SAMPLE MANAGEMENT OFFICE
P.O. BOX 818 ALEXANDRIA, VA 22313
703/557-2490 FTS-557-2490

CASE NO: 7218 | SAS NO. (IF APPLICABLE)

ORGANIC TRAFFIC REPORT
(FOR CLP USE ONLY)

TYPE OF ACTIVITY (CIRCLE ONE) ①
SUPERFUND—PA SI ESI (RIFS) RD RA ER
NPLD O&M OTHER _____
NON-SUPERFUND—_____PROGRAM

SAMPLE DESCRIPTION
(ENTER IN BOX A)
1. SURFACE WATER 4. SOIL
2. GROUND WATER 5. SEDIMENT
3. LEACHATE 6. OIL (SAS)
7. WASTE (SAS)

REGION NO: II
SAMPLING COMPANY ② Ecosco
SAMPLER: (NAME) D Cosgrove

SHIP TO: ③ Ecology and Environment
1285 Sheridan Dr
Buffalo NY 14225
ATTN: _____

SAMPLING DATE: ④
BEGIN: 4/7/88 END: 4/7/88

DATE SHIPPED: 4/7/88 CARRIER: ⑤ Fed Ex
AIRBILL NO: 505132066 6

DATE REC'D: 4-8-88 SDG NO: ⑥ BQ691
REC'D BY: William H. Howard
LABORATORY CONTRACT NO. UNIT PRICE
RECEIVED W80052 824.00

TRANSFER TO: APR 13 1988 DATE REC'D: ⑦
REC'D BY: SAMPLE BRANCH CONTRACT NO./PRICE:

CLP SAMPLE NUMBER (FROM LABELS)	Ⓐ SAMPLE DESCRIPTION (FROM BOX 1) 1 2 3 4 5 6 7	Ⓑ CONCENTRATION L = LOW/MED. H = HIGH (SAS)	Ⓒ RAS ANALYSIS: VOLATILE	BASE/NEUT /ACID	PESTICIDE /PCB's		Ⓓ SPECIAL HANDLING	Ⓔ STATION LOCATION	Ⓕ SAMPLE CONDITION ON RECEIPT	Ⓖ HIGH CONC. PHASES (CHECK): SOLID	WATER—MIS LIQUID	NON WATER—MIS LIQUID
BQ691	2	L	X	X	X		VOA HL <2	RF-SR-05-01	Good			
BQ692	2	L	X				HL <2	RF-TB-24	↓			

437772

EPA Form 2075-7 (8-87)

3

WHITE — SMO COPY PINK — CLIENT COPY WHITE — LAB COPY FOR RETURN TO SMO YELLOW — LAB COPY

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
1	VBLK	102	99	98		0
2	BQ692	108	100	101		0
3	BQ691	103	101	106		0
4	BQ691MS	97	103	104		0
5	BQ691MSD	104	100	106		0
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	QC LIMITS
S1 (TOL) = Toluene-d8	(88-110)
S2 (BFB) = Bromofluorobenzene	(86-115)
S3 (DCE) = 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Matrix Spike - EPA Sample No.: BQ691

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE CONCENTRATION (UG/L)	MS CONCENTRATION (UG/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.	0.	49.	97.	61-145
Trichloroethene	50.	0.	52.	105.	71-120
Benzene	50.	0.	44.	87.	76-127
Toluene	50.	0.	50.	100.	76-125
Chlorobenzene	50.	0.	49.	97.	75-130

COMPOUND	SPIKE ADDED (UG/L)	MSD CONCENTRATION (UG/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50.	49.	99.	2.	14	61-145
Trichloroethene	50.	48.	96.	8.	14	71-120
Benzene	50.	43.	86.	2.	11	76-127
Toluene	50.	49.	98.	2.	13	76-125
Chlorobenzene	50.	47.	94.	3.	13	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Lab File ID: D5643 Lab Sample ID: BLANK

Date Analyzed: 4/ 8/88 Time Analyzed: 10:12

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

Instrument ID: 7001D

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	BQ692	17266	D5644	11:57
2	BQ691	17265	D5645	12:49
3	BQ691MS	17265	D5646	13:41
4	BQ691MSD	17265	D5651	18:59
5				
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COMMENTS:

5A

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

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Lab File ID: D5231 BFB Injection Date: 2/19/88

Instrument ID.: 7001D BFB Injection Time: 10:47

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.8
75	30.0 - 60.0% of mass 95	49.5
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.8
173	Less than 2.0% of mass 174	.0 (.0)1
174	Greater than 50.0% of mass 95	68.7
175	5.0 - 9.0% of mass 174	6.1 (8.9)1
176	Greater than 95.0%, but less than 101.0% of mass 174	67.0 (97.5)1
177	5.0 - 9.0% of mass 176	5.9 (8.8)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD020		D5232	2/19/88	12:07
2	VSTD050		D5233	2/19/88	13:00
3	VSTD100		D5234	2/19/88	13:53
4	VSTD150		D5235	2/19/88	14:46
5	VSTD200		D5236	2/19/88	15:39
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5A

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

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Lab File ID: D5641 BFB Injection Date: 4/ 8/88

Instrument ID.: 7001D BFB Injection Time: 7:51

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.4
75	30.0 - 60.0% of mass 95	46.2
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.0
173	Less than 2.0% of mass 174	.0 (.0)1
174	Greater than 50.0% of mass 95	75.3
175	5.0 - 9.0% of mass 174	5.6 (7.5)1
176	Greater than 95.0%, but less than 101.0% of mass 174	75.2 (99.9)1
177	5.0 - 9.0% of mass 176	5.5 (7.3)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD050		D5642	4/ 8/88	8:50
2	VBLK	BLANK	D5643	4/ 8/88	10:12
3	BQ692	17266	D5644	4/ 8/88	11:57
4	BQ691	17265	D5645	4/ 8/88	12:49
5	BQ691MS	17265	D5646	4/ 8/88	13:41
6	BQ691MSD	17265	D5651	4/ 8/88	18:59
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BQ691

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Matrix: (soil/water) WATER Lab Sample ID: 17265

Sample wt/vol: 5. (g/mL) ML Lab File ID: D5645

Level: (low/med) LOW Date Received: 4/ 8/88

% Moisture: not dec.100. Date Analyzed: 4/ 8/88

Column: (pack/cap) PACK Dilution Factor: 1.00

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	2.	BJ
67-64-1	Acetone	14.	B
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	4.	J
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BQ691

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Matrix: (soil/water) WATER Lab Sample ID: 17265

Sample wt/vol: 5. (g/mL) ML Lab File ID: D5645

Level: (low/med) LOW Date Received: 4/ 8/88

% Moisture: not dec.100. Date Analyzed: 4/ 8/88

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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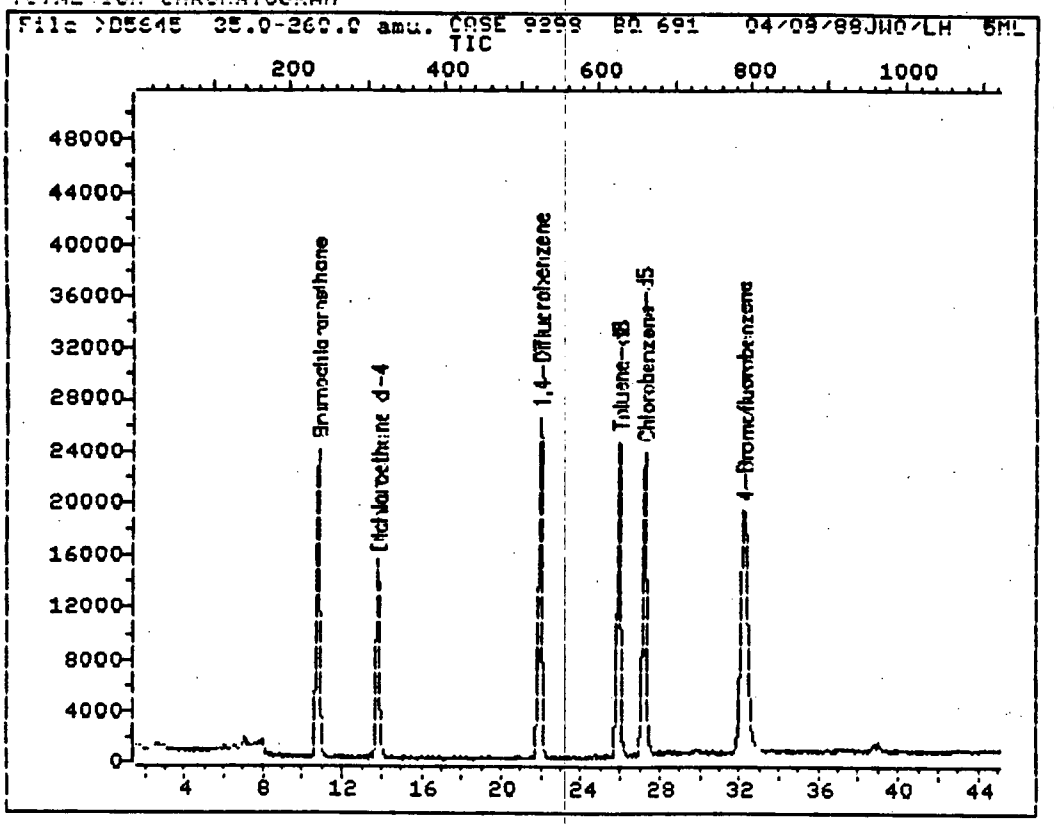
TOTAL ION CHROMATOGRAM



Data File: >D5645::D3 Quant Output File: ^D5645::Q3
Name: CASE 9298 BQ 691
Misc: 04/08/88JWO/LH 5ML SAMPLE + 10 ULS IS/SS

Id File: COND13::D2
Title: VOA ID FILE FOR WATERS ON HP-5970D (CONT.CAL.)
Last Calibration: 880503 12:03

Operator ID: USER8
Quant Time: 880503 12:13
Injected at: 880408 12:49

QUANT REPORT

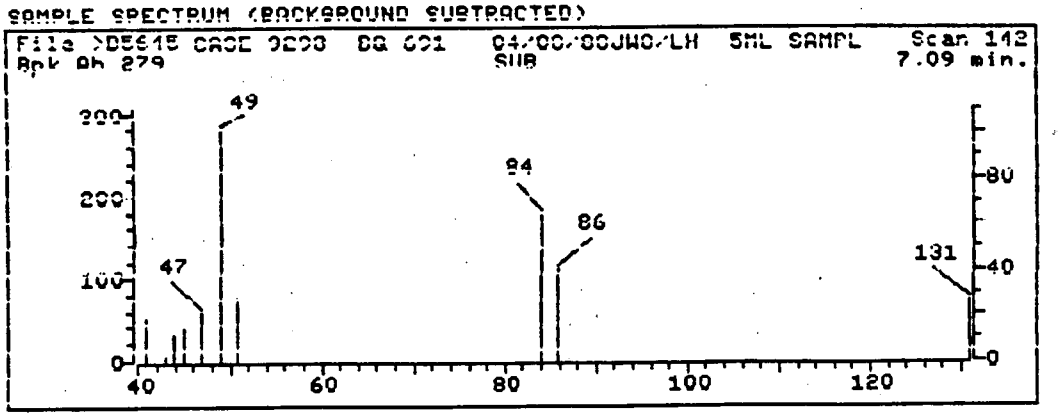
Operator ID: USER8 | Quant Rev: 6 | Quant Time: 880503 12:13
Output File: ^D5645::Q3 | Injected at: 880408 12:49
Data File: >D5645::D3 | Dilution Factor: 1.00000
Name: CASE 9298 BQ 691
Misc: 04/08/88JWO/LH 5ML SAMPLE + 10 ULS IS/SS

ID File: COND13::D2
Title: VOA ID FILE FOR WATERS ON HP-5970D (CONT.CAL.)
Last Calibration: 880503 12:03

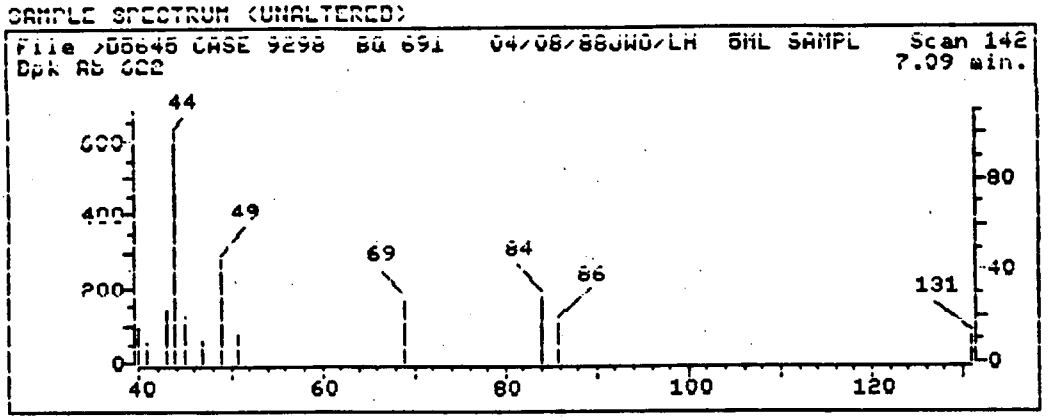
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.77	128.0	40815	50.00	UG/L	97
6)	Methylene Chloride	7.09	84.0	1801	1.85	UG/L	94
7)	Acetone	7.98	43.0	3699	13.94	UG/L	88
13)	1,2-Dichloroethane-d4	13.84	65.0	72072	53.13	UG/L	90
14)	1,2-Dichloroethane	13.95	62.0	5530	3.56	UG/L	91
15)	*1,4-Difluorobenzene	21.94	114.0	129659	50.00	UG/L	100
30)	*Chlorobenzene-d5	27.22	117.0	95565	50.00	UG/L	100
36)	Toluene-d8	25.90	98.0	121849	51.64	UG/L	96
41)	Bromofluorobenzene	32.22	95.0	94491	50.60	UG/L	96

* Compound is ISTD

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

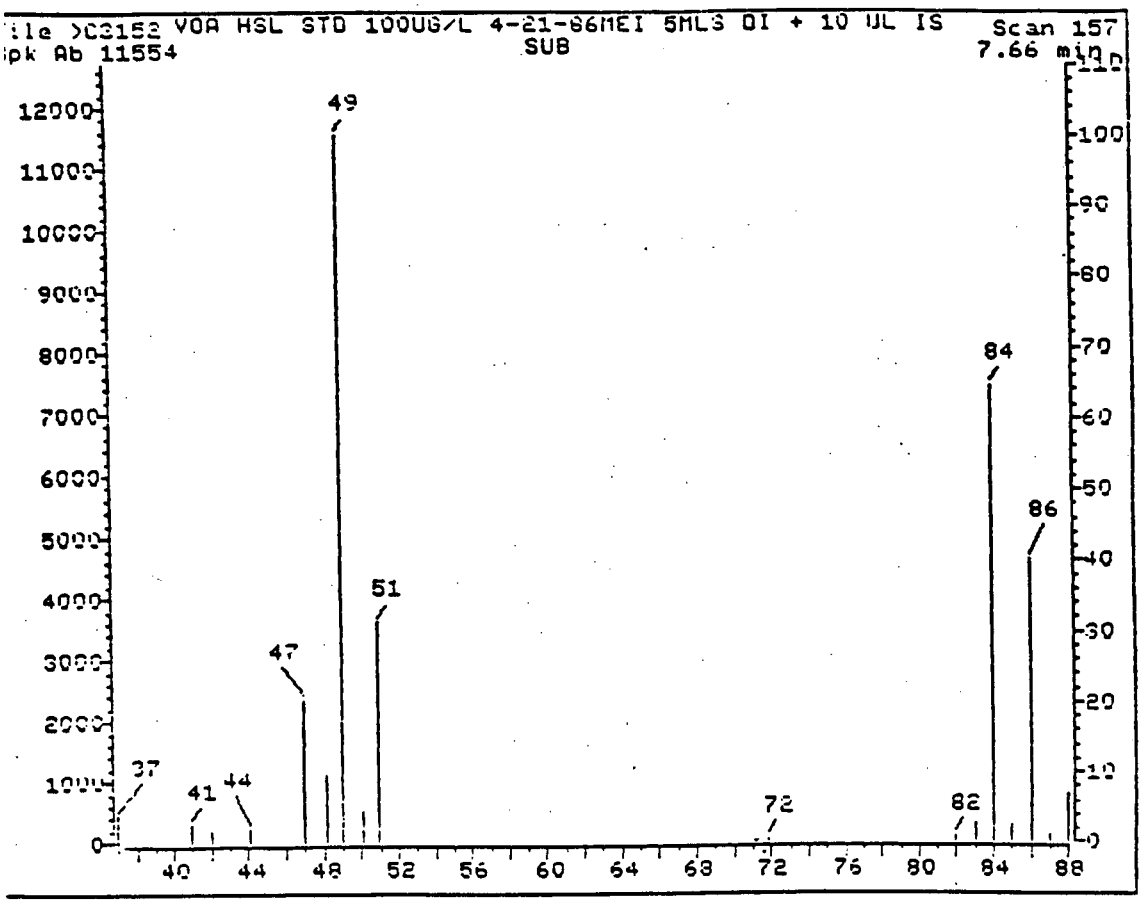


SAMPLE SPECTRUM (UNALTERED)

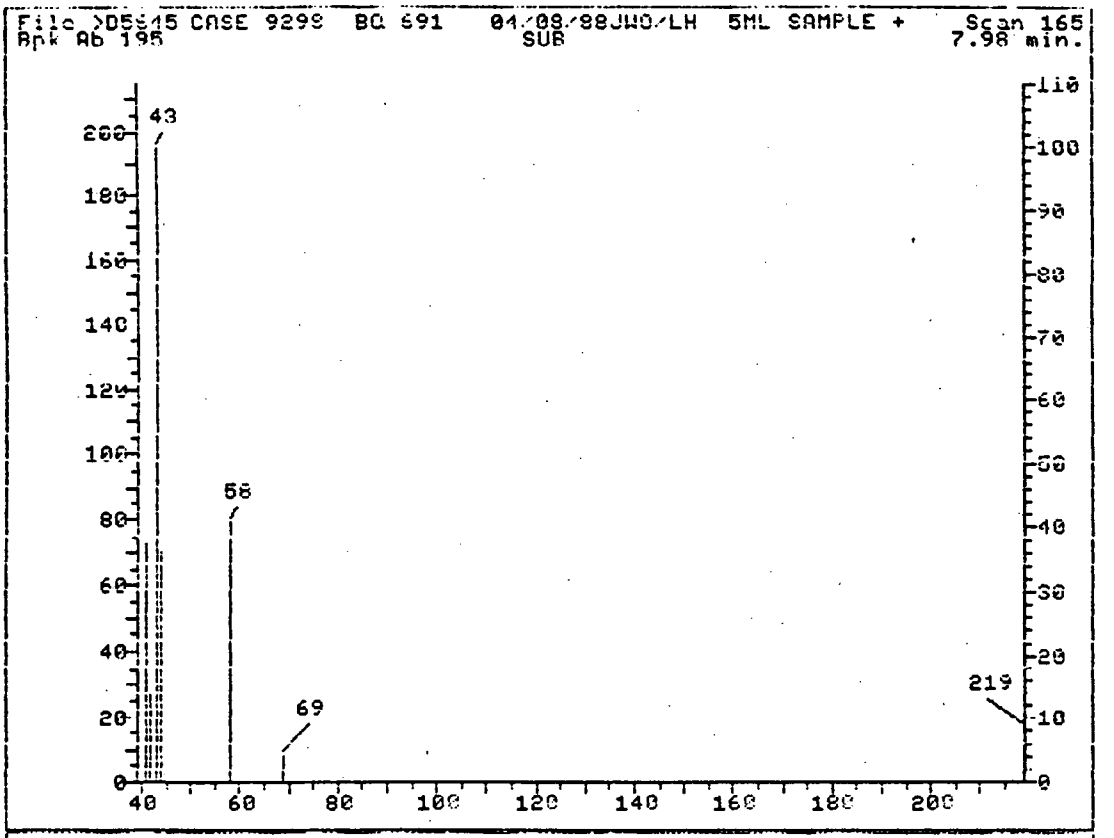


Data File: >D5645::D3 Quant Output File: ^D5645::Q3
Name: CASE 9298 BQ 691
Misc: 04/08/88JWO/LH 5ML SAMPLE + 10 ULS IS/SS
Quant Time: 880503 12:13 Quant ID File: COND13::D2
Injected at: 880408 12:49 Last Calibration: 880503 12:03

Compound No: 6
Compound Name: Methylene Chloride
Scan Number: 142
Retention Time: 7.09 min.
Quant Ion: 84.0
Area: 1801
Concentration: 1.85 UG/L
q-value: 94



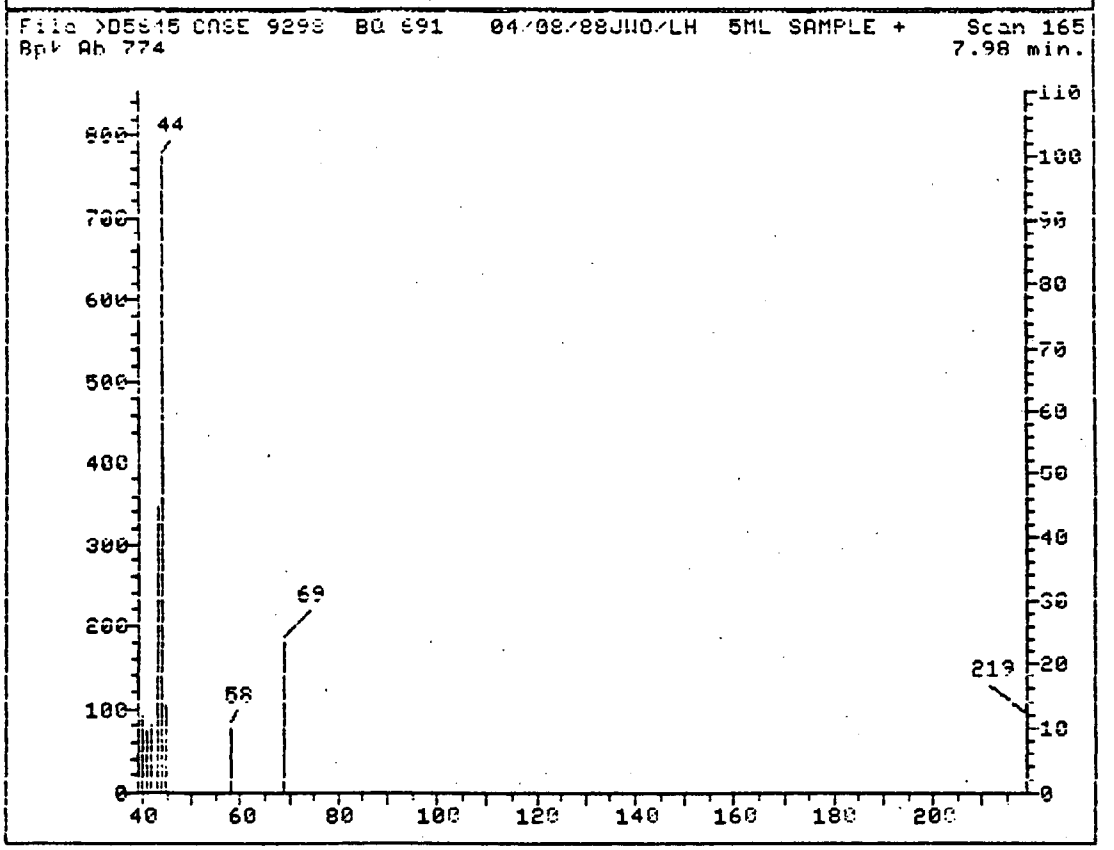
METHYLENE CHLORIDE STANDARD SPECTRA



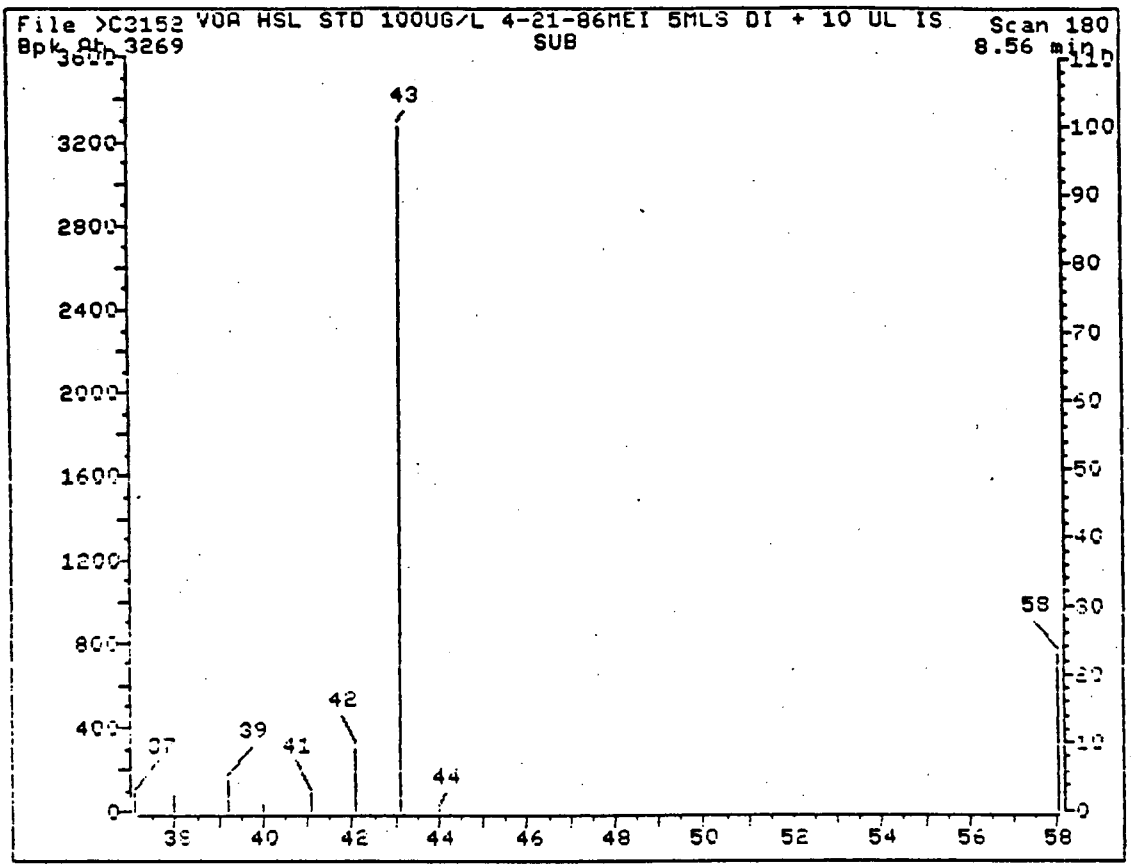
ACETONE

- BACKGROUND SUBTRACTED

RA 5/9/88

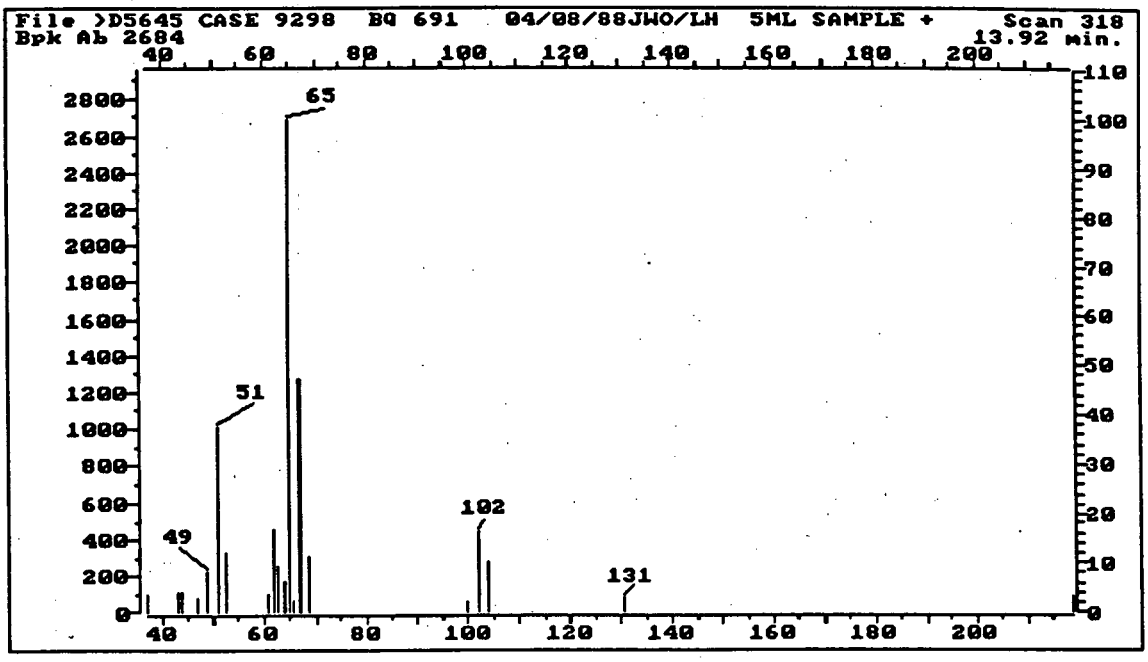


ACETONE

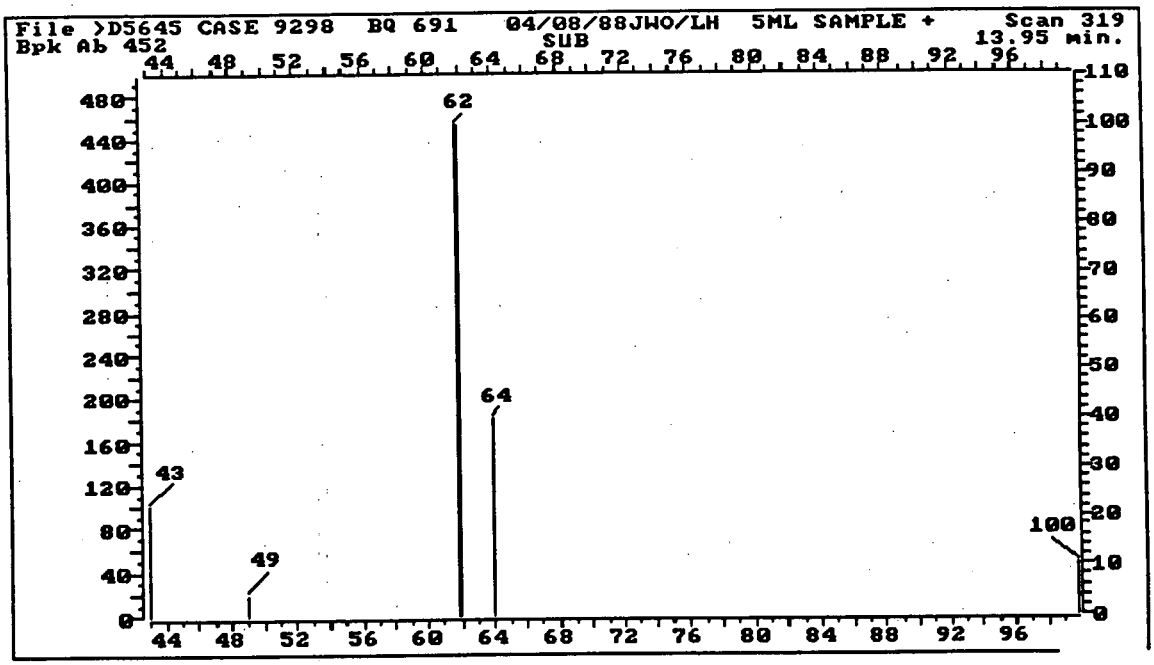


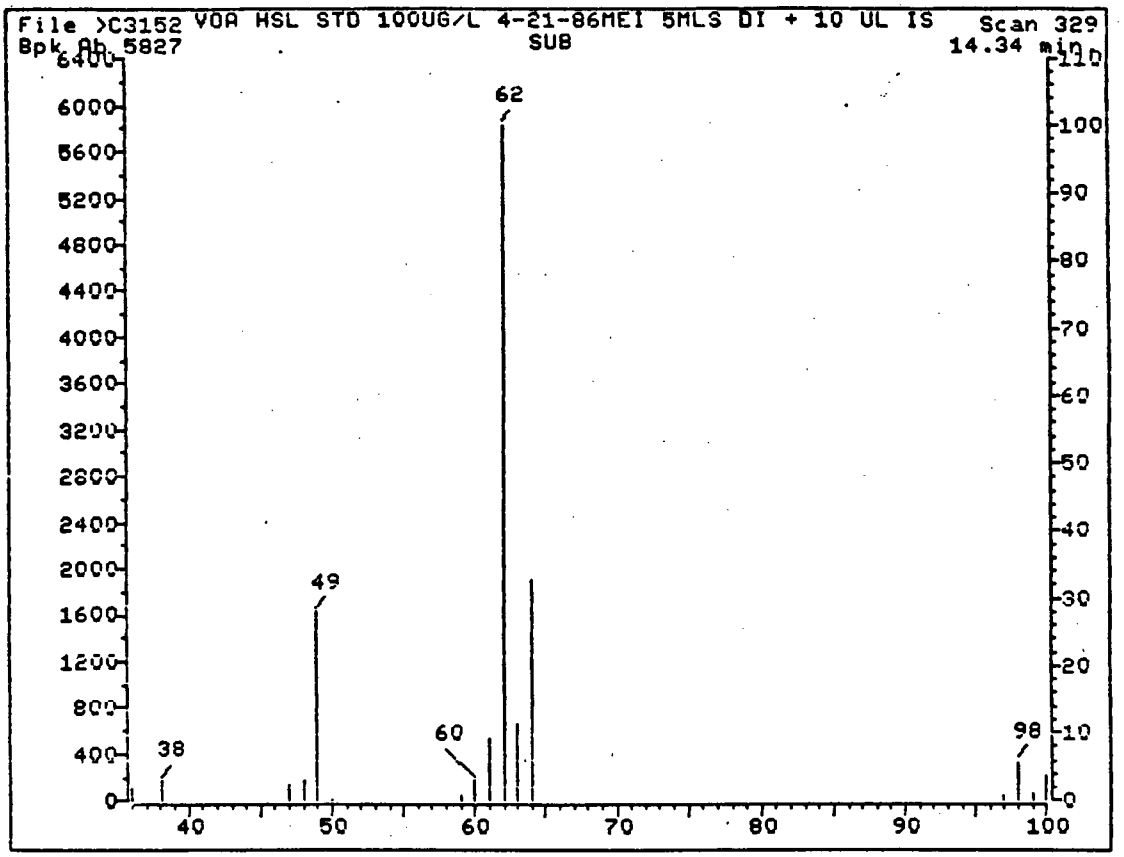
ACETONE STANDARD SPECTRA

1,2-
DICHLOROETHANE



1,2-DICHLOROETHANE - BACKGROUND SUBTRACTED





1,2 - DICHLOROETHANE STANDARD SPECTRA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BQ692

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Matrix: (soil/water) WATER Lab Sample ID: 17266

Sample wt/vol: 5. (g/mL) ML Lab File ID: D5644

Level: (low/med) LOW Date Received: 4/ 8/88

% Moisture: not dec.100. Date Analyzed: 4/ 8/88

Column: (pack/cap) PACK Dilution Factor: 1.00

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	3.	BJ
67-64-1	Acetone	19.	B
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	3. J	J
78-93-3	2-Butanone	~~10.~~	~~U~~
71-55-6	1,1,1-Trichloroethane	~~5.~~	~~U~~
56-23-5	Carbon Tetrachloride	~~5.~~	~~U~~
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	~~5.~~	~~U~~
108-10-1	4-Methyl-2-pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	~~5.~~	~~U~~
79-34-5	1,1,2,2-Tetrachloroethane	~~5.~~	~~U~~
108-88-3	Toluene	1.	J
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

5/18

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BQ692

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Matrix: (soil/water) WATER Lab Sample ID: 17266

Sample wt/vol: 5. (g/mL) ML Lab File ID: D5644

Level: (low/med) LOW Date Received: 4/ 8/88

% Moisture: not dec.100. Date Analyzed: 4/ 8/88

Column: (pack/cap) PACK Dilution Factor: 1.00

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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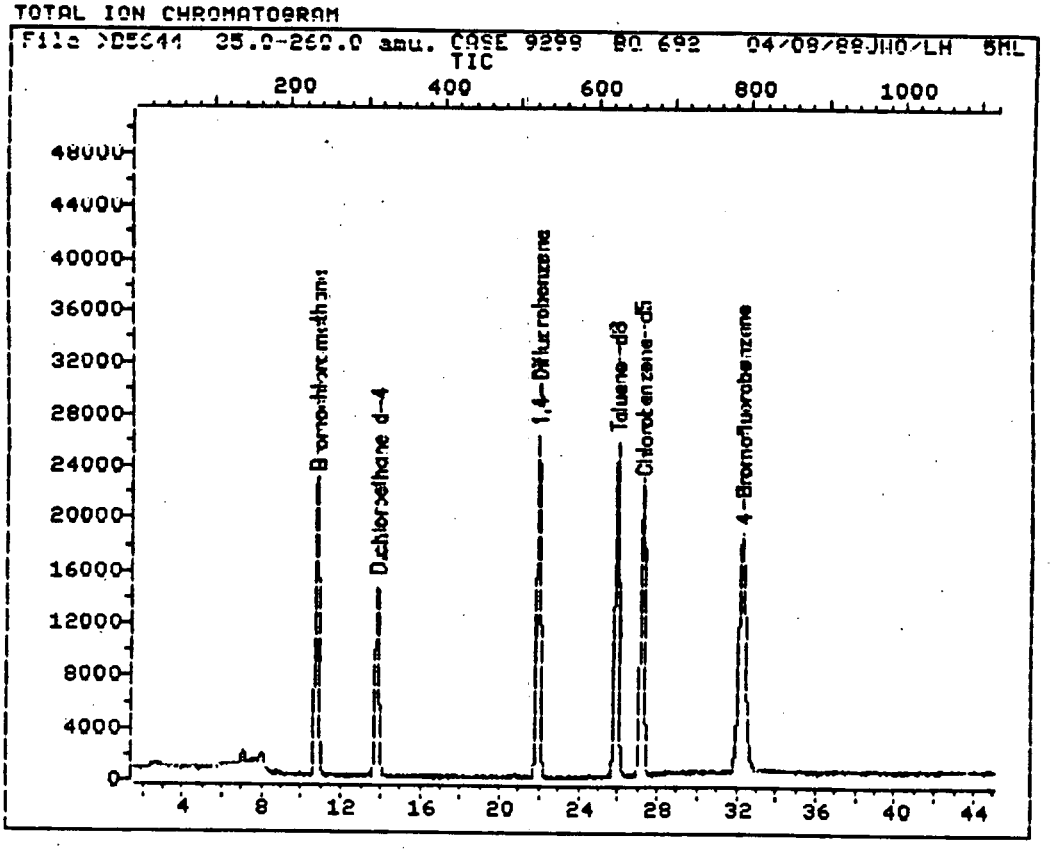
TOTAL ION CHROMATOGRAM



Data File: >D5644::D3 Quant Output File: ^D5644::Q3
Name: CASE 9298 BQ 692
Misc: 04/08/88JWO/LH 5ML SAMPLE + 10 ULS IS/SS

Id File: COND13::D2
Title: VOA ID FILE FOR WATERS ON HP-5970D (CONT.CAL.)
Last Calibration: 880503 12:03

Operator ID: USER8
Quant Time: 880503 12:11
Injected at: 880408 11:57

QUANT REPORT

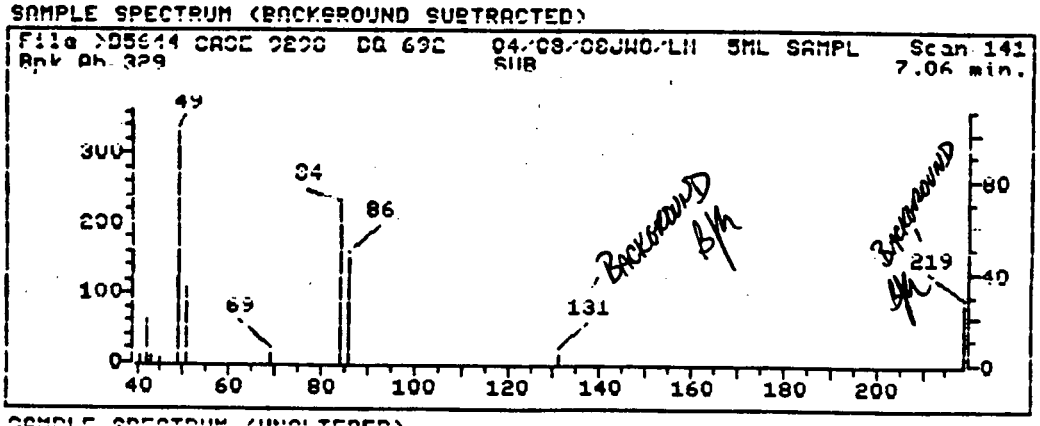
Operator ID: USER8 Quant Rev: 6 Quant Time: 880503 12:11
Output File: ^D5644::Q3 Injected at: 8811408 11:57
Data File: >D5644::D3 Dilution Factor: 1.00000
Name: CASE 9298 BQ 692
Misc: 04/08/88JWO/LH 5ML SAMPLE + 10 ULS IS/SS

ID File: COND13::D2
Title: VOA ID FILE FOR WATERS ON HP-5970D (CUNT.CAL.)
Last Calibration: 880503 12:03

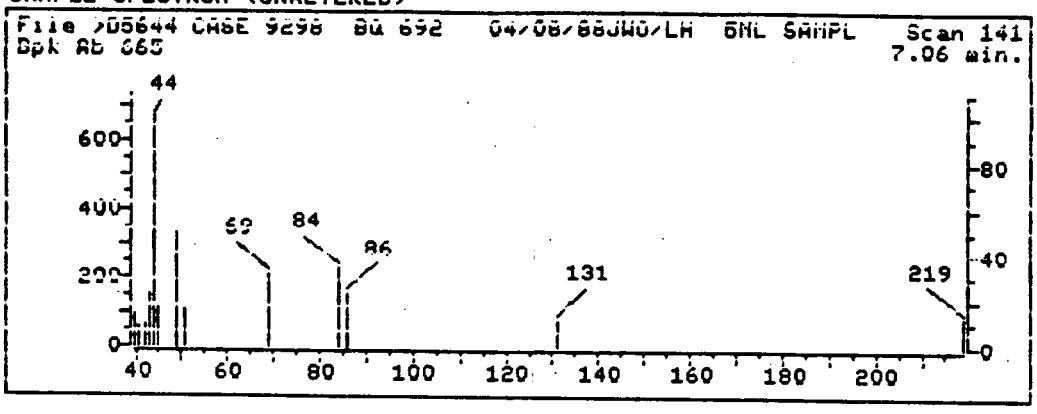
	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	10.75	236	40232	50.00	UG/L	96
6)	Methylene Chloride	7.06	141	2438	2.54	UG/L	95
7)	Acetone	7.99	165	4866	18.60	UG/L	83
13)	1,2-Dichloroethane-d4	13.81	315	67632	50.58	UG/L	95
14)	1,2-Dichloroethane	13.93	318	4923	3.22	UG/L	96
15)	*1,4-Difluorobenzene	21.96	525	131645	50.00	UG/L	100
30)	*Chlorobenzene-d5	27.19	660	93132	50.00	UG/L	100
35)	Toluene	26.15	633	1482	1.07	UG/L	94
36)	Toluene-d8	25.91	627	123625	53.76	UG/L	95
41)	Bromofluorobenzene	32.24	790	91393	50.22	UG/L	97

* Compound is ISTD

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

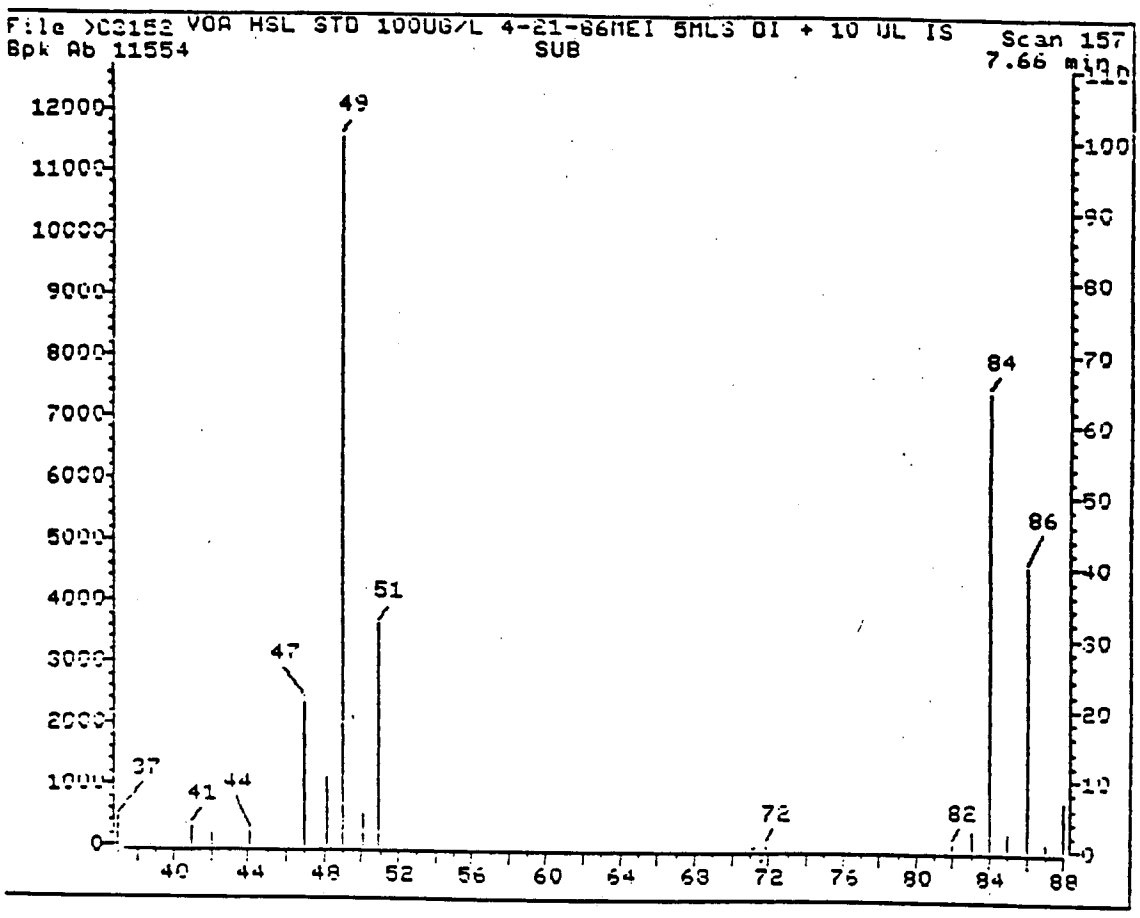


SAMPLE SPECTRUM (UNALTERED)

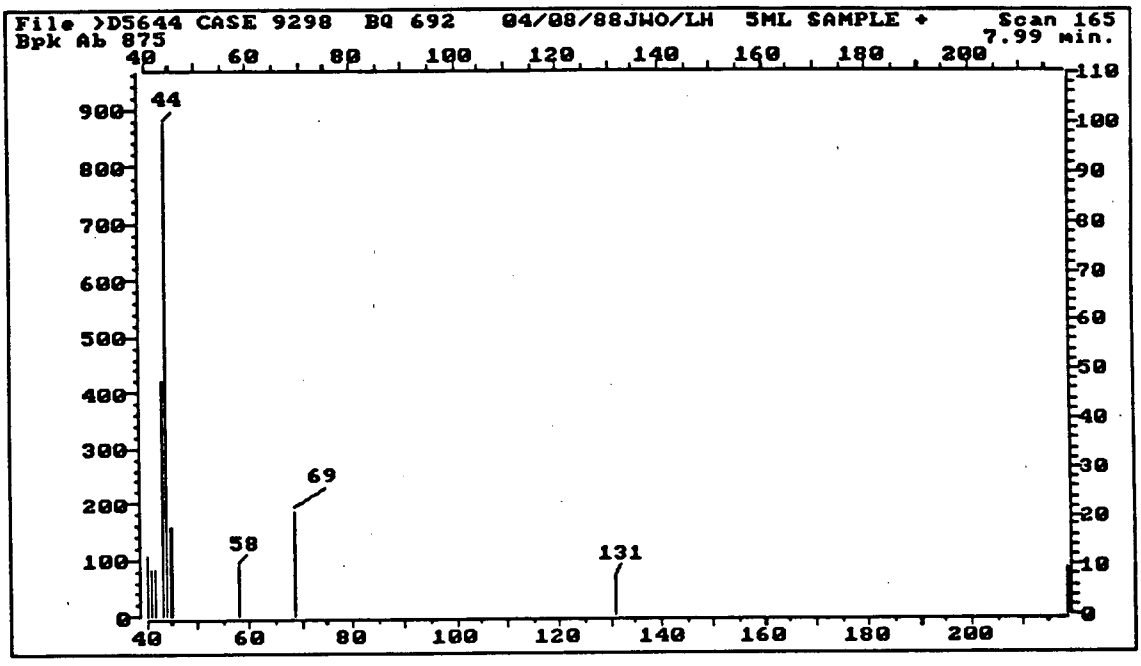


Data File: >D5644::D3 Quant Output File: ^D5644::Q3
Name: CASE 9298 BQ 692
Misc: 04/08/88JWO/LH 5ML SAMPLE + 10 ULS IS/SS
Quant Time: 880503 12:11 Quant ID File: COND13::D2
Injected at: 880408 11:57 Last Calibration: 880503 12:03

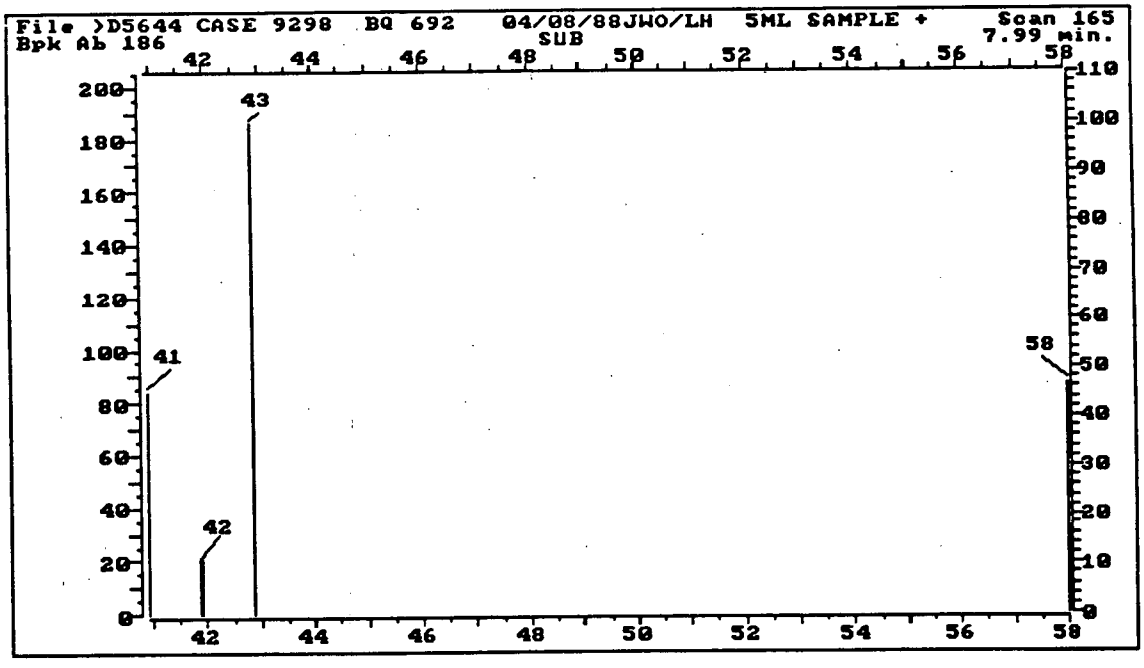
Compound No: 6
Compound Name: Methylene Chloride
Scan Number: 141
Retention Time: 7.06 min.
Quant Ion: 84.0
Area: 2438
Concentration: 2.54 UG/L
q-value: 95



