L1630200005
ST. CLAIR
SAUGET - SAUGET
LAB DATA

GROUNDWATER
ORGANICS 158279

GROUNDWATER
ORGANICS

CASE NARRATIVE

ecology and environment, inc.
ANALYTICAL SERVICES CENTER, P.O. BOX D, BUFFALO, NEW YORK 14225, TEL. 716-631-0360
International Specialists in the Environment

June 23, 1987

Job # U-5107; U-5162

Sample # DC-GW-23 through DC-GW-43

CASE NARRATIVE

Enclosed are the organic analytical results for samples received on March 24 and 25, 1987. All samples were received in good condition.

Samples DC-GW-34, DC-GW-38, and DC-GW-40 were broken due to a refrigerator malfunction which froze bottle contents and ruptured the bottles. For these wells, there was no remaining samples for semi-volatiles or Pesticide/PCB analyses. Volatile organic analyses were performed and results are enclosed.

Due to the level of contaminants in the Pesticide/PCB and semi-volatile fractions, some extracts required dilutions preventing the determination of surrogate recoveries.

Compounds are reported as UNKNOWN if, in the judgment of our mass spectral specialist, no valid tentative identification can be made.

Results flagged "E" indicate an approximate concentration. The amount detected in the analysis exceeds the calibrated range. True value are possibly underestimated.

Hexachlorobutadiene and di-n-octylphthalate, in the continuing calibration check on May 20, 1987, exceeded the alllowed relative percent difference. As neither of these compounds were observed in samples analyzed on that day, the data have not been compromised.

If you have any questions, please feel free to contact me at (716)-631-0360.

A. Clifton

Andrew P. Clifton
Director of Analytical Services

APC/drb
Enclosures

2

A D D E N D U M

Each vial of DC-GW-39 was analyzed individually for volatile organic compounds. For reporting purposes, the sample was identified as -39A and -39B. The sample was visibly different in each vial and yielded contrasting results.

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International Specialists in the Environment

CHAIN-OF-CUSTODY RECORD

Project No.: IC 8140
Project Name: ARMA CREEK / SAUGAT SITES
Project Manager: MIKE MILLER
Samplers: (Signature) [signature]
Field Team Leader: ANN SANDELL

STATION NUMBER	DATE	TIME	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE TYPE AIR	SAMPLE INFORMATION EXPECTED COMPOUNDS (Concentration)*	STATION LOCATION	NUMBER OF CONTAINERS	METALS - 1 LITER	CYANIDE 1 LITER	PCB, PESTICIDES - 500 ml	VOLATILE ORGANICS - 40 ml			REMARKS	EPE #
AC-GW-23	3-23-87	1050		X		UNKNOWN	SITE E - WELL EE-13	2	1	1						2194
AC-GW-24	3-23-87	1208		X			SITE E - WELL EE-12	2	1	1						2195
AC-GW-25	3-23-87	1145		X			SITE E - WELL EE-BH2	2	1	1						2196
AC-GW-26	3-23-87	1400		X			SITE E - WELL EE-14	2	1	1						219
AC-GW-27	3-23-87	1330		X			SITE E - WELL EE-15	2	1	1						219
AC-GW-28	3-23-87	1230		X			SITE E - WELL EE-16	2	1	1						219
AC-GW-29	3-23-87	1200		X			SITE E - WELL EE-12	2	1	1					DUPLICATE OF AC-GW-24	220
AC-GW-30	3-23-87	0945		X			BLANK WATER	2	1	1					BLANK	22
AC-GW-31	3-23-87	1630		X			SITE E - WELL EE-AO	6	1	1	2	2				22

Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By: (Signature)
[signature]	3-23-87/1900				
	3-24-87 9:30	[signature]			

Ship Via: FEDERAL EXPRESS
BL/Airbill Number: 2285199162
Date: 3-23-87

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CHAIN-OF-CUSTODY RECORD

Project No.: IL3140
Project Name: ORAS CREEK / SAUGET SITES
Project Manager: MIKE MILLER
Samplers: (Signatures) Daniel F. Sewell
Field Team Leader: DAN SEWELL

STATION NUMBER	DATE	TIME	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE TYPE AIR	SAMPLE INFORMATION / EXPECTED COMPOUNDS (Concentration)*	STATION LOCATION	NUMBER OF CONTAINERS	HSL ORGANICS - 8010	VOLATILE ORGANICS - 4011					REMARKS	E&E #
AC-GW-27	3-23-87	1330		X		UNKNOWN	SITE F - WELL GE-15	4	2	2						2198
AC-GW-28	3-23-87	1230		X			SITE F - WELL GE-16	4	2	2						2199
AC-GW-29	3-23-87	1200		X			SITE F - WELL GE-12	4	2	2					DUPLICATE OF AC-GW-24	2200
AC-GW-30	3-23-87	0945		X			BLANK WATER	4	2	2					BLANK	

Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By: (Signature)
Daniel F. Sewell	3-23-87/1900	FEDERAL EXPRESS			
	3-24-87 9:30	Received For Laboratory By: (Signature) Gerard Baier			

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Date: 3-23-87

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International Specialists in the Environment

CHAIN-OF-CUSTODY RECORD

Project No.: IL3140
Project Name: SAMA CREEK / SAMES SITES
Project Manager: MIKE MILLER
Samplers: (Signatures) [signature]
Field Team Leader: DAN SEWALL

STATION NUMBER	DATE	TIME	SAMPLE TYPE COMP	GRAB	AIR	SAMPLE INFORMATION / EXPECTED COMPOUNDS (Concentration)*	STATION LOCATION	NUMBER OF CONTAINERS	HSL ORGANICS - 80 oz	VOLATILE ORGANICS - 40 mL					REMARKS	EZEE
SC-GW-23	3-23-87	1030		X		UNKNOWN	SITE I. WALL GE-13	4	2	2						2194
SC-GW-24	3-23-87	1200		X			SITE I. WALL GE-12	4	2	2						2195
SC-GW-25	3-23-87	1145		X			SITE I. WALL GE-(illegible)	4	2	2						2196
SC-GW-26	3-23-87	1700		X			SITE I. WALL GE-14	4	2	2						2197

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	3-24-87 9:30	[signature]			

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CHAIN-OF-CUSTODY RECORD

Project No.: IL3140
Project Name: ORAN CREEK/SANGET SITES
Project Manager: MIKE MILLER
Samplers: (Signatures) [signature]
Field Team Leader: DAN SEWALL

STATION NUMBER	DATE	TIME	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE TYPE AIR	SAMPLE INFORMATION EXPECTED COMPOUNDS (Concentration)*	★ EQEE#	STATION LOCATION	NUMBER OF CONTAINERS	METALS-1 LITER	CYANIDE-1 LITER					REMARKS	
AC-GW-32	3-24-87	0815		X		UNKNOWN	2210	SITE G-WELL EE-11	2	1	1						2210
AC-GW-33	3-24-87	0820		X			2211	SITE G-WELL EE-G106	2	1	1						2211
AC-GW-34	3-24-87	0930		X			2212	SITE G-WELL EE-G102	2	1	1						2212
AC-GW-36	3-24-87	0830		X			2213	BLANK WATER	2	1	1					BLANK	2213
AC-GW-3	3-24-87	0830		X			2214	SITE H WELL EE-G110	2	1	1						2214
AC-GW-37	3-24-87	0930		X			2215	SITE I-WELL EE-G109	2	1	1						2215
AC-GW-38	3-24-87	1430		X			2216	SITE O-WELL AE-21	2	1	1						2216
AC-GW-39	3-24-87	1440		X			2217	SITE O-WELL AE-22	2	1	1					STRONG ORGANIC ODOR	2217
AC-GW-40	3-24-87	1515		X			2218	SITE-O-WELL AE-23	2	1	1						2218
AC-GW-41	3-24-87	1630		X			2219	SITE O-WELL AE-24	2	1	1						2219
AC-GW-42	3-24-87	1630		X			2220	SITE O-WELL AE-24	2	1	1					DUPLICATE OF AC-GW-41	2220
AC-GW-43	3-24-87	1700		X			2221	SITE O-WELL AE-25	2	1	1						2221
							★										

Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By: (Signature)
[signature]	3-24-87/1930	FEDERAL EXPRESS			
Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By: (Signature)
Relinquished By: (Signature) FEDERAL EXPRESS	Date/Time: 3-25-87 9:00	Received For Laboratory By: (Signature) [signature]	Relinquished By: (Signature)	Date/Time:	Received For Laboratory By: (Signature)

Ship Via: FEDERAL EXPRESS
BL/Airbill Number: 0285199151
Date: 3-24-87

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CHAIN-OF-CUSTODY RECORD

Project No.: IL 340
Project Name: LEAD CREEK / SAUGET SITES
Project Manager: MIKE MILLER
Samplers: (Signatures) Daniel T Sewall
Field Team Leader: DAN SEWALL

STATION NUMBER	DATE	TIME	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE TYPE AIR	SAMPLE INFORMATION / EXPECTED COMPOUNDS (Concentration)*		STATION LOCATION	NUMBER OF CONTAINERS	VOA ORGANICS - 60 oz.	VOLATILE ORGANICS - 40 ml					REMARKS
IC-GW-32	3-24-87	0815		X		UNKNOWN	2210	SITE G WELL EE-11	4	2	2					
IC-GW-33	3-24-87	0820		X		↓	2211	SITE G WELL EE-G104	4	2	2					
IC-GW-34	3-24-87	0930		X			2212	SITE G WELL EE-G102	4	2	2					
IC-GW-35	3-24-87	0730		X			2213	BLANK WATER	4	2	2					

Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By: (Signature)
Daniel T Sewall	3-24-87/1930	FEDERAL EXPRESS			
Federal Express	3-25-87 9:00	David Bain			

Ship Via: FEDERAL EXPRESS
BL/Airbill Number: 2285199151
Date: 3-24-87

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CHAIN-OF-CUSTODY RECORD

Project No.: IL 3140

Project Name: SEAS CREEK / SAUGET SITES

Project Manager: MIKE MILLER

Samplers: (Signature) [signature]

Field Team Leader: SAM SEWELL

STATION NUMBER	DATE	TIME	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE TYPE AIR	SAMPLE INFORMATION / EXPECTED COMPOUNDS (Concentration)*	STATION LOCATION	NUMBER OF CONTAINERS	HAL ORGANICS - 80 oz	VOLATILE ORGANICS - 40 ml					REMARKS
IC-6438	3-24-87	0930		X		UNKNOWN 2214	SITE H - WELL EE-G110	4	2	2					
IC-6439	3-24-87	0930		X		2215	SITE L WELL EE-G109	4	2	2					
IC-6440	3-24-87	1430		X		2216	SITE O WELL EE-21	4	2	2					
IC-6441	3-24-87	1440		X		2217	SITE O WELL EE-22	4	2	2					STRONG ODOR

Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By: (Signature)
[signature]	3-24-87/1930	FEDERAL EXPRESS			
FEDERAL EXPRESS	3-25-87 9:00 am	Received For Laboratory By: (Signature) [signature]			Received For Laboratory By: (Signature)

Ship Via: FEDERAL EXPRESS

BL/Airbill Number: 2285199151

Date: 3-24-87

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International Specialists in the Environment

CHAIN-OF-CUSTODY RECORD

Project No.: 1C3140
Project Name: DEAD CREEK / SAUGET SITES
Project Manager: MIKE MILLER
Samplers: (Signatures) [signature]
Field Team Leader: DAN SEWALL

STATION NUMBER	DATE	TIME	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE TYPE AIR	SAMPLE INFORMATION / EXPECTED COMPOUNDS (Concentration)*	STATION LOCATION	NUMBER OF CONTAINERS	HAL ORGANICS - 8002	VOLATILE ORGANICS - 40ml					REMARKS
DC-GW-40	3-24-87	1515		X		UNKNOWN 2218	SITE O WELL EE-23	4	2	2					
DC-GW-41	3-24-87	1630		X		2219	SITE O WELL EE-24	4	2	2					
DC-GW-42	3-24-87	1630		X		2220	SITE O WELL EE-24	4	2	2					DUPLICATE OF DC-GW-41
DC-GW-43	3-24-87	1700		X		2221	SITE O WELL EE-25	4	2	2					

Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Ship Via:
[signature]	3-24-87/1930	FEDERAL EXPRESS				FEDERAL EXPRESS
Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	BL/Airbill Number: 2285199151 — Date: 3-24-87
Relinquished By: (Signature) FEDERAL EXPRESS	Date/Time: 3/25/87 9:00	Received For Laboratory By: (Signature) [signature]	Relinquished By: (Signature)	Date/Time:	Received For Laboratory By: (Signature)	

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

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2340

SURROGATE PERCENT RECOVERY SUMMARY

WATER SURROGATE PERCENT RECOVERY SUMMARY

Case No. U-5157,5162 Contract Laboratory Ecology & Environment Inc. Contract No. IL-3140

SMO TRAFFIC NO. DC-GW-	VOLATILE: TOLUENE-D8 (88-110)	VOLATILE: BFB (86-115)	VOLATILE: 1,2 DICHLORO-ETHANE-D4 (76-114)	SEMI-VOLATILE: NITRO-BENZENE-D5 (35-114)	SEMI-VOLATILE: 2-FLUORO-BIPHENYL (43-116)	SEMI-VOLATILE: TERPHENYL-D14 (33-141)	SEMI-VOLATILE:	SEMI-VOLATILE:	SEMI-VOLATILE: PHENOL-D5 (10-94)	SEMI-VOLATILE: 2-FLUORO-PHENOL (21-100)	SEMI-VOLATILE: 2,4,6 TRIBROMO PHENOL (10-123)	PESTICIDE: ** DIBUTYL-CHLORENDATE (24-154)
23	106	109	95	90	93	97			INF	INF	12	97
24	88	95	86	77	89	90			33	38	60	95
25	103	108	98	62	72	111			15	26	46	99
26	97	103	95	81	85	75			42	52	74	DL
27	108	113	98	81	63	89			26	50	52	92
28	93	98	91	86	88	77			44	51	59	DL
29	104	106	97	82	89	108			30	35	58	90
30	101	106	97	91	92	104			44	56	88	109
31	102	107	96	80	78	54			35	42	78	108
32	103	102	109	44	40	31*			12	22	21	DL
33	88	93	91	58	57	55			51	46	77	DL
34	92	90	92	—	—	—			—	—	—	—
35	100	97	99	76	64	71			30	35	79	82
36	86*	86	87	57	61	62			36	46	63	107
37	98	96	99	INF	56	78			38	61	68	94
38	97	98	98	—	—	—			—	—	—	—
39	—	—	—	INF	58	33			28	59	51	DL
40	87*	87	88	—	—	—			—	—	—	—
41	87*	87	87	87	80	118			42	65	57	51
42	84*	90	86	89	78	96			26	35	43	121
43	89	88	90	45	56	87			26	47	61	107
39A	95	95	91	—	—	—			—	—	—	—
39B	94	92	90	—	—	—			—	—	—	—

* VALUES ARE OUTSIDE OF CONTRACT REQUIRED QC LIMITS

**ADVISORY LIMITS ONLY

Volatiles: 4 out of 406 ; outside of QC limits

Semi-Volatiles: 1 out of 104 ; outside of QC limits

Pesticides: 0 out of 13 ; outside of QC limits

Comments: DL = Diluted Out
INF = matrix interferences

Both sample vials of DC-GW-39 were analyzed for volatile organics

FORM II

7/85

WATER SURROGATE PERCENT RECOVERY SUMMARY

Case No. U-5157, 5162 Contract Laboratory Ecology & Environment Inc. Contract No. IL-3140

	VOLATILE			SEMI-VOLATILE								PESTICIDE
SMO TRAFFIC NO.	TOLUENE-D8 (88-110)	BFB (86-115)	1,2 DICHLORO-ETHANE-D4 (76-114)	NITRO-BENZENE-D5 (35-114)	2-FLUORO-BIPHENYL (43-116)	TERPHENYL-D14 (33-141)			PHENOL-D5 (10-94)	2-FLUORO-PHENOL (21-100)	2,4,6 TRIBROMO PHENOL (10-123)	DIBUTYL-CHLORENDATE ** (24-154)
C7510	102	106	96									
C7536	101	92	92									
C7623	92	90	93									
C7705	95	89	91									
C7674	106	94	92									
DC-GW-25MS	107	106	90									
DC-GW-25MSD	104	109	99									
DC-GW-26R	102	104	110									
DC-GW-30MS				87	96	101			32	73	135*	NR
DC-GW-30MSD				92	111	107			39	49	81	NR
DC-GW-41R				83	72	93			34	47	42	NR
D2338				82	84	91			38	46	85	NR
D2382				86	70	89			38	43	90	NR
D2543				72	51	131			34	44	64	NR
D2550				80	61	105			37	66	71	NR
DC-GW-27MS												92
DC-GW-27MSD												87
BLANK												90
BLANK												75
DC-GW-43R												106

Not Required

* VALUES ARE OUTSIDE OF CONTRACT REQUIRED QC LIMITS

**ADVISORY LIMITS ONLY

Volatiles: 0 out of 24 ; outside of QC limits

Semi-Volatiles: 1 out of 48 ; outside of QC limits

Pesticides: 0 out of 5 ; outside of QC limits

Comments:

MS/MSD SUMMARY

WATER MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Case No. U-5157, 5162 Contractor Ecology & Environment Inc. Contract No. IL-3140

FRACTION	COMPOUND	CONC. SPIKE ADDED (ug/L)	SAMPLE RESULT	CONC. MS	% REC	CONC. MSD	% REC	RPD	QC LIMITS* RPD	QC LIMITS* RECOVERY
VOA SMO SAMPLE NO. DC-GW-25	1,1-Dichloroethene	50	0	60	120	52	104	14	14	61-145
	Trichloroethene	50	0	52	104	52	104	0	14	71-120
	Chlorobenzene	50	33	87	108	84	102	3.5	13	75-130
	Toluene	50	0	56	112	54	108	3.6	13	76-125
	Benzene	50	28	77	98	74	92	4.0	11	76-127
B/N SMO SAMPLE NO. DC-GW-30	1,2,4-Trichlorobenzene	100	0	74	74	75	75	1.3	28	39-98
	Acenaphthene	100	0	96	96	96	96	0	31	46-118
	2,4 Dinitrotoluene	100	0	100	100*	100	100*	0	38	24-96
	Pyrene	100	0	78	78	86	86	9.8	31	26-127
	N-Nitroso-Di-n-Propylamine	100	0	78	78	89	89	13	38	41-116
	1,4-Dichlorobenzene	100	0	59	59	65	65	9.7	28	36-97
ACID SMO SAMPLE NO. DC-GW-30	Pentachlorophenol	200	0	250	125*	210	105*	17	50	9-103
	Phenol	200	0	86	43	84	42	2.4	42	12-89
	2-Chlorophenol	200	0	170	85	170	85	0	40	27-123
	4-Chloro-3-Methylphenol	200	0	210	105*	190	95	10	42	23-97
	4-Nitrophenol	200	0	82	41	73	37	12	50	10-80
PEST SMO SAMPLE NO. DC-GW-27	Lindane	0.20	0	0.17	85	0.15	75	13	15	56-123
	Heptachlor	0.20	0	0.15	75	0.15	0.15	0	20	40-131
	Aldrin	0.20	0	0.12	60	0.10	50	18	22	40-120
	Dieldrin	0.50	0	0.38	76	0.44	88	15	18	52-126
	Endrin	0.50	0	0.40	80	0.46	92	14	21	56-121
	4,4'-DDT	0.50	0	0.42	84	0.46	92	9.1	27	38-127

*ASTERISKED VALUES ARE OUTSIDE QC LIMITS.

RPD: VOAs 0 out of 5; outside QC limits
B/N 0 out of 6; outside QC limits
ACID 0 out of 5; outside QC limits
PEST 0 out of 6; outside QC limits

RECOVERY: VOAs 0 out of 10; outside QC limits
B/N 2 out of 12; outside QC limits
ACID 3 out of 10; outside QC limits
PEST 0 out of 12; outside QC limits

Comments:

FORM III

7/85
494095

STANDARDS DATA

INITIAL CALIBRATION DATA

VCI 29

Initial Calibration Data
HSL Compounds

Lab No: 4-5157,5162 Instrument ID: HP-5995C

Contractor: E & E, INC. Calibration Date: 1/27/87

Contract No: IL-3140

Minimum $\overline{RF}$ for SPCC is .3 Maximum % RSD for CCC is 30%

Compound		RF 20.00 (>C6596)	RF 50.00 (>C6597)	RF 100.00 (>C6598)	RF 150.00 (>C6601)	RF 200.00 (>C6600)	$\overline{RF}$	% RSD	CCC	SPCC	
CHLOROMETHANE	50	2.12447	2.61562	2.64220	2.23683	2.53305	2.43043	9.666		**	
BROMOMETHANE	94	1.37360	.85090	1.49079	.78242	1.03971	1.10748	28.333			
VINYL CHLORIDE	62	1.26378	1.91741	1.62120	1.07270	1.02484	1.37999	27.619	*		
CHLOROETHANE	64	.71412	1.06725	.91401	.88431	.99939	.91582	14.608			
METHYLENE CHLORIDE	84	2.02390	1.82978	1.87682	1.82862	1.84614	1.88105	4.369			
ACETONE	43	.87926	.68216	.61253	.62533	.59790	.67944	17.099			
TRICHLOROFLUOROMETHANE	101	3.93955	3.73541	3.73944	3.53603	3.79628	3.74934	3.869			
CARBON DISULFIDE	76	5.41111	5.19185	5.31658	5.22865	5.51722	5.33308	2.500			
1,1-DICHLOROETHENE	61	3.52165	3.34397	3.38225	3.31844	3.46913	3.40709	2.518	*		
1,1-DICHLOROETHANE	63	3.87093	3.60100	3.72198	3.74062	3.77956	3.74282	2.615		**	
TRANS-1,2-DICHLOROETHENE	96	1.75784	1.64597	1.69829	1.66798	1.72785	1.69959	2.642			
CHLOROFORM	83	4.07858	3.80320	3.89661	3.82621	3.77707	3.87633	3.134	*		
1,2-DICHLOROETHANE	62	3.20370	3.18262	3.20115	3.20444	3.12406	3.18319	1.076			
1,2-DICHLOROETHANE-D4(SURR)	65	2.50354	2.56635	3.05385	2.77175	2.58937	2.69697	8.270			(Conc=50.0,50.0,50.0,50.0,50.0)
2-BUTANONE	72	.04995	.04035	.03750	.03895	.03268	.03989	15.859			
1,1,1-TRICHLOROETHANE	97	.64838	.63406	.61422	.64709	.64371	.63749	2.222			
CARBON TETRACHLORIDE	117	.69068	.66160	.64699	.67838	.67099	.66973	2.474			
VINYL ACETATE	43	.73237	.73455	.65905	.82546	.59143	.70857	12.440			
BROMODICHLOROMETHANE	83	.65377	.65186	.63465	.68810	.65161	.65600	2.979			
1,2-DICHLOROPROPANE	63	.44836	.43485	.42752	.46544	.44045	.44332	3.277	*		
TRANS-1,3-DICHLOROPROPENE	75	.77151	.78890	.76792	.84197	.79552	.79316	3.736			
TRICHLOROETHENE	130	.44261	.41135	.40221	.41760	.41742	.41824	3.586			
DIBROMOCHLOROMETHANE	129	.48132	.49985	.48904	.52508	.48709	.49648	3.493			
1,1,2-TRICHLOROETHANE	97	.32534	.32254	.30479	.32191	.29501	.31392	4.241			
BENZENE	78	1.25996	1.20022	1.17115	1.20860	1.18181	1.20435	2.858			
CIS-1,3-DICHLOROPROPENE	75	.42302	.42904	.41924	.45784	.42248	.43032	3.668			
2-CHLOROETHYLVINYLETHER	63	.16774	.16872	.15971	.16061	.13746	.15885	7.950			
BROMOFORM	173	.34305	.37308	.37652	.43733	.39129	.38425	8.968		**	
4-METHYL-2-PENTANONE	43	.39722	.44457	.43898	.49417	.44329	.44365	7.752			
2-HEXANONE	43	.29447	.32074	.32552	.35942	.32311	.32465	7.121			
TETRACHLOROETHENE	164	.52835	.47793	.46854	.49696	.48933	.49222	4.656			
1,1,2,2-TETRACHLOROETHANE	83	.49533	.54849	.53286	.58165	.52036	.53574	6.011		**	
TOLUENE-D8 (SURR)	98	1.42645	1.43014	1.58052	1.36766	1.26173	1.41330	8.181			(Conc=50.0,50.0,50.0,50.0,50.0)
TOLUENE	92	1.05082	.96957	.93706	.97526	.95948	.97844	4.396	*		
CHLOROBENZENE	112	1.24962	1.18677	1.15142	1.21144	1.17467	1.19479	3.141		**	
ETHYLBENZENE	91	2.19363	2.05718	1.98682	2.05409	2.05733	2.06981	3.646	*		

RF - Response Factor (Subscript is amount in UG/L)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Initial Calibration Data
HSL Compounds

Case No: 4-5157, 5162 Instrument ID: HP-5995C

ontractor: E & E, INC. Calibration Date: 1/27/87

Contract No: IL-3140

Minimum $\overline{RF}$ for SPCC is .3 Maximum % RSD for CCC is 30%

Laboratory ID:	>C6596	>C6597	>C6598	>C6601	>C6600				
Compound	RF 20.00	RF 50.00	RF 100.00	RF 150.00	RF 200.00	$\overline{RF}$	% RSD	CCC	SPCC
4-BROMOFLUOROBENZENE(SURR)	95 .72568	.71423	.80065	.73269	.63746	.72214	8.051		(Conc=50.0,50.0,50.0,50.0,50.0)
STYRENE	104 1.28684	1.24583	1.20802	1.24619	1.22491	1.24236	2.377		
TOTAL XYLENES	91 1.88691	1.75995	1.70230	1.72756	1.73928	1.76320	4.096		

RF - Response Factor (Subscript is amount in UG/L)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Initial Calibration Data
HSL Compounds

Case No: U-5157,5162 Instrument ID: HP-5970D

Contractor: E & E, INC. Calibration Date: ~~06/20/86~~ 6-19-86

Contract No: IL-3140

Minimum $\overline{RF}$ for SPCC is .05 Maximum % RSD for CCC is 30%

Laboratory ID:		>D0036	>D0037	>D0038	>D0039	>D0040				
		RF	RF	RF	RF	RF				
Compound		20.00	50.00	80.00	120.00	160.00	$\overline{RF}$	% RSD	CCC	SPCC
PHENOL-D5 (SURR)	99	1.45905	1.41913	1.41915	1.33738	1.36821	1.40059	3.415		
PENTAFLUOROPHENOL	184	-	-	-	-	-	-	-		
2-FLUOROPHENOL (SURR)	112	.92276	.93267	.97441	.89171	.88493	.92130	3.895		
PHENOL	94	1.27336	1.40484	1.36645	1.32617	1.33444	1.34105	3.646	*	
2-METHYL PHENOL	108	.94183	1.07660	1.05407	1.08273	1.00266	1.03158	5.743		
2-CHLOROPHENOL	128	1.07483	1.16854	1.16604	1.17284	1.10940	1.13833	3.865		
4-METHYL PHENOL	108	.96587	1.08143	1.13309	1.12036	1.07834	1.07582	6.129		
2-NITROPHENOL	139	.17264	.20916	.21365	.21306	.20457	.20262	8.462	*	
2,4-DIMETHYLPHENOL	122	.26750	.29889	.30065	.29911	.27965	.28916	5.145		
BENZOIC ACID	105	-	.15595	.20240	.22265	.23506	.20401	17.036		
2,4-DICHLOROPHENOL	162	.28939	.33168	.32894	.32204	.30635	.31568	5.601	*	
4-CHLORO-3-METHYLPHENOL	107	.29459	.33844	.35108	.35646	.33826	.33577	7.252	*	
2,4,6-TRICHLOROPHENOL	196	.42290	.47918	.46473	.45782	.45268	.45546	4.555	*	
2,4,5-TRICHLOROPHENOL	196	-	.49037	.49512	.49589	.47594	.48930	1.901		
2,4,6-TRIBROMOPHENOL(SURR)	330	.29588	.32928	.34498	.31993	.33911	.32584	5.917		
2,4-DINITROPHENOL	184	-	.13902	.16374	.19064	.18943	.17071	14.351		**
4-NITROPHENOL	139	-	.28898	.31865	.33700	.34792	.32314	7.977		**
4,6-DINITRO-2-METHYLPHENOL	198	-	.10474	.11556	.12900	.13233	.12041	10.560		
PENTACHLOROPHENOL	266	-	.17917	.18989	.19137	.19048	.18773	3.054	*	

RF - Response Factor (Subscript is amount in UG/L)

$\overline{}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Initial Calibration Data
HSL Compounds

Case No: U-5157, 5162

Instrument ID: HP-5970D

Contractor: E & E, INC.

Calibration Date: 10/17/86

Contract No: IL-3140

Minimum $\overline{RF}$ for SPCC is .05 Maximum % RSD for CCC is 30%

Compound		RF 20.00	RF 50.00	RF 80.00	RF 120.00	RF 160.00	$\overline{RF}$	% RSD	CCC	SPCC
Laboratory ID:		>D0965	>D0966	>D0967	>D0968	>D0969				
ANILINE	93	1.44667	1.40722	1.59651	1.68331	1.56844	1.54043	7.321		
BIS(-2-CHLOROETHYL)ETHER	93	1.24523	1.09828	1.23677	1.16323	1.17789	1.18428	5.058		
1,3-DICHLOROBENZENE	146	1.57666	1.39985	1.51213	1.50440	1.38815	1.47624	5.436		
1,4-DICHLOROBENZENE	146	1.61777	1.38930	1.48504	1.45121	1.40035	1.46374	6.256	*	
BENZYL ALCOHOL	79	1.01010	1.00872	1.21875	1.21807	1.21800	1.13473	10.082		
1,2-DICHLOROBENZENE	146	1.63938	1.36507	1.53750	1.47276	1.44493	1.49193	6.908		
BIS(2-CHLOROISOPROPYL)ETHER	45	2.68736	2.47650	2.77020	2.69646	2.77634	2.68137	4.535		
N-NITROSO-DI-N-PROPYLAMINE	70	1.12218	1.08234	1.21987	1.19548	1.28596	1.18117	6.816		**
HEXACHLOROETHANE	117	.74389	.66875	.73696	.70875	.68371	.70841	4.605		
NITROBENZENE-D5 (SURR)	82	.35564	.33927	.38027	.40789	.38878	.37437	7.253		
NITROBENZENE	77	.39592	.35266	.39754	.39299	.35937	.37969	5.744		
ISOPHORONE	82	.79161	.70915	.78705	.75762	.73425	.75594	4.631		
BIS(-2-CHLOROETHOXY)METHANE	93	.40059	.33692	.42170	.42353	.43054	.41266	4.415		
1,2,4-TRICHLOROBENZENE	180	.41095	.34484	.39226	.39897	.37508	.38442	6.671		
NAPHTHALENE	128	1.07749	.91373	.97630	.97339	.89249	.96668	7.446		
4-CHLOROANILINE	127	.33401	.32798	.42540	.44310	.35932	.37796	14.044		
HEXACHLOROBUTADIENE	225	.29443	.23192	.26045	.25805	.23855	.25908	8.420	*	
2-METHYLNAPHTHALENE	142	.67945	.60785	.66493	.68192	.59005	.64434	6.646		
HEXACHLOROCYCLOPENTADIENE	237	.56264	.50376	.58602	.60451	.58378	.56814	6.552		**
2-FLUOROBIPHENYL (SURR)	172	1.70967	1.49275	1.56507	1.65769	1.62088	1.61321	5.059		
2-CHLORONAPHTHALENE	162	1.47542	1.23459	1.36421	1.37148	1.41834	1.37281	6.493		
2-NITROANILINE	65	.43757	.43867	.51133	.51859	.47610	.47645	8.082		*
DIMETHYL PHTHALATE	163	1.83005	1.68051	1.71649	1.69378	1.67688	1.71954	3.704		
4-NITROANILINE	138	.23949	.23631	.27642	.27327	.26589	.25828	7.365		
DIBENZOFURAN	168	2.04488	1.83571	1.94866	1.91782	1.79656	1.90873	5.115		
ACENAPHTHYLENE	152	2.24178	1.99625	2.09922	2.09094	2.07505	2.10065	4.229		
FLUORENE	166	1.55490	1.33626	1.34395	1.28944	1.20896	1.34670	9.518		
3-NITROANILINE	138	-	.04883	.11452	.11792	.08856	.09246	34.506		
ACENAPHTHENE	153	1.52777	1.33286	1.39452	1.37214	1.26556	1.37857	7.016	*	
2,4-DINITROTOLUENE	165	.35967	.32328	.34179	.32754	.30831	.33212	5.867		
2,6-DINITROTOLUENE	165	.38599	.35678	.37953	.36730	.36597	.37112	3.126		
DIETHYLPHTHALATE	149	1.88063	1.62618	1.53368	1.45917	1.43355	1.58664	11.393		
4-CHLOROPHENYL-PHENYLETHER	204	.78893	.66962	.70193	.69165	.66856	.70414	7.032		
N-NITROSODIPHENYLAMINE	169	.51567	.44734	.53097	.55655	.53802	.51771	8.111	*	
4-BROMOPHENYL-PHENYL ETHER	248	.31338	.30497	.33954	.35732	.35691	.33482	7.486		
HEXACHLOROBENZENE	284	.46739	.39463	.43794	.45763	.43251	.43791	6.471		

RF - Response Factor (Subscript is amount in UG/L)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

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Initial Calibration Data
HSL Compounds

Case No: U-5157,5162 Instrument ID: HP-5970D

Contractor: E & E, INC. Calibration Date: 10/17/86

Contract No: IL-3140

Minimum $\overline{RF}$ for SPCC is .05 Maximum % RSD for CCC is 30%

Laboratory ID:		>D0965	>D0966	>D0967	>D0968	>D0969				
		RF	RF	RF	RF	RF				
Compound		20.00	50.00	80.00	120.00	160.00	$\overline{RF}$	% RSD	CCC	SPCC
PHENANTHRENE	178	1.06803	.96082	1.02609	1.02304	.99723	1.01505	3.896		
ANTHRACENE	178	1.03628	.92880	1.01124	1.03132	.98608	.99874	4.387		
DI-N-BUTYLPHTHALATE	149	1.16959	.91435	.95835	.92928	.88461	.97124	11.741		
FLUORANTHENE	202	.74009	.58463	.63445	.60617	.54197	.62146	11.974		*
BENZIDINE		-	.65247	-	-	-	.65247	-		
PYRENE	202	2.67187	2.75714	2.57294	2.60959	2.82056	2.68642	3.814		
TERPHENYL-D14 (SURR)	244	1.42937	1.47810	1.43324	1.50928	1.55799	1.48172	3.638		
BUTYLBENZYLPHTHALATE	149	.62104	.62940	.71297	.68630	.76414	.68277	8.728		
3,3'DICHLOROBENZIDINE	252	.08557	.07185	.16233	.19359	.14980	.13263	39.182		
BENZO(A)ANTHRACENE	228	.79361	.77498	.97287	1.00315	1.03158	.91524	13.276		
BIS(2-ETHYLHEXYL)PHTHALATE	149	.78298	.70108	.85062	.83155	.91270	.81579	9.708		
CHRYSENE	228	1.34326	1.12613	1.17809	1.12675	1.18262	1.19137	7.479		
DI-N-OCTYL PHTHALATE	149	1.37470	1.35508	1.83002	1.65900	1.98983	1.64173	16.968		*
BENZO(B)FLUORANTHENE	252	.92969	.97296	1.14091	1.25304	1.37734	1.13479	16.551		
BENZO(K)FLUORANTHENE	252	1.68215	1.48612	1.68304	1.46335	1.43849	1.55063	7.844		
BENZO(A)PYRENE	252	1.05697	.98495	1.15488	1.16496	1.18217	1.10877	7.641		*
INDENO(1,2,3-CD)PYRENE	276	.67778	.93612	1.09730	1.40393	.87647	.99032	28.681		
DIBENZ(A,H)ANTHRACENE	278	.73019	.64673	.79793	.98482	.89827	.81159	16.475		
BENZO(G,H,I)PERYLENE	276	1.11119	1.08417	1.06321	1.25211	1.11363	1.10886	8.264		

RF - Response Factor (Subscript is amount in UG/L)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

HSL Compounds

Case No: U-5157, 5162 Instrument ID: HP-5970

Contractor: E & E, INC. Calibration Date: 07/30/86

Contract No: IL-3140

Minimum $\overline{RF}$ for SPCC is .05 Maximum % RSD for CCC is 30%

Compound		RF 20.00	RF 50.00	RF 80.00	RF 120.00	RF 160.00	$\overline{RF}$	% RSD	CCC	SPCC
Laboratory ID:		>B2318	>B2317	>B2320	>B2321	>B2322				
ANILINE	93	1.53020	1.25644	1.62634	1.62245	1.58163	1.52341	10.122		
BIS(-2-CHLOROETHYL)ETHER	93	1.34445	1.22081	1.26618	1.07095	1.29722	1.23992	8.441		
1,3-DICHLOROBENZENE	146	1.46014	1.37957	1.42964	1.30860	1.33586	1.38276	4.559		
1,4-DICHLOROBENZENE	146	1.66736	1.29358	1.43871	1.25577	1.18343	1.36777	14.007	*	
BENZYL ALCOHOL	79	.98994	1.18557	1.00496	1.07361	1.14382	1.07958	7.887		
1,2-DICHLOROBENZENE	146	1.61074	1.48247	1.44441	1.30085	1.30196	1.42808	9.176		
BIS(2-CHLOROISOPROPYL)ETHER	45	3.10167	2.81979	3.04493	2.94413	2.94039	2.97018	3.652		
N-NITROSO-DI-N-PROPYLAMINE	70	1.28828	1.23766	1.29486	1.34328	1.29730	1.29228	2.904		**
HEXACHLOROETHANE	117	.79392	.72848	.72662	.65702	.63961	.70913	8.755		
NITROBENZENE-D5 (SURR)	82	.38965	.37305	.41065	.42325	.40762	.40084	4.898		
NITROBENZENE	77	.42892	.38234	.41415	.43943	.43255	.41948	5.417		
ISOPHORONE	82	.84007	.76477	.79107	.82839	.82546	.80995	3.848		
BIS(-2-CHLOROETHOXY)METHANE	93	.46623	.44982	.45355	.46561	.44362	.45577	2.178		
1,2,4-TRICHLOROBENZENE	180	.39238	.38210	.37397	.37375	.37036	.37851	2.345		
NAPHTHALENE	128	1.10454	.97856	1.02942	.88370	.92738	.98472	8.778		
4-CHLOROANILINE	127	.38955	.37823	.40760	.39766	.40786	.39458	3.953		
HEXACHLOROBUTADIENE	225	.28342	.26841	.25835	.24760	.23237	.25803	7.555	*	
2-METHYLNAPHTHALENE	142	.70829	.65392	.61126	.58244	.56184	.62355	9.404		
HEXACHLOROCYCLOPENTADIENE	237	.42682	.38196	.48139	.49313	.48657	.45397	10.605		**
2-FLUOROBIPHENYL (SURR)	172	1.43778	1.49608	1.31182	1.22836	1.17905	1.33061	10.128		
2-CHLORONAPHTHALENE	162	1.26208	1.35393	1.18900	1.10195	1.13384	1.20816	8.413		
2-NITROANILINE	65	.39563	.49064	.43475	.41930	.45448	.43896	8.209		
DIMETHYL PHTHALATE	163	1.53551	1.62787	1.36166	1.32005	1.34038	1.43709	9.517		
4-NITROANILINE	138	.22174	.31144	.26162	.25592	.24885	.25992	12.546		
DIBENZOFURAN	168	1.77467	1.85500	1.58680	1.39667	1.46174	1.61498	12.191		
ACENAPHTHYLENE	152	1.97143	2.08657	1.83063	1.60600	1.52393	1.80371	13.185		
FLUORENE	166	1.35721	1.41769	1.10410	1.09087	1.00139	1.19425	15.240		
3-NITROANILINE	138	.13030	.18696	.13633	.16461	.15450	.15454	14.725		
ACENAPHTHENE	153	1.32952	1.38687	1.10696	1.08827	1.02367	1.18706	13.524	*	
2,4-DINITROTOLUENE	165	.35218	.43871	.35920	.36773	.39158	.38188	9.185		
2,6-DINITROTOLUENE	165	.33892	.38691	.34388	.34507	.33955	.35087	5.793		
DIETHYLPHTHALATE	149	1.54518	1.59131	1.28601	1.21661	1.31157	1.39014	12.017		
4-CHLOROPHENYL-PHENYLETHER	204	.69494	.72268	.58641	.55946	.56319	.62534	12.397		
N-NITROSODIPHENYLAMINE	169	.46709	.47088	.43295	.40737	.34790	.42524	11.873	*	
4-BROMOPHENYL-PHENYL ETHER	248	.26935	.26406	.28047	.26087	.25818	.26659	3.303		
HEXACHLOROBENZENE	284	.36253	.33008	.33921	.34540	.32747	.34094	4.119		

RF - Response Factor (Subscript is amount in UG/L)

$\overline{RF}$ - Average Response Factor

RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Initial Calibration Data
HSL Compounds

Case No: U-5157, 5162 Instrument ID: HP-5970

Contractor: E & E, INC. Calibration Date: 07/30/86

tract No: IL-3140

Minimum $\overline{RF}$ for SPCC is .05 Maximum % RSD for CCC is 30%

Laboratory ID:		>B2318	>B2317	>B2320	>B2321	>B2322				
		RF	RF	RF	RF	RF				
Compound		20.00	50.00	80.00	120.00	160.00	$\overline{RF}$	% RSD	CCC	SPCC
PHENANTHRENE	178	1.04931	1.01512	.98050	.95298	.88999	.97758	6.231		
ANTHRACENE	178	1.12091	1.02625	1.04493	.93788	.90233	1.00646	8.678		
DI-N-BUTYLPHTHALATE	149	1.27178	1.10891	1.06851	1.11508	1.07179	1.12721	7.409		
FLUORANTHENE	202	.93206	.85951	.80155	.77543	.70727	.81517	10.452	*	
BENZIDINE		-	-	-	-	-	-	-		
PYRENE	202	1.67420	1.68596	1.76714	1.46297	1.41935	1.60192	9.479		
TERPHENYL-D14 (SURR)	244	1.14639	1.09283	1.18955	1.06562	1.05822	1.11052	5.053		
BUTYLBENZYLPHTHALATE	149	.65685	.67321	.68349	.67508	.67739	.67361	1.353		
3,3'DICHLOROBENZIDINE	252	.27363	.29497	.31038	.35282	.36231	.31882	11.871		
BENZO(A)ANTHRACENE	228	1.11295	1.16545	1.14131	1.09826	1.08387	1.12037	2.943		
BIS(2-ETHYLHEXYL)PHTHALATE	149	.89359	.90143	.88579	.90223	.92113	.90083	1.461		
CHRYSENE	228	1.21768	1.19377	1.18843	.98625	1.04715	1.12666	9.164		
DI-N-OCTYL PHTHALATE	149	1.66258	1.75298	1.71967	1.71622	1.68266	1.70682	2.056	*	
BENZO(B)FLUORANTHENE	252	1.07961	1.23626	1.14532	1.32040	1.29211	1.21474	8.303		
BENZO(K)FLUORANTHENE	252	1.41040	1.33474	1.35790	1.08149	1.00129	1.23716	14.793		
BENZO(A)PYRENE	252	1.10805	1.15079	1.13626	1.11791	1.09145	1.12089	2.078	*	
INDENO(1,2,3-CD)PYRENE	276	.91950	1.10814	1.04174	1.09403	1.04427	1.04154	7.135		
DIBENZ(A,H)ANTHRACENE	278	.98398	1.11071	1.10486	1.07317	1.06502	1.06755	4.748		
BENZO(G,H,I)PERYLENE	276	1.10921	1.20556	1.17094	1.16451	1.14309	1.15866	3.073		

RF - Response Factor (Subscript is amount in UG/L)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

HSL Compounds

Case No: U-5157, 5162 Instrument ID: HP-5970

Contractor: E & E, INC. Calibration Date: ~~07/31/86~~ 7/30/86

ract No: IL-3140

Minimum $\overline{RF}$ for SPCC is .05 Maximum % RSD for CCC is 30%

Laboratory ID:		>B2323	>B2324	>B2325	>B2326	>B2327				
Compound		RF 20.00	RF 50.00	RF 80.00	RF 120.00	RF 160.00	$\overline{RF}$	% RSD	CCC	SPCC
PHENOL-D5	(SURR) 99	1.33554	1.32424	1.47714	1.37903	1.37876	1.37894	4.369		
PENTAFLUOROPHENOL	184	-	-	-	-	-	-	-		
2-FLUOROPHENOL	(SURR) 112	.86601	.96224	.81732	.89616	.80413	.86917	7.349		
PHENOL	94	1.21969	1.30210	1.34366	1.27248	1.24820	1.27723	3.756	*	
2-METHYL PHENOL	108	.95956	1.15622	1.11972	1.02900	1.04621	1.06214	7.299		
2-CHLOROPHENOL	128	1.03433	1.21901	1.21545	1.19049	1.20231	1.17232	6.650		
4-METHYL PHENOL	108	.99078	1.16029	1.06554	1.03758	1.09053	1.06894	5.901		
2-NITROPHENOL	139	.16395	.20209	.20713	.20379	.18968	.19333	9.154	*	
2,4-DIMETHYLPHENOL	122	.24782	.29464	.30384	.29645	.25225	.27900	9.574		
BENZOIC ACID	105	-	.22663	.22609	.24641	.25765	.23920	6.486		
2,4-DICHLOROPHENOL	162	.27062	.28484	.33611	.32608	.29302	.30213	9.219	*	
4-CHLORO-3-METHYLPHENOL	107	.29131	.34908	.34637	.34264	.32554	.33099	7.251	*	
2,4,6-TRICHLOROPHENOL	196	.39345	.50375	.46278	.44935	.41174	.44521	10.146	*	
2,4,5-TRICHLOROPHENOL	196	.42313	.61321	.54332	.51580	.50391	.51987	13.220		
2,4,6-TRIBROMOPHENOL	(SURR) 330	.29141	.38528	.33464	.31533	.31443	.32822	10.781		
2,4-DINITROPHENOL	184	-	.16377	.13943	.16124	.18313	.16189	11.045		**
4-NITROPHENOL	139	-	.19015	.15858	.14172	.15885	.16233	12.448		**
4,6-DINITRO-2-METHYLPHENOL	198	-	.13952	.13065	.14342	.15487	.14211	7.067		
PENTACHLOROPHENOL	266	-	.17560	.16016	.16451	.18549	.17144	6.650	*	

RF - Response Factor (Subscript is amount in UG/L)

$\overline{RF}$ - Average Response Factor

RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

CONTINUING CALIBRATION DATA

Continuing Calibration Check
HSL Compounds

Case No: 11-5157, 5162 Calibration Date: 03/27/87

ntractor: E & E, INC. Time: 09:51

Contract No: IL-3140 Laboratory ID: >C7507

Instrument ID: HP-5995C Initial Calibration Date: ~~03/13/87~~ 1/27/87

Minimum $\overline{RF}$ for SPCC is .3 Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC
CHLOROMETHANE	50	2.43043	1.73563	28.59		**
BROMOMETHANE	94	1.10748	1.26960	14.64		
VINYL CHLORIDE	62	1.37999	1.21133	12.22	*	
CHLOROETHANE	64	.91582	.72430	20.91		
METHYLENE CHLORIDE	84	1.88105	1.56545	16.78		
ACETONE	43	.67944	.76772	12.99		
TRICHLOROFLUOROMETHANE	101	3.74934	3.24862	13.35		
CARBON DISULFIDE	76	5.33308	4.55222	14.64		
1,1-DICHLOROETHENE	61	3.40709	2.74500	19.43	*	
1,1-DICHLOROETHANE	63	3.74282	3.06895	18.00		**
TRANS-1,2-DICHLOROETHENE	96	1.69959	1.60034	5.84		
CHLOROFORM	83	3.87633	3.22521	16.80	*	
1,2-DICHLOROETHANE	62	3.18319	2.59897	18.35		
1,2-DICHLOROETHANE-D4(SURR)	65	2.69697	2.15206	20.20		
2-BUTANONE	72	.03989	.03296	17.36		
1,1,1-TRICHLOROETHANE	97	.63749	.54157	15.05		
CARBON TETRACHLORIDE	117	.66973	.56647	15.42		
VINYL ACETATE	43	.70857	.40646	42.64		
BROMODICHLOROMETHANE	83	.65600	.54476	16.96		
1,2-DICHLOROPROPANE	63	.44332	.35604	19.69	*	
TRANS-1,3-DICHLOROPROPENE	75	.79316	.66855	15.71		
TRICHLOROETHENE	130	.41824	.39245	6.17		
DIBROMOCHLOROMETHANE	129	.49648	.41929	15.55		
1,1,2-TRICHLOROETHANE	97	.31392	.27788	11.48		
BENZENE	78	1.20435	1.08774	9.68		
CIS-1,3-DICHLOROPROPENE	75	.43032	.35550	17.39		
2-CHLOROETHYLVINYLETHER	63	.15885	.15746	.87		
BROMOFORM	173	.38425	.31334	18.45		**
4-METHYL-2-PENTANONE	43	.44365	.31334	29.37		
2-HEXANONE	43	.32465	.20065	38.20		
TETRACHLOROETHENE	164	.49222	.45994	6.56		
1,1,2,2-TETRACHLOROETHANE	83	.53574	.40702	24.03		**
TOLUENE-D8 (SURR)	98	1.41330	1.23173	12.85		
TOLUENE	92	.97844	.86854	11.23	*	
CHLOROBENZENE	112	1.19479	1.03678	13.22		**
ETHYLBENZENE	91	2.06981	1.70401	17.67	*	

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: 11-5157, 5162

Calibration Date: 03/27/87

Contractor: E & E, INC.

Time: 09:51

Contract No: IL-3140

Laboratory ID: >C7507

Instrument ID: HP-5995C

Initial Calibration Date: ~~03/13/87~~ 1/27/87

Minimum $\overline{RF}$ for SPCC is .3

Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC
4-BROMOFLUOROBENZENE(SURR)	95	.72214	.61694	14.57		
STYRENE	104	1.24236	1.02944	17.14		
TOTAL XYLENES	91	1.76320	1.39605	20.82		

RF - Response Factor from daily standard file at 50.00 UG/L

- Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Case No: H-5157, 5162 Calibration Date: 03/30/87

Contractor: E & E, INC. Time: 10:38

Contract No: IL-3140 Laboratory ID: XC7534

Instrument ID: HP-5995C Initial Calibration Date: ~~03/13/87~~ BJM 1/27/87

Minimum $\overline{RF}$ for SPCC is .3 Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC
CHLOROMETHANE	50	2.43043	1.42044	41.56		**
BROMOMETHANE	94	1.10748	1.16757	5.43		
VINYL CHLORIDE	62	1.37999	1.11022	19.55	*	
CHLOROETHANE	64	.91582	.65459	28.52		
METHYLENE CHLORIDE	84	1.88105	1.91294	1.70		
ACETONE	43	.67944	.94345	38.86		
TRICHLOROFLUOROMETHANE	101	3.74934	4.11642	9.79		
CARBON DISULFIDE	76	5.33308	5.79712	8.70		
1,1-DICHLOROETHENE	61	3.40709	3.34337	1.87	*	
1,1-DICHLOROETHANE	63	3.74282	3.62296	3.20		**
TRANS-1,2-DICHLOROETHENE	96	1.69959	1.91966	12.95		
CHLOROFORM	83	3.87633	3.96141	2.19	*	
1,2-DICHLOROETHANE	62	3.18319	3.07962	3.25		
1,2-DICHLOROETHANE-D4(SURR)	65	2.69697	2.27291	15.72		
2-BUTANONE	72	.03989	.04148	4.01		
1,1,1-TRICHLOROETHANE	97	.63749	.69028	8.28		
CARBON TETRACHLORIDE	117	.66973	.73411	9.61		
VINYL ACETATE	43	.70857	.44134	37.71		
BROMODICHLOROMETHANE	83	.65600	.67758	3.29		
1,2-DICHLOROPROPANE	63	.44332	.42758	3.55	*	
TRANS-1,3-DICHLOROPROPENE	75	.79316	.79488	.22		
TRICHLOROETHENE	130	.41824	.45803	9.52		
DIBROMOCHLOROMETHANE	129	.49648	.51986	4.71		
1,1,2-TRICHLOROETHANE	97	.31392	.31926	1.70		
BENZENE	78	1.20435	1.29135	7.22		
CIS-1,3-DICHLOROPROPENE	75	.43032	.43816	1.82		
2-CHLOROETHYLVINYLETHER	63	.15885	.17248	8.58		
BROMOFORM	173	.38425	.39859	3.73		**
4-METHYL-2-PENTANONE	43	.44365	.36941	16.73		
2-HEXANONE	43	.32465	.32974	1.57		
TETRACHLOROETHENE	164	.49222	.55130	12.00		
1,1,2,2-TETRACHLOROETHANE	83	.53574	.50276	6.16		**
TOLUENE-D8 (SURR)	98	1.41330	1.40107	.87		
TOLUENE	92	.97844	1.06080	8.42	*	
CHLOROBENZENE	112	1.19479	1.30914	9.57		**
ETHYLBENZENE	91	2.06981	2.18407	5.52	*	

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Case No: U-5157, 5162 Calibration Date: 03/30/87

Contractor: E & E, INC. Time: 10:38

Contract No: IL-3140 Laboratory ID: >C7534

Instrument ID: HP-5995C Initial Calibration Date: ~~03/13/87~~ 1/27/87

Minimum $\overline{RF}$ for SPCC is .3 Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC
4-BROMOFLUOROBENZENE(SURR)	95	.72214	.71170	1.45		
STYRENE	104	1.24236	1.31263	5.66		
TOTAL XYLENES	91	1.76320	1.76888	.32		

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: U-5157, 5162 Calibration Date: 04/03/87

Contractor: E & E, INC. Time: 09:16

Contract No: IL-3140 Laboratory ID:)C7622

Instrument ID: HP-5995C Initial Calibration Date: ~~03/13/87~~ BM 1/27/87

Minimum $\overline{RF}$ for SPCC is .3 Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC
CHLOROMETHANE	50	2.43043	2.14301	11.83		**
BROMOMETHANE	94	1.10748	1.30792	18.10		
VINYL CHLORIDE	62	1.37999	1.54620	12.04	*	
CHLOROETHANE	64	.91582	.76618	16.34		
METHYLENE CHLORIDE	84	1.88105	1.74359	7.31		
ACETONE	43	.67944	.82050	20.76		
TRICHLOROFLUOROMETHANE	101	3.74934	3.94644	5.26		
CARBON DISULFIDE	76	5.33308	5.36129	.53		
1,1-DICHLOROETHENE	61	3.40709	3.44606	1.14	*	
1,1-DICHLOROETHANE	63	3.74282	3.56863	4.65		**
TRANS-1,2-DICHLOROETHENE	96	1.69959	1.66122	2.26		
CHLOROFORM	83	3.87633	3.79080	2.21	*	
1,2-DICHLOROETHANE	62	3.18319	3.23554	1.64		
1,2-DICHLOROETHANE-D4(SURR)	65	2.69697	2.63346	2.35		
2-BUTANONE	72	.03989	.03972	.42		
1,1,1-TRICHLOROETHANE	97	.63749	.72382	13.54		
CARBON TETRACHLORIDE	117	.66973	.75798	13.18		
VINYL ACETATE	43	.70857	.47180	33.42		
BROMODICHLOROMETHANE	83	.65600	.70807	7.94		
1,2-DICHLOROPROPANE	63	.44332	.42845	3.35	*	
TRANS-1,3-DICHLOROPROPENE	75	.79316	.82684	4.25		
TRICHLOROETHENE	130	.41824	.42908	2.59		
DIBROMOCHLOROMETHANE	129	.49648	.53368	7.49		
1,1,2-TRICHLOROETHANE	97	.31392	.31133	.82		
BENZENE	78	1.20435	1.22126	1.40		
CIS-1,3-DICHLOROPROPENE	75	.43032	.47268	9.84		
2-CHLOROETHYLVINYLETHER	63	.15885	.21089	32.76		
BROMOFORM	173	.38425	.40688	5.89		**
4-METHYL-2-PENTANONE	43	.44365	.42727	3.69		
2-HEXANONE	43	.32465	.40028	23.30		
TETRACHLOROETHENE	164	.49222	.47818	2.85		
1,1,2,2-TETRACHLOROETHANE	83	.53574	.48703	9.09		**
TOLUENE-D8 (SURR)	98	1.41330	1.43243	1.35		
TOLUENE	92	.97844	.97145	.71	*	
CHLOROBENZENE	112	1.19479	1.15946	2.96		**
ETHYLBENZENE	91	2.06981	2.11619	2.24	*	

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: U-5157, 5162

Calibration Date: 04/03/87

Contractor: E & E, INC.

Time: 09:16

Contract No: IL-3140

Laboratory ID: >C7622

Instrument ID: HP-5995C

Initial Calibration Date: ~~03/15/87~~ 1/27/87

Minimum $\overline{RF}$ for SPCC is .3

Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC
4-BROMOFLUOROBENZENE(SURR)	95	.72214	.73339	1.56		
STYRENE	104	1.24236	1.19981	3.42		
TOTAL XYLENES	91	1.76320	1.72626	2.10		

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: 4-5157,5162

Calibration Date: 04/06/87

Contractor: E & E, INC.

Time: 12:46

Contract No: IL-3140

Laboratory ID: >C7673

Instrument ID: HP-5995C

Initial Calibration Date: ~~03/13/87~~ 11/27/87

Minimum $\overline{RF}$ for SPCC is .3

Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC
CHLOROMETHANE	50	2.43043	1.80158	25.87		**
BROMOMETHANE	94	1.10748	.50085	54.78		
VINYL CHLORIDE	62	1.37999	1.22379	11.32	*	
CHLOROETHANE	64	.91582	.83204	9.15		
METHYLENE CHLORIDE	84	1.88105	1.48717	20.94		
ACETONE	43	.67944	.82932	22.06		
TRICHLOROFLUOROMETHANE	101	3.74934	3.39984	9.32		
CARBON DISULFIDE	76	5.33308	4.51212	15.39		
1,1-DICHLOROETHENE	61	3.40709	2.71979	20.17	*	
1,1-DICHLOROETHANE	63	3.74282	2.88932	22.80		**
TRANS-1,2-DICHLOROETHENE	96	1.69959	1.47724	13.08		
CHLOROFORM	83	3.87633	3.20094	17.42	*	
1,2-DICHLOROETHANE	62	3.18319	2.43925	23.37		
1,2-DICHLOROETHANE-D4(SURR)	65	2.69697	2.25750	16.29		
2-BUTANONE	72	.03989	.03853	3.40		
1,1,1-TRICHLOROETHANE	97	.63749	.61276	3.88		
CARBON TETRACHLORIDE	117	.66973	.65424	2.31		
VINYL ACETATE	43	.70857	.33304	53.00		
BROMODICHLOROMETHANE	83	.65600	.58630	10.62		
1,2-DICHLOROPROPANE	63	.44332	.35100	20.83	*	
TRANS-1,3-DICHLOROPROPENE	75	.79316	.68764	13.30		
TRICHLOROETHENE	130	.41824	.37611	10.07		
DIBROMOCHLOROMETHANE	129	.49648	.46280	6.78		
1,1,2-TRICHLOROETHANE	97	.31392	.26795	14.64		
BENZENE	78	1.20435	1.03571	14.00		
CIS-1,3-DICHLOROPROPENE	75	.43032	.37913	11.90		
2-CHLOROETHYLVINYLETHER	63	.15885	.16904	6.41		
BROMOFORM	173	.38425	.33029	14.04		**
4-METHYL-2-PENTANONE	43	.44365	.33269	25.01		
2-HEXANONE	43	.32465	.30940	4.70		
TETRACHLOROETHENE	164	.49222	.40684	17.35		
1,1,2,2-TETRACHLOROETHANE	83	.53574	.41768	22.04		**
TOLUENE-D8 (SURR)	98	1.41330	1.42454	.80		
TOLUENE	92	.97844	.85206	12.92	*	
CHLOROBENZENE	112	1.19479	1.03811	13.11		**
ETHYLBENZENE	91	2.06981	1.81109	12.50	*	

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: 4-5157, 5162

Calibration Date: 04/06/87

ntractor: E & E, INC.

Time: 12:46

Contract No: IL-3140

Laboratory ID: >C7673

Instrument ID: HP-5995C

Initial Calibration Date: ~~03/13/87~~ 1/27/87

Minimum $\overline{RF}$ for SPCC is .3

Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC
4-BROMOFLUOROBENZENE(SURR)	95	.72214	.69557	3.68		
STYRENE	104	1.24236	1.05064	15.43		
TOTAL XYLENES	91	1.76320	1.46659	16.82		

-- - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: 4-5157,5162

Calibration Date: 04/07/87

ıtractor: E & E, INC.

Time: 17:40

Contract No: IL-3140

Laboratory ID: >C7704

Instrument ID: HP-5995C

Initial Calibration Date: ~~03/13/87~~ BM 1/27/87

Minimum $\overline{RF}$ for SPCC is .3

Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC
CHLOROMETHANE	50	2.43043	2.11150	13.12		**
BROMOMETHANE	94	1.10748	.61219	44.72		
VINYL CHLORIDE	62	1.37999	1.14589	16.96	*	
CHLOROETHANE	64	.91582	.82850	9.53		
METHYLENE CHLORIDE	84	1.88105	1.80606	3.99		
ACETONE	43	.67944	1.30348	91.85		
TRICHLOROFLUOROMETHANE	101	3.74934	3.57074	4.76		
CARBON DISULFIDE	76	5.33308	5.59761	4.96		
1,1-DICHLOROETHENE	61	3.40709	3.64215	6.90	*	
1,1-DICHLOROETHANE	63	3.74282	4.02891	7.64		**
TRANS-1,2-DICHLOROETHENE	96	1.69959	1.75628	3.34		
CHLOROFORM	83	3.87633	3.80795	1.76	*	
1,2-DICHLOROETHANE	62	3.18319	3.18671	.11		
1,2-DICHLOROETHANE-D4(SURR)	65	2.69697	2.56124	5.03		
2-BUTANONE	72	.03989	.05164	29.48		
1,1,1-TRICHLOROETHANE	97	.63749	.64769	1.60		
CARBON TETRACHLORIDE	117	.66973	.64008	4.43		
VINYL ACETATE	43	.70857	.49796	29.72		
BROMODICHLOROMETHANE	83	.65600	.66544	1.44		
1,2-DICHLOROPROPANE	63	.44332	.46836	5.65	*	
TRANS-1,3-DICHLOROPROPENE	75	.79316	.83864	5.73		
TRICHLOROETHENE	130	.41824	.42316	1.18		
DIBROMOCHLOROMETHANE	129	.49648	.47080	5.17		
1,1,2-TRICHLOROETHANE	97	.31392	.29680	5.45		
BENZENE	78	1.20435	1.26841	5.32		
CIS-1,3-DICHLOROPROPENE	75	.43032	.46460	7.97		
2-CHLOROETHYLVINYLETHER	63	.15885	.21727	36.78		
BROMOFORM	173	.38425	.39774	3.51		**
4-METHYL-2-PENTANONE	43	.44365	.58707	32.33		
2-HEXANONE	43	.32465	.54900	69.10		
TETRACHLOROETHENE	164	.49222	.52767	7.20		
1,1,2,2-TETRACHLOROETHANE	83	.53574	.53084	.91		**
TOLUENE-D8 (SURR)	98	1.41330	1.46712	3.81		
TOLUENE	92	.97844	1.02274	4.53	*	
CHLOROBENZENE	112	1.19479	1.16053	2.87		**
ETHYLBENZENE	91	2.06981	2.15207	3.97	*	

- Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: 4-5157,5162

Calibration Date: 04/07/87

ontractor: E & E, INC.

Time: 17:40

Contract No: IL-3140

Laboratory ID: >C7704

Instrument ID: HP-5995C

Initial Calibration Date: ~~03/13/87~~ 4/27/87

Minimum $\overline{RF}$ for SPCC is .3

Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC
4-BROMOFLUOROBENZENE(SURR)	95	.72214	.75530	4.59		
STYRENE	104	1.24236	1.18695	4.46		
TOTAL XYLENES	91	1.76320	1.73326	1.70		

Continuing Calibration Check
HSL Compounds

Case No: U-5157, 5162

Calibration Date: 04/21/87

Contractor: E & E, INC.

Time: 10:08

Contract No: IL-3140

Laboratory ID: >D2306

Instrument ID: HP-5970D

Initial Calibration Date: 10/17/86

Minimum $\overline{RF}$ for SPCC is .05

Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC
ANILINE	93	1.54043	1.49784	2.76		
BIS(-2-CHLOROETHYL)ETHER	93	1.18428	1.30822	10.47		
1,3-DICHLOROBENZENE	146	1.47624	1.46217	.95		
1,4-DICHLOROBENZENE	146	1.46874	1.45359	1.03	*	
BENZYL ALCOHOL	79	1.13473	1.33761	17.88		
1,2-DICHLOROBENZENE	146	1.49193	1.51290	1.41		
BIS(2-CHLOROISOPROPYL)ETHER	45	2.68137	3.73100	39.15		
N-NITROSO-DI-N-PROPYLAMINE	70	1.18117	1.49427	26.51		**
HEXACHLOROETHANE	117	.70841	.73180	3.30		
NITROBENZENE-D5 (SURR)	82	.37437	.41426	10.66		
NITROBENZENE	77	.37969	.43578	14.77		
ISOPHORONE	82	.75594	.84149	11.32		
BIS(-2-CHLOROETHOXY)METHANE	93	.41266	.51079	23.78		
1,2,4-TRICHLOROBENZENE	180	.38442	.38366	.20		
NAPHTHALENE	128	.96668	1.07060	10.75		
4-CHLOROANILINE	127	.37796	.40741	7.79		
HEXACHLOROBUTADIENE	225	.25908	.25728	.70	*	
2-METHYLNAPHTHALENE	142	.64484	.70445	9.24		
HEXACHLOROCYCLOPENTADIENE	237	.56814	.35504	37.51		**
2-FLUOROBIPHENYL (SURR)	172	1.61321	1.33839	17.04		
2-CHLORONAPHTHALENE	162	1.37281	1.13333	17.44		
2-NITROANILINE	65	.47645	.40169	15.69		
DIMETHYL PHTHALATE	163	1.71954	1.36500	20.62		
4-NITROANILINE	138	.25828	.22368	13.39		
DIBENZOFURAN	168	1.90873	1.47189	22.89		
ACENAPHTHYLENE	152	2.10065	1.67970	20.04		
FLUORENE	166	1.34670	1.03763	22.95		
3-NITROANILINE	138	.09246	.13773	48.96		
ACENAPHTHENE	153	1.37857	1.05588	23.41	*	
2,4-DINITROTOLUENE	165	.33212	.28664	13.69		
2,6-DINITROTOLUENE	165	.37112	.32215	13.19		
DIETHYLPHTHALATE	149	1.58664	1.26970	19.98		
4-CHLOROPHENYL-PHENYLETHER	204	.70414	.55317	21.44		
N-NITROSODIPHENYLAMINE	169	.51771	.53080	2.53	*	
4-BROMOPHENYL-PHENYL ETHER	248	.33482	.29510	11.86		
HEXACHLOROBENZENE	284	.43791	.31674	27.67		

RF - Response Factor from daily standard file at 50.00 UG/L

- Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

Continuing Calibration Check
HSL Compounds

Case No: 11-5157,5162

Calibration Date: 04/21/87

Contractor: E & E, INC.

Time: 10:08

Contract No: IL-3140

Laboratory ID: >D2306

Instrument ID: HP-5970D

Initial Calibration Date: 10/17/86

Minimum $\overline{RF}$ for SPCC is .05

Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC
PHENANTHRENE	178	1.01505	.98358	3.10		
ANTHRACENE	178	.99874	.94742	5.14		
DI-N-BUTYLPHTHALATE	149	.97124	1.10090	13.35		
FLUORANTHENE	202	.62146	.75600	21.65	*	
BENZIDINE		.65247	-	-		
PYRENE	202	2.68642	1.34688	49.86		
TERPHENYL-D14 (SURR)	244	1.48172	.83697	43.51		
BUTYLBENZYLPHTHALATE	149	.68277	.61537	9.87		
3,3'DICHLOROBENZIDINE	252	.13263	.24607	85.53		
BENZO(A)ANTHRACENE	228	.91524	1.00641	9.96		
BIS(2-ETHYLHEXYL)PHTHALATE	149	.81579	.84915	4.09		
CHRYSENE	228	1.19137	.98641	17.20		
DI-N-OCTYL PHTHALATE	149	1.64173	1.65868	1.03	*	
BENZO(B)FLUORANTHENE	252	1.13479	1.17251	3.32		
BENZO(K)FLUORANTHENE	252	1.55063	1.17356	24.32		
BENZO(A)PYRENE	252	1.10877	1.06972	3.52	*	
INDENO(1,2,3-CD)PYRENE	276	.99032	1.09271	10.34		
DIBENZ(A,H)ANTHRACENE	278	.81159	1.00738	24.12		
BENZO(G,H,I)PERYLENE	276	1.10886	1.11772	.80		

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

Continuing Calibration Check
HSL Compounds

Case No: U-5157,5162

Calibration Date: 04/21/87

Contractor: E & E, INC.

Time: 13:08

Contract No: IL-3140

Laboratory ID: >D2309

Instrument ID: HP-5970D

Initial Calibration Date: ~~06/20/86~~ 6/19/86

Minimum $\overline{RF}$ for SPCC is .05

Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC
PHENOL-D5 (SURR)	99	1.40059	1.34334	4.09		
PENTAFLUOROPHENOL	184	-	-	-		
2-FLUOROPHENOL (SURR)	112	.92130	1.01330	9.99		
PHENOL	94	1.34105	1.58182	17.95	*	
2-METHYL PHENOL	108	1.03158	1.19527	15.87		
2-CHLOROPHENOL	128	1.13833	1.22125	7.28		
4-METHYL PHENOL	108	1.07582	1.22783	14.13		
2-NITROPHENOL	139	.20262	.20702	2.18	*	
2,4-DIMETHYLPHENOL	122	.28916	.25825	10.69		
BENZOIC ACID	105	.20401	.21971	7.69		
2,4-DICHLOROPHENOL	162	.31568	.29796	5.61	*	
4-CHLORO-3-METHYLPHENOL	107	.33577	.33151	1.27	*	
2,4,6-TRICHLOROPHENOL	196	.45546	.40333	11.45	*	
2,4,5-TRICHLOROPHENOL	196	.48930	.41005	16.20		
2,4,6-TRIBROMOPHENOL(SURR)	330	.32584	.19688	39.58		
2,4-DINITROPHENOL	184	.17071	.17097	.16		**
4-NITROPHENOL	139	.32314	.18302	43.36		**
4,6-DINITRO-2-METHYLPHENOL	198	.12041	.15260	26.74		
PENTACHLOROPHENOL	266	.18773	.13842	26.26	*	

RF - Response Factor from daily standard file at 50.00 UG/L

-- - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

Continuing Calibration Check
HSL Compounds

Case No: U-5157, 5162

Calibration Date: 04/22/87

(tractor: E & E, INC.

Time: 15:53

Contract No: IL-3140

Laboratory ID: >D2336

Instrument ID: HP-5970D

Initial Calibration Date: 10/17/86

Minimum $\overline{RF}$ for SPCC is .05

Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC
ANILINE	93	1.54043	1.59837	3.76		
BIS(-2-CHLOROETHYL)ETHER	93	1.18428	1.44690	22.18		
1,3-DICHLOROBENZENE	146	1.47624	1.42681	3.35		
1,4-DICHLOROBENZENE	146	1.46874	1.54130	4.94	*	
BENZYL ALCOHOL	79	1.13473	1.59572	40.63		
1,2-DICHLOROBENZENE	146	1.49193	1.48291	.60		
BIS(2-CHLOROISOPROPYL)ETHER	45	2.68137	4.09540	52.74		
N-NITROSO-DI-N-PROPYLAMINE	70	1.18117	1.55564	31.70		**
HEXACHLOROETHANE	117	.70841	.77170	8.93		
NITROBENZENE-D5 (SURR)	82	.37437	.46929	25.36		
NITROBENZENE	77	.37969	.50076	31.88		
ISOPHORONE	82	.75594	.93433	23.60		
BIS(-2-CHLOROETHOXY)METHANE	93	.41266	.57982	40.51		
1,2,4-TRICHLOROBENZENE	180	.38442	.37895	1.42		
NAPHTHALENE	128	.96668	1.06661	10.34		
4-CHLOROANILINE	127	.37796	.36056	4.60		
HEXACHLOROBUTADIENE	225	.25908	.27215	5.05	*	
2-METHYLNAPHTHALENE	142	.64484	.67362	4.46		
HEXACHLOROCYCLOPENTADIENE	237	.56814	.38535	32.17		**
2-FLUOROBIPHENYL (SURR)	172	1.61321	1.28753	20.19		
2-CHLORONAPHTHALENE	162	1.37281	1.08005	21.33		
2-NITROANILINE	65	.47645	.51102	7.26		
DIMETHYL PHTHALATE	163	1.71954	1.45338	15.48		
4-NITROANILINE	138	.25828	.24341	5.76		
DIBENZOFURAN	168	1.90873	1.50917	20.93		
ACENAPHTHYLENE	152	2.10065	1.70652	18.76		
FLUORENE	166	1.34670	1.19003	11.63		
3-NITROANILINE	138	.09246	.15453	67.13		
ACENAPHTHENE	153	1.37857	1.11217	19.32	*	
2,4-DINITROTOLUENE	165	.33212	.34007	2.39		
2,6-DINITROTOLUENE	165	.37112	.32127	13.43		
DIETHYLPHTHALATE	149	1.58664	1.67357	5.48		
4-CHLOROPHENYL-PHENYLETHER	204	.70414	.59946	14.87		
N-NITROSODIPHENYLAMINE	169	.51771	.51009	1.47	*	
4-BROMOPHENYL-PHENYL ETHER	248	.33482	.32397	3.24		
HEXACHLOROBENZENE	284	.43791	.38414	12.28		

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

Continuing Calibration Check
HSL Compounds

Case No: 11-5157,5162

Calibration Date: 04/22/87

ıtractor: E & E, INC.

Time: 15:53

Contract No: IL-3140

Laboratory ID: >D2336

Instrument ID: HP-5970D

Initial Calibration Date: 10/17/86

Minimum $\overline{RF}$ for SPCC is .05

Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC
PHENANTHRENE	178	1.01505	.97809	3.64		
ANTHRACENE	178	.99874	.94727	5.15		
DI-N-BUTYLPHTHALATE	149	.97124	1.16877	20.34		
FLUORANTHENE	202	.62146	.75687	21.79	*	
BENZIDINE		.65247	-	-		
PYRENE	202	2.68642	1.75799	34.56		
TERPHENYL-D14 (SURR)	244	1.48172	1.09233	26.28		
BUTYLBENZYLPHTHALATE	149	.68277	.66747	2.24		
3,3'DICHLOROBENZIDINE	252	.13263	.12561	5.29		
BENZO(A)ANTHRACENE	228	.91524	1.00815	10.15		
BIS(2-ETHYLHEXYL)PHTHALATE	149	.81579	1.00505	23.20		
CHRYSENE	228	1.19137	.95039	20.23		
DI-N-OCTYL PHTHALATE	149	1.64173	1.98161	20.70	*	
BENZO(B)FLUORANTHENE	252	1.13479	1.21528	7.09		
BENZO(K)FLUORANTHENE	252	1.55063	1.25523	19.05		
BENZO(A)PYRENE	252	1.10877	1.07596	2.96	*	
INDENO(1,2,3-CD)PYRENE	276	.99032	.93352	5.74		
DIBENZ(A,H)ANTHRACENE	278	.81159	.85067	4.82		
BENZO(G,H,I)PERYLENE	276	1.10886	.95933	13.49		

RF - Response Factor from daily standard file at 50.00 UG/L

... - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

Continuing Calibration Check
HSL Compounds

Case No: U-5157,5162

Calibration Date: 04/22/87

ıtractor: E & E, INC.

Time: 16:51

Contract No: IL-3140

Laboratory ID: >D2337

Instrument ID: HP-5970D

Initial Calibration Date: ~~06/20/86~~ 6/19/86

Minimum $\overline{RF}$ for SPCC is .05

Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC
PHENOL-D5	(SURR) 99	1.40059	1.62196	15.81		
PENTAFLUOROPHENOL	184	-	-	-		
2-FLUOROPHENOL	(SURR) 112	.92130	1.29879	40.97		
PHENOL	94	1.34105	1.67104	24.61	*	
2-METHYL PHENOL	108	1.03158	1.22365	18.62		
2-CHLOROPHENOL	128	1.13833	1.20131	5.53		
4-METHYL PHENOL	108	1.07582	1.18781	10.41		
2-NITROPHENOL	139	.20262	.19971	1.43	*	
2,4-DIMETHYLPHENOL	122	.28916	.28361	1.92		
BENZOIC ACID	105	.20401	.19921	2.35		
2,4-DICHLOROPHENOL	162	.31568	.27978	11.37	*	
4-CHLORO-3-METHYLPHENOL	107	.33577	.31911	4.96	*	
2,4,6-TRICHLOROPHENOL	196	.45546	.38875	14.65	*	
2,4,5-TRICHLOROPHENOL	196	.48930	.38562	21.19		
2,4,6-TRIBROMOPHENOL	(SURR) 330	.32584	.37296	14.46		
2,4-DINITROPHENOL	184	.17071	.13493	20.96		**
4-NITROPHENOL	139	.32314	.15290	52.68		**
4,6-DINITRO-2-METHYLPHENOL	198	.12041	.13259	10.12		
PENTACHLOROPHENOL	266	.18773	.17908	4.61	*	

RF - Response Factor from daily standard file at 50.00 UG/L

.. - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

Continuing Calibration Check
HSL Compounds

Case No: U-5157,5162

Calibration Date: 04/24/87

C tractor: E & E, INC.

Time: 13:13

Contract No: IL-3140

Laboratory ID: >D2359

Instrument ID: HP-5970D

Initial Calibration Date: 10/17/86

Minimum $\overline{RF}$ for SPCC is .05

Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC
ANILINE	93	1.54043	1.40903	8.53		
BIS(-2-CHLOROETHYL)ETHER	93	1.18428	1.34217	13.33		
1,3-DICHLOROBENZENE	146	1.47624	1.40169	5.05		
1,4-DICHLOROBENZENE	146	1.46874	1.48044	.80	*	
BENZYL ALCOHOL	79	1.13473	1.49031	31.34		
1,2-DICHLOROBENZENE	146	1.49193	1.47603	1.07		
BIS(2-CHLOROISOPROPYL)ETHER	45	2.68137	3.90753	45.73		
N-NITROSO-DI-N-PROPYLAMINE	70	1.18117	1.53594	30.04		**
HEXACHLOROETHANE	117	.70841	.75809	7.01		
NITROBENZENE-D5 (SURR)	82	.37437	.45497	21.53		
NITROBENZENE	77	.37969	.46405	22.22		
ISOPHORONE	82	.75594	.90643	19.91		
BIS(-2-CHLOROETHOXY)METHANE	93	.41266	.54632	32.39		
1,2,4-TRICHLOROBENZENE	180	.38442	.38718	.72		
NAPHTHALENE	128	.96668	1.04548	8.15		
4-CHLOROANILINE	127	.37796	.34884	7.70		
HEXACHLOROBUTADIENE	225	.25908	.26496	2.27	*	
2-METHYLNAPHTHALENE	142	.64484	.63922	.87		
HEXACHLOROCYCLOPENTADIENE	237	.56814	.39821	29.91		**
2-FLUOROBIPHENYL (SURR)	172	1.61321	1.31436	18.53		
2-CHLORONAPHTHALENE	162	1.37281	1.15206	16.08		
2-NITROANILINE	65	.47645	.48165	1.09		
DIMETHYL PHTHALATE	163	1.71954	1.38078	19.70		
4-NITROANILINE	138	.25828	.24916	3.53		
DIBENZOFURAN	168	1.90873	1.54623	18.99		
ACENAPHTHYLENE	152	2.10065	1.72112	18.07		
FLUORENE	166	1.34670	1.06832	20.67		
3-NITROANILINE	138	.09246	.13831	49.59		
ACENAPHTHENE	153	1.37857	1.06658	22.63	*	
2,4-DINITROTOLUENE	165	.33212	.31866	4.05		
2,6-DINITROTOLUENE	165	.37112	.33304	10.26		
DIETHYLPHTHALATE	149	1.58664	1.34654	15.13		
4-CHLOROPHENYL-PHENYLETHER	204	.70414	.55387	21.34		
N-NITROSODIPHENYLAMINE	169	.51771	.50909	1.66	*	
4-BROMOPHENYL-PHENYL ETHER	248	.33482	.29027	13.31		
HEXACHLOROBENZENE	284	.43791	.33776	22.87		

F - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

Continuing Calibration Check
HSL Compounds

Case No: U-5157,5162

Calibration Date: 04/24/87

Contractor: E & E, INC.

Time: 13:13

Contract No: IL-3140

Laboratory ID: >D2359

Instrument ID: HP-5970D

Initial Calibration Date: 10/17/86

Minimum $\overline{RF}$ for SPCC is .05

Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC
PHENANTHRENE	178	1.01505	.98293	3.16		
ANTHRACENE	178	.99874	.90835	9.05		
DI-N-BUTYLPHTHALATE	149	.97124	1.09014	12.24		
FLUORANTHENE	202	.62146	.76789	23.56	*	
BENZIDINE		.65247	-	-		
PYRENE	202	2.68642	1.77225	34.03		
TERPHENYL-D14 (SURR)	244	1.48172	1.00183	32.39		
BUTYLBENZYLPHTHALATE	149	.68277	.67791	.71		
3,3'DICHLOROBENZIDINE	252	.13263	.13313	.38		
BENZO(A)ANTHRACENE	228	.91524	1.02890	12.42		
BIS(2-ETHYLHEXYL)PHTHALATE	149	.81579	.87613	7.40		
CHRYSENE	228	1.19137	.96119	19.32		
DI-N-OCTYL PHTHALATE	149	1.64173	1.86571	13.64	*	
BENZO(B)FLUORANTHENE	252	1.13479	1.33560	17.70		
BENZO(K)FLUORANTHENE	252	1.55063	1.08469	30.05		
BENZO(A)PYRENE	252	1.10877	1.06617	3.84	*	
INDENO(1,2,3-CD)PYRENE	276	.99032	.96087	2.97		
DIBENZ(A,H)ANTHRACENE	278	.81159	.90207	11.15		
BENZO(G,H,I)PERYLENE	276	1.10886	1.00177	9.66		

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

Continuing Calibration Check
HSL Compounds

Case No: U-5157, 5162

Calibration Date: 04/24/87

Contractor: E & E, INC.

Time: 14:11

Contract No: IL-3140

Laboratory ID: >D2360

Instrument ID: HP-5970D

Initial Calibration Date: 06/20/86

Minimum $\overline{RF}$ for SPCC is .05

Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC
PHENOL-D5	(SURR) 99	1.40059	1.59045	13.56		
PENTAFLUOROPHENOL	184	-	-	-		
2-FLUOROPHENOL	(SURR) 112	.92130	1.32538	43.86		
PHENOL	94	1.34105	1.61948	20.76	*	
2-METHYL PHENOL	108	1.03158	1.14799	11.28		
2-CHLOROPHENOL	128	1.13833	1.20220	5.61		
4-METHYL PHENOL	108	1.07582	1.15110	7.00		
2-NITROPHENOL	139	.20262	.19920	1.69	*	
2,4-DIMETHYLPHENOL	122	.28916	.27384	5.30		
BENZOIC ACID	105	.20401	.20857	2.23		
2,4-DICHLOROPHENOL	162	.31568	.26676	15.50	*	
4-CHLORO-3-METHYLPHENOL	107	.33577	.30132	10.26	*	
2,4,6-TRICHLOROPHENOL	196	.45546	.38782	14.85	*	
2,4,5-TRICHLOROPHENOL	196	.48930	.37730	22.89		
2,4,6-TRIBROMOPHENOL	(SURR) 330	.32584	.27427	15.83		
2,4-DINITROPHENOL	184	.17071	.15307	10.33		**
4-NITROPHENOL	139	.32314	.16127	50.09		**
4,6-DINITRO-2-METHYLPHENOL	198	.12041	.14350	19.18		
PENTACHLOROPHENOL	266	.18773	.15950	15.04	*	

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

Continuing Calibration Check
HSL Compounds

Case No: 4-5157,5162

Calibration Date: 04/27/87

tractor: E & E, INC.

Time: 11:18

Contract No: IL-3140

Laboratory ID: >D2373

Instrument ID: HP-5970D

Initial Calibration Date: 10/17/86

Minimum $\overline{RF}$ for SPCC is .05

Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC
ANILINE	93	1.54043	1.49834	2.73		
BIS(-2-CHLOROETHYL)ETHER	93	1.18428	1.31274	10.85		
1,3-DICHLOROBENZENE	146	1.47624	1.37592	6.80		
1,4-DICHLOROBENZENE	146	1.46874	1.46942	.05	*	
BENZYL ALCOHOL	79	1.13473	1.28877	13.58		
1,2-DICHLOROBENZENE	146	1.49193	1.48184	.68		
BIS(2-CHLOROISOPROPYL)ETHER	45	2.68137	4.00133	49.23		
N-NITROSO-DI-N-PROPYLAMINE	70	1.18117	1.55811	31.91		**
HEXACHLOROETHANE	117	.70841	.70562	.39		
NITROBENZENE-D5 (SURR)	82	.37437	.43533	16.28		
NITROBENZENE	77	.37969	.43891	15.60		
ISOPHORONE	82	.75594	.91235	20.69		
BIS(-2-CHLOROETHOXY)METHANE	93	.41266	.52406	27.00		
1,2,4-TRICHLOROBENZENE	180	.38442	.38032	1.07		
NAPHTHALENE	128	.96668	1.06682	10.36		
4-CHLOROANILINE	127	.37796	.35952	4.88		
HEXACHLOROBUTADIENE	225	.25908	.25791	.45	*	
2-METHYLNAPHTHALENE	142	.64484	.63951	.83		
HEXACHLOROCYCLOPENTADIENE	237	.56814	.38527	32.19		**
2-FLUOROBIPHENYL (SURR)	172	1.61321	1.42064	11.94		
2-CHLORONAPHTHALENE	162	1.37281	1.15956	15.53		
2-NITROANILINE	65	.47645	.42205	11.42		
DIMETHYL PHTHALATE	163	1.71954	1.37872	19.82		
4-NITROANILINE	138	.25828	.21369	17.26		
DIBENZOFURAN	168	1.90873	1.43417	24.86		
ACENAPHTHYLENE	152	2.10065	1.69952	19.10		
FLUORENE	166	1.34670	.94367	29.93		
3-NITROANILINE	138	.09246	.12680	37.15		
ACENAPHTHENE	153	1.37857	1.05369	23.57	*	
2,4-DINITROTOLUENE	165	.33212	.26154	21.25		
2,6-DINITROTOLUENE	165	.37112	.31246	15.81		
DIETHYLPHTHALATE	149	1.58664	1.17467	25.96		
4-CHLOROPHENYL-PHENYLETHER	204	.70414	.51126	27.39		
N-NITROSODIPHENYLAMINE	169	.51771	.58148	12.32	*	
4-BROMOPHENYL-PHENYL ETHER	248	.33482	.34908	4.26		
HEXACHLOROBENZENE	284	.43791	.37903	13.45		

P - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

Continuing Calibration Check
HSL Compounds

Case No: 4-5157, 5162

Calibration Date: 04/27/87

C tractor: E & E, INC.

Time: 11:18

Contract No: IL-3140

Laboratory ID: >D2373

Instrument ID: HP-5970D

Initial Calibration Date: 10/17/86

Minimum $\overline{RF}$ for SPCC is .05

Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC
PHENANTHRENE	178	1.01505	.94780	6.63		
ANTHRACENE	178	.99874	.91440	8.45		
DI-N-BUTYLPHTHALATE	149	.97124	1.09837	13.09		
FLUORANTHENE	202	.62146	.71220	14.60	*	
BENZIDINE		.65247	.26128	59.95		
PYRENE	202	2.68642	1.44410	46.24		
TERPHENYL-D14 (SURR)	244	1.48172	.95718	35.40		
BUTYLBENZYLPHTHALATE	149	.68277	.61891	9.35		
3,3'DICHLOROBENZIDINE	252	.13263	.28496	114.86		
BENZO(A)ANTHRACENE	228	.91524	1.01527	10.93		
BIS(2-ETHYLHEXYL)PHTHALATE	149	.81579	.85223	4.47		
CHRYSENE	228	1.19137	.95824	19.57		
DI-N-OCTYL PHTHALATE	149	1.64173	1.66073	1.16	*	
BENZO(B)FLUORANTHENE	252	1.13479	1.15285	1.59		
BENZO(K)FLUORANTHENE	252	1.55063	1.14568	26.12		
BENZO(A)PYRENE	252	1.10877	1.05266	5.06	*	
INDENO(1,2,3-CD)PYRENE	276	.99032	1.05160	6.19		
DIBENZ(A,H)ANTHRACENE	278	.81159	1.01275	24.79		
BENZO(G,H,I)PERYLENE	276	1.10886	1.09737	1.04		

F - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

Continuing Calibration Check
HSL Compounds

Case No: U-5157,5162

Calibration Date: 04/27/87

ntractor: E & E, INC.

Time: 15:20

Contract No: IL-3140

Laboratory ID: >D2377

Instrument ID: HP-5970D

Initial Calibration Date: ~~06/20/86~~ 6/19/86

Minimum $\overline{RF}$ for SPCC is .05

Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC
PHENOL-D5 (SURR)	99	1.40059	1.25783	10.19		
PENTAFLUOROPHENOL	184	-	-	-		
2-FLUOROPHENOL (SURR)	112	.92130	1.05606	14.63		
PHENOL	94	1.34105	1.60768	19.88	*	
2-METHYL PHENOL	108	1.03158	1.20790	17.09		
2-CHLOROPHENOL	128	1.13833	1.25498	10.25		
4-METHYL PHENOL	108	1.07582	1.20844	12.33		
2-NITROPHENOL	139	.20262	.21182	4.54	*	
2,4-DIMETHYLPHENOL	122	.28916	.26487	8.40		
BENZOIC ACID	105	.20401	.18734	8.17		
2,4-DICHLOROPHENOL	162	.31568	.28228	10.58	*	
4-CHLORO-3-METHYLPHENOL	107	.33577	.30074	10.43	*	
2,4,6-TRICHLOROPHENOL	196	.45546	.39607	13.04	*	
2,4,5-TRICHLOROPHENOL	196	.48930	.38836	20.63		
2,4,6-TRIBROMOPHENOL(SURR)	330	.32584	.22558	30.77		
2,4-DINITROPHENOL	184	.17071	.11121	34.85		**
4-NITROPHENOL	139	.32314	.10713	66.85		**
4,6-DINITRO-2-METHYLPHENOL	198	.12041	.14051	16.70		
PENTACHLOROPHENOL	266	.18773	.14192	24.40	*	

- Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

Continuing Calibration Check
HSL Compounds

:e No: U-5157,5162 Calibration Date: 04/28/87

Contractor: E & E, INC. Time: 10:27

Contract No: IL-3140 Laboratory ID: >B3672

Instrument ID: HP-5970B Initial Calibration Date: 07/30/86

Minimum $\overline{RF}$ for SPCC is .05 Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC
ANILINE	93	1.52341	1.47943	2.89		
BIS(-2-CHLOROETHYL)ETHER	93	1.23992	1.11743	9.88		
1,3-DICHLOROBENZENE	146	1.38276	1.47953	7.00		
1,4-DICHLOROBENZENE	146	1.36777	1.38255	1.08	*	
BENZYL ALCOHOL	79	1.07958	1.00172	7.21		
1,2-DICHLOROBENZENE	146	1.42808	1.42464	.24		
BIS(2-CHLOROISOPROPYL)ETHER	45	2.97018	3.01948	1.66		
N-NITROSO-DI-N-PROPYLAMINE	70	1.29228	1.21800	5.75		**
HEXACHLOROETHANE	117	.70913	.72162	1.76		
NITROBENZENE-D5 (SURR)	82	.40084	.41514	3.57		
NITROBENZENE	77	.41948	.44138	5.22		
ISOPHORONE	82	.80995	.78088	3.59		
BIS(-2-CHLOROETHOXY)METHANE	93	.45577	.49171	7.89		
1,2,4-TRICHLOROBENZENE	180	.37851	.40091	5.92		
NAPHTHALENE	128	.98472	1.04222	5.84		
4-CHLOROANILINE	127	.39458	.41200	4.42		
HEXACHLOROBUTADIENE	225	.25803	.29132	12.90	*	
2-METHYLNAPHTHALENE	142	.62355	.67850	8.81		
HEXACHLOROCYCLOPENTADIENE	237	.45397	.44417	2.16		**
2-FLUOROBIPHENYL (SURR)	172	1.33061	1.33431	.28		
2-CHLORONAPHTHALENE	162	1.20816	1.18872	1.61		
2-NITROANILINE	65	.43896	.33341	24.04		
DIMETHYL PHTHALATE	163	1.43709	1.20374	16.24		
4-NITROANILINE	138	.25992	.14463	44.35		
DIBENZOFURAN	168	1.61498	1.46867	9.06		
ACENAPHTHYLENE	152	1.80371	1.66705	7.58		
FLUORENE	166	1.19425	1.03432	13.39		
3-NITROANILINE	138	.15454	.01745	88.71		
ACENAPHTHENE	153	1.18706	1.08774	8.37	*	
2,4-DINITROTOLUENE	165	.38188	.20747	45.67		
2,6-DINITROTOLUENE	165	.35087	.24341	30.62		
DIETHYLPHTHALATE	149	1.39014	1.03619	25.46		
4-CHLOROPHENYL-PHENYLETHER	204	.62534	.55620	11.06		
N-NITROSODIPHENYLAMINE	169	.42524	.47543	11.80	*	
4-BROMOPHENYL-PHENYL ETHER	248	.26659	.32683	22.60		
HEXACHLOROBENZENE	284	.34094	.35382	3.78		

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

Continuing Calibration Check
HSL Compounds

: No: 11-5157, 5162 Calibration Date: 04/28/87

Contractor: E & E, INC. Time: 10:27

Contract No: IL-3140 Laboratory ID: >B3672

Instrument ID: HP-5970B Initial Calibration Date: 07/30/86

Minimum $\overline{RF}$ for SPCC is .05 Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC
PHENANTHRENE	178	.97758	.97581	.18		
ANTHRACENE	178	1.00646	.99222	1.41		
DI-N-BUTYLPHTHALATE	149	1.12721	.83493	25.93		
FLUORANTHENE	202	.81517	.67366	17.36	*	
BENZIDINE		-	-	-		
PYRENE	202	1.60192	1.60653	.29		
TERPHENYL-D14 (SURR)	244	1.11052	.88385	20.41		
BUTYLBENZYLPHTHALATE	149	.67361	.52798	21.62		
3,3'DICHLOROBENZIDINE	252	.31882	.16010	49.78		
BENZO(A)ANTHRACENE	228	1.12037	.82914	25.99		
BIS(2-ETHYLHEXYL)PHTHALATE	149	.90083	.76356	15.24		
CHRYSENE	228	1.12666	1.13260	.53		
DI-N-OCTYL PHTHALATE	149	1.70682	1.55207	9.07	*	
BENZO(B)FLUORANTHENE	252	1.21474	.90357	25.62		
BENZO(K)FLUORANTHENE	252	1.23716	1.50608	21.74		
BENZO(A)PYRENE	252	1.12089	1.07777	3.85	*	
INDENO(1,2,3-CD)PYRENE	276	1.04154	.88379	15.15		
DIBENZ(A,H)ANTHRACENE	278	1.06755	.99458	6.84		
BENZO(G,H,I)PERYLENE	276	1.15866	1.22075	5.36		

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

Continuing Calibration Check
HSL Compounds

r No: 4-5157,5162 Calibration Date: 04/28/87

Contractor: E & E, INC. Time: 12:14

Contract No: IL-3140 Laboratory ID: >B3674

Instrument ID: HP-5970B Initial Calibration Date: ~~07/31/86~~ 7/30/86

Minimum $\overline{RF}$ for SPCC is .05 Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC
PHENOL-D5	(SURR) 99	1.37894	1.38800	.66		
PENTAFLUOROPHENOL	184	-	-	-		
2-FLUOROPHENOL	(SURR) 112	.86917	.74233	14.59		
PHENOL	94	1.27723	1.47291	15.32	*	
2-METHYL PHENOL	108	1.06214	1.05289	.87		
2-CHLOROPHENOL	128	1.17232	.96577	17.62		
4-METHYL PHENOL	108	1.06894	1.11927	4.71		
2-NITROPHENOL	139	.19333	.18936	2.05	*	
2,4-DIMETHYLPHENOL	122	.27900	.25626	8.15		
BENZOIC ACID	105	.23920	.18461	22.82		
2,4-DICHLOROPHENOL	162	.30213	.31821	5.32	*	
4-CHLORO-3-METHYLPHENOL	107	.33099	.33250	.46	*	
2,4,6-TRICHLOROPHENOL	196	.44521	.40515	9.00	*	
2,4,5-TRICHLOROPHENOL	196	.51987	.44013	15.34		
2,4,6-TRIBROMOPHENOL	(SURR) 330	.32822	.26991	17.76		
2,4-DINITROPHENOL	184	.16189	.11519	28.85		**
4-NITROPHENOL	139	.16233	.09803	39.61		**
4,6-DINITRO-2-METHYLPHENOL	198	.14211	.12011	15.48		
PENTACHLOROPHENOL	266	.17144	.15659	8.66	*	

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

Continuing Calibration Check
HSL Compounds

Case No: U-5157, 5162

Calibration Date: 05/20/87

(tractor: E & E, INC.

Time: 11:15

Contract No: IL-3140

Laboratory ID: >D2541

Instrument ID: HP-5970D

Initial Calibration Date: ~~06/20/86~~ 6/19/86

Minimum $\overline{RF}$ for SPCC is .05

Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC
PHENOL-D5 (SURR)	99	1.40059	1.67257	19.42		
PENTAFLUOROPHENOL	184	-	-	-		
2-FLUOROPHENOL (SURR)	112	.92130	1.05102	14.08		
PHENOL	94	1.34105	1.48361	10.63	*	
2-METHYL PHENOL	108	1.03158	.78498	23.91		
2-CHLOROPHENOL	128	1.13833	1.15076	1.09		
4-METHYL PHENOL	108	1.07582	.81434	24.30		
2-NITROPHENOL	139	.20262	.18789	7.27	*	
2,4-DIMETHYLPHENOL	122	.28916	.26685	7.72		
BENZOIC ACID	105	.20401	.20795	1.93		
2,4-DICHLOROPHENOL	162	.31568	.27121	14.09	*	
4-CHLORO-3-METHYLPHENOL	107	.33577	.31830	5.20	*	
2,4,6-TRICHLOROPHENOL	196	.45546	.42078	7.61	*	
2,4,5-TRICHLOROPHENOL	196	.48930	.43808	10.47		
2,4,6-TRIBROMOPHENOL(SURR)	330	.32584	.56026	71.95		
2,4-DINITROPHENOL	184	.17071	.14002	17.98		**
4-NITROPHENOL	139	.32314	.12701	60.69		**
4,6-DINITRO-2-METHYLPHENOL	198	.12041	.12483	3.67		
PENTACHLOROPHENOL	266	.18773	.22085	17.65	*	

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

Continuing Calibration Check
HSL Compounds

Case No: U-5157, 5162

Calibration Date: 05/20/87

C ;ractor: E & E, INC.

Time: 12:09

Contract No: IL-3140

Laboratory ID: >D2542

Instrument ID: HP-5970D

Initial Calibration Date: 10/17/86

Minimum $\overline{RF}$ for SPCC is .05

Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC
ANILINE	93	1.54043	1.29376	16.01		
BIS(-2-CHLOROETHYL)ETHER	93	1.18428	1.21828	2.87		
1,3-DICHLOROBENZENE	146	1.47624	1.41103	4.42		
1,4-DICHLOROBENZENE	146	1.46874	1.45659	.83	*	
BENZYL ALCOHOL	79	1.13473	1.24039	9.31		
1,2-DICHLOROBENZENE	146	1.49193	1.44646	3.05		
BIS(2-CHLOROISOPROPYL)ETHER	45	2.68137	3.66376	36.64		
N-NITROSO-DI-N-PROPYLAMINE	70	1.18117	1.39167	17.82		**
HEXACHLOROETHANE	117	.70841	.69625	1.72		
NITROBENZENE-D5 (SURR)	82	.37437	.43283	15.61		
NITROBENZENE	77	.37969	.44507	17.22		
ISOPHORONE	82	.75594	.80179	6.07		
BIS(-2-CHLOROETHOXY)METHANE	93	.41266	.49708	20.46		
1,2,4-TRICHLOROBENZENE	180	.38442	.41522	8.01		
NAPHTHALENE	128	.96668	1.06010	9.66		
4-CHLOROANILINE	127	.37796	.38404	1.61		
HEXACHLOROBUTADIENE	225	.25908	.33604	29.71	*	
2-METHYLNAPHTHALENE	142	.64484	.65543	1.64		
HEXACHLOROCYCLOPENTADIENE	237	.56814	.51627	9.13		**
2-FLUOROBIPHENYL (SURR)	172	1.61321	1.47214	8.74		
2-CHLORONAPHTHALENE	162	1.37281	1.22020	11.12		
2-NITROANILINE	65	.47645	.37482	21.33		
DIMETHYL PHTHALATE	163	1.71954	1.14714	33.29		
4-NITROANILINE	138	.25828	.19069	26.17		
DIBENZOFURAN	168	1.90873	1.50226	21.30		
ACENAPHTHYLENE	152	2.10065	1.68700	19.69		
FLUORENE	166	1.34670	.99279	26.28		
3-NITROANILINE	138	.09246	.09533	3.11		
ACENAPHTHENE	153	1.37857	1.08084	21.60	*	
2,4-DINITROTOLUENE	165	.33212	.20288	38.91		
2,6-DINITROTOLUENE	165	.37112	.24309	34.50		
DIETHYLPHTHALATE	149	1.58664	.95905	39.55		
4-CHLOROPHENYL-PHENYLETHER	204	.70414	.59652	15.28		
N-NITROSODIPHENYLAMINE	169	.51771	.48670	5.99	*	
4-BROMOPHENYL-PHENYL ETHER	248	.33482	.40433	20.76		
HEXACHLOROBENZENE	284	.43791	.47808	9.17		

R - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

Continuing Calibration Check
HSL Compounds

Case No: 4-5157,5162

Calibration Date: 05/20/87

C :ractor: E & E, INC.

Time: 12:09

Contract No: IL-3140

Laboratory ID: >D2542

Instrument ID: HP-5970D

Initial Calibration Date: 10/17/86

Minimum $\overline{RF}$ for SPCC is .05

Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC
PHENANTHRENE	178	1.01505	.94256	7.14		
ANTHRACENE	178	.99874	.88241	11.65		
DI-N-BUTYLPHTHALATE	149	.97124	.80889	16.72		
FLUORANTHENE	202	.62146	.76657	23.35	*	
BENZIDINE		.65247	.18778	71.22		
PYRENE	202	2.68642	1.18524	55.88		
TERPHENYL-D14 (SURR)	244	1.48172	.82507	44.32		
BUTYLBENZYLPHTHALATE	149	.68277	.37713	44.77		
3,3'DICHLOROBENZIDINE	252	.13263	.20472	54.35		
BENZO(A)ANTHRACENE	228	.91524	.93166	1.79		
BIS(2-ETHYLHEXYL)PHTHALATE	149	.81579	.53680	34.20		
CHRYSENE	228	1.19137	.92550	22.32		
DI-N-OCTYL PHTHALATE	149	1.64173	1.00994	38.48	*	
BENZO(B)FLUORANTHENE	252	1.13479	1.11842	1.44		
BENZO(K)FLUORANTHENE	252	1.55063	1.21116	21.89		
BENZO(A)PYRENE	252	1.10877	.99665	10.11	*	
INDENO(1,2,3-CD)PYRENE	276	.99032	1.15281	16.41		
DIBENZ(A,H)ANTHRACENE	278	.81159	1.09377	34.77		
BENZO(G,H,I)PERYLENE	276	1.10886	1.23613	11.48		

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

PESTICIDE STANDARDS

1. FORM VIII
2. FORM IX
3. FORM X

481095

Pesticide Evaluation Standards Summary
(Page 2)
Evaluation of Retention Time Shift for Dibutyl Chlorendate
Report all standards, blanks and samples

SMO Sample No	Lab ID	Time of Analysis	Percent Diff	SMO Sample No	Lab ID	Time of Analysis	Percent Diff
EVAL A	RUN 1	13:59	—				
EVAL B	2	14:38	0.07				
EVAL C	3	15:16	0.14				
IND A	4	17:29	Ø				
IND B	5	18:09	Ø				
TOXAPHENE	6	18:56	0.04				
CHLORDANE	7	19:36	0.07				
PCB 1016/26	8	20:16	0.84				
PCB 1221	9	20:55	0.21				
PCB 1232	10	21:34	0.21				
PCB 1242	11	22:13	0.21				
PCB 1248	12	22:52	0.35				
PCB 1254	13	23:31	0.28				
BLANK	14	0:10	0.46				
2194	15	0:48	0.04				
2195	16	1:27	0.39				
2196	17	2:05	0.53				
2197	18	2:44	DL				
EVAL B	19	3:23	0.56				
2198	20	4:01	0.53				
2198 MS	21	4:39	0.56				
2198 MSD	22	5:18	0.56				
2199	23	5:56	DL				
2200	24	6:35	0.39				
IND A	25	7:13	0.46				
2201	26	7:52	0.60				
2202	27	8:31	0.39				
EVAL B	28	9:09	0.07				
IND A	29	9:48	0.14				
IND B	30	10:27	0.14				

DL - DILUTED OUT

Pesticide Evaluation Standards Summary

11-5157 (Page 1)

Case No: 11-5162 Region: IL-3140

Contract No: IL-3140

Date of Analysis 4-21-87
4-22-87

Laboratory: Ecology and Environment, Inc.

GC Column: OV-1

Instrument ID: Varian 6000 GC #2

Evaluation Check for Linearity

Laboratory ID	Run 1	Run 2	Run 3	
Pesticide	Calibration Factor Eval. Mix A	Calibration Factor Eval. Mix B	Calibration Factor Eval. Mix C	% RSD (≤10%)
Aldrin	668	648	643	2.0
Endrin	496	475	466	3.2
4,4'- DDT(1)	325	338	364	5.8
Dibutyl Chlorendate	509	491	500	1.8

Evaluation Check for 4,4'- DDT/Endrin Breakdown

(percent breakdown expressed as total degradation)

	Laboratory I.D.	Time of Analysis	Endrin	4,4'- DDT	Combined(2)
Eval Mix B 72 Hour					
Eval Mix B	Run 2	11:02	NA	NA	8.9
Eval Mix B	Run 19	23:04	NA	NA	8.0
Eval Mix B					
Eval Mix B					
Eval Mix B					
Eval Mix B					
Eval Mix B					
Eval Mix B					
Eval Mix B					
Eval Mix B					
Eval Mix B					

(1) See Exhibit E, Section 7 5 4
(2) See Exhibit E, Section 7 3 1 2 2 1

Pesticide Evaluation Standards Summary
(Page 2)
Evaluation of Retention Time Shift for Dibutyl Chlorendate
Report all standards, blanks and samples

SMO Sample No	Lab ID	Time of Analysis	Percent Diff	SMO Sample No	Lab ID	Time of Analysis	Percent Diff
EVAL A	RUN#1	10:23	—				
EVAL B	2	11:02	0.07				
EVAL C	3	11:41	0.14				
IND A	4	12:37	0.14				
IND B	5	13:16	0.07				
TOXAPHENE	6	14:23	0.14				
CHLORDANE	7	15:02	0.07				
PCB 1016/1260	8	15:41	0.60				
PCB 1221	9	16:20	0.04				
PCB 1232	10	17:00	0.18				
PCB 1242	11	17:39	0.11				
PCB 1248	12	18:18	0.07				
PCB 1254	13	18:57	0.11				
BLANK	14	19:51	0.04				
2210	15	20:29	DL				
2211	16	21:09	DL				
2213	17	21:47	0.11				
2214	18	22:26	0.14				
EVAL B	19	23:04	0.04				
2215	20	23:43	0.18				
2217	21	0:22	DL				
2219	22	1:01	0.14				
2220	23	1:39	0.25				
2220R1	24	2:18	0.25				
2221	25	2:57	0.25				
IND A	26	3:35	0.18				
IND B	27	4:14	0.14				

DL=DILUTED OUT

Pesticide Evaluation Standards Summary
(Page 1)

Case No: 11-5157 / 11-5162 Region: _____
Contract No: TL-3140
Date of Analysis: 4-22-87

Laboratory: Ecology and Environment, Inc.
GC Column: SP2250 / SP2401
Instrument ID: Varian 6000 GC #2

Evaluation Check for Linearity

Laboratory ID	Run 1	Run 2	Run 3	
Pesticide	Calibration Factor Eval. Mix A	Calibration Factor Eval. Mix B	Calibration Factor Eval. Mix C	% RSD (≤10%)
Aldrin	899	900	956	3.6
Endrin	549	525	525	2.6
4,4'- DDT(1)	488	518	579	8.8
Dibutyl Chlorendate	814	665	693	11

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

	Laboratory I.D.	Time of Analysis	Endrin	4,4'- DDT	Combined(2)
Eval Mix B 72 Hour					
Eval Mix B	Run 2	18:50	6.7	7.8	NA
Eval Mix B					
Eval Mix B					
Eval Mix B					
Eval Mix B					
Eval Mix B					
Eval Mix B					
Eval Mix B					
Eval Mix B					
Eval Mix B					
Eval Mix B					

(1) See Exhibit E, Section 7 5 4
(2) See Exhibit E, Section 7 3 1.2.2.1

Pesticide Evaluation Standards Summary
(Page 2)
Evaluation of Retention Time Shift for Dibutyl Chlorendate
Report all standards, blanks and samples

SMO Sample No	Lab ID	Time of Analysis	Percent Diff	SMO Sample No	Lab ID	Time of Analysis	Percent Diff
EVAL A	RUN 1	18:13	—				
EVAL B	2	18:50	0.13				
EVAL C	3	19:29	0.09				
IND A	4	20:02	0.17				
IND B	5	20:36	0.39				
BLANK	6	21:10	0.21				
2211	7	21:40	DL				
2217	8	22:12	DL				
IND A	9	22:46	0.30				
IND B	10	23:19	0.09				

DL = DILUTED OUT.

PESTICIDE/PCB STANDARDS SUMMARY

Case No. U-5151, 5162 Laboratory ECOLOGY AND ENVIRONMENT, INC.

Contract No. IL-3140 GC Column OV-1 GC Instrument ID VARIAN 6000 GC#2

	DATE OF ANALYSIS 4-13-87 TIME OF ANALYSIS 17:29 – 23:31 LABORATORY ID RUN 4 → RUN 13				DATE OF ANALYSIS 4-14-87 TIME OF ANALYSIS 7:13 LABORATORY ID RUN 25			
COMPOUND	RT	RETENTION TIME WINDOW	CALIBRATION FACTOR	CONF. OR QUANT.	RT	CALIBRATION FACTOR	CONF. OR QUANT.	PERCENT DIFF.**
alpha-BHC	2.22	2.19-2.25	763	QUANT.				
beta-BHC	2.38	2.35-2.41	285					
delta-BHC	2.67	2.64-2.70	650					
gamma-BHC	2.59	2.56-2.62	674		2.60	696		3.3
Heptachlor	4.10	4.06-4.14	574		4.11	587		2.3
Aldrin	5.04	5.00-5.08	689		5.06	686		0.44
Heptachlor Epoxide	6.11	6.06-6.16	655		6.14	645		1.5
Endosulfan I	7.57	7.51-7.63	632		7.60	624		1.3
Dieldrin	8.81	8.74-8.88	666		8.85	664		0.30
4,4'-DDE	8.70	8.63-8.77	627					
Endrin	9.82	9.74-9.90	534					
Endosulfan II	10.03	9.94-10.12	623		10.06	601		3.5
4,4'-DDD	10.92	10.83-11.01	559					
Endosulfan Sulfate	12.81	12.71-12.91	407					
4,4'-DDT	14.23	14.13-14.33	326		14.29	321		1.5
Methoxychlor	20.87	20.73-21.01	201		20.98	209		4.0
Endrin Ketone	16.40	16.26-16.54	651					
Tech. Chlordane	6.98	6.89-7.07	90					
alpha-Chlordane*								
gamma-Chlordane*								
Toxaphene	14.25	14.15-14.35	69	QUANT.				
Aroclor - 1016	3.59	3.54-3.64	33.8					
Aroclor - 1221	2.24	2.21-2.27	12.3					
Aroclor - 1232	3.58	3.53-3.63	20					
Aroclor - 1242	3.58	3.53-3.63	23					
Aroclor - 1248	6.22	6.16-6.28	43.8					
Aroclor - 1254	10.68	10.62-10.74	39.3					
Aroclor - 1260	23.31	22.99-23.63	74.8					

7/85

* SEE EXHIBIT E, PART 7

** CONF. = CONFIRMATION (<20% DIFFERENCE)
QUANT. = QUANTITATION (<15% DIFFERENCE)

FORM IX

PESTICIDE/PCB STANDARDS SUMMARY

Case No. U-5157,5162 Laboratory Ecology and Environment, Inc.
Contract No. IL-3140 GC Column OV-1 GC Instrument ID Varian 6000 GC#2

	DATE OF ANALYSIS 4-13-87 TIME OF ANALYSIS 17:29 – 23:31 LABORATORY ID Run 4 → Run 13				DATE OF ANALYSIS 4-14-87 TIME OF ANALYSIS 9:48 10:27 LABORATORY ID Run 29 Run 30			
COMPOUND.	RT	RETENTION TIME WINDOW	CALIBRATION FACTOR	CONF. OR QUANT.	RT	CALIBRATION FACTOR	CONF. OR QUANT.	PERCENT DIFF. **
alpha-BHC	2.22	2.19-2.25	763	QUANT.	2.22	768		0.66
beta-BHC	2.38	2.35-2.41	285		2.38	276		3.2
delta-BHC	2.67	2.64-2.70	650		2.67	655		0.77
gamma-BHC	2.59	2.56-2.62	674		2.59	691		2.5
Heptachlor	4.10	4.06-4.14	574		4.09	603		5.1
Aldrin	5.04	5.00-5.08	689		5.04	695		0.87
Heptachlor Epoxide	6.11	6.06-6.16	655		6.11	660		0.76
Endosulfan I	7.57	7.51-7.63	632		7.56	636		0.63
Dieldrin	8.81	8.74-8.88	666		8.80	673		1.1
4,4'-DDE	8.70	8.63-8.77	627		8.69	616		1.8
Endrin	9.82	9.74-9.90	534		9.81	545		2.1
Endosulfan II	10.03	9.94-10.12	623		10.01	613		1.6
4,4'-DDD	10.92	10.83-11.01	559		10.91	547		2.1
Endosulfan Sulfate	12.81	12.71-12.91	407		12.79	408		0.25
4,4'-DDT	14.23	14.13-14.33	326		14.21	336		3.1
Methoxychlor	20.87	20.73-21.01	201		20.84	214		5.0
Endrin Ketone	16.40	16.26-16.54	651		16.39	644		1.1
Tech. Chlordane	6.98	6.89-7.07	90					
alpha-Chlordane*								
gamma-Chlordane*								
Toxaphene	14.25	14.15-14.35	69	QUANT.				
Aroclor - 1016	3.59	3.54-3.64	33.8					
Aroclor - 1221	2.24	2.21-2.27	12.3					
Aroclor - 1232	3.58	3.53-3.63	20					
Aroclor - 1242	3.58	3.53-3.63	23					
Aroclor - 1248	6.22	6.16-6.28	43.8					
Aroclor - 1254	10.68	10.62-10.74	39.3					
Aroclor - 1260	23.31	22.99-23.63	74.8					

7/85

* SEE EXHIBIT E, PART 7

** CONF. = CONFIRMATION (<20% DIFFERENCE)
QUANT. = QUANTITATION (<15% DIFFERENCE)

FORM IX

PESTICIDE/PCB STANDARDS SUMMARY

Case No. U-5157, 5162 Laboratory ECOLOGY AND ENVIRONMENT, INC.

Contract No. IL-3140 GC Column OV-1 GC Instrument ID VARIAN 6000 GC#2

	DATE OF ANALYSIS 4-21-87 TIME OF ANALYSIS 12:37 → 18:57 LABORATORY ID RUN 4 → RUN 13				DATE OF ANALYSIS 4-22-87 TIME OF ANALYSIS 3:35 - 4:14 LABORATORY ID RUN 26 RUN 27			
COMPOUND	RT	RETENTION TIME WINDOW	CALIBRATION FACTOR	CONF. OR QUANT.	RT	CALIBRATION FACTOR	CONF. OR QUANT.	PERCENT DIFF. **
alpha-BHC	2.20	2.17-2.23	722	QUANT.	2.20	782		8.3
beta-BHC	2.34	2.31-2.37	267		2.34	291		9.0
delta-BHC	2.64	2.61-2.67	626		2.63	680		8.6
gamma-BHC	2.56	2.53-2.59	664		2.56	693		4.4
Heptachlor	4.06	4.02-4.10	573		4.06	587		2.4
Aldrin	5.00	4.96-5.04	677		4.99	689		1.8
Heptachlor Epoxide	6.05	6.00-6.10	642		6.05	648		0.93
Endosulfan I	7.50	7.44-7.56	620		7.50	627		1.1
Dieldrin	8.73	8.66-8.80	655		8.73	663		1.2
4,4'-DDE	8.62	8.55-8.69	584		8.62	624		6.8
Endrin	9.72	9.64-9.80	507		9.72	543		7.1
Endosulfan II	9.93	9.84-10.02	604		9.92	593		1.8
4,4'-DDD	10.81	10.72-10.90	524		10.81	554		5.7
Endosulfan Sulfate	12.67	12.57-12.77	375		12.68	410		9.3
4,4'-DDT	14.10	14.00-14.20	356		14:09	357		0.28
Methoxychlor	20.69	20.55-20.83	208		20.68	228		9.6
Endrin Ketone	16.23	16.09-16.37	613		16:23	669		9.1
Tech. Chlordane	6.90	6.81-6.99	85.3					
alpha-Chlordane*								
gamma-Chlordane*								
Toxaphene	14.10	14.00-14.20	71.0	QUANT.				
Aroclor - 1016	3.54	3.49-3.59	31.5					
Aroclor - 1221	2.22	2.19-2.25	12.6					
Aroclor - 1232	3.54	3.49-3.59	20.0					
Aroclor - 1242	3.54	3.49-3.59	22.1					
Aroclor - 1248	6.16	6.10-6.22	41.3					
Aroclor - 1254	14.55	14.49-14.61	39.3					
Aroclor - 1260	23.08	22.76-23.40	80.0					

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* SEE EXHIBIT E, PART 7

** CONF. = CONFIRMATION (<20% DIFFERENCE)
QUANT. = QUANTITATION (<15% DIFFERENCE)

FORM IX

PESTICIDE/PCB STANDARDS SUMMARY

Case No. 11-5157, 5162 Laboratory ECOLOGY AND ENVIRONMENT, INC.

Contract No. IL-3140 GC Column SP 2250/SP 2401 GC Instrument ID VARIAN 600 GC#2

	DATE OF ANALYSIS 4-22-87				DATE OF ANALYSIS 4-22-87			
	TIME OF ANALYSIS 20:02		20:36		TIME OF ANALYSIS 22:46		23:19	
	LABORATORY ID RUN 4		RUN 5		LABORATORY ID RUN 9		RUN 10	
COMPOUND	RT	RETENTION TIME WINDOW	CALIBRATION FACTOR	CONF. OR QUANT.	RT	CALIBRATION FACTOR	CONF. OR QUANT.	PERCENT DIFF. **
alpha-BHC	1.75	1.72-1.78	1220	CONF.	1.74	1209		0.90
beta-BHC	2.51	2.48-2.54	401		2.50	398		0.75
delta-BHC	2.93	2.90-2.96	845		2.92	841		0.47
gamma-BHC	2.20	2.17-2.23	1020		2.21	997		2.3
Heptachlor	2.71	2.67-2.75	896		2.72	885		1.2
Aldrin	3.28	3.24-3.32	942		3.29	926		1.7
Heptachlor Epoxide	4.90	4.85-4.95	851		4.90	841		1.2
Endosulfan I	6.17	6.11-6.23	808		6.17	810		0.25
Dieldrin	7.53	7.46-7.60	848		7.54	844		0.47
4,4'-DDE	7.13	7.06-7.20	793		7.12	793		0
Endrin	9.16	9.08-9.24	537		9.14	559		4.1
Endosulfan II	11.10	11.00-11.20	779		11.09	784		0.64
4,4'-DDD	10.90	10.80-11.00	659		10.88	662		0.46
Endosulfan Sulfate	17.47	17.32-17.62	407		17.42	392		3.7
4,4'-DDT	13.15	13.00-13.30	557		13.15	568		2.0
Methoxychlor	25.30	25.06-25.54	239		25.29	243		1.7
Endrin Ketone	23.41	23.19-23.63	662		23.34	662		0
Tech. Chlordane								
alpha-Chlordane*								
gamma-Chlordane*								
Toxaphene								
Aroclor - 1016								
Aroclor - 1221								
Aroclor - 1232								
Aroclor - 1242								
Aroclor - 1248								
Aroclor - 1254								
Aroclor - 1260								

7/85

* SEE EXHIBIT E, PART 7

** CONF. = CONFIRMATION (<20% DIFFERENCE)
QUANT. = QUANTITATION (<15% DIFFERENCE)

FORM IX

Pesticide/PCB Identification

Case No. U-5157, 5162

Laboratory ECOLOGY + ENVIRONMENT, INC.

Contract No. IL-3140

SAMPLE ID	PRIMARY COLUMN	PESTICIDE/ PCB	RT OF TENTATIVE ID	RT WINDOW OF APPROPRIATE STANDARD	CONFIRMATION COLUMN	RT ON CONFIRMATORY COLUMN	RT WINDOW OF APPROPRIATE STANDARD	GC/MS CONFIRMED (Y or N)
2211	OV-1	A-BHC	2.19	2.17 - 2.23	SP2250/SP2401	1.75	1.72 - 1.78	Y

4/84
505095

FORM X

GC/MS TUNING

1. DFTPP FORM V

2. BFB FORM V

GC/MS TUNING AND MASS CALIBRATION
Decafluorotriphenylphosphine (DFTPP)

Case No. 4-5157, 5162 Contractor Ecology & Environment Inc. Contract No. IL-3140

Instrument ID HP5970D Date 6-19-86 Time 1436

Lab ID D0034 Data Release Authorized By: C Hoytowicz

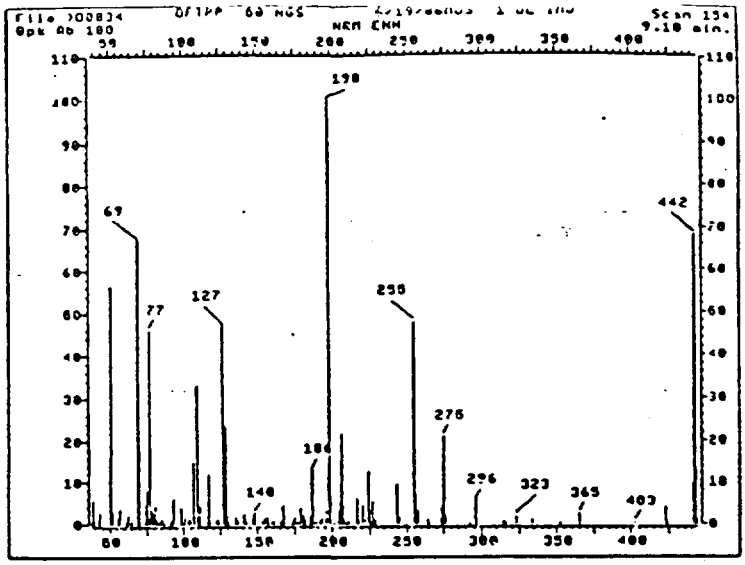
m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	56.4
68	less than 2.0% of mass 69	0 (0)[1]
69	mass 69 relative abundance	67.0
70	less than 2.0% of mass 69	0.21 (0.31)[1]
127	40.0 - 60.0% of mass 198	46.9
197	less than 1.0% of mass 198	0
198	base peak, 100% relative abundance	100
199	5.0 - 9.0% of mass 198	6.93
275	10.0 - 30.0% of mass 198	21.0
365	greater than 1.00% of mass 198	2.47
441	present, but less than mass 443	9.97
442	greater than 40.0% of mass 198	68.1
443	17.0 - 23.0% of mass 442	13.0 (19.1)[2]

THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS.

[1] Value in parenthesis is % mass 69
[2] Value in parenthesis is % mass 442

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS
	AP STD - 20 ug/L D0036	6-19-86	1632
	50 ug/L D0037		1736
	80 ug/L D0038		1836
	120 ug/L D0039		1928
	160 ug/L D0040		2024

FORM V 7/85



>00034 DFTPP 50 NGS 6/19/86MDS 1 UL INJ
154 NRM ENH

File: >D0034 Scan #: 154 Retn. time: 9.10

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.95	.85	88.00	.15	140.90	2.50	187.05	3.60	244.05	9.39
38.95	5.95	91.00	.79	142.00	.76	188.05	.18	245.05	1.11
39.95	1.12	92.00	.77	143.00	.54	188.95	.65	245.95	1.70
42.95	.73	93.00	6.11	146.10	.22	190.95	.47	248.95	.22
43.95	2.79	96.90	.15	147.00	1.32	191.95	.88	254.95	47.84
50.05	16.29	98.00	4.02	148.00	2.71	193.05	1.32	255.95	7.03
51.05	56.44	99.00	3.31	149.00	.51	195.95	3.12	257.05	.55
51.95	2.66	100.00	.23	151.00	.22	197.95	100.00	257.95	2.94
55.05	.23	101.00	1.74	153.00	.73	198.95	6.93	264.95	.97
55.95	1.77	103.00	.67	154.00	.53	200.05	.26	272.95	1.38
56.95	3.87	104.00	1.30	155.00	1.49	201.35	.40	273.95	3.92
61.05	.42	104.90	1.19	156.00	1.90	203.05	.68	274.95	21.00
61.90	.64	107.00	14.80	157.80	.22	203.95	3.15	275.95	2.42
63.00	2.24	108.00	2.15	159.00	.38	205.05	5.24	276.95	1.62
64.10	.20	110.00	32.99	160.00	.68	206.05	21.54	292.75	.38
65.00	.66	111.00	4.57	160.90	.87	207.05	4.61	295.95	5.75
69.00	67.05	111.90	.29	164.90	.82	208.05	1.11	296.85	.76
70.00	.21	116.00	.83	166.00	.71	208.75	.12	302.85	.58
73.10	.90	117.00	11.76	167.00	4.52	210.05	.17	314.90	.61
74.00	4.82	118.00	.87	168.00	2.21	210.95	.79	314.00	.38
[illegible].00	8.23	122.00	.85	171.80	.17	216.95	5.98	323.10	1.91
76.10	1.92	123.00	1.52	172.90	.45	217.95	.60	334.00	.98
77.00	46.20	123.90	.70	174.00	1.01	220.95	4.54	352.00	.46
78.10	2.96	124.80	.57	175.00	1.81	222.95	1.57	353.00	.49
79.00	4.13	127.00	46.89	176.00	.31	224.05	12.35	365.00	2.47
80.00	2.58	128.00	3.90	177.00	.77	225.05	3.21	402.90	.57
81.00	4.32	129.00	23.30	177.90	.16	225.95	.20	423.00	3.98
81.90	1.06	129.90	2.11	178.90	3.64	226.95	5.42	423.80	.60
83.10	.34	130.80	.38	180.00	2.16	227.95	.79	441.05	9.97
84.00	.38	134.00	.49	180.90	.97	228.95	.96	442.05	68.07
85.00	1.30	135.00	1.64	184.05	.18	233.85	.14	443.05	13.00
86.00	1.03	136.10	.61	185.05	2.02	237.05	.18	444.05	1.14
86.90	.40	137.10	.66	186.05	13.07	242.05	.54		

MS data file header from : >D0034

Sample: DFTPP 50 NGS Operator: MANAGER MS 6/19/86 14:36
Misc : 6/19/86MDS 1 UL INJ
Sys. #: 1 MS model: 70 SW/HW rev.: CA ALS # :***
Method file: DFTPPD Tuning file: MTDON3 No. of extra records: 1
Source temp.: 0 Analyzer temp.: 275 Transfer line temp. : 20

Chromatographic temperatures : 120. 280. 0. 0. 0.
Chromatographic times, min. : 0.0 10.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 10.0 0.0 0.0 0.0 0.0

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GC/MS TUNING AND MASS CALIBRATION
Decafluorotriphenylphosphine (DFTPP)

Case No. 4-5157, 5162 Contractor Ecology & Environment Inc. Contract No. 68-01-7158

Instrument ID HP5970B Date 7-30-86 Time 1051

Lab ID B2316 Data Release Authorized By: [illegible]

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	52.4
68	less than 2.0% of mass 69	0 (0)[1]
69	mass 69 relative abundance	63.5
70	less than 2.0% of mass 69	0 (0)[1]
127	40.0 - 60.0% of mass 198	42.6
197	less than 1.0% of mass 198	0
198	base peak, 100% relative abundance	100
199	5.0 - 9.0% of mass 198	6.54
275	10.0 - 30.0% of mass 198	22.1
365	greater than 1.00% of mass 198	2.32
441	present, but less than mass 443	10.8
442	greater than 40.0% of mass 198	76.7
443	17.0 - 23.0% of mass 442	14.5 (18.9)[2]

THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS.

[1] Value in parenthesis is % mass 69.
[2] Value in parenthesis is % mass 442

SAMPLE ID	LAB ID		DATE OF ANALYSIS	TIME OF ANALYSIS
	BNSTD - 50 ng	B2317	7-30-86	1108
	20 ng	B2318		1207
	80 ng	B2320		1414
	120 ng	B2321		1505
	160 ng	B2322		1557
	AP STD - 20 ng	B2323		1657
	50 ng	B2324		1748
	80 ng	B2325		1839
	120 ng	B2326		1931
	160 ng	B2327		2022

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FORM V

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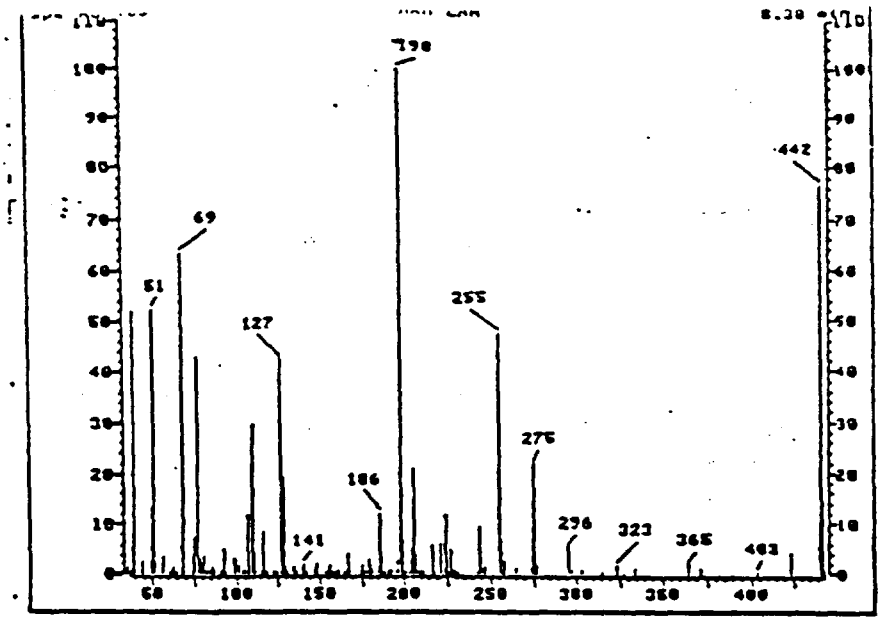

>82316 DFTPP 50NGS 7-30-86CS 1UL INJ
117 NRM ENH

File: >82316 Scan #: 117 Retn. time: 8.38

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.05	1.46	91.10	.41	137.10	.39	191.05	.20	244.05	9.41
38.15	.49	92.00	.52	141.00	2.08	191.95	.73	245.05	1.02
39.15	5.09	93.00	4.94	142.10	.36	192.95	.62	246.05	1.49
40.05	51.88	94.00	.24	143.00	.28	196.05	2.98	255.05	47.58
44.05	2.55	98.00	3.16	147.10	.97	197.95	100.00	256.05	6.77
49.05	2.49	99.00	2.89	148.00	1.99	198.95	6.54	257.00	.27
50.05	13.27	101.00	1.69	153.00	.44	199.95	.28	258.00	2.64
51.15	52.38	103.00	.35	154.00	.36	201.35	.26	265.00	.91
52.10	2.35	104.00	.66	155.05	.90	202.95	.36	273.00	1.41
56.00	.87	104.90	.71	156.05	1.52	204.05	2.91	274.00	3.64
57.00	3.48	107.00	12.01	158.05	.26	205.05	4.95	275.00	22.14
61.10	.36	108.00	1.77	159.95	.35	206.05	20.98	276.00	2.79
62.10	.35	110.00	29.62	161.05	.58	207.05	4.00	276.90	1.69
63.00	1.39	111.00	3.98	164.95	.45	207.95	.42	296.00	5.45
65.10	.47	112.00	.28	166.05	.39	210.25	.26	297.10	.75
69.00	63.51	116.10	.39	167.05	4.02	211.05	.51	303.10	.57
73.10	.22	117.00	8.26	168.05	1.77	216.95	5.83	315.00	.48
74.10	3.84	118.10	.34	174.05	.73	217.95	.43	323.00	1.78
75.00	7.43	122.10	.46	174.95	1.54	221.05	6.08	326.90	.16
77.10	42.88	123.10	.70	176.05	.35	223.05	1.08	334.00	.96
78.10	2.86	124.00	.34	176.95	.78	224.05	11.72	364.95	2.32
79.10	3.13	125.00	.25	178.95	3.03	225.05	2.92	371.95	.89
80.00	2.00	127.00	42.62	180.05	1.56	226.15	.18	402.95	.53
81.00	3.61	128.10	2.95	181.05	.83	227.05	4.81	423.05	4.16
82.00	.44	129.00	19.25	185.05	1.25	227.95	.54	423.95	.76
83.00	.58	129.90	1.48	186.05	11.94	229.05	.84	441.05	10.76
84.90	.58	131.00	.18	187.05	3.14	230.95	.21	442.05	76.66
86.00	1.30	135.10	1.37	188.05	.18	242.05	.34	443.05	14.52
87.00	.26	136.00	.27	188.95	.45	243.05	.32	444.05	1.19

MS data file header from : >82316

Sample: DFTPP 50NGS Operator: USER8 MS 7/30/86 10:51
Misc : 7-30-86CS 1UL INJ
Sys. #: 2 MS model: 70 SW/HW rev.: CA ALS # : 0
Method file: DFTPP8 Tuning file: MTBON No. of extra records: 1
Source temp.: 0 Analyzer temp.: 275 Transfer line temp. : 0

Chromatographic temperatures : 120. 280. 0. 0. 0.
Chromatographic times, min. : 0.0 10.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 10.0 0.0 0.0 0.0 0.0

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GC/MS TUNING AND MASS CALIBRATION
Decafluorotriphenylphosphine (DFTPP)

Case No. 4-5157, 5162 Contractor Ecology & Environment Inc. Contract No. IL-3140

Instrument ID HP5970D Date 10-17-86 Time 1108

Lab ID D 0960 Data Release Authorized By: C Stoytowicz

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	58.2
68	less than 2.0% of mass 69	0 (0)[1]
69	mass 69 relative abundance	68.4
70	less than 2.0% of mass 69	0 (0)[1]
127	40.0 - 60.0% of mass 198	42.6
197	less than 1.0% of mass 198	0
198	base peak, 100% relative abundance	100
199	5.0 - 9.0% of mass 198	6.46
275	10.0 - 30.0% of mass 198	21.2
365	greater than 1.00% of mass 198	2.03
441	present, but less than mass 443	8.55
442	greater than 40.0% of mass 198	50.1
443	17.0 - 23.0% of mass 442	9.72 (19.4)[2]

THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS.

[1] Value in parenthesis is % mass 69
[2] Value in parenthesis is % mass 442

SAMPLE ID	LAB ID		DATE OF ANALYSIS	TIME OF ANALYSIS
	BN STD - 20 µg/L	D0965	10-17-86	1554
	50 µg/L	D0966		1652
	80 µg/L	D0967		1747
	120 µg/L	D0968		1839
	160 µg/L	D0969		1931

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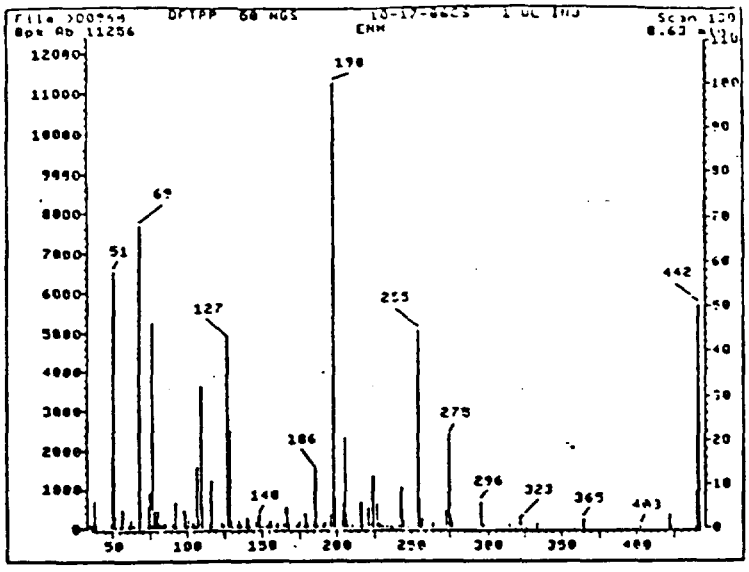

>D0960 DFTPP 50 NGS 10-17-86CS 1 UL INJ
130 NRM ENH

File: >D0960 Scan #: 130 Retn. time: 8.63

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.05	1.16	86.05	1.06	141.00	2.41	192.05	.93	248.80	.36
37.05	.11	91.00	.97	142.10	.82	197.95	1.34	253.20	.38
38.05	1.42	91.90	.80	142.70	.07	196.05	2.84	255.00	44.25
39.05	6.27	93.00	5.85	144.15	.43	197.95	100.00	254.00	6.54
39.95	.92	93.90	.45	146.95	1.26	198.95	6.46	256.90	.49
40.15	.32	98.00	4.29	147.95	2.82	202.55	.07	250.00	2.44
49.05	1.18	99.00	3.39	149.05	.55	204.05	3.39	264.95	.97
50.00	15.98	100.00	.44	151.35	.45	205.10	5.41	273.15	1.45
51.00	58.17	101.00	1.91	152.95	.83	206.00	20.24	273.95	5.85
52.10	2.54	103.00	.66	153.95	.54	207.10	3.06	275.05	21.18
52.80	.06	104.10	1.26	155.05	1.26	208.00	.73	276.05	2.69
55.10	.28	105.10	1.12	156.05	1.66	211.00	.84	276.95	1.72
56.10	1.70	105.90	.12	156.75	.32	216.20	.17	296.00	5.89
57.00	4.39	107.10	13.81	159.95	.92	217.00	5.97	297.10	.81
61.00	.82	107.95	1.96	161.05	1.05	218.00	.65	314.95	.60
62.10	.81	110.05	32.14	165.05	.94	221.10	4.61	315.15	.12
63.10	2.02	111.05	4.47	167.00	4.55	221.80	.19	323.00	1.62
65.10	.76	116.05	.75	168.00	2.08	223.00	1.50	326.70	.38
68.95	68.36	117.05	10.78	168.90	.45	224.05	11.74	334.10	.93
73.05	.54	122.95	1.38	173.00	.60	225.05	2.51	365.00	2.03
74.05	4.85	124.05	.68	174.00	.93	227.05	5.44	401.90	.38
74.95	8.24	125.05	.60	175.00	1.61	228.05	.62	403.10	.40
76.05	.59	127.00	42.62	177.80	.11	229.05	.93	420.75	.36
77.05	46.36	128.10	3.57	178.00	.40	230.95	.38	421.05	.08
78.15	3.18	129.00	21.86	179.00	3.29	234.05	.32	422.95	3.01
79.05	3.88	130.00	1.67	180.10	1.87	236.75	.38	423.95	.58
80.05	2.68	131.00	.42	181.10	1.09	241.95	.67	439.40	.20
81.05	3.98	134.10	.63	185.05	1.78	242.25	.11	439.80	.07
82.05	.91	135.10	1.72	186.05	13.11	242.90	.15	441.00	8.55
83.05	.85	136.00	.74	187.05	3.55	244.00	9.07	442.00	50.14
84.05	.53	136.90	.68	188.05	.36	245.00	1.13	443.00	9.72
84.95	1.02	140.00	:29	191.15	.49	246.00	1.80	444.10	.94

MS data file header from : >D0960

Sample: DFTPP 50 NGS Operator: USER6 MS 10/17/86 11:08
Misc : 10-17-86CS 1 UL INJ BTL# 1
Sys. #: 1 MS model: 70 SW/HW rev.: CA ALS # : 0
Method file: DFTPPD Tuning file: MTDON2 No. of extra records: 1
Source temp.: 0 Analyzer temp.: 275 Transfer line temp. : 20

Chromatographic temperatures : 120. 280. 0. 0. 0.
Chromatographic times, min. : 0.0 10.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 10.0 0.0 0.0 0.0 0.0

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Decafluorotriphenylphosphine (DFTPP)

Case No. H-5157, 5162 Contractor Ecology & Environment Inc. Contract No. IL-3140

Instrument ID HP5970D Date 4-21-87 Time 941

Lab ID D2305 Data Release Authorized By: C Stoltowski

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	56.4
68	less than 2.0% of mass 69	0 (0)[1]
69	mass 69 relative abundance	64.4
70	less than 2.0% of mass 69	0 (0)[1]
127	40.0 - 60.0% of mass 198	40.4
197	less than 1.0% of mass 198	0
198	base peak, 100% relative abundance	100
199	5.0 - 9.0% of mass 198	6.61
275	10.0 - 30.0% of mass 198	21.0
365	greater than 1.00% of mass 198	2.34
441	present, but less than mass 443	8.54
442	greater than 40.0% of mass 198	55.8
443	17.0 - 23.0% of mass 442	10.4 (18.6)[2]

THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS.

[1] Value in parenthesis is % mass 69
[2] Value in parenthesis is % mass 442

SAMPLE ID	LAB ID		DATE OF ANALYSIS	TIME OF ANALYSIS
	BN STD - 50ng	D2306	4-21-87	1008
	AP STD 50ng	D2309		1308
DC-GW-23	2317-BN	D2317		2111

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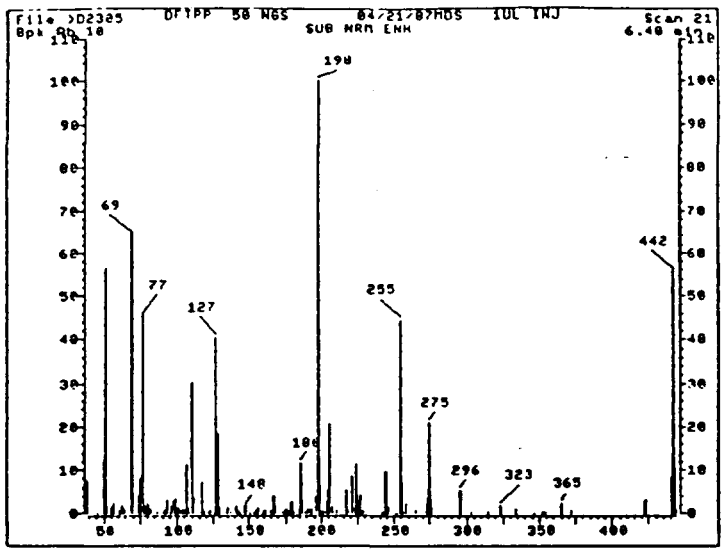


>D2305 DFTPP 50 NGS 04/21/87MDS 1UL INJ
21 SUB NRM ENH

File: >D2305 Scan #: 21 Retn. time: 6.40

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
39.05	7.51	99.00	3.24	143.90	.06	192.15	1.04	246.10	1.73
45.05	.07	100.10	.08	146.85	1.70	193.05	1.14	251.00	.06
50.10	12.34	101.00	1.49	147.05	.21	196.05	4.05	253.00	.06
51.00	56.40	102.50	.06	147.95	1.94	197.95	100.00	255.00	44.33
52.00	2.07	103.00	.67	150.85	.19	198.95	6.61	256.00	6.37
55.10	1.47	104.00	.86	153.05	.42	200.05	.31	257.00	.39
56.10	1.95	104.40	.14	154.05	.49	201.25	.61	258.00	2.43
57.10	2.22	105.00	.95	155.05	1.09	202.75	.26	265.05	.60
61.10	.82	105.80	.09	156.05	1.42	203.95	2.69	273.05	1.26
62.10	.64	107.10	11.18	159.55	.12	205.00	5.08	274.05	3.65
63.10	2.10	107.95	1.28	160.05	.57	206.00	20.45	274.95	21.03
64.00	.29	108.75	.05	161.05	.83	208.10	2.35	276.05	2.81
65.10	1.15	110.05	30.18	165.05	.67	210.40	.67	277.05	1.46
68.95	64.36	110.95	3.58	166.00	.52	210.90	.51	296.00	5.36
74.05	4.15	117.05	7.22	167.00	3.90	217.00	5.10	302.95	.53
75.05	8.12	118.05	.63	168.00	2.08	217.90	.59	315.05	.44
77.05	45.48	118.95	.17	173.80	.51	221.10	8.38	323.00	1.79
78.15	1.94	121.65	.42	175.00	1.19	223.10	1.27	323.80	.17
79.15	1.26	121.95	.24	176.00	.52	224.05	11.30	334.10	.95
80.05	2.20	123.05	.65	177.00	.71	225.05	2.75	345.85	.13
81.05	2.09	125.75	.15	178.00	.14	226.15	.20	351.95	.37
81.95	.75	127.00	40.45	179.00	2.56	226.95	4.32	353.95	.42
82.95	1.06	128.00	2.77	180.00	1.93	227.75	.27	365.00	2.34
87.05	.53	129.00	18.45	180.70	.44	228.15	.15	372.00	.68
89.20	.06	129.90	1.78	184.75	1.00	228.95	.72	421.95	.38
91.10	.87	133.90	.31	186.05	11.65	241.55	.11	423.05	2.95
92.10	.79	135.00	1.24	187.05	2.68	242.15	.46	441.10	8.54
92.90	2.98	137.10	.43	188.85	.54	243.10	.25	442.00	55.79
94.90	.10	141.00	1.68	189.05	.17	244.00	9.64	443.10	10.39
96.10	1.94	142.00	.60	191.05	1.05	245.00	1.21	444.00	.95
98.10	3.12	142.70	.34						

MS data file header from : >D2305

Sample: DFTPP 50 NGS Operator: USER6 MS 4/21/87 9:41
Misc : 04/21/87MDS 1UL INJ BTL# 1
Sys. #: 1 MS model: 70 SW/HW rev.: CA ALS # : 0
Method file: DFTPPD Tuning file: MTOON No. of extra records: 1
Source temp.: 0 Analyzer temp.: 275 Transfer line temp. : 20

Chromatographic temperatures :	150.	280.	0.	0.	0.
Chromatographic times, min. :	0.0	10.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	5.0	0.0	0.0	0.0	0.0

Decafluorotriphenylphosphine (DFTPP)

Case No. U-5157, 5162 Contractor Ecology & Environment Contract No. IL-3140

Instrument ID HP5970D Date 4-22-87 Time 15:30

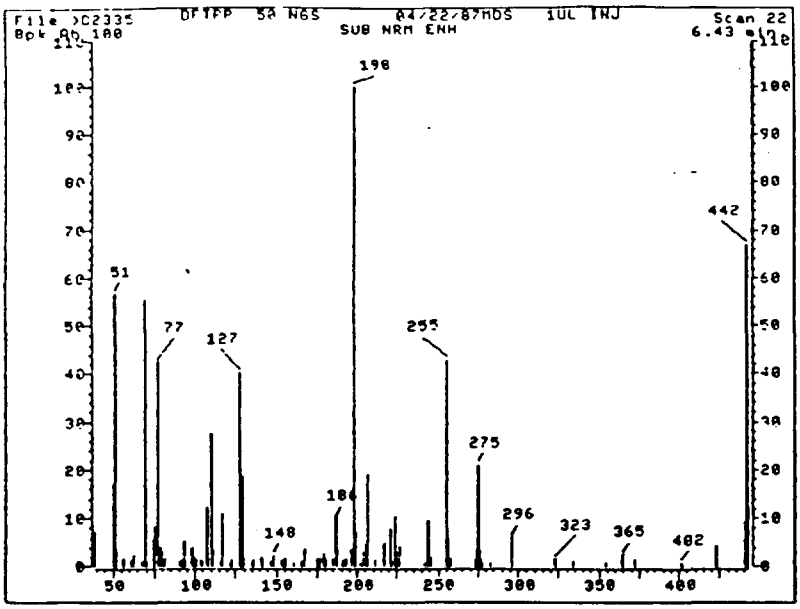
Lab ID D2335 Data Release Authorized By: C Stojowicz

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	56.80
68	less than 2.0% of mass 69	0.00 (0.00)[1]
69	mass 69 relative abundance	55.34
70	less than 2.0% of mass 69	1.08 (1.95)[1]
127	40.0 - 60.0% of mass 198	40.37
197	less than 1.0% of mass 198	0.00
198	base peak, 100% relative abundance	100.00
199	5.0 - 9.0% of mass 198	7.10
275	10.0 - 30.0% of mass 198	21.03
365	greater than 1.00% of mass 198	2.57
441	present, but less than mass 443	9.44
442	greater than 40.0% of mass 198	66.98
443	17.0 - 23.0% of mass 442	12.11 (18.08)[2]

THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS.

