. RF	Avg. RF	% Diff	True Conc	Calc Conc	% Recov	Type	
F	troleum Hydrocarbons (IR)	.0180	.0187	3.57	10.6	10.2	96.4	R	Run #8010
6	troleum Hydrocarbons (IR)	.0181	.0187	3.07	10.6	10.3	96.9	R	Run #8020
B011	Petroleum Hydrocarbons (IR)	.0180	.0187	3.57	10.6	10.2	96.4	R	Run # 8031
B011	Petroleum Hydrocarbons (IR)	.0182	.0187	2.56	10.6	10.3	97.4	R	Run # 8040

1B (GC)
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

0688 EPA SAMPLE NO.

TBLK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: N2T51714T

Sample wt/vol: 30.0 (g/mL) G Lab File ID: IR8011

Level: (low/med) Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/15/95

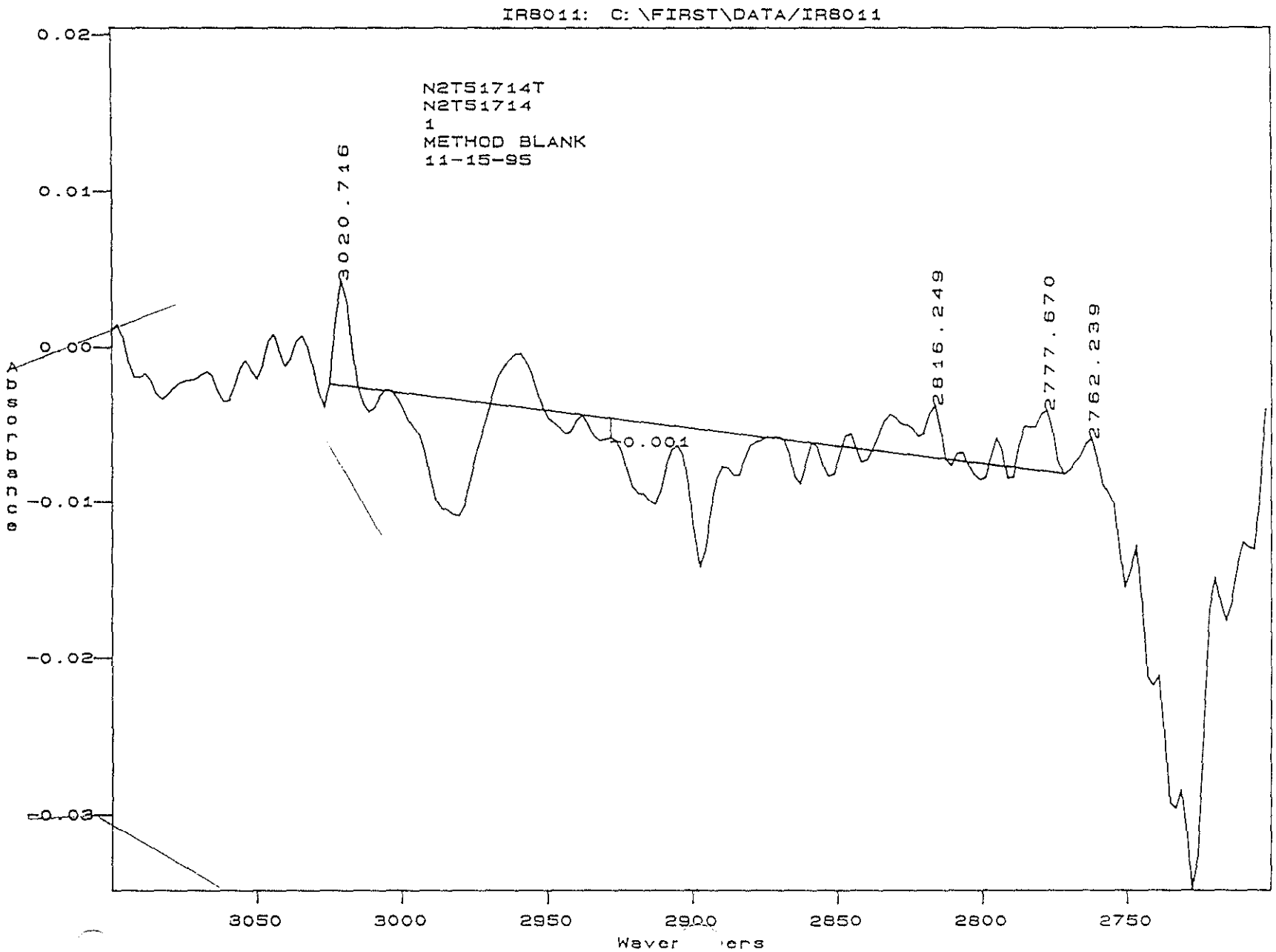
Concentrated Extract Volume: 200000 (uL) Date Analyzed: 11/15/95

Injection Volume: (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	Petroleum Hydrocarbons (IR)	6700	U

0689


IR8011: C:\FIRST\DATA/IR8011
N2T51714T
N2T51714
1
METHOD BLANK
11-15-95
3020.716
2816.249
2777.670
2762.239
-0.001
0.02
0.01
0.00
-0.01
-0.02
-0.03
Absorbance
3050
3000
2950
2900
2850
2800
2750
Wavenumbers

1B (GC) 0690 EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLJ78TW01DMS

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: JP0319TS

Sample wt/vol: 30.7 (g/mL) G Lab File ID: IR8013

Level: (low/med) Date Received: 11/14/95

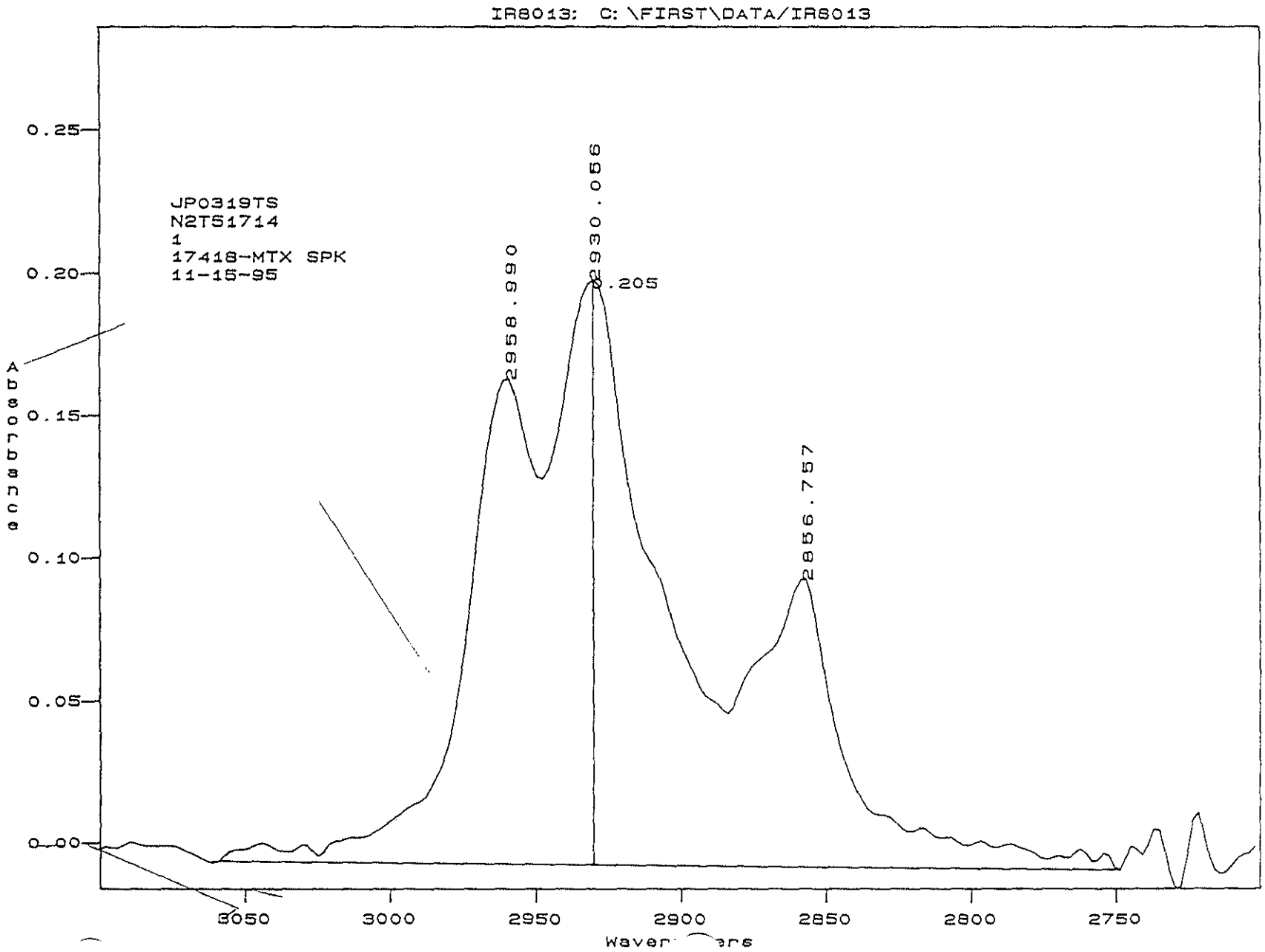
% Moisture: 18 decanted: (Y/N) N Date Extracted: 11/15/95

Concentrated Extract Volume: 200000 (uL) Date Analyzed: 11/15/95

Injection Volume: (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	Petroleum Hydrocarbons (IR)	87000	


IR8013: C:\FIRST\DATA/IR8013
JP0319TS
N2T51714
1
17418-MTX SPK
11-15-95
2958.990
2930.056
0.205
2856.757
Absorbance
0.25
0.20
0.15
0.10
0.05
0.00
3050
3000
2950
2900
2850
2800
2750

1B (GC) 0692 EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLJ78TW01DMSD

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: JP0319TR

Sample wt/vol: 30.1 (g/mL) G Lab File ID: IR8014

Level: (low/med) _____ Date Received: 11/14/95

% Moisture: 18 decanted: (Y/N) N Date Extracted: 11/15/95

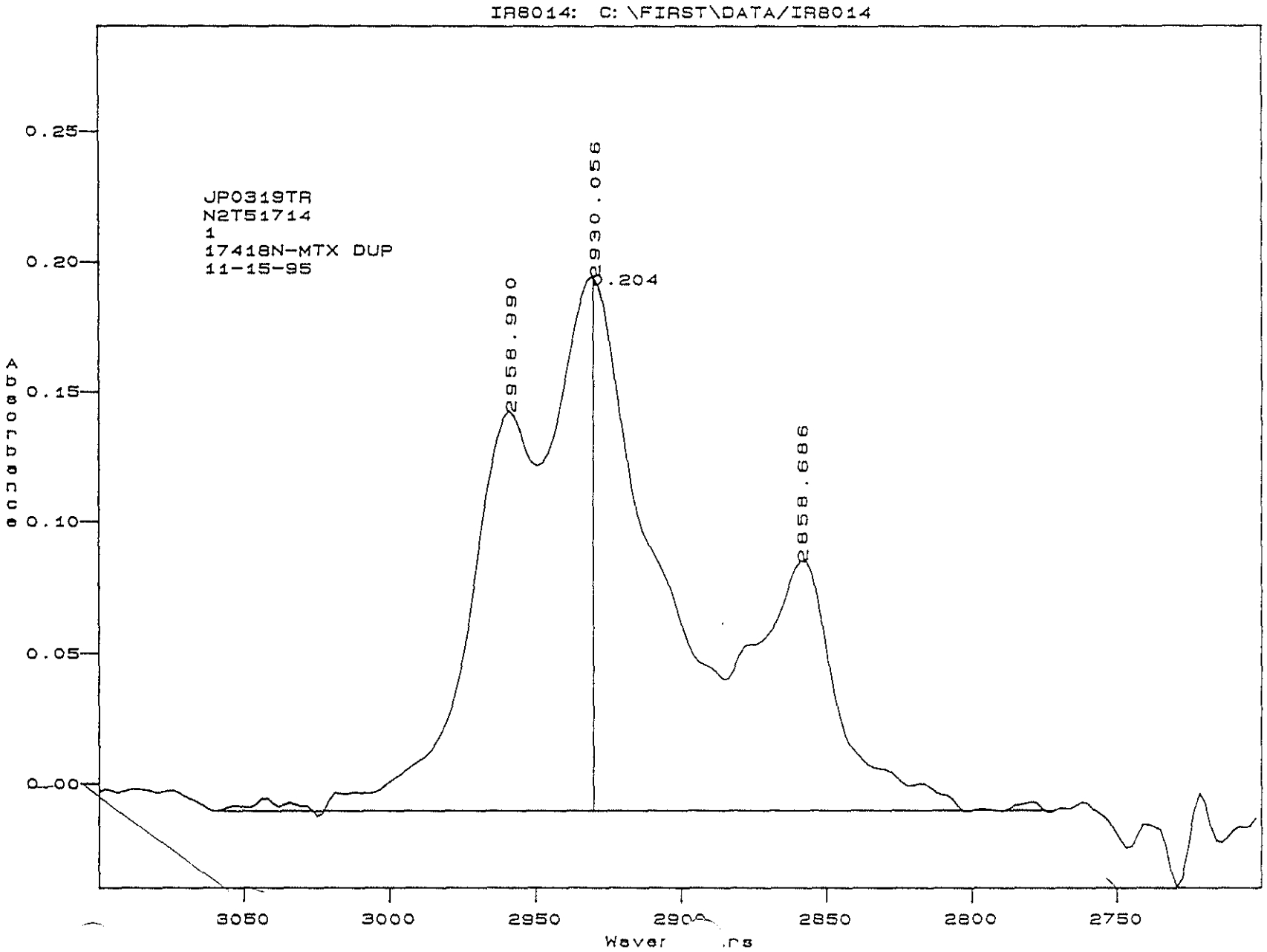
Concentrated Extract Volume: 200000 (uL) Date Analyzed: 11/16/95

Injection Volume: _____ (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) ___ pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	Petroleum Hydrocarbons (IR)	88000	

0693


IR8014: C:\FIRST\DATA/IR8014
JP0319TR
N2T51714
1
17418N-MTX DUP
11-15-95
2958.990
2930.056
.204
2858.686
0.25
0.20
0.15
0.10
0.05
0.00
3050
3000
2950
2850
2800
2750

1B (GC) 0694 EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TSPK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) SOIL Lab Sample ID: N2T51714TS

Sample wt/vol: 30.0 (g/mL) G Lab File ID: IR8012

Level: (low/med) ____ Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/15/95

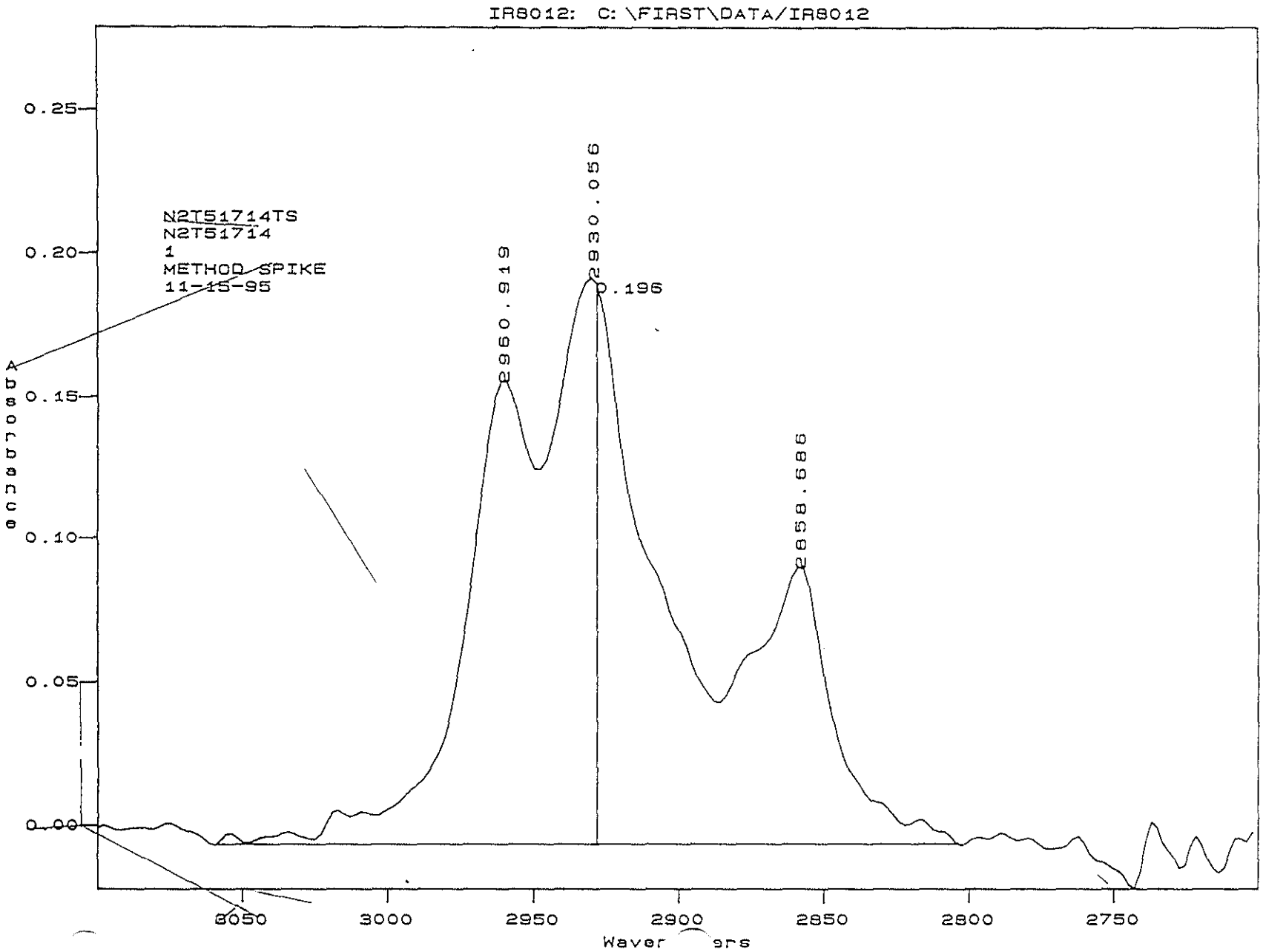
Concentrated Extract Volume: 200000 (uL) Date Analyzed: 11/15/95

Injection Volume: ____ (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	Petroleum Hydrocarbons (IR)	70000	

0695


IR8012: C:\FIRST\DATA/IR8012
N2T51714TS
N2T51714
1
METHOD SPIKE
11-15-95
2960.919
2930.056
0.196
2858.686
Absorbance
0.25
0.20
0.15
0.10
0.05
0.00
3050
3000
2950
2900
2850
2800
2750
Wavenumbers

ORGANICS

Water Total Petroleum Hydrocarbons by IR

3D (IR)
WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

0697

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

) Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix Spike - EPA Sample No.: CLJ78-RB

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
Petroleum Hydrocarbons (	4000	83	3800	93	30-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Petroleum Hydrocarbons (	4000	3600	88	6	20	30-130

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

* Values outside of QC limits

RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

COMMENTS:

)

3D (IR)
WATER SEMIVOLATILE BLANK SPIKE RECOVERY

0698

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix Spike - EPA Sample No.: TSPK01

COMPOUND	SPIKE ADDED (ug/L)	BLANK CONCENTRATION (ug/L)	BS CONCENTRATION (ug/L)	BS % REC #	QC LIMITS REC.
Petroleum Hydrocarbons ( )	2000	5	1900	95	30-130

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

* Values outside of QC limits

Spike Recovery: 0 out of 1 outside limits

COMMENTS:

4B (GC)
SEMIVOLATILE METHOD BLANK SUMMARY

0699 EPA SAMPLE NO.

TBLK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Lab File ID: IR8051 Lab Sample ID: N1T51715T

Instrument ID: PK Date Extracted: 11/16/95

Matrix: (soil/water) WATER Date Analyzed: 11/21/95

Level: (low/med) _____ Time Analyzed: 15:06

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	CLJ78TW001	JP0323T	IR8055	11/21/95
02	CLJ78TW002	JP0324T	IR8056	11/21/95
03	CLJ78TW02D	JP0325T	IR8058	11/21/95
04	CLJ78TW003	JP0326T	IR8060	11/21/95
05	CLJ78TW004	JP0327T	IR8063	11/21/95
06	CLJ78-FB	JP0328T	IR8064	11/21/95
07	CLJ78-RB	JP0329T	IR8065	11/21/95
08	CLJ78-RBMSD	JP0329TR	IR8054	11/21/95
09	TSPK01	N1T51715TS	IR8052	11/21/95
10	CLJ78-RBMS	JP0329TS	IR8053	11/21/95

COMMENTS:

1B (GC)
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

0700 EPA SAMPLE NO.

CLJ78-FB

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0328T

Sample wt/vol: 990 (g/mL) ML Lab File ID: IR8064

Level: (low/med) _____ Date Received: 11/14/95

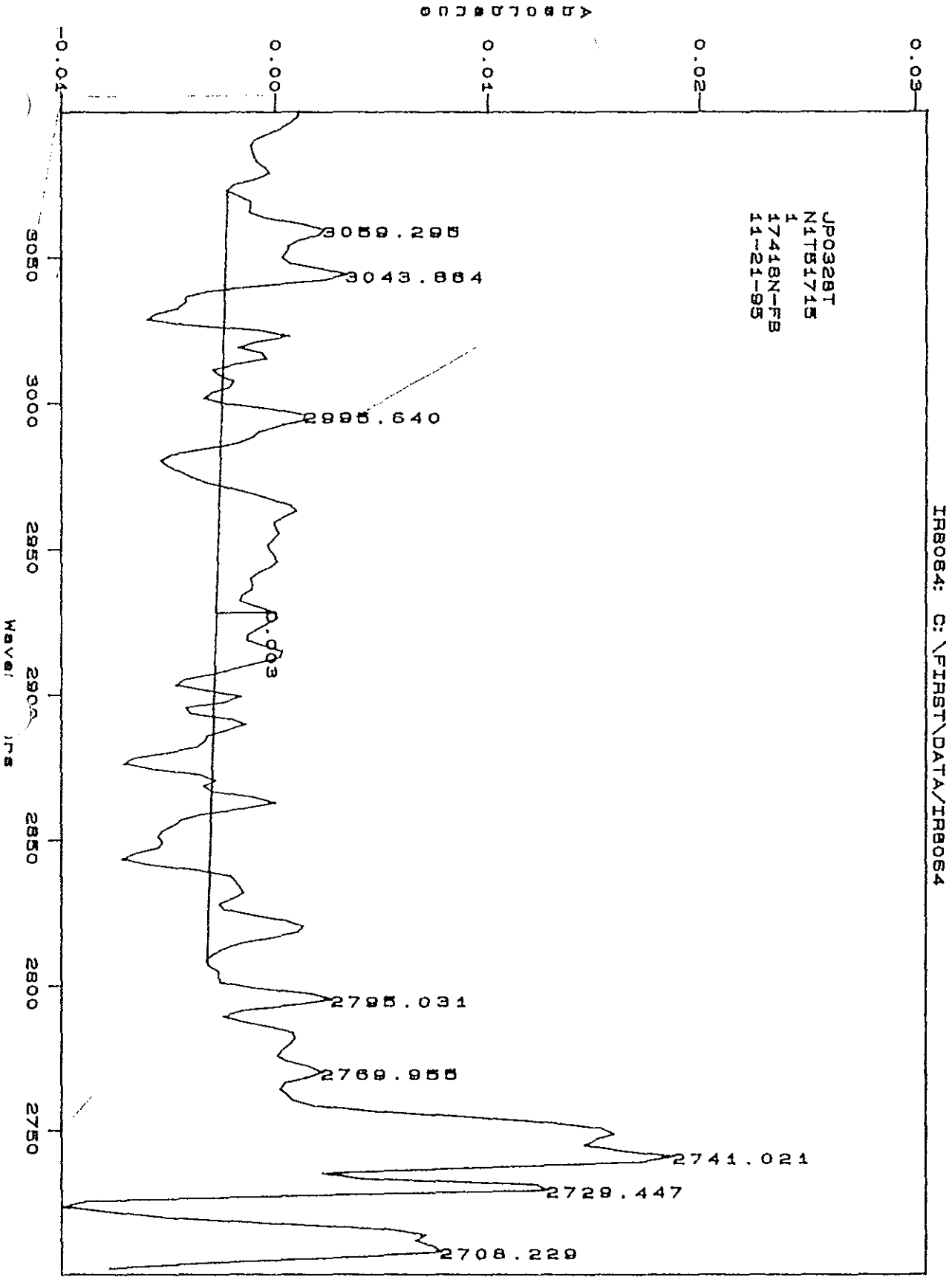
% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/16/95

