M60050.000074
MCAS EL TORO
SSIC # 5090.3

M6

HADLEY INDUSTRIES
environmental technologies

August 4, 1992

Mr. Andy Piszkin
Southwest Division, NAVFACENGCOM
1220 Pacific Highway (Code 0214)
San Diego, California 92132-5190

RE: MCAS EL TORO
Santa Ana, California

Dear Mr. Piszkin:

Enclosed is the Sample Data Package of CLP analytical work and associated Quality Assurance/Quality Control data for the samples collected during the month of June 1992.

Please feel free to call me at 1-800-345-4227 if you have any questions regarding this information.

Sincerely,

HADLEY INDUSTRIES

Jeffrey S. Barnett
Technical Assistant

dlb

Enclosures

Eastern Regional Office
Cranberry Commerce Park
209 Commerce Park Drive
Zelienople, Pennsylvania 16063
(800) 872-9080 • (412) 772-3323

Corporate Office
5900 West Fourth Street
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Western Regional Office
Suite 388 • 5241 Mission Oaks Blvd.
Camarillo, California 93012
(805) 389-4788 • (800) 676-6808
FAX (805) 389-4789

Pacific Analytical, Inc.

6349 Paseo Del Lago, Suite 102, Carlsbad, CA 92009
(619) 931-1766 • FAX: 931-9479

Pacific Analytical 07/31/92

P A Reference: 239

Hadley Industries

Samples:

INFLUENT, BETWEEN, EFFLUENT

Comments:

The above samples were analyzed by the CLP Volatiles method. Recoveries of the system monitoring compounds were all within the specified limits for this type of analysis. The internal standard areas and retention times were good for all analyses except for a blank where recovery was low.

All samples and the blank contained trace levels of methylene chloride. In addition to the methylene chloride, the INFLUENT sample contained trichloroethene and tetrachloroethene and the BETWEEN sample contained trace levels of trichloroethene.

No tentatively identified compounds were present in the samples or blank.

Elana Colby
Senior Chemist

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: PACIFIC ANALYTICAL Contract:

Lab Code: PACIF Case No.: SAS No.: SDG No.:

	EPA SAMPLE NO.	SMC1 (TOL)#	SMC2 (BFB)#	SMC3 (DCE)#	OTHER	TOT OUT
01	VBLK67	102	100	100		0
02						
03						
04	EFFLUENT	94	96	98		0
05	BETWEEN	98	100	96		0
06	INFLUENT	97	99	90		0
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		QC LIMITS
SMC1 (TOL)	= Toluene-d8	(88-110)
SMC2 (BFB)	= Bromofluorobenzene	(86-115)
SMC3 (DCE)	= 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

page _1 of _1

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK67

Lab Name: PACIFIC ANALYTICAL Contract:

Lab Code: PACIF Case No.: SAS No.: SDG No.:

Lab File ID: EE2041 Lab Sample ID: 00000

Date Analyzed: 07/09/92 Time Analyzed: 1945

GC Column: 1%SP1000 ID: 2 (mm) Heated Purge: (Y/N) N

Instrument ID: VG#2

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	HL540MS	23714	EE2051	2037
02	CASE 18392 H	00000	EE2061	2128
03	EFFLUENT	23903	EE2071	2220
04	BETWEEN	23902	EE2081	2311
05	INFLUENT	23901	EE2091	0003
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COMMENTS:

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: PACIFIC ANALYTICAL Contract:

Lab Code: PACIF Case No.: SAS No.: SDG No.:

Lab File ID: EE1011 BFB Injection Date: 07/08/92

Instrument ID: VG#2 BFB Injection Time: 1536

GC Column: 1%SP1000 ID: 2 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	16.5
75	30.0 - 66.0% of mass 95	47.2
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.1
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	77.5
175	4.0 - 9.0% of mass 174	5.2 (6.7)1
176	93.0 - 101.0% of mass 174	73.6 (95.0)1
177	5.0 - 9.0% of mass 176	6.1 (8.2)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATA ANALYZED	TIME ANALYZED
01	VSTD200	00200	EE1021	07/08/92	1626
02	VSTD100	00100	EE1031	07/08/92	1738
03	VSTD050	00050	EE1041	07/08/92	1830
04	VSTD020	00020	EE1051	07/08/92	1921
05	VSTD010	00010	EE1061	07/08/92	2013
06					
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5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: PACIFIC ANALYTICAL Contract:

Lab Code: PACIF Case No.: SAS No.: SDG No.:

Lab File ID: EE2011 BFB Injection Date: 07/09/92

Instrument ID: VG#2 BFB Injection Time: 1659

GC Column: 1%SP1000 ID: 2 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	17.9
75	30.0 - 66.0% of mass 95	44.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	73.5
175	4.0 - 9.0% of mass 174	4.7 (6.3)1
176	93.0 - 101.0% of mass 174	73.5 (100.0)1
177	5.0 - 9.0% of mass 176	3.9 (5.3)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATA ANALYZED	TIME ANALYZED
01	VSTD050	00050	EE2031	07/09/92	1853
02	VBLK67	00000	EE2041	07/09/92	1945
03	HL540MS	23714	EE2051	07/09/92	2037
04	CASE 18392 H	00000	EE2061	07/09/92	2128
05	EFFLUENT	23903	EE2071	07/09/92	2220
06	BETWEEN	23902	EE2081	07/09/92	2311
07	INFLUENT	23901	EE2091	07/10/92	0003
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8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: PACIFIC ANALYTICAL Contract:

Lab Code: PACIF Case No.: SAS No.: SDG No.:

Lab File ID (Standard): EE2031 Date Analyzed: 07/09/92

Instrument ID: VG#2 Time Analyzed: 1853

GC Column: 1%SP1000 ID: 2 (mm) Heated Purge: (Y/N)N

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	7301000	12.07	34411001	22.95	29423980	28.75
	UPPER LIMIT	14602000	12.57	68822002	23.45	58847961	29.25
	LOWER LIMIT	3650500	11.57	17205500	22.45	14711990	28.25
	EPA SAMPLE NO.						
01	VBLK67	3834000	12.08	16723000*	22.92	13672566*	28.82
02	HL540MS	7521000	12.08	34107001	22.92	27517360	28.77
03	CASE 18392 H	7616000	12.08	34896001	22.97	29982152	28.82
04	EFFLUENT	7776000	12.10	34549001	22.93	29897288	28.78
05	BETWEEN	8034000	12.07	34079001	22.97	28933296	28.80
06	INFLUENT	7819000	12.12	33291000	22.97	29547232	28.80
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21							
22							

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

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 values outside QC limits with an asterisk.
* Values outside of QC limits.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK67

Lab Name: PACIFIC ANALYTICAL Contract:

Lab Code: PACIF Case No.: SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 00000

Sample wt/vol: 5.0(g/mL) ML Lab File ID: EE2041

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

% Moisture: not dec. Date Analyzed: 07/09/92

GC Column: 1%SP1000 ID: 2(mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

INFLUENT

Lab Name: PACIFIC ANALYTICAL Contract:

Lab Code: PACIF Case No.: SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 23901

Sample wt/vol: 5.0(g/mL) ML Lab File ID: EE2091

Level: (low/med) LOW Date Received: 07/02/92

% Moisture: not dec. Date Analyzed: 07/10/92

GC Column: 1%SP1000 ID: 2 (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	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	8	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-35-3	1,1-Dichloroethane	10	U
156-60-5	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	52	
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-dichloropropene	10	U
75-25-2	Bromoform	10	U
591-78-6	4-Methyl-2-Pentanone	10	U
108-10-1	2-Hexanone	10	U
127-18-4	Tetrachloroethene	35	
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

INFLUENT

Lab Name: PACIFIC ANALYTICAL Contract:

Lab Code: PACIF Case No.: SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 23901

Sample wt/vol: 5.0(g/mL) ML Lab File ID: EE2091

Level: (low/med) LOW Date Received: 07/02/92

% Moisture: not dec. Date Analyzed: 07/10/92

GC Column: 1%SP1000 ID: 2(mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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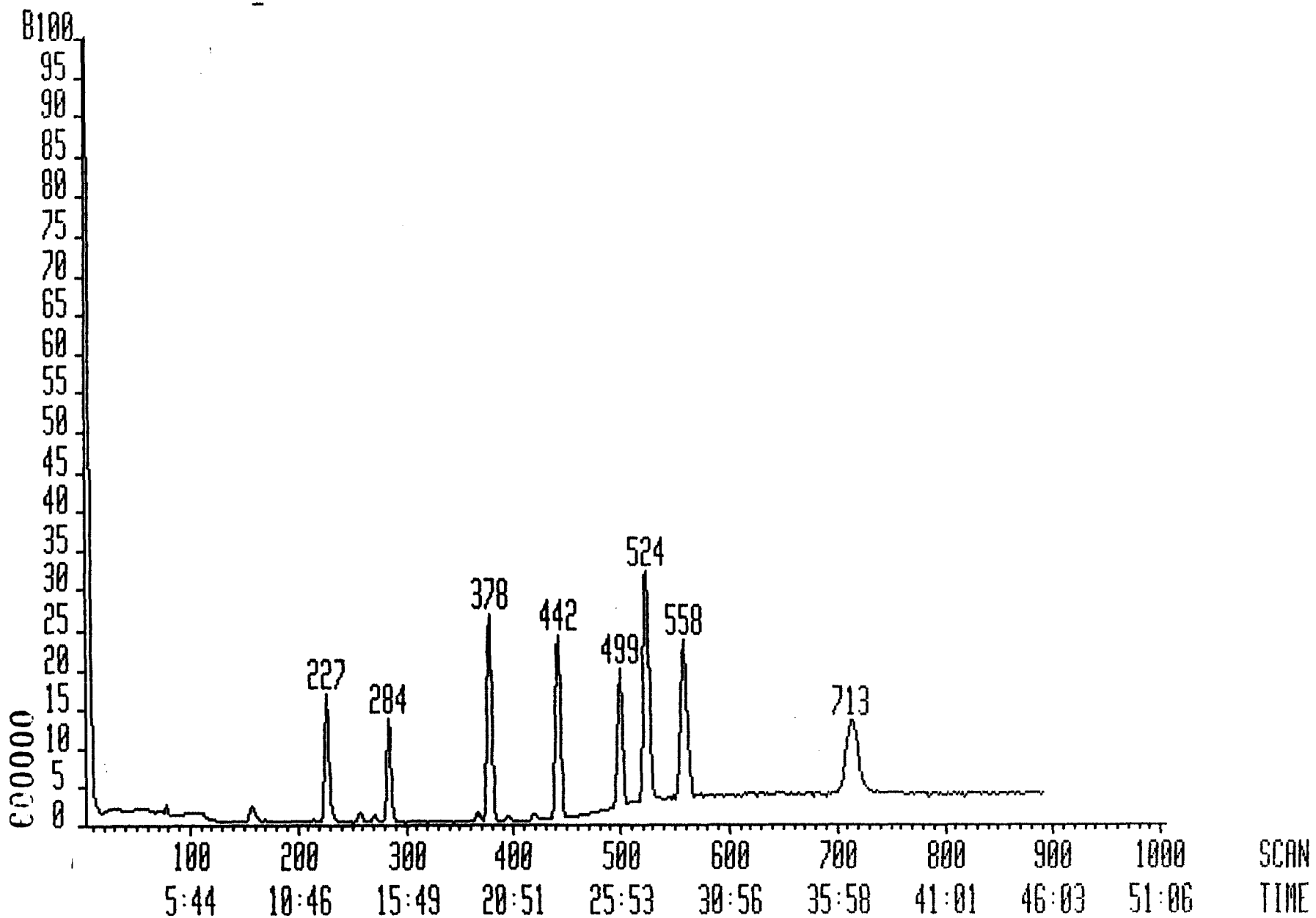
EE2091 #5-890 10-JUL-92 00:03 VG#2 (EI+) Sys:VOA91 IHP

Chromatogram Identifiers : B1:35:260 B: 67545000

Text:INFLUENT_ 23901



Interim Report Sample Analysis 10-JUL-92 13:36:46

Datafile: EE2091 10-JUL-92 00:03
Database: VOA91W
Library: VOA91

Instrument: VG#2
Account:
Text: INFLUENT_ 23901

QRE
M. H.
7/30/92

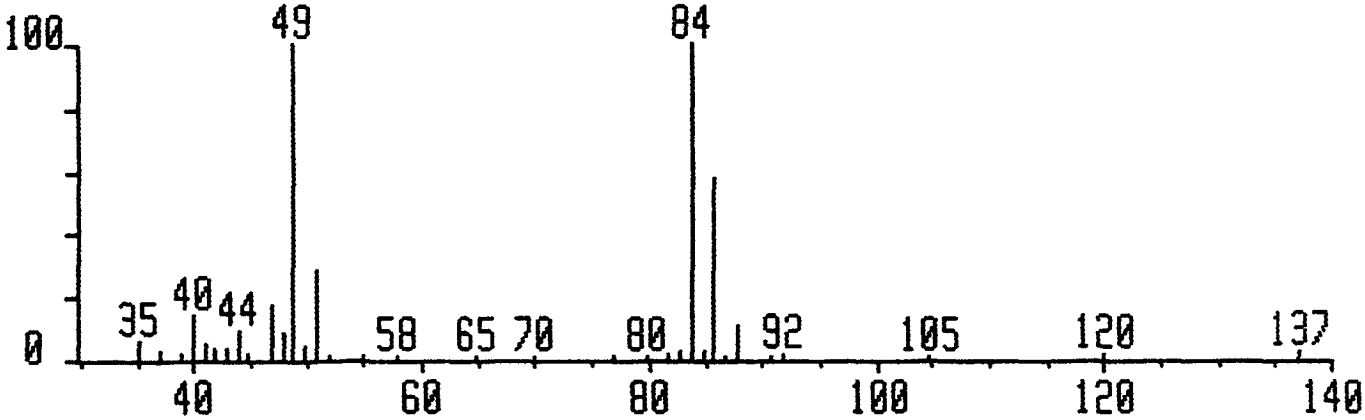
No.	Rank	Spectrum Match	Spectrum Fit	Scan Diff	Peak Area	Flgs	Scan Found	Scan Pred	Quan m/z	Compound Name
1	100	91	99	1	7819000	bv	227	226	128	Bromochloromethane
2	97	85	98	1	12085000	bv	284	283	65	1,2-Dichloroethane-d4
3	52	1	97	0	29000	b?	27	27	50	Chloromethane
	49	1	96	4	25333	?b	31			
	45	0	93	-7	3000	bb	20			
4	48	3	90	2	750	v?	61	59	94	Bromomethane
	46	3	88	5	2355	??	64			
	44	3	88	7	5059	??	66			
5	47	0	91	-2	7091	??*	77	79	62	Vinyl Chloride
	47	1	91	3	7091	??	82			
	46	0	94	-7	1261	??	72			
6	44	2	81	-1	9739	??	105	106	64	Chloroethane
	43	2	81	2	15391	??	108			
	42	2	80	-3	8696	??	103			
7	96	81	99	0	2303000	bb	157	157	84	Methylene Chloride
8	68	33	99	-3	297219	bv*	169	172	43	Acetone
	58	13	99	3	11781	??	175			Too Small
	57	15	98	5	43156	??	177			
9	80	56	97	2	550000	bb	189	187	76	Carbon Disulfide
10	78	51	99	2	178000	bb	215	213	96	1,1-Dichloroethene
11	65	23	99	0	103000	bb	243	243	63	1,1-Dichloroethane
	39	0	91	-16	79000	bb	227			
	38	1	81	-10	3000	bb	233			
12	94	79	99	1	964000	bb	257	256	96	1,2-Dichloroethene (to
13	81	56	98	1	757000	bb	271	270	83	Chloroform
14	28	17	35	0	62000	bb	286	286	62	1,2-Dichloroethane
15	53	1	99	-1	96000	vv	281	282	43	2-Butanone
	49	13	98	-13	202000	bv	269			
	45	5	84	-5	3000	??	277			
16	84	60	99	1	33291000	bb	442	441	114	1,4-Difluorobenzene
17	59	27	85	1	83000	bb	315	314	97	1,1,1-Trichloroethane
18	49	14	79	1	22000	bb	324	323	117	Carbon Tetrachloride
19	---------- No Trace Found ----------							0	1	
20	40	4	72	1	23000	bb	335	334	83	Bromodichloromethane
	23	1	43	-1	7000	b?	333			
	19	1	43	16	3000	bb	350			
21	24	4	45	7	3000	bb	369	362	63	1,2-Dichloropropane
	23	4	39	1	4000	bb	363			
	22	4	38	-1	3000	bb	361			
22	36	1	68	1	18000	bb	368	367	75	cis-1,3-Dichloropropen
23	95	81	99	1	15017000	bb	378	377	130	Trichloroethene
24	23	1	43	1	6000	bb	395	394	129	Dibromochloromethane
	16	1	37	-16	41000	bb	378			
25	74	42	97	0	235714	vb	396	396	97	1,1,2-Trichloroethane
26	64	25	97	1	115000	bb	388	387	78	Benzene
27	39	3	71	1	24000	bb	395	394	75	trans-1,3-dichloroprop
	39	3	70	-1	24000	bb	393			
28	---------- No Trace Found ----------							0	1	
29	---------- No Trace Found ----------							453	173	Bromoform
30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

000010

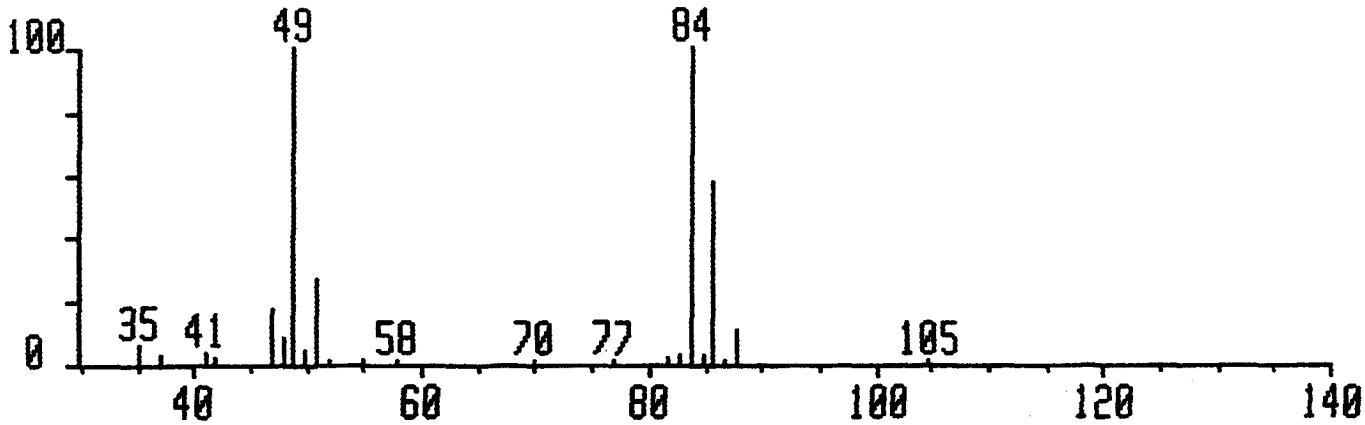
30	87	88	99	1	29547230	bv	558	557	117	Chlorobenzene-d5
31	78	51	99	2	~~10773230~~	v?	714	712	95	4-Bromofluorobenzene m-21 ~~17695354~~ 7-30
32	83	61	96	1	41886840	vb	524	523	98	Toluene-d8
33	55	20	85	-1	3871	??	459	460	43	4-Methyl-2-Pentanone
	54	21	85	3	40405	??	463	17847738		
	54	21	86	-4	4414	??	456			
34	54	21	80	0	38462	??	493	493	43	2-Hexanone
	51	20	78	-2	60872	??	491			
	51	21	79	-4	86462	??	489			
35	92	76	99	1	8060000	bb	499	498	166	Tetrachloroethene
36	45	6	85	6	23154	??*	508	502	83	1,1,2,2-Tetrachloroeth
	45	1	86	-3	235846	??	499			
	45	6	87	-8	0	??	494			
37	53	10	91	2	463087	vv	530	528	91	Toluene
	41	7	79	8	19261	??	536			
	41	8	80	10	4652	??	538			
38	42	2	79	2	123684	vv	563	561	112	Chlorobenzene
	34	1	71	-10	5882	??	551			
	34	1	71	10	4395	??	571			
39	35	7	61	2	23667	??	627	625	106	Ethylbenzene
	35	7	59	0	15500	??	625			
	32	6	57	-3	24500	??	622			
40	38	4	69	3	33000	??	763	760	104	Styrene
	36	4	65	-1	50000	??	759			
	35	4	66	6	30000	??	766			
41	36	8	60	0	29915	??	769	769	106	m-Xylene
	35	8	60	2	52021	?b	771			
	34	8	60	4	52021	?b	773			
42	36	9	61	2	31000	??	805	803	106	o-/p-Xylene
	36	9	61	-3	30000	b?	800			
	35	9	62	6	52000	?v	809			
43	---------- No Trace Found ----------							0	-	