[1] Value in parenthesis is % mass 69
[2] Value in parenthesis is % mass 442

SAMPLE ID	LAB ID		DATE OF ANALYSIS	TIME OF ANALYSIS
	Cont Calib Check B/N	D2336	4-22-87	15:53
	Cont Calib Check A/P	D2337	4-22-87	16:51
D2338	Method Blank	D2338	4-22-87	18:10
DC-GW-30	2201	D2341	4-22-87	21:10
DC-GW-30 MS	2201 MS	D2342	4-22-87	22:08
DC-GW-30 MSD	2201 MSD	D2343	4-22-87	23:06
DC-GW-31	2202	D2344	4-23-87	00:04
DC-GW-28	2199	D2345	4-23-87	01:06
DC-GW-25	2196-BN	D2339	4-22-87	1914
DC-GW-27	2198-BN	D2340	4-22-87	2012



>D2335 DFTPP 50 NGS 04/22/87MDS 1UL INJ
22 SUB NRM ENH

File: >D2335 Scan #: 22 Retn. time: 6.43

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
39.05	7.20	93.00	5.32	141.10	2.08	191.05	1.41	256.10	5.84
50.00	17.13	94.20	.93	142.00	1.57	192.05	1.21	257.30	.51
51.00	56.80	98.10	3.88	146.10	.75	192.95	1.67	258.00	1.77
52.00	3.29	99.10	2.44	146.95	1.11	196.05	3.52	272.95	1.44
56.10	1.67	100.00	1.83	148.05	2.34	197.95	100.00	274.05	3.50
57.00	1.83	101.00	1.54	153.05	1.21	198.95	7.10	275.05	21.03
60.90	1.13	104.00	1.41	153.85	.54	201.35	.77	275.95	3.19
61.90	1.21	104.80	.90	155.05	1.62	204.05	2.93	277.05	1.70
63.00	2.31	107.00	12.11	155.95	1.67	205.10	4.63	277.85	.54
67.00	1.03	107.75	1.75	160.75	.67	206.10	18.85	278.15	.67
68.95	55.34	107.95	1.80	166.00	.90	210.80	1.21	282.80	.80
69.85	1.08	110.05	27.56	167.00	3.63	217.00	4.89	296.00	6.07
73.95	5.91	110.95	3.47	167.90	1.80	221.00	7.69	323.00	1.65
75.05	8.25	116.25	1.11	175.00	1.72	222.00	1.16	334.20	1.13
77.05	42.66	117.05	10.85	176.00	1.34	224.05	10.39	354.15	.62
77.85	3.19	122.05	.77	177.00	1.54	224.95	2.91	365.00	2.57
79.05	3.86	123.05	1.49	179.00	2.70	226.95	4.11	371.90	1.47
79.95	2.98	127.00	40.37	180.00	1.88	241.65	.59	402.00	.75
81.05	1.36	128.00	2.62	181.00	1.52	244.00	9.39	423.05	4.11
82.15	1.90	129.00	18.69	184.95	1.83	245.10	1.62	441.10	9.44
90.70	.95	130.10	1.85	186.05	9.95	245.90	2.03	442.00	66.98
91.10	1.13	135.00	.77	187.05	3.73	255.00	42.81	443.10	12.11
91.90	1.44	135.80	1.34	189.85	.67				

MS data file header from : >D2335

Sample: DFTPP 50 NGS Operator: USER6 MS 4/22/87 15:30
Misc : 04/22/87MDS 1UL INJ BTL# 1
Sys. #: 1 MS model: 70 SW/HW rev.: CA ALS # : 0
Method file: DFTPPD Tuning file: MTDUN No. of extra records: 1
Source temp.: 0 Analyzer temp.: 275 Transfer line temp. : 20

Chromatographic temperatures : 150. 280. 0. 0. 0.
Chromatographic times, min. : 0.0 10.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 5.0 0.0 0.0 0.0 0.0

Decafluorotriphenylphosphine (DFTPP)

Case No. U-5157, 5162 Contractor ECOLOGY & ENVIRONMENT INC. Contract No. IL-3140

Instrument ID HP5970D Date 4-24-87 Time 1246

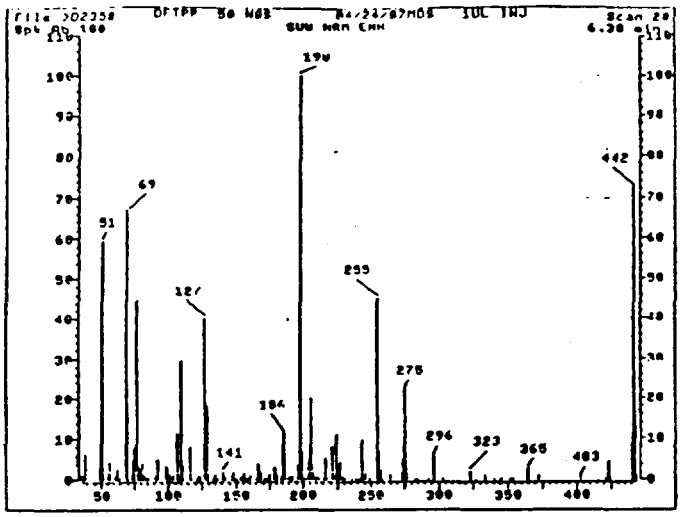
Lab ID D2358 Data Release Authorized By: [signature]

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	59.4
68	less than 2.0% of mass 69	0 (0)[1]
69	mass 69 relative abundance	66.4
70	less than 2.0% of mass 69	0.14 (0.21)[1]
127	40.0 - 60.0% of mass 198	40.1
197	less than 1.0% of mass 198	0
198	base peak, 100% relative abundance	100
199	5.0 - 9.0% of mass 198	6.88
275	10.0 - 30.0% of mass 198	22.0
365	greater than 1.00% of mass 198	2.73
441	present, but less than mass 443	11.3
442	greater than 40.0% of mass 198	72.4
443	17.0 - 23.0% of mass 442	13.3 (18.4)[2]

THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS.

[1]Value in parenthesis is % mass 69.
[2]Value in parenthesis is % mass 442

SAMPLE ID	LAB ID		DATE OF ANALYSIS	TIME OF ANALYSIS
	BN STD - 50 ng	D2359	4-24-87	1313
	AP STD - 50 ng	D2360	4-24-87	1411
DC-GW-24	2195		4-25-87	0003



>D2358 DFTPP 50 NGS 04/24/87MDS 1UL INJ
20 SUB NRM ENH

File: >D2358 Scan #: 20 Retn. time: 6.38

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
35.95	1.19	100.20	.20	154.00	.42	202.95	.50	257.05	.33
37.95	1.12	100.90	1.50	155.00	.66	203.15	.21	257.95	2.30
39.05	6.22	102.90	.68	156.00	1.73	204.05	2.94	258.95	.12
48.95	2.98	104.00	1.15	156.90	.33	204.95	4.96	269.00	1.08
49.95	16.00	107.00	11.38	157.80	.26	206.05	19.81	273.00	1.54
51.05	59.41	108.00	1.50	158.85	.09	207.05	3.26	274.00	4.09
52.05	3.06	110.00	29.66	159.75	.29	207.95	1.62	275.00	22.05
56.00	1.84	110.90	3.57	160.95	1.04	209.05	.39	276.00	2.85
56.90	4.25	111.80	.32	165.95	.52	209.85	.15	277.00	1.70
61.00	.72	116.95	8.03	166.85	3.85	210.35	.19	282.80	.19
62.00	.52	117.95	.41	168.05	1.86	210.95	.82	284.85	.14
63.00	2.23	121.45	.08	168.65	.06	211.55	.31	292.85	.15
63.90	.06	121.95	.74	168.95	.16	215.95	.35	296.05	5.78
64.70	.30	122.95	1.20	171.75	.33	216.95	5.32	296.75	.51
69.00	66.36	124.05	.47	172.65	.13	217.75	.37	302.95	.40
70.00	.14	126.95	40.13	174.05	.52	220.95	8.00	323.00	2.06
73.00	1.32	128.05	3.55	174.95	1.29	222.90	1.20	327.15	.12
74.00	4.53	128.95	18.02	177.95	.31	224.00	10.98	334.05	1.04
74.95	7.79	130.05	1.31	178.95	3.09	225.00	2.65	340.95	.15
77.05	44.43	132.95	.23	179.90	1.80	226.00	.21	345.95	.31
77.95	3.16	133.95	.25	181.00	1.07	227.00	4.22	352.10	.52
79.05	2.52	135.05	1.34	184.00	.14	228.10	.54	354.10	.50
80.05	2.48	135.85	.23	185.10	1.13	228.90	.82	365.00	2.73
81.05	3.88	136.75	.44	186.00	11.18	230.70	.29	372.05	1.14
82.05	.90	141.00	2.11	187.00	2.86	235.80	.04	372.85	.09
82.95	1.01	142.00	.95	188.90	.49	238.90	.12	403.00	.61
83.75	.42	142.80	.39	190.90	.72	240.80	.05	421.05	.43
84.85	.43	146.00	.22	191.90	.75	242.95	.55	421.75	.36
85.95	.43	147.10	1.20	192.40	.17	243.95	9.74	423.05	4.23
91.05	.76	147.90	1.96	193.00	.80	244.95	1.05	424.05	.67
91.95	.65	149.00	.25	196.10	3.70	245.95	1.73	441.10	11.32
92.95	5.03	149.90	.06	198.00	100.00	248.85	.29	442.00	72.36
97.90	3.30	151.20	.07	198.90	6.88	254.95	44.97	443.00	13.27
98.90	2.71	153.00	.71	201.45	.50	255.95	6.69	448.00	1.19

MS data file header from : >D2358

Sample: DFTPP 50 NGS Operator: USER6 MS 4/24/87 12:46
Misc : 04/24/87MDS 1UL INJ BTL# 1
Sys. #: 1 MS model: 70 SW/HW rev.: CA ALS # : 0
Method file: DFTPPD Tuning file: MTDUN No. of extra records: 1
Source temp.: 0 Analyzer temp.: 275 Transfer line temp. : 20

Chromatographic temperatures : 150. 280. 0. 0. 0.
Chromatographic times, min. : 0.0 10.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 5.0 0.0 0.0 0.0 0.0

Decafluorotriphenylphosphine (DFTPP)

Case No. 4-5157, 5162 Contractor Ecology & Environment Contract No. IL-3140

Instrument ID HP5970 D Date 4-27-87 Time 10:45

Lab ID D2372 Data Release Authorized By: C Stojowicz

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	59.04
68	less than 2.0% of mass 69	0.00 (0.00)[1]
69	mass 69 relative abundance	66.77
70	less than 2.0% of mass 69	0.00 (0.00)[1]
127	40.0 - 60.0% of mass 198	42.33
197	less than 1.0% of mass 198	0.00
198	base peak, 100% relative abundance	100.00
199	5.0 - 9.0% of mass 198	5.77
275	10.0 - 30.0% of mass 198	21.30
365	greater than 1.00% of mass 198	3.10
441	present, but less than mass 443	11.43
442	greater than 40.0% of mass 198	72.90
443	17.0 - 23.0% of mass 442	13.56 (18.60)[2]

THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS.

[1] Value in parenthesis is % mass 69
[2] Value in parenthesis is % mass 442

SAMPLE ID	LAB ID		DATE OF ANALYSIS	TIME OF ANALYSIS
	Cont Calib Check B/N	D2373	4-27-87	11:18
	Cont Calib Check A/P	D2377	4-27-87	15:20
DC-GW-29	2200	D2378	4-27-87	16:16
DC-GW-26	2197	D2379	4-27-87	17:12
D2382	Blank	D2382	4-27-87	20:07
DC-GW-33	2211	D2383	4-27-87	21:03
DC-GW-35	2213	D2384	4-27-87	21:58

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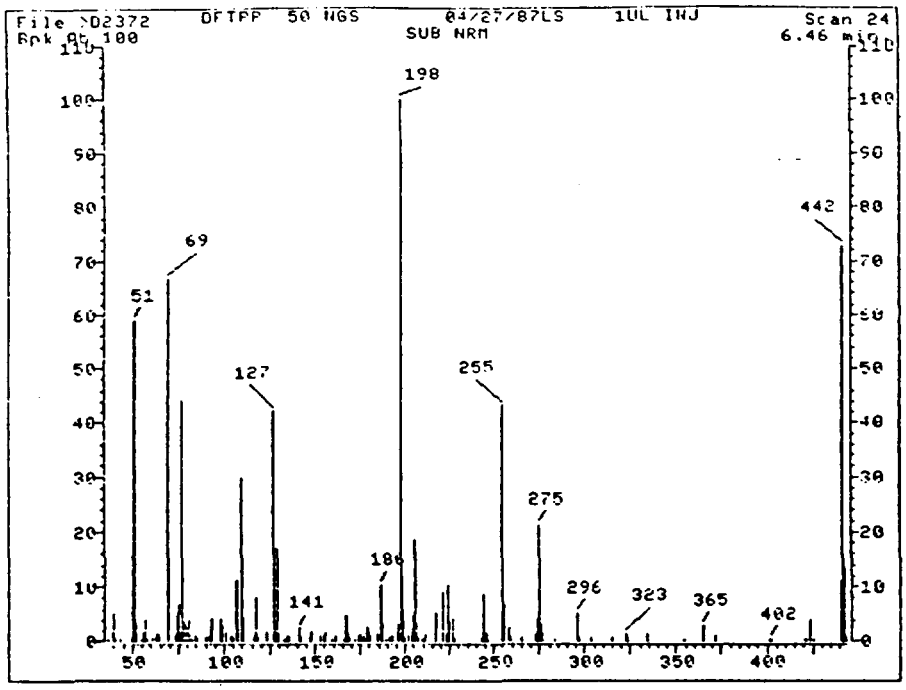

>D2372 DFTPP 50 NGS 04/27/87LS 1UL INJ
24 SUB NRM

File: >D2372 Scan #: 24 Retn. time: 6.46

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.85	.51	82.95	.46	146.90	.77	196.00	3.39	264.90	.75
39.05	5.08	84.85	1.02	148.00	2.10	198.00	100.00	273.00	1.48
39.85	.43	85.75	.51	153.00	.92	199.00	5.77	274.00	4.50
40.95	.33	90.85	.82	154.90	.90	199.70	.57	275.00	21.30
43.15	.44	91.95	.92	156.00	1.79	201.45	.93	276.00	3.50
48.95	.49	92.95	4.31	159.65	.52	203.95	2.44	277.00	1.56
50.05	15.31	97.90	4.16	160.95	.97	204.95	4.74	282.90	.49
51.05	59.04	99.00	2.93	166.05	.56	206.05	18.74	295.95	5.36
52.05	3.25	100.90	1.84	166.95	4.82	206.95	3.39	297.05	.79
55.00	.48	103.80	.90	168.05	1.82	207.95	.80	303.05	.77
56.00	1.77	105.00	.82	169.05	.61	209.35	.43	315.00	.64
57.00	4.07	107.00	11.41	171.75	.49	210.15	.54	323.10	1.51
58.00	.49	108.00	2.28	173.85	.95	210.95	1.33	323.80	.36
60.80	.72	110.00	29.76	174.15	.85	216.85	5.16	334.05	1.28
61.00	.71	111.00	4.49	175.05	1.41	220.95	9.03	354.10	.54
62.10	.85	116.00	.89	175.95	.59	222.90	1.36	364.90	3.10
63.10	1.51	116.95	8.00	176.75	1.08	224.00	10.28	371.95	1.18
64.90	1.07	118.05	.75	176.95	1.07	225.00	3.48	401.80	.48
69.00	66.77	123.05	1.57	178.05	.51	227.00	4.36	402.00	.49
73.00	.89	126.95	42.33	178.95	2.61	228.10	.75	420.95	.56
74.00	4.89	128.05	3.49	180.00	2.13	242.95	.66	421.95	.48
74.95	6.71	128.95	17.18	180.80	1.07	243.95	8.85	423.05	3.80
76.05	1.87	129.95	1.75	184.90	1.25	245.05	1.57	423.95	.72
76.95	44.29	132.85	.44	186.00	10.44	246.05	1.54	424.95	.36
78.05	3.66	133.85	.56	187.00	3.13	246.95	.44	441.10	11.43
78.95	3.41	134.85	1.00	188.90	.54	254.95	43.25	442.00	72.90
79.95	2.33	135.05	1.02	190.90	.57	255.95	6.69	443.00	13.56
80.95	4.05	141.00	2.61	192.10	.93	258.05	2.53	444.00	.98
82.05	1.11	142.00	.64	192.90	.93	259.05	.59		

MS data file header from : >D2372

Sample: DFTPP 50 NGS Operator: USER6 MS 4/27/87 10:45
Misc : 04/27/87LS 1UL INJ BTL# 1
Sys. #: 1 MS model: 70 SW/HW rev.: CA ALS # : 0
Method file: DFTPPD Tuning file: MTDUN No. of extra records: 1
Source temp.: 0 Analyzer temp.: 275 Transfer line temp. : 20

Chromatographic temperatures : 150. 280. 0. 0. 0.
Chromatographic times, min. : 0.0 10.0 0.0 0.0 0.0

Decafluorotriphenylphosphine (DFTPP)

Case No. U-5157, 5162 Contractor Ecology & Environment Contract No. IL-3140

Instrument ID HP5970D Date 4-28-87 Time 10:06

Lab ID B3671 Data Release Authorized By: C Wojtowicz

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	58.70
68	less than 2.0% of mass 69	0.00 (0.00)[1]
69	mass 69 relative abundance	67.82
70	less than 2.0% of mass 69	0.67 (0.99)[1]
127	40.0 - 60.0% of mass 198	41.65
197	less than 1.0% of mass 198	0.43
198	base peak, 100% relative abundance	100.00
199	5.0 - 9.0% of mass 198	6.12
275	10.0 - 30.0% of mass 198	22.02
365	greater than 1.00% of mass 198	1.84
441	present, but less than mass 443	8.58
442	greater than 40.0% of mass 198	58.90
443	17.0 - 23.0% of mass 442	11.24 (19.0)[2]

THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS.

[1] Value in parentheses is % mass 69.
[2] Value in parentheses is % mass 442

SAMPLE ID	LAB ID		DATE OF ANALYSIS	TIME OF ANALYSIS
	Cont Calib Check B/N	B3672	4-28-87	10:27
	Cont Calib Check A/P	B3674	4-28-87	12:14
DC-GW-36	2214	B3675	4-28 87	13:12
DC-GW-41	2219	B3676	4-28-87	14:03
DC-GW-41R	2219 Replicate	B3677	4-28-87	14:54
DC-GW-42	2220	B3678	4-28-87	15:56
DC-GW-43	2221	B3679	4-28-87	16:56
DC-GW-37	2215	B3680	4-28-87	17:47
DC-GW-39	2217	B3683	4-28-87	20:25

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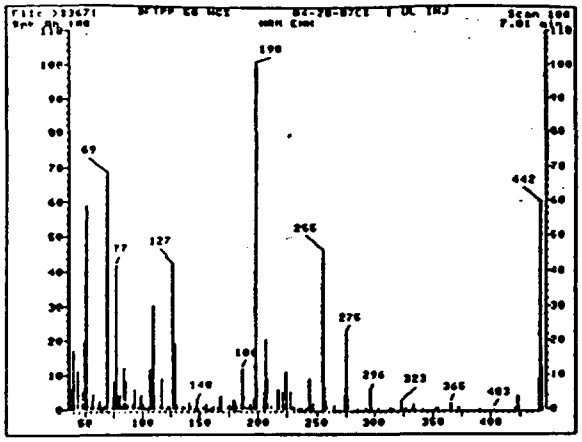


>B3671 DFTPP 50 NGS 04-28-87CS 1 UL INJ
100 NRM ENH

File: >B3671 Scan #: 100 Retn. time: 7.01

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
38.05	1.13	86.00	8.09	136.10	.49	190.05	.33	257.00	.30
39.15	5.72	87.00	.32	137.10	.80	191.95	.74	258.00	2.44
40.05	17.14	87.90	1.46	140.30	.17	193.15	1.97	259.00	.35
41.05	1.62	91.00	1.47	141.10	2.14	194.15	.16	265.00	1.00
44.05	11.44	92.00	.79	142.00	.63	195.95	3.11	273.10	1.14
46.15	.09	93.00	9.39	143.20	.41	196.75	.43	274.10	3.45
47.05	4.01	93.80	.31	146.00	.30	197.95	100.00	275.00	22.02
49.05	19.42	95.90	.76	147.10	.92	198.95	6.12	276.00	2.95
50.15	15.73	98.10	3.62	148.00	2.19	204.15	2.04	277.00	1.35
51.15	50.70	99.10	3.95	148.80	.24	205.05	4.02	285.00	.19
52.10	2.50	101.10	1.62	152.90	.73	206.05	19.97	292.00	.33
55.10	.74	101.90	.40	154.00	.75	206.95	8.06	296.00	5.00
56.10	2.10	102.90	.50	155.15	1.01	208.05	2.10	296.90	.75
57.00	4.24	103.80	.41	156.05	1.77	210.75	1.00	303.00	.36
58.10	.19	104.70	.39	157.45	.12	211.15	.01	314.00	.77
61.10	.59	105.20	.87	158.05	.11	215.05	.41	315.70	.10
61.90	.53	106.00	.63	159.95	.40	216.95	5.43	316.10	.19
63.00	2.30	107.00	11.57	160.15	.20	217.95	.49	323.10	1.54
64.90	.55	108.10	1.97	160.95	.89	220.95	4.03	324.20	.19
65.30	.56	110.00	29.05	162.05	.15	221.95	.43	327.10	.24
66.30	.19	111.00	3.63	164.05	.69	223.05	1.28	331.90	.11
67.20	1.06	111.80	.44	167.05	3.47	224.05	18.52	333.90	1.25
69.00	67.82	113.90	.18	168.05	3.52	224.95	2.42	334.90	.19
69.90	.67	116.10	1.13	171.05	.24	227.05	5.01	341.30	.15
73.30	.43	117.00	8.76	173.95	.63	227.95	.46	352.00	.24
74.00	3.48	118.10	.71	175.05	1.31	228.95	.85	354.10	.35
75.00	8.13	121.20	.14	176.15	.56	230.95	.27	364.95	1.94
76.20	2.30	121.90	.87	176.45	.27	233.95	.17	365.05	.21
77.10	41.01	123.00	.90	176.75	.01	234.05	.14	371.95	.68
78.10	3.95	124.10	.56	177.05	.27	235.35	.12	390.15	.10
79.00	3.50	125.00	.47	177.85	.10	237.05	.39	403.05	.24
79.90	2.52	127.00	41.65	179.05	2.71	240.05	.09	421.15	.40
80.20	1.14	128.20	3.11	180.05	2.02	242.05	.92	421.95	.25
81.00	4.14	129.10	10.90	181.05	.75	244.15	0.57	423.05	3.45
82.00	1.15	130.10	1.68	185.05	1.77	245.05	.71	424.05	.79
82.90	.83	130.90	1.44	186.05	11.76	246.15	1.65	441.05	0.50
83.20	.67	131.20	.39	187.05	3.60	247.15	.14	442.05	50.90
83.90	11.00	134.20	.49	188.05	.61	255.05	45.15	443.05	11.24
85.00	1.53	135.10	1.05	189.15	.51	256.05	6.50	444.15	.70

85.00 1.53 135.10 1.05 189.15 .51 256.05 6.50 444.15 .70

MS data file header from : >B3671

Sample: DFTPP 50 NGS Operator: USER8 MS 4/28/87 10:06
Misc : 04-28-87CS 1 UL INJ
Sys. #: 2 MS model: 70 SW/HW rev.: CA ALS # : 0
Method file: DFTPP8 Tuning file: MTBON 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 10.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 5.0 0.0 0.0 0.0 0.0

Decafluorotriphenylphosphine (DFTPP)

Case No. U-5157, 5162 Contractor Ecology & Environment Contract No. IL-3140

Instrument ID HP5970 D Date 5-20-87 Time 9:30

Lab ID D 2539 Data Release Authorized By: C Stojowicz

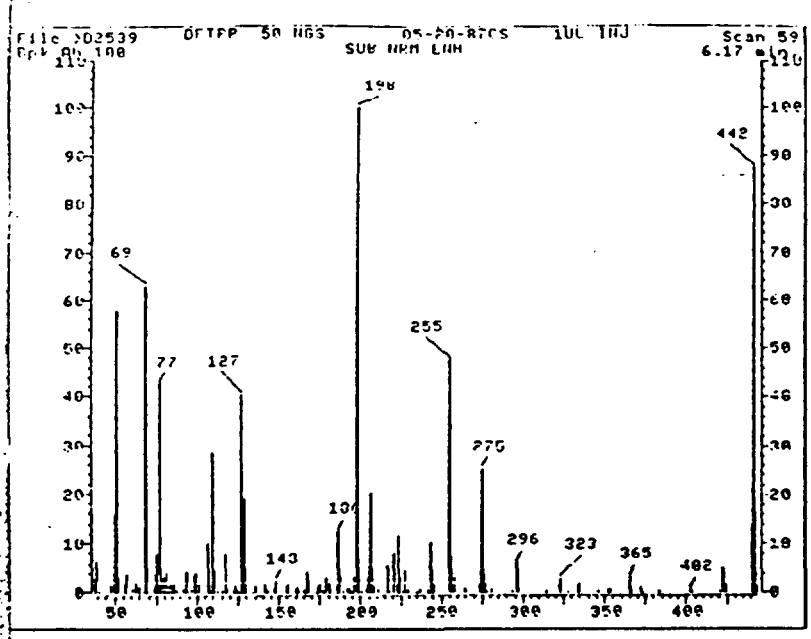
m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	57.64
68	less than 2.0% of mass 69	0.00 (0.00)[1]
69	mass 69 relative abundance	62.98
70	less than 2.0% of mass 69	0.22 (0.36)[1]
127	40.0 - 60.0% of mass 198	40.30
197	less than 1.0% of mass 198	0.00
198	base peak, 100% relative abundance	100.00
199	5.0 - 9.0% of mass 198	7.13
275	10.0 - 30.0% of mass 198	25.10
365	greater than 1.00% of mass 198	3.17
441	present, but less than mass 443	13.78
442	greater than 40.0% of mass 198	87.46
443	17.0 - 23.0% of mass 442	16.55 (18.92)[2]

THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS.

[1] Value in parenthesis is % mass 69
[2] Value in parenthesis is % mass 442

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS
	Cont Calib Check A/P D2541	5-20-87	11:15
	Cont Calib Check B/N D2542	5-20-87	12:09
D2543	Method Blank D2543	5-20-87	13:54
DC-GW-23	2194 A/P X1 D2544	5-20-87	14:54
DC-GW-25	2196 A/P X1 D2545	5-20-87	17:06
DC-GW-27	2198 A/P X1 D2546	5-20-87	17:58
DC-GW-32	2210 X1 D2547	5-20-87	18:50
D2550	Method Blank (5/5) D2550	5-20-87	21:26

FORM V 7/85



>D2539 DFIPP 50 NGS 05-20-87CS 1UL INJ
59 SUB NRM ENH

File: >D2539 Scan #: 59 Retn. time: 6.17

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
38.05	2.80	92.10	.45	152.15	.17	200.15	.27	274.95	25.10
39.15	6.05	93.00	4.26	155.05	1.39	203.15	.57	276.05	3.52
41.15	.20	93.70	.45	155.95	1.58	204.05	3.04	277.05	1.98
47.05	1.26	94.00	.21	159.95	.63	205.00	5.23	277.85	.30
49.05	3.77	95.90	.68	161.05	1.01	206.00	20.18	280.95	.61
50.00	15.76	98.00	3.59	161.95	.42	207.00	4.86	293.00	.24
51.00	57.64	99.00	3.82	164.75	.82	208.00	1.23	296.00	6.11
52.00	2.95	101.00	1.52	165.05	.59	210.80	.61	297.00	1.13
55.90	2.01	107.00	10.10	166.00	.41	211.10	.33	314.85	.39
57.00	3.51	108.05	1.68	167.00	4.09	217.00	5.57	323.00	2.72
61.00	.81	108.75	.44	167.90	2.30	218.10	.42	327.40	.17
63.00	1.76	109.95	28.63	173.00	.23	221.00	8.18	327.60	.17
65.10	1.05	110.95	4.60	174.00	1.20	223.00	1.58	333.30	.38
67.10	.18	112.05	.25	175.00	1.67	223.95	11.53	334.10	1.57
68.95	62.98	115.85	.29	176.30	.71	224.95	2.98	345.85	.43
69.75	.22	117.05	7.98	176.70	.33	226.05	.48	351.95	.62
73.25	.80	117.95	.62	177.00	.41	226.95	4.60	353.05	.45
74.05	3.87	121.95	.36	178.00	.23	228.95	.74	353.85	.67
75.05	7.79	123.15	1.30	178.90	3.08	235.15	.23	364.90	3.17
75.95	1.61	124.05	.67	180.00	2.01	236.95	.57	365.90	.25
77.05	42.52	125.15	.41	181.10	1.18	241.95	.57	372.00	1.05
78.15	2.55	125.85	.23	184.95	1.78	243.00	.57	373.00	.15
79.05	3.16	127.00	40.30	186.05	12.50	244.00	10.48	382.95	.30
80.05	2.76	128.00	3.58	187.05	3.42	245.00	1.75	402.10	.61
81.05	3.98	129.00	19.04	188.95	.34	245.90	1.73	403.00	.44
82.95	1.01	133.30	.19	193.05	.83	256.00	7.34	422.15	.71
83.95	2.08	135.00	1.49	193.85	.24	257.20	.62	423.05	4.76
84.95	.23	140.90	1.23	194.05	.27	258.00	2.98	424.05	1.67
86.05	1.81	142.00	.76	194.75	.17	258.90	.32	441.10	13.78
86.85	.54	143.00	.44	196.05	3.37	264.95	.77	442.00	87.46
87.15	.29	147.05	.86	197.95	100.00	273.05	1.61	442.90	16.55
91.10	.71	147.95	2.47	198.95	7.13	273.95	4.62	444.00	1.42

MS data file header from : >D2539

Sample: DFIPP 50 NGS Operator: USER6 MS 5/20/87 9:30
Misc : 05-20-87CS 1UL INJ BTL# 1
Sys. #: 1 MS model: 70 SW/HW rev.: CA ALS # : 0
Method file: DFIPPD Tuning file: MTDUN No. of extra records: 1
Source temp.: 0 Analyzer temp.: 275 Transfer line temp. : 20

Chromatographic temperatures : 150. 200. 0. 0. 0.
Chromatographic times, min. : 0.0 10.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 5.0 0.0 0.0 0.0 0.0

GC/MS TUNING AND MASS CALIBRATION

Bromofluorobenzene (BFB)

Case No. U-5157, 5162 Contractor Ecology & Environment Inc. Contract No. IL-3140

Instrument ID HP5995C Date 1-27-87 Time 1409

Lab ID C6595 Data Release Authorized By: C Stoltenberg

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15.0 - 40.0% of the base peak	27.6
75	30.0 - 60.0% of the base peak	59.7
95	Base peak, 100% relative abundance	100
96	5.0 - 9.0% of the base peak	5.79
173	Less than 1.0% of the base peak	0
174	Greater than 50.0% of the base peak	91.9
175	5.0 - 9.0% of mass 174	6.70 (7.29)[1]
176	Greater than 95.0%, but less than 101.0% of mass 174	91.7 (99.8)[1]
177	5.0 - 9.0% of mass 176	6.16 (6.72)[2]

THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS.

[1]Value in parenthesis is % mass 174.
[2]Value in parenthesis is % mass 176.

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS
	VOA STD - 20 ug/L C6596	1-27-87	1434
	- 50 ug/L C6597		1527
	- 100 ug/L C6598		1621
	- 200 ug/L C6600		1808
	- 150 ug/L C6601		1903

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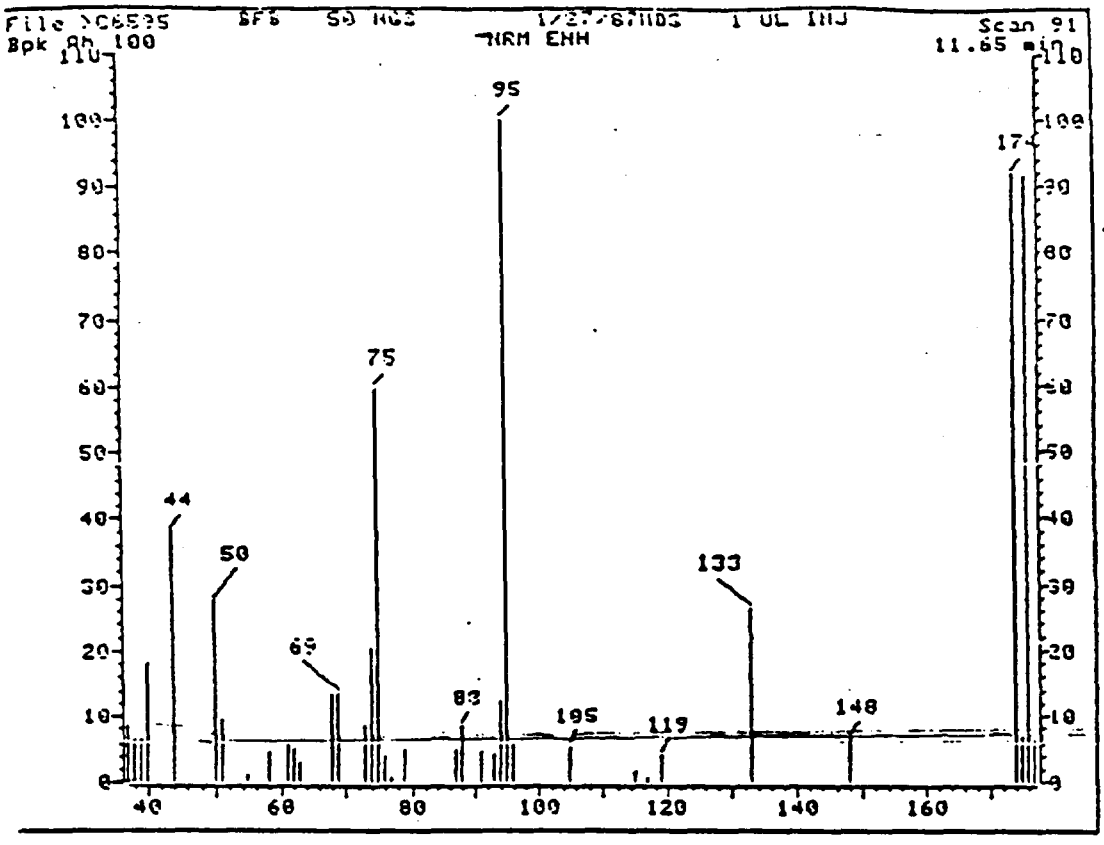

>C6595 BF8 50 NGS 1/27/87MDS 1 UL INJ
91 NRM ENH

File: >C6595 Scan #: 91 Retn. time: 11.65

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.00	8.53	57.90	4.55	74.95	59.65	92.95	4.25	119.10	4.09
37.90	6.05	60.85	5.69	75.85	3.85	94.05	12.16	133.10	26.21
39.00	6.26	61.95	4.99	76.85	.76	95.05	100.00	148.15	6.77
40.00	17.86	62.95	2.96	78.95	5.01	96.05	5.79	173.95	91.93
44.00	38.11	68.05	13.32	86.95	5.03	104.90	5.35	174.95	6.70
50.00	27.56	68.95	13.50	88.05	8.26	114.90	1.59	175.95	91.72
51.10	9.39	73.05	8.26	91.05	4.70	116.90	.64	176.95	6.16
54.90	.89	73.95	20.12						

MS data file header from : >C6595

Sample: BF8 50 NGS Operator: USER8 MS 1/27/87 14:09
Misc : 1/27/87MDS 1 UL INJ
Sys. #: 1 MS model: 96 SW/HW rev.: CA ALS # : 0
Method file: BF8001 Tuning file: MTCU4 No. of extra records: 1
Source temp.: 200 Analyzer temp.: 220 Transfer line temp. : 200

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

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GC/MS TUNING AND MASS CALIBRATION

Bromofluorobenzene (BFB)

Case No. U-5157,5162 Contractor Ecology & Environment Contract No. IL-3140

Instrument ID HP5995C Date 3-27-87 Time 9:22.

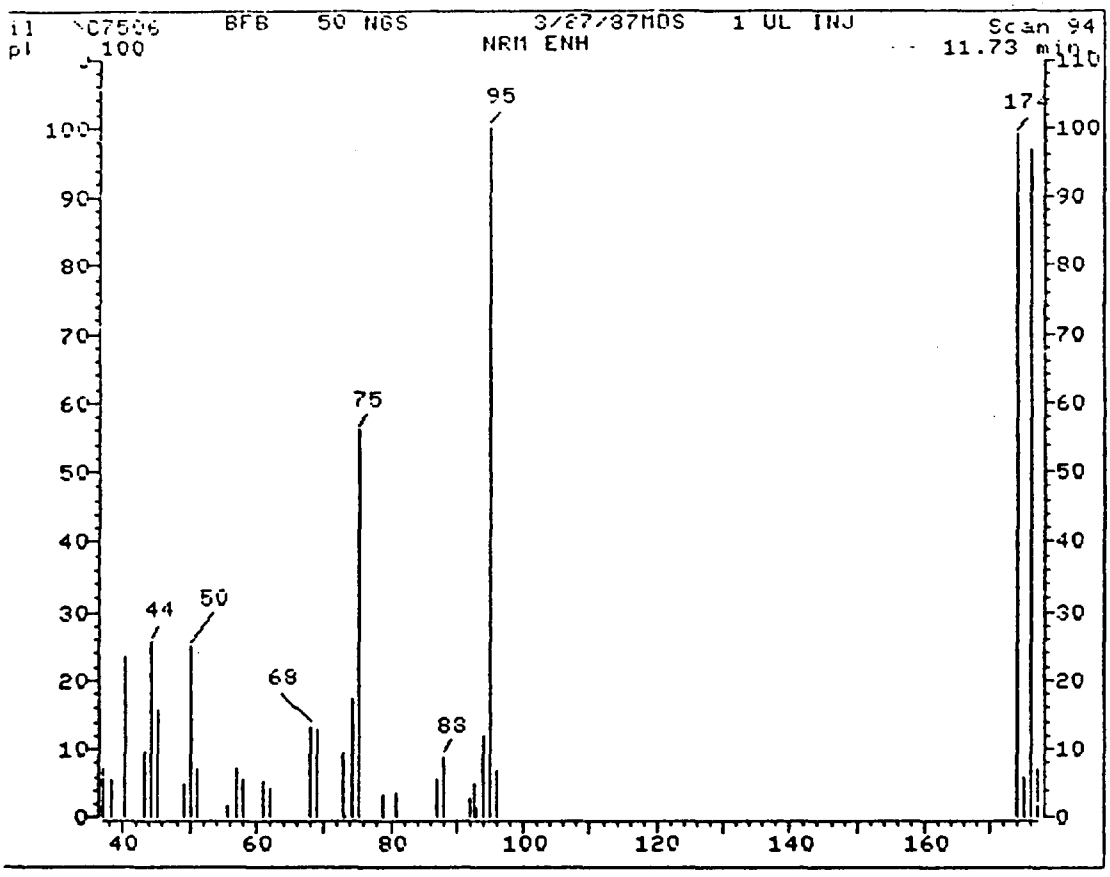
Lab ID 7C7506 Data Release Authorized By: C Slotowicz

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15.0 - 40.0% of the base peak	24.99
75	30.0 - 60.0% of the base peak	55.96
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of the base peak	6.86
173	Less than 1.0% of the base peak	0.00
174	Greater than 50.0% of the base peak	99.02
175	5.0 - 9.0% of mass 174	5.91 (5.97)[1]
176	Greater than 95.0%, but less than 101.0% of mass 174	96.91 (97.8)[1]
177	5.0 - 9.0% of mass 176	7.03 (7.25)[2]

THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS.

[1] Value in parenthesis is % mass 174.
[2] Value in parenthesis is % mass 176.

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS
	Cont Calib Check C7507	3-27-87	9:51
DC-GW-30	2201 C7509	3-27-87	11:44
C7510	method Blank C7510	3-27-87	12:36
DC-GW-23	2194 C7511	3-27-87	13:32
DC-GW-25	2196 C7512	3-27-87	14:25
DC-GW-27	2198 C7513	3-27-87	15:17
DC-GW-25MS	2196MS C7514	3-27-87	16:09
DC-GW-25MSD	2196 MSD C7515	3-27-87	17:02
DC-GW-31	2202 C7516	3-27-87	17:54
DC-GW-29	22CC C7517	3-27-87	18:47
DC-GW-28	2199 C7519	3-27-87	20:38
			87



>C7506 BFB 50 NGS 3/27/87MDS 1 UL INJ
94 NRM ENH

File: >C7506 Scan #: 94 Retn. time: 11.73

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.00	7.27	50.10	24.99	68.05	13.37	80.95	3.62	95.15	100.00
38.10	5.66	51.20	6.97	69.05	12.87	87.05	5.44	96.05	6.86
40.10	23.32	55.90	1.62	72.85	9.49	88.05	8.82	173.95	99.02
43.20	9.61	57.00	7.14	73.15	.15	92.15	2.72	174.95	5.91
44.10	25.63	58.00	5.46	74.05	17.36	92.85	4.90	175.95	96.91
45.10	15.90	61.05	5.35	75.05	55.96	93.15	1.23	176.95	7.03
49.00	5.02	61.95	4.32	78.95	3.42	94.05	11.97		

MS data file header from : >C7506

Sample: BFB 50 NGS Operator: USER8 MS 3/27/87 9:22
Misc : 3/27/87MDS 1 UL INJ
Sys. #: 1 MS model: 96 SW/HW rev.: CA ALS # : 0
Method file: BFB001 Tuning file: MTCV4 No. of extra records: 1
Source temp.: 200 Analyzer temp.: 220 Transfer line temp. : 200

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

GC/MS TUNING AND MASS CALIBRATION

Bromofluorobenzene (BFB)

Case No. U-5157,5162 Contractor Ecology & Environment Contract No. IL-3140

Instrument ID HP5995C Date 3-30-87 Time 10:01

Lab ID > C7533 Data Release Authorized By: C Stoytowicz

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15.0 - 40.0% of the base peak	23.96
75	30.0 - 60.0% of the base peak	54.12
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of the base peak	7.01
173	Less than 1.0% of the base peak	0.00
174	Greater than 50.0% of the base peak	93.05
175	5.0 - 9.0% of mass 174	4.84 (5.20)[1]
176	Greater than 95.0%, but less than 101.0% of mass 174	92.49 (99.39)[1]
177	5.0 - 9.0% of mass 176	7.30 (7.89)[2]

THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS.

[1] Value in parenthesis is % mass 174
[2] Value in parenthesis is % mass 176.

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS
	Cont Calib Check C7534	3-30-87	10:38
C7536	Method Blank C7536	3-30-87	12:18
DC-GW-24	2195 C7537	3-30-87	13:10
DC-GW-26	2197 C7538	3-30-87	14:02
DC-GW-42	2220 C7543	3-30-87	19:27
DC-GW-33	2211 C7544	3-30-87	20:20

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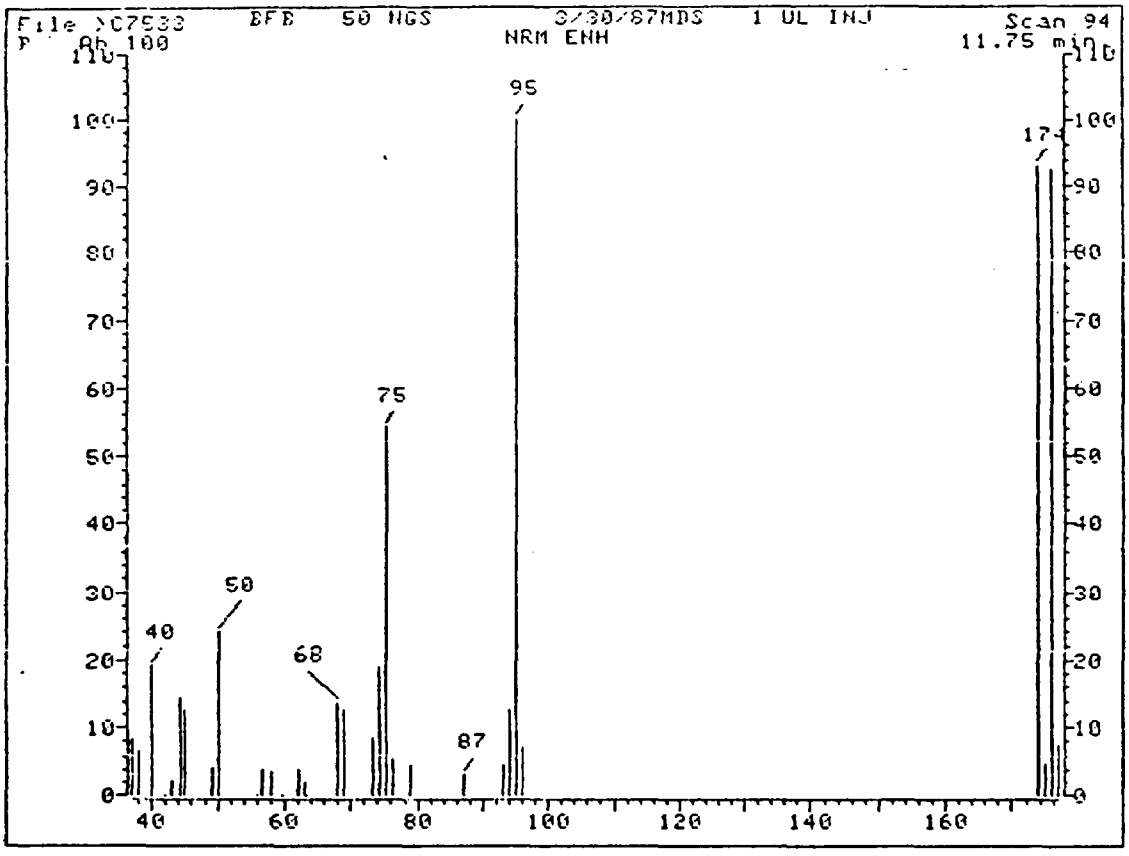


>C7533 BFB 50 NGS 3/30/87MDS 1 UL INJ
94 NRM ENH

File: >C7533 Scan #: 94 Retn. time: 11.75

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.00	8.55	49.10	4.12	62.85	1.90	75.05	54.12	95.00	100.00
38.00	6.46	50.10	23.96	63.15	.01	76.05	5.40	96.00	7.01
40.00	19.29	55.95	.06	67.95	13.69	78.95	4.59	173.90	93.05
41.80	.05	56.75	3.94	69.05	12.56	87.15	3.19	174.90	4.84
43.00	2.38	58.05	3.52	73.15	8.29	92.90	4.65	175.90	92.49
44.10	14.51	59.85	.06	74.05	18.92	94.00	12.65	176.90	7.30
45.00	12.60	61.95	4.01						

MS data file header from : >C7533

Sample: BFB 50 NGS Operator: USER8 MS 3/30/87 10:01
Misc : 3/30/87MDS 1 UL INJ
Sys. #: 1 MS model: 96 SW/HW rev.: CA ALS # : 0
Method file: BFB001 Tuning file: MTCV4 No. of extra records: 1
Source temp.: 200 Analyzer temp.: 220 Transfer line temp. : 200

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

GC/MS TUNING AND MASS CALIBRATION

Bromofluorobenzene (BFB)

Case No. U-5157,5162 Contractor Ecology & Environment Contract No. IL-3140

Instrument ID HP5995C Date 4/3/87 Time 08:53

Lab ID >C7621 Data Release Authorized By: C Slojtowicz

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15.0 - 40.0% of the base peak	27.28
75	30.0 - 60.0% of the base peak	59.02
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of the base peak	6.82
173	Less than 1.0% of the base peak	0.00
174	Greater than 50.0% of the base peak	97.65
175	5.0 - 9.0% of mass 174	7.91 (8.10)[1]
176	Greater than 95.0%, but less than 101.0% of mass 174	96.32 (98.64)[1]
177	5.0 - 9.0% of mass 176	6.40 (6.64)[2]

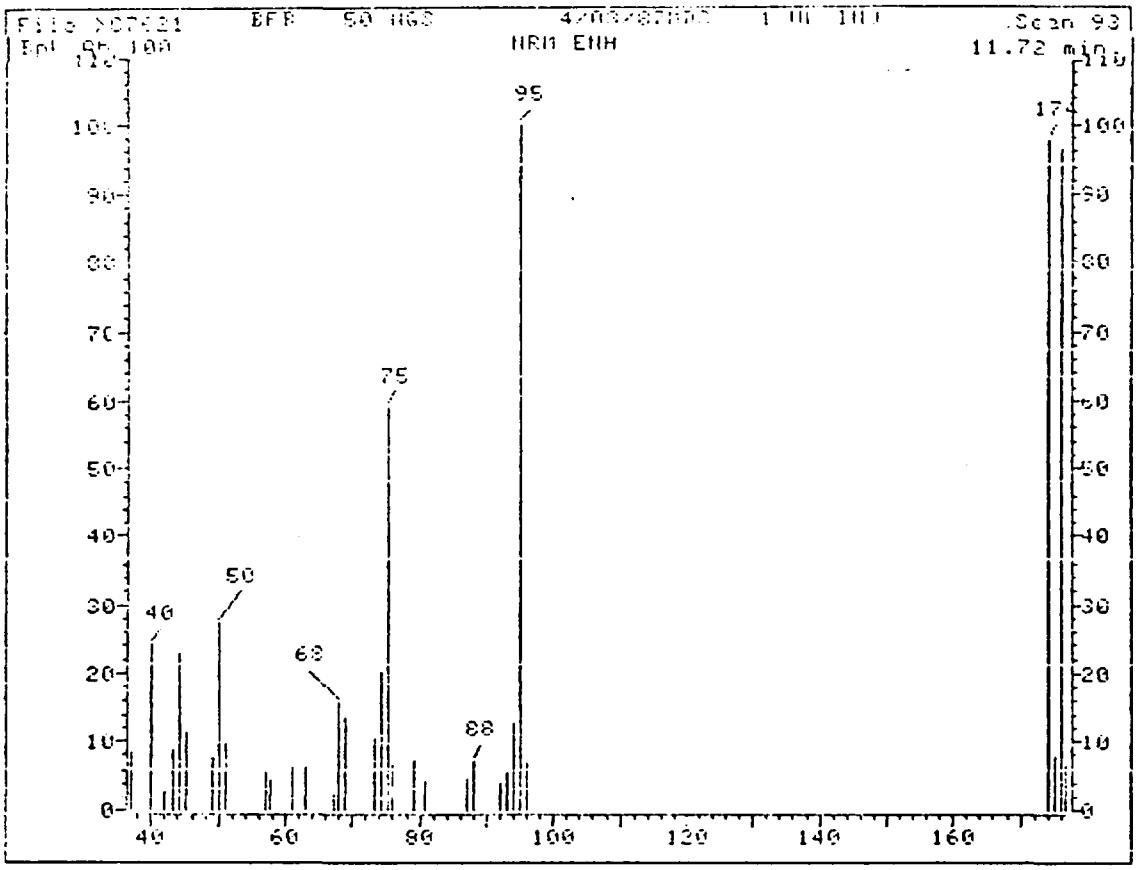
THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS.

[1] Value in parenthesis is % mass 174.
[2] Value in parenthesis is % mass 176.

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS
	Cont Calib Check >C7621	4-3-87	09:16
C7623	Method Blank C7623	4-3-87	10:08
DC-GW-26R	2197 Replicate C7624	4-3-87	11:05
DC-GW-32	2210 C7625	4-3-87	11:57
DC-GW-34	2212 C7626	4-3-87	12:49
DC-GW-37	2215 C7627	4-3-87	13:42
DC-GW-35	2213 C7628	4-3-87	14:34
DC-GW-35R	2213 Replicate C7637	4-3-87	22:54

FORM V 7/85

497095



>C7621 BFB 50 NGS 4/03/87MDS 1 UL INJ
93 NRM ENH

File: >C7621 Scan #: 93 Retn. time: 11.72

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.00	8.33	50.05	27.28	68.05	15.63	80.90	4.16	95.10	100.00
40.00	24.02	51.05	9.72	68.95	13.46	87.10	4.71	96.10	6.82
41.80	2.78	57.05	5.55	73.05	10.20	88.00	7.06	173.95	97.65
43.10	8.57	57.85	4.53	74.05	20.10	91.90	3.92	174.95	7.91
44.10	22.93	60.95	6.10	75.05	59.02	93.10	5.67	175.95	96.32
45.10	11.29	62.95	6.10	75.95	6.52	94.10	13.61	176.85	6.40
49.05	7.60	67.15	2.23	79.00	7.00				

MS data file header from : >C7621

Sample: BFB 50 NGS Operator: USER8 MS 4/03/87 8:53
Misc : 4/03/87MDS 1 UL INJ
Sys. #: 1 MS model: 96 SW/HW rev.: CA ALS # : 0
Method file: BFB001 Tuning file: MTCU4 No. of extra records: 1
Source temp.: 200 Analyzer temp.: 220 Transfer line temp. : 200

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

GC/MS TUNING AND MASS CALIBRATION

Bromofluorobenzene (BFB)

Case No. U-5157,5162 Contractor Ecology & Environment Contract No. IL-3140

Instrument ID HP5995C Date 4-6-87 Time 12:23

Lab ID C7672 Data Release Authorized By: C Hoytowicz

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15.0 - 40.0% of the base peak	25.73
75	30.0 - 60.0% of the base peak	56.12
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of the base peak	7.72
173	Less than 1.0% of the base peak	0.00
174	Greater than 50.0% of the base peak	97.86
175	5.0 - 9.0% of mass 174	8.30 (8.48)[1]
176	Greater than 95.0%, but less than 101.0% of mass 174	96.60 (98.71)[1]
177	5.0 - 9.0% of mass 176	7.49 (7.76)[2]

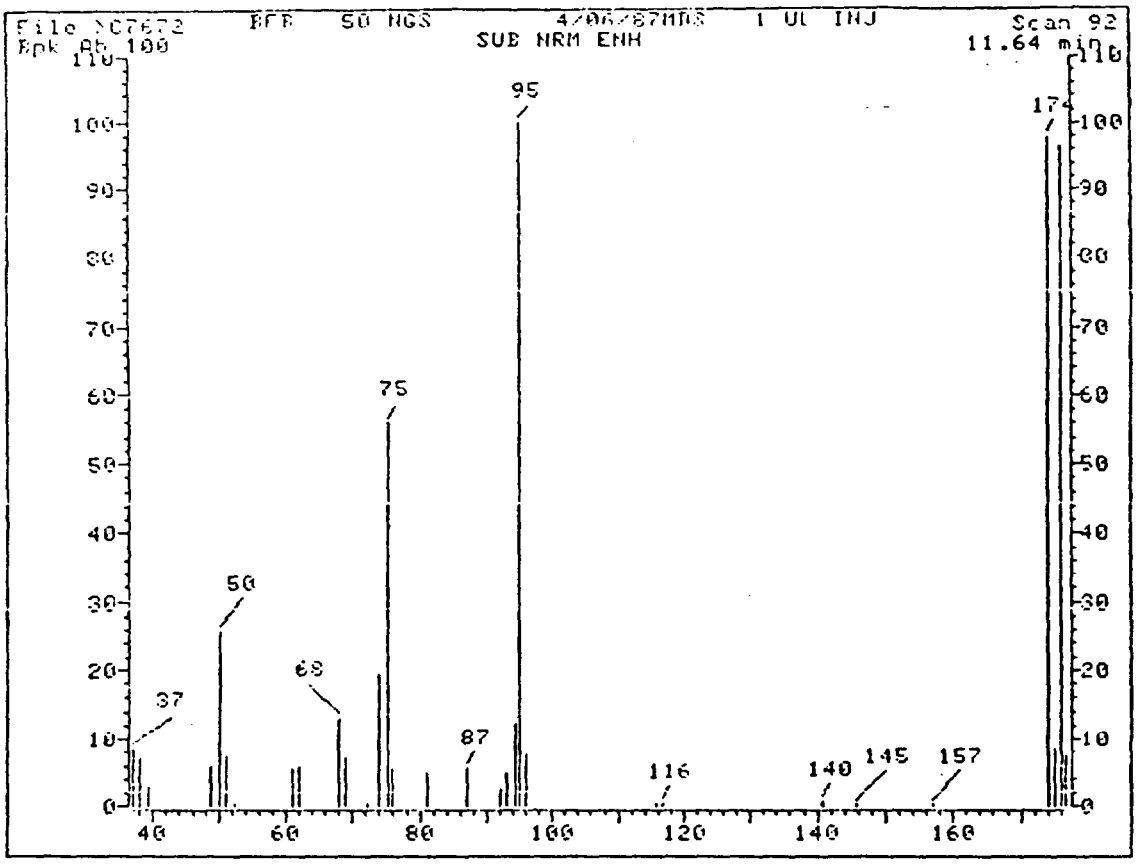
THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS.

[1] Value in parenthesis is % mass 174.
[2] Value in parenthesis is % mass 176.

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS
	Cont Calib Check C7673	4-6-87	12:46
C7674	Method Blank C7674	4-6-87	13:38
DC-GW-38	2216 C7675	4-6-87	14:30
DC-GW-40	2218 C7676	4-6-87	15:22
DC-GW-41	2219 C7677	4-6-87	16:14
DC-GW-43	2221 C7678	4-6-87	17:06
DC-GW-36	2214 C7679	4-6-87	17:59
DC-GW-39A	2217.01 C7681	4-6-87	20:05

FORM V 7/85

497095



>C7672 BFB 50 NGS 4/06/87MDS 1 UL INJ
92 SUB NRM ENH

File: >C7672 Scan #: 92 Retn. time: 11.64

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.00	8.47	61.05	5.69	75.05	56.12	94.15	12.12	145.65	.30
38.00	7.01	61.95	6.00	75.95	5.48	95.05	100.00	156.85	.30
39.10	2.54	68.05	13.01	80.95	4.94	96.05	7.72	173.95	97.86
48.90	5.70	69.05	7.12	87.05	5.60	115.70	.35	174.95	8.30
50.00	25.73	72.25	.49	91.95	2.19	116.60	.42	175.95	96.60
51.00	7.35	73.95	19.31	92.85	4.88	140.65	.85	176.85	7.49
52.30	.38								

MS data file header from : >C7672

Sample: BFB 50 NGS Operator: USER8 MS 4/06/87 12:23
Misc : 4/06/87MDS 1 UL INJ
Sys. #: 1 MS model: 96 SW/HW rev.: CA ALS # : 0
Method file: BFB001 Tuning file: MTCU4 No. of extra records: 1
Source temp.: 200 Analyzer temp.: 220 Transfer line temp. : 200

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

GC/MS TUNING AND MASS CALIBRATION

Bromofluorobenzene (BFB)

Case No. U-5157,5162 Contractor Ecology & Environment Contract No. IL-3140

Instrument ID HP5995C Date 4/7/87 Time 15:50

Lab ID C7702 Data Release Authorized By: C Slogtowicz

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15.0 - 40.0% of the base peak	29.45
75	30.0 - 60.0% of the base peak	53.36
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of the base peak	8.19
173	Less than 1.0% of the base peak	0.00
174	Greater than 50.0% of the base peak	76.52
175	5.0 - 9.0% of mass 174	6.89 (9.00)[1]
176	Greater than 95.0%, but less than 101.0% of mass 174	76.19 (99.5)[1]
177	5.0 - 9.0% of mass 176	5.21 (6.83)[2]

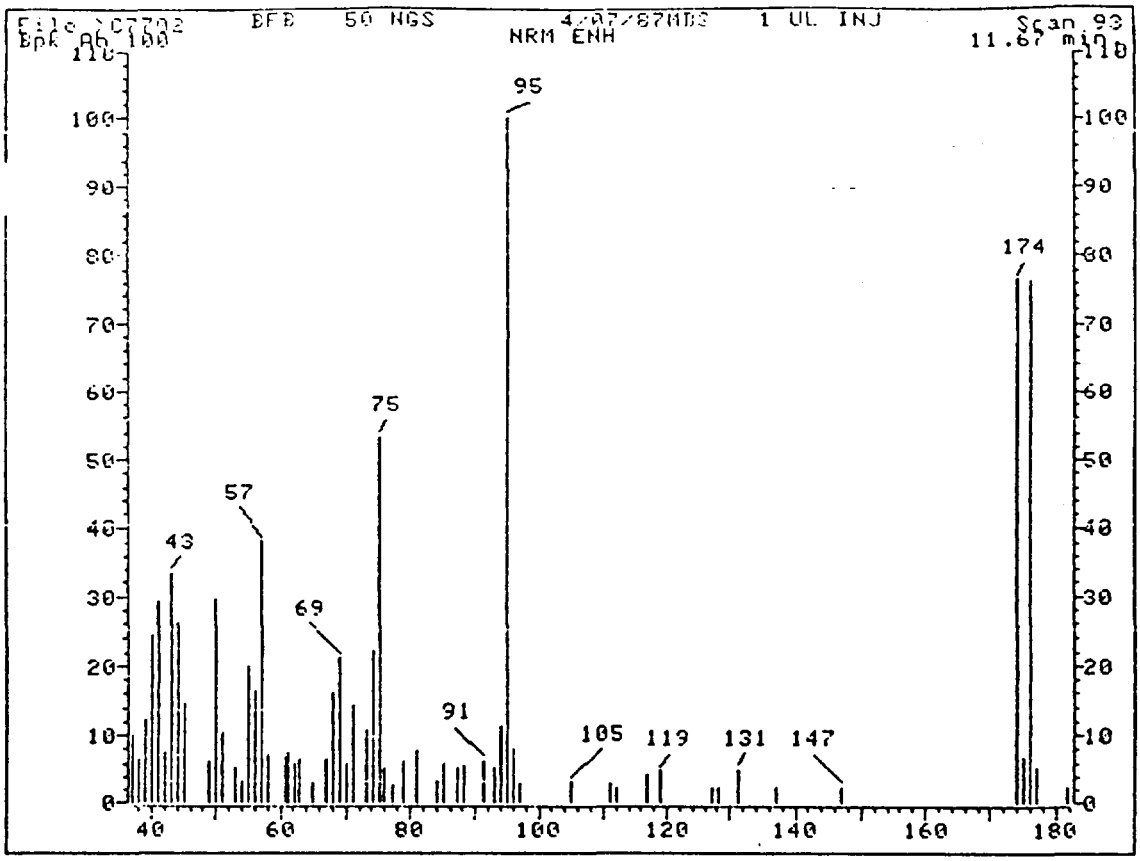
THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS.

[1] Value in parenthesis is % mass 174.
[2] Value in parenthesis is % mass 176.

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS
	Cont Calib Check C7704	4-7-87	17:40
C7705	Method Blank C7705	4-7-87	18:33
DC-GW-39B	2217.02 C7706	4-7-87	19:25

FORM V 7/85

497095



>C7702 BFB 50 NGS 4/07/87MDS 1 UL INJ
93 NRM ENH

File: >C7702 Scan #: 93 Retn. time: 11.67

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.00	10.09	53.05	5.26	68.05	16.11	85.10	5.69	117.05	4.28
38.10	6.51	54.05	3.20	69.05	21.10	87.10	5.21	119.05	4.77
39.10	12.26	55.05	19.90	70.05	5.97	88.10	5.59	127.05	2.22
40.00	24.35	56.05	16.43	71.05	14.05	91.10	6.29	128.15	2.28
41.10	29.34	57.05	38.12	73.05	10.79	93.10	5.10	131.15	4.99
42.10	7.38	58.05	7.00	74.05	22.18	94.10	11.39	137.05	2.28
43.10	33.51	60.85	6.89	75.05	53.36	95.00	100.00	146.80	2.39
44.10	26.08	61.05	7.32	76.05	5.26	96.00	8.19	173.95	76.52
45.00	14.48	62.05	5.69	77.15	2.49	97.10	3.04	174.95	6.89
48.95	6.29	63.05	6.45	79.00	6.07	104.90	3.25	175.85	76.19
50.05	29.45	64.95	2.93	81.00	7.65	110.95	2.98	176.95	5.21
50.95	10.30	67.15	6.56	84.20	3.36	112.05	2.22	181.95	2.28

MS data file header from : >C7702

Sample: BFB 50 NGS Operator: USER8 MS 4/07/87 15:51
Misc : 4/07/87MDS 1 UL INJ
Sys. #: 1 MS model: 96 SW/HW rev.: CA ALS # : 0
Method file: BFB001 Tuning file: MTCV4 No. of extra records: 1
Source temp.: 200 Analyzer temp.: 220 Transfer line temp. : 200

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

SAMPLE DATA

SAMPLE NUMBER DC-GW-23

Sample Number
DC-GW-23

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Ecology & Environment Inc. Case No: U-5157, 5162

Lab Sample ID No: 2194 QC Report No:

Sample Matrix: Water Contract No: EL-3140

Data Release Authorized By: C Slotowicz Date Sample Received: 3-24-~~85~~ 87

Volatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 3-27-87

Conc./Dil Factor: 1 pH

Percent Moisture: (Not Decanted)

CAS Number		ug/l or ug/Kg (Circle One)	
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	5	U
67-64-1	Acetone	29	B
75-15-0	Carbon Disulfide	5	U
75-35-4	1, 1-Dichloroethene	5	U
75-34-3	1, 1-Dichloroethane	5	U
156-60-5	Trans-1, 2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
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

CAS Number		ug/l or ug/Kg (Circle One)	
78-87-5	1, 2-Dichloropropane	5	U
10061-02-6	Trans-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
10061-01-5	cis-1, 3-Dichloropropene	5	U
110-75-8	2-Chloroethylvinylether	10	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
	Total Xylenes	5	U

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution/action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS.

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

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described, and such description attached to the data summary report.

99

Laboratory Name: Ecology & Environment Inc.

Case No: U-5157, 5162

Sample Number: DC-GW-23

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 3/29 and 5/6/87

Date Analyzed: 4/21 and 5/20/87

Conc/Dil Factor: 2

Percent Moisture (Decanted): -

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)	
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
39638-32-9	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	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
9-09-2	3-Nitroaniline	50	U

CAS Number		ug/l or ug/Kg (Circle One)	
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
606-20-2	2. 6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4. 6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	2	JB
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
117-81-7	bis(2-Ethylhexyl)Phthalate	2	JB
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1 2. 3-cd)Pyrene	10	U
53-70-3	Dibenzo(a h)Anthracene	10	U
191-24-2	Benzo(g h i)Perylene	10	U

(1)-Cannot be separated from diphenylamine

Laboratory Name ecology and environment, inc.

Case No U-5157, 5162

Sample Number DC-GW-23

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration (Low) Medium (Circle One)

Date Extracted/Prepared 3-30-87

Date Analyzed 4-14-87

Conc/Dil Factor 1

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☑Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/l or ug/Kg) (Circle One)
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 1,000 or W_s _____ V_t 10,000 V_i 4

Laboratory Name ecology and environment, inc.

Case No U-5157, 5162

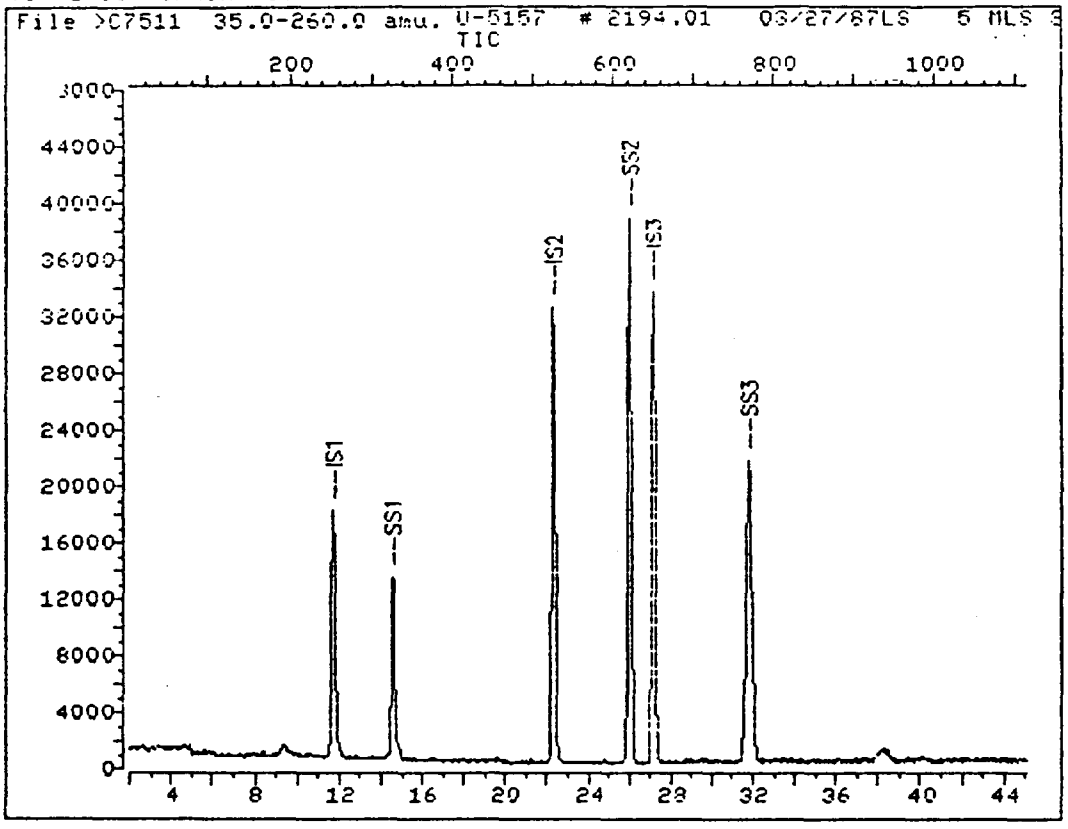
Sample Number DC-GW-23

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.	No TIC's in VOA fraction			
2.				
3.	Unknown	BN.	5.60	10 J
4.	Unknown		5.77	10 J
5.	Unknown		20.78	25 BJ
6.	Unknown		30.34	33 BJ
7	Unknown		34.45	25 J
8.				
9.	No TIC's in AP fraction			
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24				
25.				
26.				
27.				
28.				
29.				
30				

TOTAL ION CHROMATOGRAM

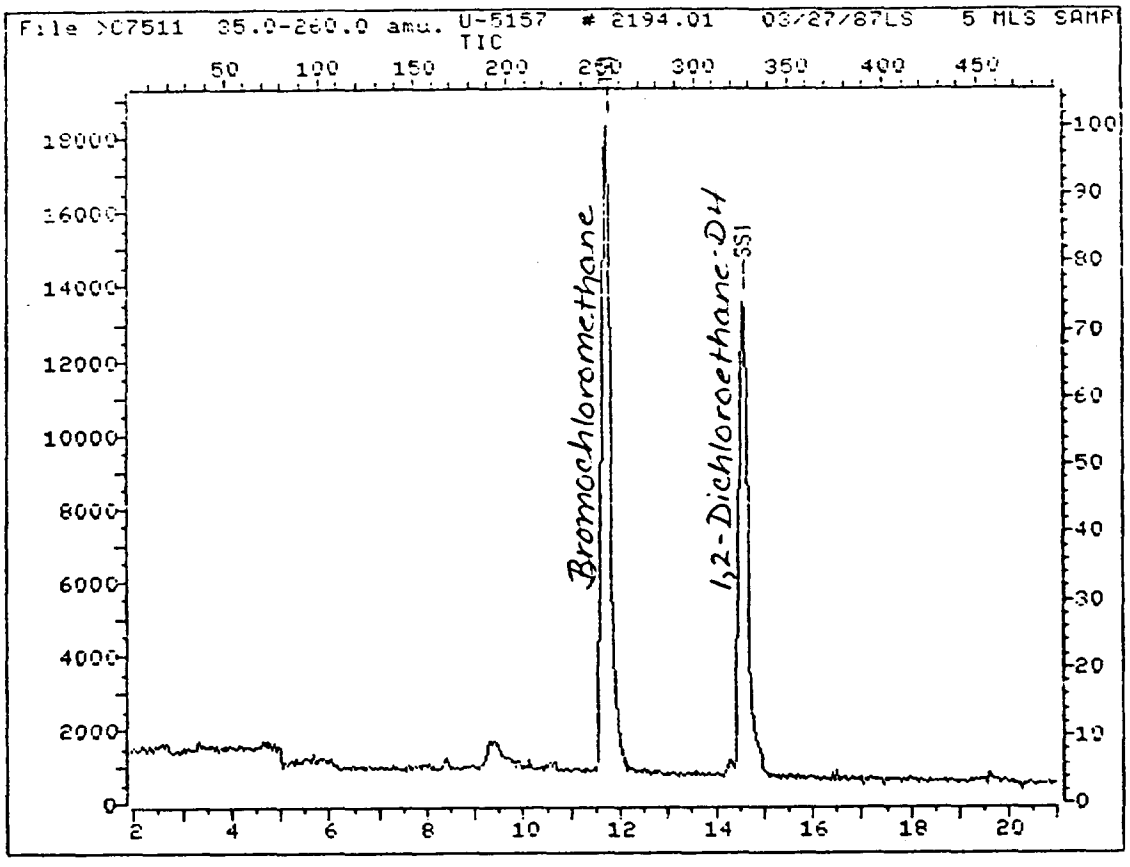


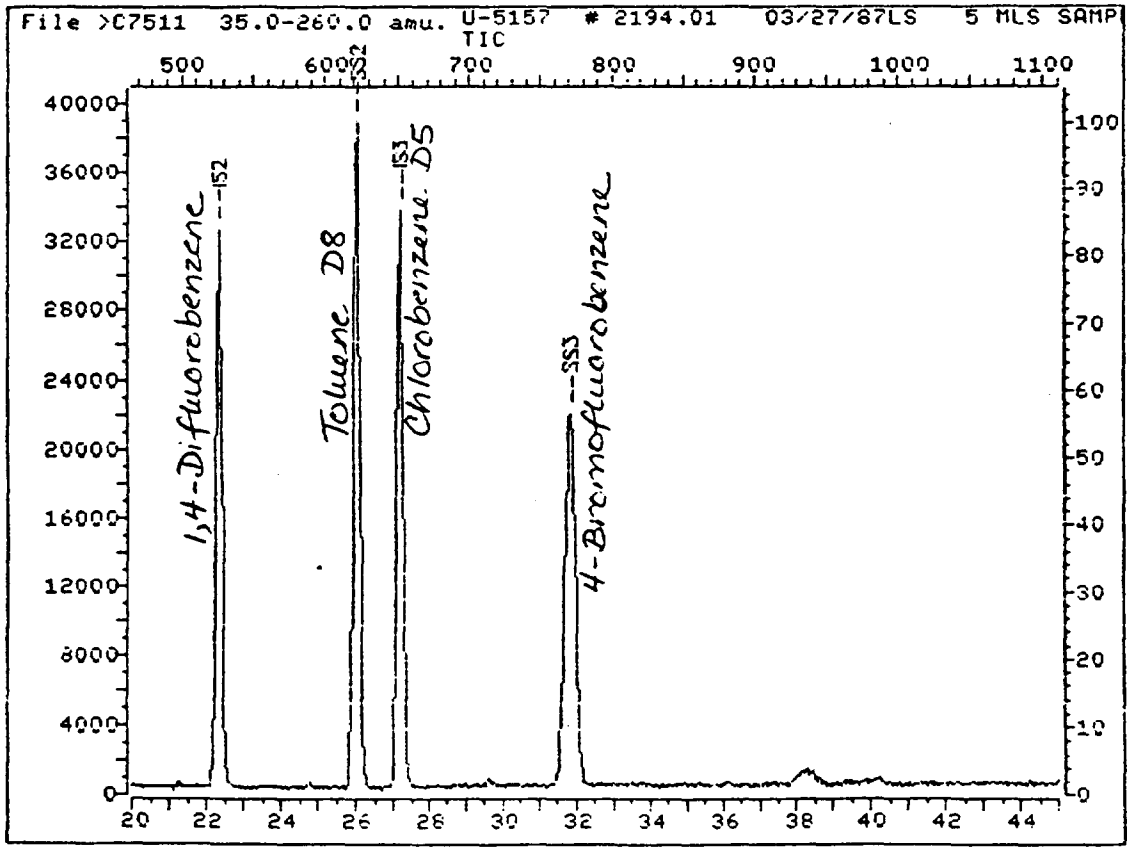
Data File: >C7511::D3
Name: U-5157 # 2194.01 DC-GW-23
Misc: 03/27/87LS 5 MLS SAMPLE + 10 ULS IS/SS

Id File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870327 11:38

Operator ID: USER8
Quant Time: 870327 14:18
Injected at: 870327 13:32

DC-GW-23


File >C7511 35.0-260.0 amu. U-5157 # 2194.01 03/27/87LS 5 MLS SAMP
TIC
Bromochloromethane
1,2-Dichloroethane-D4
551


File >C7511 35.0-260.0 amu. U-5157 # 2194.01 03/27/87LS 5 MLS SAMP
TIC
1,4-Difluorobenzene
152
Toluene D8
Chlorobenzene D5
153
4-Bromofluorobenzene
553

QUANT REPORT

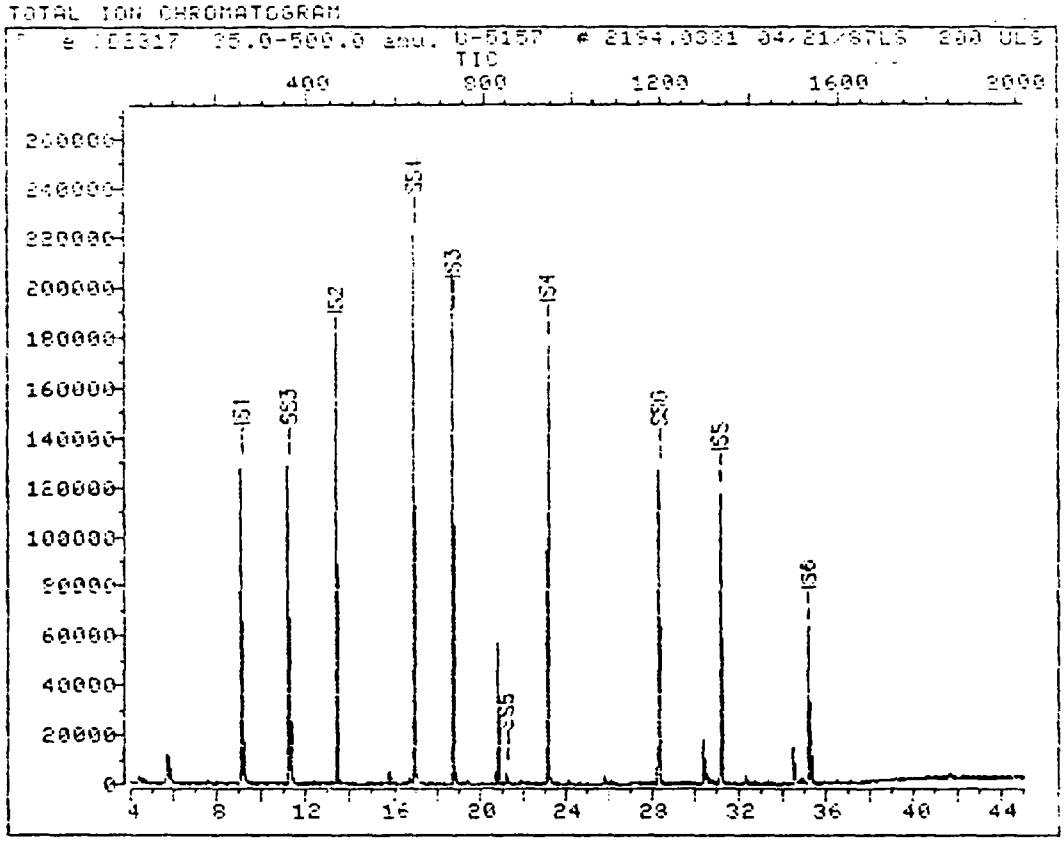
perator ID: USER8 Quant Rev: 4 Quant Time: 870327 14:18
ut t File: ^C7511::Q2 Injected at: 870327 13:32
ata File: >C7511::D3 Dilution Factor: 1.00
ame: U-5157 # 2194.01 DC-GW-23
isc: 03/27/87LS 5 MLS SAMPLE + 10 ULS IS/SS

D File: VOACR::D2
itle: VOA ID FILE FOR HP-5995 (CONT. CAL.)
ast Calibration: 870327 11:38

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	(IS)	128	11.73	253	29578	50.00 UG/L	100
7)	ACETONE		43	9.32	191	13210	29.09 UG/L	100
15)	1,2-DICHLOROETHANE-D4	(SURR)	65	14.56	326	60723	47.70 UG/L	87
16)	*1,4-DIFLUOROBENZENE	(IS)	114	22.31	526	144518	50.00 UG/L	100
31)	*CHLOROBENZENE-D5	(IS)	117	27.16	651	117018	50.00 UG/L	100
36)	TOLUENE-D8	(SURR)	98	26.04	622	152413	52.87 UG/L	98
40)	4-BROMOFLUOROBENZENE	(SURR)	95	31.83	771	78965	54.69 UG/L	100

* Compound is ISTD

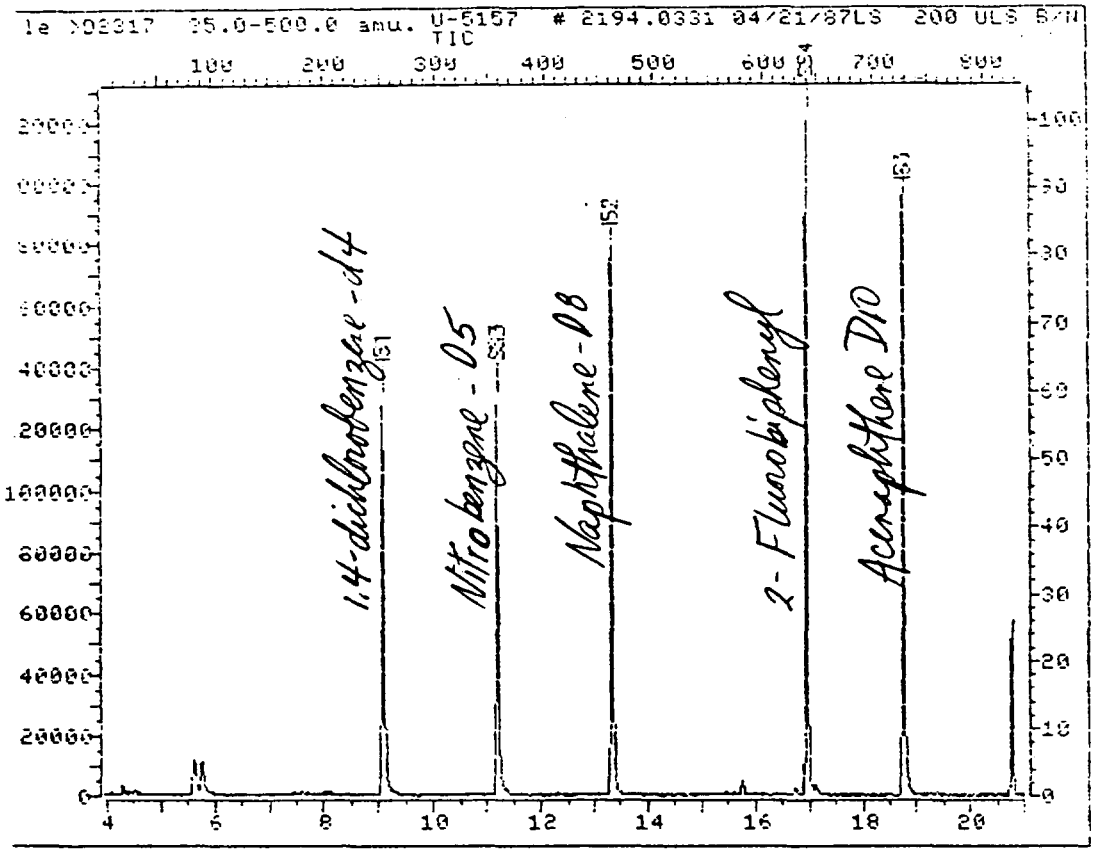
TOTAL ION CHROMATOGRAM



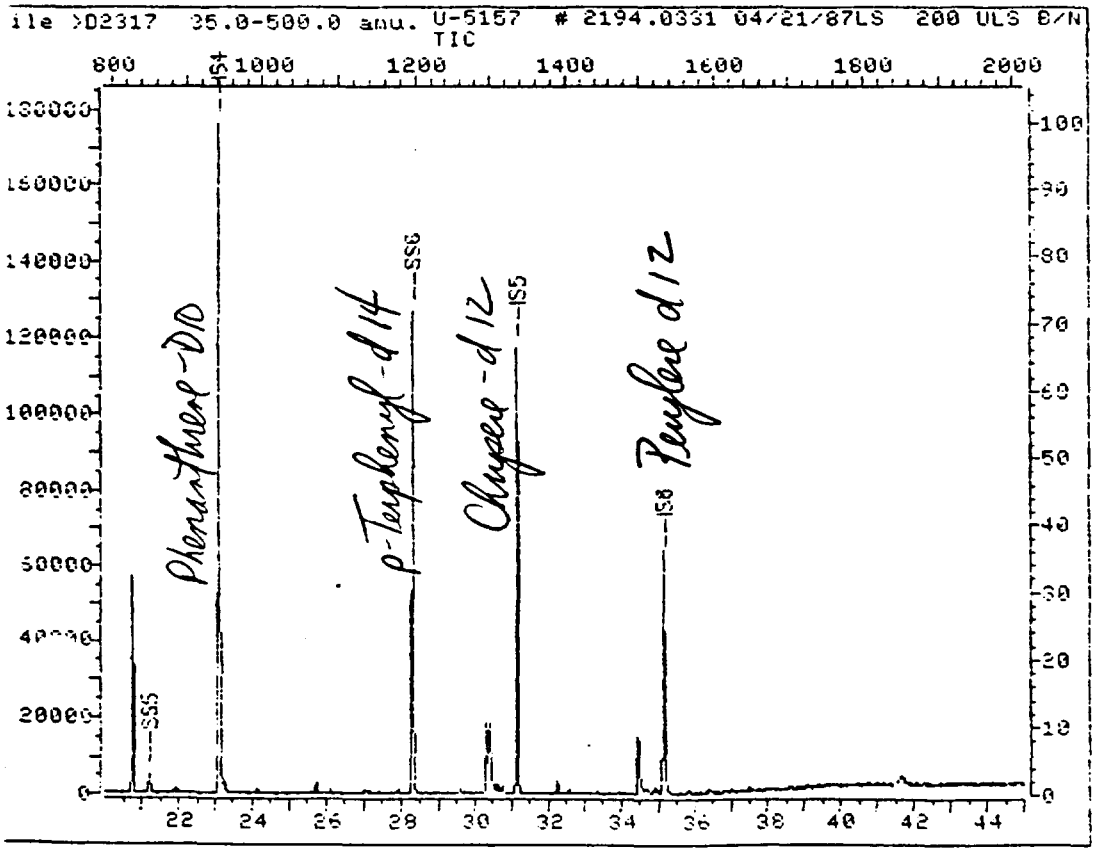
Data File: >D2317::D3
Name: U-5157 # 2194.0331 DC-GW-23
Misc: 04/21/87LS 200 ULS B/N + 200 ULS A/P + 4 ULS IS BTL# 5

Id File: BNADR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870421 16:24

Operator ID: USER6
Quant Time: 870421 21:59
Injected at: 870421 21:11


le >D2317 35.0-500.0 amu. U-5157 # 2194.0331 04/21/87LS 200 ULS S/N
TIC
1,4-dichlorobenzene-d4
Nitrobenzene-D5
Naphthalene-D8
2-Fluorobiphenyl
Acenaphthene D10

DC-GW-23


ile >D2317 35.0-500.0 amu. U-5157 # 2194.0331 04/21/87LS 200 ULS S/N
TIC
Phenanthrene-D10
p-Terphenyl-d14
Chrysene-d12
Perylene d12

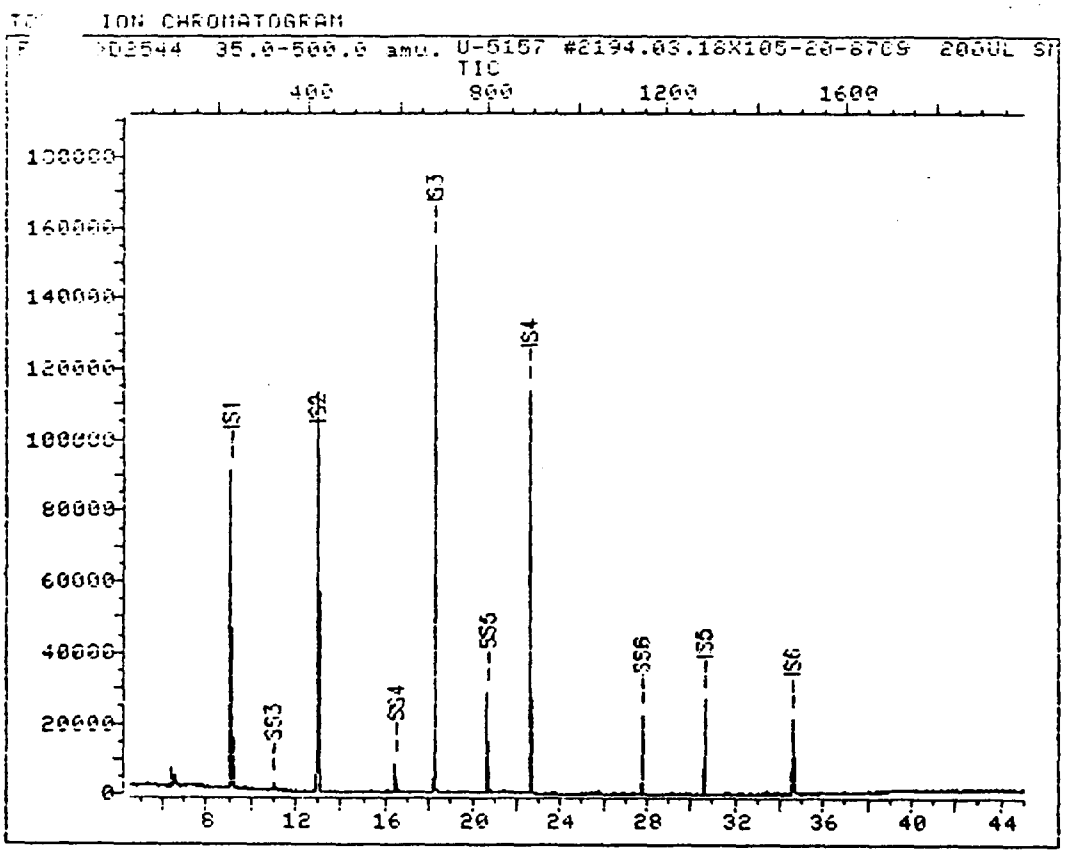
QUANT REPORT

Operator ID: USEPA Quant Rev: 4 Quant Time: [illegible]
Data File: [illegible] Injected at: 870421 21:11
Acq File: [illegible] Dilution Factor: 2.00
Vial: [illegible] DC-GW-23
Inj: [illegible] 200 ULS B/N + 200 ULS A/P + 4 ULS IS STL# [illegible]

Method File: BNADR::D2 BN FRACTION
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870421 16:24

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-D4	(IS)	152	9.07	251	60836	40.00 UG/L	87
[illegible]	~~N-NITROSO-DI-N-PROPYLAMINE~~		~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~[illegible] UG/L~~ NOBJH	91
19)	*NAPHTHALENE-D8	(IS)	136	13.32	460	212855	40.00 UG/L	100
20)	NITROBENZENE-D5	(SURR)	82	11.21	356	99465	90.24 UG/L	91
34)	*ACENAPHTHENE-D10	(IS)	162	18.74	726	114788	40.00 UG/L	93
38)	2-FLUOROBIPHENYL	(SURR)	172	16.97	639	178731	93.07 UG/L	94
[illegible]	~~DIMETHYL PHTHALATE~~		~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~[illegible] UG/L~~ NOBJH	100
48)	2,4,6-TRIBROMOPHENOL	(SURR)	330	21.21	847	2957	10.47 UG/L	97
[illegible]	~~2,4-DINITROTOLUENE~~		~~165~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~[illegible] UG/L~~ NOBJH	100
55)	*PHENANTHRENE-D10	(IS)	188	23.12	941	164597	40.00 UG/L	92
63)	DI-N-BUTYLPHTHALATE		149	25.75	1070	4428	1.95 UG/L	97
65)	*CHRYSENE-D12	(IS)	240	31.15	1335	109848	40.00 UG/L	100
68)	TERPHENYL-D14	(SURR)	244	28.30	1195	111930	97.39 UG/L	100
72)	BIS(2-ETHYLHEXYL)PHTHALATE		149	32.27	1390	2046	1.75 UG/L	99
74)	*PERYLENE-D12	(IS)	264	35.14	1531	76896	40.00 UG/L	100
75)	~~DI-N-OCTYL PHTHALATE~~		~~149~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~[illegible] UG/L~~ NOBJH	100

* Compound is ISTD



Data File: >D2544::D1
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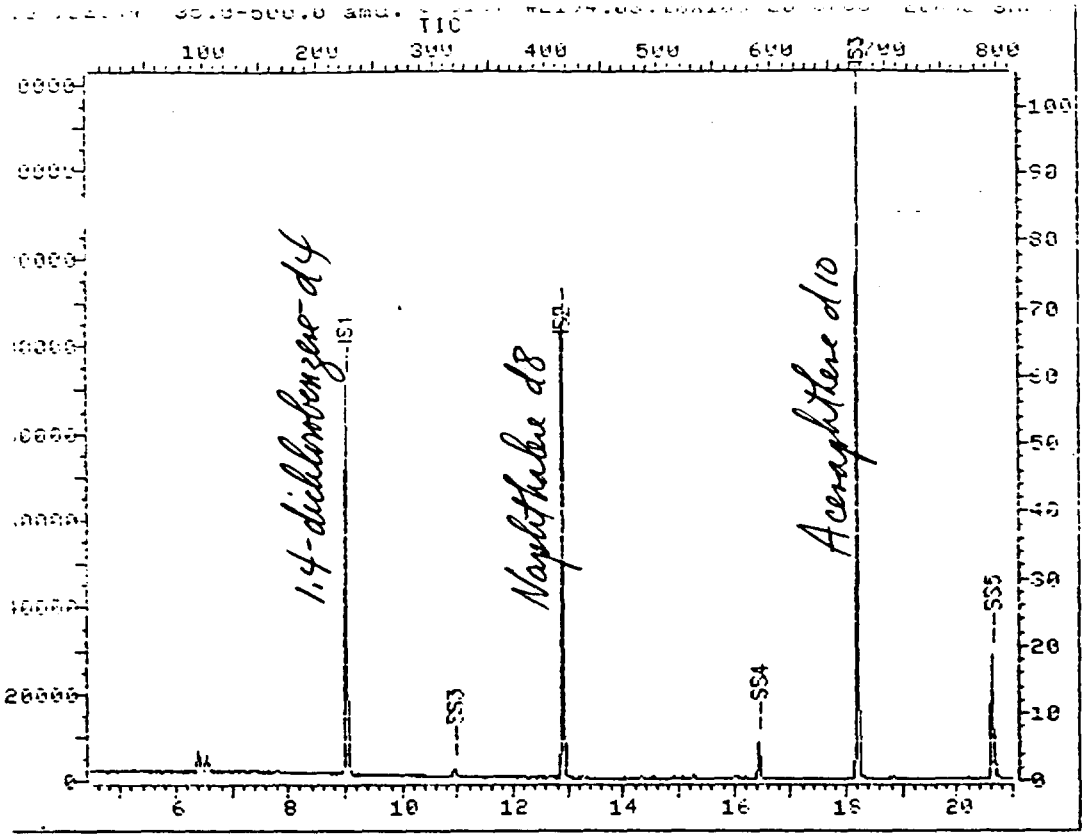
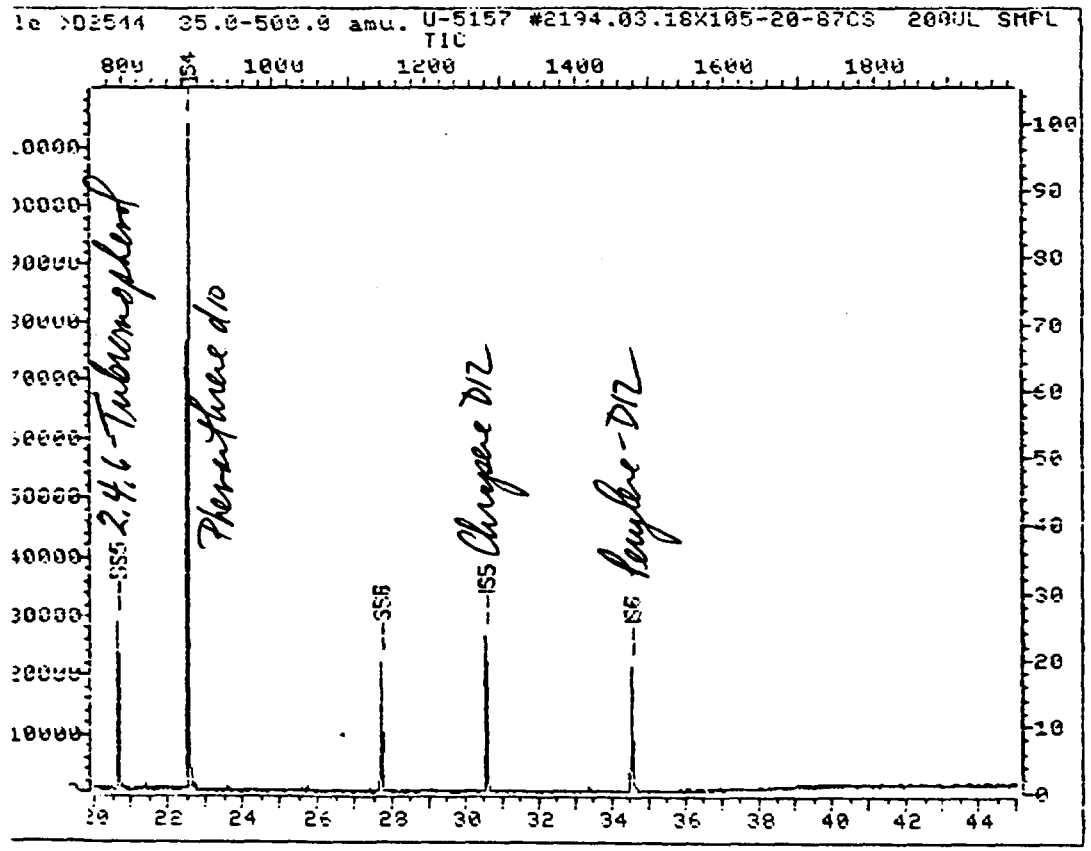
Misc: 05-20-87CS 200UL SMPL + 200UL MECL2 + 4UL IS BTL# 2

Id File: BNAOR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870520 14:58

Operator ID: USER6
Quant Time: 870520 15:42
Injected at: 870520 14:54


TIC
1,4-dichlorobenzene-d4
Naphthalene d8
Acenaphthene d10
IS1
IS2
IS3
SS3
SS4
SS5

DC-GW-23


TIC
2,4,6-Tribromophenol
Phenanthrene d10
Chrysene D12
Perylene-D12
SS5
SS6
IS5
IS6

QUANT REPORT

perator ID: USER6 Quant Rev: 4 Quant Time: 870520 15:42
utput File: ^D2544::Q2 Injected at: 870520 14:54
ata File: >D2544::D1 Dilution Factor: 2.00
ame: U-5157 #2194.03.18X1
ec: 05-20-87CS 200UL SMPL + 200UL MECL2 + 4UL IS BTL# 2

D File: BNADR::D2
itle: BNA ID FILE FOR THE HP 5970 (B)
ast Calibration: 870520 14:58

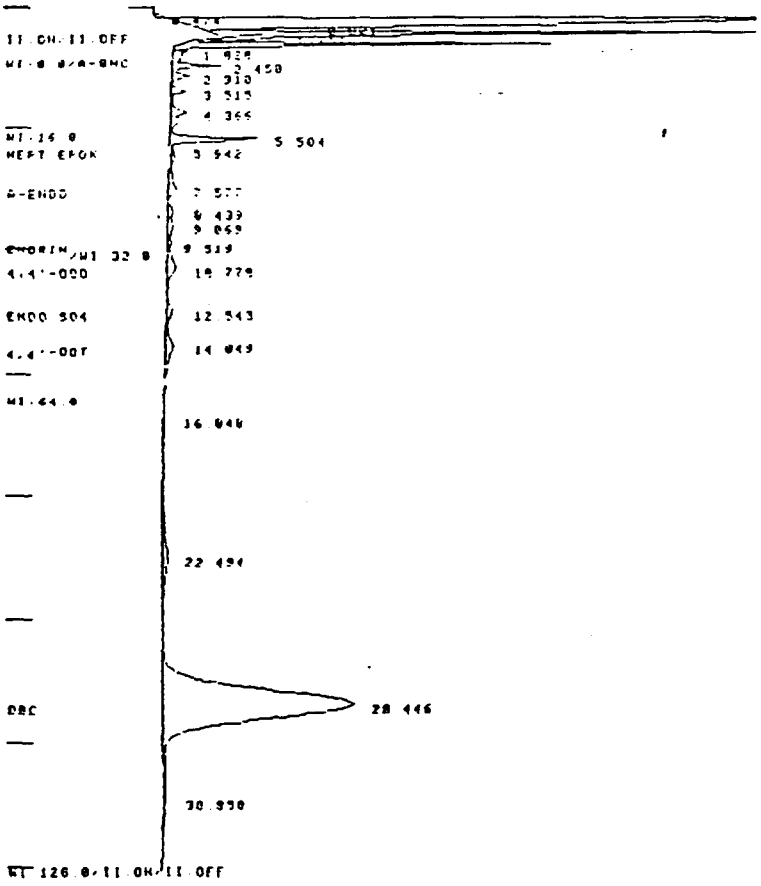
A/P only

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-D4	(IS)	152	9.03	224	31383	40.00 UG/L	84
19)	*NAPHTHALENE-D8	(IS)	136	12.90	414	111751	40.00 UG/L	100
20)	NITROBENZENE-D5	(SURR)	82	10.95	318	2286	3.78 UG/L	88
34)	*ACENAPHTHENE-D10	(IS)	162	18.22	675	68578	40.00 UG/L	95
38)	2-FLUOROBIPHENYL	(SURR)	172	16.45	588	6885	5.46 UG/L	96
~~[illegible]~~	~~DIMETHYL PHTHALATE~~		~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~13063~~	~~[illegible] UG/L~~	No Int 100
8)	2,4,6-TRIBROMOPHENOL	(SURR)	330	20.64	794	11195	23.31 UG/L	98
~~[illegible]~~	~~2,6-DINITROTOLUENE~~		~~165~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~[illegible] UG/L~~	No Int 100
5)	*PHENANTHRENE-D10	(IS)	188	22.56	888	97213	40.00 UG/L	98
51)	*CHRYSENE-D12	(IS)	240	30.56	1281	30511	40.00 UG/L	100
8)	TERPHENYL-D14	(SURR)	244	27.71	1141	24840	78.94 UG/L	100
4)	*PERYLENE-D12	(IS)	264	34.56	1477	26621	40.00 UG/L	100

* Compound is ISTD

2nd time extracted
~~100~~ 2 Acid surrs
missing

CHART SPEED 0.5 CM/MIN
ATTEN: 8 ZERO: 10% 5 MIN/TICK



RECALCULATE ON FILE: 5157631

CHANNEL: 1A - 1 TITLE: RUN# 15 0:49 14 APR 97

DC-GW-23

SAMPLE: 2194 METHOD: CEPA CALCULATION: ES - ANALYS

PEAK NO	PEAK NAME	RESULT US/L	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		0.0000	1.251		114529	BV	3.39
2		0.0000	1.516		233200	VB	4.55
3	~~0-DHC~~	0.0413	2.450	0.080	47039	VV	6.44
4		0.0000	2.910		29764	VB	9.19
5		0.0000	3.515		21997	BV	10.50
6		0.0000	4.366		33001	VV	13.19
7		0.0000	4.719		23079	VV	? 18.56
8		0.0000	5.504		163557	VV	12.31
9	~~A-ENDO~~	0.0142	7.577	0.007	35905	VV	20.00
10	~~DIELDRIN~~	0.0093	9.069	0.259	22011	VV	34.00
11	~~4,4'-DDE~~	0.0229	10.779	-0.132	50913	VB	35.25
12	~~ENDO 504~~	0.0155	12.543	-0.267	25432	BV	34.55
13	~~4,4'-DDT~~	0.0465	14.049	-0.171	60612	VB	49.00
14		0.0000	22.494		83012	BB	90.00
15	DBC	0.9741	28.446	0.026	1949011	BV	75.44

TOTALS: 1.1228 -0.198 2892960

DETECTED PKS: 32 REJECTED PKS: 17

DIVISOR: 1.00000 MULTIPLIER: 10.00000

NOISE: 22.9 OFFSET: 12

RACK: 1 VIAL: 15 INJ: 1

NOTES:
NOTEBOOK:259-186 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#U-5157
INST: VARIAN 6000# 2A ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
LIQUID PHASE: 3% OV-1
CARRIER GAS: N2 @ 50 ML/MIN
DET: 300 C INJ: 220 C
200 C ISOTHERMAL 4 UL INJECTION
PRIMARY ANALYSIS AUTOSAMPLER

SAMPLE NUMBER DC-GW-24

481095

Sample Number
DC-GW-24

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Ecology & Environment, Inc. Case No: U-5157, 5162

Lab Sample ID No: 2195 QC Report No:

Sample Matrix: Water Contract No: IL-3140

Data Release Authorized By: [signature] Date Sample Received 3-24-87

Volatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 3-30-87

Conc./Dil Factor: 5 pH

Percent Moisture: (Not Decanted)

CAS Number		(ug/l or ug/Kg) (Circle One)
74-87-3	Chloromethane	50u
74-83-9	Bromomethane	50u
75-01-4	Vinyl Chloride	50u
75-00-3	Chloroethane	50u
75-09-2	Methylene Chloride	25u
67-64-1	Acetone	40
75-15-0	Carbon Disulfide	25u
75-35-4	1, 1-Dichloroethene	25u
75-34-3	1, 1-Dichloroethane	25u
156-60-5	Trans-1, 2-Dichloroethene	25u
67-66-3	Chloroform	25u
107-06-2	1, 2-Dichloroethane	25u
78-93-3	2-Butanone	50u
71-55-6	1, 1, 1-Trichloroethane	25u
56-23-5	Carbon Tetrachloride	25u
108-05-4	Vinyl Acetate	50u
75-27-4	Bromodichloromethane	25u

CAS Number		(ug/l or ug/Kg) (Circle One)
78-87-5	1, 2-Dichloropropane	25u
10061-02-6	Trans-1, 3-Dichloropropene	25u
79-01-6	Trichloroethene	25u
124-48-1	Dibromochloromethane	25u
79-00-5	1, 1, 2-Trichloroethane	25u
71-43-2	Benzene	50
10061-01-5	cis-1, 3-Dichloropropene	25u
110-75-8	2-Chloroethylvinylether	50u
75-25-2	Bromoform	25u
591-78-6	4-Methyl-2-Pentanone	50u
108-10-1	2-Hexanone	50u
127-18-4	Tetrachloroethene	25u
79-34-5	1, 1, 2, 2-Tetrachloroethane	25u
108-88-3	Toluene	25u
108-90-7	Chlorobenzene	270
100-41-4	Ethylbenzene	25u
100-42-5	Styrene	25u
	Total Xylenes	25u

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration, dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U: Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g. 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS.

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

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

E This flag indicates an approximate concentration. The amount detected in the analysis exceeds the calibrated range.

114

Laboratory Name Ecology & Environment Inc.

Case No 4-5157, 5162

Sample Number DCGW-24

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared 3-29-87

Date Analyzed 4-25-87

Conc/Dil Factor 2

Percent Moisture (Decanted) -

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)	
108-95-2	Phenol	10	U
111-44-4	bis(-2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	5	J
541-73-1	1 3-Dichlorobenzene	110	
106-46-7	1. 4-Dichlorobenzene	640	
100-51-6	Benzyl Alcohol	10	U
95-50-1	1 2-Dichlorobenzene	110	
95-48-7	2-Methylphenol	10	U
39638-32-9	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	2	J
120-83-2	2 4-Dichlorophenol	22	
120-82-1	1. 2. 4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	140	
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	1	J
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	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	50	U

CAS Number		ug/l or ug/Kg (Circle One)	
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
606-20-2	2 6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4. 6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	7	BJ
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
117-81-7	bis(2-Ethylhexyl)Phthalate	5	BJ
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1 2. 3-cd)Pyrene	10	U
53-70-3	Dibenz(a h)Anthracene	10	U
191-24-2	Benzo(g h i)Perylene	10	U

(1)-Cannot be separated from diphenylamine

Laboratory Name ecology and environment, inc.

Case No U-5157, 5162

Sample Number DC-GW-24

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration (Low) Medium (Circle One)

Date Extracted/Prepared 3-30-87

Date Analyzed 4-14-87

Conc/Dil Factor 1

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☑Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/l or ug/Kg) (Circle One)
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 1,000 or W_s _____ V_t 10,000 V_i 4

Laboratory Name ecology and environment, inc.

Case No U-5157, 5162

Sample Number DC-GW-24

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1. 60297	Ethane, 1,1'-oxybis -	VOA	13.87	44 J
2.	Dichlorobenzene isomer	↓	38.56	84 J
3.	Dichlorobenzene isomer	↓	40.39	740 J
4.				
5.	Chloroaniline Isomer	BNA	12.26	42 J
6.	Ethylaniline Isomer		13.20	30 J
7	Nonylphenol Isomer		17.59	70 J
8.	Ethoxyphenol Isomer		12.91	62 J
9. 90415	[1,1'-Biphenyl]-2-amine		20.57	170 J
10.	Unknown Aromatic	BNA	21.55	22 J
11.	Unknown Aromatic		21.78	34 J
12.	Unknown Aromatic		22.41	27 J
13.	Unknown		30.30	33 BJ
14.	Unknown		34.42	83 J
15.				
16.				
17.				
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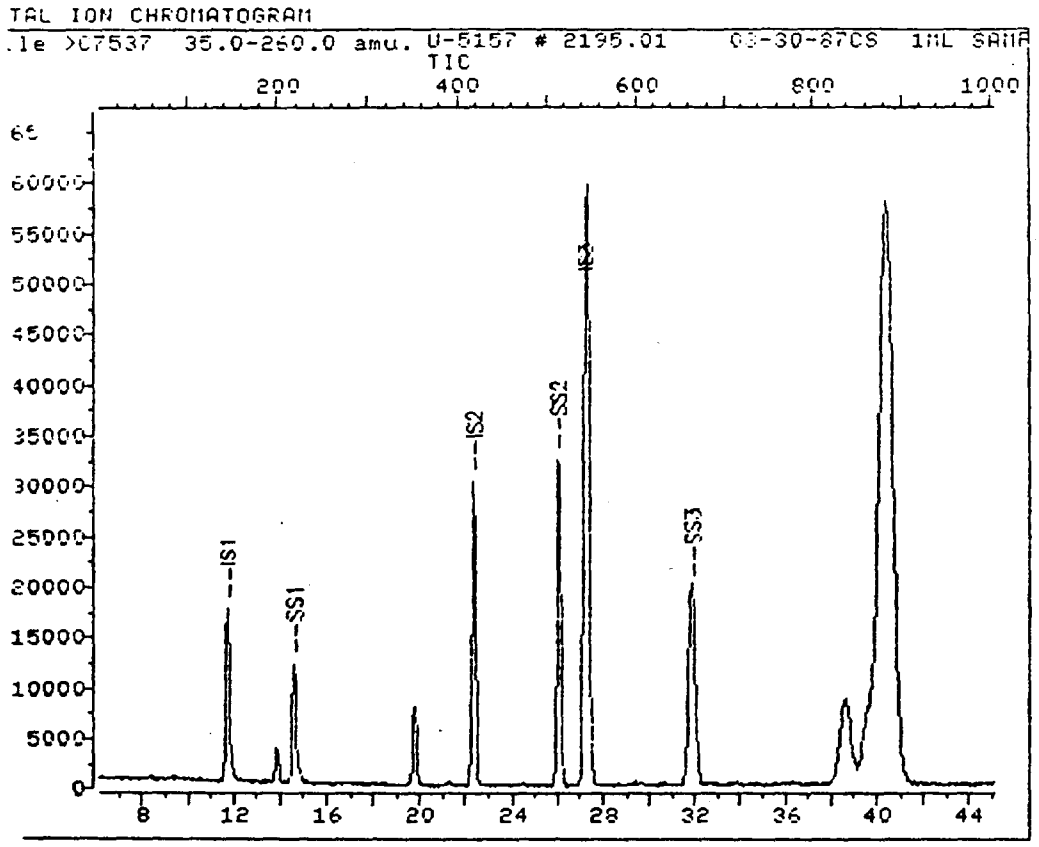
29.				
30				

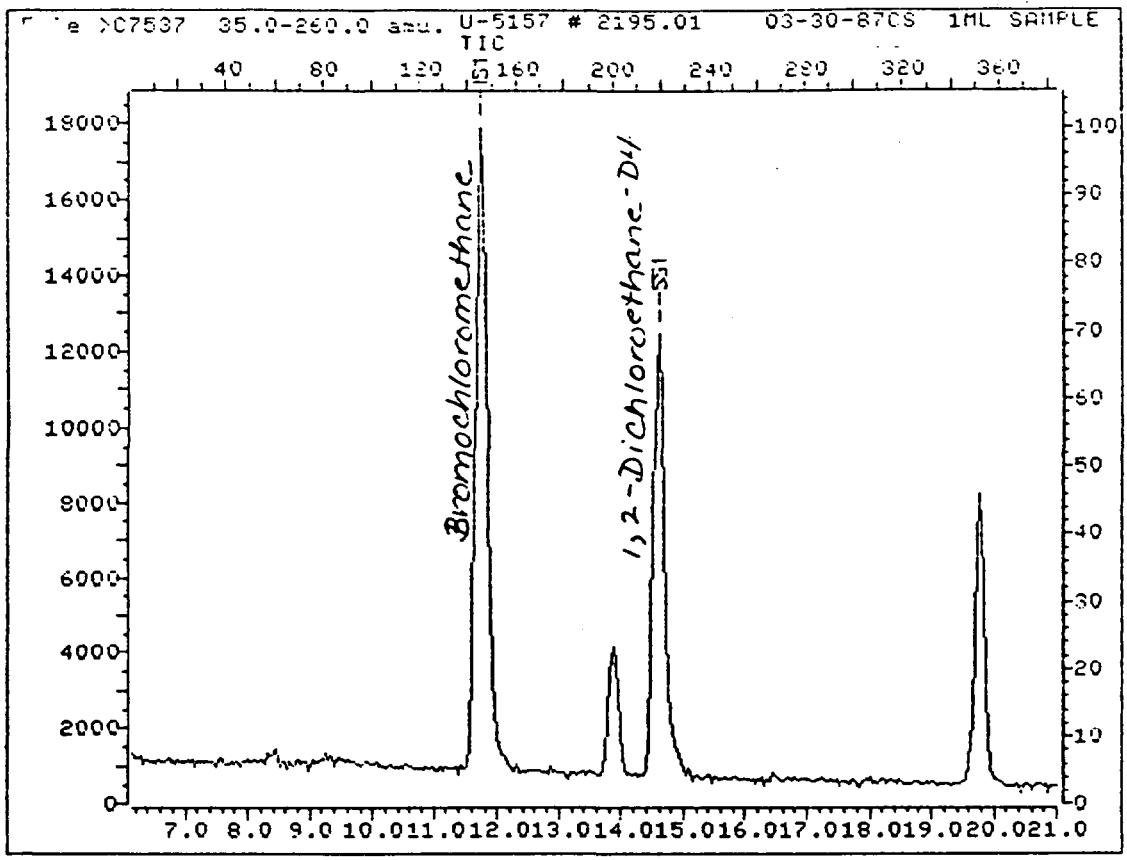


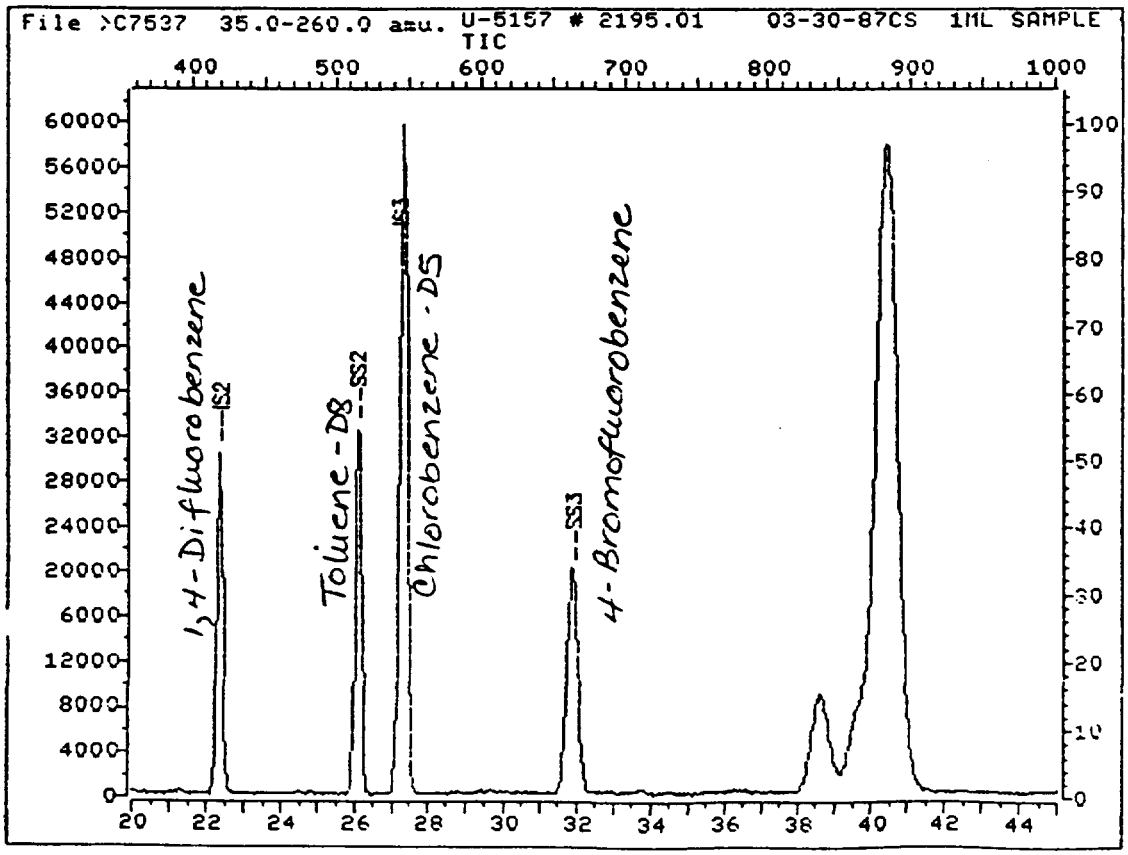
Data File: >C7537::D1
Name: U-5157 # 2195.01 DC-GW-24
Misc: 03-30-87CS 1ML SAMPLE + 4ML DI + 10UL IS/SS (5X)

Id File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870330 11:28

Operator ID: USER8
Quant Time: 870330 13:56
Injected at: 870330 13:10

DC-GW-24


File >C7537 35.0-260.0 amu. U-5157 # 2195.01 03-30-87CS 1ML SAMPLE
TIC
Bromochloromethane
1,2-Dichloroethane-D4
SS1


File >C7537 35.0-260.0 amu. U-5157 # 2195.01 03-30-87CS 1ML SAMPLE
TIC
1,4-Difluorobenzene
IS2
Toluene-D8
SS2
IS3
Chlorobenzene-D5
SS3
4-Bromofluorobenzene

QUANT REPORT

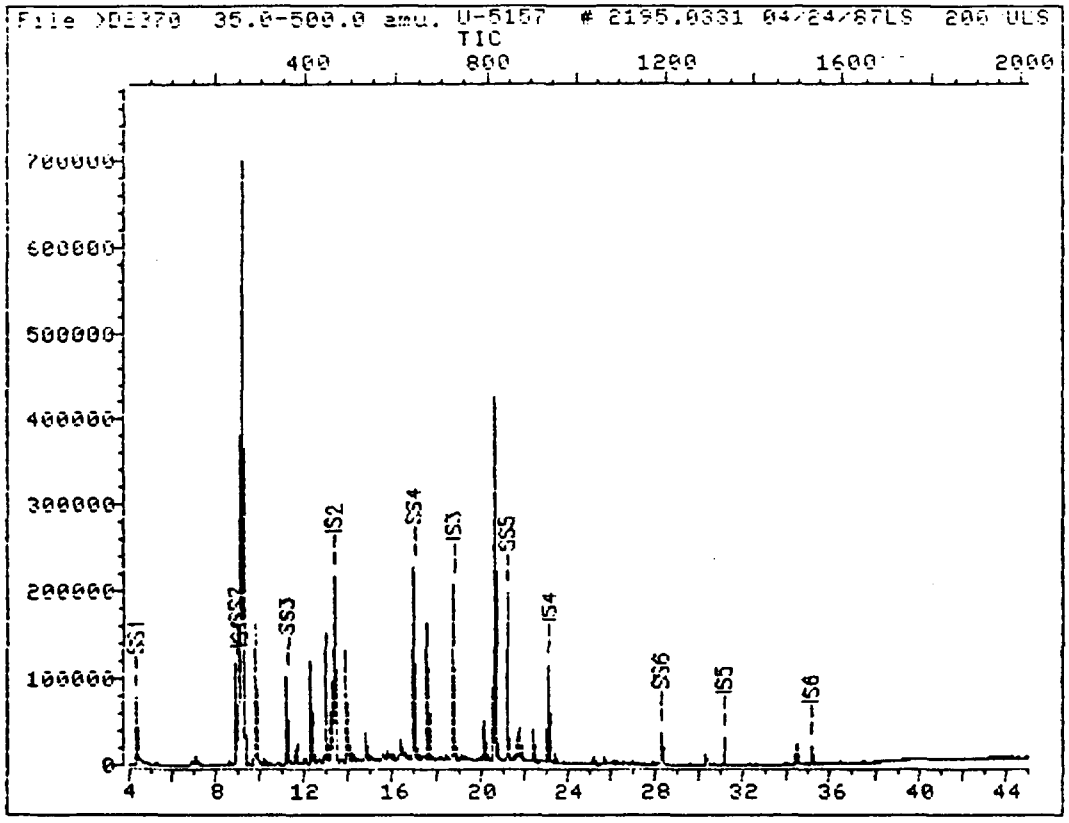
ɔɛ tor ID: USER8 Quant Rev: 4 Quant Time: 870330 13:56
ɹtput File: ^C7537::D2 Injected at: 870330 13:10
ɜta File: >C7537::D1 Dilution Factor: 1.00
ɜme: U-5157 # 2195.01 DC-GW-24
ɪsc: 03-30-87CS 1ML SAMPLE + 4ML DI + 10UL IS/SS (5X)

) File: VOACR::D2
itle: VOA ID FILE FOR HP-5995 (CONT. CAL.)
ɜst Calibration: 870330 11:28

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	(IS)	128 11.73	145	28504	50.00	UG/L	100
7)	ACETONE		43 9.25	81	4292	7.98	UG/L	100
15)	1,2-DICHLOROETHANE-D4	(SURR)	65 14.60	219	55434	42.78	UG/L	88
16)	*1,4-DIFLUOROBENZENE	(IS)	114 22.36	419	133238	50.00	UG/L	100
27)	BENZENE		78 19.77	352	34763	10.10	UG/L	100
31)	*CHLOROBENZENE-D5	(IS)	117 27.22	544	108135	50.00	UG/L	100
6)	TOLUENE-D8	(SURR)	98 26.05	514	132702	43.79	UG/L	94
3)	CHLOROBENZENE		112 27.31	546	151926	53.66	UG/L	98
0)	4-BROMOFLUOROBENZENE	(SURR)	95 31.89	664	73279	47.61	UG/L	100
3)	1,3-DICHLOROBENZENE		146 38.56	836	31125	31125.00	NO CALIB	100
3)	1,3-DICHLOROBENZENE		146 40.39	883	614376	614376.0	NO CALIB	100
4)	1,2-DICLHLOROBENZENE		146 38.56	836	31125	31125.00	NO CALIB	100
4)	1,2-DICLHLOROBENZENE		146 40.39	883	614376	614376.0	NO CALIB	100
5)	1,4-DICHLOROBENZENE		146 38.56	836	31125	31125.00	NO CALIB	100
5)	1,4-DICHLOROBENZENE		146 40.39	883	614376	614376.0	NO CALIB	100

* Compound is ISTD

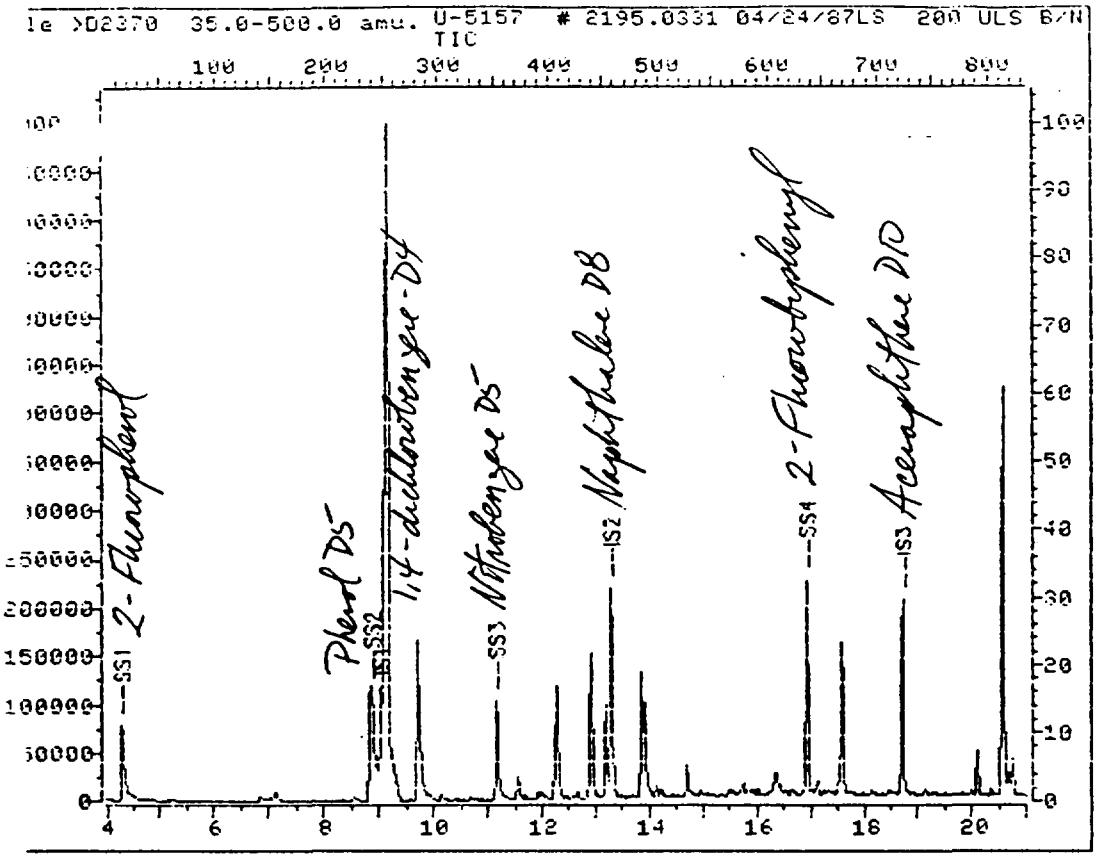
TOTAL ION CHROMATOGRAM



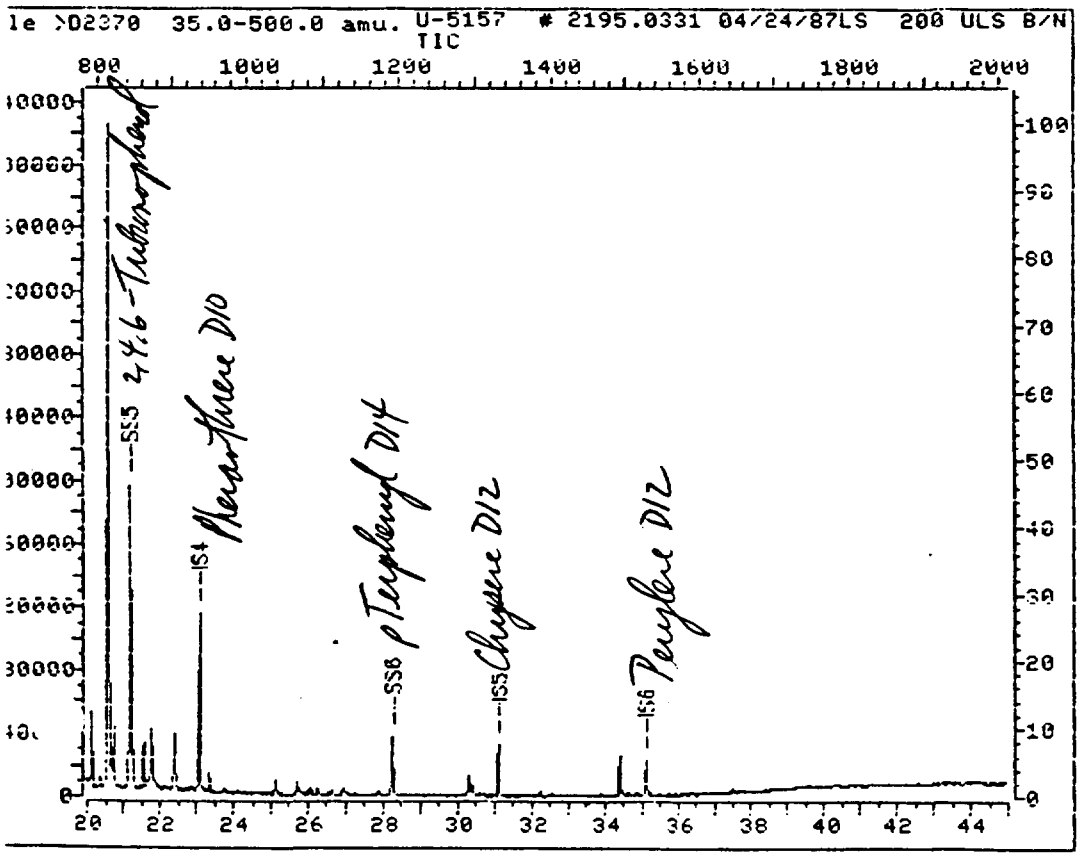
Data File: >D2370::D1
Name: U-5157 # 2195.0331 DC-GW-24
Misc: 04/24/87LS 200 ULS B/N + 200 ULS A/P + 4 ULS IS BTL# 2

Id File: BNADR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870424 15:14

Operator ID: USER6
Quant Time: 870425 00:51
Injected at: 870425 00:03


le >D2370 35.0-500.0 amu. U-5157 # 2195.0331 04/24/87LS 200 ULS B/N
TIC
SS1 2-Fluorophenol
SS2 Phenol D5
IS1
1,4-dichlorobenzene-D4
SS3 Nitrobenzene D5
IS2 Naphthalene D8
SS4 2-Fluorobiphenyl
IS3 Acenaphthene D10

DC-GW-24


le >D2370 35.0-500.0 amu. U-5157 # 2195.0331 04/24/87LS 200 ULS B/N
TIC
SS5 2,4,6-Tribromophenol
IS4 Phenanthrene D10
SS6 p-Terphenyl D14
IS5 Chrysene D12
IS6 Perylene D12

QUANT REPORT

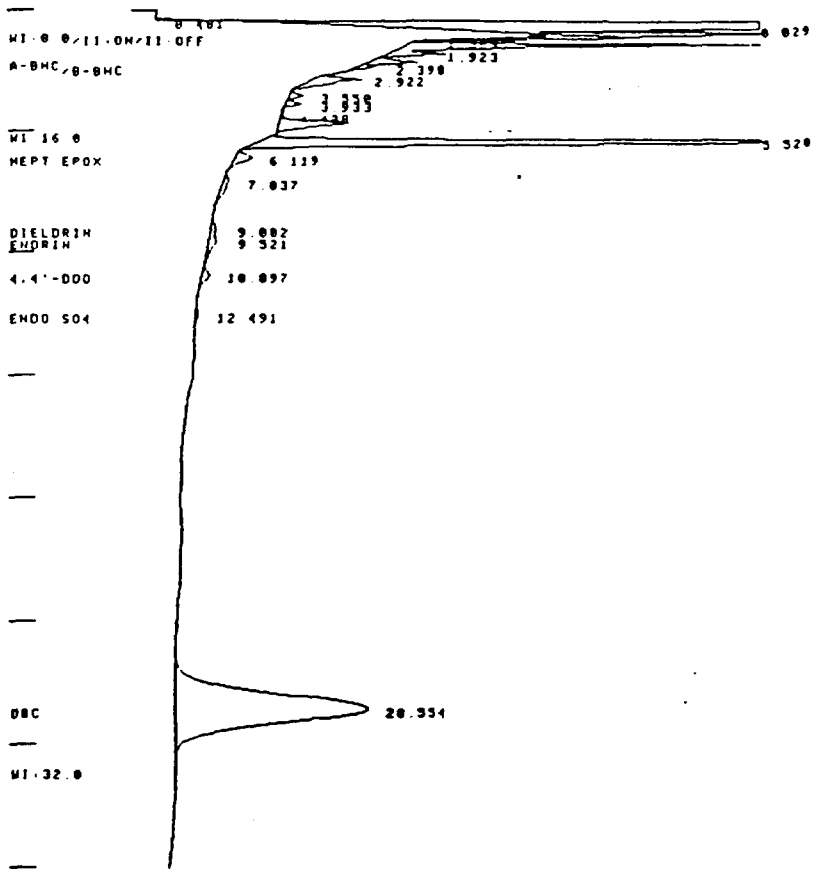
Operator ID: USER6 Quant Rev: 4 Quant Time: 870425 00:51
Data File: ^D2370::D2 Injected at: 870425 00:03
Sta File: >D2370::D1 Dilution Factor: 2.00
Name: U-5157 # 2195.0331 DC-CW-24
Misc: 04/24/87LS 200 ULS B/N + 200 ULS A/P + 4 ULS IS BTL# 2

ID File: BNADR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870424 15:14

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-D4	(IS)	152	9.04	249	59406	40.00 UG/L	86
2)	PHENOL-D5	(SURR)	99	8.88	241	77083	65.27 UG/L	96
3)	~~N-NITROSODIMETHYLAMINE~~		~~42~~	~~4.29~~	~~16~~	~~1230~~	~~1230.00 NO CAL IB~~	~~83~~
3)	~~N-NITROSODIMETHYLAMINE~~		~~42~~	~~4.40~~	~~25~~	~~1869~~	~~1869.00 NO CAL IB~~	~~23~~
5)	2-FLUOROPHENOL	(SURR)	112	4.27	15	75924	77.14 UG/L	81
9)	1,3-DICHLOROBENZENE		146	8.84	239	112151	107.75 UG/L	98
9)	~~1,3-DICHLOROBENZENE~~		~~146~~	~~9.16~~	~~255~~	~~698923~~	~~671.48 UG/L~~ CW	98
1)	~~1,4-DICHLOROBENZENE~~		~~146~~	~~8.84~~	~~239~~	~~112151~~	~~102.02 UG/L~~	99
1)	1,4-DICHLOROBENZENE		146	9.16	255	698923	635.77 UG/L	97
2)	1,2-DICHLOROBENZENE		146	9.73	283	123034	112.25 UG/L	98
4)	~~BIS(2-CHLOROISOPROPYL)ETHER~~		~~45~~	~~10.14~~	~~303~~	~~1778~~	~~.61 UG/L~~ CW	100
5)	2-CHLOROPHENOL		128	8.55	~~225~~	4385	4.91 UG/L	95
2)	~~N-NITROSO-DI-N-PROPYLAMINE~~		~~70~~	~~11.16~~	~~353~~	~~16858~~	~~1[illegible].70 UG/L~~ No BPK	89
9)	*NAPHTHALENE-D8	(IS)	136	13.30	458	222424	40.00 UG/L	100
1)	NITROBENZENE-D5	(SURR)	82	11.16	353	97251	76.88 UG/L	94
5)	~~BIS(-2-CHLOROETHOXY)METHANE~~		~~93~~	~~12.93~~	~~440~~	~~2583~~	~~1.70 UG/L~~ CW	88
5)	BIS(-2-CHLOROETHOXY)METHANE		93	13.20	453	3355	2.21 UG/L	47
7)	2,4-DICHLOROPHENOL		162	13.30	458	16307	21.99 UG/L	89
9)	~~NAPHTHALENE~~		~~128~~	~~13.36~~	~~461~~	~~1456~~	~~.98 UG/L~~ CW	100
1)	~~4-CHLOROANILINE~~		~~127~~	~~13.85~~	~~485~~	~~70253~~	~~72.45 UG/L~~	~~97~~ OK
1)	4-CHLOROANILINE		127	13.91	488	67634	69.73 UG/L	98 BPK
2)	~~4-CHLORO-3-METHYLPHENOL~~		~~107~~	~~15.51~~	~~566~~	~~2487~~	~~2.07 UG/L~~ CW	87
3)	2-METHYLNAPHTHALENE		142	15.57	569	2287	1.29 UG/L	99
4)	*ACENAPHTHENE-D10	(IS)	162	18.73	724	105921	40.00 UG/L	96
3)	2-FLUOROBIPHENYL	(SURR)	172	16.94	636	154824	88.97 UG/L	94
1)	~~DIMETHYL PHTHALATE~~		~~163~~	~~18.73~~	~~724~~	~~20057~~	~~18.97 UG/L~~ CW	100
3)	2,4,6-TRIBROMOPHENOL	(SURR)	330	21.19	844	43656	120.22 UG/L	99
9)	~~2,4-DINITROPHENOL~~		~~184~~	~~20.67~~	~~819~~	~~9162~~	~~45.21 UG/L~~	100
1)	~~4-NITROPHENOL~~		~~139~~	~~19.61~~	~~767~~	~~389~~	~~1.02 UG/L~~	100
1)	~~4-NITROPHENOL~~		~~139~~	~~19.70~~	~~775~~	~~320~~	~~1.50 UG/L~~	100
1)	~~4-NITROPHENOL~~		~~139~~	~~20.00~~	~~786~~	~~336~~	~~1.57 UG/L~~	100
1)	~~4-NITROPHENOL~~		~~139~~	~~20.35~~	~~803~~	~~172~~	~~.81 UG/L~~ CW	100
3)	~~4-NITROPHENOL~~		~~139~~	~~20.47~~	~~809~~	~~202~~	~~.95 UG/L~~	100
2)	~~2,6-DINITROTOLUENE~~		~~165~~	~~18.71~~	~~723~~	~~1[illegible]997~~	~~33.92 UG/L~~	100
5)	*PHENANTHRENE-D10	(IS)	188	23.08	937	96104	40.00 UG/L	93
7)	~~N-NITROSODIPHENYLAMINE~~		~~169~~	~~20.57~~	~~814~~	~~240729~~	~~393.82 UG/L~~ CW	~~69~~
3)	DI-N-BUTYLPHTHALATE		149	25.72	1066	9663	7.38 UG/L	98
5)	*CHRYSENE-D12	(IS)	240	31.12	1331	31912	40.00 UG/L	100
3)	TERPHENYL-D14	(SURR)	244	28.24	1190	35990	90.06 UG/L	100
2)	BIS(2-ETHYLHEXYL)PHTHALATE		149	32.24	1386	1677	4.80 UG/L	85
4)	*PERYLENE-D12	(IS)	264	35.11	1527	23892	40.00 UG/L	100

* Compound is ISTD

CHART SPEED 0.5 CM/MIN
ATTEN: 8 ZERO: 10% 5 MIN/TICK



RECALCULATE ON FILE: 5157632

DC-GW-24

CHANNEL: 1A - 1 TITLE: RUN# 16 1:27 14 APR 87

SAMPLE: 2195 METHOD: CEPA CALCULATION: ES - ANALYS

PEAK NO	PEAK NAME	RESULT UG/L	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	WI/2 (SEC)
1		0.0000	1.258		77728	BV	2.63
2		0.0000	1.524		298390	VV	4.75
3		0.0000	1.636		56541	VV	? 7.06
4		0.0000	1.923		58333	VV	4.44
5	~~A-BHC~~	~~0.0158~~	2.221	0.001	48051	VV	6.38
6		0.0000	2.922		48570	BV	7.50
7		0.0000	3.061		40407	VB	? 6.44
8		0.0000	3.550		20279	BV	12.06
9	~~HEPTACHLO~~	~~0.0009~~	3.933	-0.157	20416	VV	8.63
10		0.0000	4.733		131914	VB	14.44
11		0.0000	5.520		1065859	BV	12.13
12	~~HEPT EPOX~~	0.0185	6.119	0.009	48538	T	15.94
13		0.0000	7.037		35227	T	20.63
14	~~ENDRIN~~	0.0172	9.521	-0.289	36741	VV	18.25
15	~~4,4'-DDD~~	0.0122	10.897	-0.013	27387	VB	20.75
16	DBC	0.9479	20.554	0.134	1896632	BB	? 77.19
TOTALS:		1.0205		-0.315	3911013		

DETECTED PKS: 28 REJECTED PKS: 12

DIVISOR: 1.00000 MULTIPLIER: 10.00000

NOISE: 22.9 OFFSET: 0

RACK: 2 VIAL: 1 INJ: 1

NOTES:
NOTEBOOK:259-186 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#U-5157
INST: VARIAN 6000# 2A ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
LIQUID PHASE: 3% OV-1
CARRIER GAS: N2 @ 60 ML/MIN
DET: 300 C INJ: 220 C
200 C ISOTHERMAL 4 UL INJECTION
PRIMARY ANALYSIS AUTOSAMPLER

SAMPLE NUMBER DC-GW-25

Sample Number
DC-GW-25

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Ecology & Environment Inc Case No: U-5157, 5162

Lab Sample ID No: 2196 QC Report No:

Sample Matrix: Water Contract No: EL-3140

Data Release Authorized By: C Stojtowicz Date Sample Received: 3-24-87

Volatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 3-27-87

Conc./Dil Factor: 1 pH

Percent Moisture: (Not Decanted)

CAS Number		ug/l or ug/Kg (Circle One)	
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	5	J
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	17	B
75-15-0	Carbon Disulfide	5	U
75-35-4	1, 1-Dichloroethene	5	U
75-34-3	1, 1-Dichloroethane	5	U
156-60-5	Trans-1, 2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
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

CAS Number		ug/l or ug/Kg (Circle One)	
78-87-5	1, 2-Dichloropropane	5	U
10061-02-6	Trans-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	28	
10061-01-5	cis-1, 3-Dichloropropene	5	U
110-75-8	2-Chloroethylvinylether	10	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	33	
100-41-4	Ethylbenzene	1	J
100-42-5	Styrene	5	U
	Total Xylenes	5	U

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/µl in the final extract should be confirmed by GC/MS.

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

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described, and such description attached to the data summary report.

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Laboratory Name: Ecology & Environment Inc.

Case No: U-5157, 5162

Sample Number: DC-GW-25

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: 3/29/87 and 5/6/87

Date Analyzed: 4/22 and 5/20/87

Conc/Dil Factor: 2

Percent Moisture (Decanted) _____

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)	
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
39638-32-9	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	14	
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	Dimethyl-Phthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	50	U

CAS Number		ug/l or ug/Kg (Circle One)	
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
606-20-2	2. 6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	23	B
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4. 6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	6	J
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	2	JB
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
117-81-7	bis(2-Ethylhexyl)Phthalate	3	JB
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1 2. 3-cd)Pyrene	10	U
53-70-3	Dibenz(a h)Anthracene	10	U
191-24-2	Benzo(g h i)Perylene	10	U

(1)-Cannot be separated from diphenylamine

Laboratory Name ecology and environment, inc.

Case No U-5157,5162

Sample Number DC-GW-25

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration (Low) Medium (Circle One)

Date Extracted/Prepared 3-30-87

Date Analyzed 4-14-87

Conc/Dil Factor 1

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☑Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/l) or ug/Kg (Circle One)
319-84-6	Alpha-BHC	0.05U
319-85-7	Beta-BHC	0.05U
319-86-8	Delta-BHC	0.05U
58-89-9	Gamma-BHC (Lindane)	0.05U
76-44-8	Heptachlor	0.05U
309-00-2	Aldrin	0.05U
1024-57-3	Heptachlor Epoxide	0.05U
959-98-8	Endosulfan I	0.05U
60-57-1	Dieldrin	0.10U
72-55-9	4,4'-DDE	0.10U
72-20-8	Endrin	0.10U
33213-65-9	Endosulfan II	0.10U
72-54-8	4,4'-DDD	0.10U
1031-07-8	Endosulfan Sulfate	0.10U
50-29-3	4,4'-DDT	0.10U
72-43-5	Methoxychlor	0.50U
53494-70-5	Endrin Ketone	0.10U
57-74-9	Chlordane	0.50U
8001-35-2	Toxaphene	1.0U
12674-11-2	Aroclor-1016	0.50U
11104-28-2	Aroclor-1221	0.50U
11141-16-5	Aroclor-1232	0.50U
53469-21-9	Aroclor-1242	0.50U
12672-29-6	Aroclor-1248	0.50U
11097-69-1	Aroclor-1254	1.0U
11096-82-5	Aroclor-1260	1.0U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 1,000 or W_s _____ V_t 10,000 V_i 4

Laboratory Name ecology and environment, inc.