Concentrated Extract Volume: 100000 (uL) Date Analyzed: 11/21/95

Injection Volume: _____ (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ~~1.0~~ N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
	Petroleum Hydrocarbons (IR)	16	BJ


JP0328T
N1T51715
1
17418N-FB
11-21-95
IR8064: C:\FIRST\DATA\IR8064
3059.295
3043.864
2995.640
2795.031
2769.955
2741.021
2729.447
2708.229
0.03
0.02
0.01
0.00
-0.01
3050
3000
2950
2900
2850
2800
2750
Wavel

1B (GC) 0702 EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLJ78-RB

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0329T

Sample wt/vol: 900 (g/mL) ML Lab File ID: IR8065

Level: (low/med) _____ Date Received: 11/14/95

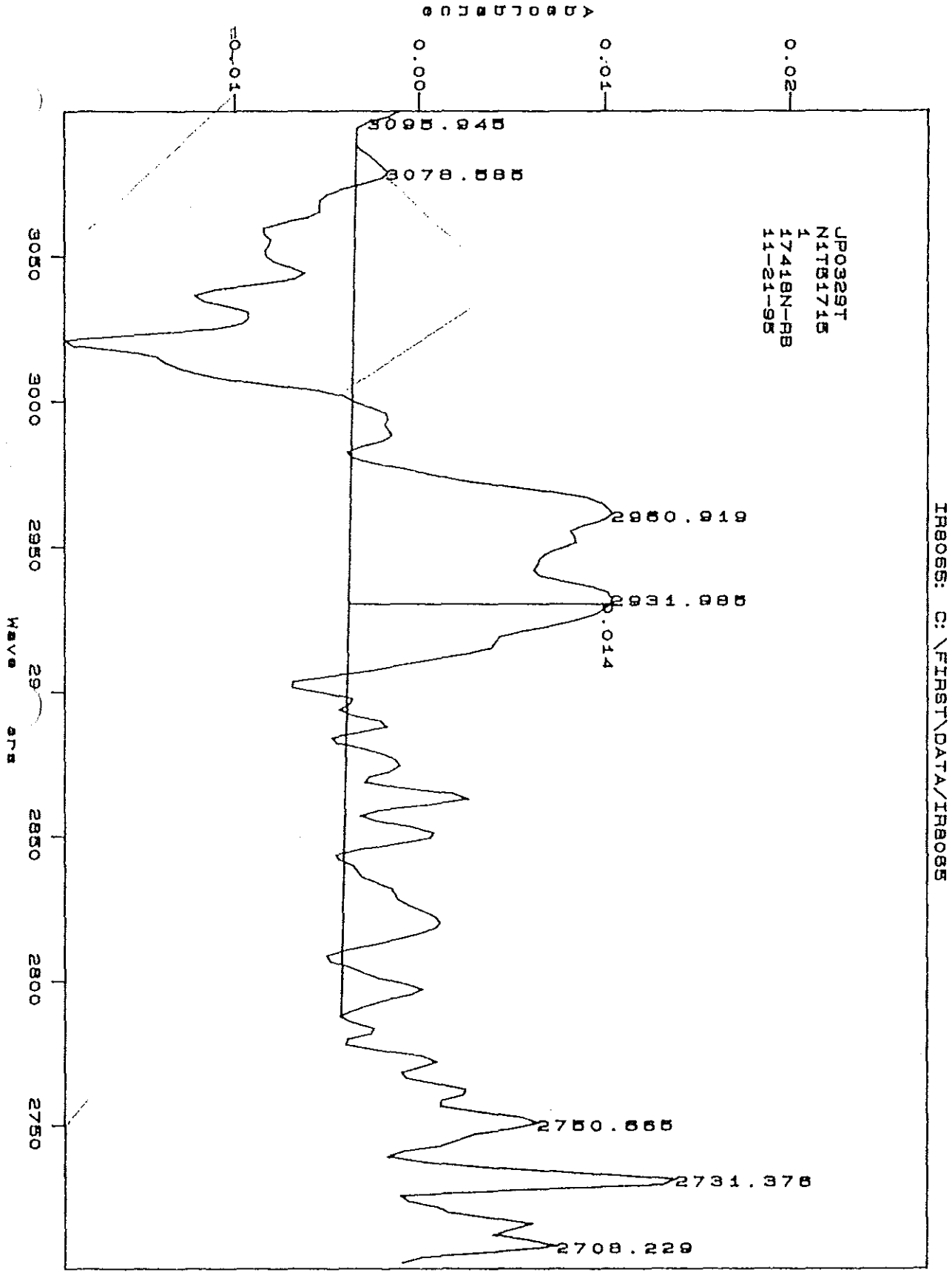
% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/16/95

Concentrated Extract Volume: 100000 (uL) Date Analyzed: 11/21/95

Injection Volume: _____ (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ~~1.0~~ N/A

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
	Petroleum Hydrocarbons (IR)	83	BJ


JP03297
N1T81715
1
17418N-RB
11-21-95
IR8065: C:\FIRST\DATA\IR8065
3095.945
3078.585
2950.919
2931.985
0.014
2750.565
2731.376
2708.229
Wave
0.02
0.01
0.00
-0.01
3050
3000
2950
2900
2850
2800
2750

1B (GC) 0704 EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLJ78TW001

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0323T

Sample wt/vol: 990 (g/mL) ML Lab File ID: IR8055

Level: (low/med) ____ Date Received: 11/14/95

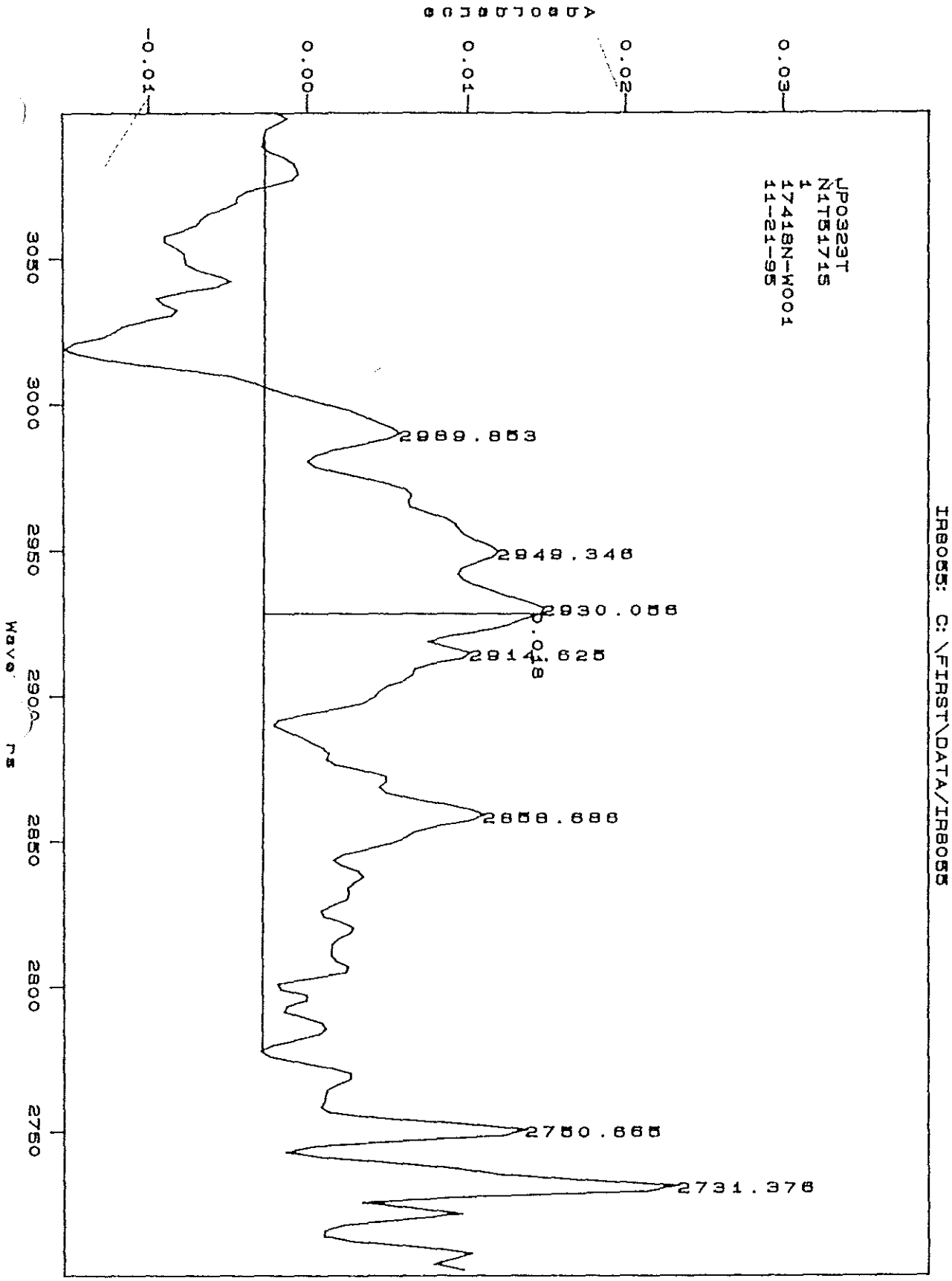
% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/16/95

Concentrated Extract Volume: 100000 (uL) Date Analyzed: 11/21/95

Injection Volume: ____ (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ~~1.0~~ NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
	Petroleum Hydrocarbons (IR)	97	BJ


UP0323T
N1T51715
1
17418N-W001
11-21-95
IR8055: C:\FIRST\DATA/IR8055
2989.853
2949.346
2930.056
2914.625
2858.686
2750.665
2731.376
0.018
Wave
3050
3000
2950
2900
2850
2800
2750
-0.01
0.00
0.01
0.02
0.03

1B (GC)
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

0706

EPA SAMPLE NO.

CLJ78TW002

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0324T

Sample wt/vol: 980 (g/mL) ML Lab File ID: IR8056

Level: (low/med) ____ Date Received: 11/14/95

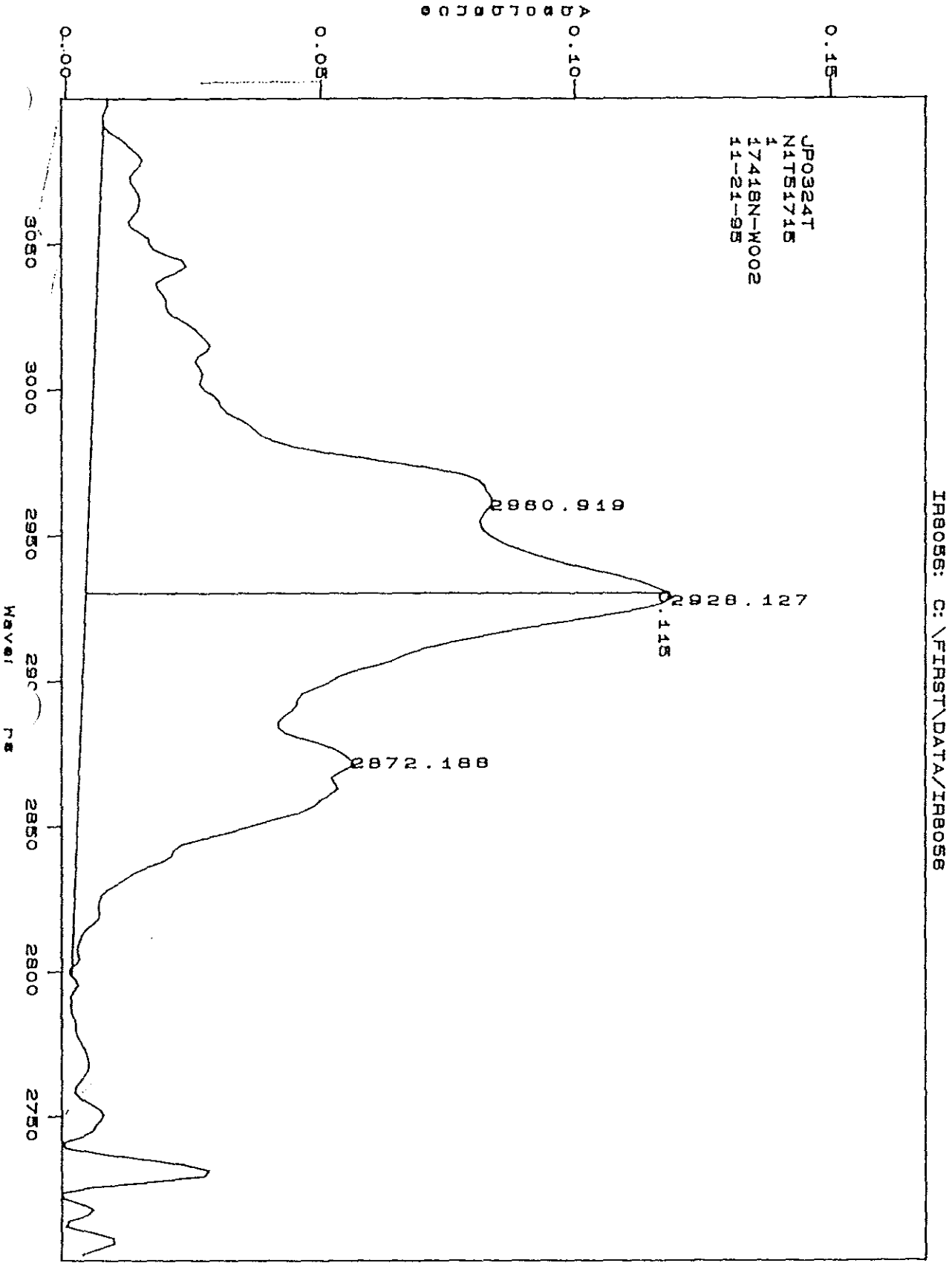
% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/16/95

Concentrated Extract Volume: 100000 (uL) Date Analyzed: 11/21/95

Injection Volume: ____ (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ~~1.0~~ NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
	Petroleum Hydrocarbons (IR)	630	B


JP03247
N1T51715
1
17418N-W002
11-21-95
IR8056: C:\FIRST\DATA/IR8056
2960.919
2928.127
.115
2872.188
0.15
0.10
0.05
0.00
3050
3000
2950
2850
2800
2750
Wavel

1B (GC)
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET 0708

EPA SAMPLE NO.

CLJ78TW003

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0326T

Sample wt/vol: 970 (g/mL) ML Lab File ID: IR8060

Level: (low/med) _____ Date Received: 11/14/95

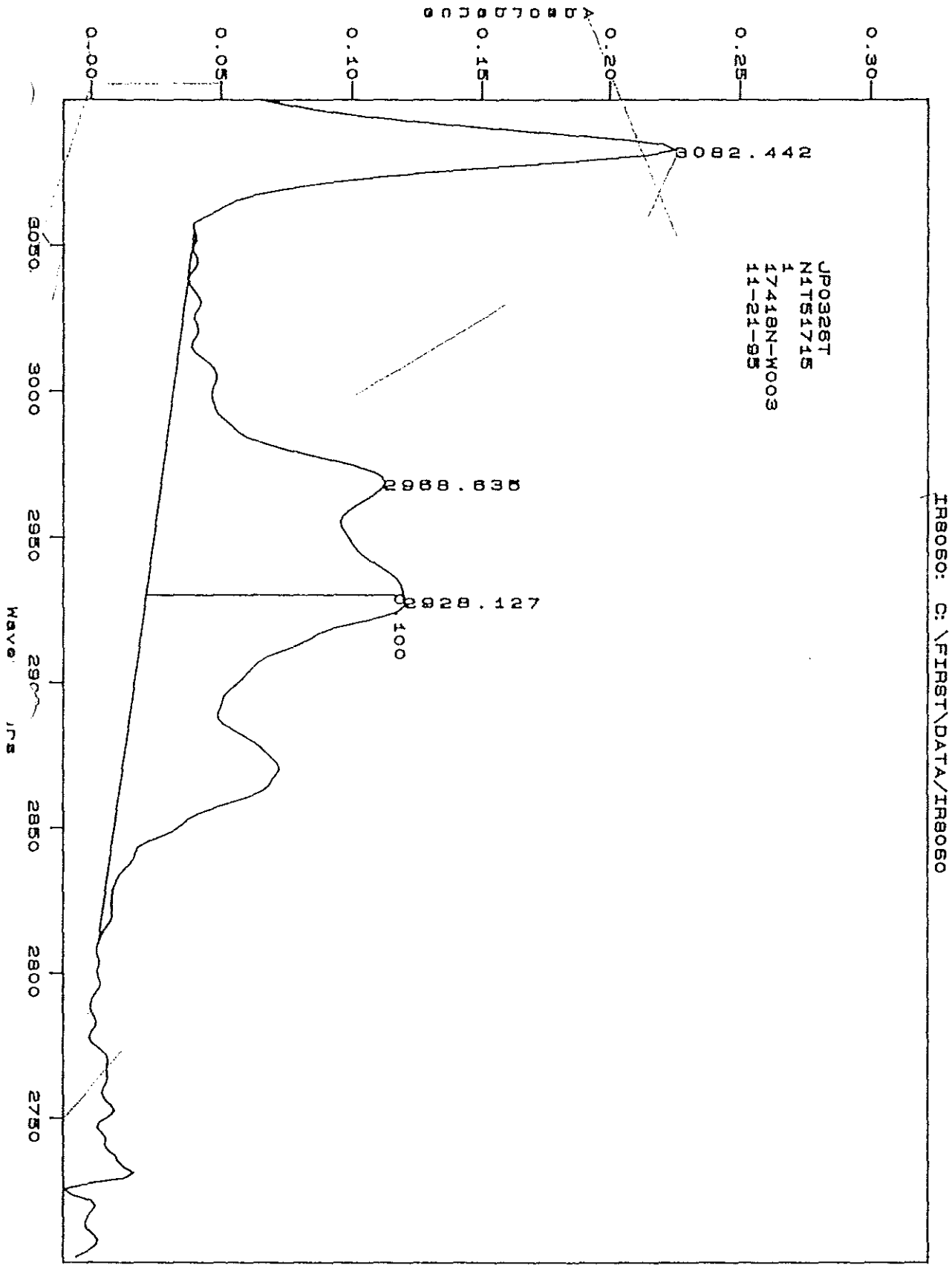
% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/16/95

Concentrated Extract Volume: 100000 (uL) Date Analyzed: 11/21/95

Injection Volume: _____ (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ~~1.0~~ NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
	Petroleum Hydrocarbons (IR)	550	B


IR8060: C:\FIRST\DATA/IR8060
JP0326T
N1T51715
1
17418N-W003
11-21-95
3082.442
2988.635
2928.127
100
Wave, cm
3050
3000
2950
2900
2850
2800
2750
0.00
0.05
0.10
0.15
0.20
0.25
0.30

1B (GC) - 0710 EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLJ78TW004

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0327T

Sample wt/vol: 900 (g/mL) ML Lab File ID: IR8063

Level: (low/med) _____ Date Received: 11/14/95

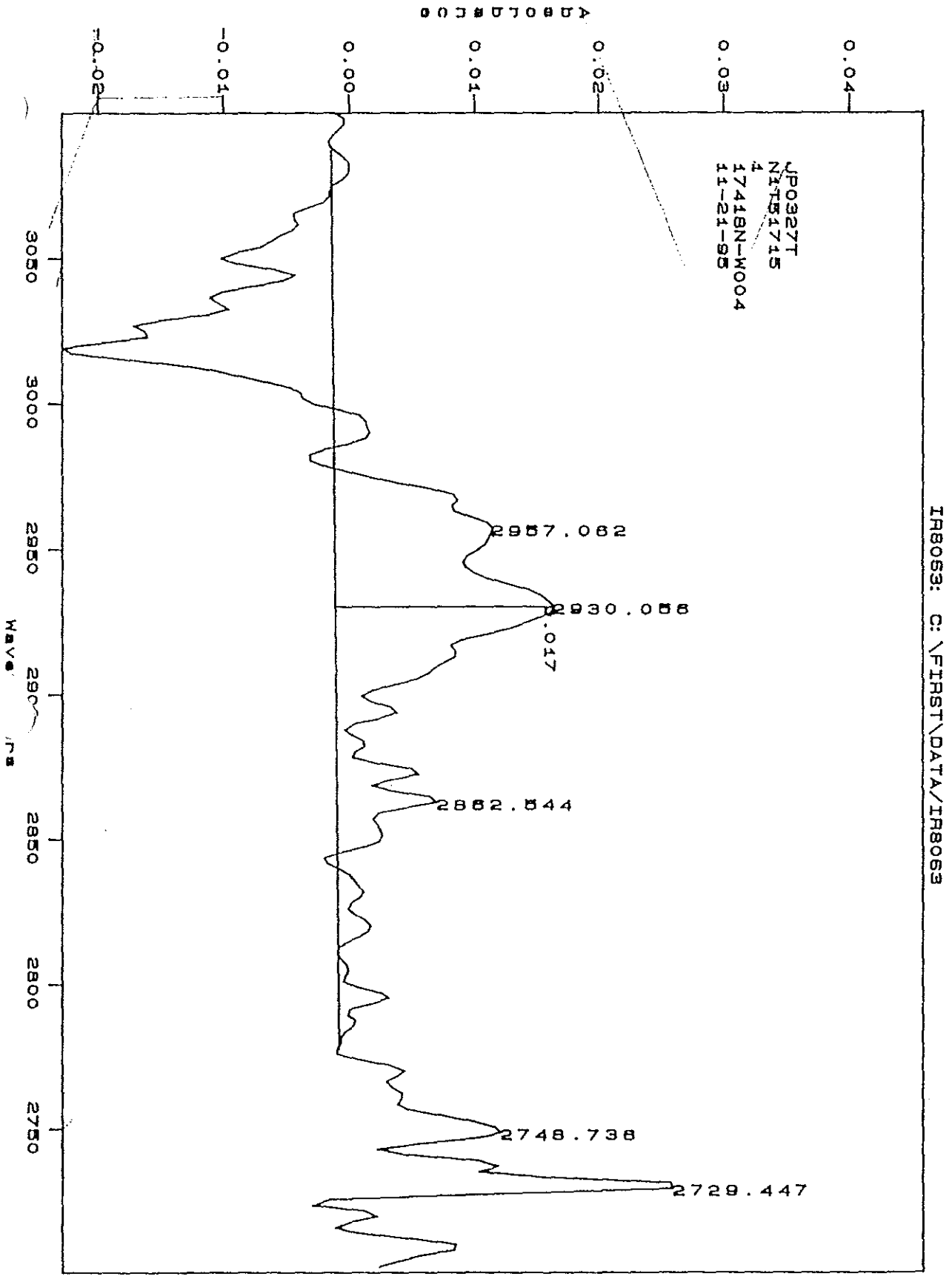
% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/16/95

Concentrated Extract Volume: 100000 (uL) Date Analyzed: 11/21/95

Injection Volume: _____ (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ~~1.0~~ N/A

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
	Petroleum Hydrocarbons (IR)	100	BJ


JP03227T
N1-T51715
4
17418N-W004
11-21-95
IR8063: C:\FIRST\DATA/IR8063
2957.062
2930.056
.017
2862.544
2748.738
2729.447
Wave
3050
3000
2950
2900
2850
2800
2750
-0.02
-0.01
0.00
0.01
0.02
0.03
0.04

1B (GC)
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

0712

EPA SAMPLE NO.