EE2091

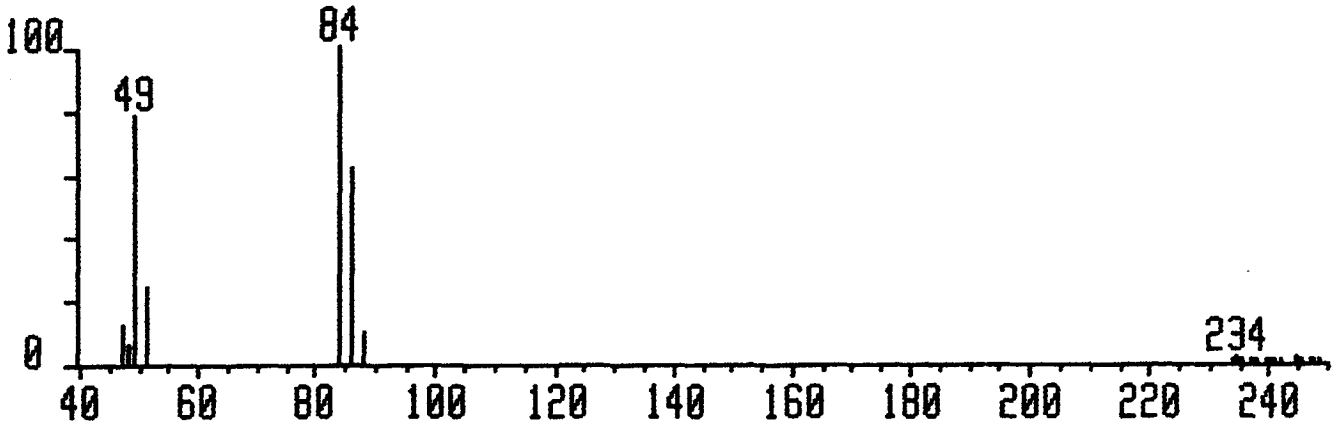
EE2091#157 x1 Bgd=1 10-JUL-92 00:03+0:08:36 EI+
I=61mv TIC=1576000 Acnt:
Text:INFLUENT_23901_Methylene Chloride



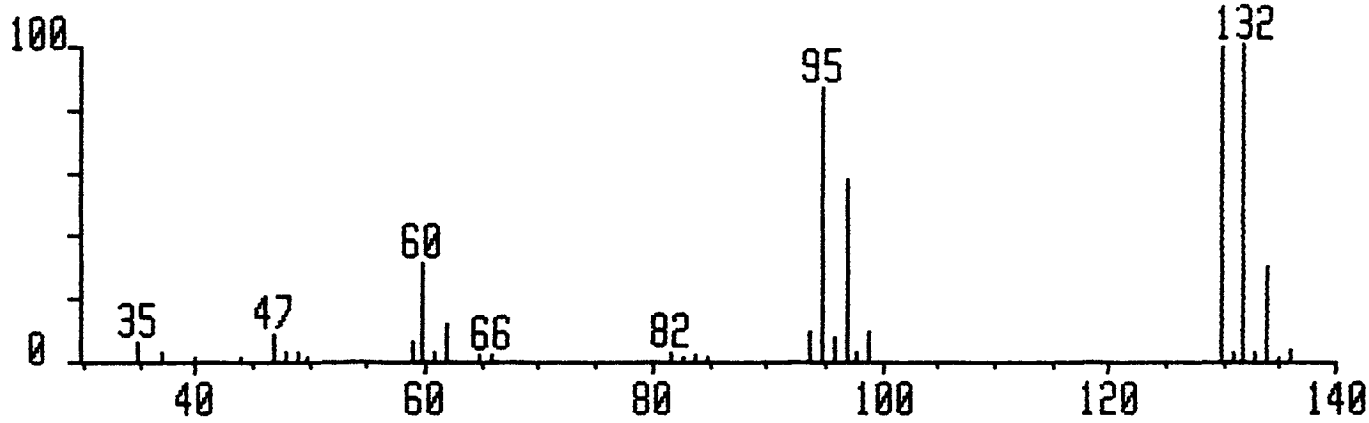
EE2091S#157 x1 Bgd=151 10-JUL-92 00:03+0:08:36 EI+
I=61mv TIC=1417000 SU Acnt:
Text:INFLUENT_23901_Methylene Chloride



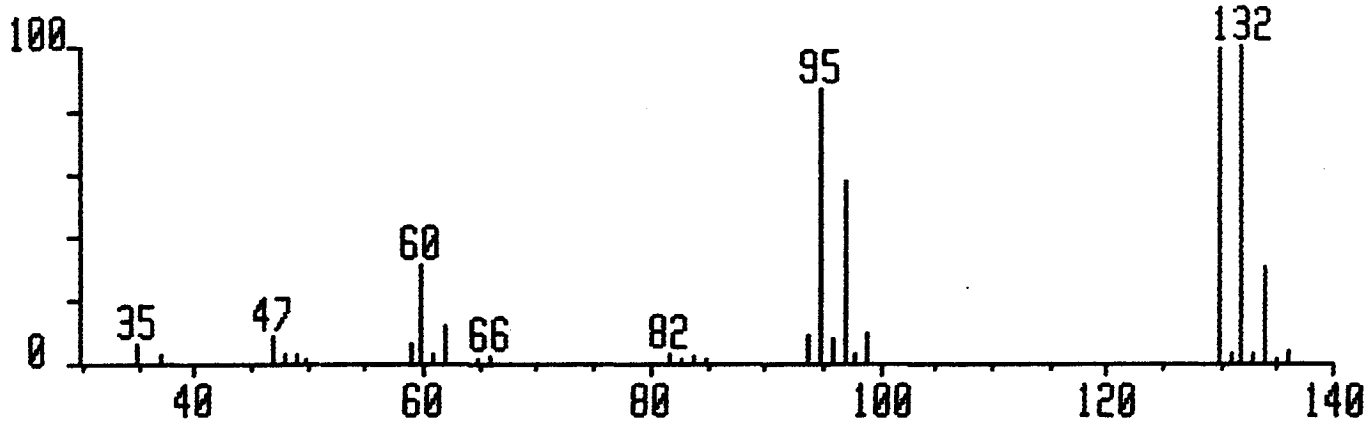
V8240#7 x1 Bgd=1 1-DEC-89 13:03+0:00:23 EI+
I=234mv TIC=10910000 Acnt:VG#2
Text:Methylene Chloride



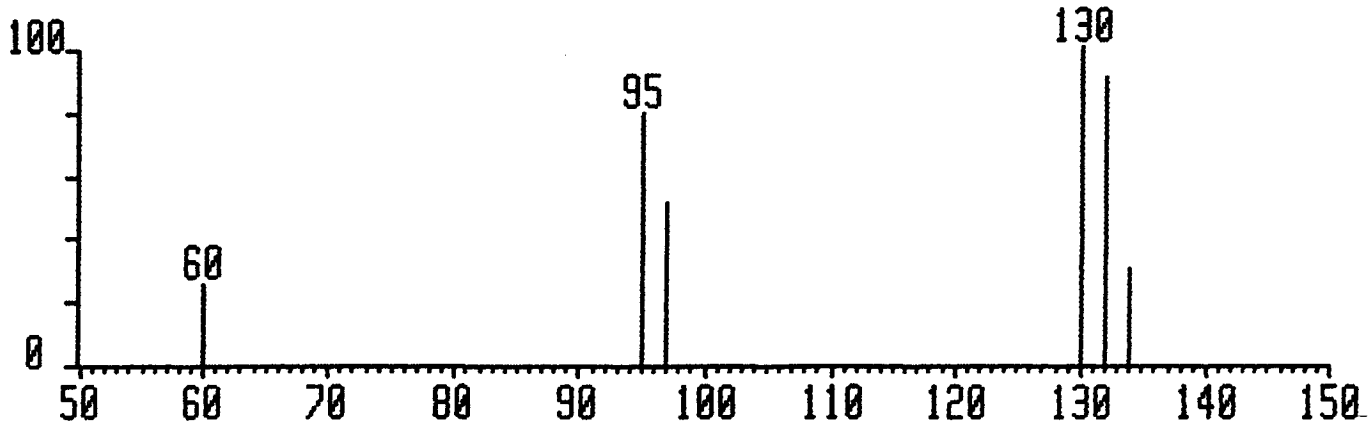
EE2091#378 x1 Bgd=372 10-JUL-92 00:03+0:19:44 EI+
I=556mv TIC=18073000 Acnt:
Text:INFLUENT_23901_TrichLoroethene



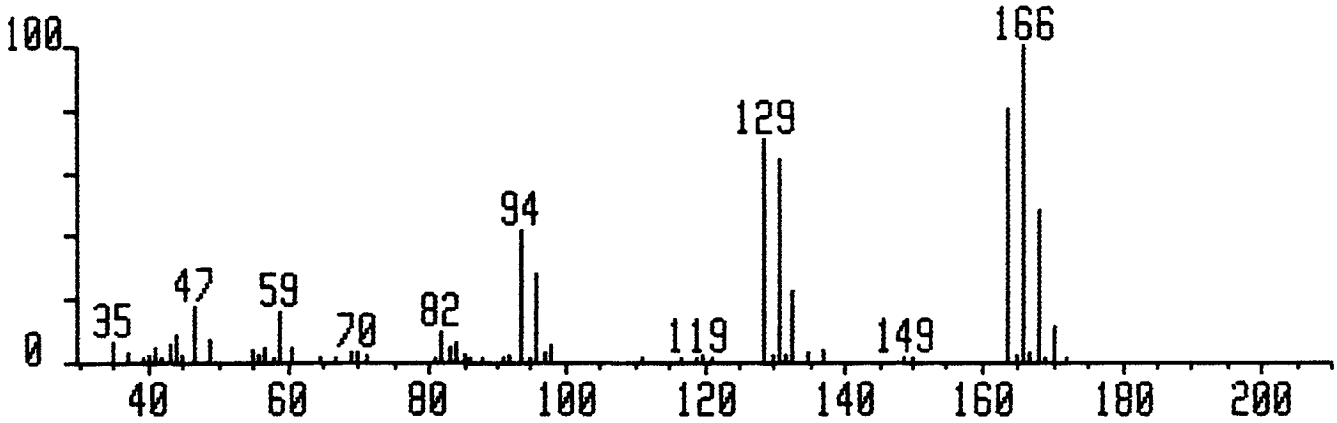
EE2091S#378 x1 Bgd=371 10-JUL-92 00:03+0:19:44 EI+
I=556mv TIC=17933000 SU Acnt:
Text:INFLUENT_23901_TrichLoroethene



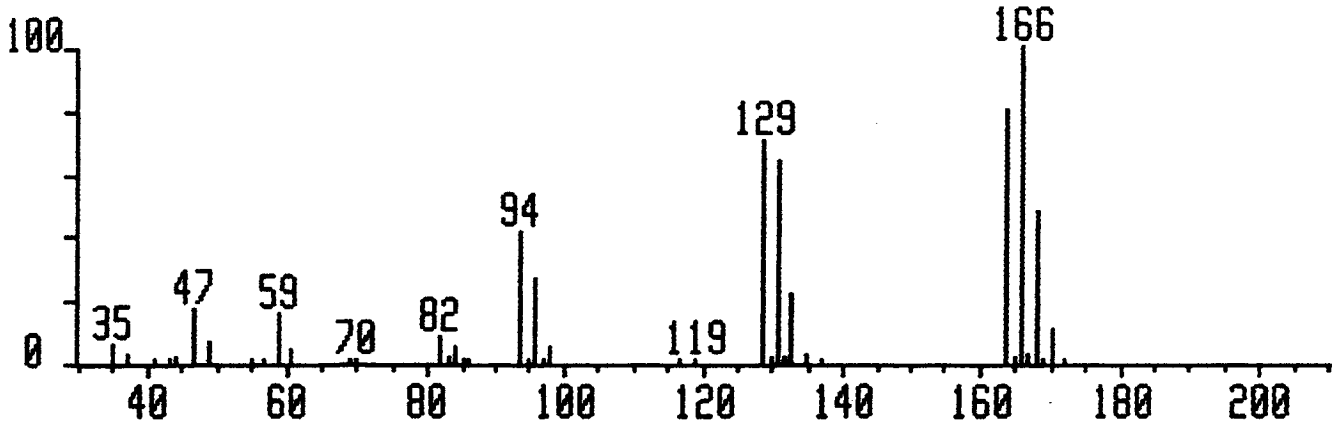
V8240#23 x1 Bgd=1 1-DEC-89 13:03+0:01:11 EI+
I=251mv TIC=11543000 Acnt:VG#2
Text:TrichLoroethene



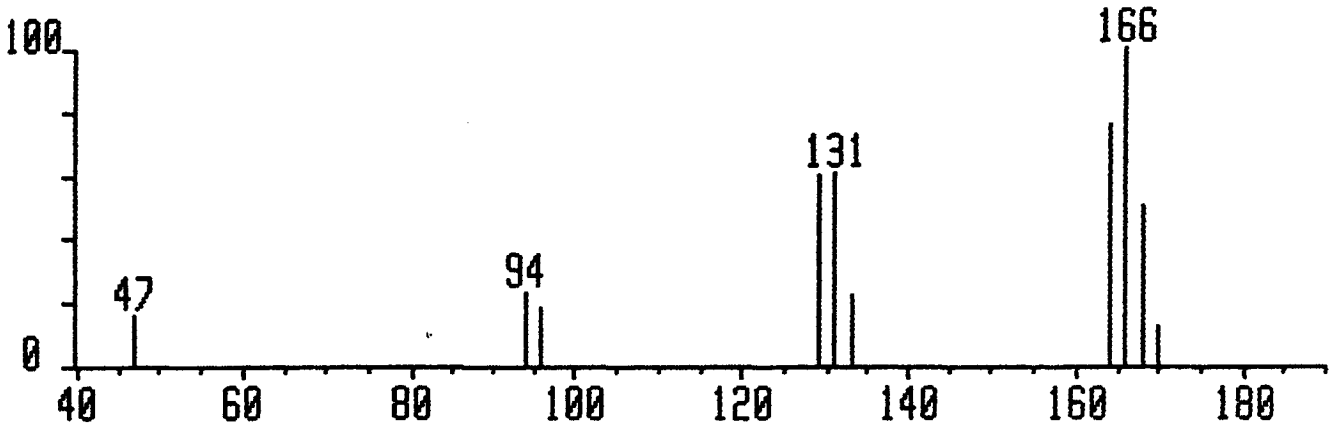
EE2091#499 x1 Bgd=492 10-JUL-92 00:03+0:25:50 EI+
I=330mv TIC=13458000 Acnt:
Text:INFLUENT_23901_Tetrachloroethene



EE2091S#499 x1 Bgd=492 10-JUL-92 00:03+0:25:50 EI+
I=330mv TIC=12173000 SU Acnt:
Text:INFLUENT_23901_Tetrachloroethene



V8240#35 x1 Bgd=1 1-DEC-89 13:03+0:01:47 EI+
I=248mv TIC=11347000 Acnt:VG#2
Text:Tetrachloroethene



ATT RESULTS EE2091 TIC 23901

Internal Standard	Scan	Area	Conc
Bromochloromethane	227	3519	50
1,4-Difluorobenzene	442	4661	50
Chlorobenzene-d5	558	5614	50

TIC Scan	BKG Scan	IS Scan	Area	Conc

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BETWEEN

Lab Name: PACIFIC ANALYTICAL Contract:

Lab Code: PACIF Case No.: SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 23902

Sample wt/vol: 5.0(g/mL) ML Lab File ID: EE2081

Level: (low/med) LOW Date Received: 07/02/92

% Moisture: not dec. Date Analyzed: 07/09/92

GC Column: 1%SP1000 ID: 2 (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	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	7	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-35-3	1,1-Dichloroethane	10	U
156-60-5	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	6	J
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-dichloropropene	10	U
75-25-2	Bromoform	10	U
591-78-6	4-Methyl-2-Pentanone	10	U
108-10-1	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BETWEEN

Lab Name: PACIFIC ANALYTICAL Contract:

Lab Code: PACIF Case No.: SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 23902

Sample wt/vol: 5.0(g/mL) ML Lab File ID: EE2081

Level: (low/med) LOW Date Received: 07/02/92

% Moisture: not dec. Date Analyzed: 07/09/92

GC Column: 1%SP1000 ID: 2(mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
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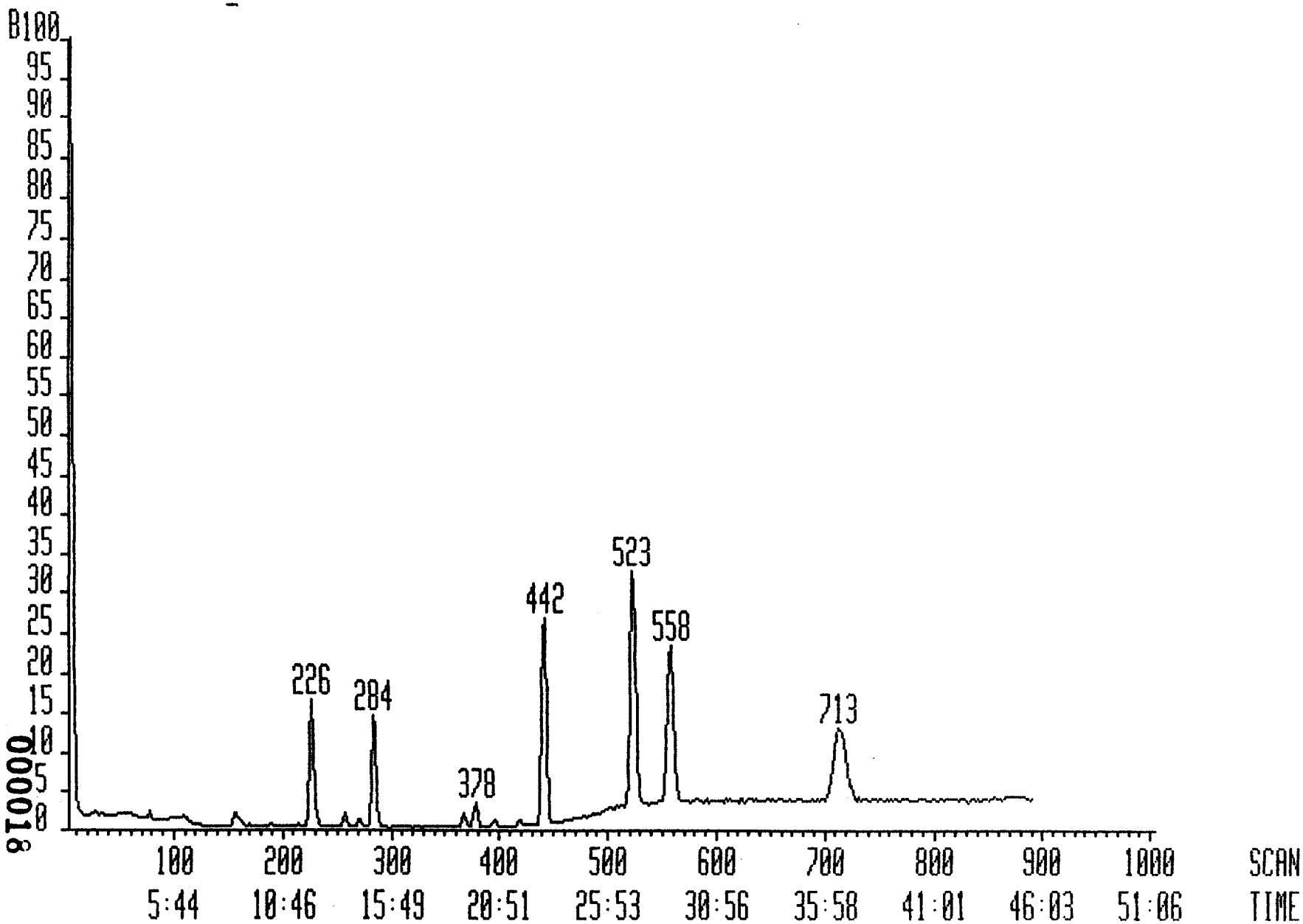
EE2081 #5-890 9-JUL-92 23:11 VG#2 (EI+) Sys:VOA91 IHP

