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ECOLOGY AND ENVIRONMENT
REPORT PACKAGE
LEVEL II

September 1, 1993

HERITAGE®

HERITAGE LABORATORIES, INC.

Q 228

ECOLOGY AND ENVIRONMENT
REPORT PACKAGE
LEVEL II

C149650-53
TO5-P308-809

September 1, 1993

Recycled Paper

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Q 228

EMS HERITAGE LABORATORIES, INC.

1319 Marquette Dr.
Romeoville, IL 60441
Phone: 708/378-1600
FAX: 708/378-2200

REPORT PACKAGE

HERITAGE LABORATORIES, INC.
ROMEOVILLE, ILLINOIS

Sample Number(s): C149650-53

Analytes of Interest: VARIOUS

Instrument(s) Used: VARIOUS

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92CK1308.R4

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REPORT PACKAGE

HERITAGE LABORATORIES, INC.
ROMEOVILLE, ILLINOIS

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92CX1308.R4

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ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 5
230 South Dearborn Street
Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD

Z117422

PROJ. NO.: 2T2051
PROJECT NAME: USS T05-P308-809
SAMPLERS: (Signature) John Nordine + Lisa Ende

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	VOAS (Total organics)	Reactive + Total CN (water)	Total Metals (Total Inorg)	SVOAS			REMARKS
Lagoon 1	8/13	AM		Y	outfall -	3x40ml	X	X	X	X			C149650
Lagoon 2				Y	outfall	1-1L Pl.	X	X	X	X			C149651
DW4				Y	well by substation 5	1-1LPL	X	X	X	X			C149652
DW2				Y	well by substation 5	2-8oz	X	X	X	X			C149653
													* TC constituents not covered in other analyses - use xtra plastic 1L + 1L amber
					QA level II								
					TAT 14 verbal calendar, 21 hard copy calendar days								Send FAX Results to 6777 Engle Rd Cleveland OH 44130 216-243-3330 c/o Emily Landis FAX #216 243 6923

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	8/13/93 1530	John Nordine	John Nordine	8/16/93 1445	
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	
		[signature]	8/16/93 14:45	EMS Heritage 1319 Marquette Drive Romeoville, IL 60441 708 378 1600 ATT: Sample Receiving	

Distribution: White — Accompanies Shipment; Pink — Coordinator Field Files; Yellow — Laboratory File

ecology and environment, inc.
6777 ENGLE ROAD, CLEVELAND, OHIO 44130, TEL. (216) 243-3330
International Specialists in the Environment

TO: SAMPLE CUSTODIAN

UPON RECEIPT OF SAMPLES, PLEASE SIGN AND FAX A COPY OF THE CHAIN-OF-CUSTODY TO:

ECOLOGY & ENVIRONMENT, INC.
FAX: 216-243-6923
ATTN: EMILY LANDIS

SEND SAMPLE DATA TO:

ECOLOGY & ENVIRONMENT, INC.
6777 ENGLE ROAD
CLEVELAND OH 44130
ATTN: EMILY

This memo accompanies EPA Chain of Custody number:

[illegible]
[illegible] 8/17/93

002

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CASE NARRATIVE

This package includes data for the water samples numbered #C149650-653. The samples numbered C149650-651 and -653 were analyzed on 8/17/93 and the sample C149652 was analyzed on 8/19/93. Four points of the initial calibration curve were analyzed on 7/30/93 and the remaining point was analyzed on 8/12/93. There were two method blanks associated with these samples and there were no target compounds detected in these blanks. The sample numbered C149652 was also analyzed as the matrix spike and spike duplicte. None of the values were out of the QC limits for these spiked samples. The sample numbered C149652 had also exhibited poor surrogate recovery which was evident again in the matrix spike and spike duplicate, therefore proving poor recovery due to sample matrix. In addition, the sample C149653 had to be reanalyzed at a higher dilution as the compound Benzene was outside of the linear calibration range in the first sample analysis. An unknown C9 hydrocarbon was also found as a TIC (tentatively identified compound) in all of the samples.

Susan Sherp
VOA GC/MS
8/30/93

5A

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

Lab Name: Heritage Labs Contract: _____

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

Lab File ID: TA290 BFB Injection Date: 7/30/93

Instrument ID: HP5970-49 BFB Injection Time: 8:19

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	35.84
75	30.0 - 60.0% of mass 95	57.37
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	8.83
173	Less than 2.0% of mass 174	1.07 (1.81) 1
174	Greater than 50.0% of mass 95	59.02
175	5.0 - 9.0% of mass 174	4.95 (8.38) 1
176	Greater than 95.0%, but less than 101.0% of mass 174	56.60 (95.89) 1
177	5.0 - 9.0% of mass 176	3.49 (6.17) 2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		200 PPB STD	CA012	7/30/93	11:36
02		150 PPB STD	CA013	7/30/93	12:22
03		100 PPB STD	CA014	7/30/93	13:04
04		20 PPB STD	CA015	7/30/93	13:47
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					004
16					
17					
18					
19					
20					
21					
22					

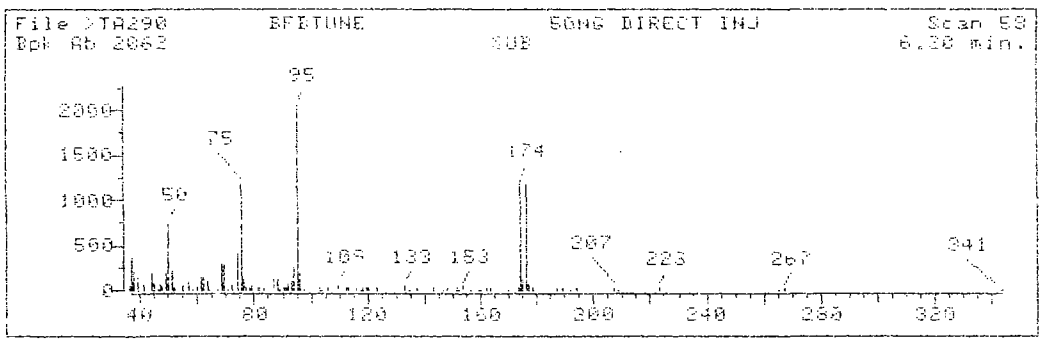
page __ of __

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	35.84	35.84	Ok
75	30-60% of mass 95	57.37	57.37	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	8.83	8.83	Ok
173	Less than 2% of mass 174	1.07	1.81	Ok
174	Greater than 50% of mass 95	59.02	59.02	Ok
175	5-9% of mass 174	4.95	8.38	Ok
176	95-101% of mass 174	56.60	95.89	Ok
177	5-9% of mass 176	3.49	6.17	Ok

Injection Date: 07/30/93
Injection Time: 08:19
Data File: >TA290
Scan: 58



005

>TA290 BFBTUNE SONG DIRECT INJ
52 SUB MSM

File: >TA290 Scan #: 58 Retn. time: 6.20

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.00	1.891	62.10	6.984	89.10	.048	119.20	1.067	170.20	.339
37.15	16.731	63.10	4.753	90.10	.873	120.20	.582	173.20	1.067
38.05	10.184	64.10	.485	91.10	1.261	123.25	1.115	174.10	59.020
39.15	7.129	67.15	.291	92.10	3.540	129.25	1.406	175.10	4.947
41.15	3.346	68.15	13.628	93.15	4.510	133.25	2.425	176.10	56.596
44.05	8.972	69.15	15.470	94.15	12.270	134.15	.242	177.10	3.492
45.05	3.734	70.15	.145	95.15	100.000	135.20	.048	178.25	.824
46.05	.097	72.15	2.279	96.15	8.826	137.10	.582	187.15	.582
47.05	2.958	74.15	19.835	97.15	.436	143.20	.533	189.25	.776
47.95	1.212	75.15	57.371	99.15	.048	146.20	.194	192.20	.339
49.05	8.147	76.05	4.995	103.15	.533	148.20	.727	194.20	.679
50.05	35.839	77.15	1.261	104.15	.242	151.25	1.261	207.25	1.212
51.10	10.087	78.05	.630	106.15	.727	152.25	.436	208.25	.291
52.10	.582	79.10	2.667	109.30	2.037	153.25	1.843	223.30	1.455
55.10	2.085	81.10	1.406	112.20	.824	156.25	.339	265.25	.048
57.10	3.977	82.10	1.018	113.20	.970	159.25	.436	267.25	.679
58.10	.194	83.20	.630	116.20	1.261	160.25	.436	341.30	.485
60.10	1.067	87.10	5.044	117.10	.048	162.25	.727	342.30	.194
61.10	6.111	88.10	5.092	118.20	1.115	163.20	.873	343.30	.194

5A

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

Lab Name: Heritage Labs Contract: _____

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

Lab File ID: TA302 BFB Injection Date: 8/12/93

Instrument ID: HP5970-49 BFB Injection Time: 8:34

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	31.76
75	30.0 - 60.0% of mass 95	54.61
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	7.76
173	Less than 2.0% of mass 174	0.00 (0.00) 1
174	Greater than 50.0% of mass 95	54.08
175	5.0 - 9.0% of mass 174	4.25 (7.87) 1
176	Greater than 95.0%, but less than 101.0% of mass 174	52.11 (96.37) 1
177	5.0 - 9.0% of mass 176	3.64 (6.98) 2

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

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

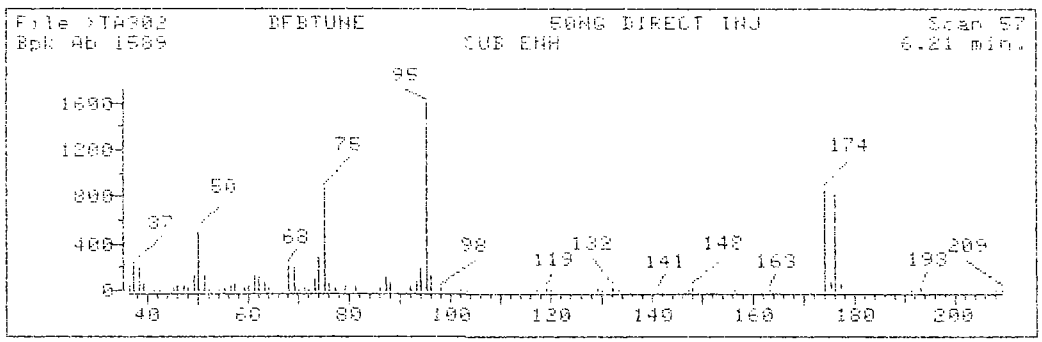
	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		50 PPB STD	VA105	8/12/93	9:49
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	31.76	31.76	Ok
75	30-60% of mass 95	54.61	54.61	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.76	7.76	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	54.08	54.08	Ok
175	5-9% of mass 174	4.25	7.87	Ok
176	95-101% of mass 174	52.11	96.37	Ok
177	5-9% of mass 176	3.64	6.98	Ok

Injection Date: 08/12/93
Injection Time: 08:34
Data File: >TA302
Scan: 57



>TA302 BFBTUNE 50NG DIRECT INJ

File: >TA302 Scan #: 57 Retn. time: 6.21

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.15	1.978	54.10	.252	72.05	.478	94.15	11.868	141.20	.491
37.05	12.610	55.10	.692	73.15	5.386	95.15	100.000	147.20	.076
38.15	11.754	56.20	1.649	74.15	17.569	96.15	7.765	148.20	1.208
39.15	3.977	57.20	3.046	75.05	54.606	98.15	.541	156.25	1.007
41.15	.126	59.10	.906	76.15	3.675	102.15	.277	163.20	.428
42.15	.302	60.10	2.089	77.15	.629	103.15	.415	174.10	54.078
45.05	1.372	61.10	7.702	79.10	1.749	117.20	.013	175.20	4.254
46.05	2.479	62.10	6.733	81.10	1.988	119.20	1.334	176.10	52.114
47.05	3.083	63.10	4.052	86.10	1.359	120.20	.415	177.10	3.637
48.05	1.321	64.10	.780	87.10	6.066	129.15	.591	191.15	.189
49.05	7.564	68.15	13.416	88.10	4.820	130.15	.252	193.20	1.359
50.05	31.764	69.15	11.440	91.10	.239	132.15	1.460	208.25	.050
51.10	8.004	70.15	.453	92.10	2.530	133.25	1.032	209.25	.289
52.10	.440	71.15	.667	93.15	4.531	135.20	.214		

5A

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

Lab Name: Heritage Labs Contract: _____

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

Lab File ID: IA305 BFB Injection Date: 8/17/93

Instrument ID: HP5970-49 BFB Injection Time: 8:45

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	38.74
75	30.0 - 60.0% of mass 95	58.33
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	7.81
173	Less than 2.0% of mass 174	0.00 (0.00)1
174	Greater than 50.0% of mass 95	53.68
175	5.0 - 9.0% of mass 174	4.04 (7.53)1
176	Greater than 95.0%, but less than 101.0% of mass 174	52.83 (98.43)1
177	5.0 - 9.0% of mass 176	4.46 (8.43)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		50 PPB STD	VA108	8/17/93	9:01
02		Lab Blank	BA108	8/17/93	10:37
03		C149650 (1:5)	A1147	8/17/93	11:20
04		C149651 (1:5)	A1151	8/17/93	14:31
05		C149653 (1:5) Rep.	A1150	8/17/93	13:37
06					
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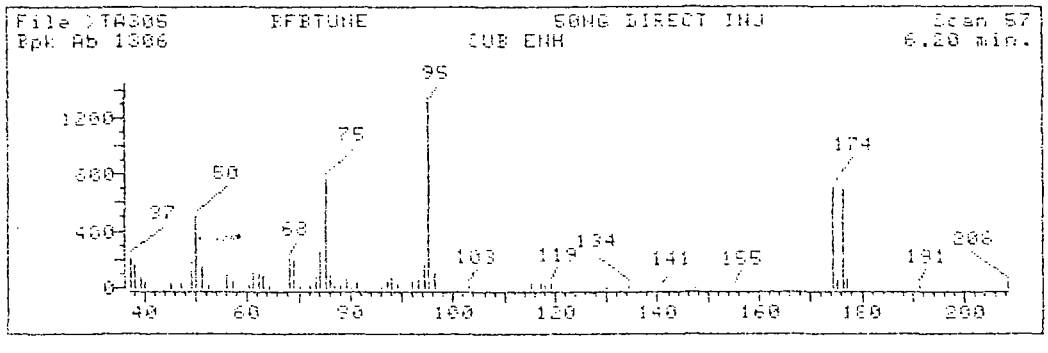
20					
21					
22					

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	38.74	38.74	Ok
75	30-60% of mass 95	58.33	58.33	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.81	7.81	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	53.68	53.68	Ok
175	5-9% of mass 174	4.04	7.53	Ok
176	95-101% of mass 174	52.83	98.43	Ok
177	5-9% of mass 176	4.46	8.43	Ok

Injection Date: 09/17/93
Injection Time: 09:45
Data File: >TA305
Scan: 57



011

File: >TA305 Scan #: 57 Retn. time: 6.20

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.15	16.401	57.10	3.492	75.15	58.331	93.15	4.686	134.25	1.440
38.05	11.332	60.10	.567	76.15	6.570	94.15	11.853	141.20	.015
39.15	5.865	61.10	7.887	77.05	.689	95.15	100.000	147.20	.046
40.05	3.063	62.10	7.106	78.05	.750	96.15	7.810	155.25	.444
45.15	1.884	63.10	6.723	79.10	4.472	103.05	1.332	174.10	53.675
47.15	2.588	64.10	1.424	80.10	.260	115.20	1.715	175.10	4.043
48.05	.842	68.15	15.773	81.10	3.522	117.10	1.853	176.10	52.833
49.05	8.836	69.05	14.793	86.10	.398	118.20	.613	177.10	4.456
50.05	38.744	70.15	1.026	87.10	5.865	119.20	2.603	191.15	1.424
51.10	10.689	72.15	1.194	88.10	5.666	130.05	.214	207.25	.459
52.20	1.194	73.15	5.176	89.10	1.685	133.15	.138	208.25	2.910
56.10	5.957	74.15	18.897	92.10	3.124				

5A

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

Lab Name: Heritage Labs Contract: _____

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

Lab File ID: TA307 BFB Injection Date: 8/19/93

Instrument ID: HP5970-49 BFB Injection Time: 7:53

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	34.30
75	30.0 - 60.0% of mass 95	55.56
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	5.75
173	Less than 2.0% of mass 174	0.00 (0.00) 1
174	Greater than 50.0% of mass 95	53.56
175	5.0 - 9.0% of mass 174	4.33 (8.09) 1
176	Greater than 95.0%, but less than 101.0% of mass 174	52.42 (97.87) 1
177	5.0 - 9.0% of mass 176	4.10 (7.83) 2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		50 PPB STD	VA110	8/19/93	8:15
02		Lab Blank	BA110	8/19/93	9:58
03		C149653 (1:50) Rpl	A1165	8/19/93	10:41
04		C149652	A1171	8/19/93	14:39
05		C149652 MS	A1172	8/19/93	15:22
06		C149652 MSD	A1173	8/19/93	16:05
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					013

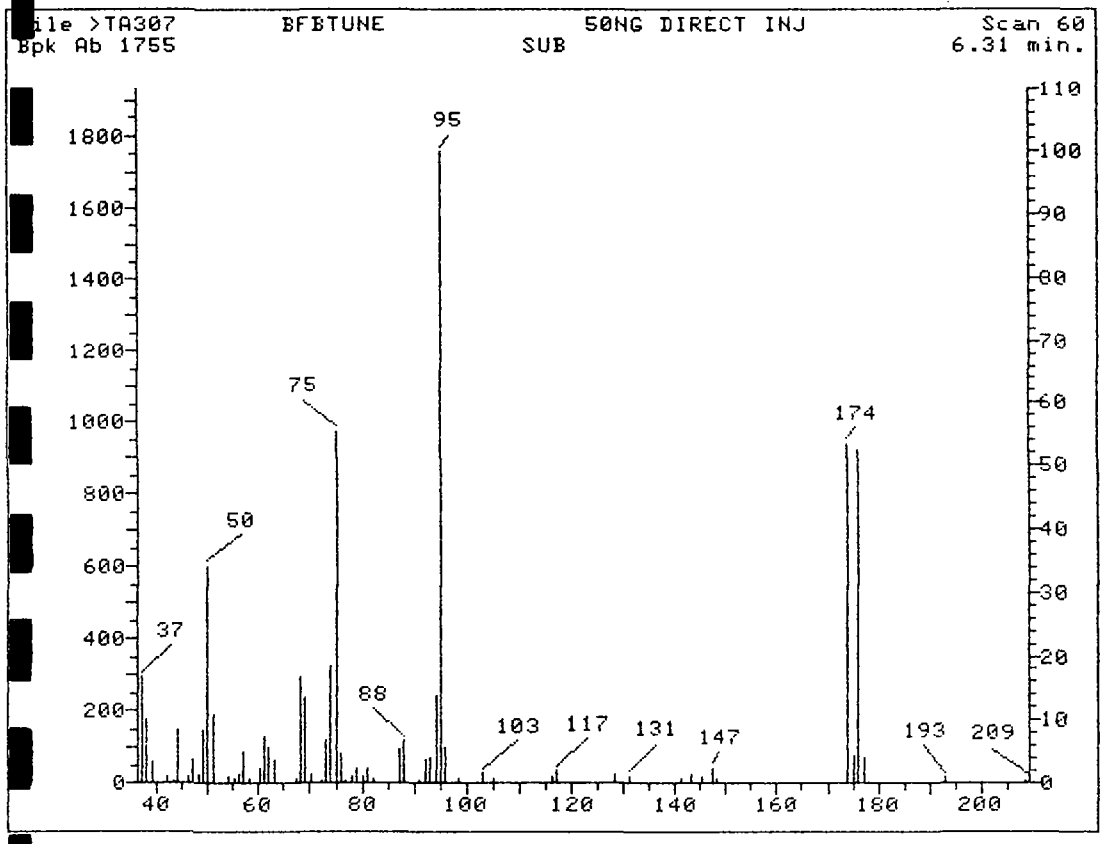
GC/MS Top Level. Select softkey...

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	34.30	34.30	Ok
75	30-60% of mass 95	55.56	55.56	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	5.75	5.75	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	53.56	53.56	Ok
175	5-9% of mass 174	4.33	8.09	Ok
176	95-101% of mass 174	52.42	97.87	Ok
177	5-9% of mass 176	4.10	7.83	Ok

Injection Date: 08/19/93
Injection Time: 07:53
Data File: >TA307
Scan: 60



014

>TA307 BFBTUNE 50NG DIRECT INJ
60 SUB NRM

File: >TA307 Scan #: 60 Retn. time: 6.31

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.00	3.704	54.10	1.140	72.15	.342	91.10	.399	141.20	.741
37.05	16.752	55.10	.570	73.15	6.667	92.10	3.704	142.20	.057
38.05	10.028	56.10	1.311	74.15	18.576	93.15	4.160	143.20	1.425
39.15	3.419	57.10	5.014	75.15	55.556	94.15	13.675	145.20	1.140
41.15	.171	58.10	.627	76.05	4.672	95.15	100.000	147.20	2.507
42.15	.912	59.10	.057	77.05	.228	96.15	5.755	148.10	.855
43.15	.285	60.10	2.336	78.15	1.197	98.25	.798	174.10	53.561
44.05	8.319	61.10	7.293	79.00	2.222	103.05	1.709	175.10	4.330
46.05	.969	62.10	5.755	80.00	1.140	105.15	.684	176.10	52.422
47.05	3.647	63.10	3.875	81.10	2.336	116.20	1.197	177.10	4.103
48.05	1.368	67.15	.684	82.20	.798	117.10	1.994	193.20	1.026
49.05	8.433	68.15	16.752	85.20	.171	128.15	1.254	208.25	.399
50.05	34.302	69.15	13.447	87.10	5.413	131.05	1.140	209.25	.456
51.10	10.940	70.15	1.538	88.10	6.667				

Initial Calibration Data
HSL Compounds

Case No: _____ Instrument ID: GC/MSD-A

Contractor: _____ Calibration Date: 08/12/93

Contract No: _____

Water Curve
CA0812

Minimum $\overline{RF}$ for SPCC is 0.300 Maximum % RSD for CCC is 30.0%

Laboratory ID:	>CA015	>UA105	>CA014	>CA013	>CA012				
	RF	RF	RF	RF	RF				
Compound	20.00	50.00	100.00	150.00	200.00	$\overline{RF}$	% RSD	CCC	SPCC
Chloromethane	1.79848	2.09764	1.38438	1.54024	2.04264	1.77267	17.477		**
Bromomethane	2.33546	2.26251	2.06619	2.25415	2.34947	2.25356	5.015		
Vinyl Chloride	2.19024	2.59395	1.91906	2.13903	2.38798	2.24605	11.409	*	
Chloroethane	1.59986	1.64580	1.49454	1.64692	1.71281	1.61998	4.991		
Methylene Chloride	2.79318	2.21563	2.66530	2.69411	2.70641	2.61292	8.704		
Acetone	.57407	.38417	.44985	.58252	.44935	.47199	15.007		
Carbon Disulfide	4.33990	4.69789	4.10660	4.56570	4.49807	4.44163	5.120		
Trichlorofluoromethane	4.37336	3.11549	4.19511	4.37858	4.53558	4.11963	13.936		
1,1-Dichloroethene	1.79218	1.55989	1.72593	1.79799	1.81160	1.73752	6.024	*	
1,1-Dichloroethane	5.81199	4.71786	5.44113	5.64351	5.74786	5.47247	8.125		**
1,2-Dichloroethene	2.17594	1.68093	1.92509	1.96264	1.92661	1.93424	9.086		
Chloroform	5.19759	4.17870	4.92829	5.08603	5.21014	4.92009	8.736	*	
1,2-DICHLOROETHANE-d4	3.08333	2.73759	3.22945	3.29610	3.78300	3.20989	12.086		(Conc=50.0,50.0,50.0,50.0,50.0)
1,2-Dichloroethane	4.08333	3.05328	3.78255	3.83767	4.15004	3.77737	11.764		
2-Butanone	.79618	.74052	.80580	.75836	.79715	.77961	3.655		
1,1,1-Trichloroethane	.85182	.66128	.78959	.83953	.83997	.79644	9.953		
Carbon Tetrachloride	.64470	.50802	.62677	.66320	.66955	.62285	10.622		
Vinyl Acetate	.78210	.81829	.95418	1.14267	1.02909	.94527	15.764		
Bromodichloromethane	1.06941	.89256	1.04414	1.09877	1.08882	1.03516	7.871		
1,2-Dichloropropane	.79189	.67198	.72829	.76293	.76586	.74419	6.218	*	
cis-1,3-Dichloropropene	.62109	.51707	.56831	.57452	.59640	.57402	6.794		(Conc=25.6,64.0,128.0,192.0,256.0
Trichloroethene	.64470	.52255	.58252	.61700	.68022	.60940	9.999		
Benzene	1.45489	1.22746	1.34746	1.43607	1.41199	1.37597	6.725		
Dibromochloromethane	.63489	.53852	.60903	.68379	.66370	.60999	7.624		
1,1,2-Trichloroethane	.43539	.37308	.39980	.38570	.41331	.40146	6.036		
trans-1,3-Dichloropropene	1.03996	.86587	.92544	.90776	1.00664	.94897	7.616		(Conc=14.4,36.0,72.0,108.0,144.0)
2-Chloroethyl Vinyl Ether	.33245	.28791	.31277	.30104	.34703	.31624	7.511		
Bromoform	.32508	.28456	.33105	.33269	.35744	.32616	8.078		**
4-Methyl-2-Pentanone	.56452	.56314	.55669	.57060	.54699	.56039	1.601		
2-Hexanone	.36450	.33839	.34863	.33240	.32595	.33995	4.806		
Tetrachloroethene	.49010	.41751	.46375	.49733	.48572	.47098	6.872		
1,1,2,2,-Tetrachloroethane	.76909	.72764	.75482	.80101	.50461	.71343	16.764		**

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

$\overline{RF}$ - Average Response Factor

RSD - Percent Relative Standard Deviation

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

016

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: GC/MSD-A

Contractor: Calibration Date: 08/12/93

Contract No:

Minimum $\overline{RF}$ for SPCC is 0.300 Maximum % RSD for CCC is 30.0%

Laboratory ID:	>CA015	>VA105	>CA014	>CA013	>CA012				
	RF	RF	RF	RF	RF	$\overline{RF}$			
Compound	20.00	50.00	100.00	150.00	200.00		% RSD	CCC	SPCC	
TOLUENE-d8	1.34518	1.35084	1.35193	1.32325	1.32081	1.34000	1.278			(Conc=50.0,50.0,50.0,50.0,50.0)
Toluene	1.02681	.87590	.35557	.97100	.95531	.95692	5.640	*		
Chlorobenzene	1.25272	1.05260	1.14715	1.15976	1.15954	1.15436	6.147		**	
Ethyl Benzene	.58453	.49056	.53598	.53213	.55223	.53909	6.325	*		
4-BROMOFLUOROBENZENE	1.11182	1.04879	1.10557	1.02710	1.13725	1.08611	4.252			(Conc=50.0,50.0,50.0,50.0,50.0)
Styrene	1.02614	.90707	.89295	.94660	.97337	.94923	5.636			
Total Xylenes	.59981	.53449	.54700	.58990	.55952	.57414	5.410			
1,3-Dichlorobenzene	1.07824	.85875	.98874	.97397	1.00863	.98167	8.097			
1,2-Dichlorobenzene	.97822	.85897	.88163	.89797	.97775	.91691	6.059			
1,4-Dichlorobenzene	.92343	.80044	.96067	.97910	.94625	.92358	7.807			

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

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

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

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 08/17/93

Contractor: Time: 09:01

Contract No: Laboratory ID: >VA108

Instrument ID: GC/MSD-A Initial Calibration Date: 08/12/93

Minimum $\overline{RF}$ for SPCC is 0.300 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Chloromethane	1.77267	2.72688	53.83		**	
Bromomethane	2.25356	2.42456	7.59			
Vinyl Chloride	2.24605	2.78442	23.97	*		
Chloroethane	1.61999	1.87607	15.81			
Methylene Chloride	2.51292	2.11965	18.88			
Acetone	.47199	.53311	12.95			
Carbon Disulfide	4.44163	4.98830	12.31			
Trichlorofluoromethane	4.11963	3.55480	13.71			
1,1-Dichloroethene	1.73752	1.50624	13.31	*		
1,1-Dichloroethane	5.47247	5.07095	7.34		**	
1,2-Dichloroethene	1.93424	1.72524	10.81			
Chloroform	4.82089	4.53219	7.88	*		
1,2-DICHLOROETHANE-d4	3.38399	3.14104	2.15			
1,2-Dichloroethane	3.77737	3.61759	4.23			
2-Butanone	.77961	.96091	23.26			
1,1,1-Trichloroethane	.79644	.76328	4.16			
Carbon Tetrachloride	.62285	.58438	6.18			
Vinyl Acetate	.94527	1.03179	9.15			
Bromodichloromethane	1.03516	.99627	3.76			
1,2-Dichloropropane	.74415	.69619	6.45	*		
cis-1,3-Dichloropropene	.57402	.54142	5.68			(Conc=64.00)
Trichloroethene	.60940	.55040	9.68			
Benzene	1.37597	1.29058	6.21			
Dibromochloromethane	.60999	.59110	3.10			
1,1,2-Trichloroethane	.40146	.39326	2.04			
trans-1,3-Dichloropropene	.94897	.93430	1.55			(Conc=36.00)
2-Chloroethyl Vinyl Ether	.31624	.30958	2.11			
Bromoform	.32616	.31386	3.77		**	
4-Methyl-2-Pentanone	.56039	.68320	21.92			
2-Hexanone	.33995	.41822	23.02			
Tetrachloroethene	.47088	.43615	7.38			
1,1,2,2,-Tetrachloroethane	.71543	.76294	7.78		**	

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

$\overline{RF}$ - 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: Calibration Date: 08/17/93

Contractor: Time: 09:01

Contract No: Laboratory ID: >VA108

Instrument ID: GC/MSD-A Initial Calibration Date: 08/12/93

Minimum $\overline{RF}$ for SPCC is 0.300 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
TOLUENE-d8	1.34080	1.37010	2.25		
Toluene	.95692	.89695	6.27	*	
Chlorobenzene	1.15436	1.07697	6.70		**
Ethyl Benzene	.53909	.58077	7.11	*	
4-BROMOFLUOROBENZENE	1.09611	1.08228	.25		
Styrene	.94923	.97178	2.38		
Total Xylenes	.57414	.57906	.86		
1,3-Dichlorobenzene	.98167	.95160	3.06		
1,2-Dichlorobenzene	.91891	.93556	1.81		
1,4-Dichlorobenzene	.92358	.88487	4.19		

RF - Response Factor from daily standard file at 50.00 NG NG

$\overline{RF}$ - 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: Calibration Date: 08/19/93

Contractor: Time: 08:15

Contract No: Laboratory ID: >VA110

Instrument ID: GC/MSD-A Initial Calibration Date: 08/12/93

Minimum $\overline{RF}$ for SPCC is 0.300 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Chloromethane	1.77267	1.98032	11.71		**	
Bromomethane	2.25356	2.40221	6.60			
Vinyl Chloride	2.24605	2.54653	13.38	*		
Chloroethane	1.61998	1.81527	12.05			
Methylene Chloride	2.61292	2.22358	14.90			
Acetone	.47189	.53967	14.34			
Carbon Disulfide	4.44163	4.87875	9.84			
Trichlorofluoromethane	4.11963	3.28127	20.35			
1,1-Dichloroethene	1.73752	1.60907	7.39	*		
1,1-Dichloroethane	5.47247	5.11491	6.53		**	
1,2-Dichloroethene	1.93424	1.80691	6.58			
Chloroform	4.92009	4.54574	7.61	*		
1,2-DICHLOROETHANE-d4	3.20989	2.81939	12.17			
1,2-Dichloroethane	3.77737	3.33420	11.73			
2-Butanone	.77961	.89680	15.03			
1,1,1-Trichloroethane	.79644	.72389	9.11			
Carbon Tetrachloride	.62285	.55486	10.92			
Vinyl Acetate	.94527	.93051	1.56			
Bromodichloromethane	1.03516	.98055	5.28			
1,2-Dichloropropane	.74419	.72404	2.71	*		
cis-1,3-Dichloropropene	.57402	.54677	4.75			(Conc=64.00)
Trichloroethene	.60940	.55496	8.93			
Benzene	1.37597	1.31762	4.24			
Dibromochloromethane	.60599	.57478	5.12			
1,1,2-Trichloroethane	.40146	.40033	.27			
trans-1,3-Dichloropropene	.94897	.93480	1.49			(Conc=56.00)
2-Chloroethyl Vinyl Ether	.31624	.31057	1.79			
Bromoform	.32616	.30094	7.73		**	
4-Methyl-2-Pentanone	.56839	.57653	2.88			
2-Hexanone	.33995	.35252	3.70			
Tetrachloroethene	.47088	.41696	11.45			
1,1,2,2,-Tetrachloroethane	.71343	.76832	6.57		**	

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

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

%Diff - % Difference from original average or curve

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

020

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 08/19/93

Contractor: Time: 08:15

Contract No: Laboratory ID: >VA110

Instrument ID: GC/MSD-A Initial Calibration Date: 08/12/93

Minimum $\overline{RF}$ for SPCC is 0.300 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
TOLUENE-d8	1.34000	1.31806	1.64		
Toluene	.95692	.89595	6.37	*	
Chlorobenzene	1.15436	1.07456	6.91		**
Ethyl Benzene	.53909	.49227	8.68	*	
4-BROMOFLUOROBENZENE	1.08611	1.01919	6.16		
Styrene	.94923	.89339	5.88		
Total Xylenes	.57414	.54663	4.79		
1,3-Dichlorobenzene	.98167	.88703	9.64		
1,2-Dichlorobenzene	.91891	.79683	13.29		
1,4-Dichlorobenzene	.92358	.84345	8.67		

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

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

%Diff - % Difference from original average or curve

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

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Heritage Labs Contract: _____

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

Lab File ID (Standard): VA108 Date Analyzed: 8/17/93

Instrument ID: HP5970-49 Time Analyzed: 9:01

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

	IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
12 HOUR STD	45640	9.41	198836	19.82	159680	24.61
UPPER LIMIT	91280		397672		319360	
LOWER LIMIT	22820		99418		79840	
EPA SAMPLE NO.						
01 Lab Blank	42166	9.47	182051	19.82	137657	24.666
02 C149650 (1:5)	41877	9.47	188774	19.82	150418	24.666
03 C14965 (1:5)	43835	9.47	201334	19.88	163758	24.666
04 C149653 (1:5)	45818	9.42	217962	19.83	177691	24.62
05						
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17						
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19						
20						
21						
22						

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

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

Column used to flag internal standard area values with an asterisk

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Heritage Labs Contract: _____

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

Lab File ID (Standard): VA110 Date Analyzed: 8/19/93

Instrument ID: HP5970-49 Time Analyzed: 8:15

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

	IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
12 HOUR STD	58740	9.47	257364	19.88	209880	24.67
UPPER LIMIT	117480		514728		419760	
LOWER LIMIT	29370		128682		104940	
EPA SAMPLE NO.						
01 Lab Blank	50009	9.48	214214	19.83	168790	24.67
02 C149653 (1:50) Rep.1	45229	9.48	196731	19.83	157027	24.67
03 C149652	41159	9.50	176649	19.85	133656	24.64
04 C149652 MS	42859	9.49	189812	19.90	144069	24.63
05 C149652 MSD	44523	9.49	188849	19.85	143266	24.63
06						
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22						

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

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

Column used to flag internal standard area values with an asterisk

METHOD BLANK SUMMARY

Case No. _____ Laboratory Name Heritage Labs

FILE ID	DATE OF ANALYSIS	FRACTION	MATRIX	CONC. LEVEL	INST. ID	CAS NUMBER	COMPOUND (HSL, TIC OR UNKNOWN)	CONC.	UNITS	CRQL
BA108	8/17/93		water	low	HP5970-49		N/A		ug/L	
BA110	8/17/93		water	low	HP5970-49		N/A		ug/L	

Comments:

FORM IV

WATER MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Case No. _____ Laboratory Name Heritage Labs

FRACTION	COMPOUND	CONC. SPIKE ADDED (µg/L)	SAMPLE RESULT	CONC. MS	% REC	CONC. MSD	% REC	RPD	QC LIMITS RPD	QC LIMITS RECOVERY
VOA	1,1-Dichloroethene	50	BDL	39	78	40	80	2	14	61-145
	Trichloroethene	↓	↓	46	92	47	94	2	14	71-120
SAMPLE NO.	Chlorobenzene	↓	↓	47	94	49	98	4	13	75-130
	Toluene	↓	(3)	47	88	49	92	4	13	76-125
C149652	Benzene	↓	12	51	78	50	76	3	11	76-127
B/N	1,2,4-Trichlorobenzene								28	39-98
	Acenaphthene								31	46-118
	2,4 Dinitrotoluene								38	24-96
SAMPLE NO.	Di-n-Butylphthalate								40	11-117
	Pyrene								31	26-127
	N-Nitroso-Di-n-Propylamine								38	41-116
_____	1,4-Dichlorobenzene								28	36-97
ACID	Pentachlorophenol								50	9-103
	Phenol								42	12-89
SAMPLE NO.	2-Chlorophenol								40	27-123
	4-Chloro-3-Methylphenol								42	23-97
_____	4-Nitrophenol								50	10-80
PEST	Lindane								15	56-123
	Heptachlor								20	40-131
SAMPLE NO.	Aldrin								22	40-120
	Dieldrin								18	52-126
	Endrin								21	56-121
_____	4,4'-DDT								27	38-127

ADVISORY LIMITS

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

RECOVERY: VOAs 0 out of 10 : outside QC limits
B/N _____ out of _____ : outside QC limits
ACID _____ out of _____ : outside QC limits
PEST _____ out of _____ : outside QC limits

Comments: _____

FORM III

Revision 0
Date September 1986

025

QUANT REPORT

Operator ID: SUEB Quant Rev: 6 Quant Time: 930817 11:57
Output File: ^A1147::SS Injected at: 930817 11:20
Data File: >A1147::E4 Dilution Factor: 1.00000
Name: C149650 (1:5)
Misc: ~~5ML~~ 1ml SAMPLE ECOLOGY ENV.

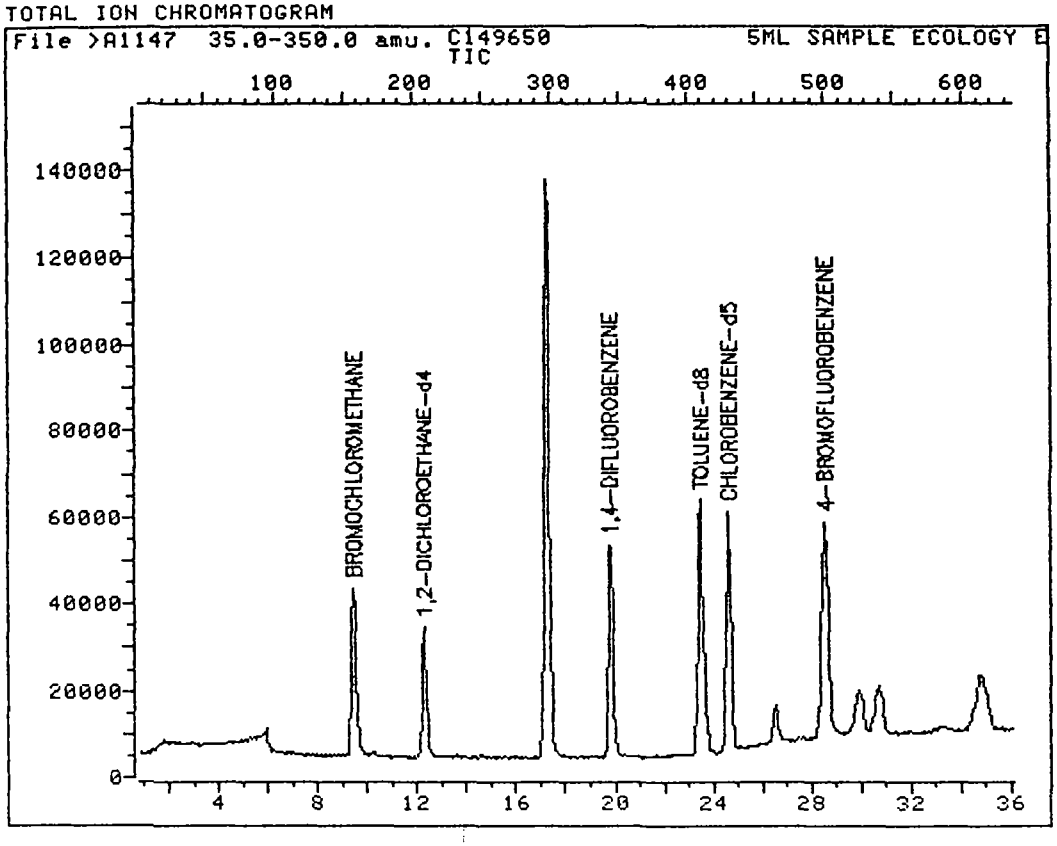
OK
LD
8/17/93

ID File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 930817 10:00

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.47	128.0	41877	50.00	UG/L	100
8)	1,2-DICHLOROETHANE-d4	12.31	65.0	136381	51.84	UG/L	97
21)	*1,4-DIFLUOROBENZENE	19.82	114.0	188774	50.00	UG/L	84
9)	Benzene	17.26	78.0	579687	118.97	UG/L	97
5)	*CHLOROBENZENE-d5	24.66	117.0	150418	50.00	UG/L	88
40)	TOLUENE-d8	23.49	98.0	207219	50.27	UG/L	95
41)	Toluene	23.66	92.0	27545	10.21	UG/L	87
3)	Ethyl Benzene	26.55	106.0	10189	6.76	UG/L	89
44)	4-BROMOFLUOROBENZENE	28.56	95.0	166670	51.19	UG/L	100
46)	Total Xylenes	30.73	106.0	50431M	28.95	UG/L	94

* Compound is ISTD

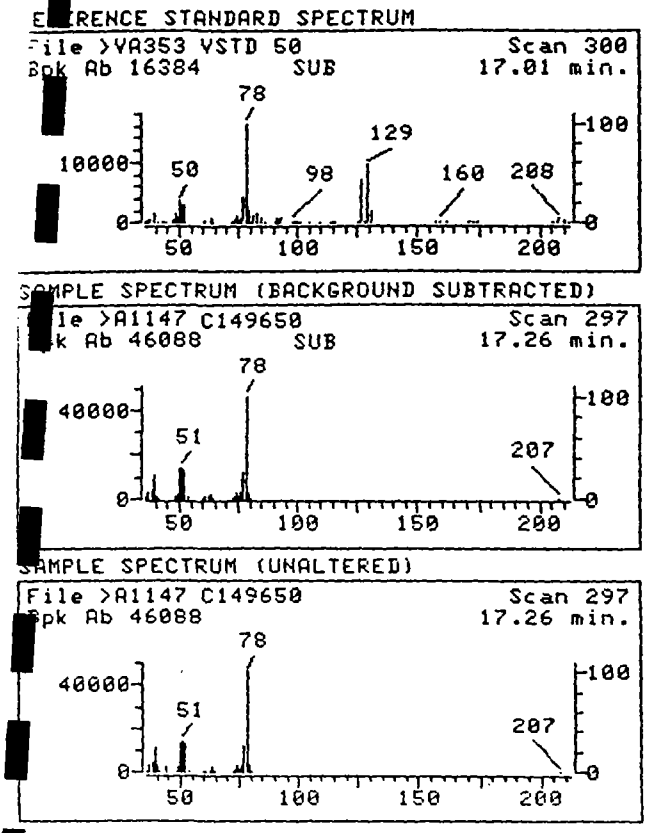
TOTAL ION CHROMATOGRAM

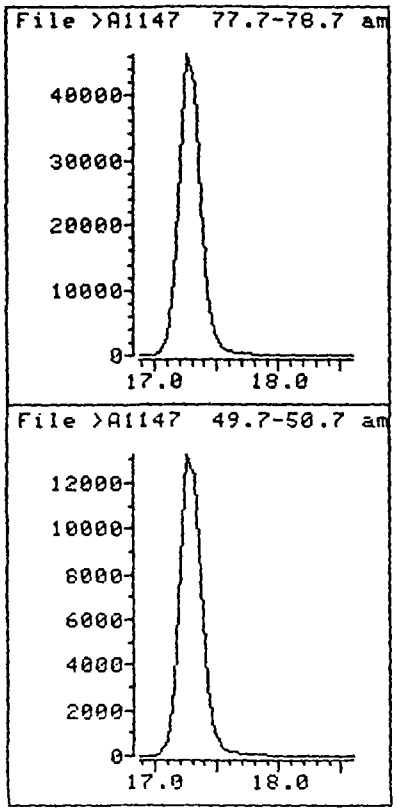


Data File: >A1147::E4 Quant Output File: ^A1147::SS
Name: C149650 (1:5)
Misc: ~~5ML~~ 1ml SAMPLE ECOLOGY ENV.

Id File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 930817 10:00

Operator ID: SUEB
Quant Time: 930817 11:57
Injected at: 930817 11:20





Data File: >A1147::E4
Name: C149650 (1:5)
Misc: ~~5ML~~ SAMPLE ECOLOGY ENV.
Quant Time: 930817 11:57
Injected at: 930817 11:20

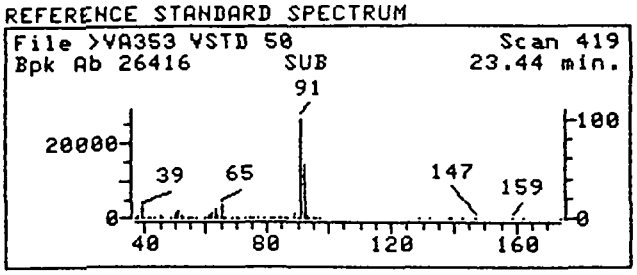
Quant Output File: ^A1147::SS

Quant ID File: IDWVOC::D5
Last Calibration: 930817 10:00

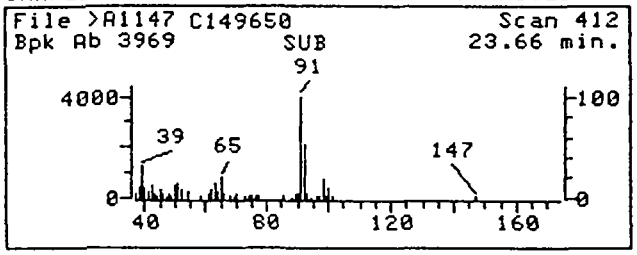
Compound No: 29
Compound Name: Benzene
Scan Number: 297
Retention Time: 17.26 min.
Quant Ion: 78.0
Area: 579687
Concentration: 118.97 UG/L
q-value: 97

C10/2341
8/17/93

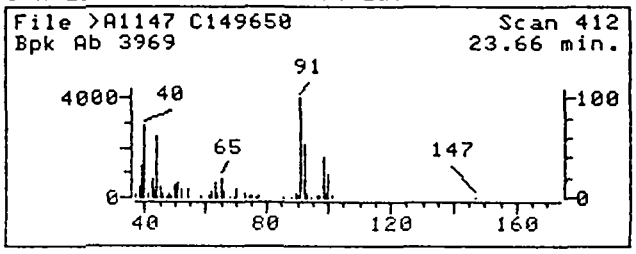
REFERENCE STANDARD SPECTRUM

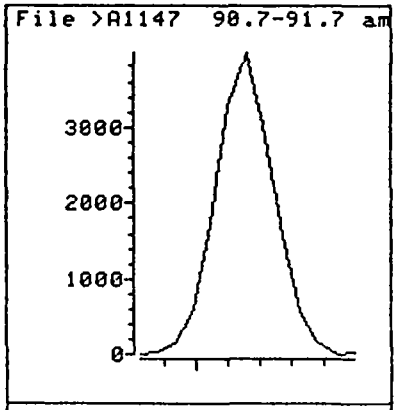


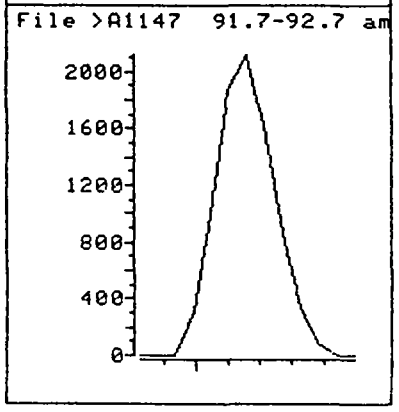
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >A1147::E4
Name: C149650 (1:5)
Misc: ~~5ML~~ SAMPLE ECOLOGY ENV.
Quant Time: 930817 11:57
Injected at: 930817 11:20

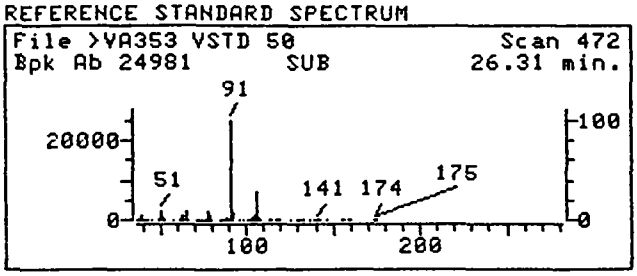
Quant Output File: ^A1147::SS

Quant ID File: IDWVOC::D5
Last Calibration: 930817 10:00

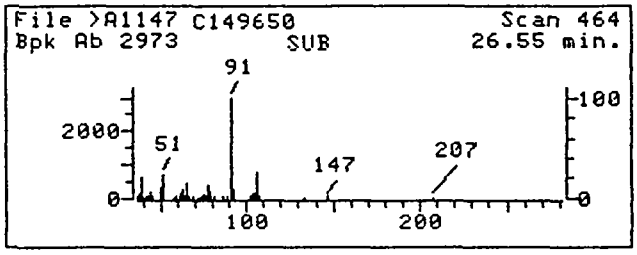
Compound No: 41
Compound Name: Toluene
Scan Number: 412
Retention Time: 23.66 min.
Quant Ion: 92.0
Area: 27545
Concentration: 10.21 UG/L
q-value: 87

✓
LID/2341
8/17/93

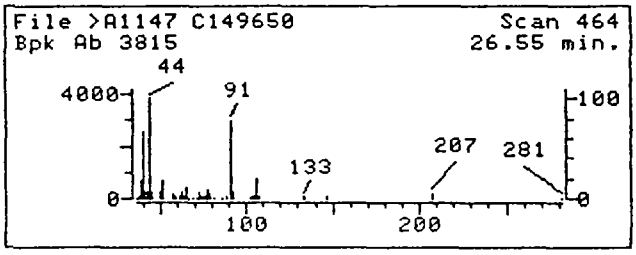
REFERENCE STANDARD SPECTRUM

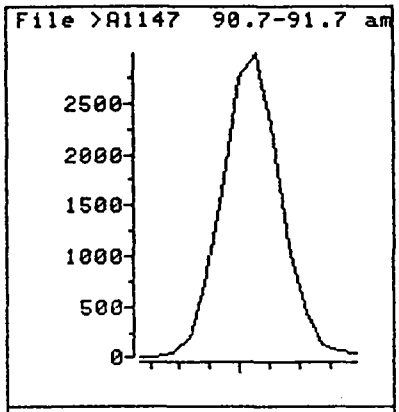


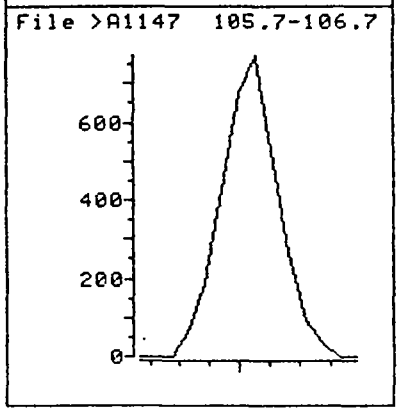
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >A1147::E4
Name: C149650 (1:5)
Misc: ~~5ML~~ SAMPLE ECOLOGY ENV.
Quant Time: 930817 11:57
Injected at: 930817 11:20

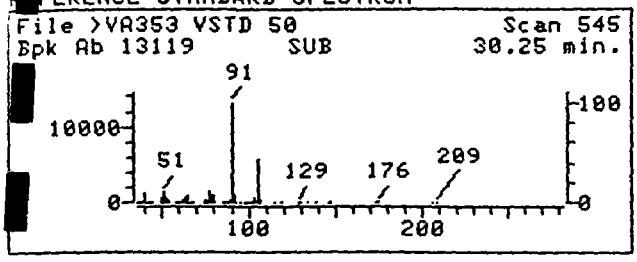
Quant Output File: ^A1147::SS

Quant ID File: IDWVOC::D5
Last Calibration: 930817 10:00

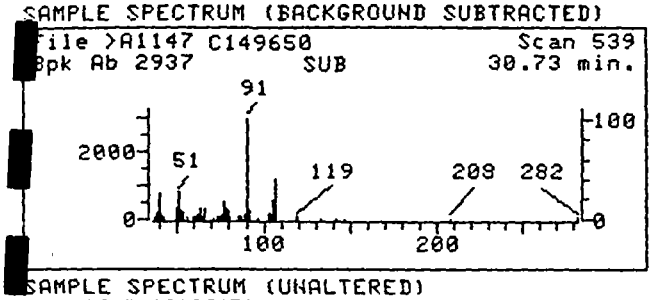
Compound No: 43
Compound Name: Ethyl Benzene
Scan Number: 464
Retention Time: 26.55 min.
Quant Ion: 106.0
Area: 10189
Concentration: 6.76 UG/L
q-value: 89

L10/2361
8/17/93

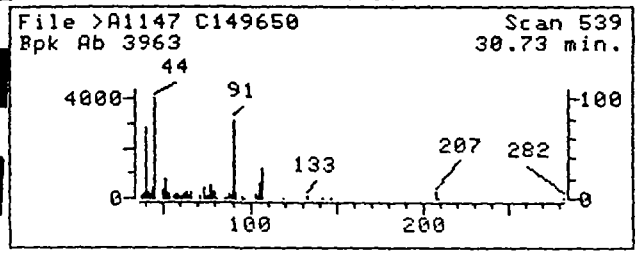
REFERENCE STANDARD SPECTRUM

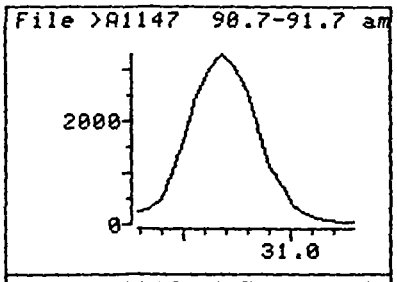


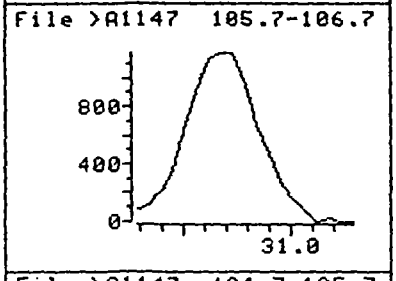
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

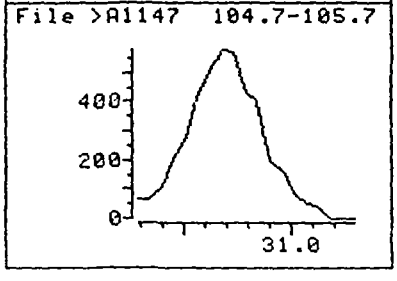


SAMPLE SPECTRUM (UNALTERED)









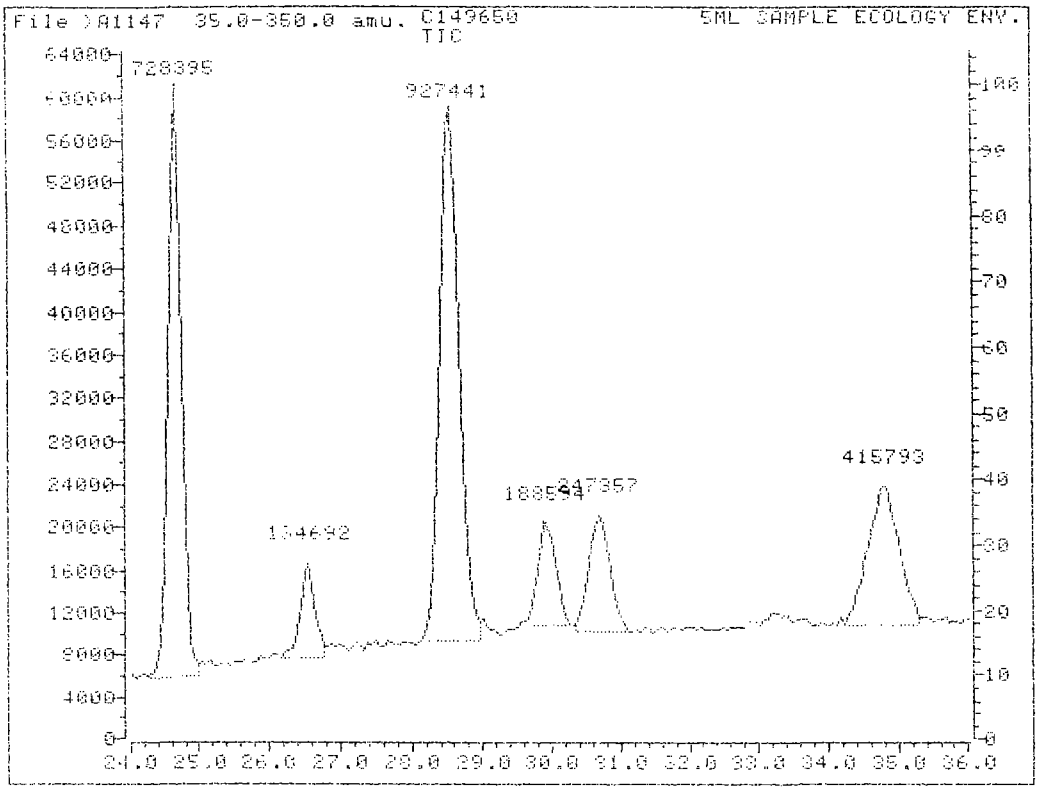
Data File: >A1147::E4
Name: C149650 (1:5)
Misc: ~~5ML~~ SAMPLE ECOLOGY ENV.
Quant Time: 930817 11:57
Injected at: 930817 11:20

Quant Output File: ^A1147::SS

Quant ID File: IDWVOC::D5
Last Calibration: 930817 10:00

Compound No: 46
Compound Name: Total Xylenes
Scan Number: 539
Retention Time: 30.73 min.
Quant Ion: 106.0
Area: 27974
Concentration: ~~16.06~~ UG/L
q-value: 94 18.95

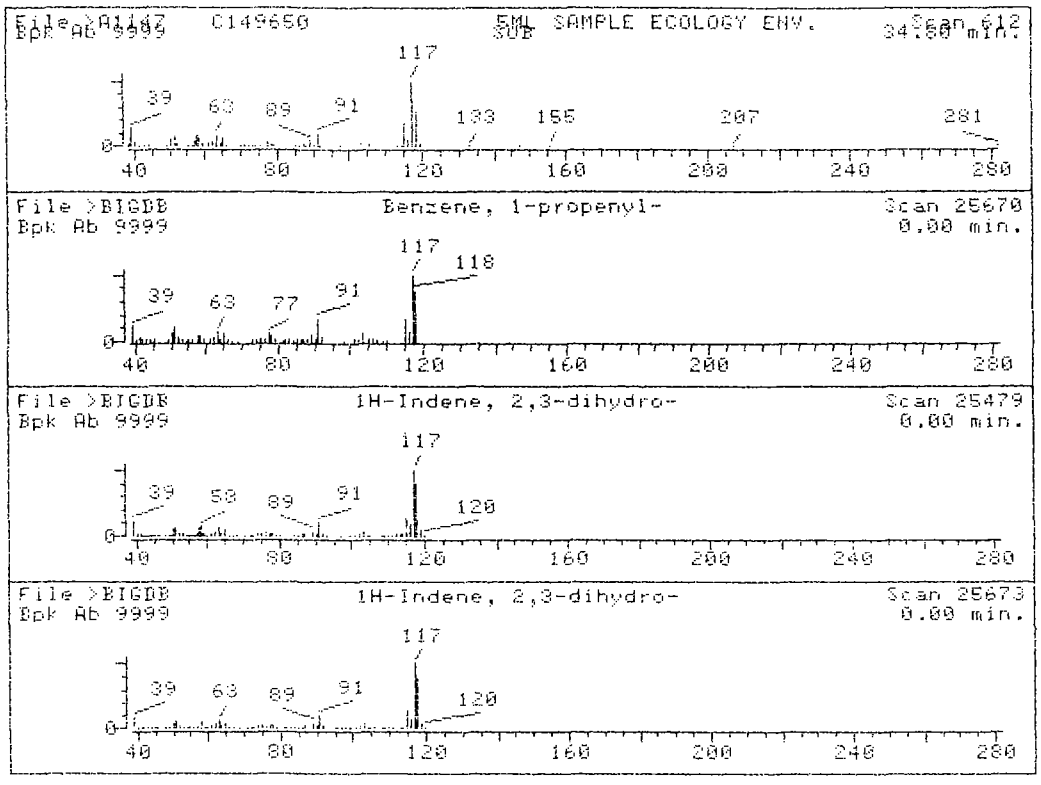
C10/2341
8/17/93



)A1147 C149650 SML SAMPLE ECOLOGY ENV.
35.0! 350.0 TIC
Upslope: .20 Area Reject: 5.00 % Max Peaks: 6 Bunching: 1
Onslope: 0.00 Results File VOLR00 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	24.66	423	430	436	55330	988678	15 728395	78.54	27.567
2	26.55	457	464	468	8924	421064	~~134692~~	14.52	5.098
3	28.56	492	500	507	49631	1383752	35 ~~927441~~	100.00	35.100
4	29.90	519	524	532	9723	658117	~~188554~~	20.33	7.138
5	30.67	532	539	547	10910	762580	~~247357~~	26.67	9.362
6	34.60	602	612	621	12834	1109919	415793	44.83	15.736

Sum of corrected areas: 2642272.



1. Benzene, 1-propenyl-	118	C9H10
2. 1H-Indene, 2,3-dihydro-	118	C9H10
3. 1H-Indene, 2,3-dihydro-	118	C9H10
4. Benzene, cyclopropyl-	118	C9H10
5. Benzene, 1-ethenyl-2-methyl-	118	C9H10
:		
:		

Sample file: >A1147 Spectrum #: 612
Search speed: 1 Tilting option: N No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	81*	637503	25670	"BIGDB	65	45	2	0	68	10	53	44
2.	79*	496117	25479	"BIGDB	66	38	1	0	67	14	43	66
3.	79*	496117	25673	"BIGDB	61	41	2	0	69	10	48	38
4.	60*	873494	25052	"BIGDB	49	61	3	0	75	13	30	13
5.	59*	611154	25473	"BIGDB	52	41	2	0	63	21	27	24

$$\text{Conc.} = \frac{415793}{728395} \times \frac{250}{(5)(1)} = 28.5\ \text{ug/L}$$

QUANT REPORT

Operator ID: SUEB Quant Rev: 6 Quant Time: 930817 15:13
Output File: ^A1151::SS Injected at: 930817 14:31
Data File: >A1151::E4 Dilution Factor: 1.00000
Name: C149651(1:5)
Misc: 1ML SAMPLE ECOLOGY ENV.

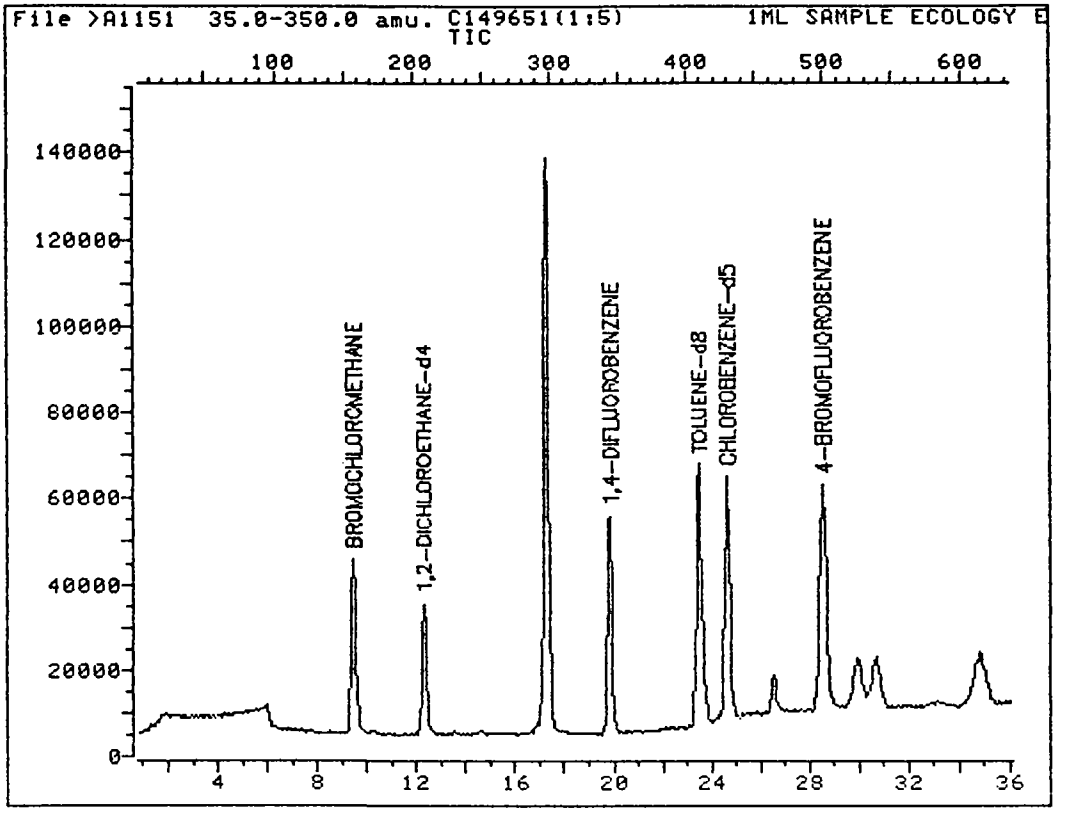
OK
LJD
8/17/93

ID File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 930817 10:00

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.47	128.0	43835	50.00	UG/L	100
8)	1,2-DICHLOROETHANE-d4	12.31	65.0	131974	47.93	UG/L	99
21)	*1,4-DIFLUOROBENZENE	19.88	114.0	201334	50.00	UG/L	88
29)	Benzene	17.26	78.0	606286	116.67	UG/L	94
35)	*CHLOROBENZENE-d5	24.66	117.0	163758	50.00	UG/L	84
40)	TOLUENE-d8	23.49	98.0	224319	49.99	UG/L	85
41)	Toluene	23.66	92.0	28570	9.73	UG/L	92
43)	Ethyl Benzene	26.50	106.0	10485	6.39	UG/L	86
44)	4-BROMOFLUOROBENZENE	28.56	95.0	176641	49.83	UG/L	100
46)	Total Xylenes	30.68	106.0	53104M	28.00	UG/L	90

* Compound is ISTD

TOTAL ION CHROMATOGRAM

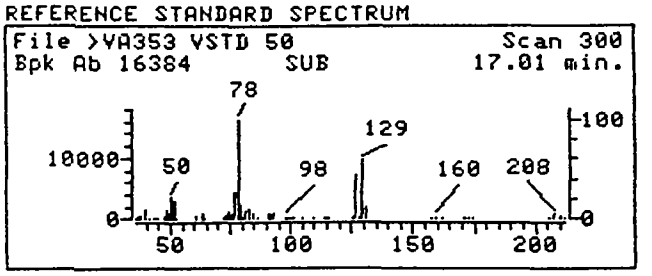


Data File: >A1151::E4 Quant Output File: ^A1151::SS
Name: C149651(1:5)
Misc: 1ML SAMPLE ECOLOGY ENV.

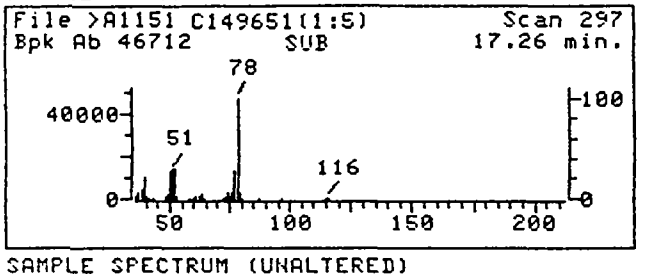
Id File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 930817 10:00

Operator ID: SUEB
Quant Time: 930817 15:13
Injected at: 930817 14:31

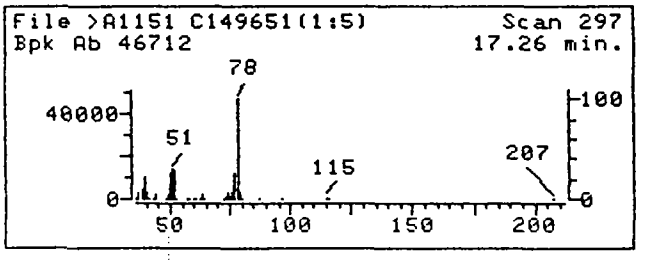
REFERENCE STANDARD SPECTRUM

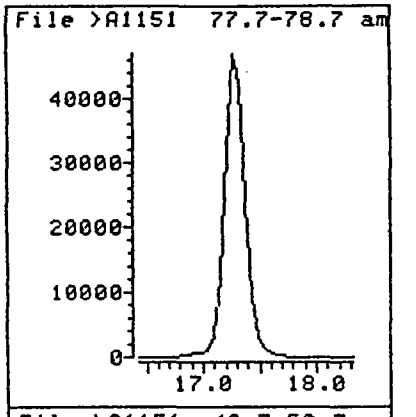


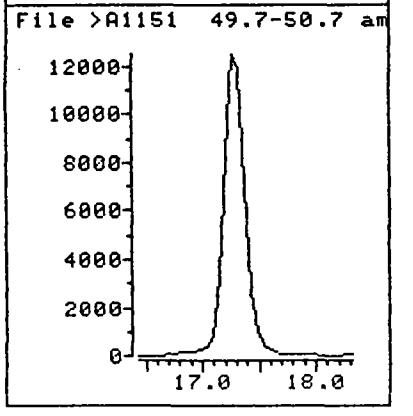
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >A1151::E4
Name: C149651(1:5)
Misc: 1ML SAMPLE ECOLOGY ENV.
Quant Time: 930817 15:13
Injected at: 930817 14:31

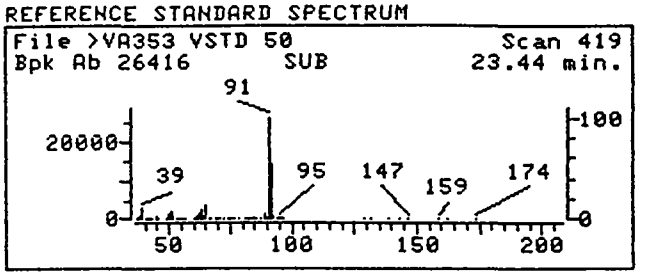
Quant Output File: ^A1151::SS

Quant ID File: IDWVOC::D5
Last Calibration: 930817 10:00

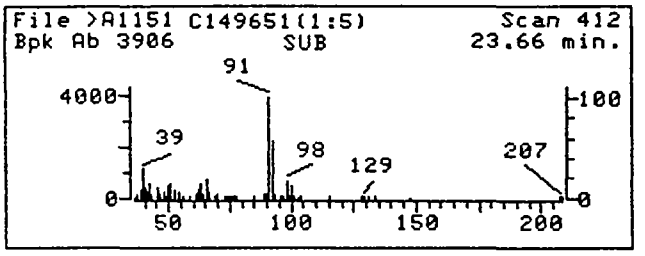
Compound No: 29
Compound Name: Benzene
Scan Number: 297
Retention Time: 17.26 min.
Quant Ion: 78.0
Area: 606286
Concentration: 116.67 UG/L
q-value: 94

✓
LIO/2361
8/17/93

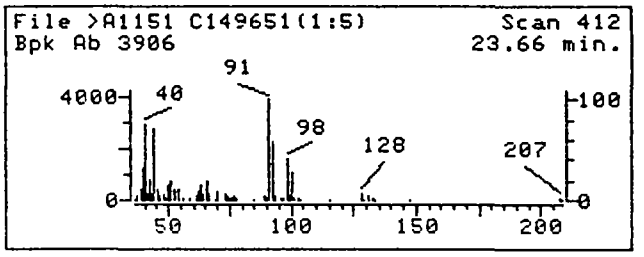
REFERENCE STANDARD SPECTRUM

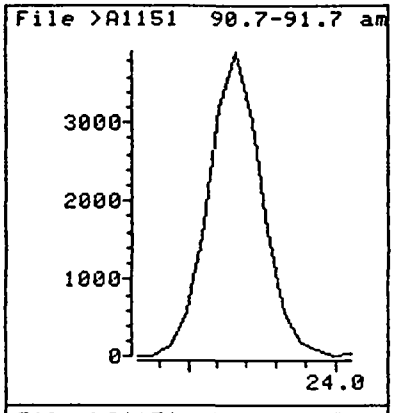


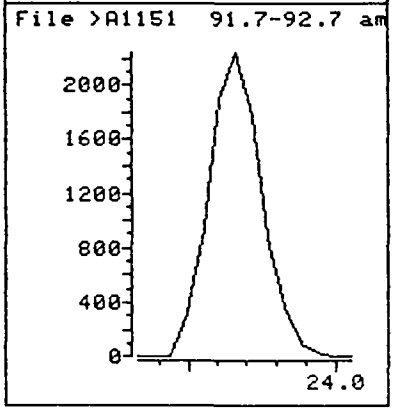
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







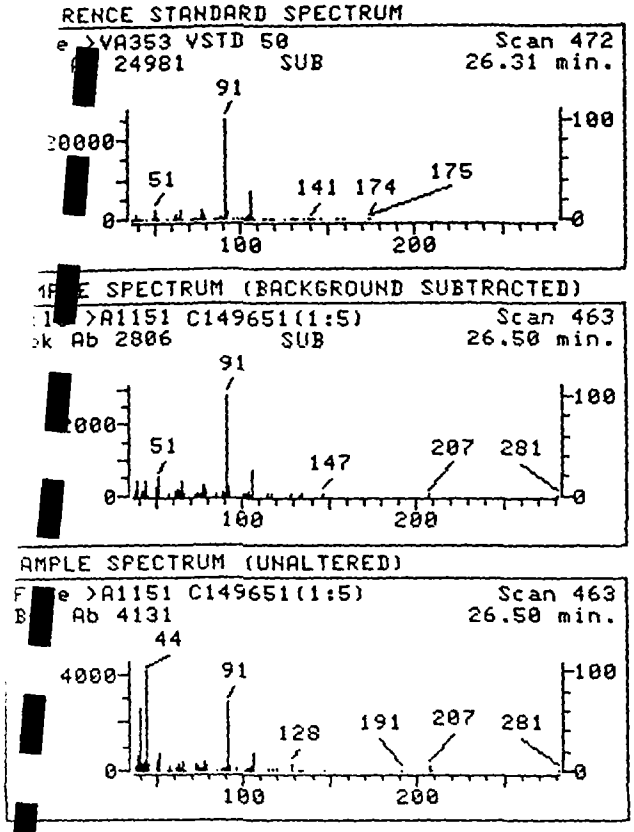
Data File: >A1151::E4
Name: C149651(1:5)
Misc: 1ML SAMPLE ECOLOGY ENV.
Quant Time: 930817 15:13
Injected at: 930817 14:31

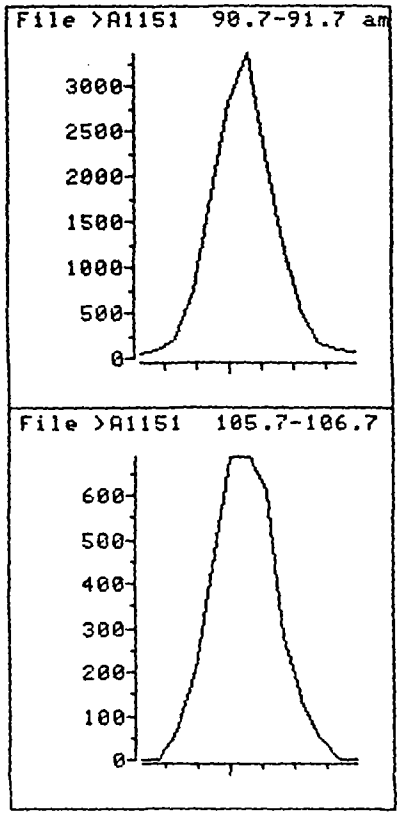
Quant Output File: ^A1151::SS

Quant ID File: IDWVOC::D5
Last Calibration: 930817 10:00

Compound No: 41
Compound Name: Toluene
Scan Number: 412
Retention Time: 23.66 min.
Quant Ion: 92.0
Area: 28570
Concentration: 9.73 UG/L
q-value: 92

/
LID/2341
8/17/93





Data File: >A1151::E4
Name: C149651(1:5)
Misc: 1ML SAMPLE ECOLOGY ENV.
Quant Time: 930817 15:13
Injected at: 930817 14:31

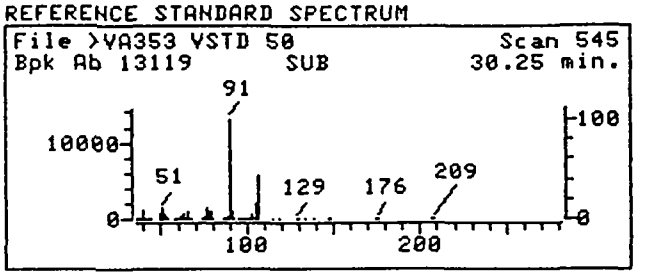
Quant Output File: ^A1151::SS

Quant ID File: IDWVOC::D5
Last Calibration: 930817 10:00

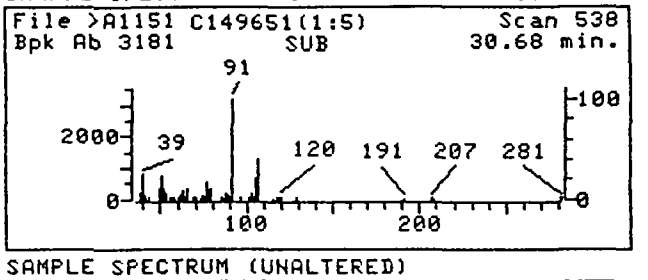
Compound No: 43
Compound Name: Ethyl Benzene
Scan Number: 463
Retention Time: 26.50 min.
Quant Ion: 106.0
Area: 10485
Concentration: 6.39 UG/L
q-value: 86

LID/2361
8/17/93

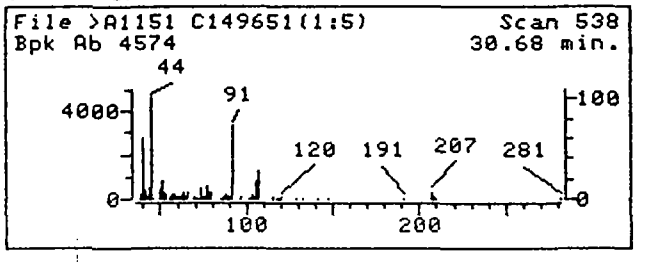
REFERENCE STANDARD SPECTRUM

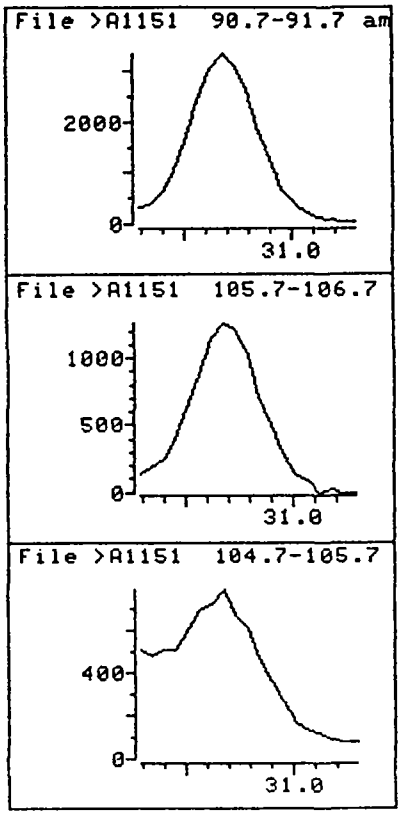


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





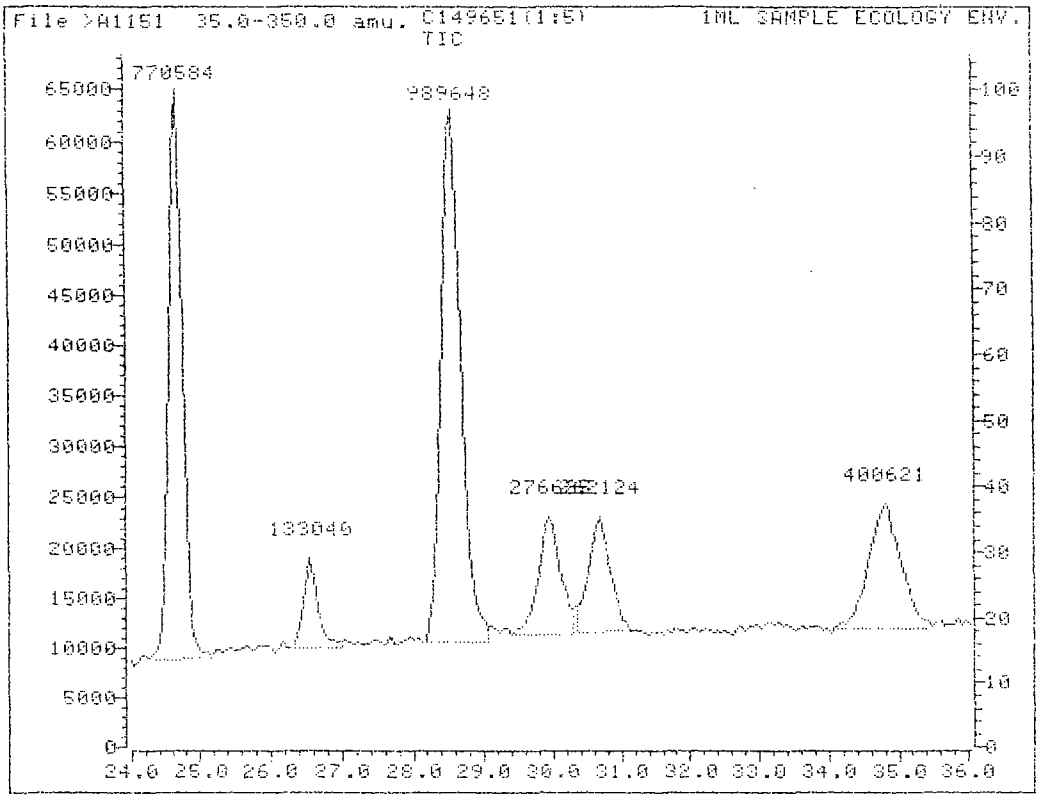
Data File: >A1151::E4
Name: C149651(1:5)
Misc: 1ML SAMPLE ECOLOGY ENV.
Quant Time: 930817 15:13
Injected at: 930817 14:31

Quant Output File: ^A1151::SS

Quant ID File: IDWVOC::D5
Last Calibration: 930817 10:00

Compound No: 46
Compound Name: Total Xylenes
Scan Number: 538
Retention Time: 30.68 min.
Quant Ion: 106.0
Area: 29236
Concentration: ~~15.42~~ UG/L
q-value: 90 28.00

CID/2341
8/17/93

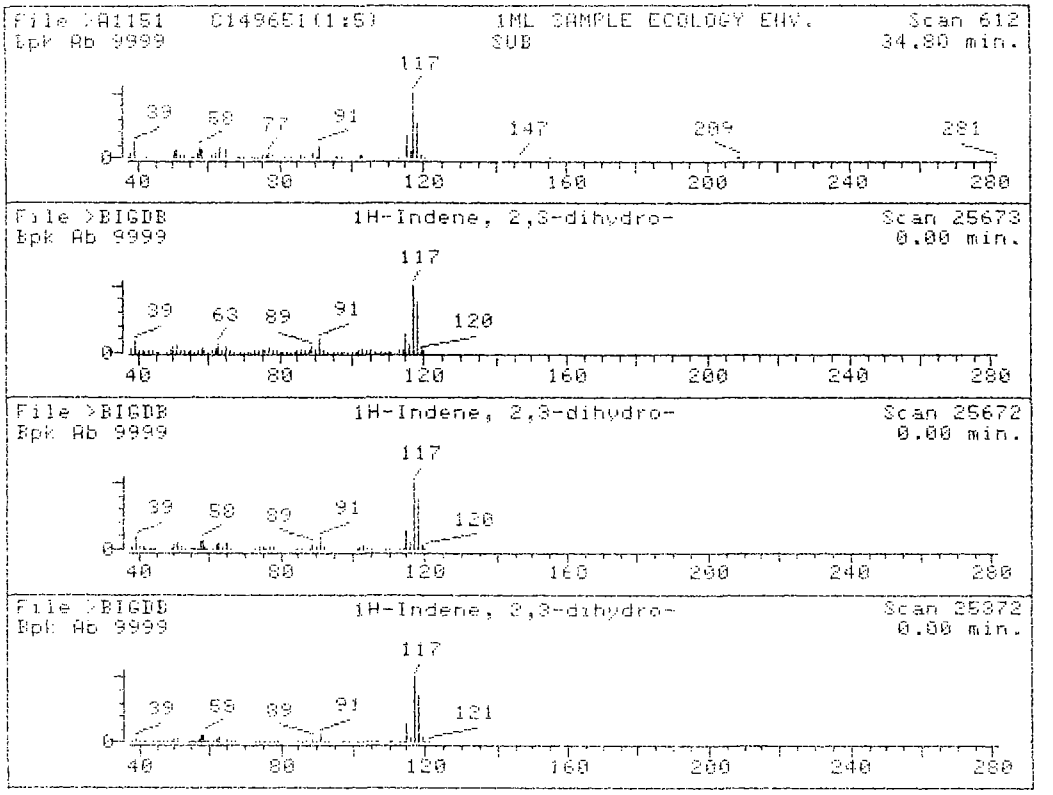


>A1151 C149651(1:5) 1ML SAMPLE ECOLOGY ENV.
35.0: 350.0 TIC

Upslope: .20 Area Reject: 5.00 % Max Peaks: 6 Bunching: 1
Dnslope: 0.00 Results File VDIR90 Sorted by Time/Area INT

Peak #	R.t. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	24.66	423	430	439	56300	1244773	IS 770584	77.86	27.204
2	26.58	459	464	472	8844	569582	~~133040~~	13.44	4.697
3	28.58	492	500	509	52548	1594407	SS ~~858648~~	100.00	34.937
4	29.95	515	525	531	11744	883784	~~276625~~	27.95	9.766
5	30.68	532	538	547	11642	844863	~~262124~~	26.49	9.254
6	34.80	599	612	624	12774	1404354	400621	40.48	14.143

Sum of corrected areas: 2832642.



1. 1H-Indene, 2,3-dihydro-	118	C9H10
2. 1H-Indene, 2,3-dihydro-	118	C9H10
3. 1H-Indene, 2,3-dihydro-	118	C9H10
4. 1H-Indene, 2,3-dihydro-	118	C9H10
5. Benzene, 1-propenyl-	118	C9H10

Sample file: >A1151 Spectrum #: 512
Search speed: 1 Tilting option: N No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	R	SK	#PLG	TILT	%	CON	C_I	R_IV
1.	83*	496117	25673	"BIGDB	71	30	1	0	89	12	51	71
2.	83*	496117	25672	"BIGDB	61	40	1	0	71	10	54	57
3.	74*	496117	25372	"BIGDB	41	51	0	0	77	14	30	43
4.	71*	496117	25479	"BIGDB	89	35	1	0	55	30	25	57
5.	66*	637503	29478	"BICDB	59	36	2	0	71	10	31	41

$$\text{conc.} = \frac{400621}{770584} \times \frac{250}{(5)(1)} = 25.9 \text{ ug/L}$$

QUANT REPORT

Operator ID: SUEB Quant Rev: 6 Quant Time: 930817 14:19
Output File: ^A1150::SS Injected at: 930817 13:37
Data File: >A1150::E4 Dilution Factor: 1.00000
Name: C149653 (1:5)
Misc: ~~5ML~~ 1ml SAMPLE ECOLOGY ENV.

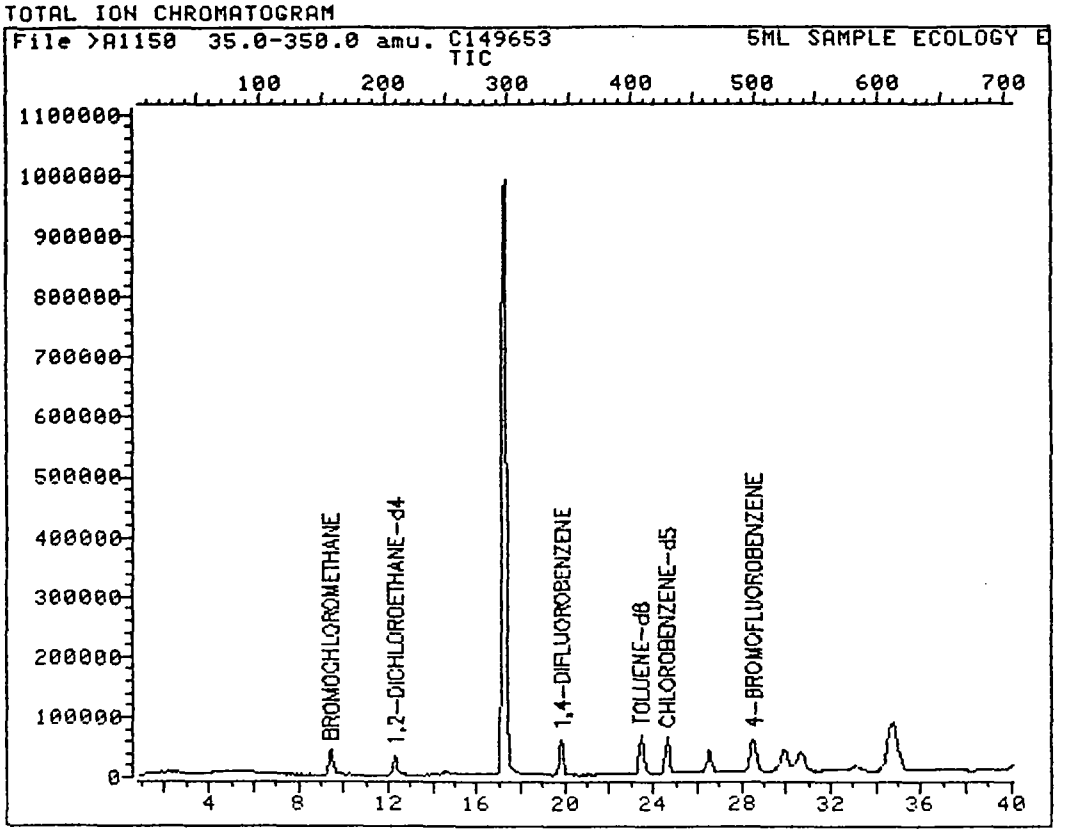
OK LID 8/17/93

ID File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 930817 10:00

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.42	128.0	45818	50.00	UG/L	100
8)	1,2-DICHLOROETHANE-d4	12.32	65.0	141644	49.21	UG/L	98
21)	*1,4-DIFLUOROBENZENE	19.83	114.0	217962	50.00	UG/L	84
39)	Benzene	17.27	78.0	4059341	721.54	UG/L	77
5)	*CHLOROBENZENE-d5	24.62	117.0	177691	50.00	UG/L	89
40)	TOLUENE-d8	23.45	98.0	239413	49.17	UG/L	97
41)	Toluene	23.67	92.0	21548	6.76	UG/L	96
43)	Ethyl Benzene	26.51	106.0	44121	24.79	UG/L	85
44)	4-BROMOFLUOROBENZENE	28.52	95.0	187766	48.82	UG/L	100
46)	Total Xylenes	29.92	106.0	153202M	74.45	UG/L	87

* Compound is ISTD

TOTAL ION CHROMATOGRAM

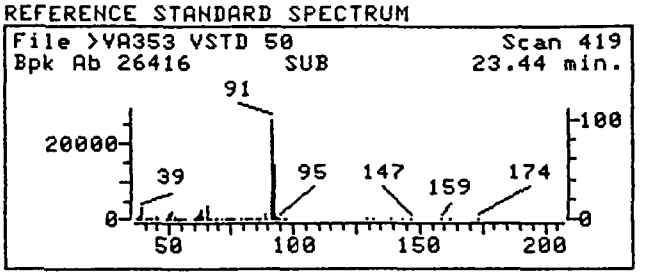


Data File: >A1150::E4 Quant Output File: ^A1150::SS
Name: C149653 (1:5)
Misc: ~~5ML~~ SAMPLE ECOLOGY ENV.

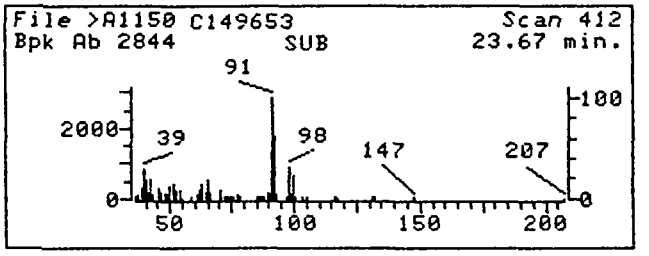
Id File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 930817 10:00

Operator ID: SUEB
Quant Time: 930817 14:19
Injected at: 930817 13:37

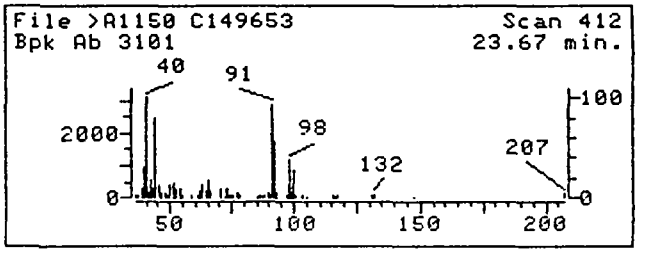
REFERENCE STANDARD SPECTRUM

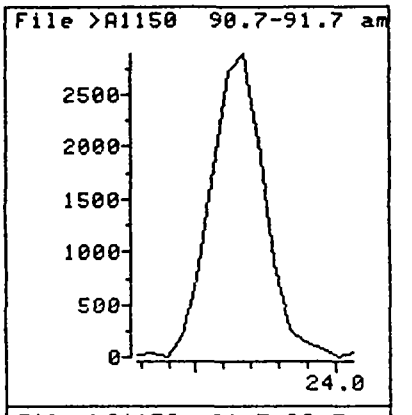


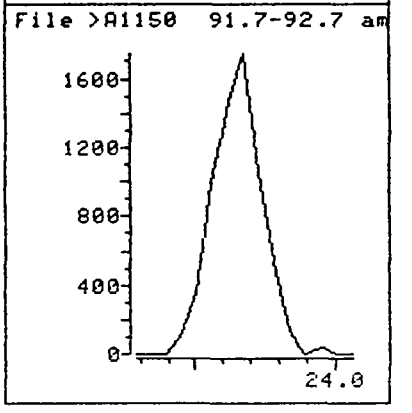
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >A1150:E4
Name: C149653 (1:5)
Misc: ~~5ML~~ SAMPLE ECOLOGY ENV.
Quant Time: 930817 14:19
Injected at: 930817 13:37

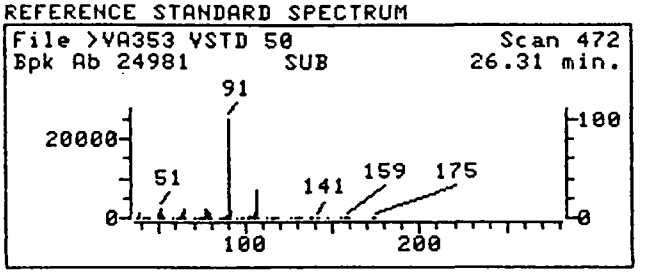
Quant Output File: ^A1150::SS

Quant ID File: IDWVOC::D5
Last Calibration: 930817 10:00

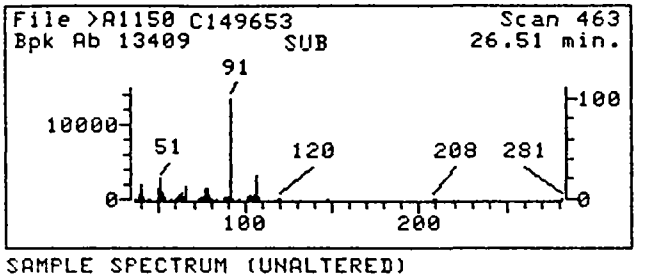
Compound No: 41
Compound Name: Toluene
Scan Number: 412
Retention Time: 23.67 min.
Quant Ion: 92.0
Area: 21548
Concentration: 6.76 UG/L
q-value: 96

✓
LID/2361
8/17/93

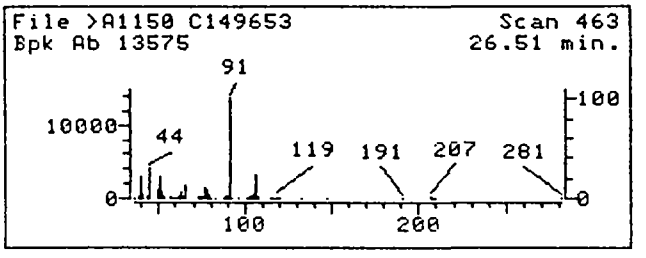
REFERENCE STANDARD SPECTRUM

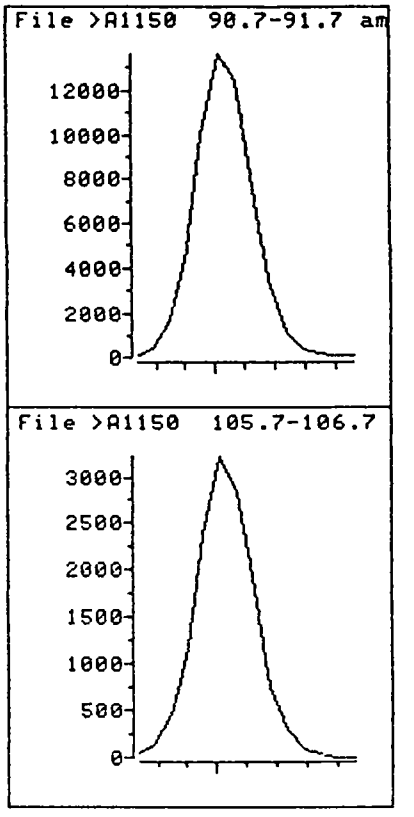


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





Data File: >A1150::E4
Name: C149653 (1:5)
Misc: ~~5ML~~ SAMPLE ECOLOGY ENV.
Quant Time: 930817 14:19
Injected at: 930817 13:37

Quant Output File: ^A1150::SS

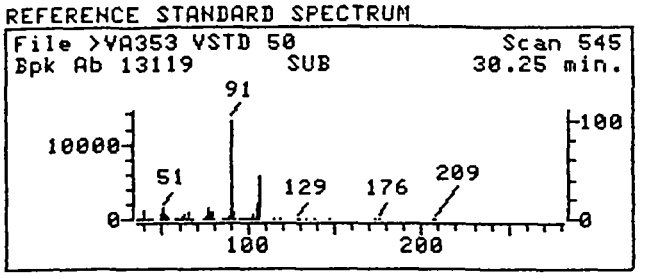
Quant ID File: IDWVOC::D5
Last Calibration: 930817 10:00

Compound No: 43
Compound Name: Ethyl Benzene
Scan Number: 463
Retention Time: 26.51 min.
Quant Ion: 106.0
Area: 44121
Concentration: 24.79 UG/L
q-value: 85

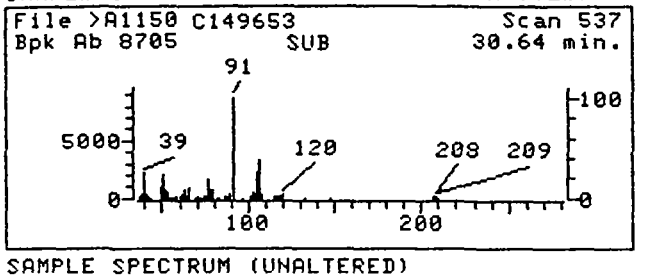
410/2341
8/17/93

045

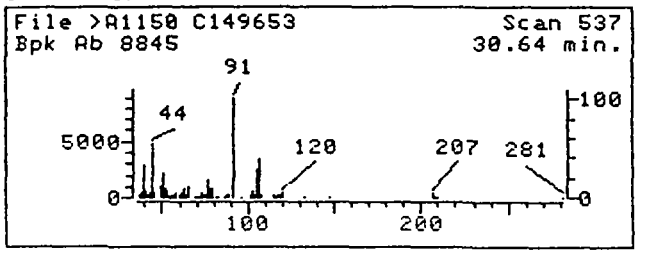
REFERENCE STANDARD SPECTRUM

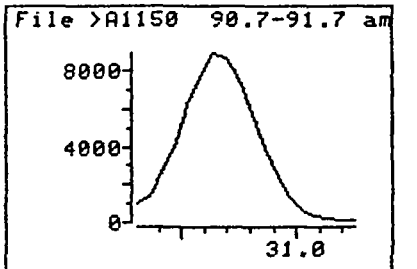


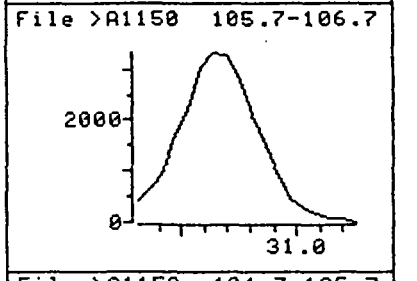
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

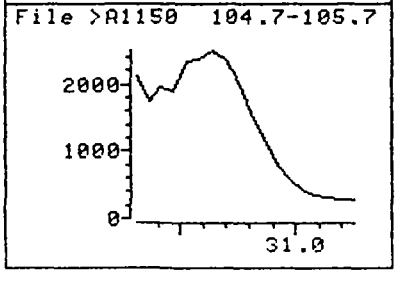


SAMPLE SPECTRUM (UNALTERED)









Data File: >A1150::E4
Name: C149653 (1:5)
Misc: ~~5ML~~ SAMPLE ECOLOGY ENV.
Quant Time: 930817 14:19
Injected at: 930817 13:37

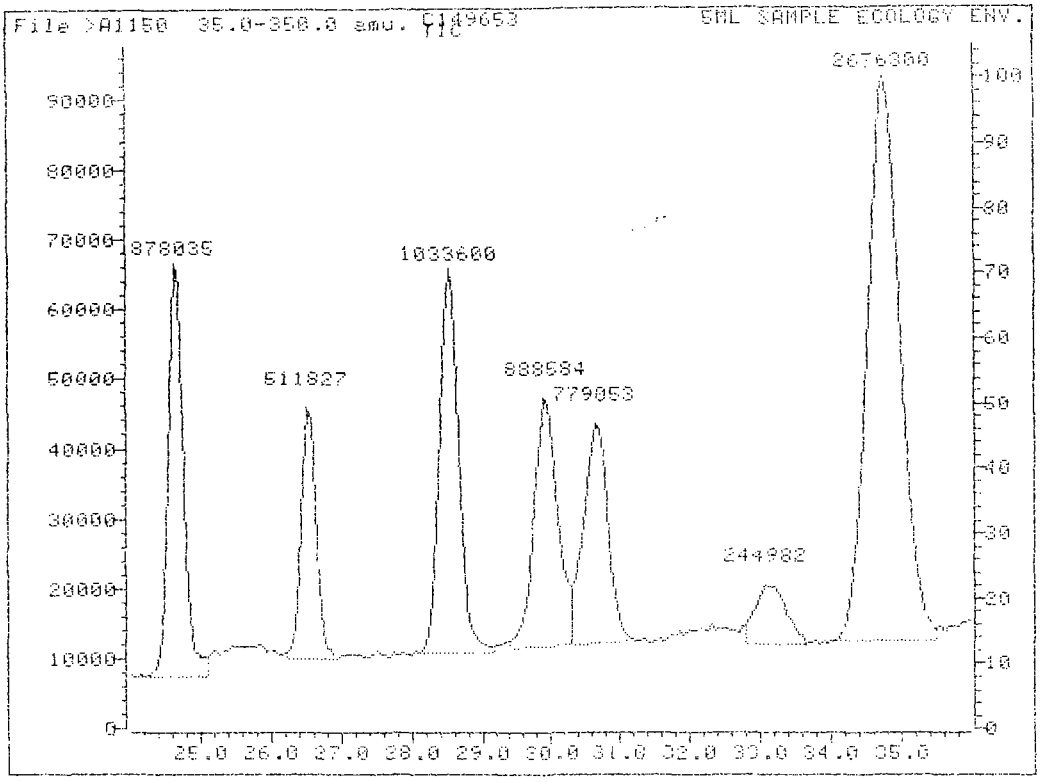
Quant Output File: ^A1150::SS

Quant ID File: IDWVOC::D5
Last Calibration: 930817 10:00

Compound No: 46
Compound Name: Total Xylenes
Scan Number: 537
Retention Time: 30.64 min.
Quant Ion: 106.0
Area: 78197
Concentration: ~~38.00~~ UG/L
q-value: 87 74.45

C10/2361
8/17/93

040



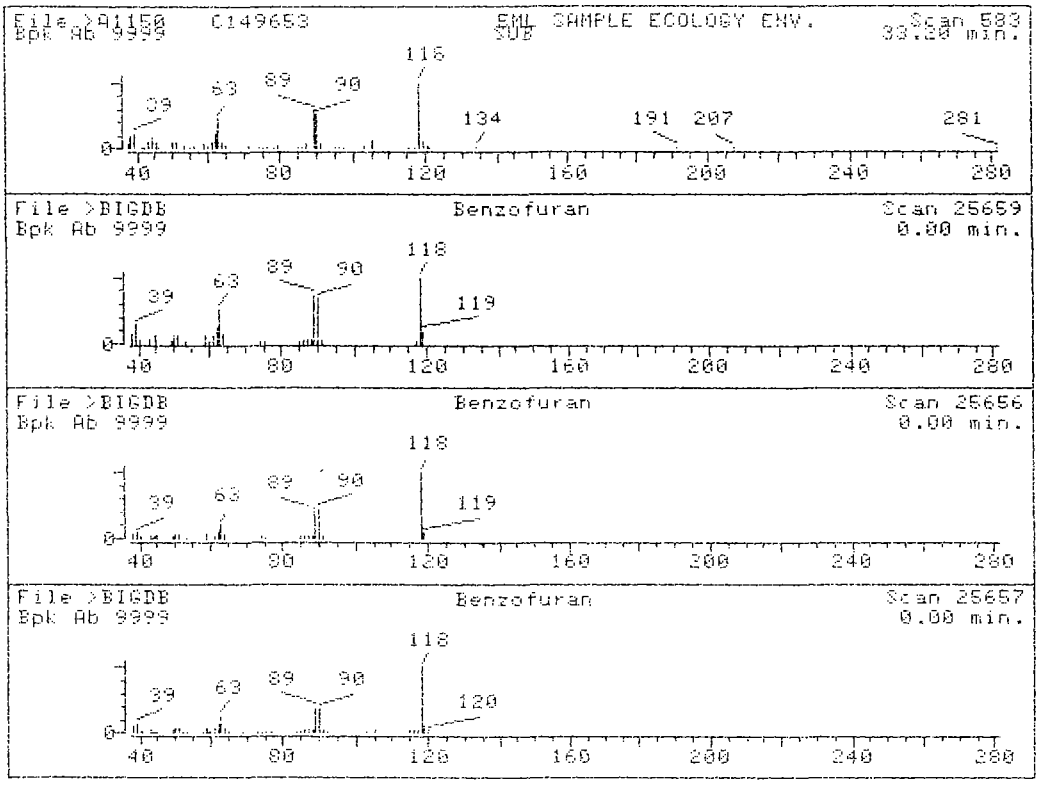
>A1150 C149653 SML SAMPLE ECOLOGY ENV.
35.0: 350.0 TIC

Upslope: .20 Area Reject: 5.00 % Max Peaks: 7 Bunching: 1
Dnslope: 0.00 Results File VDIR80 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	24.62	420	429	438	59355	1321102	13 878035	32.61	12.521
2	26.51	458	463	471	36859	850886	~~511827~~	19.12	7.299
3	28.52	492	499	511	55016	1718147	55 ~~1033600~~	38.62	14.740
4	29.92	515	524	531	35715	1516729	~~888584~~	33.30	12.672
5	30.64	531	537	548	31547	1509889	~~779053~~	29.11	11.112
6	33.09	576	581	581	8490	351023	244982	9.14	3.494
7	34.76	588	611	624	80530	7760417	2676300	100.00	38.155

Sum of corrected areas: 7012381.

047



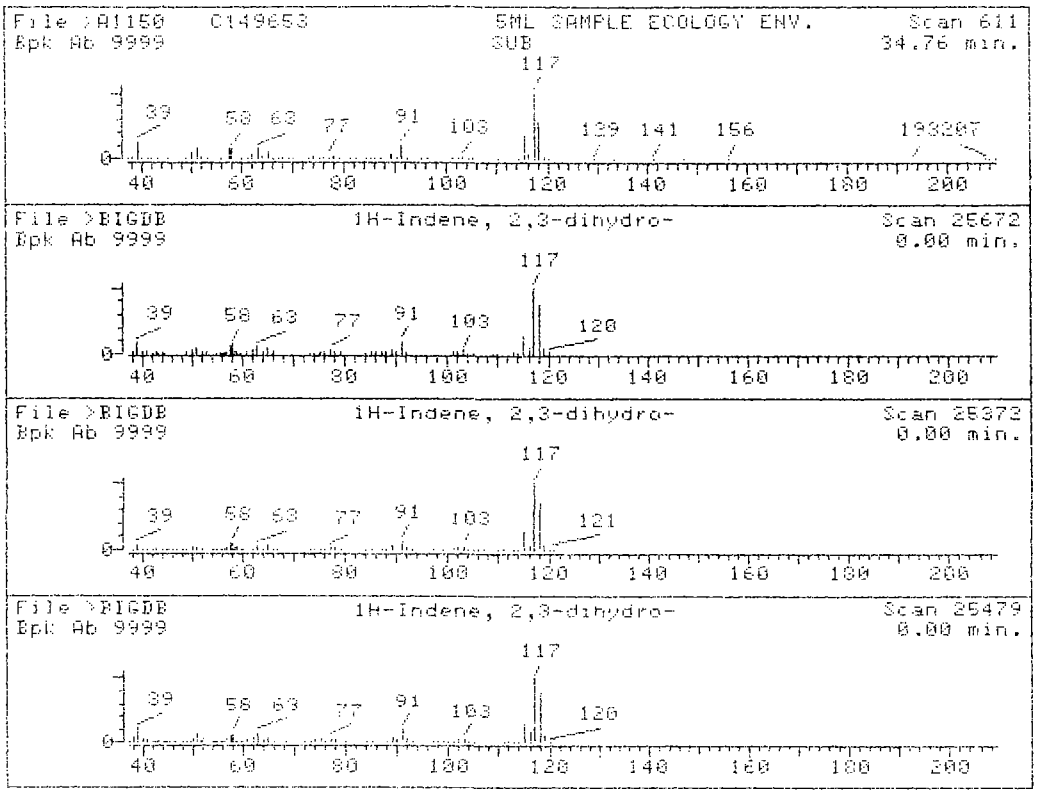
1.	Benzofuran	118	C8H6O
2.	Benzofuran	118	C8H6O
3.	Benzofuran	119	C8H6O
4.	Benzofuran	118	C8H6O
5.	Benzofuran	118	C8H6O

Sample file: >A1150 Spectrum #: 583
Search speed: 1 Tilting option: N No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	OK	#FLG	TILT	%	CON	C_I	R_IV
1.	75*	271896	25659	"BIGDB	81	39	2	0	62	19	35	61
2.	70*	271896	25656	"BIGDB	46	51	0	0	100	19	32	54
3.	58*	271896	25657	"BIGDB	52	50	2	0	100	20	25	27
4.	34*	271896	25660	"BIGDB	31	60	1	0	100	32	12	17
5.	32*	271896	25658	"BIGDB	25	67	0	0	100	39	10	18

$$\text{conc.} = \frac{244982}{878035} \times \frac{250}{(5)(1)} = 13.9\ \mu g/L$$

048



1.	1H-Indene, 2,3-dihydro-	118 C9H10
2.	1H-Indene, 2,3-dihydro-	118 C9H10
3.	1H-Indene, 2,3-dihydro-	118 C9H10
4.	1H-Indene, 2,3-dihydro-	119 C9H10
5.	1H-Indene, 2,3-dihydro-	118 C9H10

Sample file: >A1150 Spectrum #: 611
Search speed: 1 Tilting option: N No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	83*	496117	25672	"BIGDB	58	42	1	0	73	9	54	53
2.	79*	496117	25372	"BIGDB	51	41	0	0	76	13	43	81
3.	76*	496117	25479	"BIGDB	49	55	2	0	70	9	45	22
4.	72*	496117	25673	"BIGDB	61	41	0	0	65	31	32	73
5.	71*	496117	25373	"BIGDB	47	13	1	0	93	13	32	32

049

$$\text{conc.} = \frac{2676303}{878035} \times \frac{250}{(5)(1)} = 152 \text{ ug/L}$$

QUANT REPORT

Operator ID: SUEB Quant Rev: 6 Quant Time: 930819 11:18
Output File: ^A1165::SS Injected at: 930819 10:41
Data File: >A1165::E2 Dilution Factor: 1.00000
Name: C149653(1:50)
Misc: 100UL SAMPLE ECOLOGY ENV.