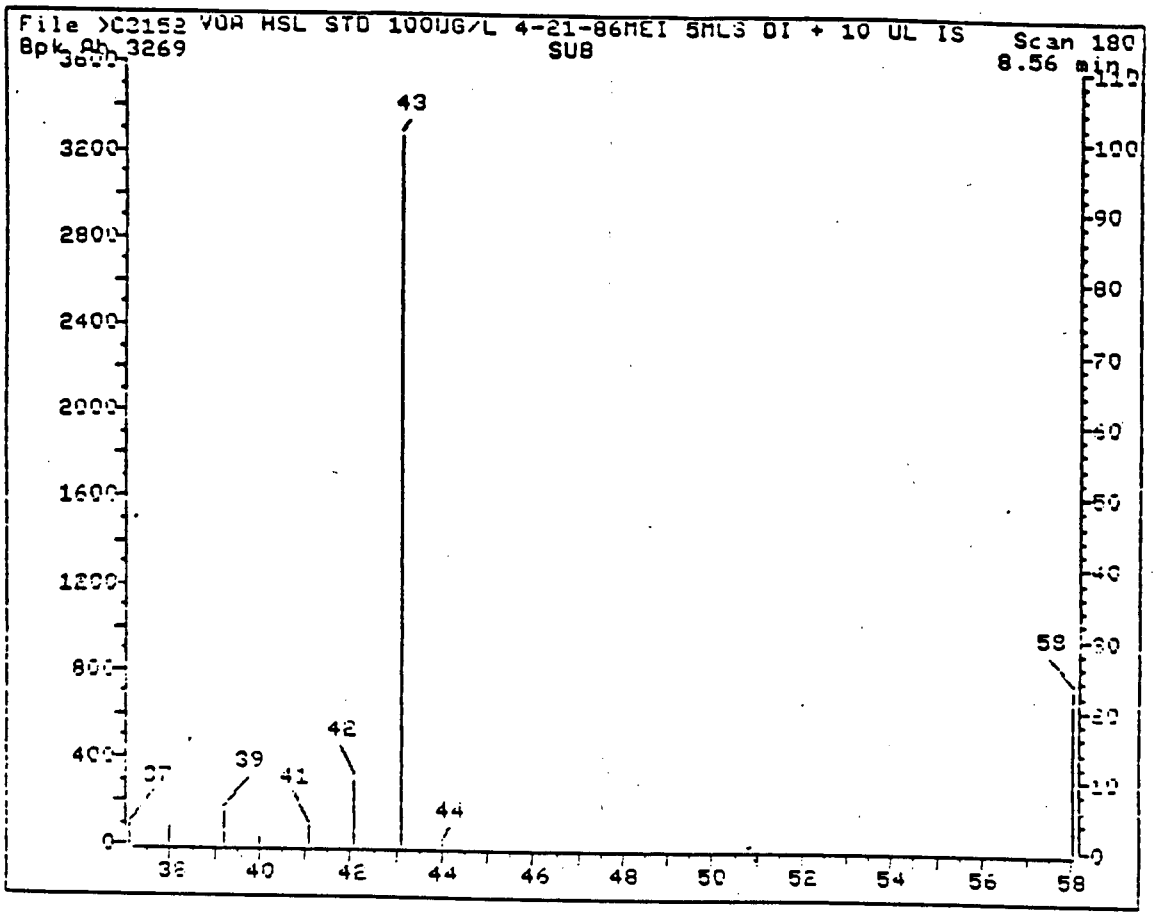
METHYLENE CHLORIDE STANDARD SPECTRA



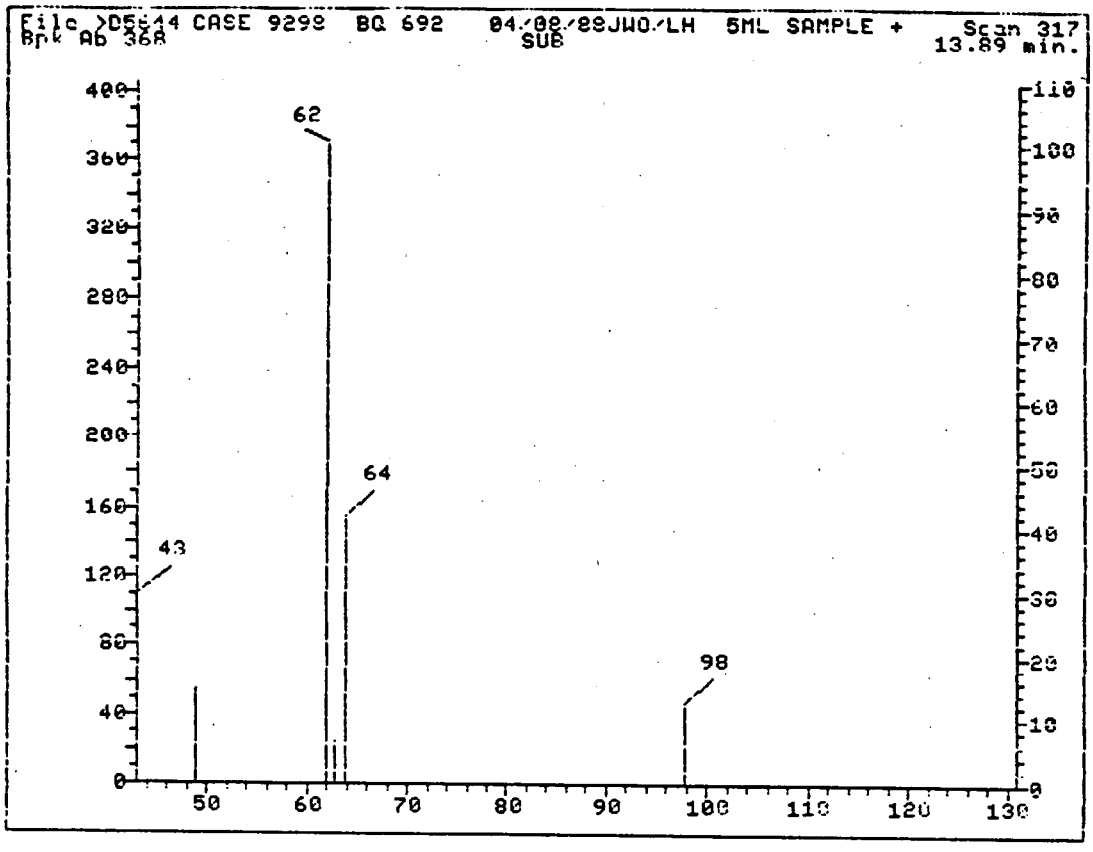
ACETONE



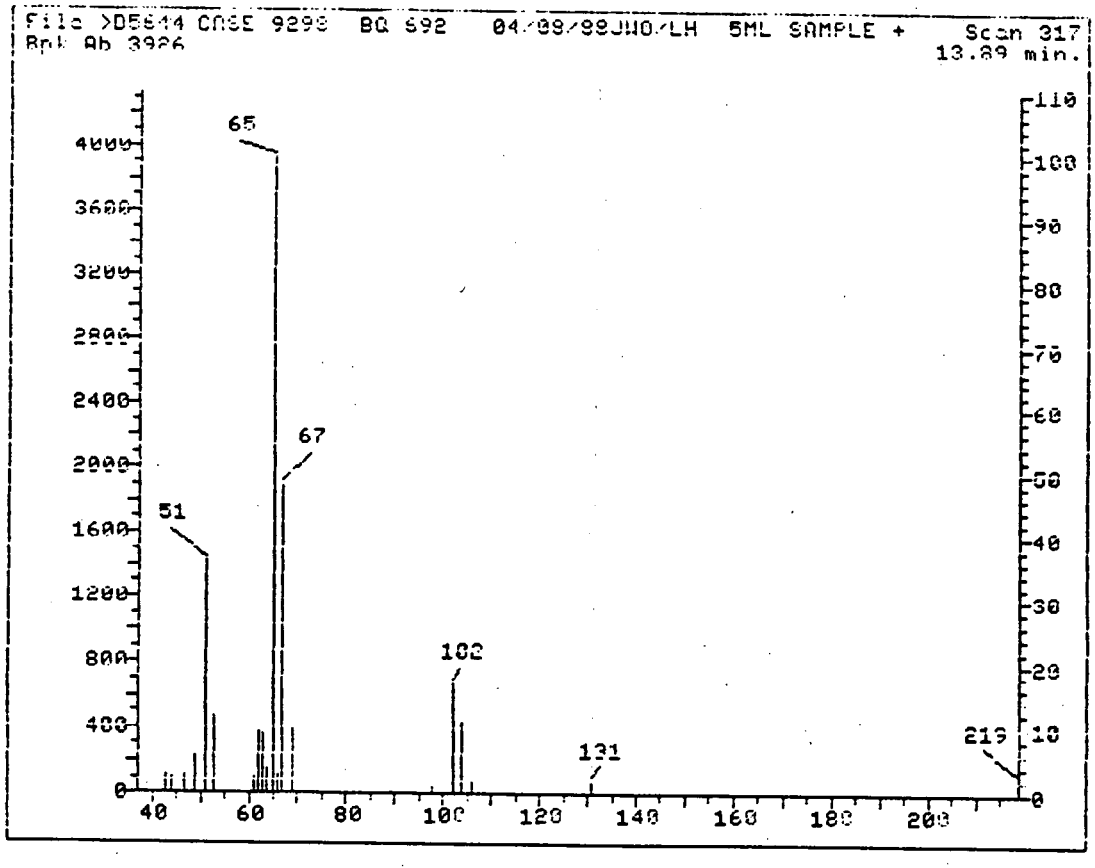
ACETONE - BACKGROUND SUBTRACTED BK



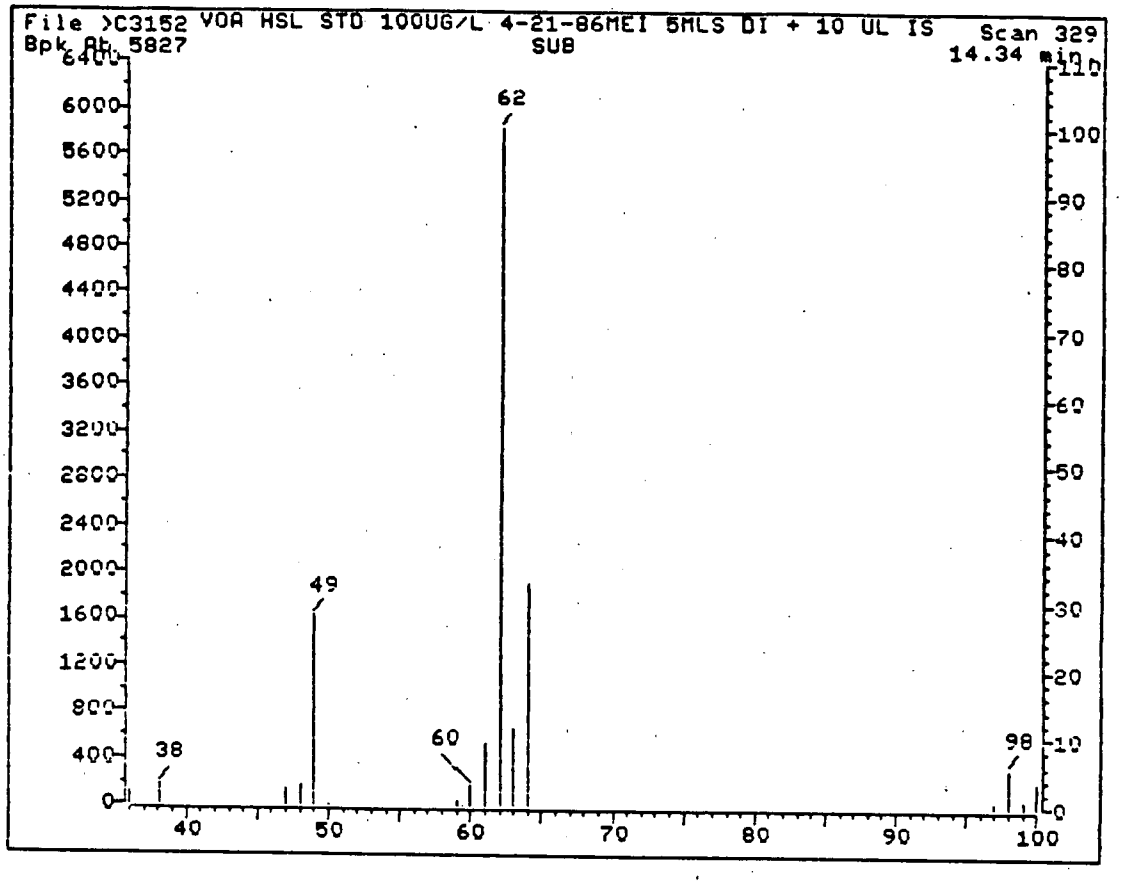
ACETONE STANDARD SPECTRA



1,2-DICHLORDETHANE
- BACKGROUND
SUBTRACTED
8/1 9/9/88

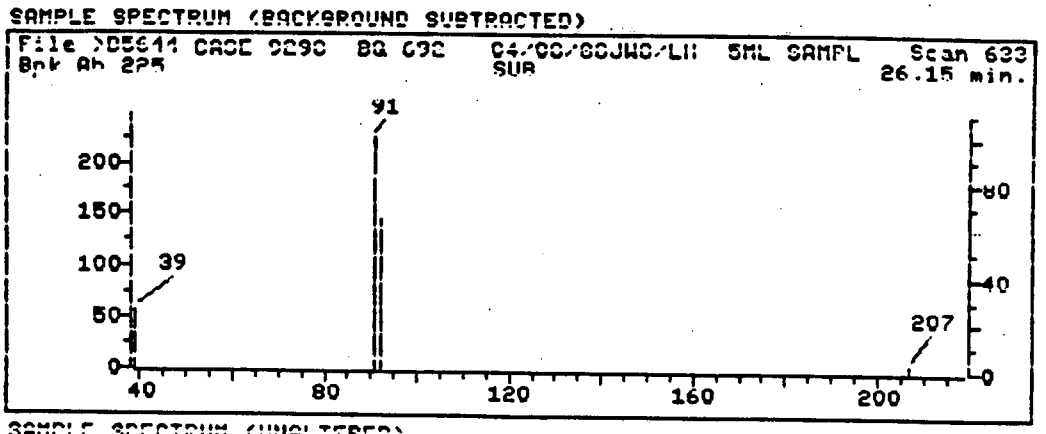


1,2-DICHLORDETHANE

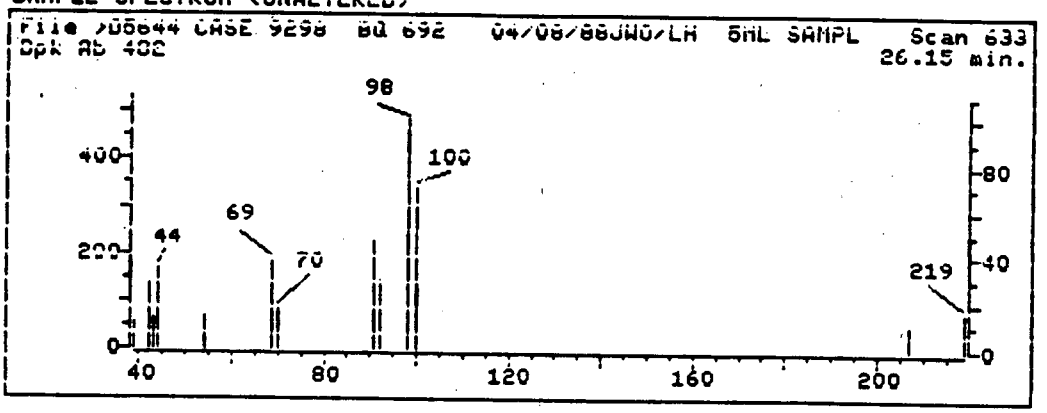


1,2 - DICHLOROETHANE STANDARD SPECTRA

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

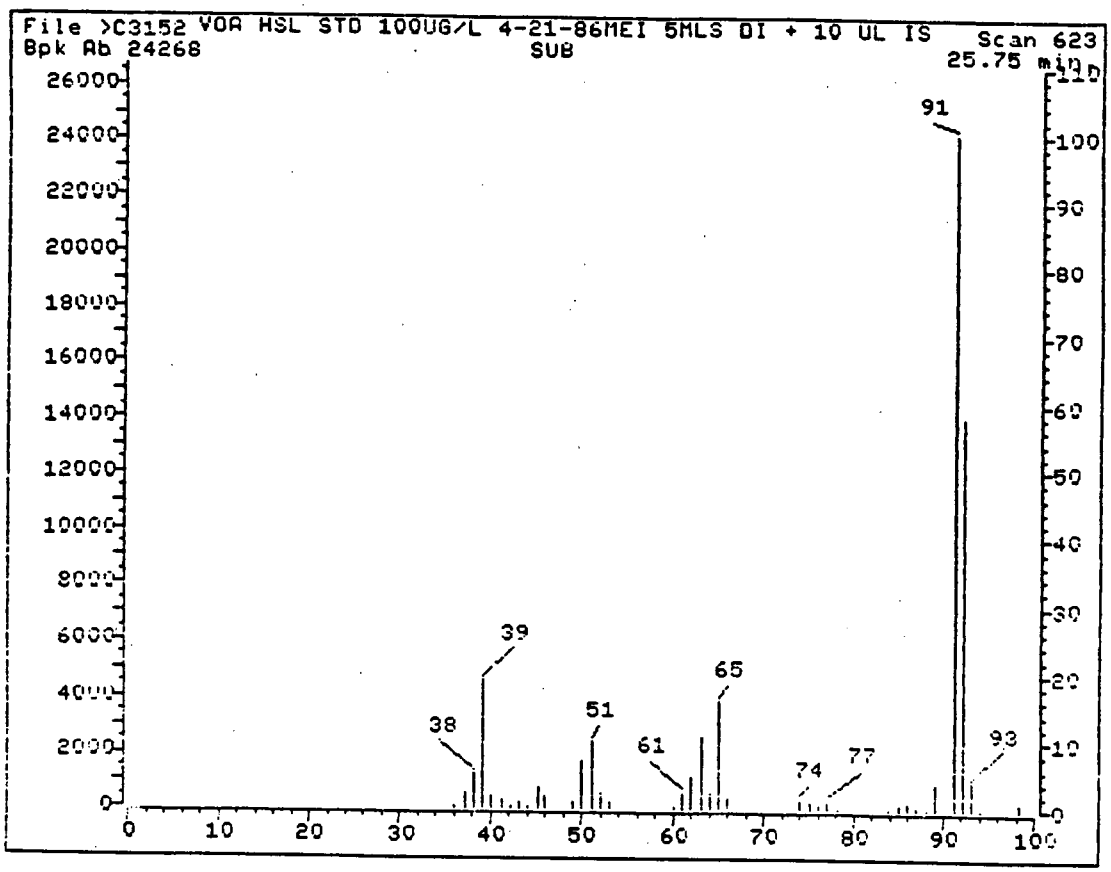


SAMPLE SPECTRUM (UNALTERED)



Data File: >D5644::D3 Quant Output File: ^D5644::Q3
Name: CASE 9298 BQ 692
Misc: 04/08/88JWO/LH 5ML SAMPLE + 10 ULS IS/SS
Quant Time: 880503 12:11 Quant ID File: COND13::D2
Injected at: 880408 11:57 Last Calibration: 880503 12:03

Compound No: 35
Compound Name: Toluene
Scan Number: 633
Retention Time: 26.15 min.
Quant Ion: 92.0
Area: 1482
Concentration: 1.07 UG/L
q-value: 94



TOLUENE STANDARD SPECTRA

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Instrument ID: 7001D Calibration Date(s): 2/19/88 2/19/88

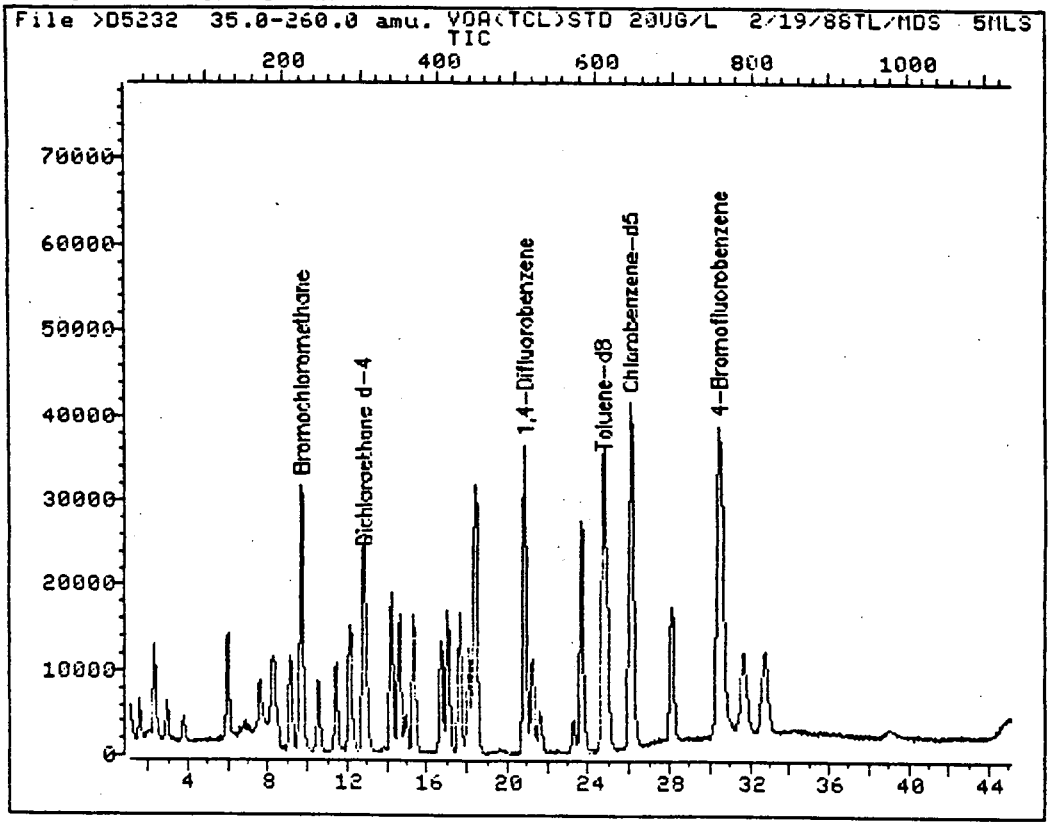
Matrix:(soil/water) WATER Level:(low/med): LOW Column:(pack/cap) PACK

Min $\overline{RRF}$ for SPCC(#) = .300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF020= D5232 RRF050= D5233
RRF100= D5234 RRF150= D5235 RRF200= D5236

COMPOUND	RRF020	RRF050	RRF100	RRF150	RRF200	$\overline{RRF}$	% RSD
Chloromethane #	1.131	1.177	1.240	1.345	1.217	1.222	6.6#
Bromomethane	1.748	1.916	1.853	1.993	1.723	1.847	6.1
Vinyl Chloride *	1.200	1.295	1.349	1.461	1.208	1.303	8.3*
Chloroethane	.719	.744	.785	.852	.756	.771	6.7
Methylene Chloride	1.509	1.433	1.354	1.487	1.381	1.433	4.6
Acetone	.477	.298	.325	.323	.371	.359	19.8
Carbon Disulfide	2.267	2.705	2.771	3.150	2.667	2.712	11.6
1,1-Dichloroethene *	2.024	2.372	2.279	2.517	2.254	2.289	7.9*
1,1-Dichloroethane #	2.131	2.421	2.293	2.520	2.302	2.333	6.3#
1,2-Dichloroethene (total)	1.154	1.245	1.150	1.238	1.118	1.181	4.8
Chloroform *	3.076	3.462	3.374	3.692	3.487	3.418	6.5*
1,2-Dichloroethane	2.188	2.642	2.729	2.994	2.972	2.705	12.1
2-Butanone	.051	.035	.030	.029	.033	.035	25.0
1,1,1-Trichloroethane	1.056	1.067	.980	1.052	1.030	1.037	3.3
Carbon Tetrachloride	.835	.992	.942	1.033	1.009	.962	8.2
Vinyl Acetate	.573	.610	.528	.625	.673	.602	9.1
Bromodichloromethane	.920	1.063	1.033	1.130	1.123	1.054	8.1
1,2-Dichloropropane *	.365	.390	.357	.378	.387	.376	3.8*
cis-1,3-Dichloropropene	.829	.890	.856	.915	.911	.880	4.2
Trichloroethene	.463	.464	.428	.460	.460	.455	3.4
Dibromochloromethane	.796	.898	.863	.950	1.000	.902	8.7
1,1,2-Trichloroethane	.391	.409	.384	.392	.429	.401	4.6
Benzene	.872	.899	.812	.880	.834	.859	4.1
trans-1,3-Dichloropropene	.316	.353	.350	.391	.392	.360	8.9
Bromoform #	.486	.580	.603	.673	.733	.615	15.3#
4-Methyl-2-pentanone	.409	.402	.392	.421	.457	.416	6.1
2-Hexanone	.367	.284	.280	.298	.335	.313	12.0
Tetrachloroethene	.456	.470	.412	.429	.411	.436	6.1
1,1,2,2-Tetrachloroethane #	.688	.726	.695	.750	.789	.729	5.7#
Toluene *	.847	.786	.691	.696	.680	.740	9.9*
Chlorobenzene #	.985	1.019	.919	.982	.934	.968	4.2#
Ethylbenzene *	1.654	1.729	1.591	1.660	1.612	1.649	3.2*
Styrene	.951	1.019	.968	1.025	.989	.990	3.2
Xylene (total)	1.396	1.509	1.395	1.437	1.432	1.434	3.2
Toluene-d8	1.164	1.229	1.266	1.272	1.248	1.236	3.5
Bromofluorobenzene	.944	1.020	1.028	1.082	1.121	1.039	6.5
1,2-Dichloroethane-d4	1.834	2.275	2.575	2.901	3.058	2.529	19.5

TOTAL ION CHROMATOGRAM



Data File: >D5232::D2 Quant Output File: ^D5232::D2
Name: VOA(TCL)STD 20UG/L
Misc: 2/19/88TL/MDS 5MLS DI+10UL IS/SS+2UL TCL/PC (249-100-

Id File: ICD13::D2
Title: VOA ID FILE FOR WATERS ON HP-5970D (INT. CAL.)
Last Calibration: 880405 12:20

Operator ID: USER8
Quant Time: 880406 16:57
Injected at: 880219 12:07

QUANT REPORT

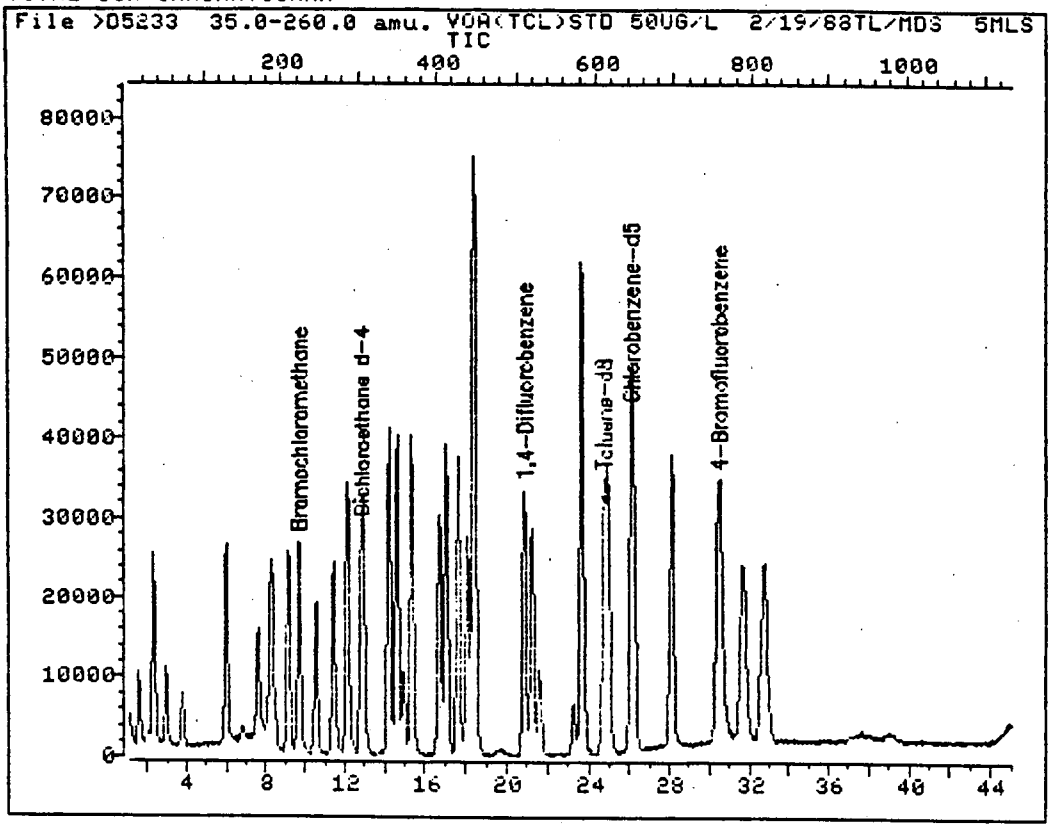
Operator ID: USER8 Quant Rev: 6 Quant Time: 880406 16:57
Output File: ^D5232::D2 Injected at: 880219 12:07
Data File: >D5232::D2 Dilution Factor: 1.00000
Name: VOA(TCL)STD 20UG/L
Misc: 2/19/88TL/MDS 5MLS DI+10UL IS/SS+2UL TCL/PC (249-100-

ID File: ICD13::D2
Title: VOA ID FILE FOR WATERS ON HP-5970D (INT. CAL.)
Last Calibration: 880405 12:20

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	9.69	222	53018	50.00	UG/L	89
2)	Chloromethane	1.57	13	23994	18.52	UG/L	88
3)	Bromomethane	2.31	32	37076	18.93	UG/L	86
4)	Vinyl Chloride	2.93	48	25459	18.43	UG/L	95
5)	Chloroethane	3.79	70	15242	18.64	UG/L	97
6)	Methylene Chloride	6.00	127	31995	21.06	UG/L	97
7)	Acetone	6.82	148	10116	26.59	UG/L	86
8)	Carbon Disulfide	7.59	168	48067	16.72	UG/L	100
9)	1,1-Dichloroethene	9.15	208	42932	17.69	UG/L	93
10)	1,1-Dichloroethane	10.55	244	45198	18.27	UG/L	97
11)	1,2-Dichloroethene (total)	11.44	267	24466	19.54	UG/L	90
12)	Chloroform	12.14	285	65232	18.00	UG/L	97
13)	1,2-Dichloroethane-d4	12.80	302	97259	36.27	UG/L	92
14)	1,2-Dichloroethane	12.95	306	46392	16.18	UG/L	96
15)	*1,4-Difluorobenzene	20.87	510	166841	50.00	UG/L	100
16)	2-Butanone	12.95	306	3377	8.53	UG/L	100
17)	1,1,1-Trichloroethane	14.19	338	70472	6.03	UG/L	77
18)	Carbon Tetrachloride	14.62	349	55725	5.12	UG/L	82
19)	Vinyl Acetate	14.97	358	38220	5.56	UG/L	100
20)	Bromodichloromethane	15.32	367	61388	5.15	UG/L	86
21)	1,2-Dichloropropane	16.72	403	24367	19.44	UG/L	94
22)	cis-1,3-Dichloropropene	17.03	411	55336	18.84	UG/L	100
23)	Trichloroethene	17.65	427	30877	20.34	UG/L	100
24)	Dibromochloromethane	18.39	446	53127	17.66	UG/L	99
25)	1,1,2-Trichloroethane	18.46	448	26064	19.48	UG/L	93
26)	Benzene	18.11	439	58188	20.29	UG/L	93
27)	trans-1,3-Dichloropropene	18.43	447	21073	17.53	UG/L	100
28)	2-Chloroethylvinylether	18.46	448	6670	18.01	UG/L	100
29)	Bromoform	21.26	520	32460	15.82	UG/L	100
30)	*Chlorobenzene-d5	26.07	644	134495	50.00	UG/L	100
31)	4-Methyl-2-pentanone	21.65	530	22023	19.66	UG/L	100
32)	2-Hexanone	23.28	572	19759	24.00	UG/L	100
33)	Tetrachloroethene	23.67	582	24545	20.93	UG/L	89
34)	1,1,2,2-Tetrachloroethane	23.70	583	37010	18.86	UG/L	100
35)	Toluene	24.95	615	45557	22.89	UG/L	95
36)	Toluene-d8	24.71	609	156547	47.09	UG/L	90
37)	Chlorobenzene	26.19	647	52984	20.35	UG/L	95
38)	Ethylbenzene	28.13	697	88990	20.06	UG/L	100
39)	Styrene	31.70	789	51155	19.20	UG/L	98
40)	Xylene (total)	32.75	816	75107	19.47	UG/L	99
41)	Bromofluorobenzene	30.46	757	126964	45.43	UG/L	81

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >D5233::D2 Quant Output File: ^D5233::D2
Name: VOA(TCL)STD 50UG/L
Misc: 2/19/88TL/MDS 5MLS DI+10UL IS/SS+5UL TCL/PC (249-100-

Id File: ICD13::D2
Title: VOA ID FILE FOR WATERS ON HP-5970D (INT. CAL.)
Last Calibration: 880405 12:20

Operator ID: USER8
Quant Time: 880406 16:58
Injected at: 880219 13:00

QUANT REPORT

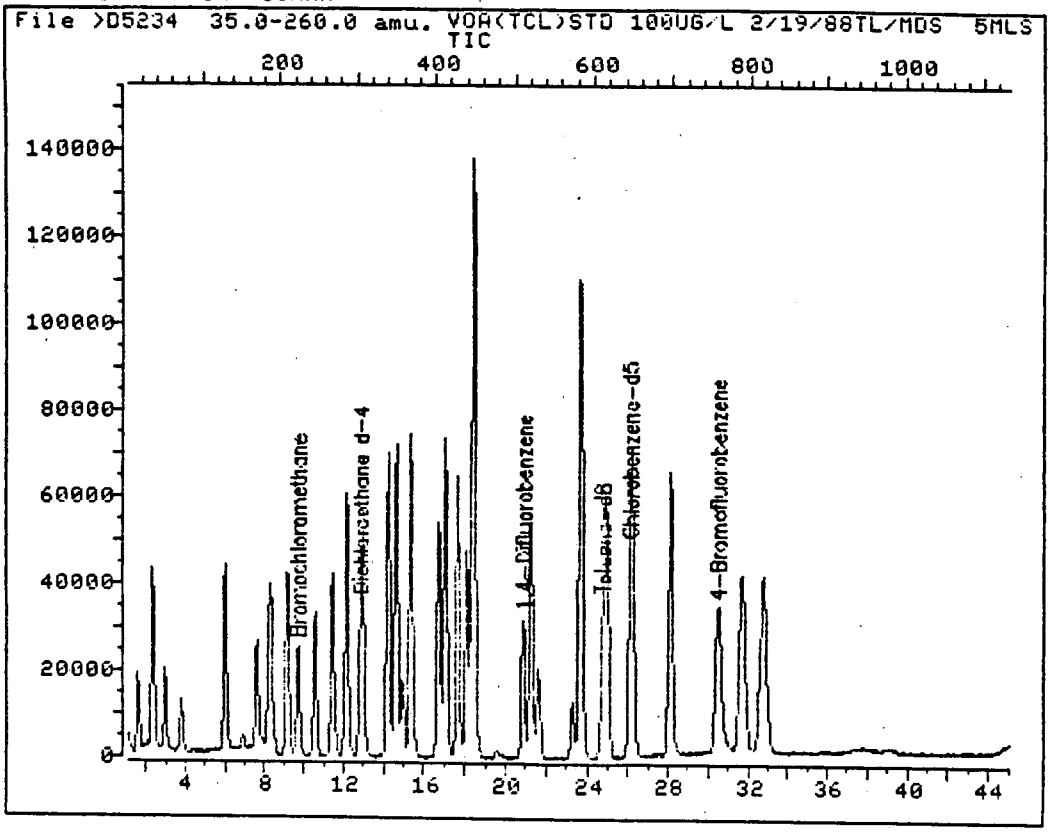
Operator ID: USER8 Quant Rev: 6 Quant Time: 880406 16:58
Output File: ^D5233::D2 Injected at: 880219 13:00
Data File: >D5233::D2 Dilution Factor: 1.00000
Name: VOA(TCL)STD 50UG/L
Misc: 2/19/88TL/MDS 5MLS DI+10UL IS/SS+5UL TCL/PC (249-100-

ID File: ICD13::D2
Title: VOA ID FILE FOR WATERS ON HP-5970D (INT. CAL.)
Last Calibration: 880405 12:20

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	9.69	222	43196	50.00	UG/L	96
2)	Chloromethane	1.61	14	50840	48.16	UG/L	86
3)	Bromomethane	2.35	33	82771	51.88	UG/L	87
4)	Vinyl Chloride	2.97	49	55924	49.70	UG/L	97
5)	Chloroethane	3.79	70	32124	48.21	UG/L	99
6)	Methylene Chloride	6.00	127	61891	50.01	UG/L	95
7)	Acetone	6.85	149	12859	41.49	UG/L	86
8)	Carbon Disulfide	7.59	168	116834	49.87	UG/L	100
9)	1,1-Dichloroethene	9.15	208	102458	51.80	UG/L	95
10)	1,1-Dichloroethane	10.58	245	104556	51.87	UG/L	96
11)	1,2-Dichloroethene (total)	11.44	267	53782	52.71	UG/L	88
12)	Chloroform	12.14	285	149544	50.64	UG/L	95
13)	1,2-Dichloroethane-d4	12.83	303	98250	44.98	UG/L	86
14)	1,2-Dichloroethane	12.95	306	114123	48.84	UG/L	96
15)	*1,4-Difluorobenzene	20.87	510	142969	50.00	UG/L	100
16)	2-Butanone	12.95	306	4948	14.59	UG/L	100
17)	1,1,1-Trichloroethane	14.19	338	152480	15.22	UG/L	78
18)	Carbon Tetrachloride	14.62	349	141795	15.20	UG/L	83
19)	Vinyl Acetate	14.97	358	87214	14.82	UG/L	100
20)	Bromodichloromethane	15.36	368	152031	14.88	UG/L	92
21)	1,2-Dichloropropane	16.72	403	55826	51.99	UG/L	97
22)	cis-1,3-Dichloropropene	17.03	411	127235	50.55	UG/L	100
23)	Trichloroethene	17.65	427	66392	51.04	UG/L	100
24)	Dibromochloromethane	18.39	446	128358	49.79	UG/L	99
25)	1,1,2-Trichloroethane	18.46	448	58504	51.03	UG/L	94
26)	Benzene	18.11	439	128530	52.31	UG/L	94
27)	trans-1,3-Dichloropropene	18.43	447	50439	48.96	UG/L	100
28)	2-Chloroethylvinylether	18.46	448	15891	50.07	UG/L	100
29)	Bromoform	21.26	520	82866	47.12	UG/L	100
30)	*Chlorobenzene-d5	26.07	644	117219	50.00	UG/L	100
31)	4-Methyl-2-pentanone	21.65	530	47111	48.24	UG/L	100
32)	2-Hexanone	23.28	572	33273	46.37	UG/L	100
33)	Tetrachloroethene	23.67	582	55141	53.95	UG/L	94
34)	1,1,2,2-Tetrachloroethane	23.70	583	85077	49.75	UG/L	100
35)	Toluene	24.95	615	92088	53.09	UG/L	98
36)	Toluene-d8	24.75	610	144045	49.72	UG/L	95
37)	Chlorobenzene	26.19	647	119450	52.64	UG/L	95
38)	Ethylbenzene	28.13	697	202680	52.42	UG/L	100
39)	Styrene	31.67	788	119468	51.45	UG/L	87
40)	Xylene (total)	32.75	816	176869	52.61	UG/L	99
41)	Bromofluorobenzene	30.46	757	119581	49.09	UG/L	78

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >D5234::D2 Quant Output File: ^D5234::D2
Name: VOA(TCL)STD 100UG/L
Misc: 2/19/88TL/MDS 5MLS DI+10UL IS/SS+10UL TCL/PC (249-100

Id File: ICD13::D2
Title: VOA ID FILE FOR WATERS ON HP-5970D (INT. CAL.)
Last Calibration: 880405 12:20

Operator ID: USER8
Quant Time: 880406 16:59
Injected at: 880219 13:53

QUANT REPORT

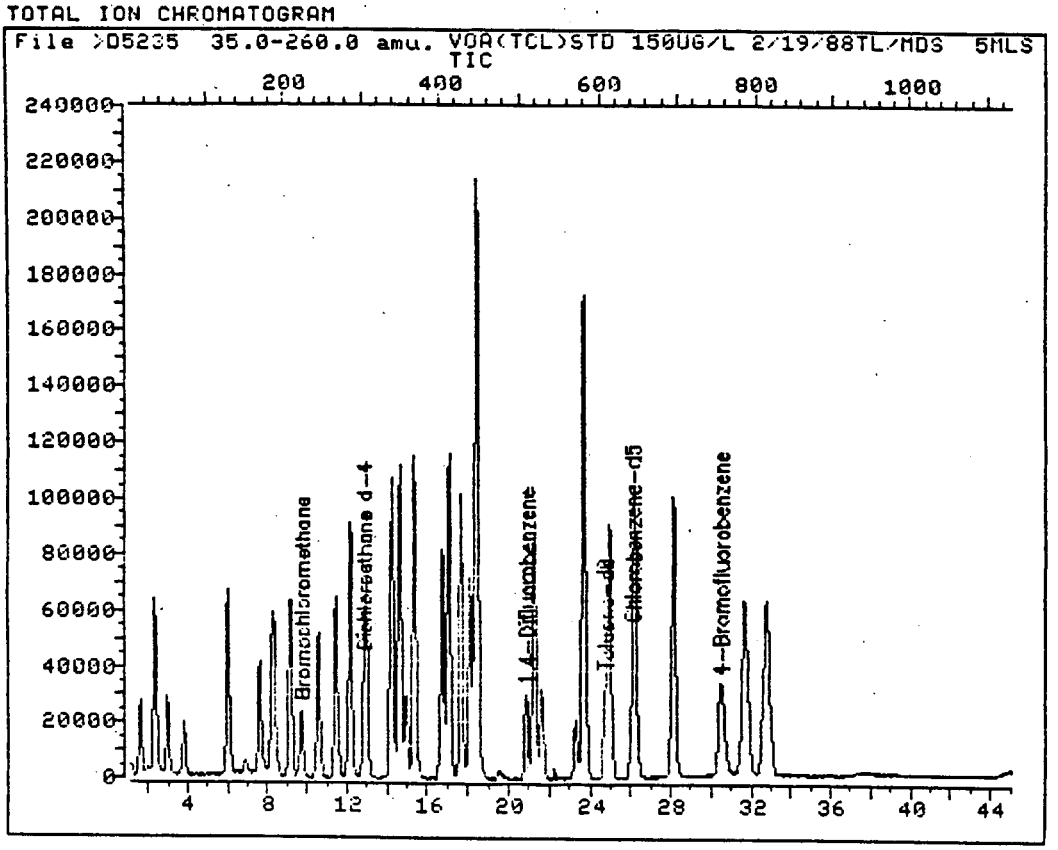
Operator ID: USER8 Quant Rev: 6 Quant Time: 880406 16:59
Output File: ^D5234::D2 Injected at: 880219 13:53
Data File: >D5234::D2 Dilution Factor: 1.00000
Name: VOA(TCL)STD 100UG/L
Misc: 2/19/88TL/MDS 5MLS DI+10UL IS/SS+10UL TCL/PC (249-100

ID File: ICD13::D2
Title: VOA ID FILE FOR WATERS ON HP-5970D (INT. CAL.)
Last Calibration: 880405 12:20

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	9.69	222	39306	50.00	UG/L	97
2)	Chloromethane	1.61	14	97478	101.48	UG/L	94
3)	Bromomethane	2.35	33	145698	100.36	UG/L	89
4)	Vinyl Chloride	2.97	49	106033	103.55	UG/L	99
5)	Chloroethane	3.79	70	61745	101.84	UG/L	97
6)	Methylene Chloride	6.00	127	106436	94.52	UG/L	95
7)	Acetone	6.89	150	25528	90.51	UG/L	77
8)	Carbon Disulfide	7.59	168	217859	102.19	UG/L	100
9)	1,1-Dichloroethene	9.15	208	179148	99.55	UG/L	92
10)	1,1-Dichloroethane	10.58	245	180250	98.27	UG/L	96
11)	1,2-Dichloroethene (total)	11.44	267	90411	97.39	UG/L	90
12)	Chloroform	12.14	285	265230	98.71	UG/L	93
13)	1,2-Dichloroethane-d4	12.84	303	101210	50.92	UG/L	82
14)	1,2-Dichloroethane	12.95	306	214526	100.89	UG/L	98
15)	*1,4-Difluorobenzene	20.87	510	136114	50.00	UG/L	100
16)	2-Butanone	12.91	305	8140	25.20	UG/L	100
17)	1,1,1-Trichloroethane	14.19	338	266767	27.96	UG/L	76
18)	Carbon Tetrachloride	14.62	349	256483	28.88	UG/L	84
19)	Vinyl Acetate	14.93	357	143793	25.66	UG/L	100
20)	Bromodichloromethane	15.36	368	281200	28.91	UG/L	92
21)	1,2-Dichloropropane	16.72	403	97282	95.15	UG/L	91
22)	cis-1,3-Dichloropropene	17.07	412	232930	97.21	UG/L	100
23)	Trichloroethene	17.65	427	116434	94.01	UG/L	100
24)	Dibromochloromethane	18.39	446	235056	95.77	UG/L	98
25)	1,1,2-Trichloroethane	18.46	448	104410	95.66	UG/L	95
26)	Benzene	18.11	439	221120	94.52	UG/L	93
27)	trans-1,3-Dichloropropene	18.43	447	95222	97.09	UG/L	100
28)	2-Chloroethylvinylether	18.46	448	28906	95.67	UG/L	100
29)	Bromoform	21.26	520	164056	97.99	UG/L	100
30)	*Chlorobenzene-d5	26.07	644	113083	50.00	UG/L	100
31)	4-Methyl-2-pentanone	21.65	530	88611	94.06	UG/L	100
32)	2-Hexanone	23.32	573	63342	91.51	UG/L	100
33)	Tetrachloroethene	23.67	582	93268	94.59	UG/L	91
34)	1,1,2,2-Tetrachloroethane	23.71	583	157187	95.28	UG/L	100
35)	Toluene	24.95	615	156314	93.42	UG/L	99
36)	Toluene-d8	24.75	610	143153	51.22	UG/L	96
37)	Chlorobenzene	26.19	647	207945	95.00	UG/L	93
38)	Ethylbenzene	28.13	697	359725	96.44	UG/L	100
39)	Styrene	31.67	788	219004	97.77	UG/L	87
40)	Xylene (total)	32.75	816	315591	97.31	UG/L	98
41)	Bromofluorobenzene	30.46	757	116265	49.48	UG/L	80

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >D5235::D2 Quant Output File: ^D5235::D2
Name: VOA(TCL)STD 150UG/L
Misc: 2/19/88TL/MDS 5MLS DI+10UL IS/SS+15UL TCL/PC (249-100

Id File: ICD13::D2
Title: VOA ID FILE FOR WATERS ON HP-5970D (INT. CAL.)
Last Calibration: 880405 12:20

Operator ID: USER8
Quant Time: 880406 17:01
Injected at: 880219 14:46

QUANT REPORT

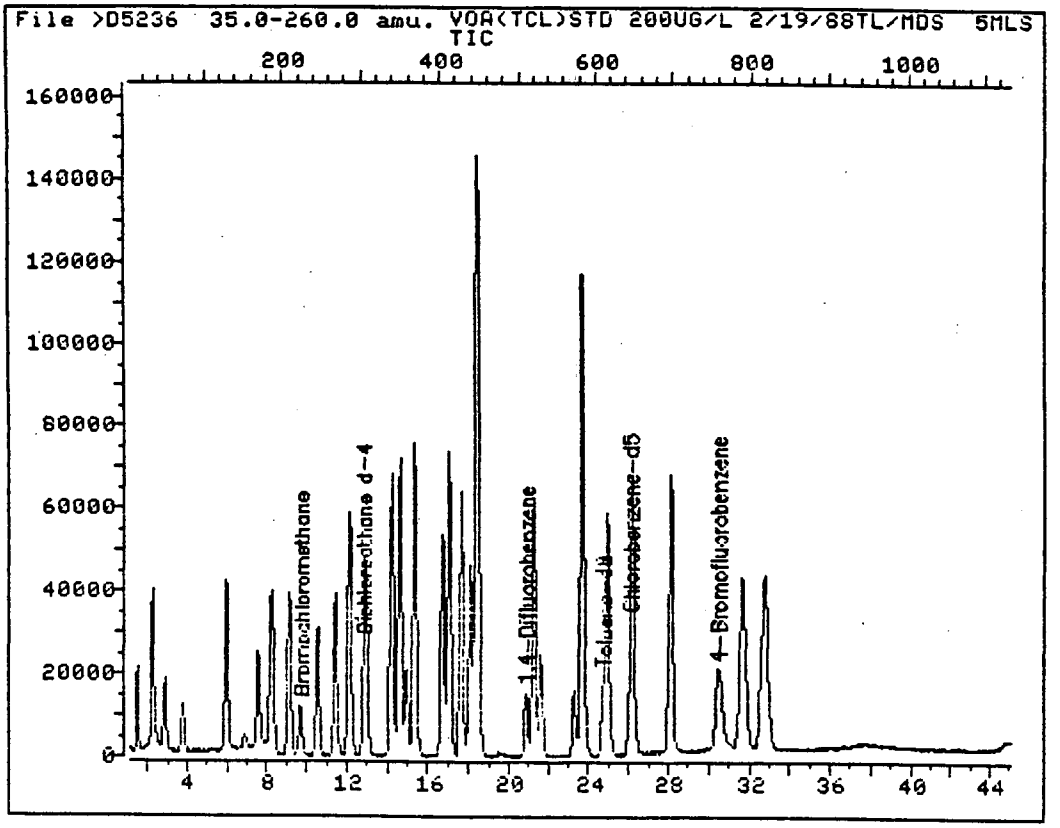
Operator ID: USER8 Quant Rev: 6 Quant Time: 880406 17:01
Output File: ^D5235::D2 Injected at: 880219 14:46
Data File: >D5235::D2 Dilution Factor: 1.00000
Name: VOA(TCL)STD 150UG/L
Misc: 2/19/88TL/MDS 5MLS DI+10UL IS/SS+15UL TCL/PC (249-100

ID File: ICD13::D2
Title: VOA ID FILE FOR WATERS ON HP-5970D (INT. CAL.)
Last Calibration: 880405 12:20

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	9.73	223	36254	50.00	UG/L	91
2)	Chloromethane	1.61	14	146252	165.07	UG/L	92
3)	Bromomethane	2.35	33	216817	161.92	UG/L	88
4)	Vinyl Chloride	2.97	49	158859	168.20	UG/L	99
5)	Chloroethane	3.79	70	92705	165.78	UG/L	98
6)	Methylene Chloride	6.00	127	161684	155.66	UG/L	96
7)	Acetone	6.89	150	35158	135.15	UG/L	75
8)	Carbon Disulfide	7.59	168	342553	174.21	UG/L	100
9)	1,1-Dichloroethene	9.19	209	273758	164.92	UG/L	88
10)	1,1-Dichloroethane	10.58	245	274067	162.00	UG/L	98
11)	1,2-Dichloroethene (total)	11.44	267	134637	157.23	UG/L	86
12)	Chloroform	12.14	285	401497	162.00	UG/L	94
13)	1,2-Dichloroethane-d4	12.84	303	105172	57.36	UG/L	81
14)	1,2-Dichloroethane	12.95	306	325624	166.03	UG/L	97
15)	*1,4-Difluorobenzene	20.87	510	129190	50.00	UG/L	100
16)	2-Butanone	12.95	306	11072	36.12	UG/L	100
17)	1,1,1-Trichloroethane	14.23	339	407682	45.02	UG/L	76
18)	Carbon Tetrachloride	14.62	349	400360	47.50	UG/L	87
19)	Vinyl Acetate	14.97	358	242233	45.54	UG/L	100
20)	Bromodichloromethane	15.36	368	437858	47.43	UG/L	92
21)	1,2-Dichloropropane	16.72	403	146487	150.96	UG/L	93
22)	cis-1,3-Dichloropropene	17.07	412	354647	155.94	UG/L	100
23)	Trichloroethene	17.65	427	178197	151.59	UG/L	100
24)	Dibromochloromethane	18.39	446	368354	158.13	UG/L	96
25)	1,1,2-Trichloroethane	18.47	448	152050	146.78	UG/L	90
26)	Benzene	18.08	438	341046	153.60	UG/L	91
27)	trans-1,3-Dichloropropene	18.43	447	151702	162.97	UG/L	100
28)	2-Chloroethylvinylether	18.47	448	44634	155.64	UG/L	100
29)	Bromoform	21.26	520	260931	164.20	UG/L	100
30)	*Chlorobenzene-d5	26.07	642	111393	50.00	UG/L	100
31)	4-Methyl-2-pentanone	21.65	530	140759	151.68	UG/L	100
32)	2-Hexanone	23.31	571	99498	145.93	UG/L	100
33)	Tetrachloroethene	23.66	580	143495	147.74	UG/L	89
34)	1,1,2,2-Tetrachloroethane	23.70	581	250496	154.14	UG/L	100
35)	Toluene	24.94	613	232432	141.02	UG/L	98
36)	Toluene-d8	24.75	608	141728	51.47	UG/L	97
37)	Chlorobenzene	26.18	645	328169	152.19	UG/L	95
38)	Ethylbenzene	28.13	695	554650	150.96	UG/L	100
39)	Styrene	31.66	786	342417	155.19	UG/L	90
40)	Xylene (total)	32.75	814	480290	150.34	UG/L	99
41)	Bromofluorobenzene	30.46	755	120492	52.06	UG/L	76

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >D5236::D2 Quant Output File: ^D5236::D2
Name: VOA(TCL)STD 200UG/L
Misc: 2/19/88TL/MDS 5MLS DI+10UL IS/SS+20UL TCL/PC (249-100

Id File: ICD13::D2
Title: VOA ID FILE FOR WATERS ON HP-5970D (INT. CAL.)
Last Calibration: 880405 12:20

Operator ID: USER8
Quant Time: 880406 17:02
Injected at: 880219 15:39

QUANT REPORT

Operator ID: USER8 Quant Rev: 6 Quant Time: 880406 17:02
Output File: ^D5236::D2 Injected at: 880219 15:39
Data File: >D5236::D2 Dilution Factor: 1.00000
Name: VOA(TCL)STD 200UG/L
Misc: 2/19/88TL/MDS 5MLS DI+10UL IS/SS+20UL TCL/PC (249-100

ID File: ICD13::D2
Title: VOA ID FILE FOR WATERS ON HP-5970D (INT. CAL.)
Last Calibration: 880405 12:20

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	9.73	223	18424	50.00	UG/L	94
2)	Chloromethane	1.53	12	89667	199.14	UG/L	91
3)	Bromomethane	2.27	31	126946	186.55	UG/L	86
4)	Vinyl Chloride	2.89	47	89049	185.53	UG/L	98
5)	Chloroethane	3.79	70	55715	196.05	UG/L	95
6)	Methylene Chloride	5.96	126	101741	192.75	UG/L	95
7)	Acetone	6.89	150	27332	206.75	UG/L	79
8)	Carbon Disulfide	7.55	167	196553	196.70	UG/L	100
9)	1,1-Dichloroethene	9.15	208	166125	196.93	UG/L	87
10)	1,1-Dichloroethane	10.58	245	169629	197.30	UG/L	96
11)	1,2-Dichloroethene (total)	11.44	267	82400	189.35	UG/L	85
12)	Chloroform	12.14	285	256948	204.01	UG/L	96
13)	1,2-Dichloroethane-d4	12.84	303	56347	60.47	UG/L	85
14)	1,2-Dichloroethane	12.95	306	219011	219.74	UG/L	96
15)	*1,4-Difluorobenzene	20.87	510	63117	50.00	UG/L	100
16)	2-Butanone	12.95	306	8404	56.12	UG/L	100
17)	1,1,1-Trichloroethane	14.19	338	260096	58.79	UG/L	80
18)	Carbon Tetrachloride	14.62	349	254805	61.87	UG/L	82
19)	Vinyl Acetate	14.97	358	169793	65.33	UG/L	100
20)	Bromodichloromethane	15.36	368	283484	62.86	UG/L	93
21)	1,2-Dichloropropane	16.72	403	97669	206.02	UG/L	93
22)	cis-1,3-Dichloropropene	17.07	412	230020	207.02	UG/L	100
23)	Trichloroethene	17.65	427	116198	202.33	UG/L	100
24)	Dibromochloromethane	18.39	446	252496	221.86	UG/L	99
25)	1,1,2-Trichloroethane	18.46	448	108307	214.00	UG/L	95
26)	Benzene	18.12	439	210434	193.99	UG/L	91
27)	trans-1,3-Dichloropropene	18.43	447	98852	217.37	UG/L	100
28)	2-Chloroethylvinylether	18.46	448	30933	220.78	UG/L	100
29)	Bromoform	21.26	520	185120	238.44	UG/L	100
30)	*Chlorobenzene-d5	26.07	644	57160	50.00	UG/L	100
31)	4-Methyl-2-pentanone	21.65	530	104576	219.61	UG/L	100
32)	2-Hexanone	23.28	572	76703	219.23	UG/L	100
33)	Tetrachloroethene	23.67	582	94073	188.75	UG/L	91
34)	1,1,2,2-Tetrachloroethane	23.71	583	180361	216.29	UG/L	100
35)	Toluene	24.95	615	155477	183.83	UG/L	93
36)	Toluene-d8	24.75	610	71354	50.50	UG/L	87
37)	Chlorobenzene	26.19	647	213552	193.00	UG/L	95
38)	Ethylbenzene	28.13	697	368665	195.54	UG/L	100
39)	Styrene	31.67	788	226083	199.69	UG/L	88
40)	Xylene (total)	32.75	816	327447	199.75	UG/L	98
41)	Bromofluorobenzene	30.46	757	64071	53.94	UG/L	79

* Compound is ISTD

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Instrument ID: 7001D Calibration Date: 4/ 8/88 Time: 8:50

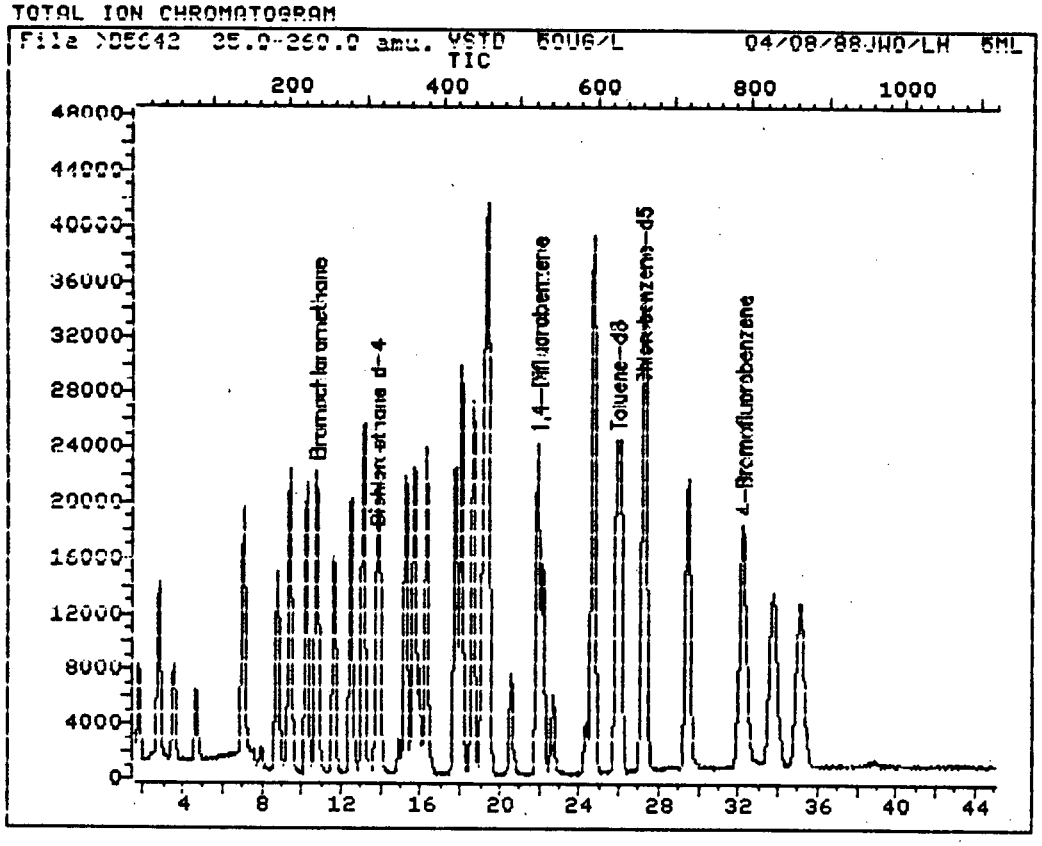
Lab File ID: D5642 Init. Calib. Date(s): 2/19/88 2/19/88