Chromatogram Identifiers : B1:35:260 B: 67687000

Text:BETWEEN_ 23902



Interim Report Sample Analysis 10-JUL-92 13:29:49

Datafile: EE2081 9-JUL-92 23:11
Database: VOA91W
Library: VOA91

Instrument: VG#2
Account:
Text: BETWEEN_ 23902

QRE
M.G.
7/30/92

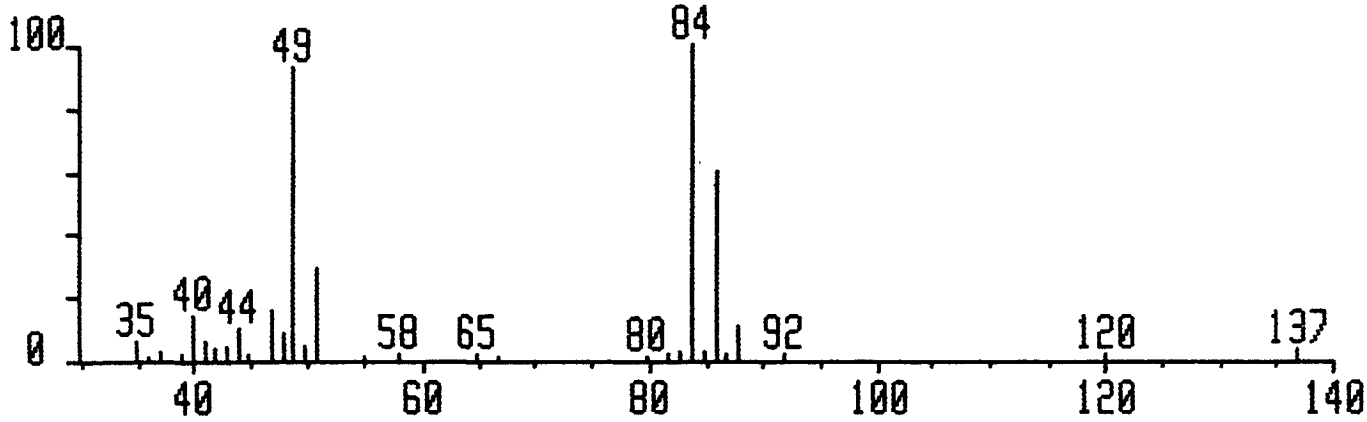
No.	Rank	Spectrum Match	Spectrum Fit	Scan Diff	Peak Area	Flgs	Scan Found	Scan Pred	Quan m/z	Compound Name
1	100	91	99	0	8034000	bb	226	226	128	Bromochloromethane
2	98	86	99	1	13174000	bv	284	283	65	1,2-Dichloroethane-d4
3	55	3	99	0	79778	b?*	27	27	50	Chloromethane
	53	3	99	2	153333	?b	29			
	45	0	89	-4	3000	bb	23			
4	49	3	90	1	2364	b?	60	59	94	Bromomethane
	46	3	88	5	4273	??	64			
	44	3	88	8	5243	??	67			
5	47	0	91	-3	14286	??*	76	79	62	Vinyl Chloride
	47	1	91	4	14286	??	83			
	45	1	91	7	3053	??	86			
6	48	2	88	1	46897	v?*	107	106	64	Chloroethane
	46	2	86	-1	46897	??	105			
	42	2	84	7	36414	?b	113			
7	95	81	99	-1	2106000	bb	156	157	84	Methylene Chloride
8	69	36	99	-3	317156	bv*	169	172	43	~~Acetone~~ Too Small
	57	14	99	5	15344	??	177			
	55	15	99	7	45156	??	179			
9	84	64	98	2	986000	bb	189	187	76	Carbon Disulfide
10	83	58	99	1	212000	bb	214	213	96	1,1-Dichloroethene
11	65	23	99	0	106000	bb*	243	243	63	1,1-Dichloroethane
	39	7	81	14	455000	bb	257			
	38	0	90	-16	80000	bb	227			
12	94	80	99	1	1386000	bb	257	256	96	1,2-Dichloroethene (to
13	85	64	99	2	833000	bb	272	270	83	Chloroform
14	29	19	35	1	66000	bb	287	286	62	1,2-Dichloroethane
15	53	1	99	-1	98032	vv	281	282	43	2-Butanone
	49	11	99	-13	177161	bv	269			
	45	4	84	-3	98032	??	279			
16	83	58	99	1	34079000	bv	442	441	114	1,4-Difluorobenzene
17	57	21	87	1	35000	bb	315	314	97	1,1,1-Trichloroethane
18	37	3	67	-1	3000	bb	322	323	117	Carbon Tetrachloride
19	---------- No Trace Found ----------							0	1	
20	22	0	43	2	3000	bb	336	334	83	Bromodichloromethane
	19	1	43	14	3000	bb	348			
21	34	6	59	2	4000	bb	364	362	63	1,2-Dichloropropane
	30	3	69	18	3000	bb	380			
	24	4	44	5	4000	bb	367			
22	---------- No Trace Found ----------							367	75	cis-1,3-Dichloropropen
23	92	76	99	1	1716000	bb	378	377	130	Trichloroethene
24	---------- No Trace Found ----------							394	129	Dibromochloromethane
25	75	46	94	0	352000	bb	396	396	97	1,1,2-Trichloroethane
26	59	19	94	2	84000	bb	389	387	78	Benzene
27	---------- No Trace Found ----------							394	75	trans-1,3-dichloroprop
28	---------- No Trace Found ----------							0	1	
29	---------- No Trace Found ----------							453	173	Bromoform
30	87	66	99	1	28933300	bv	558	557	117	Chlorobenzene-d5
31	79	50	99	1	17664600	vv	713	712	95	4-Bromofluorobenzene
	77	51	99	3	17664600	vv	715			
32	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Toluene-d8

000013

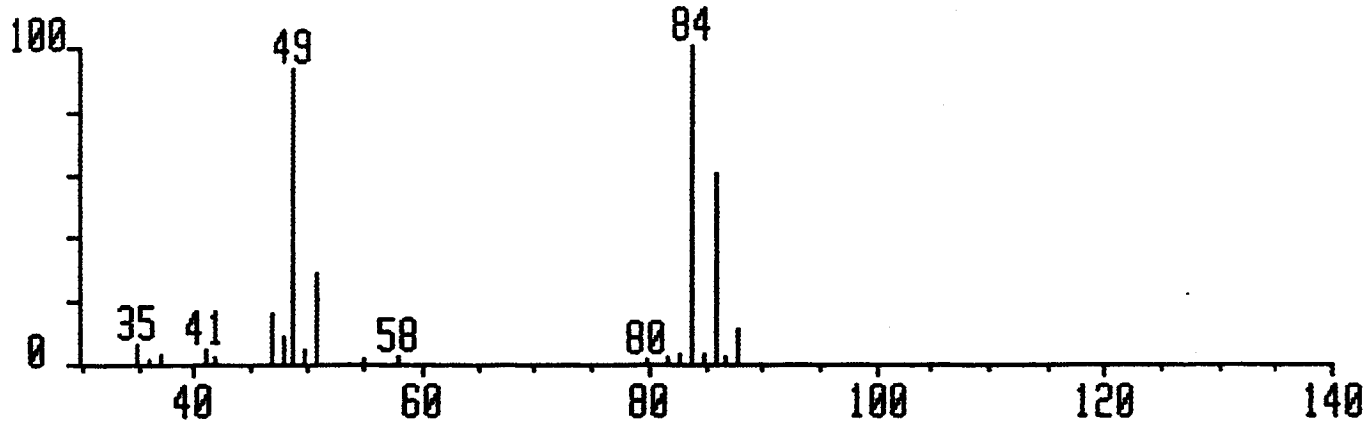
(32)	83	80	78	0	4118/720	vv	523	523	78	Toluene-d8
33	56	21	86	2	13727	??	462	460	43	4-Methyl-2-Pentanone
	55	21	85	-2	18483	??	458			
	54	21	85	4	0	??	464			
34	52	20	79	2	24895	??	495	493	43	2-Hexanone
	51	19	78	-2	19765	??	491			
	50	20	78	-4	40529	??	489			
35	43	1	79	0	6000	bb	498	498	164	Tetrachloroethene
36	50	7	87	-1	28474	??	501	502	83	1,1,2,2-Tetrachloroeth
	49	6	86	1	27316	??	503			
	47	6	86	-3	23263	??	499			
37	54	10	93	1	396769	vb	529	528	91	Toluene
	43	8	81	7	15488	??	535			
	41	7	80	9	3698	??	537			
38	36	1	72	6	11000	??	567	561	112	Chlorobenzene
	34	1	71	-10	6000	??	551			
	33	1	73	-12	6000	??	549			
39	33	6	57	-1	41333	??	624	625	106	Ethylbenzene
	30	6	54	-6	3444	??	619			
	28	5	53	8	6667	??	633			
40	34	3	61	-1	15000	??	759	760	104	Styrene
	33	3	59	1	5000	??	761			
	32	3	61	5	7000	??	765			
41	33	7	57	2	2000	??	771	769	106	m-Xylene
	33	7	56	-1	4000	??	768			
	33	8	57	4	1000	??	773			
42	34	8	58	2	10000	??	805	803	106	o-/p-Xylene
	34	7	58	-1	9000	??	802			
	32	7	58	-6	2000	??	797			
43	---------- No Trace Found ----------							0	-	

EE2081

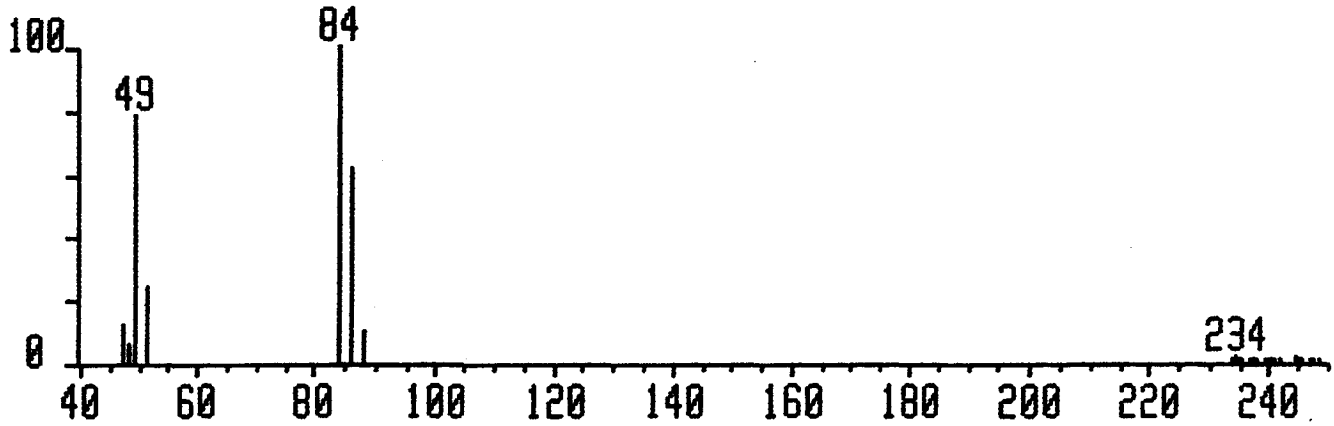
EE2081#156 x1 Bgd=1 9-JUL-92 23:11+0:08:33 EI+
I=51mv TIC=1319000 Acnt:
Text:BETWEEN_23902_Methylene Chloride



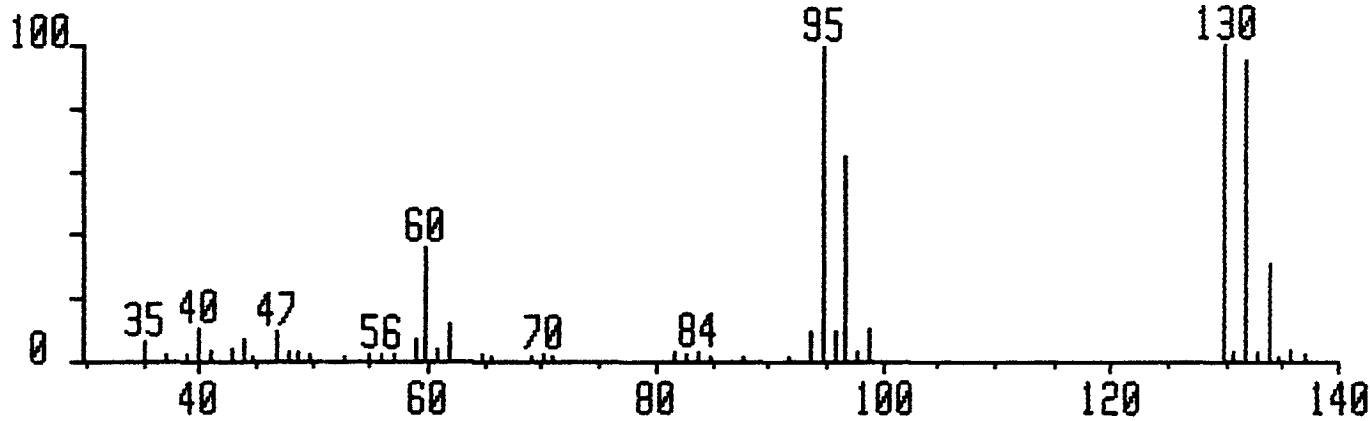
EE2081S#156 x1 Bgd=150 9-JUL-92 23:11+0:08:33 EI+
I=51mv TIC=1171000 SU Acnt:
Text:BETWEEN_23902_Methylene Chloride



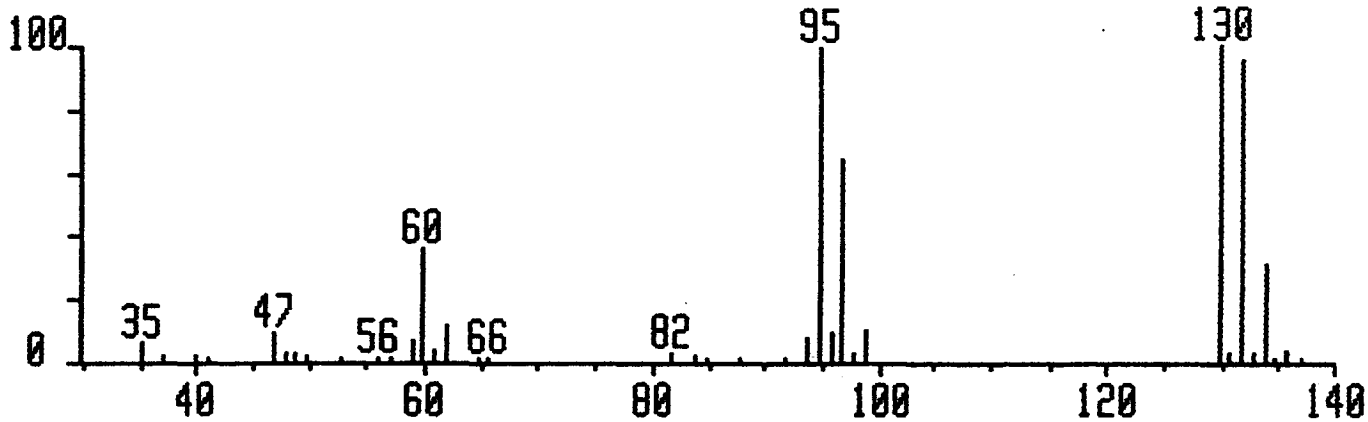
V8240#7 x1 Bgd=1 1-DEC-89 13:03+0:00:23 EI+
I=234mv TIC=10910000 Acnt:VG#2
Text:Methylene Chloride



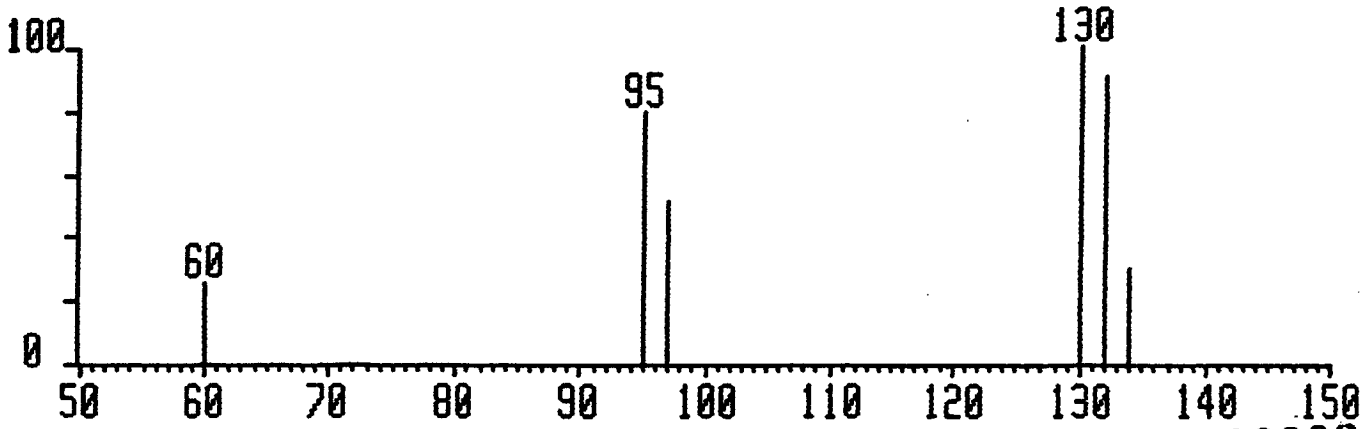
EE2081#378 x1 Bgd=276 9-JUL-92 23:11+0:19:44 EI+
I=63mv TIC=2318000 Acnt:
Text:BETWEEN_23902_Trichloroethene



EE2081S#378 x1 Bgd=372 9-JUL-92 23:11+0:19:44 EI+
I=63mv TIC=2178000 SU Acnt:
Text:BETWEEN_23902_Trichloroethene



V8240#23 x1 Bgd=1 1-DEC-89 13:03+0:01:11 EI+
I=251mv TIC=11543000 Acnt:VG#2
Text:Trichloroethene



ATT RESULTS EE2081 TIC 23902

Internal Standard	Scan	Area	Conc
Bromochloromethane	226	3615	50
1,4-Difluorobenzene	442	4771	50
Chlorobenzene-d5	558	5497	50

TIC Scan	BKG Scan	IS Scan	Area	Conc
~~491~~		442	1014	11

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EFFLUENT

Lab Name: PACIFIC ANALYTICAL Contract:

Lab Code: PACIF Case No.: SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 23903

Sample wt/vol: 5.0(g/mL) ML Lab File ID: EE2071

Level: (low/med) LOW Date Received: 07/02/92

% Moisture: not dec. Date Analyzed: 07/09/92

GC Column: 1%SP1000 ID: 2 (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	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	8	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-35-3	1,1-Dichloroethane	10	U
156-60-5	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-dichloropropene	10	U
75-25-2	Bromoform	10	U
591-78-6	4-Methyl-2-Pentanone	10	U
108-10-1	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EFFLUENT

Lab Name: PACIFIC ANALYTICAL Contract:

Lab Code: PACIF Case No.: SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 23903