CLJ78TW02D

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0325T

Sample wt/vol: 960 (g/mL) ML Lab File ID: IR8058

Level: (low/med) _____ Date Received: 11/14/95

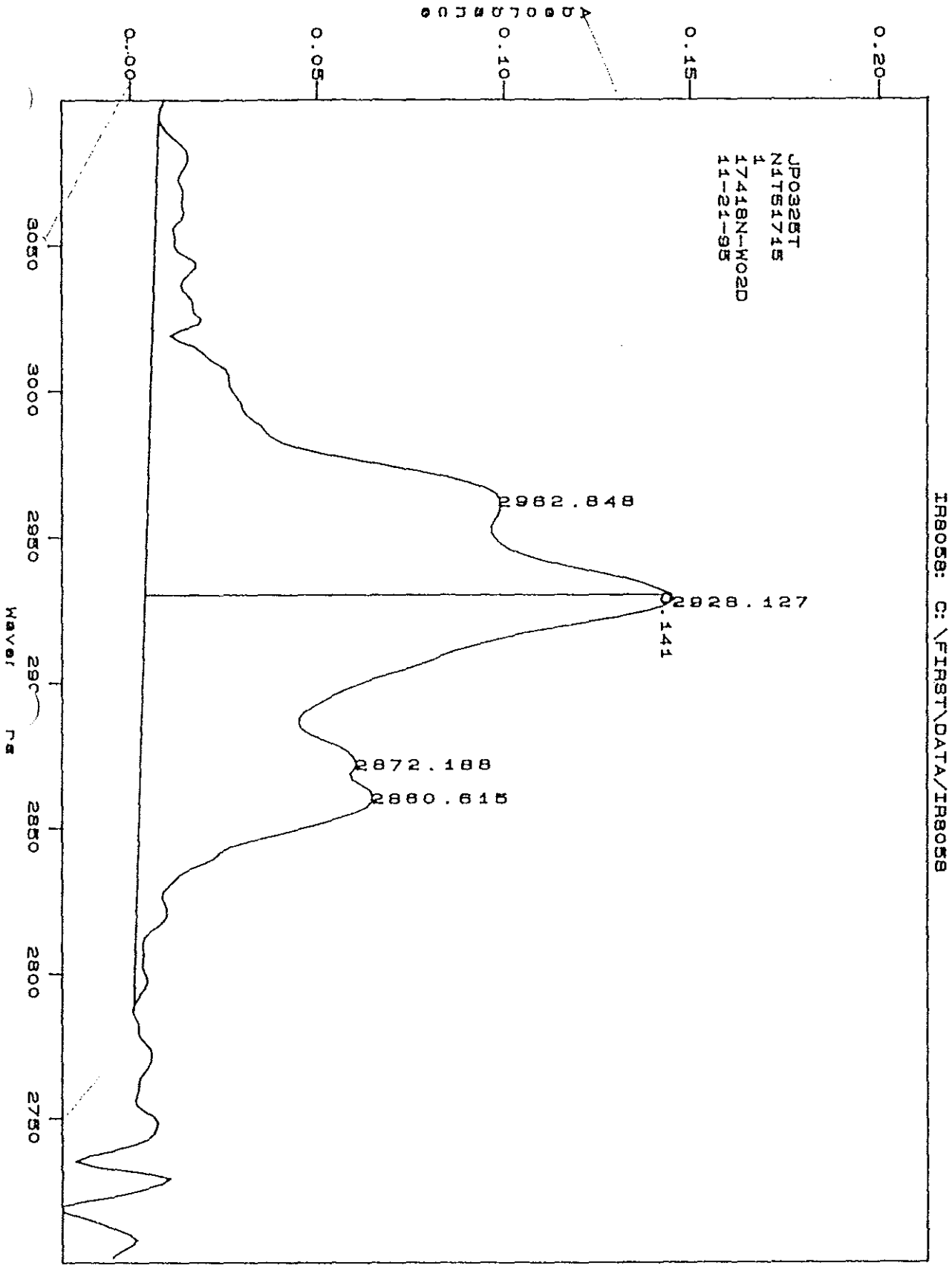
% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/16/95

Concentrated Extract Volume: 100000 (uL) Date Analyzed: 11/21/95

Injection Volume: _____ (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ~~1.0~~ N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
	Petroleum Hydrocarbons (IR)	790	B


JP0325T
N1T51715
1
17418N-W02D
11-21-95
IR8058: C:\FIRST\DATA/IR8058
2962.848
2928.127
.141
2872.188
2860.615
Absorbance
0.00
0.05
0.10
0.15
0.20
3050
3000
2950
2900
2850
2800
2750
Wavel cm

TRPH INITIAL CALIBRATION DATA

Lab Name: OHM Analytical Division Contract: NFESC

Lab Code: NA Case No.: 17418N SAS No.: NA SDG No.: CLJ78TW00

Instrument ID: FTIR Calibration Date (s): 11-21-95

Calibration Time (s): N/A

LAB FILE ID: CLOW = IR6102 CMEDL = IR6103
CMED = IR6104 CMEDH= IR6109 CHIGH = IR6110

COMPOUND	CLOW	CMEDL	CMED	CMEDH	CHIGH	$\overline{CF}$	% RSD
TRPH	.0221	.0178	.0180	.0175	.0180	.0187	10.4

TRPH CONTINUING CALIBRATION CHECK

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: NA Case No.: 17418N SAS No.: NA SDG No.: CLJ78TW001

Instrument ID: FTIR Calibration Date: 11-21-95 Time: N/A

Lab File ID: IR8050 Initial Calib Date(s): 11-21-95

Initial Calib Times: N/A

COMPOUND	$\overline{CF}$	CMED	MIN CF	% D	MAX % D
TRPH	.0187	.0182	NA	2.56	15

TRPH CONTINUING CALIBRATION CHECK

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: NA Case No.: 17418N SAS No.: NA SDG No.: CLJ78TW001

Instrument ID: FTIR Calibration Date: 11-21-95 Time: N/A

Lab File ID: IR8061 Initial Calib Date(s): 11-21-95

Initial Calib Times: N/A

COMPOUND	$\overline{CF}$	CMED	MIN CF	% D	MAX % D
TRPH	.0187	.0181	NA	3.07	15

TRPH CONTINUING CALIBRATION CHECK

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: NA Case No.: 17418N SAS No.: NA SDG No.: CLJ78TW001

Instrument ID: FTIR Calibration Date: 11-21-95 Time: N/A

Lab File ID: IR8071 Initial Calib Date(s): 11-21-95

Initial Calib Times: N/A

COMPOUND	$\overline{CF}$	CMED	MIN CF	% D	MAX % D
TRPH	.0187	.0183	NA	2.06	15

1B (GC) 0710 EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TBLK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: N1T51715T

Sample wt/vol: 1000 (g/mL) ML Lab File ID: IR8051

Level: (low/med) _____ Date Received: 11/14/95

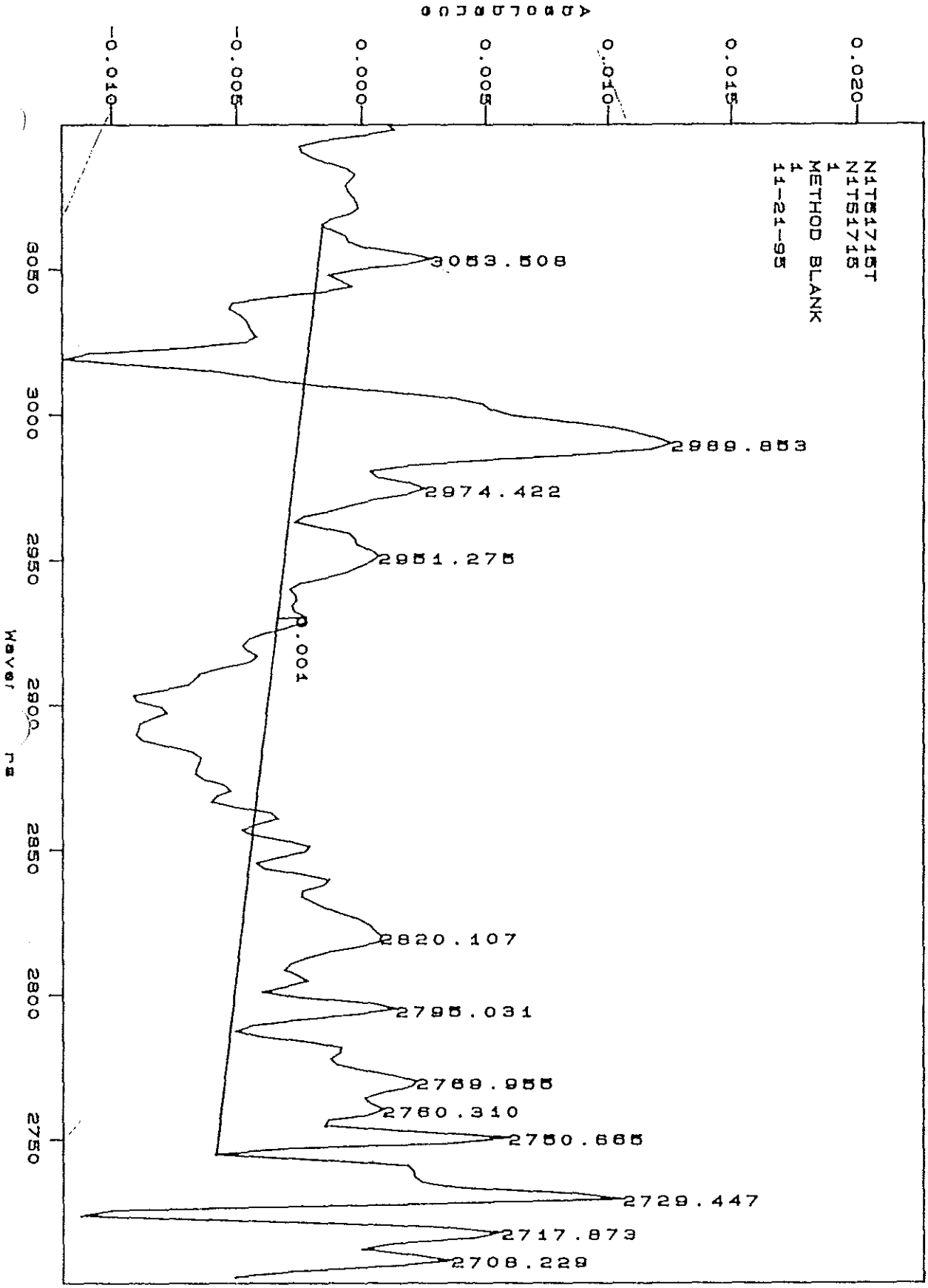
% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/16/95

Concentrated Extract Volume: 100000 (uL) Date Analyzed: 11/21/95

Injection Volume: _____ (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
	Petroleum Hydrocarbons (IR)	5	J


N1T51715T
N1T51715
1
METHOD BLANK
1
11-21-95
IR8051: C:\FIRST\DATA/IR8051
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2989.853
2974.422
2951.275
.001
2820.107
2795.031
2769.955
2760.310
2750.665
2729.447
2717.873
2708.229
Wavenumbers
3050
3000
2950
2900
2850
2800
2750
0.020
0.015
0.010
0.005
0.000
-0.005
-0.010

1B (GC) - 0720 EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLJ78-RBMS

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0329TS

Sample wt/vol: 500 (g/mL) ML Lab File ID: IR8053

Level: (low/med) _____ Date Received: 11/14/95

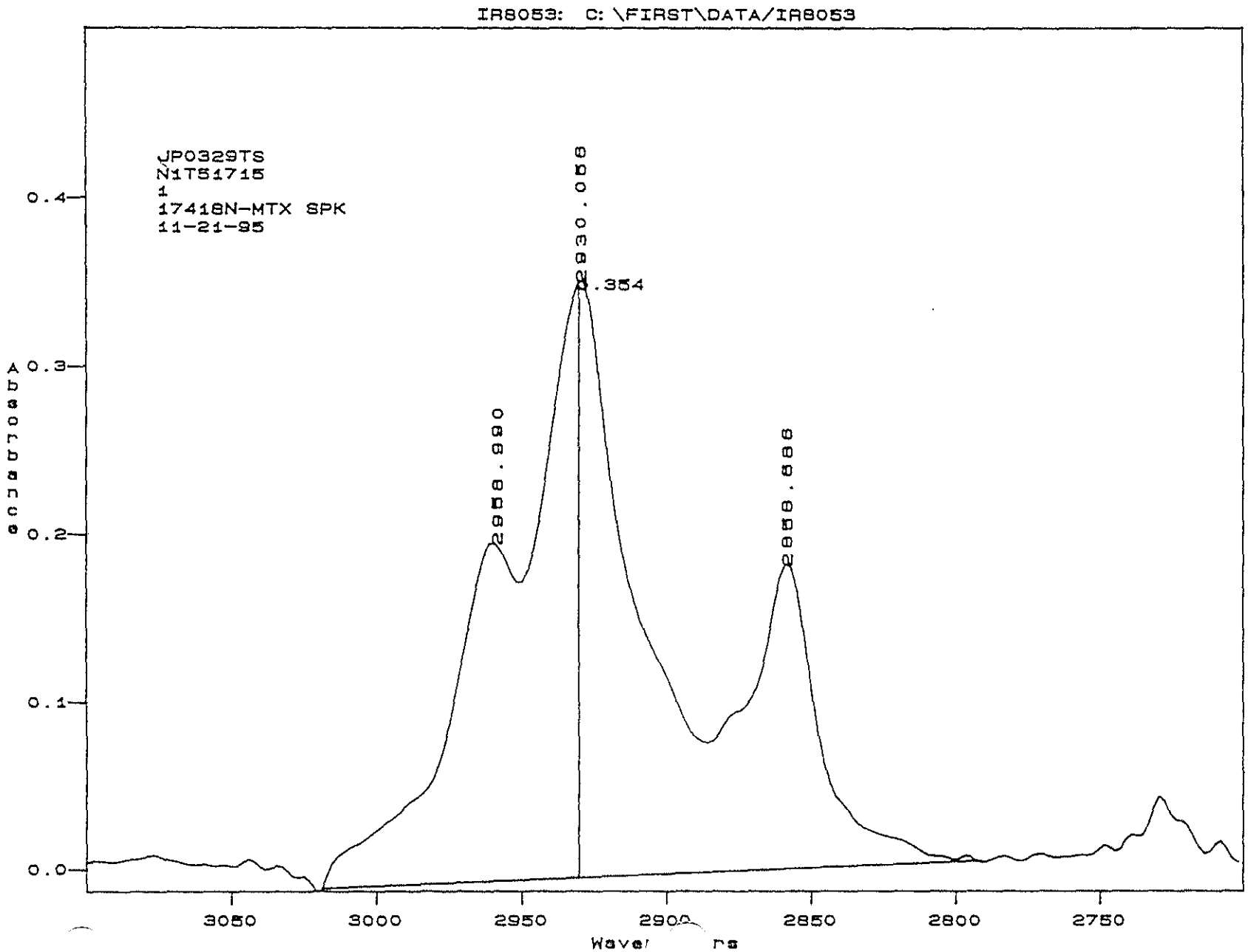
% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/16/95

Concentrated Extract Volume: 100000 (uL) Date Analyzed: 11/21/95

Injection Volume: _____ (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
	Petroleum Hydrocarbons (IR)	3800	B


IR8053: C:\FIRST\DATA/IR8053
JP0329TS
N1T51715
1
17418N-MTX SPK
11-21-95
2930.056
.354
2958.990
2858.886
Absorbance
0.4
0.3
0.2
0.1
0.0
3050
3000
2950
2900
2850
2800
2750
Wave

1B (GC)
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET 0722

EPA SAMPLE NO.

CLJ78-RBMSD

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: JP0329TR

Sample wt/vol: 500 (g/mL) ML Lab File ID: IR8054

Level: (low/med) ____ Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/16/95

Concentrated Extract Volume: 100000 (uL) Date Analyzed: 11/21/95

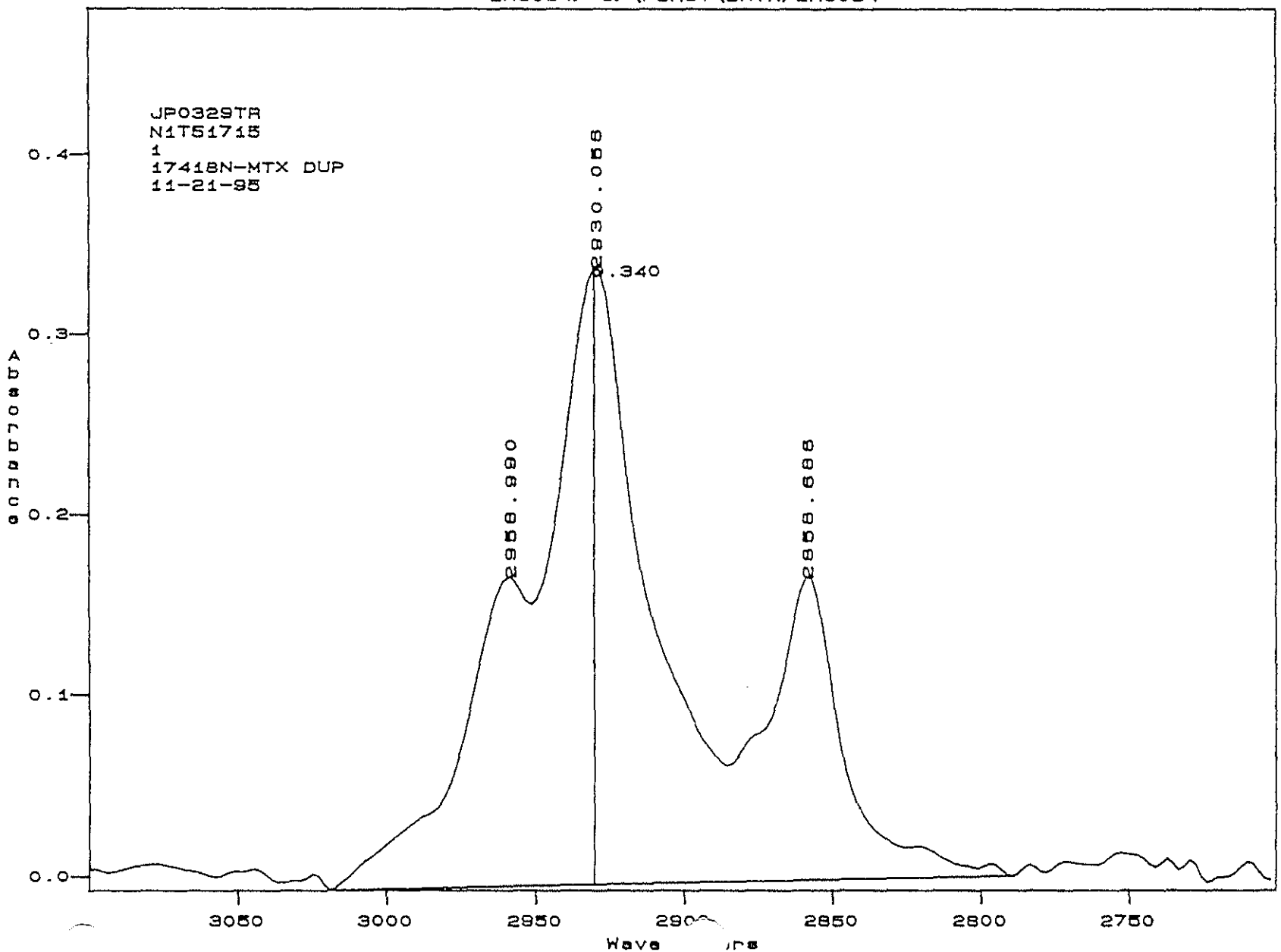
Injection Volume: ____ (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
	Petroleum Hydrocarbons (IR)	3600	B

0723

IR8054: C:\FIRST\DATA/IR8054



1B (GC)
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET 0724 EPA SAMPLE NO.