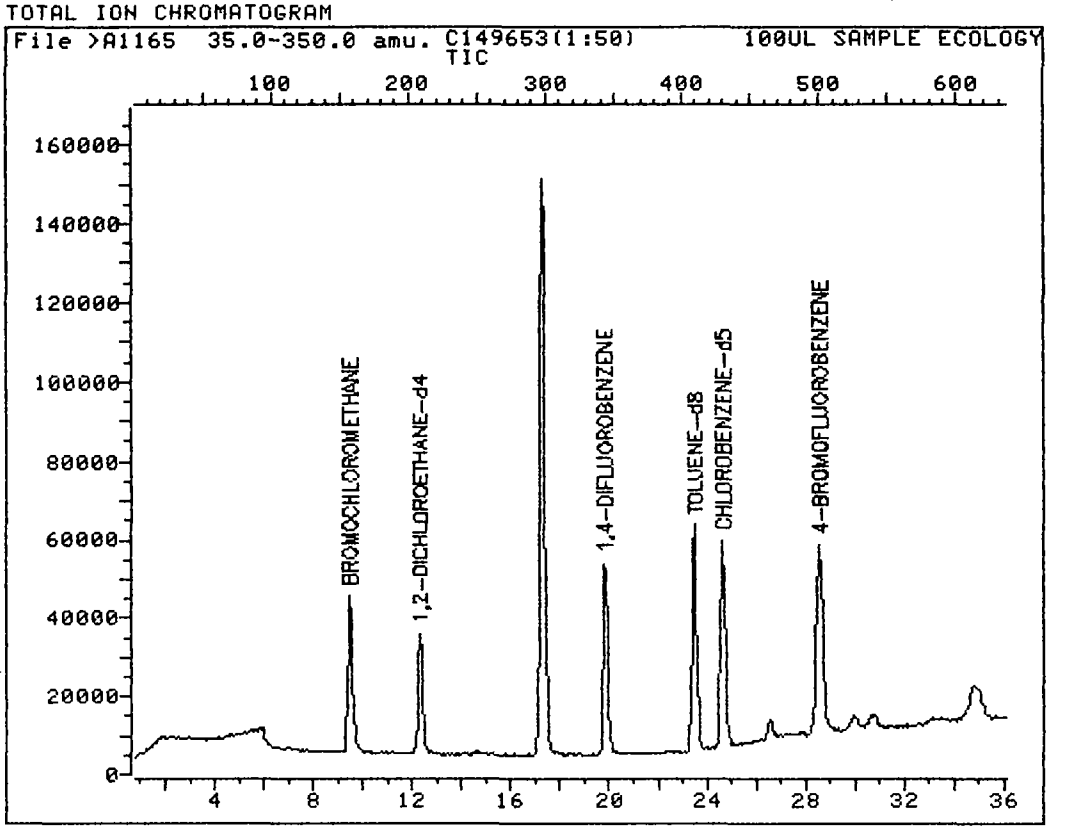
ok
LID
8/19/93

ID File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 930819 09:20

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.48	128.0	45229	50.00	UG/L	100
8)	1,2-DICHLOROETHANE-d4	12.31	65.0	134034	52.55	UG/L	94
21)	*1,4-DIFLUOROBENZENE	19.83	114.0	196731	50.00	UG/L	92
9)	Benzene	17.27	78.0	666031	128.47	UG/L	91
5)	*CHLOROBENZENE-d5	24.67	117.0	157027	50.00	UG/L	82
40)	TOLUENE-d8	23.50	98.0	219634	53.06	UG/L	95
44)	4-BROMOFLUOROBENZENE	28.57	95.0	170176	53.17	UG/L	100

* Compound is ISTD

TOTAL ION CHROMATOGRAM

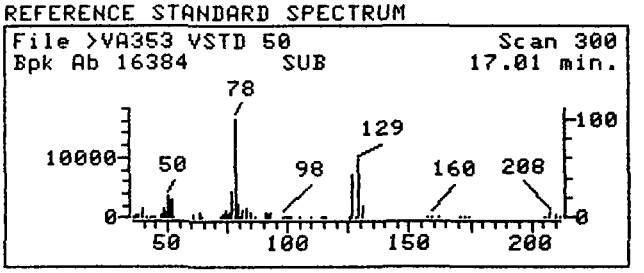


Data File: >A1165::E2 Quant Output File: ^A1165::SS
Name: C149653(1:50)
Misc: 100UL SAMPLE ECOLOGY ENV.

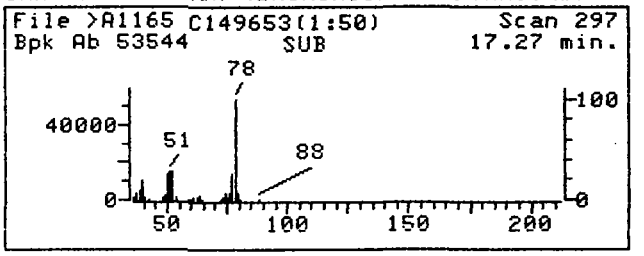
Id File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 930819 09:20

Operator ID: SUEB
Quant Time: 930819 11:18
Injected at: 930819 10:41

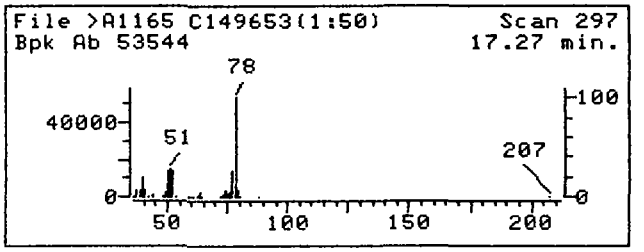
REFERENCE STANDARD SPECTRUM

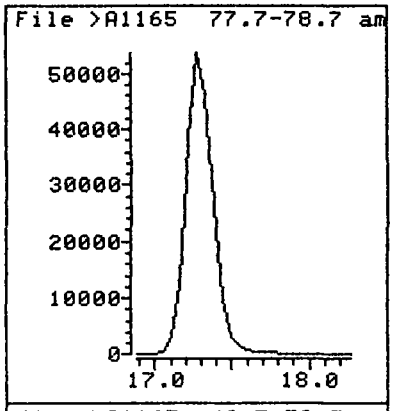


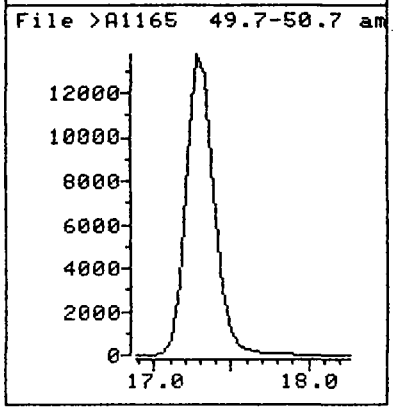
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >A1165::E2
Name: C149653(1:50)
Misc: 100UL SAMPLE ECOLOGY ENV.
Quant Time: 930819 11:18
Injected at: 930819 10:41

Quant Output File: ^A1165::SS

Quant ID File: IDWVOC::D5
Last Calibration: 930819 09:20

Compound No: 29
Compound Name: Benzene
Scan Number: 297
Retention Time: 17.27 min.
Quant Ion: 78.0
Area: 666031
Concentration: 128.47 UG/L
q-value: 91

110/2361
8/19/93

QUANT REPORT

Operator ID: SUEB Quant Rev: 6 Quant Time: 930819 15:16
Output File: ^A1171::SS Injected at: 930819 14:39
Data File: >A1171::E4 Dilution Factor: 1.00000
Name: C149652
Misc: 5ML SAMPLE ECOLOGY ENV.

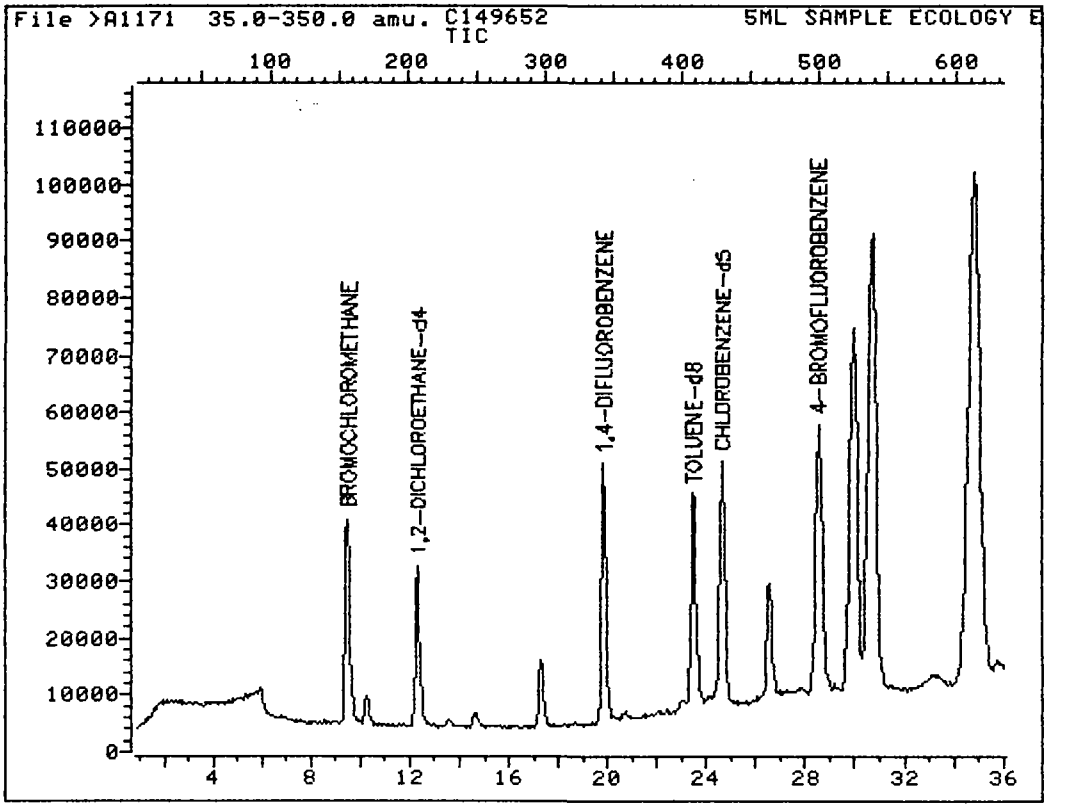
MX
OK
LD
8/20/93

ID File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 930819 09:20

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.50	128.0	41159	50.00	UG/L	100
14)	1,1-Dichloroethane	10.28	63.0	32993	7.84	UG/L	94
18)	1,2-DICHLOROETHANE-d4	12.34	65.0	124207	53.52	UG/L	94
1)	*1,4-DIFLUOROBENZENE	19.85	114.0	176649	50.00	UG/L	83
9)	Benzene	17.29	78.0	54197	11.64	UG/L	92
35)	*CHLOROBENZENE-d5	24.64	117.0	133656	50.00	UG/L	89
40)	TOLUENE-d8	23.47	98.0	149981	42.57	UG/L	91
1)	Toluene	23.63	92.0	7056	2.95	UG/L	97
43)	Ethyl Benzene	26.53	106.0	24623	18.71	UG/L	86
44)	4-BROMOFLUOROBENZENE	28.54	95.0	161051M	59.11	UG/L	100
6)	Total Xylenes	30.71	106.0	368762M	252.37	UG/L	98

* Compound is ISTD

TOTAL ION CHROMATOGRAM

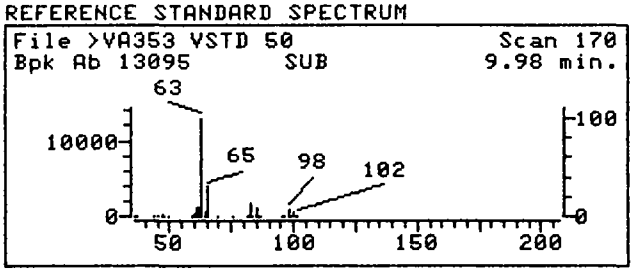


Data File: >A1171::E4 Quant Output File: ^A1171::SS
Name: C149652
Misc: 5ML SAMPLE ECOLOGY ENV.

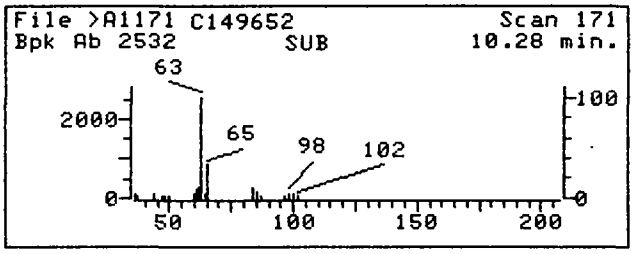
Id File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 930819 09:20

Operator ID: SUEB
Quant Time: 930819 15:16
Injected at: 930819 14:39

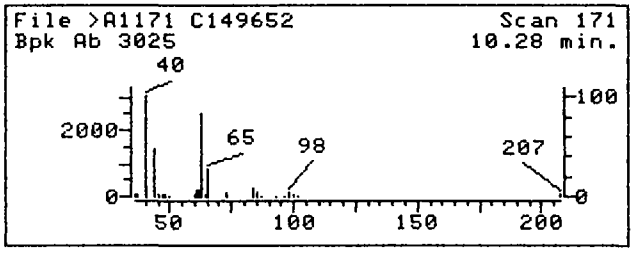
REFERENCE STANDARD SPECTRUM

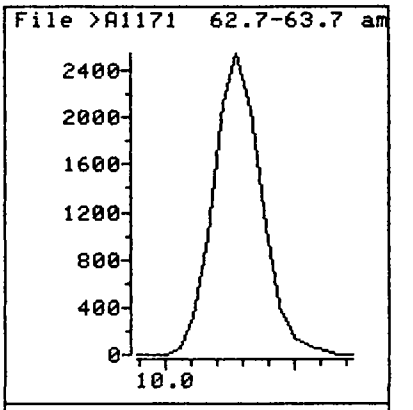


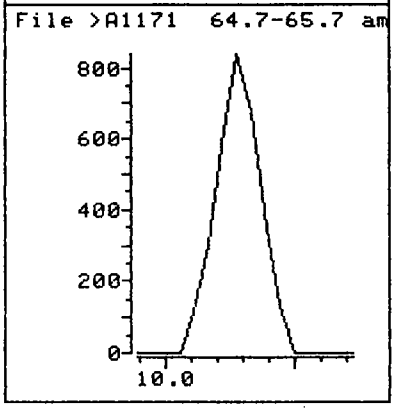
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







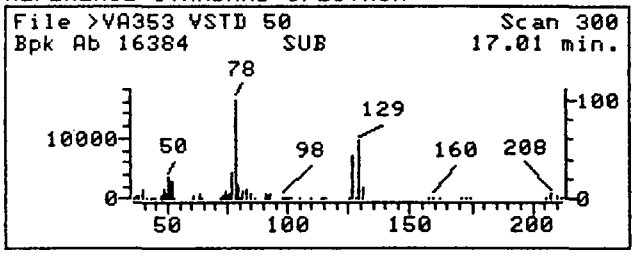
Data File: >A1171::E4
Name: C149652
Misc: 5ML SAMPLE ECOLOGY ENV.
Quant Time: 930819 15:16
Injected at: 930819 14:39

Quant Output File: ^A1171::SS
Quant ID File: IDWVOC::D5
Last Calibration: 930819 09:20

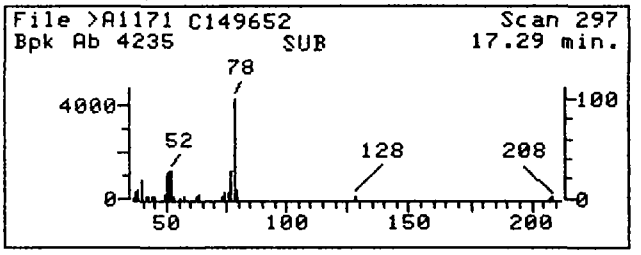
Compound No: 14
Compound Name: 1,1-Dichloroethane
Scan Number: 171
Retention Time: 10.28 min.
Quant Ion: 63.0
Area: 32993
Concentration: 7.84 UG/L
q-value: 94

CID/2361
8/20/93

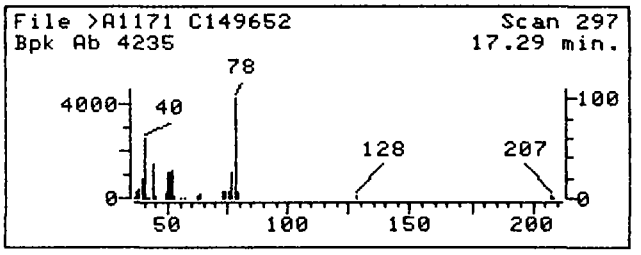
REFERENCE STANDARD SPECTRUM

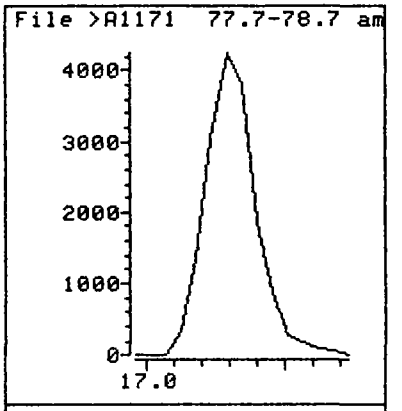


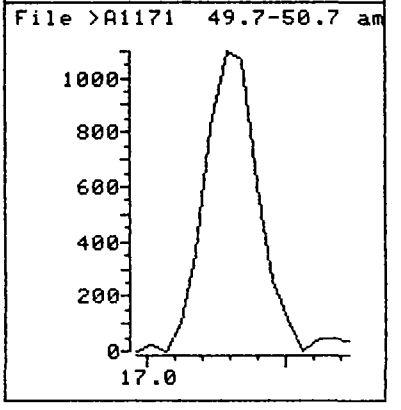
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >A1171::E4
Name: C149652
Misc: 5ML SAMPLE ECOLOGY ENV.
Quant Time: 930819 15:16
Injected at: 930819 14:39

Quant Output File: ^A1171::SS

Quant ID File: IDWVOC::D5
Last Calibration: 930819 09:20

Compound No: 29
Compound Name: Benzene
Scan Number: 297
Retention Time: 17.29 min.
Quant Ion: 78.0
Area: 54197
Concentration: 11.64 UG/L
q-value: 92

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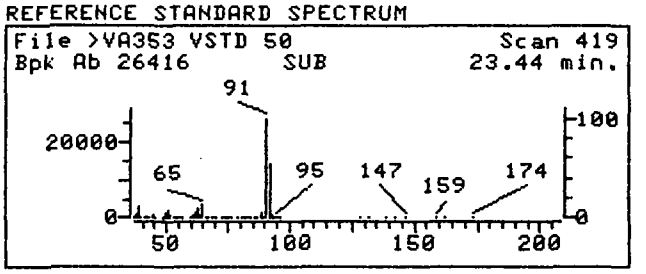
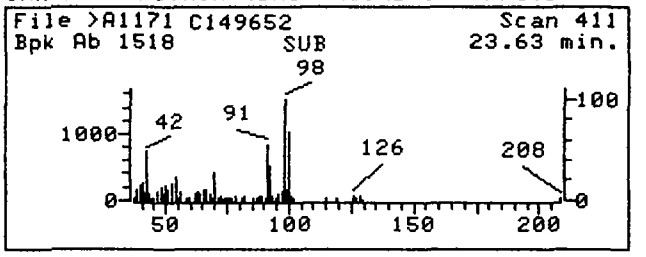
8/20/93

056

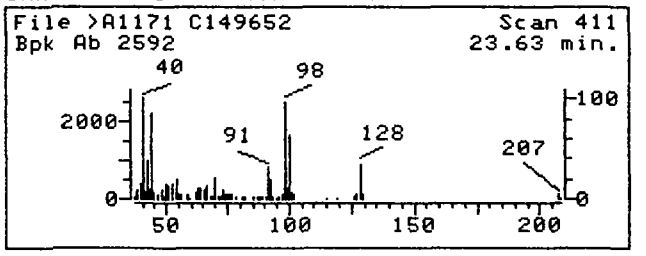
REFERENCE STANDARD SPECTRUM

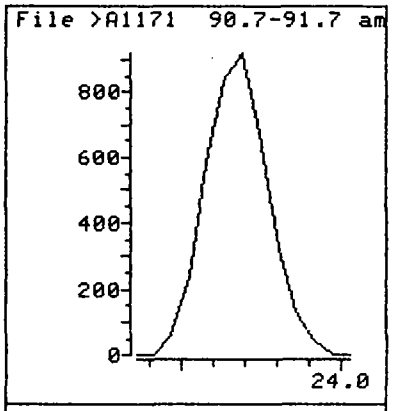


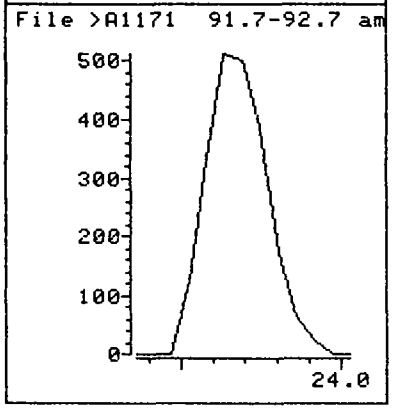
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







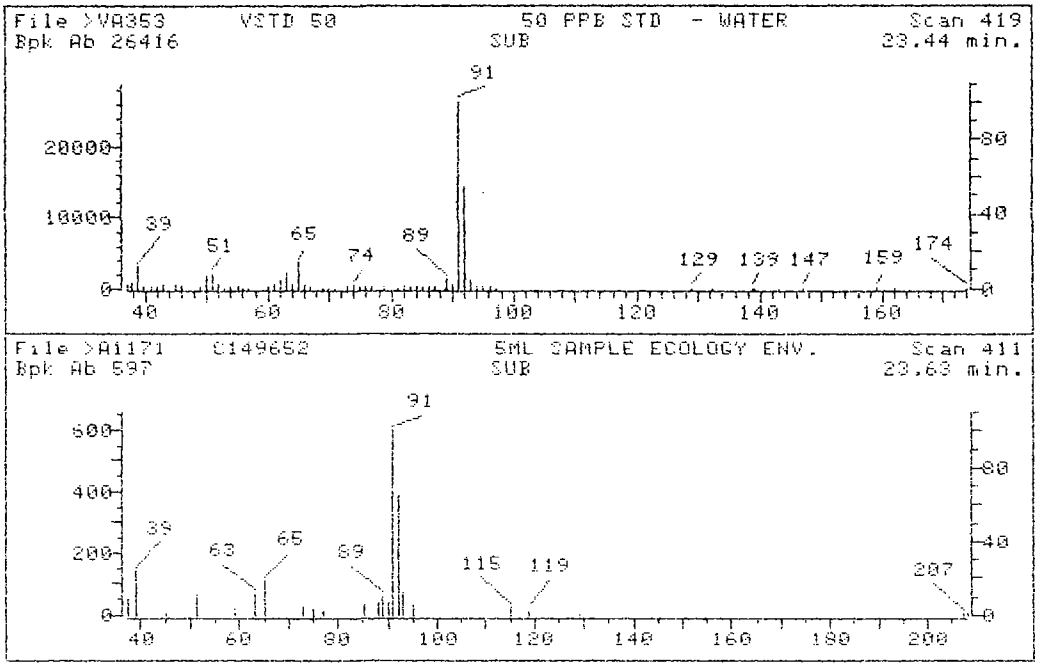
Data File: >A1171::E4
Name: C149652
Misc: 5ML SAMPLE ECOLOGY ENV.
Quant Time: 930819 15:16
Injected at: 930819 14:39

Quant Output File: ^A1171::SS

Quant ID File: IDWVOC::D5
Last Calibration: 930819 09:20

Compound No: 41
Compound Name: Toluene
Scan Number: 411
Retention Time: 23.63 min.
Quant Ion: 92.0
Area: 7056
Concentration: 2.95 UG/L
q-value: 97

see next page



Toluene
L10/2361
8/20/93

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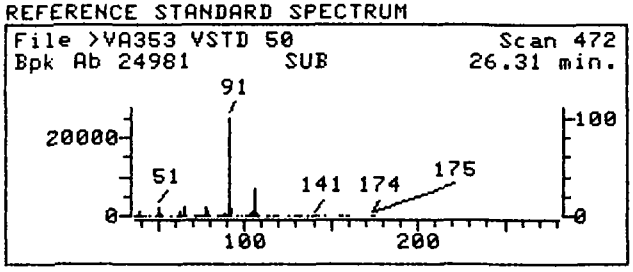
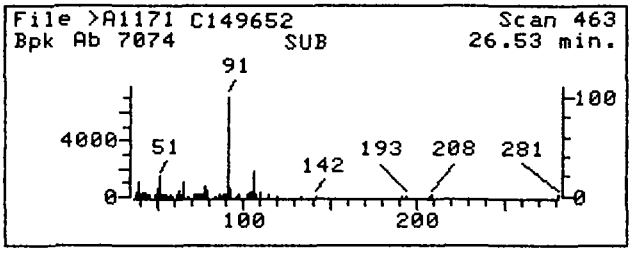
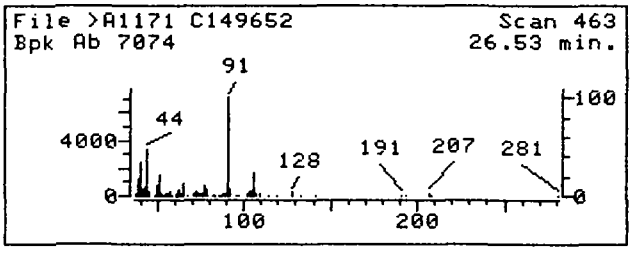
REFERENCE STANDARD SPECTRUM

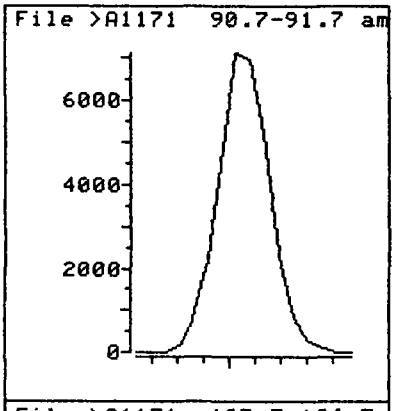


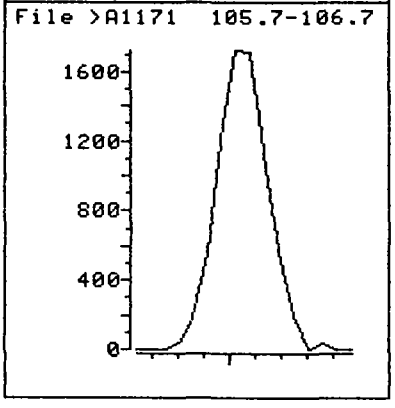
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >A1171::E4
Name: C149652
Misc: 5ML SAMPLE ECOLOGY ENV.
Quant Time: 930819 15:16
Injected at: 930819 14:39

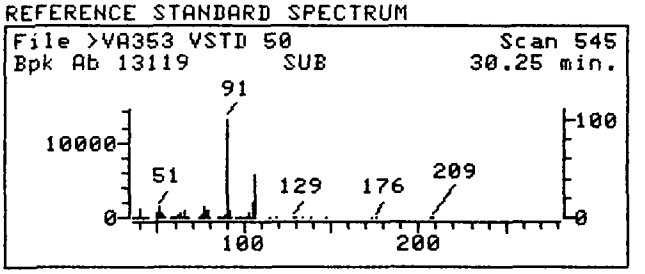
Quant Output File: ^A1171::SS

Quant ID File: IDWVOC::D5
Last Calibration: 930819 09:20

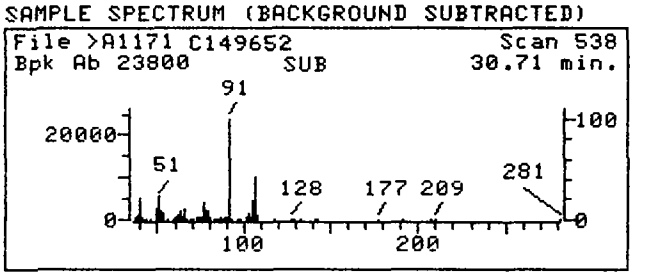
Compound No: 43
Compound Name: Ethyl Benzene
Scan Number: 463
Retention Time: 26.53 min.
Quant Ion: 106.0
Area: 24623
Concentration: 18.71 UG/L
q-value: 86

UD/2341
8/20/93

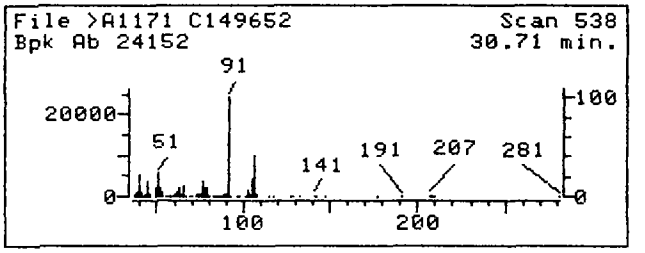
REFERENCE STANDARD SPECTRUM

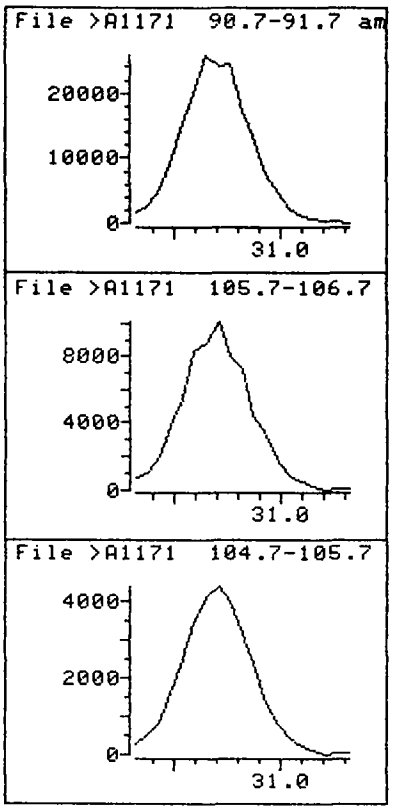


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





Data File: >A1171::E4
Name: C149652
Misc: 5ML SAMPLE ECOLOGY ENV.
Quant Time: 930819 15:16
Injected at: 930819 14:39

Quant Output File: ^A1171::SS

Quant ID File: IDWVOC::D5
Last Calibration: 930819 09:20

Compound No: 46
Compound Name: Total Xylenes
Scan Number: 538
Retention Time: 30.71 min.
Quant Ion: 106.0
Area: 216763
Concentration: ~~148.34~~ UG/L
q-value: 98

252.37

610/2341
8/20/93

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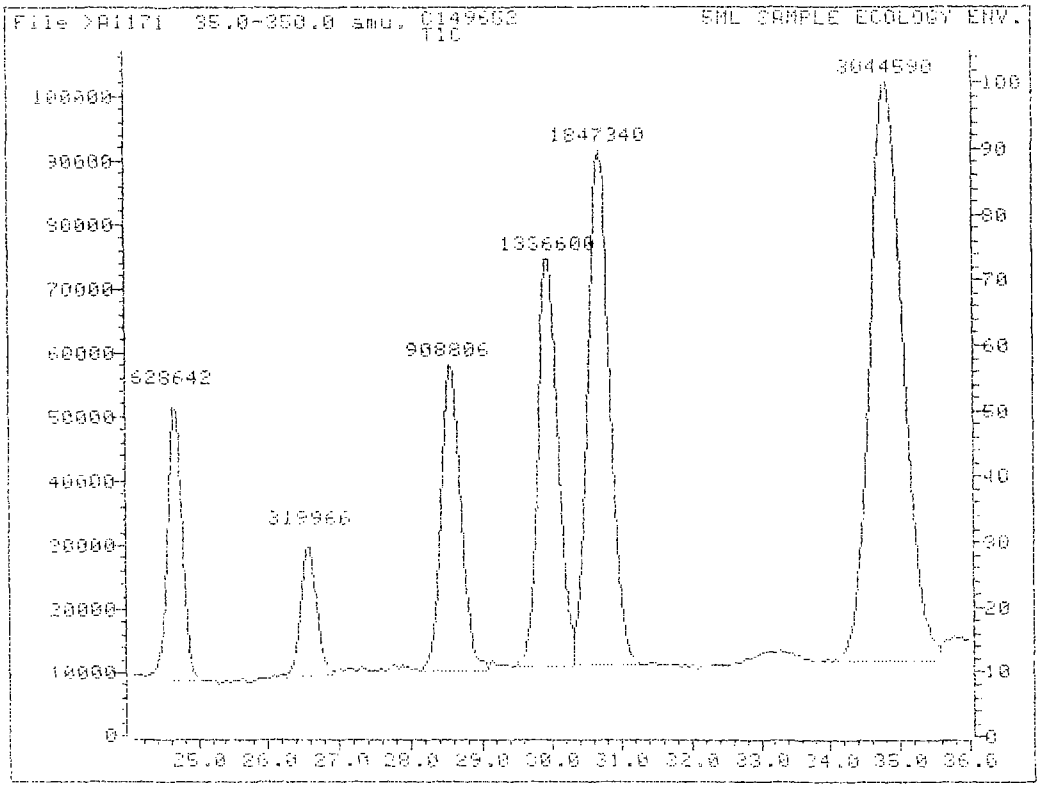
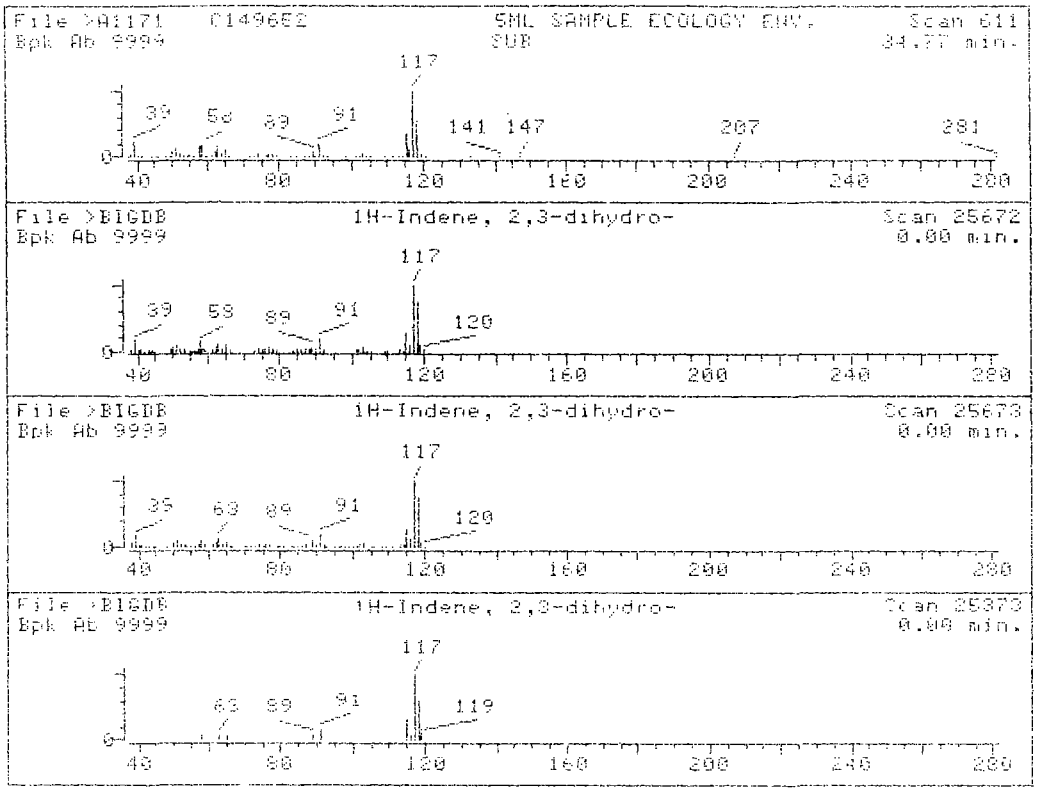


>A1171 C149652 5ML SAMPLE ECOLOGY ENV.
35.0: 350.0 TIC
Upslope: .20 Area Reject: 5.00 % Max Peaks: 6 Bunching: 1
Onslope: 0.00 Results File VDIRS0 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	24.64	422	425	439	42603	1118610	IS 628642	20.65	7.774
2	26.59	458	464	471	20536	727915	~~319966~~	10.51	3.957
3	28.54	492	499	509	47644	1496765	SC ~~908806~~	29.85	11.239
4	29.98	515	525	531	63785	1921665	~~1336601~~	43.90	16.530
5	30.71	531	535	550	80272	2560315	~~1847340~~	60.68	22.046
6	34.83	598	612	625	90058	4123950	3044591	100.00	37.653

Sum of corrected areas: 8085953.

061



1.	1H-Indene, 2,3-dihydro-	118	C9H10
2.	1H-Indene, 2,3-dihydro-	119	C9H10
3.	1H-Indene, 2,3-dihydro-	118	C9H10
4.	1H-Indene, 2,3-dihydro-	116	C9H10
5.	Benzene, 1-propenyl-	118	C9H10

Sample file: >A1171 Spectrum #: 611
Search speed: 1 Filtering option: N No. of ion ranges searched: 47

	Prob.	CAS #	CON #	ROOT	M	DM	#FLS	FILT	%	CON	C_I	R_IV
1.	85*	496117	25672	"BIGDB	71	30	1	0	72	6	58	71
2.	78*	496117	25673	"BIGDB	67	35	0	0	51	32	43	80
3.	71*	496117	25373	"BIGDB	47	16	1	0	91	14	38	31
4.	54*	496117	25372	"BIGDB	40	52	8	0	71	10	21	42
5.	56*	637903	25479	"BIGDB	62	37	1	0	71	30	21	40

$$\text{conc.} = \frac{3044591}{628642} \times \frac{250}{(5)(1)} = 242 \text{ ng/L}$$

062

QUANT REPORT

Operator ID: SUEB Quant Rev: 6 Quant Time: 930730 12:16
Output File: ^CA012::SS Injected at: 930730 11:36
Data File: >CA012::E7 Dilution Factor: 1.00000
Name: VSTD 200
Misc: 200PPB STD

ID File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 930730 09:51

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.42	128.0	43253	50.00	UG/L	100
2)	Chloromethane	1.24	50.0	353401	275.68	UG/L	93
3)	Bromomethane	2.07	94.0	406487	200.51	UG/L	97
4)	Vinyl Chloride	2.68	62.0	413149	231.19	UG/L	91
5)	Dichlorodifluoromethane	2.52	85.0	4607	227.19	UG/L	87
6)	Chloroethane	3.69	64.0	296336	211.27	UG/L	86
7)	Methylene Chloride	5.91	84.0	468241	278.77	UG/L	100
8)	Acetone	6.86	43.0	77743	222.93	UG/L	80
9)	Acrolein	6.86	56.0	37071	482.94	UG/L	89
10)	Carbon Disulfide	7.47	76.0	778220	216.52	UG/L	97
11)	Acrylonitrile	7.58	53.0	79524	490.80	UG/L	98
12)	Trichlorofluoromethane	8.09	101.0	784710	390.08	UG/L	86
13)	1,1-Dichloroethene	8.92	96.0	313429M	311.86	UG/L	
14)	1,1-Dichloroethane	10.20	63.0	994449	255.21	UG/L	96
15)	Tetrahydrofuran	10.37	42.0	105814	225.28	UG/L	68
16)	1,2-Dichloroethene	11.04	96.0	333327M	234.22	UG/L	
17)	Chloroform	11.59	83.0	901416	243.00	UG/L	99
18)	1,2-DICHLOROETHANE-d4	12.26	65.0	163626	62.61	UG/L	89
19)	1,2-Dichloroethane	12.37	62.0	718006	232.49	UG/L	94
20)	2-Butanone	12.43	43.0	137917	188.93	UG/L	65
21)	*1,4-DIFLUOROBENZENE	19.78	114.0	197347	50.00	UG/L	90
22)	1,1,1-Trichloroethane	13.54	97.0	663061	227.74	UG/L	99
23)	Carbon Tetrachloride	13.93	117.0	528531	246.13	UG/L	98
24)	Vinyl Acetate	14.27	43.0	812353	238.98	UG/L	85
25)	Bromodichloromethane	14.54	83.0	859581	225.00	UG/L	95
26)	1,2-Dichloropropane	15.88	63.0	604560	232.15	UG/L	92
27)	cis-1,3-Dichloropropene	16.16	75.0	602697	277.89	UG/L	86
28)	Trichloroethene	16.72	95.0	536961	254.77	UG/L	98
29)	Benzene	17.22	78.0	1114610	232.39	UG/L	98
30)	Dibromochloromethane	17.27	129.0	523914	227.73	UG/L	95
31)	1,1,2-Trichloroethane	17.44	97.0	326262	208.82	UG/L	88
32)	trans-1,3-Dichloropropene	17.44	75.0	572133	153.60	UG/L	100
33)	2-Chloroethyl Vinyl Ether	18.50	63.0	273941	233.18	UG/L	100
34)	Bromoform	19.95	173.0	282156	215.45	UG/L	97
35)	*CHLOROBENZENE-d5	24.63	117.0	165801	50.00	UG/L	88
36)	4-Methyl-2-Pentanone	20.45	43.0	362768	227.45	UG/L	88
37)	2-Hexanone	22.01	43.0	216107	220.02	UG/L	99
38)	Tetrachloroethene	22.34	164.0	322130	215.18	UG/L	91
39)	1,1,2,2,-Tetrachloroethane	22.23	83.0	334657	134.14	UG/L	88
40)	TOLUENE-d8	23.40	98.0	218992	50.25	UG/L	92
41)	Toluene	23.62	92.0	633563	220.62	UG/L	91
42)	Chlorobenzene	24.74	112.0	769014	219.89	UG/L	89
43)	Ethyl Benzene	26.46	106.0	366241	207.83	UG/L	87

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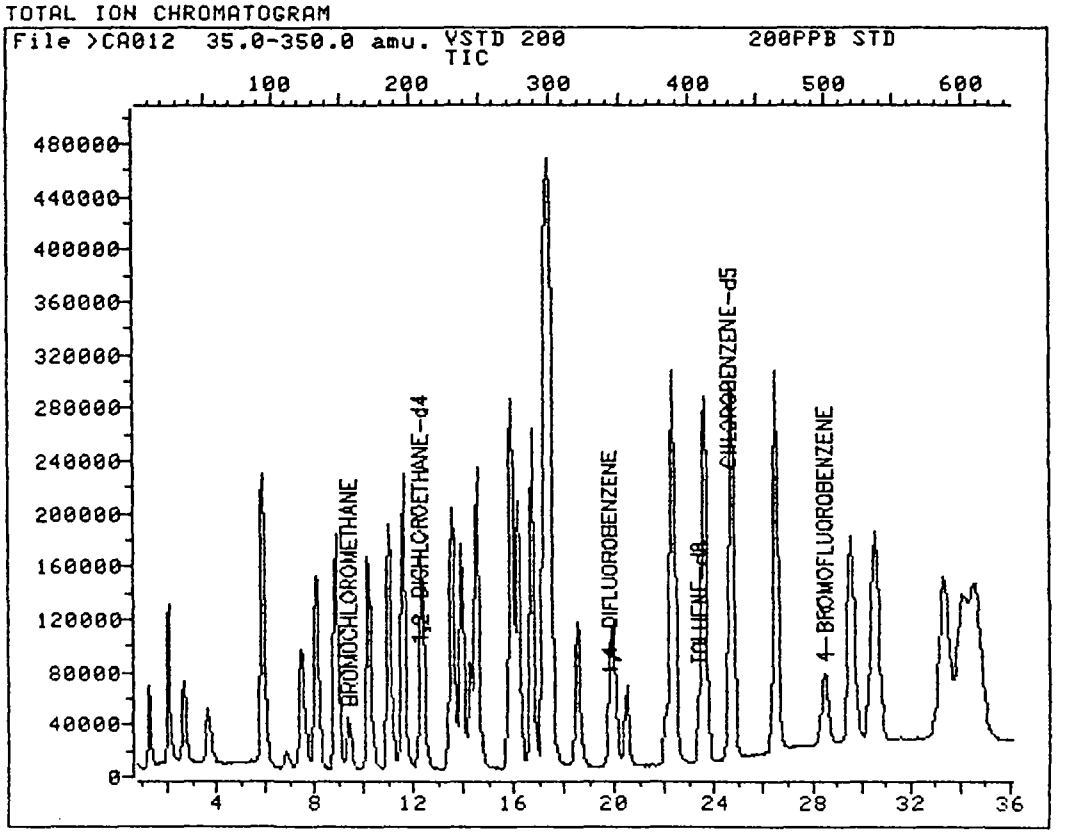
	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	4-BROMOFLUOROBENZENE	28.47	95.0	188557	51.82	UG/L	100
45)	Styrene	29.59	104.0	645544	219.33	UG/L	88
46)	Total Xylenes	30.53	106.0	397601	212.49	UG/L	92
47)	1,3-Dichlorobenzene	33.38	146.0	668929	234.23	UG/L	98
48)	1,2-Dichlorobenzene	34.21	146.0	648450M	231.13	UG/L	100
49)	1,4-Dichlorobenzene	34.55	146.0	627555M	243.64	UG/L	99

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >CA012::E7 Quant Output File: ^CA012::SS
Name: VSTD 200
Misc: 200PPB STD

Id File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 930730 09:51

Operator ID: SUEB
Quant Time: 930730 12:16
Injected at: 930730 11:36

QUANT REPORT

Operator ID: SUEB Quant Rev: 6 Quant Time: 930730 12:59
Output File: ^CA013::SS Injected at: 930730 12:22
Data File: >CA013::E7 Dilution Factor: 1.00000
Name: VSTD 150
Misc: 150PPB STD

ID File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 930730 09:51

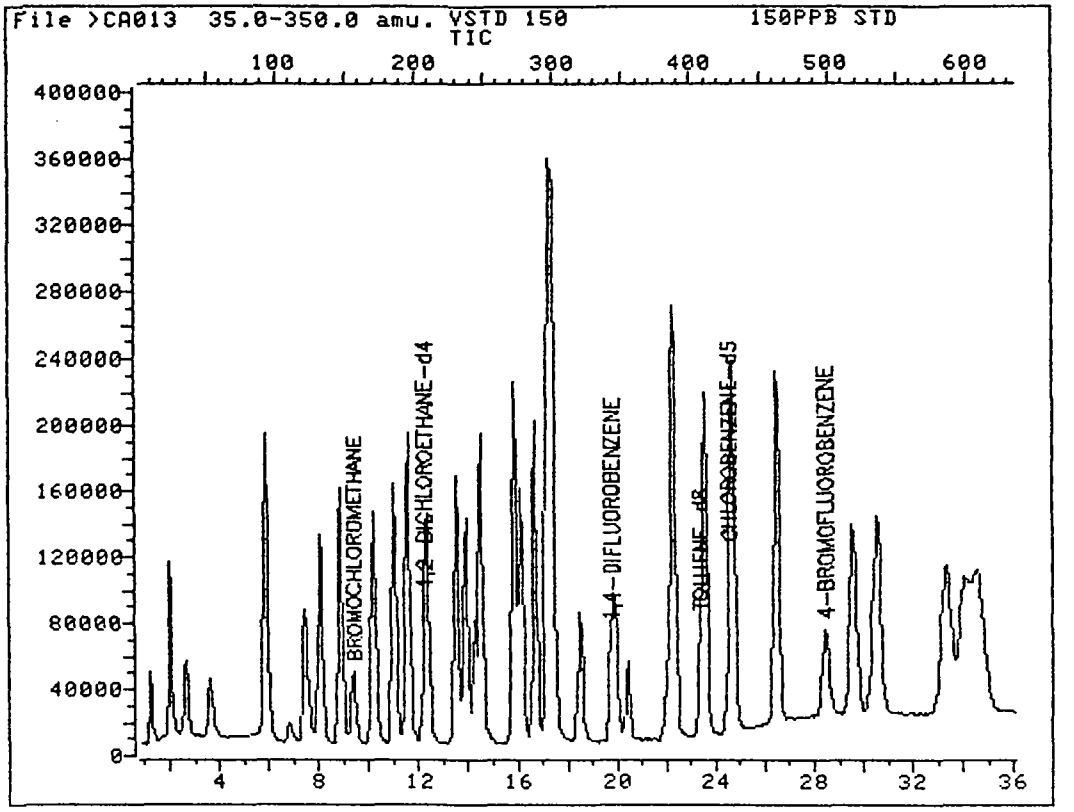
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.42	128.0	50952	50.00	UG/L	100
2)	Chloromethane	1.23	50.0	235435	155.91	UG/L	92
3)	Bromomethane	2.01	94.0	344560	144.28	UG/L	99
4)	Vinyl Chloride	2.68	62.0	326964	155.32	UG/L	94
5)	Dichlorodifluoromethane	2.51	85.0	3264	136.64	UG/L	87
6)	Chloroethane	3.63	64.0	251742	152.36	UG/L	89
7)	Methylene Chloride	5.85	84.0	410282	207.36	UG/L	100
8)	Acetone	6.86	43.0	76813	186.98	UG/L	79
9)	Acrolein	6.86	56.0	32439	358.74	UG/L	87
10)	Carbon Disulfide	7.47	76.0	697895	164.83	UG/L	96
11)	Acrylonitrile	7.58	53.0	72038	377.42	UG/L	88
12)	Trichlorofluoromethane	8.08	101.0	669293	282.43	UG/L	86
13)	1,1-Dichloroethene	8.92	96.0	274833M	232.14	UG/L	
14)	1,1-Dichloroethane	10.20	63.0	862645	187.93	UG/L	97
15)	Tetrahydrofuran	10.31	42.0	95621	172.81	UG/L	68
16)	1,2-Dichloroethene	11.03	96.0	300001	178.95	UG/L	77
17)	Chloroform	11.59	83.0	777430	177.91	UG/L	99
18)	1,2-DICHLOROETHANE-d4	12.26	65.0	167943	54.55	UG/L	93
19)	1,2-Dichloroethane	12.37	62.0	586611	161.25	UG/L	96
20)	2-Butanone	12.37	43.0	115920M	134.80	UG/L	78
21)	*1,4-DIFLUOROBENZENE	19.78	114.0	217383	50.00	UG/L	88
22)	1,1,1-Trichloroethane	13.54	97.0	547501	170.72	UG/L	99
23)	Carbon Tetrachloride	13.93	117.0	432507	182.85	UG/L	98
24)	Vinyl Acetate	14.26	43.0	745193	199.02	UG/L	85
25)	Bromodichloromethane	14.54	83.0	704822	167.49	UG/L	94
26)	1,2-Dichloropropane	15.88	63.0	497544	173.44	UG/L	92
27)	cis-1,3-Dichloropropene	16.16	75.0	479584	200.74	UG/L	86
28)	Trichloroethene	16.71	95.0	402376	173.32	UG/L	97
29)	Benzene	17.21	78.0	937838	177.51	UG/L	98
30)	Dibromochloromethane	17.27	129.0	393764	155.38	UG/L	92
31)	1,1,2-Trichloroethane	17.38	97.0	251533	146.15	UG/L	91
32)	trans-1,3-Dichloropropene	17.44	75.0	426236	103.88	UG/L	100
33)	2-Chloroethyl Vinyl Ether	18.49	63.0	196323	151.71	UG/L	100
34)	Bromoform	19.94	173.0	216965	150.40	UG/L	97
35)	*CHLOROBENZENE-d5	24.57	117.0	167446	50.00	UG/L	92
36)	4-Methyl-2-Pentanone	20.44	43.0	286632	177.95	UG/L	88
37)	2-Hexanone	22.00	43.0	166977	168.33	UG/L	96
38)	Tetrachloroethene	22.28	164.0	249828	165.25	UG/L	94
39)	1,1,2,2,-Tetrachloroethane	22.23	83.0	402377	159.70	UG/L	89
40)	TOLUENE-d8	23.40	98.0	221573	50.34	UG/L	89
41)	Toluene	23.56	92.0	487768	168.19	UG/L	99
42)	Chlorobenzene	24.68	112.0	582593	164.95	UG/L	93
43)	Ethyl Benzene	26.46	106.0	267307	150.20	UG/L	83

066

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	4-BROMOFLUOROBENZENE	28.47	95.0	171983	46.80	UG/L	100
45)	Styrene	29.58	104.0	475514	159.97	UG/L	90
46)	Total Xylenes	30.53	106.0	296329	156.81	UG/L	90
47)	1,3-Dichlorobenzene	33.37	146.0	489262	169.64	UG/L	96
48)	1,2-Dichlorobenzene	34.10	146.0	451082M	159.20	UG/L	100
49)	1,4-Dichlorobenzene	34.60	146.0	491841M	189.08	UG/L	97

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >CA013::E7 Quant Output File: ^CA013::SS
Name: VSTD 150
Misc: 150PPB STD

Id File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 930730 09:51

Operator ID: SUEB
Quant Time: 930730 12:59
Injected at: 930730 12:22

QUANT REPORT

Operator ID: SUEB Quant Rev: 6 Quant Time: 930730 13:44
Output File: ^CA014::SS Injected at: 930730 13:04
Data File: >CA014::E7 Dilution Factor: 1.00000
Name: VSTD 100
Misc: 100PPB STD

ID File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 930730 09:51

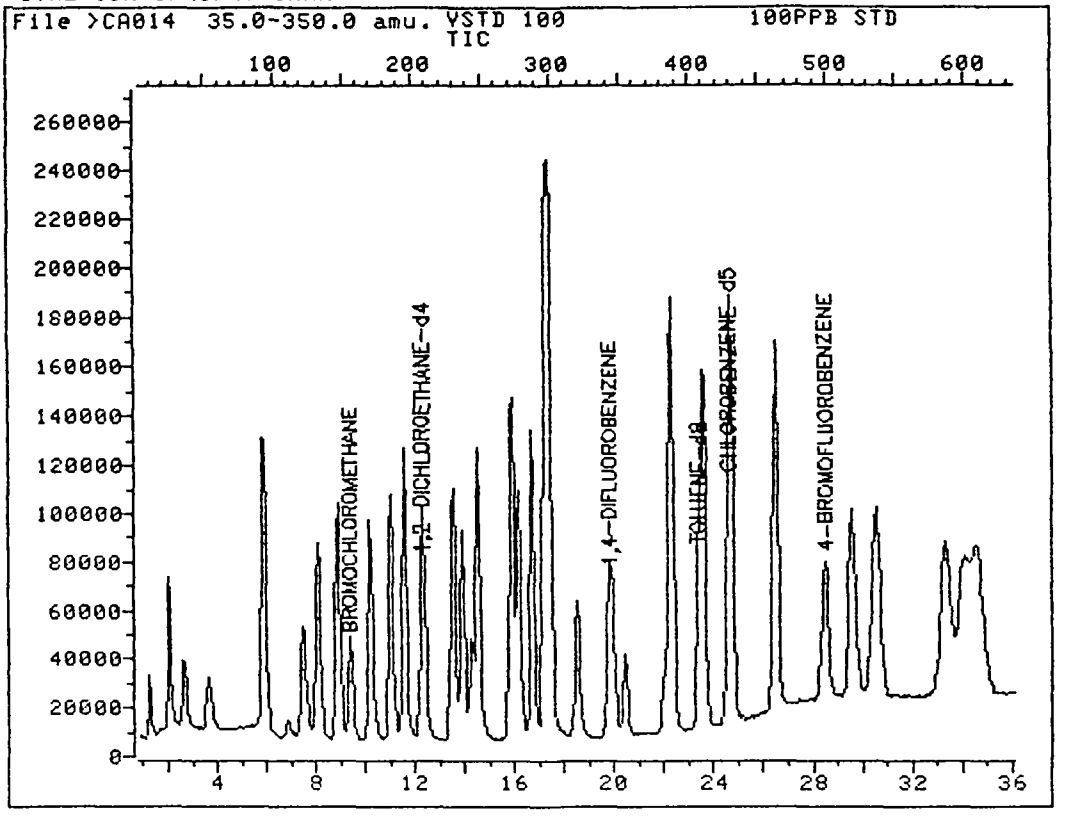
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.36	128.0	50799	50.00	UG/L	100
2)	Chloromethane	1.23	50.0	140650	93.42	UG/L	95
3)	Bromomethane	2.01	94.0	209921	88.17	UG/L	97
4)	Vinyl Chloride	2.63	62.0	194973	92.90	UG/L	94
5)	Dichlorodifluoromethane	2.52	85.0	1804	75.75	UG/L	69
6)	Chloroethane	3.63	64.0	151842	92.17	UG/L	86
7)	Methylene Chloride	5.86	84.0	270789	137.27	UG/L	100
8)	Acetone	6.86	43.0	45704	111.59	UG/L	79
9)	Acrolein	6.86	56.0	19448	215.72	UG/L	85
10)	Carbon Disulfide	7.47	76.0	417222	98.84	UG/L	99
11)	Acrylonitrile	7.58	53.0	45296	238.03	UG/L	97
12)	Trichlorofluoromethane	8.08	101.0	426215	180.40	UG/L	90
13)	1,1-Dichloroethene	8.92	96.0	175351M	148.56	UG/L	
14)	1,1-Dichloroethane	10.20	63.0	552808	120.80	UG/L	98
15)	Tetrahydrofuran	10.31	42.0	60128	109.00	UG/L	69
16)	1,2-Dichloroethene	11.03	96.0	195585	117.02	UG/L	75
17)	Chloroform	11.59	83.0	500715	114.93	UG/L	98
18)	1,2-DICHLOROETHANE-d4	12.26	65.0	164053	53.45	UG/L	95
19)	1,2-Dichloroethane	12.37	62.0	384300	105.95	UG/L	95
20)	2-Butanone	12.37	43.0	81868	95.49	UG/L	66
21)	*1,4-DIFLUOROBENZENE	19.78	114.0	224206	50.00	UG/L	87
22)	1,1,1-Trichloroethane	13.54	97.0	354063	107.04	UG/L	98
23)	Carbon Tetrachloride	13.93	117.0	281950	115.57	UG/L	99
24)	Vinyl Acetate	14.26	43.0	427864	110.79	UG/L	84
25)	Bromodichloromethane	14.54	83.0	468206	107.87	UG/L	96
26)	1,2-Dichloropropane	15.88	63.0	326576	110.38	UG/L	92
27)	cis-1,3-Dichloropropene	16.16	75.0	321598	130.52	UG/L	89
28)	Trichloroethene	16.71	95.0	261208	109.09	UG/L	98
29)	Benzene	17.21	78.0	604217	110.88	UG/L	96
30)	Dibromochloromethane	17.27	129.0	273098	104.49	UG/L	90
31)	1,1,2-Trichloroethane	17.38	97.0	179277	101.00	UG/L	90
32)	trans-1,3-Dichloropropene	17.44	75.0	298785	70.61	UG/L	100
33)	2-Chloroethyl Vinyl Ether	18.50	63.0	140252	105.08	UG/L	100
34)	Bromoform	19.94	173.0	148448	99.77	UG/L	98
35)	*CHLOROBENZENE-d5	24.57	117.0	178560	50.00	UG/L	89
36)	4-Methyl-2-Pentanone	20.44	43.0	198806	115.74	UG/L	87
37)	2-Hexanone	22.00	43.0	124501	117.70	UG/L	98
38)	Tetrachloroethene	22.34	164.0	165616M	102.73	UG/L	
39)	1,1,2,2,-Tetrachloroethane	22.23	83.0	273131	101.66	UG/L	97
40)	TOLUENE-d8	23.40	98.0	241400	51.43	UG/L	92
41)	Toluene	23.56	92.0	341254	110.34	UG/L	93
42)	Chlorobenzene	24.68	112.0	409670	108.77	UG/L	96
43)	Ethyl Benzene	26.46	106.0	181408	100.86	UG/L	87

009

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	4-BROMOFLUOROBENZENE	28.47	95.0	197411	50.37	UG/L	100
45)	Styrene	29.58	104.0	318892	100.60	UG/L	85
46)	Total Xylenes	30.53	106.0	195345	96.94	UG/L	91
47)	1,3-Dichlorobenzene	33.37	146.0	353098	114.81	UG/L	98
48)	1,2-Dichlorobenzene	34.15	146.0	314848M	104.20	UG/L	100
49)	1,4-Dichlorobenzene	34.49	146.0	345932M	124.71	UG/L	

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >CA014::E7 Quant Output File: ^CA014::SS
Name: VSTD 100
Misc: 100PPB STD

Id File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 930730 09:51

Operator ID: SUEB
Quant Time: 930730 13:44
Injected at: 930730 13:04

QUANT REPORT

Operator ID: SUEB Quant Rev: 6 Quant Time: 930730 14:24
Output File: ^CA015::SS Injected at: 930730 13:47
Data File: >CA015::E7 Dilution Factor: 1.00000
Name: VSTD 20
Misc: 20 PPB STD

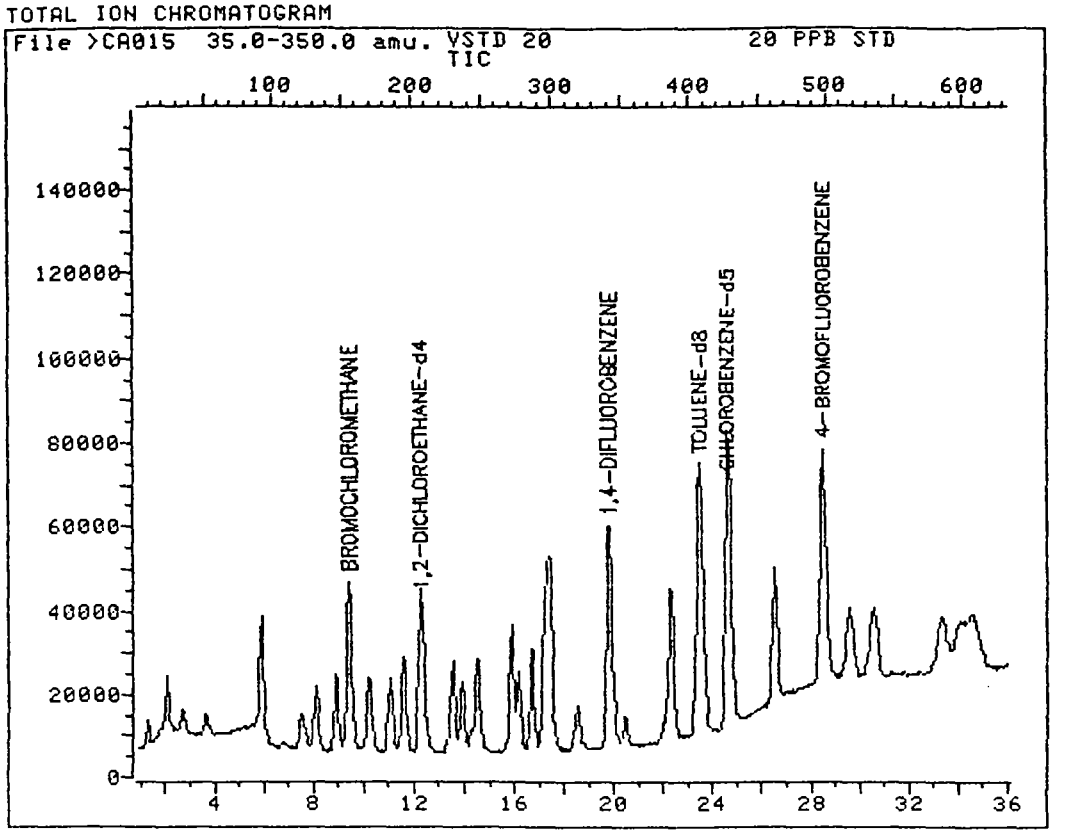
ID File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 930730 09:51

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.41	128.0	48409	50.00	UG/L	100
2)	Chloromethane	1.23	50.0	34825M	24.27	UG/L	93
3)	Bromomethane	2.00	94.0	45223	19.93	UG/L	99
4)	Vinyl Chloride	2.67	62.0	42411	21.20	UG/L	95
6)	Chloroethane	3.62	64.0	30979	19.73	UG/L	87
7)	Methylene Chloride	5.90	84.0	54086	28.77	UG/L	100
8)	Acetone	6.85	43.0	11116M	28.48	UG/L	76
9)	Acrolein	6.90	56.0	3362	39.13	UG/L	93
10)	Carbon Disulfide	7.52	76.0	84036	20.89	UG/L	97
11)	Acrylonitrile	7.63	53.0	6847	37.76	UG/L	84
12)	Trichlorofluoromethane	8.13	101.0	84684	37.61	UG/L	84
13)	1,1-Dichloroethene	8.91	96.0	34703M	30.85	UG/L	
14)	1,1-Dichloroethane	10.19	63.0	112541	25.81	UG/L	97
15)	Tetrahydrofuran	10.30	42.0	12308	23.41	UG/L	69
16)	1,2-Dichloroethene	11.02	96.0	42134	26.45	UG/L	78
17)	Chloroform	11.58	83.0	100644	24.24	UG/L	98
18)	1,2-DICHLOROETHANE-d4	12.25	65.0	145388	49.70	UG/L	98
19)	1,2-Dichloroethane	12.36	62.0	79068	22.88	UG/L	99
20)	2-Butanone	12.42	43.0	15417M	18.87	UG/L	66
21)	*1,4-DIFLUOROBENZENE	19.76	114.0	211016	50.00	UG/L	87
22)	1,1,1-Trichloroethane	13.53	97.0	71899	23.10	UG/L	98
23)	Carbon Tetrachloride	13.92	117.0	54417	23.70	UG/L	98
24)	Vinyl Acetate	14.31	43.0	66014	18.16	UG/L	84
25)	Bromodichloromethane	14.53	83.0	90265	22.10	UG/L	92
26)	1,2-Dichloropropane	15.87	63.0	66841	24.00	UG/L	95
27)	cis-1,3-Dichloropropene	16.15	75.0	67103	28.94	UG/L	86
28)	Trichloroethene	16.70	95.0	54417	24.15	UG/L	99
29)	Benzene	17.20	78.0	122802	23.94	UG/L	98
30)	Dibromochloromethane	17.31	129.0	53589	21.78	UG/L	90
31)	1,1,2-Trichloroethane	17.43	97.0	36750M	22.00	UG/L	
32)	trans-1,3-Dichloropropene	17.43	75.0	63201	15.87	UG/L	100
33)	2-Chloroethyl Vinyl Ether	18.48	63.0	28061	22.34	UG/L	100
34)	Bromoform	19.93	173.0	27439	19.59	UG/L	0725
35)	*CHLOROBENZENE-d5	24.55	117.0	172035	50.00	UG/L	93
36)	4-Methyl-2-Pentanone	20.43	43.0	38847M	23.47	UG/L	94
37)	2-Hexanone	21.99	43.0	25083M	24.61	UG/L	99
38)	Tetrachloroethene	22.33	164.0	33726	21.71	UG/L	90
39)	1,1,2,2,-Tetrachloroethane	22.27	83.0	52924	20.44	UG/L	92
40)	TOLUENE-d8	23.44	98.0	231418	51.17	UG/L	93
41)	Toluene	23.61	92.0	70659	23.71	UG/L	90
42)	Chlorobenzene	24.72	112.0	86205	23.76	UG/L	96
43)	Ethyl Benzene	26.50	106.0	40224	22.00	UG/L	85
44)	4-BROMOFLUOROBENZENE	28.45	95.0	191272	50.66	UG/L	100

	Compound	R.T.	Q ion	Area	Conc	Units	q
45)	Styrene	29.57	104.0	70613	23.12	UG/L	86
46)	Total Xylenes	30.52	106.0	41275	21.26	UG/L	87
47)	1,3-Dichlorobenzene	33.30	146.0	74198	25.04	UG/L	99
48)	1,2-Dichlorobenzene	34.25	146.0	67315M	23.12	UG/L	100
49)	1,4-Dichlorobenzene	34.53	146.0	63545M	23.78	UG/L	

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >CA015::E7 Quant Output File: ^CA015::SS
Name: VSTD 20
Misc: 20 PPB STD

Id File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 930730 09:51

Operator ID: SUEB
Quant Time: 930730 14:24
Injected at: 930730 13:47

QUANT REPORT

Operator ID: SUEB Quant Rev: 6 Quant Time: 930812 10:36
Output File: ^VA105::SS Injected at: 930812 09:49
Data File: >VA105::E4 Dilution Factor: 1.00000
Name: VSTD 50
Misc: 50PPB STD

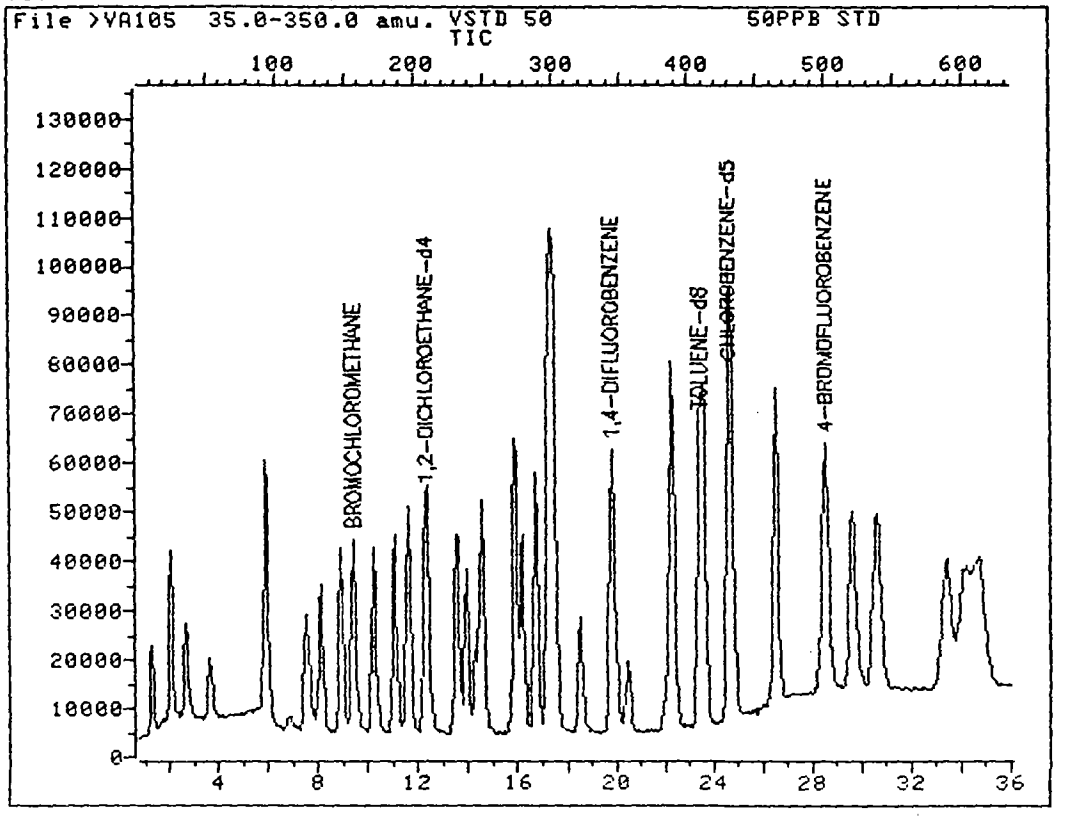
ID File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 930805 09:32

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.41	128.0	50124	50.00	UG/L	100
2)	Chloromethane	1.29	50.0	105142	87.76	UG/L	91
3)	Bromomethane	2.06	94.0	113406	52.69	UG/L	96
4)	Vinyl Chloride	2.68	62.0	130019	70.79	UG/L	95
5)	Dichlorodifluoromethane	2.51	85.0	177M	19.28	UG/L	
6)	Chloroethane	3.68	64.0	82494	51.74	UG/L	88
7)	Methylene Chloride	5.91	84.0	111056	40.39	UG/L	100
8)	Acetone	6.85	43.0	19256	31.53	UG/L	90
9)	Acrolein	6.91	56.0	8992	83.50	UG/L	95
10)	Carbon Disulfide	7.52	76.0	235477	57.15	UG/L	97
11)	Acrylonitrile	7.69	53.0	17571	74.53	UG/L	91
12)	Trichlorofluoromethane	8.13	101.0	156161	37.48	UG/L	87
13)	1,1-Dichloroethene	8.91	96.0	78188	44.50	UG/L	77
14)	1,1-Dichloroethane	10.25	63.0	236478	42.60	UG/L	98
15)	Tetrahydrofuran	10.36	42.0	26262	42.71	UG/L	75
16)	1,2-Dichloroethene	11.08	96.0	84255	43.78	UG/L	78
17)	Chloroform	11.58	83.0	209433	42.72	UG/L	97
18)	1,2-DICHLOROETHANE-d4	12.31	65.0	137219	43.38	UG/L	99
19)	1,2-Dichloroethane	12.36	62.0	152040	39.42	UG/L	97
20)	2-Butanone	12.42	43.0	37118	42.04	UG/L	69
21)	*1,4-DIFLUOROBENZENE	19.82	114.0	220914	50.00	UG/L	89
22)	1,1,1-Trichloroethane	13.53	97.0	146086	40.71	UG/L	98
23)	Carbon Tetrachloride	13.92	117.0	112229	40.06	UG/L	96
24)	Vinyl Acetate	14.31	43.0	180772	43.26	UG/L	86
25)	Bromodichloromethane	14.59	83.0	197180	42.91	UG/L	99
26)	1,2-Dichloropropane	15.87	63.0	148449	44.47	UG/L	92
27)	cis-1,3-Dichloropropene	16.20	75.0	146382	57.94	UG/L	88
28)	Trichloroethene	16.76	95.0	115439	44.58	UG/L	98
29)	Benzene	17.26	78.0	271162	44.47	UG/L	96
30)	Dibromochloromethane	17.32	129.0	118967	45.07	UG/L	91
31)	1,1,2-Trichloroethane	17.43	97.0	82419	46.66	UG/L	075 89
32)	trans-1,3-Dichloropropene	17.48	75.0	137597	31.20	UG/L	100
33)	2-Chloroethyl Vinyl Ether	18.54	63.0	63603	46.11	UG/L	100
34)	Bromoform	19.99	173.0	62863	45.50	UG/L	95
35)	*CHLOROBENZENE-d5	24.61	117.0	173201	50.00	UG/L	96
36)	4-Methyl-2-Pentanone	20.49	43.0	97536	45.87	UG/L	92
37)	2-Hexanone	22.05	43.0	56877	41.40	UG/L	94
38)	Tetrachloroethene	22.33	164.0	72313	48.28	UG/L	93
39)	1,1,2,2,-Tetrachloroethane	22.27	83.0	126028	45.11	UG/L	89
40)	TOLUENE-d8	23.44	98.0	235352	51.92	UG/L	94
41)	Toluene	23.66	92.0	151707	48.42	UG/L	92
42)	Chlorobenzene	24.72	112.0	182311	48.37	UG/L	95
43)	Ethyl Benzene	26.50	106.0	84966	48.42	UG/L	86

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	4-BROMOFLUOROBENZENE	28.51	95.0	181652	48.90	UG/L	100
45)	Styrene	29.68	104.0	157106	52.19	UG/L	91
46)	Total Xylenes	30.63	106.0	92575	50.51	UG/L	93
47)	1,3-Dichlorobenzene	33.47	146.0	148736	44.87	UG/L	99
48)	1,2-Dichlorobenzene	34.25	146.0	148775M	48.36	UG/L	100
49)	1,4-Dichlorobenzene	34.69	146.0	138637M	40.21	UG/L	

* Compound is ISTD

TOTAL ION CHROMATOGRAM



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Name: VSTD 50
Misc: 50PPB STD

Id File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 930805 09:32

Operator ID: SUEB
Quant Time: 930812 10:36
Injected at: 930812 09:49

077

QUANT REPORT

Operator ID: SUEB Quant Rev: 6 Quant Time: 930817 09:49
Output File: ^VA108::SS Injected at: 930817 09:01
Data File: >VA108::E4 Dilution Factor: 1.00000
Name: VSTD 50
Misc: 50PPB STD

ID File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 930816 10:34

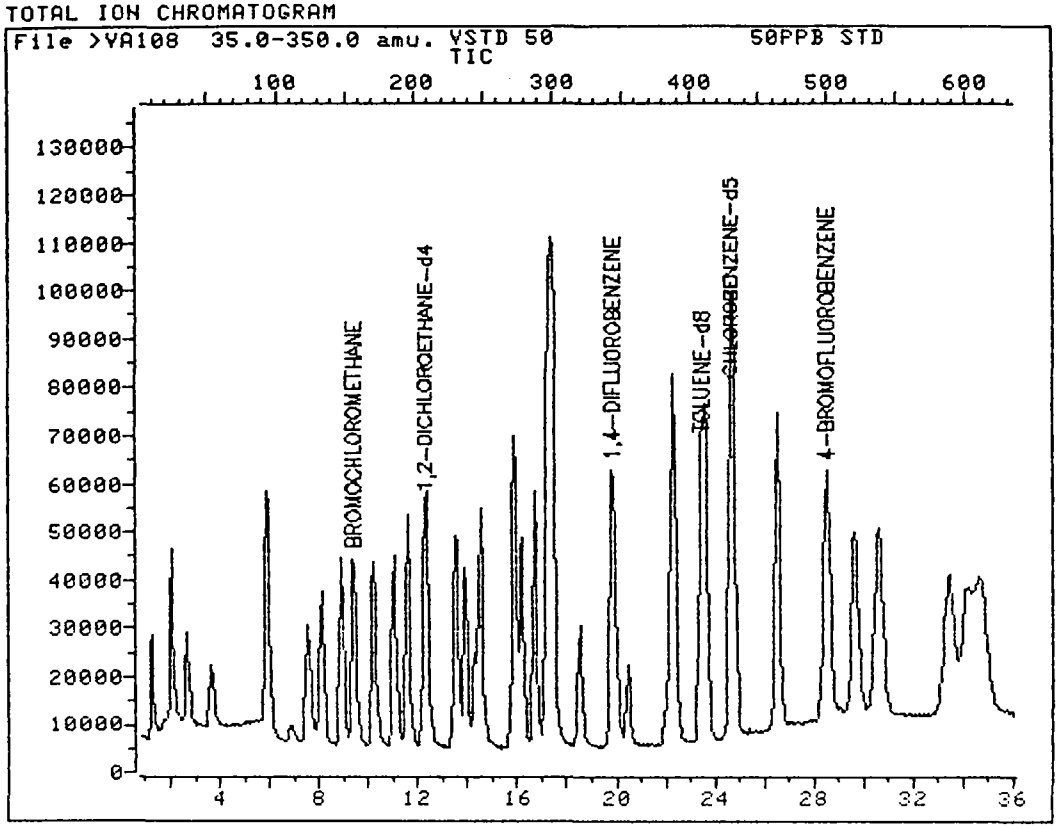
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.41	128.0	45640	50.00	UG/L	100
2)	Chloromethane	1.29	50.0	124455	57.24	UG/L	95
3)	Bromomethane	2.07	94.0	110657	55.33	UG/L	95
4)	Vinyl Chloride	2.68	62.0	127081	53.69	UG/L	91
6)	Chloroethane	3.68	64.0	85624	53.07	UG/L	84
7)	Methylene Chloride	5.91	84.0	96741	52.27	UG/L	100
8)	Acetone	6.85	43.0	24331	54.96	UG/L	79
9)	Acrolein	6.96	56.0	6297	87.99	UG/L	82
10)	Carbon Disulfide	7.52	76.0	227666	52.43	UG/L	97
11)	Acrylonitrile	7.69	53.0	19112	107.70	UG/L	92
12)	Trichlorofluoromethane	8.13	101.0	162241	52.69	UG/L	89
13)	1,1-Dichloroethene	8.97	96.0	68745M	51.98	UG/L	
14)	1,1-Dichloroethane	10.25	63.0	231438	53.35	UG/L	98
15)	Tetrahydrofuran	10.36	42.0	28624	52.52	UG/L	72
16)	1,2-Dichloroethene	11.08	96.0	78740	52.30	UG/L	76
17)	Chloroform	11.58	83.0	206849	53.99	UG/L	98
18)	1,2-DICHLOROETHANE-d4	12.31	65.0	143357	54.27	UG/L	98
19)	1,2-Dichloroethane	12.36	62.0	165107	53.77	UG/L	97
20)	2-Butanone	12.42	43.0	43856	55.75	UG/L	68
21)	*1,4-DIFLUOROBENZENE	19.82	114.0	198836	50.00	UG/L	84
22)	1,1,1-Trichloroethane	13.53	97.0	151768	50.16	UG/L	99
23)	Carbon Tetrachloride	13.92	117.0	116195	50.29	UG/L	99
24)	Vinyl Acetate	14.31	43.0	205156	53.30	UG/L	84
25)	Bromodichloromethane	14.59	83.0	198094	51.37	UG/L	98
26)	1,2-Dichloropropane	15.87	63.0	138427	51.06	UG/L	95
27)	cis-1,3-Dichloropropene	16.20	75.0	137797	63.86	UG/L	86
28)	Trichloroethene	16.76	95.0	109440	49.99	UG/L	97
29)	Benzene	17.26	78.0	256613	51.68	UG/L	93
30)	Dibromochloromethane	17.32	129.0	117531	49.51	UG/L	90
31)	1,1,2-Trichloroethane	17.43	97.0	78194	50.83	UG/L	91
32)	trans-1,3-Dichloropropene	17.49	75.0	133756	36.35	UG/L	100
33)	2-Chloroethyl Vinyl Ether	18.54	63.0	61556	51.76	UG/L	100
34)	Bromoform	19.93	173.0	62406	47.54	UG/L	98
35)	*CHLOROBENZENE-d5	24.61	117.0	159680	50.00	UG/L	83
36)	4-Methyl-2-Pentanone	20.49	43.0	109094	53.81	UG/L	90
37)	2-Hexanone	22.05	43.0	66782	55.37	UG/L	95
38)	Tetrachloroethene	22.33	164.0	69644	45.18	UG/L	90
39)	1,1,2,2,-Tetrachloroethane	22.27	83.0	122785	51.58	UG/L	88
40)	TOLUENE-d8	23.44	98.0	218777	50.39	UG/L	92
41)	Toluene	23.66	92.0	143221	50.45	UG/L	92
42)	Chlorobenzene	24.72	112.0	171971	49.96	UG/L	87
43)	Ethyl Benzene	26.50	106.0	79963	49.87	UG/L	86

078

Compound	R.T.	Q ion	Area	Conc	Units	q
tyrene	29.68	104.0	155174	52.85	UG/L	88
otal Xylenes	30.63	106.0	92464	51.72	UG/L	92
1,3-Dichlorobenzene	33.47	146.0	151952	49.65	UG/L	98
,2-Dichlorobenzene	34.19	146.0	149391M	49.33	UG/L	100
,4-Dichlorobenzene	34.64	146.0	141296M	52.85	UG/L	

Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >VA108::E4 Quant Output File: ^VA108::SS
Name: VSTD 50
Misc: 50PPB STD

Id File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 930816 10:34

Operator ID: SUEB
Quant Time: 930817 09:49
Injected at: 930817 09:01

QUANT REPORT

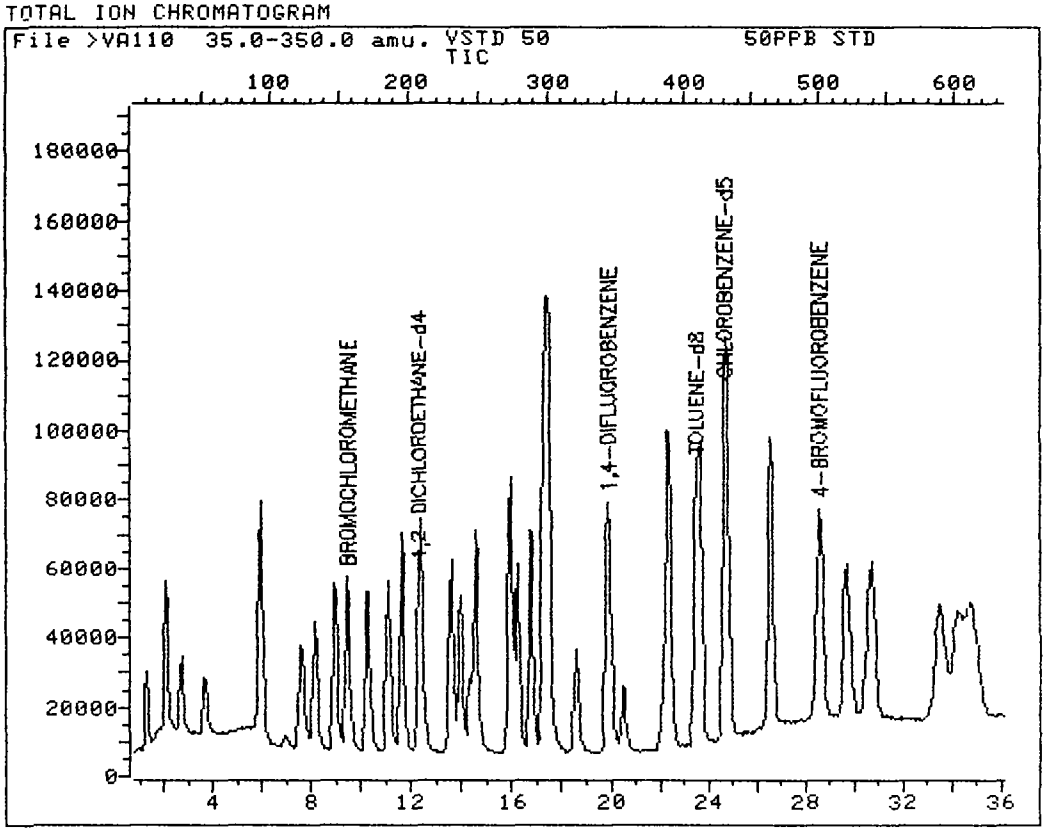
Operator ID: SUSAN Quant Rev: 6 Quant Time: 930819 09:09
Output File: ^VA110::SS Injected at: 930819 08:15
Data File: >VA110::E4 Dilution Factor: 1.00000
Name: VSTD 50
Misc: 50PPB STD

MD File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 930818 14:53

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.47	128.0	58740	50.00	UG/L	100
2)	Chloromethane	1.28	50.0	116324	30.43	UG/L	96
3)	Bromomethane	2.06	94.0	141106	53.13	UG/L	99
4)	Vinyl Chloride	2.73	62.0	149583	45.73	UG/L	94
6)	Chloroethane	3.68	64.0	106629	52.69	UG/L	85
7)	Methylene Chloride	5.96	84.0	130613	55.16	UG/L	100
8)	Acetone	6.91	43.0	31700	37.16	UG/L	84
9)	Acrolein	6.96	56.0	11100	91.43	UG/L	85
10)	Carbon Disulfide	7.58	76.0	286578	51.42	UG/L	98
11)	Acrylonitrile	7.69	53.0	23243	73.18	UG/L	90
12)	Trichlorofluoromethane	8.19	101.0	192742	50.87	UG/L	86
13)	1,1-Dichloroethene	8.97	96.0	94517M	54.96	UG/L	
14)	1,1-Dichloroethane	10.25	63.0	300450	53.38	UG/L	97
15)	Tetrahydrofuran	10.41	42.0	34020	34.32	UG/L	70
16)	1,2-Dichloroethene	11.08	96.0	106138	54.22	UG/L	83
17)	Chloroform	11.64	83.0	267017	52.92	UG/L	96
18)	1,2-DICHLOROETHANE-d4	12.31	65.0	165611	47.46	UG/L	98
19)	1,2-Dichloroethane	12.42	62.0	195851	49.24	UG/L	96
20)	2-Butanone	12.47	43.0	52678	35.32	UG/L	67
21)	*1,4-DIFLUOROBENZENE	19.88	114.0	257364	50.00	UG/L	89
22)	1,1,1-Trichloroethane	13.59	97.0	186302	50.68	UG/L	97
23)	Carbon Tetrachloride	13.98	117.0	142800	50.63	UG/L	98
24)	Vinyl Acetate	14.37	43.0	239480	38.40	UG/L	86
25)	Bromodichloromethane	14.59	83.0	252357	50.37	UG/L	96
26)	1,2-Dichloropropane	15.93	63.0	186343	52.51	UG/L	89
27)	cis-1,3-Dichloropropene	16.20	75.0	180121	65.10	UG/L	88
28)	Trichloroethene	16.76	95.0	142827	52.42	UG/L	99
29)	Benzene	17.32	78.0	339109	50.93	UG/L	98
30)	Dibromochloromethane	17.32	129.0	148958	47.66	UG/L	93
31)	1,1,2-Trichloroethane	17.48	97.0	103046	48.15	UG/L	91
32)	trans-1,3-Dichloropropene	17.48	75.0	173221	34.77	UG/L	100
33)	2-Chloroethyl Vinyl Ether	18.60	63.0	79929	41.57	UG/L	100
34)	Bromoform	19.99	173.0	77451	42.14	UG/L	97
35)	*CHLOROBENZENE-d5	24.67	117.0	209880	50.00	UG/L	88
36)	4-Methyl-2-Pentanone	20.49	43.0	121003	32.46	UG/L	92
37)	2-Hexanone	22.05	43.0	73987	33.01	UG/L	95
38)	Tetrachloroethene	22.38	164.0	87511	52.94	UG/L	88
39)	1,1,2,2,-Tetrachloroethane	22.27	83.0	159576	40.04	UG/L	90
40)	TOLUENE-d8	23.50	98.0	276634	48.83	UG/L	92
41)	Toluene	23.66	92.0	188042	52.20	UG/L	94
42)	Chlorobenzene	24.78	112.0	225529	51.53	UG/L	94
43)	Ethyl Benzene	26.56	106.0	103317	49.41	UG/L	85
44)	4-BROMOFLUOROBENZENE	28.57	95.0	213908	47.95	UG/L	100

081

TOTAL ION CHROMATOGRAM



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Name: VSTD 50
Misc: 50PPB STD

Id File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 930818 14:53

Operator ID: SUSAN
Quant Time: 930819 09:09
Injected at: 930819 08:15

QUANT REPORT

Operator ID: SUEB Quant Rev: 6 Quant Time: 930819 10:35
Output File: ^BA110::SS Injected at: 930819 09:58
Data File: >BA110::E2 Dilution Factor: 1.00000
Name: VBLANK
Misc: 5ML WATER,10UL ISS

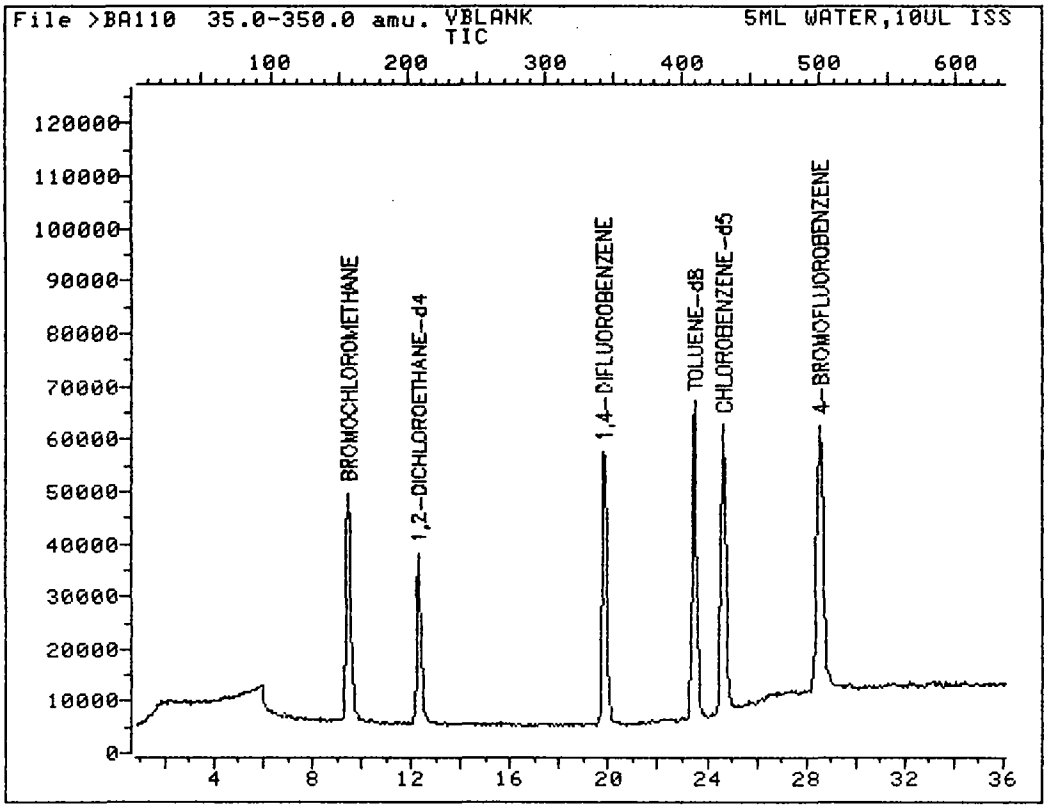
OK
LID/2361
8/19/93

ID File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 930819 09:20

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.48	128.0	50009	50.00	UG/L	100
18)	1,2-DICHLOROETHANE-d4	12.32	65.0	141579	50.21	UG/L	96
21)	*1,4-DIFLUOROBENZENE	19.83	114.0	214214	50.00	UG/L	90
35)	*CHLOROBENZENE-d5	24.67	117.0	168790	50.00	UG/L	87
40)	TOLUENE-d8	23.50	98.0	234500	52.70	UG/L	92
44)	4-BROMOFLUOROBENZENE	28.57	95.0	181924	52.88	UG/L	100

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >BA110::E2 Quant Output File: ^BA110::SS
Name: VBLANK
Misc: 5ML WATER,10UL ISS

Id File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 930819 09:20

Operator ID: SUEB
Quant Time: 930819 10:35
Injected at: 930819 09:58

QUANT REPORT

Operator ID: SUEB Quant Rev: 6 Quant Time: 930817 11:14
Output File: ^BA108::SS Injected at: 930817 10:37
Data File: >BA108::E4 Dilution Factor: 1.00000
Name: VBLANK
Misc: 5ML WATER,10UL ISS

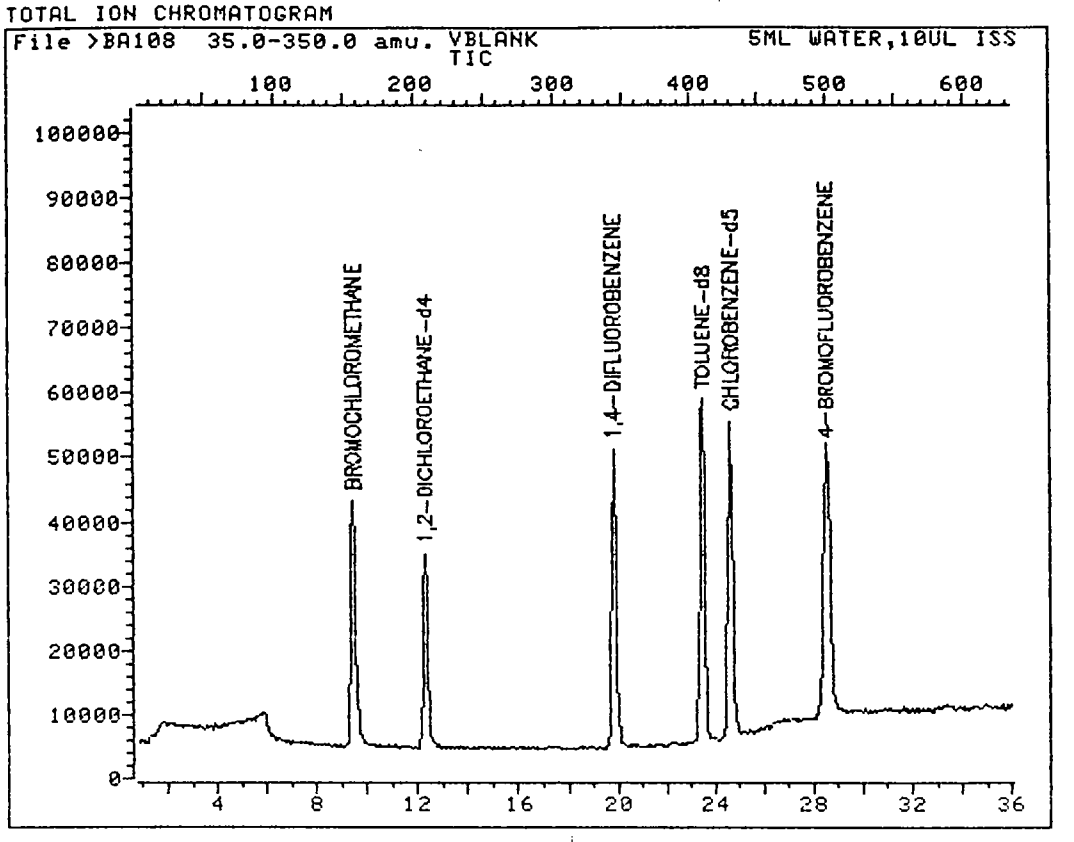
CK
LID12361
8/17/93

ID File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 930817 10:00

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.47	128.0	42166	50.00	UG/L	100
18)	1,2-DICHLOROETHANE-d4	12.31	65.0	134471	50.76	UG/L	98
21)	*1,4-DIFLUOROBENZENE	19.82	114.0	182051	50.00	UG/L	90
35)	*CHLOROBENZENE-d5	24.66	117.0	137657	50.00	UG/L	83
40)	TOLUENE-d8	23.49	98.0	199080	52.78	UG/L	93
44)	4-BROMOFLUOROBENZENE	28.50	95.0	144976	48.65	UG/L	100

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >BA108::E4
Name: VBLANK
Misc: 5ML WATER,10UL ISS

Quant Output File: ^BA108::SS

Id File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 930817 10:00

Operator ID: SUEB
Quant Time: 930817 11:14
Injected at: 930817 10:37

QUANT REPORT

Operator ID: SUEB Quant Rev: 6 Quant Time: 930819 15:59
Output File: ^A1172::SS Injected at: 930819 15:22
Data File: >A1172::E4 Dilution Factor: 1.00000
Name: C149652 MS
Misc: 5ML SAMPLE ECOLOGY ENV

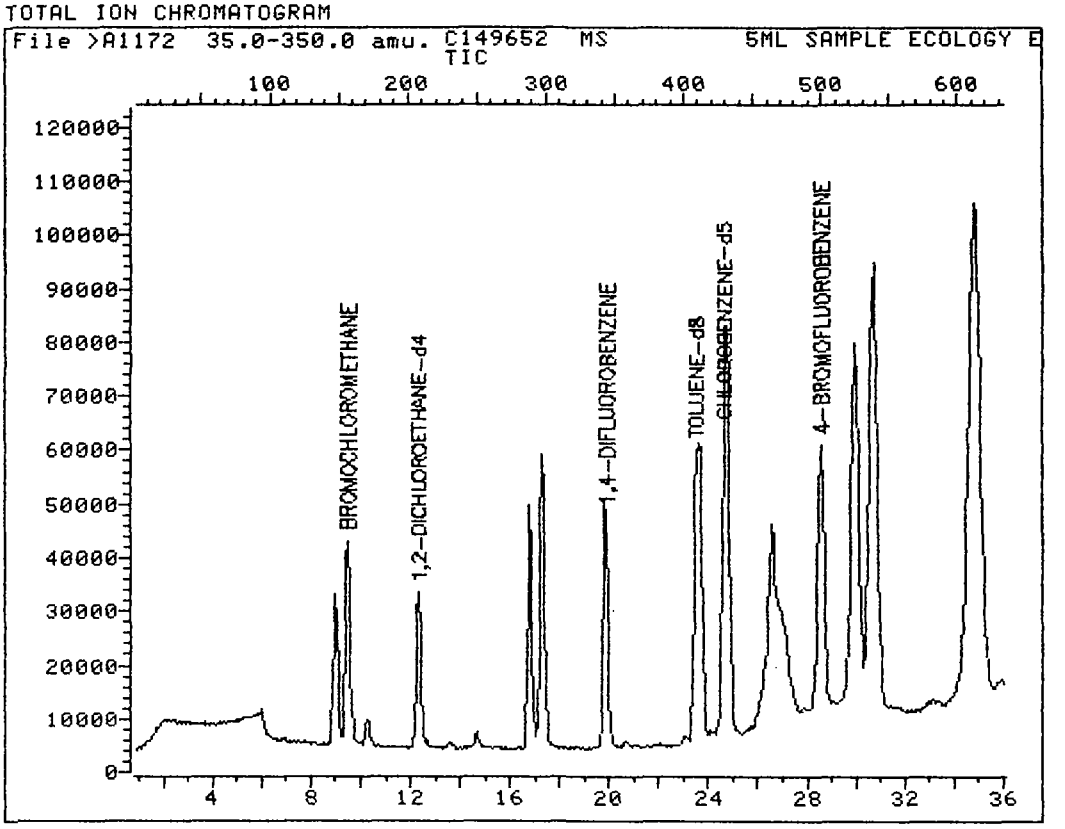
OK
LD
8/20/93

ID File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 930819 09:20

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.49	128.0	42859	50.00	UG/L	100
3)	1,1-Dichloroethene	8.99	96.0	53207M	38.58	UG/L	
14)	1,1-Dichloroethane	10.27	63.0	32942	7.51	UG/L	90
18)	1,2-DICHLOROETHANE-d4	12.33	65.0	127065	52.58	UG/L	93
1)	*1,4-DIFLUOROBENZENE	19.90	114.0	189812	50.00	UG/L	91
28)	Trichloroethene	16.78	95.0	96043	45.59	UG/L	96
29)	Benzene	17.28	78.0	253898	50.76	UG/L	91
5)	*CHLOROBENZENE-d5	24.63	117.0	144069	50.00	UG/L	87
0)	TOLUENE-d8	23.52	98.0	179970	47.39	UG/L	96
41)	Toluene	23.68	92.0	122475	47.44	UG/L	93
2)	Chlorobenzene	24.80	112.0	146782	47.41	UG/L	91
3)	Ethyl Benzene	26.52	106.0	24886	17.55	UG/L	96
44)	4-BROMOFLUOROBENZENE	28.58	95.0	175604	59.80	UG/L	100
6)	Total Xylenes	30.70	106.0	390343M	247.83	UG/L	93

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >A1172::E4 Quant Output File: ^A1172::SS
Name: C149652 MS
Misc: 5ML SAMPLE ECOLOGY ENV

Id File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 930819 09:20

Operator ID: SUEB
Quant Time: 930819 15:59
Injected at: 930819 15:22

QUANT REPORT

Operator ID: SUEB Quant Rev: 6 Quant Time: 930819 16:42
Output File: ^A1173::SS Injected at: 930819 16:05
Data File: >A1173::E2 Dilution Factor: 1.00000
Name: C149652 MSD
Misc: 5ML SAMPLE ECOLOGY ENV

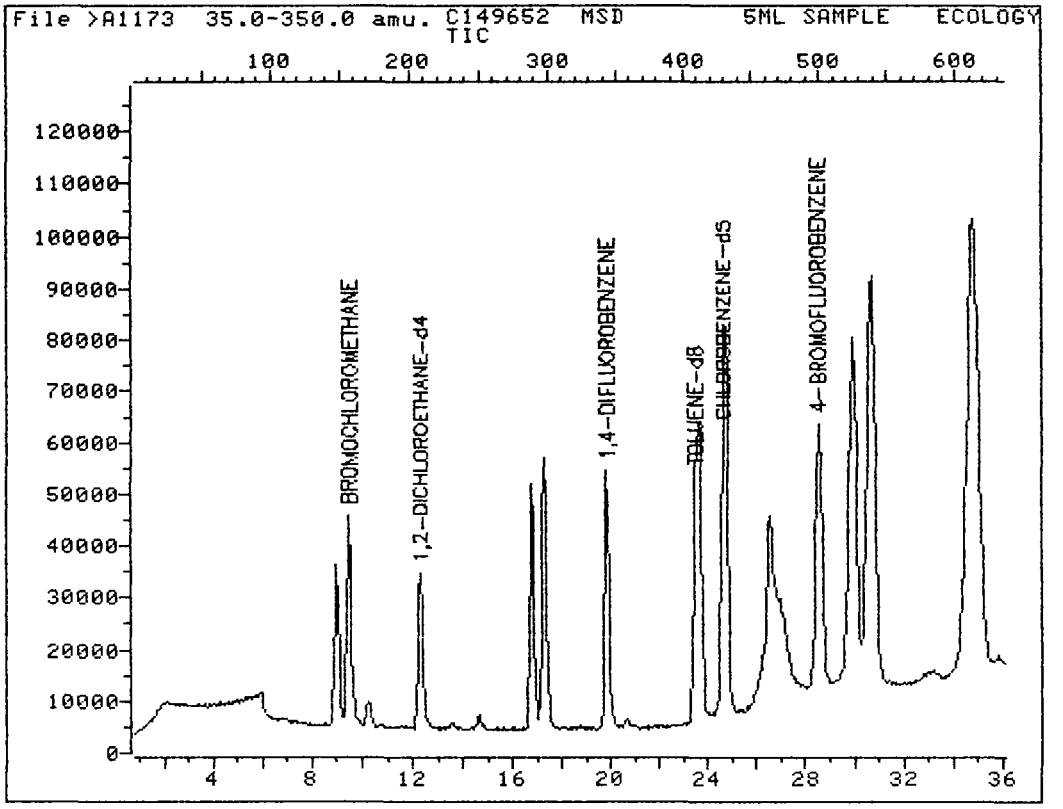
OK
LD
8/20/93

QD File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 930819 09:20

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.49	128.0	44523M	50.00	UG/L	100
3)	1,1-Dichloroethene	8.99	96.0	56837M	39.67	UG/L	
14)	1,1-Dichloroethane	10.27	63.0	34312	7.53	UG/L	94
8)	1,2-DICHLOROETHANE-d4	12.33	65.0	129902	51.74	UG/L	94
1)	*1,4-DIFLUOROBENZENE	19.85	114.0	188849M	50.00	UG/L	91
28)	Trichloroethene	16.78	95.0	98602M	47.04	UG/L	96
29)	Benzene	17.29	78.0	247170	49.67	UG/L	89
5)	*CHLOROBENZENE-d5	24.63	117.0	143266	50.00	UG/L	86
0)	TOLUENE-d8	23.46	98.0	183521	48.59	UG/L	94
41)	Toluene	23.69	92.0	125769	48.99	UG/L	92
2)	Chlorobenzene	24.80	112.0	149479	48.55	UG/L	88
3)	Ethyl Benzene	26.53	106.0	24021	17.03	UG/L	86
44)	4-BROMOFLUOROBENZENE	28.53	95.0	187490	64.20	UG/L	100
6)	Total Xylenes	30.70	106.0	381049M	243.28	UG/L	94

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >A1173::E2 Quant Output File: ^A1173::SS
Name: C149652 MSD
Misc: 5ML SAMPLE ECOLOGY ENV

Id File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 930819 09:20

Operator ID: SUEB
Quant Time: 930819 16:42
Injected at: 930819 16:05

Ecology & Environment
Semi-Volatiles

This package contains the data associated with the semi-volatile analyses of water samples C149650, C149651, C149652, and C149653.

Sample C149650 and C149651 had to be reanalyzed at 1:10 dilutions due to high concentration levels of certain compounds. Sample C149653 had to be reanalyzed at a 1:20 dilution due to high concentrations of certain compounds and a matrix effect. All reportable dilutions are included in this package.

The matrix spike and matrix spike duplicate were performed on sample C149435 and is included in this package.

Susan J. Bussey

Susan J. Bussey

Semi-Volatiles Group Leader

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

b Name: _____ Contract: _____

b Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	OTHER	TOT OUT
01	Blk188-4 /190-2	54	66	100	30	38	96	—	0
02	C149650 (Rep.0)	73	110	100	52	51	* 140	—	1
03	C149651 (Rep.0)	63	120	120	49	47	* 140	—	1
04	C149652	56	73	83	42	50	99	—	0
05	C149653 1:20	D	D	D	D	D	D	—	—
06	C149650 1:10 (Rep.1)	D	D	D	D	D	D	—	—
07	C149651 1:10 (Rep.1)	D	D	D	D	D	D	—	—
08									
09	Blk188-2	# 31	43	110	33	42	100	—	1
10	C149435	# 33	58	100	27	36	85	—	1
11	C149435 MS	35	46	89	43	49	73	—	0
12	C149435 MSD	# 28	41	92	42	46	81	—	1
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

* High Surrogate Rec. % is due to sample's matrix effect.

		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(35-114)
S2 (FBP)	= 2-Fluorobiphenyl	(43-116)
S3 (TPH)	= Terphenyl-d14	(33-141)
S4 (PHL)	= Phenol-d6	(10-94)
S5 (2FP)	= 2-Fluorophenol	(21-100)
S6 (TBP)	= 2,4,6-Tribromophenol	(10-123)

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

3C

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Heritage Laboratories, Inc. Contract: _____

Lab Code: EMSIN Case No.: _____ SAS No.: _____ SDG No.: _____

Sample No.: C149435 MS File: B3160 Date/Time: 080993/19:00
MSD File: B3161 Date/Time: 080993/19:52

QC#: Q757645 COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	#	QC. LIMITS REC.
Phenol	200	0.0	80.0	40.0		12-110
2-Chlorophenol	200	0.0	110.0	55.0		27-123
1,4-Dichlorobenzene	100	0.0	30.0	30.0	*	36- 97
N-Nitroso-di-n-prop.	100	0.0	47.0	47.0		41-116
1,2,4-Trichlorobenze	100	0.0	35.0	35.0	*	39- 98
4-Chloro-3-methylphe	200	0.0	170.0	85.0		23- 97
Acenaphthene	100	0.0	52.0	52.0		46-118
4-Nitrophenol	200	0.0	41.0	20.5		10- 80
2,4-Dinitrotoluene	100	0.0	74.0	74.0		24- 96
Pentachlorophenol	200	0.0	40.0	20.0		9-103
Pyrene	100	0.0	88.0	88.0		26-127

QC#: Q757646 COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	#	% RPD	#	QC LIMITS RPD	QC LIMITS REC.
Phenol	200	74.0	37.0		7.8		42	12-110
2-Chlorophenol	200	97.0	48.5		12.6		40	27-123
1,4-Dichlorobenzene	100	24.0	24.0	*	22.2		28	36- 97
N-Nitroso-di-n-prop.	100	37.0	37.0	*	23.8		38	41-116
1,2,4-Trichlorobenze	100	27.0	27.0	*	25.8		28	39- 98
4-Chloro-3-methylphe	200	170.0	85.0		0.0		42	23- 97
Acenaphthene	100	50.0	50.0		3.9		31	46-118
4-Nitrophenol	200	61.0	30.5		39.2		50	10- 80
2,4-Dinitrotoluene	100	77.0	77.0		4.0		38	24- 96
Pentachlorophenol	200	33.0	16.5		19.2		50	9-103
Pyrene	100	92.0	92.0		4.4		31	26-127

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

* Values outside of QC limits

RPD: 0 out of 11 outside limits
Spike Recovery: 5 out of 22 outside limits

COMMENTS: * Low Rec.% is due to sample's matrix effect.

METHOD BLANK SUMMARY

Case No. _____ Laboratory Name _____

FILE ID	DATE OF ANALYSIS	FRACTION	MATRIX	CONC. LEVEL	INST. ID	CAS NUMBER	COMPOUND (HSL, TIC OR UNKNOWN)	CONC.	UNITS	CRDL
Blk188-4/190-2	8/19/93	BNA	water		#102		—	—	ug/L	
Blk 188-2	8/9/93	BNA	water		#102		—	—	ug/L	

Comments:

FORM IV

SEMI-VOLATILE ORGANIC GC/MS TUNING and MASS CALIBRATION
DECAFLUOROTRIPHENYLPHOSPHENE (DFTPP)

LAB NAME: EMS LABS, Darien

LAB FILE NO.: TB633.