Sample wt/vol: 5.0(g/mL) ML Lab File ID: EE2071

Level: (low/med) LOW Date Received: 07/02/92

% Moisture: not dec. Date Analyzed: 07/09/92

GC Column: 1%SP1000 ID: 2(mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
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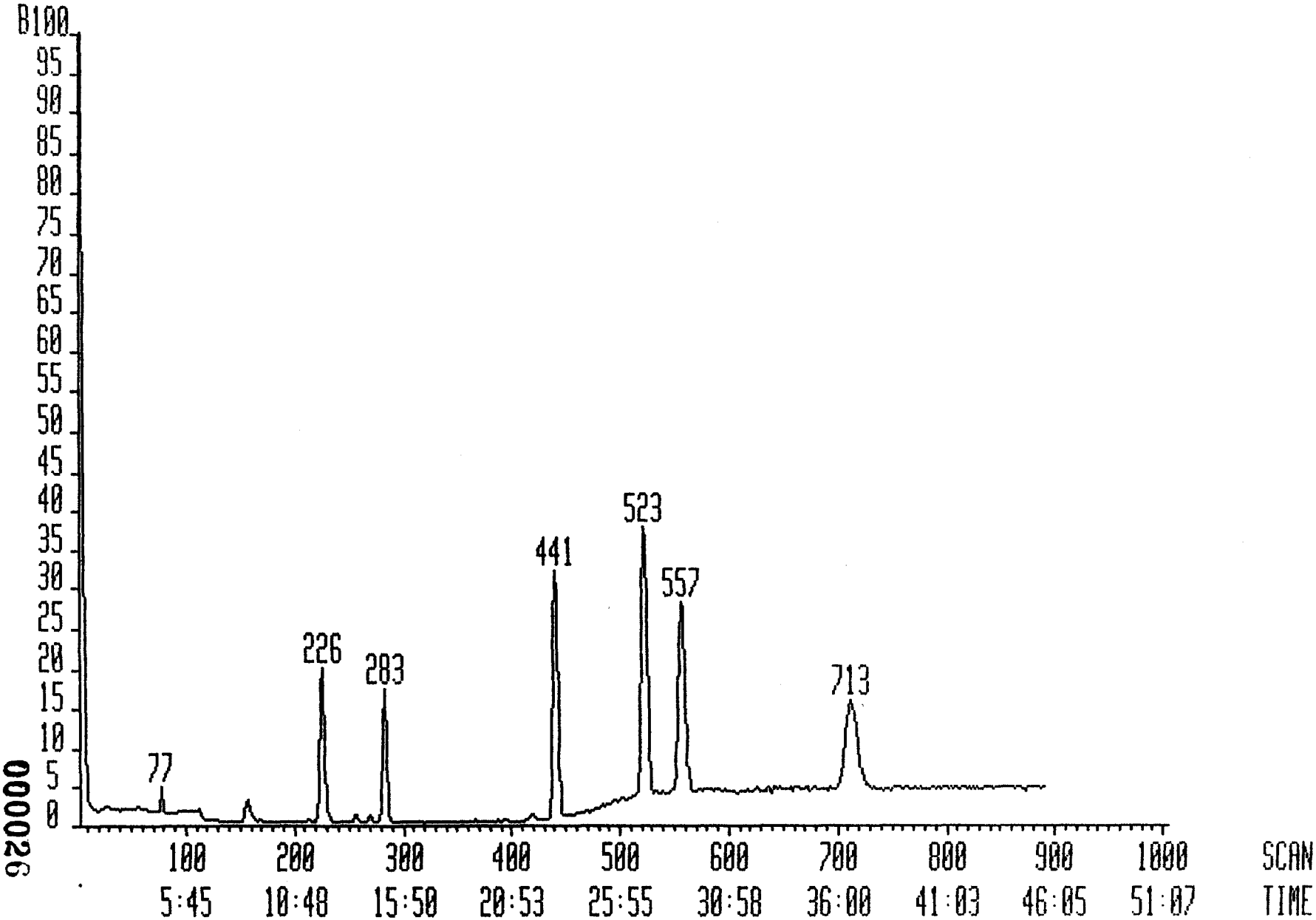
EE2071 #5-890 9-JUL-92 22:20 VG#2 (EI+) Sys:VOA91 IHP

Chromatogram Identifiers : B1:35:260 B: 57008000

Text:EFFLUENT_ 23903



000026

Interim Report Sample Analysis 10-JUL-92 13:22:51

Datafile: EE2071 9-JUL-92 22:20
Database: VOA91W
Library: VOA91

Instrument: VG#2
Account:
Text: EFFLUENT_ 23903

QRE
M.Y.
7/30/92

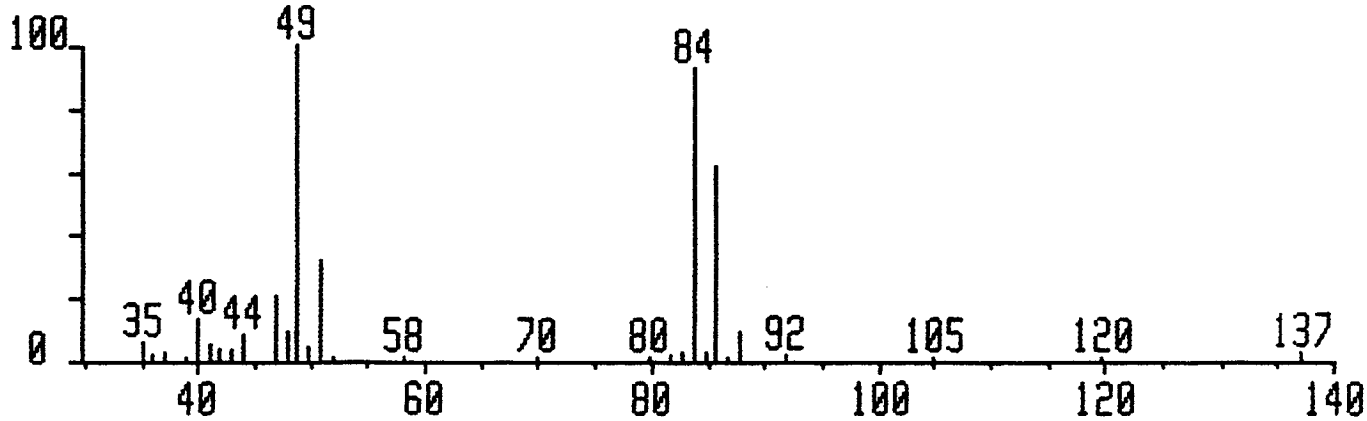
No.	Rank	Spectrum Match	Spectrum Fit	Scan Diff	Peak Area	Flgs	Scan Found	Scan Pred	Quan m/z	Compound Name
1	100	91	99	0	7776000	bb	226	226	128	Bromochloromethane
2	98	86	98	0	13132000	bv	283	283	65	1,2-Dichloroethane-d4
3	51	0	95	0	28000	b?*	27	27	50	Chloromethane
	42	1	93	13	0	??	40			
	38	0	93	18	7826	??	45			
4	49	3	89	1	14138	v?	60	59	94	Bromomethane
	47	3	89	3	4690	??	62			
	45	3	86	5	4448	??	64			
5	50	0	94	-1	1231	??	78	79	62	Vinyl Chloride
	47	0	94	-5	1273	??	74			
	47	0	91	-3	43	??	76			
6	44	2	81	1	29000	??	107	106	64	Chloroethane
	42	2	78	-2	11667	??	104			
	41	2	78	4	25667	?v	110			
7	97	83	99	0	2278000	bb*	157	157	84	Methylene Chloride
8	71	39	99	-3	331286	bv*	169	172	43	~~Acetone~~ Too Small
	56	12	99	4	17429	??	176			
	52	10	99	8	6143	??	180			
9	56	26	80	1	122000	bv	188	187	76	Carbon Disulfide
	26	10	46	9	13000	?b	196			
10	77	46	99	1	134000	bb	214	213	96	1,1-Dichloroethene
11	63	19	99	0	93000	bb*	243	243	63	1,1-Dichloroethane
	40	6	85	13	184000	bb	256			
	40	0	97	-18	73000	bb	225			
12	90	70	99	0	595000	bb	256	256	96	1,2-Dichloroethene (to
13	90	71	99	1	799000	bb	271	270	83	Chloroform
14	30	19	38	0	67000	bb	286	286	62	1,2-Dichloroethane
15	45	3	99	-13	42059	bv	269	282	43	2-Butanone
	43	5	84	-8	4882	??	274			
	41	3	84	9	5875	??	291			
16	85	60	99	0	34549000	bv	441	441	114	1,4-Difluorobenzene
17	50	15	79	0	46000	bb	314	314	97	1,1,1-Trichloroethane
18	---------- No Trace Found ----------							323	117	Carbon Tetrachloride
19	---------- No Trace Found ----------							0	1	
20	21	1	43	9	3000	bb	343	334	83	Bromodichloromethane
	19	1	43	16	3000	bb	350			
	18	1	43	18	4000	bb	352			
21	27	5	47	-2	3000	bb	360	362	63	1,2-Dichloropropane
22	---------- No Trace Found ----------							367	75	cis-1,3-Dichloropropen
23	66	25	98	0	51000	bb	377	377	130	Trichloroethene
24	---------- No Trace Found ----------							394	129	Dibromochloromethane
25	60	20	92	0	45333	vb	396	396	97	1,1,2-Trichloroethane
26	61	24	92	1	134000	bb	388	387	78	Benzene
27	25	1	45	0	3000	bb	394	394	75	trans-1,3-dichloroprop
28	---------- No Trace Found ----------							0	1	
29	---------- No Trace Found ----------							453	173	Bromoform
30	88	66	99	0	29897290	bv	557	557	117	Chlorobenzene-d5
31	78	49	99	1	17471630	vv	713	712	95	4-Bromofluorobenzene
32	84	61	96	0	40852270	vv	523	523	98	Toluene-d8

000027

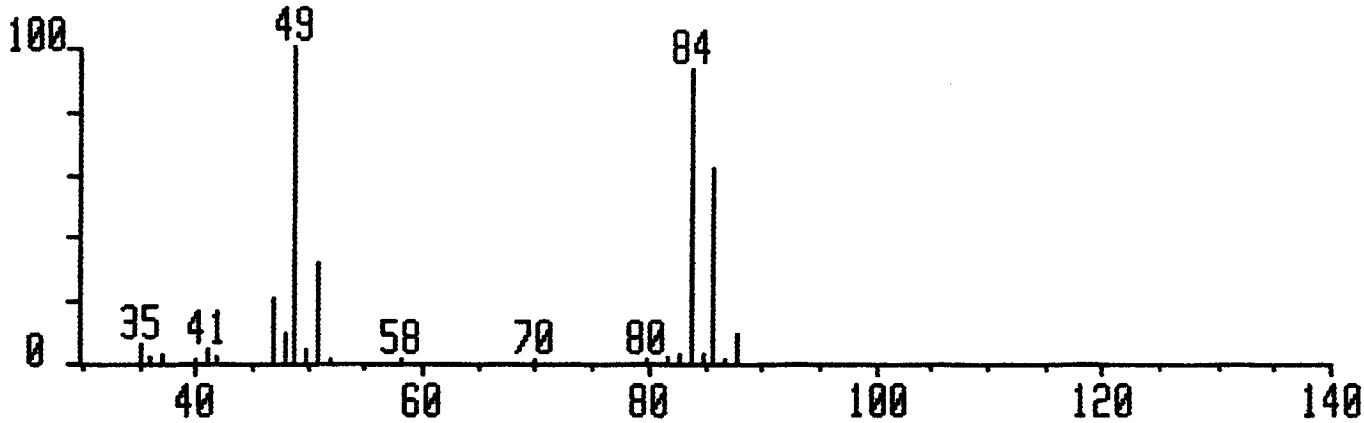
~~33~~	57	21	88	0	28143	??	480	480	43	4-Methyl-2-Pentanone
	56	21	87	2	29857	??	462			
	55	21	85	-2	7941	??	458			
~~34~~	52	20	78	0	62522	??	493	493	43	2-Hexanone
	52	20	79	2	144478	??	495			
	51	21	80	4	73565	??	497			
~~35~~	42	1	79	1	3000	bb	499	498	164	Tetrachloroethene
~~36~~	49	6	85	0	23800	??	502	502	83	1,1,2,2-Tetrachloroeth
	47	6	85	-2	12706	??	500			
	47	6	85	2	24200	??	504			
~~37~~	55	11	94	1	271191	?v	529	528	91	Toluene
	40	7	80	10	9381	??	538			
	39	8	79	12	6444	??	540			
~~38~~	35	1	74	10	22000	??*	571	561	112	Chlorobenzene
	33	1	71	-11	4000	??	550			
	33	1	73	-13	7000	??	548			
~~39~~	32	6	54	0	9600	??	625	625	106	Ethylbenzene
	31	6	55	5	4105	??	630			
	29	5	53	-4	6000	??	621			
~~40~~	34	3	62	-2	4211	??	758	760	104	Styrene
	33	3	60	1	15000	??	761			
	32	3	61	-4	8842	??	756			
~~41~~	32	7	57	-4	18077	??	765	769	106	m-Xylene
	32	7	56	3	3400	??	772			
	32	7	56	5	1000	?b	774			
~~42~~	34	7	58	1	12235	??	804	803	106	o-/p-Xylene
	32	7	56	-3	8111	??	800			
	32	7	58	-6	2630	??	797			
~~43~~	---------- No Trace Found ----------							0	-	

EE2071

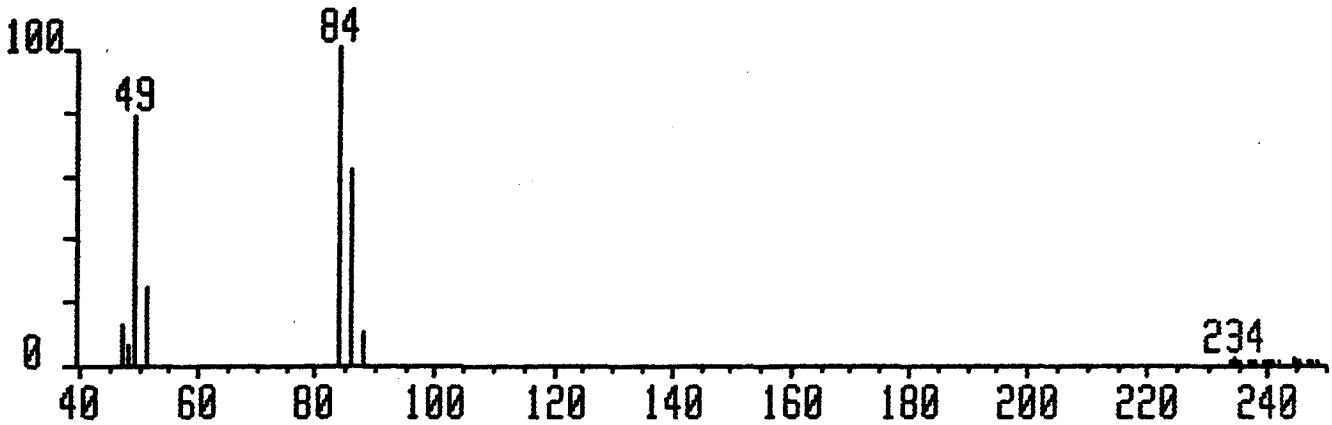
EE2071#157 x1 Bgd=1 9-JUL-92 22:20+0:08:37 EI+
I=69mv TIC=1751000 Acnt:
Text:EFFLUENT_23903_MethyLene ChLoride



EE2071S#157 x1 Bgd=150 9-JUL-92 22:20+0:08:37 EI+
I=69mv TIC=1606000 SU Acnt:
Text:EFFLUENT_23903_MethyLene ChLoride



V8240#7 x1 Bgd=1 1-DEC-89 13:03+0:00:23 EI+
I=234mv TIC=10910000 Acnt:VG#2
Text:MethyLene ChLoride



ATT RESULTS EE2071 TIC 23903

Internal Standard	Scan	Area	Conc
Bromochloromethane	226	3499	50
1,4-Difluorobenzene	441	4837	50
Chlorobenzene-d5	557	5680	50

TIC Scan	BKG Scan	IS Scan	Area	Conc
~~711~~ BFB		557	1978	17

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: PACIFIC ANALYTICAL Contract:

Lab Code: PACIF Case No.: SAS No.: SGD No.:

Instrument ID: VG#2 Calibration Date(s): 07/08/92 07/08/92

Heated Purge: (Y/N) N Calibration Times: 1626 2013

GC Column: 1%SP1000 ID: 2 (mm)

LAB FILE ID: RRF10 =EE1061 RRF20 =EE1051
RRF50=EE1041 RRF100=EE1031 RRF200=EE1021

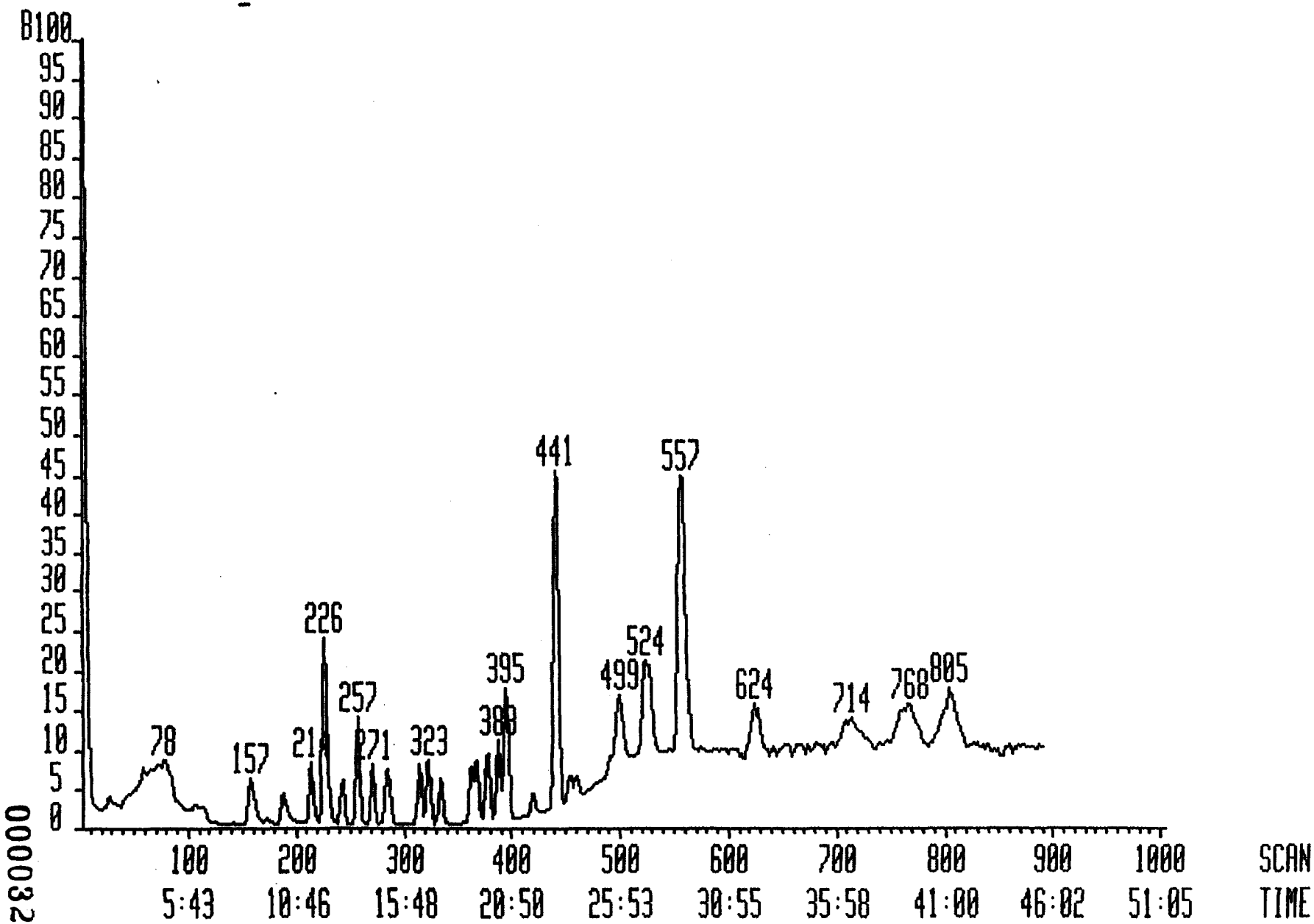
COMPOUND	RRF10	RRF20	RRF50	RRF100	RRF200	$\overline{RRF}$	% RSD
Chloromethane	1.461	1.489	1.596	1.616	1.534	1.539	4.3
Bromomethane	* 1.190	0.865	0.990	1.016	0.899	0.992	12.8*
Vinyl Chloride	* 1.502	1.334	1.380	1.773	1.293	1.456	13.3*
Chloroethane	0.923	0.908	0.992	0.942	0.939	0.941	3.4
Methylene Chloride	3.141	2.580	2.400	2.027	1.909	2.411	20.3
Acetone	0.451	0.400	0.400	0.365	0.320	0.387	12.5
Carbon Disulfide	5.719	5.443	5.656	5.344	5.003	5.433	5.2
1,1-Dichloroethene	* 1.935	1.984	1.989	1.875	1.766	1.910	4.8*
1,1-Dichloroethane	* 2.758	2.930	3.148	2.883	2.905	2.925	4.8*
1,2-Dichloroethene (total)	1.918	1.920	1.978	1.870	1.826	1.902	3.0
Chloroform	* 3.271	3.280	3.458	3.177	3.086	3.254	4.3*
1,2-Dichloroethane	* 1.911	1.853	2.040	1.935	1.915	1.931	3.5*
2-Butanone	0.819	0.731	0.693	0.647	0.559	0.690	14.0
1,1,1-Trichloroethane	* 0.656	0.665	0.701	0.654	0.619	0.659	4.4*
Carbon Tetrachloride	* 0.526	0.545	0.549	0.559	0.531	0.542	2.5*
Bromodichloromethane	* 0.568	0.588	0.585	0.621	0.582	0.589	3.3*
1,2-Dichloropropane	0.355	0.367	0.373	0.377	0.392	0.373	3.6
cis-1,3-Dichloropropene	* 0.671	0.682	0.695	0.667	0.707	0.684	2.4*
Trichloroethene	* 0.411	0.398	0.435	0.423	0.401	0.414	3.7*
Dibromochloromethane	* 0.398	0.413	0.437	0.457	0.433	0.428	5.3*
1,1,2-Trichloroethane	* 0.344	0.343	0.362	0.362	0.329	0.348	4.0*
Benzene	* 1.270	1.212	1.209	1.322	1.277	1.258	3.8*
trans-1,3-dichloropropene	* 0.478	0.486	0.491	0.504	0.489	0.490	1.9*
Bromoform	* 0.249	0.257	0.267	0.275	0.253	0.260	4.1*
4-Methyl-2-Pentanone	0.318	0.344	0.341	0.294	0.287	0.317	8.3
2-Hexanone	0.263	0.211	0.233	0.237	0.185	0.226	13.0
Tetrachloroethene	* 0.359	0.344	0.354	0.362	0.325	0.349	4.3*
1,1,2,2-Tetrachloroethane	* 0.432	0.462	0.469	0.508	0.461	0.466	5.8*
Toluene	* 1.527	1.477	1.455	1.434	1.409	1.460	3.1*
Chlorobenzene	* 0.956	0.943	0.963	0.965	0.893	0.944	3.2*
Ethylbenzene	* 0.549	0.572	0.599	0.557	0.484	0.552	7.7*
Styrene	* 1.068	1.075	1.125	1.137	0.985	1.078	5.6*
Xylene (total)	* 0.692	0.656	0.701	0.691	0.601	0.668	6.2*
Toluene-d8	1.537	1.368	1.396	1.351	1.280	1.386	6.8
4-Bromofluorobenzene	* 0.640	0.613	0.633	0.611	0.566	0.613	4.7*
1,2-Dichloroethane-d4	1.859	1.823	1.810	1.825	1.775	1.818	1.7