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

Min RRF50 for SPCC(#) = .300 (0.250 for Bromoform) Max %D for CCC(*) is 25.0%

COMPOUND		RRF	RRF50	%D
Chloromethane	#	1.222	.869	28.9 #
Bromomethane		1.847	1.215	34.2
Vinyl Chloride	*	1.303	1.225	5.9 *
Chloroethane		.771	.798	3.5
Methylene Chloride		1.433	1.192	16.8
Acetone		.359	.325	9.4
Carbon Disulfide		2.712	3.824	41.0
1,1-Dichloroethene	*	2.289	2.299	.4 *
1,1-Dichloroethane	#	2.333	2.407	3.1 #
1,2-Dichloroethene (total)		1.181	1.225	3.7
Chloroform	*	3.418	3.023	11.5 *
1,2-Dichloroethane		2.705	1.903	29.7
2-Butanone		.035	.021	41.8
1,1,1-Trichloroethane		1.037	.696	32.9
Carbon Tetrachloride		.962	.710	26.2
Vinyl Acetate		.602	.576	4.3
Bromodichloromethane		1.054	.819	22.3
1,2-Dichloropropane	*	.376	.403	7.3 *
cis-1,3-Dichloropropene		.880	.861	2.1
Trichloroethene		.455	.484	6.4
Dibromochloromethane		.902	.669	25.8
1,1,2-Trichloroethane		.401	.326	18.8
Benzene		.859	.893	4.0
trans-1,3-Dichloropropene		.360	.317	11.9
Bromoform	#	.615	.445	27.7 #
4-Methyl-2-pentanone		.416	.369	11.4
2-Hexanone		.313	.264	15.6
Tetrachloroethene		.436	.572	31.3
1,1,2,2-Tetrachloroethane	#	.729	.517	29.1 #
Toluene	*	.740	.742	.3 *
Chlorobenzene	#	.968	.994	2.7 #
Ethylbenzene	*	1.649	1.601	2.9 *
Styrene		.990	.986	.5
Xylene (total)		1.434	1.382	3.6
Toluene-d8		1.236	1.235	.1
Bromofluorobenzene		1.039	.977	6.0
1,2-Dichloroethane-d4		2.529	1.662	34.3

TOTAL ION CHROMATOGRAM



Data File: >D5642::D3 Quant Output File: ^D5642::Q3
Name: VSTD 50UG/L
Misc: 04/08/88JWO/LH 5ML DI+10UL IS/SS+5UL TCL/PC (249-106-

Id File: ICD13::D2
Title: VOA ID FILE FOR WATERS ON HP-5970D (INT. CAL.)
Last Calibration: 880425 12:06

Operator ID: USER8
Quant Time: 880502 17:19
Injected at: 880408 08:50

QUANT REPORT

Operator ID: USER8 Quant Rev: 6 Quant Time: 880502 17:19
Output File: ^D5642::Q3 Injected at: 880408 08:50
Data File: >D5642::D3 Dilution Factor: 1.00000
Name: VSTD 50UG/L
Misc: 04/08/88JWO/LH 5ML DI+10UL IS/SS+5UL TCL/PC (249-106-

ID File: ICD13::D2
Title: VOA ID FILE FOR WATERS ON HP-5970D (INT. CAL.)
Last Calibration: 880425 12:06

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	10.76	236	38588	50.00	UG/L	98
2)	Chloromethane	1.80	5	33546	35.57	UG/L	93
3)	Bromomethane	2.77	30	46880	32.89	UG/L	86
4)	Vinyl Chloride	3.55	50	47289	47.04	UG/L	94
5)	Chloroethane	4.67	79	30797	51.74	UG/L	97
6)	Methylene Chloride	7.08	141	45979	41.59	UG/L	93
7)	Acetone	7.97	164	12544	45.31	UG/L	82
8)	Carbon Disulfide	8.78	185	147567	70.51	UG/L	100
9)	1,1-Dichloroethene	10.26	223	88706	50.21	UG/L	93
10)	1,1-Dichloroethane	11.62	258	92868	51.57	UG/L	95
11)	1,2-Dichloroethene (total)	12.51	281	47270	51.86	UG/L	86
12)	Chloroform	13.13	297	116662	44.23	UG/L	95
13)	1,2-Dichloroethane-d4	13.79	314	64122	32.86	UG/L	97
14)	1,2-Dichloroethane	13.90	317	73419	35.17	UG/L	96
15)	*1,4-Difluorobenzene	21.93	524	120399	50.00	UG/L	100
16)	2-Butanone	13.90	317	2481	29.11	UG/L	100
17)	1,1,1-Trichloroethane	15.22	351	83738	33.54	UG/L	74
18)	Carbon Tetrachloride	15.65	362	85499	36.90	UG/L	86
19)	Vinyl Acetate	15.92	369	69349	47.86	UG/L	100
20)	Bromodichloromethane	16.31	379	98591	38.85	UG/L	91
21)	1,2-Dichloropropane	17.71	415	48497	53.63	UG/L	92
22)	cis-1,3-Dichloropropene	18.02	423	103717	48.94	UG/L	100
23)	Trichloroethene	18.64	439	58266	53.19	UG/L	100
24)	Dibromochloromethane	19.30	456	80543	37.10	UG/L	98
25)	1,1,2-Trichloroethane	19.41	459	39217	40.62	UG/L	93
26)	Benzene	19.14	452	107560	51.98	UG/L	92
27)	trans-1,3-Dichloropropene	19.41	459	38218	44.06	UG/L	100
28)	2-Chloroethylvinylether	19.41	459	9541	35.70	UG/L	100
29)	Bromoform	22.17	530	53572	36.17	UG/L	100
30)	*Chlorobenzene-d5	27.17	659	88934	50.00	UG/L	100
31)	4-Methyl-2-pentanone	22.67	543	32806	44.30	UG/L	100
32)	2-Hexanone	24.34	586	23489	42.21	UG/L	100
33)	Tetrachloroethene	24.69	595	50912	65.65	UG/L	94
34)	1,1,2,2-Tetrachloroethane	24.65	594	46023	35.47	UG/L	100
35)	Toluene	26.09	631	66019	50.17	UG/L	99
36)	Toluene-d8	25.89	626	109793	49.95	UG/L	95
37)	Chlorobenzene	27.33	663	88369	51.33	UG/L	97
38)	Ethylbenzene	29.46	718	142386	48.54	UG/L	100
39)	Styrene	33.77	829	87652	49.76	UG/L	90
40)	Xylene (total)	35.09	863	122922	48.19	UG/L	94
41)	Bromofluorobenzene	32.21	789	86888	47.02	UG/L	93

* Compound is ISTD

8A
VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Lab File ID (Standard): D5642 Date Analyzed: 4/ 8/88

Instrument ID: 7001D Time Analyzed: 8:50

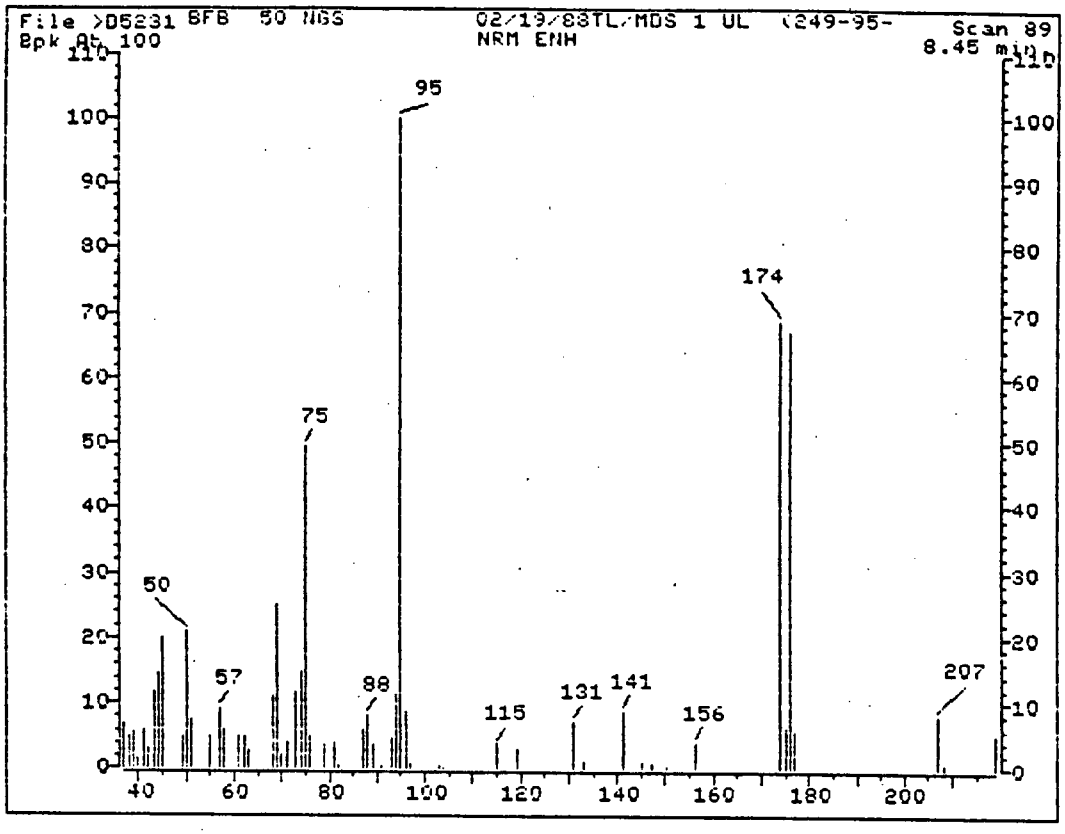
Matrix:(soil/water) WATER Level:(low/med): LOW Column:(pack/cap) PACK

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	38588.	10.76	120399.	21.93	88934.	27.17
	UPPER LIMIT	77176.	11.26	240798.	22.43	177868.	27.67
	LOWER LIMIT	19294.	10.26	60200.	21.43	44467.	26.67
	EPA SAMPLE NO.						
1	VBLK	47259.	10.75	149699.	21.92	108144.	27.20
2	BQ692	40232.	10.75	131645.	21.96	93132.	27.19
3	BQ691	40815.	10.77	129659.	21.94	95565.	27.22
4	BQ691MS	42861.	10.78	86065.	21.91	63795.	27.19
5	BQ691MSD	38943.	10.75	130994.	21.92	95646.	27.20
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

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

UPPER LIMIT = + 100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag internal standard area values with an asterisk



>D5231 BFB 50 NGS 02/19/88TL/MDS 1 UL (249-95-5)
89 NRM ENH

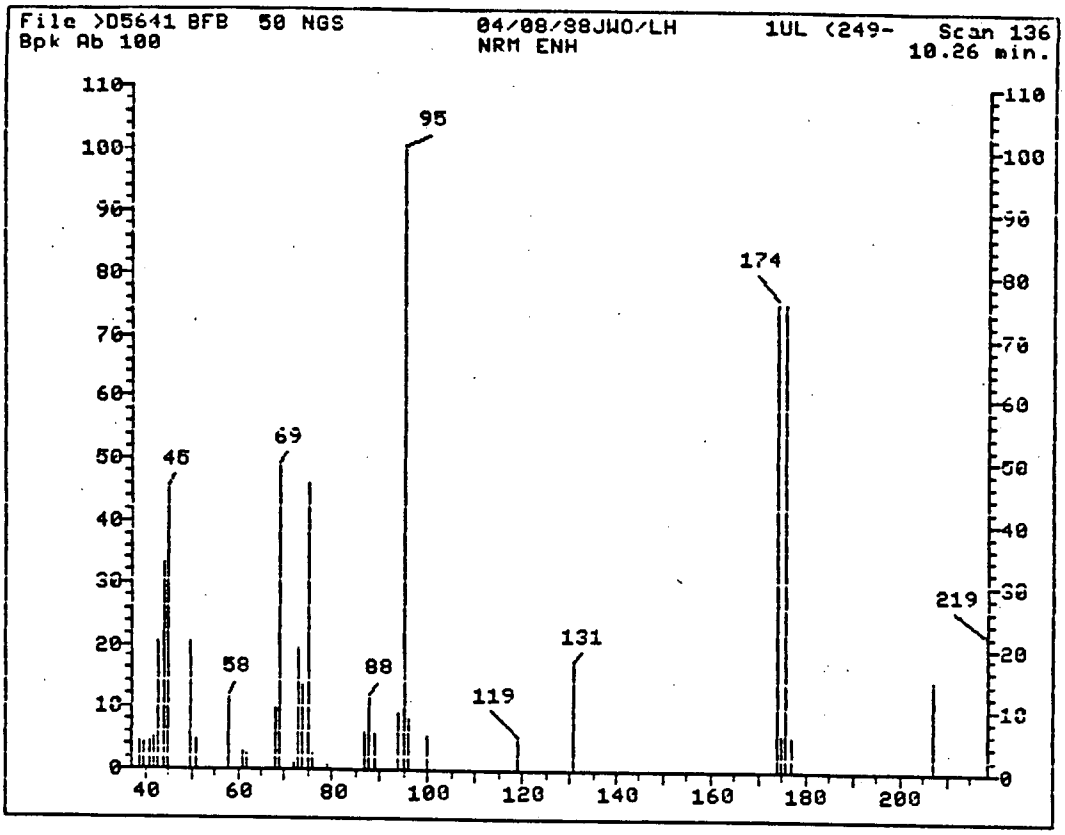
File: >D5231 Scan #: 89 Retn. time: 8.45

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.90	6.75	55.05	4.78	74.05	14.97	94.10	11.39	145.15	1.04
38.10	4.94	57.05	9.10	75.05	49.51	95.00	100.00	147.05	.58
39.10	5.43	57.95	5.71	76.05	4.99	96.10	8.76	150.05	.35
40.00	1.50	60.95	4.74	78.95	3.49	97.10	.72	156.20	4.00
41.00	5.91	61.95	4.76	80.95	4.00	103.00	.32	174.00	68.74
42.00	3.05	63.05	2.61	82.05	.30	104.00	.23	175.20	6.15
43.10	11.48	68.05	11.09	87.05	5.91	115.10	3.79	176.10	67.03
44.00	14.42	69.05	25.21	88.00	8.11	119.10	3.10	177.00	5.87
45.00	19.87	70.05	1.96	89.10	3.74	131.05	7.28	207.15	8.25
49.10	5.04	71.05	3.79	91.00	.51	133.15	.97	208.05	.81
50.10	20.79	73.05	11.46	93.10	4.48	141.15	8.87	219.15	5.15
51.00	7.37								

MS data file header from : >D5231

Sample: BFB 50 NGS Operator: USER8 MS 2/19/88 10:47
Misc : 02/19/88TL/MDS 1 UL (249-95-5)
Sys. #: 1 MS model: 70 SW/HW rev.: CA ALS # : 0
Method file: BFB001 Tuning file: MTUOD No. of extra records: 1
Source temp.: 0 Analyzer temp.: 200 Transfer line temp. : 20

Chromatographic temperatures :	220.	225.	0.	0.	0.
Chromatographic times, min. :	10.0	10.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	5.0	0.0	0.0	0.0	0.0



>D5641 BFB 50 NGS 04/08/88JWO/LH 1UL (249-95-5)
136 NRM ENH

File: >D5641 Scan #: 136 Retn. time: 10.26

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.90	4.317	49.90	20.381	72.00	.897	87.85	11.382	130.95	16.667
38.90	4.303	50.90	4.682	73.00	19.386	88.95	5.775	173.90	75.301
39.80	4.079	57.90	11.382	73.90	13.611	93.85	9.195	174.90	5.621
40.90	4.345	60.90	2.775	74.90	46.187	94.95	100.000	175.90	75.245
41.90	5.172	61.90	2.467	75.90	2.397	95.95	8.004	176.90	5.495
42.90	20.381	67.90	9.630	78.80	.561	99.95	5.467	206.95	14.312
43.90	32.913	68.90	48.640	86.85	6.210	118.95	4.598	218.95	21.110
44.90	44.884								

MS data file header from : >D5641

Sample: BFB 50 NGS Operator: USER8 MS 4/08/88 7:51
Misc : 04/08/88JWO/LH 1UL (249-95-5)
Sys. #: 1 MS model: 70 SW/HW rev.: IA ALS # : 0
Method file: BFB001 Tuning file: MTUOD No. of extra records: 2
Source temp.: 0 Analyzer temp.: 200 Transfer line temp. : 200

Chromatographic temperatures :	220.	225.	0.	0.	0.
Chromatographic times, min. :	10.0	10.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	5.0	0.0	0.0	0.0	0.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

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

Sample wt/vol: 5. (g/mL) ML Lab File ID: D5643

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec.100. Date Analyzed: 4/ 8/88

Column: (pack/cap) PACK Dilution Factor: 1.00

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	1.	J
67-64-1	Acetone	22.	
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	3.	J
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

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

Sample wt/vol: 5. (g/mL) ML Lab File ID: D5643

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec.100. Date Analyzed: 4/ 8/88

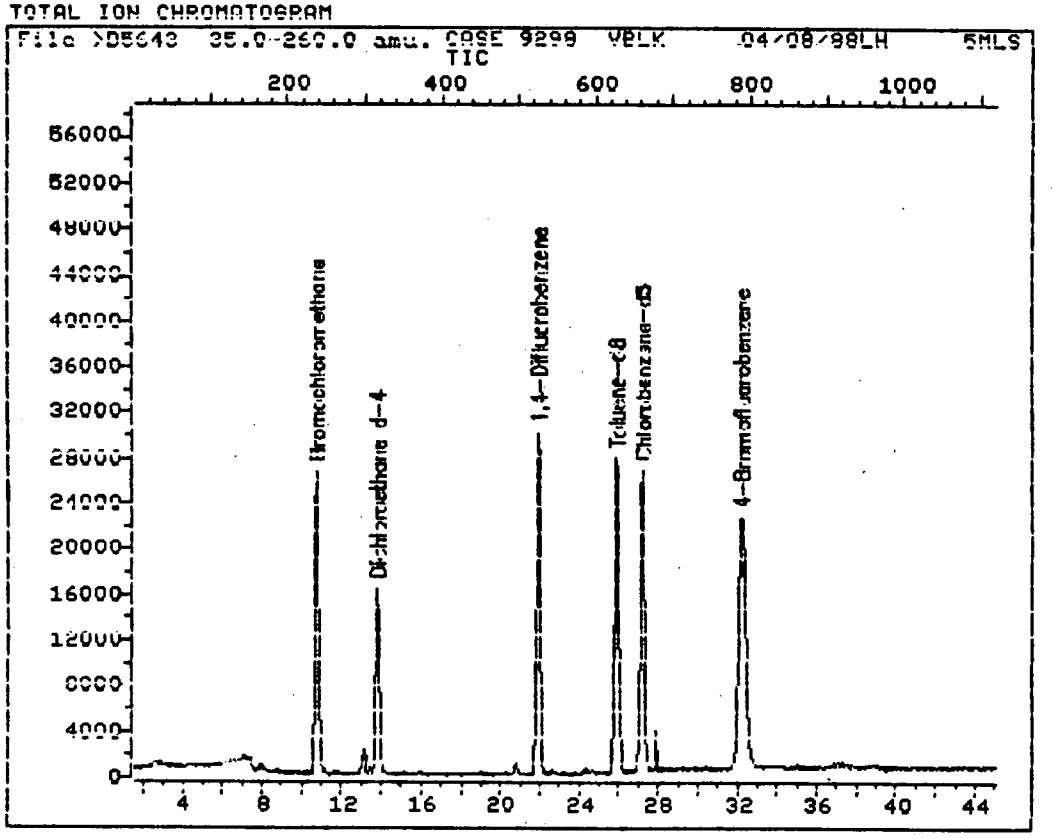
Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

TOTAL ION CHROMATOGRAM



Data File: >D5643::D3 Quant Output File: ^D5643::Q3
Name: CASE 9298 VBLK
Misc: 04/08/88LH 5MLS DI + 10ULS IS/SS

Id File: COND13::D2
Title: VOA ID FILE FOR WATERS ON HP-5970D (CONT.CAL.)
Last Calibration: 880503 12:03

Operator ID: USER8
Quant Time: 880503 12:10
Injected at: 880408 10:12

QUANT REPORT

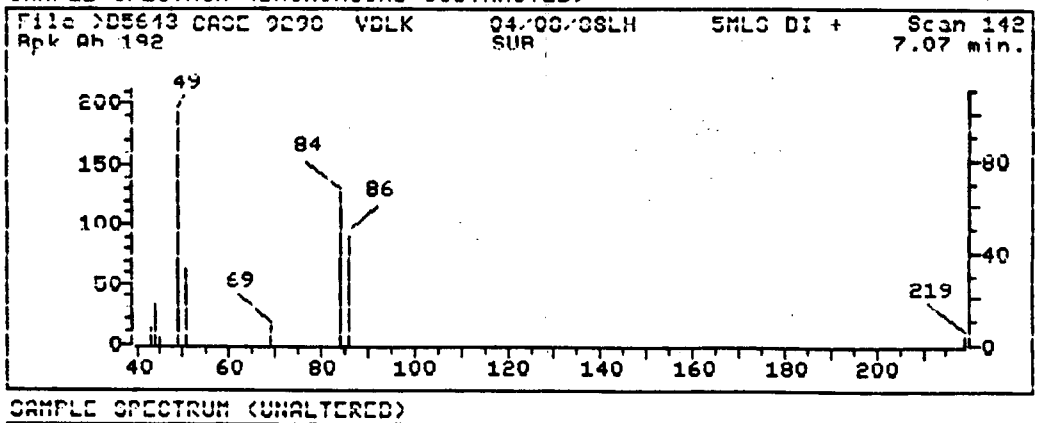
Operator ID: USER8 Quant Rev: 6 Quant Time: 880503 12:10
Output File: ^D5643::Q3 Injected at: 880408 10:12
Data File: >D5643::D3 Dilution Factor: 1.00000
Name: CASE 9298 VBLK
Misc: 04/08/88LH 5MLS DI + 10ULS IS/SS

ID File: COND13::D2
Title: VOA ID FILE FOR WATERS ON HP-5970D (CONT.CAL.)
Last Calibration: 880503 12:03

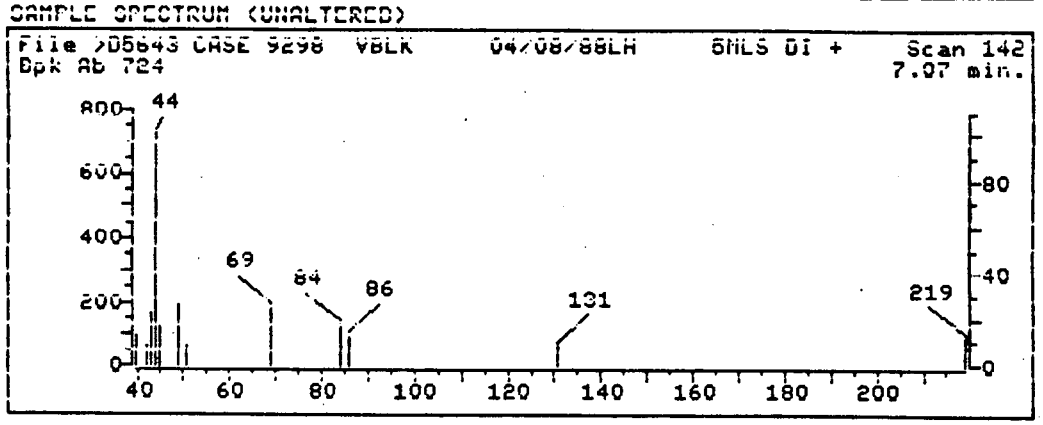
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.75	128.0	47259	50.00	UG/L	98
6)	Methylene Chloride	7.07	84.0	1135	1.01	UG/L	92
7)	Acetone	8.00	43.0	6790	22.10	UG/L	76
12)	Chloroform	13.12	83.0	9953	3.48	UG/L	97
13)	1,2-Dichloroethane-d4	13.82	65.0	77085	49.08	UG/L	95
15)	*1,4-Difluorobenzene	21.92	114.0	149699	50.00	UG/L	100
30)	*Chlorobenzene-d5	27.20	117.0	108144	50.00	UG/L	100
36)	Toluene-d8	25.88	98.0	135852	50.88	UG/L	95
41)	Bromofluorobenzene	32.19	95.0	104461	49.43	UG/L	97

* Compound is ISTD

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

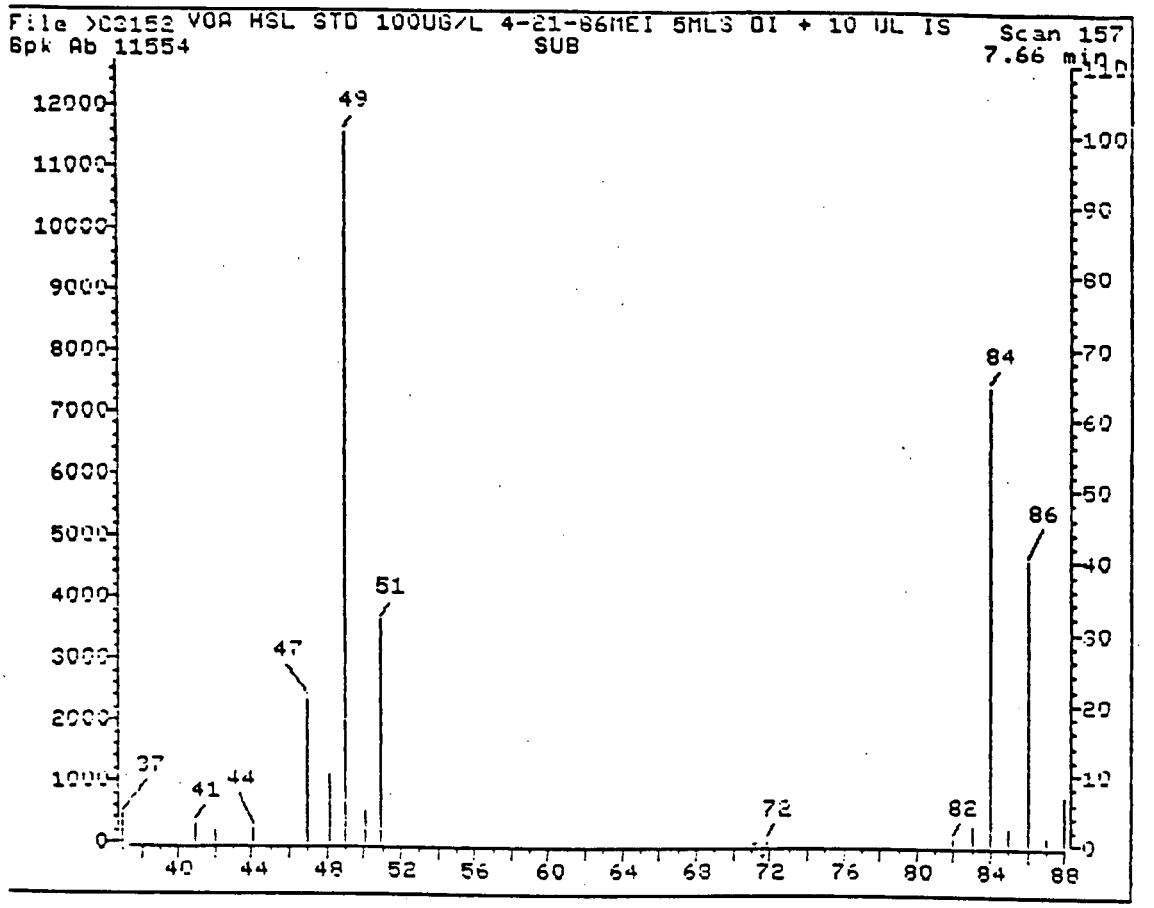


SAMPLE SPECTRUM (UNALTERED)



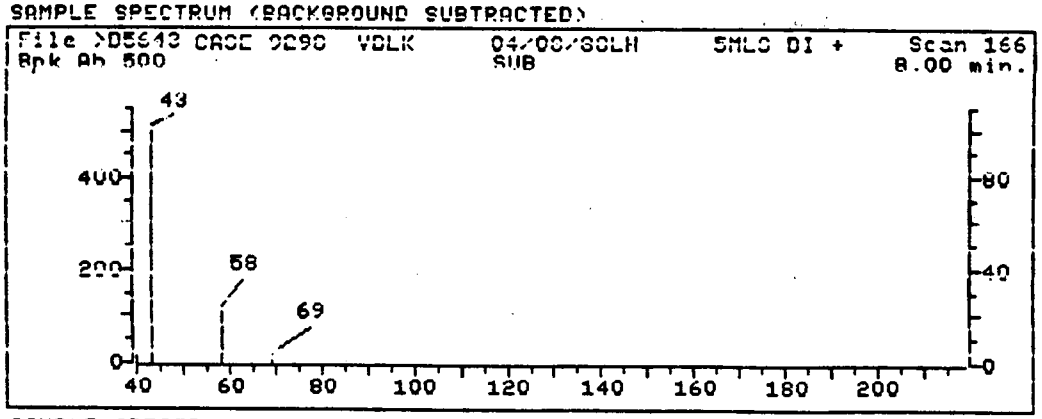
Data File: >D5643::D3 Quant Output File: ^D5643::Q3
Name: CASE 9298 VBLK
Misc: 04/08/88LH 5MLS DI + 10ULS IS/SS
Quant Time: 880503 12:10 Quant ID File: COND13::D2
Injected at: 880408 10:12 Last Calibration: 880503 12:03

Compound No: 6
Compound Name: Methylene Chloride
Scan Number: 142
Retention Time: 7.07 min.
Quant Ion: 84.0
Area: 1135
Concentration: 1.01 UG/L
q-value: 92

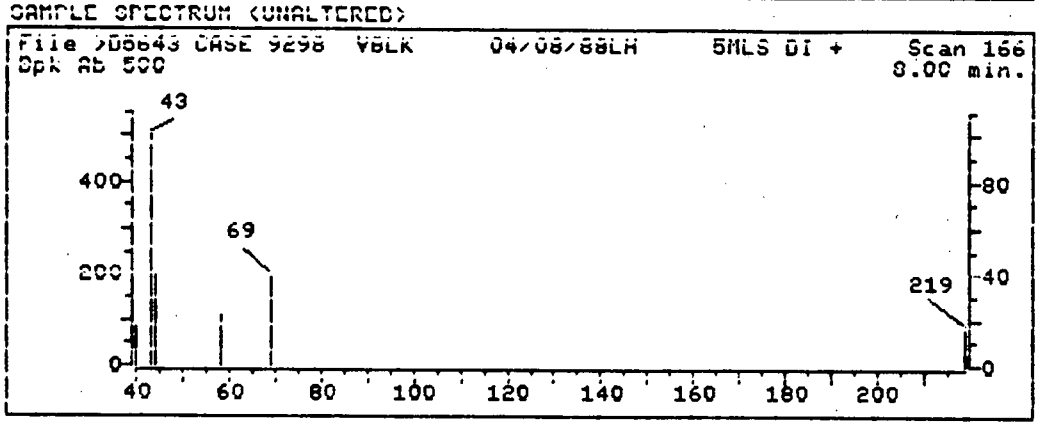


METHYLENE CHLORIDE STANDARD SPECTRA

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

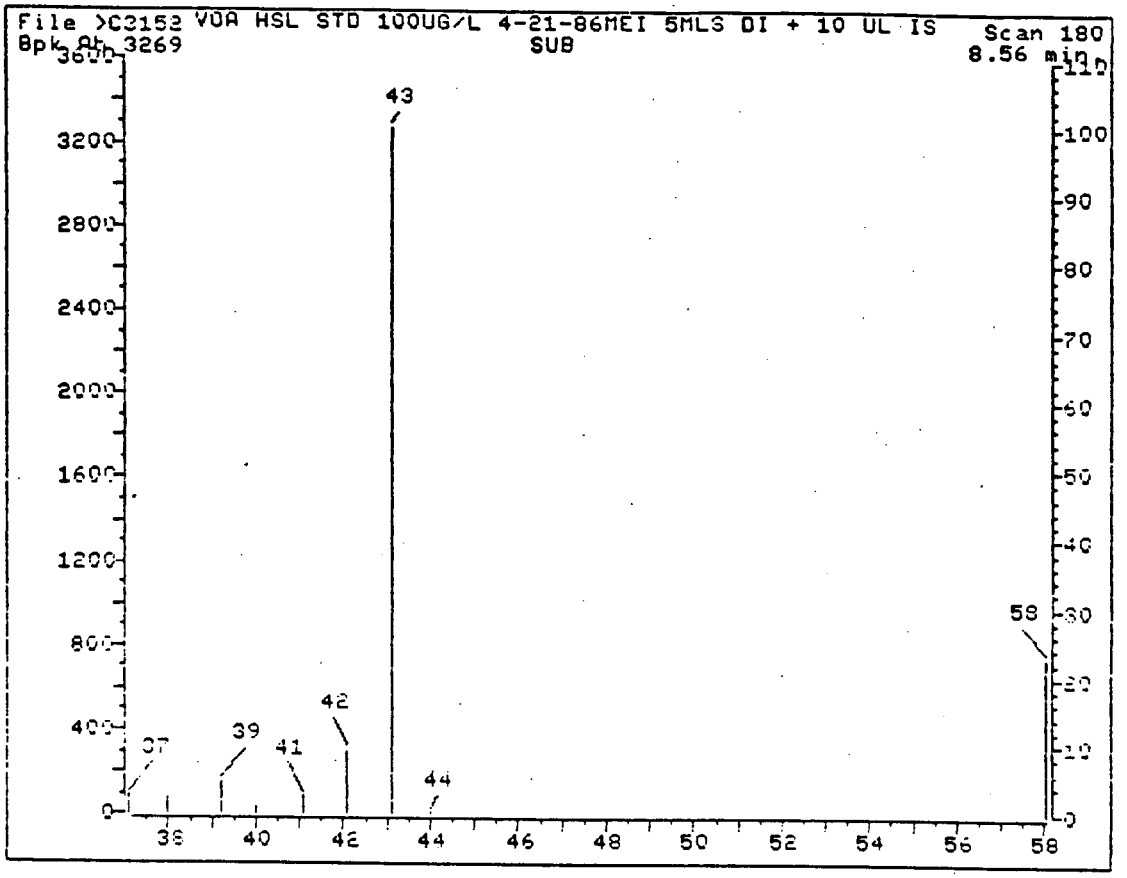


SAMPLE SPECTRUM (UNALTERED)



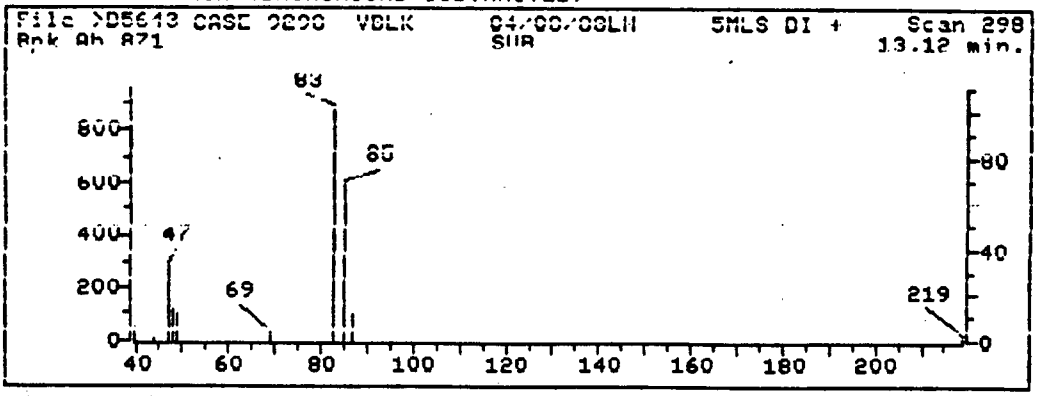
Data File: >D5643::D3 Quant Output File: ^D5643::Q3
Name: CASE 9298 VBLK
Misc: 04/08/88LH 5MLS DI + 10ULS IS/SS
Quant Time: 880503 12:10 Quant ID File: COND13::D2
Injected at: 880408 10:12 Last Calibration: 880503 12:03

Compound No: 7
Compound Name: Acetone
Scan Number: 166
Retention Time: 8.00 min.
Quant Ion: 43.0
Area: 6790
Concentration: 22.10 UG/L
q-value: 76

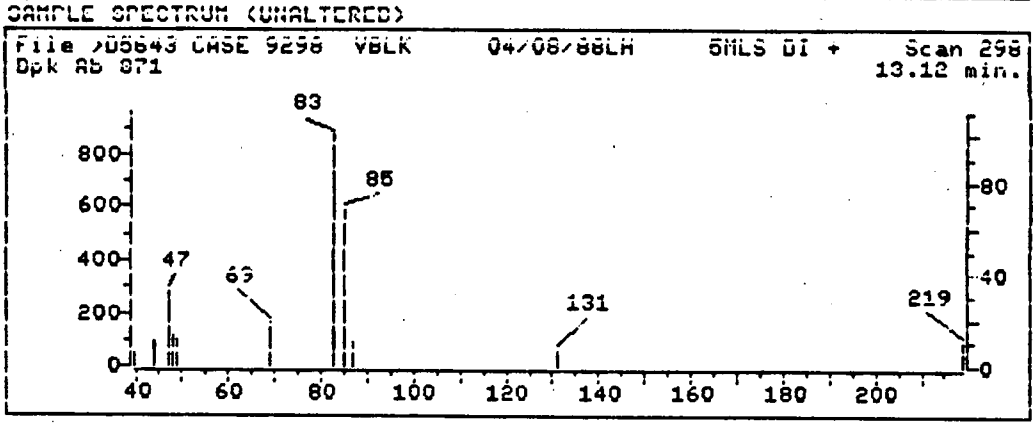


ACETONE STANDARD SPECTRA

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

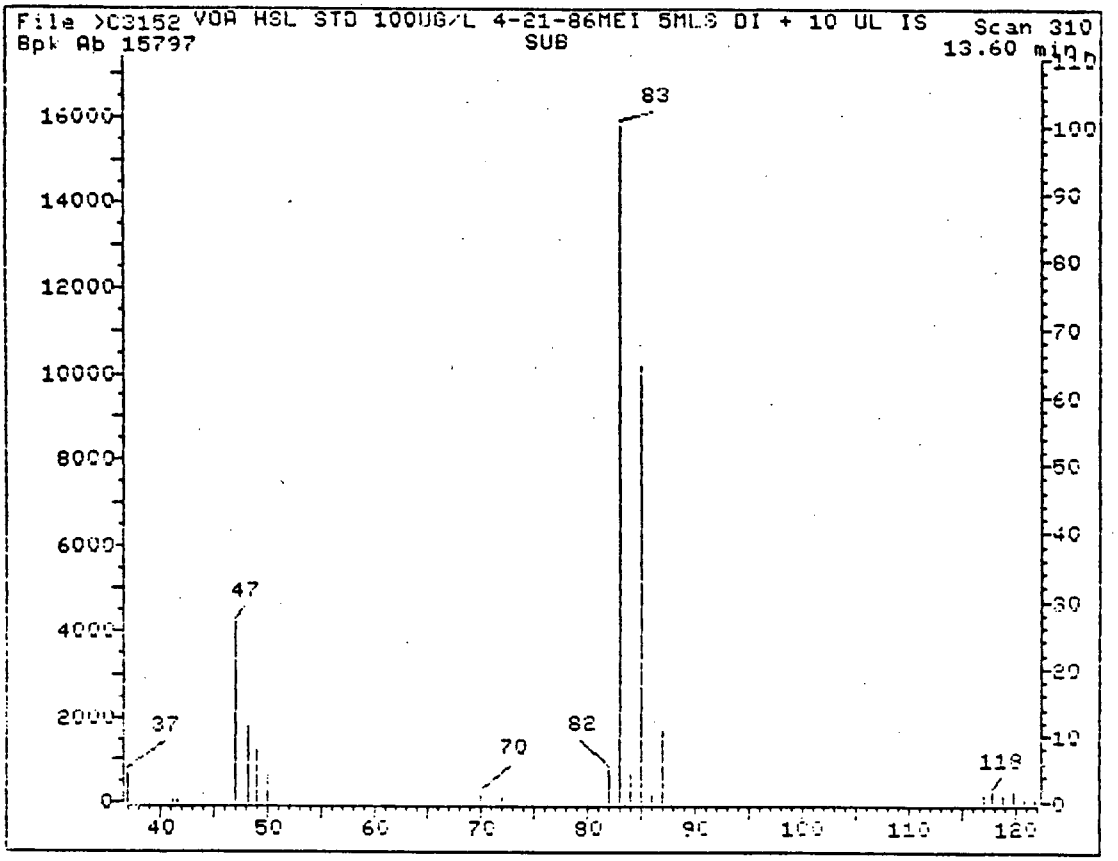


SAMPLE SPECTRUM (UNALTERED)



Data File: >D5643::D3 Quant Output File: ^D5643::Q3
Name: CASE 9298 VBLK
Misc: 04/08/88LH 5MLS DI + 10ULS IS/SS
Quant Time: 880503 12:10 Quant ID File: COND13::D2
Injected at: 880408 10:12 Last Calibration: 880503 12:03

Compound No: 12
Compound Name: Chloroform
Scan Number: 298
Retention Time: 13.12 min.
Quant Ion: 83.0
Area: 9953
Concentration: 3.48 UG/L
q-value: 97



CHLOROFORM STANDARD SPECTRA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BQ691MS

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Matrix: (soil/water) WATER Lab Sample ID: 17265

Sample wt/vol: 5. (g/mL) ML Lab File ID: D5646

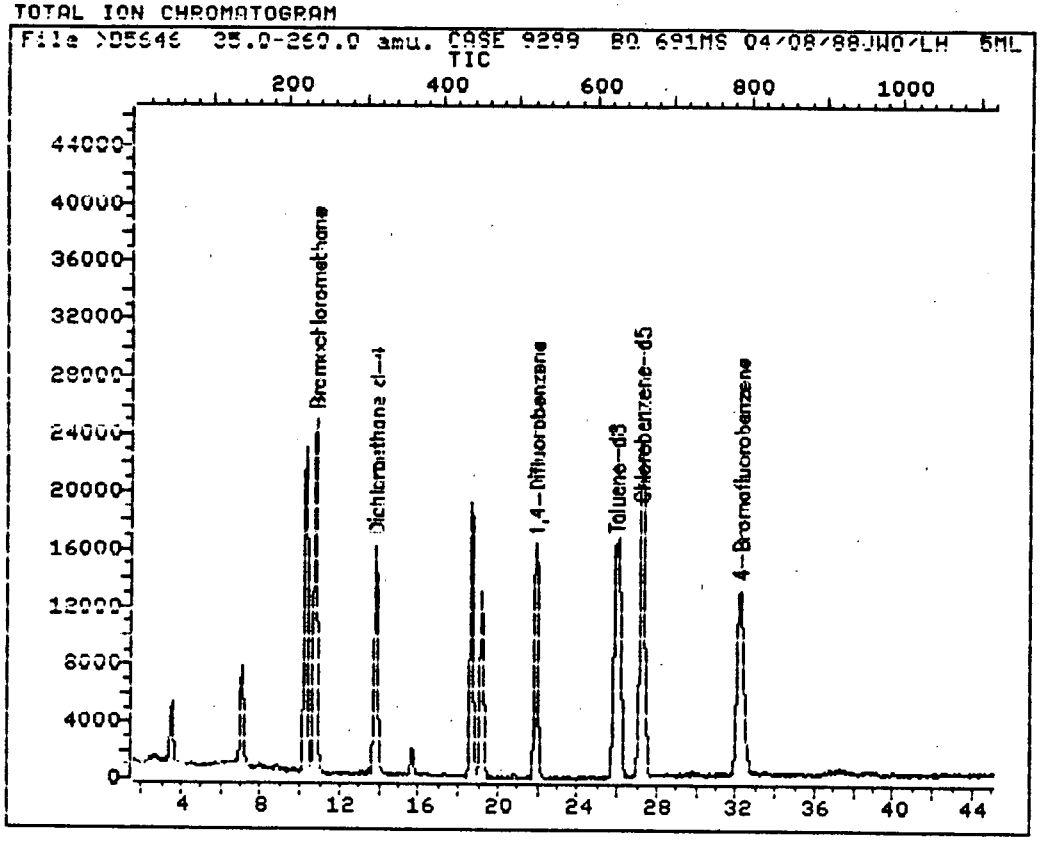
Level: (low/med) LOW Date Received: 4/ 8/88

% Moisture: not dec.100. Date Analyzed: 4/ 8/88

Column: (pack/cap) PACK Dilution Factor: 1.00

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	18.	B
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	1.	J
75-35-4	1,1-Dichloroethene	49.	
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	3.	J
78-93-3	2-Butanone	14.	
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	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	52.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	44.	
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	50.	
108-90-7	Chlorobenzene	49.	
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

TOTAL ION CHROMATOGRAM



Data File: >D5646::D3 Quant Output File: ^D5646::Q3
Name: CASE 9298 BQ 691MS
Misc: 04/08/88JWO/LH 5ML SAMPLE + 10 ULS IS/SS/MS

Id File: COND13::D2
Title: VOA ID FILE FOR WATERS ON HP-5970D (CONT.CAL.)
Last Calibration: 880503 12:03

Operator ID: USER8
Quant Time: 880503 12:14
Injected at: 880408 13:41

QUANT REPORT

Operator ID: USER8 Quant Rev: 6 Quant Time: 880503 12:14
Output File: ^D5646::Q3 Injected at: 880408 13:41
Data File: >D5646::D3 Dilution Factor: 1.00000
Name: CASE 9298 BQ 691MS
Misc: 04/08/88JWO/LH 5ML SAMPLE + 10 ULS IS/SS/MS

ID File: COND13::D2
Title: VOA ID FILE FOR WATERS ON HP-5970D (CONT.CAL.)
Last Calibration: 880503 12:03

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	10.78	236	42861	50.00	UG/L	97
6)	Methylene Chloride	7.05	140	17958	17.58	UG/L	95
8)	Carbon Disulfide	8.84	186	4349	1.33	UG/L	100
9)	1,1-Dichloroethene	10.27	223	95624	48.53	UG/L	94
13)	1,2-Dichloroethane-d4	13.80	314	74186	52.08	UG/L	92
14)	1,2-Dichloroethane	13.92	317	5610	3.44	UG/L	90
15)	*1,4-Difluorobenzene	21.91	523	86065	50.00	UG/L	100
16)	2-Butanone	13.88	316	505	14.24	UG/L	100
23)	Trichloroethene	18.65	439	43535	52.26	UG/L	100
26)	Benzene	19.16	452	66997	43.57	UG/L	93
30)	*Chlorobenzene-d5	27.19	659	63795	50.00	UG/L	100
35)	Toluene	26.10	631	47323	49.96	UG/L	99
36)	Toluene-d8	25.91	626	76261	48.41	UG/L	96
37)	Chlorobenzene	27.34	663	61507	48.51	UG/L	96
41)	Bromofluorobenzene	32.23	789	63952	51.30	UG/L	95

* Compound is ISTD

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BQ691MSD

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Matrix: (soil/water) WATER Lab Sample ID: 17265

Sample wt/vol: 5. (g/mL) ML Lab File ID: D5651

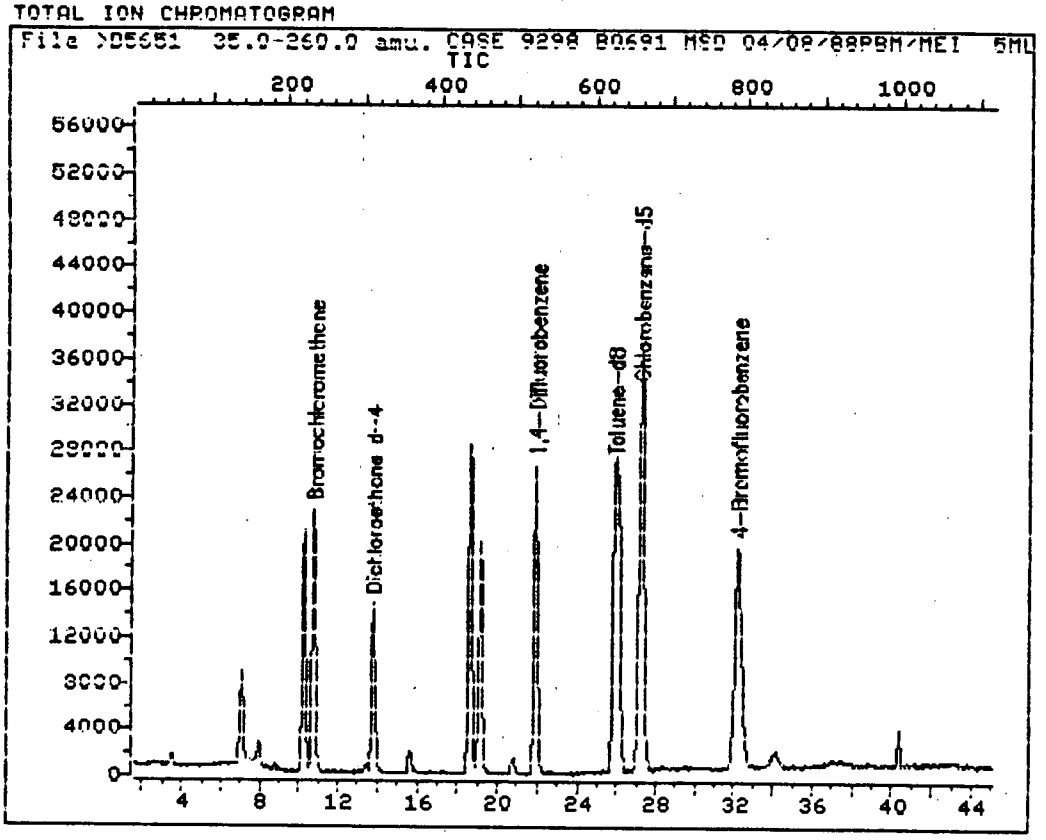
Level: (low/med) LOW Date Received: 4/ 8/88

% Moisture: not dec.100. Date Analyzed: 4/ 8/88

Column: (pack/cap) PACK Dilution Factor: 1.00

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	22.	B
67-64-1	Acetone	71.	B
75-15-0	Carbon Disulfide	1.	J
75-35-4	1,1-Dichloroethene	49.	
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	3.	J
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	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	48.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	43.	
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-pentanone	2.	J
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	49.	
108-90-7	Chlorobenzene	47.	
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

TOTAL ION CHROMATOGRAM



Data File: >D5651::D3 Quant Output File: ^D5651::Q3
Name: CASE 9298 BQ691 MSD
Misc: 04/08/88PBM/MEI 5MLS SAMPLE + 10ULS IS/SS/MS

Id File: COND13::D2
Title: VOA ID FILE FOR WATERS ON HP-5970D (CONT.CAL.)
Last Calibration: 880503 12:03

Operator ID: USER8
Quant Time: 880503 12:16
Injected at: 880408 18:59

QUANT REPORT

Operator ID: USER8 Quant Rev: 6 Quant Time: 880503 12:16
Output File: ^D5651::Q3 Injected at: 880408 18:59
Data File: >D5651::D3 Dilution Factor: 1.00000
Name: CASE 9298 BQ691 MSD
Misc: 04/08/88PBM/MEI 5MLS SAMPLE + 10ULS IS/SS/MS

ID File: COND13::D2
Title: VOA ID FILE FOR WATERS ON HP-5970D (CONT.CAL.)
Last Calibration: 880503 12:03

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	10.75	236	38943	50.00	UG/L	98
6)	Methylene Chloride	7.07	141	20079	21.64	UG/L	92
7)	Acetone	7.96	164	18038	71.24	UG/L	76
8)	Carbon Disulfide	8.81	186	4091	1.37	UG/L	100
9)	1,1-Dichloroethene	10.25	223	88489	49.42	UG/L	93
13)	1,2-Dichloroethane-d4	13.78	314	68431	52.87	UG/L	93
14)	1,2-Dichloroethane	13.93	318	4946	3.34	UG/L	97
15)	*1,4-Difluorobenzene	21.92	524	130994	50.00	UG/L	100
23)	Trichloroethene	18.63	439	60876	48.01	UG/L	100
26)	Benzene	19.17	453	100438	42.91	UG/L	90
30)	*Chlorobenzene-d5	27.20	660	95646	50.00	UG/L	100
31)	4-Methyl-2-pentanone	22.70	544	1110	1.57	UG/L	100
35)	Toluene	26.07	631	69323	48.82	UG/L	99
36)	Toluene-d8	25.88	626	122885	52.03	UG/L	97
37)	Chlorobenzene	27.32	663	89384	47.03	UG/L	96
41)	Bromofluorobenzene	32.20	789	93205	49.87	UG/L	98

* Compound is ISTD

2C

WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	OTHER	TOT OUT
1	SBLK	64	68	110	34	35	55		0
2	BQ691	64	66	95	35	37	70		0
3	BQ691MS	69	73	105	46	36	62		0
4	BQ691MSD	66	72	100	50	41	71		0
5									
6									
7									
8									
9									
10									
11									
12									
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29									
30									

	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- 94)
S5 (2FP) = 2-Fluorophenol	(21-100)
S6 (TBP) = 2,4,6-Tribromophenol	(10-123)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

3C

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Matrix Spike - EPA Sample No.: BQ691

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE CONCENTRATION (UG/L)	MS CONCENTRATION (UG/L)	MS % REC #	QC LIMITS REC.
Phenol	400.	0.	156.	39.	12- 89
2-Chlorophenol	400.	0.	153.	38.	27-123
1,4-Dichlorobenzene	200.	0.	63.	31. *	36- 97
N-Nitroso-di-n-prop.(1)	200.	0.	133.	66.	41-116
1,2,4-Trichlorobenzene	200.	0.	71.	36. *	39- 98
4-Chloro-3-methylphenol	400.	0.	175.	44.	23- 97
Acenaphthene	200.	0.	102.	51.	46-118
4-Nitrophenol	400.	0.	89.	22.	10- 80
2,4-Dinitrotoluene	200.	0.	143.	71.	24- 96
Pentachlorophenol	400.	0.	129.	32.	9-103
Pyrene	200.	0.	147.	74.	26-127

COMPOUND	SPIKE ADDED (UG/L)	MSD CONCENTRATION (UG/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	400.	166.	42.	7.	42	12- 89
2-Chlorophenol	400.	168.	42.	9.	40	27-123
1,4-Dichlorobenzene	200.	67.	34. *	7.	28	36- 97
N-Nitroso-di-n-prop.(1)	200.	126.	63.	5.	38	41-116
1,2,4-Trichlorobenzene	200.	77.	39. *	9.	28	39- 98
4-Chloro-3-methylphenol	400.	193.	48.	10.	42	23- 97
Acenaphthene	200.	108.	54.	7.	31	46-118
4-Nitrophenol	400.	112.	28.	23.	50	10- 80
2,4-Dinitrotoluene	200.	154.	77.	8.	38	24- 96
Pentachlorophenol	400.	157.	39.	19.	50	9-103
Pyrene	200.	132.	66.	11.	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: 4 out of 22 outside limits

COMMENTS:

4B

SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Lab File ID: E3058 Lab Sample ID: BLANK

Date Extracted: 4/12/88 Extraction:(SepF/Cont/Sonc) SEPF

Date Analyzed: 4/20/88 Time Analyzed: 17:20

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

Instrument ID: 7002E

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	BQ691	17265	E3059	4/20/88
2	BQ691MS	17265	E3060	4/20/88
3	BQ691MSD	17265	E3061	4/20/88
4				
5				
6				
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29				
30				

COMMENTS:

5B

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

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Lab File ID: E0028 DFTPP Injection Date: 7/16/87

Instrument ID.: 7002E DFTPP Injection Time: 10:25

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	55.1
68	Less than 2.0% of mass 69	.0 (.0)1
69	Mass 69 relative abundance	62.2
70	Less than 2.0% of mass 69	.0 (.0)1
127	40.0 - 60.0% of mass 198	42.8
197	Less than 1.0% of mass 198	.0
198	Base peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	19.8
365	Greater than 1.00% of mass 198	3.0
441	Present, but less than mass 443	9.8
442	Greater than 40.0% of mass 198	70.1
443	17.0 - 23.0% of mass 442	13.2 (18.8)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSTD020		E0029	7/16/87	10:46
2	SSTD050		E0030	7/16/87	11:44
3	SSTD080		E0031	7/16/87	12:42
4	SSTD120		E0032	7/16/87	13:41
5	SSTD160		E0033	7/16/87	14:42
6	SSTD020		E0036	7/16/87	18:15
7	SSTD050		E0037	7/16/87	19:08
8	SSTD080		E0038	7/16/87	20:02
9	SSTD120		E0039	7/16/87	20:55
10	SSTD160		E0040	7/16/87	21:48
11					
12					
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16					
17					
18					
19					
20					
21					
22					