INSTRUMENT ID: #102

MATRIX (soil/water): water

DFTPP INJECTION DATE: 8/9/93

DFTPP INJECTION TIME:

COLUMN: DB-5 CAP

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0 % of mass 198	59.69
68	Less than 2.0 % of mass 69	0.00 (0.00) 1
69	Mass 69 relative abundance	84.98
70	Less than 2.0 % of mass 69	0.60 (0.00) 1
127	40.0 - 60.0 % of mass 198	52.76
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	6.38
275	10.0 - 30.0 % of mass 198	19.54
365	Greater than 1.00 % of mass 198	1.97
441	Present, but less than mass 443	6.83 (75.85)
442	Greater than 40.0 % of mass 198	50.02
443	17.0 - 23.9 % of mass 442	9.01 (18.01) 2

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

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

	LAB SAMPLE NO.	Client SAMPLE NO.	LAB FILE ID.	DATE ANALYZED	TIME ANALYZED
1.	STD050		VB552	8/9/93	10:14
2.	BLK188-2		B3153		12:15
3.	C149435		B3154		13:08
4.	C149435MS		B3160		19:00
5.	C149435MSD		B3161		19:52
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					

SEMI-VOLATILE ORGANIC GC/MS TUNING and MASS CALIBRATION
DECAFLUOROTRIPHENYLPHOSPHENE (DFTPP)

LAB NAME: EMS LABS, Darien LAB FILE NO.: TB637

INSTRUMENT ID: #102 MATRIX (soil/water): water

DFTPP INJECTION DATE: 8/17/93 DFTPP INJECTION TIME: 9:42

COLUMN: DB-5 CAP

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0 % of mass 198	49.86
68	Less than 2.0 % of mass 69	0.00 (0.00) 1
69	Mass 69 relative abundance	73.54
70	Less than 2.0 % of mass 69	0.00 (0.00) 1
127	40.0 - 60.0 % of mass 198	46.09
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	6.50
275	10.0 - 30.0 % of mass 198	20.64
365	Greater than 1.00 % of mass 198	2.68
441	Present, but less than mass 443	11.96 (68.48)
442	Greater than 40.0 % of mass 198	86.20
443	17.0 - 23.9 % of mass 442	17.47 (20.27) 2

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

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

	LAB SAMPLE NO.	Client SAMPLE NO.	LAB FILE ID.	DATE ANALYZED	TIME ANALYZED
1.	STD050		CB440	8/17/93	10:09
2.	BLK188-4/190-2		B3171	↓	15:59
3.	C149650 (Rep.)		B3172		16:51
4.	C149651 (Rep.)		B3173		17:45
5.	C149652		B3174		18:37
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					

SEMI-VOLATILE ORGANIC GC/MS TUNING and MASS CALIBRATION
DECAFLUOROTRIPHENYLPHOSPHENE (DFTPP)

LAB NAME: EMS LABS, Darien

LAB FILE NO.: TB639

INSTRUMENT ID: #102

MATRIX (soil/water): water

DFTPP INJECTION DATE: 8/18/93

DFTPP INJECTION TIME: 15:11

COLUMN: DB-5 CAP

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0 % of mass 198	49.09
68	Less than 2.0 % of mass 69	0.00 (0.00) 1
69	Mass 69 relative abundance	73.12
70	Less than 2.0 % of mass 69	0.00 (0.00) 1
127	40.0 - 60.0 % of mass 198	46.45
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	6.77
275	10.0 - 30.0 % of mass 198	21.02
365	Greater than 1.00 % of mass 198	2.41
441	Present, but less than mass 443	11.26 (75.58)
442	Greater than 40.0 % of mass 198	75.94
443	17.0 - 23.9 % of mass 442	14.9* (19.62) 2

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

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

	LAB SAMPLE NO.	Client SAMPLE NO.	LAB FILE ID.	DATE ANALYZED	TIME ANALYZED
1.	STD050		VB555	8/18/93	15:32
2.	C149650 1:10	(Rep.1)	B3181	↓	18:20
3.	C149651 1:10	(Rep.1)	B3182	↓	19:15
4.	C149653 1:20		B3183	↓	20:07
5.					
6.					
7.					
8.					
9.					
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11.					
12.					
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14.					
15.					
16.					
17.					
18.					
19.					
20.					

HQ 8/9/93

:RU,TUNER,-DFTPP

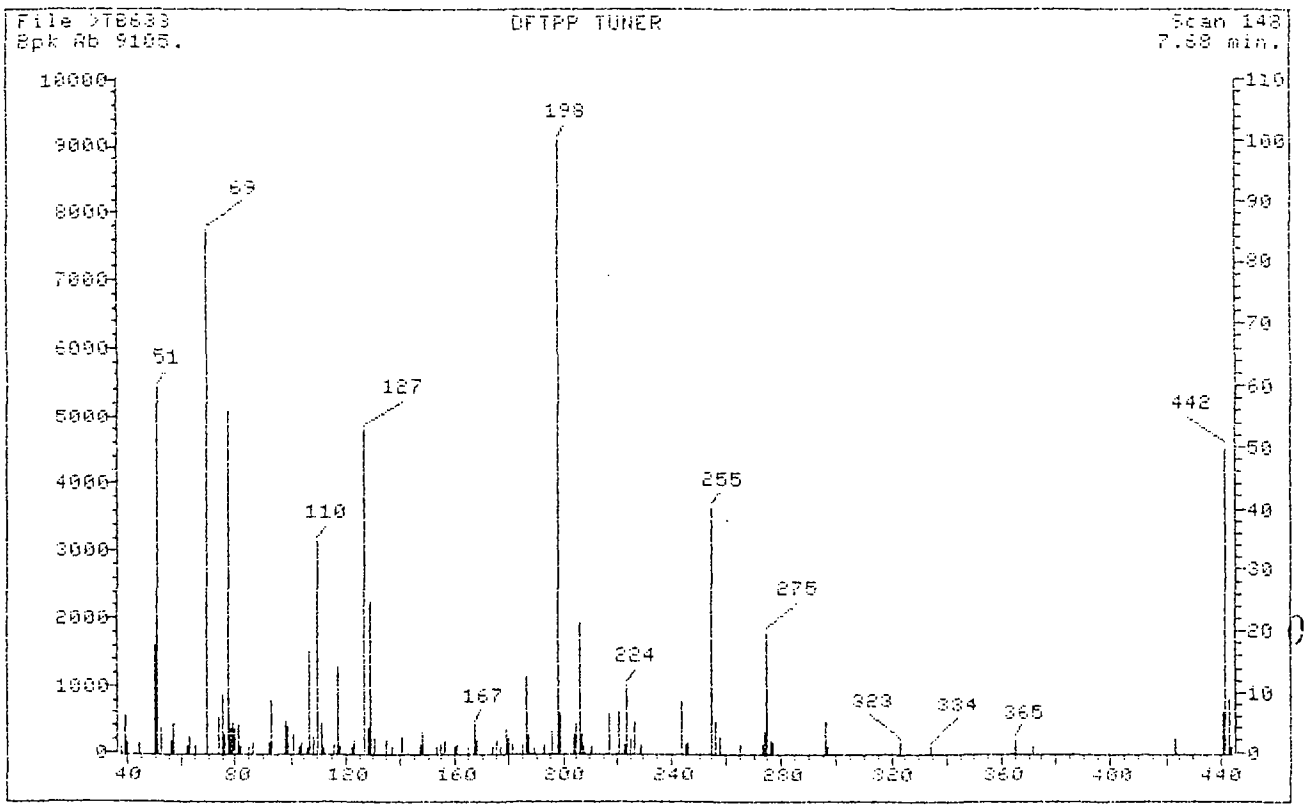
GC/MS PERFORMANCE STANDARD

Decafluorotriphenylphospine (DFTPP)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	Appropriate Peak	Status
51	30-60% of mass 198	59.69	59.69	Ok
68	Less than 2% of mass 69	0.00	0.00	Ok
69	(reference only)	84.98	84.98	Ok
70	Less than 2% of mass 69	0.00	0.00	Ok
127	40-60% of mass 198	52.76	52.76	Ok
197	Less than 1% of mass 198	0.00	0.00	Ok
198	Base peak, 100% relative abundance	100.00	100.00	Ok
199	5-9% of mass 198	6.38	6.38	Ok
275	10-30% of mass 198	19.54	19.54	Ok
365	Greater than 1% of mass 198	1.97	1.97	Ok
441	0-100% of mass 443	6.83	75.85	Ok
442	Greater than 40% of mass 198	50.02	50.02	Ok
443	17-23% of mass 442	9.01	18.01	Ok

Injection Date: 08/09/93
Injection Time: 09:55
Data File: >T6533
Scan: 148

:RU,AL,,1



098

HQ
8/9/93

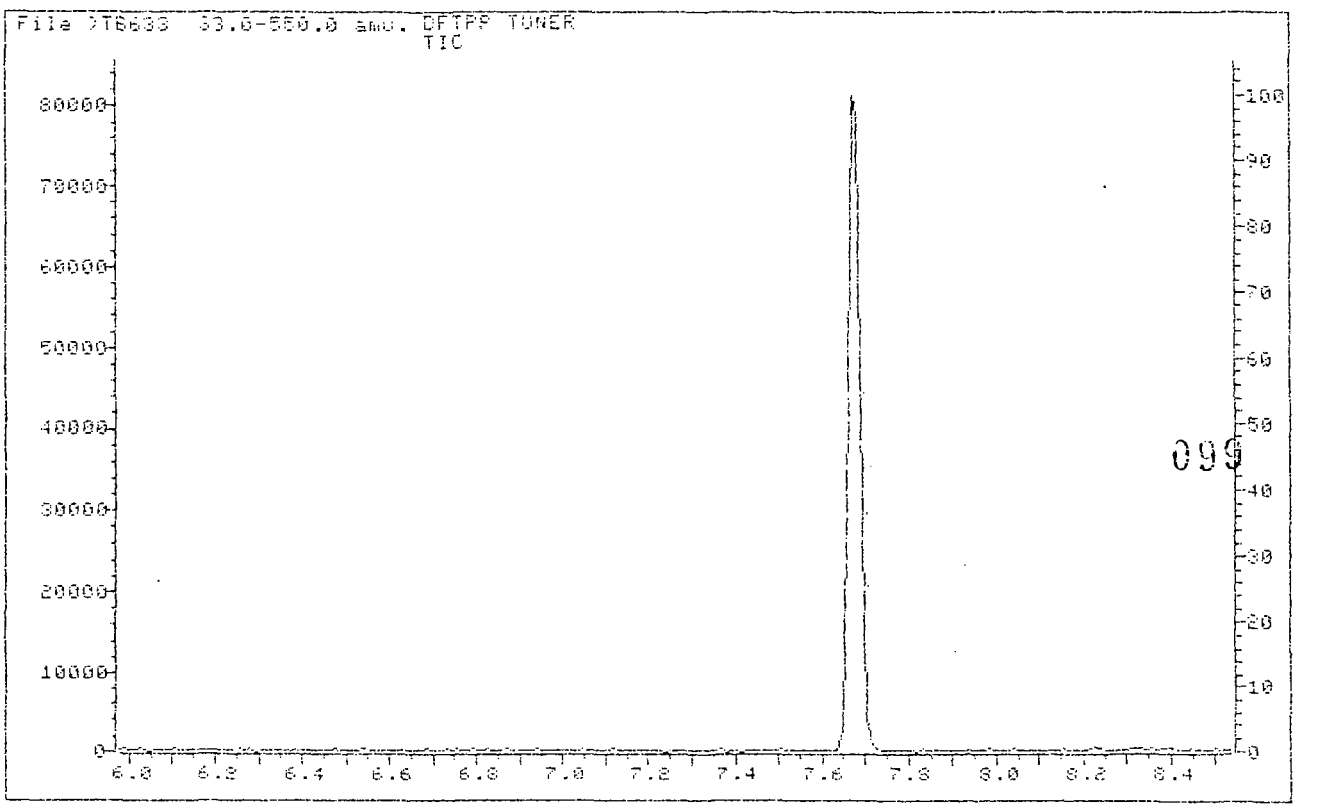
:RU,NRM,100
:RU,BIG,100
:RU,TAB

>TB633 DFTPP TUNER
148 NRM BIG

File: >TB633 Scan #: 148 Retn. time: 7.68

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.00	.890	81.05	4.338	127.95	3.943	185.00	1.505	245.00	1.153
39.05	5.172	81.95	.934	129.05	24.602	186.00	12.696	246.00	1.571
40.05	1.395	85.95	1.527	130.05	2.098	187.00	2.865	255.05	39.845
44.05	1.614	92.00	1.472	135.00	1.893	193.05	1.098	256.05	5.165
50.00	17.353	93.00	8.786	137.10	.912	195.95	3.097	257.95	2.482
51.10	59.692	98.00	5.074	141.00	2.614	197.95	100.000	264.90	1.098
52.10	3.734	99.10	4.141	147.05	1.241	198.90	5.381	272.95	1.085
56.00	1.911	101.00	2.702	147.95	3.295	204.10	2.778	274.05	3.229
57.10	4.723	103.05	.957	155.05	1.043	205.00	4.734	274.95	19.539
62.05	1.021	103.95	1.558	156.00	1.933	206.00	21.087	276.05	1.944
63.05	2.625	107.05	16.452	160.00	.934	207.00	2.910	276.95	1.483
64.95	1.065	108.05	2.504	160.90	1.076	210.95	.890	295.95	5.008
69.05	84.975	110.05	34.673	165.00	.977	217.05	6.337	323.05	1.483
74.00	5.722	111.05	4.837	166.95	4.734	220.90	6.787	365.05	1.966
75.10	9.731	116.00	1.087	169.05	1.955	223.10	1.120	371.50	.934
76.00	2.678	117.00	14.322	175.05	1.933	224.00	11.235	422.95	2.317
77.10	55.595	119.00	.967	176.90	.967	225.00	2.308	441.10	6.831
78.10	3.678	122.00	.988	178.90	3.745	227.00	4.586	442.00	50.016
79.00	4.820	123.00	1.955	180.00	2.208	229.00	1.043	443.10	9.006
80.00	3.723	127.05	52.762	181.00	1.098	244.00	8.336	443.95	.967

:RU,AL,,1



099

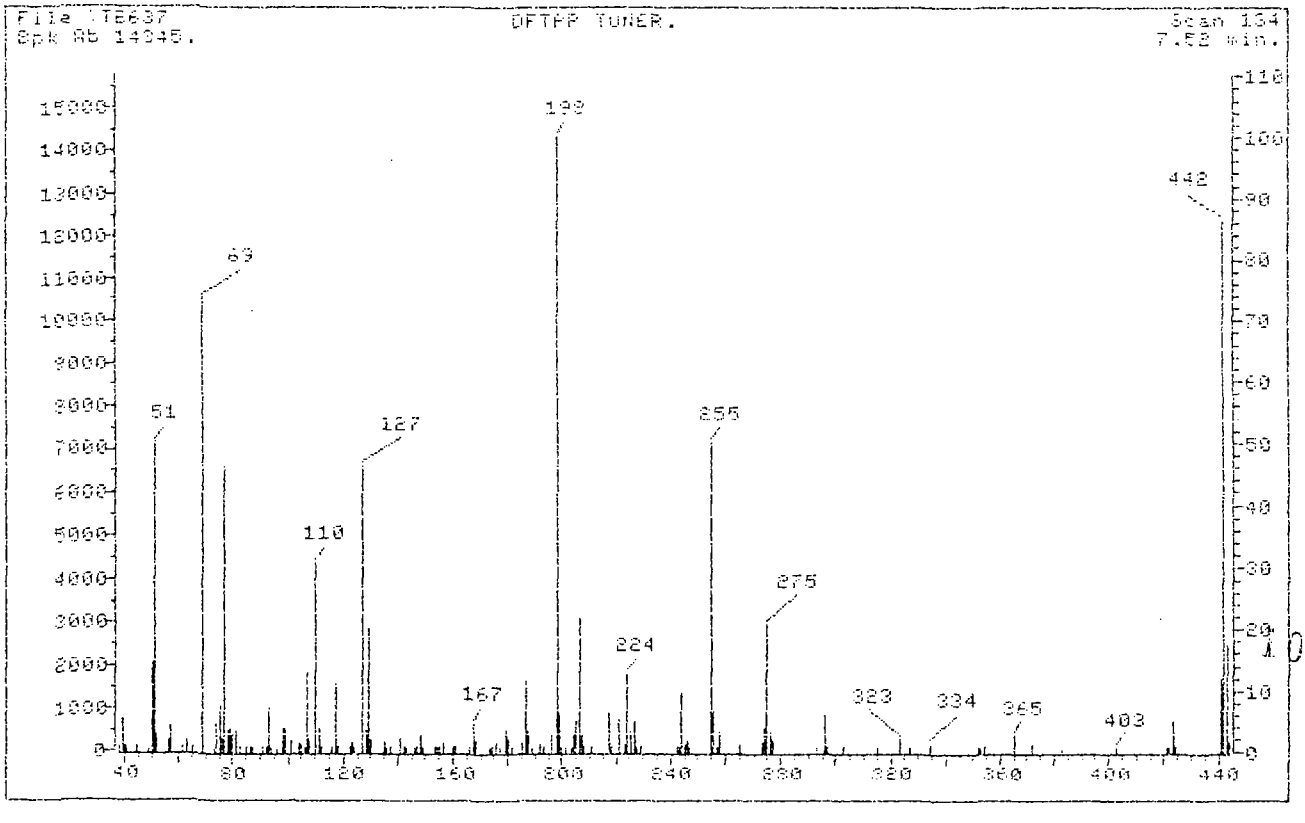
HQ
8/17/93

GC/MS PERFORMANCE STANDARD

Decafluorotriphenylphospine (DFTPP)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
51	30-60% of mass 198	49.86	49.86	Ok
68	Less than 2% of mass 69	0.00	0.00	Ok
69	(reference only)	73.54	73.54	Ok
70	Less than 2% of mass 69	0.00	0.00	Ok
127	40-60% of mass 198	46.09	46.09	Ok
197	Less than 1% of mass 198	0.00	0.00	Ok
198	Base peak, 100% relative abundance	100.00	100.00	Ok
199	5-9% of mass 198	6.50	6.50	Ok
275	10-30% of mass 198	20.64	20.64	Ok
365	Greater than 1% of mass 198	2.68	2.68	Ok
441	0-100% of mass 443	11.96	69.48	Ok
442	Greater than 40% of mass 198	86.20	86.20	Ok
443	17-23% of mass 442	17.47	20.27	Ok

Injection Date: 08/17/93
Injection Time: 09:42
Data File: >T8637
Scan: 134



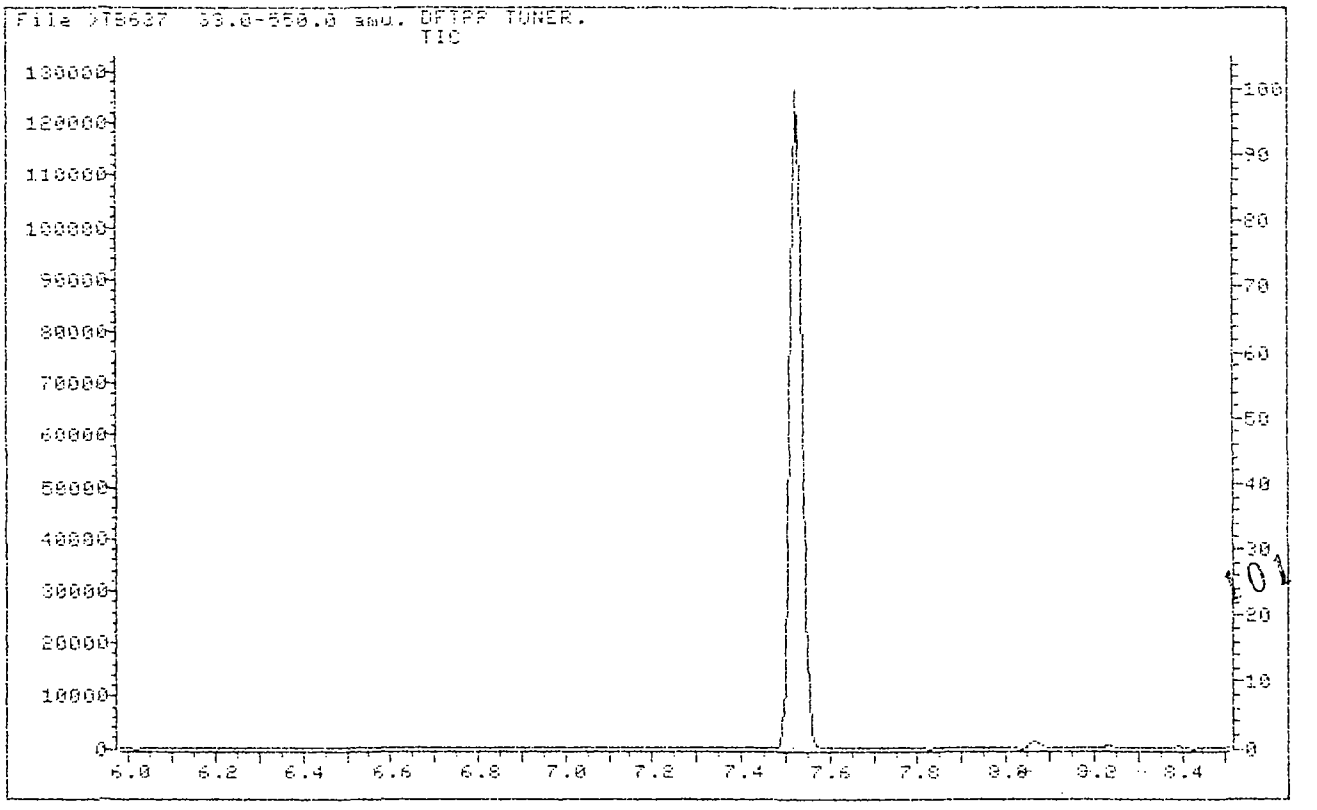
100

HO
8/17/93

>TB637 DFTPP TUNER.
134 NRM BIG

File: >TB637 Scan #: 134 Retn. time: 7.52

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
38.10	.955	83.05	.906	135.00	1.408	195.05	3.074	254.95	50.017
39.05	5.465	86.05	.837	137.10	.864	198.05	100.000	255.95	6.706
39.95	.920	93.00	6.906	141.00	2.280	199.00	6.504	258.05	3.172
44.05	.906	99.00	3.855	142.00	.850	204.10	2.774	265.00	1.115
50.00	14.521	99.00	3.883	147.05	.899	205.00	5.124	273.05	1.485
51.10	49.864	101.00	1.882	147.95	2.872	206.10	21.548	273.95	3.646
52.00	2.733	103.95	1.429	155.05	1.011	207.10	2.733	275.05	20.841
55.10	1.812	105.05	1.325	155.10	1.520	210.95	.948	276.05	3.088
57.00	4.134	107.05	12.792	165.95	4.699	211.05	.927	276.95	1.750
61.05	.843	108.05	2.091	168.05	1.715	217.05	6.330	295.95	5.918
63.05	1.859	110.05	30.749	174.05	.871	218.05	.864	323.05	2.147
69.05	73.538	111.05	3.811	175.15	1.596	221.00	5.451	334.10	1.325
74.10	4.665	117.00	11.007	179.00	3.332	223.00	1.108	365.05	2.684
75.00	8.135	118.00	.834	180.00	2.147	224.00	12.590	372.00	1.338
76.20	2.084	122.10	.997	181.00	1.011	225.10	3.095	423.05	4.949
77.10	46.150	123.10	1.562	185.00	1.464	227.00	5.193	423.95	1.011
78.10	3.353	127.05	46.093	186.10	11.670	229.00	.997	441.10	11.982
79.10	3.667	128.05	3.346	187.00	3.409	244.00	9.606	442.10	86.204
80.00	2.761	129.05	20.084	191.95	1.199	245.10	1.345	443.10	17.470
81.05	3.311	129.95	1.818	193.05	.920	246.00	1.882	444.05	1.443



101

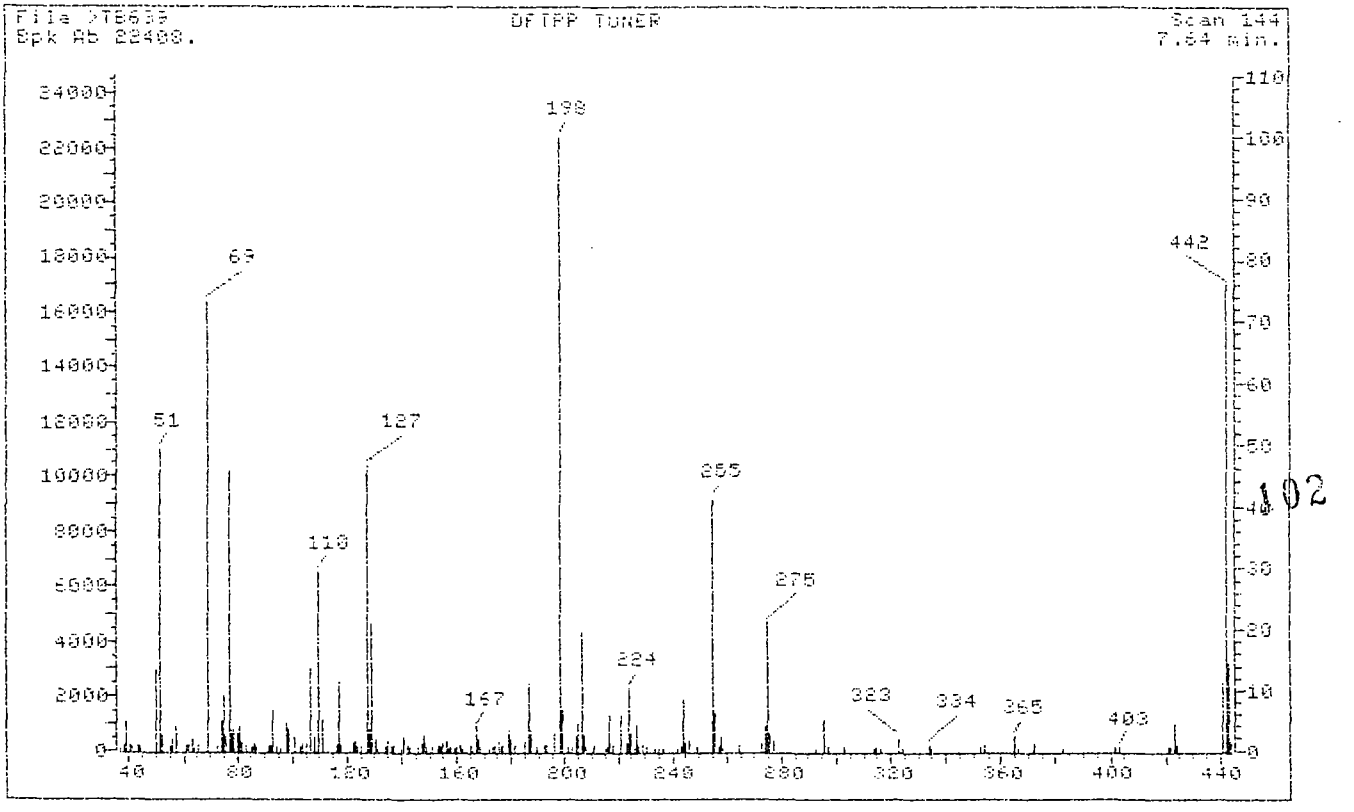
HO
8/18/93

GC/MS PERFORMANCE STANDARD

Decafluorotriphenylphospine (DFTPP)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
51	30-60% of mass 198	49.09	49.09	Ok
68	Less than 2% of mass 69	0.00	0.00	Ok
69	(reference only)	73.12	73.12	Ok
70	Less than 2% of mass 69	0.00	0.00	Ok
127	40-60% of mass 198	45.45	45.45	Ok
197	Less than 1% of mass 198	0.00	0.00	Ok
198	Base peak, 100% relative abundance	100.00	100.00	Ok
199	5-9% of mass 198	6.77	6.77	Ok
275	10-30% of mass 198	21.02	21.02	Ok
365	Greater than 1% of mass 198	2.41	2.41	Ok
441	0-100% of mass 443	11.26	75.58	Ok
442	Greater than 40% of mass 198	75.94	75.94	Ok
443	17-23% of mass 442	14.90	19.62	Ok

Injection Date: 08/18/93
Injection Time: 15:11
Data File: >T6638
Scan: 144



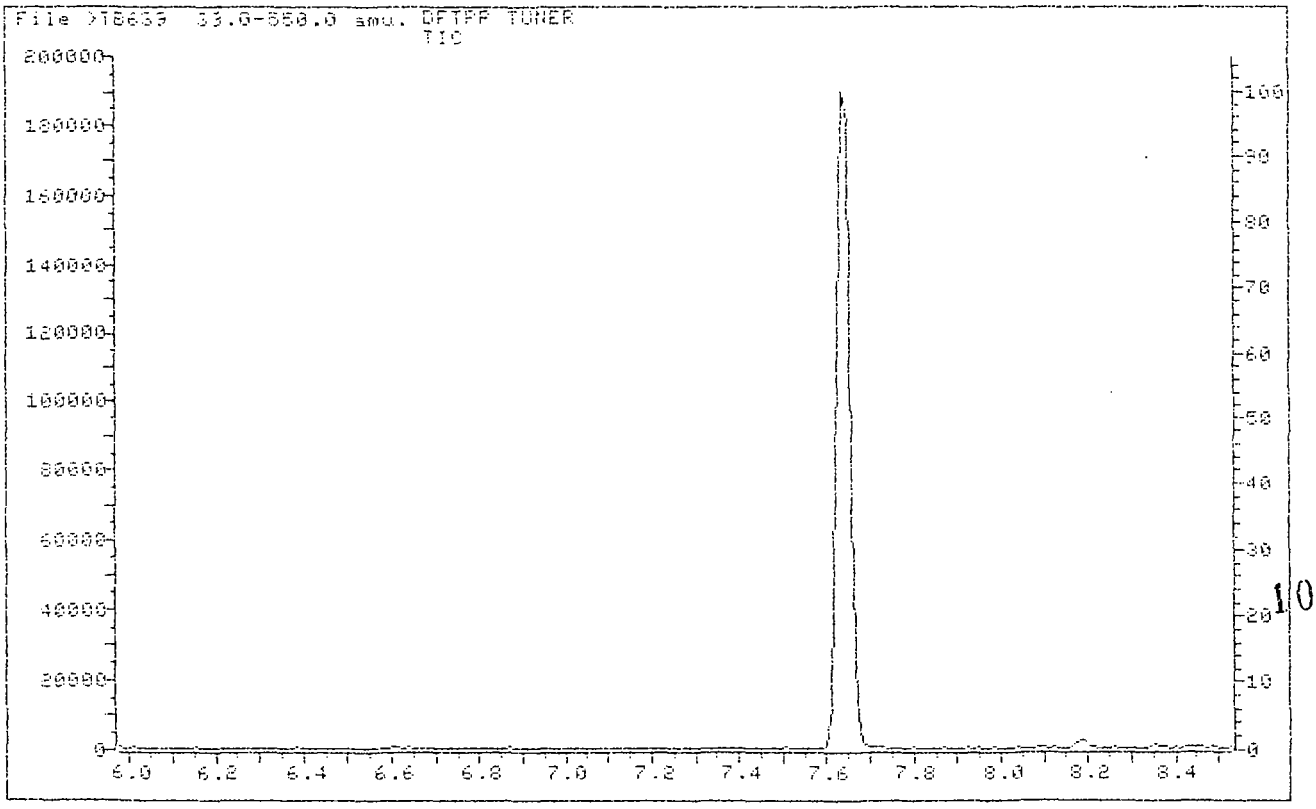
102

HO 8/18/93

>TB639 DFTPP TUNER
144 NRM BIG

File: >TB639 Scan #: 144 Retn. time: 7.64

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
38.10	.951	83.05	.883	129.05	20.778	182.05	.883	246.00	1.468
39.05	4.590	86.05	1.062	130.05	1.682	193.05	.991	255.05	40.956
43.05	.870	91.15	.851	135.00	1.522	196.05	2.834	256.05	6.034
50.00	13.366	92.00	.973	141.00	2.312	198.05	100.000	257.95	2.321
51.10	48.085	93.00	6.752	142.00	.848	199.00	6.774	264.90	.857
52.10	2.379	98.00	4.445	147.05	1.116	204.10	2.490	272.95	1.129
56.00	1.767	99.00	3.325	147.95	2.330	205.00	4.302	273.95	3.825
57.00	3.891	101.00	2.080	155.05	1.196	206.10	19.372	275.05	21.015
61.05	.768	104.05	1.254	156.00	1.357	207.10	2.330	275.95	2.722
63.05	1.758	105.05	1.138	161.00	.879	210.85	.765	276.95	1.624
68.05	73.117	107.05	13.851	166.95	3.858	216.95	5.841	285.95	5.105
74.00	4.828	108.05	2.186	168.05	1.814	218.05	.812	323.05	1.928
75.00	8.916	110.05	29.287	173.95	.857	221.00	5.868	334.10	1.013
76.10	2.437	111.05	5.082	175.05	1.660	223.00	1.147	364.95	2.405
77.10	45.524	116.00	.812	179.00	3.102	224.00	10.220	372.00	1.102
78.10	3.017	117.00	11.210	180.00	1.986	225.10	2.861	423.05	4.405
79.00	3.945	122.10	1.035	181.00	.901	227.00	4.082	441.10	11.259
80.10	2.798	123.10	1.468	185.10	1.499	229.10	.897	442.10	75.937
81.05	3.802	127.05	46.452	186.10	10.804	244.10	8.278	443.10	14.896
81.95	1.071	128.05	3.458	187.00	3.048	245.00	1.138	443.95	1.433



FLA 8/5/93

Initial Calibration Data
HSL Compounds

Case No: _____ Instrument ID: #102

Contractor: _____ Calibration Date: 08/05/93

Contract No: _____

Minimum $\overline{RF}$ for SPCC is .05 Maximum % RSD for CCC is 30.0%

Laboratory ID:	>CB436	>UB550	>CB434	>CB433	>CB431					
Compound	RF 20.00	RF 50.00	RF 80.00	RF 120.00	RF 160.00	$\overline{RF}$	% RSD	CCC	SPCC	
Pyridine	-	1.51066	-	-	-	1.51066	-			(Conc=,56.0,,,)
2-Picoline	-	1.16244	-	-	-	1.16244	-			(Conc=,55.0,,,)
2-Fluorophenol	1.13632	1.02068	1.12727	1.10127	1.10491	1.09809	4.164			
Phenol	1.84243	1.61484	1.43410	1.49493	1.37919	1.55369	11.843	*		
bis(2-chloroethyl)ether	1.38815	1.26351	1.06730	1.08994	1.01823	1.16543	13.308			
2-Chlorophenol	1.48453	1.24529	1.27769	1.34555	1.31160	1.33293	6.950			
1,3-Dichlorobenzene	1.48912	1.27730	1.33664	1.37915	1.29385	1.35521	6.249			
1,4-Dichlorobenzene	1.56725	1.33355	1.36404	1.37418	1.30104	1.38801	7.506	*		
Phenol-d6	1.65429	1.53285	1.34587	1.43647	1.29928	1.45375	9.865			
Benzyl alcohol	.85184	.79874	.34753	.34056	.36161	.54005	48.359			
1,2-Dichlorobenzene	1.59115	1.31527	1.32752	1.34479	1.26014	1.36778	9.419			
2-Methylphenol	1.31325	1.14270	1.05564	1.15714	1.08897	1.15154	8.615			
bis(2-chloroisopropyl)ether	2.82610	2.63400	2.13816	2.22804	2.18768	2.40280	12.819			
4-Methylphenol	1.41392	1.26307	1.01991	1.21396	1.21912	1.22600	11.489			
N-Nitroso-di-n-propylamine	1.29720	1.21804	.95699	1.05906	1.12546	1.13135	11.750		**	
Hexachloroethane	.76084	.69508	.65290	.66148	.62568	.67920	7.646			
Nitrobenzene	.48248	.41428	.41887	.44858	.45455	.44375	6.302			
Isophorone	.88484	.80315	.72836	.82949	.86462	.82209	7.436			
2-Nitrophenol	.23056	.20632	.20461	.21514	.22269	.21626	4.882	*		
Nitrobenzene-d5	.49455	.42319	.45225	.47022	.48174	.46439	5.985			
2,4-Dimethylphenol	.42197	.37559	.40238	.41910	.42868	.40954	5.203			
Benzoic acid	.16868	.20449	.20049	.23276	.23970	.20922	13.572			
bis(2-Chloroethoxy)methane	.52496	.45474	.42327	.44939	.45575	.46162	8.188			
2,4-Dichlorophenol	.35442	.31077	.29865	.31968	.31559	.31982	6.531	*		
1,2,4-Trichlorobenzene	.36365	.30503	.32500	.32843	.32887	.33019	6.396			
Naphthalene	1.05816	.89770	.83241	.84914	.72134	.87175	14.061			
4-Chloroaniline	.44395	.38008	.33074	.36530	.37484	.37898	10.842			
Hexachlorobutadiene	.23509	.19203	.22887	.22679	.21882	.22032	7.648	*		
4-Chloro-3-methylphenol	.41953	.36960	.32743	.37796	.37670	.37424	8.744	*		
2-Methylnaphthalene	.66950	.56786	.53913	.58241	.55136	.58205	8.858			
Hexachlorocyclopentadiene	.30308	.26791	.53958	.46565	.51243	.41773	29.731		**	
2-Fluorobiphenyl	1.33493	1.06103	1.40205	1.33484	1.27874	1.28232	10.231			

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 (**)

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HQ 8/5/93

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: #102

Contractor: Calibration Date: 08/05/93

Contract No:

Minimum $\overline{RF}$ for SPCC is .05 Maximum % RSD for CCC is 30.0%

Compound	RF 20.00	RF 50.00	RF 80.00	RF 120.00	RF 160.00	$\overline{RF}$	% RSD	CCC	SPCC	
Laboratory ID:	>CB436	>UB550	>CB434	>CB433	>CB431					
2,4,6-Trichlorophenol	.46734	.40351	.42819	.44002	.44539	.43689	5.367	*		
Toluenediamine	-	.13398	-	-	-	.13398	-			(Conc=,53.0,,,)
2,4,5-Trichlorophenol	.47286	.36969	.45681	.45599	.43841	.43875	9.228			
2-Chloronaphthalene	1.27646	1.04202	1.17031	1.18447	1.18265	1.17118	7.153			
Dinitrobenzene	-	.54227	-	-	-	.54227	-			(Conc=,48.0,,,)
2-Nitroaniline	.56414	.52652	.50696	.56360	.56301	.54485	4.877			
Dimethylphthalate	1.56084	1.36534	1.29966	1.45530	1.42849	1.42193	6.909			
Acenaphthylene	2.06162	1.80566	1.74948	1.81065	1.54948	1.79538	10.187			
2,6-Dinitrotoluene	.40907	.36089	.32426	.35016	.34273	.35742	8.900			
3-Nitroaniline	.34654	.33510	.22730	.23409	.23967	.27654	21.329			
Acenaphthene	1.26370	1.07010	1.07588	1.11786	1.12916	1.13134	6.922	*		
2,4-Dinitrophenol	.17311	.21330	.18069	.21794	.22447	.20190	11.550		**	
4-Nitrophenol	.18370	.20406	.24057	.29865	.28623	.24428	20.512		**	
Dibenzofuran	1.79978	1.56031	1.49045	1.56824	1.39230	1.56222	9.628			
Tetrachlorophenol	-	.37366	-	-	-	.37366	-			(Conc=,52.0,,,)
2,4-Dinitrotoluene	.57085	.47256	.39275	.44511	.43060	.46238	14.518			
Diethylphthalate	1.76587	1.46304	1.33104	1.51098	1.39737	1.48382	11.141			
4-Chlorophenyl-phenylether	.72364	.61736	.59067	.64232	.62058	.63892	7.949			
Fluorene	1.43537	1.21478	1.05600	1.20987	1.15953	1.21511	11.414			
4-Nitroaniline	.40274	.33239	.20085	.22972	.24227	.28159	29.720			
2,4,6-Tribromophenol	.33022	.31417	.26435	.28679	.28299	.29570	8.879			
4,6-Dinitro-2-methylphenol	.15205	.15831	.16794	.18527	.19988	.17269	11.409			
N-Nitrosodiphenylamine	.50195	.43304	.47077	.51656	.55020	.49450	9.036	*		
Benzidine	.97344	.88131	1.06818	1.11696	1.08110	1.02420	9.361			
4-Bromophenyl-phenylether	.21379	.18570	.24326	.25800	.25559	.23127	13.383			
alpha-BHC	.16709	.13275	.20418	.21195	.21248	.18569	18.845			
Hexachlorobenzene	.29920	.28705	.35430	.37807	.40768	.34526	14.685			
Pentachlorophenol	.11615	.13777	.16559	.18976	.19905	.16166	21.527	*		
beta-BHC	.12448	.10692	.13799	.14236	.14504	.13135	12.016			
gamma-BHC (Lindane)	.14568	.12759	.16835	.17748	.17637	.15909	13.681			
Phenanthrene	1.05541	.88323	.97932	1.06422	1.03262	1.00296	7.441			
delta-BHC	.13195	.11560	.14713	.15424	.15243	.14027	11.650			

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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 (**)

HQ 8/5/93

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: #102

Contractor: Calibration Date: 08/05/93

Contract No:

Minimum $\overline{RF}$ for SPCC is .05 Maximum % RSD for CCC is 30.0%

Laboratory ID:	>CB436	>VB550	>CB434	>CB433	>CB431				
Compound	RF 20.00	RF 50.00	RF 80.00	RF 120.00	RF 160.00	$\overline{RF}$	% RSD	CCC	SPCC
Carbazole	.95375	.84919	.82257	.89114	.91008	.88535	5.907		
Anthracene	1.06967	.92930	.95032	.99672	.95694	.98859	5.656		
Heptachlor	.12437	.10970	.13224	.14493	.14262	.13077	11.004		
Aldrin	.19688	.17906	.19380	.20844	.20858	.19735	6.188		
Di-n-butylphthalate	1.48040	1.28779	1.19579	1.14489	1.02171	1.22612	13.994		
Fluoranthene	1.04900	.87755	.85628	.89586	.87574	.91089	8.615	*	
Heptachlor epoxide	.14933	.15631	.15493	.19250	.19040	.16870	12.419		
Pyrene	1.59953	1.48973	1.44361	1.71206	1.73881	1.59675	8.189		
alpha-Endosulfan	.05585	.05494	.06159	.07326	.07330	.06379	14.164		
p,p'-DDE	.38399	.37728	.42129	.48348	.47300	.42781	11.485		
Dieldrin	.37442	.39224	.34583	.40308	.40573	.38426	6.444		
Endrin	.07782	.07920	.09128	.10298	.09950	.09015	12.710		
beta-Endosulfan	.05826	.05596	.06542	.07270	.07218	.06490	11.891		
p,p'-DDD	.55582	.53674	.56413	.61368	.61785	.57764	6.270		
Endrin aldehyde	.13374	.12317	.08803	.10826	.10224	.10949	16.925		
Endosulfan sulfate	.09468	.09173	.10362	.11904	.11351	.10452	11.250		
p,p'-DDT	.47873	.45832	.48365	.55292	.55314	.50535	8.815		
Butylbenzylphthalate	.83311	.80439	.71307	.78004	.78247	.78262	5.667		
3,3'-Dichlorobenzidine	.33112	.30707	.29308	.29797	.32511	.31087	5.359		
Benzo(a)anthracene	1.24090	1.09461	1.08374	1.21554	1.25590	1.17814	7.009		
Chrysene	1.15836	1.02715	.92825	1.10462	1.08328	1.05873	8.554		
bis(2-Ethylhexyl)phthalate	1.07487	1.04379	.90259	.95852	.95551	.98706	7.141		
Methoxychlor	.79381	.74252	.88227	.94730	.96596	.86637	11.149		
Terphenyl-d14	1.11652	1.10286	1.06032	1.17796	1.27664	1.14686	7.315		
Di-n-octylphthalate	2.05782	2.18973	2.07955	2.14600	2.22985	2.14059	3.384	*	
Benzo(b)fluoranthene	1.17092	1.13816	1.35630	1.40840	1.58529	1.33182	13.748		
Benzo(k)fluoranthene	1.28613	1.24594	1.14669	1.24052	1.33518	1.25089	5.558		
Benzo(a)pyrene	1.11979	1.05603	1.11963	1.25460	1.29603	1.16922	8.668	*	
Indeno(1,2,3-cd)pyrene	.85122	.78270	.95530	.99043	1.01213	.91836	10.650		
Dibenzo(a,h)anthracene	.81691	.75981	.77583	.90832	.94664	.84150	9.783		
Benzo(g,h,i)perylene	.90707	.81935	.97581	1.05912	1.01451	.95517	9.865		

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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 (**)

HQ
8/9/93

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 08/09/93

Contractor: Time: 10:14

Contract No: Laboratory ID: >V8552

Instrument ID: #102 Initial Calibration Date: 08/05/93

Minimum $\overline{RF}$ for SPCC is .05 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Pyridine	1.51066	1.73938	15.14			(Conc=56.00)
2-Picoline	1.16244	1.38816	19.42			(Conc=55.00)
2-Fluorophenol	1.09809	1.16974	6.53			(Conc=50.00)
Phenol	1.55309	1.66872	7.44	*		
bis(2-chloroethyl)ether	1.16543	1.29104	10.78			
2-Chlorophenol	1.33293	1.34344	.79			
1,3-Dichlorobenzene	1.35521	1.37694	1.60			
1,4-Dichlorobenzene	1.38801	1.33559	3.78	*		
Phenol-d6	1.45375	1.54278	6.12			(Conc=50.00)
Benzyl alcohol	.54005	.79315	46.86			
1,2-Dichlorobenzene	1.36778	1.34878	1.39			
2-Methylphenol	1.15154	1.13834	1.15			
bis(2-chloroisopropyl)ether	2.40280	1.86992	22.18			
4-Methylphenol	1.22600	1.18812	3.09			
N-Nitroso-di-n-propylamine	1.13135	1.02257	9.62		**	
Hexachloroethane	.67920	.69975	3.03			
Nitrobenzene	.44375	.42280	4.72			
Isophorone	.82209	.74495	9.38			
2-Nitrophenol	.21626	.20585	4.82	*		
Nitrobenzene-d5	.46439	.43841	5.59			
2,4-Dimethylphenol	.40954	.34955	14.65			
Benzoic acid	.20922	.16235	22.40			
bis(2-Chloroethoxy)methane	.46162	.45977	.40			
2,4-Dichlorophenol	.31982	.28569	10.67	*		
1,2,4-Trichlorobenzene	.33019	.29603	10.35			
Naphthalene	.87175	.92196	5.76			
4-Chloraniline	.37898	.34829	8.10			
Hexachlorobutadiene	.22032	.17991	18.34	*		
4-Chloro-3-methylphenol	.37424	.31106	16.88	*		
2-Methylnaphthalene	.58205	.53478	8.12			
Hexachlorocyclopentadiene	.41773	.26905	35.59		**	
2-Fluorobiphenyl	1.28232	1.19778	6.59			

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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 (**)

HQ
8/9/93

Continuing Calibration Check
BNA Compounds

Case No: Calibration Date: 08/09/93

Contractor: Time: 10:14

Contract No: Laboratory ID: >VB552

Instrument ID: #102 Initial Calibration Date: 08/05/93

Minimum $\overline{RF}$ for SPCC is .05 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
2,4,6-Trichlorophenol	.43689	.41373	5.30	*		
Toluenediamine	.13398	.08677	35.24			(Conc=53.00)
2,4,5-Trichlorophenol	.43875	.36443	16.94			
2-Chloronaphthalene	1.17118	1.17660	.46			
Dinitrobenzene	.54227	.47598	12.22			(Conc=48.00)
2-Nitroaniline	.54485	.47832	12.21			
Dimethylphthalate	1.42193	1.32430	6.87			
Acenaphthylene	1.79538	1.80328	.44			
2,6-Dinitrotoluene	.35742	.33489	6.30			
3-Nitroaniline	.27654	.29658	7.25			
Acenaphthene	1.13134	1.07856	4.67	*		
2,4-Dinitrophenol	.20198	.16776	16.91		**	
4-Nitrophenol	.24428	.18704	23.43		**	
Dibenzofuran	1.56222	1.47719	5.44			
Tetrachlorophenol	.37366	.29336	21.49			(Conc=52.00)
2,4-Dinitrotoluene	.46238	.43120	6.74			
Diethylphthalate	1.49382	1.37781	7.77			
4-Chlorophenyl-phenylether	.63892	.54402	14.85			
Fluorene	1.21511	1.06804	12.10			
4-Nitroaniline	.28159	.28080	.28			
2,4,6-Tribromophenol	.29578	.19654	33.54			(Conc=50.00)
4,6-Dinitro-2-methylphenol	.17269	.16021	7.23			
N-Nitrosodiphenylamine	.49450	.47289	4.37	*		
Benzidine	1.02420	.96002	6.27			
4-Bromophenyl-phenylether	.23127	.19273	16.67			
alpha-BHC	.18569	.16500	11.14			(Conc=50.00)
Hexachlorobenzene	.34526	.25895	25.00			
Pentachlorophenol	.16166	.12257	24.18	*		
beta-BHC	.13135	.10933	16.77			(Conc=50.00)
gamma-BHC (Lindane)	.15909	.13424	15.62			(Conc=50.00)
Phenanthrene	1.00296	.98957	1.34			
delta-BHC	.14027	.11711	16.51			(Conc=50.00)

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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 (**)

HQ
8/9/93

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 08/09/93

Contractor: Time: 10:14

Contract No: Laboratory ID: >VB552

Instrument ID: #102 Initial Calibration Date: 08/05/93

Minimum $\overline{RF}$ for SPCC is .05 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Carbazole	.88535	.87386	1.30			
Anthracene	.96059	.97539	.53			
Heptachlor	.13077	.09570	26.82			(Conc=50.00)
Aldrin	.19735	.19504	1.17			(Conc=50.00)
Di-n-butylphthalate	1.22612	1.41274	15.22			
Fluoranthene	.91089	.81758	10.24	*		
Heptachlor epoxide	.16870	.15286	9.39			(Conc=50.00)
Pyrene	1.59675	1.72658	8.13			
alpha-Endosulfan	.06379	.06722	5.39			(Conc=50.00)
p,p'-DDE	.42781	.39076	8.66			(Conc=50.00)
Dieldrin	.38426	.48384	25.91			(Conc=50.00)
Endrin	.09015	.08093	10.23			(Conc=50.00)
beta-Endosulfan	.06490	.06170	4.94			(Conc=50.00)
p,p'-DDD	.57764	.54041	6.45			(Conc=50.00)
Endrin aldehyde	.10949	.12629	15.35			(Conc=50.00)
Endosulfan sulfate	.10452	.08748	16.30			(Conc=50.00)
p,p'-DDT	.50535	.46803	7.38			(Conc=50.00)
Butylbenzylphthalate	.78262	.89777	14.71			
3,3'-Dichlorobenzidine	.31087	.31208	.39			
Benzo(a)anthracene	1.17814	1.18990	1.00			
Chrysene	1.05873	1.03648	2.10			
bis(2-Ethylhexyl)phthalate	.98706	1.23700	25.32			
Methoxychlor	.86637	.74128	14.44			(Conc=50.00)
Terphenyl-d14	1.14686	1.18351	3.23			
Di-n-octylphthalate	2.14059	2.42454	13.27	*		
Benzo(b)fluoranthene	1.33182	1.12831	15.26			
Benzo(k)fluoranthene	1.25089	1.20435	3.72			
Benzo(a)pyrene	1.16922	1.04433	10.68	*		
Indeno(1,2,3-cd)pyrene	.91836	.86279	6.05			
Dibenzo(a,h)anthracene	.84150	.81227	3.47			
Benzo(g,h,i)perylene	.95517	.93648	1.96			

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 (**)

HQ
8/17/93

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 08/17/93

Contractor: Time: 10:09

Contract No: Laboratory ID: >CB440

Instrument ID: #102 Initial Calibration Date: 08/05/93

Minimum $\overline{RF}$ for SPCC is .05 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Pyridine	1.51066	1.71942	13.82			(Conc=56.00)
2-Picoline	1.16244	1.41034	21.33			(Conc=55.00)
2-Fluorophenol	1.09809	1.19504	8.83			(Conc=50.00)
Phenol	1.55309	1.84797	18.95	*		
bis(2-chloroethyl)ether	1.16543	1.49665	28.42			
2-Chlorophenol	1.33293	1.41492	6.15			
1,3-Dichlorobenzene	1.35521	1.37238	1.27			
1,4-Dichlorobenzene	1.38801	1.38691	.08	*		
Phenol-d6	1.45375	1.68264	15.74			(Conc=50.00)
Benzyl alcohol	.54005	.88621	64.10			
1,2-Dichlorobenzene	1.36778	1.40067	2.40			
2-Methylphenol	1.15154	1.30627	13.44			
bis(2-chloroisopropyl)ether	2.40280	2.05203	14.60			
4-Methylphenol	1.22600	1.45147	18.39			
N-Nitroso-di-n-propylamine	1.13135	1.45175	28.32		**	
Hexachloroethane	.67920	.76326	12.38			
Nitrobenzene	.44375	.46986	5.88			
Isophorone	.82209	.93354	13.56			
2-Nitrophenol	.21626	.23556	8.92	*		
Nitrobenzene-d5	.46439	.50263	8.24			
2,4-Dimethylphenol	.40954	.40821	.33			
Benzoic acid	.20922	.21565	3.07			
bis(2-Chloroethoxy)methane	.46162	.53849	16.65			
2,4-Dichlorophenol	.31982	.31475	1.59	*		
1,2,4-Trichlorobenzene	.33019	.31817	3.64			
Naphthalene	.87175	.94471	8.37			
4-Chloraniline	.37898	.41808	10.32			
Hexachlorobutadiene	.22032	.20435	7.25	*		
4-Chloro-3-methylphenol	.37424	.38842	3.79	*		
2-Methylnaphthalene	.58205	.63447	9.01			
Hexachlorocyclopentadiene	.41773	.36531	12.55		**	
2-Fluorobiphenyl	1.28232	1.14383	10.80			

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

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

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HQ 8/17/93

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 08/17/93

Contractor: Time: 10:09

Contract No: Laboratory ID: XCB440

Instrument ID: #102 Initial Calibration Date: 08/05/93

Minimum $\overline{RF}$ for SPCC is .05 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
2,4,6-Trichlorophenol	.43689	.43949	.59	*		
Toluenediamine	.13398	.30672	128.92			(Conc=53.00)
2,4,5-Trichlorophenol	.43875	.37307	14.97			
2-Chloronaphthalene	1.17118	1.13783	2.85			
Dinitrobenzene	.54227	.58564	8.00			(Conc=48.00)
2-Nitroaniline	.54485	.56340	3.41			
Dimethylphthalate	1.42193	1.42572	.27			
Acenaphthylene	1.79538	1.83537	2.23			
2,6-Dinitrotoluene	.35742	.37202	4.08			
3-Nitroaniline	.27654	.35363	27.88			
Acenaphthene	1.13134	1.07753	4.76	*		
2,4-Dinitrophenol	.20190	.21732	7.64		**	
4-Nitrophenol	.24428	.22082	9.60		**	
Dibenzofuran	1.56222	1.61496	3.38			
Tetrachlorophenol	.37366	.35752	4.32			(Conc=52.00)
2,4-Dinitrotoluene	.46238	.49800	7.71			
Diethylphthalate	1.49382	1.52334	1.98			
4-Chlorophenyl-phenylether	.63892	.59634	6.66			
Fluorene	1.21511	1.18678	2.33			
4-Nitroaniline	.28159	.34227	21.55			
2,4,6-Tribromophenol	.29570	.28766	2.72			(Conc=50.00)
4,6-Dinitro-2-methylphenol	.17269	.18413	6.62			
N-Nitrosodiphenylamine	.49450	.50402	1.92	*		
Benzidine	1.02420	1.27135	24.13			
4-Bromophenyl-phenylether	.23127	.20232	12.52			
alpha-BHC	.18569	.16698	10.07			(Conc=50.00)
Hexachlorobenzene	.34526	.31267	9.38			
Pentachlorophenol	.16166	.14295	11.57	*		
beta-BHC	.13135	.11890	9.48			(Conc=50.00)
gamma-BHC (Lindane)	.15909	.14557	8.50			(Conc=50.00)
Phenanthrene	1.00296	1.04113	3.81			
delta-BHC	.14027	.12904	8.01			(Conc=50.00)

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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 (**)

HQ
8/17/93

Continuing Calibration Check
NSL Compounds

Case No: Calibration Date: 08/17/93

Contractor: Time: 10:09

Contract No: Laboratory ID: >CB440

Instrument ID: #102 Initial Calibration Date: 08/05/93

Minimum $\overline{RF}$ for SPCC is .05 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Carbazole	.88535	.92639	4.64			
Anthracene	.98059	.98726	.68			
Heptachlor	.13077	.12280	6.09			(Conc=50.00)
Aldrin	.19735	.21959	11.27			(Conc=50.00)
Di-n-butylphthalate	1.22612	1.46725	19.67			
Fluoranthene	.91089	.93569	2.72	*		
Heptachlor epoxide	.16870	.16717	.90			(Conc=50.00)
Pyrene	1.59675	1.49426	6.42			
alpha-Endosulfan	.06379	.05478	14.12			(Conc=50.00)
p,p'-DDE	.42791	.38782	9.35			(Conc=50.00)
Dieldrin	.38426	.43679	13.67			(Conc=50.00)
Endrin	.09015	.08428	6.52			(Conc=50.00)
beta-Endosulfan	.06490	.05629	13.27			(Conc=50.00)
p,p'-DDD	.57764	.56921	1.46			(Conc=50.00)
Endrin aldehyde	.10949	.13780	25.86			(Conc=50.00)
Endosulfan sulfate	.10452	.10171	2.69			(Conc=50.00)
p,p'-DDT	.50535	.47840	5.33			(Conc=50.00)
Butylbenzylphthalate	.78262	.89861	14.82			
3,3'-Dichlorobenzidine	.31887	.34195	10.00			
Benzo(a)anthracene	1.17814	1.23540	4.86			
Chrysene	1.05873	1.18140	11.59			
bis(2-Ethylhexyl)phthalate	.98706	1.24364	25.99			
Methoxychlor	.86637	.85939	.81			(Conc=50.00)
Terphenyl-d14	1.14686	1.09513	4.51			
Di-n-octylphthalate	2.14059	2.02592	5.36	*		
Benzo(b)fluoranthene	1.33182	1.24561	6.47			
Benzo(k)fluoranthene	1.25089	1.06409	14.93			
Benzo(a)pyrene	1.16922	1.07700	7.89	*		
Indeno(1,2,3-cd)pyrene	.91836	.94714	3.13			
Dibenzo(a,h)anthracene	.84150	.87170	3.59			
Benzo(g,h,i)perylene	.95517	1.02700	7.52			

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 (**)

HQ
8/18/93

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 08/18/93

Contractor: Time: 15:32

Contract No: Laboratory ID: >V8555

Instrument ID: #102 Initial Calibration Date: 08/05/93

Minimum $\overline{RF}$ for SPCC is .05 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Pyridine	1.51066	1.90168	25.88			(Conc=56.00)
2-Picoline	1.16244	1.56666	34.77			(Conc=55.00)
2-Fluorophenol	1.09809	1.28676	17.18			(Conc=50.00)
Phenol	1.55309	1.90991	22.97	*		
bis(2-chloroethyl)ether	1.16543	1.53235	31.46			
2-Chlorophenol	1.33293	1.46269	9.75			
1,3-Dichlorobenzene	1.35521	1.37385	1.38			
1,4-Dichlorobenzene	1.38801	1.38676	.09	*		
Phenol-d6	1.45375	1.79729	23.63			(Conc=50.00)
Benzyl alcohol	.54085	.92382	71.06			
1,2-Dichlorobenzene	1.36778	1.40193	2.50			
2-Methylphenol	1.15154	1.41291	22.70			
bis(2-chloroisopropyl)ether	2.40280	2.39750	.22			
4-Methylphenol	1.22600	1.38604	13.05			
N-Nitroso-di-n-propylamine	1.13135	1.17030	3.44		**	
Hexachloroethane	.67920	.76250	12.26			
Nitrobenzene	.44375	.47922	7.99			
Isophorone	.82209	.92305	12.28			
2-Nitrophenol	.21626	.24024	11.09	*		
Nitrobenzene-d5	.46439	.51697	11.32			
2,4-Dimethylphenol	.40954	.41090	.33			
Benzoic acid	.20922	.21476	2.64			
bis(2-Chloroethoxy)methane	.46162	.52868	14.53			
2,4-Dichlorophenol	.31982	.30353	5.09	*		
1,2,4-Trichlorobenzene	.33019	.30198	8.54			
Naphthalene	.87175	.93704	7.49			
4-Chloraniline	.37898	.42007	10.84			
Hexachlorobutadiene	.22032	.17442	20.83	*		
4-Chloro-3-methylphenol	.37424	.36170	3.35	*		
2-Methylnaphthalene	.58205	.57974	.40			
Hexachlorocyclopentadiene	.41773	.31923	23.58		**	
2-Fluorobiphenyl	1.28232	1.23191	3.93			

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 (**)

HQ
8/18/93

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 08/18/93

Contractor: Time: 15:32

Contract No: Laboratory ID: >08555

Instrument ID: #102 Initial Calibration Date: 08/05/93

Minimum $\overline{RF}$ for SPCC is .05 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
2,4,6-Trichlorophenol	.43683	.43930	.55	*		
Toluenediamine	.13398	.19556	45.96			(Conc=53.00)
2,4,5-Trichlorophenol	.43875	.40114	8.57			
2-Chloronaphthalene	1.17118	1.18263	.98			
Dinitrobenzene	.54227	.56823	4.79			(Conc=48.00)
2-Nitroaniline	.54485	.55480	1.83			
Dimethylphthalate	1.42193	1.38535	2.57			
Acenaphthylene	1.79538	1.86609	3.94			
2,6-Dinitrotoluene	.35742	.37234	4.17			
3-Nitroaniline	.27654	.33087	19.65			
Acenaphthene	1.13134	1.11686	1.28	*		
2,4-Dinitrophenol	.20190	.18898	6.40		**	
4-Nitrophenol	.24428	.18407	24.65		**	
Dibenzofuran	1.56222	1.55230	.63			
Tetrachlorophenol	.37366	.30918	17.26			(Conc=52.00)
2,4-Dinitrotoluene	.46238	.48340	4.55			
Diethylphthalate	1.49382	1.52074	1.80			
4-Chlorophenyl-phenylether	.63892	.55080	13.79			
Fluorene	1.21511	1.12438	7.47			
4-Nitroaniline	.28159	.32335	14.83			
2,4,6-Tribromophenol	.29570	.21903	25.93			(Conc=50.00)
4,6-Dinitro-2-methylphenol	.17269	.17022	1.43			
N-Nitrosodiphenylamine	.49450	.52035	5.23	*		
Benzidine	1.02420	1.01468	.93			
4-Bromophenyl-phenylether	.23127	.18417	20.37			
alpha-BHC	.18569	.16735	9.88			(Conc=50.00)
Hexachlorobenzene	.34526	.27421	20.58			
Pentachlorophenol	.16166	.12546	22.39	*		
beta-BHC	.13135	.12002	8.63			(Conc=50.00)
gamma-BHC (Lindane)	.15909	.14501	8.85			(Conc=50.00)
Phenanthrene	1.00296	1.05527	5.22			
delta-BHC	.14027	.12914	7.93			(Conc=50.00)

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 (**)

HQ
8/18/93

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 08/18/93

Contractor: Time: 15:32

Contract No: Laboratory ID: >08555

Instrument ID: #102 Initial Calibration Date: 08/05/93

Minimum $\overline{RF}$ for SPCC is .05 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Carbazole	.88535	.95853	8.27			
Anthracene	.98059	1.01628	3.64			
Heptachlor	.13077	.11545	11.71			(Conc=50.00)
Aldrin	.19735	.23124	17.17			(Conc=50.00)
Di-n-butylphthalate	1.22612	1.54476	25.99			
Fluoranthene	.91089	.96590	6.04	*		
Heptachlor epoxide	.16870	.13541	19.73			(Conc=50.00)
Pyrene	1.59675	1.61006	.83			
alpha-Endosulfan	.06379	.05876	7.89			(Conc=50.00)
p,p'-DDE	.42781	.37710	11.85			(Conc=50.00)
Dieldrin	.38426	.50380	31.11			(Conc=50.00)
Endrin	.09015	.09126	1.22			(Conc=50.00)
beta-Endosulfan	.06490	.06761	4.17			(Conc=50.00)
p,p'-DDD	.57764	.57208	.96			(Conc=50.00)
Endrin aldehyde	.10949	.15764	43.98			(Conc=50.00)
Endosulfan sulfate	.10452	.09073	13.14			(Conc=50.00)
p,p'-DDT	.50535	.48217	4.59			(Conc=50.00)
Butylbenzylphthalate	.78262	1.03015	31.63			
3,3'-Dichlorobenzidine	.31087	.35060	12.78			
Benzo(a)anthracene	1.17814	1.29001	9.50			
Chrysene	1.05873	1.16188	9.74			
bis(2-Ethylhexyl)phthalate	.98706	1.43280	45.16			
Methoxychlor	.86637	.85438	1.38			(Conc=50.00)
Terphenyl-d14	1.14686	1.15183	.43			
Di-n-octylphthalate	2.14059	2.64638	23.63	*		
Benzo(b)fluoranthene	1.33182	1.22917	7.71			
Benzo(k)fluoranthene	1.25089	1.21089	3.20			
Benzo(a)pyrene	1.16922	1.10568	5.43	*		
Indeno(1,2,3-cd)pyrene	.91836	.90483	1.47			
Dibenzo(a,h)anthracene	.84150	.86076	2.29			
Benzo(g,h,i)perylene	.95517	.93689	1.91			

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 (**)

HQ 7/14/93

QUANT REPORT

Operator ID: HAIYAN
Output File: ^CB431::D5
Data File: >CB431::D7
Name: SSTD160
Misc:

Quant Rev: 7
Quant Time: 930724 18:09
Injected at: 930724 17:22
Dilution Factor: 1.00000
Instrument ID: MSD102
BTL# 1

ID File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14
Last Qcal Time: 930723 14:36

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-d4	9.37	152.0	81464	40.00	UG/L	98
4)	2-Fluorophenol	6.61	112.0	360043	149.05	UG/L	75
5)	Phenol	8.85	94.0	449416	113.02	UG/L	67
6)	bis(2-chloroethyl)ether	8.85	93.0	331797	95.45	UG/L	100
7)	2-Chlorophenol	8.96	128.0	427393	137.26	UG/L	91
8)	1,3-Dichlorobenzene	9.23	146.0	421610	131.58	UG/L	99
9)	1,4-Dichlorobenzene	9.41	146.0	423951	140.63	UG/L	99
10)	Phenol-d6	8.82	99.0	423377	111.60	UG/L	84
11)	Benzyl alcohol	9.84	108.0	117832	70.65	UG/L	100
12)	1,2-Dichlorobenzene	9.75	146.0	410625	129.42	UG/L	84
13)	2-Methylphenol	10.18	108.0	354847	143.34	UG/L	78
14)	bis(2-chloroisopropyl)ether	10.09	45.0	712869M	87.90	UG/L	100
15)	4-Methylphenol	10.59	108.0	397259	123.80	UG/L	79
16)	N-Nitroso-di-n-propylamine	10.47	70.0	366739	96.05	UG/L	100
17)	Hexachloroethane	10.54	117.0	203881	126.49	UG/L	79
18)	*Naphthalene-d8	12.45	136.0	285690	40.00	UG/L	97
19)	Nitrobenzene	10.80	77.0	519447	140.83	UG/L	67
20)	Isophorone	11.43	82.0	988053M	135.48	UG/L	90
21)	2-Nitrophenol	11.55	139.0	254484	130.08	UG/L	92
22)	Nitrobenzene-d5	10.74	82.0	550508	138.13	UG/L	89
23)	2,4-Dimethylphenol	11.83	107.0	489876	135.54	UG/L	86
24)	Benzoic acid	12.44	122.0	273919M	109.71	UG/L	83
25)	bis(2-Chloroethoxy)methane	12.00	93.0	520808	130.67	UG/L	85
26)	2,4-Dichlorophenol	12.24	162.0	360646	138.51	UG/L	95
27)	1,2,4-Trichlorobenzene	12.34	180.0	375816	140.37	UG/L	98
28)	Naphthalene	12.52	128.0	824322	120.07	UG/L	100
29)	4-Chloraniline	12.73	127.0	428350	146.65	UG/L	97
30)	Hexachlorobutadiene	12.85	225.0	250055	129.51	UG/L	99
31)	4-Chloro-3-methylphenol	14.10	107.0	430476	104.82	UG/L	100
32)	2-Methylnaphthalene	14.28	142.0	630075	133.61	UG/L	72
33)	*Acenaphthene-d10	16.91	164.0	147043	40.00	UG/L	100
34)	Hexachlorocyclopentadiene	14.66	237.0	301395	170.89	UG/L	97
35)	2-Fluorobiphenyl	15.26	172.0	752119	168.90	UG/L	90
36)	2,4,6-Trichlorophenol	15.06	196.0	261967	135.64	UG/L	88
38)	2,4,5-Trichlorophenol	15.20	196.0	257861	144.96	UG/L	89
39)	2-Chloronaphthalene	15.50	162.0	695587	162.42	UG/L	94
41)	2-Nitroaniline	15.85	65.0	331144	118.85	UG/L	93
42)	Dimethylphthalate	16.37	163.0	840197	138.97	UG/L	94
43)	Acenaphthylene	16.55	152.0	911362	145.87	UG/L	97
44)	2,6-Dinitrotoluene	16.49	165.0	201586	125.29	UG/L	100
45)	3-Nitroaniline	16.91	138.0	140967	94.42	UG/L	100
46)	Acenaphthene	17.01	153.0	664139	161.10	UG/L	92
47)	2,4-Dinitrophenol	17.18	184.0	132026	100.90	UG/L	60

HR 7/14/93

QUANT REPORT

Operator ID: HAIYAN Quant Rev: 7 Quant Time: 930724 18:09
Output File: ^CB431::D5 Injected at: 930724 17:22
Data File: >CB431::D7 Dilution Factor: 1.00000
Name: SSTD160 Instrument ID: MSD102
Misc: BTL# 1

ID File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14 Last Qcal Time: 930723 14:36

	Compound	R.T.	Q ion	Area	Conc	Units	q
48)	4-Nitrophenol	17.59	109.0	168351M	117.61	UG/L	
49)	Dibenzofuran	17.46	168.0	818914	125.01	UG/L	79
51)	2,4-Dinitrotoluene	17.51	165.0	253268	99.09	UG/L	92
52)	Diethylphthalate	18.20	149.0	821895	106.99	UG/L	100
53)	4-Chlorophenyl-phenylether	18.38	204.0	365007	126.06	UG/L	100
54)	Fluorene	18.34	166.0	682006	135.84	UG/L	100
55)	4-Nitroaniline	18.53	138.0	142495M	89.12	UG/L	100
56)	2,4,6-Tribromophenol	18.97	329.8	166446	80.18	UG/L	100
57)	*Phenanthrene-d10	20.72	188.0	193095	40.00	UG/L	100
58)	4,6-Dinitro-2-methylphenol	18.56	198.0	154383	159.80	UG/L	100
59)	N-Nitrosodiphenylamine	18.72	169.0	424963	216.83	UG/L	100
60)	Benzidine	18.79	77.0	835021M	3577.60	UG/L	59
61)	4-Bromophenyl-phenylether	19.64	248.0	197416	233.43	UG/L	95
62)	alpha-BHC	19.66	181.0	164112	254.85	UG/L	86
63)	Hexachlorobenzene	19.73	283.7	314885	169.43	UG/L	98
64)	beta-BHC	20.25	181.0	112015	157.03	UG/L	87
65)	gamma-BHC (Lindane)	20.41	181.0	136226	183.73	UG/L	90
66)	Pentachlorophenol	20.30	266.0	153739	115.95	UG/L	100
67)	Phenanthrene	20.79	178.0	797574	180.80	UG/L	86
68)	delta-BHC	21.05	181.0	117737	171.55	UG/L	88
69)	Carbazole	21.40	167.0	702927	163.76	UG/L	94
70)	Anthracene	20.93	178.0	739125	164.96	UG/L	91
71)	Heptachlor	22.02	272.0	110158	136.37	UG/L	100
72)	Aldrin	22.80	66.0	161104	171.65	UG/L	67
73)	Di-n-butylphthalate	22.38	149.0	789152	111.06	UG/L	85
74)	Fluoranthene	23.85	202.0	676402	118.72	UG/L	100
75)	*Chrysene-d12	27.56	240.0	92541	40.00	UG/L	100
76)	Heptachlor epoxide	23.62	353.0	70479	144.12	UG/L	100
77)	Pyrene	24.42	202.0	643643	209.91	UG/L	97
78)	alpha-Endosulfan	24.41	195.0	27134	293.34	UG/L	97
79)	p,p'-DDE	24.77	246.0	175088	232.60	UG/L	93
80)	Dieldrin	24.96	79.0	150188M	141.72	UG/L	
81)	Endrin	25.41	263.0	36831	143.35	UG/L	73
82)	beta-Endosulfan	25.62	195.0	26719	194.75	UG/L	97
83)	p,p'-DDD	25.63	235.0	228704	169.42	UG/L	93
84)	Endrin aldehyde	27.38	67.0	37844	117.60	UG/L	81
85)	Endosulfan sulfate	26.38	272.0	42016	152.05	UG/L	76
86)	p,p'-DDT	26.39	235.0	204752	175.22	UG/L	98
87)	Butylbenzylphthalate	26.23	149.0	289644	133.24	UG/L	100
88)	3,3'-Dichlorobenzidine	27.52	252.0	120344	156.82	UG/L	99
89)	Benzo(a)anthracene	27.55	228.0	464888M	152.30	UG/L	95
90)	Chrysene	27.64	228.0	400991M	141.08	UG/L	100
91)	bis(2-Ethylhexyl)phthalate	27.77	149.0	353695	141.86	UG/L	95

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HR
7/14/93

QUANT REPORT

Operator ID: HAIYAN
Output File: ^CB431::D5
Data File: >CB431::D7
Name: SSTD160
Misc:

Quant Rev: 7
Quant Time: 930724 18:09
Injected at: 930724 17:22
Dilution Factor: 1.00000
Instrument ID: MSD102
BTL# 1

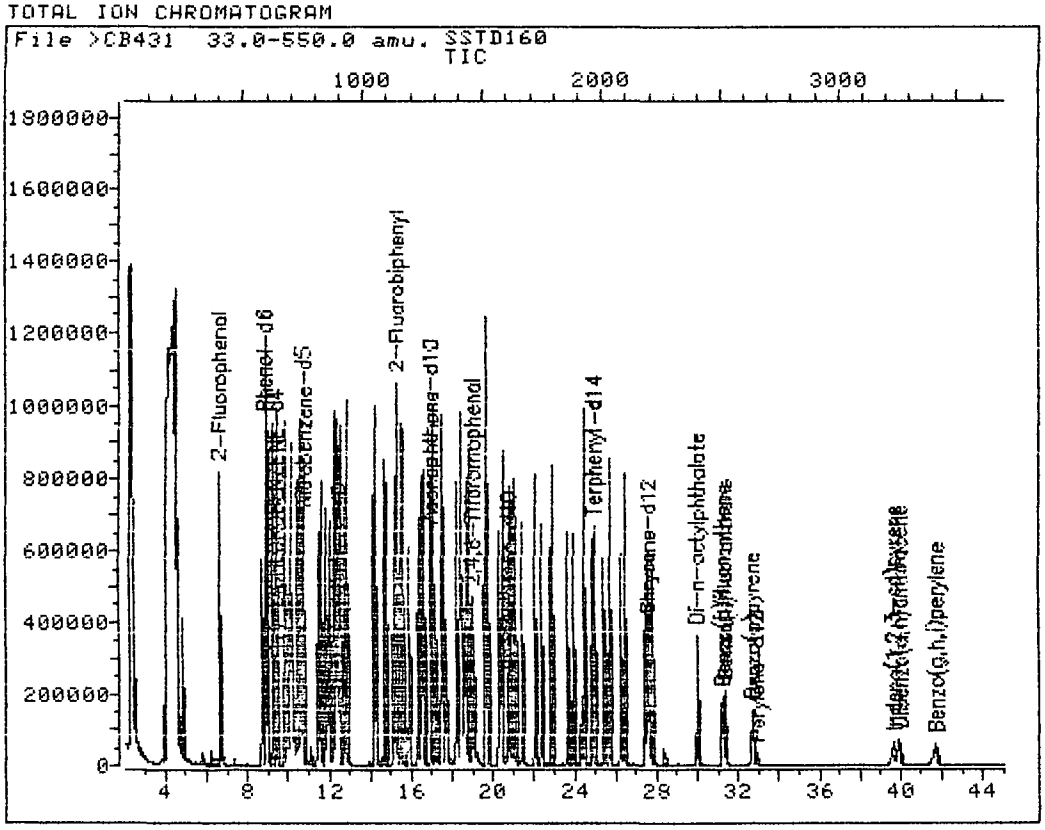
ID File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14
Last Qcal Time: 930723 14:36

	Compound	R.T.	Q ion	Area	Conc	Units	q
92)	Methoxychlor	27.45	227.0	357562	154.63	UG/L	44
93)	Terphenyl-d14	24.90	244.0	472566	173.07	UG/L	100
94)	*Perylene-d12	32.90	264.0	63665	40.00	UG/L	100
95)	Di-n-octylphthalate	29.93	149.0	567854	204.44	UG/L	100
96)	Benzo(b)fluoranthene	31.20	252.0	403711M	191.12	UG/L	91
97)	Benzo(k)fluoranthene	31.33	252.0	340017M	175.80	UG/L	97
98)	Benzo(a)pyrene	32.65	252.0	330048	174.05	UG/L	94
99)	Indeno(1,2,3-cd)pyrene	39.61	276.0	257748M	159.70	UG/L	
100)	Dibenzo(a,h)anthracene	39.92	278.0	241072M	158.25	UG/L	
101)	Benzo(g,h,i)perylene	41.67	276.0	258356M	161.82	UG/L	

* Compound is ISTD

HQ 7/29/93

TOTAL ION CHROMATOGRAM



Data File: >CB431::D7 Quant Output File: ^CB431::D5
Name: SSTD160 Instrument ID: MSD102
Misc: BTL# 1

Id File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14 Last Qcal Time: 930723 14:36

Operator ID: HAIYAN
Quant Time : 930724 18:09
Injected at: 930724 17:22

HQ 7/14/93

QUANT REPORT

Operator ID: HAIYAN
Output File: ^CB433::D5
Data File: >CB433::D7
Name: SSTD080
Misc:

Quant Rev: 7
Quant Time: 930724 19:54
Injected at: 930724 19:09
Dilution Factor: 1.00000
Instrument ID: MSD102
BTL# 3

ID File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14
Last Qcal Time: 930723 14:36

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-d4	9.36	152.0	70061	40.00	UG/L	97
4)	2-Fluorophenol	6.60	112.0	231469	111.42	UG/L	72
5)	Phenol	8.82	94.0	314208	91.88	UG/L	66
6)	bis(2-chloroethyl)ether	8.82	93.0	229087	76.63	UG/L	100
7)	2-Chlorophenol	8.94	128.0	282812	105.61	UG/L	89
8)	1,3-Dichlorobenzene	9.22	146.0	289873	105.19	UG/L	99
9)	1,4-Dichlorobenzene	9.41	146.0	288829	111.40	UG/L	98
10)	Phenol-d6	8.79	99.0	301921	92.54	UG/L	86
11)	Benzyl alcohol	9.81	108.0	71579	49.90	UG/L	100
12)	1,2-Dichlorobenzene	9.74	146.0	282652	103.59	UG/L	88
13)	2-Methylphenol	10.16	108.0	243212	114.23	UG/L	73
14)	bis(2-chloroisopropyl)ether	10.09	45.0	468296M	67.14	UG/L	100
15)	4-Methylphenol	10.56	108.0	255154	92.45	UG/L	81
16)	N-Nitroso-di-n-propylamine	10.44	70.0	222597	67.79	UG/L	100
17)	Hexachloroethane	10.54	117.0	139032	100.30	UG/L	77
18)	*Naphthalene-d8	12.44	136.0	256850	40.00	UG/L	97
19)	Nitrobenzene	10.77	77.0	345655	104.23	UG/L	70
20)	Isophorone	11.40	82.0	639161	97.48	UG/L	88
21)	2-Nitrophenol	11.54	139.0	165774	94.25	UG/L	93
22)	Nitrobenzene-d5	10.72	82.0	362325	101.12	UG/L	89
23)	2,4-Dimethylphenol	11.82	107.0	322940	99.38	UG/L	86
24)	Benzoic acid	12.36	122.0	179352M	79.90	UG/L	
25)	bis(2-Chloroethoxy)methane	11.98	93.0	346280	96.63	UG/L	83
26)	2,4-Dichlorophenol	12.22	162.0	246330	105.23	UG/L	93
27)	1,2,4-Trichlorobenzene	12.33	180.0	253070	105.14	UG/L	92
28)	Naphthalene	12.50	128.0	654302	106.00	UG/L	100
29)	4-Chloraniline	12.71	127.0	281480	107.19	UG/L	93
30)	Hexachlorobutadiene	12.84	225.0	174756	100.67	UG/L	94
31)	4-Chloro-3-methylphenol	14.10	107.0	291235	78.88	UG/L	100
32)	2-Methylnaphthalene	14.26	142.0	448778	105.85	UG/L	74
33)	*Acenaphthene-d10	16.90	164.0	136238	40.00	UG/L	100
34)	Hexachlorocyclopentadiene	14.66	237.0	190318	116.47	UG/L	92
35)	2-Fluorobiphenyl	15.24	172.0	545569	132.23	UG/L	99
36)	2,4,6-Trichlorophenol	15.04	196.0	179844	100.50	UG/L	91
38)	2,4,5-Trichlorophenol	15.19	196.0	186369	113.08	UG/L	89
39)	2-Chloronaphthalene	15.50	162.0	484109	122.01	UG/L	93
41)	2-Nitroaniline	15.83	65.0	230353	89.24	UG/L	91
42)	Dimethylphthalate	16.34	163.0	594803	106.19	UG/L	93
43)	Acenaphthylene	16.54	152.0	740036	127.84	UG/L	89
44)	2,6-Dinitrotoluene	16.48	165.0	143116	96.00	UG/L	100
45)	3-Nitroaniline	16.90	138.0	95674	69.16	UG/L	100
46)	Acenaphthene	17.00	153.0	456886	119.61	UG/L	95
47)	2,4-Dinitrophenol	17.16	184.0	89077	73.47	UG/L	54

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HQ 7/14/93

QUANT REPORT

Operator ID: HAIYAN Quant Rev: 7 Quant Time: 930724 19:54
Output File: ^CB433::D5 Injected at: 930724 19:09
Data File: >CB433::D7 Dilution Factor: 1.00000
Name: SSTD080 Instrument ID: MSD102
Misc: BTL# 3

ID File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14 Last Qcal Time: 930723 14:36

	Compound	R.T.	Q ion	Area	Conc	Units	q
48)	4-Nitrophenol	17.58	109.0	122146M	92.10	UG/L	
49)	Dibenzofuran	17.45	168.0	640962	105.61	UG/L	96
51)	2,4-Dinitrotoluene	17.50	165.0	181924	76.82	UG/L	93
52)	Diethylphthalate	18.17	149.0	617559	86.76	UG/L	100
53)	4-Chlorophenyl-phenylether	18.37	204.0	262527	97.86	UG/L	100
54)	Fluorene	18.33	166.0	494489	106.30	UG/L	100
55)	4-Nitroaniline	18.50	138.0	93890	63.38	UG/L	100
56)	2,4,6-Tribromophenol	18.96	329.8	117213	60.94	UG/L	100
57)	*Phenanthrene-d10	20.72	188.0	197175	40.00	UG/L	100
58)	4,6-Dinitro-2-methylphenol	18.55	198.0	109592	111.09	UG/L	100
59)	N-Nitrosodiphenylamine	18.71	169.0	305558	152.68	UG/L	100
60)	Benzidine	18.78	77.0	660711M	2772.20	UG/L	58
61)	4-Bromophenyl-phenylether	19.62	248.0	152614	176.72	UG/L	99
62)	alpha-BHC	19.63	181.0	125376	190.67	UG/L	93
63)	Hexachlorobenzene	19.72	283.7	223636	117.84	UG/L	99
64)	beta-BHC	20.24	181.0	84210	115.61	UG/L	89
65)	gamma-BHC (Lindane)	20.39	181.0	104983	138.67	UG/L	90
66)	Pentachlorophenol	20.29	266.0	112247	82.90	UG/L	100
67)	Phenanthrene	20.79	178.0	629515	139.75	UG/L	95
68)	delta-BHC	21.04	181.0	91238	130.19	UG/L	90
69)	Carbazole	21.39	167.0	527131	120.26	UG/L	93
70)	Anthracene	20.92	178.0	589585	128.87	UG/L	97
71)	Heptachlor	22.00	272.0	85731	103.94	UG/L	100
72)	Aldrin	22.80	66.0	123299	128.65	UG/L	70
73)	Di-n-butylphthalate	22.38	149.0	677231	93.33	UG/L	83
74)	Fluoranthene	23.84	202.0	529926	91.09	UG/L	100
75)	*Chrysene-d12	27.55	240.0	96983	40.00	UG/L	100
76)	Heptachlor epoxide	23.61	353.0	56009	109.29	UG/L	100
77)	Pyrene	24.42	202.0	498122	155.01	UG/L	98
78)	alpha-Endosulfan	24.40	195.0	21316	219.89	UG/L	93
79)	p,p'-DDE	24.77	246.0	140667	178.32	UG/L	91
80)	Dieldrin	24.95	79.0	117276M	105.60	UG/L	
81)	Endrin	25.40	263.0	29961	111.27	UG/L	81
82)	beta-Endosulfan	25.61	195.0	21153	147.12	UG/L	95
83)	p,p'-DDD	25.62	235.0	178551	126.21	UG/L	90
84)	Endrin aldehyde	27.37	67.0	29172	86.50	UG/L	80
85)	Endosulfan sulfate	26.37	272.0	34636	119.60	UG/L	78
86)	p,p'-DDT	26.38	235.0	160871	131.37	UG/L	98
87)	Butylbenzylphthalate	26.22	149.0	226951	99.62	UG/L	100
88)	3,3'-Dichlorobenzidine	27.51	252.0	86693	107.79	UG/L	92
89)	Benzo(a)anthracene	27.54	228.0	353660M	110.56	UG/L	99
90)	Chrysene	27.63	228.0	321388M	107.90	UG/L	100
91)	bis(2-Ethylhexyl)phthalate	27.76	149.0	278880	106.73	UG/L	97

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HR 7/14/93

QUANT REPORT

Operator ID: HAIYAN
Output File: ^CB433::D5
Data File: >CB433::D7
Name: SSTD080
Misc:

Quant Rev: 7
Quant Time: 930724 19:54
Injected at: 930724 19:09
Dilution Factor: 1.00000
Instrument ID: MSD102
BTL# 3

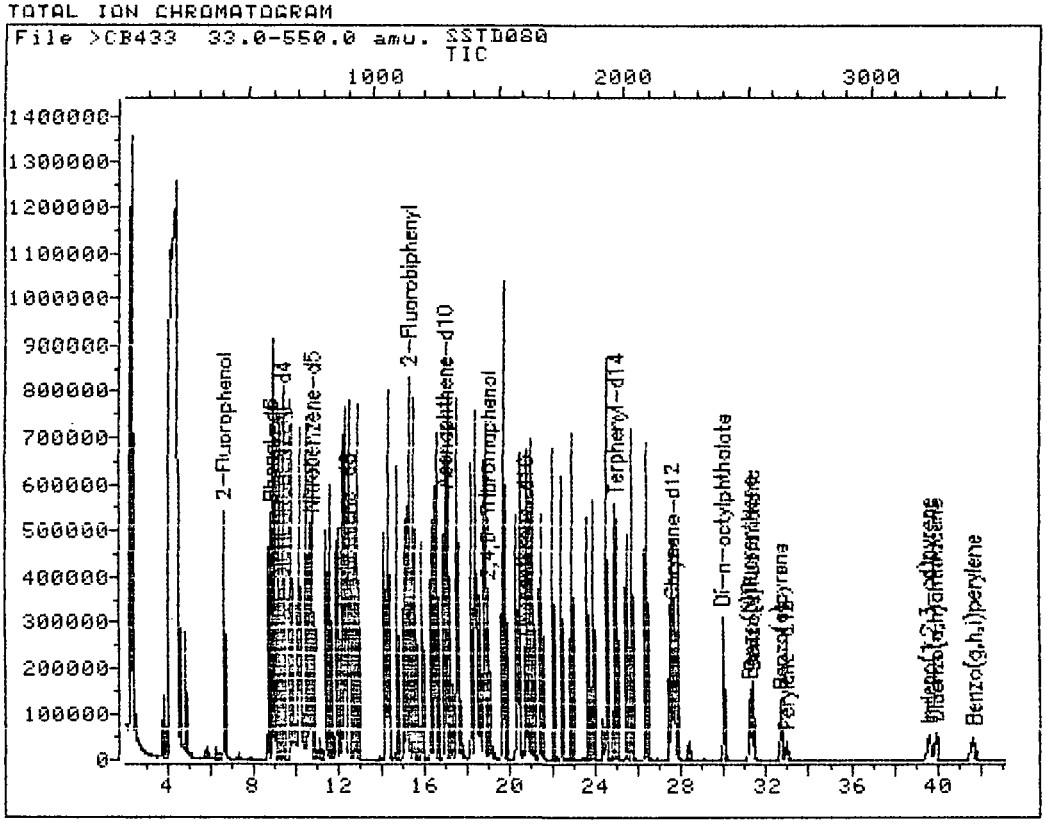
ID File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14
Last Qcal Time: 930723 14:36

	Compound	R.T.	Q ion	Area	Conc	Units	q
92)	Methoxychlor	27.44	227.0	275615	113.73	UG/L	44
93)	Terphenyl-d14	24.90	244.0	342726	119.77	UG/L	100
94)	*Perylene-d12	32.89	264.0	69697	40.00	UG/L	100
95)	Di-n-octylphthalate	29.92	149.0	448709	147.56	UG/L	100
96)	Benzo(b)fluoranthene	31.19	252.0	294484	127.34	UG/L	96
97)	Benzo(k)fluoranthene	31.31	252.0	259382M	122.50	UG/L	98
98)	Benzo(a)pyrene	32.63	252.0	262325	126.37	UG/L	95
99)	Indeno(1,2,3-cd)pyrene	39.56	276.0	207090	117.20	UG/L	100
100)	Dibenzo(a,h)anthracene	39.89	278.0	189922M	113.89	UG/L	85
101)	Benzo(g,h,i)perylene	41.64	276.0	221453M	126.70	UG/L	

* Compound is ISTD

HQ 7/24/93

TOTAL ION CHROMATOGRAM



Data File: >CB433::D7 Quant Output File: ^CB433::D5
Name: SSTD080 Instrument ID: MSD102
Misc: BTL# 3

Id File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14 Last Qcal Time: 930723 14:36

Operator ID: HAIYAN
Quant Time : 930724 19:54
Injected at: 930724 19:09

HB 7/14/93

QUANT REPORT

Operator ID: HAIYAN
Output File: ^CB434::D5
Data File: >CB434::D7
Name: SSTD120
Misc:

Quant Rev: 7
Quant Time: 930724 20:47
Injected at: 930724 20:02
Dilution Factor: 1.00000
Instrument ID: MSD102
BTL# 4

ID File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14
Last Qcal Time: 930723 14:36

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-d4	9.36	152.0	109431	40.00	UG/L	97
4)	2-Fluorophenol	6.61	112.0	246716	76.03	UG/L	78
5)	Phenol	8.82	94.0	313869	58.76	UG/L	71
6)	bis(2-chloroethyl)ether	8.84	93.0	233592	50.02	UG/L	100
7)	2-Chlorophenol	8.94	128.0	279638	66.85	UG/L	92
8)	1,3-Dichlorobenzene	9.22	146.0	292540	67.96	UG/L	97
9)	1,4-Dichlorobenzene	9.41	146.0	298536	73.72	UG/L	99
10)	Phenol-d6	8.80	99.0	294560	57.80	UG/L	84
11)	Benzyl alcohol	9.81	108.0	76062	33.95	UG/L	100
12)	1,2-Dichlorobenzene	9.74	146.0	290544	68.17	UG/L	88
13)	2-Methylphenol	10.16	108.0	231040	69.47	UG/L	77
14)	bis(2-chloroisopropyl)ether	10.09	45.0	467962M	42.95	UG/L	100
15)	4-Methylphenol	10.56	108.0	223220	51.78	UG/L	84
16)	N-Nitroso-di-n-propylamine	10.44	70.0	209449	40.84	UG/L	100
17)	Hexachloroethane	10.54	117.0	142896	66.00	UG/L	78
18)	*Naphthalene-d8	12.44	136.0	382363	40.00	UG/L	97
19)	Nitrobenzene	10.77	77.0	320320	64.89	UG/L	72
20)	Isophorone	11.40	82.0	556995	57.07	UG/L	88
21)	2-Nitrophenol	11.54	139.0	156472	59.76	UG/L	93
22)	Nitrobenzene-d5	10.72	82.0	345844	64.84	UG/L	89
23)	2,4-Dimethylphenol	11.82	107.0	307713	63.61	UG/L	86
24)	Benzoic acid	12.35	122.0	153321M	45.88	UG/L	86
25)	bis(2-Chloroethoxy)methane	11.98	93.0	323685	60.68	UG/L	82
26)	2,4-Dichlorophenol	12.22	162.0	228384	65.54	UG/L	92
27)	1,2,4-Trichlorobenzene	12.33	180.0	248533	69.36	UG/L	97
28)	Naphthalene	12.50	128.0	636565	69.28	UG/L	100
29)	4-Chloraniline	12.71	127.0	252928	64.70	UG/L	98
30)	Hexachlorobutadiene	12.84	225.0	175020	67.73	UG/L	90
31)	4-Chloro-3-methylphenol	14.10	107.0	250397	45.56	UG/L	100
32)	2-Methylnaphthalene	14.26	142.0	412288	65.32	UG/L	72
33)	*Acenaphthene-d10	16.90	164.0	173937	40.00	UG/L	100
34)	Hexachlorocyclopentadiene	14.66	237.0	187706	89.97	UG/L	93
35)	2-Fluorobiphenyl	15.24	172.0	487737	92.59	UG/L	99
36)	2,4,6-Trichlorophenol	15.04	196.0	148956	65.20	UG/L	91
38)	2,4,5-Trichlorophenol	15.19	196.0	158913	75.52	UG/L	91
39)	2-Chloronaphthalene	15.49	162.0	407121	80.37	UG/L	90
41)	2-Nitroaniline	15.83	65.0	176359	53.51	UG/L	81
42)	Dimethylphthalate	16.34	163.0	452124	63.22	UG/L	92
43)	Acenaphthylene	16.54	152.0	608599	82.35	UG/L	84
44)	2,6-Dinitrotoluene	16.47	165.0	112802	59.27	UG/L	100
45)	3-Nitroaniline	16.89	138.0	79071	44.77	UG/L	100
46)	Acenaphthene	17.00	153.0	374269	76.75	UG/L	96
47)	2,4-Dinitrophenol	17.16	184.0	62858M	40.61	UG/L	

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HQ 7/14/93

Operator ID: HAIYAN Quant Rev: 7 Quant Time: 930724 20:47
Output File: ^CB434::D5 Injected at: 930724 20:02
Data File: >CB434::D7 Dilution Factor: 1.00000
Name: SSTD120 Instrument ID: MSD102
Misc: BTL# 4

ID File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14 Last Qcal Time: 930723 14:36

	Compound	R.T.	Q ion	Area	Conc	Units	q
48)	4-Nitrophenol	17.58	109.0	86472M	51.07	UG/L	
49)	Dibenzofuran	17.44	168.0	518488	66.91	UG/L	99
51)	2,4-Dinitrotoluene	17.49	165.0	136628	45.19	UG/L	93
52)	Diethylphthalate	18.17	149.0	463313	50.98	UG/L	100
53)	4-Chlorophenyl-phenylether	18.37	204.0	205480	59.99	UG/L	100
54)	Fluorene	18.32	166.0	367356	61.85	UG/L	100
55)	4-Nitroaniline	18.48	138.0	69870	36.94	UG/L	100
56)	2,4,6-Tribromophenol	18.95	329.8	91959	37.45	UG/L	100
57)	*Phenanthrene-d10	20.72	188.0	238299	40.00	UG/L	100
58)	4,6-Dinitro-2-methylphenol	18.53	198.0	80038	67.13	UG/L	100
59)	N-Nitrosodiphenylamine	18.70	169.0	224367	92.76	UG/L	100
60)	Benzidine	18.78	77.0	509092M	1767.42	UG/L	58
61)	4-Bromophenyl-phenylether	19.62	248.0	115939	111.08	UG/L	96
62)	alpha-BHC	19.63	181.0	97314	122.45	UG/L	90
63)	Hexachlorobenzene	19.71	283.7	168860	73.62	UG/L	98
64)	beta-BHC	20.22	181.0	65765	74.70	UG/L	96
65)	gamma-BHC (Lindane)	20.39	181.0	80236	87.69	UG/L	92
66)	Pentachlorophenol	20.28	266.0	78921	48.23	UG/L	100
67)	Phenanthrene	20.79	178.0	466743	85.73	UG/L	97
68)	delta-BHC	21.03	181.0	70120	82.79	UG/L	97
69)	Carbazole	21.38	167.0	392037	74.01	UG/L	93
70)	Anthracene	20.92	178.0	452920	81.91	UG/L	97
71)	Heptachlor	22.01	272.0	63024	63.22	UG/L	100
72)	Aldrin	22.80	66.0	92364M	79.74	UG/L	
73)	Di-n-butylphthalate	22.37	149.0	569912	64.99	UG/L	82
74)	Fluoranthene	23.84	202.0	408102	58.04	UG/L	100
75)	*Chrysene-d12	27.55	240.0	134332	40.00	UG/L	100
76)	Heptachlor epoxide	23.60	353.0	41623	58.64	UG/L	100
77)	Pyrene	24.41	202.0	387845	87.14	UG/L	95
78)	alpha-Endosulfan	24.40	195.0	16547	123.23	UG/L	71
79)	p,p'-DDE	24.76	246.0	113185	103.59	UG/L	93
80)	Dieldrin	24.96	79.0	92912M	60.40	UG/L	
81)	Endrin	25.39	263.0	24523	65.75	UG/L	84
82)	beta-Endosulfan	25.61	195.0	17575	88.25	UG/L	92
83)	p,p'-DDD	25.63	235.0	151561	77.35	UG/L	88
84)	Endrin aldehyde	27.37	67.0	23650	50.63	UG/L	81
85)	Endosulfan sulfate	26.37	272.0	27839	69.40	UG/L	79
86)	p,p'-DDT	26.38	235.0	129938	76.60	UG/L	88
87)	Butylbenzylphthalate	26.21	149.0	191576	60.71	UG/L	100
88)	3,3'-Dichlorobenzidine	27.51	252.0	78741	70.68	UG/L	96
89)	Benzo(a)anthracene	27.53	228.0	291161M	65.71	UG/L	94
90)	Chrysene	27.62	228.0	247237M	59.93	UG/L	100
91)	bis(2-Ethylhexyl)phthalate	27.76	149.0	242494	67.00	UG/L	90

HQ
7/21/93

QUANT REPORT

Operator ID: HAIYAN
Output File: ^CB434::D5
Data File: >CB434::D7
Name: SSTD120
Misc:

Quant Rev: 7
Quant Time: 930724 20:47
Injected at: 930724 20:02
Dilution Factor: 1.00000
Instrument ID: MSD102
BTL# 4

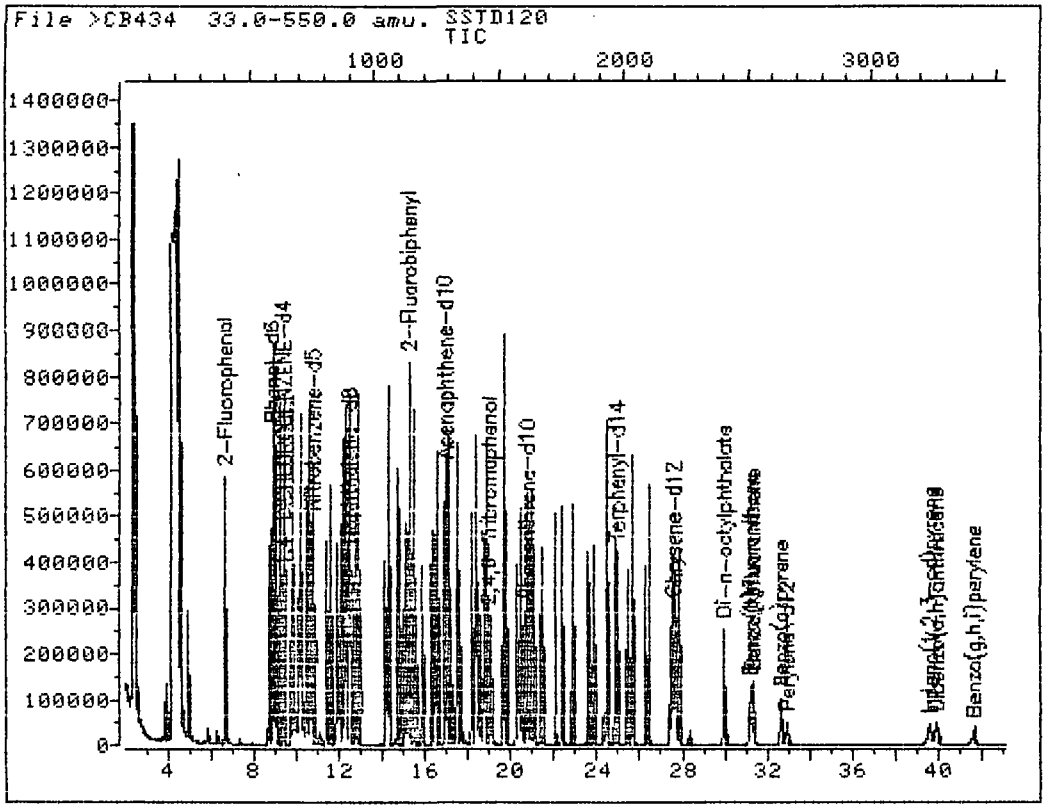
ID File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14
Last Qcal Time: 930723 14:36

	Compound	R.T.	Q ion	Area	Conc	Units	q
92)	Methoxychlor	27.44	227.0	237034^	70.62	UG/L	44
93)	Terphenyl-d14	24.89	244.0	284871	71.87	UG/L	100
94)	*Perylene-d12	32.89	264.0	93567	40.00	UG/L	100
95)	Di-n-octylphthalate	29.92	149.0	389155	95.33	UG/L	100
96)	Benzo(b)fluoranthene	31.18	252.0	253809	81.75	UG/L	93
97)	Benzo(k)fluoranthene	31.29	252.0	214584M	75.49	UG/L	96
98)	Benzo(a)pyrene	32.62	252.0	209520	75.18	UG/L	94
99)	Indeno(1,2,3-cd)pyrene	39.56	276.0	178770	75.37	UG/L	100
100)	Dibenzo(a,h)anthracene	39.86	278.0	145184	64.85	UG/L	90
101)	Benzo(g,h,i)perylene	41.60	276.0	182607M	77.82	UG/L	

* Compound is ISTD

HQ
7/24/93

TOTAL ION CHROMATOGRAM



Data File: >CB434::D7 Quant Output File: ^CB434::D5
Name: SSTD120 Instrument ID: MSD102
Misc: BTL# 4

Id File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14 Last Qcal Time: 930723 14:36

Operator ID: HAIYAN
Quant Time : 930724 20:47
Injected at: 930724 20:02

HQ 8/5/93

QUANT REPORT

Operator ID: HAIYAN
Output File: ^CB436::D1
Data File: >CB436::D4
Name: STD020
Misc:

Quant Rev: 7
Quant Time: 930805 15:10
Injected at: 930805 14:26
Dilution Factor: 1.00000
Instrument ID: MSD102
BTL# 2

ID File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14
Last Qcal Time: 930804 13:58

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-d4	9.27	152.0	47103	40.00	UG/L	97
4)	2-Fluorophenol	6.58	112.0	26762	18.68	UG/L	76
5)	Phenol	8.82	94.0	43392	21.44	UG/L	93
6)	bis(2-chloroethyl)ether	8.73	93.0	32693	20.94	UG/L	100
7)	2-Chlorophenol	8.89	128.0	34963	21.91	UG/L	87
8)	1,3-Dichlorobenzene	9.12	146.0	35071	21.39	UG/L	94
9)	1,4-Dichlorobenzene	9.31	146.0	36911	22.10	UG/L	96
10)	Phenol-d6	8.80	99.0	38961	21.38	UG/L	90
11)	Benzyl alcohol	9.73	108.0	20062	23.49	UG/L	100
12)	1,2-Dichlorobenzene	9.66	146.0	37474	23.04	UG/L	84
13)	2-Methylphenol	10.15	108.0	30929	22.31	UG/L	76
14)	bis(2-chloroisopropyl)ether	10.01	45.0	66559M	26.45	UG/L	100
15)	4-Methylphenol	10.54	108.0	33300	21.85	UG/L	80
16)	N-Nitroso-di-n-propylamine	10.31	70.0	30551	23.73	UG/L	100
17)	Hexachloroethane	10.45	117.0	17919	19.95	UG/L	79
18)	*Naphthalene-d8	12.35	136.0	183899	40.00	UG/L	89
19)	Nitrobenzene	10.66	77.0	44364	23.84	UG/L	71
20)	Isophorone	11.27	82.0	81361	24.58	UG/L	86
21)	2-Nitrophenol	11.44	139.0	21200	22.51	UG/L	88
22)	Nitrobenzene-d5	10.61	82.0	45474	22.92	UG/L	93
23)	2,4-Dimethylphenol	11.76	107.0	38800	23.41	UG/L	90
24)	Benzoic acid	12.18	122.0	15510	19.86	UG/L	85
25)	bis(2-Chloroethoxy)methane	11.87	93.0	48270	23.48	UG/L	84
26)	2,4-Dichlorophenol	12.18	162.0	32589	25.19	UG/L	92
27)	1,2,4-Trichlorobenzene	12.23	180.0	33437	24.75	UG/L	96
28)	Naphthalene	12.41	128.0	97297	23.91	UG/L	100
29)	4-Chloraniline	12.64	127.0	40821	26.67	UG/L	93
30)	Hexachlorobutadiene	12.75	225.0	21616	26.00	UG/L	87
31)	4-Chloro-3-methylphenol	14.08	107.0	38576	27.17	UG/L	100
32)	2-Methylnaphthalene	14.17	142.0	61560	27.24	UG/L	72
33)	*Acenaphthene-d10	16.82	164.0	109732	40.00	UG/L	100
34)	Hexachlorocyclopentadiene	14.57	237.0	16629	16.93	UG/L	92
35)	2-Fluorobiphenyl	15.15	172.0	73242	21.62	UG/L	99
36)	2,4,6-Trichlorophenol	14.98	196.0	25641	22.32	UG/L	94
38)	2,4,5-Trichlorophenol	15.15	196.0	25944	24.06	UG/L	93
39)	2-Chloronaphthalene	15.39	162.0	70034	21.04	UG/L	97
41)	2-Nitroaniline	15.75	65.0	30952	23.06	UG/L	97
42)	Dimethylphthalate	16.25	163.0	85637	23.46	UG/L	91
43)	Acenaphthylene	16.45	152.0	113113	22.72	UG/L	83
44)	2,6-Dinitrotoluene	16.38	165.0	22444	24.43	UG/L	100
45)	3-Nitroaniline	16.83	138.0	19013	22.12	UG/L	100
46)	Acenaphthene	16.89	153.0	69334	22.84	UG/L	92
47)	2,4-Dinitrophenol	17.07	184.0	9498	18.58	UG/L	88

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QUANT REPORT

Operator ID: HAIYAN Quant Rev: 7 Quant Time: 930805 15:10
Output File: ^CB436::D1 Injected at: 930805 14:26
Data File: >CB436::D4 Dilution Factor: 1.00000
Name: STD020 Instrument ID: MSD102
Misc: BTL# 2

ID File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14 Last Qcal Time: 930804 13:58

	Compound	R.T.	Q ion	Area	Conc	Units	q
48)	4-Nitrophenol	17.58	109.0	10079	18.16	UG/L	73
49)	Dibenzofuran	17.35	168.0	98747	24.45	UG/L	96
51)	2,4-Dinitrotoluene	17.40	165.0	31320	26.91	UG/L	81
52)	Diethylphthalate	18.07	149.0	96886	26.52	UG/L	100
53)	4-Chlorophenyl-phenylether	18.28	204.0	39703	26.08	UG/L	100
54)	Fluorene	18.22	166.0	78753	26.05	UG/L	100
55)	4-Nitroaniline	18.40	138.0	22097	26.66	UG/L	100
56)	2,4,6-Tribromophenol	18.86	329.8	18118	32.40	UG/L	100
57)	*Phenanthrene-d10	20.63	188.0	220396	40.00	UG/L	100
58)	4,6-Dinitro-2-methylphenol	18.43	198.0	16756	19.29	UG/L	100
59)	N-Nitrosodiphenylamine	18.61	169.0	55314	21.59	UG/L	100
60)	Benzidine	18.69	77.0	107271	21.19	UG/L	80
61)	4-Bromophenyl-phenylether	19.52	248.0	23559	22.83	UG/L	97
62)	alpha-BHC	19.53	181.0	18413	20.73	UG/L	90
63)	Hexachlorobenzene	19.62	283.7	32971	22.85	UG/L	92
64)	beta-BHC	20.15	181.0	13717	23.55	UG/L	82
65)	gamma-BHC (Lindane)	20.30	181.0	16054	21.31	UG/L	88
66)	Pentachlorophenol	20.22	266.0	12800	18.92	UG/L	100
67)	Phenanthrene	20.69	178.0	116304	22.49	UG/L	93
68)	delta-BHC	20.96	181.0	14541	22.64	UG/L	88
69)	Carbazole	21.31	167.0	105101	20.82	UG/L	99
70)	Anthracene	20.81	178.0	117876	22.72	UG/L	99
71)	Heptachlor	21.92	272.0	13705	23.22	UG/L	100
72)	Aldrin	22.71	66.0	21696M	19.97	UG/L	
73)	Di-n-butylphthalate	22.29	149.0	163137	22.27	UG/L	80
74)	Fluoranthene	23.75	202.0	115598	23.81	UG/L	100
75)	*Chrysene-d12	27.46	240.0	135576	40.00	UG/L	100
76)	Heptachlor epoxide	23.52	353.0	10123	26.05	UG/L	100
77)	Pyrene	24.32	202.0	108429	21.57	UG/L	97
78)	alpha-Endosulfan	24.31	195.0	3786	21.54	UG/L	92
79)	p,p'-DDE	24.67	246.0	26030	23.41	UG/L	92
80)	Dieldrin	24.87	79.0	25381	18.98	UG/L	86
81)	Endrin	25.30	263.0	5275	20.73	UG/L	88
82)	beta-Endosulfan	25.52	195.0	3949	21.01	UG/L	94
83)	p,p'-DDD	25.54	235.0	37678	22.00	UG/L	90
84)	Endrin aldehyde	27.28	67.0	9066	20.97	UG/L	69
85)	Endosulfan sulfate	26.28	272.0	6418	20.73	UG/L	89
86)	p,p'-DDT	26.30	235.0	32452	21.97	UG/L	98
87)	Butylbenzylphthalate	26.13	149.0	56475	19.42	UG/L	100
88)	3,3'-Dichlorobenzidine	27.43	252.0	22446	19.05	UG/L	98
89)	Benzo(a)anthracene	27.43	228.0	84118M	21.64	UG/L	99
90)	Chrysene	27.53	228.0	78523M	21.57	UG/L	100
91)	bis(2-Ethylhexyl)phthalate	27.67	149.0	72863	18.13	UG/L	92

HR
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QUANT REPORT

Operator ID: HAIYAN
Output File: ^CB436::D1
Data File: >CB436::D4
Name: STD020
Misc:

Quant Rev: 7
Quant Time: 930805 15:10
Injected at: 930805 14:26
Dilution Factor: 1.00000
Instrument ID: MSD102
BTL# 2

ID File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14
Last Qcal Time: 930804 13:58

	Compound	R.T.	Q ion	Area	Conc	Units	q
92)	Methoxychlor	27.35	227.0	53811	20.67	UG/L	45
93)	Terphenyl-d14	24.79	244.0	75687	22.99	UG/L	100
94)	*Perylene-d12	32.71	264.0	98929	40.00	UG/L	100
95)	Di-n-octylphthalate	29.79	149.0	101789	20.08	UG/L	100
96)	Benzo(b)fluoranthene	31.01	252.0	57919	21.47	UG/L	98
97)	Benzo(k)fluoranthene	31.13	252.0	63618M	23.50	UG/L	94
98)	Benzo(a)pyrene	32.43	252.0	55390	21.34	UG/L	94
99)	Indeno(1,2,3-cd)pyrene	39.24	276.0	42105	17.75	UG/L	100
100)	Dibenzo(a,h)anthracene	39.55	278.0	40408	19.61	UG/L	69
101)	Benzo(g,h,i)perylene	41.23	276.0	44868M	18.22	UG/L	100