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

EE1061 #5-890 8-JUL-92 20:13 VG#2 (EI+) Sys:IDVOA IHP

Chromatogram Identifiers : B1:35:260 B: 40277000

Text:VSTD010_ 00010



000032

Datafile: EE1061 8-JUL-92 20:13
Database: VOA91T
Library: VOA91

QRE
an. E.
7/9/92

Instrument: VG#2
Account:
Text: VSTD010_ 00010

No.	Rank	Spectrum Match	Spectrum Fit	Scan Diff	Peak Area	Flgs	Scan Found	Scan Pred	Quan m/z	Compound Name
1	90	70	98	0	7365000	bb	226	226	128	Bromochloromethane
2	67	28	99	1	2738000	bb	284	283	65	1,2-Dichloroethane-d4
3	56	5	99	0	~~781000~~	b?*	27	27	50	Chloromethane 2152425
	53	4	99	3	1751000	?b	30			
	31	0	74	16	27000	b?	43			
4	52	0	98	0	~~845474~~	b?	59	59	94	Bromomethane 1752303
	48	0	96	5	942684	??	64			
	34	0	83	18	145737	??	77			
5	53	0	99	0	~~1133286~~	~~bv~~	79	79	62	Vinyl Chloride 2212853
	47	0	99	8	1156000	?b	87			
	47	0	93	-5	47000	bb	74			
6	54	2	99	0	~~711000~~	~~v?*~~	106	106	64	Chloroethane 1359293
	50	1	99	5	743000	?v	111			
	40	0	83	-8	16000	??	98			
7	72	36	99	0	4627000	vv*	157	157	84	Methylene Chloride
8	55	6	99	1	663774	bv*	173	172	43	Acetone
	45	0	99	-11	19429	??	161			
	36	0	75	8	40161	??	180			
9	68	30	99	1	8423725	bv	188	187	76	Carbon Disulfide
	40	4	96	19	613725	?v	206			
10	73	40	99	1	2850000	bv	214	213	96	1,1-Dichloroethene
11	69	30	99	0	4063000	bb	243	243	63	1,1-Dichloroethane
12	81	54	99	1	5651000	bb	257	256	96	1,2-Dichloroethene (to
13	77	46	99	1	4818000	bb	271	270	83	Chloroform
14	67	32	93	0	2815000	bb	286	286	62	1,2-Dichloroethane
15	55	6	99	1	1207000	vb	283	282	43	2-Butanone
	44	0	94	-10	9000	??	272			
	43	0	96	-12	30000	b?	270			
16	80	50	99	0	33177000	bb	441	441	114	1,4-Difluorobenzene
17	75	45	98	1	4352000	bb	315	314	97	1,1,1-Trichloroethane
18	74	41	98	0	3489000	vb	323	323	117	Carbon Tetrachloride
	50	6	99	-8	504000	bv	315			
19	---------- No Trace Found ----------							0	1	
20	73	38	99	0	3766000	bv	334	334	83	Bromodichloromethane
21	74	43	98	1	2353000	bb	363	362	63	1,2-Dichloropropane
22	73	40	98	1	4450000	bb	368	367	75	cis-1,3-Dichloropropen
23	76	44	99	0	2726000	bb	377	377	130	Trichloroethene
24	63	19	99	0	2638000	bb	394	394	129	Dibromochloromethane
25	67	27	99	0	2284000	vb	396	396	97	1,1,2-Trichloroethane
26	77	50	95	1	8425000	bb	388	387	78	Benzene
27	61	18	98	1	3173000	vb	395	394	75	trans-1,3-dichloroprop
28	---------- No Trace Found ----------							0	1	
29	65	25	99	1	1655000	bb	454	453	173	Bromoform
30	79	49	98	0	28440400	vv	557	557	117	Chlorobenzene-d5
31	59	12	98	0	~~2164000~~	v?	712	712	95	4-Bromofluorobenzene
	57	12	97	2	1945000	?v	714		3641987	
32	68	29	99	0	8741240	vv	523	523	98	Toluene-d8
33	68	29	98	0	1810700	vb	460	460	43	4-Methyl-2-Pentanone
	44	10	81	7	12286	??	467			

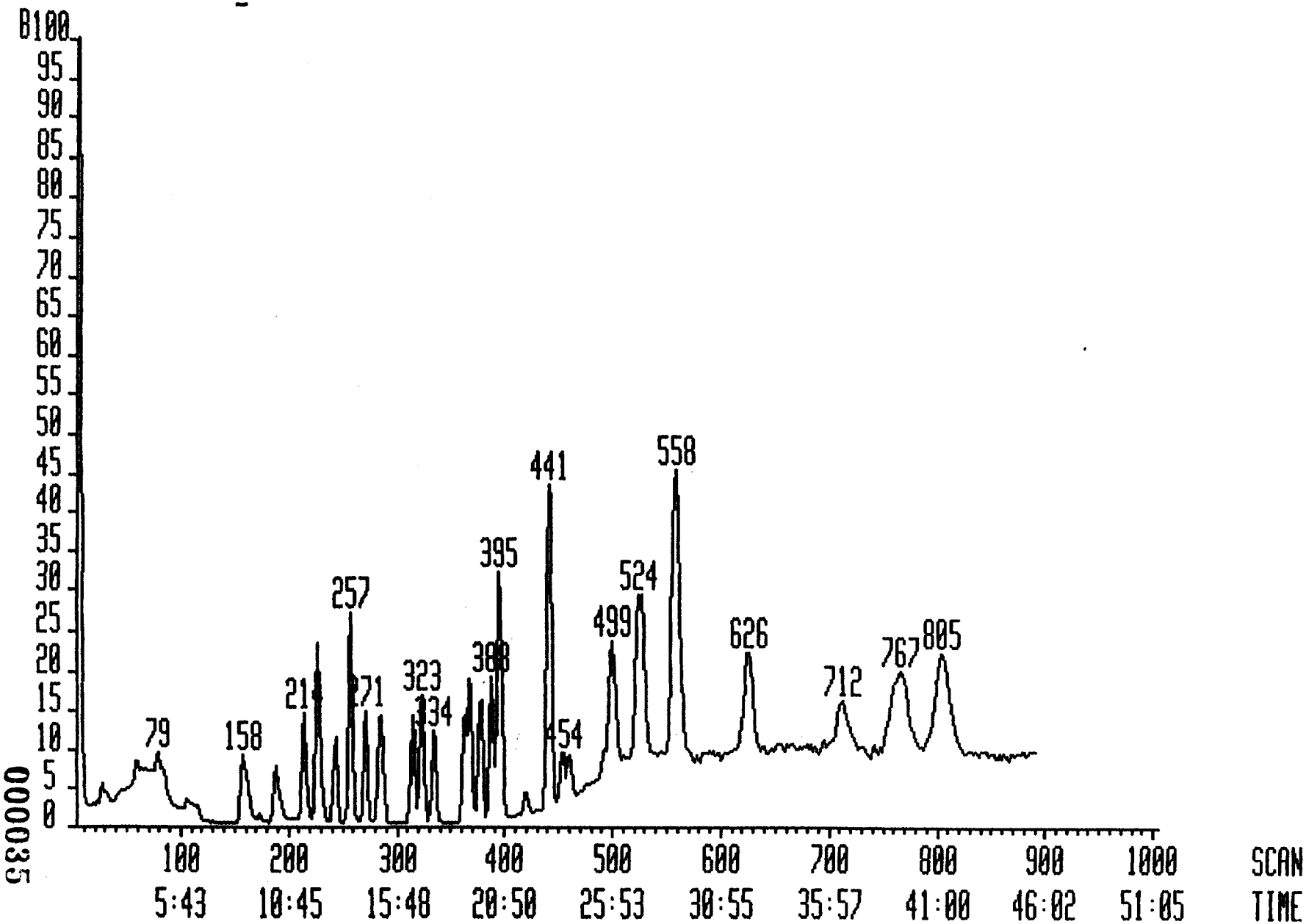
	43	11	81	7	28130	??	487				
34	60	22	91	0	1493842	vv	OK 493	493	43	2-Hexanone	
	40	10	73	7	164553	??	500				
	39	14	74	14	104511	??	507				
35	70	31	99	0	2044000	bb	498	498	164	Tetrachloroethene	
36	61	16	98	0	2455733	vv	502	502	83	1,1,2,2-Tetrachloroeth	
	45	4	89	-3	0	??	494				
	44	5	88	9	30111	??	511				
37	70	32	99	0	8684116	vv	528	528	91	Toluene	
38	61	15	99	0	5438364	vv	561	561	112	Chlorobenzene	
	37	0	81	-12	15636	??	549				
	35	0	77	11	12773	??	572				
39	65	25	99	-1	3121000	vv	624	625	106	Ethylbenzene	
40	61	18	97	1	6072745	vb	761	760	104	Styrene	
41	63	21	97	0	3935351	vb	769	769	106	m-Xylene	
42	66	28	99	2	~~5217600~~	?v	805	803	106	o-/p-Xylene	7691289
43	---------- No Trace Found ----------							0	-		

EE1061

EE1051 #5-890 8-JUL-92 19:21 VG#2 (EI+) Sys:IDVOA IHP

Chromatogram Identifiers : B1:35:260 B: 44074000

Text:VSTD020_ 00020



000035

Interim Report Sample Analysis 09-JUL-92 09 12:03

Datafile: EE1051 8-JUL-92 19:21
Database: VOA91T
Library: VOA91

QRE
M.H.
7/9/92

Instrument: VG#2
Account:
Text: VSTD020_ 00020

No.	Rank	Spectrum Match	Spectrum Fit	Scan Diff	Peak Area	Flgs	Scan Found	Scan Pred	Quan m/z	Compound Name
1	90	69	99	0	7710000	bb	226	226	128	Bromochloromethane
2	71	35	99	1	5623000	bb	284	283	65	1,2-Dichloroethane-d4
3	58	9	99	0	~~1941455~~	~~b?~~	27	27	50	Chloromethane 4591196
	54	8	99	4	2886818	?b	31			
	31	0	74	-17	4000	bb	10			
4	53	0	99	0	~~1687672~~	~~bv~~	59	59	94	Bromomethane 2668072
	49	0	98	5	480769	??	64			
	47	0	97	7	1467385	?v	66			
5	53	0	99	0	~~1846000~~	~~bv~~	79	79	62	Vinyl Chloride 4112969
	47	0	99	9	2487750	?b	88			
6	54	3	98	0	~~1291000~~	~~v?*~~	106	106	64	Chloroethane 2800818
	49	2	99	7	1291000	?b	113			
7	76	45	99	1	7957000	vv	158	157	84	Methylene Chloride
8	57	9	99	1	1233778	vv	173	172	43	Acetone
	38	0	75	-5	5867	??	167			
	36	0	75	-7	5600	??	165			
9	77	46	99	1	16786000	bv	188	187	76	Carbon Disulfide
10	80	52	99	1	6120000	bb	214	213	96	1,1-Dichloroethene
11	74	39	99	0	9037000	bb	243	243	63	1,1-Dichloroethane
12	87	65	99	1	11840000	bv	257	256	96	1,2-Dichloroethene (to
13	83	58	99	1	10115000	bb	271	270	83	Chloroform
14	73	42	94	0	5715000	bb	286	286	62	1,2-Dichloroethane
15	58	10	99	0	2253000	vv	282	282	43	2-Butanone
	43	0	97	-13	72647	??	269			
	41	0	84	-7	22529	??	275			
16	79	49	99	0	33610000	bv	441	441	114	1,4-Difluorobenzene
17	82	57	98	1	8941000	bb	315	314	97	1,1,1-Trichloroethane
18	80	51	98	0	7323000	vb	323	323	117	Carbon Tetrachloride
	51	7	99	-8	1056000	bv	315			
19	---------- No Trace Found ----------							0	1	
20	81	52	99	0	7904000	bv	334	334	83	Bromodichloromethane
21	80	52	98	0	4936000	bb	362	362	63	1,2-Dichloropropane
22	76	45	99	1	9170000	bb	368	367	75	cis-1,3-Dichloropropen
23	84	58	99	0	5357000	bb	377	377	130	Trichloroethene
24	65	23	99	0	5554000	bb	394	394	129	Dibromochloromethane
25	70	32	99	0	4611000	vb	396	396	97	1,1,2-Trichloroethane
26	83	63	95	1	16298000	bb	388	387	78	Benzene
27	63	22	98	1	6530000	vb	395	394	75	trans-1,3-dichloroprop
28	---------- No Trace Found ----------							0	1	
29	74	39	99	0	3461000	bb	453	453	173	Bromoform
30	79	48	99	0	29931800	bv	557	557	117	Chlorobenzene-d5
31	63	20	98	0	7341034	vv	712	712	95	4-Bromofluorobenzene
32	73	40	99	1	16379610	vv	524	523	98	Toluene-d8
33	73	38	99	0	4124000	vv	460	460	43	4-Methyl-2-Pentanone
	45	11	82	7	4124000	??	467			
34	67	30	95	0	2524484	vv	493	493	43	2-Hexanone
	43	13	74	-6	75263	??	487			
	40	13	73	-10	43000	??	483			
35	76	44	99	0	4116000	bb	498	498	164	Tetrachloroethene
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

000036

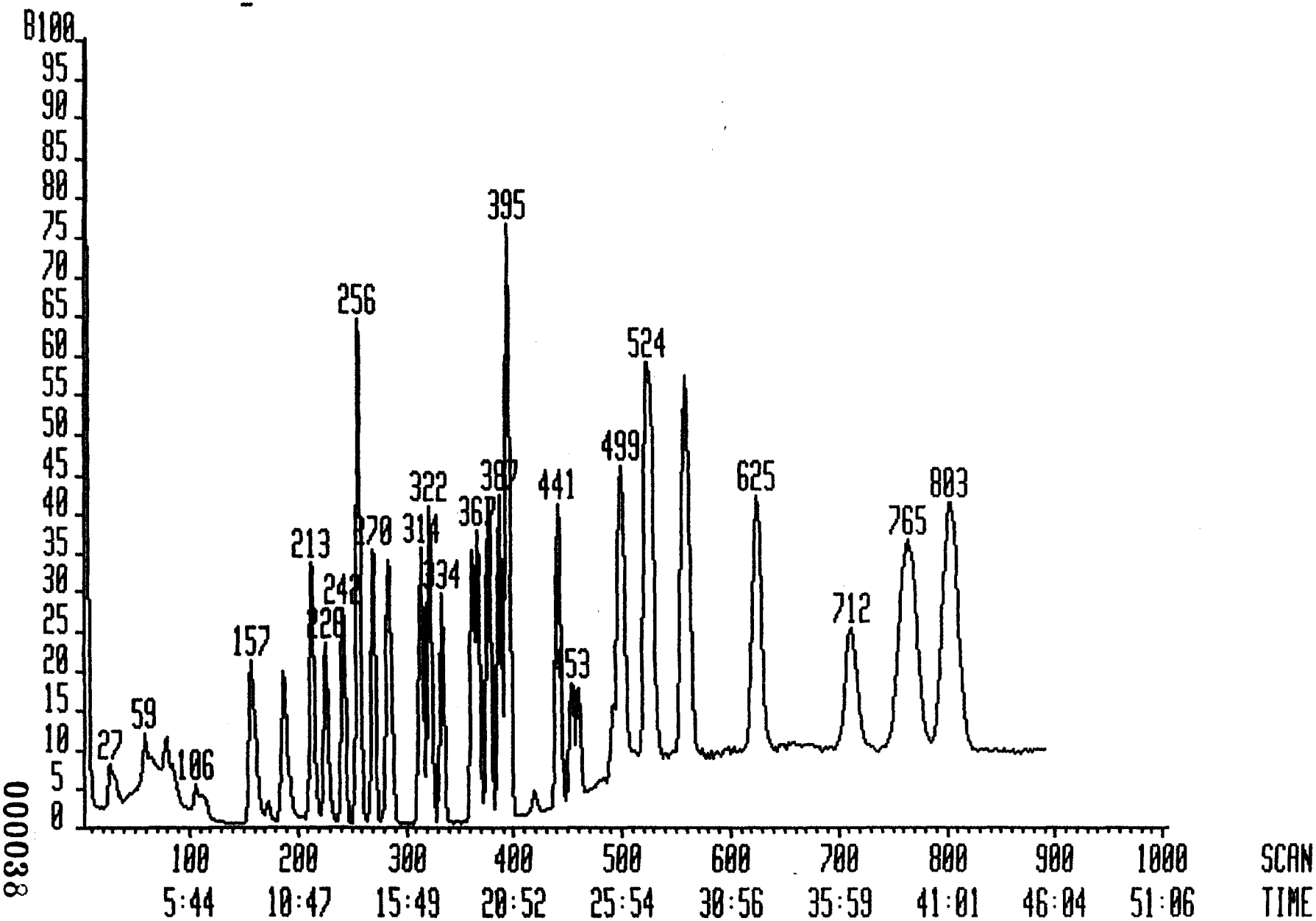
36	85	24	78	0	3330373	vvv	502	502	83	[illegible]
	45	4	89	-7	0	??	495			
	45	5	88	8	80056	??	510			
37	77	45	99	0	17682710	vv	528	528	91	Toluene
38	66	26	99	1	11285520	bv	562	561	112	Chlorobenzene
39	73	37	99	0	6849000	vv	625	625	106	Ethylbenzene
40	67	28	98	1	12869000	bb	761	760	104	Styrene
41	68	31	97	1	7857501	bb	770	769	106	m-Xylene
42	74	41	99	1	15286480	bv	804	803	106	o-/p-Xylene
43	---------- No Trace Found ----------							0	-	