TSPK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix: (soil/water) WATER Lab Sample ID: N1T51715TS

Sample wt/vol: 1000 (g/mL) ML Lab File ID: IR8052

Level: (low/med) _____ Date Received: 11/14/95

% Moisture: N/A decanted: (Y/N) N Date Extracted: 11/16/95

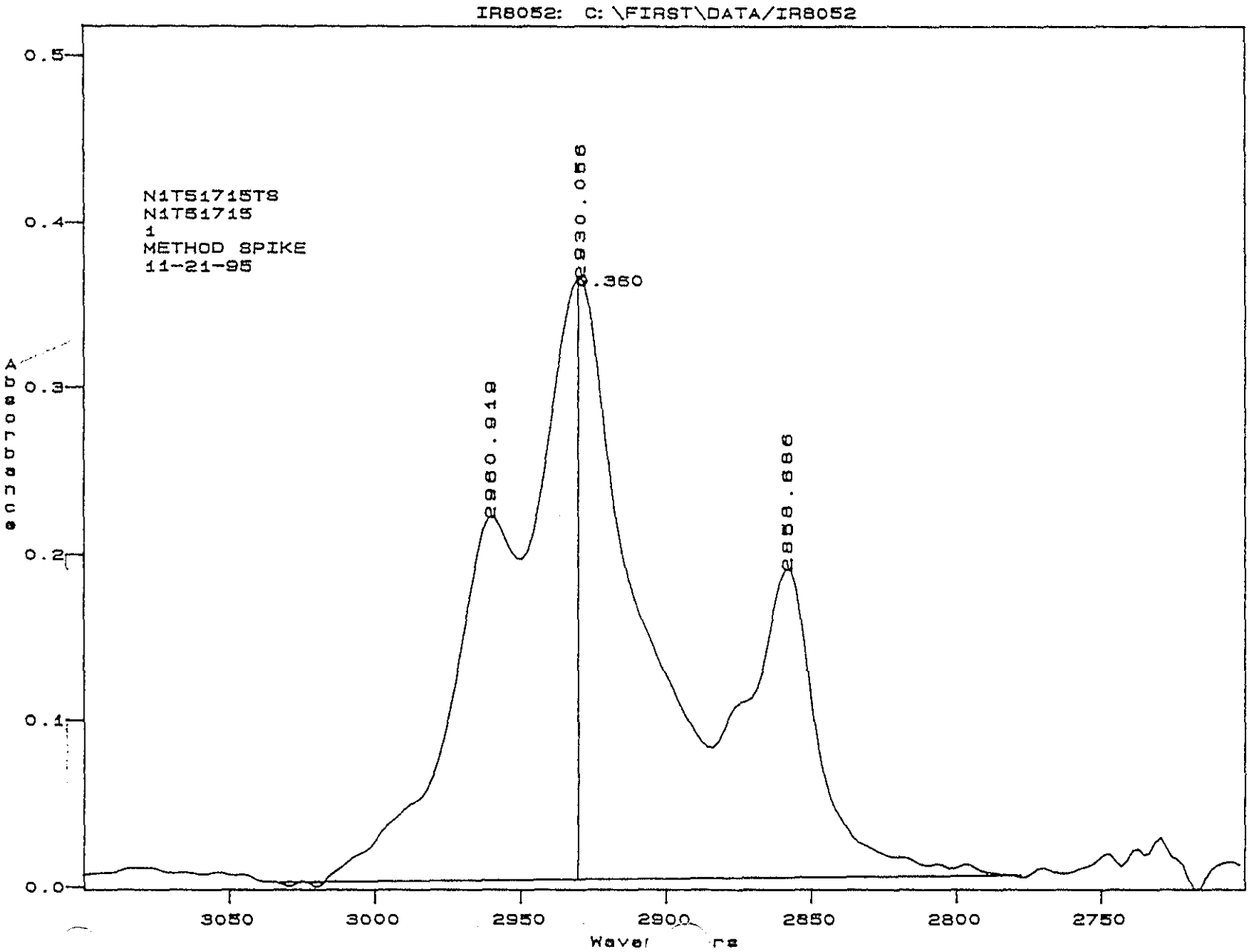
Concentrated Extract Volume: 100000 (uL) Date Analyzed: 11/21/95

Injection Volume: _____ (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
	Petroleum Hydrocarbons (IR)	1900	B

0725


IR8052: C:\FIRST\DATA/IR8052
N1T51715TS
N1T51715
1
METHOD SPIKE
11-21-95
2930.056
.360
2980.918
2850.886
Absorbance
0.5
0.4
0.3
0.2
0.1
0.0
3050
3000
2950
2900
2850
2800
2750

INORGANICS

Metals

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

SOW No.: _____

EPA Sample No.	Lab Sample ID.
CLJ78-FB	JP0328
CLJ78-FBD	JP0328D
CLJ78-FBS	JP0328S
CLJ78-FBSD	JP0328SD
CLJ78-RB	JP0329
CLJ78-RBD	JP0329D
CLJ78-RBS	JP0329S
CLJ78-RBSD	JP0329SD
CLJ78TW001	JP0318
CLJ78TW001	JP0323
CLJ78TW001D	JP0323D
CLJ78TW001S	JP0323S
CLJ78TW001SD	JP0323SD
CLJ78TW002	JP0320
CLJ78TW002	JP0324
CLJ78TW003	JP0321
CLJ78TW003	JP0326
CLJ78TW004	JP0322
CLJ78TW004	JP0327
CLJ78TW004D	JP0322D

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES
If yes-were raw data generated before application of background corrections? Yes/No NO

Comments: See SDG Narrative

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: [signature] Name: William A. Fathian

Date: 12/20/95 Title: Technical Project Manager

U.S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

0728

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

SOW No.:

EPA Sample No.	Lab Sample ID.
CLJ78TW004S	JP0322S
CLJ78TW004SD	JP0322SD
CLJ78TW01D	JP0319
CLJ78TW02D	JP0325

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments: See SDG Narrative

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: [signature] Name: William A. Fathian

Date: 12/20/95 Title: Technical Project Manager

Narrative for SDG # CLJ78TW001

Metals

CLP Forms and/or analytical requirements do not apply to all Level C type deliverable requirements. Every effort was made to conform to the CLP format and all applicable CLP/Level C forms have been included.

All of the initial calibration criteria were within QC limits except for Nickel and Potassium.

Sodium and Thallium did not pass all continuing calibration criteria but should not negatively impact the data validity.

The CRDL standard met all QC criteria.

Low levels of Barium, Cobalt and Vanadium were detected in the initial calibration blank. This anomaly should not impact the validity of the data generated.

Low levels of Barium and Chromium were detected in the continuing calibration blank. This anomaly should not impact the validity of the data generated.

Low levels of Calcium, Copper and Zinc were detected in the method blank. This anomaly should not impact the validity of the data generated.

All water matrix spike recoveries were within QC limits.

Low soil matrix spike recoveries were noted for Antimony, Iron, Lead and Selenium. All post spike recoveries were within acceptable QC limits.

Duplicate water results were within QC limits.

Duplicate soil results were >20% for Lead. This will have minimal impact on the validity of the data submitted.

All Laboratory Control Samples (LCS) were within acceptable QC limits.

All holding times were met for this SDG.

The Particle Size Analysis was performed by the Treatability division of the laboratory. A summarized report of the data has been attached to the Metals section for this SDG.

U.S. EPA - CLP 0730 EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

CLJ78TW001

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix (soil/water): SOIL Lab Sample ID: JP0318

Level (low/med): MED Date Received: 11/14/95

% Solids: 74

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5240			P
7440-36-0	Antimony	6.3	U	N	P
7440-38-2	Arsenic	.36	B		F
7440-39-3	Barium	7.2	B		P
7440-41-7	Beryllium	.090	U		P
7440-43-9	Cadmium	.18	U		P
7440-70-2	Calcium	75.2	B		P
7440-47-3	Chromium	6.2			P
7440-48-4	Cobalt	.45	U		P
7440-50-8	Copper	.92	U		P
7439-89-6	Iron	770		N	P
7439-92-1	Lead	7.2		N*	F
7439-95-4	Magnesium	164	B		P
7439-96-5	Manganese	3.4			P
7439-97-6	Mercury	.010	B		CV
7440-02-0	Nickel	1.4	U		P
7440-09-7	Potassium	118	B		P
7782-49-2	Selenium	.66	U	N	F
7440-22-4	Silver	.70	U		P
7440-23-5	Sodium	67.9	B		P
7440-28-0	Thallium	.15	U	W	F
7440-62-2	Vanadium	3.3	B		P
7440-66-6	Zinc	2.0	B		P
	Cyanide				NR

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

U.S. EPA - CLP **0731** EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

CLJ78TW01D

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix (soil/water): SOIL Lab Sample ID: JP0319

Level (low/med): MED Date Received: 11/14/95

% Solids: 82

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5260			P
7440-36-0	Antimony	5.7	U	N	P
7440-38-2	Arsenic	1.2	B		F
7440-39-3	Barium	6.3	B		P
7440-41-7	Beryllium	.081	U		P
7440-43-9	Cadmium	.16	U		P
7440-70-2	Calcium	87.2	B		P
7440-47-3	Chromium	7.9			P
7440-48-4	Cobalt	.41	U		P
7440-50-8	Copper	1.4	B		P
7439-89-6	Iron	1430		N	P
7439-92-1	Lead	5.2		N*	F
7439-95-4	Magnesium	209	B		P
7439-96-5	Manganese	5.4			P
7439-97-6	Mercury	.0085	U		CV
7440-02-0	Nickel	1.2	U		P
7440-09-7	Potassium	241	B		P
7782-49-2	Selenium	.64	U	N	F
7440-22-4	Silver	.64	U		P
7440-23-5	Sodium	73.5	B		P
7440-28-0	Thallium	.15	U	W	F
7440-62-2	Vanadium	7.4			P
7440-66-6	Zinc	2.9			P
	Cyanide				NR

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

U.S. EPA - CLP **0732** EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

CLJ78TW002

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

) Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix (soil/water): SOIL Lab Sample ID: JP0320

Level (low/med): MED Date Received: 11/14/95

% Solids: 81

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1950			P
7440-36-0	Antimony	5.7	U	N	P
7440-38-2	Arsenic	1.3			F
7440-39-3	Barium	2.6	B		P
7440-41-7	Beryllium	.082	U		P
7440-43-9	Cadmium	.16	U		P
7440-70-2	Calcium	64.1	B		P
7440-47-3	Chromium	4.4			P
7440-48-4	Cobalt	.41	U		P
7440-50-8	Copper	1.1	B		P
7439-89-6	Iron	871		N	P
7439-92-1	Lead	4.9		N*	F
7439-95-4	Magnesium	79.7	B		P
7439-96-5	Manganese	1.6	B		P
7439-97-6	Mercury	.0085	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	113	B		P
7782-49-2	Selenium	.62	U	N	F
7440-22-4	Silver	.65	U		P
7440-23-5	Sodium	56.8	B		P
7440-28-0	Thallium	.15	U	W	F
7440-62-2	Vanadium	5.8	B		P
7440-66-6	Zinc	1.2	B		P
	Cyanide				NR

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

U.S. EPA - CLP **0733** EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

CLJ78TW003

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix (soil/water): SOIL Lab Sample ID: JP0321

Level (low/med): MED Date Received: 11/14/95

% Solids: 86

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5200			P
7440-36-0	Antimony	5.4	U	N	P
7440-38-2	Arsenic	1.0	B		F
7440-39-3	Barium	4.9	B		P
7440-41-7	Beryllium	.078	U		P
7440-43-9	Cadmium	.16	U		P
7440-70-2	Calcium	86.5	B		P
7440-47-3	Chromium	6.6			P
7440-48-4	Cobalt	.39	U		P
7440-50-8	Copper	.80	U		P
7439-89-6	Iron	2610		N	P
7439-92-1	Lead	19.8		N*	F
7439-95-4	Magnesium	161	B		P
7439-96-5	Manganese	2.9			P
7439-97-6	Mercury	.042			CV
7440-02-0	Nickel	1.2	U		P
7440-09-7	Potassium	116	B		P
7782-49-2	Selenium	.60	U	N	F
7440-22-4	Silver	.61	U		P
7440-23-5	Sodium	56.2	B		P
7440-28-0	Thallium	.14	U	W	F
7440-62-2	Vanadium	8.1			P
7440-66-6	Zinc	1.8	B		P
	Cyanide				NR

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

U.S. EPA - CLP **0734** EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

CLJ78TW004

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix (soil/water): SOIL Lab Sample ID: JP0322

Level (low/med): MED Date Received: 11/14/95

% Solids: 84

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6840			P
7440-36-0	Antimony	5.8	U	N	P
7440-38-2	Arsenic	.50	B		F
7440-39-3	Barium	8.7	B		P
7440-41-7	Beryllium	.084	U		P
7440-43-9	Cadmium	.17	U		P
7440-70-2	Calcium	281	B		P
7440-47-3	Chromium	7.8			P
7440-48-4	Cobalt	.42	U		P
7440-50-8	Copper	1.7	B		P
7439-89-6	Iron	3700		N	P
7439-92-1	Lead	6.8		N*	F
7439-95-4	Magnesium	165	B		P
7439-96-5	Manganese	4.3			P
7439-97-6	Mercury	.0080	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	82.6	B		P
7782-49-2	Selenium	.60	U	N	F
7440-22-4	Silver	.66	U		P
7440-23-5	Sodium	92.2	B		P
7440-28-0	Thallium	.14	U	W	F
7440-62-2	Vanadium	9.0			P
7440-66-6	Zinc	3.1			P
	Cyanide				NR

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

U.S. EPA - CLP **0735** EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

CLJ78TW001

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix (soil/water): WATER Lab Sample ID: JP0323

Level (low/med): LOW Date Received: 11/14/95

% Solids: N/A

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	9010			P
7440-36-0	Antimony	48.8	U		P
7440-38-2	Arsenic	5.4	B		F
7440-39-3	Barium	93.7	B		P
7440-41-7	Beryllium	.90	B		P
7440-43-9	Cadmium	1.4	U		P
7440-70-2	Calcium	5820			P
7440-47-3	Chromium	13.5			P
7440-48-4	Cobalt	4.6	B		P
7440-50-8	Copper	10.8	B		P
7439-89-6	Iron	4790			P
7439-92-1	Lead	5.2		W	F
7439-95-4	Magnesium	3340	B		P
7439-96-5	Manganese	39.5			P
7439-97-6	Mercury	.14	U		CV
7440-02-0	Nickel	132			P
7440-09-7	Potassium	1440	B		P
7782-49-2	Selenium	5.3	U		F
7440-22-4	Silver	5.5	U		P
7440-23-5	Sodium	11300			P
7440-28-0	Thallium	1.2	U	W	F
7440-62-2	Vanadium	18.0	B		P
7440-66-6	Zinc	34.6			P
	Cyanide				NR

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

U.S. EPA - CLP **0736** EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

CLJ78TW002

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix (soil/water): WATER Lab Sample ID: JP0324

Level (low/med): LOW Date Received: 11/14/95

% Solids: N/A

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	9270			P
7440-36-0	Antimony	48.8	U		P
7440-38-2	Arsenic	3.0	B		F
7440-39-3	Barium	63.4	B		P
7440-41-7	Beryllium	.84	B		P
7440-43-9	Cadmium	1.4	U		P
7440-70-2	Calcium	9770			P
7440-47-3	Chromium	14.5			P
7440-48-4	Cobalt	3.5	U		P
7440-50-8	Copper	20.6	B		P
7439-89-6	Iron	4520			P
7439-92-1	Lead	5.0		W	F
7439-95-4	Magnesium	1970	B		P
7439-96-5	Manganese	40.4			P
7439-97-6	Mercury	.14	U		CV
7440-02-0	Nickel	222			P
7440-09-7	Potassium	1340	B		P
7782-49-2	Selenium	5.3	U		F
7440-22-4	Silver	5.5	U		P
7440-23-5	Sodium	7750			P
7440-28-0	Thallium	1.2	U		F
7440-62-2	Vanadium	16.2	B		P
7440-66-6	Zinc	20.7			P
	Cyanide				NR

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

U.S. EPA - CLP **0737** EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

CLJ78TW02D

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix (soil/water): WATER Lab Sample ID: JP0325

Level (low/med): LOW Date Received: 11/14/95

% Solids: N/A

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4580			P
7440-36-0	Antimony	48.8	U		P
7440-38-2	Arsenic	4.3	B		F
7440-39-3	Barium	53.0	B		P
7440-41-7	Beryllium	.72	B		P
7440-43-9	Cadmium	1.4	U		P
7440-70-2	Calcium	9710			P
7440-47-3	Chromium	10.7			P
7440-48-4	Cobalt	3.5	U		P
7440-50-8	Copper	12.5	B		P
7439-89-6	Iron	3770			P
7439-92-1	Lead	3.9			F
7439-95-4	Magnesium	1740	B		P
7439-96-5	Manganese	36.9			P
7439-97-6	Mercury	.14	U		CV
7440-02-0	Nickel	231			P
7440-09-7	Potassium	590	U		P
7782-49-2	Selenium	5.3	U		F
7440-22-4	Silver	5.5	U		P
7440-23-5	Sodium	7640			P
7440-28-0	Thallium	1.2	U	W	F
7440-62-2	Vanadium	11.6	B		P
7440-66-6	Zinc	17.2	B		P
	Cyanide				NR

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

U.S. EPA - CLP **0738** EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

CLJ78TW003

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix (soil/water): WATER Lab Sample ID: JP0326

Level (low/med): LOW Date Received: 11/14/95

% Solids: N/A

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8110			P
7440-36-0	Antimony	48.8	U		P
7440-38-2	Arsenic	5.3	B		F
7440-39-3	Barium	28.3	B		P
7440-41-7	Beryllium	.70	U		P
7440-43-9	Cadmium	1.4	U		P
7440-70-2	Calcium	14300			P
7440-47-3	Chromium	15.3			P
7440-48-4	Cobalt	3.5	U		P
7440-50-8	Copper	13.4	B		P
7439-89-6	Iron	10100			P
7439-92-1	Lead	4.5		W	F
7439-95-4	Magnesium	1940	B		P
7439-96-5	Manganese	46.5			P
7439-97-6	Mercury	.14	U		CV
7440-02-0	Nickel	197			P
7440-09-7	Potassium	2890	B		P
7782-49-2	Selenium	5.3	U		F
7440-22-4	Silver	5.5	U		P
7440-23-5	Sodium	4190	B		P
7440-28-0	Thallium	1.2	U	W	F
7440-62-2	Vanadium	17.1	B		P
7440-66-6	Zinc	14.3	B		P
	Cyanide				NR

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

U.S. EPA - CLP **0739** EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

CLJ78TW004

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix (soil/water): WATER Lab Sample ID: JP0327

Level (low/med): LOW Date Received: 11/14/95

% Solids: N/A

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7970			P
7440-36-0	Antimony	48.8	U		P
7440-38-2	Arsenic	8.4	B		F
7440-39-3	Barium	53.0	B		P
7440-41-7	Beryllium	.70	U		P
7440-43-9	Cadmium	1.4	U		P
7440-70-2	Calcium	2370	B		P
7440-47-3	Chromium	15.2			P
7440-48-4	Cobalt	4.5	B		P
7440-50-8	Copper	12.1	B		P
7439-89-6	Iron	4740			P
7439-92-1	Lead	2.8	B		F
7439-95-4	Magnesium	1150	B		P
7439-96-5	Manganese	25.1			P
7439-97-6	Mercury	.14	U		CV
7440-02-0	Nickel	279			P
7440-09-7	Potassium	3250	B		P
7782-49-2	Selenium	5.3	U		F
7440-22-4	Silver	5.5	U		P
7440-23-5	Sodium	8210			P
7440-28-0	Thallium	1.2	U	W	F
7440-62-2	Vanadium	22.3	B		P
7440-66-6	Zinc	22.6			P
	Cyanide				NR

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

U.S. EPA - CLP **0740** EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

CLJ78-FB

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix (soil/water): WATER Lab Sample ID: JP0328

Level (low/med): LOW Date Received: 11/14/95

% Solids: N/A

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	79.6	U		P
7440-36-0	Antimony	48.8	U		P
7440-38-2	Arsenic	2.2	U		F
7440-39-3	Barium	2.6	U		P
7440-41-7	Beryllium	.70	U		P
7440-43-9	Cadmium	1.4	U		P
7440-70-2	Calcium	80.9	B		P
7440-47-3	Chromium	3.4	U		P
7440-48-4	Cobalt	3.5	U		P
7440-50-8	Copper	7.5	B		P
7439-89-6	Iron	96.2	B		P
7439-92-1	Lead	1.1	U	W	F
7439-95-4	Magnesium	107	U		P
7439-96-5	Manganese	1.9	U		P
7439-97-6	Mercury	.14	U		CV
7440-02-0	Nickel	10.7	U		P
7440-09-7	Potassium	590	U		P
7782-49-2	Selenium	5.3	U		F
7440-22-4	Silver	5.5	U		P
7440-23-5	Sodium	471	U		P
7440-28-0	Thallium	1.2	U	W	F
7440-62-2	Vanadium	3.2	U		P
7440-66-6	Zinc	8.5	B		P
	Cyanide				NR

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

U.S. EPA - CLP **0741** EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

CLJ78-RB

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix (soil/water): WATER Lab Sample ID: JP0329

Level (low/med): LOW Date Received: 11/14/95

% Solids: N/A

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	79.6	U		P
7440-36-0	Antimony	48.8	U		P
7440-38-2	Arsenic	2.2	U		F
7440-39-3	Barium	2.6	U		P
7440-41-7	Beryllium	.70	U		P
7440-43-9	Cadmium	1.4	U		P
7440-70-2	Calcium	42.4	B		P
7440-47-3	Chromium	4.2	B		P
7440-48-4	Cobalt	3.5	U		P
7440-50-8	Copper	7.2	U		P
7439-89-6	Iron	57.5	U		P
7439-92-1	Lead	1.1	U		F
7439-95-4	Magnesium	107	U		P
7439-96-5	Manganese	1.9	U		P
7439-97-6	Mercury	.14	U		CV
7440-02-0	Nickel	10.7	U		P
7440-09-7	Potassium	590	U		P
7782-49-2	Selenium	5.3	U		F
7440-22-4	Silver	5.5	U		P
7440-23-5	Sodium	471	U		P
7440-28-0	Thallium	1.2	U	W	F
7440-62-2	Vanadium	3.2	U		P
7440-66-6	Zinc	5.2	U		P
	Cyanide				NR

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Name: OHM CORPORATION ANALYTICAL DIVISION Contract: NFESC

Lab Code: NA Case No.: ~~NA~~ 17418N SAS No.: NA SDG No.: CLJ78TW001

Initial Calibration Source: NIST

Continuing Calibration Source: NIST

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum	9660.0	9510.00	98.4	4921.0	4970.00	101.0	4920.00	100.0	P
Antimony	4820.0	4980.00	103.3	2534.0	2600.00	102.6	2540.00	100.2	P
Arsenic									
Barium	9853.0	9680.00	98.2	4944.0	5070.00	102.5	5020.00	101.5	P
Beryllium	230.3	230.00	99.9	118.6	121.00	102.0	120.00	101.2	P
Cadmium	1232.0	1230.00	99.8	754.1	773.00	102.5	768.00	101.8	P
Calcium	9641.0	9670.00	100.3	4924.0	5020.00	101.9	4970.00	100.9	P
Chromium	470.2	475.00	101.0	246.5	248.00	100.6	244.00	99.0	P
Cobalt	2446.0	2470.00	101.0	1251.0	1270.00	101.5	1260.00	100.7	P
Copper	1208.0	1220.00	101.0	733.8	724.00	98.7	714.00	97.3	P
Iron	4893.0	4910.00	100.3	2526.0	2590.00	102.5	2560.00	101.3	P
Lead									
Magnesium	9631.0	9610.00	99.8	4980.0	5120.00	102.8	5040.00	101.2	P
Manganese	724.3	724.00	100.0	397.6	403.00	101.4	401.00	100.9	P
Mercury	5.0	4.69	93.8	5.0	4.55	91.0	4.49	89.8	CV
Nickel	1990.0	4960.00	249.2	999.3	1020.00	102.1	1000.00	100.1	P
Potassium	9082.0	10000.00	110.1	4970.0	4960.00	99.8	4600.00	92.6	P
Selenium									
Silver	500.1	537.00	107.4	260.4	279.00	107.1	275.00	105.6	P
Sodium	9671.0	9030.00	93.4	4536.0	4780.00	105.4	4710.00	103.8	P
Thallium									
Vanadium	2445.0	2420.00	99.0	1245.0	1260.00	101.2	1250.00	100.4	P
Zinc	962.9	983.00	102.1	494.6	512.00	103.5	505.00	102.1	P
Cyanide									