* Compound is ISTD

HQ
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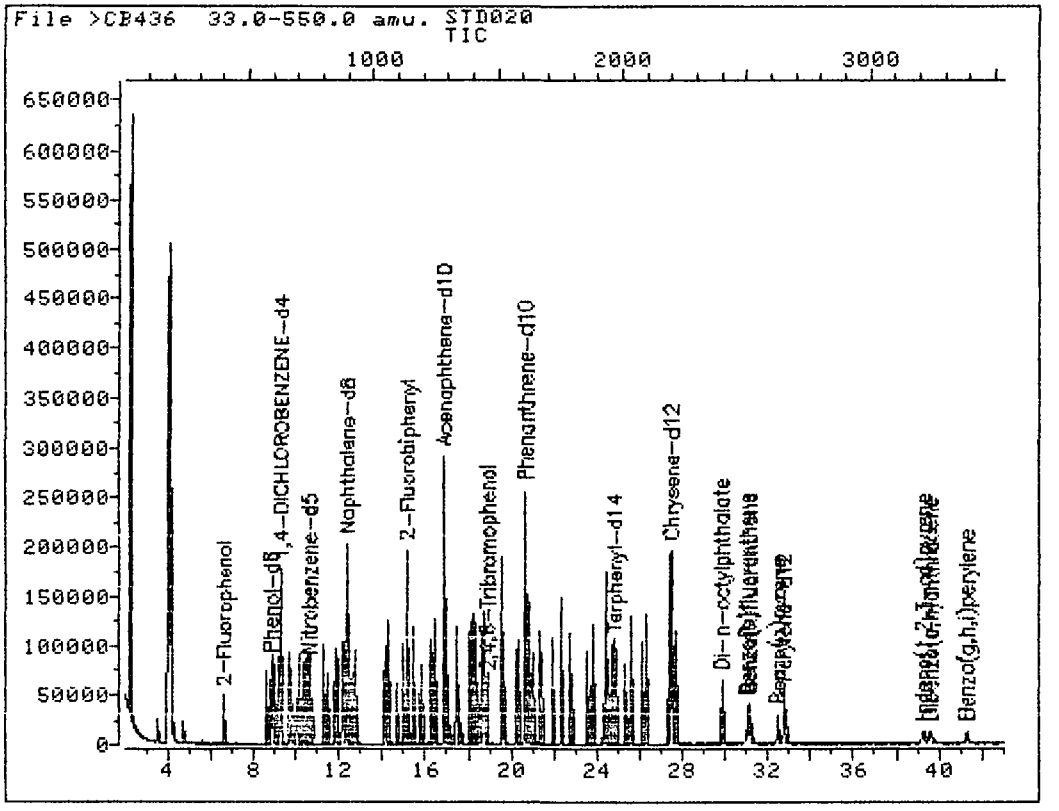
TOTAL ION CHROMATOGRAM



Data File: >CB436::D4 Quant Output File: ^CB436::D1
Name: STD020 Instrument ID: MSD102
Misc: BTL# 2

Id File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14 Last Qcal Time: 930804 13:58

Operator ID: HAIYAN
Quant Time : 930805 15:10
Injected at: 930805 14:26

HG
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QUANT REPORT

Operator ID: HAIYAN
Output File: ^VB550::D5
Data File: >VB550::D4
Name: SSTD050
Misc:

Quant Rev: 7
Quant Time: 930805 13:11
Injected at: 930805 12:27
Dilution Factor: 1.00000
Instrument ID: MSD102
BTL# 1

ID File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14
Last Qcal Time: 930804 13:58

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-d4	9.28	152.0	44916	40.00	UG/L	93
2)	Pyridine	3.47	79.0	94994	46.06	UG/L	95
3)	2-Picoline	5.02	93.0	71792	45.60	UG/L	85
4)	2-Fluorophenol	6.60	112.0	57306	41.94	UG/L	69
5)	Phenol	8.84	94.0	90665	46.98	UG/L	91
6)	bis(2-chloroethyl)ether	8.74	93.0	70940	47.64	UG/L	100
7)	2-Chlorophenol	8.90	128.0	69917	45.95	UG/L	85
8)	1,3-Dichlorobenzene	9.14	146.0	71714	45.87	UG/L	93
9)	1,4-Dichlorobenzene	9.33	146.0	74872	47.01	UG/L	99
10)	Phenol-d6	8.80	99.0	86062	49.52	UG/L	95
11)	Benzyl alcohol	9.74	108.0	44845	55.07	UG/L	100
12)	1,2-Dichlorobenzene	9.66	146.0	73846	47.61	UG/L	83
13)	2-Methylphenol	10.15	108.0	64157	48.54	UG/L	73
14)	bis(2-chloroisopropyl)ether	10.02	45.0	147886M	61.63	UG/L	100
15)	4-Methylphenol	10.56	108.0	70915	48.80	UG/L	80
16)	N-Nitroso-di-n-propylamine	10.34	70.0	68387	55.72	UG/L	100
17)	Hexachloroethane	10.45	117.0	39025	45.57	UG/L	76
18)	*Naphthalene-d8	12.37	136.0	181433	40.00	UG/L	88
19)	Nitrobenzene	10.67	77.0	93954	51.18	UG/L	75
20)	Isophorone	11.30	82.0	182147	55.78	UG/L	86
21)	2-Nitrophenol	11.45	139.0	47245	50.85	UG/L	83
22)	Nitrobenzene-d5	10.63	82.0	95975	49.03	UG/L	89
23)	2,4-Dimethylphenol	11.78	107.0	85180	52.09	UG/L	89
24)	Benzoic acid	12.25	122.0	46377M	60.19	UG/L	86
25)	bis(2-Chloroethoxy)methane	11.89	93.0	103132	50.85	UG/L	84
26)	2,4-Dichlorophenol	12.18	162.0	70480	55.22	UG/L	92
27)	1,2,4-Trichlorobenzene	12.24	180.0	69179	51.90	UG/L	97
28)	Naphthalene	12.41	128.0	203590	50.70	UG/L	100
29)	4-Chloraniline	12.66	127.0	86198	57.07	UG/L	96
30)	Hexachlorobutadiene	12.76	225.0	43550	53.10	UG/L	91
31)	4-Chloro-3-methylphenol	14.09	107.0	83822	59.84	UG/L	100
32)	2-Methylnaphthalene	14.18	142.0	128785	57.75	UG/L	77
33)	*Acenaphthene-d10	16.83	164.0	112039	40.00	UG/L	100
34)	Hexachlorocyclopentadiene	14.57	237.0	37521	37.41	UG/L	94
35)	2-Fluorobiphenyl	15.15	172.0	148596	42.96	UG/L	95
36)	2,4,6-Trichlorophenol	14.99	196.0	56511	48.17	UG/L	89
37)	Toluenediamine	15.47	121.0	19890	30.08	UG/L	98
38)	2,4,5-Trichlorophenol	15.15	196.0	51774	47.02	UG/L	92
39)	2-Chloronaphthalene	15.41	162.0	145934	42.95	UG/L	92
40)	Dinitrobenzene	16.33	50.0	72907M	51.32	UG/L	97
41)	2-Nitroaniline	15.77	65.0	73739	53.81	UG/L	98
42)	Dimethylphthalate	16.27	163.0	191214	51.31	UG/L	93
43)	Acenaphthylene	16.46	152.0	252880	49.75	UG/L	84

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QUANT REPORT

Operator ID: HAIYAN Quant Rev: 7 Quant Time: 930805 13:11
Output File: ^VB550::D5 Injected at: 930805 12:27
Data File: >VB550::D4 Dilution Factor: 1.00000
Name: SSTD050 Instrument ID: MSD102
Misc: BTL# 1

ID File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14 Last Qcal Time: 930804 13:58

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	2,6-Dinitrotoluene	16.40	165.0	50542	53.88	UG/L	100
45)	3-Nitroaniline	16.85	138.0	46931	53.48	UG/L	100
46)	Acenaphthene	16.91	153.0	149866	48.36	UG/L	93
47)	2,4-Dinitrophenol	17.08	184.0	29872	57.23	UG/L	87
48)	4-Nitrophenol	17.60	109.0	28579	50.43	UG/L	73
49)	Dibenzofuran	17.36	168.0	218519	53.00	UG/L	97
50)	Tetrachlorophenol	17.64	232.0	54424	60.67	UG/L	97
51)	2,4-Dinitrotoluene	17.41	165.0	66182	55.70	UG/L	82
52)	Diethylphthalate	18.08	149.0	204897	54.93	UG/L	100
53)	4-Chlorophenyl-phenylether	18.29	204.0	86461	55.63	UG/L	100
54)	Fluorene	18.24	166.0	170128	55.12	UG/L	100
55)	4-Nitroaniline	18.42	138.0	46551	55.00	UG/L	100
56)	2,4,6-Tribromophenol	18.88	329.8	43999	77.07	UG/L	100
57)	*Phenanthrene-d10	20.64	188.0	208714	40.00	UG/L	100
58)	4,6-Dinitro-2-methylphenol	18.45	198.0	41303	50.21	UG/L	100
59)	N-Nitrosodiphenylamine	18.63	169.0	112976	46.57	UG/L	100
60)	Benzidine	18.70	77.0	229928	47.96	UG/L	81
61)	4-Bromophenyl-phenylether	19.54	248.0	48449	49.58	UG/L	93
62)	alpha-BHC	19.55	181.0	34633	41.17	UG/L	92
63)	Hexachlorobenzene	19.63	283.7	74890	54.81	UG/L	98
64)	beta-BHC	20.17	181.0	27894	50.58	UG/L	82
65)	gamma-BHC (Lindane)	20.32	181.0	33286	46.65	UG/L	88
66)	Pentachlorophenol	20.22	266.0	35942	56.11	UG/L	100
67)	Phenanthrene	20.70	178.0	230428	47.05	UG/L	96
68)	delta-BHC	20.98	181.0	30158	49.57	UG/L	85
69)	Carbazole	21.33	167.0	221547	46.35	UG/L	97
70)	Anthracene	20.83	178.0	242447	49.34	UG/L	98
71)	Heptachlor	21.92	272.0	28619	51.19	UG/L	100
72)	Aldrin	22.71	66.0	46715M	45.41	UG/L	
73)	Di-n-butylphthalate	22.30	149.0	335974	48.43	UG/L	80
74)	Fluoranthene	23.76	202.0	228946	49.79	UG/L	100
75)	*Chrysene-d12	27.47	240.0	106888	40.00	UG/L	100
76)	Heptachlor epoxide	23.53	353.0	20885	68.16	UG/L	100
77)	Pyrene	24.33	202.0	199043	50.22	UG/L	97
78)	alpha-Endosulfan	24.32	195.0	7340	52.96	UG/L	80
79)	p,p'-DDE	24.69	246.0	50409	57.50	UG/L	94
80)	Dieldrin	24.88	79.0	52407	49.72	UG/L	85
81)	Endrin	25.32	263.0	10582M	52.74	UG/L	
82)	beta-Endosulfan	25.53	195.0	7477	50.47	UG/L	94
83)	p,p'-DDD	25.55	235.0	71714	53.11	UG/L	94
84)	Endrin aldehyde	27.29	67.0	16457	48.28	UG/L	75
85)	Endosulfan sulfate	26.30	272.0	12256	50.21	UG/L	88
86)	p,p'-DDT	26.31	235.0	61236	52.57	UG/L	97

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QUANT REPORT

Operator ID: HAIYAN
Output File: ^VB550::D5
Data File: >VB550::D4
Name: SSTD050
Misc:

Quant Rev: 7
Quant Time: 930805 13:11
Injected at: 930805 12:27
Dilution Factor: 1.00000
Instrument ID: MSD102
BTL# 1

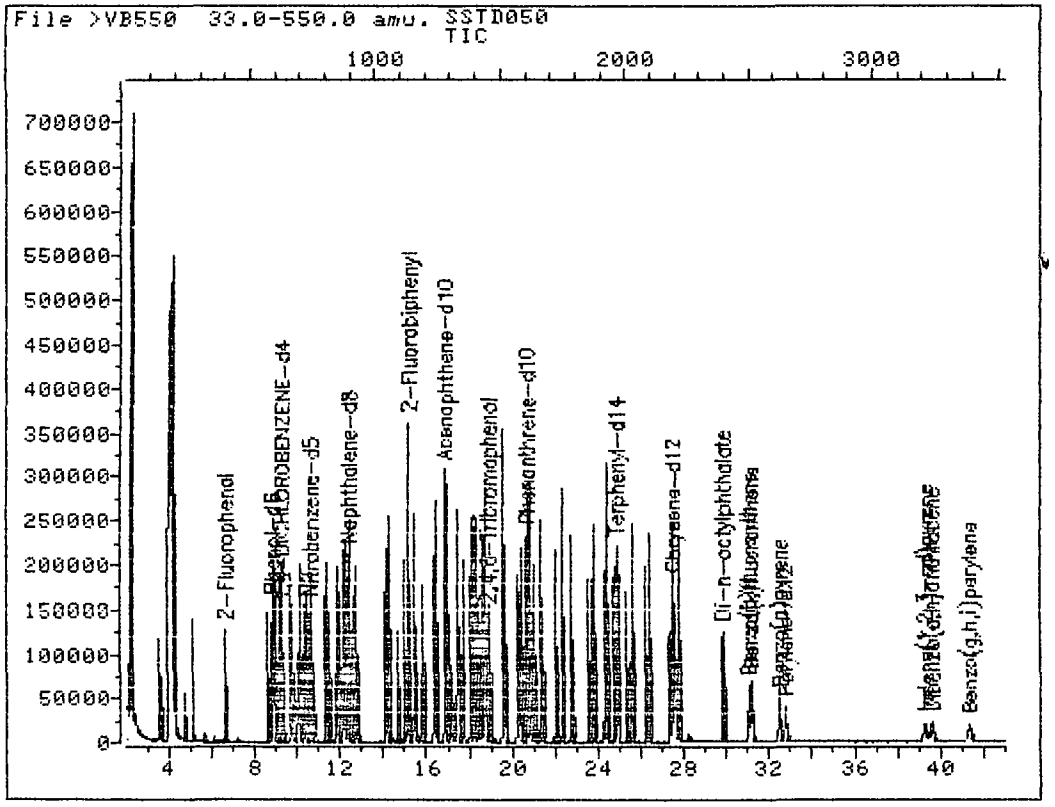
ID File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14
Last Qcal Time: 930804 13:58

	Compound	R.T.	Q ion	Area	Conc	Units	q
87)	Butylbenzylphthalate	26.13	149.0	107475	46.86	UG/L	100
88)	3,3'-Dichlorobenzidine	27.44	252.0	41028	44.16	UG/L	99
89)	Benzo(a)anthracene	27.44	228.0	146251M	47.72	UG/L	91
90)	Chrysene	27.53	228.0	137237M	47.82	UG/L	100
91)	bis(2-Ethylhexyl)phthalate	27.68	149.0	139461	44.03	UG/L	91
92)	Methoxychlor	27.37	227.0	99208	48.35	UG/L	45
93)	Terphenyl-d14	24.82	244.0	147353	56.77	UG/L	100
94)	*Perylene-d12	32.74	264.0	70070	40.00	UG/L	100
95)	Di-n-octylphthalate	29.81	149.0	191793	53.41	UG/L	100
96)	Benzo(b)fluoranthene	31.03	252.0	99689	52.18	UG/L	97
97)	Benzo(k)fluoranthene	31.15	252.0	109129M	56.91	UG/L	93
98)	Benzo(a)pyrene	32.46	252.0	92495	50.32	UG/L	95
99)	Indeno(1,2,3-cd)pyrene	39.27	276.0	68555M	40.81	UG/L	100
100)	Dibenzo(a,h)anthracene	39.56	278.0	66550	45.59	UG/L	74
101)	Benzo(g,h,i)perylene	41.29	276.0	71765M	41.15	UG/L	100

* Compound is ISTD

HR
8/5/93

TOTAL ION CHROMATOGRAM



Data File: >VB550::D4 Quant Output File: ^VB550::D5
Name: SSTD050 Instrument ID: MSD102
Misc: BTL# 1

Id File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14 Last Qcal Time: 930804 13:58

Operator ID: HAIYAN
Quant Time : 930805 13:11
Injected at: 930805 12:27

HO 8/9/93

QUANT REPORT

Operator ID: HAIYAN
Output File: ^VB552::D5
Data File: >VB552::D4
Name: SSTD050
Misc:

Quant Rev: 7
Quant Time: 930809 10:58
Injected at: 930809 10:14
Dilution Factor: 1.00000
Instrument ID: MSD102
BTL# 1

ID File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14
Last Qcal Time: 930806 10:09

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-d4	9.27	152.0	96543	40.00	UG/L	97
2)	Pyridine	3.47	79.0	235095	61.51	UG/L	81
3)	2-Picoline	5.02	93.0	184273	63.38	UG/L	98
4)	2-Fluorophenol	6.59	112.0	141163	53.50	UG/L	85
5)	Phenol	8.83	94.0	201379	49.66	UG/L	97
6)	bis(2-chloroethyl)ether	8.74	93.0	155801	50.59	UG/L	100
7)	2-Chlorophenol	8.89	128.0	162125	52.01	UG/L	96
8)	1,3-Dichlorobenzene	9.13	146.0	166168	51.29	UG/L	99
9)	1,4-Dichlorobenzene	9.32	146.0	161177	49.46	UG/L	99
10)	Phenol-d6	8.80	99.0	186171	49.11	UG/L	96
11)	Benzyl alcohol	9.74	108.0	95716	50.33	UG/L	100
12)	1,2-Dichlorobenzene	9.66	146.0	162769	48.53	UG/L	83
13)	2-Methylphenol	10.14	108.0	137373	47.33	UG/L	83
14)	bis(2-chloroisopropyl)ether	9.99	45.0	225660M	34.21	UG/L	100
15)	4-Methylphenol	10.54	108.0	143381	45.17	UG/L	84
16)	N-Nitroso-di-n-propylamine	10.33	70.0	123402	40.45	UG/L	100
17)	Hexachloroethane	10.45	117.0	84445	50.96	UG/L	69
18)	*Naphthalene-d8	12.35	136.0	345949	40.00	UG/L	93
19)	Nitrobenzene	10.67	77.0	182833	50.48	UG/L	74
20)	Isophorone	11.29	82.0	322144	45.54	UG/L	86
21)	2-Nitrophenol	11.44	139.0	89015	48.94	UG/L	82
22)	Nitrobenzene-d5	10.62	82.0	189586	49.92	UG/L	92
23)	2,4-Dimethylphenol	11.76	107.0	151158	46.44	UG/L	89
24)	Benzoic acid	12.26	122.0	70205	40.07	UG/L	89
25)	bis(2-Chloroethoxy)methane	11.87	93.0	198820	49.84	UG/L	85
26)	2,4-Dichlorophenol	12.16	162.0	123541	45.58	UG/L	89
27)	1,2,4-Trichlorobenzene	12.24	180.0	128014	48.60	UG/L	95
28)	Naphthalene	12.41	128.0	398691	51.50	UG/L	100
29)	4-Chloraniline	12.64	127.0	150614	43.64	UG/L	95
30)	Hexachlorobutadiene	12.75	225.0	77801	46.03	UG/L	98
31)	4-Chloro-3-methylphenol	14.07	107.0	134515	41.02	UG/L	100
32)	2-Methylnaphthalene	14.16	142.0	231260	42.33	UG/L	74
33)	*Acenaphthene-d10	16.81	164.0	160267	40.00	UG/L	100
34)	Hexachlorocyclopentadiene	14.57	237.0	53900	49.02	UG/L	89
35)	2-Fluorobiphenyl	15.14	172.0	239955	55.28	UG/L	99
36)	2,4,6-Trichlorophenol	14.98	196.0	82885	47.68	UG/L	94
37)	Toluenediamine	15.43	121.0	18426	36.66	UG/L	96
38)	2,4,5-Trichlorophenol	15.13	196.0	73008	47.40	UG/L	87
39)	2-Chloronaphthalene	15.40	162.0	235712	55.32	UG/L	98
40)	Dinitrobenzene	16.30	50.0	91541M	148.54	UG/L	85
41)	2-Nitroaniline	15.75	65.0	95824	43.38	UG/L	88
42)	Dimethylphthalate	16.26	163.0	265301	51.65	UG/L	93
43)	Acenaphthylene	16.44	152.0	361257	48.44	UG/L	83

HQ
8/9/93

QUANT REPORT

Operator ID: HAIYAN
Output File: ^VB552::D5
Data File: >VB552::D4
Name: SSTD050
Misc:

Quant Rev: 7
Quant Time: 930809 10:58
Injected at: 930809 10:14
Dilution Factor: 1.00000
Instrument ID: MSD102
BTL# 1

ID File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14
Last Qcal Time: 930806 10:09

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	2,6-Dinitrotoluene	16.38	165.0	67090	44.40	UG/L	100
45)	3-Nitroaniline	16.83	138.0	59415	42.16	UG/L	100
46)	Acenaphthene	16.90	153.0	216072	49.52	UG/L	90
47)	2,4-Dinitrophenol	17.07	184.0	33607	37.50	UG/L	77
48)	4-Nitrophenol	17.57	109.0	37471	40.28	UG/L	73
49)	Dibenzofuran	17.35	168.0	295932	46.18	UG/L	99
50)	Tetrachlorophenol	17.63	232.0	61120	38.90	UG/L	98
51)	2,4-Dinitrotoluene	17.40	165.0	86383	42.83	UG/L	89
52)	Diethylphthalate	18.07	149.0	276022	48.95	UG/L	100
53)	4-Chlorophenyl-phenylether	18.27	204.0	108985	44.44	UG/L	100
54)	Fluorene	18.22	166.0	213965	45.45	UG/L	100
55)	4-Nitroaniline	18.40	138.0	56254	39.12	UG/L	100
56)	2,4,6-Tribromophenol	18.86	329.8	39373	31.97	UG/L	100
57)	*Phenanthrene-d10	20.62	188.0	234578	40.00	UG/L	100
58)	4,6-Dinitro-2-methylphenol	18.43	198.0	46976	49.05	UG/L	100
59)	N-Nitrosodiphenylamine	18.61	169.0	138662	53.21	UG/L	100
60)	Benzidine	18.68	77.0	281498	55.00	UG/L	81
61)	4-Bromophenyl-phenylether	19.53	248.0	56512	51.99	UG/L	97
62)	alpha-BHC	19.54	181.0	48383	56.16	UG/L	79
63)	Hexachlorobenzene	19.61	283.7	75929	46.40	UG/L	98
64)	beta-BHC	20.14	181.0	32057	51.72	UG/L	78
65)	gamma-BHC (Lindane)	20.30	181.0	39361	52.96	UG/L	81
66)	Pentachlorophenol	20.20	266.0	35941M	41.38	UG/L	100
67)	Phenanthrene	20.68	178.0	290163	57.47	UG/L	94
68)	delta-BHC	20.96	181.0	34338	50.88	UG/L	80
69)	Carbazole	21.31	167.0	256234	51.18	UG/L	96
70)	Anthracene	20.81	178.0	286007	54.38	UG/L	99
71)	Heptachlor	21.91	272.0	28060	43.74	UG/L	100
72)	Aldrin	22.69	66.0	57189M	56.14	UG/L	
73)	Di-n-butylphthalate	22.29	149.0	414246	55.59	UG/L	79
74)	Fluoranthene	23.74	202.0	239732	44.76	UG/L	100
75)	*Chrysene-d12	27.45	240.0	101320	40.00	UG/L	100
76)	Heptachlor epoxide	23.51	353.0	19360	57.84	UG/L	100
77)	Pyrene	24.31	202.0	218671	63.64	UG/L	97
78)	alpha-Endosulfan	24.30	195.0	8514	70.99	UG/L	91
79)	p,p'-DDE	24.67	246.0	49490	59.44	UG/L	87
80)	Dieldrin	24.86	79.0	61278	69.94	UG/L	83
81)	Endrin	25.30	263.0	10250M	53.48	UG/L	
82)	beta-Endosulfan	25.51	195.0	7814	59.70	UG/L	91
83)	p,p'-DDD	25.52	235.0	68443	57.12	UG/L	90
84)	Endrin aldehyde	27.27	67.0	15995	52.61	UG/L	64
85)	Endosulfan sulfate	26.28	272.0	11079	54.10	UG/L	96
86)	p,p'-DDT	26.29	235.0	59276	55.81	UG/L	96

HB 8/9/93

QUANT REPORT

Operator ID: HAIYAN
Output File: ^VB552::D5
Data File: >VB552::D4
Name: SSTD050
Misc:

Quant Rev: 7
Quant Time: 930809 10:58
Injected at: 930809 10:14
Dilution Factor: 1.00000
Instrument ID: MSD102
BTL# 1

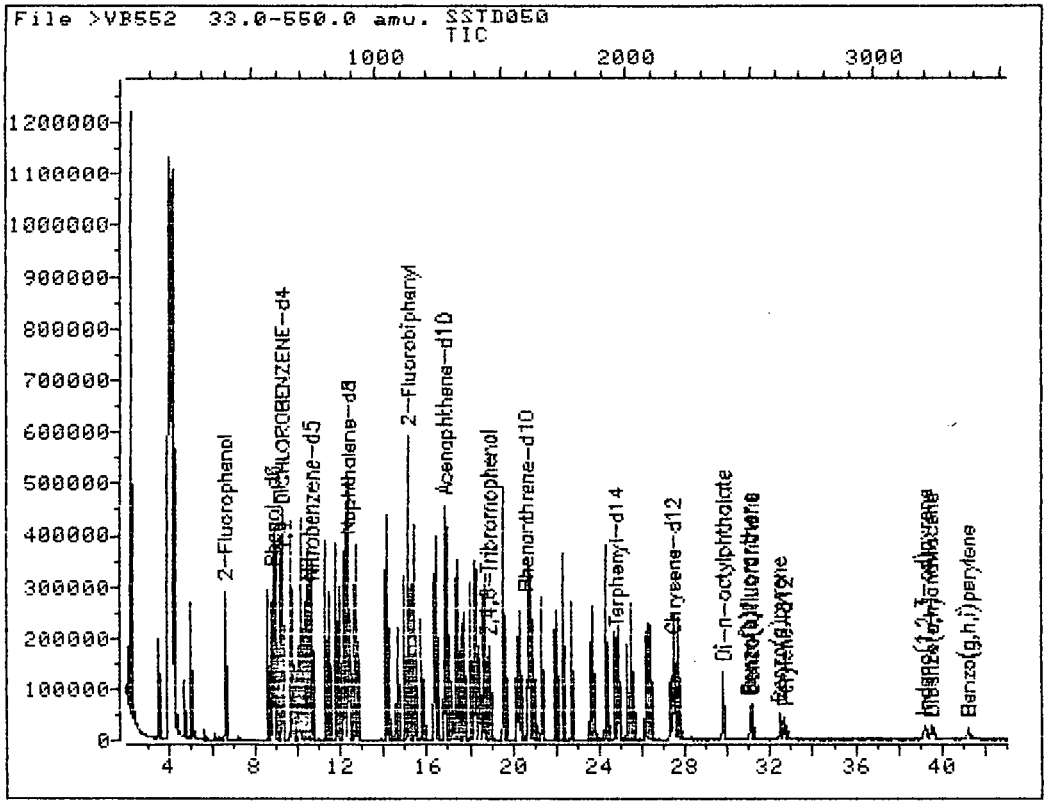
ID File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14
Last Qcal Time: 930806 10:09

	Compound	R.T.	Q ion	Area	Conc	Units	q
87)	Butylbenzylphthalate	26.12	149.0	113703	59.09	UG/L	100
88)	3,3'-Dichlorobenzidine	27.41	252.0	39525	44.85	UG/L	92
89)	Benzo(a)anthracene	27.42	228.0	150701M	56.73	UG/L	99
90)	Chrysene	27.52	228.0	131270M	47.66	UG/L	100
91)	bis(2-Ethylhexyl)phthalate	27.66	149.0	156666	59.75	UG/L	92
92)	Methoxychlor	27.35	227.0	93883	50.45	UG/L	45
93)	Terphenyl-d14	24.79	244.0	149942	61.42	UG/L	100
94)	*Perylene-d12	32.68	264.0	72096	40.00	UG/L	100
95)	Di-n-octylphthalate	29.77	149.0	218500	56.14	UG/L	100
96)	Benzo(b)fluoranthene	30.99	252.0	101683	48.72	UG/L	91
97)	Benzo(k)fluoranthene	31.11	252.0	108536M	50.03	UG/L	97
98)	Benzo(a)pyrene	32.40	252.0	94115	49.22	UG/L	97
99)	Indeno(1,2,3-cd)pyrene	39.17	276.0	77755	50.39	UG/L	100
100)	Dibenzo(a,h)anthracene	39.50	278.0	73202	50.45	UG/L	58
101)	Benzo(g,h,i)perylene	41.18	276.0	84396	52.82	UG/L	100

* Compound is ISTD

HQ 8/9/93

TOTAL ION CHROMATOGRAM



Data File: >VB552::D4 Quant Output File: ^VB552::D5
Name: SSTD050 Instrument ID: MSD102
Misc: BTL# 1

Id File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14 Last Qcal Time: 930806 10:09

Operator ID: HAIYAN
Quant Time : 930809 10:58
Injected at: 930809 10:14

HQ
8/17/93

QUANT REPORT

Operator ID: HAIYAN
Output File: ^CB440::D1
Data File: >CB440::D7
Name: STD050
Misc:

Quant Rev: 7
Quant Time: 930817 10:53
Injected at: 930817 10:09
Dilution Factor: 1.00000
Instrument ID: MSD102
BTL# 1

ID File: ID6251::D6
Title: SEMI-VOLATILES ID FILE - INST. #1
Last Calibration: 930810 15:43
Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-d4	9.13	152.0	55510	40.00	UG/L	99
2)	Pyridine	3.36	79.0	133623	43.73	UG/L	95
3)	2-Picoline	4.88	93.0	107646	53.21	UG/L	86
6)	2-Fluorophenol	6.45	112.0	82921	48.54	UG/L	79
7)	Phenol	8.70	94.0	128226	52.64	UG/L	90
8)	bis(2-chloroethyl)ether	8.59	93.0	103849	52.96	UG/L	100
9)	2-Chlorophenol	8.74	128.0	98178	52.81	UG/L	87
10)	1,3-Dichlorobenzene	8.99	146.0	95226	51.50	UG/L	98
11)	1,4-Dichlorobenzene	9.17	146.0	96234	50.81	UG/L	98
12)	Phenol-d6	8.66	99.0	116754	48.16	UG/L	88
13)	Benzyl alcohol	9.60	108.0	61492M	47.58	UG/L	100
14)	1,2-Dichlorobenzene	9.51	146.0	97189	50.44	UG/L	82
15)	2-Methylphenol	10.01	108.0	90639	49.88	UG/L	77
16)	bis(2-chloroisopropyl)ether	9.87	45.0	142385	54.96	UG/L	100
17)	4-Methylphenol	10.40	108.0	100714	54.52	UG/L	85
18)	N-Nitroso-di-n-propylamine	10.19	70.0	100733	58.62	UG/L	100
19)	Hexachloroethane	10.30	117.0	52961	52.04	UG/L	69
20)	*Naphthalene-d8	12.20	136.0	229057	40.00	UG/L	86
21)	Nitrobenzene	10.53	77.0	134532	55.83	UG/L	71
22)	Isophorone	11.15	82.0	267293	55.85	UG/L	86
23)	2-Nitrophenol	11.30	139.0	67445	51.61	UG/L	86
24)	Nitrobenzene-d5	10.47	82.0	143915	54.86	UG/L	90
25)	2,4-Dimethylphenol	11.61	107.0	116878	51.55	UG/L	90
26)	Benzoic acid	12.16	122.0	61745M	55.43	UG/L	89
27)	bis(2-Chloroethoxy)methane	11.74	93.0	154182	55.86	UG/L	83
28)	2,4-Dichlorophenol	12.01	162.0	90119	54.02	UG/L	93
29)	1,2,4-Trichlorobenzene	12.08	180.0	91098	55.62	UG/L	95
30)	Naphthalene	12.25	128.0	270491	51.49	UG/L	100
31)	4-Chloraniline	12.50	127.0	119706	56.54	UG/L	98
32)	Hexachlorobutadiene	12.60	225.0	58511	61.84	UG/L	96
33)	4-Chloro-3-methylphenol	13.91	107.0	111213	56.89	UG/L	100
34)	2-Methylnaphthalene	14.00	142.0	181662M	52.80	UG/L	79
35)	*Acenaphthene-d10	16.64	164.0	134052	40.00	UG/L	100
36)	Hexachlorocyclopentadiene	14.41	237.0	61213	70.74	UG/L	98
37)	2-Fluorobiphenyl	14.99	172.0	191666	47.22	UG/L	99
38)	2,4,6-Trichlorophenol	14.82	196.0	73643	54.35	UG/L	90
39)	Toluenediamine	15.27	121.0	54479M	633.36	UG/L	54
40)	2,4,5-Trichlorophenol	14.97	196.0	62513	46.62	UG/L	89
41)	2-Chloronaphthalene	15.24	162.0	190660	49.37	UG/L	96
42)	Dinitrobenzene	16.12	50.0	94207M	57.48	UG/L	93
43)	2-Nitroaniline	15.60	65.0	94406	53.26	UG/L	97
44)	Dimethylphthalate	16.12	163.0	238900M	54.65	UG/L	92
45)	Acenaphthylene	16.28	152.0	307543	52.68	UG/L	83

HR 8/17/93

QUANT REPORT

Operator ID: HAIYAN
Output File: ^CB440::D1
Data File: >CB440::D7
Name: STD050
Misc:

Quant Rev: 7
Quant Time: 930817 10:53
Injected at: 930817 10:09
Dilution Factor: 1.00000
Instrument ID: MSD102
BTL# 1

ID File: ID6251::D6
Title: SEMI-VOLATILES ID FILE - INST. #1
Last Calibration: 930810 15:43
Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
46)	2,6-Dinitrotoluene	16.24	165.0	62338	54.17	UG/L	100
47)	3-Nitroaniline	16.68	138.0	59256	52.01	UG/L	100
48)	Acenaphthene	16.74	153.0	180556	51.28	UG/L	96
49)	2,4-Dinitrophenol	16.91	184.0	36416	62.42	UG/L	84
50)	4-Nitrophenol	17.41	109.0	37002	58.19	UG/L	69
51)	Dibenzofuran	17.18	168.0	270610	54.27	UG/L	96
52)	Tetrachlorophenol	17.46	232.0	62305	88.26	UG/L	97
53)	2,4-Dinitrotoluene	17.24	165.0	83448	56.17	UG/L	84
54)	Diethylphthalate	17.93	149.0	255258	54.97	UG/L	100
55)	4-Chlorophenyl-phenylether	18.11	204.0	99926	57.15	UG/L	100
56)	Fluorene	18.05	166.0	198862	54.34	UG/L	100
57)	4-Nitroaniline	18.25	138.0	57353	61.99	UG/L	100
58)	2,4,6-Tribromophenol	18.69	329.8	48202	76.14	UG/L	100
59)	*Phenanthrene-d10	20.45	188.0	214100	40.00	UG/L	100
60)	4,6-Dinitro-2-methylphenol	18.28	198.0	49278	60.60	UG/L	100
61)	N-Nitrosodiphenylamine	18.45	169.0	134888	50.13	UG/L	100
62)	Benzidine	18.52	77.0	340245M	1598.56	UG/L	59
63)	4-Bromophenyl-phenylether	19.35	248.0	54147	56.99	UG/L	94
64)	alpha-BHC	19.37	181.0	44689	49.51	UG/L	87
65)	Hexachlorobenzene	19.44	283.7	83732	62.03	UG/L	99
66)	beta-BHC	19.98	181.0	31820	54.94	UG/L	79
67)	gamma-BHC (Lindane)	20.12	181.0	38957	53.38	UG/L	88
68)	Pentachlorophenol	20.03	266.0	38258	83.30	UG/L	100
69)	Phenanthrene	20.51	178.0	278633	53.18	UG/L	95
70)	delta-BHC	20.79	181.0	34534	55.85	UG/L	85
71)	Carbazole	21.14	167.0	247924	49.33	UG/L	99
72)	Anthracene	20.64	178.0	264215	51.20	UG/L	99
73)	Heptachlor	21.73	272.0	32865	62.68	UG/L	100
74)	Aldrin	22.51	66.0	58767M	53.27	UG/L	
75)	Di-n-butylphthalate	22.11	149.0	392672	57.59	UG/L	81
76)	Fluoranthene	23.54	202.0	250413	57.33	UG/L	100
77)	*Chrysene-d12	27.24	240.0	119615	40.00	UG/L	100
78)	Heptachlor epoxide	23.32	353.0	24995	58.96	UG/L	100
79)	Pyrene	24.13	202.0	223420	42.48	UG/L	99
80)	alpha-Endosulfan	24.10	195.0	8191	43.87	UG/L	93
81)	p,p'-DDE	24.49	246.0	57987	52.07	UG/L	87
82)	Dieldrin	24.66	79.0	65308	41.59	UG/L	82
83)	Endrin	25.10	263.0	12601	49.76	UG/L	64
84)	beta-Endosulfan	25.32	195.0	8417	43.90	UG/L	98
85)	p,p'-DDD	25.34	235.0	85107	52.57	UG/L	93
86)	Endrin aldehyde	27.06	67.0	20604	46.06	UG/L	68
87)	Endosulfan sulfate	26.09	272.0	15207	60.14	UG/L	87
88)	p,p'-DDT	26.10	235.0	71530	51.90	UG/L	99

HO 8/17/93

QUANT REPORT

Operator ID: HAIYAN
Output File: ^CB440::D1
Data File: >CB440::D7
Name: STD050
Misc:

Quant Rev: 7
Quant Time: 930817 10:53
Injected at: 930817 10:09
Dilution Factor: 1.00000
Instrument ID: MSD102
BTL# 1

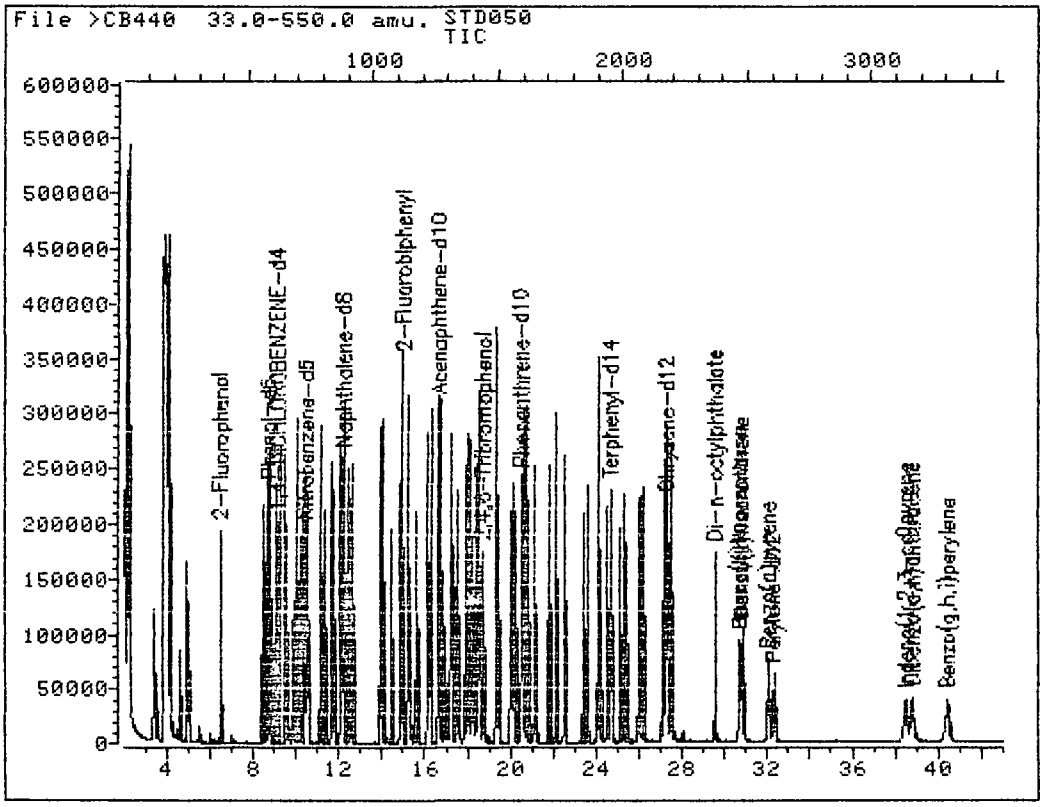
ID File: ID6251::D6
Title: SEMI-VOLATILES ID FILE - INST. #1
Last Calibration: 930810 15:43
Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
89)	Butylbenzylphthalate	25.95	149.0	134359	44.88	UG/L	100
90)	3,3'-Dichlorobenzidine	27.22	252.0	51128	52.11	UG/L	98
91)	Benzo(a)anthracene	27.21	228.0	184716	49.14	UG/L	96
92)	Chrysene	27.30	228.0	176641M	51.46	UG/L	100
93)	bis(2-Ethylhexyl)phthalate	27.46	149.0	185947	47.64	UG/L	90
94)	Methoxychlor	27.16	227.0	128495^	59.80	UG/L	46
95)	Terphenyl-d14	24.62	244.0	163742	48.13	UG/L	100
96)	*Perylene-d12	32.25	264.0	114832	40.00	UG/L	100
97)	Di-n-octylphthalate	29.50	149.0	290800	37.27	UG/L	100
98)	Benzo(b)fluoranthene	30.65	252.0	178795	46.23	UG/L	98
99)	Benzo(k)fluoranthene	30.77	252.0	152740M	40.97	UG/L	95
100)	Benzo(a)pyrene	32.00	252.0	154593	44.96	UG/L	96
101)	Indeno(1,2,3-cd)pyrene	38.45	276.0	135952M	52.66	UG/L	100
102)	Dibenzo(a,h)anthracene	38.75	278.0	125124M	52.34	UG/L	69
103)	Benzo(g,h,i)perylene	40.38	276.0	147416M	54.29	UG/L	

* Compound is ISTD

HQ 8/17/94

TOTAL ION CHROMATOGRAM



Data File: >CB440::D7 Quant Output File: ^CB440::D1
Name: STD050 Instrument ID: MSD102
Misc: BTL# 1

Id File: ID6251::D6
Title: SEMI-VOLATILES ID FILE - INST. #1
Last Calibration: 930810 15:43 Last Qcal Time: <none>

Operator ID: HAIYAN
Quant Time : 930817 10:53
Injected at: 930817 10:09

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QUANT REPORT

Operator ID: HAIYAN
Output File: ^VB555::D5
Data File: >VB555::D7
Name: SSTD050
Misc:

Quant Rev: 7
Quant Time: 930818 16:18
Injected at: 930818 15:32
Dilution Factor: 1.00000
Instrument ID: MSD102
BTL# 1

ID File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14
Last Qcal Time: 930817 10:09

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-d4	9.25	152.0	102047	40.00	UG/L	98
2)	Pyridine	3.53	79.0	271685	61.94	UG/L	91
3)	2-Picoline	5.03	93.0	219826	61.10	UG/L	93
4)	2-Fluorophenol	6.58	112.0	164138	53.84	UG/L	80
5)	Phenol	8.80	94.0	243626	51.68	UG/L	94
6)	bis(2-chloroethyl)ether	8.71	93.0	195465	51.19	UG/L	100
7)	2-Chlorophenol	8.86	128.0	186605	51.70	UG/L	90
8)	1,3-Dichlorobenzene	9.11	146.0	175247	50.05	UG/L	99
9)	1,4-Dichlorobenzene	9.29	146.0	176894	49.99	UG/L	99
10)	Phenol-d6	8.77	99.0	229260	53.41	UG/L	97
11)	Benzyl alcohol	9.72	108.0	117841	52.12	UG/L	100
12)	1,2-Dichlorobenzene	9.63	146.0	178829	50.05	UG/L	88
13)	2-Methylphenol	10.12	108.0	180229	54.08	UG/L	78
14)	bis(2-chloroisopropyl)ether	9.97	45.0	305822M	58.42	UG/L	100
15)	4-Methylphenol	10.50	108.0	176801	47.75	UG/L	78
16)	N-Nitroso-di-n-propylamine	10.34	70.0	149282	40.31	UG/L	100
17)	Hexachloroethane	10.42	117.0	97263M	49.95	UG/L	
18)	*Naphthalene-d8	12.33	136.0	403739	40.00	UG/L	88
19)	Nitrobenzene	10.65	77.0	241850	51.00	UG/L	73
20)	Isophorone	11.27	82.0	465837	49.44	UG/L	89
21)	2-Nitrophenol	11.42	139.0	121242	50.99	UG/L	82
22)	Nitrobenzene-d5	10.61	82.0	260903	51.43	UG/L	88
23)	2,4-Dimethylphenol	11.72	107.0	207368	50.33	UG/L	91
24)	Benzoic acid	12.27	122.0	108382M	49.79	UG/L	86
25)	bis(2-Chloroethoxy)methane	11.86	93.0	266813	49.09	UG/L	83
26)	2,4-Dichlorophenol	12.13	162.0	153185	48.22	UG/L	94
27)	1,2,4-Trichlorobenzene	12.20	180.0	152403	47.46	UG/L	93
28)	Naphthalene	12.39	128.0	472898	49.59	UG/L	100
29)	4-Chloraniline	12.61	127.0	212000	50.24	UG/L	98
30)	Hexachlorobutadiene	12.71	225.0	88026	42.68	UG/L	94
31)	4-Chloro-3-methylphenol	14.01	107.0	182542	46.56	UG/L	100
32)	2-Methylnaphthalene	14.13	142.0	292581	45.69	UG/L	75
33)	*Acenaphthene-d10	16.77	164.0	200927	40.00	UG/L	100
34)	Hexachlorocyclopentadiene	14.54	237.0	80177	43.69	UG/L	88
35)	2-Fluorobiphenyl	15.12	172.0	309406	53.85	UG/L	98
36)	2,4,6-Trichlorophenol	14.93	196.0	110333	49.98	UG/L	89
37)	Toluenediamine	15.39	121.0	52063	33.79	UG/L	98
38)	2,4,5-Trichlorophenol	15.08	196.0	100750	53.76	UG/L	92
39)	2-Chloronaphthalene	15.36	162.0	297027	51.97	UG/L	96
40)	Dinitrobenzene	16.28	50.0	137008M	46.57	UG/L	85
41)	2-Nitroaniline	15.72	65.0	139342	49.24	UG/L	97
42)	Dimethylphthalate	16.24	163.0	347943	48.58	UG/L	92
43)	Acenaphthylene	16.41	152.0	468686	50.84	UG/L	85

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Operator ID: HAIYAN Quant Rev: 7 Quant Time: 930818 16:18
Output File: ^VB555::D5 Injected at: 930818 15:32
Data File: >VB555::D7 Dilution Factor: 1.00000
Name: SSTD050 Instrument ID: MSD102
Misc: BTL# 1

ID File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14 Last Qcal Time: 930817 10:09

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	2,6-Dinitrotoluene	16.36	165.0	93517	50.04	UG/L	100
45)	3-Nitroaniline	16.80	138.0	83102	46.78	UG/L	100
46)	Acenaphthene	16.87	153.0	280510	51.83	UG/L	93
47)	2,4-Dinitrophenol	17.04	184.0	47464	43.48	UG/L	80
48)	4-Nitrophenol	17.51	109.0	46231	41.68	UG/L	64
49)	Dibenzofuran	17.31	168.0	389874	48.06	UG/L	99
50)	Tetrachlorophenol	17.59	232.0	80759	44.97	UG/L	96
51)	2,4-Dinitrotoluene	17.37	165.0	121411	48.53	UG/L	84
52)	Diethylphthalate	18.04	149.0	381947	49.91	UG/L	100
53)	4-Chlorophenyl-phenylether	18.24	204.0	138338	46.18	UG/L	100
54)	Fluorene	18.19	166.0	282377	47.37	UG/L	100
55)	4-Nitroaniline	18.38	138.0	81211	47.23	UG/L	100
56)	2,4,6-Tribromophenol	18.82	329.8	55012	38.07	UG/L	100
57)	*Phenanthrene-d10	20.58	188.0	292833	40.00	UG/L	100
58)	4,6-Dinitro-2-methylphenol	18.40	198.0	62307	46.22	UG/L	100
59)	N-Nitrosodiphenylamine	18.58	169.0	190469	51.62	UG/L	100
60)	Benzidine	18.65	77.0	371416	39.91	UG/L	78
61)	4-Bromophenyl-phenylether	19.49	248.0	67414	45.51	UG/L	98
62)	alpha-BHC	19.50	181.0	61258	50.11	UG/L	87
63)	Hexachlorobenzene	19.58	283.7	100371	43.82	UG/L	99
64)	beta-BHC	20.10	181.0	43933	50.47	UG/L	74
65)	gamma-BHC (Lindane)	20.26	181.0	53081	49.81	UG/L	76
66)	Pentachlorophenol	20.16	266.0	45925	43.88	UG/L	100
67)	Phenanthrene	20.64	178.0	386272	50.68	UG/L	95
68)	delta-BHC	20.91	181.0	47271	50.04	UG/L	75
69)	Carbazole	21.26	167.0	350882	51.74	UG/L	97
70)	Anthracene	20.77	178.0	371999	51.47	UG/L	97
71)	Heptachlor	21.87	272.0	42261	47.01	UG/L	100
72)	Aldrin	22.66	66.0	84642M	52.65	UG/L	
73)	Di-n-butylphthalate	22.24	149.0	565446	52.64	UG/L	80
74)	Fluoranthene	23.70	202.0	353561	51.61	UG/L	100
75)	*Chrysene-d12	27.40	240.0	156711	40.00	UG/L	100
76)	Heptachlor epoxide	23.46	353.0	26526	40.50	UG/L	100
77)	Pyrene	24.27	202.0	315392	53.87	UG/L	95
78)	alpha-Endosulfan	24.26	195.0	11510	53.63	UG/L	86
79)	p,p'-DDE	24.62	246.0	73870	48.62	UG/L	85
80)	Dieldrin	24.81	79.0	98688	57.67	UG/L	82
81)	Endrin	25.25	263.0	17876M	54.14	UG/L	
82)	beta-Endosulfan	25.47	195.0	13244	60.05	UG/L	88
83)	p,p'-DDD	25.48	235.0	112065	50.25	UG/L	93
84)	Endrin aldehyde	27.21	67.0	30880	57.20	UG/L	69
85)	Endosulfan sulfate	26.23	272.0	17784	44.63	UG/L	94
86)	p,p'-DDT	26.24	235.0	94452	50.39	UG/L	88

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QUANT REPORT

Operator ID: HAIYAN
Output File: ^VB555::D5
Data File: >VB555::D7
Name: SSTD050
Misc:

Quant Rev: 7
Quant Time: 930818 16:18
Injected at: 930818 15:32
Dilution Factor: 1.00000
Instrument ID: MSD102
BTL# 1

ID File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14
Last Qcal Time: 930817 10:09

	Compound	R.T.	Q ion	Area	Conc	Units	q
87)	Butylbenzylphthalate	26.07	149.0	201795	57.32	UG/L	100
88)	3,3'-Dichlorobenzidine	27.36	252.0	68678	51.26	UG/L	99
89)	Benzo(a)anthracene	27.37	228.0	252698M	52.21	UG/L	95
90)	Chrysene	27.47	228.0	227600M	49.17	UG/L	100
91)	bis(2-Ethylhexyl)phthalate	27.61	149.0	280669	57.61	UG/L	89
92)	Methoxychlor	27.29	227.0	167364^	49.71	UG/L	45
93)	Terphenyl-d14	24.75	244.0	225631	52.59	UG/L	100
94)	*Perylene-d12	32.57	264.0	123102	40.00	UG/L	100
95)	Di-n-octylphthalate	29.70	149.0	407219	65.31	UG/L	100
96)	Benzo(b)fluoranthene	30.90	252.0	189142	49.34	UG/L	97
97)	Benzo(k)fluoranthene	31.01	252.0	186329M	56.90	UG/L	94
98)	Benzo(a)pyrene	32.31	252.0	170139	51.33	UG/L	95
99)	Indeno(1,2,3-cd)pyrene	39.00	276.0	139233	47.77	UG/L	100
100)	Dibenzo(a,h)anthracene	39.31	278.0	132452M	49.37	UG/L	58
101)	Benzo(g,h,i)perylene	40.97	276.0	144166	45.61	UG/L	100

* Compound is ISTD

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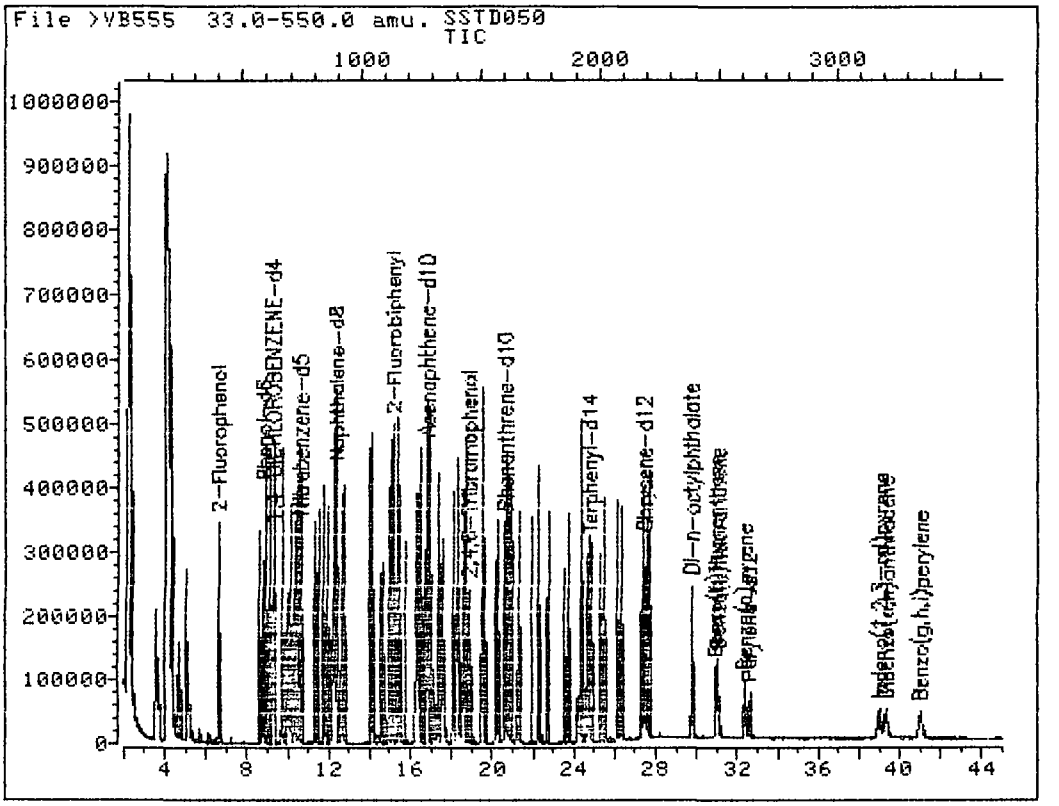
TOTAL ION CHROMATOGRAM



Data File: >VB555::D7 Quant Output File: ^VB555::D5
Name: SSTD050 Instrument ID: MSD102
Misc: BTL# 1

Id File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14 Last Qcal Time: 930817 10:09

Operator ID: HAIYAN
Quant Time : 930818 16:18
Injected at: 930818 15:32

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QUANT REPORT

Operator ID: HAIYAN
Output File: ^B3153::D1
Data File: >B3153::D4
Name: C149243
Misc: BLK 188-2

Quant Rev: 7
Quant Time: 930809 13:00
Injected at: 930809 12:15
Dilution Factor: 1.00000
Instrument ID: MSD102
BTL# 2

ID File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14
Last Qcal Time: 930809 10:14

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-d4	9.27	152.0	75442	40.00	UG/L	98
4)	2-Fluorophenol	6.56	112.0	91802	41.61	UG/L	91
10)	Phenol-d6	8.78	99.0	95791	32.92	UG/L	95
18)	*Naphthalene-d8	12.35	136.0	266712	40.00	UG/L	91
22)	Nitrobenzene-d5	10.59	82.0	44850	15.34	UG/L	95
33)	*Acenaphthene-d10	16.80	164.0	124309	40.00	UG/L	100
35)	2-Fluorobiphenyl	15.13	172.0	80942	21.74	UG/L	97
56)	2,4,6-Tribromophenol	18.85	329.8	62387	102.14	UG/L	100
57)	*Phenanthrene-d10	20.60	188.0	191939	40.00	UG/L	100
73)	Di-n-butylphthalate	22.27	149.0	4968	.733	UG/L	79
75)	*Chrysene-d12	27.44	240.0	100773	40.00	UG/L	100
93)	Terphenyl-d14	24.79	244.0	159293	53.41	UG/L	100
94)	*Perylene-d12	32.66	264.0	83288	40.00	UG/L	100

* Compound is ISTD

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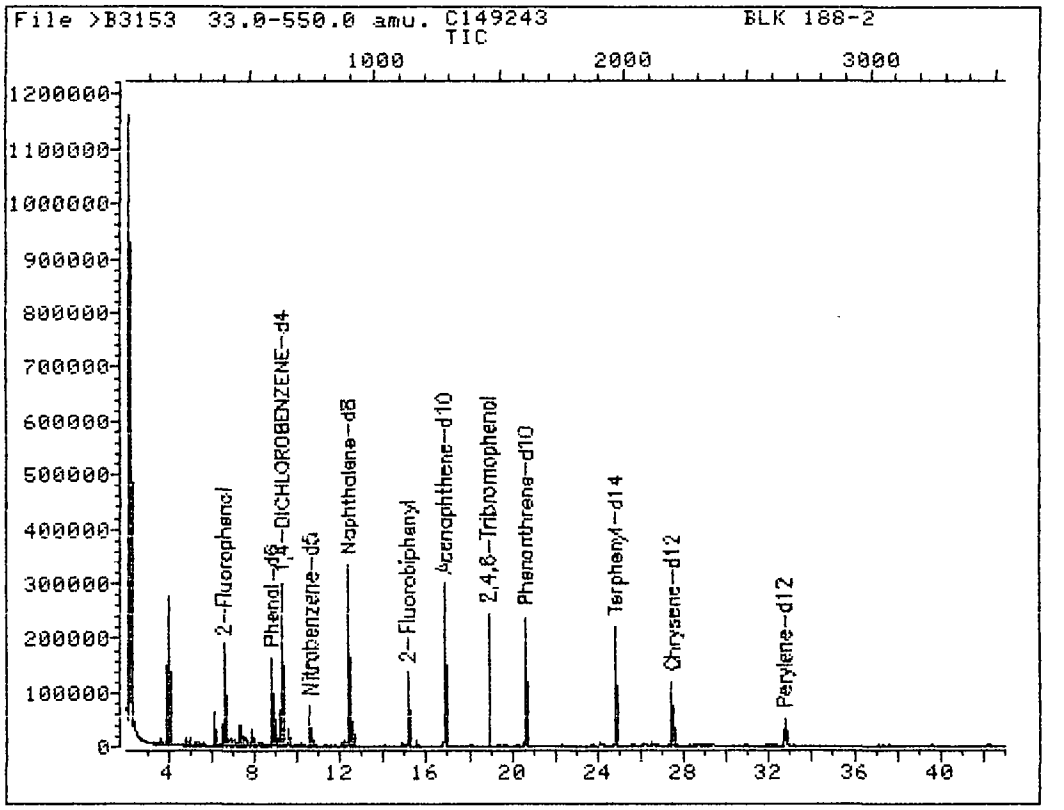
TOTAL ION CHROMATOGRAM



Data File: >B3153::D4 Quant Output File: ^B3153::D1
Name: C149243 Instrument ID: MSD102
Misc: BLK 188-2 BTL# 2

Id File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14 Last Qcal Time: 930809 10:14

Operator ID: HAIYAN
Quant Time : 930809 13:00
Injected at: 930809 12:15

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QUANT REPORT

Operator ID: HAIYAN
Output File: ^B3160::D1
Data File: >B3160::D4
Name: C149435 MS
Misc: REPREP

Quant Rev: 7
Quant Time: 930809 19:44
Injected at: 930809 19:00
Dilution Factor: 1.00000
Instrument ID: MSD102
BTL# 9

ID File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14
Last Qcal Time: 930809 10:14

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-d4	9.28	152.0	83017	40.00	UG/L	98
4)	2-Fluorophenol	6.62	112.0	119813	49.35	UG/L	87
5)	Phenol	8.88	94.0	276186	79.75	UG/L	94
6)	bis(2-chloroethyl)ether	8.91	93.0	9222	3.44	UG/L	100
7)	2-Chlorophenol	8.92	128.0	293945	105.42	UG/L	86
8)	1,3-Dichlorobenzene	9.13	146.0	3155	1.10	UG/L	98
9)	1,4-Dichlorobenzene	9.32	146.0	82005	29.58	UG/L	98
10)	Phenol-d6	8.85	99.0	139088	43.44	UG/L	99
11)	Benzyl alcohol	9.65	108.0	3251	1.97	UG/L	100
12)	1,2-Dichlorobenzene	9.65	146.0	6432	2.30	UG/L	89
16)	N-Nitroso-di-n-propylamine	10.32	70.0	98774	46.54	UG/L	100
18)	*Naphthalene-d8	12.36	136.0	318169	40.00	UG/L	92
22)	Nitrobenzene-d5	10.61	82.0	60761	17.42	UG/L	90
25)	bis(2-Chloroethoxy)methane	11.77	93.0	39878	10.90	UG/L	64
27)	1,2,4-Trichlorobenzene	12.24	180.0	81649	34.68	UG/L	96
31)	4-Chloro-3-methylphenol	14.12	107.0	427947	172.96	UG/L	100
33)	*Acenaphthene-d10	16.82	164.0	200077	40.00	UG/L	100
35)	2-Fluorobiphenyl	15.14	172.0	137712	22.99	UG/L	98
46)	Acenaphthene	16.90	153.0	283144	52.48	UG/L	94
48)	4-Nitrophenol	17.68	109.0	38713	41.38	UG/L	72
51)	2,4-Dinitrotoluene	17.41	165.0	158872	73.66	UG/L	83
52)	Diethylphthalate	18.07	149.0	6938	1.01	UG/L	100
56)	2,4,6-Tribromophenol	18.88	329.8	72152	73.40	UG/L	100
57)	*Phenanthrene-d10	20.63	188.0	282326	40.00	UG/L	100
66)	Pentachlorophenol	20.23	266.0	35014	40.47	UG/L	100
73)	Di-n-butylphthalate	22.28	149.0	6506	.652	UG/L	79
75)	*Chrysene-d12	27.46	240.0	129501	40.00	UG/L	100
77)	Pyrene	24.32	202.0	491091	87.85	UG/L	99
93)	Terphenyl-d14	24.80	244.0	169811	44.30	UG/L	100
94)	*Perylene-d12	32.70	264.0	116800	40.00	UG/L	100

* Compound is ISTD

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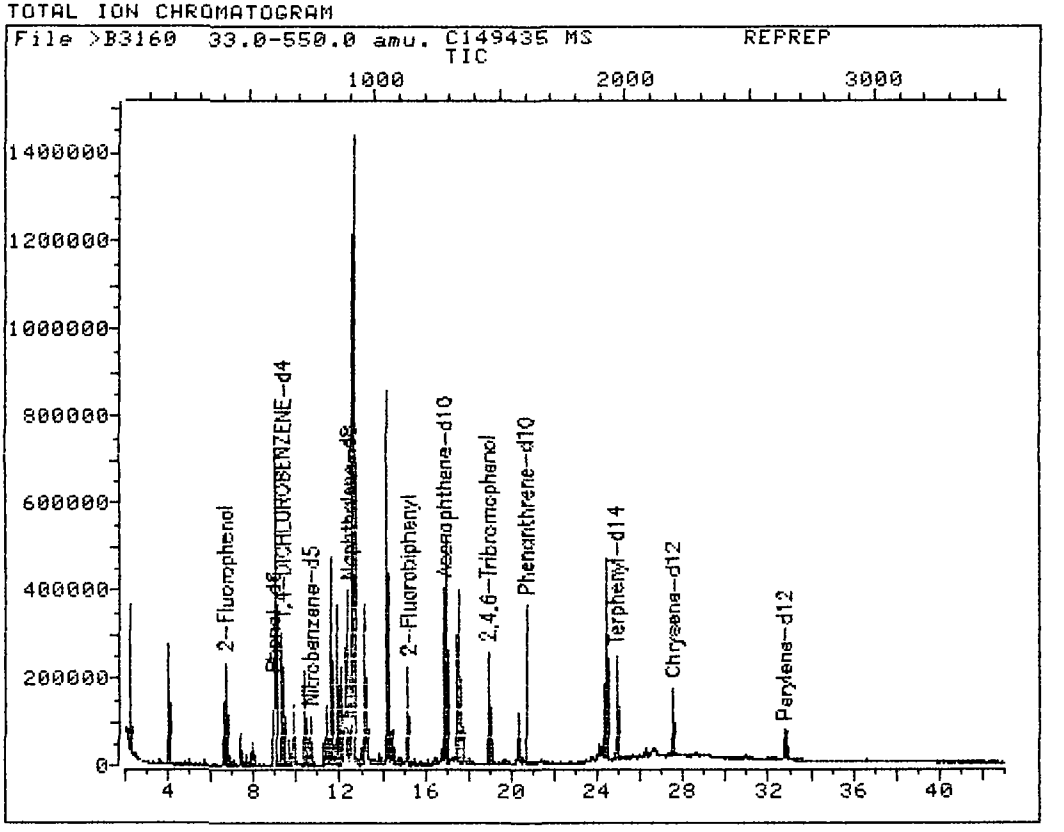
TOTAL ION CHROMATOGRAM



Data File: >B3160::D4 Quant Output File: ^B3160::D1
Name: C149435 MS Instrument ID: MSD102
Misc: REPREP BTL# 9

Id File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14 Last Qcal Time: 930809 10:14

Operator ID: HAIYAN
Quant Time : 930809 19:44
Injected at: 930809 19:00

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QUANT REPORT

Operator ID: HAIYAN
Output File: ^B3161::D1
Data File: >B3161::D4
Name: C149435 MSD
Misc: REPREP

Quant Rev: 7
Quant Time: 930809 20:37
Injected at: 930809 19:52
Dilution Factor: 1.00000
Instrument ID: MSD102
BTL#10

ID File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14
Last Qcal Time: 930809 10:14

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-d4	9.28	152.0	87517	40.00	UG/L	95
4)	2-Fluorophenol	6.62	112.0	117481	45.90	UG/L	82
5)	Phenol	8.89	94.0	270117	73.98	UG/L	91
6)	bis(2-chloroethyl)ether	8.91	93.0	8266	2.93	UG/L	100
7)	2-Chlorophenol	8.91	128.0	283682	96.51	UG/L	93
8)	1,3-Dichlorobenzene	9.32	146.0	69868	23.19	UG/L	98
9)	1,4-Dichlorobenzene	9.32	146.0	69868	23.91	UG/L	98
10)	Phenol-d6	8.85	99.0	140405	41.60	UG/L	94
12)	1,2-Dichlorobenzene	9.65	146.0	5732	1.94	UG/L	79
16)	N-Nitroso-di-n-propylamine	10.32	70.0	82636	36.94	UG/L	100
18)	*Naphthalene-d8	12.36	136.0	330218	40.00	UG/L	90
22)	Nitrobenzene-d5	10.62	82.0	50266	13.89	UG/L	91
25)	bis(2-Chloroethoxy)methane	11.77	93.0	34230	9.02	UG/L	75
27)	1,2,4-Trichlorobenzene	12.23	180.0	67028	27.43	UG/L	88
31)	4-Chloro-3-methylphenol	14.12	107.0	437491	170.36	UG/L	100
33)	*Acenaphthene-d10	16.82	164.0	198328	40.00	UG/L	100
35)	2-Fluorobiphenyl	15.15	172.0	122423	20.61	UG/L	99
46)	Acenaphthene	16.90	153.0	265395	49.63	UG/L	98
48)	4-Nitrophenol	17.67	109.0	56953	61.41	UG/L	61
51)	2,4-Dinitrotoluene	17.42	165.0	165044	77.20	UG/L	87
52)	Diethylphthalate	18.07	149.0	7413	1.09	UG/L	100
56)	2,4,6-Tribromophenol	18.88	329.8	79068	81.14	UG/L	100
57)	*Phenanthrene-d10	20.63	188.0	289248	40.00	UG/L	100
66)	Pentachlorophenol	20.23	266.0	28921	32.63	UG/L	100
73)	Di-n-butylphthalate	22.29	149.0	6211	.608	UG/L	82
75)	*Chrysene-d12	27.46	240.0	126893	40.00	UG/L	100
77)	Pyrene	24.33	202.0	506344	92.44	UG/L	98
93)	Terphenyl-d14	24.81	244.0	172535	45.94	UG/L	100
94)	*Perylene-d12	32.72	264.0	102683	40.00	UG/L	100

* Compound is ISTD

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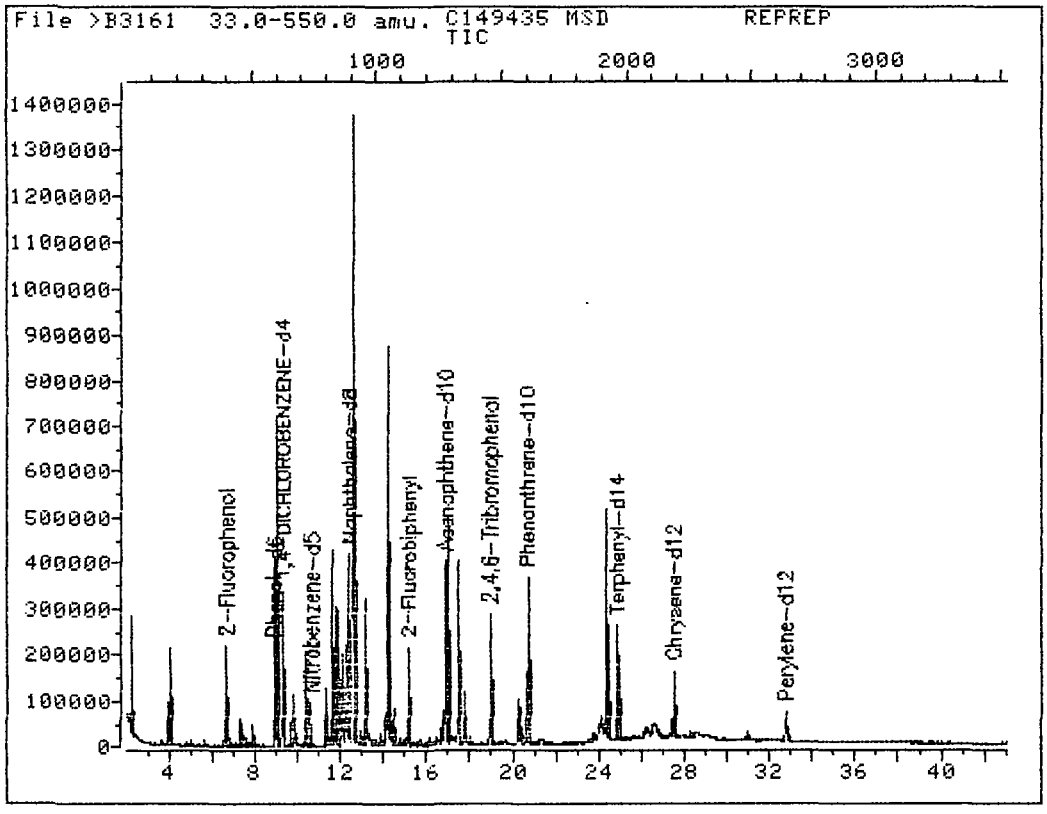
TOTAL ION CHROMATOGRAM



Data File: >B3161::D4 Quant Output File: ^B3161::D1
Name: C149435 MSD Instrument ID: MSD102
Misc: REPREP BTL#10

Id File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14 Last Qcal Time: 930809 10:14

Operator ID: HAIYAN
Quant Time : 930809 20:37
Injected at: 930809 19:52

HQ 8/17/93

QUANT REPORT

Operator ID: HAIYAN
Output File: ^B3171::D1
Data File: >B3171::D7
Name: BLK188-4
Misc:

Quant Rev: 7
Quant Time: 930817 16:43
Injected at: 930817 15:59
Dilution Factor: 1.00000
Instrument ID: MSD102
BTL# 3

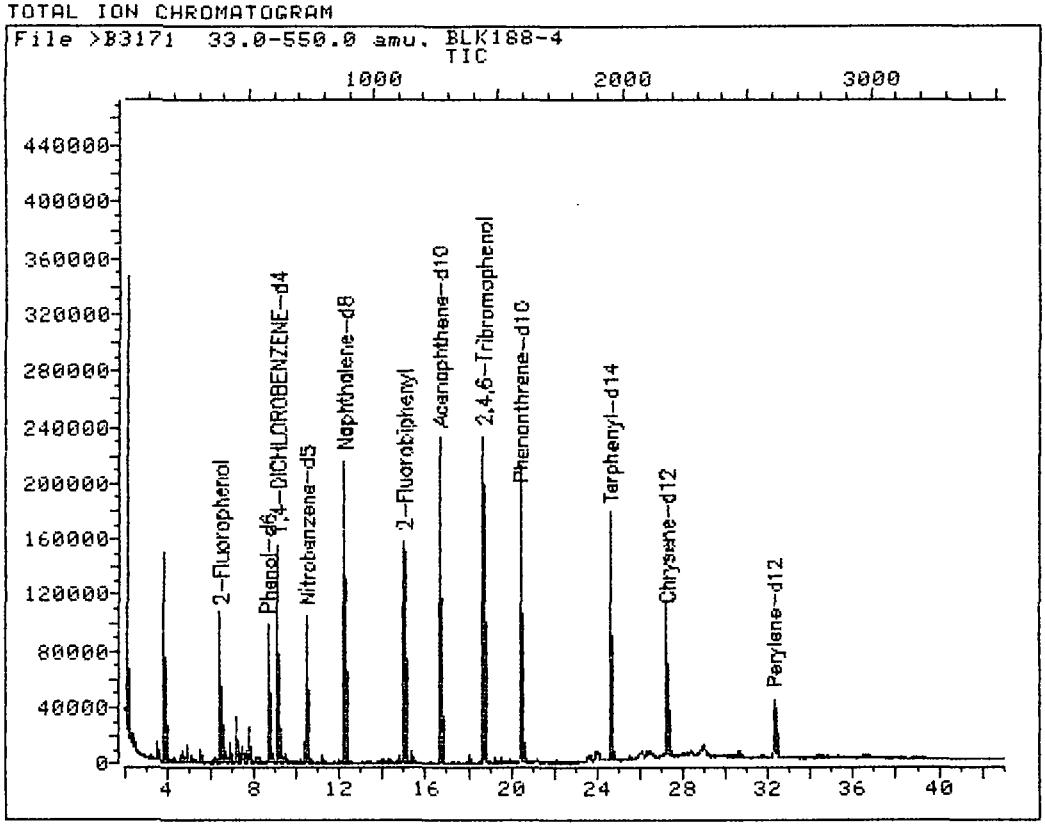
ID File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14
Last Qcal Time: 930817 10:09

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-d4	9.12	152.0	42242	40.00	UG/L	98
4)	2-Fluorophenol	6.43	112.0	48153	38.16	UG/L	77
10)	Phenol-d6	8.64	99.0	53295	29.99	UG/L	93
18)	*Naphthalene-d8	12.19	136.0	168089	40.00	UG/L	86
22)	Nitrobenzene-d5	10.45	82.0	57346	27.15	UG/L	88
33)	*Acenaphthene-d10	16.63	164.0	102280	40.00	UG/L	100
35)	2-Fluorobiphenyl	14.97	172.0	96381	32.95	UG/L	99
56)	2,4,6-Tribromophenol	18.68	329.8	70274	95.54	UG/L	100
57)	*Phenanthrene-d10	20.42	188.0	168196	40.00	UG/L	100
75)	*Chrysene-d12	27.22	240.0	94327	40.00	UG/L	100
93)	Terphenyl-d14	24.60	244.0	135161	52.34	UG/L	100
94)	*Perylene-d12	32.25	264.0	72236	40.00	UG/L	100

* Compound is ISTD

HQ 8/17/93

TOTAL ION CHROMATOGRAM



Data File: >B3171::D7 Quant Output File: ^B3171::D1
Name: BLK188-4 Instrument ID: MSD102
Misc: BTL# 3

Id File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14 Last Qcal Time: 930817 10:09

Operator ID: HAIYAN
Quant Time : 930817 16:43
Injected at: 930817 15:59

HQ 8/17/93

QUANT REPORT

Operator ID: HAIYAN
Output File: ^B3172::D1
Data File: >B3172::D7
Name: C149650 Lab. 0
Misc:

Quant Rev: 7
Quant Time: 930817 17:35
Injected at: 930817 16:51
Dilution Factor: 1.00000
Instrument ID: MSD102
BTL# 4

ID File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14
Last Qcal Time: 930817 10:09

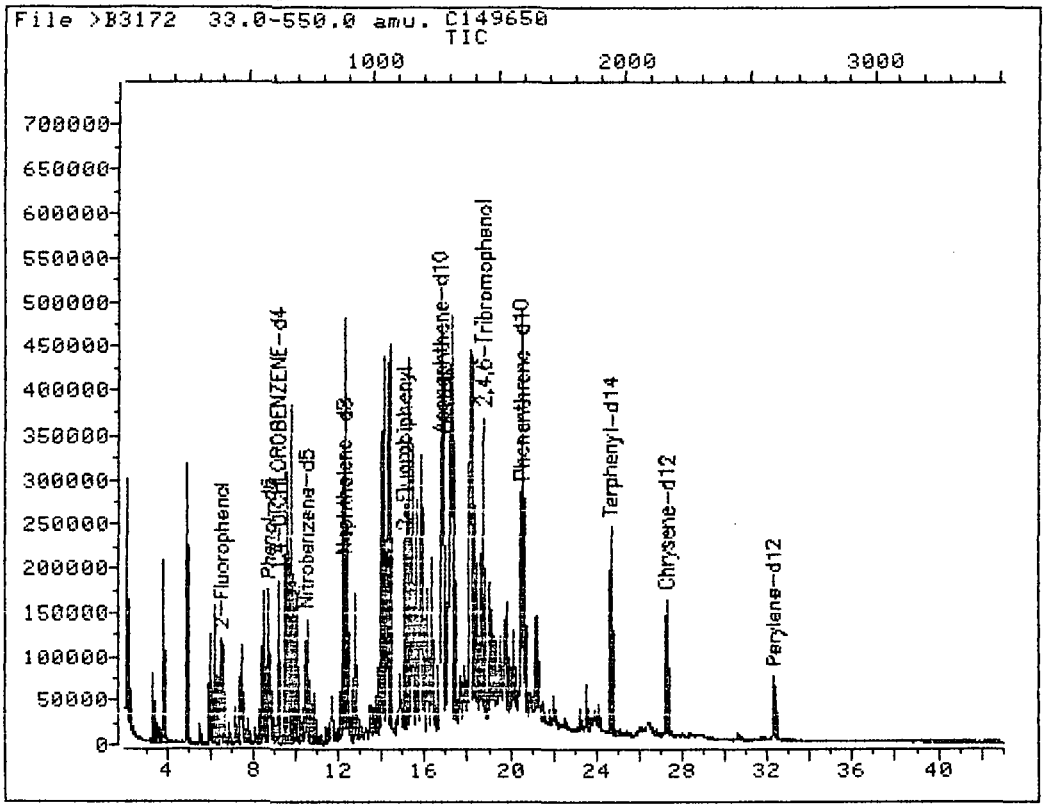
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-d4	9.13	152.0	47962	40.00	UG/L	98
2)	Pyridine	3.30	79.0	32840	15.93	UG/L	96
3)	2-Picoline	4.87	93.0	171137	101.20	UG/L	81
4)	2-Fluorophenol	6.48	112.0	73077	51.00	UG/L	71
5)	Phenol	8.70	94.0	34652	15.64	UG/L	85
~~6)~~	~~bis(2-chloroethyl)ether~~	~~8.42~~	~~93.0~~	~~104710~~	~~58.35~~	~~UG/L~~	100
10)	Phenol-d6	8.66	99.0	105710	52.39	UG/L	90
13)	2-Methylphenol	9.99	108.0	63527	40.56	UG/L	76
15)	4-Methylphenol	10.41	108.0	6175	3.55	UG/L	90
18)	*Naphthalene-d8	12.20	136.0	179849	40.00	UG/L	86
22)	Nitrobenzene-d5	10.47	82.0	82497	36.50	UG/L	89
23)	2,4-Dimethylphenol	11.64	107.0	28264M	15.40	UG/L	88
24)	Benzoic acid	11.98	122.0	54548M	BDL ~~56.26~~	~~UG/L~~	~~73~~
*28)	Naphthalene out of range	12.29	128.0	778149	183.20	UG/L	100
*32)	2-Methylnaphthalene out of range	14.03	142.0	642439	225.20	UG/L	71
33)	*Acenaphthene-d10	16.68	164.0	95337	40.00	UG/L	100
35)	2-Fluorobiphenyl	14.99	172.0	153459	56.29	UG/L	99
39)	2-Chloronaphthalene	15.39	162.0	6198^	2.29	UG/L	62
41)	2-Nitroaniline	15.62	65.0	5862	4.37	UG/L	28
43)	Acenaphthylene	16.28	152.0	185072	42.31	UG/L	84
*46)	Acenaphthene	16.72	153.0	1197652M	466.34	UG/L	95
*49)	Dibenzofuran	17.20	168.0	1230770	319.75	UG/L	99
*54)	Fluorene	18.11	166.0	723287M	255.71	UG/L	100
56)	2,4,6-Tribromophenol	18.71	329.8	96450	140.68	UG/L	100
57)	*Phenanthrene-d10	20.46	188.0	211593	40.00	UG/L	100
59)	N-Nitrosodiphenylamine	18.46	169.0	3305	1.24	UG/L	100
67)	Phenanthrene	20.54	178.0	632344	114.82	UG/L	96
69)	Carbazole	21.13	167.0	108535	22.15	UG/L	96
70)	Anthracene	20.64	178.0	157325	30.12	UG/L	98
73)	Di-n-butylphthalate	22.11	149.0	4046	.521	UG/L	85
74)	Fluoranthene	23.54	202.0	37852	7.65	UG/L	100
75)	*Chrysene-d12	27.24	240.0	136034	40.00	UG/L	100
77)	Pyrene	24.11	202.0	22519	4.43	UG/L	92
91)	bis(2-Ethylhexyl)phthalate	27.46	149.0	3183	.753	UG/L	87
93)	Terphenyl-d14	24.61	244.0	188190	50.53	UG/L	100
94)	*Perylene-d12	32.25	264.0	116744	40.00	UG/L	100

* Compound is ISTD

* Outside of calibration range. Re-analyzed at 1:10 dilution.

HQ 8/17/93

TOTAL ION CHROMATOGRAM



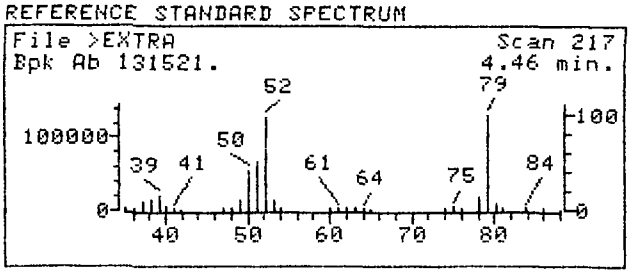
Data File: >B3172::D7 Quant Output File: ^B3172::D1
Name: C149650 Instrument ID: MSD102
Misc: BTL# 4

Id File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14 Last Qcal Time: 930817 10:09

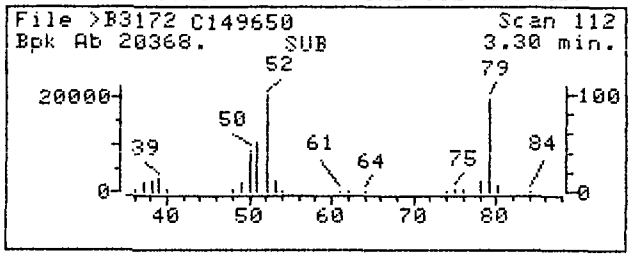
Operator ID: HAIYAN
Quant Time : 930817 17:35
Injected at: 930817 16:51

HQ
8/17/93

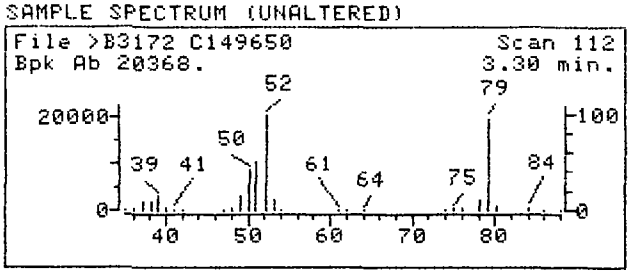
REFERENCE STANDARD SPECTRUM

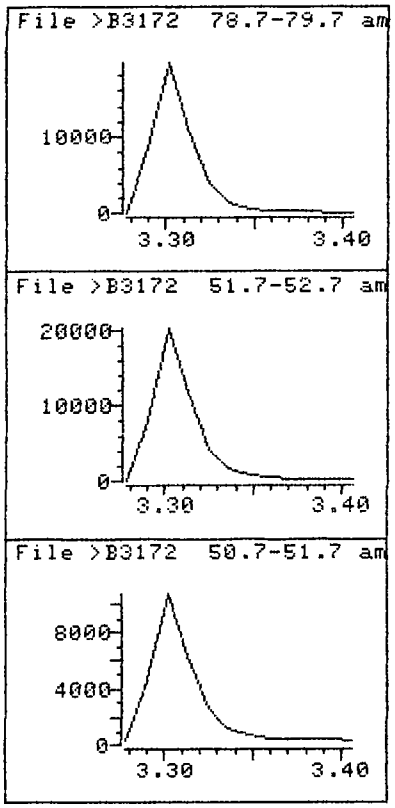


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





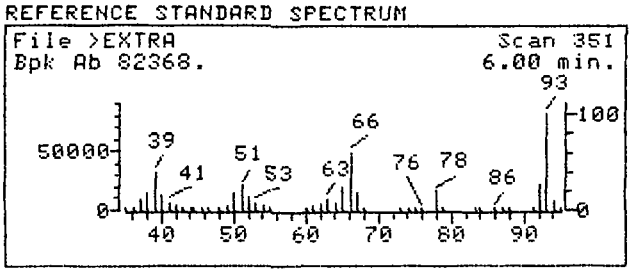
Data File: >B3172::D7
Name: C149650
Misc:
Quant Time: 930817 17:35
Injected at: 930817 16:51
Last Qcal Time: 930817 10:09

Quant Output File: ^B3172::D1
Instrument ID: MSD102
BTL# 4
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

Compound No : 2
Compound Name : Pyridine
Scan Number : 112
Retention Time: 3.30 min.
Quant Ion : 79.0
Area : 32840
Concentration : 15.93 UG/L
q-value : 96

HQ
8/17/93

REFERENCE STANDARD SPECTRUM



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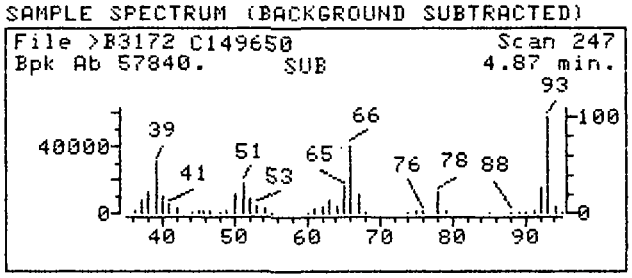
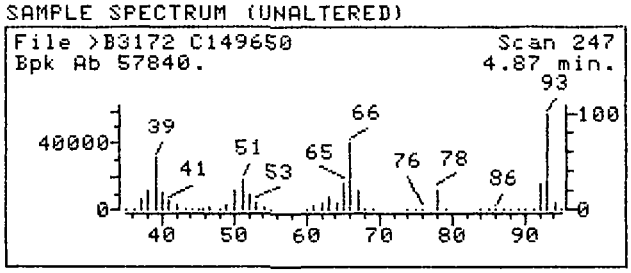
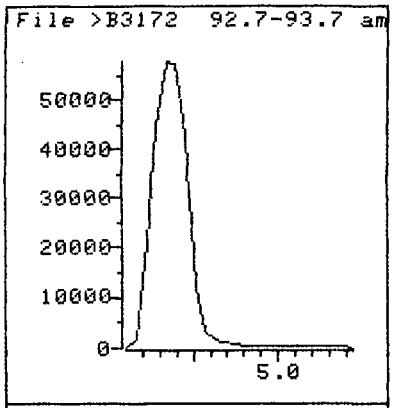
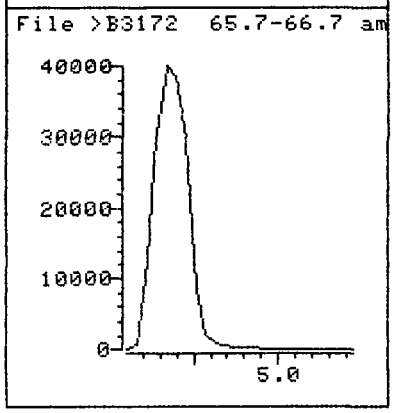


SAMPLE SPECTRUM (UNALTERED)







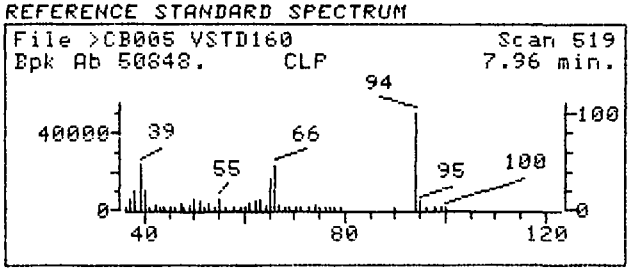
Data File: >B3172::D7
Name: C149650
Misc:
Quant Time: 930817 17:35
Injected at: 930817 16:51
Last Qcal Time: 930817 10:09

Quant Output File: ^B3172::D1
Instrument ID: MSD102
BTL# 4
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

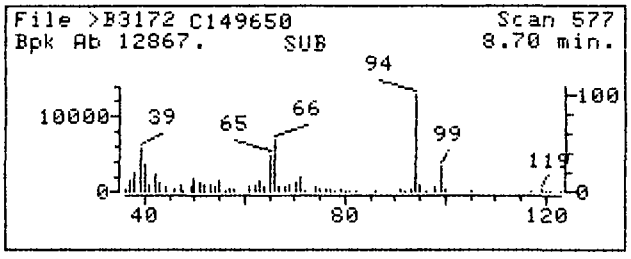
Compound No : 3
Compound Name : 2-Picoline
Scan Number : 247
Retention Time: 4.87 min.
Quant Ion : 93.0
Area : 171137
Concentration : 101.20 UG/L
q-value : 81

HQ
8/17/93

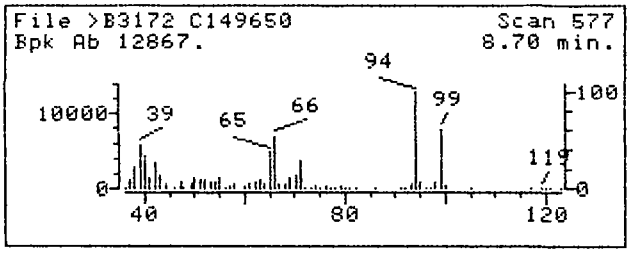
REFERENCE STANDARD SPECTRUM

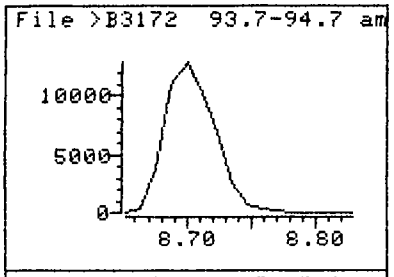


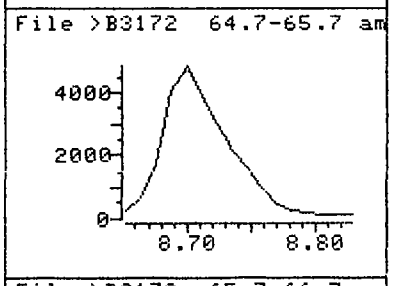
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

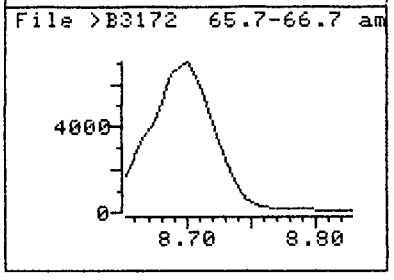


SAMPLE SPECTRUM (UNALTERED)









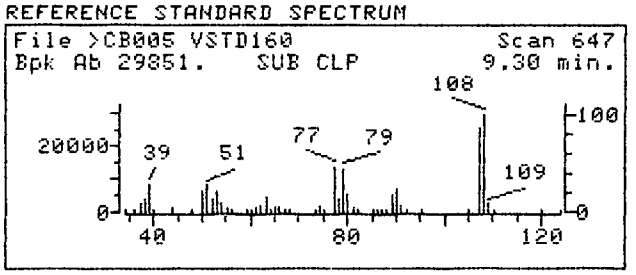
Data File: >B3172::D7
Name: C149650
Misc:
Quant Time: 930817 17:35
Injected at: 930817 16:51
Last Qcal Time: 930817 10:09

Quant Output File: ^B3172::D1
Instrument ID: MSD102
BTL# 4
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

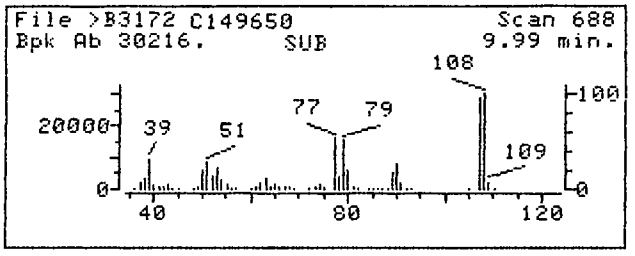
Compound No : 5
Compound Name : Phenol
Scan Number : 577
Retention Time: 8.70 min.
Quant Ion : 94.0
Area : 34652
Concentration : 15.64 UG/L
q-value : 85

HQ
8/17/93

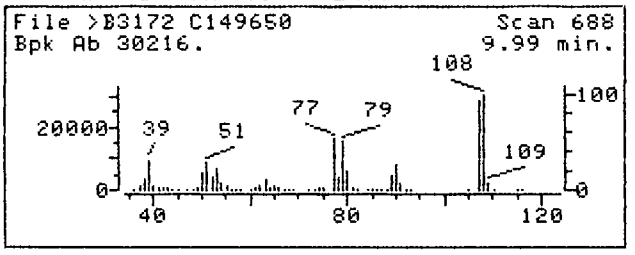
REFERENCE STANDARD SPECTRUM

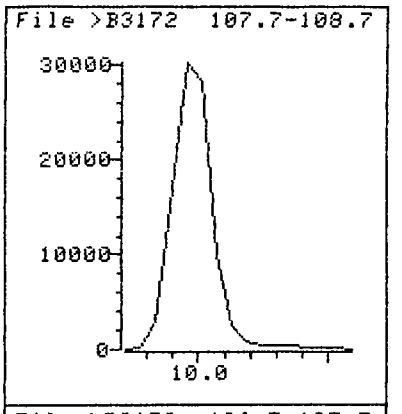


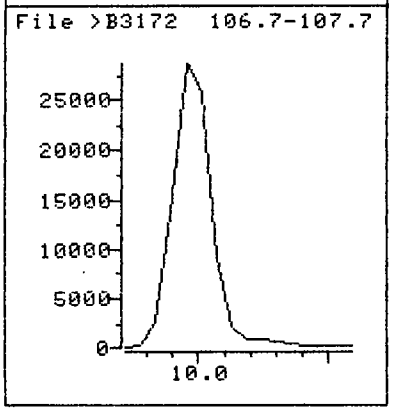
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







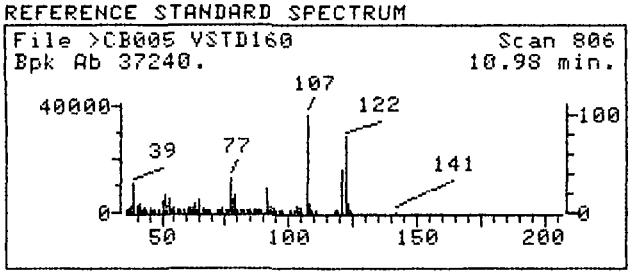
Data File: >B3172::D7
Name: C149650
Misc:
Quant Time: 930817 17:35
Injected at: 930817 16:51
Last Qcal Time: 930817 10:09

Quant Output File: ^B3172::D1
Instrument ID: MSD102
BTL# 4
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

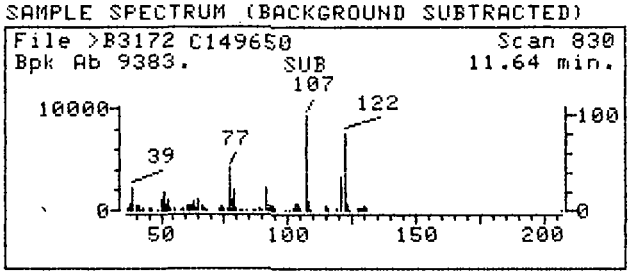
Compound No : 13
Compound Name : 2-Methylphenol
Scan Number : 688
Retention Time: 9.99 min.
Quant Ion : 108.0
Area : 63527
Concentration : 40.56 UG/L
q-value : 76

HQ
8/17/93

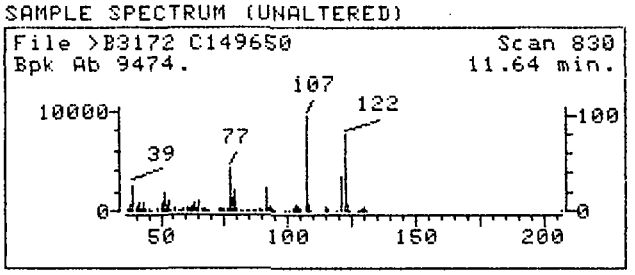
REFERENCE STANDARD SPECTRUM

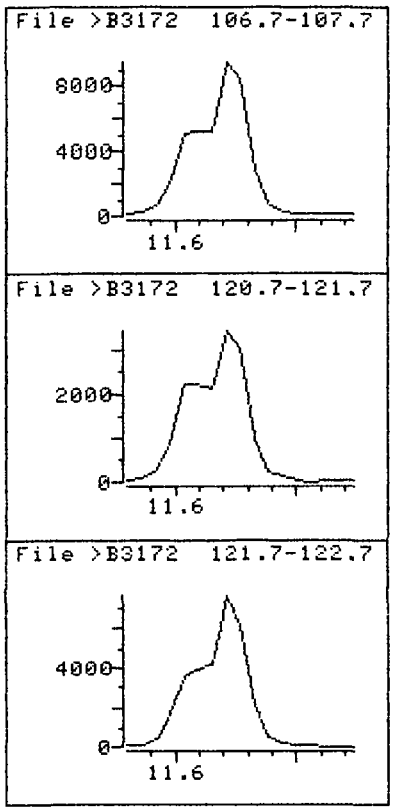


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





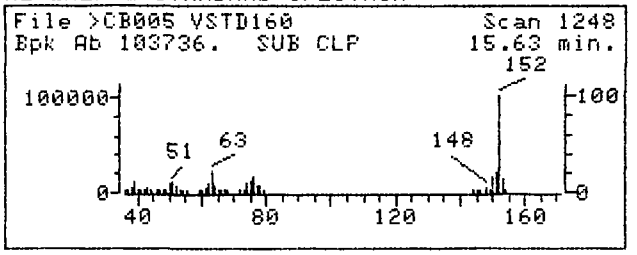
Data File: >B3172::D7
Name: C149650
Misc:
Quant Time: 930817 17:35
Injected at: 930817 16:51
Last Qcal Time: 930817 10:09

Quant Output File: ^B3172::D1
Instrument ID: MSD102
BTL# 4
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

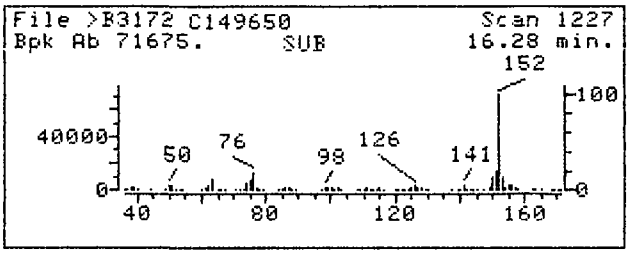
Compound No : 23
Compound Name : 2,4-Dimethylphenol
Scan Number : 830
Retention Time: 11.64 min.
Quant Ion : 107.0
Area : 28264M
Concentration : 15.40 UG/L
q-value : 88

HQ
8/17/93

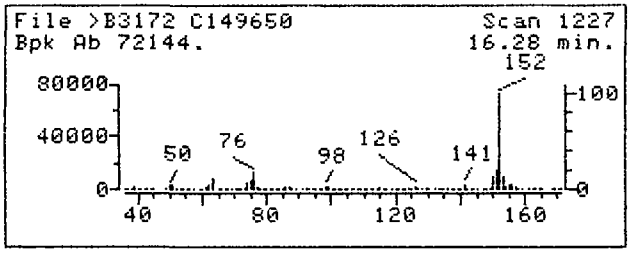
REFERENCE STANDARD SPECTRUM

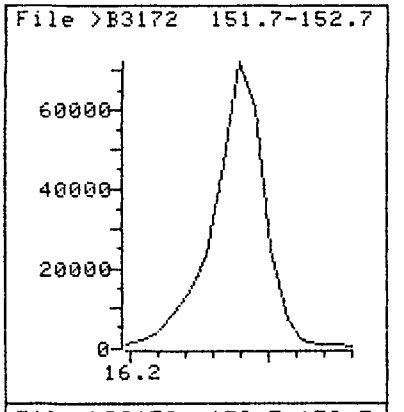


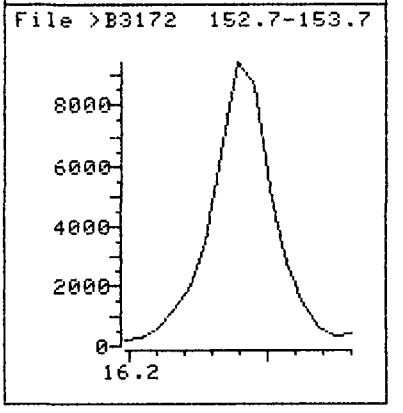
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







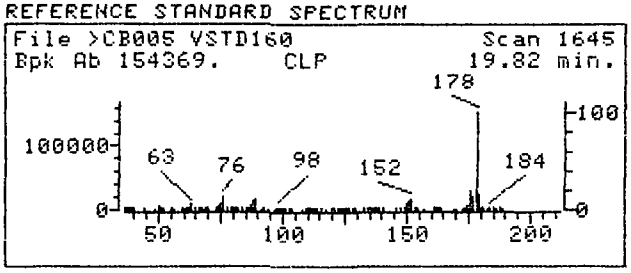
Data File: >B3172::D7
Name: C149650
Misc:
Quant Time: 930817 17:35
Injected at: 930817 16:51
Last Qcal Time: 930817 10:09

Quant Output File: ^B3172::D1
Instrument ID: MSD102
BTL# 4
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

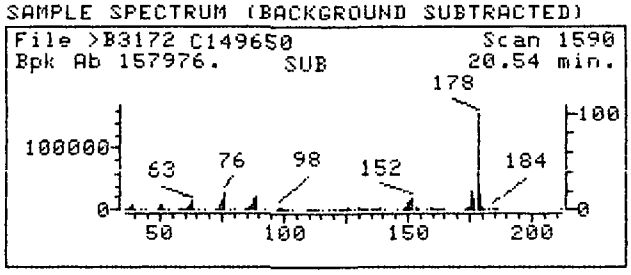
Compound No : 43
Compound Name : Acenaphthylene
Scan Number : 1227
Retention Time: 16.28 min.
Quant Ion : 152.0
Area : 185072
Concentration : 42.31 UG/L
q-value : 84

HG
8/17/93

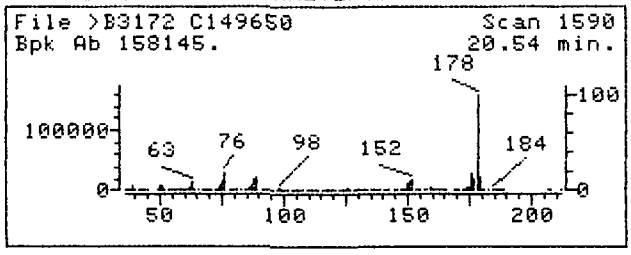
REFERENCE STANDARD SPECTRUM

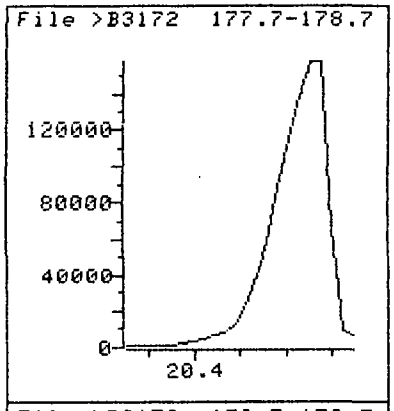


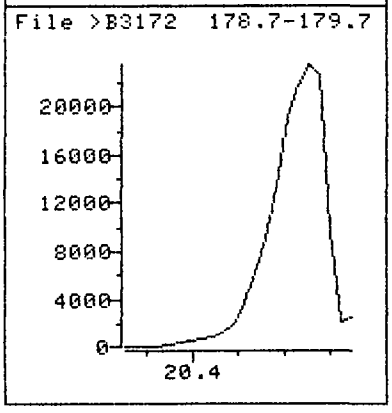
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







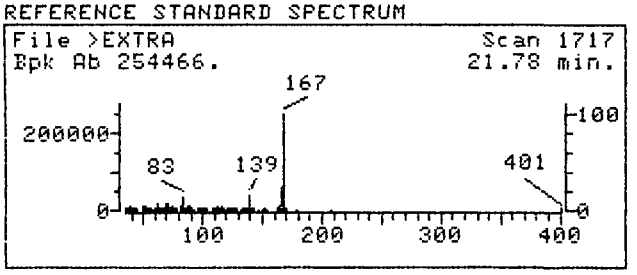
Data File: >B3172::D7
Name: C149650
Misc:
Quant Time: 930817 17:35
Injected at: 930817 16:51
Last Qcal Time: 930817 10:09

Quant Output File: ^B3172::D1
Instrument ID: MSD102
BTL# 4
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

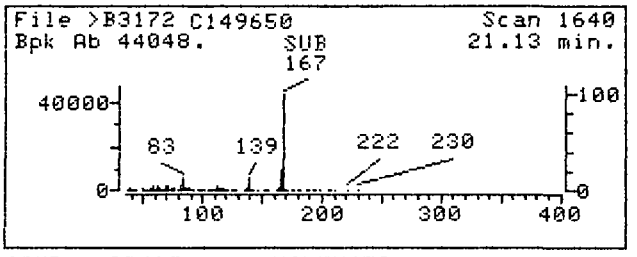
Compound No : 67
Compound Name : Phenanthrene
Scan Number : 1590
Retention Time: 20.54 min.
Quant Ion : 178.0
Area : 632344
Concentration : 114.82 UG/L
q-value : 96

HQ
8/17/93

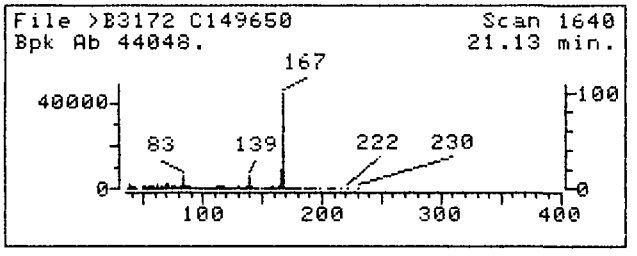
REFERENCE STANDARD SPECTRUM

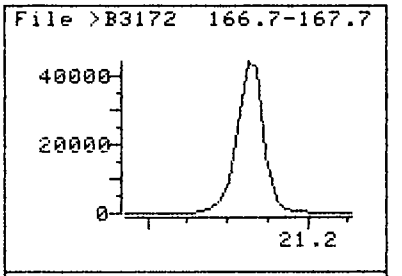


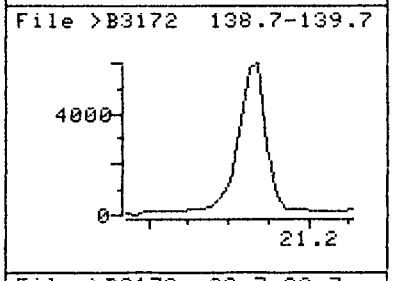
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

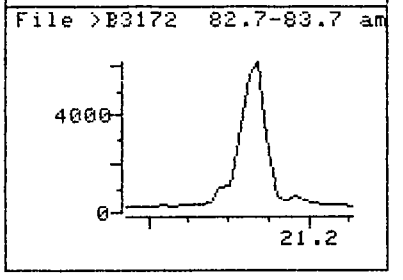


SAMPLE SPECTRUM (UNALTERED)









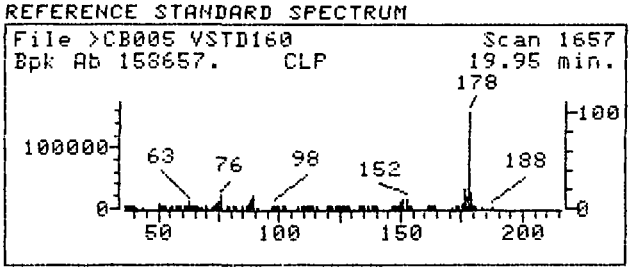
Data File: >B3172::D7
Name: C149650
Misc:
Quant Time: 930817 17:35
Injected at: 930817 16:51
Last Qcal Time: 930817 10:09

Quant Output File: ^B3172::D1
Instrument ID: MSD102
BTL# 4
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

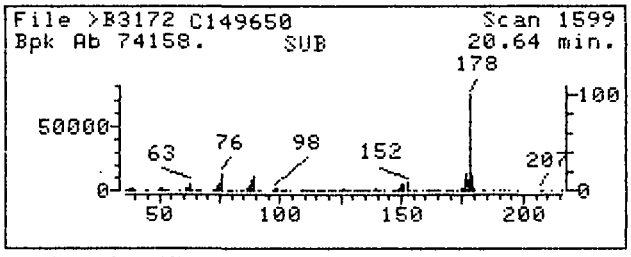
Compound No : 69
Compound Name : Carbazole
Scan Number : 1640
Retention Time: 21.13 min.
Quant Ion : 167.0
Area : 108535
Concentration : 22.15 UG/L
q-value : 96

HQ
8/17/93

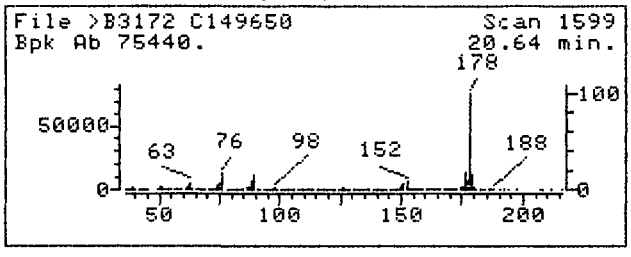
REFERENCE STANDARD SPECTRUM

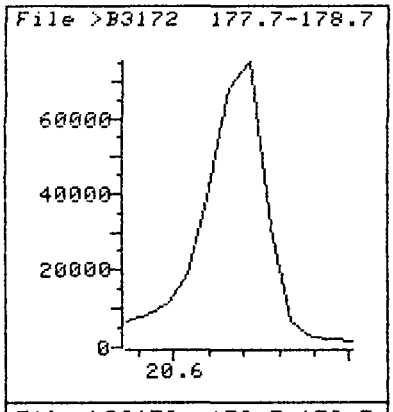


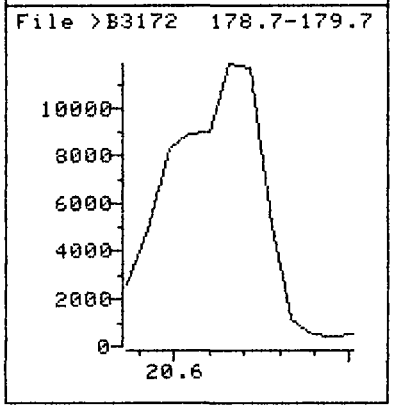
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







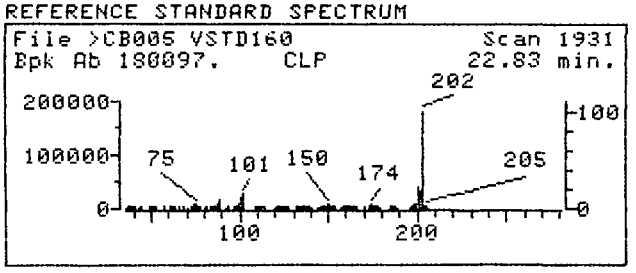
Data File: >B3172::D7
Name: C149650
Misc:
Quant Time: 930817 17:35
Injected at: 930817 16:51
Last Qcal Time: 930817 10:09

Quant Output File: ^B3172::D1
Instrument ID: MSD102
BTL# 4
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

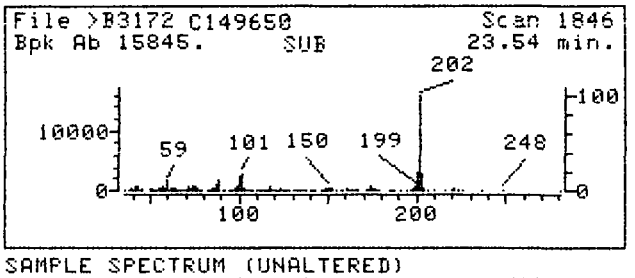
Compound No : 70
Compound Name : Anthracene
Scan Number : 1599
Retention Time: 20.64 min.
Quant Ion : 178.0
Area : 157325
Concentration : 30.12 UG/L
q-value : 98

HQ
8/17/93

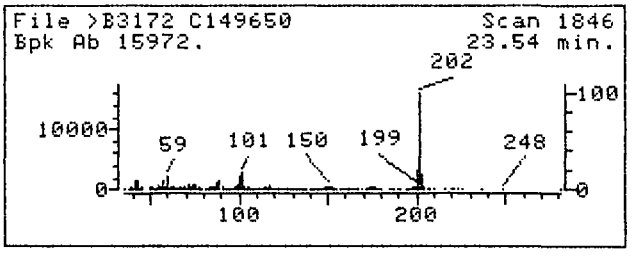
REFERENCE STANDARD SPECTRUM

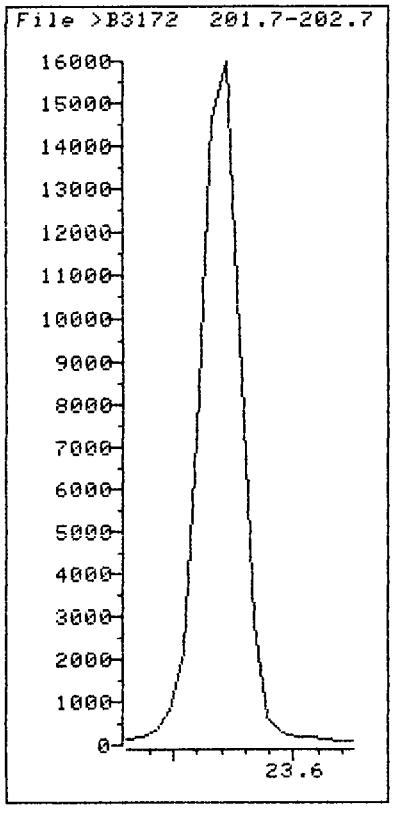


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





Data File: >B3172::D7
Name: C149650
Misc:
Quant Time: 930817 17:35
Injected at: 930817 16:51
Last Qcal Time: 930817 10:09

Quant Output File: ^B3172::D1
Instrument ID: MSD102
BTL# 4
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

Compound No : 74
Compound Name : Fluoranthene
Scan Number : 1846
Retention Time: 23.54 min.
Quant Ion : 202.0
Area : 37852
Concentration : 7.65 UG/L
q-value : 100

HG
8/17/93

QUANT REPORT

Operator ID: HAIYAN
Output File: ^B3173::D1
Data File: >B3173::D7
Name: C149651 Rs. 0
Misc:

Quant Rev: 7
Quant Time: 930817 18:29
Injected at: 930817 17:45
Dilution Factor: 1.00000
Instrument ID: MSD102
BTL# 5

ID File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14
Last Qcal Time: 930817 10:09

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-d4	9.14	152.0	50421	40.00	UG/L	98
2)	Pyridine	3.29	79.0	28837	13.31	UG/L	95
3)	2-Picoline	4.87	93.0	158988	89.43	UG/L	79
4)	2-Fluorophenol	6.47	112.0	70195	46.60	UG/L	75
5)	Phenol	8.71	94.0	34313	14.73	UG/L	88
~~6)~~	~~bis(2-chloroethyl)ether~~	~~8.43~~	~~93.0~~	~~90197~~	~~47.81~~	~~UG/L~~	100
10)	Phenol-d6	8.67	99.0	102903	48.52	UG/L	91
13)	2-Methylphenol	10.00	108.0	61662	37.45	UG/L	78
15)	4-Methylphenol	10.42	108.0	5886	3.22	UG/L	88
18)	*Naphthalene-d8	12.21	136.0	201200	40.00	UG/L	85
22)	Nitrobenzene-d5	10.48	82.0	79574	31.47	UG/L	84
23)	2,4-Dimethylphenol	11.65	107.0	27697	13.49	UG/L	91
24)	Benzoic acid	11.99	122.0	49157M	21.~~345.32~~	~~UG/L~~	50
28)	Naphthalene	12.28	128.0	566818	119.28	UG/L	100
*32)	2-Methylnaphthalene	14.08	142.0	641451M	200.99	UG/L	74
33)	*Acenaphthene-d10	16.68	164.0	91844	40.00	UG/L	100
35)	2-Fluorobiphenyl	15.00	172.0	152436	58.04	UG/L	98
39)	2-Chloronaphthalene	15.39	162.0	5874^	2.25	UG/L	63
41)	2-Nitroaniline	15.47	65.0	5398	4.17	UG/L	26
43)	Acenaphthylene	16.29	152.0	183274	43.49	UG/L	86
*46)	Acenaphthene	16.90	153.0	1232220M	498.05	UG/L	93
*49)	Dibenzofuran	17.21	168.0	1344008M	362.45	UG/L	94
*54)	Fluorene	18.15	166.0	758586M	278.38	UG/L	100
56)	2,4,6-Tribromophenol	18.72	329.8	92495	140.04	UG/L	100
57)	*Phenanthrene-d10	20.46	188.0	187653	40.00	UG/L	100
59)	N-Nitrosodiphenylamine	18.42	169.0	4371	1.85	UG/L	100
67)	Phenanthrene	20.56	178.0	747072	152.95	UG/L	96
69)	Carbazole	21.14	167.0	98428	22.65	UG/L	97
70)	Anthracene	20.65	178.0	210880	45.53	UG/L	98
73)	Di-n-butylphthalate	22.12	149.0	4299	.625	UG/L	84
74)	Fluoranthene	23.54	202.0	75009	17.09	UG/L	100
75)	*Chrysene-d12	27.23	240.0	94041	40.00	UG/L	100
77)	Pyrene	24.11	202.0	48581	13.83	UG/L	88
89)	Benzo(a)anthracene	27.21	228.0	6441	2.22	UG/L	94
90)	Chrysene	27.29	228.0	3627	1.31	UG/L	100
91)	bis(2-Ethylhexyl)phthalate	27.47	149.0	4860	1.66	UG/L	90
93)	Terphenyl-d14	24.61	244.0	158495	61.56	UG/L	100
94)	*Perylene-d12	32.24	264.0	69144	40.00	UG/L	100
96)	Benzo(b)fluoranthene	30.63	252.0	4863	2.26	UG/L	93
98)	Benzo(a)pyrene	31.99	252.0	3430	1.84	UG/L	95

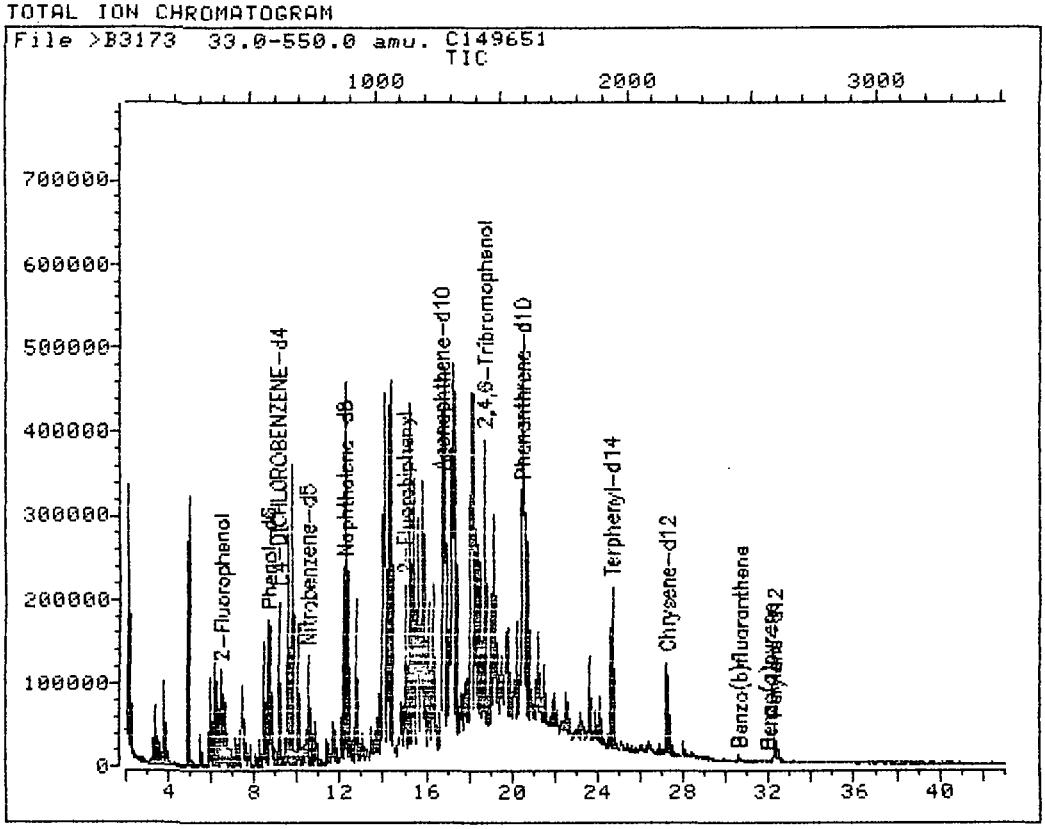
* Compound is ISTD

168

* OUTSIDE CALIBRATION RANGE.
RE-ANALYZED AT 1:10 DILUTION.