EE1051

EE1041 #5-890 8-JUL-92 18:30 VG#2 (EI+) Sys:IDVOA IHP

Chromatogram Identifiers : B1:35:260 B: 43863000

Text:VSTD050_ 00050



000038

Interim Report Sample Analysis 08-JUL-92 19:27:07

Datafile: EE1041 8-JUL-92 18:30 GRE
Database: VOA91T
Library: VOA91

Instrument: VG#2
Account:
Text: VSTD050_ 00050

No.	Rank	Spectrum Match	Spectrum Fit	Scan Diff	Peak Area	Flgs	Scan Found	Scan Pred	Quan m/z	Compound Name
1	87	71	99	3	7219000	bb	226	223	128	Bromochloromethane
2	74	42	98	-1	13066000	bb	283	284	65	1,2-Dichloroethane-d4
3	63	19	99	0	5422592	b?	27	27	50	Chloromethane 11519288
	61	20	99	3	7086556	?b	30			
4	52	0	99	2	3608369	bv	59	57	94	Bromomethane 7144146
	48	0	99	7	3786000	?v	64			
5	52	0	99	1	4447345	bv	79	78	62	Vinyl Chloride -9560627
	47	1	99	9	6013620	?b	87			
6	54	8	98	4	3357450	v?*	106	102	64	Chloroethane- 7158447
	48	6	98	10	4280917	?b	112			
7	82	65	99	5	17326000	vv	157	152	84	Methylene Chloride
8	59	17	99	4	2890800	vv*	172	168	43	Acetone
	50	0	99	-5	19260	??	163			
	47	0	99	-9	35800	??	159			
9	83	63	99	3	40828560	bv	187	184	76	Carbon Disulfide
10	87	65	99	1	14358000	bb	213	212	96	1,1-Dichloroethene
11	77	48	99	2	22729000	bv	243	241	63	1,1-Dichloroethane
12	92	73	99	0	28556410	bv	256	256	96	1,2-Dichloroethene (to
13	91	72	98	0	24962000	bb	270	270	83	Chloroform
14	78	52	96	-1	14725000	bb	286	287	62	1,2-Dichloroethane
15	59	12	99	0	5006334	vv	282	282	43	2-Butanone
	44	0	93	-9	9667	??	273			
	41	0	84	-7	20333	??	275			
16	72	48	99	-6	31210000	bv	441	447	114	1,4-Difluorobenzene
17	89	70	98	-1	21870000	bb	314	315	97	1,1,1-Trichloroethane
18	85	63	98	-1	17130000	vb	323	324	117	Carbon Tetrachloride
19	----------		No	Trace	Found	----------		0	1	
20	85	65	99	-2	18269900	vb	334	336	83	Bromodichloromethane
21	83	63	98	-3	11639000	bb	362	365	63	1,2-Dichloropropane
22	83	63	98	-3	21680000	bb	367	370	75	cis-1,3-Dichloropropen
23	85	68	99	-4	13587000	bb	377	381	130	Trichloroethene
24	63	25	99	-4	13648000	bb	394	398	129	Dibromochloromethane
25	69	37	99	-4	11289700	vb	396	400	97	1,1,2-Trichloroethane
26	86	74	96	-4	37720000	bv	387	391	78	Benzene
27	62	24	98	-4	15312590	vv	394	398	75	trans-1,3-dichloroprop
	37	1	79	11	9370	??	409			
	36	1	79	13	2167	??	411			
28	----------		No	Trace	Found	----------		0	1	
29	79	61	99	-6	8342000	bb	453	459	173	Bromoform
30	71	42	99	-4	28792330	vv	557	561	117	Chlorobenzene-d5
31	65	34	99	7	18216000	vv	712	705	95	4-Bromofluorobenzene
32	74	52	99	-6	40183000	vv	523	529	98	Toluene-d8
33	76	55	99	-6	9827728	vv	460	466	43	4-Methyl-2-Pentanone
	48	11	80	1	33455	??	467			
	47	11	81	3	18057	??	469			
34	69	43	97	-6	6711667	vb	493	499	43	2-Hexanone
	41	14	73	9	9143	??	508			
	41	14	70	7	11400	??	506			
35	79	63	99	-7	10206000	bb	498	505	164	Tetrachloroethene

000039

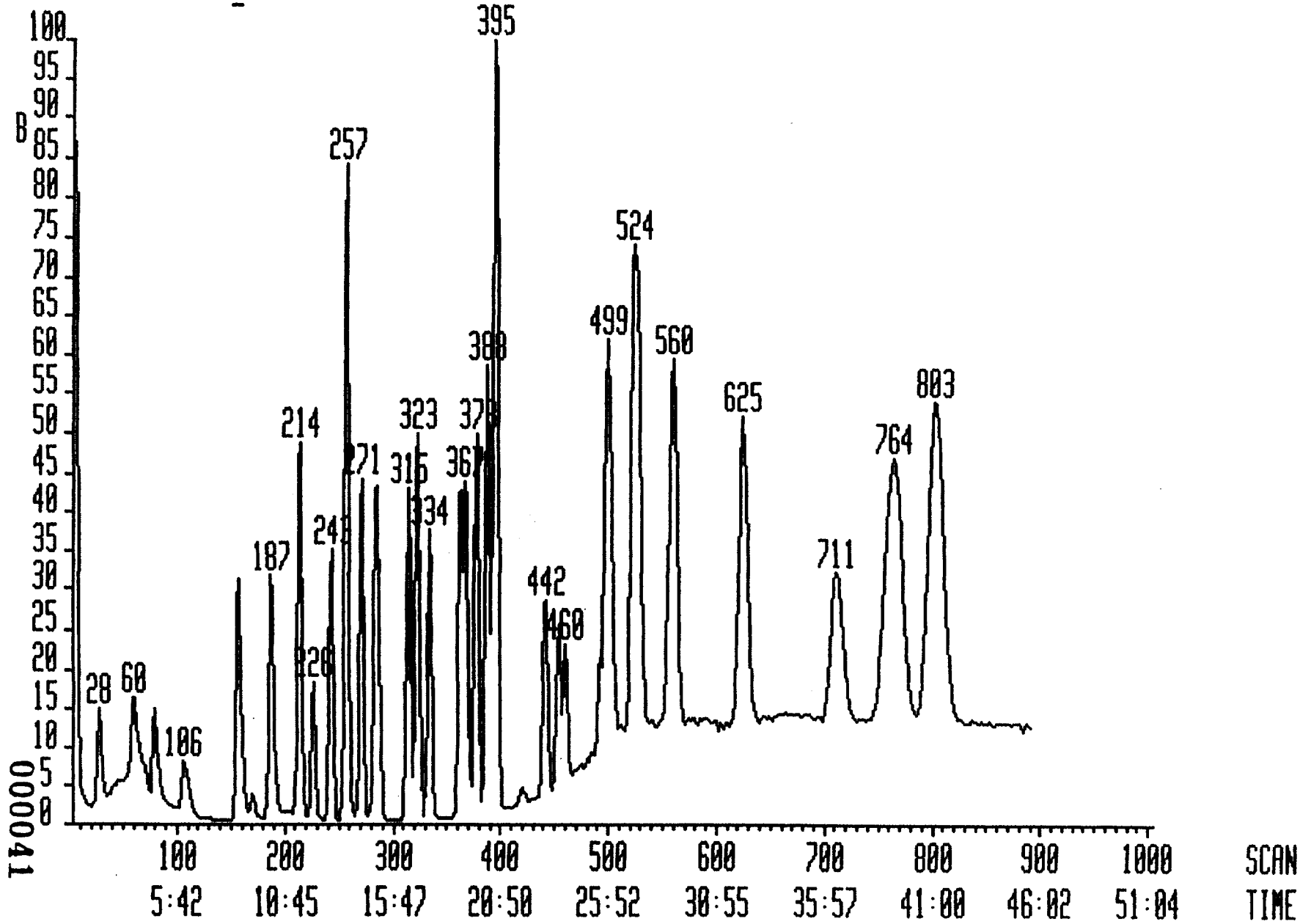
36	84	55	77	-3	13501900	vv	502	510	83	[illegible]
	50	5	88	0	80053	??	510			
	48	5	88	2	309737	??	512			
37	77	59	99	-7	41906880	bv	528	535	91	Toluene
38	70	41	99	-5	27719210	vv	561	566	112	Chlorobenzene
	45	1	93	8	51717	??	574			
39	81	54	99	1	17259000	bv	625	624	106	Ethylbenzene
40	64	43	98	12	32392500	vb	760	748	104	Styrene
41	66	48	98	12	20178840	vb	769	757	106	m-Xylene
42	69	59	99	14	20766340	b?	803	789	106	o-/p-Xylene 40604000
	67	59	99	16	19990000	?b	805			
43	----------		No	Trace	Found		----------	0	-	

EE1041

EE1031 #5-890 8-JUL-92 17:38 VG#2 (EI+) Sys:IDVOA IHP

Chromatogram Identifiers : B1:35:260 B: 34474000

Text:VSTD100_ 00100



Interim Report Sample Analysis 08-JUL-92 19:21:59

Datafile: EE1031 8-JUL-92 17:38 QRC
Database: VOA91T
Library: VOA91

Instrument: VG#2
Account:
Text: VSTD100_ 00100

No.	Rank	Spectrum Match	Fit	Scan Diff	Peak Area	Flgs	Scan Found	Pred	Quan m/z	Compound Name
1	83	62	99	3	3774000	bb	226	223	128	Bromochloromethane
2	75	41	99	0	13777000	bb	284	284	65	1,2-Dichloroethane-d4
3	69	31	99	1	12198000	bv	28	27	50	Chloromethane
	39	0	95	18	99000	??	45			
4	52	1	99	2	7151895	bv	59	57	94	Bromomethane
	41	0	99	17	152368	??	74			7667813
5	58	10	99	1	13381000	bb	79	78	62	Vinyl Chloride
6	57	14	98	4	7111000	bv*	106	102	64	Chloroethane
7	85	70	99	5	15298670	vv	157	152	84	Methylene Chloride
8	63	22	99	2	2757870	vv*	170	168	43	Acetone
	42	0	99	16	34174	??	184			
	41	0	99	18	10609	??	186			
9	85	68	98	3	40338210	bv	187	184	76	Carbon Disulfide
10	87	68	99	2	14153000	bb	214	212	96	1,1-Dichloroethene
11	77	49	99	2	21761000	bv	243	241	63	1,1-Dichloroethane
12	92	75	99	1	28222360	bv*	257	256	96	1,2-Dichloroethene (to
13	90	73	98	1	23978000	bv	271	270	83	Chloroform
14	78	53	95	-1	14604000	bb	286	287	62	1,2-Dichloroethane
15	60	13	99	0	4880814	vv	282	282	43	2-Butanone
	43	0	91	-9	44344	??	273			
	42	0	95	-14	25406	??	268			
16	69	41	99	-6	15480000	bb	441	447	114	1,4-Difluorobenzene
17	90	69	99	0	20256000	bv	315	315	97	1,1,1-Trichloroethane
18	84	62	98	-1	17319000	vb	323	324	117	Carbon Tetrachloride
19	----------		No	Trace	Found	----------		0	1	
20	86	66	99	-2	19219430	bv	334	336	83	Bromodichloromethane
21	83	63	98	-3	11665000	bb	362	365	63	1,2-Dichloropropane
22	85	66	98	-2	20637080	bv	368	370	75	cis-1,3-Dichloropropen
23	87	70	99	-3	13103000	bb	378	381	130	Trichloroethene
24	63	26	99	-4	14147000	bb	394	398	129	Dibromochloromethane
25	68	35	99	-4	11212590	vb	396	400	97	1,1,2-Trichloroethane
26	86	73	95	-3	40917000	bv	388	391	78	Benzene
27	62	23	98	-3	15602980	vv	395	398	75	trans-1,3-dichloroprop
	37	1	79	11	20723	??	409			
	33	1	76	15	2235	??	413			
28	----------		No	Trace	Found	----------		0	1	
29	80	60	99	-5	8507000	bb	454	459	173	Bromoform
30	65	30	99	-4	14106230	vv	557	561	117	Chlorobenzene-d5
	41	1	84	7	86077	?v	568			
	39	1	81	9	30692	?v	570			17243396
31	65	33	99	6	9187131	v?	711	705	95	4-Bromofluorobenzene
	63	32	99	8	9853016	?v	713			
32	74	51	99	-6	38104790	bv	523	529	98	Toluene-d8
33	75	55	98	-6	8293380	vb	460	466	43	4-Methyl-2-Pentanone
	48	13	80	2	115200	??	468			
	47	13	80	4	77933	??	470			
34	70	44	97	-6	6675250	vv	493	499	43	2-Hexanone
	42	16	73	9	67417	??	508			
	41	16	73	11	102250	??	510			
35	79	60	99	-6	10715000	bb	498	505	164	Tetrachloroethene

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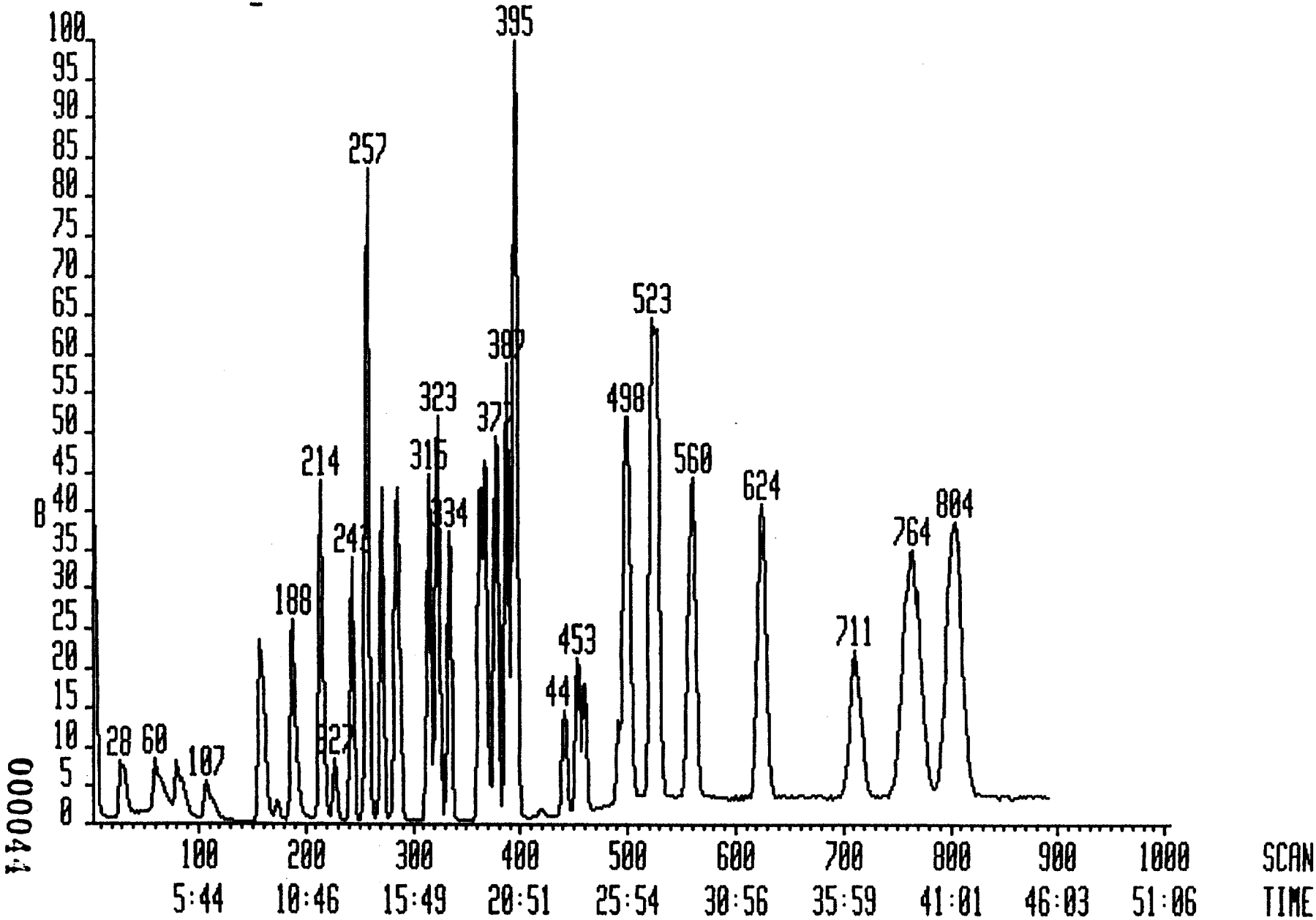
35	78	80	77	-5	10210000	bb	477	505	165	Tetrachloroethene
36	66	36	99	-7	14323430	vv	503	510	83	1,1,2,2-Tetrachloroeth
	48	5	89	3	58973	??	513			
	46	5	88	6	19682	??	516			
37	76	57	99	-7	40449180	vv	528	535	91	Toluene
38	72	44	99	-5	27232640	vv*	561	566	112	Chlorobenzene
39	81	54	99	1	15715140	bv	625	624	106	Ethylbenzene
40	64	43	98	12	32080560	vb	760	748	104	Styrene
41	66	46	97	11	19497000	bb	768	757	106	m-Xylene
42	68	58	99	15	37838000	bb	804	789	106	o-/p-Xylene
43	---------- No Trace Found ----------							0	-	

EE1031

EE1021 #5-890 8-JUL-92 16:26 VG#2 (EI+) Sys:IDVOA IHP

Chromatogram Identifiers : B1:35:260 B: 133355000

Text:VSTD200_ 00200



000044

Interim Report Sample Analysis 08-JUL-92 15:49

Datafile: EE1021 8-JUL-92 16:26 PRE
Database: VOA91T
Library: VOA91

Instrument: VG#2
Account:
Text: VSTD200_ 00200

No.	Rank	Spectrum Match	Spectrum Fit	Scan Diff	Peak Area	Flgs	Scan Found	Scan Pred	Quan m/z	Compound Name
1	86	71	99	4	7284000	bb	227	223	128	Bromochloromethane
2	79	48	99	0	51728000	bv	284	284	65	1,2-Dichloroethane-d4
3	77	47	99	1	17372760	b?	28	27	50	Chloromethane 44683152
	75	49	99	4	33263830	?b	31			
4	52	2	99	3	12400950	b?	60	57	94	Bromomethane 26203000
	49	1	99	7	14579430	?v	64			
	31	0	78	-19	17000	bb	38			
5	52	1	99	2	18096450	b?	80	78	62	Vinyl Chloride 37664000
	49	5	99	9	21767210	?b	87			
6	61	23	98	5	16080950	v?*	107	102	64	Chloroethane 27355000
	54	18	99	10	12868600	?b	112			
7	89	82	99	6	55621760	vv*	158	152	84	Methylene Chloride
8	70	40	99	5	9330760	vv*	173	168	43	Acetone
	50	0	99	-4	30020	??	164			
	46	0	98	-9	229600	v?	159			
9	91	80	99	4	145765300	bv	188	184	76	Carbon Disulfide
10	90	74	99	2	51448000	bb	214	212	96	1,1-Dichloroethene
11	80	57	99	3	84634310	bv	244	241	63	1,1-Dichloroethane
12	94	79	99	1	106412700	bv	257	256	96	1,2-Dichloroethene (to
13	95	82	98	1	89922000	bv	271	270	83	Chloroform
14	84	62	96	0	55795840	bv	287	287	62	1,2-Dichloroethane
15	61	16	98	0	16294470	vb	282	282	43	2-Butanone
	39	0	90	-14	20118	??	268			
	36	0	84	15	3265	??	297			
16	72	47	99	-6	31767000	bb	441	447	114	1,4-Difluorobenzene
17	94	77	99	0	78653000	bv	315	315	97	1,1,1-Trichloroethane
18	91	73	98	0	67476000	vb	324	324	117	Carbon Tetrachloride
19	----------	No	Trace	Found	----------			0	1	
20	90	74	99	-2	74016310	vv	334	336	83	Bromodichloromethane
21	88	72	99	-3	49863330	bv	362	365	63	1,2-Dichloropropane
22	88	73	98	-3	89861010	bb	367	370	75	cis-1,3-Dichloropropen
23	89	76	99	-4	51007000	bv	377	381	130	Trichloroethene
24	64	28	99	-4	55008000	bb	394	398	129	Dibromochloromethane
25	69	38	99	-4	41825760	vb*	396	400	97	1,1,2-Trichloroethane
	46	3	92	7	41825760	??	407			
	42	3	88	10	5239	??	410			
26	88	80	94	-4	162288400	bv*	387	391	78	Benzene
27	64	28	99	-4	62189250	vv*	394	398	75	trans-1,3-dichloroprop
	40	3	91	16	40000	??	414			
	37	2	88	18	40000	??	416			
28	----------	No	Trace	Found	----------			0	1	
29	88	79	99	-6	32155000	bb	453	459	173	Bromoform
30	65	30	99	-5	29257640	bv*	556	561	117	Chlorobenzene-d5
31	75	53	99	6	35949560	v?	711	705	95	4-Bromofluorobenzene
	73	54	99	8	33468300	?v	713			66295000
32	78	62	99	-7	149745200	vv	522	529	98	Toluene-d8
33	84	72	99	-6	33608910	vb	460	466	43	4-Methyl-2-Pentanone
34	78	62	98	-7	21622300	vv	492	499	43	2-Hexanone
35	84	74	99	-7	37984000	bb	498	505	164	Tetrachloroethene