Case No U-5157, 5162

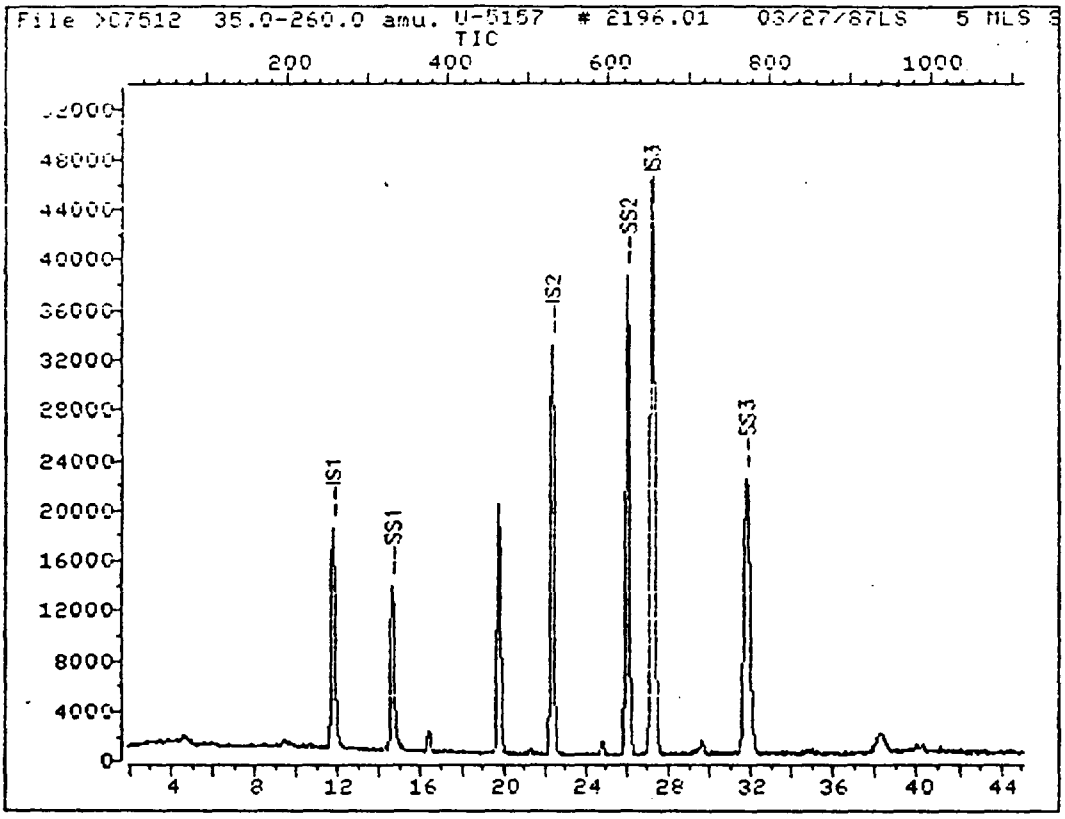
Sample Number DC-GW-25

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.	Hexene Isomer	VOA	16.39	4 B
2.				
3.	Unknown	BN	5.58	13 J
4.	Unknown		5.72	12 J
5.	Chloroaniline Isomer		12.28	16 J
6.	Ethylaniline Isomer		12.96	10 J
7.	Unknown		20.72	34 BJ
8.	Unknown		24.02	7 BJ
9.				
10.	No T.I.C's found in AP fraction			
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24				
25.				
26.				
27.				
28.				
29.				
30				

TOTAL ION CHROMATOGRAM

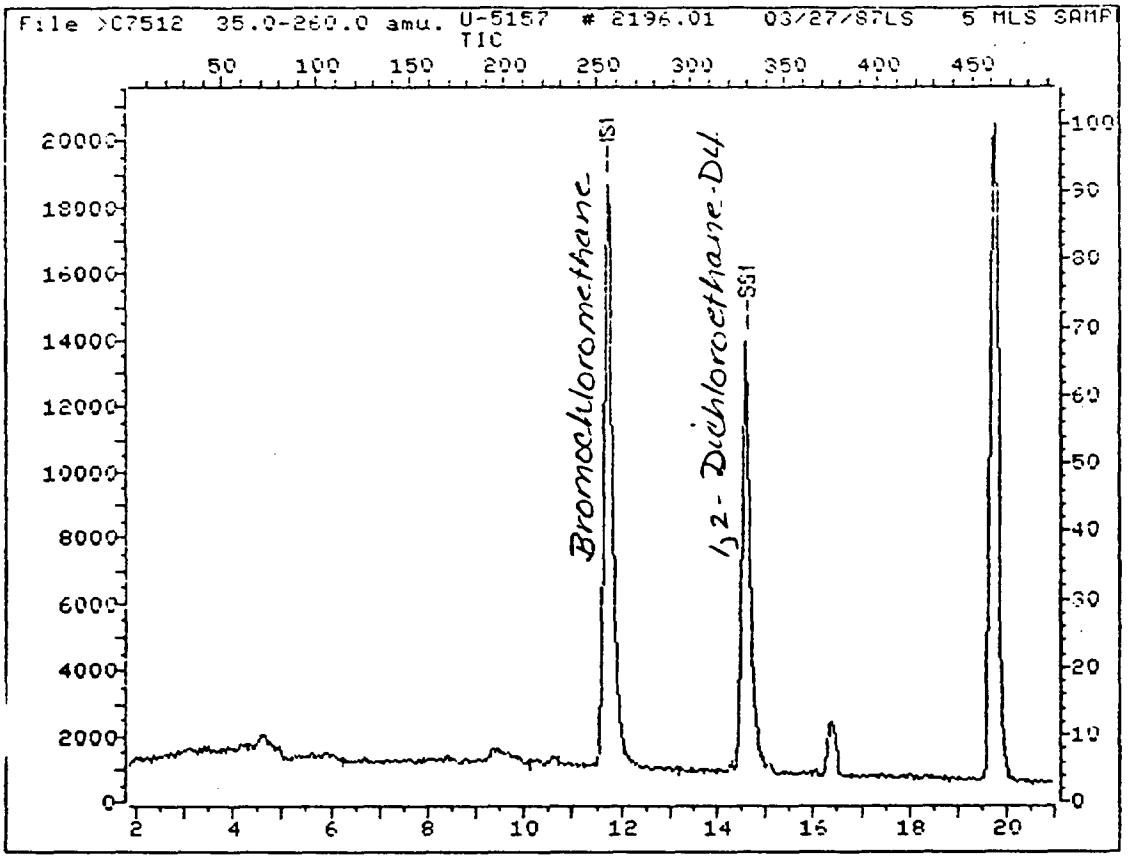


Data File: >C7512::D3
Name: U-5157 # 2196.01 DC-GW-25
Misc: 03/27/87LS 5 MLS SAMPLE + 10 ULS IS/SS

Id File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870327 11:38

Operator ID: USER8
Quant Time: 870327 15:11
Injected at: 870327 14:25

DC-GW-25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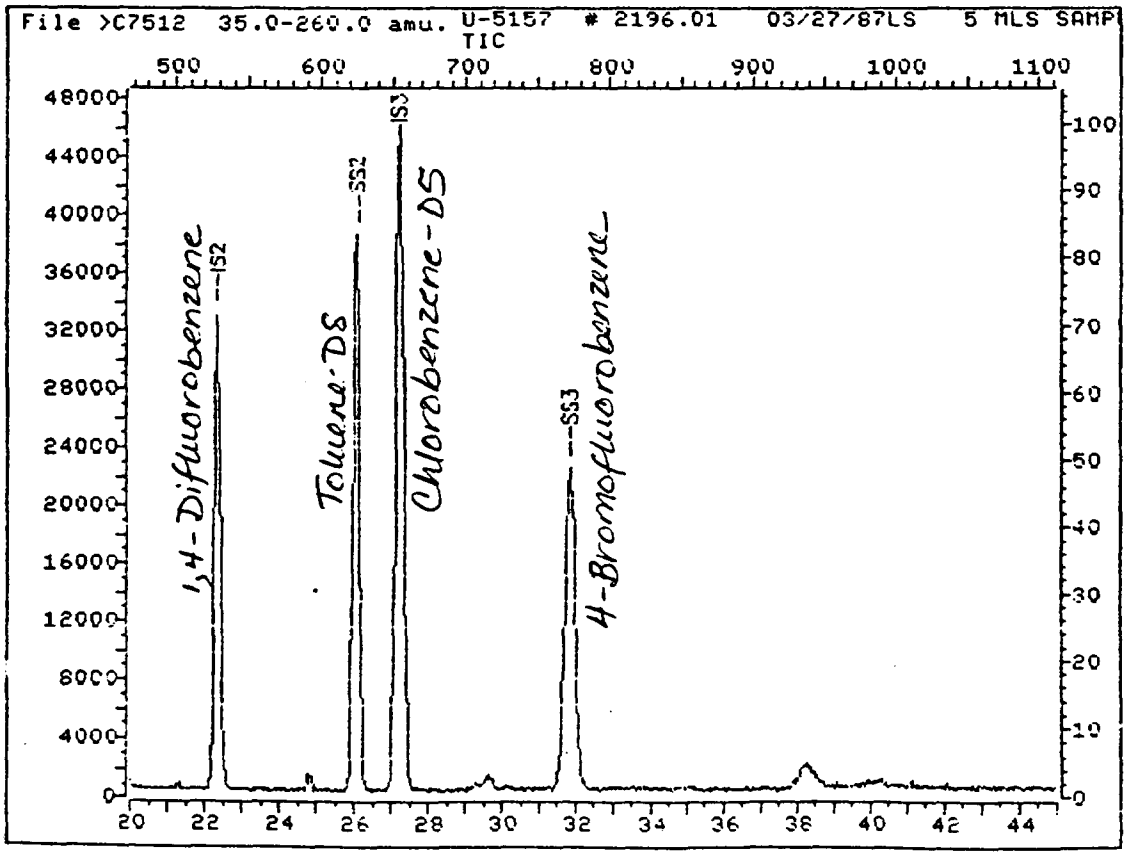
TIC
Bromochloromethane
--IS1
1,2-Dichloroethane-D4
--SS1


File >C7512 35.0-260.0 amu. U-5157 # 2196.01 03/27/87LS 5 MLS SAMP
TIC
1,4-Difluorobenzene
--IS2
Toluene-D8
--SS2
IS3
Chlorobenzene-D5
--SS3
4-Bromofluorobenzene

QUANT REPORT

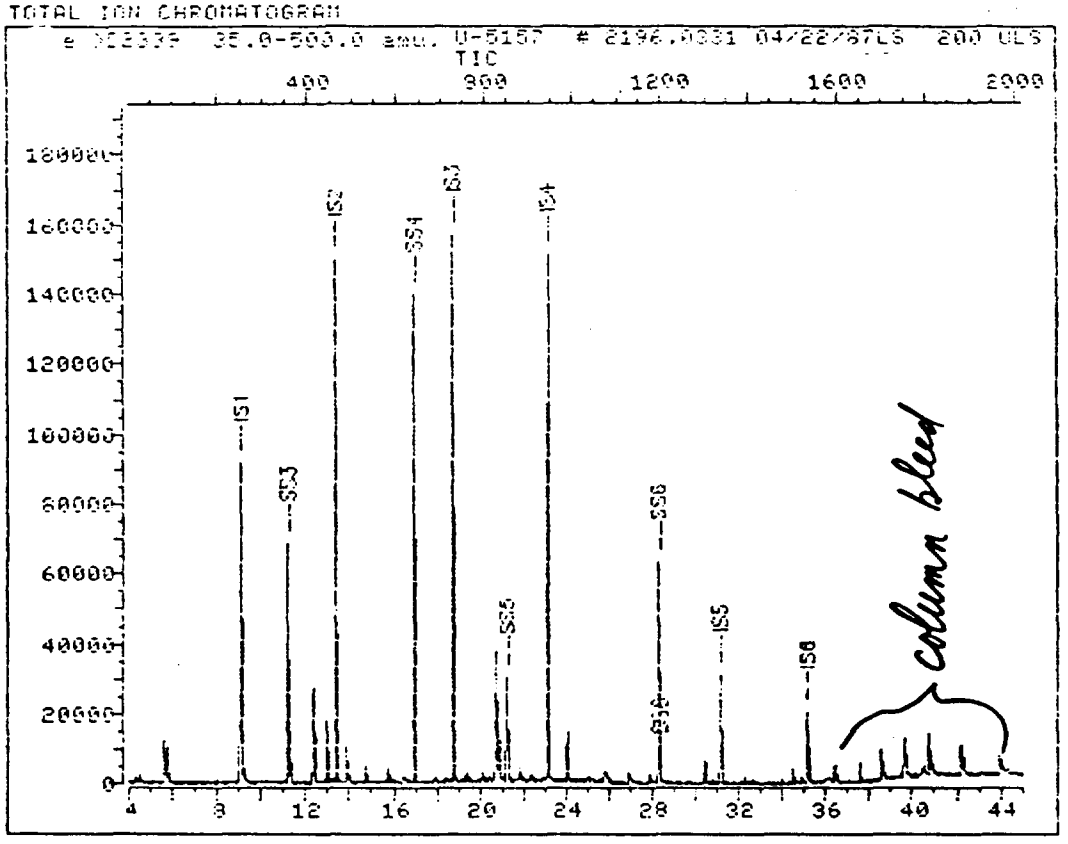
perator ID: USER8 Quant Rev: 4 Quant Time: 870327 15:11
ut t File: ^C7512::Q2 Injected at: 870327 14:25
ata File: >C7512::D3 Dilution Factor: 1.00
ame: U-5157 # 2196.01 DC-GW-25
isc: 03/27/87LS 5 MLS SAMPLE + 10 ULS IS/SS

D File: VOACR::D2
itle: VOA ID FILE FOR HP-5995 (CONT. CAL.)
ast Calibration: 870327 11:38

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	(IS) 128	11.74	255	29265	50.00	UG/L	100
4)	VINYL CHLORIDE	62	4.64	72	3455	4.87	UG/L	94
7)	ACETONE	43	9.49	197	7639	17.00	UG/L	100
15)	1,2-DICHLOROETHANE-D4	(SURR) 65	14.61	329	61657	48.95	UG/L	84
16)	*1,4-DIFLUOROBENZENE	(IS) 114	22.32	528	149070	50.00	UG/L	100
27)	BENZENE	78	19.72	461	91876	28.33	UG/L	100
31)	*CHLOROBENZENE-D5	(IS) 117	27.17	653	122039	50.00	UG/L	100
6)	TOLUENE-D8	(SURR) 98	26.05	624	154493	51.39	UG/L	94
8)	CHLOROBENZENE	112	27.30	656	83079	32.83	UG/L	98
9)	ETHYLBENZENE	91	29.31	708	2634	.63	UG/L	94
0)	4-BROMOFLUOROBENZENE	(SURR) 95	31.80	772	81526	54.14	UG/L	100

* Compound is ISTD

TOTAL ION CHROMATOGRAM

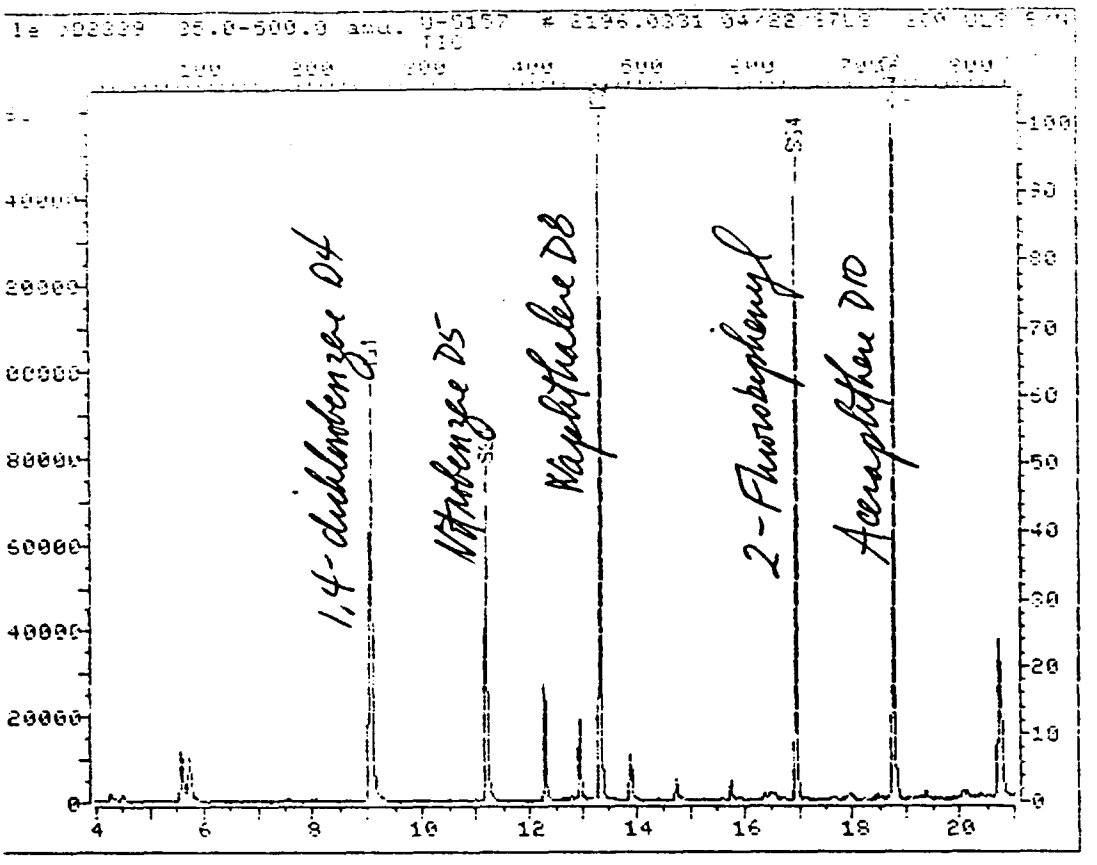


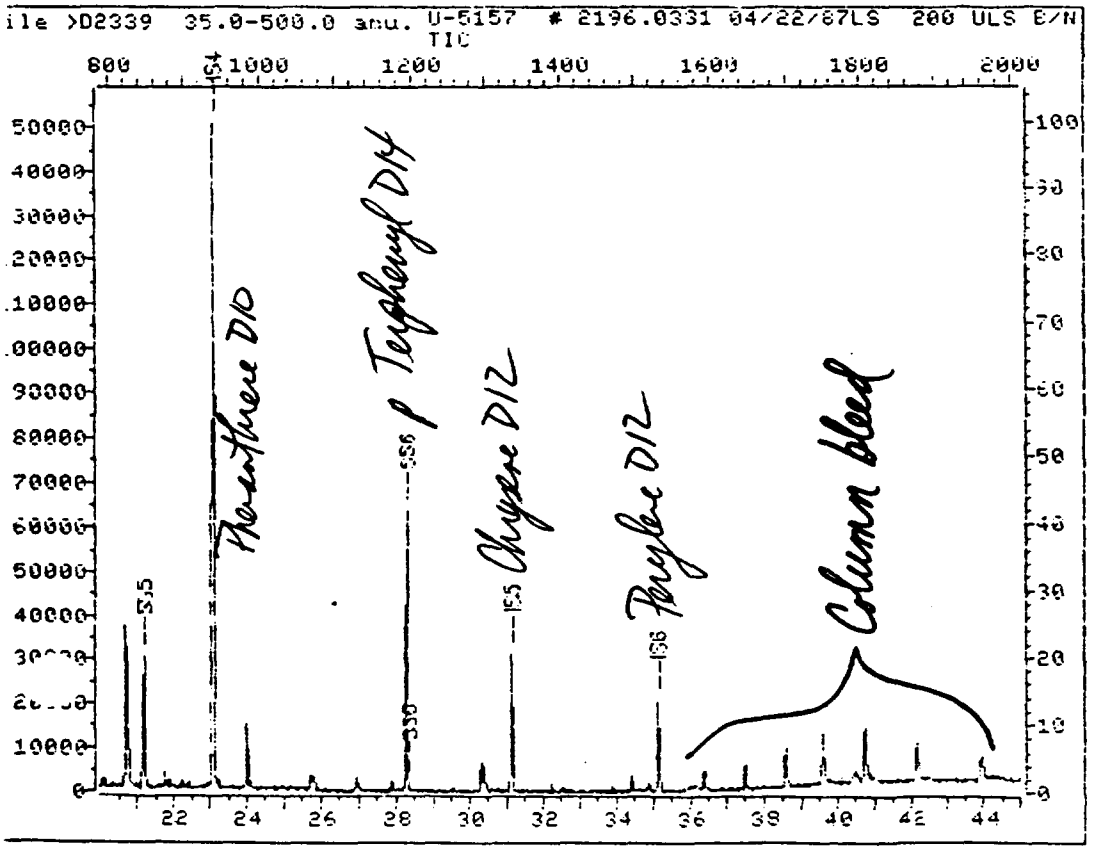
Data File: >D2339::D3
Name: U-5157 # 2196.0331 DC-GW-25
Misc: 04/22/87LS 200 ULS B/N + 200 ULS A/P + 4 ULS IS BTL# 1

Id File: BNADR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870422 18:03

Operator ID: USER6
Quant Time: 870422 20:02
Injected at: 870422 19:14

DC-GW-25


1,4-dichlorobenzene D4
Naphthalene D8
2-Fluorobiphenyl
Acenaphthene D10


Phenanthrene D10
Terphenyl D14
Chrysene D12
Perylene D12
Column bleed

QUANT REPORT

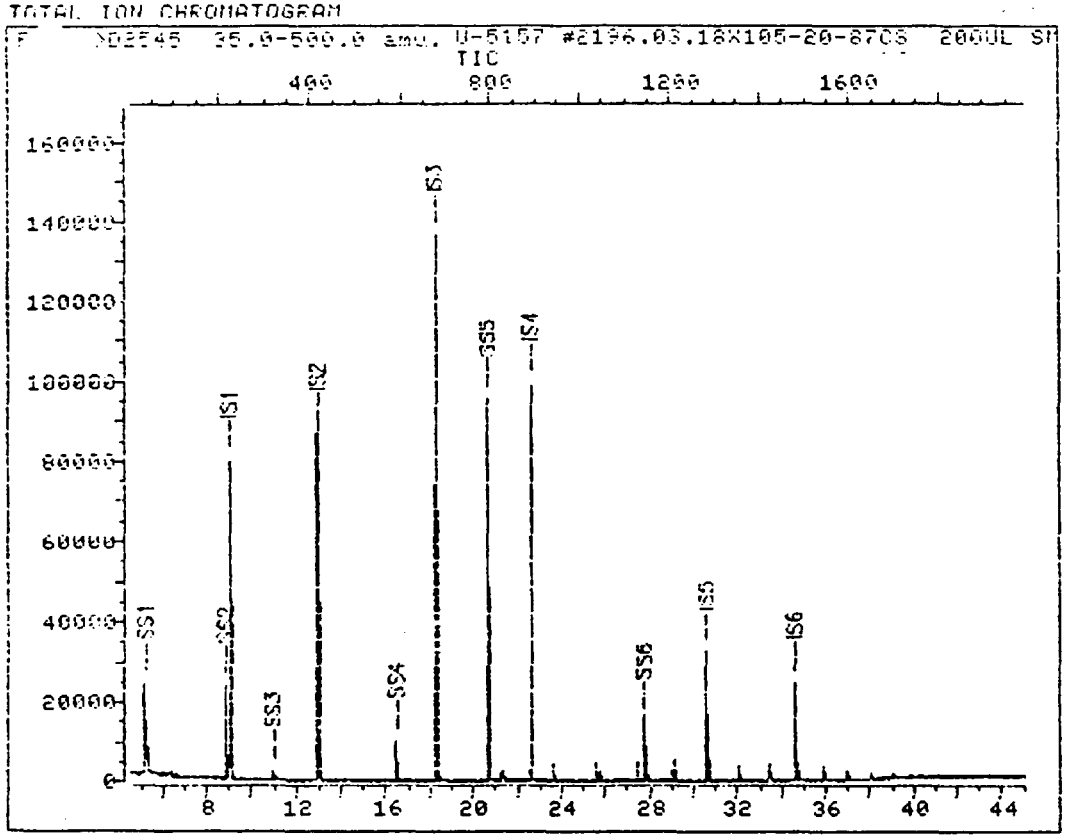
perator ID: USER6 Quant Rev: 4 Quant Time: 870422 20:02
utput File: ^D2339::D2 Injected at: 870422 19:14
ata File: >D2339::D3 Dilution Factor: 2.00
ame: U-5157 # 2196.0331 DC-GW-25
ise: 04/22/87LS 200 ULS B/N + 200 ULS A/P + 4 ULS IS BTL# 1

D File: BNADR::D2 BN FRACTION
itle: BNA ID FILE FOR THE HP 5970 (B)
ast Calibration: 870422 18:03

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-D4	(IS)	152	9.05	250	38550	UG/L	87
~~17)~~	~~N-NITROSO-DI-N-PROPYLAMINE~~	~~70~~	~~11.19~~	~~355~~	~~9399~~	~~12.42~~	~~UG/L~~	~~89~~ No Bfr
19)	*NAPHTHALENE-D8	(IS)	136	13.32	460	142319	UG/L	100
20)	NITROBENZENE-D5	(SURR)	82	11.18	355	51754	61.99 UG/L	91
30)	4-CHLOROANILINE		127	13.87	487	8878	13.84 UG/L	99
4)	*ACENAPHTHENE-D10	(IS)	162	18.74	726	86810	40.00 UG/L	97
8)	2-FLUOROBIPHENYL	(SURR)	172	16.95	638	100076	71.63 UG/L	94
~~1)~~	~~DIMETHYL PHTHALATE~~		~~163~~	~~18.74~~	~~726~~	~~14522~~	~~10.51~~	~~UG/L~~ No Bfr ~~100~~
8)	2,4,6-TRIBROMOPHENOL	(SURR)	330	21.21	847	10198	25.20 UG/L	97
~~2)~~	~~2,6-DINITROTOLUENE~~		~~165~~	~~18.74~~	~~726~~	~~11318~~	~~32.47~~	~~UG/L~~ No Bfr ~~100~~
3)	DIETHYLPHTHALATE		149	20.72	823	41639	22.93 UG/L	98
5)	*PHENANTHRENE-D10	(IS)	188	23.13	941	131509	40.00 UG/L	85
0)	PENTACHLOROPHENOL		266	23.09	939	1820	6.18 UG/L	100
3)	DI-N-BUTYLPHTHALATE		149	25.74	1069	3537	1.84 UG/L	87
5)	*CHRYSENE-D12	(IS)	240	31.13	1334	38384	40.00 UG/L	100
8)	TERPHENYL-D14	(SURR)	244	28.28	1194	58122	110.90 UG/L	100
~~2)~~	~~TERPHENYL-D14~~	~~(SURR)~~	~~244~~	~~28.74~~	~~1197~~	~~287~~	~~.55~~ ~~UG/L~~ No Bfr ~~100~~
2)	BIS(2-ETHYLHEXYL)PHTHALATE		149	32.25	1389	1387	2.88 UG/L	93
4)	*PERYLENE-D12	(IS)	264	35.15	1531	23833	40.00 UG/L	100

* Compound is ISTD

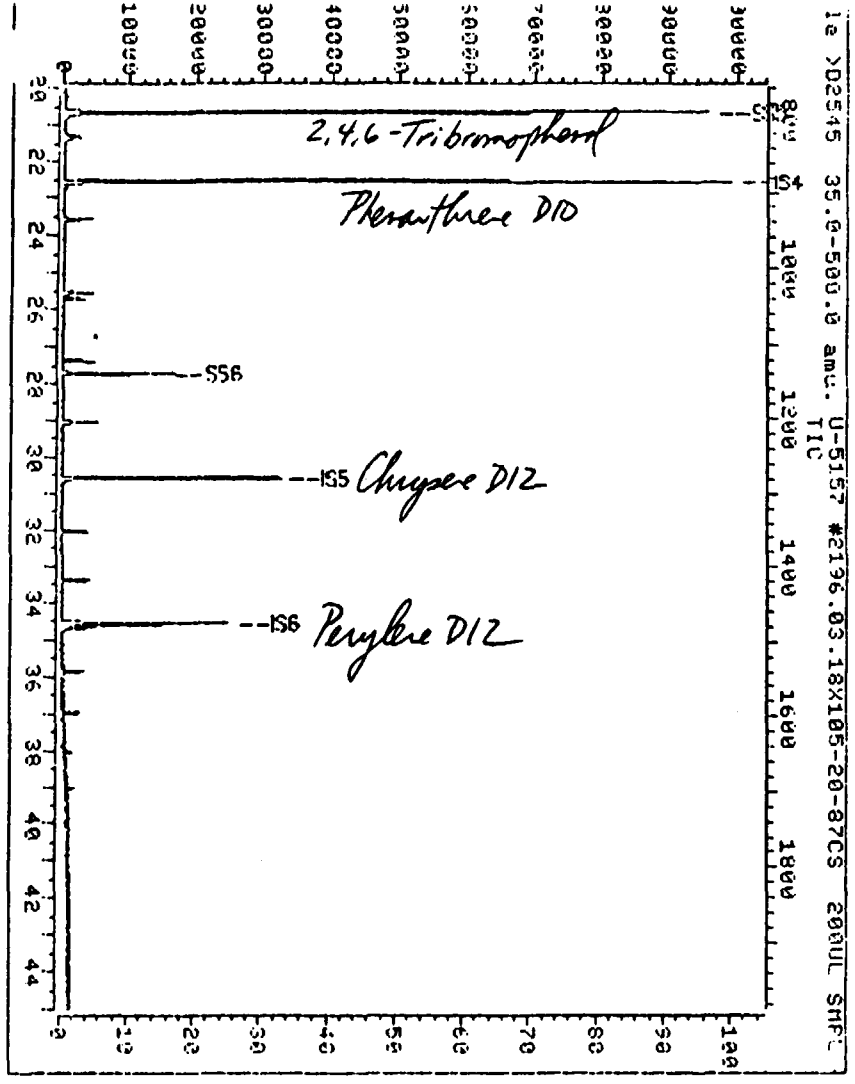
TOTAL ION CHROMATOGRAM

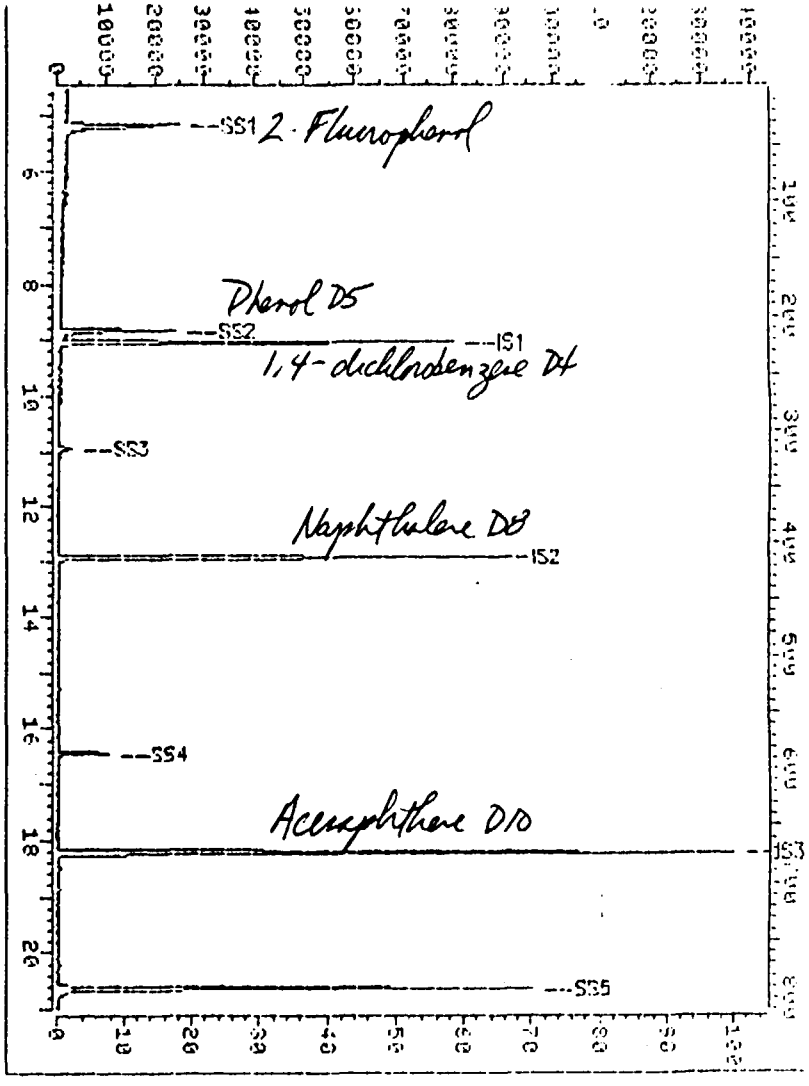


Data File: >D2545::D1
Name: U-5157 #2196.03.18X1 DC-GW-25
Misc: 05-20-87CS 200UL SMPL + 200UL MECL2 + 4UL IS BTL# 3

Id File: BNAUR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870520 14:58

Operator ID: USER6
Quant Time: 870520 17:53
Injected at: 870520 17:06


le >D2545 35.0-500.0 amu. U-5157 #2196.03.18X105-20-87CS 200UL SHPL
TIC
2,4,6-Tribromophenol
Phenanthrene D10
SS6
IS5 Chrysene D12
IS6 Perylene D12


SS1 2-Fluorophenol
Phenol D5
SS2
IS1
1,4-dichlorobenzene D4
SS3
Naphthalene D8
IS2
SS4
Acenaphthene D10
SS5

DC-GW-25

QUANT REPORT

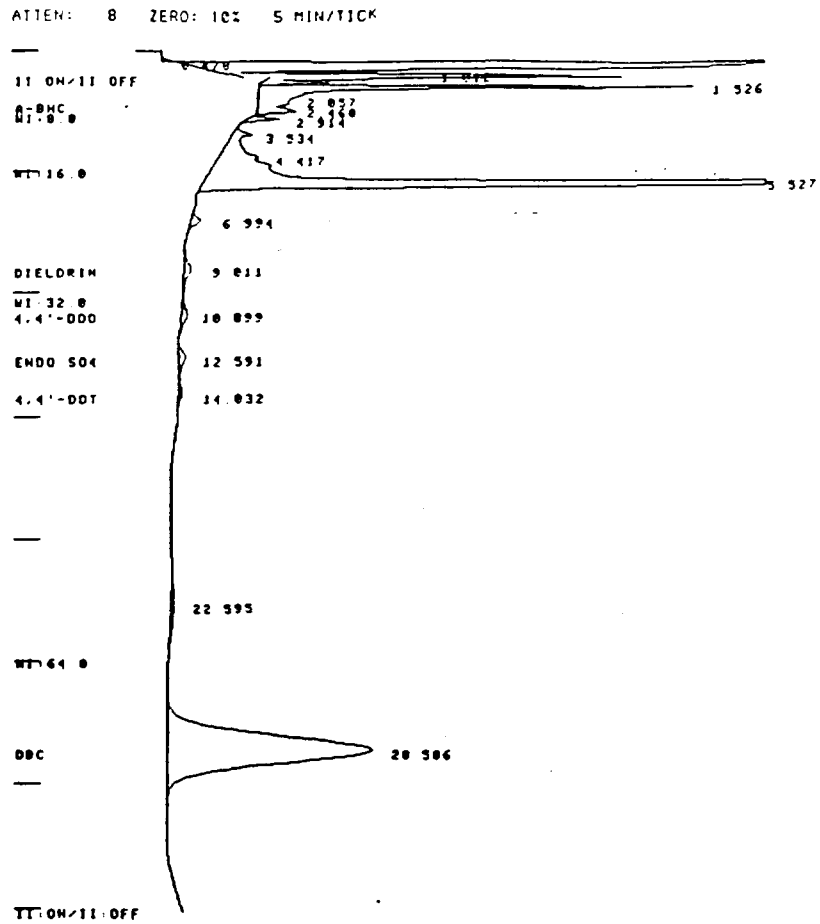
p. tor ID: USER6 Quant Rev: 4 Quant Time: 870520 17:53
utput File: ^D2545::Q2 Injected at: 870520 17:06
ata File: >D2545::D1 Dilution Factor: 2.00
ame: U-5157 #2196.03.18X1 DC-GW-25
ec: 05-20-87CS 200UL SMPL + 200UL MECL2 + 4UL IS BTL# 3

D File: BNADR::D2
itle: BNA ID FILE FOR THE HP 5970 (B)
ast Calibration: 870520 14:58

AP ONLY

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-D4	(IS)	152	9.03	222	27876	40.00 UG/L	84
2)	PHENOL-D5	(SURR)	99	8.83	212	17675	30.33 UG/L 15 ✓	97
5)	2-FLUOROPHENOL	(SURR)	112	5.16	32	18779	51.28 UG/L 26 ✓	87
19)	*NAPHTHALENE-D8	(IS)	136	12.90	412	99810	40.00 UG/L	100
20)	NITROBENZENE-D5	(SURR)	82	10.93	315	3021	5.59 UG/L	98
24)	*ACENAPHTHENE-D10	(IS)	162	18.22	673	64594	40.00 UG/L	97
8)	2-FLUOROBIPHENYL	(SURR)	172	16.45	586	8713	7.33 UG/L	88
~~1)~~	~~DIMETHYL PHTHALATE~~		~~163~~	~~18.22~~	~~673~~	~~12463~~	~~13.46 UG/L~~ No 6/4	~~100~~
8)	2,4,6-TRIBROMOPHENOL	(SURR)	330	20.64	792	41384	91.48 UG/L 46 ✓	97
~~4)~~	~~2,6-DINITROTOLUENE~~		~~165~~	~~18.22~~	~~673~~	~~8430~~	~~42.55 UG/L~~ No 6/4	~~100~~
5)	*PHENANTHRENE-D10	(IS)	188	22.56	886	92731	40.00 UG/L	96
5)	*CHRYSENE-D12	(IS)	240	30.56	1279	39975	40.00 UG/L	100
8)	TERPHENYL-D14	(SURR)	244	27.71	1139	20751	50.33 UG/L	100
4)	*PERYLENE-D12	(IS)	264	34.55	1475	35207	40.00 UG/L	100

* Compound is ISTD



RECALCULATE ON FILE: S1S7633

CHANNEL: 1A - 1 TITLE: RUN# 17 2:05 14 APR 87

DC-GW-25

SAMPLE: 2196 METHOD: CEPA CALCULATION: ES - ANALYS

PEAK NO	PEAK NAME	RESULT UG/L	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	WI/2 (SEC)
1		0.0000	1.259		148852	BV	3.63
2		0.0000	1.526		363290	VV	4.75
3		0.0000	1.747		27109	VV	? 6.25
4		0.0000	1.770		80111	VV	?
5	~~A-BHC~~	0.0121	2.204	-0.016	36878	VV	? 14.75
6	~~B-BHC~~	0.0488	2.460	0.090	55563	VB	6.44
7		0.0000	2.914		29783	BB	6.25
8		0.0000	3.534		36369	BV	10.19
9		0.0000	4.417		131091	VV	? 17.56
10	~~ALDRIN~~	0.0482	4.798	-0.242	134762	VV	? 18.31
11		0.0000	5.527		2463651	VB	12.19
12		0.0000	6.994		26112	BB	17.00
13	~~DIELDRIN~~	0.0148	9.011	0.201	39447	BB	31.50
14	~~4,4'-DDD~~	0.0156	10.899	-0.011	34857	BV	31.13
15	~~ENDO SO4~~	0.0193	12.591	-0.219	31372	VV	32.31
16		0.0000	22.595		35050	BB	52.00
17	DBC	0.9894	28.586	0.166	1979535	BB	74.31
TOTALS:		1.1482		-0.031	5653832		

DETECTED PKS: 27 REJECTED PKS: 10

DIVISOR: 1.00000 MULTIPLIER: 10.00000

NOISE: 22.9 OFFSET: -11

RACK: 2 VIAL: 2 INJ: 1

NOTES:
NOTEBOOK:259-186 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#U-5157
INST: VARIAN 6000# 2A ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
LIQUID PHASE: 3% OV-1
CARRIER GAS: N2 @ 60 ML/MIN
DET: 300 C INJ: 220 C
200 C ISOTHERMAL 4 UL INJECTION
PRIMARY ANALYSIS AUTOSAMPLER

SAMPLE NUMBER DC-GW-26

Sample Number
DC-GW-26

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Ecology & Environment, Inc. Case No: U-5157, 5162

Lab Sample ID No: 2197 QC Report No:

Sample Matrix: Water Contract No: IL-3140

Data Release Authorized By: [signature] Date Sample Received: 3-24-87

Volatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 3-30-87

Conc./Dil Factor: 25 pH

Percent Moisture: (Not Decanted)

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	250u
74-83-9	Bromomethane	250u
75-01-4	Vinyl Chloride	250u
75-00-3	Chloroethane	250u
75-09-2	Methylene Chloride	56 J
67-64-1	Acetone	180 J
75-15-0	Carbon Disulfide	120u
75-35-4	1, 1-Dichloroethene	120u
75-34-3	1, 1-Dichloroethane	120u
156-60-5	Trans-1, 2-Dichloroethene	150
67-66-3	Chloroform	110 J
107-06-2	1, 2-Dichloroethane	120u
78-93-3	2-Butanone	250u
71-55-6	1, 1, 1-Trichloroethane	120u
56-23-5	Carbon Tetrachloride	120u
108-05-4	Vinyl Acetate	250u
75-27-4	Bromodichloromethane	120u

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	120u
10061-02-6	Trans-1, 3-Dichloropropene	120u
79-01-6	Trichloroethene	270
124-48-1	Dibromochloromethane	120u
79-00-5	1, 1, 2-Trichloroethane	120u
71-43-2	Benzene	1400
10061-01-5	cis-1, 3-Dichloropropene	120u
110-75-8	2-Chloroethylvinylether	250u
75-25-2	Bromoform	120u
591-78-6	4-Methyl-2-Pentanone	230J
108-10-1	2-Hexanone	250u
127-18-4	Tetrachloroethene	470
79-34-5	1, 1, 2, 2-Tetrachloroethane	120u
108-88-3	Toluene	240
108-90-7	Chlorobenzene	3100
100-41-4	Ethylbenzene	190
100-42-5	Styrene	120u
	Total Xylenes	61 J

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit report the value

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration, dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g. 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS

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

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

E This flag indicates an approximate concentration. The amount detected in the analysis exceeds the calibrated range.

Laboratory Name ECOLOGY & ENVIRONMENT INC.

Case No U-5157, 5162

Sample Number DC-GW-26

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared 3/29/87

Date Analyzed 4-27-87

Conc/Dil Factor: 50

Percent Moisture (Decanted) -

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)
108-95-2	Phenol	1800
111-44-4	bis(-2-Chloroethyl)Ether	250 U
95-57-8	2-Chlorophenol	370
541-73-1	1 3-Dichlorobenzene	250 U
106-46-7	1 4-Dichlorobenzene	910
100-51-6	Benzyl Alcohol	230 J
95-50-1	1 2-Dichlorobenzene	220 J
95-48-7	2-Methylphenol	89 J
39638-32-9	bis(2-chloroisopropyl)Ether	250 U
106-44-5	4-Methylphenol	350
621-64-7	N-Nitroso-Di-n-Propylamine	250 U
67-72-1	Hexachloroethane	250 U
98-95-3	Nitrobenzene	250 U
78-59-1	Isophorone	250 U
88-75-5	2-Nitrophenol	250 U
105-67-9	2. 4-Dimethylphenol	250 U
65-85-0	Benzoic Acid	1200 U
111-91-1	bis(-2-Chloroethoxy)Methane	2900
120-83-2	2. 4-Dichlorophenol	1000
120-82-1	1. 2. 4-Trichlorobenzene	2700
91-20-3	Naphthalene	57 J
106-47-8	4-Chloroaniline	8300
87-68-3	Hexachlorobutadiene	250 U
59-50-7	4-Chloro-3-Methylphenol	140 J
91-57-6	2-Methylnaphthalene	250 U
77-47-4	Hexachlorocyclopentadiene	250 U
88-06-2	2 4 6-Trichlorophenol	290
95-95-4	2 4 5-Trichlorophenol	1200 U
91-58-7	2-Chloronaphthalene	250 U
88-74-4	2-Nitroaniline	1200 U
131-11-3	Dimethyl Phthalate	250 U
208-96-8	Acenaphthylene	250 U
99-09-2	3-Nitroaniline	1200 U

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	250 U
51-28-5	2. 4-Dinitrophenol	1200 U
100-02-7	4-Nitrophenol	1200 U
132-64-9	Dibenzofuran	250 U
121-14-2	2 4-Dinitrotoluene	250 U
606-20-2	2 6-Dinitrotoluene	250 U
84-66-2	Diethylphthalate	250 U
7005-72-3	4-Chlorophenyl-phenylether	250 U
86-73-7	Fluorene	250 U
100-01-6	4-Nitroaniline	1200 U
534-52-1	4. 6-Dinitro-2-Methylphenol	1200 U
86-30-6	N-Nitrosodiphenylamine (1)	250 U
101-55-3	4-Bromophenyl-phenylether	250 U
118-74-1	Hexachlorobenzene	250 U
87-86-5	Pentachlorophenol	2400
85-01-8	Phenanthrene	250 U
120-12-7	Anthracene	250 U
84-74-2	Di-n-Butylphthalate	250 U
206-44-0	Fluoranthene	250 U
129-00-0	Pyrene	250 U
85-68-7	Butylbenzylphthalate	250 U
91-94-1	3. 3 -Dichlorobenzidine	500 U
56-55-3	Benzo(a)Anthracene	250 U
117-81-7	bis(2-Ethylhexyl)Phthalate	250 U
218-01-9	Chrysene	250 U
117-84-0	Di-n-Octyl Phthalate	250 U
205-99-2	Benzo(b)Fluoranthene	250 U
207-08-9	Benzo(k)Fluoranthene	250 U
50-32-8	Benzo(a)Pyrene	250 U
193-39-5	Indeno(1 2. 3-cd)Pyrene	250 U
53-70-3	Dibenz(a h)Anthracene	250 U
191-24-2	Benzo(g h i)Perylene	250 U

(1)-Cannot be separated from diphenylamine

Laboratory Name ecology and environment, inc.

Case No H-5157, 5162

Sample Number DC--GW-26

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration (Low) Medium (Circle One)

Date Extracted/Prepared 3-30-87

Date Analyzed 4-14-87

Conc/Dil Factor 50

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☑Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/l or ug/Kg) (Circle One)
319-84-6	Alpha-BHC	2.5U
319-85-7	Beta-BHC	2.5U
319-86-8	Delta-BHC	2.5U
58-89-9	Gamma-BHC (Lindane)	2.5U
76-44-8	Heptachlor	2.5U
309-00-2	Aldrin	2.5U
1024-57-3	Heptachlor Epoxide	2.5U
959-98-8	Endosulfan I	2.5U
60-57-1	Dieldrin	5.0U
72-55-9	4,4'-DDE	5.0U
72-20-8	Endrin	5.0U
33213-65-9	Endosulfan II	5.0U
72-54-8	4,4'-DDD	5.0U
1031-07-8	Endosulfan Sulfate	5.0U
50-29-3	4,4'-DDT	5.0U
72-43-5	Methoxychlor	25U
53494-70-5	Endrin Ketone	5.0U
57-74-9	Chlordane	25U
8001-35-2	Toxaphene	50U
12674-11-2	Aroclor-1016	25U
11104-28-2	Aroclor-1221	25U
11141-16-5	Aroclor-1232	25U
53469-21-9	Aroclor-1242	25U
12672-29-6	Aroclor-1248	25U
11097-69-1	Aroclor-1254	50U
11096-82-5	Aroclor-1260	50U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 1,000 or W_s _____ V_t 10,000 V_i 4

Laboratory Name ecology and environment, inc.

Case No U-5157, 5162

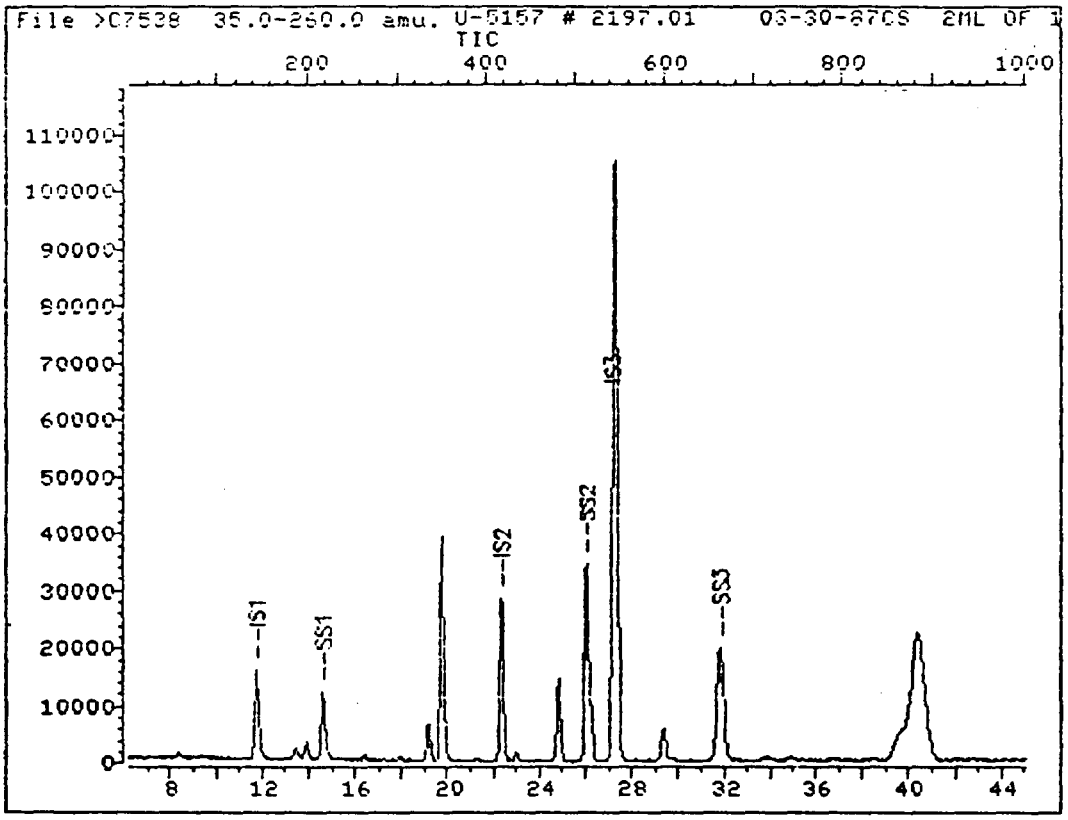
Sample Number DC-GW-26

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.		Dichlorobenzene isomer	VOA	39.65	580 J
2.		Dichlorobenzene isomer	↓	40.35	3500 J
3.					
4.	62533	Aniline	BNA	8.23	6800
5.		Chloroaniline Isomer		12.33	1600 J
6.		Ethylaniline Isomer		13.25	18,000 J
7.		Ethylaniline Isomer		13.45	7000 J
8.		Chlorophenol Isomer		14.16	3200 J
9.		Unknown		14.55	4200 J
10.		Ethoxyaniline Isomer		14.76	3000 J
11.		Ethylnitrobenzene Isomer		15.65	770 J
12.		Ethylnitrobenzene Isomer		16.04	570 J
13.		Dichloroaniline Isomer		16.37	1200 J
14.		Tetrachlorobenzene Isomer		17.12	1900 J
15.		Unknown Aromatic		20.16	1500 J
16.	90415	[1,1'-Biphenyl]-2-amine		20.61	1200 J
17.		Unknown Aromatic		21.79	200 J
18.	81845	1H,3H-Naphtho[1,8-cd]pyran-1,3-dione		26.54	310 J
19.		Unknown		27.66	240 J
20.					
21.					
22.					
23.					
24					
25.					
26.					
27.					
28.					
29.					
30					

TOTAL ION CHROMATOGRAM

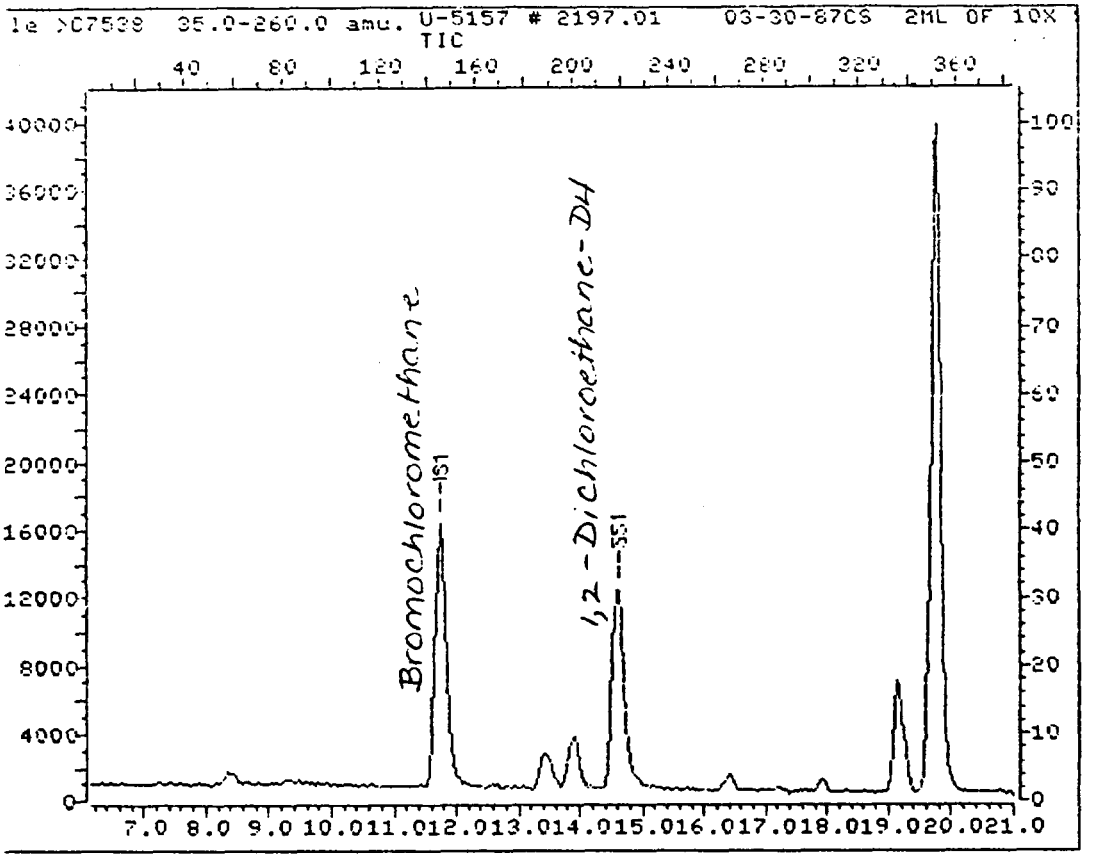


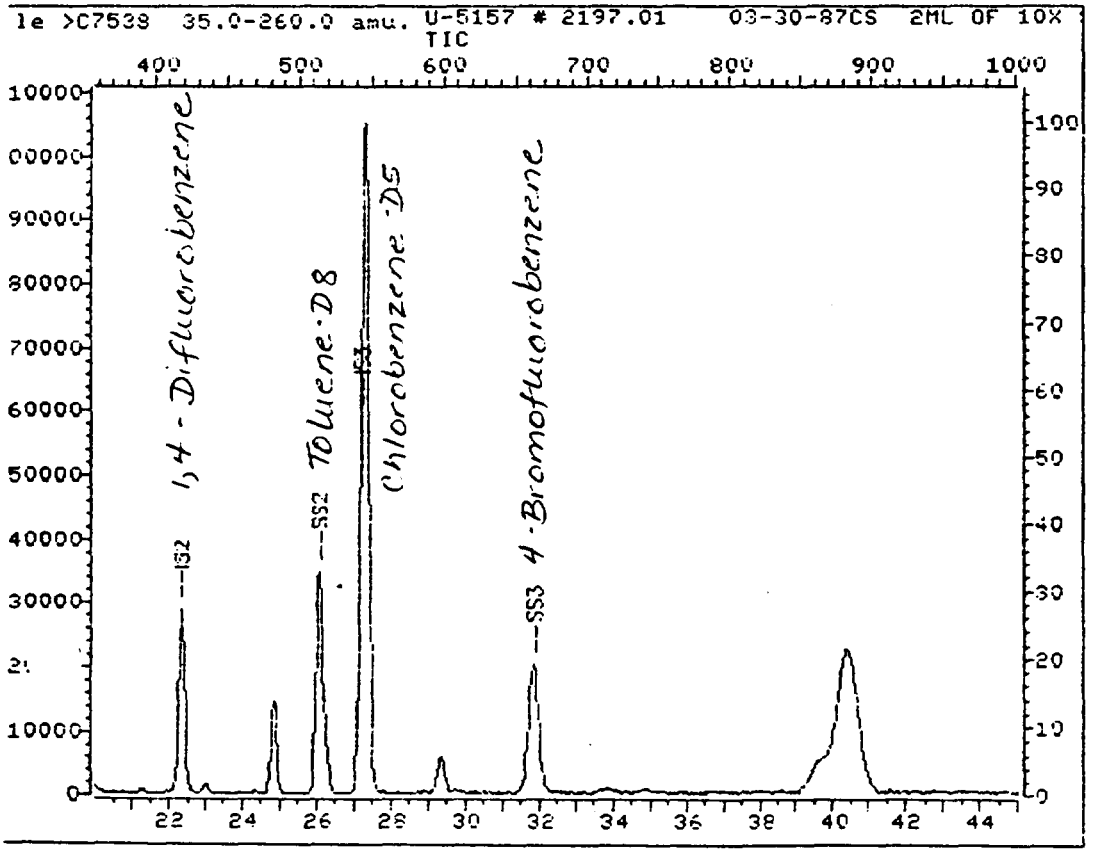
Data File: >C7538::D1
Name: U-5157 # 2197.01 DC-GW-26
Misc: 03-30-87CS 2ML OF 10X SAMPLE + 3ML DI + 10UL IS/SS (

Id File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870330 11:28

Operator ID: USER8
Quant Time: 870330 14:48
Injected at: 870330 14:02

DC-GW-26


le >C7538 35.0-260.0 amu. U-5157 # 2197.01 03-30-87CS 2ML OF 10X
TIC
Bromochloromethane
--151
1,2-Dichloroethane-D4
--551


le >C7538 35.0-260.0 amu. U-5157 # 2197.01 03-30-87CS 2ML OF 10X
TIC
1,4-Difluorobenzene
--152
Toluene-D8
--552
Chlorobenzene-D5
4-Bromofluorobenzene
--553

QUANT REPORT

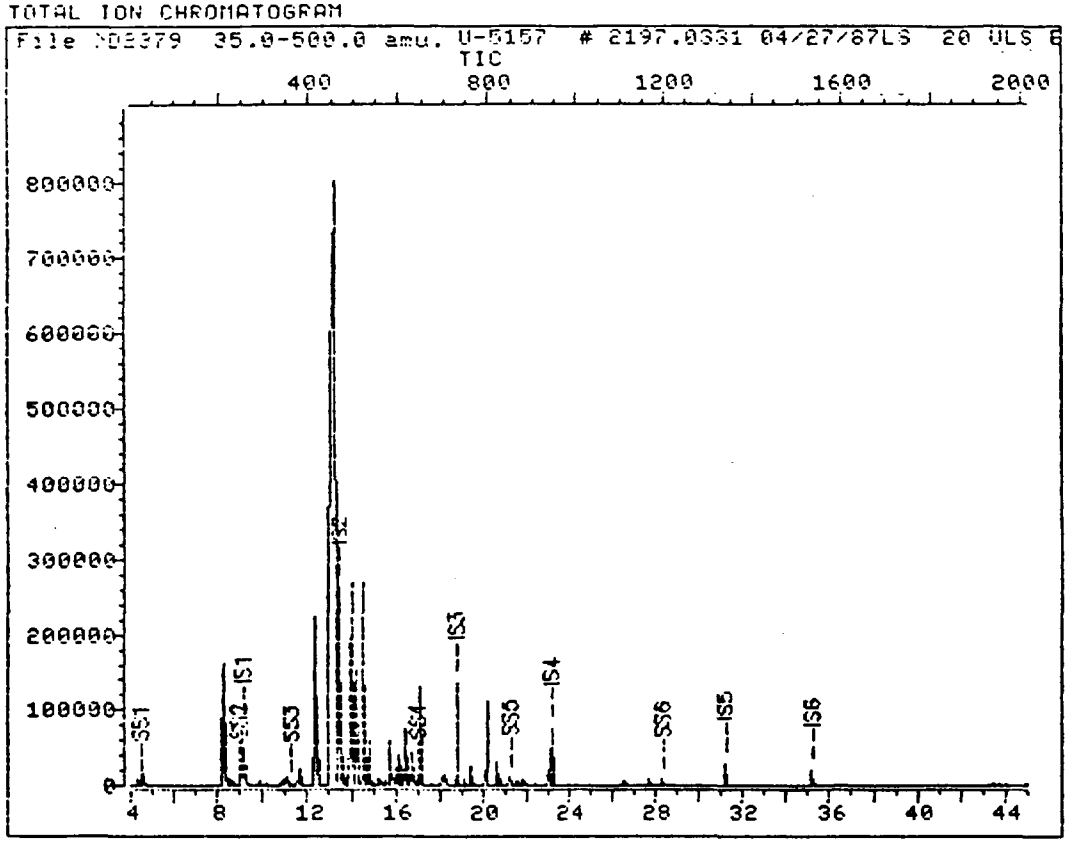
perator ID: USER8 Quant Rev: 4 Quant Time: 870330 14:48
u! t File: ^C7538::D2 Injected at: 870330 14:02
ata File: >C7538::D1 Dilution Factor: 1.00
ame: U-5157 # 2197.01 DC-GW-26
isc: 03-30-87CS 2ML OF 10X SAMPLE + 3ML DI + 10UL IS/SS (

D File: VOACR::D2
itle: VOA ID FILE FOR HP-5995 (CONT. CAL.)
ast Calibration: 870330 11:28

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	(IS)	128 11.74	145	25811	50.00	UG/L	100
6)	METHYLENE CHLORIDE		84 8.37	58	2225	2.25	UG/L	100
7)	ACETONE		43 9.26	81	3431	7.04	UG/L	100
12)	TRANS-1,2-DICHLOROETHENE		96 13.45	189	6020	6.07	UG/L	85
13)	CHLOROFORM		83 13.91	201	8868	4.34	UG/L	100
15)	1,2-DICHLOROETHANE-D4	(SURR)	65 14.61	219	55764	47.53	UG/L	86
16)	*1,4-DIFLUOROBENZENE	(IS)	114 22.33	418	125647	50.00	UG/L	100
4)	TRICHLOROETHENE		130 19.15	336	12279	10.67	UG/L	88
7)	BENZENE		78 19.77	352	176915	54.52	UG/L	100
~~9)~~	~~CIS-1,3-DICHLOROPROPENE~~		~~75 19.77~~	~~352~~	~~3761~~	~~3.42~~	~~UG/L~~ No Cyl	100
1)	*CHLOROBENZENE-D5	(IS)	117 27.19	543	99847	50.00	UG/L	100
2)	4-METHYL-2-PENTANONE		43 22.99	435	6786	9.20	UG/L	89
4)	TETRACHLOROETHENE		164 24.82	482	20526	18.64	UG/L	95
6)	TOLUENE-D8	(SURR)	98 26.06	514	136005	48.61	UG/L	98
7)	TOLUENE		92 26.22	518	20021	9.45	UG/L	98
8)	CHLOROBENZENE		112 27.31	546	326675	124.96	UG/L	99
9)	ETHYLBENZENE		91 29.37	599	32727	7.50	UG/L	97
0)	4-BROMOFLUOROBENZENE	(SURR)	95 31.85	663	73459	51.69	UG/L	100
2)	TOTAL XYLENES		91 33.87	715	3522	1.00	UG/L	100
2)	TOTAL XYLENES		91 34.88	741	5093	1.44	UG/L	100
3)	1,3-DICHLOROBENZENE		146 39.65	864	28557	28557.00	NO CALIB	100
3)	1,3-DICHLOROBENZENE		146 40.35	882	70972	70972.00	NO CALIB	100
4)	1,2-DICLHLOROBENZENE		146 39.65	864	28557	28557.00	NO CALIB	100
4)	1,2-DICLHLOROBENZENE		146 40.35	882	70972	70972.00	NO CALIB	100
5)	1,4-DICHLOROBENZENE		146 39.65	864	28557	28557.00	NO CALIB	100
5)	1,4-DICHLOROBENZENE		146 40.35	882	70972	70972.00	NO CALIB	100

* Compound is ISTD

TOTAL ION CHROMATOGRAM

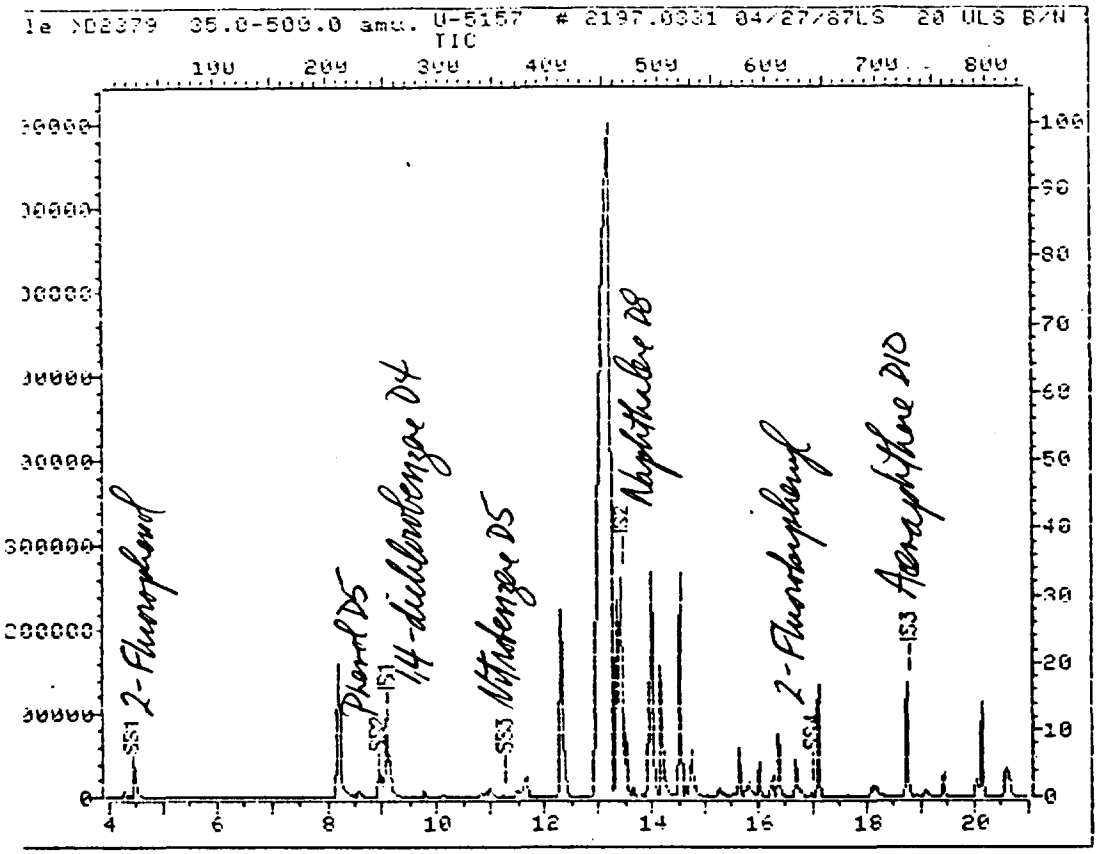


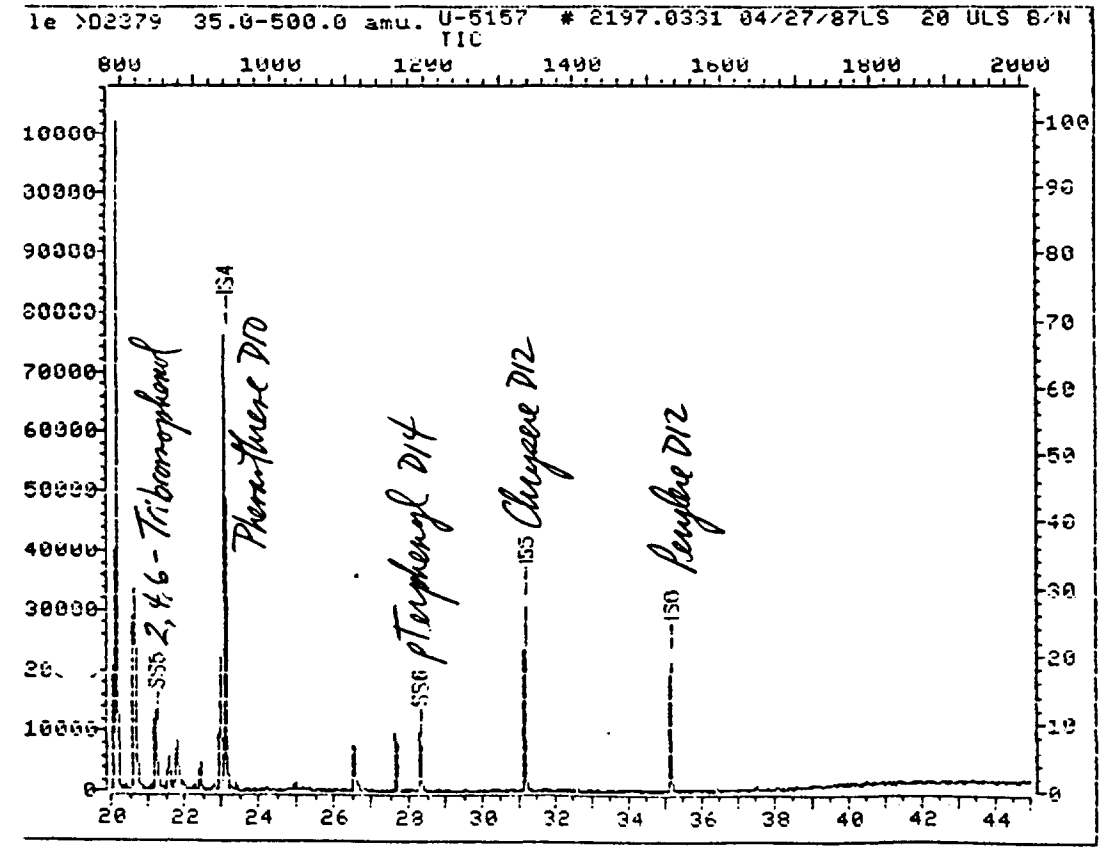
Data File: >D2379::D2
Name: U-5157 # 2197.0331 DC-GW-26
Misc: 04/27/87LS 20 ULS B/N & A/P + 960 ULS MECL2 + 10 ULS BTL# 2

Id File: BNADR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870427 17:24

Operator ID: USER6
Quant Time: 870427 18:00
Injected at: 870427 17:12

DC-GW-26


le >D2379 35.0-500.0 amu. U-5157 # 2197.0331 04/27/87LS 20 ULS B/N
TIC
2-Fluorophenol
Phenol D5
1,4-dichlorobenzene D4
Nitrobenzene D5
Naphthalene D8
2-Fluorobiphenyl
Acenaphthene D10


le >D2379 35.0-500.0 amu. U-5157 # 2197.0331 04/27/87LS 20 ULS B/N
TIC
2,4,6-Tribromophenol
Phenanthrene D10
pTerphenyl D14
Chrysene D12
Perylene D12

QUANT REPORT

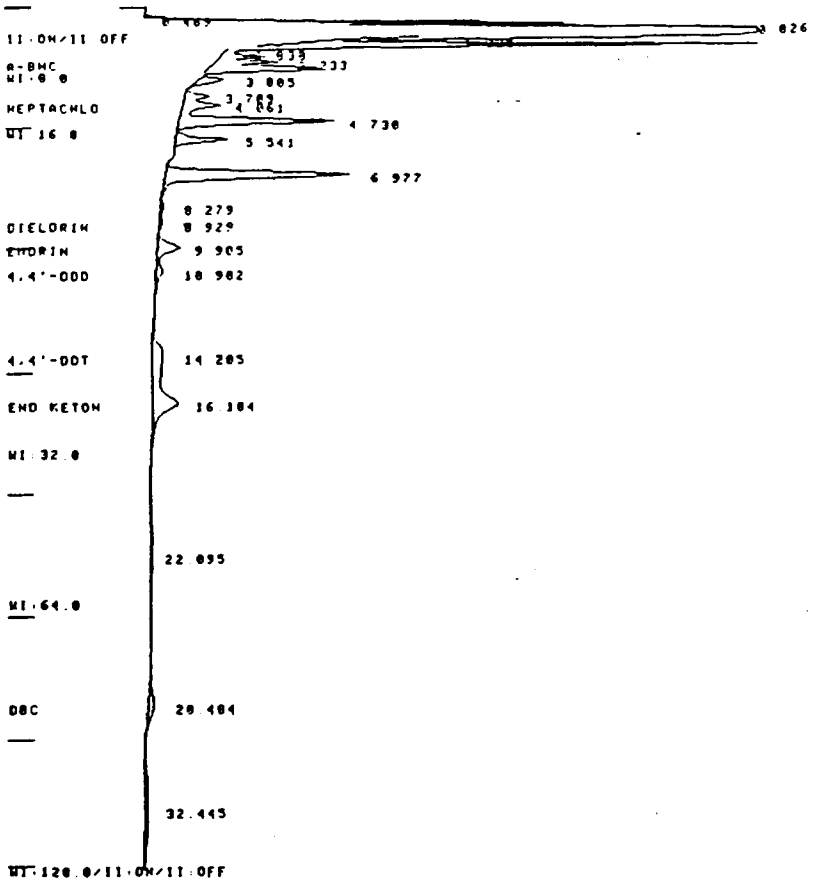
pe ator ID: USER6 Quant Rev: 4 Quant Time: 870427 18:00
utput File: ^02379::U2 Injected at: 870427 17:12
ata File: >02379::D2 Dilution Factor: 50.00
ame: U-5157 # 2197.0331 DC-GW-26
isc: 04/27/87LS 20 ULS B/N & A/P + 960 ULS MECL2 + 10 ULS BTL# 2

D File: BNAUR::D2
itle: BNA ID FILE FOR THE HP 5970 (B)
ast Calibration: 870427 17:24

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-D4	(IS)	152	9.07	251	37632	40.00 UG/L	84
2)	PHENOL-D5	(SURR)	99	8.90	243	2013	85.05 UG/L	98
5)	2-FLUOROPHENOL	(SURR)	112	4.40	22	2047	103.02 UG/L	79
6)	PHENOL		94	8.92	244	55901	1847.96 UG/L	59
7)	ANILINE		93	8.23	210	191784	6802.60 UG/L	89
8)	~~BIS(-2-CHLOROETHYL)ETHER~~		~~93~~	~~8.23~~	~~210~~	~~191784~~	~~7764.37 UG/L~~ CW	20
9)	~~1,3-DICHLOROBENZENE~~		~~146~~	~~9.13~~	~~254~~	~~25267~~	~~913.86 UG/L~~	99
0)	1,4-DICHLOROBENZENE		146	9.13	254	25267	913.86 UG/L	98
1)	BENZYL ALCOHOL		79	10.11	302	5662	233.49 UG/L	92
2)	1,2-DICHLOROBENZENE		146	9.76	285	6080	218.06 UG/L	89
3)	2-METHYL PHENOL		108	10.92	342	2027	89.19 UG/L	99
5)	2-CHLOROPHENOL		128	8.58	227	8772	371.48 UG/L	99
6)	~~4-METHYL PHENOL~~		~~108~~	~~10.98~~	~~345~~	~~3342~~	~~145.98 UG/L~~ CW	41
6)	4-METHYL PHENOL		108	11.47	369	7967	350.38 UG/L	89
6)	~~4-METHYL PHENOL~~		~~108~~	~~11.66~~	~~378~~	~~23066~~	~~1014.42 UG/L~~ CW	80
9)	*NAPHTHALENE-D8	(IS)	136	13.43	465	130015	40.00 UG/L	100
0)	NITROBENZENE-D5	(SURR)	82	11.23	357	2298	81.20 UG/L	88
4)	~~2,4-DIMETHYLPHENOL~~		~~122~~	~~13.53~~	~~478~~	~~38949~~	~~1797.40 UG/L~~ CW	86
6)	BIS(-2-CHLOROETHOXY)METHANE		93	13.25	456	98941	2904.22 UG/L	48
6)	~~BIS(-2-CHLOROETHOXY)METHANE~~		~~93~~	~~13.35~~	~~461~~	~~3543~~	~~104.00 UG/L~~ CW	51
6)	~~BIS(-2-CHLOROETHOXY)METHANE~~		~~93~~	~~13.45~~	~~466~~	~~15582~~	~~457.30 UG/L~~	48
7)	2,4-DICHLOROPHENOL		162	13.35	461	18331	998.94 UG/L	98
8)	1,2,4-TRICHLOROBENZENE		180	13.39	463	66338	2683.17 UG/L	100
9)	NAPHTHALENE		128	13.49	468	3963	57.14 UG/L	100
9)	~~NAPHTHALENE~~		~~128~~	~~13.94~~	~~490~~	~~3100~~	~~44.70 UG/L~~ CW	100
0)	4-CHLOROANILINE		127	14.00	493	194543	8323.98 UG/L	95
2)	4-CHLORO-3-METHYLPHENOL		107	15.53	568	2762	141.28 UG/L	94
3)	~~2-METHYLNAPHTHALENE~~		~~142~~	~~15.53~~	~~568~~	~~1422~~	~~34.21 UG/L~~ NOT	28
4)	*ACENAPHTHENE-D10	(IS)	162	18.77	727	66168	40.00 UG/L	94
6)	2,4,6-TRICHLOROPHENOL		196	16.77	629	3787	289.00 UG/L	97
7)	~~2,4,5-TRICHLOROPHENOL~~		~~196~~	~~16.77~~	~~629~~	~~3787~~	~~289.74 UG/L~~ CW	99
8)	2-FLUOROBIPHENYL	(SURR)	172	16.98	639	4001	85.13 UG/L	99
9)	~~2-CHLORONAPHTHALENE~~		~~162~~	~~16.69~~	~~625~~	~~2084~~	~~54.32 UG/L~~	88
1)	~~DIMETHYL PHTHALATE~~		~~163~~	~~18.10~~	~~694~~	~~8878~~	~~193.21 UG/L~~ CW	100
1)	~~DIMETHYL PHTHALATE~~		~~163~~	~~18.77~~	~~727~~	~~13164~~	~~285.68 UG/L~~	100
8)	2,4,6-TRIBROMOPHENOL	(SURR)	330	21.22	847	1098	147.12 UG/L	95
2)	~~2,6-DINITROTOLUENE~~		~~165~~	~~18.77~~	~~727~~	~~9060~~	~~876.43 UG/L~~ CW	100
5)	*PHENANTHRENE-D10	(IS)	188	23.13	941	69539	40.00 UG/L	86
7.	~~N-NITROSODIPHENYLAMINE~~		~~169~~	~~28.61~~	~~817~~	~~38395~~	~~1857.88 UG/L~~ CW	68
0)	PENTACHLOROPHENOL		266	22.97	933	11817	2394.81 UG/L	100
5)	*CHRYSENE-D12	(IS)	240	31.16	1335	30525	40.00 UG/L	100
3)	TERPHENYL-D14	(SURR)	244	28.29	1194	1091	74.68 UG/L	100
4)	*PERYLENE-D12	(IS)	264	35.17	1532	25426	40.00 UG/L	100

* Compound is ISTD

CHART SPEED 0.5 CM/MIN
ATTEN: 8 ZERO: 10% 5 MIN/TICK



DC-GW-26

RECALCULATE ON FILE: 5157634

CHANNEL: 1A - 1 TITLE: RUN# 18 2:44 14 APR 87

SAMPLE: 2197 METHOD: CEPA CALCULATION: ES - ANALYS

PEAK NO	PEAK NAME	RESULT UG/L	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		0.0000	1.325		31540	BV	2.44
2		0.0000	1.519		2914987	VB	4.44
3		0.0000	1.985		36638	VV	5.50
4	~~A-BHC~~ <	1.2309	2.233	0.013	75098	VV	5.94
5	~~B-BHC~~	8.0626	2.454	0.004	183528	VB	6.69
6		0.0000	3.005		41654	BV	10.13
7		0.0000	3.709		43794	VV	12.00
8	~~HEPTACHLO~~ <	1.6047	4.061	-0.029	73640	VV	11.63
9		0.0000	4.730		206806	VB	13.19
10		0.0000	5.541		183134	BB	12.81
11		0.0000	6.977		418016	BV	17.06
12	~~ENDRIN~~	1.8063	9.905	0.095	77220	VV	24.94
13	~~4,4'-DDD~~ <	0.6907	10.902	-0.008	30906	VB	22.50
14	~~4,4'-DDT~~	~~4.4810~~	14.205	-0.015	117000	BV	?145.31
15	~~END KETON~~	3.3593	16.184	-0.216	174970	VB	? 46.69
16	~~DBC~~ DL	1.1794	28.484	0.064	47197	BB	48.06
17		0.0000	32.445		63860	BB	?150.63

TOTALS: 22.4249 -0.012 4719988

DETECTED PKS: 28 REJECTED PKS: 11

DIVISOR: 1.00000 MULTIPLIER: 500.00000

NOISE: 22.9 OFFSET: -95

RACK: 2 VIAL: 3 INJ: 1

NOTES:
NOTEBOOK:259-186.ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#U-5157
INST: VARIAN 6000# 2A ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
LIQUID PHASE: 3% OV-1
CARRIER GAS: N2 @ 60 ML/MIN
DET: 300 C INJ: 220 C
200 C ISOTHERMAL 4 IN. INJECTION

SAMPLE NUMBER DC-GW-26R

481095

Sample Number
DC-GW-26R

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Ecology & Environment, Inc. Case No: U-5157, 5162
Lab Sample ID No: 2197 Replicate QC Report No:
Sample Matrix: Water Contract No: IL-3140
Data Release Authorized By: C Stoytowicz Date Sample Received: 3-24-87

Volatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 4-3-87

Conc./Dil Factor: 25 pH

Percent Moisture: (Not Decanted)

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	250u
74-83-9	Bromomethane	250u
75-01-4	Vinyl Chloride	250u
75-00-3	Chloroethane	250u
75-09-2	Methylene Chloride	70 J
67-64-1	Acetone	740 B
75-15-0	Carbon Disulfide	120u
75-35-4	1, 1-Dichloroethene	120u
75-34-3	1, 1-Dichloroethane	120u
156-60-5	Trans-1, 2-Dichloroethene	170
67-66-3	Chloroform	130
107-06-2	1, 2-Dichloroethane	37 J
78-93-3	2-Butanone	250u
71-55-6	1, 1, 1-Trichloroethane	120u
56-23-5	Carbon Tetrachloride	120u
108-05-4	Vinyl Acetate	250u
75-27-4	Bromodichloromethane	120u

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	120u
10061-02-6	Trans-1, 3-Dichloropropene	120u
79-01-6	Trichloroethene	250
124-48-1	Dibromochloromethane	120u
79-00-5	1, 1, 2-Trichloroethane	120u
71-43-2	Benzene	1500
10061-01-5	cis-1, 3-Dichloropropene	120u
110-75-8	2-Chloroethylvinylether	250u
75-25-2	Bromoform	120u
591-78-6	4-Methyl-2-Pentanone	180 BJ
108-10-1	2-Hexanone	250u
127-18-4	Tetrachloroethene	280
79-34-5	1, 1, 2, 2-Tetrachloroethane	120u
108-88-3	Toluene	230 B
108-90-7	Chlorobenzene	2800
100-41-4	Ethylbenzene	130
100-42-5	Styrene	120u
	Total Xylenes	33 J

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit report the value

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration, dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g. 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J

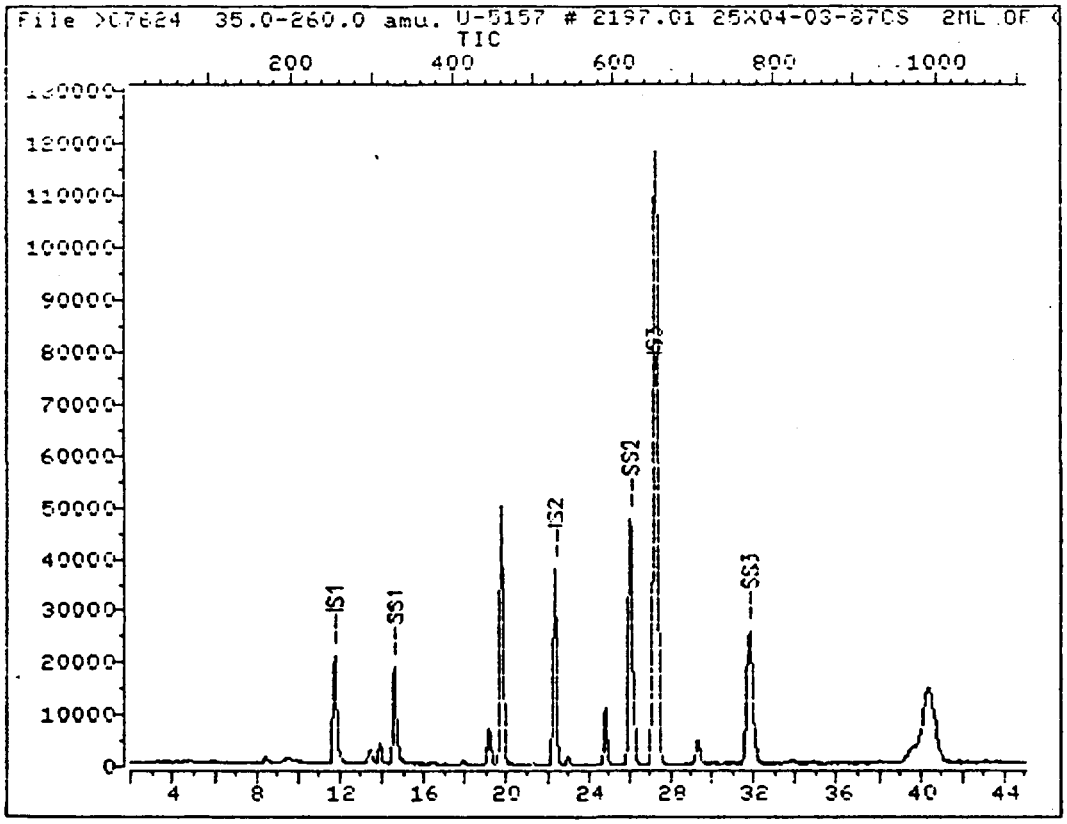
C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS

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

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

E This flag indicates an approximate concentration. The amount detected in the analysis exceeds the calibrated range.

TOTAL ION CHROMATOGRAM

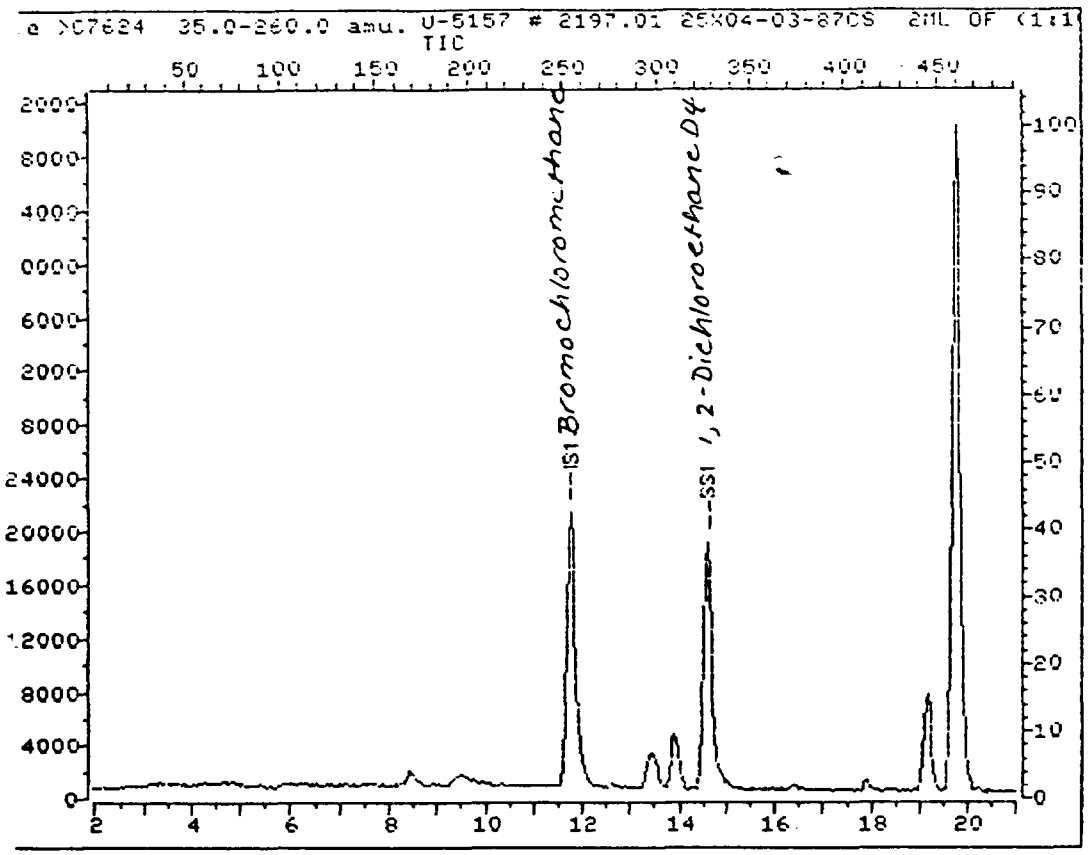


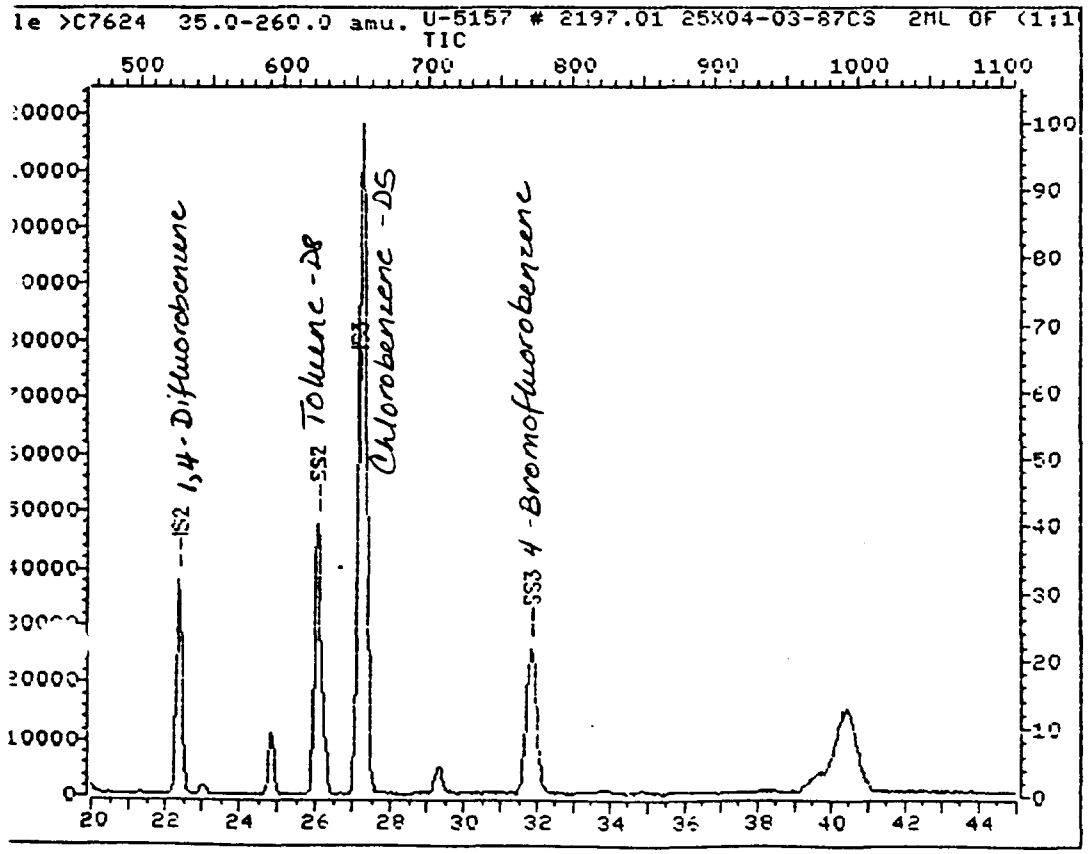
Data File: >C7624::D1
Name: U-5157 # 2197.01 25X DC-GW-26R
Misc: 04-03-87CS 2ML OF (1:10) SAMPLE + 3ML DI + 10UL IS/SS

Id File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870403 10:07

Operator ID: USER8
Quant Time: 870403 11:51
Injected at: 870403 11:05

DC-GW-26R


e >C7624 35.0-260.0 amu. U-5157 # 2197.01 25X04-03-87CS 2ML OF (1:1
TIC
--IS1 Bromochloromethane
--SS1 1,2-Dichloroethane D4


le >C7624 35.0-260.0 amu. U-5157 # 2197.01 25X04-03-87CS 2ML OF (1:1
TIC
--IS2 1,4-Difluorobenzene
--SS2 Toluene-D8
IS3 Chlorobenzene-D5
--SS3 4-Bromofluorobenzene

QUANT REPORT

)e tor ID: USER8 Quant Rev: 4 Quant Time: 870403 11:51
)t t File: ^C7624::Q2 Injected at: 870403 11:05
)ta File: >C7624::D1 Dilution Factor: 1.00
)me: U-5157 # 2197.01 25X DC-GW-26R
sc: 04-03-87CS 2ML OF (1:10) SAMPLE + 3ML DI + 10UL IS/SS

) File: VOACR::D2
tle: VOA ID FILE FOR HP-5995 (CONT. CAL.)
)st Calibration: 870403 10:07

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	(IS)	128	11.76	254	30230	50.00 UG/L	100
5)	METHYLENE CHLORIDE		84	8.46	169	2951	2.80 UG/L	100
7)	ACETONE		43	9.51	196	14640	29.51 UG/L	100
12)	TRANS-1,2-DICHLOROETHENE		96	13.43	297	6960	6.93 UG/L	81
13)	CHLOROFORM		83	13.90	309	11731	5.12 UG/L	100
14)	1,2-DICHLOROETHANE		62	14.71	330	2892	1.48 UG/L	97
15)	1,2-DICHLOROETHANE-D4	(SURR)	65	14.59	327	87594	55.01 UG/L	77
6)	*1,4-DIFLUOROBENZENE	(IS)	114	22.35	527	141702	50.00 UG/L	100
4)	TRICHLOROETHENE		130	19.17	445	12019	9.88 UG/L	76
7)	BENZENE		78	19.76	460	209407	60.50 UG/L	100
3)	~~CIS-1,3-DICHLOROPROPENE~~		~~75~~	~~19.76~~	~~460~~	~~4464~~	~~3.33 UG/L~~ CW	100
1)	*CHLOROBENZENE-D5	(IS)	117	27.17	651	119866	50.00 UG/L	100
2)	4-METHYL-2-PENTANONE		43	23.01	544	7337	7.16 UG/L	89
4)	TETRACHLOROETHENE		164	24.84	591	12966	11.31 UG/L	85
6)	TOLUENE-D8	(SURR)	98	26.04	622	177695	51.75 UG/L	93
7)	TOLUENE		92	26.24	627	21590	9.27 UG/L	90
3)	CHLOROBENZENE		112	27.29	654	312821	112.54 UG/L	99
9)	ETHYLBENZENE		91	29.35	707	27001	5.32 UG/L	89
1)	4-BROMOFLUOROBENZENE	(SURR)	95	31.83	771	89318	50.80 UG/L	100
2)	TOTAL XYLENES		91	33.85	823	3142	.76 UG/L	100
2)	TOTAL XYLENES		91	34.86	849	2372	.57 UG/L	100
3)	1,3-DICHLOROBENZENE		146	39.63	972	16420	16420.00 NO CALIB	100
3)	1,3-DICHLOROBENZENE		146	40.29	989	31745	31745.00 NO CALIB	100
4)	1,2-DICLHLOROBENZENE		146	39.63	972	16420	16420.00 NO CALIB	100
4)	1,2-DICLHLOROBENZENE		146	40.29	989	31745	31745.00 NO CALIB	100
5)	1,4-DICHLOROBENZENE		146	39.63	972	16420	16420.00 NO CALIB	100
5)	1,4-DICHLOROBENZENE		146	40.29	989	31745	31745.00 NO CALIB	100

* Compound is ISTD

Use as rep

SAMPLE NUMBER DC-GW-27

481095

Sample Number
DC-GW-27

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Ecology & Environment Inc. Case No: U-5157, 5162

Lab Sample ID No: 2198 QC Report No:

Sample Matrix: Water Contract No: EL-3140

Data Release Authorized By: C Stoytowicz Date Sample Received: 3-24-87

Volatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 3-27-87

Conc./Dil Factor: 1 pH

Percent Moisture: (Not Decanted)

CAS Number		ug/l or ug/Kg (Circle One)	
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	76	
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	2J	
67-64-1	Acetone	10B	
75-15-0	Carbon Disulfide	5	U
75-35-4	1, 1-Dichloroethene	10	
75-34-3	1, 1-Dichloroethane	120	
156-60-5	Trans-1, 2-Dichloroethene	310	
67-66-3	Chloroform	5	U
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

CAS Number		ug/l or ug/Kg (Circle One)	
78-87-5	1, 2-Dichloropropane	5	U
10061-02-6	Trans-1, 3-Dichloropropene	5	U
79-01-6	Trichloroethene	4J	
124-48-1	Dibromochloromethane	5	U
79-00-5	1, 1, 2-Trichloroethane	5	U
71-43-2	Benzene	5	
10061-01-5	cis-1, 3-Dichloropropene	5	U
110-75-8	2-Chloroethylvinylether	10	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	120	
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
	Total Xylenes	5	U

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS.

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

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

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Laboratory Name: ECOLOGY & ENVIRONMENT INC.

Case No: U-5157, 5162

Sample Number: DC-GW-27

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 3/29 and 5/6/87

Date Analyzed: 4/22 and 5/20/87

Conc/Dil Factor: 2

Percent Moisture (Decanted) -

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)	
108-95-2	Phenol	18	
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	
100-51-6	Benzyl Alcohol	10	U
95-50-1	1. 2-Dichlorobenzene	4	J
95-48-7	2-Methylphenol	10	U
39638-32-9	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	18	
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	Dimethyl-Phthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	50	U

CAS Number		ug/l or ug/Kg (Circle One)	
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
606-20-2	2. 6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	13	B
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4. 6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	7	J
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	2	JB
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
117-81-7	bis(2-Ethylhexyl)Phthalate	2	JB
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1 2. 3-cd)Pyrene	10	U
53-70-3	Dibenzo(a h)Anthracene	10	U
191-24-2	Benzo(g h. i)Perylene	10	U

(1)-Cannot be separated from diphenylamine

Laboratory Name ecology and environment, inc.

Case No 4-5157, 5162

Sample Number DC-GW-27

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration (Low) Medium (Circle One)

Date Extracted/Prepared 3-30-87

Date Analyzed 4-14-87

Conc/Dil Factor 1

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☑Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/l) or ug/Kg (Circle One)
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 1,000 or W_s _____ V_t 10,000 V_i 4

Laboratory Name ecology and environment, inc.

Case No U-5157, 5162

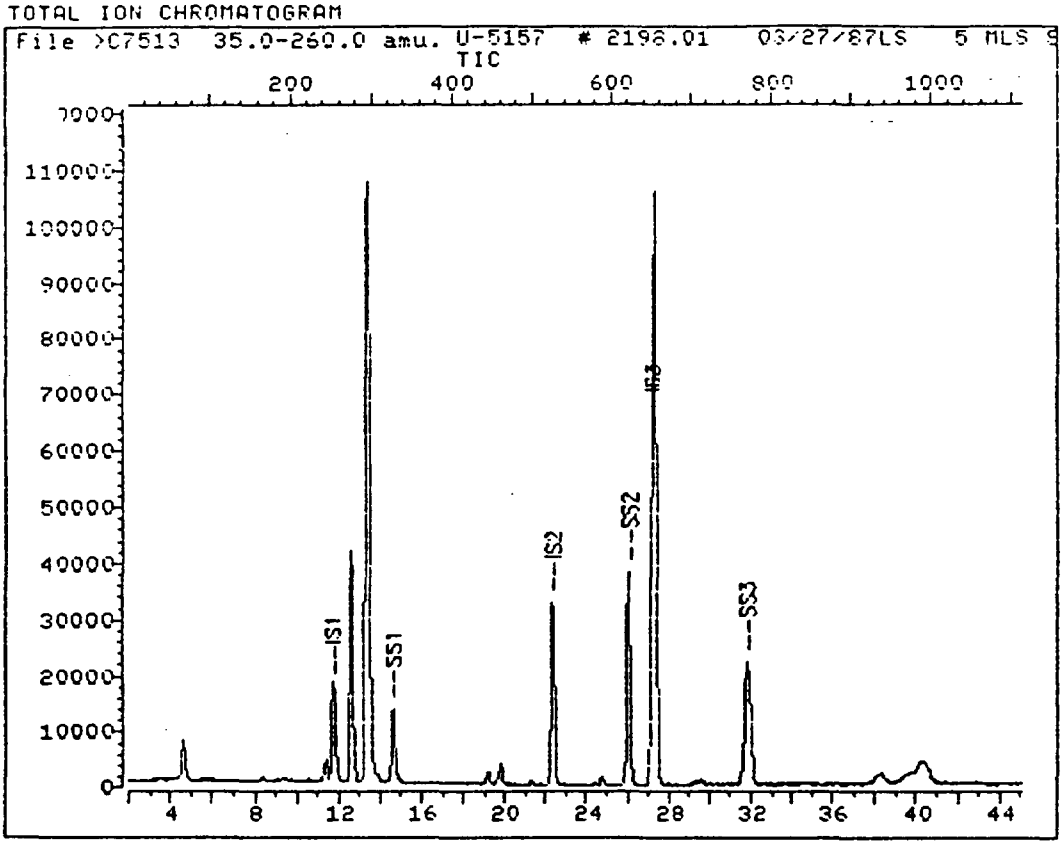
Sample Number DC-GW-27

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.	Dichlorobenzene isomer	VOA	39.44	2 J
2.	Dichlorobenzene isomer		40.26	3 J
3.				
4.	Chloroaniline Isomer	BN	12.29	25 J
5.	Ethylaniline Isomer		13.00	180 J
6.	Ethylaniline Isomer		13.22	13 J
7	Unknown		20.72	19 B J
8.	Unknown		24.02	6 B J
9. 127639	1,1'-sulfonylbis benzene		25.16	8 J
10.	Unknown Hydrocarbon		26.93	28 J
11.	Unknown		30.34	61 B J
12.	Unknown		34.45	33 J
13.				
14.				
15.	Molecular Sulfur	AP	25.73	6 J
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24				
25.				
26.				
27.				
28.				
29.				
30				

TOTAL ION CHROMATOGRAM

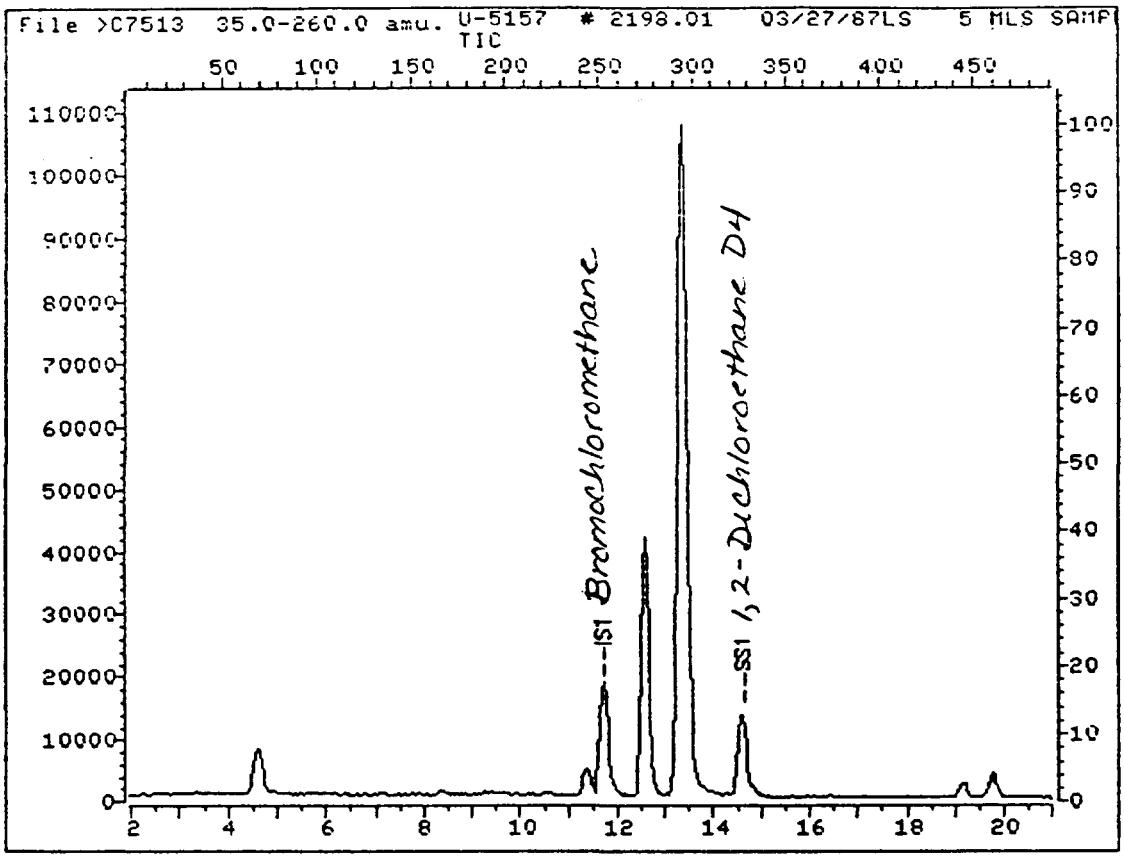


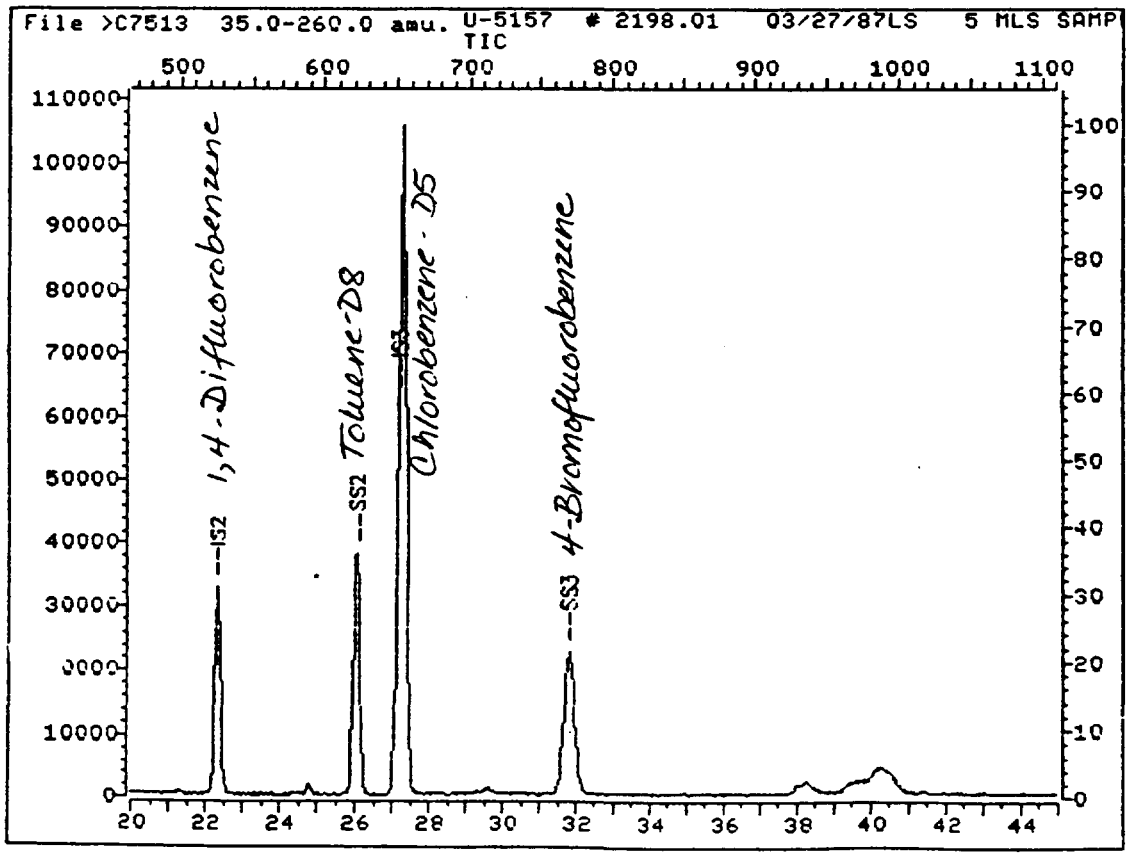
Data File: >C7513::D3
Name: U-5157 # 2198.01 DC-GW-27
Misc: 03/27/87LS 5 MLS SAMPLE + 10 ULS IS/SS

Id File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870327 11:38

Operator ID: USER8
Quant Time: 870327 16:03
Injected at: 870327 15:17

DC-GW-27


File >C7513 35.0-260.0 amu. U-5157 # 2198.01 03/27/87LS 5 MLS SAMP
TIC
--IS1 Bromochloromethane
--SS1 1,2-Dichloroethane D4


File >C7513 35.0-260.0 amu. U-5157 # 2198.01 03/27/87LS 5 MLS SAMP
TIC
--IS2 1,4-Difluorobenzene
--SS2 Toluene-D8
--IS3 Chlorobenzene-D5
--SS3 4-Bromofluorobenzene

QUANT REPORT

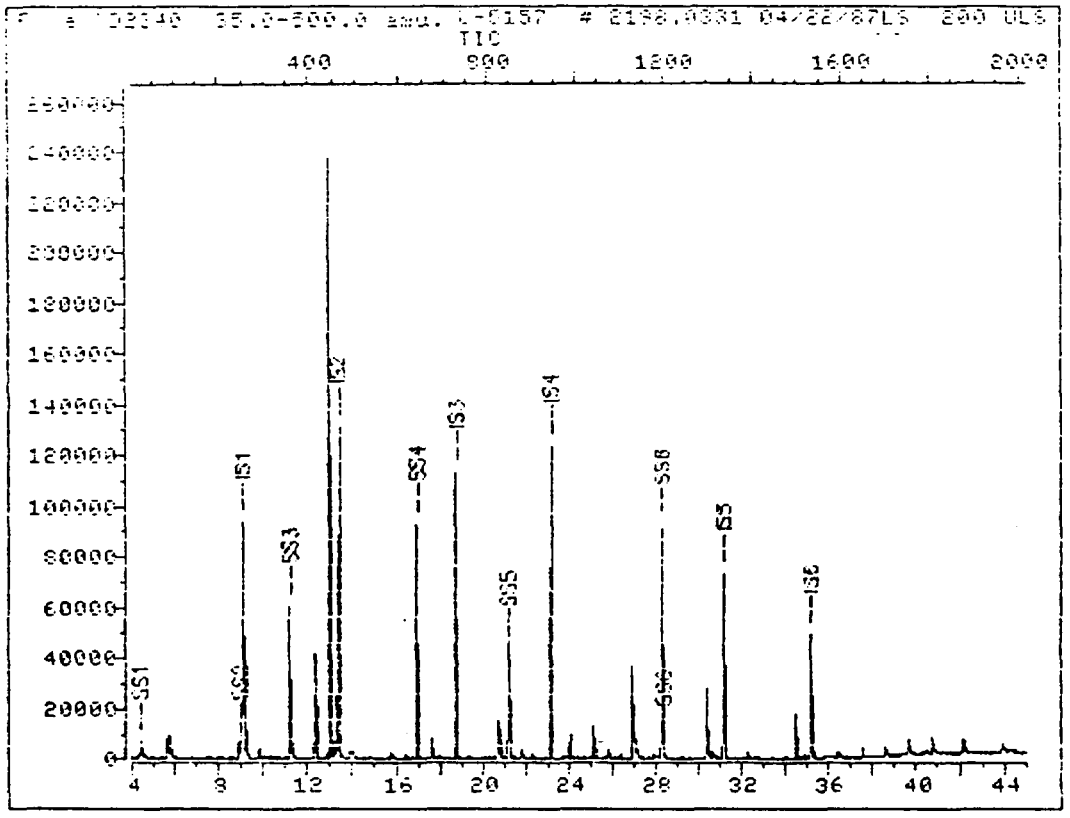
ɔerator ID: USER8 Quant Rev: 4 Quant Time: 870327 16:03
ɪt : File: ^C7513::Q2 Injected at: 870327 15:17
ɪtɔ File: >C7513::D3 Dilution Factor: 1.00
ɪme: U-5157 # 2198.01 DC-GW-27
ɛc: 03/27/87LS 5 MLS SAMPLE + 10 ULS IS/SS

) File: VOACR::D2
.tle: VOA ID FILE FOR HP-5995 (CONT. CAL.)
ɪst Calibration: 870327 11:38

	Compound			R.T.	Scan#	Area	Conc	Units	q
.)	*BROMOCHLOROMETHANE	(IS)	128	11.69	252	29568	50.00	UG/L	100
4)	VINYL CHLORIDE		62	4.59	69	54244	75.72	UG/L	99
6)	METHYLENE CHLORIDE		84	8.39	167	1873	2.02	UG/L	100
7)	ACETONE		43	9.36	192	4412	9.72	UG/L	100
10)	1,1-DICHLOROETHENE		61	11.38	244	16834	10.37	UG/L	98
11)	1,1-DICHLOROETHANE		63	12.58	275	221992	122.32	UG/L	97
12)	TRANS-1,2-DICHLOROETHENE		96	13.36	295	290059	306.49	UG/L	86
5)	1,2-DICHLOROETHANE-D4	(SURR)	65	14.60	327	62697	49.27	UG/L	86
).	*1,4-DIFLUOROBENZENE	(IS)	114	22.32	526	146569	50.00	UG/L	100
4)	TRICHLOROETHENE		130	19.18	445	4863	4.23	UG/L	82
2)	BENZENE		78	19.76	460	17140	5.38	UG/L	100
.)	*CHLOROBENZENE-D5	(IS)	117	27.17	651	117417	50.00	UG/L	100
5)	TOLUENE-D8	(SURR)	98	26.04	622	155888	53.89	UG/L	93
3)	CHLOROBENZENE		112	27.26	653	296058	121.60	UG/L	98
1)	4-BROMOFLUOROBENZENE	(SURR)	95	31.80	770	81672	56.37	UG/L	100
5)	1,3-DICHLOROBENZENE		146	39.44	967	6418	6418.00	NO CALIB	100
5)	1,3-DICHLOROBENZENE		146	40.26	988	7789	7789.00	NO CALIB	100
4)	1,2-DICLHLOROBENZENE		146	39.44	967	6418	6418.00	NO CALIB	100
4)	1,2-DICLHLOROBENZENE		146	40.26	988	7789	7789.00	NO CALIB	100
5)	1,4-DICHLOROBENZENE		146	39.44	967	6418	6418.00	NO CALIB	100
5)	1,4-DICHLOROBENZENE		146	40.26	988	7789	7789.00	NO CALIB	100

* Compound is ISTD

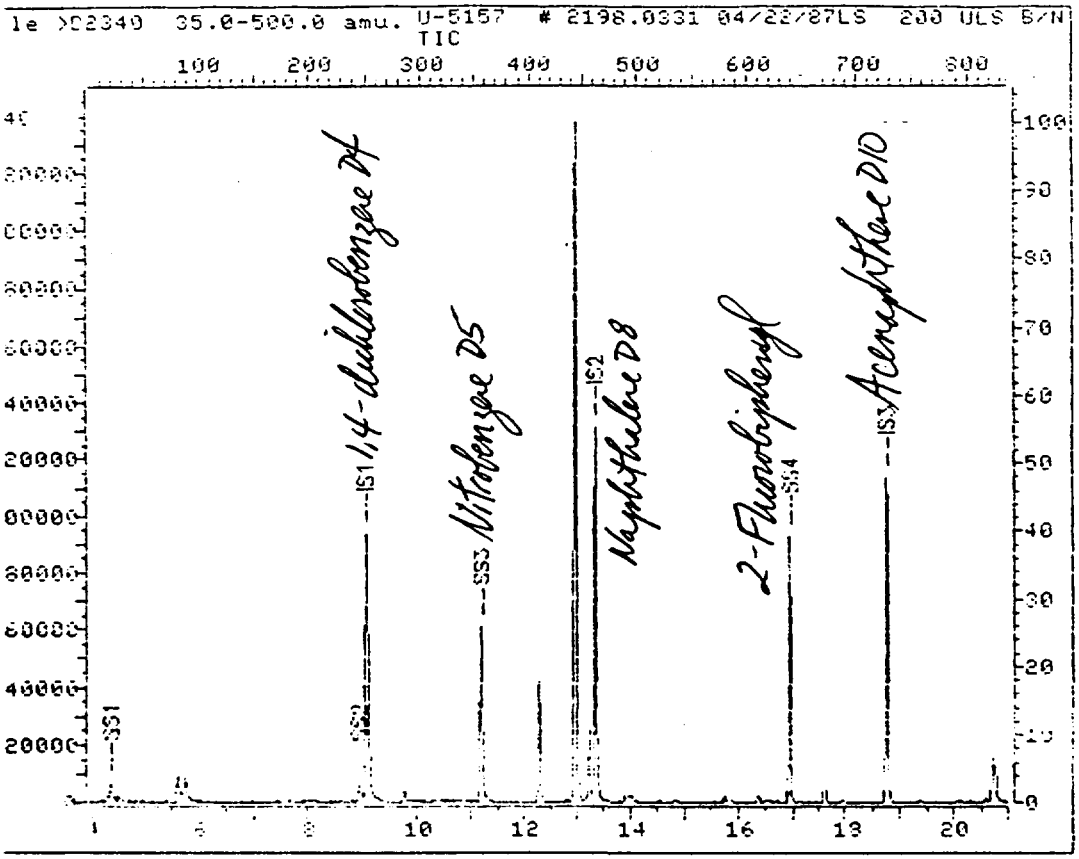
TOTAL ION CHROMATOGRAM



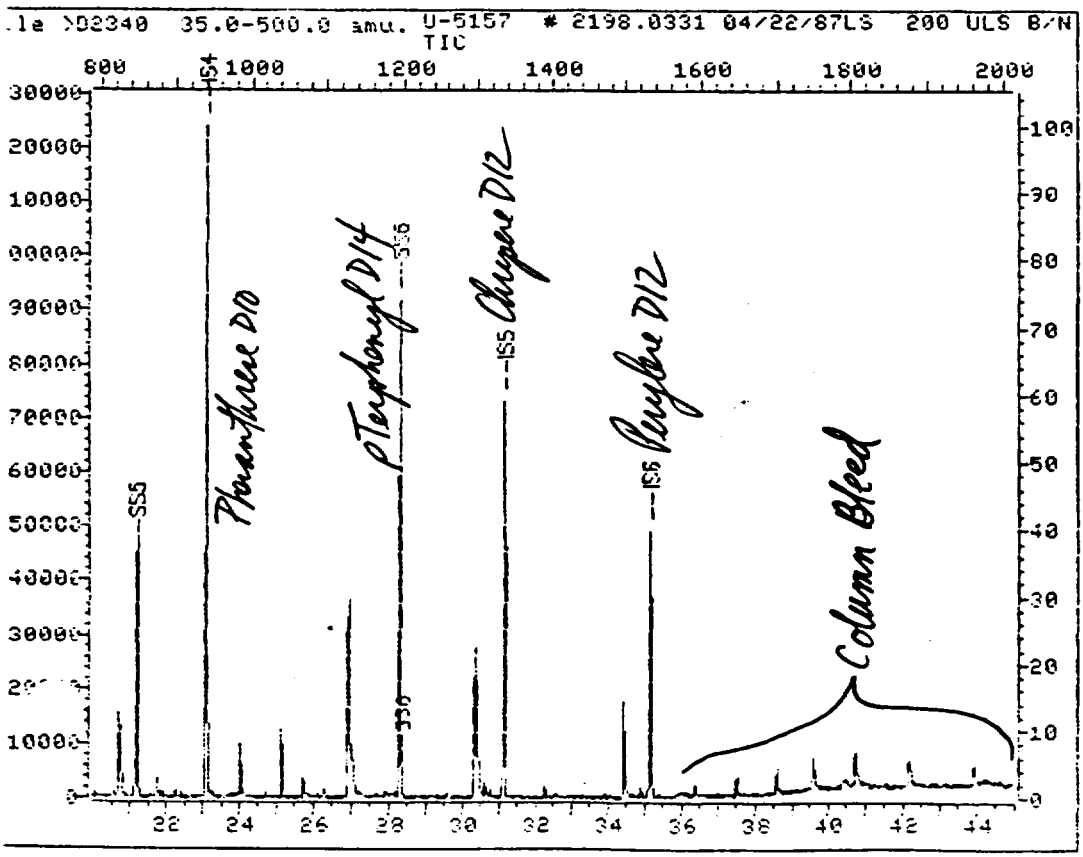
Data File: >D2340::D3
Name: U-5157 # 2198.0331 DC-GW-27
Misc: 04/22/87LS 200 ULS B/N + 200 ULS A/P + 4 ULS IS BTL# 2

Id File: BNADR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870422 18:03

Operator ID: USER6
Quant Time: 870422 21:00
Injected at: 870422 20:12


le >D2340 35.0-500.0 amu. U-5157 # 2198.0331 04/22/87LS 200 ULS B/N
TIC
1,4-dichlorobenzene D4
Nitrobenzene D5
Naphthalene D8
2-Fluorobiphenyl
Acenaphthene D10
IS1
SS1
SS2
SS3
IS2
SS4
IS3

DC-GW-27


le >D2340 35.0-500.0 amu. U-5157 # 2198.0331 04/22/87LS 200 ULS B/N
TIC
Phenanthrene D10
pTerphenyl D14
Chrysene D12
Perylene D12
Column Bleed
SS5
IS4
SS6
IS5
IS6

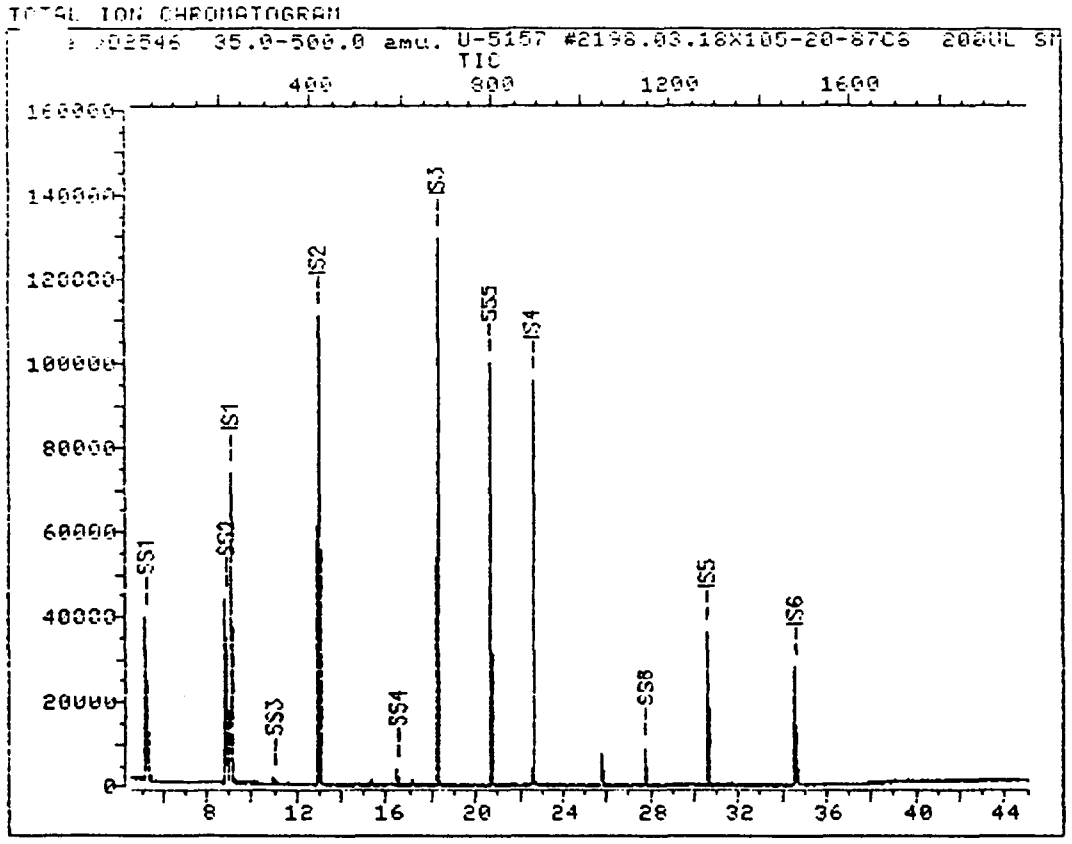
QUANT REPORT

Operator ID: USER6 Quant Rev: 4 Quant Time: 870422 21:09
Output File: ^D2340::D2 Injected at: 870422 20:12
Data File: >D2340::D3 Dilution Factor: 2.00
Name: U-5157 # 2198.0331 DC-GW-27
Misc: 04/22/87LS 200 ULS B/N + 200 ULS A/P + 4 ULS IS BTL# 2

ID File: BNADR::D2 BN Fraction
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870422 18:03

	Compound			R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-D4	(IS)	152	9.05	250	44861	40.00	UG/L	82
2)	PHENOL-D5	(SURR)	99	8.92	244	7977	8.77	UG/L	89
5)	2-FLUOROPHENOL	(SURR)	112	4.34	19	5947	8.17	UG/L	77
9)	~~1,3-DICHLOROBENZENE~~		~~146~~	~~9.11~~	~~253~~	~~8310~~	~~10.39~~	~~UG/L~~ No BN	99
10)	1,4-DICHLOROBENZENE		146	9.11	253	8310	9.61	UG/L	99
12)	1,2-DICHLOROBENZENE		146	9.76	285	3302	3.97	UG/L	96
17)	~~N-NITROSO-DI-N-PROPYLAMINE~~		~~70~~	~~11.19~~	~~355~~	~~7221~~	~~2.08~~	~~UG/L~~ No BN	89
19)	*NAPHTHALENE-D8	(IS)	136	13.35	461	99298	40.00	UG/L	100
20)	NITROBENZENE-D5	(SURR)	82	11.19	355	46981	80.65	UG/L	91
~~24~~	~~BIS-2-CHLOROETHOXYMETHANE~~		~~93~~	~~13.09~~	~~444~~	~~7217~~	~~13.86~~	~~UG/L~~ No BN	50
~~26~~	~~BIS-2-CHLOROETHOXYMETHANE~~		~~93~~	~~13.35~~	~~461~~	~~2916~~	~~4.05~~	~~UG/L~~	54
30)	4-CHLOROANILINE		127	13.90	488	2002	4.47	UG/L	75
30)	4-CHLOROANILINE		127	13.98	492	6054	13.53	UG/L	90
34)	*ACENAPHTHENE-D10	(IS)	162	18.74	726	63336	40.00	UG/L	96
38)	2-FLUOROBIPHENYL	(SURR)	172	16.95	638	64181	62.96	UG/L	91
~~41~~	~~DIMETHYL PHTHALATE~~		~~163~~	~~12.76~~	~~726~~	~~13021~~	~~11.32~~	~~UG/L~~ No BN	100
48)	2,4,6-TRIBROMOPHENOL	(SURR)	330	21.19	846	23174	78.48	UG/L	94
~~52~~	~~2,6-DINITROTOLUENE~~		~~165~~	~~16.76~~	~~726~~	~~3838~~	~~32.57~~	~~UG/L~~ No BN	100
53)	DIETHYLPHTHALATE		149	20.72	823	17862	13.49	UG/L	99
55)	*PHENANTHRENE-D10	(IS)	188	23.13	941	108671	40.00	UG/L	94
60)	PENTACHLOROPHENOL		266	23.08	939	1705	7.01	UG/L	100
63)	DI-N-BUTYLPHTHALATE		149	25.73	1069	3671	2.31	UG/L	99
65)	*CHRYSENE-D12	(IS)	240	31.15	1335	78046	40.00	UG/L	100
68)	TERPHENYL-D14	(SURR)	244	28.28	1194	94759	88.92	UG/L	100
~~69~~	~~[illegible]~~		~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~597~~	~~[illegible]~~	~~UG/L~~ No BN	100
72)	BIS(2-ETHYLHEXYL)PHTHALATE		149	32.25	1389	1727	1.76	UG/L	85
74)	*PERYLENE-D12	(IS)	264	35.15	1531	54875	40.00	UG/L	100

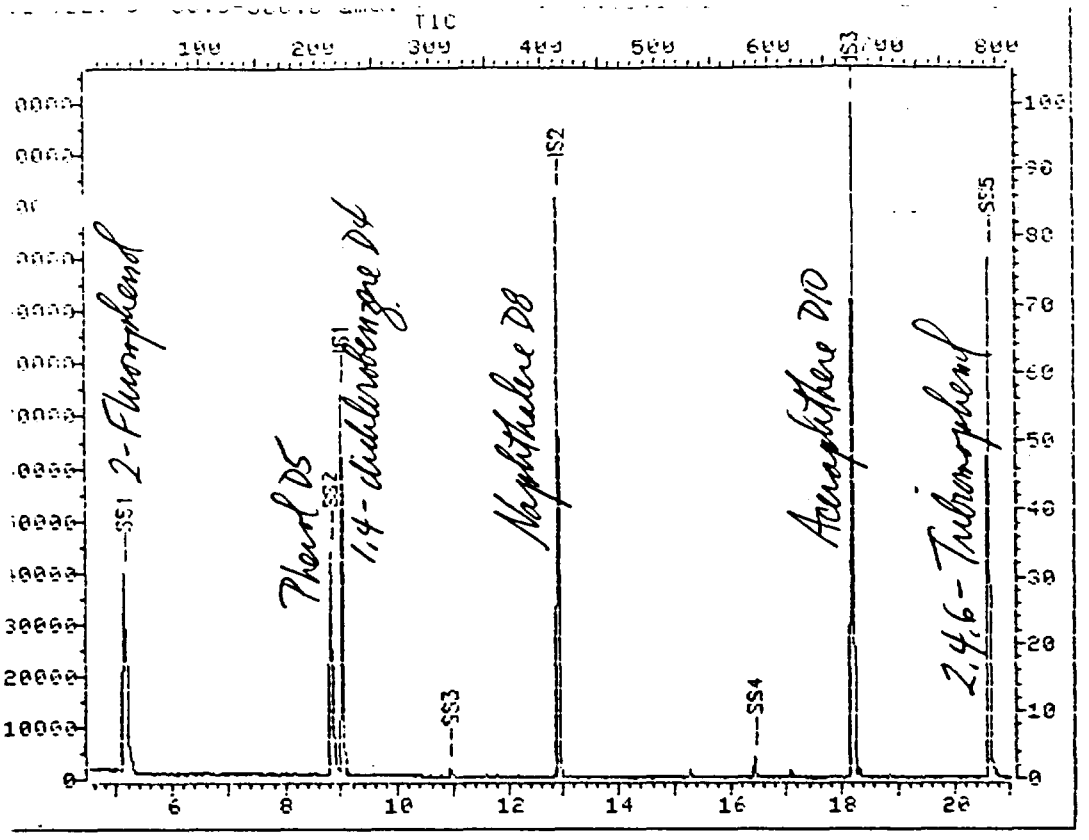
* Compound is ISTD



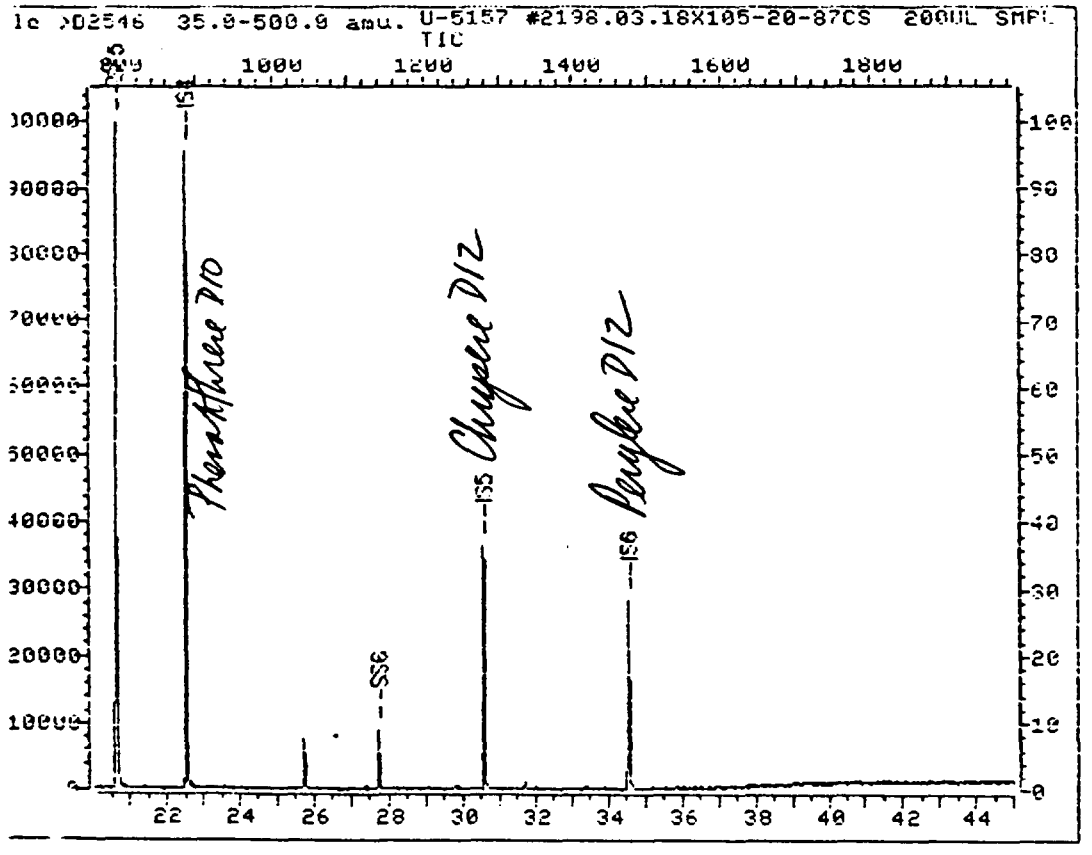
Data File: >D2546::D1
Name: U-5157 #2198.03.18X1 DC-GW-27
Misc: 05-20-87CS 200UL SMPL + 200UL MECL2 + 4UL IS BTL# 4

Id File: BNADR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870520 14:58

Operator ID: USER6
Quant Time: 870520 18:45
Injected at: 870520 17:58


TIC
2-Fluorophenol
Phenol D5
1,4-dichlorobenzene D4
Naphthalene D8
Acenaphthene D10
2,4,6-Tribromophenol
SS1
SS2
IS1
SS3
IS2
SS4
IS3
SS5

DC-GW-27


TIC
Phenanthrene D10
Chrysene D12
Perylene D12
SS6
IS5
IS6

QUANT REPORT

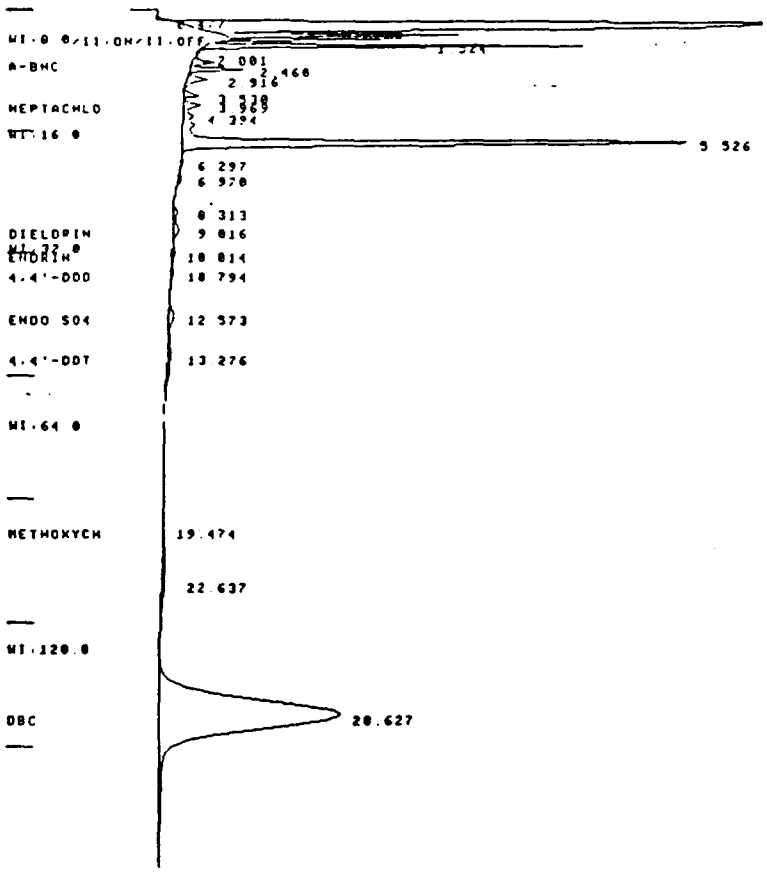
perator ID: USER6 Quant Rev: 4 Quant Time: 870520 18:45
utput File: ^D2546::Q2 Injected at: 870520 17:58
ata File: >D2546::D1 Dilution Factor: 2.00
ame: U-5157 #2198.03.18X1 DC-GW-27
ise: 05-20-87CS 200UL SMPL + 200UL MECL2 + 4UL IS BTL# 4

D File: BNAUR::D2
itle: BNA ID FILE FOR THE HP 5970 (B) A|P ONLY
ast Calibration: 870520 14:58

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-D4	(IS)	152	9.03	222	26876	40.00 UG/L	88
2)	PHENOL-D5	(SURR)	99	8.82	212	28761	51.19 UG/L 26	99
5)	2-FLUOROPHENOL	(SURR)	112	5.14	31	35518	100.59 UG/L 50	98
6)	PHENOL		94	8.86	214	9075	18.21 UG/L	65
9)	*NAPHTHALENE-D8	(IS)	136	12.92	413	98456	40.00 UG/L	100
0)	NITROBENZENE-D5	(SURR)	82	10.94	316	1704	3.20 UG/L	90
4)	*ACENAPHTHENE-D10	(IS)	162	18.21	673	61534	40.00 UG/L	94
8)	2-FLUOROBIPHENYL	(SURR)	172	16.44	586	3415	3.02 UG/L	92
~~1)~~	~~DIMETHYL PHTHALATE~~		~~163~~	~~18.21~~	~~673~~	~~12204~~	~~13.83 UG/L~~ 10.8 µ	~~100~~
8)	2,4,6-TRIBROMOPHENOL	(SURR)	330	20.64	792	45281	105.07 UG/L 53	98
~~2)~~	~~2,6-DINITROTOLUENE~~		~~165~~	~~18.21~~	~~673~~	~~8166~~	~~43.67 UG/L~~ 10.8 µ	~~100~~
5)	*PHENANTHRENE-D10	(IS)	188	22.55	886	94110	40.00 UG/L	93
5)	*CHRYSENE-D12	(IS)	240	30.56	1279	44251	40.00 UG/L	100
8)	TERPHENYL-D14	(SURR)	244	27.73	1140	11281	24.72 UG/L	100
4)	*PERYLENE-D12	(IS)	264	34.55	1475	38676	40.00 UG/L	100

* Compound is ISTD

CHART SPEED 0.5 CM/MIN
ATTEN: 8 ZERO: 10% 5 MIN/TICK



RECALCULATE ON FILE: S157636

CHANNEL: 1A - 1 TITLE: RUN#20 4:01 14 APR 87

DC-GW-27

SAMPLE: 2198 METHOD: CEPA CALCULATION: ES - ANALYS

PEAK NO	PEAK NAME	RESULT UG/L	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		0.0000	1.258		95572	BB	3.56
2		0.0000	1.524		239425	BV	4.56
3	~~A-BHC~~	0.0072	2.188	-0.032	21911	VV	6.63
4	~~B-BHC~~	0.0429	2.460	0.090	48862	VV	5.94
5		0.0000	2.916		33626	VV	8.50
6		0.0000	3.530		21330	VV	9.56
7	~~HEPTACHLO~~	0.0122	3.969	-0.121	28064	VV	10.19
8		0.0000	4.394		20642	VV	15.88
9		0.0000	4.771		27270	VV	? 10.06
10		0.0000	5.526		873057	VB	12.56
11	~~ENDO SO4~~	0.0275	12.573	-0.237	44774	BV	32.75
12		0.0000	13.276		32421	T	?193.38
13		0.0000	23.254		40540	BB	? 86.69
14	DBC	0.9239	28.594	0.174	1048530	BB	75.56
TOTALS:		1.0137		-0.126	3376024		

DETECTED PKS: 28 REJECTED PKS: 14

DIVISOR: 1.00000 MULTIPLIER: 10.00000

NOISE: 22.9 OFFSET: 0

RACK: 2 VIAL: 5 INJ: 1

NOTES:
NOTEBOOK:259-186 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#U-5157
INST: VARIAN 6000# 2A ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
LIQUID PHASE: 3% OV-1
CARRIER GAS: N2 @ 60 ML/MIN
DET: 300 C INJ: 220 C
200 C ISOTHERMAL 4 UL INJECTION
PRIMARY ANALYSIS AUTOSAMPLER

SAMPLE NUMBER DC-GW-28

481095

Sample Number
DC-GW-28

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Ecology & Environment, Inc. Case No: U-5157, 5162

Lab Sample ID No: 2199 QC Report No:

Sample Matrix: Water Contract No: IL-3140

Data Release Authorized By: [illegible] Date Sample Received 3-24-87

Volatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 3-27-87

Conc./Dil Factor: 5 pH

Percent Moisture: (Not Decanted)

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	50u
74-83-9	Bromomethane	50u
75-01-4	Vinyl Chloride	790
75-00-3	Chloroethane	50u
75-09-2	Methylene Chloride	25u
67-64-1	Acetone	190B
75-15-0	Carbon Disulfide	25u
75-35-4	1, 1-Dichloroethene	25u
75-34-3	1, 1-Dichloroethane	25u
156-60-5	Trans-1, 2-Dichloroethene	640
67-66-3	Chloroform	25u
107-06-2	1, 2-Dichloroethane	25u
78-93-3	2-Butanone	50u
71-55-6	1, 1, 1-Trichloroethane	25u
56-23-5	Carbon Tetrachloride	25u
108-05-4	Vinyl Acetate	50u
75-27-4	Bromodichloromethane	25u

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	25u
10061-02-6	Trans-1, 3-Dichloropropene	25u
79-01-6	Trichloroethene	25u
124-48-1	Dibromochloromethane	25u
79-00-5	1, 1, 2-Trichloroethane	25u
71-43-2	Benzene	550
10061-01-5	cis-1, 3-Dichloropropene	25u
110-75-8	2-Chloroethylvinylether	50u
75-25-2	Bromoform	25u
591-78-6	4-Methyl-2-Pentanone	50u
108-10-1	2-Hexanone	50u
127-18-4	Tetrachloroethene	25u
79-34-5	1, 1, 2, 2-Tetrachloroethane	25u
108-88-3	Toluene	740
108-90-7	Chlorobenzene	550
100-41-4	Ethylbenzene	58
100-42-5	Styrene	25u
	Total Xylenes	58

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration, dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g. 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS.

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

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

E This flag indicates an approximate concentration. The amount detected in the analysis exceeds the calibrated range.

Laboratory Name Ecology & Environment

Case No. 11-5157, 5162

Sample Number
DC-GW-28

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 3-29-87

Date Analyzed: 4-23-87

Conc/Dil Factor: 10

Percent Moisture (Decanted) -

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)	
108-95-2	Phenol	80	
111-44-4	bis(-2-Chloroethyl)Ether	50	U
95-57-8	2-Chlorophenol	50	U
541-73-1	1 3-Dichlorobenzene	50	U
106-46-7	1 4-Dichlorobenzene	110	
100-51-6	Benzyl Alcohol	350	
95-50-1	1 2-Dichlorobenzene	15	J
95-48-7	2-Methylphenol	76	
39638-32-9	bis(2-chloroisopropyl)Ether	50	U
106-44-5	4-Methylphenol	50	U
621-64-7	N-Nitroso-Di-n-Propylamine	50	U
67-72-1	Hexachloroethane	50	U
98-95-3	Nitrobenzene	50	U
78-59-1	Isophorone	50	U
88-75-5	2-Nitrophenol	50	U
105-67-9	2. 4-Dimethylphenol	50	U
65-85-0	Benzoic Acid	250	U
111-91-1	bis(-2-Chloroethoxy)Methane	50	U
120-83-2	2. 4-Dichlorophenol	50	U
120-82-1	1 2. 4-Trichlorobenzene	50	U
91-20-3	Naphthalene	230	
106-47-8	4-Chloroaniline	9600	E
87-68-3	Hexachlorobutadiene	50	U
59-50-7	4-Chloro-3-Methylphenol	50	U
91-57-6	2-Methylnaphthalene	9	J
77-47-4	Hexachlorocyclopentadiene	50	U
88-06-2	2 4 6-Trichlorophenol	50	U
95-95-4	2. 4 5-Trichlorophenol	250	U
91-58-7	2-Chloronaphthalene	50	U
88-74-4	2-Nitroaniline	250	U
131-11-3	Dimethyl Phthalate	50	U
208-96-8	Acenaphthylene	50	U
99-09-2	3-Nitroaniline	250	U

CAS Number		ug/l or ug/Kg (Circle One)	
83-32-9	Acenaphthene	50	U
51-28-5	2. 4-Dinitrophenol	250	U
100-02-7	4-Nitrophenol	250	U
132-64-9	Dibenzofuran	50	U
121-14-2	2 4-Dinitrotoluene	50	U
606-20-2	2. 6-Dinitrotoluene	50	U
84-66-2	Diethylphthalate	140	B
7005-72-3	4-Chlorophenyl-phenylether	50	U
86-73-7	Fluorene	25	J
100-01-6	4-Nitroaniline	250	U
534-52-1	4. 6-Dinitro-2-Methylphenol	250	U
86-30-6	N-Nitrosodiphenylamine (1)	50	U
101-55-3	4-Bromophenyl-phenylether	50	U
118-74-1	Hexachlorobenzene	50	U
87-86-5	Pentachlorophenol	60	J
85-01-8	Phenanthrene	50	U
120-12-7	Anthracene	50	U
84-74-2	Di-n-Butylphthalate	50	U
206-44-0	Fluoranthene	50	U
129-00-0	Pyrene	50	U
85-68-7	Butylbenzylphthalate	50	U
91-94-1	3. 3'-Dichlorobenzidine	100	U
56-55-3	Benzo(a)Anthracene	50	U
117-81-7	bis(2-Ethylhexyl)Phthalate	20	BJ
218-01-9	Chrysene	50	U
117-84-0	Di-n-Octyl Phthalate	50	U
205-99-2	Benzo(b)Fluoranthene	50	U
207-08-9	Benzo(k)Fluoranthene	50	U
50-32-8	Benzo(a)Pyrene	50	U
193-39-5	Indeno(1 2. 3-cd)Pyrene	50	U
53-70-3	Dibenz(a h)Anthracene	50	U
191-24-2	Benzo(g h i)Perylene	50	U

(1)-Cannot be separated from diphenylamine

Laboratory Name ecology and environment, inc.

Case No U-5157,5162

Sample Number DC-GW-28

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration (Low) Medium (Circle One)

Date Extracted/Prepared 3-30-87

Date Analyzed 4-14-87

Conc/Dil Factor 50

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☑Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/l or ug/Kg) (Circle One)
319-84-6	Alpha-BHC	2.5U
319-85-7	Beta-BHC	2.5U
319-86-8	Delta-BHC	2.5U
58-89-9	Gamma-BHC (Lindane)	2.5U
76-44-8	Heptachlor	2.5U
309-00-2	Aldrin	2.5U
1024-57-3	Heptachlor Epoxide	2.5U
959-98-8	Endosulfan I	2.5U
60-57-1	Dieldrin	5.0U
72-55-9	4,4'-DDE	5.0U
72-20-8	Endrin	5.0U
33213-65-9	Endosulfan II	5.0U
72-54-8	4,4'-DDD	5.0U
1031-07-8	Endosulfan Sulfate	5.0U
50-29-3	4,4'-DDT	5.0U
72-43-5	Methoxychlor	25U
53494-70-5	Endrin Ketone	5.0U
57-74-9	Chlordane	25U
8001-35-2	Toxaphene	50U
12674-11-2	Aroclor-1016	25U
11104-28-2	Aroclor-1221	25U
11141-16-5	Aroclor-1232	25U
53469-21-9	Aroclor-1242	25U
12672-29-6	Aroclor-1248	25U
11097-69-1	Aroclor-1254	50U
11096-82-5	Aroclor-1260	50U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 1,000 or W_s _____ V_t 10,000 V_i 4

Laboratory Name Ecology & Environment Inc.