5B

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

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Lab File ID: E3055 DFTPP Injection Date: 4/20/88

Instrument ID.: 7002E DFTPP Injection Time: 14:18

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	60.0
68	Less than 2.0% of mass 69	.0 (.0)1
69	Mass 69 relative abundance	57.5
70	Less than 2.0% of mass 69	.0 (.0)1
127	40.0 - 60.0% of mass 198	41.5
197	Less than 1.0% of mass 198	.0
198	Base peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.5
275	10.0 - 30.0% of mass 198	23.1
365	Greater than 1.00% of mass 198	2.6
441	Present, but less than mass 443	13.0
442	Greater than 40.0% of mass 198	87.3
443	17.0 - 23.0% of mass 442	16.0 (18.3)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSTD050		E3056	4/20/88	14:58
2	SSTD050		E3057	4/20/88	15:56
3	SBLK	BLANK	E3058	4/20/88	17:20
4	BQ691	17265	E3059	4/20/88	18:18
5	BQ691MS	17265	E3060	4/20/88	19:12
6	BQ691MSD	17265	E3061	4/20/88	20:07
7					
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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BQ691

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Matrix: (soil/water) WATER Lab Sample ID: 17265

Sample wt/vol: 1000. (g/mL) ML Lab File ID: E3059

Level: (low/med) LOW Date Received: 4/ 8/88

% Moisture: not dec.100. dec. 0. Date Extracted: 4/12/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 4/20/88

GPC Cleanup: (Y/N) N pH: .0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10.	U
111-44-4	bis(2-Chloroethyl)ether	10.	U
95-57-8	2-Chlorophenol	10.	U
541-73-1	1,3-Dichlorobenzene	10.	U
106-46-7	1,4-Dichlorobenzene	10.	U
100-51-6	Benzyl alcohol	10.	U
95-50-1	1,2-Dichlorobenzene	10.	U
95-48-7	2-Methylphenol	10.	U
108-60-1	bis(2-Chloroisopropyl)ether	10.	U
106-44-5	4-Methylphenol	10.	U
621-64-7	N-Nitroso-di-n-propylamine	10.	U
67-72-1	Hexachloroethane	10.	U
98-95-3	Nitrobenzene	10.	U
78-59-1	Isophorone	10.	U
88-75-5	2-Nitrophenol	10.	U
105-67-9	2,4-Dimethylphenol	10.	U
65-85-0	Benzoic Acid	50.	U
111-91-1	bis(2-Chloroethoxy)methane	10.	U
120-83-2	2,4-Dichlorophenol	10.	U
120-82-1	1,2,4-Trichlorobenzene	10.	U
91-20-3	Naphthalene	10.	U
106-47-8	4-Chloroaniline	10.	U
87-68-3	Hexachlorobutadiene	10.	U
59-50-7	4-Chloro-3-methylphenol	10.	U
91-57-6	2-Methylnaphthalene	10.	U
77-47-4	Hexachlorocyclopentadiene	10.	U
88-06-2	2,4,6-Trichlorophenol	10.	U
95-95-4	2,4,5-Trichlorophenol	50.	U
91-58-7	2-Chloronaphthalene	10.	U
88-74-4	2-Nitroaniline	50.	U
131-11-3	Dimethylphthalate	10.	U
208-96-8	Acenaphthylene	10.	U
606-20-2	2,6-Dinitrotoluene	10.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BQ691

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Matrix: (soil/water) WATER Lab Sample ID: 17265

Sample wt/vol: 1000. (g/mL) ML Lab File ID: E3059

Level: (low/med) LOW Date Received: 4/ 8/88

% Moisture: not dec.100. dec. 0. Date Extracted: 4/12/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 4/20/88

GPC Cleanup: (Y/N) N pH: .0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50.	U
83-32-9	Acenaphthene	10.	U
51-28-5	2,4-Dinitrophenol	50.	U
100-02-7	4-Nitrophenol	50.	U
132-64-9	Dibenzofuran	10.	U
121-14-2	2,4-Dinitrotoluene	~~10.~~	~~U~~
84-66-2	Diethylphthalate	10.	U
7005-72-3	4-Chlorophenyl-phenylether	10.	U
86-73-7	Fluorene	10.	U
100-01-6	4-Nitroaniline	50.	U
534-52-1	4,6-Dinitro-2-methylphenol	50.	U
86-30-6	N-Nitrosodiphenylamine	10.	U
101-55-3	4-Bromophenyl-phenylether	10.	U
118-74-1	Hexachlorobenzene	10.	U
87-86-5	Pentachlorophenol	50.	U
85-01-8	Phenanthrene	10.	U
120-12-7	Anthracene	10.	U
84-74-2	Di-n-butylphthalate	2.	J
206-44-0	Fluoranthene	10.	U
129-00-0	Pyrene	~~10.~~	~~U~~
85-68-7	Butylbenzylphthalate	10.	U
91-94-1	3,3'-Dichlorobenzidine	~~20.~~	~~U~~
56-55-3	Benzo(a)anthracene	10.	U
218-01-9	Chrysene	10.	U
117-81-7	bis(2-Ethylhexyl)phthalate	~~10.~~	~~BJ~~
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

70

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BQ691

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Matrix: (soil/water) WATER Lab Sample ID: 17265

Sample wt/vol: 1000. (g/mL) ML Lab File ID: E3059

Level: (low/med) LOW Date Received: 4/ 8/88

% Moisture: not dec.100. dec. 0. Date Extracted: 4/12/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 4/20/88

GPC Cleanup: (Y/N) N pH: .0 Dilution Factor: 1.00

Number TICs found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	32.44	~~60.~~	~~J~~
2.					
3.					
4.					
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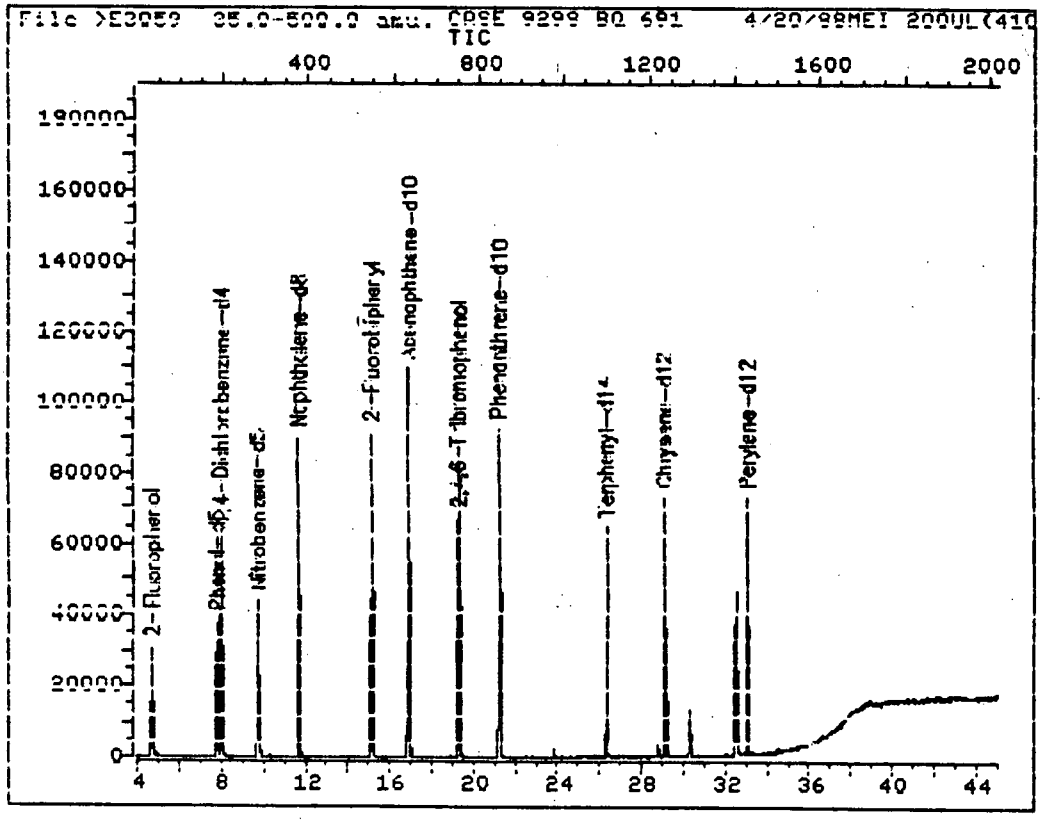
29.					
30.					

TOTAL ION CHROMATOGRAM



Data File: >E3059::D8 Quant Output File: ^E3059::Q1
Name: CASE 9298 BQ 691
Misc: 4/20/88MEI 200UL(4100)+200UL(4200) + 4UL IS(17265.01) BTL# 1

Id File: CONE72::D2
Title: BNA ID FILE FOR THE HP5970E (CONT. CAL.)
Last Calibration: 880502 17:05

Operator ID: USER8
Quant Time: 880502 17:09
Injected at: 880420 18:18

QUANT REPORT

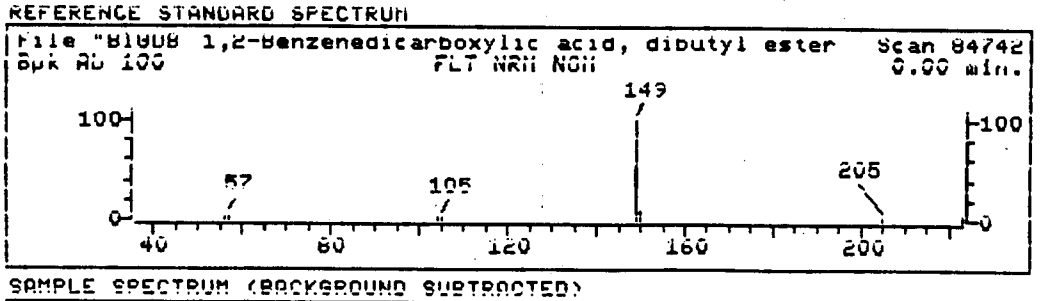
Operator ID: USER8 Quant Rev: 6 Quant Time: 880502 17:09
Output File: ^E3059::Q1 Injected at: 880420 18:18
Data File: >E3059::D8 Dilution Factor: 2.00000
Name: CASE 9298 BQ 691
Misc: 4/20/88MEI 200UL(4100)+200UL(4200) + 4UL IS(17265.01) BTL# 1

ID File: CONE72::D2
Title: BNA ID FILE FOR THE HP5970E (CONT. CAL.)
Last Calibration: 880502 17:05

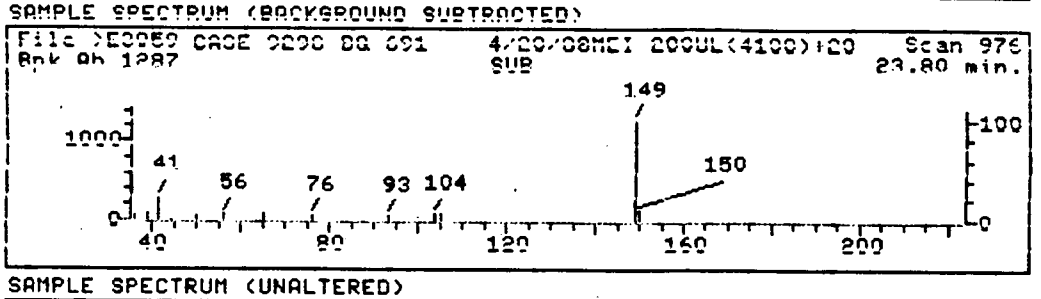
	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	7.97	197	23775	40.00	UG/L	98
2)	2-Fluorophenol	4.64	33	18982	73.48	UG/L	91
3)	Phenol-d5	7.73	185	26334	70.74	UG/L	86
16)	*Naphthalene-d8	11.65	378	89713	40.00	UG/L	92
17)	Nitrobenzene-d5	9.70	282	32308	64.34	UG/L	81
31)	*Acenaphthene-d10	16.87	635	59393	40.00	UG/L	97
36)	2-Fluorobiphenyl	15.12	549	66761	66.22	UG/L	95
51)	2,4,6-Tribromophenol	19.25	752	34790	140.32	UG/L	90
52)	*Phenanthrene-d10	21.16	846	100205	40.00	UG/L	99
60)	Di-n-butylphthalate	23.80	976	3199	2.20	UG/L	97
62)	*Chrysene-d12	29.08	1236	73682	40.00	UG/L	98
64)	Terphenyl-d14	26.28	1098	70929	94.80	UG/L	85
68)	bis(2-Ethylhexyl)phthalate	30.26	1294	8946	9.70	UG/L	93
70)	*Perylene-d12	33.03	1430	74044	40.00	UG/L	93

* Compound is ISTD

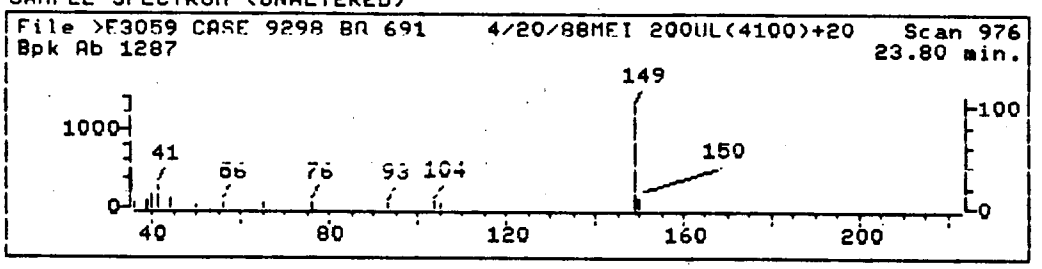
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

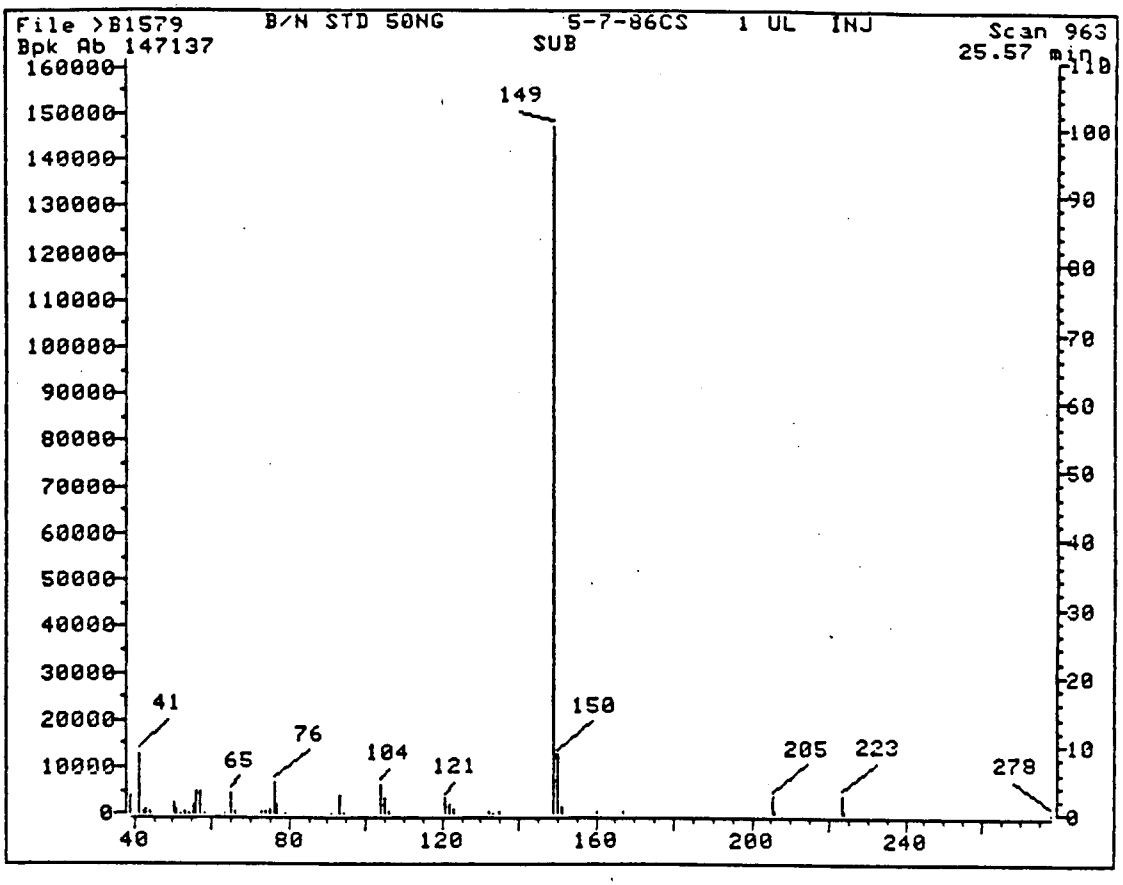


SAMPLE SPECTRUM (UNALTERED)



Data File: >E3059::D8 Quant Output File: ^E3059::Q1
Name: CASE 9298 BQ 691
Misc: 4/20/88MEI 200UL(4100)+200UL(4200) + 4UL IS(17265.01) BTL# 1
Quant Time: 880502 17:09 Quant ID File: CONE72::D2
Injected at: 880420 18:18 Last Calibration: 880502 17:05

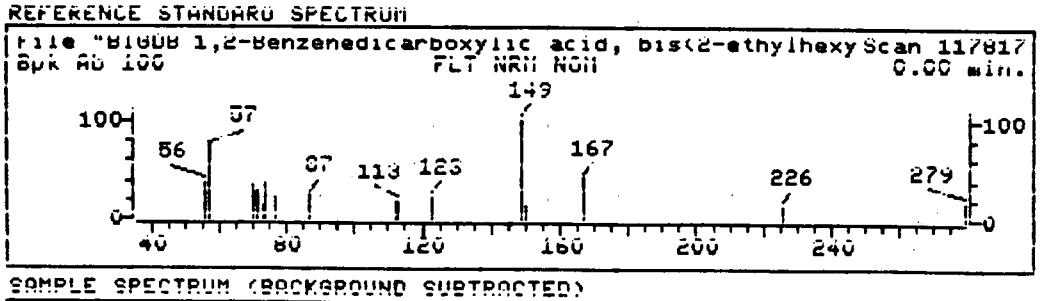
Compound No: 60
Compound Name: Di-n-butylphthalate
Scan Number: 976
Retention Time: 23.80 min.
Quant Ion: 149.0
Area: 3199
Concentration: 2.20 UG/L
q-value: 97



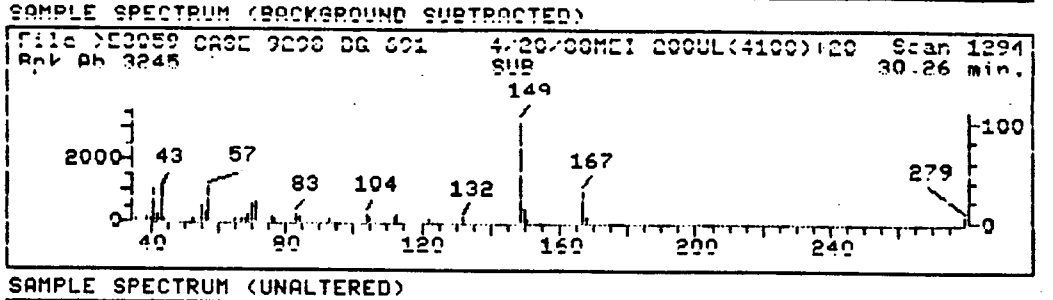
DI-N-BUTYLPHTHALATE

STANDARD SPECTRA

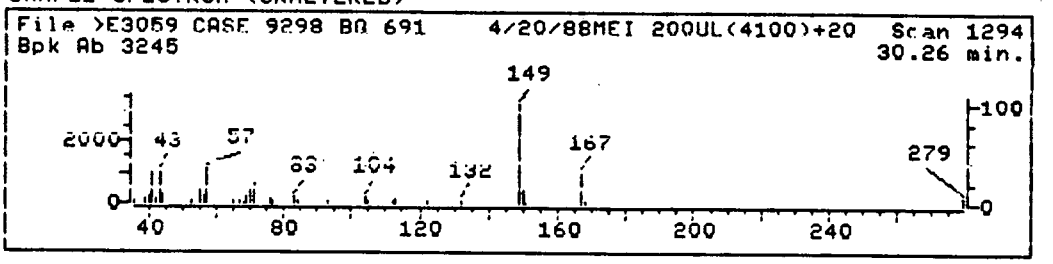
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

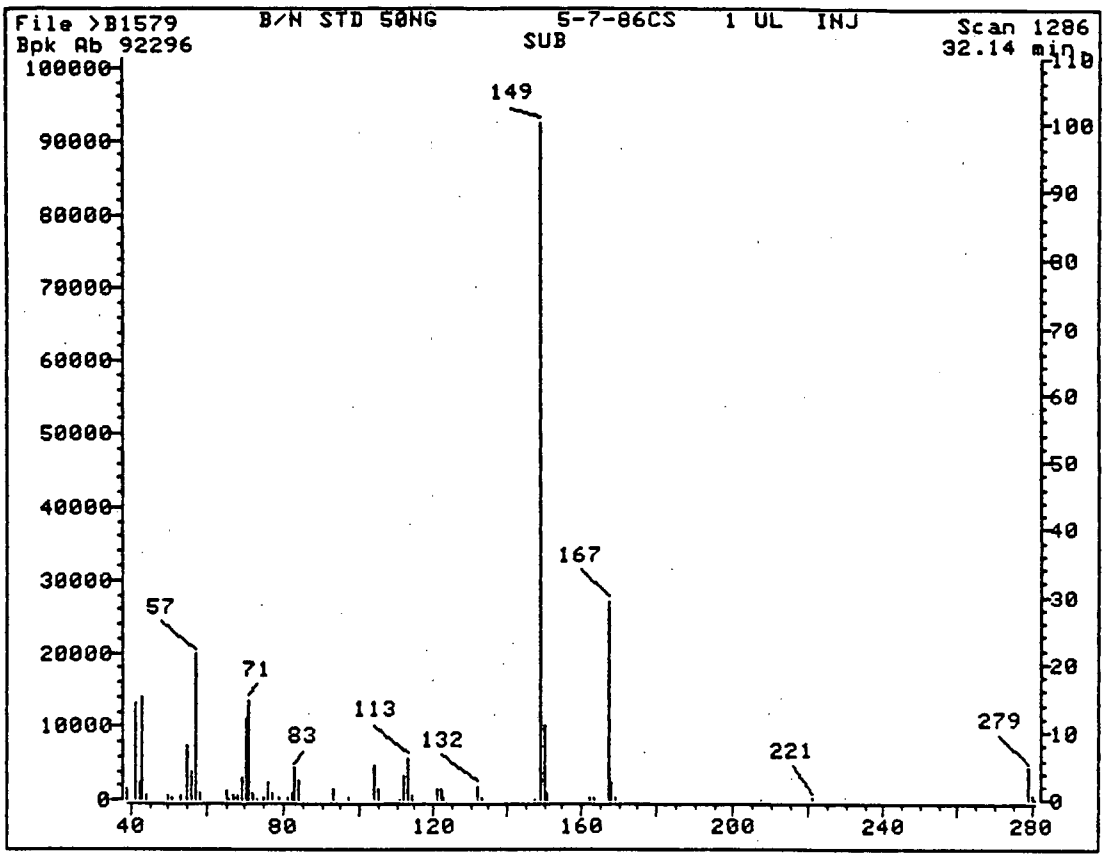


SAMPLE SPECTRUM (UNALTERED)



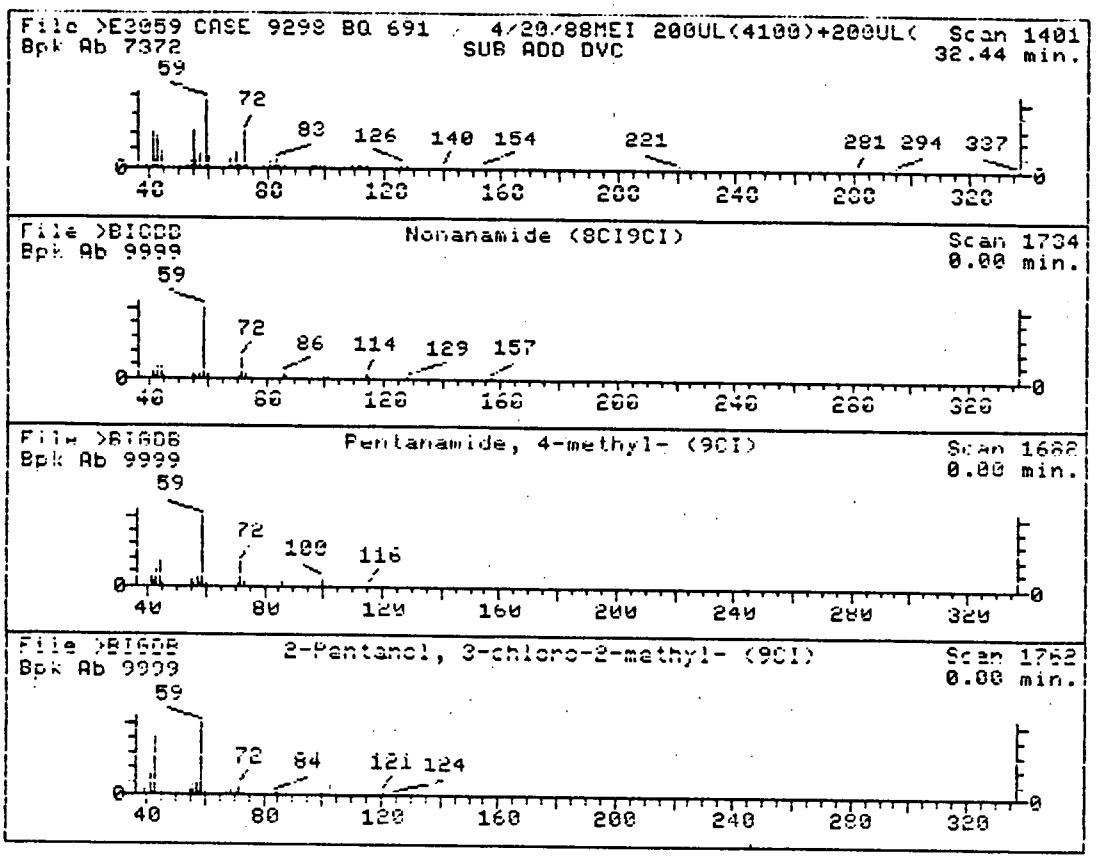
Data File: >E3059::D8 Quant Output File: ^E3059::Q1
Name: CASE 9298 BQ 691
Misc: 4/20/88MEI 200UL(4100)+200UL(4200) + 4UL IS(17265.01) BTL# 1
Quant Time: 880502 17:09 Quant ID File: CONE72::D2
Injected at: 880420 18:18 Last Calibration: 880502 17:05

Compound No: 68
Compound Name: bis(2-Ethylhexyl)phthalate
Scan Number: 1294
Retention Time: 30.26 min.
Quant Ion: 149.0
Area: 8946
Concentration: 9.70 UG/L
q-value: 93



BIS(2-ETHYLHEXYL)PHTHALATE

STANDARD SPECTRA



Unknown #,1
Area = 150310.0 Tentative Concentration is 30.00

1.	Nonanamide (8CI9CI)	157 C9H19NO
2.	Pentanamide, 4-methyl- (9CI)	115 C6H13NO
3.	2-Pentanol, 3-chloro-2-methyl- (9CI)	136 C6H13ClO
4.	Oxepane, 2,2,3-trimethyl- (9CI)	100 C6H12O
5.	Oxirane, 3-ethyl-2,2-dimethyl- (9CI)	100 C6H12O
6.	Oxirane, tetramethyl- (9CI)	100 C6H12O
7.	1,7-Octanediol, 3,7-dimethyl- (8CI9CI)	174 C10H22O2

Sample file: >E3059 Spectrum #: 1401
Search speed: 2 Tilting option: N No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	40	1120076	1754	"BIGDB	32	54	0	0	100	26	14	17
2.	32*	1119295	1682	"BIGDB	28	59	1	0	71	34	12	15
3.	28	74685497	1762	"BIGDB	45	44	2	0	100	37	10	14
4.	26*	23120436	1638	"BIGDB	25	69	2	0	100	45	8	14
5.	25*	1192229	1695	"BIGDB	25	77	3	0	70	43	8	13
6.	25*	5076200	1636	"BIGDB	20	75	2	0	72	46	7	13
7.	25	107744	1764	"BIGDB	51	42	2	0	95	50	7	16

6B

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Instrument ID: 7002E Calibration Date(s): 7/16/87 7/16/87

Min $\overline{RRF}$ for SPCC(#) = .050 Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF020= E0036 RRF050= E0037
RRF080= E0038 RRF120= E0039 RRF160= E0040

COMPOUND	RRF020	RRF050	RRF080	RRF120	RRF160	$\overline{RRF}$	% RSD
Phenol *	1.415	1.164	1.318	1.210	1.080	1.237	10.6*
bis(2-Chloroethyl)ether	1.081	1.202	1.159	1.133	1.158	1.147	3.9
2-Chlorophenol	1.202	1.038	1.082	1.014	.995	1.066	7.8
1,3-Dichlorobenzene	1.506	1.454	1.386	1.437	1.379	1.432	3.6
1,4-Dichlorobenzene *	1.631	1.494	1.323	1.514	1.408	1.474	7.9*
Benzyl alcohol	.473	.630	.694	.736	.731	.653	16.7
1,2-Dichlorobenzene	1.621	1.505	1.462	1.520	1.352	1.492	6.5
2-Methylphenol	1.096	1.009	.964	.959	.898	.985	7.5
bis(2-Chloroisopropyl)ether	2.554	2.677	2.610	2.865	2.869	2.715	5.4
4-Methylphenol	1.202	1.092	1.039	.984	.918	1.047	10.3
N-Nitroso-di-n-propylamine #	1.089	1.255	1.172	1.405	1.309	1.246	9.8#
Hexachloroethane	.814	.787	.762	.766	.751	.776	3.2
Nitrobenzene	.435	.441	.443	.436	.454	.442	1.8
Isophorone	.863	.786	.767	.824	.860	.820	5.2
2-Nitrophenol *	.206	.174	.185	.185	.191	.188	6.2*
2,4-Dimethylphenol	.294	.254	.254	.237	.221	.252	10.7
Benzoic Acid		.219	.230	.146	.249	.211	21.4
bis(2-Chloroethoxy)methane	.542	.513	.494	.573	.543	.533	5.7
2,4-Dichlorophenol *	.319	.294	.310	.285	.266	.295	7.0*
1,2,4-Trichlorobenzene	.446	.419	.414	.422	.436	.427	3.1
Naphthalene	1.045	.991	1.032	1.093	.990	1.030	4.1
4-Chloroaniline	.435	.492	.518	.535	.549	.506	8.9
Hexachlorobutadiene *	.333	.305	.294	.296	.296	.305	5.3*
4-Chloro-3-methylphenol *	.371	.328	.349	.320	.290	.332	9.1*
2-Methylnaphthalene	.673	.677	.660	.678	.698	.677	2.0
Hexachlorocyclopentadiene #	.456	.423	.464	.481	.462	.457	4.6#
2,4,6-Trichlorophenol *	.441	.411	.426	.408	.378	.413	5.7*
2,4,5-Trichlorophenol	.335	.450	.458	.452	.426	.424	12.1
2-Chloronaphthalene	1.259	1.187	1.125	1.092	1.076	1.148	6.6
2-Nitroaniline	.344	.407	.434	.433	.426	.409	9.3
Dimethylphthalate	1.384	1.404	1.342	1.414	1.341	1.377	2.5
Acenaphthylene	1.759	1.724	1.698	1.673	1.678	1.706	2.1
2,6-Dinitrotoluene	.290	.344	.309	.355	.332	.326	8.1
3-Nitroaniline	.236	.292	.302	.343	.349	.304	15.0
Acenaphthene *	1.108	1.116	1.128	1.051	1.054	1.091	3.3*
2,4-Dinitrophenol #		.101	.111	.132	.149	.123	17.4#
4-Nitrophenol #		.165	.151	.194	.223	.183	17.5#

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Instrument ID: 7002E Calibration Date(s): 7/16/87 7/16/87

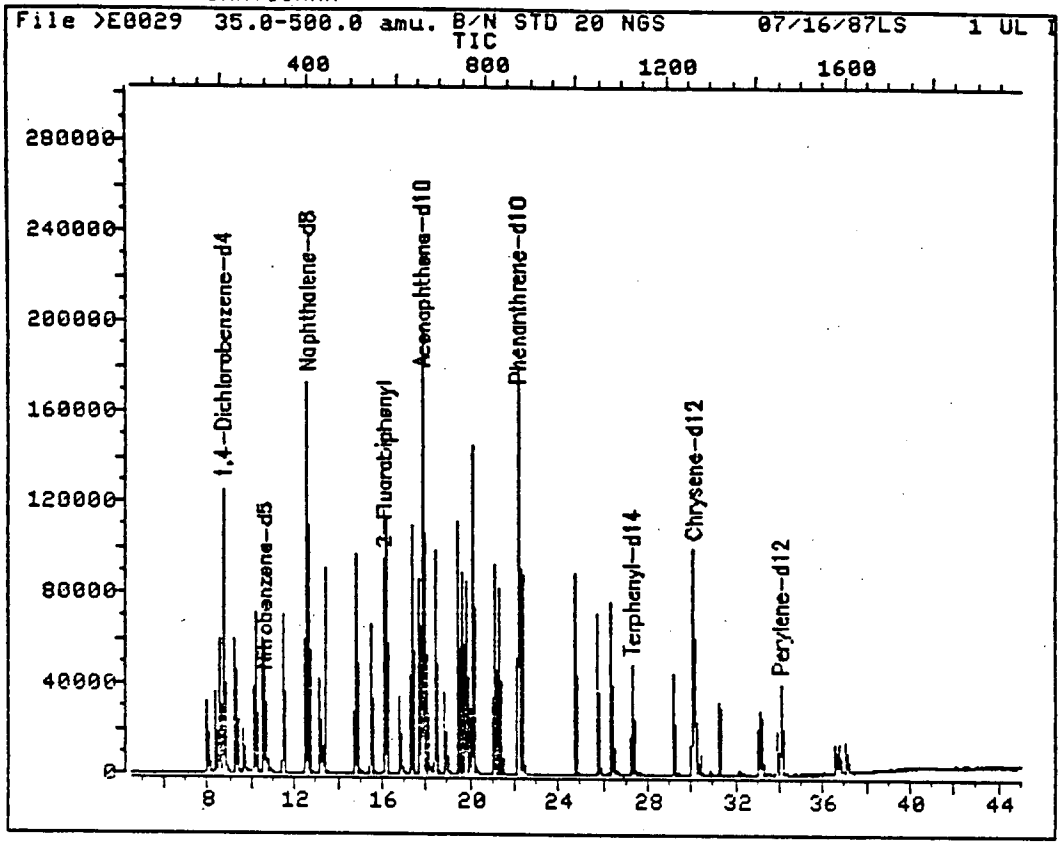
Min $\overline{RRF}$ for SPCC(#) = .050 Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF020= E0036 RRF050= E0037
RRF080= E0038 RRF120= E0039 RRF160= E0040

COMPOUND		RRF020	RRF050	RRF080	RRF120	RRF160	$\overline{RRF}$	% RSD
Dibenzofuran		1.600	1.590	1.621	1.706	1.494	1.602	4.7
2,4-Dinitrotoluene		.312	.368	.336	.371	.352	.348	7.0
Diethylphthalate		1.398	1.482	1.372	1.469	1.342	1.413	4.3
4-Chlorophenyl-phenylether		.643	.629	.618	.603	.573	.613	4.3
Fluorene		1.238	1.159	1.140	1.174	1.070	1.156	5.3
4-Nitroaniline		.129	.228	.223	.250	.271	.220	24.6
4,6-Dinitro-2-methylphenol			.108	.116	.116	.137	.119	10.6
N-Nitrosodiphenylamine	*	.467	.415	.412	.400	.378	.415	7.9*
4-Bromophenyl-phenylether		.280	.259	.267	.276	.252	.267	4.4
Hexachlorobenzene		.366	.338	.346	.357	.320	.345	5.2
Pentachlorophenol	*		.157	.170	.176	.195	.175	8.8*
Phenanthrene		.977	.897	.943	1.021	.912	.950	5.3
Anthracene		.973	.905	.994	.988	.935	.959	4.0
Di-n-butylphthalate		1.191	1.165	1.107	1.291	1.208	1.192	5.6
Fluoranthene	*	.887	.851	.893	.943	.887	.892	3.7*
Pyrene		1.846	1.691	1.999	1.879	1.679	1.819	7.4
Butylbenzylphthalate		.585	.620	.661	.704	.677	.650	7.3
3,3'-Dichlorobenzidine		.202	.257	.281	.330	.337	.282	19.7
Benzo(a)anthracene		.971	.936	1.040	1.085	1.055	1.018	6.1
Chrysene		.931	.903	1.007	1.032	.948	.964	5.6
bis(2-Ethylhexyl)phthalate		.599	.675	.754	.828	.834	.738	13.7
Di-n-octylphthalate	*	1.647	1.761	1.823	2.078	1.923	1.846	8.9*
Benzo(b)fluoranthene		1.215	1.264	1.332	1.404	1.490	1.341	8.2
Benzo(k)fluoranthene		1.587	1.353	1.396	1.438	1.067	1.368	13.9
Benzo(a)pyrene	*	1.098	1.137	1.213	1.286	1.172	1.181	6.1*
Indeno(1,2,3-cd)pyrene		.866	1.013	1.079	1.196	1.179	1.067	12.6
Dibenz(a,h)anthracene		.805	.932	.980	1.116	1.061	.979	12.3
Benzo(g,h,i)perylene		.956	1.038	1.091	1.241	1.183	1.102	10.3
Nitrobenzene-d5		.343	.433	.430	.446	.417	.414	9.8
2-Fluorobiphenyl		1.123	1.255	1.174	1.228	1.021	1.160	8.0
Terphenyl-d14		.941	.993	1.102	1.087	.912	1.007	8.5
Phenol-d5		1.272	1.128	1.111	1.091	1.094	1.139	6.6
2-Fluorophenol		.726	.721	.719	.695	.711	.715	1.7
2,4,6-Tribromophenol		.306	.310	.299	.307	.332	.311	4.1

(1) Cannot be separated from Diphenylamine

TOTAL ION CHROMATOGRAM



Data File: >E0029::D6 Quant Output File: ^E0029::D2
Name: B/N STD 20 NGS
Misc: 07/16/87LS 1 UL INJ BTL# 1

Id File: ICE5::D2
Title: BN ID FILE FOR THE HP5970E (INT. CAL.)
Last Calibration: 880422 12:18

Operator ID: USER6
Quant Time: 880422 12:18
Injected at: 870716 10:46

QUANT REPORT

Operator ID: USER6
Output File: ^E0029::D2
Data File: >E0029::D6
Name: B/N STD 20 NGS
Misc: 07/16/87LS 1 UL INJ

Quant Rev: 6 Quant Time: 880422 12:18
Injected at: 870716 10:46
Dilution Factor: 1.00000

BTL# 1

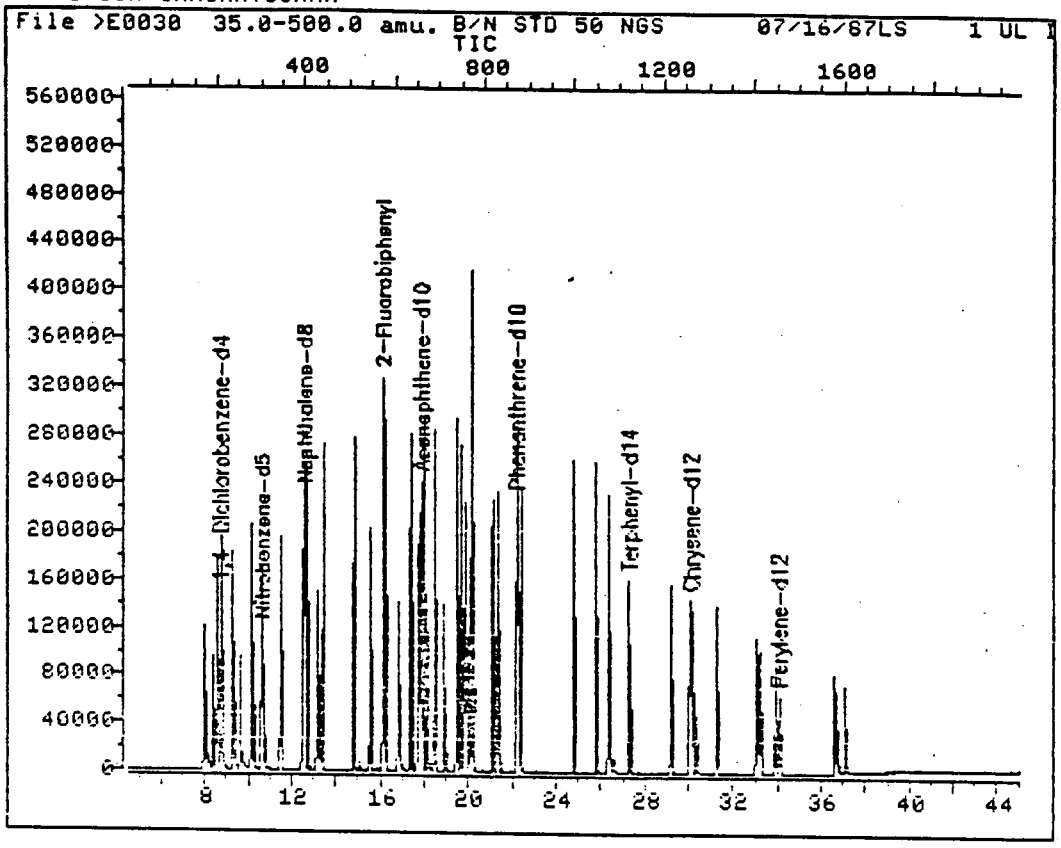
ID File: ICE5::D2
Title: BN ID FILE FOR THE HP5970E (INT. CAL.)
Last Calibration: 880422 12:18

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	8.68	152.0	53569	40.00	UG/L	95
2)	bis(2-Chloroethyl)ether	8.35	93.0	28954	18.85	UG/L	83
3)	1,3-Dichlorobenzene	8.52	146.0	40336	21.03	UG/L	95
4)	1,4-Dichlorobenzene	8.72	146.0	43695	22.14	UG/L	93
5)	Benzyl alcohol	9.58	108.0	12667	14.49	UG/L	96
6)	1,2-Dichlorobenzene	9.27	146.0	43409	21.72	UG/L	95
7)	bis(2-Chloroisopropyl)ether	10.06	45.0	68399	18.81	UG/L	83
8)	N-Nitroso-di-n-propylamine	10.49	70.0	29168	17.48	UG/L	94
9)	Hexachloroethane	10.17	117.0	21807	20.98	UG/L	97
10)	*Naphthalene-d8	12.57	136.0	184023	40.00	UG/L	91
11)	Nitrobenzene-d5	10.59	82.0	31604	16.60	UG/L	90
12)	Nitrobenzene	10.63	77.0	40056	19.70	UG/L	98
13)	Isophorone	11.43	82.0	79364	21.04	UG/L	95
14)	bis(2-Chloroethoxy)methane	12.42	93.0	49884	20.34	UG/L	91
15)	1,2,4-Trichlorobenzene	12.55	180.0	41018	20.86	UG/L	97
16)	Naphthalene	12.63	128.0	96146	20.28	UG/L	99
17)	4-Chloroaniline	13.16	127.0	40028	17.20	UG/L	99
18)	Hexachlorobutadiene	13.36	225.0	30606	21.83	UG/L	96
19)	2-Methylnaphthalene	14.74	142.0	61945	19.88	UG/L	93
20)	*Acenaphthene-d10	17.83	164.0	120139	40.00	UG/L	94
21)	Hexachlorocyclopentadiene	15.51	237.0	27372	19.93	UG/L	96
22)	2-Chloronaphthalene	16.14	162.0	75613	21.93	UG/L	96
23)	2-Fluorobiphenyl	16.08	172.0	67436	19.35	UG/L	95
24)	2-Nitroaniline	16.80	138.0	20675	16.83	UG/L	93
25)	Dimethylphthalate	17.65	163.0	83127	20.10	UG/L	75
26)	Acenaphthylene	17.34	152.0	105642	20.61	UG/L	96
27)	3-Nitroaniline	18.08	138.0	14171	15.50	UG/L	93
28)	Acenaphthene	17.93	153.0	66536	20.30	UG/L	95
29)	Dibenzofuran	18.42	168.0	96091	19.97	UG/L	94
30)	2,4-Dinitrotoluene	18.87	165.0	18718	17.92	UG/L	67
31)	2,6-Dinitrotoluene	17.75	165.0	17399	17.77	UG/L	85
32)	Diethylphthalate	19.83	149.0	83998	19.80	UG/L	88
33)	4-Chlorophenyl-phenylether	19.68	204.0	38602	20.97	UG/L	96
34)	Fluorene	19.44	166.0	74369	21.41	UG/L	99
35)	4-Nitroaniline	19.93	138.0	7760	11.73	UG/L	92
36)	*Phenanthrene-d10	22.15	188.0	200120	40.00	UG/L	99
37)	N-Nitrosodiphenylamine	20.13	169.0	46749	22.54	UG/L	96
38)	4-Bromophenyl-phenylether	21.09	248.0	28049	20.99	UG/L	84
39)	Hexachlorobenzene	21.29	284.0	36638	21.21	UG/L	92
40)	Phenanthrene	22.21	178.0	97766	20.57	UG/L	97
41)	Anthracene	22.35	178.0	97391	20.30	UG/L	98
42)	Di-n-butylphthalate	24.79	149.0	119165	19.98	UG/L	96
43)	Fluoranthene	25.74	202.0	98754	19.88	UG/L	88

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	*Chrysene-d12	30.10	240.0	93956	40.00	UG/L	94
45)	Pyrene	26.35	202.0	86722	20.30	UG/L	95
46)	Terphenyl-d14	27.27	244.0	44191	18.68	UG/L	89
47)	Butylbenzylphthalate	29.18	149.0	27483	18.01	UG/L	95
48)	3,3'-Dichlorobenzidine	30.36	252.0	9499	14.36	UG/L	94
49)	Benzo(a)anthracene	30.05	228.0	45638	19.09	UG/L	96
50)	bis(2-Ethylhexyl)phthalate	31.23	149.0	28126	16.23	UG/L	94
51)	Chrysene	30.16	228.0	43725	19.30	UG/L	96
52)	*Perylene-d12	34.04	264.0	42893	40.00	UG/L	97
53)	Di-n-octylphthalate	33.00	149.0	35320	17.84	UG/L	84
54)	Benzo(b)fluoranthene	33.11	252.0	26066	18.13	UG/L	95
55)	Benzo(k)fluoranthene	33.17	252.0	34046	23.20	UG/L	96
56)	Benzo(a)pyrene	33.90	252.0	23542	18.59	UG/L	96
57)	Indeno(1,2,3-cd)pyrene	36.58	276.0	18579	16.24	UG/L	87
58)	Dibenz(a,h)anthracene	36.71	278.0	17263	16.45	UG/L	91
59)	Benzo(g,h,i)perylene	37.09	276.0	20510	17.37	UG/L	93

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >E0030::D6 Quant Output File: ^E0030::D2
Name: B/N STD 50 NGS
Misc: 07/16/87LS 1 UL INJ BTL# 2

Id File: ICE5::D2
Title: BN ID FILE FOR THE HP5970E (INT. CAL.)
Last Calibration: 880422 12:18

Operator ID: USER6
Quant Time: 880422 12:20
Injected at: 870716 11:44

QUANT REPORT

Operator ID: USER6
Output File: ^E0030::D2
Data File: >E0030::D6
Name: B/N STD 50 NGS
Misc: 07/16/87LS 1 UL INJ

Quant Rev: 6
Quant Time: 880422 12:20
Injected at: 870716 11:44
Dilution Factor: 1.00000
BTL# 2

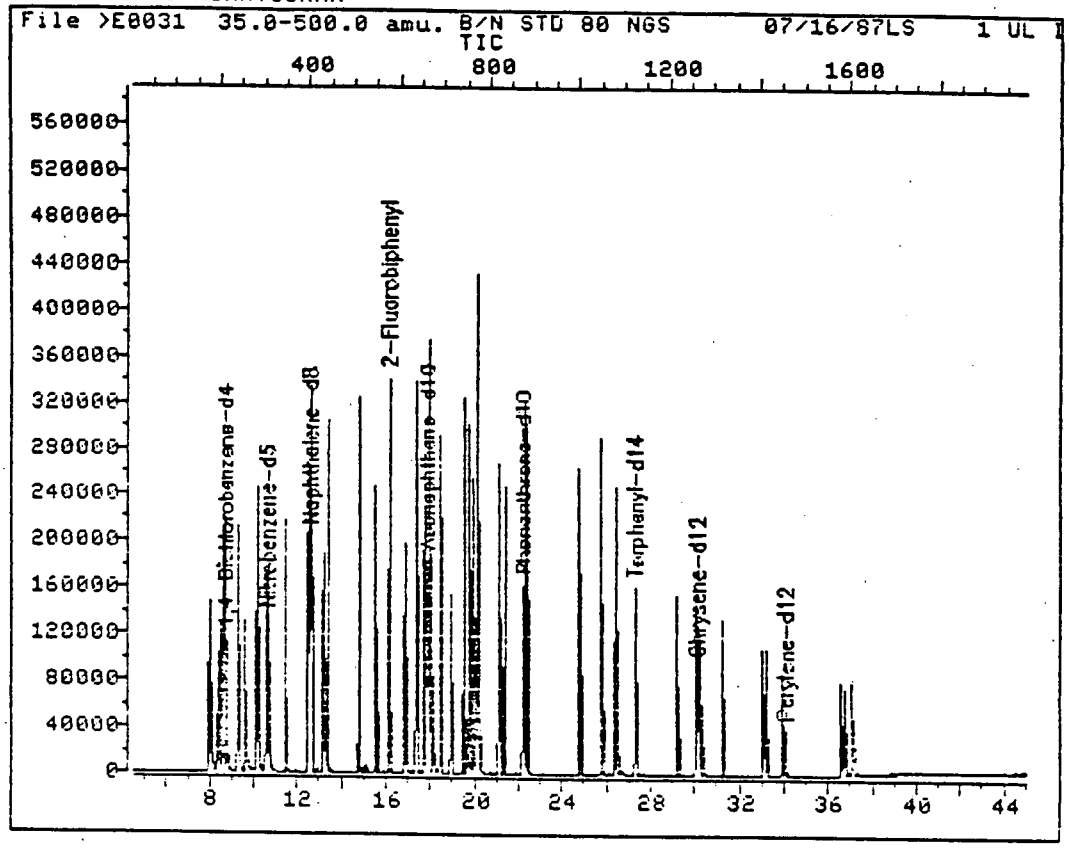
ID File: ICE5::D2
Title: BN ID FILE FOR THE HP5970E (INT. CAL.)
Last Calibration: 880422 12:18

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	8.69	152.0	64090	40.00	UG/L	93
2)	bis(2-Chloroethyl)ether	8.37	93.0	96289	52.40	UG/L	90
3)	1,3-Dichlorobenzene	8.53	146.0	116469	50.75	UG/L	96
4)	1,4-Dichlorobenzene	8.73	146.0	119650	50.66	UG/L	93
5)	Benzyl alcohol	9.59	108.0	50486	48.27	UG/L	94
6)	1,2-Dichlorobenzene	9.28	146.0	120605	50.45	UG/L	94
7)	bis(2-Chloroisopropyl)ether	10.08	45.0	214442	49.30	UG/L	84
8)	N-Nitroso-di-n-propylamine	10.55	70.0	100518	50.35	UG/L	85
9)	Hexachloroethane	10.18	117.0	63050	50.71	UG/L	94
10)	*Naphthalene-d8	12.58	136.0	225687	40.00	UG/L	92
11)	Nitrobenzene-d5	10.61	82.0	122152	52.32	UG/L	94
12)	Nitrobenzene	10.67	77.0	124503	49.92	UG/L	99
13)	Isophorone	11.44	82.0	221871	47.95	UG/L	95
14)	bis(2-Chloroethoxy)methane	12.44	93.0	144792	48.15	UG/L	92
15)	1,2,4-Trichlorobenzene	12.56	180.0	118220	49.03	UG/L	93
16)	Naphthalene	12.64	128.0	279691	48.12	UG/L	98
17)	4-Chloroaniline	13.17	127.0	138758	48.63	UG/L	98
18)	Hexachlorobutadiene	13.37	225.0	85984	50.02	UG/L	95
19)	2-Methylnaphthalene	14.76	142.0	190884	49.95	UG/L	89
20)	*Acenaphthene-d10	17.85	164.0	147771	40.00	UG/L	94
21)	Hexachlorocyclopentadiene	15.51	237.0	78196	46.30	UG/L	90
22)	2-Chloronaphthalene	16.16	162.0	219279	51.72	UG/L	95
23)	2-Fluorobiphenyl	16.10	172.0	231902	54.11	UG/L	94
24)	2-Nitroaniline	16.81	138.0	75215	49.78	UG/L	93
25)	Dimethylphthalate	17.67	163.0	259283	50.97	UG/L	71
26)	Acenaphthylene	17.36	152.0	318406	50.52	UG/L	95
27)	3-Nitroaniline	18.09	138.0	53915	47.93	UG/L	91
28)	Acenaphthene	17.95	153.0	206116	51.13	UG/L	96
29)	Dibenzofuran	18.44	168.0	293746	49.63	UG/L	93
30)	2,4-Dinitrotoluene	18.89	165.0	68010	52.95	UG/L	76
31)	2,6-Dinitrotoluene	17.79	165.0	63615	52.82	UG/L	70
32)	Diethylphthalate	19.85	149.0	273789	52.47	UG/L	87
33)	4-Chlorophenyl-phenylether	19.70	204.0	116125	51.28	UG/L	87
34)	Fluorene	19.46	166.0	214100	50.12	UG/L	99
35)	4-Nitroaniline	19.95	138.0	42156	51.82	UG/L	89
36)	*Phenanthrene-d10	22.16	188.0	253979	40.00	UG/L	98
37)	N-Nitrosodiphenylamine	20.15	169.0	131616	50.00	UG/L	95
38)	4-Bromophenyl-phenylether	21.09	248.0	82181	48.47	UG/L	87
39)	Hexachlorobenzene	21.31	284.0	107316	48.95	UG/L	96
40)	Phenanthrene	22.23	178.0	284891	47.22	UG/L	99
41)	Anthracene	22.35	178.0	287162	47.16	UG/L	99
42)	Di-n-butylphthalate	24.79	149.0	369801	48.85	UG/L	95
43)	Fluoranthene	25.76	202.0	270154	47.70	UG/L	95

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	*Chrysene-d12	30.10	240.0	123406	40.00	UG/L	96
45)	Pyrene	26.35	202.0	260792	46.47	UG/L	97
46)	Terphenyl-d14	27.27	244.0	153121	49.29	UG/L	87
47)	Butylbenzylphthalate	29.18	149.0	95631	47.72	UG/L	90
48)	3,3'-Dichlorobenzidine	30.34	252.0	39665	45.66	UG/L	95
49)	Benzo(a)anthracene	30.06	228.0	144439	46.01	UG/L	98
50)	bis(2-Ethylhexyl)phthalate	31.24	149.0	104135	45.74	UG/L	96
51)	Chrysene	30.16	228.0	139298	46.82	UG/L	95
52)	*Perylene-d12	34.04	264.0	66787	40.00	UG/L	92
53)	Di-n-octylphthalate	33.01	149.0	147016	47.69	UG/L	86
54)	Benzo(b)fluoranthene	33.11	252.0	105531	47.13	UG/L	94
55)	Benzo(k)fluoranthene	33.17	252.0	112937	49.43	UG/L	92
56)	Benzo(a)pyrene	33.88	252.0	94902	48.12	UG/L	98
57)	Indeno(1,2,3-cd)pyrene	36.57	276.0	84595	47.49	UG/L	89
58)	Dibenz(a,h)anthracene	36.69	278.0	77822	47.61	UG/L	95
59)	Benzo(g,h,i)perylene	37.07	276.0	86686	47.15	UG/L	94