LUEL 7/8/92

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36	70	47	99	-3	53920000	vv*	502	510	83	[illegible]
	46	5	89	6	146200	??	516			
37	81	70	99	-3	164937800	vv	527	535	91	Toluene
38	79	61	99	-6	104482200	vv*	560	566	112	Chlorobenzene
39	90	70	99	0	34783000	v?	624	624	106	Ethylbenzene — 56654000
	88	69	99	2	27775430	?v	626			
40	75	63	99	10	115271000	bb	758	748	104	Styrene
41	75	64	97	10	35546260	b?	767	757	106	m-Xylene — 70310000
	74	66	98	12	34514330	?b	769			
42	78	76	99	13	63667770	b?	802	789	106	o-/p-Xylene 137212048
	74	75	99	16	74242160	?b	805			
43	---------- No Trace Found ----------							0	-	

EE1021

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: PACIFIC ANALYTICAL Contract:

Lab Code: PACIF Case No.: SAS No.: SDG No.:

Instrument ID: VG#2 Calibration Date: 07/09/92 Time: 1853

Lab File ID: EE2031 Init. Calib. Date(s): 07/08/92 07/08/92

Heated Purge: (Y/N) N Init. Calib. Times: 1626 2013

GC Column: 1%SP1000 ID: 2 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Chloromethane	1.539	1.410		8.0	
Bromomethane	0.992	0.763	0.100	23.0	25.0
Vinyl Chloride	1.456	1.103	0.100	24.0	25.0
Chloroethane	0.941	0.943		0.0	
Methylene Chloride	2.411	1.838		24.0	
Acetone	0.387	0.359		7.0	
Carbon Disulfide	5.433	4.940		9.0	
1,1-Dichloroethene	1.910	1.918	0.100	0.0	25.0
1,1-Dichloroethane	2.925	2.692	0.200	8.0	25.0
1,2-Dichloroethene (total)	1.902	1.949		-2.0	
Chloroform	3.254	3.161	0.200	3.0	25.0
1,2-Dichloroethane	1.931	1.875	0.100	3.0	25.0
2-Butanone	0.690	0.627		9.0	
1,1,1-Trichloroethane	0.659	0.657	0.100	0.0	25.0
Carbon Tetrachloride	0.542	0.590	0.100	-9.0	25.0
Bromodichloromethane	0.589	0.589	0.200	0.0	25.0
1,2-Dichloropropane	0.373	0.333		11.0	
cis-1,3-Dichloropropene	0.684	0.675	0.200	1.0	25.0
Trichloroethene	0.414	0.436	0.300	-5.0	25.0
Dibromochloromethane	0.428	0.447	0.100	-4.0	25.0
1,1,2-Trichloroethane	0.348	0.354	0.100	-2.0	25.0
Benzene	1.258	1.238	0.500	2.0	25.0
trans-1,3-dichloropropene	0.490	0.474	0.100	3.0	25.0
Bromoform	0.260	0.264	0.100	-2.0	25.0
4-Methyl-2-Pentanone	0.317	0.330		-4.0	
2-Hexanone	0.226	0.207		8.0	
Tetrachloroethene	0.349	0.393	0.200	-13.0	25.0
1,1,2,2-Tetrachloroethane	0.466	0.419	0.500	10.0	25.0
Toluene	1.460	1.491	0.400	-2.0	25.0
Chlorobenzene	0.944	1.036	0.500	-10.0	25.0
Ethylbenzene	0.552	0.604	0.100	-9.0	25.0
Styrene	1.078	1.163	0.300	-8.0	25.0
Xylene (total)	0.668	0.694	0.300	-4.0	25.0
Toluene-d8	1.386	1.456		-5.0	
4-Bromofluorobenzene	0.613	0.609	0.200	1.0	25.0
1,2-Dichloroethane-d4	1.818	1.717		6.0	

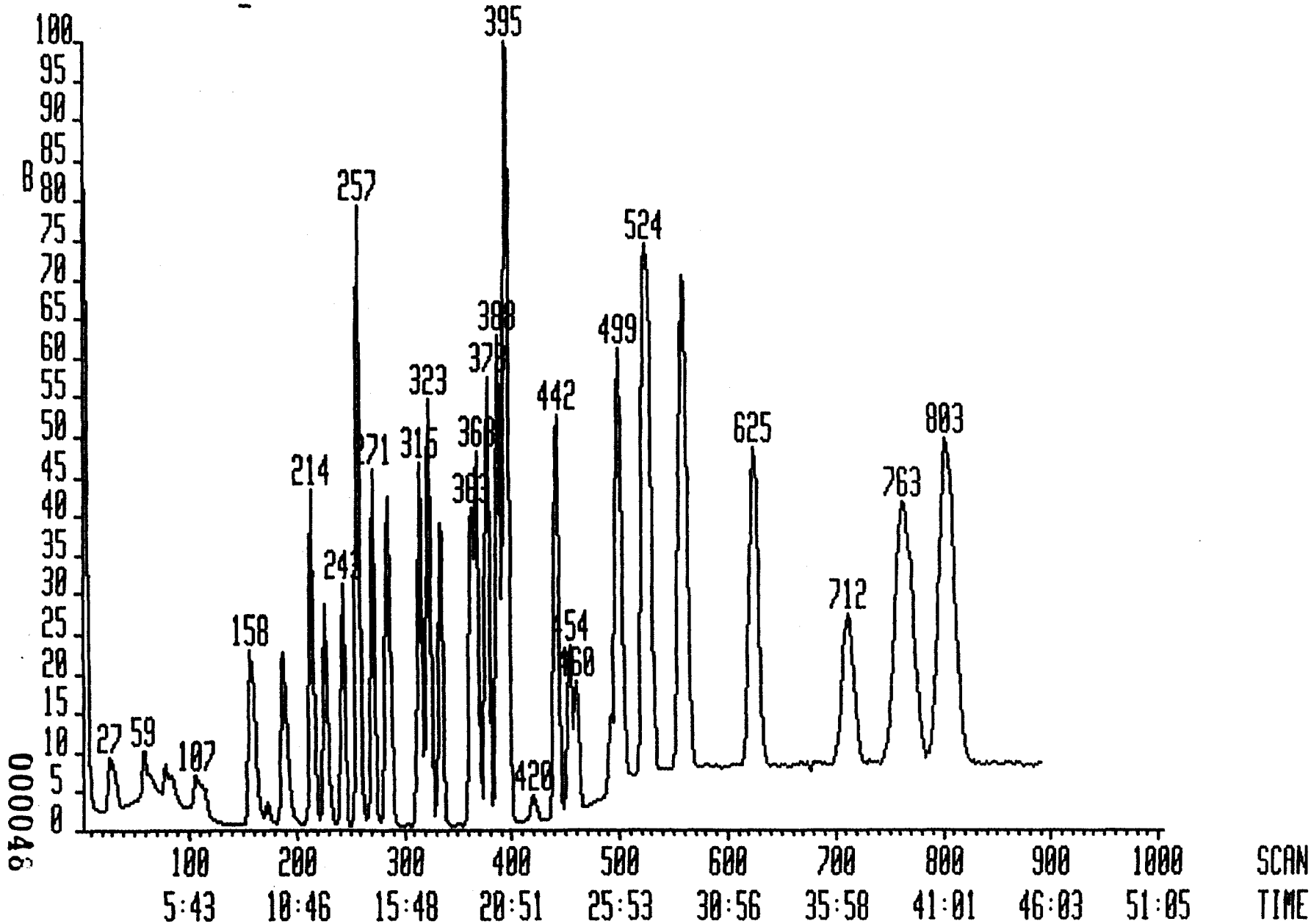
All other compounds must meet a minimum RRF of 0.010.

000047

EE2031 #5-890 9-JUL-92 18:53 VG#2 (EI+) Sys:VOA91 IHP

Chromatogram Identifiers : B1:35:260 B: 34060000

Text:VSTD050_ 00050



000046

Datafile: EE2031 9-JUL-92 18:53
Database: VOA91W
Library: VOA91

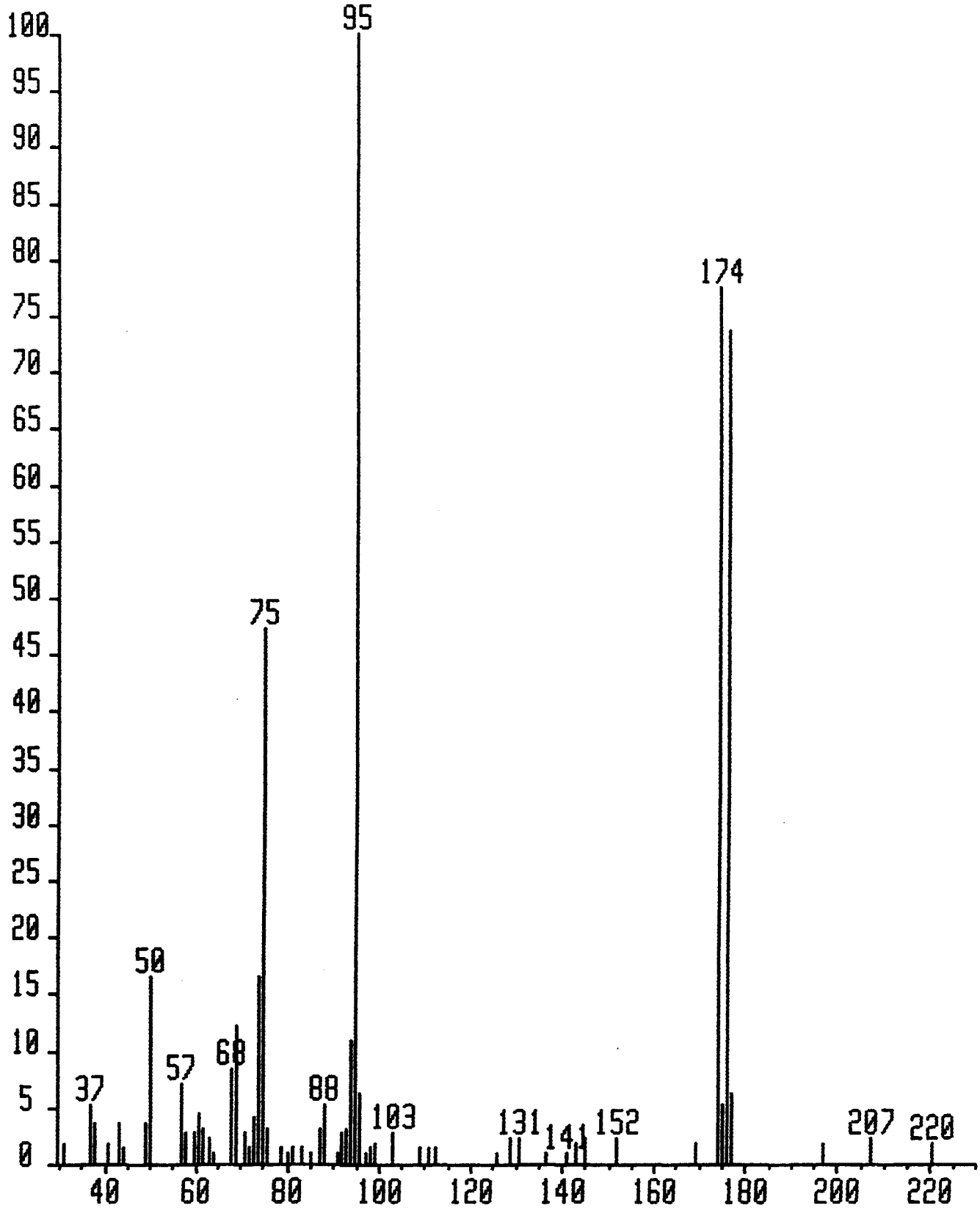
Instrument: VG#2
Account:
Text: VSTD050_ 00050

QRE
am.G.
7/10/92

No.	Rank	Spectrum Match	Spectrum Fit	Scan Diff	Peak Area	Flgs	Scan Found	Scan Pred	Quan m/z	Compound Name
1	100	91	98	0	7301000	bb	226	226	128	Bromochloromethane
2	84	61	98	1	12536000	bv	284	283	65	1,2-Dichloroethane-d4
3	85	60	99	0	~~3855581 b~~?*		27	27	50	Chloromethane 10293570
	80	57	99	3	8306871	?b	30			
4	83	56	99	0	5568692	vv	59	59	94	Bromomethane
5	74	39	99	0	~~3175883 v~~?		79	79	62	Vinyl Chloride 8051943
	70	43	99	6	5369608	?b	85			
6	79	51	98	1	~~3251657~~ v?		107	106	64	Chloroethane 6886749
	69	42	98	6	4459205	?b	112			
7	98	88	98	1	13422000	bv*	158	157	84	Methylene Chloride
8	88	68	99	1	2621758	bv	173	172	43	Acetone
9	100	91	99	1	36065850	bv	188	187	76	Carbon Disulfide
10	94	80	99	1	14000000	bb	214	213	96	1,1-Dichloroethene
11	89	68	99	0	19656760	bv*	243	243	63	1,1-Dichloroethane
12	97	84	99	1	28455590	bv	257	256	96	1,2-Dichloroethene (to
13	97	85	99	1	23077000	bv	271	270	83	Chloroform
14	93	81	96	1	13687000	bb	287	286	62	1,2-Dichloroethane
15	61	17	99	1	4576920	vb*	283	282	43	2-Butanone
	48	2	96	-6	1750	??	276			
16	83	59	99	1	34411000	bv	442	441	114	1,4-Difluorobenzene
17	97	85	98	1	22593000	bb	315	314	97	1,1,1-Trichloroethane
18	93	79	98	1	20296000	vb	324	323	117	Carbon Tetrachloride
19	----------		No	Trace	Found	----------		0	1	
20	94	77	99	0	20276950	vb	334	334	83	Bromodichloromethane
21	93	78	98	1	11443500	bb	363	362	63	1,2-Dichloropropane
22	93	78	99	1	23239500	bb	368	367	75	cis-1,3-Dichloropropen
23	94	80	99	1	14999000	bv	378	377	130	Trichloroethene
24	69	30	99	0	15377000	bb	394	394	129	Dibromochloromethane
25	73	37	99	0	12182810	vv	396	396	97	1,1,2-Trichloroethane
	48	11	90	9	4791	??	405			
26	94	84	95	1	42603000	bv	388	387	78	Benzene
27	66	26	99	1	16322000	vv*	395	394	75	trans-1,3-dichloroprop
28	----------		No	Trace	Found	----------		0	1	
29	97	84	99	1	9072000	bv	454	453	173	Bromoform
30	80	51	99	0	29423980	vv	557	557	117	Chlorobenzene-d5
31	80	50	99	0	17932630	vv	712	712	95	4-Bromofluorobenzene
32	86	61	99	0	42828480	vv	523	523	98	Toluene-d8
33	97	82	99	0	9724128	vv	460	460	43	4-Methyl-2-Pentanone
34	89	68	99	0	6099000	vv	493	493	43	2-Hexanone
35	91	73	99	1	11559000	bb	499	498	164	Tetrachloroethene
36	77	46	99	1	12327470	vv	503	502	83	1,1,2,2-Tetrachloroeth
37	90	70	99	0	43866300	vb	528	528	91	Toluene
38	79	49	99	0	30496070	vv	561	561	112	Chlorobenzene
39	89	68	99	0	17774560	bv	625	625	106	Ethylbenzene
40	84	58	99	0	34232500	bb	760	760	104	Styrene
	83	60	99	-2	34232500	bb	758			
41	84	63	98	2	~~8262279~~ ?b		771	769	106	m-Xylene 20421210
	83	61	96	-1	12620930	b?	768			
42	91	74	99	1	~~29446160 b?~~		804	803	106	o-/p-Xylene 40934252
	84	71	98	4	12255180	?b	802			

000043

BFBTUNS#1 x1 Bgd=693 31-JUL-92 14:30+0:36:29 EI+
I=35mv TIC=1140000 AV SU Acnt:
Text:07/08/92 _TIME_1536_ EE1011_AVE_(710-712)-



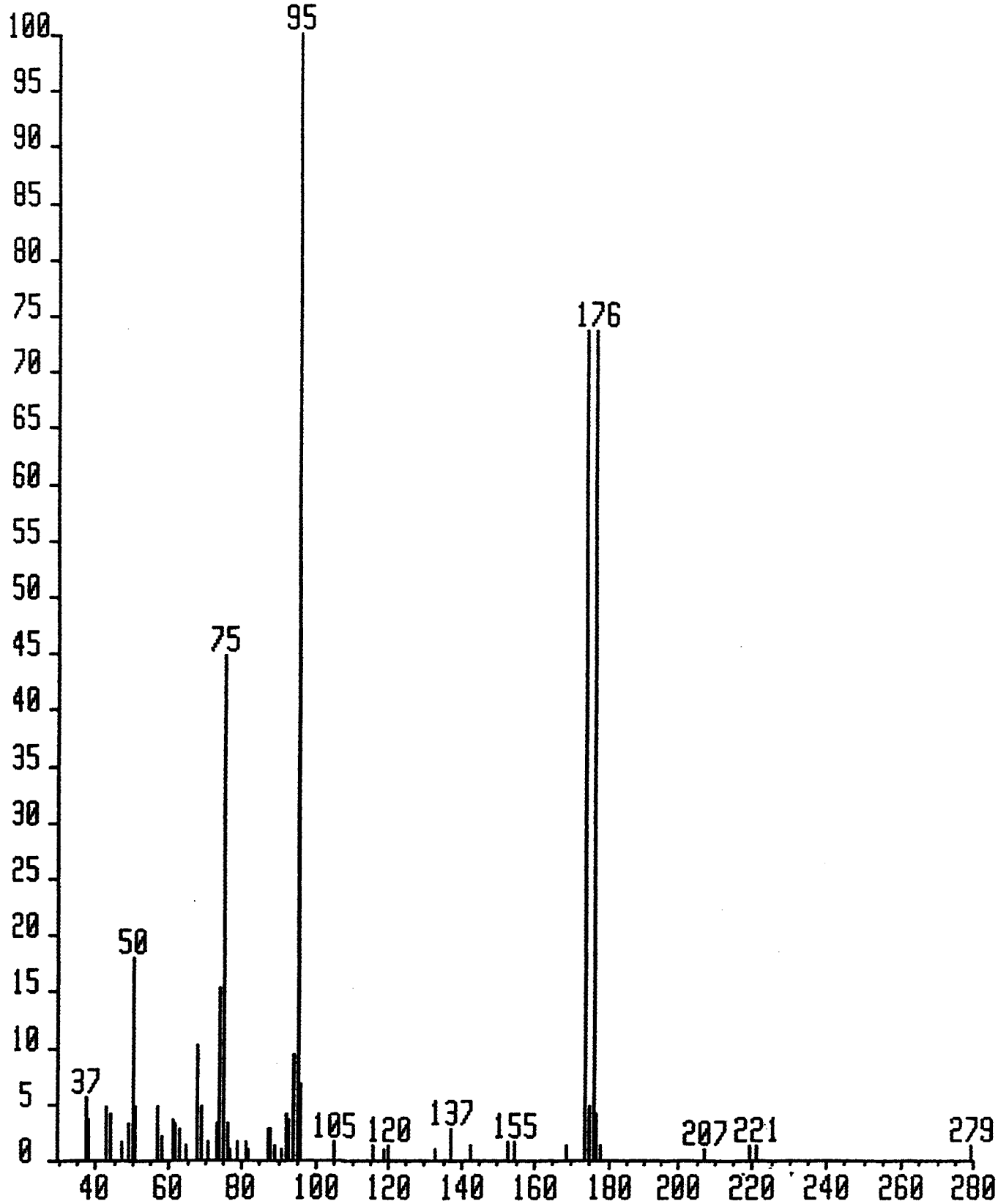
BFBTUNS#1 x1 Bgd=693 31-JUL-92 14:30+0:36:29 VG#2 EI+ 1.1
BpM=95 I=35mv Hm=220 TIC=1140000 AV SU Acnt: Sys: IDVOA
Text: 07/08/92 _TIME_1536 _ EE1011_AVE_(710-712)-SCPT=0 Cal:

Mass	Abs. Ht	% Mass
37	12000	5.2
38	8000	3.5
41	4000	1.7
43	8000	3.5
44	3000	1.3
45	1000	0.4
49	8000	3.5
50	38000	16.5
51	1000	0.4
57	16000	6.9
58	6000	2.6
60	6000	2.6
61	10000	4.3
62	7000	3.0
63	5000	2.2
64	2000	0.9
67	1000	0.4
68	19000	8.2
69	28000	12.1
70	1000	0.4
71	6000	2.6
72	3000	1.3
73	9000	3.9
74	38000	16.5
75	109000	47.2
76	7000	3.0
79	3000	1.3
80	2000	0.9
81	3000	1.3
83	3000	1.3
85	2000	0.9
86	1000	0.4
87	7000	3.0
88	12000	5.2
91	2000	0.9
92	6000	2.6
93	7000	3.0
94	25000	10.8
95	231000	100.0
96	14000	6.1
97	2000	0.9
98	3000	1.3
99	4000	1.7
103	6000	2.6
104	1000	0.4
109	3000	1.3
111	3000	1.3
112	3000	1.3
115	1000	0.4
117	1000	0.4
118	1000	0.4
119	1000	0.4
123	1000	0.4
125	1000	0.4
126	2000	0.9
128	1000	0.4