Case No H-5157, 5162

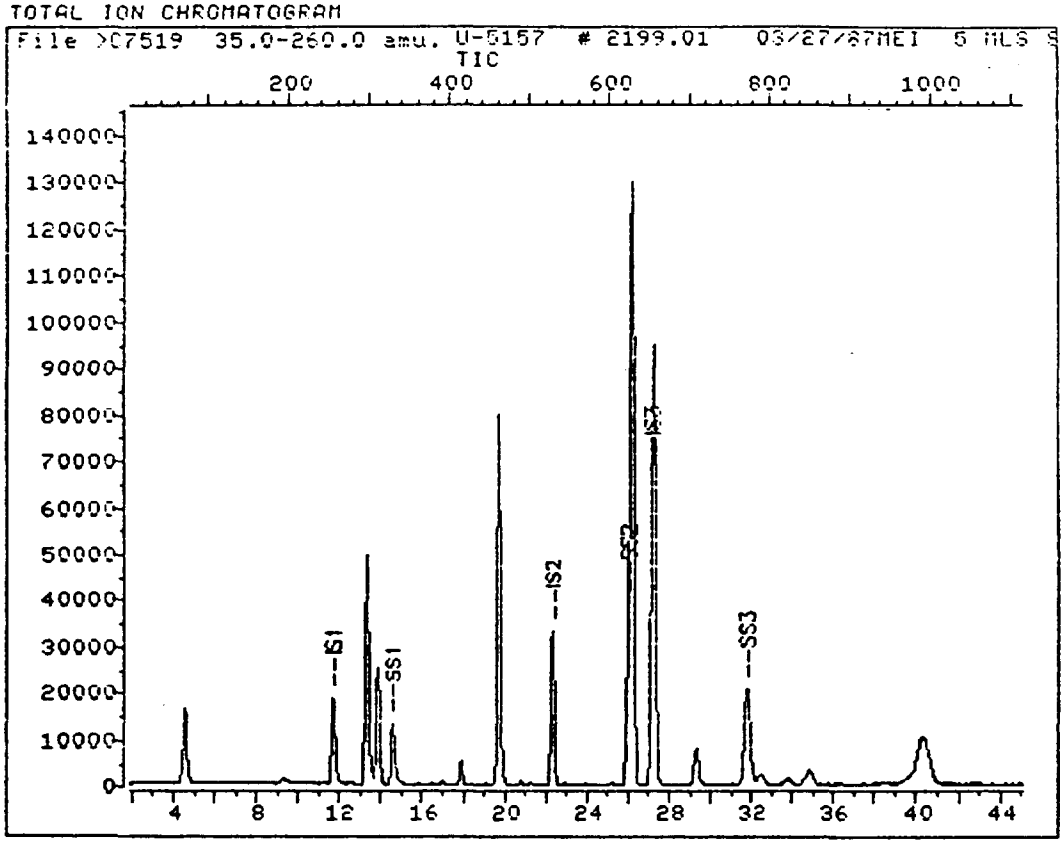
Sample Number DC-GW-28

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1. 60297	Ethane, 1,1'-oxybis	VOA	13.83	320 J
2.	Hexene Isomer		17.90	37 J
3.	Dichlorobenzene Isomer		40.29	270 J
4.				
5. 62533	Aniline	BNA	8.23	2300
6.	Chloroaniline Isomer		12.39	3100 J
7.	Ethylaniline Isomer		13.00	1800 J
8.	Dimethylphenol Isomer		13.57	260 J
9.	Chlorophenol Isomer		14.17	1400 J
10.	Ethoxybenzenamine Isomer		14.78	650 J
11.	Ethoxybenzenamine Isomer		15.74	390 J
12. 92524	1,1'-biphenyl		17.17	510 J
13.	Unknown		17.55	3100 J
14.	Unknown		17.64	1100 J
15.	Unknown Aromatic		21.29	1300 J
16.	Unknown		21.60	120 J
17. 70553	4-methylsulfonamide		21.90	1200 J
18. 62442	Phenacetin		22.43	320 J
19.	Unknown		24.78	390 J
20.	Unknown		24.96	240 J
21. 81845	1H,3H-Naphtho[1,8-cd]pyran-1,3-dione		26.57	870 J
22.	Unknown		27.92	270 J
23.	Unknown		31.77	600 J
24.	Unknown		33.40	480 J
25.				
26.				
27.				
28.				
29.				
30				

TOTAL ION CHROMATOGRAM

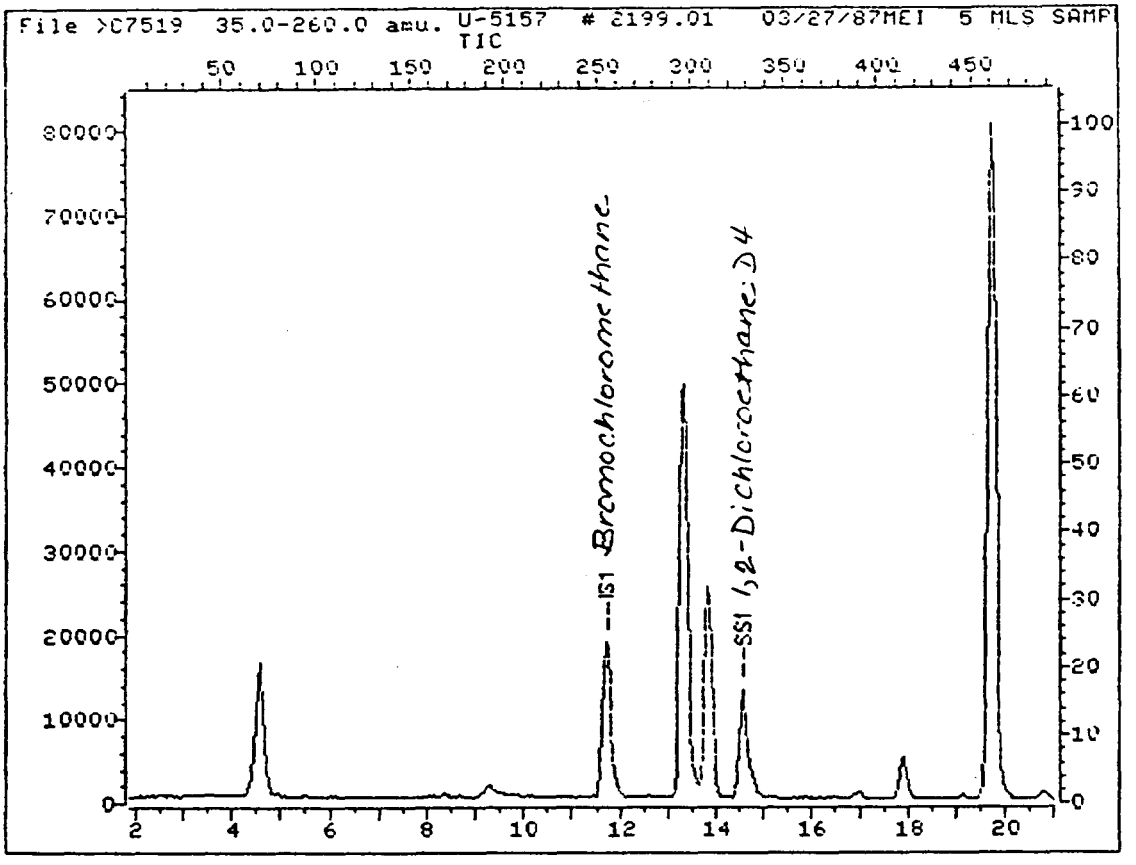


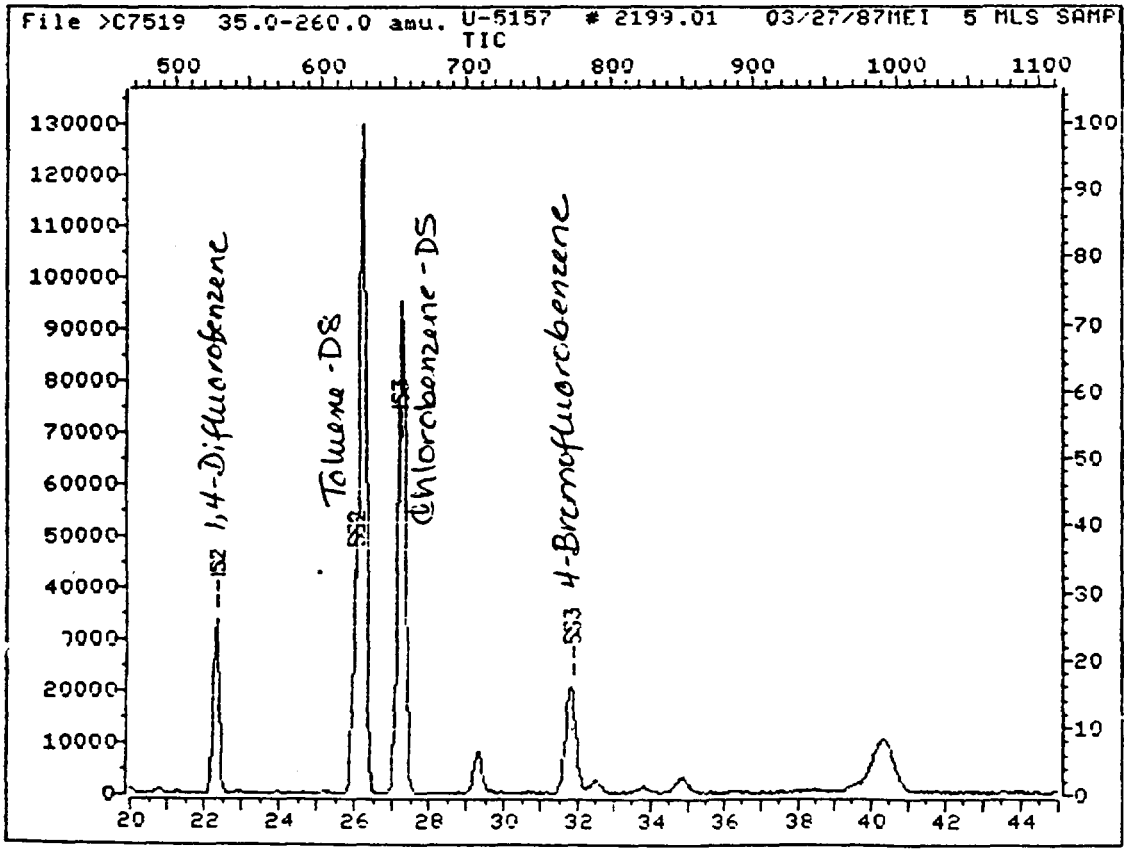
Data File: >C7519::D3
Name: U-5157 # 2199.01 DC-GW-28
Misc: 03/27/87MEI 5 MLS SAMPLE AT 5X DIL + 10UL IS/SS

Id File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870327 11:38

Operator ID: USER8
Quant Time: 870327 21:29
Injected at: 870327 20:38

DC-GW-28


File >C7519 35.0-260.0 amu. U-5157 # 2199.01 03/27/87MEI 5 MLS SAMP
TIC
--IS1 Bromochloromethane
--SS1 1,2-Dichloroethane-D4


File >C7519 35.0-260.0 amu. U-5157 # 2199.01 03/27/87MEI 5 MLS SAMP
TIC
--IS2 1,4-Difluorobenzene
--SS2 Toluene-D8
--IS3 Chlorobenzene-D5
--SS3 4-Bromofluorobenzene

QUANT REPORT

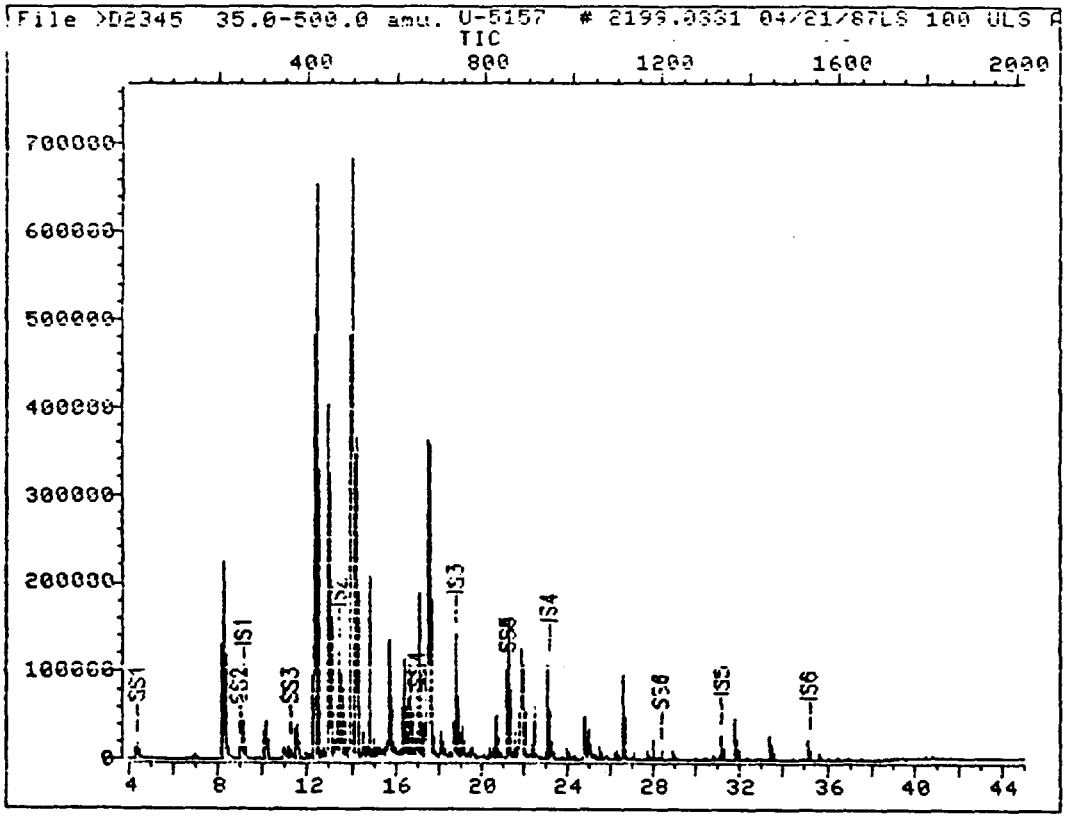
perator ID: USER8 Quant Rev: 4 Quant Time: 870327 21:29
t File: ^C7519::Q1 Injected at: 870327 20:38
ata File: >C7519::D3 Dilution Factor: 1.00
ame: U-5157 # 2199.01 DC-GW-28
isc: 03/27/87MEI 5 MLS SAMPLE AT 5X DIL + 10UL IS/SS

) File: VOACR::D2
itle: VOA ID FILE FOR HP-5995 (CONT. CAL.)
ast Calibration: 870327 11:38

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	(IS)	128 11.70	254	30129	50.00	UG/L	100
4)	VINYL CHLORIDE		62 4.56	70	114811	157.29	UG/L yes	98
7)	ACETONE		43 9.29	192	17286	37.37	UG/L yes	100
12)	TRANS-1,2-DICHLOROETHENE		96 13.32	296	123820	128.40	UG/L yes	87
15)	1,2-DICHLOROETHANE-D4	(SURR)	65 14.57	328	59211	45.66	UG/L	87
16)	*1,4-DIFLUOROBENZENE	(IS)	114 22.32	528	151172	50.00	UG/L	100
7)	BENZENE		78 19.72	461	360377	109.58	UG/L yes	100
8)	~~CIS 1,3 DICHLOROPROPENE~~		~~75 19.72~~	~~461~~	~~7098~~	~~5.60~~	~~UG/L~~ OW	100
1)	*CHLOROBENZENE-D5	(IS)	117 27.17	653	122925	50.00	UG/L	100
2)	~~4-METHYL-2-PENTANONE~~		~~43 22.98~~	~~545~~	~~2678~~	~~3.48~~	~~UG/L~~ CW	90
3)	~~2-HEXANONE~~		~~43 25.15~~	~~601~~	~~3253~~	~~6.59~~	~~UG/L~~	100
6)	TOLUENE-D8	(SURR)	98 26.01	623	141459	46.71	UG/L	93
7)	TOLUENE		92 26.20	628	317677	148.77	UG/L yes	94
8)	CHLOROBENZENE		112 27.26	655	278498	109.26	UG/L yes	97
9)	ETHYLBENZENE		91 29.31	708	48261	11.52	UG/L yes	95
0)	4-BROMOFLUOROBENZENE	(SURR)	95 31.83	773	74617	49.20	UG/L	100
2)	TOTAL XYLENES		91 33.81	824	12180	3.55	UG/L yes	100
2)	TOTAL XYLENES		91 34.82	850	27741	8.08	UG/L yes	100
3)	1,3-DICHLOROBENZENE		146 39.44	969	4987	4987.00	NO CALIB	100
3)	1,3-DICHLOROBENZENE		146 40.29	991	106016	106016.0	NO CALIB	100
4)	1,2-DICLHLOROBENZENE		146 39.44	969	4987	4987.00	NO CALIB	100
4)	1,2-DICLHLOROBENZENE		146 40.29	991	106016	106016.0	NO CALIB	100
5)	1,4-DICHLOROBENZENE		146 39.44	969	4987	4987.00	NO CALIB	100
5)	1,4-DICHLOROBENZENE		146 40.29	991	106016	106016.0	NO CALIB	100

* Compound is ISTD

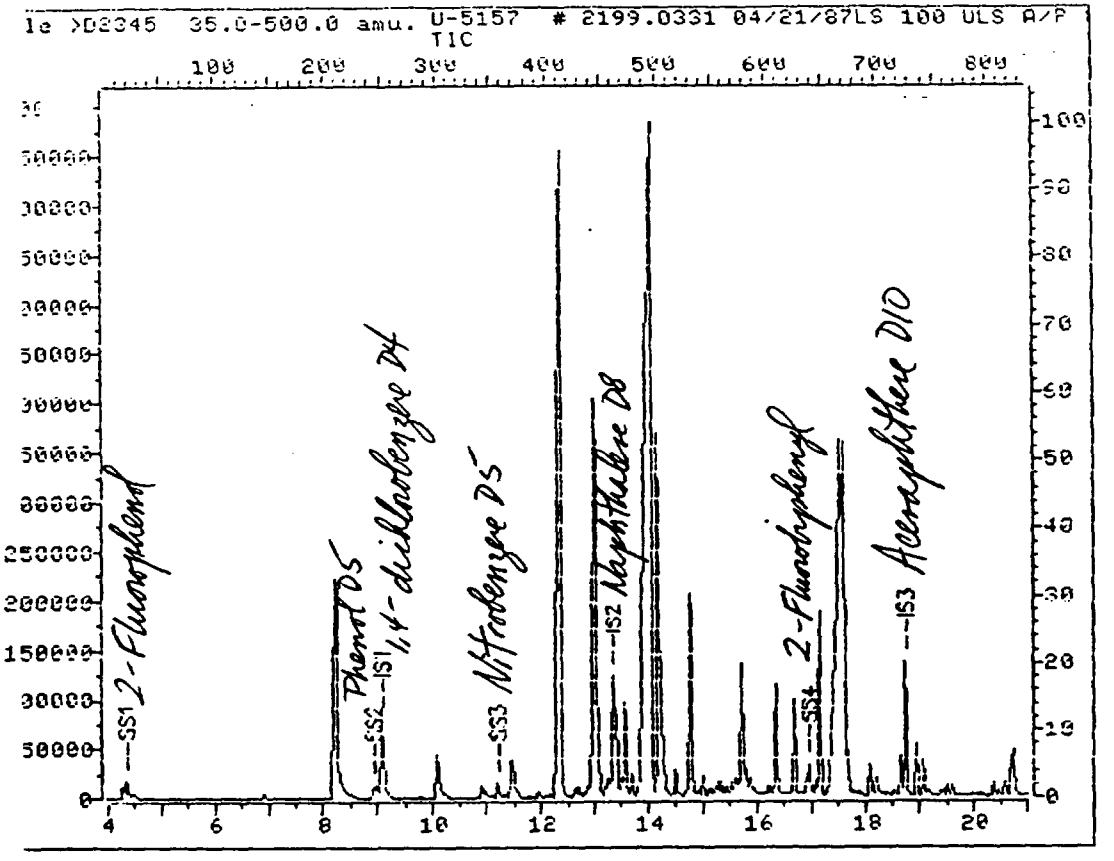
TOTAL ION CHROMATOGRAM



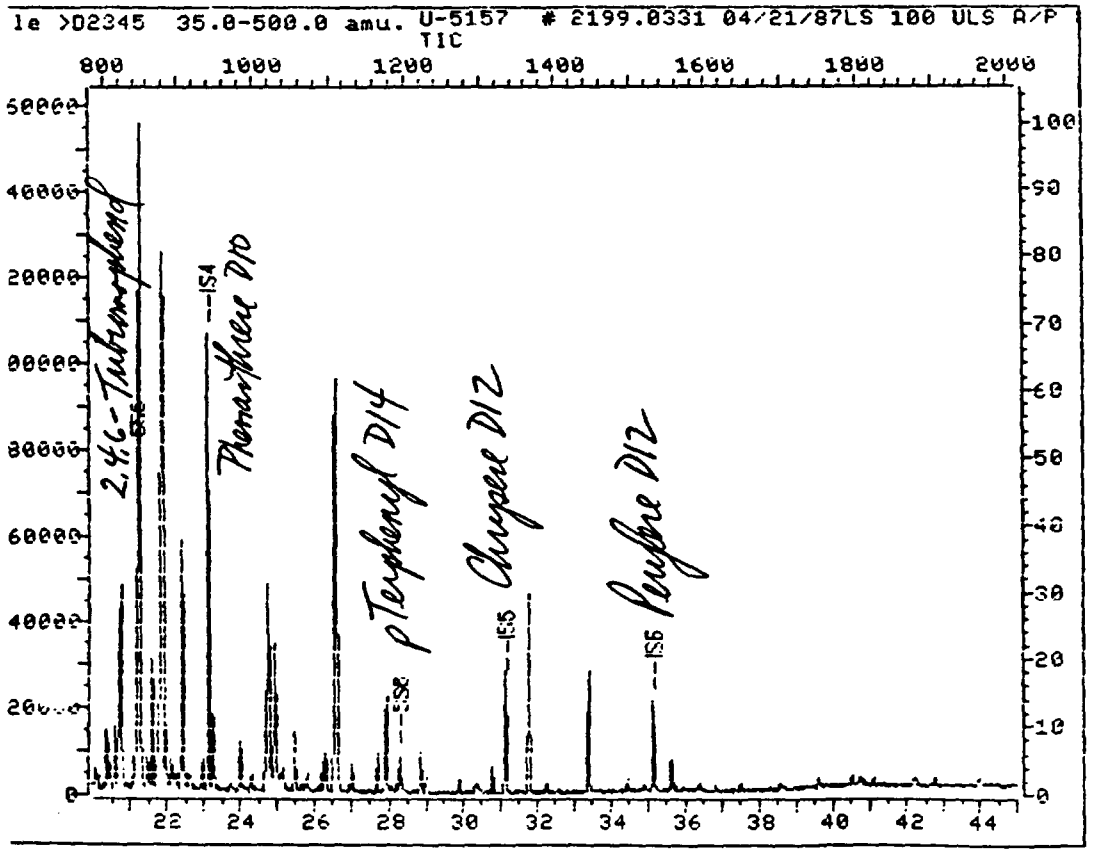
Data File: >D2345::D3
Name: U-5157 # 2199.0331 DC-GW-28
Misc: 04/21/87LS 100 ULS A/P & B/N + 900 ULS MECL2 + 10 ULS BTL# 7

Id File: BNADR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870422 18:03

Operator ID: USER6
Quant Time: 870423 01:54
Injected at: 870423 01:06


le >D2345 35.0-500.0 amu. U-5157 # 2199.0331 04/21/87LS 100 ULS A/P
TIC
SS1 2-Fluorophenol
SS2 Phenol D5
IS1 1,4-dichlorobenzene D4
SS3 Nitrobenzene D5
IS2 Naphthalene D8
SS4 2-Fluorobiphenyl
IS3 Acenaphthene D10

DC-GW-28


le >D2345 35.0-500.0 amu. U-5157 # 2199.0331 04/21/87LS 100 ULS A/P
TIC
SS6 2,4,6-Tribromophenol
IS4 Phenanthrene D10
SS7 pTerphenyl D14
IS5 Chrysene D12
IS6 Perylene D12

QUANT REPORT

:rator ID: USER6 Quant Rev: 4 Quant Time: 870423 01:54
Output File: ^D2345::Q2 Injected at: 870423 01:06
Data File: >D2345::D3 Dilution Factor: 10.00
Name: U-5157 # 2199.0331 DC-GW-28
Misc: 04/21/87LS 100 ULS A/P & B/N + 900 ULS MECL2 + 10 ULS BTL# 7

ID File: BNADR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870422 18:03

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-D4	(IS)	152	9.07	251	32243	40.00 UG/L	83
2)	PHENOL-D5	(SURR)	99	8.92	244	11460	87.65 UG/L	86
5)	2-FLUOROPHENOL	(SURR)	112	4.34	19	10757	102.75 UG/L	67
6)	PHENOL		94	8.97	246	10773	79.98 UG/L	72
7)	ANILINE		93	8.23	210	294609	2286.61 UG/L	85
8)	~~BIS(-2-CHLOROETHYL)ETHER~~		~~93~~	~~8.23~~	~~210~~	~~294609~~	~~2526.00 UG/L~~ CW	20
9)	~~1,3-DICHLOROBENZENE~~		~~146~~	~~9.11~~	~~253~~	~~14197~~	~~123.44 UG/L~~	89
10)	1,4-DICHLOROBENZENE		146	9.11	253	14197	114.27 UG/L	88
11)	BENZYL ALCOHOL		79	10.09	301	44610	346.82 UG/L	88
12)	1,2-DICHLOROBENZENE		146	9.76	285	1846	15.44 UG/L	94
13)	2-METHYL PHENOL		108	10.92	342	7514	76.18 UG/L	89
16)	~~4-METHYL PHENOL~~		~~108~~	~~10.92~~	~~342~~	~~7514~~	~~76.18 UG/L~~ CW	55
17)	~~N-NITROSO-DI-N-PROPYLAMINE~~		~~70~~	~~11.21~~	~~356~~	~~2183~~	~~16.77 UG/L~~	96
19)	*NAPHTHALENE-D8	(IS)	136	13.35	461	117830	40.00 UG/L	100
20)	NITROBENZENE-D5	(SURR)	82	11.21	356	11856	85.76 UG/L	86
24)	~~2,4-DIMETHYLPHENOL~~		~~122~~	~~12.86~~	~~437~~	~~2315~~	~~27.71 UG/L~~	46
25)	~~BENZOIC ACID~~		~~105~~	~~13.92~~	~~489~~	~~14866~~	~~239.69 UG/L~~ CW	83
26)	~~BIS(-2-CHLOROETHOXY)METHANE~~		~~93~~	~~13.02~~	~~445~~	~~13725~~	~~88.65 UG/L~~	55
26)	~~BIS(-2-CHLOROETHOXY)METHANE~~		~~93~~	~~13.57~~	~~472~~	~~2151~~	~~12.59 UG/L~~ CW	84
29)	NAPHTHALENE		128	13.41	464	72242	229.93 UG/L	100
30)	4-CHLOROANILINE		127	14.06	496	1024584	9646.49 UG/L	99
30)	~~4-CHLOROANILINE~~		~~127~~	~~14.15~~	~~500~~	~~3420~~	~~32.20 UG/L~~ CW	48
32)	~~4-CHLORO-3-METHYLPHENOL~~		~~107~~	~~15.53~~	~~568~~	~~5498~~	~~58.48 UG/L~~ CW	81
33)	~~2-METHYLNAPHTHALENE~~		~~142~~	~~15.53~~	~~568~~	~~2965~~	~~14.94 UG/L~~ CW	32
33)	2-METHYLNAPHTHALENE		142	15.62	572	1792	9.03 UG/L	44
33)	~~2-METHYLNAPHTHALENE~~		~~142~~	~~15.90~~	~~586~~	~~1598~~	~~8.05 UG/L~~ CW	85
34)	*ACENAPHTHENE-D10	(IS)	162	18.76	726	59231	40.00 UG/L	95
38)	2-FLUOROBIPHENYL	(SURR)	172	16.96	638	16720	87.70 UG/L	93
39)	~~2-CHLORONAPHTHALENE~~		~~162~~	~~16.70~~	~~625~~	~~3583~~	~~22.40 UG/L~~	68
41)	~~DIMETHYL PHTHALATE~~		~~163~~	~~18.09~~	~~693~~	~~9346~~	~~43.43 UG/L~~	100
41)	~~DIMETHYL PHTHALATE~~		~~163~~	~~18.76~~	~~726~~	~~11317~~	~~52.59 UG/L~~	100
43)	~~DIBENZOFURAN~~		~~168~~	~~18.94~~	~~735~~	~~24287~~	~~108.68 UG/L~~ CW	100
43)	~~DIBENZOFURAN~~		~~168~~	~~19.07~~	~~741~~	~~15297~~	~~68.45 UG/L~~	100
45)	FLUORENE		166	20.37	805	4392	24.92 UG/L	98
47)	~~ACENAPHTHENE~~		~~153~~	~~18.94~~	~~735~~	~~4557~~	~~27.67 UG/L~~ CW	1
47)	~~ACENAPHTHENE~~		~~153~~	~~19.07~~	~~741~~	~~2951~~	~~17.92 UG/L~~	1
48)	2,4,6-TRIBROMOPHENOL	(SURR)	330	21.21	846	6528	118.20 UG/L	96
50)	~~4-NITROPHENOL~~		~~139~~	~~20.37~~	~~805~~	~~354~~	~~15.64 UG/L~~	100
	~~2,6-DINITROTOLUENE~~		~~165~~	~~18.76~~	~~726~~	~~8145~~	~~171.21 UG/L~~	100
52)	~~2,6-DINITROTOLUENE~~		~~165~~	~~18.94~~	~~735~~	~~6750~~	~~141.89 UG/L~~ CW	100
52)	~~2,6-DINITROTOLUENE~~		~~165~~	~~19.07~~	~~741~~	~~4750~~	~~99.85 UG/L~~	100
53)	DIETHYLPHTHALATE		149	20.74	823	34897	140.82 UG/L	96
55)	*PHENANTHRENE-D10	(IS)	188	23.13	940	71285	40.00 UG/L	81
57)	~~N-NITROSODIPHENYLAMINE~~		~~169~~	~~20.57~~	~~815~~	~~7225~~	~~79.48 UG/L~~ CW	65
60)	PENTACHLOROPHENOL		266	22.96	932	1922	60.22 UG/L	100
[illegible]	*CHRYSENE-D12	(IS)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

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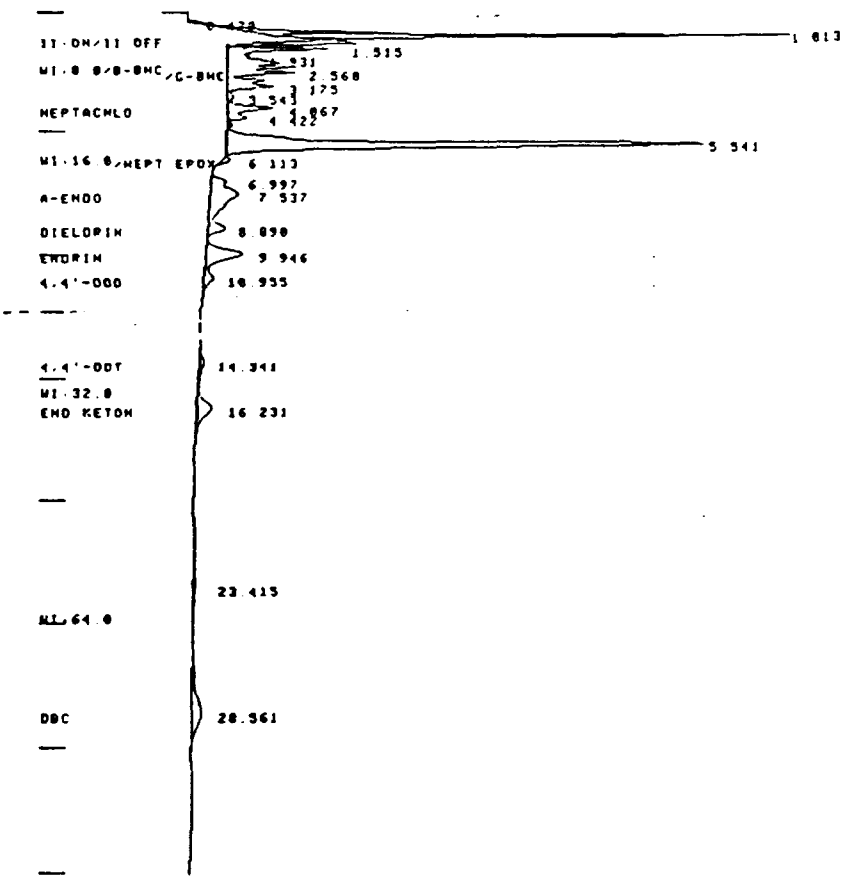
	Compound			R.T.	Scan#	Area	Conc	Units	q
[illegible])	TERPHENYL-D14	(SURR)	244	28.28	1193	5630	77.26	UG/L	100
72)	BIS(2-ETHYLHEXYL)PHTHALATE		149	32.26	1388	1340	19.99	UG/L	98
74)	*PERYLENE-D12	(IS)	264	35.15	1530	19011	40.00	UG/L	100

* Compound is ISTD

CHART SPEED 0.5 CM/MIN
ATTEN: 8 ZERO: 10% 5 MIN/TICK



RECALCULATE ON FILE: S157639

CHANNEL: 1A - 1 TITLE: RUN# 23 5:56 14 APR 87

DC-GW-28

SAMPLE: 2199 METHOD: CEPA CALCULATION: ES - ANALYS

PEAK NO	PEAK NAME	RESULT UG/L	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		0.0000	1.315		28891	BB	2.06
2		0.0000	1.515		83209	BV	5.81
3		0.0000	2.108		79078	VV	? 13.88
4	~~B-BHC~~	3.6854	2.339	-0.031	83890	VV	8.31
5	~~B-BHC~~	1.4739	2.568	-0.022	79514	VV	9.00
6		0.0000	2.933		50999	VV	? 8.94
7		0.0000	3.175		55933	VV	? 10.81
8	~~HEPTACHLO~~	1.5250	4.067	-0.023	69985	VV	11.25
9		0.0000	4.422		31431	VV	14.00
10		0.0000	5.541		939950	VB	13.25
11		0.0000	6.997		29173	BV	? 16.00
12	~~A-ENDO~~	3.3645	7.537	-0.033	170128	VV	? 47.25
13	~~DIELDRIN~~	0.9334	8.890	0.000	49710	VV	18.94
14	~~B-ENDO~~	2.0009	9.946	-0.074	143699	VV	28.00
15	~~4,4'-DDD~~	0.7706	10.955	0.045	34485	VB	21.69
16	~~4,4'-DDT~~	0.8980	14.341	0.121	23395	BB	33.00
17	~~END KETON~~	1.5110	16.231	-0.169	78700	BB	39.38
18	~~DDC~~	2.6667	28.561	0.141	106713	BB	70.31
TOTALS:		19.7175		0.035	2138883		

DETECTED PKS: 31 REJECTED PKS: 13

DIVISOR: 1.00000 MULTIPLIER: 500.00000

NOISE: 22.9 OFFSET: 8

RACK: 2 VIAL: 8 INJ: 1

NOTES:
NOTEBOOK:259-186 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#U-S157
INST: HERTAN [illegible]

SAMPLE NUMBER DC-GW-29

Sample Number
DC-GW-29

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Ecology & Environment Inc. Case No: U-5157, 5162

Lab Sample ID No: 2200 QC Report No:

Sample Matrix: Water Contract No: EL-3140

Data Release Authorized By: C. Wyatt Wray Date Sample Received: 3-24-87

Volatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 3-27-87

Conc./Dil Factor: 1 pH

Percent Moisture: (Not Decanted)

CAS Number		ug/l or ug/Kg (Circle One)	
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	6J	
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	16B	
75-15-0	Carbon Disulfide	5	U
75-35-4	1, 1-Dichloroethene	5	U
75-34-3	1, 1-Dichloroethane	5	U
156-60-5	Trans-1, 2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
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

CAS Number		ug/l or ug/Kg (Circle One)	
78-87-5	1, 2-Dichloropropane	5	U
10061-02-6	Trans-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	75	
10061-01-5	cis-1, 3-Dichloropropene	5	U
110-75-8	2-Chloroethylvinylether	10	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	1J	
108-90-7	Chlorobenzene	390	
100-41-4	Ethylbenzene	2J	
100-42-5	Styrene	5	U
	Total Xylenes	5	U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/µl in the final extract should be confirmed by GC/MS.

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

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described, and such description attached to the data summary report.

Laboratory Name Ecology & Environment Inc.

Case No U-5157, 5162

Sample Number DC-GW-29

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 3-29-87

Date Analyzed: 4-27-87

Conc/Dil Factor: 10

Percent Moisture (Decanted) _____

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)	
108-95-2	Phenol	50	U
111-44-4	bis(-2-Chloroethyl)Ether	50	U
95-57-8	2-Chlorophenol	50	U
541-73-1	1 3-Dichlorobenzene	110	
106-46-7	1 4-Dichlorobenzene	830	
100-51-6	Benzyl Alcohol	50	U
95-50-1	1 2-Dichlorobenzene	110	
95-48-7	2-Methylphenol	50	U
39638-32-9	bis(2-chloroisopropyl)Ether	50	U
106-44-5	4-Methylphenol	50	U
621-64-7	N-Nitroso-Di-n-Propylamine	50	U
67-72-1	Hexachloroethane	50	U
98-95-3	Nitrobenzene	50	U
78-59-1	Isophorone	50	U
88-75-5	2-Nitrophenol	50	U
105-67-9	2. 4-Dimethylphenol	50	U
65-85-0	Benzoic Acid	250	U
111-91-1	bis(-2-Chloroethoxy)Methane	50	U
120-83-2	2. 4-Dichlorophenol	50	U
120-82-1	1 2. 4-Trichlorobenzene	50	U
91-20-3	Naphthalene	50	U
106-47-8	4-Chloroaniline	78	
87-68-3	Hexachlorobutadiene	50	U
59-50-7	4-Chloro-3-Methylphenol	50	U
91-57-6	2-Methylnaphthalene	50	U
77-47-4	Hexachlorocyclopentadiene	50	U
88-06-2	2 4 6-Trichlorophenol	50	U
95-95-4	2. 4 5-Trichlorophenol	250	U
91-58-7	2-Chloronaphthalene	50	U
88-74-4	2-Nitroaniline	250	U
131-11-3	Dimethyl Phthalate	50	U
208-96-8	Acenaphthylene	50	U
99-09-2	3-Nitroaniline	250	U

CAS Number		ug/l or ug/Kg (Circle One)	
83-32-9	Acenaphthene	50	U
51-28-5	2. 4-Dinitrophenol	250	U
100-02-7	4-Nitrophenol	250	U
132-64-9	Dibenzofuran	50	U
121-14-2	2 4-Dinitrotoluene	50	U
606-20-2	2. 6-Dinitrotoluene	50	U
84-66-2	Diethylphthalate	50	U
7005-72-3	4-Chlorophenyl-phenylether	50	U
86-73-7	Fluorene	50	U
100-01-6	4-Nitroaniline	250	U
534-52-1	4. 6-Dinitro-2-Methylphenol	250	U
86-30-6	N-Nitrosodiphenylamine (1)	50	U
101-55-3	4-Bromophenyl-phenylether	50	U
118-74-1	Hexachlorobenzene	50	U
87-86-5	Pentachlorophenol	250	U
85-01-8	Phenanthrene	50	U
120-12-7	Anthracene	50	U
84-74-2	Di-n-Butylphthalate	50	U
206-44-0	Fluoranthene	50	U
129-00-0	Pyrene	50	U
85-68-7	Butylbenzylphthalate	50	U
91-94-1	3. 3'-Dichlorobenzidine	100	U
56-55-3	Benzo(a)Anthracene	50	U
117-81-7	bis(2-Ethylhexyl)Phthalate	50	U
218-01-9	Chrysene	50	U
117-84-0	Di-n-Octyl Phthalate	50	U
205-99-2	Benzo(b)Fluoranthene	50	U
207-08-9	Benzo(k)Fluoranthene	50	U
50-32-8	Benzo(a)Pyrene	50	U
193-39-5	Indeno(1 2. 3-cd)Pyrene	50	U
53-70-3	Dibenz(a h)Anthracene	50	U
191-24-2	Benzo(g h i)Perylene	50	U

(1)-Cannot be separated from diphenylamine

Laboratory Name ecology and environment, inc.

Case No U-5157, 5162

Sample Number
DC-GW-29

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration (Low) Medium (Circle One)

Date Extracted/Prepared 3-30-87

Date Analyzed 4-14-87

Conc/Dil Factor 1

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☑Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/l or ug/Kg) (Circle One)
319-84-6	Alpha-BHC	0.05U
319-85-7	Beta-BHC	0.05U
319-86-8	Delta-BHC	0.05U
58-89-9	Gamma-BHC (Lindane)	0.05U
76-44-8	Heptachlor	0.05U
309-00-2	Aldrin	0.05U
1024-57-3	Heptachlor Epoxide	0.05U
959-98-8	Endosulfan I	0.05U
60-57-1	Dieldrin	0.10U
72-55-9	4,4'-DDE	0.10U
72-20-8	Endrin	0.10U
33213-65-9	Endosulfan II	0.10U
72-54-8	4,4'-DDD	0.10U
1031-07-8	Endosulfan Sulfate	0.10U
50-29-3	4,4'-DDT	0.10U
72-43-5	Methoxychlor	0.50U
53494-70-5	Endrin Ketone	0.10U
57-74-9	Chlordane	0.50U
8001-35-2	Toxaphene	1.0U
12674-11-2	Aroclor-1016	0.50U
11104-28-2	Aroclor-1221	0.50U
11141-16-5	Aroclor-1232	0.50U
53469-21-9	Aroclor-1242	0.50U
12672-29-6	Aroclor-1248	0.50U
11097-69-1	Aroclor-1254	1.0U
11096-82-5	Aroclor-1260	1.0U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 1,000 or W_s _____ V_t 10,000 V_i 4

Laboratory Name ecology and environment, inc.

Case No U-5157, 5162

Sample Number DC-GW-29

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1. 60297	Ethane, 1,1'-oxybis-	VOA	13.86	52 J
2.	Dichlorobenzene isomer	↓	38.53	180 J
3.	Dichlorobenzene isomer	↓	40.20	1400 J
4.				
5.	Chloroaniline Isomer	BNA	12.31	51 J
6.	Ethylaniline Isomer	↓	12.96	52 J
7 98544	4-(1,1-dimethylethyl) phenol	↓	17.62	67 J
8. 90415	[1,1'-biphenyl]-2-amine	↓	20.60	430 J
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
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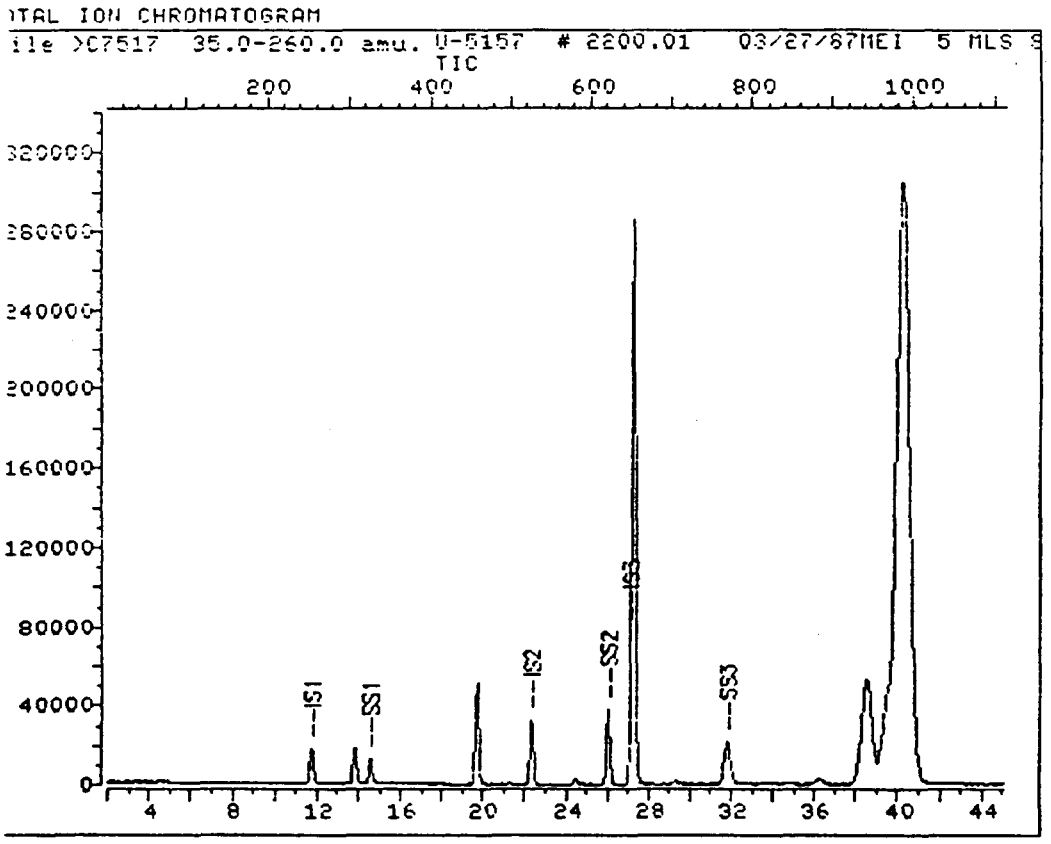
21.				
22.				
23.				
24				
25.				
26.				
27.				
28.				
29.				
30				

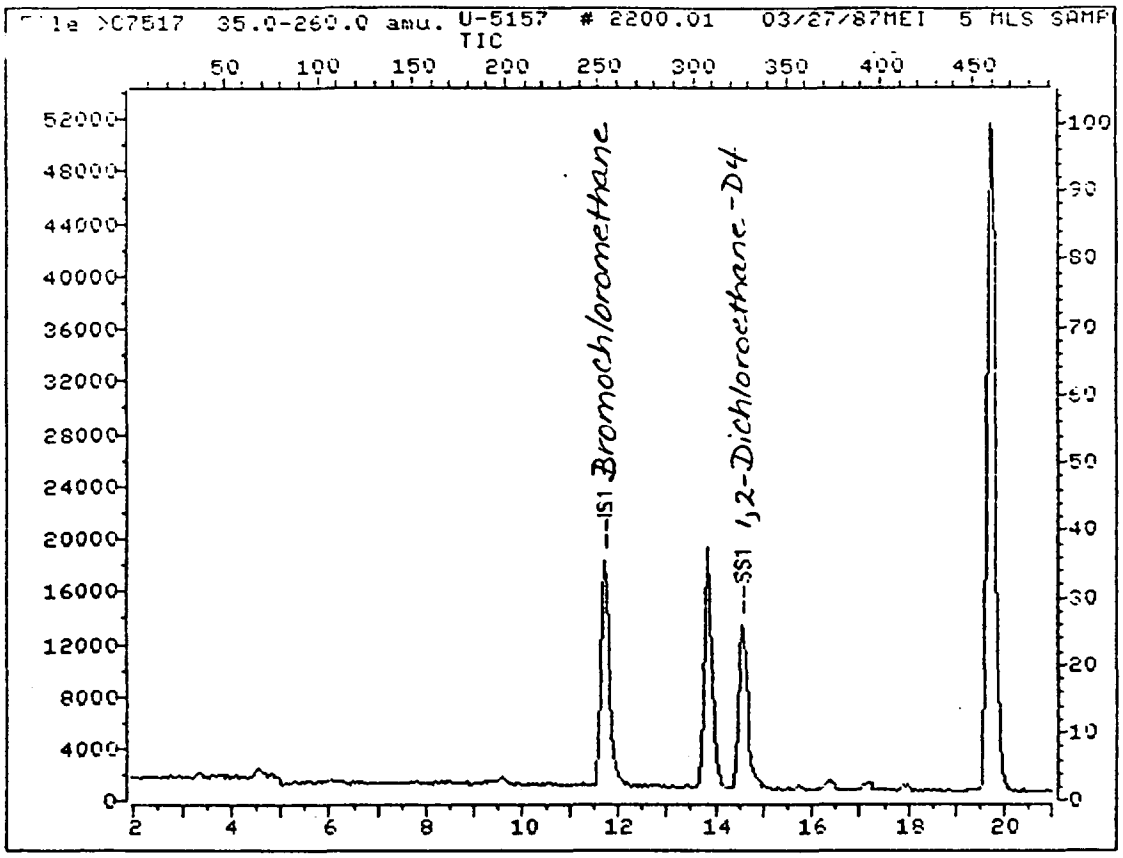


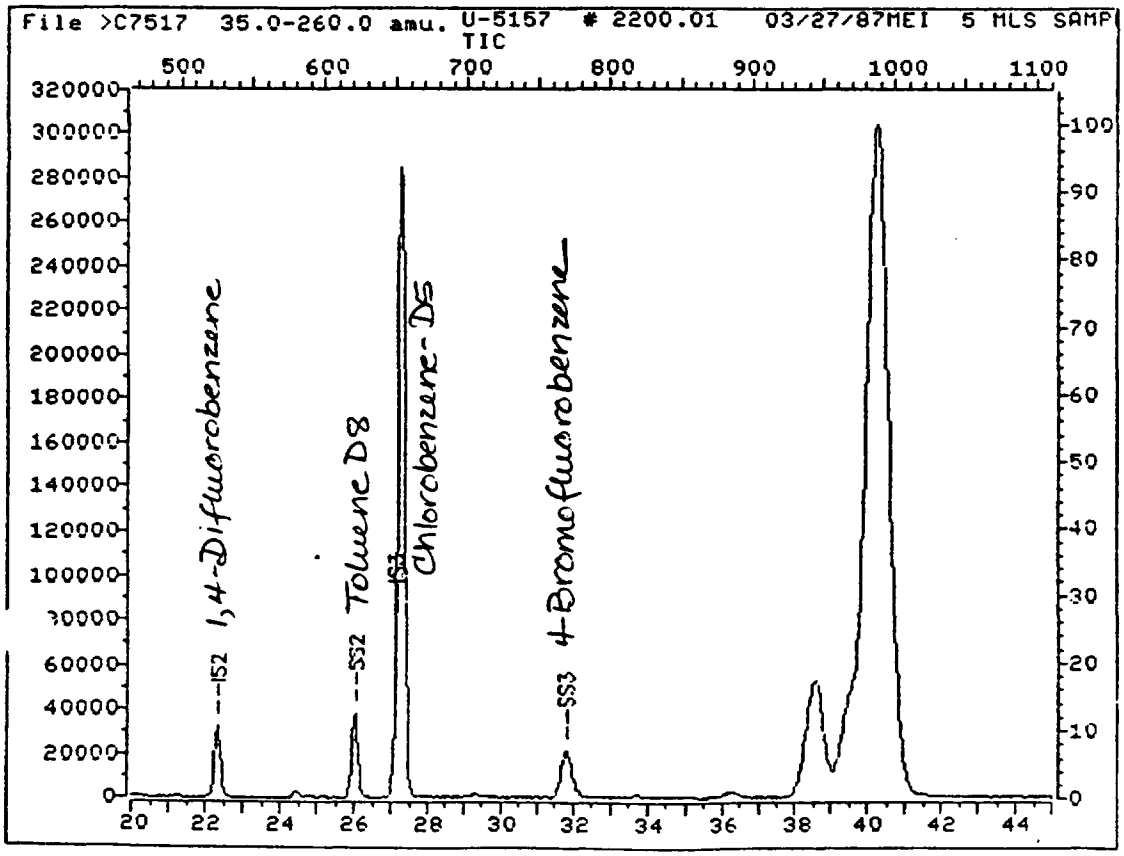
Data File: >C7517::D3
Name: U-5157 # 2200.01 DC-GW-29
Misc: 03/27/87MEI 5 MLS SAMPLE + 10 ULS IS/SS

Id File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870327 11:38

Operator ID: USER8
Quant Time: 870327 19:33
Injected at: 870327 18:47

DC-GW-29


File >C7517 35.0-260.0 amu. U-5157 # 2200.01 03/27/87MEI 5 MLS SAMP
TIC
--IS1 Bromochloromethane
--SS1 1,2-Dichloroethane-D4


File >C7517 35.0-260.0 amu. U-5157 # 2200.01 03/27/87MEI 5 MLS SAMP
TIC
--IS2 1,4-Difluorobenzene
--SS2 Toluene D8
IS3 Chlorobenzene-D5
--SS3 4-Bromofluorobenzene

QUANT REPORT

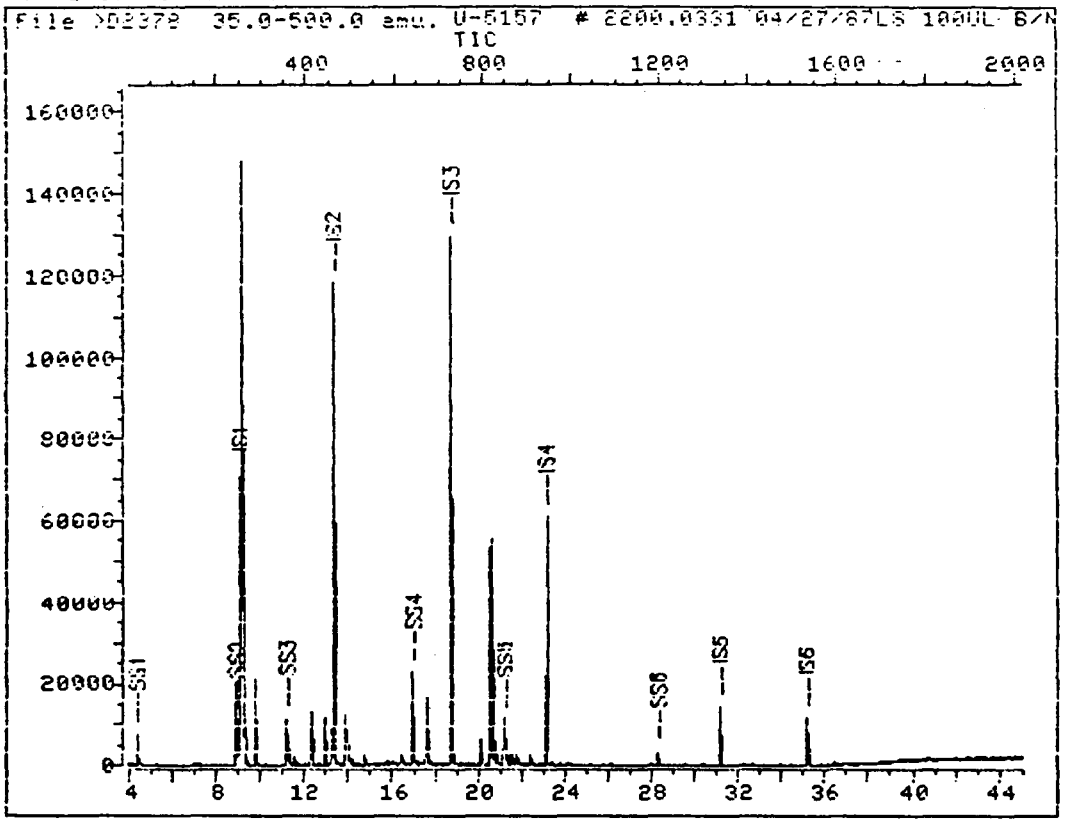
ɔr ɜtor ID: USER8 Quant Rev: 4 Quant Time: 870327 19:33
ɔ ɔt File: ^C7517::Q2 Injected at: 870327 18:47
ɜta File: >C7517::D3 Dilution Factor: 1.00
ɜme: U-5157 # 2200.01 DC-GW-29
isc: 03/27/87MEI 5 MLS SAMPLE + 10 ULS IS/SS

ɔ File: VOACR::D2
itle: VOA ID FILE FOR HP-5995 (CONT. CAL.)
ast Calibration: 870327 11:38

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	(IS)	128 11.73	253	28241	50.00	UG/L	100
4)	VINYL CHLORIDE		62 4.59	69	4156	6.07	UG/L	94
7)	ACETONE		43 9.59	198	6969	16.07	UG/L	100
15)	1,2-DICHLOROETHANE-D4	(SURR)	65 14.56	326	58968	48.51	UG/L	86
16)	*1,4-DIFLUOROBENZENE	(IS)	114 22.31	526	143957	50.00	UG/L	100
27)	BENZENE		78 19.71	459	234981	75.03	UG/L	100
28)	~~CIS-1,3-DICHLOROPROPENE~~		~~75 19.71~~	~~459~~	~~4953~~	~~4.84~~	~~UG/L~~ CW	100
1)	*CHLOROBENZENE-D5	(IS)	117 27.12	650	116590	50.00	UG/L	100
5)	~~1,1,2,2-TETRACHLOROETHANE~~		~~83 24.41~~	~~580~~	~~4942~~	~~5.21~~	~~UG/L~~ CW	100
5)	TOLUENE-D8	(SURR)	98 26.04	622	149444	52.03	UG/L	94
7)	TOLUENE		92 26.19	626	2741	1.35	UG/L yes	99
3)	CHLOROBENZENE		112 27.25	653	929822	384.61	UG/L	98
9)	ETHYLBENZENE		91 29.34	707	6343	1.60	UG/L	90
0)	4-BROMOFLUOROBENZENE	(SURR)	95 31.78	770	76189	52.96	UG/L	100
2)	~~TOTAL XYLENES~~		~~91 36.25~~	~~885~~	~~28540~~	~~8.77~~	~~UG/L~~ CW	100
3)	1,3-DICHLOROBENZENE		146 38.53	944	421514	421514.0	NO CALIB	100
3)	1,3-DICHLOROBENZENE		146 40.20	987	3374996	3374996.	NO CALIB	100
4)	1,2-DICLHLOROBENZENE		146 38.53	944	421514	421514.0	NO CALIB	100
4)	1,2-DICLHLOROBENZENE		146 40.20	987	3374996	3374996.	NO CALIB	100
5)	1,4-DICHLOROBENZENE		146 38.53	944	421514	421514.0	NO CALIB	100
5)	1,4-DICHLOROBENZENE		146 40.20	987	3374996	3374996.	NO CALIB	100

* Compound is ISTD

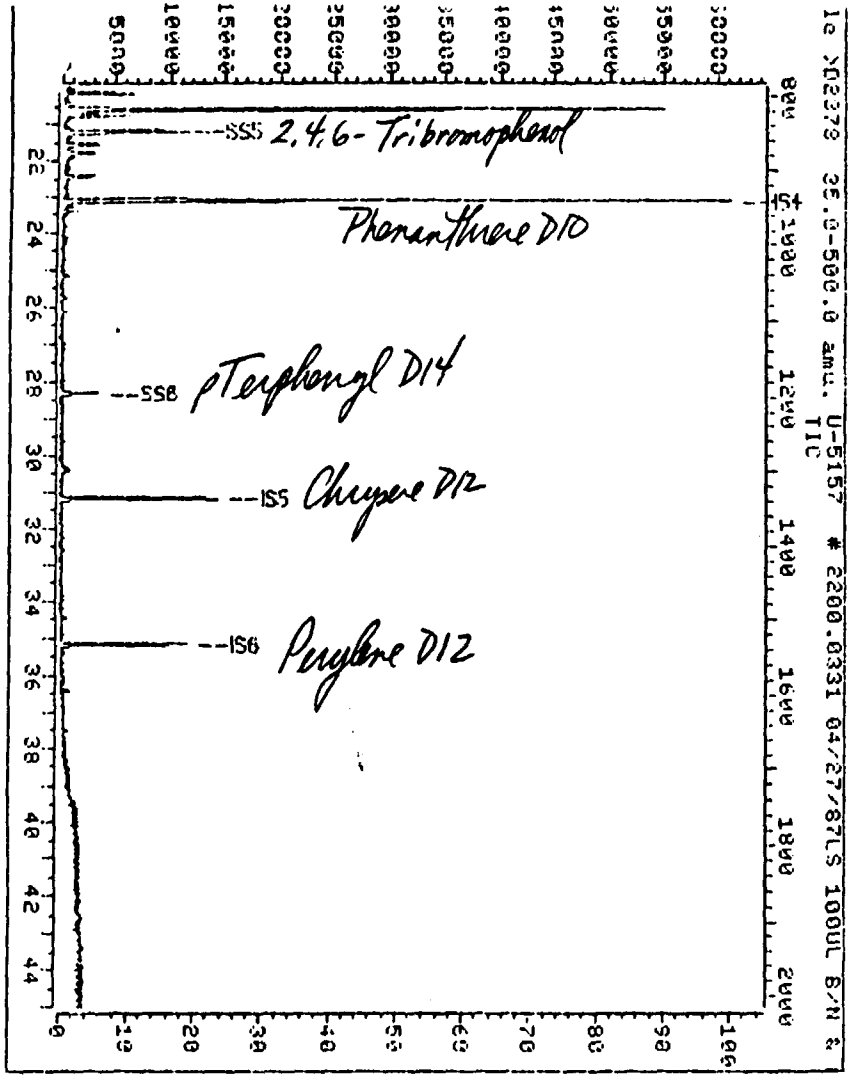
TOTAL ION CHROMATOGRAM

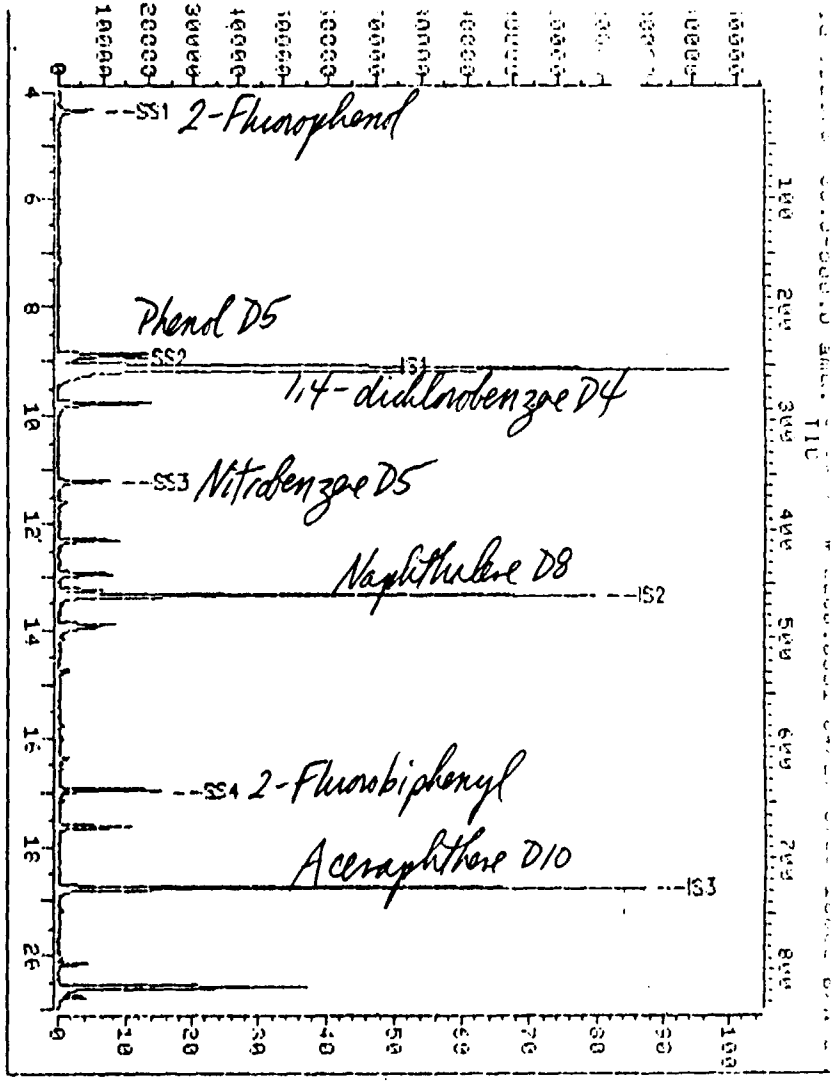


Data File: >D2378::D2
Name: U-5157 # 2200.0331 DC-GW-29
Misc: 04/27/87LS 100UL B/N & A/P + 800 ULS MECL2 + 10 ULS ISBTL# 1

Id File: BNAUR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870427 17:24

Operator ID: USER6
Quant Time: 870427 17:35
Injected at: 870427 16:16


--SS1 2-Fluorophenol
Phenol D5
SS2
IS1
1,4-dichlorobenzene D4
--SS3 Nitrobenzene D5
Naphthalene D8
--IS2
--SS4 2-Fluorobiphenyl
Acenaphthene D10
--IS3


--SS5 2,4,6-Tribromophenol
IS4
Phenanthrene D10
--SS6 pTerphenyl D14
--IS5 Chrysene D12
--IS6 Perylene D12

DC-GW-29

QUANT REPORT

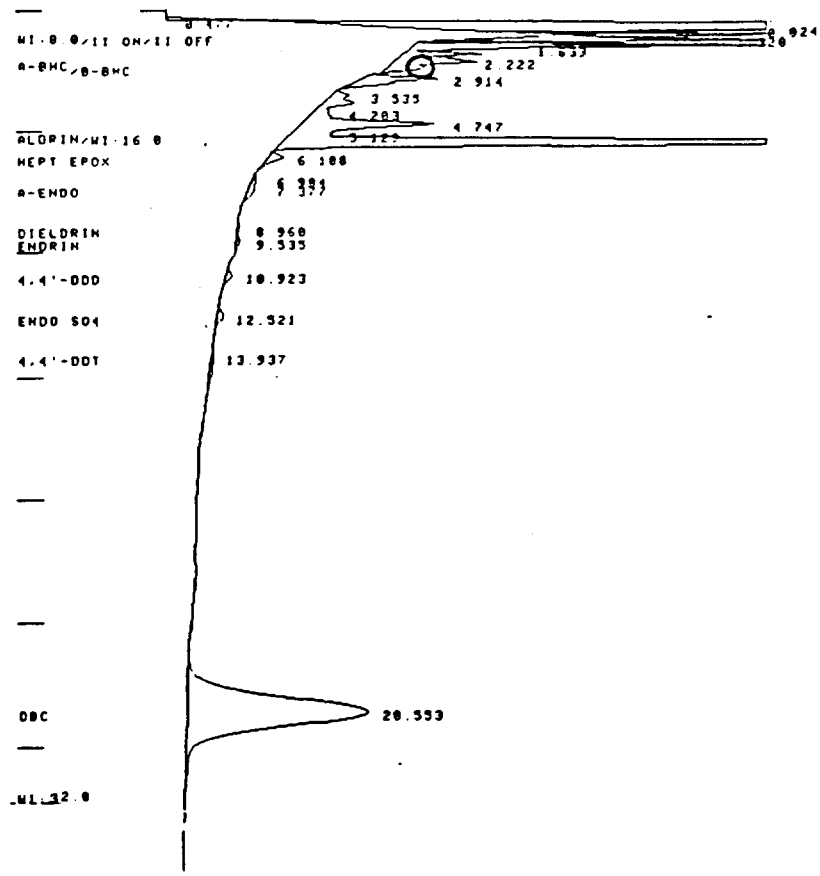
pr tor ID: USER6 Quant Rev: 4 Quant Time: 870427 17:35
utput File: ^D2378::Q2 Injected at: 870427 16:16
ata File: >D2378::D2 Dilution Factor: 10.00
ame: U-5157 # 2200.0331 DC-GW-29
isc: 04/27/87LS 100UL B/N & A/P + 800 ULS MECL2 + 10 ULS ISBTL# 1

D File: BNADR::D2
itle: BNA ID FILE FOR THE HP 5970 (B)
ast Calibration: 870427 17:24

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-D4	(IS)	152	9.07	251	36919	40.00 UG/L	89
2)	PHENOL-D5	(SURR)	99	8.92	244	6941	59.79 UG/L	90
5)	2-FLUOROPHENOL	(SURR)	112	4.34	19	6884	70.63 UG/L	77
9)	1,3-DICHLOROBENZENE		146	8.88	242	14140	111.34 UG/L	93
9)	~~1,3-DICHLOROBENZENE~~		~~146~~	~~9.13~~	~~254~~	~~113043~~	~~894.14 UG/L~~	~~97~~
10)	~~1,4-DICHLOROBENZENE~~		~~146~~	~~8.88~~	~~242~~	~~14140~~	~~184.26 UG/L~~	~~95~~ CW
0)	1,4-DICHLOROBENZENE		146	9.13	254	113043	833.50 UG/L	96
2)	1,2-DICHLOROBENZENE		146	9.26	285	15441	112.90 UG/L	98
7)	~~N-NITROSO-DI-N-PROPYLAMINE~~		~~70~~	~~11.21~~	~~356~~	~~1910~~	~~13.28 UG/L~~ CW	92
9)	*NAPHTHALENE-D8	(IS)	136	13.35	461	125677	40.00 UG/L	100
0)	NITROBENZENE-D5	(SURR)	82	11.21	356	11147	81.50 UG/L	89
0)	~~4-CHLOROANILINE~~		~~127~~	~~13.90~~	~~488~~	~~7469~~	~~66.03 UG/L~~ CW	99
0)	4-CHLOROANILINE		127	13.94	491	8775	77.68 UG/L	97
4)	*ACENAPHTHENE-D10	(IS)	162	18.76	727	60593	40.00 UG/L	94
8)	2-FLUOROBIPHENYL	(SURR)	172	16.97	639	19178	89.12 UG/L	97
1)	~~DIMETHYL PHTHALATE~~		~~163~~	~~18.76~~	~~727~~	~~11880~~	~~56.88 UG/L~~ CW	100
8)	2,4,6-TRIBROMOPHENOL	(SURR)	330	21.21	847	3973	116.27 UG/L	99
2)	~~2,6-DINITROTOLUENE~~		~~165~~	~~18.76~~	~~727~~	~~8204~~	~~173.33 UG/L~~ CW	100
5)	*PHENANTHRENE-D10	(IS)	188	23.12	941	56161	40.00 UG/L	92
7)	~~N-NITROSODIPHENYLAMINE~~		~~169~~	~~20.58~~	~~816~~	~~35410~~	~~433.73 UG/L~~ CW	71
5)	*CHRYSENE-D12	(IS)	240	31.17	1336	16786	40.00 UG/L	100
8)	TERPHENYL-D14	(SURR)	244	28.30	1195	4348	108.25 UG/L	100
4)	*PERYLENE-D12	(IS)	264	35.16	1532	13715	40.00 UG/L	100

* Compound is ISTD

CHART SPEED 0.5 CM/MIN
ATTEN: 8 ZERO: 10% 5 MIN/TICK



RECALCULATE ON FILE: S157640

DC-GW-29

CHANNEL: 1A - 1 TITLE: RUN# 24 6:35 14 APR 87

SAMPLE: 2200 METHOD: CEPA CALCULATION: ES - ANALYS

PEAK NO	PEAK NAME	RESULT UG/L	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		0.0000	1.328		318373	BV		3.63
2		0.0000	1.520		288620	VV		4.75
3		0.0000	1.639		60918	VV	?	4.94
4		0.0000	1.916		77714	VV		5.25
5	~~A-BHC~~	0.0460	2.222	0.002	140422	VV	?	13.19
6	~~B-BHC~~	~~0.0540~~	2.403	0.033	~~62405~~	VB		7.69
7		0.0000	2.914		87245	BV		7.50
8		0.0000	3.080		42308	VV	?	8.38
9		0.0000	3.535		35339	VV		15.13
10		0.0000	3.875		57365	VV		11.44
11		0.0000	4.424		31740	VV	?	10.80
12		0.0000	4.747		317132	VV		14.50
13	~~ALDRIN~~	0.0114	5.129	0.089	31917	VV	?	15.38
14		0.0000	5.524		2633592	VV		12.19
15	~~HEPT EPOX~~	0.0163	6.108	-0.002	42651	T		13.06
16	~~A-ENDO~~	0.0095	7.377	-0.193	24145	T	?	10.44
17	~~ENDO SO4~~	0.0161	12.521	-0.289	26177	BB		22.06
18	~~4,4'-DDT~~	0.0208	13.937	-0.283	27135	BB	?	8.00
19	DBC	0.9007	28.553	0.133	1802172	BB	?	73.13
TOTALS:		1.0757		-0.510	6099370			

DETECTED PKS: 29 REJECTED PKS: 10

DIVISOR: 1.00000 MULTIPLIER: 10.00000

NOISE: 22.9 OFFSET: 10

RACK: 2 VIAL: 9 INJ: 1

NOTES:
NOTEBOOK:259-186 ANALYST:RICHARD SAMSON
SECURE AREA: D IDR#W-5157

SAMPLE NUMBER DC-GW-30

Sample Number
DC-GW-30

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Ecology & Environment Inc Case No: U-5157, 5162

Lab Sample ID No: 2201 QC Report No:

Sample Matrix: Water Contract No: EL-3140

Data Release Authorized By: C Stoltowicz Date Sample Received: 3-24-87

Volatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 3-27-87

Conc./Dil Factor: 1 pH

Percent Moisture: (Not Decanted)

CAS Number		ug/l or ug/Kg (Circle One)	
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	J
67-64-1	Acetone	23	B
75-15-0	Carbon Disulfide	5	U
75-35-4	1, 1-Dichloroethene	5	U
75-34-3	1, 1-Dichloroethane	5	U
156-60-5	Trans-1, 2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
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

CAS Number		ug/l or ug/Kg (Circle One)	
78-87-5	1, 2-Dichloropropane	5	U
10061-02-6	Trans-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
10061-01-5	cis-1, 3-Dichloropropene	5	U
110-75-8	2-Chloroethylvinylether	10	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
	Total Xylenes	5	U

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 ug/l and a concentration of 3 ug/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS.

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

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described, and such description attached to the data summary report.

Laboratory Name ecology and environment, inc.

Case No U-5157, 5162

E&E # 2201

Sample Number DC-GW-30

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared 3-29-87

Date Analyzed: 4-22-87

Conc/Dil Factor: 2

Percent Moisture (Decanted) _____

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)	
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
39638-32-9	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	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	50	U

CAS Number		ug/l or ug/Kg (Circle One)	
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
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	13	B
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	2J	B
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
117-81-7	bis(2-Ethylhexyl)Phthalate	2J	B
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	1J	
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

Laboratory Name ecology and environment, inc.

Case No 4-5157,5162

Sample Number
DC - GW-30

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration (Low) Medium (Circle One)

Date Extracted/Prepared 3-30-87

Date Analyzed 4-14-87

Conc/Dil Factor 1

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☑Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/l or ug/Kg) (Circle One)
319-84-6	Alpha-BHC	0.05U
319-85-7	Beta-BHC	0.05U
319-86-8	Delta-BHC	0.05U
58-89-9	Gamma-BHC (Lindane)	0.05U
76-44-8	Heptachlor	0.05U
309-00-2	Aldrin	0.05U
1024-57-3	Heptachlor Epoxide	0.05U
959-98-8	Endosulfan I	0.05U
60-57-1	Dieldrin	0.10U
72-55-9	4,4'-DDE	0.10U
72-20-8	Endrin	0.10U
33213-65-9	Endosulfan II	0.10U
72-54-8	4,4'-DDD	0.10U
1031-07-8	Endosulfan Sulfate	0.10U
50-29-3	4,4'-DDT	0.10U
72-43-5	Methoxychlor	0.50U
53494-70-5	Endrin Ketone	0.10U
57-74-9	Chlordane	0.50U
8001-35-2	Toxaphene	1.0U
12674-11-2	Aroclor-1016	0.50U
11104-28-2	Aroclor-1221	0.50U
11141-16-5	Aroclor-1232	0.50U
53469-21-9	Aroclor-1242	0.50U
12672-29-6	Aroclor-1248	0.50U
11097-69-1	Aroclor-1254	1.0U
11096-82-5	Aroclor-1260	1.0U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 1,000 or W_s _____ V_t 10,000 V_i 4

Laboratory Name ecology and environment, inc.

Case No U-5157, 5162

Sample Number DC-GW-30

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.	No TIC's in VOA fraction			
2.				
3.				
4.	Unknown	BNA	30.34	52 B J
5.	Unknown	BNA	34.46	27 J
6.				
7				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
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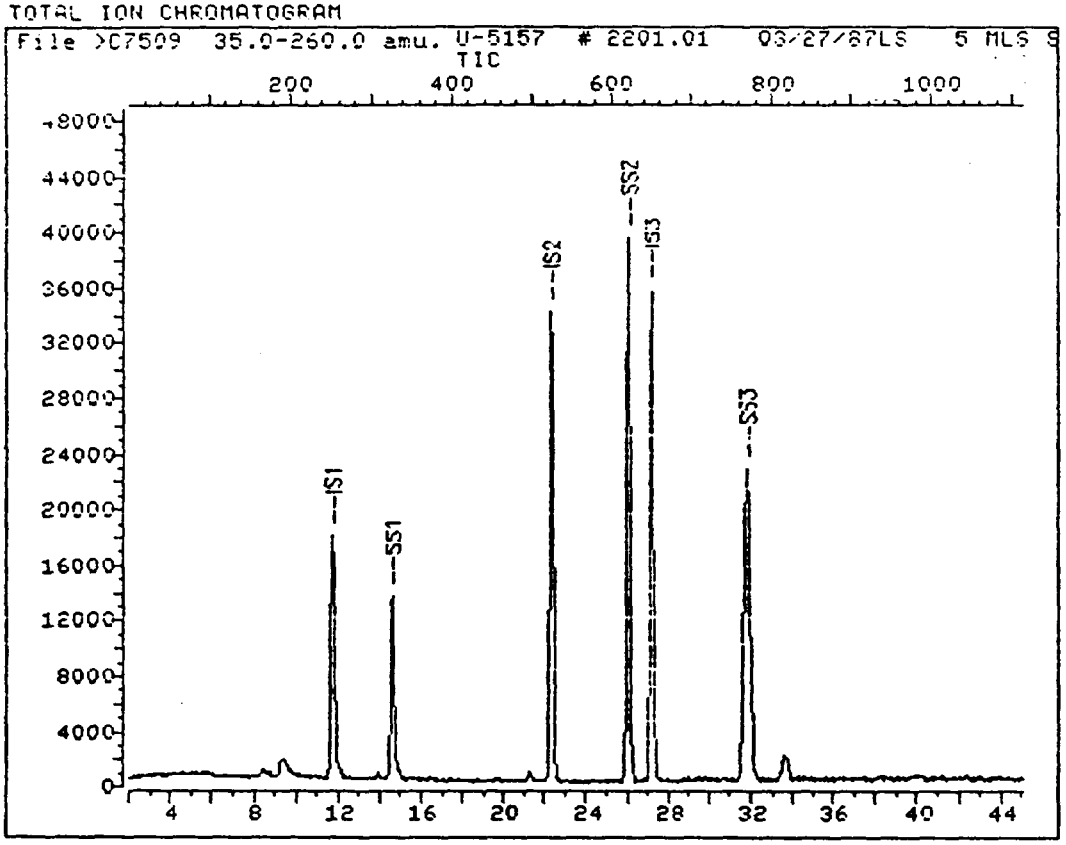
TOTAL ION CHROMATOGRAM

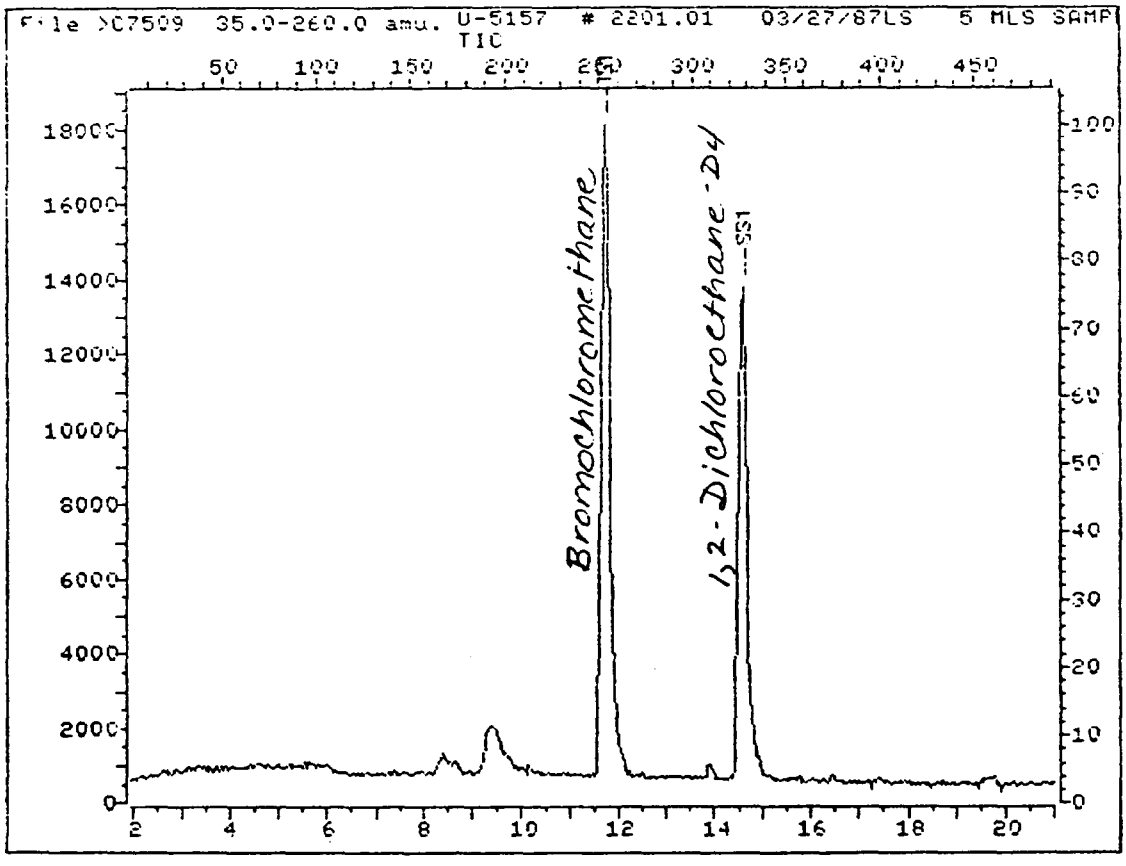


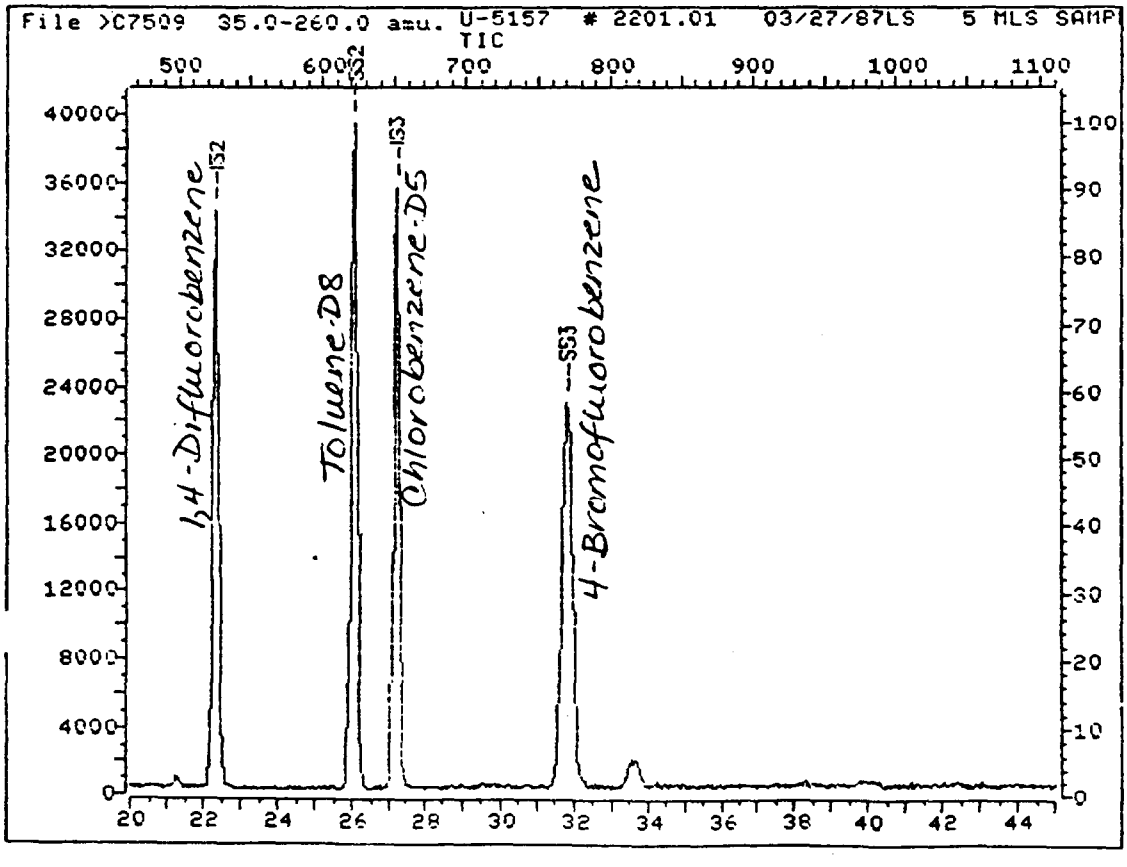
Data File: >C7509::D3
Name: U-5157 # 2201.01 DC-GW-30
Misc: 03/27/87LS 5 MLS SAMPLE + 10 ULS IS/SS

Id File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870327 11:38

Operator ID: USER8
Quant Time: 870327 12:30
Injected at: 870327 11:44

DC-GW-30


File >C7509 35.0-260.0 amu. U-5157 # 2201.01 03/27/87LS 5 MLS SAMP
TIC
Bromochloromethane
1,2-Dichloroethane-D4
SS1


File >C7509 35.0-260.0 amu. U-5157 # 2201.01 03/27/87LS 5 MLS SAMP
TIC
1,4-Difluorobenzene
152
Toluene-D8
152
Chlorobenzene-D5
153
4-Bromofluorobenzene
SS3

QUANT REPORT

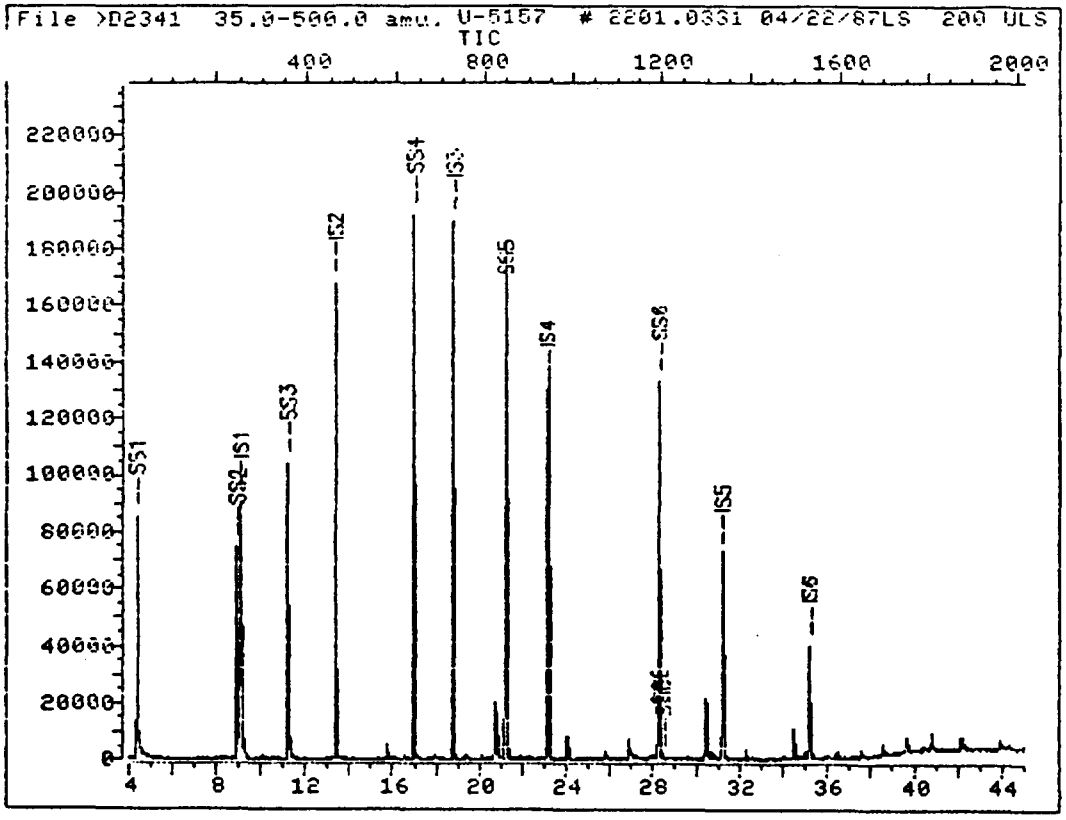
ɔ. ɹtor ID: USER8 Quant Rev: 4 Quant Time: 870327 12:30
ɹtput File: ^C7509::Q2 Injected at: 870327 11:44
ɜta File: >C7509::D3 Dilution Factor: 1.00
ɜme: U-5157 # 2201.01 DC-GW-30
ɪsc: 03/27/87LS 5 MLS SAMPLE + 10 ULS IS/SS

D File: VOACR::D2
itle: VOA ID FILE FOR HP-5995 (CONT. CAL.)
ast Calibration: 870327 11:38

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	(IS)	128	11.73	253	29442	50.00 UG/L	100
6)	METHYLENE CHLORIDE		84	8.39	167	1694	1.84 UG/L	100
7)	ACETONE		43	9.36	192	10392	22.99 UG/L	100
15)	1,2-DICHLOROETHANE-D4	(SURR)	65	14.60	327	61608	48.62 UG/L	88
16)	*1,4-DIFLUOROBENZENE	(IS)	114	22.32	526	151937	50.00 UG/L	100
31)	*CHLOROBENZENE-D5	(IS)	117	27.16	651	125814	50.00 UG/L	100
6)	TOLUENE-D8	(SURR)	98	26.04	622	156406	50.46 UG/L	95
0)	4-BROMOFLUOROBENZENE	(SURR)	95	31.79	770	81907	52.76 UG/L	100

* Compound is ISTD

TOTAL ION CHROMATOGRAM

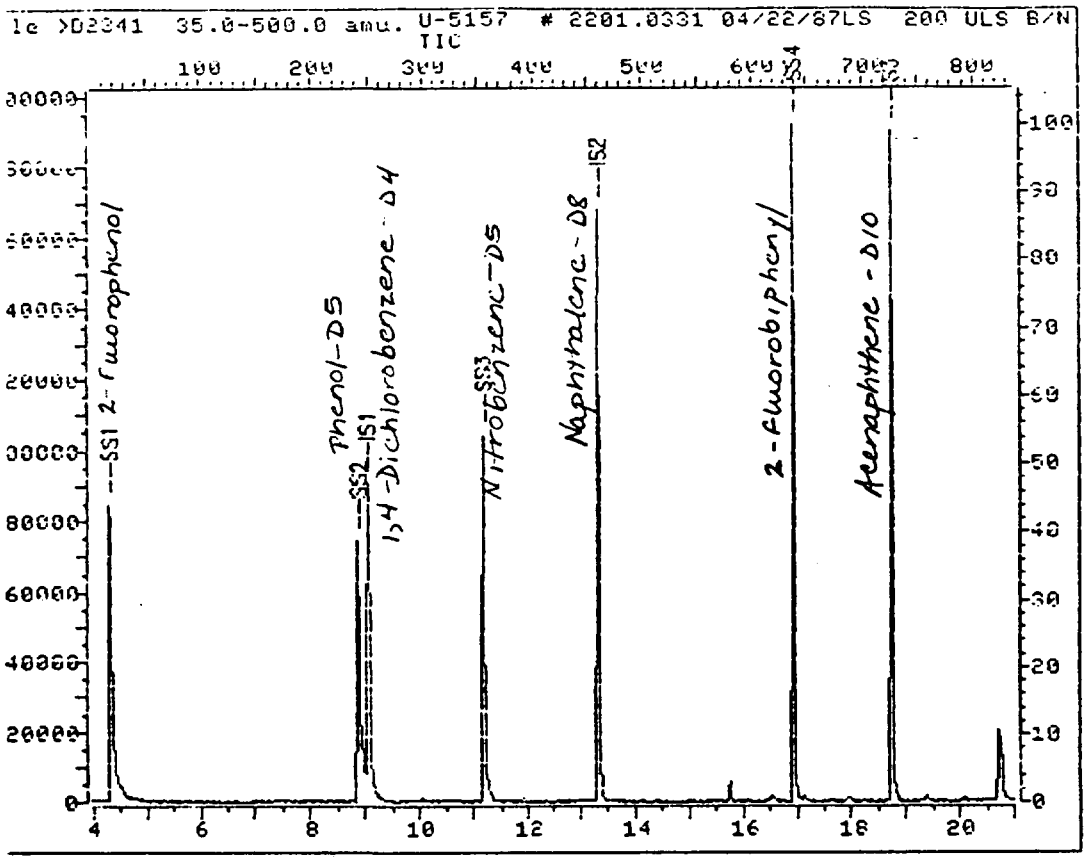


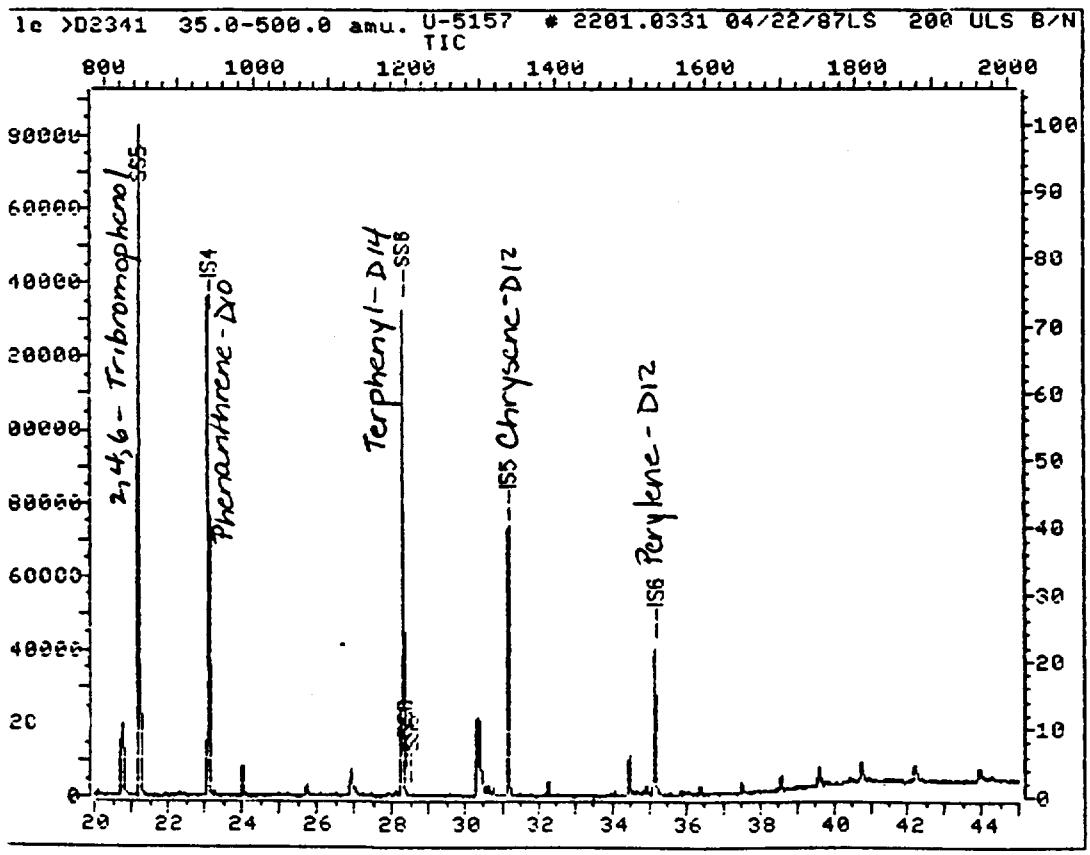
Data File: >D2341::D3
Name: U-5157 # 2201.0331 DC-GW-30
Misc: 04/22/87LS 200 ULS B/N + 200 ULS A/P + 4 ULS IS BTL# 3

Id File: BNADR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870422 18:03

Operator ID: USER6
Quant Time: 870422 21:58
Injected at: 870422 21:10

DC-GW-30


1c >D2341 35.0-500.0 amu. U-5157 # 2201.0331 04/22/87LS 200 ULS B/N
TIC
SS1 2-Fluorophenol
SS2 Phenol-D5
IS1 1,4-Dichlorobenzene-D4
SS3 Nitrobenzene-D5
IS2 Naphthalene-D8
2-Fluorobiphenyl
Acenaphthene-D10


1c >D2341 35.0-500.0 amu. U-5157 # 2201.0331 04/22/87LS 200 ULS B/N
TIC
SS5 2,4,6-Tribromophenol
IS4 Phenanthrene-D10
SS6 Terphenyl-D14
IS5 Chrysene-D12
IS6 Perylene-D12

QUANT REPORT

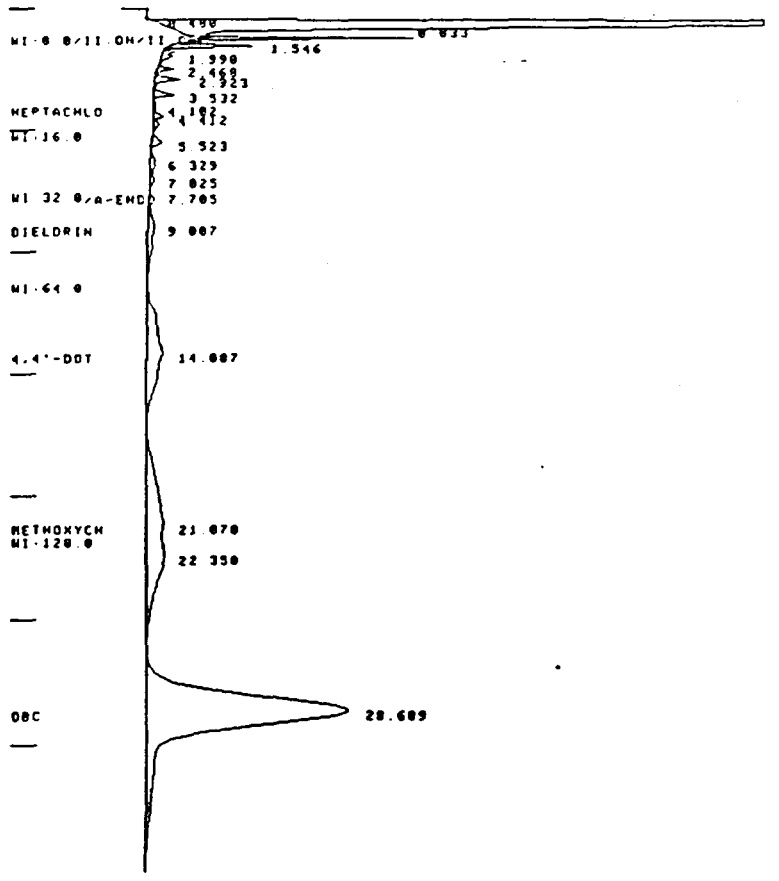
Operator ID: USER6 Quant Rev: 4.. Quant Time: 870422.21:58
Output File: ^D2341::Q2 Injected at: 870422 21:10
Data File: >D2341::D3 Dilution Factor: 2.00
Name: U-5157 # 2201.0331 DC-GW-30
Misc: 04/22/87LS 200 ULS B/N + 200 ULS A/P + 4 ULS IS BTL# 3

ID File: BNADR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870422 18:03

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-D4	(IS)	152	9.05	250	43132	40.00 UG/L	87
2)	PHENOL-D5	(SURR)	99	8.89	242	77644	88.79 UG/L	92
5)	2-FLUOROPHENOL	(SURR)	112	4.30	17	78571	112.21 UG/L	82
~~17)~~	~~N-NITROSO-DI-N-PROPYLAMINE~~		~~70~~	~~11.42~~	~~355~~	~~13099~~	~~16.57 UG/L~~ NBM	92
19)	*NAPHTHALENE-D8	(IS)	136	13.33	460	151681	40.00 UG/L	100
20)	NITROBENZENE-D5	(SURR)	82	11.19	355	81240	91.30 UG/L	93
34)	*ACENAPHTHENE-D10	(IS)	162	18.75	726	87830	40.00 UG/L	97
38)	2-FLUOROBIPHENYL	(SURR)	172	16.95	638	130705	92.47 UG/L	96
~~41)~~	~~DIMETHYL PHTHALATE~~		~~163~~	~~18.75~~	~~726~~	~~17255~~	~~10.81 UG/L~~ NBM	100
48)	2,4,6-TRIBROMOPHENOL	(SURR)	330	21.19	846	72227	176.39 UG/L	98
~~52)~~	~~2,6-DINITROTOLUENE~~		~~165~~	~~18.75~~	~~726~~	~~11960~~	~~39.91 UG/L~~ NBM	100
53)	DIETHYLPHTHALATE		149	20.72	823	24407	13.28 UG/L	98
55)	*PHENANTHRENE-D10	(IS)	188	23.11	940	137555	40.00 UG/L	97
63)	DI-N-BUTYLPHTHALATE		149	25.74	1069	3578	1.78 UG/L	98
65)	*CHRYSENE-D12	(IS)	240	31.14	1334	82698	40.00 UG/L	100
68)	TERPHENYL-D14	(SURR)	244	28.28	1194	117556	104.11 UG/L	100
~~68)~~	~~TERPHENYL-D14~~	~~(SURR)~~	~~244~~	~~28.34~~	~~1197~~	~~781~~	~~.69 UG/L~~	100
~~68)~~	~~TERPHENYL-D14~~	~~(SURR)~~	~~244~~	~~28.49~~	~~1204~~	~~58~~	~~.05 UG/L~~ } CW	100
72)	BIS(2-ETHYLHEXYL)PHTHALATE		149	32.26	1389	2315	2.23 UG/L	93
74)	*PERYLENE-D12	(IS)	264	35.15	1531	43095	40.00 UG/L	100
75)	DI-N-OCTYL PHTHALATE		149	34.07	1478	1256	1.18 UG/L	100

* Compound is ISTD

CHART SPEED 0.5 CM/MIN
ATTEN: 8 ZERO: 10% 5 MIN/TICK



RECALCULATE ON FILE: 5157642

CHANNEL: 1A - 1 TITLE: RUN# 2L 7:52 14 APR 87

DC-GW-30

SAMPLE: 2201 METHOD: CEPA CALCULATION: ES - ANALYS

PEAK NO	PEAK NAME	RESULT UG/L	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		0.0000	1.261		99567	BB	3.63
2		0.0000	1.546		62522	BV	4.44
3		0.0000	2.923		31843	VV	8.44
4		0.0000	3.532		30910	VV	10.38
5		0.0000	5.523		24713	BV	17.13
6	~~HEPT-EP~~OX	0.0093	6.329	0.219	24364	VV	? 34.56
7	~~DIELDR~~IN	0.0249	9.007	0.197	66228	VB	82.00
8	~~4,4'-DD~~T	0.2309	14.007	-0.133	300005	BV	?165.31
9	~~METHOXYCH~~	0.3631	21.070	0.200	292768	VV	?144.00
10		0.0000	22.350		293409	VV	?200.38
11	DBC	1.0906	28.609	0.189	2182091	VB	76.75
TOTALS:		1.7188		0.672	3409300		

DETECTED PKS: 28 REJECTED PKS: 17

DIVISOR: 1.00000 MULTIPLIER: 10.00000

NOISE: 22.9 OFFSET: -134

RACK: 2 VIAL: 11 INJ: 1

NOTES:
NOTEBOOK:259-186 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#U-5157
INST: VARIAN 6000# 2A ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
LIQUID PHASE: 3% OV-1
CARRIER GAS: N2 @ 60 ML/MIN
DET: 300 C INJ: 220 C
200 C ISOTHERMAL 4 UL INJECTION
PRIMARY ANALYSIS AUTOSAMPLER

SAMPLE NUMBER DC-GW-31

481095

Sample Number
DC-GW-31

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Ecology & Environment Inc Case No: U-5157, 5162

Lab Sample ID No: 2202 QC Report No:

Sample Matrix: Water Contract No: EL-3140

Data Release Authorized By: C Slogtowicz Date Sample Received: 3-24-87

Volatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 3-27-87

Conc/Dil Factor: 1 pH

Percent Moisture: (Not Decanted)

CAS Number		ug/l or ug/Kg (Circle One)	
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	5	U
67-64-1	Acetone	29	B
75-15-0	Carbon Disulfide	5	U
75-35-4	1, 1-Dichloroethene	5	U
75-34-3	1, 1-Dichloroethane	5	U
156-60-5	Trans-1, 2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
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

CAS Number		ug/l or ug/Kg (Circle One)	
78-87-5	1, 2-Dichloropropane	5	U
10061-02-6	Trans-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
10061-01-5	cis-1, 3-Dichloropropene	5	U
110-75-8	2-Chloroethylvinylether	10	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
	Total Xylenes	5	U

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 ug/l and a concentration of 3 ug/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS.

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

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

210

Laboratory Name ecology and environment, inc.

Case No 4-5157, 5162

Sample Number DC-6W-31

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 3-29-87

Date Analyzed: 4-23-87

Conc/Dil Factor: 2

Percent Moisture (Decanted) -

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)	
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
39638-32-9	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-Chloroethoxyl)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	Dimethyl Phthalate	10	U
[illegible] 95-8	Acenaphthylene	10	U
[illegible] 09-2	3-Nitroaniline	50	U

CAS Number		ug/l or ug/Kg (Circle One)	
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
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	8	BJ
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	4	BJ
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
117-81-7	bis(2-Ethylhexyl)Phthalate	3	BJ
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenzo(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1)-Cannot be separated from diphenylamine

Laboratory Name ecology and environment, inc.

Case No U-5157, 5162

Sample Number DC-GW-31

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration (Low) Medium (Circle One)

Date Extracted/Prepared 3-30-87

Date Analyzed 4-14-87

Conc/Dil Factor 1

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☑Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/l or ug/Kg) (Circle One)
319-84-6	Alpha-BHC	0.05U
319-85-7	Beta-BHC	0.05U
319-86-8	Delta-BHC	0.05U
58-89-9	Gamma BHC (Lindane)	0.05U
76-44-8	Heptachlor	0.05U
309-00-2	Aldrin	0.05U
1024-57-3	Heptachlor Epoxide	0.05U
959-98-8	Endosulfan I	0.05U
60-57-1	Dieldrin	0.10U
72-55-9	4,4'-DDE	0.10U
72-20-8	Endrin	0.10U
33213-65-9	Endosulfan II	0.10U
72-54-8	4,4'-DDD	0.10U
1031-07-8	Endosulfan Sulfate	0.10U
50-29-3	4,4'-DDT	0.10U
72-43-5	Methoxychlor	0.50U
53494-70-5	Endrin Ketone	0.10U
57-74-9	Chlordane	0.50U
8001-35-2	Toxaphene	1.0U
12674-11-2	Aroclor-1016	0.50U
11104-28-2	Aroclor-1221	0.50U
11141-16-5	Aroclor-1232	0.50U
53469-21-9	Aroclor-1242	0.50U
12672-29-6	Aroclor-1248	0.50U
11097-69-1	Aroclor-1254	1.0U
11096-82-5	Aroclor-1260	1.0U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 1,000 or W_s _____ V_t 10,000 V_i 4

Laboratory Name ecology and environment, inc.

Case No U-5157, 5162

Sample Number DC-GW-31

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number mix	Estimated Concentration (ug/l or ug/kg)
1.	No TIC's in VOA fraction			
2.				
3.	Unknown Hydrocarbon	BNA	26.93	12 J
4.	Unknown		30.34	60 BJ
5.	Unknown		34.45	37 J
6.				
7				
8.				
9.				
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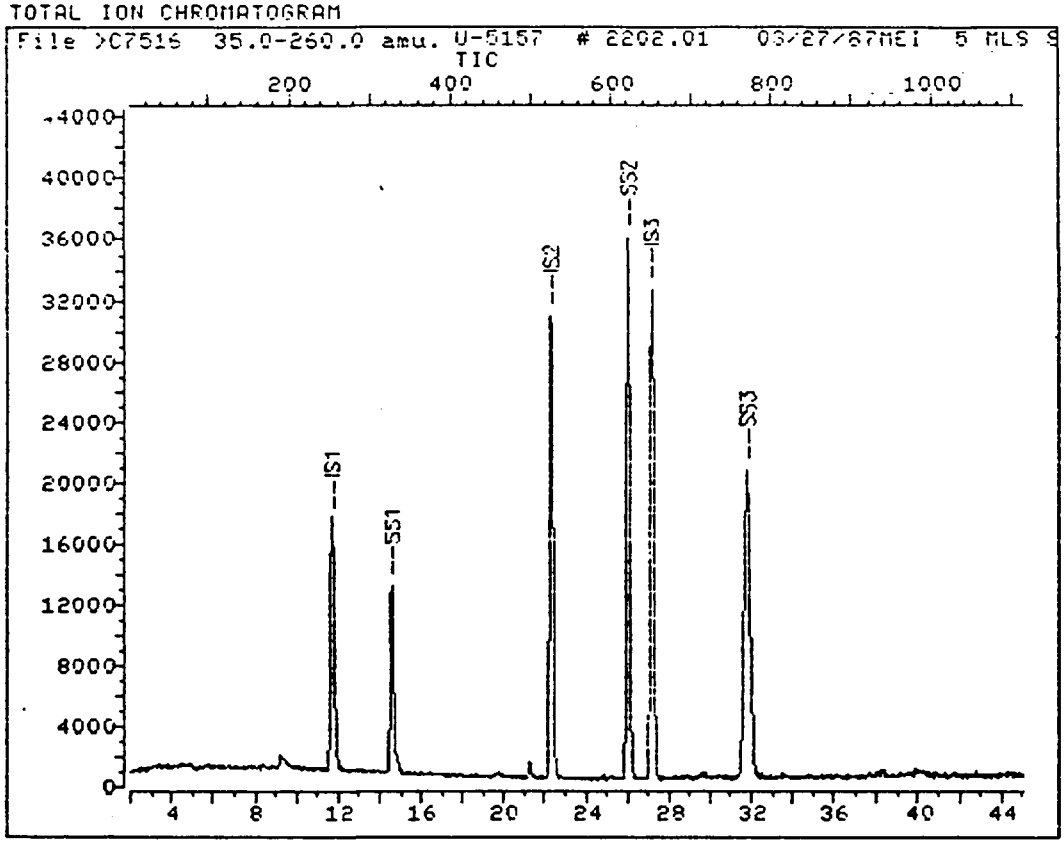
TOTAL ION CHROMATOGRAM

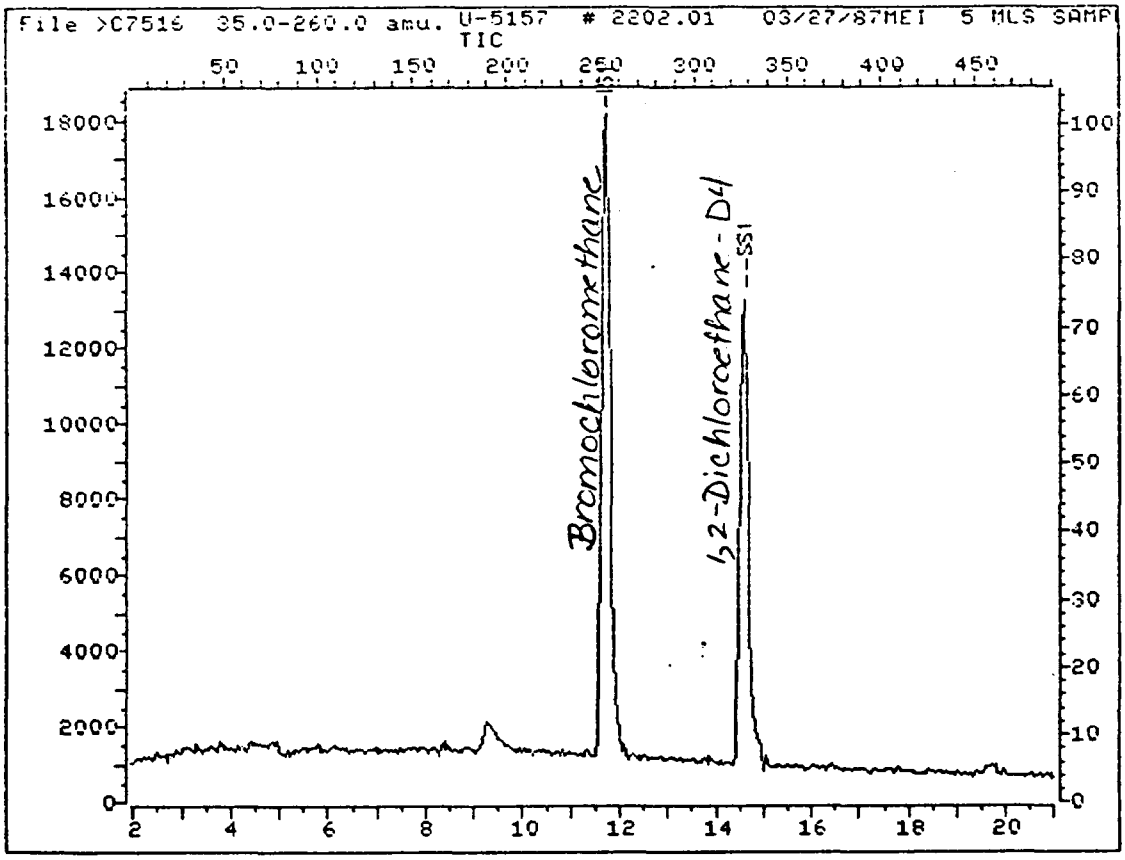


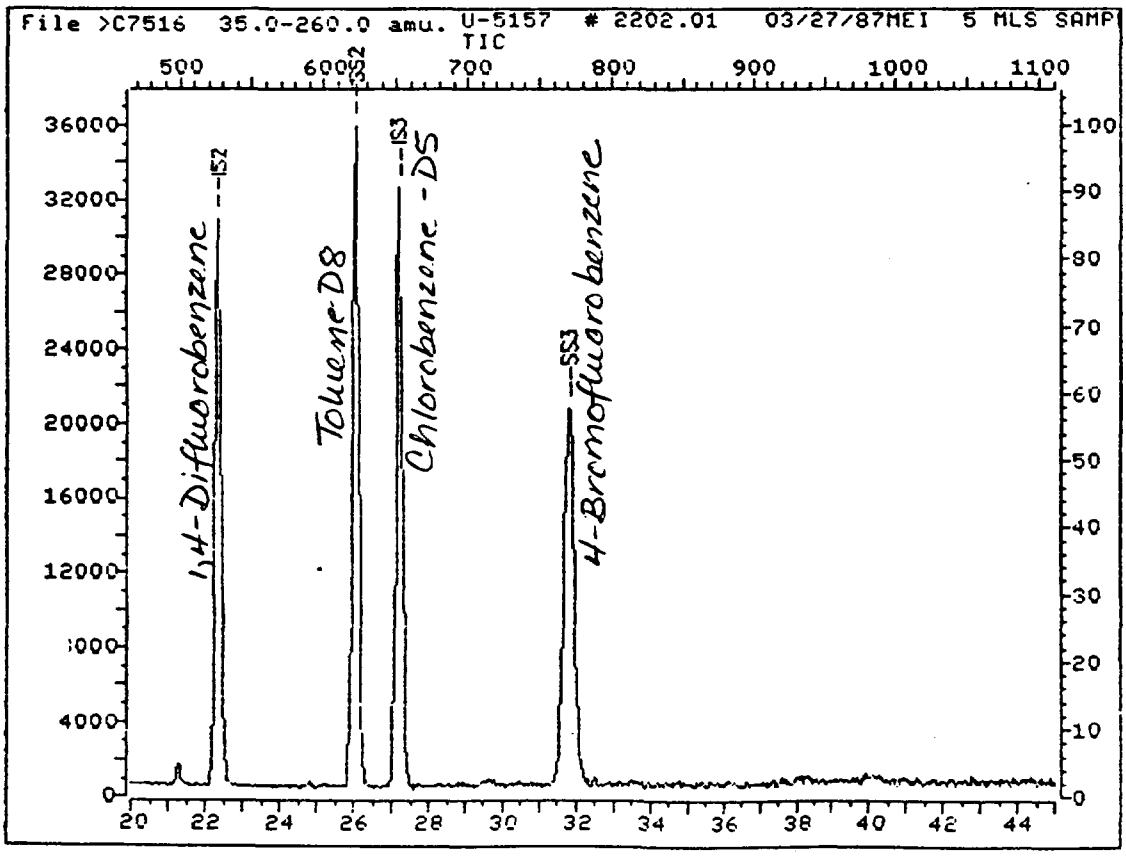
Data File: >C7516::D3
Name: U-5157 # 2202.01 DC-GW-31
Misc: 03/27/87MEI 5 MLS SAMPLE + 10 ULS IS/SS

Id File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870327 11:38

Operator ID: USER8
Quant Time: 870327 18:40
Injected at: 870327 17:54

DC-GW-31


File >C7516 35.0-260.0 amu. U-5157 # 2202.01 03/27/87MEI 5 MLS SAMP
TIC
Bromochloromethane
1,2-Dichloroethane - D4
IS1
SS1


File >C7516 35.0-260.0 amu. U-5157 # 2202.01 03/27/87MEI 5 MLS SAMP
TIC
1,4-Difluorobenzene
Toluene-D8
Chlorobenzene - D5
4-Bromofluorobenzene
IS2
IS3
SS2
SS3

QUANT REPORT

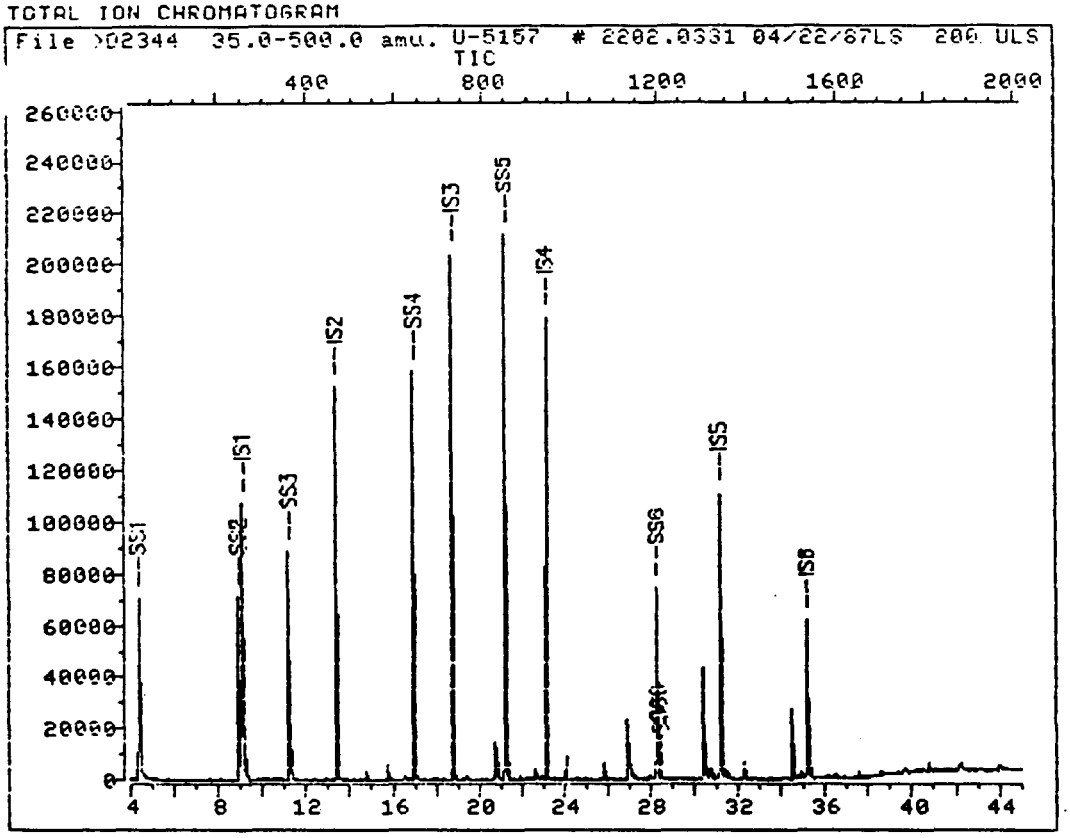
ɔerator ID: USER8 Quant Rev: 4 Quant Time: 870327 18:40
ɹt : File: ^C7516::Q2 Injected at: 870327 17:54
ɜta File: >C7516::D3 Dilution Factor: 1.00
ɜme: U-5157 # 2202.01 DC-GW-31
ɪsc: 03/27/87MEI 5 MLS SAMPLE + 10 ULS IS/SS

) File: VOACR::D2
ɪtle: VOA ID FILE FOR HP-5995 (CONT. CAL.)
ɜst Calibration: 870327 11:38

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	(IS)	128	11.69	252	27982	50.00 UG/L	100
7)	ACETONE		43	9.32	191	12509	29.11 UG/L	100
15)	1,2-DICHLOROETHANE-D4	(SURR)	65	14.59	327	57928	48.10 UG/L	89
16)	*1,4-DIFLUOROBENZENE	(IS)	114	22.31	526	138795	50.00 UG/L	100
31)	*CHLOROBENZENE-D5	(IS)	117	27.16	651	113778	50.00 UG/L	100
36)	TOLUENE-D8	(SURR)	98	26.04	622	142633	50.89 UG/L	99
40)	4-BROMOFLUOROBENZENE	(SURR)	95	31.78	770	75206	53.57 UG/L	100

* Compound is ISTD

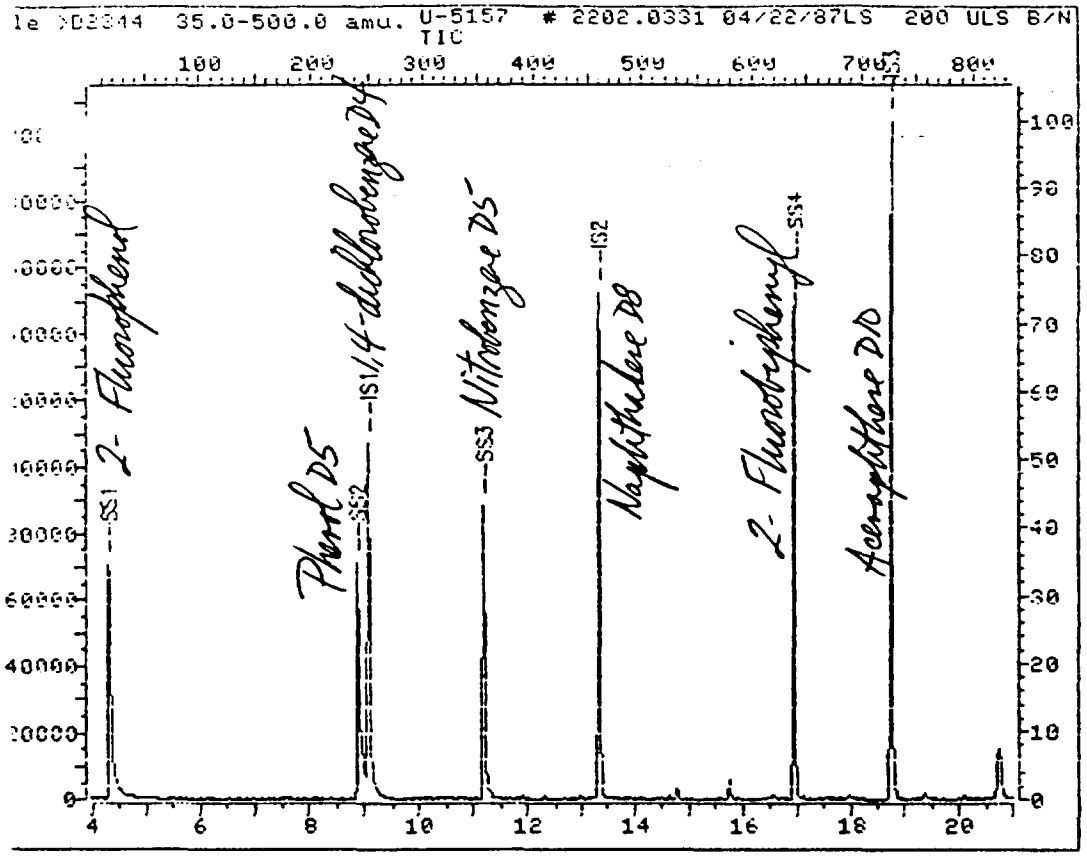
TOTAL ION CHROMATOGRAM



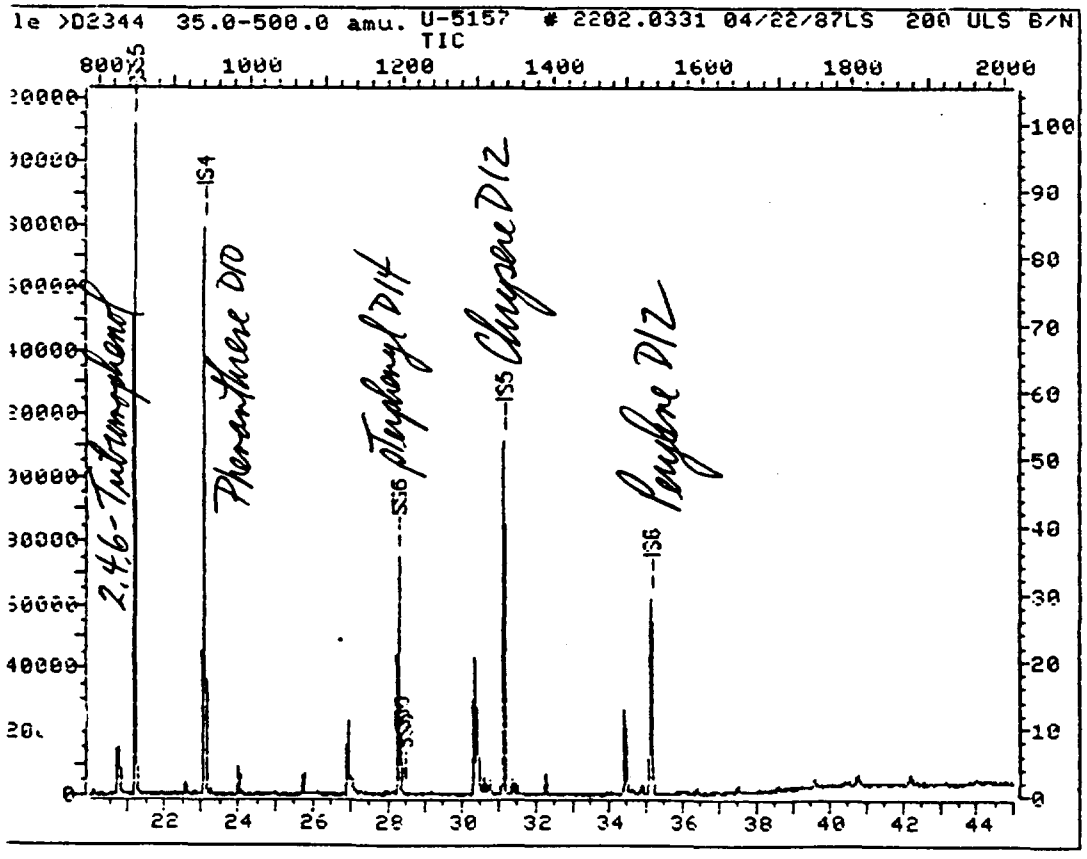
Data File: >D2344::D3
Name: U-5157 # 2202.0331 DC-GW-31
Misc: 04/22/87LS 200 ULS B/N + 200 ULS A/P + 4 ULS IS BTL# 6

Id File: BNADR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870422 18:03

Operator ID: USER6
Quant Time: 870423 00:51
Injected at: 870423 00:04


le >D2344 35.0-500.0 amu. U-5157 # 2202.0331 04/22/87LS 200 ULS B/N
TIC
2-Fluorophenol
Phenol D5
1,4-dichlorobenzene D4
Nitrobenzene D5
Naphthalene D8
2-Fluorobiphenyl
Acenaphthene D10

DC-GW-31


le >D2344 35.0-500.0 amu. U-5157 # 2202.0331 04/22/87LS 200 ULS B/N
TIC
2,4,6-Tribromophenol
Phenanthrene D10
p-Terphenyl D14
Chrysene D12
Perylene D12

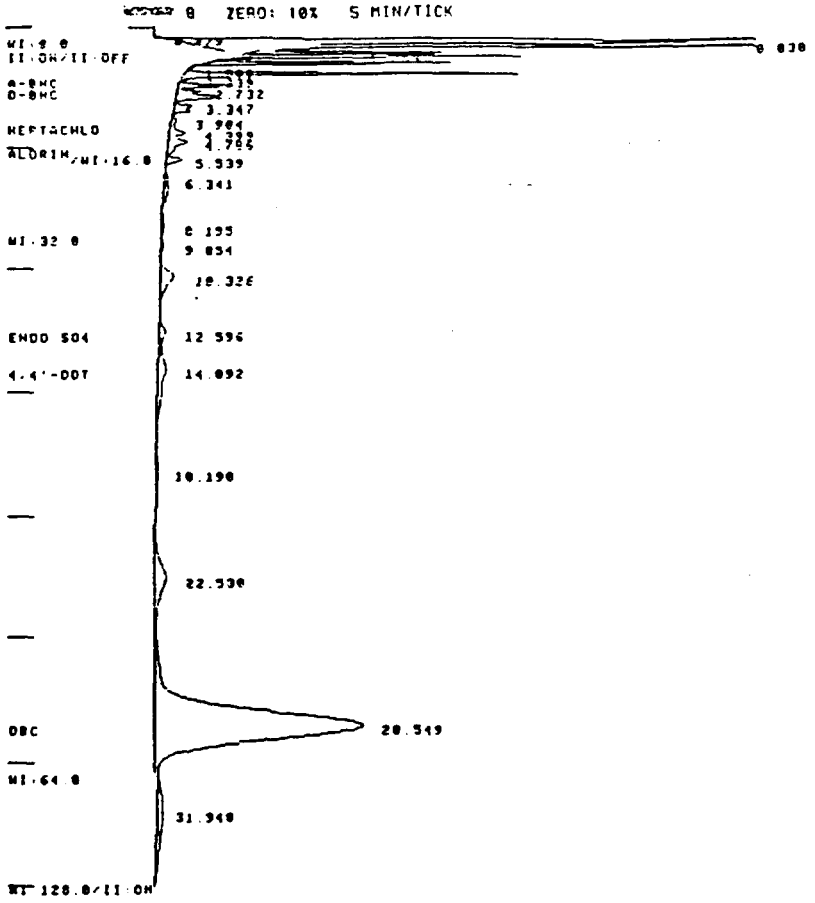
QUANT REPORT

O -ator ID: USER6 Quant Rev: 4 Quant Time: 870423 00:51
O put File: ^D2344::Q2 Injected at: 870423 00:04
Data File: >D2344::D3 Dilution Factor: 2.00
Name: U-5157 # 2202.0331 DC-GW-31
Misc: 04/22/87LS 200 ULS B/N + 200 ULS A/P + 4 ULS IS BTL# 6

ID File: BNADR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870422 18:03

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-D4	(IS)	152	9.07	251	47410	40.00 UG/L	86
2)	PHENOL-D5	(SURR)	99	8.88	242	67551	70.28 UG/L	96
5)	2-FLUOROPHENOL	(SURR)	112	4.30	17	64659	84.01 UG/L	84
17)	~~N-NITROSO-DI-N-PROPYLAMINE~~		~~70~~	~~11.21~~	~~356~~	~~13586~~	~~14.65 UG/L~~ cw	90
19)	*NAPHTHALENE-D8	(IS)	136	13.32	460	165178	40.00 UG/L	100
20)	NITROBENZENE-D5	(SURR)	82	11.21	356	77283	79.76 UG/L	86
34)	*ACENAPHTHENE-D10	(IS)	162	18.76	727	99236	40.00 UG/L	97
38)	2-FLUOROBIPHENYL	(SURR)	172	16.97	639	124447	77.92 UG/L	94
41)	~~DIMETHYL PHTHALATE~~		~~163~~	~~18.76~~	~~727~~	~~19223~~	~~10.66 UG/L~~ cw	100
48)	2,4,6-TRIBROMOPHENOL	(SURR)	330	21.21	847	72669	157.07 UG/L	97
52)	~~2,6-DINITROTOLUENE~~		~~165~~	~~18.76~~	~~727~~	~~12995~~	~~32.61 UG/L~~ cw	100
53)	DIETHYLPHTHALATE		149	20.74	824	17491	8.43 UG/L	94
55)	*PHENANTHRENE-D10	(IS)	188	23.12	941	150797	40.00 UG/L	91
~~57)~~	~~N-NITROSODIPHENYLAMINE~~		~~169~~	~~21.21~~	~~847~~	~~1470~~	~~1.53 UG/L~~	37
63)	DI-N-BUTYLPHTHALATE		149	25.75	1070	8652	3.93 UG/L	98
65)	*CHRYSENE-D12	(IS)	240	31.15	1335	102691	40.00 UG/L	100
68)	TERPHENYL-D14	(SURR)	244	28.28	1194	76434	54.51 UG/L	100
68)	~~TERPHENYL-D14~~	~~(SURR)~~	~~244~~	~~28.34~~	~~1197~~	~~432~~	~~.31 UG/L~~	100
68)	~~TERPHENYL-D14~~	~~(SURR)~~	~~244~~	~~28.42~~	~~1201~~	~~133~~	~~.09 UG/L~~ cw	100
72)	BIS(2-ETHYLHEXYL)PHTHALATE		149	32.27	1390	3444	2.67 UG/L	95
74)	*PERYLENE-D12	(IS)	264	35.14	1531	67242	40.00 UG/L	100

* Compound is ISTD



CHANNEL: 1A - 1 TITLE: RUN# 27 8:31 14 APR 87

DC-GW-31

SAMPLE: 2202 METHOD: CEPA CALCULATION: ES - ANALYS

PEAK NO	PEAK NAME	RESULT UG/L	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	WI/2 (SEC)
1		0.0000	1.259		129428	BV	3.56
2		0.0000	1.529		148791	VB	4.50
3		0.0000	2.005		258857	VV	5.31
4	~~α-BHC~~	0.0411	2.464	0.094	46765	VV	6.13
5	~~β-BHC~~	0.0084	2.732	0.062	21873	VV	? 6.81
6		0.0000	2.955		61747	VV	10.69
7		0.0000	3.347		20530	VV	9.25
8		0.0000	4.399		27174	VV	12.50
9		0.0000	4.786		34903	VV	12.13
10		0.0000	5.539		25720	VB	10.94
11		0.0000	6.683		20792	VB	? 10.94
12	~~α-ENDO~~	0.0283	10.326	0.306	70460	BB	41.00
13	~~ENDO SO4~~	0.0161	12.596	-0.214	26251	BV	31.00
14	~~4,4'-DDT~~	0.0703	14.092	-0.128	91591	VB	45.06
15		0.0000	22.530		130754	BV	? 82.38
16	DBC	1.0836	28.549	0.129	2168192	VV	? 74.63
17		0.0000	31.940		106452	T	?177.31
TOTALS:		1.2479		0.249	3392280		

DETECTED PKS: 35 REJECTED PKS: 18

DIVISOR: 1.00000 MULTIPLIER: 10.00000

NOISE: 22.9 OFFSET: -13

RACK: 2 VIAL: 12 INJ: 1

NOTES:
NOTEBOOK:259-186 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#U-5157
INST: VARIAN 6000# 2A ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
LIQUID PHASE: 3% OV-1
CARRIER GAS: N2 @ 60 ML/MIN
DET: 300 C INJ: 220 C
200 C ISOTHERMAL 4 UL INJECTION
PRIMARY ANALYSIS AUTOSAMPLER

POST RUN:
SAVE FILE: RAW 5157643

220

SAMPLE NUMBER DC-GW-32

Sample Number
DC-GW-32

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Ecology & Environment, Inc. Case No: U-5157, 5162

Lab Sample ID No: 2210 QC Report No:

Sample Matrix: Water Contract No: IL-3140

Data Release Authorized By: [signature] Date Sample Received: 3-25-87

Volatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 4-3-87

Conc./Dil Factor: 25 pH

Percent Moisture: (Not Decanted)

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	250u
74-83-9	Bromomethane	250u
75-01-4	Vinyl Chloride	250u
75-00-3	Chloroethane	250u
75-09-2	Methylene Chloride	120u
67-64-1	Acetone	1700B
75-15-0	Carbon Disulfide	120u
75-35-4	1, 1-Dichloroethene	120u
75-34-3	1, 1-Dichloroethane	120u
156-60-5	Trans-1, 2-Dichloroethene	120u
67-66-3	Chloroform	120u
107-06-2	1, 2-Dichloroethane	120u
78-93-3	2-Butanone	250u
71-55-6	1, 1, 1-Trichloroethane	120u
56-23-5	Carbon Tetrachloride	120u
108-05-4	Vinyl Acetate	250u
75-27-4	Bromodichloromethane	120u

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	120u
10061-02-6	Trans-1, 3-Dichloropropene	120u
79-01-6	Trichloroethene	120u
124-48-1	Dibromochloromethane	120u
79-00-5	1, 1, 2-Trichloroethane	120u
71-43-2	Benzene	460
10061-01-5	cis-1, 3-Dichloropropene	120u
110-75-8	2-Chloroethylvinylether	250u
75-25-2	Bromoform	120u
591-78-6	4-Methyl-2-Pentanone	250u
108-10-1	2-Hexanone	250u
127-18-4	Tetrachloroethene	120u
79-34-5	1, 1, 2, 2-Tetrachloroethane	120u
108-88-3	Toluene	100 BJ
108-90-7	Chlorobenzene	2500
100-41-4	Ethylbenzene	840
100-42-5	Styrene	120u
	Total Xylenes	400

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration, dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U: *Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.*

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g. 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS.

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

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

E This flag indicates an approximate concentration. The amount detected in the analysis exceeds the calibrated range.

222

Laboratory Name: ECOLOGY & ENVIRONMENT INC.

Case No: U-5157, 5162

Sample Number: DC-GW-32

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5-5-87

Date Analyzed: 5-20-87

Conc/Dil Factor: 10

Percent Moisture (Decanted) _____

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/l or ug/Kg) (Circle One)	
108-95-2	Phenol	50	U
111-44-4	bis(-2-Chloroethyl)Ether	50	U
95-57-8	2-Chlorophenol	130	
541-73-1	1 3-Dichlorobenzene	50	U
106-46-7	1 4-Dichlorobenzene	34	J
100-51-6	Benzyl Alcohol	50	U
95-50-1	1 2-Dichlorobenzene	50	U
95-48-7	2-Methylphenol	50	U
39638-32-9	bis(2-chloroisopropyl)Ether	50	U
106-44-5	4-Methylphenol	37	J
621-64-7	N-Nitroso-Di-n-Propylamine	50	U
67-72-1	Hexachloroethane	50	U
98-95-3	Nitrobenzene	50	U
78-59-1	Isophorone	50	U
88-75-5	2-Nitrophenol	50	U
105-67-9	2. 4-Dimethylphenol	240	
65-85-0	Benzoic Acid	250	U
111-91-1	bis(-2-Chloroethoxy)Methane	50	U
120-83-2	2. 4-Dichlorophenol	50	U
120-82-1	1. 2. 4-Trichlorobenzene	50	U
91-20-3	Naphthalene	36	J
106-47-8	4-Chloroaniline	15,000	E
87-68-3	Hexachlorobutadiene	50	U
59-50-7	4-Chloro-3-Methylphenol	50	U
91-57-6	2-Methylnaphthalene	50	U
77-47-4	Hexachlorocyclopentadiene	50	U
88-06-2	2. 4. 6-Trichlorophenol	50	U
95-95-4	2. 4. 5-Trichlorophenol	250	U
91-58-7	2-Chloronapnthalene	50	U
88-74-4	2-Nitroaniline	250	U
131-11-3	Dimethyl Phthalate	98	
208-96-8	Acenaphthylene	50	U
99-09-2	3-Nitroaniline	250	U

CAS Number		(ug/l or ug/Kg) (Circle One)	
83-32-9	Acenaphthene	50	U
51-28-5	2. 4-Dinitrophenol	250	U
100-02-7	4-Nitrophenol	250	U
132-64-9	Dibenzofuran	50	U
121-14-2	2 4-Dinitrotoluene	50	U
606-20-2	2. 6-Dinitrotoluene	50	U
84-66-2	Diethylphthalate	50	U
7005-72-3	4-Chlorophenyl-phenylether	50	U
86-73-7	Fluorene	50	U
100-01-6	4-Nitroaniline	250	U
534-52-1	4. 6-Dinitro-2-Methylphenol	250	U
86-30-6	N-Nitrosodiphenylamine (1)	50	U
101-55-3	4-Bromophenyl-phenylether	50	U
118-74-1	Hexachlorobenzene	50	U
87-86-5	Pentachlorophenol	250	U
85-01-8	Phenanthrene	50	U
120-12-7	Anthracene	50	U
84-74-2	Di-n-Butylphthalate	50	U
206-44-0	Fluoranthene	50	U
129-00-0	Pyrene	50	U
85-68-7	Butylbenzylphthalate	50	U
91-94-1	3. 3'-Dichlorobenzidine	50	U
56-55-3	Benzo(a)Anthracene	50	U
117-81-7	bis(2-Ethylhexyl)Phthalate	50	U
218-01-9	Chrysene	50	U
117-84-0	Di-n-Octyl Phthalate	50	U
205-99-2	Benzo(b)Fluoranthene	50	U
207-08-9	Benzo(k)Fluoranthene	50	U
50-32-8	Benzo(a)Pyrene	50	U
193-39-5	Indeno(1 2. 3-cd)Pyrene	50	U
53-70-3	Dibenzo(a h)Anthracene	50	U
191-24-2	Benzo(g h. i)Perylene	50	U

(1)-Cannot be separated from diphenylamine

Laboratory Name ecology and environment, inc.

Case No U-5157,5162

Sample Number DC-GW-32

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration (Low) Medium (Circle One)

Date Extracted/Prepared 3-31-87

Date Analyzed 4-21-87

Conc/Dil Factor 20

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☑Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/l or ug/Kg) (Circle One)
319-84-6	Alpha-BHC	1.0U
319-85-7	Beta-BHC	1.0U
319-86-8	Delta-BHC	1.0U
58-89-9	Gamma-BHC (Lindane)	1.0U
76-44-8	Heptachlor	1.0U
309-00-2	Aldrin	1.0U
1024-57-3	Heptachlor Epoxide	1.0U
959-98-8	Endosulfan I	1.0U
60-57-1	Dieldrin	2.0U
72-55-9	4,4'-DDE	2.0U
72-20-8	Endrin	2.0U
33213-65-9	Endosulfan II	2.0U
72-54-8	4,4'-DDD	2.0U
1031-07-8	Endosulfan Sulfate	2.0U
50-29-3	4,4'-DDT	2.0U
72-43-5	Methoxychlor	10U
53494-70-5	Endrin Ketone	2.0U
57-74-9	Chlordane	10U
8001-35-2	Toxaphene	20U
12674-11-2	Aroclor-1016	10U
11104-28-2	Aroclor-1221	10U
11141-16-5	Aroclor-1232	10U
53469-21-9	Aroclor-1242	10U
12672-29-6	Aroclor-1248	10U
11097-69-1	Aroclor-1254	20U
11096-82-5	Aroclor-1260	20U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 1,000 or W_s _____ V_t 10,000 V_i 4

Laboratory Name ecology and environment, inc.