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >E0031::D6 Quant Output File: ^E0031::D2
Name: B/N STD 80 NGS
Misc: 07/16/87LS 1 UL INJ BTL# 3

Id File: ICE5::D2
Title: BN ID FILE FOR THE HP5970E (INT. CAL.)
Last Calibration: 880422 12:18

Operator ID: USER6
Quant Time: 880422 12:22
Injected at: 870716 12:42

QUANT REPORT

Operator ID: USER6 Quant Rev: 6 Quant Time: 880422 12:22
Output File: ^E0031::D2 Injected at: 870716 12:42
Data File: >E0031::D6 Dilution Factor: 1.00000
Name: B/N STD 80 NGS
Misc: 07/16/87LS 1 UL INJ BTL# 3

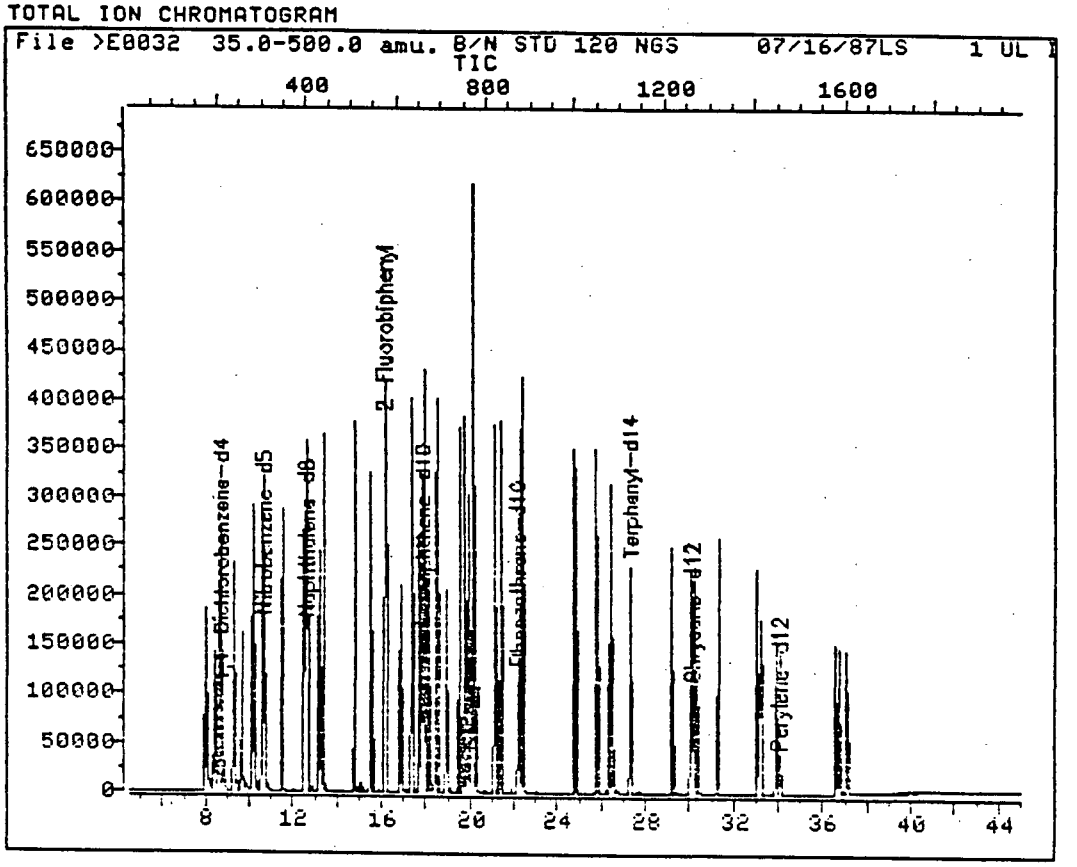
ID File: ICE5::D2
Title: BN ID FILE FOR THE HP5970E (INT. CAL.)
Last Calibration: 880422 12:18

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	8.69	152.0	48426	40.00	UG/L	97
2)	bis(2-Chloroethyl)ether	8.39	93.0	112298	80.88	UG/L	88
3)	1,3-Dichlorobenzene	8.53	146.0	134244	77.42	UG/L	95
4)	1,4-Dichlorobenzene	8.73	146.0	128114	71.80	UG/L	93
5)	Benzyl alcohol	9.61	108.0	67211	85.04	UG/L	99
6)	1,2-Dichlorobenzene	9.28	146.0	141629	78.40	UG/L	94
7)	bis(2-Chloroisopropyl)ether	10.08	45.0	252755	76.90	UG/L	85
8)	N-Nitroso-di-n-propylamine	10.55	70.0	113511	75.25	UG/L	87
9)	Hexachloroethane	10.18	117.0	73794	78.54	UG/L	95
10)	*Naphthalene-d8	12.58	136.0	165716	40.00	UG/L	95
11)	Nitrobenzene-d5	10.61	82.0	142398	83.07	UG/L	85
12)	Nitrobenzene	10.67	77.0	146917	80.23	UG/L	98
13)	Isophorone	11.44	82.0	254208	74.82	UG/L	97
14)	bis(2-Chloroethoxy)methane	12.44	93.0	163584	74.08	UG/L	98
15)	1,2,4-Trichlorobenzene	12.56	180.0	137238	77.51	UG/L	88
16)	Naphthalene	12.64	128.0	342021	80.13	UG/L	98
17)	4-Chloroaniline	13.17	127.0	171627	81.91	UG/L	97
18)	Hexachlorobutadiene	13.37	225.0	97306	77.09	UG/L	97
19)	2-Methylnaphthalene	14.76	142.0	218805	77.98	UG/L	93
20)	*Acenaphthene-d10	17.85	164.0	107204	40.00	UG/L	96
21)	Hexachlorocyclopentadiene	15.51	237.0	99493	81.20	UG/L	96
22)	2-Chloronaphthalene	16.16	162.0	241137	78.39	UG/L	93
23)	2-Fluorobiphenyl	16.10	172.0	251682	80.95	UG/L	95
24)	2-Nitroaniline	16.83	138.0	93145	84.97	UG/L	94
25)	Dimethylphthalate	17.67	163.0	287796	77.99	UG/L	73
26)	Acenaphthylene	17.36	152.0	364077	79.62	UG/L	94
27)	3-Nitroaniline	18.11	138.0	64845	79.46	UG/L	96
28)	Acenaphthene	17.95	153.0	241824	82.68	UG/L	97
29)	Dibenzofuran	18.44	168.0	347661	80.96	UG/L	94
30)	2,4-Dinitrotoluene	18.89	165.0	72090	77.37	UG/L	79
31)	2,6-Dinitrotoluene	17.79	165.0	66290	75.88	UG/L	89
32)	Diethylphthalate	19.84	149.0	294062	77.68	UG/L	88
33)	4-Chlorophenyl-phenylether	19.70	204.0	132495	80.64	UG/L	90
34)	Fluorene	19.46	166.0	244527	78.91	UG/L	97
35)	4-Nitroaniline	19.95	138.0	47844	81.07	UG/L	85
36)	*Phenanthrene-d10	22.16	188.0	171662	40.00	UG/L	99
37)	N-Nitrosodiphenylamine	20.15	169.0	141586	79.58	UG/L	95
38)	4-Bromophenyl-phenylether	21.09	248.0	91761	80.07	UG/L	87
39)	Hexachlorobenzene	21.31	284.0	118709	80.11	UG/L	97
40)	Phenanthrene	22.22	178.0	323793	79.41	UG/L	98
41)	Anthracene	22.37	178.0	341102	82.89	UG/L	99
42)	Di-n-butylphthalate	24.79	149.0	380226	74.31	UG/L	96
43)	Fluoranthene	25.76	202.0	306515	80.07	UG/L	92

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	*Chrysene-d12	30.09	240.0	71332	40.00	UG/L	95
45)	Pyrene	26.35	202.0	285248	87.94	UG/L	97
46)	Terphenyl-d14	27.27	244.0	157259	87.57	UG/L	88
47)	Butylbenzylphthalate	29.18	149.0	94324	81.43	UG/L	92
48)	3,3'-Dichlorobenzidine	30.34	252.0	40126	79.90	UG/L	99
49)	Benzo(a)anthracene	30.05	228.0	148414	81.79	UG/L	98
50)	bis(2-Ethylhexyl)phthalate	31.23	149.0	107594	81.75	UG/L	98
51)	Chrysene	30.16	228.0	143688	83.55	UG/L	94
52)	*Perylene-d12	34.04	264.0	40312	40.00	UG/L	95
53)	Di-n-octylphthalate	33.00	149.0	146965	78.98	UG/L	85
54)	Benzo(b)fluoranthene	33.11	252.0	107351	79.43	UG/L	93
55)	Benzo(k)fluoranthene	33.17	252.0	112587	81.64	UG/L	97
56)	Benzo(a)pyrene	33.88	252.0	97779	82.14	UG/L	97
57)	Indeno(1,2,3-cd)pyrene	36.56	276.0	87032	80.95	UG/L	90
58)	Dibenz(a,h)anthracene	36.69	278.0	79001	80.08	UG/L	95
59)	Benzo(g,h,i)perylene	37.07	276.0	87953	79.26	UG/L	96

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >E0032::D6 Quant Output File: ^E0032::D2
Name: B/N STD 120 NGS
Misc: 07/16/87LS 1 UL INJ BTL# 4

Id File: ICE5::D2
Title: BN ID FILE FOR THE HP5970E (INT. CAL.)
Last Calibration: 880422 12:18

Operator ID: USER6
Quant Time: 880422 12:24
Injected at: 870716 13:41

QUANT REPORT

Operator ID: USER6
Output File: ^E0032::D2
Data File: >E0032::D6
Name: B/N STD 120 NGS
Misc: 07/16/87LS 1 UL INJ

Quant Rev: 6 Quant Time: 880422 12:24
Injected at: 870716 13:41
Dilution Factor: 1.00000

BTL# 4

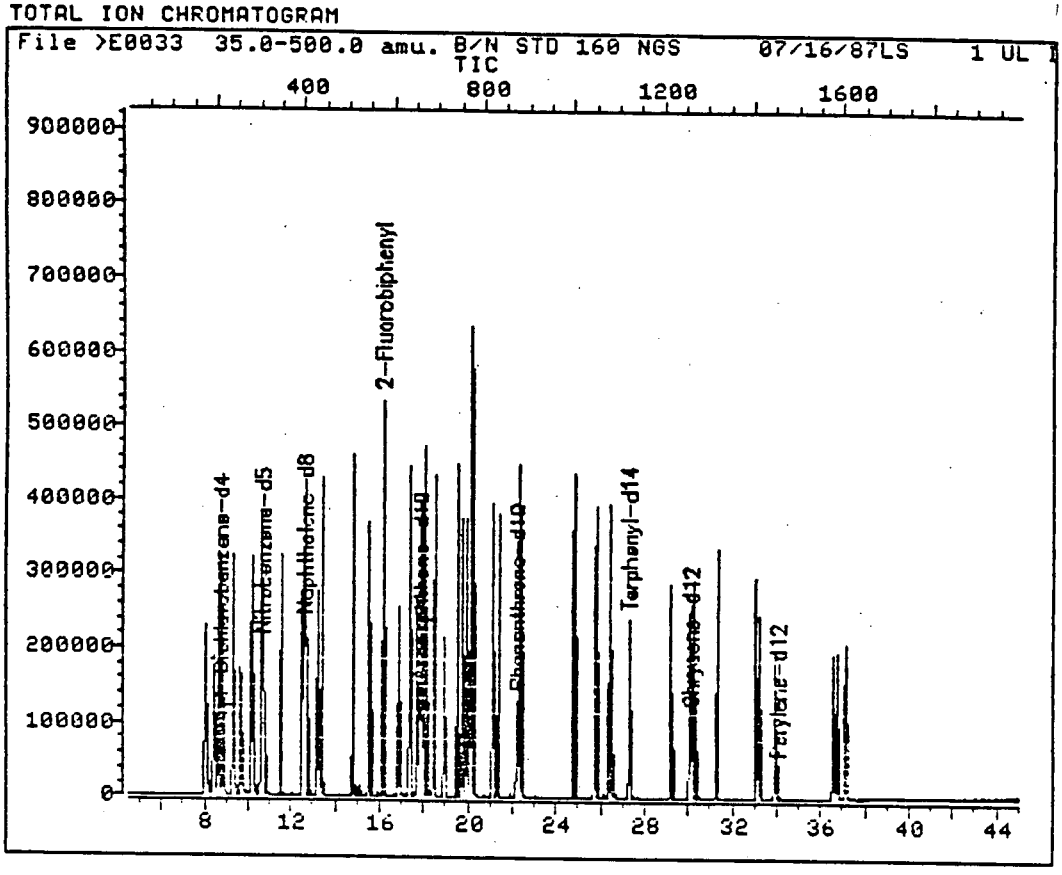
ID File: ICE5::D2
Title: BN ID FILE FOR THE HP5970E (INT. CAL.)
Last Calibration: 880422 12:18

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	8.70	152.0	39976	40.00	UG/L	95
2)	bis(2-Chloroethyl)ether	8.39	93.0	135929	118.60	UG/L	87
3)	1,3-Dichlorobenzene	8.54	146.0	172321	120.38	UG/L	93
4)	1,4-Dichlorobenzene	8.76	146.0	181587	123.27	UG/L	96
5)	Benzyl alcohol	9.63	108.0	88306	135.35	UG/L	98
6)	1,2-Dichlorobenzene	9.29	146.0	182285	122.23	UG/L	95
7)	bis(2-Chloroisopropyl)ether	10.10	45.0	343592	126.64	UG/L	83
8)	N-Nitroso-di-n-propylamine	10.59	70.0	168507	135.31	UG/L	82
9)	Hexachloroethane	10.18	117.0	91913	118.51	UG/L	97
10)	*Naphthalene-d8	12.61	136.0	140401	40.00	UG/L	94
11)	Nitrobenzene-d5	10.63	82.0	187910	129.39	UG/L	90
12)	Nitrobenzene	10.69	77.0	183484	118.27	UG/L	98
13)	Isophorone	11.47	82.0	347232	120.63	UG/L	98
14)	bis(2-Chloroethoxy)methane	12.46	93.0	241339	129.00	UG/L	94
15)	1,2,4-Trichlorobenzene	12.56	180.0	177709	118.46	UG/L	93
16)	Naphthalene	12.65	128.0	460342	127.30	UG/L	97
17)	4-Chloroaniline	13.18	127.0	225535	127.05	UG/L	97
18)	Hexachlorobutadiene	13.38	225.0	124726	116.63	UG/L	96
19)	2-Methylnaphthalene	14.76	142.0	285656	120.16	UG/L	93
20)	*Acenaphthene-d10	17.86	164.0	96864	40.00	UG/L	98
21)	Hexachlorocyclopentadiene	15.51	237.0	139824	126.29	UG/L	95
22)	2-Chloronaphthalene	16.17	162.0	317405	114.20	UG/L	95
23)	2-Fluorobiphenyl	16.10	172.0	356801	127.01	UG/L	96
24)	2-Nitroaniline	16.84	138.0	125819	127.03	UG/L	93
25)	Dimethylphthalate	17.69	163.0	410844	123.22	UG/L	77
26)	Acenaphthylene	17.37	152.0	486027	117.63	UG/L	94
27)	3-Nitroaniline	18.14	138.0	99799	135.35	UG/L	92
28)	Acenaphthene	17.96	153.0	305462	115.59	UG/L	98
29)	Dibenzofuran	18.47	168.0	495809	127.79	UG/L	98
30)	2,4-Dinitrotoluene	18.89	165.0	107749	127.98	UG/L	89
31)	2,6-Dinitrotoluene	17.81	165.0	103096	130.60	UG/L	67
32)	Diethylphthalate	19.85	149.0	426811	124.78	UG/L	89
33)	4-Chlorophenyl-phenylether	19.71	204.0	175187	118.01	UG/L	90
34)	Fluorene	19.46	166.0	341169	121.85	UG/L	99
35)	4-Nitroaniline	19.97	138.0	72619	136.18	UG/L	91
36)	*Phenanthrene-d10	22.15	188.0	156353	40.00	UG/L	99
37)	N-Nitrosodiphenylamine	20.16	169.0	187729	115.85	UG/L	91
38)	4-Bromophenyl-phenylether	21.11	248.0	129645	124.20	UG/L	76
39)	Hexachlorobenzene	21.34	284.0	167356	123.99	UG/L	98
40)	Phenanthrene	22.23	178.0	478938	128.96	UG/L	99
41)	Anthracene	22.37	178.0	463419	123.64	UG/L	97
42)	Di-n-butylphthalate	24.79	149.0	605394	129.89	UG/L	93
43)	Fluoranthene	25.77	202.0	442247	126.83	UG/L	94

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	*Chrysene-d12	30.10	240.0	74884	40.00	UG/L	96
45)	Pyrene	26.36	202.0	422192	123.98	UG/L	99
46)	Terphenyl-d14	27.28	244.0	244186	129.53	UG/L	87
47)	Butylbenzylphthalate	29.19	149.0	158202	130.10	UG/L	92
48)	3,3'-Dichlorobenzidine	30.33	252.0	74142	140.64	UG/L	97
49)	Benzo(a)anthracene	30.06	228.0	243760	127.96	UG/L	99
50)	bis(2-Ethylhexyl)phthalate	31.24	149.0	185974	134.61	UG/L	98
51)	Chrysene	30.18	228.0	231886	128.45	UG/L	96
52)	*Perylene-d12	34.03	264.0	45198	40.00	UG/L	96
53)	Di-n-octylphthalate	33.01	149.0	281717	135.03	UG/L	83
54)	Benzo(b)fluoranthene	33.11	252.0	190395	125.65	UG/L	93
55)	Benzo(k)fluoranthene	33.18	252.0	194942	126.08	UG/L	95
56)	Benzo(a)pyrene	33.89	252.0	174384	130.66	UG/L	97
57)	Indeno(1,2,3-cd)pyrene	36.57	276.0	162107	134.49	UG/L	90
58)	Dibenz(a,h)anthracene	36.70	278.0	151376	136.86	UG/L	94
59)	Benzo(g,h,i)perylene	37.08	276.0	168263	135.23	UG/L	97

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >E0033::D6 Quant Output File: ^E0033::D2
Name: B/N STD 160 NGS
Misc: 07/16/87LS 1 UL INJ BTL# 5

Id File: ICE5::D2
Title: BN ID FILE FOR THE HP5970E (INT. CAL.)
Last Calibration: 880422 12:18

Operator ID: USER6
Quant Time: 880422 12:26
Injected at: 870716 14:42

QUANT REPORT

Operator ID: USER6 Quant Rev: 6 Quant Time: 880422 12:26
Output File: ^E0033::D2 Injected at: 870716 14:42
Data File: >E0033::D6 Dilution Factor: 1.00000
Name: B/N STD 160 NGS
Misc: 07/16/87LS 1 UL INJ BTL# 5

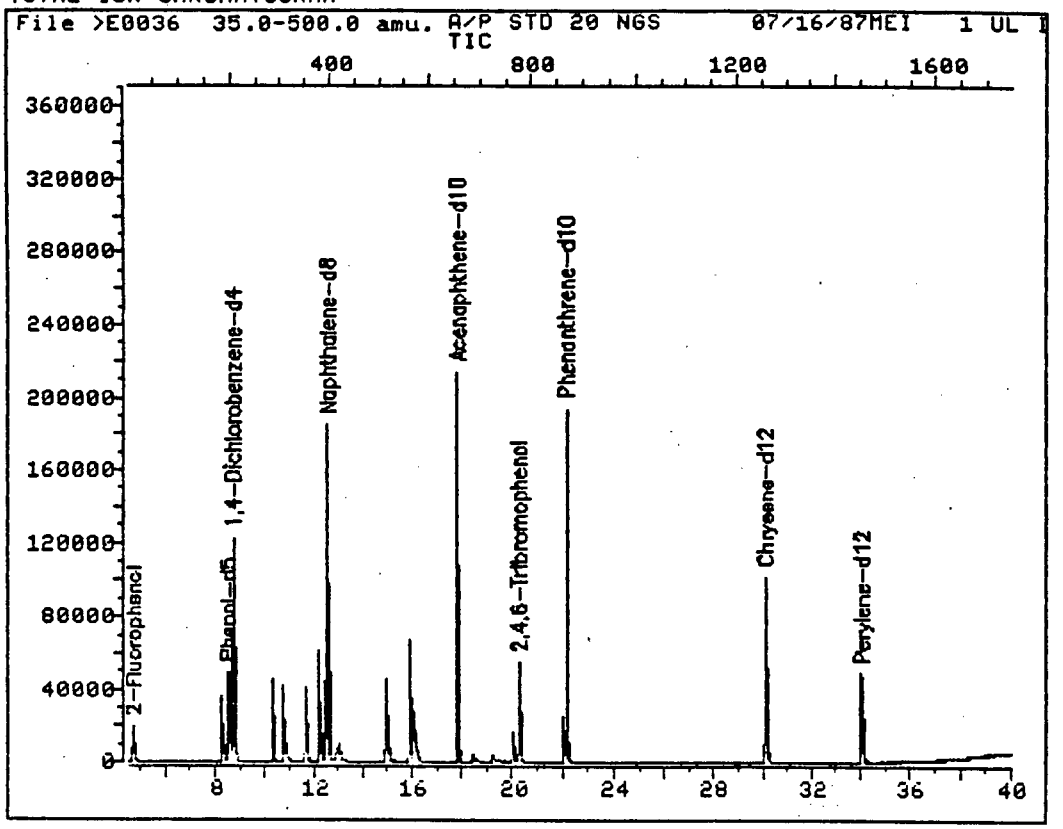
ID File: ICE5::D2
Title: BN ID FILE FOR THE HP5970E (INT. CAL.)
Last Calibration: 880422 12:18

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	8.70	152.0	39424	40.00	UG/L	98
2)	bis(2-Chloroethyl)ether	8.41	93.0	182659	161.60	UG/L	81
3)	1,3-Dichlorobenzene	8.55	146.0	217415	154.01	UG/L	96
4)	1,4-Dichlorobenzene	8.76	146.0	222007	152.82	UG/L	94
5)	Benzyl alcohol	9.65	108.0	115227	179.09	UG/L	98
6)	1,2-Dichlorobenzene	9.31	146.0	213272	145.02	UG/L	94
7)	bis(2-Chloroisopropyl)ether	10.10	45.0	452404	169.08	UG/L	83
8)	N-Nitroso-di-n-propylamine	10.61	70.0	206501	168.15	UG/L	88
9)	Hexachloroethane	10.20	117.0	118393	154.79	UG/L	88
10)	*Naphthalene-d8	12.61	136.0	136193	40.00	UG/L	94
11)	Nitrobenzene-d5	10.65	82.0	226942	161.09	UG/L	90
12)	Nitrobenzene	10.71	77.0	247546	164.49	UG/L	98
13)	Isophorone	11.49	82.0	468456	167.77	UG/L	97
14)	bis(2-Chloroethoxy)methane	12.46	93.0	295890	163.04	UG/L	98
15)	1,2,4-Trichlorobenzene	12.56	180.0	237553	163.25	UG/L	89
16)	Naphthalene	12.67	128.0	539349	153.76	UG/L	98
17)	4-Chloroaniline	13.18	127.0	298830	173.54	UG/L	94
18)	Hexachlorobutadiene	13.40	225.0	161415	155.60	UG/L	98
19)	2-Methylnaphthalene	14.78	142.0	380334	164.93	UG/L	94
20)	*Acenaphthene-d10	17.86	164.0	95895	40.00	UG/L	93
21)	Hexachlorocyclopentadiene	15.51	237.0	177113	161.59	UG/L	99
22)	2-Chloronaphthalene	16.19	162.0	412719	149.99	UG/L	96
23)	2-Fluorobiphenyl	16.13	172.0	391521	140.77	UG/L	95
24)	2-Nitroaniline	16.86	138.0	163531	166.77	UG/L	84
25)	Dimethylphthalate	17.69	163.0	514365	155.82	UG/L	75
26)	Acenaphthylene	17.39	152.0	643635	157.35	UG/L	93
27)	3-Nitroaniline	18.16	138.0	133780	183.27	UG/L	95
28)	Acenaphthene	17.98	153.0	404169	154.49	UG/L	95
29)	Dibenzofuran	18.47	168.0	572928	149.15	UG/L	93
30)	2,4-Dinitrotoluene	18.91	165.0	134859	161.80	UG/L	78
31)	2,6-Dinitrotoluene	17.84	165.0	127318	162.91	UG/L	72
32)	Diethylphthalate	19.87	149.0	514630	151.97	UG/L	88
33)	4-Chlorophenyl-phenylether	19.71	204.0	219825	149.57	UG/L	93
34)	Fluorene	19.48	166.0	410274	148.01	UG/L	99
35)	4-Nitroaniline	20.01	138.0	103790	196.60	UG/L	88
36)	*Phenanthrene-d10	22.17	188.0	150262	40.00	UG/L	96
37)	N-Nitrosodiphenylamine	20.18	169.0	227401	146.02	UG/L	96
38)	4-Bromophenyl-phenylether	21.11	248.0	151718	151.23	UG/L	86
39)	Hexachlorobenzene	21.34	284.0	192188	148.16	UG/L	92
40)	Phenanthrene	22.25	178.0	548186	153.59	UG/L	98
41)	Anthracene	22.38	178.0	562095	156.04	UG/L	99
42)	Di-n-butylphthalate	24.82	149.0	725965	162.08	UG/L	95
43)	Fluoranthene	25.79	202.0	532905	159.03	UG/L	96

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	*Chrysene-d12	30.11	240.0	72938	40.00	UG/L	96
45)	Pyrene	26.38	202.0	489968	147.72	UG/L	97
46)	Terphenyl-d14	27.28	244.0	266209	144.98	UG/L	87
47)	Butylbenzylphthalate	29.19	149.0	197610	166.85	UG/L	90
48)	3,3'-Dichlorobenzidine	30.33	252.0	98434	191.70	UG/L	98
49)	Benzo(a)anthracene	30.06	228.0	307699	165.83	UG/L	96
50)	bis(2-Ethylhexyl)phthalate	31.25	149.0	243375	180.85	UG/L	99
51)	Chrysene	30.19	228.0	276723	157.37	UG/L	95
52)	*Perylene-d12	34.03	264.0	49275	40.00	UG/L	96
53)	Di-n-octylphthalate	33.01	149.0	379080	166.67	UG/L	85
54)	Benzo(b)fluoranthene	33.12	252.0	293666	177.77	UG/L	91
55)	Benzo(k)fluoranthene	33.20	252.0	210404	124.82	UG/L	92
56)	Benzo(a)pyrene	33.89	252.0	231077	158.81	UG/L	96
57)	Indeno(1,2,3-cd)pyrene	36.58	276.0	232414	176.86	UG/L	92
58)	Dibenz(a,h)anthracene	36.70	278.0	209130	173.43	UG/L	97
59)	Benzo(g,h,i)perylene	37.10	276.0	233106	171.85	UG/L	90

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >E0036::D6 Quant Output File: ^E0036::D2
Name: A/P STD 20 NGS
Misc: 07/16/87MEI 1 UL INJ BTL# 1

Id File: ICE62::D2
Title: AP ID FILE FOR HP5970E (INT. CAL.)
Last Calibration: 880429 05:59

Operator ID: USER6
Quant Time: 880429 08:29
Injected at: 870716 18:15

QUANT REPORT

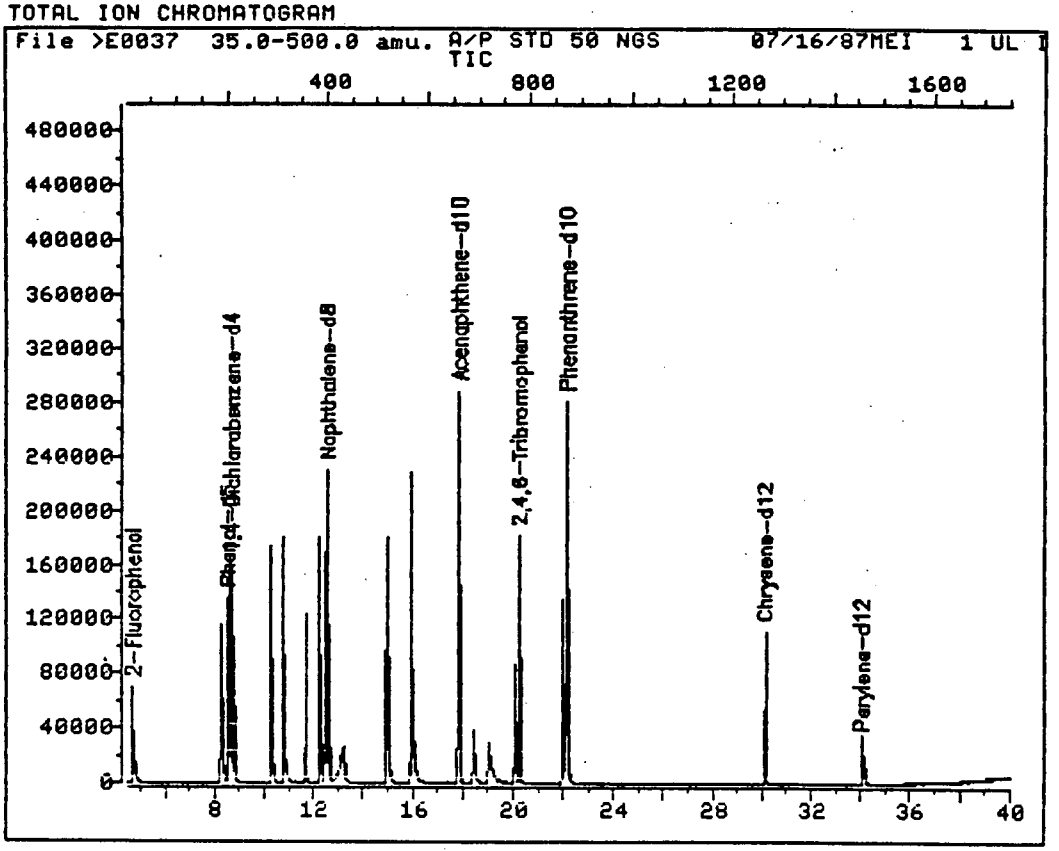
Operator ID: USER6 Quant Rev: 6 Quant Time: 880429 08:29
Output File: ^E0036::D2 Injected at: 870716 18:15
Data File: >E0036::D6 Dilution Factor: 1.00000
Name: A/P STD 20 NGS
Misc: 07/16/87MEI 1 UL INJ BTL# 1

ID File: ICE62::D2
Title: AP ID FILE FOR HP5970E (INT. CAL.)
Last Calibration: 880429 05:59

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	8.68	152.0	51746	40.00	UG/L	94
2)	2-Fluorophenol	4.69	112.0	18793	20.33	UG/L	92
3)	Phenol-d5	8.49	99.0	32901	22.32	UG/L	97
4)	Phenol	8.51	94.0	36601	22.86	UG/L	79
5)	2-Chlorophenol	8.23	128.0	31111	22.55	UG/L	99
6)	2-Methylphenol	10.26	108.0	28369	22.26	UG/L	89
7)	4-Methylphenol	10.75	108.0	31107	22.97	UG/L	97
8)	*Naphthalene-d8	12.56	136.0	186246	40.00	UG/L	91
9)	2-Nitrophenol	11.62	139.0	19175	21.88	UG/L	86
10)	2,4-Dimethylphenol	12.23	122.0	27359	23.33	UG/L	96
12)	2,4-Dichlorophenol	12.46	162.0	29681	21.62	UG/L	90
13)	4-Chloro-3-methylphenol	14.96	107.0	34512	22.35	UG/L	90
14)	*Acenaphthene-d10	17.83	164.0	119793	40.00	UG/L	95
15)	2,4,6-Trichlorophenol	15.85	196.0	26406	21.36	UG/L	89
16)	2,4,5-Trichlorophenol	16.00	196.0	20068	15.79	UG/L	92
19)	2,4,6-Tribromophenol	20.25	330.0	18314	19.69	UG/L	99
20)	*Phenanthrene-d10	22.14	188.0	205416	40.00	UG/L	98
23)	*Chrysene-d12	30.08	240.0	112269	40.00	UG/L	99
24)	*Perylene-d12	34.03	264.0	63295	40.00	UG/L	95

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >E0037::D6 Quant Output File: ^E0037::D2
Name: A/P STD 50 NGS
Misc: 07/16/87MEI 1 UL INJ BTL# 2

Id File: ICE62::D2
Title: AP ID FILE FOR HP5970E (INT. CAL.)
Last Calibration: 880429 05:59

Operator ID: USER6
Quant Time: 880429 08:30
Injected at: 870716 19:08

QUANT REPORT

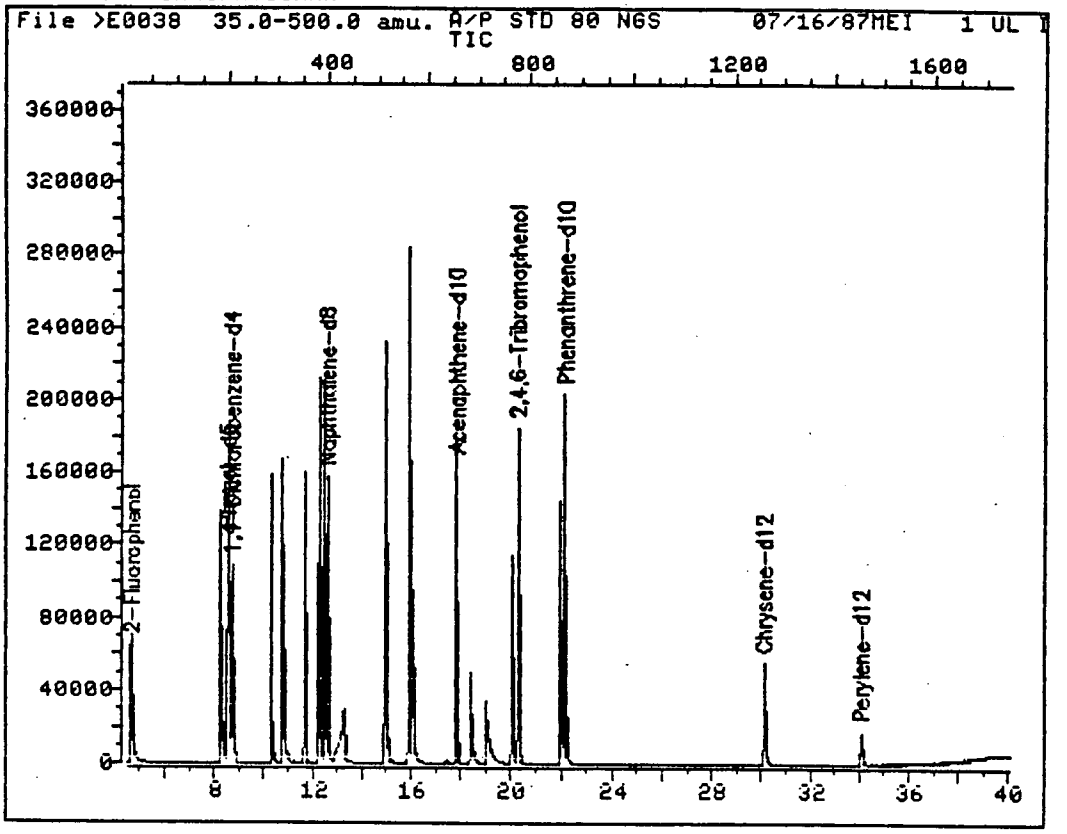
Operator ID: USER6 Quant Rev: 6 Quant Time: 880429 08:30
Output File: ^E0037::D2 Injected at: 870716 19:08
Data File: >E0037::D6 Dilution Factor: 1.00000
Name: A/P STD 50 NGS
Misc: 07/16/87MEI 1 UL INJ BTL# 2

ID File: ICE62::D2
Title: AP ID FILE FOR HP5970E (INT. CAL.)
Last Calibration: 880429 05:59

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	8.67	152.0	69222	40.00	UG/L	96
2)	2-Fluorophenol	4.67	112.0	62395	50.46	UG/L	97
3)	Phenol-d5	8.51	99.0	97642	49.52	UG/L	99
4)	Phenol	8.55	94.0	100716	47.03	UG/L	90
5)	2-Chlorophenol	8.22	128.0	89781	48.65	UG/L	98
6)	2-Methylphenol	10.26	108.0	87294	51.20	UG/L	94
7)	4-Methylphenol	10.77	108.0	94504	52.15	UG/L	96
8)	*Naphthalene-d8	12.58	136.0	253489	40.00	UG/L	89
9)	2-Nitrophenol	11.62	139.0	55138	46.22	UG/L	91
10)	2,4-Dimethylphenol	12.25	122.0	80331	50.33	UG/L	93
11)	Benzoic Acid	13.27	105.0	69518	51.96	UG/L	96
12)	2,4-Dichlorophenol	12.45	162.0	93216	49.89	UG/L	92
13)	4-Chloro-3-methylphenol	14.96	107.0	103839	49.41	UG/L	91
14)	*Acenaphthene-d10	17.84	164.0	154282	40.00	UG/L	98
15)	2,4,6-Trichlorophenol	15.87	196.0	79202	49.75	UG/L	90
16)	2,4,5-Trichlorophenol	15.97	196.0	86846	53.07	UG/L	95
17)	2,4-Dinitrophenol	18.37	184.0	19539	41.11	UG/L	88
18)	4-Nitrophenol	19.02	65.0	31767	44.92	UG/L	78
19)	2,4,6-Tribromophenol	20.25	330.0	59764	49.89	UG/L	98
20)	*Phenanthrene-d10	22.16	188.0	287603	40.00	UG/L	96
21)	4,6-Dinitro-2-methylphenol	20.00	198.0	38670	45.11	UG/L	97
22)	Pentachlorophenol	21.99	266.0	56611	45.10	UG/L	98
23)	*Chrysene-d12	30.08	240.0	121295	40.00	UG/L	96
24)	*Perylene-d12	34.03	264.0	49508	40.00	UG/L	91

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >E0038::D6 Quant Output File: ^E0038::D2
Name: A/P STD 80 NGS
Misc: 07/16/87MEI 1 UL INJ BTL# 3

Id File: ICE62::D2
Title: AP ID FILE FOR HP5970E (INT. CAL.)
Last Calibration: 880429 05:59

Operator ID: USER6
Quant Time: 880429 08:31
Injected at: 870716 20:02

QUANT REPORT

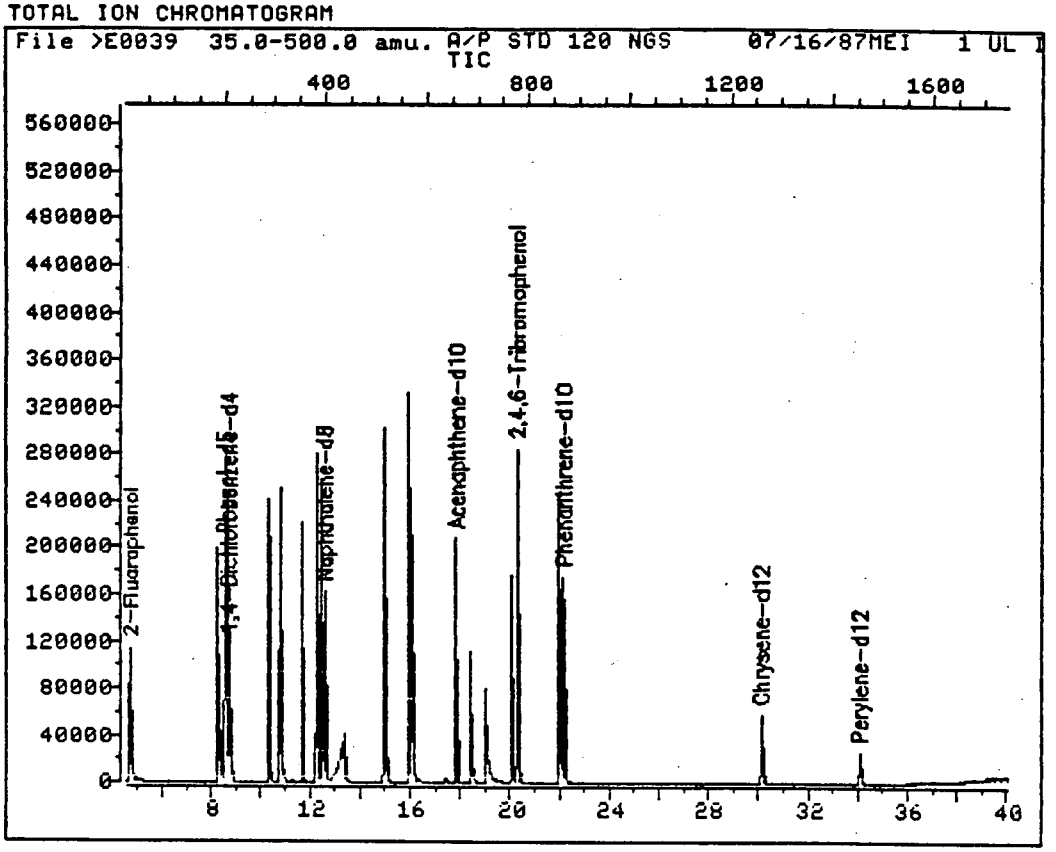
Operator ID: USER6 Quant Rev: 6 Quant Time: 880429 08:31
Output File: ^E0038::D2 Injected at: 870716 20:02
Data File: >E0038::D6 Dilution Factor: 1.00000
Name: A/P STD 80 NGS
Misc: 07/16/87MEI 1 UL INJ BTL# 3

ID File: ICE62::D2
Title: AP ID FILE FOR HP5970E (INT. CAL.)
Last Calibration: 880429 05:59

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	8.67	152.0	47916	40.00	UG/L	94
2)	2-Fluorophenol	4.67	112.0	68880	80.47	UG/L	92
3)	Phenol-d5	8.51	99.0	106492	78.03	UG/L	95
4)	Phenol	8.55	94.0	126325	85.22	UG/L	81
5)	2-Chlorophenol	8.22	128.0	103707	81.19	UG/L	98
6)	2-Methylphenol	10.26	108.0	92369	78.27	UG/L	87
7)	4-Methylphenol	10.76	108.0	99543	79.36	UG/L	95
8)	*Naphthalene-d8	12.58	136.0	171377	40.00	UG/L	91
9)	2-Nitrophenol	11.64	139.0	63360	78.56	UG/L	85
10)	2,4-Dimethylphenol	12.25	122.0	86904	80.54	UG/L	91
11)	Benzoic Acid	13.31	105.0	78873	87.20	UG/L	98
12)	2,4-Dichlorophenol	12.45	162.0	106132	84.01	UG/L	93
13)	4-Chloro-3-methylphenol	14.95	107.0	119764	84.29	UG/L	87
14)	*Acenaphthene-d10	17.82	164.0	105677	40.00	UG/L	97
15)	2,4,6-Trichlorophenol	15.87	196.0	90114	82.64	UG/L	91
16)	2,4,5-Trichlorophenol	15.97	196.0	96805	86.37	UG/L	94
17)	2,4-Dinitrophenol	18.37	184.0	23401	71.87	UG/L	84
18)	4-Nitrophenol	19.02	65.0	32012	66.09	UG/L	82
19)	2,4,6-Tribromophenol	20.24	330.0	63169	76.98	UG/L	91
20)	*Phenanthrene-d10	22.16	188.0	186985	40.00	UG/L	97
21)	4,6-Dinitro-2-methylphenol	20.00	198.0	43362	77.81	UG/L	95
22)	Pentachlorophenol	21.97	266.0	63616	77.95	UG/L	96
23)	*Chrysene-d12	30.08	240.0	68283	40.00	UG/L	97
24)	*Perylene-d12	34.05	264.0	26352	40.00	UG/L	93

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >E0039::D6 Quant Output File: ^E0039::D2
Name: A/P STD 120 NGS
Misc: 07/16/87MEI 1 UL INJ BTL# 4

Id File: ICE62::D2
Title: AP ID FILE FOR HP5970E (INT. CAL.)
Last Calibration: 880429 05:59

Operator ID: USER6
Quant Time: 880429 08:33
Injected at: 870716 20:55

QUANT REPORT

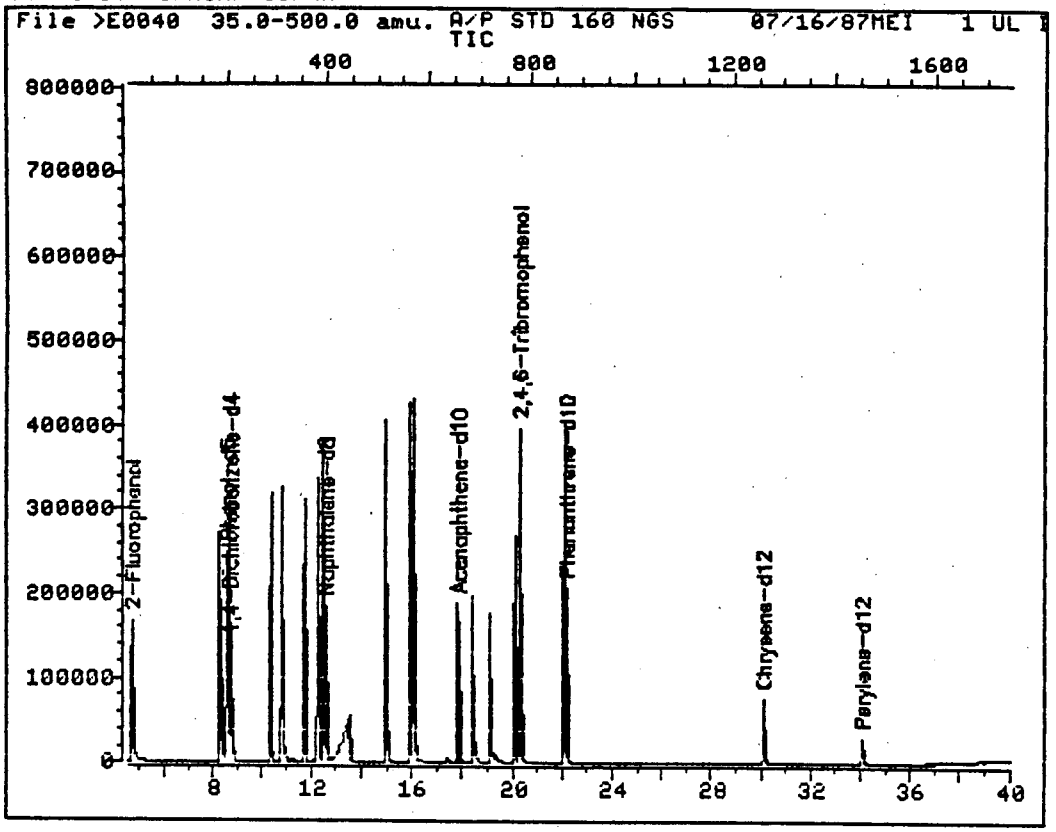
Operator ID: USER6 Quant Rev: 6 Quant Time: 880429 08:33
Output File: ^E0039::D2 Injected at: 870716 20:55
Data File: >E0039::D6 Dilution Factor: 1.00000
Name: A/P STD 120 NGS
Misc: 07/16/87MEI 1 UL INJ BTL# 4

ID File: ICE62::D2
Title: AP ID FILE FOR HP5970E (INT. CAL.)
Last Calibration: 880429 05:59

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	8.68	152.0	48677	40.00	UG/L	93
2)	2-Fluorophenol	4.68	112.0	101558	116.79	UG/L	95
3)	Phenol-d5	8.54	99.0	159389	114.96	UG/L	98
4)	Phenol	8.58	94.0	176765	117.39	UG/L	81
5)	2-Chlorophenol	8.23	128.0	148135	114.15	UG/L	96
6)	2-Methylphenol	10.27	108.0	140099	116.85	UG/L	88
7)	4-Methylphenol	10.80	108.0	143692	112.77	UG/L	97
8)	*Naphthalene-d8	12.57	136.0	173115	40.00	UG/L	91
9)	2-Nitrophenol	11.65	139.0	96313	118.22	UG/L	86
10)	2,4-Dimethylphenol	12.26	122.0	123262	113.09	UG/L	95
11)	Benzoic Acid	13.28	105.0	75711^	82.87	UG/L	94
12)	2,4-Dichlorophenol	12.44	162.0	148227	116.16	UG/L	85
13)	4-Chloro-3-methylphenol	14.97	107.0	166247	115.82	UG/L	92
14)	*Acenaphthene-d10	17.83	164.0	103407	40.00	UG/L	98
15)	2,4,6-Trichlorophenol	15.86	196.0	126550	118.60	UG/L	94
16)	2,4,5-Trichlorophenol	15.96	196.0	140312	127.93	UG/L	91
17)	2,4-Dinitrophenol	18.38	184.0	40934	128.48	UG/L	83
18)	4-Nitrophenol	19.01	65.0	60095	126.79	UG/L	85
19)	2,4,6-Tribromophenol	20.26	330.0	95085	118.42	UG/L	98
20)	*Phenanthrene-d10	22.15	188.0	191826	40.00	UG/L	98
21)	4,6-Dinitro-2-methylphenol	20.01	198.0	66819	116.87	UG/L	94
22)	Pentachlorophenol	21.98	266.0	101412	121.12	UG/L	98
23)	*Chrysene-d12	30.07	240.0	80102	40.00	UG/L	94
24)	*Perylene-d12	34.04	264.0	39506	40.00	UG/L	98

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >E0040::D6 Quant Output File: ^E0040::D2
Name: A/P STD 160 NGS
Misc: 07/16/87MEI 1 UL INJ BTL# 5

Id File: ICE62::D2
Title: AP ID FILE FOR HP5970E (INT. CAL.)
Last Calibration: 880429 05:59

Operator ID: USER6
Quant Time: 880429 08:34
Injected at: 870716 21:48

QUANT REPORT

Operator ID: USER6 Quant Rev: 6 Quant Time: 880429 08:34
Output File: ^E0040::D2 Injected at: 870716 21:48
Data File: >E0040::D6 Dilution Factor: 1.00000
Name: A/P STD 160 NGS
Misc: 07/16/87MEI 1 UL INJ BTL# 5

ID File: ICE62::D2
Title: AP ID FILE FOR HP5970E (INT. CAL.)
Last Calibration: 880429 05:59

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	8.68	152.0	54681	40.00	UG/L	94
2)	2-Fluorophenol	4.68	112.0	155529	159.22	UG/L	97
3)	Phenol-d5	8.56	99.0	239259	153.62	UG/L	98
4)	Phenol	8.60	94.0	236159	139.61	UG/L	85
5)	2-Chlorophenol	8.23	128.0	217678	149.32	UG/L	98
6)	2-Methylphenol	10.29	108.0	196315	145.76	UG/L	91
7)	4-Methylphenol	10.81	108.0	200817	140.30	UG/L	98
8)	*Naphthalene-d8	12.59	136.0	195791	40.00	UG/L	89
9)	2-Nitrophenol	11.67	139.0	149598	162.35	UG/L	91
10)	2,4-Dimethylphenol	12.28	122.0	173103	140.42	UG/L	95
11)	Benzoic Acid	13.54	105.0	195102	188.81	UG/L	96
12)	2,4-Dichlorophenol	12.46	162.0	208573	144.51	UG/L	90
13)	4-Chloro-3-methylphenol	14.99	107.0	227445	140.11	UG/L	91
14)	*Acenaphthene-d10	17.83	164.0	113836	40.00	UG/L	97
15)	2,4,6-Trichlorophenol	15.88	196.0	172104	146.51	UG/L	96
16)	2,4,5-Trichlorophenol	15.98	196.0	193785	160.50	UG/L	92
17)	2,4-Dinitrophenol	18.40	184.0	67833	193.41	UG/L	83
18)	4-Nitrophenol	19.03	65.0	101758	195.02	UG/L	78
19)	2,4,6-Tribromophenol	20.28	330.0	151172	171.02	UG/L	95
20)	*Phenanthrene-d10	22.17	188.0	204348	40.00	UG/L	98
21)	4,6-Dinitro-2-methylphenol	20.05	198.0	112194	184.21	UG/L	86
22)	Pentachlorophenol	22.01	266.0	159041	178.31	UG/L	95
23)	*Chrysene-d12	30.10	240.0	95086	40.00	UG/L	96
24)	*Perylene-d12	34.06	264.0	44112	40.00	UG/L	96

* Compound is ISTD

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Instrument ID: 7002E Calibration Date: 4/20/88 Time: 15:56

Lab File ID: E3057 Init. Calib. Date(s): 7/16/87 7/16/87

Min RRF50 for SPCC(#) = .050 Max %D for CCC(*) is 25.0%

COMPOUND		$\overline{RRF}$	RRF50	%D	
Phenol	*	1.237	1.392	12.5	*
bis(2-Chloroethyl)ether		1.147	1.186	3.4	
2-Chlorophenol		1.066	1.125	5.5	
1,3-Dichlorobenzene		1.432	1.391	2.9	
1,4-Dichlorobenzene	*	1.474	1.446	1.9	*
Benzyl alcohol		.653	.712	9.1	
1,2-Dichlorobenzene		1.492	1.429	4.2	
2-Methylphenol		.985	1.092	10.9	
bis(2-Chloroisopropyl)ether		2.715	3.778	39.2	
4-Methylphenol		1.047	1.149	9.8	
N-Nitroso-di-n-propylamine	#	1.246	1.229	1.4	#
Hexachloroethane		.776	.765	1.4	
Nitrobenzene		.442	.456	3.1	
Isophorone		.820	.749	8.7	
2-Nitrophenol	*	.188	.219	16.1	*
2,4-Dimethylphenol		.252	.283	12.6	
Benzoic Acid		.211	.108	48.9	
bis(2-Chloroethoxy)methane		.533	.488	8.4	
2,4-Dichlorophenol	*	.295	.335	13.5	*
1,2,4-Trichlorobenzene		.427	.414	3.1	
Naphthalene		1.030	.973	5.6	
4-Chloroaniline		.506	.492	2.7	
Hexachlorobutadiene	*	.305	.344	12.8	*
4-Chloro-3-methylphenol	*	.332	.354	6.8	*
2-Methylnaphthalene		.677	.644	5.0	
Hexachlorocyclopentadiene	#	.457	.659	44.1	#
2,4,6-Trichlorophenol	*	.413	.453	9.8	*
2,4,5-Trichlorophenol		.424	.498	17.4	
2-Chloronaphthalene		1.148	1.212	5.6	
2-Nitroaniline		.409	.372	9.0	
Dimethylphthalate		1.377	1.171	15.0	
Acenaphthylene		1.706	1.679	1.6	
2,6-Dinitrotoluene		.326	.225	31.0	
3-Nitroaniline		.304	.254	16.7	
Acenaphthene	*	1.091	1.097	.5	*
2,4-Dinitrophenol	#	.123	.109	11.5	#
4-Nitrophenol	#	.183	.211	15.0	#

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Instrument ID: 7002E Calibration Date: 4/20/88 Time: 15:56

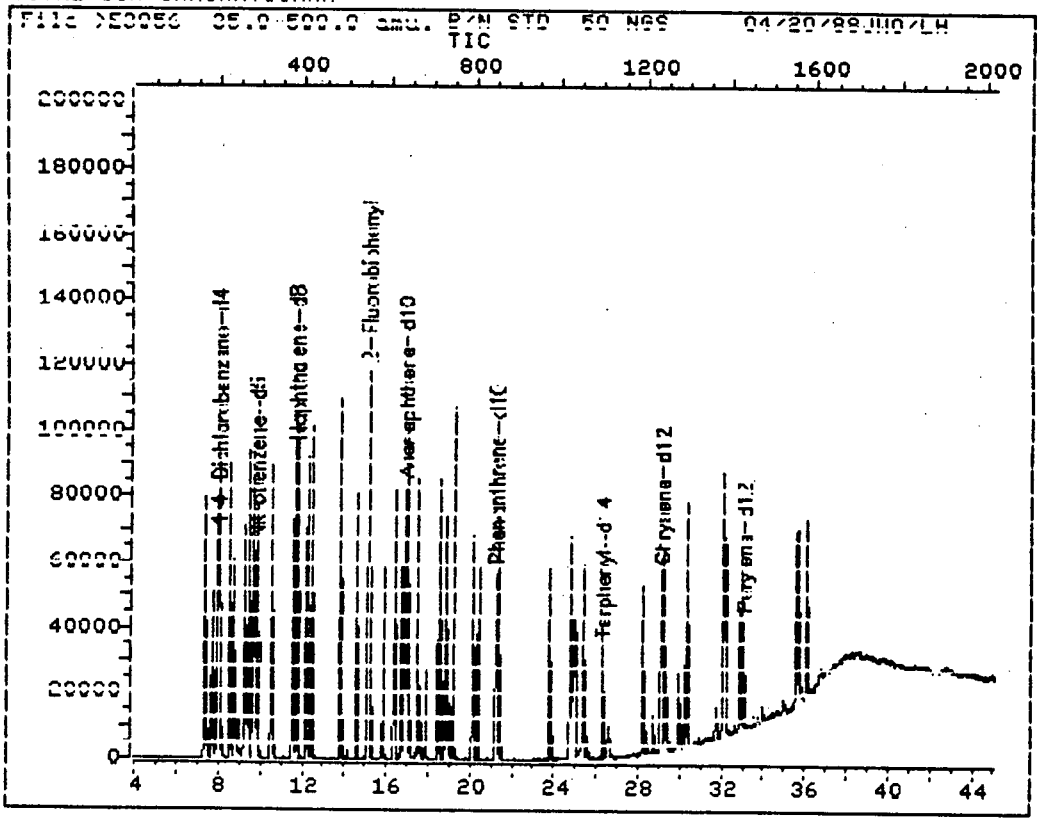
Lab File ID: E3057 Init. Calib. Date(s): 7/16/87 7/16/87