3 N1M7342

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

ame: OHM CORPORATION ANALYTICAL DIVISION Contract: NFESC

Lab Code: NA Case No.: ~~NAK~~ 17418N SAS No.: NA SDG No.: CCJ78TW001

Initial Calibration Source: NIST

Continuing Calibration Source: NIST

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum				4921.0	4840.00	98.4			P
Antimony				2534.0	2520.00	99.4			P
Arsenic									
Barium				4944.0	4950.00	100.1			P
Beryllium				118.6	118.00	99.5			P
Cadmium				754.1	756.00	100.3			P
Calcium				4924.0	4890.00	99.3			P
romium				246.5	241.00	97.8			P
t				1251.0	1230.00	98.3			P
r				733.8	709.00	96.6			P
Iron				2526.0	2520.00	99.8			P
Lead									
Magnesium				4980.0	4960.00	99.6			P
Manganese				397.6	397.00	99.8			P
Mercury				5.0	4.52				CV
Nickel				999.3	987.00	98.8			P
Potassium				4970.0	4680.00	94.2			P
Selenium									
Silver				260.4	273.00	104.8			P
Sodium				4536.0	4640.00	102.3			P
Thallium									
Vanadium				1245.0	1230.00	98.8			P
Zinc				494.6	499.00	100.9			P
Cyanide									

4

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Name: OHM CORPORATION ANALYTICAL DIVISION Contract: NFESC

Lab Code: NA Case No.: ~~NA~~ AS 17418N SAS No.: NA SDG No. CLJ78TW001

Initial Calibration Source: NIST

Continuing Calibration Source: NIST

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum	9660.0	10300.00	106.6	4921.0	5060.00	102.8	5050.00	102.6	P
Antimony	4820.0	5240.00	108.7	2534.0	2630.00	103.8	2590.00	102.2	P
Arsenic									
Barium	9853.0	10200.00	103.5	4944.0	5060.00	102.3	5110.00	103.4	P
Beryllium	230.3	236.00	102.5	118.6	119.00	100.3	119.00	100.3	P
Cadmium	1232.0	1280.00	103.9	754.1	765.00	101.4	770.00	102.1	P
Calcium	9641.0	10300.00	106.8	4924.0	5100.00	103.6	5120.00	104.0	P
Chromium	470.2	497.00	105.7	246.5	249.00	101.0	250.00	101.4	P
Cobalt	2446.0	2570.00	105.1	1251.0	1270.00	101.5	1270.00	101.5	P
Copper	1208.0	1280.00	106.0	733.8	734.00	100.0	731.00	99.6	P
Iron	4893.0	5200.00	106.3	2526.0	2600.00	102.9	2580.00	102.1	P
Lead									
Magnesium	9631.0	10200.00	105.9	4980.0	5170.00	103.8	5160.00	103.6	P
Manganese	724.3	754.00	104.1	397.6	399.00	100.4	400.00	100.6	P
Mercury	5.0	4.89	97.8	5.0	4.73	94.6	4.81	96.2	CV
Nickel	1990.0	2070.00	104.0	999.3	1020.00	102.1	1030.00	103.1	P
Potassium	9082.0	10200.00	112.3	4970.0	4640.00	93.4	5450.00	109.7	P
Selenium									
Silver	500.1	536.00	107.2	260.4	272.00	104.5	266.00	102.2	P
Sodium	9671.0	9590.00	99.2	4536.0	4870.00	107.4	4980.00	109.8	P
Thallium									
Vanadium	2445.0	2530.00	103.5	1245.0	1270.00	102.0	1270.00	102.0	P
Zinc	962.9	1000.00	103.9	494.6	500.00	101.1	499.00	100.9	P
Cyanide									

1

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Name: OHM CORPORATION ANALYTICAL DIVISION Contract: NFESC

Lab Code: NA Case No.: ~~NAAS~~ 17418K SAS No.: NA SDG No.: CLJ78TW001

Initial Calibration Source: NIST

Continuing Calibration Source: NIST

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum				4921.0	5020.00	102.0	4980.00	101.2	P
Antimony				2534.0	2520.00	99.4	2540.00	100.2	P
Arsenic									
Barium				4944.0	5050.00	102.1	5050.00	102.1	P
Beryllium				118.6	119.00	100.3	119.00	100.3	P
Cadmium				754.1	762.00	101.0	764.00	101.3	P
Calcium				4924.0	5060.00	102.8	5060.00	102.8	P
Chromium				246.5	248.00	100.6	250.00	101.4	P
Cobalt				1251.0	1250.00	99.9	1250.00	99.9	P
Copper				733.8	718.00	97.8	717.00	97.7	P
Iron				2526.0	2560.00	101.3	2560.00	101.3	P
Lead									
Magnesium				4980.0	5120.00	102.8	5150.00	103.4	P
Manganese				397.6	390.00	98.1	387.00	97.3	P
Mercury									
Nickel				999.3	1030.00	103.1	1030.00	103.1	P
Potassium				4970.0	4640.00	93.4	5020.00	101.0	P
Selenium									
Silver				260.4	258.00	99.1	265.00	101.8	P
Sodium				4536.0	5060.00	111.6	5110.00	112.7	P
Thallium									
Vanadium				1245.0	1250.00	100.4	1250.00	100.4	P
Zinc				494.6	498.00	100.7	495.00	100.1	P
Cyanide									

2

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: OHM CORPORATION ANALYTICAL DIVISION Contract: NFESC

Lab Code: NA Case No.: 17418N SAS No.: NA SDG No.: CCJ78T1N001

Initial Calibration Source: PERKIN-ELMER

Continuing Calibration Source: PERKIN-ELMER

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum									
Antimony									
Arsenic	30.0	32.50	108.3	20.0	19.79	99.0	20.53	102.7	F
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead	30.0	30.30	101.0	20.0	20.80	104.0	21.20	106.0	F
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium	40.0	39.87	99.7	20.6	20.61	100.0	21.51	104.4	F
Silver									
Sodium									
Thallium	40.0	41.10	102.8	20.0	20.70	103.5	20.70	103.5	F
Vanadium									
Zinc									
Cyanide									

1

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

0747

Name: OHM CORPORATION ANALYTICAL DIVISION Contract: NFESC

Lab Code: NA Case No.: 17418N SAS No.: NA SDG No.: CCJ78TW001

Initial Calibration Source: PERKIN-ELMER

Continuing Calibration Source: PERKIN-ELMER

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum									
Antimony									
Arsenic				20.0	21.18	105.9	20.92	104.6	F
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead				20.0	21.60	108.0	19.90	99.5	F
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium				20.6	21.48	104.2	21.70	105.3	F
Silver									
Sodium									
Thallium				20.0	21.60	108.0	21.60	108.0	F
Vanadium									
Zinc									
Cyanide									

2

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

0748

Name: OHM CORPORATION ANALYTICAL DIVISION Contract: NFESC

Lab Code: NA Case No.: 17418N SAS No.: NA SDG No.: CLJ78TW001

Initial Calibration Source: PERKIN-ELMER

Continuing Calibration Source: PERKIN-ELMER

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum									
Antimony									
Arsenic				20.0	21.51	107.6			F
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead				20.0	20.90	104.5	21.40	107.0	F
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium				20.6	20.30	98.5	19.87	96.4	F
Silver									
Sodium									
Thallium				20.0	22.60	113.0			F
Vanadium									
Zinc									
Cyanide									

3

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Name: OHM CORPORATION ANALYTICAL DIVISION Contract: NFESC

Lab Code: NA Case No.: 17418N SAS No.: NA SDG No.: CLJ78TW001

Initial Calibration Source: PERKIN-ELMER

Continuing Calibration Source: PERKIN-ELMER

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead				20.0	21.60	108.0			F
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium				20.6	19.77	95.9	21.06	102.2	F
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

4

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

b Name: OHM CORPORATION ANALYTICAL DIVISION Contract: NFESC

Lab Code: NA Case No.: 17418N SAS No.: NA SDG No.: CG7871W001

Initial Calibration Source: PERKIN-ELMER

Continuing Calibration Source: PERKIN-ELMER

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium				20.6	20.87	101.3	21.62	104.9	F
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

5

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

b Name: OHM CORPORATION ANALYTICAL DIVISION Contract: NFESC

Lab Code: NA Case No.: 17418N SAS No.: NA SDG No.: CU78TN001

Initial Calibration Source: PERKIN-ELMER

Continuing Calibration Source: PERKIN-ELMER

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead	30.0	27.80	92.7	20.0	18.60	93.0			F
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									
	6								

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP
3
BLANKS

Lab Name: OHM CORPORATION ANALYTICAL DIVISION Contract: NFESC

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: CLJ78TW001

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	79.6	U	79.6	U	79.6	U	79.6	U	79.600	U	P
Antimony	48.8	U	48.8	U	48.8	U	48.8	U	48.800	U	P
Arsenic											
Barium	4.1	B	2.6	U	2.6	U	2.6	U	2.600	U	P
Beryllium	0.7	U	0.7	U	0.7	U	0.7	U	0.700	U	P
Cadmium	1.4	U	1.4	U	1.4	U	1.4	U	1.400	U	P
Calcium	32.3	U	32.3	U	32.3	U	32.3	U	32.400	B	P
Chromium	3.4	U	3.4	U	3.4	U	3.4	U	3.400	U	P
Cobalt	3.5	U	3.5	U	3.5	U	3.5	U	3.500	U	P
Copper	7.2	U	7.2	U	7.2	U	7.2	U	10.100	B	P
Iron	57.5	U	57.5	U	57.5	U	57.5	U	57.500	U	P
Lead											
Magnesium	107.0	U	107.0	U	107.0	U	107.0	U	107.000	U	P
Manganese	1.9	U	1.9	U	1.9	U	1.9	U	1.900	U	P
Mercury	0.2	U	0.2	U	0.2	U			0.140	U	CV
Nickel	10.7	U	10.7	U	10.7	U	10.7	U	10.700	U	P
Potassium	590.0	U	590.0	U	590.0	U	590.0	U	590.000	U	P
Selenium											
Silver	5.5	U	5.5	U	5.5	U	5.5	U	5.500	U	P
Sodium	471.0	U	471.0	U	471.0	U	471.0	U	471.000	U	P
Thallium											
Vanadium	3.2	U	3.2	U	3.2	U	3.2	U	3.200	U	P
Zinc	5.2	U	5.2	U	5.2	U	5.2	U	6.200	B	P
Cyanide											

1 N2M7351

U.S. EPA - CLP
3
BLANKS

Lab Name: OHM CORPORATION ANALYTICAL DIVISION Contract: NFESC

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: CLJ78TW001

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum			79.6	U							P
Antimony			48.8	U							P
Arsenic											
Barium			2.6	U							P
Beryllium			0.7	U							P
Cadmium			1.4	U							P
Calcium			32.3	U							P
Chromium			3.5	B							P
Cobalt			3.5	U							P
Copper			7.2	U							P
Iron			57.5	U							P
Lead											
Magnesium			107.0	U							P
Manganese			1.9	U							P
Mercury											
Nickel			10.7	U							P
Potassium			590.0	U							P
Selenium											
Silver			5.5	U							P
Sodium			471.0	U							P
Thallium											
Vanadium			3.2	U							P
Zinc			5.2	U							P
Cyanide											

2 N2M7351

U.S. EPA - CLP
3
BLANKS

Lab Name: OHM CORPORATION ANALYTICAL DIVISION Contract: NFESC

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: CLJ78TN001

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	79.6	U	79.6	U	79.6	U	79.6	U	79.600	U	P
Antimony	48.8	U	48.8	U	48.8	U	48.8	U	48.800	U	P
Arsenic											
Barium	9.5	B	3.9	B	5.7	B	5.5	B	2.600	U	P
Beryllium	0.7	U	0.7	U	0.7	U	0.7	U	0.700	U	P
Cadmium	1.4	U	1.4	U	1.4	U	1.4	U	1.400	U	P
Calcium	32.3	U	32.3	U	32.3	U	32.3	U	38.600	B	P
Chromium	3.4	U	3.4	U	3.4	U	3.4	U	3.400	U	P
Cobalt	3.9	B	3.5	U	3.5	U	3.5	U	3.500	U	P
Copper	7.2	U	7.2	U	7.2	U	7.2	U	9.300	B	P
Iron	57.5	U	57.5	U	57.5	U	57.5	U	57.500	U	P
Lead											
Magnesium	107.0	U	107.0	U	107.0	U	107.0	U	107.000	U	P
Manganese	1.9	U	1.9	U	1.9	U	1.9	U	1.900	U	P
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.140	U	CV
Nickel	10.7	U	10.7	U	10.7	U	10.7	U	10.700	U	P
Potassium	590.0	U	590.0	U	590.0	U	590.0	U	590.000	U	P
Selenium											
Silver	5.5	U	5.5	U	5.5	U	5.5	U	5.500	U	P
Sodium	471.0	U	471.0	U	471.0	U	471.0	U	471.000	U	P
Thallium											
Vanadium	4.5	B	3.2	U	3.2	U	3.2	U	3.200	U	P
Zinc	5.2	U	5.2	U	5.2	U	5.2	U	5.200	U	P
Cyanide											

3 N1M7342

U.S. EPA - CLP
3
BLANKS

Lab Name: OHM CORPORATION ANALYTICAL DIVISION Contract: NFESC

Lab Code: NA Case No.: 17418N SAS No.: NA SDG No.: CLJ78TW601

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											
Antimony											
Arsenic	2.2	U	2.2	U	2.2	U	2.2	U	2.240	U	F
Barium											
Beryllium											
Cadmium											
Calcium											
Chromium											
Cobalt											
Copper											
Iron											
Lead	2.0	U	2.0	U	2.0	U	2.0	U	1.960	U	F
Magnesium											
Manganese											
Mercury											
Nickel											
Potassium											
Selenium	1.2	U	1.2	U	1.2	U	1.2	U	1.160	U	F
Silver											
Sodium											
Thallium	1.2	U	1.2	U	1.2	U	1.2	U	1.240	U	F
Vanadium											
Zinc											
Cyanide											

1

U.S. EPA - CLP
3
BLANKS

Lab Name: OHM CORPORATION ANALYTICAL DIVISION Contract: NFESC

Lab Code: NA Case No.: 17418N SAS No.: NA SDG No.: CJ78TW001

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											
Antimony											
Arsenic			2.2	U	2.2	U			2.240	U	F
Barium											
Beryllium											
Cadmium											
Calcium											
Chromium											
Cobalt											
Copper											
Iron											
Lead			2.0	U	2.0	U	2.0	U	1.960	U	F
Magnesium											
Manganese											
Mercury											
Nickel											
Potassium											
Selenium			1.2	U	1.2	U	1.2	U	1.160	U	F
Silver											
Sodium											
Thallium			1.2	U	1.2	U			1.200	U	F
Vanadium											
Zinc											
Cyanide											

2

U.S. EPA - CLP
3
BLANKS

Lab Name: OHM CORPORATION ANALYTICAL DIVISION Contract: NFESC

Lab Code: NA Case No.: 17418N SAS No.: NA SDG No.: CCJ 78TW00/

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											
Antimony											
Arsenic											
Barium											
Beryllium											
Cadmium											
Calcium											
Chromium											
Cobalt											
Copper											
Iron											
Lead			2.0	U							F
Magnesium											
Manganese											
Mercury											
Nickel											
Potassium											
Selenium			1.2	U	1.2	U	1.2	U			F
Silver											
Sodium											
Thallium											
Vanadium											
Zinc											
Cyanide											

3

U.S. EPA - CLP
3
BLANKS

Lab Name: OHM CORPORATION ANALYTICAL DIVISION Contract: NFESC

Lab Code: NA Case No.: 17418N SAS No.: NA SDG No.: CG787W001

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											
Antimony											
Arsenic											
Barium											
Beryllium											
Cadmium											
Calcium											
Chromium											
Cobalt											
Copper											
Iron											
Lead											
Magnesium											
Manganese											
Mercury											
Nickel											
Potassium											
Selenium			1.2	U							F
Silver											
Sodium											
Thallium											
Vanadium											
Zinc											
Cyanide											

4

U.S. EPA - CLP
3
BLANKS

Lab Name: OHM CORPORATION ANALYTICAL DIVISION Contract: NFESC

Lab Code: NA Case No.: 17418N SAS No.: NA SDG No.: CCJ787W001

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											
Antimony											
Arsenic											
Barium											
Beryllium											
Cadmium											
Calcium											
Chromium											
Cobalt											
Copper											
Iron											
Lead	2.0	U	2.0	U							
Magnesium											
Manganese											
Mercury											
Nickel											
Potassium											
Selenium											
Silver											
Sodium											
Thallium											
Vanadium											
Zinc											
Cyanide											

5

U.S. EPA - CLP
4
ICP INTERFERENCE CHECK SAMPLE

Lab Name: OHM CORPORATION ANALYTICAL DIVISION Contract: NFESC

Lab Code: NA Case No.: NA~~N~~ 17418N SAS No.: NA SDG No.: CLJ78T~~W~~001

ICP ID Number: 61 ICS Source: INORGANIC VENTURES

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	Initial Found %R	Final Found Sol. A	Final Found Sol. AB	Final Found %R
Aluminum	500800	490000	498000	497000.0	101.4	489000	490000.0	100.0
Antimony	0	1050	37	1090.0	103.8	62	1070.0	101.9
Arsenic								
Barium	0	491	4	506.0	103.1	2	506.0	103.1
Beryllium	0	478	0	482.0	100.8	0	479.0	100.2
Cadmium	0	976	-15	968.0	99.2	-16	967.0	99.1
Calcium	187900	191000	195000	194000.0	101.6	192000	193000.0	101.0
Chromium	0	474	2	485.0	102.3	1	477.0	100.6
Cobalt	0	467	-3	482.0	103.2	-5	476.0	101.9
Copper	0	476	28	495.0	104.0	18	479.0	100.6
Iron	196600	188000	194000	193000.0	102.7	190000	191000.0	101.6
Lead								
Magnesium	273900	256000	256000	255000.0	99.6	255000	256000.0	100.0
Manganese	0	483	16	503.0	104.1	18	494.0	102.3
Mercury								
Nickel	0	937	-5	962.0	102.7	-3	960.0	102.5
Potassium								
Selenium								
Silver	0	1040	-6	1050.0	101.0	-12	1040.0	100.0
Sodium								
Thallium								
Vanadium	0	497	2	499.0	100.4	4	497.0	100.0
Zinc	0	987	7	976.0	98.9	7	968.0	98.1
Cyanide								

N2M7351

U.S. EPA - CLP
4
ICP INTERFERENCE CHECK SAMPLE

Lab Name: OHM CORPORATION ANALYTICAL DIVISION Contract: NFESC

Lab Code: NA Case No.: ~~NA~~ 174184 SAS No.: NA SDG No.: CLJ78TW001

ICP ID Number: 61 ICS Source: INORGANIC VENTURES

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	Initial Found %R	Final Found Sol. A	Final Found Sol. AB	Final Found %R
Aluminum	500800	490000	497000	490000.0	100.0	483000	488000.0	99.6
Antimony	0	1050	62	1060.0	101.0	65	1060.0	101.0
Arsenic								
Barium	0	491	2	497.0	101.2	4	499.0	101.6
Beryllium	0	478	0	488.0	102.1	0	486.0	101.7
Cadmium	0	976	-13	971.0	99.5	-13	963.0	98.7
Calcium	187900	191000	195000	191000.0	100.0	188000	190000.0	99.5
Chromium	0	474	-1	477.0	100.6	0	473.0	99.8
Cobalt	0	467	-4	479.0	102.6	-3	471.0	100.9
Copper	0	476	24	484.0	101.7	16	473.0	99.4
Iron	196600	188000	195000	192000.0	102.1	189000	190000.0	101.1
Lead								
Magnesium	273900	256000	259000	256000.0	100.0	253000	255000.0	99.6
Manganese	0	483	16	499.0	103.3	17	503.0	104.1
Mercury								
Nickel	0	937	-7	942.0	100.5	-3	947.0	101.1
Potassium								
Selenium								
Silver	0	1040	-7	1100.0	105.8	-5	1100.0	105.8
Sodium								
Thallium								
Vanadium	0	497	8	501.0	100.8	8	500.0	100.6
Zinc	0	987	5	997.0	101.0	5	992.0	100.5
Cyanide								

N1M7342

U.S. EPA - CLP **0762** EPA SAMPLE NO.

5A

SPIKE SAMPLE RECOVERY

CLJ78TW004

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix (soil/water): SOIL Level (low/med): MED

% Solids for Sample: _____

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		8465.4219		6838.3223		1179.99	137.9		P
Antimony	75-125	39.3331		-.5341	U	60.90	64.6	N	P
Arsenic	75-125	2.3138		.4954	B	2.26	80.5		F
Barium	75-125	241.8692		8.6826	B	234.94	99.3		P
Beryllium	75-125	5.8002		.0503	U	5.78	100.3		P
Cadmium	75-125	5.5888		-.1856	U	6.19	90.3		P
Calcium	75-125	1502.8765		281.4371	B	1176.47	103.8		P
Chromium	75-125	31.3491		7.8204		26.04	90.4		P
Cobalt	75-125	58.0016		.3605	U	58.81	98.6		P
Copper	75-125	30.2924		1.7365	B	28.68	99.6		P
Iron	75-125	4121.1689		3700.5986		1185.86	35.5	N	P
Lead	75-125	8.1938		6.8182		2.39	57.6	N	F
Magnesium	75-125	1326.7581		165.2695	B	1190.56	97.6		P
Manganese	75-125	60.2325		4.2635		59.45	94.1		P
Mercury	75-125	.2465		.004	U	.29	85.0		CV
Nickel	75-125	58.4713		.9305	U	58.28	100.3		P
Potassium	75-125	1279.7932		82.6347	B	1192.91	100.4		P
Selenium	75-125	1.5858	B	.0691	U	2.26	70.2	N	F
Silver	75-125	5.6358		-.1940	U	6.28	89.7		P
Sodium	75-125	1420.6880		92.2156	B	1545.15	86.0		P
Thallium	75-125	2.3476		-.0115	U	2.26	103.9		F
Vanadium	75-125	66.6901		8.9581		59.65	96.8		P
Zinc	75-125	58.4713		3.1138		58.99	93.8		P
Cyanide									NR

Comments:

U.S. EPA - CLP **0763** EPA SAMPLE NO.