Case No U-5157, 5162

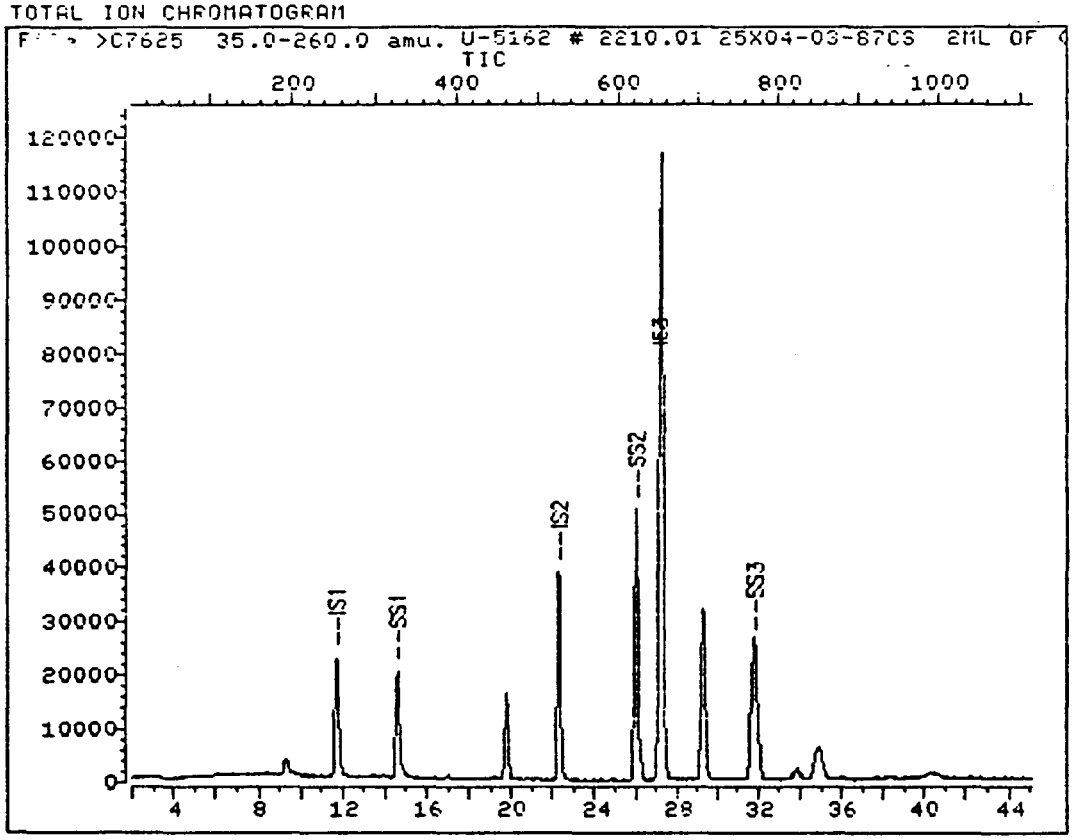
Sample Number DC-GW-32

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.	No TIC's in VOA fraction			
2.				
3.				
4.	Aniline	BNA	8.41	5700
5.	Chloroaniline Isomer		12.10	9900 J
6.	Chloroaniline Isomer		13.65	9000 J
7	Chlorophenol Isomer		13.84	1000 J
8.	Ethoxyaniline Isomer		14.43	10,000 J
9.	Ethoxy aniline Isomer		15.24	660 J
10.	Dichloroaniline Isomer		15.88	500 J
11.	Unknown Aromatic		21.05	730 J
12. 70553	4-methylbenzene sulfonamide		21.23	320 J
13.	Unknown Aromatic		21.91	360 J
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24				
25.				
26.				
27.				
28.				
29.				
30				

TOTAL ION CHROMATOGRAM

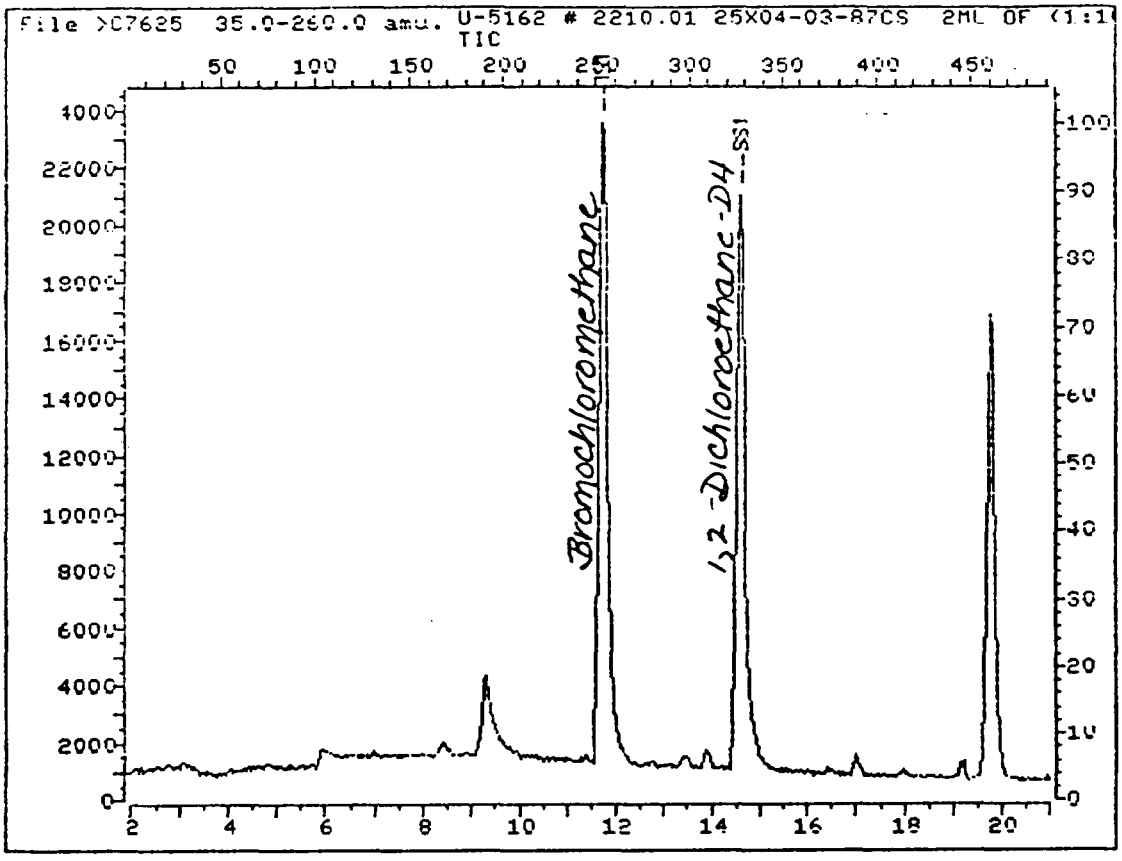


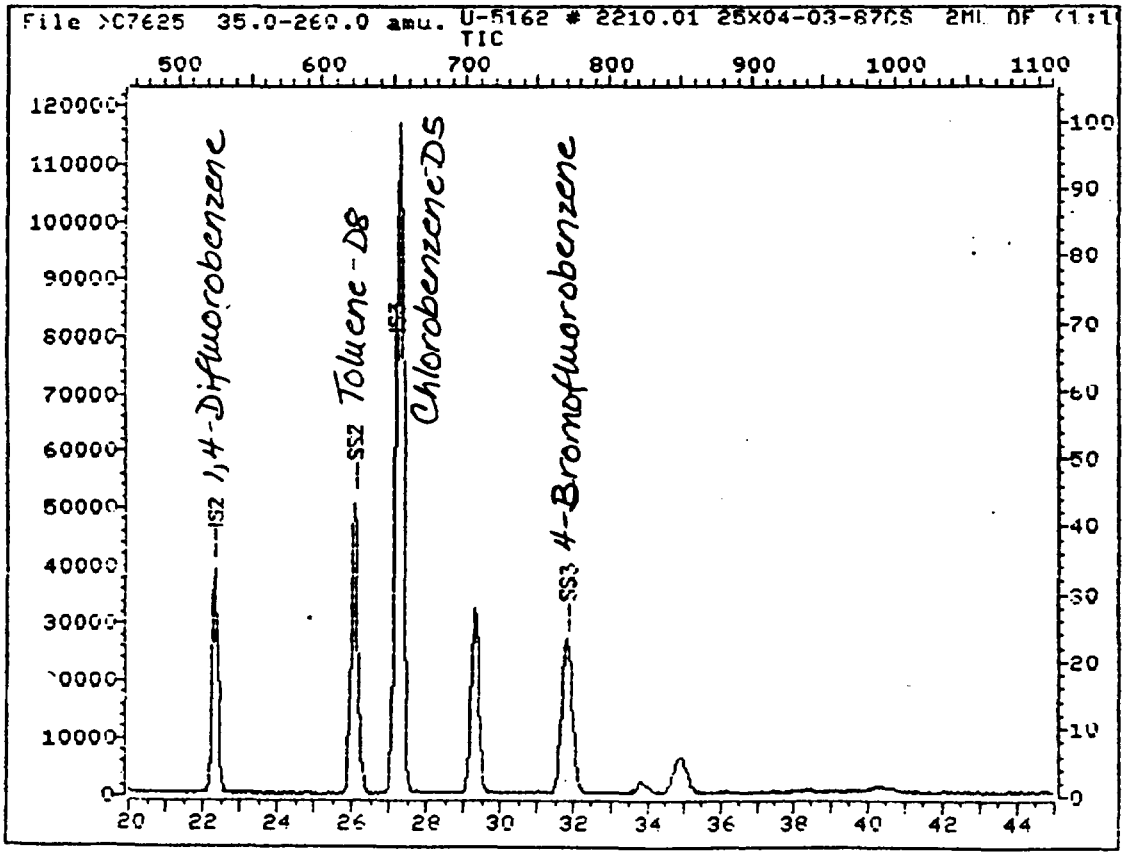
Data File: >C7625::D1
Name: U-5162 # 2210.01 25X DC-GW-32
Misc: 04-03-87CS 2ML OF (1:10) SAMPLE + 3ML DI + 10UL IS/SS

Id File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870403 10:07

Operator ID: USER8
Quant Time: 870403 12:43
Injected at: 870403 11:57

DC-GW-32


File >C7625 35.0-260.0 amu. U-5162 # 2210.01 25X04-03-87CS 2ML OF (1:1
TIC
Bromochloromethane
1,2-Dichloroethane-D4
SS1


File >C7625 35.0-260.0 amu. U-5162 # 2210.01 25X04-03-87CS 2ML OF (1:1
TIC
IS2 1,4-Difluorobenzene
SS2 Toluene-D8
IS3 Chlorobenzene-D5
SS3 4-Bromofluorobenzene

QUANT REPORT

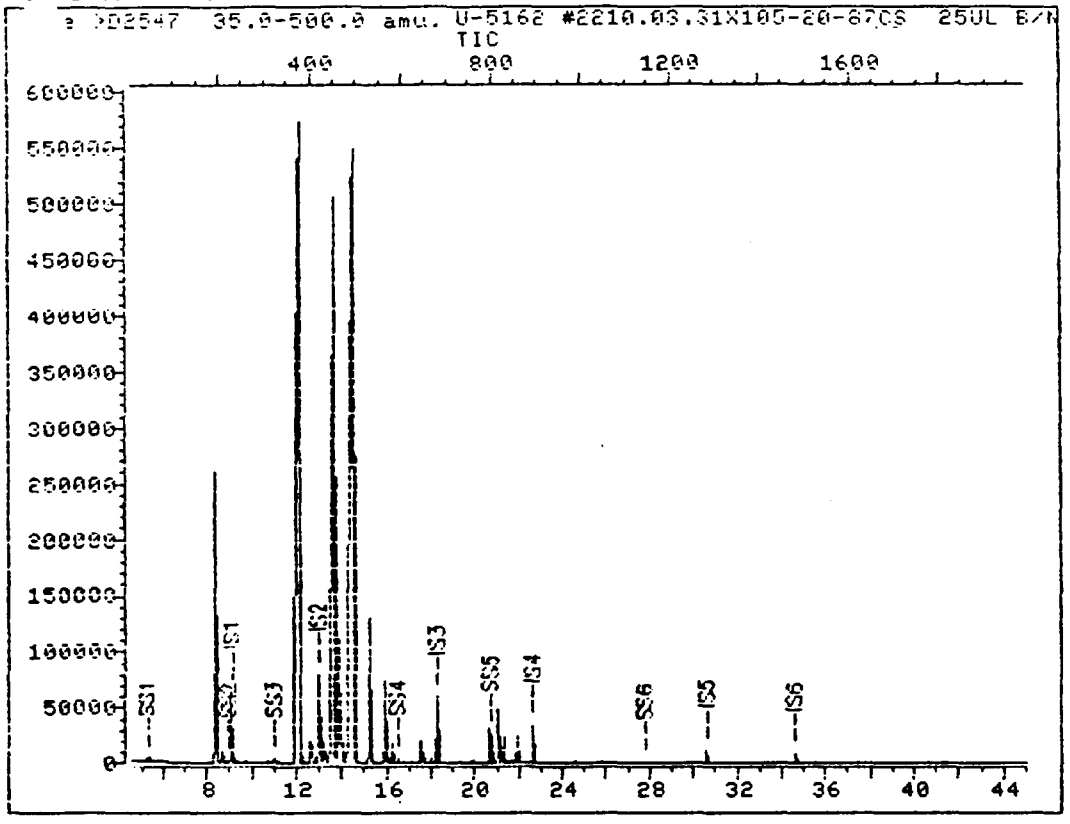
ɔeɾɾtor ID: USER8 Quant Rev: 4 Quant Time: 870403 12:43
ɹt t File: ^C7625::Q2 Injected at: 870403 11:57
ɜta File: >C7625::D1 Dilution Factor: 1.00
ɜme: U-5162 # 2210.01 25X DC-GW-32
ɜsc: 04-03-87CS 2ML OF (1:10) SAMPLE + 3ML DI + 10UL IS/SS

) File: VOACR::D2
ɜtle: VOA ID FILE FOR HP-5995 (CONT. CAL.)
ɜst Calibration: 870403 10:07

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	(IS)	128 11.72	253	32944	50.00	UG/L	100
7)	ACETONE		43 9.32	191	36489	67.50	UG/L yes	100
12)	~~TRANS-1,2-DICHLOROETHENE~~		~~96 13.43~~	~~297~~	~~777~~	~~.71~~	~~UG/L~~ CW	96
15)	1,2-DICHLOROETHANE-D4	(SURR)	65 14.59	327	94286	54.34	UG/L	81
16)	*1,4-DIFLUOROBENZENE	(IS)	114 22.32	526	154953	50.00	UG/L	100
27)	BENZENE		78 19.75	460	70092	18.52	UG/L yes	100
31)	*CHLOROBENZENE-D5	(IS)	117 27.17	651	127681	50.00	UG/L	100
6)	TOLUENE-D8	(SURR)	98 26.04	622	188506	51.53	UG/L	96
7)	TOLUENE		92 26.23	627	9932	4.00	UG/L yes	91
3)	CHLOROBENZENE		112 27.30	654	296810	100.25	UG/L yes	97
9)	ETHYLBENZENE		91 29.31	706	181504	33.59	UG/L yes	94
1)	4-BROMOFLUOROBENZENE	(SURR)	95 31.84	771	95969	51.24	UG/L	100
2)	TOTAL XYLENES		91 33.81	822	15813	3.59	UG/L yes	100
2)	TOTAL XYLENES		91 34.90	850	54407	12.34	UG/L yes	100
3)	1,3-DICHLOROBENZENE		146 40.33	990	3404	3404.00	NO CALIB	100
4)	1,2-DICLHLOROBENZENE		146 40.33	990	3404	3404.00	NO CALIB	100
)	1,4-DICHLOROBENZENE		146 40.33	990	3404	3404.00	NO CALIB	100

* Compound is ISTD

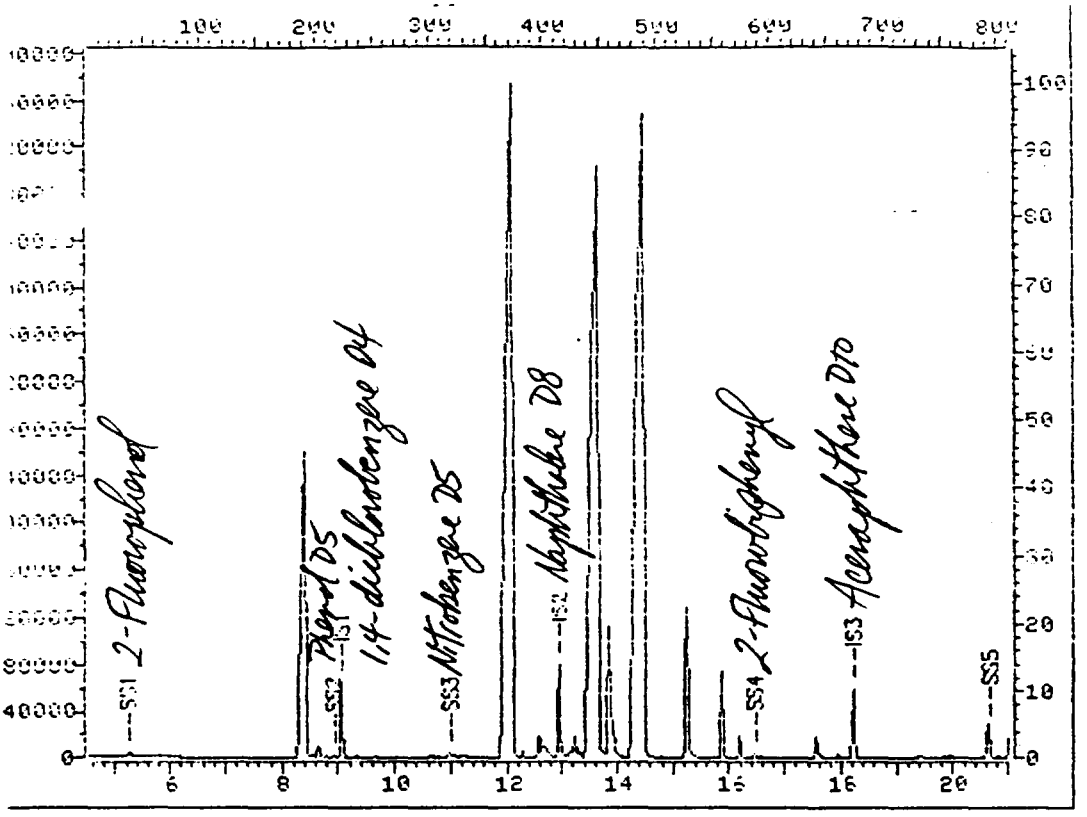
TOTAL ION CHROMATOGRAM



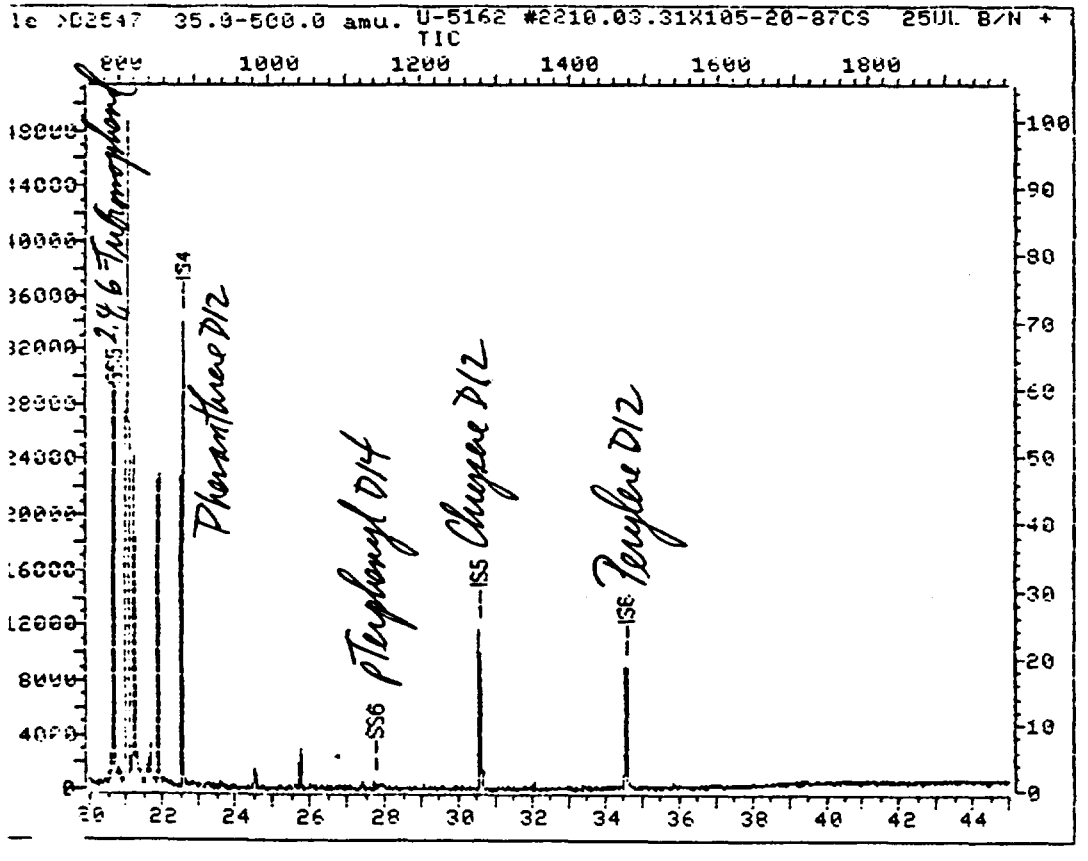
Data File: >D2547::D1
Name: U-5162 #2210.03.31X1 DC-GW-32
Misc: 05-20-87CS 25UL B/N + 25UL A/P + 450UL MECL2 + 5UL ISBTL# 5

Id File: BNADR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870520 14:58

Operator ID: USER6
Quant Time: 870520 19:37
Injected at: 870520 18:50


2-Fluorophenol
Phenol D5
1,4-dichlorobenzene D4
Nitrobenzene D5
Naphthalene D8
2-Fluorobiphenyl
Acenaphthene D10
SS1
SS2
IS1
SS3
IS2
SS4
IS3
SS5

DC-GW-32.


le >D2547 35.0-500.0 amu. U-5162 #2210.03.31X105-20-87CS 25UL 8/N +
TIC
2,4,6-Tribromophenol
Phenanthrene D12
pTerphenyl D14
Chrysene D12
Perylene D12
SS5
IS4
SS6
IS5
IS6

QUANT REPORT

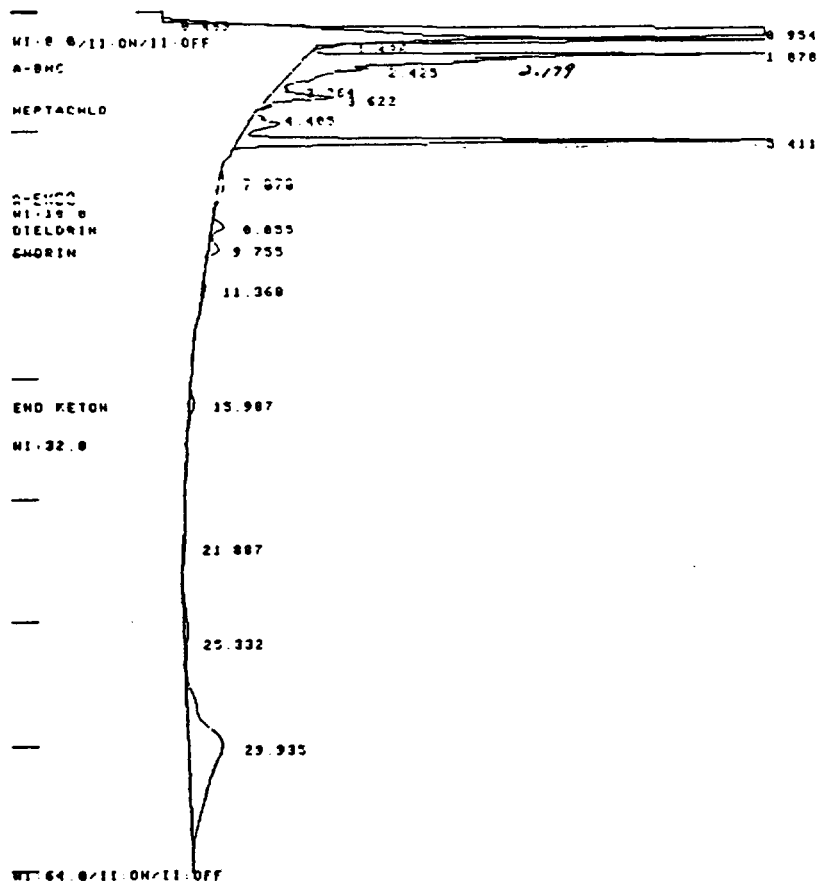
ator ID: USER6 Quant Rev: 4 Quant Time: 870520 19:37
utput File: ^D2547::Q2 Injected at: 870520 18:50
ata File: >D2547::D1 Dilution Factor: 10.00
ame: U-5162 #2210.03.31X1 DC-GW-32
isc: 05-20-87CS 25UL B/N + 25UL A/P + 450UL MECL2 + 5UL ISBTL# 5

D File: BNADR::D2
itle: BNA ID FILE FOR THE HP 5970 (B)
ast Calibration: 870520 14:58

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-D4	(IS)	152	9.05	223	22799	40.00 UG/L	82
2)	PHENOL-D5	(SURR)	99	8.90	216	2225	23.34 UG/L 12	91
5)	2-FLUOROPHENOL	(SURR)	112	5.22	35	2580	43.07 UG/L 22	89
7)	ANILINE		93	8.41	192	418423	5674.22 UG/L	86
~~8)~~	~~BIS(2-CHLOROETHYL)ETHER~~		~~93~~	~~8.41~~	~~192~~	~~418423~~	~~6025.75 UG/L~~ NOGM	20
~~9)~~	~~1,3-DICHLOROBENZENE~~		~~146~~	~~9.09~~	~~225~~	~~2865~~	~~35.62 UG/L~~ NOGM	96
0)	1,4-DICHLOROBENZENE		146	9.09	225	2865	34.51 UG/L	95
5)	2-CHLOROPHENOL		128	8.62	202	8466	129.07 UG/L	99
6)	4-METHYL PHENOL		108	11.23	330	1726	37.19 UG/L	86
9)	*NAPHTHALENE-D8	(IS)	136	12.94	414	69955	40.00 UG/L	100
0)	NITROBENZENE-D5	(SURR)	82	10.98	318	3329	43.98 UG/L 44	97
4)	2,4-DIMETHYLPHENOL		122	12.67	401	11479	245.97 UG/L	94
9)	NAPHTHALENE		128	12.98	416	6655	35.90 UG/L	100
0)	4-CHLOROANILINE		127	13.65	449	993044	14785.47 UG/L E	98
4)	*ACENAPHTHENE-D10	(IS)	162	18.22	673	27965	40.00 UG/L	91
8)	2-FLUOROBIPHENYL	(SURR)	172	16.45	586	4137	40.20 UG/L 40	90
1)	DIMETHYL PHTHALATE		163	17.55	640	7860	98.01 UG/L	100
~~1)~~	~~DIMETHYL PHTHALATE~~		~~163~~	~~18.22~~	~~673~~	~~5710~~	~~71.20 UG/L~~ NOGM	100
8)	2,4,6-TRIBROMOPHENOL	(SURR)	330	20.66	793	1662	42.43 UG/L 21	92
~~2)~~	~~2,6-DINITROTOLUENE~~		~~165~~	~~18.22~~	~~673~~	~~3854~~	~~226.77 UG/L~~ NOGM	100
5)	*PHENANTHRENE-D10	(IS)	188	22.56	886	29610	40.00 UG/L	99
5)	*CHRYSENE-D12	(IS)	240	30.56	1279	14303	40.00 UG/L	100
8)	TERPHENYL-D14	(SURR)	244	27.73	1140	922	31.25 UG/L 31	100 LOW
4)	*PERYLENE-D12	(IS)	264	34.55	1475	13849	40.00 UG/L	100

* Compound is ISTD

CHART SPEED 0.5 CM/MIN
ATTEN: 8 ZERO: 10% 5 MIN/TICK



CHANNEL: 1A - 1 TITLE: RUN# 15 20:29 21 APR 87

DC-GW-32 SAMPLE: 2210 METHOD: CEPA CALCULATION: ES - ANALYS

PEAK NO	PEAK NAME	RESULT UG/L	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	WI/2 (SEC)
1		0.0000	1.303		272537	BV	3.38
2		0.0000	1.878		407597	VV	5.44
3		0.0000	2.072		177225	VV	? 9.38
4	~~A-BHC~~	~~[illegible]~~	2.179	-0.011	172646	VV	? 9.69
5	~~G-BHC~~	3.5630	2.425	0.005	189988	VV	? 11.44
6		0.0000	3.622		149630	VV	? 16.19
7		0.0000	4.718		81834	VV	15.06
8		0.0000	5.411		905843	VB	11.56
9	~~DIELDRIN~~	0.3657	8.055	0.125	47917	BV	23.69
10	~~ENDRIN~~	0.3671	9.755	0.035	37227	VB	19.44
11	~~END KETON~~	0.2581	15.987	-0.243	31627	BB	34.81
12		0.0000	25.332		41367	BV	?192.00
13		0.0000	29.935		741137	VB	?246.81
TOTALS:		5.7499		-0.009	3416575		

DETECTED PKS: 28 REJECTED PKS: 15

DIVISOR: 1.00000 MULTIPLIER: 200.00000

NOISE: 11.4 OFFSET: 5

RACK: 1 VIAL: 15 INJ: 1

NOTES:
NOTEBOOK:297-1,3 ANALYST:RICHARD SAMSON
SECURE AREA: O JOB#:U-5162
INST: VARIAN 6000# 2A ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
LIQUID PHASE: 3% OV-1
CARRIER GAS: N2 @ 60 ML/MIN
DET: 300 C INJ: 220 C
200 C ISOTHERMAL 4 UL INJECTION
PRIMARY ANALYSIS AUTOSAMPLER
DEAD CREEK

SAMPLE NUMBER DC-GW-33

481095

Sample Number
DC-GW-33

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Ecology & Environment, Inc. Case No: U-5157, 5162

Lab Sample ID No: 2211 QC Report No:

Sample Matrix: Water Contract No: IL-3140

Data Release Authorized By: C. Hoffmann Date Sample Received: 3-25-87

Volatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 3-30-87

Conc./Dil Factor: 20 pH

Percent Moisture: (Not Decanted)

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	200u
74-83-9	Bromomethane	200u
75-01-4	Vinyl Chloride	200u
75-00-3	Chloroethane	200u
75-09-2	Methylene Chloride	440
67-64-1	Acetone	210
75-15-0	Carbon Disulfide	100u
75-35-4	1, 1-Dichloroethene	100u
75-34-3	1, 1-Dichloroethane	100u
156-60-5	Trans-1, 2-Dichloroethene	110
67-66-3	Chloroform	100u
107-06-2	1, 2-Dichloroethane	100u
78-93-3	2-Butanone	560
71-55-6	1, 1, 1-Trichloroethane	51J
56-23-5	Carbon Tetrachloride	100u
108-05-4	Vinyl Acetate	200u
75-27-4	Bromodichloromethane	100u

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	100u
10061-02-6	Trans-1, 3-Dichloropropene	100u
79-01-6	Trichloroethene	800
124-48-1	Dibromochloromethane	100u
79-00-5	1, 1, 2-Trichloroethane	100u
71-43-2	Benzene	1800
10061-01-5	cis-1, 3-Dichloropropene	100u
110-75-8	2-Chloroethylvinylether	200u
75-25-2	Bromoform	100u
591-78-6	4-Methyl-2-Pentanone	150
108-10-1	2-Hexanone	200u
127-18-4	Tetrachloroethene	100u
79-34-5	1, 1, 2, 2-Tetrachloroethane	100u
108-88-3	Toluene	83J
108-90-7	Chlorobenzene	1200
100-41-4	Ethylbenzene	100u
100-42-5	Styrene	100u
	Total Xylenes	100u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration, dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g. 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS.

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

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

E This flag indicates an approximate concentration. The amount detected in the analysis exceeds the calibrated range.

234

Laboratory Name: Ecology & Environment Inc.

Case No: W-5157, 5162

Sample Number: DC-GW-33

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 3-30-87

Date Analyzed: 4-27-87

Conc/Dil Factor: 2

Percent Moisture (Decanted): -

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)	
108-95-2	Phenol	2	J
111-44-4	bis(-2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	9	J
541-73-1	1 3-Dichlorobenzene	4	J
106-46-7	1 4-Dichlorobenzene	350	
100-51-6	Benzyl Alcohol	10	U
95-50-1	1, 2-Dichlorobenzene	6	J
95-48-7	2-Methylphenol	10	U
39638-32-9	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	11	
120-82-1	1 2, 4-Trichlorobenzene	280	
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	110	
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	3	J
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	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
-09-2	3-Nitroaniline	50	U

CAS Number		ug/l or ug/Kg (Circle One)	
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
606-20-2	2 6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4, 6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	12	B
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
117-81-7	bis(2-Ethylhexyl)Phthalate	4	BJ
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	2	BJ
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

Laboratory Name ecology and environment, inc.

Case No U-5157,5162

Sample Number DC-GW-33

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration (Low) Medium (Circle One)

Date Extracted/Prepared 3-31-87

Date Analyzed 4-21-87

Conc/Dil Factor 100

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☑Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/l or ug/Kg) (Circle One)
319-84-6	Alpha-BHC	70 C
319-85-7	Beta-BHC	5.0U
319-86-8	Delta-BHC	5.0U
58-89-9	Gamma-BHC (Lindane)	5.0U
76-44-8	Heptachlor	5.0U
309-00-2	Aldrin	5.0U
1024-57-3	Heptachlor Epoxide	5.0U
959-98-8	Endosulfan I	5.0U
60-57-1	Dieldrin	10U
72-55-9	4,4'-DDE	10U
72-20-8	Endrin	10U
33213-65-9	Endosulfan II	10U
72-54-8	4,4'-DDD	10U
1031-07-8	Endosulfan Sulfate	10U
50-29-3	4,4'-DDT	10U
72-43-5	Methoxychlor	50U
53494-70-5	Endrin Ketone	10U
57-74-9	Chlordane	50U
8001-35-2	Toxaphene	100U
12674-11-2	Aroclor-1016	50U
11104-28-2	Aroclor-1221	50U
11141-16-5	Aroclor-1232	50U
53469-21-9	Aroclor-1242	50U
12672-29-6	Aroclor-1248	50U
11097-69-1	Aroclor-1254	100U
11096-82-5	Aroclor-1260	100U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 4,000 or W_s _____ V_t 10,000 V_i 4

7/85

Laboratory Name ecology and environment, inc.

Case No 4-5157, 5162

Sample Number DC-GW-33

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.	Dichlorobenzene Isomer	VOA	40.34	3300 J
2.				
3.	Chloroaniline Isomer	BNA	12.27	36 J
4.	Ethylaniline Isomer		12.97	22 J
5.	Tetrachlorobenzene Isomer		16.25	34 J
6.	Tetrachlorobenzene Isomer		17.15	310 J
7 608935	Pentachlorobenzene		19.43	23 J
8.	Unknown		20.78	80 BJ
9.	Unknown		30.34	32 BJ
10.	Unknown	—	34.46	160 BJ
11.	BHC	BNA	22.11	—
12.				
13.				
14.				
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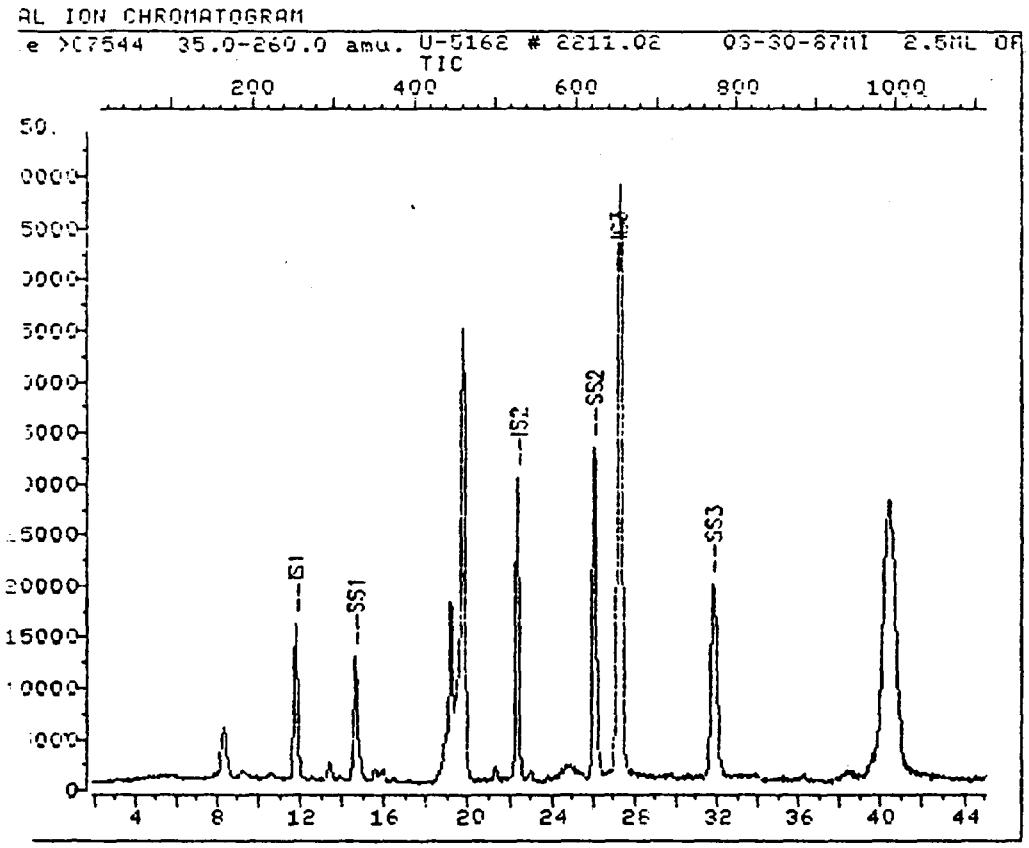
30				

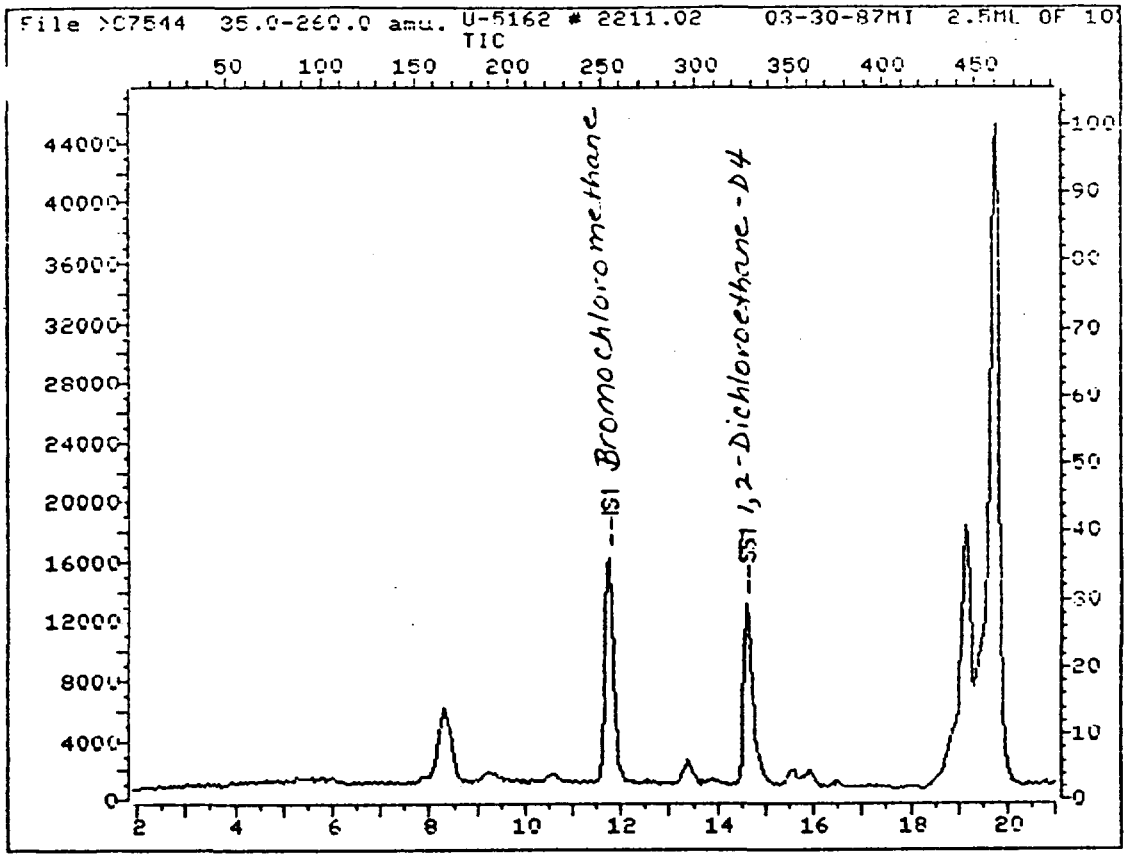


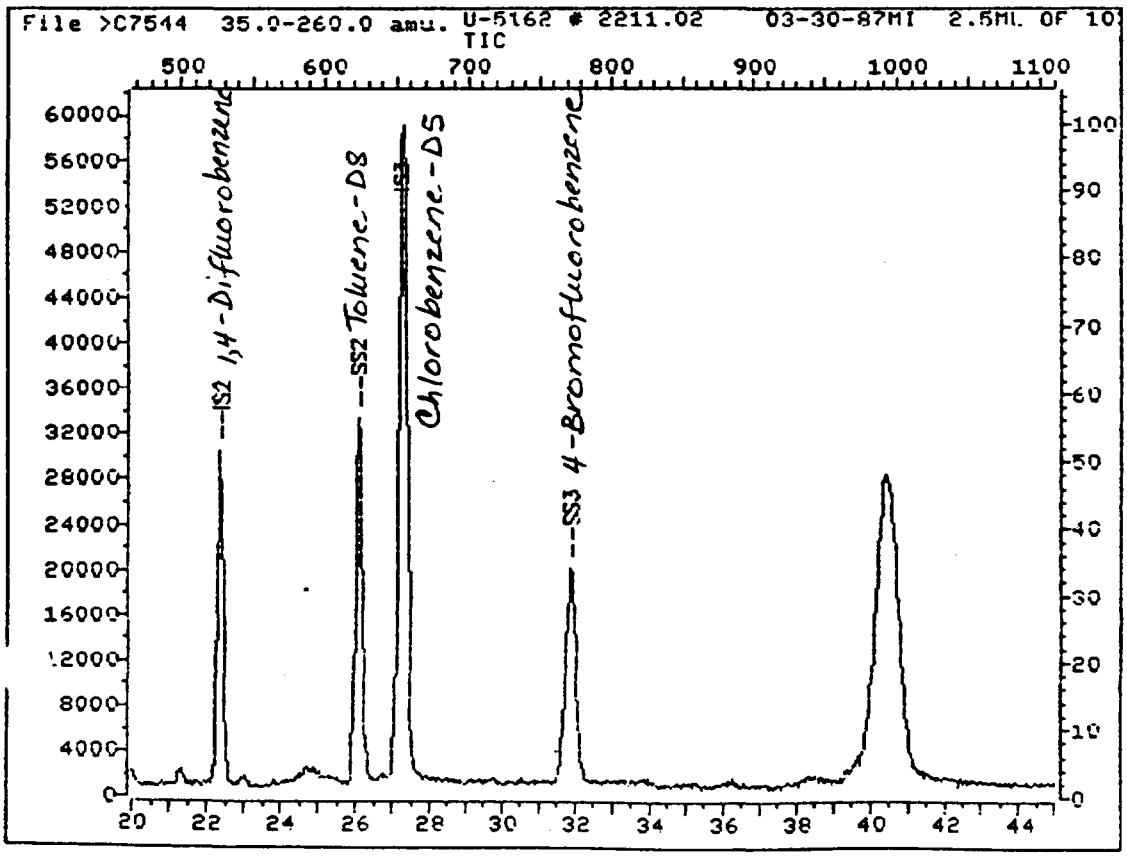
Data File: >C7544::D3
Name: U-5162 # 2211.02 DC-GW-33
Misc: 03-30-87MI 2.5ML OF 10X SAMPLE + 2.5ML DI + 10UL IS/S

Id File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870330 11:28

Operator ID: USER8
Quant Time: 870330 21:06
Injected at: 870330 20:20

DC-GW-33


File >C7544 35.0-260.0 amu. U-5162 # 2211.02 03-30-87MI 2.5ML OF 10
TIC
--IS1 Bromochloromethane
--SS1 1,2-Dichloroethane-D4


File >C7544 35.0-260.0 amu. U-5162 # 2211.02 03-30-87MI 2.5ML OF 10
TIC
--IS2 1,4-Difluorobenzene
--SS2 Toluene-D8
--IS3 Chlorobenzene-D5
--SS3 4-Bromofluorobenzene

QUANT REPORT

Operator ID: USER8 Quant Rev: 4 Quant Time: 870330 21:06
Output File: ^C7544::Q2 Injected at: 870330 20:20
Data File: >C7544::D3 Dilution Factor: 1.00
Name: U-5162 # 2211.02 DC-GW-33
Misc: 03-30-87MI 2.5ML OF 10X SAMPLE + 2.5ML DI + 10UL IS/S

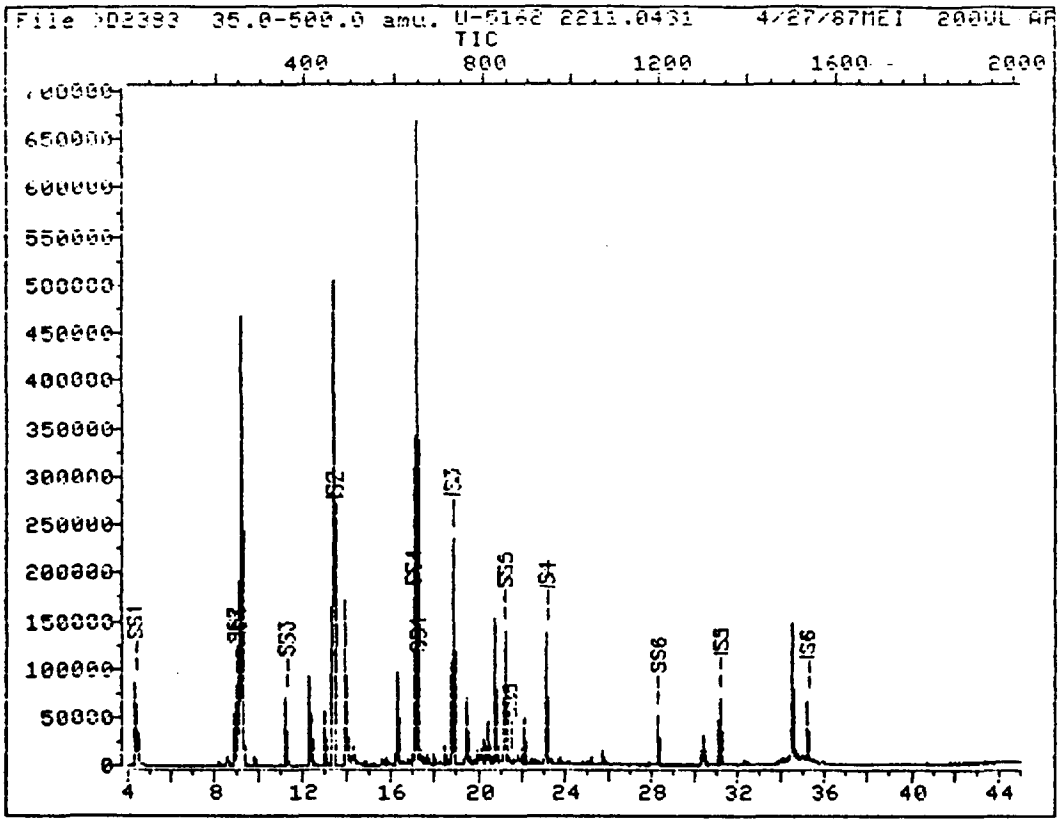
20x

ID File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870330 11:28

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE (IS)	128	11.77	255	25489	50.00	UG/L	100
6)	METHYLENE CHLORIDE	84	8.32	166	21636	22.19	UG/L	100
7)	ACETONE	43	9.21	189	4956	10.30	UG/L	100
12)	TRANS-1,2-DICHLOROETHENE	96	13.40	297	5184	5.30	UG/L	93
15)	1,2-DICHLOROETHANE-D4(SURR)	65	14.60	328	52734	45.51	UG/L 91	88
16)	*1,4-DIFLUOROBENZENE (IS)	114	22.36	528	128523	50.00	UG/L	100
17)	2-BUTANONE	72	14.84	334	3001	28.14	UG/L	100
18)	1,1,1-TRICHLOROETHANE	97	15.92	362	4519	2.55	UG/L	99
~~22)~~	~~1,2-DICHLOROPROPANE~~	~~63~~	~~19.14~~	~~445~~	~~456~~	~~.41~~	~~UG/L~~ Cut	33
24)	TRICHLOROETHENE	130	19.14	445	46871	39.81	UG/L	91
27)	BENZENE	78	19.76	461	298359	89.88	UG/L	100
~~28)~~	~~CIS-1,3-DICHLOROPROPENE~~	~~75~~	~~19.73~~	~~460~~	~~6947~~	~~6.17~~	~~UG/L~~ Cut	100
31)	*CHLOROBENZENE-D5 (IS)	117	27.22	653	103894	50.00	UG/L	100
32)	4-METHYL-2-PENTANONE	43	22.98	544	5662	7.38	UG/L	82
36)	TOLUENE-D8 (SURR)	98	26.05	623	127546	43.81	UG/L 88	95
37)	TOLUENE	92	26.24	628	9191	4.17	UG/L	94
38)	CHLOROBENZENE	112	27.30	655	157803	58.01	UG/L	98
40)	4-BROMOFLUOROBENZENE(SURR)	95	31.84	772	69121	46.74	UG/L 94	100
43)	1,3-DICHLOROBENZENE	146	40.34	991	111060	111060.0	NO CALIB	100
44)	1,2-DICLHLOROBENZENE	146	40.34	991	111060	111060.0	NO CALIB	100
45)	1,4-DICHLOROBENZENE	146	40.34	991	111060	111060.0	NO CALIB	100

* Compound is ISTD

TOTAL ION CHROMATOGRAM

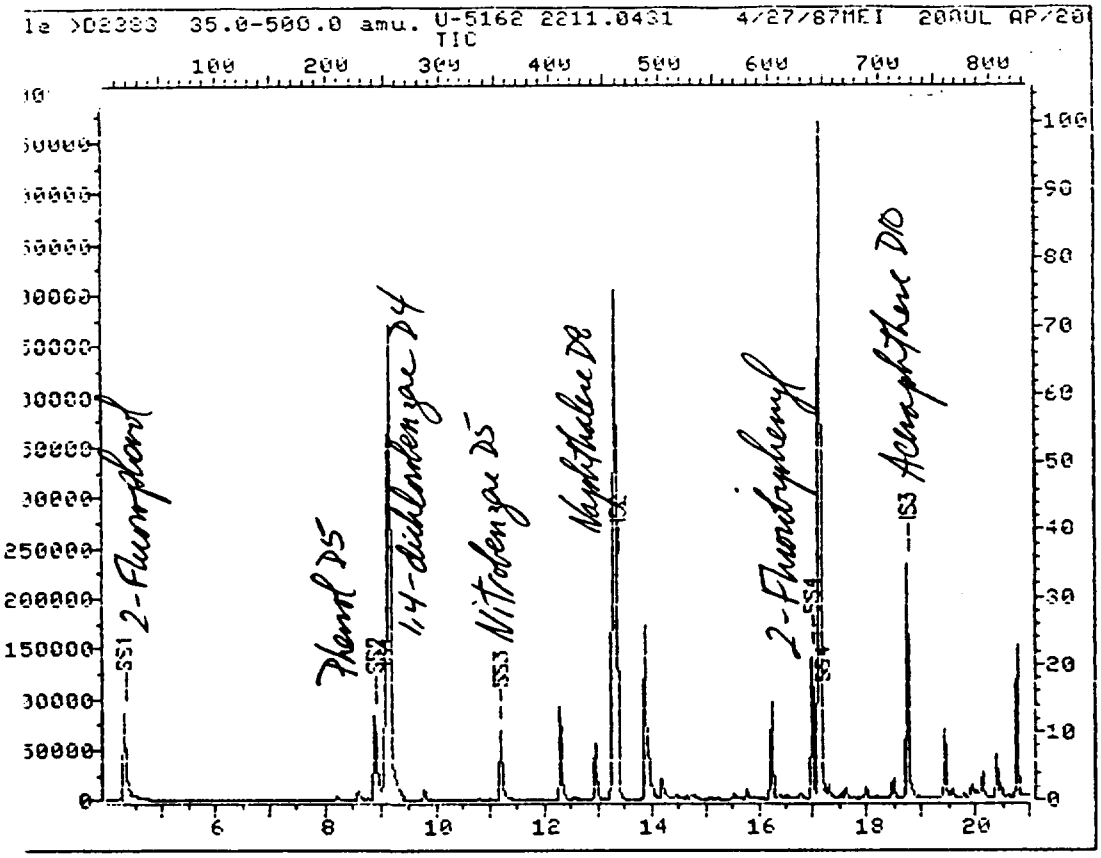


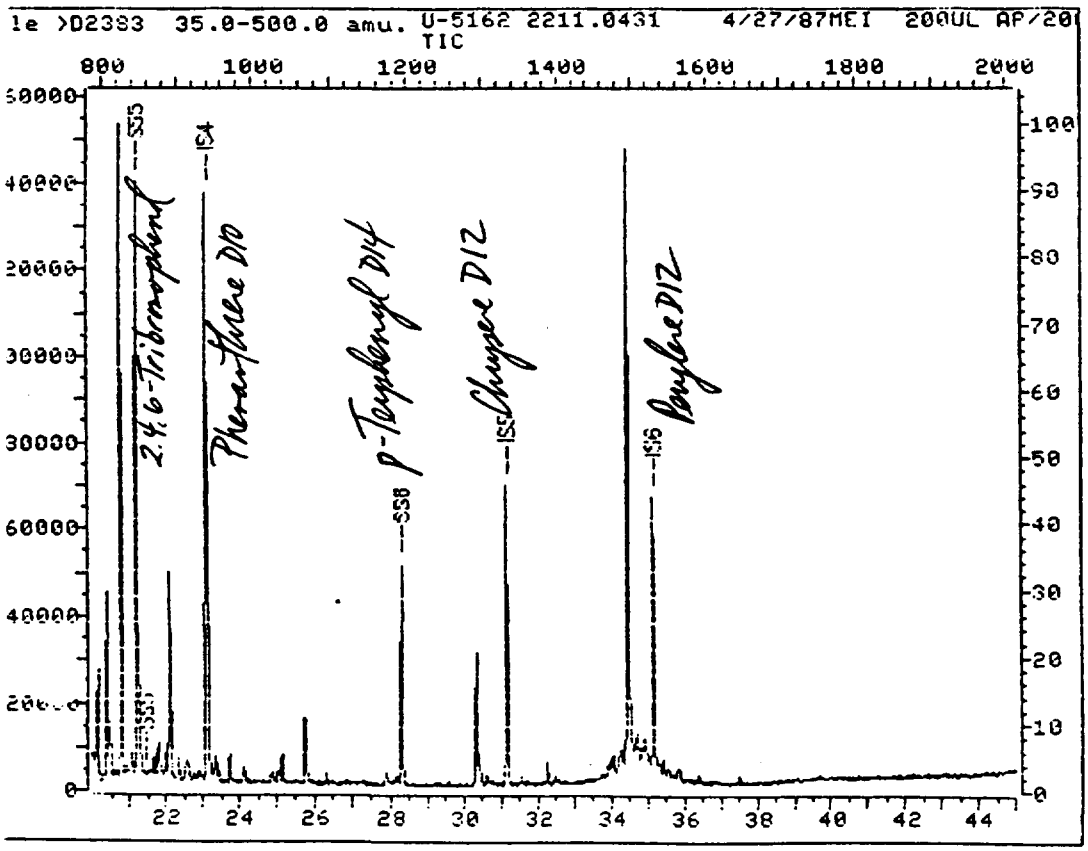
Data File: >D2383::D3
Name: U-5162 2211.0431 DC-GW-33
Misc: 4/27/87MEI 200UL AP/200UL BN + 4UL IS (2X) BTL# 8

Id File: BNADR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870427 17:24

Operator ID: USER6
Quant Time: 870427 21:50
Injected at: 870427 21:03

DC-GW-33


le >D2383 35.0-500.0 amu. U-5162 2211.0431 4/27/87MEI 200UL AP/20
TIC
2-Fluorophenol
Phenol D5
1,4-dichlorobenzene D4
Nitrobenzene D5
Naphthalene D8
2-Fluorobiphenyl
Acenaphthene D10


le >D2383 35.0-500.0 amu. U-5162 2211.0431 4/27/87MEI 200UL AP/20
TIC
2,4,6-Tribromophenol
Phenanthrene D10
p-Terphenyl D14
Chrysene D12
Perylene D12

QUANT REPORT

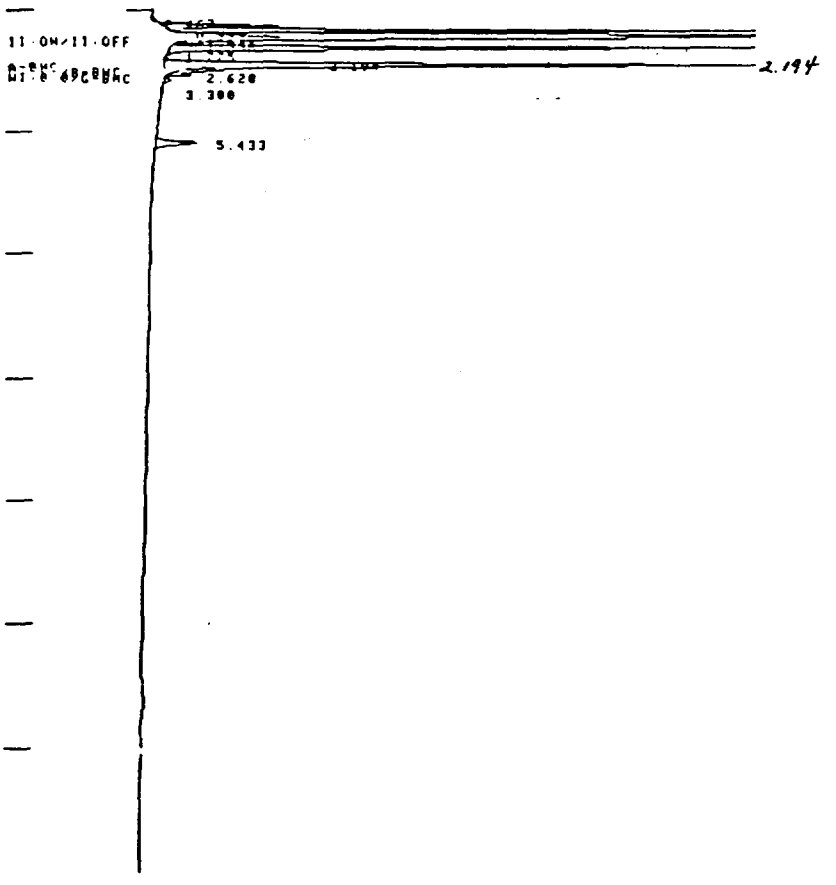
perator ID: USER6 Quant Rev: 4 Quant Time: 870427 21:50
utput File: ^D2383::Q2 Injected at: 870427 21:03
ata File: >D2383::D3 Dilution Factor: 2.00
ar U-5162 2211.0431 DC-GW-33
isc: 4/27/87MEI 200UL AP/200UL BN + 4UL IS (2X) BTL# 8

D File: BNADR::D2
itle: BNA ID FILE FOR THE HP 5970 (B)
ast Calibration: 870427 17:24

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-D4	(IS)	152	9.07	250	58046	40.00 UG/L	90
2)	PHENOL-D5	(SURR)	99	8.89	241	92671	101.54 UG/L	95
5)	2-FLUOROPHENOL	(SURR)	112	4.31	16	70575	92.10 UG/L	76
6)	PHENOL		94	8.75	234	2051	1.76 UG/L	41
7)	ANILINE		93	8.22	208	5643	5.19 UG/L	93
9)	1,3-DICHLOROBENZENE		146	8.89	241	3768	3.77 UG/L	96
9)	~~1,3-DICHLOROBENZENE~~		~~146~~	~~9.18~~	~~255~~	~~376450~~	~~353.08 UG/L~~	99
10)	~~1,4-DICHLOROBENZENE~~		~~146~~	~~8.99~~	~~241~~	~~3768~~	~~3.53 UG/L~~ CW	98
10)	1,4-DICHLOROBENZENE		146	9.18	255	376450	353.08 UG/L	98
2)	1,2-DICHLOROBENZENE		146	9.77	284	6610	6.15 UG/L	97
5)	2-CHLOROPHENOL		128	8.59	226	8080	8.87 UG/L	94
7)	~~N-NITROSO-DI-N-PROPYLAMINE~~		~~70~~	~~11.19~~	~~354~~	~~11180~~	~~9.89 UG/L~~ CW	86
9)	*NAPHTHALENE-D8	(IS)	136	13.37	461	207816	40.00 UG/L	100
0)	NITROBENZENE-D5	(SURR)	82	11.19	354	65492	57.91 UG/L	97
7)	2,4-DICHLOROPHENOL		162	13.25	455	8190	11.17 UG/L	93
7)	~~2,4-DICHLOROPHENOL~~		~~162~~	~~13.31~~	~~458~~	~~16198~~	~~22.89 UG/L~~ CW	95
8)	1,2,4-TRICHLOROBENZENE		180	13.33	459	281126	284.55 UG/L	100
9)	~~NAPHTHALENE~~		~~128~~	~~13.42~~	~~463~~	~~1967~~	~~.71 UG/L~~ No Opt	100
9)	~~NAPHTHALENE~~		~~128~~	~~13.08~~	~~486~~	~~8685~~	~~3.13 UG/L~~ CW	
0)	4-CHLOROANILINE		127	13.88	486	101096	108.25 UG/L	96
4)	*ACENAPHTHENE-D10	(IS)	162	18.76	725	112404	40.00 UG/L	96
6)	2,4,6-TRICHLOROPHENOL		196	16.78	628	1927	3.46 UG/L	96
6)	~~2,4,6-TRICHLOROPHENOL~~		~~196~~	~~17.00~~	~~639~~	~~2165~~	~~3.89 UG/L~~	88
7)	~~2,4,5-TRICHLOROPHENOL~~		~~196~~	~~16.78~~	~~628~~	~~1927~~	~~3.53 UG/L~~ CW	95
7)	~~2,4,5-TRICHLOROPHENOL~~		~~196~~	~~17.00~~	~~639~~	~~2165~~	~~3.97 UG/L~~	87
7)	~~2,4,5-TRICHLOROPHENOL~~		~~196~~	~~17.29~~	~~653~~	~~4511~~	~~8.27 UG/L~~	93
8)	2-FLUOROBIPHENYL	(SURR)	172	16.98	638	113421	56.82 UG/L	94
8)	~~2-FLUOROBIPHENYL~~	~~(SURR)~~	~~172~~	~~17.17~~	~~647~~	~~319~~	~~.16 UG/L~~ CW	75
1)	~~DIMETHYL PHTHALATE~~		~~163~~	~~18.76~~	~~725~~	~~21701~~	~~11.24 UG/L~~	100
8)	2,4,6-TRIBROMOPHENOL	(SURR)	330	21.21	845	48699	153.65 UG/L	99
8)	~~2,4,6-TRIBROMOPHENOL~~	~~(SURR)~~	~~330~~	~~21.43~~	~~854~~	~~190~~	~~.60 UG/L~~	98
2)	~~2,6-DINITROTOLUENE~~		~~165~~	~~18.76~~	~~725~~	~~14797~~	~~33.68 UG/L~~ CW	100
2)	~~2,6-DINITROTOLUENE~~		~~165~~	~~18.82~~	~~728~~	~~1891~~	~~4.31 UG/L~~	100
5)	*PHENANTHRENE-D10	(IS)	188	23.13	939	122752	40.00 UG/L	90
7)	~~N-NITROSODIPHENYLAMINE~~		~~169~~	~~20.68~~	~~815~~	~~1618~~	~~1.81 UG/L~~ CW	69
3)	DI-N-BUTYLPHTHALATE		149	25.74	1067	20992	12.46 UG/L	99
5)	*CHRYSENE-D12	(IS)	240	31.16	1333	67701	40.00 UG/L	100
8)	TERPHENYL-D14	(SURR)	244	28.28	1192	44814	55.32 UG/L	100
2)	BIS(2-ETHYLHEXYL)PHTHALATE		149	32.26	1387	3299	4.57 UG/L	98
4)	*PERYLENE-D12	(IS)	264	35.15	1529	61682	40.00 UG/L	100
5)	~~DI-N-OCTYL PHTHALATE~~		~~149~~	~~33.99~~	~~1472~~	~~1684~~	~~1.25 UG/L~~ CW	100
5	DI-N-OCTYL PHTHALATE		149	34.07	1476	2962	2.31 UG/L	100
5)	~~DI-N-OCTYL PHTHALATE~~		~~149~~	~~34.24~~	~~1484~~	~~3230~~	~~2.91 UG/L~~	100
5)	~~DI-N-OCTYL PHTHALATE~~		~~149~~	~~34.46~~	~~1495~~	~~2690~~	~~2.10 UG/L~~ CW	100
5)	~~DI-N-OCTYL PHTHALATE~~		~~149~~	~~34.54~~	~~1499~~	~~2235~~	~~1.75 UG/L~~	100

* Compound is ISTD

CHART SPEED 0.5 CM/MIN
ATTEN: 8 ZERO: 10% 5 MIN/TICK



DC-GW-33.

CHANNEL: IA - 1 TITLE: RUN#16 21:09 21 APR 87

SAMPLE: 2211 METHOD: CERA CALCULATION: ES - ANALYS

PEAK NO	PEAK NAME	RESULT UG/L	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		0.0000	1.496		1329881	VV	3.94
+2	A-BHC	70.4323	2.194	0.004	2033469	VV	5.44
3		0.0000	5.433		61853	BB	11.56
TOTALS:		70.4323		0.004	3425203		

DETECTED PKS: 16 REJECTED PKS: 13

DIVISOR: 1.00000 MULTIPLIER: 1000.00000

NOISE: 11.4 OFFSET: -42

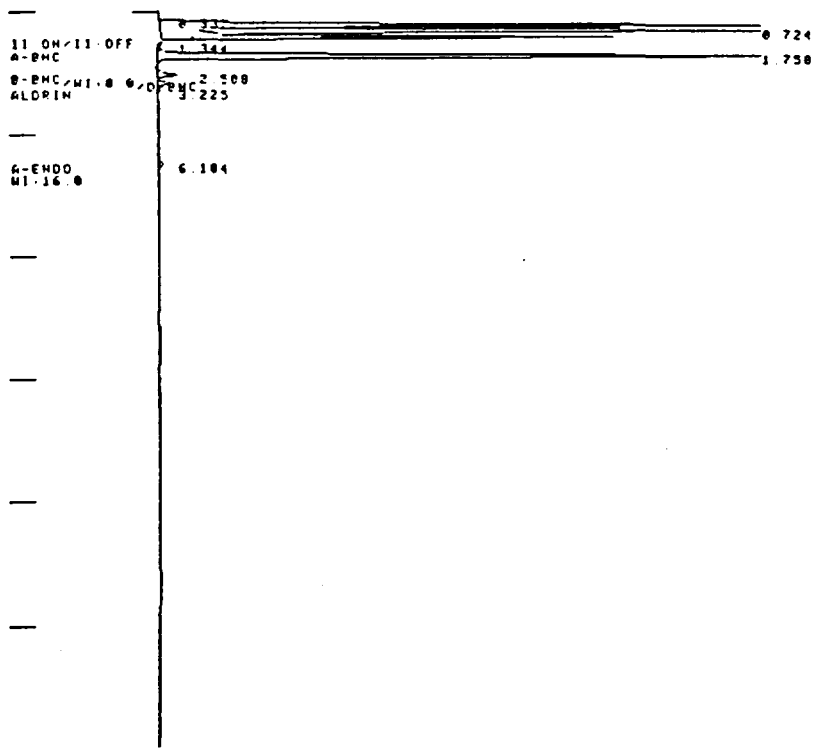
RACK: 2 VIAL: 1 INJ: 1

NOTES:
NOTEBOOK:297-1,3 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#:U-5162
INST: VARIAN 6000# 2A ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
LIQUID PHASE: 3% OV-1
CARRIER GAS: N2 @ 60 ML/MIN
DET: 300 C INJ: 220 C
200 C ISOTHERMAL 4 UL INJECTION
PRIMARY ANALYSIS AUTOSAMPLER
DEAD CREEK

POST RUN:
SAVE FILE: RAW 7010686

CHART SPEED 0.5 CM/MIN

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



DC-GW-33

CHANNEL: 1B - 1 TITLE: RUN# 7 21:40 22 APR 87

SAMPLE: 2211 METHOD: PEPA CALCULATION: ES - ANALYS

PEAK NO	PEAK NAME	RESULT UG/L	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	WI/2 (SEC)
1		0.0000	1.623		27391	VV ?	4.06
2	A-BHC	94.0472	1.750	0.010	4593728	VB	3.31
3	~~B-BHC~~	2.6018	2.508	0.008	41779	BB	6.81
4	~~B-BHC~~	0.7554	2.931	0.011	25529	BV	6.94
TOTALS:		97.4044		0.029	4688427		

DETECTED PKS: 14 REJECTED PKS: 10

DIVISOR: 1.00000 MULTIPLIER: 1000.00000

NOISE: 45.7 OFFSET: -19

NOTES:
NOTEBOOK:297-5 ANALYST:RICHARD SAMSON
SECURE AREA:D JOB #U-5162
INST:VARIAN 6000#2B ECD 10X1 ATTN:8X
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
200 C ISOTHERMAL 4 UL INJECTION
CONFIRMATION DEAD CREEK WATERS

POST RUN:
SAVE FILE: RAW 5152227

SAMPLE NUMBER DC-GW-34

481095

Sample Number
DC-GW-34

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Ecology & Environment Inc. Case No: U-5157, 5162

Lab Sample ID No: 2212 QC Report No:

Sample Matrix: Water Contract No: IL-3140

Data Release Authorized By: C Hojtowicz Date Sample Received: 3-25-87

Volatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 4-3-87

Conc./Dil Factor: 1 pH

Percent Moisture: (Not Decanted)

CAS Number		ug/l or ug/Kg (Circle One)	
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	5	U
67-64-1	Acetone	7	B
75-15-0	Carbon Disulfide	5	U
75-35-4	1, 1-Dichloroethene	5	U
75-34-3	1, 1-Dichloroethane	5	U
156-60-5	Trans-1, 2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
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

CAS Number		ug/l or ug/Kg (Circle One)	
78-87-5	1, 2-Dichloropropane	5	U
10061-02-6	Trans-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
10061-01-5	cis-1, 3-Dichloropropene	5	U
110-75-8	2-Chloroethylvinylether	10	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	20	
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
	Total Xylenes	5	U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS.

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

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

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Laboratory Name ecology and environment, inc.

Case No 4-5157, 5162

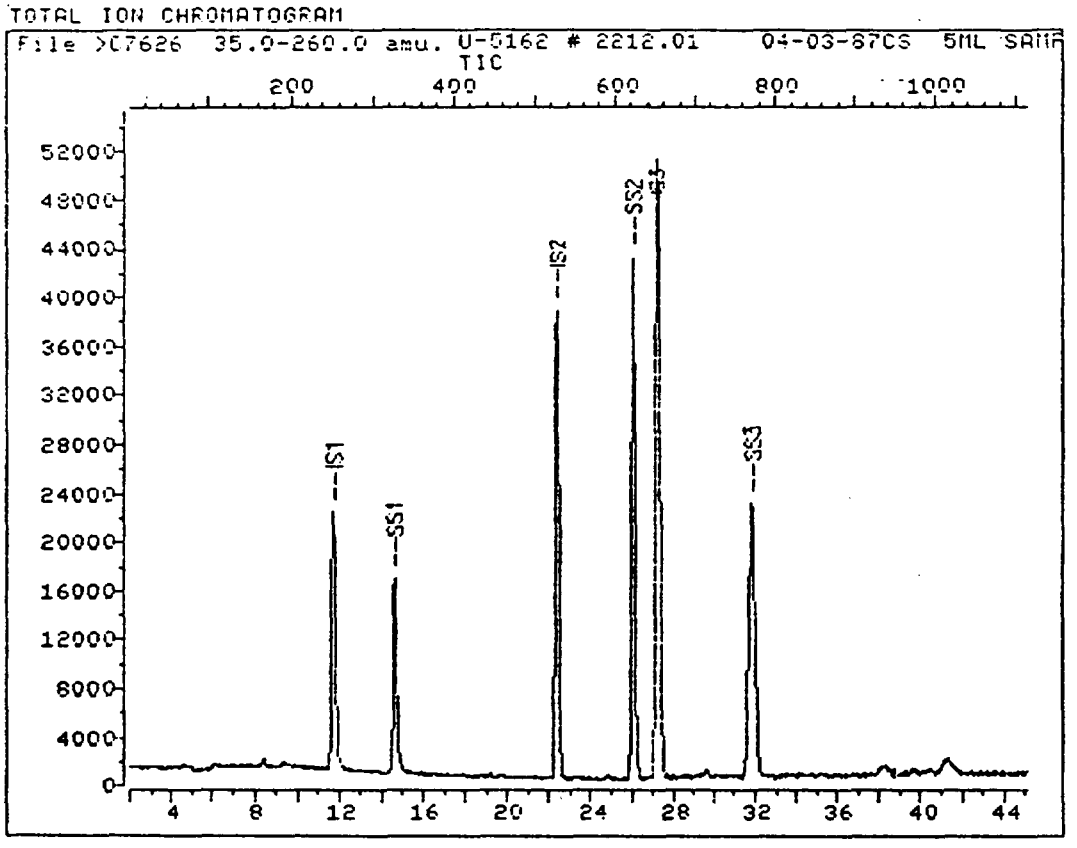
Sample Number DC-GW-34

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.	No TIC's in VOA fraction			
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				

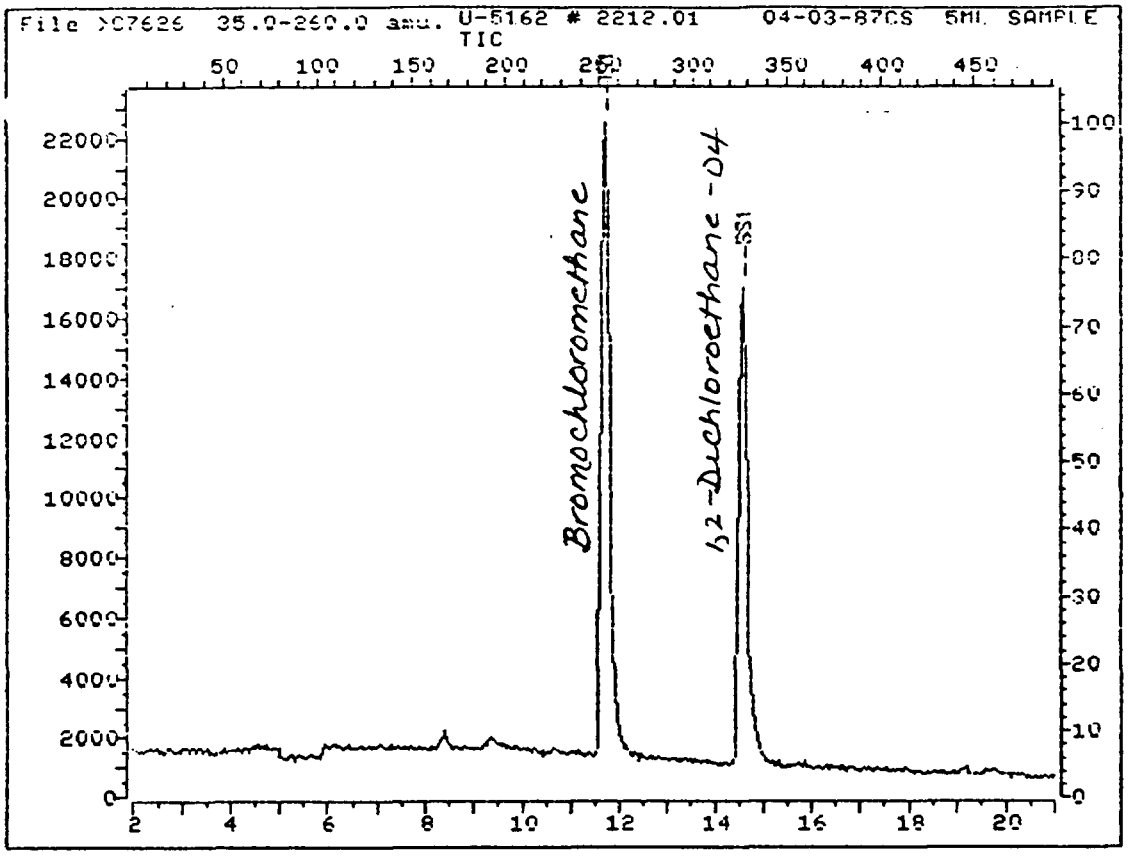
TOTAL ION CHROMATOGRAM



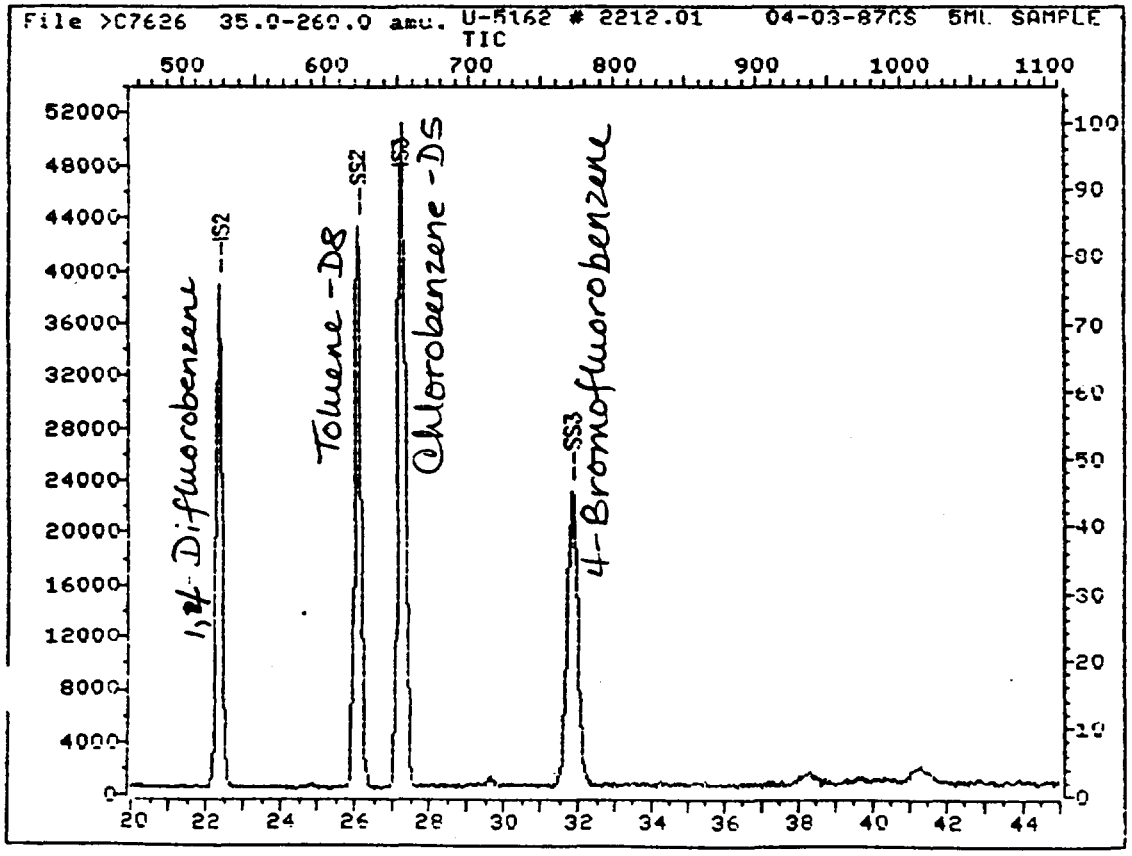
Data File: >C7626::D1
Name: U-5162 # 2212.01 JC-GW-34
Misc: 04-03-87CS 5ML SAMPLE + 10UL IS/SS

Id File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870403 10:07

Operator ID: USER8
Quant Time: 870403 13:35
Injected at: 870403 12:49


File >C7626 35.0-260.0 amu. U-5162 # 2212.01 04-03-87CS 5ML SAMPLE
TIC
Bromochloromethane
1,2-Dichloroethane-D4
--SS1

DC-GW-34


File >C7626 35.0-260.0 amu. U-5162 # 2212.01 04-03-87CS 5ML SAMPLE
TIC
1,4-Difluorobenzene
--IS2
Toluene-D8
--SS2
IS3
Chlorobenzene-D5
--SS3
4-Bromofluorobenzene

QUANT REPORT

pe ~tor ID: USER8 Quant Rev: 4 Quant Time: 870403 13:35
ut t File: ^C7626::Q2 Injected at: 870403 12:49
ata File: >C7626::D1 Dilution Factor: 1.00
ame: U-5162 # 2212.01 DC-GW-34
isc: 04-03-87CS 5ML SAMPLE + 10UL IS/SS

D File: VOACR::D2
itle: VOA ID FILE FOR HP-5995 (CONT. CAL.)
ast Calibration: 870403 10:07

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	(IS)	128 11.72	253	31619	50.00	UG/L	100
7)	ACETONE		43 9.32	191	3652	7.04	UG/L yes	100
15)	1,2-DICHLOROETHANE-D4	(SURR)	65 14.60	327	77092	46.29	UG/L	77
16)	*1,4-DIFLUOROBENZENE	(IS)	114 22.36	527	151087	50.00	UG/L	100
31)	*CHLOROBENZENE-D5	(IS)	117 27.17	651	123323	50.00	UG/L	100
36)	TOLUENE-D8	(SURR)	98 26.04	622	162129	45.89	UG/L	91
8)	CHLOROBENZENE		112 27.29	654	55978	19.57	UG/L yes	97
0)	4-BROMOFLUOROBENZENE	(SURR)	95 31.83	771	81759	45.20	UG/L	100

* Compound is ISTD

SAMPLE NUMBER DC-GW-35

481095

Sample Number
DC-GW-35

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Ecology & Environment, Inc. Case No: U-5157, 5162

Lab Sample ID No: 2213 QC Report No:

Sample Matrix: Water Contract No: IL-3140

Data Release Authorized By: C Krzyzowicz Date Sample Received: 3-25-87

Volatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 4-3-87

Conc./Dil Factor: 1 pH

Percent Moisture: (Not Decanted)

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	10u
74-83-9	Bromomethane	10u
75-01-4	Vinyl Chloride	10u
75-00-3	Chloroethane	10u
75-09-2	Methylene Chloride	2J
67-64-1	Acetone	13B
75-15-0	Carbon Disulfide	5u
75-35-4	1, 1-Dichloroethene	5u
75-34-3	1, 1-Dichloroethane	5u
156-60-5	Trans-1, 2-Dichloroethene	5u
67-66-3	Chloroform	1J
107-06-2	1, 2-Dichloroethane	5u
78-93-3	2-Butanone	10u
71-55-6	1, 1, 1-Trichloroethane	5u
56-23-5	Carbon Tetrachloride	5u
108-05-4	Vinyl Acetate	10u
75-27-4	Bromodichloromethane	5u

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	5u
10061-02-6	Trans-1, 3-Dichloropropene	5u
79-01-6	Trichloroethene	5u
124-48-1	Dibromochloromethane	5u
79-00-5	1, 1, 2-Trichloroethane	5u
71-43-2	Benzene	5u
10061-01-5	cis-1, 3-Dichloropropene	5u
110-75-8	2-Chloroethylvinylether	10u
75-25-2	Bromoform	5u
591-78-6	4-Methyl-2-Pentanone	10u
108-10-1	2-Hexanone	10u
127-18-4	Tetrachloroethene	5u
79-34-5	1, 1, 2, 2-Tetrachloroethane	5u
108-88-3	Toluene	5u
108-90-7	Chlorobenzene	5u
100-41-4	Ethylbenzene	5u
100-42-5	Styrene	5u
	Total Xylenes	5u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit report the value

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration, dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g. 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS

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

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

E This flag indicates an approximate concentration. The amount detected in the analysis exceeds the calibrated range.

253

Laboratory Name Ecology & Environment Inc.

Case No U-5157, 5162

Sample Number DC-GW-35

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared 3-30-87

Date Analyzed 4-27-87

Conc/Dil Factor 2

Percent Moisture (Decanted) -

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)	
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
39638-32-9	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-Chloroethoxyl)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	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	50	U

CAS Number		ug/l or ug/Kg (Circle One)	
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
606-20-2	2 6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4 6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	6	BJ
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
117-81-7	bis(2-Ethylhexyl)Phthalate	2	BJ
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	3	BJ
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	Dibenzo(a h)Anthracene	10	U
191-24-2	Benzo(g h i)Perylene	10	U

(1)-Cannot be separated from diphenylamine

Laboratory Name ecology and environment, inc.

Case No 4-5157, 5162

Sample Number DC-GW-35

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration (Low) Medium (Circle One)

Date Extracted/Prepared 3-31-87

Date Analyzed 4-21-87

Conc/Dil Factor 1

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☑Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/l or ug/Kg) (Circle One)
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 4,000 or W_s _____ V_t 10,000 V_i 4

Laboratory Name ecology and environment, inc.

Case No U-5157, 5162

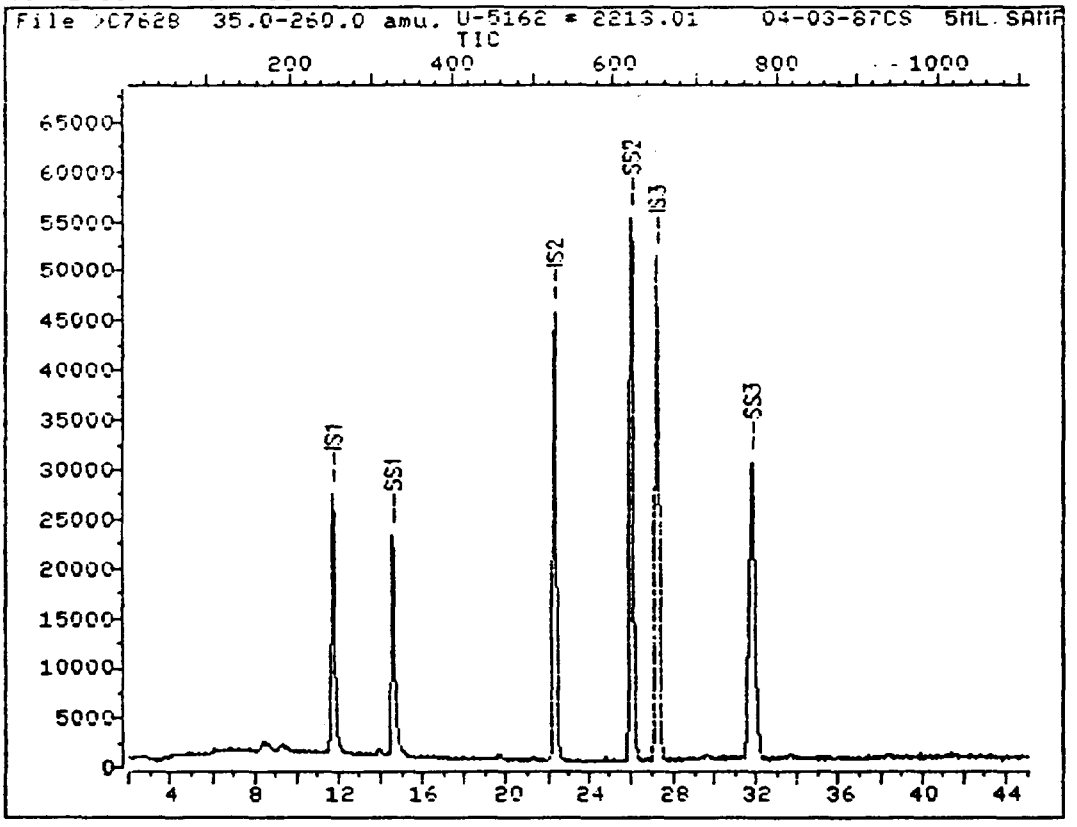
Sample Number DC-GW-35

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.	No TIC's in VOA fraction			
2.				
3.	Unknown	BNA	20.78	140 BJ
4.	Unknown		30.35	16 BJ
5.	Unknown Phthalate		34.47	79 BJ
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

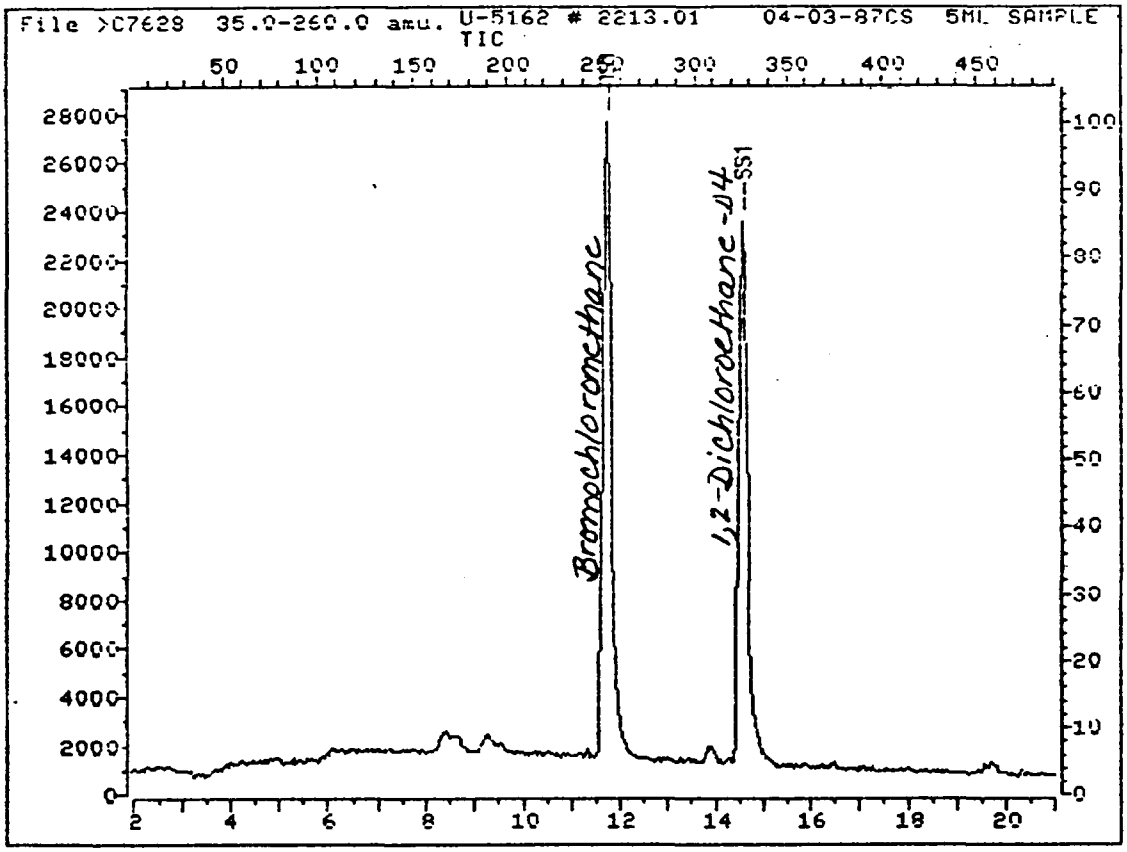


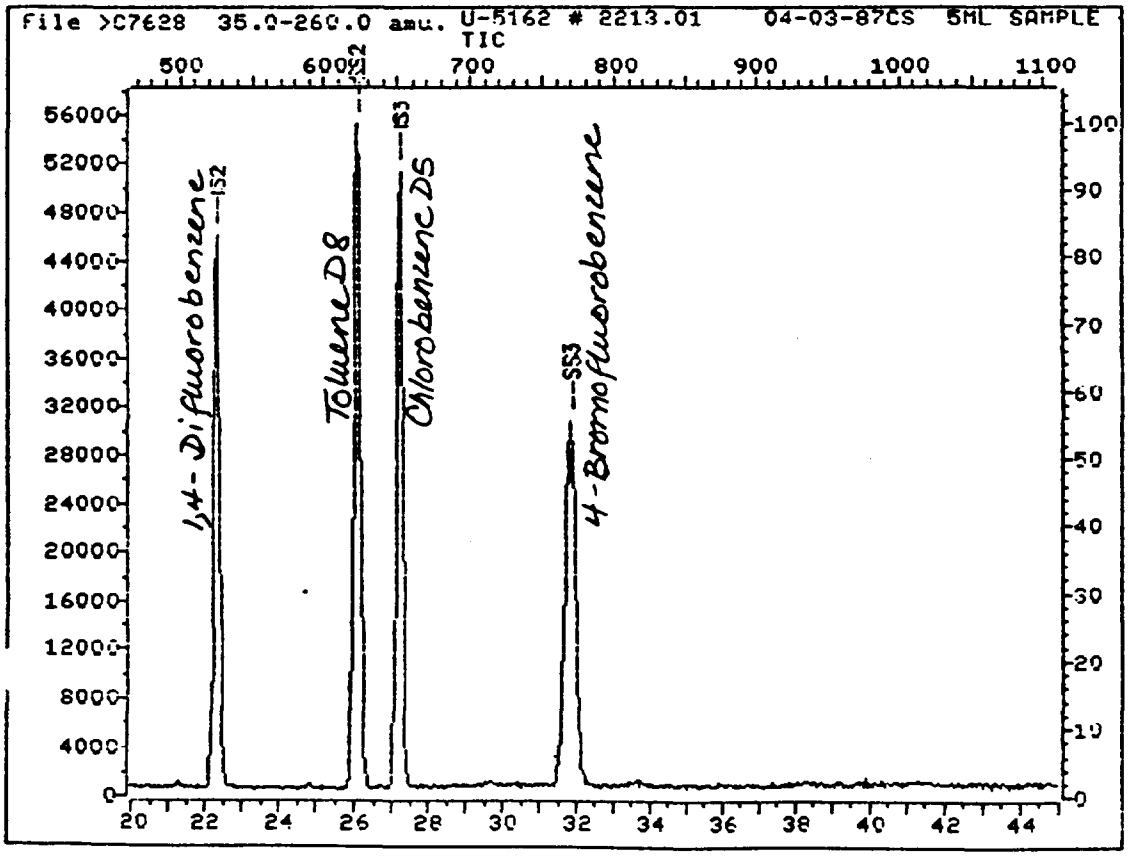
Data File: >C7628::D1
Name: U-5162 # 2213.01 DC-GW-35
Misc: 04-03-87CS 5ML SAMPLE + 10UL IS/SS

Id File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870403 10:07

Operator ID: USER8
Quant Time: 870403 15:20
Injected at: 870403 14:34

DC-GW-35


File >C7628 35.0-260.0 amu. U-5162 # 2213.01 04-03-87CS 5ML SAMPLE
TIC
Bromochloromethane
1,2-Dichloroethane-D4
SS1


File >C7628 35.0-260.0 amu. U-5162 # 2213.01 04-03-87CS 5ML SAMPLE
TIC
1,4-Difluorobenzene
IS2
Toluene D8
IS3
Chlorobenzene D5
SS3
4-Bromofluorobenzene

QUANT REPORT

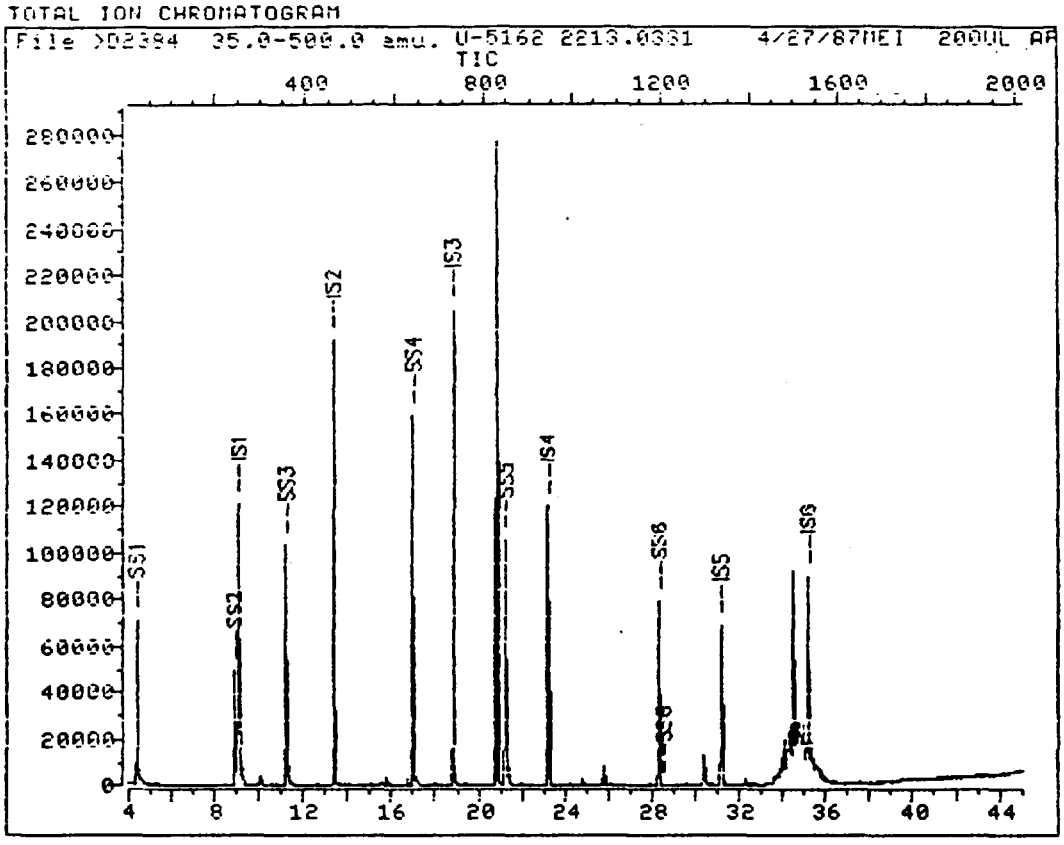
ɔe tor ID: USER8 Quant Rev: 4 Quant Time: 870403 15:20
ɹt, .t File: ^C7628::Q2 Injected at: 870403 14:34
ata File: >C7628::D1 Dilution Factor: 1.00
ɜme: U-5162 # 2213.01 DC-GW-35
isc: 04-03-87CS 5ML SAMPLE + 10UL IS/SS

) File: VOACR::D2
itle: VOA ID FILE FOR HP-5995 (CONT. CAL.)
ɜst Calibration: 870403 10:07

	Compound			R.T.	Scan#	Area	Conc	Units		q
1)	*BROMOCHLOROMETHANE	(IS)	128	11.72	253	40074	50.00	UG/L		100
6)	METHYLENE CHLORIDE		84	8.39	167	2970	2.13	UG/L	yes	100
7)	ACETONE		43	9.24	189	8227	12.51	UG/L	yes	100
13)	CHLOROFORM		83	13.90	309	3480	1.15	UG/L	yes	100
15)	1,2-DICHLOROETHANE-D4	(SURR)	65	14.56	326	104876	49.69	UG/L		82
16)	*1,4-DIFLUOROBENZENE	(IS)	114	22.32	526	181749	50.00	UG/L		100
31)	*CHLOROBENZENE-D5	(IS)	117	27.21	652	145738	50.00	UG/L		100
6)	TOLUENE-D8	(SURR)	98	26.04	622	209811	50.25	UG/L		97
7)	~~TOLUENE~~		~~92~~	~~26.24~~	~~627~~	~~2461~~	~~.87~~	~~UG/L~~	CW	95
0)	4-BROMOFLUOROBENZENE	(SURR)	95	31.83	770	103274	48.31	UG/L		100

* Compound is ISTD

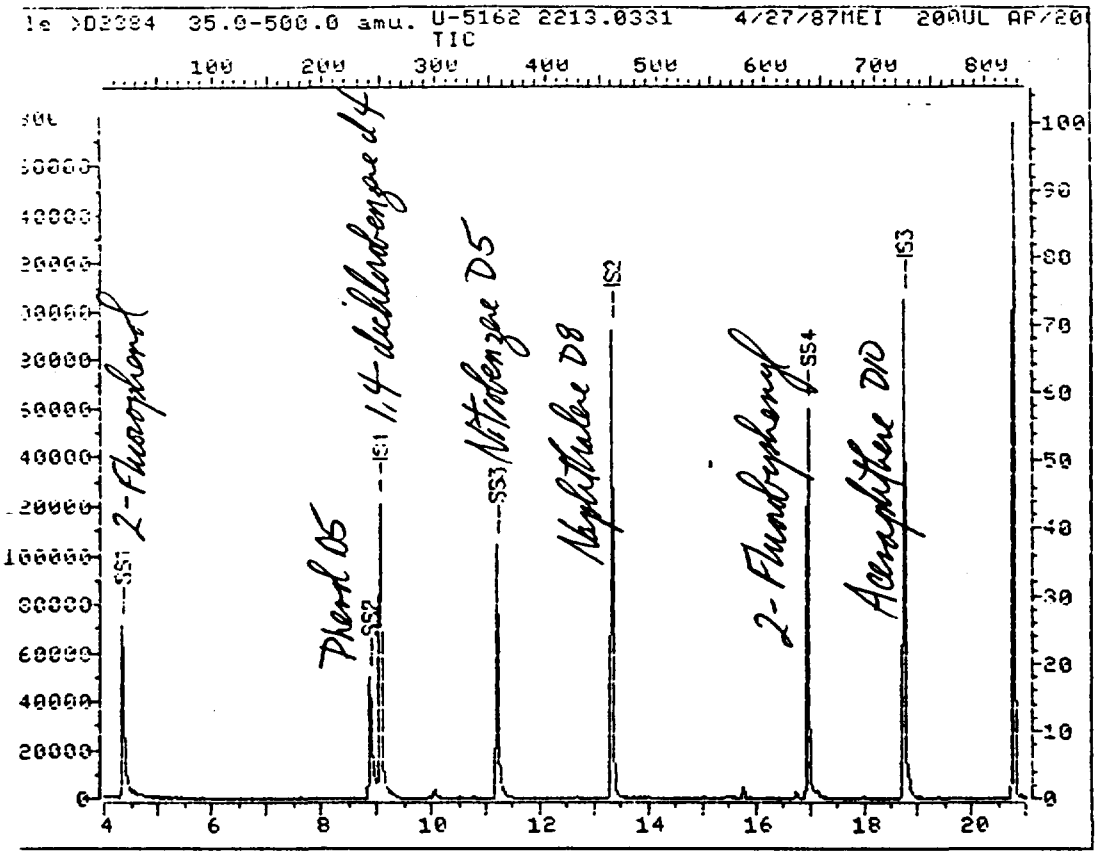
TOTAL ION CHROMATOGRAM



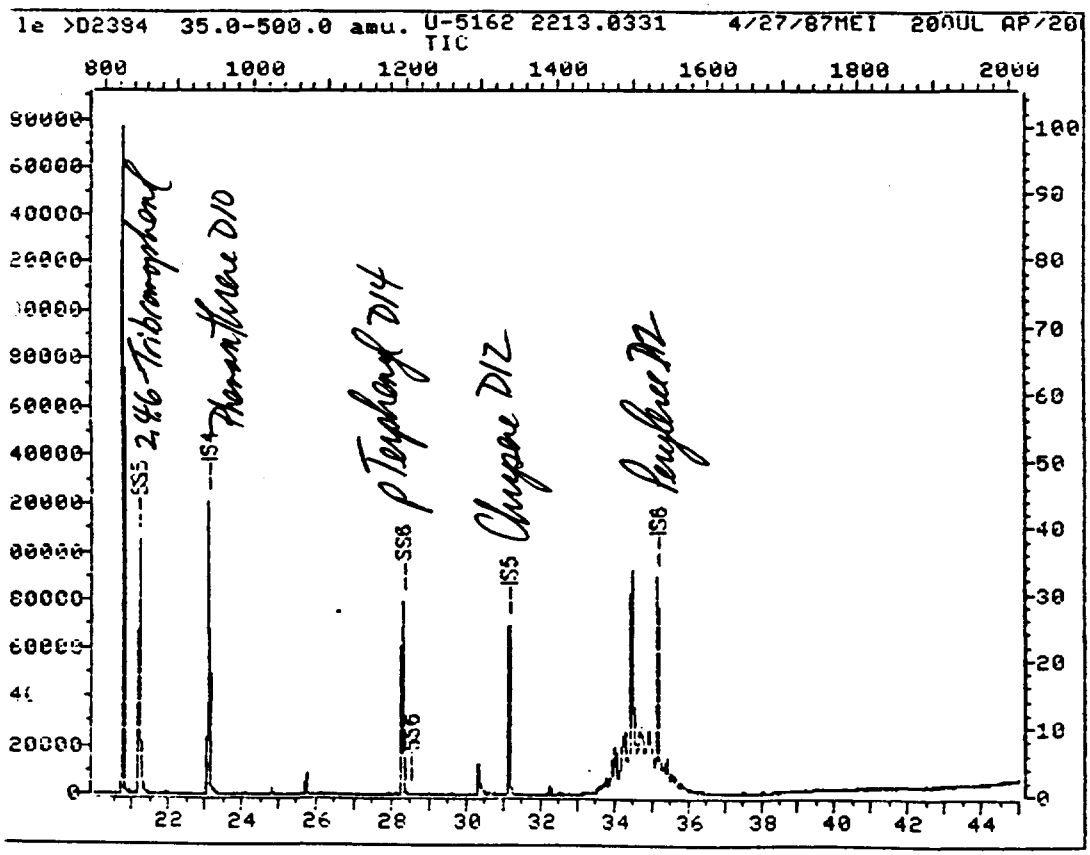
Data File: >D2384::D3
Name: U-5162 2213.0331 DC-GW-35
Misc: 4/27/87MEI 200UL AP/200UL BN + 4UL IS (2X) BTL# 9

Id File: BNADR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870427 17:24

Operator ID: USER6
Quant Time: 870427 22:46
Injected at: 870427 21:58


le >D2394 35.0-500.0 amu. U-5162 2213.0331 4/27/87MEI 200UL AP/20
TIC
2-Fluorophenol
Phenol D5
1,4-dichlorobenzene d4
Nitrobenzene D5
Naphthalene D8
2-Fluorobiphenyl
Acenaphthene D10
SS1
SS2
IS1
SS3
IS2
SS4
IS3

DC-GW-35


le >D2394 35.0-500.0 amu. U-5162 2213.0331 4/27/87MEI 200UL AP/20
TIC
2,4,6-Tribromophenol
Phenanthrene D10
p-Terphenyl D14
Chrysene D12
Perylene D12
SS5
IS4
SS6
IS5
IS6

QUANT REPORT

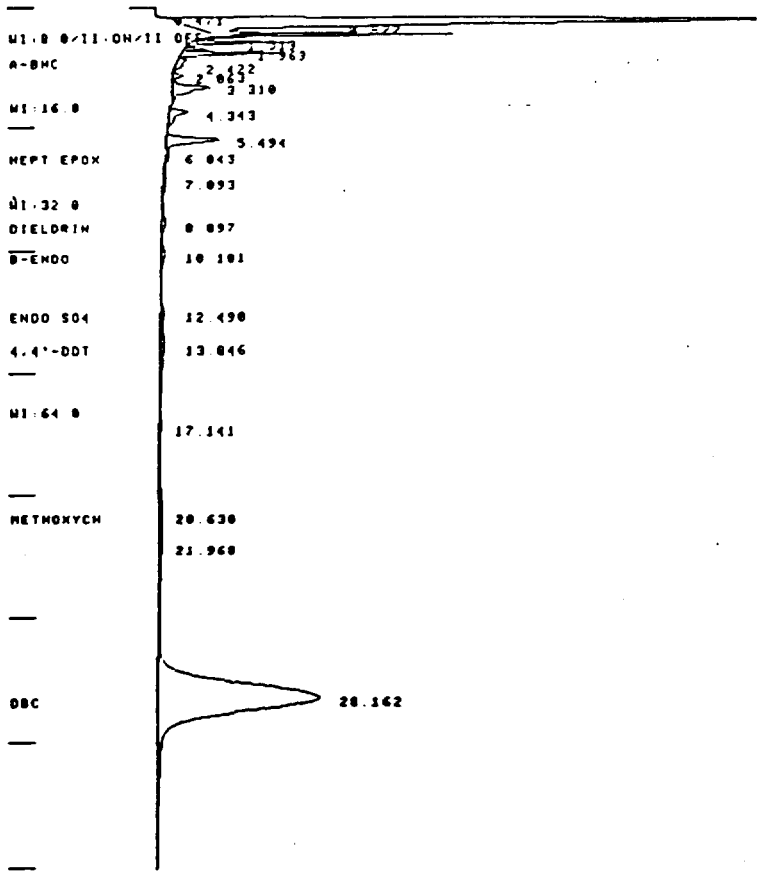
ıerator ID: USER6 Quant Rev: 4 Quant Time: 870427 22:46
ıt t File: ^D2384::Q2 Injected at: 870427 21:58
ıta File: >D2384::D3 Dilution Factor: 2.00
ıme: U-5162 2213.0331 DC-GW-35
.sc: 4/27/87MEI 200UL AP/200UL BN + 4UL IS (2X) BTL# 9

) File: BNADR::D2
.tle: BNA ID FILE FOR THE HP 5970 (B)
ıst Calibration: 870427 17:24

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-D4	(IS)	152	9.06	250	61384	40.00 UG/L	89
2)	PHENOL-D5	(SURR)	99	8.88	241	58421	60.53 UG/L	95
5)	2-FLUOROPHENOL	(SURR)	112	4.32	17	56222	69.38 UG/L	80
17)	~~N-NITROSO-DI-N-PROPYLAMINE~~		~~70~~	~~11.20~~	~~355~~	~~14888~~	~~12.45 UG/L~~ Not BN	87
19)	*NAPHTHALENE-D8	(IS)	136	13.34	460	208833	40.00 UG/L	100
20)	NITROBENZENE-D5	(SURR)	82	11.20	355	86752	76.34 UG/L	94
34)	*ACENAPHTHENE-D10	(IS)	162	18.76	726	109216	40.00 UG/L	93
9)	2-FLUOROBIPHENYL	(SURR)	172	16.97	638	125142	64.52 UG/L	92
1)	~~DIMETHYL PHTHALATE~~		~~163~~	~~18.76~~	~~726~~	~~20908~~	~~11.11 UG/L~~ No BN	100
3)	2,4,6-TRIBROMOPHENOL	(SURR)	330	21.20	846	48702	158.14 UG/L	95
2)	~~2,6-DINITROTOLUENE~~		~~165~~	~~18.76~~	~~726~~	~~15705~~	~~36.82 UG/L~~ No BN	100
5)	*PHENANTHRENE-D10	(IS)	188	23.12	940	130295	40.00 UG/L	94
3)	DI-N-BUTYLPHTHALATE		149	25.75	1069	10632	5.94 UG/L	98
5)	*CHRYSENE-D12	(IS)	240	31.14	1334	83263	40.00 UG/L	100
3)	TERPHENYL-D14	(SURR)	244	28.29	1194	71218	71.49 UG/L	100
3)	~~TERPHENYL-D14~~	~~(SURR)~~	~~244~~	~~28.48~~	~~1203~~	~~103~~	~~.10 UG/L~~ No BN	100
3)	~~TERPHENYL-D14~~	~~(SURR)~~	~~244~~	~~28.52~~	~~1205~~	~~52~~	~~.05 UG/L~~	100
2)	BIS(2-ETHYLHEXYL)PHTHALATE		149	32.26	1389	1859	2.10 UG/L	95
4)	*PERYLENE-D12	(IS)	264	35.16	1531	77139	40.00 UG/L	100
5)	~~DI-N-OCTYL PHTHALATE~~		~~149~~	~~33.96~~	~~1472~~	~~3679~~	~~2.30 UG/L~~ No BN	100
5)	DI-N-OCTYL PHTHALATE		149	34.00	1474	4298	2.68 UG/L	100
5)	~~DI-N-OCTYL PHTHALATE~~		~~149~~	~~34.24~~	~~1486~~	~~11443~~	~~7.15 UG/L~~	100
5)	~~DI-N-OCTYL PHTHALATE~~		~~149~~	~~34.30~~	~~1489~~	~~5860~~	~~3.66 UG/L~~ No BN	100
5)	~~DI-N-OCTYL PHTHALATE~~		~~149~~	~~34.47~~	~~1497~~	~~14132~~	~~8.83 UG/L~~	100

* Compound is ISTD

CHART SPEED 0.5 CM/MIN
ATTEN: 8 ZERO: 10% 5 MIN/TICK



CHANNEL: 1A - 1 TITLE: RUN# 17 21:47 21 APR 87

DC-GW-35

SAMPLE: 2213 METHOD: CEPA CALCULATION: ES - ANALYS

PEAK NO	PEAK NAME	RESULT UG/L	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		0.0000	1.239		72147	BB	2.69
2		0.0000	1.519		54709	BV	4.06
3		0.0000	1.969		72304	VV	5.06
4		0.0000	3.310		49283	VV	10.81
5		0.0000	3.475		24291	VB	? 13.44
6		0.0000	4.343		41598	BV	11.81
7		0.0000	5.494		107771	VV	15.00
8	~~DIELDRIN~~	0.0082	8.877	0.147	21396	VV	? 34.88
9	~~B-ENDO~~	0.0083	10.101	0.101	20064	VB	32.00
10	~~4,4'-DDT~~	0.0348	13.846	-0.244	49562	VB	? 70.88
11	~~METHOXYCH~~	0.0405	20.630	-0.050	33640	VV	?156.50
12		0.0000	21.960		31984	VB	? 87.63
13	DBC	0.8164	28.162	0.012	1549465	BB	69.88
TOTALS:		0.9082		0.046	2120214		

DETECTED PKS: 29 REJECTED PKS: 16

DIVISOR: 1.00000 MULTIPLIER: 10.00000

NOISE: 11.4 OFFSET: -4

RACK: 2 VIAL: 2 INJ: 1

NOTES:
NOTEBOOK:297-1,3 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#:U-5162
INST: VARIAN 6000# 2A ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
LIQUID PHASE: 3% OV-1
CARRIER GAS: N2 @ 60 ML/MIN
DET: 300 C INJ: 220 C
200 C ISOTHERMAL 4 UL INJECTION
PRIMARY ANALYSIS AUTOSAMPLER
DEAD CREEK

POST RUN:
SAVE FILE: RAW 7010687

SAMPLE NUMBER DC-GW-35R

481095

Sample Number
DC-GW-35R

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Ecology & Environment Inc. Case No: U-5157, 5162

Lab Sample ID No: 2213 Replicate QC Report No:

Sample Matrix: Water Contract No: EL-3140

Data Release Authorized By: O Sloytowicz Date Sample Received: 3-25-87

Volatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 4-3-87

Conc./Dil Factor: 1 pH

Percent Moisture: (Not Decanted)

CAS Number		ug/l or ug/Kg (Circle One)	
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	2J	B
67-64-1	Acetone	9 8J	
75-15-0	Carbon Disulfide	5	U
75-35-4	1, 1-Dichloroethene	5	U
75-34-3	1, 1-Dichloroethane	5	U
156-60-5	Trans-1, 2-Dichloroethene	5	U
67-66-3	Chloroform	1J	
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

CAS Number		ug/l or ug/Kg (Circle One)	
78-87-5	1, 2-Dichloropropane	5	U
10061-02-6	Trans-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
10061-01-5	cis-1, 3-Dichloropropene	5	U
110-75-8	2-Chloroethylvinylether	10	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
	Total Xylenes	5	U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

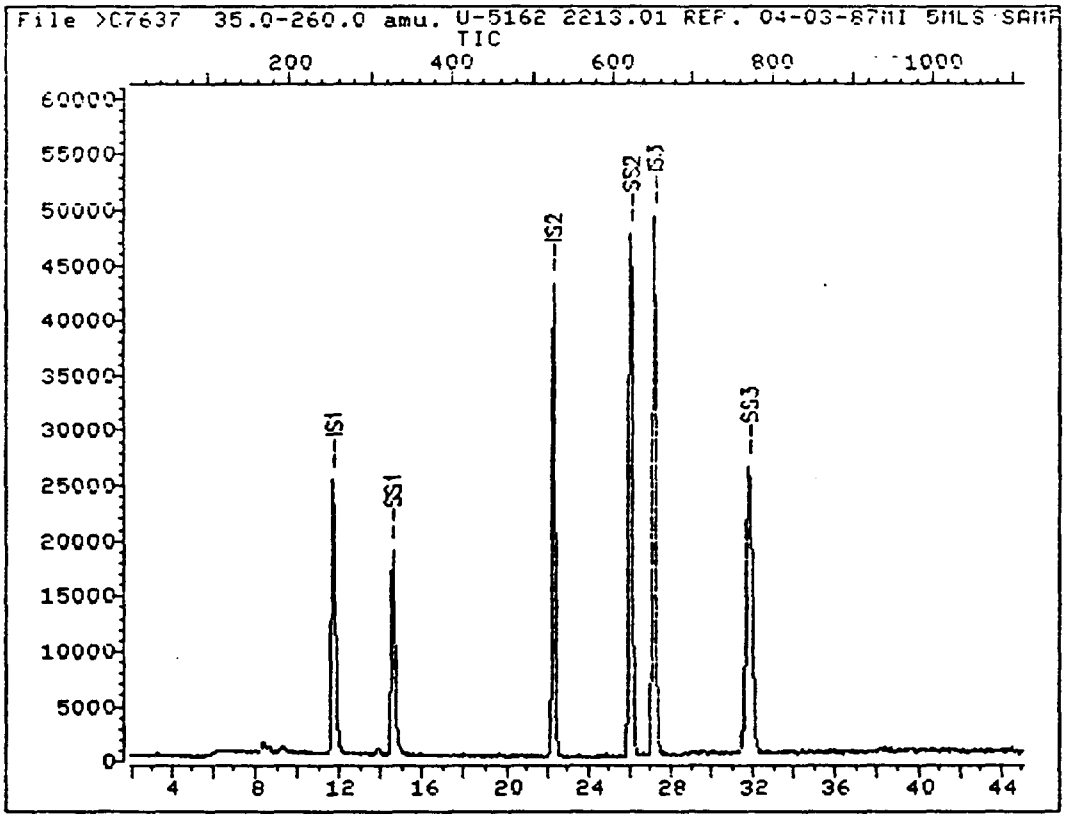
C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS.

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

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described, and such description attached to the data summary report.

265

TOTAL ION CHROMATOGRAM

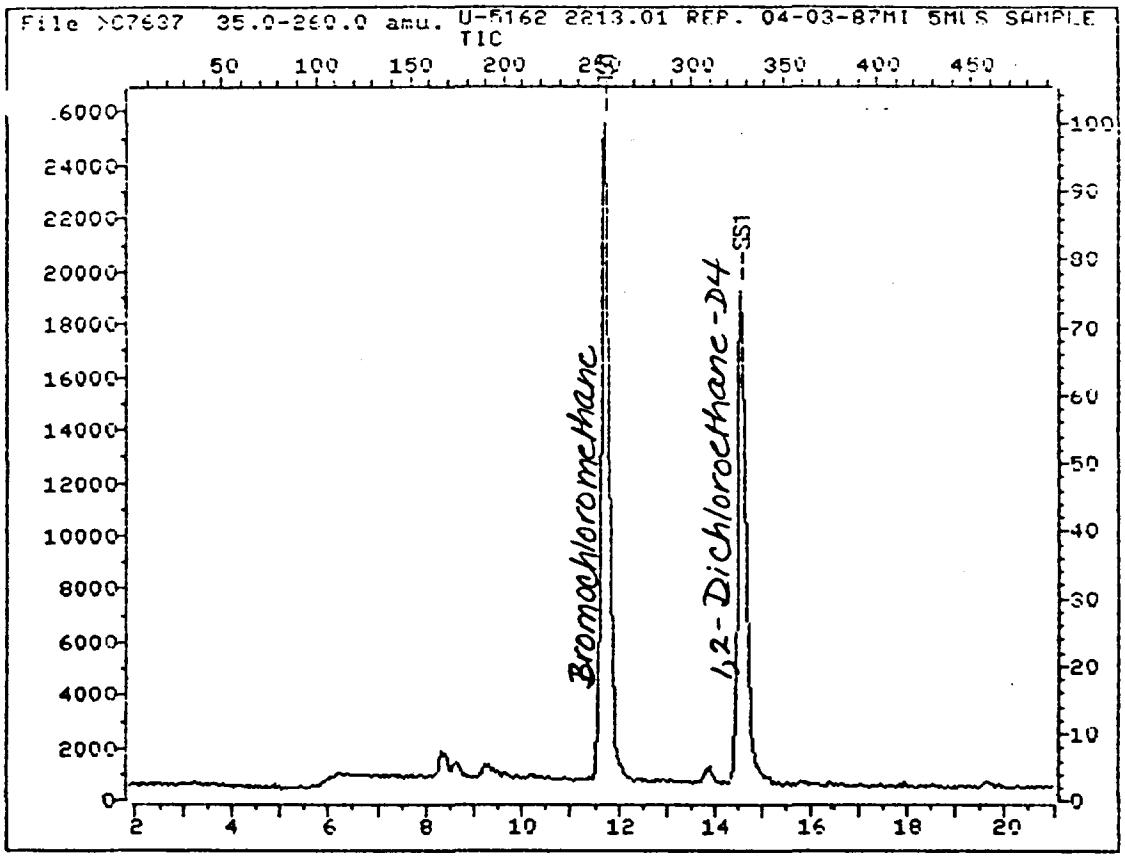


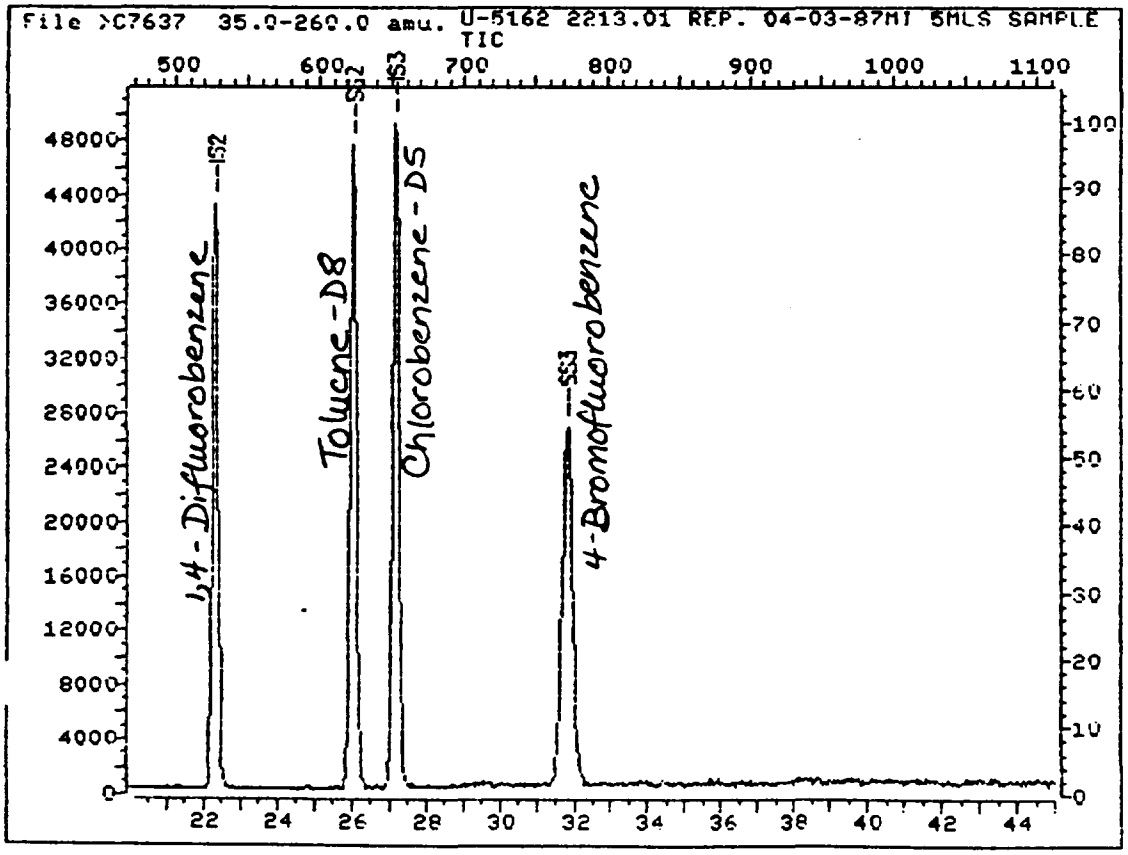
Data File: >C7637::D1
Name: U-5162 2213.01 REP. DC-GW-35 R
Misc: 04-03-87MI 5MLS SAMPLE + 10UL IS/SS

Id File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870403 10:07

Operator ID: USER8
Quant Time: 870403 23:40
Injected at: 870403 22:54

DC-GW-35R


File >C7637 35.0-260.0 amu. U-5162 2213.01 REF. 04-03-87MT 5MLS SAMPLE
TIC
Bromochloromethane
1,2-Dichloroethane-D4
IS1
SS1


File >C7637 35.0-260.0 amu. U-5162 2213.01 REF. 04-03-87MT 5MLS SAMPLE
TIC
1,4-Difluorobenzene
IS2
Toluene-D8
SS2
IS3
Chlorobenzene-D5
4-Bromofluorobenzene
SS3

QUANT REPORT

pe tor ID: USER8 Quant Rev: 4 Quant Time: 870403 23:40
utput File: ^C7637::Q1 Injected at: 870403 22:54
ata File: >C7637::D1 Dilution Factor: 1.00
ame: U-5162 2213.01 REP DC-GW-35R
isc: 04-03-87MI 5MLS SAMPLE + 10UL IS/SS

D File: VOACR::D2
itle: VOA ID FILE FOR HP-5995 (CONT. CAL.)
ast Calibration: 870403 10:07

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	(IS) 128	11.72	254	37122	50.00	UG/L	100
6)	METHYLENE CHLORIDE	84	8.38	168	2409	1.86	UG/L yes	100
7)	ACETONE	43	9.31	192	5556	9.12	UG/L yes	100
13)	CHLOROFORM	83	13.89	310	2933	1.04	UG/L yes	100
15)	1,2-DICHLOROETHANE-D4	(SURR) 65	14.55	327	86800	44.39	UG/L 88	83
16)	*1,4-DIFLUOROBENZENE	(IS) 114	22.31	527	167351	50.00	UG/L	100
1)	*CHLOROBENZENE-D5	(IS) 117	27.16	652	147513	50.00	UG/L	100
6)	TOLUENE-D8	(SURR) 98	26.03	623	179325	42.43	UG/L 84	93
0)	4-BROMOFLUOROBENZENE	(SURR) 95	31.82	772	91083	42.10	UG/L 84	100

* Compound is ISTD

SAMPLE NUMBER DC-GW-36

481095

Sample Number
DC-GW-36

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Ecology & Environment, Inc. Case No: U-5157, 5162

Lab Sample ID No: 2214 QC Report No:

Sample Matrix: Water Contract No: IL-3140

Data Release Authorized By: C Stoftowicz Date Sample Received: 3-25-87

Volatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 4-6-87

Conc./Dil Factor: 1 pH

Percent Moisture: (Not Decanted)

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	10u
74-83-9	Bromomethane	10u
75-01-4	Vinyl Chloride	10u
75-00-3	Chloroethane	10u
75-09-2	Methylene Chloride	5u
67-64-1	Acetone	10u
75-15-0	Carbon Disulfide	5u
75-35-4	1, 1-Dichloroethene	5u
75-34-3	1, 1-Dichloroethane	5u
156-60-5	Trans-1, 2-Dichloroethene	5u
67-66-3	Chloroform	5u
107-06-2	1, 2-Dichloroethane	5u
78-93-3	2-Butanone	10u
71-55-6	1, 1, 1-Trichloroethane	5u
56-23-5	Carbon Tetrachloride	5u
108-05-4	Vinyl Acetate	10u
75-27-4	Bromodichloromethane	5u

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	5u
10061-02-6	Trans-1, 3-Dichloropropene	5u
79-01-6	Trichloroethene	5u
124-48-1	Dibromochloromethane	5u
79-00-5	1, 1, 2-Trichloroethane	5u
71-43-2	Benzene	1 J
10061-01-5	cis-1, 3-Dichloropropene	5u
110-75-8	2-Chloroethylvinylether	10u
75-25-2	Bromoform	5u
591-78-6	4-Methyl-2-Pentanone	10u
108-10-1	2-Hexanone	10u
127-18-4	Tetrachloroethene	5u
79-34-5	1, 1, 2, 2-Tetrachloroethane	5u
108-88-3	Toluene	5u
108-90-7	Chlorobenzene	6
100-41-4	Ethylbenzene	5u
100-42-5	Styrene	5u
	Total Xylenes	5u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration, dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g. 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS.

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

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

E This flag indicates an approximate concentration. The amount detected in the analysis exceeds the calibrated range.

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Laboratory Name _____

Case No: 4-5157, 5162

Sample Number: DC-GW-36

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 3-30-87

Date Analyzed: 4-28-87

Conc/Dil Factor: 2

Percent Moisture (Decanted) _____

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)	
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
39638-32-9	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	30	
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	Dimethyl Phthalate	10	U
96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	50	U

CAS Number		ug/l or ug/Kg (Circle One)	
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
606-20-2	2, 6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4, 6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3, 3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1 2, 3-cd)Pyrene	10	U
53-70-3	Dibenzo(a h)Anthracene	10	U
191-24-2	Benzo(g h i)Perylene	10	U

(1)-Cannot be separated from diphenylamine

Laboratory Name ecology and environment, inc.

Case No U-5157,5162

Sample Number DC-GW-36

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration (Low) Medium (Circle One)

Date Extracted/Prepared 3-31-87

Date Analyzed 4-21-87

Conc/Dil Factor 1

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☑Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/l or ug/Kg) (Circle One)
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 1,000 or W_s _____ V_t 10,000 V_i 4

Laboratory Name ecology and environment, inc.

Case No 4-5157, 5162

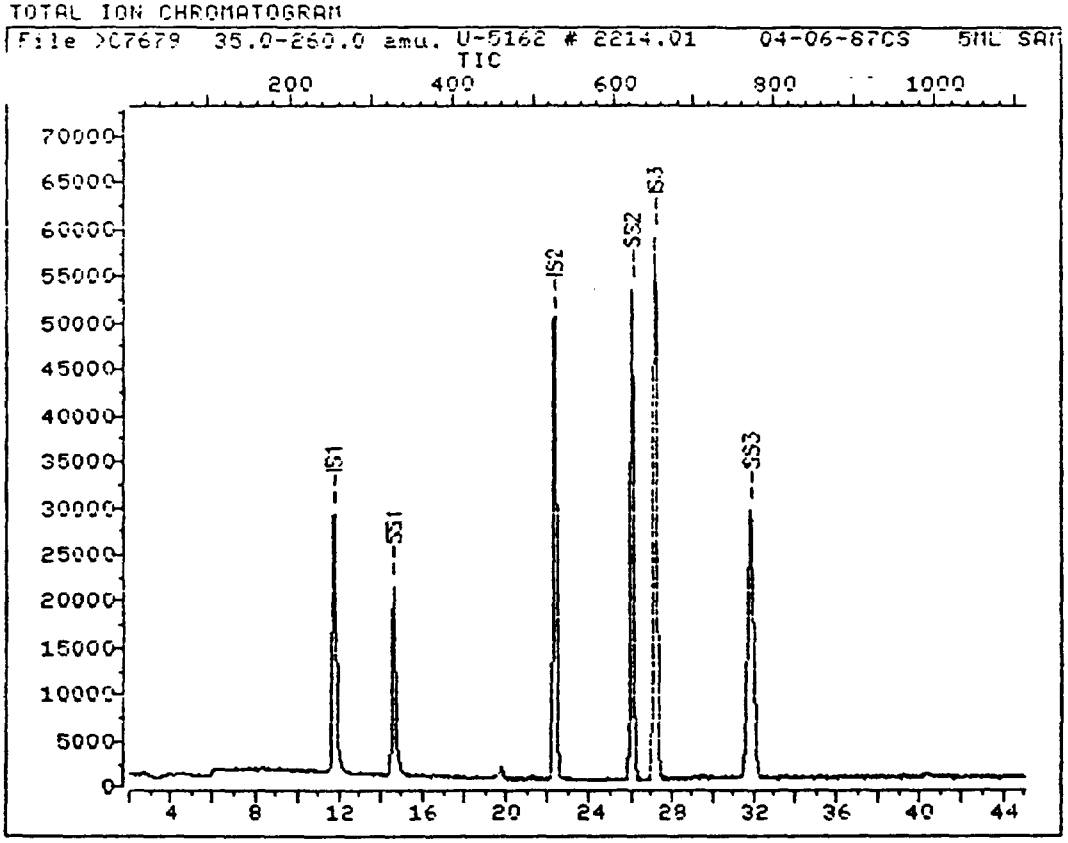
Sample Number DC-GW-36

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.	No TIC's in VOA fraction			
2.				
3.	Unknown	BNA	19.92	56 J
4.	Unknown Phthalate	BNA	33.69	58 J
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

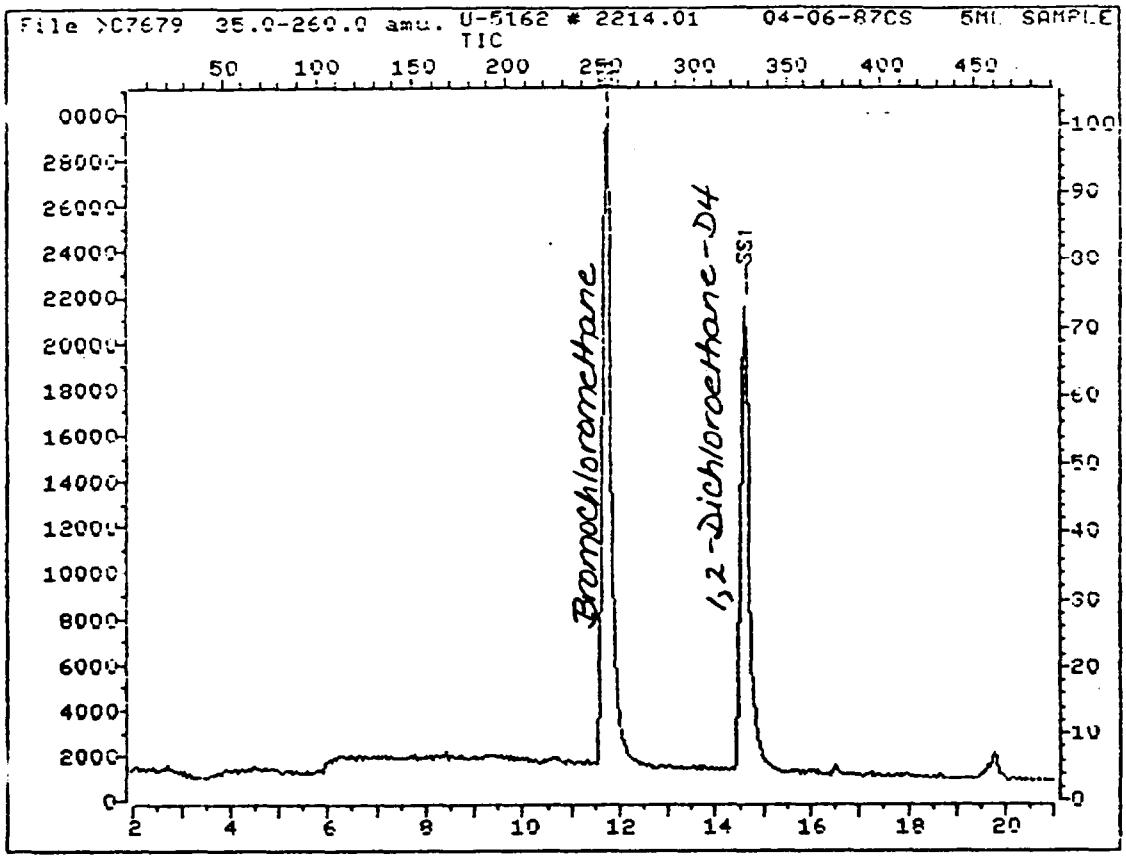


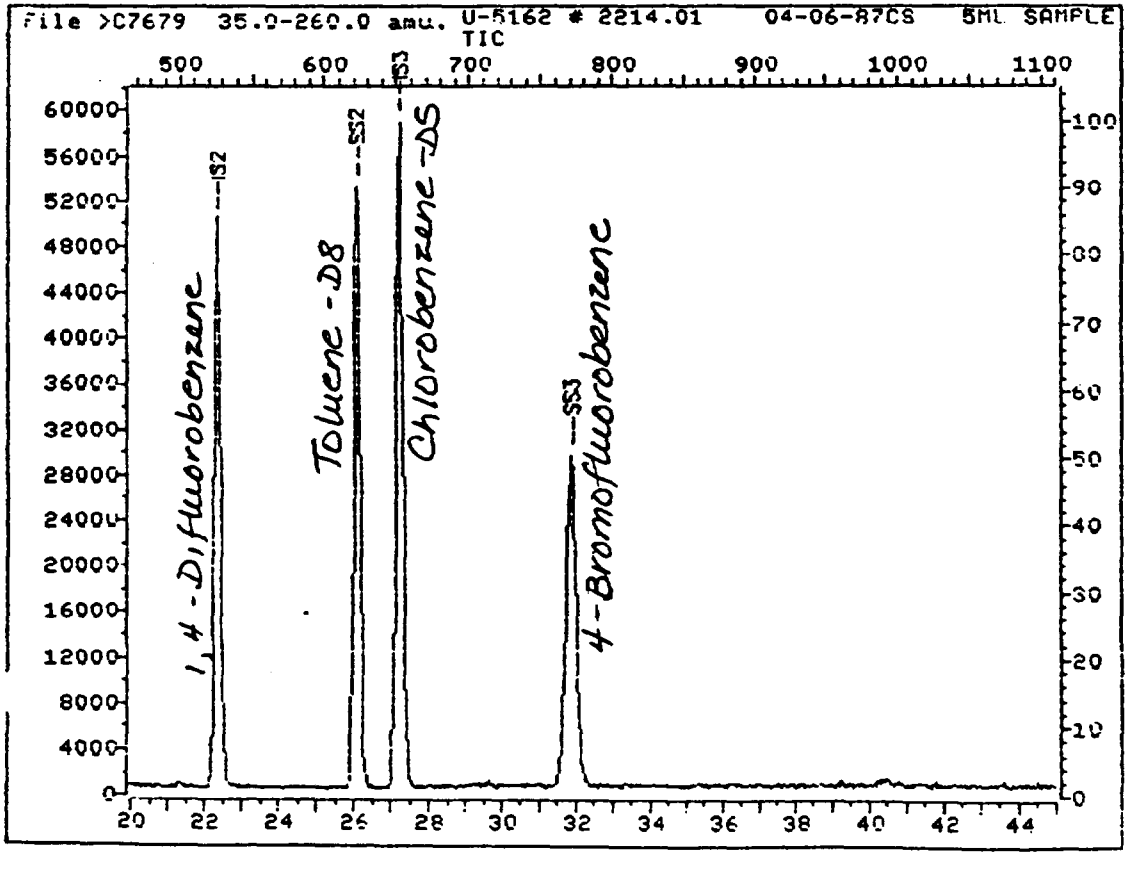
Data File: >C7679::D3
Name: U-5162 # 2214.01 DC-GW-36
Misc: 04-06-87CS 5ML SAMPLE + 10UL IS/SS

Id File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870406 13:39

Operator ID: USER8
Quant Time: 870406 18:45
Injected at: 870406 17:59

DC-GW-36


File >C7679 35.0-260.0 amu. U-5162 # 2214.01 04-06-87CS 5ML SAMPLE
TIC
Bromochloromethane
1,2-Dichloroethane-D4
SS1


File >C7679 35.0-260.0 amu. U-5162 # 2214.01 04-06-87CS 5ML SAMPLE
TIC
1,4-Difluorobenzene
IS2
Toluene-D8
SS2
IS3
Chlorobenzene-D5
SS3
4-Bromofluorobenzene

QUANT REPORT

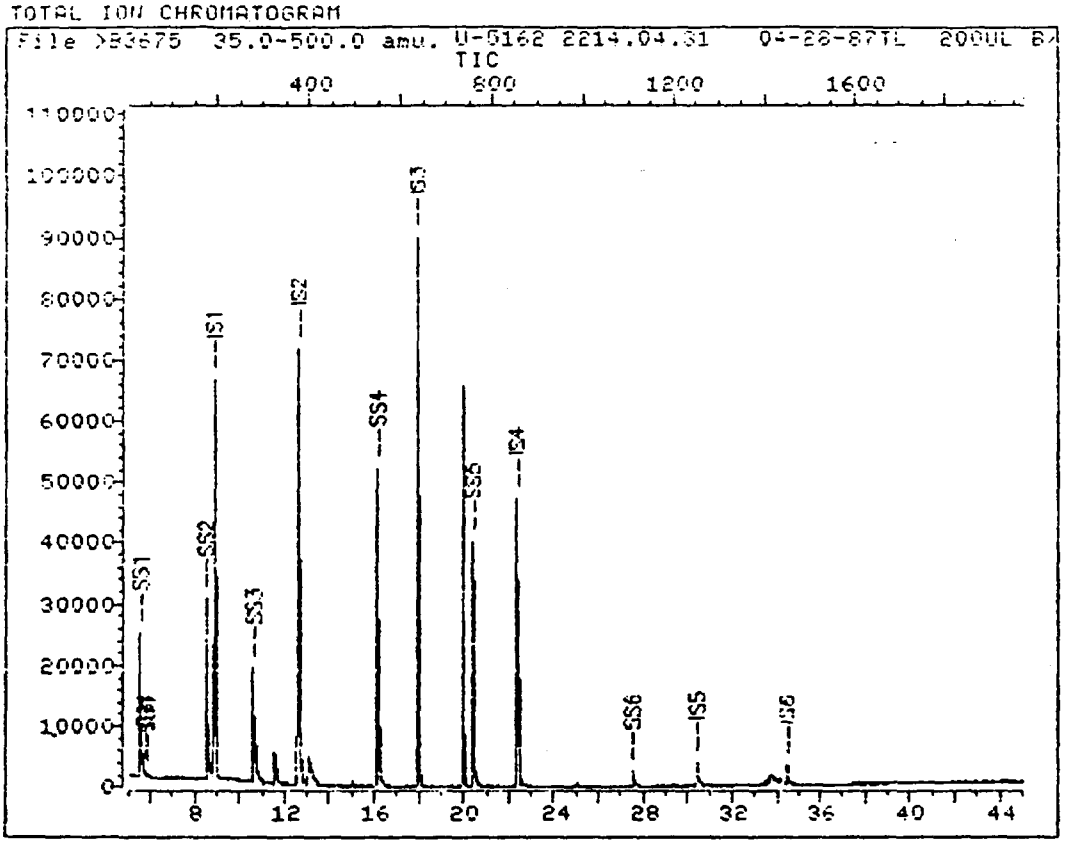
Operator ID: USER8 Quant Rev: 4 Quant Time: 870406 18:45
Computer File: ^C7679::Q2 Injected at: 870406 17:59
Data File: >C7679::D3 Dilution Factor: 1.00
Name: U-5162 # 2214.01 DC-GW-36
Misc: 04-06-87CS 5ML SAMPLE + 10UL IS/SS

ID File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870406 13:39

	Compound			R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	(IS)	128	11.73	253	48539	50.00	UG/L	100
15)	1,2-DICHLOROETHANE-D4	(SURR)	65	14.60	327	95284	43.48	UG/L	87
16)	*1,4-DIFLUOROBENZENE	(IS)	114	22.32	526	218893	50.00	UG/L	100
27)	BENZENE		78	19.80	461	5072	1.12	UG/L yes	100
31)	*CHLOROBENZENE-D5	(IS)	117	27.21	652	175948	50.00	UG/L	100
36)	TOLUENE-D8	(SURR)	98	26.05	622	216570	43.20	UG/L	93
38)	CHLOROBENZENE		112	27.30	654	22812	6.24	UG/L yes	97
40)	4-BROMOFLUOROBENZENE	(SURR)	95	31.84	771	104551	42.71	UG/L	100

* Compound is ISTD

TOTAL ION CHROMATOGRAM

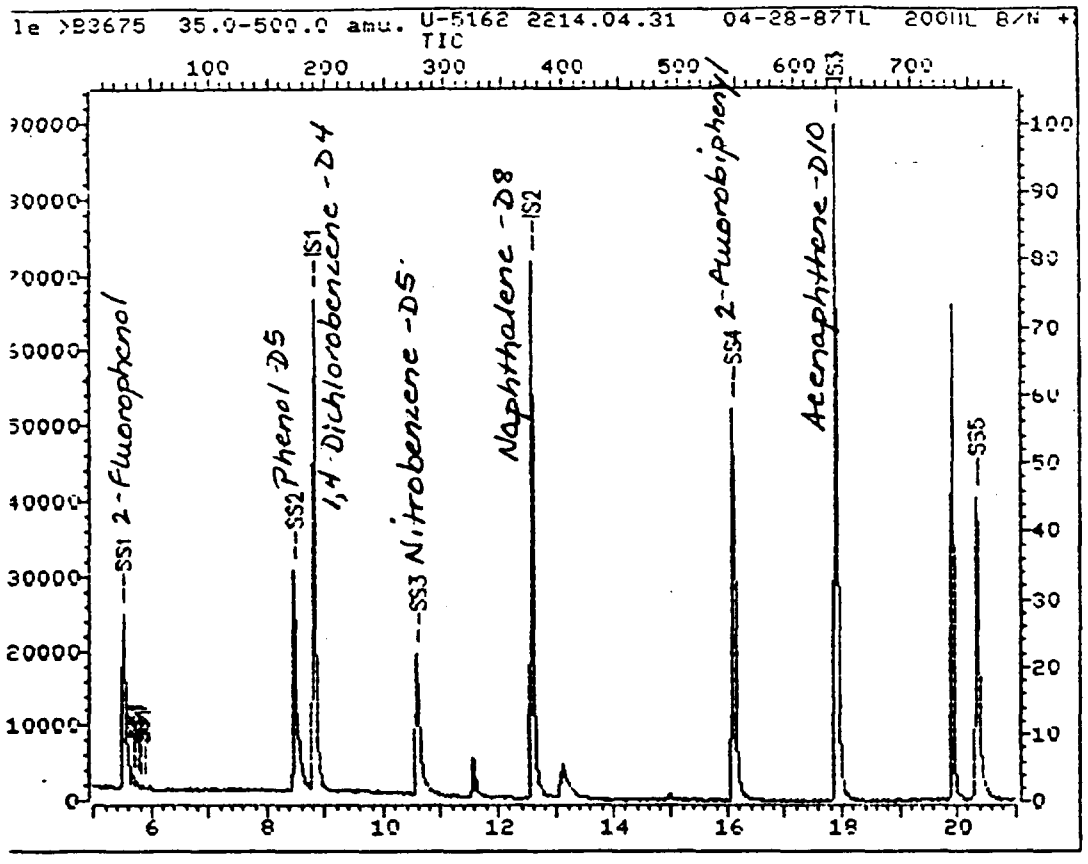


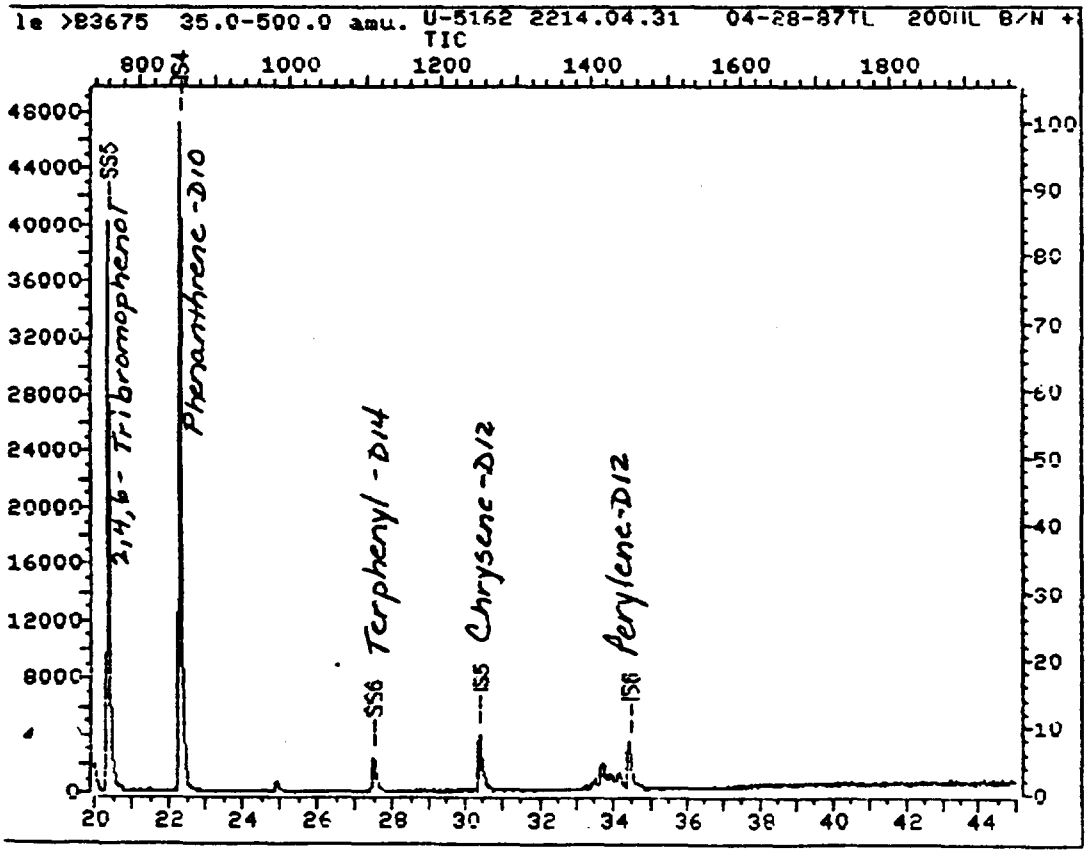
Data File: >B3675::D4
Name: U-5162 2214.04.31 DC-GW-36
Misc: 04-28-87TL 200UL B/N +200UL A/P +4UL IS

Id File: BNABR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870428 13:13

Operator ID: USER8
Quant Time: 870428 14:00
Injected at: 870428 13:12

DC-GW-36


le >B3675 35.0-500.0 amu. U-5162 2214.04.31 04-28-87TL 200ML B/N +
TIC
SS1 2-Fluorophenol
SS2 Phenol-D5
IS1 1,4-Dichlorobenzene-D4
SS3 Nitrobenzene-D5
Naphthalene-D8 IS2
SS4 2-Fluorobiphenyl
Acenaphthene-D10 IS3
SS5


le >B3675 35.0-500.0 amu. U-5162 2214.04.31 04-28-87TL 200ML B/N +
TIC
SS5 2,4,6-Tribromophenol
IS4 Phenanthrene-D10
SS6 Terphenyl-D14
IS5 Chrysene-D12
IS6 Perylene-D12

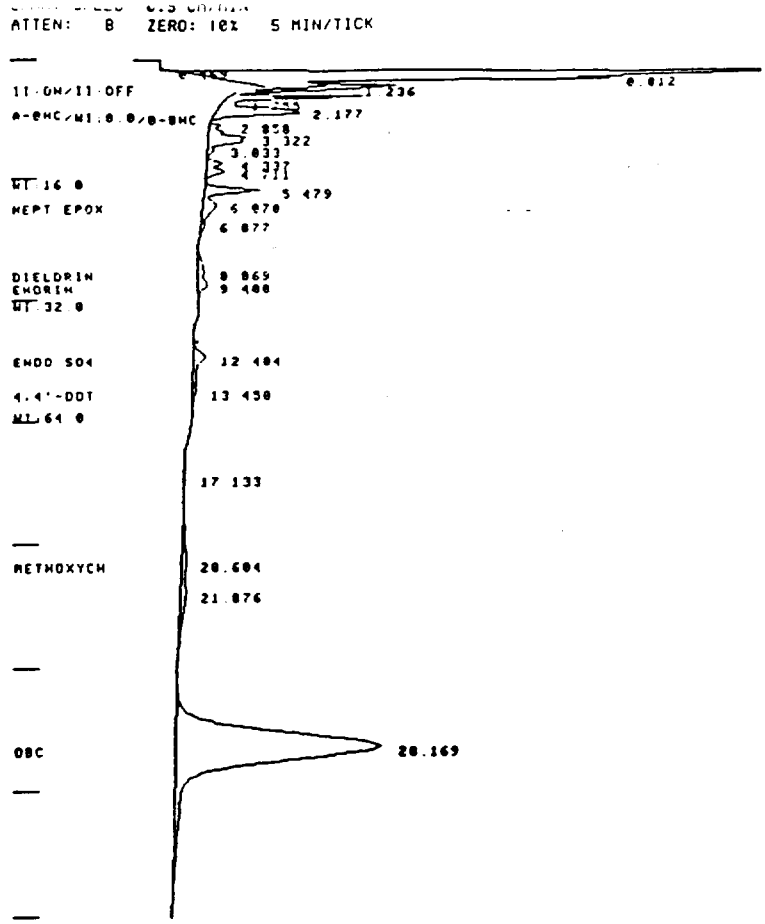
QUANT REPORT

perator ID: USER8 Quant Rev: 4 Quant Time: 870428 14:00
utput File: ^B3675::Q2 Injected at: 870428 13:12
a* File: >B3675::D4 Dilution Factor: 2.00
sm. . U-5162 2214.04.31 DC-GW-36
isc: 04-28-87TL 200UL B/N +200UL A/P +4UL IS

) File: BNABR::D2
itle: BNA ID FILE FOR THE HP 5970 (B)
ast Calibration: 870428 13:13

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-D4	(IS)	152	8.82	189	26290	40.00 UG/L	84
2)	PHENOL-D5	(SURR)	99	8.47	172	32569	71.40 UG/L	99
5)	2-FLUOROPHENOL	(SURR)	112	5.50	26	22486	92.18 UG/L	72
5)	~~2-FLUOROPHENOL~~	~~(SURR)~~	~~112~~	~~5.69~~	~~35~~	~~1193~~	~~4.85 UG/L~~	73
5)	~~2-FLUOROPHENOL~~	~~(SURR)~~	~~112~~	~~5.75~~	~~38~~	~~800~~	~~3.28 UG/L~~	91
5)	~~2-FLUOROPHENOL~~	~~(SURR)~~	~~112~~	~~5.81~~	~~41~~	~~454~~	~~1.86 UG/L~~ CW	91
5)	~~2-FLUOROPHENOL~~	~~(SURR)~~	~~112~~	~~5.85~~	~~43~~	~~444~~	~~1.82 UG/L~~	78
17)	~~N-NITROSO-DI-N-PROPYLAMINE~~		~~70~~	~~10.59~~	~~276~~	~~4290~~	~~19.72 UG/L~~	89
19)	*NAPHTHALENE-D8	(IS)	136	12.58	374	94723	40.00 UG/L	100
0)	NITROBENZENE-D5	(SURR)	82	10.59	276	27894	56.75 UG/L	93
9)	~~NAPHTHALENE~~		~~128~~	~~13.09~~	~~399~~	~~710~~	~~.58 UG/L~~ CW	100
0)	4-CHLOROANILINE		127	13.09	399	14846	30.43 UG/L	97
4)	*ACENAPHTHENE-D10	(IS)	162	17.90	636	63596	40.00 UG/L	97
8)	2-FLUOROBIPHENYL	(SURR)	172	16.09	547	64875	61.16 UG/L	94
1)	~~DIMETHYL PHTHALATE~~		~~163~~	~~17.90~~	~~636~~	~~11092~~	~~11.59 UG/L~~ CW	100
8)	2,4,6-TRIBROMOPHENOL	(SURR)	330	20.34	756	27131	126.45 UG/L	98
2)	~~2,6-DINITROTOLUENE~~		~~165~~	~~17.90~~	~~636~~	~~3270~~	~~2.53 UG/L~~ CW	100
5)	*PHENANTHRENE-D10	(IS)	188	22.29	852	82401	40.00 UG/L	97
5)	*CHRYSENE-D12	(IS)	240	30.40	1251	17561	40.00 UG/L	100
8)	TERPHENYL-D14	(SURR)	244	27.50	1108	11949	61.59 UG/L	100
4)	*PERYLENE-D12	(IS)	264	34.42	1449	14674	40.00 UG/L	100
5)	~~DI-N-OCTYL PHTHALATE~~		~~149~~	~~33.23~~	~~1398~~	~~842~~	~~2.96 UG/L~~	100
5)	~~DI-N-OCTYL PHTHALATE~~		~~149~~	~~33.51~~	~~1404~~	~~2959~~	~~10.39 UG/L~~ CW	100
5)	~~DI-N-OCTYL PHTHALATE~~		~~149~~	~~33.69~~	~~1413~~	~~1124~~	~~3.95 UG/L~~	100

* Compound is ISTD



DC-GW-36

CHANNEL: 1A - 1 TITLE: RUN# 18 22:26 21 APR 87

SAMPLE: 2214 METHOD: CEPA CALCULATION: ES - ANALYS

PEAK NO	PEAK NAME	RESULT UG/L	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	WI/2 (SEC)
1		0.0000	1.236		60911	BB	2.69
2		0.0000	1.513		81868	BV	4.38
3		0.0000	1.967		60318	VV	? 4.88
4		0.0000	2.099		44477	VV	? 7.44
5	~~A-BHC~~	0.0278	2.177	-0.013	80256	VV	? 8.81
6	~~B-BHC~~	0.0278	2.422	0.082	29643	VV	? 8.25
7		0.0000	3.322		48792	VV	? 11.19
8		0.0000	3.453		43932	VV	? 14.13
9		0.0000	4.337		25077	BV	12.75
10		0.0000	4,711		37326	VB	14.94
11		0.0000	5.479		108301	BV	15.06
12	~~HEPT EPOX~~	0.0225	6.070	0.020	57753	VV	20.06
13	~~DIELDRIN~~	0.0121	8.869	0.139	31039	BV	? 34.38
14	~~ENDRIN~~	0.0159	9.400	-0.320	32303	VB	? 29.81
15	~~ENDO SO4~~	0.0426	12.404	-0.266	63955	BV	30.50
16	~~METHOXYCH~~	0.0720	20.604	-0.076	59814	BV	?132.63
17		0.0000	21.876		69600	VB	? 57.25
18	DBC 107%	1.0670	28.169	0.019	2025030	BB	70.63
TOTALS:		1.2878		-0.415	2969195		

DETECTED PKS: 34 REJECTED PKS: 16

DIVISOR: 1.00000 MULTIPLIER: 10.00000

NOISE: 11.4 OFFSET: -11

RACK: 2 VIAL: 3 INJ: 1

NOTES:
NOTEBOOK:297-1,3 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#:U-5162
INST: VARIAN 6000# 2A ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
LIQUID PHASE: 3% OV-1
CARRIER GAS: N2 @ 60 ML/MIN
DET: 300 C INJ: 220 C
200 C ISOTHERMAL 4 UL INJECTION
PRIMARY ANALYSIS AUTOSAMPLER
DEAD CREEK

POST RUN:

SAMPLE NUMBER DC-GW-37

Sample Number
DC-GW-37

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Ecology & Environment, Inc. Case No: U-5157, 5162

Lab Sample ID No: 2215 QC Report No:

Sample Matrix: Water Contract No: IL-3140

Data Release Authorized By: C Krzyzowicz Date Sample Received: 3-25-87

Volatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 4-3-87

Conc./Dil Factor: 20 pH

Percent Moisture: (Not Decanted)

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	200u
74-83-9	Bromomethane	200u
75-01-4	Vinyl Chloride	200u
75-00-3	Chloroethane	200u
75-09-2	Methylene Chloride	44J
67-64-1	Acetone	650B
75-15-0	Carbon Disulfide	100u
75-35-4	1, 1-Dichloroethene	100u
75-34-3	1, 1-Dichloroethane	100u
156-60-5	Trans-1, 2-Dichloroethene	100u
67-66-3	Chloroform	730
107-06-2	1, 2-Dichloroethane	100u
78-93-3	2-Butanone	200u
71-55-6	1, 1, 1-Trichloroethane	100u
56-23-5	Carbon Tetrachloride	100u
108-05-4	Vinyl Acetate	200u
75-27-4	Bromodichloromethane	100u

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	100u
10061-02-6	Trans-1, 3-Dichloropropene	100u
79-01-6	Trichloroethene	100u
124-48-1	Dibromochloromethane	100u
79-00-5	1, 1, 2-Trichloroethane	100u
71-43-2	Benzene	150
10061-01-5	cis-1, 3-Dichloropropene	100u
110-75-8	2-Chloroethylvinylether	200u
75-25-2	Bromoform	100u
591-78-6	4-Methyl-2-Pentanone	270B
108-10-1	2-Hexanone	200u
127-18-4	Tetrachloroethene	100u
79-34-5	1, 1, 2, 2-Tetrachloroethane	100u
108-88-3	Toluene	970 B
108-90-7	Chlorobenzene	100u
100-41-4	Ethylbenzene	100u
100-42-5	Styrene	100u
	Total Xylenes	100u

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U: Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g. 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS.

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

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

E This flag indicates an approximate concentration. The amount detected in the analysis exceeds the calibrated range.

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Case No: 11-5157, 5162

DC-GW-37

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 3-30-87

Date Analyzed: 4-28-87

Conc/Dil Factor: 2

Percent Moisture (Decanted) -

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)	
108-95-2	Phenol	150	
111-44-4	bis(-2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	150	
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	6	J
39638-32-9	bis(2-chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	75	
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	41	
120-82-1	1 2 4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	60	
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	Dimethyl Phthalate	10	U
2[illegible]96-8	Acenaphthylene	10	U
5[illegible]9-2	3-Nitroaniline	50	U

CAS Number		ug/l or ug/Kg (Circle One)	
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
606-20-2	2 6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4 6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	6	BJ
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
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1 2 3-cd)Pyrene	10	U
53-70-3	Dibenzo(a h)Anthracene	10	U
191-24-2	Benzo(g h i)Perylene	10	U

(1)-Cannot be separated from diphenylamine

Laboratory Name ECOLOGY + ENVIRONMENT, INC

Case No U-5157, 5162

Sample Number DC-GW-37

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 3-31-87

Date Analyzed: 4-21-87

Conc/Dil Factor: 10 80

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☑Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/L or ug/Kg) (Circle One)	
319-84-6	Alpha-BHC	4.0	U
319-85-7	Beta-BHC	4.0	U
319-86-8	Delta-BHC	4.0	U
58-89-9	Gamma-BHC (Lindane)	4.0	U
76-44-8	Heptachlor	4.0	U
309-00-2	Aldrin	4.0	U
1024-57-3	Heptachlor Epoxide	4.0	U
959-98-8	Endosulfan I	0.50	U
60-57-1	Dieldrin	1.0	U
72-55-9	4,4'-DDE	1.0	U
72-20-8	Endrin	1.0	U
33213-65-9	Endosulfan II	1.0	U
72-54-8	4,4'-DDD	1.0	U
1031-07-8	Endosulfan Sulfate	1.0	U
50-29-3	4,4'-DDT	1.0	U
72-43-5	Methoxychlor	5.0	U
53494-70-5	Endrin Ketone	1.0	U
57-74-9	Chlordane	5.0	U
8001-35-2	Toxaphene	10	U
12674-11-2	Aroclor-1016	5.0	U
11104-28-2	Aroclor-1221	5.0	U
11141-16-5	Aroclor-1232	5.0	U
53469-21-9	Aroclor-1242	5.0	U
12672-29-6	Aroclor-1248	5.0	U
11097-69-1	Aroclor-1254	10	U
11096-82-5	Aroclor-1260	10	U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 1000 or W_s _____ V_t 10,000 V_i 4

Laboratory Name ecology and environment, inc.