Min RRF50 for SPCC(#) = .050 Max %D for CCC(*) is 25.0%

COMPOUND		RRF	RRF50	%D	
Dibenzofuran		1.602	1.509	5.8	
2,4-Dinitrotoluene		.348	.220	36.9	
Diethylphthalate		1.413	1.077	23.8	
4-Chlorophenyl-phenylether		.613	.587	4.3	
Fluorene		1.156	1.004	13.1	
4-Nitroaniline		.220	.176	20.2	
4,6-Dinitro-2-methylphenol		.119	.110	7.8	
N-Nitrosodiphenylamine	*	.415	.450	8.6	*
4-Bromophenyl-phenylether		.267	.321	20.3	
Hexachlorobenzene		.345	.375	8.6	
Pentachlorophenol	*	.175	.168	3.7	*
Phenanthrene		.950	1.001	5.4	
Anthracene		.959	1.002	4.5	
Di-n-butylphthalate		1.192	1.163	2.5	
Fluoranthene	*	.892	.921	3.2	*
Pyrene		1.819	1.261	30.7	
Butylbenzylphthalate		.650	.699	7.6	
3,3'-Dichlorobenzidine		.282	.389	38.3	
Benzo(a)anthracene		1.018	1.140	12.1	
Chrysene		.964	1.113	15.4	
bis(2-Ethylhexyl)phthalate		.738	1.001	35.7	
Di-n-octylphthalate	*	1.846	1.788	3.2	*
Benzo(b)fluoranthene		1.341	1.267	5.5	
Benzo(k)fluoranthene		1.368	1.234	9.8	
Benzo(a)pyrene	*	1.181	1.192	.9	*
Indeno(1,2,3-cd)pyrene		1.067	1.233	15.6	
Dibenz(a,h)anthracene		.979	1.136	16.0	
Benzo(g,h,i)perylene		1.102	1.263	14.6	
Nitrobenzene-d5		.414	.448	8.2	
2-Fluorobiphenyl		1.160	1.358	17.1	
Terphenyl-d14		1.007	.812	19.3	
Phenol-d5		1.139	1.253	9.9	
2-Fluorophenol		.715	.869	21.7	
2,4,6-Tribromophenol		.311	.334	7.5	

(1) Cannot be separated from Diphenylamine

TOTAL ION CHROMATOGRAM



Data File: >E3056::D4 Quant Output File: ^E3056::Q1
Name: B/N STD 50 NGS
Misc: 04/20/88JWO/LH 1UL INJ (249-107-3) BTL# 1

Id File: ICE52::D2
Title: BN ID FILE FOR THE HP5970E (INT. CAL.)
Last Calibration: 880429 13:01

Operator ID: USER6
Quant Time: 880502 16:12
Injected at: 880420 14:58

QUANT REPORT

Operator ID: USER6 Quant Rev: 6 Quant Time: 880502 16:12
Output File: ^E3056::Q1 Injected at: 880420 14:58
Data File: >E3056::D4 Dilution Factor: 1.00000
Name: B/N STD 50 NGS
Misc: 04/20/88JWO/LH 1UL INJ (249-107-3) BTL# 1

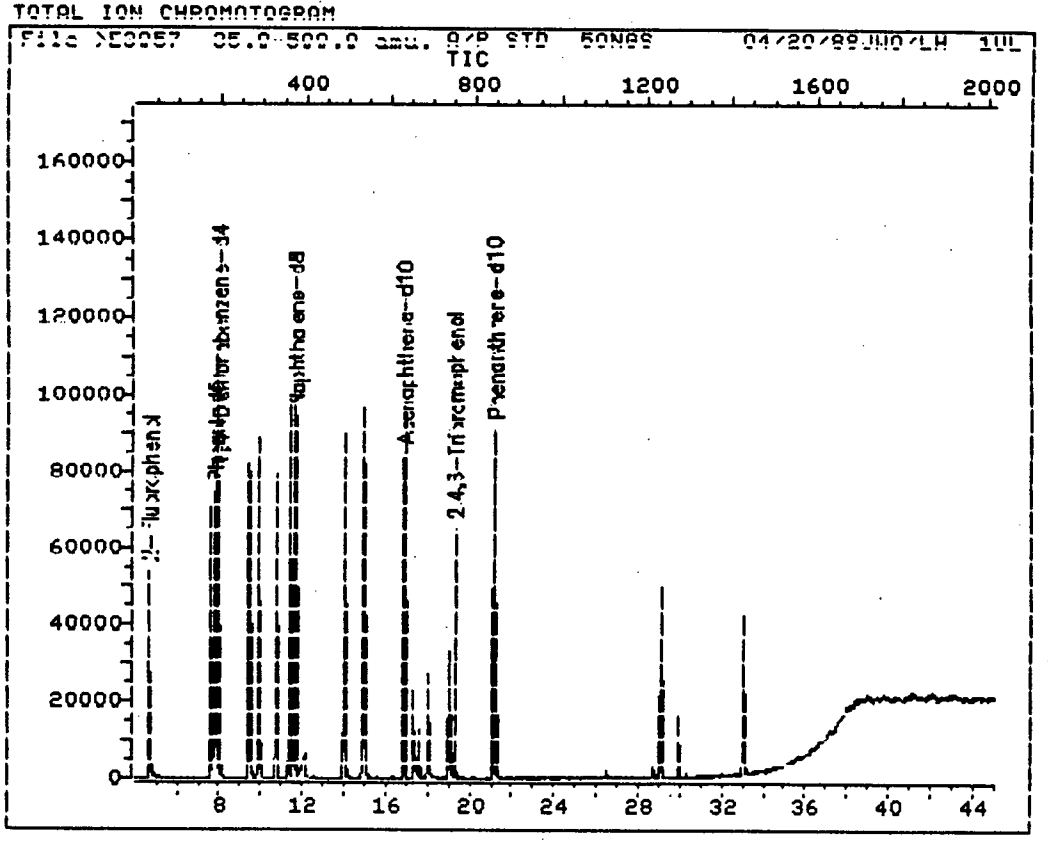
ID File: ICE52::D2
Title: BN ID FILE FOR THE HP5970E (INT. CAL.)
Last Calibration: 880429 13:01

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	7.97	152.0	28773	40.00	UG/L	96
2)	bis(2-Chloroethyl)ether	7.64	93.0	42658	51.71	UG/L	92
3)	1,3-Dichlorobenzene	7.83	146.0	50017	48.55	UG/L	93
4)	1,4-Dichlorobenzene	8.03	146.0	51990	49.04	UG/L	99
5)	Benzyl alcohol	8.76	108.0	25612	54.54	UG/L	97
6)	1,2-Dichlorobenzene	8.52	146.0	51397	47.88	UG/L	95
7)	bis(2-Chloroisopropyl)ether	9.23	45.0	135883	69.58	UG/L	81
8)	N-Nitroso-di-n-propylamine	9.66	70.0	44208	49.32	UG/L	73
9)	Hexachloroethane	9.37	117.0	27516	49.29	UG/L	97
10)	*Naphthalene-d8	11.67	136.0	93562	40.00	UG/L	93
11)	Nitrobenzene-d5	9.74	82.0	52366	54.11	UG/L	80
12)	Nitrobenzene	9.78	77.0	53299	51.55	UG/L	87
13)	Isophorone	10.53	82.0	87545	45.64	UG/L	96
14)	bis(2-Chloroethoxy)methane	11.49	93.0	57082	45.78	UG/L	92
15)	1,2,4-Trichlorobenzene	11.63	180.0	48448	48.46	UG/L	92
16)	Naphthalene	11.71	128.0	113754	47.20	UG/L	98
17)	4-Chloroaniline	12.20	127.0	57552	48.65	UG/L	85
18)	Hexachlorobutadiene	12.44	225.0	40181	56.38	UG/L	93
19)	2-Methylnaphthalene	13.80	142.0	75271	47.51	UG/L	96
20)	*Acenaphthene-d10	16.87	164.0	50742	40.00	UG/L	99
21)	Hexachlorocyclopentadiene	14.56	237.0	41796	72.07	UG/L	99
22)	2-Chloronaphthalene	15.19	162.0	76868	52.79	UG/L	98
23)	2-Fluorobiphenyl	15.12	172.0	86128	58.53	UG/L	95
24)	2-Nitroaniline	15.80	138.0	23602	45.49	UG/L	76
25)	Dimethylphthalate	16.67	163.0	74256	42.51	UG/L	86
26)	Acenaphthylene	16.36	152.0	106523	49.22	UG/L	99
27)	3-Nitroaniline	17.06	138.0	16096	41.67	UG/L	86
28)	Acenaphthene	16.96	153.0	69572	50.26	UG/L	98
29)	Dibenzofuran	17.46	168.0	95703	47.09	UG/L	97
30)	2,4-Dinitrotoluene	17.83	165.0	13924	31.57	UG/L	76
31)	2,6-Dinitrotoluene	16.75	165.0	14264	34.49	UG/L	62
32)	Diethylphthalate	18.85	149.0	68297	38.12	UG/L	89
33)	4-Chlorophenyl-phenylether	18.70	204.0	37228	47.87	UG/L	94
34)	Fluorene	18.46	166.0	63695	43.43	UG/L	99
35)	4-Nitroaniline	18.89	138.0	11149	39.91	UG/L	89
36)	*Phenanthrene-d10	21.16	188.0	57178	40.00	UG/L	99
37)	N-Nitrosodiphenylamine	19.13	169.0	32169	54.29	UG/L	93
38)	4-Bromophenyl-phenylether	20.11	248.0	22957	60.14	UG/L	83
39)	Hexachlorobenzene	20.33	284.0	26805	54.31	UG/L	98
40)	Phenanthrene	21.23	178.0	71558	52.69	UG/L	98
41)	Anthracene	21.35	178.0	71647	52.27	UG/L	99
42)	Di-n-butylphthalate	23.81	149.0	83089	48.75	UG/L	96
43)	Fluoranthene	24.76	202.0	65793	51.60	UG/L	95

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	*Chrysene-d12	29.08	240.0	41311	40.00	UG/L	98
45)	Pyrene	25.35	202.0	65121	34.67	UG/L	94
46)	Terphenyl-d14	26.27	244.0	41948	40.33	UG/L	85
47)	Butylbenzylphthalate	28.18	149.0	36104	53.82	UG/L	89
48)	3,3'-Dichlorobenzidine	29.32	252.0	20107	69.14	UG/L	95
49)	Benzo(a)anthracene	29.06	228.0	58889	56.04	UG/L	98
50)	bis(2-Ethylhexyl)phthalate	30.26	149.0	51700	67.83	UG/L	95
51)	Chrysene	29.16	228.0	57465	57.70	UG/L	96
52)	*Perylene-d12	33.01	264.0	40038	40.00	UG/L	95
53)	Di-n-octylphthalate	32.03	149.0	89476	48.42	UG/L	87
54)	Benzo(b)fluoranthene	32.09	252.0	63421	47.25	UG/L	94
55)	Benzo(k)fluoranthene	32.15	252.0	61754	45.09	UG/L	95
56)	Benzo(a)pyrene	32.86	252.0	59633	50.44	UG/L	98
57)	Indeno(1,2,3-cd)pyrene	35.54	276.0	61692	57.78	UG/L	89
58)	Dibenz(a,h)anthracene	35.66	278.0	56850	58.02	UG/L	96
59)	Benzo(g,h,i)perylene	36.05	276.0	63198	57.34	UG/L	90

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >E3057::D4 Quant Output File: ^F3057::Q2
Name: A/P STD 50NGS
Misc: 04/20/88JWO/LH 1UL INJ (249-107-5) RTI # 2

Id File: ICE62::D2
Title: AP ID FILE FOR HP5970E (INT. CAL.)
Last Calibration: 880429 05:59

Operator ID: USER6
Quant Time: 880502 11:31
Injected at: 880420 15:56

QUANT REPORT

Operator ID: USER6 Quant Rev: 6 Quant Time: 880502 11:31
Output File: ^E3057::Q2 Injected at: 880420 15:56
Data File: >E3057::D4 Dilution Factor: 1.00000
Name: A/P STD 50NGS
Misc: 04/20/88JWO/LH 1UL INJ (249-107-5) BTL# 2

ID File: ICE62::D2
Title: AP ID FILE FOR HP5970E (INT. CAL.)
Last Calibration: 880429 05:59

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	7.98	152.0	30430	40.00	UG/L	98
2)	2-Fluorophenol	4.64	112.0	33065	60.83	UG/L	88
3)	Phenol-d5	7.75	99.0	47649	54.97	UG/L	92
4)	Phenol	7.79	94.0	52951	56.25	UG/L	95
5)	2-Chlorophenol	7.53	128.0	42795	52.75	UG/L	97
6)	2-Methylphenol	9.38	108.0	41550	55.44	UG/L	94
7)	4-Methylphenol	9.87	108.0	43712	54.88	UG/L	95
8)	*Naphthalene-d8	11.66	136.0	99720	40.00	UG/L	93
9)	2-Nitrophenol	10.72	139.0	27246	58.06	UG/L	82
10)	2,4-Dimethylphenol	11.31	122.0	35334	56.28	UG/L	92
11)	Benzoic Acid	12.12	105.0	13438	25.53	UG/L	89
12)	2,4-Dichlorophenol	11.51	162.0	41725	56.76	UG/L	94
13)	4-Chloro-3-methylphenol	13.97	107.0	44153	53.40	UG/L	83
14)	*Acenaphthene-d10	16.86	164.0	59478	40.00	UG/L	99
15)	2,4,6-Trichlorophenol	14.89	196.0	33702	54.91	UG/L	93
16)	2,4,5-Trichlorophenol	14.99	196.0	37035	58.71	UG/L	90
17)	2,4-Dinitrophenol	17.35	184.0	8106	44.23	UG/L	78
18)	4-Nitrophenol	17.98	65.0	15672	57.49	UG/L	43
19)	2,4,6-Tribromophenol	19.26	330.0	24828	53.76	UG/L	98
20)	*Phenanthrene-d10	21.17	188.0	88499	40.00	UG/L	99
21)	4,6-Dinitro-2-methylphenol	18.99	198.0	12164	46.12	UG/L	80
22)	Pentachlorophenol	20.99	266.0	18592	48.13	UG/L	98

* Compound is ISTD

8B

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Lab File ID (Standard): E3057 Date Analyzed: 4/20/88

Instrument ID: 7002E Time Analyzed: 15:56

		IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
	12 HOUR STD	30430.	7.98	99720.	11.66	59478.	16.86
	UPPER LIMIT	60860.	8.48	199440.	12.16	118956.	17.36
	LOWER LIMIT	15215.	7.48	49860.	11.16	29739.	16.36
	EPA SAMPLE NO.						
1	SBLK	21234.	7.95	77869.	11.65	46909.	16.87
2	BQ691	23775.	7.97	89713.	11.65	59393.	16.87
3	BQ691MS	20444.	7.97	76027.	11.65	47976.	16.87
4	BQ691MSD	19329.	7.97	73200.	11.65	47526.	16.87
5							
6							
7							
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15							
16							
17							
18							
19							
20							
21							
22							

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

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

8C

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Lab File ID (Standard): E3057 Date Analyzed: 4/20/88

Instrument ID: 7002E Time Analyzed: 15:56

		IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
	12 HOUR STD	88499.	21.17	41311.	29.08	40038.	33.01
	UPPER LIMIT	176998.	21.67	82622.	29.58	80076.	33.51
	LOWER LIMIT	44250.	20.67	20656.	28.58	20019.	32.51
	EPA SAMPLE NO.						
1	SBLK	61077.	21.16	29618.	29.09	26625.	33.01
2	BQ691	100205.	21.16	73682.	29.08	74044.	33.03
3	BQ691MS	69009.	21.16	36403.	29.07	32706.	33.01
4	BQ691MSD	74192.	21.16	50301.	29.07	49660.	33.01
5							
6							
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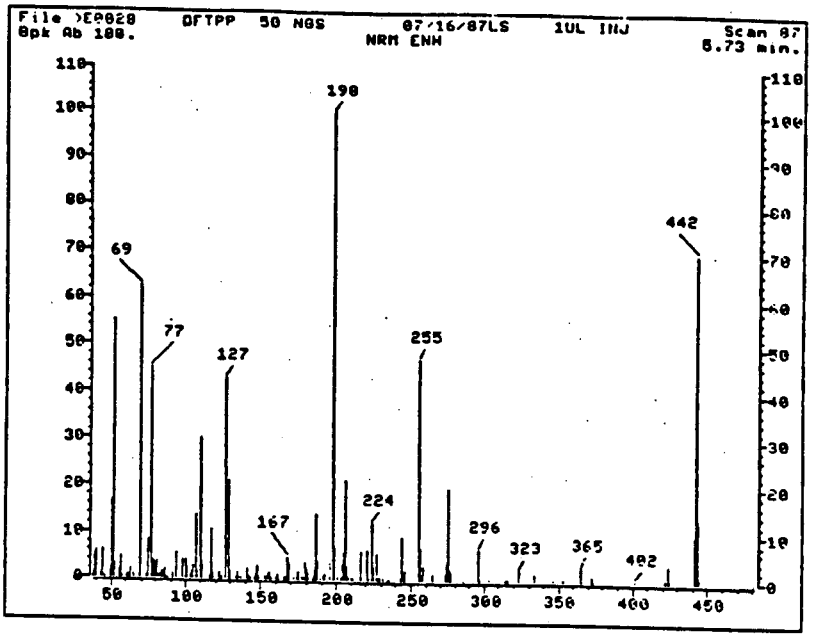
18							
19							
20							
21							
22							

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

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk



>E0028 DFTPP 50 NGS 07/16/87LS 1UL INJ
87 NRM ENH

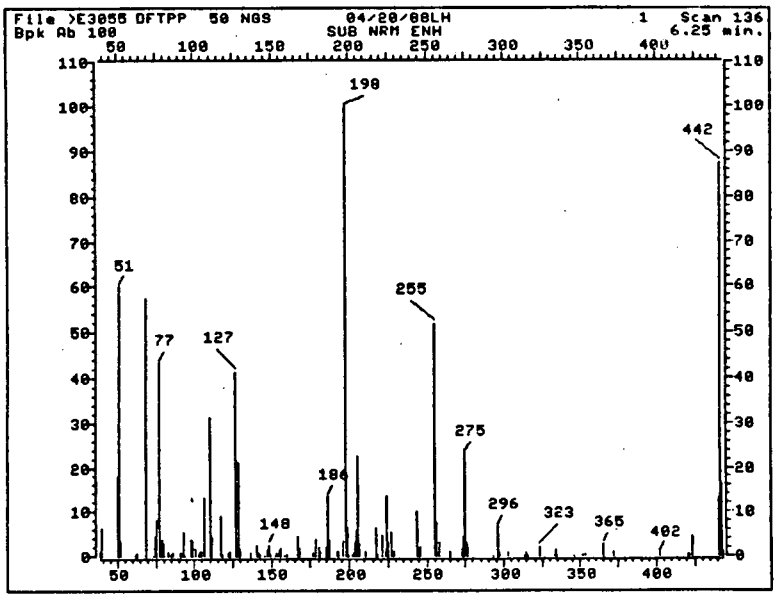
File: >E0028 Scan #: 87 Retn. time: 5.73

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
38.15	1.043	86.75	.195	146.90	1.145	199.00	6.922	275.00	19.841
39.05	5.052	88.05	.155	148.00	2.939	201.40	.746	276.00	2.508
39.85	5.936	90.95	.981	148.80	.817	202.70	.360	277.00	1.918
43.25	.999	93.05	5.461	153.00	.679	204.10	3.512	285.20	.089
43.95	6.273	96.95	.107	153.90	.284	205.10	5.749	292.80	.147
45.25	.386	97.95	4.111	155.00	1.363	206.00	21.315	296.00	6.748
46.05	.124	99.05	4.284	155.80	1.541	207.00	3.228	296.90	.559
49.15	2.162	101.05	2.420	156.70	.129	208.10	.608	303.10	.300
50.05	16.480	102.85	.799	157.00	.284	210.70	.511	313.85	.138
51.05	55.070	103.80	1.319	160.10	.502	211.00	.426	314.25	.133
52.05	3.099	104.90	2.850	161.00	1.132	217.00	6.131	314.85	.542
55.95	1.763	106.90	13.537	161.90	.151	221.00	6.402	315.95	.293
56.95	4.817	108.00	1.731	164.90	.861	222.10	.506	323.15	2.429
57.55	.258	109.90	30.110	166.20	.542	224.00	12.112	334.05	1.434
57.85	.320	111.00	3.920	167.00	4.688	225.00	2.275	345.95	.293
61.15	.635	115.90	.866	168.00	3.587	227.00	5.567	352.15	.249
62.05	.915	117.00	10.717	172.00	.315	227.70	.377	352.85	.364
63.05	2.109	118.00	1.159	174.10	1.288	228.00	.408	353.55	.142
64.85	1.066	122.40	.422	174.90	1.807	229.10	.852	353.95	.426
68.95	62.151	123.00	1.456	176.40	.107	230.90	.284	364.95	3.010
73.05	.728	123.80	.435	177.10	.679	234.10	.107	366.05	.182
74.15	5.115	125.00	.293	178.20	.266	235.00	.186	372.05	1.123
74.95	8.191	127.00	42.848	178.90	3.725	242.30	.346	373.15	.151
77.05	44.970	128.90	21.089	180.00	2.340	243.10	.884	389.75	.129
78.05	3.885	130.00	1.891	180.90	1.327	244.00	9.159	401.85	.417
79.15	3.805	134.10	.453	184.00	.102	245.00	1.057	421.05	.613
80.15	2.992	134.90	1.603	185.00	2.198	245.90	2.011	422.05	.400
81.05	3.765	136.90	.559	186.00	13.839	255.00	47.323	422.95	3.814
81.85	.879	139.70	.133	187.10	4.018	256.00	6.855	424.05	.777
82.35	.320	141.00	2.548	188.90	.488	257.10	1.003	441.05	9.838
83.25	.715	142.00	.604	191.90	.999	258.00	3.050	442.05	70.063
84.05	1.323	142.50	.395	192.90	1.345	265.00	1.301	443.05	13.199
84.95	.986	143.00	.289	196.00	3.645	273.10	1.416	443.95	1.123
86.05	2.153	146.00	.160	197.90	100.000	274.10	3.929	481.25	.089

MS data file header from : >E0028

Sample: DFTPP 50 NGS Operator: USER6 MS 7/16/87 10:25
Misc : 07/16/87LS 1UL INJ BTL# 1
Sys. #: 2 MS model: 70 SW/HW rev.: CA ALS # : 0
Method file: DFTPPE Tuning file: MTEUN No. of extra records: 1
Source temp.: 0 Analyzer temp.: 275 Transfer line temp. : 0

Chromatographic temperatures : 150. 280. 0. 0. 0.
Chromatographic times, min. : 0.0 18.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 5.0 0.0 0.0 0.0 0.0
FMGR : CRT,,FF



>E3055 DFTPP 50 NGS 04/20/88LH 1UL INJ (249

136 SUB NRM ENH

File: >E3055 Scan #: 136 Retn. time: 6.25

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
38.05	1.201	103.15	.338	155.00	1.329	207.10	2.824	296.00	6.742
39.05	6.503	104.05	1.065	156.00	1.656	210.90	.889	297.00	.698
50.05	17.919	105.05	1.193	157.90	.147	217.00	6.411	303.00	.577
51.05	59.960	107.05	13.043	160.00	.492	218.00	.397	314.00	.173
52.05	3.308	110.00	31.253	167.00	4.249	221.00	4.799	315.00	.646
62.15	.422	111.00	4.326	168.00	1.796	223.10	.925	315.90	.191
63.05	.595	117.00	9.261	177.00	.845	224.00	13.307	323.00	2.100
68.95	57.507	118.00	.382	177.90	.121	225.10	2.960	333.25	.132
73.15	.121	121.90	.643	178.90	3.584	227.00	5.402	333.95	1.322
74.05	4.432	123.00	1.157	180.00	2.141	228.00	.826	334.95	.140
75.05	8.156	127.00	41.483	181.00	1.036	229.00	.878	345.95	.195
77.05	43.205	128.00	3.852	185.10	1.942	244.00	9.977	352.05	.459
78.05	2.908	129.00	21.129	186.00	13.396	245.00	1.263	353.95	.496
79.05	3.701	130.00	1.719	187.00	3.430	245.90	2.115	364.95	2.592
79.95	2.622	137.00	.690	192.00	1.061	255.00	51.783	372.05	1.182
83.05	.922	141.00	2.324	193.00	1.010	256.00	7.465	402.05	.551
84.95	.503	141.90	.705	196.00	3.264	257.00	.650	421.05	.419
86.05	.771	142.90	.217	198.00	100.000	257.90	3.004	421.95	.448
90.95	.679	145.80	.143	199.00	6.540	265.00	1.138	423.05	4.267
92.05	.712	147.00	1.219	199.90	.198	273.00	1.564	423.95	.683
93.05	5.313	147.90	2.545	201.60	.217	274.00	4.278	441.05	13.036
94.05	.184	148.90	.319	203.10	.650	275.00	23.057	442.05	87.335
97.95	3.591	152.10	.129	204.10	3.136	276.00	3.092	443.05	16.006
99.05	3.242	153.10	.650	205.00	5.791	277.00	2.064	444.05	1.102
100.95	1.869	154.00	.213	206.00	22.388	292.90	.162		

MS data file header from : >E3055

Sample: DFTPP 50 NGS Operator: USER6 MS 4/20/88 14:18
Misc : 04/20/88LH 1UL INJ (249-103-4) BTL# 1
Sys. #: 2 MS model: 70 SW/HW rev.: IA ALS # : 0
Method file: DFTPPE Tuning file: MTEON No. of extra records: 2
Source temp.: 0 Analyzer temp.: 275 Transfer line temp. : 0

Chromatographic temperatures :	150.	280.	0.	0.	0.
Chromatographic times, min. :	0.0	5.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	4.0	0.0	0.0	0.0	0.0

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

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

Sample wt/vol: 1000. (g/mL) ML Lab File ID: E3058

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec.100. dec. 0. Date Extracted: 4/12/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 4/20/88

GPC Cleanup: (Y/N) N pH: .0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10.	U
111-44-4	bis(2-Chloroethyl)ether	10.	U
95-57-8	2-Chlorophenol	10.	U
541-73-1	1,3-Dichlorobenzene	10.	U
106-46-7	1,4-Dichlorobenzene	10.	U
100-51-6	Benzyl alcohol	10.	U
95-50-1	1,2-Dichlorobenzene	10.	U
95-48-7	2-Methylphenol	10.	U
108-60-1	bis(2-Chloroisopropyl)ether	10.	U
106-44-5	4-Methylphenol	10.	U
621-64-7	N-Nitroso-di-n-propylamine	10.	U
67-72-1	Hexachloroethane	10.	U
98-95-3	Nitrobenzene	10.	U
78-59-1	Isophorone	10.	U
88-75-5	2-Nitrophenol	10.	U
105-67-9	2,4-Dimethylphenol	10.	U
65-85-0	Benzoic Acid	50.	U
111-91-1	bis(2-Chloroethoxy)methane	10.	U
120-83-2	2,4-Dichlorophenol	10.	U
120-82-1	1,2,4-Trichlorobenzene	10.	U
91-20-3	Naphthalene	10.	U
106-47-8	4-Chloroaniline	10.	U
87-68-3	Hexachlorobutadiene	10.	U
59-50-7	4-Chloro-3-methylphenol	10.	U
91-57-6	2-Methylnaphthalene	10.	U
77-47-4	Hexachlorocyclopentadiene	10.	U
88-06-2	2,4,6-Trichlorophenol	10.	U
95-95-4	2,4,5-Trichlorophenol	50.	U
91-58-7	2-Chloronaphthalene	10.	U
88-74-4	2-Nitroaniline	50.	U
131-11-3	Dimethylphthalate	10.	U
208-96-8	Acenaphthylene	10.	U
606-20-2	2,6-Dinitrotoluene	10.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

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

Sample wt/vol: 1000. (g/mL) ML Lab File ID: E3058

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec.100. dec. 0. Date Extracted: 4/12/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 4/20/88

GPC Cleanup: (Y/N) N pH: .0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50.	U
83-32-9	Acenaphthene	10.	U
51-28-5	2,4-Dinitrophenol	50.	U
100-02-7	4-Nitrophenol	50.	U
132-64-9	Dibenzofuran	10.	U
121-14-2	2,4-Dinitrotoluene	10.	U
84-66-2	Diethylphthalate	10.	U
7005-72-3	4-Chlorophenyl-phenylether	10.	U
86-73-7	Fluorene	10.	U
100-01-6	4-Nitroaniline	50.	U
534-52-1	4,6-Dinitro-2-methylphenol	50.	U
86-30-6	N-Nitrosodiphenylamine	10.	U
101-55-3	4-Bromophenyl-phenylether	10.	U
118-74-1	Hexachlorobenzene	10.	U
87-86-5	Pentachlorophenol	50.	U
85-01-8	Phenanthrene	10.	U
120-12-7	Anthracene	10.	U
84-74-2	Di-n-butylphthalate	10.	U
206-44-0	Fluoranthene	10.	U
129-00-0	Pyrene	10.	U
85-68-7	Butylbenzylphthalate	10.	U
91-94-1	3,3'-Dichlorobenzidine	20.	U
56-55-3	Benzo(a)anthracene	10.	U
218-01-9	Chrysene	10.	U
117-81-7	bis(2-Ethylhexyl)phthalate	18.	
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.

SBLK

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

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

Sample wt/vol: 1000. (g/mL) ML Lab File ID: E3058

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec.100. dec. 0. Date Extracted: 4/12/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 4/20/88

GPC Cleanup: (Y/N) N pH: .0 Dilution Factor: 1.00

Number TICs found: 2

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	25.21	70.	J
2.	- -	UNKNOWN	32.44	20.	J
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
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16.					
17.					
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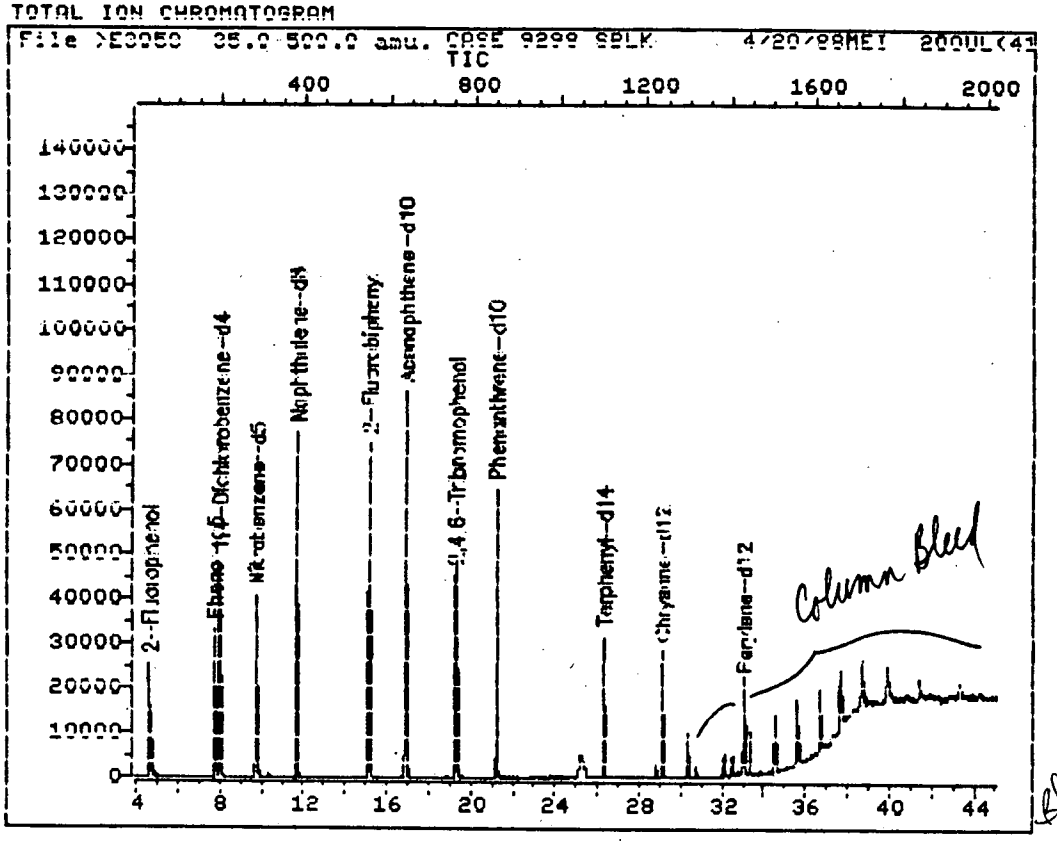
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

TOTAL ION CHROMATOGRAM



Data File: >E3058::D8 Quant Output File: ^E3058::Q1
Name: CASE 9298 SBLK
Misc: 4/20/88MEI 200UL(4100) + 200UL(4200) + 4UL IS (4/12) BTL# 1

Id File: CONE72::D2
Title: BNA ID FILE FOR THE HP5970E (CONT. CAL.)
Last Calibration: 880502 17:05

Operator ID: USER8
Quant Time: 880502 17:06
Injected at: 880420 17:20

QUANT REPORT

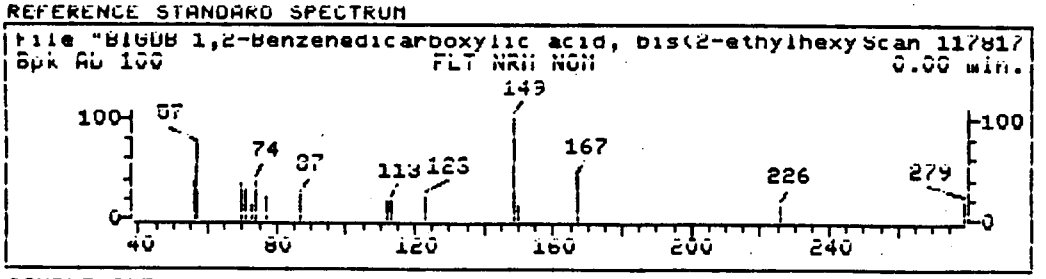
Operator ID: USER8 Quant Rev: 6 Quant Time: 880502 17:06
Output File: ^E3058::Q1 Injected at: 880420 17:20
Data File: >E3058::D8 Dilution Factor: 2.00000
Name: CASE 9298 SBLK
Misc: 4/20/88MEI 200UL(4100) + 200UL(4200) + 4UL IS (4/12) BTL# 1

ID File: CONE72::D2
Title: BNA ID FILE FOR THE HP5970E (CONT. CAL.)
Last Calibration: 880502 17:05

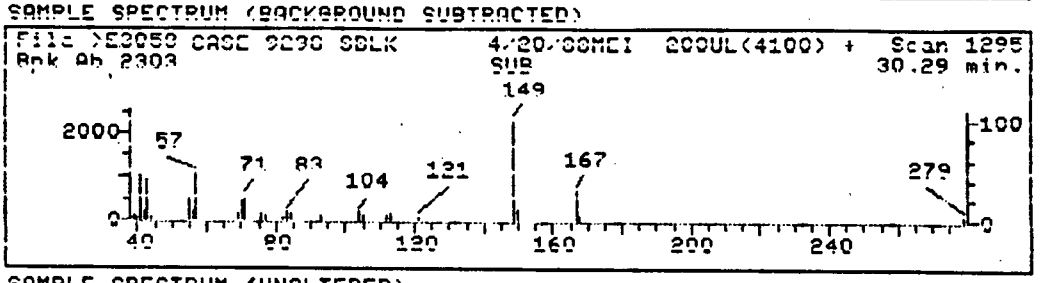
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	7.95	152.0	21234	40.00	UG/L	96
2)	2-Fluorophenol	4.62	112.0	16379	70.99	UG/L	87
3)	Phenol-d5	7.71	99.0	22653	68.13	UG/L	95
16)	*Naphthalene-d8	11.65	136.0	77869	40.00	UG/L	93
17)	Nitrobenzene-d5	9.70	82.0	27818	63.83	UG/L	79
31)	*Acenaphthene-d10	16.87	164.0	46909	40.00	UG/L	98
36)	2-Fluorobiphenyl	15.13	172.0	54259	68.15	UG/L	94
51)	2,4,6-Tribromophenol	19.25	330.0	21380	109.19	UG/L	94
52)	*Phenanthrene-d10	21.16	188.0	61077	40.00	UG/L	98
62)	*Chrysene-d12	29.09	240.0	29618	40.00	UG/L	97
64)	Terphenyl-d14	26.28	244.0	33036	109.85	UG/L	86
68)	bis(2-Ethylhexyl)phthalate	30.29	149.0	6581	17.75	UG/L	95
70)	*Perylene-d12	33.01	264.0	26625	40.00	UG/L	93

* Compound is ISTD

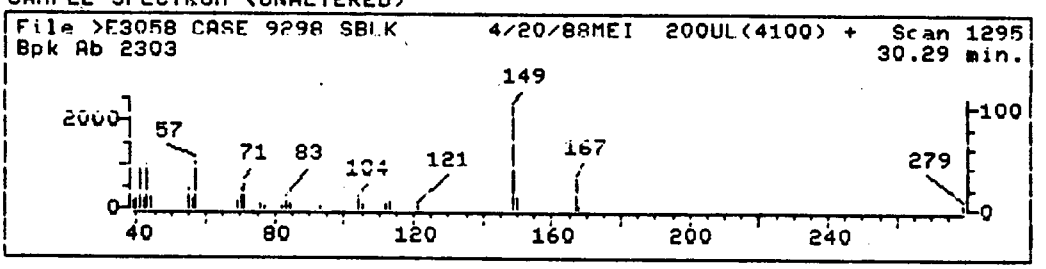
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

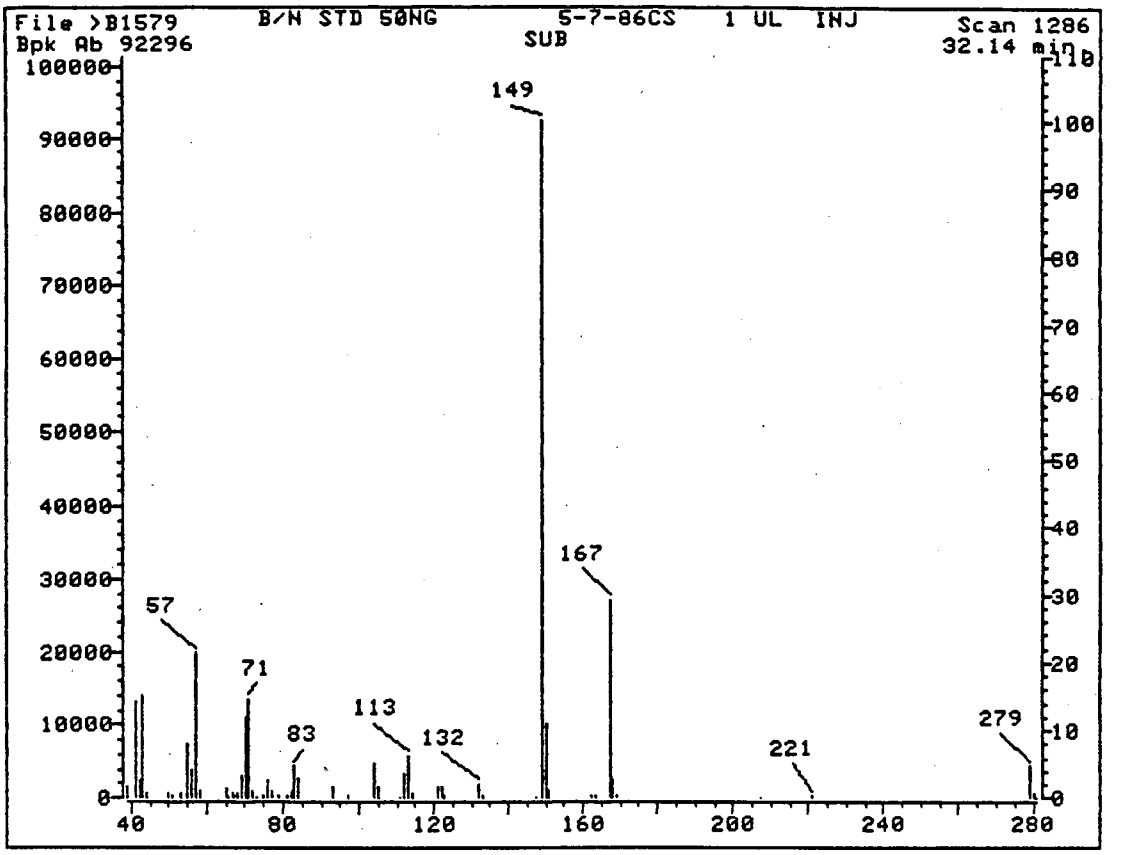


SAMPLE SPECTRUM (UNALTERED)



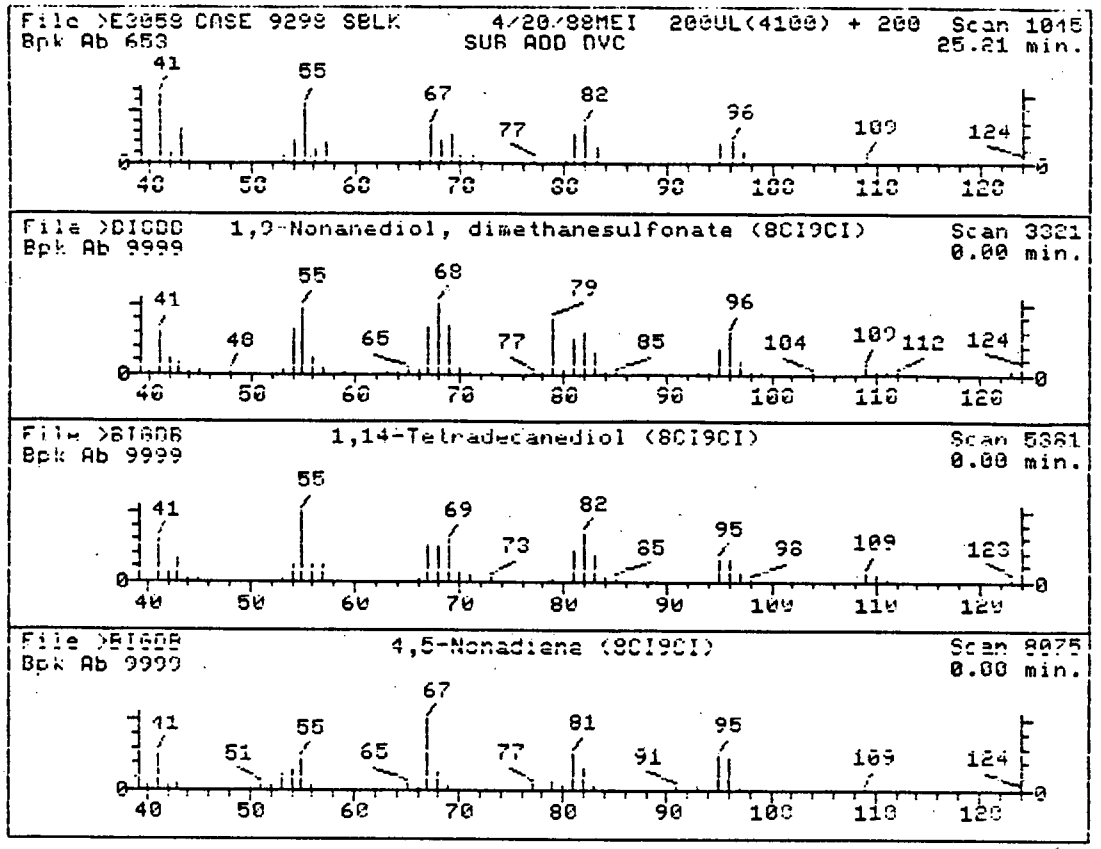
Data File: >E3058::D8 Quant Output File: ^E3058::Q1
Name: CASE 9298 SBLK
Misc: 4/20/88MEI 200UL(4100) + 200UL(4200) + 4UL IS (4/12) BTL# 1
Quant Time: 880502 17:06 Quant ID File: CONE72::D2
Injected at: 880420 17:20 Last Calibration: 880502 17:05

Compound No: 68
Compound Name: bis(2-Ethylhexyl)phthalate
Scan Number: 1295
Retention Time: 30.29 min.
Quant Ion: 149.0
Area: 6581
Concentration: 17.75 UG/L
q-value: 95



BIS(2-ETHYLHEXYL)PHTHALATE

STANDARD SPECTRA

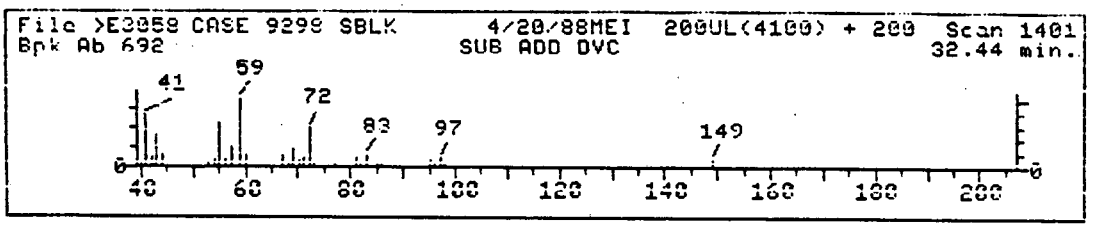


. Unknown #,1
Area = 65979.00 Tentative Concentration is 35.00

1.	1,9-Nonanediol, dimethanesulfonate (8CI9CI)	316	C11H24O6S2
2.	1,14-Tetradecanediol (8CI9CI)	230	C14H30O2
3.	4,5-Nonadiene (8CI9CI)	124	C9H16
4.	Spiropentane, butyl- (8CI9CI)	124	C9H16
5.	Bicyclo[3.1.0]hexan-3-one (8CI9CI)	96	C6H8O
6.	Cyclohexane, cyclopropyl- (8CI)	124	C9H16
7.	Cyclohexane, methylene- (8CI9CI)	96	C7H12

Sample file: >E3058 Spectrum #: 1045
Search speed: 2 Tilting option: N No. of ion ranges searched: 51

	Prob.	CAS #	CON #	ROUT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	70	4248725	3321	"BIGDB	86	85	3	0	61	9	42	16
2.	52	19812647	5381	"BIGDB	68	75	2	0	65	17	20	15
3.	29*	821749	8075	"BIGDB	36	57	2	0	45	43	8	17
4.	26	6191908	3286	"BIGDB	61	53	2	0	52	39	10	12
5.	25*	1755040	3268	"BIGDB	51	69	3	0	70	50	7	13
6.	25*	32669866	8096	"BIGDB	29	77	2	0	36	46	7	14
7.	24*	1192376	8056	"BIGDB	23	81	3	0	72	45	8	12



Unknown #,3
Area = 17312.00 Tentative Concentration is 10.00

Sample file: >E3058 Spectrum #: 1401

No data base entries were retrieved.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BQ691MS

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Matrix: (soil/water) WATER Lab Sample ID: 17265

Sample wt/vol: 500. (g/mL) ML Lab File ID: E3060

Level: (low/med) LOW Date Received: 4/ 8/88

% Moisture: not dec.100. dec. 0. Date Extracted: 4/12/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 4/20/88

GPC Cleanup: (Y/N) N pH: .0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	160.	
111-44-4	bis(2-Chloroethyl)ether	20.	U
95-57-8	2-Chlorophenol	150.	
541-73-1	1,3-Dichlorobenzene	20.	U
106-46-7	1,4-Dichlorobenzene	63.	
100-51-6	Benzyl alcohol	20.	U
95-50-1	1,2-Dichlorobenzene	20.	U
95-48-7	2-Methylphenol	20.	U
108-60-1	bis(2-Chloroisopropyl)ether	20.	U
106-44-5	4-Methylphenol	20.	U
621-64-7	N-Nitroso-di-n-propylamine	130.	
67-72-1	Hexachloroethane	20.	U
98-95-3	Nitrobenzene	20.	U
78-59-1	Isophorone	20.	U
88-75-5	2-Nitrophenol	20.	U
105-67-9	2,4-Dimethylphenol	20.	U
65-85-0	Benzoic Acid	100.	U
111-91-1	bis(2-Chloroethoxy)methane	20.	U
120-83-2	2,4-Dichlorophenol	20.	U
120-82-1	1,2,4-Trichlorobenzene	71.	
91-20-3	Naphthalene	20.	U
106-47-8	4-Chloroaniline	20.	U
87-68-3	Hexachlorobutadiene	20.	U
59-50-7	4-Chloro-3-methylphenol	180.	
91-57-6	2-Methylnaphthalene	20.	U
77-47-4	Hexachlorocyclopentadiene	20.	U
88-06-2	2,4,6-Trichlorophenol	20.	U
95-95-4	2,4,5-Trichlorophenol	100.	U
91-58-7	2-Chloronaphthalene	20.	U
88-74-4	2-Nitroaniline	100.	U
131-11-3	Dimethylphthalate	20.	U
208-96-8	Acenaphthylene	20.	U
606-20-2	2,6-Dinitrotoluene	20.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BQ691MS

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Matrix: (soil/water) WATER Lab Sample ID: 17265

Sample wt/vol: 500. (g/mL) ML Lab File ID: E3060

Level: (low/med) LOW Date Received: 4/ 8/88

% Moisture: not dec.100. dec. 0. Date Extracted: 4/12/88

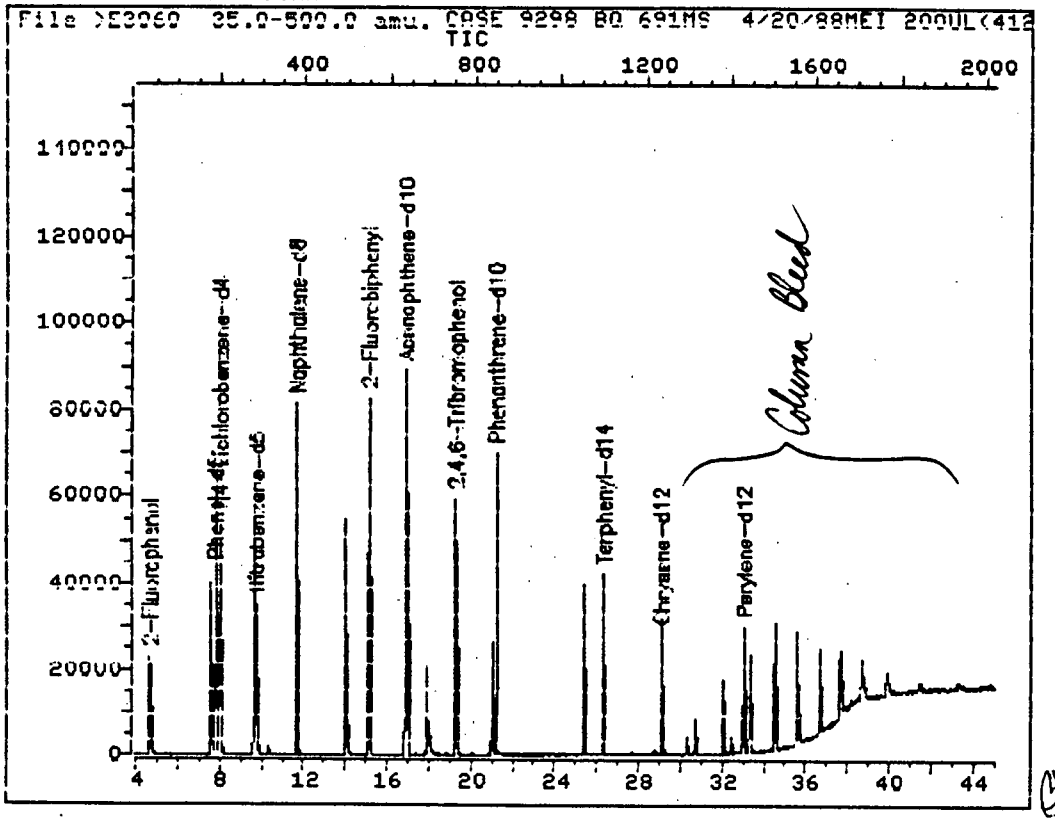
Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 4/20/88

GPC Cleanup: (Y/N) N pH: .0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	100.	U
83-32-9	Acenaphthene	100.	
51-28-5	2,4-Dinitrophenol	100.	U
100-02-7	4-Nitrophenol	89.	J
132-64-9	Dibenzofuran	20.	U
121-14-2	2,4-Dinitrotoluene	140.	
84-66-2	Diethylphthalate	20.	U
7005-72-3	4-Chlorophenyl-phenylether	20.	U
86-73-7	Fluorene	20.	U
100-01-6	4-Nitroaniline	100.	U
534-52-1	4,6-Dinitro-2-methylphenol	100.	U
86-30-6	N-Nitrosodiphenylamine	20.	U
101-55-3	4-Bromophenyl-phenylether	20.	U
118-74-1	Hexachlorobenzene	20.	U
87-86-5	Pentachlorophenol	130.	
85-01-8	Phenanthrene	20.	U
120-12-7	Anthracene	20.	U
84-74-2	Di-n-butylphthalate	20.	U
206-44-0	Fluoranthene	20.	U
129-00-0	Pyrene	150.	
85-68-7	Butylbenzylphthalate	20.	U
91-94-1	3,3'-Dichlorobenzidine	40.	U
56-55-3	Benzo(a)anthracene	20.	U
218-01-9	Chrysene	20.	U
117-81-7	bis(2-Ethylhexyl)phthalate	13.	BJ
117-84-0	Di-n-octylphthalate	20.	U
205-99-2	Benzo(b)fluoranthene	20.	U
207-08-9	Benzo(k)fluoranthene	20.	U
50-32-8	Benzo(a)pyrene	20.	U
193-39-5	Indeno(1,2,3-cd)pyrene	20.	U
53-70-3	Dibenz(a,h)anthracene	20.	U
191-24-2	Benzo(g,h,i)perylene	20.	U

(1) - Cannot be separated from diphenylamine

TOTAL ION CHROMATOGRAM



Data File: >E3060::D8 Quant Output File: ^E3060::Q1
Name: CASE 9298 BQ 691MS
Misc: 4/20/88MEI 200UL(4120)+200UL(4220) + 4UL IS(17265.01) BTL# 2

Id File: CONE72::D2
Title: BNA ID FILE FOR THE HP5970E (CONT. CAL.)
Last Calibration: 880502 17:05

Operator ID: USER8
Quant Time: 880502 17:14
Injected at: 880420 19:12

QUANT REPORT

Operator ID: USER8 Quant Rev: 6 Quant Time: 880502 17:14
Output File: ^E3060::Q1 Injected at: 880420 19:12
Data File: >E3060::D8 Dilution Factor: 2.00000
Name: CASE 9298 BQ 691MS
Misc: 4/20/88MEI 200UL(4120)+200UL(4220) + 4UL IS(17265.01) BTL# 2

ID File: CONE72::D2
Title: BNA ID FILE FOR THE HP5970E (CONT. CAL.)
Last Calibration: 880502 17:05

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	7.97	197	20444	40.00	UG/L	96
2)	2-Fluorophenol	4.62	32	16151	72.71	UG/L	96
3)	Phenol-d5	7.73	185	29683	92.72	UG/L	94
4)	Phenol	7.77	187	27691	77.84	UG/L	97
6)	2-Chlorophenol	7.53	175	22017	76.58	UG/L	98
8)	1,4-Dichlorobenzene	8.01	199	11626	31.47	UG/L	96
14)	N-Nitroso-di-n-propylamine	9.62	278	20826	66.30	UG/L	75
16)	*Naphthalene-d8	11.65	378	76027	40.00	UG/L	94
17)	Nitrobenzene-d5	9.72	283	29527	69.39	UG/L	78
25)	1,2,4-Trichlorobenzene	11.61	376	13983	35.52	UG/L	91
29)	4-Chloro-3-methylphenol	13.95	491	29530	87.72	UG/L	87
31)	*Acenaphthene-d10	16.87	635	47976	40.00	UG/L	96
36)	2-Fluorobiphenyl	15.13	549	59833	73.48	UG/L	95
41)	Acenaphthene	16.96	639	33399	50.77	UG/L	98
43)	4-Nitrophenol	17.97	689	5644	44.65	UG/L	47
45)	2,4-Dinitrotoluene	17.83	682	9393	71.35	UG/L	77
51)	2,4,6-Tribromophenol	19.25	752	24923	124.45	UG/L	92
52)	*Phenanthrene-d10	21.16	846	69009	40.00	UG/L	99
57)	Pentachlorophenol	20.98	837	9373	64.65	UG/L	96
62)	*Chrysene-d12	29.07	1235	36403	40.00	UG/L	97
63)	Pyrene	25.35	1052	42182	73.51	UG/L	97
64)	Terphenyl-d14	26.28	1098	38689	104.67	UG/L	88
68)	bis(2-Ethylhexyl)phthalate	30.27	1294	2981	6.54	UG/L	91
70)	*Perylene-d12	33.01	1429	32706	40.00	UG/L	95

* Compound is ISTD

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BQ691MSD

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Matrix: (soil/water) WATER Lab Sample ID: 17265

Sample wt/vol: 500. (g/mL) ML Lab File ID: E3061

Level: (low/med) LOW Date Received: 4/ 8/88

% Moisture: not dec.100. dec. 0. Date Extracted: 4/12/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 4/20/88

GPC Cleanup: (Y/N) N pH: .0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	170.	
111-44-4	bis(2-Chloroethyl)ether	20.	U
95-57-8	2-Chlorophenol	170.	
541-73-1	1,3-Dichlorobenzene	20.	U
106-46-7	1,4-Dichlorobenzene	67.	
100-51-6	Benzyl alcohol	20.	U
95-50-1	1,2-Dichlorobenzene	20.	U
95-48-7	2-Methylphenol	20.	U
108-60-1	bis(2-Chloroisopropyl)ether	20.	U
106-44-5	4-Methylphenol	20.	U
621-64-7	N-Nitroso-di-n-propylamine	130.	
67-72-1	Hexachloroethane	20.	U
98-95-3	Nitrobenzene	20.	U
78-59-1	Isophorone	20.	U
88-75-5	2-Nitrophenol	20.	U
105-67-9	2,4-Dimethylphenol	20.	U
65-85-0	Benzoic Acid	100.	U
111-91-1	bis(2-Chloroethoxy)methane	20.	U
120-83-2	2,4-Dichlorophenol	20.	U
120-82-1	1,2,4-Trichlorobenzene	77.	
91-20-3	Naphthalene	20.	U
106-47-8	4-Chloroaniline	20.	U
87-68-3	Hexachlorobutadiene	20.	U
59-50-7	4-Chloro-3-methylphenol	190.	
91-57-6	2-Methylnaphthalene	20.	U
77-47-4	Hexachlorocyclopentadiene	20.	U
88-06-2	2,4,6-Trichlorophenol	20.	U
95-95-4	2,4,5-Trichlorophenol	100.	U
91-58-7	2-Chloronaphthalene	20.	U
88-74-4	2-Nitroaniline	100.	U
131-11-3	Dimethylphthalate	20.	U
208-96-8	Acenaphthylene	20.	U
606-20-2	2,6-Dinitrotoluene	20.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BQ691MSD

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Matrix: (soil/water) WATER Lab Sample ID: 17265

Sample wt/vol: 500. (g/mL) ML Lab File ID: E3061

Level: (low/med) LOW Date Received: 4/ 8/88

% Moisture: not dec.100. dec. 0. Date Extracted: 4/12/88

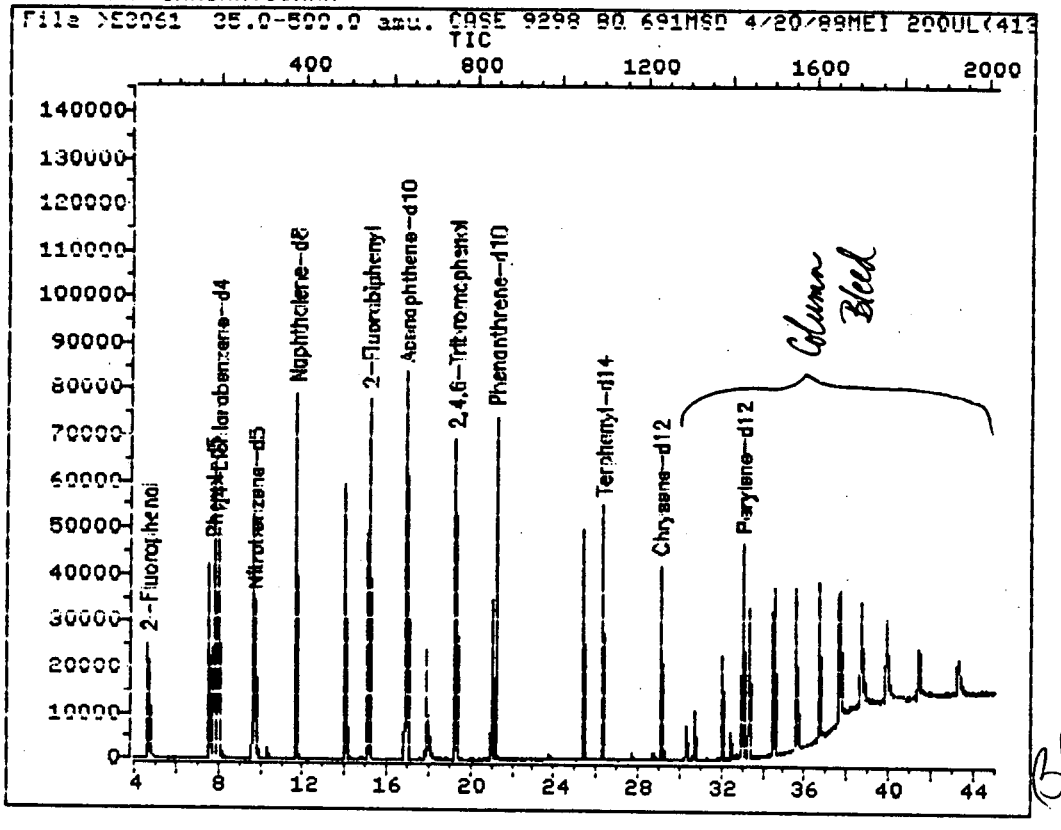
Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 4/20/88

GPC Cleanup: (Y/N) N pH: .0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	100.	U
83-32-9	Acenaphthene	110.	
51-28-5	2,4-Dinitrophenol	100.	U
100-02-7	4-Nitrophenol	110.	
132-64-9	Dibenzofuran	20.	U
121-14-2	2,4-Dinitrotoluene	150.	
84-66-2	Diethylphthalate	20.	U
7005-72-3	4-Chlorophenyl-phenylether	20.	U
86-73-7	Fluorene	20.	U
100-01-6	4-Nitroaniline	100.	U
534-52-1	4,6-Dinitro-2-methylphenol	100.	U
86-30-6	N-Nitrosodiphenylamine	20.	U
101-55-3	4-Bromophenyl-phenylether	20.	U
118-74-1	Hexachlorobenzene	20.	U
87-86-5	Pentachlorophenol	160.	
85-01-8	Phenanthrene	20.	U
120-12-7	Anthracene	20.	U
84-74-2	Di-n-butylphthalate	3.	J
206-44-0	Fluoranthene	20.	U
129-00-0	Pyrene	130.	
85-68-7	Butylbenzylphthalate	20.	U
91-94-1	3,3'-Dichlorobenzidine	40.	U
56-55-3	Benzo(a)anthracene	20.	U
218-01-9	Chrysene	20.	U
117-81-7	bis(2-Ethylhexyl)phthalate	14.	BJ
117-84-0	Di-n-octylphthalate	2.	J
205-99-2	Benzo(b)fluoranthene	20.	U
207-08-9	Benzo(k)fluoranthene	20.	U
50-32-8	Benzo(a)pyrene	20.	U
193-39-5	Indeno(1,2,3-cd)pyrene	20.	U
53-70-3	Dibenz(a,h)anthracene	20.	U
191-24-2	Benzo(g,h,i)perylene	20.	U

(1) - Cannot be separated from diphenylamine

TOTAL ION CHROMATOGRAM



Data File: >E3061::D8 Quant Output File: ^E3061::Q1
Name: CASE 9298 BQ 691MSD
Misc: 4/20/88MEI 200UL(4130)+200UL(4230) + 4UL IS(17265.01) BTL# 3

Id File: CONE72::D2
Title: BNA ID FILE FOR THE HP5970E (CONT. CAL.)
Last Calibration: 880502 17:05

Operator ID: USER8
Quant Time: 880502 17:17
Injected at: 880420 20:07

QUANT REPORT

Operator ID: USER8 Quant Rev: 6 Quant Time: 880502 17:17
Output File: ^E3061::Q1 Injected at: 880420 20:07
Data File: >E3061::D8 Dilution Factor: 2.00000
Name: CASE 9298 BQ 691MSD
Misc: 4/20/88MEI 200UL(4130)+200UL(4230) + 4UL IS(17265.01) BTL# 3

ID File: CONE72::D2
Title: BNA ID FILE FOR THE HP5970E (CONT. CAL.)
Last Calibration: 880502 17:05

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	7.97	197	19329	40.00	UG/L	99
2)	2-Fluorophenol	4.62	32	17371	82.71	UG/L	91
3)	Phenol-d5	7.73	185	30220	99.85	UG/L	90
4)	Phenol	7.77	187	27956	83.12	UG/L	98
6)	2-Chlorophenol	7.53	175	22810	83.91	UG/L	96
8)	1,4-Dichlorobenzene	8.01	199	11767	33.69	UG/L	96
14)	N-Nitroso-di-n-propylamine	9.62	278	18760	63.17	UG/L	73
16)	*Naphthalene-d8	11.65	378	73200	40.00	UG/L	92
17)	Nitrobenzene-d5	9.70	282	27051	66.03	UG/L	78
25)	1,2,4-Trichlorobenzene	11.61	376	14677	38.72	UG/L	94
29)	4-Chloro-3-methylphenol	13.95	491	31348	96.72	UG/L	86
31)	*Acenaphthene-d10	16.87	635	47526	40.00	UG/L	93
36)	2-Fluorobiphenyl	15.13	549	58006	71.91	UG/L	95
41)	Acenaphthene	16.96	639	35312	54.19	UG/L	99
43)	4-Nitrophenol	17.95	688	7012	55.99	UG/L	68
45)	2,4-Dinitrotoluene	17.83	682	10067	77.19	UG/L	74
51)	2,4,6-Tribromophenol	19.25	752	28150	141.89	UG/L	85
52)	*Phenanthrene-d10	21.16	846	74192	40.00	UG/L	99
57)	Pentachlorophenol	20.98	837	12249	78.59	UG/L	97
60)	Di-n-butylphthalate	23.80	976	1520	1.41	UG/L	95
62)	*Chrysene-d12	29.07	1235	50301	40.00	UG/L	97
63)	Pyrene	25.35	1052	52176	65.80	UG/L	96
64)	Terphenyl-d14	26.28	1098	51285	100.41	UG/L	87
68)	bis(2-Ethylhexyl)phthalate	30.27	1294	4530	7.20	UG/L	96
70)	*Perylene-d12	33.01	1429	49660	40.00	UG/L	95
71)	Di-n-octylphthalate	32.03	1381	1327	1.20	UG/L	91

* Compound is ISTD

2E
WATER PESTICIDE SURROGATE RECOVERY

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

	EPA SAMPLE NO.	S1 (DBC) #	OTHER
1	PBLK	89	
2	BQ691	89	
3	BQ691MS	82	
4	BQ691MSD	87	
5			
6			
7			
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29			
30			

S1 (DBC) = Dibutylchlorendate ADVISORY QC LIMITS (20-150)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

3E

WATER PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Matrix Spike - EPA Sample No.: BQ691

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE CONCENTRATION (UG/L)	MS CONCENTRATION (UG/L)	MS % REC #	QC LIMITS REC.
gamma-BHC	.40	.00	.29	73.	56-123
Heptachlor	.40	.00	.28	71.	40-131
Aldrin	.40	.00	.25	63.	40-120
Dieldrin	1.00	.00	.81	81.	52-126
Endrin	1.00	.00	.90	90.	56-121
4,4'-DDT	1.00	.00	.88	88.	38-127

COMPOUND	SPIKE ADDED (UG/L)	MSD CONCENTRATION (UG/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC	.40	.31	77.	6.	15	56-123
Heptachlor	.40	.34	85.	18.	20	40-131
Aldrin	.40	.28	70.	11.	22	40-120
Dieldrin	1.00	.82	82.	1.	18	52-126
Endrin	1.00	.94	94.	4.	21	56-121
4,4'-DDT	1.00	.96	96.	8.	27	38-127

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 6 outside limits
Spike Recovery: 0 out of 12 outside limits

COMMENTS:

4C

PESTICIDE METHOD BLANK SUMMARY

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Lab Sample ID: BLANK Lab File ID: RUN31

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

Date Extracted: 4/12/88 Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed (1): 4/20/88 Date Analyzed (2): 0/ 0/ 0

Time Analyzed (1): 3:07 Time Analyzed (2): 0:00

Instrument ID (1): B B Instrument ID (2): B B

GC Column ID (1): SP2250/S GC Column ID (2): OV-1

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
1	BQ691	17265	4/20/88	
2	BQ691MSD	17265	4/20/88	
3	BQ691MSD	17265	4/20/88	
4				
5				
6				
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23				
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26				

Comments:

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BQ691

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Matrix: (soil/water) WATER Lab Sample ID: 17265

Sample wt/vol: 1000. (g/mL)ML Lab File ID: RUN32

Level: (low/med) LOW Date Received: 4/ 8/88

% Moisture: not dec.100. dec. 0. Date Extracted: 4/12/88

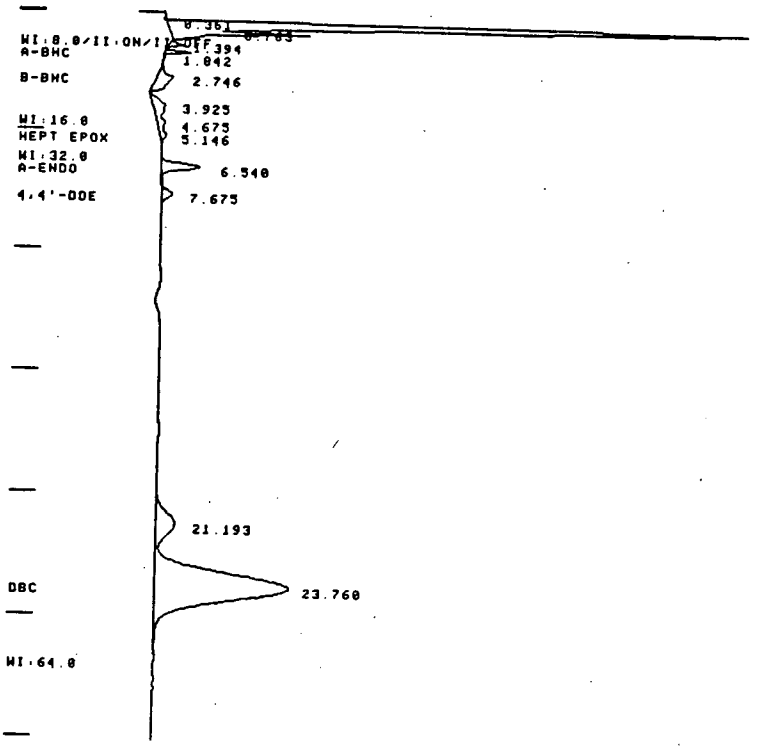
Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 4/20/88

GPC Cleanup: (Y/N) N pH: .0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	.050	U
319-85-7	beta-BHC	.050	U
319-86-8	delta-BHC	.050	U
58-89-9	gamma-BHC	.050	U
76-44-8	Heptachlor	.050	U
309-00-2	Aldrin	.050	U
1024-57-3	Heptachlor epoxide	.050	U
959-98-8	Endosulfan I	.050	U
60-57-1	Dieldrin	.050	U
72-55-9	4,4'-DDE	.10	U
72-20-8	Endrin	.050	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	.50	U
53494-70-5	Endrin ketone	.10	U
5103-71-9	alpha-Chlordane	.50	U
5103-74-2	gamma-Chlordane	.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	.50	U
11104-28-2	Aroclor-1221	.50	U
11141-16-5	Aroclor-1232	.50	U
53469-21-9	Aroclor-1242	.50	U
12672-29-6	Aroclor-1248	.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

POST RUN:
SAVE FILE: RAW U7605-420

CHART SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10% 5 MIN/TICK



CHANNEL: 6B - 1 TITLE: RUN# 32 3:41 20 APR 88

SAMPLE: BQ691 METHOD: PEPA CALCULATION: ES - ANALYS - OP

PEAK NO	PEAK NAME	RESULT ug/L	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	WI/2 (SEC)
1		0.0000	1.394		26159	BV	5.13
2	~~A-BHC~~	0.0088	1.694	-0.116	43705	VV	5.31
3	~~HEPTACHLO~~	0.0360	2.746	-0.048	151818	BV	19.56
4		0.0000	3.925		80746	VV	? 17.06
5		0.0000	4.086		35679	VV	?
6		0.0000	4.675		53767	VV	? 23.00
7	~~HEPT EPOX~~	0.0093	5.146	0.156	36232	VB	? 40.50
8	~~A-ENDO~~	0.0479	6.540	0.266	177136	BV	17.19
9	~~DIELDRIN~~	0.0164	7.675	0.008	64618	VB	22.88
10		0.0000	21.193		301335	BV	65.00
11	DBC 98 100	0.9339	23.760	-0.033	2579651	VB	? 72.63
TOTALS:		1.0523		0.233	3550846		

DETECTED PKS: 17 REJECTED PKS: 6

DIVISOR: 1.00000 AMT STD: 1.00000 MULTIPLIER: 10.00000

NOISE: 68.6 OFFSET: -11

RACK: 3 VIAL: 2 INJ: 1

NOTES:
NOTEBOOK:315-164 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#'S:U-7605(38.029),U-7653(38.030)
INST: VARIAN 6000#28 ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
PHASE:1.5% SP2250/1.95% SP2401
CARRIER GAS: N2 @ 60 ML/MIN.
DET:300 C INJ:220 C
200C ISOTHERMAL 4UL AUTO. INJ
PRIMARY ANALYSIS AUTOSAMPLER
EPA CASE#'S: ~~9247~~,9298

POST RUN:
SAVE FILE: RAW

8D

PESTICIDE EVALUATION STANDARDS SUMMARY

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9247 SAS No.: SDG No.: BQ691

Instrument ID: B B GC Column ID: SP2250/S

Dates of Analyses: 4/19/88 to 4/20/88

Evaluation Check for Linearity

PESTICIDE	CALIBRATION FACTOR EVAL MIX A	CALIBRATION FACTOR EVAL MIX B	CALIBRATION FACTOR EVAL MIX C	%RSD (</= 10.0%)	
Aldrin	925.	1013.	1038.	6.0	
Endrin	750.	815.	768.	4.3	
4,4'-DDT	635.	703.	716.	6.4	(1)
DBC	630.	660.	650.	2.4	

(1) If > 10.0% RSD, plot a standard curve and determine the ng for each sample in that set from the curve.

Evaluation Check for 4,4'-DDT/Endrin Breakdown (percent breakdown expressed as total degradation)

		DATE ANALYZED	TIME ANALYZED	ENDRIN	4,4'-DDT	COMBINED (2)
1	INITIAL EVAL MIX B	4/19/88	8:45	.00	5.39	3.48
2	EVAL MIX B	4/19/88	19:38	.00	1.96	1.25
3	EVAL MIX B	4/20/88	2:31	.00	1.37	.85
4						
5						
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11						
12						
13						
14						

(2) See Form instructions.

8E

PESTICIDE EVALUATION STANDARDS SUMMARY

Evaluation of Retention Time Shift for Dibutylchlorendate

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Instrument ID: B B GC Column ID: SP2250/S

Dates of Analyses: 4/19/88 to 4/20/88

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	% D	*
1	EVALA		4/19/88	8:11	.0	
2	EVALB		4/19/88	8:45	.6	
3	EVALC		4/19/88	9:19	.6	
4	INDA		4/19/88	10:04	.5	
5	INDB		4/19/88	10:47	.5	
6	TOXAPH		4/19/88	11:21	.5	
7	AR1660		4/19/88	12:02	.0	
8	AR1221		4/19/88	12:38	.3	
9	AR1232		4/19/88	13:11	.1	
10	AR1242		4/19/88	13:45	.2	
11	AR1248		4/19/88	14:20	.1	
12	AR1254		4/19/88	14:54	.3	
13	PBLK	BLANK	4/19/88	15:28	.3	
14	BR305	16743	4/19/88	17:21	.3	
15	BR306	16744	4/19/88	17:53	.5	
16	BR306MS	16744	4/19/88	18:29	.2	
17	BR306MSD	16744	4/19/88	19:04	.5	
18	EVALB		4/19/88	19:38	.1	
19	BR307	16745	4/19/88	20:14	.2	
20	BR308	16746	4/19/88	20:49	.0	
21	BR310	16747	4/19/88	21:23	.0	
22	BR311	16748	4/19/88	21:58	.3	
23	BR312	16749	4/19/88	22:33	.6	
24	INDA		4/19/88	23:06	.8	
25	PBLK	BLANK	4/19/88	23:40	.4	
26	BR314	16751	4/20/88	0:15	.7	
27	BR314MS	16751	4/20/88	0:49	.6	
28	BR314MSD	16751	4/20/88	1:23	.1	
29	BR315	16752	4/20/88	1:57	1.4	
30	EVALB		4/20/88	2:31	.3	
31	PBLK	BLANK	4/20/88	3:07	.2	
32	BQ691	17265	4/20/88	3:41	.3	
33	BQ691MS	17265	4/20/88	4:15	.5	
34	BQ691MSD	17265	4/20/88	4:49	.7	
35	INDA		4/20/88	5:23	.7	
36	INDB		4/20/88	5:58	1.1	
37						
38						

* Values outside of QC limits (2.0% for packed columns, 0.3% for capillary columns)

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Instrument ID: B B GC Column ID: SP2250/S

DATE(S) OF ANALYSIS FROM: 4/19/88 TO: 4/19/88
TIME(S) OF ANALYSIS FROM: 10:04 TO: 14:54

DATE OF ANALYSIS 4/19/88
TIME OF ANALYSIS 23:06
EPA SAMPLE NO. (STANDARD) INDA

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	1.81	1.78	1.84	1240.			Y	
beta-BHC	2.60	2.57	2.63	420.			Y	
delta-BHC	3.03	3.00	3.06	880.			Y	
gamma-BHC	2.27	2.23	2.31	1118.	2.28	1190.	Y	6.4
Heptachlor	2.79	2.75	2.83	1060.	2.80	1090.	Y	2.8
Aldrin	3.40	3.36	3.44	1070.	3.39	1090.	Y	1.9
Hept. Epoxide	4.99	4.94	5.04	970.	5.01	1000.	Y	3.1
Endosulfan I	6.27	6.21	6.33	920.	6.29	950.	Y	3.3
Dieldrin	7.67	7.60	7.74	990.	7.69	1010.	Y	2.0
4,4'-DDE	7.38	7.31	7.45	890.			Y	
Endrin	9.36	9.28	9.44	770.			Y	
Endosulfan II	11.28	11.18	11.38	900.	11.30	910.	Y	1.1
4,4'-DDD	11.22	11.12	11.32	710.			Y	
Endo. sulfate	17.41	17.26	17.56	450.			Y	
4,4'-DDT	13.53	13.38	13.68	710.	13.56	680.	Y	4.2
Methoxychlor	26.19	25.95	26.43	361.	26.26	363.	Y	.3
Endrin ketone	23.90	23.68	24.12	742.			Y	
a. Chlordane	6.13	6.07	6.19	920.			Y	
g. Chlordane	5.61	5.55	5.67	800.			Y	
Toxaphene	13.97	13.81	14.13	83.			Y	
Aroclor-1016	2.76	2.73	2.79	49.			Y	
Aroclor-1221	1.68	1.67	1.69	21.			Y	
Aroclor-1232	2.77	2.73	2.81	22.			Y	
Aroclor-1242	2.76	2.73	2.79	43.			Y	
Aroclor-1248	5.14	5.08	5.20	72.			Y	
Aroclor-1254	13.29	13.25	13.33	57.			Y	
Aroclor-1260	20.78	20.55	21.01	115.			Y	

Under QNT Y/N: enter Y if quantitation was performed, N if not performed. %D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the largest single peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition.

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Instrument ID: B B GC Column ID: SP2250/S

	DATE(S) OF ANALYSIS	FROM:	4/19/88	DATE OF ANALYSIS	4/20/88			
		TO:	4/19/88	TIME OF ANALYSIS	5:23			
	TIME(S) OF ANALYSIS	FROM:	10:04	EPA SAMPLE NO.				
		TO:	14:54	(STANDARD)	INDA			
COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	1.81	1.78	1.84	1240.			Y	
beta-BHC	2.60	2.57	2.63	420.			Y	
delta-BHC	3.03	3.00	3.06	880.			Y	
gamma-BHC	2.27	2.23	2.31	1118.	2.28	1120.	Y	.2
Heptachlor	2.79	2.75	2.83	1060.	2.81	1050.	Y	.9
Aldrin	3.40	3.36	3.44	1070.	3.40	1060.	Y	.9
Hept. Epoxide	4.99	4.94	5.04	970.	5.02	980.	Y	1.0
Endosulfan I	6.27	6.21	6.33	920.	6.30	940.	Y	2.2
Dieldrin	7.67	7.60	7.74	990.	7.70	1000.	Y	1.0
4,4'-DDE	7.38	7.31	7.45	890.			Y	
Endrin	9.36	9.28	9.44	770.			Y	
Endosulfan II	11.28	11.18	11.38	900.	11.32	900.	Y	.0
4,4'-DDD	11.22	11.12	11.32	710.			Y	
Endo. sulfate	17.41	17.26	17.56	450.			Y	
4,4'-DDT	13.53	13.38	13.68	710.	13.58	710.	Y	.0
Methoxychlor	26.19	25.95	26.43	361.	26.26	371.	Y	2.8
Endrin ketone	23.90	23.68	24.12	742.			Y	
a. Chlordane	6.13	6.07	6.19	920.			Y	
g. Chlordane	5.61	5.55	5.67	800.			Y	
Toxaphene	13.97	13.81	14.13	83.			Y	
Aroclor-1016	2.76	2.73	2.79	49.			Y	
Aroclor-1221	1.68	1.67	1.69	21.			Y	
Aroclor-1232	2.77	2.73	2.81	22.			Y	
Aroclor-1242	2.76	2.73	2.79	43.			Y	
Aroclor-1248	5.14	5.08	5.20	72.			Y	
Aroclor-1254	13.29	13.25	13.33	57.			Y	
Aroclor-1260	20.78	20.55	21.01	115.			Y	

Under QNT Y/N: enter Y if quantitation was performed, N if not performed. %D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the largest single peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition.

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PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Instrument ID: B B GC Column ID: SP2250/S

DATE(S) OF ANALYSIS FROM: 4/19/88 TO: 4/19/88
TIME(S) OF ANALYSIS FROM: 10:04 TO: 14:54

DATE OF ANALYSIS 4/20/88
TIME OF ANALYSIS 5:58
EPA SAMPLE NO. (STANDARD) INDB

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	1.81	1.78	1.84	1240.	1.82	1210.	Y	2.4
beta-BHC	2.60	2.57	2.63	420.	2.61	420.	Y	.0
delta-BHC	3.03	3.00	3.06	880.	3.04	880.	Y	.0
gamma-BHC	2.27	2.23	2.31	1118.			Y	
Heptachlor	2.79	2.75	2.83	1060.			Y	
Aldrin	3.40	3.36	3.44	1070.	3.41	1070.	Y	.0
Hept. Epoxide	4.99	4.94	5.04	970.			Y	
Endosulfan I	6.27	6.21	6.33	920.			Y	
Dieldrin	7.67	7.60	7.74	990.			Y	
4,4'-DDE	7.38	7.31	7.45	890.	7.38	880.	Y	1.1
Endrin	9.36	9.28	9.44	770.	9.37	800.	Y	3.9
Endosulfan II	11.28	11.18	11.38	900.			Y	
4,4'-DDD	11.22	11.12	11.32	710.	11.24	720.	Y	1.4
Endo. sulfate	17.41	17.26	17.56	450.	17.40	440.	Y	2.2
4,4'-DDT	13.53	13.38	13.68	710.			Y	
Methoxychlor	26.19	25.95	26.43	361.			Y	
Endrin ketone	23.90	23.68	24.12	742.	23.93	734.	Y	1.1
a. Chlordane	6.13	6.07	6.19	920.	6.14	910.	Y	1.1
g. Chlordane	5.61	5.55	5.67	800.	5.62	790.	Y	1.3
Toxaphene	13.97	13.81	14.13	83.			Y	
Aroclor-1016	2.76	2.73	2.79	49.			Y	
Aroclor-1221	1.68	1.67	1.69	21.			Y	
Aroclor-1232	2.77	2.73	2.81	22.			Y	
Aroclor-1242	2.76	2.73	2.79	43.			Y	
Aroclor-1248	5.14	5.08	5.20	72.			Y	
Aroclor-1254	13.29	13.25	13.33	57.			Y	
Aroclor-1260	20.78	20.55	21.01	115.			Y	

Under QNT Y/N: enter Y if quantitation was performed, N if not performed. ✓
%D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the largest single peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition.

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

BQ691MS

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

GC Column ID (1): SP2250/S GC Column ID (2): OV-1

Instrument ID (1): B B Instrument ID (2): B B

Lab Sample ID: 17265

Lab File ID: (only if confirmed by GC/MS)

	PESTICIDE/PCB	RETENTION TIME		RT WINDOW OF STANDARD FROM	TO	QUANT? (Y/N)	GC/MS? (Y/N)
1	gamma-BHC	Column 1	2.28	2.23	2.31	Y	N
2		Column 2	.00	.00	.00	N	N
3	Heptachlor	Column 1	2.80	2.75	2.83	Y	N
4		Column 2	.00	.00	.00	N	N
5	Aldrin	Column 1	3.39	3.36	3.44	Y	N
6		Column 2	.00	.00	.00	N	N
7	Dieldrin	Column 1	7.68	7.60	7.74	Y	N
8		Column 2	.00	.00	.00	N	N
9	Endrin	Column 1	9.34	9.28	9.44	Y	N
10		Column 2	.00	.00	.00	N	N
11	4,4'-DDT	Column 1	13.56	13.38	13.68	Y	N
12		Column 2	.00	.00	.00	N	N

Comments:

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PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

BQ691MSD

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

GC Column ID (1): SP2250/S GC Column ID (2): OV-1

Instrument ID (1): B B Instrument ID (2): B B

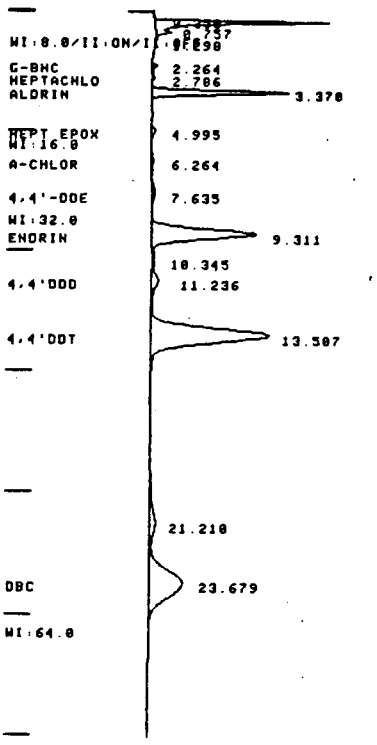
Lab Sample ID: 17265

Lab File ID: (only if confirmed by GC/MS)

	PESTICIDE/PCB	RETENTION TIME		RT WINDOW OF STANDARD FROM	TO	QUANT? (Y/N)	GC/MS? (Y/N)
1	gamma-BHC	Column 1	2.28	2.23	2.31	Y	N
2		Column 2	.00	.00	.00	N	N
3	Heptachlor	Column 1	2.81	2.75	2.83	Y	N
4		Column 2	.00	.00	.00	N	N
5	Aldrin	Column 1	3.40	3.36	3.44	Y	N
6		Column 2	.00	.00	.00	N	N
7	Dieldrin	Column 1	7.69	7.60	7.74	Y	N
8		Column 2	.00	.00	.00	N	N
9	Endrin	Column 1	9.35	9.28	9.44	Y	N
10		Column 2	.00	.00	.00	N	N
11	4,4'-DDT	Column 1	13.56	13.38	13.68	Y	N
12		Column 2	.00	.00	.00	N	N

Comments:

CHART SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10% 5 MIN/TICK



CHANNEL: 6B - 1 TITLE: RUN$ 1 8:11 19 APR 88

SAMPLE: EVALA METHOD: PEPA CALCULATION: ES - ANALYS - OP

PEAK NO	PEAK NAME	RESULT	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	WI/2 (SEC)
1	ALDRIN 0.04	0.0086	3.370	-0.036	374362	BB	10.06
2	~~HEPT.EPOX~~	0.0005	4.995	-0.037	20268	BB	16.31
~~3~~	~~DIELDRIN~~	0.0009	7.635	-0.096	34577	BB	? 35.00
4	ENDRIN 0.10	0.0269	9.311	-0.069	752747	BV	26.63
5	4,4'DDD	0.0034	11.236	-0.041	93451	VV	38.38
6	4,4'DDT 0.30	0.0444	13.507	-0.117	1266629	VB	39.19
7		0.0000	21.210		102655	BV	67.25
8	DBC 0.10	0.0205	23.679	-0.258	632170	VB	72.44

TOTALS: 0.1053 -0.654 3276859

DETECTED PKS: 18 REJECTED PKS: 10

DIVISOR: 1.00000 AMT STD: 1.00000 MULTIPLIER: 1.00000

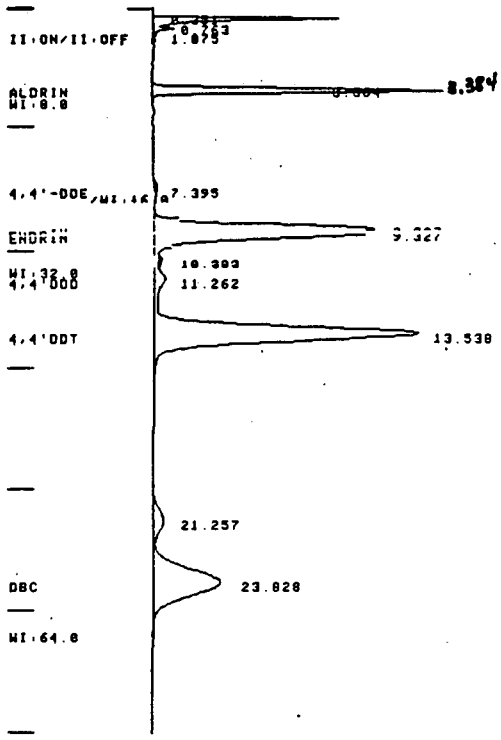
NOISE: 68.6 OFFSET: -3

RACK: 1 VIAL: 1 INJ: 1

NOTES:
NOTEBOOK:315-164 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB$'S:U-7605(38.029),U-7653(38.030)
INST: VARIAN 6000$2B ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
PHASE:1.5% SP2250/1.95% SP2401
CARRIER GAS: N2 @ 60 ML/MIN.
DET:300 C INJ:220 C
200C ISOTHERMAL 4UL AUTO. INJ
PRIMARY ANALYSIS AUTOSAMPLER
EPA CASE$'S: 9247,9298

POST RUN:
SAVE FILE: RAW U7605-387

CHART SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10% 5 MIN/TICK



CHANNEL: GB - 1 TITLE: RUN# 2 8:45 19 APR 88

SAMPLE: EVALB METHOD: PEPA CALCULATION: ES - ANALYS - OP

PEAK NO	PEAK NAME	RESULT	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	WI/2 (SEC)
1	ALDRIN 0.08	0.0187	3.384	-0.022	808447	BB	? 10.13
2	ENDRIN 0.20	0.0584	9.327	-0.053	1632347	BV	26.69
3	4,4'DDD	0.0058	11.262	-0.015	160807	VV	45.06
4	4,4'DDT 0.40	0.0986	13.538	-0.086	2810382	VB	39.06
5		0.0000	21.257		183379	BV	63.81
6	DBC 0.20	0.0427	23.828	-0.109	1319281	VB	72.31
TOTALS:		0.2242		-0.285	6914643		

DETECTED PKS: 14 REJECTED PKS: 8

DIVISOR: 1.00000 AMT STD: 1.00000 MULTIPLIER: 1.00000

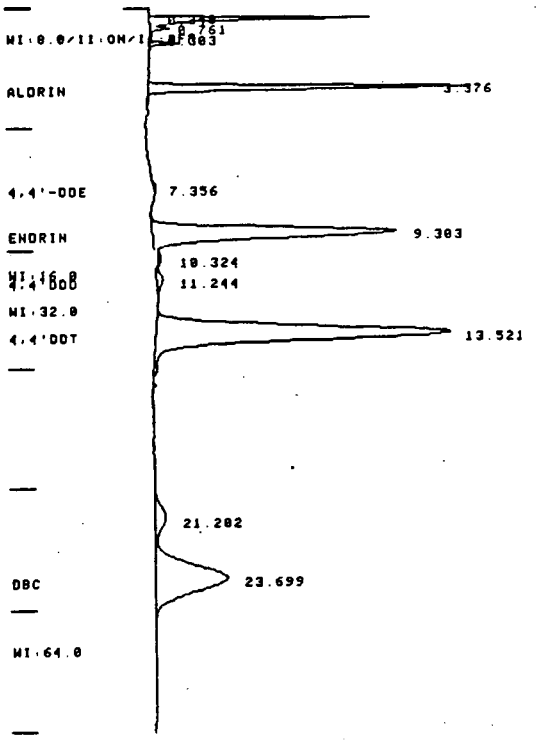
NOISE: 68.6 OFFSET: 11

RACK: 1 VIAL: 2 INJ: 1

NOTES:
NOTEBOOK:315-164 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#'S:U-7605(38.029),U-7653(38.030)
INST: VARIAN 6000#2B ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
PHASE:1.5% SP2250/1.95% SP2401
CARRIER GAS: N2 @ 60 ML/MIN.
DET:300 C INJ:220 C
200C ISOTHERMAL 4UL AUTO. INJ
PRIMARY ANALYSIS AUTOSAMPLER
EPA CASE#'S: 9247,9298

POST RUN:
SAVE FILE: RAW U7605-388

CHART SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10% 5 MIN/TICK



CHANNEL: 6B - 1 TITLE: RUN# 18 19:38 19 APR 88

SAMPLE: EVAL8 METHOD: PEPA CALCULATION: ES - ANALYS - OP

PEAK NO	PEAK NAME	RESULT ng/inj	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	WI/2 (SEC)
1		0.0000	1.520		50668	VB	5.00
2	ALDRIN 0.08	0.0196	3.376	-0.020	846703	BB	9.75
3	ENDRIN 0.20	0.0562	9.303	-0.060	1735922	BV	? 26.31
4		0.0000	10.324		20648	T	? 32.38
5	4,4'DDD	0.0020	11.244	0.025	57258	VB	? 52.63
6	4,4'DDT 0.40	0.1064	13.521	-0.007	3004997	BB	37.88
7		0.0000	21.202		198860	BV	65.69
8	DBC 0.20	0.0498	23.699	-0.094	1374847	VB	? 71.81
TOTALS:		0.2339		-0.156	7289903		

DETECTED PKS: 15 REJECTED PKS: 7

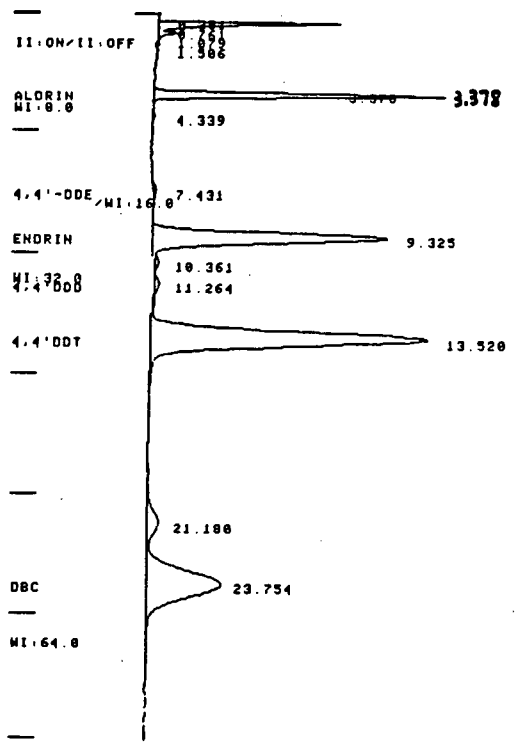
DIVISOR: 1.00000 AMT STD: 1.00000 MULTIPLIER: 1.00000

NOISE: 57.1 .OFFSET: 2

RACK: 2 VIAL: 3 INJ: 1

NOTES:
NOTEBOOK:315-164 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#'S:U-7605(38.029),U-7653(38.030)
INST: VARIAN 6000#28 ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
PHASE:1.5% SP2250/1.95% SP2401
CARRIER GAS: N2 @ 60 ML/MIN.
DET:300 C INJ:220 C
200C ISOTHERMAL 4UL AUTO. INJ
PRIMARY ANALYSIS AUTOSAMPLER
EPA CASE#'S: 9247,9298

POST RUN:
SAVE FILE: RAW U7605-406



CHANNEL: 6B - 1 TITLE: RUN# 30 2:31 20 APR 88

SAMPLE: EVALB METHOD: PEPA CALCULATION: ES - ANALYS - OP

PEAK NO	PEAK NAME	RESULT ng inj	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		WI/2 (SEC)
1	ALDRIN 0.05	0.0190	3.378	-0.018	821522	BB	?	9.81
2	ENDRIN 0.20	0.0573	9.325	-0.038	1769966	BV		26.13
qv'DDD ~~0 ENDOSUL~~		0.0012	11.264	-0.020	42252	T	?	44.75
4	4,4'DDT 0.40	0.1019	13.520	-0.008	2879410	VB		38.19
5		0.0000	21.180		189998	BV		64.38
6	DBC 0.20	0.0521	23.754	-0.039	1438641	VB		71.94
TOTALS:		0.2315		-0.123	7141789			

DETECTED PKS: 16 REJECTED PKS: 10

DIVISOR: 1.00000 AMT STD: 1.00000 MULTIPLIER: 1.00000

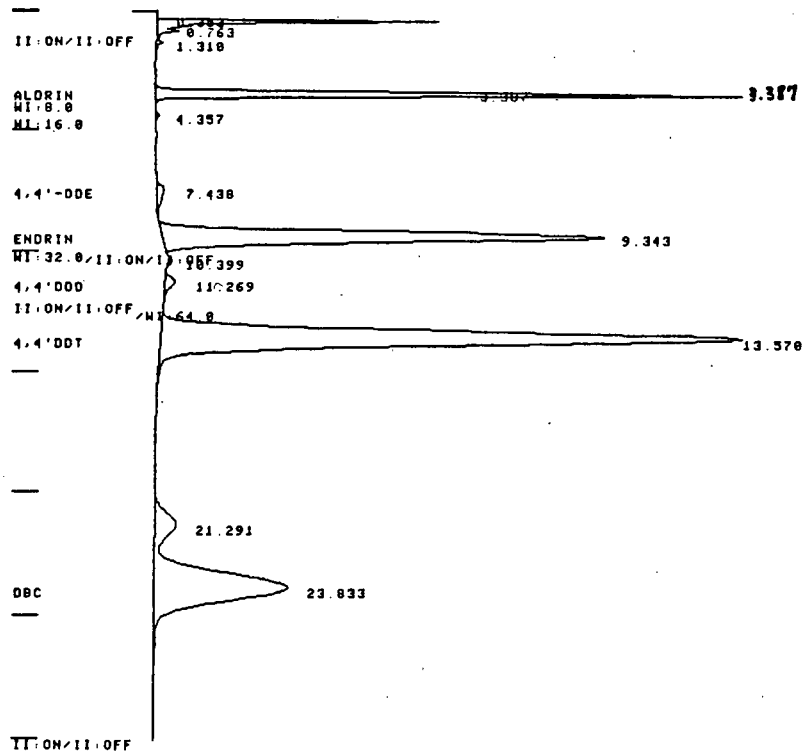
NOISE: 68.6 OFFSET: 10

RACK: 2 VIAL: 15 INJ: 1

NOTES:
NOTEBOOK:315-164 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#'S:U-7605(38.029),U-7653(38.030)
INST: VARIAN 6000#2B ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
PHASE:1.5% SP2250/1.95% SP2401
CARRIER GAS: N2 @ 60 ML/MIN.
DET:300 C INJ:220 C
200C ISOTHERMAL 4UL AUTO. INJ
PRIMARY ANALYSIS AUTOSAMPLER
EPA CASE#'S: 9247,9298

POST RUN:
SAVE FILE: RAW U7605-419

CHART SPEED 0.5 CM/MIN



RECALCULATE ON FILE: U7605-389

CHANNEL: 6B - 1 TITLE: RUN# 3 9:19 19 APR 88

SAMPLE: EVALC METHOD: PEPA CALCULATION: ES - ANALYS - OP

PEAK NO	PEAK NAME	RESULT	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	WI/2 (SEC)
1	ALDRIN 0.16	0.0383	3.387	-0.019	1658064	BB 7	9.63
2	4,4'-DDE	0.0022	7.438	0.043	78157	BV	49.94
3	ENDRIN 0.40	0.1100	9.343	-0.037	3072870	VB	26.44
4	4,4'DDD	0.0026	11.269	-0.008	71989	VB	28.56
5	4,4'DDT 0.20	0.2012	13.570	-0.054	5732777	BB	36.56
6		0.0000	21.291		369866	BV	67.13
7	DBC 0.40	0.0842	23.833	-0.104	2602218	VB	73.13
TOTALS:		0.4384		-0.179	13585941		

DETECTED PKS: 17 REJECTED PKS: 10

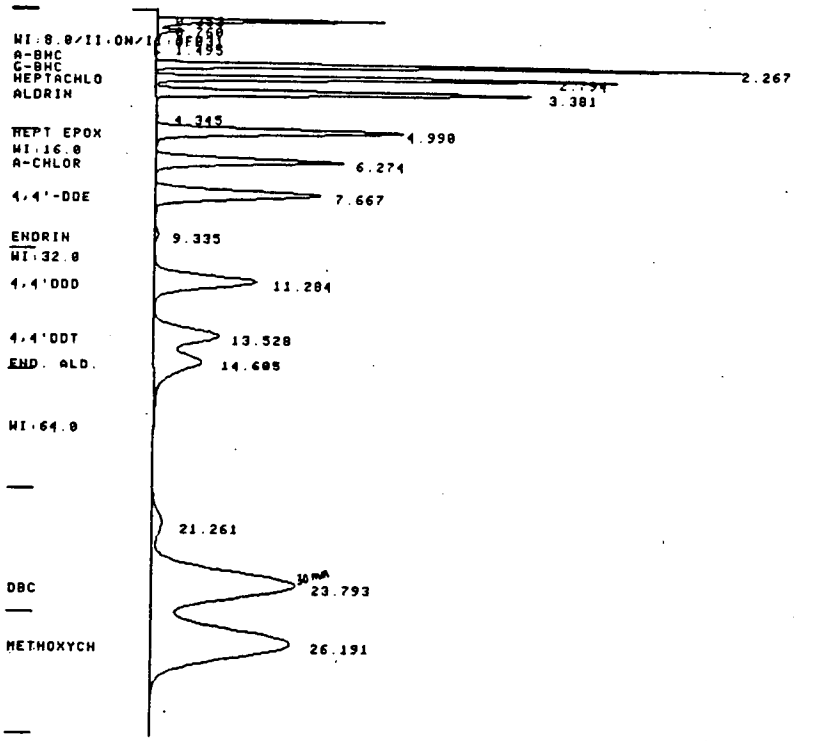
DIVISOR: 1.00000 AMT STD: 1.00000 MULTIPLIER: 1.00000

NOISE: 68.6 OFFSET: -13

RACK: 1 VIAL: 3 INJ: 1

NOTES:
NOTEBOOK:315-164 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#'S:U-7605(38.029),U-7653(38.030)
INST: VARIAN 6000#2B ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
PHASE:1.5% SP2250/1.95% SP2401
CARRIER GAS: N2 @ 60 ML/MIN.
DET:300 C INJ:220 C
200C ISOTHERMAL 4UL AUTO. INJ
PRIMARY ANALYSIS AUTOSAMPLER
EPA CASE#'S: 9247,9298

CHART SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10% 5 MIN/TICK



CHANNEL: 6B - 1 TITLE: RUN# 4 10:04 19 APR 88

SAMPLE: INDA METHOD: PEPA CALCULATION: ES - ANALYS - OP

PEAK NO	PEAK NAME	ng inj	RESULT	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	WI/2 (SEC)
1	G-BHC	0.10	0.0250	2.267	0.000	1118212	VV	6.50
2	HEPTACHLO		0.0250	2.794	0.000	1055498	VV	8.25
3	ALDRIN		0.0250	3.381	0.000	1062139	VB	10.00
4	HEPT EPOX		0.0250	4.990	0.000	971509	VB	14.63
5	A-ENDO		0.0250	6.274	0.000	923960	BB	18.25
6	DIELDRIN		0.0250	7.667	0.000	986777	BB	22.31
7	~~ENDRIN~~		0.0000	9.335	0.000	23105	BB	25.00
8	B-ENDOSUL		0.0250	11.284	0.000	903685	BV	33.06
9	4,4'DDT		0.0250	13.528	0.000	706220	VV	41.56
10	END. ALD.		0.0250	14.605	0.000	667354	VB	? 55.75
11			0.0000	21.261		175724	BV	68.75
12	DBC	0.40	0.1000	23.793	0.000	2762377	VV	72.63
13	METHOXYCH	0.80	0.2000	26.191	0.000	2888240	VB	79.69
TOTALS:			0.5250			14244800		

DETECTED PKS: 20 REJECTED PKS: 7

DIVISOR: 1.00000 AMT STD: 1.00000 MULTIPLIER: 1.00000

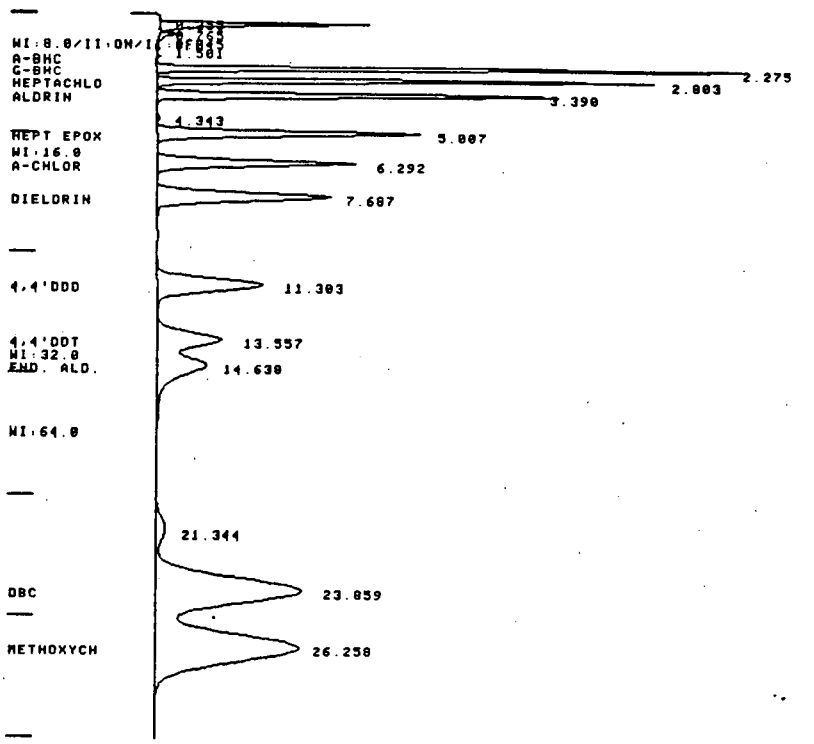
NOISE: 68.6 OFFSET: 1

RACK: 1 VIAL: 4 INJ: 1

NOTES:
NOTEBOOK:315-164 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#'S:U-7605(38.029),U-7653(38.030)
INST: VARIAN 6000#28 ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
PHASE:1.5% SP2250/1.95% SP2401
CARRIER GAS: N2 @ 60 ML/MIN.
DET:300 C INJ:220 C
200C ISOTHERMAL 4UL AUTO. INJ
PRIMARY ANALYSIS AUTOSAMPLER
EPA CASE#'S: 9247,9298

CHART SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10% 5 MIN/TICK

CHART SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10% 5 MIN/TICK



CHANNEL: GB - 1 TITLE: RUN# 24 23:06 19 APR 88

SAMPLE: INDA METHOD: PEPA CALCULATION: ES - ANALYS - OP

PEAK NO	PEAK NAME	ng inj	RESULT	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	WI/2 (SEC)
1	G-BHC	0.10	0.0266	2.275	0.008	1188542	VV	6.38
2	HEPTACHLO		0.0258	2.803	0.009	1090207	VV	8.13
3	ALDRIN		0.0252	3.390	-0.006	1091659	VB	9.81
4	HEPT EPOX		0.0259	5.007	0.017	1004665	VB	14.38
5	A-ENDO		0.0258	6.292	0.018	954539	BV	18.13
6	DIELDRIN		0.0256	7.687	0.020	1012051	VB	21.63
7	B-ENDOSUL		0.0252	11.303	0.019	910967	BV	32.19
8	4,4'DDT		0.0240	13.557	0.029	678362	VV	? 40.69
9	END. ALD.		0.0254	14.638	0.033	679254	VB	53.69
10			0.0000	21.344		176572	BV	66.25
11	DBC	0.40	0.0993	23.859	0.066	2742602	VV	71.00
12	METHOXYCH	0.80	0.2008	26.258	0.067	2899497	VB	77.06
TOTALS:			0.5297		0.280	14428917		

DETECTED PKS: 19 REJECTED PKS: 7

DIVISOR: 1.00000 AMT STD: 1.00000 MULTIPLIER: 1.00000

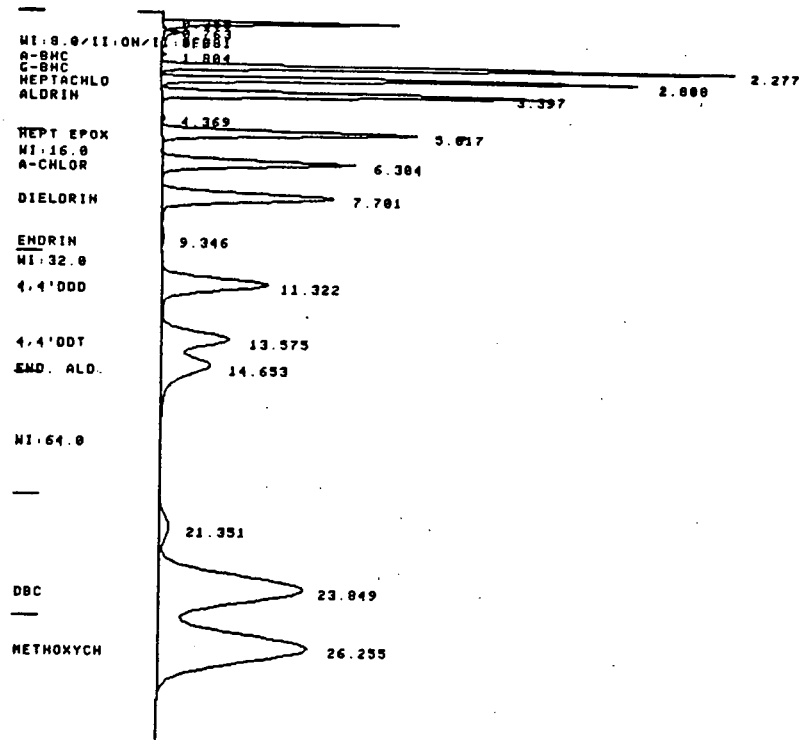
NOISE: 68.6 OFFSET: -7

RACK: 2 VIAL: 9 INJ: 1

NOTES:
NOTEBOOK:315-164 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#'S:U-7605(38.029),U-7653(38.030)
INST: VARIAN 6000#28 ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
PHASE:1.5% SP2250/1.95% SP2401
CARRIER GAS: N2 @ 60 ML/MIN.
DET:300 C INJ:220 C
200C ISOTHERMAL 4UL AUTO. INJ
PRIMARY ANALYSIS AUTOSAMPLER
EPA CASE#'S: 9247,9298

POST RUN:
SAVE FILE: RAW U7605-413

CHART SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10% 5 MIN/TICK



CHANNEL: 6B - 1 TITLE: RUN# 35 5:23 20 APR 88

SAMPLE: INDA METHOD: PEPA CALCULATION: ES - ANALYS - OP

PEAK NO	PEAK NAME	RESULT	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	WI/2 (SEC)
1	G-BHC	0.0249	2.277	0.010	1115921	VV	6.63
2	HEPTACHLO	0.0250	2.808	0.014	1054947	VV	8.25
3	ALDRIN	0.0245	3.397	0.001	1060031	VB	10.00
4	HEPT EPOX	0.0251	5.017	0.027	975588	VB	14.38
5	A-ENDO	0.0253	6.304	0.030	935936	BV	18.19
6	DIELDRIN	0.0254	7.701	0.034	1004331	VB	21.81
7	B-ENDOSUL	0.0249	11.322	0.038	898729	BV	32.44
8	4,4'DDT	0.0250	13.575	0.047	705524	VV	40.31
9	END. ALD.	0.0255	14.653	0.048	679432	VB	55.06
10		0.0000	21.351		177185	BV	68.31
11	DBC	0.1002	23.849	0.056	2769241	VV	73.13
12	METHOXYCH	0.2056	26.255	0.064	2969412	VB	76.13
TOTALS:		0.5315		0.369	14346277		

DETECTED PKS: 20 REJECTED PKS: 8

DIVISOR: 1.00000 AMT STD: 1.00000 MULTIPLIER: 1.00000

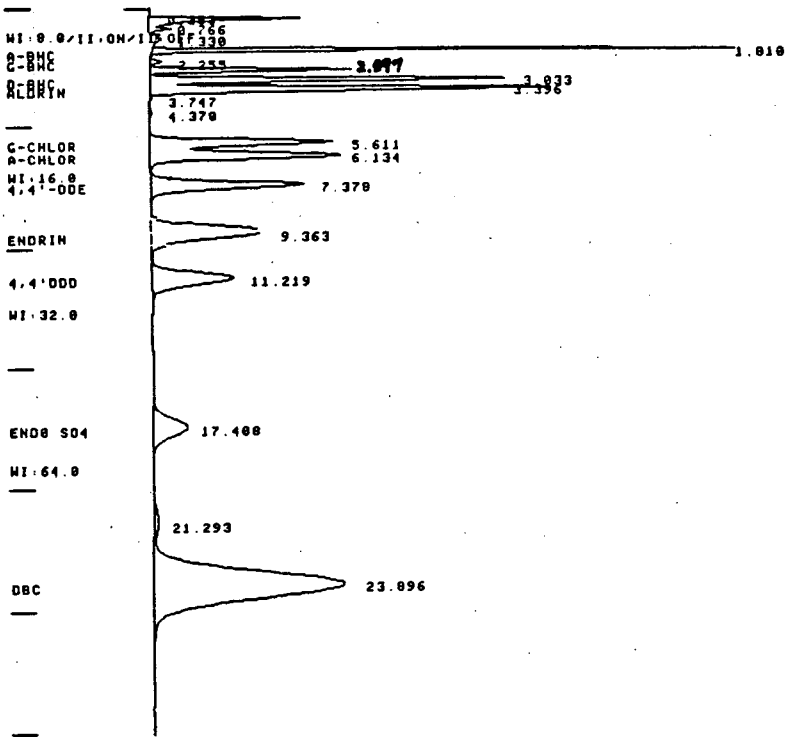
NOISE: 68.6 OFFSET: -6

RACK: 3 VIAL: 5 INJ: 1

NOTES:
NOTEBOOK:315-164 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#'S:U-7605(38.029),U-7653(38.030)
INST: VARIAN 6000#28 ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
PHASE:1.5% SP2250/1.95% SP2401
CARRIER GAS: N2 @ 60 ML/MIN.
DET:300 C INJ:220 C
200C ISOTHERMAL 4UL AUTO. INJ
PRIMARY ANALYSIS AUTOSAMPLER
EPA CASE#'S: 9247,9298

POST RUN:
SAVE FILE: RAW U7605-424

CHART SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10% 5 MIN/TICK



RECALCULATE ON FILE: U7605-391

CHANNEL: 68 - 1 TITLE: RUN# 5 10:47 19 APR 88

SAMPLE: IND8 METHOD: PEPA CALCULATION: ES - ANALYS - OP

PEAK NO	PEAK NAME	RESULT	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	WI/2 (SEC)
1	A-BHC	0.0250	1.810	0.000	1238287	BV	5.13
2	~~G-BHC~~	0.0006	2.255	-0.012	26328	T	8.56
3	B-BHC	0.0250	2.597	0.000	423859	VV	7.81
4	D-BHC	0.0250	3.033	0.000	882041	VV	8.56
5	ALDRIN	0.0250	3.396	0.000	1081216	VV	9.94
6	G-CHLOR	0.0250	5.611	0.000	794922	BV	16.69
7	A-CHLOR	0.0250	6.134	0.000	921093	VV	? 18.06
8	4,4'-DDE	0.0250	7.378	0.000	885893	VB	21.69
9	ENDRIN	0.0250	9.363	0.000	772209	BV	27.06
10	4,4'DDD	0.0250	11.219	0.000	711423	VB	32.69
11	END0 SO4	0.0250	17.408	0.000	453499	BB	50.19
12		0.0000	21.293		80589	BV	67.94
13	DBC	0.1344	23.896	0.103	3713075	VB	73.31

TOTALS: 0.3850 0.091 11984434

DETECTED PKS: 23 REJECTED PKS: 10

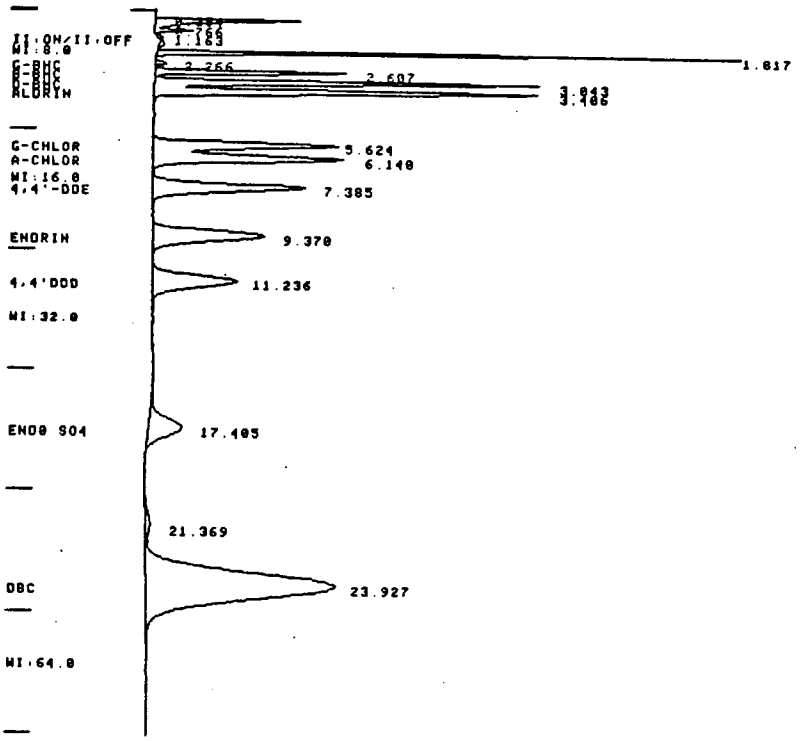
DIVISOR: 1.00000 AMT STD: 1.00000 MULTIPLIER: 1.00000

NOISE: 68.6 OFFSET: 6

RACK: 1 VIAL: 5 INJ: 1

NOTES:
NOTEBOOK:315-164 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#'S:U-7605(38.029),U-7653(38.030)
INST: VARIAN 6000#28 ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
PHASE:1.5% SP2250/1.95% SP2401
CARRIER GAS: N2 @ 60 ML/MIN.
DET:300 C INJ:220 C
200C ISOTHERMAL 4M AUTO INJ

CHART SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10% 5 MIN/TICK



CHANNEL: GB - 1 TITLE: RUN# 36 5:58 20 APR 88

SAMPLE: IND8 METHOD: PEPA CALCULATION: ES - ANALYS - OP

PEAK NO	PEAK NAME	RESULT	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	WI/2 (SEC)
1	A-BHC	0.0245	1.817	0.007	1213343	BV	5.31
2	~~B-BHC~~	0.0006	2.266	-0.001	26450	T	8.69
3	B-BHC	0.0250	2.607	0.010	424619	VV	7.81
4	D-BHC	0.0250	3.043	0.010	882661	VV	8.50
5	ALDRIN	0.0248	3.406	0.010	1071311	VB	10.00
6	G-CHLOR	0.0249	5.624	0.013	791310	BV	16.00
7	A-CHLOR	0.0248	6.140	0.006	914102	VV	18.19
8	4,4'-DDE	0.0248	7.385	0.007	877606	VB	21.44
9	ENDRIN	0.0260	9.370	0.007	801833	BV	27.19
10	4,4'DDD	0.0253	11.236	0.017	722184	VB	32.00
11	END0 SO4	0.0245	17.405	-0.003	443970	BB	45.25
12		0.0000	21.369		84159	BV	? 79.06
13	DBC	0.1328	23.927	0.134	3668149	VB	? 73.19
TOTALS:		0.3830		0.217	11921697		

DETECTED PKS: 21 REJECTED PKS: 8

DIVISOR: 1.00000 AMT STD: 1.00000 MULTIPLIER: 1.00000

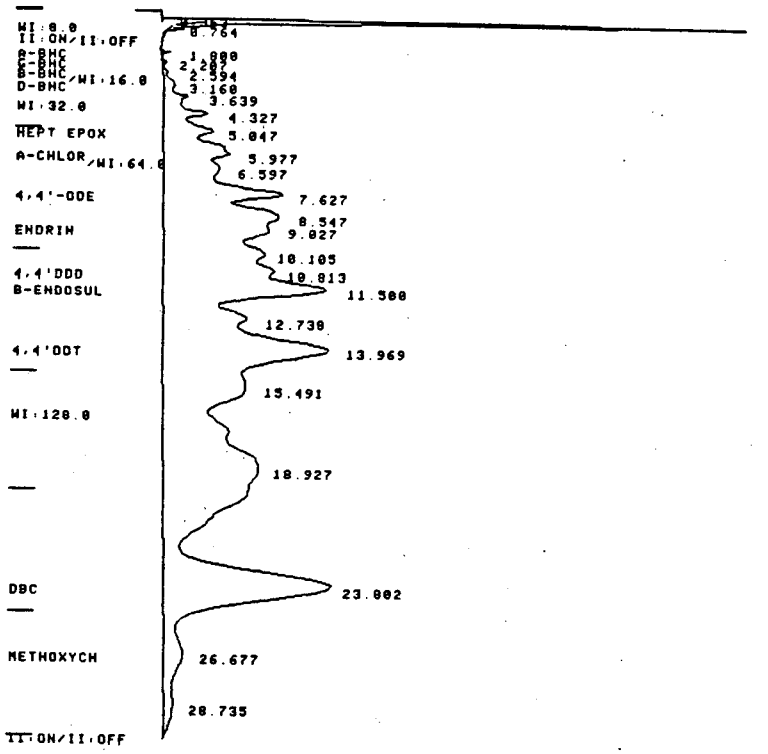
NOISE: 68.6 OFFSET: -14

RACK: 3 VIAL: 6 INJ: 1

NOTES:
NOTEBOOK:315-164 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#'S:U-7605(38.029),U-7653(38.030)
INST: VARIAN 6000#2B ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
PHASE:1.5% SP2250/1.95% SP2401
CARRIER GAS: N2 @ 60 ML/MIN.
DET:300 C INJ:220 C
200C ISOTHERMAL 4UL AUTO. INJ
PRIMARY ANALYSIS AUTOSAMPLER
EPA CASE#'S: 9247,9298

POST RUN:
SAVE FILE: RAW U7605-425

CHART SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10% 5 MIN/TICK



CHANNEL: 6B - 1 TITLE: RUN$ 6 11:21 19 APR 88

SAMPLE: TOXAPH METHOD: PEPA CALCULATION: ES - ANALYS - OP

PEAK NO	PEAK NAME	RESULT	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	WI/2 (SEC)
1	~~B-BHC~~ 4.0	0.0023	3.166	0.133	79654	VV	? 29.88
2	~~ALDRIN~~	0.0026	3.634	0.238	110690	VV	? 17.69
3		0.0000	4.318		295323	VV	? 22.44
4	~~HEPT EPOX~~	0.0110	5.037	0.047	427764	VV	? 37.00
5	~~G-CHLOR~~	0.0110	5.721	0.110	349823	VV	? 35.13
6	~~A-CHLOR~~	0.0109	5.975	-0.159	402654	VV	? 47.50
7	~~A-ENDO~~	0.0156	6.556	0.282	576481	VV	? 29.38
8	~~DIELDRIN~~	0.0318	7.617	-0.050	1255266	VV	? 51.19
9		0.0000	8.519		1406537	VV	? 56.88
10	~~ENDRIN~~	0.0314	9.050	-0.313	969421	VV	?114.94
11		0.0000	10.105		1036663	VV	? 47.19
12	~~4,4'DDD~~	0.0000	10.813	-0.187	894194	VV	? 36.13
13	~~B-ENDOSUL~~	0.0602	11.500	0.216	2172745	VV	? 64.31
14		0.0000	12.738		948128	VV	? 51.06
15	~~4,4'DDT~~	0.1179	#13.969	0.441	3330255	VV	98.50
16		0.0000	15.491		1693248	VV	?202.69
17		0.0000	18.927		5385409	VV	233.06
18	DBC 0.40	0.1358	23.802	0.009	3750481	VV	85.00
19	~~METHOXYCH~~	0.0331	26.677	0.486	478607	VV	?150.00
20		0.0000	28.735		166676	VB	?220.25
TOTALS:		0.4635		1.253	25730022		

DETECTED PKS: 28 REJECTED PKS: 8

DIVISOR: 1.00000 AMT STD: 1.00000 MULTIPLIER: 1.00000

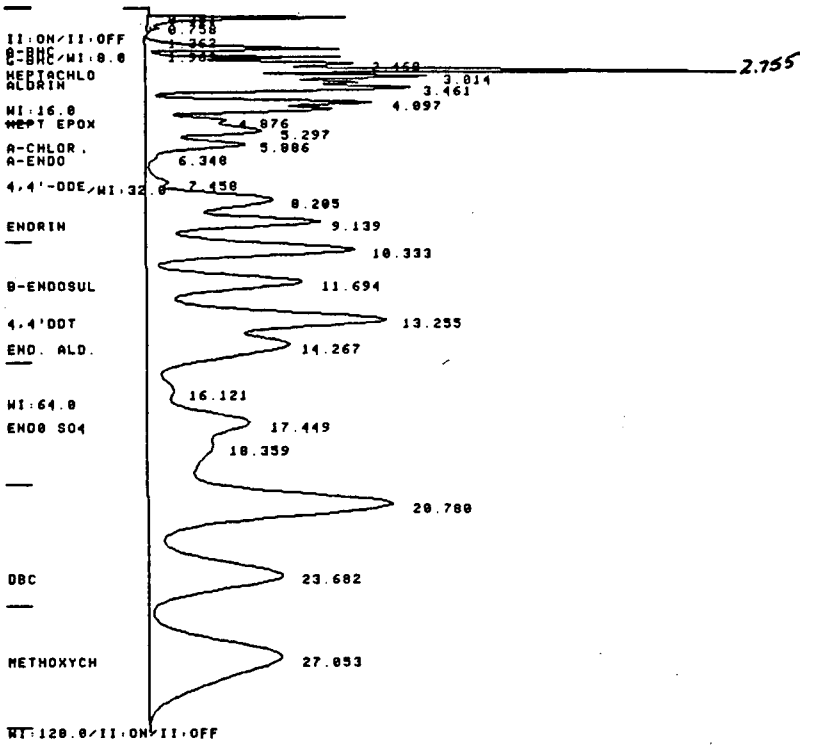
NOISE: 68.6 OFFSET: 0

RACK: 1 VIAL: 6 INJ: 1

NOTES:
NOTEBOOK:315-164 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB$'S:U-7605(38.029),U-7653(38.030)
INST: VARIAN 6000#2B ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
PHASE:1.5% SP2250/1.95% SP2401
CARRIER GAS: N2 @ 60 ML/MIN.
DET:300 C INJ:220 C
200C ISOTHERMAL 4UL AUTO. INJ
PRIMARY ANALYSIS AUTOSAMPLER
EPA CASE$'S: 9247,9298

POST RUN:
SAVE FILE: RAW U7605-392

CHART SPEED: 0.5 CM/MIN
ATTEN: 16 ZERO: 10% 5 MIN/TICK



CHANNEL: 6B - 1 TITLE: RUN# 7 12:02 19 APR 88

SAMPLE: AR1660 METHOD: PEPA CALCULATION: ES - ANALYS - OP

PEAK NO	PEAK NAME	RESULT	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	WI/2 (SEC)
1		0.0000	1.362		37089	BV ?	4.94
2		0.0000	1.477		71692	VV	5.13
3	A-BHC 4.0	0.0099	1.666	-0.144	487908	VV	6.00
4		0.0000	1.969		37507	VV ?	6.69
5	G-BHC	0.0181	2.135	-0.132	810150	VV	6.81
6	B-BHC	0.0378	2.468	-0.129	641300	VV ?	12.19
7	HEPTACHLO	0.0462	#2.755	-0.039	1950264	VV	8.00
8	D-BHC	0.0208	3.014	-0.019	733798	VV ?	10.56
9		0.0000	3.229		516483	VV ?	10.06
10	ALDRIN	0.0242	3.461	0.065	1046825	VV ?	17.81
11		0.0000	4.097		825516	VV ?	13.94
12		0.0000	4.382		716567	VV ?	19.94
13	HEPT EPOX	0.0080	4.876	-0.114	311927	VV ?	18.94
14	G-CHLOR	0.0242	5.297	-0.314	770804	VV ?	32.56
15	A-CHLOR	0.0158	5.886	-0.248	580387	VV	21.63
16	A-ENDO	0.0013	6.348	0.074	48667	VV ?	33.44
17	4,4'-DDE	0.0044	7.458	0.080	154111	VV ?	30.19
18		0.0000	8.205		1340204	VV	46.69
19	ENDRIN	0.0447	9.139	-0.224	1382064	VV	30.63
20	4.0	0.0000	10.333		2019491	VV	35.88
21	B-ENDOSUL	0.0460	11.694	0.410	1659011	VV	40.44
22	4,4'DDT	0.0997	13.255	-0.273	2816489	VV	46.38
23	END. ALD.	0.0776	14.267	-0.338	2071067	VV ?	70.19
24		0.0000	16.121		333761	VV ?	71.13
25	ENDO SO4	0.0961	17.449	0.041	1743030	VV ?	62.94
26		0.0000	18.359		1094012	VV	156.75
27		0.0000	#20.780		4599531	VV	68.00
28	DBC 0.40	0.0969	23.682	-0.111	2677456	VV	76.31
29	METHOXYCH	0.2565	27.053	0.862	3703802	VB	109.25

TOTALS: 0.9281 -0.553 35180916

DETECTED PKS: 35 REJECTED PKS: 6

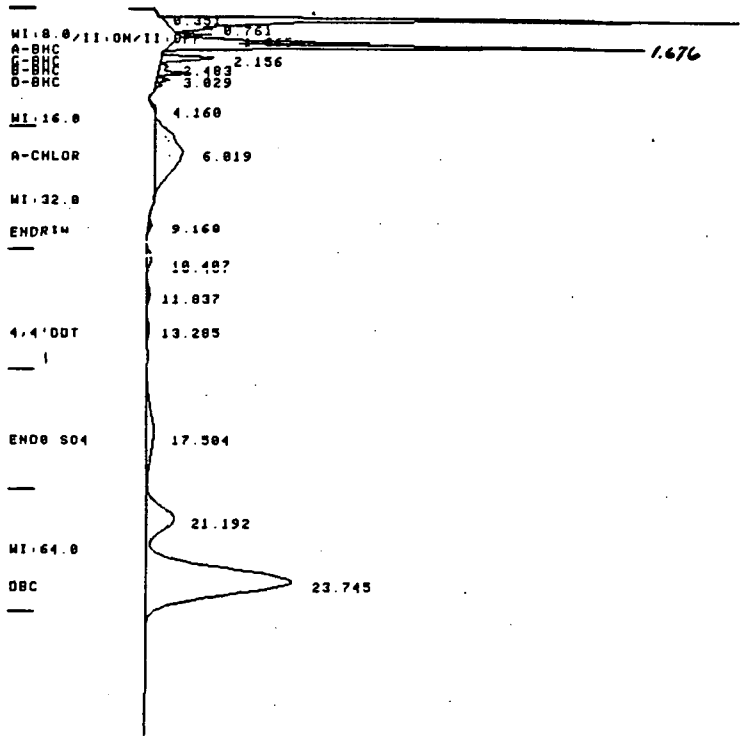
DIVISOR: 1.00000 AMT STD: 1.00000 MULTIPLIER: 1.00000

NOISE: 68.6 OFFSET: -24

RACK: 1 VIAL: 7 INJ: 1

NOTES:
NOTEBOOK:315-164 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#'S:U-7605(38.029),U-7653(38.030)
INST: VARIAN 6000#28 ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
PHASE:1.5% SP2250/1.95% SP2401
CARRIER GAS: N2 @ 60 ML/MIN.
DET: 300 C INJ: 250 C

CHART SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10% 5 MIN/TICK



CHANNEL: 6B - 1 TITLE: RUN# 8 12:38 19 APR 88

SAMPLE: AR1221 METHOD: PEPA CALCULATION: ES - ANALYS - OP

PEAK NO	PEAK NAME	RESULT	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	WI/2 (SEC)
1		0.0000	1.365		69086	BV ?	4.75
2		0.0000	1.486		262738	VV	4.94
3	~~A-BHC~~	0.0172	1.676	-0.134	851626	VB	6.19
4	~~B-BHC~~	0.0030	2.156	-0.111	133725	BV	9.88
5	~~B-BHC~~	0.0013	2.483	-0.114	22540	VV	8.81
6	~~HEPTACHLO~~	0.0019	2.767	-0.027	78874	VV	7.50
7	~~D-BHC~~	0.0007	3.029	-0.004	26223	VV	7.38
8	~~A-CHLOR~~	0.0196	6.019	-0.115	722412	BB ?	87.56
9		0.0000	10.407		40301	BB	30.06
10	~~B-ENDOSUL~~	0.0010	11.837	0.553	35232	BV	38.69
11	~~4,4'DDT~~	0.0010	13.285	-0.243	27241	VB	36.13
12	~~ENDO SO4~~	0.0142	17.504	0.096	258147	BV	7117.63
13		0.0000	21.192		47489S	VV	65.44
14	DBC 0.40	0.0992	23.745	-0.048	2739870	VB	71.19
TOTALS:		0.1591		-0.147	5742910		

DETECTED PKS: 22 REJECTED PKS: 8

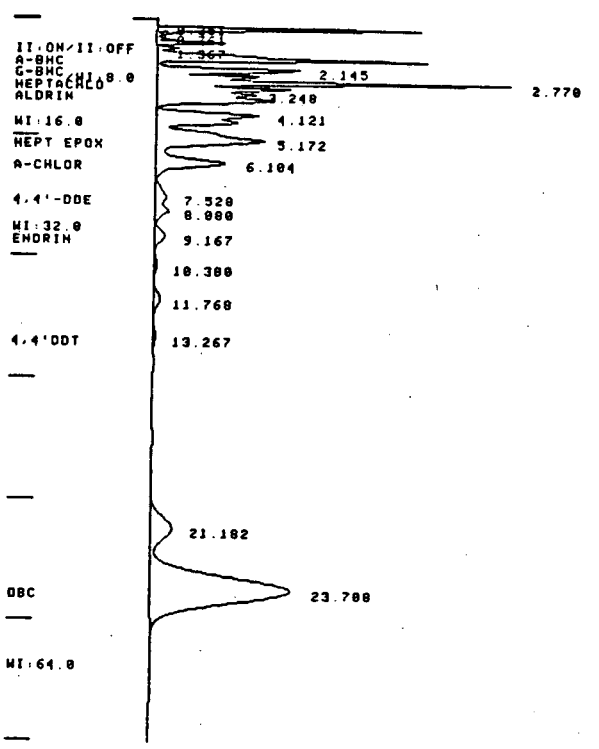
DIVISOR: 1.00000 AMT STD: 1.00000 MULTIPLIER: 1.00000

NOISE: 68.6 OFFSET: -19

RACK: 1 VIAL: 8 INJ: 1

NOTES:
NOTEBOOK:315-164 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#'S:U-7605(38.029),U-7653(38.030)
INST: VARIAN 6000#2B ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
PHASE:1.5% SP2250/1.95% SP2401
CARRIER GAS: N2 @ 60 ML/MIN.
DET:300 C INJ:220 C
200C ISOTHERMAL 4UL AUTO. INJ
PRIMARY ANALYSIS AUTOSAMPLER
EPA CASE#'S: 9247,9298

POST RUN:
SAVE FILE: RAW U7605-394



CHANNEL: 6B - 1 TITLE: RUN# 9 13:11 19 APR 88

SAMPLE: AR1232 METHOD: PEPA CALCULATION: ES - ANALYS - OP

PEAK NO	PEAK NAME	RESULT	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		WI/2 (SEC)
1		0.0000	1.367		42858	BV	?	4.81
2		0.0000	1.485		142113	VV		5.19
3	A-BHC	0.0115	1.676	-0.134	569201	VV		6.31
4	G-BHC	0.0098	2.145	-0.122	438472	VV		7.44
5	B-BHC	0.0180	2.483	-0.114	305005	VV	?	12.31
6	HEPTACHLO	0.0207	2.770	-0.024	872574	VV		8.88
7	D-BHC	0.0099	3.031	-0.002	349046	VV	?	10.81
8		0.0000	3.248		251805	VV	?	9.81
9	ALDRIN	0.0101	3.480	0.084	436031	VV	?	18.13
10		0.0000	4.121		378222	VV	?	14.19
11		0.0000	4.400		306313	VV	?	20.00
12	HEPT EPOX	0.0196	5.172	0.182	760534	VV	?	29.75
13	A-CHLOR	0.0115	6.104	-0.030	424923	VV		20.44
14	DIELDRIN	0.0028	7.528	-0.139	110608	VV	?	34.44
15		0.0000	8.080		97790	VV	?	30.25
16	ENDRIN	0.0030	9.167	-0.196	93617	VV		33.00
17		0.0000	10.380		25109	VV		34.88
18	B-ENDOSUC	0.0018	11.768	0.484	64762	VV		37.44
19		0.0000	21.182		353532	BV		65.56
20	DBC 0.40	0.0960	23.708	-0.085	2652107	VB		71.94
TOTALS:		0.2147		-0.096	8674622			

DETECTED PKS: 26 REJECTED PKS: 6

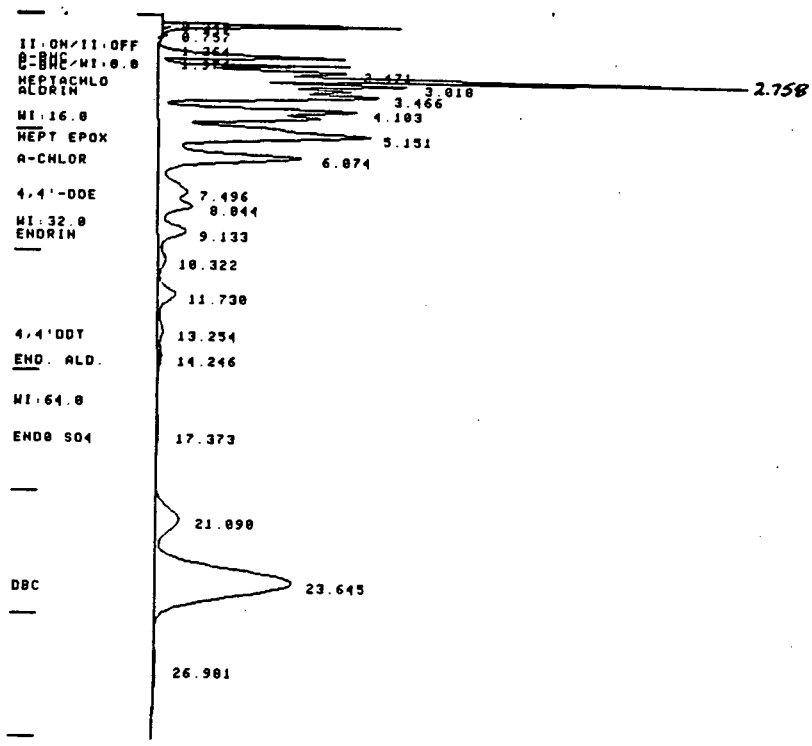
DIVISOR: 1.00000 AMT STD: 1.00000 MULTIPLIER: 1.00000

NOISE: 68.6 OFFSET: -7

RACK: 1 VIAL: 9 INJ: 1

NOTES:
NOTEBOOK:315-164 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#'S:U-7605(38.029),U-7653(38.030)
INST: VARIAN 6000#28 ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
PHASE:1.5% SP2250/1.95% SP2401
CARRIER GAS: N2 @ 60 ML/MIN.
DET:300 C INJ:220 C
200C ISOTHERMAL 4UL AUTO. INJ
PRIMARY ANALYSIS AUTOSAMPLER
EPA CASE#'S: 9247,9298

POST RUN:
SAVE FILE: RAW U7605 305



CHANNEL: 68 - 1 TITLE: RUN# 10 13:45 19 APR 88

SAMPLE: AR1242 METHOD: PEPA CALCULATION: ES - ANALYS - OP

PEAK NO	PEAK NAME	RESULT	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		WI/Z (SEC)
1		0.0000	1.364		34564	BV	?	4.94
2	4.0	0.0000	1.480		63059	VV		5.38
3	A-BHC	0.0090	1.669	-0.141	447234	VV		6.13
4		0.0000	1.976		35202	VV	?	7.31
5	G-BHC	0.0164	2.138	-0.129	731611	VV		6.94
6	B-BHC	0.0346	2.471	-0.126	587151	VV	?	12.25
7	HEPTACHLO	0.0408	#2.758	-0.036	1720865	VV		8.25
8	D-BHC	0.0188	3.018	-0.015	662551	VV	?	10.75
9		0.0000	3.233		489179	VV	?	10.56
10	ALDRIN	0.0200	3.466	0.070	865451	VV	?	18.13
11		0.0000	4.103		745860	VV	?	14.31
12		0.0000	4.384		622876	VV	?	20.38
13	HEPT EPOX	0.0395	5.151	0.161	1533549	VV	?	30.31
14	A-CHLOR	0.0249	6.074	-0.060	918939	VV		21.13
15	4,4'-DDE	0.0088	7.496	0.118	311721	VV	?	53.94
16	DIELDRIN	0.0065	8.044	0.377	258112	VV	?	35.44
17	ENDRIN	0.0087	9.133	-0.230	268149	VV		38.00
18		0.0000	10.322		92400	VV	?	65.69
19	B-ENDOSUL	0.0053	11.730	0.446	192949	VV		43.44
20	4,4'DDT	0.0025	13.254	-0.274	69603	VV	?	74.56
21	END. ALD.	0.0021	14.246	-0.359	55677	VB	?	84.69
22	ENDO SO4	0.0019	17.373	-0.035	33838	BV		56.00
23		0.0000	21.090		385238	VV		66.00
24	DBC 0.4e	0.0955	23.645	-0.148	2638972	VB		73.81
25	METHOXYCH	0.0031	26.981	0.790	44657	BB	?	65.31
TOTALS:		0.3384		0.409	13809407			

DETECTED PKS: 30 REJECTED PKS: 5

DIVISOR: 1.00000 AMT STD: 1.00000 MULTIPLIER: 1.00000

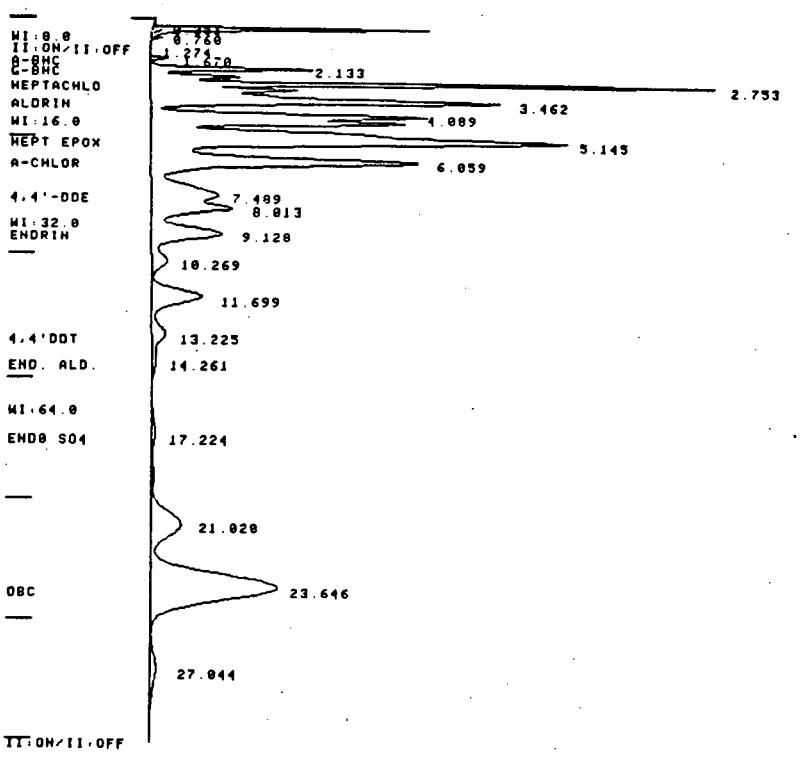
NOISE: 68.6 OFFSET: -6

RACK: 1 VIAL: 10 INJ: 1

NOTES:
NOTEBOOK:315-164 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#'S:U-7605(38.029),U-7653(38.030)
INST: VARIAN 6000#2B ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
PHASE:1.5% SP2250/1.95% SP2401
CARRIER GAS: N2 @ 60 ML/MIN.
DET:300 C INJ:220 C
200C ISOTHERMAL 4UL AUTO. INJ
PRIMARY ANALYSIS AUTOSAMPLER
EPA CASE#'S: 9247,9298

POST RUN:

CHART SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10% 5 MIN/TICK



CHANNEL: 6B - 1 TITLE: RUN# 11 14:20 19 APR 88

SAMPLE: AR1248 METHOD: PEPA CALCULATION: ES - ANALYS - OP

PEAK NO	PEAK NAME	RESULT ng INJ 4.0	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	WI/2 (SEC)
1	A-BHC	0.0006	1.668	-0.142	29495	BV	5.38
2	G-BHC	0.0076	2.131	-0.136	337909	VV	6.75
3	B-BHC	0.0154	2.437	-0.160	260701	VV	? 12.63
4	HEPTACHLO	0.0300	2.753	-0.041	1267745	VV	8.19
5	D-BHC	0.0108	3.014	-0.019	381712	VV	? 11.81
6	ALDRIN	0.0375	3.462	0.066	1621097	VV	15.44
7		0.0000	4.089		977355	VV	? 13.50
8		0.0000	4.375		947663	VV	? 18.56
9	HEPT EPOX	0.0739	5.145	0.155	2873555	VV	28.13
10	A-CHLOR	0.0466	6.059	-0.075	1716591	VV	21.31
11	4,4'-DDE	0.0195	7.489	0.111	691851	VV	? 36.81
12	DIELDRIN	0.0146	8.013	0.346	576756	VV	? 34.25
13	ENDRIN	0.0214	9.128	-0.235	660631	VV	35.50
14		0.0000	10.269		169879	VV	? 50.75
15	B-ENDOSUL	0.0141	11.699	0.415	508992	VV	39.19
16	4,4'DDT	0.0059	13.225	-0.303	167215	VV	59.31
17	END. ALD.	0.0021	14.261	-0.344	56302	VB	? 85.38
18	ENDO SO4	0.0026	17.224	-0.184	46434	BV	60.75
19		0.0000	21.020		581856	VV	70.31
20	DBC 0.40	0.0884	23.646	-0.147	2440702	VV	73.06
21	METHOXYCH	0.0098	27.044	0.853	142031	T	91.00
TOTALS:		0.4008		0.160	16456472		

DETECTED PKS: 27 REJECTED PKS: 6

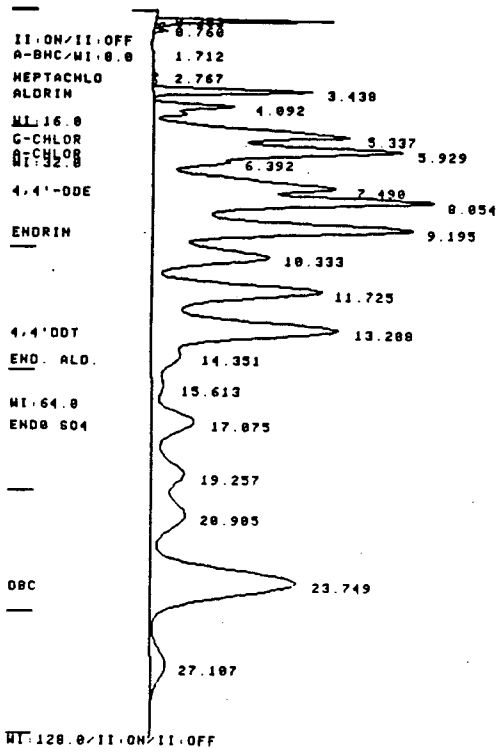
DIVISOR: 1.00000 AMT STD: 1.00000 MULTIPLIER: 1.00000

NOISE: 68.6 OFFSET: 4

RACK: 1 VIAL: 11 INJ: 1

NOTES:
NOTEBOOK:315-164 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#'S:U-7605(38.029),U-7653(38.030)
INST: VARIAN 6000#2B ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
PHASE:1.5% SP2250/1.95% SP2401
CARRIER GAS: N2 @ 60 ML/MIN.
DET:300 C INJ:220 C
200C ISOTHERMAL 4UL AUTO. INJ
PRIMARY ANALYSIS AUTOSAMPLER
EPA CASE#'S: 9247,9298

POST RUN:



CHANNEL: 6B - 1 TITLE: RUN# 12 14:54 19 APR 88

SAMPLE: AR1254 METHOD: PEPA CALCULATION: ES - ANALYS - OP

PEAK NO	PEAK NAME	RESULT	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	WI/2 (SEC)
1	~~ALDRIN~~ ng inj 4.0	0.0114	3.438	0.042	492935	VV	11.63
2		0.0000	4.092		274616	VV	12.94
3		0.0000	4.389		113954	VV	? 16.69
4	~~G-CHLOR~~	0.0461	5.337	-0.274	1466276	VV	? 31.81
5	~~A-CHLOR~~	0.0461	5.929	-0.205	1700202	VV	26.44
6	~~A-END0~~	0.0092	6.392	0.118	341648	VV	? 22.56
7	~~4,4'-DDE~~	0.0452	7.490	0.112	1600667	VV	? 46.63
8	~~DICLORIN~~	0.0526	8.054	0.387	2075004	VV	28.63
9	~~ENDRIN~~	0.0750	9.195	-0.168	2317558	VV	32.25
10		0.0000	10.333		1209893	VV	40.88
11	~~B-ENDOSUL~~	0.0496	11.725	0.441	1790601	VV	38.25
12	~~4,4'DDT~~	0.0803	13.288	-0.240	2268777	VV	44.25
13	~~END. ALD.~~	0.0124	14.351	-0.254	331381	VV	? 73.44
14		0.0000	15.613		152532	VV	? 73.06
15	~~END0 SO4~~	0.0387	17.075	-0.333	702795	VV	61.81
16		0.0000	19.257		610231	VV	? 77.81
17		0.0000	20.905		714460	VV	? 95.75
18	DBC 0.40	0.1017	23.749	-0.044	2809522	VV	73.88
19	~~METHOXYCHL~~	0.0239	27.107	0.916	345114	VB	97.75
TOTALS:		0.5924		0.498	21318168		

DETECTED PKS: 27 REJECTED PKS: 8

DIVISOR: 1.00000 AMT STD: 1.00000 MULTIPLIER: 1.00000

NOISE: 68.6 OFFSET: 3

RACK: 1 VIAL: 12 INJ: 1

NOTES:
NOTEBOOK:315-164 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#'S:U-7605(38.029),U-7653(38.030)
INST: VARIAN 6000#2B ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
PHASE:1.5% SP2250/1.95% SP2401
CARRIER GAS: N2 @ 60 ML/MIN.
DET:300 C INJ:220 C
200C ISOTHERMAL 4UL AUTO. INJ
PRIMARY ANALYSIS AUTOSAMPLER
EPA CASE#'S: 9247,9298

POST RUN:
SAVE FILE: RAW

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

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

Sample wt/vol: 1000. (g/mL)ML Lab File ID: RUN31

Level: (low/med) LOW Date Received: 0/ 0/ 0

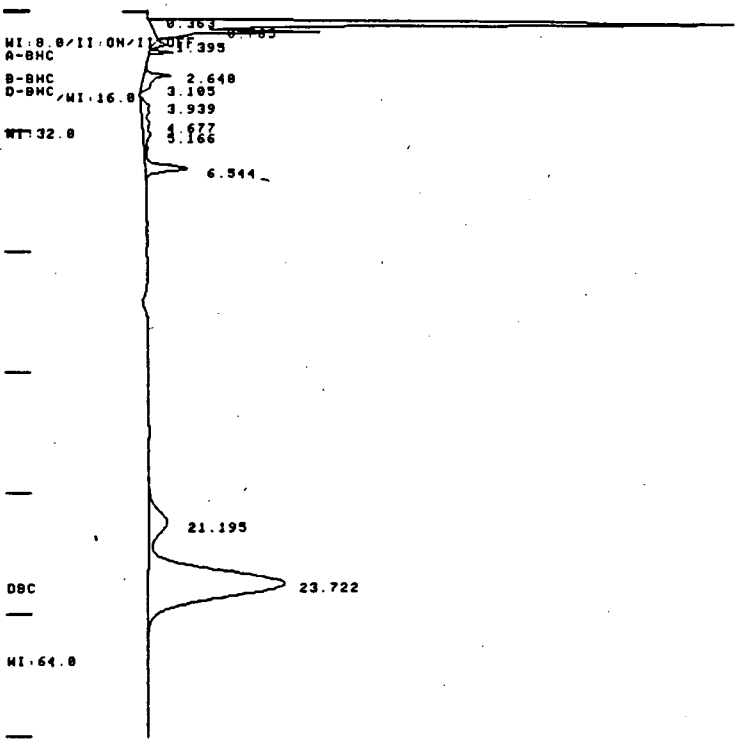
% Moisture: not dec.100. dec. 0. Date Extracted: 4/12/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 4/20/88

GPC Cleanup: (Y/N) N pH: .0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	.050	U
319-85-7	beta-BHC	.050	U
319-86-8	delta-BHC	.050	U
58-89-9	gamma-BHC	.050	U
76-44-8	Heptachlor	.050	U
309-00-2	Aldrin	.050	U
1024-57-3	Heptachlor epoxide	.050	U
959-98-8	Endosulfan I	.050	U
60-57-1	Dieldrin	.050	U
72-55-9	4,4'-DDE	.10	U
72-20-8	Endrin	.050	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	.50	U
53494-70-5	Endrin ketone	.10	U
5103-71-9	alpha-Chlordane	.50	U
5103-74-2	gamma-Chlordane	.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	.50	U
11104-28-2	Aroclor-1221	.50	U
11141-16-5	Aroclor-1232	.50	U
53469-21-9	Aroclor-1242	.50	U
12672-29-6	Aroclor-1248	.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

CHART SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10% 5 MIN/TICK



CHANNEL: GB - 1 TITLE: RUN# 81 3:07 20 APR 88

SAMPLE: PBLK 04128W881 BM METHOD: PEPA CALCULATION: ES - ANALYS - OP

PEAK NO	PEAK NAME	RESULT UG/L	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		0.0000	1.395		31497	BV	8.50
2	A-BHC	0.0072	1.695	-0.115	35438	VB	5.38
3	B-BHC	0.0739	2.648	0.051	125356	BV	11.00
4	B-BHC	0.0068	3.105	0.072	24042	VB	? 16.63
5		0.0000	3.939		39680	BV	? 20.00
6		0.0000	4.205		41902	VV	? 26.13
7		0.0000	4.677		45349	VV	? 24.38
8	HEPT EPOX	0.0209	5.166	0.176	81185	VV	? 36.19
9	A-ENDO	0.0576	6.544	0.270	212934	VB	19.38
10		0.0000	21.195		317278	BV	64.25
11	DBC 94	1.00/0.9393	23.722	-0.071	2594676	VB	70.63

TOTALS: 1.1057 0.383 3549337

DETECTED PKS: 16 REJECTED PKS: 5

DIVISOR: 1.00000 AMT STD: 1.00000 MULTIPLIER: 10.00000

NOISE: 68.6 OFFSET: -11

RACK: 3 VIAL: 1 INJ: 1

NOTES:
NOTEBOOK:315-164 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#'S:U-7605(38.029),U-7653(38.030)
INST: VARIAN 6000#28 ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
PHASE:1.5% SP2250/1.95% SP2401
CARRIER GAS: N2 @ 60 ML/MIN.
DET:300 C INJ:220 C
200C ISOTHERMAL 4UL AUTO. INJ
PRIMARY ANALYSIS AUTOSAMPLER
EPA CASE#'S: 9247,9298 BM

POST RUN:
SAVE FILE: RAW U7605-420

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BQ691MS

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Matrix: (soil/water) WATER Lab Sample ID: 17265

Sample wt/vol: 500. (g/mL)ML Lab File ID: RUN33

Level: (low/med) LOW Date Received: 4/ 8/88

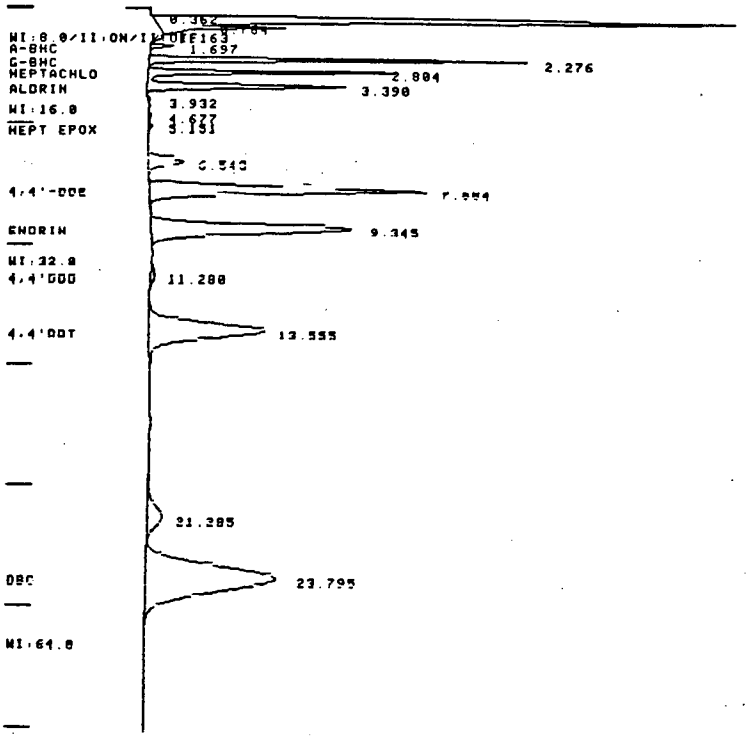
% Moisture: not dec.100. dec. 0. Date Extracted: 4/12/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 4/20/88

GPC Cleanup: (Y/N) N pH: .0 Dilution Factor: 1.00

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
58-89-9	gamma-BHC	.29	
76-44-8	Heptachlor	.28	
309-00-2	Aldrin	.25	
1024-57-3	Heptachlor epoxide	.10	U
959-98-8	Endosulfan I	.10	U
60-57-1	Dieldrin	.81	
72-55-9	4,4'-DDE	.20	U
72-20-8	Endrin	.90	
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	.88	
72-43-5	Methoxychlor	1.0	U
53494-70-5	Endrin ketone	.20	U
5103-71-9	alpha-Chlordane	1.0	U
5103-74-2	gamma-Chlordane	1.0	U
8001-35-2	Toxaphene	2.0	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	2.0	U
11096-82-5	Aroclor-1260	2.0	U

CHART SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10% 5 MIN/TICK



CHANNEL: 6B - 1 TITLE: RUN# 33 4:15 20 APR 88

SAMPLE: BQ619MS METHOD: PEPA CALCULATION: ES - ANALYS - OP

PEAK NO	PEAK NAME	RESULT ug/L	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	WI/2 (SEC)
1	~~A-BHC~~	0.0177	1.697	-0.113	43889	VB	5.44
2	G-BHC	0.2925	2.276	0.009	654136	BV	6.44
3	HEPTACHLO	0.2855	2.804	0.010	602587	VV	8.38
4	ALDRIN	0.2496	3.390	-0.006	539778	VB	9.81
5	~~HEPT EPOX~~	0.0119	5.151	0.161	23174	VB	15.31
6	~~A-ENDO~~	0.0880	6.543	0.269	162676	BV	16.88
7	DIELDRIN	0.8094	7.684	0.017	1597387	VV	21.69
8	ENDRIN	0.9013	9.345	-0.018	1391910	VB	26.50
9	~~B-ENDOSUL~~	0.0233	11.280	-0.004	42070	BV	30.69
10	4,4'DDT	0.8862	13.555	0.027	1251749	VB	39.56
11		0.0000	21.285		234898	BV	55.88
12	DBC 86	2.0/1.7203	23.795	0.002	2376019	VB	68.31
TOTALS:		5.2857		0.354	8920273		

DETECTED PKS: 22 REJECTED PKS: 10

DIVISOR: 0.50000 AMT STD: 1.00000 MULTIPLIER: 10.00000

NOISE: 68.6 OFFSET: -15

RACK: 3 VIAL: 3 INJ: 1

NOTES:
NOTEBOOK:315-164 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#'S:U-7605(38.029),U-7653(38.030)
INST: VARIAN 6000#2B ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
PHASE:1.5% SP2250/1.95% SP2401
CARRIER GAS: N2 @ 60 ML/MIN.
DET:300 C INJ:220 C
200C ISOTHERMAL 4UL AUTO. INJ
PRIMARY ANALYSIS AUTOSAMPLER
EPA CASE#'S: ~~9247~~ 8977,9298

POST RUN:
SAVE FILE: RAW U7605-422

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BQ691MSD

Lab Name: EANDE Contract: 68-W8-0052

Lab Code: EANDE Case No.: 9298 SAS No.: SDG No.: BQ691

Matrix: (soil/water) WATER Lab Sample ID: 17265

Sample wt/vol: 500. (g/mL)ML Lab File ID: RUN34

Level: (low/med) LOW Date Received: 4/ 8/88

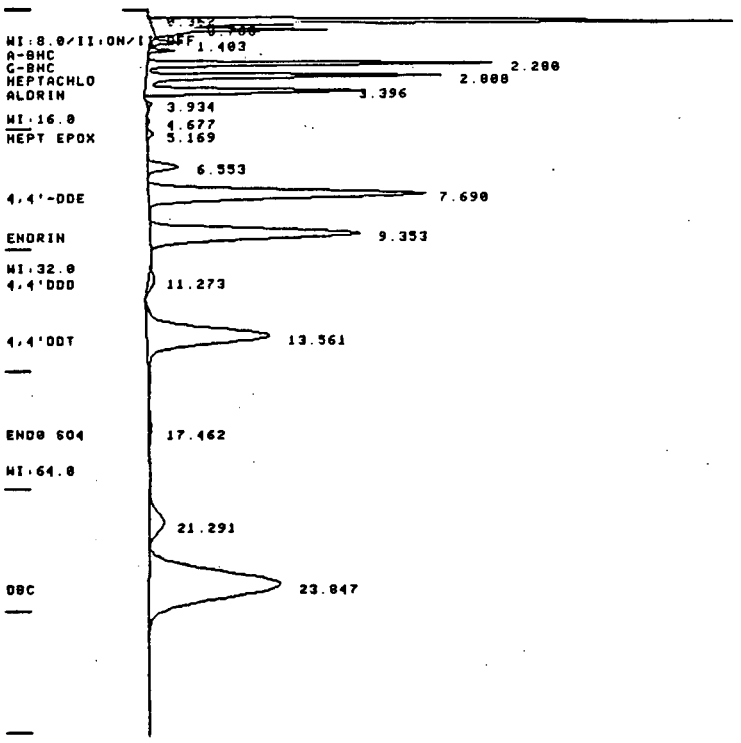
% Moisture: not dec.100. dec. 0. Date Extracted: 4/12/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 4/20/88

GPC Cleanup: (Y/N) N pH: .0 Dilution Factor: 1.00

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
58-89-9	gamma-BHC	.31	
76-44-8	Heptachlor	.34	
309-00-2	Aldrin	.28	
1024-57-3	Heptachlor epoxide	.10	U
959-98-8	Endosulfan I	.10	U
60-57-1	Dieldrin	.82	
72-55-9	4,4'-DDE	.20	U
72-20-8	Endrin	.94	
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	1.0	
72-43-5	Methoxychlor	1.0	U
53494-70-5	Endrin ketone	.20	U
5103-71-9	alpha-Chlordane	1.0	U
5103-74-2	gamma-Chlordane	1.0	U
8001-35-2	Toxaphene	2.0	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	2.0	U
11096-82-5	Aroclor-1260	2.0	U

CHART SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10% 5 MIN/TICK



CHANNEL: 6B - 1 TITLE: RUN# 34 4:49 20 APR 88

SAMPLE: 8Q619MSD METHOD: PEPA CALCULATION: ES - ANALYS - OP

PEAK NO	PEAK NAME	RESULT ug/L	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	WI/2 (SEC)
1		0.0000	1.403		52298	BV	5.56
2	~~A-BHC~~	0.0173	1.700	-0.110	42961	VB	5.69
3	G-BHC	0.3097	2.280	0.013	692621	BV	6.69
4	HEPTACHLO	0.3415	2.808	0.014	720887	VV	8.63
5	ALDRIN	0.2774	3.396	0.000	599900	VB	9.94
6	~~HEPT EPOX~~	0.0126	5.169	0.179	24435	VB	15.00
7	~~A-ENDO~~	0.0773	6.553	0.279	142764	BV	16.94
8	DIELDRIN	0.8184	7.690	0.023	1615205	VV	21.75
9	ENDRIN	0.9315	9.353	-0.010	1438625	VB	26.13
10	~~B-ENDOSUL~~	0.0362	11.273	-0.011	65430	BV	30.56
11	4,4'DDT	0.9598	13.561	0.033	1355720	VB	39.69
12	~~ENDO 504~~	0.0256	17.462	0.054	23179	BB	? 49.06
13		0.0000	21.291		224550	BV	56.50
14	DBC 92 2.0/	1.8282	23.847	0.054	2525097	VB	72.94
TOTALS:		5.6356		0.518	9523672		

DETECTED PKS: 21 REJECTED PKS: 7

DIVISOR: 0.50000 AMT STD: 1.00000 MULTIPLIER: 10.00000

NOISE: 68.6 OFFSET: -22

RACK: 3 VIAL: 4 INJ: 1

NOTES:
NOTEBOOK:315-164 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#'S:U-7605(38.029),U-7653(38.030)
INST: VARIAN 6000#28 ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
PHASE:1.5% SP2250/1.95% SP2401
CARRIER GAS: N2 @ 60 ML/MIN.
DET:300 C INJ:220 C
200C ISOTHERMAL 4UL AUTO. INJ
PRIMARY ANALYSIS AUTOSAMPLER
EPA CASE#'S: ~~9247~~,9298

POST RUN: GPC
SAVE FILE: RAW U7605-423