BFBTUNS#1 x1 Bgd=693 31-JUL-92 14:30+0:36:29 VG#2 EI+ 1.2
BpM=95 I=35mv Hm=220 TIC=1140000 AV SU Acnt: Sys: IDVOA
Text: 07/08/92 _TIME_1536 _ EE1011_AVE_(710-712)-SCPT=0 Cal:

Mass	Abs. Ht	% Mass
129	5000	2.2
131	5000	2.2
137	2000	0.9
138	1000	0.4
140	1000	0.4
141	2000	0.9
143	4000	1.7
145	5000	2.2
149	1000	0.4
151	1000	0.4
152	5000	2.2
153	1000	0.4
154	1000	0.4
167	1000	0.4
169	4000	1.7
170	1000	0.4
174	179000	77.5
175	12000	5.2
176	170000	73.6
177	14000	6.1
197	4000	1.7
207	5000	2.2
220	4000	1.7

BFBTUNS#1 x1 Bgd=690 31-JUL-92 15:36+0:36:29 EI+
I=39mv TIC=1193000 AV SU Acnt:
Text:07/09/92 _TIME_1659_ EE2011_AVE_(710-712)-



BFBTUNS#1 x1 Bgd=690 31-JUL-92 15:36+0:36:29 VG#2 EI+ 1.1
BpM=95 I=39mv Hm=279 TIC=1193000 AV SU Acnt: Sys:VOA91
Text:07/09/92 _TIME_1659 _ EE2011_AVE_(710-712)-SCPT=0 Cal:

Mass	Abs. Ht	% Mass
37	14000	5.4
38	9000	3.5
39	1000	0.4
40	1000	0.4
43	12000	4.7
44	10000	3.9
46	1000	0.4
47	4000	1.6
49	8000	3.1
50	46000	17.9
51	12000	4.7
53	1000	0.4
54	1000	0.4
57	12000	4.7
58	5000	1.9
60	1000	0.4
61	9000	3.5
62	8000	3.1
63	7000	2.7
65	3000	1.2
67	1000	0.4
68	26000	10.1
69	12000	4.7
71	4000	1.6
73	8000	3.1
74	39000	15.2
75	115000	44.7
76	8000	3.1
77	2000	0.8
78	1000	0.4
79	4000	1.6
81	4000	1.6
82	2000	0.8
87	7000	2.7
88	7000	2.7
89	3000	1.2
91	2000	0.8
92	10000	3.9
93	9000	3.5
94	24000	9.3
95	257000	100.0
96	17000	6.6
101	1000	0.4
102	1000	0.4
104	1000	0.4
105	4000	1.6
106	1000	0.4
109	1000	0.4
113	1000	0.4
116	3000	1.2
119	2000	0.8
120	3000	1.2
122	1000	0.4
124	1000	0.4
126	1000	0.4
133	2000	0.8

BFBTUNS#1 x1 Bgd=690 31-JUL-92 15:36+0:36:29 VG#2 EI+ 1.2
BpM=95 I=39mv Hm=279 TIC=1193000 AV SU Acnt: Sys:VOA91
Text:07/09/92 _TIME_1659 _ EE2011_AVE_(710-712)-SCPT=0 Cal:

Mass	Abs. Ht	% Mass
137	7000	2.7
139	1000	0.4
140	1000	0.4
143	3000	1.2
147	1000	0.4
150	1000	0.4
153	4000	1.6
154	1000	0.4
155	4000	1.6
167	1000	0.4
168	1000	0.4
169	3000	1.2
174	189000	73.5
175	12000	4.7
176	189000	73.5
177	10000	3.9
178	3000	1.2
191	1000	0.4
207	2000	0.8
219	3000	1.2
221	3000	1.2

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK67

Lab Name: PACIFIC ANALYTICAL Contract:

Lab Code: PACIF Case No.: SAS No.: SDG No.: BLANK

Matrix: (soil/water) WATER Lab Sample ID: 00000

Sample wt/vol: 5.0(g/mL) ML Lab File ID: EE2041

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

% Moisture: not dec. Date Analyzed: 07/09/92

GC Column: 1%SP1000 ID: 2 (mm) Dilution Factor: 1.0

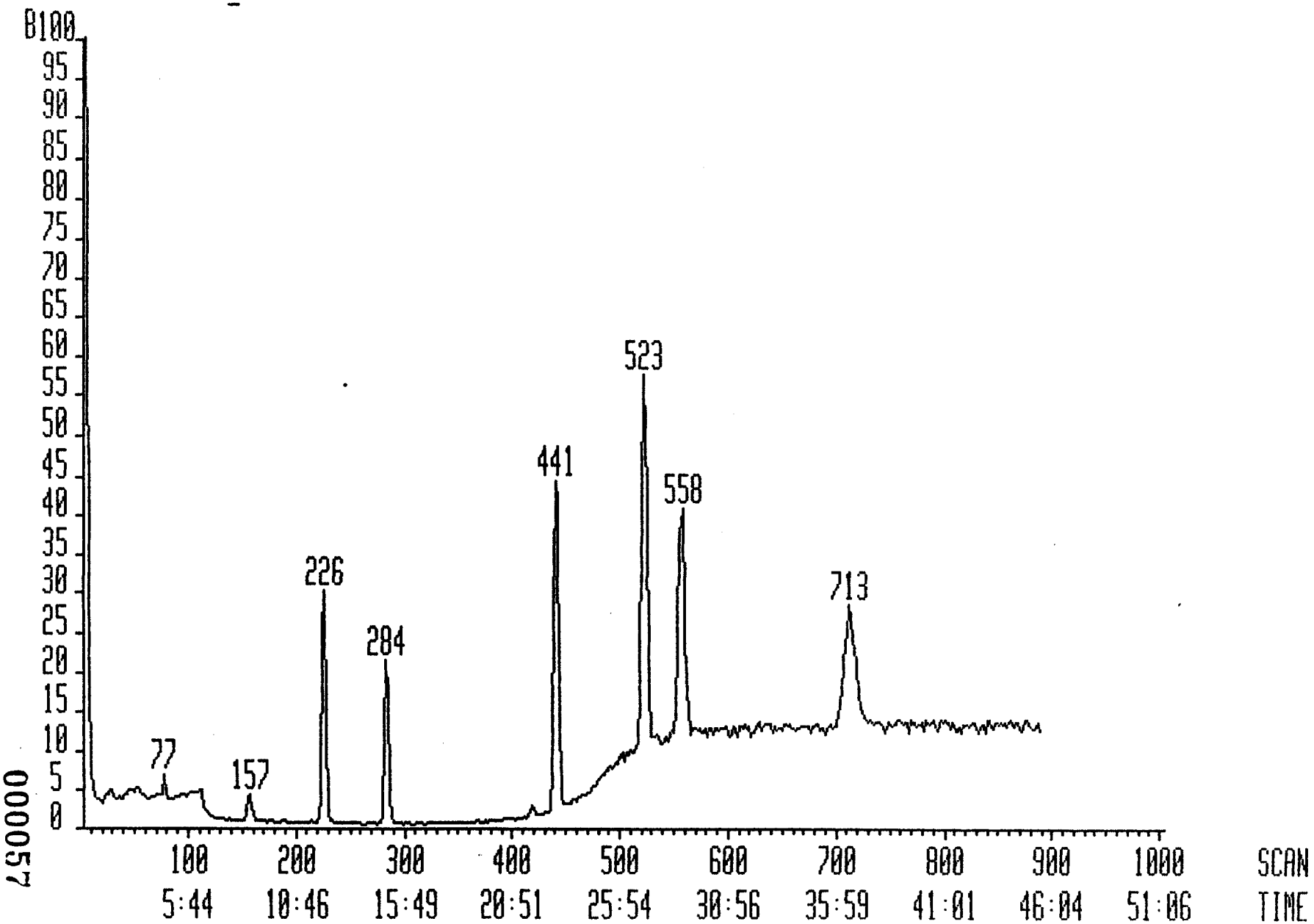
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	7	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-35-3	1,1-Dichloroethane	10	U
156-60-5	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-dichloropropene	10	U
75-25-2	Bromoform	10	U
591-78-6	4-Methyl-2-Pentanone	10	U
108-10-1	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

EE2041 #5-889 9-JUL-92 19:45 VG#2 (EI+) Sys:VOA91 IHP

Chromatogram Identifiers : B1:35:260 B: 20645000

Text:VBLK67_ 00000



000057

Interim Report Sample Analysis 10-JUL-92 13:02:09

Datafile: EE2041 9-JUL-92 19:45
Database: VOA91W
Library: VOA91

Instrument: VG#2
Account:
Text: VBLK67_ 00000

QRE
on. g.
7/30/92

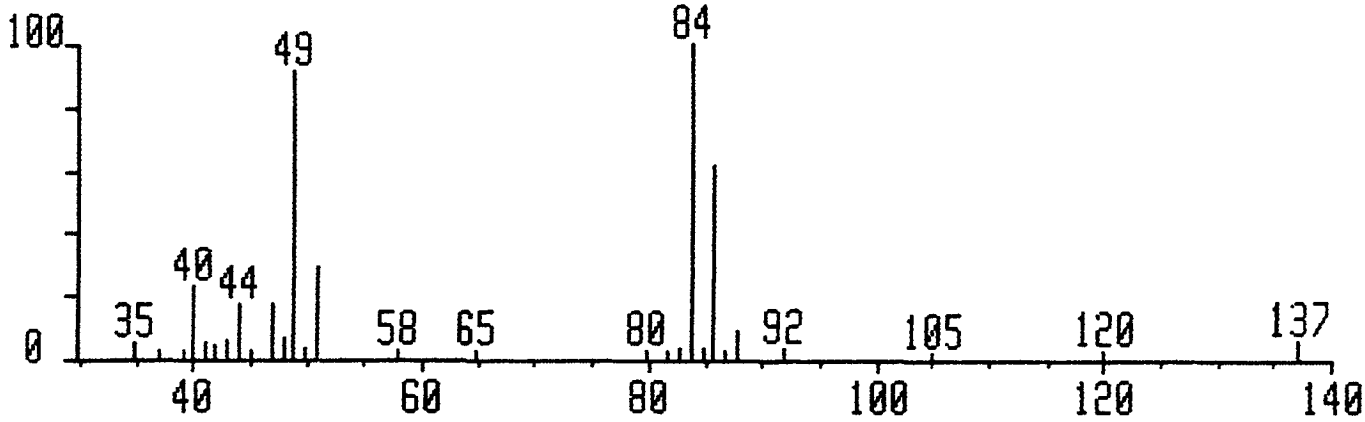
No.	Rank	Spectrum Match	Fit	Scan Diff	Peak Area	Flgs	Scan Found	Pred	Quan m/z	Compound Name
1	100	91	99	0	3834000	bb	226	226	128	Bromochloromethane
2	97	85	98	1	6561000	bb	284	283	65	1,2-Dichloroethane-d4
3	51	1	96	1	44000	bb*	28	27	50	Chloromethane
	48	0	93	3	17000	?b	30			
	46	1	96	-8	4000	bb	19			
4	52	5	93	1	26000	v?	60	59	94	Bromomethane
	42	3	85	9	3894	??	68			
	41	4	87	12	17660	??	71			
5	49	1	94	3	9538	??*	82	79	62	Vinyl Chloride
	49	0	91	0	14192	??	79			
	46	1	91	5	16365	??	84			
6	43	2	79	0	5500	??	106	106	64	Chloroethane
	43	2	82	3	10500	??	109			
	42	2	82	5	25250	?b	111			
7 OK	92	75	99	-1	939000	bb	156	157	84	Methylene Chloride
8	63	23	99	-3	93500	bv*	169	172	43	Acetone
	62	27	96	4	157250	vv	176			
	51	8	99	-8	0	??	164			
9	64	34	88	2	158000	bb	189	187	76	Carbon Disulfide
10	67	28	99	1	40000	bb	214	213	96	1,1-Dichloroethene
11	47	5	84	1	8000	bb	244	243	63	1,1-Dichloroethane
	45	5	81	-2	3000	bb	241			
	39	5	84	14	6000	bb	257			
12	57	18	90	1	17000	bb	257	256	96	1,2-Dichloroethene (to
13	41	7	71	1	28000	bb	271	270	83	Chloroform
	41	6	71	-1	5000	b?	269			
14	---------- No Trace Found ----------							286	62	1,2-Dichloroethane
15	54	3	99	-1	180961	vv	281	282	43	2-Butanone
	46	8	84	-5	25686	??	277			
	44	7	84	-7	9569	??	275			
16	84	58	99	0	16723000	bb	441	441	114	1,4-Difluorobenzene
17	34	7	57	1	39000	bb	315	314	97	1,1,1-Trichloroethane
18	---------- No Trace Found ----------							323	117	Carbon Tetrachloride
19	---------- No Trace Found ----------							0	1	
20	24	1	43	0	11000	bb	334	334	83	Bromodichloromethane
	21	1	43	8	3000	bb	342			
	19	1	43	14	3000	bb	348			
21	---------- No Trace Found ----------							362	63	1,2-Dichloropropane
22	---------- No Trace Found ----------							367	75	cis-1,3-Dichloropropen
23	51	11	84	0	21000	bb	377	377	130	Trichloroethene
24	---------- No Trace Found ----------							394	129	Dibromochloromethane
25	46	9	77	0	27500	b?	396	396	97	1,1,2-Trichloroethane
	31	5	54	-2	27500	b?	394			
	29	4	56	7	5571	??	403			
26	50	15	79	1	76000	bb	388	387	78	Benzene
27	25	1	47	1	7000	bb	395	394	75	trans-1,3-dichloroprop
28	---------- No Trace Found ----------							0	1	
29	---------- No Trace Found ----------							453	173	Bromoform
30	82	56	99	1	13672570	bv	558	557	117	Chlorobenzene-d5
31	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

000058

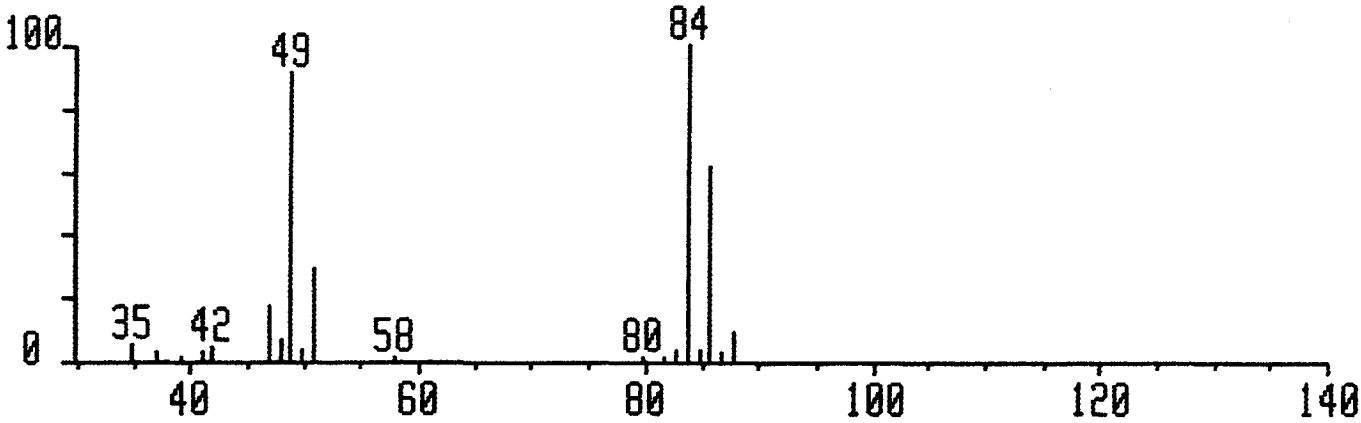
31	72	37	77	1	8356200	vv	713	712	95	4-Bromofluorobenzene
32	81	55	96	0	20366230	vv	523	523	98	Toluene-d8
33	60	24	90	-1	41941	??	459	460	43	4-Methyl-2-Pentanone
	55	20	85	2	6667	??	462			
	54	22	86	5	24122	??	465			
34	54	21	82	-1	59000	??	492	493	43	2-Hexanone
	52	21	80	-3	69000	??	490			
	51	20	78	2	18892	??	495			
35	44	1	83	1	9000	bb	499	498	164	Tetrachloroethene
36	49	7	86	1	47000	??	503	502	83	1,1,2,2-Tetrachloroeth
	48	7	85	-2	46000	??	500			
	47	7	85	-4	41000	??	498			
37	53	10	90	1	346400	vv	529	528	91	Toluene
	42	7	80	8	10000	??	536			
	39	7	79	11	3149	??	539			
38	46	2	87	2	29765	??	563	561	112	Chlorobenzene
	35	1	72	7	6794	??	568			
	35	1	74	10	8765	??	571			
39	33	6	58	-3	50000	??	622	625	106	Ethylbenzene
	33	6	58	3	28000	??	628			
	29	5	54	-6	15000	??	619			
40	38	4	67	0	30000	??	760	760	104	Styrene
	35	4	65	4	18000	??	764			
	34	4	64	-4	18000	??	756			
41	34	7	58	2	18186	??	771	769	106	m-Xylene
	33	7	57	-2	27349	??	767			
	33	7	58	4	7395	??	773			
42	35	7	60	1	20000	??	804	803	106	o-/p-Xylene
	35	7	59	-1	20000	??	802			
	33	7	58	-5	8000	??	798			
43	---------- No Trace Found ----------							0	-	

EE2041

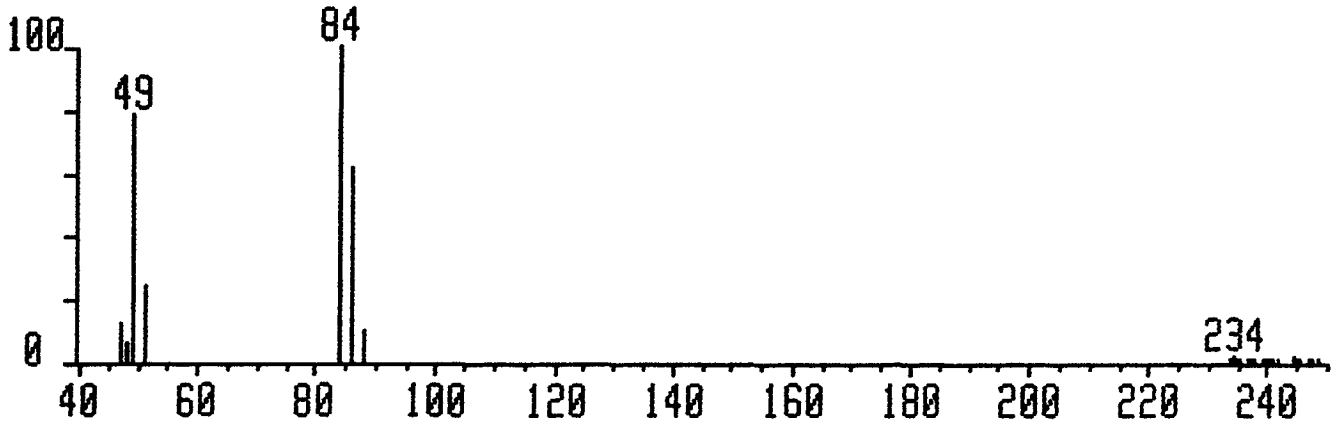
EE2041#156 x1 Bgd=1 9-JUL-92 19:45+0:08:33 EI+
I=29mv TIC=801000 Acnt:
Text:VBLK67_00000_Methylene Chloride



EE2041S#156 x1 Bgd=151 9-JUL-92 19:45+0:08:33 EI+
I=29mv TIC=661000 SU Acnt:
Text:VBLK67_00000_Methylene Chloride



V8240#7 x1 Bgd=1 1-DEC-89 13:03+0:00:23 EI+
I=234mv TIC=10910000 Acnt:VG#2
Text:Methylene Chloride



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ATT RESULTS EE2041 TIC 00000

Internal Standard	Scan	Area	Conc
Bromochloromethane	226	1725	50
1,4-Difluorobenzene	441	2341	50
Chlorobenzene-d5	558	2598	50

TIC Scan	BKG Scan	IS Scan	Area	Conc
~~489~~		441	728	16
~~137~~ TRACE $MeCl_2$		226	216	6