HQ 8/17/93.

TOTAL ION CHROMATOGRAM



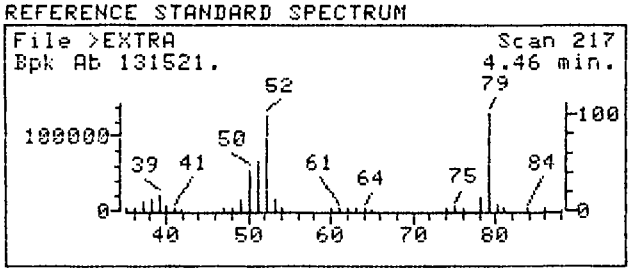
Data File: >B3173::D7 Quant Output File: ^B3173::D1
Name: C149651 Instrument ID: MSD102
Misc: BTL# 5

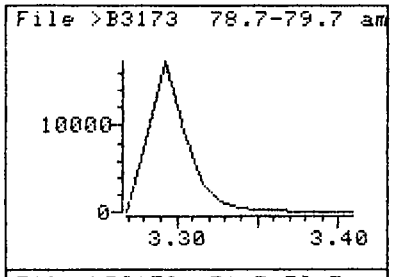
Id File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14 Last Qcal Time: 930817 10:09

Operator ID: HAIYAN
Quant Time : 930817 18:29
Injected at: 930817 17:45

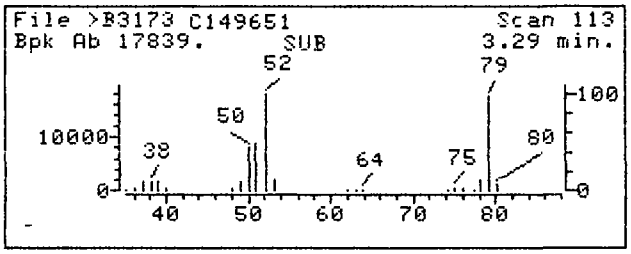
HQ 8/17/93

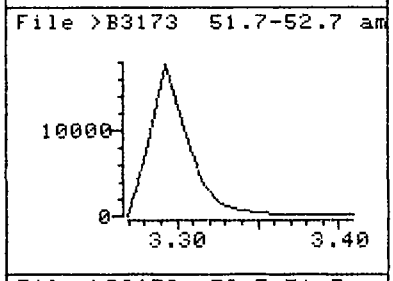
REFERENCE STANDARD SPECTRUM



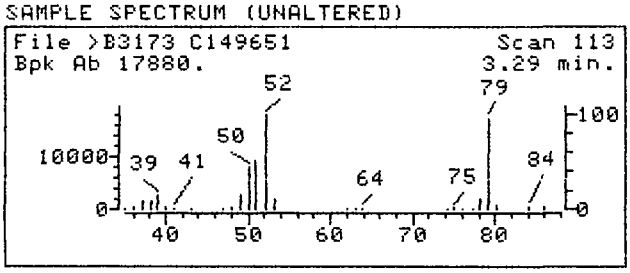


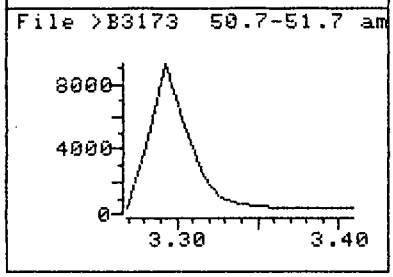
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)





SAMPLE SPECTRUM (UNALTERED)





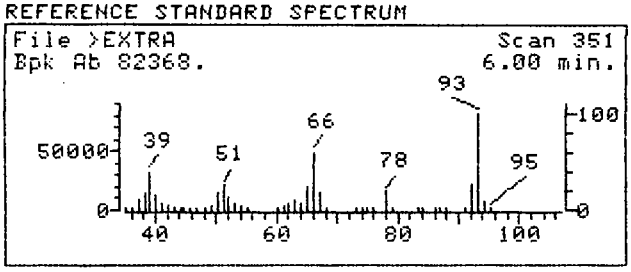
Data File: >B3173::D7
Name: C149651
Misc:
Quant Time: 930817 18:29
Injected at: 930817 17:45
Last Qcal Time: 930817 10:09

Quant Output File: ^B3173::D1
Instrument ID: MSD102
BTL# 5
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

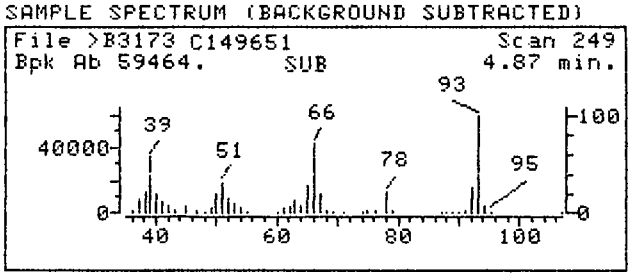
Compound No : 2
Compound Name : Pyridine
Scan Number : 113
Retention Time: 3.29 min.
Quant Ion : 79.0
Area : 28837
Concentration : 13.31 UG/L
q-value : 95

HQ 8/17/93

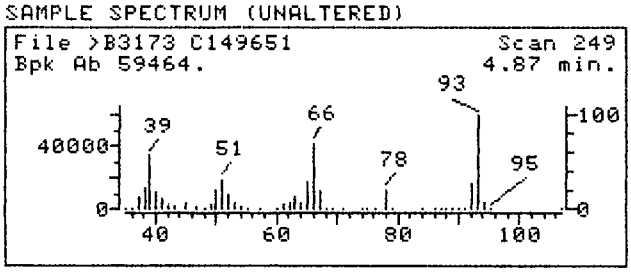
REFERENCE STANDARD SPECTRUM

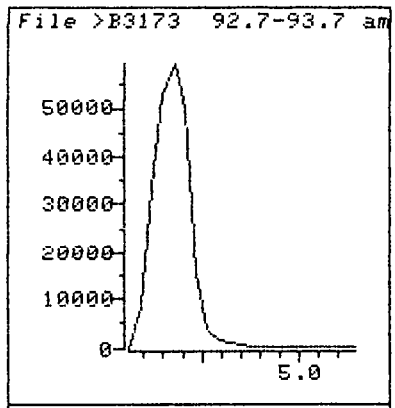


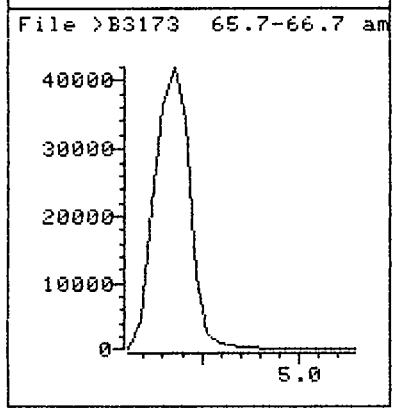
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







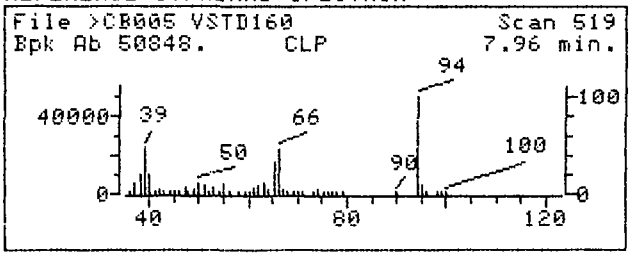
Data File: >B3173::D7
Name: C149651
Misc:
Quant Time: 930817 18:29
Injected at: 930817 17:45
Last Qcal Time: 930817 10:09

Quant Output File: ^B3173::D1
Instrument ID: MSD102
BTL# 5
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

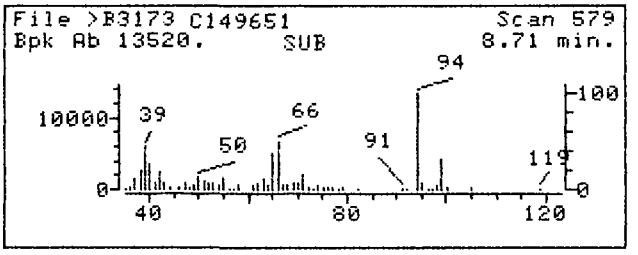
Compound No : 3
Compound Name : 2-Picoline
Scan Number : 249
Retention Time: 4.87 min.
Quant Ion : 93.0
Area : 158988
Concentration : 89.43 UG/L
q-value : 79

HQ
8/17/93

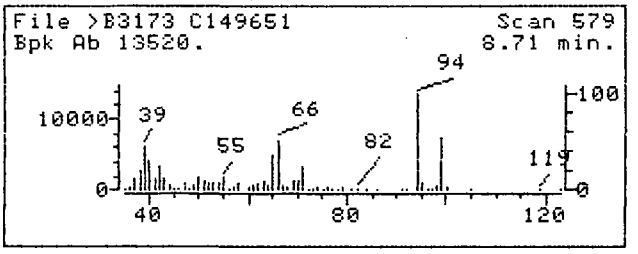
REFERENCE STANDARD SPECTRUM

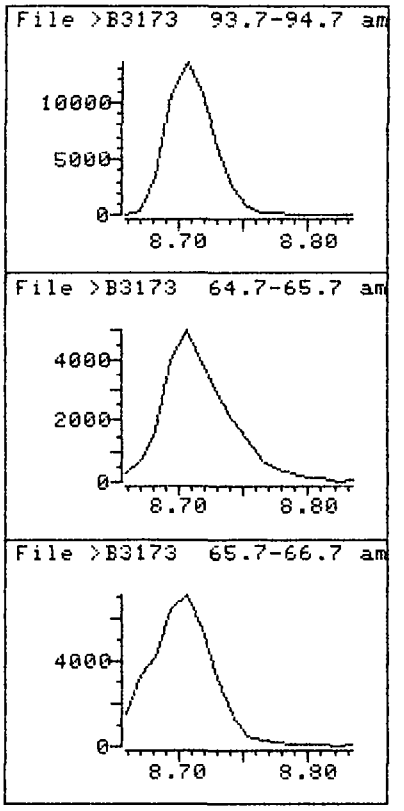


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





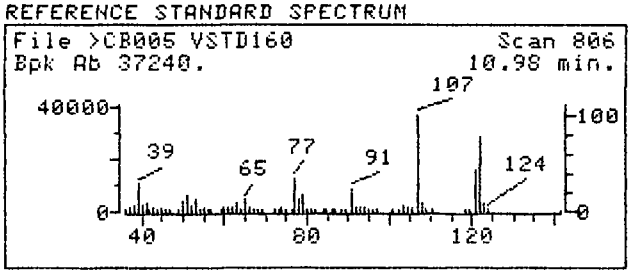
Data File: >B3173::D7
Name: C149651
Misc:
Quant Time: 930817 18:29
Injected at: 930817 17:45
Last Qcal Time: 930817 10:09

Quant Output File: ^B3173::D1
Instrument ID: MSD102
BTL# 5
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

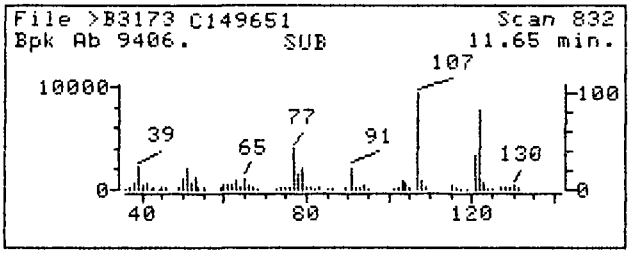
Compound No : 5
Compound Name : Phenol
Scan Number : 579
Retention Time: 8.71 min.
Quant Ion : 94.0
Area : 34313
Concentration : 14.73 UG/L
q-value : 88

HQ
8/17/93

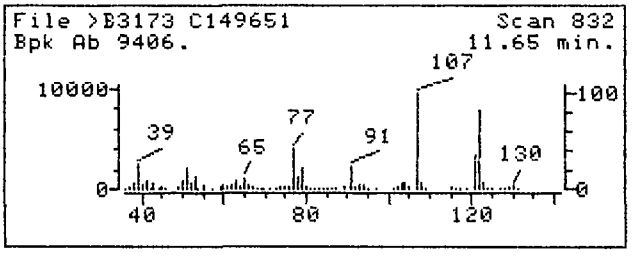
REFERENCE STANDARD SPECTRUM

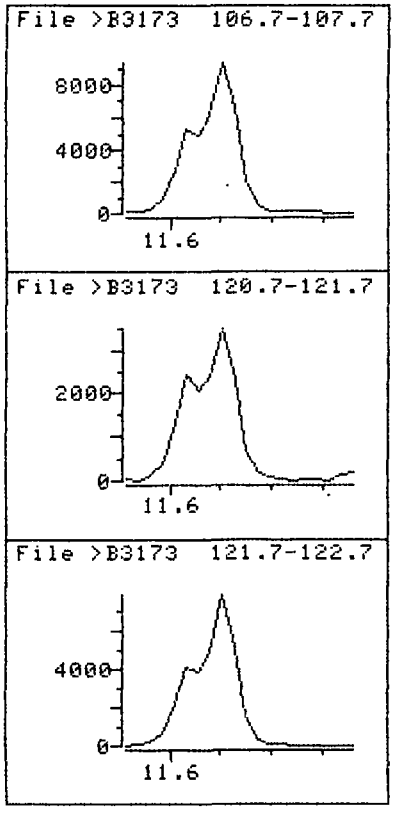


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





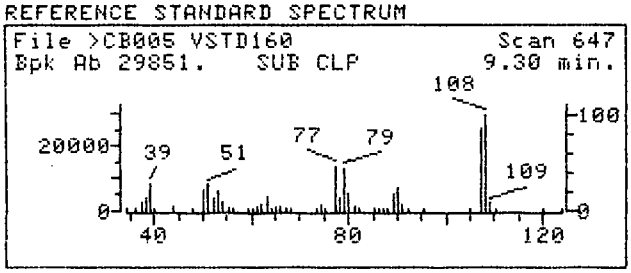
Data File: >B3173::D7
Name: C149651
Misc:
Quant Time: 930817 18:29
Injected at: 930817 17:45
Last Qcal Time: 930817 10:09

Quant Output File: ^B3173::D1
Instrument ID: MSD102
BTL# 5
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

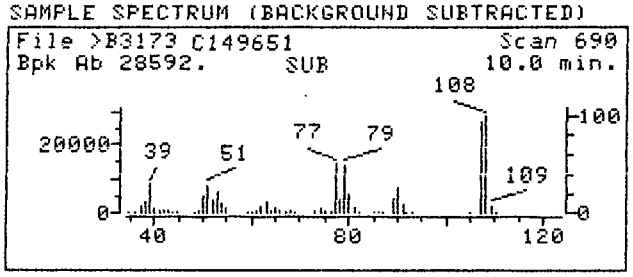
Compound No : 23
Compound Name : 2,4-Dimethylphenol
Scan Number : 832
Retention Time: 11.65 min.
Quant Ion : 107.0
Area : 27697
Concentration : 13.49 UG/L
q-value : 91

HQ 8/17/93

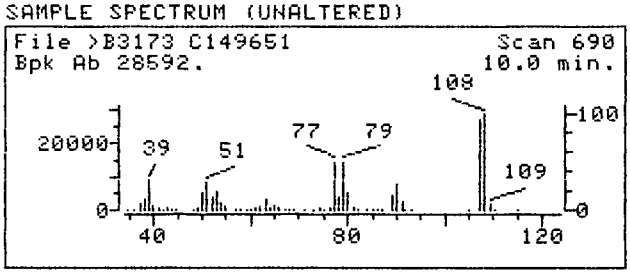
REFERENCE STANDARD SPECTRUM

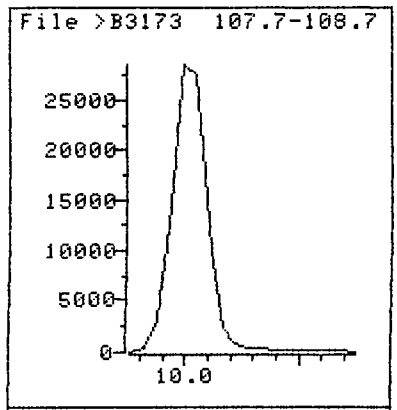


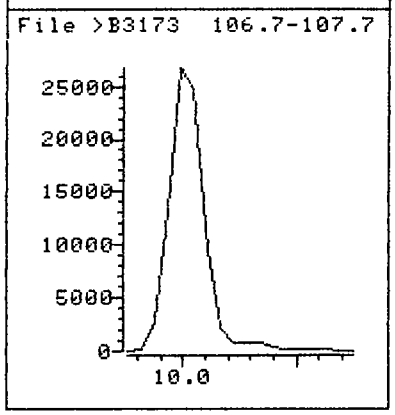
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







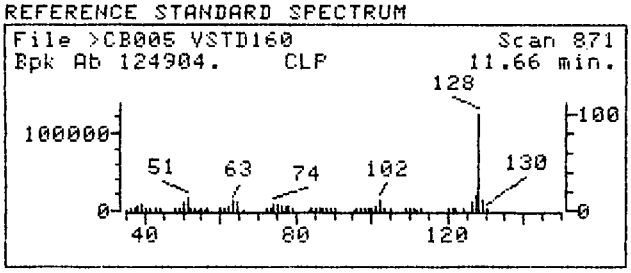
Data File: >B3173::D7
Name: C149651
Misc:
Quant Time: 930817 18:29
Injected at: 930817 17:45
Last Qcal Time: 930817 10:09

Quant Output File: ^B3173::D1
Instrument ID: MSD102
BTL# 5
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

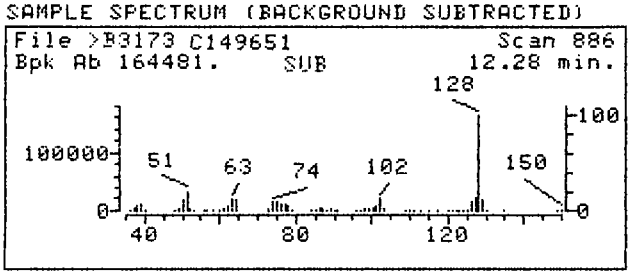
Compound No : 13
Compound Name : 2-Methylphenol
Scan Number : 690
Retention Time: 10.00 min.
Quant Ion : 108.0
Area : 61662
Concentration : 37.45 UG/L
q-value : 78

HQ 8/17/93

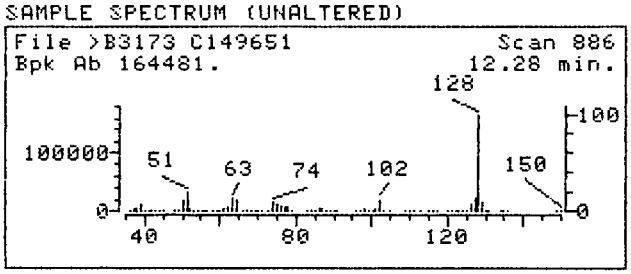
REFERENCE STANDARD SPECTRUM

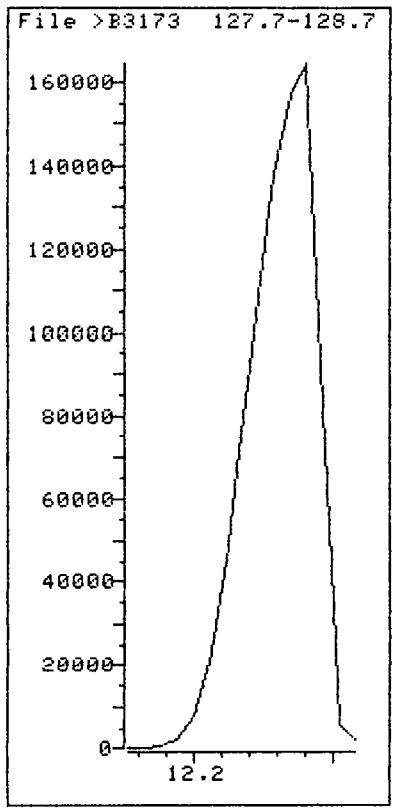


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





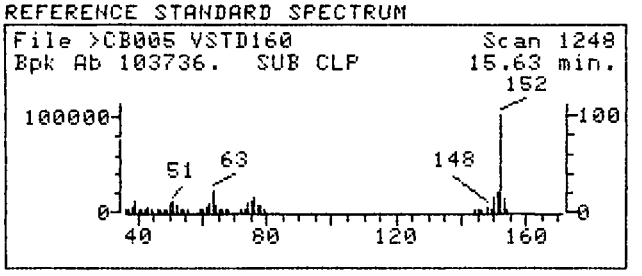
Data File: >B3173::D7
Name: C149651
Misc:
Quant Time: 930817 18:29
Injected at: 930817 17:45
Last Qcal Time: 930817 10:09

Quant Output File: ^B3173::D1
Instrument ID: MSD102
BTL# 5
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

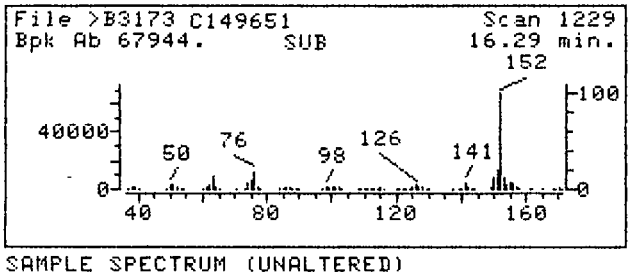
Compound No : 28
Compound Name : Naphthalene
Scan Number : 886
Retention Time: 12.28 min.
Quant Ion : 128.0
Area : 566818
Concentration : 119.28 UG/L
q-value : 100

HQ 8/17/93

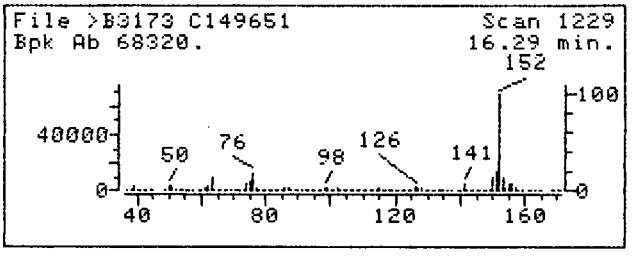
REFERENCE STANDARD SPECTRUM

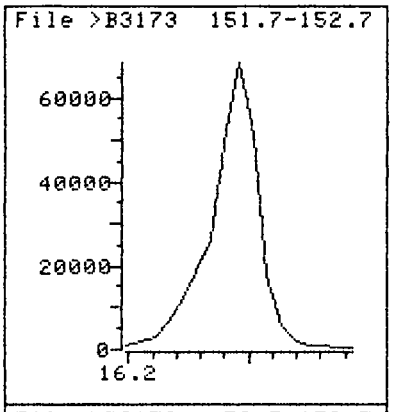


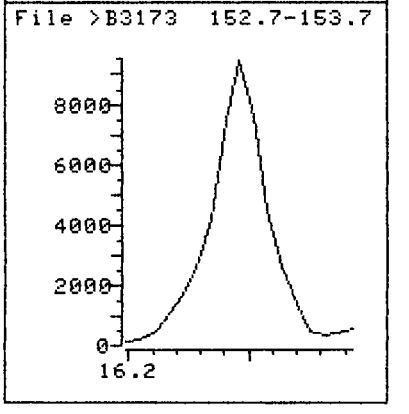
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







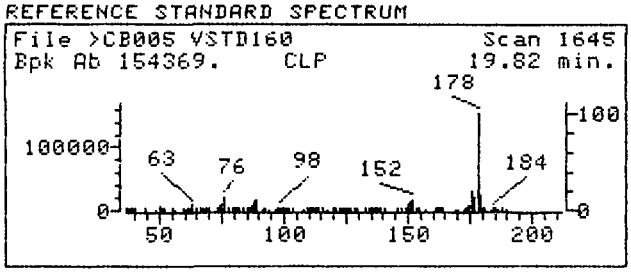
Data File: >B3173::D7
Name: C149651
Misc:
Quant Time: 930817 18:29
Injected at: 930817 17:45
Last Qcal Time: 930817 10:09

Quant Output File: ^B3173::D1
Instrument ID: MSD102
BTL# 5
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

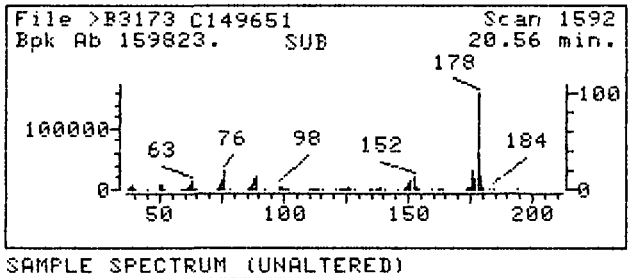
Compound No : 43
Compound Name : Acenaphthylene
Scan Number : 1229
Retention Time: 16.29 min.
Quant Ion : 152.0
Area : 183274
Concentration : 43.49 UG/L
q-value : 86

HQ 8/17/93

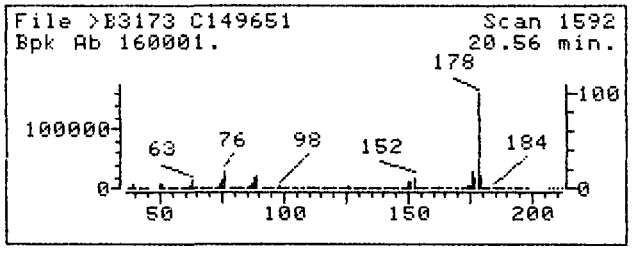
REFERENCE STANDARD SPECTRUM

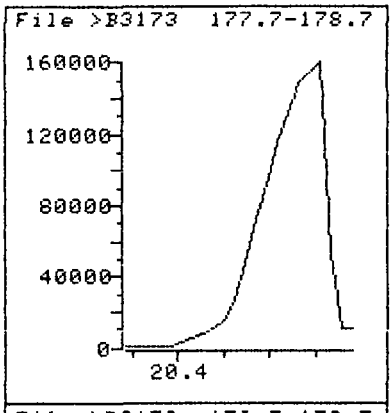


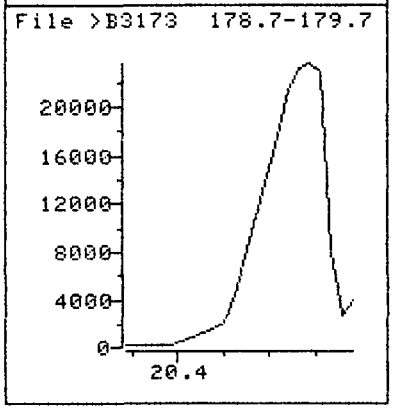
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







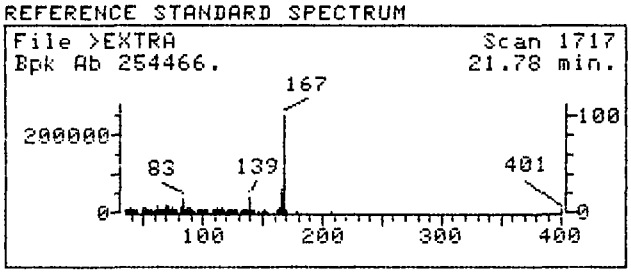
Data File: >B3173::D7
Name: C149651
Misc:
Quant Time: 930817 18:29
Injected at: 930817 17:45
Last Qcal Time: 930817 10:09

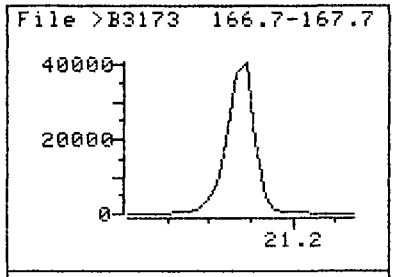
Quant Output File: ^B3173::D1
Instrument ID: MSD102
BTL# 5
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

Compound No : 67
Compound Name : Phenanthrene
Scan Number : 1592
Retention Time: 20.56 min.
Quant Ion : 178.0
Area : 747072
Concentration : 152.95 UG/L
q-value : 96

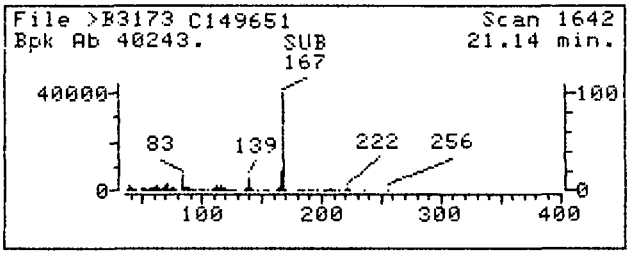
HQ
8/17/93

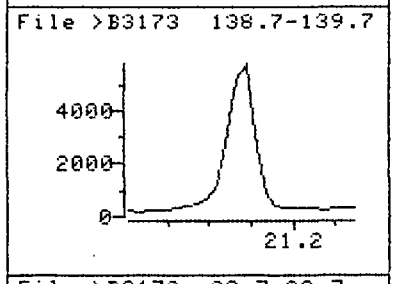
REFERENCE STANDARD SPECTRUM



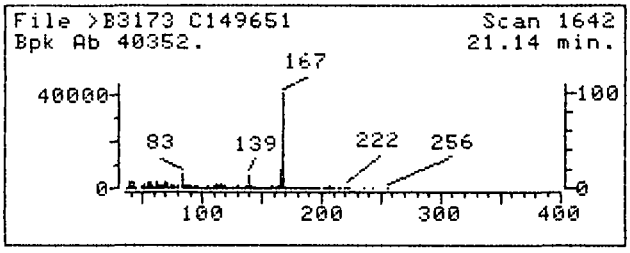


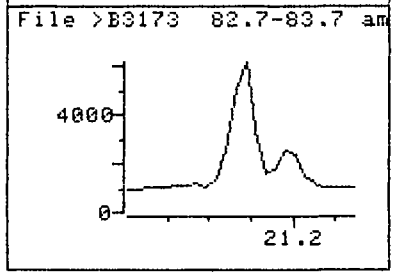
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)





SAMPLE SPECTRUM (UNALTERED)





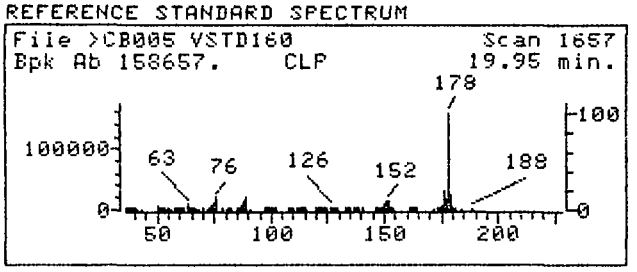
Data File: >B3173::D7
Name: C149651
Misc:
Quant Time: 930817 18:29
Injected at: 930817 17:45
Last Qcal Time: 930817 10:09

Quant Output File: ^B3173::D1
Instrument ID: MSD102
BTL# 5
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

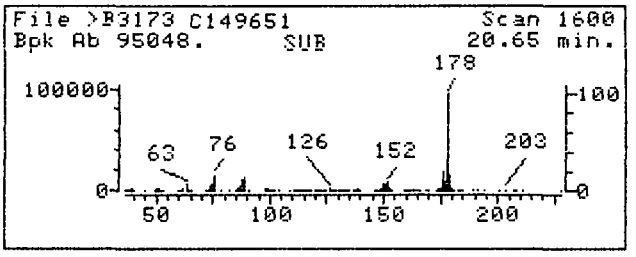
Compound No : 69
Compound Name : Carbazole
Scan Number : 1642
Retention Time: 21.14 min.
Quant Ion : 167.0
Area : 98428
Concentration : 22.65 UG/L
q-value : 97

HQ
8/17/93

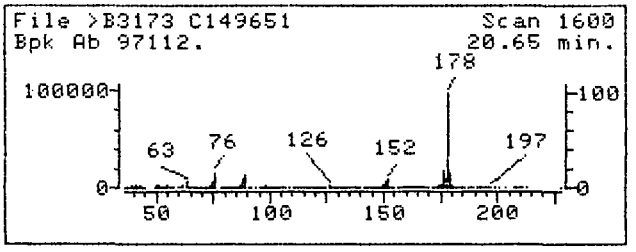
REFERENCE STANDARD SPECTRUM

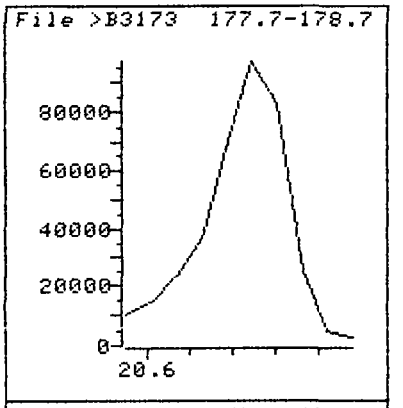


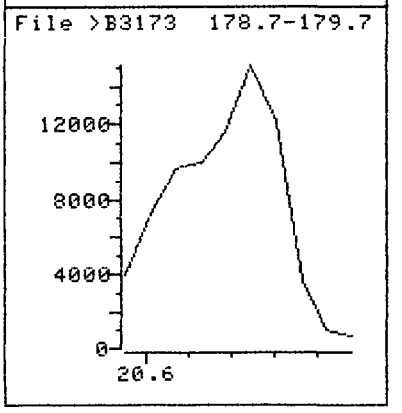
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







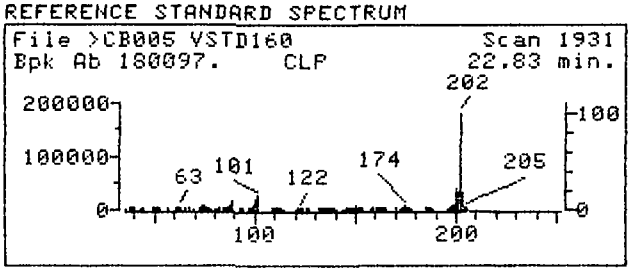
Data File: >B3173::D7
Name: C149651
Misc:
Quant Time: 930817 18:29
Injected at: 930817 17:45
Last Qcal Time: 930817 10:09

Quant Output File: ^B3173::D1
Instrument ID: MSD102
BTL# 5
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

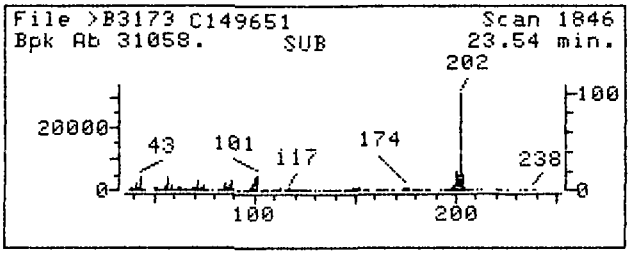
Compound No : 70
Compound Name : Anthracene
Scan Number : 1600
Retention Time: 20.65 min.
Quant Ion : 178.0
Area : 210880
Concentration : 45.53 UG/L
q-value : 98

HQ
8/17/93

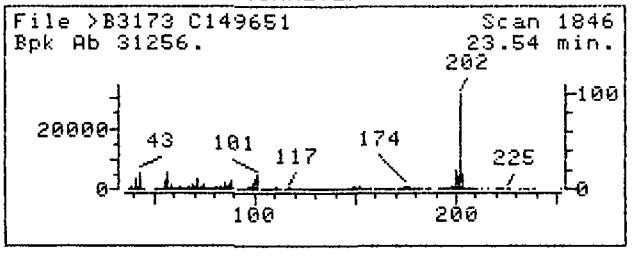
REFERENCE STANDARD SPECTRUM

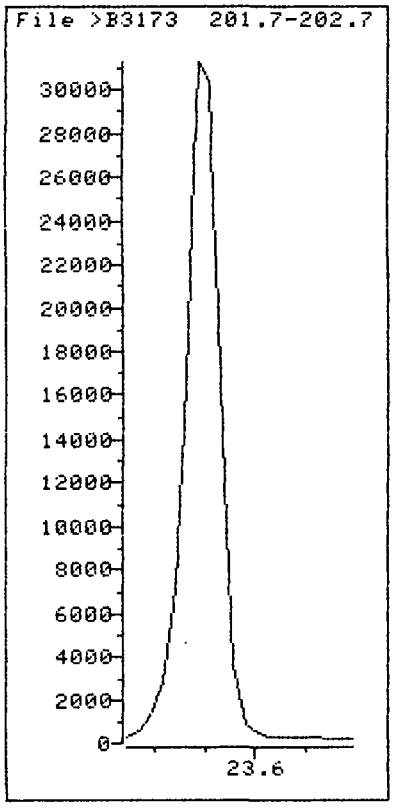


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





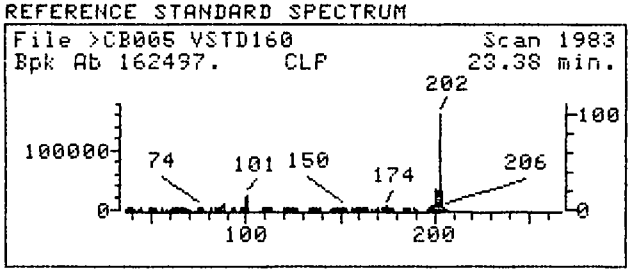
Data File: >B3173::D7
Name: C149651
Misc:
Quant Time: 930817 18:29
Injected at: 930817 17:45
Last Qcal Time: 930817 10:09

Quant Output File: ^B3173::D1
Instrument ID: MSD102
BTL# 5
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

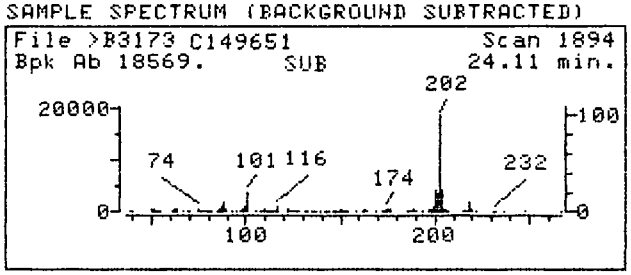
Compound No : 74
Compound Name : Fluoranthene
Scan Number : 1846
Retention Time: 23.54 min.
Quant Ion : 202.0
Area : 75009
Concentration : 17.09 UG/L
q-value : 100

HQ
8/17/93

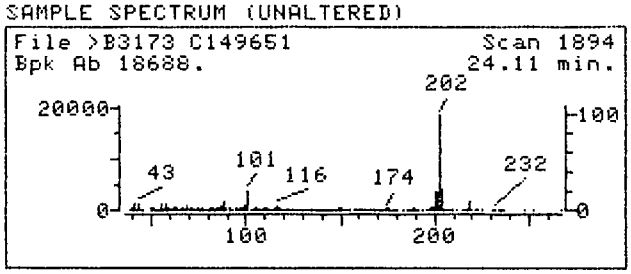
REFERENCE STANDARD SPECTRUM

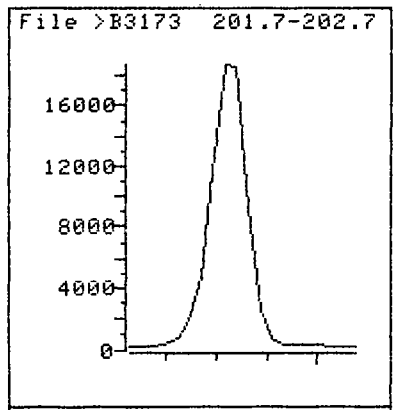


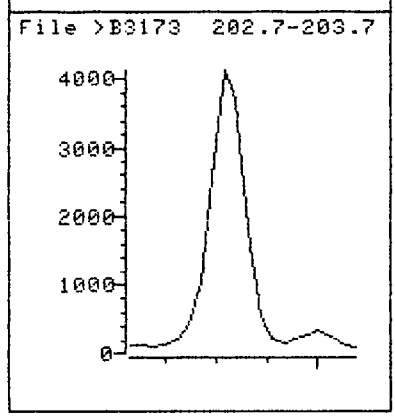
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >B3173::D7
Name: C149651
Misc:
Quant Time: 930817 18:29
Injected at: 930817 17:45
Last Qcal Time: 930817 10:09

Quant Output File: ^B3173::D1
Instrument ID: MSD102
BTL# 5
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

Compound No : 77
Compound Name : Pyrene
Scan Number : 1894
Retention Time: 24.11 min.
Quant Ion : 202.0
Area : 48581
Concentration : 13.83 UG/L
q-value : 88

HQ 8/17/93

QUANT REPORT

Operator ID: HAIYAN
Output File: ^B3174::D1
Data File: >B3174::D7
Name: C149652
Misc:

Quant Rev: 7
Quant Time: 930817 19:22
Injected at: 930817 18:37
Dilution Factor: 1.00000
Instrument ID: MSD102
BTL# 6

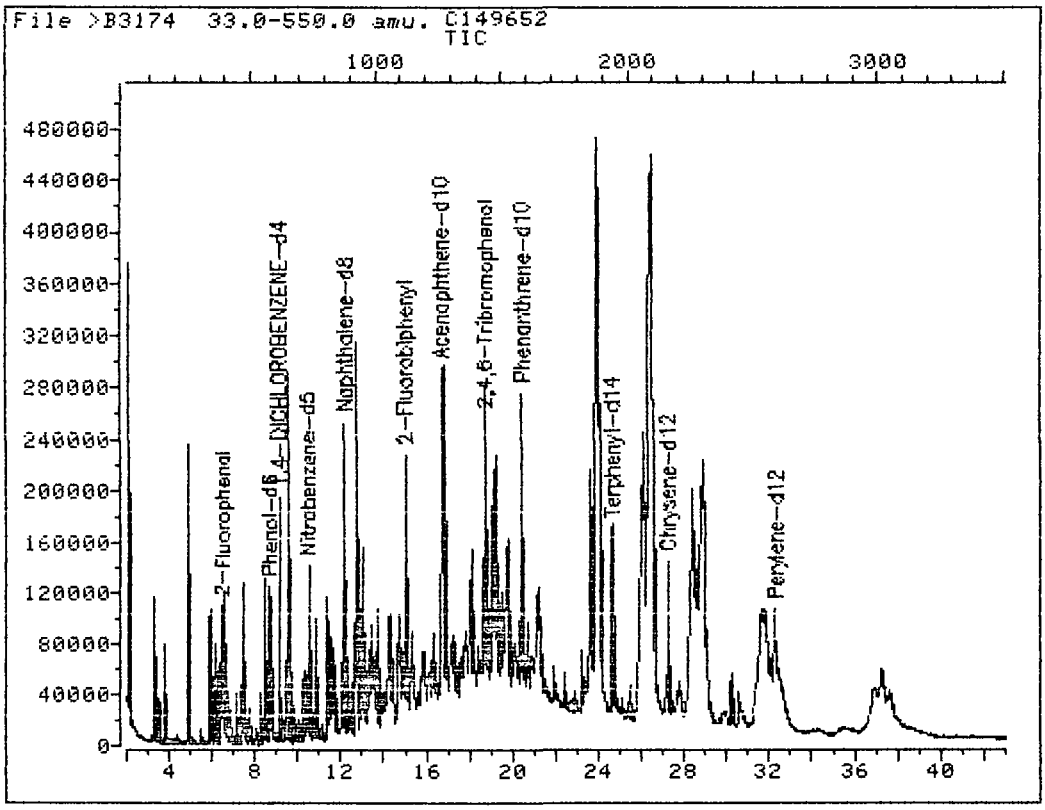
ID File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14
Last Qcal Time: 930817 10:09

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-d4	9.12	152.0	49312	40.00	UG/L	97
2)	Pyridine	3.28	79.0	50196	23.68	UG/L	95
3)	2-Picoline	4.86	93.0	96048	55.24	UG/L	83
4)	2-Fluorophenol	6.46	112.0	72993	49.55	UG/L	70
5)	Phenol	8.70	94.0	7539^	3.31	UG/L	66
~~6)~~	~~bis(2-chloroethyl)ether~~	~~8.41~~	~~93.0~~	~~75855~~	~~41.11~~	~~UG/L~~	100
10)	Phenol-d6	8.67	99.0	86250	41.58	UG/L	92
18)	*Naphthalene-d8	12.20	136.0	202947	40.00	UG/L	85
19)	Nitrobenzene	10.49	77.0	5138	2.16	UG/L	76
22)	Nitrobenzene-d5	10.46	82.0	71910	28.20	UG/L	87
23)	2,4-Dimethylphenol	11.62	107.0	51146	24.70	UG/L	85
28)	Naphthalene	12.24	128.0	15581	3.25	UG/L	100
32)	2-Methylnaphthalene	13.99	142.0	10304	3.20	UG/L	80
33)	*Acenaphthene-d10	16.64	164.0	124710	40.00	UG/L	100
35)	2-Fluorobiphenyl	14.98	172.0	130280	36.53	UG/L	98
43)	Acenaphthylene	16.27	152.0	3247	.567	UG/L	97
46)	Acenaphthene	16.72	153.0	143215	42.63	UG/L	91
49)	Dibenzofuran	17.17	168.0	16848	3.35	UG/L	98
52)	Diethylphthalate	17.90	149.0	4928	1.04	UG/L	100
54)	Fluorene	18.05	166.0	26355	7.12	UG/L	100
56)	2,4,6-Tribromophenol	18.70	329.8	88974	99.21	UG/L	100
57)	*Phenanthrene-d10	20.44	188.0	196108	40.00	UG/L	100
60)	Benzidine	18.63	77.0	7679	1.23	UG/L	48
67)	Phenanthrene	20.50	178.0	4188	.820	UG/L	80
69)	Carbazole	21.13	167.0	5060	1.11	UG/L	72
70)	Anthracene	20.50	178.0	4188	.865	UG/L	86
73)	Di-n-butylphthalate	22.11	149.0	6399	.890	UG/L	86
74)	Fluoranthene	23.54	202.0	52151	11.37	UG/L	100
75)	*Chrysene-d12	27.23	240.0	108270	40.00	UG/L	100
77)	Pyrene	24.11	202.0	34689	8.58	UG/L	95
91)	bis(2-Ethylhexyl)phthalate	27.46	149.0	6503	1.93	UG/L	91
93)	Terphenyl-d14	24.60	244.0	123094	41.53	UG/L	100
94)	*Perylene-d12	32.27	264.0	87205	40.00	UG/L	100

* Compound is ISTD

dQ
8/17/93

TOTAL ION CHROMATOGRAM



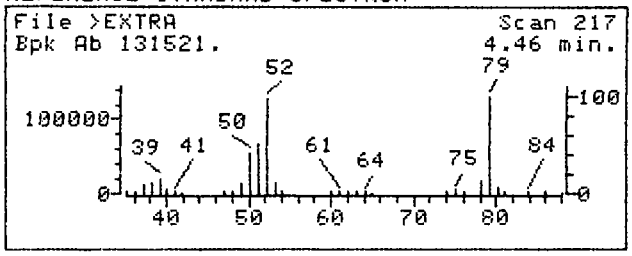
Data File: >B3174::D7 Quant Output File: ^B3174::D1
Name: C149652 Instrument ID: MSD102
Misc: BTL# 6

Id File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14 Last Qcal Time: 930817 10:09

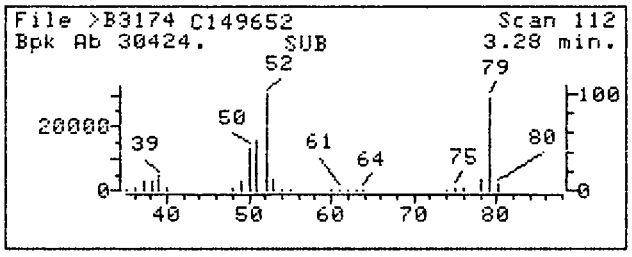
Operator ID: HAIYAN
Quant Time : 930817 19:22
Injected at: 930817 18:37

HO 8/17/93

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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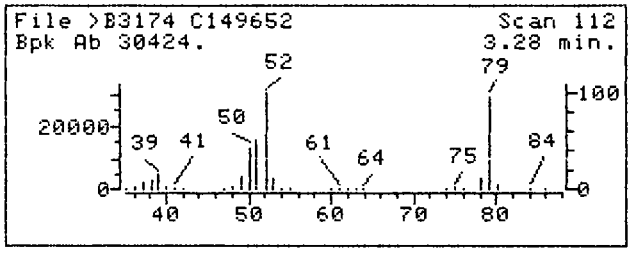
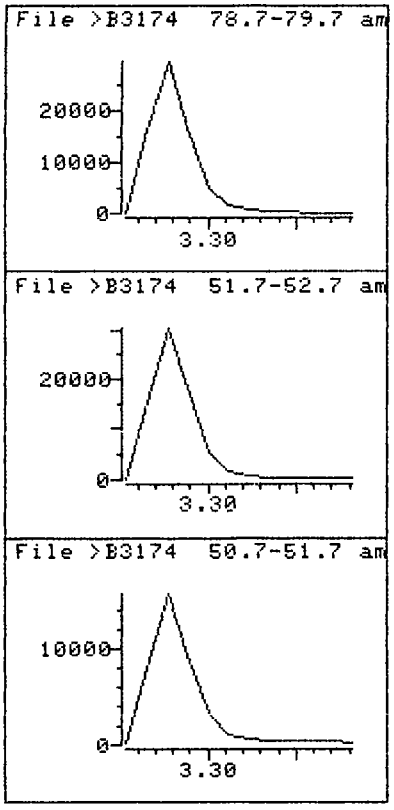




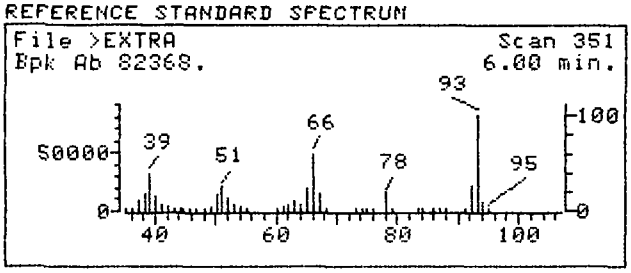
Data File: >B3174::D7
Name: C149652
Misc:
Quant Time: 930817 19:22
Injected at: 930817 18:37
Last Qcal Time: 930817 10:09

Quant Output File: ^B3174::D1
Instrument ID: MSD102
BTL# 6
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

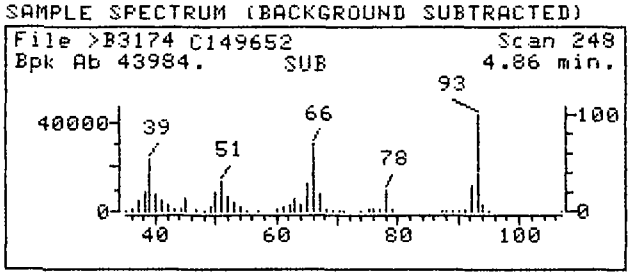
Compound No : 2
Compound Name : Pyridine
Scan Number : 112
Retention Time: 3.28 min.
Quant Ion : 79.0
Area : 50196
Concentration : 23.68 UG/L
q-value : 95

μQ
8/17/93

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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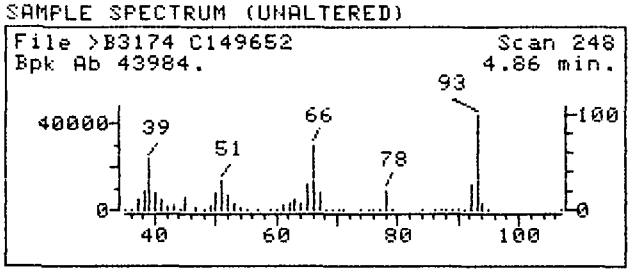
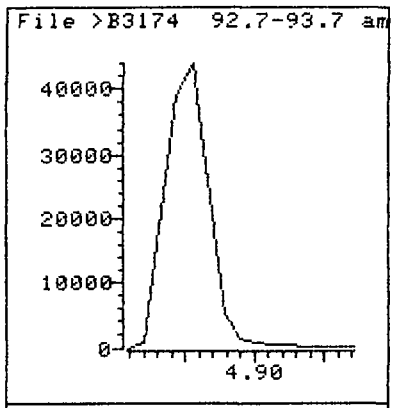
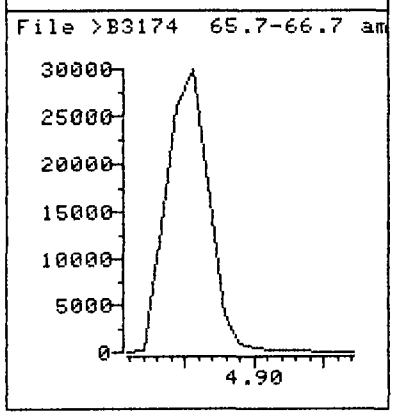






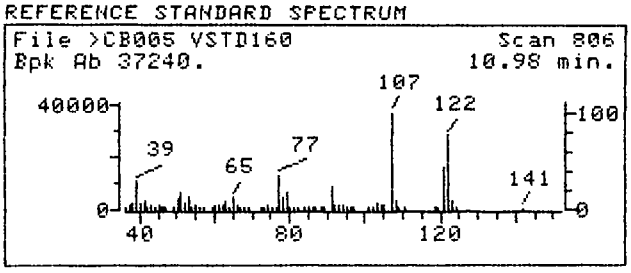
Data File: >B3174::D7
Name: C149652
Misc:
Quant Time: 930817 19:22
Injected at: 930817 18:37
Last Qcal Time: 930817 10:09

Quant Output File: ^B3174::D1
Instrument ID: MSD102
BTL# 6
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

Compound No : 3
Compound Name : 2-Picoline
Scan Number : 248
Retention Time: 4.86 min.
Quant Ion : 93.0
Area : 96048
Concentration : 55.24 UG/L
q-value : 83

HQ
8/17/93

REFERENCE STANDARD SPECTRUM



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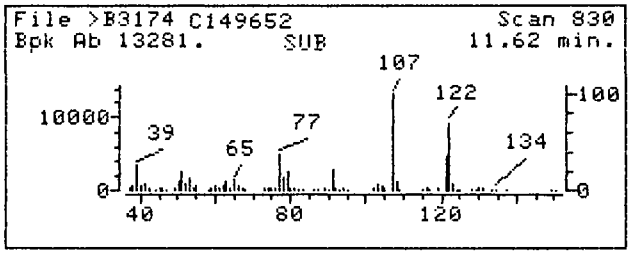

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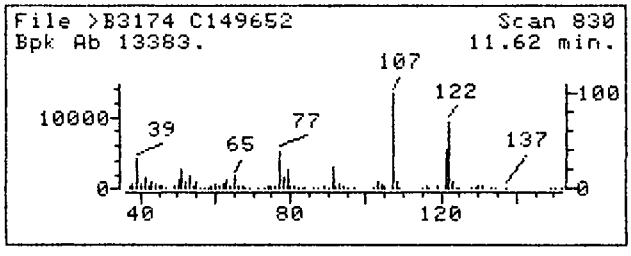
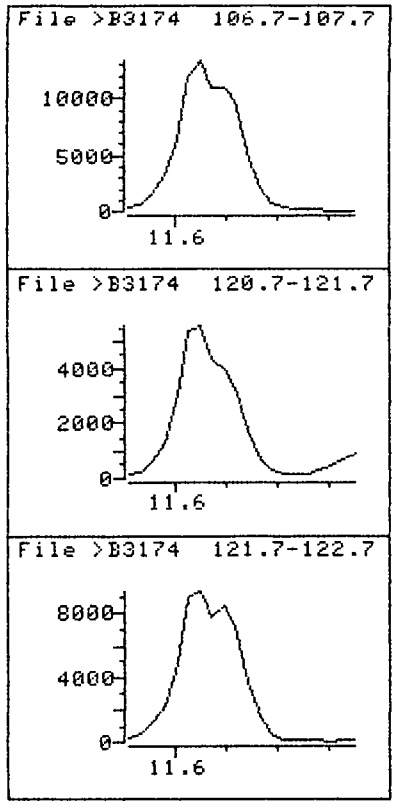




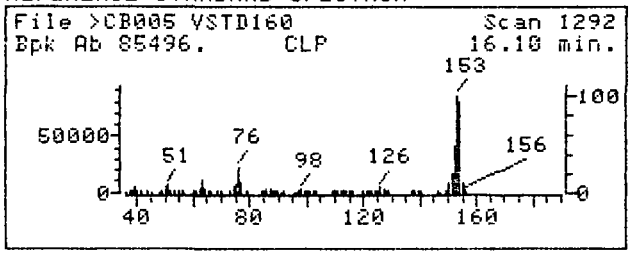
Data File: >B3174::D7
Name: C149652
Misc:
Quant Time: 930817 19:22
Injected at: 930817 18:37
Last Qcal Time: 930817 10:09

Quant Output File: ^B3174::D1
Instrument ID: MSD102
BTL# 6
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

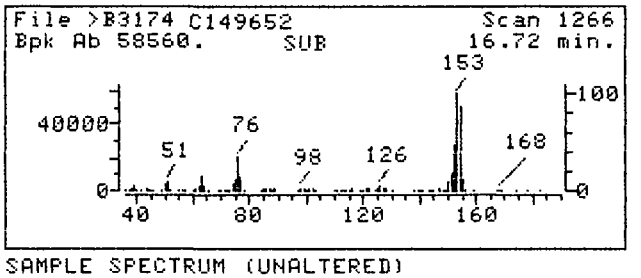
Compound No : 23
Compound Name : 2,4-Dimethylphenol
Scan Number : 830
Retention Time: 11.62 min.
Quant Ion : 107.0
Area : 51146
Concentration : 24.70 UG/L
q-value : 85

HQ
8/17/93

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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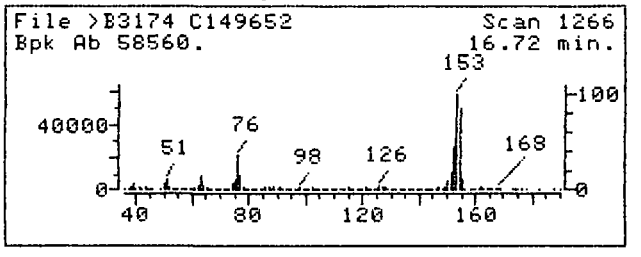
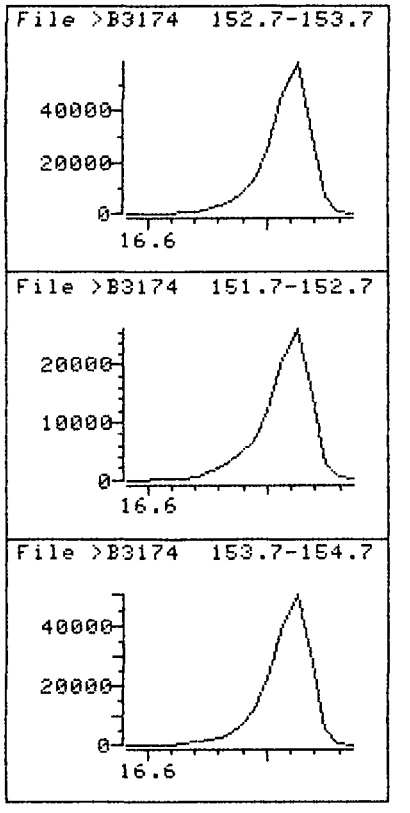




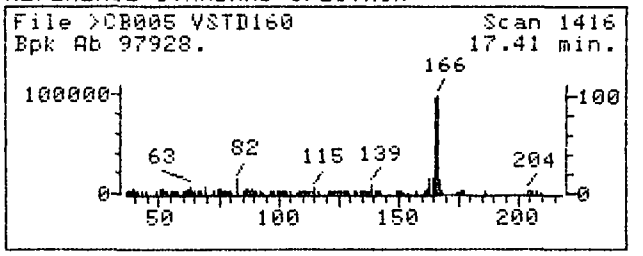
Data File: >B3174::D7
Name: C149652
Misc:
Quant Time: 930817 19:22
Injected at: 930817 18:37
Last Qcal Time: 930817 10:09

Quant Output File: ^B3174::D1
Instrument ID: MSD102
BTL# 6
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

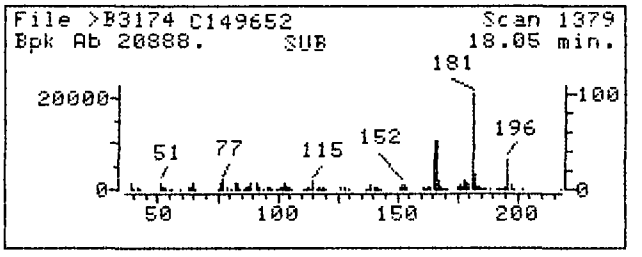
Compound No : 46
Compound Name : Acenaphthene
Scan Number : 1266
Retention Time: 16.72 min.
Quant Ion : 153.0
Area : 143215
Concentration : 42.63 UG/L
q-value : 91

HQ
8/17/93

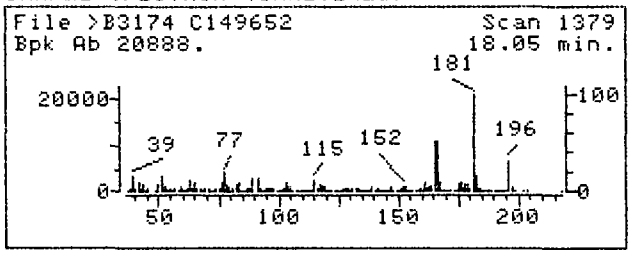
REFERENCE STANDARD SPECTRUM

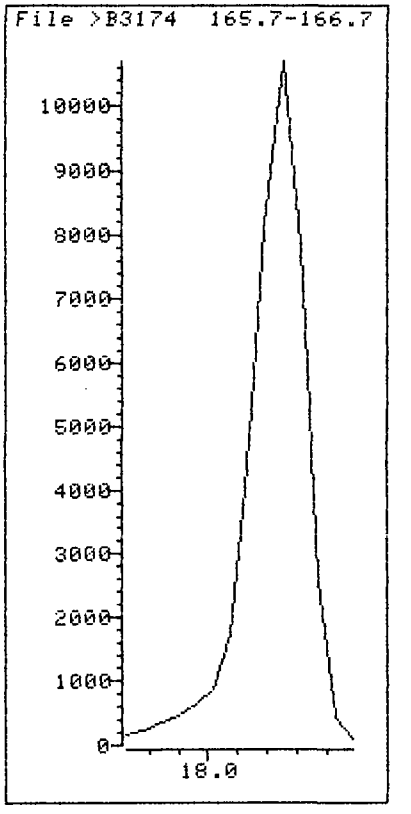


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





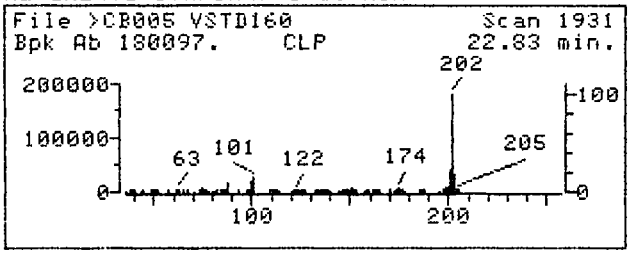
Data File: >B3174::D7
Name: C149652
Misc:
Quant Time: 930817 19:22
Injected at: 930817 18:37
Last Qcal Time: 930817 10:09

Quant Output File: ^B3174::D1
Instrument ID: MSD102
BTL# 6
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

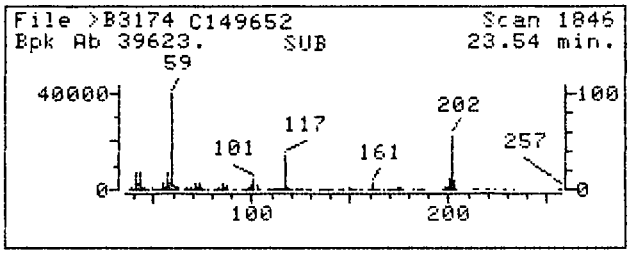
Compound No : 54
Compound Name : Fluorene
Scan Number : 1379
Retention Time: 18.05 min.
Quant Ion : 166.0
Area : 26355
Concentration : 7.12 UG/L
q-value : 100

HQ
8/17/93

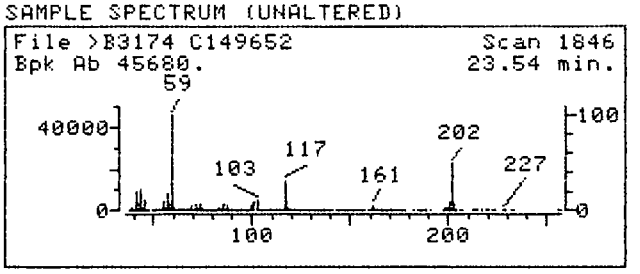
REFERENCE STANDARD SPECTRUM

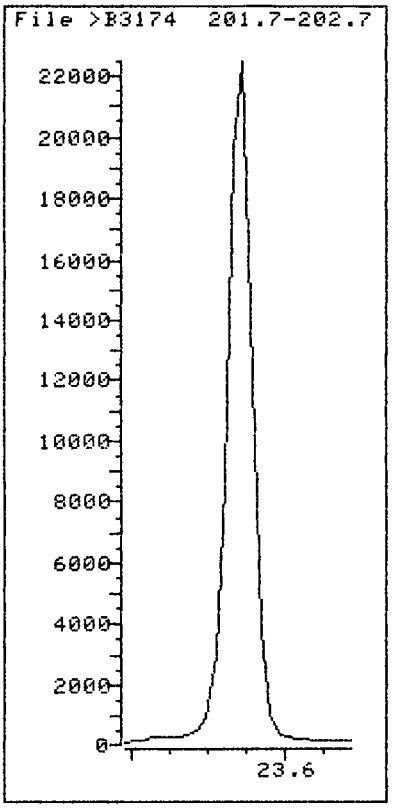


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





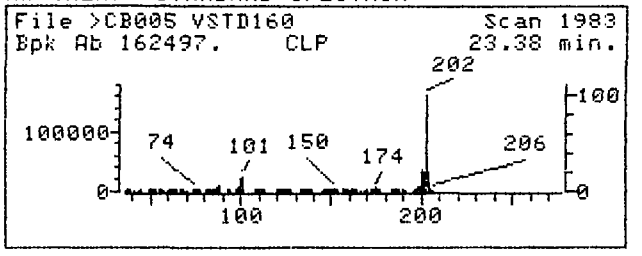
Data File: >B3174::D7
Name: C149652
Misc:
Quant Time: 930817 19:22
Injected at: 930817 18:37
Last Qcal Time: 930817 10:09

Quant Output File: ^B3174::D1
Instrument ID: MSD102
BTL# 6
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

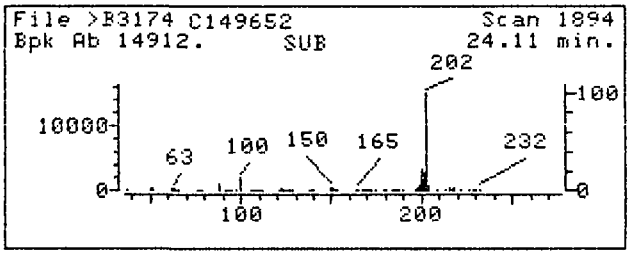
Compound No : 74
Compound Name : Fluoranthene
Scan Number : 1846
Retention Time: 23.54 min.
Quant Ion : 202.0
Area : 52151
Concentration : 11.37 UG/L
q-value : 100

HO 8/17/93

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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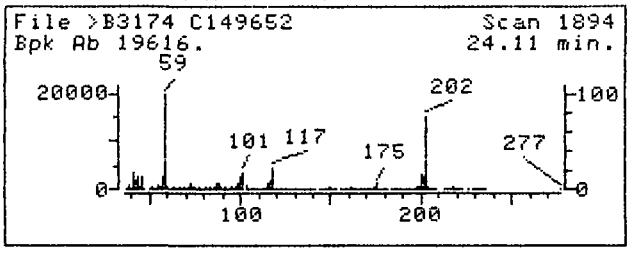
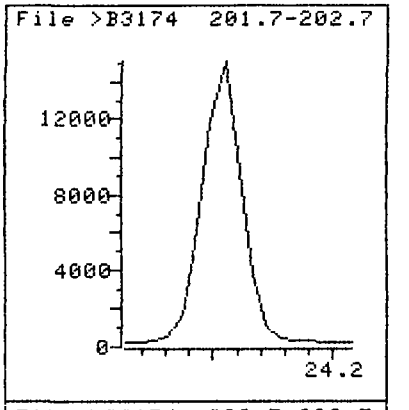
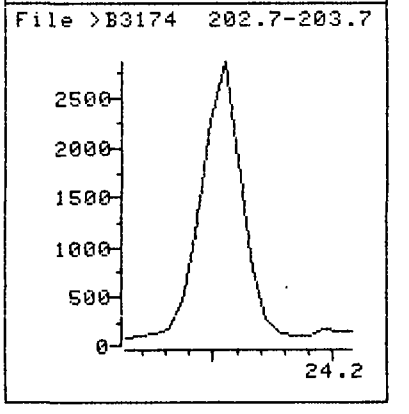






Data File: >B3174::D7
Name: C149652
Misc:
Quant Time: 930817 19:22
Injected at: 930817 18:37
Last Qcal Time: 930817 10:09

Quant Output File: ^B3174::D1
Instrument ID: MSD102
BTL# 6
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

Compound No : 77
Compound Name : Pyrene
Scan Number : 1894
Retention Time: 24.11 min.
Quant Ion : 202.0
Area : 34689
Concentration : 8.58 UG/L
q-value : 95

HG 8/18/93

QUANT REPORT

Operator ID: HAIYAN
Output File: ^B3181::D1
Data File: >B3181::D7
Name: C149650 1:10 Rep. 1
Misc:

Quant Rev: 7
Quant Time: 930818 19:07
Injected at: 930818 18:20
Dilution Factor: 1.00000
Instrument ID: MSD102
BTL# 3

ID File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14
Last Qcal Time: 930818 15:32

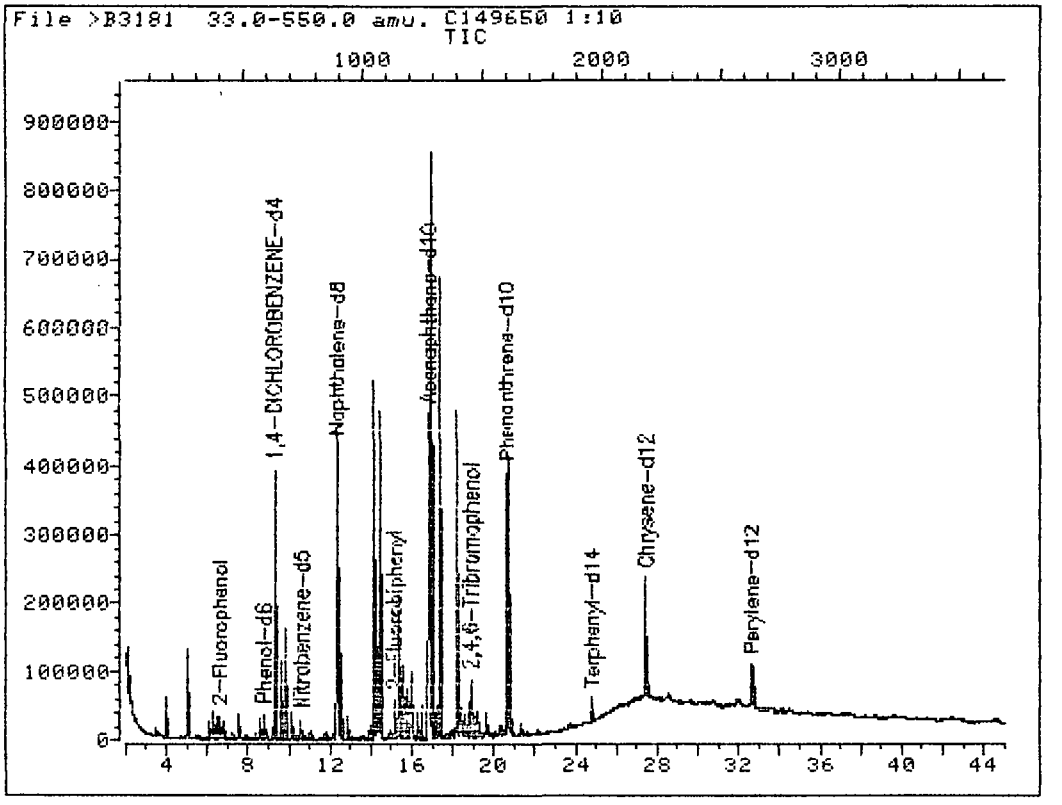
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-d4	9.25	152.0	101345	40.00	UG/L	97
2)	Pyridine	3.46	79.0	7454	1.55	UG/L	87
3)	2-Picoline	4.99	93.0	54887	13.83	UG/L	95
4)	2-Fluorophenol	6.57	112.0	15956	4.89	UG/L	78
5)	Phenol	8.79	94.0	7763	1.60	UG/L	90
6)	bis(2-chloroethyl)ether	8.53	93.0	19501	5.02	UG/L	100
10)	Phenol-d6	8.75	99.0	25101	5.51	UG/L	95
13)	2-Methylphenol	10.09	108.0	14787	4.13	UG/L	78
18)	*Naphthalene-d8	12.32	136.0	411241	40.00	UG/L	89
22)	Nitrobenzene-d5	10.58	82.0	17378	3.27	UG/L	85
23)	2,4-Dimethylphenol	11.74	107.0	4062	.962	UG/L	87
24)	Benzoic acid	12.06	122.0	8405M	3.81	UG/L	91
*28)	Naphthalene	12.38	128.0	355004	36.85	UG/L	100
*32)	2-Methylnaphthalene	14.15	142.0	300056	50.34	UG/L	78
33)	*Acenaphthene-d10	16.79	164.0	239640	40.00	UG/L	100
35)	2-Fluorobiphenyl	15.11	172.0	34511	4.68	UG/L	97
43)	Acenaphthylene	16.40	152.0	38838	3.47	UG/L	86
*46)	Acenaphthene	16.88	153.0	600253	89.71	UG/L	95
*49)	Dibenzofuran	17.32	168.0	598537	64.36	UG/L	98
*54)	Fluorene	18.20	166.0	306202	45.46	UG/L	100
55)	4-Nitroaniline	18.20	138.0	3692	1.91	UG/L	100
56)	2,4,6-Tribromophenol	18.82	329.8	14528	11.07	UG/L	100
57)	*Phenanthrene-d10	20.58	188.0	343311	40.00	UG/L	100
67)	Phenanthrene	20.64	178.0	162496	17.94	UG/L	94
69)	Carbazole	21.26	167.0	16329	1.98	UG/L	98
70)	Anthracene	20.77	178.0	27892	3.20	UG/L	97
74)	Fluoranthene	23.70	202.0	5319	.642	UG/L	100
75)	*Chrysene-d12	27.39	240.0	162623	40.00	UG/L	100
77)	Pyrene	24.26	202.0	3156	.482	UG/L	89
93)	Terphenyl-d14	24.75	244.0	26045	5.56	UG/L	100
94)	*Perylene-d12	32.58	264.0	112845	40.00	UG/L	100

* Compound is ISTD

* REPORT ONLY.

HO 8/18/93

TOTAL ION CHROMATOGRAM



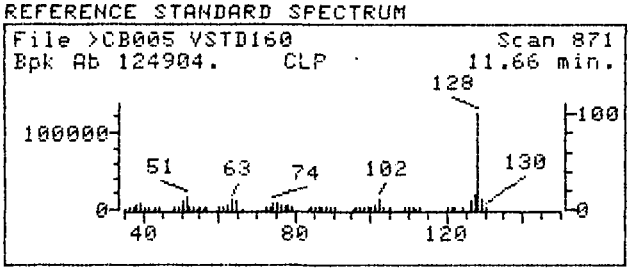
Data File: >B3181::D7 Quant Output File: ^B3181::D1
Name: C149650 1:10 Instrument ID: MSD102
Misc: BTL# 3

Id File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14 Last Qcal Time: 930818 15:32

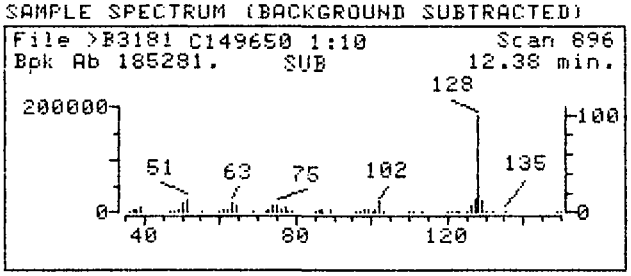
Operator ID: HAIYAN
Quant Time : 930818 19:07
Injected at: 930818 18:20

HQ 8/18/93

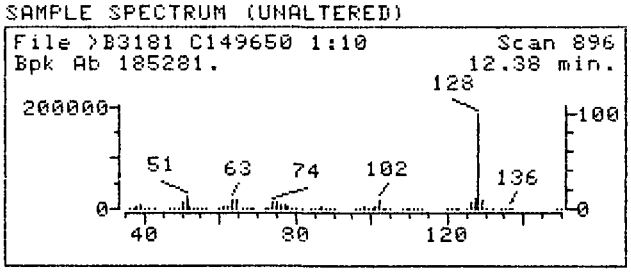
REFERENCE STANDARD SPECTRUM

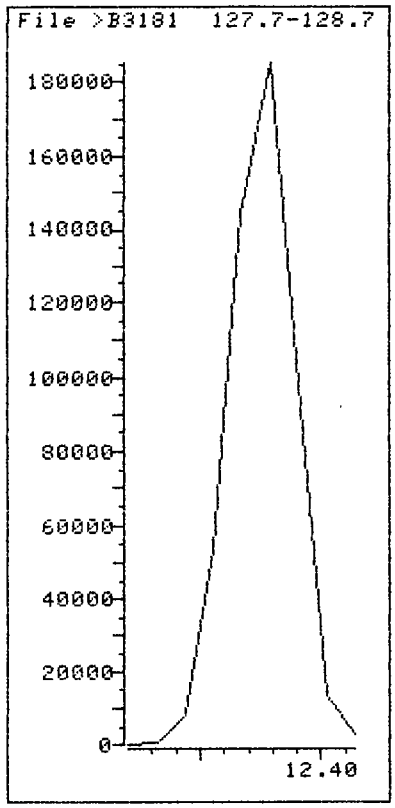


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





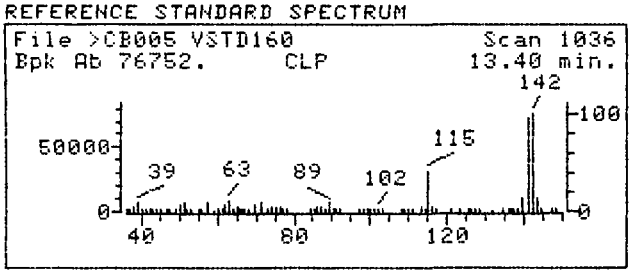
Data File: >B3181::D7
Name: C149650 1:10
Misc:
Quant Time: 930818 19:07
Injected at: 930818 18:20
Last Qcal Time: 930818 15:32

Quant Output File: ^B3181::D1
Instrument ID: MSD102
BTL# 3
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

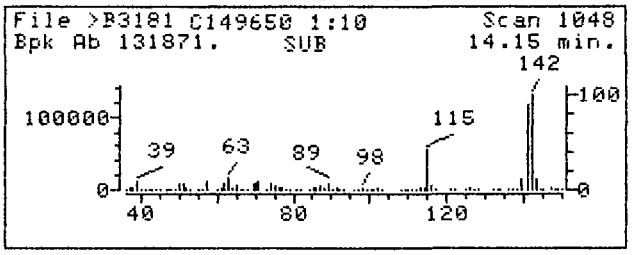
Compound No : 28
Compound Name : Naphthalene
Scan Number : 896
Retention Time: 12.38 min.
Quant Ion : 128.0
Area : 355004
Concentration : 36.85 UG/L
q-value : 100

HO
8/18/93

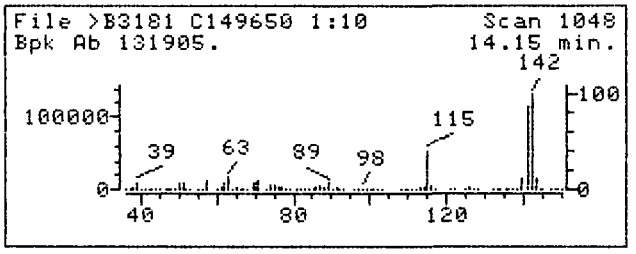
REFERENCE STANDARD SPECTRUM

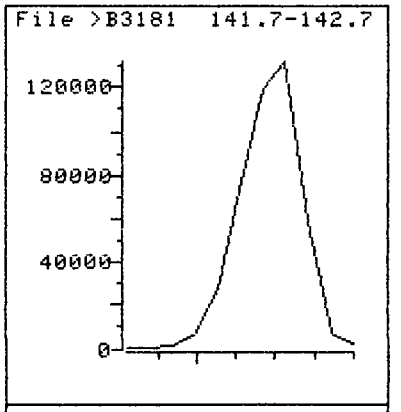


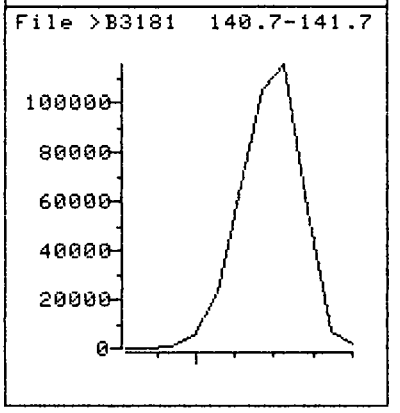
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







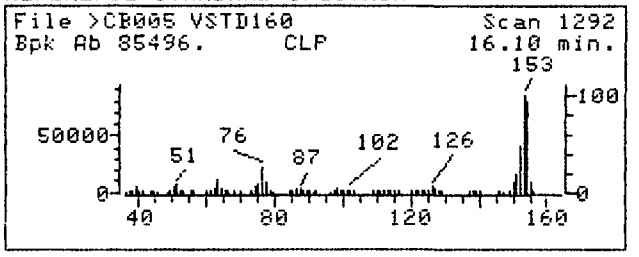
Data File: >B3181::D7
Name: C149650 1:10
Misc:
Quant Time: 930818 19:07
Injected at: 930818 18:20
Last Qcal Time: 930818 15:32

Quant Output File: ^B3181::D1
Instrument ID: MSD102
BTL# 3
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

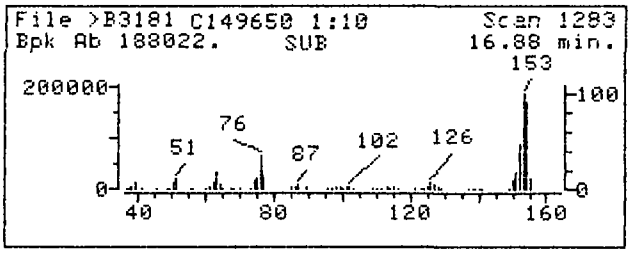
Compound No : 32
Compound Name : 2-Methylnaphthalene
Scan Number : 1048
Retention Time: 14.15 min.
Quant Ion : 142.0
Area : 300056
Concentration : 50.34 UG/L
q-value : 78

HO
8/18/93

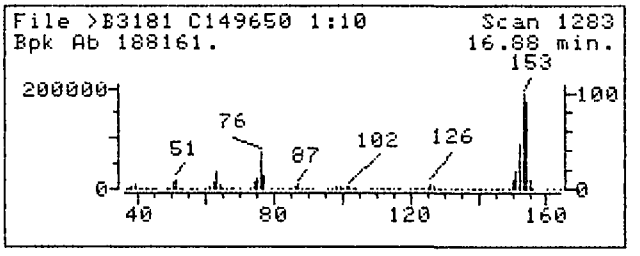
REFERENCE STANDARD SPECTRUM

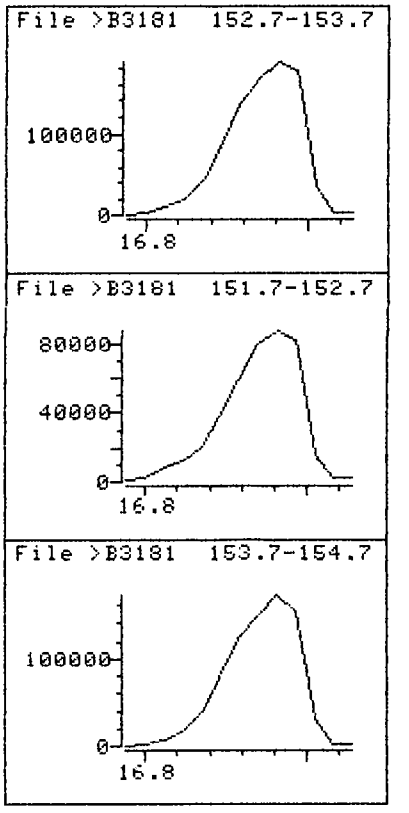


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





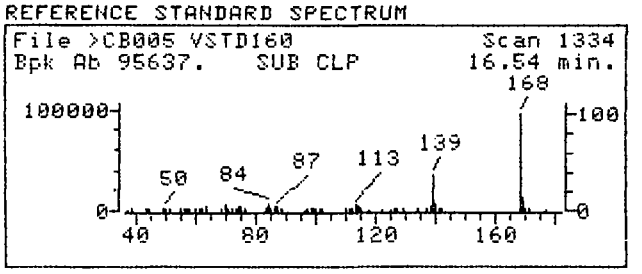
Data File: >B3181::D7
Name: C149650 1:10
Misc:
Quant Time: 930818 19:07
Injected at: 930818 18:20
Last Qcal Time: 930818 15:32

Quant Output File: ^B3181::D1
Instrument ID: MSD102
BTL# 3
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

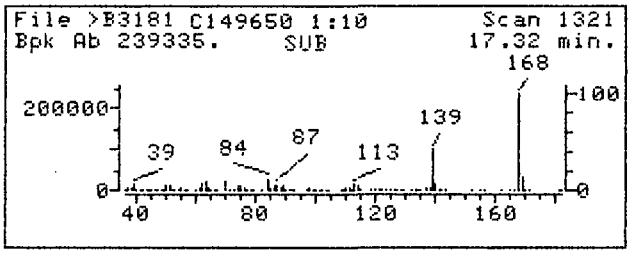
Compound No : 46
Compound Name : Acenaphthene
Scan Number : 1283
Retention Time: 16.88 min.
Quant Ion : 153.0
Area : 600253
Concentration : 89.71 UG/L
q-value : 95

HQ
8/18/93

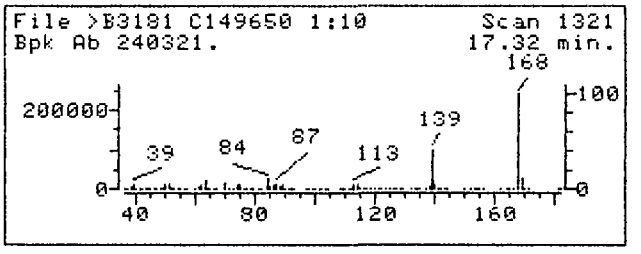
REFERENCE STANDARD SPECTRUM

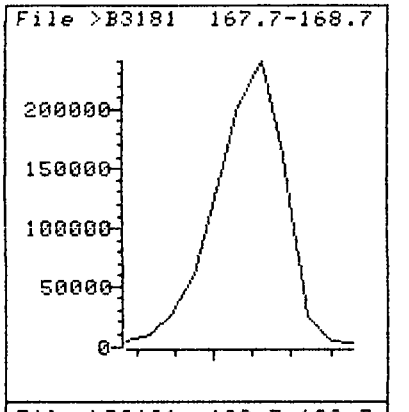


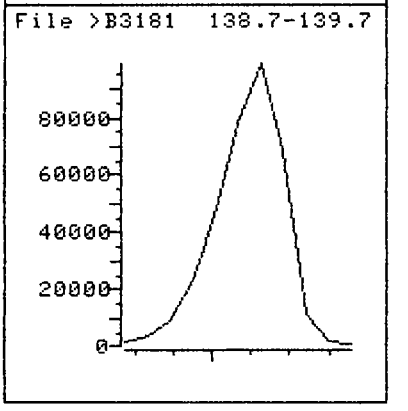
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







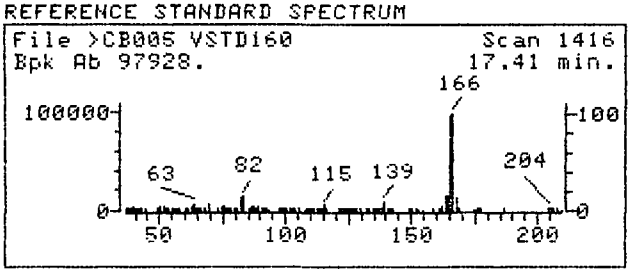
Data File: >B3181::D7
Name: C149650 1:10
Misc:
Quant Time: 930818 19:07
Injected at: 930818 18:20
Last Qcal Time: 930818 15:32

Quant Output File: ^B3181::D1
Instrument ID: MSD102
BTL# 3
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

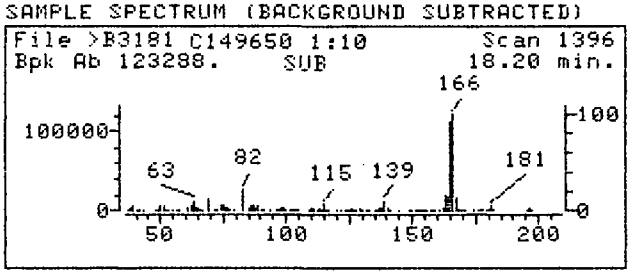
Compound No : 49
Compound Name : Dibenzofuran
Scan Number : 1321
Retention Time: 17.32 min.
Quant Ion : 168.0
Area : 598537
Concentration : 64.36 UG/L
q-value : 98

HO 8/18/93

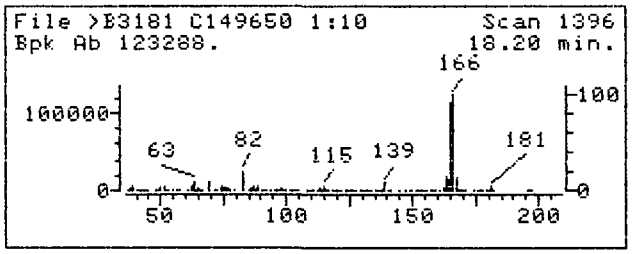
REFERENCE STANDARD SPECTRUM

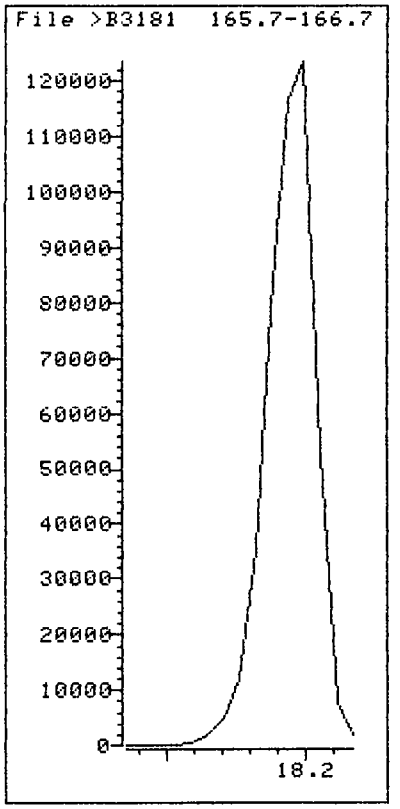


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





Data File: >B3181::D7
Name: C149650 1:10
Misc:
Quant Time: 930818 19:07
Injected at: 930818 18:20
Last Qcal Time: 930818 15:32

Quant Output File: ^B3181::D1
Instrument ID: MSD102
BTL# 3
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

Compound No : 54
Compound Name : Fluorene
Scan Number : 1396
Retention Time: 18.20 min.
Quant Ion : 166.0
Area : 306202
Concentration : 45.46 UG/L
q-value : 100

HQ 8/18/93

QUANT REPORT

Operator ID: HAIYAN
Output File: ^B3182::D1
Data File: >B3182::D7
Name: C149651 1:10
Misc:

Quant Rev: 7
Quant Time: 930818 20:01
Injected at: 930818 19:15
Dilution Factor: 1.00000
Instrument ID: MSD102
BTL# 4

ID File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14
Last Qcal Time: 930818 15:32

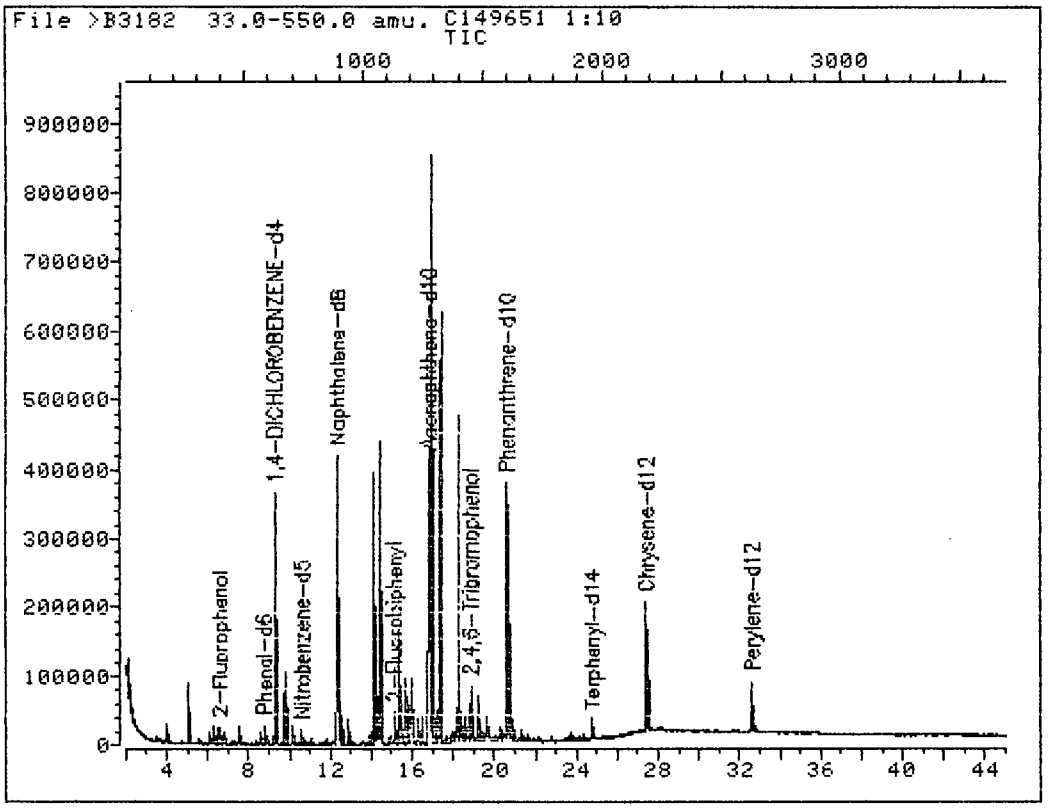
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-d4	9.25	152.0	96328	40.00	UG/L	97
2)	Pyridine	3.46	79.0	5341	1.17	UG/L	79
3)	2-Picoline	4.99	93.0	39340	10.43	UG/L	93
4)	2-Fluorophenol	6.57	112.0	11922	3.85	UG/L	81
5)	Phenol	8.79	94.0	5869	1.28	UG/L	93
6)	bis(2-chloroethyl)ether	8.53	93.0	11618	3.15	UG/L	100
10)	Phenol-d6	8.75	99.0	19250	4.45	UG/L	97
13)	2-Methylphenol	10.09	108.0	11121	3.27	UG/L	76
18)	*Naphthalene-d8	12.32	136.0	383835	40.00	UG/L	90
22)	Nitrobenzene-d5	10.58	82.0	12589	2.54	UG/L	87
23)	2,4-Dimethylphenol	11.74	107.0	4556	1.16	UG/L	91
24)	Benzoic acid	12.02	122.0	584	.283	UG/L	83
28)	Naphthalene	12.36	128.0	162741	18.10	UG/L	100
*32)	2-Methylnaphthalene	14.13	142.0	227810	40.95	UG/L	80
33)	*Acenaphthene-d10	16.77	164.0	221073	40.00	UG/L	100
35)	2-Fluorobiphenyl	15.11	172.0	26579	3.90	UG/L	96
43)	Acenaphthylene	16.40	152.0	31514	3.06	UG/L	85
*46)	Acenaphthene	16.88	153.0	552019	89.43	UG/L	91
*49)	Dibenzofuran	17.32	168.0	555968	64.80	UG/L	98
*54)	Fluorene	18.19	166.0	286815	46.16	UG/L	100
55)	4-Nitroaniline	18.19	138.0	3604	2.02	UG/L	100
56)	2,4,6-Tribromophenol	18.82	329.8	12066	9.97	UG/L	100
57)	*Phenanthrene-d10	20.58	188.0	306283	40.00	UG/L	100
67)	Phenanthrene	20.64	178.0	189973	23.51	UG/L	96
69)	Carbazole	21.26	167.0	14279	1.95	UG/L	96
70)	Anthracene	20.77	178.0	35367	4.54	UG/L	99
74)	Fluoranthene	23.69	202.0	11056	1.49	UG/L	100
75)	*Chrysene-d12	27.39	240.0	156846	40.00	UG/L	100
77)	Pyrene	24.25	202.0	7166	1.14	UG/L	92
93)	Terphenyl-d14	24.74	244.0	22691	5.02	UG/L	100
94)	*Perylene-d12	32.58	264.0	120402	40.00	UG/L	100

* Compound is ISTD

* REPORT ONLY.