Case No 4-5157, 5162

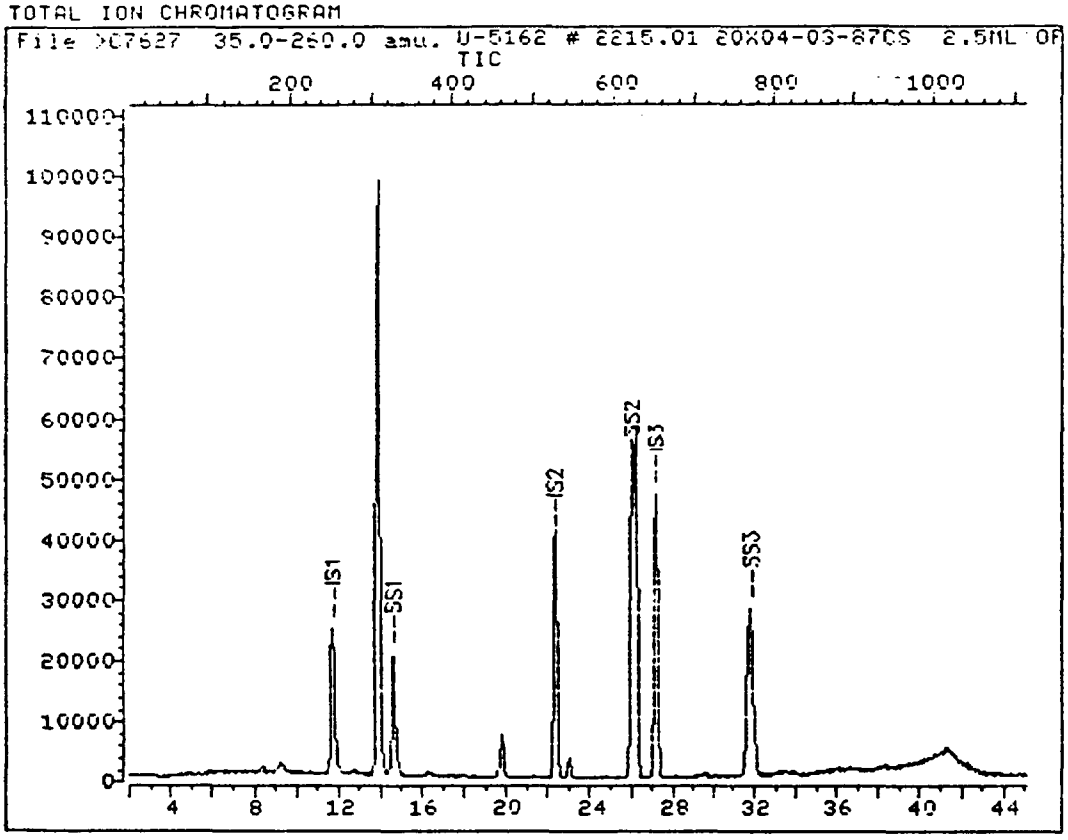
Sample Number DC-GW-37

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.		No TIC's in VOA fraction			
2.					
3.		Aniline	BNA	8.10	33
4.		Unknown Hydrocarbon		9.40	36 J
5.		Unknown		9.50	48 J
6.		Unknown		11.31	57 J
7.		Chloroaniline Isomer		11.58	72 J
8.	76222	1,7,7-Trimethylbicyclo[2.2.1]hept-2-one		11.90	87 J
9.		Chloroaniline Isomer		13.10	40 J
10.		Chlorophenol Isomer		13.23	130 J
11.		Unknown		14.26	18 J
12.		Unknown		14.57	98 J
13.		Unknown		19.94	180 J
14.		Unknown		24.37	24 J
15.		Unknown		29.25	550 J
16.		Unknown Phthalate		33.68	100 BJ
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24					
25.					
26.					
27.					
28.					
29.					
30					

TOTAL ION CHROMATOGRAM

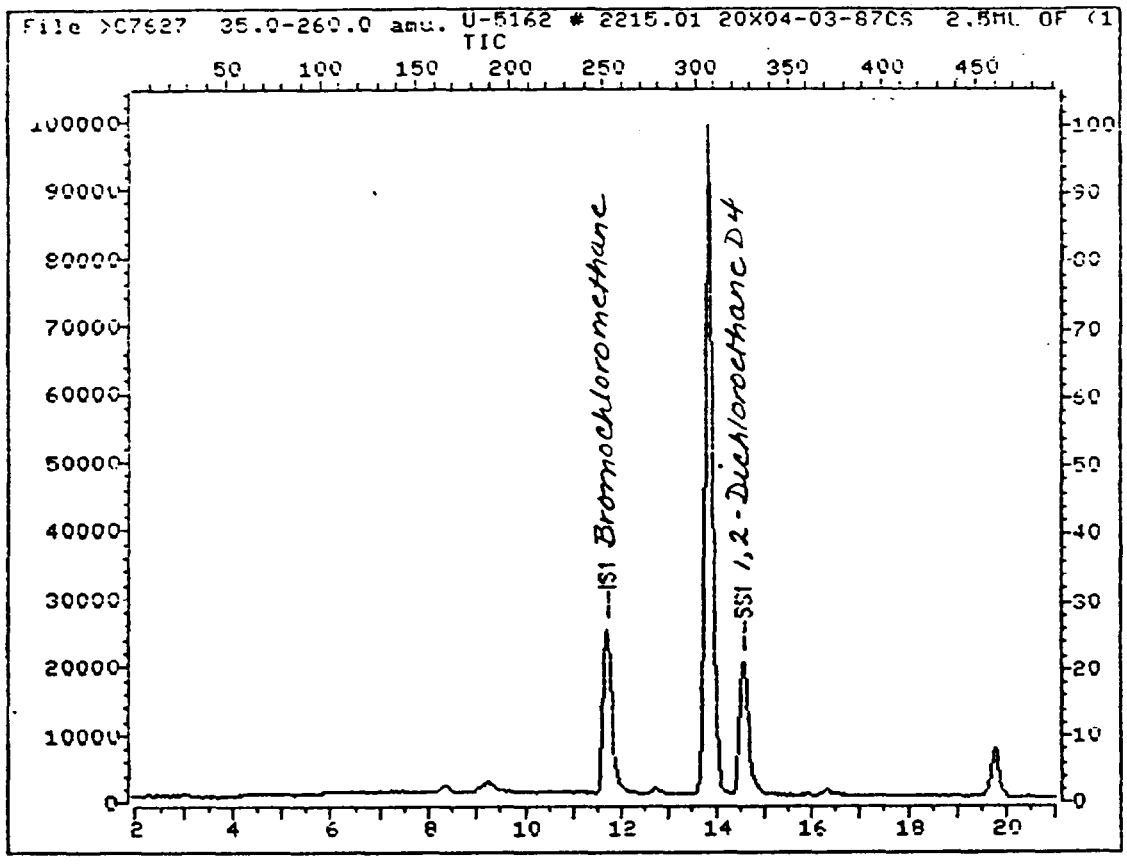


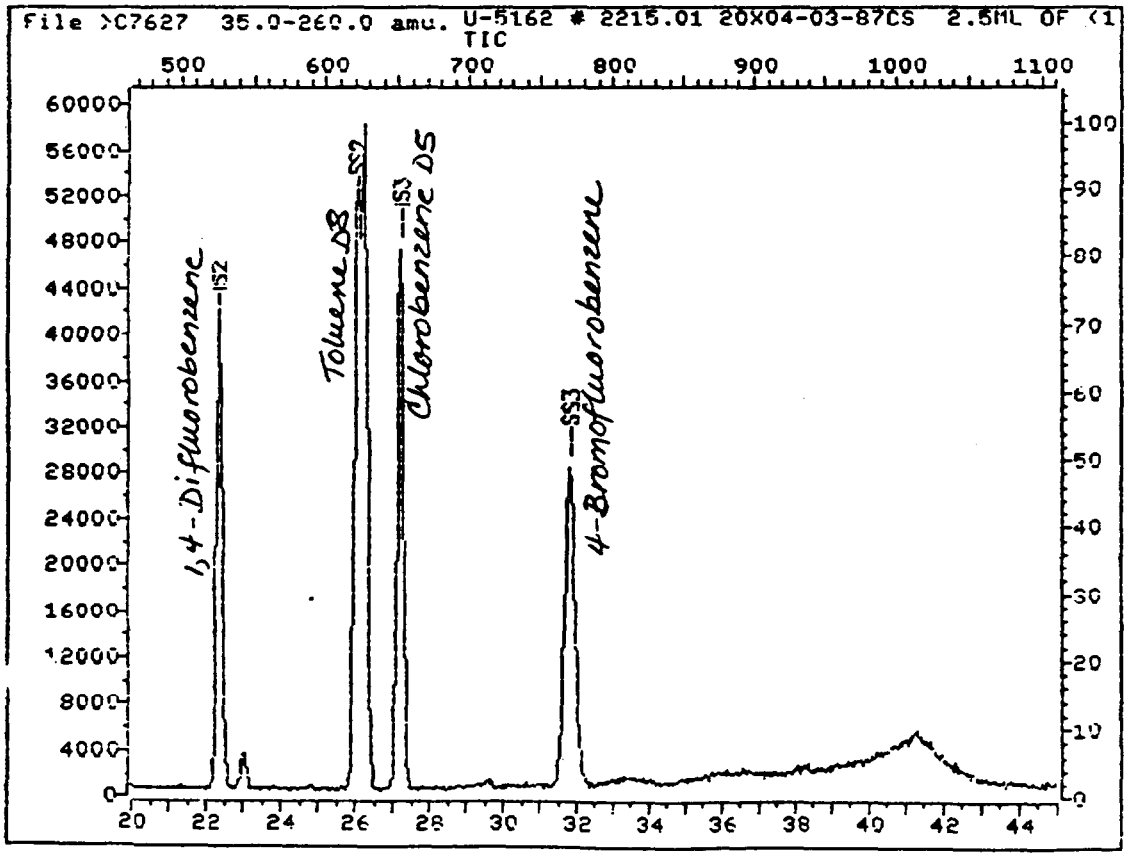
Data File: >C7627::D1
Name: U-5162 # 2215.01 20X DC-GW-37
Misc: 04-03-87CS 2.5ML OF (1:10) SAMPLE + 2.5ML DI + 10UL I

Id File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870403 10:07

Operator ID: USER8
Quant Time: 870403 14:28
Injected at: 870403 13:42

DC-GW-37


File >C7627 35.0-260.0 amu. U-5162 # 2215.01 20X04-03-87CS 2.5ML OF (1
TIC
IS1 Bromochloromethane
SS1 1,2-Dichloroethane D4


File >C7627 35.0-260.0 amu. U-5162 # 2215.01 20X04-03-87CS 2.5ML OF (1
TIC
IS2 1,4-Difluorobenzene
SS2 Toluene D8
IS3 Chlorobenzene D5
SS3 4-Bromofluorobenzene

QUANT REPORT

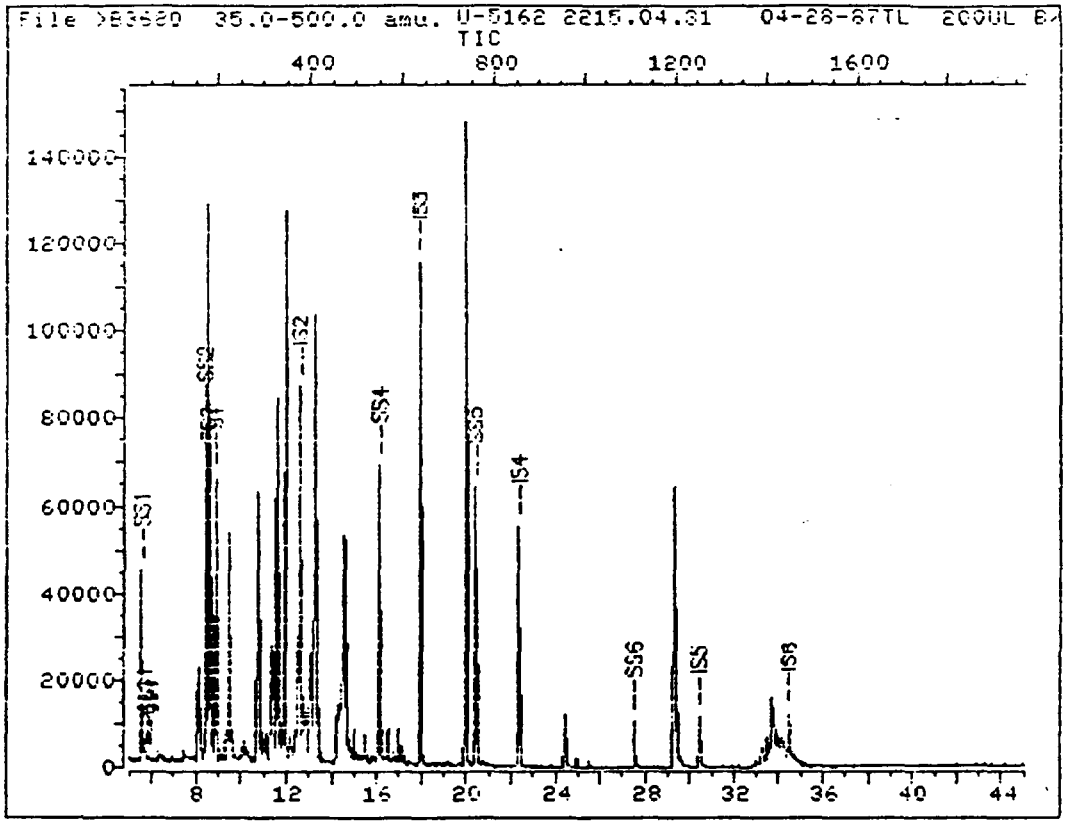
p tor ID: USER8 Quant Rev: 4 Quant Time: 870403 14:28
ut ut File: ^C7627::Q2 Injected at: 870403 13:42
ata File: >C7627::D1 Dilution Factor: 1.00
ame: U-5162 # 2215.01 20X DC-GW-37
isc: 04-03-87CS 2.5ML OF (1:10) SAMPLE + 2.5ML DI + 10UL I 20X

D File: VOACR::D2
itle: VOA ID FILE FOR HP-5995 (CONT. CAL.)
ast Calibration: 870403 10:07

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	(IS) 128	11.69	252	36676	50.00	UG/L	100
6)	METHYLENE CHLORIDE	84	8.35	166	2812	2.20	UG/L yes	100
7)	ACETONE	43	9.24	189	19615	32.59	UG/L yes	100
13)	CHLOROFORM	83	13.86	308	101567	36.53	UG/L yes	100
15)	1,2-DICHLOROETHANE-D4	(SURR) 65	14.56	326	95947	49.67	UG/L	81
16)	*1,4-DIFLUOROBENZENE	(IS) 114	22.32	526	164909	50.00	UG/L	100
27)	BENZENE	78	19.76	460	30939	7.68	UG/L yes	100
1)	*CHLOROBENZENE-D5	(IS) 117	27.17	651	134847	50.00	UG/L	100
2)	4-METHYL-2-PENTANONE	43	23.02	544	15814	13.72	UG/L yes	85
6)	TOLUENE-D8	(SURR) 98	26.00	621	189511	49.06	UG/L	94
7)	TOLUENE	92	26.20	626	127249	48.57	UG/L yes	94
~~3)~~	~~CHLOROBENZENE~~	~~112~~	~~27.29~~	~~654~~	~~2705~~	~~.07~~	~~UG/L~~ (ND)	94
0)	4-BROMOFLUOROBENZENE	(SURR) 95	31.79	770	95117	48.09	UG/L	100

* Compound is ISTD

TOTAL ION CHROMATOGRAM

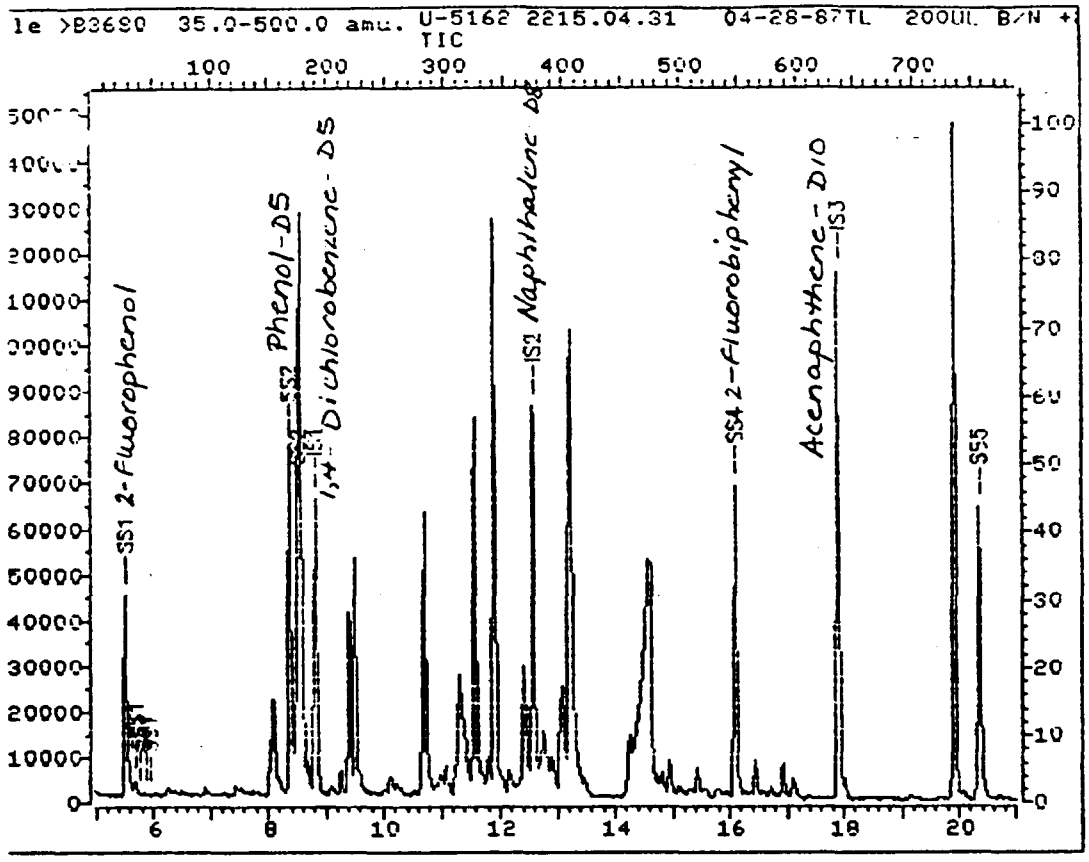


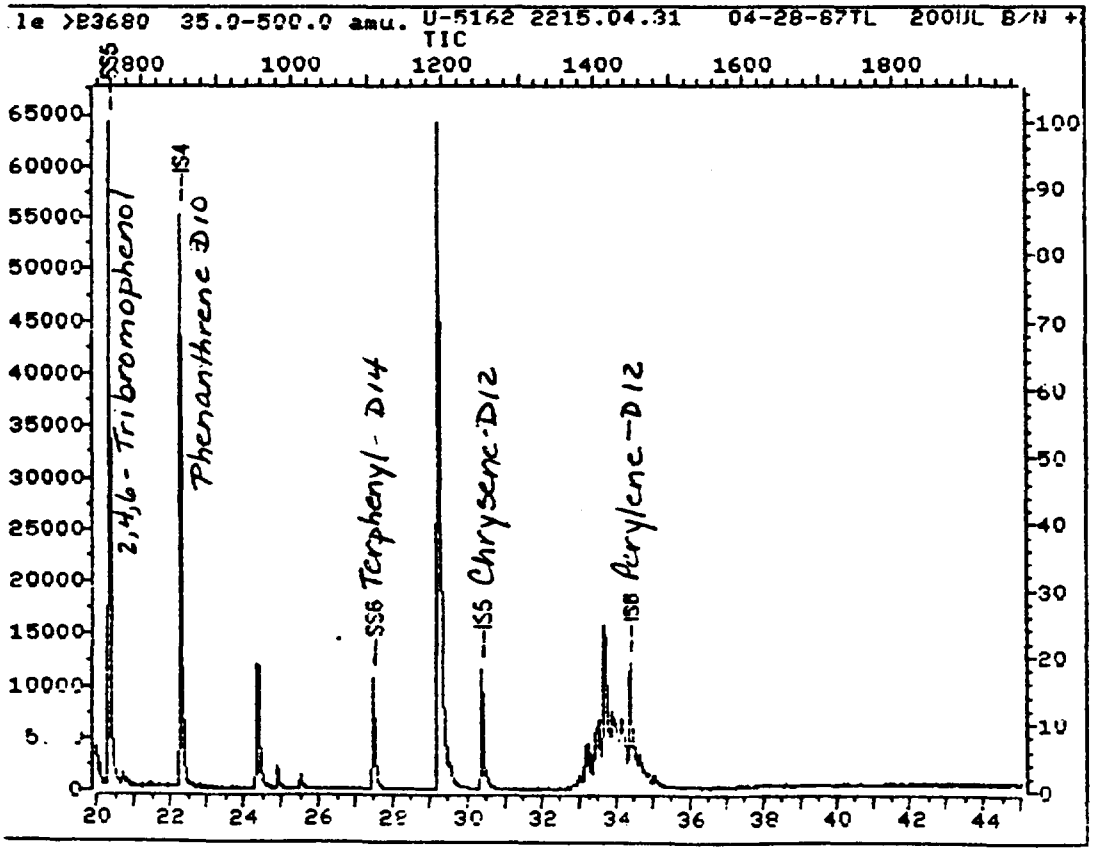
Data File: >B3680::D4
Name: U-5162 2215.04.31 DC-GW-37
Misc: 04-28-87TL 200UL B/N +200UL A/P +4UL IS

Id File: BNABR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870428 13:13

Operator ID: USER8
Quant Time: 870428 18:35
Injected at: 870428 17:47

DC-GW-37


le >B3680 35.0-500.0 amu. U-5162 2215.04.31 04-28-87TL 200UL B/N +
TIC
SS1 2-Fluorophenol
SS2 Phenol-D5
1,4-Dichlorobenzene-D5
IS1 Naphthalene-D8
SS4 2-Fluorobiphenyl
IS3 Acenaphthene-D10
SS5


le >B3680 35.0-500.0 amu. U-5162 2215.04.31 04-28-87TL 200UL B/N +
TIC
SS5 2,4,6-Tribromophenol
IS4 Phenanthrene-D10
SS6 Terphenyl-D14
IS5 Chrysene-D12
IS6 Perylene-D12

QUANT REPORT

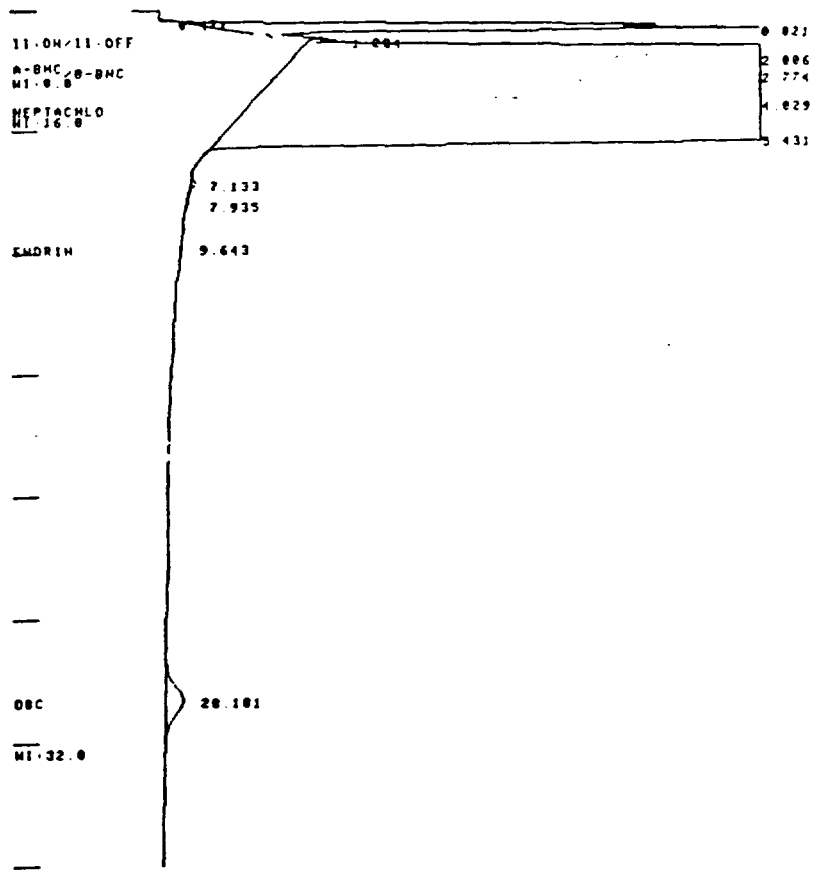
perator ID: USER8 Quant Rev: 4 Quant Time: 870428 18:35
it t File: ^B3680::Q2 Injected at: 870428 17:47
sta File: >B3680::D4 Dilution Factor: 2.00
ame: U-5162 2215.04.31 DC-GW-37
isc: 04-28-87TL 200UL B/N +200UL A/P +4UL IS

D File: BNABR::D2
itle: BNA ID FILE FOR THE HP 5970 (8)
ast Calibration: 870428 13:13

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-D4	(IS)	152	8.81	189	31559	40.00 UG/L	84
2)	~~PHENOL-D5~~	~~(SURR)~~	~~99~~	~~9.36~~	~~167~~	~~3240~~	~~5.92 UG/L~~ cw	47
2)	PHENOL-D5	(SURR)	99	8.50	174	41375	75.56 UG/L	99
5)	2-FLUOROPHENOL	(SURR)	112	5.49	26	35816	122.31 UG/L	81
5)	~~2-FLUOROPHENOL~~	~~(SURR)~~	~~112~~	~~5.60~~	~~35~~	~~1306~~	~~4.73 UG/L~~	79
5)	~~2-FLUOROPHENOL~~	~~(SURR)~~	~~112~~	~~5.74~~	~~39~~	~~1363~~	~~4.67 UG/L~~ cw	74
5)	~~2-FLUOROPHENOL~~	~~(SURR)~~	~~112~~	~~5.84~~	~~43~~	~~495~~	~~1.69 UG/L~~	78
5)	~~2-FLUOROPHENOL~~	~~(SURR)~~	~~112~~	~~5.92~~	~~47~~	~~334~~	~~1.14 UG/L~~	71
6)	PHENOL		94	8.54	176	89115	153.37 UG/L	80
7)	ANILINE		93	8.10	154	19383	33.21 UG/L	91
7)	~~ANILINE~~		~~93~~	~~8.36~~	~~167~~	~~2136~~	~~3.66 UG/L~~ cw	46
9)	~~1,3-DICHLOROBENZENE~~		~~146~~	~~8.85~~	~~191~~	~~449~~	~~.77 UG/L~~	98
0)	1,4-DICHLOROBENZENE		146	8.85	191	449	.82 UG/L	93
3)	2-METHYL PHENOL		108	10.21	258	2370	5.71 UG/L	98
5)	2-CHLOROPHENOL		128	8.36	167	56300	147.77 UG/L	96
6)	~~4-METHYL PHENOL~~		~~108~~	~~10.21~~	~~258~~	~~2370~~	~~5.37 UG/L~~ cw	71
6)	4-METHYL PHENOL		108	10.70	282	33142	75.06 UG/L	97
6)	~~4-METHYL PHENOL~~		~~108~~	~~10.97~~	~~295~~	~~977~~	~~2.21 UG/L~~ cw	92
7)	~~N-NITROSO-DI-N-PROPYLAMINE~~		~~70~~	~~10.70~~	~~282~~	~~766~~	~~1.53 UG/L~~ No bkg	1
9)	*NAPHTHALENE-D8	(IS)	136	12.57	374	113010	40.00 UG/L	100
4)	~~2,4-DIMETHYLPHENOL~~		~~122~~	~~11.80~~	~~336~~	~~996~~	~~2.75 UG/L~~	64
4)	~~2,4-DIMETHYLPHENOL~~		~~122~~	~~12.21~~	~~356~~	~~1751~~	~~4.84 UG/L~~ cw	85
5)	~~BENZOIC ACID~~		~~105~~	~~12.86~~	~~388~~	~~15266~~	~~58.54 UG/L~~	95
7)	2,4-DICHLOROPHENOL		162	12.41	366	18312	40.74 UG/L	98
9)	~~NAPHTHALENE~~		~~128~~	~~12.41~~	~~366~~	~~371~~	~~.25 UG/L~~ cw	100
9)	~~NAPHTHALENE~~		~~128~~	~~12.45~~	~~368~~	~~138~~	~~.07 UG/L~~	100
9)	~~NAPHTHALENE~~		~~128~~	~~12.64~~	~~377~~	~~1169~~	~~.79 UG/L~~ No bkg	100
9)	~~NAPHTHALENE~~		~~128~~	~~13.08~~	~~399~~	~~3014~~	~~2.35 UG/L~~ cw	100
0)	4-CHLOROANILINE		127	13.04	397	13807	23.72 UG/L	98
0)	4-CHLOROANILINE		127	13.10	400	21459	36.87 UG/L	52
4)	*ACENAPHTHENE-D10	(IS)	162	17.90	636	71185	40.00 UG/L	97
8)	2-FLUOROBIPHENYL	(SURR)	172	16.09	547	67150	56.56 UG/L	94
1)	~~DIMETHYL-PHTHALATE~~		~~163~~	~~17.98~~	~~636~~	~~12755~~	~~11.91 UG/L~~ cw	100
8)	2,4,6-TRIBROMOPHENOL	(SURR)	330	20.34	756	32613	135.79 UG/L	97
2)	~~2,6-DINITROTOLUENE~~		~~165~~	~~17.98~~	~~636~~	~~9486~~	~~43.88 UG/L~~ cw	100
5)	*PHENANTHRENE-D10	(IS)	188	22.30	852	83909	40.00 UG/L	98
3)	DI-N-BUTYLPHTHALATE		149	24.90	980	5703	6.51 UG/L	99
5)	*CHRYSENE-D12	(IS)	240	30.39	1250	26160	40.00 UG/L	100
8)	TERPHENYL-D14	(SURR)	244	27.48	1107	22521	77.92 UG/L	100
4	PERYLENE-D12	(IS)	264	34.41	1448	23473	40.00 UG/L	100
5	~~DI-N-OCTYL PHTHALATE~~		~~149~~	~~32.82~~	~~1320~~	~~678~~	~~1.49 UG/L~~ cw	100
5)	DI-N-OCTYL PHTHALATE		149	33.21	1389	3608	7.92 UG/L	100
5)	DI-N-OCTYL PHTHALATE		149	33.47	1402	4973	10.92 UG/L	100
5)	DI-N-OCTYL PHTHALATE		149	33.52	1404	1500	3.29 UG/L	100
5)	DI-N-OCTYL PHTHALATE		149	33.68	1412	5394	11.8 UG/L cw	100

* Compound is ISTD

CHART SPEED 0.5 CM/MIN
ATTEN: 8 ZERO: 10% 5 MIN/TICK



DC-GW-37

CHANNEL: 1A - 1 TITLE: RUN#20 23:43 21 APR 87

SAMPLE: 2215 METHOD: CEPA CALCULATION: ES - ANALYS

PEAK NO	PEAK NAME	RESULT UG/L	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		0.0000	1.234		31872	BV	2.69
2		0.0000	1.491		905708	VV	? 5.08
3		0.0000	2.005		2839574	VV	? 9.31
4		0.0000	2.044		942771	VV	?
5	~~A-BHC~~	1.7892	2.188	-0.002	516569	VV	?
6	~~B-BHC~~	29.1713	2.352	0.012	3118951	VV	? 65.88
7		0.0000	2.774		127739	VV	? 66.63
8		0.0000	2.826		5689454	VV	? 60.31
9	~~HEPTACHLO~~	8.2969	4.029	-0.021	1900021	VV	?100.81
10		0.0000	5.431		15733761	VB	11.06
11	DBC	0.9399	28.101	0.031	178374	BB	? 74.06
TOTALS:		40.1973		0.020	31977794		

DETECTED PKS: 20 REJECTED PKS: 9

DIVISOR: 1.00000 MULTIPLIER: 100.00000

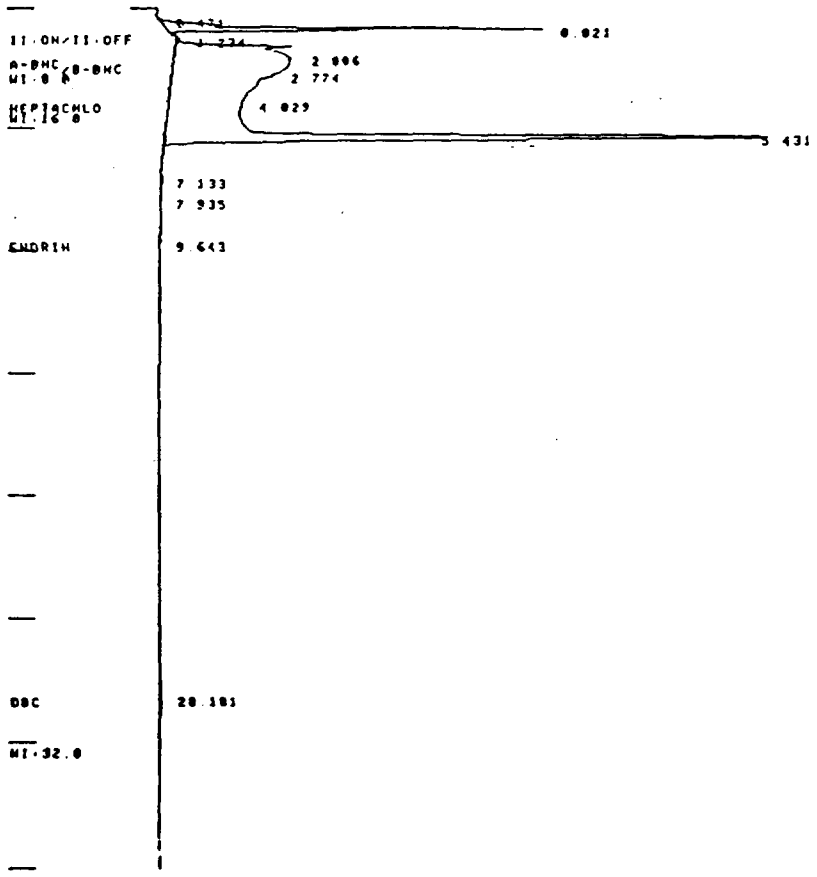
NOISE: 11.4 OFFSET: -2

RACK: 2 VIAL: 5 INJ: 1

NOTES:
NOTEBOOK:297-1,3 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#:U-5162
INST: VARIAN 6000# 2A ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
LIQUID PHASE: 3% OV-1
CARRIER GAS: N2 @ 60 ML/MIN
DET: 300 C INJ: 220 C
200 C ISOTHERMAL 4 UL INJECTION
PRIMARY ANALYSIS AUTOSAMPLER
DEAD CREEK

POST RUN:
SAVE FILE: RAW 7010690

CHART SPEED 0.5 CM/MIN
ATTEN: 64 ZERO: 10% 5 MIN/TICK



RECALCULATE ON FILE: 7010690

DC-GW-37

CHANNEL: 1A - 1 TITLE: RUN# 20 23:43 21 APR 87

SAMPLE: 2215 METHOD: CEPA CALCULATION: ES - ANALYS

PEAK NO	PEAK NAME	RESULT UG/L	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	WI/2 (SEC)
1		0.0000	1.234		31872	BV	2.69
2		0.0000	1.491		906708	VV	? 5.88
3		0.0000	2.006		2839574	VV	? 9.31
4		0.0000	2.044		942771	VV	?
5	~~A-BHC~~	1.7892	2.100	-0.002	516569	VV	?
6	~~B-BHC~~	29.1713	2.352	0.012	3110951	VV	? 65.88
7		0.0000	2.774		127739	VV	? 66.63
8		0.0000	2.826		5771934	VV	? 52.50
9	~~HEPTACHLO~~	8.2969	4.029	-0.021	1900071	VV	?100.81
10		0.0000	5.431		15852814	VB	11.06
11	DBC	0.9399	20.181	0.031	178374	BB	? 74.06

TOTALS: 40.1973 0.020 32179328

DETECTED PKS: 20 REJECTED PKS: 9

DIVISOR: 1.00000 MULTIPLIER: 100.00000

NOISE: 11.4 OFFSET: -2

RACK: 2 VIAL: 5 INJ: 1

NOTES:
NOTEBOOK:297-1,3 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#:U-5162
INST: VARIAN 6000# 2A ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
LIQUID PHASE: 3% OV-1
CARRIER GAS: N2 @ 60 ML/MIN
DET: 300 C INJ: 220 C
200 C ISOTHERMAL 4 UL INJECTION
PRIMARY ANALYSIS AUTOSAMPLER
DEAD CREEK

SAMPLE NUMBER DC-GW-38

Sample Number
DC-GW-38

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Ecology & Environment, Inc. Case No: U-5157, 5162

Lab Sample ID No: 2216 QC Report No:

Sample Matrix: Water Contract No: IL-3140

Data Release Authorized By: [signature] Date Sample Received: 3-25-87

Volatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 4-6-87

Conc./Dil Factor: 1 pH

Percent Moisture: (Not Decanted)

CAS Number		(ug/l) or ug/Kg (Circle One)
74-87-3	Chloromethane	10u
74-83-9	Bromomethane	10u
75-01-4	Vinyl Chloride	10u
75-00-3	Chloroethane	10u
75-09-2	Methylene Chloride	5u
67-64-1	Acetone	7J
75-15-0	Carbon Disulfide	5u
75-35-4	1, 1-Dichloroethene	5u
75-34-3	1, 1-Dichloroethane	5u
156-60-5	Trans-1, 2-Dichloroethene	5u
67-66-3	Chloroform	5u
107-06-2	1, 2-Dichloroethane	5u
78-93-3	2-Butanone	10u
71-55-6	1, 1, 1-Trichloroethane	5u
56-23-5	Carbon Tetrachloride	5u
108-05-4	Vinyl Acetate	10u
75-27-4	Bromodichloromethane	5u

CAS Number		(ug/l) or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	5u
10061-02-6	Trans-1, 3-Dichloropropene	5u
79-01-6	Trichloroethene	5u
124-48-1	Dibromochloromethane	5u
79-00-5	1, 1, 2-Trichloroethane	5u
71-43-2	Benzene	5u
10061-01-5	cis-1, 3-Dichloropropene	5u
110-75-8	2-Chloroethylvinylether	10u
75-25-2	Bromoform	5u
591-78-6	4-Methyl-2-Pentanone	10u
108-10-1	2-Hexanone	10u
127-18-4	Tetrachloroethene	5u
79-34-5	1, 1, 2, 2-Tetrachloroethane	5u
108-88-3	Toluene	5u
108-90-7	Chlorobenzene	5u
100-41-4	Ethylbenzene	5u
100-42-5	Styrene	5u
	Total Xylenes	5u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g. 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS.

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

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

E This flag indicates an approximate concentration. The amount detected in the analysis exceeds the calibrated range.

295

Laboratory Name ecology and environment, inc.

Case No U-5157, 5162

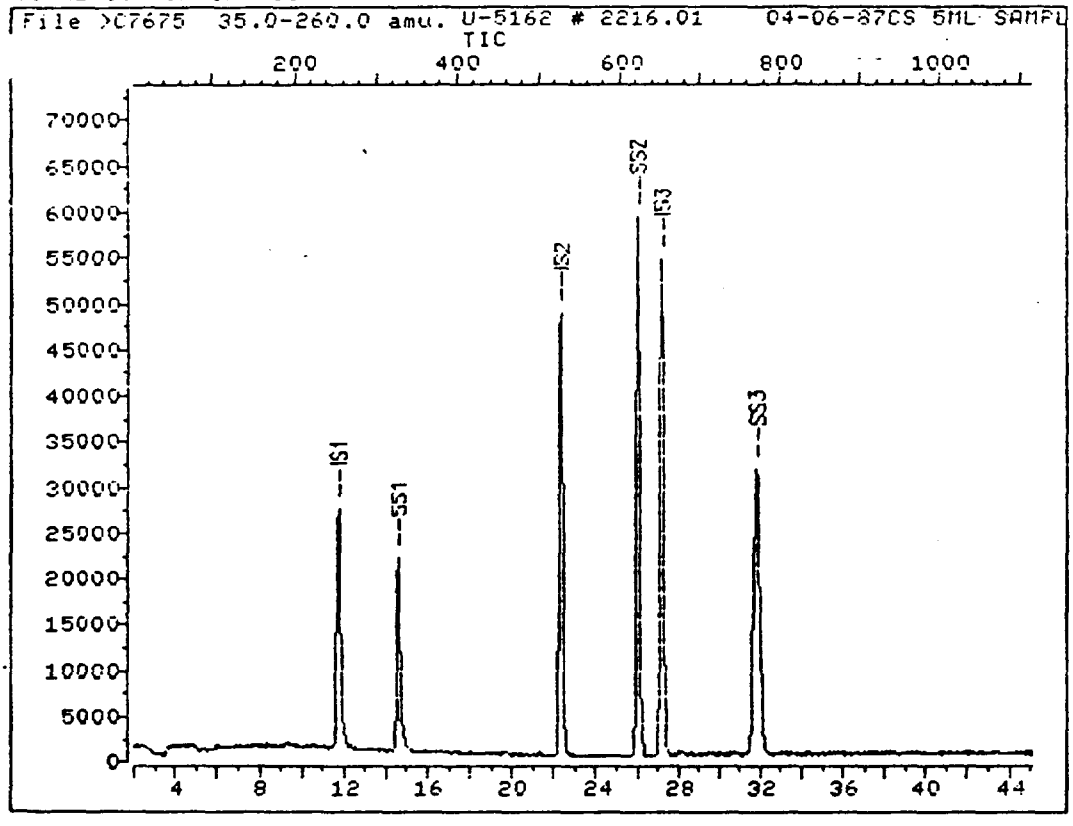
Sample Number DC-GW-38

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.	No TIC's in VOA fraction			
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

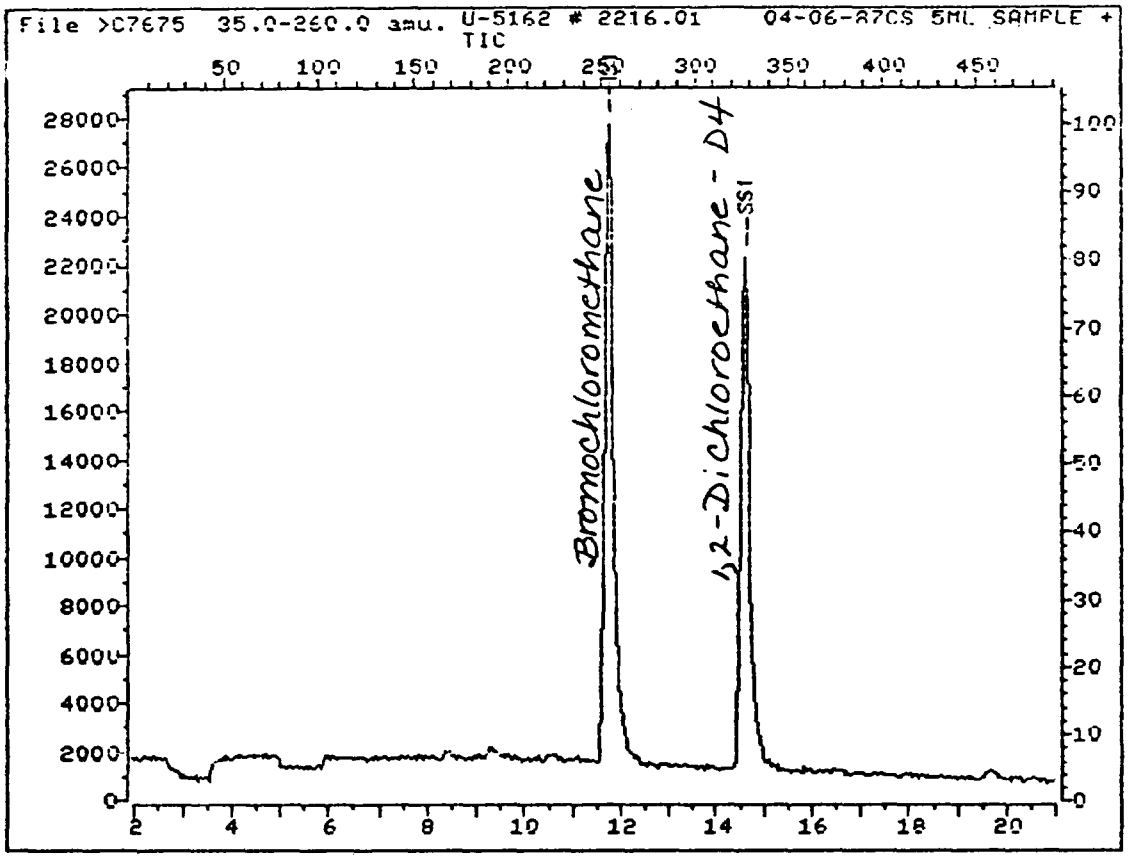


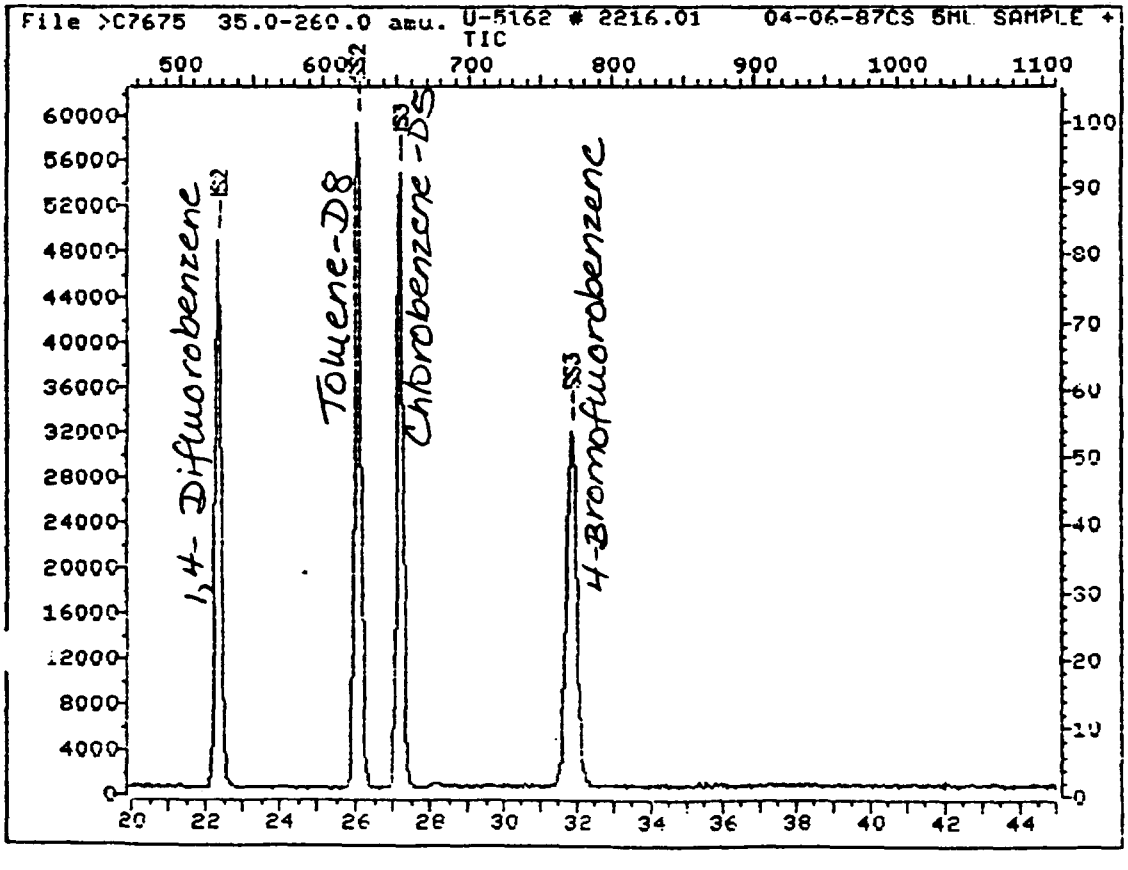
Data File: >C7675::D1
Name: U-5162 # 2216.01 DC-GW-38
Misc: 04-06-87CS 5ML SAMPLE + 10UL IS/SS

Id File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870406 13:39

Operator ID: USER8
Quant Time: 870406 15:16
Injected at: 870406 14:30

DC-GW-38


File >C7675 35.0-260.0 amu. U-5162 # 2216.01 04-06-87CS 5ML SAMPLE +
TIC
Bromochloromethane
1,2-Dichloroethane - D4
SS1


File >C7675 35.0-260.0 amu. U-5162 # 2216.01 04-06-87CS 5ML SAMPLE +
TIC
1,4-Difluorobenzene
IS2
Toluene-D8
SS2
Chlorobenzene-D5
IS3
4-Bromofluorobenzene
SS3

QUANT REPORT

Operator ID: USER8 Quant Rev: 4 Quant Time: 870406 15:16
Output File: ^C7675::Q2 Injected at: 870406 14:30
Data File: >C7675::D1 Dilution Factor: 1.00
Name: U-5162 # 2216.01 DC-GW-38
Misc: 04-06-87CS 5ML SAMPLE + 10UL IS/SS

ID File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870406 13:39

	Compound			R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	(IS)	128	11.77	254	44843	50.00	UG/L	100
7)	ACETONE		43	9.32	191	5518	7.42	UG/L yes	100
15)	1,2-DICHLOROETHANE-D4	(SURR)	65	14.60	327	99471	49.13	UG/L	87
16)	*1,4-DIFLUOROBENZENE	(IS)	114	22.36	527	207792	50.00	UG/L	100
31)	*CHLOROBENZENE-D5	(IS)	117	27.21	652	169691	50.00	UG/L	100
36)	TOLUENE-D8	(SURR)	98	26.05	622	233970	48.39	UG/L	93
~~37)~~	~~TOLUENE~~ CIS		~~92~~	~~26.24~~	~~627~~	~~2473~~	~~.86~~	~~UG/L~~	89
40)	4-BROMOFLUOROBENZENE	(SURR)	95	31.84	771	116250	49.25	UG/L	100

* Compound is ISTD

SAMPLE NUMBER DC-GW-39

Sample Number
DC-GW-39 A

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Ecology & Environment, Inc. Case No: U-5157, 5162

Lab Sample ID No: 2217-01 QC Report No:

Sample Matrix: Water Contract No: IL-3140

Data Release Authorized By: [signature] Date Sample Received: 3-25-87

Volatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 4-6-87

Conc./Dil Factor: 1 pH

Percent Moisture: (Not Decanted)

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	10u
74-83-9	Bromomethane	10u
75-01-4	Vinyl Chloride	10u
75-00-3	Chloroethane	10u
75-09-2	Methylene Chloride	5u
67-64-1	Acetone	4J
75-15-0	Carbon Disulfide	5u
75-35-4	1, 1-Dichloroethene	5u
75-34-3	1, 1-Dichloroethane	5u
156-60-5	Trans-1, 2-Dichloroethene	5u
67-66-3	Chloroform	5u
107-06-2	1, 2-Dichloroethane	5u
78-93-3	2-Butanone	10u
71-55-6	1, 1, 1-Trichloroethane	5u
56-23-5	Carbon Tetrachloride	5u
108-05-4	Vinyl Acetate	10u
75-27-4	Bromodichloromethane	5u

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	5u
10061-02-6	Trans-1, 3-Dichloropropene	5u
79-01-6	Trichloroethene	5u
124-48-1	Dibromochloromethane	5u
79-00-5	1, 1, 2-Trichloroethane	5u
71-43-2	Benzene	5u
10061-01-5	cis-1, 3-Dichloropropene	5u
110-75-8	2-Chloroethylvinylether	10u
75-25-2	Bromoform	5u
591-78-6	4-Methyl-2-Pentanone	10u
108-10-1	2-Hexanone	10u
127-18-4	Tetrachloroethene	5u
79-34-5	1, 1, 2, 2-Tetrachloroethane	5u
108-88-3	Toluene	5u
108-90-7	Chlorobenzene	5u
100-41-4	Ethylbenzene	5u
100-42-5	Styrene	5u
	Total Xylenes	5u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit report the value

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration, dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g. 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS

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

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

E This flag indicates an approximate concentration. The amount detected in the analysis exceeds the calibrated range.

301

Sample Number
DC-GW-39B

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Ecology & Environment, Inc. Case No: U-5157, 5162

Lab Sample ID No: 2217.02 QC Report No:

Sample Matrix: Water Contract No: IL-3140

Data Release Authorized By: [signature] Date Sample Received: 3-25-87

Volatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 4-7-87

Conc./Dil Factor: 1000 pH

Percent Moisture: (Not Decanted)

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	10000 U
74-83-9	Bromomethane	10000 U
75-01-4	Vinyl Chloride	10000 U
75-00-3	Chloroethane	10000 U
75-09-2	Methylene Chloride	52000
67-64-1	Acetone	38000 B
75-15-0	Carbon Disulfide	5000 U
75-35-4	1, 1-Dichloroethene	5000 U
75-34-3	1, 1-Dichloroethane	5000 U
156-60-5	Trans-1, 2-Dichloroethene	20000 U
67-66-3	Chloroform	3000 J
107-06-2	1, 2-Dichloroethane	4000 J
78-93-3	2-Butanone	62000
71-55-6	1, 1, 1-Trichloroethane	7800
56-23-5	Carbon Tetrachloride	5000 U
108-05-4	Vinyl Acetate	10000 U
75-27-4	Bromodichloromethane	5000 U

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	5000 U
10061-02-6	Trans-1, 3-Dichloropropene	5000 U
79-01-6	Trichloroethene	83000
124-48-1	Dibromochloromethane	5000 U
79-00-5	1, 1, 2-Trichloroethane	5000 U
71-43-2	Benzene	190000
10061-01-5	cis-1, 3-Dichloropropene	5000 U
110-75-8	2-Chloroethylvinylether	10000 U
75-25-2	Bromoform	5000 U
591-78-6	4-Methyl-2-Pentanone	38000
108-10-1	2-Hexanone	10000 U
127-18-4	Tetrachloroethene	10000
79-34-5	1, 1, 2, 2-Tetrachloroethane	5000 U
108-88-3	Toluene	15000
108-90-7	Chlorobenzene	150,000
100-41-4	Ethylbenzene	5000 U
100-42-5	Styrene	5000 U
	Total Xylenes	4600 J

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration, dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g. 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS.

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

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

E This flag indicates an approximate concentration. The amount detected in the analysis exceeds the calibrated range.

302

Laboratory Name: ECOLOGY & ENVIRONMENT INC

Case No: U-5157, 5167

Sample Number: DC-GW-39

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 3-30-87

Date Analyzed: 4-28-87

Conc/Dil Factor: 25

Percent Moisture (Decanted) —

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)
108-95-2	Phenol	500
111-44-4	bis(-2-Chloroethyl)Ether	120 U
95-57-8	2-Chlorophenol	120
541-73-1	1 3-Dichlorobenzene	320
106-46-7	1 4-Dichlorobenzene	10,000 E
100-51-6	Benzyl Alcohol	120 U
95-50-1	1 2-Dichlorobenzene	7800
95-48-7	2-Methylphenol	78 J
39638-32-9	bis(2-chloroisopropyl)Ether	120 U
106-44-5	4-Methylphenol	820
621-64-7	N-Nitroso-Di-n-Propylamine	120 U
67-72-1	Hexachloroethane	120 U
98-95-3	Nitrobenzene	120 U
78-59-1	Isophorone	120 U
88-75-5	2-Nitrophenol	120 U
105-67-9	2, 4-Dimethylphenol	350
65-85-0	Benzoic Acid	620 U
111-91-1	bis(-2-Chloroethoxyl)Methane	120 U
120-83-2	2, 4-Dichlorophenol	30 J
120-82-1	1, 2, 4-Trichlorobenzene	270
91-20-3	Naphthalene	160
106-47-8	4-Chloroaniline	780
87-68-3	Hexachlorobutadiene	120 U
59-50-7	4-Chloro-3-Methylphenol	120 U
91-57-6	2-Methylnaphthalene	6 J
77-47-4	Hexachlorocyclopentadiene	120 U
88-06-2	2 4 6-Trichlorophenol	120 U
95-95-4	2, 4, 5-Trichlorophenol	620 U
91-58-7	2-Chloronaphthalene	120 U
88-74-4	2-Nitroaniline	620 U
131-11-3	Dimethyl Phthalate	120 U
208-96-8	Acenaphthylene	120 U
99-09-2	3-Nitroaniline	620 U

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	120 U
51-28-5	2, 4-Dinitrophenol	620 U
100-02-7	4-Nitrophenol	620 U
132-64-9	Dibenzofuran	120 U
121-14-2	2 4-Dinitrotoluene	120 U
606-20-2	2, 6-Dinitrotoluene	120 U
84-66-2	Diethylphthalate	120 U
7005-72-3	4-Chlorophenyl-phenylether	120 U
86-73-7	Fluorene	120 U
100-01-6	4-Nitroaniline	620 U
534-52-1	4, 6-Dinitro-2-Methylphenol	620 U
86-30-6	N-Nitrosodiphenylamine (1)	120 U
101-55-3	4-Bromophenyl-phenylether	120 U
118-74-1	Hexachlorobenzene	120 U
87-86-5	Pentachlorophenol	23 J
85-01-8	Phenanthrene	120 U
120-12-7	Anthracene	120 U
84-74-2	Di-n-Butylphthalate	120 U
206-44-0	Fluoranthene	120 U
129-00-0	Pyrene	120 U
85-68-7	Butylbenzylphthalate	120 U
91-94-1	3, 3'-Dichlorobenzidine	250 U
56-55-3	Benzo(a)Anthracene	120 U
117-81-7	bis(2-Ethylhexyl)Phthalate	120 U
218-01-9	Chrysene	120 U
117-84-0	Di-n-Octyl Phthalate	120 U
205-99-2	Benzo(b)Fluoranthene	120 U
207-08-9	Benzo(k)Fluoranthene	120 U
50-32-8	Benzo(a)Pyrene	120 U
193-39-5	Indeno(1 2, 3-cd)Pyrene	120 U
53-70-3	Dibenz(a h)Anthracene	120 U
191-24-2	Benzo(g, h i)Perylene	120 U

(1)-Cannot be separated from diphenylamine

Laboratory Name ecology and environment, inc.

Case No U-5157, 5162

Sample Number DC-GW-39

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration (Low) Medium (Circle One)

Date Extracted/Prepared 3-31-87

Date Analyzed 4-22-87

Conc/Dil Factor 100

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☑Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/l or ug/Kg) (Circle One)
319-84-6	Alpha-BHC	5.0U
319-85-7	Beta-BHC	5.0U
319-86-8	Delta-BHC	5.0U
58-89-9	Gamma-BHC (Lindane)	5.0U
76-44-8	Heptachlor	5.0U
309-00-2	Aldrin	5.0U
1024-57-3	Heptachlor Epoxide	5.0U
959-98-8	Endosulfan I	5.0U
60-57-1	Dieldrin	10U
72-55-9	4,4'-DDE	10U
72-20-8	Endrin	10U
33213-65-9	Endosulfan II	10U
72-54-8	4,4'-DDD	10U
1031-07-8	Endosulfan Sulfate	10U
50-29-3	4,4'-DDT	10U
72-43-5	Methoxychlor	50U
53494-70-5	Endrin Ketone	10U
57-74-9	Chlordane	50U
8001-35-2	Toxaphene	100U
12674-11-2	Aroclor-1016	50U
11104-28-2	Aroclor-1221	50U
11141-16-5	Aroclor-1232	50U
53469-21-9	Aroclor-1242	50U
12672-29-6	Aroclor-1248	50U
11097-69-1	Aroclor-1254	100U
11096-82-5	Aroclor-1260	100U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 4,000 or W_s _____ V_t 10,000 V_i 4 304

Laboratory Name

Case No U-5157, 5162

Sample Number DC-GW-39 A

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.	No TIC's in VOA fraction			
2.				
3.				
4.	Xylene Isomer	BNA	5.06	360 J
5.	Unknown Alcohol		5.25	360 J
6.	Xylene Isomer		5.72	180 J
7	Tetrachloroethane		6.37	320 J
8.	Unknown Alcohol		10.99	5500 J
9.	Chloroaniline Isomer		11.62	550 J
10.	Unknown Acid		12.21	2400 J
11.	Unknown Acid		14.29	11,000 J
12.	Unknown Acid		15.08	430 J
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24				
25.				
26.				
27.				
28.				
29.				
30				

Laboratory Name Ecology & Environment

Case No U-5157, 5162

Sample Number DC-GW-39B

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.	No TIC's in VOA fraction			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
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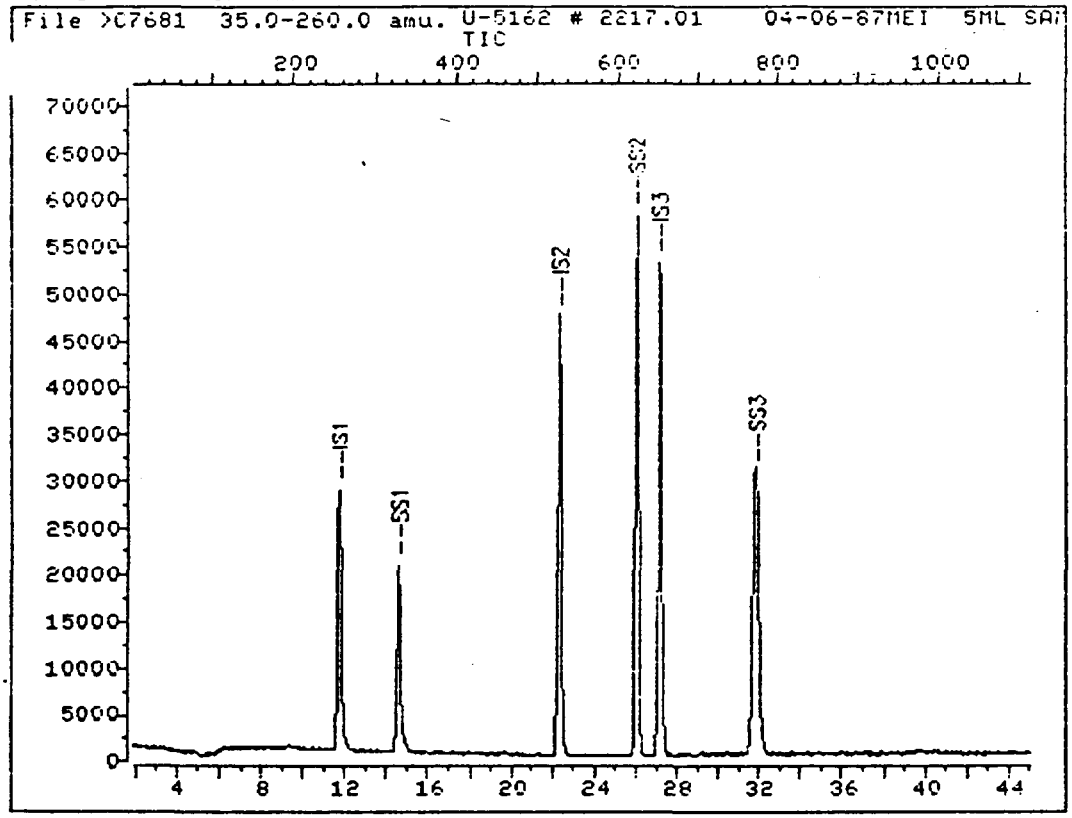
26.				
27.				
28.				
29.				
30				

TOTAL ION CHROMATOGRAM

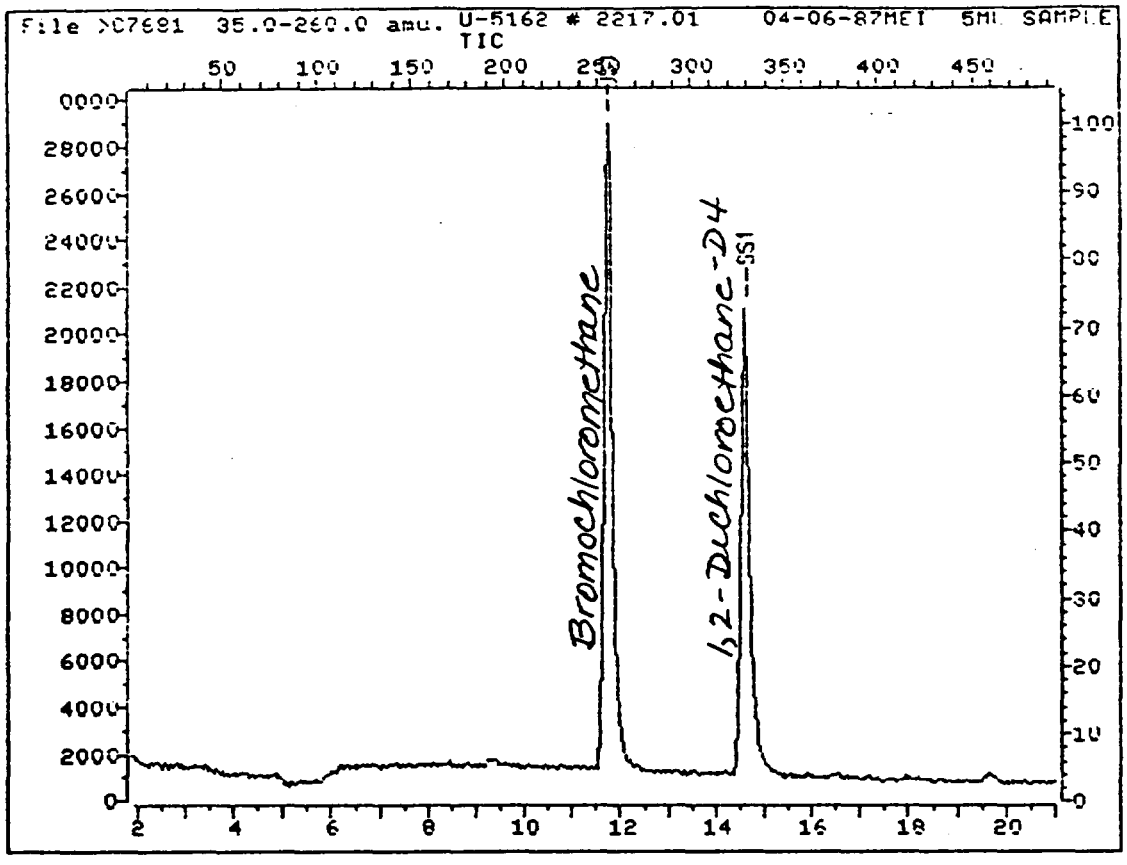


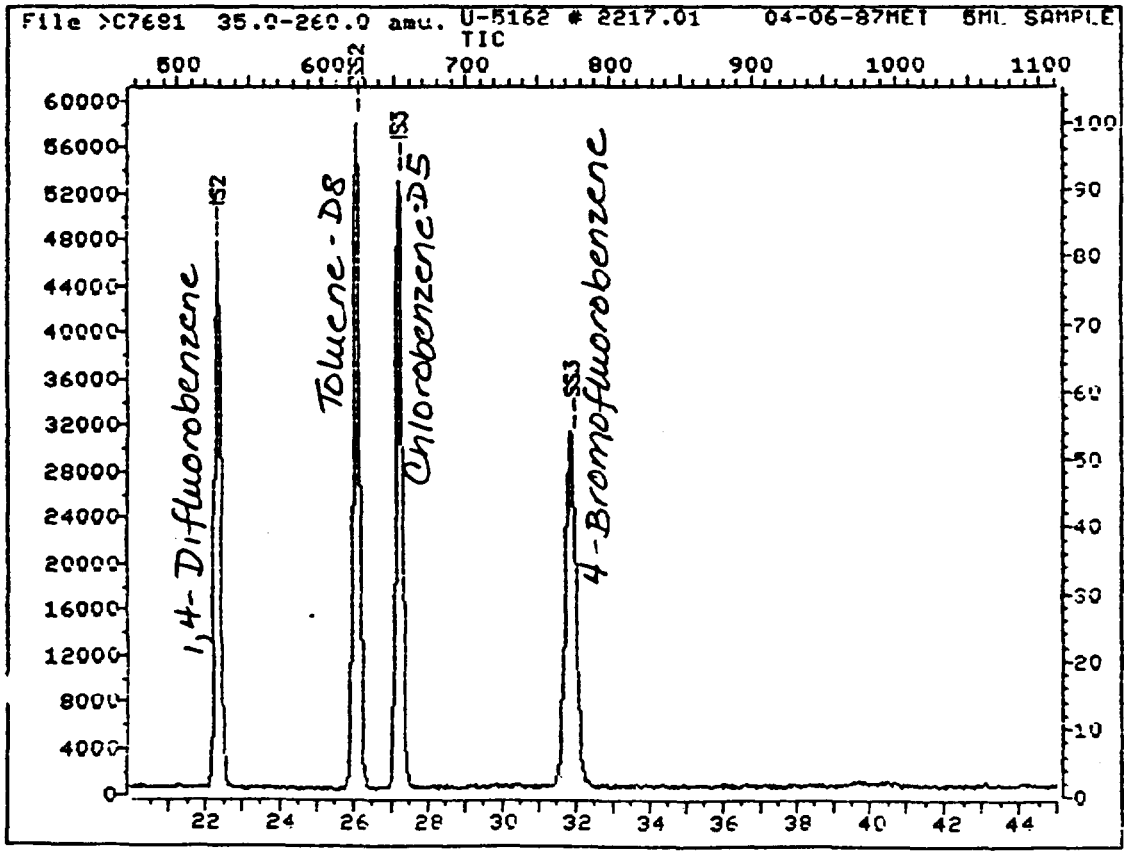
Data File: >C7681::D3
Name: U-5162 # 2217.01 DC-GW-39A
Misc: 04-06-87MEI 5ML SAMPLE + 10UL IS/SS

Id File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870406 13:39

Operator ID: USER8
Quant Time: 870406 20:51
Injected at: 870406 20:05

DC-GW-39A


File >C7691 35.0-260.0 amu. U-5162 # 2217.01 04-06-87MET 5ML SAMPLE
TIC
Bromochloromethane
1,2-Dichloroethane-D4
SS1


File >C7691 35.0-260.0 amu. U-5162 # 2217.01 04-06-87MET 5ML SAMPLE
TIC
1,4-Difluorobenzene
IS2
Toluene-D8
SS2
Chlorobenzene-D5
IS3
4-Bromofluorobenzene
SS3

QUANT REPORT

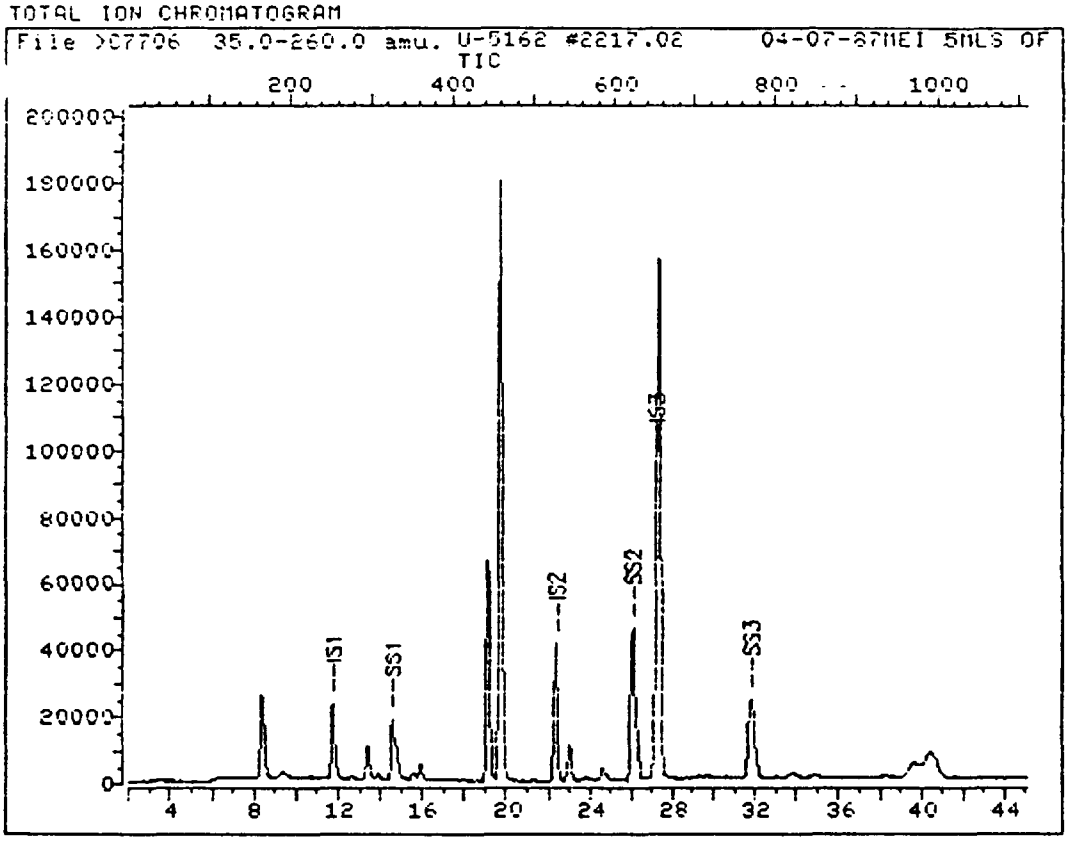
O ator ID: USER8 Quant Rev: 4 Quant Time: 870406 20:51
Output File: ^C7681::Q2 Injected at: 870406 20:05
Data File: >C7681::D3 Dilution Factor: 1.00
Name: U-5162 # 2217.01 DC-GW-39A
Misc: 04-06-87MEI 5ML SAMPLE + 10UL IS/SS

ID File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870406 13:39

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	(IS)	128 11.74	255	46869	50.00	UG/L	100
7)	ACETONE		43 9.38	194	2954	3.80	UG/L yes	100
15)	1,2-DICHLOROETHANE-D4	(SURR)	65 14.61	329	95969	45.35	UG/L	85
16)	*1,4-DIFLUOROBENZENE	(IS)	114 22.33	528	213191	50.00	UG/L	100
31)	*CHLOROBENZENE-D5	(IS)	117 27.19	653	170758	50.00	UG/L	100
36)	TOLUENE-D8	(SURR)	98 26.06	624	230520	47.38	UG/L	93
40)	4-BROMOFLUOROBENZENE	(SURR)	95 31.89	774	112396	47.32	UG/L	100

* Compound is ISTD

TOTAL ION CHROMATOGRAM

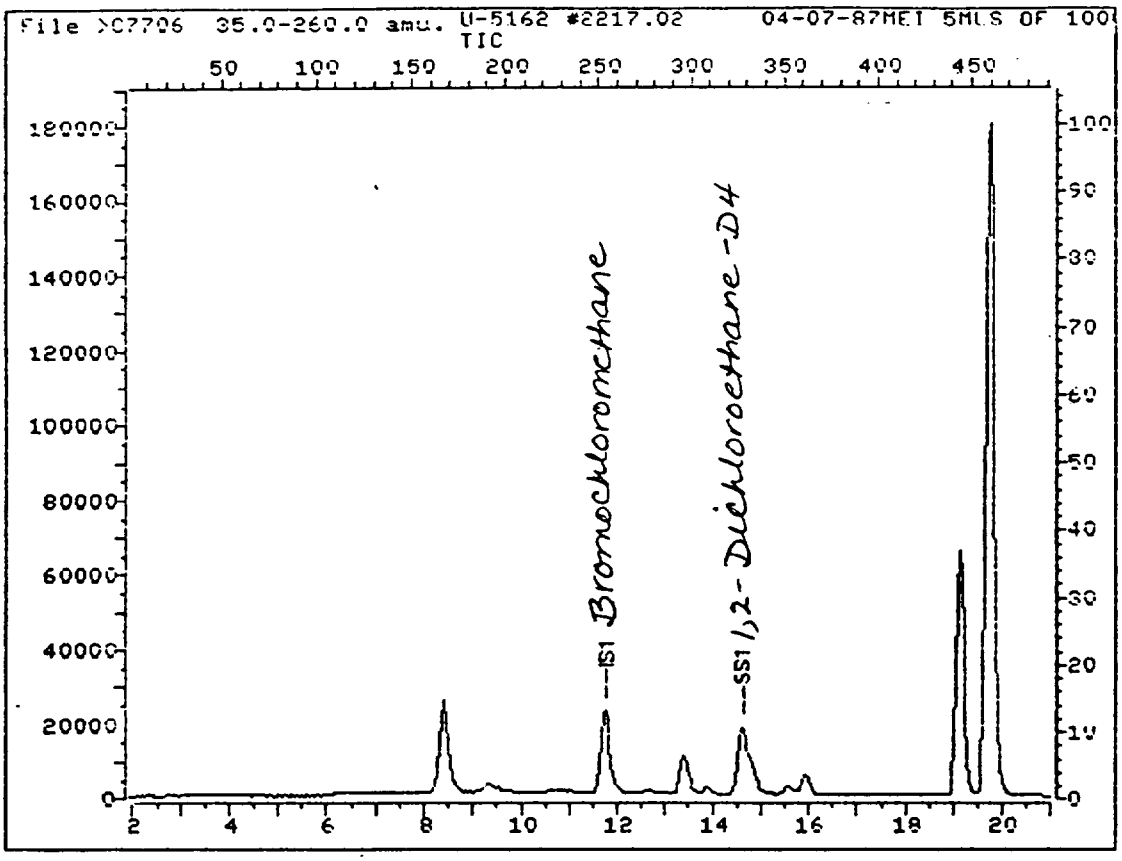


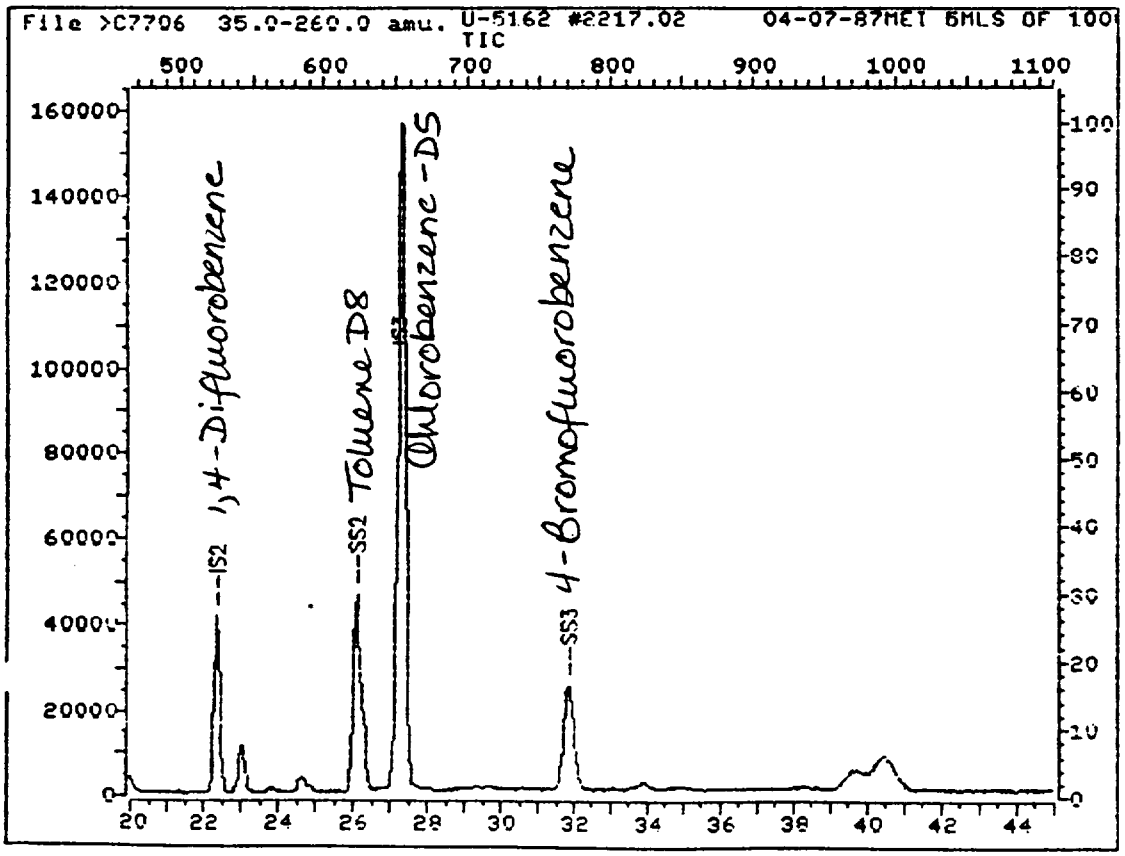
Data File: >C7706::D3
Name: U-5162 #2217.02 DC-GW-39B
Misc: 04-07-87MEI 5MLS OF 1000X DIL. + 10UL IS/SS

Id File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870407 18:50

Operator ID: USER8
Quant Time: 870407 20:11
Injected at: 870407 19:25

DC-GW-39B


File >C7706 35.0-260.0 amu. U-5162 #2217.02 04-07-87MEI 5MLS OF 100
TIC
--IS1 Bromochloromethane
--SS1 1,2-Dichloroethane-D4


File >C7706 35.0-260.0 amu. U-5162 #2217.02 04-07-87MEI 5MLS OF 100
TIC
--IS2 1,4-Difluorobenzene
--SS2 Toluene D8
IS3 Chlorobenzene-D5
--SS3 4-Bromofluorobenzene

QUANT REPORT

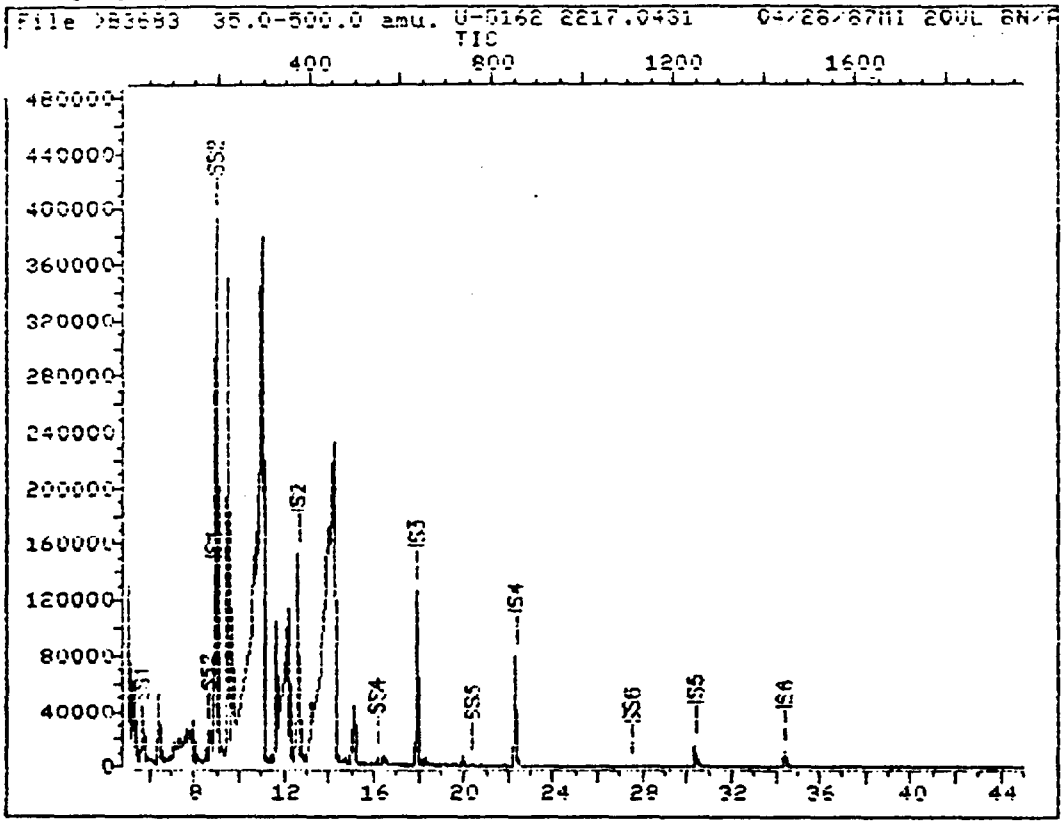
erator ID: USER8 Quant Rev: 4 Quant Time: 870407 20:11
utput File: ^C7706::Q2 Injected at: 870407 19:25
Data File: >C7706::D3 Dilution Factor: 1.00
Name: U-5162 #2217.02 DC-GW-39 B
Misc: 04-07-87MEI 5MLS OF 1000X DIL. + 10UL IS/SS

ID File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870407 18:50

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE (IS)	128	11.76	254	34023	50.00	UG/L	100
6)	METHYLENE CHLORIDE	84	8.39	167	64479	52.47	UG/L	100
7)	ACETONE	43	9.32	191	34119	38.47	UG/L	100
12)	TRANS-1,2-DICHLOROETHENE	96	13.39	296	24352	20.38	UG/L	83
13)	CHLOROFORM	83	13.93	310	7898	3.05	UG/L	100
14)	1,2-DICHLOROETHANE	62	14.71	330	7743	3.57	UG/L	88
15)	1,2-DICHLOROETHANE-D4(SURR)	65	14.59	327	78876	45.26	UG/L	83
16)	*1,4-DIFLUOROBENZENE (IS)	114	22.35	527	165125	50.00	UG/L	100
17)	2-BUTANONE	72	14.79	332	10576	62.01	UG/L	100
18)	1,1,1-TRICHLOROETHANE	97	15.95	362	16568	7.75	UG/L	97
24)	TRICHLOROETHENE	130	19.13	444	115413	82.59	UG/L	84
26)	~~1,1,2-TRICHLOROETHANE~~	~~97~~	~~19.13~~	~~444~~	~~79852~~	~~81.47~~	~~UG/L~~ aw	13
27)	BENZENE	78	19.75	460	775513	185.13	UG/L	100
28)	~~CIS-1,3-DICHLOROPROPENE~~	~~75~~	~~19.72~~	~~459~~	~~16145~~	~~10.52~~	~~UG/L~~	~~100~~
31)	*CHLOROBENZENE-D5 (IS)	117	27.21	652	124887	50.00	UG/L	100
32)	4-METHYL-2-PENTANONE	43	23.01	544	55169	37.62	UG/L	89
35)	1,1,2,2-TETRACHLOROETHANE	83	24.61	585	13504	10.18	UG/L	100
36)	TOLUENE-D8 (SURR)	98	26.08	623	173016	47.21	UG/L	91
37)	TOLUENE	92	26.24	627	38277	14.98	UG/L	93
38)	CHLOROBENZENE	112	27.33	655	444606	153.38	UG/L	98
39)	~~ETHYLBENZENE~~	~~91~~	~~29.39~~	~~708~~	~~5145~~	~~.96~~	~~UG/L~~ aw	91
40)	4-BROMOFLUOROBENZENE(SURR)	95	31.83	771	87204	46.22	UG/L	100
42)	TOTAL XYLENES	91	33.89	824	13369	3.09	UG/L	100
42)	TOTAL XYLENES	91	34.90	850	6320	1.46	UG/L	100
43)	1,3-DICHLOROBENZENE	146	39.71	974	39411	39411.00	NO CALIB	100
43)	1,3-DICHLOROBENZENE	146	40.45	993	68365	68365.00	NO CALIB	100
44)	1,2-DICLHLOROBENZENE	146	39.71	974	39411	39411.00	NO CALIB	100
44)	1,2-DICLHLOROBENZENE	146	40.45	993	68365	68365.00	NO CALIB	100
45)	1,4-DICHLOROBENZENE	146	39.71	974	39411	39411.00	NO CALIB	100
45)	1,4-DICHLOROBENZENE	146	40.45	993	68365	68365.00	NO CALIB	100

* Compound is ISTD

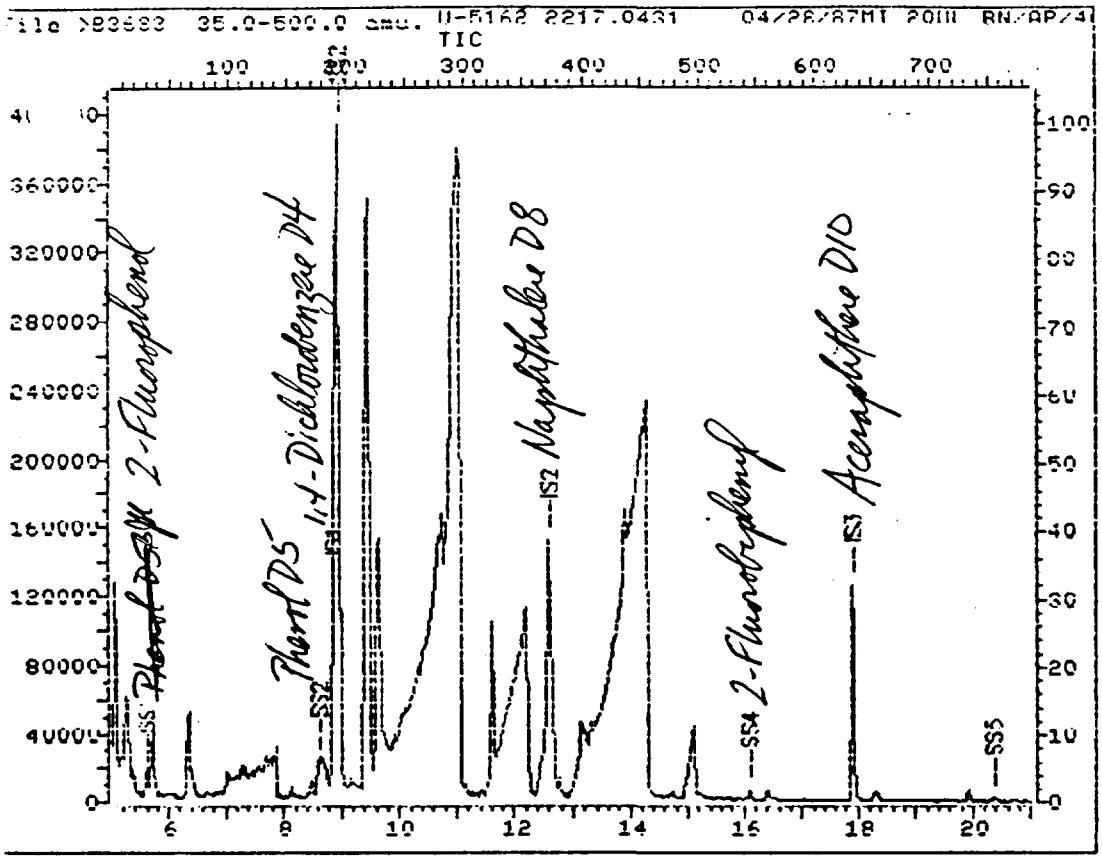
TOTAL ION CHROMATOGRAM



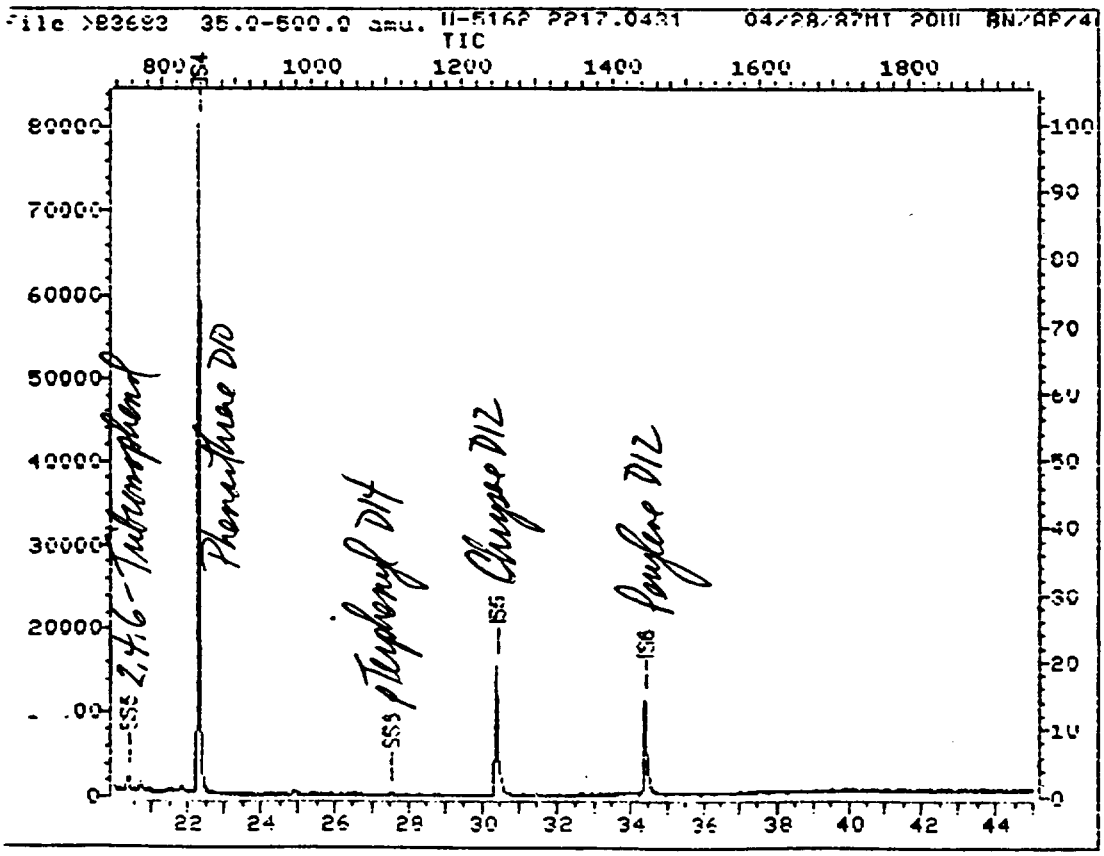
Data File: >B3683::D4 DC-GW-39
Name: U-5162 2217.0431
Misc: 04/28/87MI 20UL BN/AP/460UL MFCL2 + 5UL IS (25X)

Id File: BNABR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870428 13:13

Operator ID: USER8
Quant Time: 870428 21:13
Injected at: 870428 20:25


File >83693 35.0-500.0 amu. U-5162 2217.0431 04/28/87MT 20UU BN/AP/4
TIC
2-Fluorophenol
Phenol D5
1,4-Dichlorobenzene D4
Naphthalene D8
2-Fluorobiphenyl
Acenaphthene D10
SS1
SS2
IS1
IS2
SS4
IS3
SS5

DC-GW-39


File >83693 35.0-500.0 amu. U-5162 2217.0431 04/28/87MT 20UU BN/AP/4
TIC
2,4,6-Tribromophenol
Phenanthrene D10
p-Terphenyl D14
Chrysene D12
Perylene D12
SS5
IS4
SS6
IS5
IS6

QUANT REPORT

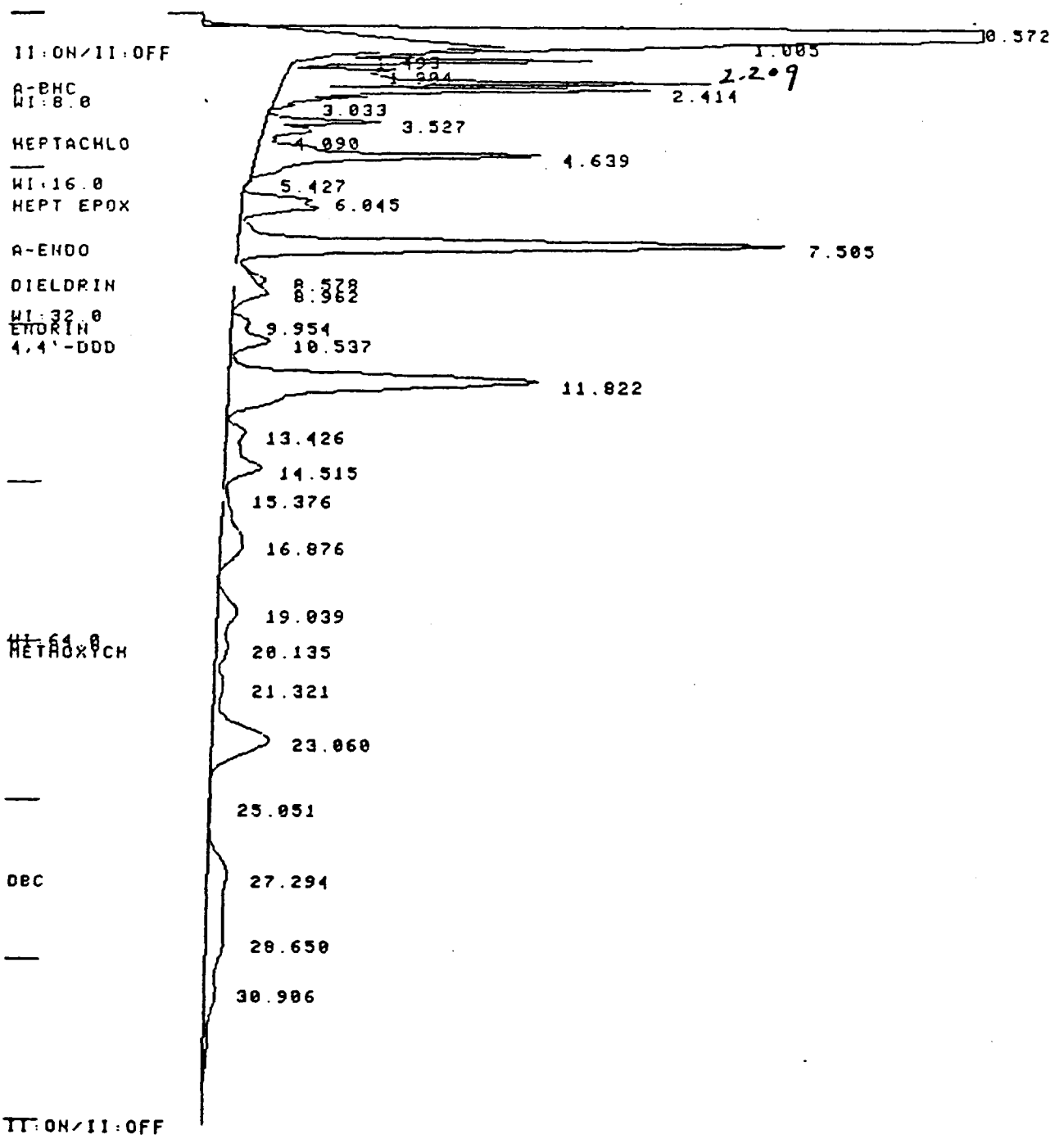
Operator ID: USER8 Quant Rev: 4 Quant Time: 870428 21:13
Output File: ^B3683::Q2 Injected at: 870428 20:05
Data File: >B3683::D4 Dilution Factor: 25.00
Name: U-5162 2217.0431 DC-GW-39
Misc: 04/28/87MI 20UL BN/AP/460UL MECL2 + 5UL IS (25X)

ID File: BNABR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870428 13:13

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-D4	(IS)	152	8.85	189	30243	40.00	UG/L	97
~~2)~~	~~PHENOL-D5~~	~~(SURR)~~	~~99~~	~~8.60~~	~~177~~	~~3672~~	~~87.48~~	~~UG/L~~	~~95~~
2)	PHENOL-D5	(SURR)	99	8.93	193	2311	55.05	UG/L	4
5)	2-FLUOROPHENOL	(SURR)	112	5.59	29	2635	117.37	UG/L	67
6)	PHENOL		94	8.60	177	20650	463.57	UG/L	75
6)	PHENOL		94	8.87	190	1642	36.86	UG/L	84
7)	ANILINE		93	8.14	154	7235	161.70	UG/L	84
~~8)~~	~~BIS(-2-CHLOROETHYL)ETHER~~		~~93~~	~~8.46~~	~~170~~	~~2895~~	~~85.67~~	~~UG/L~~	~~64~~
9)	1,3-DICHLOROBENZENE		146	8.69	181	14469	323.36	UG/L	97
~~9)~~	~~1,3-DICHLOROBENZENE~~		~~146~~	~~8.93~~	~~193~~	~~436740~~	~~9760.58~~	~~UG/L~~	~~97~~
~~10)~~	~~1,4-DICHLOROBENZENE~~		~~146~~	~~8.69~~	~~181~~	~~14469~~	~~346.05~~	~~UG/L~~	~~96~~
10)	1,4-DICHLOROBENZENE		146	8.93	193	436740	10445.24	UG/L	96
~~12)~~	~~1,2-DICHLOROBENZENE~~		~~146~~	~~8.93~~	~~193~~	~~436740~~	~~10136.59~~	~~UG/L~~	~~95~~
12)	1,2-DICHLOROBENZENE		146	9.46	219	334611	7766.21	UG/L	96
13)	2-METHYL PHENOL		108	10.40	265	2503	78.61	UG/L	93
~~14)~~	~~BIS(2-CHLOROISOPROPYL)ETHER~~		~~45~~	~~9.64~~	~~228~~	~~6995~~	~~76.80~~	~~UG/L~~	~~100~~
14)	BIS(2-CHLOROISOPROPYL)ETHER		45	9.81	236	2727	30.41	UG/L	
~~14)~~	~~BIS(2-CHLOROISOPROPYL)ETHER~~		~~45~~	~~10.33~~	~~262~~	~~51635~~	~~565.44~~	~~UG/L~~	~~100~~
15)	2-CHLOROPHENOL		128	8.42	168	3448	118.05	UG/L	92
~~16)~~	~~4-METHYL PHENOL~~		~~108~~	~~10.40~~	~~265~~	~~2503~~	~~23.94~~	~~UG/L~~	~~97~~
16)	4-METHYL PHENOL		108	10.88	289	27624	816.07	UG/L	98
19)	*NAPHTHALENE-D8	(IS)	136	12.59	373	125628	40.00	UG/L	100
24)	2,4-DIMETHYLPHENOL		122	12.23	355	11196	347.77	UG/L	93
~~24)~~	~~2,4-DIMETHYLPHENOL~~		~~122~~	~~12.66~~	~~376~~	~~7289~~	~~241.94~~	~~UG/L~~	~~91~~
~~25)~~	~~BENZOIC ACID~~		~~105~~	~~13.27~~	~~406~~	~~334~~	~~14.40~~	~~UG/L~~	~~69~~
~~26)~~	~~BIS(-2-CHLOROETHOXY)METHANE~~		~~93~~	~~12.25~~	~~356~~	~~382~~	~~6.18~~	~~UG/L~~	~~24~~
27)	2,4-DICHLOROPHENOL		162	12.45	366	1189	29.74	UG/L	92
28)	1,2,4-TRICHLOROBENZENE		180	12.55	371	13580	269.63	UG/L	100
29)	NAPHTHALENE		128	12.64	375	21395	163.40	UG/L	100
~~29)~~	~~NAPHTHALENE~~		~~128~~	~~13.12~~	~~399~~	~~3112~~	~~23.77~~	~~UG/L~~	~~100~~
~~30)~~	~~4-CHLOROANILINE~~		~~127~~	~~12.64~~	~~375~~	~~3096~~	~~59.82~~	~~UG/L~~	~~73~~
30)	4-CHLOROANILINE		127	13.12	399	40244	777.52	UG/L	98
~~31)~~	~~4-CHLOROANILINE~~		~~127~~	~~13.57~~	~~421~~	~~494~~	~~9.54~~	~~UG/L~~	~~32~~
33)	2-METHYLNAPHTHALENE		142	14.77	480	502	5.89	UG/L	80
34)	*ACENAPHTHENE-D10	(IS)	162	17.91	634	88828	40.00	UG/L	99
38)	2-FLUOROBIPHENYL	(SURR)	172	16.10	545	6829	57.62	UG/L	95
~~41)~~	~~DIMETHYL PHTHALATE~~		~~163~~	~~17.91~~	~~634~~	~~16316~~	~~152.59~~	~~UG/L~~	~~100~~
4P	2,4,6-TRIBROMOPHENOL	(SURR)	330	20.35	754	2466	102.85	UG/L	93
~~5~~	~~2,6-DINITROTOLUENE~~		~~165~~	~~17.91~~	~~634~~	~~11367~~	~~595.71~~	~~UG/L~~	~~100~~
55)	*PHENANTHRENE-D10	(IS)	188	22.30	850	117964	40.00	UG/L	99
60)	PENTACHLOROPHENOL		266	22.14	842	433	23.44	UG/L	100
65)	*CHRYSENE-D12	(IS)	240	30.37	1247	41195	40.00	UG/L	100
68)	TERPHENYL-D14	(SURR)	244	27.50	1106	1209	33.20	UG/L	100
74)	*PERYLENE-D12	(IS)	264	34.39	1445	35002	40.00	UG/L	
~~75)~~	~~DI-N-OCTYL PHTHALATE~~		~~149~~	~~33.72~~	~~1412~~	~~265~~	~~4.88~~	~~UG/L~~	~~100~~

No BN

CHART SPEED 0.5 CM/MIN
ATTEN: 8 ZERO: 10% 5 MIN/TICK



DC-GW-39

CHANNEL: 1A - 1 TITLE: RUN# 21 0:22 22 APR 87

SAMPLE: 2217 METHOD: CEPA CALCULATION: ES - ANALYS

PEAK NO	PEAK NAME	RESULT UG/L	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		0.0000	1.493		123586	VV	3.63
2		0.0000	1.775		69423	VV	4.69
3		0.0000	1.904		39564	VV	5.63

CHANNEL: 1A - 1 TITLE: RUN# 21 0:22 22 APR 87

DC-GW-39

SAMPLE: 2217 METHOD: CEPA CALCULATION: ES - ANALYS

PEAK NO	PEAK NAME	RESULT UG/L	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		0.0000	1.493		123586	VV		3.63
2		0.0000	1.775		69423	VV		4.69
3		0.0000	1.904		39564	VV		5.63
4		0.0000	2.048		96116	VV	?	5.81
5	~~A-BHC~~ -	9.4138	2.209	0.019	271788	VV		6.19
6	~~B-BHC~~	25.0264	2.414	0.074	266893	VV		6.06
7	~~D-BHC~~	4.8192	2.732	0.102	120733	VV		8.13
8		0.0000	3.527		109730	BV		8.94
9	~~HEPTACHLO~~	2.9923	3.858	-0.192	68525	VV	?	15.00
10		0.0000	4.355		47964	VV	?	12.69
11		0.0000	4.639		460251	VB		12.50
12	~~HEPT-EPOX~~	3.4936	6.045	-0.005	89650	VV	?	16.13
13		0.0000	6.283		125662	VV	?	21.81
14	~~A-ENDO~~ -	45.7440	7.505	0.005	1135161	VV		18.63
15	~~DIELDRIN~~	3.1123	8.962	0.232	81561	VV	?	28.56
16	~~B-ENDO~~	1.4841	9.954	0.034	35849	VV	?	24.75
17	~~4,4'-DDD~~	5.1328	10.537	-0.263	107534	VV		27.19
18		0.0000	11.822		985068	VV		28.19
19		0.0000	13.426		56928	VV	?	28.69
20	~~4,4'-DDT~~	10.7025	14.515	0.425	152589	VV		32.44
21	~~END-KETON~~	6.4420	16.876	0.646	157887	VV		59.13
22		0.0000	19.039		100446	VV		50.63
23	~~METHOXYCH~~	6.4002	20.135	-0.545	53154	VV	?	52.63
24		0.0000	21.321		40239	VV		43.38
25		0.0000	23.060		322536	VV		52.31
26		0.0000	27.294		198406	VV	?	77.88
27	~~DDE~~	7.8050	28.650	0.500	148130	VV	?	204.00
28		0.0000	30.906		102432	VB	?	68.94
TOTALS:		132.5683		1.032	5567805			

DETECTED PKS: 43 REJECTED PKS: 15

DIVISOR: 1.00000 MULTIPLIER: 1000.00000

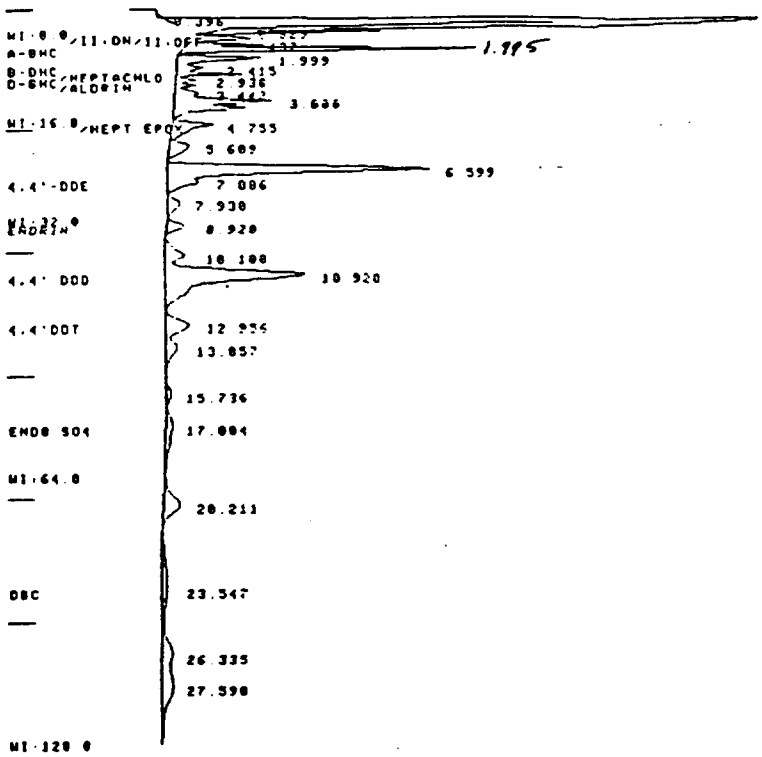
NOISE: 11.4 OFFSET: -4

RACK: 2 VIAL: 6 INJ: 1

NOTES:
NOTEBOOK:297-1,3 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#:U-5162
INST: VARIAN 6000# 2A ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
LIQUID PHASE: 3% OV-1
CARRIER GAS: N2 @ 60 ML/MIN
DET: 300 C INJ: 220 C
200 C ISOTHERMAL 4 UL INJECTION
PRIMARY ANALYSIS AUTOSAMPLER
DEAD CREEK

POST RUN:
SAVE FILE: RAW 7010691

ATTEN: 16 ZERO: 10% 5 MIN/TICK



CHANNEL: 18 - 1 TITLE: RUN# 8 22:12 22 APR 87

DC-GW-39

SAMPLE: 2217 METHOD: PEPA CALCULATION: ES - ANALYS

PEAK NO	PEAK NAME	RESULT UG/L	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		0.0000	1.434		82424	BV	3.56
2		0.0000	1.626		514011	VV	4.31
3	~~A-BHC~~ RATIO OFF	0.6383	1.748	0.008	31177	VV	? 4.50
4	~~G-BHC~~	5.4810	1.995	-0.205	222932	VV	10.38
5	~~B-BHC~~	4.5380	2.414	-0.086	72884	VV	? 12.00
6	~~HEPTACHL~~O	3.8136	2.678	-0.032	136706	VV	7.00
7	~~D-BHC~~	1.2709	2.938	0.018	42948	VV	7.25
8	~~ALDRIN~~	1.0734	3.143	-0.137	40424	VV	6.75
9		0.0000	3.442		86958	VV	? 13.25
10		0.0000	3.808		285031	VV	10.56
11		0.0000	4.069		221223	VB	? 12.06
12	~~HEPT EPOX~~	5.8201	4.755	-0.145	198105	BV	13.56
13		0.0000	5.609		132171	VV	24.38
14		0.0000	6.599		1141399	VV	16.19
15	~~4,4' DDE~~	4.8097	7.086	-0.044	152517	VV	? 26.81
16	~~DIELDRIN~~	2.6987	7.930	0.400	91537	VB	29.81
17	~~ENDRIN~~	4.2732	8.920	-0.230	91820	BV	21.00
18		0.0000	10.100		145745	VV	20.00
19	~~4,4' DDD~~	44.2491	10.920	0.020	1167250	VV	27.25
20	~~4,4'DDT~~	9.2647	12.956	-0.194	206246	VV	32.81
21	~~ENDO. ALD.~~	5.2499	13.857	-0.633	121574	VB	40.38
22		0.0000	15.735		55647	BV	35.63
23	~~ENDO SO4~~	8.7494	17.084	-0.456	142520	VB	83.81
24		0.0000	20.211		200078	BV	45.44
25	~~DBC~~	7.0586	23.547	0.227	162735	VV	?127.69
26	~~METHOXYCH~~	19.8420	26.335	1.035	189126	VV	? 69.69
27		0.0000	27.590		251105	VB	? 97.00
TOTALS:		128.8313		-0.454	6195173		

DETECTED PKS: 36 REJECTED PKS: 9

DIVISOR: 1.00000 MULTIPLIER: 1000.00000

NOISE: 45.7 OFFSET: -9

NOTES:
NOTEBOOK:297-5 ANALYST:RICHARD SAMSON
SECURE AREA:D JOB #U-5162
INST:VARIAN 6000#28 ECD 10X1 ATTN:0X
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
200 C ISOTHERMAL 4 UL INJECTION
CONFIRMATION DEAD CREEK WATERS

POST RUN:

SAMPLE NUMBER DC-GW-40

Sample Number
DC-GW-40

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Ecology & Environment, Inc. Case No: U-5157, 5162

Lab Sample ID No: 2218 QC Report No:

Sample Matrix: Water Contract No: IL-3140

Data Release Authorized By: C Stoytowicz Date Sample Received: 3-25-87

Volatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 4-6-87

Conc./Dil Factor: 1 pH

Percent Moisture: (Not Decanted)

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	10 µ
74-83-9	Bromomethane	10 µ
75-01-4	Vinyl Chloride	10 µ
75-00-3	Chloroethane	10 µ
75-09-2	Methylene Chloride	5 µ
67-64-1	Acetone	6 J
75-15-0	Carbon Disulfide	5 µ
75-35-4	1, 1-Dichloroethene	5 µ
75-34-3	1, 1-Dichloroethane	5 µ
156-60-5	Trans-1, 2-Dichloroethene	5 µ
67-66-3	Chloroform	5 µ
107-06-2	1, 2-Dichloroethane	5 µ
78-93-3	2-Butanone	10 µ
71-55-6	1, 1, 1-Trichloroethane	5 µ
56-23-5	Carbon Tetrachloride	5 µ
108-05-4	Vinyl Acetate	10 µ
75-27-4	Bromodichloromethane	5 µ

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	5 µ
10061-02-6	Trans-1, 3-Dichloropropene	5 µ
79-01-6	Trichloroethene	5 µ
124-48-1	Dibromochloromethane	5 µ
79-00-5	1, 1, 2-Trichloroethane	5 µ
71-43-2	Benzene	5 µ
10061-01-5	cis-1, 3-Dichloropropene	5 µ
110-75-8	2-Chloroethylvinylether	10 µ
75-25-2	Bromoform	5 µ
591-78-6	4-Methyl-2-Pentanone	10 µ
108-10-1	2-Hexanone	10 µ
127-18-4	Tetrachloroethene	5 µ
79-34-5	1, 1, 2, 2-Tetrachloroethane	5 µ
108-88-3	Toluene	5 µ
108-90-7	Chlorobenzene	5 µ
100-41-4	Ethylbenzene	5 µ
100-42-5	Styrene	5 µ
	Total Xylenes	5 µ

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g. 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS.

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

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

E This flag indicates an approximate concentration. The amount detected in the analysis exceeds the calibrated range.

320

Laboratory Name ecology and environment, inc.

Case No U-5157, 5162

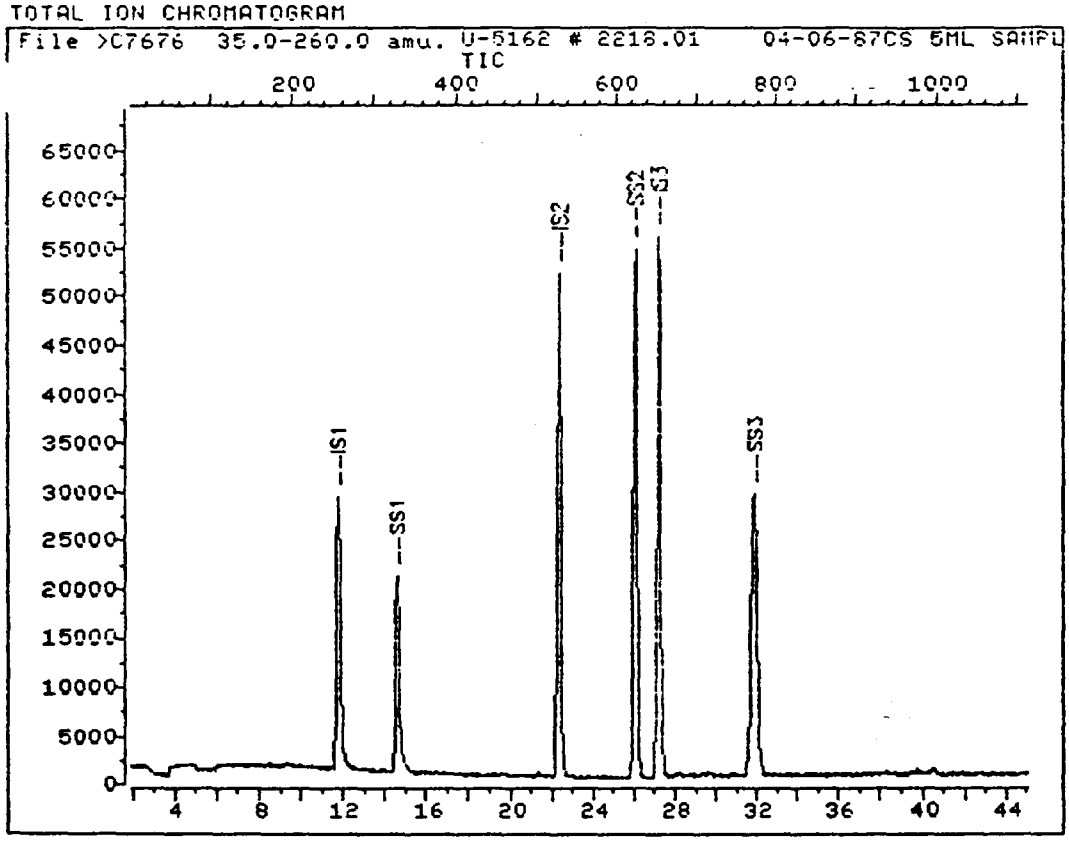
Sample Number DC-GW-40

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.	No TIC's in VOA fraction			
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

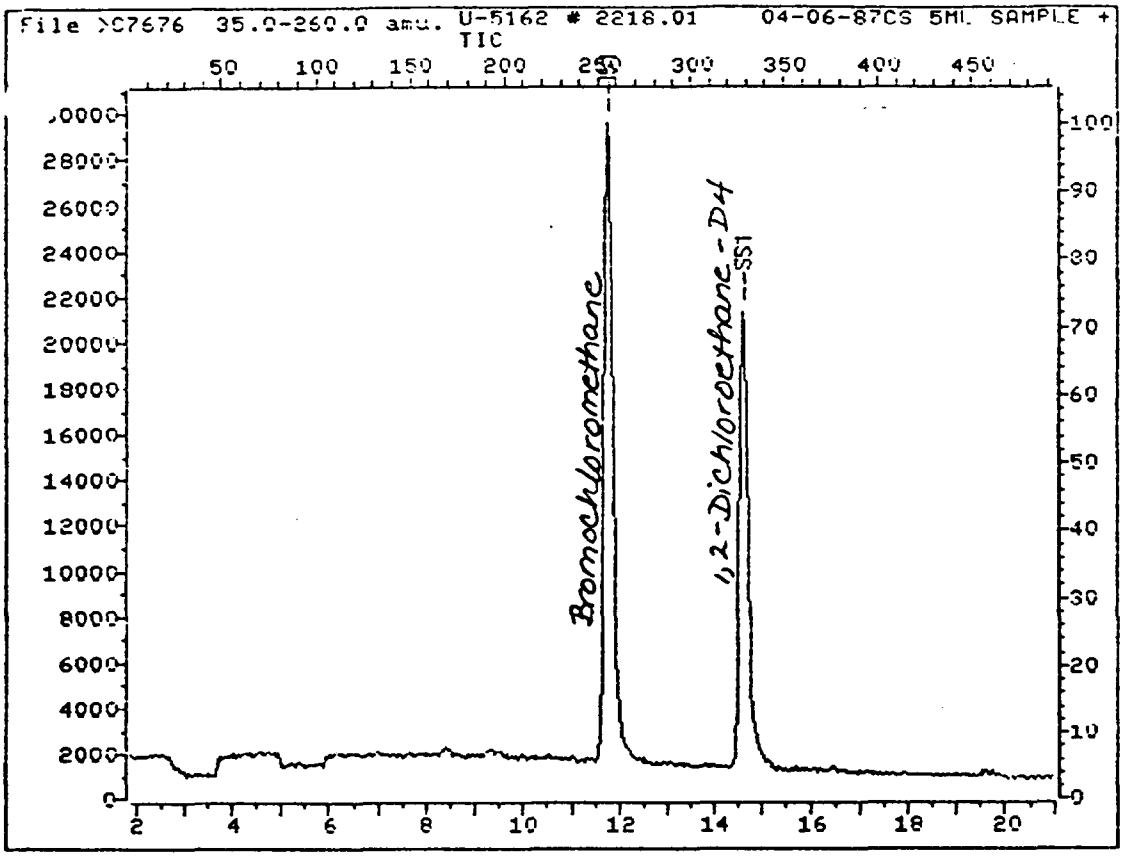


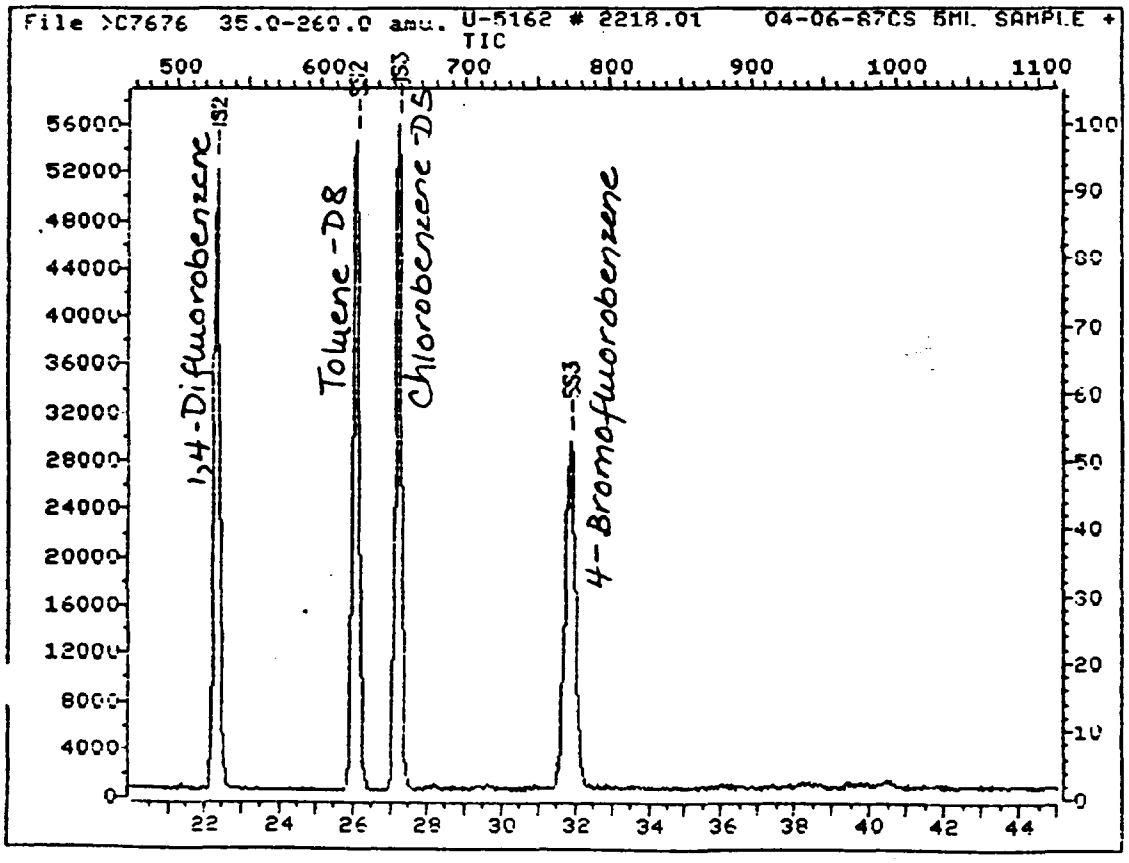
Data File: >C7676::D3
Name: U-5162 # 2218.01 DC-GW-40
Misc: 04-06-87CS 5ML SAMPLE + 10UL IS/SS

Id File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870406 13:39

Operator ID: USER8
Quant Time: 870406 16:08
Injected at: 870406 15:22

DC-GW-40


File >C7676 35.0-260.0 amu. U-5162 # 2218.01 04-06-87CS 5ML SAMPLE +
TIC
Bromochloromethane
1,2-Dichloroethane-D4
SS1


File >C7676 35.0-260.0 amu. U-5162 # 2218.01 04-06-87CS 5ML SAMPLE +
TIC
1,4-Difluorobenzene
IS2
Toluene-D8
SS2
Chlorobenzene-D5
IS3
4-Bromofluorobenzene
SS3

QUANT REPORT

Operator ID: USER8 Quant Rev: 4 Quant Time: 870406 16:08
Output File: ^C7676::Q2 Injected at: 870406 15:22
Data File: >C7676::D3 Dilution Factor: 1.00
Name: U-5162 # 2218.01 DC-GW-40
Misc: 04-06-87CS 5ML SAMPLE + 10UL IS/SS

ID File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870406 13:39

	Compound			R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	(IS)	128	11.75	255	47781	50.00	UG/L	100
7)	ACETONE		43	9.34	193	4588	5.79	UG/L 40	100
15)	1,2-DICHLOROETHANE-D4	(SURR)	65	14.58	328	95537	44.29	UG/L	86
16)	*1,4-DIFLUOROBENZENE	(IS)	114	22.34	528	220030	50.00	UG/L	100
31)	*CHLOROBENZENE-D5	(IS)	117	27.19	653	177103	50.00	UG/L	100
36)	TOLUENE-D8	(SURR)	98	26.07	624	219428	43.49	UG/L	93
~~37)~~	~~TOLUENE~~		~~92~~	~~26.26~~	~~629~~	~~2510~~	~~.83~~	~~UG/L~~ CW	95
40)	4-BROMOFLUOROBENZENE	(SURR)	95	31.86	773	107639	43.69	UG/L	100

* Compound is ISTD

Toluene-D8 - slightly low -
Sample spikes 4/6/87 ok - CW

SAMPLE NUMBER DC-GW-41

481095

Sample Number
DC-GW-41

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Ecology & Environment, Inc. Case No: U-5157, 5162

Lab Sample ID No: 2219 QC Report No:

Sample Matrix: Water Contract No: IL-3140

Data Release Authorized By: C Slogtowicz Date Sample Received: 3-25-87

Volatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 4-6-87

Conc./Dil Factor: 1 pH

Percent Moisture: (Not Decanted)

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	10u
74-83-9	Bromomethane	10u
75-01-4	Vinyl Chloride	10u
75-00-3	Chloroethane	10u
75-09-2	Methylene Chloride	5u
67-64-1	Acetone	10
75-15-0	Carbon Disulfide	5u
75-35-4	1, 1-Dichloroethene	5u
75-34-3	1, 1-Dichloroethane	5u
156-60-5	Trans-1, 2-Dichloroethene	5u
67-66-3	Chloroform	5u
107-06-2	1, 2-Dichloroethane	5u
78-93-3	2-Butanone	10u
71-55-6	1, 1, 1-Trichloroethane	5u
56-23-5	Carbon Tetrachloride	5u
108-05-4	Vinyl Acetate	10u
75-27-4	Bromodichloromethane	5u

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	5u
10061-02-6	Trans-1, 3-Dichloropropene	5u
79-01-6	Trichloroethene	5u
124-48-1	Dibromochloromethane	5u
79-00-5	1, 1, 2-Trichloroethane	5u
71-43-2	Benzene	10
10061-01-5	cis-1, 3-Dichloropropene	5u
110-75-8	2-Chloroethylvinylether	10u
75-25-2	Bromoform	5u
591-78-6	4-Methyl-2-Pentanone	10u
108-10-1	2-Hexanone	10u
127-18-4	Tetrachloroethene	5u
79-34-5	1, 1, 2, 2-Tetrachloroethane	5u
108-88-3	Toluene	1J
108-90-7	Chlorobenzene	5
100-41-4	Ethylbenzene	5u
100-42-5	Styrene	5u
	Total Xylenes	2J

Data Reporting Qualifiers

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J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g. 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS.

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

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

E This flag indicates an approximate concentration. The amount detected in the analysis exceeds the calibrated range.

326

Laboratory Name _____

Case No. U-5157, 5162

Sample Number DC-GW-41

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 3-30-87

Date Analyzed: 4-28-87

Conc/Dil Factor: 2

Percent Moisture (Decanted) -

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/L or ug/Kg (Circle One)	
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
39638-32-9	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	Dimethyl Phthalate	10	U
96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	50	U

CAS Number		ug/L or ug/Kg (Circle One)	
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
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	B
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
117-81-7	bis(2-Ethylhexyl)Phthalate	3	BJ
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	2	BJ
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

327

Laboratory Name ecology and environment, inc.

Case No 4-5157, 5162

Sample Number DC-GW-4

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration (Low) Medium (Circle One)

Date Extracted/Prepared 3-31-87

Date Analyzed 4-22-87

Conc/Dil Factor 1.0

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☑Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/l or ug/Kg) (Circle One)
319-84-6	Alpha-BHC	0.07U
319-85-7	Beta-BHC	0.07U
319-86-8	Delta-BHC	0.07U
58-89-9	Gamma-BHC (Lindane)	0.07U
76-44-8	Heptachlor	0.07U
309-00-2	Aldrin	0.07U
1024-57-3	Heptachlor Epoxide	0.07U
959-98-8	Endosulfan I	0.07U
60-57-1	Dieldrin	0.13U
72-55-9	4,4'-DDE	0.13U
72-20-8	Endrin	0.13U
33213-65-9	Endosulfan II	0.13U
72-54-8	4,4'-DDD	0.13U
1031-07-8	Endosulfan Sulfate	0.13U
50-29-3	4,4'-DDT	0.13U
72-43-5	Methoxychlor	0.65U
53494-70-5	Endrin Ketone	0.13U
57-74-9	Chlordane	0.65U
8001-35-2	Toxaphene	1.3U
12674-11-2	Aroclor-1016	0.65U
11104-28-2	Aroclor-1221	0.65U
11141-16-5	Aroclor-1232	0.65U
53469-21-9	Aroclor-1242	0.65U
12672-29-6	Aroclor-1248	0.65U
11097-69-1	Aroclor-1254	1.3U
11096-82-5	Aroclor 1260	1.3U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 780 or W_s _____ V_t 10,000 V_i 4

Laboratory Name [illegible]

Case No U-5157, 5162

Sample Number DC-GW-4

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.	No TIC's in VOA fraction			
2.	Unknown	BNA	11.48	19 J
3.	Chloroaniline Isomer	BNA	11.56	100 J
4. 50763514	3-methyl-1,5-heptadiene		15.34	39 J
5.	Unknown		19.91	52 B J
6.	Unknown Phthalate		33.67	83 B J
7				
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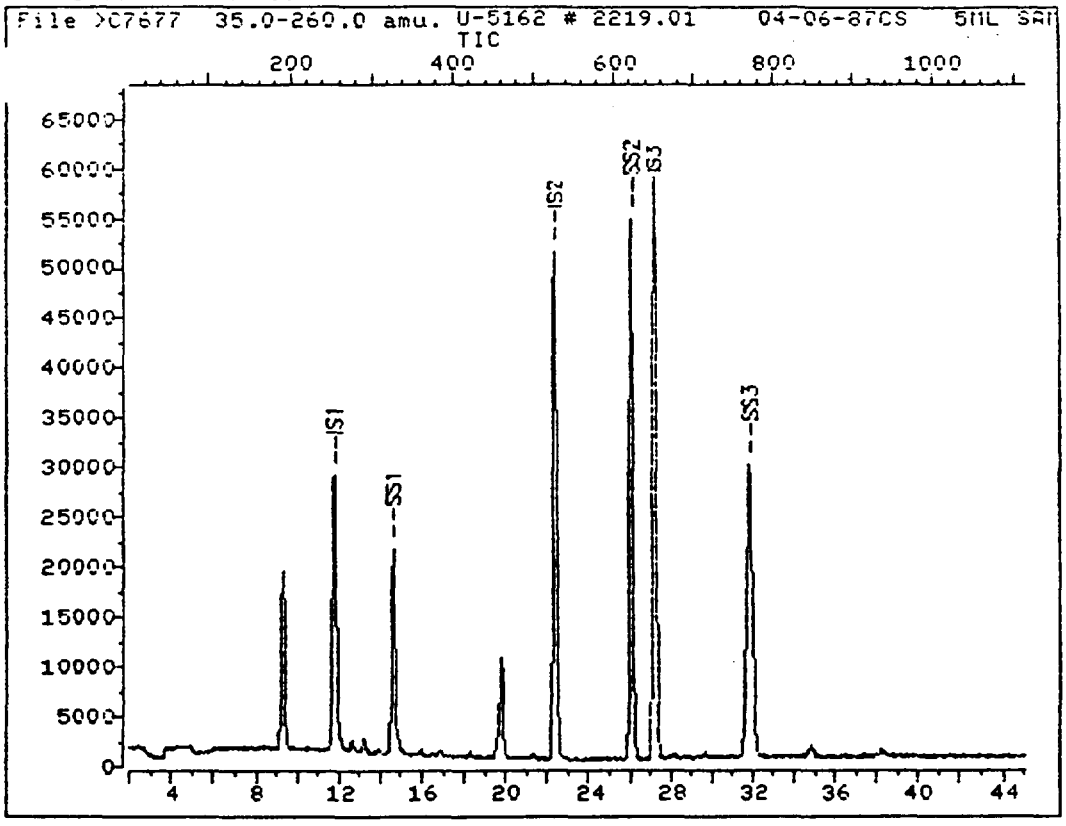
TOTAL ION CHROMATOGRAM

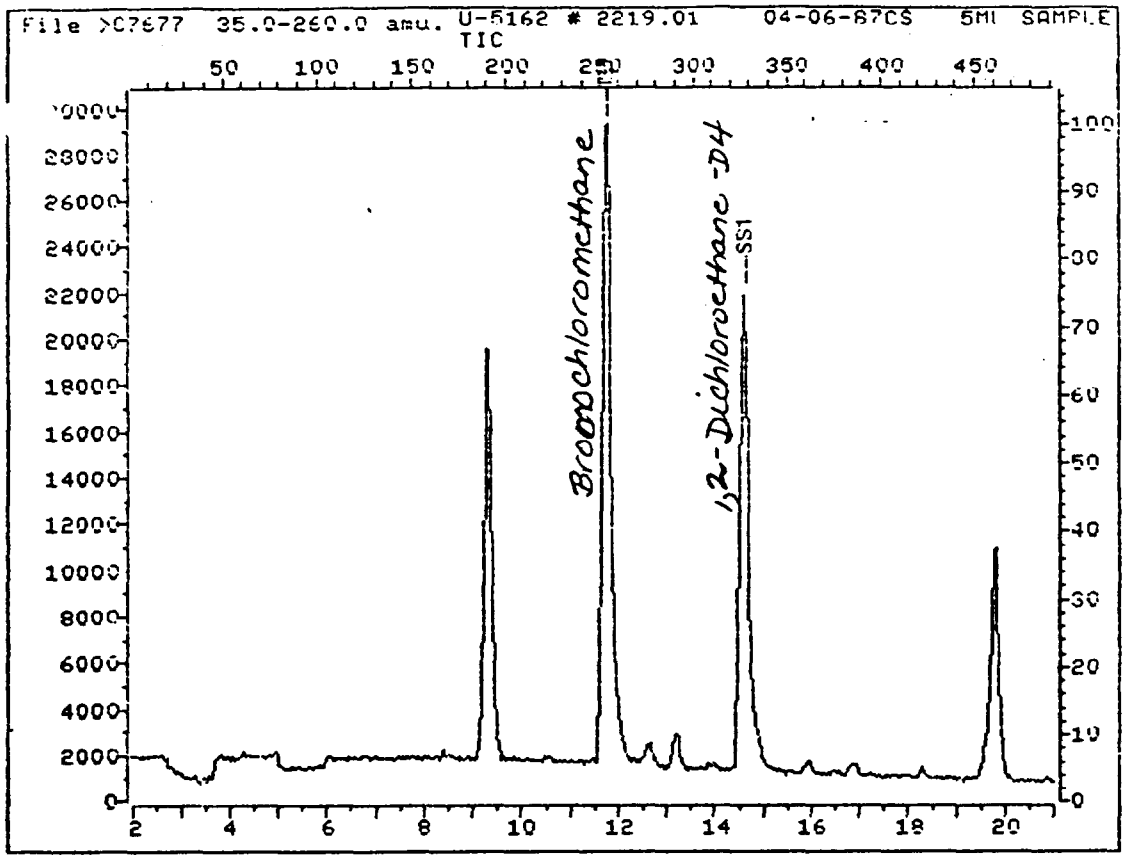


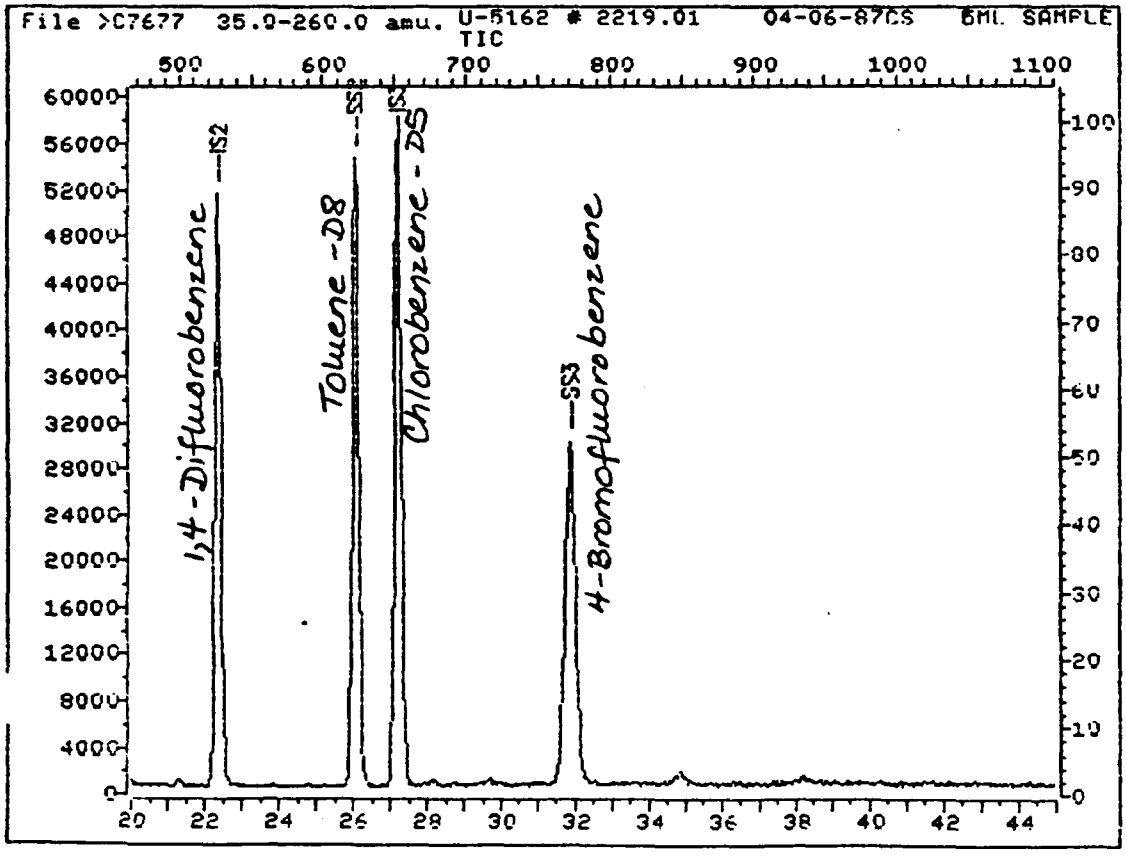
Data File: >C7677::D3
Name: U-5162 # 2219.01 DC-GW-41
Misc: 04-06-87CS 5ML SAMPLE + 10UL IS/SS

Id File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870406 13:39

Operator ID: USER8
Quant Time: 870406 17:00
Injected at: 870406 16:14

DC-GW-41


File >C7677 35.0-260.0 amu. U-5162 # 2219.01 04-06-87CS 5ML SAMPLE
TIC
Bromochloromethane
1,2-Dichloroethane -D4
SS1


File >C7677 35.0-260.0 amu. U-5162 # 2219.01 04-06-87CS 5ML SAMPLE
TIC
1,4-Difluorobenzene
IS2
Toluene -D8
SS2
IS2
Chlorobenzene - D5
SS3
4-Bromofluorobenzene

QUANT REPORT

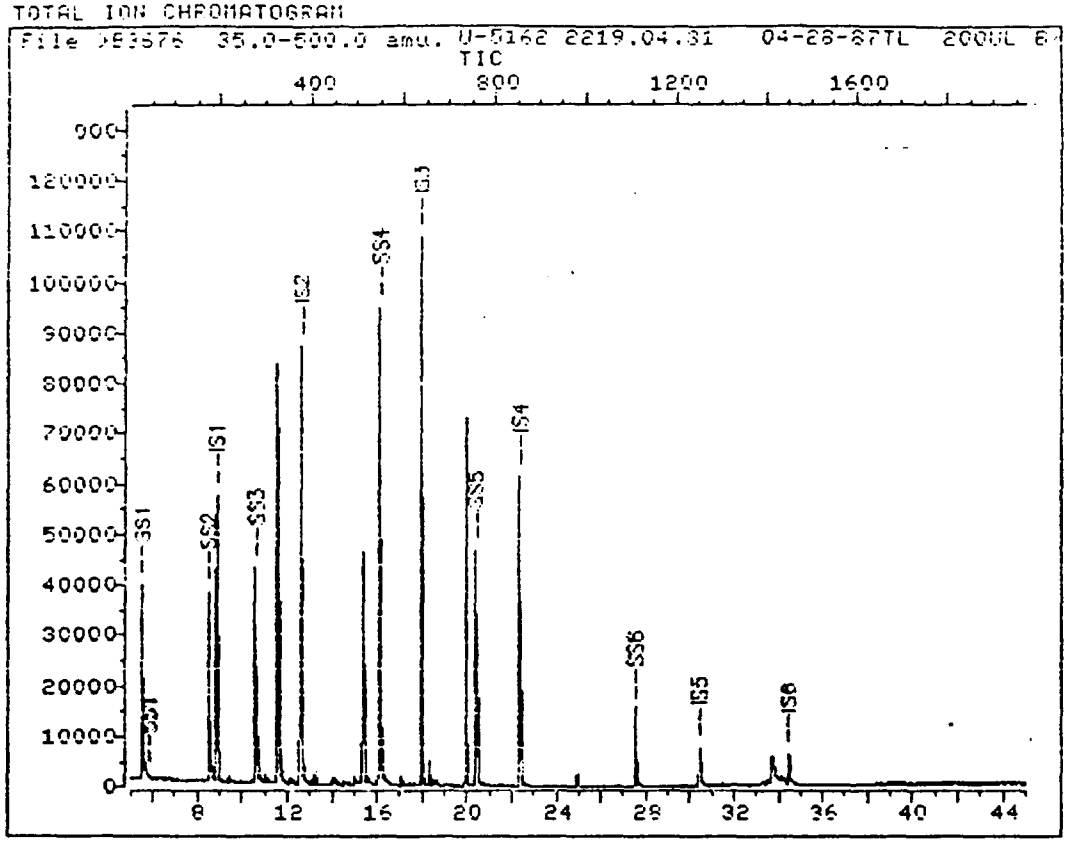
Operator ID: USER8 Quant Rev: 4 Quant Time: 870406 17:00
Output File: ^C7677::Q2 Injected at: 870406 16:14
Data File: >C7677::D3 Dilution Factor: 1.00
Name: U-5162 # 2219.01 DC-GW-41
Misc: 04-06-87CS 5ML SAMPLE + 10UL IS/SS

ID File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870406 13:39

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	(IS)	128	11.73	253	48060	50.00 UG/L	100
7)	ACETONE		43	9.29	190	8088	10.15 UG/L yes	100
11)	~~1,1-DICHLOROETHANE~~		~~63~~	~~12.62~~	~~276~~	~~7149~~	~~2.57 UG/L~~ CSV	91
15)	1,2-DICHLOROETHANE-D4	(SURR)	65	14.60	327	94716	43.65 UG/L	86
16)	*1,4-DIFLUOROBENZENE	(IS)	114	22.36	527	221349	50.00 UG/L	100
27)	BENZENE		78	19.80	461	45761	9.98 UG/L yes	100
31)	*CHLOROBENZENE-D5	(IS)	117	27.17	651	175590	50.00 UG/L	100
36)	TOLUENE-D8	(SURR)	98	26.05	622	218621	43.70 UG/L	93
37)	TOLUENE		92	26.28	628	2607	.87 UG/L yes	99
38)	CHLOROBENZENE		112	27.30	654	18383	5.04 UG/L yes	96
40)	4-BROMOFLUOROBENZENE	(SURR)	95	31.84	771	106585	43.63 UG/L	100
42)	TOTAL XYLENES		91	34.82	848	10618	2.06 UG/L yes	100

* Compound is ISTD

TOTAL ION CHROMATOGRAM

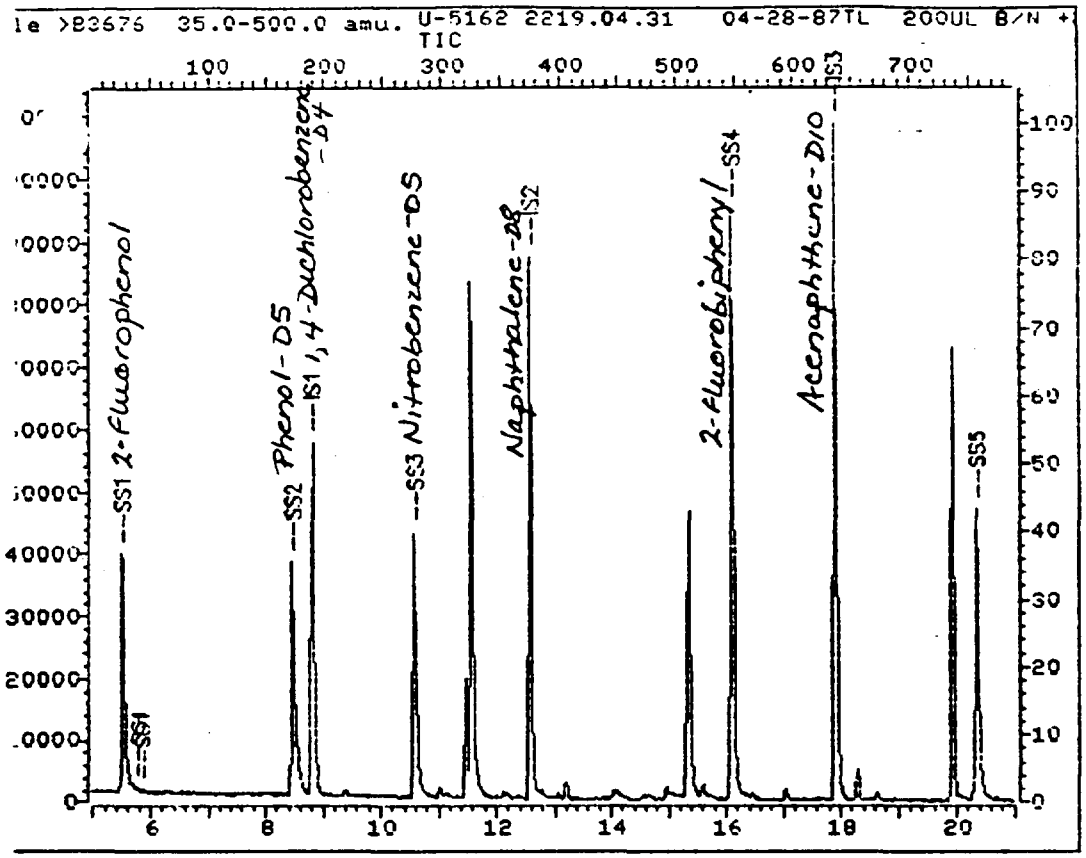


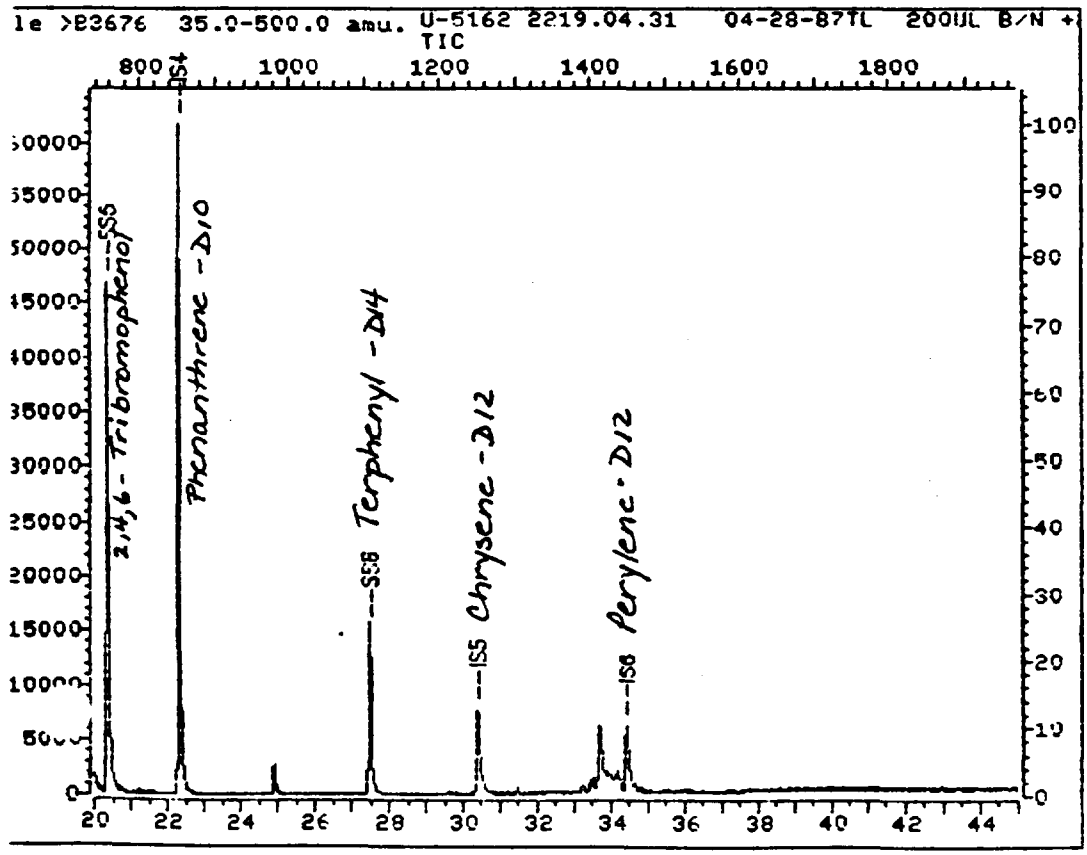
Data File: >B3676::D4
Name: U-5162 2219.04.31 DC-GW-41
Misc: 04-28-87TL 200UL B/N +200UL A/P +4UL IS

Id File: BNABR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870428 13:13

Operator ID: USER8
Quant Time: 870428 14:51
Injected at: 870428 14:03

DC-GW-41


le >B3676 35.0-500.0 amu. U-5162 2219.04.31 04-28-87TL 200UL B/N +
TIC
--SS1 2-Fluorophenol
--SS2 Phenol-D5
--IS1 1,4-Dichlorobenzene-D4
--SS3 Nitrobenzene-D5
Naphthalene-D8 --IS2
2-Fluorobiphenyl --SS4
Acenaphthene-D10
--SS5


le >B3676 35.0-500.0 amu. U-5162 2219.04.31 04-28-87TL 200UL B/N +
TIC
--SS6 2,4,6-Tribromophenol
Phenanthrene-D10
--SS8 Terphenyl-D14
--IS5 Chrysene-D12
--IS6 Perylene-D12

333A

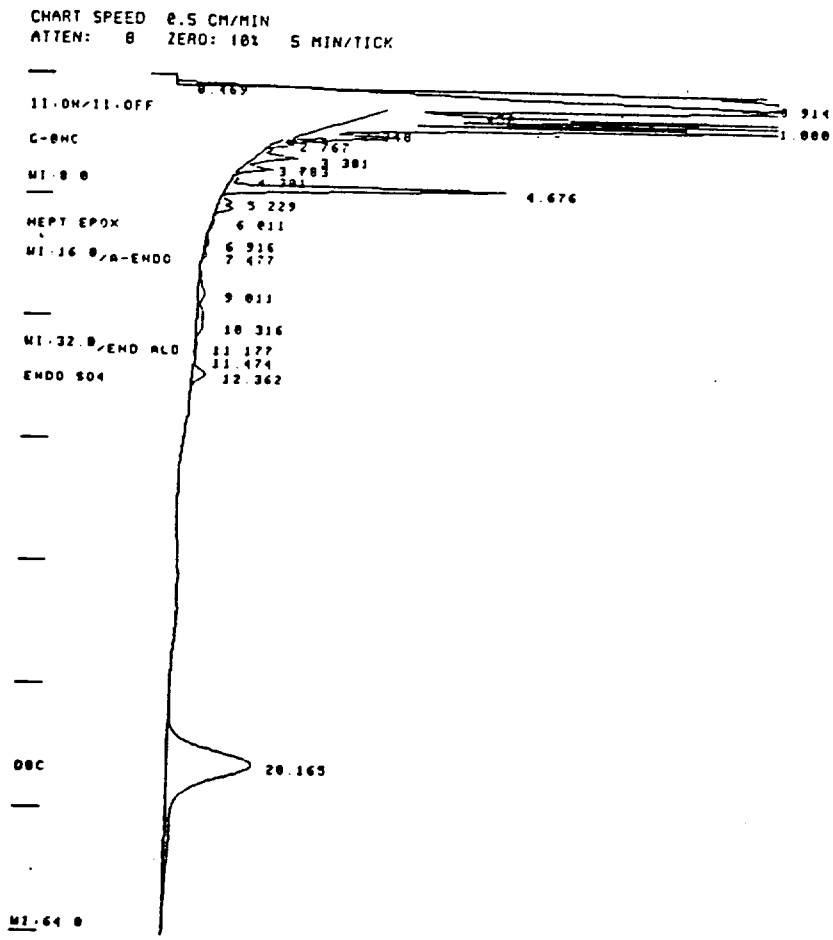
QUANT REPORT

erator ID: USER8 Quant Rev: 4 Quant Time: 870428 14:51
tput File: ^B3676::Q2 Injected at: 870428 14:03
t File: >B3676::D4 Dilution Factor: 2.00
me: U-5162 2219.04.31 DC-GW-41
sc: 04-28-87TL 200UL B/N +200UL A/P +4UL IS

) File: BNABR::D2
tle: BNA ID FILE FOR THE HP 5970 (B)
ast Calibration: 870428 13:13

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-D4	(IS)	152	8.81	189	29419	40.00 UG/L	83
2)	PHENOL-D5	(SURR)	99	8.47	172	43300	84.83 UG/L	98
3)	2-FLUOROPHENOL	(SURR)	112	5.48	25	35499	130.04 UG/L	64
~~6)~~	~~2-FLUOROPHENOL~~	~~(SURR)~~	~~112~~	~~5.76~~	~~39~~	~~699~~	~~2.56 UG/L~~	5
~~5)~~	~~2-FLUOROPHENOL~~	~~(SURR)~~	~~112~~	~~5.84~~	~~43~~	~~485~~	~~1.48 UG/L~~	76
~~9)~~	~~1,3-DICHLOROBENZENE~~		~~146~~	~~8.85~~	~~191~~	~~366~~	~~1.59 UG/L~~	94
10)	1,4-DICHLOROBENZENE		146	8.85	191	866	1.70 UG/L	88
~~17)~~	~~N-NITROSO-DI-N-PROPYLAMINE~~		~~70~~	~~10.50~~	~~276~~	~~7835~~	~~17.49 UG/L~~	89
9)	*NAPHTHALENE-D8	(IS)	136	12.57	374	107829	40.00 UG/L	100
3)	NITROBENZENE-D5	(SURR)	82	10.58	276	48762	87.15 UG/L	93
4)	*ACENAPHTHENE-D10	(IS)	162	17.90	636	71409	40.00 UG/L	98
3)	2-FLUOROBIPHENYL	(SURR)	172	16.09	547	95545	80.22 UG/L	94
~~1)~~	~~DIMETHYL PHTHALATE~~		~~163~~	~~12.90~~	~~636~~	~~12690~~	~~11.81 UG/L~~	100
3)	2,4,6-TRIBROMOPHENOL	(SURR)	330	20.34	756	27529	114.26 UG/L	99
~~2)~~	~~2,6-DINITROTOLUENE~~		~~165~~	~~17.70~~	~~636~~	~~9848~~	~~49.32 UG/L~~	100
5)	*PHENANTHRENE-D10	(IS)	188	22.29	852	94034	40.00 UG/L	99
3)	DI-N-BUTYLPHTHALATE		149	24.91	981	9618	9.80 UG/L	99
5)	*CHRYSENE-D12	(IS)	240	30.38	1250	26418	40.00 UG/L	100
3)	TERPHENYL-D14	(SURR)	244	27.47	1107	34376	117.78 UG/L	100
2)	BIS(2-ETHYLHEXYL)PHTHALATE		149	31.48	1304	821	3.26 UG/L	88
4)	*PERYLENE-D12	(IS)	264	34.40	1448	19702	40.00 UG/L	100
~~5)~~	~~DI-N-OCTYL PHTHALATE~~		~~149~~	~~33.22~~	~~1390~~	~~1313~~	~~3.44 UG/L~~	100
5)	DI-N-OCTYL PHTHALATE		149	33.28	1393	618	1.62 UG/L	100
~~5)~~	~~DI-N-OCTYL PHTHALATE~~		~~149~~	~~33.45~~	~~1401~~	~~682~~	~~1.73 UG/L~~	100
~~5)~~	~~DI-N-OCTYL PHTHALATE~~		~~149~~	~~33.91~~	~~1404~~	~~774~~	~~2.02 UG/L~~	100
~~5)~~	~~DI-N-OCTYL PHTHALATE~~		~~149~~	~~33.69~~	~~1413~~	~~1806~~	~~4.72 UG/L~~	100

* Compound is ISTD



DC-GW-41

CHANNEL: 1A - 1 TITLE: RUN# 22 1:01 22 APR 87

SAMPLE: 2219 METHOD: CEPA CALCULATION: ES - ANALYS

PEAK NO	PEAK NAME	RESULT UG/L	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		WI/2 (SEC)
1		0.0000	1.450		142228	BV		4.13
2		0.0000	1.587		500492	VV		5.50
3		0.0000	1.800		517749	VV		4.50
4		0.0000	2.038		615773	VV		4.63
5	~~A-BHC~~	0.0177	2.248	0.058	39815	VV		5.13
6	~~B-BHC~~	0.1289	2.426	0.086	107245	VV		5.50
7		0.0000	3.301		58632	VV	?	9.06
8		0.0000	3.783		36276	VB		7.44
9		0.0000	4.676		403159	VV		10.88
10		0.0000	5.526		29105	T		11.56
11	~~DIELDRIN~~	0.0188	9.011	0.281	38511	BV		34.63
12	~~B-ENDO~~	0.0257	10.316	0.396	48352	VB	?	43.75
13	~~ENDO SO4~~	0.0401	12.362	-0.308	46955	VB		23.38
14	DBC	0.6454	28.165	0.015	955400	BB		75.13
TOTALS:		0.0767		0.528	3619692			

DETECTED PKS: 32 REJECTED PKS: 18

DIVISOR: 1.00000 MULTIPLIER: 12.02100

NOISE: 11.4 OFFSET: -29

RACK: 2 VIAL: 7 INJ: 1

NOTES:
NOTEBOOK:297-1,3 ANALYST:RICHARD SAMSON
SECURE AREA: D JO9#:U-5162
INST: VARIAN 6000# 2A ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
LIQUID PHASE: 3% OV-1
CARRIER GAS: N2 @ 60 ML/MIN
DET: 300 C INJ: 220 C
200 C ISOTHERMAL 4 UL INJECTION
PRIMARY ANALYSIS AUTOSAMPLER
DEAD CREEK

POST RUN:

SAMPLE NUMBER DC-GW-41R

481095

Laboratory Name: Ecology & Environment Inc.