5A

SPIKE SAMPLE RECOVERY

CLJ78-FB

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

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

% Solids for Sample: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	9200.0000		6.9800	U	10050.00	91.5		P
Antimony	75-125	474.0000		16.2000	U	518.70	91.4		P
Arsenic									NR
Barium	75-125	1850.0000		.1900	U	2001.00	92.5		P
Beryllium	75-125	46.2000		.4300	U	49.20	93.9		P
Cadmium	75-125	46.7000		.4900	U	52.70	88.6		P
Calcium	75-125	9300.0000		80.9000	B	10020.00	92.0		P
Chromium	75-125	188.0000		-.2200	U	221.80	84.8		P
Cobalt	75-125	465.0000		.6600	U	500.90	92.8		P
Copper	75-125	237.0000		7.5400	B	244.30	93.9		P
Iron	75-125	9300.0000		96.2000	B	10100.00	91.1		P
Lead									NR
Magnesium	75-125	9350.0000		4.9600	U	10140.00	92.2		P
Manganese	75-125	463.0000		.7800	U	506.30	91.4		P
Mercury									NR
Nickel	75-125	453.0000		-.5500	U	496.40	91.3		P
Potassium	75-125	10100.0000		-82.4000	U	10160.00	99.4		P
Selenium									NR
Silver	75-125	53.3000		.3700	U	53.50	99.6		P
Sodium	75-125	11000.0000		143.0000	U	13160.00	83.6		P
Thallium									NR
Vanadium	75-125	474.0000		0	U	508.00	93.3		P
Zinc	75-125	508.9999		8.4600	B	502.40	99.6		P
Cyanide									NR

Comments:

U.S. EPA - CLP

5A

SPIKE SAMPLE RECOVERY

0764 EPA SAMPLE NO.

CLJ78-RB

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

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

% Solids for Sample: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony									NR
Arsenic	75-125	22.5000		.2800	U	20.00	112.5		F
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury	75-125	1.7500		.1080	U	2.00	87.5		CV
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium	75-125	21.0000		-1.000	U	20.00	105.0		F
Vanadium									NR
Zinc									NR
Cyanide									NR

Comments:

U.S. EPA - CLP

0765

EPA SAMPLE NO.

5A

SPIKE SAMPLE RECOVERY

CLJ78TW001

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Job Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

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

% Solids for Sample: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead	75-125	25.1000		5.2000		20.00	99.5		F
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium	75-125	18.3500	B	1.2500	U	20.00	91.7		F
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

Comments:

U.S. EPA - CLP **0766** EPA SAMPLE NO.

5B

POST DIGEST SPIKE SAMPLE RECOVERY

CLJ78TW004

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix (soil/water): SOIL Level (low/med): MED

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony		.51		-.004	U	.6	85.0		P
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron		42.30		30.90		11.1	102.7		P
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

Comments:

U.S. EPA - CLP 0767 EPA SAMPLE NO.

6
DUPLICATES

CLJ78-FB

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

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

% Solids for Sample: _____ % Solids for Duplicate: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		6.9800	U	33.3000	U			P
Antimony		16.2000	U	14.1000	U			P
Arsenic								NR
Barium		.1900	U	.7200	U			P
Beryllium		.4300	U	.4300	U			P
Cadmium		.4900	U	.2400	U			P
Calcium		80.9000	B	112.0000	B	31.1		P
Chromium		-.2200	U	3.3400	U			P
Cobalt		.6600	U	.5500	U			P
Copper		7.5400	B	9.7600	B	2.2		P
Iron		96.2000	B	44.5000	U	96.2		P
Lead								NR
Magnesium		4.9600	U	36.3000	U			P
Manganese		.7800	U	1.3700	U			P
Mercury								NR
Nickel		-.5500	U	-2.2500	U			P
Potassium		-82.4000	U	23.5000	U			P
Selenium								NR
Silver		.3700	U	-.3700	U			P
Sodium		143.0000	U	441.0000	U			P
Thallium								NR
Vanadium		0	U	.7800	U			P
Zinc		8.4600	B	10.0000	B	1.5		P
Cyanide								NR

U.S. EPA - CLP

6
DUPLICATES

0768 EPA SAMPLE NO.

CLJ78TW004

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Matrix (soil/water): SOIL Level (low/med): MED

% Solids for Sample: _____ % Solids for Duplicate: _____

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		6838.3223		6853.6191		.2		P
Antimony		-.5341	U	-.4684	U			P
Arsenic		.4954	B	.4616	B	.03		F
Barium		8.6826	B	8.4307	B	.3		P
Beryllium		.0503	U	.0498	U			P
Cadmium		-.1856	U	-.2122	U			P
Calcium		281.4371	B	273.9076	B	7.5		P
Chromium		7.8204		7.8141		.08		P
Cobalt		.3605	U	.1968	U			P
Copper		1.7365	B	1.1466	B	.6		P
Iron		3700.5986		3699.5313		.03		P
Lead	1.8	6.8182		14.9522		8.1	*	F
Magnesium		165.2695	B	162.4474	B	2.8		P
Manganese	1.8	4.2635		3.2727		1		P
Mercury		.004	U	.008	U			CV
Nickel		.9305	U	.6000	U			P
Potassium		82.6347	B	131.6179	B	49.0		P
Selenium		.0691	U	.9199	B	.9		F
Silver		-.1940	U	.0581	U			P
Sodium		92.2156	B	72.3306	B	19.9		P
Thallium		-.0115	U	-.0564	U			F
Vanadium	5.9	8.9581		9.0354		.08		P
Zinc	2.4	3.1138		2.4071		.7		P
Cyanide								NR

U.S. EPA - CLP

6
DUPLICATES

0769

EPA SAMPLE NO.

CLJ78-RB

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

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

% Solids for Sample: _____ % Solids for Duplicate: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum								NR
Antimony								NR
Arsenic		.2800	U	.2900	U			F
Barium								NR
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium								NR
Cobalt								NR
Copper								NR
Iron								NR
Lead								NR
Magnesium								NR
Manganese								NR
Mercury		.1080	U	.0150	U			CV
Nickel								NR
Potassium								NR
Selenium								NR
Silver								NR
Sodium								NR
Thallium		-1.000	U	-.4000	U			F
Vanadium								NR
Zinc								NR
Cyanide								NR

U.S. EPA - CLP

6
DUPLICATES

0770

EPA SAMPLE NO.

CLJ78TW001

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

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

% Solids for Sample: _____ % Solids for Duplicate: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum								NR
Antimony								NR
Arsenic								NR
Barium								NR
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium								NR
Cobalt								NR
Copper								NR
Iron								NR
Lead	3.0	5.2000		5.7000		.5		F
Magnesium								NR
Manganese								NR
Mercury								NR
Nickel								NR
Potassium								NR
Selenium		1.2500	U	7.5500	B	7.6		F
Silver								NR
Sodium								NR
Thallium								NR
Vanadium								NR
Zinc								NR
Cyanide								NR

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

0771

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Solid LCS Source:

Aqueous LCS Source: INORGANIC VENTURES

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum	10050	9860.00	98.1						
Antimony	518.7	494.00	95.2						
Arsenic	20.0	21.70	109						
Barium	2001.0	1970.00	98.5						
Beryllium	49.2	48.30	98.2						
Cadmium	52.7	50.10	95.1						
Calcium	10020	10100.00	101						
Chromium	221.8	198.00	89.3						
Cobalt	500.9	492.00	98.2						
Copper	244.3	251.00	103						
Iron	10100	9870.00	97.7						
Lead	20.0	19.50	97.5						
Magnesium	10140	10100.00	99.6						
Manganese	506.3	491.00	97.0						
Mercury	5.0	4.88	97.6						
Nickel	496.4	495.00	99.7						
Potassium	10160	9930.00	97.7						
Selenium	20.0	20.60	103						
Silver	53.5	58.30	109						
Sodium	13160	11900.00	90.4						
Thallium	20.0	20.50	103						
Vanadium	508.0	503.00	99.0						
Zinc	502.4	506.00	101						
Cyanide									

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

0772

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

b Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Solid LCS Source:

Aqueous LCS Source: INORGANIC VENTURES

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum	10050	9120.00	90.7						
Antimony	518.7	483.00	93.1						
Arsenic									
Barium	2001.0	1830.00	91.5						
Beryllium	49.2	46.10	93.7						
Cadmium	52.7	46.40	88.0						
Calcium	10020	9330.00	93.1						
Chromium	221.8	184.00	83.0						
Cobalt	500.9	459.00	91.6						
Copper	244.3	236.00	96.6						
ron	10100	9270.00	91.8						
)ad	20.0	20.30	102						
Magnesium	10140	9350.00	92.2						
Manganese	506.3	462.00	91.3						
Mercury	2.0	1.99	99.5						
Nickel	496.4	458.00	92.3						
Potassium	10160	9340.00	91.9						
Selenium	20.0	20.70	104						
Silver	53.5	55.90	104						
Sodium	13160	11100.00	84.3						
Thallium									
Vanadium	508.0	471.00	92.7						
Zinc	502.4	478.00	95.1						
Cyanide									

)

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

0773

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 17418N SAS No.: N/A SDG No.: CLJ78TW001

Solid LCS Source: _____

Aqueous LCS Source: INORGANIC VENTURES

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum									
Antimony									
Arsenic	20.0	23.10	115						
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium	20.0	20.30	102						
Vanadium									
Zinc									
Cyanide									

INORGANICS

Conventionals

OHM TREATABILITY LABORATORY
PARTICLE SIZE ANALYSIS SUMMARY

Project: Camp Leguene / 17418
Date: 11/17/95
Sample: CLJ78TW001

TYLER SIEVE	PARTICLE RANGE	% OF TOTAL SOLIDS (DRY WT.)
No. 4	> 4.75 mm	0
No. 10	2.00 - 4.75 mm	0
No. 30	600 um - 2.00 mm	0
No. 50	300 um - 600 um	0.21
No. 100	150 um - 300 um	51.69
No. 200	75 um - 150 um	12.84
No. 400	38 um - 75 um	5.69
< No. 400	<38 um	29.57

OHM TREATABILITY LABORATORY
PARTICLE SIZE ANALYSIS SUMMARY

Project: Camp Leguene / 17418
Date: 11/17/95
Sample: CLJ78TW01D

TYLER SIEVE	PARTICLE RANGE	% OF TOTAL SOLIDS (DRY WT.)
No. 4	> 4.75 mm	0
No. 10	2.00 - 4.75 mm	0.29
No. 30	600 um - 2.00 mm	0.51
No. 50	300 um - 600 um	7.72
No. 100	150 um - 300 um	59.15
No. 200	75 um - 150 um	13.35
No. 400	38 um - 75 um	3.34
< No. 400	<38 um	15.64

CHAIN-OF-CUSTODY RECORD(S)

Ocean Remediation Services Corp.

LAB-COPY

Form 0019
Field Technical Services
Rev. 08/89

CHAIN-OF-CUSTODY RECORD

1 of 2

166462

O.H. MATERIALS CORP. • P.O. BOX 551 • FINDLAY, OH 45839-0551 • 419-423-3526

PROJECT NAME: Camp Lejeune
PROJECT LOCATION: Camp Lejeune, N.C.
PROJ. NO.: 17418
PROJECT CONTACT: Alan Whitt
PROJECT TELEPHONE NO.: (910) 451-2599
CLIENT'S REPRESENTATIVE: VANN Marshburn
PROJECT MANAGER/SUPERVISOR: Jim Dunn / Alan Whitt

ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)	NUMBER OF CONTAINERS	METALS (6010/7470)	Volatiles (8240)	Semi-Volatiles (8270)	PST/PCB (8080)	TPH (418.1)	Particle Size Analysis			REMARKS
1	CLJ78-TW-001	11/12	1215		X	Soil Sample from 4'-8'	1-4oz 2-8oz	X	X	X	X	X	X			ASTM (D-422) - Particle Size Analysis
2	CLJ78-TW-001D	11/12	1215		X	Soil Sample from 4'-8' Duplicate	1-4oz 2-8oz	X	X	X	X	X				
3	CLJ78-TW-002	11/12	1109		X	Soil sample from 4'-7.5'	1-4oz 2-8oz	X	X	X	X	X				
4	CLJ78-TW-003	11/12	1358		X	Soil Sample from 3.2'-7.2'	1-4oz 2-8oz	X	X	X	X	X				
5	CLJ78-TW-004	11/12	1503		X	Soil Sample from 3.85'-7.85'	1-4oz 2-8oz	X	X	X	X	X				
6	CLJ78-TW-001	11/12	1430		X	Ground water	7-1L 2-40mL	X	X	X	X	X				
7	CLJ78-TW-002	11/12	1315		X	Ground water	7-1L 2-40mL	X	X	X	X	X				
8	CLJ78-TW-002D	11/12	1315		X	Ground water Duplicate	7-1L 2-40mL	X	X	X	X	X				
9	CLJ78-TW-003	11/12	1540		X	Ground water	7-1L 2-40mL	X	X	X	X	X				
10	CLJ78-TW-004	11/12	1730		X	Ground water	7-1L 2-40mL	X	X	X	X	X				

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1	1-10	Aaron R. Gran	FED-EX 6921490962	11/13	1700
2	1-10	Fedex	Angela D. Schimmel	11-14-95	1111
3					
4					

REMARKS: Samples sent To A.S.C. Lab 7 day T.A.T. Please Fax Results To 910.451.1809 ATTN. Alan Whitt or AARON GRAN Thank you

SAMPLER'S SIGNATURE: Aaron R. Gran

0778

Remediation Services Corp.

LAB COPY

Form 0019
Field Technical Services
Rev. 08/89

CHAIN-OF-CUSTODY RECORD

2 of 2

166463

O.H. MATERIALS CORP. • P.O. BOX 551 • FINDLAY, OH 45839-0551 • 419-423-3526

PROJECT NAME: Camp Lejeune
PROJECT LOCATION: Camp Lejeune, N.C.
PROJ. NO.: 17418
PROJECT CONTACT: Alan Whitt
PROJECT TELEPHONE NO.: (910) 451-2599
CLIENT'S REPRESENTATIVE: VANN Marshburn
PROJECT MANAGER/SUPERVISOR: Jim DUNN / Alan Whitt

ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)	NUMBER OF CONTAINERS	METALS (6010/7470)	Volatiles (8240)	semi-Volatiles (8270)	PST/PCB (8080)	TPH (418.1)				REMARKS
1	CJ78-FB	11/12	1345		X	Field Blank	7-1L 2-40mL	X	X	X	X	X				
2	CJ78-RB	11/12	1445		X	Rinsate Blank	7-1L 2-40mL	X	X	X	X	X				
3																
4																
5																
6																
7																
8																
9																
10																

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1	1-2	Aaron R. Gran	FED-EX 6921490962	11/13	1700
2	1-2	Fedex	Angela D. Schimmel	11-14-95	1111
3					
4					

REMARKS: Samples Sent To ASC. LAB. 7 day T.A.T. Please FAX Results to 910 451-1809 ATTN. Alan Whitt or AARON GRAN Thanks

SAMPLER'S SIGNATURE: Aaron R. Gran

0779

Appendix I

Temporary Monitoring Well, Data Summary and Field Notes

TEMPORARY MONITORING WELL DATA

BUILDING 25 - SITE 83

SAMPLING EVENT NOVEMBER 19,1995

GROUNDWATER DATA

A.	TAL Metals (mg/L)	TW-01	TW-02	TW-03	TW-04	State 2L
	Aluminum	9.01	9.27	8.11	7.97	NA
	Calcium	5.82	9.77	14.3	<0.032	NA
	Chromium	0.014	0.015	0.015	0.015	0.05
	Iron	4.79	4.52	10.1	4.74	0.30
	Lead	0.005	0.005	0.005	<0.001	0.015
	Manganese	0.040	0.040	0.047	0.025	0.05
	Nickel	0.132	0.231	0.197	0.279	0.1
	Sodium	11.3	7.75	<0.471	8.21	NA
	Zinc	0.35	0.21	<0.005	0.23	2.1
B.	TPH (mg/L)	<0.101	0.786	0.552	<0.111	
C.	A/B/N (mg/L)					
	Bis(2-Ethylhexyl)-phthlate	0.02	<0.01	0.624	<0.01	
	Napthalene	<0.010	<0.010	0.53	<0.012	
D.	Volatile Organic Analysis (mg/L)					
	Tetrachloroethylene	1.62	0.416	4.19	29.2	0.0007
	1,2 Dichloroethene	<0.01	0.154	10.0	<1.25	0.07
	Trichloroethylene	<0.1	<0.05	2.75	<1.25	0.0028
E.	PCBs and Pesticides (mg/kg)	ND	ND	ND	ND	

SOILS DATA

A.	TAL Metals (mg/kg)	TW-01	TW-02	TW-03	TW-04
	Aluminum	5260	1950	5200	6840
	Calcium	ND	ND	ND	ND
	Chromium	7.88	4.4	6.63	7.82
	Iron	1430	871	2600	3700
	Lead	7.2	4.86	19.8	6.82
	Manganese	5.38	<0.223	2.90	4.26
	Vanadium	7.57	<0.376	8.12	8.96
	Zinc	2.91	<0.611	<0.581	3.11
B.	TPH (mg/kg)	<0.222	<0.202	<0.190	<0.198
C.	A/B/N (mg/kg)	ND	ND	ND	ND
D.	Volatile Organic Analysis (mg/kg)				
	Acetone	0.035	0.061	0.083	0.019
	Methylene Chloride	0.053	<0.006	<0.006	0.034
	Tetrachloroethylene	0.013	0.055	0.036	<0.005
	1,2 Dichloroethene	<0.006	0.009	<0.006	<0.005
	Trichloroethylene	<0.006	<0.006	<0.006	<0.005
E.	PCBs and Pesticides (mg/kg)	ND	ND	ND	ND

17418 - 3.58

BLANK

Entry Discontinued

SUNDAY 11/12/95

0715 Prepare Equip (H&S, Sampling ect) for Bldg. 25 Investigation

weather: clear, cool, Hi Mid 50's

Obj. ① Install 4 temp. wells for OHM @ Bldg. 25

② collect soil samples during well Installation

③ collect G.W. Samples from temp. wells

0800 Assemble 4 temp. 1" ϕ PVC wells

1030 Meet Alan Witt w/ OHM @ lot 203 Mob to Bldg. 25 (Dry cleaning Facility) Layout Locations of 4 Temp. wells

1100 set-up ON 25-TWϕ2

CREW: MicroSeeps using Geoprobe samplers

Baker = Jim Culp ; Jeff Tepsic

Note:

Moisture		
Dry	Trace = 0-10%	CONTACTS
Damp	Little = 10-20%	—— Definite
Moist	Some = 20-35%	- - - - Indefinite
Wet	AND = 35-50%	oooo Gradational

② JPT

JPT ③

11/12/95 25-TWØ2

Depth(ft)	Sample#	Time	Rec(IN)	PID BG/PS.	DESCRIPTION	Notes
0-4	S-1	1103	36"	0.6/1.8	BRN. Sand ~ F.G., T. Silt, (Fill material) DRY to DAMP, Bricks Pieces in sample	Fill
4-7.5	S-2	1109	31"	0.6/2.0	BRN. Sand (F.G.) Poorly sorted to ~6' then lt. gray Sand (F.G.) Some silt, T. Clay moist to wet	SP/SM
7.5-10.5	S-3	1117	24½"	0.4/16	lt. Gray Sand (F.G.) Poorly Sorted - wet G.W. @ 7.5'	SP
10.5-13.5	S-4	1121	36"	—	Gray Sand (F.G.) Poorly sorted - wet Set well @ 16'	SP

Lab sample from S-2 (4'-7.5') Give to DHM

Borehole caves in @ ~8' (i.e. waterfall)
Push well hydraulically to 14.6'

11/12/95

1200

Mob to 25-TWØ1

JPT Drilling Next well J.S.C. begin purging & Sampling

10.08 = WATER

17.50 = TD

7.42 = Water Column

7.42 × 0.163 = 0.3 gal/well vol.

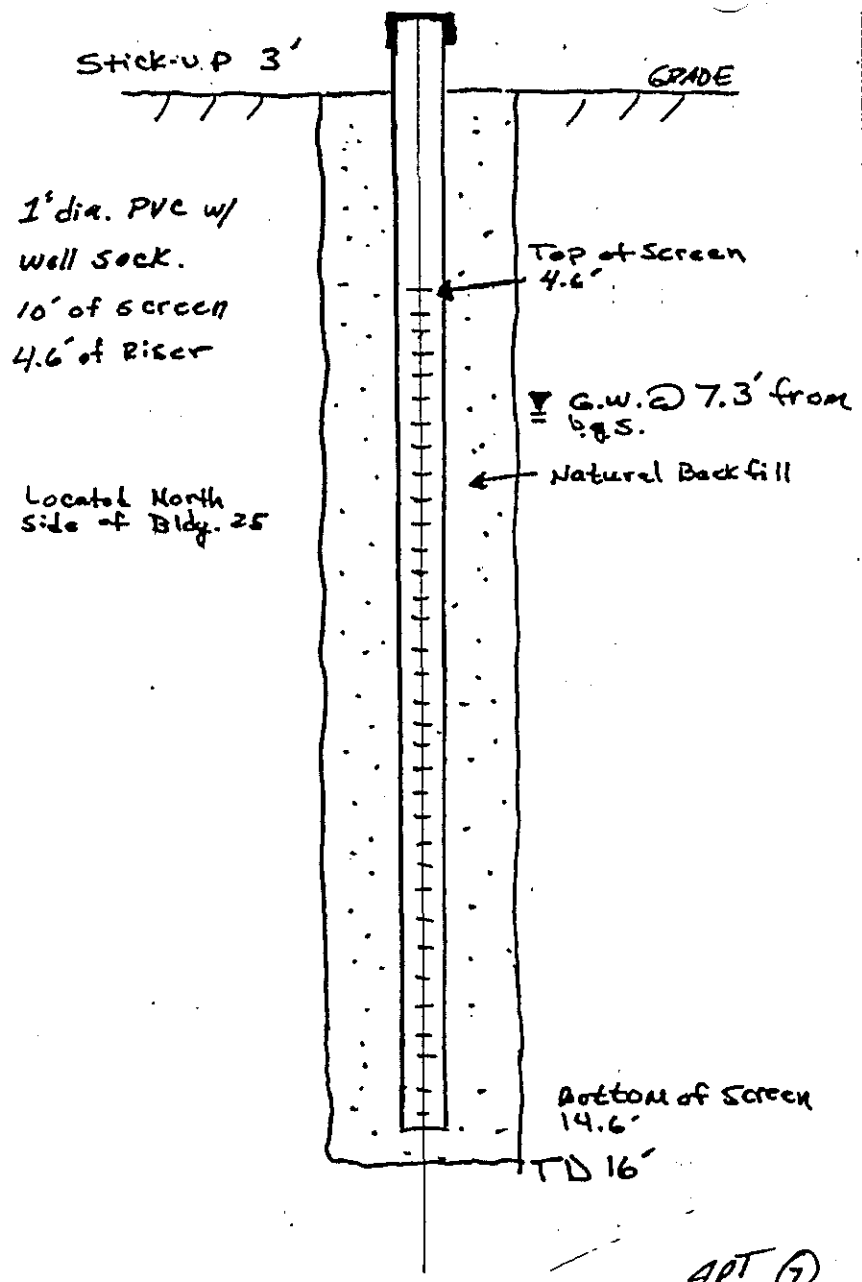
7.42 × .041 = .304 22

Purge Rate = 8 oz/1 min
= 1 gal/16 min
= 1/16 gal/min

16) 128 (8
8
48

@ JPT

25-TWØ2



JPT @

11/12/95 25-TWØ1 25-TWØ1

Depth (ft)	Sample #	Time	Rec (in)	PID B.G. / P.S.	Description	Notes
0-4	S-1	1212	38"	0.3 / 5.0	0-2' DRK. BRN. to Blk Sand (F.G.) T. Silt w/ organic Material Dry to Damp	SM
					~2'-4' Gray Sand (F.G.), little Silt, Damp to moist.	0 0 0 0 ~4'
4-8	S-2	1215	36"	0.3 / 2.0	lt. Gray SAND (F.G.) Poorly Sorted, T. Silt, Moist to wet.	SP
					G.W. @ 8.0' Measure w/ w.l. indicator = 7.0 from b.g.s.	▼
8-11.5	S-3	1224	98" ~~36"~~	0.3/0.3	lt. Brn. w/ orange Mottling SAND (F.G.) Poorly sorted wet	SP
					Lab Sample S-2 @ 4-8' ⇒ TO OHM	1230 Attempt to set well @ ~15.0'

Note: When taking H_2O level in well found that pvc Broke while forcing well in hydraulically. Broke ~8' b.g.s. Have to Do another one here

11/12/95

Page TPT to start work on putting together New Well. Can't do it ~~Later~~ Now in middle of sampling.