HQ
8/18/93

TOTAL ION CHROMATOGRAM



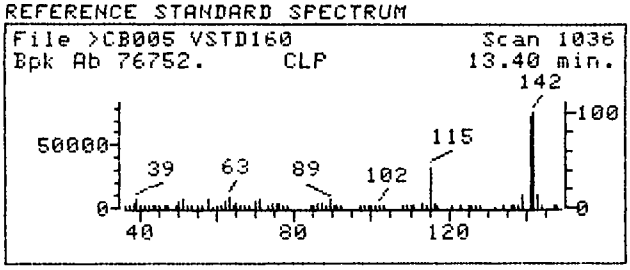
Data File: >B3182::D7 Quant Output File: ^B3182::D1
Name: C149651 1:10 Instrument ID: MSD102
Misc: BTL# 4

Id File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14 Last Qcal Time: 930818 15:32

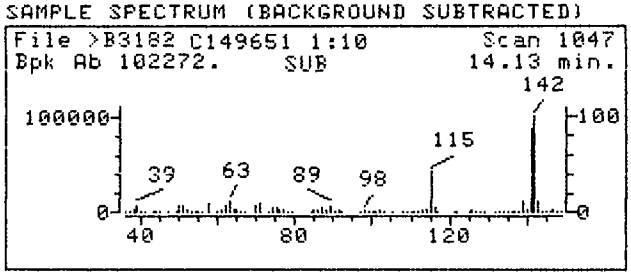
Operator ID: HAIYAN
Quant Time : 930818 20:01
Injected at: 930818 19:15

HQ
8/18/93

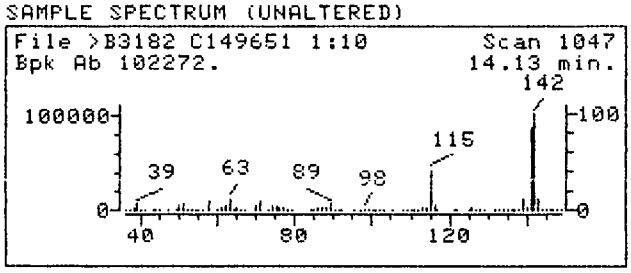
REFERENCE STANDARD SPECTRUM

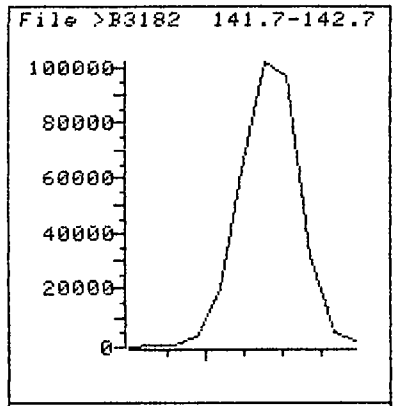


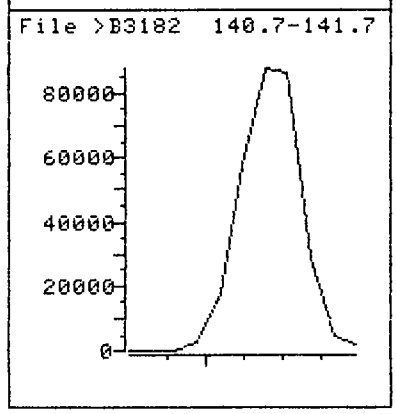
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







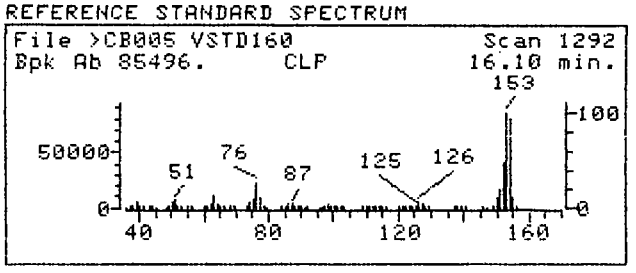
Data File: >B3182::D7
Name: C149651 1:10
Misc:
Quant Time: 930818 20:01
Injected at: 930818 19:15
Last Qcal Time: 930818 15:32

Quant Output File: ^B3182::D1
Instrument ID: MSD102
BTL# 4
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

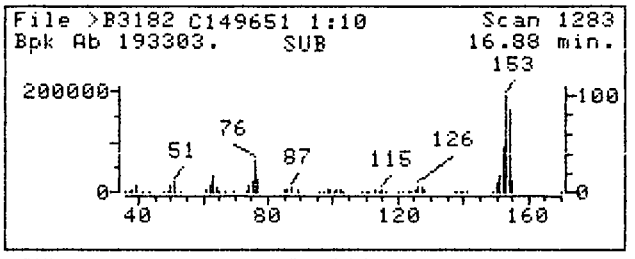
Compound No : 32
Compound Name : 2-Methylnaphthalene
Scan Number : 1047
Retention Time: 14.13 min.
Quant Ion : 142.0
Area : 227810
Concentration : 40.95 UG/L
q-value : 80

HQ
8/18/93

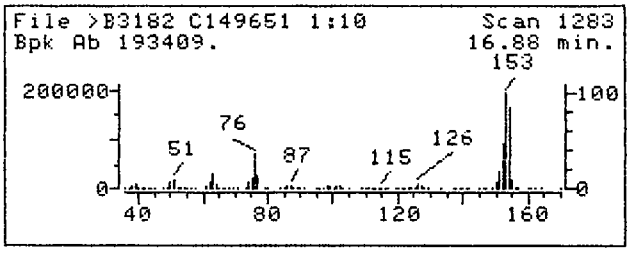
REFERENCE STANDARD SPECTRUM

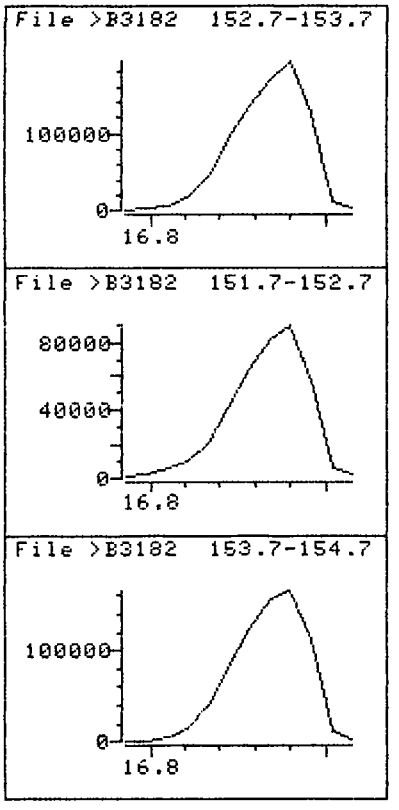


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





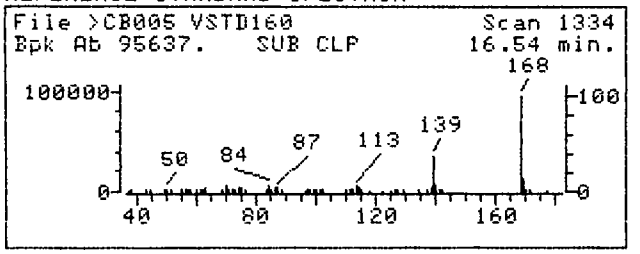
Data File: >B3182::D7
Name: C149651 1:10
Misc:
Quant Time: 930818 20:01
Injected at: 930818 19:15
Last Qcal Time: 930818 15:32

Quant Output File: ^B3182::D1
Instrument ID: MSD102
BTL# 4
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

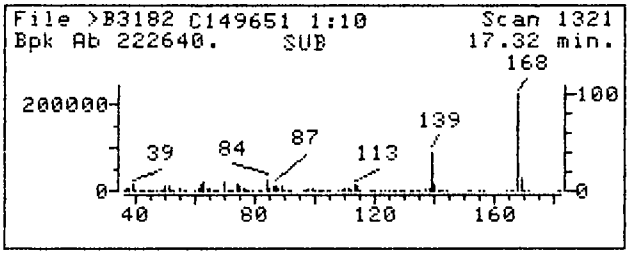
Compound No : 46
Compound Name : Acenaphthene
Scan Number : 1283
Retention Time: 16.88 min.
Quant Ion : 153.0
Area : 552019
Concentration : 89.43 UG/L
q-value : 91

HQ
8/18/93

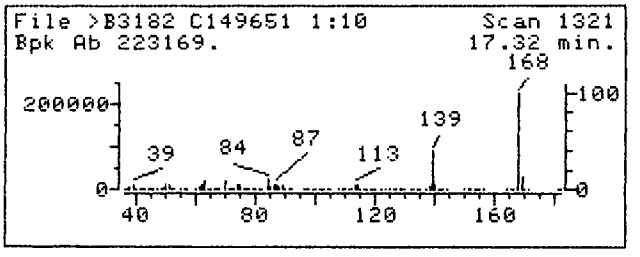
REFERENCE STANDARD SPECTRUM

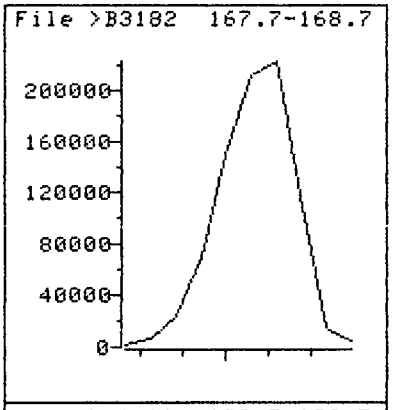


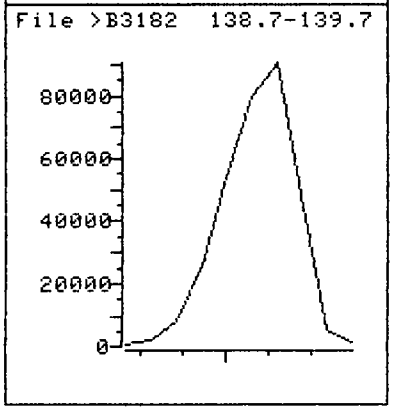
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







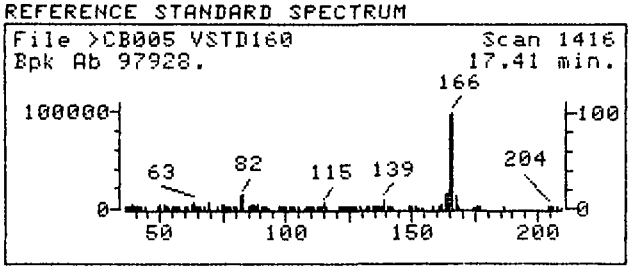
Data File: >B3182::D7
Name: C149651 1:10
Misc:
Quant Time: 930818 20:01
Injected at: 930818 19:15
Last Qcal Time: 930818 15:32

Quant Output File: ^B3182::D1
Instrument ID: MSD102
BTL# 4
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

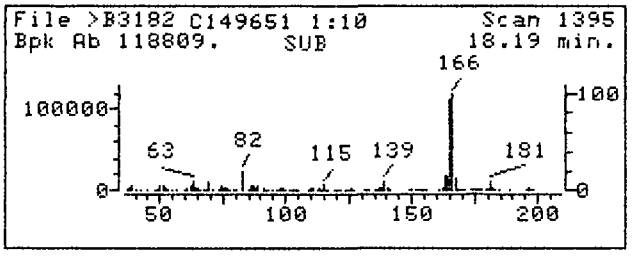
Compound No : 49
Compound Name : Dibenzofuran
Scan Number : 1321
Retention Time: 17.32 min.
Quant Ion : 168.0
Area : 555968
Concentration : 64.80 UG/L
q-value : 98

AQ
8/18/93

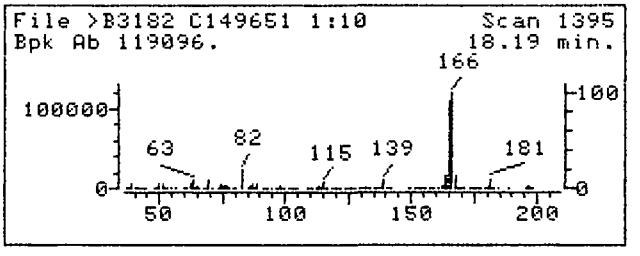
REFERENCE STANDARD SPECTRUM

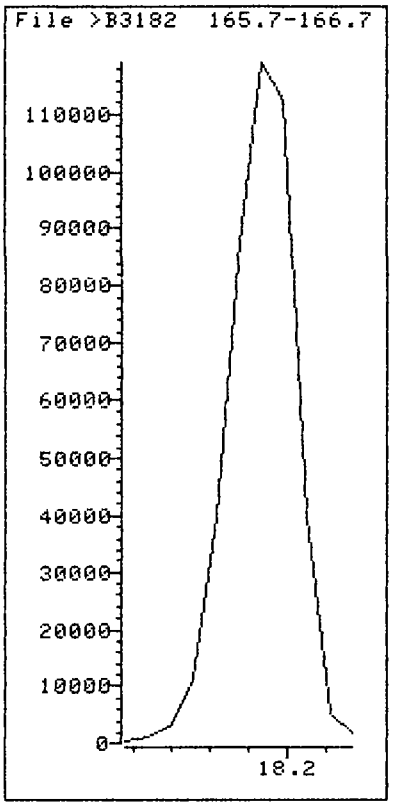


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





Data File: >B3182::D7
Name: C149651 1:10
Misc:
Quant Time: 930818 20:01
Injected at: 930818 19:15
Last Qcal Time: 930818 15:32

Quant Output File: ^B3182::D1
Instrument ID: MSD102
BTL# 4
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

Compound No : 54
Compound Name : Fluorene
Scan Number : 1395
Retention Time: 18.19 min.
Quant Ion : 166.0
Area : 286815
Concentration : 46.16 UG/L
q-value : 100

HQ 8/18/93

QUANT REPORT

Operator ID: HAIYAN
Output File: ^B3183::D1
Data File: >B3183::D7
Name: C149653 1:20
Misc:

Quant Rev: 7
Quant Time: 930818 20:55
Injected at: 930818 20:09
Dilution Factor: 1.00000
Instrument ID: MSD102
BTL# 5

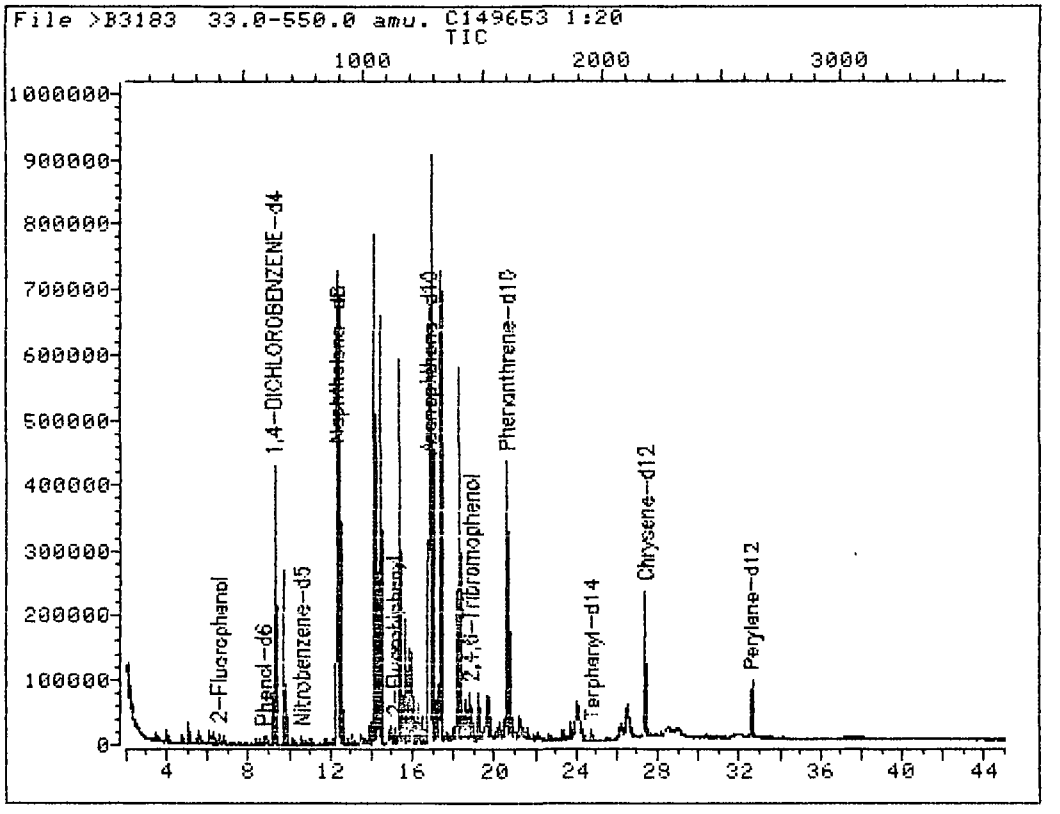
ID File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14
Last Qcal Time: 930818 15:32

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-d4	9.24	152.0	115488	40.00	UG/L	98
3)	2-Picoline	4.99	93.0	15635	3.46	UG/L	96
4)	2-Fluorophenol	6.56	112.0	8525	2.29	UG/L	85
5)	Phenol	8.78	94.0	5277	.957	UG/L	95
6)	bis(2-chloroethyl)ether	8.52	93.0	5536	1.25	UG/L	100
10)	Phenol-d6	8.74	99.0	10219	1.97	UG/L	98
13)	2-Methylphenol	10.08	108.0	3492	.856	UG/L	84
18)	*Naphthalene-d8	12.32	136.0	459023	40.00	UG/L	87
22)	Nitrobenzene-d5	10.56	82.0	7627	1.29	UG/L	90
23)	2,4-Dimethylphenol	11.74	107.0	3462	.734	UG/L	84
28)	Naphthalene	12.38	128.0	707269	65.77	UG/L	100
32)	2-Methylnaphthalene	14.14	142.0	533032	80.12	UG/L	69
33)	*Acenaphthene-d10	16.77	164.0	263864	40.00	UG/L	100
35)	2-Fluorobiphenyl	15.10	172.0	14609	1.80	UG/L	98
43)	Acenaphthylene	16.40	152.0	21658	1.76	UG/L	92
46)	Acenaphthene	16.89	153.0	711062	96.51	UG/L	92
48)	4-Nitrophenol	17.32	109.0	4027	3.32	UG/L	31
49)	Dibenzofuran	17.32	168.0	781366	76.31	UG/L	92
51)	2,4-Dinitrotoluene	17.19	165.0	3966	1.24	UG/L	71
54)	Fluorene	18.18	166.0	396710	53.49	UG/L	100
55)	4-Nitroaniline	18.18	138.0	4980	2.33	UG/L	100
56)	2,4,6-Tribromophenol	18.81	329.8	7167	4.96	UG/L	100
57)	*Phenanthrene-d10	20.58	188.0	368444	40.00	UG/L	100
67)	Phenanthrene	20.64	178.0	259197	26.67	UG/L	95
69)	Carbazole	21.25	167.0	21325	2.42	UG/L	97
70)	Anthracene	20.75	178.0	49632	5.30	UG/L	95
74)	Fluoranthene	23.67	202.0	16055	1.80	UG/L	100
75)	*Chrysene-d12	27.38	240.0	192995	40.00	UG/L	100
77)	Pyrene	24.24	202.0	10257	1.32	UG/L	89
93)	Terphenyl-d14	24.73	244.0	10844	1.95	UG/L	100
94)	*Perylene-d12	32.55	264.0	145770	40.00	UG/L	100

* Compound is ISTD

HQ
8/18/93

TOTAL ION CHROMATOGRAM



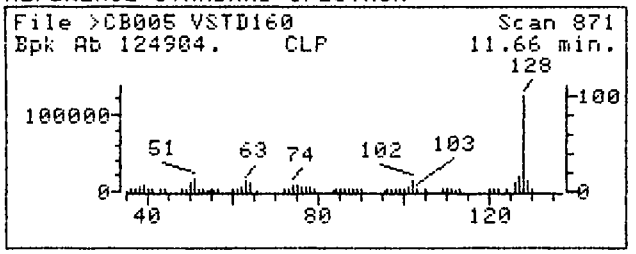
Data File: >B3183::D7 Quant Output File: ^B3183::D1
Name: C149653 1:20 Instrument ID: MSD102
Misc: BTL# 5

Id File: IDSV01::D6
Title: SEMI-VOLATILES ID FILE - INST. #102
Last Calibration: 910930 16:14 Last Qcal Time: 930818 15:32

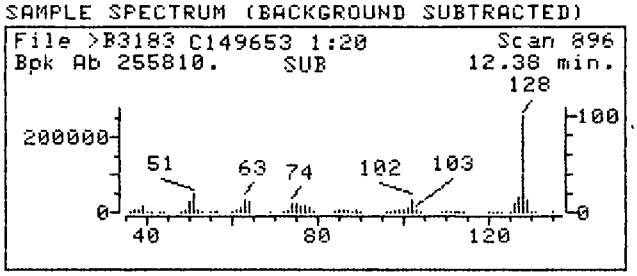
Operator ID: HAIYAN
Quant Time : 930818 20:55
Injected at: 930818 20:09

HA
8/18/93

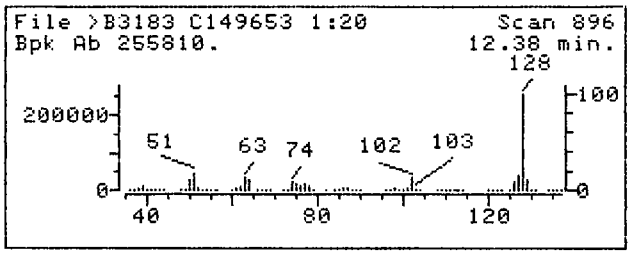
REFERENCE STANDARD SPECTRUM

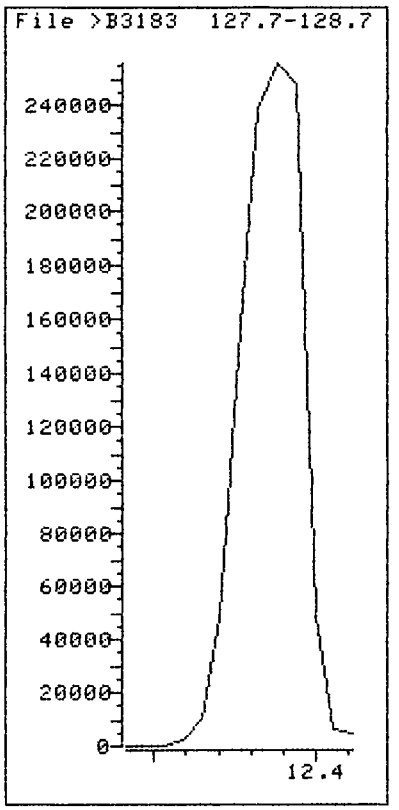


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





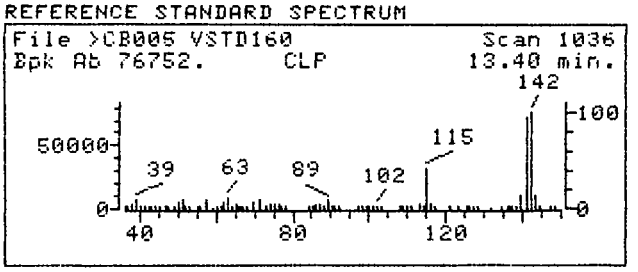
Data File: >B3183::D7
Name: C149653 1:20
Misc:
Quant Time: 930818 20:55
Injected at: 930818 20:09
Last Qcal Time: 930818 15:32

Quant Output File: ^B3183::D1
Instrument ID: MSD102
BTL# 5
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

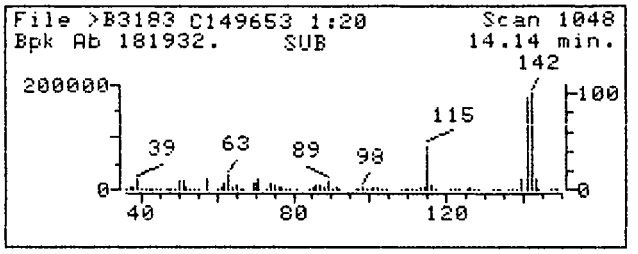
Compound No : 28
Compound Name : Naphthalene
Scan Number : 896
Retention Time: 12.38 min.
Quant Ion : 128.0
Area : 707269
Concentration : 65.77 UG/L
q-value : 100

HQ 8/18/93

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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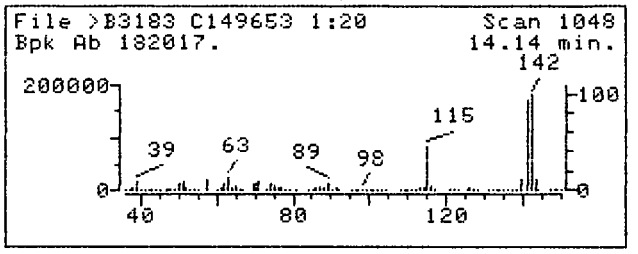
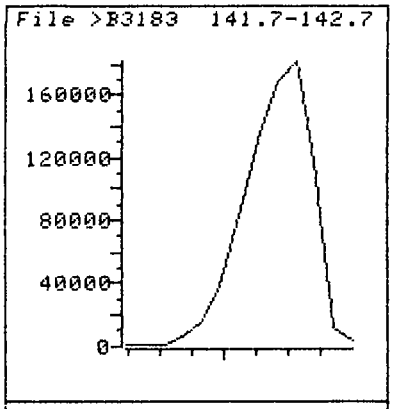
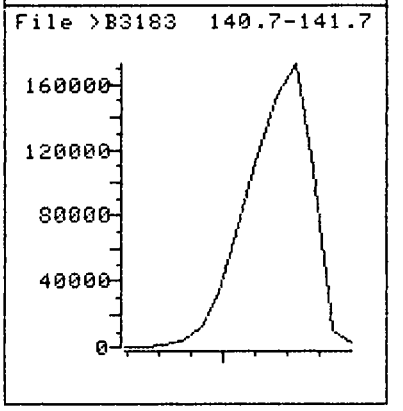






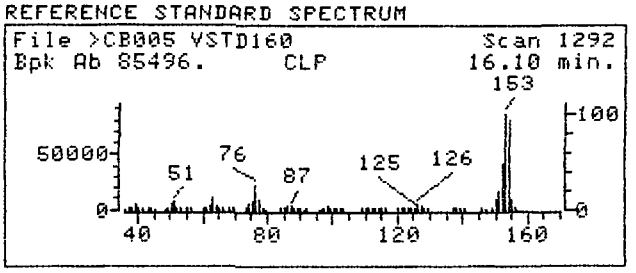
Data File: >B3183::D7
Name: C149653 1:20
Misc:
Quant Time: 930818 20:55
Injected at: 930818 20:09
Last Qcal Time: 930818 15:32

Quant Output File: ^B3183::D1
Instrument ID: MSD102
BTL# 5
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

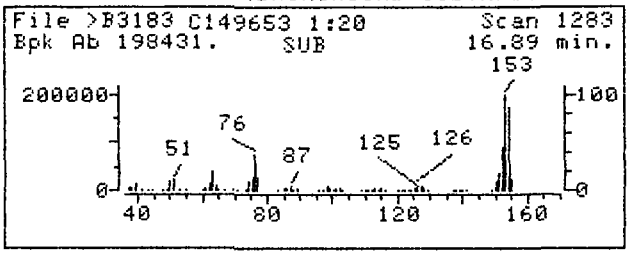
Compound No : 32
Compound Name : 2-Methylnaphthalene
Scan Number : 1048
Retention Time: 14.14 min.
Quant Ion : 142.0
Area : 533032
Concentration : 80.12 UG/L
q-value : 69

HG
8/18/93

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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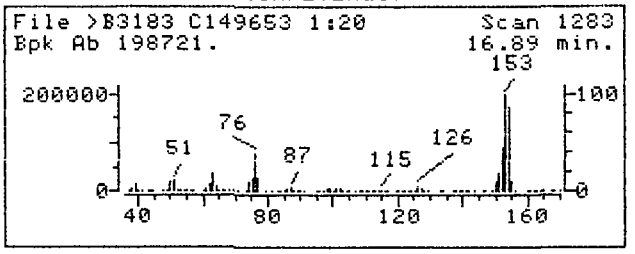
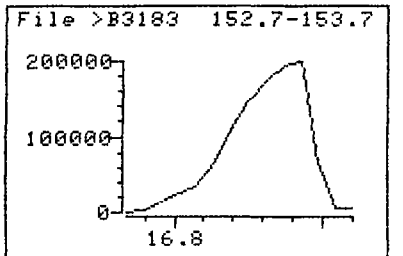
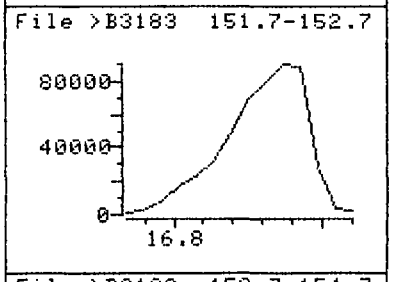
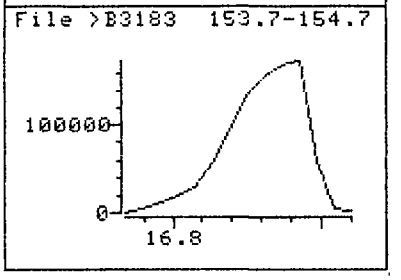








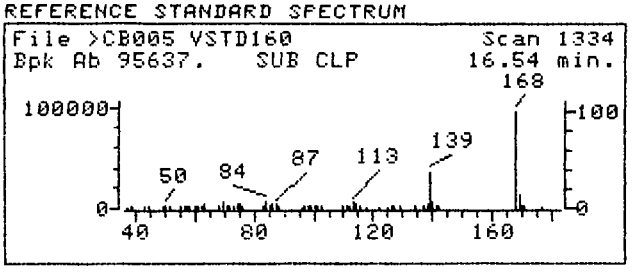
Data File: >B3183::D7
Name: C149653 1:20
Misc:
Quant Time: 930818 20:55
Injected at: 930818 20:09
Last Qcal Time: 930818 15:32

Quant Output File: ^B3183::D1
Instrument ID: MSD102
BTL# 5
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

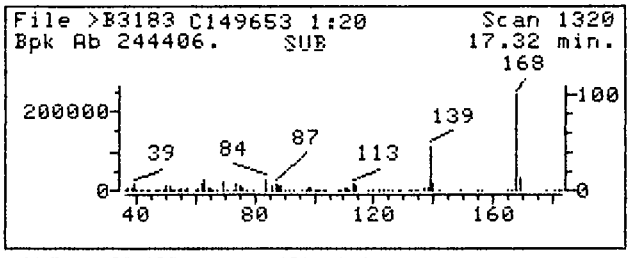
Compound No : 46
Compound Name : Acenaphthene
Scan Number : 1283
Retention Time: 16.89 min.
Quant Ion : 153.0
Area : 711062
Concentration : 96.51 UG/L
q-value : 92

HG
8/18/93

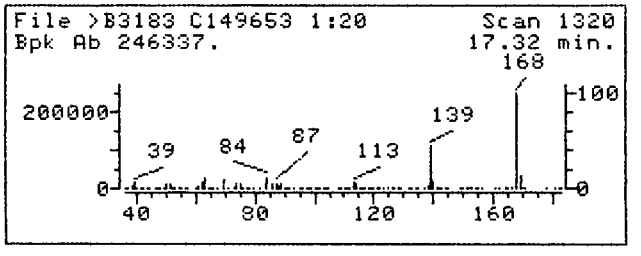
REFERENCE STANDARD SPECTRUM

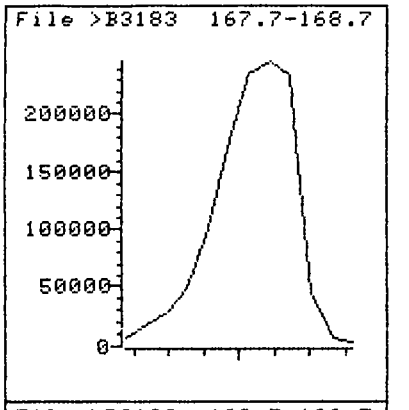


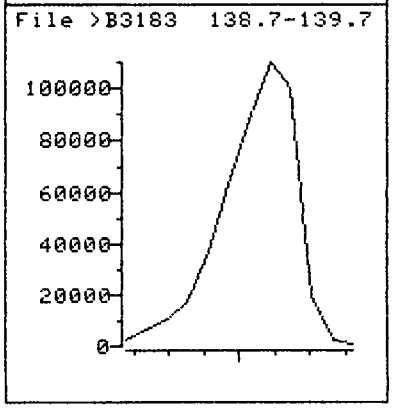
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







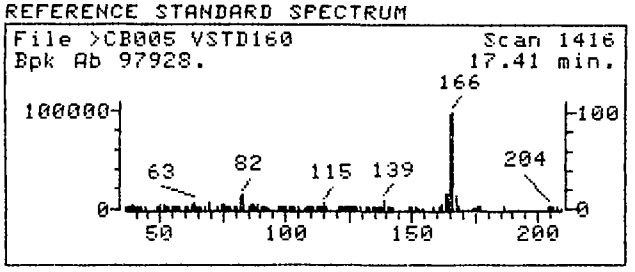
Data File: >B3183::D7
Name: C149653 1:20
Misc:
Quant Time: 930818 20:55
Injected at: 930818 20:09
Last Qcal Time: 930818 15:32

Quant Output File: ^B3183::D1
Instrument ID: MSD102
BTL# 5
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

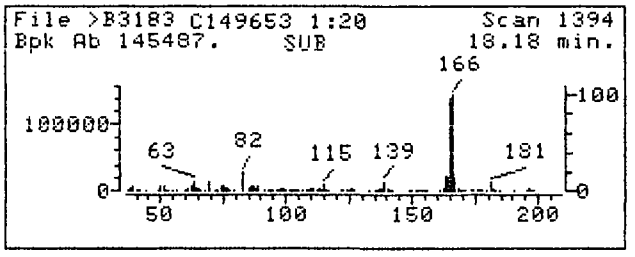
Compound No : 49
Compound Name : Dibenzofuran
Scan Number : 1320
Retention Time: 17.32 min.
Quant Ion : 168.0
Area : 781366
Concentration : 76.31 UG/L
q-value : 92

HQ 8/18/93

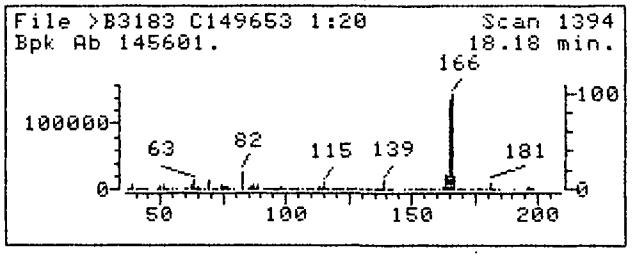
REFERENCE STANDARD SPECTRUM

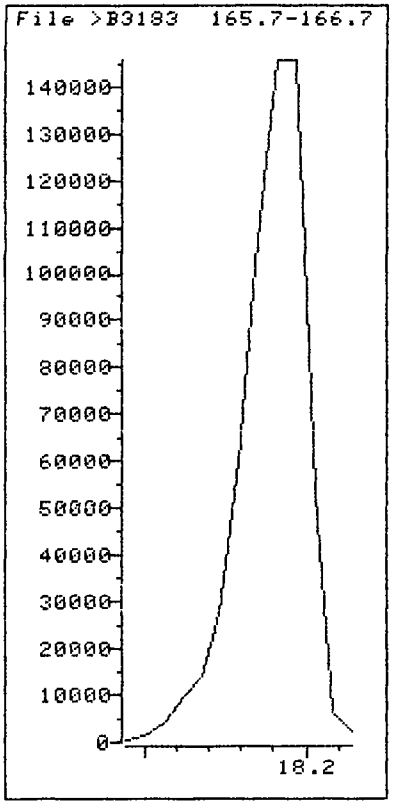


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





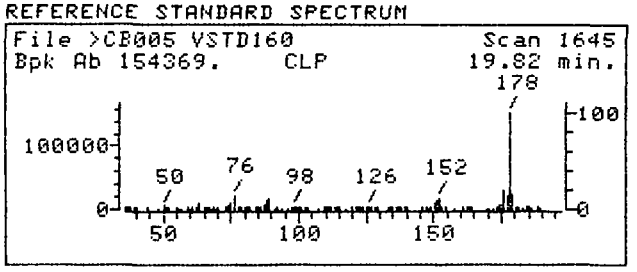
Data File: >B3183::D7
Name: C149653 1:20
Misc:
Quant Time: 930818 20:55
Injected at: 930818 20:09
Last Qcal Time: 930818 15:32

Quant Output File: ^B3183::D1
Instrument ID: MSD102
BTL# 5
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

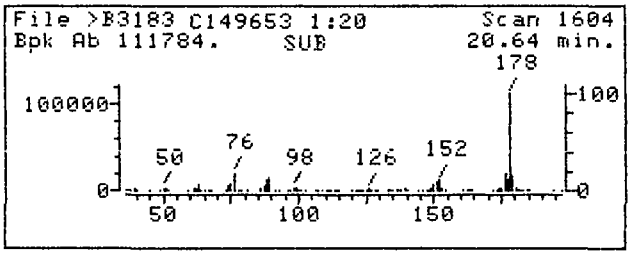
Compound No : 54
Compound Name : Fluorene
Scan Number : 1394
Retention Time: 18.18 min.
Quant Ion : 166.0
Area : 396710
Concentration : 53.49 UG/L
q-value : 100

HQ
8/18/93

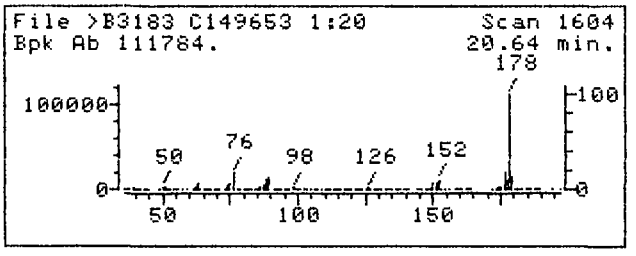
REFERENCE STANDARD SPECTRUM

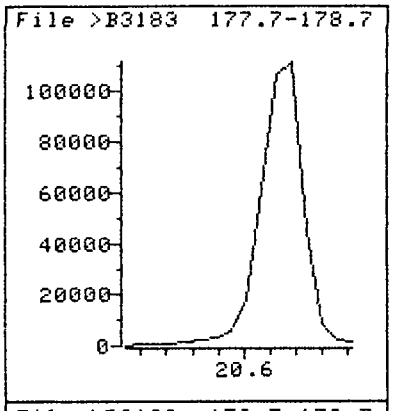


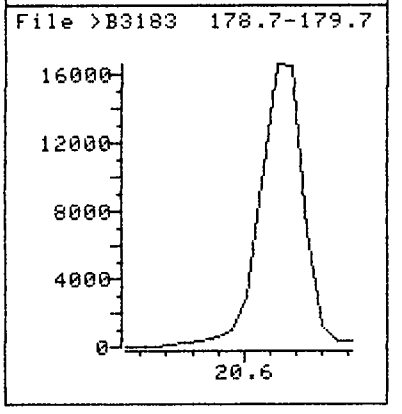
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







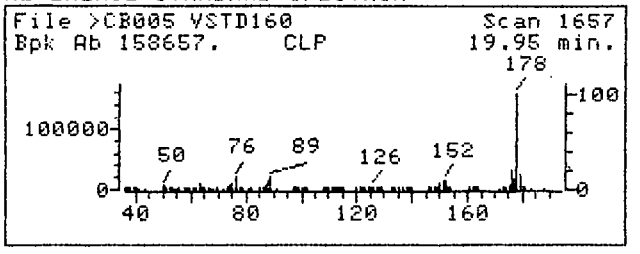
Data File: >B3183::D7
Name: C149653 1:20
Misc:
Quant Time: 930818 20:55
Injected at: 930818 20:09
Last Qcal Time: 930818 15:32

Quant Output File: ^B3183::D1
Instrument ID: MSD102
BTL# 5
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

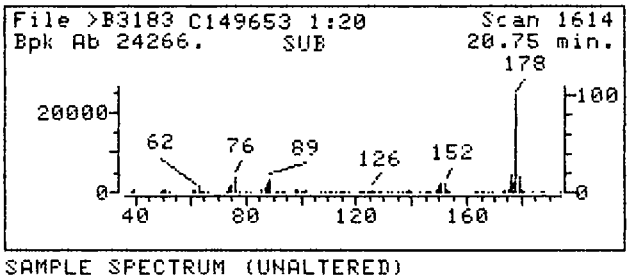
Compound No : 67
Compound Name : Phenanthrene
Scan Number : 1604
Retention Time: 20.64 min.
Quant Ion : 178.0
Area : 259197
Concentration : 26.67 UG/L
q-value : 95

HA 8/18/93

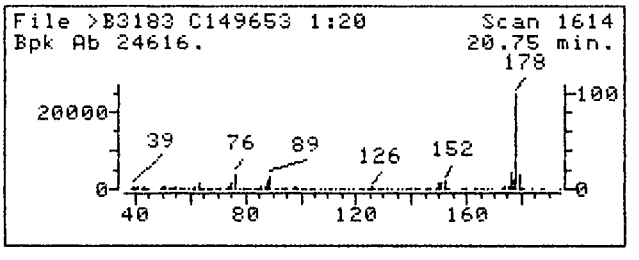
REFERENCE STANDARD SPECTRUM

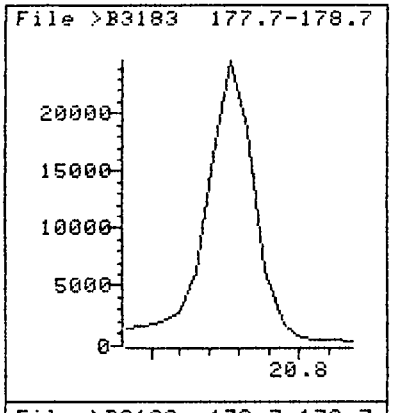


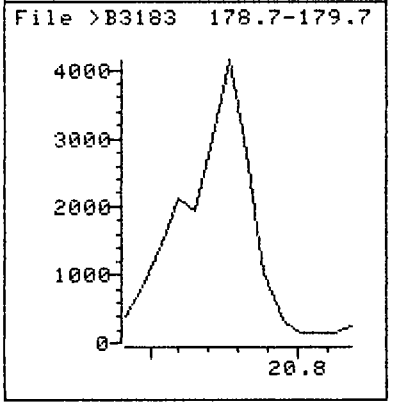
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >B3183::D7
Name: C149653 1:20
Misc:
Quant Time: 930818 20:55
Injected at: 930818 20:09
Last Qcal Time: 930818 15:32

Quant Output File: ^B3183::D1
Instrument ID: MSD102
BTL# 5
Quant ID File: IDSV01::D6
Last Calibration: 910930 16:14

Compound No : 70
Compound Name : Anthracene
Scan Number : 1614
Retention Time: 20.75 min.
Quant Ion : 178.0
Area : 49632
Concentration : 5.30 UG/L
q-value : 95

M 117

August 27, 1993

U.S. EPA - CLP

M 117 COVER PAGE - INORGANIC ANALYSES DATA PACKAGE metals

Lab Name: Heritage Labs Contract: Ecol+Ener.

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

SOW No.: NA

EPA Sample No.	Lab Sample ID.
	C149650 water
	↓
	C149653

Were ICP interelement corrections applied? Yes/No Y

Were ICP background corrections applied? Yes/No Y
If yes-were raw data generated before application of background corrections? Yes/No N

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for oth than the conditions detailed above. Release of the data contained in thi hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

213

Signature: Name:

Date: Title:

HERITAGE LABORATORIES, INC.

7901 West Morris Street
Indianapolis, IN 46231-3301
Phone: 317/243-0811
FAX: 317-486-5095

METALS CASE NARRATIVE

SAMPLE # C149650-653

No sample from this set could be used as the Q.C. sample due to limited sample.

Steven J. Endersen 8-27-93

STEVEN J. ENDERSEN

INORGANIC SECTION LEADER

INORGANICS

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Heritage Labs Contract: _____

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

Concentration Units: ug/L

Analyte	WOMN	Initial Calibration True	Initial Calibration Found	Initial Calibration %R	Continuing Calibration True	Continuing Calibration Found 1	Continuing Calibration %R 1	Continuing Calibration Found 2	Continuing Calibration %R 2	M
Aluminum										
Antimony										
Arsenic		20	21.1	106	20	18.1	91	~~18.8~~ 18.9	~~94~~ 94	F
Barium		2000	2000	100	5000	4900	98	5160	103	P
Beryllium										
Cadmium		400	427	107	5000	5030	101	5150	103	P
Calcium										
Chromium		400	416	104	5000	5000	100	5220	104	P
Cobalt										
Copper										
Iron										
Lead		400	429	107	5000	5090	102	5270	105	P
Magnesium										
Manganese										
Mercury		2.00	2.10	105	3.00	2.86	95	3.11	104	CV
Nickel										
Potassium										
Selenium		20	21.0	105	20	21.2	106	~~19.6~~ 20.9	~~98~~ 105	F
Silver		2000	2030	102	1000	1000	100	1040	104	P
Sodium										
Thallium										
Vanadium										
Zinc										
Lithium										
Strontium										
Tin										
Molybdenum										
Titanium										

FORM II __ - LCIN

INORGANICS

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Heritage Labs Contract: _____

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

Concentration Units: ug/L

Analyte	WOMN	Initial Calibration True	Initial Calibration Found	Initial Calibration %R	Continuing Calibration True	Continuing Calibration Found 1	Continuing Calibration %R 1	Continuing Calibration Found 2	Continuing Calibration %R 2	M
Aluminum										
Antimony										
Arsenic										
Barium					5000	5170	103			P
Beryllium										
Cadmium					5000	5100	102			P
Calcium										
Chromium					5000	5230	105			P
Cobalt										
Copper										
Iron										
Lead					5000	5270	105			P
Magnesium										
Manganese										
Mercury					3.00	3.03	101			CV
Nickel										
Potassium										
* Selenium		20	21.0	105	20	18.1	91	17.9	90	
Silver					1000	1040	104			P
Sodium										
Thallium										
Vanadium										
Zinc										
Lithium										
Strontium										
Tin										
Molybdenum										
Titanium										

* C149651 ONLY

FORM II __ - LCIN

4

U.S. EPA - CLP
INORGANICS

BLANKS

Lab Name: Heritage Labs Contract: _____

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

Concentration Units: ug/L Solid (mg/kg) _____ water (ug/L) ✓

Analyte	WOMN	Initial Calib. Blank	C	Continuing Calibration Blanks (ug/L) 1	C	2	C	3	C	Prep. Blank	C	M
Aluminum												
Antimony												
Arsenic		ND		ND		ND		ND		ND		
Barium		ND								ND		
Beryllium												
Cadmium		ND		ND		11.7		ND		ND		*
Calcium												
Chromium		ND								ND		
Cobalt												
Copper												
Iron												
Lead		ND								ND		
Magnesium												
Manganese												
Mercury		ND								ND		
Nickel												
Potassium												
Selenium		ND		ND		ND		ND		ND		
Silver		ND								ND		
Sodium												
Thallium												
Vanadium												
Zinc												
Lithium												
Strontium												
Tin												
Molybdenum												
Titanium												
* Se		ND		ND		ND						

* All Cd results were BDL

* C149651 Only

FORM V __ - LCIN

217

5

U.S. EPA - CLP
INORGANICS

DUPLICATES

EPA SAMPLE N
CIN9650-6FAA
A287177

Lab Name: Heritage Labs Contract: _____

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

Concentration Units: water (ug/L) ✓ solid (mg/kg) ____

Analyte	WOMN	Control Limit*	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum									
Antimony									
Arsenic			32		33		3		
Barium			224		223		0.4		
Beryllium									
Cadmium			ND		ND		NC		
Calcium									
Chromium			ND		ND		NC		
Cobalt									
Copper									
Iron									
Lead			ND		ND		NC		
Magnesium									
Manganese									
Mercury			ND		ND		NC		I
Nickel									
Potassium									
Selenium			ND		ND		NC		
Silver			ND		ND		NC		
Sodium									
Thallium									
Vanadium									
Zinc									
Lithium									
Strontium									
Tin									
Molybdenum									
Titanium									

+ A286254

FORM VIII __ - LCIN

218

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* control limit is 20% unless noted

U.S. EPA - CLP
INORGANICS

SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.
C149650-6FAA
A287177

Lab Name: Heritage Labs Contract: _____

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

Concentration Units: water (ug/L) ✓ solid (mg/kg) ___

Analyte	WOMN	☆ Control Limit %R	Sample Result (SR)	C	Spiked Sample Result (SSR)	C	Spike Added (SA)	%R	Q	M
Aluminum										
Antimony										
Arsenic			32		125		100	93		
Barium			224		2140		2000	96		
Beryllium										
Cadmium			ND		50.1		50.0	100		
Calcium										
Chromium			ND		201		200	101		
Cobalt										
Copper										
Iron										
Lead			ND		490		500	98		
Magnesium										
Manganese										
Mercury			ND		1.02		1.00	102		+
Nickel										
Nickel										
Selenium			ND		45		50	90		
Silver			ND		54.7		50.0	109		
Sodium										
Thallium										
Vanadium										
Zinc										
Lithium										
Strontium										
Tin										
Molybdenum										
Titanium										

+A286254

FORM VII __ - LCIN

219

☆ control limit is 75-125% unless noted.

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U.S. EPA - CLP
INORGANICS

LCS

Lab Name: Heritage Labs Contract: _____

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

Concentration Units: ug/L

Analyte	WOMN	Limits Lower	Limits Upper	True	Found	C	%R	M
Aluminum		80%	120%					
Antimony								
Arsenic				100	108		108	
Barium				20,000	19,500		98	
Beryllium								
Cadmium				500	486		97	
Calcium								
Chromium				2000	1910		96	
Cobalt								
Copper								
Iron								
Lead				5000	4760		95	
Magnesium								
Manganese								
Mercury				3.00	3.08		103	
Nickel								
Potassium								
Selenium				50	57		114	
Silver				500	462		92	
Sodium								
Thallium								
Vanadium								
Zinc								
Lithium								
Strontium								
Tin								
Molybdenum								
Titanium								

FORM IX __ - LCIN

U.S. EPA - CLP
INORGANICS

ICS

Lab Name: Heritage Labs Contract: _____

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

Instrument ID Number: ICAP-61 Date: 8-24-93

Concentration Units: ug/L

Analyte	WOMN	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	%R	Final Found Sol. A	Final Found Sol. AB	%R	M
Aluminum		NA	500,000	NA	501,000	101	NA	504,000	101	
Antimony			NA		NA	NA		NA	NA	
Arsenic			NA		NA	NA		NA	NA	
Barium			500		487	97		488	98	
Beryllium			500		478	96		480	96	
Cadmium			1000		925	93		936	94	
Calcium			500,000		457,000	91		459,000	92	
Chromium			500		448	90		460	92	
Cobalt			500		450	90		460	92	
Copper			500		554	111		517	103	
Iron			200,000		179,000	90		183,000	92	
Lead			1000		875	88		906	91	
Magnesium			500,000		470,000	94		476,000	95	
Manganese			500		473	95		476	95	
Mercury			NA		NA	NA		NA	NA	
Nickel			1000		889	89		911	91	
Potassium			NA		NA	NA		NA	NA	
Selenium			NA		NA	NA		NA	NA	
Silver			1000		954	95		947	95	
Sodium			NA		NA	NA		NA	NA	
Thallium			NA		NA	NA		NA	NA	
Vanadium			500		466	93		476	95	
Zinc			1000		987	99		981	98	

Comments:

FORM VI __ - LCIN

9

U.S. EPA - CLP
INORGANICS

ICS

Lab Name: Heritage Labs Contract: _____

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

Instrument ID Number: ICAP-61 Date: 8-26-93

Concentration Units: ug/L

Analyte	WOMN	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	%R	Final Found Sol. A	Final Found Sol. AB	%R	M
Aluminum		NA	500,000	NA	496,000	99	NA	491,000	98	
Antimony			NA		NA	NA		NA	NA	
Arsenic			NA		NA	NA		NA	NA	
Barium			500		483	97		481	96	
Beryllium			500		468	94		500	100	
Cadmium			1000		918	92		973	97	
Calcium			500,000		454,000	91		480,000	96	
Chromium			500		443	89		462	92	
Cobalt			500		449	90		473	95	
Copper			500		529	106		682	136	
Iron			200,000		175,000	88		189,000	95	
Lead			1000		901	90		956	96	
Magnesium			500,000		468,000	94		473,000	95	
Manganese			500		467	93		480	96	
Mercury			NA		NA	NA		NA	NA	
Nickel			1000		888	89		939	94	
Potassium			NA		NA	NA		NA	NA	
Selenium			NA		NA	NA		NA	NA	
Silver			1000		947	95		945	95	
Sodium			NA		NA	NA		NA	NA	
Thallium			NA		NA	NA		NA	NA	
Vanadium			500		458	92		480	96	
Zinc			1000		973	97		1050	105	

Comments:

FORM VI __ - LCIN

U.S. EPA - CLP
INORGANICS

CRDL STANDARDS

Lab Name: Heritage Labs Contract: _____

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

Concentration Units: ug/L

Analyte	WOMN	Initial True	Initial Found	Initial %R	Final Found	Final %R	M
Aluminum							
Antimony							
Arsenic		20	20.8	104	19.1	96	
Barium							
Beryllium							
Cadmium		10.0	10.5	105	11.2	112	
Calcium							
Chromium		20.0	19.8	99	17.1	86	
Cobalt							
Copper							
Iron							
Lead		100	78.2	78	103	103	
Magnesium							
Manganese							
Mercury							
Nickel							
Potassium							
Selenium		20	20.2	101	21.8	109	
Silver		20.0	17.5	88	20.3	102	
Sodium							
Thallium							
Vanadium							
Zinc							

Comments:

FORM III __ - LCIN

11

U.S. EPA - CLP
INORGANICS

SERIAL DILUTION

EPA SAMPLE NO.

C149650

Lab Name: Heritage Labs Contract: _____

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

Matrix: water

Concentration Units: ug/L

Analyte	WOMN	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum								
Antimony								
Arsenic								
Barium		109		130		10.1		
Beryllium								
Cadmium		ND		NR		NR		
Calcium								
Chromium		ND		NR		NR		
Cobalt								
Copper								
Iron								
Lead		ND		NR		NR		
Magnesium								
Manganese								
Mercury		NA →						
Nickel								
Potassium								
Selenium								
Silver		ND		NR		NR		
Sodium								
Thallium								
Vanadium								
Zinc								
Lithium								
Strontium								
Tin								
Molybdenum								
Titanium								

Comments:

FORM X __ - LCIN

224

* sample diluted 1:4

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U.S. EPA - CLP
INORGANICS

STANDARD SOLUTIONS SOURCES

Lab Name: Heritage Labs Contract: _____

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

Analyte	ICV Standard Source	CCV Standard Source	CRI Standard Source	LRS Standard Source	ICS Standard Source
Aluminum	PE Pure	IV		NA	IV
Antimony	PE Pure	↓	IV	↓	NA
Arsenic		PE Pure	IV	↓	NA
Barium		IV		↓	IV
Beryllium	PE Pure	↓	IV	↓	↓
Cadmium	↓	↓	IV	↓	↓
Calcium	↓	↓	↓	↓	↓
Chromium	↓	↓	IV	↓	↓
Cobalt	↓	↓	IV	↓	↓
Copper	↓	↓	IV	↓	↓
Iron	↓	↓	↓	↓	↓
Lead	↓	PE Pure	IV	↓	↓
Magnesium	↓	IV	↓	↓	↓
Manganese	↓	↓	IV	↓	↓
Mercury	NIST 1641-b	Fisher	↓	↓	NA
Nickel	PE Pure	IV	IV	↓	IV
Potassium	↓	↓	↓	↓	NA
Selenium	PE Pure	PE Pure	IV	↓	NA
Silver	↓	IV	IV	↓	IV
Sodium	↓	↓	↓	↓	NA
Thallium	PE Pure	PE Pure	IV	↓	NA
Vanadium	↓	IV	IV	↓	IV
Zinc	↓	↓	IV	↓	IV
Boron	PE Pure	↓	↓	↓	NA
Lithium	IV	IV	↓	↓	NA
Strontium	↓	↓	↓	↓	NA
Tin	↓	↓	↓	↓	NA
Titanium	↓	↓	↓	↓	NA
Molybdenum	PE Pure	IV	↓	↓	NA

Comments:

FORM XVII __ - LCIN

PE = Perkin Elmer
IV = Inorganic Ventures

U.S. EPA - CLP

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ICP LINEAR RANGES (QUARTERLY)

Lab Name: Heritage Labs Contract: _____

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

ICP ID Number: ICAP-61 Date: July, 1993

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Aluminum	10	500,000	
Antimony		100,000	
Arsenic		200,000	
Barium		500,000	
Beryllium		100,000	
Cadmium		1,000,000	
Calcium		1,000,000	
Chromium		600,000	
Cobalt		800,000	
Copper		200,000	
Iron		400,000	
Lead		300,000	
Magnesium		1,000,000	
Manganese		500,000	
Mercury		NA	
Nickel		500,000	
Potassium		500,000	
Selenium		200,000	
Silver		100,000	
Sodium		500,000	
Thallium		300,000	
Vanadium		200,000	
Zinc		200,000	
Molybdenum		300,000	
Lithium		100,000	
Strontium		50,000	
Tin		500,000	
Titanium		200,000	
Boron		300,000	
Silicon		500,000	
Zirconium		300,000	

Comments:

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U.S. EPA - CLP
- INORGANICS

INTERELEMENT CORRECTION FACTORS

Lab Name: EMS Contract: _____

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

Instrument ID Number: ICAP-61 Method: P Date: August, 1992

Analyte	Wave-Length or Mass	Interelement Correction Factors* for: Al	Ca	Cr	Cu	Fe	Mg	Ni
Aluminum	308.2		-0.00020			0.000945		
Antimony	206.8			0.01244		-0.00506		
Arsenic	193.6	0.003668		0.001575		-0.000214		
Barium	493.4							
Beryllium	313.0							
Cadmium	226.5	-0.0000354		0.000263		-0.000342		-0.009627
Calcium	393.3							
Chromium	267.7							
Cobalt	228.6							
Copper	324.7					-0.000203		
Iron	259.9							
Lead	220.3	0.000648			-0.002769	0.000173		0.00021
Magnesium	279.5							
Manganese	257.6							
Mercury								
Nickel	231.6				0.000305			
Potassium	766.4							
Selenium	196.0					-0.014845		
Silver	328.0							
Sodium	589.0							
Thallium	190.8	0.0004056					-0.00614	
Vanadium	292.4			-0.00406				
Zinc	213.8				0.00243			0.003842
Tin	189.9					0.000224		
Strontium	421.5		0.00039					
Silicon	288.1			-0.01354				
Molybdenum	198.5			0.001985				
Bismuth	223.0			-0.008328	-0.6615			

FORM XIII __ - LCIN

* Correction per 1mg/L

U.S. EPA - CLP
INORGANICS

IDL

Lab Name: Heritage Labs Contract: _____

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

Instrument ID Number: ICAP-61 only Method: P Date: July, 1993

Concentration Units: ug/L

Analyte	Back-ground	Wave-Length (nm)	Integ. Time (sec.)	CRDL water	CRDL D.W.	CRDL Solid (mg/kg)	IDL
Aluminum		308.2	10	200	80	40	12
Antimony		206.8		60		2.4	12
Arsenic		193.6					25
Barium		493.4		50	6.0	40	0.84
Beryllium		313.0		5.0	1.0	1.0	0.63
Cadmium		226.5		5.0		1.0	1.2
Calcium		393.3		5000	0.50	1000	16
Chromium		267.7		10	8.0	2.0	2.8
Cobalt		228.6		50	6.0	10	2.7
Copper		324.7		25	6.0	5.0	5.7
Iron		259.9		100	80	20	8.3
Lead		220.3				1.0	18
Magnesium		279.5		5000	100	1000	31
Manganese		257.6		25	5.0	3.0	0.96
Mercury							NA
Nickel		231.6		10	15	8.0	3.1
Potassium		766.4		5000	2000	1000	58
Selenium		196.0					43
Silver		328.0		10	6.0	2.0	2.7
Sodium		589.5		1000	1000	1000	41
Thallium		190.8					72
Vanadium		292.4		50	5.0	10	1.8
Zinc		213.8		20	40	4.0	5.2
Titanium		337.2					1.4
Strontium		421.5		10	10	1.0	0.63
Molybdenum		202.0		150	15	1.0	2.0
Boron		249.6					3.9
Tin		189.9	↓	40	40	8.0	10.0

Comments:

Zirconium	339.1	10	1.8
Lithium	670.7	10	1.2
Silicon	288.1	10	15
Bismuth	223.0	10	26
Yttrium	371.0	10	0.92

FORM XII __ - LCIN
U.S. EPA - CLP
LOW CONCENTRATION INORGANICS

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IDL

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U.S. EPA - CLP
LOW CONCENTRATION INORGANICS

IDL

Lab Name: Heritage Labs Contract: _____

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

Instrument ID Number: PE 2380 Method: CV Date: July, 1993

PE 5100 GFAA

Concentration Units: ug/L

Analyte	Back-ground	Wave-Length (nm)	Integ. Time (sec.)	CRDL water	CRDL D.W.	CRDL solid (mg/kg)	IDL
Aluminum							
Antimony							
Arsenic	—	193.6		—	—	—	3
Barium							
Beryllium							
Cadmium							
Calcium							
Chromium							
Cobalt							
Copper							
Iron							
Lead							
Magnesium							
Manganese							
Mercury	BD	253.7	NA	0.20	0.10	0.008	0.044
Nickel							
Potassium							
Selenium	—	196.0	—	—	—	—	3
Silver							
Sodium							
Thallium							
Vanadium							
Zinc							

Comments:

U.S. EPA - CLP
LOW CONCENTRATION INORGANICS

IDL

Hg

METALS REF

Test # P131.6 Method _____ #R 194007

Analyst A / Z / R # 2971 Reviewer / / # _____ Recorder / / # _____

Date 8 / 18 / 93 Date / / Date / /

SAMPLE	WGT OR VOL	FINAL VOL	DUE DATE	CODE	COMMENTS	PARAMETERS
Q 761293 LCS	100ml	100ml				3.0ml 0.1ppm from 1000ppm 10 Lot 6-4 60-21
Q 761294 BIA02	↓	↓				
C149650	100ml	100ml	8-27-93	MM0.1	E&E	Insufficient Sample to QC. Hg
651	↓	↓	↓	↓	↓	↓ ↓
652	↓	↓	↓	↓	↓	↓ ↓
653	↓	↓	↓	↓	↓	↓ ↓
A286254	↓	↓	8-25-93	↓	Alcoa	↓
255	↓	↓	↓	↓	↓	↓
256	↓	↓	↓	↓	↓	↓
257	↓	↓	↓	↓	↓	↓
258	↓	↓	↓	↓	↓	↓
259	↓	↓	↓	↓	↓	↓
Q 761295 SPIO2 A286254	100ml	100ml				1.0ml 0.1ppm from 1000ppm Fluor Lot 924323-2
Q 761296 IDPSO2						
Q 761297 CM 8-13-93 DUPO2 A286254	100ml	100ml				

8 30

METALS REP

Test # P130.4.0 + P130.4.1 (ICP) Method _____ #R R193970

Analyst S/N IC # 2060 Reviewer / / # _____ Recorder M/T # _____

Date 8/20/93 Date / / Date 8/24/93

SAMPLE	WGT OR VOL	FINAL VOL	DUE DATE	CODE	COMMENTS	PARAMETERS
Q 761093 LCS	50mL	50mL				Lcs # 439
Q 761094 BIA02	↓	↓				
C149650 (1) *	50mL	50mL	8-28-93	M1.3	E & E	Ba, Cd, Pb, Cr, Ag
651 (1) *	↓	↓	↓	↓	↓	↓
652 (1) *	↓	↓	↓	↓	↓	↓
653 (1) *	↓	↓	↓	↓	↓	↓
B122151	50mL	50mL	8-29-93	↓	Celanese	Ba
A287152	↓	↓	8-31-93	↓	SIA	~~Pb~~ Ba, B, Cr, Cu, Fe, Mn, Ag, Na, Zn SNC 8-20-93
175	↓	↓	↓	↓	HRE	Pb
177 *	↓	↓	8-31-93	↓	Jasper	Ba, B, Cr, Cu, Fe, Mn, Ag, Na, Zn
178	↓	↓	↓	↓	↓	↓
179 (1)	↓	↓	↓	↓	↓	↓
Q 761095 SPIO2 A287177	50mL	50mL				SpK #: 429, 430, 440 (500uL ea)
Q 761096 IDPSO2						HNO_3 = 1409 KJHH HCl = 2062 KJDR
Q 761097 DUPO2 A287177	SNC 8/20/93 ~~B~~ 50mL	50mL				NO SB

* Insufficent sample to use as QC

COPY

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PAGE: 1 OF 1

METALS, PREP

RUN NO.: R193594

ANALYST: JJK / 2860 /

DATE: 8 / 17 / 93.

REVIEWER: Jn / 2520 1551B

DATE: 8 / 18 / 93

RECORDER: D / J / L

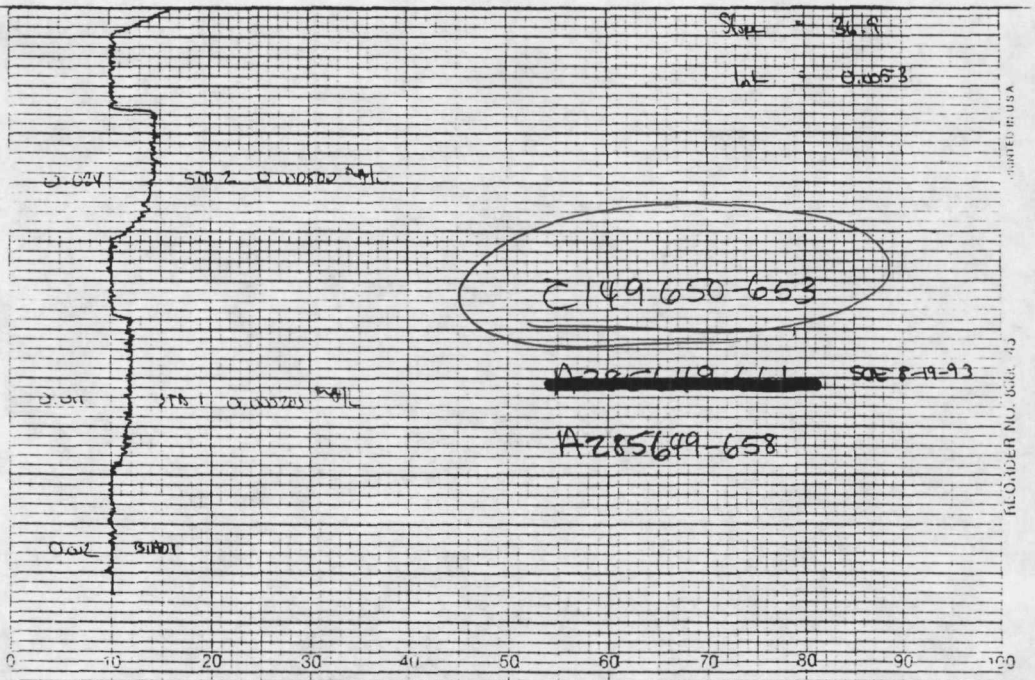
DATE: 8 / 17 / 93

NITRIC MP 396

SAMPLE	TYPE	WT/VOL	FINAL VOL	DILUTION	COMMENTS
LCS	Q758180	50ml	50ml		500ml (053193 A + B)
BLA02	Q758181	↓	↓		
C149650	P130.6	↓	↓		
DUP02	Q758182	↓	↓		
SPI02	Q758183	↓	↓		500ml (053193A + B)
C149651	P130.6	↓	↓		
C149652	↓	↓	↓		
C149653	↓	↓	↓		

232

91CK1034.R1



C149650-653

[redacted] SOE 8-19-93

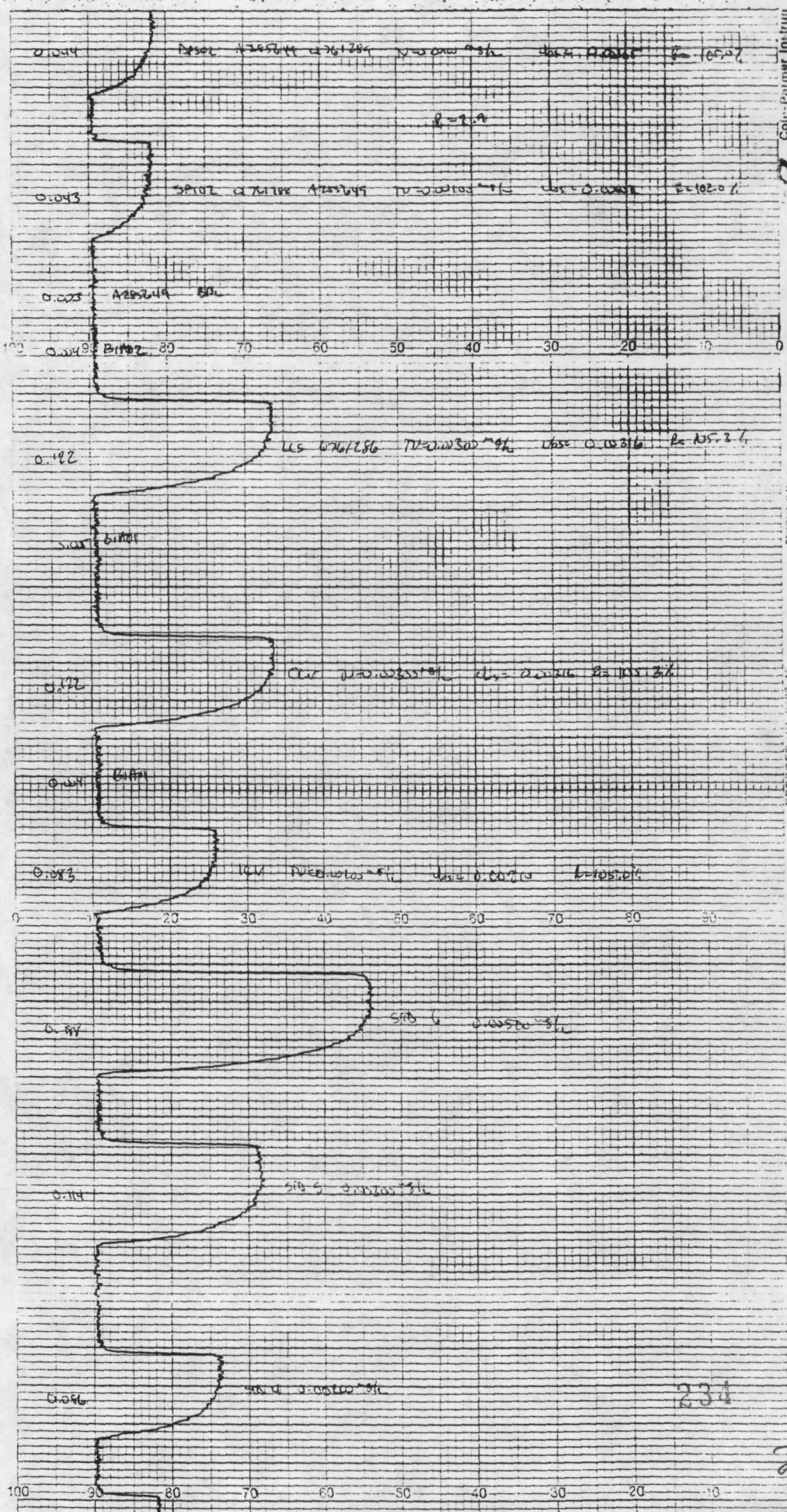
A285649-658

233

Hg Fe2380 No. 33 8.19.93

AZR 2971

20



Cole-Parmer Instrument
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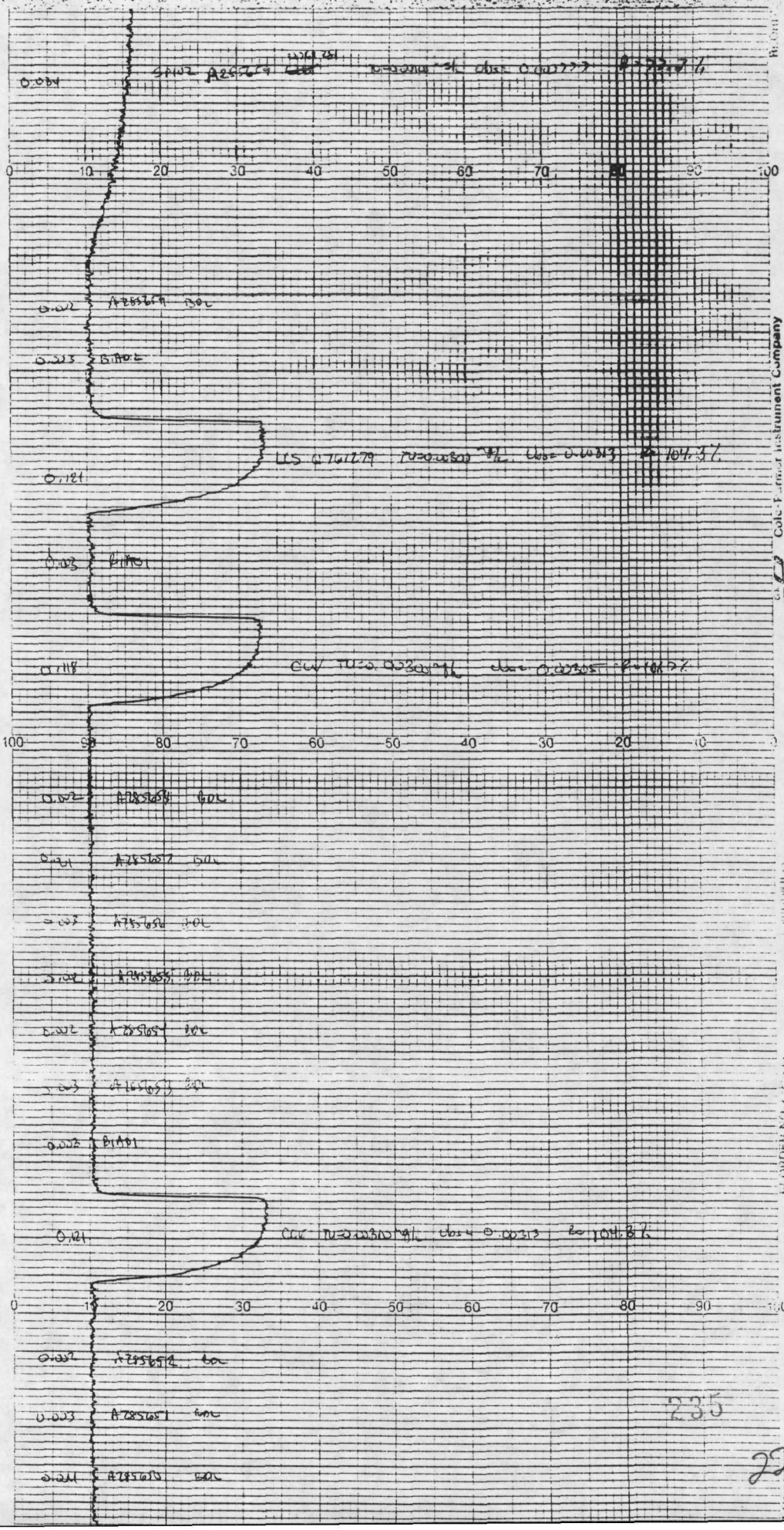
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Cole-Parmer Instrument Company
Chicago, Illinois 60648

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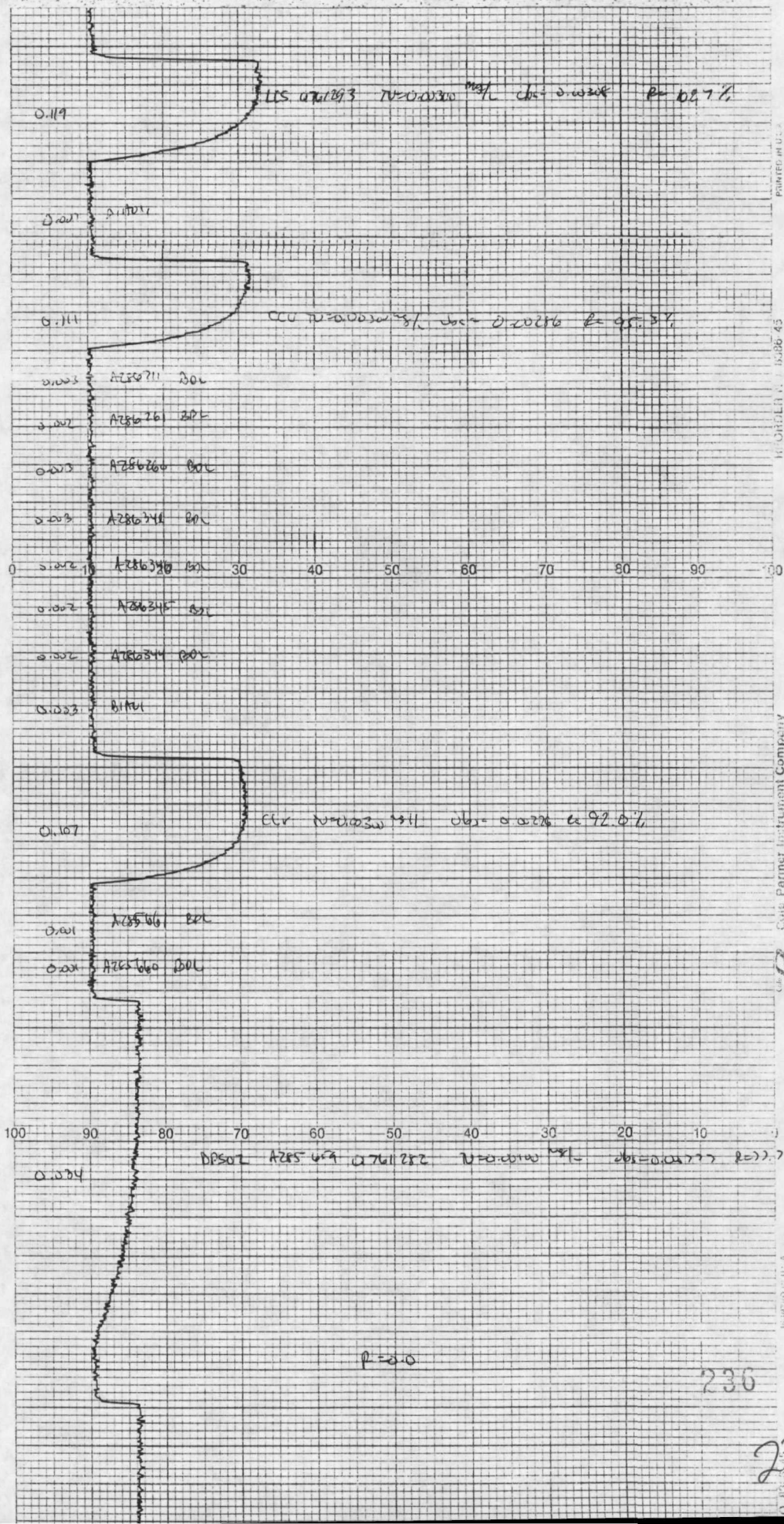
22



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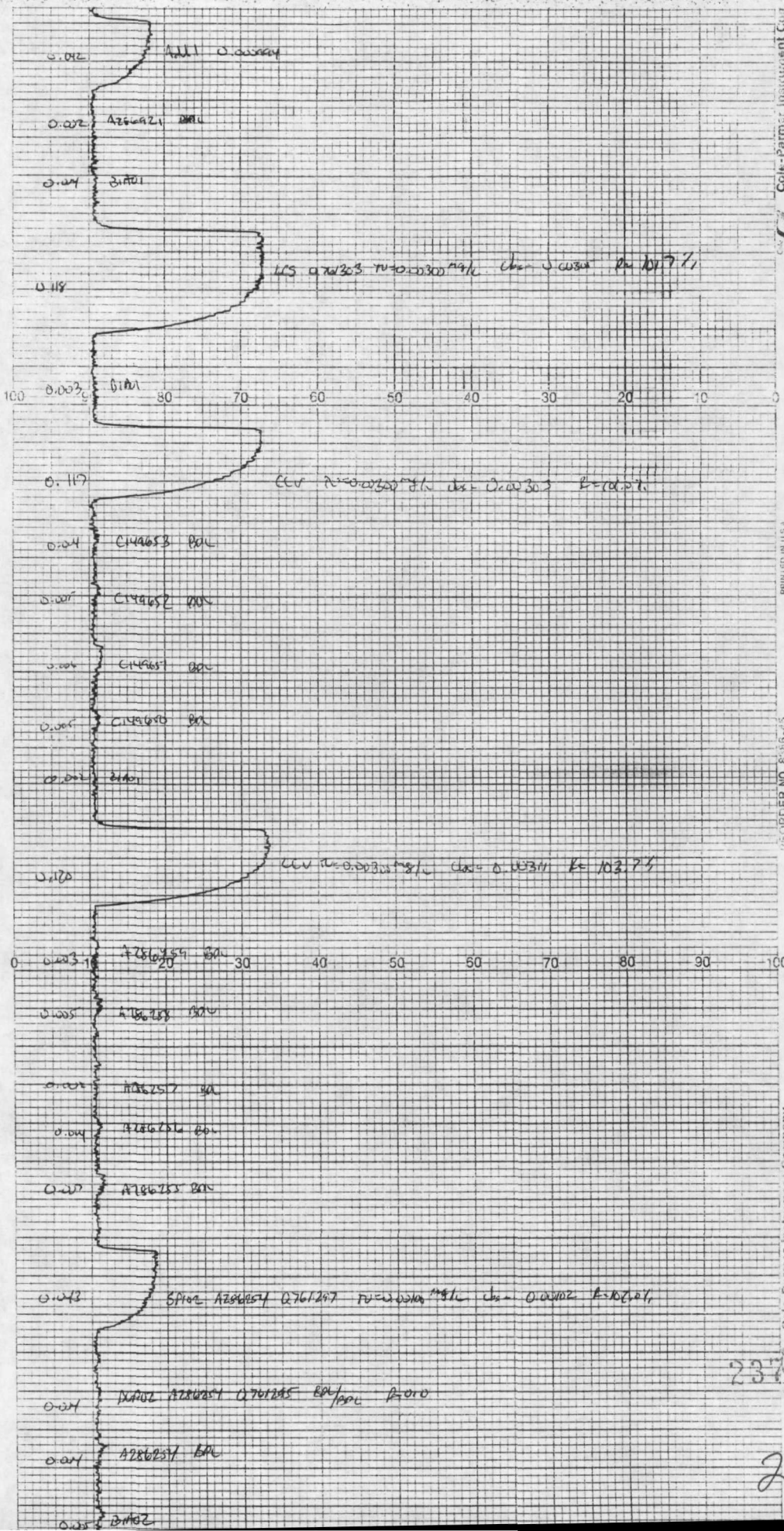
23



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Method: EMS Standard: STD1-Blank

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	-.0100	-.0001	.0001	.0022	.0003	.0001	.0006
SDev	.0000	.0009	.0005	.0003	.0000	.0002	.0002
%RSD	.0000	707.1	424.3	15.71	.0000	141.4	28.28
#1	-.0100	-.0008	.0005	.0025	.0003	.0000	.0005
#2	-.0100	.0005	-.0003	.0020	.0003	.0003	.0008

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	.1186	.0000	.0004	.0003	.0022	.0015	.0033
SDev	.0005	.0000	.0002	.0003	.0003	.0000	.0003
%RSD	.4471	.0000	47.14	84.85	15.71	.0000	10.88
#1	.1190	.0000	.0003	.0001	.0025	.0015	.0030
#2	.1182	.0000	.0005	.0005	.0020	.0015	.0035

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.1402	.0295	.0003	.0010	.0004	.0009	.0001
SDev	.0000	.0003	.0000	.0000	.0003	.0002	.0002
%RSD	.0000	1.198	.0000	.0000	94.28	20.20	141.4
#1	.1402	.0298	.0003	.0010	.0006	.0010	.0000
#2	.1402	.0292	.0003	.0010	.0001	.0008	.0003

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	-.0003	.0000	.0205	.0000	.0003	-.0011	.0149
SDev	.0011	.0000	.0007	.0000	.0000	.0000	.0012
%RSD	424.3	.0000	3.449	.0000	.0000	.0000	8.319
#1	-.0010	.0000	.0200	.0000	.0003	-.0011	.0140
#2	.0005	.0000	.0210	.0000	.0003	-.0011	.0158

Elem	V_2924	Zn2138	Zr3391
Avge	.0004	.0010	.0000
SDev	.0002	.0000	.0000

ICP MYJ 8-24-93
R194901

C149650-653 Ba, Pb, Cr, Ag (no Cd)

%RSD	47.14	.0000	.0000
#1	.0003	.0010	-.0000
#2	.0005	.0010	.0000

Method: EMS Standard: STD2

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.3832	1.487	1.451	1.707	3.315	1.609	.4594
SDev	.0003	.003	.002	.006	.008	.000	.0019
%RSD	.0923	.1783	.1097	.3470	.2533	.0165	.4233
#1	.3830	1.485	1.452	1.703	3.309	1.609	.4580
#2	.3835	1.489	1.450	1.711	3.321	1.609	.4608

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	Li6707	Mn2576
Avge	1.919	1.606	1.356	2.537	1.242	18.16	1.495
SDev	.002	.003	.000	.007	.001	.09	.001
%RSD	.1197	.1651	.0130	.2927	.0569	.4770	.0709
#1	1.921	1.608	1.357	2.532	1.243	18.10	1.496
#2	1.918	1.604	1.356	2.542	1.242	18.22	1.494

Elem	Ni2316	Pb2203	Se1960	Sr4215	Tl1908	V_2924	Zn2138
Avge	1.414	.4003	.1301	4.536	.6178	2.852	1.013
SDev	.002	.0011	.0003	.010	.0042	.002	.001
%RSD	.1375	.2650	.2717	.2105	.6868	.0682	.0698
#1	1.416	.4010	.1304	4.529	.6148	2.851	1.012
#2	1.413	.3995	.1299	4.543	.6208	2.853	1.013

Elem	Zr3391
Avge	1.839
SDev	.003
%RSD	.1682
#1	1.837
#2	1.841

Method: EMS Standard: STD3

Elem	Ca3158	K_7664	Mg3832	Na5895
Avge	2.587	.2711	.1423	.4082
SDev	.007	.0010	.0000	.0032
%RSD	.2734	.3587	.0000	.7794
#1	2.582	.2718	.1423	.4105
#2	2.592	.2704	.1423	.4060

Method: EMS Standard: STD4

Elem	Mo2020	Sb2068	Si2881	Sn1899	Ti3372
Avge	1.526	.2244	.9840	.5906	3.361
SDev	.011	.0034	.0035	.0023	.021

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%RSD	.7296	1.497	.3593	.3891	6206
#1	1.518	.2220	.9815	5922	3.346
#2	1.534	2268	9865	5890	3.376

Method: EMS Sample Name: CCV Operator: MYJ
Run Time: 08/24/93 09:48:09
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	1.028	5.284	5.221	5.184	5.158	5.150	5.179
SDev	.003	.005	.045	.003	.019	.008	.046
%RSD	.2624	.0898	8639	.0600	3722	1600	.8930
#1	1.030	5.287	5.189	5.186	5.172	5.156	5.146
#2	1.026	5.280	5.253	5.182	5.145	5.144	5.212

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	48.15	5.151	5.121	5.124	5.254	5.142	49.50
SDev	04	.004	.004	001	.011	.003	.22
%RSD	.0907	0715	0860	.0127	.2124	.0554	.4534
#1	48.12	5.149	5.118	5.124	5.261	5.144	49.66
#2	48.19	5.154	5.125	5.125	5.246	5.140	49.34

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	5.256	48.63	5.118	4.872	49.12	5.082	5.145
SDev	026	.06	.009	.007	.14	.000	.013
%RSD	.4852	.1290	.1733	.1427	.2780	.0001	.2571
#1	5.274	48.67	5.125	4.877	49.21	5.082	5.136
#2	5.238	48.58	5.112	4.867	49.02	5.082	5.154

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.9762	5.206	5.060	4.716	5.141	4.915	5.072
SDev	.0078	.027	.009	.039	.015	.010	.014
%RSD	.8039	.5211	.1811	.8250	.2847	.2032	.2847
#1	.9706	5.187	5.067	4.689	5.151	4.922	5.061
#2	.9817	5.225	5.054	4.744	5.130	4.908	5.082

Elem	V_2924	Zn2138	Zr3391
Avge	5.172	5.137	5.187
SDev	.005	.014	013
%RSD	.0958	.2726	.2595
#1	5.176	5.127	5.197
#2	5.169	5.147	5.178

Method: EMS Sample Name: BLA01 Operator: MYJ
Run Time: 08/24/93 09:50:33
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	-.0019	-.0050	.0164	.0088	.0000	.0008	.0027
SDev	.0009	.0036	.0097	.0021	.0000	.0000	.0077
%RSD	47.14	70.76	59.40	23.57	.0000	.0000	281.3
#1	-.0025	-.0025	.0233	.0103	.0000	.0008	.0082
#2	-.0013	-.0076	.0095	.0073	.0000	.0008	-.0027

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	-.0020	-.0000	-.0016	.0023	.0030	-.0010	-.0327
SDev	.0050	.0000	.0011	.0013	.0000	.0014	.0462
%RSD	247.5	195.0	70.71	56.57	.0098	141.4	141.4
#1	.0015	.0000	-.0008	.0032	.0030	-.0020	-.0000
#2	-.0056	-.0000	-.0023	.0014	.0030	-.0000	-.0653

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0006	.0000	.0008	.0033	-.0061	-.0018	-.0031
SDev	.0000	.0314	.0012	.0000	.0000	.0038	.0000
%RSD	.0000	29e6	141.4	.0791	.0000	212.0	.0917
#1	.0006	.0222	.0017	.0033	-.0061	.0009	-.0031
#2	.0006	-.0222	-.0000	.0033	-.0061	-.0044	-.0031

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.0078	.0192	.0078	.0042	.0003	-.0004	.0041
SDev	.0079	.0272	.0110	.0060	.0004	.0011	.0441
%RSD	101.8	141.4	141.1	141.4	140.3	282.8	1063
#1	.0022	.0384	.0156	.0085	.0006	.0004	.0353
#2	.0133	-.0000	.0000	.0000	.0000	-.0011	-.0270

Elem	V_2924	Zn2138	Zr3391
Avge	.0000	-.0000	.0000
SDev	.0006	.0000	.0000
%RSD	6683.	3694.	.0000
#1	.0005	-.0000	.0000
#2	-.0004	.0000	.0000

Method: EMS Sample Name: ICV01-19 Operator: MYJ
Run Time: 08/24/93 09:52:42
Comment:
Mode: CONC Corr. Factor: 1

AH 8/24/93

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	-.0025	.0123	.4112	.0007	-.0004	.4122	-.0374
SDev	.0000	.0024	.0158	.0031	.0005	.0039	.0000
%RSD	.0000	19.38	3.854	424.3	141.4	.9330	.0000
#1	-.0025	.0140	.4000	.0029	.0000	.4095	-.0374
#2	-.0025	.0106	.4225	-.0015	-.0008	.4150	-.0374

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	.4102	.4320	.4258	.4143	H.4501	.4251	-.0420
SDev	.0050	.0046	.0022	.0000	.0010	.0029	.0066

%RSD	1.222	1.077	5171	0000	2326	.6702	15.71
#1	.4138	.4287	.4243	.4143	H.4494	.4231	-.0373
#2	.4067	4353	.4274	.4143	H.4509	4272	-.0467

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0003	.4213	4190	4048	-.0061	.4218	4088
SDev	.0008	.0000	.0012	.0012	.0000	.0050	.0110
%RSD	282.8	0000	2823	.2863	.0000	1.186	2.701
#1	.0008	4213	.4181	.4040	-.0061	4182	.4166
#2	-.0003	.4213	.4198	.4056	-.0061	.4253	4010

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.4055	.3233	0030	0041	-.0004	.3974	H.4680
SDev	.0016	.0000	.0110	.0060	0004	.0021	.0938
%RSD	.3918	0131	365.1	144.7	89.03	.5292	20.05
#1	.4043	.3233	.0108	.0084	-.0002	.3960	.4017
#2	.4066	.3233	-.0048	-.0001	-.0007	.3989	H.5344

Elem	V_2924	Zn2138	Zr3391
Avge	.4098	H.4470	.0000
SDev	.0012	.0000	.0000
%RSD	.3026	.0049	.0000
#1	.4089	H.4470	.0000
#2	.4107	H.4470	.0000

Method: EMS Sample Name: ICV01-19 Operator: MYJ
Run Time: 08/24/93 09:56:09
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	-.0013	.0136	3983	.0007	.0000	.4122	-.0810
SDev	.0018	.0042	.0170	.0031	.0000	.0039	.0000
%RSD	141.4	30.71	4.280	424.3	.0000	.9330	.0268
#1	-.0000	.0106	.3863	.0029	.0000	.4095	-.0810
#2	-.0025	.0165	.4104	-.0015	.0000	.4150	-.0810

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	.4128	.4326	.4250	.4162	.4395	.4231	.0467
SDev	.0029	.0018	0011	.0026	0007	0000	.0000
%RSD	.6941	4256	2590	6265	1587	.0000	0000
#1	.4107	4339	.4243	4180	4390	.4231	.0467
#2	.4148	4313	.4258	4143	.4400	4231	.0467

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	0002	.4213	4190	4024	-.0061	4218	4290
SDev	.0003	.0000	.0012	0023	.0000	0000	0088
%RSD	141.4	.0000	2823	5773	0000	.0000	2.060
#1	.0004	.4213	4181	4007	-.0061	4218	.4353

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#2	-.0000	.4213	.4198	4040	-.0061	.4218	.4228

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.4065	.4241	.0056	.0041	-.0007	.3967	H.4929
SDev	.0283	.0068	.0074	.0060	.0000	.0010	.0176
%RSD	6.961	1.601	130.9	144.7	.1569	.2651	3.570
#1	.4265	.4290	.0108	-.0001	-.0007	3960	H.5053
#2	.3865	4193	0004	0084	-.0007	.3974	H.4804

Elem	V_2924	Zn2138	Zr3391
Avge	.4102	4334	0000
SDev	.0006	.0018	.0000
%RSD	1485	.4035	.0000
#1	.4098	4347	.0000
#2	.4107	.4322	0000

Method: EMS Sample Name: ICV01-07 Operator: MYJ
Run Time: 08/24/93 09:58:23
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	2.027	1.953	-.0166	2.049	1.998	-.0008	.0272
SDev	.001	.001	.0122	.006	.002	.0000	0270
%RSD	.0443	.0306	73.23	3037	0801	.0000	98.93
#1	2.028	1.953	-.0253	2.053	2.000	- 0008	.0463
#2	2.027	1.952	-.0080	2.045	1.997	- 0008	.0082

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	.0116	0007	- 0008	- 0005	.0148	.0071	19.34
SDev	.0014	.0009	.0022	.0026	0000	.0043	06
%RSD	12.30	132 2	282.8	565 7	0059	60.61	.3072
#1	.0106	.0014	.0008	-.0023	0148	.0040	19.30
#2	.0127	.0000	-.0023	0014	.0148	0101	19.38

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0005	.0222	-.0000	- 0025	1 981	-.0018	.0081
SDev	.0001	.0000	.0000	.0012	.041	0013	.0000
%RSD	20.20	.0000	.0000	47.37	2.078	70.53	.0011
#1	0004	.0222	-.0000	- 0016	1.952	- 0009	.0081
#2	.0006	.0222	- 0000	-.0033	2.010	-.0027	0081

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.0034	.0001	.9964	- 0000	-.0006	- 0007	0636
SDev	.0016	.0001	.0074	0000	.0000	.0005	0293
%RSD	46.88	60.61	.7401	60.61	1005	70.71	46 13
#1	.0045	.0001	.9911	- 0000	- 0006	-.0004	0843
#2	.0023	.0001	1.002	- 0000	- 0006	- 0011	0428

Elem	V_2924	Zn2138	Zr3391

Avge	-.0013	.0123	.0000
SDev	.0000	.0035	.0000
%RSD	.8038	28.31	.0000
#1	-.0013	.0148	.0000
#2	-.0013	.0099	.0000

Method: EMS Sample Name: ICV01-31 Operator: MYJ
Run Time: 08/24/93 10:00:32
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	-.0000	-.0135	-.0077	.0000	.0000	.0008	.0354
SDev	.0000	.0048	.0097	.0021	.0000	.0000	.0077
%RSD	.0000	35.37	126.6	274e6	.0000	.0000	21.75
#1	-.0000	-.0101	-.0008	.0015	.0000	.0008	.0300
#2	-.0000	-.0169	-.0146	-.0015	.0000	.0008	.0409

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	96.88	.0019	-.0023	.0014	.0148	.0826	102.8
SDev	.09	.0009	.0000	.0000	.0000	.0057	.1
%RSD	.0939	48.45	.0000	.0000	.0078	6.899	.1284
#1	96.95	.0026	-.0023	.0014	.0148	.0866	102.9
#2	96.82	.0013	-.0023	.0014	.0148	.0786	102.7

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	-.0001	99.42	.0050	-.0033	101.5	-.0053	-.0031
SDev	.0006	.09	.0000	.0000	.2	.0013	.0000
%RSD	424.3	.0946	.0000	.0000	.2071	23.55	.1404
#1	-.0006	99.49	.0050	-.0033	101.6	-.0044	-.0031
#2	.0003	99.36	.0050	-.0033	101.3	-.0062	-.0031

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.0049	-.0372	-.0155	.0127	-.0356	-.0026	-.1591
SDev	.0031	.0001	.0000	.0060	.0000	.0000	.0451
%RSD	64.28	.2274	.0000	47.20	.0997	.0000	28.35
#1	.0026	-.0371	-.0155	.0169	-.0356	-.0026	-.1910
#2	.0071	-.0373	-.0155	.0084	-.0356	-.0026	-.1272

Elem	V_2924	Zn2138	Zr3391
Avge	-.0013	.0198	.0000
SDev	.0000	.0000	.0000
%RSD	.0000	.0243	.0000
#1	-.0013	.0197	.0000
#2	-.0013	.0198	.0000

Method: EMS Sample Name: BLA01 Operator: MYJ
Run Time: 08/24/93 10:02:48

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Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	-.0025	-.0050	.0112	-.0015	-.0011	-.0008	-.0027
SDev	.0000	.0107	.0024	.0000	.0005	.0000	.0154
%RSD	.0000	212.3	21.40	0000	47.14	.0000	565.1
#1	-.0025	-.0126	.0095	-.0015	-.0015	-.0008	-.0136
#2	-.0025	.0025	.0129	-.0015	-.0008	-.0008	.0082

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	.0086	-.0000	-.0016	-.0000	-.0010	- 0020	.0280
SDev	.0057	.0000	.0011	.0020	0000	.0000	.0000
%RSD	66.55	247.3	70.71	3359e6	0000	0000	0000
#1	.0127	.0000	- 0023	0014	-.0010	-.0020	0280
#2	0046	-.0000	-.0008	-.0014	-.0010	- 0020	.0280

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	- 0001	.0222	-.0000	-.0008	.0230	-.0009	.0031
SDev	.0002	.0000	.0000	.0012	.0412	.0025	.0088
%RSD	141.4	0000	0000	141.9	179.1	282.9	282.5
#1	- 0003	.0222	- 0000	-.0016	.0521	.0009	-.0031
#2	-.0000	.0222	-.0000	0000	- 0061	-.0027	.0094

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.0033	-.0192	-.0052	0000	-.0006	-.0019	.0892
SDev	.0047	.0272	.0000	.0000	.0000	.0011	.0176
%RSD	141.1	141.2	.5102	.0000	4030	56.57	19.71
#1	.0067	-.0385	-.0052	0000	-.0006	-.0026	0768
#2	.0000	-.0000	-.0052	0000	-.0006	- 0011	.1017

Elem	V_2924	Zn2138	Zr3391
Avge	- 0013	- 0049	.0000
SDev	.0012	.0000	0000
%RSD	93.68	.1947	.0000
#1	-.0022	-.0049	.0000
#2	-.0004	-.0049	0000

Method: EMS Sample Name: DLS Operator: MYJ
Run Time: 08/24/93 10:04:58
Comment:
Mode: CONC Corr Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0089	.0479	.0059	-.0059	.0091	.0054	-.0081
SDev	.0018	.0000	.0049	.0021	.0000	0000	.0077
%RSD	20.20	.0006	83.21	35.36	.0000	.0000	95.22
#1	.0102	.0479	.0024	-.0044	.0091	0054	-.0136
#2	L.0076	.0479	.0093	- 0073	.0091	.0054	-.0027

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664

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Avge	.0076	L.0037	.0086	L.0069	H.0291	H.0363	.0327
SDev	.0014	.0014	.0000	.0026	.0007	.0000	.0330
%RSD	18.86	37.62	.0000	37.71	2.396	.0000	101.4
#1	.0086	L.0027	.0086	L.0051	H.0296	H.0363	.0093
#2	.0066	.0046	.0086	.0088	H.0286	H.0363	.0560

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0000	-.0222	L.0084	-.0033	-.0061	L.0080	L.0407
SDev	.0004	.0000	.0000	.0000	.0000	.0000	.0088
%RSD	73e6	.0000	.0000	1572	.0000	.0027	21.73
#1	.0003	-.0222	L.0084	-.0033	-.0061	L.0080	.0344
#2	-.0003	-.0222	L.0084	-.0033	-.0061	L.0080	.0469

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.0335	.0005	-.0025	-.0000	-.0006	-.0013	.0372
SDev	.0000	.0000	.0036	.0000	.0000	.0003	.1085
%RSD	.0969	.0000	145.3	.0000	.1008	20.20	291.5
#1	.0335	.0005	.0001	-.0000	-.0006	-.0011	-.0395
#2	.0335	.0005	-.0051	-.0000	-.0006	-.0015	.1139

Elem	V_2924	Zn2138	Zr3391
Avge	.0088	H.0296	.0000
SDev	.0006	.0000	.0000
%RSD	6.928	.0057	.0000
#1	.0092	H.0295	.0000
#2	L.0084	H.0296	.0000

Method: EMS Sample Name: CDL01 Operator: MYJ
Run Time: 08/24/93 10:07:12
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0175	.0008	.0163	-.0033	-.0011	.0085	.0192
SDev	.0004	.0000	.0146	.0016	.0005	.0000	.0077
%RSD	2.571	.0686	89.50	47.14	47.14	.0000	40.06
#1	.0178	.0008	.0267	-.0022	-.0015	.0085	.0247
#2	.0172	.0008	.0060	-.0044	-.0008	.0085	.0138

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	.0127	.0112	.0989	.0198	.0567	.0081	-.0000
SDev	.0029	.0000	.0022	.0000	.0007	.0000	.0132
%RSD	22.63	.0000	2.227	.0000	1.230	.0000	709e6
#1	.0106	.0112	.0973	.0198	.0572	.0081	-.0093
#2	.0147	.0112	.1004	.0198	.0562	.0081	.0093

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0006	.0222	.0268	-.0033	-.0077	.0787	L.0782
SDev	.0000	.0000	.0000	.0000	.0022	.0000	.0088
%RSD	.0000	.0000	.0000	.0000	28.28	.0003	11.30

#1	.0006	.0222	.0268	- 0033	- 0092	.0787	1 0845
#2	.0006	.0222	.0268	- 0033	-.0061	0787	1.0720

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.1300	.0001	-.0023	- 0000	-.0006	-.0011	.0602
SDev	.0016	.0000	.0000	.0000	.0000	.0000	.0586
%RSD	1.211	.0000	.0000	0000	.2009	.0000	97.41
#1	1289	0001	-.0023	-.0000	-.0006	-.0011	.1017
#2	.1311	0001	-.0023	- 0000	- 0006	- 0011	0187

Elem	V_2924	Zn2138	Zr3391
Avge	.0948	H.0465	0000
SDev	.0006	.0000	0000
%RSD	.6542	.0036	.0000
#1	.0943	H.0465	.0000
#2	.0952	H.0465	0000

Method: EMS Sample Name: HMCS Operator: MYJ
Run Time: 08/24/93 10:09:25
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	2.028	10.13	10 18	10.16	10.13	10.20	10.17
SDev	.002	.01	02	.02	.00	.00	13
%RSD	.0887	.1056	.2159	1786	0316	.0216	1 251
#1	2.027	10.12	10 19	10.15	10.13	10.20	10.08
#2	2.029	10.13	10.16	10.17	10.13	10 19	10.26

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	.1109	10.35	10 24	10 22	10.12	10.19	- 0000
SDev	.0014	.00	.01	.00	.03	.00	.0132
%RSD	1.292	.0080	.0968	0000	2962	.0000	709e6
#1	.1099	10.35	10.25	10.22	10.10	10.19	-.0093
#2	.1119	10 35	10.23	10.22	10.15	10.19	.0093

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	10.05	.0665	10.20	0018	.0490	10.22	10.26
SDev	.01	.0000	00	.0012	0000	.01	.03
%RSD	.1191	.0000	.0000	62.79	0000	.0978	.2807
#1	10.04	.0665	10 20	0010	0490	10.21	10.24
#2	10.06	0665	10 20	0027	.0490	10.23	10.28

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	-.0021	10.30	.0553	0104	10.13	- 0033	10 27
SDev	.0126	00	0000	0060	.00	.0011	06
%RSD	608 2	.0000	0000	57.47	.0077	31 43	.5711
#1	.0068	10.30	.0553	0062	10.13	-.0041	10 31
#2	-.0110	10.30	0553	0146	10.13	- 0026	10 23

Elem	V_2924	Zn2138	Zr3391
Avge	10.22	10.14	10.17
SDev	.01	.02	.00
%RSD	.0606	.1883	.0284
#1	10.22	10.13	10.16
#2	10.23	10.16	10.17

Method: EMS Sample Name: ICS Operator: MYI
Run Time: 08/24/93 10:11:34
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.9536	501.3	.1167	.0176	.4873	.4779	.0201
SDev	.0018	2.2	.1007	.0104	.0011	.0000	.0038
%RSD	.1886	.4293	86.31	58.93	.2189	.0000	19.13
#1	.9523	499.8	.0455	.0249	.4865	.4779	.0228
#2	.9549	502.8	.1879	.0103	.4880	.4779	.0174

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	456.9	.9246	.4499	.4484	.5541	178.8	-.0467
SDev	2.4	.0004	.0033	.0013	.0054	.7	.0528
%RSD	.5161	.0402	.7340	.2907	.9803	.4061	113.1
#1	455.3	.9244	.4476	.4475	.5580	178.2	-.0840
#2	458.6	.9249	.4523	.4494	.5503	179.3	-.0093

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0009	469.6	.4729	-.0107	.0766	.8887	.8749
SDev	.0009	1.9	.0006	.0046	.0087	.0050	.0007
%RSD	97.91	.4006	.1250	43.25	11.31	.5632	.0769
#1	.0015	468.3	.4725	-.0074	.0827	.8852	.8744
#2	.0003	471.0	.4733	-.0140	.0705	.8923	.8753

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ta3372	Ti1908
Avge	.2178	-.4203	.0385	-.0125	-.1716	.0009	L-1.035
SDev	.0163	.0244	.0018	.0088	.0017	.0008	.082
%RSD	7.460	5.797	4.719	70.37	.9903	84.85	7.924
#1	.2063	-.4375	.0398	-.0188	-.1704	.0015	L-1.093
#2	.2293	-.4030	.0372	-.0063	-.1728	.0004	-.9772

Elem	V_2924	Zn2138	Zr3391
Avge	.4661	.9873	.0092
SDev	.0000	.0053	.0024
%RSD	.0011	.5315	26.19
#1	.4660	.9910	.0109
#2	.4661	.9836	.0075

#1	-.0078	L-.2439	.0167	-.0000	4.033	.0044	.0342
#2	-.0072	L-.2217	.0167	.0032	4.171	.0062	.0154

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.0398	.0003	.7709	.0251	.0029	.0167	-.0154
SDev	.0064	.0270	.0330	.0000	.0004	.0000	.0938
%RSD	15.99	8430.	4.284	.0127	13.45	.0000	609.9
#1	.0353	.0194	.7475	.0251	.0032	.0167	.0509
#2	.0443	-.0187	.7942	.0251	.0026	.0167	-.0817

Elem	V_2924	Zn2138	Zr3391
Avge	-.0004	.0506	.0020
SDev	.0012	.0018	.0010
%RSD	339.3	3.468	47.14
#1	.0005	.0518	.0014
#2	-.0012	.0493	.0027

Method: EMS Sample Name: CCV Operator: MYJ
Run Time: 08/24/93 14:39:39
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	1.003	5.053	5.189	5.086	4.896	4.879	4.739
SDev	.004	.012	.016	.006	.008	.010	.019
%RSD	.4032	.2354	.3042	.1223	.1688	.2027	.4079
#1	1.006	5.062	5.200	5.091	4.902	4.886	4.753
#2	1.001	5.045	5.178	5.082	4.890	4.872	4.725

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	46.57	4.974	4.995	4.997	4.973	4.991	46.44
SDev	.10	.017	.010	.008	.002	.011	.13
%RSD	.2176	.3440	.1984	.1565	.0420	.2284	.2701
#1	46.64	4.986	5.002	5.003	4.971	4.999	46.53
#2	46.50	4.962	4.988	4.992	4.974	4.983	46.35

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	4.888	47.22	4.956	4.756	L44.23	4.963	5.085
SDev	.002	.05	.012	.012	.10	.008	.018
%RSD	.0351	.0996	.2506	.2433	.2254	.1512	.3472
#1	4.886	47.25	4.965	4.764	L44.30	4.968	5.098
#2	4.889	47.18	4.947	4.748	L44.16	4.958	5.073

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.9625	5.271	5.000	4.875	4.872	4.694	5.301
SDev	.0189	.027	.004	.030	.010	.011	.000
%RSD	1.966	.5187	.0755	.6140	.2112	.2352	.0031
#1	.9491	5.290	5.003	4.854	4.879	4.702	5.301
#2	.9759	5.252	4.998	4.896	4.864	4.686	5.301

Elem	V_2924	Zn2138	Zr3391
Avge	4.988	5.099	4.976
SDev	.012	.007	.012
%RSD	.2492	.1375	.2318
#1	4.997	5.094	4.985
#2	4.979	5.104	4.968

Method: EMS Sample Name: BLA01 Operator: MYJ
Run Time: 08/24/93 14:41:45
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0019	-.0109	.0121	.0161	.0006	.0016	.0082
SDev	.0009	.0024	.0036	.0083	.0013	.0011	.0000
%RSD	47.14	21.76	30.10	51.43	235.7	70.71	.2652
#1	.0025	-.0092	.0147	H.0220	.0015	H.0023	.0082
#2	.0013	-.0126	.0095	.0103	-.0004	.0008	.0082

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	.0238	.0013	-.0008	.0014	.0089	.0030	-.0000
SDev	.0043	.0019	.0022	.0026	.0000	.0014	.0132
%RSD	18.05	148.0	282.8	188.6	.0033	47.14	709e6
#1	.0268	.0026	.0008	.0032	.0089	.0040	.0093
#2	.0208	-.0001	-.0023	-.0005	.0089	.0020	-.0093

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0047	.0887	-.0000	H.0082	.0490	-.0027	.0032
SDev	.0008	.0314	.0000	.0023	.0000	.0050	.0088
%RSD	16.64	35.36	.0000	28.23	.0000	188.4	279.9
#1	.0053	.1109	-.0000	H.0098	.0490	.0009	.0094
#2	.0042	.0665	-.0000	H.0066	.0490	-.0062	-.0031

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.0067	.0048	.0578	L-.0106	.0001	-.0004	-.0204
SDev	.0063	.0068	.0027	.0030	.0002	.0011	.0558
%RSD	93.93	140.5	4.704	28.28	150.3	282.8	273.4
#1	.0111	.0097	.0558	-.0085	.0003	.0004	.0191
#2	.0022	.0000	.0597	L-.0127	-.0000	-.0011	-.0599

Elem	V_2924	Zn2138	Zr3391
Avge	-.0004	.0099	.0014
SDev	.0013	.0000	.0019
%RSD	289.0	.1947	141.4
#1	.0005	.0099	.0027
#2	-.0013	.0099	.0000

Method: EMS Sample Name: 0761093 LCS Operator: MYJ

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Run Time: 08/24/93 15:01:07
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.4622	19.35	19.47	1.020	19.50	.4853	L.3919
SDev	.0009	.01	.07	.001	.01	.0016	.0115
%RSD	.1945	.0308	.3694	.1017	.0657	.3397	2.941
#1	.4615	19.35	19.52	1.021	19.50	.4865	L.4001
#2	.4628	19.36	19.42	1.019	19.49	.4841	L.3838

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	87.98	.4993	4.818	1.910	2.461	9.712	92.03
SDev	.13	.0009	.007	.004	.004	.014	.04
%RSD	.1490	.1836	.1371	.2047	.1702	.1467	.0394
#1	87.89	.5000	4.823	1.908	2.458	9.702	92.05
#2	88.07	.4987	4.813	1.913	2.464	9.722	92.00

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.9899	90.91	4.794	.9583	88.32	4.760	4.759
SDev	.0041	.00	.001	.0116	.03	.000	.013
%RSD	.4162	.0000	.0247	1.209	.0294	.0000	.2786
#1	.9928	90.91	4.793	.9501	88.34	4.760	4.749
#2	.9869	90.91	4.795	.9665	88.30	4.760	4.768

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	L.0165	20.31	.0648	L.0148	.9529	.9611	21.27
SDev	.0220	.03	.0037	.0000	.0016	.0010	.00
%RSD	133.6	.1348	5.746	.0216	.1690	.1094	.0000
#1	L.0320	20.29	.0622	L.0148	.9540	.9618	21.27
#2	L.0009	20.33	.0674	L.0148	.9517	.9603	21.27

Elem	V_2924	Zn2138	Zr3391
Avge	4.869	4.742	1.014
SDev	.009	.024	.000
%RSD	.1786	.5156	.0000
#1	4.863	4.725	1.014
#2	4.875	4.760	1.014

Method: EMS Sample Name: 0761094 BLA02 Operator: MYJ
Run Time: 08/24/93 15:03:13
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0013	-.0076	.0267	.0198	.0019	-.0008	.0218
SDev	.0018	.0024	.0146	.0031	.0005	.0000	.0116
%RSD	141.4	31.44	54.65	15.71	28.28	.0000	53.04
#1	-.0000	-.0092	.0164	.0176	.0023	-.0008	.0136
#2	.0025	-.0059	.0371	H.0220	.0015	-.0008	.0300

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	.0481	-.0013	.0008	-.0005	.0158	.0040	-.0093
SDev	.0043	.0000	.0000	.0000	.0014	.0000	.0000
%RSD	8.932	1.845	.0000	.0000	8.838	.0000	.0000
#1	.0512	-.0013	.0008	-.0005	.0168	.0040	-.0093
#2	.0451	-.0013	.0008	-.0005	.0148	.0040	-.0093

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0016	.0443	.0008	-.0041	.0812	-.0009	.0000
SDev	.0001	.0000	.0012	.0012	.0065	.0025	.0044
%RSD	6.149	.0000	141.4	28.29	8.005	281.4	9175.
#1	.0015	.0443	-.0000	-.0049	.0858	-.0027	-.0031
#2	.0017	.0443	.0017	-.0033	.0766	.0009	.0032

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.0034	-.0047	H.9004	-.0042	-.0000	-.0007	.0893
SDev	.0126	.0068	.0110	.0060	.0000	.0016	.0293
%RSD	374.2	143.2	1.223	141.4	8.932	212.1	32.83
#1	-.0055	.0001	H.8926	-.0000	-.0000	-.0019	.1101
#2	.0123	-.0095	H.9081	-.0085	-.0000	.0004	.0686

Elem	V_2924	Zn2138	Zr3391
Avge	.0004	H.0370	.0014
SDev	.0000	.0035	.0019
%RSD	.0000	9.454	141.4
#1	.0004	H.0395	.0027
#2	.0004	H.0346	.0000

Method: EMS Sample Name: C149650-M1 Operator: MYJ
Run Time: 08/24/93 15:05:18
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0051	.0177	.0423	.2699	.1086	-.0008	.0409
SDev	.0000	.0022	.0109	.0021	.0011	.0000	.0154
%RSD	.0000	12.54	25.90	.7686	.9821	.0000	37.74
#1	.0051	.0161	.0345	.2713	.1094	-.0008	.0300
#2	.0051	.0192	.0500	.2684	.1079	-.0008	.0518

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	181.4	.0003	.0008	.0005	.0118	4.556	6.534
SDev	1.0	.0018	.0000	.0013	.0014	.037	.092
%RSD	.5359	626.4	.0000	282.8	11.78	.8131	1.414
#1	182.1	-.0010	.0008	-.0005	.0108	4.582	6.600
#2	180.7	.0016	.0008	.0014	.0128	4.530	6.469

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0400	37.49	.6523	-.0025	45.26	.0035	.0086
SDev	.0002	.38	.0047	.0012	.64	.0013	.0000

%RSD	.4911	1.004	.7252	47.23	1 417	35.40	.1055
#1	.0398	37.76	.6556	-.0016	45 71	.0044	.0086
#2	.0401	37.23	.6489	-.0033	44.81	.0026	.0086

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.0075	.0004	13.81	.0117	.3305	.0026	- 0207
SDev	.0065	.0141	.08	.0060	.0051	.0010	0336
%RSD	87.07	3657	.5713	51.33	1.536	40.41	162.2
#1	.0121	0104	13.86	0074	.3341	.0019	.0030
#2	.0029	-.0096	13.75	.0159	3269	0033	-.0445

Elem	V_2924	Zn2138	Zr3391
Avge	.0031	.0370	.0041
SDev	.0013	.0035	0000
%RSD	40.55	9.435	.0000
#1	.0022	.0395	.0041
#2	.0040	.0346	.0041

Method: EMS Sample Name: C149651-M1 Operator: MYJ
Run Time: 08/24/93 15:07:24
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0013	.0169	.0586	2640	.1086	- 0008	.0218
SDev	.0018	.0029	.0049	.0021	.0011	.0000	.0039
%RSD	141.4	17.43	8.329	.7857	.9821	.0000	17.68
#1	.0025	.0148	.0621	.2655	1079	-.0008	.0245
#2	-.0000	0190	.0552	.2625	.1094	-.0008	.0191

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	179.7	-.0010	.0008	-.0005	0162	4 561	6 488
SDev	.1	.0000	.0000	.0000	.0007	.001	.040
%RSD	.0564	4.592	0000	.0000	4.300	0312	6105
#1	179.8	-.0010	.0008	-.0005	.0167	4.560	6 516
#2	179.6	-.0011	.0008	-.0005	0157	4.562	6.460

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0395	37.29	.6422	L-.0066	145.3	.0009	.0055
SDev	.0003	.03	.0000	0000	.7	.0050	.0133
%RSD	.7456	.0841	.0000	.0000	4548	568.8	241 4
#1	.0397	37.27	.6422	L-.0066	144.9	.0044	.0149
#2	.0393	37.32	6422	L-.0066	145.8	- 0027	-.0039

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	-.0014	-.0091	13.85	.0053	.3304	.0019	- 1044
SDev	.0000	.0272	.03	.0090	.0012	0000	.0324
%RSD	.5141	297.3	.1855	168 5	.3659	.0000	31.02
#1	- 0014	-.0284	13.83	.0117	.3295	.0019	- 1272