Case No: U-5157, 5162

Sample Number: DC-GW-41R

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 3-30-87

Date Analyzed: 4-28-87

Conc/Dil Factor: 2

Percent Moisture (Decanted) —

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)	
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	2	J
100-51-6	Benzyl Alcohol	10	U
95-50-1	1. 2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	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	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	50	U

CAS Number		ug/l or ug/Kg (Circle One)	
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
606-20-2	2. 6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4. 6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	7	BJ
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
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	2	BJ
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

Case No U-5157, 5162

DC-GW-41R

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number MIN.	Estimated Concentration (ug/l or ug/kg)
1.	Unknown	BNA	11.48	11 J
2.	Chloroaniline Isomer		11.58	73 J
3. 50763574	3-methyl-1,5-heptadiene		15.34	36 J
4	Unknown		19.92	42 B J
5.	Unknown Phthalate		33.69	39 B J
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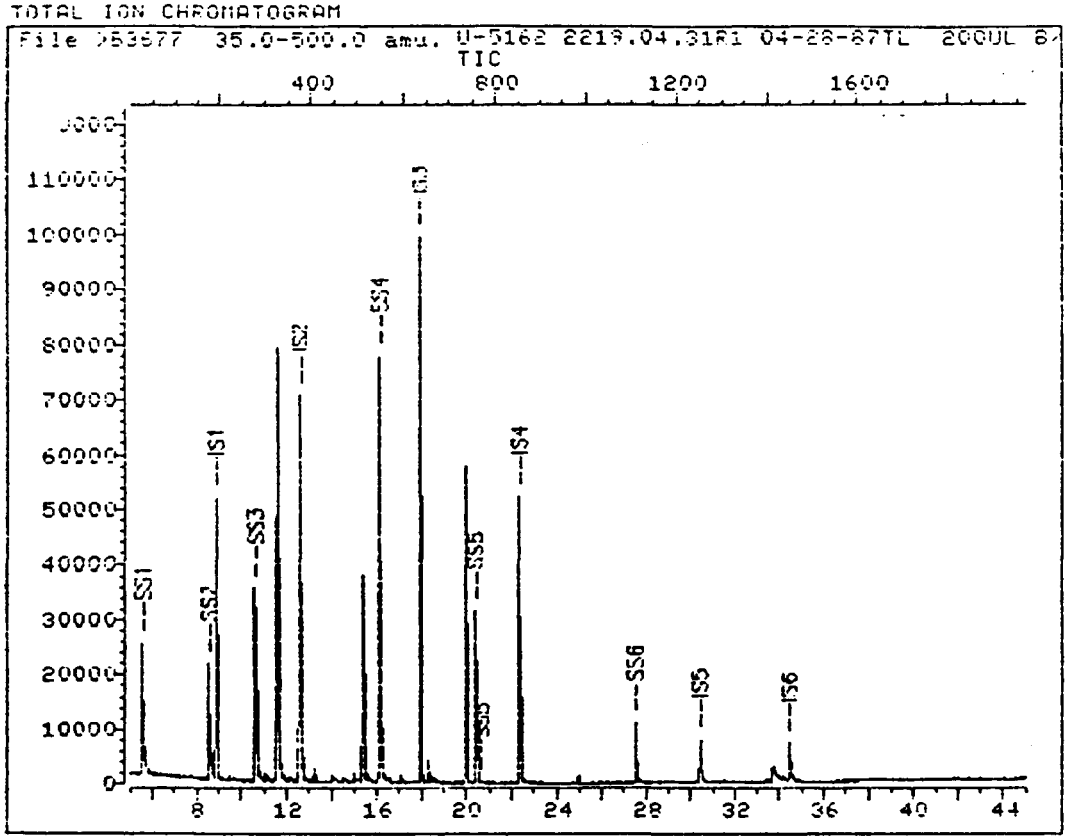
TOTAL ION CHROMATOGRAM

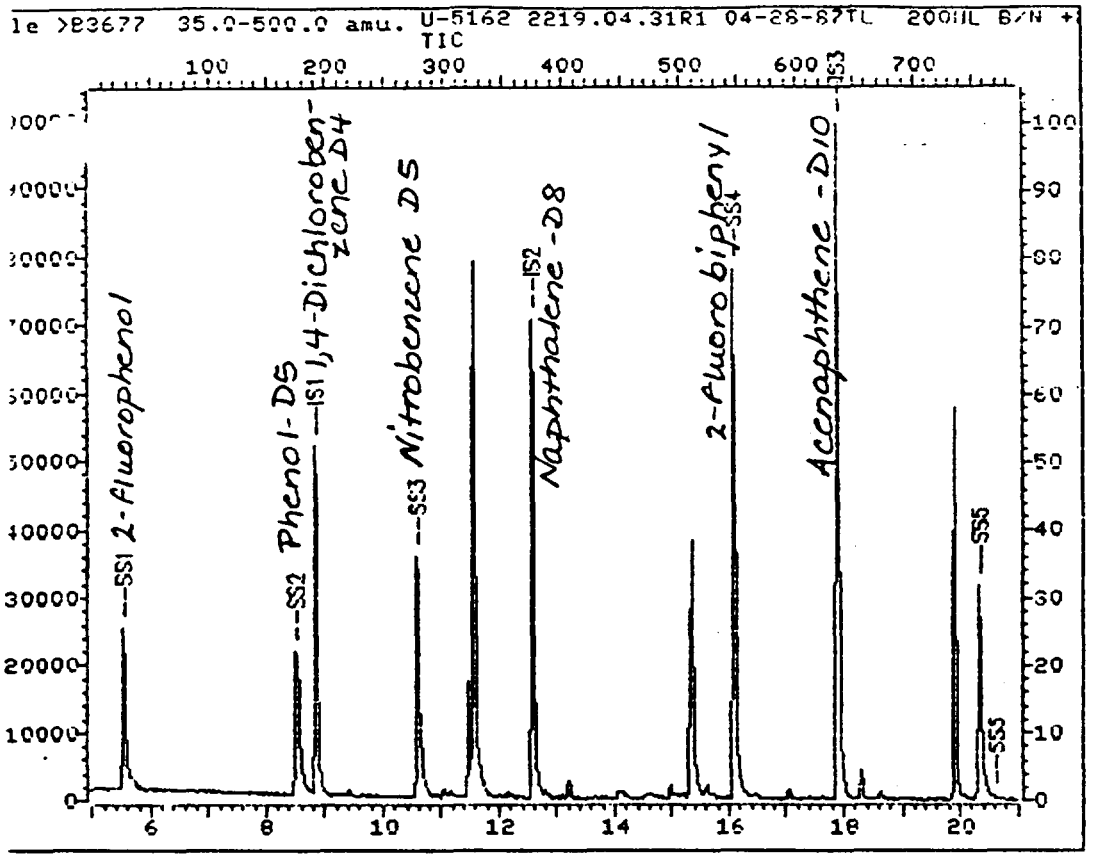


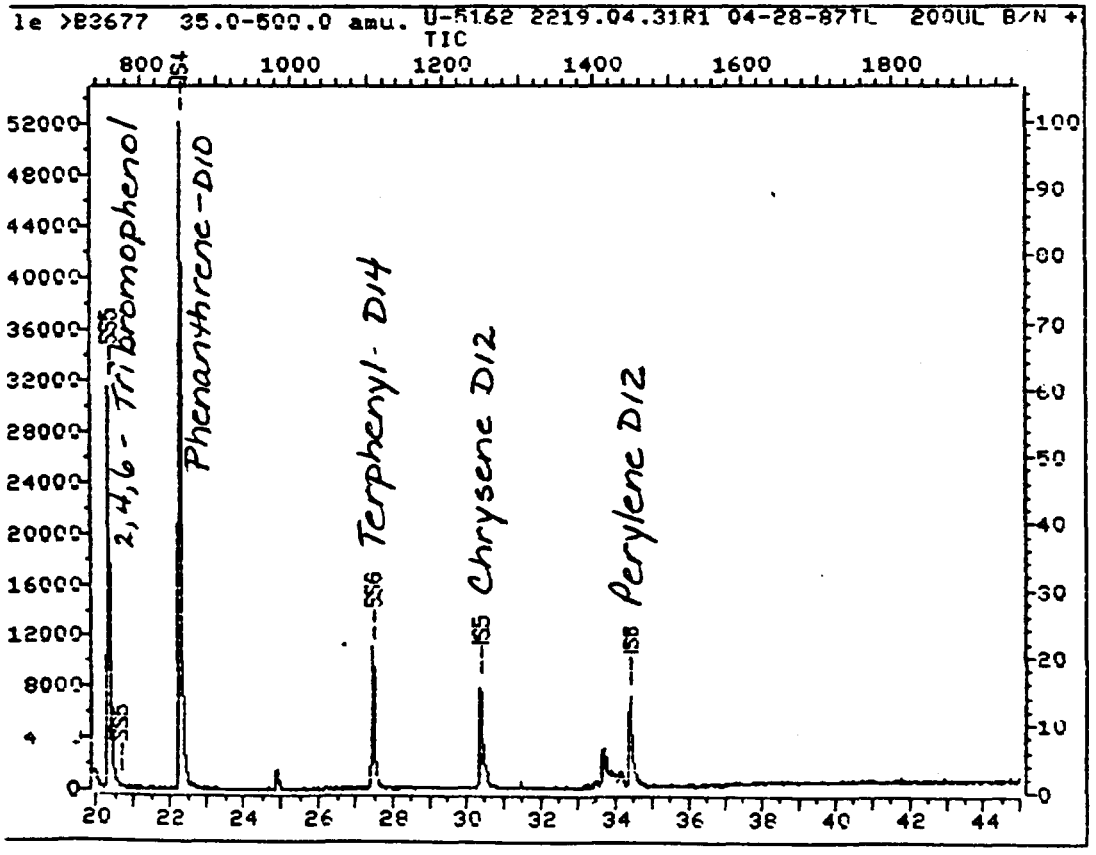
Data File: >B3677::D4
Name: U-5162 2219.04.31R1 DC-GW-41R
Misc: 04-28-87TL 200UL B/N +200UL A/P +4UL IS

Id File: BNABR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870428 13:13

Operator ID: USER8
Quant Time: 870428 15:42
Injected at: 870428 14:54

DC-GW-41R


le >B3677 35.0-500.0 amu. U-5162 2219.04.31R1 04-28-87TL 200UL B/N +
TIC
2-Fluorophenol
Phenol-D5
1,4-Dichlorobenzene D4
Nitrobenzene D5
Naphthalene-D8
2-Fluorobiphenyl
Acenaphthene-D10


le >B3677 35.0-500.0 amu. U-5162 2219.04.31R1 04-28-87TL 200UL B/N +
TIC
2,4,6-Tribromophenol
Phenanthrene-D10
Terphenyl-D14
Chrysene D12
Perylene D12

QUANT REPORT

perator ID: USER8 Quant Rev: 4 Quant Time: 870428 15:42
utput File: ^B3677::Q2 Injected at: 870428 14:54
a File: >B3677::D4 Dilution Factor: 2.00
ame: U-5162 2219.04.31R1 DC-GW-41 Replicate
isc: 04-28-87TL 200UL B/N +200UL A/P +4UL IS

D File: BNABR::D2
itle: BNA ID FILE FOR THE HP 5970 (B)
ast Calibration: 870428 13:13

	Compound		R.T.	Scan#	Area	Conc	Units		q
1)	*1,4-DICHLOROBENZENE-D4	(IS)	152	8.84	190	26362	40.00	UG/L	84
2)	PHENOL-D5	(SURR)	99	8.51	174	31037	67.86	UG/L	97
5)	2-FLUOROPHENOL	(SURR)	112	5.52	27	23005	94.05	UG/L	73
9)	~~1,3-DICHLOROBENZENE~~		~~146~~	~~8.80~~	~~192~~	~~793~~	~~1.67~~	~~UG/L~~ CW	96
10)	1,4-DICHLOROBENZENE		146	8.88	192	793	1.74	UG/L	94
17)	~~N-NITROSO-DI-N-PROPYLAMINE~~		~~70~~	~~10.58~~	~~276~~	~~6919~~	~~17.24~~	~~UG/L~~ CW	85
19)	*NAPHTHALENE-D8	(IS)	136	12.58	374	100159	40.00	UG/L	100
20)	NITROBENZENE-D5	(SURR)	82	10.58	276	43005	82.74	UG/L	97
4)	*ACENAPHTHENE-D10	(IS)	162	17.90	636	68365	40.00	UG/L	97
8)	2-FLUOROBIPHENYL	(SURR)	172	16.09	547	81747	71.69	UG/L	93
1)	~~DIMETHYL PHTHALATE~~		~~163~~	~~17.90~~	~~636~~	~~12163~~	~~11.32~~	~~UG/L~~ CW	100
3)	2,4,6-TRIBROMOPHENOL	(SURR)	330	20.34	756	19582	84.90	UG/L	94
~~8)~~	~~2,4,6-TRIBROMOPHENOL~~	~~(SURR)~~	~~330~~	~~20.63~~	~~770~~	~~224~~	~~.97~~	~~UG/L~~ CW	94
2)	~~2,6-DINITROTOLUENE~~		~~165~~	~~17.90~~	~~636~~	~~9166~~	~~44.06~~	~~UG/L~~ CW	100
5)	*PHENANTHRENE-D10	(IS)	188	22.29	852	86190	40.00	UG/L	99
3)	DI-N-BUTYLPHTHALATE		149	24.92	981	6185	6.88	UG/L	99
5)	*CHRYSENE-D12	(IS)	240	30.38	1250	26467	40.00	UG/L	100
8)	TERPHENYL-D14	(SURR)	244	27.48	1107	27079	92.61	UG/L	100
4)	*PERYLENE-D12	(IS)	264	34.41	1448	22407	40.00	UG/L	100
5)	~~DI-N-OCTYL PHTHALATE~~		~~149~~	~~33.21~~	~~1389~~	~~424~~	~~.98~~	~~UG/L~~ CW	100
5)	DI-N-OCTYL PHTHALATE		149	33.27	1392	559	1.29	UG/L	100
5)	~~DI-N-OCTYL PHTHALATE~~		~~149~~	~~33.45~~	~~1401~~	~~797~~	~~1.83~~	~~UG/L~~	100
5)	~~DI-N-OCTYL PHTHALATE~~		~~149~~	~~33.51~~	~~1404~~	~~220~~	~~.51~~	~~UG/L~~ CW	100
5)	~~DI-N-OCTYL PHTHALATE~~		~~149~~	~~33.69~~	~~1413~~	~~1710~~	~~3.93~~	~~UG/L~~	100

* Compound is ISTD

SAMPLE NUMBER DC-GW-42

481095

Sample Number
DC-GW-42

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Ecology & Environment, Inc. Case No: U-5157, 5162

Lab Sample ID No: 2220 QC Report No:

Sample Matrix: Water Contract No: IL-3140

Data Release Authorized By: [illegible] Date Sample Received: 3-25-87

Volatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 3-30-87

Conc./Dil Factor: 20 pH

Percent Moisture: (Not Decanted)

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	200u
74-83-9	Bromomethane	200u
75-01-4	Vinyl Chloride	200u
75-00-3	Chloroethane	200u
75-09-2	Methylene Chloride	310
67-64-1	Acetone	430
75-15-0	Carbon Disulfide	100u
75-35-4	1, 1-Dichloroethene	100u
75-34-3	1, 1-Dichloroethane	100u
156-60-5	Trans-1, 2-Dichloroethene	94J
67-66-3	Chloroform	100u
107-06-2	1, 2-Dichloroethane	100u
78-93-3	2-Butanone	570
71-55-6	1, 1, 1-Trichloroethane	43J
56-23-5	Carbon Tetrachloride	100u
108-05-4	Vinyl Acetate	200u
75-27-4	Bromodichloromethane	100u

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	100u
10061-02-6	Trans-1, 3-Dichloropropene	100u
79-01-6	Trichloroethene	1000
124-48-1	Dibromochloromethane	100u
79-00-5	1, 1, 2-Trichloroethane	100u
71-43-2	Benzene	1800
10061-01-5	cis-1, 3-Dichloropropene	100u
110-75-8	2-Chloroethylvinylether	200u
75-25-2	Bromoform	100u
591-78-6	4-Methyl-2-Pentanone	200u
108-10-1	2-Hexanone	200u
127-18-4	Tetrachloroethene	100u
79-34-5	1, 1, 2, 2-Tetrachloroethane	100u
108-88-3	Toluene	130
108-90-7	Chlorobenzene	1000
100-41-4	Ethylbenzene	100u
100-42-5	Styrene	100u
	Total Xylenes	27J

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration, dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g. 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS.

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

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

E This flag indicates an approximate concentration. The amount detected in the analysis exceeds the calibrated range.

343

aboratory Name ecology and environment, inc.

:ase No U-5157, 5162

Sample Number
DC-GW-42

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

:oncentration: Low Medium (Circle One)

)ate Extracted/Prepared: 3-30-87

)ate Analyzed: 4-28-87

:onc/Dil Factor: 2

'ercent Moisture (Decanted) -

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)	
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
39638-32-9	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
1[illegible]11-3	Dimethyl Phthalate	10	U
2[illegible]95-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	50	U

CAS Number		ug/l or ug/Kg (Circle One)	
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
606-20-2	2 6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4. 6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	B
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
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	11	B
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	Dibenzo(a h)Anthracene	10	U
191-24-2	Benzo(g h i)Perylene	10	U

(1)-Cannot be separated from diphenylamine

Laboratory Name ecology and environment, inc.

Case No U-5157, 5162

Sample Number
IC-GW-42

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration (Low) Medium (Circle One)

Date Extracted/Prepared 3-31-87

Date Analyzed 4-22-87

Conc/Dil Factor 1

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☑Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/l or ug/Kg) (Circle One)
319-84-6	Alpha-BHC	0.05U
319-85-7	Beta-BHC	0.05U
319-86-8	Delta-BHC	0.05U
58-89-9	Gamma-BHC (Lindane)	0.05U
76-44-8	Heptachlor	0.05U
309-00-2	Aldrin	0.05U
1024-57-3	Heptachlor Epoxide	0.05U
959-98-8	Endosulfan I	0.05U
60-57-1	Dieldrin	0.10U
72-55-9	4,4'-DDE	0.10U
72-20-8	Endrin	0.10U
33213-65-9	Endosulfan II	0.10U
72-54-8	4,4'-DDD	0.10U
1031-07-8	Endosulfan Sulfate	0.10U
50-29-3	4,4'-DDT	0.10U
72-43-5	Methoxychlor	0.50U
53494-70-5	Endrin Ketone	0.10U
57-74-9	Chlordane	0.50U
8001-35-2	Toxaphene	1.0U
12674-11-2	Aroclor-1016	0.50U
11104-28-2	Aroclor-1221	0.50U
11141-16-5	Aroclor-1232	0.50U
53469-21-9	Aroclor-1242	0.50U
12672-29-6	Aroclor-1248	0.50U
11097-69-1	Aroclor-1254	1.0U
11096-82-5	Aroclor-1260	1.0U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 1,000 or W_s _____ V_t 10,000 V_i 4

Laboratory Name ecology and environment, inc.

Case No U-5157, 5162

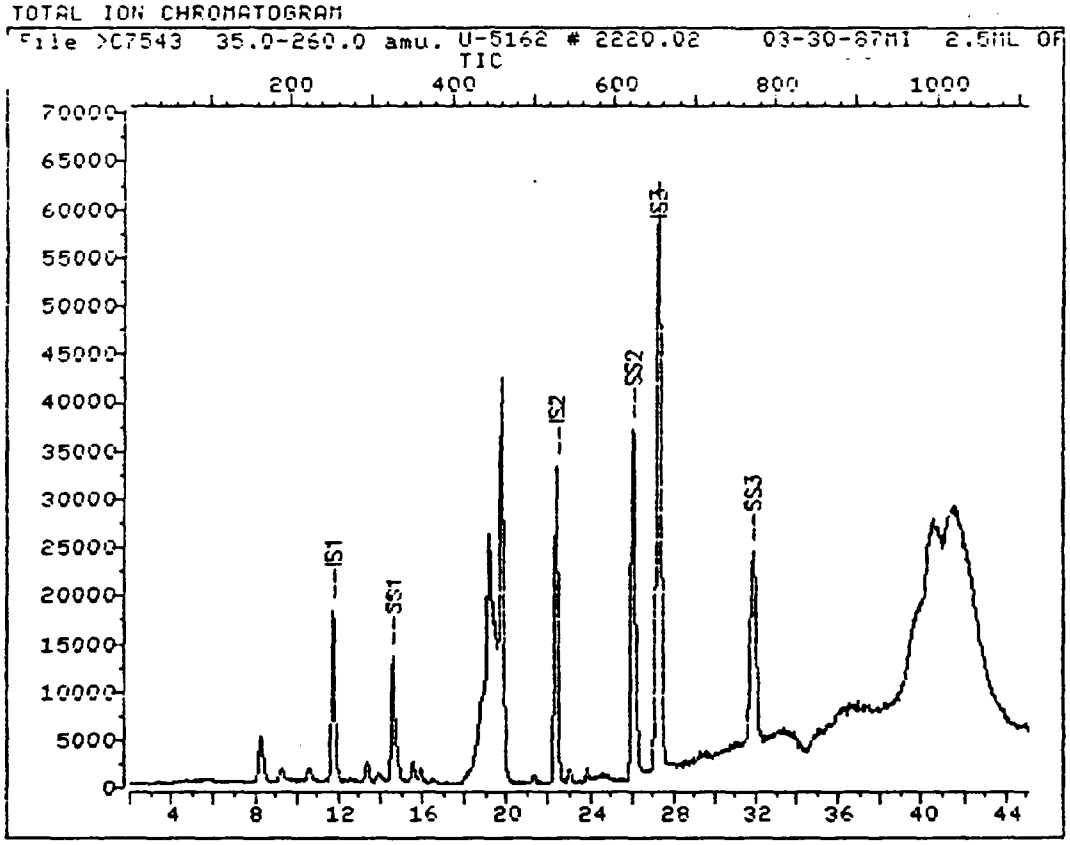
Sample Number DC-GW-42

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.	Unknown alcohol	VOA	15.53	120 J
2.	Dichlorobenzene isomer	↓	39.80	1100 J
3.	Dichlorobenzene isomer	↓	40.50	2900 J
4.	Dichlorobenzene isomer	↓	41.80	5800 J
5.				
6.	Chloroaniline Isomer	BNA	11.59	180 J
7 50763514	3-Methyl-1,5-Heptadiene	↓	15.37	57 J
8.	Unknown	↓	19.92	76 BJ
9.	Unknown Phthalate	↓	33.68	51 JB
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24				
25.				
26.				
27.				
28.				
29.				
30				

TOTAL ION CHROMATOGRAM

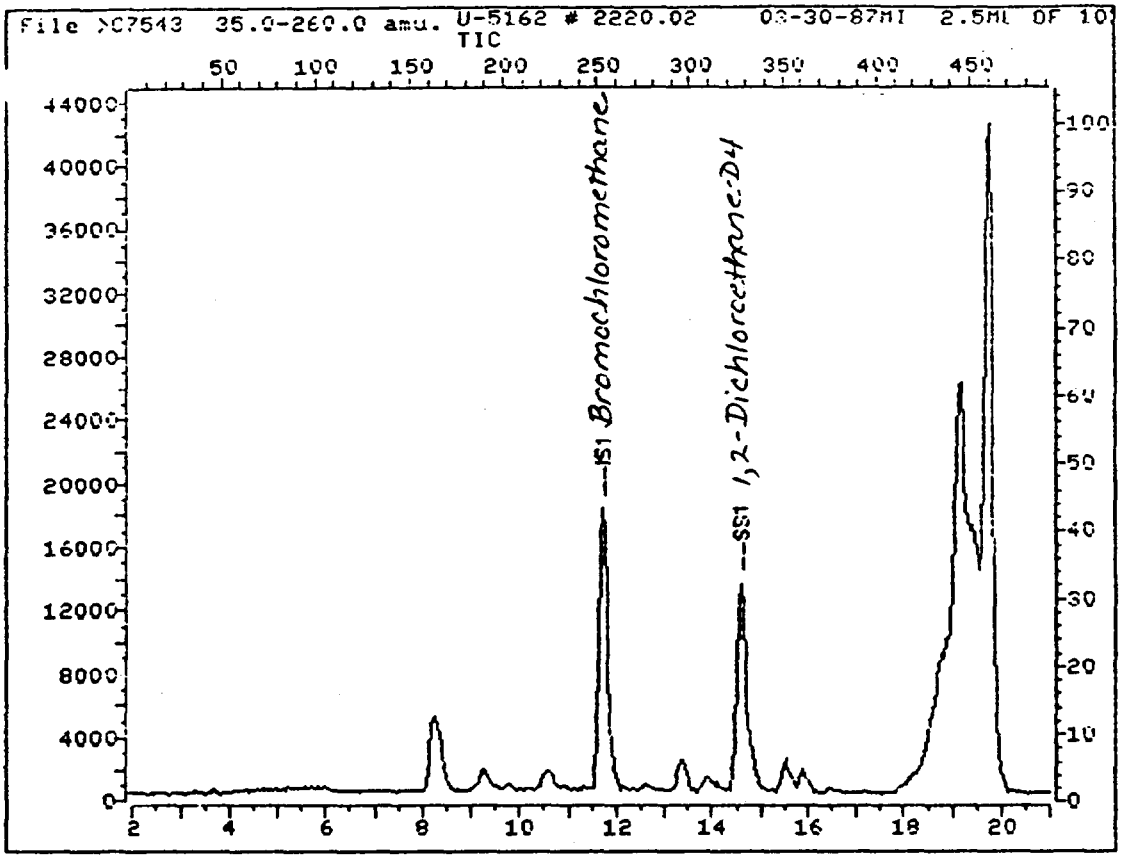


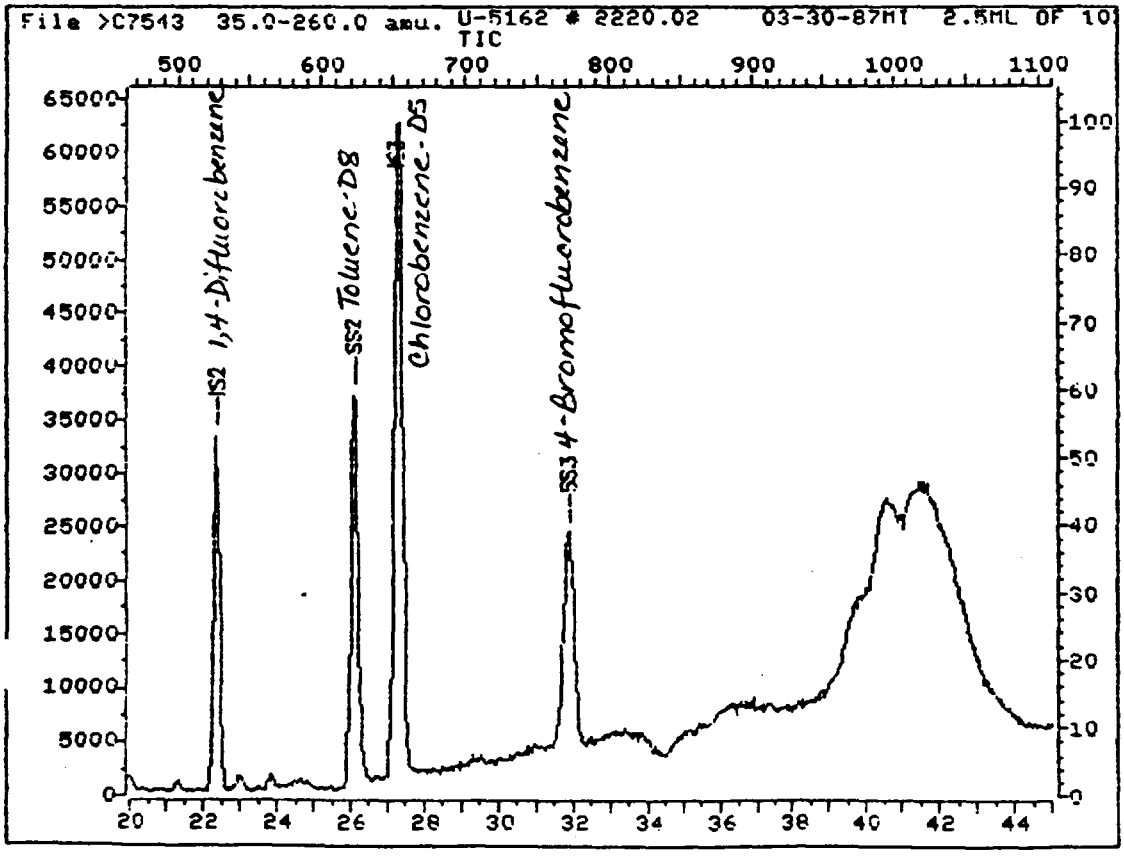
Data File: >C7543::D3
Name: U-5162 # 2220.02 DC-GW-42
Misc: 03-30-87MI 2.5ML OF 10X SAMPLE + 2.5ML DI + 10UL IS/S

Id File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870330 11:28

Operator ID: USER8
Quant Time: 870330 20:14
Injected at: 870330 19:27

DC-GW-42


File >C7543 35.0-260.0 amu. U-5162 # 2220.02 03-30-87MT 2.5ML OF 10
TIC
IS1 Bromochloromethane
SS1 1,2-Dichloroethane-D4


File >C7543 35.0-260.0 amu. U-5162 # 2220.02 03-30-87MT 2.5ML OF 10
TIC
IS2 1,4-Difluorobenzene
SS2 Toluene-D8
IS3 Chlorobenzene-D5
SS3 4-Bromofluorobenzene

QUANT REPORT

Operator ID: USER8 Quant Rev: 4 Quant Time: 870330 20:14
Output File: ^C7543::Q2 Injected at: 870330 19:27
Data File: >C7543::D3 Dilution Factor: 1.00
Name: U-5162 # 2220.02 DC-GW-42
Misc: 03-30-87MI 2.5ML OF 10X SAMPLE + 2.5ML DI + 10UL IS/S

20X

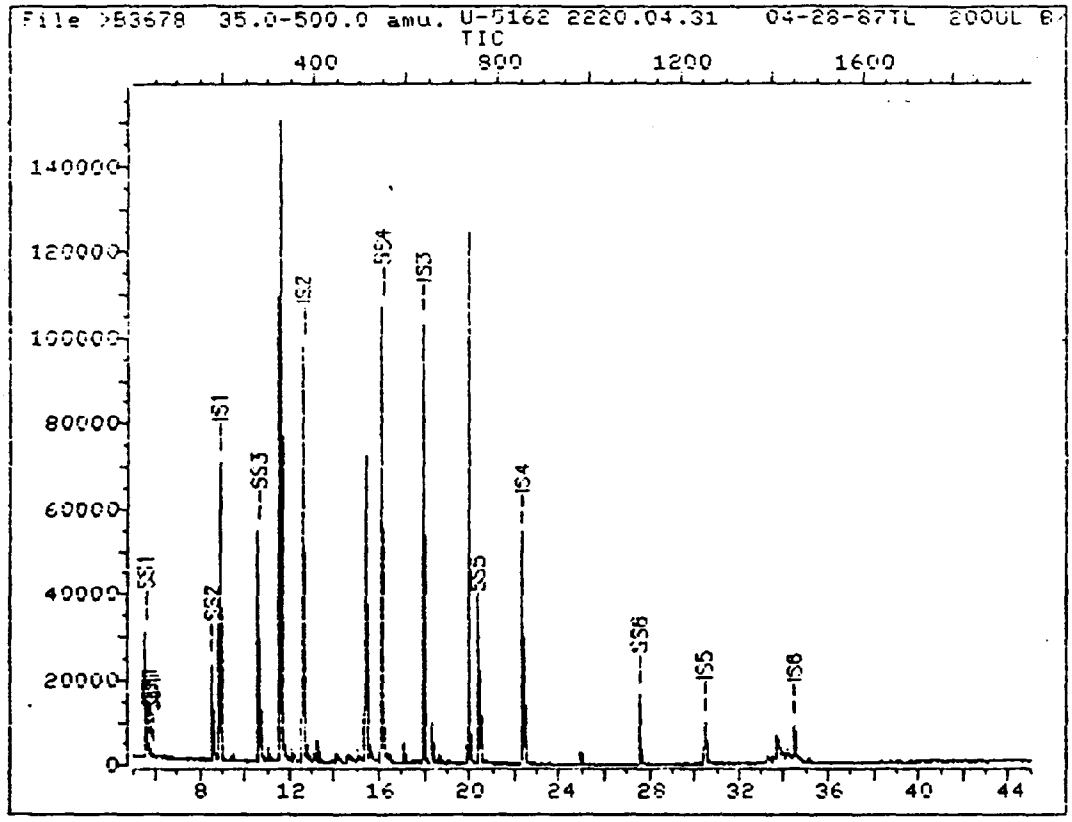
ID File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870330 11:28

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	(IS) 128	11.73	253	29296	50.00	UG/L	100
6)	METHYLENE CHLORIDE	84	8.24	163	17210	15.35	UG/L	100
7)	ACETONE	43	9.25	189	11875	21.48	UG/L	100
12)	TRANS-1,2-DICHLOROETHENE	96	13.36	295	5265	4.68	UG/L	84
15)	1,2-DICHLOROETHANE-D4	(SURR) 65	14.60	327	57371	43.08	UG/L	89
16)	*1,4-DIFLUOROBENZENE	(IS) 114	22.36	527	146967	50.00	UG/L	100
17)	2-BUTANONE	72	14.76	331	3458	28.36	UG/L	100
18)	1,1,1-TRICHLOROETHANE	97	15.92	361	4390	2.16	UG/L	99
24)	TRICHLOROETHENE	130	18.72	433	33886	25.17	UG/L	98
24)	TRICHLOROETHENE	130	19.14	444	35494	26.36	UG/L	89
27)	BENZENE	78	19.34	449	139185	36.67	UG/L	100
27)	BENZENE	78	19.76	460	208929	55.04	UG/L	100
~~28)~~	~~CIS-1,3-DICHLOROPROPENE~~	~~75~~	~~19.76~~	~~460~~	~~3766~~	~~2.92~~	~~UG/L~~	100
31)	*CHLOROBENZENE-D5	(IS) 117	27.22	652	118687	50.00	UG/L	100
~~32)~~	~~4-METHYL-2-PENTANONE~~	~~43~~	~~22.99~~	~~543~~	~~7691~~	~~8.77~~	~~UG/L~~	98
~~35)~~	~~1,1,2,2-TETRACHLOROETHANE~~	~~83~~	~~24.62~~	~~589~~	~~2567~~	~~2.15~~	~~UG/L~~	~~100~~
36)	TOLUENE-D8	(SURR) 98	26.05	622	140245	42.17	UG/L	95
37)	TOLUENE	92	26.25	627	16410	6.52	UG/L	98
38)	CHLOROBENZENE	112	27.30	654	159903	51.46	UG/L	99
40)	4-BROMOFLUOROBENZENE	(SURR) 95	31.84	771	76256	45.14	UG/L	100
42)	TOTAL XYLENES	91	33.94	825	5666	1.35	UG/L	100
43)	1,3-DICHLOROBENZENE	146	39.73	974	29269	29269.00	NO CALIB	100
43)	1,3-DICHLOROBENZENE	146	40.50	994	73817	73817.00	NO CALIB	100
44)	1,2-DICLHLOROBENZENE	146	39.73	974	29269	29269.00	NO CALIB	100
44)	1,2-DICLHLOROBENZENE	146	40.50	994	73817	73817.00	NO CALIB	100
45)	1,4-DICHLOROBENZENE	146	39.73	974	29269	29269.00	NO CALIB	100
45)	1,4-DICHLOROBENZENE	146	40.50	994	73817	73817.00	NO CALIB	100

* Compound is ISTD

Note:
TCE — peak split and together
" " "
Acetone

TOTAL ION CHROMATOGRAM

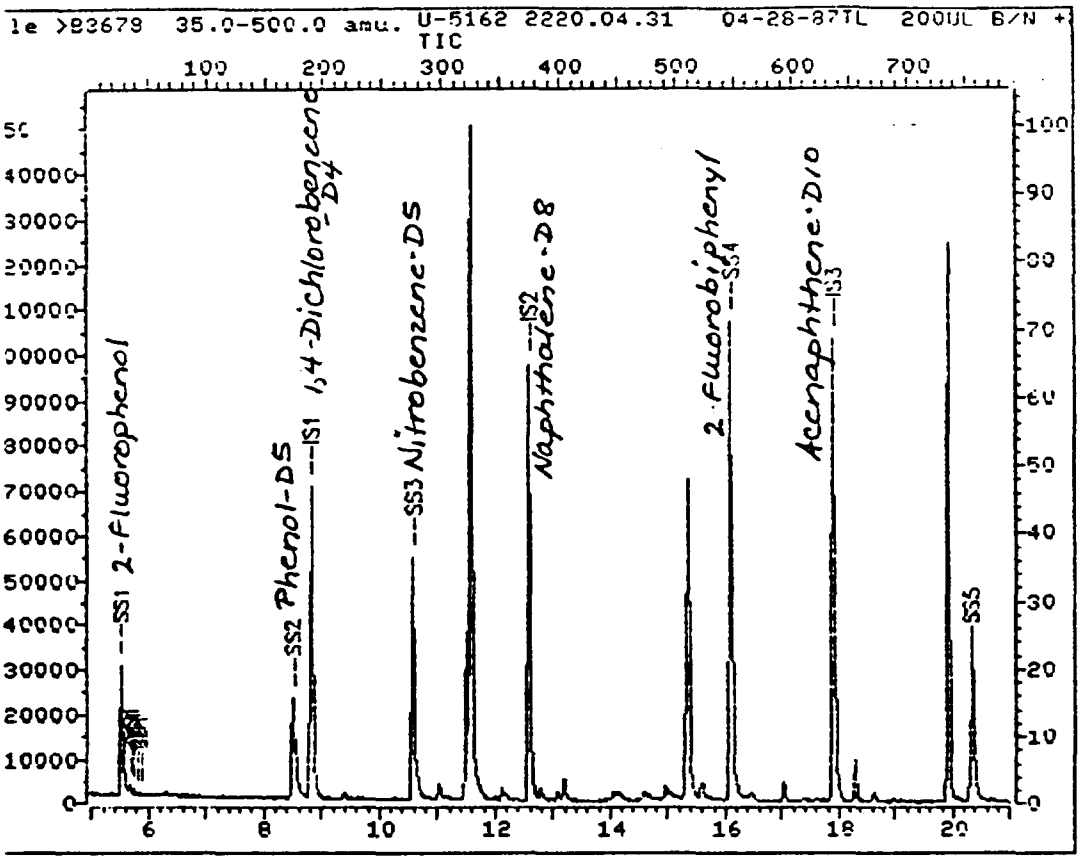


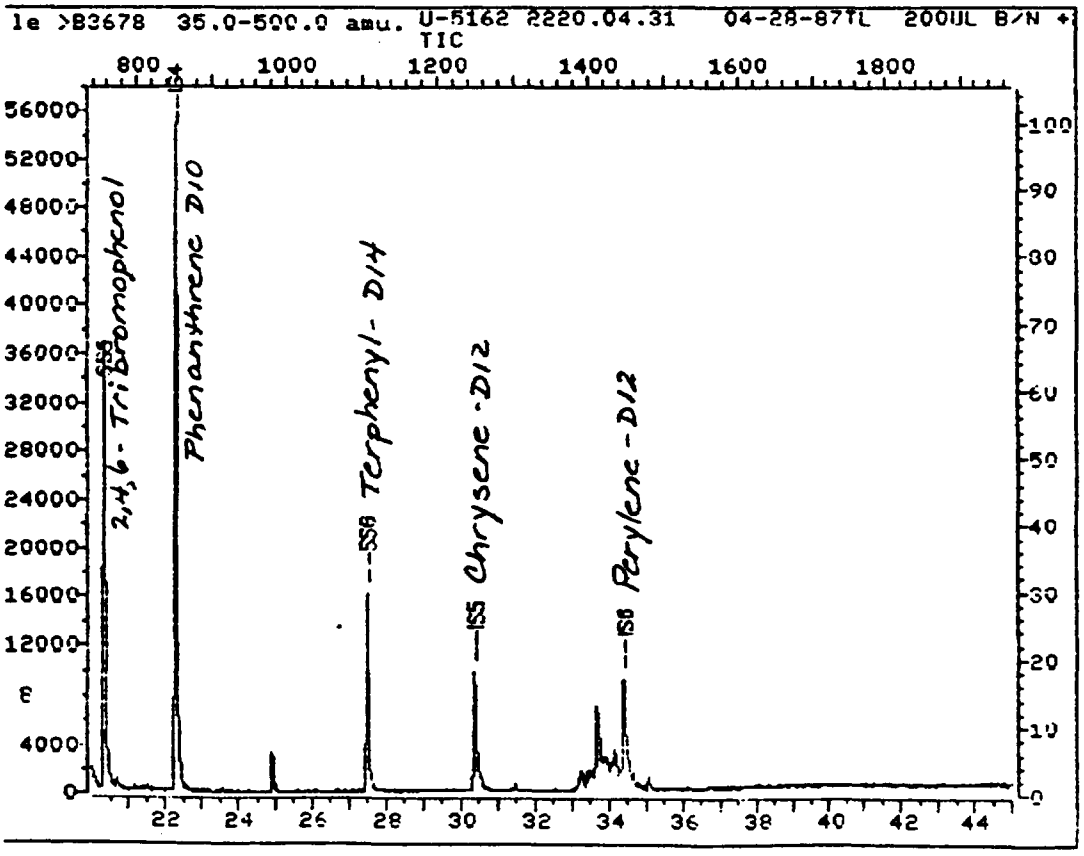
Data File: >B3678::D4
Name: U-5162 2220.04.31 DC-GW-42
Misc: 04-28-87TL 200UL B/N +200UL A/P +4UL IS

Id File: BNABR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870428 13:13

Operator ID: USER8
Quant Time: 870428 16:43
Injected at: 870428 15:56

DC-GW-42


le >B3678 35.0-500.0 amu. U-5162 2220.04.31 04-28-87TL 200UL B/N +
TIC
SS1 2-Fluorophenol
SS2 Phenol-D5
IS1 1,4-Dichlorobenzene-D4
SS3 Nitrobenzene-D5
IS2 Naphthalene-D8
SS4 2-Fluorobiphenyl
IS3 Acenaphthene-D10
SS5


le >B3678 35.0-500.0 amu. U-5162 2220.04.31 04-28-87TL 200UL B/N +
TIC
SS6 2,4,6-Tribromophenol
IS4 Phenanthrene-D10
SS8 Terphenyl-D14
IS5 Chrysene-D12
IS6 Perylene-D12

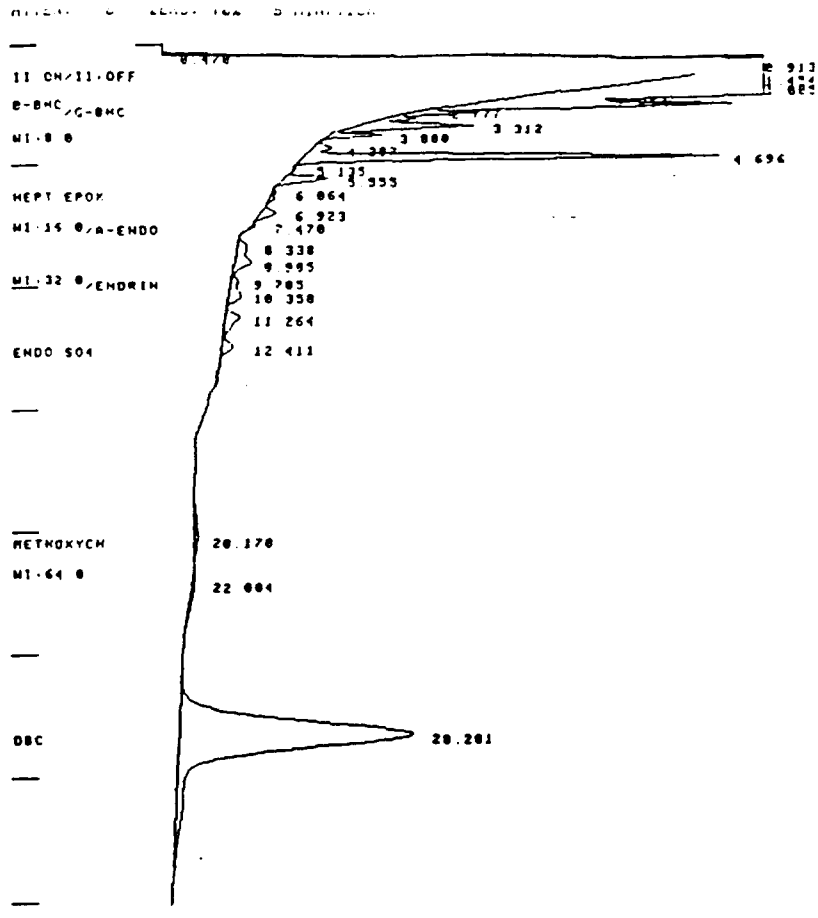
QUANT REPORT

perator ID: USER8 Quant Rev: 4 Quant Time: 870428 16:43
utput File: ^B3678::Q2 Injected at: 870428 15:56
a File: >B3678::D4 Dilution Factor: 2.00
ame: U-5162 2220.04.31 DC-GW-42
isc: 04-28-87TL 200UL B/N +200UL A/P +4UL IS

) File: BNABR::D2
itle: BNA ID FILE FOR THE HP 5970 (B)
ast Calibration: 870428 13:13

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-D4	(IS)	152	8.82	189	32940	40.00 UG/L	86
2)	PHENOL-D5	(SURR)	99	8.49	173	30203	52.85 UG/L	99
5)	2-FLUOROPHENOL	(SURR)	112	5.51	26	21603	70.68 UG/L	60
5)	~~2-FLUOROPHENOL~~	~~(SURR)~~	~~112~~	~~5.67~~	~~34~~	~~1073~~	~~3.51 UG/L~~	95
5)	~~2-FLUOROPHENOL~~	~~(SURR)~~	~~112~~	~~5.73~~	~~37~~	~~564~~	~~1.85 UG/L~~	71
5)	~~2-FLUOROPHENOL~~	~~(SURR)~~	~~112~~	~~5.79~~	~~40~~	~~509~~	~~1.67 UG/L~~	71
5)	~~2-FLUOROPHENOL~~	~~(SURR)~~	~~112~~	~~5.85~~	~~43~~	~~329~~	~~1.08 UG/L~~	91
17)	~~N-NITROSO-DI-N-PROPYLAMINE~~		~~70~~	~~10.59~~	~~276~~	~~5324~~	~~17.40 UG/L~~	94
9)	*NAPHTHALENE-D8	(IS)	136	12.58	374	119819	40.00 UG/L	100
0)	NITROBENZENE-D5	(SURR)	82	10.59	276	55481	89.23 UG/L	92
4)	*ACENAPHTHENE-D10	(IS)	162	17.91	636	75697	40.00 UG/L	96
8)	2-FLUOROBIPHENYL	(SURR)	172	16.10	547	98397	77.94 UG/L	94
1)	~~DIMETHYL PHTHALATE~~		~~163~~	~~17.91~~	~~636~~	~~13295~~	~~11.67 UG/L~~	100
8)	2,4,6-TRIBROMOPHENOL	(SURR)	330	20.33	755	21994	86.12 UG/L	99
9)	~~2,4-DINITROPHENOL~~		~~184~~	~~16.47~~	~~565~~	~~235~~	~~2.16 UG/L~~	100
2)	~~2,6-DINITROTOLUENE~~		~~165~~	~~17.89~~	~~635~~	~~10137~~	~~44.01 UG/L~~	100
5)	*PHENANTHRENE-D10	(IS)	188	22.28	851	94328	40.00 UG/L	94
3)	DI-N-BUTYLPHTHALATE		149	24.90	980	9526	9.68 UG/L	99
5)	*CHRYSENE-D12	(IS)	240	30.39	1250	28893	40.00 UG/L	100
8)	TERPHENYL-D14	(SURR)	244	27.48	1107	30607	95.88 UG/L	100
4)	*PERYLENE-D12	(IS)	264	34.41	1448	24915	40.00 UG/L	100
5)	~~DI-N-OCTYL PHTHALATE~~		~~149~~	~~33.03~~	~~1380~~	~~249~~	~~.52 UG/L~~	100
5)	DI-N-OCTYL PHTHALATE		149	33.27	1392	5192	10.74 UG/L	100
5)	~~DI-N-OCTYL PHTHALATE~~		~~149~~	~~33.46~~	~~1401~~	~~561~~	~~1.16 UG/L~~	100
5)	~~DI-N-OCTYL PHTHALATE~~		~~149~~	~~33.68~~	~~1412~~	~~2169~~	~~4.49 UG/L~~	100

* Compound is ISTD



DC-GW-42

CHANNEL: 1A - 1 TITLE: RUN# 23 1:39 22 APR 87

SAMPLE: 2220 METHOD: CEPA CALCULATION: ES - ANALYS

PEAK NO	PEAK NAME	RESULT UG/L	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		WI/2 (SEC)
1		0.0000	1.454		410061	BV	?	3.81
2		0.0000	1.576		1737227	VV		5.50
3		0.0000	1.805		1577414	VV		4.56
4		0.0000	2.044		1418998	VV		4.69
5	~~A-BHC~~	0.0453	2.254	0.064	130927	VV		5.19
6	~~B-BHC~~	0.2556	2.433	0.093	272561	VV		5.81
7	~~G-BHC~~	0.0292	2.573	0.013	77641	VV	?	4.94
8		0.0000	2.777		43266	VV		5.13
9		0.0000	3.312		164439	VB	?	9.56
10		0.0000	3.800		54777	BB		7.50
11		0.0000	4.307		29046	BV		11.69
12		0.0000	4.696		624956	VB		11.19
13		0.0000	5.555		72662	BB		11.81
14		0.0000	6.923		31982	BB		15.63
15	~~4,4'-DDE~~	0.0140	8.338	-0.272	32604	BV	?	28.88
16	~~DIELDRIN~~	0.0239	8.985	0.255	62534	VV		28.19
17	~~4,4'-DDD~~	0.0265	10.358	-0.442	55530	VV		25.44
18	~~ENDRIN~~	0.0331	11.264	0.334	62971	VV		27.56
19	~~ENDO SO4~~	0.0237	12.411	-0.259	35569	VB		20.56
20	~~METHOXYCH~~	0.0467	20.170	-0.510	38762	BB	?	88.13
21		0.0000	22.004		33725	BB		27.00
22	DBC	1.2102	28.281	0.051	2296902	BB		70.31

TOTALS: 1.7082 -0.673 9264554

DETECTED PKS: 36 REJECTED PKS: 14

DIVISOR: 1.00000 MULTIPLIER: 10.00000

NOISE: 11.4 OFFSET: 9

RACK: 2 VIAL: 8 INJ: 1

NOTES:
NOTEBOOK:297-1,3 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#:U-5162
INST: VARIAN 6000# 2A ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
LIQUID PHASE: 3% OV-1
CARRIER GAS: N2 @ 60 ML/MIN
DET: 300 C INJ: 220 C
220 C ISOTHERMAL 4 UL INJECTION

SAMPLE NUMBER DC-GW-42R

481095

Laboratory Name ecology and environment, inc.

Case No 4-5157,5162

Sample Number DC-GW-42R

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration (Low) Medium (Circle One)

Date Extracted/Prepared 3-31-87

Date Analyzed 4-22-87

Conc/Dil Factor 1

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☑Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/l or ug/Kg) (Circle One)
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

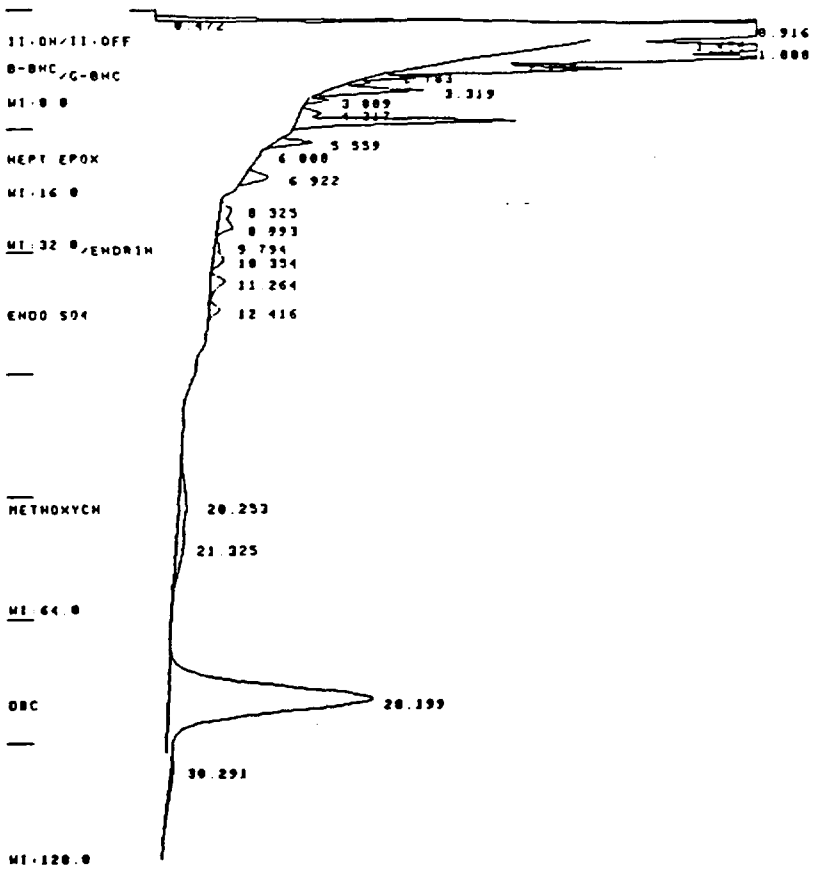
V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 1,000 or W_s _____ V_t 10,000 V_i 4



DC-GW-42R

CHANNEL: 1A - 1 TITLE: RUN# 24 2:18 22 APR 87

SAMPLE: 2220R1 METHOD: CEPA CALCULATION: ES - ANALYS

PEAK NO	PEAK NAME	RESULT UG/L	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	WI/2 (SEC)
1		0.0000	1.456		318579	BV	? 3.88
2		0.0000	1.582		1554646	VV	5.56
3		0.0000	1.808		1297807	VV	4.56
4		0.0000	2.048		1075509	VV	4.75
5	~~A-BHC~~	0.0316	2.255	0.065	91297	VV	5.06
6	~~B-BHC~~	0.2162	2.438	0.098	230555	VV	5.81
7	~~G-BHC~~	0.0261	2.578	0.018	69355	VV	? 5.13
8		0.0000	2.783		43826	VV	5.31
9		0.0000	3.319		125345	VB	? 9.31
10		0.0000	3.809		21493	BV	7.63
11		0.0000	4.317		35419	VV	14.94
12		0.0000	4.705		362103	VB	11.94
13		0.0000	5.559		64496	BB	10.81
14		0.0000	6.922		68601	BB	? 10.69
15	~~4,4'-DDE~~	0.0160	8.325	-0.285	37470	BV	? 27.00
16	~~DIELDRIN~~	0.0213	8.993	0.263	55715	VV	? 29.94
17	~~4,4'-DDD~~	0.0188	10.354	-0.446	39377	VV	25.56
18	~~ENDRIN~~	0.0279	11.264	0.334	53012	VV	25.88
19	~~ENDO SO4~~	0.0253	12.416	-0.254	37973	VB	21.81
20	~~METHOXYCH~~	0.1277	20.253	-0.427	106090	BV	?106.44
21		0.0000	21.325		97591	VB	?114.00
22	DBC	1.0586	28.199	0.049	2009109	BV	69.75
23		0.0000	30.291		32392	T	?148.00

TOTALS: 1.5695 -0.585 7827760

DETECTED PKS: 34 REJECTED PKS: 11

DIVISOR: 1.00000 MULTIPLIER: 10.00000

NOISE: 11.4 OFFSET: -11

RACK: 2 VIAL: 9 INJ: 1

NOTES:
NOTEBOOK:297-1,3 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#:U-5162
INST: VARIAN 6000# 2A ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
LIQUID PHASE: 3% OV-1
CARRIER GAS: N2 @ 60 ML/MIN
DET: 300 C INJ: 220 C
200 C ISOTHERMAL 4 UL INJECTION
PRIMARY ANALYSIS AUTOSAMPLER

SAMPLE NUMBER DC-GW-43

481095

Sample Number
DC-GW-43

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Ecology & Environment, Inc. Case No: U-5157, 5162

Lab Sample ID No: 2221 QC Report No:

Sample Matrix: Water Contract No: IL-3140

Data Release Authorized By: [signature] Date Sample Received 3-25-87

Volatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 4-6-87

Conc./Dil Factor: 1 pH

Percent Moisture: (Not Decanted)

CAS Number		ug/l or ug/Kg (Circle One)
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	5 u
67-64-1	Acetone	5 J
75-15-0	Carbon Disulfide	5 u
75-35-4	1, 1-Dichloroethene	5 u
75-34-3	1, 1-Dichloroethane	5 u
156-60-5	Trans-1, 2-Dichloroethene	5 u
67-66-3	Chloroform	5 u
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

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	5 u
10061-02-6	Trans-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
10061-01-5	cis-1, 3-Dichloropropene	5 u
110-75-8	2-Chloroethylvinylether	10 u
75-25-2	Bromoform	5 u
591-78-6	4-Methyl-2-Pentanone	10 u
108-10-1	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
	Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration, dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g. 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS.

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

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

E This flag indicates an approximate concentration. The amount detected in the analysis exceeds the calibrated range.

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Laboratory Name: Ecology & Environment Inc.

Case No: U-5157, 5162

Sample Number: DC-GW-43

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 3-30-87

Date Analyzed: 4-28-87

Conc/Dil Factor: 2

Percent Moisture (Decanted): -

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)	
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
39638-32-9	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	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
9-09-2	3-Nitroaniline	50	U

CAS Number		ug/l or ug/Kg (Circle One)	
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
606-20-2	2 6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4 6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3 3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1 2 3-cd)Pyrene	10	U
53-70-3	Dibenz(a h)Anthracene	10	U
191-24-2	Benzo(g h i)Perylene	10	U

(1)-Cannot be separated from diphenylamine

Laboratory Name ecology and environment, inc.

Case No U-5157, 5162

Sample Number
DC - GW-21

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration (Low) Medium (Circle One)

Date Extracted/Prepared 3-31-87

Date Analyzed 4-22-87

Conc/Dil Factor 1

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☑Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/l or ug/Kg) (Circle One)
319-84-6	Alpha-BHC	0.05U
319-85-7	Beta-BHC	0.05U
319-86-8	Delta-BHC	0.05U
58-89-9	Gamma-BHC (Lindane)	0.05U
76-44-8	Heptachlor	0.05U
309-00-2	Aldrin	0.05U
1024-57-3	Heptachlor Epoxide	0.05U
959-98-8	Endosulfan I	0.05U
60-57-1	Dieldrin	0.10U
72-55-9	4,4'-DDE	0.10U
72-20-8	Endrin	0.10U
33213-65-9	Endosulfan II	0.10U
72-54-8	4,4'-DDD	0.10U
1031-07-8	Endosulfan Sulfate	0.10U
50-29-3	4,4'-DDT	0.10U
72-43-5	Methoxychlor	0.50U
53494-70-5	Endrin Ketone	0.10U
57-74-9	Chlordane	0.50U
8001-35-2	Toxaphene	1.0U
12674-11-2	Aroclor-1016	0.50U
11104-28-2	Aroclor-1221	0.50U
11141-16-5	Aroclor-1232	0.50U
53469-21-9	Aroclor-1242	0.50U
12672-29-6	Aroclor-1248	0.50U
11097-69-1	Aroclor-1254	1.0U
11096-82-5	Aroclor-1260	1.0U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 1,000 or W_s _____ V_t 10,000 V_i 4

Laboratory Name ecology and environment, inc.

Case No U-5157, 5162

Sample Number DC-GW-43

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.	No TIC's in VOA fraction			
2.				
3.	Unknown	BNA	19.91	33 BJ
4.	Unknown Phthalate	BNA	33.69	56 BJ
5.				
6.				
7.				
8.				
9.				
10.				
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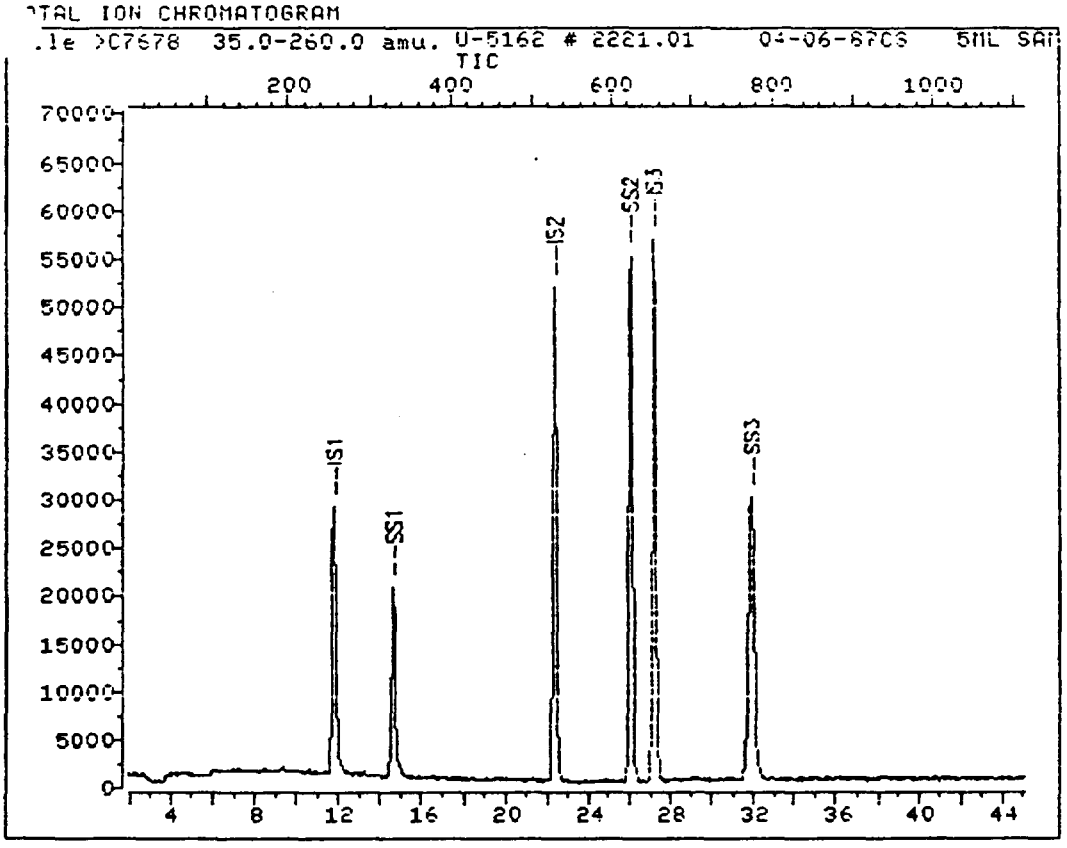
30				



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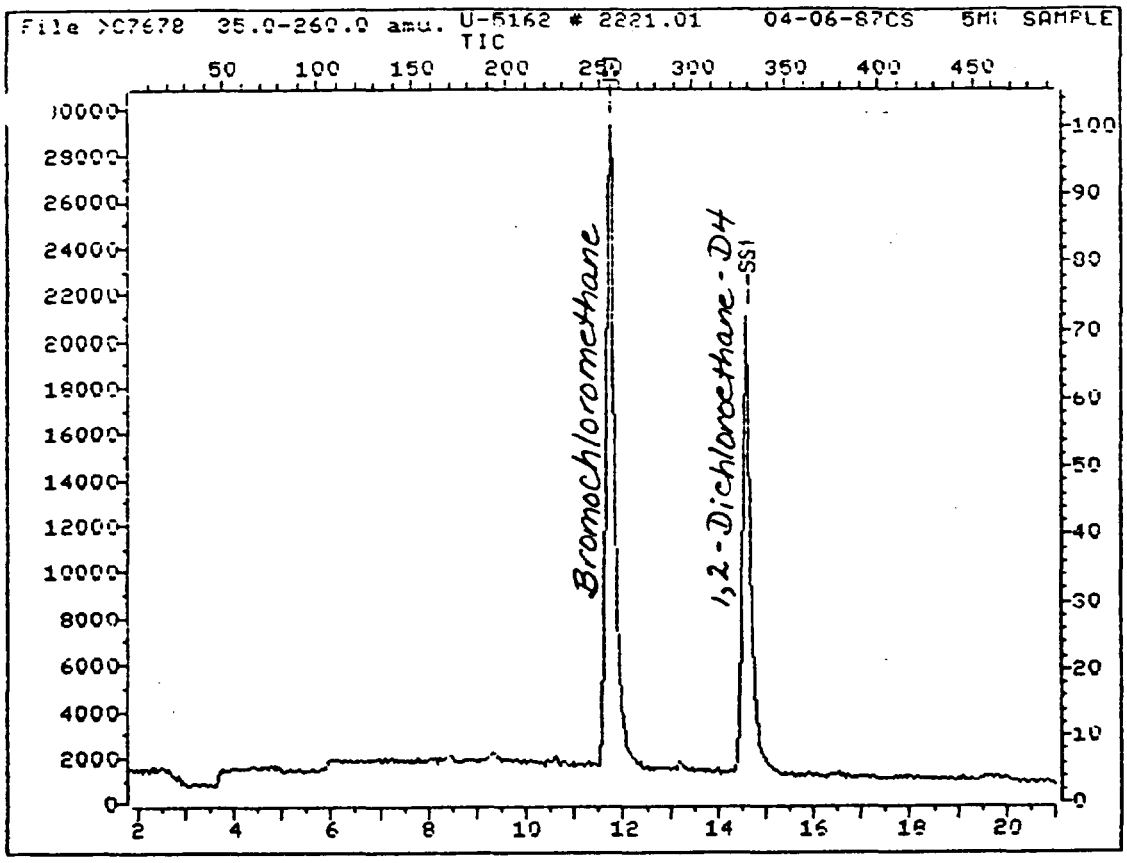
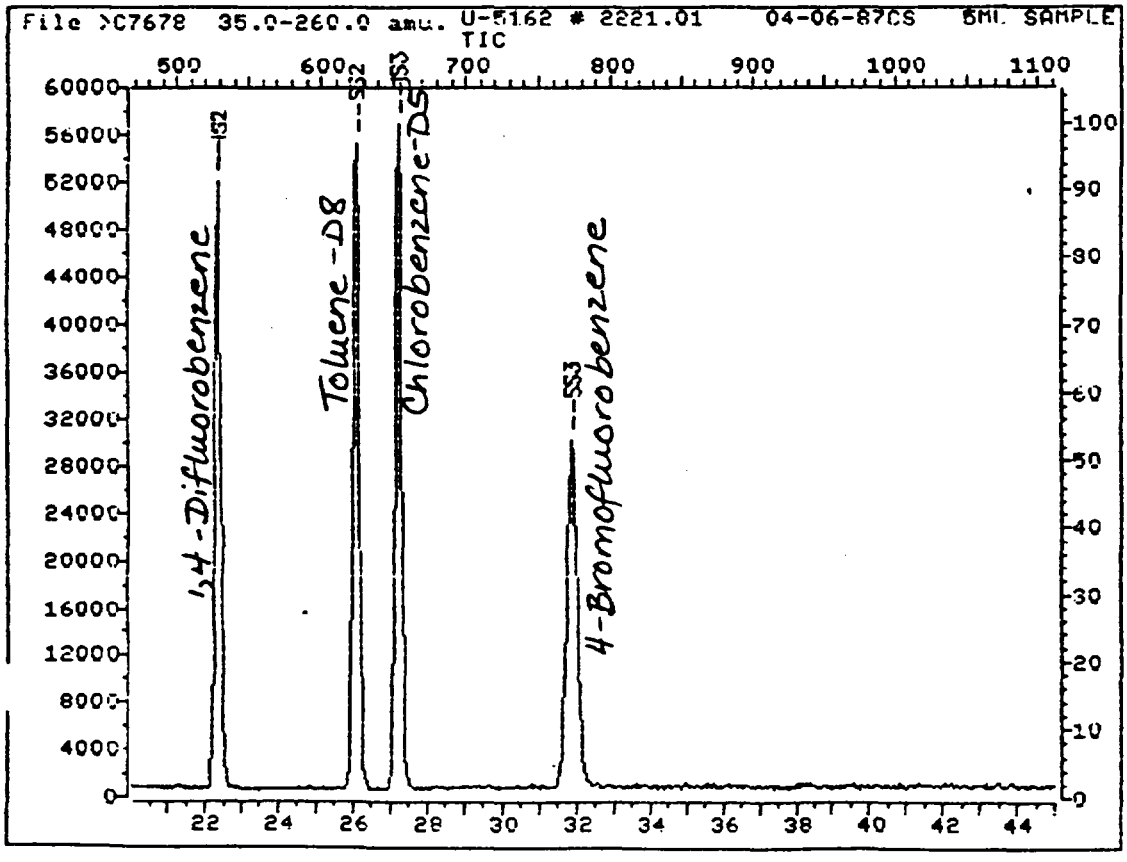
Name: U-5162 # 2221.01 DC-GW-43
Misc: 04-06-87CS 5ML SAMPLE + 10UL IS/SS

Id File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870406 13:39

Operator ID: USER8
Quant Time: 870406 17:52
Injected at: 870406 17:06


File >C7678 35.0-260.0 amu. U-5162 # 2221.01 04-06-87CS 5ml SAMPLE
TIC
Bromochloromethane
1,2-Dichloroethane-D4
SS1

DC-GW-43


File >C7678 35.0-260.0 amu. U-5162 # 2221.01 04-06-87CS 5ml SAMPLE
TIC
1,4-Difluorobenzene
IS2
Toluene-D8
SS2
Chlorobenzene-D5
IS3
4-Bromofluorobenzene
SS3

QUANT REPORT

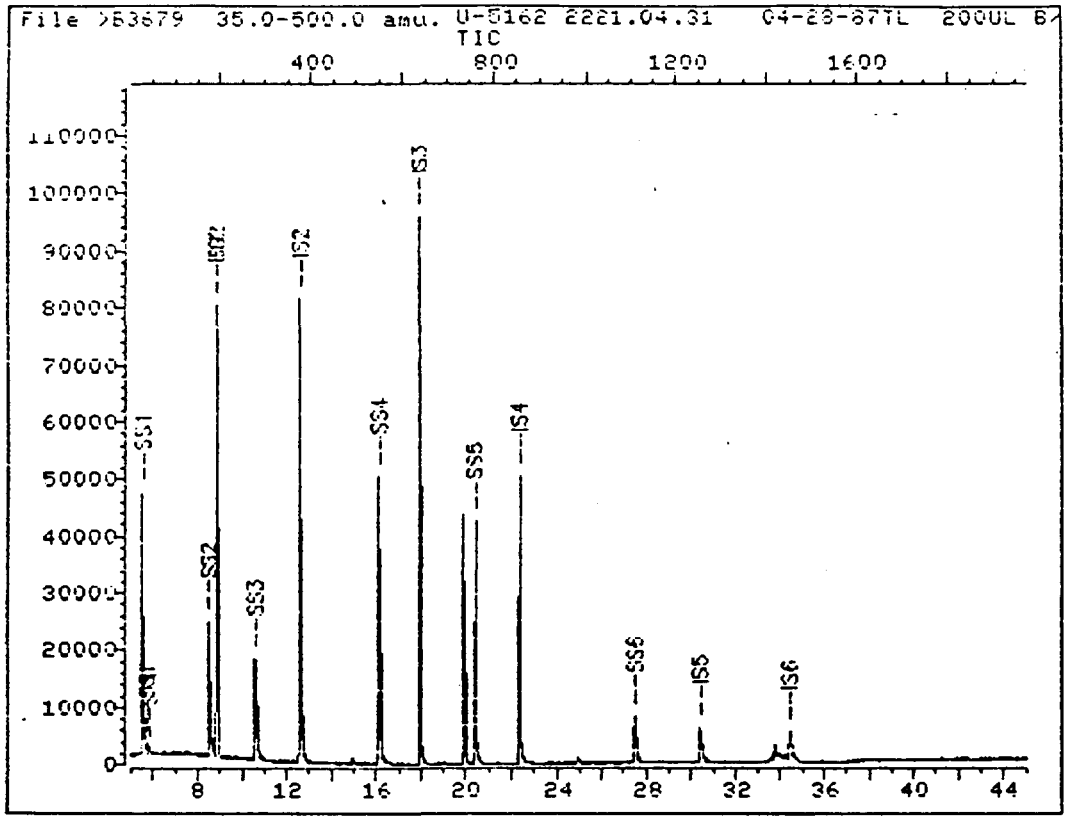
C ator ID: USER8 Quant Rev: 4 Quant Time: 870406 17:52
Output File: ^C7678::Q2 Injected at: 870406 17:06
Data File: >C7678::D3 Dilution Factor: 1.00
Name: U-5162 # 2221.01 DC-GW-43
Misc: 04-06-87CS 5ML SAMPLE + 10UL IS/SS

ID File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870406 13:39

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	(IS)	128 11.74	255	47135	50.00	UG/L	100
7)	ACETONE		43 9.34	193	4083	5.22	UG/L yes	100
15)	1,2-DICHLOROETHANE-D4	(SURR)	65 14.61	329	96217	45.21	UG/L	84
16)	*1,4-DIFLUOROBENZENE	(IS)	114 22.34	528	219556	50.00	UG/L	100
31)	*CHLOROBENZENE-D5	(IS)	117 27.19	653	176827	50.00	UG/L	100
36)	TOLUENE-D8	(SURR)	98 26.06	624	223198	44.30	UG/L	93
37)	~~TOLUENE~~		~~92 26.22~~	~~620~~	~~2359~~	~~.78~~	~~UG/L~~ DW	98
40)	4-BROMOFLUOROBENZENE	(SURR)	95 31.85	773	108090	43.94	UG/L	100

* Compound is ISTD

TOTAL ION CHROMATOGRAM

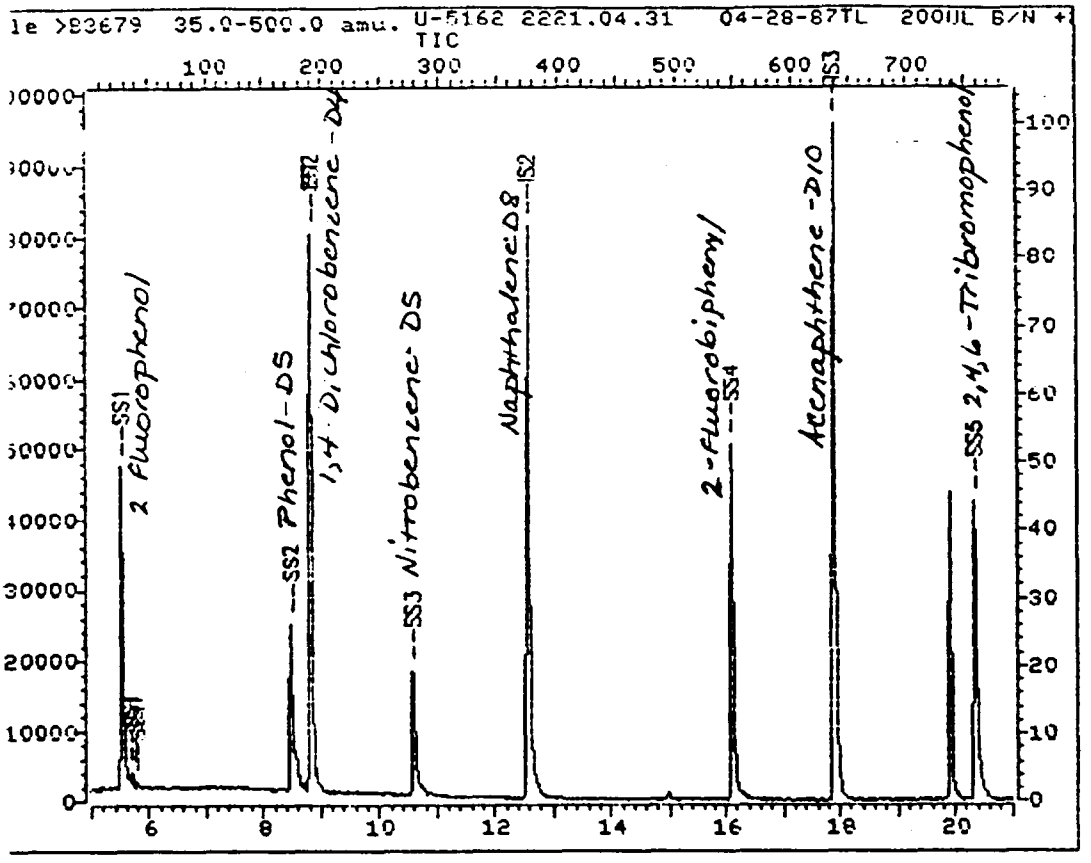


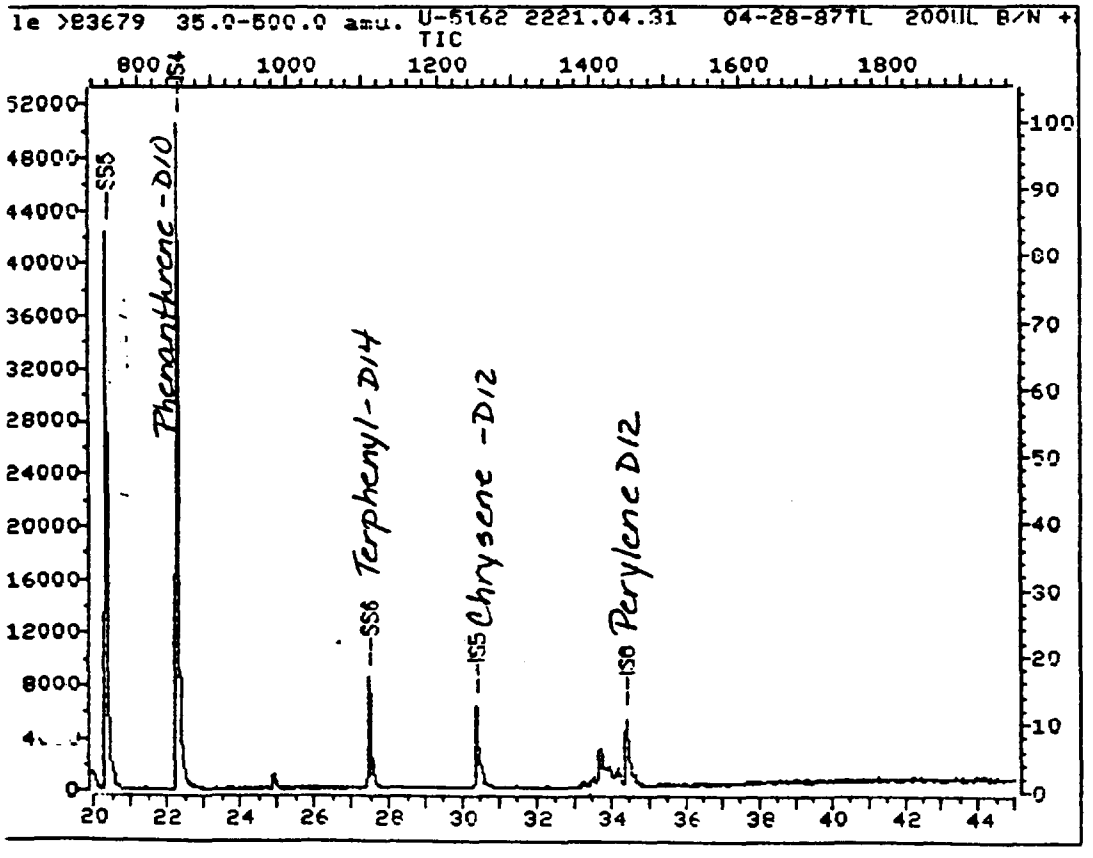
Data File: >B3679::D4
Name: U-5162 2221.04.31 DC-GW-43
Misc: 04-28-87TL 200UL B/N +200UL A/P +4UL IS

Id File: BNABR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870428 13:13

Operator ID: USER8
Quant Time: 870428 17:44
Injected at: 870428 16:56

DC-GW-43


le >83679 35.0-500.0 amu. U-5162 2221.04.31 04-28-87TL 200ULL B/N +
TIC
SS1 2 Fluorophenol
SS2 Phenol-D5
IS2 1,4-Dichlorobenzene-D4
SS3 Nitrobenzene-D5
Naphthalene D8
SS4 2-Fluorobiphenyl
IS3 Acenaphthene-D10
SS5 2,4,6-Tribromophenol


le >83679 35.0-500.0 amu. U-5162 2221.04.31 04-28-87TL 200ULL B/N +
TIC
SS5
IS4 Phenanthrene-D10
SS6 Terphenyl-D14
IS5 Chrysene-D12
IS6 Perylene D12

QUANT REPORT

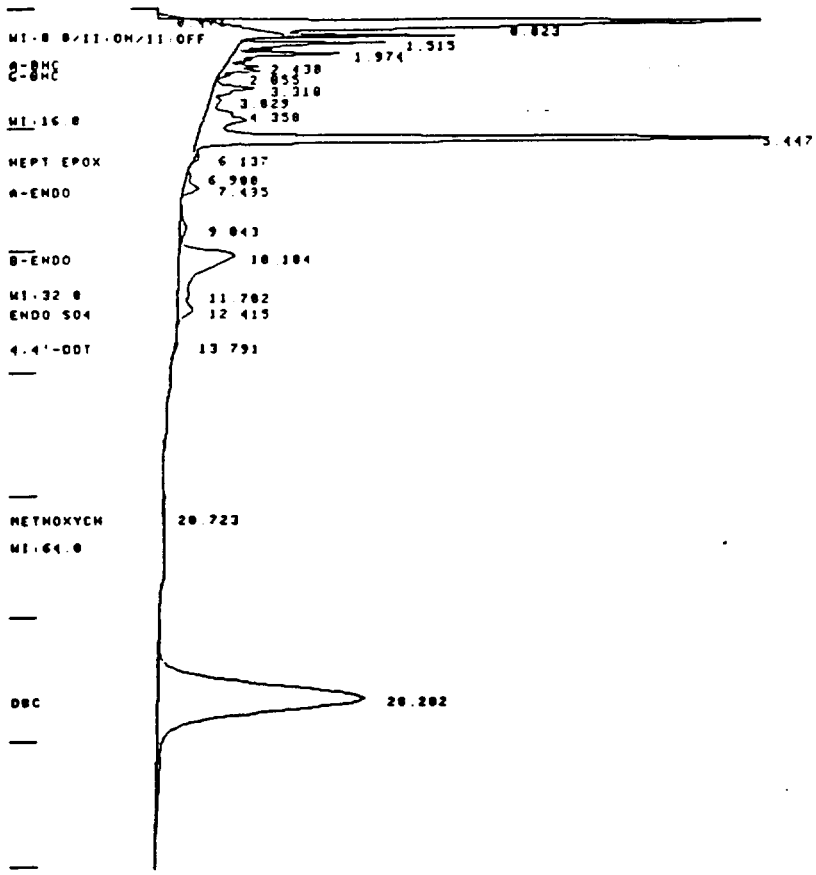
Operator ID: USER8 Quant Rev: 4 Quant Time: 870428 17:44
Output File: ^B3679::Q2 Injected at: 870428 16:56
Data File: >B3679::D4 Dilution Factor: 2.00
Name: U-5162 2221.04.31 DC-GW-43
Misc: 04-28-87TL 200UL B/N +200UL A/P +4UL IS

D File: BNABR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870428 13:13

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-D4	(IS)	152	8.82	190	32448	40.00 UG/L	83
2)	PHENOL-D5	(SURR)	99	8.47	173	29791	52.92 UG/L	95
2)	~~PHENOL-D5~~	~~(SURR)~~	~~99~~	~~8.82~~	~~190~~	~~1096~~	~~1.95 UG/L~~ CW	72
5)	2-FLUOROPHENOL	(SURR)	112	5.50	27	28446	94.48 UG/L	59
5)	~~2-FLUOROPHENOL~~	~~(SURR)~~	~~112~~	~~5.66~~	~~35~~	~~1356~~	~~4.50 UG/L~~	64
5)	~~2-FLUOROPHENOL~~	~~(SURR)~~	~~112~~	~~5.73~~	~~36~~	~~790~~	~~2.62 UG/L~~	48
5)	~~2-FLUOROPHENOL~~	~~(SURR)~~	~~112~~	~~5.79~~	~~41~~	~~594~~	~~1.96 UG/L~~ CW	46
17)	~~N-NITROSO-DI-N-PROPYLAMINE~~		~~70~~	~~10.58~~	~~277~~	~~4069~~	~~8.23 UG/L~~	83
19)	*NAPHTHALENE-D8	(IS)	136	12.58	375	111430	40.00 UG/L	100
20)	NITROBENZENE-D5	(SURR)	82	10.56	276	26247	45.39 UG/L	95
34)	*ACENAPHTHENE-D10	(IS)	162	17.90	637	68443	40.00 UG/L	98
38)	2-FLUOROBIPHENYL	(SURR)	172	16.09	548	64304	56.33 UG/L	95
41)	~~DIMETHYL PHTHALATE~~		~~163~~	~~17.90~~	~~637~~	~~11910~~	~~11.56 UG/L~~ CW	100
48)	2,4,6-TRIBROMOPHENOL	(SURR)	330	20.34	757	28390	122.94 UG/L	98
52)	~~2,6-DINITROTOLUENE~~		~~165~~	~~17.90~~	~~637~~	~~8783~~	~~42.18 UG/L~~ CW	100
65)	*PHENANTHRENE-D10	(IS)	188	22.29	853	87269	40.00 UG/L	98
65)	*CHRYSENE-D12	(IS)	240	30.38	1251	23757	40.00 UG/L	100
68)	TERPHENYL-D14	(SURR)	244	27.50	1109	22832	86.99 UG/L	100
74)	*PERYLENE-D12	(IS)	264	34.41	1449	18540	40.00 UG/L	100
75)	~~DI-N-OCTYL PHTHALATE~~		~~149~~	~~33.23~~	~~1391~~	~~725~~	~~2.02 UG/L~~	100
75)	~~DI-N-OCTYL PHTHALATE~~		~~149~~	~~33.51~~	~~1405~~	~~2270~~	~~6.31 UG/L~~ CW	100
75)	~~DI-N-OCTYL PHTHALATE~~		~~149~~	~~33.69~~	~~1414~~	~~1056~~	~~2.94 UG/L~~	100

* Compound is ISTD

CHART SPEED 0.5 CM/MIN
ATTEN: 8 ZERO: 10% 5 MIN/TICK



DC-GW-43

CHANNEL: 1A - 1 TITLE: RUN# 25 2:57 22 APR 87

SAMPLE: 2221 METHOD: CEPA CALCULATION: ES - ANALYS

PEAK NO	PEAK NAME	RESULT UG/L	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		0.0000	1.240		54767	BB	2.44
2		0.0000	1.515		121317	BV	4.69
3		0.0000	1.767		26238	VV	5.00
4		0.0000	1.974		96544	VV	5.19
5	~~A-BHC~~	0.0072	2.210	0.020	20795	VV	4.81
6	~~B-BHC~~	0.0290	2.430	0.090	30927	VV	5.56
7	~~D-BHC~~	0.0130	2.600	-0.030	32686	VV	6.56
8		0.0000	3.318		53302	VV	9.75
9		0.0000	3.492		21903	VV	? 11.13
10		0.0000	3.829		32279	VV	12.63
11		0.0000	4.358		45047	VV	? 12.44
12		0.0000	4.671		129802	VV	20.75
13		0.0000	5.447		1550578	VV	11.94
14	~~A-ENDO~~	0.0167	7.495	-0.005	41340	T	15.81
15	~~DIELDRIN~~	0.0135	9.043	0.313	35257	BV	35.31
16	~~B-ENDO~~	0.1533	10.184	0.264	370210	VV	47.44
17		0.0000	11.782		39454	VV	? 41.44
18	~~ENDO-SO4~~	0.0429	12.415	-0.255	64373	VB	28.13
19	DBC	1.0672	20.202	0.052	2025427	BB	71.25

TOTALS: 1.3427 0.449 4792326

DETECTED PKS: 32 REJECTED PKS: 13

DIVISOR: 1.00000 MULTIPLIER: 10.00000

NOISE: 11.4 OFFSET: -3

RACK: 2 VIAL: 10 INJ: 1

NOTES:
NOTEBOOK:297-1,3 ANALYST:RICHARD SAMSON
SECURE AREA: O JOB#:U-5162
INST: VARIAN 6000# 2A ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
LIQUID PHASE: 3% OV-1
CARRIER GAS: N2 @ 60 ML/MIN
DET: 300 C INJ: 220 C
200 C ISOTHERMAL 4 UL INJECTION

MATRIX SPIKE DATA

1. FORM I OF NON-SPIKED COMPOUNDS
2. RAW DATA VOA, S-V, PESTICIDES
   (a) RIC AND QUANT REPORTS (GC/MS)
   (b) CHROMATOGRAMS AND LISTING (GC)

Sample Number
DC-GW-25 MS

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Ecology & Environment, Inc. Case No: U-5157, 5162

Lab Sample ID No: 2196 MS QC Report No:

Sample Matrix: Water Contract No: IL-3140

Data Release Authorized By: [illegible] Date Sample Received: 3-24-87

Volatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 3-27-87

Conc./Dil Factor: 1 pH

Percent Moisture: (Not Decanted)

CAS Number		(ug/l) or ug/Kg (Circle One)
74-87-3	Chloromethane	10u
74-83-9	Bromomethane	10u
75-01-4	Vinyl Chloride	4J
75-00-3	Chloroethane	10u
75-09-2	Methylene Chloride	5u
67-64-1	Acetone	13B
75-15-0	Carbon Disulfide	5u
75-35-4	1, 1-Dichloroethene	SPIKE
75-34-3	1, 1-Dichloroethane	5u
156-60-5	Trans-1, 2-Dichloroethene	5u
67-66-3	Chloroform	5u
107-06-2	1, 2-Dichloroethane	5u
78-93-3	2-Butanone	10u
71-55-6	1, 1, 1-Trichloroethane	5u
56-23-5	Carbon Tetrachloride	5u
108-05-4	Vinyl Acetate	10u
75-27-4	Bromodichloromethane	5u

CAS Number		(ug/l) or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	5u
10061-02-6	Trans-1, 3-Dichloropropene	5u
79-01-6	Trichloroethene	SPIKE
124-48-1	Dibromochloromethane	5u
79-00-5	1, 1, 2-Trichloroethane	5u
71-43-2	Benzene	SPIKE
10061-01-5	cis-1, 3-Dichloropropene	5u
110-75-8	2-Chloroethylvinylether	10u
75-25-2	Bromoform	5u
591-78-6	4-Methyl-2-Pentanone	10u
108-10-1	2-Hexanone	10u
127-18-4	Tetrachloroethene	5u
79-34-5	1, 1, 2, 2-Tetrachloroethane	5u
108-88-3	Toluene	SPIKE
108-90-7	Chlorobenzene	SPIKE
100-41-4	Ethylbenzene	5u
100-42-5	Styrene	5u
	Total Xylenes	5u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration, dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U: Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g. 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS.

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

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

E This flag indicates an approximate concentration. The amount detected in the analysis exceeds the calibrated range.

370

Laboratory Name Ecology & Environment

Case No 4-5157, 5162

Sample Number
DC-GW-30MS

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: 3-29-87

Date Analyzed: 4-22-87

Conc/Dil Factor: 2

Percent Moisture (Decanted) _____

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)
108-95-2	Phenol	SPIKE
111-44-4	bis(-2-Chloroethyl)Ether	10 U
95-57-8	2-Chlorophenol	SPIKE
541-73-1	1 3-Dichlorobenzene	10 U
106-46-7	1. 4-Dichlorobenzene	SPIKE
100-51-6	Benzyl Alcohol	10 U
95-50-1	1 2-Dichlorobenzene	10 U
95-48-7	2-Methylphenol	10 U
39638-32-9	bis(2-chloroisopropyl)Ether	10 U
106-44-5	4-Methylphenol	10 U
621-64-7	N-Nitroso-Di-n-Propylamine	SPIKE
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	SPIKE
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	SPIKE
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	Dimethyl Phthalate	10 U
208-96-8	Acenaphthylene	10 U
99-09-2	3-Nitroaniline	50 U

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	SPIKE
51-28-5	2. 4-Dinitrophenol	50 U
100-02-7	4-Nitrophenol	SPIKE
132-64-9	Dibenzofuran	10 U
121-14-2	2 4-Dinitrotoluene	SPIKE
606-20-2	2 6-Dinitrotoluene	10 U
84-66-2	Diethylphthalate	10 B
7005-72-3	4-Chlorophenyl-phenylether	10 U
86-73-7	Fluorene	10 U
100-01-6	4-Nitroaniline	50 U
534-52-1	4. 6-Dinitro-2-Methylphenol	50 U
86-30-6	N-Nitrosodiphenylamine (1)	10 U
101-55-3	4-Bromophenyl-phenylether	10 U
118-74-1	Hexachlorobenzene	10 U
87-86-5	Pentachlorophenol	SPIKE
85-01-8	Phenanthrene	10 U
120-12-7	Anthracene	10 U
84-74-2	Di-n-Butylphthalate	3 BJ
206-44-0	Fluoranthene	10 U
129-00-0	Pyrene	SPIKE
85-68-7	Butylbenzylphthalate	10 U
91-94-1	3. 3'-Dichlorobenzidine	20 U
56-55-3	Benzo(a)Anthracene	10 U
117-81-7	bis(2-Ethylhexyl)Phthalate	2 bJ
218-01-9	Chrysene	10 U
117-84-0	Di-n-Octyl Phthalate	10 U
205-99-2	Benzo(b)Fluoranthene	10 U
207-08-9	Benzo(k)Fluoranthene	10 U
50-32-8	Benzo(a)Pyrene	10 U
193-39-5	Indeno(1 2. 3-cd)Pyrene	10 U
53-70-3	Dibenz(a h)Anthracene	10 U
191-24-2	Benzo(g h i)Perylene	10 U

(1)-Cannot be separated from diphenylamine

Laboratory Name ecology and environment, inc.

Case No 11-5157, 5162.

Sample Number
DC-GW-27MS

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration (Low) Medium (Circle One)

Date Extracted/Prepared 3-30-87

Date Analyzed 4-19-87

Conc/Dil Factor 1

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☑Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/l or ug/Kg) (Circle One)
319-84-6	Alpha-BHC	0.05U
319-85-7	Beta-BHC	0.05U
319-86-8	Delta-BHC	0.05U
58-89-9	Gamma-BHC (Lindane)	0.17 S
76-44-8	Heptachlor	0.15 S
309-00-2	Aldrin	0.12 S
1024-57-3	Heptachlor Epoxide	0.05U
959-98-8	Endosulfan I	0.05U
60-57-1	Dieldrin	0.38 S
72-55-9	4,4'-DDE	0.10U
72-20-8	Endrin	0.40 S
33213-65-9	Endosulfan II	0.10U
72-54-8	4,4'-DDD	0.10U
1031-07-8	Endosulfan Sulfate	0.10U
50-29-3	4,4'-DDT	0.42 S
72-43-5	Methoxychlor	0.50U
53494-70-5	Endrin Ketone	0.10U
57-74-9	Chlordane	0.50U
8001-35-2	Toxaphene	1.0U
12674-11-2	Aroclor-1016	0.50U
11104-28-2	Aroclor-1221	0.50U
11141-16-5	Aroclor-1232	0.50U
53469-21-9	Aroclor-1242	0.50U
12672-29-6	Aroclor-1248	0.50U
11097-69-1	Aroclor-1254	1.0U
11096-82-5	Aroclor-1260	1.0U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

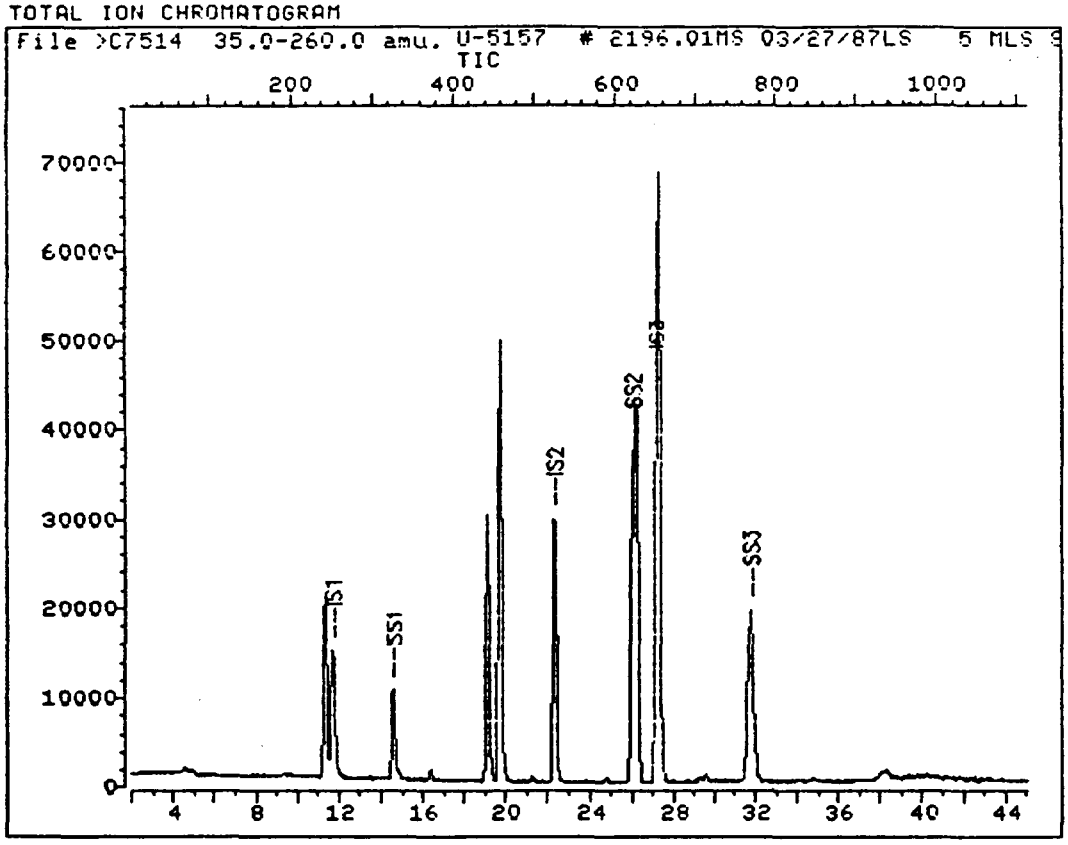
W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 1,000 or W_s _____ V_t 10,000 V_i 4

S = SPIKED COMPOUND

TOTAL ION CHROMATOGRAM

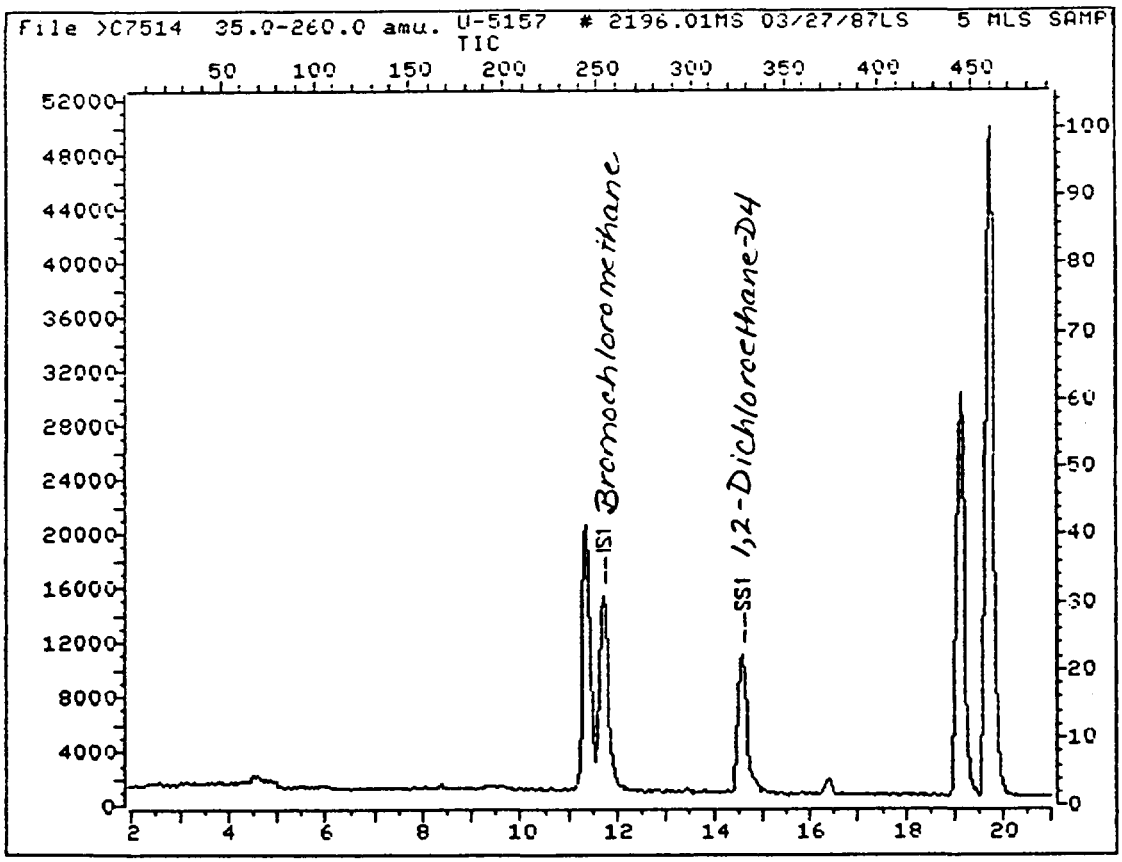


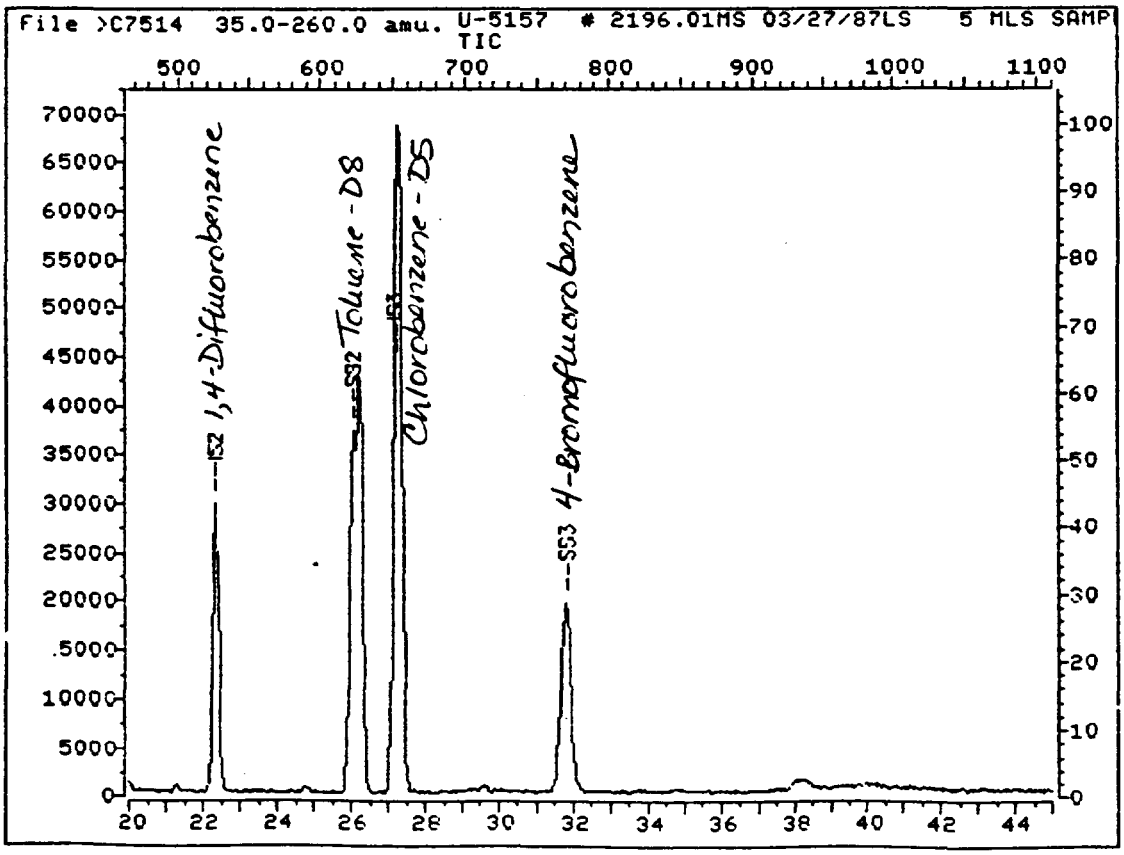
Data File: >C7514::D3
Name: U-5157 # 2196.01MS DC-GW-25MS
Misc: 03/27/87LS 5 MLS SAMPLE + 10 ULS IS/SS/MS

Id File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870327 11:38

Operator ID: USER8
Quant Time: 870327 16:55
Injected at: 870327 16:09

DC-GW-25MS


File >C7514 35.0-260.0 amu. U-5157 # 2196.01MS 03/27/87LS 5 MLS SAMP
TIC
Bromochloromethane
--IS1
1,2-Dichloroethane-D4
--SS1


File >C7514 35.0-260.0 amu. U-5157 # 2196.01MS 03/27/87LS 5 MLS SAMP
TIC
--IS2 1,4-Difluorobenzene
--SS2 Toluene-D8
IS3
Chlorobenzene-D5
--SS3 4-Bromofluorobenzene

QUANT REPORT

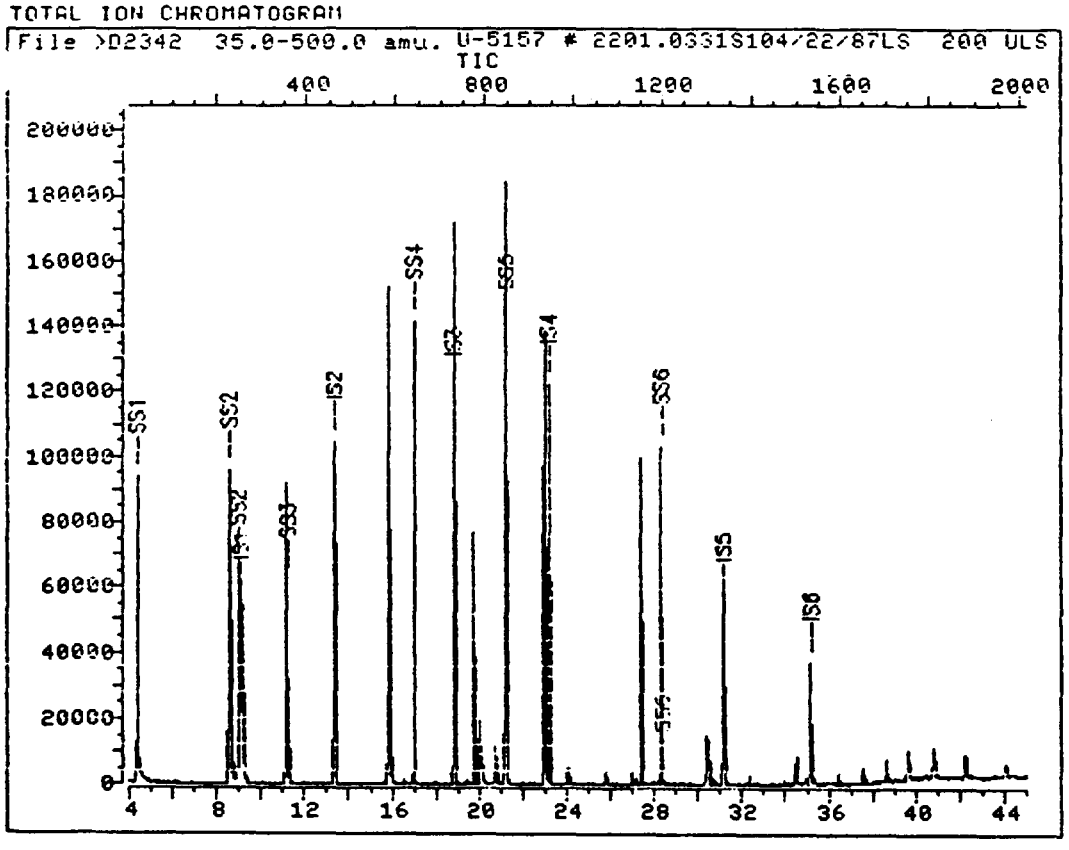
perator ID: USER8 Quant Rev: 4 Quant Time: 870327 16:55
ut t File: ^C7514::Q2 Injected at: 870327 16:09
ata File: >C7514::D3 Dilution Factor: 1.00
ame: U-5157 # 2196.01MS DC-GW-25-MS
isc: 03/27/87LS 5 MLS SAMPLE + 10 ULS IS/SS/MS

D File: VOACR::D2
itle: VOA ID FILE FOR HP-5995 (CONT. CAL.)
ast Calibration: 870327 11:38

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE (IS)	128	11.72	253	24220	50.00	UG/L	100
4)	VINYL CHLORIDE	62	4.55	68	2571	4.38	UG/L	98
7)	ACETONE	43	9.40	193	4698	12.63	UG/L	100
10)	1,1-DICHLOROETHENE	61	11.38	244	79237	59.59	UG/L 120%	97
15)	1,2-DICHLOROETHANE-D4(SURR)	65	14.59	327	47067	45.15	UG/L	87
16)	*1,4-DIFLUOROBENZENE (IS)	114	22.31	526	135211	50.00	UG/L	100
24)	TRICHLOROETHENE	130	19.13	444	55242	52.05	UG/L 104%	87
7)	BENZENE	78	19.75	460	227651	77.39	UG/L 100%	100
8)	~~CIS-1,3-DICHLOROPROPENE~~	~~75~~	~~19.71~~	~~459~~	~~4539~~	~~4.72~~	~~UG/L~~ NW	100
1)	*CHLOROBENZENE-D5 (IS)	117	27.16	651	106676	50.00	UG/L	100
6)	TOLUENE-D8 (SURR)	98	26.04	622	140980	53.65	UG/L	92
7)	TOLUENE	92	26.23	627	104354	56.32	UG/L 112%	98
8)	CHLOROBENZENE	112	27.28	654	193238	87.36	UG/L 105%	97
0)	4-BROMOFLUOROBENZENE(SURR)	95	31.78	770	69484	52.79	UG/L	100

* Compound is ISTD

TOTAL ION CHROMATOGRAM

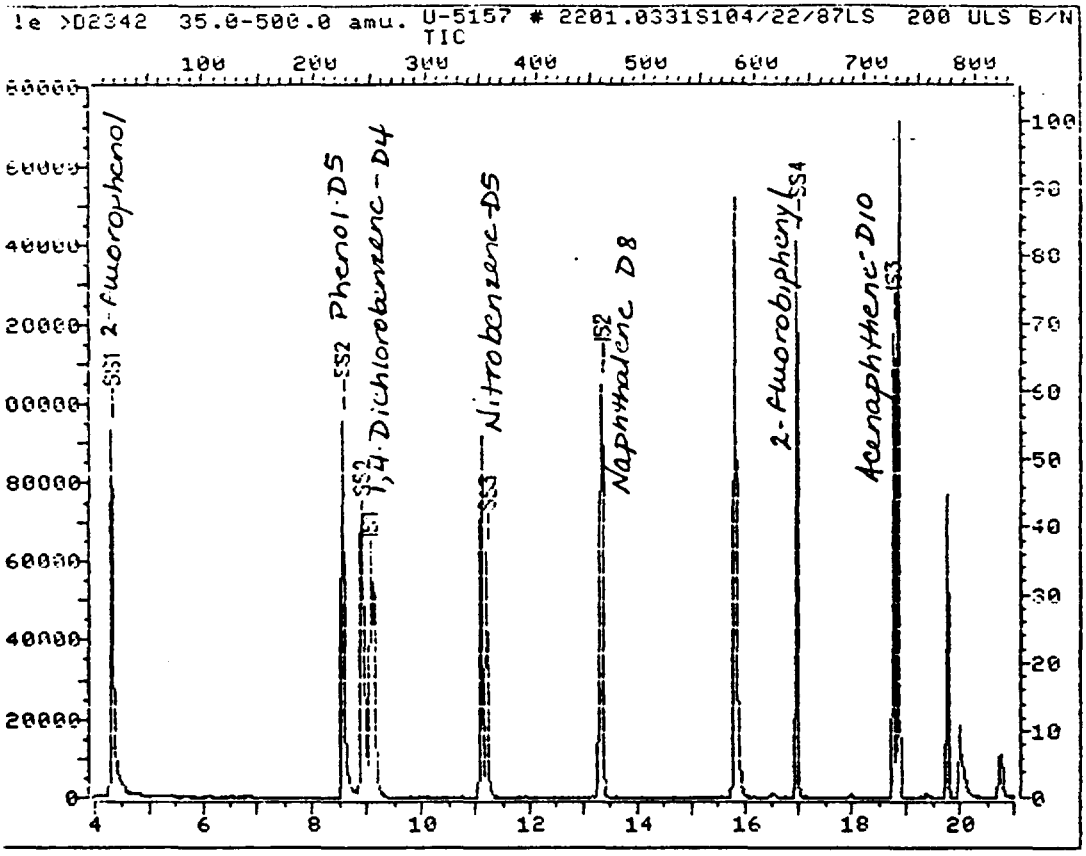


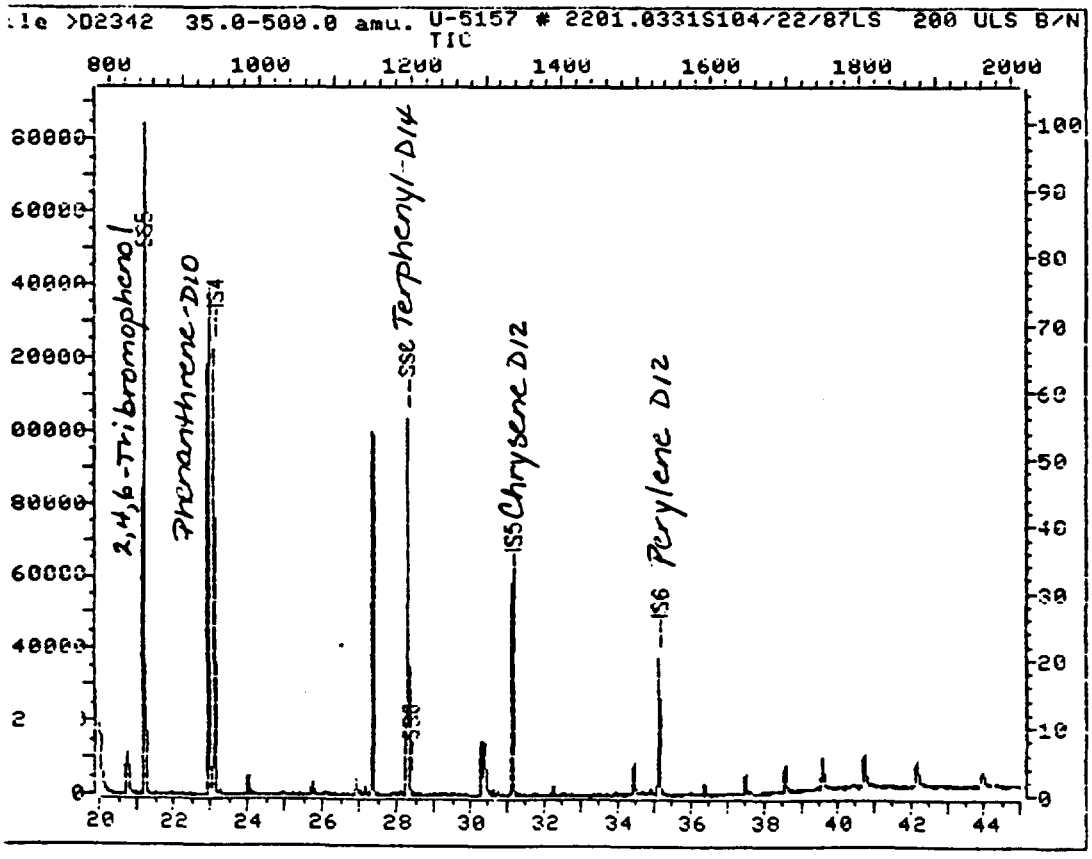
Data File: >D2342::D3
Name: U-5157 # 2201.0331S1 DC-GW-30MS
Misc: 04/22/87LS 200 ULS B/N + 200 ULS A/P + 4 ULS IS BTL# 4

Id File: BNADR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870422 18:03

Operator ID: USER6
Quant Time: 870422 22:56
Injected at: 870422 22:08

DC-GW-30MS


le >D2342 35.0-500.0 amu. U-5157 # 2201.0331S104/22/87LS 200 ULS B/N
TIC
SS1 2-Fluorophenol
SS2 Phenol-D5
IS2 1,4-Dichlorobenzene-D4
SS3 Nitrobenzene-D5
IS2 Naphthalene D8
SS4 2-Fluorobiphenyl
IS3 Acenaphthene-D10


le >D2342 35.0-500.0 amu. U-5157 # 2201.0331S104/22/87LS 200 ULS B/N
TIC
SS5 2,4,6-Tribromophenol
IS4 Phenanthrene-D10
SS6 Terphenyl-D14
IS5 Chrysene D12
IS6 Perylene D12

QUANT REPORT

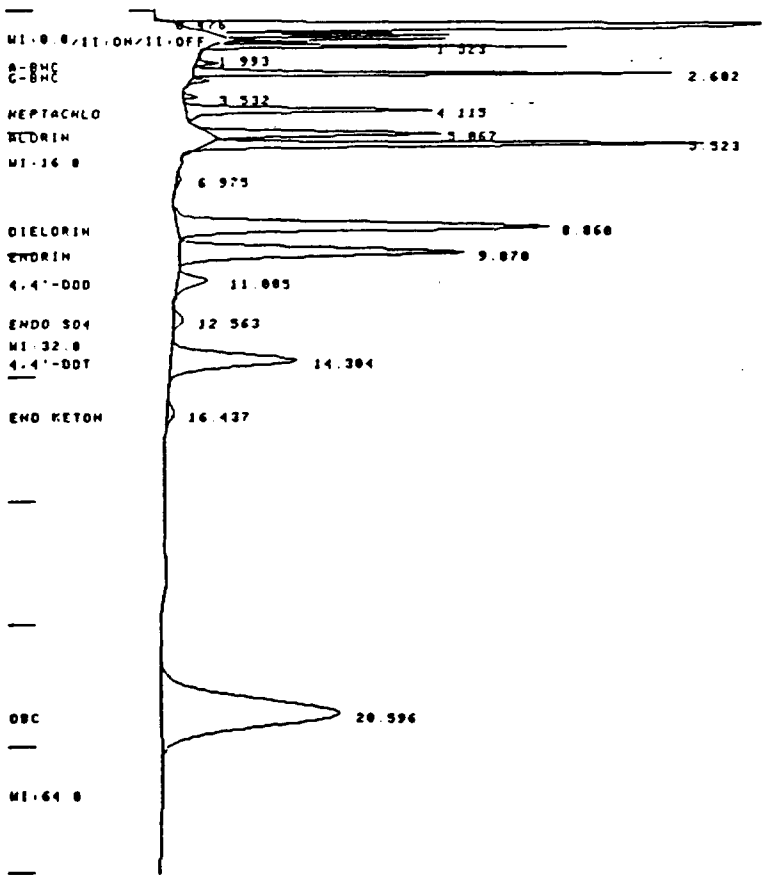
Operator ID: USER6 Quant Rev: 4 Quant Time: 870422 22:56
Output File: ^D2342::Q2 Injected at: 870422 22:08
Data File: >D2342::D3 Dilution Factor: 2.00
Name: U-5157 # 2201.0331S1 DC-GW-30MS
Misc: 04/22/87LS 200 ULS B/N + 200 ULS A/P + 4 ULS IS BTL# 4

ID File: BNADR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870422 18:03

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-D4	(IS)	152	9.05	250	28886	40.00 UG/L	85
~~2)~~	~~PHENOL-D5~~	~~(SURR)~~	~~99~~	~~8.54~~	~~225~~	~~3924~~	~~6.70 UG/L~~ No GM	43
2)	PHENOL-D5	(SURR)	99	8.89	242	38008	64.90 UG/L	96
5)	2-FLUOROPHENOL	(SURR)	112	4.30	17	68459	145.98 UG/L	72
6)	PHENOL		94	8.93	244	51759	85.78 UG/L 43%	63
7)	ANILINE		93	8.54	225	1431	2.48 UG/L	7
~~9)~~	~~1,3-DICHLOROBENZENE~~		~~146~~	~~9.11~~	~~253~~	~~33149~~	~~64.34 UG/L~~ No GM	98
10)	1,4-DICHLOROBENZENE		146	9.11	253	33149	59.56 UG/L 60%	97
15)	2-CHLOROPHENOL		128	8.54	225	75577	174.24 UG/L 87%	98
17)	N-NITROSO-DI-N-PROPYLAMINE		70	11.11	351	43908	78.17 UG/L 78%	94
~~17)~~	~~N-NITROSO-DI-N-PROPYLAMINE~~		~~70~~	~~11.21~~	~~356~~	~~11632~~	~~20.71 UG/L~~ No GM	96
19)	*NAPHTHALENE-D8	(IS)	136	13.33	460	101718	40.00 UG/L	100
20)	NITROBENZENE-D5	(SURR)	82	11.21	356	52142	87.38 UG/L	88
28)	1,2,4-TRICHLOROBENZENE		180	13.29	458	35772	74.24 UG/L 74%	100
32)	4-CHLORO-3-METHYLPHENOL		107	15.81	582	84217	207.56 UG/L 104%	99 big
~~33)~~	~~2-METHYLNAPHTHALENE~~		~~142~~	~~15.91~~	~~582~~	~~60804~~	~~71.11 UG/L~~ No GM	20
34)	*ACENAPHTHENE-D10	(IS)	162	18.75	726	67218	40.00 UG/L	94
38)	2-FLUOROBIPHENYL	(SURR)	172	16.96	638	103575	95.74 UG/L	90
~~41)~~	~~DIMETHYL-PHTHALATE~~		~~163~~	~~18.75~~	~~726~~	~~13702~~	~~11.22 UG/L~~ No GM	100
47)	ACENAPHTHENE		153	18.85	731	89367	95.63 UG/L 96%	97
48)	2,4,6-TRIBROMOPHENOL	(SURR)	330	21.19	846	84812	270.64 UG/L	98
50)	4-NITROPHENOL		139	19.99	787	10209	79.47 UG/L 40%	100
50)	4-NITROPHENOL		139	20.28	801	336	2.62 UG/L	100
51)	2,4-DINITROTOLUENE		165	19.77	776	28950	101.32 UG/L 101%	100 big
~~52)~~	~~2,6-DINITROTOLUENE~~		~~165~~	~~18.75~~	~~726~~	~~9207~~	~~34.11 UG/L~~ No GM	100
53)	DIETHYLPHTHALATE		149	20.72	823	14589	10.37 UG/L	98
55)	*PHENANTHRENE-D10	(IS)	188	23.13	941	108509	40.00 UG/L	97
~~57)~~	~~N-NITROSODIPHENYLAMINE~~		~~169~~	~~21.21~~	~~847~~	~~1290~~	~~1.86 UG/L~~ No GM	31
60)	PENTACHLOROPHENOL		266	22.97	933	60250	248.05 UG/L 124%	100 big
63)	DI-N-BUTYLPHTHALATE		149	25.74	1069	4552	2.87 UG/L	99
65)	*CHRYSENE-D12	(IS)	240	31.14	1334	72821	40.00 UG/L	100
67)	PYRENE		202	27.37	1149	125536	78.45 UG/L 78%	92
68)	TERPHENYL-D14	(SURR)	244	28.28	1194	100406	100.98 UG/L	100
~~69)~~	~~TERPHENYL-D14~~	~~(SURR)~~	~~244~~	~~28.34~~	~~1197~~	~~368~~	~~.37 UG/L~~ No GM	100
72)	BIS(2-ETHYLHEXYL)PHTHALATE		149	32.26	1389	1892	2.07 UG/L	95
74)	*PERYLENE-D12	(IS)	264	35.15	1531	44223	40.00 UG/L	100

* Compound is ISTD

CHART SPEED 0.5 CM/MIN
ATTEN: 8 ZERO: 10% 5 MIN/TICK



RECALCULATE ON FILE: 5157637

DC-GW-27MS

CHANNEL: 1A - 1 TITLE: RUN#21 4:39 14 APR 87

SAMPLE: 2198 MS METHOD: CEPA CALCULATION: ES - ANALYS

PEAK NO	PEAK NAME	RESULT UG/L	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	WI/2 (SEC)
1		0.0000	1.257		116436	BB	3.56
2		0.0000	1.523		225260	BB	4.50
3	6-BHC	0.1691	2.602	0.012	456054	BB	6.50
4		0.0000	2.916		21890	T	6.63
5	HEPTACHLO	0.1530	4.115	0.025	351045	BB	10.13
6	ALDRIN	0.1225	5.067	0.027	342206	BB	12.44
7		0.0000	5.523		746338	BB	12.56
8	DIELDRIN	0.3782	8.860	0.050	1007133	BB	21.38
9	ENDRIN	0.3953	9.870	0.060	845027	BB	23.94
10	~~END-ALD~~	0.0501	11.005	-0.025	102583	BB	30.69
11	~~ENDO-SO4~~	0.0218	12.563	-0.247	35471	BB	30.38
12	4,4'-DDT	0.4202	14.304	0.084	547371	VV	33.25
13	~~END-KETON~~	0.0126	16.437	0.037	32837	T	32.38
14	DBC	0.8654	20.596	0.176	1731460	BB	? 74.94
TOTALS:		2.5802		0.199	6561111		

DETECTED PKS: 26 REJECTED PKS: 12

DIVISOR: 1.00000 MULTIPLIER: 10.00000

NOISE: 22.9 OFFSET: -31

RACK: 2 VIAL: 6 INJ: 1

NOTES:
NOTEBOOK:259-186 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#U-5157
INST: VARIAN 6000# 2A ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
LIQUID PHASE: 3% OV-1
CARRIER GAS: N2 @ 60 ML/MIN
DET: 300 C INJ: 220 C
200 C ISOTHERMAL 4 UL INJECTION
PRIMARY ANALYSIS AUTOSAMPLER

MATRIX SPIKE DUPLICATE DATA

1. FORM I OF NON-SPIKED COMPOUNDS
2. RAW DATA VOA, S-V, PESTICIDES
   (a) RIC AND QUANT REPORTS (GC/MS)
   (b) CHROMATOGRAMS AND LISTING (GC)

Sample Number
DC-GW-25MSD

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Ecology & Environment, Inc. Case No: U-5157, 5162
Lab Sample ID No: 2196 MSD QC Report No:
Sample Matrix: Water Contract No: IL-3140
Data Release Authorized By: C Stoytowicz Date Sample Received 3-24-87

Volatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 3-27-87

Conc./Dil Factor: 1 pH

Percent Moisture: (Not Decanted)

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	10u
74-83-9	Bromomethane	10u
75-01-4	Vinyl Chloride	3J
75-00-3	Chloroethane	10u
75-09-2	Methylene Chloride	5u
67-64-1	Acetone	7BJ
75-15-0	Carbon Disulfide	5u
75-35-4	1, 1-Dichloroethene	SPIKE
75-34-3	1, 1-Dichloroethane	5u
156-60-5	Trans-1, 2-Dichloroethene	5u
67-66-3	Chloroform	5u
107-06-2	1, 2-Dichloroethane	5u
78-93-3	2-Butanone	10u
71-55-6	1, 1, 1-Trichloroethane	5u
56-23-5	Carbon Tetrachloride	5u
108-05-4	Vinyl Acetate	10u
75-27-4	Bromodichloromethane	5u

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	5u
10061-02-6	Trans-1, 3-Dichloropropene	5u
79-01-6	Trichloroethene	SPIKE
124-48-1	Dibromochloromethane	5u
79-00-5	1, 1, 2-Trichloroethane	5u
71-43-2	Benzene	SPIKE
10061-01-5	cis-1, 3-Dichloropropene	5u
110-75-8	2-Chloroethylvinylether	10u
75-25-2	Bromoform	5u
591-78-6	4-Methyl-2-Pentanone	10u
108-10-1	2-Hexanone	10u
127-18-4	Tetrachloroethene	5u
79-34-5	1, 1, 2, 2-Tetrachloroethane	5u
108-88-3	Toluene	SPIKE
108-90-7	Chlorobenzene	SPIKE
100-41-4	Ethylbenzene	1J
100-42-5	Styrene	5u
	Total Xylenes	1J

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g. 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS.

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

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

E This flag indicates an approximate concentration. The amount detected in the analysis exceeds the calibrated range.

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Laboratory Name Ecology & Environment

Case No 4-5157, 5162

Sample Number
DC-GW-30MSD

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 3-29-87

Date Analyzed: 4-22-87

Conc/Dil Factor: 2

Percent Moisture (Decanted) _____

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/l or ug/Kg) (Circle One)
108-95-2	Phenol	SPIKE
111-44-4	bis(-2-Chloroethyl)Ether	10 U
95-57-8	2-Chlorophenol	SPIKE
541-73-1	1 3-Dichlorobenzene	10 U
106-46-7	1. 4-Dichlorobenzene	SPIKE
100-51-6	Benzyl Alcohol	10 U
95-50-1	1 2-Dichlorobenzene	10 U
95-48-7	2-Methylphenol	10 U
39638-32-9	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	SPIKE
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	SPIKE
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	Dimethyl Phthalate	10 U
208-96-8	Acenaphthylene	10 U
99-09-2	3-Nitroaniline	50 U

CAS Number		(ug/l or ug/Kg) (Circle One)
83-32-9	Acenaphthene	SPIKE
51-28-5	2. 4-Dinitrophenol	50 U
100-02-7	4-Nitrophenol	SPIKE
132-64-9	Dibenzofuran	10 U
121-14-2	2 4-Dinitrotoluene	SPIKE
606-20-2	2. 6-Dinitrotoluene	10 U
84-66-2	Diethylphthalate	8 BJ
7005-72-3	4-Chlorophenyl-phenylether	10 U
86-73-7	Fluorene	10 U
100-01-6	4-Nitroaniline	50 U
534-52-1	4. 6-Dinitro-2-Methylphenol	50 U
86-30-6	N-Nitrosodiphenylamine (1)	10 U
101-55-3	4-Bromophenyl-phenylether	10 U
118-74-1	Hexachlorobenzene	10 U
87-86-5	Pentachlorophenol	SPIKE
85-01-8	Phenanthrene	10 U
120-12-7	Anthracene	10 U
84-74-2	Di-n-Butylphthalate	2 BJ
206-44-0	Fluoranthene	10 U
129-00-0	Pyrene	SPIKE
85-68-7	Butylbenzylphthalate	10 U
91-94-1	3. 3'-Dichlorobenzidine	20 U
56-55-3	Benzo(a)Anthracene	10 U
117-81-7	bis(2-Ethylhexyl)Phthalate	2 BJ
218-01-9	Chrysene	10 U
117-84-0	Di-n-Octyl Phthalate	10 U
205-99-2	Benzo(b)Fluoranthene	10 U
207-08-9	Benzo(k)Fluoranthene	10 U
50-32-8	Benzo(a)Pyrene	10 U
193-39-5	Indeno(1 2. 3-cd)Pyrene	10 U
53-70-3	Dibenz(a h)Anthracene	10 U
191-24-2	Benzo(g h i)Perylene	10 U

(1)-Cannot be separated from diphenylamine

Laboratory Name ecology and environment, inc.