LATE ENTRY: @ 1315 began collecting GW sample from 25TW02 and collected Dup.

1350 mob to Next Pt.

1403 -

Depth to Water 10.04

TD = 19.26

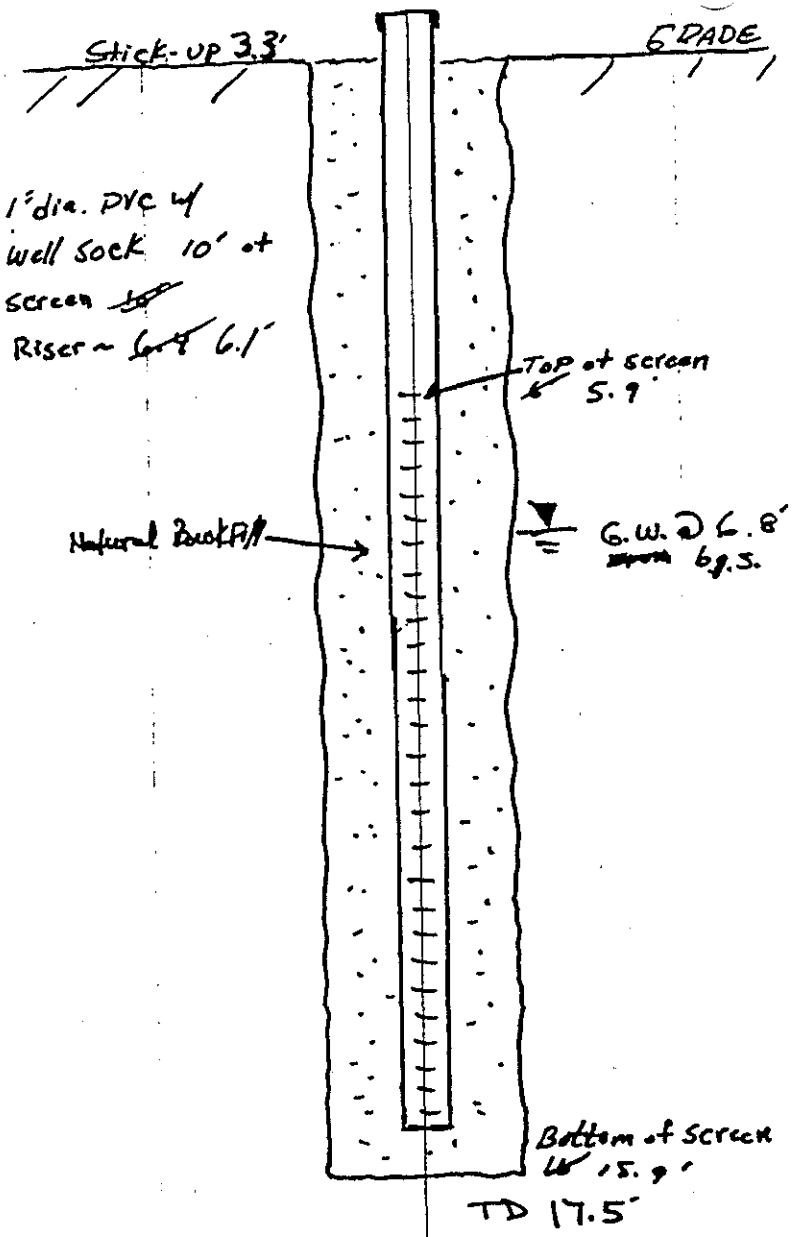
Water Column:

19.26
10.04
9.22

9.22
.041
922
3688
.37802

0.38 gal/well Vol.

25-TW01



11/12/95 25-TW03 25-TW03 /95

Depth (ft)	Sample #	Time	Rec (ft)	PID Bag	PID BS	Description	Notes
0 - 3.2	—	—	—	—		DRK. BRN. to BLK. SAND (F. G.) Some organic material	Hand auger 0-3.2' Start sampling @ 3.2' b.g.s.
3.2-7.2'	S-1	1358	3.3	1.4	1.4	lt. BRN. ~~of orange mott~~ w/ mottled orange SAND, (T. Silt moist to wet) @ TIP of sample (F.G.) G.W. @ 8.5'	SP
7.2-10'	S-2	1405	2.4	1.3	1.3	lt. BRN. Mottled orange sand (F.G.) wet, poorly sorted	SP

Lab Sample S-1 @ 3.2' to 7.2'
~~to ottm~~

Try & set well @ 16'

2.2' Stick-up
w.L. @ 7.35 bgs
TD 16.8'

(12) 4pT

4pT (13)

11/12/95

1430 Sampled 25-TWØ1 (G.W.)

1450 Mob to 25-TWØ4

1512 -

10.38 = Depth to water
17.95 = TD
7.57 = Water column

7.57
.041
757
3028
.30957

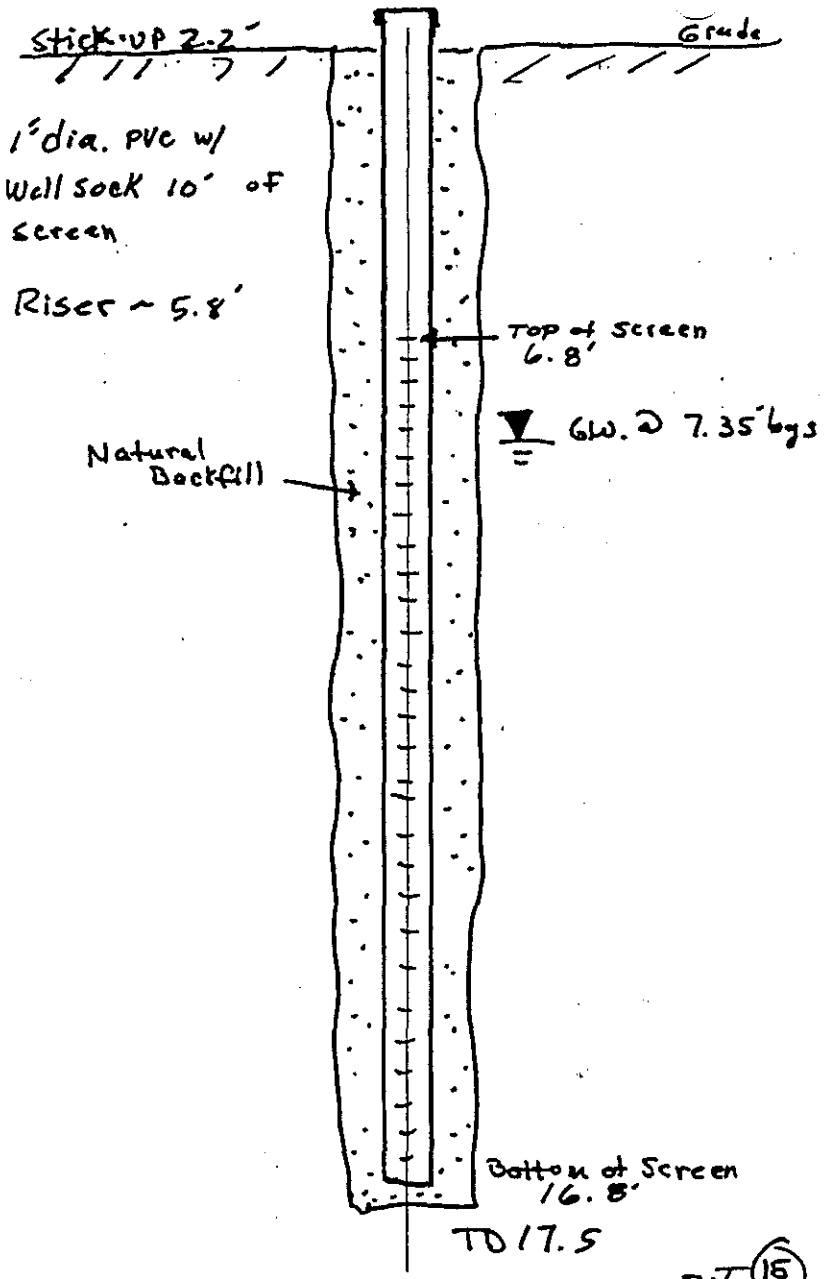
.31 gal/well vol.

1540 - Sampled 25-TWØ3

(14) APT

-95

25-TWØ3



APT (15)

11/12/95 25-TWØ4 25-TWØ4 1 '95

Depth (Ft)	Sample #	Time	Rec (ft)	B.G.	PID R.S.	DESCRIPTION		Notes
0-3.85	—	—	—	—		BRN/BLK Sand (F. G.)	Dry - DAMP	Hand Auger To 3.85' Start sampling @ 3.85'
3.85-7.85'	S-1	1503	3.2	0.0/	0.0	lt. Gray & orange mottled Sand (F. G.) T. Silt, Moist.		
7.85 - 11.0 ~~10.75~~	S-2	15.12	2.8	?	PID out!	lt. Gray & orange mottled FG. Sand T. Silt wet G.W. @ ~8.5'		HNU out
						1520 To Air Station Trailer to get well screen. Decon well screen		
						1645 Back @ Bldg. 25		

(16) 9pT

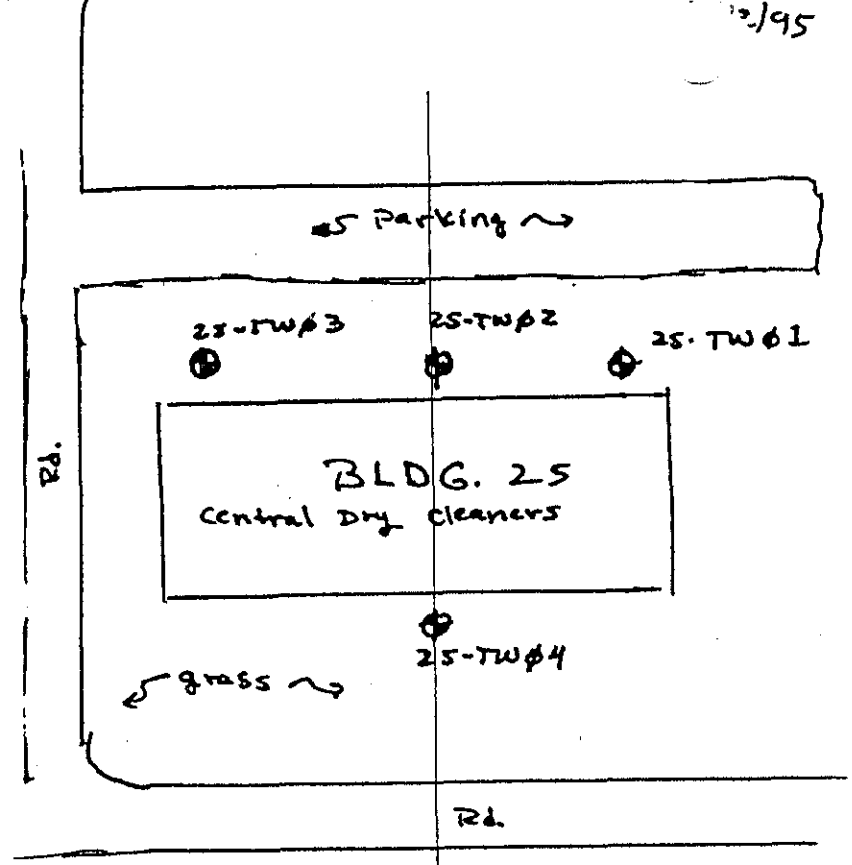
9pT (17)

11/12/95

1745 Leave Bldg. 25
All samples Collected

Anthony P. Topini
11/12/95

(20) APT



RODIE GRILLA → GROUNDWATER MODELING

— STEVE DI MARTINO

— BEN GRUNE

APT (21)

Appendix J

Air Monitoring Data and Daily Safety Meeting Logs

OHM

DIRECT READING INSTRUMENT LOG

Project: 17418 BLDG. 25

Job No.: 17418

Date: 9/19/95

Operator: S. GRAND

Instrument: PID

Calibration: Full CALIBRATION
Amt, Component, Date

Sampling Technique:

Sample Interval: CONTINUOS

Background Reading: .2ppm

Action Level/Response: 5ppm FOR 5 minutes in Breathing Zone

Time	Location	Reading (units)	Detection Limit (Scale)
1030	Excavation	.1 above Background	5ppm
1045	Excavation	0.0	
1115	Breathing Zone	0.0	
1200	Background	.2	
1230	Breathing Zone	0.0	
1315	Excavation	0.0	
1430	Breathing Zone	0.0	
1630	Excavation	0.0	
1730	Perimeter	0.0	

AIR MONITORING INSTRUMENT
($LEL/O_2/PID/FID/HCN/H_2S$)
CALIBRATION/MAINTENANCE LOG

Type Instrument: PID

Date: 9/19/95

Model Number:

Performed By: S. GRAND

OHM or Serial No:

Battery Check: Full charge

Instrument Zero: 0

Alarm Check/Set: ✓

Maintenance Performed:
(e.g., sensor, lamp, battery replacement)

Comments:

Calibration Data

Calibration Standard: manufactured specs

Instrument Response: 70 ppm

Calibration Respone: 70 ppm

Span Setting (PID/FID): 2

O_2 Calibration Setting: NA

Notes:

General Condition of Instrument: FAIR

Battery Last Charged: 9/18/95 Duration of Charge: 12

Other:

OHM

DIRECT READING INSTRUMENT LOG

Project: BIDG 25 Job No.: 17418

Date: 9-28-95 Operator: S. GRANT

Instrument: PID Calibration: FULL CALIBRATION
Amt, Component, Date

Sampling Technique:

Sample Interval:

Background Reading: 0.0

Action Level/Response: 5ppm FOR 5 mins. in the Breathing Zone

Time	Location	Reading (units)	Detection Limit (Scale)
0730	Perimeter	0.0	5ppm FOR 5 minutes
1020	Sampling B2 T-1	0.0	
1045	Sampler B2 T-1	0.0	
1115	Sampler B2 T-3	0.0	
1200	Perimeter	0.0	

AIR MONITORING INSTRUMENT
(LEL/O_2/PID/FID/HCN/H_2S)
CALIBRATION/MAINTENANCE LOG

pe Instrument: PID

Date: 9/26/95

odel Number:

Performed By: S. GRAND

EM or Serial No:

Battery Check: Full charge

nstrument Zero: 0

Alarm Check/Set: ✓

Maintenance Performed:
(Sensor, lamp, battery replacement)

omments:

Calibration Data

Calibration Standard: manufactured specs.

Instrument Response: 70 ppm

Calibration Respone: 70 ppm

Span Setting (PID/FID): 2

O_2 Calibration Setting: NA

Notes:

General Condition of Instrument: FAIR

Battery Last Charged: 9/19/95 Duration of Charge: 12

Other:

AIR MONITORING INSTRUMENT
($LEL/O_2/PID/FID/HCN/H_2S$)
CALIBRATION/MAINTENANCE LOG

Type Instrument: HNU - PID

Date: 01-10-96

Model Number: PI 101

Performed By: Scott Dunbar

OHM or Serial No: 2PD-16

Battery Check: OK Fully Charged

Instrument Zero: OK

Alarm Check/Set: N/A

Maintenance Performed:
(eg., sensor, lamp, battery replacement)

N/A

Comments:

Calibration Data

Calibration Standard: 99.7ppm Isobutylene

Instrument Response: 58ppm

Calibration Respone: 60ppm

Span Setting (PID/FID): 9.6

O_2 Calibration Setting: N/A

Notes:

General Condition of Instrument: good

Battery Last Charged: 1/9/96 Duration of Charge: 12hrs

Other:

OHM

DIRECT READING INSTRUMENT LOG

Project: Camp LeJeune Bldg #25 Job No.: 17418

Date: 01-10-96 Operator: Scott Dunbar

Instrument: HNU-PID Calibration: 01-10-96
Amt, Component, Date

Sampling Technique: Ambient air Monitoring

Sample Interval: Periodic

Background Reading: <1 PPM

Action Level/Response: As Listed in SHSP

Time	Location	Reading (units)	Detection Limit (Scale)
1035	Bldg #25 UST Excavation	<1-1 PPM	
1048	Bldg #25 Edge of Bldg	<1-10 ppm From Bldg Exhaust	
1105	Bldg #25 UST Excavation	<1 PPM	
1120	Bldg #25 Edge of Bldg	<1-12 PPM From Bldg Exhaust	
1355	Bldg #25 UST Excavation	1-10 ppm	
1410	Bldg #25 Edge of Bldg	1-5 PPM From Bldg Exhaust	
1415	Bldg #25 UST Excavation	1-2 PPM	
1425	Bldg #25 Edge of Bldg	1-7 PPM From Bldg Exhaust	
1600	Bldg #25 UST Excavation	<1 PPM	
1610	Bldg #25 Edge of Bldg	<1 PPM	

OHM Corporation

DAILY SAFETY MEETING LOG

Date: 01-11-96 Client: LANTDIV

Specific Location: Camp LeJeune Job No.: 17418

SAFETY TOPICS PRESENTED:

Protective Clothing/Equipment: Tank pumping Level "C", over Burden Removal Level "C".

Chemical Hazards: Dry Cleaning Solvents (PCE, TCE, Mineral Spirits, ~~Benzene~~ and BTEX.

Physical Hazards: Heavy Equipment, open Excavation, Fire & Explosions, Suspend Loads

Emergency Procedures: Notify & Evacuate personnel, Notify Site Supervisor/Foremen and Respond To The Capability without endangering personnel

Hospital/Clinic: USMC Base Hospital Phone: 910-451-1540

Hospital Address: Take Holcomb Blvd Toward Main gate Turn Left on Brewster St. Follow signs.

EMS Phone: 911

Special Equipment:

Other:

ATTENDEES:

Name Printed:	Signature:

Meeting Conducted By:

Scott Dunbar #6098 — Name Printed

Signature

DAILY SAFETY MEETING LOG
(CONTINUATION PAGE)

Date: 01-11-96

Client: Lantdiv

Specific Location: Camp Le Jeune

Job No. 17418

SAFETY TOPICS PRESENTED:

ATTENDEES:

Name Printed:	Signature:
Jerrod Shiets 9952	J Shiets
Kris Phillips 8044	Kris Phillips
STEVEN A. DILLER 3442	Steven A. Diller
Scott W. Dunbar 8098	Scott Dunbar

OHM

DIRECT READING INSTRUMENT LOG

Project: Camp LeJeune Bldg #25 Job No.: 17415

Date: 1-11-96 Operator: S. Dunbar

Instrument: HNU-PID Calibration: 1-11-96
Amt. Component. Date

Sampling Technique: Ambient work zone (Breathing zone) and Perimeter

Sample Interval: Periodically

Background Reading: <1 ppm

Action Level/Response: >1 ppm Level C, >25 ppm Level "B", >500 ppm Shut down @ Bldg >1 ppm Shut windows and >10 ppm shut down

Time	Location	Reading (units)	Detection Limit (Scale)
1115	Tank pumping area	<1-2 ppm	<1 ppm
1120	Edge of Bldg #25	1-2 ppm	
1135	Tank pumping area	<1-1 ppm	
1145	Bldg #25 under Exhaust Fan	4-10 ppm	
1200	Tank Pumping area	2 ppm	
1205	Bldg #25 along Tank area	1-7 ppm	
1215	Tank Pumping area	<1-1 ppm	
1220	Edge of Bldg #25	1-4 ppm	
1230	Tank pumping area	1-2 ppm	
1235	Edge of Bldg #25	1-8 ppm	
1250	Perimeter of exclusion zone	<1-1 ppm	
1255	Edge of Bldg #25	<1-8 ppm	
1500	Perimeter of Tank Purging	1 ppm	
1515	Edge of Bldg #25	<1-2 ppm	
1545	Perimeter of Tank Purging	<1-2 ppm	
1620	Edge of Bldg #25	1-3 ppm	

AIR MONITORING INSTRUMENT
($LEL/O_2/PID/FID/HCN/H_2S$)
CALIBRATION/MAINTENANCE LOG

Type Instrument: HNU-PID

Date: 01-11-96

Model Number: PI-101

Performed By: Scott Dunbar

OHM or Serial No: 2PD-16

Battery Check: Fully charged

Instrument Zero: OK

Alarm Check/Set: N/A

Maintenance Performed:
(eg., sensor, lamp, battery replacement)

Comments:

Calibration Data

Calibration Standard: 56 ppm Isobutylene

Instrument Response: 50 ppm

Calibration Respone: 56 ppm

Span Setting (PID/FID): 8.85

O_2 Calibration Setting: N/A

Notes:

General Condition of Instrument:

Battery Last Charged: 1/10/96 Duration of Charge: 12

Other:

OHM Corporation

DAILY SAFETY MEETING LOG

Date: 1-12-96 Client: LANTDIV

Specific Location: Camp LeJeune Job No.: 17418

SAFETY TOPICS PRESENTED:

Protective Clothing/Equipment: Level C Soil Excavation & Tank Removal

Chemical Hazards: Dry Cleaning Solvents (TCE, Ace, Btex, and

Physical Hazards: Heavy Equipment, Open Excavation, Fire & Explosions, Suspend Loads, Manual Lifting, Material Handling, and Backstrain

Emergency Procedures: Notify & Evacuate personnel, Notify Site Supervisor/Foreman and Respond To The Capability without endangering personnel

Hospital/Clinic: USMC Base Hospital Phone: 910-451-1540

Hospital Address: Take Holcomb Blvd Toward Main gate Turn Left on Brewster St. Follow Signs.