#2	-.0014	.0101	13.87	-.0010	.3312	0019	-.0815

Elem	V_2924	Zn2138	Zr3391
Avge	.0022	.0383	.0027
SDev	.0025	.0017	.0000
%RSD	113.2	4.512	.0000
#1	.0039	.0395	.0027
#2	.0004	.0370	.0027

Method: EMS Sample Name: C149652-M1 Operator: MYJ
Run Time: 08/24/93 15:09:30
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0032	.0632	.0291	.3872	0577	-.0008	.0354
SDev	.0009	.0012	.0024	.0021	.0005	.0000	.0077
%RSD	28.28	1.949	8.369	.5357	.9243	.0000	21.75
#1	.0025	.0641	.0274	.3887	.0581	-.0008	.0300
#2	.0038	.0623	.0309	.3857	.0573	-.0008	.0409

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	76.24	.0015	-.0008	.0014	.0137	4.386	10.81
SDev	.29	.0000	.0022	.0000	.0000	.014	.02
%RSD	.3748	1.898	282.8	.0000	.0211	.3248	.1833
#1	76.44	.0015	.0008	.0014	.0137	4.397	10.82
#2	76.04	.0015	-.0023	.0014	.0137	4.376	10.79

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0581	15.10	.2467	-.0016	24.05	.0026	.0164
SDev	.0001	.06	.0012	.0023	.16	.0025	.0022
%RSD	.1690	.4153	.4794	141.2	.6667	94.43	13.43
#1	.0581	15.14	.2475	-.0033	24 17	.0044	.0180
#2	.0580	15.06	.2459	-.0000	23.94	.0009	.0149

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.0088	-.0646	17.82	.0011	.2100	.0041	-.0046
SDev	.0031	.0745	.06	.0150	.0014	.0010	.0379
%RSD	34.86	115.4	.3089	1320.	.6892	25.71	818.9
#1	.0066	L-.1173	17.86	-.0095	.2111	.0033	-.0314
#2	.0110	-.0119	17.78	.0117	.2090	.0048	.0222

Elem	V_2924	Zn2138	Zr3391
Avge	.0033	.0395	.0027
SDev	.0003	.0000	.0000
%RSD	9.412	.0244	.0000
#1	.0035	.0395	0027
#2	.0031	.0395	.0027

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Method: EMS Sample Name: C149653-M1 Operator: MYJ
Run Time: 08/24/93 15:11:35
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0045	.0269	.0358	.2801	.0505	-.0008	.0518
SDev	.0009	.0047	.0195	.0000	.0000	.0000	.0000
%RSD	20.20	17.46	54.35	.0000	.0000	.0000	.0419
#1	.0051	.0236	.0221	.2801	.0505	-.0008	.0518
#2	.0038	.0302	.0496	.2801	.0505	-.0008	.0518

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	76.77	.0017	.0008	.0032	.0119	2.886	5.036
SDev	.38	.0009	.0000	.0026	.0007	.024	.033
%RSD	.5015	54.13	.0000	80.81	5.806	.8392	.6553
#1	77.04	.0024	.0008	.0051	.0114	2.903	5.060
#2	76.50	.0011	.0008	.0014	.0124	2.869	5.013

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0375	17.24	.3136	-.0025	46.97	.0080	.0229
SDev	.0002	.11	.0012	.0012	.43	.0000	.0022
%RSD	.5238	.6366	.3771	46.81	.9228	.0027	9.614
#1	.0376	17.32	.3144	-.0016	47.27	.0080	.0245
#2	.0373	17.16	.3128	-.0033	46.66	.0080	.0214

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	-.0032	L-.1012	14.82	.0036	.1985	.0052	.0258
SDev	.0157	.0004	.06	.0060	.0006	.0016	.0172
%RSD	482.6	.3551	.4335	166.8	.3170	30.30	66.76
#1	-.0143	L-.1010	14.87	.0078	.1990	.0041	.0136
#2	.0078	L-.1015	14.77	-.0006	.1981	.0063	.0379

Elem	V_2924	Zn2138	Zr3391
Avge	.0062	.0321	.0027
SDev	.0006	.0035	.0000
%RSD	9.908	10.90	.0000
#1	.0057	.0345	.0027
#2	.0066	.0296	.0027

Method: EMS Sample Name: B122151-M1 Operator: MYJ
Run Time: 08/24/93 15:13:41
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0038	-.0014	.0134	.0653	.0875	-.0008	.0354
SDev	.0000	.0042	.0085	.0010	.0011	.0000	.0000
%RSD	.0000	309.3	63.75	1.589	1.219	.0000	.0000
#1	.0038	.0016	.0074	.0660	.0883	-.0008	.0354
#2	.0038	-.0043	.0194	.0645	.0867	-.0008	.0354

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	70.78	-.0007	.0257	.0014	.0111	6.191	2.768
SDev	.41	.0005	.0000	.0000	.0000	.038	.020
%RSD	.5722	71.70	.0000	.0000	.0702	.6214	.7155
#1	71.07	-.0003	.0257	.0014	.0111	6.218	2.754
#2	70.49	-.0010	.0257	.0014	.0111	6.164	2.782

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0043	37.34	5.171	L-.0066	248.6	.0141	.0083
SDev	.0002	.13	.028	.0000	.9	.0013	.0000
%RSD	4.562	.3359	.5488	.0000	.3809	8.841	.1155
#1	.0042	37.43	5.192	L-.0066	249.3	.0150	.0083
#2	.0044	37.25	5.151	L-.0066	248.0	.0133	.0083

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.0040	-.0426	19.37	.0028	1.042	-.0000	-.0855
SDev	.0089	.0006	.06	.0060	.004	.0005	.1998
%RSD	219.1	1.341	.3267	210.6	.3963	201e6	233.7
#1	.0103	-.0422	19.42	-.0014	1.045	.0004	.0558
#2	-.0022	-.0430	19.33	.0071	1.039	-.0004	-.2268

Elem	V_2924	Zn2138	Zr3391
Avge	.0000	.0296	-.0027
SDev	.0019	.0000	.0000
%RSD	33130.	.0163	.0000
#1	.0013	.0296	-.0027
#2	-.0013	.0296	-.0027

Method: EMS Sample Name: CCV Operator: MYJ
Run Time: 08/24/93 15:15:47
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	1.040	5.295	5.406	5.366	5.159	5.195	4.989
SDev	.000	.001	.017	.030	.010	.011	.023
%RSD	.0000	.0223	.3155	.5605	.1861	.2116	.4639
#1	1.040	5.294	5.394	5.344	5.152	5.187	4.973
#2	1.040	5.296	5.418	5.387	5.166	5.203	5.005

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	49.91	5.228	5.215	5.222	5.223	5.246	49.81
SDev	.03	.004	.007	.003	.016	.014	.04
%RSD	.0553	.0777	.1267	.0499	.3072	.2580	.0795
#1	49.89	5.225	5.210	5.221	5.212	5.237	49.78
#2	49.93	5.231	5.220	5.224	5.235	5.256	49.84

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	5.125	50.42	5.186	5.073	48.10	5.185	5.273

SDev	.015	.03	.006	.003	.04	.009	.000
%RSD	.2891	.0622	.1140	.0684	.0811	.1690	.0008
#1	5.114	50.44	5.181	5.070	48.07	5.191	5.273
#2	5.135	50.40	5.190	5.075	48.13	5.179	5.273

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	1.018	Q5.505	Q5.579	5.163	5.133	5.050	5.497
SDev	.013	.027	.161	.042	.009	007	.097
%RSD	1.317	.4972	2.893	.8116	.1744	.1353	1.762
#1	1.009	5.486	Q5.693	5.133	5.127	5.046	Q5.565
#2	1.028	Q5.525	5.465	5.192	5.140	5.055	5.428

Elem	V_2924	Zn2138	Zr3391
Avge	5.227	5.260	5.242
SDev	.008	.000	.013
%RSD	.1544	.0001	.2568
#1	5.222	5.260	5.232
#2	5.233	5.260	5.251

Method: EMS Sample Name: BLA01 Operator: MYJ
Run Time: 08/24/93 15:17:53
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0032	.0135	.0103	.0154	.0045	Q.0054	.0028
SDev	.0009	.0012	.0183	.0052	.0011	.0000	.0077
%RSD	28.28	8.825	177.8	33.67	23.57	.0000	278.0
#1	.0038	.0126	-.0026	.0191	.0053	Q.0054	.0082
#2	.0025	.0143	.0232	.0117	.0038	Q.0054	-.0027

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	.0846	Q.0065	.0039	.0065	.0069	0030	.0747
SDev	.0100	.0018	.0000	.0020	.0000	.0014	.0132
%RSD	11.86	27.96	.0000	30.30	.0042	47.14	17.68
#1	.0917	Q.0053	.0039	.0078	.0069	.0040	.0653
#2	.0775	Q.0078	.0039	.0051	.0069	.0020	.0840

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0073	.1220	.0042	Q.0098	1563	.0035	.0094
SDev	.0013	.0157	.0012	.0069	.0130	.0013	.0000
%RSD	17.51	12.86	28.28	70.76	8.319	35.38	.0028
#1	.0082	.1330	.0050	Q.0147	.1655	.0044	.0094
#2	.0064	.1109	.0033	.0049	.1471	.0027	.0094

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.0083	.0048	.0805	.0063	.0047	.0041	.0834
SDev	.0086	.0068	.0257	0090	.0004	.0010	.0146
%RSD	104.3	140.5	31.93	141.4	8.294	25.71	17.52

#1	.0144	.0097	.0987	0.0127	.0049	.0048	.0730
#2	.0022	.0000	.0623	-.0000	.0044	.0033	.0937

Elem	V_2924	Zn2138	Zr3391
Avge	.0053	.0074	.0054
SDev	.0006	.0000	.0000
%RSD	11.88	.0651	.0000
#1	.0057	.0074	.0054
#2	.0048	.0074	.0054

Method: EMS Sample Name: A287152-M1 Operator: MYJ
Run Time: 08/24/93 15:19:58
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0019	.5254	-.0035	.0499	.0226	.0000	.0409
SDev	.0009	.0095	.0061	.0000	.0000	.0011	.0000
%RSD	47.14	1.810	173.5	.0000	.0000	.0000	.0266
#1	.0025	.5187	.0008	.0499	.0226	.0008	.0409
#2	.0013	.5321	-.0079	.0499	.0226	-.0008	.0409

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	20.06	.0002	-.0023	.0005	.0203	.5601	1.708
SDev	.01	.0000	.0000	.0013	.0021	.0000	.026
%RSD	.0286	.3701	.0000	282.8	10.29	.0000	1.546
#1	20.06	.0002	-.0023	.0014	.0218	.5601	1.690
#2	20.06	.0002	-.0023	-.0005	.0189	.5601	1.727

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0017	4.634	.0435	-.0008	2.602	-.0027	.0121
SDev	.0000	.000	.0000	.0012	.035	.0000	.0133
%RSD	.0000	.0000	.0000	140.9	1.333	.0240	109.5
#1	.0017	4.634	.0435	-.0000	2.626	-.0027	.0215
#2	.0017	4.634	.0435	-.0016	2.577	-.0027	.0027

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.0028	.0083	1.943	.0041	.0386	.0123	.0349
SDev	.0031	.0000	.015	.0000	.0002	.0000	.0000
%RSD	110.7	.0000	.7543	.0000	.4989	.0000	.0111
#1	.0050	.0083	1.933	.0041	.0388	.0123	.0349
#2	.0006	.0083	1.954	.0041	.0385	.0123	.0348

Elem	V_2924	Zn2138	Zr3391
Avge	.0018	.0296	.0027
SDev	.0019	.0000	.0000
%RSD	105.7	.0172	.0000
#1	.0004	.0296	.0027
#2	.0031	.0296	.0027

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Method: EMS Sample Name: A287175-M1 Operator: MYJ
Run Time: 08/24/93 15:22:03
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0019	-.0171	-.0067	.1283	.0984	.0008	.0409
SDev	.0009	.0000	.0426	.0010	.0005	.0000	.0000
%RSD	47.14	.2872	634.3	.8081	.5418	.0000	.0000
#1	.0013	-.0171	-.0369	.1276	.0988	.0008	.0409
#2	.0025	-.0172	.0234	.1291	.0981	.0008	.0409

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	114.3	.0001	-.0008	.0014	.0090	.5098	3.071
SDev	.3	.0000	.0022	.0000	.0000	.0029	.026
%RSD	.2268	.6605	282.8	.0000	.0064	.5590	.8597
#1	114.5	.0001	-.0023	.0014	.0090	.5118	3.090
#2	114.2	.0001	.0008	.0014	.0090	.5078	3.053

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0062	33.50	.1856	-.0033	23.76	-.0027	.0062
SDev	.0006	.09	.0000	.0023	.13	.0000	.0044
%RSD	9.428	.2808	.0000	70.65	.5655	.0000	71.29
#1	.0058	33.57	.1856	-.0016	23.85	-.0027	.0093
#2	.0067	33.44	.1856	-.0049	23.66	-.0027	.0031

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.0070	-.0116	7.308	-.0001	.1748	-.0004	-.1261
SDev	.0094	.0271	.031	.0000	.0007	.0011	.0443
%RSD	134.4	233.0	.4268	.5590	.3881	282.8	35.16
#1	.0003	-.0308	7.330	-.0001	.1753	-.0011	-.0947
#2	.0137	.0075	7.286	-.0001	.1743	.0004	-.1574

Elem	V_2924	Zn2138	Zr3391
Avge	.0000	.0346	.0000
SDev	.0006	.0000	.0000
%RSD	11040.	.0000	.0000
#1	.0004	.0346	.0000
#2	-.0004	.0346	.0000

Method: EMS Sample Name: A287177-M1 Operator: MYJ
Run Time: 08/24/93 15:24:09
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0006	.0194	-.0000	.1877	.2238	-.0008	.0218
SDev	.0009	.0047	.0110	.0021	.0019	.0000	.0038
%RSD	141.4	24.52	22540.	1.105	.8340	.0000	17.58

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#1	.0013	.0227	-.0078	.1863	.2225	-.0008	.0191
#2	-.0000	.0160	.0077	.1892	.2252	-.0008	.0245

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	42.68	.0027	-.0008	-.0005	.0202	.1007	2.268
SDev	.03	.0019	.0022	.0026	.0007	.0000	.026
%RSD	.0747	70.21	282.8	565.7	3.446	.0000	1.164
#1	42.66	.0040	.0008	.0014	.0207	.1007	2.250
#2	42.70	.0013	-.0023	-.0023	.0197	.1007	2.287

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0069	17.16	.0393	-.0016	71.40	.0035	.0031
SDev	.0004	.06	.0012	.0023	.57	.0037	.0088
%RSD	5.657	.3654	3.009	141.2	.7982	106.2	280.6
#1	.0067	17.12	.0385	-.0000	71.00	.0062	-.0031
#2	.0072	17.21	.0401	-.0033	71.81	.0009	.0094

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	-.0039	.0015	7.001	-.0043	.4353	.0004	-.0212
SDev	.0032	.0000	.011	.0060	.0031	.0000	.1244
%RSD	80.79	.0000	.1578	140.7	.7134	.0000	588.0
#1	-.0062	.0015	7.008	-.0085	.4331	.0004	.0668
#2	-.0017	.0015	6.993	-.0000	.4375	.0004	-.1091

Elem	V_2924	Zn2138	Zr3391
Avge	-.0013	.0592	.0000
SDev	.0000	.0000	.0000
%RSD	.8038	.0272	.0000
#1	-.0013	.0592	.0000
#2	-.0013	.0593	.0000

Method: EMS Sample Name: Q761097 DUP02 Operator: MYJ
Run Time: 08/24/93 15:26:14
Comment:
Mode: CONC Corr. Factor: 1

A287177

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	-.0000	.0160	.0077	.1753	.2225	-.0008	.0027
SDev	.0000	.0000	.0317	.0010	.0016	.0000	.0077
%RSD	.0000	.0551	410.8	.5917	.7191	.0000	281.7
#1	-.0000	.0160	-.0147	.1760	.2214	-.0008	-.0027
#2	-.0000	.0160	.0301	.1745	.2236	-.0008	.0082

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	42.51	.0027	-.0016	.0014	.0178	.0887	2.259
SDev	.04	.0000	.0011	.0000	.0014	.0000	.013
%RSD	.1036	.9052	70.71	.0000	7.849	.0000	.5844
#1	42.54	.0026	-.0023	.0014	.0188	.0887	2.250
#2	42.48	.0027	-.0008	.0014	.0168	.0887	2.268

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0062	17.07	.0385	-.0008	71.14	.0026	.0094
SDev	.0010	.00	.0000	.0012	.11	.0025	.0088
%RSD	15.71	.0000	.0000	140.9	.1584	94.49	94.10
#1	.0069	17.07	.0385	-.0016	71.06	.0009	.0156
#2	.0055	17.07	.0385	-.0000	71.22	.0044	.0031

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.0116	.0013	6.929	.0042	.4333	.0004	-.0028
SDev	.0063	.0000	.012	.0060	.0002	.0000	.0572
%RSD	54.46	.0000	.1721	142.1	.0489	.0000	2038.
#1	.0071	.0013	6.937	-.0000	.4332	.0004	.0376
#2	.0160	.0013	6.920	.0084	.4335	.0004	-.0432

Elem	V_2924	Zn2138	Zr3391
Avge	-.0013	.0592	.0000
SDev	.0000	.0000	.0000
%RSD	.0000	.0105	.0000
#1	-.0013	.0593	.0000
#2	-.0013	.0592	.0000

Method: EMS Sample Name: SP102 Q761095 Operator: MYJ
Run Time: 08/24/93 15:28:20
Comment:
Mode: CONC Corr Factor: 1

A 287177

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0547	1.982	2.021	1.205	2.144	.0482	1.231
SDev	.0018	.018	.082	.009	.002	.0011	.000
%RSD	3.289	.9091	4.036	.7747	.0995	2.281	.0018
#1	.0534	1.969	1.963	1.198	2.145	.0474	1.231
#2	.0559	1.995	2.079	1.211	2.142	.0490	1.231

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	133.1	.0512	.4767	.2005	.2665	1.085	98.63
SDev	1.0	.0028	.0088	.0026	.0014	.004	.12
%RSD	.7356	5.467	1.840	1.300	.5237	.3939	.1171
#1	132.4	.0492	.4725	.1986	.2656	1.082	98.71
#2	133.8	.0532	.4850	.2023	.2675	1.088	98.55

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	1.011	111.5	.5206	.9715	162.9	.4775	.4896
SDev	.004	.2	.0030	.0069	.5	.0037	.0088
%RSD	.3786	.1687	.5680	.7152	.3232	.7857	1.803
#1	1.013	111.4	.5185	.9666	163.3	.4749	.4834
#2	1.008	111.7	.5227	.9764	162.5	.4802	.4959

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.0052	2.033	6.861	.0125	1.373	.9700	2.810
SDev	.0000	.027	.022	.0180	.000	.0032	.077

%RSD	.2069	1.333	.3214	144.2	.0290	.3252	2.737
#1	.0052	2.053	6.845	.0252	1.373	.9678	2.755
#2	.0052	2.014	6.876	-.0002	1.373	.9722	2.864

Elem	V_2924	Zn2138	Zr3391
Avge	.4830	.5374	.9987
SDev	.0006	.0035	.0048
%RSD	.1305	.6469	.4814
#1	.4826	.5350	.9953
#2	.4835	.5399	1.002

Method: EMS Sample Name: A287178-M1 Operator: MYJ
Run Time: 08/24/93 15:30:25
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	-.0000	.0198	.0094	.2127	.1245	-.0008	.0272
SDev	.0000	.0000	.0195	.0000	.0000	.0000	.0116
%RSD	.0000	.1361	207.1	.0000	.0000	.0000	42.46
#1	-.0000	.0198	-.0044	.2127	.1245	-.0008	.0354
#2	-.0000	.0198	.0232	.2127	.1245	-.0008	.0191

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	27.63	.0013	-.0023	-.0023	.0049	.0322	2.800
SDev	.13	.0000	.0000	.0000	.0000	.0000	.066
%RSD	.4873	1.893	.0000	.0000	.0000	.0000	2.357
#1	27.54	.0013	-.0023	-.0023	.0049	.0322	2.847
#2	27.73	.0013	-.0023	-.0023	.0049	.0322	2.754

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0178	14.71	.3144	.0000	64.92	-.0044	.0125
SDev	.0004	.05	.0024	.0000	.18	.0025	.0044
%RSD	2.210	.3197	.7522	.0000	.2804	56.55	35.36
#1	.0180	14.68	.3128	.0000	64.79	-.0027	.0094
#2	.0175	14.75	.3161	.0000	65.04	-.0062	.0156

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.0069	.0005	8.107	-.0000	.3073	-.0004	.0065
SDev	.0063	.0000	.035	.0000	.0019	.0011	.0090
%RSD	91.65	.0000	.4300	.0000	.6171	282.8	138.8
#1	.0024	.0005	8.082	-.0000	.3059	.0004	.0001
#2	.0113	.0005	8.132	-.0000	.3086	-.0011	.0128

Elem	V_2924	Zn2138	Zr3391
Avge	-.0009	.0395	.0000
SDev	.0006	.0000	.0000
%RSD	69.96	.0243	.0000
#1	-.0004	.0395	.0000

#2	-.0013	.0395	.0000

Method: EMS Sample Name: A287179-M1 Operator: MYJ
Run Time: 08/24/93 15:32:31
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	-.0000	-.0052	.0086	.5126	.1816	-.0008	.0191
SDev	.0036	.0000	.0061	.0010	.0013	.0000	.0154
%RSD	3089e6	.9033	70.45	.2033	.7343	.0000	80.89
#1	-.0025	-.0053	.0130	.5133	.1806	-.0008	.0082
#2	.0025	-.0052	.0043	.5119	.1825	-.0008	.0300

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	53.88	-.0007	-.0023	-.0023	.0030	.0423	3.561
SDev	.24	.0009	.0000	.0000	.0014	.0000	.007
%RSD	.4387	132.1	.0000	.0000	47.00	.0000	.1854
#1	53.71	-.0000	-.0023	-.0023	.0020	.0423	3.557
#2	54.05	-.0013	-.0023	-.0023	.0040	.0423	3.566

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0132	24.33	.6665	-.0025	115.4	-.0044	-.0016
SDev	.0007	.11	.0036	.0012	.6	.0025	.0022
%RSD	5.183	.4510	.5323	47.23	.4883	56.55	142.1
#1	.0128	24.26	.6640	-.0033	115.0	-.0062	-.0031
#2	.0137	24.41	.6690	-.0016	115.8	-.0027	.0000

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	-.0042	-.0522	5.291	-.0021	.8179	-.0011	.0136
SDev	.0031	.0747	.011	.0030	.0030	.0000	.0825
%RSD	74.79	143.1	.2081	140.8	.3699	.0000	607.5
#1	-.0064	.0006	5.283	-.0042	.8158	-.0011	-.0448
#2	-.0020	L-.1050	5.298	-.0000	.8200	-.0011	.0719

Elem	V_2924	Zn2138	Zr3391
Avge	-.0009	.0395	.0000
SDev	.0006	.0000	.0000
%RSD	69.96	.0328	.0000
#1	-.0004	.0396	.0000
#2	-.0013	.0395	.0000

Method: EMS Sample Name: CCV Operator: MYJ
Run Time: 08/24/93 15:34:37
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	1.040	5.301	5.477	5.417	5.174	5.182	4.954
SDev	.002	.024	.055	.024	.017	.018	.050

%RSD	.1729	.4487	.9991	.4403	.3196	.3393	1.013
#1	1.041	5.284	5.439	5.400	5.162	5.170	4.918
#2	1.039	5.317	5.516	5.434	5.186	5.195	4.989

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	48.64	5.240	5.231	5.233	5.228	5.241	48.47
SDev	.09	.002	.010	.013	.021	.006	.05
%RSD	.1767	.0374	.1894	.2491	.4003	.1087	.0953
#1	48.58	5.238	5.224	5.224	5.213	5.237	48.44
#2	48.70	5.241	5.238	5.243	5.243	5.245	48.50

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	5.132	49.22	5.199	4.959	46.49	5.198	5.273
SDev	.014	.03	.008	.025	.12	.013	.000
%RSD	.2734	.0637	.1592	.5136	.2610	.2405	.0007
#1	5.122	49.20	5.193	4.941	46.40	5.189	5.273
#2	5.141	49.25	5.205	4.977	46.57	5.207	5.273

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	1.003	5.486	5.138	5.080	5.149	4.938	5.495
SDev	.034	.054	.011	.003	.015	.009	.018
%RSD	3.439	.9921	.2177	.0589	.2984	.1810	.3220
#1	.9788	5.448	5.130	5.082	5.138	4.932	5.482
#2	1.028	H5.525	5.146	5.078	5.159	4.944	5.507

Elem	V_2924	Zn2138	Zr3391
Avge	5.240	5.258	5.249
SDev	.013	.003	.005
%RSD	.2435	.0646	.0916
#1	5.231	5.255	5.246
#2	5.249	5.260	5.252

Method: EMS Sample Name: BLA01 Operator: MYJ
Run Time: 08/24/93 15:36:42
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0013	-.0042	.0164	.0110	.0000	.0016	.0000
SDev	.0018	.0071	.0048	.0073	.0011	.0011	.0193
%RSD	141.4	170.1	29.57	66.00	.0000	70.71	71790
#1	.0025	.0009	.0198	.0161	.0008	H.0023	.0137
#2	-.0000	-.0092	.0130	.0059	-.0008	.0008	-.0136

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	.0289	.0019	-.0008	.0032	.0020	-.0040	.0140
SDev	.0086	.0028	.0022	.0026	.0014	.0000	.0066
%RSD	29.77	143.4	282.8	80.81	70.74	.0000	47.14
#1	.0349	.0039	.0008	.0051	.0030	-.0040	.0093

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#2	.0228	-.0000	-.0023	.0014	.0010	-.0040	.0187

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0031	.0665	-.0000	H.0065	.0582	-.0018	.0031
SDev	.0004	.0000	.0000	.0046	.0130	.0013	.0088
%RSD	12.86	.0000	.0000	70.70	22.33	70.66	282.0
#1	.0033	.0665	-.0000	H.0098	.0674	-.0009	.0094
#2	.0028	.0665	-.0000	.0033	.0490	-.0027	-.0031

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.0044	-.0049	0117	.0042	.0008	-.0011	.0085
SDev	.0031	.0068	.0019	.0060	.0012	0021	.0323
%RSD	70.95	139.7	15.96	141 4	143.0	188.6	378.1
#1	.0066	-.0001	.0130	.0085	.0016	.0004	.0313
#2	.0022	-.0097	.0104	.0000	-.0000	-.0026	-.0143

Elem	V_2924	Zn2138	Zr3391
Avge	.0013	.0000	.0000
SDev	.0013	.0000	.0000
%RSD	94.15	408.3	.0000
#1	.0022	-.0000	.0000
#2	.0004	.0000	.0000

Method: EMS Sample Name: A287902-M1 Operator: MYJ
Run Time: 08/24/93 15:45:43
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0045	.0886	-.0261	.1291	.1094	.0000	-.0082
SDev	.0009	.0034	.0183	.0021	.0005	.0011	.0231
%RSD	20.20	3.868	69.91	1.607	.4877	.0000	282.4
#1	.0038	.0882	-.0391	.1305	.1090	-.0008	-.0245
#2	.0051	.0910	-.0132	.1276	.1097	.0008	.0082

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	99.27	.0014	.0008	-.0005	-.0029	.1894	3.669
SDev	.70	.0019	.0000	.0026	.0000	.0000	.013
%RSD	.7020	137.1	.0000	565.7	.0000	.0000	.3599
#1	99.76	.0000	.0008	.0014	-.0029	.1894	3.678
#2	98.78	.0027	.0008	-.0023	-.0029	.1894	3.659

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0055	14.33	.2609	.0074	9.959	-.0009	0030
SDev	.0001	.11	.0024	.0011	.050	.0025	.0265
%RSD	1.790	.7656	.9065	15.64	.5005	283.1	876.1
#1	.0054	14.41	.2626	.0082	9.994	-.0027	.0218
#2	.0055	14.26	.2592	.0066	9.923	.0009	-.0157

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908

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8.5

Run Time: 08/24/93 17:21:17
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	-.0006	-.0101	.0061	.0117	.0004	.0016	.0123
SDev	.0027	.0012	.0097	.0021	.0016	.0011	.0058
%RSD	424.3	11.79	160.7	17.68	424.3	70.71	46.98
#1	-.0025	-.0109	-.0008	.0132	.0015	H.0023	.0082
#2	.0013	-.0092	.0130	.0103	-.0008	.0008	.0164

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	.0339	.0036	-.0008	.0023	.0010	-.0040	-.0000
SDev	.0043	.0014	.0022	.0013	.0000	.0000	.0132
%RSD	12.66	38.45	282.8	56.57	.0000	.0000	709e6
#1	.0370	.0026	.0008	.0032	.0010	-.0040	.0093
#2	.0309	.0045	-.0023	.0014	.0010	-.0040	-.0093

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0035	.0665	-.0000	.0049	.0506	-.0018	.0063
SDev	.0003	.0000	.0000	.0069	.0022	.0013	.0044
%RSD	8.319	.0000	.0000	141.5	4.285	70.70	70.60
#1	.0033	.0665	-.0000	H.0098	.0521	-.0009	.0094
#2	.0037	.0665	-.0000	-.0000	.0490	-.0027	.0031

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.0161	.0047	.0117	-.0042	.0011	-.0004	.0044
SDev	-.0055	.0068	.0018	.0180	.0008	.0011	.0029
%RSD	34.14	143.2	15.52	424.4	71.42	282.8	66.84
#1	.0200	-.0001	.0104	.0085	.0016	.0004	.0023
#2	.0122	.0095	.0130	L-.0169	.0005	-.0011	.0065

Elem	V_2924	Zn2138	Zr3391
Avge	.0013	.0000	.0014
SDev	.0013	.0000	.0019
%RSD	94.01	109.2	141.4
#1	.0022	.0000	.0027
#2	.0004	.0000	.0000

Method: EMS Sample Name: DLS Operator: MYJ
Run Time: 08/24/93 17:23:23
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0114	.0437	.0317	.0022	L.0083	.0054	.0382
SDev	.0018	.0036	.0024	.0031	.0000	.0000	.0038
%RSD	15.71	8.161	7.732	141.4	.0000	.0000	10.06
#1	H.0127	L.0412	.0334	.0044	L.0083	.0054	.0409
#2	.0102	.0462	.0300	.0000	L.0083	.0054	.0355

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Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	.0289	.0053	.0101	L.0078	H.0286	.0242	.0280
SDev	.0029	.0018	.0000	.0013	.0000	.0000	.0000
%RSD	9.924	34.23	.0000	16.64	.0000	.0000	.0000
#1	.0309	H.0066	.0101	L.0069	H.0286	.0242	.0280
#2	.0268	L.0040	.0101	.0088	H.0286	.0242	.0280

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0025	.0665	.0096	-.0033	.0490	.0097	.0563
SDev	.0004	.0000	.0030	.0000	.0043	.0025	.0133
%RSD	15.71	.0000	30.74	.0786	8.839	25.74	23.56
#1	.0028	.0665	H.0117	-.0033	.0521	L.0080	H.0657
#2	.0022	.0665	L.0075	-.0033	.0460	.0115	.0469

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	H.0418	.0004	.0105	.0042	-.0000	-.0004	.0603
SDev	.0118	.0000	.0000	.0060	.0000	.0011	.0117
%RSD	28.31	.0000	.1683	141.6	9.924	282.8	19.44
#1	H.0501	.0004	.0105	.0085	-.0000	.0004	.0686
#2	.0334	.0004	.0105	-.0000	-.0000	-.0011	.0521

Elem	V_2924	Zn2138	Zr3391
Avge	L.0075	H.0370	.0000
SDev	.0000	.0035	.0000
%RSD	.0707	9.481	.0000
#1	L.0075	H.0394	.0000
#2	L.0075	H.0345	.0000

Method: EMS Sample Name: CDL01 Operator: MYJ
Run Time: 08/24/93 17:25:28
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0203	-.0034	.0276	.0000	-.0008	.0085	.0083
SDev	.0000	.0012	.0110	.0000	.0000	.0000	.0154
%RSD	.0000	35.33	39.78	.0000	.0000	.0000	185.5
#1	.0203	-.0042	.0198	.0000	-.0008	.0085	.0192
#2	.0203	-.0025	.0353	.0000	-.0008	.0085	-.0026

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	.0218	.0112	.0996	.0171	.0533	.0081	-.0187
SDev	.0014	.0001	.0011	.0013	.0014	.0000	.0396
%RSD	6.578	.4344	1.105	7.644	2.619	.0000	212.1
#1	.0208	.0111	.0989	.0180	.0523	.0081	-.0467
#2	.0228	.0112	.1004	L.0161	.0543	.0081	.0093

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0014	.0443	.0289	-.0066	.0199	.0787	.1032
SDev	.0004	.0000	.0018	.0000	.0412	.0050	.0088

%RSD	28.28	.0000	6.149	.0393	206.7	6.357	8.558
#1	.0017	.0443	.0276	-.0066	.0490	.0752	.1095
#2	.0011	.0443	.0301	-.0066	-.0092	.0822	.0970

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	H.1417	.0001	.0002	-.0021	-.0000	-.0007	.0478
SDev	.0040	.0000	.0000	.0030	.0000	.0005	.0411
%RSD	2.788	.0000	7.644	141.3	6.578	70.71	85.80
#1	H.1389	.0001	.0002	-.0042	-.0000	-.0004	.0769
#2	H.1445	.0001	.0002	-.0000	-.0000	-.0011	.0188

Elem	V_2924	Zn2138	Zr3391
Avge	.0952	H.0490	.0014
SDev	.0025	.0000	.0019
%RSD	2.599	.0462	141.4
#1	.0934	H.0490	.0027
#2	.0969	H.0490	.0000

Method: EMS Sample Name: ICS Operator: MYJ
Run Time: 08/24/93 17:27:34
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.9472	504.4	.2294	-.0059	.4880	.4795	-.0915
SDev	.0036	2.7	.0781	.0021	.0021	.0022	.0231
%RSD	.3797	.5371	34.07	35.36	.4372	.4584	25.25
#1	.9447	502.5	.2847	-.0044	.4865	.4779	-.0752
#2	.9498	506.4	.1741	-.0073	.4895	.4810	-.1079

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	459.4	.9356	.4601	.4595	.5166	183.2	-.0560
SDev	.4	.0017	.0022	.0013	.0042	.1	.0924
%RSD	.0895	.1810	.4786	.2837	.8150	.0677	165.0
#1	459.7	.9368	.4616	.4586	.5136	183.1	.0093
#2	459.1	.9344	.4585	.4604	.5195	183.2	-.1214

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	-.0000	475.5	.4763	-.0148	.0644	.9109	.9063
SDev	.0008	1.3	.0018	.0012	.0000	.0013	.0093
%RSD	22e6	.2638	.3725	7.790	.0000	.1372	1.024
#1	.0006	474.6	.4775	-.0157	.0644	.9100	.8998
#2	-.0006	476.4	.4750	-.0140	.0644	.9117	.9129

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.1381	-.6816	.0477	.0055	-.1742	.0004	L-1.244
SDev	.0282	.0253	.0073	.0060	.0002	.0000	.085
%RSD	20.39	3.716	15.34	108.7	.0920	.0000	6.804
#1	.1182	-.6637	.0529	.0098	-.1743	.0004	L-1.184

#2	.1580	-.6995	.0426	.0013	-.1741	.0004	1.-1.304

Elem	V_2924	Zn2138	Zr3391
Avge	.4764	.9812	.0041
SDev	.0009	.0035	.0000
%RSD	.1963	.3546	.0000
#1	.4757	.9787	.0041
#2	.4771	.9836	.0041

Method: EMS Sample Name: CCV Operator: MYJ
Run Time: 08/24/93 17:29:41
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	1.041	5.388	5.476	5.416	5.182	5.193	4.804
SDev	.004	.029	.007	.015	.005	.004	.085
%RSD	.3454	.5292	.1351	.2681	.0875	.0741	1.767
#1	1.044	5.408	5.471	5.406	5.185	5.190	4.744
#2	1.039	5.368	5.482	5.427	5.179	5.196	4.864

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	48.58	5.268	5.246	5.232	5.224	5.303	48.51
SDev	.03	.005	.009	.010	.003	.009	.09
%RSD	.0700	.0871	.1679	.1993	.0667	.1612	.1769
#1	48.55	5.265	5.240	5.224	5.222	5.309	48.57
#2	48.60	5.271	5.252	5.239	5.227	5.297	48.45

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	5.090	49.22	5.196	4.992	46.00	5.204	5.282
SDev	.017	.03	.008	.012	.18	.001	.004
%RSD	.3247	.0637	.1593	.2318	.3910	.0240	.0842
#1	5.102	49.25	5.190	4.983	46.13	5.205	5.279
#2	5.079	49.20	5.202	5.000	45.87	5.204	5.285

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.9879	H5.564	5.094	5.063	5.155	4.954	H5.536
SDev	.0124	.000	.007	.015	.009	.003	.141
%RSD	1.257	.0023	.1468	.2956	.1742	.0531	2.544
#1	.9791	H5.564	5.089	5.053	5.161	4.956	H5.636
#2	.9967	H5.564	5.099	5.074	5.148	4.952	5.436

Elem	V_2924	Zn2138	Zr3391
Avge	5.243	5.272	5.259
SDev	.004	.017	.000
%RSD	.0836	.3313	.0000
#1	5.240	5.260	5.259
#2	5.246	5.285	5.259

Method: EMS Sample Name: BLA01 Operator: MYJ
Run Time: 08/24/93 17:31:47
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0019	.0109	.0043	.0132	.0000	.0016	.0027
SDev	.0009	.0000	.0122	.0083	.0011	.0011	.0231
%RSD	47.14	.0184	285.4	62.85	.0000	70.71	849.7
#1	.0025	.0109	.0129	.0191	.0008	H.0023	.0191
#2	.0013	.0109	-.0043	.0073	-.0008	.0008	-.0136

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	.0339	.0013	-.0008	-.0005	.0030	.0040	.0140
SDev	.0100	.0000	.0022	.0000	.0000	.0000	.0462
%RSD	29.55	1.859	282.8	.0000	.0000	.0000	330.0
#1	.0410	.0013	.0008	-.0005	.0030	.0040	.0467
#2	.0268	.0013	-.0023	-.0005	.0030	.0040	-.0187

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0024	.0665	.0017	H.0066	.0169	-.0009	.0094
SDev	.0010	.0000	.0000	.0046	.0325	.0025	.0000
%RSD	41.59	.0000	.0000	70.70	192.8	282.6	.0056
#1	.0031	.0665	.0017	H.0098	-.0061	-.0027	.0094
#2	.0017	.0665	.0017	.0033	.0398	.0009	.0094

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.0095	.0001	.0091	.0042	.0011	.0011	.0852
SDev	.0024	.0000	.0055	.0060	.0008	.0010	.0293
%RSD	24.89	.0000	60.65	141.5	71.21	94.28	34.40
#1	.0112	.0001	.0052	.0085	.0016	.0019	.1060
#2	.0078	.0001	.0130	-.0000	.0005	.0004	.0645

Elem	V_2924	Zn2138	Zr3391
Avge	.0013	-.0000	.0027
SDev	.0012	.0000	.0000
%RSD	94.42	253.5	.0000
#1	.0022	.0000	.0027
#2	.0004	-.0000	.0027

Run Time: 08/26/93 08:51:54
Comment:
Mode: CONC Corr. Factor:

Elem	B_2496	Si2881
Units	ppm	ppm
Avge	.0893	.0081
SDev	.0045	.0114
%RSD	5.051	141.4
#1	.0925	.0000
#2	.0861	.0161

ICP MYJ 8-26-93

C149650-653
cd + serial dilution

Method: ANTIFREE Sample Name: BLA01 Operator: MYJ
Run Time: 08/26/93 08:54:56
Comment:
Mode: CONC Corr. Factor: 1

Elem	B_2496	Si2881
Units	ppm	ppm
Avge	.0330	-.0061
SDev	.0000	.0143
%RSD	.0000	235.7
#1	.0330	-.0161
#2	.0330	.0040

Method: EMS Standard: STD1-Blank

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	-.0104	.0008	.0010	.0050	-.0005	.0000	.0000
SDev	.0005	.0011	.0028	.0000	.0000	.0000	.0003
%RSD	5.112	141.4	282.8	.0000	.0000	.0000	.0000
#1	-.0100	.0015	-.0010	.0050	-.0005	.0000	-.0003
#2	-.0108	.0000	.0030	.0050	-.0005	.0000	.0003

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	.1120	.0000	.0000	.0003	.0014	.0009	.0021
SDev	.0003	.0000	.0000	.0003	.0001	.0002	.0009
%RSD	.3157	.0000	.0000	141.4	6.149	20.20	41.59
#1	.1123	.0000	.0000	.0000	.0014	.0010	.0015
#2	.1117	.0000	.0000	.0005	.0015	.0008	.0027

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.1354	.0282	.0000	.0000	.0008	-.0003	-.0003
SDev	.0005	.0000	.0000	.0000	.0003	.0004	.0004
%RSD	.3917	.0000	.0000	.0000	47.14	141.4	141.4
#1	.1357	.0282	.0000	.0000	.0005	.0000	.0000
#2	.1350	.0282	.0000	.0000	.0010	-.0005	-.0005

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.0010	-.0003	.0203	-.0008	.0000	-.0020	.0194
SDev	.0007	.0004	.0011	.0004	.0000	.0000	.0045

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SDev	.0007	.0004	.0011	.0004	.0000	.0000	.0045
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
#1	[illegible]	-.0005	.0210	-.0010	.0000	-.0020	.0226
#2	.0005	.0000	.0195	-.0005	.0000	-.0020	.0162

Elem	V_2924	Zn2138	Zr3391
Avge	.0000	.0000	.0000
SDev	.0000	.0000	.0000
%RSD	.0000	.0000	.0000
#1	.0000	.0000	.0000
#2	.0000	.0000	.0000

Method: EMS Standard: STD2

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.3879	1.517	1.487	1.758	3.414	1.657	.4680
SDev	.0005	.002	.003	.000	.008	.001	.0032
%RSD	.1367	.1398	.2259	.0101	.2460	.0533	.6799
#1	.3875	1.518	1.489	1.758	3.420	1.658	.4658
#2	.3882	1.515	1.485	1.758	3.408	1.657	.4703

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	Li6707	Mn2576
Avge	1.939	1.617	1.366	2.572	1.272	18.96	1.517
SDev	.008	.005	.004	.001	.002	.12	.003
%RSD	.4377	.2897	.2848	.0412	.1806	.6269	.1748
#1	1.933	1.614	1.363	2.573	1.271	19.05	1.515
#2	1.945	1.620	1.368	2.572	1.274	18.88	1.519

Elem	Ni2316	Pb2203	Se1960	Sr4215	Tl1908	V_2924	Zn2138
Avge	1.429	.3972	.1334	4.648	.6457	2.892	1.008
SDev	.005	.0025	.0000	.006	.0106	.003	.006
%RSD	.3710	.6230	.0000	.1350	1.643	.0978	.5612
#1	1.426	.3955	.1334	4.653	.6382	2.890	1.004
#2	1.433	.3990	.1334	4.644	.6532	2.894	1.012

Elem	Zr3391
Avge	1.877
SDev	.004
%RSD	.1884
#1	1.879
#2	1.874

Method: EMS Standard: STD3

Elem	Ca3158	K_7664	Mg3832	Na5895
Avge	2.568	.2749	.1433	.4240
SDev	.008	.0009	.0000	.0007
%RSD	.3098	.3216	.0000	.1668
#1	2.563	.2743	.1433	.4245
#2	2.574	.2755	.1433	.4235

#2	2.574	.2755	.1433	4235

Method: EMS Standard: STD4

Elem	Mo2020	Sb2068	Si2881	Sn1899	Ti3372
Avge	1.526	.2235	9906	6029	3.354
SDev	002	0003	.0019	.0023	.005
%RSD	1158	.1582	1963	.3812	.1397
#1	1.528	.2237	.9920	6045	3.351
#2	1.525	.2233	9893	6012	3.357

Method: EMS Sample Name: CCV Operator: MYJ
Run Time: 08/26/93 09:05:15
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	1.014	5.172	5.049	5.062	5.055	5 039	5.074
SDev	.000	.012	.019	016	.002	.003	008
%RSD	.0000	.2259	.3784	3188	.0307	.0635	.1519
#1	1.014	5.164	5 062	5 051	5.056	5 037	5.069
#2	1.014	5.180	5.035	5 074	5.054	5.041	5.079

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	47.86	5.067	5.046	5 037	5.141	5 006	48 38
SDev	.18	.022	.009	.018	.005	.010	.13
%RSD	.3700	.4339	.1733	3599	0937	1944	.2679
#1	47.73	5.052	5.040	5 024	5.138	4 999	48 29
#2	47 98	5.083	5.052	5 049	5.145	5.013	48 47

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	5 137	48.07	5.035	4.821	48.53	4.991	5.091
SDev	006	.09	.010	.016	04	011	000
%RSD	.1087	.1919	2083	3355	0818	.2229	.0000
#1	5.141	48.00	5.028	4 810	48.50	4.984	5 091
#2	5.133	48.13	5.042	4 833	48 56	4.999	5.091

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.9851	5.051	5.009	4.675	5.040	4.856	4.933
SDev	.0030	.027	004	.018	.001	.002	139
%RSD	.3047	.5267	.0860	3758	.0288	.0380	2.810
#1	.9830	5.032	5.012	4.662	5.039	4.855	4.835
#2	.9873	5.070	5.006	4.687	5.041	4.857	5.031

Elem	V_2924	Zn2138	Zr3391
Avge	5.086	5.081	5.087
SDev	.004	030	.001
%RSD	.0856	.5857	.0185
#1	5 083	5 060	5 086
#2	5.089	5.102	5.087

[redacted]H: E[redacted] [redacted]le N[redacted]BLA[redacted] [redacted]ator[redacted]
Run Time: [redacted]6/93 09:07:39
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0013	-.0033	.0051	.0029	.0022	H.0023	.0107
SDev	.0009	.0023	.0024	.0040	.0010	.0011	.0000
%RSD	70.71	70.87	46.89	141.4	47.14	47.14	.0000
#1	.0006	-.0016	.0067	.0057	.0029	H.0030	.0107
#2	.0019	-.0049	.0034	-.0000	.0015	.0015	.0107

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	.0193	.0013	.0015	.0018	.0051	-.0029	.0275
SDev	.0029	.0018	.0022	.0000	.0000	.0000	.0454
%RSD	14.89	136.2	141.4	.0000	.0000	.0000	165.0
#1	.0214	.0026	.0031	.0018	.0051	-.0029	-.0046
#2	.0173	.0000	.0000	.0018	.0051	-.0029	.0596

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0018	.0435	.0016	H.0115	.0000	.0044	.0173
SDev	.0008	.0000	.0000	.0023	.0000	.0012	.0111
%RSD	41.90	.0000	.0000	20.21	.0000	28.29	64.23
#1	.0023	.0435	.0016	H.0131	.0000	.0035	.0094
#2	.0013	.0435	.0016	H.0098	.0000	.0052	.0252

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	-.0045	.0187	.0148	H.0207	.0015	.0037	.0091
SDev	.0064	.0000	.0027	.0000	.0006	.0010	.0000
%RSD	140.2	.0000	18.42	.0000	38.69	28.28	.0104
#1	-.0000	.0187	.0168	H.0207	.0019	.0045	.0091
#2	-.0090	.0187	.0129	H.0207	.0011	.0030	.0091

Elem	V_2924	Zn2138	Zr3391
Avge	.0011	.0049	.0007
SDev	.0009	.0000	.0009
%RSD	84.27	.0963	141.4
#1	.0017	.0049	.0000
#2	.0004	.0049	.0013

Method: EMS Sample Name: ICV01-19 Operator: MYJ
Run Time: 08/26/93 09:12:26
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	-.0031	.0096	.3956	-.0111	.0015	.4099	-.0740
SDev	.0000	.0023	.0226	.0005	.0000	.0005	.0113
%RSD	.0000	24.36	5.712	4.562	.0000	.1301	15.28
#1	-.0031	.0079	.3797	-.0107	.0015	.4103	-.0820
#2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

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#1	- 0031	.0079	3797	-.0107	.0015	.4103	-.0820
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Elem	Ca[redacted]	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	.4219	.4271	.4221	.4101	.4340	.4119	.0137
SDev	.0050	.0000	.0022	.0026	.0027	.0028	.0778
%RSD	1.194	.0027	.5180	.6313	.6338	.6750	565.7
#1	.4183	.4271	.4236	.4119	.4360	.4139	-.0412
#2	.4255	.4271	4205	.4083	.4321	.4099	0687

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0009	4348	.4181	.4103	- 0044	4239	.4350
SDev	.0001	.0000	.0018	.0023	.0021	.0012	.0000
%RSD	10.10	.0000	.4180	5658	47.14	.2919	.0020
#1	.0009	.4348	.4194	.4086	-.0059	.4230	.4350
#2	.0010	.4348	.4169	.4119	-.0030	.4248	.4350

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.3914	.3335	0043	.0144	.0002	.3999	L.3418
SDev	.0016	.0000	.0055	.0088	.0006	0029	.0056
%RSD	4014	.0124	129.0	60.99	238.0	.7246	1.652
#1	.3925	.3336	.0082	.0206	-.0002	4019	L.3458
#2	.3903	.3335	.0004	0082	.0006	.3978	L.3378

Elem	V_2924	Zn2138	Zr3391
Avge	.4080	.4413	.0013
SDev	.0025	.0035	.0019
%RSD	6019	.7944	141.4
#1	.4097	H.4437	.0000
#2	.4063	.4388	0027

Method: EMS Sample Name: ICV01-07 Operator: MYJ
Run Time: 08/26/93 09:17:13
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	2.016	1.932	.0030	2.006	1.986	0000	.0214
SDev	.000	.005	.0047	.010	001	0000	.0000
%RSD	.0000	.2413	157.5	.5029	.0261	.0000	.0000
#1	2.016	1.929	-.0003	1.998	1.985	.0000	.0214
#2	2.016	1.936	.0064	2.013	1 986	.0000	.0214

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	.0153	-.0012	0000	-.0018	0061	.0010	19.16
SDev	.0000	.0000	.0000	0000	.0000	0000	.10
%RSD	.0000	1.023	.0000	.0000	.0000	.0000	.5075
#1	0153	- 0012	0000	- 0018	0061	0010	19 09
#2	0153	-.0012	.0000	-.0018	0061	0010	19 23

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
SDev	[redacted]	.0307	.0000	.0012	.008	.0012	.0000
%RSD	[redacted]	141.4	.0000	140.8	.4241	28.30	.0649
#1	.0007	-.0000	.0000	.0016	1.976	.0035	.0051
#2	.0010	.0435	.0000	.0000	1.964	.0052	.0051

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	-.0157	.0000	1.025	.0083	-.0000	.0015	-.0017
SDev	.0032	.0265	.011	.0059	.0000	.0000	.0255
%RSD	20.24	181300.	1.066	70.71	.0000	.0000	1496.
#1	-.0179	-.0187	1.018	.0124	-.0000	.0015	-.0197
#2	-.0135	.0187	1.033	.0041	-.0000	.0015	.0163

Elem	V_2924	Zn2138	Zr3391
Avge	-.0007	.0161	.0007
SDev	.0009	.0018	.0009
%RSD	139.8	10.93	141.4
#1	-.0000	.0173	.0000
#2	-.0013	.0148	.0013

Method: EMS Sample Name: ICV01-31 Operator: MYJ
Run Time: 08/26/93 09:19:22
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0019	-.0064	.0274	-.0093	.0029	.0000	.0534
SDev	.0000	.0034	.0470	.0010	.0000	.0000	.0075
%RSD	.0000	53.32	171.6	10.88	.0000	.0000	14.12
#1	.0019	-.0089	-.0058	-.0086	.0029	.0000	.0588
#2	.0019	-.0040	.0606	-.0100	.0029	.0000	.0481

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	95.77	.0000	.0008	.0009	.0129	.0324	100.2
SDev	.34	.0000	.0011	.0013	.0014	.0000	7
%RSD	3547	53.28	141.4	141.4	10.67	.0000	7178
#1	96.01	.0000	.0000	-.0000	.0119	.0324	100.7
#2	95.53	.0001	.0015	.0018	.0139	.0324	99.72

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0015	98.17	.0049	.0016	100.4	.0035	.0063
SDev	.0004	.55	.0000	.0023	1.0	.0025	.0000
%RSD	24.60	.5637	.0000	141.4	.9481	70.78	.0169
#1	.0013	98.57	.0049	.0000	101.1	.0017	.0063
#2	.0018	97.78	.0049	.0033	99.76	.0052	.0063

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	-.0043	.0192	.0039	.0207	-.0349	.0015	-.1784
SDev	.0063	.0000	.0054	.0000	.0001	.0000	.0358
%RSD	146.0	.0000	140.5	.0000	.3793	.0000	20.09

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%RSD	146.0	.0000	140.5	.0000	.3793	.0000	20.09
#1	[illegible]	.0192	.0077	.0207	-.0350	.0015	- 1530
#2	[illegible]	.0192	.0000	.0207	-.0348	0015	- 2037

Elem	V_2924	Zn2138	Zr3391
Avge	.0004	.0248	.0000
SDev	.0006	.0000	.0000
%RSD	141.4	.0519	.0000
#1	-.0000	.0248	.0000
#2	0009	.0247	.0000

Method: EMS Sample Name: BLA01 Operator: MYJ
Run Time: 08/26/93 09:21:38
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0013	.0058	-.0051	-.0143	.0015	.0000	.0080
SDev	.0009	.0105	.0023	.0000	.0000	.0000	.0265
%RSD	70.71	181.7	46.11	.0000	.0000	.0000	330.3
#1	.0006	-.0016	-.0067	-.0143	.0015	.0000	- 0107
#2	.0019	.0132	-.0034	-.0143	.0015	0000	.0267

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	.0214	-.0013	.0000	-.0000	.0017	.0010	.0229
SDev	.0029	.0018	.0000	.0036	.0021	.0000	.0648
%RSD	13.47	147.1	.0000	4448e6	121.2	.0000	282.8
#1	.0234	-.0026	.0000	- 0018	0002	.0010	-.0229
#2	.0193	.0001	.0000	.0018	.0032	.0010	.0687

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0009	.0435	.0000	.0016	.0030	.0035	.0079
SDev	0002	.0000	.0000	.0023	.0083	.0025	.0022
%RSD	21.76	.0000	.0000	141.1	282.8	70.70	28.26
#1	.0007	.0435	.0000	.0000	-.0030	.0017	.0063
#2	.0010	.0435	.0000	.0033	.0089	.0052	.0094

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	-.0157	.0187	.0271	.0041	.0001	0007	.0211
SDev	.0031	.0000	0073	.0117	.0002	.0010	.0452
%RSD	20.00	.0000	27.07	282.9	151.7	141.4	213.9
#1	-.0179	.0187	.0219	-.0041	-.0000	0000	-.0108
#2	-.0135	.0187	.0322	H.0124	.0003	.0015	.0530

Elem	V_2924	Zn2138	Zr3391
Avge	- 0000	-.0000	0003
SDev	.0000	.0000	.0042
%RSD	4623e6	82.59	1273.

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
#2	[illegible]	-.0000	.0033				

Method: EMS Sample Name: DLS Operator: MYJ
Run Time: 08/26/93 09:23:47
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0107	.0457	- 0010	-.0157	.0110	0049	.0188
SDev	.0018	.0029	.0036	.0020	.0000	.0016	.0113
%RSD	16.64	6.369	351.8	12 86	.0000	32.64	60 36
#1	.0094	.0478	-.0035	-.0171	0110	H.0060	.0268
#2	H.0119	.0437	.0015	- 0143	.0110	L.0038	.0108

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	.0265	0053	0093	.0092	H.0236	0275	0183
SDev	.0029	.0000	0000	0000	.0000	0014	0324
%RSD	10 88	.4382	.0000	.0000	.0012	5.051	176 8
#1	.0244	.0053	.0093	.0092	H.0236	.0285	- 0046
#2	0285	.0053	0093	0092	H.0236	.0265	.0412

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0011	.0435	.0099	.0016	-.0030	H.0140	H.0661
SDev	.0002	.0000	.0000	0023	.0000	0025	.0044
%RSD	16.64	.0000	0000	143.0	.0000	17 69	6.734
#1	0010	.0435	.0099	.0033	- 0030	H 0122	H.0629
#2	.0013	.0435	.0099	-.0000	-.0030	H.0157	H.0692

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	H.0349	-.0183	.0426	0083	.0001	.0000	- 0148
SDev	.0143	.0000	.0000	0176	0002	0000	0282
%RSD	41 01	.1128	.0000	212 3	152 3	0000	190.3
#1	L.0247	-.0183	.0426	.0207	-.0000	0000	.0051
#2	H.0450	-.0183	.0426	- 0041	.0003	.0000	-.0348

Elem	V_2924	Zn2138	Zr3391
Avge	.0108	H.0297	.0013
SDev	.0018	.0000	.0019
%RSD	16.91	.0320	141.4
#1	H.0121	H.0297	0027
#2	.0095	H.0296	.0000

Method: EMS Sample Name: CDL01 Operator: MYJ
Run Time: 08/26/93 09:26:01
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0207	.0025	.0235	- 0157	0015	.0091	.0108
SDev	.0018	.0035	.0048	.0020	.0000	.0000	.0151
%RSD	8.571	141.3	20.31	12.86	0000	.0000	139.6

SDev	.0016	.0035	.0048	.0020	.0000	.0000	.0151
%RSD	8.571	141.3	20.31	13.86	.0000	.0000	139.6
#1	[illegible]	.0050	.0201	-.0171	.0015	.0091	.0215
#2	.0135	.0000	.0269	-.0143	.0015	.0091	.0001

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	.0219	.0105	.1005	.0183	.0518	.0010	-.0046
SDev	.0036	.0027	.0022	.0026	.0014	.0000	.0519
%RSD	16.44	26.20	2.176	14.14	2.656	.0000	1131.
#1	.0244	H.0124	.1020	.0201	.0528	.0010	.0321
#2	.0193	.0085	.0989	L.0165	.0508	.0010	-.0412

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0011	.0326	.0297	.0032	.0030	.0848	.1102
SDev	.0006	.0461	.0000	.0000	.0083	.0012	.0044
%RSD	49.91	141.4	.0000	.1587	282.8	1.458	4.035
#1	.0015	.0652	.0297	.0032	.0089	.0857	.1070
#2	.0007	-.0000	.0297	.0032	-.0030	.0839	.1133

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.1234	.0094	.0382	.0145	.0001	.0007	-.0448
SDev	.0032	.0132	.0137	.0205	.0002	.0010	.0481
%RSD	2.550	141.2	35.81	141.4	149.9	141.4	107.5
#1	.1256	.0187	.0479	.0290	.0003	.0015	-.0107
#2	.1211	.0000	.0286	-.0000	-.0000	.0000	-.0788

Elem	V_2924	Zn2138	Zr3391
Avge	.0947	H.0492	-.0007
SDev	.0006	.0000	.0009
%RSD	.6563	.0165	141.4
#1	.0952	H.0491	.0000
#2	.0943	H.0492	-.0013

Method: EMS Sample Name: HMCS Operator: MYJ
Run Time: 08/26/93 09:28:14
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	2.032	10.18	9.750	10.17	10.20	10.14	10.31
SDev	.005	.05	.013	.04	.06	.05	.01
%RSD	.2403	.4578	.1319	.3867	.5634	.5153	.0702
#1	2.035	10.21	9.759	10.20	10.24	10.18	10.30
#2	2.028	10.15	9.741	10.14	10.16	10.11	10.32

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	.1150	10.38	10.30	10.28	10.20	10.16	-.0183
SDev	.0029	.04	.04	.04	.03	.03	.0065
%RSD	2.503	.3728	.3979	.3651	.3101	.3421	35.36
#1	.1171	10.41	10.33	10.31	10.22	10.19	-.0229
#2	.1130	10.35	10.27	10.26	10.18	10.14	-.0137

#2	.1130	10.35	10.27	10.26	10.18	10.14	-.0137

Elem	L[illegible]	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	1[illegible]	.0870	10.26	.0058	-.0148	10.27	10.37
SDev	.07	.0000	.04	.0001	.0000	.04	.00
%RSD	.6546	.0000	.3692	1.287	.0000	.3972	.0425
#1	10.23	.0870	10.28	.0057	-.0148	10.30	10.37
#2	10.14	.0870	10.23	.0058	-.0148	10.24	10.38

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	-.0091	10.12	.0697	.0143	10.21	-.0015	L8.910
SDev	.0061	.10	.0068	.0059	.06	.0000	.023
%RSD	66.74	.9857	9.730	41.04	.5421	.0000	.2536
#1	-.0048	10.19	.0649	.0101	10.25	-.0015	L8.894
#2	-.0134	10.05	.0745	.0184	10.17	-.0015	L8.926

Elem	V_2924	Zn2138	Zr3391
Avge	10.26	10.25	10.22
SDev	.04	.03	.05
%RSD	.4244	.2714	.4791
#1	10.29	10.27	10.26
#2	10.23	10.23	10.19

Method: EMS Sample Name: ICS Operator: MYJ
Run Time: 08/26/93 09:31:53
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.9466	496.4	.1315	-.0078	.4825	.4676	.0090
SDev	.0027	.1	.0959	.0030	.0010	.0000	.0076
%RSD	.2813	.0248	72.96	38.57	.2146	.0000	83.88
#1	.9448	496.3	.0637	-.0057	.4832	.4676	.0144
#2	.9485	496.5	.1993	-.0100	.4818	.4676	.0037

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	454.3	.9182	.4491	.4431	.5294	175.4	-.0687
SDev	1.2	.0028	.0011	.0026	.0007	.1	.0259
%RSD	.2646	.3063	.2434	.5844	.1353	.0809	37.71
#1	453.5	.9162	.4483	.4449	.5289	175.3	-.0504
#2	455.2	.9201	.4499	.4412	.5299	175.5	-.0871

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0010	468.1	.4672	-.0025	.0354	.8881	.9008
SDev	.0000	.1	.0012	.0023	.0167	.0025	.0179
%RSD	.0000	.0131	.2494	91.81	47.14	.2784	1.986
#1	.0010	468.2	.4663	-.0009	.0236	.8864	.9135
#2	.0010	468.1	.4680	-.0042	.0473	.8899	.8882

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.2190	-.3526	.0575	.0373	-.1718	.0030	-.8084

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.2190	-.3526	.0575	.0373	-.1718	.0030	-.8084
SDev	[illegible]	[illegible]44	[illegible]36	.0088	.001[illegible]	.000[illegible]	[illegible]
%RSD	1[illegible]	6.907	6.273	23.62	.2728	.0000	24.06
#1	.2027	-.3353	.0550	.0436	-.1715	.0030	-.9459
#2	.2352	-.3698	.0601	.0311	-.1721	.0030	-.6709

Elem	V_2924	Zn2138	Zr3391
Avge	.4578	.9725	.0073
SDev	.0006	.0035	.0009
%RSD	.1312	.3595	12.86
#1	.4574	.9700	.0067
#2	.4583	.9750	.0080

Method: EMS Sample Name: ~~CCV~~ Operator: MYJ
Run Time: 08/26/93 09:34:17
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	1.024	5.283	4.982	5.065	5.082	5.042	5.101
SDev	.005	.017	001	.004	.018	.009	.000
%RSD	.5203	.3910	.0254	0796	.3566	.1798	.0017
#1	1.028	5.296	4.981	5.062	5.095	5.048	5.101
#2	1.020	5.271	4.983	5.068	5.068	5.035	5.101

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	48.26	5.111	5.093	5.086	5.185	5.087	48.59
SDev	07	.010	011	.010	.013	.017	.21
%RSD	.1491	.1958	.2147	.2036	.2520	.3279	.4402
#1	48.31	5.118	5.100	5.093	5.194	5.099	48.74
#2	48.21	5.104	5.085	5.079	5.176	5.076	48.44

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	5.168	48.63	5.064	4.856	49.13	5.040	5.154
SDev	.009	.15	.012	.008	.19	.002	.044
%RSD	.1644	.3161	.2301	1665	.3911	.0491	.8634
#1	5.174	48.74	5.072	4.862	49.26	5.038	5.185
#2	5.162	48.52	5.056	4.851	48.99	5.041	5.122

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.9737	5.052	5.042	4.519	5.071	4.858	4.701
SDev	.0064	.027	.015	.015	.015	.009	040
%RSD	.6573	.5286	.3044	3239	.2957	1843	.8519
#1	.9692	5.071	5.031	4.530	5.081	4.865	4.730
#2	.9782	5.033	5.053	4.509	5.060	4.852	4.673

Elem	V_2924	Zn2138	Zr3391
Avge	5.108	5.157	5.121

Method: EMS Sample Name: B122233-M4 Operator: MYJ
Run Time: 08/26/93 13:14:37
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	3.262	6.594	.0192	2.210	.0146	.0000	.0214
SDev	.010	.023	.0190	.009	.0000	.0000	.0000
%RSD	.2994	.3530	98.74	.4107	.0000	.0000	.0000
#1	3.269	6.610	.0326	2.212	.0146	.0000	.0214
#2	3.255	6.577	.0058	2.204	.0146	.0000	.0214

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	8.666	.0453	.0363	.0055	.0371	14.10	19.01
SDev	.030	.0006	.0011	.0000	.0014	.05	.06
%RSD	.3488	1.262	3.009	.0000	3.731	.3698	.3409
#1	8.687	.0449	.0356	.0055	.0381	14.13	19.06
#2	8.645	.0457	.0371	.0055	.0362	14.06	18.97

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0013	1.870	.3312	-.0000	92.98	8.936	.3406
SDev	.0000	.000	.0023	.0000	.19	.033	.0133
%RSD	.0000	.0000	.7036	.0000	.2066	.3736	3.909
#1	.0013	1.870	.3329	-.0000	93.12	8.960	.3500
#2	.0013	1.870	.3296	-.0000	92.84	8.912	.3312

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.0196	-.0293	3.817	.0093	.0312	.0026	-.0210
SDev	.0098	.0058	.009	.0000	.0002	.0005	.0197
%RSD	50.05	19.95	.2386	.1260	.5721	20.20	94.02
#1	.0265	-.0334	3.823	.0093	.0313	.0030	-.0070
#2	.0126	-.0251	3.810	.0093	.0311	.0022	-.0350

Elem	V_2924	Zn2138	Zr3391
Avge	.0002	.0871	.0010
SDev	.0003	.0034	.0014
%RSD	128.2	3.876	141.4
#1	.0000	.0895	.0000
#2	.0005	.0847	.0020

Method: EMS Sample Name: CCV Operator: MYJ
Run Time: 08/26/93 13:16:43
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.9887	5.115	5.136	5.000	5.008	5.001	4.900
SDev	.0018	.042	.066	.050	.049	.049	.011
%RSD	.1296	.8209	1.284	1.000	[illegible]	[illegible]	[illegible]

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Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SDev	[illegible]	.042	.066	.050	.049	.049	.011
%RSD	[illegible]	.8209	1.294	1.009	.9873	.9812	.2275
#1	.9900	5.144	5.183	5.035	5.043	5.035	4.893
#2	.9874	5.085	5.089	4.964	4.973	4.966	4.908

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	48.74	5.026	4.996	5.041	5.101	5.025	48.53
SDev	.19	.020	.014	.022	.035	.025	.47
%RSD	.3943	.4023	.2845	.4366	.6876	.4981	.9616
#1	48.88	5.040	5.006	5.057	5.126	5.042	48.86
#2	48.61	5.011	4.986	5.026	5.077	5.007	48.20

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	5.013	49.54	4.995	4.949	48.03	4.958	5.103
SDev	.072	.34	.026	.030	.54	.016	.000
%RSD	1.440	.6826	.5132	.6075	1.131	.3240	.0012
#1	5.064	49.78	5.013	4.970	48.41	4.970	5.103
#2	4.962	49.30	4.977	4.928	47.64	4.947	5.103

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.9807	5.159	5.077	4.617	5.018	4.948	4.960
SDev	.0224	.019	.011	.018	.048	.040	.018
%RSD	2.283	.3775	.2212	.3805	.9573	.8091	.3652
#1	.9649	5.145	5.085	4.629	5.052	4.976	4.973
#2	.9965	5.173	5.069	4.604	4.984	4.920	4.947

Elem	V_2924	Zn2138	Zr3391
Avge	5.051	5.074	5.105
SDev	.033	.019	.038
%RSD	.6553	.3773	.7381
#1	5.075	5.087	5.131
#2	5.028	5.060	5.078

Method: EMS Sample Name: BLA01 Operator: MYJ
Run Time: 08/26/93 13:18:49
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0019	.0033	.0151	.0029	.0026	H.0023	.0214
SDev	.0000	.0070	.0024	.0040	.0005	.0011	.0000
%RSD	.0000	211.9	15.56	141.4	20.20	47.14	.0000
#1	.0019	.0082	.0168	.0057	.0029	H.0030	.0214
#2	.0019	-.0016	.0135	-.0000	.0022	.0015	.0214

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	.0270	.0020	.0015	.0018	.0061	.0029	.0504
SDev	.0036	.0027	.0022	.0000	.0000	.0028	.0259
%RSD	13.34	137.8	141.4	.0000	.0093	94.28	51.43

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
SDev	[redacted]	.020	.014	.022	.035	.025	47
%RSD	[redacted]	.4023	.2845	.4366	.6876	.4981	.9616
#1	48.88	5.040	5.006	5.057	5.126	5.042	48.86
#2	48.61	5.011	4.986	5.026	5.077	5.007	48.20

Elem	La6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	5.013	49.54	4.995	4.949	48.03	4.958	5.103
SDev	.072	.34	.026	.030	.54	.016	.000
%RSD	1.440	.6826	.5132	.6075	1.131	.3240	.0012
#1	5.064	49.78	5.013	4.970	48.41	4.970	5.103
#2	4.962	49.30	4.977	4.928	47.64	4.947	5.103

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.9807	5.159	5.077	4.617	5.018	4.948	4.960
SDev	.0224	.019	.011	.018	.048	.040	.018
%RSD	2.283	.3775	.2212	.3805	.9573	.8091	.3652
#1	.9649	5.145	5.085	4.629	5.052	4.976	4.973
#2	.9965	5.173	5.069	4.604	4.984	4.920	4.947

Elem	V_2924	Zn2138	Zr3391
Avge	5.051	5.074	5.105
SDev	.033	.019	.038
%RSD	.6553	.3773	.7381
#1	5.075	5.087	5.131
#2	5.028	5.060	5.078

Method: EMS Sample Name: BLA01 Operator: MYJ
Run Time: 08/26/93 13:18:49
Comment:
Mode: CONC Corr Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0019	.0033	.0151	.0029	.0026	H.0023	.0214
SDev	.0000	.0070	.0024	.0040	.0005	.0011	.0000
%RSD	.0000	211.9	15.56	141.4	20.20	47.14	.0000
#1	.0019	.0082	.0168	.0057	.0029	H.0030	.0214
#2	.0019	- .0016	.0135	- .0000	.0022	.0015	.0214

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	.0270	.0020	.0015	.0018	.0061	.0029	.0504
SDev	.0036	.0027	.0022	.0000	.0000	.0028	.0259
%RSD	13.34	137.8	141.4	.0000	.0093	94.28	51.43
#1	.0295	.0039	.0031	.0018	.0061	.0049	.0321
#2	.0244	.0001	.0000	.0018	.0061	.0010	.0687

Elem	La6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0033	.0652	.0016	H.0123	.0030	.0052	.0189
SDev	.0006	.0000	.0000	.0012	.0000	.0000	.0000
%RSD	17.32	.0000	.0000	9.431	.0000	.0000	.0265

%RSD	17.32	.0000	.0000	9.431	.0000	.0000	.0265
#1	[illegible]	.0652	0016	H.0131	.0030	.0052	.0189
#2	.0[illegible]	.0652	0016	H.0115	.0030	.0052	.0189

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	-.0028	.0094	.0239	H.0124	.0016	.0022	-.0097
SDev	.0024	.0133	.0082	.0000	.0004	.0010	.0833
%RSD	84.12	141.2	34.36	0050	23.64	47.14	854.0
#1	-.0045	.0188	.0297	H.0124	.0019	.0030	.0491
#2	-.0011	.0000	0181	H.0124	.0013	.0015	-.0686

Elem	V_2924	Zn2138	Zr3391
Avge	.0017	.0049	.0020
SDev	.0000	.0000	.0009
%RSD	.0000	.0000	47.14
#1	.0017	.0049	.0013
#2	.0017	.0049	.0027

Method: EMS Sample Name: Q761093 LCS Operator: MYJ
Run Time: 08/26/93 13:20:55
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.4463	18.70	18.42	.9429	18.98	.4631	L.5282
SDev	.0000	.02	02	.0020	.09	.0021	0000
%RSD	.0000	.1217	1103	2140	4528	4607	0041
#1	.4463	18.71	18.40	.9443	19.04	.4646	L.5282
#2	.4463	18.68	18.43	9414	18.92	.4616	L.5282

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	86.26	.4856	4.606	1.844	2.416	9.286	90.00
SDev	17	.0038	.009	.003	.010	.024	.32
%RSD	.1952	.7895	.1899	.1404	.3987	.2545	.3601
#1	86.38	.4883	4.612	1.845	2.423	9.303	90.22
#2	86.14	.4829	4.599	1.842	2.409	9.270	89.77

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.9755	89.57	4.611	.9479	89.60	4.555	4.583
SDev	.0050	.22	.007	.0023	30	.019	.018
%RSD	.5101	.2403	.1516	.2438	.3310	4071	.3882
#1	.9791	89.72	4.616	9495	89.81	4.568	4.596
#2	.9720	89.41	4.606	.9462	89.39	4.542	4.571

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	L.0100	19.16	.0752	L.0186	.9361	.9409	18.59
SDev	.0007	.03	.0055	.0000	.0056	.0063	.12
%RSD	7.065	1362	7.314	.0284	6024	6718	6189
#1	L.0095	19.15	.0791	L.0186	9401	9454	18.67
#2	L.0105	19.18	.0713	L.0186	9321	.9364	18.51

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#2	L.0105	19.18	.0713	L.0186	.9321	.9364	18.51

Elem	V[illegible]4	Zn2138	Zr3391
Avge	4[illegible]	4.597	.9877
SDev	.015	.004	0066
%RSD	.3255	.0784	.6675
#1	4.709	4.595	9924
#2	4.687	4.600	.9831

Method: EMS Sample Name: Q761094 BLA02 Operator: MYJ

Run Time: 08/26/93 13:23:01
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0019	.0239	0252	.0100	H.0249	.0008	.0481
SDev	.0000	.0105	.0166	.0020	.0103	.0011	.0076
%RSD	.0000	43.88	66.08	20.20	41.59	141.4	15.71
#1	.0019	.0165	.0134	.0114	H.0176	.0000	.0534
#2	.0019	0313	0369	0086	H.0322	0015	.0428

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	.1517	.0020	.0070	.0018	H.0246	0167	.1398
SDev	.0518	.0009	.0055	.0000	.0014	.0056	.0486
%RSD	34.17	45.95	78.57	.0000	5.595	33.28	34.78
#1	.1150	.0014	.0031	0018	H.0255	0128	1054
#2	.1883	.0027	H.0108	.0018	H.0236	.0206	.1742

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0026	.1304	.0062	0049	.1639	H.0105	.0252
SDev	.0000	.0615	.0029	.0023	.0397	.0025	.0089
%RSD	.0000	47.14	47.14	47.18	24.21	23.59	35.24
#1	.0026	.0870	0041	0033	1359	.0087	0189
#2	.0026	.1739	.0082	H.0065	.1920	H.0122	.0315

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	-.0117	.0236	H.9301	H.0166	.0018	0015	.0513
SDev	.0024	.0067	.0000	.0059	.0004	.0000	.0200
%RSD	20.07	28.34	.0000	35.37	19.75	0000	38.90
#1	-.0101	.0189	H.9301	H.0207	.0016	0015	.0372
#2	-.0134	.0284	H.9301	H.0124	0021	.0015	0655

Elem	V_2924	Zn2138	Zr3391
Avge	.0069	H.0520	.0020
SDev	.0024	.0035	.0009
%RSD	35.32	6.759	47.14
#1	0052	H.0545	.0013
#2	0087	H.0495	0027

Method: EMS Sample Name: C149650-M4 1:4 Operator: MYJ

Method: EMS Sample Name: C149650-M4 1:4 Operator: MYJ
Run Time: [illegible]6/93 [illegible]5:07
Comment:
Mode: CONC [illegible]orr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0019	.0018	0074	.0514	.0326	.0000	.0133
SDev	.0000	.0001	0381	.0000	.0026	.0000	.0113
%RSD	.0000	3.255	512.5	0000	7.945	.0000	84.98
#1	.0019	.0018	-.0195	0514	0308	.0000	.0053
#2	.0019	.0017	.0343	.0514	0344	.0000	0214

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	49.18	.0005	0023	- 0009	0072	3.285	1.682
SDev	.37	.0046	.0011	.0013	.0007	.017	.104
%RSD	.7514	833.6	47.14	141.4	9.557	.5079	6.166
#1	49.45	-.0027	0015	- 0018	.0077	3.296	1.609
#2	48.92	.0038	.0031	-.0000	.0067	3.273	1.755

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0140	10.24	1961	.0016	12.25	.0070	.0120
SDev	.0000	.03	.0000	.0023	.03	.0000	.0089
%RSD	.0000	.3003	0000	141.1	2046	.0030	73.94
#1	.0140	10.26	.1961	.0000	12.27	0070	.0183
#2	.0140	10.22	1961	.0033	12.23	0070	.0057

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	-.0081	.0160	3.724	.0055	0879	0007	.0093
SDev	.0033	.0725	.027	0146	.0001	0010	.0620
%RSD	40.54	452.7	.7333	267.3	.1641	141.4	666.3
#1	-.0058	-.0353	3.743	.0158	.0877	0000	- 0345
#2	-.0104	.0673	3.705	- 0049	0880	.0015	0531

Elem	V_2924	Zn2138	Zr3391
Avge	.0009	.0248	.0000
SDev	.0012	.0000	.0000
%RSD	142.6	.0068	.0000
#1	-.0000	.0248	.0000
#2	.0017	.0248	.0000

Method: EMS Sample Name: C149650-M4 Operator: MYJ
Run Time: 08/26/93 13:27:13
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0019	.0125	.0514	.2396	.1080	.0000	.0588
SDev	.0000	.0081	.0190	0000	.0005	0000	0076
%RSD	.0000	64.53	37.01	.0000	4794	0000	12.89
#1	0019	.0183	.0648	.2396	.1076	0000	.0534
#2	.0019	0068	0379	2396	1084	0000	0641

#2	.0019	.0068	.0379	2395	.1084	.0000	.0641

Elem	C[illegible]	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	1[illegible]	-.0000	.0031	-.0000	.0118	4.391	6.320
SDev	.3	.0023	.0022	.0026	.0014	003	.104
%RSD	.1950	7716.	70.71	4448e6	11.63	0633	1.641
#1	178.0	.0016	.0046	- 0018	.0109	4.390	6.393
#2	178.5	-.0016	.0015	.0018	0128	4 393	6.247

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0387	37.02	.6328	0041	46.23	.0083	.0150
SDev	.0006	.09	.0000	.0035	.08	0006	.0044
%RSD	1.455	.2491	.0000	84 98	.1716	7.452	29.62
#1	.0383	36 96	.6328	0066	46 18	0087	.0181
#2	.0391	37.09	.6328	.0016	46 29	0079	.0118

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	-.0053	.0091	13.46	0259	.3290	0052	- 1174
SDev	.0056	.0000	.02	.0088	.0014	.0010	.0477
%RSD	105.1	.4554	.1288	33.88	.4211	20.20	40.58
#1	- 0014	.0090	13.45	0321	.3280	0045	- 0837
#2	-.0093	.0091	13.48	.0197	.3300	.0060	- 1511

Elem	V_2924	Zn2138	Zr3391
Avge	.0022	.0396	.0027
SDev	.0006	.0000	.0000
%RSD	27.80	.0024	.0000
#1	.0026	.0396	.0027
#2	.0017	.0396	.0027

Method: EMS Sample Name: C149151-M4 Operator: MYJ
Run Time: 08/26/93 13:29:19 C149651 MYJ 8/26/93
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0038	.0259	.0429	.2382	.1080	0000	0267
SDev	.0027	.0089	.0357	0020	.0005	0000	.0000
%RSD	70 71	34.20	83.12	.8468	.4794	.0000	.0000
#1	.0019	.0196	.0177	2368	.1076	0000	.0267
#2	.0056	.0322	.0681	.2396	.1084	.0000	.0267

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	177.1	-.0000	.0054	.0018	.0206	4.391	6.384
SDev	.7	.0014	.0011	.0000	.0000	025	.026
%RSD	.3946	16050.	20.20	.0000	.0247	.5699	.4061
#1	176.6	.0010	.0046	0018	.0206	4 374	6.402
#2	177 6	- 0010	0062	0018	0206	4 409	6 366

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0385	36 64	6270	0065	146 2	0105	0276

Avge	.0385	36.64	.6270	.0065	146.2	.0105	.0276
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
%RSD	[redacted]	.2098	.1858	.0000	.3028	23.58	16.16
#1	.0379	36.59	.6262	.0065	145.9	.0122	.0307
#2	.0391	36.70	.6278	.0065	146.5	.0087	.0244

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	-.0025	.0091	13.48	.0156	.3241	.0052	-.0469
SDev	.0033	.0004	.05	.0059	.0005	.0010	.0759
%RSD	131.1	4.099	.3650	37.55	.1506	20.20	161.8
#1	-.0049	.0088	13.44	.0114	.3238	.0045	.0068
#2	-.0002	.0093	13.51	.0197	.3245	.0060	-.1006

Elem	V_2924	Zn2138	Zr3391
Avge	.0039	.0594	.0027
SDev	.0006	.0000	.0000
%RSD	15.68	.0160	.0000
#1	.0043	.0594	.0027
#2	.0035	.0594	.0027

Method: EMS Sample Name: C149152-M4 Operator: MYJ
Run Time: 08/26/93 13:31:24 C149652 MYJ 8/26/93
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	-.0013	.0671	.0326	.3552	.0586	.0000	.0615
SDev	.0009	.0069	.0024	.0020	.0000	.0000	.0114
%RSD	70.71	10.35	7.223	.5680	.0000	.0000	18.49
#1	-.0019	.0721	.0343	.3538	.0586	.0000	.0534
#2	-.0006	.0622	.0310	.3566	.0586	.0000	.0695

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	75.51	.0016	.0031	.0027	.0152	4.253	10.60
SDev	.29	.0000	.0000	.0039	.0007	.015	.13
%RSD	.3856	1.274	.0000	141.4	4.501	.3596	1.223
#1	75.30	.0016	.0031	-.0000	.0157	4.242	10.51
#2	75.71	.0015	.0031	.0055	.0147	4.264	10.69

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0568	15.02	.2431	.0025	24.76	.0105	.0150
SDev	.0003	.03	.0012	.0035	.07	.0025	.0044
%RSD	.4956	.2047	.4794	142.1	.2784	23.58	29.68
#1	.0570	15.00	.2422	.0049	24.71	.0122	.0181
#2	.0566	15.04	.2439	-.0000	24.81	.0087	.0118

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	-.0077	-.0585	17.50	.0094	.2096	.0071	-.0716
SDev	.0047	.0002	.10	.0205	.0006	.0005	.0535
%RSD	61.31	.3882	.5521	218.0	.3087	7.443	74.75

[redacted]	[redacted]	[redacted]86	[redacted]43	[redacted]0051	[redacted]2092	[redacted].007[redacted]	- [redacted]
#2	- [redacted]	-.0583	17.57	0239	2101	.0067	-.1094

Elem	V_2924	Zn2138	Zr3391
Avge	.0056	.0421	.0027
SDev	.0006	.0035	.0000
%RSD	10.58	8.308	.0000
#1	.0061	.0446	.0027
#2	.0052	.0396	.0027

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Method: EMS Sample Name: C149153-M4 Operator: MYJ
Run Time: 08/26/93 13:33:30 C149653 MYJ 8/26/93
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0031	.0265	.0156	.2496	.0533	0000	0641
SDev	.0018	.0011	.0071	.0020	.0008	0000	0151
%RSD	56.57	4.334	45.68	8081	1.458	0000	23.55
#1	.0044	.0257	.0207	.2511	.0527	.0000	.0535
#2	.0019	.0274	0106	.2482	0538	.0000	.0748

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	75.91	.0004	.0015	0055	.0110	2.801	4.881
SDev	.09	.0009	.0022	.0000	.0007	.003	.065
%RSD	.1176	214.9	141.4	.0000	6.233	.0993	1.328
#1	75.97	.0010	.0000	.0055	.0105	2.803	4.835
#2	75.84	-.0002	.0031	.0055	.0115	2.799	4.927

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0360	17.09	.3057	0033	48.03	.0105	.0168
SDev	.0000	.03	.0000	.0000	.19	.0025	.0022
%RSD	.0000	.1799	.0000	0000	.4000	23.58	13.21
#1	.0360	17.07	3057	0033	47.89	.0087	.0184
#2	.0360	17.11	.3057	.0033	48.16	.0122	.0153

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	- 0078	-.0613	14.54	.0180	1989	.0067	-.0742
SDev	.0056	.0265	.04	.0088	.0010	.0010	.0566
%RSD	71.42	43.21	.2630	48.78	.4957	15.71	76.18
#1	-.0039	-.0426	14.52	.0242	.1982	.0074	- 1142
#2	-.0117	-.0801	14.57	.0118	.1995	.0060	-.0342

Elem	V_2924	Zn2138	Zr3391
Avge	.0061	.0371	0027
SDev	.0012	.0000	0000
%RSD	20.13	0301	0000
#1	.0052	.0371	.0027
#2	.0069	.0371	.0027

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#2	.0069	.0371	.0027

Method: EMS Sample Name: CCV Operator: MYJ
Run Time: 08/26/93 13:35:36
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	1.016	5.136	5.208	5.033	5.065	5.072	5.096
SDev	.004	.002	002	.014	015	.001	007
%RSD	.4370	.0447	.0459	.2706	3015	0210	.1457
#1	1.019	5.134	5.207	5.023	5.055	5.072	5.091
#2	1.013	5.138	5.210	5.042	5.076	5.071	5.101

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	48.67	5.146	5.088	5.130	5.166	5.115	47.53
SDev	.23	.014	024	.016	.017	.011	.03
%RSD	.4733	.2688	.4727	.3028	.3194	.2174	.0545
#1	48.83	5.156	5.105	5.141	5.154	5.123	47.55
#2	48.50	5.136	5.071	5.119	5.178	5.107	47.51

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	5.018	49.00	5.070	4.918	47.65	5.046	5.204
SDev	.030	00	014	.005	.28	.016	.018
%RSD	.5913	.0000	.2758	.0948	.5960	3187	.3409
#1	4.997	49.00	5.080	4.914	47.45	5.057	5.217
#2	5.039	49.00	5.061	4.921	47.85	5.034	5.191

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	1.003	5.305	5.118	4.590	5.084	4.877	4.876
SDev	.003	.026	005	015	015	.003	020
%RSD	.3307	.4956	.0931	3190	.3048	0648	4051
#1	1.000	5.287	5.122	4.600	5.073	4.880	4.863
#2	1.005	5.324	5.115	4.580	5.095	4.875	4.890

Elem	V_2924	Zn2138	Zr3391
Avge	5.112	5.175	5.162
SDev	.004	.019	.002
%RSD	.0849	.3723	0365
#1	5.116	5.189	5.161
#2	5.109	5.162	5.163

Method: EMS Sample Name: BLA01 Operator: MYJ
Run Time: 08/26/93 13:37:42
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0031	.0140	.0083	.0136	0.0124	0.0106	.0295
SDev	0018	0035	0119	0030	.0031	0021	0038
%RSD	56.57	24.96	142.7	22.33	24.96	20.20	12.89
#1	0044	.0116	0168	0157	0.0103	0.0091	0268

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#1	0044	.0116	0168	0157	Q.0103	Q.0091	.0268

Elem	Ca[illegible]	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	.1797	Q.0117	Q.0124	Q.0110	0158	0118	.0825
SDev	.0410	.0019	.0000	.0026	.0027	.0014	.0194
%RSD	22.84	15.73	.0000	23.57	17.40	11.79	23.57
#1	.1506	Q.0104	Q.0124	0092	.0139	0108	.0687
#2	Q.2087	Q.0130	Q.0124	Q.0128	.0177	0128	.0962

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	Q.0125	.1793	Q.0124	Q.0229	.1477	Q.0140	.0220

all results BDL

SDev	.0021	.0077	.0035	.0000	.0334	.0025	.0134
%RSD	16.46	4.286	28.28	.0224	22.63	17.68	60.55
#1	Q.0111	.1739	.0099	Q.0229	1240	Q.0122	.0126
#2	Q.0140	.1848	Q.0148	Q.0229	.1713	Q.0157	0315

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.0044	.0189	0472	Q.0166	Q.0111	Q.0127	.0296
SDev	.0063	.0000	.0046	.0059	0025	.0010	.0113
%RSD	143.3	.1093	9.730	35.36	22.15	8.319	38.10
#1	-.0001	.0189	.0439	Q.0124	.0094	Q.0119	0375
#2	.0089	.0189	.0504	Q.0207	Q.0128	Q.0134	.0216

Elem	V_2924	Zn2138	Zr3391
Avge	Q.0126	.0135	.0087
SDev	.0018	.0053	.0028
%RSD	14.66	38.71	32.64
#1	Q.0113	.0098	.0067
#2	Q.0139	.0173	.0107

Method: EMS Sample Name: A287152-M4 Operator: MYJ
Run Time: 08/26/93 13:39:47
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0000	.5278	-.0077	.0364	.0234	0000	.0614
SDev	.0027	.0023	0179	0010	.0000	.0000	.0114
%RSD	199e6	.4386	231.6	2.773	.0000	0000	18.48
#1	-.0019	.5262	.0049	.0357	0234	.0000	.0695
#2	.0019	.5294	- 0203	.0371	.0234	.0000	.0534

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	19.98	.0002	.0039	- 0000	.0217	5515	1.609
SDev	.11	.0000	.0011	.0026	.0027	0056	026
%RSD	.5585	9.420	28.28	4448e6	12.65	1.008	1.612
#1	20.05	.0002	.0046	.0018	0237	5554	1.590
#2	19.90	.0003	0031	- 0018	.0198	5476	1.627

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203

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Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
SDev	[redacted]	.015	.0000	0023	.033	.0025	.0000
%RSD	[redacted]	.3343	.0000	28.22	1.266	70.87	.0711
#1	.0015	4.609	.0461	.0098	2.664	.0017	.0122
#2	.0018	4.587	.0461	.0066	2.617	.0052	.0122

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	-.0011	.0222	1.955	0164	.0390	.0156	-.0468
SDev	.0056	.0065	.033	.0059	0007	.0010	.0564
%RSD	486.7	29.40	1.679	35.63	1.839	6.734	120.5
#1	.0028	.0176	1.979	.0123	.0395	.0164	-.0867
#2	-.0051	.0268	1.932	.0206	.0385	0149	- 0069

Elem	V_2924	Zn2138	Zr3391
Avge	.0022	0396	.0013
SDev	.0006	.0000	.0000
%RSD	28.77	.0071	.0000
#1	.0026	.0396	.0013
#2	.0017	.0396	.0013

Method: EMS Sample Name: A287177-M4 Operator: MYJ
Run Time: 08/26/93 13:41:54
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0019	.0290	.0243	1612	.2219	.0000	.0508
SDev	.0000	.0035	0059	.0020	.0010	.0000	0038
%RSD	.0000	11.94	24.43	1.252	.4667	.0000	7.419
#1	.0019	.0315	0285	1626	2211	0000	0534
#2	.0019	.0266	0201	1598	2226	.0000	.0481

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	42.57	.0030	.0031	.0027	0255	1013	2.296
SDev	.16	.0014	.0022	.0013	.0000	.0000	039
%RSD	.3821	45.27	70.71	47.14	0000	.0000	1.694
#1	42.45	.0021	.0046	.0018	0255	.1013	2.269
#2	42.68	.0040	0015	.0037	.0255	1013	2.324

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0068	17.07	.0420	0041	72.90	0087	.0252
SDev	.0008	.12	0012	0035	58	.0000	.0089
%RSD	12.48	.7206	2.773	85.03	.7935	.0000	35.30
#1	.0074	16.98	.0412	0065	72.50	.0087	.0315
#2	.0062	17.15	.0428	.0016	73.31	.0087	.0189

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	-.0063	.0202	6.902	.0165	4325	.0037	- 0843
SDev	0032	0000	026	.0059	.0030	.0010	0258
%RSD	51.00	0000	.3698	35.40	6888	28.28	30.65

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%RSD	51.00	.0000	.3698	35.40	.6888	28.28	30.65
#1	[illegible]	.0202	6.884	.0124	.4304	.0045	-.1026
#2	[illegible]	.0202	6.920	.0207	.4346	.0030	-.0660

Elem	V_2924	Zn2138	Zr3391
Avge	.0004	.0693	.0013
SDev	.0006	.0000	.0000
%RSD	136.7	.0000	.0000
#1	.0009	.0693	.0013
#2	.0000	.0693	.0013

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Method: EMS Sample Name: DUP02 Q761097 Operator: MYJ
Run Time: 08/26/93 13:44:00
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0019	.0265	.0176	.1541	.2200	.0000	.0401
SDev	.0000	.0000	.0060	.0040	.0005	.0000	.0113
%RSD	.0000	.1389	33.83	2.619	.2353	.0000	28.27
#1	.0019	.0265	.0134	.1512	.2197	.0000	.0481
#2	.0019	.0265	.0218	.1569	.2204	.0000	.0321

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	42.28	.0040	.0023	.0018	.0217	.0895	2.209
SDev	.20	.0000	.0011	.0000	.0000	.0028	.006
%RSD	.4664	.5713	47.14	.0000	.0026	3.108	.2934
#1	42.14	.0040	.0031	.0018	.0217	.0875	2.204
#2	42.42	.0040	.0015	.0018	.0217	.0914	2.214

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0066	16.96	.0428	.0025	72.50	.0105	.0157
SDev	.0000	.03	.0000	.0012	.13	.0025	.0044
%RSD	.0000	.1813	.0000	47.21	.1786	23.59	28.24
#1	.0066	16.93	.0428	.0016	72.40	.0122	.0189
#2	.0066	16.98	.0428	.0033	72.59	.0087	.0126

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	-.0114	.0200	6.825	.0165	.4294	.0030	-.0687
SDev	.0024	.0000	.047	.0117	.0014	.0000	.0029
%RSD	21.09	.2060	.6940	70.79	.3364	.0000	4.266
#1	-.0131	.0200	6.791	.0083	.4284	.0030	-.0708
#2	-.0097	.0201	6.858	.0248	.4304	.0030	-.0666

Elem	V_2924	Zn2138	Zr3391
Avge	.0013	.0681	.0007
SDev	.0006	.0018	.0009
%RSD	46.87	2.589	141.4
#1	[illegible]	[illegible]	[illegible]

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#2	[illegible]	.0694	.0013				

Method: EMS Sample Name: SPI02 0761095 Operator: MYJ
Run Time: 08/26/93 13:46:06
Comment:
Mode: CONC Corr. Factor: 1

A287177

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0508	1.937	1.928	1.124	2.114	.0483	1.209
SDev	.0018	.003	.033	.006	.004	.0000	.008
%RSD	3.492	.1800	1.729	.5384	.1959	.0000	.6249
#1	.0521	1.935	1.951	1.120	2.111	.0483	1.214
#2	.0496	1.940	1.904	1.128	2.117	.0483	1.204

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	132.9	.0501	.4739	.1959	.2689	1.066	96.26
SDev	.0	.0000	.0011	.0000	.0000	.001	.30
%RSD	.0309	.0487	.2307	.0000	.0001	.1305	.3165
#1	132.9	.0501	.4731	.1959	.2689	1.065	96.04
#2	132.8	.0501	.4746	.1959	.2689	1.067	96.48

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.9938	111.0	.5141	.9732	167.1	.4755	.4835
SDev	.0017	.1	.0000	.0081	.2	.0025	.0000
%RSD	.1701	.1108	.0000	.8329	.1288	.5200	.0006
#1	.9926	110.9	.5141	.9675	166.9	.4738	.4835
#2	.9950	111.0	.5141	.9790	167.2	.4773	.4835

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	-.0083	1.929	6.786	.0205	1.365	.9610	2.439
SDev	.0032	.073	.018	.0117	.002	.0010	.059
%RSD	38.46	3.773	.2685	57.23	.1405	.1096	2.413
#1	-.0105	1.877	6.773	.0288	1.363	.9603	2.480
#2	-.0060	1.980	6.799	.0122	1.366	.9618	2.397

Elem	V_2924	Zn2138	Zr3391
Avge	.4769	.5444	.9951
SDev	.0015	.0018	.0000
%RSD	.3204	.3239	.0000
#1	.4780	.5456	.9951
#2	.4759	.5431	.9951

Method: EMS Sample Name: A287178-M4 Operator: MYJ
Run Time: 08/26/93 13:48:12
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0006	.0319	.0062	.1879	.1267	.0000	.0534
SDev	.0018	.0070	.0006	.0035	.0010	.0000	.0000
%RSD	282.8	21.96	10.00	1.878	.8175	.0000	.0000

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%RSD	282.8	21.96	10.00	1.878	.8175	.0000	.0000
#1	[illegible]	.0368	.0058	.1904	.1274	.0000	.0534
#2	[illegible]	.0269	.0066	.1854	.1259	.0000	.0534

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	27.74	.0007	0031	-.0018	.0090	.0364	2.791
SDev	.05	.0009	.0000	.0000	.0014	.0000	.013
%RSD	.1803	119.2	.0000	0000	15.28	.0000	.4644
#1	27.78	.0001	.0031	- 0018	.0100	0364	2.782
#2	27 71	.0014	.0031	- 0018	.0080	0364	2.800

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0179	14.80	.3139	.0057	67.28	.0079	.0157
SDev	.0002	.06	.0012	.0035	.23	.0037	.0044
%RSD	1.051	.4153	.3712	60.57	.3383	47.15	28.29
#1	.0177	14.85	.3147	.0082	67.44	.0105	.0126
#2	.0180	14.76	.3131	.0033	67.12	.0052	.0189

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	-.0037	.0192	8.056	0186	.3087	.0030	-.1143
SDev	.0056	.0000	.015	0088	.0015	.0000	.0792
%RSD	149.3	0000	.1809	47.16	.4865	0000	69.36
#1	.0002	0192	8.066	0248	.3097	.0030	-.0582
#2	-.0077	.0192	8.046	.0124	.3076	0030	- 1703

Elem	V_2924	Zn2138	Zr3391
Avge	.0024	.0496	.0013
SDev	.0003	.0000	.0000
%RSD	12 90	.0355	0000
#1	.0026	.0495	.0013
#2	.0022	0496	.0013

Method: EMS Sample Name: A287179-M4 Operator: MYJ
Run Time: 08/26/93 13:50:18
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0019	.0034	-.0059	.4700	.1805	.0000	.0267
SDev	.0000	.0059	.0083	.0030	.0005	.0000	.0000
%RSD	.0000	175.3	141.0	.6438	.2869	0000	.0404
#1	.0019	-.0008	- 0118	.4679	.1808	.0000	.0267
#2	.0019	.0075	-.0000	4721	.1801	.0000	.0267

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	54.06	.0001	.0023	-.0009	.0071	.0442	3.359
SDev	23	.0000	.0011	.0013	.0000	.0000	039
%RSD	4220	28.59	47 14	141 4	0000	0000	1 158
#1	53.90	.0001	.0031	-.0018	.0071	0442	3 332
#2	54 22	.0001	0015	- 0000	.0071	.0442	3.387

#2	54.22	.0001	.0015	-.0000	.0071	.0442	3.387

Elem	Li[illegible]	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0[illegible]	24.28	.6575	.0000	118.0	.0070	.0126
SDev	.0001	.00	.0023	.0000	.2	.0025	.0089
%RSD	.6865	.0000	.3544	141.4	.1735	35.37	70.63
#1	.0136	24.28	.6558	.0000	118.1	.0052	.0063
#2	.0137	24.28	.6591	.0000	117.8	.0087	.0189

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	-.0048	.0194	5.221	.0124	.8137	.0026	-.1106
SDev	.0071	.0000	.020	.0234	.0008	.0016	.0254
%RSD	148.0	.0000	3842	188.7	.1044	60.61	22.96
#1	-.0099	.0194	5.207	.0290	.8143	.0015	-.0927
#2	.0002	.0194	5.235	-.0042	.8131	.0037	-.1286

Elem	V_2924	Zn2138	Zr3391
Avge	-.0000	.0446	.0000
SDev	.0000	.0000	.0000
%RSD	141.4	.0213	.0000
#1	-.0000	.0446	.0000
#2	-.0000	.0446	.0000

Method: EMS Sample Name: CCV Operator: MYJ
Run Time: 08/26/93 13:52:25
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.9749	5.072	5.113	5.000	5.021	5.049	5.005
SDev	.0036	.000	.029	.015	.010	.006	.060
%RSD	.3643	.0001	.5585	.3026	.1959	.1162	1.208
#1	.9724	5.072	5.133	4.990	5.014	5.045	4.962
#2	.9774	5.072	5.093	5.011	5.028	5.053	5.048

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	49.16	5.096	5.036	5.081	5.124	5.086	47.64
SDev	.04	.008	.001	.004	.014	.014	.25
%RSD	.0857	.1604	.0217	.0764	.2684	.2734	.5306
#1	49.13	5.091	5.037	5.079	5.114	5.076	47.46
#2	49.19	5.102	5.035	5.084	5.134	5.095	47.81

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	4.953	49.49	5.020	5.010	48.38	5.002	5.135
SDev	.013	.05	.001	.014	.19	.004	.009
%RSD	.2540	.0932	.0232	.2772	.3971	.0742	.1725
#1	4.944	49.46	5.019	5.000	48.25	5.005	5.141
#2	4.962	49.52	5.021	5.019	48.52	4.999	5.128

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.9833	5.183	5.069	4.500	5.045	4.956	14.459

Avge	.9833	5.183	5.069	4.580	5.045	4.956	4.459
SDev	.0072	.000	.015	.012	.012	.003	.014
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
#1	.97[illegible]	5.183	5.059	4.571	5.037	4.954	4.449
#2	.9884	5.183	5.080	4.588	5.054	4.958	4.469

Elem	V_2924	Zn2138	Zr3391
Avge	5.071	5.097	5.131
SDev	.005	.014	.012
%RSD	.0968	.2749	.2387
#1	5.068	5.087	5.122
#2	5.075	5.107	5.139

Method: EMS Sample Name: BLA01 Operator: MYJ
Run Time: 08/26/93 13:54:31
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	-.0019	.0025	-.0034	.0029	.0031	H.0030	.0214
SDev	.0000	.0035	.0143	.0040	.0003	.0000	.0227
%RSD	.0000	141.0	422.4	141.4	8.319	.0000	106.0
#1	-.0019	.0000	-.0135	.0057	.0033	H.0030	.0054
#2	-.0019	.0050	.0067	-.0000	.0029	H.0030	.0374

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	.0407	.0013	.0031	.0018	.0080	.0010	.0367
SDev	.0014	.0000	.0022	.0000	.0000	.0000	.0194
%RSD	3.536	.0091	70.71	.0000	.0000	.0000	53.03
#1	.0417	.0013	.0046	.0018	.0080	.0010	.0229
#2	.0397	.0013	.0015	.0018	.0080	.0010	.0504

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0047	.0870	.0033	H.0139	.0222	.0052	.0220
SDev	.0000	.0000	.0000	.0035	.0355	.0000	.0133
%RSD	.0000	.0000	.0000	24.96	160.3	.0000	60.55
#1	.0047	.0870	.0033	H.0164	-.0030	.0052	.0126
#2	.0047	.0870	.0033	H.0115	.0473	.0052	.0315

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	-.0023	.0187	.0226	.0062	.0029	.0034	-.0646
SDev	.0095	.0000	.0064	.0146	.0000	.0005	.0367
%RSD	420.9	.0000	28.25	235.7	.0191	15.71	56.84
#1	.0045	.0187	.0181	-.0041	.0029	.0037	-.0386
#2	-.0090	.0187	.0271	H.0166	.0029	.0030	-.0905

Elem	V_2924	Zn2138	Zr3391
Avge	.0030	.0049	.0000

Elem	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Avge	[redacted]	.0187	.0090	H.0166	.0010	.0056	-.0780
SDev	[redacted]	.0000	.0091	.0059	.0008	.0000	.0621
%RSD	142.6	.0000	100.7	35.36	73.21	.0000	79.62
#1	.0045	.0187	.0155	H.0124	.0016	.0056	-.0341
#2	-.0000	.0187	.0026	H.0207	.0005	.0056	-.1219

Elem	V_2924	Zn2138	Zr3391
Avge	.0009	.0197	.0013
SDev	.0000	.0000	.0019
%RSD	.0000	.0496	141.4
#1	.0009	.0197	.0027
#2	.0009	.0197	.0000

Method: EMS Sample Name: DLS Operator: MYJ
Run Time: 08/26/93 16:57:14
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0094	L.0379	-.0001	-.0114	H.0132	L.0008	-.0427
SDev	.0000	.0047	.0000	.0000	.0000	.0000	.0302
%RSD	.0000	12.31	13.02	.0000	.0000	.0000	70.87
#1	.0094	L.0346	-.0001	-.0114	H.0132	L.0008	-.0640
#2	.0094	L.0412	-.0002	-.0114	H.0132	L.0008	-.0213

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	.0560	H.0066	H.0116	.0101	H.3515	H.0364	-.0642
SDev	.0000	.0019	.0033	.0013	.0285	.0000	.0454
%RSD	.0000	27.88	28.28	12.86	8.117	.0000	70.71
#1	.0560	.0053	.0093	.0092	H.3717	H.0364	-.0962
#2	.0560	H.0079	H.0139	.0110	H.3314	H.0364	-.0321

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0081	.1739	H.0124	.0049	.0089	H.0174	H.0921
SDev	.0003	.0000	.0012	.0000	.0042	.0025	.0134
%RSD	3.478	.0000	9.428	.0525	47.14	14.28	14.57
#1	.0083	.1739	H.0115	.0049	.0059	H.0156	H.1016
#2	.0079	.1739	H.0132	.0049	.0118	H.0191	H.0826

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	H.0349	.0192	-.0050	.0207	-.0000	.0026	-.0064
SDev	.0095	.1455	.0036	.0117	.0000	.0000	.0677
%RSD	27.28	756.0	72.28	56.59	.0000	.0000	1061.
#1	.0282	-.0837	-.0025	.0124	-.0000	.0026	-.0543
#2	H.0416	.1221	-.0076	.0290	-.0000	.0026	.0415

Elem	V_2924	Zn2138	Zr3391
Avge	H.0117	H.1640	.0013
SDev	.0031	.0122	.0019
%RSD	26.14	7.449	141.4

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
[redacted]	H[redacted]	[redacted]2	[redacted]050	[redacted]207	[redacted].00[redacted]	00[redacted]	-.[redacted]
SDev	[redacted]	.1455	.0036	.0117	.0000	.0000	.0677
%RSD	2[redacted]	756.0	72.28	56.59	.0000	.0000	1061.
#1	.0282	-.0837	-.0025	.0124	-.0000	.0026	-.0543
#2	H.0416	.1221	-.0076	.0290	-.0000	.0026	.0415

Elem	V_2924	Zn2138	Zr3391
Avge	H.0117	H.1640	.0013
SDev	.0031	.0122	.0019
%RSD	26.14	7.449	141.4
#1	.0095	H.1726	.0000
#2	H.0139	H.1554	.0027

Method: EMS Sample Name: CDI.01 Operator: MYJ
Run Time: 08/26/93 16:59:19
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.0182	-.0058	.0067	-.0136	.0018	L.0008	-.0559
SDev	.0000	.0012	.0048	.0030	.0000	.0000	.0264
%RSD	.0000	20.24	70.87	22.33	.0000	.0000	47.28
#1	.0182	-.0066	.0101	-.0114	.0018	L.0008	-.0746
#2	.0182	-.0049	.0034	-.0157	.0018	L.0008	-.0372

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	.0550	.0112	.1082	.0201	H.3007	.0079	-.0046
SDev	.0014	.0000	.0000	.0000	.0124	.0014	.0000
%RSD	2.619	.2086	.0000	.0000	4.116	17.68	.0000
#1	.0539	.0112	.1082	.0201	H.3095	.0088	-.0046
#2	.0560	.0112	.1082	.0201	H.2920	.0069	-.0046

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0075	.1739	.0330	.0041	.0251	H.0943	H.1360
SDev	.0002	.0000	.0000	.0012	.0188	.0025	.0044
%RSD	2.503	.0000	.0000	28.56	74.87	2.625	3.243
#1	.0076	.1739	.0330	.0049	.0384	H.0926	H.1329
#2	.0074	.1739	.0330	.0032	.0118	H.0961	H.1392

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.1273	.0703	-.0158	.0124	.0002	.0011	-.0403
SDev	.0040	.0727	.0118	.0117	.0004	.0000	.0085
%RSD	3.115	103.5	74.81	94.29	153.4	.0000	21.01
#1	.1245	.0188	-.0075	.0207	-.0000	.0011	-.0463
#2	.1301	.1217	-.0242	.0041	.0005	.0011	-.0343

Elem	V_2924	Zn2138	Zr3391
Avge	.1038	H.1428	-.0013
SDev	.0000	.0070	.0019
%RSD	.0000	4.900	141.4

300

%RSD	.0000	4.900	141.4
#1	[illegible]	H.1477	-.0027
#2	[illegible]	H.1378	.0000

Method: EMS Sample Name: ICS Operator: MYJ
Run Time: 08/26/93 17:01:25
Comment:

Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	.9448	490.6	2718	-.0185	.4809	.5001	-.0870
SDev	.0036	1.9	.0721	.0020	.0013	.0043	.0227
%RSD	.3759	.3839	26.51	10.88	2692	.8532	26.05
#1	.9473	492.0	.2208	-.0171	.4818	.5031	-.1030
#2	.9422	489.3	.3227	-.0200	.4799	.4971	-.0709

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	480.0	.9729	.4731	.4623	H.6815	189.4	-.0550
SDev	3.2	.0060	.0044	.0013	.0058	1.4	0324
%RSD	.6736	.6213	.9243	.2800	.8478	.7199	58.93
#1	482.3	.9771	4762	.4632	H.6856	190.3	-.0321
#2	477.7	.9686	4700	.4614	H.6774	188.4	-.0779

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0060	472.9	.4795	-.0075	.0325	.9392	.9560
SDev	.0004	2.5	.0023	.0070	.0125	.0043	.0297
%RSD	6.216	.5299	.4860	93.07	38.57	.4606	3.105
#1	.0063	474.6	.4812	-.0124	.0236	.9423	.9770
#2	.0058	471.1	.4779	-.0026	.0413	.9361	.9350

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	.0984	-.3556	0307	0270	-.1818	.0041	-.9570
SDev	.0307	.1195	.0018	.0164	.0013	.0000	.0907
%RSD	31.20	33.60	5.870	60.88	.6936	.0000	9.476
#1	.1202	-.2711	.0295	.0154	-.1827	.0041	L-1.021
#2	.0767	-.4400	.0320	.0386	-.1809	.0041	-.8929

Elem	V_2924	Zn2138	Zr3391
Avge	.4802	1.051	0033
SDev	.0015	.007	.0009
%RSD	.3194	.6644	28.28
#1	.4813	1.056	.0040
#2	.4791	1.046	.0027

Method: EMS Sample Name: CCV Operator: MYJ
Run Time: 08/26/93 17:03:30
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
SDev	[redacted]	.026	.020	.029	.032	.037	026
%RSD	[redacted]	.4814	.3684	.5645	.6205	.7048	.5406
#1	1.030	5.355	5.460	5.202	5.112	5.324	4.799
#2	1.020	5.319	5.431	5.161	5.067	5.271	4.836

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	51.55	H5.537	5.415	5.340	H5.527	H5.562	46.23
SDev	.41	.031	.038	.048	.028	.038	.25
%RSD	.7987	.5679	.7066	.8971	.5102	.6749	.5467
#1	51.84	H5.559	5.442	5.373	H5.547	H5.589	46.41
#2	51.25	5.515	5.388	5.306	5.507	H5.536	46.05

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	4.730	49.53	5.254	5.143	45.69	5.402	H5.541
SDev	.024	.38	.041	.039	27	.046	.031
%RSD	.5022	.7758	.7762	.7637	.5897	.8467	.5626
#1	4.747	49.80	5.283	5.171	45.88	5.435	H5.563
#2	4.713	49.26	5.225	5.116	45.50	5.370	5.519

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	1.049	5.508	5.135	4.561	5.165	5.117	4.966
SDev	.024	.026	023	.061	.031	.033	.015
%RSD	2.310	.4702	.4384	1.348	.6044	.6486	.3114
#1	1.066	5.490	5.151	4.604	5.187	5.140	4.977
#2	1.032	H5.527	5.119	4.517	5.143	5.093	4.955

Elem	V_2924	Zn2138	Zr3391
Avge	5.343	5.511	5.334
SDev	.041	.042	.028
%RSD	.7702	.7593	.5298
#1	5.372	H5.541	5.354
#2	5.314	5.482	5.314

Method: EMS Sample Name: BLA01 Operator: MYJ
Run Time: 08/26/93 17:05:37
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Bi2230
Avge	-.0019	.0280	-.0152	.0029	.0029	.0008	.0161
SDev	.0000	.0256	.0263	.0040	.0005	.0000	.0226
%RSD	.0000	91.50	172.3	141.4	17.68	.0000	141.0
#1	- 0019	.0099	0033	0057	.0026	0008	0321
#2	-.0019	.0462	- 0338	-.0000	0033	.0008	.0000

Elem	Ca3158	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664
Avge	.0901	.0007	.0031	.0037	H.0338	.0206	-.0183
SDev	.0281	.0009	.0000	.0026	.0007	.0111	0194
%RSD	31.16	130.4	0000	70.71	2.028	53.87	106.1

Avge	.0903	.0007	.0031	.0037	H.0338	.0206	-.0183
SDev	.0281	.0009	.0000	.0026	.0007	.0111	.0194
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
#1	[illegible]	.0001	.0031	.0018	H.0343	.0128	-.0321
#2	.1099	.0013	.0031	.0055	H.0333	H.0285	-.0046

Elem	Li6707	Mg3832	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Avge	.0077	.1739	.0025	H.0156	.0384	.0052	.0142
SDev	.0007	.0000	.0012	.0058	.0000	.0000	.0066
%RSD	8.534	.0000	47.14	37.27	.0000	.0040	46.76
#1	.0082	.1739	.0033	H.0196	.0384	.0052	.0095
#2	.0072	.1739	.0016	H.0115	.0384	.0052	.0189

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4215	Ti3372	Tl1908
Avge	-.0044	.0190	-.0154	H.0186	.0012	.0026	-.0463
SDev	.0032	.0002	.0036	.0029	.0002	.0005	.0790
%RSD	72.19	.8683	23.42	15.70	17.11	20.20	170.7
#1	-.0067	.0189	-.0129	H.0166	.0013	.0030	.0096
#2	-.0022	.0191	-.0180	H.0207	.0010	.0022	-.1022

Elem	V_2924	Zn2138	Zr3391
Avge	.0017	.0197	.0000
SDev	.0000	.0000	.0000
%RSD	.6028	.0084	.0000
#1	.0017	.0197	.0000
#2	.0018	.0197	.0000

ANALYSIS RUN: R194679

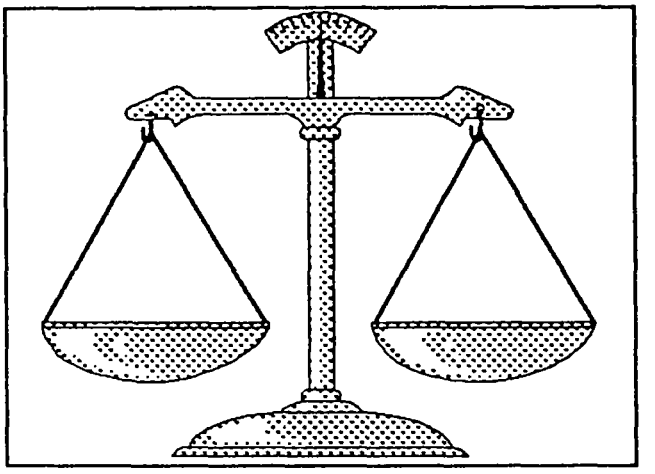
RUN NUMBER: 9316

TEST: As 136

ANALYST: Jn 2520

DATE: 8 / 20 / 93

INSTRUMENT: #22



Reprep_____(complete)

Reprep_____(incomplete)

COMMENTS: _____

91CK1072.R6

METALS, GFAA

INSTRUMENT	# 22
TEST #	
ELEMENT	As 136
WAVELENGTH	193.6
ANALYST	Jn 2520
DATE	8/20/93

REVIEWER	CS
DATE	8/23/93
RECORDER	DJL
DATE	8/23/93

ADD 1 CONC._____ CAL. CURVE 0 0.005 0.010 0.020 0.040 mg/l

ADD 2 CONC._____ RESPONSE ~~0.000~~ 0.003 Jn 8/22/93 0.032 0.061 0.119 0.229

ADD 3 CONC._____ C.C. 0.9999 SLOPE 0.177 Y INTERCEPT 0.0007

SAMPLE:	ICV01	BLA01	CDL	LCS	BLA02	C149650	Spike	CCV
TYPE:	# 080593A		# 070193C	Q758180	Q758181	M103.2	C149650 Q758183	# 070193C
TRUVAL:	0.02		0.02	0.10			0.10	0.02
RESULT:	0.0211	BDL	0.0208	0.108	BDL	0.0322	~~0.125~~ 0.033	0.0181
UNITS:	mg/l	→		mg/l	mg/l	mg/l	mg/l	mg/l
DETLIM:	0.010	→		0.05	0.010	0.010	0.05	0.010
% REC:	106%		104%	108%			93%	91%
WT/VOL:				50	50	50	50	
FINVOL:				50	50	50	50	
DILUTE:				1:5	–	–	1:5	
SAMABS:	0.122	0.000	0.120	0.125	0.000	0.188	0.145	0.105
AD1ABS:						0.240		
AD2ABS:								
AD3ABS:								
COMMENT:								

91CK1065.R6

METALS, GFAA

INSTRUMENT	#22
TEST #	
ELEMENT	As 136
WAVELENGTH	193.6
ANALYST	Jn 2520
DATE	8 20 93

REVIEWER	
DATE	/ /
RECORDER	
DATE	/ /

ADD 1 CONC._____ CAL. CURVE_____ _____ _____ _____ _____

ADD 2 CONC._____ RESPONSE _____ _____ _____ _____ _____

ADD 3 CONC._____ C.C._____ SLOPE_____ Y INTERCEPT_____

	✓	✓	✓	✓	✓	Jn 8/20/93	✓	✓
SAMPLE:	B1a01	C149652	C149653	CCV	B1a01	~~C145777~~	DUP02 C149650	C149651
TYPE:		M103.2	→	# 070193C			Q758182	M103.2
TRUVAL:				0.02			0.032	
RESULT:	BDL	0.032	0.021	0.0188	BDL		0.033	0.033
UNITS:	mg/l	mg/l	mg/l	mg/l →			mg/l	mg/l
DETLIM:	0.010	0.010	0.010	0.010 →			0.010	0.010
% REC:				94%			3% rpd	
WT/VOL:		50	50				50	50
FINVOL:		50	50				50	50
DILUTE:		–	–				–	–
SAMABS:	0.001	0.187	0.121	0.109	0.001		0.194	0.189
AD1ABS:			0.177				0.243	0.238
AD2ABS:								
AD3ABS:								
COMMENT:								

91CK1065.R6

METALS, GFAA

INSTRUMENT	#22
TEST #	
ELEMENT	As 136
WAVELENGTH	193.6
ANALYST	Sn 2520
DATE	8/20/93

REVIEWER	
DATE	/ /
RECORDER	
DATE	/ /

ADD 1 CONC._____ CAL. CURVE_____

ADD 2 CONC._____ RESPONSE _____

ADD 3 CONC._____ C.C._____ SLOPE_____ Y INTERCEPT_____

SAMPLE:	CCV	Blk01	CDL						
TYPE:	#0701 93C		#0701 93C						
TRUVAL:	0.02		0.02						
RESULT:	0.0189	BDL	0.0191						
UNITS:	mg/l	→							
DETLIM:	0.010	→							
% REC:	94%		96%						
WT/VOL:									
FINVOL:									
DILUTE:									
SAMABS:	0.110	0.003	0.110						
AD1ABS:									
AD2ABS:									
AD3ABS:									
COMMENT:									

91CK1065.R6

Jn 8/20/93
[illegible]
99%

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s ID: Blank Seq. No.: 00109 A/S Pos.: 0 Date: 01/19/94

uL dispensed: 5 from 0, 5 from 40, 20 from 0
Replicate 1 Time: 12:48
eak Area (A-s): 0.003 Peak Height (A): 0.008
ackground Pk Area (A-s): 0.090 Background Pk Height (A): 0.164
Blank Corrected Pk Area (A-s): 0.000 308
oncentration (mg/L): 0.0001

Jn 8/20/93

Auto-zero performed.

As ID: Blank Seq. No.: 00110 A/S Pos.: 0 Date: 01/19/94

 dispensed: 5 from 0, 5 from 40, 20 from 0
eplicate 1 Time: 12:56
Peak Area (A-s): 0.000 Peak Height (A): 0.005

Background Pk Area (A-s): 0.044   Background Pk Height (A): 0.017
[redacted]ank Corrected Pk Area (A-s): -0.003
[redacted]ncentration (mg/L): -0.0005

Auto-zero performed.

[redacted]~~~~~~

As   ID: Standard 1   Seq. No.: 00111   A/S Pos.: 36   Date: 01/19/94

[redacted] dispensed: 5 from 0, 5 from 40, 20 from 36
Replicate 1   Time: 12:59
Peak Area (A-s): 0.032   Peak Height (A): 0.079
[redacted]ckground Pk Area (A-s): 0.041   Background Pk Height (A): 0.022
[redacted]ank Corrected Pk Area (A-s): 0.032
Concentration (mg/L): 0.0061

[redacted]andard number 1 applied.   [0.0050]
Correlation coefficient: 1.000000   Slope: 6.3537

[redacted]~~~~~~

[redacted]   ID: Standard 2   Seq. No.: 00112   A/S Pos.: 37   Date: 01/19/94

[redacted] dispensed: 5 from 0, 5 from 40, 20 from 37
[redacted]plicate 1   Time: 13:01
Peak Area (A-s): 0.061   Peak Height (A): 0.164
[redacted]ckground Pk Area (A-s): 0.042   Background Pk Height (A): 0.027
[redacted]ank Corrected Pk Area (A-s): 0.061
Concentration (mg/L): 0.0096

[redacted]andard number 2 applied.   [0.0100]
Correlation coefficient: 0.99826   Slope: 6.1264

[redacted]~~~~~~

[redacted]   ID: Standard 3   Seq. No.: 00113   A/S Pos.: 38   Date: 01/19/94

[redacted]

[redacted]

[redacted]

[redacted]

uL dispensed: 5 from 0, 5 from 40, 20 from 38
[redacted]plicate 1   Time: 13:04
[redacted]ak Area (A-s): 0.119   Peak Height (A): 0.315
Background Pk Area (A-s): 0.048   Background Pk Height (A): 0.038
[redacted]ank Corrected Pk Area (A-s): 0.119
[redacted]ncentration (mg/L): 0.0195

Standard number 3 applied.   [0.0200]   309
[redacted]rrelation coefficient: 0.99951   Slope: 6.0049

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[redacted]   ID: Standard 4   Seq. No.: 00114   A/S Pos.: 39   Date: 01/19/94

uL dispensed: 5 from 0, 5 from 40, 20 from 39
[redacted]plicate 1   Time: 13:06
[redacted]ak Area (A-s): 0.229   Peak Height (A): 0.581
Background Pk Area (A-s): 0.058   Background Pk Height (A): 0.059
Blank Corrected Pk Area (A-s): 0.229
~~~~~~

Standard number 4 applied. [0.0400]
Correlation coefficient: 0.99926 Slope: 5.7938

ID: BLA01 Seq. No.: 00115 A/S Pos.: 2 Date: 01/19/94

uL dispensed: 5 from 0, 5 from 40, 20 from 2

Replicate 1 Time: 13:09
Peak Area (A-s): 0.003 Peak Height (A): 0.006
Background Pk Area (A-s): 0.035 Background Pk Height (A): 0.015
Blank Corrected Pk Area (A-s): 0.003
Concentration (mg/L): 0.0003

ID: ICV01 Seq. No.: 00116 A/S Pos.: 1 Date: 01/19/94

uL dispensed: 5 from 0, 5 from 40, 20 from 1
Replicate 1 Time: 13:11
Peak Area (A-s): 0.183 Peak Height (A): 0.329
Background Pk Area (A-s): 0.046 Background Pk Height (A): 0.037
Blank Corrected Pk Area (A-s): 0.122
Concentration (mg/L): 0.0211

ID: BLA01 Seq. No.: 00117 A/S Pos.: 2 Date: 01/19/94

uL dispensed: 5 from 0, 5 from 40, 20 from 2
Replicate 1 Time: 13:13
Peak Area (A-s): 0.000 Peak Height (A): 0.006
Background Pk Area (A-s): 0.037 Background Pk Height (A): 0.017
Blank Corrected Pk Area (A-s): -0.000
Concentration (mg/L): -0.0000

ID: CDL Seq. No.: 00118 A/S Pos.: 3 Date: 01/19/94

uL dispensed: 5 from 0, 5 from 40, 20 from 3
Replicate 1 Time: 13:16
Peak Area (A-s): 0.120 Peak Height (A): 0.321

Background Pk Area (A-s): 0.044   Background Pk Height (A): 0.035
Blank Corrected Pk Area (A-s): 0.120
Concentration (mg/L): 0.0206

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As   ID: LCS 758180   Seq. No.: 00119   A/S Pos.: 9   Date: 01/19/94

uL dispensed: 5 from 0, 5 from 40, 20 from 9
Replicate 1   Time: 13:19
Peak Area (A-s): 0.125   Peak Height (A): 0.334   311
Background Pk Area (A-s): 0.046   Background Pk Height (A): 0.039
Blank Corrected Pk Area (A-s): 0.125
Concentration (mg/L): 0.0216   Corrected Conc (mg/L): 0.108

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As   ID: BLA02 758181   Seq. No.: 00120   A/S Pos.: 10   Date: 01/19/94

uL dispensed: 5 from 0, 5 from 40, 20 from 10
Replicate 1   Time: 13:21

Peak Area (A-s): 0.000 Peak Height (A): 0.005
Background Pk Area (A-s): 0.037 Background Pk Height (A): 0.016
Blank Corrected Pk Area (A-s): 0.000
Concentration (mg/L): 0.0000

As ID: C149650 Seq. No.: 00121 A/S Pos.: 11 Date: 01/19/94

L dispensed: 5 from 0, 5 from 40, 20 from 11
Replicate 1 Time: 13:23
Peak Area (A-s): 0.188 Peak Height (A): 0.530
Background Pk Area (A-s): 0.147 Background Pk Height (A): 0.152
Blank Corrected Pk Area (A-s): 0.188
Concentration (mg/L): 0.0325

As ID: C149650 Seq. No.: 00122 A/S Pos.: 11 Date: 01/19/94

L dispensed: 5 from 40, 5 from 39, 20 from 11
Replicate 1 Time: 13:25
Peak Area (A-s): 0.240 Peak Height (A): 0.684
Background Pk Area (A-s): 0.140 Background Pk Height (A): 0.139
Blank Corrected Pk Area (A-s): 0.240
Concentration (mg/L): 0.0414

Recovery is 88.9%

As ID: DUP 650 758182 Seq. No.: 00123 A/S Pos.: 12 Date: 01/19/94

uL dispensed: 5 from 0, 5 from 40, 20 from 12
Replicate 1 Time: 13:28
Peak Area (A-s): 0.188 Peak Height (A): 0.559
Background Pk Area (A-s): 0.138 Background Pk Height (A): 0.139
Blank Corrected Pk Area (A-s): 0.188
Concentration (mg/L): 0.0325

As ID: DUP 650 758182 Seq. No.: 00124 A/S Pos.: 12 Date: 01/19/94

Repeat
Jm 8/20/93

uL dispensed: 5 from 40, 5 from 39, 20 from 12
Replicate 1 Time: 13:31
Peak Area (A-s): 0.236 Peak Height (A): 0.656
Background Pk Area (A-s): 0.134 Background Pk Height (A): 0.122
Blank Corrected Pk Area (A-s): 0.235
Concentration (mg/L): 0.0406

Recovery is 81.8%

As ID: SPI 650 758183 Seq. No.: 00125 A/S Pos.: 13 Date: 01/19/94

L dispensed: 5 from 0, 5 from 40, 20 from 13
Replicate 1 Time: 13:33
Peak Area (A-s): 0.145 Peak Height (A): 0.390
Background Pk Area (A-s): 0.078 Background Pk Height (A): 0.058
Blank Corrected Pk Area (A-s): 0.145
Concentration (mg/L): 0.0251 Corrected Conc (mg/L): 0.125

A[redacted] ID: C149651 Seq. No.: 00126 A/S Pos.: 14 Date: 01/19/94

uL dispensed: 5 from 0, 5 from 40, 20 from 14
R[redacted]plicate 1 Time: 13:35
P[redacted]ak Area (A-s): 0.193 Peak Height (A): 0.537
Background Pk Area (A-s): 0.175 Background Pk Height (A): 0.162
Blank Corrected Pk Area (A-s): 0.193
C[redacted]ncentration (mg/L): 0.0332

Repeat 8/20/93

A[redacted] ID: C149651 Seq. No.: 00127 A/S Pos.: 14 Date: 01/19/94

uL dispensed: 5 from 40, 5 from 39, 20 from 14
R[redacted]plicate 1 Time: 13:38
P[redacted]ak Area (A-s): 0.228 Peak Height (A): 0.661
Background Pk Area (A-s): 0.190 Background Pk Height (A): 0.174
Blank Corrected Pk Area (A-s): 0.228
[redacted]ncentration (mg/L): 0.0394

Recovery is 61.6%

[redacted]

As ID: AS Position 38 Seq. No.: 00128 A/S Pos.: 38 Date: 01/19/94

[redacted] dispensed: 5 from 0, 5 from 40, 20 from 38
Replicate 1 Time: 13:40
Peak Area (A-s): 0.105 Peak Height (A): 0.293
[redacted]ckground Pk Area (A-s): 0.067 Background Pk Height (A): 0.048
[redacted]ank Corrected Pk Area (A-s): 0.105
Concentration (mg/L): 0.0181

[redacted]eck sample is within range 0.0179 - 0.0220

A[redacted] ID: BLA01 Seq. No.: 00129 A/S Pos.: 0 Date: 01/19/94

uL dispensed: 5 from 0, 5 from 40, 20 from 0
[redacted]plicate 1 Time: 13:43
[redacted]ak Area (A-s): -0.001 Peak Height (A): 0.006

[redacted]

[redacted]

Background Pk Area (A-s): 0.047 Background Pk Height (A): 0.021
[redacted]ank Corrected Pk Area (A-s): -0.001
[redacted]ncentration (mg/L): -0.0002

[redacted]eck sample is within range -0.0094 - 0.0094

As ID: C149652 Seq. No.: 00130 A/S Pos.: 15 Date: 01/19/94

[redacted] dispensed: 5 from 0, 5 from 40, 20 from 15 313
Replicate 1 Time: 13:45
[redacted]eak Area (A-s): 0.187 Peak Height (A): 0.396
[redacted]ackground Pk Area (A-s): 0.086 Background Pk Height (A): 0.065
Blank Corrected Pk Area (A-s): 0.187
Concentration (mg/L): 0.0323

[redacted]

As ID: C149652 Seq. No.: 00131 A/S Pos.: 15 Date: 01/19/94

mL dispensed: 5 from 40, 5 from 39, 20 from 15
Replicate 1 Time: 13:47
Peak Area (A-s): 0.237 Peak Height (A): 0.527
Background Pk Area (A-s): 0.084 Background Pk Height (A): 0.065
Blank Corrected Pk Area (A-s): 0.237
Concentration (mg/L): 0.0409

Recovery is 86.5%

As ID: C149653 Seq. No.: 00132 A/S Pos.: 16 Date: 01/19/94

mL dispensed: 5 from 0, 5 from 40, 20 from 16
Replicate 1 Time: 13:50
Peak Area (A-s): 0.121 Peak Height (A): 0.297
Background Pk Area (A-s): 0.066 Background Pk Height (A): 0.068
Blank Corrected Pk Area (A-s): 0.121
Concentration (mg/L): 0.0208

As ID: C149653 Seq. No.: 00133 A/S Pos.: 16 Date: 01/19/94

mL dispensed: 5 from 40, 5 from 39, 20 from 16
Replicate 1 Time: 13:52
Peak Area (A-s): 0.177 Peak Height (A): 0.440
Background Pk Area (A-s): 0.081 Background Pk Height (A): 0.065
Blank Corrected Pk Area (A-s): 0.177
Concentration (mg/L): 0.0305

Recovery is 96.8%

ID: AS Position 38 Seq. No.: 00134 A/S Pos.: 38 Date: 01/19/94

mL dispensed: 5 from 0, 5 from 40, 20 from 38
Replicate 1 Time: 13:54
Peak Area (A-s): 0.109 Peak Height (A): 0.288
Background Pk Area (A-s): 0.053 Background Pk Height (A): 0.042
Blank Corrected Pk Area (A-s): 0.109
Concentration (mg/L): 0.0188

Check sample is within range 0.0179 - 0.0220

As ID: BLA01 Seq. No.: 00135 A/S Pos.: 0 Date: 01/19/94

mL dispensed: 5 from 0, 5 from 40, 20 from 0
Replicate 1 Time: 13:57
Peak Area (A-s): -0.000 Peak Height (A): 0.005
Background Pk Area (A-s): 0.042 Background Pk Height (A): 0.017
Blank Corrected Pk Area (A-s): -0.001
Concentration (mg/L): -0.0001

Check sample is within range -0.0094 - 0.0094

As ID: C148777 Seq. No.: 00136 A/S Pos.: 17 Date: 01/19/94

mL dispensed: 5 from 0, 5 from 40, 20 from 17

Jm 8/20/93

Peak Area (A-s): 0.116 Peak Height (A): 0.132
Background Pk Area (A-s): 0.032 Background Pk Height (A): 0.035
Blank Corrected Pk Area (A-s): 0.115
Concentration (mg/L): 0.0199 Corrected Conc (mg/L): 0.199

As ID: C148777 Seq. No.: 00137 A/S Pos.: 17 Date: 01/19/94

ul dispensed: 5 from 40, 5 from 39, 20 from 17
Replicate 1 Time: 14:01
Peak Area (A-s): 0.170 Peak Height (A): 0.382
Background Pk Area (A-s): 0.053 Background Pk Height (A): 0.043
Blank Corrected Pk Area (A-s): 0.170
Concentration (mg/L): 0.0294 Corrected Conc (mg/L): 0.294

Recovery is 94.0%

As ID: DUP 650 758182 Seq. No.: 00139 A/S Pos.: 12 Date: 01/19/94

ul dispensed: 5 from 0, 5 from 40, 20 from 12
Replicate 1 Time: 14:04
Peak Area (A-s): 0.193 Peak Height (A): 0.497
Background Pk Area (A-s): 0.132 Background Pk Height (A): 0.122
Blank Corrected Pk Area (A-s): 0.193
Concentration (mg/L): 0.0333

As ID: DUP 650 758182 Seq. No.: 00140 A/S Pos.: 12 Date: 01/19/94

ul dispensed: 5 from 40, 5 from 39, 20 from 12
Replicate 1 Time: 14:07
Peak Area (A-s): 0.241 Peak Height (A): 0.633
Background Pk Area (A-s): 0.135 Background Pk Height (A): 0.120
Blank Corrected Pk Area (A-s): 0.241
Concentration (mg/L): 0.0416

Recovery is 82.7%

As ID: DUP 650 758182 Seq. No.: 00141 A/S Pos.: 12 Date: 01/19/94

ul dispensed: 5 from 0, 5 from 40, 20 from 12
Replicate 1 Time: 14:09
Peak Area (A-s): 0.194 Peak Height (A): 0.501
Background Pk Area (A-s): 0.131 Background Pk Height (A): 0.117
Blank Corrected Pk Area (A-s): 0.194
Concentration (mg/L): 0.0334

As ID: DUP 650 758182 Seq. No.: 00142 A/S Pos.: 12 Date: 01/19/94

ul dispensed: 5 from 40, 5 from 39, 20 from 12
Replicate 1 Time: 14:12
Peak Area (A-s): 0.243 Peak Height (A): 0.634
Background Pk Area (A-s): 0.135 Background Pk Height (A): 0.120
Blank Corrected Pk Area (A-s): 0.243
Concentration (mg/L): 0.0419

Recovery is 85.1%

As ID: C149651 Seq. No.: 00143 A/S Pos.: 14 Date: 01/19/94

uL dispensed: 5 from 0, 5 from 40, 20 from 14

Replicate 1	Time: 14:14
Peak Area (A-s): 0.189	Peak Height (A): 0.515
Background Pk Area (A-s): 0.180	Background Pk Height (A): 0.152
Blank Corrected Pk Area (A-s): 0.189	
Concentration (mg/L): 0.0326	

As ID: C149651 Seq. No.: 00144 A/S Pos.: 14 Date: 01/19/94

uL dispensed: 5 from 40, 5 from 39, 20 from 14

Replicate 1	Time: 14:17
Peak Area (A-s): 0.237	Peak Height (A): 0.632
Background Pk Area (A-s): 0.179	Background Pk Height (A): 0.146
Blank Corrected Pk Area (A-s): 0.237	
Concentration (mg/L): 0.0409	

Recovery is 83.1%

As ID: AS Position 36 Seq. No.: 00145 A/S Pos.: 36 Date: 01/19/94

uL dispensed: 5 from 0, 5 from 40, 20 from 36

Replicate 1	Time: 14:19
Peak Area (A-s): 0.107	Peak Height (A): 0.270
Background Pk Area (A-s): 0.063	Background Pk Height (A): 0.037
Blank Corrected Pk Area (A-s): 0.107	
Concentration (mg/L): 0.0184	

Check sample is within range 0.0179 - 0.0220

As ID: BLA01 Seq. No.: 00146 A/S Pos.: 0 Date: 01/19/94

uL dispensed: 5 from 0, 5 from 40, 20 from 0

Replicate 1	Time: 14:22
Peak Area (A-s): 0.000	Peak Height (A): 0.006
Background Pk Area (A-s): 0.046	Background Pk Height (A): 0.019
Blank Corrected Pk Area (A-s): -0.000	
Concentration (mg/L): -0.0000	

Check sample is within range -0.0094 - 0.0094

316

As ID: AS Position 36 Seq. No.: 00147 A/S Pos.: 36 Date: 01/19/94

uL dispensed: 5 from 0, 5 from 40, 20 from 38

As ID: C149651 Seq. No.: 00148 A/S Pos.: 14 Date: 01/19/94

uL dispensed: 5 from 0, 5 from 40, 20 from 14

Replicate 1	Time: 14:24
Peak Area (A-s): 0.189	Peak Height (A): 0.512

```
Background Pk Area (A-s): 0.158          Background Pk Height (A): 0.139
B[redacted]ank Corrected Pk Area (A-s): 0.189
C[redacted]ncentration (mg/L  ): 0.0327

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A[redacted]    ID: C149651          Seq. No.: 00149    A/S Pos.: 14    Date: 01/19/94

uL dispensed: 5 from 40, 5 from 39, 20 from 14
[redacted]plicate  1                         Time: 14:27
[redacted]ak Area (A-s): 0.239               Peak Height (A): 0.637
Background Pk Area (A-s): 0.180          Background Pk Height (A): 0.154
B[redacted]ank Corrected Pk Area (A-s): 0.238
C[redacted]ncentration (mg/L  ): 0.0412

Recovery is 84.8%
[redacted]
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
As    ID: AS Position 38     Seq. No.: 00150    A/S Pos.: 38    Date: 01/19/94

[redacted] dispensed: 5 from 0, 5 from 40, 20 from 38
Replicate  1                             Time: 14:30
P[redacted]ak Area (A-s): 0.110              Peak Height (A): 0.279
[redacted]ckground Pk Area (A-s): 0.063       Background Pk Height (A): 0.034
Blank Corrected Pk Area (A-s): 0.110
Concentration (mg/L  ): 0.0169

[redacted]eck sample is within range 0.0179 - 0.0220

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[redacted]    ID: BLA01            Seq. No.: 00151    A/S Pos.: 0     Date: 01/19/94

[redacted] dispensed: 5 from 0, 5 from 40, 20 from 0
[redacted]licate  1                          Time: 14:32
Peak Area (A-s): 0.003                   Peak Height (A): 0.008
Background Pk Area (A-s): 0.043          Background Pk Height (A): 0.016
[redacted]ank Corrected Pk Area (A-s): 0.003
[redacted]ncentration (mg/L  ): 0.0006

[redacted]eck sample is within range -0.0094 - 0.0094

[redacted]

[redacted]

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[redacted]    ID: AS Position 38     Seq. No.: 00152    A/S Pos.: 38    Date: 01/19/94

uL dispensed: 5 from 0, 5 from 40, 20 from 38
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
[redacted]    ID: CDL              Seq. No.: 00153    A/S Pos.: 3     Date: 01/19/94

uL dispensed: 5 from 0, 5 from 40, 20 from 3
[redacted]plicate  1                         Time: 14:35
[redacted]ak Area (A-s): 0.111               Peak Height (A): 0.283
Background Pk Area (A-s): 0.050          Background Pk Height (A): 0.034
[redacted]ank Corrected Pk Area (A-s): 0.110
[redacted]ncentration (mg/L  ): 0.0191

[redacted]
```

ANALYSIS RUN: R194951

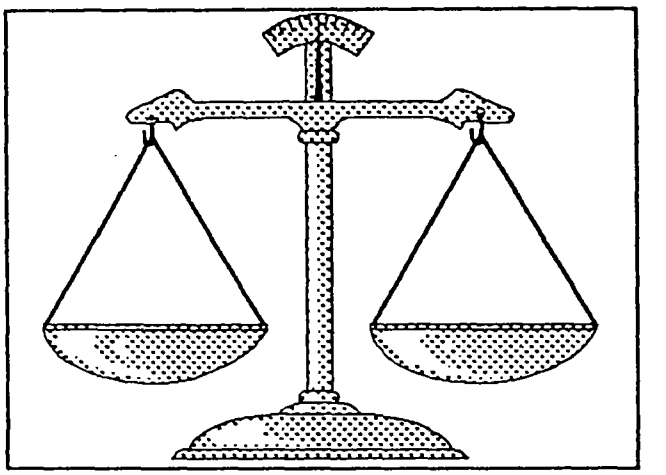
RUN NUMBER: 9317

TEST: Se 645

ANALYST: Jn 2520

DATE: 8 / 24 / 93

INSTRUMENT: #22



Reprep_____(complete)

Reprep_____(incomplete)

COMMENTS: _____

91CK1072.R6

METALS, GFAA

INSTRUMENT	#22
TEST #	
ELEMENT	Se 645
WAVELENGTH	196.0
ANALYST	Sn 2520
DATE	8/24/93

REVIEWER	[illegible]
DATE	8/25/93
RECORDER	DJL
DATE	8/25/93

ADD 1 CONC._____ CAL. CURVE 0 0.010 0.020 0.040 0.050 mg/L

ADD 2 CONC._____ RESPONSE 0.004 0.032 0.062 0.126 0.158

ADD 3 CONC._____ C.C. 0.999 SLOPE 0.322 Y INTERCEPT 0.0006

SAMPLE:	ICV01	B1a01	CDL	DUP01	C149248	DUP01	CCV	B1a01
TYPE:	# 080593A		# 070193C	C149239	M428.2	C149240	# 070193C	
TRUVAL:	0.02		0.02	0.034		0.132	0.02	
RESULT:	0.0210	BDL	0.0202	0.034	0.132	0.129	0.0216	BDL
UNITS:	mg/l	→		mg/l	mg/l	mg/l	mg/l	→
DETLIM:	0.010	→		0.020	0.10	0.10	0.010	→
% REC:	105%		101%	0% rpt		23% rpt	108%	
WT/VOL:								
FINVOL:								
DILUTE:				1:2	1:10	1:10		
SAMABS:	0.066	0.001	0.064	0.106	0.083	0.081	0.068	0.002
AD1ABS:				0.136	0.114	0.112		
AD2ABS:								
AD3ABS:				APY 2+ .0671	APY 2+ 0.264	APY 2+ 0.257		
COMMENT:								

319

91CK1065.R6

METALS, GFAA

INSTRUMENT	#22
TEST #	
ELEMENT	Se 645
WAVELENGTH	196.0
ANALYST	Jn 2520
DATE	8/24/93

REVIEWER	
DATE	/ /
RECORDER	
DATE	/ /

ADD 1 CONC._____ CAL. CURVE_____

ADD 2 CONC._____ RESPONSE _____

ADD 3 CONC._____ C.C._____ SLOPE_____ Y INTERCEPT_____

SAMPLE:	A.C. C148687	C148767	DUP01 C148767	CCV # 070193C	B1001	LCS	B1002	C149650 Jn 8/24/93
TYPE:		M4282				Q758180	Q758181	M1282
TRUVAL:			BDL	0.02		0.05		
RESULT:	0.0995	BDL	BDL	0.0212	BDL	0.057	BDL	
UNITS:	mg/l	mg/l	mg/l	mg/l →		mg/l	mg/l	
DETLIM:	0.10	0.010	0.010	0.010 →		0.050	0.010	
% REC:			0% rpd	106%		114%		
WT/VOL:								
FINVOL:						50	50	
DILUTE:	1:10	—	—			1:5	—	
SAMABS:	0.063	0.002	0.001	0.067	0.001	0.035	0.000	~~0.001~~
AD1ABS:	0.093	0.033	0.030					0.
AD2ABS:	EPA PE. 2x							
AD3ABS:	0.199							
COMMENT:								

320

91CK1065.R6

PAGE 3 OF 4 METALS, GFAA

INSTRUMENT	#22
TEST #	
ELEMENT	Se 645
WAVELENGTH	196.0
ANALYST	Sn 2520
DATE	8/24/93

REVIEWER	
DATE	/ /
RECORDER	
DATE	/ /

ADD 1 CONC._____ CAL. CURVE_____ _____ _____ _____ _____

ADD 2 CONC._____ RESPONSE _____ _____ _____ _____ _____

ADD 3 CONC._____ C.C._____ SLOPE_____ Y INTERCEPT_____

SAMPLE:	Spic2 C149650	C149652	C149653	CCV #	Blaa1	C149239	C149650	DUP02 C149650
TYPE:	Q758183	M128.2	M128.2	070193C		M428.2	M128.2	Q758182
TRUVAL:	0.05			0.02				BDL
RESULT:	BDL / 0.045	BDL	BDL	0.0196	BDL	0.034	BDL	BDL
UNITS:	mg/l	mg/l	mg/l	mg/l →		mg/l	mg/l *	mg/l
DETLIM:	0.05	0.010	0.010	0.010 →		0.020	0.020	0.020
% REC:	90%			98%				0% rpt
WT/VOL:	50	50	50				50	50
FINVOL:	50	50	50				50	50
DILUTE:	1:5	-	-			1:2	1:2	1:2
SAMABS:	0.028	0.014	0.003	0.062	0.002	0.108	0.001	0.001
AD1ABS:		0.039	0.026			0.141	0.021	0.018
AD2ABS:						Apg 2x		
AD3ABS:						.0687		
COMMENT:							* due to high sample Background	

321

91CK1065.R6

METALS, GFAA

INSTRUMENT	#22
TEST #	
ELEMENT	Se 645
WAVELENGTH	196.0
ANALYST	Jn 2520
DATE	8/24/93

REVIEWER	
DATE	/ /
RECORDER	
DATE	/ /

ADD 1 CONC._____ CAL. CURVE_____

ADD 2 CONC._____ RESPONSE _____

ADD 3 CONC._____ C.C._____ SLOPE_____ Y INTERCEPT_____

SAMPLE:	CCU	Blaci	CDL						
TYPE:	# 070193C		# 070193C						
TRUVAL:	0.02		0.02						
RESULT:	0.0209	BDL	0.0218						
UNITS:	mg/l	→							
DETLIM:	0.010	→							
% REC:	105%		109%						
WT/VOL:									
FINVOL:									
DILUTE:									
SAMABS:	0.066	0.000	0.068						
AD1ABS:									
AD2ABS:									
AD3ABS:									
COMMENT:									

322

91CK1065.R6

Charmass. 101% Jn 8/24/93

Element File: SE82290.GEL Element: Se Wavelength: 196.0
Date: 01/23/94 Time: 08:18 Slit: 2.0
Data File: SE082493.DAT ID/Wt File: SE082493.IDW Lamp Current: 0
Technique: HGA Calib. Type: Linear Energy: 61
Remark 1: THIS FILE IS TO DETERMINE SE AT 5 PPB USING STANDARDS 10,20,
Remark 2: 40 AND 50 PPB. PALLADIUM IS THE MODIFIER USED. THIS IS CLP
Remark 3: PROTOCOL.

Se ID: Blank Seq. No.: 00001 A/S Pos.: 0 Date: 01/23/94

Replicate 1 Time: 08:20
Peak Area (A-s): 0.004 Peak Height (A): 0.009
Background Pk Area (A-s): 0.046 Background Pk Height (A): 0.019
Blank Corrected Pk Area (A-s): 0.004

Auto-zero performed.

Se ID: Standard 1 Seq. No.: 00002 A/S Pos.: 36 Date: 01/23/94

Replicate 1 Time: 08:23
Peak Area (A-s): 0.036 Peak Height (A): 0.085
Background Pk Area (A-s): 0.049 Background Pk Height (A): 0.038
Blank Corrected Pk Area (A-s): 0.032

Standard number 1 applied. [0.0100]
Correlation coefficient: 1.00000 Slope: 3.1738 Int: 0.000

Se ID: Standard 2 Seq. No.: 00003 A/S Pos.: 37 Date: 01/23/94

Replicate 1 Time: 08:26
Peak Area (A-s): 0.066 Peak Height (A): 0.165
Background Pk Area (A-s): 0.059 Background Pk Height (A): 0.061
Blank Corrected Pk Area (A-s): 0.062
Concentration (mg/L): 0.0195

Standard number 2 applied. [0.0200]
Correlation coefficient: 0.99988 Slope: 3.0901 Int: 0.000

Se ID: Standard 3 Seq. No.: 00004 A/S Pos.: 38 Date: 01/23/94

Replicate 1 Time: 08:28
Peak Area (A-s): 0.131 Peak Height (A): 0.317
Background Pk Area (A-s): 0.080 Background Pk Height (A): 0.108
Blank Corrected Pk Area (A-s): 0.126
Concentration (mg/L): 0.0408

Standard number 3 applied. [0.0400]
Correlation coefficient: 0.99991 Slope: 3.1560 Int: -0.000

Se ID: Standard 4 Seq. No.: 00005 A/S Pos.: 39 Date: 01/23/94

Replicate 1 Time: 08:31
Peak Area (A-s): 0.162 Peak Height (A): 0.395

Background Pk Area (A-s): 0.091 Background Pk Height (A): 0.130
Blank Corrected Pk Area (A-s): 0.158
Concentration (mg/L): 0.0500

Standard number 4 applied. [0.0500]
Correlation coefficient: 0.99995 Slope: 3.1564 Int: -0.000

Se ID: ICV01 Seq. No.: 00006 A/S Pos.: 1 Date: 01/23/94

Replicate 1 Time: 08:33
Peak Area (A-s): 0.070 Peak Height (A): 0.168
Background Pk Area (A-s): 0.058 Background Pk Height (A): 0.064
Blank Corrected Pk Area (A-s): 0.066
Concentration (mg/L): 0.0210

Se ID: BLA001 Seq. No.: 00007 A/S Pos.: 2 Date: 01/23/94

Replicate 1 Time: 08:36
Peak Area (A-s): 0.006 Peak Height (A): 0.008
Background Pk Area (A-s): 0.040 Background Pk Height (A): 0.018
Blank Corrected Pk Area (A-s): 0.001
Concentration (mg/L): 0.0003

Se ID: CDL Seq. No.: 00008 A/S Pos.: 3 Date: 01/23/94

Replicate 1 Time: 08:38
Peak Area (A-s): 0.068 Peak Height (A): 0.174
Background Pk Area (A-s): 0.061 Background Pk Height (A): 0.064
Blank Corrected Pk Area (A-s): 0.064
Concentration (mg/L): 0.0202

Se ID: C149239 Seq. No.: 00009 A/S Pos.: 4 Date: 01/23/94

Replicate 1 Time: 08:41
Peak Area (A-s): 0.109 Peak Height (A): 0.260
Background Pk Area (A-s): 0.070 Background Pk Height (A): 0.090
Blank Corrected Pk Area (A-s): 0.104
Concentration (mg/L): 0.0331 Corrected Conc (mg/L): 0.0662

Se ID: C149239 Seq. No.: 00010 A/S Pos.: 4 Date: 01/23/94

Replicate 1 Time: 08:44
Peak Area (A-s): 0.135 Peak Height (A): 0.341
Background Pk Area (A-s): 0.076 Background Pk Height (A): 0.113
Blank Corrected Pk Area (A-s): 0.131
Concentration (mg/L): 0.0415 Corrected Conc (mg/L): 0.0829

Recovery is 83.5%

Repeat 8/24/93

324

Se ID: DUP 239 Seq. No.: 00011 A/S Pos.: 5 Date: 01/23/94

Replicate 1 Time: 08:46
Peak Area (A-s): 0.110 Peak Height (A): 0.256

Background Pk Area (A-s): 0.069 Background Pk Height (A): 0.091
Blank Corrected Pk Area (A-s): 0.106
Concentration (mg/L): 0.0335 Corrected Conc (mg/L): 0.0671

Se ID: DUP 239 Seq. No.: 00012 A/S Pos.: 5 Date: 01/23/94

Replicate 1 Time: 08:49
Peak Area (A-s): 0.140 Peak Height (A): 0.346
Background Pk Area (A-s): 0.078 Background Pk Height (A): 0.119
Blank Corrected Pk Area (A-s): 0.136
Concentration (mg/L): 0.0431 Corrected Conc (mg/L): 0.0862

Recovery is 96.0%

S ID: C149240 Seq. No.: 00013 A/S Pos.: 6 Date: 01/23/94

Replicate 1 Time: 08:52
Peak Area (A-s): 0.067 Peak Height (A): 0.204
Background Pk Area (A-s): 0.060 Background Pk Height (A): 0.072
Blank Corrected Pk Area (A-s): 0.083
Concentration (mg/L): 0.0264 Corrected Conc (mg/L): 0.264

Se ID: C149240 Seq. No.: 00014 A/S Pos.: 6 Date: 01/23/94

Replicate 1 Time: 08:54
Peak Area (A-s): 0.118 Peak Height (A): 0.287
Background Pk Area (A-s): 0.070 Background Pk Height (A): 0.099
Blank Corrected Pk Area (A-s): 0.114
Concentration (mg/L): 0.0361 Corrected Conc (mg/L): 0.361

Recovery is 97.8%

S ID: DUP 240 Seq. No.: 00015 A/S Pos.: 7 Date: 01/23/94

Replicate 1 Time: 08:57
Peak Area (A-s): 0.085 Peak Height (A): 0.202
Background Pk Area (A-s): 0.064 Background Pk Height (A): 0.073
Blank Corrected Pk Area (A-s): 0.081
Concentration (mg/L): 0.0257 Corrected Conc (mg/L): 0.257

Se ID: DUP 240 Seq. No.: 00016 A/S Pos.: 7 Date: 01/23/94

Replicate 1 Time: 06:59
Peak Area (A-s): 0.117 Peak Height (A): 0.293
Background Pk Area (A-s): 0.072 Background Pk Height (A): 0.102
Blank Corrected Pk Area (A-s): 0.112
Concentration (mg/L): 0.0357 Corrected Conc (mg/L): 0.357

325

Recovery is 99.8%

Se ID: AS Position 37 CCV Seq. No.: 00017 A/S Pos.: 37 Date: 01/23/94

108%

Replicate 1 Time: 09:02

Peak Area (A-s): 0.072 Peak Height (A): 0.172
Background Pk Area (A-s): 0.058 Background Pk Height (A): 0.064
Blank Corrected Pk Area (A-s): 0.068
Concentration (mg/L): 0.0216

Check sample is within range 0.0179 - 0.0220

ID: BLA02 Seq. No.: 00018 A/S Pos.: 0 Date: 01/23/94

Replicate 1 Time: 09:05
Peak Area (A-s): 0.006 Peak Height (A): 0.008
Background Pk Area (A-s): 0.039 Background Pk Height (A): 0.017
Blank Corrected Pk Area (A-s): 0.002
Concentration (mg/L): 0.0006

Check sample is within range -0.00994 - 0.00994

ID: C146687 Seq. No.: 00019 A/S Pos.: 8 Date: 01/23/94

Replicate 1 Time: 09:07
Peak Area (A-s): 0.067 Peak Height (A): 0.142
Background Pk Area (A-s): 0.059 Background Pk Height (A): 0.056
Blank Corrected Pk Area (A-s): 0.063
Concentration (mg/L): 0.0199 Corrected Conc (mg/L): 0.199

ID: C148687 Seq. No.: 00020 A/S Pos.: 8 Date: 01/23/94

Replicate 1 Time: 09:10
Peak Area (A-s): 0.097 Peak Height (A): 0.237
Background Pk Area (A-s): 0.065 Background Pk Height (A): 0.082
Blank Corrected Pk Area (A-s): 0.093
Concentration (mg/L): 0.0294 Corrected Conc (mg/L): 0.294

Recovery is 94.5%

ID: C148767 Seq. No.: 00021 A/S Pos.: 9 Date: 01/23/94

Replicate 1 Time: 09:12
Peak Area (A-s): 0.006 Peak Height (A): 0.009
Background Pk Area (A-s): 0.068 Background Pk Height (A): 0.029
Blank Corrected Pk Area (A-s): 0.002
Concentration (mg/L): 0.0007

ID: C148767 Seq. No.: 00022 A/S Pos.: 9 Date: 01/23/94

Replicate 1 Time: 09:15
Peak Area (A-s): 0.038 Peak Height (A): 0.088
Background Pk Area (A-s): 0.070 Background Pk Height (A): 0.049
Blank Corrected Pk Area (A-s): 0.033
Concentration (mg/L): 0.0106

Recovery is 99.6%

Se ID: DUP 767 Seq. No.: 00023 A/S Pos.: 10 Date: 01/23/94

Replicate 1 Time: 09:18
Peak Area (A-s): 0.006 Peak Height (A): 0.009
Background Pk Area (A-s): 0.067 Background Pk Height (A): 0.027
Blank Corrected Pk Area (A-s): 0.002
Concentration (mg/L): 0.0007

JR 8/31/93

Se ID: DUP 767 Seq. No.: 00025 A/S Pos.: 10 Date: 01/23/94

Replicate 1 Time: 09:21
Peak Area (A-s): 0.006 Peak Height (A): 0.008
Background Pk Area (A-s): 0.066 Background Pk Height (A): 0.028
Blank Corrected Pk Area (A-s): 0.001
Concentration (mg/L): 0.0005

Se ID: DUP 767 Seq. No.: 00026 A/S Pos.: 10 Date: 01/23/94

Replicate 1 Time: 09:24
Peak Area (A-s): 0.035 Peak Height (A): 0.058
Background Pk Area (A-s): 0.074 Background Pk Height (A): 0.051
Blank Corrected Pk Area (A-s): 0.030
Concentration (mg/L): 0.0097

Recovery is 91.9%

Se ID: AS Position 37 CCV 106% Seq. No.: 00027 A/S Pos.: 37 Date: 01/23/94

Replicate 1 Time: 09:27
Peak Area (A-s): 0.071 Peak Height (A): 0.160
Background Pk Area (A-s): 0.062 Background Pk Height (A): 0.064
Blank Corrected Pk Area (A-s): 0.067
Concentration (mg/L): 0.0212

Check sample is within range 0.0175 - 0.0220

Se ID: BLA01 Seq. No.: 00028 A/S Pos.: 0 Date: 01/23/94

Replicate 1 Time: 09:29
Peak Area (A-s): 0.006 Peak Height (A): 0.008
Background Pk Area (A-s): 0.045 Background Pk Height (A): 0.018
Blank Corrected Pk Area (A-s): 0.001
Concentration (mg/L): 0.0005

Check sample is within range -0.00994 - 0.00994

Se ID: LCS 758180 Seq. No.: 00029 A/S Pos.: 11 Date: 01/23/94

327

Replicate 1 Time: 09:32
Peak Area (A-s): 0.040 Peak Height (A): 0.094
Background Pk Area (A-s): 0.051 Background Pk Height (A): 0.038
Blank Corrected Pk Area (A-s): 0.035
Concentration (mg/L): 0.0113 Corrected Conc (mg/L): 0.057

Be ID: BLA02 758181 Seq. No.: 00030 A/S Pos.: 12 Date: 01/23/94

Replicate 1 Time: 09:34
Peak Area (A-s): 0.004 Peak Height (A): 0.005
Background Pk Area (A-s): 0.042 Background Pk Height (A): 0.018
Blank Corrected Pk Area (A-s): 0.000
Concentration (mg/L): 0.0001

ID: C149650 Seq. No.: 00031 A/S Pos.: 13 Date: 01/23/94

Replicate 1 Time: 09:37
Peak Area (A-s): 0.006 Peak Height (A): 0.009
Background Pk Area (A-s): 0.136 Background Pk Height (A): 0.085
Blank Corrected Pk Area (A-s): 0.001
Concentration (mg/L): 0.0005

ID: C149650 Seq. No.: 00032 A/S Pos.: 13 Date: 01/23/94

Replicate 1 Time: 09:39
Peak Area (A-s): 0.017 Peak Height (A): 0.037
Background Pk Area (A-s): 0.124 Background Pk Height (A): 0.088
Blank Corrected Pk Area (A-s): 0.013
Concentration (mg/L): 0.0042

Recovery is 37.4%

Repeat low 1 pt
Jn 8/24/93

ID: DUP 650 758182 Seq. No.: 00033 A/S Pos.: 14 Date: 01/23/94

Replicate 1 Time: 09:42
Peak Area (A-s): 0.006 Peak Height (A): 0.008
Background Pk Area (A-s): 0.136 Background Pk Height (A): 0.092
Blank Corrected Pk Area (A-s): 0.002
Concentration (mg/L): 0.0007

ID: DUP 650 758182 Seq. No.: 00034 A/S Pos.: 14 Date: 01/23/94

Replicate 1 Time: 09:44
Peak Area (A-s): 0.013 Peak Height (A): 0.034
Background Pk Area (A-s): 0.120 Background Pk Height (A): 0.085
Blank Corrected Pk Area (A-s): 0.009
Concentration (mg/L): 0.0029

Recovery is 22.8%

ID: SPI 650 758183 Seq. No.: 00035 A/S Pos.: 15 Date: 01/23/94

328

Replicate 1 Time: 09:47
Peak Area (A-s): 0.032 Peak Height (A): 0.086
Background Pk Area (A-s): 0.066 Background Pk Height (A): 0.053
Blank Corrected Pk Area (A-s): 0.028
Concentration (mg/L): 0.0089 Corrected Conc (mg/L): 0.045

Se ID: C149651 Seq. No.: 00036 A/S Pos.: 16 Date: 01/23/94

Replicate 1 Time: 09:49
Peak Area (A-s): 0.005 Peak Height (A): 0.007
Background Pk Area (A-s): 0.138 Background Pk Height (A): 0.132
Blank Corrected Pk Area (A-s): 0.001
Concentration (mg/L): 0.0002

Repeat
Jh 8/24/93

Se ID: C149651 Seq. No.: 00037 A/S Pos.: 16 Date: 01/23/94

Replicate 1 Time: 09:52
Peak Area (A-s): 0.012 Peak Height (A): 0.027
Background Pk Area (A-s): 0.138 Background Pk Height (A): 0.123
Blank Corrected Pk Area (A-s): 0.008
Concentration (mg/L): 0.0026

Recovery is 23.5%

Se ID: C149652 Seq. No.: 00038 A/S Pos.: 17 Date: 01/23/94

Replicate 1 Time: 09:54
Peak Area (A-s): 0.015 Peak Height (A): 0.040
Background Pk Area (A-s): 0.084 Background Pk Height (A): 0.051
Blank Corrected Pk Area (A-s): 0.014
Concentration (mg/L): 0.0046

Se ID: C149652 Seq. No.: 00039 A/S Pos.: 17 Date: 01/23/94

Replicate 1 Time: 09:57
Peak Area (A-s): 0.043 Peak Height (A): 0.120
Background Pk Area (A-s): 0.087 Background Pk Height (A): 0.089
Blank Corrected Pk Area (A-s): 0.039
Concentration (mg/L): 0.0123

Recovery is 77.2%

Se ID: C149653 Seq. No.: 00040 A/S Pos.: 18 Date: 01/23/94

Replicate 1 Time: 10:00
Peak Area (A-s): 0.007 Peak Height (A): 0.016
Background Pk Area (A-s): 0.087 Background Pk Height (A): 0.047
Blank Corrected Pk Area (A-s): 0.003
Concentration (mg/L): 0.0010

Se ID: C149653 Seq. No.: 00041 A/S Pos.: 18 Date: 01/23/94

Replicate 1 Time: 10:02
Peak Area (A-s): 0.030 Peak Height (A): 0.083

Background Pk Area (A-s): 0.091 Background Pk Height (A): 0.002
Blank Corrected Pk Area (A-s): 0.026
Concentration (mg/L): 0.0084

Recovery is 73.1%

Se ID: AS Position 37 CCV Seq. No.: 00042 A/S Pos.: 37 Date: 01/23/94

98

Replicate 1 Time: 10:05
Peak Area (A-s): 0.066 Peak Height (A): 0.174
Background Pk Area (A-s): 0.072 Background Pk Height (A): 0.069
Blank Corrected Pk Area (A-s): 0.062
Concentration (mg/L): 0.0196

Check sample is within range 0.0179 - 0.0220

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e ID: BLA01 Seq. No.: 00043 A/S Pos.: 0 Date: 01/23/94

Replicate 1 Time: 10:07
Peak Area (A-s): 0.006 Peak Height (A): 0.007
Background Pk Area (A-s): 0.047 Background Pk Height (A): 0.021
Blank Corrected Pk Area (A-s): 0.002
Concentration (mg/L): 0.0006

Check sample is within range -0.00994 - 0.00994

---

e ID: CDL Seq. No.: 00044 A/S Pos.: 19 Date: 01/23/94

Replicate 1 Time: 10:10
Peak Area (A-s): 0.071 Peak Height (A): 0.188
Background Pk Area (A-s): 0.068 Background Pk Height (A): 0.067
Blank Corrected Pk Area (A-s): 0.068
Concentration (mg/L): 0.0217

---

e ID: AS Position 37 Seq. No.: 00045 A/S Pos.: 37 Date: 01/23/94

Replicate 1 Time: 10:12
Peak Area (A-s): 0.072 Peak Height (A): 0.192
Background Pk Area (A-s): 0.064 Background Pk Height (A): 0.056
Blank Corrected Pk Area (A-s): 0.067
Concentration (mg/L): 0.0213

Check sample is within range 0.0179 - 0.0220

---

e ID: BLA01 Seq. No.: 00046 A/S Pos.: 0 Date: 01/23/94

Replicate 1 Time: 10:15
Peak Area (A-s): 0.005 Peak Height (A): 0.009
Background Pk Area (A-s): 0.044 Background Pk Height (A): 0.017
Blank Corrected Pk Area (A-s): 0.001
Concentration (mg/L): 0.0004

331

Check sample is within range -0.00994 - 0.00994

Se ID: C149239 Seq. No.: 00047 A/S Pos.: 4 Date: 01/23/94

Replicate 1 Time: 10:32
Peak Area (A-s): 0.112 Peak Height (A): 0.281
Background Pk Area (A-s): 0.075 Background Pk Height (A): 0.095

Blank Corrected Pk Area (A-s): 0.108
Concentration (mg/L): 0.0343 Corrected Conc (mg/L): 0.0687

Se ID: C149239 Seq. No.: 00048 A/S Pos.: 4 Date: 01/23/94

Replicate 1 Time: 10:35
Peak Area (A-s): 0.146 Peak Height (A): 0.375
Background Pk Area (A-s): 0.082 Background Pk Height (A): 0.186
Blank Corrected Pk Area (A-s): 0.141
Concentration (mg/L): 0.0449 Corrected Conc (mg/L): 0.0897

Recovery is 105.4%

Se ID: C149650 Seq. No.: 00049 A/S Pos.: 13 Date: 01/23/94

Replicate 1 Time: 10:39
Peak Area (A-s): 0.005 Peak Height (A): 0.011
Background Pk Area (A-s): 0.068 Background Pk Height (A): 0.043
Blank Corrected Pk Area (A-s): 0.001
Concentration (mg/L): 0.0003 Corrected Conc (mg/L): 0.0006

Se ID: C149650 Seq. No.: 00050 A/S Pos.: 13 Date: 01/23/94

Replicate 1 Time: 10:41
Peak Area (A-s): 0.025 Peak Height (A): 0.067
Background Pk Area (A-s): 0.077 Background Pk Height (A): 0.056
Blank Corrected Pk Area (A-s): 0.021
Concentration (mg/L): 0.0067 Corrected Conc (mg/L): 0.0134

Recovery is 63.9%

Se ID: DUP 650 758182 Seq. No.: 00051 A/S Pos.: 14 Date: 01/23/94

Replicate 1 Time: 10:44
Peak Area (A-s): 0.006 Peak Height (A): 0.010
Background Pk Area (A-s): 0.077 Background Pk Height (A): 0.046
Blank Corrected Pk Area (A-s): 0.001
Concentration (mg/L): 0.0005 Corrected Conc (mg/L): 0.0009

Se ID: DUP 650 758182 Seq. No.: 00052 A/S Pos.: 14 Date: 01/23/94

Replicate 1 Time: 10:46
Peak Area (A-s): 0.023 Peak Height (A): 0.058
Background Pk Area (A-s): 0.080 Background Pk Height (A): 0.055
Blank Corrected Pk Area (A-s): 0.018
Concentration (mg/L): 0.0059 Corrected Conc (mg/L): 0.0118

Recovery is 54.5%

Se ID: AS Position 37 Seq. No.: 00053 A/S Pos.: 37 Date: 01/23/94

Replicate 1 Time: 10:49
Peak Area (A-s): 0.070 Peak Height (A): 0.181

Background Pk Area (A-s): 0.068 Background Pk Height (A): 0.065
Blank Corrected Pk Area (A-s): 0.066
Concentration (mg/L): 0.0209

Check sample is within range 0.0179 - 0.0220

Se ID: BLA01 Seq. No.: 00054 A/S Pos.: 0 Date: 01/23/94

Replicate 1 Time: 10:52
Peak Area (A-s): 0.004 Peak Height (A): 0.010
Background Pk Area (A-s): 0.045 Background Pk Height (A): 0.019
Blank Corrected Pk Area (A-s): -0.000
Concentration (mg/L): -0.0000

Check sample is within range -0.00994 - 0.00994

Se ID: CDL Seq. No.: 00056 A/S Pos.: 3 Date: 01/23/94

Replicate 1 Time: 10:55
Peak Area (A-s): 0.073 Peak Height (A): 0.188
Background Pk Area (A-s): 0.062 Background Pk Height (A): 0.066
Blank Corrected Pk Area (A-s): 0.068
Concentration (mg/L): 0.0218

ANALYSIS RUN: R194969

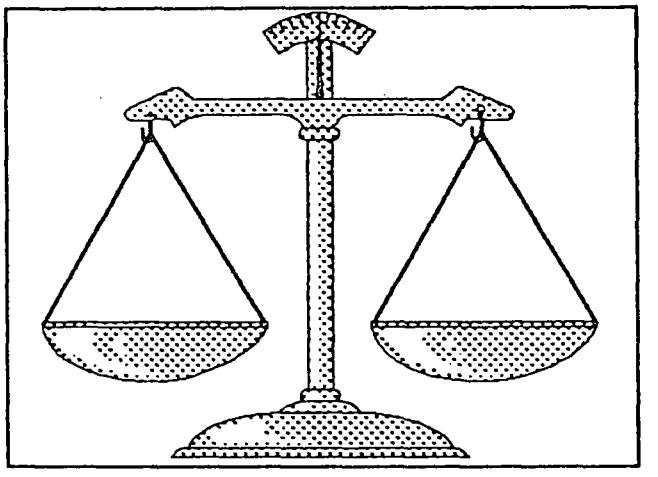
RUN NUMBER: 9319

TEST: Se 445

ANALYST: In 2520

DATE: 3 / 25 / 93

INSTRUMENT: #22



Reprep_____(complete)

Reprep_____(incomplete)

COMMENTS: _____

METALS, GFAA

INSTRUMENT	# 22
TEST #	
ELEMENT	Se 645
WAVELENGTH	196.0
ANALYST	Jn 2530
DATE	8/24/93

REVIEWER	CS
DATE	8/25/93
RECORDER	DJL
DATE	8/25/93

ADD 1 CONC._____ CAL. CURVE 0 0.010 0.020 0.040 0.050 mg/l

ADD 2 CONC._____ RESPONSE 0.002 0.039 0.071 0.141 0.174

ADD 3 CONC._____ C.C. 0.9999 SLOPE 0.291 Y INTERCEPT 0.0009

SAMPLE:	ICV01	B1a01	CDL	LCS	B1a02	C149641	DUP02	Sp102
TYPE:	# 080593A		# 070193C	Q763088 Jn 8-25-93	Q763089	M428.2	C149641 Q763090	C149641 Q763091
TRUVAL:	0.02		0.02	0.05			BDL	0.05
RESULT:	0.0210	BDL	0.0209	0.047	BDL	BDL	BDL	BDL / 0.046
UNITS:	mg/l →			mg/l →		mg/l	mg/l	mg/l
DETLIM:	0.010 →			0.05	0.010	0.010	0.010	0.05
% REC:	105%		105%	94%			0% rpd	92%
WT/VOL:						50	50	50
FINVOL:				50	50	50	50	50
DILUTE:				1:5	–	–	–	1:5
SAMABS:	0.075	0.003	0.074	0.035	0.001	0.004	0.001	0.034
AD1ABS:						0.031	0.027	
AD2ABS:								
AD3ABS:								
COMMENT:								

91CK1065.R6

METALS, GFAA

INSTRUMENT	#22
TEST #	
ELEMENT	Se 645
WAVELENGTH	196.0
ANALYST	Jn 2520
DATE	8/24/93

REVIEWER	
DATE	/ /
RECORDER	
DATE	/ /

ADD 1 CONC._____ CAL. CURVE_____ _____ _____ _____ _____

ADD 2 CONC._____ RESPONSE _____ _____ _____ _____ _____

ADD 3 CONC._____ C.C._____ SLOPE_____ Y INTERCEPT_____

SAMPLE:	CCV	B1a01	C149642	C149643	C149651	CCV	B1a01	CDL
TYPE:	#070193C		M428.2	M428.2	M128.2	#070193C		#070193C
TRUVAL:	0.02					0.02		0.02
RESULT:	0.0181	BDL	BDL	BDL	BDL	0.0179	BDL	0.0194
UNITS:	mg/l →		mg/l	mg/l *	mg/l	→		mg/l
DETLIM:	0.010 →		0.010	0.50	0.020	0.010 →		0.010
% REC:	91%					90%		97%
WT/VOL:			50	50	50			
FINVOL:			50	50	50			
DILUTE:			-	1:50	1:2			
SAMABS:	0.065	0.001	0.003	0.013	0.002	0.064	0.002	0.049
AD1ABS:			0.030	0.031	0.016			
AD2ABS:								
AD3ABS:								
COMMENT:				*dil due to high sample Background				

91CK1065.R6

In 8-25-93
Char mass
89%

Element File: SE82290.GEL Element: Se Wavelength: 196.0
Date: 01/24/94 Time: 07:58 Slit: 2.0
Data File: SE082593.DAT ID/Wt File: SE082593.IDW Lamp Current: 0
Technique: HGA Calib. Type: Linear Energy: 59
Remark 1: THIS FILE IS TO DETERMINE SE AT 5 PPB USING STANDARDS 10,20,
Remark 2: 40 AND 50 PPB. PALLADIUM IS THE MODIFIER USED. THIS IS CLP
Remark 3: PROTOCOL.

Se ID: Blank Seq. No.: 00001 A/S Pos.: 0 Date: 01/24/94

Replicate 1 Time: 08:03
Peak Area (A-s): 0.002 Peak Height (A): 0.006
Background Pk Area (A-s): 0.037 Background Pk Height (A): 0.016
Blank Corrected Pk Area (A-s): 0.002

Auto-zero performed.

Se ID: Standard 1 Seq. No.: 00002 A/S Pos.: 36 Date: 01/24/94

Replicate 1 Time: 08:05
Peak Area (A-s): 0.041 Peak Height (A): 0.100
Background Pk Area (A-s): 0.044 Background Pk Height (A): 0.044
Blank Corrected Pk Area (A-s): 0.039

Standard number 1 applied. [0.0100]
Correlation coefficient: 1.00000 Slope: 3.8945 Int: 0.000

Se ID: Standard 2 Seq. No.: 00003 A/S Pos.: 37 Date: 01/24/94

Replicate 1 Time: 08:08
Peak Area (A-s): 0.073 Peak Height (A): 0.192
Background Pk Area (A-s): 0.061 Background Pk Height (A): 0.071
Blank Corrected Pk Area (A-s): 0.071
Concentration (mg/L): 0.0183

Standard number 2 applied. [0.0200]
Correlation coefficient: 0.99860 Slope: 3.5674 Int: 0.001

Se ID: Standard 3 Seq. No.: 00004 A/S Pos.: 38 Date: 01/24/94

337

Replicate 1 Time: 08:11
Peak Area (A-s): 0.143 Peak Height (A): 0.378
Background Pk Area (A-s): 0.081 Background Pk Height (A): 0.125
Blank Corrected Pk Area (A-s): 0.141
Concentration (mg/L): 0.0393

Standard number 3 applied. [0.0400]

Se ID: Standard 4 Seq. No.: 00005 A/S Pos.: 39 Date: 01/24/94

Replicate 1 Time: 08:13
Peak Area (A-s): 0.176 Peak Height (A): 0.461

Background Pk Area (A-s): 0.092 Background Pk Height (A): 0.152
Blank Corrected Pk Area (A-s): 0.174
Concentration (mg/L): 0.0492

Standard number 4 applied. [0.0500]
Correlation coefficient: 0.99973 Slope: 3.4615 Int: 0.002

Se ID: ICV01 Seq. No.: 00006 A/S Pos.: 1 Date: 01/24/94

Replicate 1 Time: 08:16
Peak Area (A-s): 0.076 Peak Height (A): 0.194
Background Pk Area (A-s): 0.061 Background Pk Height (A): 0.070
Blank Corrected Pk Area (A-s): 0.075
Concentration (mg/L): 0.0210

Se ID: BLA01 Seq. No.: 00007 A/S Pos.: 2 Date: 01/24/94

Replicate 1 Time: 08:18
Peak Area (A-s): 0.005 Peak Height (A): 0.008
Background Pk Area (A-s): 0.039 Background Pk Height (A): 0.020
Blank Corrected Pk Area (A-s): 0.003
Concentration (mg/L): 0.0004

Se ID: CDL Seq. No.: 00008 A/S Pos.: 3 Date: 01/24/94

Replicate 1 Time: 08:21
Peak Area (A-s): 0.076 Peak Height (A): 0.199
Background Pk Area (A-s): 0.060 Background Pk Height (A): 0.073
Blank Corrected Pk Area (A-s): 0.074
Concentration (mg/L): 0.0209

Se ID: C149651 Seq. No.: 00009 A/S Pos.: 4 Date: 01/24/94

Repeat In 5/25/93

Replicate 1 Time: 08:24
Peak Area (A-s): 0.004 Peak Height (A): 0.008
Background Pk Area (A-s): 0.093 Background Pk Height (A): 0.077
Blank Corrected Pk Area (A-s): 0.002
Concentration (mg/L): 0.0001 Corrected Conc (mg/L): 0.0003

Se ID: C149651 Seq. No.: 00010 A/S Pos.: 4 Date: 01/24/94

Replicate 1 Time: 08:26
Peak Area (A-s): 0.015 Peak Height (A): 0.038
Background Pk Area (A-s): 0.091 Background Pk Height (A): 0.075
Blank Corrected Pk Area (A-s): 0.013
Concentration (mg/L): 0.0032 Corrected Conc (mg/L): 0.0064

Recovery is 30.9%

338

Se ✓ ID: LCS 763088 Seq. No.: 00011 A/S Pos.: 5 Date: 01/24/94

Replicate 1 Time: 08:29
Peak Area (A-s): 0.036 Peak Height (A): 0.104

Background Pk Area (A-s): 0.055 Background Pk Height (A): 0.047
Blank Corrected Pk Area (A-s): 0.035
Concentration (mg/L): 0.0095 Corrected Conc (mg/L): 0.047

Se ✓ ID: BLA02 763089 Seq. No.: 00012 A/S Pos.: 6 Date: 01/24/94

Replicate 1 Time: 08:31
Peak Area (A-s): 0.002 Peak Height (A): 0.007
Background Pk Area (A-s): 0.043 Background Pk Height (A): 0.021
Blank Corrected Pk Area (A-s): 0.001
Concentration (mg/L): -0.0003

Se ✓ ID: C149641 Seq. No.: 00013 A/S Pos.: 7 Date: 01/24/94

Replicate 1 Time: 08:34
Peak Area (A-s): 0.006 Peak Height (A): 0.011
Background Pk Area (A-s): 0.090 Background Pk Height (A): 0.053
Blank Corrected Pk Area (A-s): 0.004
Concentration (mg/L): 0.0006

Se ID: C149641 Seq. No.: 00014 A/S Pos.: 7 Date: 01/24/94

Replicate 1 Time: 08:37
Peak Area (A-s): 0.033 Peak Height (A): 0.092
Background Pk Area (A-s): 0.098 Background Pk Height (A): 0.072
Blank Corrected Pk Area (A-s): 0.031
Concentration (mg/L): 0.0083

Recovery is 77.9%

Se ✓ ID: DUP 641 763090 Seq. No.: 00015 A/S Pos.: 6 Date: 01/24/94

Replicate 1 Time: 08:39
Peak Area (A-s): 0.003 Peak Height (A): 0.010
Background Pk Area (A-s): 0.089 Background Pk Height (A): 0.055
Blank Corrected Pk Area (A-s): 0.001
Concentration (mg/L): -0.0003

Se ID: DUP 641 763090 Seq. No.: 00016 A/S Pos.: 8 Date: 01/24/94

Replicate 1 Time: 08:42
Peak Area (A-s): 0.029 Peak Height (A): 0.069
Background Pk Area (A-s): 0.157 Background Pk Height (A): 0.087
Blank Corrected Pk Area (A-s): 0.027
Concentration (mg/L): 0.0072

Recovery is 75.8%

S ID: SPI 641 763091 Seq. No.: 00017 A/S Pos.: 9 Date: 01/24/94

Replicate 1 Time: 08:45
Peak Area (A-s): 0.036 Peak Height (A): 0.080
Background Pk Area (A-s): 0.066 Background Pk Height (A): 0.044

Blank Corrected Pk Area (A-s): 0.034
Concentration (mg/L): 0.0092 Corrected Conc (mg/L): 0.046

Sa ID: AS Position 37 CC Seq. No.: 00018 A/S Pos.: 37 Date: 01/24/94

91

Replicate 1 Time: 08:47
Peak Area (A-s): 0.066 Peak Height (A): 0.187
Background Pk Area (A-s): 0.063 Background Pk Height (A): 0.070
Blank Corrected Pk Area (A-s): 0.065
Concentration (mg/L): 0.0181

Check sample is within range 0.0179 - 0.0220

ID: BLA01 Seq. No.: 00019 A/S Pos.: 0 Date: 01/24/94

Replicate 1 Time: 08:50
Peak Area (A-s): 0.003 Peak Height (A): 0.007
Background Pk Area (A-s): 0.041 Background Pk Height (A): 0.019
Blank Corrected Pk Area (A-s): 0.001
Concentration (mg/L): -0.0002

Check sample is within range -0.00994 - 0.00994

ID: C149642 Seq. No.: 00020 A/S Pos.: 10 Date: 01/24/94

Replicate 1 Time: 08:52
Peak Area (A-s): 0.005 Peak Height (A): 0.007
Background Pk Area (A-s): 0.078 Background Pk Height (A): 0.049
Blank Corrected Pk Area (A-s): 0.003
Concentration (mg/L): 0.0003

ID: C149642 Seq. No.: 00021 A/S Pos.: 10 Date: 01/24/94

Replicate 1 Time: 08:55
Peak Area (A-s): 0.032 Peak Height (A): 0.083
Background Pk Area (A-s): 0.083 Background Pk Height (A): 0.065
Blank Corrected Pk Area (A-s): 0.030
Concentration (mg/L): 0.0081

340

Recovery is 77.7%

ID: C149643 Seq. No.: 00022 A/S Pos.: 11 Date: 01/24/94

Replicate 1 Time: 08:57
Peak Area (A-s): 0.035 Peak Height (A): 0.084
Background Pk Area (A-s): 0.990 Background Pk Height (A): 0.959
Blank Corrected Pk Area (A-s): 0.033

repeat 1:25

ID: C149643 Seq. No.: 00023 A/S Pos.: 11 Date: 01/24/94

plicate 1 Time: 09:00

ak Area (A-s): 0.045 Peak Height (A): 0.111

Background Pk Area (A-s): 1.001 Background Pk Height (A): 1.018
Blank Corrected Pk Area (A-s): 0.043
Concentration (mg/L): 0.0118 Corrected Conc (mg/L): 0.059

Recovery is 28.0%

S ID: C149643 Seq. No.: 00025 A/S Pos.: 11 Date: 01/24/94

Replicate 1 Time: 09:05
Peak Area (A-s): 0.020 Peak Height (A): 0.055
Background Pk Area (A-s): 0.306 Background Pk Height (A): 0.201
Blank Corrected Pk Area (A-s): 0.019
Concentration (mg/L): 0.0045 Corrected Conc (mg/L): 0.121

Repeat 1:50
In 8/25/93

S ID: C149643 Seq. No.: 00027 A/S Pos.: 11 Date: 01/24/94

Replicate 1 Time: 09:10
Peak Area (A-s): 0.015 Peak Height (A): 0.034
Background Pk Area (A-s): 0.192 Background Pk Height (A): 0.146
Blank Corrected Pk Area (A-s): 0.013
Concentration (mg/L): 0.0032 Corrected Conc (mg/L): 0.16

S ID: C149643 Seq. No.: 00028 A/S Pos.: 11 Date: 01/24/94

Replicate 1 Time: 09:12
Peak Area (A-s): 0.033 Peak Height (A): 0.070
Background Pk Area (A-s): 0.202 Background Pk Height (A): 0.173
Blank Corrected Pk Area (A-s): 0.031
Concentration (mg/L): 0.0084 Corrected Conc (mg/L): 0.42

Recovery is 51.2%

342

S ID: C149651 Seq. No.: 00029 A/S Pos.: 4 Date: 01/24/94

Replicate 1 Time: 09:17
Peak Area (A-s): 0.006 Peak Height (A): 0.008
Background Pk Area (A-s): 0.101 Background Pk Height (A): 0.064
Blank Corrected Pk Area (A-s): 0.004
Concentration (mg/L): 0.0007 Corrected Conc (mg/L): 0.0014

Se ID: C149651 Seq. No.: 00030 A/S Pos.: 4 Date: 01/24/94

Replicate 1 Time: 09:19
Peak Area (A-s): 0.017 Peak Height (A): 0.040
Background Pk Area (A-s): 0.085 Background Pk Height (A): 0.070
Blank Corrected Pk Area (A-s): 0.016
Concentration (mg/L): 0.0039 Corrected Conc (mg/L): 0.0079

Recovery is 32.3%

ID: C149651 Seq. No.: 00031 A/S Pos.: 4 Date: 01/24/94

Replicate 1 Time: 09:25

eak Area (A-s): 0.004 Peak Height (A): 0.007
Background Pk Area (A-s): 0.086 Background Pk Height (A): 0.060
Blank Corrected Pk Area (A-s): 0.002
oncentration (mg/L): 0.0000 Corrected Conc (mg/L): 0.0000

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e ID: C149651 Seq. No.: 00032 A/S Pos.: 4 Date: 01/24/94

Replicate 1 Time: 09:26
eak Area (A-s): 0.018 Peak Height (A): 0.047
ackground Pk Area (A-s): 0.038 Background Pk Height (A): 0.071
Blank Corrected Pk Area (A-s): 0.016
Concentration (mg/L): 0.0041 Corrected Conc (mg/L): 0.0063

ecovery is 41.8%

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e ID: AS Position 37 CCV Seq. No.: 00033 A/S Pos.: 37 Date: 01/24/94
90

eplicate 1 Time: 09:31
eak Area (A-s): 0.066 Peak Height (A): 0.152
ackground Pk Area (A-s): 0.066 Background Pk Height (A): 0.063
Blank Corrected Pk Area (A-s): 0.064
oncentration (mg/L): 0.0179

Check sample is within range 0.0179 - 0.0220

Se ID: BLA01 Seq. No.: 00034 A/S Pos.: 0 Date: 01/24/94

eplicate 1 Time: 09:33
Peak Area (A-s): 0.003 Peak Height (A): 0.007
Background Pk Area (A-s): 0.041 Background Pk Height (A): 0.021
lank Corrected Pk Area (A-s): 0.002
oncentration (mg/L): -0.0001

heck sample is within range -0.00994 - 0.00994

Se ID: AS Position 37 Seq. No.: 00036 A/S Pos.: 37 Date: 01/24/94

eplicate 1 Time: 09:36
Peak Area (A-s): 0.068 Peak Height (A): 0.163
ackground Pk Area (A-s): 0.059 Background Pk Height (A): 0.069
lank Corrected Pk Area (A-s): 0.066
Concentration (mg/L): 0.0186

heck sample is within range 0.0179 - 0.0220

---

e ID: BLA01 Seq. No.: 00037 A/S Pos.: 0 Date: 01/24/94

Replicate 1 Time: 09:39

Peak Area (A-s): 0.003 Peak Height (A): 0.007
Background Pk Area (A-s): 0.041 Background Pk Height (A): 0.020
Blank Corrected Pk Area (A-s): 0.001
Concentration (mg/L): -0.0003

Check sample is within range -0.00994 - 0.00994

Se ID: C149651 Seq. No.: 00039 A/S Pos.: 4 Date: 01/24/94

Replicate 1 Time: 09:41
Peak Area (A-s): 0.005 Peak Height (A): 0.007
Background Pk Area (A-s): 0.084 Background Pk Height (A): 0.060
Blank Corrected Pk Area (A-s): 0.003
Concentration (mg/L): 0.0003 Corrected Conc (mg/L): 0.0005

Se ID: C149651 Seq. No.: 00040 A/S Pos.: 4 Date: 01/24/94

Replicate 1 Time: 09:44
Peak Area (A-s): 0.023 Peak Height (A): 0.045
Background Pk Area (A-s): 0.080 Background Pk Height (A): 0.066
Blank Corrected Pk Area (A-s): 0.021
Concentration (mg/L): 0.0055 Corrected Conc (mg/L): 0.0110

Recovery is 52.3%

Se ID: C149642 Seq. No.: 00041 A/S Pos.: 10 Date: 01/24/94

Replicate 1 Time: 09:47
Peak Area (A-s): 0.005 Peak Height (A): 0.008
Background Pk Area (A-s): 0.077 Background Pk Height (A): 0.049
Blank Corrected Pk Area (A-s): 0.004
Concentration (mg/L): 0.0005

Se ID: C149642 Seq. No.: 00042 A/S Pos.: 10 Date: 01/24/94

Replicate 1 Time: 09:50
Peak Area (A-s): 0.038 Peak Height (A): 0.103
Background Pk Area (A-s): 0.084 Background Pk Height (A): 0.072
Blank Corrected Pk Area (A-s): 0.036
Concentration (mg/L): 0.0099

Recovery is 94.8%

Se ID: C149643 Seq. No.: 00043 A/S Pos.: 11 Date: 01/24/94

Replicate 1 Time: 09:52
Peak Area (A-s): 0.010 Peak Height (A): 0.020
Background Pk Area (A-s): 0.171 Background Pk Height (A): 0.100
Blank Corrected Pk Area (A-s): 0.009
Concentration (mg/L): 0.0020 Corrected Conc (mg/L): 0.10

Se ID: C149643 Seq. No.: 00044 A/S Pos.: 11 Date: 01/24/94

Peak Area (A-s): 0.039 Peak Height (A): 0.093
Background Pk Area (A-s): 0.166 Background Pk Height (A): 0.107
Blank Corrected Pk Area (A-s): 0.037
Concentration (mg/L): 0.0101 Corrected Conc (mg/L): 0.50

Recovery is 81.4%

8/25/93

Se ID: AS Position 37 Seq. No.: 00045 A/S Pos.: 37 Date: 01/24/94

Replicate 1 Time: 10:02
Peak Area (A-s): 0.067 Peak Height (A): 0.182
Background Pk Area (A-s): 0.072 Background Pk Height (A): 0.054
Blank Corrected Pk Area (A-s): 0.065
Concentration (mg/L): 0.0183

Check sample is within range 0.0179 - 0.0220

Se ID: BLA01 Seq. No.: 00046 A/S Pos.: 0 Date: 01/24/94

Replicate 1 Time: 10:04
Peak Area (A-s): 0.002 Peak Height (A): 0.006
Background Pk Area (A-s): 0.042 Background Pk Height (A): 0.022
Blank Corrected Pk Area (A-s): 0.000
Concentration (mg/L): -0.0005

Check sample is within range -0.00994 - 0.00994

Se ID: C149239 Seq. No.: 00048 A/S Pos.: 12 Date: 01/24/94

Replicate 1 Time: 10:06
Peak Area (A-s): 0.108 Peak Height (A): 0.292
Background Pk Area (A-s): 0.070 Background Pk Height (A): 0.104
Blank Corrected Pk Area (A-s): 0.107
Concentration (mg/L): 0.0302 Corrected Conc (mg/L): 0.0005

Se ID: C149239 Seq. No.: 00049 A/S Pos.: 12 Date: 01/24/94

Replicate 1 Time: 10:10
Peak Area (A-s): 0.148 Peak Height (A): 0.404
Background Pk Area (A-s): 0.078 Background Pk Height (A): 0.138
Blank Corrected Pk Area (A-s): 0.146
Concentration (mg/L): 0.0416 Corrected Conc (mg/L): 0.0831

Recovery is 113.2%

Se ID: C149240 Seq. No.: 00050 A/S Pos.: 13 Date: 01/24/94

Replicate 1 Time: 10:13
Peak Area (A-s): 0.086 Peak Height (A): 0.229
Background Pk Area (A-s): 0.064 Background Pk Height (A): 0.082
Blank Corrected Pk Area (A-s): 0.085
Concentration (mg/L): 0.0238 Corrected Conc (mg/L): 0.238

Se ID: C149240 Seq. No.: 00051 A/S Pos.: 13 Date: 01/24/94

Replicate 1 Time: 10:16
Peak Area (A-s): 0.123 Peak Height (A): 0.343
Background Pk Area (A-s): 0.073 Background Pk Height (A): 0.115
Blank Corrected Pk Area (A-s): 0.121
Concentration (mg/L): 0.0343 Corrected Conc (mg/L): 0.343

Recovery is 105.1%

Se ID: AS Position 37 Seq. No.: 00052 A/S Pos.: 37 Date: 01/24/94

Replicate 1 Time: 10:18
Peak Area (A-s): 0.071 Peak Height (A): 0.187
Background Pk Area (A-s): 0.056 Background Pk Height (A): 0.072
Blank Corrected Pk Area (A-s): 0.069
Concentration (mg/L): 0.0194

Check sample is within range 0.0179 - 0.0220

Se ID: BLA01 Seq. No.: 00053 A/S Pos.: 0 Date: 01/24/94

Replicate 1 Time: 10:21
Peak Area (A-s): 0.005 Peak Height (A): 0.006
Background Pk Area (A-s): 0.039 Background Pk Height (A): 0.020
Blank Corrected Pk Area (A-s): 0.003
Concentration (mg/L): 0.0003

Check sample is within range -0.00994 - 0.00994

Se ID: CDL Seq. No.: 00054 A/S Pos.: 14 Date: 01/24/94

Replicate 1 Time: 10:23
Peak Area (A-s): 0.071 Peak Height (A): 0.150
Background Pk Area (A-s): 0.056 Background Pk Height (A): 0.070
Blank Corrected Pk Area (A-s): 0.069
Concentration (mg/L): 0.0194

Se ID: AS Position 37 Seq. No.: 00055 A/S Pos.: 37 Date: 01/24/94

Replicate 1 Time: 10:26
Peak Area (A-s): 0.070 Peak Height (A): 0.165
Background Pk Area (A-s): 0.055 Background Pk Height (A): 0.065
Blank Corrected Pk Area (A-s): 0.066
Concentration (mg/L): 0.0191

Check sample is within range 0.0179 - 0.0220

Se ID: BLA01 Seq. No.: 00056 A/S Pos.: 0 Date: 01/24/94

Replicate 1 Time: 10:28
Peak Area (A-s): 0.006 Peak Height (A): 0.009
Background Pk Area (A-s): 0.036 Background Pk Height (A): 0.020
Blank Corrected Pk Area (A-s): 0.004
Concentration (mg/L): 0.0005

PAGE: 1 OF 11

CYANIDE

RUN NO.: R194625

INSTRUMENT: 53

WAVELENGTH: 578

ANALYST: Jun2523

REVIEWER:

RECORDER: DVL

DATE: 8/20/93

DATE: / /

DATE: 8/20/93

CC: 0.999

SLOPE: 0.411

Y INTERCEPT: 0.0002

CALIBRATION CONC.:	.000	0.01	0.02	0.05	0.1	0.3	mg/l
ABS/TRANS:	.000	.024	0.039	0.119	.257	.725	080293A
TEST CODE:	✓	✓	✓	G119.3.0 G119.0.1	✓	✓	G119.3.0 G119.0.1
SAMPLE:	ICV01 080293A	BLA02	LCS 080293A	C149694	DUP02	SP102	C149694
TYPE:					C149694	C149694	
QC #:		Q764552	Q764551		Q764553	Q764554	
TRUE VALUE:	0.2		0.2		Bdl	0.5	
RESULT:	0.193	0.004	0.185	Bdl	Bdl	~~Bdl~~ 0.446	Bdl
UNITS:	mg/l			mg/l			
DETECTION LIMIT:	0.01			0.01		0.03	0.01
% RECOVERY:	96.3%		92.4%		Rpd=0.0%	89%	
DILUTION at DIST:				250mls/250mls		100mls/250mls	250mls/250mls
DILUTION at SPEC:							
ABSORBANCE:	.468	0.010	.449	.000	.005	.433	.003
TRANSMITTANCE:							
RAW DATA:							
PREP PAGE:	524						
COMMENT:	.05 mls of 100ppm.		.5 mls of 100ppm				

PAGE: 2 OF 11

CYANIDE

RUN NO.:

INSTRUMENT:

WAVELENGTH: 349

ANALYST: Qjm2523

REVIEWER:

RECORDER:

DATE: 8/20/93

DATE: / /

DATE: / /

CC:

SLOPE:

Y INTERCEPT:

CALIBRATION CONC.:

ABS/TRANS: AM2948

TEST CODE:	G119.3	G119.3					G119.5
SAMPLE:	DUP02	C149643	C149639	C149640	CCV	BLA01	C149650
TYPE:	C149644				0812934		
QC #:	Q764555						
TRUE VALUE:	Bdl				0.01		
RESULT:	Bdl	Bdl	Bdl	Bdl	0.01	LO.004	0.26
UNITS:	mg/l	mg/kg	mg/l	mg/l	mg/l		mg/l
DETECTION LIMIT:	0.01	0.23	0.01	0.01	0.01		0.01
% RECOVERY:	Rpd 0.0%				101%		
DILUTION at DIST:	250ml/250ml	11.01g/250ml	250ml/250ml	250ml/250ml			250ml/250ml
DILUTION at SPEC:							
ABSORBANCE:	.002	0.010	.000	.017	.024	.000	.628
TRANSMITTANCE:							
RAW DATA:							
PREP PAGE:	524						
COMMENT:							.258

PAGE: 3 OF 11

CYANIDE

RUN NO.:

INSTRUMENT:

WAVELENGTH:

ANALYST: JM2523

REVIEWER:

RECORDER:

DATE: 8/20/93

DATE: / /

DATE: / /

CC:

SLOPE:

Y INTERCEPT:

CALIBRATION CONC.:

ABS/TRANS:							
TEST CODE:	G119.5			G119.3 ~~DUP02~~	~~DUP02~~		
SAMPLE:	C149651	C149652	C149653	C149643	C149643	SP102 C149643	SP102 C149643
TYPE:							
QC #:				Q764556	Q764557	Q764558	Q764559
TRUE VALUE:				8/20/93	Bdl	7.99	7.55
RESULT:	0.25	0.11	0.15	0.24	Bdl	Bdl/7.86	Bdl/6.14
UNITS:	mg/l			mg/kg	~~mg/kg~~	mg/kg	
DETECTION LIMIT:	0.01			0.24	0.28	0.40	0.38
% RECOVERY:					Rpd=0.0%	98%	81%
DILUTION at DIST:	250mls/250mls			10.52g/250mls	8.87g/250mls	6.26g/250mls	6.62g/250mls
DILUTION at SPEC:							
ABSORBANCE:	.614	.266	.357	.024	.020	.478	.395
TRANSMITTANCE:							
RAW DATA:	.253	.109	.146				
PREP PAGE:							
COMMENT:						3mls of 100ppm	

DATE: / /

Y INTERCEPT:

ABS/TRANS:							
TEST CODE:							
SAMPLE:	BLA02	LCS	CCV	BLA01	6119.5		
TYPE:		0802934					
QC #:	Q764570	Q764571			B121845	B121846	B121847
TRUE VALUE:		0.2					
RESULT:	<0.004	0.192	0.02				
UNITS:	mg/l		0.021	<0.004	Bdl	Bdl	Bdl
ETECTION LIMIT:	0.001				mg/kg		
% RECOVERY:		96%	108%		0.23	0.24	0.24
LUTION at DIST:							
UTION at SPEC:					10.73g/250mls	10.62g/250mls	10.53g/250mls
ABSORBANCE:	.004	.467	052	.001	-016	.013	.005
NSMITTANCE:							
RAW DATA:							
PREP PAGE:	524						
COMMENT:							

PAGE: 5 OF 11

CYANIDE

RUN NO.:

INSTRUMENT:

WAVELENGTH:

ANALYST: Gm2523

REVIEWER:

RECORDER:

DATE: 8/20/93

DATE: / /

DATE: / /

CC:

SLOPE:

Y INTERCEPT:

CALIBRATION CONC.:							
ABS/TRANS:							
TEST CODE:	G119.5 ✓	✓	✓	✓	✓	✓	✓
SAMPLE:	B121848	B121849	B121850	B121851	B121852	B121853	B121854
TYPE:							
QC #:							
TRUE VALUE:							
RESULT:	Bdl	Bdl	Bdl	Bdl	0.27	Bdl	26
UNITS:	mg/kg						
DETECTION LIMIT:	0.24	0.24	0.23	0.24	0.24	0.23	1.1
% RECOVERY:							
DILUTION at DIST:	10.61g/250mls	10.61g/250mls	11.02g/250mls	10.44g/250mls	10.57g/250mls	10.92g/250mls	11.36g/250mls
DILUTION at SPEC:							5mls/25mls
ABSORBANCE:	.007	.008	.004	.002	.027	.004	.571
TRANSMITTANCE:							
RAW DATA:							25.8
PREP PAGE:	524						
COMMENT:							

PAGE: 6 OF 11

CYANIDE

RUN NO.:

INSTRUMENT:

353 WAVELENGTH:

ANALYST: Alm2523

REVIEWER:

RECORDER:

DATE: 8/20/93

DATE: / /

DATE: / /

CC:

SLOPE:

Y INTERCEPT:

CALIBRATION CONC.:

ABS/TRANS:

TEST CODE: G119.5

SAMPLE:	CCV 081293A	BLA01	DUP02	DUP02	SP102	SP102	BLA02
TYPE:			B121854	B121854	B121854	B121854	
QC #:			Q765552	Q765553	Q765554	Q765555	Q765556
TRUE VALUE:	0.02		25.8	25.8	65.2	55.9	
RESULT:	0.021	<0.004	26.1	27.3	25.8/31.7	25.8/43.5	<0.004
UNITS:	mg/l		mg/kg				mg/l
DETECTION LIMIT:	0.01		1.4	1.5	3.3	2.8	0.01
% RECOVERY:	106%		Rpd= 1.2%	Rpd= 0.75%	*NA due to matrix.		
DILUTION at DIST:			4.09g/250mls	8.27g/250mls	6.395g/250mls	7.458g/250mls	
DILUTION at SPEC:			5/25mls	5mls/25mls	3/25mls	3mls/25mls	
ABSORBANCE:	.051	.005	.461	.439	.236	.378	.000
TRANSMITTANCE:							
RAW DATA:			26.09				
PREP PAGE:	52d						
COMMENT:			51.9	53.1	.5 mls of 100ppm 081293A	081293A	

PAGE: 7 OF 11

CYANIDE

354

RUN NO.:

INSTRUMENT:

WAVELENGTH:

ANALYST: Jm2523

REVIEWER:

RECORDER:

DATE: 8/20/93

DATE: / /

DATE: / /

CC:

SLOPE:

Y INTERCEPT:

CALIBRATION CONC.:

ABS/TRANS:							
TEST CODE:	✓	G119.5 ✓	✓	✓		✓	✓
SAMPLE:	LCS 080293A	B121855	B121856	B121857		CCV 081292A	BLA01
TYPE:							
QC #:	Q7H5557				SKIP		
TRUE VALUE:	0.2					0.02	
RESULT:	0.199	Bdl	Bdl	42		0.019	<0.004
UNITS:	mg/l	mg/kg →				mg/l →	
DETECTION LIMIT:	0.01	0.83	0.24	1.8	6.2	0.01 →	
% RECOVERY:	99.3%					99.9%	
DILUTION at DIST:		10.66g/250mls	10.48/250mls	11.27g/250mls	10.06g/250mls		
DILUTION at SPEC:				3/25mls	1/25mls		
ABSORBANCE:	.483	.018	.007	.552	.291	.048	.000
TRANSMITTANCE:							
RAW DATA:							
PREP PAGE:	.5mls of 100ppm (524)			41.9			
COMMENT:							

PAGE: 8 OF 11

CYANIDE

RUN NO.:

INSTRUMENT:

WAVELENGTH:

ANALYST: Jm2523

REVIEWER:

RECORDER:

DATE: 8/20/93

DATE: / /

DATE: / /

CC:

SLOPE:

Y INTERCEPT:

CALIBRATION CONC.:

ABS/TRANS:

TEST CODE: G119.5

SAMPLE:	SP102	SP102	B121858	B121859	B121860	B121861	B121862
TYPE:	B121857	B121857					
QC #:	Q765559	~~Q765558~~ 765560 DC					
TRUE VALUE:	187	159					
RESULT:	42 / 79.5	42 / 83.0	Bdl	Bdl	Bdl	Bdl	Bdl
UNITS:	mg/kg		mg/kg				
DETECTION LIMIT:	0.37	0.31	0.24	0.25	0.24	0.24	0.24
% RECOVERY:	*NA due to matrix						
DILUTION at DIST:	6.68g/250mls	7.88g/250mls	10.48g/250mls	10.17g/250mls	10.38g/250mls	10.57g/250mls	10.49g/250mls
DILUTION at SPEC:	1/25mls						
ABSORBANCE:	.206	.254	.004	.002	.008	.010	.000
TRANSMITTANCE:							
RAW DATA:	080293A 52d						
PREP PAGE:	.5mls 100ppm						
COMMENT:							

PAGE: 9 OF 11

CYANIDE

356

RUN NO.:

INSTRUMENT:

WAVELENGTH:

ANALYST: Jim 2523

REVIEWER:

RECORDER:

DATE: 8/20/93

DATE: / /

DATE: / /

CC:

SLOPE:

Y INTERCEPT:

CALIBRATION CONC.:							
ABS/TRANS:							
TEST CODE:	G119.5		G115.1			G115.1	
SAMPLE:	B121863	DUP 28-20-93	BLA02	CCV	BLA01	LCS	C149650
TYPE:		B121864		081293A		080293A	
QC #:			Q763340			Q763342	
TRUE VALUE:				0.02		0.4	
RESULT:	Bdl	Bdl	L0.004	0.02	L0.004	0.049	Bdl
UNITS:	mg/kg		mg/l				mg/l
DETECTION LIMIT:	0.20	0.23	0.01				0.01
% RECOVERY:				102%		0.12%	
DILUTION at DIST:	12.399g/250mls	10.78g/250mls					250mls/250mls
DILUTION at SPEC:							
ABSORBANCE:	.000	.000	.010	.049	.000	.121	.006
TRANSMITTANCE:							
RAW DATA:							
PREP PAGE:	524					1 mls of 10 ppm	
COMMENT:							

PAGE: 10 OF 11

CYANIDE

357

RUN NO.:

INSTRUMENT:

WAVELENGTH:

ANALYST: Jim 2523

REVIEWER:

RECORDER:

DATE: 8/20/93

DATE: / /

DATE: / /

CC:

SLOPE:

Y INTERCEPT:

CALIBRATION CONC.:							
ABS/TRANS:							
TEST CODE:	G115.1			G115.1			
SAMPLE:	DUP02	C149651	C149652	C149653	BLA02	LCS 080293A	C149751
TYPE:	C149650						
QC #:	Q763341				Q765500	Q765499	
TRUE VALUE:	Bdl					0.4	
RESULT:	Bdl	Bdl	Bdl	Bdl	<0.004	~~138~~ 0.137	7.2
UNITS:	mg/l						mg/l
DETECTION LIMIT:	0.03	0.01					0.25
% RECOVERY:	Rpd=0.0%					34%	
DILUTION at DIST:	100ml/250ml	250ml/250ml					10.05g/250ml
DILUTION at SPEC:							
ABSORBANCE:	.006	.000	.005	.005	.005	.332	.703
TRANSMITTANCE:							
RAW DATA:							
PREP PAGE:	524					1ml of 100ppm	7.2
COMMENT:							

PAGE: 11 OF 11

CYANIDE

RUN NO.:

INSTRUMENT:

WAVELENGTH:

ANALYST: Jm 2523

REVIEWER:

RECORDER:

DATE: 8/20/93

DATE: / /

DATE: / /

CC:

SLOPE:

Y INTERCEPT:

CALIBRATION CONC.:

ABS/TRANS:

TEST CODE:			G115.1				
SAMPLE:	CCV	BLA01	DUP02	CCV	BLA01		
TYPE:	081293A		C149751	081293A			
QC #:			Q765501				
TRUE VALUE:	0.02		7.19	0.02			
RESULT:	0.019	<0.004	7.18	0.021	<0.004		
UNITS:	mg/l		mg/kg	mg/l			
DETECTION LIMIT:	0.01		0.4	0.01			
% RECOVERY:	99.9%			108%			
DILUTION at DIST:			6.24g/250mls				
DILUTION at SPEC:	8/20/93						
ABSORBANCE:	.002	.048	.436	.052	.000		
TRANSMITTANCE:							
RAW DATA:							
PREP PAGE:			7.18				
COMMENT:							

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PAGE: 1 OF 7

CYANIDE

RUN NO.: R195222

359

INSTRUMENT: 53

WAVELENGTH: 578

ANALYST: Jun 2523

REVIEWER: AM 2948

RECORDER: Cls

DATE: 8/27/93

DATE: 8/27/93

DATE: 8/27/93

CC: 0.9987

SLOPE: 0.356

Y INTERCEPT: 0.003

CALIBRATION CONC.:	.000	001	0.02	0.05	0.1	0.3	mg/l
ABS/TRANS:	.000	.027	.051	.136	.239	.841	081293A
TEST CODE:	✓	✓	✓	G119.5 →	✓	✓	✓ B121868
SAMPLE:	ICV01	BLA02	LCS	B121866	B121867	B122050	~~B122~~ 8-27-93
TYPE:	080293A		080293A				
QC #:		Q768909	Q768908				
TRUE VALUE:	0.2		0.2				
RESULT:	0.213	<0.004	0.186	Bdl	0.79	Bdl	Bdl
UNITS:	mg/l →			mg/kg →			
DETECTION LIMIT:	0.01 →			0.21	0.22	0.24	0.22
% RECOVERY:	107%		92.8%				
DILUTION at DIST:				8-27-93 ~~10.55g~~ 10.55g/250 ab	11.36g/250 ab	10.27g/250 ab	11.231g/250 ab
DILUTION at SPEC:							
ABSORBANCE:	0.589	.001	.512	.016	.092	.008	.011
TRANSMITTANCE:							
RAW DATA:							
PREP PAGE:	526 →						
COMMENT:							

PAGE: 2 OF 7

CYANIDE

RUN NO.:

INSTRUMENT: 53

360 WAVELENGTH:

ANALYST: Gm2523

REVIEWER:

RECORDER:

DATE: 8/27/93

DATE: / /

DATE: / /

CC:

SLOPE:

Y INTERCEPT:

CALIBRATION CONC.:							
ABS/TRANS:							
TEST CODE:	G119.5			G119.5			G119.3
SAMPLE:	B122051	DUP02	SP102	B121908	CCV	BLA01	C149239
TYPE:		B122051	B122051		081293A		
QC #:		Q768913	Q768914				
TRUE VALUE:		0.625	9.03		0.02		
RESULT:	0.63	0.612	0.63 / 7.10	8/27/93 ~~2.1~~ 26	0.022	<0.004	0.104
UNITS:	mg/kg				mg/l		mg/l
DETECTION LIMIT:	0.25	0.22	0.45	2.9	0.01		0.03
% RECOVERY:		Rpd=1.6%	*NA due to matrix		108% (110)		
DILUTION at DIST:	10.086g/250mls	11.405g/250mls	5.535g/250mls	10.6dg/250mls			250mls/250mls
DILUTION at SPEC:				2/25			10/25
ABSORBANCE:	.062	.070	.432	.242	.052	.000	.108
TRANSMITTANCE:							
RAW DATA:							0.104
PREP PAGE:	526						
COMMENT:		1.24					

PAGE: 3 OF 1

CYANIDE

RUN NO.:

INSTRUMENT:

WAVELENGTH:

ANALYST: Jm 2523

REVIEWER:

RECORDER:

DATE: 8/27/93

DATE: / /

DATE: / /

CC:

SLOPE:

Y INTERCEPT:

CALIBRATION CONC.:

ABS/TRANS:

TEST CODE:	✓	✓	G119.5				
SAMPLE:	DUP02	SP102	B121865	C149240	DUP02	B122051	DUP02
TYPE:	C149239	C149239			C149240		B122051
QC #:	Q768910	Q768911					
TRUE VALUE:	0.104	2.5		Jm	Jm 8-27-93		
RESULT:	0.108	0.104/2.0	18	~~0.88~~ Jm 8-27-93		Jm	Jm
UNITS:	mg/l →		mg/kg				
DETECTION LIMIT:	0.03	0.13	2.8				
% RECOVERY:	3.8%	75.8%					
DILUTION at DIST:	250mls/250mls	50mls/250mls	11.00g/250mls	150mls/250mls			
DILUTION at SPEC:	10/25	10/25	2/25	2/25			
ABSORBANCE:	.112	.439	.165	.110		.062	.070
TRANSMITTANCE:							
RAW DATA:	.108						
PREP PAGE:	526	.5mls of 100ppm 050293					
COMMENT:							

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PAGE: 4 OF 7

CYANIDE

RUN NO.:

INSTRUMENT:

WAVELENGTH:

ANALYST: [illegible] 2523

REVIEWER:

RECORDER:

DATE: 8/27/93

DATE: / /

DATE: / /

CC:

SLOPE:

Y INTERCEPT:

362

CALIBRATION CONC.:		✓					
ABS/TRANS:	✓	G119.5	✓	✓	✓	✓	✓
TEST CODE:	✓	C149753	✓	✓	G119.5 →	✓	✓
SAMPLE:	SP102	~~C149753~~ [illegible] 8-27-93	CCV 081293A	BLA01	C149773	DUP02	SP102
TYPE:	C149051					C149773	C149773
QC #:	Q768915					Q769823	Q769824
TRUE VALUE:	8.71		0.02			1.42	8.36
RESULT:	0.63 / 7.60	Bdl	0.021	<0.004	1.4	2.19	1.4 / 7.22
UNITS:	mg/kg →		mg/l →		mg/kg →		
DETECTION LIMIT:	~~0.0~~ 0.43	0.24	0.01 →		0.25	0.24	0.42
% RECOVERY:	*NA due to matrix		103% 105			←	*NA due to matrix
DILUTION at DIST:	5.743g/250mls	10.25g/250mls			10.05g/250mls	10.40g/250mls	5.98g/250mls
DILUTION at SPEC:							
ABSORBANCE:	.481	.015	.049	.000	.151	.247	.476
TRANSMITTANCE:							
RAW DATA:	.5mls of 100ppm 080293A						
PREP PAGE:	526						69.3%
COMMENT:							.5mls of 100ppm 080293A

CYANIDE

RUN NO.:

INSTRUMENT:

WAVELENGTH:

ANALYST: Gjm 2523

REVIEWER:

363

RECORDER:

DATE: 8/27/93

DATE: / /

DATE: / /

CC:

SLOPE:

Y INTERCEPT:

CALIBRATION CONC.:

ABS/TRANS:	✓		✓	QC ONLY →			✓
TEST CODE:	✓	✓	✓	G119.5	G119.6	QC ONLY	✓
SAMPLE:	DSP102	BLA02	LCS	C149570	C149570	C148687	QCV
TYPE:	C149773		080293A		Amen		081293A
QC #:	Q769825	Q768922	Q768923				
TRUE VALUE:	7.57		0.2				0.02
RESULT:	1.42/3.73	0.007	0.229	3400	Bdl	0.162	0.020
UNITS:	mg/kg	mg/l →		mg/kg →		mg/l	mg/l
DETECTION LIMIT:	0.38	0.01 →		290	290	0.03	0.01
% RECOVERY:	*NA due to matrix		115%				101%
DILUTION at DIST:	6.607g/250mls			10.963g/250mls	10.963g/250mls	250mls/250mls	
DILUTION at SPEC:				1/50 1/25	1/30 1/25	10/25	
ABSORBANCE:	.268	.011	.1635	.314	.316	.173	.048
TRANSMITTANCE:							
RAW DATA:							
PREP PAGE:	30.51.526 →				3299		
COMMENT:				Reput	Reput	Reput	

PAGE: 6 OF 7

CYANIDE

RUN NO.:

364

INSTRUMENT:

WAVELENGTH:

ANALYST: JM2523

REVIEWER:

RECORDER:

DATE: / /

DATE: / /

DATE: / /

CC:

SLOPE:

Y INTERCEPT:

CALIBRATION CONC.:							
ABS/TRANS:	✓	✓	✓	✓	✓	✓	✓
TEST CODE:				G119.6			
SAMPLE:	BLA01	CCV01 080293A	BLA01	C149650	DUP02	C149651	C149652
TYPE:					C149650		
QC #:					Q769826		
TRUE VALUE:		0.20			AM2948 ~~0.170~~ 0.090		
RESULT:	<0.004	0.207	<0.004	~~0.17~~ AM2948 0.09	AM2948 ~~0.142~~ ~~0.0~~ AM2948 0.118	0.19	0.01
UNITS:	mg/l						
DETECTION LIMIT:	0.01						
% RECOVERY:		103.5%			RPD=17.9% 26.9		
DILUTION at DIST:				N/A			
DILUTION at SPEC:				N/A			
ABSORBANCE:	.000	0.572	0.000	0.468	0.389	0.164	0.264
TRANSMITTANCE:							
RAW DATA:				0.170	0.142	0.062	0.097
PREP PAGE:	526						
COMMENT:				TCN=0.26	TCN=0.26	0.25=TCN	TCN=0.11

CYANIDE

RUN NO.:

INSTRUMENT:

WAVELENGTH:

ANALYST:

REVIEWER:

RECORDER:

DATE: / /

DATE: / /

DATE: / /

CC:

SLOPE:

Y INTERCEPT:

CALIBRATION CONC.:

ABS/TRANS:

TEST CODE:	G119.6						
SAMPLE:	P149653	CCW01 08039317	BLK01				
TYPE:							
QC #:							
TRUE VALUE:		0.20					
RESULT:	0.07	0.211	<0.004				
UNITS:	mg/L						
DETECTION LIMIT:	0.01						
% RECOVERY:		105.3%					
DILUTION at DIST:	N/A						
DILUTION at SPEC:	N/A						
ABSORBANCE:	0.222	0.582	0.000				
TRANSMITTANCE:							
RAW DATA:	0.082						
PREP PAGE:	526						
COMMENT:	TCN = 0.15						

TEST: G110.4

PAGE: 1 OF 2

ANALYST: LR3064

DATE: 8/17/93

SULFIDES, TITRIMETRIC

684

REVIEWER: [illegible] 2948

DATE: 8/17/93

366

RUN: R194327

RECORDER: DJL

DATE: 8/17/93

SAMPLE:	PAO	CALO1(I_2)	ICV01	BLA01	LCS	BLA02	C149650
TYPE:	NV	NV	SULFIDE		W263		
QC NO:	W228	W262	W263		Q763339	Q763340	
TRUE VALUE:	0.0250N	0.0250N	279		279		
RESULT:	0.0256	0.0250	279	<1.6	224	<1.6	BDL
UNITS:	mg/L						
DET. LIMIT:			8	4	20	4	4
% RECOVERY:	103%	100%	100%		80%		
VOL. SAMPLE TITRATED:			100ml				
MLS PAO TITRATED:	29.5 29.3 29.4 } 29.4	9.7 9.8 9.8 } 9.77	5.0	9.8	8.6	9.8	9.7
INITIAL VOL/WGT:					50ml ICV		250ml
FINAL VOLUME:					250		
DILUTION:			50/100				
MLS OF I_2 USED:			40	10	20	10	10
COMMENTS:			139.52 (100/50)		44.8 (250/50)		

PAO: .0256 N

I_2: .0250 N

PREP PAGE:

TEST: G1104 | SULFIDES, TITRIMETRIC | RUN:

PAGE: 2 OF 2

ANALYST: LR3064 | REVIEWER: | RECORDER:

DATE: 8/17/93 | DATE: / / | DATE: / /

SAMPLE:	DUP02	C149651	C149652	C149653	SP102	CCV01	BLA01
TYPE:	C149650				W2263 C149653	W263	
QC NO:	Q763341				Q763343		
TRUE VALUE:	BDL				279	279	
RESULT:	BDL	BDL	BDL	BDL	BDL 207	262	<1.6
UNITS:	mg/L						
DET. LIMIT:	10	4	4	4	20	6	4
% RECOVERY:	RPD=0%				74%	94%	
VOL SAMPLE TITRATED:	100ml						
MLS PAO TITRATED:	9.7	9.8	9.8	9.8	9.4	4.1	9.8
INITIAL VOL/WGT:	100ml	250ml	250ml	250ml	50ml icy 150ml		
FINAL VOLUME:	250ml						
DILUTION:						70/100	
MLS OF I_2 USED:	10	10	10	10	20	50	10
COMMENTS:					41.4 $\left(\frac{250}{50}\right)$	183.2 $\left(\frac{10}{7}\right)$	

PAO: _____ N PREP PAGE: _____

I_2: _____ N

PAGE: 1 OF 1

IGNITABILITY

RUN NUMBER: R194517

INSTRUMENT:

TEST CODE: G509.9

ANALYST: LR3064

REVIEWER: AM2948

RECORDER: DL

DATE: 8/18/93

DATE: 8/19/93

DATE: 8/19/93

SAMPLE:	1CV01	C149650	DUP01	C149651	C149652	C149653	
TYPE:	W120		C149650				
TRUE VALUE:	81°						
RESULT:	81°	211°*	210°*	210°*	210°*	210°*	
UNITS:	F°						
INITIAL TEMP:	67°	53°	62°	70°	45°	65°	
% RECOVERY:	100%		RPD: 0.5%				
COMMENTS:		*boiled at 211°	* boiled at 210°	* boiled at 210°	* boiled at 210°	* boiled at 210°	

SAMPLE:							
TYPE:							
TRUE VALUE:							
RESULT:							
UNITS:							
INITIAL TEMP:							
% RECOVERY:							
COMMENTS:							

SOURCE NO:

PAGE: 1 OF 1

pH LIQUID

RUN: R194278

369

INSTRUMENT: pH meter 159

ANALYST: 2947 CRA

REVIEWER: AM 2948

RECORDER: DJL

DATE: 08, 17, 93

DATE: 8, 17, 93

DATE: 8, 17, 93

CALIBRATION 10.0 STD: 10.11 7.0 STD: 7.03 4.0 STD: 4.00 SLOPE: 100.3

TEST CODE:	↓	G07.5 ↓	↓	↓	↓	↓	CRA 8/17/93 ~~CCV01~~ ↓
♦ SAMPLE:	ICV01	C149650	C149651	C149652	C149653	Dup 01	CCV01
TYPE:	Baxter					C149653	Fisher
TRUE VALUE:	5.00					7.73	7.00
RESULT:	5.04	7.5	7.5	8.0	7.7	7.73	7.02
% RECOVERY:	101%					RPD = 0%	100%
RAW DATA:	5.04	7.51	7.49	8.03	7.73	7.73	7.02
COMMENTS:		E&E 01110	→	→	→	→	

TEST CODE:							
♦ SAMPLE:							
TYPE:							
TRUE VALUE:							
RESULT:							
% RECOVERY:							
RAW DATA:							
COMMENTS:							

92CK1404.R6