Case No U-5157, 5162

Sample Number
DC-GW-27MSD

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration (Low) Medium (Circle One)

Date Extracted/Prepared 3-30-87

Date Analyzed 4-14-87

Conc/Dil Factor 1

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☑Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha-BHC	0.05U
319-85-7	Beta-BHC	0.05U
319-86-8	Delta-BHC	0.05U
58-89-9	Gamma-BHC (Lindane)	0.15 S
76-44-8	Heptachlor	0.15 S
309-00-2	Aldrin	0.10 S
1024-57-3	Heptachlor Epoxide	0.05U
959-98-8	Endosulfan I	0.05U
60-57-1	Dieldrin	0.44 S
72-55-9	4,4'-DDE	0.10U
72-20-8	Endrin	0.46 S
33213-65-9	Endosulfan II	0.10U
72-54-8	4,4'-DDD	0.10U
1031-07-8	Endosulfan Sulfate	0.10U
50-29-3	4,4'-DDT	0.46 S
72-43-5	Methoxychlor	0.50U
53494-70-5	Endrin Ketone	0.10U
57-74-9	Chlordane	0.50U
8001-35-2	Toxaphene	1.0U
12674-11-2	Aroclor-1016	0.50U
11104-28-2	Aroclor-1221	0.50U
11141-16-5	Aroclor-1232	0.50U
53469-21-9	Aroclor-1242	0.50U
12672-29-6	Aroclor-1248	0.50U
11097-69-1	Aroclor-1254	1.0U
11096-82-5	Aroclor-1260	1.0U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

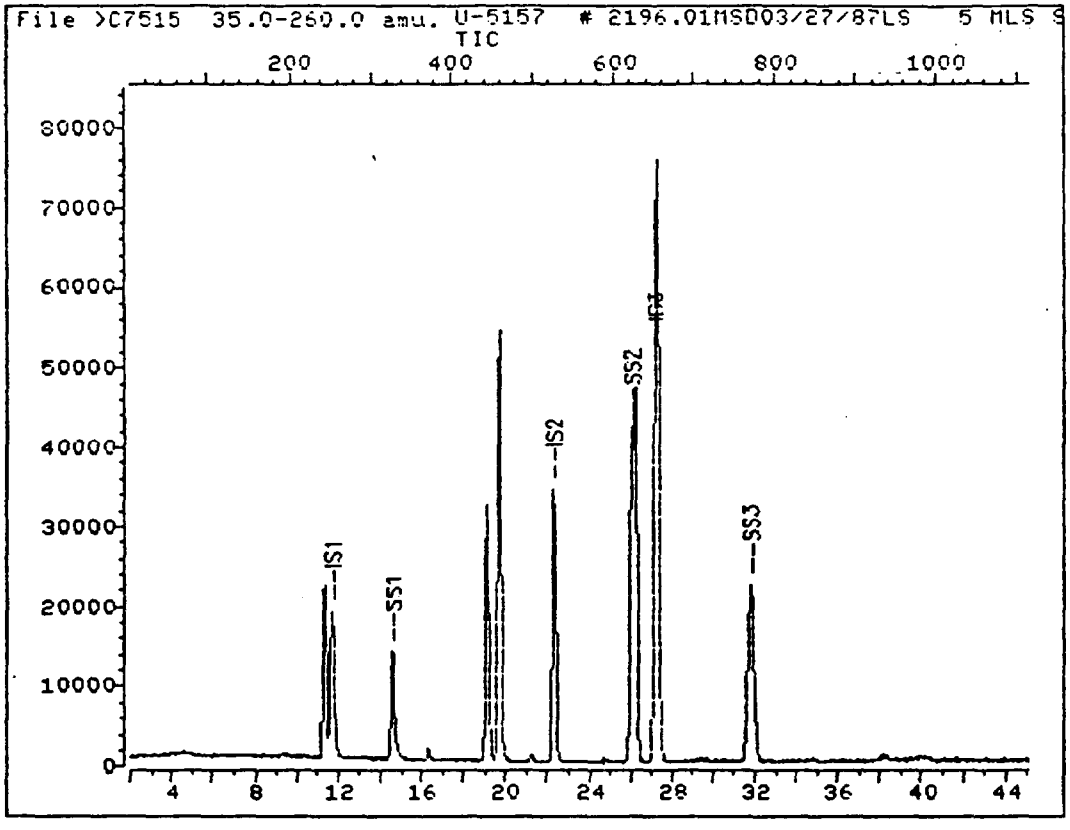
W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 1,000 or W_s _____ V_t 10,000 V_i 4

S = Spiked Compound

TOTAL ION CHROMATOGRAM

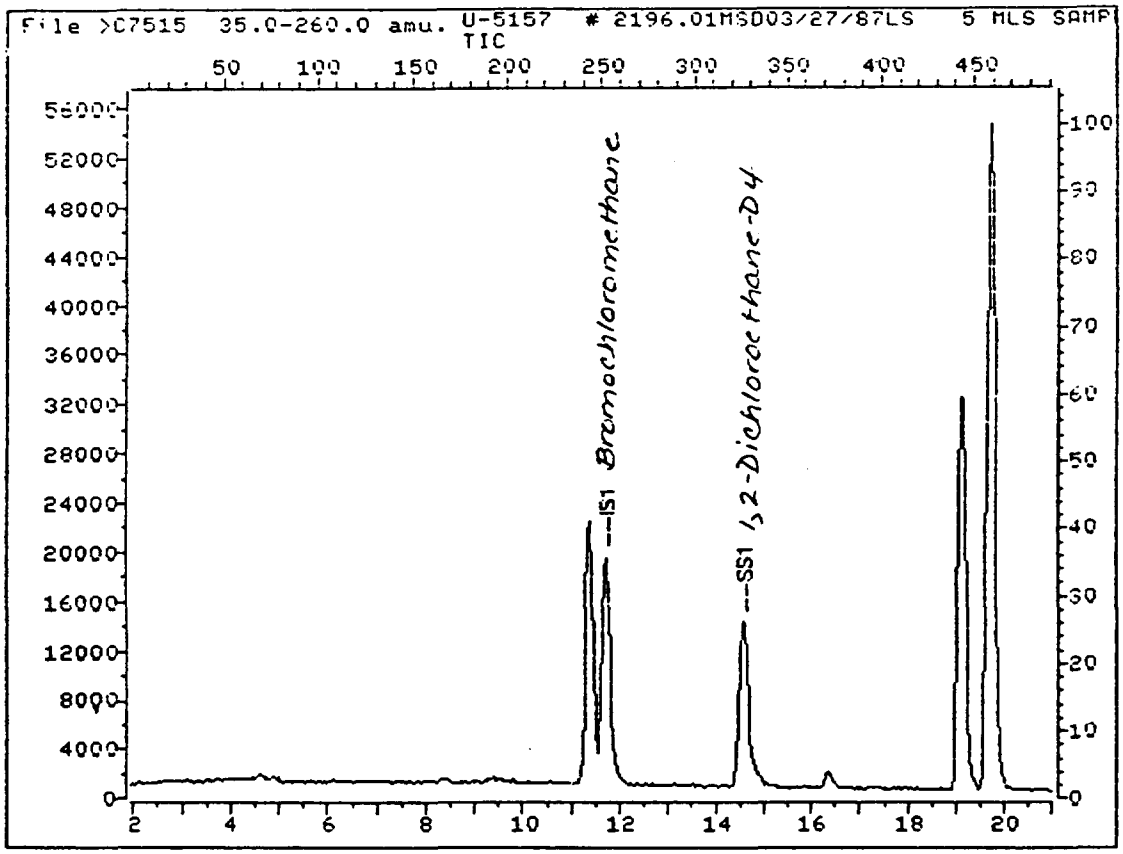


Data File: >C7515::D3
Name: U-5157 # 2196.01MSD DC-GW-25 MSD
Misc: 03/27/87LS 5 MLS SAMPLE + 10 ULS IS/SS/MS

Id File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870327 11:38

Operator ID: USER8
Quant Time: 870327 17:48
Injected at: 870327 17:02

DC-GW-25MSD


File >C7515 35.0-260.0 amu. U-5157 # 2196.01MSD03/27/87LS 5 MLS SAMP
TIC
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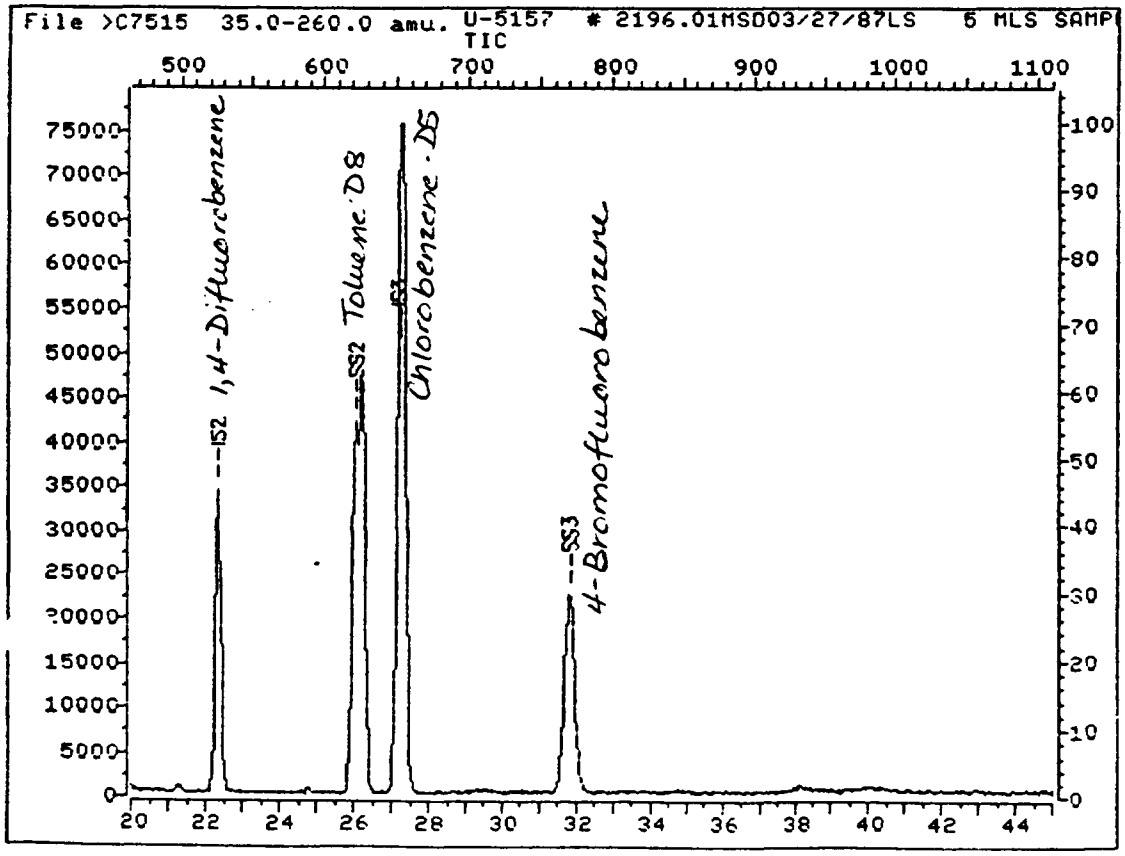
SS1 1,2-Dichloroethane-D4


File >C7515 35.0-260.0 amu. U-5157 # 2196.01MSD03/27/87LS 5 MLS SAMP
TIC
IS2 1,4-Difluorobenzene
SS2 Toluene-D8
IS3 Chlorobenzene-D5
SS3 4-Bromofluorobenzene

QUANT REPORT

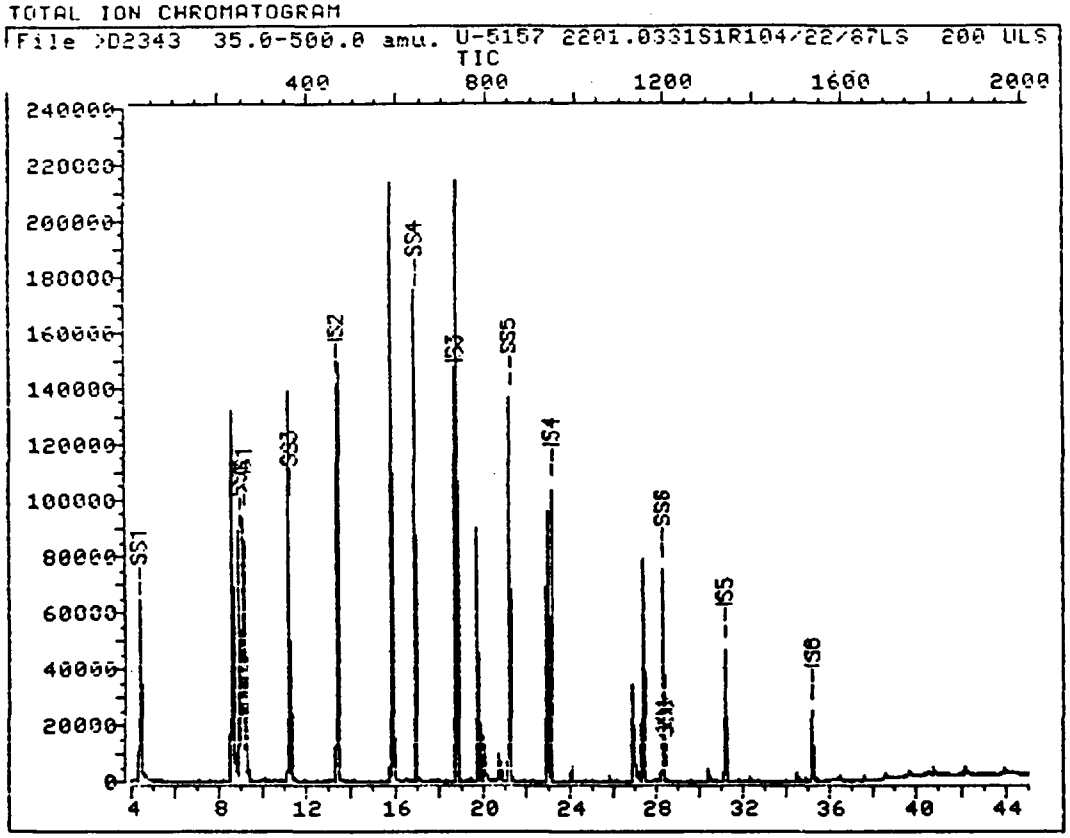
pe.ator ID: USER8 Quant Rev: 4 Quant Time: 870327 17:48
utput File: ^C7515::Q2 Injected at: 870327 17:02
ata File: >C7515::D3 Dilution Factor: 1.00
ame: U-5157 # 2196.01MSD DC-GW-25-MSD
isc: 03/27/87LS 5 MLS SAMPLE + 10 ULS IS/SS/MS

D File: VOACR::D2
itle: VOA ID FILE FOR HP-5995 (CONT. CAL.)
ast Calibration: 870327 11:38

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	(IS)	128	11.73	253	29955	50.00 UG/L	100
4)	VINYL CHLORIDE		62	4.63	70	2338	3.22 UG/L	95
7)	ACETONE		43	9.32	191	3087	6.71 UG/L	100
10)	1,1-DICHLOROETHENE		61	11.38	244	85488	51.98 UG/L 104%	98
15)	1,2-DICHLOROETHANE-D4	(SURR)	65	14.60	327	63838	49.51 UG/L	87
6)	*1,4-DIFLUOROBENZENE	(IS)	114	22.31	526	151321	50.00 UG/L	100
4)	TRICHLOROETHENE		130	19.09	443	61311	51.62 UG/L 104%	90
7)	BENZENE		78	19.72	459	244555	74.29 UG/L 98%	100
8)	~~CIS-1,3-DICHLOROPROPENE~~		~~75~~	~~19.72~~	~~459~~	~~4995~~	~~4.64 UG/L~~ ew	100
1)	*CHLOROBENZENE-D5	(IS)	117	27.16	651	121361	50.00 UG/L	100
6)	TOLUENE-D8	(SURR)	98	26.04	622	156193	52.24 UG/L	96
7)	TOLUENE		92	26.19	626	114100	54.12 UG/L 108%	98
8)	CHLOROBENZENE		112	27.29	654	211667	84.11 UG/L 102%	97
9)	ETHYLBENZENE		91	29.30	706	3241	.78 UG/L	98
0)	4-BROMOFLUOROBENZENE	(SURR)	95	31.79	770	81517	54.44 UG/L	100
2)	TOTAL XYLENES		91	34.81	848	2541	.75 UG/L	100

* Compound is ISTD

TOTAL ION CHROMATOGRAM

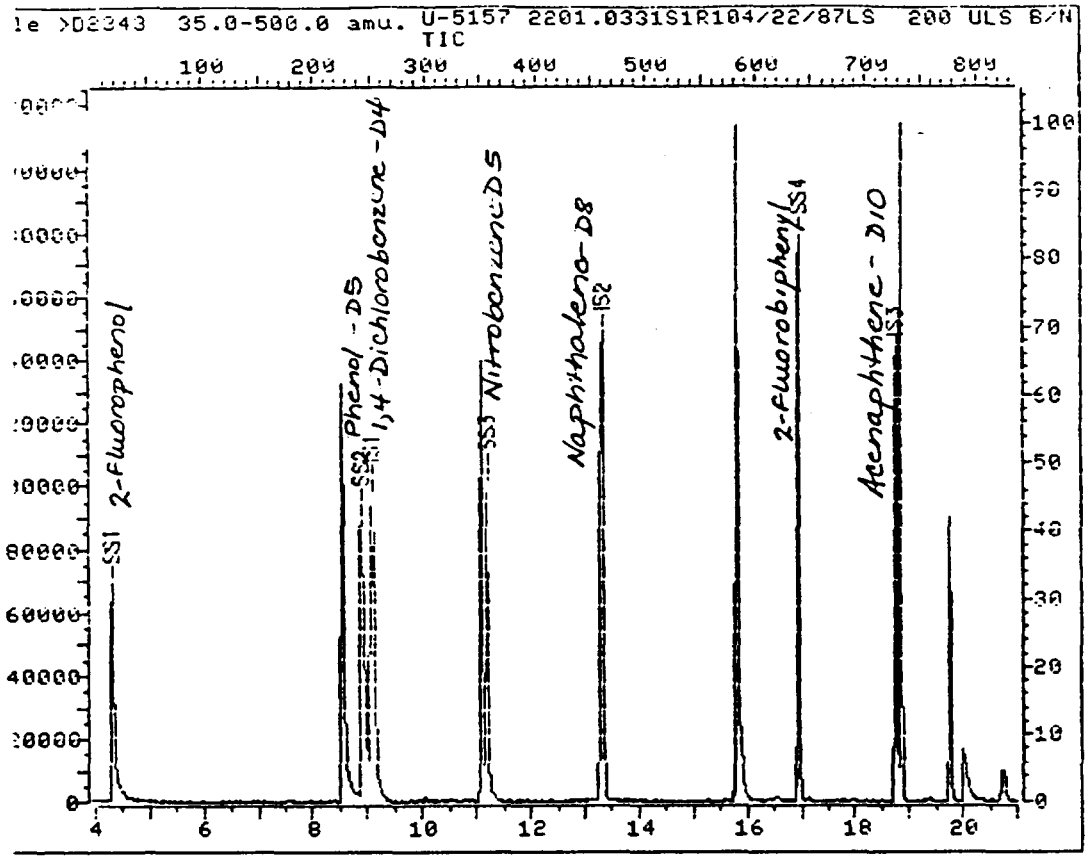


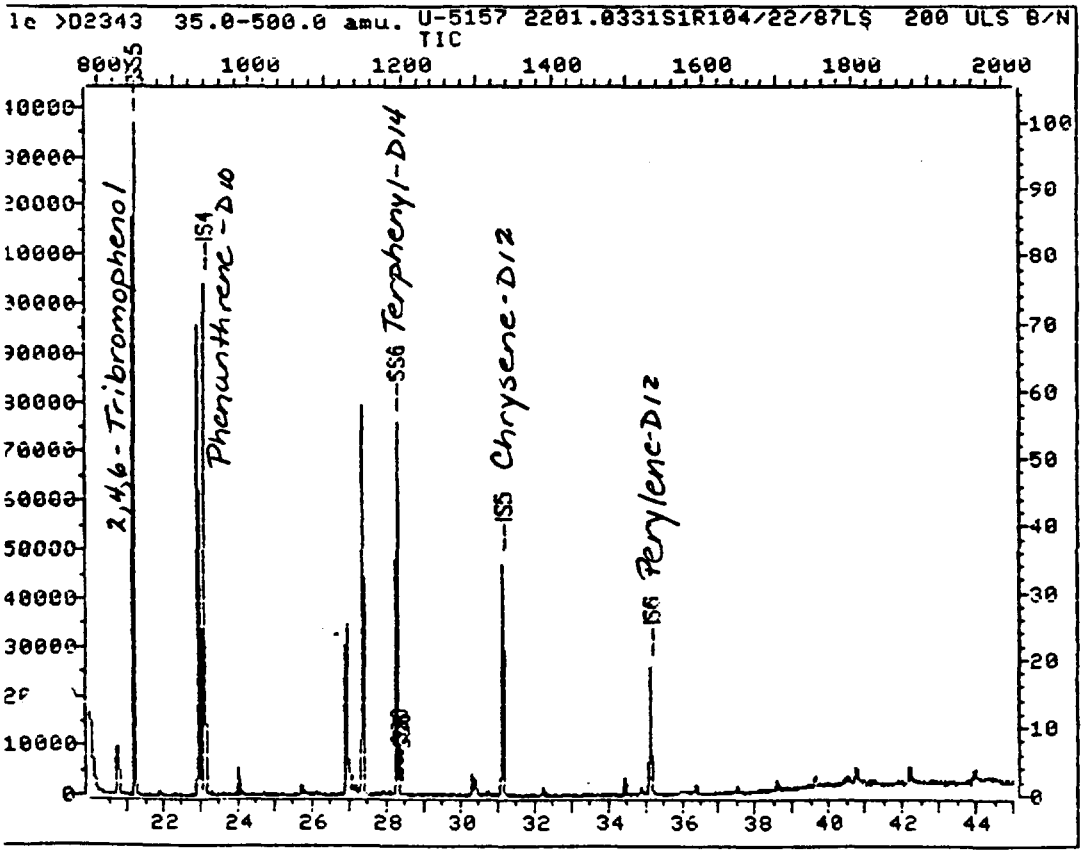
Data File: >D2343::D3
Name: U-5157 2201.0331S1R1 DC-GW-30 MSD
Misc: 04/22/87LS 200 ULS B/N + 200 ULS A/P + 4 ULS IS BTL# 5

Id File: BNADR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870422 18:03

Operator ID: USER6
Quant Time: 870422 23:53
Injected at: 870422 23:06

DC-GW-30MSD


le >D2343 35.0-500.0 amu. U-5157 2201.0331S1R104/22/87LS 200 ULS B/N
TIC
2-Fluorophenol
SS1
Phenol - D5
SS2
1,4-Dichlorobenzene -D4
SS3
Nitrobenzene-D5
Naphthalene- D8
IS2
2-Fluorobiphenyl
SS4
Acenaphthene - D10
IS3


le >D2343 35.0-500.0 amu. U-5157 2201.0331S1R104/22/87LS 200 ULS B/N
TIC
SS5
2,4,6-Tribromophenol
IS4
Phenanthrene -D10
SS6 Terphenyl-D14
IS5 Chrysene-D12
IS6 Perylene-D12

QUANT REPORT

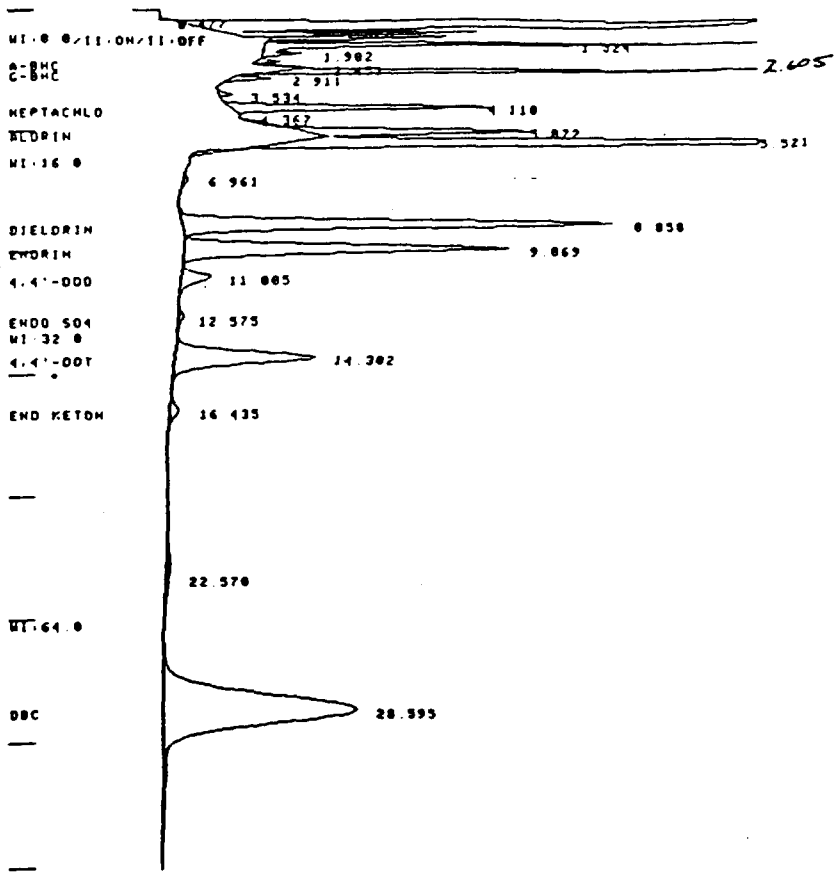
Operator ID: USER6 Quant Rev: 4 Quant Time: 870422 23:53
Output File: ^D2343::Q2 Injected at: 870422 23:06
Data File: >D2343::D3 Dilution Factor: 2.00
Name: U-5157 2201.0331S1R1 DC-GW-30MSD
Misc: 04/22/87LS 200 ULS B/N + 200 ULS A/P + 4 ULS IS BTL# 5

ID File: BNADR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870422 18:03

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-D4	(IS)	152	9.07	251	40382	40.00 UG/L	84
2)	PHENOL-D5	(SURR)	99	8.88	242	64214	78.43 UG/L	97
5)	2-FLUOROPHENOL	(SURR)	112	4.30	17	63909	97.48 UG/L	83
6)	PHENOL		94	8.92	244	71014	84.19 UG/L 42%	67
7)	ANILINE		93	8.56	226	2212	2.74 UG/L	19
~~9)~~	~~1,3-DICHLOROBENZENE~~		~~146~~	~~9.13~~	~~254~~	~~50832~~	~~70.58 UG/L~~ No BM	98
10)	1,4-DICHLOROBENZENE		146	9.13	254	50832	65.34 UG/L 65%	97
15)	2-CHLOROPHENOL		128	8.56	226	100923	166.43 UG/L 83%	95
17)	N-NITROSO-DI-N-PROPYLAMINE		70	11.10	351	70175	89.37 UG/L 69%	90
~~17)~~	~~N-NITROSO-DI-N-PROPYLAMINE~~		~~70~~	~~11.21~~	~~356~~	~~16809~~	~~21.41 UG/L~~ No BM	92
19)	*NAPHTHALENE-D8	(IS)	136	13.33	460	149538	40.00 UG/L	100
20)	NITROBENZENE-D5	(SURR)	82	11.21	356	80748	92.05 UG/L	87
28)	1,2,4-TRICHLOROBENZENE		180	13.28	458	53219	75.13 UG/L 75%	100
32)	4-CHLORO-3-METHYLPHENOL		107	15.83	583	112575	188.73 UG/L 95%	89
~~33)~~	~~2-METHYLNAPHTHALENE~~		~~142~~	~~15.83~~	~~583~~	~~79428~~	~~63.24 UG/L~~ No BM	19
34)	*ACENAPHTHENE-D10	(IS)	162	18.74	726	80529	40.00 UG/L	93
38)	2-FLUOROBIPHENYL	(SURR)	172	16.95	638	144117	111.20 UG/L	94
~~41)~~	~~DIMETHYL PHTHALATE~~		~~163~~	~~18.76~~	~~727~~	~~16011~~	~~10.94 UG/L~~ No BM	100
47)	ACENAPHTHENE		153	18.85	731	107085	95.65 UG/L 96%	97
48)	2,4,6-TRIBROMOPHENOL	(SURR)	330	21.21	847	61125	162.81 UG/L	99
50)	4-NITROPHENOL		139	20.01	788	11248	73.08 UG/L 37%	100
51)	2,4-DINITROTOLUENE		165	19.76	776	34522	100.85 UG/L 101%	100 Lig.
~~52)~~	~~2,6-DINITROTOLUENE~~		~~165~~	~~18.74~~	~~726~~	~~10414~~	~~32.20 UG/L~~ No BM	100
53)	DIETHYLPHTHALATE		149	20.72	823	13480	8.00 UG/L	96
55)	*PHENANTHRENE-D10	(IS)	188	23.13	941	92255	40.00 UG/L	96
60)	PENTACHLOROPHENOL		266	22.96	933	43573	210.99 UG/L 106%	100 Lig.
63)	DI-N-BUTYLPHTHALATE		149	25.73	1069	3252	2.41 UG/L	95
65)	*CHRYSENE-D12	(IS)	240	31.15	1335	51848	40.00 UG/L	100
67)	PYRENE		202	27.36	1149	98598	86.54 UG/L 87%	90
68)	TERPHENYL-D14	(SURR)	244	28.28	1194	75832	107.12 UG/L	100
~~68)~~	~~TERPHENYL-D14~~	~~(SURR)~~	~~244~~	~~28.34~~	~~1197~~	~~249~~	~~.35 UG/L~~ No BM	100
~~68)~~	~~TERPHENYL-D14~~	~~(SURR)~~	~~244~~	~~28.48~~	~~1200~~	~~183~~	~~.26 UG/L~~	100
72)	BIS(2-ETHYLHEXYL)PHTHALATE		149	32.27	1390	1242	1.91 UG/L	99
74)	*PERYLENE-D12	(IS)	264	35.14	1531	30307	40.00 UG/L	100

* Compound is ISTD

ATTEN: 8 ZERO: 10% 5 MIN/INCH



RECALCULATE ON FILE: 5157638

DC-GW-27MSD

CHANNEL: 1A - 1 TITLE: RUN# 22 5:18 14 APR 87

SAMPLE: 2198 MSD METHOD: CEPA CALCULATION: ES - ANALYS

PEAK NO	PEAK NAME	RESULT UG/L	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		0.0000	1.261		124645	BV	3.81
2		0.0000	1.524		373545	VV	4.75
3		0.0000	1.902		34690	VV	5.75
4	G-BHC	0.1535	2.605	0.015	414091	BB	6.38
5		0.0000	2.911		41528	BB	6.19
6	HEPTACHLO	0.1514	4.110	0.028	347453	BB	10.31
7	ALDRIN	0.1027	5.072	0.032	286987	BB	14.13
8		0.0000	5.521		2433300	BB	12.38
9	DIELDRIN	0.4377	8.858	0.048	1165585	BB	21.25
10	ENDRIN	0.4568	9.869	0.059	976483	BB	23.88
11	~~END-ACO~~	0.0537	11.005	-0.025	109809	BB	29.63
12	~~ENDO-SO4~~	0.0129	12.575	-0.235	21045	BB	28.56
13	4,4'-DDT	0.4644	14.302	0.082	604927	BB	32.88
14	~~END-KETON~~	0.0150	16.435	0.035	38947	BB	33.31
15		0.0000	22.570		44110	BB	? 58.00
16	DBC	0.9887	28.595	0.175	1970250	BB	75.63
TOTALS:		2.8369		0.214	8995395		

DETECTED PKS: 28 REJECTED PKS: 12

DIVISOR: 1.00000 MULTIPLIER: 10.00000

NOISE: 22.9 OFFSET: -2

RACK: 2 VIAL: 7 INJ: 1

NOTES:
NOTEBOOK:259-186 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#U-5157
INST: VARIAN 6000# 2A ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
LIQUID PHASE: 3% OV-1
CARRIER GAS: N2 @ 60 ML/MIN
DET: 300 C INJ: 220 C
200 C ISOTHERMAL 4 UL INJECTION
PRIMARY ANALYSIS AUTOSAMPLER

BLANK DATA

1. FORM I PAGES 1 THROUGH 4
2. RAW DATA VOA, S-V, PESTICIDES
   (a) RIC AND QUANT REPORTS (GC/MS)
   (b) CHROMATOGRAMS AND LISTINGS (GC)

Sample Number
C7510

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Ecology & Environment Inc Case No: U-5157, 5162

Lab Sample ID No: Method Blank QC Report No:

Sample Matrix: Water Contract No: EL-3140

Data Release Authorized By: C Stoytowicz Date Sample Received:

Volatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 3-27-87

Conc/Dil Factor: 1 pH

Percent Moisture: (Not Decanted)

CAS Number		ug/l or ug/Kg (Circle One)	
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	5	U
67-64-1	Acetone	48	
75-15-0	Carbon Disulfide	5	U
75-35-4	1, 1-Dichloroethene	5	U
75-34-3	1, 1-Dichloroethane	5	U
156-60-5	Trans-1, 2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
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

CAS Number		ug/l or ug/Kg (Circle One)	
78-87-5	1, 2-Dichloropropane	5	U
10061-02-6	Trans-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
10061-01-5	cis-1, 3-Dichloropropene	5	U
110-75-8	2-Chloroethylvinylether	10	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
	Total Xylenes	5	U

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS.

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

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

392

Laboratory Name Ecology and Environment, Inc.

Case No 4-5157, 5162

Sample Number C7510

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.	No TIC's in VOA fraction			
2.				
3.				
4.				
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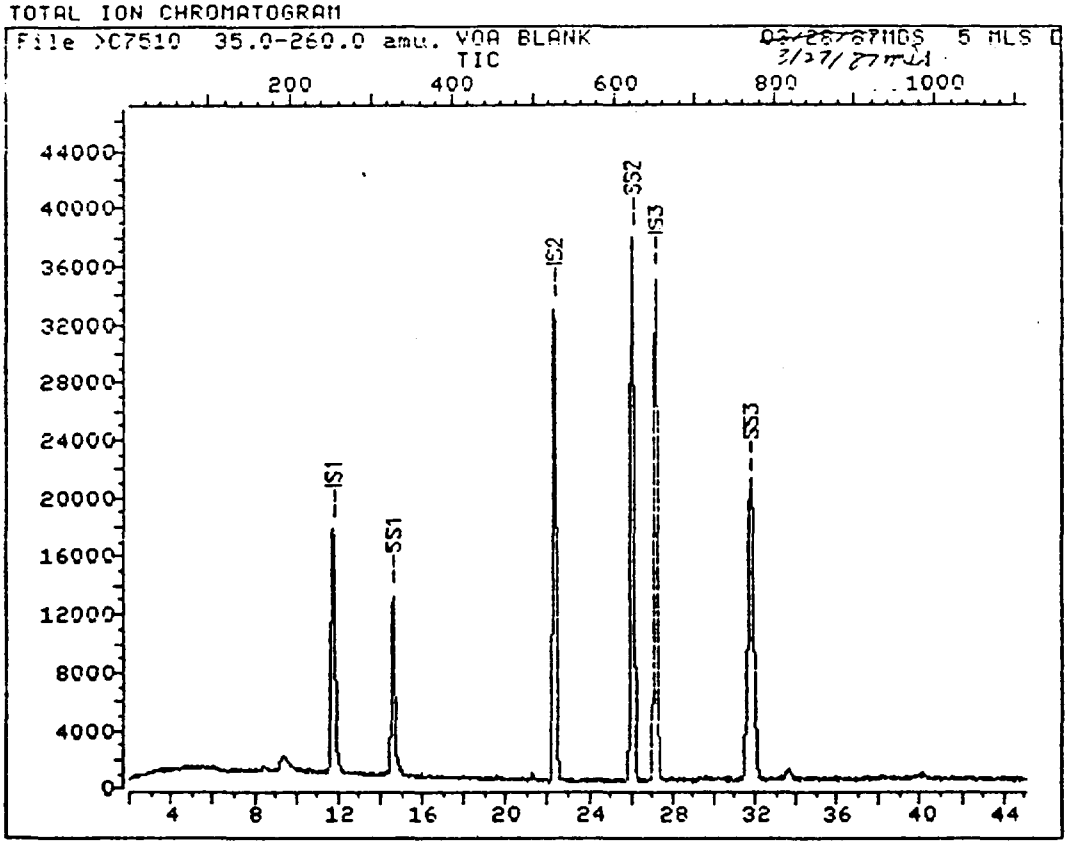
29.				
30				

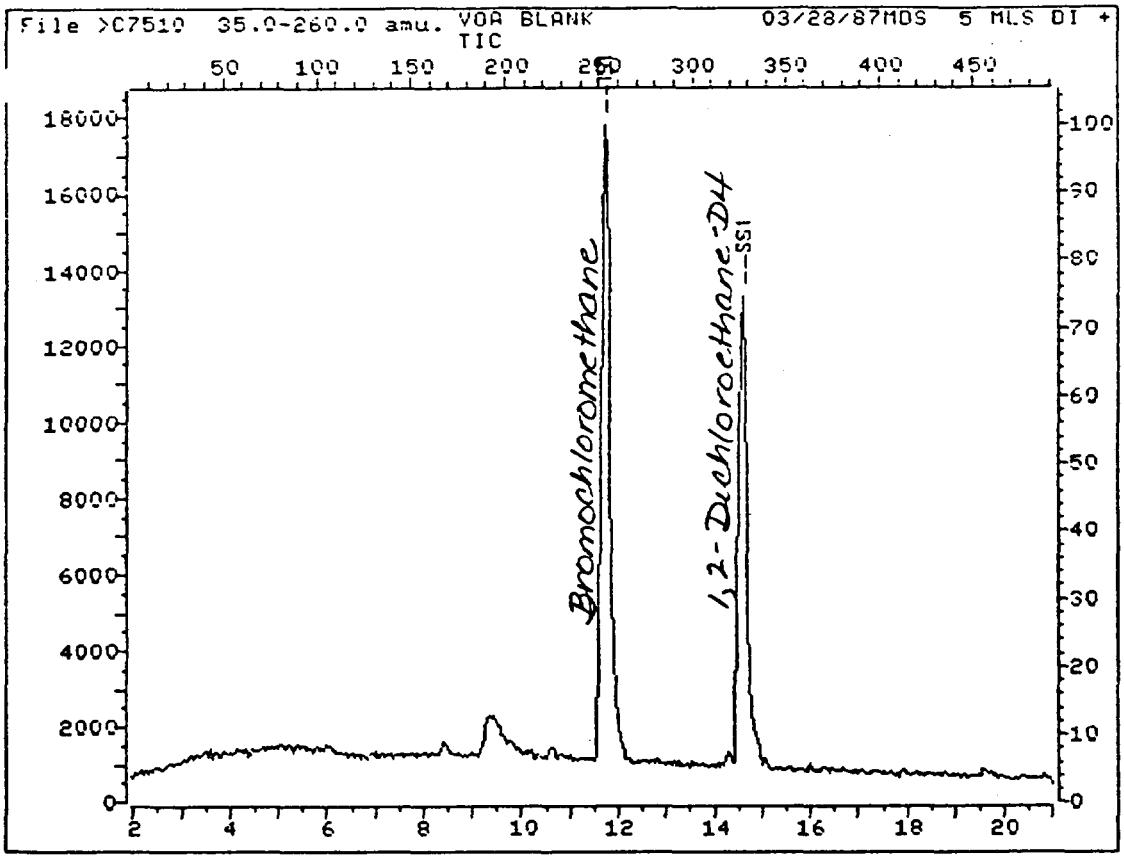
TOTAL ION CHROMATOGRAM

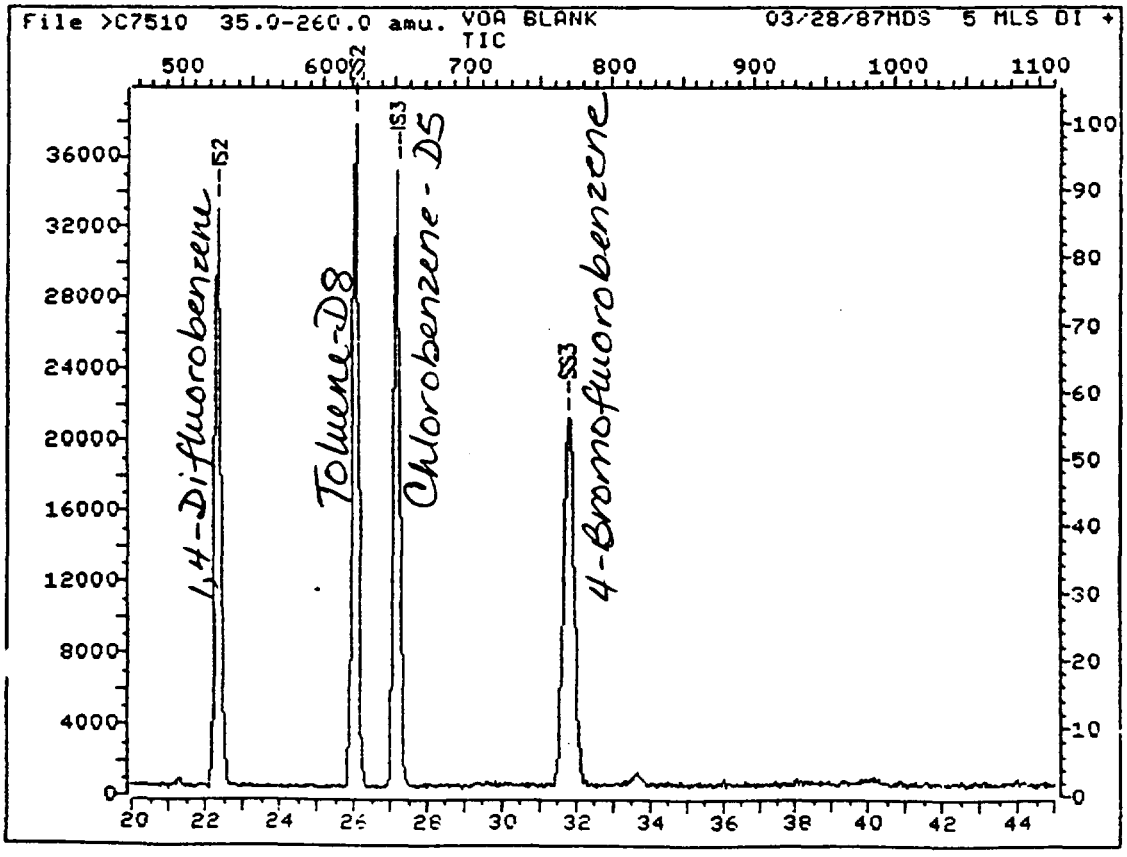


Data File: >C7510::D3
Name: VOA BLANK
Misc: ~~03/28/87MDS~~ 3/27/87 MDS 5 MLS DI + 10 ULS IS/SS
Id File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870327 11:38

Operator ID: USER8
Quant Time: 870327 13:22
Injected at: 870327 12:36

C7510


File >C7510 35.0-260.0 amu. VOA BLANK 03/28/87MDS 5 MLS DI +
TIC
Bromochloromethane
1,2-Dichloroethane-D4
SS1


File >C7510 35.0-260.0 amu. VOA BLANK 03/28/87MDS 5 MLS DI +
TIC
1,4-Difluorobenzene
IS2
Toluene-D8
IS3
Chlorobenzene-D5
SS3
4-Bromofluorobenzene

QUANT REPORT

ɔerator ID: USER8 Quant Rev: 4 Quant Time: 870327 13:22
ɹ t File: ^C7510::Q2 Injected at: 870327 12:36
ata File: >C7510::D3 Dilution Factor: 1.00
ame: VOA BLANK
isc: ~~03/28/87~~MDS 5 MLS DI + 10 ULS IS/SS
3/27/87 MDS
ɔ File: VOACR::D2
itle: VOA ID FILE FOR HP-5995 (CONT. CAL.)
ast Calibration: 870327 11:38

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	(IS)	128	11.73	253	28734	50.00 UG/L	100
7)	ACETONE		43	9.36	192	20980	47.55 UG/L	100
15)	1,2-DICHLOROETHANE-D4	(SURR)	65	14.60	327	59208	47.87 UG/L	85
16)	*1,4-DIFLUOROBENZENE	(IS)	114	22.31	526	148558	50.00 UG/L	100
31)	*CHLOROBENZENE-D5	(IS)	117	27.16	651	118394	50.00 UG/L	100
36)	TOLUENE-D8	(SURR)	98	26.04	622	148896	51.05 UG/L	94
40)	4-BROMOFLUOROBENZENE	(SURR)	95	31.75	769	77073	52.76 UG/L	100

* Compound is ISTD

Sample Number
C7536

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Ecology & Environment Inc. Case No: U-5157, 5162

Lab Sample ID No: Method Blank QC Report No:

Sample Matrix: Water Contract No:

Data Release Authorized By: C Stojowicz Date Sample Received:

Volatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 3-30-87

Conc./Dil Factor: 1 pH

Percent Moisture: (Not Decanted)

CAS Number		ug/l or ug/Kg (Circle One)	
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	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1, 1-Dichloroethene	5	U
75-34-3	1, 1-Dichloroethane	5	U
156-60-5	Trans-1, 2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
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

CAS Number		ug/l or ug/Kg (Circle One)	
78-87-5	1, 2-Dichloropropane	5	U
10061-02-6	Trans-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
10061-01-5	cis-1, 3-Dichloropropene	5	U
110-75-8	2-Chloroethylvinylether	10	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
	Total Xylenes	5	U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

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U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS.

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Laboratory Name ecology and environment, inc.

Case No U-5157, 5162

Sample Number C7536

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.	No TIC's in VOA fraction			
2.				
3.				
4.				
5.				
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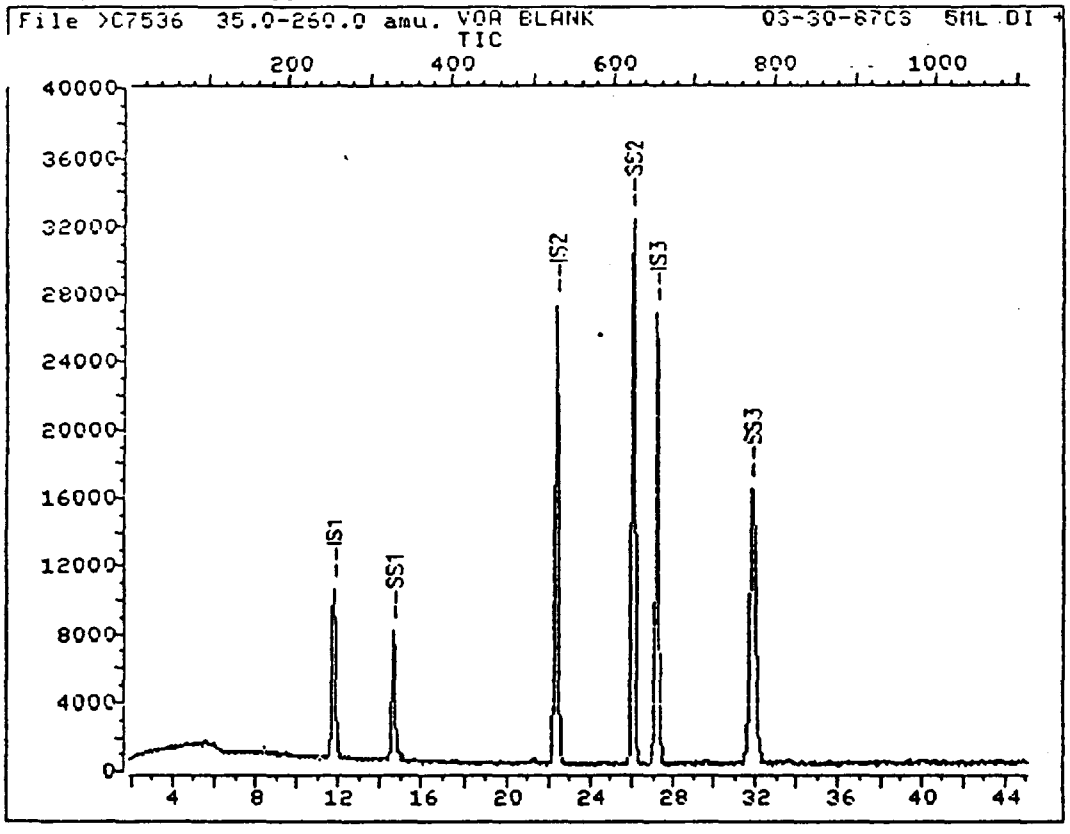
TOTAL ION CHROMATOGRAM

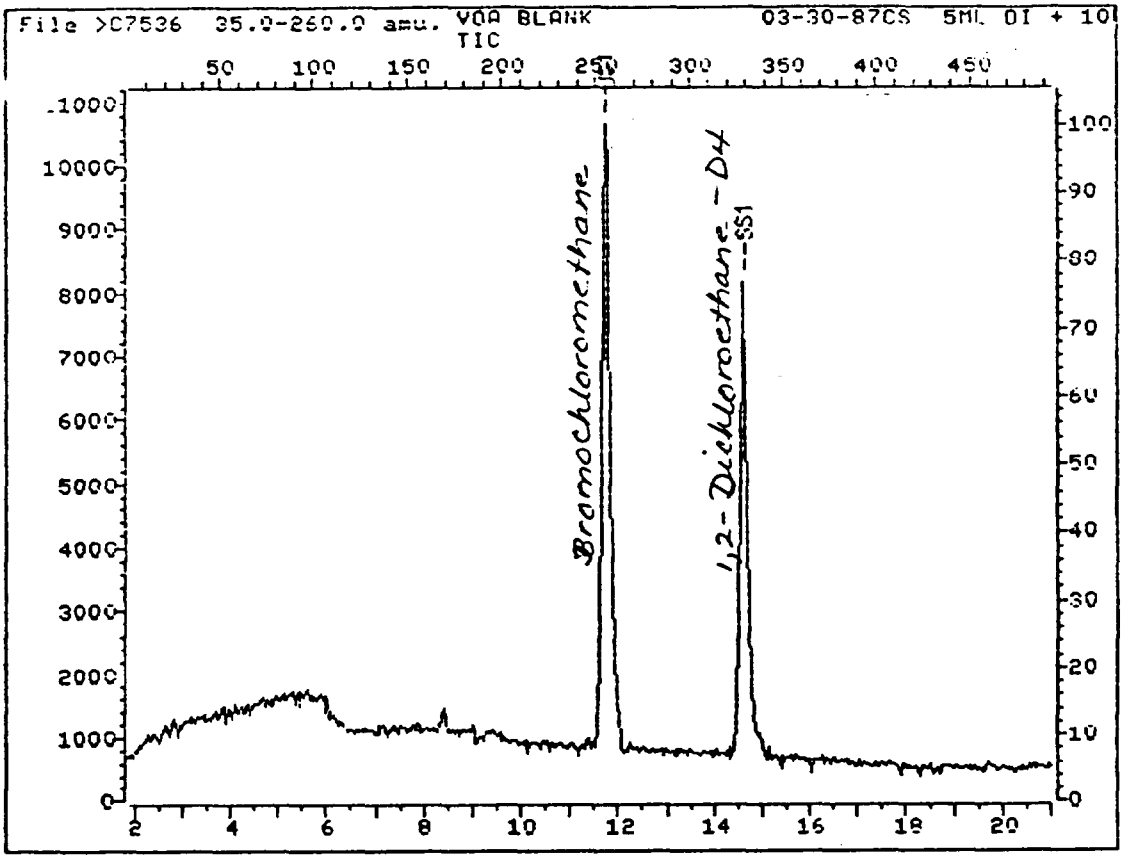


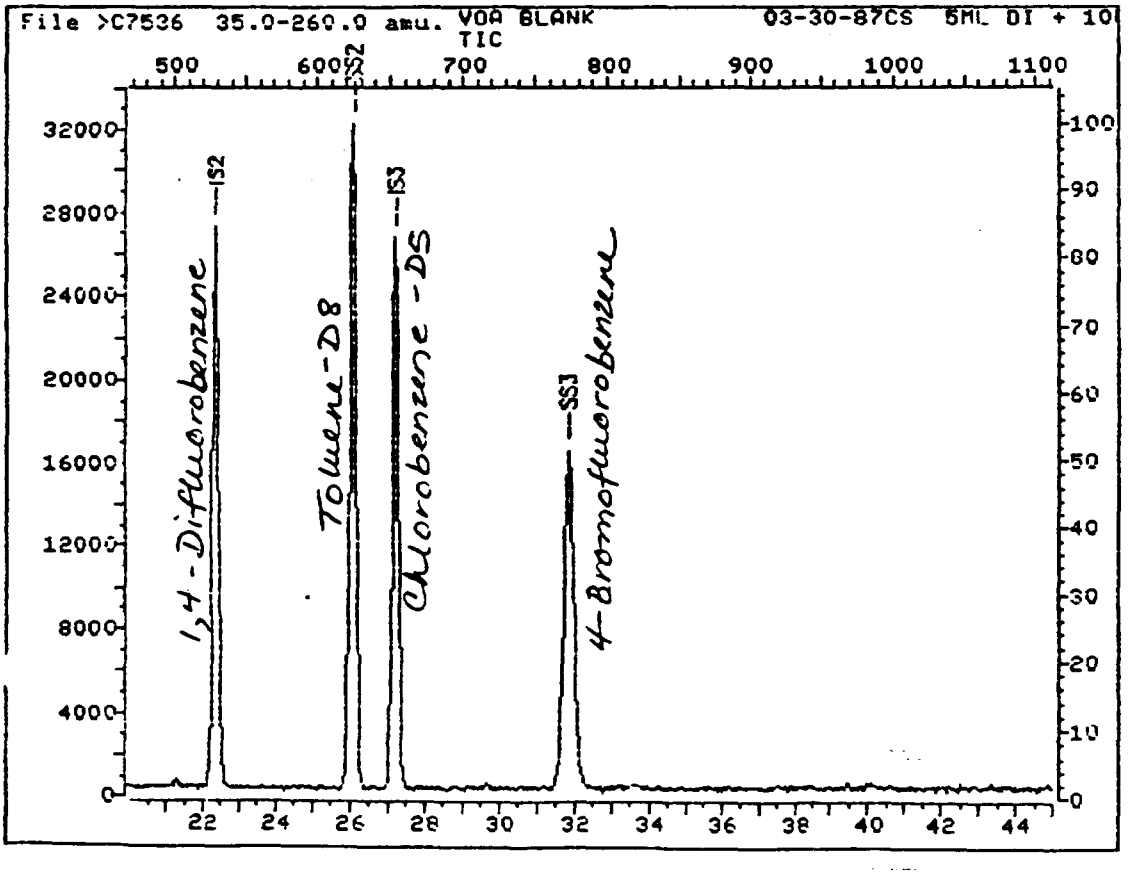
Data File: >C7536::D1
Name: VOA BLANK
Misc: 03-30-87CS 5ML DI + 10UL IS/SS

Id File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870330 11:28

Operator ID: USER8
Quant Time: 870330 13:03
Injected at: 870330 12:18

C 7536


File >C7536 35.0-260.0 amu. VOA BLANK 03-30-87CS 5ML DI + 10
TIC
Bromochloromethane
1,2-Dichloroethane-D4
SS1


File >C7536 35.0-260.0 amu. VOA BLANK 03-30-87CS 5ML DI + 10
TIC
1,4-Difluorobenzene
IS2
Toluene-D8
SS2
Chlorobenzene-D5
IS3
4-Bromofluorobenzene
SS3

QUANT REPORT

pr tor ID: USER8 Quant Rev: 4 Quant Time: 870330 13:03
ut, ut File: ^C7536::D2 Injected at: 870330 12:18
ata File: >C7536::D1 Dilution Factor: 1.00
ame: VOA BLANK
isc: 03-30-87CS 5ML DI + 10UL IS/SS

D File: VOACR::D2
itle: VOA ID FILE FOR HP-5995 (CONT. CAL.)
ast Calibration: 870330 11:28

	Compound			R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	(IS)	128	11.74	255	16401	50.00	UG/L	100
5)	1,2-DICHLOROETHANE-D4	(SURR)	65	14.62	329	34202	45.87	UG/L	85
16)	*1,4-DIFLUOROBENZENE	(IS)	114	22.34	528	120448	50.00	UG/L	100
31)	*CHLOROBENZENE-D5	(IS)	117	27.19	653	90211	50.00	UG/L	100
36)	TOLUENE-D8	(SURR)	98	26.06	624	128136	50.69	UG/L	94
40)	4-BROMOFLUOROBENZENE	(SURR)	95	31.81	772	58766	45.77	UG/L	100

* Compound is ISTD

Sample Number
C7623

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Ecology & Environment Inc Case No: U-5157, 5162

Lab Sample ID No: Method Blank QC Report No:

Sample Matrix: Water Contract No: EL-3140

Data Release Authorized By: C Woytowicz Date Sample Received:

Volatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 4-3-87

Conc./Dil Factor: 1 pH

Percent Moisture: (Not Decanted)

CAS Number		ug/l or ug/Kg (Circle One)	
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	5	U
67-64-1	Acetone	11	
75-15-0	Carbon Disulfide	5	U
75-35-4	1, 1-Dichloroethene	5	U
75-34-3	1, 1-Dichloroethane	5	U
156-60-5	Trans-1, 2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
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

CAS Number		ug/l or ug/Kg (Circle One)	
78-87-5	1, 2-Dichloropropane	5	U
10061-02-6	Trans-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
10061-01-5	cis-1, 3-Dichloropropene	5	U
110-75-8	2-Chloroethylvinylether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	2	J
591-78-6	2-Hexanone	2	J
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
	Total Xylenes	5	U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS.

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

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described, and such description attached to the data summary report.

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Laboratory Name ecology and environment, inc.

Case No U-5157, 5162

Sample Number C7623

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.	No TIC's in VOA fraction			
2.				
3.				
4.				
5.				
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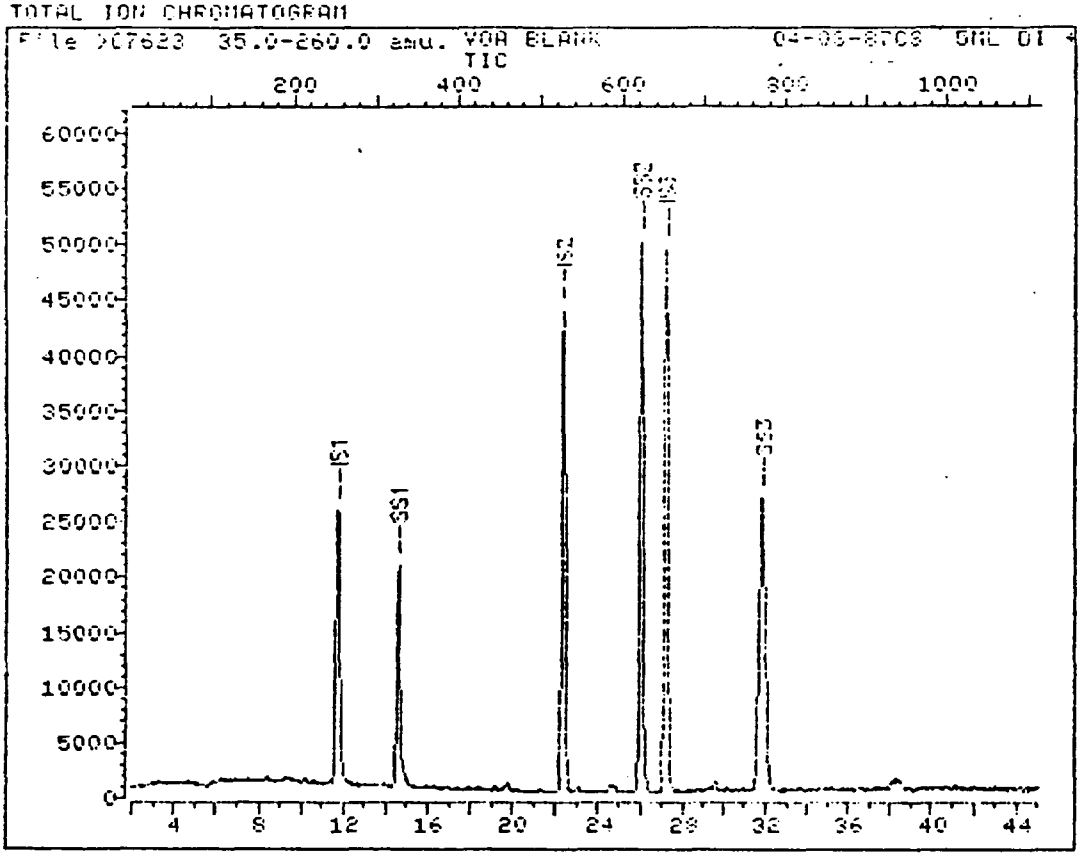
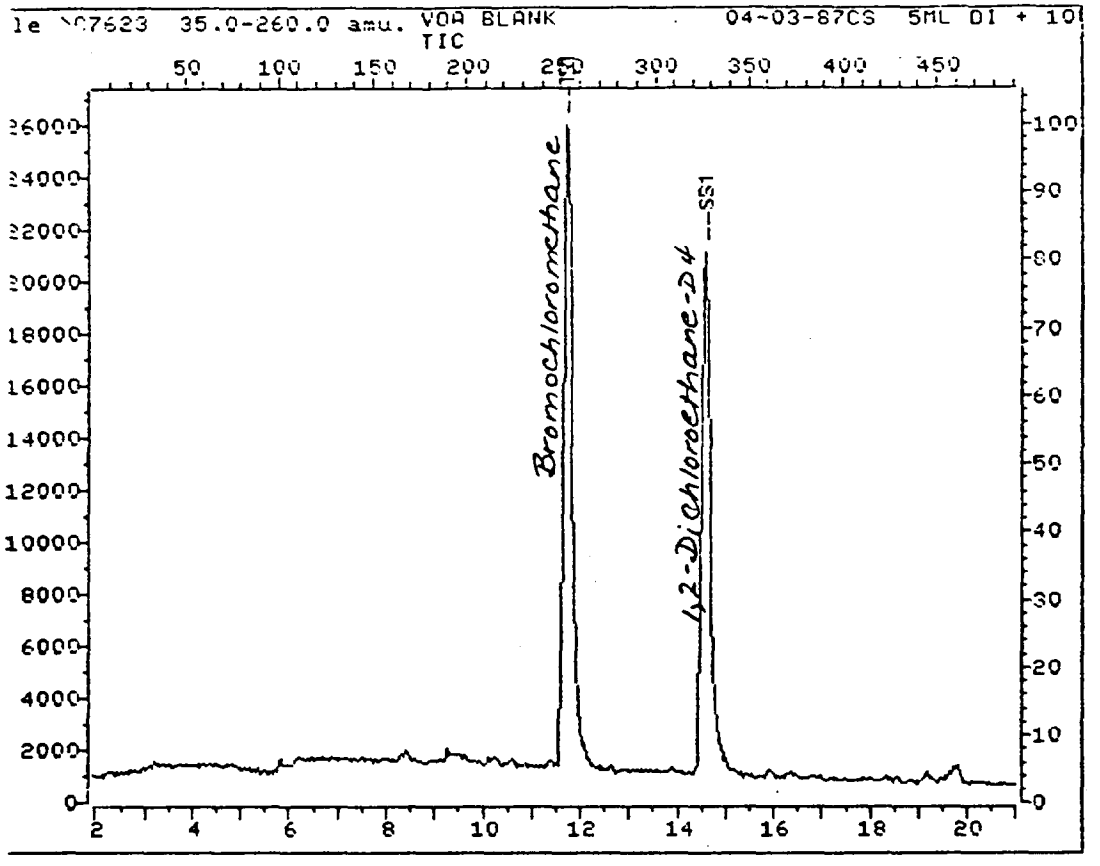
TOTAL ION CHROMATOGRAM



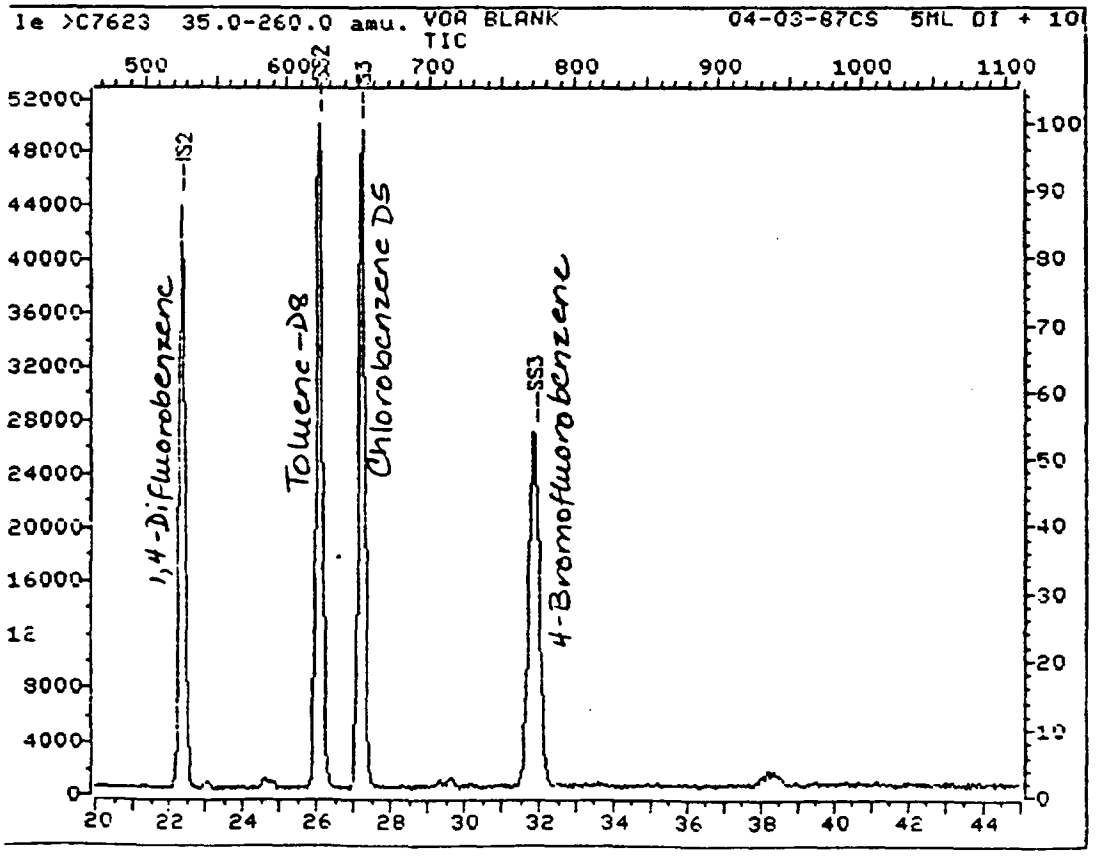
Data File: >C7623::D1
Name: VOA BLANK
Misc: 04-03-87CS 5ML DI + 10UL IS/SS

Id File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (QUNT. CAL.)
Last Calibration: 870403 10:07

Operator ID: USER8
Quant Time: 870403 10:54
Injected at: 870403 10:08


le >C7623 35.0-260.0 amu. VOA BLANK 04-03-87CS 5ML DI + 10
TIC
Bromochloromethane
1,2-Dichloroethane-D4
SS1

C7623


le >C7623 35.0-260.0 amu. VOA BLANK 04-03-87CS 5ML DI + 10
TIC
IS2
1,4-Difluorobenzene
Toluene-D8
IS3
Chlorobenzene D5
SS3
4-Bromofluorobenzene

QUANT REPORT

Operator ID: USER8 Quant Rev: 4 Quant Time: 870403 10:54
Output File: ^C7623::02 Injected at: 870403 10:08
Data File: >C7623::01 Dilution Factor: 1.00
Name: VOA BLANK
Misc: 04-03-87CS 5ML DI + 10UL IS/SS

ID File: VOACR::02
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870403 10:07

	Compound		R.I.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	(IS)	128	11.72	253	38882	50.00 UG/L	100
7)	ACETONE		43	9.36	192	6886	10.79 UG/L	100
15)	1,2-DICHLOROETHANE-D4	(SURR)	65	14.59	327	94897	46.34 UG/L	81
16)	*1,4-DIFLUOROBENZENE	(IS)	114	22.35	527	172163	50.00 UG/L	100
30)	~~BROMOFORM~~		~~173~~	~~22.28~~	~~545~~	~~1246~~	~~[illegible] UG/L~~	100
31)	*CHLOROBENZENE-D5	(IS)	117	27.21	652	142212	50.00 UG/L	100
32)	4-METHYL-2-PENTANONE		43	23.01	544	2737	2.25 UG/L	98
33)	2-HEXANONE		43	24.57	584	2709	2.38 UG/L	100
36)	TOLUENE-D8	(SURR)	98	26.04	622	188514	46.27 UG/L	94
37)	TOLUENE		92	26.24	627	2978	1.08 UG/L	92
39)	~~ETHYLBENZENE~~		~~91~~	~~29.35~~	~~707~~	~~2712~~	~~.45 UG/L~~	96
40)	4-BROMOFLUOROBENZENE	(SURR)	95	31.87	772	93876	44.98 UG/L	100

* Compound is ISTD

Sample Number
C7674

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Ecology & Environment Inc. Case No: U-5157, 5162

Lab Sample ID No: Method Blank QC Report No:

Sample Matrix: Water Contract No: EL-3140

Data Release Authorized By: C Stoytowicz Date Sample Received:

Volatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 4-6-87

Conc./Dil Factor: 1 pH

Percent Moisture: (Not Decanted)

CAS Number		ug/l or ug/Kg (Circle One)	
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	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1, 1-Dichloroethene	5	U
75-34-3	1, 1-Dichloroethane	5	U
156-60-5	Trans-1, 2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
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

CAS Number		ug/l or ug/Kg (Circle One)	
78-87-5	1, 2-Dichloropropane	5	U
10061-02-6	Trans-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
10061-01-5	cis-1, 3-Dichloropropene	5	U
110-75-8	2-Chloroethylvinylether	10	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
	Total Xylenes	5	U

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS.

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

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

Laboratory Name ecology and environment, inc.

Case No U-5157, 5162

Sample Number C7646

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.	No TIC's in VOA fraction			
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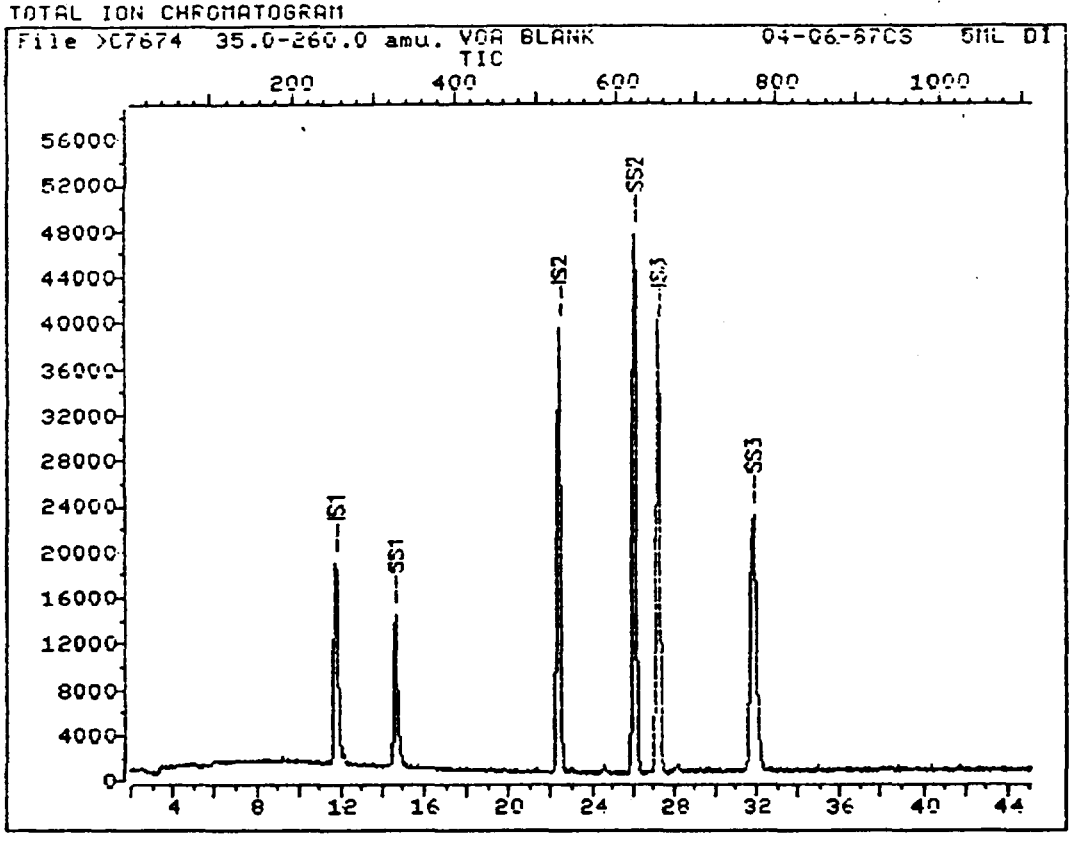
TOTAL ION CHROMATOGRAM

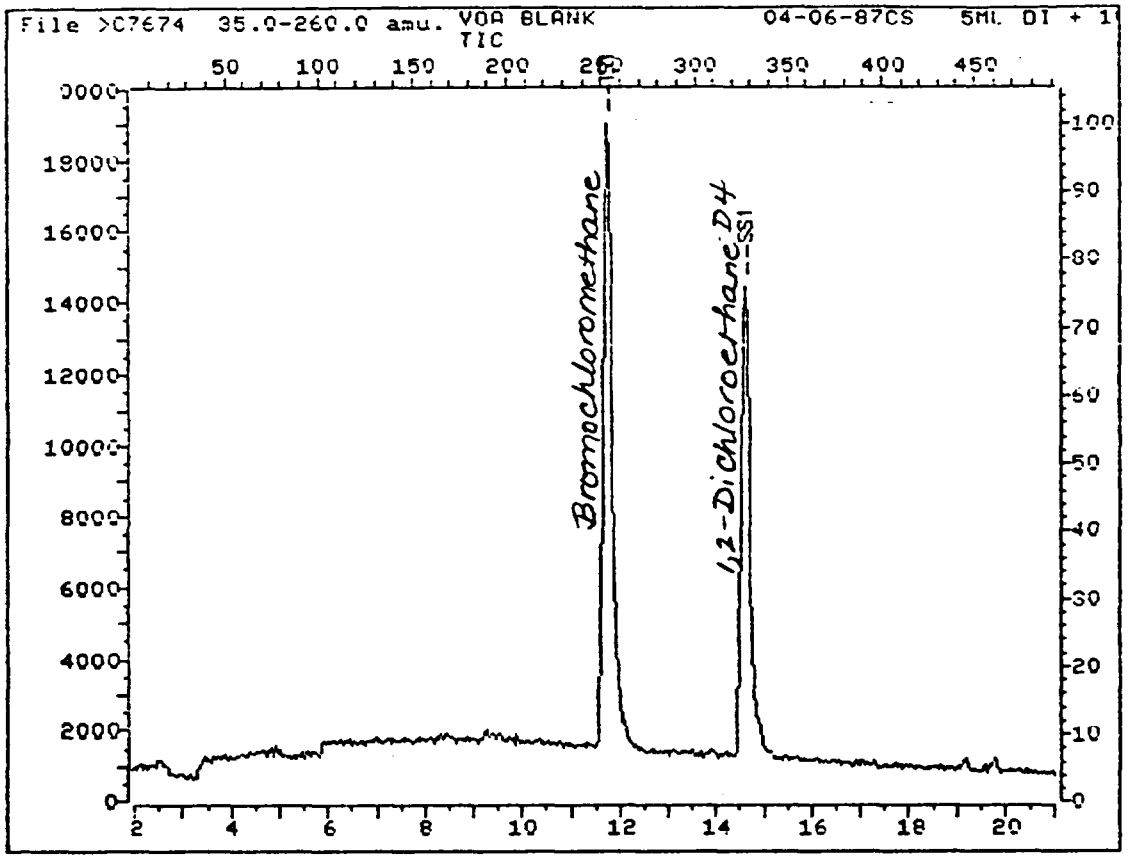


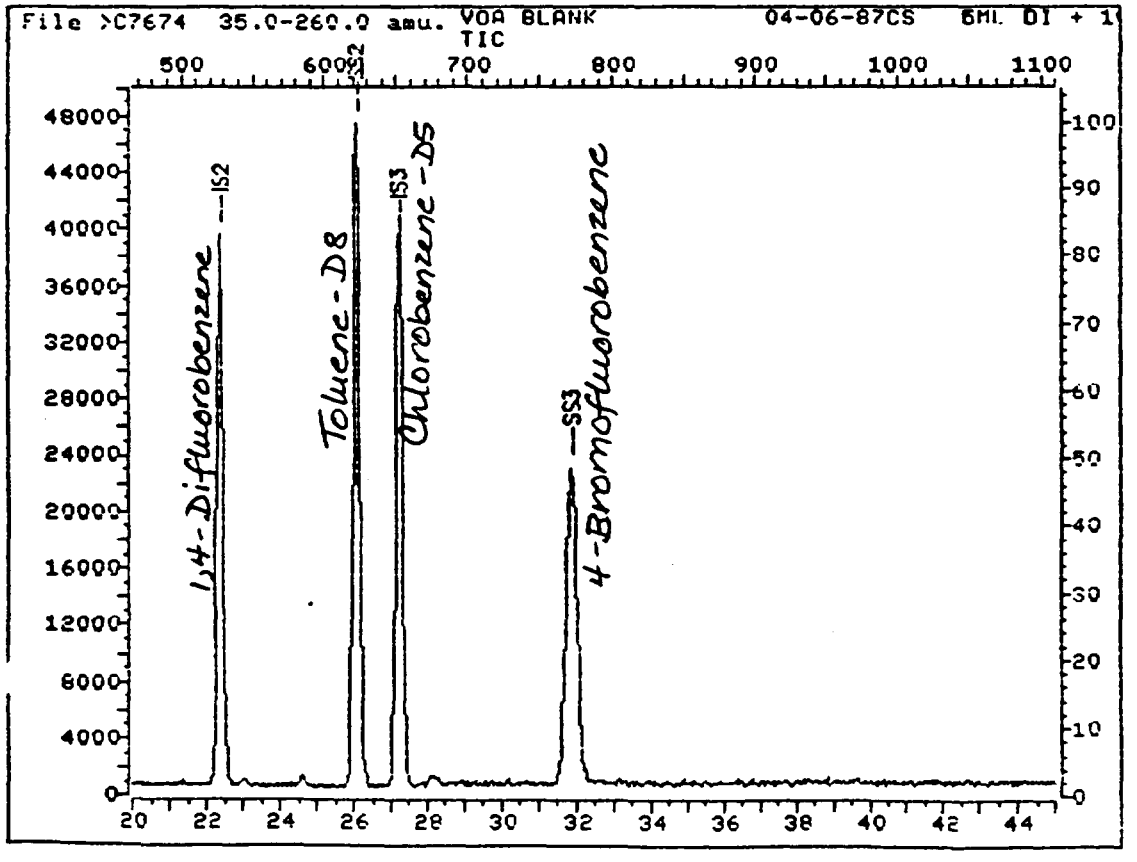
Data File: >C7674::D1
Name: VOA BLANK
Misc: 04-06-87CS 5ML DI + 10UL IS/SS

Id File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870406 13:39

Operator ID: USER8
Quant Time: 870406 14:25
Injected at: 870406 13:38

C7646


File >C7674 35.0-260.0 amu. VOA BLANK 04-06-87CS 5ML DI + 1
TIC
Bromochloromethane
1,2-Dichloroethane-D4
SS1


File >C7674 35.0-260.0 amu. VOA BLANK 04-06-87CS 5ML DI + 1
TIC
1,4-Difluorobenzene
IS2
Toluene-D8
IS3
Chlorobenzene-D5
SS3
4-Bromofluorobenzene

QUANT REPORT

Operator ID: USER8 Quant Rev: 4 Quant Time: 870406 14:25
Output File: ^C7674::Q2 Injected at: 870406 13:38
Data File: >C7674::D1 Dilution Factor: 1.00
Name: VOA BLANK
Misc: 04-06-87CS 5ML DI + 10UL IS/SS

ID File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870406 13:39

	Compound			R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	(IS)	128	11.73	253	30398	50.00	UG/L	100
15)	1,2-DICHLOROETHANE-D4	(SURR)	65	14.61	327	63137	46.00	UG/L	88
16)	*1,4-DIFLUOROBENZENE	(IS)	114	22.37	527	171189	50.00	UG/L	100
~~30)~~	~~BROMOFORM~~		~~173~~	~~22.29~~	~~525~~	~~559~~	~~.49~~	~~UG/L~~ CW	100
31)	*CHLOROBENZENE-D5	(IS)	117	27.18	651	125101	50.00	UG/L	100
36)	TOLUENE-D8	(SURR)	98	26.05	622	189901	53.28	UG/L	96
40)	4-BROMOFLUOROBENZENE	(SURR)	95	31.85	771	82017	47.13	UG/L	100

* Compound is ISTD

Sample Number
C7705

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Ecology & Environment Inc Case No: U-5157, 5162

Lab Sample ID No: Method Blank QC Report No:

Sample Matrix: Water Contract No: IL-3140

Data Release Authorized By: C Slogtowicz Date Sample Received:

Volatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 4-7-87

Conc./Dil Factor: 1 pH

Percent Moisture: (Not Decanted)

CAS Number		ug/l or ug/Kg (Circle One)	
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	5	U
67-64-1	Acetone	10	
75-15-0	Carbon Disulfide	5	U
75-35-4	1, 1-Dichloroethene	5	U
75-34-3	1, 1-Dichloroethane	5	U
156-60-5	Trans-1, 2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
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

CAS Number		ug/l or ug/Kg (Circle One)	
78-87-5	1, 2-Dichloropropane	5	U
10061-02-6	Trans-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
10061-01-5	cis-1, 3-Dichloropropene	5	U
110-75-8	2-Chloroethylvinylether	10	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
	Total Xylenes	5	U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS.

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

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

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Laboratory Name Ecology & Environment

Case No U-5157, 5162

Sample Number C7705

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.	No TIC's in VOA fraction			
2.				
3.				
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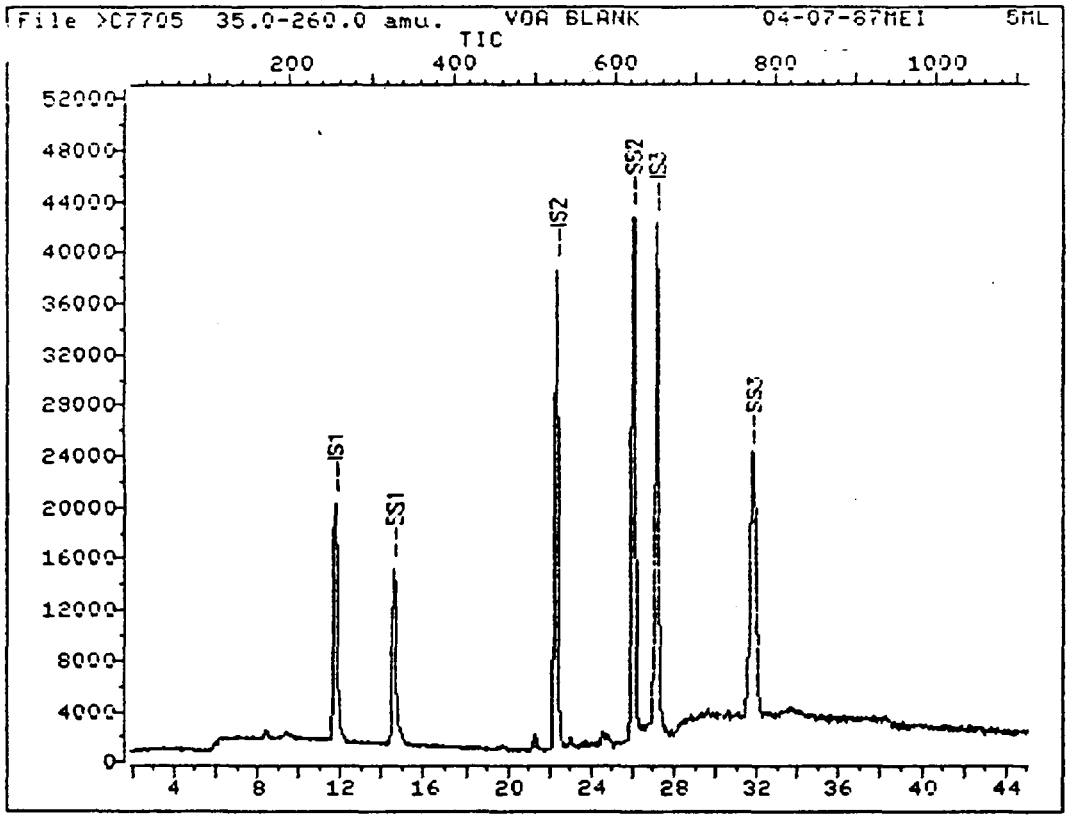
TOTAL ION CHROMATOGRAM

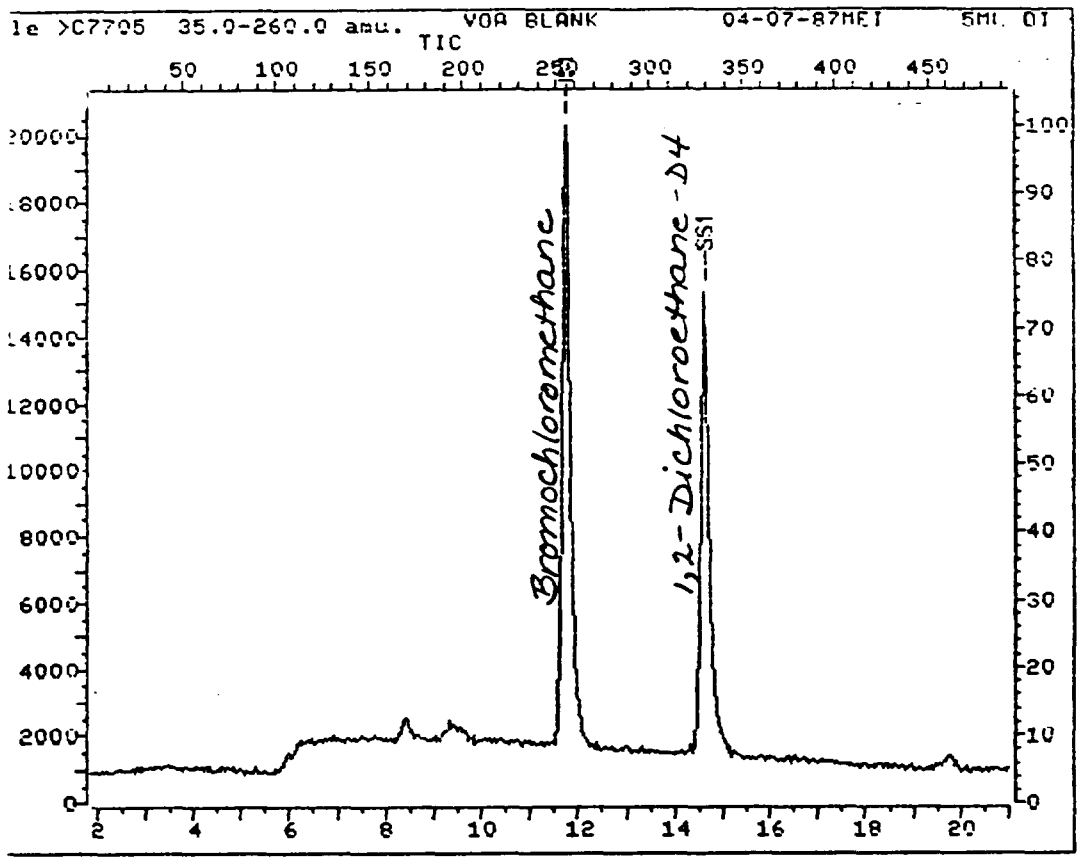


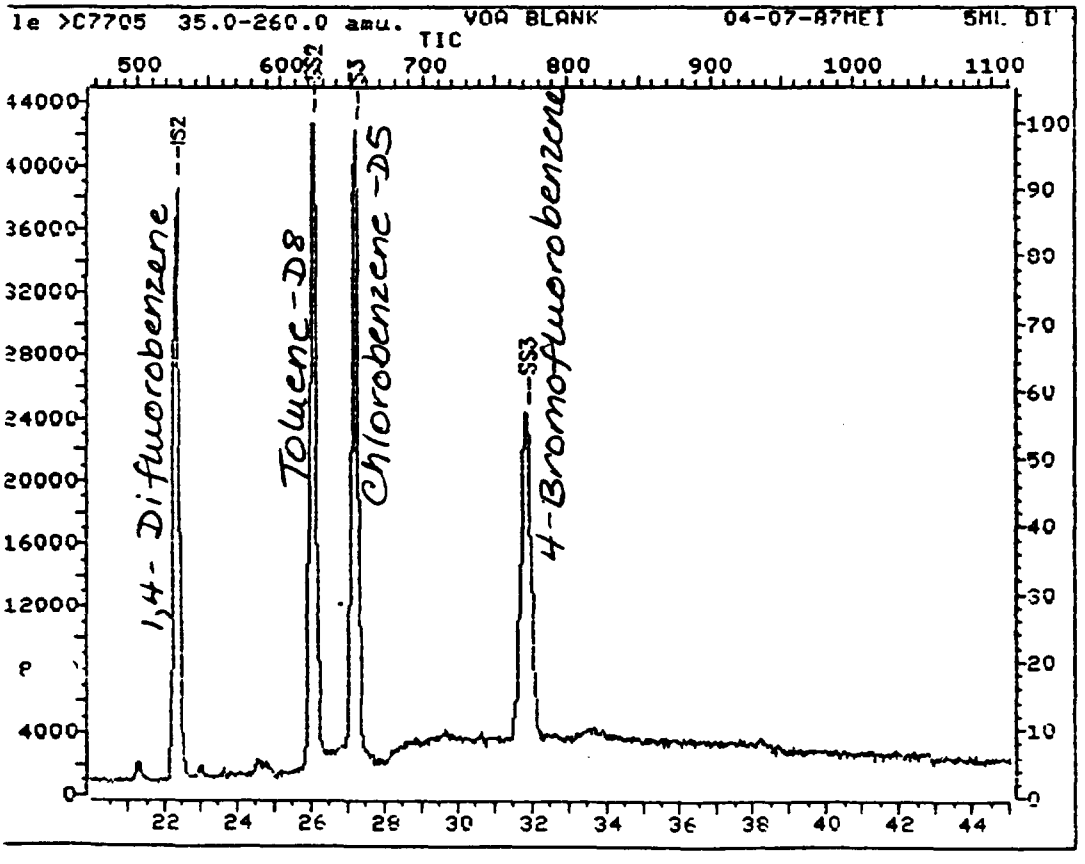
Data File: >C7705::D3
Name: VOA BLANK
Misc: 04-07-87MEI 5ML DI + 10UL IS/SS

Id File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870407 18:50

Operator ID: USER8
Quant Time: 870407 19:19
Injected at: 870407 18:33

C7705


le >C7705 35.0-260.0 amu. VOA BLANK 04-07-87MEI 5ML. DI
TIC
Bromochloromethane
1,2-Dichloroethane-D4
--SS1


le >C7705 35.0-260.0 amu. VOA BLANK 04-07-87MEI 5ML. DI
TIC
1,4-Difluorobenzene
--IS2
Toluene-D8
Chlorobenzene-D5
--SS3
4-Bromofluorobenzene

QUANT REPORT

Operator ID: USER8 Quant Rev: 4 Quant Time: 870407 19:19
Output File: ^C7705::Q2 Injected at: 870407 18:33
Data File: >C7705::D3 Dilution Factor: 1.00
Name: VOA BLANK
Misc: 04-07-87MEI 5ML DI + 10UL IS/SS

ID File: VOACR::D2
Title: VOA ID FILE FOR HP-5995 (CONT. CAL.)
Last Calibration: 870407 18:50

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	(IS)	128 11.74	255	27837	50.00	UG/L	100
6)	METHYLENE CHLORIDE		84 8.41	169	1806	1.80	UG/L	100
7)	ACETONE		43 9.46	196	7449	10.26	UG/L	100
15)	1,2-DICHLOROETHANE-D4	(SURR)	65 14.62	329	65126	45.67	UG/L	85
16)	*1,4-DIFLUOROBENZENE	(IS)	114 22.34	528	150974	50.00	UG/L	100
30)	~~BROMOFORM~~		~~173 22.26~~	~~526~~	~~659~~	~~.59~~	~~UG/L~~ CW	100
31)	*CHLOROBENZENE-D5	(IS)	117 27.19	653	114275	50.00	UG/L	100
32)	~~4-METHYL-2-PENTANONE~~		~~43 23.00~~	~~545~~	~~3690~~	~~2.75~~	~~UG/L~~ CW	92
33)	~~2-HEXANONE~~		~~43 24.59~~	~~586~~	~~3697~~	~~2.91~~	~~UG/L~~	100
36)	TOLUENE-D8	(SURR)	98 26.02	623	159813	47.66	UG/L	90
37)	TOLUENE		92 26.22	628	2643	1.13	UG/L	97
40)	4-BROMOFLUOROBENZENE	(SURR)	95 31.85	773	76605	44.38	UG/L	100

* Compound is ISTD

Laboratory Name ecology and environment, inc.

Case No U-5157, 5162

Sample Number
D2338

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared 3-29-87

Date Analyzed 4-22-87

Conc/Dil Factor 2

Percent Moisture (Decanted) -

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)	
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
39638-32-9	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-Chloroethoxyl)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	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	50	U

CAS Number		ug/l or ug/Kg (Circle One)	
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
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	36	
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	3J	
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
117-81-7	bis(2-Ethylhexyl)Phthalate	4J	
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1)-Cannot be separated from diphenylamine

Laboratory Name Ecology & Environment

Case No 4-5157, 5162

Sample Number D2338

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration ug/l or ug/kg	
1.	Unknown	BNA	20.72	56	J
2.	Unknown		24.02	11	J
3.	Unknown		30.34	15	J
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
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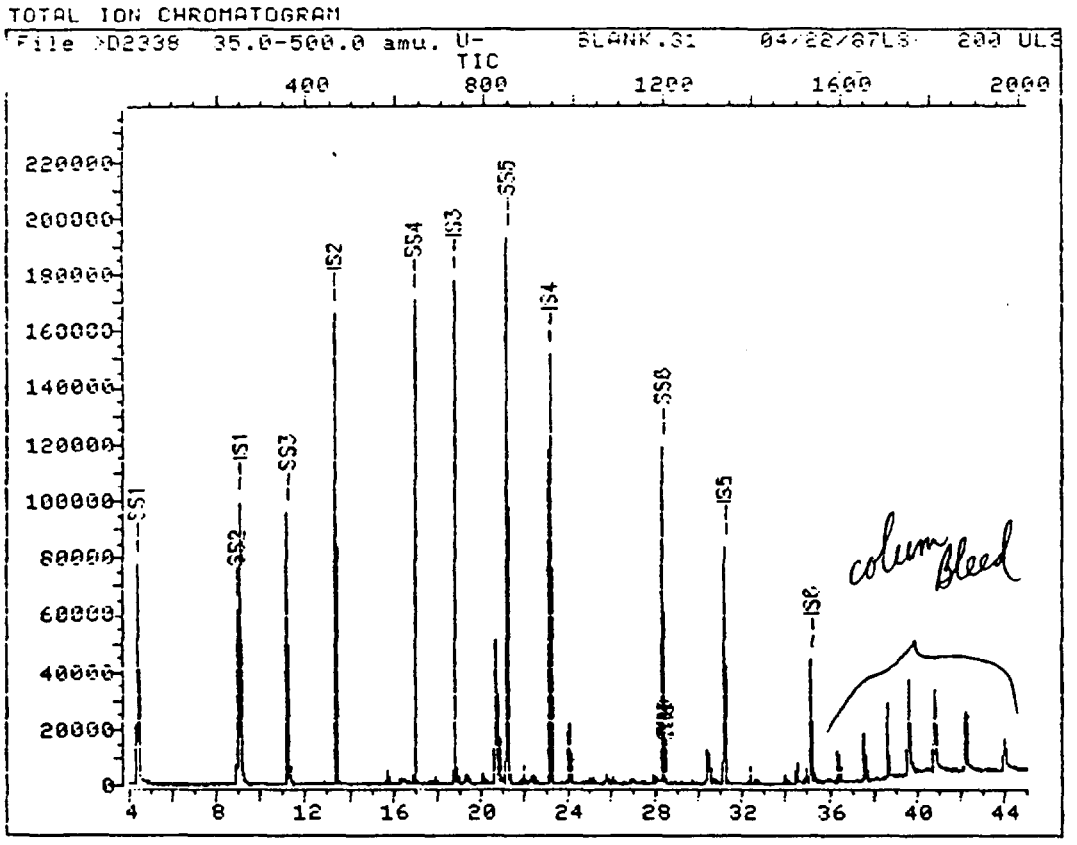
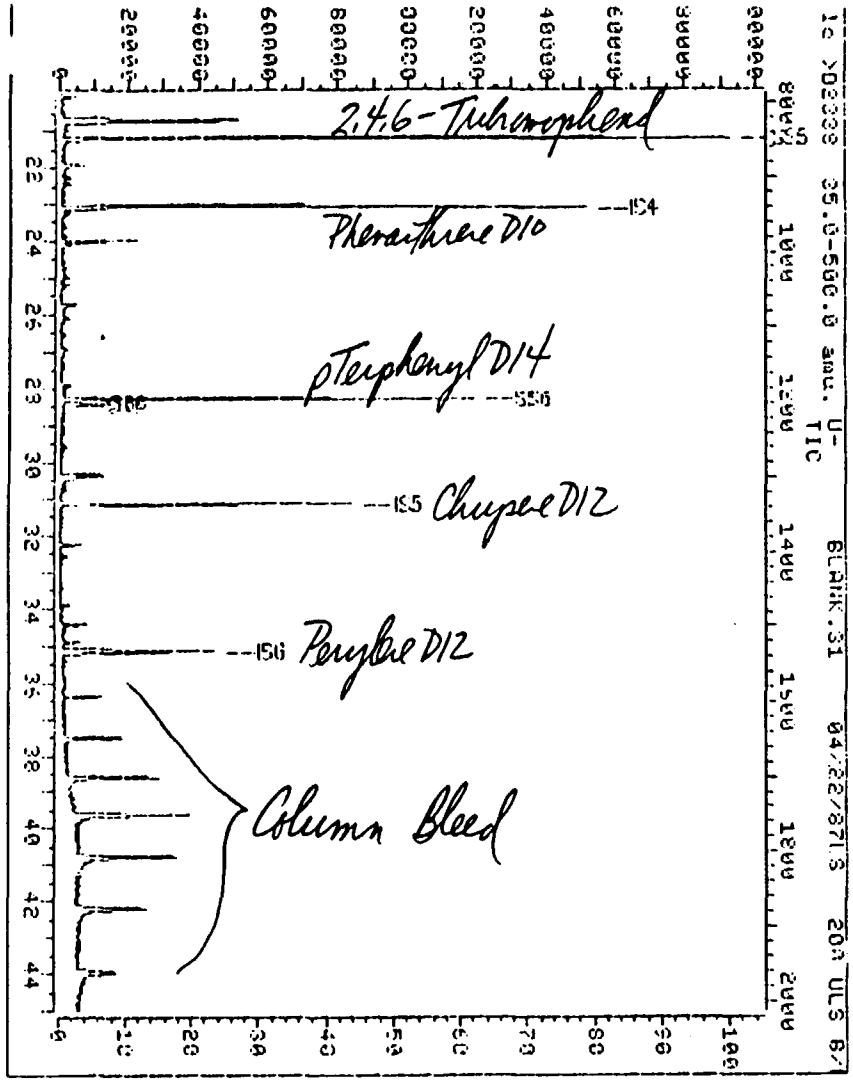
27.					
28.					
29.					
30					

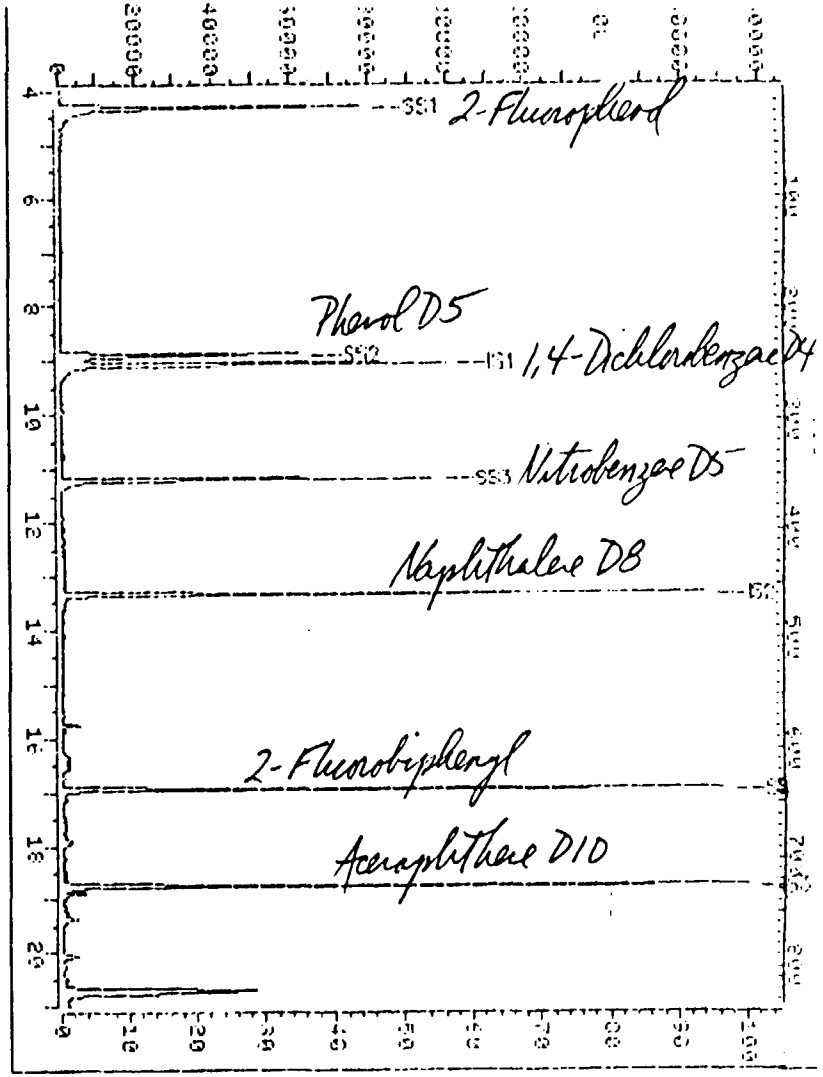

TOTAL ION CHROMATOGRAM
File >D2338 35.0-500.0 amu. U- TIC BLANK.31 04/22/87LS 200 ULS
400 800 1200 1600 2000
220000 200000 180000 160000 140000 120000 100000 80000 60000 40000 20000 0
SS1 SS2 IS1 SS3 IS2 SS4 IS3 SS5 IS4 SS6 IS5 IS6
column Bleed
4 8 12 16 20 24 28 32 36 40 44

Data File: >D2338::D3
Name: U-SIST BLANK.31
Misc: 04/22/87LS 200 ULS B/N + 200 ULS A/P + 4 ULS IS (3/2BIL# 1

Id File: BNADR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870422 18:03

Operator ID: USER6
Quant Time: 870422 18:58
Injected at: 870422 18:10


2,4,6-Tribromophenol
Phenanthrene D10
pTerphenyl D14
Chrysene D12
Perylene D12
Column Bleed
154
155
156
556
BLANK.31
04/22/87 13
20 ULS 87


2-Fluorophenol
Phenol D5
1,4-Dichlorobenzene D4
Nitrobenzene D5
Naphthalene D8
2-Fluorobiphenyl
Acenaphthene D10
551
552
553

QUANT REPORT

rator ID: USER6 Quant Rev: 4.. Quant Time: 870422.18:58
Output File: ^D2338::Q2 Injected at: 870422 18:10
Data File: >D2338::D3 Dilution Factor: 2.00
Name: U-5157 BLANK.31
Misc: 04/22/87LS 200 ULS B/N + 200 ULS A/P + 4 ULS IS (3/2BTL# 1

ID File: BNADR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870422 18:03

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-D4	(IS)	152	9.05	250	41734	40.00 UG/L	82
2)	PHENOL-D5	(SURR)	99	8.88	242	64522	76.25 UG/L 38 ✓	96
5)	2-FLUOROPHENOL	(SURR)	112	4.30	17	62397	92.09 UG/L 46	92
~~17)~~	~~N-NITROSO-DI-N-PROPYLAMINE~~		~~70~~	~~11.18~~	~~355~~	~~12351~~	~~15.22 UG/L~~ No 6/12	~~42~~
19)	*NAPHTHALENE-D8	(IS)	136	13.32	460	148493	40.00 UG/L	100
20)	NITROBENZENE-D5	(SURR)	82	11.18	355	71514	82.10 UG/L 82 ✓	89
34)	*ACENAPHTHENE-D10	(IS)	162	18.74	726	87625	40.00 UG/L	93
38)	2-FLUOROBIPHENYL	(SURR)	172	16.95	638	119059	84.42 UG/L 84 ✓	92
~~41)~~	~~DIMETHYL PHTHALATE~~		~~163~~	~~18.74~~	~~726~~	~~17239~~	~~10.83 UG/L~~ No 6/12	~~100~~
48)	2,4,6-TRIBROMOPHENOL	(SURR)	330	21.21	847	69272	169.57 UG/L 85 ✓	98
~~52)~~	~~2,6-DINITROTOLUENE~~		~~165~~	~~18.74~~	~~726~~	~~11069~~	~~33.73 UG/L~~ No 6/12	~~100~~
53)	DIETHYLPHTHALATE		149	20.70	822	66277	36.16 UG/L	98
55)	*PHENANTHRENE-D10	(IS)	188	23.13	941	139359	40.00 UG/L	83
57)	~~N-NITROSODIPHENYLAMINE~~		~~169~~	~~21.21~~	~~847~~	~~1363~~	~~1.53 UG/L~~ No cw	~~41~~
63)	DI-N-BUTYLPHTHALATE		149	25.73	1069	5272	2.59 UG/L	98
65)	*CHRYSENE-D12	(IS)	240	31.16	1335	84867	40.00 UG/L	100
68)	TERPHENYL-D14	(SURR)	244	28.28	1194	105385	90.94 UG/L 91 ✓	100
~~68)~~	~~TERPHENYL-D14~~	~~(SURR)~~	~~244~~	~~28.36~~	~~1198~~	~~484~~	~~.35 UG/L~~ } cw	~~100~~
~~68)~~	~~TERPHENYL-D14~~	~~(SURR)~~	~~244~~	~~28.42~~	~~1201~~	~~202~~	~~.17 UG/L~~	~~100~~
72)	BIS(2-ETHYLHEXYL)PHTHALATE		149	32.26	1389	4058	3.81 UG/L	99
74)	*PERYLENE-D12	(IS)	264	35.15	1531	45562	40.00 UG/L	100

* Compound is ISTD

Laboratory Name _____

Case No U-5157, 5162

Sample Number D2382

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 3-30-87

Date Analyzed: 4-27-87

Conc/Dil Factor: 2

Percent Moisture (Decanted) -

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)	
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
39638-32-9	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-Chloroethoxyl)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	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	50	U

CAS Number		ug/l or ug/Kg (Circle One)	
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
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	
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
117-81-7	bis(2-Ethylhexyl)Phthalate	4	J
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	2	J
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

Laboratory Name Ecology & Environment

Case No U-5157, 5162

Sample Number D2382

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min.	Estimated Concentration (ug/l or ug/kg)
1.	Hexene isomer	BNA	20.76	64 J
2.	Unknown		30.34	11 J
3.	Unknown		34.45	76 J
4.				
5.				
6.				
7.				
8.				
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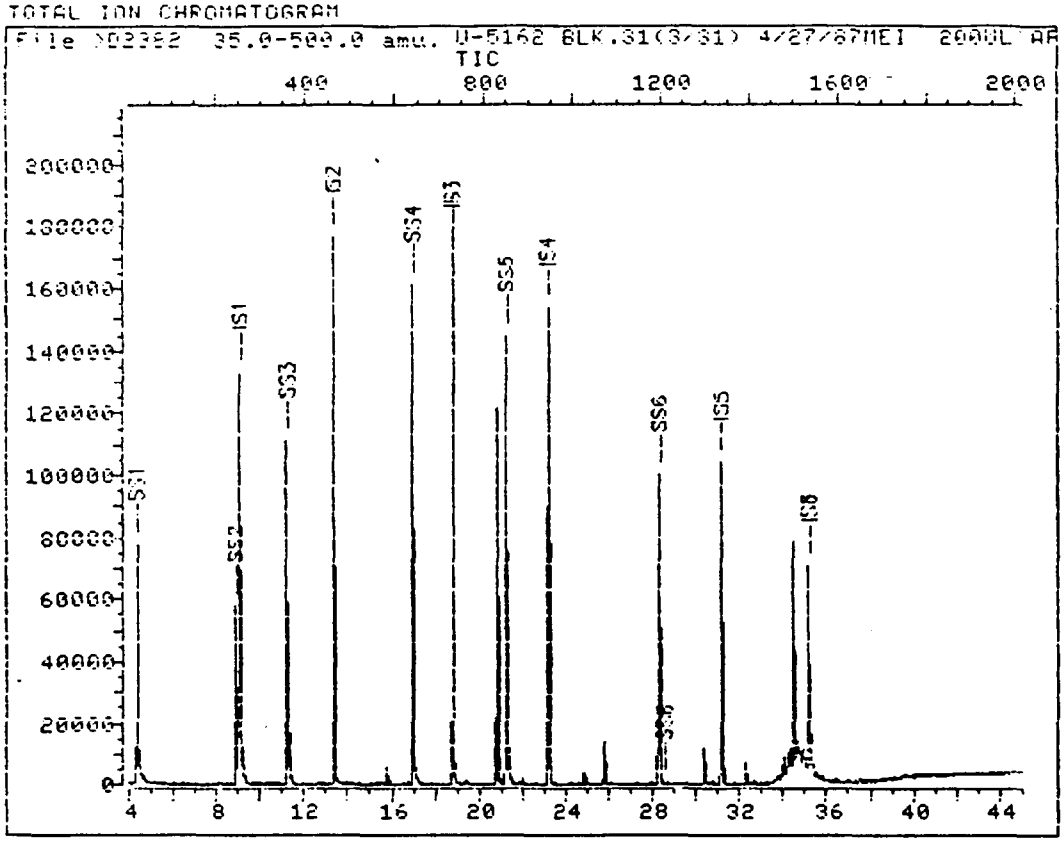
30				

TOTAL ION CHROMATOGRAM



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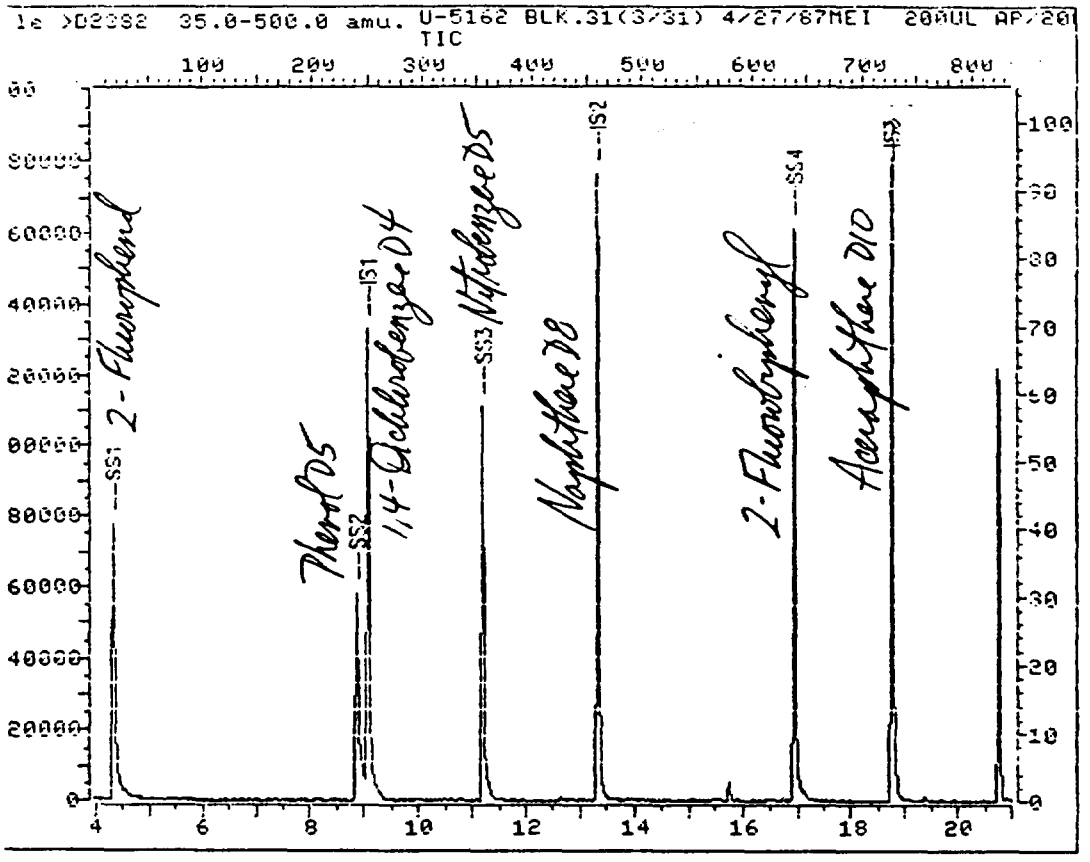
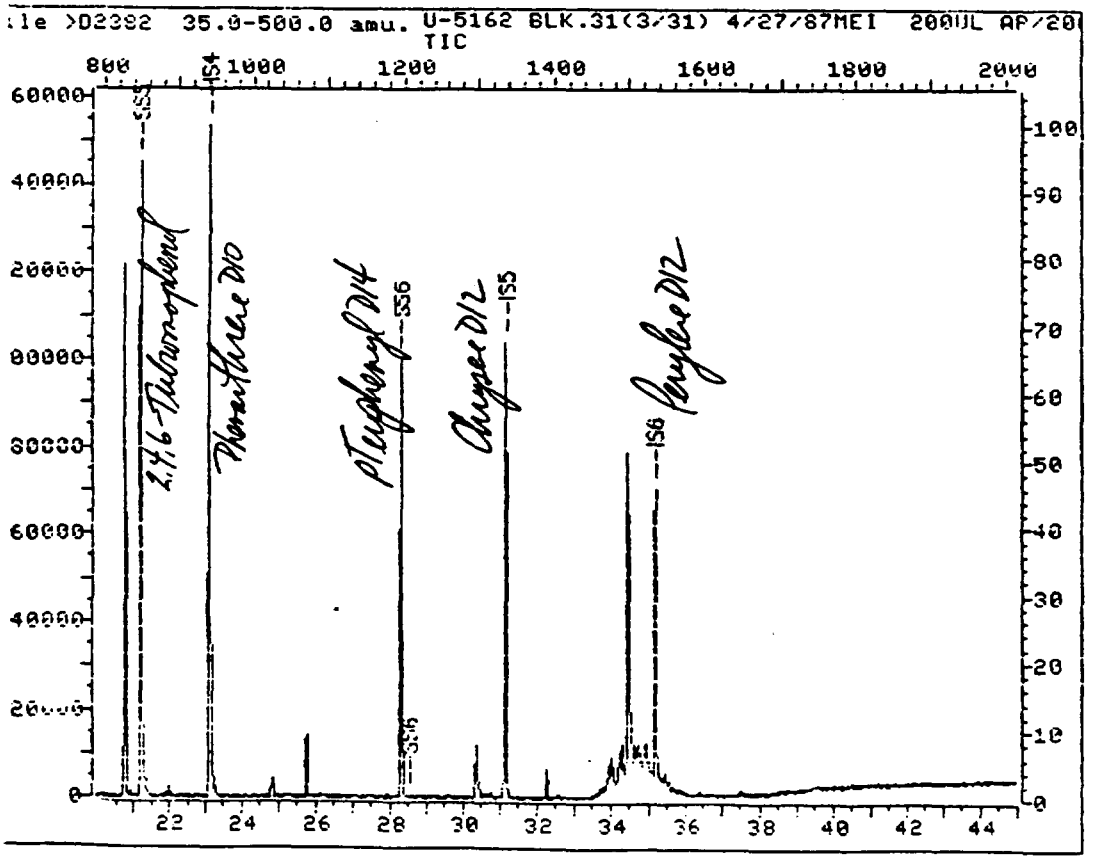
Name: U-5162 BLK.31(3/31)
Misc: 4/27/87MEI 200UL AP/200UL BN + 4UL IS (2X) BTL# 7

Id File: BNADR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870427 17:24

Operator ID: USER6
Quant Time: 870427 20:55
Injected at: 870427 20:07


le >D2382 35.0-500.0 amu. U-5162 BLK.31(3/31) 4/27/87MEI 200UL AP/20
TIC
SS1
2-Fluorophenol
SS2
Phenol D5
IS1
1,4-Dichlorobenzene D4
SS3
Nitrobenzene D5
IS2
Naphthalene D8
SS4
2-Fluorobiphenyl
IS3
Acenaphthene D10


le >D2382 35.0-500.0 amu. U-5162 BLK.31(3/31) 4/27/87MEI 200UL AP/20
TIC
SS5
2,4,6-Tribromophenol
IS4
Phenanthrene D10
SS6
p-Terphenyl D14
IS5
Chrysene D12
IS6
Perylene D12

QUANT REPORT

perator ID: USER6 Quant Rev: 4 Quant Time: 870427 20:55
utput File: ^D2382::Q2 Injected at: 870427 20:07
a+ File: >D2382::D3 Dilution Factor: 2.00
a: U-5162 BLK.31(3/31)
isc: 4/27/87MEI 200UL AP/200UL BN + 40UL IS (2X) BIL# 7

D File: BNADR::D2
itle: BNA ID FILE FOR THE HP 5970 (B)
ast Calibration: 870427 17:24

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-D4	(IS)	152	9.07	251	61820	40.00 UG/L	86
2)	PHENOL-D5	(SURR)	99	8.87	241	73713	75.84 UG/L	99
5)	2-FLUOROPHENOL	(SURR)	112	4.32	18	70577	86.48 UG/L	76
7)	~~N-NITROSO-DI-N-PROPYLAMINE~~		~~70~~	~~11.21~~	~~356~~	~~17289~~	~~14.36 UG/L~~ NoBM	90
19)	*NAPHTHALENE-D8	(IS)	136	13.33	460	213995	40.00 UG/L	100
20)	NITROBENZENE-D5	(SURR)	82	11.21	356	99847	85.74 UG/L	90
34)	*ACENAPHTHENE-D10	(IS)	162	18.75	726	116203	40.00 UG/L	94
38)	2-FLUOROBIPHENYL	(SURR)	172	16.95	638	144943	70.24 UG/L	94
41)	~~DIMETHYL PHTHALATE~~		~~163~~	~~18.77~~	~~727~~	~~22603~~	~~11.29 UG/L~~ NoBM	100
48)	2,4,6-TRIBROMOPHENOL	(SURR)	330	21.21	847	58708	179.17 UG/L	98
52)	~~2,6-DINITROTOLUENE~~		~~165~~	~~18.75~~	~~726~~	~~15250~~	~~34.70 UG/L~~ NoBM	100
55)	*PHENANTHRENE-D10	(IS)	188	23.13	941	151903	40.00 UG/L	90
63)	DI-N-BUTYLPHTHALATE		149	25.73	1069	20964	10.05 UG/L	98
65)	*CHRYSENE-D12	(IS)	240	31.15	1335	101980	40.00 UG/L	100
68)	TERPHENYL-D14	(SURR)	244	28.28	1194	108369	88.82 UG/L	100
68)	~~TERPHENYL-D14~~	~~(SURR)~~	~~244~~	~~28.50~~	~~1205~~	~~130~~	~~.11 UG/L~~ NoBM	100
72)	BIS(2-ETHYLHEXYL)PHTHALATE		149	32.27	1390	3947	3.63 UG/L	97
74)	*PERYLENE-D12	(IS)	264	35.17	1532	72609	40.00 UG/L	100
75)	~~DI-N-OCTYL PHTHALATE~~		~~149~~	~~34.00~~	~~1475~~	~~6270~~	~~4.16 UG/L~~ NoBM	100
75)	DI-N-OCTYL PHTHALATE		149	34.06	1478	2673	1.77 UG/L	100
75)	~~DI-N-OCTYL PHTHALATE~~		~~149~~	~~34.29~~	~~1489~~	~~11026~~	~~7.32 UG/L~~	100
75)	~~DI-N-OCTYL PHTHALATE~~		~~149~~	~~34.47~~	~~1498~~	~~6703~~	~~4.45 UG/L~~ NoBM	100
75)	~~DI-N-OCTYL PHTHALATE~~		~~149~~	~~34.53~~	~~1501~~	~~4456~~	~~2.96 UG/L~~	100

* Compound is ISTD

Laboratory Name ecology and environment, inc.

Case No 4-5157, 5162

Sample Number D2543

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: 5-6-87

Date Analyzed: 5-20-87

Conc/Dil Factor: 2

Percent Moisture (Decanted) _____

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)	
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
39638-32-9	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
[illegible]-11-3	Dimethyl Phthalate	10	U
[illegible]-95-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	50	U

CAS Number		ug/l or ug/Kg (Circle One)	
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
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenzo(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1)-Cannot be separated from diphenylamine

Laboratory Name Ecology & Environment

Case No 4-5157, 5162

Sample Number D2543

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.	No TICs in BNA fraction			
2.				
3.				
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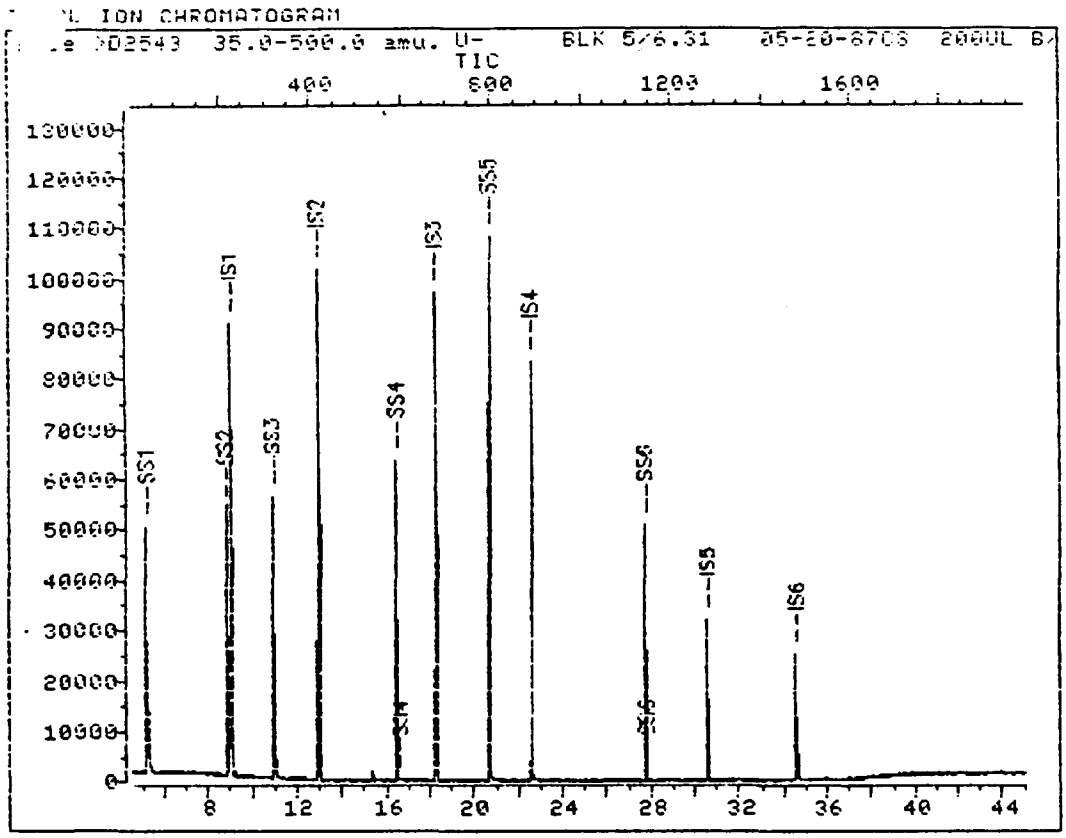
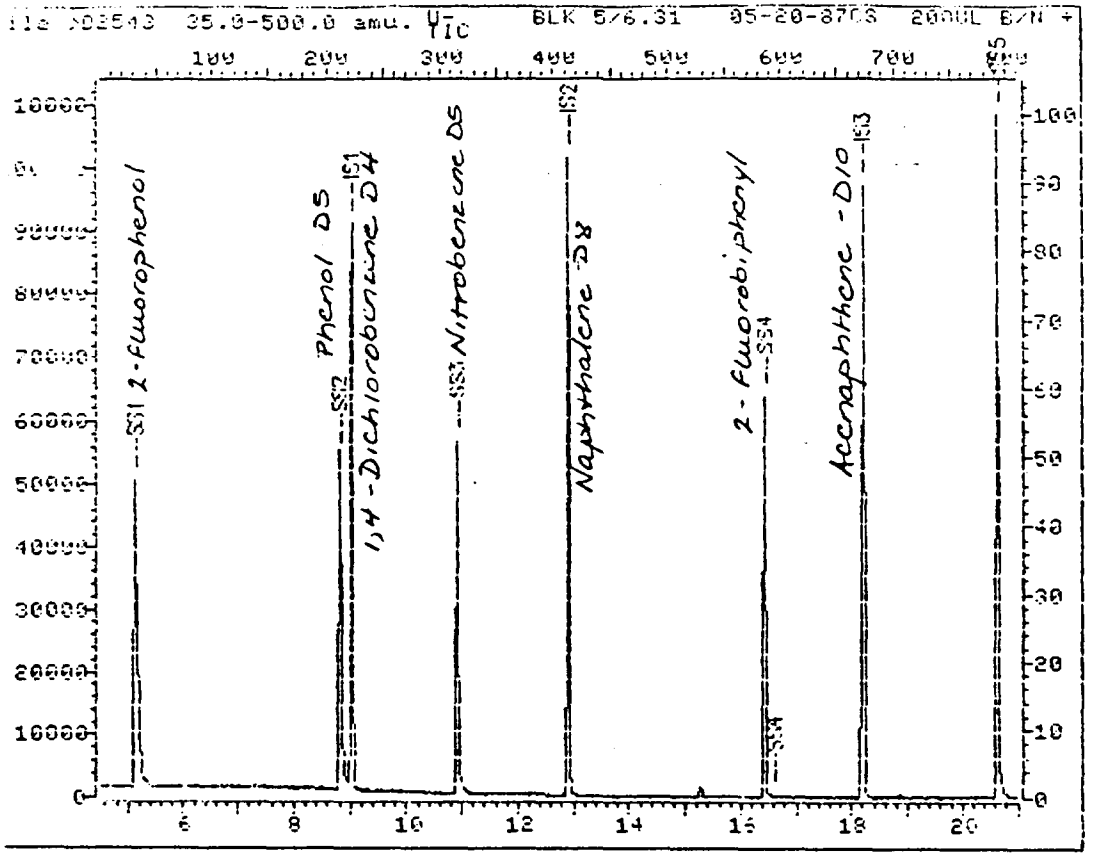


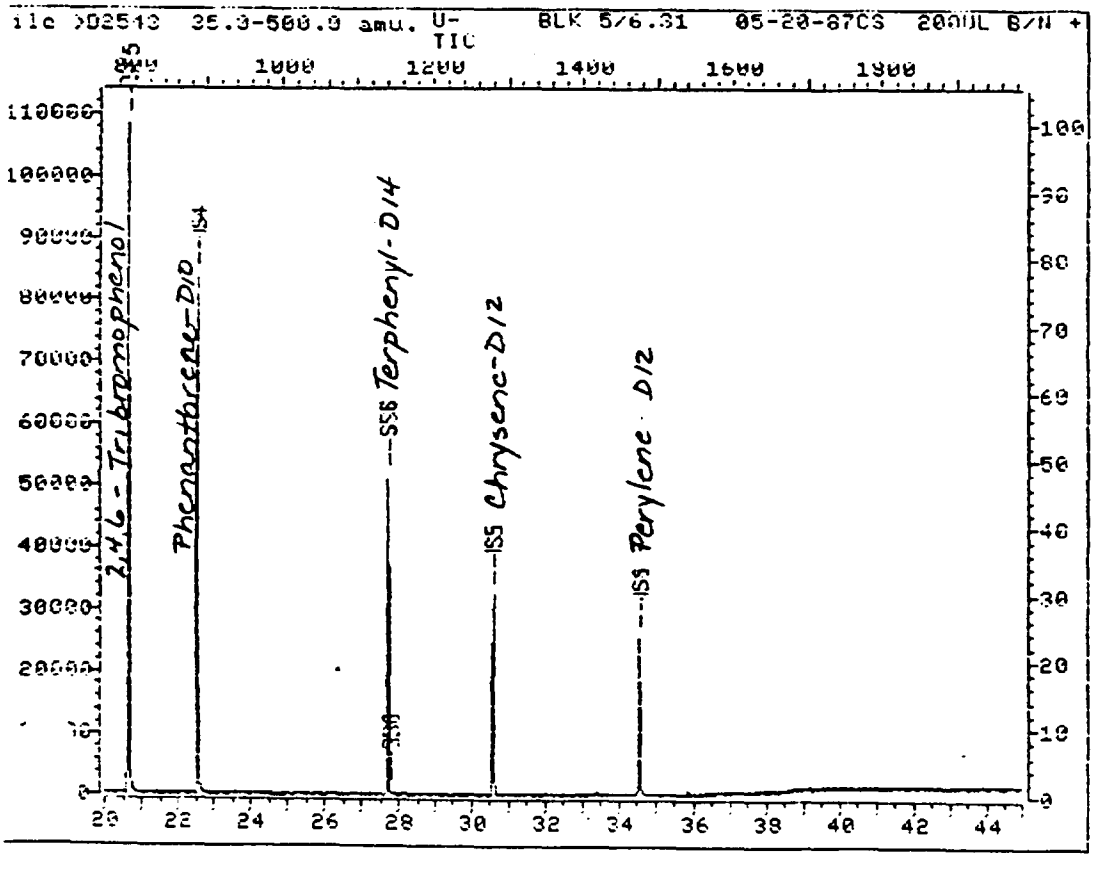
Data File: >D2543::D1
Name: U- BLK 5/6.31
Misc: 05-20-87CS 200UL B/N + 200UL A/P + 4UL IS BTL# 1

Id File: BNADR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870520 14:58

Operator ID: USER6
Quant Time: 870520 15:07
Injected at: 870520 13:54

D2543


11c D02543 35.0-500.0 amu. U-TIC BLK 5/6.31 05-20-87CS 200UL B/N +
2-Fluorophenol
Phenol D5
1,4-Dichlorobenzene D4
Nitrobenzene D5
Naphthalene D8
2-Fluorobiphenyl
Acenaphthene-D10


11c D02543 35.0-500.0 amu. U-TIC BLK 5/6.31 05-20-87CS 200UL B/N +
2,4,6-Tribromophenol
Phenanthrene-D10
Terphenyl-D14
Chrysene-D12
Perylene-D12

QUANT REPORT

perator ID: USER6 Quant Rev: 4 Quant Time: 870520 15:07
utput File: ^D2543::Q2 Injected at: 870520 13:54
ata File: >D2543::D1 Dilution Factor: 2.00
ame: U- BLK 5/6.31
isc: 05-20-87CS 200UL B/N + 200UL A/P + 4UL IS BTL# 1

D File: BNAOR::D2
itle: BNA ID FILE FOR THE HP 5970 (B)
ast Calibration: 870520 14:58

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-D4	(IS)	152	9.04	223	34349	40.00 UG/L	81
2)	PHENOL-D5	(SURR)	99	8.81	212	48260	67.20 UG/L 34 ✓	96
5)	2-FLUOROPHENOL	(SURR)	112	5.13	31	40237	89.16 UG/L 45 ✓	83
17)	~~N-NITROSO-DI-N-PROPYLAMINE~~		~~70~~	~~10.91~~	~~315~~	~~6366~~	~~10.65 UG/L~~ cw	88
9)	*NAPHTHALENE-D8	(IS)	136	12.91	413	94897	40.00 UG/L	100
0)	NITROBENZENE-D5	(SURR)	82	10.91	315	37084	72.23 UG/L 72 ✓	94
4)	*ACENAPHTHENE-D10	(IS)	162	18.20	673	56331	40.00 UG/L	95
8)	2-FLUOROBIPHENYL	(SURR)	172	16.43	586	52643	50.78 UG/L 51 ✓	93
8)	~~2-FLUOROBIPHENYL~~	~~(SURR)~~	~~172~~	~~16.59~~	~~594~~	~~216~~	~~.21 UG/L~~ cw	81
1)	~~DIMETHYL PHTHALATE~~		~~163~~	~~18.20~~	~~673~~	~~11308~~	~~14.00 UG/L~~ cw	100
8)	2,4,6-TRIBROMOPHENOL	(SURR)	330	20.65	793	50527	128.08 UG/L 64 ✓	99
2)	~~2,6-DINITROTOLUENE~~		~~165~~	~~18.20~~	~~673~~	~~7709~~	~~45.04 UG/L~~ cw	100
5)	*PHENANTHRENE-D10	(IS)	188	22.56	887	81359	40.00 UG/L	96
5)	*CHRYSENE-D12	(IS)	240	30.57	1280	35609	40.00 UG/L	100
8)	TERPHENYL-D14	(SURR)	244	27.72	1140	47996	130.69 UG/L 131 ✓	100
8)	~~TERPHENYL-D14~~	~~(SURR)~~	~~244~~	~~27.78~~	~~1143~~	~~472~~	~~1.29 UG/L~~ cw	100
4)	*PERYLENE-D12	(IS)	264	34.56	1476	31473	40.00 UG/L	100

* Compound is ISTD

Laboratory Name ECOLOGY & ENVIRONMENT INC.

Case No 4-5157, 5162

Sample Number D2550

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5-5-87

Date Analyzed: 5-20-87

Conc/Dil Factor: 2

Percent Moisture (Decanted) —

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/l or ug/Kg) (Circle One)	
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
39638-32-9	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	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	50	U

CAS Number		(ug/l or ug/Kg) (Circle One)	
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
606-20-2	2. 6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4. 6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3. 3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1 2. 3-cd)Pyrene	10	U
53-70-3	Dibenzo(a h)Anthracene	10	U
191-24-2	Benzo(g h i)Perylene	10	U

(1)-Cannot be separated from diphenylamine

Laboratory Name Ecology & Environment Inc.

Case No U-5157, 5162

Sample Number D2550

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.	No Semi-Volatile Compounds Found			
2.				
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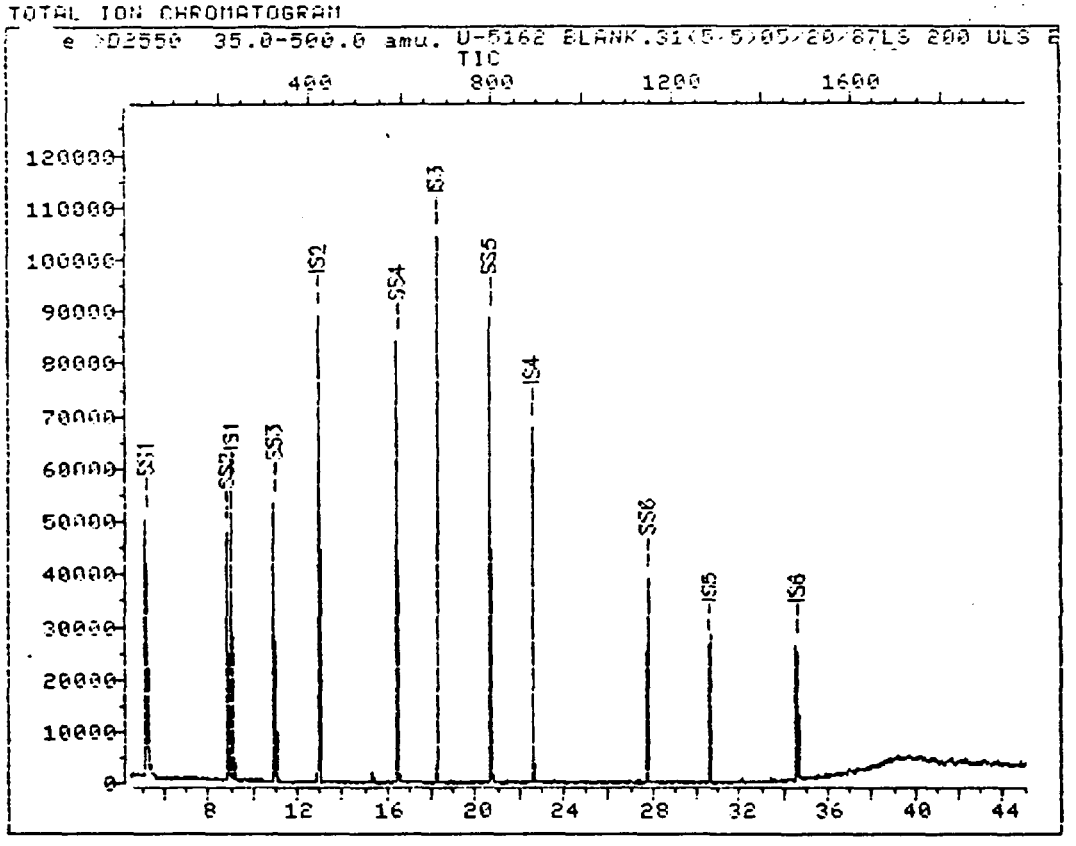
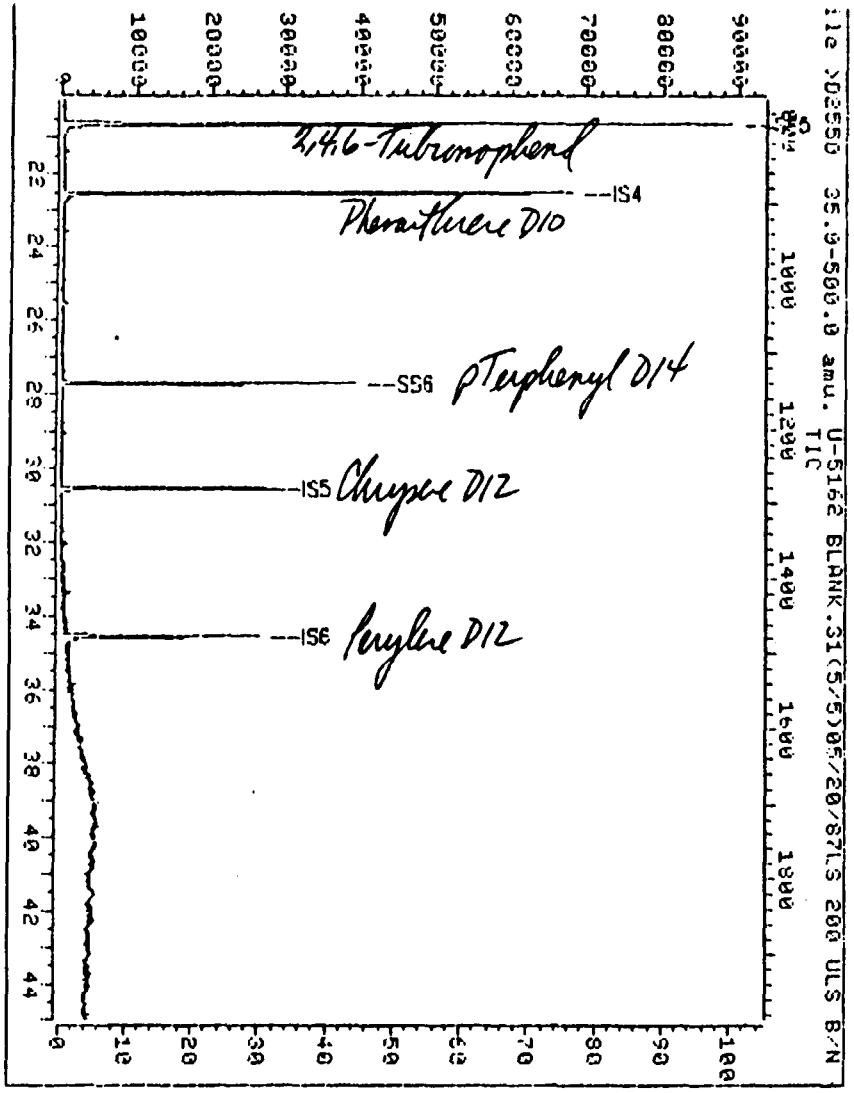
TOTAL ION CHROMATOGRAM

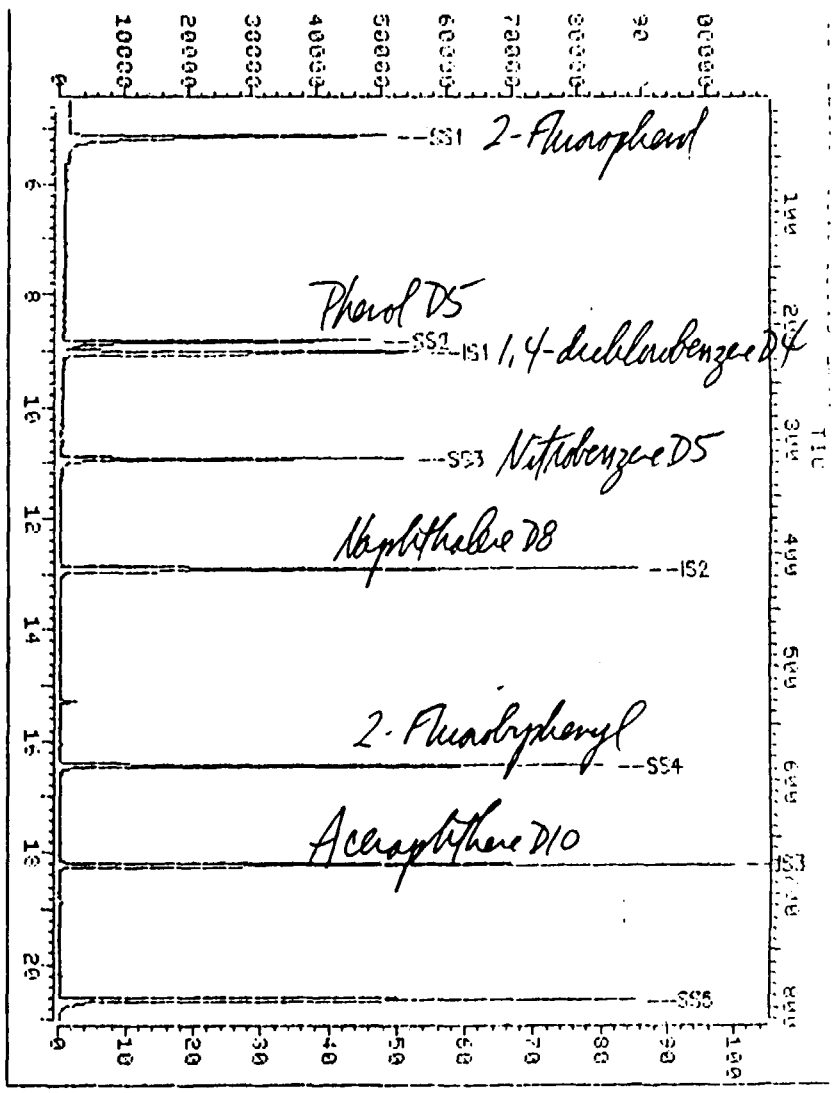


Data File: >D2550::D1
Name: U-5162 BLANK.31(5/5)
Misc: 05/20/87LS 200 ULS B/N + 200 ULS A/P + 4 ULS IS BTL# 3

Id File: BNADR::D2
Title: BNA ID FILE FOR THE HP 5970 (B)
Last Calibration: 870520 14:58

Operator ID: USER6
Quant Time: 870520 22:14
Injected at: 870520 21:26


File ND2550 35.0-500.0 amu. U-5162 BLANK.31(5/5)05/20/87LS 200 ULS B/N
TIC
2,4,6-Tribromophenol
--IS4
Phenanthrene D10
--SS6
pTerphenyl D14
--IS5
Chrysene D12
--IS6
Perylene D12


TIC
--SS1
2-Fluorophenol
Phenol D5
--SS2
--IS1
1,4-dichlorobenzene D4
--SS3
Nitrobenzene D5
Naphthalene D8
--IS2
2-Fluorobiphenyl
--SS4
Acenaphthene D10
--SS5

QUANT REPORT

perator ID: USER6 Quant Rev: 4 Quant Time: 870520 22:14
utput File: ^D2550::Q2 Injected at: 870520 21:26
ata File: >D2550::D1 Dilution Factor: 2.00
ame: U-5162 BLANK.31(5/5)
isc: 05/20/87LS 200 ULS B/N + 200 ULS A/P + 4 ULS IS BTL# 3

D File: BNADR::D2
itle: BNA ID FILE FOR THE HP 5970 (B)
ast Calibration: 870520 14:58

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-D4	(IS)	152	9.03	223	21745	40.00 UG/L	86
2)	PHENOL-D5	(SURR)	99	8.82	213	34001	74.79 UG/L 37✓	93
5)	2-FLUOROPHENOL	(SURR)	112	5.13	32	37981	132.95 UG/L 66✓	77
~~[illegible]~~	~~N-NITROSO-DI-N-PROPYLAMINE~~		~~70~~	~~10.42~~	~~316~~	~~[illegible]~~	~~15.26 UG/L~~ NoGK	91
19)	*NAPHTHALENE-D8	(IS)	136	12.92	414	79753	40.00 UG/L	100
0)	NITROBENZENE-D5	(SURR)	82	10.92	316	34592	80.17 UG/L 80✓	93
4)	*ACENAPHTHENE-D10	(IS)	162	18.21	674	50291	40.00 UG/L	95
3)	2-FLUOROBIPHENYL	(SURR)	172	16.44	587	56806	61.38 UG/L 61✓	91
~~[illegible]~~	~~DIMETHYL PHTHALATE~~		~~163~~	~~18.21~~	~~674~~	~~10433~~	~~14.54 UG/L~~ No Rpt	100
8)	2,4,6-TRIBROMOPHENOL	(SURR)	330	20.64	793	50201	142.53 UG/L 71✓	99
~~[illegible]~~	~~2,4-DINITROTOLUENE~~		~~165~~	~~18.21~~	~~674~~	~~6664~~	~~43.60 UG/L~~ NoGK	100
5)	*PHENANTHRENE-D10	(IS)	188	22.55	887	69142	40.00 UG/L	95
5)	*CHRYSENE-D12	(IS)	240	30.56	1280	37252	40.00 UG/L	100
8)	TERPHENYL-D14	(SURR)	244	27.73	1141	40399	105.15 UG/L 105✓	100
4)	*PERYLENE-D12	(IS)	264	34.55	1476	37291	40.00 UG/L	100

* Compound is ISTD

Laboratory Name ecology and environment, inc.

Case No 4-5157, 5162

Sample Number
BLANK

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration (Low) Medium (Circle One)

Date Extracted/Prepared 3-30-87

Date Analyzed 4-14-87

Conc/Dil Factor 1

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☑Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/l or ug/Kg) (Circle One)
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

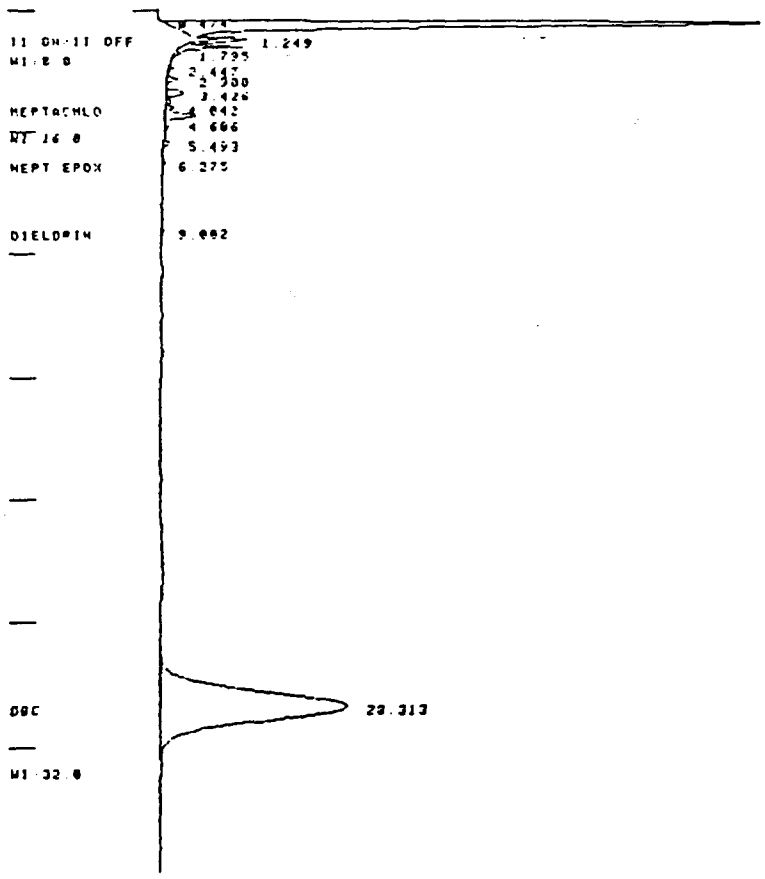
V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 1,000 or W_s _____ V_t 10,000 V_i 4

CHART SPEED 0.5 CM/MIN
ATTEN: 8 ZERO: 10% 5 MIN/TICK



RECALCULATE ON FILE: 5157630

CHANNEL: 1A - 1 TITLE: RUN# 14 0:10 14 APR 87

SAMPLE: BLANK 3-30 METHOD: CEPA CALCULATION: ES - ANALYS

PEAK NO	PEAK NAME	RESULT UG/L	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	WI/2 (SEC)
1		0.0000	1.249		68478	BV	3.38
2		0.0000	1.533		50579	VB	4.31
3		0.0000	3.426		30099	VV	13.06
4		0.0000	4.360		52607	VV	13.00
5	DBC	0.9049	28.313	-0.107	1810463	BB	? 74.75
TOTALS:		0.9049		-0.107	2012226		

DETECTED PKS: 19 REJECTED PKS: 14

DIVISOR: 1.00000 MULTIPLIER: 10.00000

NOISE: 22.9 OFFSET: -12

RACK: 1 VIAL: 14 INJ: 1

NOTES:
NOTEBOOK:259-186 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#U-5157
INST: VARIAN 6000# 2A ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
LIQUID PHASE: 3% OV-1
CARRIER GAS: N2 @ 50 ML/MIN
DET: 300 C INJ: 220 C
200 C ISOTHERMAL 4 UL INJECTION
PRIMARY ANALYSIS AUTOSAMPLER

Laboratory Name ecology and environment, inc.

Case No 4-5157,5762

Sample Number
BLANK

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration (Low) Medium (Circle One)

Date Extracted/Prepared 3-31-87

Date Analyzed 4-21-87

Conc/Dil Factor 1

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☑Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/l or ug/Kg) (Circle One)
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

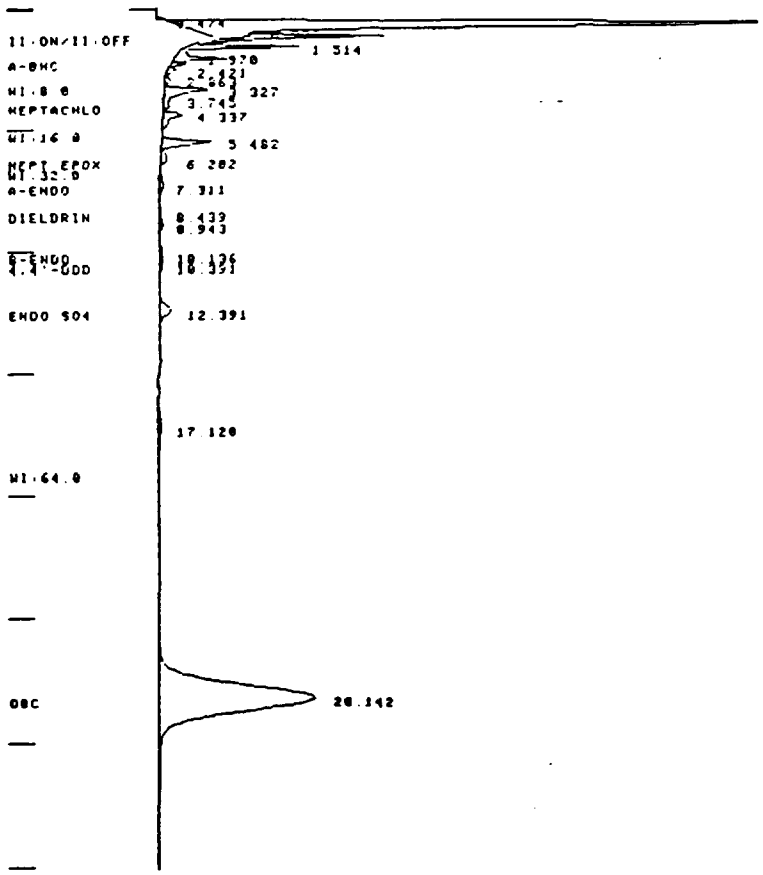
V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 1,000 or W_s _____ V_t 10,000 V_i 4

CHART SPEED 0.5 CM/MIN
ATTEN: 8 ZERO: 10% 5 MIN/TICK



CHANNEL: 1A - 1 TITLE: RUN# 14 19:51 21 APR 87

SAMPLE: BLANK METHOD: CEPA CALCULATION: ES - ANALYS

PEAK NO	PEAK NAME	RESULT UG/L	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	WI/2 (SEC)
1		0.0000	1.239		52414	BB	2.88
2		0.0000	1.514		63673	BB	4.19
3		0.0000	1.970		51630	VV	4.88
4		0.0000	3.327		77641	VV	11.56
5		0.0000	4.337		30396	VV	11.63
6		0.0000	5.482		94261	BV	14.56
7	~~ENDO SO4~~	0.0279	12.391	-0.279	41910	VB	29.13
8	DBC	0.7545	28.142	-0.008	1431995	BB	68.94
TOTALS:		0.7825		-0.287	1843920		

DETECTED PKS: 29 REJECTED PKS: 21

DIVISOR: 1.00000 MULTIPLIER: 10.00000

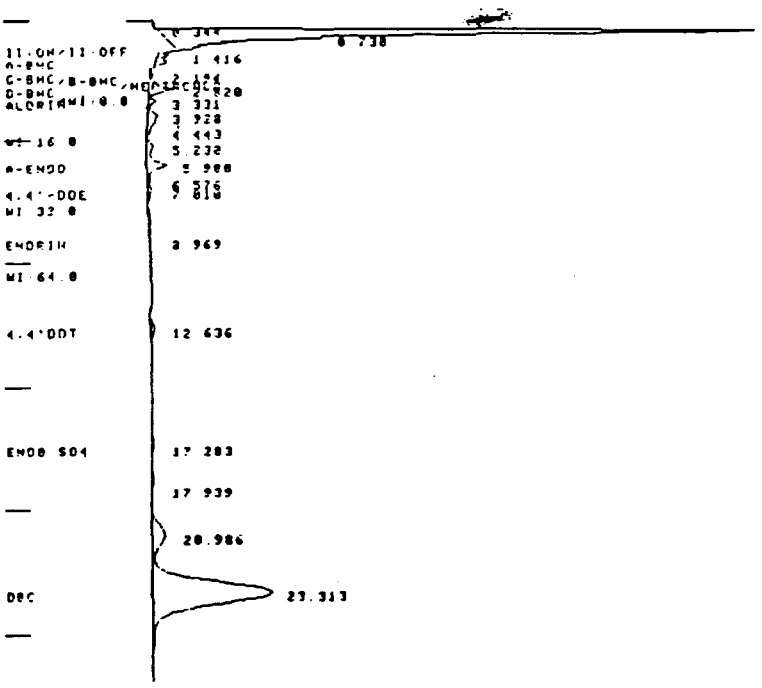
NOISE: 11.4 OFFSET: -9

RACK: 1 VIAL: 14 INJ: 1

NOTES:
NOTEBOOK:297-1,3 ANALYST:RICHARD SAMSON
SECURE AREA: D JOB#:U-5162
INST: VARIAN 6000# 2A ECD 10X1
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
LIQUID PHASE: 3% OV-1
CARRIER GAS: N2 @ 60 ML/MIN
DET: 300 C INJ: 220 C
200 C ISOTHERMAL 4 UL INJECTION
PRIMARY ANALYSIS AUTOSAMPLER
DEAD CREEK

POST RUN:
SAVE FILE: RAW 7010684

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



CHANNEL: 1B - 1 TITLE: RUN# 6 21:10 22 APR 87

SAMPLE: BLANK METHOD: PEPA CALCULATION: ES - ANALYS

PEAK NO	PEAK NAME	RESULT UG/L	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	WI/2 (SEC)
1	~~A-BHC~~	0.0052	1.742	0.002	25327	VB	4.25
2	~~B-BHC~~	0.0153	2.566	0.066	24643	VV	7.06
3	~~B-BHC~~	0.0230	2.820	-0.100	77739	VB	? 10.56
4	~~ALDRIN~~	0.0074	3.331	0.051	27843	BV	10.00
5		0.0000	3.928		41975	VV	? 15.19
6		0.0000	4.074		32198	VV	? 27.13
7	~~HEPT-EPOX~~	0.0125	5.230	0.330	42663	VV	? 23.63
8	~~A-ENDO~~	0.0346	5.980	-0.120	111618	VV	18.50
9	~~4,4'-DDE~~	0.0107	7.010	-0.120	33905	VV	? 59.56
10	~~ENDRIN~~	0.0119	8.969	-0.181	25580	VB	? 66.31
11	~~4,4'-DDT~~	0.0197	12.636	-0.514	43827	BB	52.88
12		0.0000	20.986		189855	VV	55.88
13	DBC	0.8194	23.313	-0.007	1889177	VV	59.75
TOTALS:		0.9597		-0.653	2566350		

DETECTED PKS: 27 REJECTED PKS: 14

DIVISOR: 1.00000 MULTIPLIER: 10.00000

NOISE: 34.3 OFFSET: -8

NOTES:
NOTEBOOK:297-5 ANALYST:RICHARD SAMSON
SECURE AREA:D JOB #U-5162
INST:VARIAN 6000#2B ECD 10X1 ATTN:8X
COLUMN: 6' GLASS 4MM ID 100/120 SUPELCOPORT
PHASE:1.5% SP2250/1.95% SP2401
CARRIER GAS: N2 @ 60 ML/MIN.
CET:300 C INJ:220 C
200 C ISOTHERMAL 4 UL INJECTION
CONFIRMATION DEAD CREEK WATERS

POST RUN:
SAVE FILE: RAW 5162226