EMS Phone: 911

Special Equipment:

Other:

ATTENDEES:

Name Printed:	Signature:
Kris Phillips #3044	Kris Phillips
Steven A. Diller 3442	Steven A. Diller
Jerrad L. Shirts 9952	J. Shirts

Meeting Conducted By:

Scott W. Dunbar #8098 — Name Printed

Signature

AIR MONITORING INSTRUMENT
(LEL/O_2/PID/FID/HCN/H_2S)
CALIBRATION/MAINTENANCE LOG

ou-PID

I-101

2PD-16

Date: 01-12-96

Performed By: S Dunbar

OK Fully change

OK

N/A

d:
tery replacement)

Calibration Data

Calibration Standard: 56 ppm

Instrument Response: 56 ppm

Calibration Respone: —

Span Setting (PID/FID): 8.85

O_2 Calibration Setting: N/A

Notes:

General Condition of Instrument:

Battery Last Charged: 01/12/96 Duration of Charge: 12hr

Other:

AIR MONITORING INSTRUMENT
(LEL/O_2/PID/FID/HCN/H_2S)
CALIBRATION/MAINTENANCE LOG

Type Instrument: MSA LEL/O2 Meter

Date: 01-12-96

Model Number: 261

Performed By: S. Dunbar

OHM or Serial No: 5216

Battery Check: Fully charged

Instrument Zero: OK

Alarm Check/Set: 19.5% & 23% O2
10% LEL

Maintenance Performed:
(eg., sensor, lamp, battery replacement)

Comments:

Calibration Data

Calibration Standard: 50% LEL / 15% O2

Instrument Response: 50% LEL / 15% O2

Calibration Respone: N/A

Span Setting (PID/FID): N/A

O_2 Calibration Setting: N/A

Notes:

General Condition of Instrument:

Battery Last Charged: 1/11/96 Duration of Charge: 12

Other:

DIRECT READING INSTRUMENT LOG

Page #1

Project: Camp LeJeune Bldg #25 Job No.: 17418

Date: 01-12-95 Operator: S. Dunbar

Instrument: HNU (PID) & MSA (LEL/O2) Calibration: 01-12-96
Amt, Component, Date

Sampling Technique: ambient workzone and Perimeter Monitoring with PID and (Hot work) intrusive Tank monitoring with LEL/O2

Sample Interval: ambient & Perimeter PID monitoring is Periodic and LEL will be conducted on UST prior to beginning activities

Background Reading: <1 ppm (PID) 0% LEL / 20.8% O2 (LEL/O2)

Action Level/Response: as ~~acti~~ Safety Plan Requires

Time	Location	Reading (units)	Detection Limit (Scale)
0900	UST work area	<1-1 ppm	<1 ppm
0910	UST #1	6% O2 / 0% LEL	
	UST #2	21% O2 / 0% LEL	
	UST #3	20.5% O2 / 0% LEL	
	UST #4	5% O2 / 0% LEL	
	UST #5	6% O2 / 0% LEL	
0930	Bldg #25 Edge	1-8 ppm Highest under Bldg Exhaust	
1200	Soil Excavation area	2-6 ppm	
1210	Bldg #25 Edge	1-6 ppm	
1230	Soil Excavation area	1-18 ppm	
1240	Edge of Bldg #25	2-5 ppm	
1300	Soil Excavation area	1-5 ppm	
1315	Edge of Bldg #25	1-8 ppm	
1345	Soil Excavation area	1-2 ppm	
1410	Edge of Bldg #25	1-2 ppm	
1412	Soil Excavation area	<1-3 ppm	
1425	Tank Removal	1-15 ppm	
1428	Edge of Bldg #25	1-2 ppm Except under Bldg Exhaust @ 15 ppm	
1515	Edge of Bldg #25	1-3 ppm Except under Bldg Exhaust @ 6 ppm	
1520	Soil Excavation area	1-15 ppm No sustained Readings	

DIRECT READING INSTRUMENT LOG

Page #2

Project: Camp LeJeune Bldg#25 Job No.: 17418

Date: 01-12-95 Operator: S. Dunbar

Instrument: (Same AS Page 1) Calibration: Same as Page 1
Amt, Component, Date

Sampling Technique: (Same as Page 1)

Sample Interval: (Same as Page 1)

Background Reading: (Same as page 1)

Action Level/Response: (Same as Page 1)

Time	Location	Reading (units)	Detection Limit (Scale)
1545	~~Page #~~ Tank 3, 4, 5	0% LEL	
1550	Soil Excavation area	<1 ppm	
1610	Edge of Bldg#25	<1-3 ppm	
1620	Soil Excavation area	<1-3 ppm	
1705	edge of Bldg #25	<1 ppm	

OHM Corporation

DAILY SAFETY MEETING LOG

Date: 01-13-95 Client: LANTDIV

Specific Location: Camp LeJeune Job No.: 17418

SAFETY TOPICS PRESENTED:

Protective Clothing/Equipment: Tank cutting Operation (Level C)

Chemical Hazards: Dry Cleaning Solvents

Physical Hazards: Heavy Equipment, Open Excavation, Fire & Explosions, Suspend Loads, Manual Lift, Material Handling, Backstrain, Noise

Emergency Procedures: Notify & Evacuate personnel, Notify Site Supervision/Foremen and Respond to the Capability without endangering personnel

Hospital/Clinic: USMC Base Hospital Phone: 910-451-1540

Hospital Address: Take Holcomb Blvd Toward Main gate Turn Left on Brewster St. Follow Signs.

EMS Phone: 911

Special Equipment:

Other:

ATTENDEES:

Name Printed:	Signature:
Jerrod Shiets 9952	J Shiets
Eris Phillips #8044	Eris Phillips

Meeting Conducted By:

Scott W. Dunbar #8098 — Scott Dunbar

Name Printed — Signature

AIR MONITORING INSTRUMENT
(LEL/O_2/PID/FID/HCN/H_2S)
CALIBRATION/MAINTENANCE LOG

Type Instrument: MSA - LEL/O2 meter

Date: 01-13-96

Model Number: MSA 261

Performed By: S. Dunbar

OEM or Serial No: 5216

Battery Check: Fully charged

Instrument Zero: OK

Alarm Check/Set: 19.5% O_2 & 23% O_2
10% LEL

Maintenance Performed:
(eg., sensor, lamp, battery replacement)

Comments:

Calibration Data

Calibration Standard: 50% LEL / 15% O2

Instrument Response: 50% LEL / 15% O2

Calibration Respone: OK

Span Setting (PID/FID): N/A

O_2 Calibration Setting: N/A

Notes:

General Condition of Instrument:

Battery Last Charged: 1/12/96 Duration of Charge: 12

Other:

AIR MONITORING INSTRUMENT
($LEL/O_2/PID/FID/HCN/H_2S$)
CALIBRATION/MAINTENANCE LOG

Type Instrument: Hnu-Pid

Date: 01-13-96

Model Number: PI-101

Performed By: S. Dunbar

OHM or Serial No: 2PA-16

Battery Check: Fully Charged

Instrument Zero: OK

Alarm Check/Set: N/A

Maintenance Performed:
(eg., sensor, lamp, battery replacement)

Comments:

Calibration Data

Calibration Standard: 56 ppm

Instrument Response: 50 ppm

Calibration Respone: 56 ppm

Span Setting (PID/FID): 7.0

O_2 Calibration Setting: N/A

Notes:

General Condition of Instrument:

Battery Last Charged: 1/13/96 Duration of Charge: 12+

Other:

OHM

DIRECT READING INSTRUMENT LOG

Project: Camp Le Jeune Bldg #25 Job No.: 01-13-96

Date: 01-13-96 Operator: S. Dunbar

Instrument: PID & LEL/O2 meter Calibration: 01-13-96
Amt, Component, Date

Sampling Technique: Ambient work area monitoring with PID and intrusive tank monitoring with LEL/O2

Sample Interval: Periodic with PID, & prior to tank cutting with LEL/O2

Background Reading: <1 PPM and 0% LEL / 20.8% O2

Action Level/Response: As prescribed by SHSP

Time	Location	Reading (units)	Detection Limit (Scale)
0845	UST #1 1500 gal H V	0% LEL	
	UST #2 700 gal. H V	0% LEL	
	UST #3 700 gal H V	0% LEL	
	UST #4 700 gal. H	0% LEL	
	UST #5 700 gal H	0% LEL	
0955	work area (Decon Pad)	<1 PPM	
1200	UST #2 700 gal. V	0% LEL	
1210	Work area (Decon Pad)	<1 PPM	
1215	Perimeter of Exclusion zone	<1 PPM	
1255	Perimeter of exclusion zone	<1-1 PPM	
1310	Work area (Decon Pad)	1-3 PPM	
1430	UST #3 700 gal. V	0% LEL	
1445	Perimeter of exclusion zone	<1-1 PPM	
1500	Work area (Decon Pad)	2-5 PPM	
1600	Perimeter of Exclusion zone	<1-2 PPM	
1615	work area (Decon Pad)	1-2 PPM	

OHM Corporation

DAILY SAFETY MEETING LOG

Date: 01-14-96 Client: LANTDIV

Specific Location: Camp LeJeune Job No.: 17418

SAFETY TOPICS PRESENTED:

Protective Clothing/Equipment: Tank Cutting and Decon (Level C)

Chemical Hazards: Dry Cleaning Solvents (PCE, TCE, BTEX)

Physical Hazards: Heavy Equipment, Open Excavation, Fire & Explosions, Suspend Loads, Manual Lifting, Material Handling, Back Strain, Slip, Trip, Fall, Noise

Emergency Procedures: Notify & Evacuate personnel, Notify Site Supervisor/Foreman and Respond to the Capability without endangering personnel

Hospital/Clinic: USMC Base Hospital Phone: 910-451-1540

Hospital Address: Take Holcomb Blvd Toward Main gate Turn Left on Brewster St. Follow signs.

EMS Phone: 911

Special Equipment:

Other:

ATTENDEES:

Name Printed:	Signature:
Rodney S. Davis #9858	
John P. Dean 8483	John P. Dean
Jerrad Shiets 7952	

Meeting Conducted By:

Scott W. Dunbar #8098 — Name Printed

Signature

AIR MONITORING INSTRUMENT
(LEL/O_2/PID/FID/HCN/H_2S)
CALIBRATION/MAINTENANCE LOG

Type Instrument: HNU - PID

Date: 01-14-96

Model Number: PT-101

Performed By: S. Dunbar

OEM or Serial No: 2 PD-16

Battery Check: Fully Charged

Instrument Zero: OK

Alarm Check/Set: N/A

Maintenance Performed:
(eg., sensor, lamp, battery replacement)

Comments:

Calibration Data

Calibration Standard: 50 ppm Isobutylene

Instrument Response: 51 ppm

Calibration Respone: N/A

Span Setting (PID/FID): 7.9

O_2 Calibration Setting: N/A

Notes:

General Condition of Instrument:

Battery Last Charged: 1/13/96 Duration of Charge: 12

Other:

AIR MONITORING INSTRUMENT
(LEL/O_2/PID/FID/HCN/H_2S)
CALIBRATION/MAINTENANCE LOG

Type Instrument: MSA LEL / O2 Meter

Date: 01-14-96

Model Number: MSA 261

Performed By: Scott Dunban

OHM or Serial No: OHM 5216

Battery Check: Fully Charged

Instrument Zero: OK

Alarm Check/Set: 19% O2 & 23% O2
10% LEL

Maintenance Performed:
(eg., sensor, lamp, battery replacement)

Comments:

Calibration Data

Calibration Standard: 50% LEL & 15% O2

Instrument Response: 50% LEL & 15% O2

Calibration Respone: N/A

Span Setting (PID/FID): N/A

O_2 Calibration Setting: N/A

Notes:

General Condition of Instrument:

Battery Last Charged: 1/10/96 Duration of Charge: 17

Other:

DIRECT READING INSTRUMENT LOG

Project: Camp LeJeune Bldg #25 Job No.: 17418

Date: 01-14-96 Operator: S. Dunbar

Instrument: HNu(PID) & MSA(LEL/O2) Calibration: 01-14-96
Amt, Component, Date

Sampling Technique: Periodic PID monitoring in the work area and perimeter. Prior to cutting tank the air content of the tank is monitored with LEL/O2

Sample Interval: Periodic w/PID and prior to cutting with LEL/O2 meter

Background Reading: 0-1ppm w/PID & 0% LEL / 20.8% O2

Action Level/Response: As specified in SHSP.

Time	Location	Reading (units)	Detection Limit (Scale)
0800	UST #1 1500 gal V.	0% LEL / 20% O2	
0810	Work area (Pre Decon Pad)	<1-3 ppm	
0815	Perimeter of Exclusion Zone	<1-1 ppm	
0850	Work area (Decon Pad)	3-12 ppm	
0900	Perimeter of Exclusion Zone	1-4 ppm	
0940	Work area (Decon Pad)	5-18 ppm	
0945	Perimeter of Exclusion Zone	2-5 ppm	
1030	Work area (Decon Pad)	1-2 ppm	
1050	Perimeter of Exclusion Zone	<1 ppm	

OHM Corporation

DAILY SAFETY MEETING LOG

Date: 01-15-96 Client: LANTDIV

Specific Location: Camp Lejeune Job No.: 17418

SAFETY TOPICS PRESENTED:

Protective Clothing/Equipment: UST Cutting and Decontamination Level C

Chemical Hazards: Dry Cleaning Solvents (Tce, Ace, BTEX)

Physical Hazards: Heavy Equipment, Open Excavation, Fire & Explosions, Suspend Loads, Manual Lifting, Material Handling, Backstrain, Noise, High Pressure Washing

Emergency Procedures: Notify & Evacuate personnel, Notify Site Supervisor/Foreman and Respond to the Capability without endangering personnel

Hospital/Clinic: USMC Base Hospital Phone: 910-451-1540

Hospital Address: Take Holcomb Blvd Toward Main gate Turn Left on Brewster St. Follow signs.

EMS Phone: 911

Special Equipment:

Other:

ATTENDEES:

Name Printed:	Signature:
Jerrad L. Shiets	J. Shiets
Kris Phillips	Kris Phillips
Steven A. Diller	Steven A. Diller

Meeting Conducted By:

Scott W. Dunbar #8098 — Scott Dunbar

Name Printed — Signature

AIR MONITORING INSTRUMENT
(LEL/O_2/PID/FID/HCN/H_2S)
CALIBRATION/MAINTENANCE LOG

Type Instrument: HNU (PID)

Date: 01-15-96

Model Number: PI-101

Performed By: S. Dunbar

OEM or Serial No:

Battery Check: Fully charged

Instrument Zero: OK

Alarm Check/Set: N/A

Maintenance Performed:
(eg., sensor, lamp, battery replacement)

Comments:

Calibration Data

Calibration Standard: 50 ppm Isobutylene

Instrument Response: 52 ppm

Calibration Respone: —

Scan Setting (PID/FID): 7.9

O_2 Calibration Setting: N/A

Notes:

General Condition of Instrument:

Battery Last Charged: 01/14/96 Duration of Charge: 12

Other:

AIR MONITORING INSTRUMENT
(LEL/O_2/PID/FID/HCN/H_2S)
CALIBRATION/MAINTENANCE LOG

Type Instrument: ~~Hoo-AED~~ MSA (LEL/O_2)

Date: 01-15-96

Model Number: MSA 260

Performed By: S. Dunbar

OEM or Serial No: _____

Battery Check: Fully charged

Instrument Zero: OK

Alarm Check/Set: 19.5% & 23% O_2
10% LEL

Maintenance Performed:
(eg., sensor, lamp, battery replacement)

Comments:

Calibration Data

Calibration Standard: 15% O_2 / 50% LEL

Instrument Response: 15% O_2 / 48% LEL

Calibration Respone: _____

Span Setting (PID/FID): _____

O_2 Calibration Setting: _____

Notes:

General Condition of Instrument: _____

Battery Last Charged: 01/14/96 Duration of Charge: 12

Other:

OHM

DIRECT READING INSTRUMENT LOG

Project: Camp Le Jeune Bldg 25 Job No.: 17418

Date: 01-15-96 Operator: S. Dunbar

Instrument: PID & LEL/O2 Calibration: 1-15-96
Amt, Component, Date

Sampling Technique: Periodic work area and Perimeter PID Monitoring
Intrusive Tank Monitoring prior to cutting with LEL/O2 monitoring

Sample Interval: Periodic and Prior to cutting

Background Reading: <1 PPM and 0% LEL / 20.8% O2

Action Level/Response: As ~~Appr~~ Prescribed in The SHSP

Time	Location	Reading (units)	Detection Limit (Scale)
0830	UST#4 700gal H	0% LEL / 20.8% O2	
0836	UST#5 700gal H	0% LEL / 20.8% O2	
0900	Work area (Decon Pad)	<1-1 PPM	
0910	Perimeter of Exclusion Zone	<1-1 PPM	
0940	UST Excavation area	<1-5 PPM	
1000	Work area (Decon Pad)	1-2 PPM	
1005	Perimeter of exclusion zone	<1-1 PPM	
1030	Work area (Decon Pad)	<1-8 PPM	
1040	Perimeter of Exclusion Zone	<1-3 PPM	
1300	Work area (Decon Pad)	2-15 PPM	
1310	Perimeter of exclusion zone	1-8 PPM	
1420	Perimeter of Exclusion Zone	1-3 PPM	
1430	Work area (Decon Pad)	2-6 PPM	
1605	Perimeter of Exclusion Zone	<1-2 PPM	
1615	Work area (Decon Pad)	1-5 PPM	
1735	Work area (Decon Pad)	1-2 PPM	
1740	Perimeter of Exclusion zone	<1-1 PPM	

OHM Corporation

DAILY SAFETY MEETING LOG

Date: 01-16-96 Client: LANTDIV

Specific Location: Camp Lejeune Job No.: 17418

SAFETY TOPICS PRESENTED:

Protective Clothing/Equipment: Soil Excavation & Load Level "C", Equipment & Used Materials Staging Mod "D"

Chemical Hazards: Dry Cleaning Solvents (TCE, PCE, BTEX)

Physical Hazards: Heavy Equipment, Open Excavation, Fire & Explosions, Susp Loads, Manual Lifting, Material Handling, Back Strain, Slip/Trip/Fall

Emergency Procedures: Notify & Evacuate personnel, Notify Site Supervisor/Foreman and Respond To The Capability Without endangering personnel

Hospital/Clinic: USMC Base Hospital Phone: 910-451-1540

Hospital Address: Take Holcomb Blvd Toward Main gate Turn Left on Brewster Follow Signs.

EMS Phone: 911

Special Equipment:

Other:

ATTENDEES:

Name Printed:	Signature:
Jerrad Shirts 9952	J Shirts
Kris Phillips 8044	Kris Phillips
STEVEN A. DILLER 3442	Steven A. Diller

Meeting Conducted By:

SCOTT W. Dunbar # 8098 — Name Printed

Scott Dunbar — Signature

AIR MONITORING INSTRUMENT
(LEL/O_2/PID/FID/HCN/H_2S)
CALIBRATION/MAINTENANCE LOG

Type Instrument: HNU(PID)

Date: 01-16-96

Model Number: PI-101

Performed By: S. Dunbar

OEM or Serial No: 2PD-16

Battery Check: Fully Charged

Instrument Zero: OK

Alarm Check/Set: N/A

Maintenance Performed:
(eg., sensor, lamp, battery replacement)

Comments:

Calibration Data

Calibration Standard: 50 ppm Isobutylene

Instrument Response: ~~50~~ 48 ppm

Calibration Respone: 50 ppm

Span Setting (PID/FID): 7.80

O_2 Calibration Setting: ~~0~~ N/A

Notes:

General Condition of Instrument:

Battery Last Charged: 1/~~14~~15/96 Duration of Charge: 12.

Other:

OHM

DIRECT READING INSTRUMENT LOG

Project: Camp LeJeune Bldg #25 Job No.: 17418

Date: 1-16-96 Operator: S. Drewbar

Instrument: HNU (PID) Calibration: 1-16-96
Amt, Component, Date

Sampling Technique: ambient work area and Perimeter of Exclusion Zone

Sample Interval: Periodic

Background Reading: <1 ppm

Action Level/Response: As Prescribed in The SHSP

Time	Location	Reading (units)	Detection Limit (Scale)
0830	Excavation area	<1-3 ppm	
0930	"	<1-5 ppm	
1015	Excavation area	<1-3 ppm	
1025	Perimeter of exclusion zone	<1-3 ppm High Readings at Bldg Exhaust	
1330	Excavation/Sampling area	<1 ppm	
1430	"	<1 ppm	
1500	"	<1 ppm	

OHM Corporation

DAILY SAFETY MEETING LOG

Date: 1-17-96 Client: LANTDIV

Specific Location: Camp Lejeune Job No.: 17413

SAFETY TOPICS PRESENTED:

Protective Clothing/Equipment: BackFill & Grading Level "D"

Chemical Hazards: Dry Cleaning Solvents (PCE, TCE, BTEX)

Physical Hazards: Heavy Equipment, Open Excavation, Fire & Explosions, Susp Loads, Manual Lifting, Material Handling, Back Strain, Slip/Trip/Fall

Emergency Procedures: Notify & Evacuate personnel, Notify Site Supervisor/Foreman and Respond To The Capability Without endangering personnel

Hospital/Clinic: USMC Base Hospital Phone: 910-451-1540

Hospital Address: Take Holcomb Blvd Toward Main gate Turn Left on Brewster Follow Signs.

EMS Phone: 911

Special Equipment:

Other:

ATTENDEES:

Name Printed:	Signature:
Jerrod Shiefs 9850	J Shiefs
Kris Phillips 8044	Kris Phillips
STEVEN A. DILLER 3442	Steven A. Diller

Meeting Conducted By:

SCOTT W. Dunbar #8098 — Name Printed

Scott Dunbar — Signature

AIR MONITORING INSTRUMENT
(LEL/O_2/PID/FID/HCN/H_2S)
CALIBRATION/MAINTENANCE LOG

Type Instrument: HNU (PID)

Date: 1-17-96

Model Number: PI 101

Performed By: S. Dunbar

OEM or Serial No: ZPD-16

Battery Check: Fully Charged

Instrument Zero: OK

Alarm Check/Set: N/A

Maintenance Performed:
(eg., sensor, lamp, battery replacement)

Comments:

Calibration Data

Calibration Standard: 50 ppm Isobutylene

Instrument Response: 45 ppm

Calibration Respone: 50 ppm

Span Setting (PID/FID): 6.6

O_2 Calibration Setting: N/A

Notes:

General Condition of Instrument:

Battery Last Charged: 1/16/96 Duration of Charge: 12

Other: