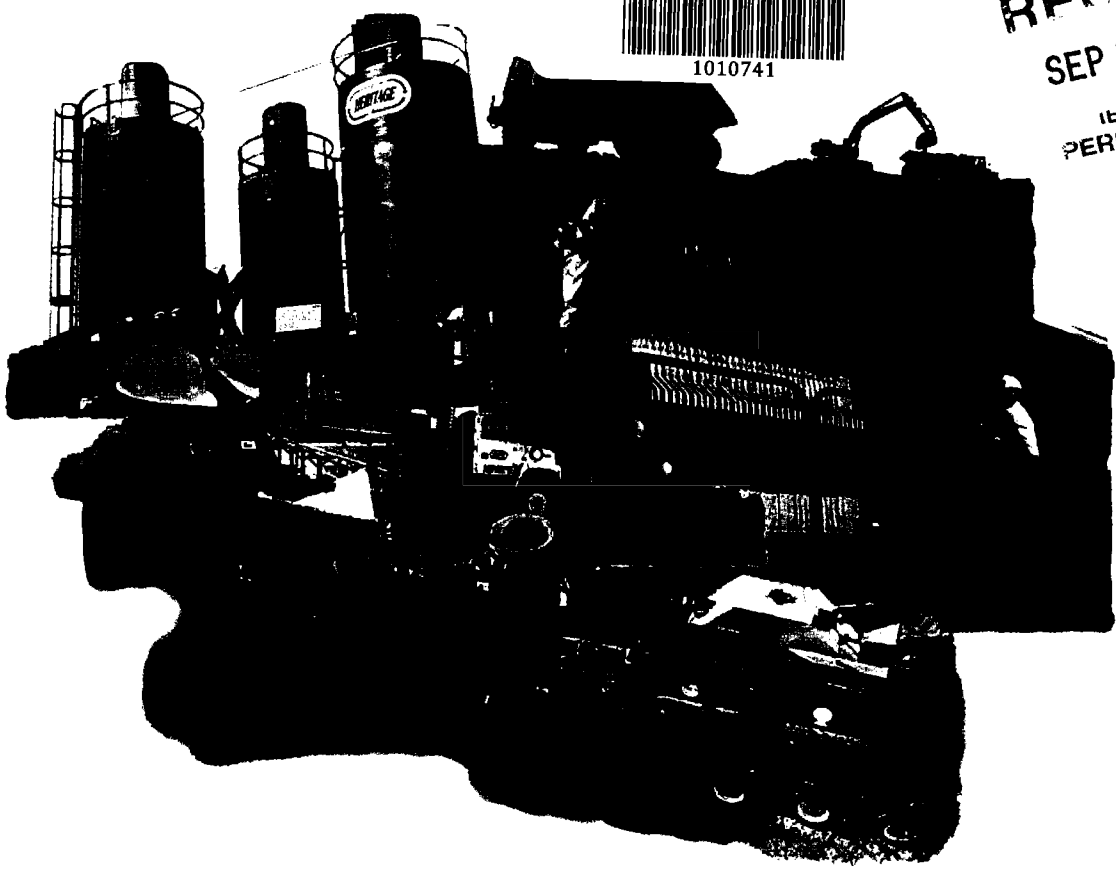
HERITAGE ENVIRONMENTAL SERVICES ■ HERITAGE LABORATORIES ■ HERITAGE TRANSPORT ■ HERITAGE REMEDIATION ENGINEERING ■ HERITAGE TREATMENT CENTERS

File in D. 2, 4.

ILD 085349264

US EPA RECORDS CENTER REGION 5
1010741

RECEIVED
SEP 1 - 1994
IEPA - BOL
PERMIT SECTION



RECEIVED
WMD RECORD CENTER
SEP 30 1994

VOLUME 2 - APPENDIX H
PART 2

RCRA FACILITY INVESTIGATION
PHASE I - REPORT

0311620007 -- Cook County
Heritage Environmental Services, Inc.
ILD 085349264

Heritage Treatment Center
Lemont, Illinois

HERITAGE REMEDIATION / ENGINEERING, INC.

HERITAGE ENVIRONMENTAL SERVICES ■ HERITAGE LABORATORIES ■ HERITAGE TRANSPORT ■ HERITAGE REMEDIATION ENGINEERING ■ HERITAGE TREATMENT CENTERS

ANALYSIS RUN: R218067

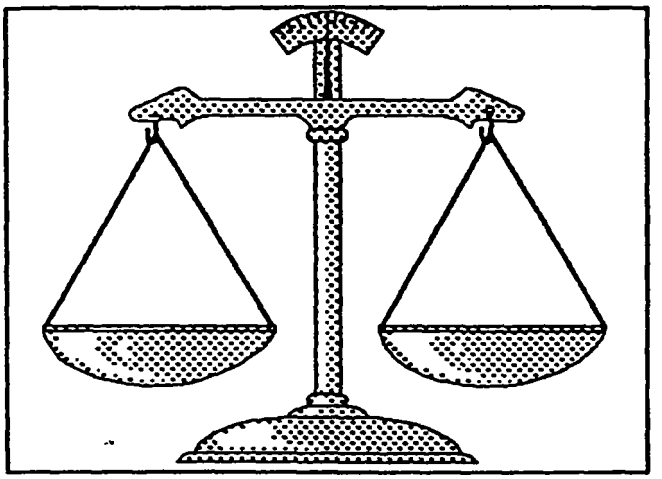
RUN NUMBER: 10005

TEST: Cd

ANALYST: Cb

DATE: 5/23/94

INSTRUMENT: 97-1



Reprep_____(complete)

Reprep_____(incomplete)

COMMENTS: _____

RECEIVED
SEP 1 - 1994
IEPA - BOL
PERMIT SECTION

91CK1072.R6

K218067

PAGE 1 OF 5

METALS, ATOMIC SPECTROSCOPY

TEST:

ELEMENT: Cd

INSTRUMENT: 97-1

WAVELENGTH: 228.8

ANALYST: Cls

DATE: 5/23/94

REVIEWER:

DATE: / /

RECORDER: Cls

DATE: 5/23/94

C.C.: 0.9994

SLOPE: 8.5

Y INTERCEPT: -0.0118

1.5 0.171/2 = 86

CALIBRATION CURVE: 0 0.1 0.2 0.5 0.75 1.0 mg/l

ABSORBANCE: 0.000 0.013 0.025 0.063 0.090 0.117

CONC. ABS.	✓	SAMPLE	TYPE	TRUE VALUE	RESULT	UNIT	DET. LIMIT	% REC.	DILUTION	WT./VOL.	FINAL VOL.	COMMENT
0.066	✓	ICV01	1905	0.5	0.550	mg/l	0.05	110				
-0.002	✓	BLA01			BDL							
0.012	✓	CDL01		0.1	0.090			90				
0.063	✓	CCV		0.5	0.524			105				
-0.001	✓	BLA01			BDL							
0.113	✓	LCS	0920273	1.0	0.950			95				
-0.002	✓	BLA02	0920274		~~-0.08~~ 0.028							
~~-0.002~~ 0.061	✗	C156212	QC	~~BDL~~ 0.5	~~-0.028~~ 0.507			96		50 ml	50 ml	
~~-0.001~~ 0.065	✓	DUP02	0920275	BDL	BDL			e				
0.115	✓	SPI02	0920276	1.0	~~BDL~~ 0.967			97				
~~-0.003~~ 0.062	✗	C156216	QC	~~BDL~~ 0.5	~~-0.037~~ 0.516			96				
0.066	✓	CCV		0.5	0.550			110				
0.001	✓	BLA01			BDL							

91CK1066.R6

000502

METALS, ATOMIC SPECTROSCOPY

TEST:

ELEMENT: Cd

INSTRUMENT: 97-1

WAVELENGTH: 228.8

ANALYST: Cb

DATE: 5/23/94

CALIBRATION CURVE:

ABSORBANCE:

REVIEWER:

DATE: / /

RECORDER:

DATE: / /

C.C.:

SLOPE:

Y INTERCEPT:

CONC.	✓	SAMPLE	TYPE	TRUE VALUE	RESULT	UNIT	DET. LIMIT	% REC.	DILUTION	WT./VOL.	FINAL VOL.	COMMENT
0.002 / 0.070	X	C156217	QC	BDL / 0.5	0.005 / 0.584	mg/l	0.05	115		50 ml	50 ml	
0.004 / 0.070	X	C156218	↓	BDL / 0.5	0.022 / 0.584			112		↓	↓	
0.053	✓	LCS	Q924420	0.4650	0.439			94				
-0.003	✓	BLA02	~~Q924419~~ ~~Q924421~~	Q925019 5-23-94	0.037							
0.058	✓	CCV		0.5	0.482			96				
-0.000	✓	BLA01			BDL							
-0.001	✓	BLA02	Q924421		0.020							
0.001 / 0.068	X	C156505		BDL / 0.5	-0.003 / 0.567			113		50 ml	50 ml	
0.001 / 0.066	✓	DUP02	Q924422	BDL	BDL			~~0~~		↓	↓	
0.055	✓	SPK02	Q924423	0.4650	BDL / 0.456			98				
-0.001 / 0.068	✓	C156588		BDL / 0.5	0.020 / 0.567			109		↓	↓	
0.064	✓	CCV		0.5	0.533			107				
-0.002	✓	BLA01			BDL	↓	↓					

91CK1066.R6

000503

METALS, ATOMIC SPECTROSCOPY

TEST:

ELEMENT: Cd

INSTRUMENT: 97-1

WAVELENGTH: 228.8

ANALYST: Cb

DATE: 5/23/94

CALIBRATION CURVE:

ABSORBANCE:

REVIEWER:

DATE: / /

RECORDER:

DATE: / /

C.C.:

SLOPE:

Y INTERCEPT:

CONC.	✓	SAMPLE	TYPE	TRUE VALUE	RESULT	UNIT	DET. LIMIT	% REC.	DILUTION	WT./VOL.	FINAL VOL.	COMMENT
0.052	✓	LCS	Q924444	0.4650	0.431	mg/l	0.05	93				
-0.001	✓	BLA02	Q924445		0.02	↓						
0.003	X	B126409	QC		BDL	mg/kg	Cb 5-23-94 ~~2.5~~ 1.3			1.993	50ml	
0.003	✓	Dup02	Q924446	BDL	BDL			~~0~~		1.99		
0.058	✓	Spi02	Q924447	11.5	BDL / 11.9			103		2.02		
0.004	✓	B126408			BDL	↓	↓			2.02	↓	
0.064	✓	CCV		0.5	0.533	mg/l	0.05	107				
-0.001	✓	BLA01			BDL		↓					
0.062	✓	LCS	Q926841	1.0	1.03		0.10	103	1:2			
-0.003	✓	BLA02	Q926842		0.037		0.05					
-0.004	X	B126261	QC		BDL	mg/kg	2.5			1.995	100ml	
-0.002	✓	Dup02	Q926843	BDL	BDL			~~0~~		2.00		
0.065	✓	Spi02	Q926844	50.2	BDL / 54.4		↓ 5.0	108	1:2	1.99	↓	

91CK1066.R6

METALS, ATOMIC SPECTROSCOPY

TEST:

ELEMENT: Cd

INSTRUMENT: 97-1

WAVELENGTH: 228.8

ANALYST: CL

DATE: 5/23/94

CALIBRATION CURVE:

ABSORBANCE:

REVIEWER:

DATE: / /

RECORDER:

DATE: / /

C.C.:

SLOPE:

Y INTERCEPT:

CONC.	✓	SAMPLE	TYPE	TRUE VALUE	RESULT	UNIT	DET. LIMIT	% REC.	DILUTION	WT./VOL	FINAL VOL	COMMENT
-0.002	✓	C156720			BDL	mg/kg	2.5			2.039	100ml	
0.009	✓	C156722			3.2	↓	↓			2.03	↓	
-0.000	✓	C156723			BDL	↓	↓			1.97	↓	
0.0666	✓	CCV		0.5	0.550	mg/l	0.05	110				
-0.001	✓	BLA01			BDL	↓	↓					
0.061	✓	LCS	Q928479	1.0	1.01	↓	0.10	101	1:2			
-0.001	✓	BLA02	Q928480		0.020	↓	0.05					
-0.001	X	C156715										
0.064	✓	CCV		0.5	0.533	mg/l	0.05	107				
0.000	✓	BLA01			BDL							
~~0.003~~ 0.068	✓	C156715		~~BDL~~ 0.5	~~0.014~~ 0.567			110		.50ml	50ml	
	X	DUP02	Q928481									
0.065	✓	MSP		1.0	BDL ~~0.544~~ 1.08			108	1:2	↓	↓	

CL 5-23-94

91CK1066.R6

0005d5

PAGE 5 OF 5

METALS, ATOMIC SPECTROSCOPY

TEST:

ELEMENT: Cd

INSTRUMENT: 97-1

WAVELENGTH: 228.8

ANALYST: Cl

DATE: 5/23/94

CALIBRATION CURVE:

ABSORBANCE:

REVIEWER:

DATE: / /

RECORDER:

DATE: / /

C.C.:

SLOPE:

Y INTERCEPT:

CONC.	✓	SAMPLE	TYPE	TRUE VALUE	RESULT	UNIT	DET. LIMIT	% REC.	DILUTION	WT./VOL.	FINAL VOL.	COMMENT
0.003 / 0.071	✓	Dup02	Q928481	BDL	BDL	mg/l	0.05	Ø		50ml	50ml	
0.063	✓	Spi02	Q928482	1.0	BDL / 1.05		0.10	105	1:2	↓	↓	
0.065	✓	CCV		0.5	0.541		0.05	108				
0.000	✓	Bla01			BDL							
-0.000 / 0.067	✓	C156716		BDL / 0.5	-0.012 / 0.558			109		50ml	50ml	
-0.001 / 0.067	✓	C156717		BDL / 0.5	-0.020 / 0.558			108				
-0.000 / 0.066	✓	C156718		BDL / 0.5	-0.012 / 0.549			108				
-0.008 / 0.066	✓	C156719		BDL / 0.5	-0.029 / 0.549			104		↓	↓	
0.064	✓	CCV		0.5	0.533			107				
0.001	✓	Bla01			BDL							
0.013	✓	CDL01		0.1	0.099	↓	↓	99				

91CK1066.R6

		0.002 Z	
		0.002 Z	
		0.002 Z	
		0.000AV	
		-0.002 Z	
		0.000 Z	
		0.001 Z	
		0.000AV	
		0.001 Z	
		0.001 Z	
		0.000 Z	
		0.000AV	
		0.001	
		0.000	
		0.000	
	0	0.000AV	
		0.013	
		0.013	
		0.013	
	0.1	0.013AV	041394C
		0.025	
		0.024	
		0.024	
	0.2	0.025AV	
		0.062	CH1394B
		0.063	
		0.063	
	0.5	0.063AV	
		0.090	CH2694A
		0.089	
		0.090	
	0.75	0.090AV	CH1394A
		0.116	
		0.118	
		0.116	
	1.0	0.117AV	
		0.172	F052394A
		0.170	
		0.170	
	15	0.171AV	
		0.066	F052394B
		0.066	
		0.066	
ICV01	1905	0.066AV	
		-0.002	022894B
		-0.001	
		-0.002	
B1A01	0	-0.002AV	
		0.013	
		0.012	
		0.012	
	0.1	0.012AV	
		0.063	F050994B CDL01
		0.063	
		0.063	
	0.5	0.063AV	CCV
		-0.000	
		-0.001	
		-0.001	B1A01

Cls
Cd
97-1
5-23-94

000507

		0.115	
		0.112	
Q920	273	0.113AV	LCS
		-0.001	
		-0.002	
		-0.001	
Q920	274	-0.002AV	Blk Ø2
		-0.001	
		-0.003	
		-0.002	
C156	212	-0.002AV	
		0.063	
		0.061	
		0.060	
	1	0.061AV	1point
		-0.002	
		-0.000	
		-0.002	
Q920	275	-0.001AV	Dup Ø2
		0.065	
		0.065	
		0.064	
	1	0.065AV	
		0.114	
		0.115	
		0.116	
Q920	276	0.115AV	Spi Ø2
		-0.003	
		-0.004	
		-0.003	
C156	216	-0.003AV	
		0.055	
		0.070	
		0.069	
	1	0.065AV	1point
		0.071	
		0.071	
		0.046	Rerun
	2	0.062AV	
		0.066	
		0.066	
		0.065	
	0.5	0.066AV	CCV
		0.001	
		0.002	
		0.001	
	0	0.001AV	Blk Ø1
		0.002	
		0.002	
		0.002	
C156	217	0.002AV	
		0.071	
		0.071	
		0.068	
	1	0.070AV	
		0.004	
		0.003	
		0.003	
C156	218	0.004AV	
		0.070	
		0.070	
		0.070	
	1	0.070AV	
		0.054	

		0.054	
Q924	420	0.053AV	LCS
		-0.002	
		-0.003	
		-0.003	
Q925	0 19	-0.003AV	Bla Ø2 Spin Blank
		0.059	
		0.057	
		0.058	
O.	5	0.058AV	CCV
		-0.000	
		0.000	
		-0.001	
	0	-0.000AV	Bla Ø1
		-0.000	
		-0.002	
		-0.001	
Q924	421	-0.001AV	Bla Ø2
		0.001	
		-0.000	
		0.001	
C156	505	0.001AV	
		0.064	
		0.069	
		0.070	
	1	0.068AV	1point
		0.001	
		-0.000	
		0.001	
Q924	422	0.001AV	Dup Ø2
		0.067	
		0.065	
		0.067	
	1	0.066AV	
		0.055	
		0.054	
		0.055	
Q924	423	0.055AV	Sp. Ø2
		-0.001	
		-0.001	
		-0.001	
C156	588	-0.001AV	
		0.068	
		0.068	
		0.068	
	1	0.068AV	1point
		0.064	
		0.064	
		0.063	
O.	5	0.064AV	CCV
		-0.004	
		-0.003	
		-0.001	
	0	-0.002AV	Bla Ø1
		0.052	
		0.052	
		0.052	
Q924	444	0.052AV	LCS
		-0.001	
		0.000	
		-0.001	
Q924	445	-0.001AV	Bla Ø2
		0.003	
		0.003	
		0.003	

		0.003	
		0.003	
		0.004	
Q926	446	0.003AV	DupØ2
		0.057	
		0.058	
		0.058	
Y126	447	0.058AV	SpiØ2
		0.004	
		0.005	
		0.005	
B126	408	0.005AV	
		0.064	
		0.064	
		0.064	
C1	5	0.064AV	CCV
		-0.001	
		-0.001	
		-0.001	
	0	-0.001AV	BlaØ1
		0.121	
		0.120	
		0.120	
Q926	841	0.120AV	LCS
		0.062	
		0.062	
		0.062	
Q926	841Z	0.062AV	1:2
		-0.003	
		-0.003	
		-0.004	
Q926	842	-0.003AV	BlaØ2
		-0.004	
		-0.004	
		-0.004	
B126	261	-0.004AV	
		-0.002	
		-0.003	
		-0.002	
Q926	843	-0.002AV	DupØ2
		0.127	
		0.127	
		0.025	
Q926	844	0.093AV	SpiØ2
		0.065	
		0.065	
		0.065	
Q926	844Z	0.065AV	1:2
		-0.001	
		-0.001	
		-0.005	
C156	720	-0.002AV	
		0.010	
		0.009	
		0.010	
C156	722	0.009AV	
		-0.001	
		0.001	
		-0.001	
C156	723	-0.000AV	
		0.067	
		0.066	
		0.065	
	0.5	0.066AV	CCV
		-0.001	

000510

		-0.001	
	0	-0.001AV	Bla01
		0.120	
		0.119	
		0.120	
Q928	479	0.120AV	LCS
		0.061	
		0.061	
		0.060	1:2
	4792	0.061AV	
		-0.000	
		-0.000	
		-0.002	
Q928	480	-0.001AV	Bla02
		-0.000	
		-0.001	
		-0.001	
C156	715	-0.001AV	Rerun
		0.030	
		0.048	
		0.066	
	1	0.048AV	
		0.074	Rerun Ipoints
		0.059	
		0.066	
	2	0.060AV	
		0.064	
		0.065	
		0.063	
C.	5	0.064AV	CCV
		0.001	
		0.002	
		-0.002	
	0	0.000AV	Bla01
		0.003	
		0.001	
		0.002	
C156	715	0.002AV	
		0.068	
		0.069	
		0.068	
	1	0.068AV	Ipoint
		0.122	
		0.122	
		0.123	
	1	0.122AV	MSP C156715
		0.065	
		0.065	
		0.065	1:2
	2	0.065AV	
		0.003	
		0.004	
		0.002	
Q928	481	0.003AV	Dup02
		0.071	
		0.070	
		0.071	
	1	0.071AV	Ipoint
		0.123	
		0.122	
		0.036	
Q928	482	0.094AV	Spi02
		0.063	
		0.062	

000511

		0.065	
		0.064	
		0.065	
	0.5	0.065AV	CCV
		-0.001	
		0.001	
		0.001	
	0	0.000AV	BlAØ1
		-0.000	
		0.001	
		-0.001	
C156	716	-0.000AV	
		0.066	
		0.068	
		0.066	
	1	0.067AV	1point
		0.000	
		-0.001	
		-0.002	
C156	717	-0.001AV	1point
		0.067	
		0.067	
		0.068	
	1	0.067AV	
		0.000	
		-0.000	
		-0.000	
C156	718	-0.000AV	
		0.066	
		0.066	
		0.066	
	1	0.066AV	1point
		-0.002	
		-0.001	
		-0.002	
C156	719	-0.002AV	
		0.066	
		0.066	
		0.066	
	1	0.066AV	1point
		0.064	
		0.064	
		0.064	
	0.5	0.064AV	CCV
		0.001	
		0.001	
		-0.000	
	0	0.001AV	BlAØ1
		0.013	
		0.013	
		0.013	
	0.1	0.013AV	CDLØ1

CORRECTIVE ACTION REPORT

TEST Cd ANALYSIS RUN _____ RUN NUMBER _____

ANALYST JM/dls DATE 5-27-94 INSTRUMENT _____

Describe the problem Spike solution incorrectly prepared by Analyst.

Describe Corrective Action Solution analyzed neat by ICP to develop TRUE Values — List attached.

Analyst instructed to review preparation techniques. Analyst will now have any new spike solutions analyzed by ICP to verify true values prior to use in preparations

Comments Set R217299 ; R217304

Approved [signature] Date 5-27-94

QA [signature] 5-27-94

000513

Spike

LCS True Value

593	LCS-R1
594	SP102W-R1

Al 1.529
Al 1.347
As 0.4633
Ba 1.526
Be 0.4295
Ca 0.3652
Cd 0.4650
Co 0.4668
Cr 0.4720
Cu 0.4569
Fe 0.4448
K 14.15
Mg 0.4477
Mn 0.4542
Ni 0.4604
Pb 0.4392
Sb 0.4889
Se 0.4609
Tl 0.4467

V 0.4520
Zn 0.4509

000514

ANALYSIS RUN: R218292

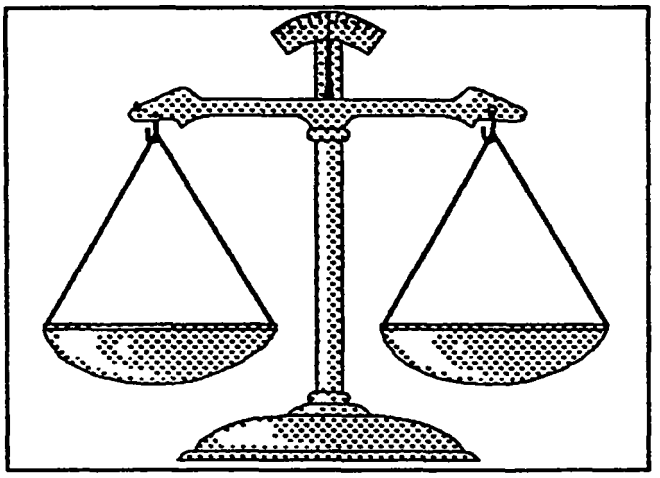
RUN NUMBER: 10011

TEST: Ag

ANALYST: CD

DATE: 5/25/94

INSTRUMENT: 97-1



Reprep_____(complete)

Reprep_____(incomplete)

COMMENTS: _____

91CK1072.R6

PAGE: 1 OF 6

METALS, ATOMIC SPECTROSCOPY

RUN NUMBER: R218293

TEST:

REVIEWER:

ELEMENT: Ag

DATE: 1

INSTRUMENT: 97-1

RECORDER: DJL

WAVELENGTH: 328.1

DATE: 5/26/94

ANALYST: CLB

CALIBRATION CURVE: 0 0.5 1.0 1.5 2.0 2.5

C.C.: 0.9998

DATE: 5/25/94

ABSORBANCE: 0.001 0.040 0.073 0.113 0.148 0.186

mg/l SLOPE: 13.57

Y INTERCEPT: -0.0189

ABS.	✓	SAMPLE	TYPE	TRUE VALUE	RESULT	UNIT	DET. LIMIT	% REC.	DILUTION	WT./VOL.	FINAL VOL.	COMMENT
0.118	✓	ICV01	715	1.5	1.58	mg/l	0.05	105				
0.002	✓	BLA01			BDL							
0.010	✓	CDL01		0.15	0.117			78				
0.071	✓	CCV		1.0	0.945			94				
-0.001	✓	BLA01			BDL							
0.107	✓	LCS	QF124420	1.529	1.43			94				
-0.001	✓	BLA01	QF124421		0.03							
-0.000 / 0.079	✓	C156505	M630.5	BDL / 1.0	-0.019 / 1.05			103		50.0	50.0	
0.001 / 0.077	✓	DUP01	QF124422	BDL	BDL			~~0~~				
0.105	✓	SPK01	QF124423	1.529	BDL / 1.41			92				
0.004 / 0.084	✓	C156503	M630.5	BDL / 1.0	0.035 / 1.12			109				
0.077	✓	CCV		1.0	1.03			103				
-0.000	✓	BLA01			BDL							

91CK1066.R6

0005143

PAGE: 2 OF 6

METALS, ATOMIC SPECTROSCOPY

RUN NUMBER:

TEST:

REVIEWER:

ELEMENT: Ag

DATE: / /

INSTRUMENT: 97-1

RECORDER:

WAVELENGTH: 328.1

DATE: / /

ANALYST: QS

CALIBRATION CURVE:

C.C.:

DATE: 5/25/94

ABSORBANCE:

SLOPE:

Y INTERCEPT:

ABS.	✓	SAMPLE	TYPE	TRUE VALUE	RESULT	UNIT	DET. LIMIT	% REC.	DILUTION	WT./VOL.	FINAL VOL.	COMMEN
-0.000 / 0.080	✓	C156504	M630.5	BDL / 1.0	-0.019 / 1.07	mg/l	0.05	105		50ml	50ml	
-0.002 / 0.076	✓	C156588	↓	BDL / 1.0	-0.016 / 1.01	↓	↓	96		↓	↓	
	X	BLA02	Q									
0.071	✓	CCV		1.0	0.945	mg/l	0.05	94				
-0.001	✓	BLA01			BDL	↓	↓					
	X	BLA02	Q925019									
0.071	✓	CCV		1.0	0.945	mg/l	0.05	94				
0.002	✓	BLA01			BDL							
0.002	✓	BLA02	Q925019		<0.02							
0.073	✓	LCS	Q928479	1.0	0.972			97				
0.002	✓	BLA02	Q928480		<0.02							
-0.001 / 0.076	✓	C156715	M730.5	BDL / 1.0	-0.032 / 1.01			98		50ml	50ml	
0.034	✓	MSP		1.0	BDL / 0.442			44		↓	↓	

91CK1066.R6

000517

PAGE: 3 OF 6

METALS, ATOMIC SPECTROSCOPY

RUN NUMBER:

TEST:

REVIEWER:

ELEMENT: Ag

DATE: / 000518

INSTRUMENT: 97-1

RECORDER:

WAVELENGTH: 328.1

DATE: / /

ANALYST: Cls

CALIBRATION CURVE:

C.C.:

DATE: 5 / 25 / 94

ABSORBANCE:

SLOPE:

Y INTERCEPT:

ABS.	✓	SAMPLE	TYPE	TRUE VALUE	RESULT	UNIT mg/l	DET. LIMIT 0.05	% REC.	DILUTION	WT./VOL	FINAL VOL	COMMENT
0.002 / 0.081	✓	Dup02	Q928481		BDL	~~BDL~~	~~mg/l~~	~~0.05~~	Ø			
0.072	✓	Spi02	Q928482	1.0	BDL / 0.958			96				
0.074	✓	CCV		1.0	0.985			98				
-0.001	✓	Bla01			BDL							
0.000 / 0.080	✓	C156716	M630.5	BDL / 1.0	-0.018 / 1.07			105		50ml	50ml	
	X	C156717										
0.071	✓	CCV		1.0	0.945	mg/l	0.05	94				
-0.001	✓	Bla01			BDL							
-0.001 / 0.077	✓	C156717	M630.5	BDL / 1.0	-0.032 / 1.03			100		50ml	50ml	
0.000 / 0.071	✓	C156718		BDL / 1.0	-0.018 / 0.945			93				
-0.001 / 0.071	✓	C156719		BDL / 1.0	-0.032 / 0.945			91				
0.070	✓	CCV		1.0	0.931			93				
0.002	✓	Bla01			BDL							

91CK1066.R6

PAGE: 5 OF 6

METALS, ATOMIC SPECTROSCOPY

RUN NUMBER:

TEST:

REVIEWER:

ELEMENT: Ag

DATE: / /

INSTRUMENT: 97-1

RECORDER:

WAVELENGTH: 328.1

DATE: / /

ANALYST: CLS

CALIBRATION CURVE:

C.C.:

DATE: 5/25/94

ABSORBANCE:

SLOPE:

Y INTERCEPT:

ABS.	✓	SAMPLE	TYPE	TRUE VALUE	RESULT	UNIT	DET. LIMIT	% REC.	DILUTION	WT./VOL.	FINAL VOL.	COMMEN
0.000	✓	Blank 1			BDL	mg/l	0.05					
0.075	✓	LCS	Q928519	1.0	0.999			100				
0.001	✓	Blank	Q928520		<0.02							
0.002 / 0.081	✓	C156765	M630.5	BDL / 1.0	0.002 / 1.08			107		50 ml	50 ml	
0.001 / 0.081	✓	Dupl	Q928521	BDL	BDL			0				
0.059	✓	Spike	Q928522	1.0	BDL / 0.782			78				
-0.002 / 0.074	✓	C156863	M630.5	BDL / 1.0	-0.046 / 0.985			94				
0.071	✓	CCV		1.0	0.945			95				
0.000	✓	Blank 1			BDL							
0.001 / 0.073	✓	C156766	M630.5	BDL / 1.0	-0.005 / 0.972			97		50 ml	50 ml	
-0.002 / 0.079	✓	C156767		BDL / 1.0	-0.046 / 1.05			100				
-0.002 / 0.078	✓	C156768		BDL / 1.0	-0.046 / 1.04			99				
0.001 / 0.081	✓	C156769		BDL / 1.0	-0.005 / 1.08			108				

91CK1066.R6

000519

PAGE: 6 OF 6

METALS, ATOMIC SPECTROSCOPY

RUN NUMBER:

TEST:

REVIEWER:

ELEMENT: Ag

DATE: / /

INSTRUMENT: 97-1

RECORDER:

WAVELENGTH: 328.1

DATE: / /

ANALYST: Cls

CALIBRATION CURVE:

C.C.:

DATE: 5/25/94

ABSORBANCE:

SLOPE:

Y INTERCEPT:

ABS.	✓	SAMPLE	TYPE	TRUE VALUE	RESULT	UNIT	DET. LIMIT	% REC.	DILUTION	WT./VOL.	FINAL VOL.	COMMEN
0.075	✓	CCV		1.0	0.999	mg/l	0.05	100				
0.001	✓	BLAØ1			BDL							
0.007 / 0.083	✓	C156812	M630.5	BDL / 1.0	0.035 / 1.11			107		50ml	50ml	
0.000 / 0.079	✓	C156813		BDL / 1.0	-0.019 / 1.05			103				
-0.001 / 0.079	✓	C156815		BDL / 1.0	0.038 / 1.05			102				
0.001 / 0.080	✓	C156816		BDL / 1.0	-0.005 / 1.07			106				
0.074	✓	CCV		1.0	0.985			98				
0.002	✓	BLAØ1			BDL							
0.013	✓	CDLØ1		0.15	0.158			105				

91CK1066.R6

CORRECTIVE ACTION REPORT

TEST Ag ANALYSIS RUN _____ RUN NUMBER _____

ANALYST JM/ds DATE 5-27-94 INSTRUMENT _____

Describe the problem Spike solution incorrectly prepared by Analyst.

Describe Corrective Action Solution analyzed neat by ICP to develop True Values — List attached.

Analyst instructed to review preparation techniques. Analyst will now have any new spike solutions analyzed by ICP to verify true values prior to use in preparations.

Comments Set R217299

Approved [signature] Date 5-27-94

QA [signature] 5-27-94

000521

Spike

LCS True Value

593	LCS-R1
594	SP102W-R1

Al 1.529
Al 1.347
As 0.4633
Ba 1.526
Be 0.4295
Ca 0.3652
Cd 0.4650
Co 0.4668
Cr 0.4720
Cu 0.4569
Fe 0.4448
K 14.15
Mg 0.4477
Mn 0.4542
Ni 0.4604
Pb 0.4392
Si 0.4889
Se 0.4609
Tl 0.4467

V 0.4520
Zn 0.4509

000522

PAGE: 4 OF 6

METALS, ATOMIC SPECTROSCOPY

RUN NUMBER:

TEST:

REVIEWER:

ELEMENT: Ag

DATE: / /

INSTRUMENT: 97-1

RECORDER:

WAVELENGTH: 328.1

DATE: / /

ANALYST: CL

CALIBRATION CURVE:

C.C.:

DATE: 5/25/94

ABSORBANCE:

SLOPE:

Y INTERCEPT:

ABS.	✓	SAMPLE	TYPE	TRUE VALUE	RESULT	UNIT	DET. LIMIT	% REC.	DILUTION	WT./VOL.	FINAL VOL.	COMMENT
0.074	✓	LCS	Q128336	1.0	0.985	mg/l	0.05	98				
0.002	✓	B1A02	Q128338	6-2-94	<0.02							
-0.000 / 0.070	✓	C156691	M630.5	BDL / 1.0	-0.019 / 0.931			91		50ml	50ml	
0.004 / 0.088	✓	D0202	Q128339	BDL	BDL			Ø				
0.062	✓	3202	Q128340	1.0	BDL / 0.822			82				
-0.000 / 0.072	✓	C156706	M630.5	BDL / 1.0	-0.019 / 0.958			94				
0.072	✓	CCV		1.0	0.958			96				
0.000	✓	B1A01			BDL							
-0.002 / 0.072	✓	C156707	M630.5	BDL / 1.0	-0.0016 / 0.958			91		50ml	50ml	
0.002 / 0.079	✓	C156711		BDL / 1.0	0.008 / 1.05			105				
0.000 / 0.079	✓	C156712		BDL / 1.0	-0.019 / 1.05			103				
0.000 / 0.084	✓	C156714		BDL / 1.0	-0.019 / 1.12			110				
0.075	✓	CCV		1.0	1.00			100				

CK1066.R6

0.001 Z
0.001 Z
0.002 Z
0.000AV
0.001
0.001
0.001
0 0.001AV
0.039
0.040
0.040
0.5 0.040AV
0.073 F052594B
0.073
0.074
1.0 0.073AV F051394B
0.112
0.113
0.113
1.5 0.113AV F052594C
0.149
0.148
0.149
2.0 0.148AV F052594D
0.186
0.187
0.185
2.5 0.186AV
0.117 F052594E
0.118
0.120
ICV01 715 0.118AV
0.002 F051394C
0.002
0.002
0 0.002AV B1A01
0.000
0.000
-0.000
1 ~~0.000AV~~ No silver in this STD
0.010
0.010
0.010
0.1 0.010AV 1:10 of F051394C at bench
0.071
0.071
0.071
1.0 0.071AV CCV
-0.001
-0.001
-0.001
0 -0.001AV B1A01
0.106
0.107
0.107
Q924 420 0.107AV LCS
-0.002
-0.002
Q924 -0.001 B1A01

C.6
5-25-94
Ag
97-1

000524

		-0.001	
		-0.000	
		-0.000	
C156	505	-0.000AV	
		0.069	
		0.077	
		0.091	
	1	0.079AV	1point
		0.002	
		0.001	
		0.002	
Q924	422	0.001AV	DupØ2
		0.077	
		0.079	
		0.076	
	1	0.077AV	
		0.105	
		0.106	
		0.105	
Q924	423	0.105AV	SpiØ2
		0.004	
		0.004	
		0.004	
C156	503	0.004AV	
		0.091	
		0.086	
		0.075	
	1	0.084AV	
		0.076	
		0.077	
		0.077	
	1	0.077AV	CCr
		0.000	
		-0.001	
		-0.000	
	0	-0.000AV	BlAØ1
		-0.001	
		0.000	
		-0.000	
_156	504	-0.000AV	
		0.076	
		0.083	
		0.080	
	1	0.080AV	
		-0.002	
		-0.002	
		-0.002	
C156	588	-0.002AV	
		0.077	
		0.075	
		0.076	
	1	0.076AV	
		-0.005	
		-0.005	
		-0.006	
	~~530~~	~~-0.005AV~~	Repeated
		0.071	
		0.071	
		0.071	
	1.0	0.071AV	CCr
		-0.000	
		-0.001	
		-0.001	
	0	-0.001AV	BlAØ1
		0.072	

		0.070	
		0.070	
	19	0.070AV	
		-0.003	
		-0.004	
		-0.004	
	19	-0.004AV	
		-0.004	Rerun
		-0.003	
		-0.002	
	20	-0.003AV	
	-0.006 Z		
	-0.003 Z		
	-0.003 Z		
	0.000AV		
		0.069	
		0.072	
		0.071	
	1.0	0.071AV	CCV
		0.002	
		0.001	
		0.002	
	0	0.002AV	BLK 1
		0.002	
		0.002	
		0.002	
9250	19	0.002AV	BLK02 Spin Blank
		0.073	
		0.072	
		0.072	
128	479	0.073AV	LCS
		0.002	
		0.003	
		0.002	
928	480	0.002AV	BLK02
		-0.001	
		-0.001	
		-0.001	
M56	715	-0.001AV	
		0.075	
		0.076	
		0.076	
	1	0.076AV	1point
		0.032	
		0.036	
		0.035	
	1	0.034AV	MBC spike
		0.002	
		0.002	
		0.002	
928	481	0.002AV	Dup02
		0.081	
		0.080	
		0.082	
	1	0.081AV	
		0.072	
		0.073	
		0.072	
.28	482	0.072AV	Spi02
		0.075	
		0.074	
		0.074	
	1	0.074AV	CCV
		-0.002	
		0.000	

		0.000	
		0.000	
		0.001	
2156	716	0.000AV	
		0.076	
		0.082	
		0.081	
	1	0.080AV	1point
		-0.002	
		-0.004	
		-0.003	
	717	-0.003AV	Repeated
		0.070	
		0.071	
		0.071	
	1	0.071AV	CCV
		-0.000	
		-0.001	
		-0.001	
	0	-0.001AV	BLØ1
		-0.001	
		-0.001	
		-0.001	
C156	717	-0.001AV	
		0.077	
		0.076	
		0.077	
	1	0.077AV	
		-0.000	
		0.001	
		-0.000	
56	718	0.000AV	
		0.061	
		0.070	
		0.080	
	1	0.071AV	
		-0.000	
		-0.001	
		-0.000	
.56	719	-0.001AV	
		0.072	
		0.074	
		0.069	
	1	0.071AV	
		0.070	
		0.070	
		0.070	
	1.0	0.070AV	CCV
		0.002	
		0.002	
		0.001	
	0	0.002AV	BLØ1
		0.073	
		0.074	
		0.073	
Q928	337	0.074AV	LCS
		0.001	
		0.002	
		0.002	
Q928	338 cb	0.002AV	BLØ2
	5-25-94	0.000	
		0.000	
		-0.001	
C156	691	-0.000AV	
		0.069	

000527

		0.073	
	1	0.070AV	1 point
		0.004	
		0.003	
		0.004	
Q928339 ~~338~~		0.004AV	Dup#2
Clo 5-25-94		0.094	
		0.088	
		0.082	
	1	0.088AV	
		0.062	
		0.063	
		0.062	
~~Q928340~~ Clo 5-25-94 ~~339~~		0.062AV	
Q928340		0.000	
		0.000	
		-0.000	
C156	706	-0.000AV	
		0.073	
		0.070	
		0.072	
	1	0.072AV	
		0.071	
		0.072	
		0.072	
	1.0	0.072AV	CCV
		0.001	
		-0.000	
		0.000	
	0	0.000AV	BK#1
		-0.002	
		-0.002	
		-0.002	
C156	707	-0.002AV	
		0.072	
		0.073	
		0.072	
	1	0.072AV	
		0.002	
		0.002	
		0.002	
C156	711	0.002AV	
		0.076	
		0.073	
		0.087	
	1	0.079AV	
		0.000	
		0.000	
		0.000	
C156	712	0.000AV	
		0.078	
		0.078	
		0.079	
	1	0.079AV	
		0.000	
		-0.000	
		-0.000	
56	714	0.000AV	
		0.082	
		0.089	
		0.082	
	1	0.084AV	
		0.076	
		0.076	
		0.075	

		0.000	
		0.001	
		0.000	
	0	0.000AV	BlØ1
		0.075	
		0.074	
		0.074	
Q928	519	0.075AV	LCS
		0.001	
		0.000	
		0.001	
Q928	520	0.001AV	BlØ2
		0.002	
		0.002	
		0.002	
C156	765	0.002AV	
		0.086	
		0.082	
		0.076	
	1	0.081AV	
		0.001	
		0.001	
		0.001	
Q928	521	0.001AV	DupØ2
		0.066	
		0.087	
		0.092	
	1	0.081AV	
		0.059	
		0.059	
		0.059	
Q928	522	0.059AV	SpiØ2
		-0.001	
		-0.002	
		-0.002	
C156	863	-0.002AV	
		0.061	
		0.077	
		0.084	
	1	0.074AV	
		0.071	
		0.071	
		0.070	
	1	0.071AV	CCV
		-0.000	
		0.001	
		0.000	
	0	0.000AV	BlØ1
		0.001	
		0.001	
		0.000	
C156	766	0.001AV	
		0.058	
		0.073	
		0.078	
	1	0.070AV	1point Repeated
		0.094	
		0.085	
		0.008	
	1	0.062AV	
		0.072	
		0.073	
		0.072	
	1	0.073AV	1point
		-0.001	

000529

		-0.004	
C156	767	-0.002AV	
		0.079	
		0.079	
		0.078	
	1	0.079AV	
		-0.001	
		-0.002	
		-0.002	
C156	768	-0.002AV	
		0.077	
		0.077	
		0.079	
	1	0.078AV	
		0.001	
		0.001	
C156769	~~768~~ 5-25-94	0.002	
		0.001AV	
		0.080	
		0.081	
		0.081	
	1	0.081AV	
		0.075	
		0.075	
		0.074	
	1	0.075AV	CCV
		-0.000	
		0.001	
		0.001	
	0	0.001AV	BLAZO 1
		0.004	
		0.003	
		0.004	
C156	812	0.004AV	
		0.082	
		0.083	
		0.083	
	1	0.083AV	
		-0.000	
		0.001	
		0.000	
C156	813	0.000AV	
		0.079	
		0.079	
		0.080	
	1	0.079AV	
		-0.000	
		-0.001	
		-0.001	
C156	815	-0.001AV	
		0.079	
		0.079	
		0.081	
	1	0.079AV	
		0.001	
		0.001	
		0.002	
6	816	0.001AV	
		0.080	
		0.081	
		0.080	
	1	0.080AV	
		0.074	
		0.075	
		0.074	

1.0	0.074AV	CCV
	0.002	
	0.002	
	0.002	
0	0.002AV	BAØ1
	0.012	
	0.013	
	0.012	
0.1	0.013AV	COLØ1

ANALYSIS RUN: R218104

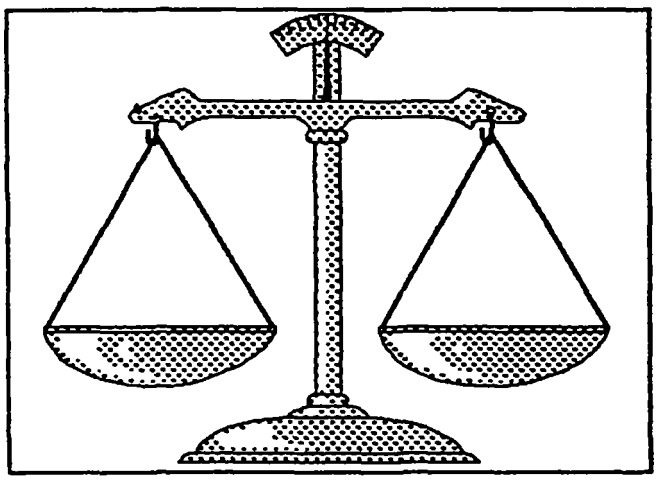
RUN NUMBER: 10017

TEST: AS 136

ANALYST: Jhc 2520

DATE: 5 / 23 / 94

INSTRUMENT: #22



Reprep_____(complete)

Reprep_____(incomplete)

COMMENTS: _____

91CK1072.R6

PAGE 1 OF 8

METALS, GFAA

RUN: RQ18694

ANALYST: Jn 2520 REVIEWER: Cls RECORDER: Dx

DATE: 5/28/94 DATE: 5/31/94 DATE: 5/31/94

INSTRUMENT: #22 ELEMENT: As 136 WAVELENGTH: 1937

CAL. CURVE.: 0 | 0.005 | 0.010 | 0.020 | 0.040 | mg/L

RESPONSE: ~~0.003~~ 0.004 | 0.022 | 0.048 | 0.102 | 0.203 | Jn 5/28/94

ADD 1 CONC.: ADD 2 CONC.: ADD 3 CONC.:

C.C.: 0.999 SLOPE: 0.197 Y INTERCEPT: 0.00005

SAMPLE:	ICV01	BLA01	CDL	C156727	C156728	CCV
TYPE:	G052594B		#05C294F	[illegible]	[illegible]	#05C294F
VALUE:	0.02		0.02			0.02
RESULT:	0.0195	BDL	0.0200	4.80	BDL	0.0202
UNITS:	mg/L	→	→	mg/kg	mg/kg	mg/L
DET. LIMIT:	0.010	→	→	2.51	1.26	0.010
% RECOVERY:	98%		100%			101%
WT/VOL:				1.99	1.98	
FINAL VOL:				50	50	
DILUTE:				1:10	1:5	
SAMABS:	0.098	0.004	0.101	0.097	0.000	0.102
AD1ABS:				0.149	0.052	
AD2ABS:						
AD3ABS:						
COMMENT:						

000533

PAGE 2 OF 8 **METALS, GFAA** RUN:

ANALYST: Jn 2520 REVIEWER: RECORDER:

DATE: 5/28/94 DATE: / / DATE: / /

INSTRUMENT: #22 ELEMENT: AS 136 WAVELENGTH: 193.7

CAL. CURVE.:

RESPONSE:

ADD 1 CONC.: ADD 2 CONC.: ADD 3 CONC.:

C.C.: SLOPE: Y INTERCEPT:

SAMPLE:	B1001	LCS	B1002	C156716	D0802	Spion
TYPE:		[illegible]	Q928486	[illegible]	C156716 Q928487	C156716 Q928488
VALUE:	1	0.10		BDL / 0.01	BDL	0.10
RESULT:	BDL	0.101	BDL	(0.0020) BDL / 0.0119	BDL	BDL / 0.095
UNITS:	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
DET. LIMIT:	0.010	~~0.010~~ 0.05	0.010	0.005	0.005	0.025
% RECOVERY:		Jn 5 28 94 101 %		99%	0% RPD	95%
WT/VOL:				50	50	50
FINAL VOL:		50	50	50	50	50
DILUTE:		1:5		–	–	1:5
SAMABS:	0.004	0.102	0.005	0.008	0.006	0.095
AD1ABS:				0.059	0.060	
AD2ABS:						
AD3ABS:						
COMMENT:				CIP D.L		

000534

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METALS, GFAA

RUN:

ANALYST: Jn 2520

REVIEWER:

RECORDER:

DATE: 5/28/94

DATE: / /

DATE: / /

INSTRUMENT: #22

ELEMENT: As 136

WAVELENGTH: 193.7

CAL. CURVE:

RESPONSE:

ADD 1 CONC.:

ADD 2 CONC.:

ADD 3 CONC.:

C.C.:

SLOPE:

Y INTERCEPT:

SAMPLE:	CCV	Blank	QC only MSP C156116	C156715	C156717	C156718
TYPE:	# 050294F			[illegible]	[illegible]	[illegible]
TRUE VALUE:	0.02		0.10	BDL / 0.01	0.007 / 0.01	BDL / 0.01
RESULT:	0.0205	BDL	BDL / 0.094	(0.0041) BDL / 0.0126	0.0072 / 0.062	(0.0024) BDL / 0.0126
UNITS:	mg/l		mg/l	mg/l	mg/l	mg/l
DET. LIMIT:	0.010		0.025	0.005	0.005	0.005
COVERY:	103%		94%	115%	91%	103%
WT/VOL:			50	50	50	50
FINAL VOL:			50	50	50	50
DILUTE:			1:5	—	—	—
SAMABS:	0.104	0.004	0.094	0.004	0.035	0.010
AD1ABS:				0.063	0.081	0.063
AD2ABS:						
AD3ABS:						
COMMENT:						

91DL1065.R6

000535

11-18-93

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METALS, GFAA

RUN:

ANALYST: Jn 2520 REVIEWER: RECORDER:

DATE: 5/28/94 DATE: / / DATE: / /

INSTRUMENT: #22 ELEMENT: As 136 WAVELENGTH: 193.7

CAL. CURVE.:

RESPONSE:

ADD 1 CONC.: ADD 2 CONC.: ADD 3 CONC.:

C.C.: SLOPE: Y INTERCEPT:

SAMPLE:	C156719	CCV	Blaci	C156257	Nu PO1	LCS
TYPE:	[illegible]	#0502946		M40[illegible]	C156257	[illegible]
TRUE VALUE:	BDL 0.01 (0.0001)	0.02			0.130	0.10
RESULT:	BDL 0.0106	0.0187	BDL	0.130	0.136	0.085
UNITS:	mg/l	mg/l		mg/l	mg/l	mg/l
DET. LIMIT:	0.005	0.010		0.10	0.10	~~0.025~~ 0.05 Jn 5/28/94
ECOVERY:	105%	94%			4.5% ppt	85%
WT/VOL:	50					
FINAL VOL:	50					50
DILUTE:	-					1.5
SAMABS:	0.001	0.094	0.005	0.131	0.137	0.056
AD1ABS:	0.053			0.188	0.187	
AD2ABS:						
AD3ABS:						
COMMENT:				WS 2X 0.259	0.271	

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METALS, GFAA

RUN:

ANALYST: Jh 2520

REVIEWER:

RECORDER:

DATE: 5/28/94

DATE: / /

DATE: / /

INSTRUMENT: #22

ELEMENT: As 136

WAVELENGTH: 193.7

CAL. CURVE.:

RESPONSE:

ADD 1 CONC.:

ADD 2 CONC.:

ADD 3 CONC.:

C.C.:

SLOPE:

Y INTERCEPT:

SAMPLE:	B1a02	CCV	B1a01	C156766	DUP02	Sp1a02
TYPE:	[illegible]	#050294F		[illegible]	C156766 [illegible]	C156766 [illegible]
TRUE VALUE:		0.02		0.014 / 0.01	0.014	0.10
RESULT:	BDL	0.0196	BDL	0.0136 / 0.0229	0.014	0.014 / 0.106
UNITS:	mg/l	mg/l →		mg/l	mg/l	mg/l
DET. LIMIT:	0.010	0.010 →		0.005	0.005	0.025
RECOVERY:		98%		93%	0% rpd	92%
WT/VOL:				50	50	50
FINAL VOL:	50			50	50	50
DILUTE:	–			–		1:5
SAMABS:	0.002	0.044	0.005	0.068	0.072	0.107
AD1ABS:				0.115	0.121	
AD2ABS:						
AD3ABS:						
COMMENT:						

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METALS, GFAA

RUN:

ANALYST: [illegible] 2520 REVIEWER: RECORDER:

DATE: 5 / 28 / 94 DATE: / / DATE: / /

INSTRUMENT: #22 ELEMENT: AS 136 WAVELENGTH: 193.7

CAL. CURVE.:

RESPONSE:

ADD 1 CONC.: ADD 2 CONC.: ADD 3 CONC.:

C.C.: SLOPE: Y INTERCEPT:

SAMPLE:	C156863	C156765	C156767	CCV	Blaa01	C156768
TYPE:	M6036	M6036	M6036	#050294F		M6036
VALUE:	BDL / 0.01		0.006 / 0.01	0.02		0.006 / 0.01
RESULT:	BDL 0.0000 / 0.0131		0.0063 / 0.0159	0.0189	BDL	0.0058 / 0.0157
UNITS:	mg/l	mg/l	mg/l	mg/l	→	mg/l
DET. LIMIT:	0.05	0.005	0.005	0.010	→	0.005
RECOVERY:	131%		96%	95%		99%
WT/VOL:	50	50	50			50
FINAL VOL:	50	50	50			50
DILUTE:	1:5		—			—
SAMABS:	0.002	[illegible] 5-31-94	0.031	0.095	0.004	0.028
AD1ABS:	0.065		0.080			0.079
AD2ABS:						
AD3ABS:						
COMMENT:						

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METALS, GFAA

RUN:

ANALYST: Jn 2520 REVIEWER: RECORDER:

DATE: 5/28/94 DATE: / / DATE: / /

INSTRUMENT: #22 ELEMENT: As 136 WAVELENGTH: 193.7

CAL. CURVE:

RESPONSE:

ADD 1 CONC.: ADD 2 CONC.: ADD 3 CONC.:

C.C.: SLOPE: Y INTERCEPT:

SAMPLE:	C156769	C156812	C156813	C156815	C156816	C156765
TYPE:	M6036	M6036	M6036	M6036	M6036	M6036
TRUE VALUE:	0.008 / 0.01 / 0.0083	BDL / 0.01 / (0.0006)	BDL / 0.01 / (0.0001)	BDL / 0.01 / (0.0003)	BDL / 0.01 / (-0.0008)	~~BDL~~ Jn 5-28-94 / 0.008 / 0.01 / 0.0094
RESULT:	0.0188	BDL 0.0101	0.0103	BDL 0.0108	0.0095	0.0193
UNITS:	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
DET. LIMIT:	0.005	0.005	0.005	0.005	~~0.0005~~ 0.005 Jn 5-28-94	0.005
% RECOVERY:	105 %	101 %	104 %	106 %	103 %	109 %
WT/VOL:	50	50	50	50	50	50
FINAL VOL:	50	50	50	50	50	50
DILUTE:	-	-	-	-	-	
SAMABS:	0.041	0.002	0.002	0.000	0.006	0.041
AD1ABS:	0.095	0.050	0.051	0.054	0.047	0.097
AD2ABS:						
AD3ABS:						
COMMENT:						

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METALS, GFAA

RUN:

ANALYST: Jn 2520

REVIEWER:

RECORDER:

DATE: 5 / 28 / 94

DATE: / /

DATE: / /

INSTRUMENT: #22

ELEMENT: As 136

WAVELENGTH: 1937

CAL. CURVE.:

RESPONSE:

ADD 1 CONC.:

ADD 2 CONC.:

ADD 3 CONC.:

C.C.:

SLOPE:

Y INTERCEPT:

SAMPLE:	CCV	B1a01	CDL			
TYPE:						
TRUE VALUE:	0.02		0.02			
RESULT:	0.0215	BDL	0.0222			
UNITS:	mg/L		mg/L			
DET. LIMIT:	0.010		0.010			
:COVERY:	108%		111%			
WT/VOL:						
FINAL VOL:						
DILUTE:						
SAMABS:	0.108	0.004	0.112			
AD1ABS:						
AD2ABS:						
AD3ABS:						
COMMENT:						

In 5-28-94

Element File: AS_CLP.FEL Element: As Wavelength: 193.7
Date: 05/28/94 Time: 09:54 Slit: 0.7
Data File: AS052894.DAT ID/Wt File: AS052894.IDW Lamp Current: 0
Technique: HGA Calib. Type: Linear Energy: 57
Remark 1: THIS FILE IS TO DETERMINE AS AT 5 PPB USING STANDARDS 10, 20
Remark 2: AND 40 PPB. PD IS THE MODIFIER USED. THIS IS CLP PROTOCOL.

As ID: Blank Seq. No.: 00005 A/S Pos.: 0 Date: 05/28/94

uL dispensed: 5 from 0, 5 from 40, 20 from 0
Replicate 1 Time: 09:56
Peak Area (A-s): 0.007 Peak Height (A): 0.009
Background Pk Area (A-s): 0.004 Background Pk Height (A): 0.014
Blank Corrected Pk Area (A-s): 0.004
Concentration (mg/L): 0.0011

Autozero performed.

As ID: Standard 1 Seq. No.: 00006 A/S Pos.: 36 Date: 05/28/94

uL dispensed: 5 from 0, 5 from 40, 20 from 36
Replicate 1 Time: [illegible]
Peak Area (A-s): 0.029 Peak Height (A): 0.046
Background Pk Area (A-s): 0.018 Background Pk Height (A): 0.012
Blank Corrected Pk Area (A-s): 0.011
Concentration (mg/L): 0.0144

Standard number 1 applied. [0.0200]
Correlation coefficient: 1.00000 Slope: 4.4831 Int: 0.000

As ID: Standard 2 Seq. No.: 00007 A/S Pos.: 37 Date: 05/28/94

uL dispensed: 5 from 0, 5 from 40, 20 from 37
Replicate 1 Time: [illegible]
Peak Area (A-s): 0.033 Peak Height (A): 0.037
Background Pk Area (A-s): 0.031 Background Pk Height (A): 0.016
Blank Corrected Pk Area (A-s): 0.002
Concentration (mg/L): 0.0106

Standard number 2 applied. [0.0100]
Correlation coefficient: 0.99940 Slope: 5.7450 Int: -0.003

ID: Standard 3 Seq. No.: 00008 A/S Pos.: 38 Date: 05/28/94

uL dispensed: 5 from 0, 5 from 40, 20 from 38
Replicate 1 Time: 10:03
Peak Area (A-s): 0.109 Peak Height (A): 0.220
Background Pk Area (A-s): 0.028 Background Pk Height (A): 0.020
Blank Corrected Pk Area (A-s): 0.102
Concentration (mg/L): 0.0215

Standard number 3 applied. [0.0200]
Correlation coefficient: 0.99909 Slope: 5.1417 Int: -0.003

As ID: Standard 4 Seq. No.: 00009 A/S Pos.: 39 Date: 05/28/94

uL dispensed: 5 from 0, 5 from 40, 20 from 39
Replicate 1 Time: 10:05
Peak Area (A-s): 0.210 Peak Height (A): 0.401
Background Pk Area (A-s): 0.036 Background Pk Height (A): 0.033
Blank Corrected Pk Area (A-s): 0.203
Concentration (mg/L): 0.0399

Standard number 4 applied. [0.0400]

Correlation coefficient: 0.99980 Slope: 5.1276 Int: -0.7[illegible]

~~~~~~

A- ID: ICV01 Seq. No.: 00010 A/S Pos.: 1 Date: 05/28/94

dispensed: 5 from 0, 5 from 40, 20 from 1

Replicate 1 | Time: 10:08

Peak Area (A-s): 0.105 | Peak Height (A): 0.182

Background Pk Area (A-s): 0.033 | Background Pk Height (A): 0.021

Blank Corrected Pk Area (A-s): 0.098

Concentration (mg/L): 0.0195

~~~~~~

As ID: BLA01 Seq. No.: 00011 A/S Pos.: 2 Date: 05/2[illegible]

uL dispensed: 5 from 0, 5 from 40, 20 from 2

Replicate 1 | Time: 10:10

Peak Area (A-s): 0.003 | Peak Height (A): 0.008

Background Pk Area (A-s): 0.022 | Background Pk Height (A): 0.01[illegible]

Blank Corrected Pk Area (A-s): -0.004

Concentration (mg/L): -0.0[illegible]

~~~~~~

As ID: [illegible] Seq. No.: 000[illegible] A/S Pos.: 3 Date: [illegible]

uL dispensed: [illegible] from 0, 5 from 40, 20 from 3

Replicate 1 | Time: [illegible]

Peak Area (A-s): [illegible] | Peak Height (A): [illegible]

Background Pk Area (A-s): 0.030 | Background Pk Height (A): [illegible]

Blank Corrected Pk Area (A-s): 0.10[illegible]

Concentration (mg/L): 0.0[illegible]

~~~~~~

As ID: C156257 Seq. No.: 000[illegible] A/S Pos.: [illegible] Date: [illegible]

uL dispensed: 5 from 0, 5 from 40, 20 from 6

Sample abs. is greater than that of the largest standard.

Replicate 1 | Time: 10:16

Peak Area (A-s): 0.276 | Peak Height (A): 0.468

Background Pk Area (A-s): 0.042 | Background Pk Height (A): 0.040

Blank Corrected Pk Area (A-s): 0.28[illegible]

Concentration (mg/L): 0.0529 | Corrected Conc (mg/L): 0.264

~~~~~~

As ID: C156257 Seq. No.: 00014 A/S Pos.: 6 Date: 05/28/94

uL dispensed: [illegible] from 0, 5 from 40, 4 from 6

Replicate 1 | Time: 10:19

Peak Area (A-s): 0.076 | Peak Height (A): 0.138

Background Pk Area (A-s): 0.033 | Background Pk Height (A): 0.019

Blank Corrected Pk Area (A-s): 0.060

Concentration (mg/L): 0.0137 | Corrected Conc (mg/L): 0.343

~~~~~~

ID: C156257 Seq. No.: 00015 A/S Pos.: 6 Date: 05/28/94

uL dispensed: 16 from 0, 5 from 40, 5 from 39, 4 from 6

Replicate 1 | Time: 10:21

Peak Area (A-s): 0.127 | Peak Height (A): 0.226

Background Pk Area (A-s): 0.031 Background Pk Height (A): 0.026
Blank Corrected Pk Area (A-s): 0.120
Concentration (mg/L): 0.0238 Corrected Conc (mg/L): 0.594

...overy is 100.5%

As ID: DUP01 257 Seq. No.: 00016 A/S Pos.: 7 Date: 05/28/94

uL dispensed: 5 from 0, 5 from 40, 20 from 7
Sample abs. is greater than that of the largest standard.
Replicate 1 Time: 10:24
Peak Area (A-s): 0.285 Peak Height (A): 0.474
Background Pk Area (A-s): 0.050 Background Pk Height (A): 0.041
Blank Corrected Pk Area (A-s): 0.235
Concentration (mg/L): 0.0552 Corrected Conc (mg/L): 0.276

As ID: DUP01 257 Seq. No.: 00017 A/S Pos.: 7 Date: 05/28/94

uL dispensed: 21 from 0, 5 from 40, 4 from 7
Replicate 1 Time: 10:26
Peak Area (A-s): 0.069 Peak Height (A): 0.104
Background Pk Area (A-s): 0.051 Background Pk Height (A): 0.036
Blank Corrected Pk Area (A-s): 0.018
Concentration (mg/L): [illegible] Corrected Conc (mg/L): 0.311

ID: DUP01 257 Seq. No.: 00018 A/S Pos.: 7 Date: 05/28/94

uL dispensed: 16 from 0, 5 from 40, 5 from 39, 4 from 7
Replicate 1 Time: 10:29
Peak Area (A-s): [illegible] Peak Height (A): 0.232
Background Pk Area (A-s): [illegible] Background Pk Height (A): 0.024
Blank Corrected Pk Area (A-s): [illegible]
Concentration (mg/L): 0.0241 Corrected Conc (mg/L): 0.606

Recovery is 118.0%

Repeat 1:10 In 5/28/94

As ID: C156727 1.99 Seq. No.: 00019 A/S Pos.: 9 Date: 05/28/94

uL dispensed: 5 from 0, 5 from 40, 20 from 9
Replicate 1 Time: 10:32
Peak Area (A-s): 0.104 Peak Height (A): 0.053
Background Pk Area (A-s): 0.136 Background Pk Height (A): 0.063
Blank Corrected Pk Area (A-s): 0.097
Concentration (mg/L): 0.0192 Corrected Conc (mg/L): 0.096

As ID: C156727 1.99 Seq. No.: 00020 A/S Pos.: 9 Date: 05/28/94

uL dispensed: 5 from 40, 5 from 39, 20 from 9
Replicate 1 Time: 10:34
Peak Area (A-s): 0.156 Peak Height (A): 0.087
Background Pk Area (A-s): 0.152 Background Pk Height (A): 0.069
Blank Corrected Pk Area (A-s): 0.149
Concentration (mg/L): 0.0295 Corrected Conc (mg/L): 0.148

Recovery is 102.6%

As ID: C156728 1.96 Seq. No.: 00021 A/S Pos.: 10 Date: 05/26/94

[illegible]ispensed: 5 from 0, 5 from 40, 20 from 10
[illegible]licate 1 Time: 10:[illegible]
Peak Area (A-s): 0.007 Peak Height (A): 0.012
Background Pk Area (A-s): 0.037 Background Pk Height (A): 0.027
Blank Corrected Pk Area (A-s): 0.000
Concentration (mg/L): 0.0004 Corrected Conc (mg/L): 0.0009

As ID: C156728 1.98 Seq. No.: 00022 A/S Pos.: 10 Date: 05/26/94

uL dispensed: 5 from 40, 5 from 39, 20 from 10
Replicate 1 Time: [illegible]
Peak Area (A-s): 0.059 Peak Height (A): 0.083
Background Pk Area (A-s): 0.031 Background Pk Height (A): 0.018
Blank Corrected Pk Area (A-s): 0.052
Concentration (mg/L): 0.0106 Corrected Conc (mg/L): 0.0087

Recovery is 102.0%

As ID: AS Position 30 Seq. No.: 000[illegible] A/S Pos.: [illegible] Date: 05/26/94

uL dispensed: 5 from 0, 5 from 40, 10 from 30
Replicate 1 Time: [illegible]
Peak Area (A-s): 0.[illegible]09 Peak Height (A): 0.246
Background Pk Area (A-s): 0.032 Background Pk Height (A): 0.021
Blank Corrected Pk Area (A-s): 0.102
Concentration (mg/L): 0.0202

Check sample is within range 0.0179 - 0.0220

As ID: BLA01 Seq. No.: 00024 A/S Pos.: [illegible] Date: 05/26/94

uL dispensed: 5 from 0, 5 from 40, 20 from 1
Replicate 1 Time: [illegible]
Peak Area (A-s): 0.003 Peak Height (A): 0.009
Background Pk Area (A-s): 0.023 Background Pk Height (A): 0.012
Blank Corrected Pk Area (A-s): -0.004
Concentration (mg/L): -0.0003

Check sample is within range -0.0004 - 0.0004

As ID: LCD 926485 Seq. No.: 00025 A/S Pos.: 11 Date: 05/26/94

uL dispensed: 5 from 0, 5 from 40, 20 from 11
Replicate 1 Time: [illegible]
Peak Area (A-s): 0.139 Peak Height (A): 0.228
[illegible]ground Pk Area (A-s): 0.031 Background Pk Height (A): 0.023
[illegible]k Corrected Pk Area (A-s): 0.108
Concentration (mg/L): 0.0202 Corrected Conc (mg/L): 0.101

As . ID: BLA02 928486 Seq. No.: 00026 A/S Pos.: 12 Date: 05/28/94

uL dispensed: 5 from 0, 5 from 40, 20 from 12
Replicate 1 Time: 10:48
Peak Area (A-s): 0.002 Peak Height (A): 0.001
Background Pk Area (A-s): 0.022 Background Pk Height (A): 0.012
Blank Corrected Pk Area (A-s): -0.005
Concentration (mg/L): -0.0006

As ID: C151716 Seq. No.: 00027 A/S Pos.: 13 Date: 05/28/94

uL dispensed: 5 from 0, 5 from 40, 20 from 13
Replicate 1 Time: 10:51
Peak Area (A-s): 0.018 Peak Height (A): 0.033
Background Pk Area (A-s): 0.1[illegible] Background Pk Height (A): 0.012
Blank Corrected Pk Area (A-s): 0.008
Concentration (mg/L): 0.001[illegible]

As ID: C156716 Seq. No.: 00028 A/S Pos.: 13 Date: 05/28/94

uL dispensed: 5 from 40, 5 from 40, 20 from 13
Replicate 1 Time: 10:53
Peak Area (A-s): 0.068 Peak Height (A): 0.[illegible]
Background Pk Area (A-s): [illegible] Background Pk Height (A): [illegible]
Blank Corrected Pk Area (A-s): 0.059
Concentration (mg/L): [illegible]

Recovery is 98.7%

As ID: DUP 716 928[illegible] Seq. No.: 00029 A/S Pos.: 14 Date: 05/28/94

uL dispensed: 5 from 0, 5 from 40, 20 from 14
Replicate 1 Time: [illegible]
Peak Area (A-s): 0.013 Peak Height (A): 0.033
Background Pk Area (A-s): 0.1[illegible] Background Pk Height (A): 0.060
Blank Corrected Pk Area (A-s): 0.006
Concentration (mg/L): 0.00[illegible]

As ID: DUP 716 928487 Seq. No.: 00030 A/S Pos.: 14 Date: 05/28/94

uL dispensed: 5 from 40, 5 from 30, 20 from 14
Replicate 1 Time: 10:58
Peak Area (A-s): 0.067 Peak Height (A): 0.101
Background Pk Area (A-s): 0.171 Background Pk Height (A): 0.058
Blank Corrected Pk Area (A-s): 0.060
Concentration (mg/L): 0.0120

Recovery is 104.3%

As ID: SPI 716 928488 Seq. No.: 00031 A/S Pos.: 15 Date: 05/28/94

uL dispensed: 5 from 0, 5 from 40, 20 from 15
Replicate 1 Time: 11:00

eak Area (A-s): 0.108 Peak Height (A): [illegible]
ackground Pk Area (A-s): 0.076 Background Pk Height (A): 0.023
lank Corrected Pk Area (A-s): 0.095
oncentration (mg/L): 0.0189 Corrected Conc (mg/L): 0.095

---

s ID: AS Position 38 Seq. No.: 00032 A/S Pos.: 38 Date: 05/28/94

L dispensed: 5 from 0, 5 from 40, 20 from 38
eplicate 1 Time: 11:02
eak Area (A-s): 0.111 Peak Height (A): 0.145
ackground Pk Area (A-s): 0.033 Background Pk Height (A): 0.019
lank Corrected Pk Area (A-s): 0.104
oncentration (mg/L): 0.0205

heck sample is within range 0.0175 - 0.0220

---

s ID: BLA01 Seq. No.: 00033 A/S Pos.: 0 Date: 05/28/94

L dispensed: 5 from 0, 5 from 40, 20 from 0
eplicate Time: 11:02
eak Area (A-s): 0.023 Peak Height (A): 0.008
ackground Pk Area (A-s): 0.020 Background Pk Height (A): 0.013
lank Corrected Pk Area (A-s): -0.004
oncentration (mg/L): [illegible]

heck sample is within range -0.0004 - 0.0004

---

s ID: MBP716 Seq. No.: 00034 A/S Pos.: 16 Date: 05/28/94

L dispensed: 5 from 0, 5 from 40, 20 from 16
eplicate Time: 11:07
eak Area (A-s): [illegible] Peak Height (A): [illegible]
ackground Pk Area (A-s): 0.056 Background Pk Height (A): 0.026
lank Corrected Pk Area (A-s): [illegible]
oncentration (mg/L): 0.0187 Corrected Conc (mg/L): 0.094

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s ID: C156715 Seq. No.: 00035 A/S Pos.: 17 Date: 05/28/94

L dispensed: 5 from 0, 5 from 40, 20 from 17
eplicate 1 Time: 11:09
eak Area (A-s): 0.011 Peak Height (A): 0.019
ackground Pk Area (A-s): 0.102 Background Pk Height (A): 0.037
lank Corrected Pk Area (A-s): 0.004
oncentration (mg/L): 0.0013

---

s ID: C156715 Seq. No.: 00036 A/S Pos.: 17 Date: 05/28/94

L dispensed: 5 from 40, 5 from 39, 20 from 17
eplicate 1 Time: 11:12
er Area (A-s): 0.070 Peak Height (A): 0.115
a round Pk Area (A-s): 0.102 Background Pk Height (A): 0.038
lank Corrected Pk Area (A-s): 0.063
oncentration (mg/L): 0.0126

Recovery is 114.6%

P ID: C156717 Seq. No.: 00037 A/S Pos.: 18 Date: 05/28/94

dispensed: 5 from 0, 5 from 40, 20 from 18
Replicate 1 Time: [illegible]
Peak Area (A-s): 0.042 Peak Height (A): 0.069
Background Pk Area (A-s): 0.108 Background Pk Height (A): 0.036
Blank Corrected Pk Area (A-s): 0.035
Concentration (mg/L): 0.0073

As ID: C156717 Seq. No.: 00038 A/S Pos.: 18 Date: 05/28/94

uL dispensed: 5 from 40, 5 from 39, 20 from 18
Replicate 1 Time: [illegible]
Peak Area (A-s): 0.088 Peak Height (A): 0.148
Background Pk Area (A-s): 0.108 Background Pk Height (A): 0.036
Blank Corrected Pk Area (A-s): 0.021
Concentration (mg/L): 0.0122

Recovery is 53.5%

[illegible] ID: C156718 Seq. No.: [illegible] A/S Pos.: [illegible] Date: [illegible]

uL dispensed: 5 from 0, 5 from 40, 20 from 19
Replicate [illegible] Time: [illegible]
Peak Area (A-s): 0.017 Peak Height (A): [illegible]
Background Pk Area (A-s): 0.147 Background Pk Height (A): [illegible]
Blank Corrected Pk Area (A-s): 0.010
Concentration (mg/L): 0.0024

As ID: C156718 Seq. No.: [illegible] A/S Pos.: [illegible] Date: [illegible]

uL dispensed: 5 from 40, 5 from 39, 20 from [illegible]
Replicate 1 Time: [illegible]
Peak Area (A-s): 0.070 Peak Height (A): 0.092
Background Pk Area (A-s): 0.156 Background Pk Height (A): 0.253
Blank Corrected Pk Area (A-s): 0.063
Concentration (mg/L): 0.0128

Recovery is 108.7%

As ID: C156719 Seq. No.: 00041 A/S Pos.: 20 Date: 05/28/94

uL dispensed: 5 from 0, 5 from 40, 20 from 20
Replicate 1 Time: 11:23
Peak Area (A-s): 0.006 Peak Height (A): 0.013
Background Pk Area (A-s): 0.160 Background Pk Height (A): 0.057
Blank Corrected Pk Area (A-s): -0.001
Concentration (mg/L): 0.0001

As ID: C156719 Seq. No.: 00042 A/S Pos.: 20 Date: 05/28/94

L dispensed: 5 from 40, 5 from 39, 20 from 20
Replicate 1 Time: 11:26
Peak Area (A-s): 0.060 Peak Height (A): 0.081
Background Pk Area (A-s): 0.181 Background Pk Height (A): 0.058
Corrected Pk Area (A-s): 0.057
Concentration (mg/L): 0.0106

Recovery is 105.0%

ID: AS Position 38 Seq. No.: 00043 A/S Pos.: 38 Date: 05/28/94

L dispensed: 5 from 0, 5 from 40, 20 from 38
Replicate 1 Time: 11:28
Peak Area (A-s): 0.101 Peak Height (A): 0.110
Background Pk Area (A-s): 0.041 Background Pk Height (A): 0.018
Blank Corrected Pk Area (A-s): 0.094
Concentration (mg/L): 0.0167

Check sample is within range 0.0179 - 0.0220

ID: BLA01 Seq. No.: 00044 A/S Pos.: 0 Date: 05/28/94

L dispensed: 5 from 0, 5 from 40, 20 from 0
Replicate 1 Time: 11:30
Peak Area (A-s): [illegible] Peak Height (A): [illegible]
Background Pk Area (A-s): [illegible] Background Pk Height (A): 0.014
Blank Corrected Pk Area (A-s): [illegible]
Concentration (mg/L): -0.0005

[illegible] sample is within range [illegible]

ID: C156257 [illegible] 00045 A/S Pos.: 6 [illegible]

L dispensed: 5 from 0, 5 from 40, 20 from 6
Replicate 1 Time: 11:40
Peak Area (A-s): 0.133 Peak Height (A): 0.154
Background Pk Area (A-s): [illegible] Background Pk Height (A): 0.012
Blank Corrected Pk Area (A-s): 0.131
Concentration (mg/L): [illegible] Corrected Conc (mg/L): 0.[illegible]

ID: C156257 Seq. No.: 00046 A/S Pos.: 6 Date: 05/28/94

L dispensed: 5 from 40, 5 from 39, 20 from 6
Replicate 1 Time: 11:43
Peak Area (A-s): 0.195 Peak Height (A): 0.234
Background Pk Area (A-s): 0.032 Background Pk Height (A): 0.024
Blank Corrected Pk Area (A-s): 0.188
Concentration (mg/L): 0.0370 Corrected Conc (mg/L): 0.370

Recovery is 110.3%

ID: DUP01 257 Seq. No.: 00047 A/S Pos.: 7 Date: 05/28/94

L dispensed: 5 from 0, 5 from 40, 20 from 7

Replicate 1 Time: 11:45
Peak Area (A-s): 0.144 Peak Height (A): 0.164
Background Pk Area (A-s): 0.030 Background Pk Height (A): 0.018
Blank Corrected Pk Area (A-s): 0.137
Concentration (mg/L): 0.0271 Corrected Conc (mg/L): 0.271

As ID: DUP01 257 Seq. No.: 00045 A/S Pos.: 7 Date: 05/28/94

uL dispensed: 5 from 40, 5 from 39, 20 from 7
Replicate 1 Time: 11:46
Peak Area (A-s): 0.194 Peak Height (A): 0.297
Background Pk Area (A-s): 0.033 Background Pk Height (A): 0.016
Blank Corrected Pk Area (A-s): 0.187
Concentration (mg/L): 0.0369 Corrected Conc (mg/L): 0.369

Recovery is 97.7%

As ID: [illegible] Seq. No.: [illegible] A/S Pos.: [illegible] Date: [illegible]

uL dispensed: 5 from 0, 5 from 40, 20 from 31
Replicate 1 Time: [illegible]
Peak Area (A-s): 0.093 Peak Height (A): 0.153
Background Pk Area (A-s): [illegible] Background Pk Height (A): [illegible]
Blank Corrected Pk Area (A-s): 0.085
Concentration (mg/L): 0.017 Corrected Conc (mg/L): [illegible]

As ID: BLA02 [illegible] Seq. No.: 00050 A/S Pos.: 38 Date: 05/28/94

uL dispensed: 5 from 0, 5 from 40, 20 from [illegible]

Replicate 1 Time: [illegible]
Peak Area (A-s): 0.005 Peak Height (A): 0.010
Background Pk Area (A-s): 0.043 Background Pk Height (A): 0.017
Blank Corrected Pk Area (A-s): -0.008
Concentration (mg/L): -0.0000

As ID: AS Position 38 Seq. No.: 00051 A/S Pos.: 38 Date: [illegible]

uL dispensed: 5 from 0, 5 from 40, 20 from 38
Replicate 1 Time: 11:57
Peak Area (A-s): 0.106 Peak Height (A): 0.155
Background Pk Area (A-s): 0.036 Background Pk Height (A): 0.015
Blank Corrected Pk Area (A-s): 0.099
Concentration (mg/L): 0.0196

Check sample is within range 0.0179 - 0.0220

As ID: BLA01 Seq. No.: 00052 A/S Pos.: 0 Date: 05/28/94

uL dispensed: 5 from 0, 5 from 40, 20 from 0
Replicate 1 Time: 12:00
Peak Area (A-s): 0.002 Peak Height (A): 0.009
Background Pk Area (A-s): 0.023 Background Pk Height (A): 0.015

000550

[illegible] sample is within range -0.0094 - 0.0094

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s ID: C156766 Seq. No.: 00053 A/S Pos.: 23 Date: 05/28/94

L dispensed: 5 from 0, 5 from 40, 20 from 23
eplicate 1 Time: 12:02
eak Area (A-s): 0.075 Peak Height (A): 0.085
ackground Pk Area (A-s): 0.107 Background Pk Height (A): 0.040
lank Corrected Pk Area (A-s): 0.068
oncentration (mg/L): 0.0136

[illegible] ID: C156766 Seq. No.: 00054 A/S Pos.: 23 Date: 05/28/94

L dispensed: 5 from 40, 5 from 39, 20 from 23
eplicate 1 Time: 12:04
eak Area (A-s): 0.122 Peak Height (A): 0.150
ackground Pk Area (A-s): 0.109 Background Pk Height (A): 0.040
lank Corrected Pk Area (A-s): 0.115
[illegible] (mg/): 0.0229

[illegible]

[illegible] ID: [illegible] Seq. No.: [illegible] A/S Pos.: [illegible] Date: 05/28/94

L dispensed: 5 from [illegible], 5 from 40, 20 from 24
eplicate 1 Time: [illegible]
eak Area (A-s): [illegible] Peak Height (A): 0.088
[illegible] Background Pk Height (A): 0.041
lank Corrected Pk Area (A-s): 0.072
[illegible]

[illegible] ID: [illegible] Seq. No.: [illegible] A/S Pos.: [illegible] Date: 05/28/94

L dispensed: 5 from 40, 5 from 39, 20 from 24
eplicate 1 Time: [illegible]
eak Area (A-s): 0.128 Peak Height (A): 0.147
ackground Pk Area (A-s): [illegible] Background Pk Height (A): 0.038
lank Corrected Pk Area (A-s): 0.121
[illegible] (mg/L): [illegible]

ecovery is 96.2%

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s ID: SPT 766 928529 Seq. No.: 00057 A/S Pos.: 25 Date: 05/28/94

L dispensed: 5 from 0, 5 from 40, 20 from 25
eplicate 1 Time: [illegible]
eak Area (A-s): 0.114 Peak Height (A): 0.156
ackground Pk Area (A-s): 0.054 Backgrouno Pk Height (A): 0.026
lank Corrected Pk Area (A-s): 0.107
[illegible]tration (mg/L): 0.0212 Corrected Conc (mg/L): 0.106

As ID: C156863 Seq. No.: 00058 A/S Pos.: 26 Date: 05/28/94

uL dispensed: 5 from 0, 5 from 40, 20 from 26
Replicate 1 Time: 12:14
Peak Area (A-s): 0.005 Peak Height (A): 0.013
Background Pk Area (A-s): 0.049 Background Pk Height (A): 0.020
Blank Corrected Pk Area (A-s): -0.002
Concentration (mg/L): -0.0000 Corrected Conc (mg/L): -1.66E-004

As ID: C156863 Seq. No.: 00059 A/S Pos.: 26 Date: 05/28/94

uL dispensed: 5 from 41, 5 from 39, 20 from 26
Replicate 1 Time: 12:17
Peak Area (A-s): 0.072 Peak Height (A): 0.138
Background Pk Area (A-s): 0.408 Background Pk Height (A): 0.304
Blank Corrected Pk Area (A-s): 0.065
Concentration (mg/L): 0.0131 Corrected Conc (mg/L): 0.065

Recovery is 130.9%

As ID: C156765 Seq. No.: 00060 A/S Pos.: 27 Date: 05/28/94

uL dispensed: 5 from 0, 5 from 40, 20 from 27
Replicate 1 Time: 12:19
Peak Area (A-s): 0.045 Peak Height (A): 0.048
Background Pk Area (A-s): 0.156 Background Pk Height (A): 0.052
Blank Corrected Pk Area (A-s): 0.038
Concentration (mg/L): 0.0073

As ID: C156768 Seq. No.: 00061 A/S Pos.: 27 Date: 05/28/94

uL dispensed: 5 from 40, 5 from 39, 20 from 27
Replicate 1 Time: [illegible]
Peak Area (A-s): 0.073 Peak Height (A): 0.088
Background Pk Area (A-s): 0.501 Background Pk Height (A): 0.063
Blank Corrected Pk Area (A-s): 0.066
Concentration (mg/L): 0.0133

Recovery is 54.6%

Repeat In 5/28/94

As ID: C156767 Seq. No.: 00062 A/S Pos.: 28 Date: 05/28/94

uL dispensed: 5 from 0, 5 from 40, 20 from 28
Replicate 1 Time: 12:24
Peak Area (A-s): 0.038 Peak Height (A): 0.042
Background Pk Area (A-s): 0.156 Background Pk Height (A): 0.062
Blank Corrected Pk Area (A-s): 0.031
Concentration (mg/L): 0.0063

As ID: C156767 Seq. No.: 00063 A/S Pos.: 28 Date: 05/28/94

uL dispensed: 5 from 40, 5 from 39, 20 from 28
Replicate 1 Time: 12:26
Peak Area (A-s): 0.087 Peak Height (A): 0.094
Background Pk Area (A-s): 0.146 Background Pk Height (A): 0.055
Blank Corrected Pk Area (A-s): 0.080

oncentration (mg/L): 0.0159

ecovery is 96.0%

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s ID: AS Position 38 Seq. No.: 00064 A/S Pos.: 38 Date: 05/28/94

L dispensed: 5 from 0, 5 from 40, 20 from 38
eplicate 1 Time: 12:29
eak Area (A-s): 0.102 Peak Height (A): 0.100
ackground Pk Area (A-s): 0.042 Background Pk Height (A): 0.015
lank Corrected Pk Area (A-s): 0.095
oncentration (mg/L): 0.0189

heck sample is within range 0.0179 - 0.0220

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s ID: BLA01 Seq. No.: 00065 A/S Pos.: 0 Date: 05/28/94

L dispensed: 5 from 0, 5 from 40, 20 from 0
eplicate 1 Time: 12:31
eak Area (A-s): 0.0[illegible] Peak Height (A): 0.0[illegible]
ackground Pk Area (A-s): 0.031 Background Pk Height (A): 0.035
lank Corrected Pk Area (A-s): -0.004
oncentration (mg/L): -0.0005

lank sample is within range -0.0[illegible] - 0.0004

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s ID: [illegible] Seq. No.: 00066 A/S Pos.: [illegible] Date: 05/28/94

L dispensed: 5 from 0, 5 from 40, 20 from [illegible]
eplicate 1 Time: 12:3[illegible]
eak Area (A-s): 0.0[illegible] Peak Height (A): [illegible]
ackground Pk Area (A-s): 0.1[illegible] Background Pk Height (A): [illegible]
lank Corrected Pk Area (A-s): 0.0[illegible]
oncentration (mg/L): 0.0[illegible]

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s ID: C151762 Seq. No.: 00067 A/S Pos.: [illegible] Date: 05/28/94

L dispensed: 5 from 40, 5 from [illegible], 20 from [illegible]
eplicate 1 Time: 12:3[illegible]
eak Area (A-s): 0.0[illegible] Peak Height (A): 0.0[illegible]
ackground Pk Area (A-s): 0.142 Background Pk Height (A): 0.0[illegible]
lank Corrected Pk Area (A-s): 0.079
oncentration (mg/L): 0.0157

ecovery is 99.3%

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s ID: AS Position 38 Seq. No.: 00068 A/S Pos.: 38 Date: 05/28/94

L dispensed: 5 from 0, 5 from 40, 20 from 38
eplicate 1 Time: 12:3[illegible]
eak Area (A-s): 0.109 Peak Height (A): 0.113
ackground Pk Area (A-s): 0.039 Background Pk Height (A): 0.020
lank Corrected Pk Area (A-s): 0.102
oncentration (mg/L): 0.0203
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Check sample is within range 0.0179 - 0.0220

[illegible] ID: [illegible] Seq. No.: 00067 A/S Pos.: 0 Date: 05/28/94

uL dispensed: 5 from 0, 5 from 40, 20 from 0
Replicate [illegible] Time: [illegible]
Peak Area (A-s): 0.304 Peak Height (A): 0.009
Background Pk Area (A-s): 0.021 Background Pk Height (A): 0.014
Blank Corrected Pk Area (A-s): -0.003
Concentration (mg/L [illegible]): [illegible]

Check sample is within range -0.0094 - 0.0094

As ID: C156760 Seq. No.: 00070 A/S Pos.: 30 Date: 05/28/94

uL dispensed: [illegible] from [illegible], 20 from 30
Replicate [illegible] Time: [illegible]
Peak Area (A-s): [illegible] Peak Height (A): [illegible]
Background Pk Area (A-s): 0.121 Background Pk Height (A): 0.043
Blank Corrected Pk Area (A-s): 0.04[illegible]
Concentration (mg/L [illegible]): [illegible]

[illegible] Seq. No.: [illegible] A/S Pos.: [illegible] Date: 05/28/94

uL dispensed: 5 from [illegible], 5 from 39, 20 from 30
Replicate [illegible] Time: [illegible]
Peak Area (A-s): 0.[illegible] Peak Height (A): 0.112
Background Pk Area (A-s): 0.113 Background Pk Height (A): 0.044
Blank Corrected Pk Area (A-s): 0.055
Concentration (mg/L [illegible]): [illegible]

Recovery is 108.4%

As ID: [illegible] Seq. No.: 00072 A/S Pos.: 31 Date: 05/28/94

uL dispensed: 5 from 0, 5 from 40, 20 from 31
Replicate [illegible] Time: 12:47
Peak Area (A-s): 0.005 Peak Height (A): 0.009
Background Pk Area (A-s): 0.135 Background Pk Height (A): 0.060
Blank Corrected Pk Area (A-s): -0.002
Concentration (mg/L [illegible]): -0.0020

As ID: C156812 Seq. No.: 00073 A/S Pos.: 31 Date: 05/28/94

uL dispensed: 5 from 40, 5 from 39, 20 from 31
Replicate 1 Time: 12:50
Peak Area (A-s): 0.057 Peak Height (A): 0.095
Background Pk Area (A-s): 0.143 Background Pk Height (A): 0.058
Blank Corrected Pk Area (A-s): 0.050
Concentration (mg/L [illegible]): 0.0101

Recovery is 101.1%

As ID: C156813 Seq. No.: 00074 A/S Pos.: 32 Date: 05/26/94

uL dispensed: 5 from 0, 5 from 40, 20 from 32
Replicate 1 Time: 12:52
Peak Area (A-s): 0.005 Peak Height (A): 0.011
Background Pk Area (A-s): 0.138 Background Pk Height (A): 0.048
Blank Corrected Pk Area (A-s): -0.005
Concentration (mg/L): -0.0001

As ID: C156813 Seq. No.: 00075 A/S Pos.: [illegible] Date: 05/26/94

uL dispensed: 5 from 40, 5 from 39, 20 from 32
Replicate 1 Time: 12:54
Peak Area (A-s): 0.058 Peak Height (A): [illegible]
Background Pk Area (A-s): [illegible] Background Pk Height (A): [illegible]
Blank Corrected Pk Area (A-s): 0.05[illegible]
Concentration (mg/L): [illegible]

Recovery is 103.3%

As ID: C156813 Seq. No.: 00076 A/S Pos.: [illegible] Date: 05/26/94

uL dispensed: 5 from 0, 5 from 40, 20 from 33
Replicate 1 Time: [illegible]
Peak Area (A-s): [illegible] Peak Height (A): [illegible]
Background Pk Area (A-s): [illegible] Background Pk Height (A): [illegible]
Blank Corrected Pk Area (A-s): [illegible]
Concentration (mg/L): [illegible]

As ID: C156813 Seq. No.: 00077 A/S Pos.: [illegible] Date: 05/26/94

uL dispensed: 5 from 40, 5 from 39, 20 from 33
Replicate 1 Time: [illegible]
Peak Area (A-s): 0.061 Peak Height (A): [illegible]
Background Pk Area (A-s): [illegible] Background Pk Height (A): [illegible]
Blank Corrected Pk Area (A-s): 0.054
Concentration (mg/L): [illegible]

Recovery is 105.7%

As ID: C156816 Seq. No.: 00078 A/S Pos.: 34 Date: 05/26/94

uL dispensed: 5 from 0, 5 from 40, 20 from 34
Replicate 1 Time: 13:01
Peak Area (A-s): 0.001 Peak Height (A): 0.003
Background Pk Area (A-s): 0.113 Background Pk Height (A): 0.044
Blank Corrected Pk Area (A-s): -0.000
Concentration (mg/L): [illegible]

As ID: C156816 Seq. No.: 00079 A/S Pos.: 34 Date: 05/26/94

uL dispensed: 5 from 40, 5 from 39, 20 from 34
Replicate 1 Time: 13:03

Peak Area (A-s): 0.054 Peak Height (A): 0.060
Background Pk Area (A-s): 0.121 Background Pk Height (A): 0.043
Blank Corrected Pk Area (A-s): 0.047
Concentration (mg/L): 0.0095

Recovery is 103.5%

As ID: 0135765 Seq. No.: 00001 A/S Pos.: 27 Date: 05/23/94

µL dispensed: 5 from 0, 5 from 40, 20 from 27
Replicate 1 Time: 13:06
Peak Area (A-s): 0.047 Peak Height (A): 0.050
Background Pk Area (A-s): 0.121 Background Pk Height (A): 0.050
Blank Corrected Pk Area (A-s): 0.040
Concentration (mg/L): 0.0086

As ID: 0135767 Seq. No.: 00002 A/S Pos.: 27 Date: 05/23/94

µL dispensed: 5 from 40, 5 from 0, 20 from 27
Replicate 1 Time: [illegible]
Peak Area (A-s): 0.111 Peak Height (A): [illegible]
Background Pk Area (A-s): [illegible] Background Pk Height (A): 0.050
Blank Corrected Pk Area (A-s): 0.104
Concentration (mg/L): [illegible]

Recovery is [illegible]%

Repeat In 5-28-94

As ID: [illegible] Seq. No.: 00003 A/S Pos.: 27 Date: [illegible]

µL dispensed: 5 from 0, 5 from 40, 20 from 27
Replicate 1 Time: [illegible]
Peak Area (A-s): 0.043 Peak Height (A): 0.056
Background Pk Area (A-s): [illegible] Background Pk Height (A): 0.044
Blank Corrected Pk Area (A-s): 0.041
Concentration (mg/L): 0.0086

As ID: 0135763 Seq. No.: 00004 A/S Pos.: 27 Date: 05/23/94

µL dispensed: 5 from 0, 5 from 40, 20 from 27
Replicate 1 Time: [illegible]
Peak Area (A-s): 0.164 Peak Height (A): 0.133
Background Pk Area (A-s): 0.067 Background Pk Height (A): 0.047
Blank Corrected Pk Area (A-s): 0.097
Concentration (mg/L): 0.0193

Recovery is 109.0%

As ID: AS Position 38 Seq. No.: 00005 A/S Pos.: 38 Date: 05/23/94

µL dispensed: 5 from 0, 5 from 40, 20 from 38
Replicate 1 Time: 13:18
Peak Area (A-s): 0.115 Peak Height (A): 0.122
Background Pk Area (A-s): 0.039 Background Pk Height (A): 0.018
Blank Corrected Pk Area (A-s): 0.108

Concentration (mg/L) [illegible]

Check sample is within range 0.0175 - 0.0225

ID: BLA01 Seq. No.: 00086 A/S Pos.: 0 Date: 05/28/94

mL dispensed: 5 from 0, 5 from 40, 10 from 0

Replicate 1 Time: [illegible]

Peak Area (A-s): 0.303 Peak Height (A): 0.008

Background Pk Area (A-s): 0.026 Background Pk Height (A): 0.013

Blank Corrected Pk Area (A-s): -0.004

Concentration (mg/L) [illegible] -0.0004

Check sample is within range -0.0004 - 0.0004

ID: [illegible] Seq. No.: [illegible] A/S Pos.: [illegible] Date: 05/28/94

mL dispensed: 5 from 0, 5 from 40, 10 from 0

Replicate 1 Time: [illegible]

Peak Area (A-s): [illegible] Peak Height (A): [illegible]

Background Pk Area (A-s): [illegible] Background Pk Height (A): 0.023

Blank Corrected Pk Area (A-s): 0.[illegible]

Concentration (mg/L) [illegible]

ANALYSIS RUN: R218292

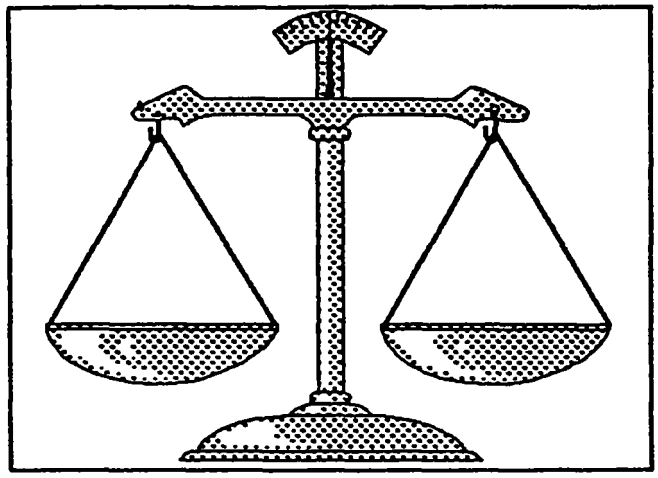
RUN NUMBER: 10011

TEST: Ag

ANALYST: CB

DATE: 5/25/94

INSTRUMENT: 97-1



Reprep_____(complete)

Reprep_____(incomplete)

COMMENTS: _____

91CK1072R6

GE: 1 OF 6

METALS, MIC SPECTROSCOPY

RUN NUM.: R218292

TEST:

REVIEWER:

ELEMENT: Ag

DATE: / /

INSTRUMENT: 97-1

RECORDER: DJL

WAVELENGTH: 328.1

DATE: 5/26/

ANALYST: Cls

CALIBRATION CURVE: 0 0.5 1.0 1.5 2.0 2.5

C.C.: 0.9998

DATE: 5/25/94

ABSORBANCE: 0.001 0.040 0.073 0.113 0.148 0.186 mg/l

SLOPE: 13.57

Y INTERCEPT: -0.0189

ABS.	✓	SAMPLE	TYPE	TRUE VALUE	RESULT	UNIT	DET. LIMIT	% REC.	DILUTION	WT./VOL.	FINAL VOL.	COMMEN
0.118	✓	ICV01	715	1.5	1.58	mg/l	0.05	105				
0.002	✓	Bla01			BDL							
0.010	✓	CDL01		0.15	0.117			78				
0.071	✓	CCV		1.0	0.945			94				
-0.001	✓	Bla01			BDL							
0.107	✓	LCS	Q924420	1.529	1.43			94				
-0.001	✓	Bla01	Q924421		0.03							
-0.000 / 0.079	✓	C156505	M630.5	BDL / 1.0	-0.019 / 1.05			103		50ml	50ml	
0.001 / 0.077	✓	Dup01	Q924422	BDL	BDL			0				
0.105	✓	Spi01	Q924423	1.529	BDL / 1.41			92				
0.004 / 0.084	✓	C156503	M630.5	BDL / 1.0	0.035 / 1.12			109				
0.077	✓	CCV		1.0	1.03			103				
-0.000	✓	BlA01			BDL							

000559

91CK1066.R6

PAGE: 2 OF 6

METALS, ATOMIC SPECTROSCOPY

RUN NUM

TEST:

REVIEWER:

ELEMENT: Ag

DATE: / /

INSTRUMENT: 97-1

RECORDER:

WAVELENGTH: 328.1

DATE: / /

ANALYST: Q

CALIBRATION CURVE:

C.C.:

DATE: 5/25/94

ABSORBANCE:

SLOPE:

Y INTERCEPT:

ABS.	✓	SAMPLE	TYPE	TRUE VALUE	RESULT	UNIT	DET. LIMIT	% REC.	DILUTION	WT./VOL	FINAL VOL	COMMENT
-0.000 / 0.080	✓	C156504	M630.5	BDL / 1.0	-0.019 / 1.07	mg/l	0.05	105		50ml	50ml	
-0.002 / 0.076	✓	C156588	↓	BDL / 1.0	-0.016 / 1.01	↓	↓	96		↓	↓	
	X	BLA02	Q									
0.071	✓	CCV		1.0	0.945	mg/l	0.05	94				
-0.001	✓	BLA01			BDL	↓	↓					
	X	BLA02	Q925019									
0.071	✓	CCV		1.0	0.945	mg/l	0.05	94				
0.002	✓	BLA01			BDL							
0.002	✓	BLA02	Q925019		<0.02							
0.073	✓	LCS	Q928479	1.0	0.972			97				
0.002	✓	BLA02	Q928480		<0.02							
-0.001 / 0.076	✓	C156715	U730.5	BDL / 1.0	-0.032 / 1.01			98		50ml	50ml	
0.034	✓	MSP		1.0	BDL / 0.442			44		↓	↓	

91CK1066.R6

000560

PAGE: 3 OF 6

METALS, ATOMIC SPECTROSCOPY

RUN NUM

TEST:

REVIEWER:

ELEMENT: Ag

DATE: / /

INSTRUMENT: 97-1

RECORDER:

WAVELENGTH: 328.1

DATE: / /

ANALYST: Cls

CALIBRATION CURVE:

C.C.:

DATE: 5/25/94

ABSORBANCE:

SLOPE:

Y INTERCEPT:

ABS.	✓	SAMPLE	TYPE	TRUE VALUE	RESULT	UNIT mg/l	DET. LIMIT 0.05	% REC.	DILUTION	WT./VOL.	FINAL VOL.	COMMENT
0.002 / 0.081	✓	Dupl	Q928481		BDL	~~BDL~~	mg/l	~~0.05~~	Ø			
0.072	✓	Spike	Q928482	1.0	BDL / 0.958			96				
0.074	✓	CCV		1.0	0.985			98				
-0.001	✓	BLAØ1			BDL							
0.000 / 0.080	✓	C156716	M630.5	BDL / 1.0	-0.018 / 1.07			105		50.0	50.0	
	X	C156717										
0.071	✓	CCV		1.0	0.945	mg/l	0.05	94				
-0.001	✓	BLAØ1			BDL							
-0.001 / 0.077	✓	C156717	M630.5	BDL / 1.0	-0.032 / 1.03			100		50.0	50.0	
0.000 / 0.071	✓	C156718		BDL / 1.0	-0.018 / 0.945			93				
-0.001 / 0.071	✓	C156719		BDL / 1.0	-0.032 / 0.945			91				
0.070	✓	CCV		1.0	0.931			93				
0.002	✓	BLAØ1			BDL							

000561

91CK1066.R6

PAGE: 4 OF 6

METALS, ATO SPECTROSCOPY

RUN NUMB

TEST:

REVIEWER:

ELEMENT: Ag

DATE: / /

INSTRUMENT: 97-1

RECORDER:

WAVELENGTH: 328.1

DATE: / /

ANALYST: CL

CALIBRATION CURVE:

C.C.:

DATE: 5/25/94

ABSORBANCE:

SLOPE:

Y INTERCEPT:

ABS.	✓	SAMPLE	TYPE	TRUE VALUE	RESULT	UNIT	DET. LIMIT	% REC.	DILUTION	WT./VOL.	FINAL VOL.	COMMENT
0.074	✓	LCS	Q928336	1.0	0.985	mg/l	0.05	98				
0.002	✓	BIA02	Q928338	6-2-94	<0.02							
-0.000 / 0.070	✓	C156691	M630.5	BDL / 1.0	-0.019 / 0.931			91		50ml	50ml	
0.004 / 0.088	✓	Dup02	Q928339	BDL	BDL			0				
0.062	✓	Sp02	Q928340	1.0	BDL / 0.822			82				
-0.000 / 0.072	✓	C156706	M630.5	BDL / 1.0	-0.019 / 0.958			94				
0.072	✓	CCV		1.0	0.958			96				
0.000	✓	BIA01			BDL							
-0.002 / 0.072	✓	C156707	M630.5	BDL / 1.0	-0.046 / 0.958			91		50ml	50ml	
0.002 / 0.079	✓	C156711		BDL / 1.0	0.008 / 1.05			105				
0.000 / 0.079	✓	C156712		BDL / 1.0	-0.019 / 1.05			103				
0.000 / 0.084	✓	C156714		BDL / 1.0	-0.019 / 1.12			110				
0.075	✓	CCV		1.0	1.00			100				

000562

91CK1066.R6

PAGE: 5 OF 6

METALS, ATO....ᴗ SPECTROSCOPY

RUN NUMB

TEST:

REVIEWER:

ELEMENT: Ag

DATE: / /

INSTRUMENT: 97-1

RECORDER:

WAVELENGTH: 328.1

DATE: / /

ANALYST: Cb

CALIBRATION CURVE:

C.C.:

DATE: 5/25/94

ABSORBANCE:

SLOPE:

Y INTERCEPT:

ABS.	✓	SAMPLE	TYPE	TRUE VALUE	RESULT	UNIT	DET. LIMIT	% REC.	DILUTION	WT./VOL.	FINAL VOL.	COMMENT
0.000	✓	Blank 1			BDL	mg/l	0.05					
0.075	✓	LCS	Q928519	1.0	0.999			100				
0.001	✓	Blank	Q928520		<0.02							
0.002 / 0.081	✓	C1S6765	M630.5	BDL / 1.0	0.002 / 1.08			107		50ml	50ml	
0.001 / 0.081	✓	Dupl	Q928521	BDL	BDL			0				
0.059	✓	Spike	Q928522	1.0	BDL / 0.782			78				
-0.002 / 0.074	✓	C1S6863	M630.5	BDL / 1.0	-0.046 / 0.985			94				
0.071	✓	CCV		1.0	0.945			95				
0.000	✓	Blank 1			BDL							
0.001 / 0.073	✓	C1S6766	M630.5	BDL / 1.0	-0.003 / 0.972			97		50ml	50ml	
-0.002 / 0.079	✓	C1S6767		BDL / 1.0	-0.046 / 1.05			100				
-0.002 / 0.078	✓	C1S6768		BDL / 1.0	-0.046 / 1.04			99				
0.001 / 0.081	✓	C1S6769		BDL / 1.0	-0.003 / 1.08			108				

000563

91CK1066.R6

PA : 6 OF 6

METALS, ATC : SPECTROSCOPY

RUN NUM

TEST:

REVIEWER:

ELEMENT: Ag

DATE: / /

INSTRUMENT: 97-1

RECORDER:

WAVELENGTH: 328.1

DATE: / /

ANALYST: Cls

CALIBRATION CURVE:

C.C.:

DATE: 5/25/94

ABSORBANCE:

SLOPE:

Y INTERCEPT:

ABS.	✓	SAMPLE	TYPE	TRUE VALUE	RESULT	UNIT	DET. LIMIT	% REC.	DILUTION	WT./VOL	FINAL VOL	COMMENT
0.075	✓	CCV		1.0	0.999	mg/l	0.05	100				
0.001	✓	BLA01			BDL							
0.004 / 0.083	✓	C156812	M630.5	BDL / 1.0	0.035 / 1.11			107		50ml	50ml	
0.000 / 0.079	✓	C156813		BDL / 1.0	-0.019 / 1.05			103				
-0.001 / 0.079	✓	C156815		BDL / 1.0	0.038 / 1.05			102				
0.001 / 0.080	✓	C156816		BDL / 1.0	-0.005 / 1.07			106				
0.074	✓	CCV		1.0	0.985			98				
0.002	✓	BLA01			BDL							
0.013	✓	CDL01		0.15	0.158			105				

000564

91CK1066.R6

000265

CORRECTIVE ACTION REPORT

TEST Ag ANALYSIS RUN _____ RUN NUMBER _____

ANALYST JM/dls DATE 5-27-94 INSTRUMENT _____

Describe the problem Spike solution incorrectly prepared by Analyst.

Describe Corrective Action Solution analyzed neat by ICP to develop TRUE Values — List attached.

Analyst instructed to review preparation techniques. Analyst will now have any new spike solutions analyzed by ICP to verify true values prior to use in preparations

Comments Set R217299

Approved [signature] Date 5-27-94

QA [signature] 5-27-94

Spike

LCS True Value

593 LCS-R1
594 SP102W-R1

Al 1.529
Al 1.347
As 0.4633
Ba 1.526
Be 0.4295
Ca 0.3652
Cd 0.4650
Co 0.4668
Cr 0.4720
Cu 0.4569
Fe 0.4448
K 14.15
Mg 0.4477
Mn 0.4542
Ni 0.4604
Pb 0.4392
Sb 0.4889
Se 0.4609
Tl 0.4467
V 0.4520
Zn 0.4509

000566

0.001 Z
0.001 Z
0.002 Z
0.000AV
0.001
0.001
0.001
0 0.001AV
0.039
0.040
0.040
0.5 0.040AV
0.073 F052594B
0.073
0.074
1.0 0.073AV F051394B
0.112
0.113
0.113
1.5 0.113AV F052594C
0.149
0.148
0.149
2.0 0.148AV F052594D
0.186
0.187
0.185
2.5 0.186AV
0.117 F052594E
0.118
0.120
IC V01 7.15 0.118AV
0.002 F051394C
0.002
0.002
0 0.002AV B1A01
0.000
0.000
-0.000
1 ~~0.000AV~~ No silver in this STD
0.010
0.010
0.010
0.1 0.010AV 1:10 of F051394C at bench
0.071
0.071
0.071
1.0 0.071AV CCV
-0.001
-0.001
-0.001
0 -0.001AV B1A01
0.106
0.107
0.107
Q924 420 0.107AV LCS
-0.002
-0.002

Cb 5-25-94
Ag
97-1

		-0.001	
		-0.000	
		-0.000	
C156	505	-0.000AV	
		0.069	
		0.077	
		0.091	
	1	0.079AV	1point
		0.002	
		0.001	
		0.002	
Q924	422	0.001AV	DupØ2
		0.077	
		0.079	
		0.076	
	1	0.077AV	
		0.105	
		0.106	
		0.105	
Q924	423	0.105AV	SpiØ2
		0.004	
		0.004	
		0.004	
C156	503	0.004AV	
		0.091	
		0.086	
		0.075	
	1	0.084AV	
		0.076	
		0.077	
		0.077	
	1	0.077AV	CCr
		0.000	
		-0.001	
		-0.000	
	0	-0.000AV	BlAØ1
		-0.001	
		0.000	
		-0.000	
C156	504	-0.000AV	
		0.076	
		0.083	
		0.080	
	1	0.080AV	
		-0.002	
		-0.002	
		-0.002	
C156	588	-0.002AV	
		0.077	
		0.075	
		0.076	
	1	0.076AV	
		-0.005	
		-0.005	
		-0.006	
	~~530~~	~~-0.005AV~~	Repeated
		0.071	
		0.071	
		0.071	
	1.0	0.071AV	CCr
		-0.000	
		-0.001	
		-0.001	
	0	-0.001AV	BlAØ1
		0.070	

000568

		0.070	
	19	0.070AV	
		-0.003	
		-0.004	
		-0.004	
	19	-0.004AV	
		-0.004	ReRun
		-0.003	
		-0.002	
	20	-0.003AV	
	-0.006 Z		
	-0.003 Z		
	-0.003 Z		
	0.000AV		
		0.069	
		0.072	
		0.071	
	1.0	0.071AV	CCV
		0.002	
		0.001	
		0.002	
	0	0.002AV	BLØ 1
		0.002	
		0.002	
		0.002	
Q9250	19	0.002AV	BLØ2 Spen Blank
		0.073	
		0.072	
		0.072	
Q928	479	0.073AV	LCS
		0.002	
		0.003	
		0.002	
Q928	480	0.002AV	BLØ2
		-0.001	
		-0.001	
		-0.001	
M56	715	-0.001AV	
		0.075	
		0.076	
		0.076	
	1	0.076AV	1point
		0.032	
		0.036	
		0.035	
	1	0.034AV	MBC spike
		0.002	
		0.002	
		0.002	
Q928	481	0.002AV	DupØ2
		0.081	
		0.080	
		0.082	
	1	0.081AV	
		0.072	
		0.073	
		0.072	
- 128	482	0.072AV	SpiØ2
		0.075	
		0.074	
		0.074	
	1	0.074AV	CCV
		-0.002	
		0.000	

		0.000	
		0.000	
		0.001	
C156	716	0.000AV	
		0.076	
		0.082	
		0.081	
	1	0.080AV	1point
		-0.002	
		-0.004	
		-0.003	
	717	-0.003AV	Repeated
		0.070	
		0.071	
		0.071	
	1	0.071AV	CCV
		-0.000	
		-0.001	
		-0.001	
	0	-0.001AV	BLØ1
		-0.001	
		-0.001	
		-0.001	
C156	717	-0.001AV	
		0.077	
		0.076	
		0.077	
	1	0.077AV	
		-0.000	
		0.001	
		-0.000	
156	718	0.000AV	
		0.061	
		0.070	
		0.080	
	1	0.071AV	
		-0.000	
		-0.001	
		-0.000	
156	719	-0.001AV	
		0.072	
		0.074	
		0.069	
	1	0.071AV	
		0.070	
		0.070	
		0.070	
	1.0	0.070AV	CCV
		0.002	
		0.002	
		0.001	
	0	0.002AV	BLØ1
		0.073	
		0.074	
		0.073	
Q928	337	0.074AV	LCS
		0.001	
		0.002	
		0.002	
Q928	338 8 cb 5-25-94	0.002AV	BLØ2
		0.000	
		0.000	
		-0.001	
C156	691	-0.000AV	
		0.059	

000570

		0.073	
	1	0.070AV	1 point
		0.004	
		0.003	
		0.004	
Q928339 ~~338~~		0.004AV	Dup Ø2
Cl 5-25-94		0.094	
		0.088	
		0.082	
	1	0.088AV	
		0.062	
		0.063	
~~Q928~~ Cl 5-25-94		0.062	
~~339~~		0.062AV	
Q928340		0.000	
		0.000	
		-0.000	
C156	706	-0.000AV	
		0.073	
		0.070	
		0.072	
	1	0.072AV	
		0.071	
		0.072	
		0.072	
	1.0	0.072AV	CCV
		0.001	
		-0.000	
		0.000	
	0	0.000AV	BA Ø1
		-0.002	
		-0.002	
		-0.002	
C156	707	-0.002AV	
		0.072	
		0.073	
		0.072	
	1	0.072AV	
		0.002	
		0.002	
		0.002	
C156	711	0.002AV	
		0.076	
		0.073	
		0.087	
	1	0.079AV	
		0.000	
		0.000	
		0.000	
C156	712	0.000AV	
		0.078	
		0.078	
		0.079	
	1	0.079AV	
		0.000	
		-0.000	
		-0.000	
6	714	0.000AV	
		0.082	
		0.089	
		0.082	
	1	0.084AV	
		0.076	
		0.076	
		0.075	

		-0.004	
C156	767	-0.002AV	
		0.079	
		0.079	
		0.078	
	1	0.079AV	
		-0.001	
		-0.002	
		-0.002	
C156	768	-0.002AV	
		0.077	
		0.077	
		0.079	
	1	0.078AV	
		0.001	
		0.001	
		0.002	
156769	~~768~~ do	0.001AV	
	5-25-94	0.080	
		0.081	
		0.081	
	1	0.081AV	
		0.075	
		0.075	
		0.074	
	1	0.075AV	CCr
		-0.000	
		0.001	
		0.001	
	0	0.001AV	Blaz 1
		0.004	
		0.003	
		0.004	
C156	812	0.004AV	
		0.082	
		0.083	
		0.083	
	1	0.083AV	
		-0.000	
		0.001	
		0.000	
C156	813	0.000AV	
		0.079	
		0.079	
		0.080	
	1	0.079AV	
		-0.000	
		-0.001	
		-0.001	
C156	815	-0.001AV	
		0.079	
		0.079	
		0.081	
	1	0.079AV	
		0.001	
		0.001	
		0.002	
C156	816	0.001AV	
		0.080	
		0.081	
		0.080	
	1	0.080AV	
		0.074	
		0.075	

1.0 0.074AV CCV
0.002
0.002
0.002
0 0.002AV BLØ1
0.012
0.013
0.012
0.1 0.013AV CDLØ1

ANALYSIS RUN: R218707

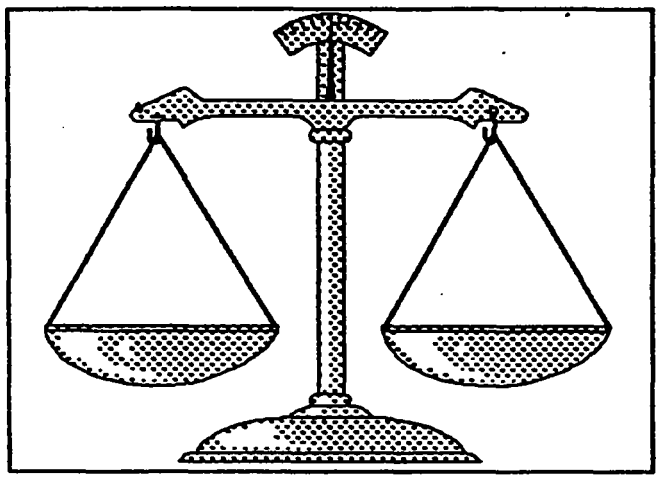
RUN NUMBER: 10021

TEST: Pb

ANALYST: Cls

DATE: 5/31/94

INSTRUMENT: 97-1



Reprep_____(complete)

Reprep_____(incomplete)

COMMENTS: _____

91CK1072R6

PAGE 1 OF 6

METALS, ATOMIC SPECTROSCOPY

TEST:

ELEMENT: Pb

INSTRUMENT: 97-1

WAVELENGTH: 283.3

ANALYST: CLO

DATE: 5/31/94

CALIBRATION CURVE: 0 1.0 2.5 5.0 10 20 mg/l

ABSORBANCE: 0.000 0.008 0.028 0.043 0.084 0.163

REVIEWER: MMC

DATE: 6/3/94

RECORDER: DSC

DATE: 5/31/94

C.C.: 0.9998

SLOPE: 122.6

Y INTERCEPT: -0.124

CONC.	✓	SAMPLE	TYPE	TRUE VALUE	RESULT	UNIT	DET. LIMIT	% REC.	DILUTION	WT./VOL.	FINAL VOL.	COMMENT
0.045	✓	ICV01	519	5.0	5.40	mg/l	0.25	108				
-0.000	✓	BLA01			BDL							
0.005	✓	CDL01		0.5	0.489			98				
0.044	✓	CCV		5.0	5.27			105				
0.001	✓	BLA01			BDL							
0.010	✓	LCS	Q928479	1.0	1.10			110				
0.001	✓	BLA02	Q928480		<0.1							
0.001 / 0.018	✓	C156715	M716.5	BDL / 2.0	-0.001 / 2.08			104		50ml	50ml	
0.009	X	MSP		1.0	BDL / 0.980			98				
0.000 / 0.017	✓	DUP02	Q928481	BDL	BDL			Ø				
0.009	✓	SPI02	Q928482	1.0	BDL / 0.980			98				
-0.000 / 0.017	✓	C156716	M616.5	BDL / 2.0	-0.12 / 1.96			98	1			
0.044	✓	CCV		5.0	5.27			105				

91CK1066.R6

PAGE 2 OF 6

METALS, ATOMIC SPECTROSCOPY

TEST:

ELEMENT: Pb

INSTRUMENT: 97-1

WAVELENGTH: 283.3

ANALYST: CLD

DATE: 5/31/94

CALIBRATION CURVE:

ABSORBANCE:

REVIEWER:

DATE: /

RECORDER:

DATE: / /

C.C.:

SLOPE:

Y INTERCEPT:

CONC.	✓	SAMPLE	TYPE	TRUE VALUE	RESULT	UNIT	DET. LIMIT	% REC.	DILUTION	WT./VOL.	FINAL VOL.	COMMENT
0.000	✓	BLA01			BDL	mg/l	0.25					
0.000 / 0.018	✓	C156717	M616.5	BDL / 2.0	-0.12 / 2.08			104	1	50.l	50.l	
0.002 / 0.020	✓	C156718		BDL / 2.0	0.121 / 2.33			110	1			
0.001 / 0.018	✓	C156719		BDL / 2.0	-0.001 / 2.08			104	1			
0.044	✓	CCV		5.0	5.27			105				
0.001	✓	BLA01			BDL							
0.010	✓	LCS	Q926519	1.0	1.10			110				
0.001	✓	BLA02	Q928520		<0.1							
0.001 / 0.019	✓	C156765	M616.5	BDL / 2.0	0.001 / 2.21			110	1	50.l	50.l	
0.001 / 0.018	✓	DUP01	Q928521	BDL	BDL			Ø				
0.009	✓	SPI02	Q928522	1.0	BDL / 0.980			98				
0.004 / 0.021	✓	C156863	M616.5	0.37 / 2.0	0.366 / 2.45			104	1			
0.044	✓	CCV		5.0	5.27			105				

91CK1066.R6

000577

METALS, ATOMIC SPECTROSCOPY

TEST:

ELEMENT: Pb

INSTRUMENT: 97-1

WAVELENGTH: 283.3

ANALYST: [illegible]

DATE: 5/31/94

CALIBRATION CURVE:

ABSORBANCE:

REVIEWER:

DATE: / /

RECORDER:

DATE: / /

C.C.:

SLOPE:

Y INTERCEPT:

CONC.	✓	SAMPLE	TYPE	TRUE VALUE	RESULT	UNIT	DET. LIMIT	% REC.	DILUTION	WT./VOL	FINAL VOL	COMMENT
0.000	✓	Blø1			BDL	mg/l	0.25					
0.000 / 0.018	✓	C156766	M616.5	BDL / 2.0	-.12 / 2.08			104	1	50ml	50ml	
0.001 / 0.018	✓	C156767		BDL / 2.0	-0.001 / 2.08			104	1			
0.001 / 0.019	✓	C156768		BDL / 2.0	-0.001 / 2.21			110	1			
0.000 / 0.019	✓	C156769		BDL / 2.0	-.12 / 2.21			110	1			
0.002 / 0.018	✓	C156812		BDL / 2.0	0.12 / 2.08			98	1			
0.045	✓	CCV		5.0	5.40			108				
0.001	✓	Blø1			BDL							
0.001 / 0.019	✓	C156813	M616.5	BDL / 2.0	-0.001 / 2.21			110	1	50ml	50ml	
0.001 / 0.019	✓	C156815		BDL / 2.0	-0.001 / 2.21			110	1			
0.002 / 0.020	✓	C156816		BDL / 2.0	.12 / 2.33			110	1			
0.045	✓	CCV		5.0	5.40			108				
0.002	✓	Blø1			BDL							
0.045	✓	CCV		5.0	5.40			108				
-0.000	✓	Blø1			BDL							

C1066.R6

PAGE 4 OF 6

METALS, ATOMIC SPECTROSCOPY

TEST:

ELEMENT: Pb

INSTRUMENT: 97-1

WAVELENGTH: 283.3

ANALYST: Cl

DATE: 5/31/94

CALIBRATION CURVE:

ABSORBANCE:

REVIEWER:

DATE: / /

RECORDER:

DATE: / /

C.C.:

SLOPE:

Y INTERCEPT:

000579

CONC.	✓	SAMPLE	TYPE	TRUE VALUE	RESULT	UNIT	DET. LIMIT	% REC.	DILUTION	WT./VOL	FINAL VOL	COMMENT
0.009	✓	LCS	Q930672	1.0	0.980	mg/l	0.25	98				
-0.000	✓	BLA02	Q930673		-0.12							
0.001	✓	C156977	M116.1		BDL	mg/kg	13			1.993	100ml	
0.001	✓	DUP02	Q930674	BDL	BDL			Ø		2.03		
0.011	✓	SPI02	Q930675	50.2	BDL / 61.6			123		1.99		
0.000	✓	C156975	M116.1		BDL					2.00		
0.001	✓	C156976			BDL					2.01		
0.002	✓	C156978			BDL					2.00		
0.045	✓	CCV		5.0	5.40	mg/l	0.25	108				
0.001	✓	BLA01			BDL							
	X	LCS	Q928532									
	X	BLA02	Q928533									
0.045	✓	CCV		5.0	5.40	mg/l	0.25	108				

CK1066.R6

METALS, ATOMIC SPECTROSCOPY

TEST:

ELEMENT: Pb

INSTRUMENT: 97-1

WAVELENGTH: 283.3

ANALYST: CLS

DATE: 5/31/94

CALIBRATION CURVE:

ABSORBANCE:

REVIEWER:

DATE: / /

RECORDER:

DATE: / /

C.C.:

SLOPE:

Y INTERCEPT:

CONC.	✓	SAMPLE	TYPE	TRUE VALUE	RESULT	UNIT	DET. LIMIT	% REC.	DILUTION	WT./VOL.	FINAL VOL.	COMMENT
-0.001	✓	BLØ1			BDL	mg/l	0.25					
0.010	✓	LCS	Q928532	1.0	1.10	↓	↓	110				
-0.001	✓	BLØ2	Q928533		-0.2	↓	↓					
-0.000	X	C156909	QC		BDL	mg/kg	13			2.019	100ml	
-0.000	✓	DUPP	Q928534	BDL	BDL	↓	↓	Ø		1.99	↓	
0.008	✓	SPIØ2	Q928535	50.5	BDL/143.3	↓	↓	86		1.98	↓	
0.059	✓	C156861	M116.1		3500	↓	130		1:10	2.02	↓	
0.028	✓	C156862	↓		170	↓	13			1.97	↓	
0.006	✓	B126471	↓		30	↓	↓			2.00	↓	
0.045	✓	CCV		5.0	5.40	mg/l	0.25					
-0.000	✓	BLØ1			BDL	↓	↓					
0.006	✓	C156858	M116.1		31	mg/kg	13			1.985	100ml	
0.005	✓	C156914	↓		25	↓	↓			1.99	↓	

1CK1066.R6

000530

METALS, ATOMIC SPECTROSCOPY

TEST:

ELEMENT: Pb

INSTRUMENT: 97-1

WAVELENGTH: 283.3

ANALYST:

DATE: / /

CALIBRATION CURVE:

ABSORBANCE:

REVIEWER:

DATE: / /

RECORDER:

DATE: / /

C.C.:

SLOPE:

Y INTERCEPT:

CONC.	✓	SAMPLE	TYPE	TRUE VALUE	RESULT	UNIT	DET. LIMIT	% REC.	DILUTION	WT./VOL.	FINAL VOL.	COMMENT
0.046	✓	CCV		5.0	5.52	mg/l	0.25	110				
-0.000	✓	Blø1			BDL	↓	↓					
0.005	✓	CDLø1		0.5	0.489	↓	↓	98				

91CK1066.R6

000531

		-0.871	
	1	-0.861AV	
?		0.001 Z	
		0.001 Z	
		0.001 Z	
		0.000AV	
		0.000	
		-0.000	
		0.000	
	0	0.000AV	
		0.009	
		0.008	
		0.008	
	1.0	0.008AV	040794C
		0.022	
		0.022	
		0.023	
	25	0.022AV	
		0.043	111293B
		0.043	
		0.043	
	5.0	0.043AV	042494B
		0.085	
		0.084	
		0.084	
	10.0	0.084AV	
		0.163	F052394D
		0.162	
		0.163	
	20.0	0.163AV	
		0.045	F052394E
		0.045	
		0.044	
Ir.Ø1	519	0.045AV	011894D
		0.000	
		-0.001	
		-0.000	
BlAØ1	0	-0.000AV	
		0.005	
		0.006	
		0.006	
CDLØ1	0.5	0.005AV	022894B
		0.044	
		0.045	
		0.044	
	5.0	0.044AV	CCV
		0.001	
		0.002	
		0.001	
	0	0.001AV	BlAØ1
		0.010	
		0.010	
		0.009	
Q928	479	0.010AV	LCS
		0.002	
		0.001	
		0.001	
Q928	480	0.001AV	BlAØ2

Pb
Cls
5-31-94
97-1

283.3
Slit 0.7
Background Y

			0.001	
			0.001	
C156	715		0.001AV	
			0.019	
			0.018	
			0.018	
		1	0.018AV	1 point
			0.010	
			0.009	
			0.009	
		1	0.009AV	Matrix Bias Correction (MSP) Spike
			-0.000	
			0.000	
			0.000	
Q928	481		0.000AV	Dup02
			0.017	
			0.017	
			0.018	
		1	0.017AV	
			0.009	
			0.009	
			0.009	
Q928	482		0.009AV	Spi02
			0.000	
			0.000	
			-0.000	
C156	716		-0.000AV	
			0.017	
			0.017	
			0.019	
		1	0.017AV	
			0.043	
			0.044	
			0.044	
		5.0	0.044AV	CCV
			-0.000	
			0.000	
			-0.000	
		0	0.000AV	BIA01
			0.000	
			0.000	
			-0.000	
C156	717		0.000AV	
			0.018	
			0.018	
			0.020	
		1	0.018AV	
			0.001	
			0.002	
			0.002	
C156	718		0.002AV	
			0.020	
			0.019	
			0.020	
		1	0.020AV	
			0.001	
			0.000	
			0.001	
C156	719		0.001AV	
			0.018	
			0.018	
			0.018	
		1	0.018AV	
			0.044	

	5.0	0.044AV	CCV
		0.001	
		0.001	
		0.001	
	0	0.001AV	BA01
		0.010	
		0.010	
		0.010	
Q928	519	0.010AV	LCS
		0.001	
		0.001	
		0.001	
Q928	520	0.001AV	BA02
		0.001	
		0.001	
		0.001	
C156	765	0.001AV	
		0.018	
		0.018	
		0.020	
	1	0.019AV	
		0.001	
		0.001	
		0.000	
Q928	521	0.001AV	DUP02
		0.019	
		0.018	
		0.018	
	1	0.018AV	
		0.010	
		0.009	
		0.009	
Q928	522	0.009AV	SP02
		0.004	
		0.004	
		0.004	
C156	863	0.004AV	
		0.021	
		0.020	
		0.021	
	1	0.021AV	
		0.045	
		0.044	
		0.044	
	5.0	0.044AV	CCV
		0.001	
		-0.000	
		0.000	
	0	0.000AV	BA01
		0.000	
		0.001	
		0.000	
C156	766	0.000AV	
		0.018	
		0.018	
		0.018	
	1	0.018AV	
		0.001	
		0.000	
		0.001	
C156	767	0.001AV	
		0.018	
		0.018	
		0.018	
	1	0.018AV	

		0.001	
		0.000	
C156	768	0.001AV	
		0.019	
		0.019	
		0.019	
	1	0.019AV	
		0.001	
		-0.000	
		0.000	
C156	769	0.000AV	
		0.019	
		0.020	
		0.018	
	1	0.019AV	
		0.001	
		0.002	
		0.002	
C156	812	0.002AV	
		0.018	
		0.018	
		0.019	
	1	0.018AV	
		0.045	
		0.044	
		0.045	
	5.0	0.045AV	CCV
		0.001	
		0.001	
		0.001	
	0	0.001AV	BlaØ1
		0.001	
		0.002	
		0.001	
C156	813	0.001AV	
		0.019	
		0.018	
		0.019	
	1	0.019AV	
		0.001	
		0.001	
		0.001	
C156	815	0.001AV	
		0.019	
		0.019	
		0.018	
	1	0.019AV	
		0.002	
		0.002	
		0.001	
C156	816	0.002AV	
		0.019	
		0.020	
		0.020	
	1	0.020AV	
		0.045	
		0.045	
		0.045	
	5.0	0.045AV	CCV
		0.002	
		0.002	
		0.001	
	0	0.002AV	BlaØ1
		0.011	
		0.011	

	672	0.011AV	Repeat
		0.046	
		0.045	
		0.045	
	5.0	0.045AV	CCV
		-0.000	
		-0.000	
		-0.001	
	0	-0.000AV	BlaØ1
		0.009	
		0.009	
		0.009	
Q930	672	0.009AV	LCS
		-0.000	
		-0.000	
		0.000	
Q930	673	-0.000AV	BlaØ2
		0.001	
		0.001	
		0.001	
C156	977	0.001AV	
		0.001	
		0.001	
		0.001	
Q930	674	0.001AV	DupØ2
		0.011	
		0.010	
		0.011	
Q930	675	0.011AV	SpiØ2
		0.001	
		-0.000	
		-0.000	
156	975	0.000AV	
		0.002	
		0.001	
		0.000	
C156	976	0.001AV	
		0.002	
		0.002	
		0.002	
C156	978	0.002AV	
		0.045	
		0.045	
		0.046	
	5.0	0.045AV	CCV
		0.001	
		0.001	
		0.000	
	0	0.001AV	BPØ1
		0.011	
		0.011	
		0.010	
	532	0.011AV	
		0.001 Z	AZ
		0.001 Z	
		0.001 Z	
		0.000AV	
		0.045	
		0.046	
		0.045	
	5.0	0.045AV	CCV
		-0.000	
		-0.001	
		-0.001	
	0	-0.001AV	BlaØ1

		0.010	
		0.010	
Q928	532	0.010AV	LCS
		-0.000	
		-0.001	
		-0.001	
28	533	-0.001AV	BlaØ2
		-0.000	
		-0.001	
		-0.000	
C156	909	-0.000AV	
		-0.000	
		-0.000	
		-0.000	
Q928	534	-0.000AV	DupØ2
		0.008	
		0.009	
		0.008	
Q928	535	0.008AV	SpiØ2
		0.496	
		0.500	
		0.332	
C156	861	0.443AV	Range
		0.060	
		0.058	
		0.058	
C156	861	0.059AV	1:10
		0.027	
		0.028	
		0.028	
C156	862	0.028AV	
		0.005	
		0.006	
B126		0.006	
~~C156~~	471	0.006AV	
Q5 5-3-94		0.045	
		0.045	
		0.045	
	5.0	0.045AV	CCV
		0.000	
		-0.000	
		-0.001	
	0	-0.000AV	BlaØ1
		0.006	
		0.006	
		0.006	
C156	858	0.006AV	
		0.006	
		0.005	
		0.005	
C156	914	0.005AV	
		0.046	
		0.045	
		0.045	
	5.0	0.046AV	CCV
		-0.000	
		-0.000	
		-0.000	
	0	-0.000AV	BlaØ1
		0.005	
		0.004	
		0.005	
Q5		0.005AV	CDLØ1

ANALYSIS RUN: R219121

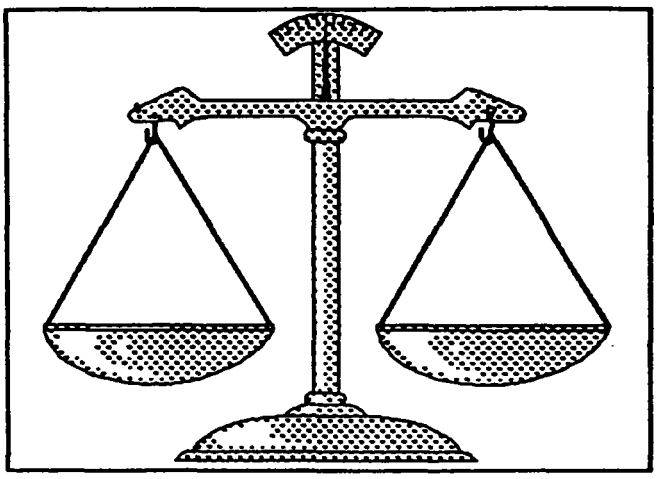
RUN NUMBER: 10023

TEST: Cr

ANALYST: AW2948

DATE: 6/1 94

INSTRUMENT: 97-1



Reprep_____(complete)

Reprep_____(incomplete)

COMMENTS: _____

91CK1072.R6

PAGE: 1 OF 4

METALS, ATOMIC SPECTROSCOPY

RUN NUMBER: 000589

TEST:

ELEMENT: Cr

INSTRUMENT: ~~3~~ 97.1

WAVELENGTH: 357.9

ANALYST: AM2948

DATE: 6/1/94

CALIBRATION CURVE: 0.00 0.50 1.00 2.00 3.00 4.00 mg/L

ABSORBANCE: 0.000 0.029 0.056 0.116 0.173 0.206

REVIEWER: mmc

DATE: 4/3/

RECORDER: mmc

DATE: 6/3/

C.C.: 0.9968

SLOPE: 18.76

Y INTERCEPT: -0.0447

ABS.	✓	SAMPLE	TYPE	TRUE VALUE	RESULT	UNIT	DET. LIMIT	% REC.	DILUTION	WT./VOL.	FINAL VOL.	COMMEN
0.081	✓	ICV01	1915	1.50	1.47	mg/L	0.05	98				
0.006	✓	CCL01		0.100	0.068			68				
-0.000	✓	BLK01			BDL							
0.053	✓	LCS	Q978519	1.00	0.950			95				1845A
0.000	✓	BLK02	Q978520		<0.02							
0.001 / 0.058	✓	C156765	H610.5	BDL / 1.00	BDL / 0.931			93		50mL	50mL	
0.001 / 0.057	✓	DUP03 C156765	Q978521	BDL	BDL			0				
AM2948 / 0.044	✓	MS03 C156765	Q978522	1.00	BDL / 0.781			78				
0.001 / 0.06	✓	C156766		BDL / 1.00	BDL / 1.01			101				
0.003 / 0.056	✓	C156767		BDL / 1.00	BDL / 1.01			101				
0.109	✓	CCV01		2.00	2.00			100				
0.000	✓	CCB01			BDL							
0.001 / 0.055	✓	C156768		BDL / 1.00	BDL / 0.987			99		50mL	50mL	

CK1066.R6

PAGE 2 OF 4

METALS, ATOMIC SPECTROSCOPY

TEST:

ELEMENT: Cr

INSTRUMENT: 97.1

WAVELENGTH: 357.9

ANALYST: AM2948

DATE: 4/1/94

CALIBRATION CURVE:

ABSORBANCE:

REVIEWER:

DATE: / /

RECORDER:

DATE: / /

C.C.:

SLOPE:

Y INTERCEPT:

CONC.	✓	SAMPLE	TYPE	TRUE VALUE	RESULT	UNIT	DET. LIMIT	% REC.	DILUTION	WT./VOL.	FINAL VOL	COMMENT
0.001 0.055	✓	C156769		BDL 1.00	BDL 0.987	mg/L	0.05	99		50 mls	50 mls	
0.001 0.055	✓	C156812		BDL 1.00	BDL 0.987			99				
0.001 0.055	✓	C156813		BDL 1.00	BDL 0.987			99				
0.001 0.055	✓	C156815		BDL 1.00	BDL 0.987			99				
0.108	✓	AW01		2.00	1.98			99				
0.000	✓	BLA01			BDL							
0.001 0.055	✓	C156816		BDL 1.00	BDL 0.987			99		50 mls	50 mls	
0.017 0.066	✓	C156863		0.574 1.00	0.07 1.19			92				
0.050	✓	LCS	Q933307	1.00	0.893			89				1849B
0.000	✓	BLA02	Q933308		<0.02							
0.010	✗	C156988	QC ONLY		3.5	mg/kg	1.3			2.02g	50 mls	
0.010	✓	DUP02 C156988	Q933309	3.54	3.54			0		2.02g		
0.048	✓	SPK02 C156988	933310	25.0	3.54 21.4			76		2.00g		

91CK1066.R6

000590

PAGE: 3 OF 4

METALS, ATOMIC SPECTROSCOPY

RUN NUMBER:

TEST:

REVIEWER:

ELEMENT: Cu

DATE: / /

INSTRUMENT: 97-1

RECORDER:

WAVELENGTH: 3579

DATE: / /

ANALYST: AM 9/18

CALIBRATION CURVE:

C.C.:

DATE: 6/1/97

ABSORBANCE:

SLOPE:

Y INTERCEPT:

ABS.	✓	SAMPLE	TYPE	TRUE VALUE	RESULT	UNIT	DET. LIMIT	% REC.	DILUTION	WT./VOL	FINAL VOL	COMMEN
0.107	✓	BW01		2.00	1.96	mg/L	0.05	98				
-0.000	✓	BLA01			BDL	↓	↓					
0.016	✓	B126472	M110.1		6.4	mg/kg	1.3			1.99g	50mls	
0.058	✓	LCS	Q930672	1.00	1.04	mg/L	0.05	104				184873
-0.000	✓	BLA02	Q930673		<0.02	↓	↓					
0.045	✓	C156977	M110.1		40	mg/kg	2.5			1.99g 2.03g	100mls	
0.045	✓	DUP02 C156977	Q930674	40.2	39.4			2.0		1.99g		
0.104	✓	SP02 C156977	Q930675	50.3	~~40.2~~ 95.8			111		2.00g		
0.100	✗	DPS02 C156977	Q930676							~~0.01g~~ 1.98g		
-0.000	✓	C156975	M110.1		BDL					2.00g		
~~0.025~~ 0.008	✓	C156976			21					2.01g		
0.023	✓	C156978	↓		19	↓	↓			2.00g	↓	
0.006	✓	CCL01		0.100	0.068	mg/L	0.05	68				

CK1066.R6

PAGE: 4 OF 4

METALS, ATOMIC SPECTROSCOPY

RUN NUMBER:

TEST:

REVIEWER:

ELEMENT: Cr

DATE: / /

INSTRUMENT: 97-1

RECORDER:

WAVELENGTH: 357.9

DATE: / /

ANALYST: AM 2948

CALIBRATION CURVE: C.C.:

DATE: 6 / 1 / 94

ABSORBANCE: SLOPE:

Y INTERCEPT:

ABS.	✓	SAMPLE	TYPE	TRUE VALUE	RESULT	UNIT	DET. LIMIT	% REC.	DILUTION	WT./VOL.	FINAL VOL.	COMMEN
0.079	✓	CrW01		1.50	1.44	mg/L	0.05	96				
0.000	✓	BLA01			BDL	↓	↓					

CK1066.R6

000592

Cu
357.9
97-1
AW294B
6-1-94

		0.001 Z	
		0.001 Z	
		0.001 Z	
		0.000AV	
		-0.000	
		-0.000	
		0.000	
	0	0.000AV	
		0.029	
		0.029	
		0.028	
	0.5	0.029AV	017494A
		0.056	
		0.056	
		0.056	
	1	0.056AV	F053394H
		0.110	
		0.109	
		0.110	
	2	0.110AV	F053394G
		0.173	
		0.173	
		0.173	
	3	0.173AV	042594D
		0.206	
		0.206	
		0.206	
	4	0.206AV	F053394F
		0.080	
		0.080	
		0.081	
Fe(II)	915	0.081AV	030494B
		0.006	
		0.006	
		0.006	
		0.006	
PDL	0.1	0.006AV	F050994B
		-0.000	
		0.000	
		-0.000	
	0	-0.000AV	
		0.053	
		0.053	
		0.053	
Li	8519	0.053AV	1545A
		0.001	
		0.000	
		0.000	
BeAlO	8520	0.000AV	
		0.001	
		0.001	
		0.001	
Cl156	765	0.001AV	
		0.056	
		0.057	
		0.043	
	1	0.052AV	
		0.002	
		0.001	

Cal Curve

C156 765	8521	0.001AV
	2UP02	0.056
		0.057
		0.057
	1	0.057AV
		0.044
		0.044
		0.044
C156 765	8522	0.044AV
	3PI02	0.001
		0.001
		0.002
C156	766	0.001AV
		0.056
		0.056
		0.056
	1	0.056AV
		0.002
		0.001
		0.002
C156	767	0.002AV
		0.056
		0.056
		0.056
	1	0.056AV
		0.110
		0.109
		0.109
[illegible]	2 .0	0.109AV F057394G7
		0.000
		0.000
		0.000
2UP01	0	0.000AV
		0.001
		0.001
		0.001
C156	768	0.001AV
		0.055
		0.055
		0.055
	1	0.055AV
		0.001
		0.000
		0.001
C156	769	0.001AV
		0.055
		0.055
		0.056
	1	0.055AV
		0.001
		0.001
		0.001
C156	812	0.001AV
		0.055
		0.055
		0.056
	1	0.055AV
		0.001
		0.001
		0.000
C156	813	0.001AV
		0.055
		0.055
		0.055

		0.001	
		0.001	
		0.001	
C156	815	0.001AV	
		0.055	
		0.055	
		0.055	
	1	0.055AV	
		0.108	
		0.108	
		0.109	
	2.0	0.108AV	F053946
		-0.000	
		0.000	
		-0.000	
	0	0.000AV	
		0.001	
		0.001	
		0.001	
C150	816	0.001AV	
		0.056	
		0.055	
		0.055	
	1	0.055AV	
		0.017	
		0.017	
		0.017	
C156	863	0.017AV	
		0.066	
		0.066	
		0.066	
	1	0.066AV	
		0.050	
		0.050	
		0.050	
LCS	3307	0.050AV	1849B
		-0.000	
		0.000	
		0.001	
	3308	0.000AV	
		0.009	
		0.010	
		0.010	
C156	888	0.010AV	
		0.009	
188		0.009	
		0.010	
	3309	0.010AV	
		0.048	
		0.048	
		0.048	
	3310	0.048AV	
		0.017	
		0.017	
		0.002	← Hose pulled out
	472	0.012AV	
		0.107	
		0.108	
		0.107	
	2.0	0.107AV	F053946
		-0.000	
		-0.000	
		-0.000	
	0	-0.000AV	
		0.016	

		0.017	
B126	472	0.016AV	
		0.057	
		0.058	
		0.059	
	672	0.058AV	1946B
		-0.000	
		-0.000	
		-0.000	
BLA02	673	-0.000AV	
		0.045	
		0.046	
		0.046	
C156	977	0.045AV	
		0.044	
		0.045	
6977	AUP02	0.045	
	674	0.045AV	
		0.103	
		0.104	
	SPE02	0.104	
	675	0.104AV	
		0.100	
		0.101	
	DPS02	0.100	
	676	0.100AV	
		-0.000	
		-0.000	
		0.000	
C156	975	-0.000AV	
		0.025	
		0.025	
		0.025	
C156	976	0.025AV	
		0.022	
		0.023	
		0.023	
C156	978	0.023AV	
		0.006	
		0.006	
		0.006	
	0.1	0.006AV	F050494B
		0.079	
		0.080	
		0.079	
30C01	1915	0.079AV	030494B
		0.000	
		0.000	
		-0.000	
BLA01	0	0.000AV	
		-0.391	
		~~-0.461~~	
		~~-0.464~~	
	1	~~-0.438AV~~	

ICP COVER SHEET

RDL
Ba 5.0 mg/L

Analysis Run: R219436 mm

Data File: 0609

Analyst: JM 3487

QC Checked:

Serial dilutions or reruns needed: YES _____ NO ✓
(If yes, see below. If no, run is completed as is.)

Serial dilution ("L") done on sample No.(s):

NUMBER	CLIENT	DILUTION	DONE IN RUN NO.

Rerun(s)/Repreps(s):

QC NO.	SAMPLE NO.	CLIENT	REASON	RUN NO.

92CK1461.R6

JML 6/9/94
3487

PLASMA 400 Analysis Ver. 4.10 Thu 06/09/94 - 09:00:20

:thod File Name: ems Replicates:2 Read Delay: 60
emarks: Analyst: Sandy Kanapilly Data File: 0609

STANDARD #1 REPLICATE #1 0902 6/09/94
BA230 EM 34326

STANDARD #1 REPLICATE #2
BA230 EM 35041

BA230 AV 34683.5 SD 505.6 CV 1.5 CONC 10.000

BLANK REPLICATE #1 0904 6/09/94
BA230 EM 378

BLANK REPLICATE #2
BA230 EM 359

BA230 AV 368.5 SD 13.4 CV 3.6 CONC 0.000

ICV01
SAMPLE #1 REPLICATE #1 0906 6/09/94
BA230 1.906

SAMPLE #1 REPLICATE #2
BA230 1.909

BA230 AV 1.907 SD 0.0021 CV 0.11 TV 2.0 mg/L % Rec 95%

BLA01
SAMPLE #2 REPLICATE #1 0908 6/09/94
BA230 -0.009

SAMPLE #2 REPLICATE #2
BA230 -0.008

BA230 AV -0.009 SD 0.0008 CV 9.27 BDL

CDL01
SAMPLE #3 REPLICATE #1 0911 6/09/94
BA230 0.673

SAMPLE #3 REPLICATE #2
BA230 0.667

BA230 AV 0.670 SD 0.0045 CV 0.68 TV 0.7 % Rec 96%

CAL01
SAMPLE #4 REPLICATE #1 0913 6/09/94
BA230 9.792

SAMPLE #4 REPLICATE #2
BA230 9.787

ICSA
BA230 AV 9.789 SD 0.0037 CV 0.04 TV 10 mg/L % Rec 98%

SAMPLE #5 REPLICATE #1 0915 6/09/94
BA230 0.012

000598

BA230 0.011

ICSAB BA230 AV 0.011 SD 0.0008 CV 7.35 BDL

SAMPLE #6 REPLICATE #1 0918 6/09/94
BA230 0.450

AMPLE #6 REPLICATE #2
BA230 0.445

CCV BA230 AV 0.447 SD 0.0033 CV 0.74 TV 0.5mg/L % Rec 89%

SAMPLE #7 REPLICATE #1 0920 6/09/94
BA230 4.898

SAMPLE #7 REPLICATE #2
BA230 4.870

BA230 AV 4.884 SD 0.0196 CV 0.40 TV 5.0mg/L % Rec 98%

BLA01
SAMPLE #8 REPLICATE #1 0922 6/09/94
BA230 -0.005

SAMPLE #8 REPLICATE #2
BA230 -0.006

LCS 1843A BA230 AV -0.006 SD 0.0002 CV 3.72 BDL

SAMPLE #9 REPLICATE #1 0924 6/09/94
Q928479 BA230 0.884

AMPLE #9 REPLICATE #2
BA230 0.894

BA230 AV 0.889 SD 0.0072 CV 0.81 TV 1.0 % Rec 89%

BLA02 1843A
SAMPLE #10 REPLICATE #1 0926 6/09/94
Q928480 BA230 -0.012

SAMPLE #10 REPLICATE #2
BA230 -0.011 peak-noisy

✓C156715 BA230 AV -0.011 SD 0.0004 CV 3.67 BDL

SAMPLE #11 REPLICATE #1 0929 6/09/94
BA230 2.864

SAMPLE #11 REPLICATE #2
BA230 2.859

SPI01 BA230 AV 2.862 SD 0.0035 CV 0.12 BDL

SAMPLE #12 REPLICATE #1 0931 6/09/94
BA230 3.708

SAMPLE #12 REPLICATE #2
BA230 3.671

DUP02 C156715 BA230 AV 3.689 SD 0.0268 CV 0.73 TV 1.0 % Rec 83%

SAMPLE #13 REPLICATE #1 0933 6/09/94
Q928481 BA230 2.847

SAMPLE #13 REPLICATE #2
BA230 2.871

SPIOR C156715 BA230 AV 2.859 SD 0.0171 CV 0.60 BDL %RPD NA

SAMPLE #14 REPLICATE #1 0935 6/09/94
Q928482 BA230 3.722

SAMPLE #14 REPLICATE #2
BA230 3.714

DRSOR C156715 BA230 AV 3.718 SD 0.0056 CV 0.15 TV 1.0 %Rec 86%

SAMPLE #15 REPLICATE #1 0938 6/09/94
Q928483 BA230 3.819

SAMPLE #15 REPLICATE #2
BA230 3.855

MSP C156715 BA230 AV 3.837 SD 0.0260 CV 0.68 TV 1.0 %RPD 12%

SAMPLE #16 REPLICATE #1 0940 6/09/94
BA230 3.767

SAMPLE #16 REPLICATE #2
BA230 3.743

CCV BA230 AV 3.755 SD 0.0171 CV 0.46 TV 1.0 %Rec 89%

SAMPLE #17 REPLICATE #1 0942 6/09/94
BA230 4.961

SAMPLE #17 REPLICATE #2
BA230 4.931

BLA01 BA230 AV 4.946 SD 0.0208 CV 0.42 TV 5.0mg/L %Rec 99%

SAMPLE #18 REPLICATE #1 0944 6/09/94
BA230 -0.001

SAMPLE #18 REPLICATE #2
BA230 -0.003

C156716 BA230 AV -0.002 SD 0.0012 CV 56.57 BDL

SAMPLE #19 REPLICATE #1 0946 6/09/94
BA230 3.406

SAMPLE #19 REPLICATE #2
BA230 3.381

SPIO1 C156716 BA230 AV 3.394 SD 0.0171 CV 0.50 BDL

SAMPLE #20 REPLICATE #1 0949 6/09/94
BA230 4.204

SAMPLE #20 REPLICATE #2
BA230 4.241

MSP C156716 BA230 AV 4.222 SD 0.0262 CV 0.62 TV 1.0 %Rec 83%

SAMPLE #21 REPLICATE #1 0951 6/09/94
BA230 4.340

000600

SAMPLE #21 REPLICATE #2
BA230 4.358

TV %Rec

SAMPLE #22 REPLICATE #1 0953 6/09/94
BA230 3.185

SAMPLE #22 REPLICATE #2
BA230 3.198

BA230 AV 3.191 SD 0.0095 CV 0.30 BDL

PDI C156717
SAMPLE #23 REPLICATE #1 0955 6/09/94
BA230 3.990

SAMPLE #23 REPLICATE #2
BA230 4.007

TV / % Rec

BA230 AV 3.998 SD 0.0124 CV 0.31 1.0 / 81%

MSP C156717
SAMPLE #24 REPLICATE #1 0958 6/09/94
BA230 3.973

SAMPLE #24 REPLICATE #2
BA230 3.990

TV / % Rec

C156718 BA230 AV 3.981 SD 0.0115 CV 0.29 1.0 / 79%

SAMPLE #25 REPLICATE #1 1000 6/09/94
BA230 3.746

SAMPLE #25 REPLICATE #2
BA230 3.728

BA230 AV 3.737 SD 0.0126 CV 0.34 BDL

PDI C156718
SAMPLE #26 REPLICATE #1 1002 6/09/94
BA230 4.623

SAMPLE #26 REPLICATE #2
BA230 4.674

TV / % Rec

BA230 AV 4.649 SD 0.0361 CV 0.78 1.0 / 91%

MSP C156718
SAMPLE #27 REPLICATE #1 1004 6/09/94
BA230 4.447

SAMPLE #27 REPLICATE #2
BA230 4.458

TV / % Rec

BA230 AV 4.453 SD 0.0080 CV 0.18 1.0 / 72%

CCV
SAMPLE #28 REPLICATE #1 1007 6/09/94
BA230 4.983

SAMPLE #28 REPLICATE #2
BA230 4.985

TV / % Rec

BA230 AV 4.984 SD 0.0016 CV 0.03 5.0 mg/L / 100

BLA01
SAMPLE #29 REPLICATE #1 1009 6/09/94
BA230 -0.003

SAMPLE #29 REPLICATE #2
BA230 -0.003

000001

C156719 BA230 AV -0.003 SD 0.0000 CV 0.00 BDL

SAMPLE #30 REPLICATE #1

SAMPLE #30 REPLICATE #2
BA230 3.317

BA230 AV 3.302 SD 0.0218 CV 0.66 BDL

PDI01 C156719
SAMPLE #31 REPLICATE #1 1013 6/09/94
BA230 4.055

SAMPLE #31 REPLICATE #2
BA230 4.116

BA230 AV 4.085 SD 0.0435 CV 1.06 TV 1.0 % Rec 28%

MSP C156719
SAMPLE #32 REPLICATE #1 1016 6/09/94
BA230 3.980

SAMPLE #32 REPLICATE #2
BA230 4.047

BA230 AV 4.014 SD 0.0474 CV 1.18 TV 1.0 % Rec 71%

LCS 1845A
SAMPLE #33 REPLICATE #1 1018 6/09/94
Q928519
BA230 0.925

SAMPLE #33 REPLICATE #2
BA230 0.946

BLA02 1845A
BA230 AV 0.935 SD 0.0146 CV 1.56 TV 1.0 % Rec 94%

SAMPLE #34 REPLICATE #1 1020 6/09/94
Q928520
BA230 -0.009

SAMPLE #34 REPLICATE #2
BA230 -0.008

C156765
BA230 AV -0.008 SD 0.0006 CV 7.31 BDL

SAMPLE #35 REPLICATE #1 1022 6/09/94
BA230 4.187

SAMPLE #35 REPLICATE #2
BA230 4.245

SPI01 C156765
BA230 AV 4.216 SD 0.0410 CV 0.97 BDL

SAMPLE #36 REPLICATE #1 1024 6/09/94
BA230 5.075

SAMPLE #36 REPLICATE #2
BA230 5.093

DUP02 C156765
~~MSP C156765~~
BA230 AV 5.084 SD 0.0128 CV 0.25 TV 1.0 mg/L % Rec 87%

SAMPLE #37 REPLICATE #1 1027 6/09/94
Q928521
BA230 4.182

SAMPLE #37 REPLICATE #2 BDL % RPD NA
BA230 4.170

SPI02 C156765
BA230 AV 4.176 SD 0.0087 CV 0.21 TV 1.0 % Rec 0% 6/9

SAMPLE #38 REPLICATE #1 1029 6/09/94
Q928522
BA230 4.979

000602

SAMPLE #38 REPLICATE #2
BA230 4.980

DP8R C156765 BA230 AV 4.979 SD 0.0010 CV 0.02 TV 1.0 % Rec 76%

SAMPLE #39 REPLICATE #1 1031 6/09/94
2928523 BA230 5.044

SAMPLE #39 REPLICATE #2
BA230 4.980

CW BA230 AV 5.012 SD 0.0455 CV 0.91 TV 1.0 % RPD 4%

SAMPLE #40 REPLICATE #1 1033 6/09/94
BA230 4.940

SAMPLE #40 REPLICATE #2
BA230 4.853

BLA01 BA230 AV 4.896 SD 0.0620 CV 1.27 TV 5.0 % Rec 98%

SAMPLE #41 REPLICATE #1 1036 6/09/94
BA230 -0.004

SAMPLE #41 REPLICATE #2
BA230 -0.005 peak-noisy

C156863 BA230 AV -0.005 SD 0.0010 CV 22.10 BDL

SAMPLE #42 REPLICATE #1 1038 6/09/94
BA230 0.606

SAMPLE #42 REPLICATE #2
BA230 0.615

SPIOL C156863 BA230 AV 0.610 SD 0.0064 CV 1.05 BDL

SAMPLE #43 REPLICATE #1 1040 6/09/94
BA230 1.513

SAMPLE #43 REPLICATE #2
BA230 1.492

C156766 ~~C1568~~ 6/9/94 BA230 AV 1.503 SD 0.0152 CV 1.01 TV 1.0 % Rec 89%

SAMPLE #44 REPLICATE #1 1042 6/09/94
BA230 3.156

SAMPLE #44 REPLICATE #2
BA230 3.219

SPIOL C156766 BA230 AV 3.187 SD 0.0441 CV 1.38 BDL

SAMPLE #45 REPLICATE #1 1045 6/09/94
BA230 4.063

SAMPLE #45 REPLICATE #2
BA230 4.014

C156767 BA230 AV 4.038 SD 0.0348 CV 0.86 TV 1.0 mg/L % Rec 85%

SAMPLE #46 REPLICATE #1 1047 6/09/94
BA230 3.362

SAMPLE #46 REPLICATE #2

SPD01 C156767

BA230 AV 3.389 SD 0.0381 CV 1.12 BDL

SAMPLE #47 REPLICATE #1 1049 6/09/94
BA230 4.261

SAMPLE #47 REPLICATE #2
BA230 4.217

C156768

BA230 AV 4.239 SD 0.0311 CV 0.73 TV 1.0 % Rec 85%

SAMPLE #48 REPLICATE #1 1051 6/09/94
BA230 3.480

SAMPLE #48 REPLICATE #2
BA230 3.456

SPD01 C156768

BA230 AV 3.468 SD 0.0167 CV 0.48 BDL

SAMPLE #49 REPLICATE #1 1053 6/09/94
BA230 4.329

SAMPLE #49 REPLICATE #2
BA230 4.316

C156769

BA230 AV 4.322 SD 0.0089 CV 0.20 TV 1.0 % Rec 85%

SAMPLE #50 REPLICATE #1 1056 6/09/94
BA230 3.203

SAMPLE #50 REPLICATE #2
BA230 3.200

SPD01 C156769

BA230 AV 3.202 SD 0.0019 CV 0.06 BDL

SAMPLE #51 REPLICATE #1 1058 6/09/94
BA230 3.897

SAMPLE #51 REPLICATE #2
BA230 3.941

CCV

BA230 AV 3.919 SD 0.0313 CV 0.80 TV 1.0 % Rec 72%

SAMPLE #52 REPLICATE #1 1100 6/09/94
BA230 4.974

SAMPLE #52 REPLICATE #2
BA230 4.952

BLA01

BA230 AV 4.963 SD 0.0159 CV 0.32 TV 5.0 mg/L % Rec 99%

SAMPLE #53 REPLICATE #1 1102 6/09/94
BA230 0.005

SAMPLE #53 REPLICATE #2
BA230 0.007

C156812

BA230 AV 0.006 SD 0.0012 CV 20.70 BDL

SAMPLE #54 REPLICATE #1 1104 6/09/94
BA230 2.511

SAMPLE #54 REPLICATE #2
BA230 2.559

SAMPLE #55 REPLICATE #1 1107 6/09/94
SPI01 C156812 BA230 3.335

SAMPLE #55 REPLICATE #2
BA230 3.346

BA230 AV 3.341 SD 0.0074 CV 0.22 N 1.0 % Rec 81%

156813
SAMPLE #56 REPLICATE #1 1109 6/09/94
BA230 2.635

SAMPLE #56 REPLICATE #2
BA230 2.717

BA230 AV 2.676 SD 0.0581 CV 2.17 BDL

SPI01 C156813
SAMPLE #57 REPLICATE #1 1111 6/09/94
BA230 3.499

SAMPLE #57 REPLICATE #2
BA230 3.530

C156815 BA230 AV 3.515 SD 0.0218 CV 0.62 N 1.0 % Rec 84%

SAMPLE #58 REPLICATE #1 1113 6/09/94
BA230 2.615

SAMPLE #58 REPLICATE #2
BA230 2.607

PDI C156815 BA230 AV 2.611 SD 0.0058 CV 0.22 BDL

SAMPLE #59 REPLICATE #1 1116 6/09/94
BA230 3.407

SAMPLE #59 REPLICATE #2
BA230 3.416

C156816 BA230 AV 3.411 SD 0.0068 CV 0.20 N 1.0 % Rec 80%

SAMPLE #60 REPLICATE #1 1118 6/09/94
BA230 2.376

SAMPLE #60 REPLICATE #2
BA230 2.409

BA230 AV 2.393 SD 0.0235 CV 0.98 BDL

SPI01 C156816
SAMPLE #61 REPLICATE #1 1120 6/09/94
BA230 3.290

SAMPLE #61 REPLICATE #2
BA230 3.270

CCV BA230 AV 3.280 SD 0.0142 CV 0.43 N 1.0 % Rec 89%

SAMPLE #62 REPLICATE #1 1122 6/09/94
BA230 4.896

SAMPLE #62 REPLICATE #2
BA230 4.932

BA230 AV 4.914 SD 0.0256 CV 0.52 N 5.0 % Rec 98%

BLA01 SAMPLE #63 REPLICATE #1 1124 6/09/94

000605

SAMPLE #63 REPLICATE #2
BA230 0.002

TISA

BA230 AV 0.004 SD 0.0023 CV 59.83 BDL

SAMPLE #64 REPLICATE #1 1127 6/09/94
BA230 0.004

SAMPLE #64 REPLICATE #2
BA230 0.003

BA230 AV 0.004 SD 0.0004 CV 11.31 BDL

ICSAB

SAMPLE #65 REPLICATE #1 1129 6/09/94
BA230 0.440

SAMPLE #65 REPLICATE #2
BA230 0.452

BA230 AV 0.446 SD 0.0087 CV 1.94 TV 0.5 % Rec 89%

CDL01

SAMPLE #66 REPLICATE #1 1131 6/09/94
BA230 0.679

SAMPLE #66 REPLICATE #2
BA230 0.658

BA230 AV 0.669 SD 0.0150 CV 2.25 TV 0.5 % Rec 96%

ANALYSIS RUN: R219901

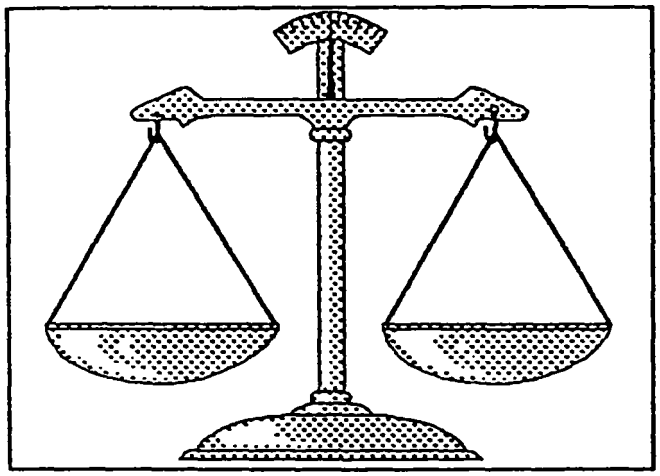
RUN NUMBER: 10050

TEST: As 136

ANALYST: Jn 2520

DATE: 6 / 10 / 94

INSTRUMENT: #22



Reprep_____(complete)

Reprep_____(incomplete)

COMMENTS: _____

91CK1072.R6

PAGE 1 OF 7 **METALS, GFAA** RUN: R219907

ANALYST: Jn 2520 REVIEWER: MMC RECORDER: DDL

DATE: 6/10/94 DATE: 6/13/94 DATE: 6/13/94

INSTRUMENT: #22 ELEMENT: As 136 WAVELENGTH: 193.7

CAL. CURVE:	0	0.005	0.010	0.020	0.040	mg/l
RESPONSE:	0.003	0.030	0.059	0.121	0.233	
		#050294E		#050294E	#050294F	

ADD 1 CONC.: ADD 2 CONC.: ADD 3 CONC.:

C.C.: 0.999 SLOPE: 0.173 Y INTERCEPT: 0.0004

SAMPLE:	ICV01	Bla01	CDL	LCS	Bla02	C157163
TYPE:	#G052594B		#050294E	[illegible]	[illegible]	[illegible]
E VALUE:	0.02		0.02	0.10		
RESULT:	0.0205	BDL	0.0203	0.101	BDL	BDL
UNITS:	mg/l	→	→	mg/l	→	mg/l
DET. LIMIT:	0.010	→	→	0.05	0.010	0.005
ECOVERY:	103%		102%	101%		
WT/VOL:						50
FINAL VOL:				50	50	50
DILUTE:	0.121	0.000	0.120	1:5		
SAMABS:				0.119	0.001	0.014
AD1ABS:						0.072
AD2ABS:						
AD3ABS:						
COMMENT:						

PAGE 2 OF 7

METALS, GFAA

RUN:

ANALYST: Jn 252D

REVIEWER:

RECORDER:

DATE: 6/10/94

DATE: / /

DATE: / /

INSTRUMENT: #22

ELEMENT: As 136

WAVELENGTH: 193.7

CAL. CURVE.:

RESPONSE:

ADD 1 CONC.:

ADD 2 CONC.:

ADD 3 CONC.:

C.C.:

SLOPE:

Y INTERCEPT:

SAMPLE:	DUP02	Sp102D	CCV	B1a01	C157164	C157165
TYPE:	C157163	C157163	#050244E			
1 VALUE:	BDL	0.10	0.02			
RESULT:	BDL	BDL / 0.105	0.0202	BDL	BDL	BDL
UNITS:	mg/l	→	mg/l →		mg/l	→
DET. LIMIT:	0.005	0.025	0.010 →		0.005	→
RECOVERY:	0%rpd	105%	101%			
WT/VOL:	50	50			50	50
FINAL VOL:	50	50			50	50
DILUTE:						
SAMABS:	0.018	0.124	0.119	0.000	0.001	0.020
AD1ABS:	0.070				0.058	0.078
AD2ABS:						
AD3ABS:						
COMMENT:						

PAGE 3 OF 7

METALS, GFAA

RUN:

ANALYST: Jn 2520 REVIEWER: RECORDER:

DATE: 6/10/94 DATE: / / DATE: / /

INSTRUMENT: #22 ELEMENT: As 136 WAVELENGTH: 193.7

CAL. CURVE:

RESPONSE:

ADD 1 CONC.: ADD 2 CONC.: ADD 3 CONC.:

C.C.: SLOPE: Y INTERCEPT:

SAMPLE:	C157166	C157167	C157168	C157169	C157170	C157171
TYPE:	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
VALUE:						
RESULT:	BDL	BDL	BDL	BDL	BDL	BDL
UNITS:	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
DET. LIMIT:	0.005	0.005	0.005	0.005	0.005	0.005
RECOVERY:						
WT/VOL:	50	50	50	50	50	50
FINAL VOL:	50	50	50	50	50	50
DILUTE:						
SAMABS:	0.002	0.001	0.002	0.002	0.001	0.002
AD1ABS:	0.065	0.057	0.062	0.057	0.060	0.057
AD2ABS:						
AD3ABS:						
COMMENT:						

PAGE 4 OF 7 **METALS, GFAA** RUN:

ANALYST: Jn 2520 REVIEWER: RECORDER:

DATE: 6/10/94 DATE: / / DATE: / /

INSTRUMENT: # 22 ELEMENT: As 136 WAVELENGTH: 193.7

CAL. CURVE.:

RESPONSE:

ADD 1 CONC.: ADD 2 CONC.: ADD 3 CONC.:

C.C.: SLOPE: Y INTERCEPT:

SAMPLE:	C137172	CCV	B1001	LCS	B1002	B126627
TYPE:	[illegible]			[illegible]	[illegible]	[illegible]
VALUE:		0.02		0.10		BDL 0.01 (0.0002)
RESULT:	0.005	0.0199	BDL	0.104	BDL	BDL 0.0097
UNITS:	mg/l	mg/l →		mg/l	mg/l	mg/l
DET. LIMIT:	0.005	0.010 →		0.05	0.010	0.05
RECOVERY:		99%		104%		95%
WT/VOL:	50					50
FINAL VOL:	50			50	50	50
DILUTE:				1:5		1:5
SAMABS:	0.029	0.117	0.003	0.122	0.001	0.003
AD1ABS:	0.084					0.058
AD2ABS:						
AD3ABS:						
COMMENT:						

PAGE 5 OF 7 **METALS, GFAA** RUN:

ANALYST: Jn 2520 REVIEWER: RECORDER:

DATE: 6/10/94 DATE: / / DATE: / /

INSTRUMENT: #22 ELEMENT: As 136 WAVELENGTH: 193.7

CAL. CURVE.:

RESPONSE:

ADD 1 CONC.: ADD 2 CONC.: ADD 3 CONC.:

C.C.: SLOPE: Y INTERCEPT:

SAMPLE:	DUPO2	Spio2	B126628	B126630	CCV	BlaCl
TYPE:	B126627 [illegible]	B126627 G433307	Me136	→		
VALUE:	BDL	0.10	BDL 0.01	BDL 0.01	0.02	
RESULT:	BDL	BDL 0.101	(0.0028) BDL 0.0106	(0.0061) BDL 0.0142	0.0198	BDL
UNITS:	mg/l	mg/l	mg/l	mg/l	mg/l →	
DET. LIMIT:	0.05	0.05	0.05	0.02	0.010 →	
ECOVERY:	0% rpd	101%	77%	81%	99%	
WT/VOL:	50	50	50	50		
FINAL VOL:	50	50	50	50		
DILUTE:	1:5	1:5	1:5	1:2		
SAMABS:	0.002	0.119	0.018	0.037	0.117	0.002
AD1ABS:	0.057		0.063	0.084		
AD2ABS:						
AD3ABS:						
COMMENT:						

PAGE 6 OF 7

METALS, GFAA

RUN:

ANALYST: Jn 2520 REVIEWER: RECORDER:

DATE: 6/10/94 DATE: / / DATE: / /

INSTRUMENT: #22 ELEMENT: As 136 WAVELENGTH: 193.7

CAL. CURVE.:

RESPONSE:

ADD 1 CONC.: ADD 2 CONC.: ADD 3 CONC.:

C.C.: SLOPE: Y INTERCEPT:

SAMPLE:	LCS	Blank	C157150	DUP02	Sp102	C157151
TYPE:	[illegible]	[illegible]	[illegible]	C157150 [illegible]	C157150 [illegible]	[illegible]
VALUE:	0.10 ~~0.125~~ Jn 6-10-94			BDL	5.08	
RESULT:	0.082	BDL	BDL	BDL	BDL / 6.20	BDL
UNITS:	mg/l →		mg/kg	mg/kg	mg/kg	mg/kg
DET. LIMIT:	0.05	0.010	2.5	2.5	2.5	2.5
RECOVERY:	82%			0 % Rpd	122%	
WT/VOL:			1.98	2.00	1.97	1.98
FINAL VOL:	100	100	100	100	100	100
DILUTE:	1:5		1:5	1:5	1:5	1:5
SAMABS:	0.097 ~~0.147~~ Jn 6-10-94	0.001	0.001	0.000	0.144	0.005
AD1ABS:			0.057	0.036		0.037
AD2ABS:						
AD3ABS:						
COMMENT:						

PAGE 6 OF 7

METALS, GFAA

RUN:

ANALYST: Jn 2520 REVIEWER: RECORDER:

DATE: 6/10/94 DATE: / / DATE: / /

INSTRUMENT: #22 ELEMENT: As 136 WAVELENGTH: 193.7

CAL. CURVE:

RESPONSE:

ADD 1 CONC.: ADD 2 CONC.: ADD 3 CONC.:

C.C.: SLOPE: Y INTERCEPT:

SAMPLE:	CCV	B1a01	C156858	C156876	B126597	B126629
TYPE:			[illegible]	[illegible]	[illegible]	[illegible]
T VALUE:	0.02					
RESULT:	0.0202	BDL	BDL	0.005	BDL	BDL
UNITS:	mg/l →		mg/kg	mg/l	mg/kg	mg/kg
DET. LIMIT:	0.010 →		2.5	0.005	2.5	2.5
COVERY:	101 %					
WT/VOL:			1.98	50	2.01	2.02
FINAL VOL:			100	50	100	100
DILUTE:			1:5		1:5	1:5
SAMABS:	0.119	0.023	0.001 ~~0.003~~ Jn 6/10/94	0.030	0.002	0.053 ~~0.030~~ Jn 6-10-94
AD1ABS:			0.051 ~~0.027~~	0.081	0.056	0.107 ~~0.075~~
AD2ABS:						
AD3ABS:						
COMMENT:						

PAGE 7 OF 7

METALS, GFAA

RUN:

ANALYST: Jn 2520 REVIEWER: RECORDER:

DATE: 6/10/94 DATE: / / DATE: / /

INSTRUMENT: #22 ELEMENT: As 136 WAVELENGTH: 193.7

CAL. CURVE.:

RESPONSE:

ADD 1 CONC.: ADD 2 CONC.: ADD 3 CONC.:

C.C.: SLOPE: Y INTERCEPT:

SAMPLE:	CCV	B1001	CDL			
TYPE:						
E VALUE:	0.02		0.02			
RESULT:	0.0206	BDL	0.0212			
UNITS:	mg/l →		mg/l			
DET. LIMIT:	0.010 →		0.010			
ECOVERY:	103 %		106 %			
WT/VOL:						
FINAL VOL:						
DILUTE:						
SAMABS:	0.121	0.002	0.125			
AD1ABS:						
AD2ABS:						
AD3ABS:						
COMMENT:						

AS
6-10-94

Element File: AS_CLP.GEL Element: As Wavelength: 193.7
Date: 06/10/94 Time: 09:56 Slit: 0.7
Data File: AS061094.DAT ID/Wt File: AS061094.IDW Lamp Current: 0
Technique: HGA Calib. Type: Linear Energy: 59
Remark 1: THIS FILE IS TO DETERMINE AS AT 5 PPB USING STANDARDS 10, 20
Remark 2: AND 40 PPB. PD IS THE MODIFIER USED. THIS IS CLP PROTOCOL.

~~~~~~

As ID: Blank Seq. No.: 00036 A/S Pos.: 0 Date: 06/10/94

dispensed: 5 from 0, 5 from 40, 20 from 0

Replicate 1 Time: 09:58
Peak Area (A-s): 0.003 Peak Height (A): 0.009
Background Pk Area (A-s): 0.080 Background Pk Height (A): 0.028
Blank Corrected Pk Area (A-s): 0.003
Concentration (ug/L): 0.0002
~~~~~~

As ID: Standard 1 Seq. No.: 00037 A/S Pos.: 36 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 36
Replicate 1 Time: 10:01
Peak Area (A-s): 0.033 Peak Height (A): 0.066
Background Pk Area (A-s): 0.055 Background Pk Height (A): 0.021
Blank Corrected Pk Area (A-s): 0.030
Concentration (mg/L): 0.0055

Standard number 1 applied. [0.0050]
Correlation coefficient: 1.00000 Slope: 6.0801 Int: 0.000

As ID: Standard 2 Seq. No.: 00038 A/S Pos.: 37 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 37
Replicate 1 Time: 10:03
Peak Area (A-s): 0.062 Peak Height (A): 0.120
Background Pk Area (A-s): 0.042 Background Pk Height (A): 0.022
Blank Corrected Pk Area (A-s): 0.059
Concentration (mg/L): 0.0097

Standard number 2 applied. [0.0100]
Correlation coefficient: 0.99986 Slope: 5.9082 Int: 0.000

ID: Standard 3 Seq. No.: 00039 A/S Pos.: 38 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 38
Replicate 1 Time: 10:05
Peak Area (A-s): 0.124 Peak Height (A): 0.270
Background Pk Area (A-s): 0.043 Background Pk Height (A): 0.030
Blank Corrected Pk Area (A-s): 0.121

Standard number 3 applied. [0.0200]
Correlation coefficient: 0.99990 Slope: 6.0366 Int: -0.000

~~~~~~

As ID: Standard 4 Seq. No.: 00040 A/S Pos.: 39 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 39
Replicate 1 Time: 10:08
Peak Area (A-s): 0.239 Peak Height (A): 0.511
Background Pk Area (A-s): 0.045 Background Pk Height (A): 0.047
Blank Corrected Pk Area (A-s): 0.233
Concentration (mg/L): 0.0387

Standard number 4 applied. [0.0400]
Correlation coefficient: 0.99981 Slope: 5.8334 Int: 0.001

~~~~~~

As ID: ICV01 Seq. No.: 00041 A/S Pos.: 1 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 1
Replicate 1 Time: 10:12
Peak Area (A-s): 0.124 Peak Height (A): 0.262
Background Pk Area (A-s): 0.037 Background Pk Height (A): 0.026
Blank Corrected Pk Area (A-s): 0.121
Concentration (mg/L): 0.0205

~~~~~~

As ID: BLA01 Seq. No.: 00042 A/S Pos.: 2 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 2
Replicate 1 Time: 10:13
Peak Area (A-s): 0.003 Peak Height (A): 0.008
Background Pk Area (A-s): 0.027 Background Pk Height (A): 0.013
Blank Corrected Pk Area (A-s): 0.000
Concentration (mg/L): -0.0002

~~~~~~

As ID: CRL Seq. No.: 00043 A/S Pos.: 3 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 3
Replicate 1 Time: 10:15
Peak Area (A-s): 0.123 Peak Height (A): 0.275
Background Pk Area (A-s): 0.037 Background Pk Height (A): 0.028
Blank Corrected Pk Area (A-s): 0.120
Concentration (mg/L): 0.0203

~~~~~~

As ID: LCS 933402 Seq. No.: 00044 A/S Pos.: 4 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 4
Replicate 1 Time: 10:18
Peak Area (A-s): 0.122 Peak Height (A): 0.244
Background Pk Area (A-s): 0.036 Background Pk Height (A): 0.027
Blank Corrected Pk Area (A-s): 0.119
Concentration (mg/L): 0.0202 Corrected Conc. (mg/L): 0.101
~~~~~~

uL dispensed: 5 from 0, 5 from 40, 20 from 5
Replicate 1 Time: 10:20
Peak Area (A-s): 0.002 Peak Height (A): 0.008
Background Pk Area (A-s): 0.027 Background Pk Height (A): 0.013
Blank Corrected Pk Area (A-s): -0.001
C[illegible]ntration (mg/L): -0.0003

~~~~~~

As ID: C157163 Seq. No.: 00046 A/S Pos.: 6 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 6
Replicate 1 Time: 10:22
Peak Area (A-s): 0.017 Peak Height (A): 0.045
Background Pk Area (A-s): 0.080 Background Pk Height (A): 0.065
Blank Corrected Pk Area (A-s): 0.014
Concentration (mg/L): 0.0022

~~~~~~

As ID: C157163 Seq. No.: 00047 A/S Pos.: 6 Date: 06/10/94

uL dispensed: 5 from 40, 5 from 39, 20 from 6
Replicate 1 Time: 10:25
Peak Area (A-s): 0.075 Peak Height (A): 0.182
Background Pk Area (A-s): 0.079 Background Pk Height (A): 0.066
Blank Corrected Pk Area (A-s): 0.072
Concentration (mg/L): 0.0122

Recovery is 99.9%

~~~~~~

A ID: DUP 163 933404 Seq. No.: 00048 A/S Pos.: 7 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 7
Replicate 1 Time: 10:27
Peak Area (A-s): 0.021 Peak Height (A): 0.051
Background Pk Area (A-s): 0.083 Background Pk Height (A): 0.074
Blank Corrected Pk Area (A-s): 0.018
Concentration (mg/L): 0.0030

~~~~~~

As ID: DUP 163 933404 Seq. No.: 00049 A/S Pos.: 7 Date: 06/10/94

uL dispensed: 5 from 40, 5 from 39, 20 from 7
Replicate 1 Time: 10:30
Peak Area (A-s): 0.073 Peak Height (A): 0.186
Background Pk Area (A-s): 0.077 Background Pk Height (A): 0.062
Blank Corrected Pk Area (A-s): 0.070
Concentration (mg/L): 0.0118

[illegible]overy is 89.4%

~~~~~~

As ID: SPI 163 933405 Seq. No.: 00050 A/S Pos.: 8 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 8
Replicate 1 Time: 10:32
Peak Area (A-s): 0.126 Peak Height (A): [illegible]
~~~~~~

Blank Corrected Pk Area (A-s): 0.124
Concentration (mg/L): 0.0210 Corrected Conc (mg/L): 0.105

Re ID: AS Position 38 Seq. No.: 00051 A/S Pos.: 38 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 38
Replicate 1 Time: 10:35
Peak Area (A-s): 0.122 Peak Height (A): 0.018
Background Pk Area (A-s): 0.003 Background Pk Height (A): 0.006
Blank Corrected Pk Area (A-s): 0.119
Concentration (mg/L): 0.0202

Check sample is within range 0.0179 - 0.0220

Re ID: BLA01 Seq. No.: 00052 A/S Pos.: 0 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 0
Replicate 1 Time: 10:37
Peak Area (A-s): 0.003 Peak Height (A): 0.007
Background Pk Area (A-s): 0.006 Background Pk Height (A): 0.012
Blank Corrected Pk Area (A-s): 0.000
Concentration (mg/L): -0.0002

Check sample is within range -0.0034 - 0.0034

Re ID: C157164 Seq. No.: 00053 A/S Pos.: 1 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 9
Replicate 1 Time: 10:40
Peak Area (A-s): 0.004 Peak Height (A): 0.010
Background Pk Area (A-s): 0.061 Background Pk Height (A): 0.051
Blank Corrected Pk Area (A-s): 0.001
Concentration (mg/L): 0.0001

Re ID: C157164 Seq. No.: 00054 A/S Pos.: 9 Date: 06/10/94

uL dispensed: 5 from 40, 5 from 39, 20 from 9
Replicate 1 Time: 10:42
Peak Area (A-s): 0.061 Peak Height (A): 0.145
Background Pk Area (A-s): 0.053 Background Pk Height (A): 0.043
Blank Corrected Pk Area (A-s): 0.058
Concentration (mg/L): 0.0097

Recovery is 96.6%

Re ID: C157165 Seq. No.: 00055 A/S Pos.: 10 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 10
Replicate 1 Time: 10:44
Peak Area (A-s): 0.023 Peak Height (A): 0.050
Background Pk Area (A-s): 0.065 Background Pk Height (A): 0.051
Blank Corrected Pk Area (A-s): 0.020
Concentration (mg/L): 0.0033

As ID: C157165 Seq. No.: 00058 A/S Pos.: 10 Date: 06/10/94

uL dispensed: 5 from 40, 5 from 39, 20 from 10
Replicate 1 Time: 10:47
Peak Area (A-s): 0.081 Peak Height (A): 0.172
Background Pk Area (A-s): 0.063 Background Pk Height (A): 0.051
Blank Corrected Pk Area (A-s): 0.078
Concentration (mg/L): 0.0132

Recovery is 99.3%

As ID: C157166 Seq. No.: 00057 A/S Pos.: 11 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 11
Replicate 1 Time: 10:49
Peak Area (A-s): 0.005 Peak Height (A): 0.311
Background Pk Area (A-s): 0.048 Background Pk Height (A): 0.018
Blank Corrected Pk Area (A-s): 0.003
Concentration (mg/L): 0.0002

As ID: C157165 Seq. No.: 00058 A/S Pos.: 11 Date: 06/10/94

uL dispensed: 5 from 40, 5 from 39, 20 from 11
Replicate 1 Time: 10:51
Peak Area (A-s): 0.068 Peak Height (A): 0.130
Background Pk Area (A-s): 0.048 Background Pk Height (A): 0.019
Blank Corrected Pk Area (A-s): 0.065
Concentration (mg/L): 0.0110

Recovery is 107.3%

As ID: C157167 Seq. No.: 00059 A/S Pos.: 12 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 12
Replicate 1 Time: 10:54
Peak Area (A-s): 0.022 Peak Height (A): 0.010

Background Pk Area (A-s): 0.059 Background Pk Height (A): 0.047
Blank Corrected Pk Area (A-s): -0.001
Concentration (mg/L): -0.0003

As ID: C157167 Seq. No.: 00060 A/S Pos.: 12 Date: 06/10/94

uL dispensed: 5 from 40, 5 from 39, 20 from 12
Replicate 1 Time: 10:56
Peak Area (A-s): 0.060 Peak Height (A): 0.140
Background Pk Area (A-s): 0.066 Background Pk Height (A): 0.054
Blank Corrected Pk Area (A-s): 0.057
Concentration (mg/L): 0.0095

Recovery is 98.7%

As ID: C157168 Seq. No.: 00061 A/S Pos.: 13 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 13
Replicate 1 Time: 10:59
Peak Area (A-s): 0.005 Peak Height (A): 0.012
Background Pk Area (A-s): 0.043 Background Pk Height (A): 0.016
Blank Corrected Pk Area (A-s): 0.002
Concentration (mg/L): 0.0001

As ID: C157162 Seq. No.: 00062 A/S Pos.: 13 Date: 06/10/94

uL dispensed: 5 from 40, 5 from 39, 20 from 13
Replicate 1 Time: 11:01
Peak Area (A-s): 0.064 Peak Height (A): 0.141
Background Pk Area (A-s): 0.043 Background Pk Height (A): 0.022
Blank Corrected Pk Area (A-s): 0.062
Concentration (mg/L): 0.0103

Recovery is 103.1%

As ID: C157163 Seq. No.: 00063 A/S Pos.: 14 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 14
Replicate 1 Time: 11:03
Peak Area (A-s): 0.001 Peak Height (A): 0.01[illegible]
Background Pk Area (A-s): 0.[illegible] Background Pk Height (A): 0.05[illegible]
Blank Corrected Pk Area (A-s): -0.00[illegible]
Concentration (mg/L): -0.[illegible]

As ID: C157163 Seq. No.: 00064 A/S Pos.: 14 Date: 06/10/94

uL dispensed: 5 from 40, 5 from 39, 20 from 14
Replicate 1 Time: 11:05
Peak Area (A-s): 0.060 Peak Height (A): 0.148
Background Pk Area (A-s): 0.060 Background Pk Height (A): 0.05[illegible]
Blank Corrected Pk Area (A-s): 0.057
Concentration (mg/L): 0.0096

Recovery is 100.5%

As ID: C157170 Seq. No.: 00065 A/S Pos.: 15 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 15
Replicate 1 Time: 11:08
Peak Area (A-s): 0.004 Peak Height (A): 0.013
Background Pk Area (A-s): 0.060 Background Pk Height (A): 0.039
Blank Corrected Pk Area (A-s): 0.001
Concentration (mg/L): 0.0000

ID: C157170 Seq. No.: 00066 A/S Pos.: 15 Date: 06/10/94

uL dispensed: 5 from 40, 5 from 39, 20 from 15
Replicate 1 Time: 11:10
Peak Area (A-s): 0.063 Peak Height (A): 0.126
Background Pk Area (A-s): [illegible] Background Pk Height (A): 0.042
Blank Corrected Pk Area (A-s): 0.060

Recovery is 100.8%

~~~~~~

As ID: C157171 Seq. No.: 00067 A/S Pos.: 16 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 16
R cate 1 Time: 11:13
P Area (A-s): 0.005 Peak Height (A): 0.011
Background Pk Area (A-s): 0.056 Background Pk Height (A): 0.041
Blank Corrected Pk Area (A-s): 0.002
Concentration (mg/L): 0.0002

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As ID: C157171 Seq. No.: 00068 A/S Pos.: 16 Date: 06/10/94

uL dispensed: 5 from 40, 5 from 39, 20 from 16
Replicate 1 Time: 11:13
Peak Area (A-s): 0.060 Peak Height (A): 0.151
Background Pk Area (A-s): 0.053 Background Pk Height (A): 0.045
Blank Corrected Pk Area (A-s): 0.057
Concentration (mg/L): 0.0056

Recovery is 93.6%

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As ID: C157172 Seq. No.: 00069 A/S Pos.: 17 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 17
Replicate 1 Time: [illegible]
Peak Area (A-s): 0.033 Peak Height (A): 0.072
Background Pk Area (A-s): 0.037 Background Pk Height (A): 0.062
Blank Corrected Pk Area (A-s): 0.009
Concentration (mg/L): 0.0048

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As ID: C157172 Seq. No.: 00070 A/S Pos.: 17 Date: 06/10/94

uL dispensed: 5 from 40, 5 from 39, 20 from 17
Replicate 2 Time: 11:13

Peak Area (A-s): 0.087 Peak Height (A): 0.208
Background Pk Area (A-s): 0.062 Background Pk Height (A): 0.061
Blank Corrected Pk Area (A-s): 0.084
Concentration (mg/L): 0.0142

Recovery is 93.6%

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As ID: AS Position 38 Seq. No.: 00071 A/S Pos.: 38 Date: 06/10/94

dispensed: 5 from 0, 5 from 40, 20 from 38
Replicate 1 Time: 11:13
Peak Area (A-s): 0.120 Peak Height (A): 0.164
Background Pk Area (A-s): 0.036 Background Pk Height (A): 0.022
Blank Corrected Pk Area (A-s): 0.117
Concentration (mg/L): 0.0199

Check sample is within range 0.0179 - 0.0220
~~~~~~

As ID: BLA01 Seq. No.: 00072 A/S Pos.: 0 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 0
Replicate 1 Time: 11:24
Peak Area (A-s): -0.001 Peak Height (A): 0.006
Background Pk Area (A-s): 0.027 Background Pk Height (A): 0.213
Blank Corrected Pk Area (A-s): -0.003
Concentration (mg/L): -0.0008

Check sample is within range -0.0094 +- 0.0094

As ID: LCS 933394 Seq. No.: 00073 A/S Pos.: 18 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 18
Replicate 1 Time: 11:27
Peak Area (A-s): 0.165 Peak Height (A): 0.291
Background Pk Area (A-s): 0.033 Background Pk Height (A): 0.039
Blank Corrected Pk Area (A-s): 0.132
Concentration (mg/L): 0.0807 Corrected Conc (mg/L): 0.104

As ID: BLA02 933332 Seq. No.: 00074 A/S Pos.: 19 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 19
Replicate 1 Time: 11:29
Peak Area (A-s): 0.012 Peak Height (A): 0.006
Background Pk Area (A-s): 0.033 Background Pk Height (A): 0.012
Blank Corrected Pk Area (A-s): -0.021
Concentration (mg/L): -0.0008

As ID: B126627 Seq. No.: 00075 A/S Pos.: 20 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 20
Replicate 1 Time: 11:3[illegible]
Peak Area (A-s): 0.023 Peak Height (A): 0.018
Background Pk Area (A-s): 0.050 Background Pk Height (A): 0.043
Blank Corrected Pk Area (A-s): 0.033

Concentration (mg/L): 0.0008 Corrected Conc (mg/L): 0.001

As ID: B126627 Seq. No.: 00076 A/S Pos.: 20 Date: 06/10/94

uL dispensed: 5 from 40, 5 from 39, 20 from 20
Replicate 1 Time: 11:34
Peak Area (A-s): 0.061 Peak Height (A): 0.160
Background Pk Area (A-s): 0.050 Background Pk Height (A): 0.047
Blank Corrected Pk Area (A-s): 0.058
Concentration (mg/L): 0.0097 Corrected Conc (mg/L): 0.049

Recovery is 95.0%

As ID: DUP 627 933396 Seq. No.: 00077 A/S Pos.: 21 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 21

Peak Area (A-s): 0.005 Peak Height (A): 0.019
Background Pk Area (A-s): 0.056 Background Pk Height (A): 0.045
Blank Corrected Pk Area (A-s): 0.002
Concentration (mg/L): 0.0002 Corrected Conc (mg/L): 0.001

ID: DUP 627 933396 Seq. No.: 00078 A/S Pos.: 21 Date: 06/10/94

uL dispensed: 5 from 40, 5 from 39, 20 from 21
Replicate 1 Time: 11:38
Peak Area (A-s): 0.060 Peak Height (A): 0.165
Background Pk Area (A-s): 0.053 Background Pk Height (A): 0.045
Blank Corrected Pk Area (A-s): 0.057
Concentration (mg/L): 0.0095 Corrected Conc (mg/L): 0.048

Recovery is 94.0%

ID: EPI 627 933397 Seq. No.: 00079 A/S Pos.: 22 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 22
Replicate 1 Time: 11:41
Peak Area (A-s): 0.122 Peak Height (A): 0.336
Background Pk Area (A-s): 0.085 Background Pk Height (A): [illegible]
Blank Corrected Pk Area (A-s): 0.119
Concentration (mg/L): 0.2202 Corrected Conc (mg/L): [illegible]

ID: B126626 Seq. No.: 00080 A/S Pos.: 23 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 23
Replicate 1 Time: 11:43
Peak Area (A-s): 0.081 Peak Height (A): 0.239
Background Pk Area (A-s): 0.069 Background Pk Height (A): [illegible]
Blank Corrected Pk Area (A-s): 0.012
Concentration (mg/L): 0.0222 Corrected Conc (mg/L): [illegible]

ID: [illegible] Seq. No.: [illegible] A/S Pos.: [illegible] Date: [illegible]

uL dispensed: 5 from 40, 5 from 39, 20 from 23
Replicate 1 Time: 11:46
Peak Area (A-s): 0.066 Peak Height (A): 0.144
Background Pk Area (A-s): 0.086 Background Pk Height (A): 0.088
Blank Corrected Pk Area (A-s): 0.063
Concentration (mg/L): 0.0106 Corrected Conc (mg/L): 0.053

Recovery is 77.4%

ID: B126630 Seq. No.: 00082 A/S Pos.: 24 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 24
Replicate 1 Time: 11:48
Peak Area (A-s): 0.040 Peak Height (A): 0.107
Background Pk Area (A-s): 0.093 Background Pk Height (A): 0.079
Blank Corrected Pk Area (A-s): 0.037
Concentration (mg/L): 0.0061 Corrected Conc (mg/L): 0.0122

000625

As ID: B126630 Seq. No.: 00083 A/S Pos.: 24 Date: 06/10/94

L dispensed: 5 from 40, 5 from 39, 20 from 24

Replicate 1 Time: 11:51
Peak Area (A-s): 0.087 Peak Height (A): 0.251
Background Pk Area (A-s): 0.033 Background Pk Height (A): 0.062
Blank Corrected Pk Area (A-s): 0.054
Concentration (mg/L): 0.0142 Corrected Conc (mg/L): 0.0284

Recovery is 51.0%

As ID: AS Position 38 Seq. No.: 00084 A/S Pos.: 38 Date: 06/10/94

L dispensed: 5 from 0, 5 from 40, 20 from 38

Replicate 1 Time: 11:53
Peak Area (A-s): 0.120 Peak Height (A): 0.209
Background Pk Area (A-s): 0.039 Background Pk Height (A): 0.026
Blank Corrected Pk Area (A-s): 0.117
Concentration (mg/L): 0.0133

Check sample is within range 0.0179 - 0.0220

As ID: BLAS1 Seq. No.: 00085 A/S Pos.: 0 Date: 06/10/94

L dispensed: 5 from 0, 5 from 40, 20 from 0

Replicate 1 Time: 11:56
Peak Area (A-s): 0.031 Peak Height (A): 0.009
Background Pk Area (A-s): 0.033 Background Pk Height (A): 0.012
Blank Corrected Pk Area (A-s): -0.002
Concentration (mg/L): -0.0006

Check sample is within range -0.0094 - 0.0094

As ID: LCS 933412 Seq. No.: 00086 A/S Pos.: 25 Date: 06/10/94

L dispensed: 5 from 0, 5 from 40, 20 from 25

Replicate 1 Time: 11:58
Peak Area (A-s): 0.150 Peak Height (A): 0.306
Background Pk Area (A-s): 0.041 Background Pk Height (A): 0.035
Blank Corrected Pk Area (A-s): 0.147
Concentration (mg/L): 0.0250 Corrected Conc (mg/L): 0.125

As ID: LCS 933412 Seq. No.: 00087 A/S Pos.: 25 Date: 06/10/94

L dispensed: 5 from 40, 5 from 39, 20 from 25

Replicate 1 Time: 12:00
Peak Area (A-s): 0.199 Peak Height (A): 0.320

Blank Corrected Pk Area (A-s): 0.196
Concentration (mg/L): 0.0334 Corrected Conc (mg/L): 0.167

Recovery is 83.7%

ID: BLA02 933413 Seq. No.: 00086 A/S Pos.: 26 Date: 06/10/94

dispensed: 5 from 0, 5 from 40, 20 from 26

Replicate 1	Time: 12:03
Peak Area (A-s): 0.007	Peak Height (A): 0.011
Background Pk Area (A-s): 0.026	Background Pk Height (A): 0.014
Blank Corrected Pk Area (A-s): 0.004	
Concentration (mg/L): 0.0005	

As ID: BLA02 933413 Seq. No.: 00089 A/S Pos.: 26 Date: 06/10/94

uL dispensed: 5 from 40, 5 from 39, 20 from 26

Replicate 1	Time: 12:05
Peak Area (A-s): 0.062	Peak Height (A): 0.098
Background Pk Area (A-s): 0.027	Background Pk Height (A): 0.016
Blank Corrected Pk Area (A-s): 0.059	
Concentration (mg/L): 0.0099	

Recovery is 94.4%

As ID: C157(50 1.98 Seq. No.: 00090 A/S Pos.: 27 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 27

Replicate 1	Time: 12:06
Peak Area (A-s): 0.000	Peak Height (A): 0.007
Background Pk Area (A-s): 0.028	Background Pk Height (A): 0.012
Blank Corrected Pk Area (A-s): -0.028	
Concentration (mg/L): -0.0007	Corrected Conc (mg/L): -0.0017

As ID: C157 [illegible] 1.98 Seq. No.: 00091 A/S Pos.: 27 Date: [illegible]

uL dispensed: 5 from 40, 5 from 39, 20 from 27

Replicate 1	Time: 12:10
Peak Area (A-s): 0.059	Peak Height (A): 0.077
Background Pk Area (A-s): 0.027	Background Pk Height (A): 0.016
Blank Corrected Pk Area (A-s): 0.057	
Concentration (mg/L): 0.0095	Corrected Conc (mg/L): 0.0240

Recovery is 101.5%

As ID: DUP 150 933414 Seq. No.: 00092 A/S Pos.: 28 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 28
Replicate 1 Time: 12:13
Peak Area (A-s): 0.006 Peak Height (A): 0.007
Background Pk Area (A-s): 0.054 Background Pk Height (A): 0.123
nk Corrected Pk Area (A-s): 0.004
entration (mg/L): 0.0004 Corrected Conc (mg/L): 0.0010

As ID: DUP 150 933414 Seq. No.: 00093 A/S Pos.: 28 Date: 06/10/94

uL dispensed: 5 from 40, 5 from 39, 20 from 28
Replicate 2 Time: 12:15
Peak Area (A-s): 0.045 Peak Height (A): 0.091

Concentration (mg/L): 0.0071 Corrected Conc (mg/L): 0.0177

Recovery is 66.9%

As ID: SPI 150 933415 Seq. No.: 00094 A/S Pos.: 29 Date: 06/10/94

ispensed: 5 from 0, 5 from 40, 20 from 29
Replicate 1 Time: 12:17
Peak Area (A-s): 0.133 Peak Height (A): 0.157
Background Pk Area (A-s): 0.053 Background Pk Height (A): 0.025
Blank Corrected Pk Area (A-s): 0.130
Concentration (mg/L): 0.0221 Corrected Conc (mg/L): 0.0561

As ID: SPI 150 933415 Seq. No.: 00093 A/S Pos.: 39 Date: 06/10/94

uL dispensed: 5 from 40, 5 from 39, 20 from 29
Replicate 1 Time: 12:20
Peak Area (A-s): 0.133 Peak Height (A): 0.039
Background Pk Area (A-s): 0.048 Background Pk Height (A): 0.023
Blank Corrected Pk Area (A-s): 0.130
Concentration (mg/L): 0.0207 Corrected Conc (mg/L): 0.0776

Recovery is 85.6%

As ID: C157151 1.98 Seq. No.: 00095 A/S Pos.: 30 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 30
Replicate 1 Time: 12:22
Peak Area (A-s): 0.012 Peak Height (A): 0.024
Background Pk Area (A-s): 0.126 Background Pk Height (A): 0.031
Blank Corrected Pk Area (A-s): 0.009
Concentration (mg/L): 0.0010 Corrected Conc (mg/L): 0.0178

As ID: C157151 1.98 Seq. No.: 00097 A/S Pos.: 31 Date: 06/10/94

uL dispensed: 5 from 40, 5 from 39, 20 from 30
Replicate 1 Time: 12:24
Peak Area (A-s): 0.045 Peak Height (A): 0.089
Background Pk Area (A-s): 0.125 Background Pk Height (A): 0.091
Blank Corrected Pk Area (A-s): 0.042
Concentration (mg/L): 0.0069 Corrected Conc (mg/L): 0.0175

Recovery is 56.5%

ID: 08 Position 38 Seq. No.: 00098 A/S Pos.: 38 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 38
Replicate 1 Time: 12:27
Peak Area (A-s): 0.107 Peak Height (A): 0.167
Background Pk Area (A-s): 0.066 Background Pk Height (A): 0.031
Blank Corrected Pk Area (A-s): 0.104
Concentration (mg/L): 0.0177

BAD CCV Digest

Check sample is out of range

As ID: BLA01 Seq. No.: 00099 A/S Pos.: 0 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 0

As ID: [illegible] Seq. No.: 00100 A/S Pos.: 26 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 26
Replicate 1 Time: [illegible]
Peak Area (A-s): 0.122 Peak Height (A): 0.173
Background Pk Area (A-s): 0.038 Background Pk Height (A): 0.023
Blank Corrected Pk Area (A-s): 0.119
Concentration (mg/L): 0.0202

Check sample is within range 0.0175 - 0.0220

As ID: BLA01 Seq. No.: 00101 A/S Pos.: 0 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 0
Replicate 1 Time: 12:33
Peak Area (A-s): [illegible] Peak Height (A): 0.005
Background Pk Area (A-s): 0.037 Background Pk Height (A): 0.013
Blank Corrected Pk Area (A-s): [illegible]
Concentration (mg/L): [illegible]

Check sample is within range [illegible] - [illegible]

As ID: [illegible] Seq. No.: 00102 A/S Pos.: 25 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 25
Replicate 1 Time: [illegible]
Peak Area (A-s): 0.100 Peak Height (A): 0.207
Background Pk Area (A-s): 0.102 Background Pk Height (A): 0.17[illegible]
Blank Corrected Pk Area (A-s): 0.097
Concentration (mg/L): 0.0164 Corrected Conc (mg/L): 0.002

As ID: BLA02 933413 Seq. No.: 00103 A/S Pos.: 26 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 26
Replicate 1 Time: 12:45
Peak Area (A-s): 0.004 Peak Height (A): 0.009
Background Pk Area (A-s): 0.030 Background Pk Height (A): 0.014
Blank Corrected Pk Area (A-s): 0.001
Concentration (mg/L): 0.0000

A ID: C157150 1.98 Seq. No.: 00104 A/S Pos.: 27 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 27
Replicate 1 Time: 12:48
Peak Area (A-s): 0.002 Peak Height (A): 0.006
Background Pk Area (A-s): 0.025 Background Pk Height (A): 0.012
Blank Corrected Pk Area (A-s): [illegible]
Concentration (mg/L): [illegible] Corrected Conc (mg/L): 0.0008

As ID: C157150 1.98 Seq. No.: 00105 A/S Pos.: 27 Date: 06/10/94

uL dispensed: 5 from 40, 5 from 39, 20 from 27
Replicate 1 Time: 12:50
Peak Area (A-s): 0.059 Peak Height (A): 0.080
kground Pk Area (A-s): 0.026 Background Pk Height (A): 0.016
nk Corrected Pk Area (A-s): 0.057
centration (mg/L): 0.0095 Corrected Conc (mg/L): 0.0240

Recovery is 98.3%

As ID: DUP 150 933414 Seq. No.: 00106 A/S Pos.: 28 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 28
Replicate 1 Time: 12:52
Peak Area (A-s): 0.003 Peak Height (A): 0.007
Background Pk Area (A-s): 0.025 Background Pk Height (A): 0.013
Blank Corrected Pk Area (A-s): -0.003
Concentration (mg/L): -0.0003 Corrected Conc (mg/L): -0.0037

As ID: DUP 150 933414 Seq. No.: 00107 A/S Pos.: 28 Date: 06/10/94

uL dispensed: 5 from 40, 5 from 39, 20 from 28
Replicate 1 Time: 12:55
Peak Area (A-s): 0.039 Peak Height (A): 0.074
Background Pk Area (A-s): 0.002 Background Pk Height (A): 0.112
Blank Corrected Pk Area (A-s): 0.036
Concentration (mg/L): 0.0060 Corrected Conc (mg/L): 0.0149

Recovery is 82.2%

As ID: SPI 150 933415 Seq. No.: 00108 A/S Pos.: 29 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 29
Replicate 1 Time: 12:57

Peak Area (A-s): 0.147 Peak Height (A): 0.188
Background Pk Area (A-s): 0.041 Background Pk Height (A): 0.029
Blank Corrected Pk Area (A-s): 0.144
Concentration (mg/L): 0.0244 Corrected Conc (mg/L): 0.0620

As ID: C157151 1.98 Seq. No.: 00109 A/S Pos.: 30 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 30
Replicate 1 Time: 13:00
Peak Area (A-s): 0.008 Peak Height (A): 0.017
Background Pk Area (A-s): 0.116 Background Pk Height (A): 0.095
Blank Corrected Pk Area (A-s): 0.005
Concentration (mg/L): 0.0007 Corrected Conc (mg/L): 0.0018

As ID: C157151 1.98 Seq. No.: 00110 A/S Pos.: 30 Date: 06/10/94

000631

uL dispensed: 5 from 40, 5 from 39, 20 from 30

Peak Area (A-s): 0.040 Peak Height (A): 0.086
Background Pk Area (A-s): 0.115 Background Pk Height (A): 0.082
Blank Corrected Pk Area (A-s): 0.037
Concentration (mg/L): 0.0062 Corrected Conc (mg/L): 0.0157

Recovery is 33.1%

As ID: AS Position 32 Seq. No.: 00111 A/S Pos.: 32 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 38
Replicate 1 Time: 13:04
Peak Area (A-s): 0.122 Peak Height (A): 0.148
Background Pk Area (A-s): 0.042 Background Pk Height (A): 0.026
Blank Corrected Pk Area (A-s): 0.119
Concentration (mg/L): 0.0202

Check sample is within range 0.0179 - 0.0220

As ID: BLA01 Seq. No.: 00112 A/S Pos.: 3 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 0
Replicate 1 Time: 13:07
Peak Area (A-s): -0.000 Peak Height (A): 0.002
Background Pk Area (A-s): 0.042 Background Pk Height (A): 0.012
Blank Corrected Pk Area (A-s): -0.042
Concentration (mg/L): -0.0071

Check sample is within range -0.0194 - 0.0194

As ID: CCL Seq. No.: 00113 A/S Pos.: 31 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 31
Replicate 1 Time: 13:09
Peak Area (A-s): 0.022 Peak Height (A): 0.003
Background Pk Area (A-s): 0.032 Background Pk Height (A): 0.011
Blank Corrected Pk Area (A-s): -0.010

Concentration (mg/L): -0.0027

As ID: AS Position 35 Seq. No.: 00114 A/S Pos.: 35 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 35
Replicate 1 Time: 13:11
Peak Area (A-s): 0.124 Peak Height (A): 0.170
Background Pk Area (A-s): 0.033 Background Pk Height (A): 0.023
Blank Corrected Pk Area (A-s): 0.121
Concentration (mg/L): 0.0205

Ch sample is within range 0.0179 - 0.0220

As ID: BLA01 Seq. No.: 00115 A/S Pos.: [illegible] Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 0
Replicate 1 Time: [illegible]

Peak Area (A-s): 0.000 Peak Height (A): 0.000
Background Pk Area (A-s): 0.023 Background Pk Height (A): 0.013
Blank Corrected Pk Area (A-s): -0.003
Concentration (mg/L): -0.0007

Check sample is within range -0.0094 - 0.0094

ID: 0156858 Seq. No.: 00116 A/S Pos.: 4 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 4
Replicate 1 Time: 13:53
Peak Area (A-s): 0.006 Peak Height (A): 0.012
Background Pk Area (A-s): 0.031 Background Pk Height (A): 0.113
Blank Corrected Pk Area (A-s): 0.003
Concentration (mg/L): 0.0003 Corrected Conc (mg/L): 0.0007

As ID: 0156876 Seq. No.: 00117 A/S Pos.: 5 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 5
Replicate 1 Time: 17:33
Peak Area (A-s): 0.020 Peak Height (A): 0.058
Background Pk Area (A-s): 0.040 Background Pk Height (A): 0.028
Blank Corrected Pk Area (A-s): 0.027
Concentration (mg/L): 0.0027

As ID: 0156888 Seq. No.: 00118 A/S Pos.: 4 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 4
Replicate 1 Time: 13:57
Peak Area (A-s): 0.004 Peak Height (A): 0.011
Background Pk Area (A-s): 0.073 Background Pk Height (A): 0.181
Blank Corrected Pk Area (A-s): 0.001
Concentration (mg/L): 0.0000 Corrected Conc (mg/L): 0.0001

[illegible]

uL dispensed: 5 from 40, 5 from 39, 20 from 4
Replicate 1 Time: 14:01
Peak Area (A-s): 0.054 Peak Height (A): 0.032
Background Pk Area (A-s): 0.040 Background Pk Height (A): 0.024
Blank Corrected Pk Area (A-s): 0.051
Concentration (mg/L): 0.0086 Corrected Conc (mg/L): 0.0017

Recovery is 85.5%

ID: 0156876 Seq. No.: 00120 A/S Pos.: 5 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 5
Replicate 1 Time: 14:04
Peak Area (A-s): 0.033 Peak Height (A): 0.056
Background Pk Area (A-s): 0.049 Background Pk Height (A): 0.028
Blank Corrected Pk Area (A-s): 0.030
Concentration (mg/L): 0.0050

As ID: [illegible] Seq. No.: 00121 A/S Pos.: 3 Date: 06/10/94

UL dispensed: 5 from 40, 5 from 39, 20 from 5
Replicate 1 Time: 14:0[illegible]
Peak Area (A-s): 0.084 Peak Height (A): 0.170
Background Pk Area (A-s): 0.0[illegible] Background Pk Height (A): 0.026
Blank Corrected Pk Area (A-s): 0.081
Concentration (mg/L): 0.0[illegible]

Recovery is 8[illegible]

As ID: B126597 Seq. No.: 00122 A/S Pos.: 4 Date: 06/10/94

UL dispensed: 5 from 0, 5 from 40, 20 from 4
Replicate 1 Time: 14:1[illegible]
Peak Area (A-s): 0.001 Peak Height (A): 0.002
Background Pk Area (A-s): 0.030 Background Pk Height (A): 0.017
Blank Corrected Pk Area (A-s): -0.002
Concentration (mg/L): -0.0003 Corrected Conc (mg/L): -0.0012

As ID: B126597 Seq. No.: 00123 A/S Pos.: 4 Date: 06/10/94

UL dispensed: 5 from 40, 5 from 39, 20 from 4
Replicate [illegible] Time: 14:1[illegible]
Peak Area (A-s): 0.0[illegible] Peak Height (A): 0.1[illegible]
Background Pk Area (A-s): [illegible] Background Pk Height (A): 0.0[illegible]
Blank Corrected Pk Area (A-s): 0.0[illegible]
Concentration (mg/L): 0.0[illegible] Corrected Conc (mg/L): 0.0234

Recovery is 98.9%

As ID: B126[illegible] Seq. No.: 00124 A/S Pos.: 5 Date: 06/10/94

UL dispensed: 5 from 0, 5 from 40, 20 from 5
Replicate 1 Time: 14:1[illegible]
Peak Area (A-s): 0.03[illegible] Peak Height (A): 0.060

Background Pk Area (A-s): 0.04[illegible] Background Pk Height (A): 0.029
Blank Corrected Pk Area (A-s): 0.[illegible]
Concentration (mg/L): 0.0049 Corrected Conc (mg/L): 0.0120

As ID: B126[illegible] Seq. No.: 00125 A/S Pos.: 5 Date: 06/10/94

UL dispensed: 5 from 40, 5 from 39, 20 from 5
Replicate 1 Time: 14:17
Peak Area (A-s): 0.081 Peak Height (A): 0.138
Background Pk Area (A-s): 0.045 Background Pk Height (A): 0.027
Blank Corrected Pk Area (A-s): 0.078
Concentration (mg/L): 0.0131 Corrected Conc (mg/L): 0.0324

Recovery is 82.4%

000634

As ID: AS Position 38 Seq. No.: 00126 A/S Pos.: 38 Date: 06/10/94

As ID: B126629 Seq. No.: 00127 A/S Pos.: 5 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 5
Replicate 1 Time: 14:31
Peak Area (A-s): 0.056 Peak Height (A): 0.090
Background Pk Area (A-s): 0.058 Background Pk Height (A): 0.041
Blank Corrected Pk Area (A-s): 0.053
Concentration (mg/L): 0.0089 Corrected Conc (mg/L): 0.0220

As ID: B126629 Seq. No.: 00128 A/S Pos.: 5 Date: 06/10/94

uL dispensed: 5 from 40, 5 from 39, 20 from 5
Replicate 1 Time: 14:40
Peak Area (A-s): 0.110 Peak Height (A): 0.174
Background Pk Area (A-s): 0.038 Background Pk Height (A): 0.043
Blank Corrected Pk Area (A-s): 0.107
Concentration (mg/L): 0.0188 Corrected Conc (mg/L): 0.0451

Recovery is 82.0%

As ID: AS Position 38 Seq. No.: 00129 A/S Pos.: 38 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 38
Replicate 1 Time: 14:43
Peak Area (A-s): 0.124 Peak Height (A): 0.225
Background Pk Area (A-s): 0.033 Background Pk Height (A): 0.027
Blank Corrected Pk Area (A-s): 0.121
Concentration (mg/L): 0.0208

Check sample is within range 0.0179 - 0.0220

As ID: BLAD1 Seq. No.: 00132 A/S Pos.: 0 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 5
Replicate 1 Time: 14:45

Peak Area (A-s): 0.001 Peak Height (A): 0.006
Background Pk Area (A-s): 0.005 Background Pk Height (A): 0.012
Blank Corrected Pk Area (A-s): -0.002
Concentration (mg/L): -0.0005

Check sample is within range -0.0094 - 0.0094

As ID: AS Position 38 Seq. No.: 00131 A/S Pos.: 38 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 38

As ID: AS Position 3 Seq. No.: 00132 A/S Pos.: 3 Date: 06/10/94

uL dispensed: 5 from 0, 5 from 40, 20 from 3
Replicate 1 Time: 14:47
Peak Area (A-s): 0.128 Peak Height (A): 0.241
Background Pk Area (A-s): 0.033 Background Pk Height (A): 0.026
Blank Corrected Pk Area (A-s): 0.125

000635

Replicate : 1
Time: 14:47
Peak Area (A-s): 0.128
Peak Height (A): 0.241
Background Pk Area (A-s): 0.033
Background Pk Height (A): 0.026
Blank Corrected Pk Area (A-s): 0.105
Concentration (mg/L): 0.0212

ANALYSIS RUN: R21992

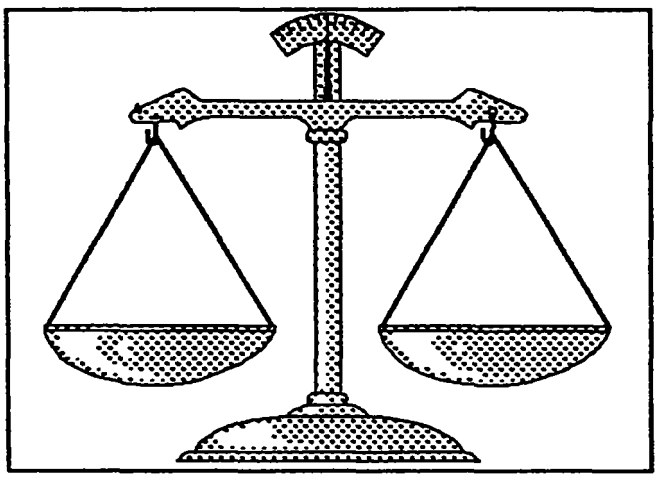
RUN NUMBER: 10026

TEST: As 136

ANALYST: Jn 2520

DATE: 6 / 1 / 94

INSTRUMENT: #22



Reprep_____(complete)

Reprep_____(incomplete)

COMMENTS: _____

91CK1072.R6

PAGE 1 OF 6

METALS, GFAA

RUN: [illegible]

ANALYST: JN 2520 REVIEWER: CLS RECORDER: [illegible]

DATE: 6/1/94 DATE: 6/2/94 DATE: [illegible]

INSTRUMENT: #22 ELEMENT: AS 136 WAVELENGTH: 193.7

CAL. CURVE.:	0	0.005	0.010	0.020	0.040	mg/l
RESPONSE:	0.0085 JN 6-1-94	0.028 #050294E	0.056 #050294E	0.106 #050294F	0.208 #050294G	

ADD 1 CONC.: ADD 2 CONC.: ADD 3 CONC.:

C.C.: 0.999 SLOPE: 0.196 Y INTERCEPT: -0.0008

SAMPLE:	ICV01	Blaa01	CDL	LCS	Blaa02	QC only C156909
TYPE:	G052544B		#050294F	G928532	G928533	
TI VALUE:	0.02		0.02	0.10		
RESULT:	0.0216	BDL	0.0200	0.090	BDL	BDL
UNITS:	mg/l	→	→	mg/l	→	mg/kg
DET. LIMIT:	0.020	→		0.05	0.010	2.5
% COVERY:	108%		100%			
WT/VOL:						2.01
FINAL VOL:				100		100
DILUTE:				1:5		1:5
SAMABS:	0.113	0.002	0.105	0.095	0.004	0.015
AD1ABS:						0.068
AD2ABS:						
AD3ABS:						
COMMENT:						

PAGE 2 OF 6 **METALS, GFAA** RUN:

ANALYST: Jn 2520 REVIEWER: RECORDER:

DATE: 6/1/94 DATE: / / DATE: / /

INSTRUMENT: #22 ELEMENT: As 136 WAVELENGTH: 193.7

CAL. CURVE.:

RESPONSE:

ADD 1 CONC.: ADD 2 CONC.: ADD 3 CONC.:

C.C.: SLOPE: Y INTERCEPT:

SAMPLE:	DUPC2 C156409	Spic2D C156409	CCV	Blank1	Spic2 C156409	CCV
TYPE:	[illegible]	[illegible]	#050294F		[illegible]	#050294F
E VALUE:	BDL	5.0	0.02		5.0	0.02
RESULT:	BDL	BDL / 6.74	0.0187	BDL	BDL / 6.89	0.0194
UNITS:	mg/kg	→	mg/L →		mg/kg	mg/L
DET. LIMIT:	2.5	2.5	0.010 →		2.5	0.010
ECOVERY:	0% rpd	NA	94%		NA	97%
WT/VOL:	1.99	1.98			2.00	
FINAL VOL:	100	100			100	
DILUTE:	1:5	1:5			1:5	
SAMABS:	0.014	0.140	0.099	0.002	0.143	0.102
AD1ABS:	0.066					
AD2ABS:						
AD3ABS:						
COMMENT:		*dp spike			*Both spikes had a ~~low~~ high % REC showing matrix inter.	

91DL1065.R6 11-18-93

000639

PAGE 3 OF 6 | METALS, GFAA | RUN:

ANALYST: In 2520 | REVIEWER: | RECORDER:

DATE: 6/1/94 | DATE: / / | DATE: / /

INSTRUMENT: #22 | ELEMENT: As 136 | WAVELENGTH: 193.7

CAL. CURVE.:

RESPONSE:

ADD 1 CONC.: | ADD 2 CONC.: | ADD 3 CONC.:

C.C.: | SLOPE: | Y INTERCEPT:

SAMPLE:	B1601	C156861	CCV	B1601	B126471	C156914
TYPE:		[illegible]	#050294F		[illegible]	[illegible]
: VALUE:			0.02			
RESULT:	BDL	120	0.0191	BDL	BDL	BDL
UNITS:	mg/L	mg/kg	mg/L →		mg/kg	mg/kg
DET. LIMIT:	0.010	~~49.5~~ CLS	0.010 →		2.5	2.5
ECOVERY:		50	96%			
WT/VOL:		2.02			2.00	1.99
FINAL VOL:		100			100	100
DILUTE:		1:100			1:5	1:5
SAMABS:	0.001	0.126	0.101	0.001	0.006	0.006
AD1ABS:		0.177			0.055	0.053
AD2ABS:						
AD3ABS:						
COMMENT:		1.185				

6-2-94

PAGE 4 OF 6

METALS, GFAA

RUN:

ANALYST: In 2520

REVIEWER:

RECORDER:

DATE: 6/1/94

DATE: / /

DATE: / /

INSTRUMENT:

ELEMENT:

WAVELENGTH:

CAL. CURVE.:

RESPONSE:

ADD 1 CONC.:

ADD 2 CONC.:

ADD 3 CONC.:

C.C.:

SLOPE:

Y INTERCEPT:

SAMPLE:	LCS	B1902	C156881	DUP02	Spic2	CCV	B1401
TYPE:	Q930648	Q930649	M1032	C156881 Q930650	C156881 0.10 Q930651	050294F	
VALUE:	0.10			BDL	0.10	0.02	
RESULT:	0.103	BDL	BDL	BDL	BDL / 0.105	0.0184	BDL
UNITS:	mg/l →		mg/l	mg/l	→	mg/l	→
DET. LIMIT:	0.05	0.010	0.005	0.005	0.025	0.010	→
RECOVERY:	103%			0% RPD	105%	92%	
WT/VOL:			50	50	50		
FINAL VOL:	50		50	50	50		
DILUTE:	1:5				1:5		
SAMABS:	0.108	0.003	0.013	0.015	0.110	0.097	0.001
AD1ABS:			0.065	0.066			
AD2ABS:							
AD3ABS:							
COMMENT:			CIP				

PAGE 5 OF 6 **METALS, GFAA** RUN:

ANALYST: In 2520 REVIEWER: RECORDER:

DATE: 6/1/94 DATE: / / DATE: / /

INSTRUMENT: ELEMENT: WAVELENGTH:

CAL. CURVE:	0	0.005	0.010	0.020	0.040	mg/l
RESPONSE:	0.000	0.024	0.049	0.093	0.188	

ADD 1 CONC.: ADD 2 CONC.: ADD 3 CONC.:

C.C.: 0.999 SLOPE: 0.214 Y INTERCEPT: 0.0001

*new curve

SAMPLE:	ICV01	C156862	C156876 7 6-2-94	C156878	C156882	CCV
TYPE:		M1032	M1032	M1032	M1032	
VALUE:	0.02					0.02
RESULT:	0.0215	BDL	BDL	BDL	BDL	0.0218
UNITS:	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
DET. LIMIT:	0.010	* ~~5.01~~ 5.0 Cls 6-2-94	0.005	0.005	0.005	0.010
COVERY:	108%					109%
WT/VOL:		1.97	50	50	50	
FINAL VOL:		100	50	50	50	
DILUTE:		1:10	–	–		
SAMABS:	0.101	0.002	0.011 ~~0.036~~ In 6-2-94	0.004	0.006	0.103
AD1ABS:		0.034	0.048	0.048	0.051	
AD2ABS:						
AD3ABS:						
COMMENT:		* dil due to high Background in sample	CIP			

PAGE 6 OF 6 METALS, GFAA RUN:

ANALYST: Jn 2520 REVIEWER: RECORDER:

DATE: 6/1/94 DATE: / / DATE: / /

INSTRUMENT: ELEMENT: WAVELENGTH:

CAL. CURVE.:

RESPONSE:

ADD 1 CONC.: ADD 2 CONC.: ADD 3 CONC.:

C.C.: SLOPE: Y INTERCEPT:

SAMPLE:	B1001	CDI				
TYPE:						
UE VALUE:		0.02				
RESULT:	BDL	0.0218				
UNITS:	mg/l →					
DET. LIMIT:	0.010 →					
ECOVERY:		109%				
WT/VOL:						
FINAL VOL:						
DILUTE:						
SAMABS:	0.002	0.103				
AD1ABS:						
AD2ABS:						
AD3ABS:						
COMMENT:						

Element File: AS_CLP.GEL Element: As Wavelength: 193.7
Date: 06/01/94 Time: 13:27 Slit: 0.7
Data File: AS060194.DAT ID/Wt File: AS060194.IDW Lamp Current: 0
Technique: HGA Calib. Type: Linear Energy: 57
Remark 1: THIS FILE IS TO DETERMINE AS AT 5 PPB USING STANDARDS 10, 20
Remark 2: AND 40 PPB. PD IS THE MODIFIER USED. THIS IS CLP PROTOCOL.

As ID: Blank Seq. No.: 00010 A/S Pos.: 0 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 0

Replicate 1 Time: 13:30
Peak Area (A-s): -0.006 Peak Height (A): 0.121
Background Pk Area (A-s): -1.076 Background Pk Height (A): 0.033
Blank Corrected Pk Area (A-s): -0.003
Concentration (mg/L): -0.0030

Auto-zero performed.

As ID: Blank Seq. No.: 00011 A/S Pos.: 0 Date: 06/01/94

dispensed: 5 from 0, 5 from 40, 20 from 0

Replicate 1 Time: 13:41
Peak Area (A-s): -0.001 Peak Height (A): 0.007
Background Pk Area (A-s): 0.049 Background Pk Height (A): 0.021
Blank Corrected Pk Area (A-s): 0.005
Concentration (mg/L): -0.0014

Auto-zero performed.

As ID: Standard 1 Seq. No.: 00012 A/S Pos.: 36 Date: 06/01/94

dispensed: 5 from 0, 5 from 40, 20 from 36

Replicate 1 Time: 13:43
Peak Area (A-s): 0.026 Peak Height (A): 0.085
Background Pk Area (A-s): 0.041 Background Pk Height (A): 0.023
Blank Corrected Pk Area (A-s): 0.028
Concentration (mg/L): 0.0030

Standard number 1 applied. [0.0050]
Correlation coefficient: 1.00000 Slope: 5.5009 Int: 0.000

~~~~~~

As ID: Standard 2 Seq. No.: 00013 A/S Pos.: 37 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 37
Replicate 1 Time: 13:46
Peak Area (A-s): 0.054 Peak Height (A): 0.167
Background Pk Area (A-s): 0.039 Background Pk Height (A): 0.028
Blank Corrected Pk Area (A-s): 0.056
Concentration (mg/L): 0.0101

Standard number 2 applied. [0.0100]
Correlation coefficient: 0.99995 Slope: 5.5544 Int: -0.000

~~~~~~

As ID: Standard 3 Seq. No.: 00014 A/S Pos.: 38 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 38
Replicate 1 Time: 13:48
Peak Area (A-s): 0.105 Peak Height (A): 0.315
Background Pk Area (A-s): 0.048 Background Pk Height (A): 0.039
B k Corrected Pk Area (A-s): 0.105
C. entration (mg/L): 0.0191

Standard number 3 applied. [0.0200]
Correlation coefficient: 0.99965 Slope: 5.3083 Int: 0.001

~~~~~~

As ID: Standard 4 Seq. No.: 00015 A/S Pos.: 39 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 39
Replicate 1 Time: 13:51
Peak Area (A-s): 0.206 Peak Height (A): 0.611
Background Pk Area (A-s): 0.049 Background Pk Height (A): 0.056
Blank Corrected Pk Area (A-s): 0.208
Concentration (mg/L): 0.0389

Standard number 4 applied. [0.0400]
Correlation coefficient: 0.99982 Slope: 5.1682 Int: 0.002

~~~~~~

As ID: ICV01 Seq. No.: 00016 A/S Pos.: 1 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 1

000645

R icate 1 Time: 13:53
P Area (A-s): 0.112 Peak Height (A): 0.333
Background Pk Area (A-s): 0.042 Background Pk Height (A): 0.037
Blank Corrected Pk Area (A-s): 0.113
Concentration (mg/L): 0.0216

~~~~~~

As ID: BLA01 Seq. No.: 00017 A/S Pos.: 2 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 2
Replicate 1 Time: 13:56
Peak Area (A-s): 0.001 Peak Height (A): 0.010
Background Pk Area (A-s): 0.032 Background Pk Height (A): 0.018
Blank Corrected Pk Area (A-s): 0.002
Concentration (mg/L): 0.0001

~~~~~~

As ID: CDL Seq. No.: 00018 A/S Pos.: 3 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 3
Replicate 1 Time: 13:58
Peak Area (A-s): 0.104 Peak Height (A): 0.317
Background Pk Area (A-s): 0.040 Background Pk Height (A): 0.237
Blank Corrected Pk Area (A-s): 0.105
Concentration (mg/L): 0.0200

~~~~~~

A ID: LCS 926532 Seq. No.: 00019 A/S Pos.: 4 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 4
Replicate 1 Time: 14:00
Peak Area (A-s): 0.093 Peak Height (A): 0.294
Background Pk Area (A-s): 0.090 Background Pk Height (A): 0.161
Blank Corrected Pk Area (A-s): 0.095
C entration (mg/L): 0.0179 Corrected Conc (mg/L): 0.090

~~~~~~

As ID: BLA02 926533 Seq. No.: 00020 A/S Pos.: 5 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 5
Replicate 1 Time: 14:03
Peak Area (A-s): 0.003 Peak Height (A): 0.010
Background Pk Area (A-s): 0.038 Background Pk Height (A): 0.019
Blank Corrected Pk Area (A-s): 0.004
Concentration (mg/L): 0.0005

~~~~~~

As ID: C156909 2.01 Seq. No.: 00021 A/S Pos.: 6 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 6

Replicate 1 Time: 14:05
Peak Area (A-s): 0.013 Peak Height (A): 0.035
Background Pk Area (A-s): 0.092 Background Pk Height (A): 0.116
Blank Corrected Pk Area (A-s): 0.015
Concentration (mg/L): 0.0025 Corrected Conc (mg/L): 0.0061
~~~~~~

uL dispensed: 5 from 40, 5 from 39, 20 from 6
Replicate 1 Time: 14:08
Peak Area (A-s): 0.066 Peak Height (A): 0.174
Background Pk Area (A-s): 0.093 Background Pk Height (A): 0.123
Blank Corrected Pk Area (A-s): 0.068
(:entration (mg/L): 0.0127 Corrected Conc (mg/L): 0.0317

Recovery is 102.9%

~~~~~~

As ID: DUP 909 928534 Seq. No.: 00023 A/S Pos.: 7 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 7
Replicate 1 Time: 14:10
Peak Area (A-s): 0.013 Peak Height (A): 0.036
Background Pk Area (A-s): 0.094 Background Pk Height (A): 0.119
Blank Corrected Pk Area (A-s): 0.014
Concentration (mg/L): 0.0024 Corrected Conc (mg/L): 0.0061

~~~~~~

As ID: DUP 909 928534 Seq. No.: 00024 A/S Pos.: 7 Date: 06/01/94

uL dispensed: 5 from 40, 5 from 39, 20 from 7
Replicate 1 Time: 14:13
Peak Area (A-s): 0.065 Peak Height (A): 0.175
Background Pk Area (A-s): 0.093 Background Pk Height (A): 0.130
Blank Corrected Pk Area (A-s): 0.066
Concentration (mg/L): 0.0124 Corrected Conc (mg/L): 0.0312

overy is 99.9%

~~~~~~

As ID: SPI 909 928535 Seq. No.: 00025 A/S Pos.: 8 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 8
Replicate 1 Time: 14:15
? ak Area (A-s): 0.138 Peak Height (A): 0.328
ckground Pk Area (A-s): 0.107 Background Pk Height (A): 0.132
Blank Corrected Pk Area (A-s): 0.140
Concentration (mg/L): 0.0267 Corrected Conc (mg/L): 0.0674

~~~~~~

As ID: AS Position 38 Seq. No.: 00026 A/S Pos.: 38 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 38
Replicate 1 Time: 14:17
Peak Area (A-s): 0.097 Peak Height (A): 0.285
Background Pk Area (A-s): 0.041 Background Pk Height (A): 0.042
Blank Corrected Pk Area (A-s): 0.099
Concentration (mg/L): 0.0187

Check sample is within range 0.0179 - 0.0220

~~~~~~

ID: BLA01 Seq. No.: 00027 A/S Pos.: 0 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 0
Replicate 1 Time: 14:20
Peak Area (A-s): 0.001 Peak Height (A): 0.007
Background Pk Area (A-s): 0.073 Background Pk Height (A): 0.162
Blank Corrected Pk Area (A-s): 0.002
Concentration (mg/L): 0.0001
~~~~~~

neck sample is within range -0.0094 - 0.0094

s ID: C156858 1.98 Seq. No.: 00028 A/S Pos.: 9 Date: 06/01/94

L dispensed: 5 from 0, 5 from 40, 20 from 9
Replicate 1 Time: 14:22
Peak Area (A-s): 0.003 Peak Height (A): 0.017
Background Pk Area (A-s): 0.042 Background Pk Height (A): 0.025
Blank Corrected Pk Area (A-s): 0.005
Concentration (mg/L): 0.0005 Corrected Conc (mg/L): 0.0013

s ID: C156858 1.98 Seq. No.: 00029 A/S Pos.: 9 Date: 06/01/94

L dispensed: 5 from 40, 5 from 39, 20 from 9
Replicate 1 Time: 14:25
Peak Area (A-s): 0.050 Peak Height (A): 0.157
Background Pk Area (A-s): 0.043 Background Pk Height (A): 0.031
Blank Corrected Pk Area (A-s): 0.051
Concentration (mg/L): 0.0095 Corrected Conc (mg/L): 0.0241

ecovery is 89.9%

s ID: C156861 2.02 Seq. No.: 00030 A/S Pos.: 10 Date: 06/01/94

L dispensed: 5 from 0, 5 from 40, 20 from 10
ample abs. is greater than that of the largest standard.
eplicate 1 Time: 14:27
eak Area (A-s): 0.602 Peak Height (A): 1.498
ac ound Pk Area (A-s): 0.185 Background Pk Height (A): 0.189
ia Corrected Pk Area (A-s): 0.804
oncentration (mg/L): 0.1551 Corrected Conc (mg/L): 0.3340

s ID: C156861 2.02 Seq. No.: 00031 A/S Pos.: 10 Date: 06/01/94

L dispensed: 21 from 0, 5 from 40, 4 from 10

plicate 1 Time: 14:29
ak Area (A-s): 0.026 Peak Height (A): 0.074
ckground Pk Area (A-s): 0.024 Background Pk Height (A): 0.015
a orrected Pk Area (A-s): 0.027
n ration (mg/L): 0.0049 Corrected Conc (mg/L): 0.060

ID: C156861 2.02 Seq. No.: 00032 A/S Pos.: 10 Date: 06/01/94

dispensed: 16 from 0, 5 from 40, 5 from 39, 4 from 10
plicate 1 Time: 14:32

000649

Blank Corrected Pk Area (A-s): 0.004
Concentration (mg/L): 0.0005 Corrected Conc (mg/L): 0.006

Recovery Is -43.8%

~~~~~~

ID: C156862 1.97 Seq. No.: 00033 A/S Pos.: 11 Date: 06/01/94

dispensed: 5 from 0, 5 from 40, 20 from 11
~~~~~~

Bad CCV Repeat
Jm 6-1-94

~~~~~~

As ID: AS Position 38 Seq. No.: 00034 A/S Pos.: 38 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 38
Replicate 1 Time: 14:37
Peak Area (A-s): 0.089 Peak Height (A): 0.224
Background Pk Area (A-s): 0.138 Background Pk Height (A): 0.183
Blank Corrected Pk Area (A-s): 0.090
Concentration (mg/L): 0.0171

Check sample is out of range 0.0179 - 0.0220

~~~~~~

As ID: BLA01 Seq. No.: 00035 A/S Pos.: 0 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 0

~~~~~~

As ID: AS Position 38 Seq. No.: 00036 A/S Pos.: 38 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 38
Re cate 1 Time: 14:41
Pe. Area (A-s): 0.098 Peak Height (A): 0.270
Background Pk Area (A-s): 0.040 Background Pk Height (A): 0.040
Blank Corrected Pk Area (A-s): 0.099
Concentration (mg/L): 0.0188

Check sample is within range 0.0179 - 0.0220

~~~~~~

As ID: BLA01 Seq. No.: 00037 A/S Pos.: 0 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 0
Replicate 1 Time: 14:43
Peak Area (A-s): -0.001 Peak Height (A): 0.007
Background Pk Area (A-s): 0.032 Background Pk Height (A): 0.176
Blank Corrected Pk Area (A-s): 0.001
Concentration (mg/L): -0.0002

Check sample is within range -0.0094 - 0.0094

~~~~~~

As ID: C156861 2.02 Seq. No.: 00039 A/S Pos.: 10 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 10
Sample abs. is greater than that of the largest standard.
R icate 1 Time: 14:46
F Area (A-s): 0.413 Peak Height (A): 1.091
Background Pk Area (A-s): 0.098 Background Pk Height (A): 0.110
Blank Corrected Pk Area (A-s): 0.414
Concentration (mg/L): 0.0797 Corrected Conc (mg/L): 0.987

~~~~~~

As ID: C156861 2.02 Seq. No.: 00040 A/S Pos.: 10 Date: 06/01/94

000651

ID: SPI 909 928535 Seq. No.: 00041 A/S Pos.: 8 Date: 06/01/94

dispensed: 5 from 0, 5 from 40, 20 from 8

Replicate 1 Time: 14:49
Peak Area (A-s): 0.070 Peak Height (A): 0.181
Background Pk Area (A-s): 0.115 Background Pk Height (A): 0.109
Blank Corrected Pk Area (A-s): 0.072
Concentration (mg/L): 0.0135 Corrected Conc (mg/L): 0.0342

As ID: SPI 909 928535 Seq. No.: 00042 A/S Pos.: 8 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 8
Replicate 1 Time: 14:52
Peak Area (A-s): 0.076 Peak Height (A): 0.193
Background Pk Area (A-s): 0.117 Background Pk Height (A): 0.113
Blank Corrected Pk Area (A-s): 0.077
Concentration (mg/L): 0.0146 Corrected Conc (mg/L): 0.0368

As ID: SPI 909 928535 Seq. No.: 00043 A/S Pos.: 8 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 8
Replicate 1 Time: 14:56
ak Area (A-s): 0.141 Peak Height (A): 0.334
ckground Pk Area (A-s): 0.103 Background Pk Height (A): 0.131
Blank Corrected Pk Area (A-s): 0.143
Concentration (mg/L): 0.0273 Corrected Conc (mg/L): 0.0689

As ID: AS Position 38 Seq. No.: 00044 A/S Pos.: 38 Date: 06/01/94

dispensed: 5 from 0, 5 from 40, 20 from 38

As ID: Seq. 00045 Seq. No.: 00045 A/S Pos.: -- Date: 06/01/94

Replicate 1 Time: 14:59
ak Area (A-s): 0.064 Peak Height (A): 0.159
ckground Pk Area (A-s): 0.092 Background Pk Height (A): 0.183
Blank Corrected Pk Area (A-s): 0.065
Concentration (mg/L): 0.0123

As ID: AS Position 38 Seq. No.: 00046 A/S Pos.: 38 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 38

Replicate 1 Time: 15:03
Peak Area (A-s): 0.101 Peak Height (A): 0.281
Background Pk Area (A-s): 0.041 Background Pk Height (A): 0.043
Blank Corrected Pk Area (A-s): 0.102
Concentration (mg/L): 0.0194

Ch sample is within range 0.0179 - 0.0220

As ID: BLA01 Seq. No.: 02047 A/S Pos.: 0 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 0
Replicate 1 Time: 15:06
Peak Area (A-s): -0.001 Peak Height (A): 0.007
Background Pk Area (A-s): 0.031 Background Pk Height (A): 0.020
Blank Corrected Pk Area (A-s): 0.001

Concentration (mg/L): -0.0002

Check sample is within range -0.0094 - 0.0094

~~~~~~

As ID: AS Position 37 Seq. No.: 00048 A/S Pos.: 37 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 37

~~~~~~

As ID: C156861 2.02 Seq. No.: 00049 A/S Pos.: 10 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 10
Replicate 1 Time: 15:09
Peak Area (A-s): 0.184 Peak Height (A): 0.569
Background Pk Area (A-s): 0.128 Background Pk Height (A): 0.156
Blank Corrected Pk Area (A-s): 0.165
Concentration (mg/L): 0.0355 Corrected Conc (mg/L): 0.878

~~~~~~

A ID: C156861 2.02 Seq. No.: 00050 A/S Pos.: 10 Date: 06/01/94

uL dispensed: 5 from 40, 5 from 39, 20 from 10
Sample abs. is greater than that of the largest standard.
Replicate 1 Time: 15:11
Peak Area (A-s): 0.284 Peak Height (A): 0.879
Background Pk Area (A-s): 0.062 Background Pk Height (A): 0.066
Blank Corrected Pk Area (A-s): 0.286
Concentration (mg/L): 0.0549 Corrected Conc (mg/L): 1.359

Recovery is 194.5%

Repeat 6-1-94

~~~~~~

As ID: C156861 2.02 Seq. No.: 00052 A/S Pos.: 10 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 10
Replicate 1 Time: 15:18
Peak Area (A-s): 0.124 Peak Height (A): 0.404
Background Pk Area (A-s): 0.047 Background Pk Height (A): 0.050
Blank Corrected Pk Area (A-s): 0.126
Concentration (mg/L): 0.0239 Corrected Conc (mg/L): 1.185

~~~~~~

As ID: C156861 2.02 Seq. No.: 00053 A/S Pos.: 10 Date: 06/01/94

uL dispensed: 5 from 40, 5 from 39, 20 from 10
~~~~~~

R cate 1 Time: 15:20
P. . Area (A-s): 0.175 Peak Height (A): 0.540
Background Pk Area (A-s): 0.048 Background Pk Height (A): 0.059
Blank Corrected Pk Area (A-s): 0.177
Concentration (mg/L): 0.0338 Corrected Conc (mg/L): 1.675

Recovery is 99.1%

As ID: C156862 1.97 Seq. No.: 00054 A/S Pos.: 11 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 11
Replicate 1 Time: 15:23
Peak Area (A-s): 0.002 Peak Height (A): 0.013

Repeat
1:10
lh 6-2-94

Background Pk Area (A-s): 0.035   Background Pk Height (A): 0.021
Blank Corrected Pk Area (A-s): 0.003
Concentration (mg/L): 0.0002   Corrected Conc (mg/L): 0.003

~~~~~~

As   ID: C156862 1.97   Seq. No.: 00055   A/S Pos.: 11   Date: 06/01/94

uL dispensed: 5 from 40, 5 from 39, 20 from 11
Replicate 1   Time: 15:25
Peak Area (A-s): 0.053   Peak Height (A): 0.181
Background Pk Area (A-s): 0.033   Background Pk Height (A): 0.030
Blank Corrected Pk Area (A-s): 0.054
Concentration (mg/L): 0.0101   Corrected Conc (mg/L): 0.129

Recovery is 99.0%

~~~~~~

As   ID: AS Position 38   Seq. No.: 00056   A/S Pos.: 38   Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 38
Replicate 1   Time: 15:27
Peak Area (A-s): 0.099   Peak Height (A): 0.270
Background Pk Area (A-s): 0.034   Background Pk Height (A): 0.034
Blank Corrected Pk Area (A-s): 0.101
Concentration (mg/L): 0.0191

Check sample is within range 0.0179 - 0.0220

~~~~~~

As   ID: BLA01   Seq. No.: 00057   A/S Pos.: 0   Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 0
Replicate 1   Time: 15:30
Peak Area (A-s): -0.002   Peak Height (A): 0.007
Background Pk Area (A-s): 0.028   Background Pk Height (A): 0.017
Blank Corrected Pk Area (A-s): -0.001
Concentration (mg/L): -0.0005

Check sample is within range -0.0094 - 0.0094

~~~~~~

As   ID: B126471 2.00   Seq. No.: 00058   A/S Pos.: 12   Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 12
Replicate 1   Time: 15:32
Peak Area (A-s): 0.004   Peak Height (A): 0.013
Background Pk Area (A-s): 0.092   Background Pk Height (A): 0.193
Blank Corrected Pk Area (A-s): 0.006
Concentration (mg/L): 0.0007   Corrected Conc (mg/L): 0.0018

~~~~~~

As   ID: B126471 2.00   Seq. No.: 00059   A/S Pos.: 12   Date: 06/01/94

uL dispensed: 5 from 40, 5 from 39, 20 from 12   000656
Replicate 1   Time: 15:34
Peak Area (A-s): 0.054   Peak Height (A): 0.200
~~~~~~

eak Area (A-s): 0.054 Peak Height (A): 0.200
ackground Pk Area (A-s): 0.039 Background Pk Height (A): 0.031
lank Corrected Pk Area (A-s): 0.055
oncentration (mg/L): 0.0104 Corrected Conc (mg/L): 0.0259

ecovery is 96.4%

~~~~~~

s ID: C156914 1.99 Seq. No.: 00060 A/S Pos.: 13 Date: 06/01/94

L dispensed: 5 from 0, 5 from 40, 20 from 13
eplicate 1 Time: 15:37
eak Area (A-s): 0.004 Peak Height (A): 0.016
ackground Pk Area (A-s): 0.085 Background Pk Height (A): 0.150
lank Corrected Pk Area (A-s): 0.006
oncentration (mg/L): 0.0007 Corrected Conc (mg/L): 0.0018

~~~~~~

s ID: C156914 1.99 Seq. No.: 00061 A/S Pos.: 13 Date: 06/01/94

L dispensed: 5 from 40, 5 from 39, 20 from 13
eplicate 1 Time: 15:39
eak Area (A-s): 0.052 Peak Height (A): 0.194
ackground Pk Area (A-s): 0.040 Background Pk Height (A): 0.033
lank Corrected Pk Area (A-s): 0.053
oncentration (mg/L): 0.0100 Corrected Conc (mg/L): 0.0251

ecovery is 92.6%

~~~~~~

s ID: LCS 930648 Seq. No.: 00062 A/S Pos.: 14 Date: 06/01/94

L dispensed: 5 from 0, 5 from 40, 20 from 14
e cate 1 Time: 15:41
e Area (A-s): 0.106 Peak Height (A): 0.322
ackground Pk Area (A-s): 0.038 Background Pk Height (A): 0.041
lank Corrected Pk Area (A-s): 0.108
oncentration (mg/L): 0.0205 Corrected Conc (mg/L): 0.103

~~~~~~

s ID: BLA02 930649 Seq. No.: 00063 A/S Pos.: 15 Date: 06/01/94

L dispensed: 5 from 0, 5 from 40, 20 from 15
eplicate 1 Time: 15:44
eak Area (A-s): 0.002 Peak Height (A): 0.010
ackground Pk Area (A-s): 0.029 Background Pk Height (A): 0.020
lank Corrected Pk Area (A-s): 0.003
oncentration (mg/L): 0.0003

~~~~~~

s ID: C156881 Seq. No.: 00064 A/S Pos.: 16 Date: 06/01/94

L pensed: 5 from 0, 5 from 40, 20 from 16
eplicate 1 Time: 15:46
eak Area (A-s): 0.012 Peak Height (A): 0.041
ackground Pk Area (A-s): 0.079 Background Pk Height (A): 0.049
lank Corrected Pk Area (A-s): 0.013
oncentration (mg/L): 0.0022

~~~~~~

uL dispensed: 5 from 40, 5 from 39, 20 from 16
Replicate 1 Time: 15:48

Peak Area (A-s): 0.064 Peak Height (A): 0.165
Background Pk Area (A-s): 0.078 Background Pk Height (A): 0.062
Blank Corrected Pk Area (A-s): 0.065
Concentration (mg/L): 0.0123

Recovery is 100.4%

~~~~~~

As ID: DUP 881 930650 Seq. No.: 00066 A/S Pos.: 17 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 17
Replicate 1 Time: 15:50
Peak Area (A-s): 0.013 Peak Height (A): 0.041
Background Pk Area (A-s): 0.084 Background Pk Height (A): 0.051
Blank Corrected Pk Area (A-s): 0.015
Concentration (mg/L): 0.0025

~~~~~~

As ID: DUP 881 930650 Seq. No.: 00067 A/S Pos.: 17 Date: 06/01/94

uL dispensed: 5 from 40, 5 from 39, 20 from 17
 licate 1 Time: 15:53
 ak Area (A-s): 0.064 Peak Height (A): 0.183
Background Pk Area (A-s): 0.083 Background Pk Height (A): 0.059
Blank Corrected Pk Area (A-s): 0.066
Concentration (mg/L): 0.0124

Recovery is 99.0%

~~~~~~

As ID: SPI 881 930651 Seq. No.: 00068 A/S Pos.: 18 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 18
Replicate 1 Time: 15:55
Peak Area (A-s): 0.109 Peak Height (A): 0.327
Background Pk Area (A-s): 0.055 Background Pk Height (A): 0.046
Blank Corrected Pk Area (A-s): 0.110
Concentration (mg/L): 0.0210 Corrected Conc (mg/L): 0.105

~~~~~~

As ID: AS Position 38 Seq. No.: 00069 A/S Pos.: 38 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 38
Replicate 1 Time: 15:57
Peak Area (A-s): 0.096 Peak Height (A): 0.252
Background Pk Area (A-s): 0.041 Background Pk Height (A): 0.036
 ink Corrected Pk Area (A-s): 0.097
 centration (mg/L): 0.0184

Check sample is within range 0.0179 - 0.0220

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As ID: BLA01 Seq. No.: 00070 A/S Pos.: 0 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 0
~~~~~~

Replicate 1 Time: 16:00
Peak Area (A-s): -0.000 Peak Height (A): 0.008
Background Pk Area (A-s): 0.033 Background Pk Height (A): 0.019
Blank Corrected Pk Area (A-s): 0.001

Concentration (mg/L): -0.0001

Check sample is within range -0.0094 - 0.0094

As ID: C156876 Seq. No.: 00071 A/S Pos.: 19 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 19
Replicate 1 Time: 16:02
Peak Area (A-s): 0.022 Peak Height (A): 0.065
Background Pk Area (A-s): 0.131 Background Pk Height (A): 0.137
Blank Corrected Pk Area (A-s): 0.023
Concentration (mg/L): 0.0041

As ID: C156876 Seq. No.: 00072 A/S Pos.: 19 Date: 06/01/94

uL dispensed: 5 from 40, 5 from 39, 20 from 19
Replicate 1 Time: 16:04
Peak Area (A-s): 0.056 Peak Height (A): 0.155
Background Pk Area (A-s): 0.119 Background Pk Height (A): 0.105
Blank Corrected Pk Area (A-s): 0.057
Concentration (mg/L): 0.0108

Recovery is 66.5%

As ID: C156877 Seq. No.: 00073 A/S Pos.: 20 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 20
Replicate 1 Time: 16:07
Peak Area (A-s): 0.005 Peak Height (A): 0.024
Background Pk Area (A-s): 0.076 Background Pk Height (A): 0.030
Blank Corrected Pk Area (A-s): 0.007
Concentration (mg/L): 0.0010

As ID: C156877 Seq. No.: 00074 A/S Pos.: 20 Date: 06/01/94

uL dispensed: 5 from 40, 5 from 39, 20 from 20
Replicate 1 Time: 16:09
Peak Area (A-s): 0.058 Peak Height (A): 0.130
Background Pk Area (A-s): 0.082 Background Pk Height (A): 0.038
Blank Corrected Pk Area (A-s): 0.059
Concentration (mg/L): 0.0110

Recovery is 101.0%

As ID: C156878 Seq. No.: 00075 A/S Pos.: 21 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 21
Replicate 1 Time: 16:12
Peak Area (A-s): 0.001 Peak Height (A): 0.011

000658

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As ID: C156878 Seq. No.: 00076 A/S Pos.: 21 Date: 06/01/94

uL dispensed: 5 from 40, 5 from 39, 20 from 21
Replicate 1 Time: 16:14
Peak Area (A-s): 0.054 Peak Height (A): 0.156
Background Pk Area (A-s): 0.057 Background Pk Height (A): 0.039
Blank Corrected Pk Area (A-s): 0.056
Concentration (mg/L): 0.0104

Recovery is 103.1%

~~~~~~

As ID: C156882 Seq. No.: 00077 A/S Pos.: 22 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 22
Replicate 1 Time: 16:16
Peak Area (A-s): 0.007 Peak Height (A): 0.021
Background Pk Area (A-s): 0.117 Background Pk Height (A): 0.094
Blank Corrected Pk Area (A-s): 0.009
Concentration (mg/L): 0.0013

~~~~~~

As ID: C156882 Seq. No.: 00078 A/S Pos.: 22 Date: 06/01/94

uL dispensed: 5 from 40, 5 from 39, 20 from 22
Replicate 1 Time: 16:19
Peak Area (A-s): 0.059 Peak Height (A): 0.191
Background Pk Area (A-s): 0.121 Background Pk Height (A): 0.1?7
Blank Corrected Pk Area (A-s): 0.061
Concentration (mg/L): 0.0114

Recovery is 100.7%

~~~~~~

As ID: AS Position 38 Seq. No.: 00079 A/S Pos.: 38 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 38
Replicate 1 Time: 16:21
Peak Area (A-s): 0.090 Peak Height (A): 0.245
Background Pk Area (A-s): 0.042 Background Pk Height (A): 0.036
Blank Corrected Pk Area (A-s): 0.091
Concentration (mg/L): 0.0173 Repeat Bad ccv

Check sample is out of range 0.0179 - 0.0220

~~~~~~

ID: BLA01 Seq. No.: 00080 A/S Pos.: 0 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 0
Replicate 1 Time: 16:24
Peak Area (A-s): -0.000 Peak Height (A): 0.009
Background Pk Area (A-s): 0.034 Background Pk Height (A): 0.019
Blank Corrected Pk Area (A-s): 0.001
Concentration (mg/L): -0.0001
~~~~~~

Concentration (mg/L): -0.0001

Check sample is within range -0.0094 - 0.0094

~~~~~~

As ID: Blank Seq. No.: 00081 A/S Pos.: 0 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 0
Replicate 1 Time: 16:26
Peak Area (A-s): -0.001 Peak Height (A): 0.006
Background Pk Area (A-s): 0.035 Background Pk Height (A): 0.017
Blank Corrected Pk Area (A-s): -0.002
Concentration (mg/L): -0.0004

Auto-zero performed.

~~~~~~

As ID: Standard 1 Seq. No.: 00082 A/S Pos.: 36 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 36
Replicate 1 Time: 16:28
Peak Area (A-s): 0.026 Peak Height (A): 0.076
Background Pk Area (A-s): 0.036 Background Pk Height (A): 0.021
Bl Corrected Pk Area (A-s): 0.026
Co ntration (mg/L): 0.0050

Standard number 1 applied. [0.0050]
Correlation coefficient: 1.00000 Slope: 5.5692 Int: 0.000

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As ID: Standard 2 Seq. No.: 00083 A/S Pos.: 37 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 37
Replicate 1 Time: 16:31
Peak Area (A-s): 0.095 Peak Height (A): 0.269
Background Pk Area (A-s): 0.039 Background Pk Height (A): 0.033
Blank Corrected Pk Area (A-s): 0.097
Concentration (mg/L): 0.0174

Standard number 2 applied. [0.0100]
Correlation coefficient: 0.97121 Slope: 9.6630 Int: -0.007

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As ID: Standard 3 Seq. No.: 00084 A/S Pos.: 38 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 38
Replicate 1 Time: 16:33
Peak Area (A-s): 0.095 Peak Height (A): 0.268
B ground Pk Area (A-s): 0.037 Background Pk Height (A): 0.034
I Corrected Pk Area (A-s): 0.097
Co centration (mg/L): 0.0107

Standard abs. & conc. values are not in the same order.

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As ID: Standard 4 Seq. No.: 00085 A/S Pos.: 39 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 39
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Concentration (mg/L): 0.0209

Standard number 4 applied. [0.0400]
Correlation coefficient: 0.96408 Slope: 4.6725 Int: 0.016

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As ID: AS Position 38 Seq. No.: 00086 A/S Pos.: 38 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 38
Replicate 1 Time: 16:38
Peak Area (A-s): 0.098 Peak Height (A): 0.273
Background Pk Area (A-s): 0.038 Background Pk Height (A): 0.038
Blank Corrected Pk Area (A-s): 0.100
Concentration (mg/L): 0.0180

Check sample is within range 0.0179 - 0.0220

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As ID: BLA01 Seq. No.: 00087 A/S Pos.: 0 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 0
Replicate 1 Time: 16:40
Peak Area (A-s): 0.002 Peak Height (A): 0.009
Background Pk Area (A-s): 0.031 Background Pk Height (A): 0.016
nk Corrected Pk Area (A-s): 0.004
..ncentration (mg/L): -0.0026

Check sample is within range -0.0094 - 0.0094

~~~~~~

As ID: C156876 Seq. No.: 00088 A/S Pos.: 19 Date: 06/01/94

dispensed: 5 from 0, 5 from 40, 20 from 19
Replicate 1 Time: 16:43
Peak Area (A-s): 0.029 Peak Height (A): 0.077
Background Pk Area (A-s): 0.080 Background Pk Height (A): 0.037
Blank Corrected Pk Area (A-s): 0.031
Concentration (mg/L): 0.0032

~~~~~~

As ID: C156876 Seq. No.: 00089 A/S Pos.: 19 Date: 06/01/94

uL dispensed: 5 from 40, 5 from 39, 20 from 19
Replicate 1 Time: 16:45
Peak Area (A-s): 0.050 Peak Height (A): 0.137
Background Pk Area (A-s): 0.160 Background Pk Height (A): 0.156
Blank Corrected Pk Area (A-s): 0.052
Concentration (mg/L): 0.0076

very is 44.4%

~~~~~~

As ID: C156877 Seq. No.: 00090 A/S Pos.: 20 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 20 00066
Replicate 1 Time: 16:47
Peak Area (A-s): 0.005 Peak Height (A): 0.017
Background Pk Area (A-s): 0.272 Background Pk Height (A): [illegible]
~~~~~~

Blank Corrected Pk Area (A-s): 0.006 | Background Pk Height (A): 0.307
Concentration (mg/L): -0.0021

As ID: C156877 Seq. No.: 00091 A/S Pos.: 20 Date: 06/01/94

uL dispensed: 5 from 40, 5 from 39, 20 from 20
Replicate 1 | Time: 16:50
Peak Area (A-s): 0.052 | Peak Height (A): 0.136
Background Pk Area (A-s): 0.072 | Background Pk Height (A): 0.033
Blank Corrected Pk Area (A-s): 0.054
Concentration (mg/L): 0.0081

Recovery is 101.6%

As ID: C156878 Seq. No.: 00092 A/S Pos.: 21 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 21
Replicate 1 | Time: 16:53
Peak Area (A-s): 0.002 | Peak Height (A): 0.010
Background Pk Area (A-s): 0.056 | Background Pk Height (A): 0.032
Blank Corrected Pk Area (A-s): 0.003
Concentration (mg/L): -0.0036

As ID: C156878 Seq. No.: 00093 A/S Pos.: 21 Date: 06/01/94

uL dispensed: 5 from 40, 5 from 39, 20 from 21
Replicate 1 | Time: 16:54
Peak Area (A-s): 0.051 | Peak Height (A): 0.149
Background Pk Area (A-s): 0.053 | Background Pk Height (A): 0.039
Blank Corrected Pk Area (A-s): 0.053
Concentration (mg/L): 0.0079

Recovery is 105.7%

As ID: C156882 Seq. No.: 00094 A/S Pos.: 22 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 22
Replicate 1 | Time: 16:57
Peak Area (A-s): 0.003 | Peak Height (A): 0.019
Background Pk Area (A-s): 0.117 | Background Pk Height (A): 0.096
Blank Corrected Pk Area (A-s): 0.005
Concentration (mg/L): -0.0024

As ID: C156882 Seq. No.: 00095 A/S Pos.: 22 Date: 06/01/94

uL dispensed: 5 from 40, 5 from 39, 20 from 22
Replicate 1 | Time: 16:59
Peak Area (A-s): 0.055 | Peak Height (A): 0.170
Background Pk Area (A-s): 0.118 | Background Pk Height (A): 0.105
Blank Corrected Pk Area (A-s): 0.057
Concentration (mg/L): 0.0088

Recovery is 111.5%

As ID: AS Position 38 Seq. No.: 00096 A/S Pos.: 38 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 38
Replicate 1 Time: 17:02
Peak Area (A-s): 0.093 Peak Height (A): 0.264
Background Pk Area (A-s): 0.043 Background Pk Height (A): 0.034
Blank Corrected Pk Area (A-s): 0.095
Concentration (mg/L): 0.0168

Check sample is out of range 0.0179 - 0.0220

As ID: BLA01 Seq. No.: 00097 A/S Pos.: 0 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 0
Replicate 1 Time: 17:04
Peak Area (A-s): 0.003 Peak Height (A): 0.009
Background Pk Area (A-s): 0.031 Background Pk Height (A): 0.019
Blank Corrected Pk Area (A-s): 0.004
Concentration (mg/L): -0.0025

Check sample is within range -0.0094 - 0.0094

ID: Blank Seq. No.: 00098 A/S Pos.: 0 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 0
Replicate 1 Time: 17:06
Peak Area (A-s): 0.004 Peak Height (A): 0.007
Background Pk Area (A-s): 0.029 Background Pk Height (A): 0.015
Blank Corrected Pk Area (A-s): 0.003
Concentration (mg/L): -0.0022

Auto-zero performed.

As ID: Standard 1 Seq. No.: 00099 A/S Pos.: 36 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 36
Replicate 1 Time: 17:09
Peak Area (A-s): 0.024 Peak Height (A): 0.070
Background Pk Area (A-s): 0.036 Background Pk Height (A): 0.023
Blank Corrected Pk Area (A-s): 0.021
Concentration (mg/L): 0.0010

Standard number 1 applied. [0.0050]
Correlation coefficient: 1.00000 Slope: 4.1078 Int: 0.000

ID: Standard 2 Seq. No.: 00100 A/S Pos.: 37 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 37
Replicate 1 Time: 17:11
Peak Area (A-s): 0.093 Peak Height (A): 0.261
Background Pk Area (A-s): 0.035 Background Pk Height (A): 0.030
Blank Corrected Pk Area (A-s): 0.089
Concentration (mg/L): 0.0218

Concentration (mg/L): 0.0218

Standard number 2 applied. [0.0100]
Correlation coefficient: 0.95464 Slope: 6.9353 Int: -0.006

As ID: Standard 3 Seq. No.: 00101 A/S Pos.: 38 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 38
Replicate 1 Time: 17:13
Peak Area (A-s): 0.096 Peak Height (A): 0.271
Background Pk Area (A-s): 0.036 Background Pk Height (A): 0.033
Blank Corrected Pk Area (A-s): 0.062
Concentration (mg/L): 0.0112

Standard number 3 applied. [0.0200]
Correlation coefficient: 0.28456 Slope: 4.8865 Int: 0.008

As ID: Standard 4 Seq. No.: 00102 A/S Pos.: 39 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 39
Replicate 1 Time: 17:16
Peak Area (A-s): 0.137 Peak Height (A): 0.333
Background Pk Area (A-s): 0.230 Background Pk Height (A): 0.170
Blank Corrected Pk Area (A-s): 0.133
Concentration (mg/L): 0.0256

Standard number 4 applied. [0.0400]
Correlation coefficient: 0.89925 Slope: 3.1886 Int: 0.020

As ID: AS Position 38 Seq. No.: 00103 A/S Pos.: 38 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 38
Replicate 1 Time: 17:18
Peak Area (A-s): 0.097 Peak Height (A): 0.273
Background Pk Area (A-s): 0.036 Background Pk Height (A): 0.034
Blank Corrected Pk Area (A-s): 0.093
Concentration (mg/L): 0.0234

Check sample is out of range 0.0179 - 0.0220

As ID: BLA01 Seq. No.: 00104 A/S Pos.: 0 Date: 06/01/94

uL dispensed: 5 from 0, 5 from 40, 20 from 0
Replicate 1 Time: 17:21
Peak Area (A-s): -0.000 Peak Height (A): 0.010
Background Pk Area (A-s): 0.031 Background Pk Height (A): 0.016
Blank Corrected Pk Area (A-s): -0.004
Concentration (mg/L): -0.0077

Check sample is within range -0.0094 - 0.0094

As ID: Blank Seq. No.: 00105 A/S Pos.: 0 Date: 06/02/94

uL dispensed: 5 from 0, 5 from 40, 20 from 0
Replicate 1 Time: 08:15
Peak Area (A-s): -0.000 Peak Height (A): 0.007
Background Pk Area (A-s): 0.103 Background Pk Height (A): 0.161
Blank Corrected Pk Area (A-s): -0.004
Concentration (mg/L): -0.0077

Auto-zero performed.

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As ID: Standard 1 Seq. No.: 00106 A/S Pos.: 36 Date: 06/02/94

uL dispensed: 5 from 0, 5 from 40, 20 from 36

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As ID: Blank Seq. No.: 00107 A/S Pos.: 0 Date: 06/02/94

uL dispensed: 5 from 0, 5 from 40, 20 from 0
Replicate 1 Time: 06:18
Peak Area (A-s): -0.000 Peak Height (A): 0.037
Background Pk Area (A-s): 0.036 Background Pk Height (A): 0.021
Blank Corrected Pk Area (A-s): -0.000
Concentration (mg/L): -0.0264

Auto-zero performed.

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As ID: Standard 1 Seq. No.: 00108 A/S Pos.: 36 Date: 06/02/94

uL spensed: 5 from 0, 5 from 40, 20 from 36
Re cate 1 Time: 06:21
Peak Area (A-s): 0.023 Peak Height (A): 0.088
Background Pk Area (A-s): 0.038 Background Pk Height (A): 0.024
Blank Corrected Pk Area (A-s): 0.024
Concentration (mg/L): 0.0012

Standard number 1 applied. [0.0050]
Correlation coefficient: 1.00000 Slope: 4.7733 Int: 0.000

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As ID: Standard 2 Seq. No.: 00109 A/S Pos.: 37 Date: 06/02/94

uL dispensed: 5 from 0, 5 from 40, 20 from 37
Replicate 1 Time: 06:23
Peak Area (A-s): 0.049 Peak Height (A): 0.147
Background Pk Area (A-s): 0.037 Background Pk Height (A): 0.026
Blank Corrected Pk Area (A-s): 0.049
Co tration (mg/L): 0.0104

Standard number 2 applied. [0.0100]
Correlation coefficient: 0.99979 Slope: 4.9492 Int: -0.000

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As ID: Standard 3 Seq. No.: 00110 A/S Pos.: 38 Date: 06/02/94
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Replicate 1 Time: 06:25
Peak Area (A-s): 0.093 Peak Height (A): 0.275
Background Pk Area (A-s): 0.037 Background Pk Height (A): 0.035
Blank Corrected Pk Area (A-s): 0.093
Concentration (mg/L): 0.0189

dard number 3 applied. [0.0200]
relation coefficient: 0.99946 Slope: 4.6819 Int: 0.001

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As ID: Standard 4 Seq. No.: 00111 A/S Pos.: 39 Date: 06/02/94
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uL dispensed: 5 from 0, 5 from 40, 20 from 39
Replicate 1 Time: 06:28
Peak Area (A-s): 0.185 Peak Height (A): 0.529
Background Pk Area (A-s): 0.041 Background Pk Height (A): 0.051
Blank Corrected Pk Area (A-s): 0.188
Concentration (mg/L): 0.0400

Standard number 4 applied. [0.0400]
Correlation coefficient: 0.99968 Slope: 4.6785 Int: 0.001

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As ID: AS Position 38 Seq. No.: 00112 A/S Pos.: 38 Date: 06/02/94

uL dispensed: 5 from 0, 5 from 40, 20 from 38
Replicate 1 Time: 06:30
Peak Area (A-s): 0.095 Peak Height (A): 0.277
Background Pk Area (A-s): 0.038 Background Pk Height (A): 0.035
Blank Corrected Pk Area (A-s): 0.093
Concentration (mg/L): 0.0203

Check sample is within range 0.0175 - 0.0280

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As ID: BLA01 Seq. No.: 00113 A/S Pos.: 0 Date: 06/02/94

uL dispensed: 5 from 0, 5 from 40, 20 from 0
Replicate 1 Time: 06:33
Peak Area (A-s): 0.002 Peak Height (A): 0.012
Background Pk Area (A-s): 0.032 Background Pk Height (A): 0.016
Blank Corrected Pk Area (A-s): 0.002
Concentration (mg/L): 0.0003

Check sample is within range -0.0094 - 0.0094

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As ID: ICV01 Seq. No.: 00115 A/S Pos.: 1 Date: 06/02/94

uL dispensed: 5 from 0, 5 from 40, 20 from 1
Replicate 1 Time: 06:35
Peak Area (A-s): 0.101 Peak Height (A): 0.300
Background Pk Area (A-s): 0.038 Background Pk Height (A): 0.035
Blank Corrected Pk Area (A-s): 0.101
Concentration (mg/L): 0.0215

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As ID: BLA01 Seq. No.: 00116 A/S Pos.: 2 Date: 06/02/94

uL dispensed: 5 from 0, 5 from 40, 20 from 2
Replicate 1 Time: 06:38
Peak Area (A-s): -0.001 Peak Height (A): 0.006
Background Pk Area (A-s): 0.031 Background Pk Height (A): 0.020
Blank Corrected Pk Area (A-s): -0.000
Concentration (mg/L): -0.0002

uL dispensed: 5 from 0, 5 from 40, 20 from 3
Replicate 1 Time: 06:40

Peak Area (A-s): 0.096 Peak Height (A): 0.268
Background Pk Area (A-s): 0.036 Background Pk Height (A): 0.034
Blank Corrected Pk Area (A-s): 0.096
Concentration (mg/L): 0.0204

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As ID: C156862 1.97 Seq. No.: 00118 A/S Pos.: 11 Date: 06/02/94

uL dispensed: 5 from 0, 5 from 40, 20 from 11
Replicate 1 Time: 06:55
Peak Area (A-s): 0.002 Peak Height (A): 0.013
Background Pk Area (A-s): 0.093 Background Pk Height (A): 0.212
Blank Corrected Pk Area (A-s): 0.002
Concentration (mg/L): 0.0003 Corrected Conc (mg/L): 0.001

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As ID: C156862 1.97 Seq. No.: 00119 A/S Pos.: 11 Date: 06/02/94

uL dispensed: 5 from 40, 5 from 39, 20 from 11

Replicate 1 Time: 06:57
Peak Area (A-s): 0.033 Peak Height (A): 0.100
Background Pk Area (A-s): 0.080 Background Pk Height (A): 0.164
nk Corrected Pk Area (A-s): 0.034
centration (mg/L): 0.0070 Corrected Conc (mg/L): 0.026

Recovery is 67.4%

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As ID: AS Position 38 Seq. No.: 00120 A/S Pos.: 38 Date: 06/02/94

uL dispensed: 5 from 0, 5 from 40, 20 from 38
Replicate 1 Time: 07:51
Peak Area (A-s): 0.096 Peak Height (A): 0.267
Background Pk Area (A-s): 0.039 Background Pk Height (A): 0.035
Blank Corrected Pk Area (A-s): 0.097
Concentration (mg/L): 0.0205

Check sample is within range 0.0179 - 0.0220

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ID: BLA01 Seq. No.: 00121 A/S Pos.: 0 Date: 06/02/94

uL dispensed: 5 from 0, 5 from 40, 20 from 0
Replicate 1 Time: 07:54
Peak Area (A-s): 0.001 Peak Height (A): 0.009
Background Pk Area (A-s): 0.030 Background Pk Height (A): 0.020
Blank Corrected Pk Area (A-s): 0.001
Concentration (mg/L): 0.0001

Check sample is within range -0.0094 - 0.0094

As ID: C156876 Seq. No.: 00123 A/S Pos.: 19 Date: 06/02/94

uL dispensed: 5 from 0, 5 from 40, 20 from 19
Replicate 1 Time: 08:07
Peak Area (A-s): 0.036 Peak Height (A): 0.095
Background Pk Area (A-s): 0.030 Background Pk Height (A): 0.037
Blank Corrected Pk Area (A-s): 0.036

Concentration (mg/L): 0.0076

As ID: C156876 Seq. No.: 00124 A/S Pos.: 19 Date: 06/02/94

uL dispensed: 5 from 40, 5 from 39, 20 from 19

Replicate 1 Time: 08:09
Peak Area (A-s): 0.062 Peak Height (A): 0.182
Background Pk Area (A-s): 0.060 Background Pk Height (A): 0.040
Blank Corrected Pk Area (A-s): 0.062
Concentration (mg/L): 0.0131

Recovery is 55.9%

Repeat
In 6-1-94

As ID: C156877 Seq. No.: 00125 A/S Pos.: 20 Date: 06/02/94

uL dispensed: 5 from 0, 5 from 40, 20 from 20
Replicate 1 Time: 08:12
Peak Area (A-s): 0.010 Peak Height (A): 0.033
Background Pk Area (A-s): 0.064 Background Pk Height (A): 0.025
Blank Corrected Pk Area (A-s): 0.011
Concentration (mg/L): 0.0021

A ID: C156877 Seq. No.: 00126 A/S Pos.: 20 Date: 06/02/94

uL dispensed: 5 from 40, 5 from 39, 20 from 20
Replicate 1 Time: 08:14
Peak Area (A-s): 0.048 Peak Height (A): 0.121
Background Pk Area (A-s): 0.053 Background Pk Height (A): 0.027
Blank Corrected Pk Area (A-s): 0.048
Concentration (mg/L): 0.0101

Recovery is 80.2%

As ID: C156878 Seq. No.: 00127 A/S Pos.: 21 Date: 06/02/94

uL dispensed: 5 from 0, 5 from 40, 20 from 21
Replicate 1 Time: 08:16
Peak Area (A-s): 0.003 Peak Height (A): 0.011
Background Pk Area (A-s): 0.048 Background Pk Height (A): 0.030
Blank Corrected Pk Area (A-s): 0.004
Concentration (mg/L): 0.0006

As ID: C156878 Seq. No.: 00128 A/S Pos.: 21 Date: 06/02/94

000870

uL dispensed: 5 from 40, 5 from 39, 20 from 21
Replicate 1 Time: 08:19

Background Pk Area (A-s): 0.040 Background Pk Height (A): 0.035
Blank Corrected Pk Area (A-s): 0.048
Concentration (mg/L): 0.0100

Recovery is 93.6%

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As ID: C156882 Seq. No.: 00129 A/S Pos.: 22 Date: 06/02/94

uL dispensed: 5 from 0, 5 from 40, 20 from 22
Replicate 1 Time: 08:21
Peak Area (A-s): 0.005 Peak Height (A): 0.023
Background Pk Area (A-s): 0.132 Background Pk Height (A): 0.113
Blank Corrected Pk Area (A-s): 0.006
Concentration (mg/L): 0.0010

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As ID: C156882 Seq. No.: 00130 A/S Pos.: 22 Date: 06/02/94

uL dispensed: 5 from 40, 5 from 39, 20 from 22
Replicate 1 Time: 08:24
Peak Area (A-s): 0.051 Peak Height (A): 0.152
Background Pk Area (A-s): 0.121 Background Pk Height (A): 0.107
Blank Corrected Pk Area (A-s): 0.051
Concentration (mg/L): 0.0108

Recovery is 97.9%

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As ID: AS Position 38 Seq. No.: 00131 A/S Pos.: 38 Date: 06/02/94

uL dispensed: 5 from 0, 5 from 40, 20 from 38
Replicate 1 Time: 08:32
Peak Area (A-s): 0.102 Peak Height (A): 0.288
Background Pk Area (A-s): 0.044 Background Pk Height (A): 0.034
Blank Corrected Pk Area (A-s): 0.103
Concentration (mg/L): 0.0216

Check sample is within range 0.0179 - 0.0220

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As ID: BLA01 Seq. No.: 00132 A/S Pos.: 0 Date: 06/02/94

uL dispensed: 5 from 0, 5 from 40, 20 from 0
Replicate 1 Time: 08:34
Peak Area (A-s): 0.002 Peak Height (A): 0.011
Background Pk Area (A-s): 0.031 Background Pk Height (A): 0.015
Blank Corrected Pk Area (A-s): 0.002
Concentration (mg/L): 0.0003

Check sample is within range -0.0094 - 0.0094

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ID: AS Position 38 Seq. No.: 00133 A/S Pos.: 38 Date: 06/02/94

uL dispensed: 5 from 0, 5 from 40, 20 from 38
Replicate 1 Time: 08:37
000671
Peak Area (A-s): 0.099 Peak Height (A): 0.287
Background Pk Area (A-s): 0.039 Background Pk Height (A): 0.032
Blank Corrected Pk Area (A-s): 0.100
Concentration (mg/L): 0.021[illegible]
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Blank Corrected Pk Area (A-s): 0.100
Concentration (mg/L): 0.0211

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As ID: AS Position 38 Seq. No.: 00134 A/S Pos.: 38 Date: 06/02/94

uL dispensed: 5 from 0, 5 from 40, 20 from 38
Replicate 1 Time: 08:39
Peak Area (A-s): 0.102 Peak Height (A): 0.272
Background Pk Area (A-s): 0.038 Background Pk Height (A): 0.032
Blank Corrected Pk Area (A-s): 0.103
Concentration (mg/L): 0.0216

Check sample is within range 0.0179 - 0.0220

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As ID: CDL Seq. No.: 00135 A/S Pos.: 3 Date: 06/02/94

uL dispensed: 5 from 0, 5 from 40, 20 from 3
Replicate 1 Time: 08:44
Peak Area (A-s): 0.102 Peak Height (A): 0.293
Background Pk Area (A-s): 0.040 Background Pk Height (A): 0.035
Blank Corrected Pk Area (A-s): 0.103
Concentration (mg/L): 0.0216

HERITAGE LABORATORIES, INC
Analytical Worksheet by Sample for Run R218713

ment: ICP, SIMULTANEOUS
lyst: KANAPILLY, SANDRA
tarted: 27-MAY-94 08:00:00
Ended: 27-MAY-94 14:00:00

Reviewer: CARROLL, MELODY
Date: 02-JUN-94
File Name:

Recorder: DATA ENTRY, AUTOMATED
Date: 01-JUN-94

SAMPLE	TEST	R	PARAMETER	QCTYPE	RESULT	RQL	UNITS	DET. LIMIT	SOURCE	TRUE VALUE	SPIKE VALUE	% REC	% DIFF
C156216	M604.7	0	ADDITION 1		1.0		MG/L						
			BARIUM			BDL	MG/L	5.0					
			DILUTION		1								
			SAMPLE		2.212		CONC						
			SAMPLE + ADD 1		3.018		CONC						
C156878	M130.3	0	SILVER			BDL	MG/L	0.010					
C156876	M130.3	0	SILVER			BDL	MG/L	0.010					
C156877	M130.3	0	SILVER			BDL	MG/L	0.010					
C156881	M130.3	0	SILVER			BDL	MG/L	0.010					
C156882	M130.3	0	SILVER			BDL	MG/L	0.010					
C156917	M439.3	0	ZINC			BDL	MG/L	0.020					

(runsamp.sql)

11 rows selected.

R218713

ICP

DATE 5/27/94 START TIME 8:00am

ANALYST JM 3487 ENDING TIME

SAMPLE	M#	PREPPED WT./VOL	DILUTIONS	PARAMETERS
1. STD1				Al, Sb, K, Fe not
2. STD2				
3. CCV				
4. BLA01				
5. ICV01				
6. BLA01				
7. HMCS				
8. CDL01				
9 ICS				
10. DLS				
11. CCV				
12. BLA01				
13. LCS				Q 920273
BLA02				
15. C156212				QC only
16. DUP				
17. SPI				
18. DPS				
19. C156216				Ba
20. SPD01				↓
21. CCV				
22. BLA01				
23. LCS				Q930641 Reprep entire set
BLA02				
25. C156878				
26. DUP				
27. SPI				

(2)

R

ICP

DATE 5/27/94 START TIME 8:00am

ANALYST OM 3487 ENDING TIME

SAMPLE	M#	PREPPED WT./VOL	DILUTIONS	PARAMETERS
1. DPS C156878				Reprep set
2. C156876				
3. 877				
4. 881				
5. 882				
6. CCV				
7. BLA01				
8. LCS				Q 930636
9. BLA02				
10. C156917				
11. DUP				
12. SPI				
13. DPS				
14. CCV				
15. BLA01				
16. CDL01				
17. ICS				
18. DLS				
19. CCV				
20. BLA01				
21.				
22.				
23.				
25.				
26.				
27.				

ICP LEACHATES (1PTMSA)

Heritage Laboratories, Indianapolis

Sample C156 216
Prep Run # R 216696
Analyst /# JM 3487
Date : 5/27/94

QC Type
Units mg/L
Init (Wt/Vol) 50 ml (G/ML)
Final (Vol) 50 ml

Reviewer mmc
Review date 6/2/94
Recorder mm
Record Date 6/7/94

	Ag-660	As-136	Ba-144	Cd-203	Cr-239	Cu-260	Ni-496	Pb-435	Se-645	Zn-783
Test			M604.7							
Result			BDL							
Corrected Result										
Spike True Value										
Sample + Spike										
Spike Recovery										
Add1 True Value			1.0							
Sample Raw Data			2.212							
Samp + Add1			3.018							
Dilution			NA							
Detection Limit			5.0							
% Rec/RDP			81%							
849 Density										
Density Cor. Result										
Density Cor. DL.										
Comments										

Page __ f _____

DM 3487 5/27/94

Method: EMS2 Standard: STD1-Blank

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Avge	-.1117	-.0129	.0005	-.0004	.0032	.0026	.0006
SDev	.0039	.0037	.0041	.0001	.0001	.0006	.0014
%RSD	3.480	28.83	813.2	20.20	2.773	24.15	226.3
#1	-.1090	-.0103	-.0024	-.0004	.0033	.0030	.0016
#2	-.1145	-.0155	.0034	-.0005	.0031	.0021	-.0004

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Avge	-.0006	.0001	.0009	.0043	.0212	.0028	.0011
SDev	.0004	.0013	.0006	.0000	.0109	.0004	.0001
%RSD	78.57	2121.	66.00	.0000	51.31	15.71	8.319
#1	-.0003	.0010	.0014	.0043	.0289	.0025	.0011
#2	-.0009	-.0009	.0005	.0043	.0135	.0031	.0010

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Avge	.0553	.0019	.0094	-.0091	-.0050	.0000	.0079
SDev	.0017	.0029	.0065	.0072	.0076	.0000	.0034
%RSD	3.036	150.5	69.77	79.43	152.0	.0000	43.43
#1	.0565	.0040	.0047	-.0143	.0004	.0000	.0104
#2	.0541	-.0001	.0140	-.0040	-.0104	.0000	.0055

Elem	V_2924	Zn2138
Avge	-.0008	.0016
SDev	.0017	.0012
%RSD	206.7	76.15
#1	.0004	.0008
#2	-.0020	.0025

Method: EMS2 Standard: STD2

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Avge	1.389	1.654	2.849	7.418	25.85	1.669	9.704
SDev	.002	.005	.001	.016	.05	.002	.014
%RSD	.1464	.3152	.0496	.2133	.1905	.1271	.1448
#1	1.387	1.651	2.849	7.406	25.81	1.668	9.714
#2	1.390	1.658	2.848	7.429	25.88	1.671	9.694

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Avge	3.532	4.192	2.178	6.766	.9156	.9266	2.522
SDev	.005	.014	.003	.004	.0113	.0011	.000
%RSD	.1426	.3416	.1380	.0549	1.236	.1240	.0070
#1	3.529	4.182	2.176	6.763	.9236	.9274	2.521
#2	3.536	4.202	2.180	6.768	.9076	.9258	2.522

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Avge	1.471	4.580	2.577	1.285	4.316	9.525	3.788
SDev	.004	.001	.013	.009	.026	.010	.013
%RSD	.2945	.0309	.5145	.7221	.5959	.1012	.3500

#1	1.467	4.579	2.586	1.279	4.298	9.518	3.798
#2	1.474	4.581	2.568	1.292	4.334	9.531	3.779

Elem	V_2924	Zn2138
Avge	10.66	7.685
SDev	.02	.011
%RSD	.1616	.1461
#1	10.65	7.693
#2	10.68	7.677

Method: EMS2 Standard: STD1-Blank

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Avge	-.1105	-.0115	.0014	-.0001	.0041	.0025	.0008
SDev	.0025	.0011	.0027	.0004	.0011	.0005	.0015
%RSD	2.240	9.223	192.8	282.8	25.71	21.21	184.9
#1	-.1123	-.0122	-.0005	-.0004	.0034	.0021	-.0003
#2	-.1088	-.0108	.0033	.0001	.0049	.0029	.0019

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Avge	-.0002	.0013	.0009	.0045	.0204	.0024	.0011
SDev	.0001	.0004	.0008	.0011	.0078	.0001	.0003
%RSD	47.14	33.67	84.85	23.57	38.18	3.626	24.96
#1	-.0003	.0016	.0004	.0037	.0259	.0025	.0009
#2	-.0001	.0010	.0015	.0052	.0149	.0024	.0012

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr12[illegible]	[illegible]
Avge	.0551	.0014	-.0021	.0111	.0088	.0004	-.0037
SDev	.0025	.0019	.0023	.0080	.0012	.0006	.0019
%RSD	4.490	141.4	108.1	71.51	14.14	141.4	50.34
#1	.0534	.0000	-.0037	.0168	.0096	.0000	-.0050
#2	.0569	.0027	-.0005	.0055	.0079	.0009	-.0024

Elem	V_2924	Zn2138
Avge	-.0003	.0016
SDev	.0004	.0003
%RSD	141.4	21.76
#1	-.0005	.0019
#2	.0000	.0014

Method: EMS2 Standard: STD2

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Avge	1.368	1.463	2.833	7.250	25.56	1.663	9.610
SDev	.010	.005	.010	.039	.07	.000	.005
%RSD	.7432	.3686	.3494	.5425	.2683	.0159	.0543
#1	1.375	1.467	2.840	7.278	25.61	1.664	9.614
#2	1.360	1.459	2.826	7.223	25.51	1.663	9.607

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Avge	3.491	4.161	2.148	6.660	.8220	.9087	2.492
SDev	.001	.004	.013	.015	.0194	.0034	.005
%RSD	.0329	.1041	.5883	.2283	2.366	.3696	.1844
#1	3.492	4.158	2.157	6.671	.8357	.9111	2.495
#2	3.490	4.165	2.139	6.649	.8083	.9064	2.489

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Avge	1.168	4.533	2.568	1.231	4.283	9.360	3.754
SDev	.011	.000	.007	.055	.009	.034	.002
%RSD	.9387	.0019	.2891	4.488	.2002	.3664	.0424
#1	1.175	4.533	2.573	1.192	4.290	9.384	3.753
#2	1.160	4.533	2.563	1.270	4.277	9.336	3.755

Elem	V_2924	Zn2138
Avge	10.49	7.543
SDev	.02	.005
%RSD	.1543	.0645
#1	10.50	7.546
#2	10.47	7.539

Method: EMS2 Sample Name: CCV-R Operator: SLK
Run Time: 05/27/94 08:33:34
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9932	4.967	5.010	4.847	4.920	4.999	5.029
SDev	.0006	.014	.034	.011	.006	.002	.006
%RSD	.0603	.2777	.6846	.2213	.1243	.0424	.1097
#1	.9936	4.957	5.034	4.855	4.916	5.000	5.026
#2	.9928	4.977	4.986	4.839	4.925	4.997	5.033

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.012	5.016	4.943	5.013	4.976	5.014	4.999
SDev	.013	.016	.010	.004	.132	.006	.012
%RSD	.2526	.3179	.2082	.0874	2.659	.1174	.2485
#1	5.021	5.027	4.950	5.016	5.069	5.010	5.007
#2	5.003	5.005	4.935	5.010	4.882	5.018	4.990

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.957	5.031	5.027	1.065	4.943	4.892	4.887
SDev	.010	.001	.090	.037	.019	.012	.022
%RSD	.1923	.0271	1.787	3.489	.3890	.2510	.4402
#1	4.964	5.032	5.091	1.092	4.930	4.900	4.872
#2	4.951	5.030	4.964	1.039	4.957	4.883	4.902

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	4.983	5.023
SDev	.008	.010
%RSD	.1578	.1919
#1	4.989	5.030
#2	4.977	5.017

Method: EMS2 Sample Name: BLA01-R Operator: SLK
Run Time: 05/27/94 08:37:04
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.0046	Q.0174	Q-.0039	Q.0001	Q-.0002	Q.0045	Q-.0014
SDev	.0006	.0054	.0245	.0001	.0000	.0021	.0015
%RSD	12.85	31.05	624.5	141.4	1.078	47.18	107.6
#1	Q.0042	Q.0136	Q.0134	Q-.0000	Q-.0002	Q.0030	Q-.0003
#2	Q.0051	Q.0212	Q-.0212	Q.0002	Q-.0002	Q.0060	Q-.0024

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q-.0005	Q-.0011	Q.0026	Q.0008	Q.0164	Q-.0104	Q.0010
SDev	.0000	.0026	.0008	.0015	.3165	.0274	.0004
%RSD	.1102	242.2	31.43	173.0	1933.	264.0	35.41
#1	Q-.0005	Q-.0029	Q.0032	Q.0019	Q.2401	Q.0090	Q.0008
#2	Q-.0005	Q.0008	Q.0020	Q-.0002	Q-.2074	Q-.0297	Q.0013

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.1337	Q-.0054	Q-.0205	Q.0035	Q.0020	Q-.0004	Q.0232
SDev	.0032	.0021	.0124	.0265	.0025	.0001	.0052
%RSD	2.377	39.90	60.58	755.7	121.2	23.57	22.42
#1	Q.1360	Q-.0069	Q-.0117	Q.0222	Q.0038	Q-.0005	Q.0195
#2	Q.1315	Q-.0039	Q-.0292	Q-.0152	Q.0003	Q-.0003	Q.0269

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	Q.0010	Q-.0005
SDev	.0011	.0012
%RSD	107.7	243.3
#1	Q.0018	Q.0004
#2	Q.0002	Q-.0013

Method: EMS2 Sample Name: ICV01-R Operator: SLK
Run Time: 05/27/94 08:40:24
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.084	Q2.722	.3803	2.075	.3849	95.27	.4033
SDev	.001	.026	.0031	.006	.0015	.07	.0031
%RSD	.0687	.9696	.8097	.3114	.3798	.0722	.7756
#1	2.083	Q2.703	.3781	2.070	.3839	95.23	.4055
#2	2.085	Q2.740	.3825	2.079	.3860	95.32	.4011

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4024	.4082	.4107	Q.4441	124.9	105.9	.4008
SDev	.0003	.0051	.0025	.0001	.1	.2	.0000
%RSD	.0632	1.250	.6014	.0297	.0936	.1633	.0010
#1	.4023	.4118	.4089	Q.4442	124.8	105.8	.4008
#2	.4026	.4046	.4124	Q.4440	125.0	106.1	.4008

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	100.8	.3990	.4325	.3968	.3689	.0053	.4328
SDev	.3	.0037	.0086	.0627	.0271	.0000	.0050
%RSD	.3091	.9288	1.995	15.80	7.343	.0000	1.143
#1	100.5	.4016	.4386	Q.4411	Q.3497	.0053	.4363
#2	101.0	.3964	.4264	Q.3525	.3880	.0053	.4293

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	.4105	.4112
SDev	.0033	.0060
%RSD	.8022	1.462
#1	.4128	.4155
#2	.4081	.4070

Method: EMS2 Sample Name: BLA01-R Operator: SLK
Run Time: 05/27/94 08:44:18
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.0016	Q.0102	Q-.0115	Q.0002	Q-.0001	Q.0011	Q-.0024
SDev	.0030	.0036	.0073	.0000	.0000	.0005	.0004
%RSD	186.1	35.35	63.11	.0000	1.932	46.97	15.30
#1	Q.0037	Q.0127	Q-.0064	Q.0002	Q-.0001	Q.0015	Q-.0027
#2	Q-.0005	Q.0076	Q-.0167	Q.0002	Q-.0001	Q.0008	Q-.0021

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.0011	Q-.0029	Q.0012	Q-.0006	Q-.0320	Q.0028	Q-.0000
SDev	.0023	.0055	.0004	.0011	.2415	.0147	.0011
%RSD	212.1	193.4	35.36	188.4	755.4	529.8	1676000.

#1	Q.0027	Q.0011	Q.0015	Q.0002	Q.1388	Q.0131	Q.0008
#2	Q-.0005	Q-.0068	Q.0009	Q-.0013	Q-.2027	Q-.0076	Q-.0008

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.1079	Q-.0017	Q-.0107	Q-.0262	Q-.0092	Q-.0001	Q.0180
SDev	.0238	.0004	.0447	.0391	.0159	.0002	.0257
%RSD	22.10	23.63	417.5	149.3	172.8	282.8	142.8

#1	Q.1247	Q-.0019	Q.0209	Q.0015	Q.0020	Q-.0002	Q-.0002
#2	Q.0910	Q-.0014	Q-.0423	Q-.0538	Q-.0205	Q.0001	Q.0362

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	Q.0002	Q.0003
SDev	.0014	.0001
%RSD	856.5	46.59

#1	Q.0012	Q.0003
#2	Q-.0009	Q.0002

Method: EMS2 Sample Name: HMCS-R Operator: SLK
Run Time: 05/27/94 08:47:37
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.050	Q12.04	10.44	10.20	10.39	10.27	10.31
SDev	.008	.09	.11	.11	.09	.01	.02
%RSD	.3677	.7869	1.083	1.043	.8218	.0786	.1981

#1	2.044	Q11.97	10.36	10.12	10.33	10.27	10.32
#2	2.055	Q12.11	Q10.52	10.27	10.45	10.26	10.29

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.31	10.38	10.36	10.32	Q11.52	10.42	10.33
SDev	.04	.00	.10	.05	.11	.09	.05
%RSD	.3659	.0320	.9337	.4775	.9189	.9096	.4398

#1	10.29	10.38	10.29	10.28	Q11.59	10.35	10.29
#2	10.34	10.38	10.43	10.35	Q11.44	10.48	10.36

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q15.20	10.30	10.30	Q2.126	10.33	10.25	10.14
SDev	.14	.01	.00	.108	.09	.10	.06
%RSD	.9197	.0982	.0427	5.094	.9005	1.019	.5684

#1	Q15.11	10.29	10.29	2.049	10.27	10.18	10.18
#2	Q15.30	10.30	10.30	Q2.202	10.40	10.33	10.10

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	10.31	10.40

SDev	.05	.03
%RSD	.5199	.2851
#1	10.27	10.38
#2	10.35	10.42

Method: EMS2 Sample Name: CDL01-R Operator: SLK
Run Time: 05/27/94 08:51:01
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0438	Q.7387	Q.1746	Q.0456	.0202	.2025	.0212
SDev	.0002	.0048	.0057	.0001	.0000	.0043	.0015
%RSD	.5457	.6494	3.254	.2673	.1735	2.106	6.958
#1	.0440	Q.7353	Q.1706	Q.0457	.0202	.1995	.0222
#2	.0436	Q.7421	Q.1786	Q.0455	.0202	.2055	.0201

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2182	.0508	.1100	Q.1880	Q.9192	.1482	.0647
SDev	.0020	.0075	.0012	.0021	.1047	.0156	.0004
%RSD	.9284	14.66	1.122	1.131	11.40	10.54	.5487
#1	.2197	.0456	.1091	Q.1865	Q.9933	.1372	.0650
#2	.2168	.0561	.1109	Q.1895	Q.8452	.1593	.0645

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q3.078	.1710	.1132	.2321	Q.1092	.0003	Q.1748
SDev	.041	.0004	.0172	.0011	.0089	.0004	.0449
%RSD	1.316	.2282	15.20	.4802	8.141	113.1	25.67
#1	Q3.107	.1707	.1254	.2313	Q.1029	.0001	Q.1431
#2	Q3.049	.1712	.1011	.2329	Q.1155	.0006	Q.2065

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	.2126	.0899
SDev	.0002	.0006
%RSD	.0905	.6625
#1	.2124	.0903
#2	.2127	.0894

Method: EMS2 Sample Name: ICS-R Operator: SLK
Run Time: 05/27/94 08:54:18
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.015	495.0	.1745	.4948	.4660	460.5	.9687

SDev	.004	3.3	.0670	.0049	.0032	1.7	.0060
%RSD	.3608	.6655	38.41	.9855	.6976	.3754	.6247
#1	1.013	492.7	.1271	.4913	.4637	459.2	.9645
#2	1.018	497.3	.2219	.4982	.4683	461.7	.9730

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4709	.4932	.5076	184.7	-.0117	531.0	.4837
SDev	.0040	.0024	.0029	.9	.1996	4.0	.0045
%RSD	.8602	.4890	.5676	.4933	1706.	.7577	.9347
#1	.4680	.4915	.5056	184.0	.1294	528.2	.4805
#2	.4737	.4949	.5096	185.3	-.1528	533.9	.4869

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.3006	.9330	.9657	.0712	-.0988	.0143	.1175
SDev	.0024	.0057	.0032	.0235	.0699	.0001	.0422
%RSD	.7930	.6064	.3279	33.02	70.71	.6608	35.94
#1	.3022	.9290	.9680	.0546	-.1483	.0142	.1474
#2	.2989	.9370	.9635	.0878	-.0494	.0144	.0876

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	.4917	1.045
SDev	.0033	.002
%RSD	.6681	.2154
#1	.4893	1.043
#2	.4940	1.047

Method: EMS2 Sample Name: DLS-R Operator: SLK
Run Time: 05/27/94 08:57:41
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0106	Q.0950	-.0018	Q.0080	.0049	.0200	Q.0062
SDev	.0024	.0048	.0244	.0004	.0000	.0048	.0004
%RSD	22.45	5.053	1381.	4.562	.0297	24.03	5.993
#1	.0090	Q.0916	-.0191	Q.0078	.0049	.0166	Q.0059
#2	Q.0123	Q.0984	.0155	Q.0083	.0049	.0234	Q.0064

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0097	.0105	.0218	Q.0889	.0343	.0007	.0093
SDev	.0013	.0057	.0016	.0016	.1544	.0039	.0007
%RSD	13.08	54.58	7.542	1.793	450.0	573.3	7.643
#1	.0088	Q.0065	.0207	Q.0900	.1435	.0035	.0098
#2	.0106	Q.0146	.0230	Q.0878	-.0748	-.0021	.0088

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2371	Q.0055	Q.0748	Q.0138	-.0209	-.0005	.0256
SDev	.0127	.0070	.0261	.0459	.0031	.0000	.0267
%RSD	5.362	127.4	34.94	334.0	14.83	.0000	104.4
#1	.2281	Q.0005	.0564	Q-.0187	-.0187	-.0005	.0067
#2	.2461	.0105	Q.0933	Q.0462	-.0231	-.0005	.0444

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	Q.0065	Q.0241
SDev	.0007	.0030
%RSD	11.33	12.60
#1	Q.0070	.0220
#2	Q.0060	Q.0263

Method: EMS2 Sample Name: CCV-R Operator: SLK
Run Time: 05/27/94 09:00:44
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9953	4.954	5.003	4.887	4.879	4.887	4.987
SDev	.0031	.003	.028	.022	.016	.009	.014
%RSD	.3119	.0606	.5683	.4490	.3197	.1740	.2841
#1	.9931	4.952	5.023	4.902	4.890	4.893	4.997
#2	.9975	4.957	4.982	4.871	4.868	4.881	4.977

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.969	5.014	5.010	4.969	4.946	4.989	4.970
SDev	.021	.023	.019	.011	.260	.020	.015
%RSD	.4127	.4494	.3697	.2164	5.261	.4107	.3070
#1	4.983	5.030	5.023	4.977	5.130	5.003	4.980
#2	4.954	4.998	4.997	4.961	4.762	4.974	4.959

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.985	4.971	4.997	.9775	4.943	4.939	4.946
SDev	.015	.022	.056	.0606	.027	.024	.076
%RSD	.3028	.4356	1.116	6.197	.5397	.4895	1.534
#1	4.996	4.986	5.037	.9347	4.924	4.956	4.892
#2	4.974	4.956	4.958	1.020	4.961	4.922	4.999

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	4.950	4.949
SDev	.014	.027
%RSD	.2832	.5505

#1	4.960	4.968
#2	4.940	4.929

Method: EMS2 Sample Name: BLA01-R Operator: SLK
Run Time: 05/27/94 09:04:05
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.0018	Q-.0021	Q.0092	Q-.0000	Q-.0002	Q.0019	Q-.0001
SDev	.0011	.0018	.0003	.0005	.0000	.0005	.0009
%RSD	60.61	84.88	3.418	3351e6	20.72	28.38	1408.
#1	Q.0010	Q-.0008	Q.0094	Q-.0003	Q-.0001	Q.0023	Q-.0007
#2	Q.0025	Q-.0034	Q.0090	Q.0003	Q-.0002	Q.0015	Q.0006

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.0005	Q.0001	Q.0012	Q.0002	Q.0312	Q.0055	Q-.0010
SDev	.0040	.0004	.0012	.0019	.1014	.0010	.0032
%RSD	753.8	285.5	106.1	988.8	325.3	17.69	318.2
#1	Q-.0023	Q.0005	Q.0003	Q-.0011	Q.1029	Q.0048	Q-.0033
#2	Q.0034	Q-.0002	Q.0020	Q.0015	Q-.0405	Q.0062	Q.0013

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.0764	Q-.0011	Q-.0090	Q.0146	Q.0013	Q-.0002	Q.0190
SDev	.0143	.0012	.0423	.0134	.0130	.0004	.0366
%RSD	18.72	106.0	470.2	92.12	990.0	188.6	192.3
#1	Q.0663	Q-.0019	Q-.0389	Q.0241	Q-.0079	Q-.0005	Q-.0069
#2	Q.0865	Q-.0003	Q.0209	Q.0051	Q.0105	Q.0001	Q.0449

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	Q.0007	Q.0007
SDev	.0006	.0019
%RSD	89.79	281.2
#1	Q.0002	Q-.0007
#2	Q.0011	Q.0020

Method: EMS2 Sample Name: Q920273 LCS-R Operator: SLK
Run Time: 05/27/94 09:21:38
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.8911	1.014	.9237	.9031	.9193	.9486	.9655
SDev	.0047	.028	.0262	.0018	.0023	.0069	.0035
%RSD	.5230	2.721	2.840	.2025	.2485	.7301	.3619

#1	.8878	.9945	.9422	.9018	.9177	.9437	.9630
#2	.8944	1.034	.9051	.9044	.9209	.9535	.9680

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9669	.9782	.9744	1.013	8.975	.9834	.9557
SDev	.0005	.0008	.0053	.000	.021	.0049	.0021
%RSD	.0523	.0868	.5491	.0393	.2334	.4965	.2228
#1	.9672	.9776	.9707	1.013	8.960	.9800	.9542
#2	.9665	.9788	.9782	1.013	8.990	.9869	.9572

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.366	.9682	[illegible]	[illegible]			
SDev	.064	.0016	.0289	.0157	.0120	.0000	.056
%RSD	4.712	.1613	3.017	1.662	1.251	.0000	5.507
#1	1.320	.9693	.9795	.9321	.9504	-.0005	.9769
#2	1.411	.9671	.9385	.9542	.9673	-.0005	1.056

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	.9609	.9711
SDev	.0013	.0006
%RSD	.1315	.0617
#1	.9600	.9715
#2	.9618	.9707

Method: EMS2 Sample Name: Q920274 BLA02-R Operator: SLK
Run Time: 05/27/94 09:25:09
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	[illegible]	[illegible]
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0066	.1073	-.0036	.0009	-.0004	.0524	.0006
SDev	.0010	.0066	.0015	.0001	.0000	.0027	.0016
%RSD	14.50	6.152	43.35	12.86	.1154	5.088	244.5
#1	-.0073	.1119	-.0025	.0009	-.0004	.0543	-.0005
#2	-.0059	.1026	-.0047	.0010	-.0004	.0505	.0017

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0011	.0008	.0058	.0849	.0655	.0207	.0020
SDev	.0023	.0060	.0012	.0040	.0640	.0029	.0003
%RSD	211.9	788.6	21.21	4.693	97.65	14.12	17.68
#1	.0027	.0050	.0049	.0821	.1107	.0228	.0023
#2	-.0005	-.0035	.0067	.0878	.0203	.0187	.0018

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5534	-.0032	.0230	-.0381	-.0355	-.0001	-.0043

SDev	.0723	.0025	.0244	.0071	.0267	.0001	.0482
%RSD	13.07	79.90	106.2	18.55	75.08	70.71	1118.
#1	.6045	-.0014	.0403	-.0331	-.0544	-.0001	-.0384
#2	.5022	-.0050	.0057	-.0431	-.0167	-.0002	.0298

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	.0023	.0060
SDev	.0002	.0012
%RSD	10.02	19.58
#1	.0022	.0068
#2	.0025	.0052

Method: EMS2 Sample Name: C156212 Operator: SLK
Run Time: 05/27/94 09:28:11
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0141	1.252	.0178	2.574	-.0001	54.48	.0051
SDev	.0011	.006	.0062	.042	.0000	.35	.0014
%RSD	7.972	.4652	34.61	1.644	41.92	.6447	27.66
#1	-.0133	1.256	.0221	2.544	-.0001	54.23	.0061
#2	-.0149	1.248	.0134	2.604	-.0001	54.73	.0041

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0055	.3993	.0055	103.7	3.160	15.87	.8884
SDev	.0015	.0033	.0025	1.1	.155	.15	.0075
%RSD	27.41	.8216	44.66	1.027	4.920	.9367	.8384
#1	.0045	.3970	.0073	103.0	3.270	15.76	.8831
#2	.0066	.4016	.0038	104.5	3.050	15.97	.8936

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1075.	.0207	.0434	.0220	-.0423	1.087	.0418
SDev	15.	.0018	.0507	.0112	.0085	.015	.0251
%RSD	1.356	8.502	116.6	51.03	20.06	1.407	60.04
#1	1064.	.0219	.0076	.0299	-.0482	1.077	.0241
#2	1085.	.0194	.0793	.0140	-.0363	1.098	.0596

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	.0053	3.848
SDev	.0003	.042
%RSD	4.996	1.093
#1	.0051	3.818
#2	.0055	3.878

Method: EMS2 Sample Name: Q920275 DUP02 Operator: SLK
Run Time: 05/27/94 09:31:12
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0053	1.280	.0131	2.631	-.0001	55.68	.0061
SDev	.0024	.028	.0232	.012	.0000	.19	.0023
%RSD	44.68	2.194	177.6	.4494	40.45	.3360	37.01
#1	-.0036	1.300	.0295	2.639	-.0001	55.81	.0077
#2	-.0070	1.260	-.0033	2.623	-.0001	55.54	.0045

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0061	.4123	.0087	105.8	3.264	16.14	.9077
SDev	.0018	.0034	.0012	.3	.127	.10	.0043
%RSD	29.13	.8202	14.14	.2764	3.884	.6417	.4689
#1	.0048	.4099	.0096	106.0	3.354	16.22	.9107
#2	.0073	.4147	.0079	105.6	3.175	16.07	.9047

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1090.	.0244	.0422	.0167	-.0515	1.113	.0624
SDev	4.	.0043	.0287	.0091	.0174	.004	.0107
%RSD	.4127	17.61	67.99	54.45	33.75	.3226	17.08
#1	1093.	.0213	.0219	.0103	-.0392	1.115	.0700
#2	1087.	.0274	.0624	.0232	-.0637	1.110	.0549

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	.0074	3.911
SDev	.0005	.006
%RSD	6.668	.1505
#1	.0077	3.915
#2	.0071	3.907

Method: EMS2 Sample Name: Q920275 SPI02W-R Operator: SLK
Run Time: 05/27/94 09:34:31
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.8464	2.256	.9889	3.483	.8926	56.21	.9451
SDev	.0048	.010	.0060	.002	.0004	.38	.0037
%RSD	.5633	.4468	.6036	.0665	.0399	.6751	.3953
#1	.8430	2.249	.9931	3.485	.8928	55.94	.9425
#2	.8497	2.263	.9847	3.482	.8923	56.47	.9478

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9434	1.362	.9651	105.8	12.98	17.07	1.833
SDev	.0078	.010	.0012	.3	.13	.03	.004
%RSD	.8320	.7514	.1279	.2755	1.036	.2010	.1937
#1	.9379	1.354	.9643	105.6	13.07	17.09	1.830
#2	.9490	1.369	.9660	106.0	12.88	17.05	1.835

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1083.	.9494	.9698	1.060	.9419	1.101	.9982
SDev	3.	.0041	.0106	.065	.0347	.001	.0484
%RSD	.2659	.4314	1.092	6.146	3.688	.1287	4.852
#1	1085.	.9465	.9623	1.106	.9173	1.102	.9640
#2	1081.	.9522	.9773	1.014	.9664	1.100	1.032

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	.9513	4.847
SDev	.0047	.013
%RSD	.4981	.2645
#1	.9479	4.838
#2	.9546	4.856

Method: EMS2 Sample Name: Q920275 SPI02W-R Operator: SLK
Run Time: 05/27/94 09:37:31
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.8468	2.161	.9850	3.430	.8867	55.37	.9248
SDev	.0088	.009	.0204	.027	.0039	.28	.0056
%RSD	1.042	.4255	2.074	.7996	.4404	.5034	.6101
#1	.8405	2.167	.9705	3.411	.8840	55.17	.9208
#2	.8530	2.154	.9994	3.450	.8895	55.56	.9288

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9357	1.352	.9570	104.3	12.77	16.72	1.810
SDev	.0081	.007	.0053	.5	.15	.03	.007
%RSD	.8659	.5377	.5591	.4739	1.200	.2044	.3921
#1	.9300	1.347	.9532	104.0	12.88	16.70	1.805
#2	.9415	1.357	.9608	104.7	12.66	16.75	1.815

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1059.	.9347	.9934	1.021	.9594	1.083	1.009
SDev	2.	.0060	.0655	.005	.0190	.007	.032
%RSD	.1986	.6469	6.594	.5290	1.983	.6804	3.204

#1	1057.	.9305	1.040	1.025	.9460	1.077	.9858
#2	1060.	.9390	.9471	1.017	.9729	1.088	1.031

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	.9442	4.781
SDev	.0056	.010
%RSD	.5898	.2056
#1	.9403	4.774
#2	.9481	4.788

Method: EMS2 Sample Name: C156216 Operator: SLK
Run Time: 05/27/94 09:41:19
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0056	.4329	.0236	2.212	-.0002	387.6	.0011
SDev	.0020	.0060	.0121	.050	.0000	2.5	.0012
%RSD	36.24	1.385	51.39	2.265	20.11	.6332	113.5
#1	.0070	.4287	.0322	2.177	-.0002	385.9	.0002
#2	.0042	.4372	.0151	2.248	-.0002	389.4	.0019

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0132	.0206	.0114	1.218	9.131	108.8	11.90
SDev	.0021	.0013	.0025	.007	.020	.7	.10
%RSD	15.53	6.205	21.76	.6084	.2173	.6755	.8051
#1	.0146	.0215	.0131	1.213	9.117	108.3	11.83
#2	.0117	.0197	.0096	1.223	9.145	109.3	11.97

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1077.	8.727	.1023	.0143	-.0306	.7737	.0966
SDev	17.	.076	.0027	.0052	.0254	.0151	.0058
%RSD	1.596	.8701	2.683	36.13	83.23	1.953	5.970
#1	1065.	8.673	.1043	.0179	-.0126	.7631	.1006
#2	1089.	8.780	.1004	.0106	-.0485	.7844	.0925

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	.0024	3.865
SDev	.0004	.025
%RSD	16.85	.6429
#1	.0027	3.848
#2	.0022	3.883

Method: EMS2 Sample Name: SPI01 C156216 Operator: SLK

Run Time: 05/27/94 09:44:29
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.8272	1.337	.9386	3.018	.8620	383.8	.8735
SDev	.0023	.023	.0202	.000	.0027	.9	.0052
%RSD	.2744	1.705	2.150	.0121	.3089	.2221	.6001
#1	.8288	1.321	.9529	3.018	.8601	383.2	.8772
#2	.8256	1.353	.9243	3.019	.8639	384.4	.8698

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.8997	.9300	.9678	2.095	18.37	108.5	12.66
SDev	.0010	.0066	.0025	.007	.12	.2	.02
%RSD	.1128	.7099	.2552	.3230	.6421	.1853	.1962
#1	.9004	.9347	.9695	2.090	18.46	108.4	12.64
#2	.8990	.9253	.9660	2.100	18.29	108.7	12.68

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1062.	9.495	1.005	.8727	.9599	.7647	1.013
SDev	6.	.006	.053	.0193	.0076	.0002	.002
%RSD	.5796	.0637	5.273	2.211	.7970	.0247	.1849
#1	1058.	9.491	1.043	.8864	.9653	.7648	1.014
#2	1067.	9.499	.9680	.8591	.9545	.7645	1.011

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	.9140	4.738
SDev	.0028	.000
%RSD	.3105	.0096
#1	.9120	4.738
#2	.9160	4.738

Method: EMS2 Sample Name: CCV-R Operator: SLK
Run Time: 05/27/94 09:48:19
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9912	5.042	5.184	4.947	4.976	4.973	5.080
SDev	.0047	.044	.016	.041	.024	.005	.013
%RSD	.4705	.8683	.3047	.8206	.4848	.0969	.2480
#1	.9945	5.073	5.195	4.976	4.993	4.969	5.089
#2	.9879	5.011	5.173	4.918	4.959	4.976	5.071

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.067	5.153	5.137	5.089	5.009	5.090	5.067

SDev	.010	.001	.036	.010	.147	.000	.011
%RSD	.1999	.0201	.7051	.1983	2.927	.0003	.2241
#1	5.074	5.154	5.162	5.096	5.113	5.090	5.075
#2	5.060	5.153	5.111	5.082	4.906	5.090	5.059

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.002	5.073	5.092	1.096	5.166	5.013	5.070
SDev	.038	.004	.047	.046	.023	.035	.077
%RSD	.7624	.0733	.9266	4.193	.4523	.7046	1.525
#1	5.029	5.071	5.059	1.064	5.182	5.038	5.015
#2	4.975	5.076	5.126	Q1.129	5.149	4.988	5.125

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	5.052	5.061
SDev	.016	.001
%RSD	.3210	.0099
#1	5.063	5.061
#2	5.040	5.060

Method: EMS2 Sample Name: BLA01-R Operator: SLK
Run Time: 05/27/94 09:51:49
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q-.0051	Q.0250	Q.0147	Q.0004	Q-.0001	Q.0026	Q.0007
SDev	.0014	.0042	.0019	.0004	.0001	.0016	.0018
%RSD	28.28	16.77	12.61	84.85	66.99	60.52	257.6
#1	Q-.0061	Q.0280	Q.0160	Q.0007	Q-.0001	Q.0038	Q-.0006
#2	Q-.0041	Q.0221	Q.0134	Q.0002	Q-.0001	Q.0015	Q.0020

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q-.0011	Q-.0045	Q.0015	Q.0009	Q.0086	Q.0028	Q-.0005
SDev	.0033	.0049	.0016	.0027	.1974	.0205	.0004
%RSD	306.8	108.4	113.1	282.8	2301.	741.5	70.79
#1	Q.0013	Q-.0011	Q.0026	Q.0028	Q.1481	Q.0173	Q-.0008
#2	Q-.0034	Q-.0080	Q.0003	Q-.0009	Q-.1310	Q-.0117	Q-.0003

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.0848	Q-.0068	Q.0158	Q.0147	Q-.0095	Q-.0003	Q.0232
SDev	.0135	.0041	.0540	.0524	.0453	.0002	.0005
%RSD	15.92	60.59	342.1	355.3	476.5	56.57	1.983
#1	Q.0753	Q-.0039	Q.0540	Q.0518	Q.0225	Q-.0002	Q.0235
#2	Q.0944	Q-.0097	Q-.0224	Q-.0223	Q-.0415	Q-.0005	Q.0229

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0055	.1162	-.0027	.0024	-.0004	.0482	-.0000
SDev	.0006	.0048	.0296	.0005	.0000	.0011	.0052
%RSD	10.87	4.130	1093.	20.20	8.471	2.207	103200.
#1	.0051	.1128	.0182	.0028	-.0003	.0490	.0037
#2	.0059	.1196	-.0236	.0021	-.0004	.0475	-.0037

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0023	.0048	.0076	.0390	.1403	.0103	.0010
SDev	.0010	.0070	.0012	.0001	.1676	.0059	.0018
%RSD	43.53	145.8	16.32	.3413	119.4	56.59	176.8
#1	.0030	.0098	.0084	.0391	.2588	.0145	-.0003
#2	.0016	-.0001	.0067	.0389	.0218	.0062	.0023

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5747	-.0012	.0352	-.0111	-.0132	-.0001	.0367
SDev	.0072	.0021	.0699	.0045	.0141	.0001	.0102
%RSD	1.244	172.8	198.6	40.89	106.9	70.71	27.72
#1	.5697	-.0028	.0846	-.0079	-.0231	-.0001	.0295
#2	.5798	.0003	-.0142	-.0143	-.0032	-.0002	.0439

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	.0020	.0062
SDev	.0016	.0018
%RSD	81.92	28.45
#1	.0031	.0075
#2	.0008	.0050

Method: EMS2 Sample Name: C156878 Operator: SLK
Run Time: 05/27/94 10:15:38
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0016	.1398	-.0011	.0104	-.0003	34.64	.0002
SDev	.0056	.0060	.0060	.0001	.0001	.03	.0009
%RSD	347.1	4.288	531.8	1.169	19.50	.0923	575.8
#1	.0024	.1441	.0031	.0105	-.0003	34.62	-.0005
#2	-.0056	.1356	-.0054	.0103	-.0004	34.67	.0008

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0007	.0021	.0140	.2856	7.730	15.85	.0021
SDev	.0003	.0079	.0045	.0027	.083	.01	.0011
%RSD	35.48	369.8	32.41	.9302	1.070	.0925	49.58

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	Q-.0000	Q.0000
SDev	.0019	.0009
%RSD	12580.	4197.
#1	Q.0013	Q.0007
#2	Q-.0013	Q-.0006

Method: EMS2 Sample Name: Q930641 LCS-R Operator: SLK
Run Time: 05/27/94 10:09:06
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.8487	1.013	.6936	.8674	.6751	.6980	.7119
SDev	.0024	.006	.0134	.0050	.0027	.0069	.0018
%RSD	.2815	.5919	1.927	.5762	.3950	.9927	.2586
#1	.8470	1.009	.7031	.8710	.6770	.6931	.7132
#2	.8504	1.018	.6842	.8639	.6732	.7029	.7106

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.7121	.7335	.7407	.7661	8.421	.7296	.7035
SDev	.0068	.0053	.0058	.0008	.248	.0225	.0004
%RSD	.9598	.7252	.7780	.1041	2.946	3.081	.0505
#1	.7170	.7373	.7448	.7667	8.597	.7455	.7033
#2	.7073	.7297	.7367	.7655	8.246	.7137	.7038

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.425	.7118	.7093	.7280	.6965	.0001	.7731
SDev	.006	.0076	.0158	.0107	.0194	.0001	.0383
%RSD	.3902	1.069	2.233	1.469	2.790	70.71	4.948
#1	1.421	.7172	.7205	.7355	.6828	.0001	.8002
#2	1.429	.7064	.6981	.7204	.7103	.0002	.7461

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	.7102	.6926
SDev	.0008	.0049
%RSD	.1089	.7090
#1	.7108	.6961
#2	.7097	.6892

Method: EMS2 Sample Name: Q930642 BLA02-R Operator: SLK
Run Time: 05/27/94 10:12:37
Comment:
Mode: CONC Corr. Factor: 1

#1	-.0009	.0077	.0172	.2875	7.789	15.84	.0029
#2	-.0005	-.0034	.0108	.2838	7.672	15.86	.0014

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	386.7	-.0012	.0400	-.0123	-.0295	.4409	.0251
SDev	1.4	.0029	.0334	.0210	.0323	.0016	.0123
%RSD	.3727	235.6	83.53	170.3	109.2	.3642	48.86
#1	385.7	.0008	.0636	-.0272	-.0067	.4397	.0338
#2	387.7	-.0033	.0164	.0025	-.0523	.4420	.0164

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	.0010	.0165
SDev	.0010	.0004
%RSD	108.0	2.718
#1	.0017	.0168
#2	.0002	.0161

Method: EMS2 Sample Name: Q930643 DUP02 Operator: SLK
Run Time: 05/27/94 10:18:40
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0025	.0775	.0100	.0081	-.0003	33.47	-.0017
SDev	.0027	.0042	.0118	.0002	.0000	.17	.0004
%RSD	111.5	5.416	118.2	3.009	1.501	.5207	22.03
#1	-.0005	.0745	.0184	.0083	-.0003	33.34	-.0019
#2	-.0044	.0804	.0016	.0079	-.0003	33.59	-.0014

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0023	.0021	.0090	.3240	7.577	15.42	.0029
SDev	.0005	.0040	.0016	.0043	.112	.06	.0007
%RSD	21.73	189.3	18.25	1.312	1.484	.3609	24.43
#1	.0027	-.0007	.0079	.3210	7.656	15.38	.0034
#2	.0020	.0050	.0102	.3270	7.497	15.45	.0024

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	378.6	.0000	.0298	-.0044	-.0215	.4318	.0144
SDev	2.8	.0019	.0120	.0073	.0163	.0030	.0104
%RSD	.7277	1148000.	40.46	168.0	76.00	.6998	72.13
#1	376.7	.0014	.0383	.0008	-.0330	.4297	.0070
#2	380.6	-.0014	.0213	-.0096	-.0099	.4340	.0217

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	.0002	.0116

SDev	.0026	.0002
%RSD	1411.	2.010
#1	-.0017	.0118
#2	.0020	.0115

Method: EMS2 Sample Name: Q930644 SPI02W-R Operator: SLK
Run Time: 05/27/94 10:21:41
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9149	1.044	.7461	.9267	.7045	34.31	.7508
SDev	.0013	.012	.0060	.0012	.0011	.13	.0039
%RSD	.1436	1.150	.8005	.1316	.1626	.3743	.5144
#1	.9139	1.052	.7503	.9275	.7036	34.22	.7536
#2	.9158	1.035	.7418	.9258	.7053	34.40	.7481

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.7578	.7792	.7777	1.051	16.87	16.08	.7466
SDev	.0020	.0028	.0012	.006	.21	.00	.0050
%RSD	.2672	.3553	.1588	.5308	1.255	.0179	.6654
#1	.7564	.7772	.7786	1.047	17.02	16.08	.7431
#2	.7592	.7811	.7768	1.055	16.72	16.08	.7501

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	372.9	.7516	.7279	.7544	.7338	.4239	.7868
SDev	.2	.0051	.0127	.0454	.0279	.0001	.0347
%RSD	.0477	.6753	1.751	6.020	3.804	.0223	4.412
#1	373.0	.7480	.7189	.7865	.7141	.4240	.8113
#2	372.7	.7552	.7369	.7223	.7536	.4238	.7622

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	.7550	.7644
SDev	.0011	.0003
%RSD	.1434	.0441
#1	.7558	.7641
#2	.7543	.7646

Method: EMS2 Sample Name: Q930645 DPS02W-R Operator: SLK
Run Time: 05/27/94 10:24:42
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.8878	1.035	.7221	.9381	.6785	34.74	.7144

SDev	.0142	.005	.0260	.0138	.0063	.09	.0034
%RSD	1.602	.5213	3.598	1.468	.9230	.2715	.4763
#1	.8979	1.039	.7404	.9479	.6830	34.81	.7168
#2	.8778	1.031	.7037	.9284	.6741	34.67	.7120

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.7154	.7356	.7433	1.011	17.10	16.36	.7137
SDev	.0023	.0032	.0070	.007	.37	.15	.0053
%RSD	.3186	.4330	.9413	.7223	2.141	.8900	.7453
#1	.7170	.7379	.7483	1.017	17.36	16.46	.7175
#2	.7138	.7334	.7384	1.006	16.84	16.26	.7100

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	382.0	.7005	.7160	.7360	.7085	.4359	.7023
SDev	5.8	.0006	.0220	.0288	.0033	.0065	.0279
%RSD	1.513	.0832	3.077	3.919	.4669	1.495	3.972
#1	386.1	.7009	.7004	.7564	.7109	.4405	.6825
#2	377.9	.7000	.7316	.7156	.7062	.4313	.7220

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	.7215	.7192
SDev	.0046	.0087
%RSD	.6419	1.211
#1	.7248	.7254
#2	.7182	.7130

Method: EMS2 Sample Name: C156876 Operator: SLK
Run Time: 05/27/94 10:28:14
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0008	.1891	-.0014	.0611	-.0003	17.82	.0031
SDev	.0005	.0102	.0284	.0006	.0000	.05	.0004
%RSD	57.75	5.397	1984.	.9973	1.334	.2782	11.82
#1	-.0012	.1818	.0186	.0615	-.0003	17.85	.0034
#2	-.0005	.1963	-.0215	.0607	-.0003	17.78	.0028

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.3255	.0051	.0640	3.397	372.2	24.25	.3239
SDev	.0010	.0036	.0004	.019	4.1	.15	.0014
%RSD	.3110	71.05	.6428	.5555	1.112	.6288	.4372
#1	.3262	.0025	.0637	3.410	375.1	24.36	.3249
#2	.3248	.0076	.0643	3.384	369.3	24.14	.3229

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
vge	457.7	.8780	-.0055	-.0160	-.0387	.1317	.0001
SDev	4.4	.0031	.0313	.0069	.0010	.0016	.0328
%RSD	.9652	.3558	572.8	43.17	2.668	1.219	44290.
#1	460.8	.8802	-.0276	-.0111	-.0395	.1328	-.0232
#2	454.6	.8758	.0167	-.0208	-.0380	.1305	.0233

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	.0027	.1442
SDev	.0020	.0015
%RSD	75.93	1.055
#1	.0012	.1453
#2	.0041	.1432

Method: EMS2 Sample Name: C156877 Operator: SLK
Run Time: 05/27/94 10:31:59
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0001	.1449	-.0195	.0539	-.0002	17.39	.0023
SDev	.0010	.0306	.0170	.0008	.0000	.01	.0014
%RSD	914.2	21.11	87.20	1.584	14.84	.0644	59.09
#1	-.0006	.1665	-.0075	.0545	-.0002	17.40	.0033
#2	.0008	.1233	-.0315	.0533	-.0002	17.38	.0014

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0338	.0033	.0111	1.423	448.3	11.36	.1076
SDev	.0015	.0043	.0021	.002	.8	.00	.0003
%RSD	4.495	130.1	18.61	.1214	.1805	.0087	.3297
#1	.0327	.0063	.0125	1.424	448.9	11.35	.1079
#2	.0349	.0003	.0096	1.422	447.7	11.36	.1074

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	640.6	.1658	.0224	-.0456	-.0254	.1651	.0179
SDev	1.0	.0002	.0075	.0417	.0008	.0002	.0142
%RSD	.1550	.1174	33.65	91.42	3.251	.1144	79.16
#1	641.3	.1656	.0278	-.0751	-.0249	.1653	.0079
#2	639.9	.1659	.0171	-.0161	-.0260	.1650	.0279

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	.0016	.0290
SDev	.0007	.0027
%RSD	45.58	9.380

#1	.0011	.0271
#2	.0022	.0309

Method: EMS2 Sample Name: C156881 Operator: SLK
Run Time: 05/27/94 10:35:36
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0040	.1819	-.0211	.0559	-.0003	74.34	-.0002
SDev	.0023	.0126	.0214	.0000	.0000	.04	.0004
%RSD	57.20	6.924	101.4	.0000	.7100	.0523	182.0
#1	.0056	.1908	-.0362	.0559	-.0003	74.37	-.0005
#2	.0024	.1730	-.0060	.0559	-.0004	74.31	.0001

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0002	-.0006	.0125	.0617	59.32	218.6	-.0035
SDev	.0005	.0002	.0000	.0017	.23	.2	.0004
%RSD	285.2	35.69	.0000	2.797	.3866	.0934	10.33
#1	-.0002	-.0005	.0125	.0605	59.49	218.8	-.0037
#2	.0005	-.0008	.0125	.0630	59.16	218.5	-.0032

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	117.0	.0046	.0059	.0058	-.0118	.7790	.0131
SDev	.1	.0025	.0224	.0109	.0167	.0003	.0014
%RSD	.0985	55.76	378.7	188.4	141.4	.0364	10.78
#1	117.1	.0063	-.0099	-.0019	-.0000	.7788	.0121
#2	116.9	.0028	.0217	.0135	-.0237	.7792	.0141

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	.0031	.0210
SDev	.0013	.0012
%RSD	40.03	5.673
#1	.0023	.0201
#2	.0040	.0218

Method: EMS2 Sample Name: C156882 Operator: SLK
Run Time: 05/27/94 10:39:08
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0030	.8085	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SDev	.0043	.0132	.0328	.0001	.0001	.9	.0009
%RSD	145.2	1.632	1154.	.1104	22.81	.4551	680.6

#1	.0060	.8178	-.0260	.1105	-.0003	187.7	-.0008
#2	-.0001	.7992	.0204	.1103	-.0003	188.9	.0005

lem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0147	.0603	.0186	1.731	53.88	339.2	.1544
SDev	.0018	.0015	.0004	.009	.17	1.2	.0010
%RSD	12.07	2.469	2.210	.5373	.3111	.3480	.6722
#1	.0134	.0593	.0183	1.725	54.00	338.4	.1536
#2	.0159	.0614	.0189	1.738	53.76	340.0	.1551

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	187.6	.0556	.0507	.0020	-.0591	1.103	-.0030
SDev	.1	.0057	.0444	.0033	.0037	.002	.0149
%RSD	.0712	10.17	87.61	165.5	6.301	.2227	489.4
#1	187.5	.0516	.0193	-.0003	-.0617	1.101	-.0135
#2	187.6	.0596	.0821	.0044	-.0564	1.104	.0075

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	.0031	.0197
SDev	.0004	.0022
%RSD	13.59	11.27
#1	.0028	.0181
#2	.0034	.0213

Method: EMS2 Sample Name: CCV-R Operator: SLK
Run Time: 05/27/94 10:42:39
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.007	5.055	5.311	5.033	5.018	5.029	5.178
SDev	.001	.040	.006	.011	.013	.022	.011
%RSD	.1184	.7831	.1210	.2107	.2598	.4349	.2043
#1	1.008	5.083	5.306	5.026	5.008	5.045	5.185
#2	1.006	5.027	5.316	5.041	5.027	5.014	5.170

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.152	5.290	5.303	5.159	4.917	5.156	5.147
SDev	.006	.002	.024	.004	.136	.002	.001
%RSD	.1131	.0367	.4579	.0746	2.758	.0378	.0138
#1	5.148	5.292	5.286	5.156	5.013	5.155	5.146
#2	5.156	5.289	5.320	5.161	4.821	5.158	5.147

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.080	5.180	5.131	1.019	5.137	5.127	5.156

SDev	.014	.016	.010	.069	.056	.017	.057
%RSD	.2815	.3091	.1885	6.776	1.095	.3242	1.105
#1	5.070	5.192	5.125	.9705	5.097	5.115	5.197
#2	5.090	5.169	5.138	1.068	5.177	5.139	5.116

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	5.100	5.093
SDev	.015	.012
%RSD	.2898	.2315
#1	5.089	5.085
#2	5.110	5.102

Method: EMS2 Sample Name: BLA01-R Operator: SLK
Run Time: 05/27/94 10:46:11
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q-.0032	Q.0157	Q.0168	Q.0005	Q-.0000	Q.0049	Q-.0007
SDev	.0012	.0030	.0028	.0002	.0000	.0005	.0010
%RSD	37.20	19.11	16.74	47.14	109.8	10.96	155.5
#1	Q-.0041	Q.0178	Q.0187	Q.0003	Q-.0000	Q.0045	Q-.0014
#2	Q-.0024	Q.0136	Q.0148	Q.0007	Q-.0000	Q.0053	Q.0001

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.0020	Q-.0009	Q.0029	Q.0004	Q.0499	Q.0041	Q.0013
SDev	.0025	.0045	.0004	.0011	.1588	.0029	.0014
%RSD	128.6	493.6	14.14	283.8	318.2	70.57	113.1
#1	Q.0002	Q.0023	Q.0032	Q-.0004	Q.1622	Q.0062	Q.0023
#2	Q.0038	Q-.0041	Q.0026	Q.0011	Q-.0624	Q.0021	Q.0003

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.1365	Q.0007	Q.0324	Q.0512	Q.0133	Q.0003	Q.0199
SDev	.0167	.0029	.0052	.0043	.0358	.0000	.0028
%RSD	12.22	424.3	15.95	8.330	268.9	.0000	14.22
#1	Q.1483	Q.0028	Q.0360	Q.0543	Q.0386	Q.0003	Q.0219
#2	Q.1247	Q-.0014	Q.0287	Q.0482	Q-.0120	Q.0003	Q.0179

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	Q.0009	Q.0027
SDev	.0029	.0004
%RSD	332.7	13.37
#1	Q.0030	Q.0025
#2	Q-.0012	Q.0030

Method: EMS2 Sample Name: Q920275 DUP02 Operator: SLK
Run Time: 05/27/94 09:31:12
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0053	1.280	.0131	2.631	-.0001	55.68	.0061
SDev	.0024	.028	.0232	.012	.0000	.19	.0023
%RSD	44.68	2.194	177.6	.4494	40.45	.3360	37.01
#1	-.0036	1.300	.0295	2.639	-.0001	55.81	.0077
#2	-.0070	1.260	-.0033	2.623	-.0001	55.54	.0045

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0061	.4123	.0087	105.8	3.264	16.14	.9077
SDev	.0018	.0034	.0012	.3	.127	.10	.0043
%RSD	29.13	.8202	14.14	.2764	3.884	.6417	.4689
#1	.0048	.4099	.0096	106.0	3.354	16.22	.9107
#2	.0073	.4147	.0079	105.6	3.175	16.07	.9047

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1090.	.0244	.0422	.0167	-.0515	1.113	.0624
SDev	4.	.0043	.0287	.0091	.0174	.004	.0107
%RSD	.4127	17.61	67.99	54.45	33.75	.3226	17.08
#1	1093.	.0213	.0219	.0103	-.0392	1.115	.0700
#2	1087.	.0274	.0624	.0232	-.0637	1.110	.0549

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	.0074	3.911
SDev	.0005	.006
%RSD	6.668	.1505
#1	.0077	3.915
#2	.0071	3.907

Method: EMS2 Sample Name: Q920275 SPI02W-R Operator: SLK
Run Time: 05/27/94 09:34:31
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.8464	2.256	.9889	3.483	.8926	56.21	.9451
SDev	.0048	.010	.0060	.002	.0004	.38	.0037
%RSD	.5633	.4468	.6036	.0665	.0399	.6751	.3953
#1	.8430	2.249	.9931	3.485	.8928	55.94	.9425
#2	.8497	2.263	.9847	3.482	.8923	56.47	.9478

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Avge	3.491	4.161	2.148	6.660	.8220	.9087	2.492
SDev	.001	.004	.013	.015	.0194	.0034	.005
%RSD	.0329	.1041	.5883	.2283	2.366	.3696	.1844
#1	3.492	4.158	2.157	6.671	.8357	.9111	2.495
#2	3.490	4.165	2.139	6.649	.8083	.9064	2.489

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Avge	1.168	4.533	2.568	1.231	4.283	9.360	3.754
SDev	.011	.000	.007	.055	.009	.034	.002
%RSD	.9387	.0019	.2891	4.488	.2002	.3664	.0424
#1	1.175	4.533	2.573	1.192	4.290	9.384	3.753
#2	1.160	4.533	2.563	1.270	4.277	9.336	3.755

Elem	V_2924	Zn2138
Avge	10.49	7.543
SDev	.02	.005
%RSD	.1543	.0645
#1	10.50	7.546
#2	10.47	7.539

Method: EMS2 Sample Name: CCV-R Operator: SLK
Run Time: 05/27/94 08:33:34
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9932	4.967	5.010	4.847	4.920	4.999	5.029
SDev	.0006	.014	.034	.011	.006	.002	.006
%RSD	.0603	.2777	.6846	.2213	.1243	.0424	.1097
#1	.9936	4.957	5.034	4.855	4.916	5.000	5.026
#2	.9928	4.977	4.986	4.839	4.925	4.997	5.033

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.012	5.016	4.943	5.013	4.976	5.014	4.999
SDev	.013	.016	.010	.004	.132	.006	.012
%RSD	.2526	.3179	.2082	.0874	2.659	.1174	.2485
#1	5.021	5.027	4.950	5.016	5.069	5.010	5.007
#2	5.003	5.005	4.935	5.010	4.882	5.018	4.990

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.957	5.031	5.027	1.065	4.943	4.892	4.887
SDev	.010	.001	.090	.037	.019	.012	.022
%RSD	.1923	.0271	1.787	3.489	.3890	.2510	.4402
#1	4.964	5.032	5.091	1.092	4.930	4.900	4.872
#2	4.951	5.030	4.964	1.039	4.957	4.883	4.902

#1	34.66	.0006	.0324	-.0128	-.0231	.1374	.0445
#2	34.50	-.0017	-.0343	-.0404	-.0158	.1371	-.0013

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	-.0012	.0134
SDev	.0007	.0001
%RSD	57.81	.9389
#1	-.0007	.0133
#2	-.0017	.0134

Method: EMS2 Sample Name: Q930638 DUP02 Operator: SLK
Run Time: 05/27/94 11:01:04
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0064	.1762	-.0257	.0112	-.0003	64.30	-.0011
SDev	.0014	.0060	.0010	.0000	.0000	.44	.0001
%RSD	22.41	3.403	3.843	.0000	12.66	.6772	8.325
#1	.0074	.1720	-.0250	.0112	-.0002	63.99	-.0012
#2	.0054	.1805	-.0264	.0112	-.0003	64.60	-.0010

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0007	.0037	.0114	.5117	4.210	14.92	.0069
SDev	.0013	.0015	.0008	.0027	.216	.10	.0014
%RSD	176.6	40.78	7.252	.5195	5.133	.6606	20.50
#1	.0016	.0026	.0108	.5098	4.363	14.85	.0079
#2	-.0002	.0047	.0119	.5136	4.057	14.99	.0059

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	34.81	-.0028	.0133	-.0134	-.0363	.1379	-.0081
SDev	.21	.0012	.0048	.0027	.0041	.0008	.0206
%RSD	.5979	42.45	36.07	20.03	11.40	.5479	253.6
#1	34.67	-.0036	.0099	-.0153	-.0392	.1374	.0064
#2	34.96	-.0019	.0167	-.0115	-.0333	.1384	-.0226

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	-.0005	.0136
SDev	.0003	.0012
%RSD	71.65	8.613
#1	-.0002	.0128
#2	-.0007	.0144

Method: EMS2 Sample Name: Q930639 SPI02W-R Operator: SLK

Run Time: 05/27/94 09:44:29
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.8272	1.337	.9386	3.018	.8620	383.8	.8735
SDev	.0023	.023	.0202	.000	.0027	.9	.0052
%RSD	.2744	1.705	2.150	.0121	.3089	.2221	.6001
#1	.8288	1.321	.9529	3.018	.8601	383.2	.8772
#2	.8256	1.353	.9243	3.019	.8639	384.4	.8698

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.8997	.9300	.9678	2.095	18.37	108.5	12.66
SDev	.0010	.0066	.0025	.007	.12	.2	.02
%RSD	.1128	.7099	.2552	.3230	.6421	.1853	.1962
#1	.9004	.9347	.9695	2.090	18.46	108.4	12.64
#2	.8990	.9253	.9660	2.100	18.29	108.7	12.68

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1062.	9.495	1.005	.8727	.9599	.7647	1.013
SDev	6.	.006	.053	.0193	.0076	.0002	.002
%RSD	.5796	.0637	5.273	2.211	.7970	.0247	.1849
#1	1058.	9.491	1.043	.8864	.9653	.7648	1.014
#2	1067.	9.499	.9680	.8591	.9545	.7645	1.011

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	.9140	4.738
SDev	.0028	.000
%RSD	.3105	.0096
#1	.9120	4.738
#2	.9160	4.738

Method: EMS2 Sample Name: CCV-R Operator: SLK
Run Time: 05/27/94 09:48:19
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9912	5.042	5.184	4.947	4.976	4.973	5.080
SDev	.0047	.044	.016	.041	.024	.005	.013
%RSD	.4705	.8683	.3047	.8206	.4848	.0969	.2480
#1	.9945	5.073	5.195	4.976	4.993	4.969	5.089
#2	.9879	5.011	5.173	4.918	4.959	4.976	5.071

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.067	5.153	5.137	5.089	5.009	5.090	5.067

SDev	.0048	.0087	.0091	.011	.02	.14	.0046
%RSD	.5121	.8916	.9105	.7539	.1855	.8743	.4899
#1	.9354	.9708	.9881	1.507	13.10	15.76	.9378
#2	.9422	.9831	1.001	1.523	13.06	15.96	.9443

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	35.57	.9351	.9473	.9801	.9062	.1379	.9423
SDev	.50	.0137	.0292	.0248	.0261	.0019	.0101
%RSD	1.409	1.460	3.086	2.527	2.875	1.370	1.073
#1	35.22	.9254	.9267	.9626	.8878	.1366	.9351
#2	35.93	.9447	.9680	.9976	.9246	.1392	.9494

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	.9418	.9313
SDev	.0094	.0039
%RSD	1.002	.4222
#1	.9351	.9285
#2	.9485	.9341

Method: EMS2 Sample Name: CCV-R Operator: SLK
Run Time: 05/27/94 11:10:36
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.003	5.056	5.298	5.050	4.982	4.967	5.112
SDev	.002	.002	.001	.005	.008	.005	.016
%RSD	.1548	.0475	.0237	.1062	.1627	.0965	.3131
#1	1.002	5.054	5.298	5.046	4.988	4.971	5.123
#2	1.004	5.057	5.297	5.054	4.976	4.964	5.100

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.104	5.261	5.333	5.125	4.913	5.124	5.113
SDev	.003	.003	.002	.009	.148	.017	.003
%RSD	.0596	.0485	.0463	.1789	3.007	.3242	.0555
#1	5.102	5.263	5.331	5.132	5.018	5.136	5.115
#2	5.106	5.260	5.335	5.119	4.809	5.112	5.111

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.107	5.096	5.127	1.053	5.095	5.155	5.175
SDev	.014	.009	.051	.070	.004	.004	.012
%RSD	.2644	.1800	.9935	6.639	.0852	.0788	.2331
#1	5.098	5.103	5.091	1.003	5.092	5.152	5.166
#2	5.117	5.090	5.163	Q1.102	5.098	5.158	5.183

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	4.983	5.023
SDev	.008	.010
%RSD	.1578	.1919
#1	4.989	5.030
#2	4.977	5.017

Method: EMS2 Sample Name: BLA01-R Operator: SLK
Run Time: 05/27/94 08:37:04
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.0046	Q.0174	Q-.0039	Q.0001	Q-.0002	Q.0045	Q-.0014
SDev	.0006	.0054	.0245	.0001	.0000	.0021	.0015
%RSD	12.85	31.05	624.5	141.4	1.078	47.18	107.6
#1	Q.0042	Q.0136	Q.0134	Q-.0000	Q-.0002	Q.0030	Q-.0003
#2	Q.0051	Q.0212	Q-.0212	Q.0002	Q-.0002	Q.0060	Q-.0024

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q-.0005	Q-.0011	Q.0026	Q.0008	Q.0164	Q-.0104	Q.0010
SDev	.0000	.0026	.0008	.0015	.3165	.0274	.0004
%RSD	.1102	242.2	31.43	173.0	1933.	264.0	35.41
#1	Q-.0005	Q-.0029	Q.0032	Q.0019	Q.2401	Q.0090	Q.0008
#2	Q-.0005	Q.0008	Q.0020	Q-.0002	Q-.2074	Q-.0297	Q.0013

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.1337	Q-.0054	Q-.0205	Q.0035	Q.0020	Q-.0004	Q.0232
SDev	.0032	.0021	.0124	.0265	.0025	.0001	.0052
%RSD	2.377	39.90	60.58	755.7	121.2	23.57	22.42
#1	Q.1360	Q-.0069	Q-.0117	Q.0222	Q.0038	Q-.0005	Q.0195
#2	Q.1315	Q-.0039	Q-.0292	Q-.0152	Q.0003	Q-.0003	Q.0269

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	Q.0010	Q-.0005
SDev	.0011	.0012
%RSD	107.7	243.3
#1	Q.0018	Q.0004
#2	Q.0002	Q-.0013

Method: EMS2 Sample Name: ICV01-R Operator: SLK
Run Time: 05/27/94 08:40:24
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.084	Q2.722	.3803	2.075	.3849	95.27	.4033
SDev	.001	.026	.0031	.006	.0015	.07	.0031
%RSD	.0687	.9696	.8097	.3114	.3798	.0722	.7756
#1	2.083	Q2.703	.3781	2.070	.3839	95.23	.4055
#2	2.085	Q2.740	.3825	2.079	.3860	95.32	.4011

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4024	.4082	.4107	Q.4441	124.9	105.9	.4008
SDev	.0003	.0051	.0025	.0001	.1	.2	.0000
%RSD	.0632	1.250	.6014	.0297	.0936	.1633	.0010
#1	.4023	.4118	.4089	Q.4442	124.8	105.8	.4008
#2	.4026	.4046	.4124	Q.4440	125.0	106.1	.4008

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	100.8	.3990	.4325	.3968	.3689	.0053	.4328
SDev	.3	.0037	.0086	.0627	.0271	.0000	.0050
%RSD	.3091	.9288	1.995	15.80	7.343	.0000	1.143
#1	100.5	.4016	.4386	Q.4411	Q.3497	.0053	.4363
#2	101.0	.3964	.4264	Q.3525	.3880	.0053	.4293

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	.4105	.4112
SDev	.0033	.0060
%RSD	.8022	1.462
#1	.4128	.4155
#2	.4081	.4070

Method: EMS2 Sample Name: BLA01-R Operator: SLK
Run Time: 05/27/94 08:44:18
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.0016	Q.0102	Q-.0115	Q.0002	Q-.0001	Q.0011	Q-.0024
SDev	.0030	.0036	.0073	.0000	.0000	.0005	.0004
%RSD	186.1	35.35	63.11	.0000	1.932	46.97	15.30
#1	Q.0037	Q.0127	Q-.0064	Q.0002	Q-.0001	Q.0015	Q-.0027
#2	Q-.0005	Q.0076	Q-.0167	Q.0002	Q-.0001	Q.0008	Q-.0021

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.0011	Q-.0029	Q.0012	Q-.0006	Q-.0320	Q.0028	Q-.0000
SDev	.0023	.0055	.0004	.0011	.2415	.0147	.0011
%RSD	212.1	193.4	35.36	188.4	755.4	529.8	1676000.

#1	.4787	.5131	.5556	187.1	.0577	539.8	.4903
#2	.4759	.5152	.5545	186.8	-.0826	540.3	.4888

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.3084	.9464	.9396	.0241	-.0599	.0148	.1105
SDev	.0199	.0043	.0540	.0426	.0083	.0000	.0120
%RSD	6.440	.4540	5.744	177.0	13.80	.0000	10.82
#1	.2944	.9433	.9015	.0542	-.0658	.0148	.1190
#2	.3225	.9494	.9778	-.0061	-.0541	.0148	.1021

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	.4998	1.024
SDev	.0041	.001
%RSD	.8226	.0695
#1	.5027	1.024
#2	.4969	1.025

Method: EMS2 Sample Name: DLS-R Operator: SLK
Run Time: 05/27/94 12:26:52
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.0128	Q.1009	-.0030	Q.0084	.0050	.0222	.0045
SDev	.0002	.0180	.0122	.0001	.0000	.0016	.0008
%RSD	1.858	17.83	412.5	1.458	.0660	7.203	18.21
#1	Q.0130	Q.0882	.0057	Q.0083	.0050	.0234	.0051
#2	Q.0127	Q.1136	-.0116	Q.0084	.0050	.0211	Q.0040

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0091	Q.0081	Q.0250	Q.0917	.0086	.0014	.0085
SDev	.0005	.0028	.0037	.0008	.2172	.0147	.0011
%RSD	5.542	34.11	14.80	.8698	2533.	1068.	12.47
#1	.0088	.0101	.0224	Q.0923	.1622	.0117	.0093
#2	.0095	Q.0062	Q.0277	Q.0911	-.1450	-.0090	Q.0078

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2455	Q.0119	.0432	Q.0214	-.0363	-.0003	.0272
SDev	.0167	.0019	.0296	.0050	.0132	.0002	.0036
%RSD	6.796	16.44	68.53	23.59	36.50	56.57	13.04
#1	.2573	.0105	Q.0641	Q.0250	-.0269	-.0005	.0297
#2	.2337	Q.0132	Q.0223	Q.0178	-.0456	-.0002	.0247

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	.0092	Q.0242

SDev	.0017	.0017
%RSD	18.21	6.891
#1	Q.0080	Q.0254
#2	.0104	Q.0231

Method: EMS2 Sample Name: CCV-R Operator: SLK
Run Time: 05/27/94 12:29:46
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9951	4.965	5.353	5.103	4.995	4.844	5.078
SDev	.0024	.028	.008	.007	.003	.015	.009
%RSD	.2401	.5677	.1509	.1290	.0659	.3190	.1793
#1	.9935	4.945	5.348	5.098	4.997	4.834	5.084
#2	.9968	4.984	5.359	5.108	4.993	4.855	5.071

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.048	5.253	5.483	5.066	4.810	5.100	5.061
SDev	.014	.019	.000	.011	.052	.032	.007
%RSD	.2708	.3606	.0000	.2203	1.077	.6321	.1402
#1	5.038	5.240	5.483	5.058	4.846	5.078	5.056
#2	5.058	5.267	5.483	5.074	4.773	5.123	5.066

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.034	5.021	4.905	1.009	5.143	5.239	5.063
SDev	.018	.009	.009	.011	.019	.002	.004
%RSD	.3630	.1827	.1900	1.068	.3779	.0433	.0746
#1	5.021	5.015	4.912	1.016	5.130	5.237	5.060
#2	5.047	5.028	4.899	1.001	5.157	5.240	5.066

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	5.027	4.887
SDev	.001	.008
%RSD	.0105	.1722
#1	5.027	4.893
#2	5.026	4.881

Method: EMS2 Sample Name: BLA01-R Operator: SLK
Run Time: 05/27/94 12:33:05
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.0073	Q-.0144	Q.0180	Q.0003	Q-.0002	Q-.0000	Q.0006

SDev	.0034	.0144	.0082	.0001	.0000	.0000	.0006
RSD	46.04	99.83	45.40	47.14	20.06	15.18	94.33
1	Q.0096	Q-.0042	Q.0238	Q.0003	Q-.0002	Q-.0000	Q.0002
#2	Q.0049	Q-.0246	Q.0122	Q.0002	Q-.0002	Q-.0000	Q.0010

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.0009	Q.0004	Q.0044	Q-.0009	Q.0429	Q.0104	Q.0008
SDev	.0025	.0030	.0016	.0013	.2304	.0254	.0000
%RSD	282.5	668.0	37.71	141.3	537.4	245.2	.0770
#1	Q-.0009	Q-.0017	Q.0055	Q-.0019	Q.2058	Q.0283	Q.0008
#2	Q.0027	Q.0026	Q.0032	Q-.0000	Q-.1201	Q-.0076	Q.0008

Elem	Na5889	Ni2316	Pb2203	Sb2068	Se1960	Sr4215	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.0315	Q-.0039	Q.0297	Q.0399	Q-.0086	Q-.0001	Q.0048
SDev	.0016	.0012	.0510	.0191	.0217	.0002	.0052
%RSD	5.051	30.28	171.5	47.83	251.7	282.8	107.5
#1	Q.0303	Q-.0030	Q-.0063	Q.0264	Q.0067	Q.0001	Q.0012
#2	Q.0326	Q-.0047	Q.0657	Q.0534	Q-.0240	Q-.0002	Q.0085

Elem	V_2924	Zn2138
Units	ppm	ppm
Avge	Q.0031	Q-.0001
SDev	.0005	.0025
%RSD	15.99	3066.
#1	Q.0034	Q-.0018
#2	Q.0027	Q.0017

CASE NARRATIVE

This package includes data for the water samples numbered #C156876-882 which were analyzed on three different days. There were two calibration curves used with these samples that were analyzed on 5/26/94 and 6/2/94. There were three method blanks associated with these samples and there were no target compounds detected in these blanks. The sample numbered #C156878 was further analyzed as the matrix spike and spike duplicate. None of the values were out side of the QC limits for these spiked samples. Some of the samples had to be diluted and reanalyzed as some target compounds exceeded the linear calibration range.

Susan Sharp
VOA GC/MS
8/5/94

WATER MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Case No. _____ Laboratory Name Heritage Labs

FRACTION	COMPOUND	CONC. SPIKE ADDED (ug/L)	SAMPLE RESULT	CONC. MS	% REC	CONC. MSD	% REC	RPD	QC LIMITS RPD	QC LIMITS RECOVERY
VOA	1,1-Dichloroethene	50	BDL	63	126	65	130	3	14	61-145
	Trichloroethene			56	112	57	114	2	14	71-120
SAMPLE NO.	Chlorobenzene			55	110	54	108	2	13	75-130
	Toluene			50	100	49	98	2	13	76-125
C156878	Benzene			57	114	56	112	2	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
	2-Chlorophenol								40	27-123
SAMPLE NO.	4-Chloro-3-Methylphenol								42	23-97
_____	4-Nitrophenol								50	10-80
PEST	Lindane								15	56-123
	Heptachlor								20	40-131
	Aldrin								22	40-120
SAMPLE NO.	Dieldrin								18	52-126
	Endrin								21	56-121
_____	4,4'-DDT								27	38-177

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

000714

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	CRDL
BA281	5/26/94		water	low	HP5970-49		NA		ug/L	
BA286	6/2/94		water	low	HP5970-49		NA		ug/L	
BA288	6/6/94		water	low	HP5970-49		NA		ug/L	

Comments:

FORM IV

5A

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

ab ne: Heritage Labs Contract: _____

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

ab File ID: TA861 BFB Injection Date: 5/26/94

nstrument ID: HP5970-49 BFB Injection Time: 9:20

atrix: (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	27.48
75	30.0 - 60.0% of mass 95	56.74
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	5.85
173	Less than 2.0% of mass 174	0.00 (0.00) 1
174	Greater than 50.0% of mass 95	89.06
175	5.0 - 9.0% of mass 174	7.89 (8.86) 1
176	Greater than 95.0%, but less than 101.0% of mass 174	86.13 (96.71) 1
177	5.0 - 9.0% of mass 176	6.49 (7.53) 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		20 PPB STD	CA188	5/26/94	10:01
02		100 PPB STD	CA189	↓	10:49
03		150 PPB STD	CA190		11:34
04		200 PPB STD	CA191		12:19
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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: TA863 BFB Injection Date: 5/26/94

Instrument ID: HP5970-49 BFB Injection Time: 14:58

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	28.86
75	30.0 - 60.0% of mass 95	54.88
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	5.46
173	Less than 2.0% of mass 174	0.00 (0.00) 1
174	Greater than 50.0% of mass 95	83.14
175	5.0 - 9.0% of mass 174	5.53 (6.65) 1
176	Greater than 95.0%, but less than 101.0% of mass 174	79.81 (96.00) 1
177	5.0 - 9.0% of mass 176	5.50 (6.89) 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	CA192	5/26/94	15:27
02		Lab Blank	BA281		16:13
03		C1516879	A3113		20:43
04		C1516880	A3114		21:28
05		C1516881	A3115		22:13
06		C1516882	A3116		22:59
07		C1516877 Rep. 0	A3109		17:43
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5A

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

e: Heritage Labs Contract: _____

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

b File ID: TA870 BFB Injection Date: 6/2/94

strument ID: HP5970-49 BFB Injection Time: 7:03

trix: (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	24.19
75	30.0 - 60.0% of mass 95	53.68
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.43
173	Less than 2.0% of mass 174	0.00 (0.00) 1
174	Greater than 50.0% of mass 95	90.94
175	5.0 - 9.0% of mass 174	7.73 (8.50) 1
176	Greater than 95.0%, but less than 101.0% of mass 174	90.65 (99.68) 1
177	5.0 - 9.0% of mass 176	5.31 (5.85) 2

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

HIS 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		20 PPB STD	CA198	6/2/94	7:42
02		100PPB STD	CA199		8:28
03		150 PPB STD	CA200		9:13
04		200 PPB STD	CA201		11:55
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5A

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

b e: Heritage Labs Contract: _____

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

b File ID: TA871 BFB Injection Date: 6/2/94

strument ID: HPS970-49 BFB Injection Time: 10:48

trix: (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	27:41
75	30.0 - 60.0% of mass 95	55:39
95	Base peak, 100% relative abundance	100:00
96	5.0 - 9.0% of mass 95	8.55
173	Less than 2.0% of mass 174	0.00 (0.00) 1
174	Greater than 50.0% of mass 95	82.91
175	5.0 - 9.0% of mass 174	6.10 (7.35) 1
176	Greater than 95.0%, but less than 101.0% of mass 174	82.49 (99.50) 1
177	5.0 - 9.0% of mass 176	4.79 (5.81) 2

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

HIS 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	CA202	6/2/94	11:03
02		Lab Blank	BA286	↓	12:49
03		C156876 1:10	A3192	↓	21:57
04		C156877 1:5	A3193	↓	22:43
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5A

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

b me: Heritage Labs Contract: _____

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

b File ID: TA873 BFB Injection Date: 6/6/94

strument ID: HP5970-49 BFB Injection Time: 8:26

trix: (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	23.91
75	30.0 - 60.0% of mass 95	56.88
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.99
173	Less than 2.0% of mass 174	0.00 (0.00) 1
174	Greater than 50.0% of mass 95	87.45
175	5.0 - 9.0% of mass 174	7.53 (8.61) 1
176	Greater than 95.0%, but less than 101.0% of mass 174	85.70 (98.00) 1
177	5.0 - 9.0% of mass 176	7.10 (8.28) 2

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

HIS 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	VA288	6/6/94	9:21
02		Lab Blank	BA288		10:53
03		C156878	A3213		13:10
04		C156878 MS	A3214		13:55
05		C156878 MSD	A3215		14:40
06		C156876 1:50	A3219		17:42
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page ___ of ___

Initial Calibration Data
HSL Compounds

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

Contractor: _____ Calibration Date: 05/26/94 _____

Contract No: _____

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

Laboratory ID:	)CA188	)CA192	)CA189	)CA190	)CA191					
Compound	RF 20.00	RF 50.00	RF 100.00	RF 150.00	RF 200.00	$\overline{RF}$	% RSD	CCC	SPCC	
Chloromethane	.43737	.35471	.32280	.33948	.32348	.35557	13.381		**	
Bromomethane	.66081	.51384	.43313	.42963	.38366	.48421	22.567			
Vinyl Chloride	.82266	.68804	.66692	.69629	.59598	.69398	11.824	*		
Chloroethane	.62186	.53671	.49524	.52618	.50253	.53650	9.435			
Methylene Chloride	1.40264	1.25213	1.16812	1.23393	1.20473	1.25231	7.174			
Acetone	.25155	.22850	.22214	.20462	.18411	.21818	11.642			
Carbon Disulfide	2.77747	2.47677	2.50659	2.68950	2.61047	2.61216	4.796			
Trichlorofluoromethane	3.13966	2.30703	2.61522	2.60274	2.45001	2.62293	12.014			
1,1-Dichloroethene	1.32172	1.17196	1.21500	1.25658	1.21233	1.23552	4.591	*		
1,1-Dichloroethane	2.95934	2.53767	2.63747	2.75866	2.62247	2.70312	6.048		**	
1,2-Dichloroethene	1.72835	1.52441	1.57470	1.64102	1.58556	1.61081	4.822			
Chloroform	3.74423	3.07449	3.30529	3.33612	3.23696	3.33942	7.422	*		
1,2-DICHLOROETHANE-d4	1.63672	1.64090	1.70423	1.70609	1.85744	1.70907	5.227			(Conc=50.0,50.0,50.0,50.0,50.0)
1,2-Dichloroethane	2.33866	2.01483	1.99983	1.95429	2.07338	2.07620	7.358			
2-Butanone	.25073	.25211	.21158	.22122	.24545	.23622	7.865			
1,1,1-Trichloroethane	.81772	.66041	.67525	.67959	.71132	.70886	8.975			
Carbon Tetrachloride	.65809	.52490	.55846	.56026	.57808	.57596	8.642			
Vinyl Acetate	.19130	.24771	.21678	.24104	.32589	.24454	20.694			
Bromodichloromethane	.86784	.78080	.75084	.74655	.83035	.79528	6.610			
1,2-Dichloropropane	.35314	.37199	.33272	.34685	.38095	.35713	5.432	*		
cis-1,3-Dichloropropene	.44658	.42339	.41315	.42070	.47309	.43538	5.628			(Conc=25.6,64.0,128.0,192.0,256.0
Trichloroethene	.47876	.41607	.41175	.42805	.44848	.43662	6.304			
Benzene	.95215	.90127	.84961	.89570	.93829	.90740	4.432			
Dibromochloromethane	.58375	.54581	.51217	.50712	.59204	.54818	7.169			
1,1,2-Trichloroethane	.28555	.28414	.25414	.24729	.29757	.27374	7.961			
trans-1,3-Dichloropropene	.60583	.59404	.56336	.56298	.66205	.59764	6.802			(Conc=14.4,36.0,72.0,108.0,144.0)
2-Chloroethyl Vinyl Ether	.11755	.13434	.12008	.11873	.15524	.12919	12.440			
Bromoform	.37496	.35339	.34523	.33344	.40659	.36272	7.948		**	
4-Methyl-2-Pentanone	.16958	.18695	.15824	.15799	.21065	.17668	12.653			
2-Hexanone	.10954	.12756	.10247	.10051	.13523	.11506	13.489			
Tetrachloroethene	.53769	.40914	.45072	.44422	.44641	.45764	10.431			
1,1,2,2,-Tetrachloroethane	.43496	.44607	.40068	.39667	.47296	.43027	7.440		**	

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

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

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

Initial Calibration Data
HSL Compounds

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

Contractor: _____ Calibration Date: 05/26/94 _____

Contract No: _____

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

Laboratory ID:	>CA188	>CA192	>CA189	>CA190	>CA191					
	RF	RF	RF	RF	RF					
Compound	20.00	50.00	100.00	150.00	200.00	$\overline{RF}$	% RSD	CCC	SPCC	
TOLUENE-d8	1.02803	1.05035	1.02114	1.04274	1.03410	1.03527	1.119			(Conc=50.0,50.0,50.0,50.0,50.0)
Toluene	.83993	.73931	.72053	.75097	.74891	.75993	6.095	*		
Chlorobenzene	1.04659	.91381	.91006	.94092	.95537	.95335	5.814		**	
Ethyl Benzene	.52270	.46155	.46841	.48546	.48105	.48383	4.907	*		
4-BROMOFLUOROBENZENE	.72282	.74864	.77384	.75868	.75892	.75258	2.513			(Conc=50.0,50.0,50.0,50.0,50.0)
Styrene	.91458	.85245	.80826	.86733	.88923	.86637	4.624			
Total Xylenes	.56651	.51857	.49523	.52295	.53940	.52853	5.006			
1,3-Dichlorobenzene	1.21496	1.04163	1.05657	1.08685	1.11996	1.10399	6.243			
1,2-Dichlorobenzene	.97153	.95973	.96356	.90691	.95523	.95139	2.688			
1,4-Dichlorobenzene	1.19009	1.07888	1.09248	1.12400	1.08153	1.11340	4.174			

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: GC/MSD-A

Contractor: Calibration Date: 06/02/94

Contract No:

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

Laboratory ID:	>CA198	>CA202	>CA199	>CA200	>CA201				
	RF	RF	RF	RF	RF				
Compound	20.00	50.00	100.00	150.00	200.00	$\overline{RF}$	% RSD	CCC	SPCC
Chloromethane	.36837	.37138	.33339	.38854	.32444	.35722	7.600		**
Bromomethane	.55317	.50651	.40454	.48858	.39967	.47049	14.189		
Vinyl Chloride	.62582	.63202	.60072	.69044	.63571	.63694	5.162	*	
Chloroethane	.48409	.50776	.46435	.52902	.48548	.49414	5.025		
Methylene Chloride	1.21781	1.13111	1.00222	1.16367	1.06235	1.11543	7.592		
Acetone	.15924	.13736	.14046	.14760	.17442	.15182	9.999		
Carbon Disulfide	2.24499	2.35347	2.26916	2.64063	2.39295	2.38024	6.620		
Trichlorofluoromethane	2.17827	2.20641	1.99855	2.33363	2.07203	2.15778	5.972		
1,1-Dichloroethene	1.02356	.91015	.90771	1.03759	.90587	.95698	7.041	*	
1,1-Dichloroethane	2.40184	2.33132	2.15461	2.53640	2.29242	2.34332	5.999		**
1,2-Dichloroethene	1.41221	1.25362	1.23875	1.44742	1.27017	1.32444	7.372		
Chloroform	3.16827	3.00283	2.82733	3.28502	3.09667	3.07602	5.627	*	
1,2-DICHLOROETHANE-d4	1.41320	1.51182	1.47401	1.68728	1.78400	1.57406	9.876		
1,2-Dichloroethane	1.86001	1.95249	1.88379	1.96016	2.08454	1.94820	4.495		
2-Butanone	.20931	.21366	.23287	.20605	.23938	.22025	6.771		
1,1,1-Trichloroethane	.80849	.79008	.75990	.80076	.84248	.80034	3.739		
Carbon Tetrachloride	.65279	.64207	.62473	.67306	.70543	.65962	4.704		
Vinyl Acetate	.15952	.20792	.25106	.20784	.30610	.22649	24.303		
Bromodichloromethane	.86902	.85432	.86688	.86871	.96133	.88405	4.934		
1,2-Dichloropropane	.34907	.35427	.34871	.36016	.38278	.35900	3.923	*	
cis-1,3-Dichloropropene	.40803	.41613	.43542	.43337	.47768	.43413	6.207		(Conc=25.6,64.0,128.0,192.0,256.0
Trichloroethene	.45705	.43873	.44207	.45422	.47144	.45270	2.882		
Benzene	.89362	.86729	.86568	.89673	.91233	.88713	2.271		
Dibromochloromethane	.61350	.65608	.66937	.62929	.74025	.66170	7.417		
1,1,2-Trichloroethane	.29265	.30034	.30542	.27614	.31673	.29826	5.077		
trans-1,3-Dichloropropene	.57136	.59252	.63059	.60344	.70379	.62034	8.270		(Conc=14.4,36.0,72.0,108.0,144.0)
2-Chloroethyl Vinyl Ether	.10027	.11574	.13907	.12119	.15634	.12652	17.135		
Bromoform	.41260	.45626	.49260	.43027	.53882	.46611	10.851		**
4-Methyl-2-Pentanone	.14808	.16166	.20018	.16601	.21797	.17878	16.290		
2-Hexanone	.08525	.11380	.12179	.11320	.13114	.11304	15.175		
Tetrachloroethene	.56195	.49544	.50379	.53956	.52329	.52480	5.134		
1,1,2,2,-Tetrachloroethane	.42023	.44981	.48214	.41126	.48451	.44959	7.551		**

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

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

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

Initial Calibration Data
HSL Compounds

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

Contractor: _____ Calibration Date: 06/02/94 _____

Contract No: _____

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

Laboratory ID:	>CA198	>CA202	>CA199	>CA200	>CA201				
	RF	RF	RF	RF	RF				
Compound	20.00	50.00	100.00	150.00	200.00	$\overline{RF}$	% RSD	CCC	SPCC
TOLUENE-d8	.98763	.95026	.98998	1.01424	.96723	.98187	2.474		
Toluene	.74942	.69018	.68644	.73562	.70220	.71277	3.956	*	
Chlorobenzene	1.04244	.94051	.93936	.99282	.94786	.97260	4.608		**
Ethyl Benzene	.50363	.46150	.47102	.51079	.49596	.48858	4.361	*	
4-BROMOFLUOROBENZENE	.73809	.68788	.72557	.73965	.70420	.71908	3.126		
Styrene	.78829	.83950	.85964	.89962	.91523	.86046	5.863		
Total Xylenes	.49149	.51888	.51978	.55622	.54586	.52645	4.830		
1,3-Dichlorobenzene	1.27547	1.27882	1.26353	1.37562	1.37090	1.31287	4.224		
1,2-Dichlorobenzene	1.12103	1.16397	1.16777	1.05521	1.05192	1.11198	5.073		
1,4-Dichlorobenzene	1.32846	1.25575	1.31204	1.22297	1.25038	1.27392	3.490		

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 05/26/94

Contractor: Time: 15:27

Contract No: Laboratory ID: >CA192

Instrument ID: GC/MSD-A Initial Calibration Date: 05/26/94

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

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Chloromethane	.35557	.35471	.24		**	
Bromomethane	.48421	.51384	6.12			
Vinyl Chloride	.69398	.68804	.86	*		
Chloroethane	.53650	.53671	.04			
Methylene Chloride	1.25231	1.25213	.01			
Acetone	.21818	.22850	4.73			
Carbon Disulfide	2.61216	2.47677	5.18			
Trichlorofluoromethane	2.62293	2.30703	12.04			
1,1-Dichloroethene	1.23552	1.17196	5.14	*		
1,1-Dichloroethane	2.70312	2.53767	6.12		**	
1,2-Dichloroethene	1.61081	1.52441	5.36			
Chloroform	3.33942	3.07449	7.93	*		
1,2-DICHLOROETHANE-d4	1.70907	1.64090	3.99			
1,2-Dichloroethane	2.07620	2.01483	2.96			
2-Butanone	.23622	.25211	6.73			
1,1,1-Trichloroethane	.70886	.66041	6.83			
Carbon Tetrachloride	.57596	.52490	8.87			
Vinyl Acetate	.24454	.24771	1.29			
Bromodichloromethane	.79528	.78080	1.82			
1,2-Dichloropropane	.35713	.37199	4.16	*		
cis-1,3-Dichloropropene	.43538	.42339	2.75			(Conc=64.00)
Trichloroethene	.43662	.41607	4.71			
Benzene	.90740	.90127	.68			
Dibromochloromethane	.54818	.54581	.43			
1,1,2-Trichloroethane	.27374	.28414	3.80			
trans-1,3-Dichloropropene	.59764	.59404	.60			(Conc=36.00)
2-Chloroethyl Vinyl Ether	.12919	.13434	3.99			
Bromoform	.36272	.35339	2.57		**	
4-Methyl-2-Pentanone	.17668	.18695	5.81			
2-Hexanone	.11506	.12756	10.86			
Tetrachloroethene	.45764	.40914	10.60			
1,1,2,2,-Tetrachloroethane	.43027	.44607	3.67		**	

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

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

%Diff - % Difference from original average or curve

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

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 05/26/94

Contractor: Time: 15:27

Contract No: Laboratory ID: >CA192

Instrument ID: GC/MSD-A Initial Calibration Date: 05/26/94

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

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
TOLUENE-d8	1.03527	1.05035	1.46		
Toluene	.75993	.73931	2.71	*	
Chlorobenzene	.95335	.91381	4.15		**
Ethyl Benzene	.48383	.46155	4.61	*	
4-BROMOFLUOROBENZENE	.75258	.74864	.52		
Styrene	.86637	.85245	1.61		
Total Xylenes	.52853	.51857	1.89		
1,3-Dichlorobenzene	1.10399	1.04163	5.65		
1,2-Dichlorobenzene	.95139	.95973	.88		
1,4-Dichlorobenzene	1.11340	1.07888	3.10		

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

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

%Diff - % Difference from original average or curve

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

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 06/02/94

Contractor: Time: 11:03

Contract No: Laboratory ID: >CA202

Instrument ID: GC/MSD-A Initial Calibration Date: 06/02/94

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

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Chloromethane	.35722	.37138	3.96		**	
Bromomethane	.47049	.50651	7.66			
Vinyl Chloride	.63694	.63202	.77	*		
Chloroethane	.49414	.50776	2.76			
Methylene Chloride	1.11543	1.13111	1.41			
Acetone	.15182	.13736	9.52			
Carbon Disulfide	2.38024	2.35347	1.12			
Trichlorofluoromethane	2.15778	2.20641	2.25			
1,1-Dichloroethene	.95698	.91015	4.89	*		
1,1-Dichloroethane	2.34332	2.33132	.51		**	
1,2-Dichloroethene	1.32444	1.25362	5.35			
Chloroform	3.07602	3.00283	2.38	*		
1,2-DICHLOROETHANE-d4	1.57406	1.51182	3.95			
1,2-Dichloroethane	1.94820	1.95249	.22			
2-Butanone	.22025	.21366	2.99			
1,1,1-Trichloroethane	.80034	.79008	1.28			
Carbon Tetrachloride	.65962	.64207	2.66			
Vinyl Acetate	.22649	.20792	8.20			
Bromodichloromethane	.88405	.85432	3.36			
1,2-Dichloropropane	.35900	.35427	1.32	*		
cis-1,3-Dichloropropene	.43413	.41613	4.14			(Conc=64.00)
Trichloroethene	.45270	.43873	3.09			
Benzene	.88713	.86729	2.24			
Dibromochloromethane	.66170	.65608	.85			
1,1,2-Trichloroethane	.29826	.30034	.70			
trans-1,3-Dichloropropene	.62034	.59252	4.48			(Conc=36.00)
2-Chloroethyl Vinyl Ether	.12652	.11574	8.52			
Bromoform	.46611	.45626	2.11		**	
4-Methyl-2-Pentanone	.17878	.16166	9.58			
2-Hexanone	.11304	.11380	.68			
Tetrachloroethene	.52480	.49544	5.60			
1,1,2,2,-Tetrachloroethane	.44959	.44981	.05		**	

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

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

%Diff - % Difference from original average or curve

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

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 06/02/94

Contractor: Time: 11:03

Contract No: Laboratory ID: XCA202

Instrument ID: GC/MSD-A Initial Calibration Date: 06/02/94

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

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
TOLUENE-d8	.98187	.95026	3.22		
Toluene	.71277	.69018	3.17	*	
Chlorobenzene	.97260	.94051	3.30		**
Ethyl Benzene	.48858	.46150	5.54	*	
4-BROMOFLUOROBENZENE	.71908	.68788	4.34		
Styrene	.86046	.83950	2.44		
Total Xylenes	.52645	.51888	1.44		
1,3-Dichlorobenzene	1.31287	1.27882	2.59		
1,2-Dichlorobenzene	1.11198	1.16397	4.68		
1,4-Dichlorobenzene	1.27392	1.25575	1.43		

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

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

%Diff - % Difference from original average or curve

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

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 06/06/94

Contractor: Time: 09:21

Contract No: Laboratory ID: >VA288

Instrument ID: GC/MSD-A Initial Calibration Date: 06/02/94

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

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Chloromethane	.35722	.32243	9.74		**	
Bromomethane	.47049	.57545	22.31			
Vinyl Chloride	.63694	.64805	1.74	*		
Chloroethane	.49414	.55467	12.25			
Methylene Chloride	1.11543	1.18494	6.23			
Acetone	.15182	.15893	4.68			
Carbon Disulfide	2.38024	2.39270	.52			
Trichlorofluoromethane	2.15778	1.70474	21.00			
1,1-Dichloroethene	.95698	.89806	6.16	*		
1,1-Dichloroethane	2.34332	2.50234	6.79		**	
1,2-Dichloroethene	1.32444	1.40177	5.84			
Chloroform	3.07602	3.37905	9.85	*		
1,2-DICHLOROETHANE-d4	1.57406	1.64207	4.32			
1,2-Dichloroethane	1.94820	2.11420	8.52			
2-Butanone	.22025	.21631	1.79			
1,1,1-Trichloroethane	.80034	.71422	10.76			
Carbon Tetrachloride	.65962	.54565	17.28			
Vinyl Acetate	.22649	.12526	44.70			
Bromodichloromethane	.88405	.79388	10.20			
1,2-Dichloropropane	.35900	.33810	5.82	*		
cis-1,3-Dichloropropene	.43413	.40428	6.88			(Conc=64.00)
Trichloroethene	.45270	.43654	3.57			
Benzene	.88713	.85406	3.73			
Dibromochloromethane	.66170	.54614	17.46			
1,1,2-Trichloroethane	.29826	.27794	6.81			
trans-1,3-Dichloropropene	.62034	.55443	10.63			(Conc=36.00)
2-Chloroethyl Vinyl Ether	.12652	.11758	7.07			
Bromoform	.46611	.40465	13.19		**	
4-Methyl-2-Pentanone	.17878	.16391	8.32			
2-Hexanone	.11304	.10428	7.75			
Tetrachloroethene	.52480	.52826	.66			
1,1,2,2,-Tetrachloroethane	.44959	.40610	9.67		**	

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

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

%Diff - % Difference from original average or curve

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

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 06/06/94

Contractor: Time: 09:21

Contract No: Laboratory ID: >VA288

Instrument ID: GC/MSD-A Initial Calibration Date: 06/02/94

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

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
TOLUENE-d8	.98187	1.01180	3.05		
Toluene	.71277	.73782	3.51	*	
Chlorobenzene	.97260	.99574	2.38		**
Ethyl Benzene	.48858	.51816	6.05	*	
4-BROMOFLUOROBENZENE	.71908	.75613	5.15		
Styrene	.86046	.85448	.69		
Total Xylenes	.52645	.51794	1.62		
1,3-Dichlorobenzene	1.31287	1.18436	9.79		
1,2-Dichlorobenzene	1.11198	1.15308	3.70		
1,4-Dichlorobenzene	1.27392	1.20491	5.42		

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 (**)

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

e: Heritage Labs Contract: _____

ode: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

b File ID (Standard): CA192 Date Analyzed: 5/26/94

strument ID: HP5970-49 Time Analyzed: 15:27

trix: (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	52581	9.27	223225	19.64	194704	24.45
UPPER LIMIT	105162		446450		389408	
LOWER LIMIT	26290		111612		97352	
EPA SAMPLE NO.						
01 Lab Blank	46288	9.29	193041	19.66	166762	24.41
C156879	47215	9.26	192167	19.63	168383	24.44
03 C156880	41403	9.28	159735	19.65	146843	24.45
04 C156881	41532	9.32	160293	19.63	143495	24.44
05 C156882	42150	9.27	177532	19.58	154503	24.38
06 C156877	45091	9.27	189323	19.64	163870	24.44
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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

Page ___ of ___

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Heritage Labs Contract: _____

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

Lab File ID (Standard): CA202 Date Analyzed: 6/2/94

Instrument ID: HP5970-49 Time Analyzed: 11:03

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	39989	9.26	143847	19.63	124758	24.44
UPPER LIMIT	79978		287694		249516	
LOWER LIMIT	19994		71924		62379	
EPA SAMPLE NO.						
01 Lab Blank	40993	9.27	137892	19.63	121380	24.44
02 C156876 1:10	31888	9.26	115568	19.63	104147	24.43
03 C156877 1:5	33146	9.27	119824	19.64	107118	24.44
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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

page ___ of ___

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Heritage Labs Contract: _____

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

Lab File ID (Standard): VA288 Date Analyzed: 6/6/94

Instrument ID: HP5970-49 Time Analyzed: 9:21

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	78389	9.32	336249	19.69	282447	24.50
UPPER LIMIT	156778		672498		564894	
LOWER LIMIT	39194		168124		141224	
EPA SAMPLE NO.						
01 Lab Blank	86812	9.32	349417	19.69	298992	24.50
02 C156878	65903	9.32	243403	19.68	214238	24.49
03 C156878 MS	69202	9.34	262332	19.66	227428	24.52
04 C156878 MSD	66147	9.32	252274	19.68	224657	24.49
05 C156876	52785	9.32	195926	19.68	169455	24.49
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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

page ___ of ___

QUANT REPORT

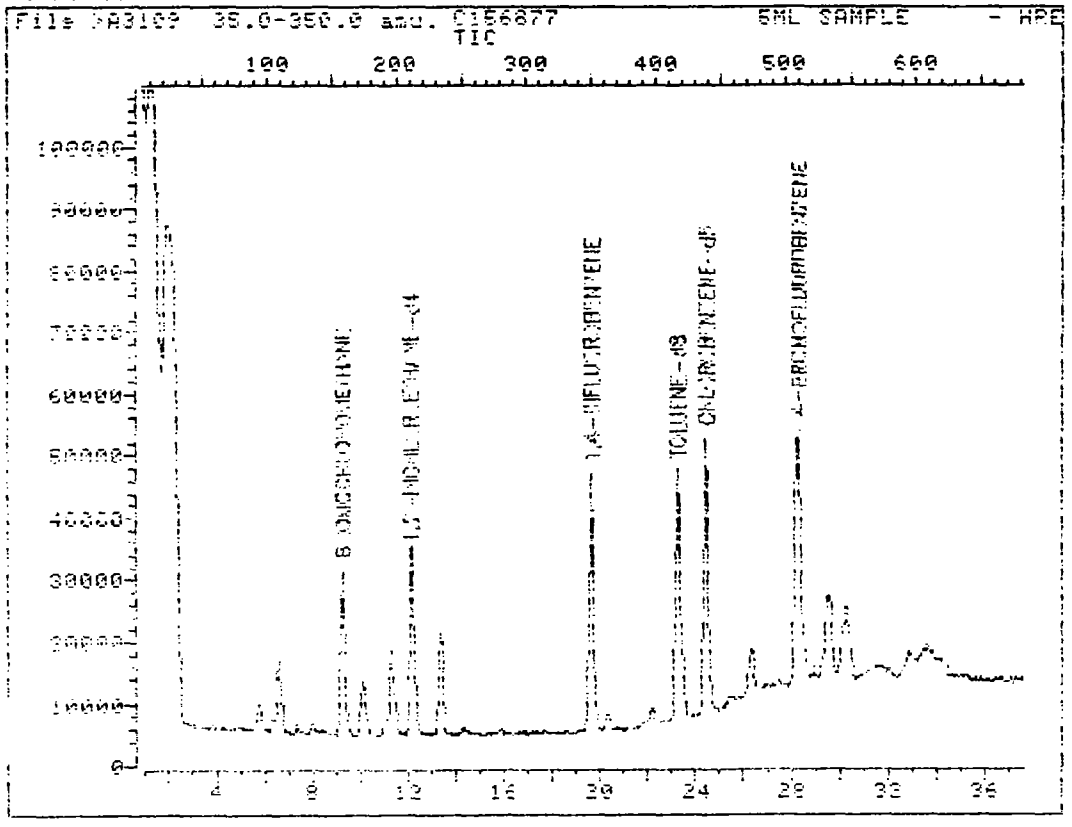
Operator ID: USER8 Quant Rev: 6 Quant Time: 940526 18:22
Output File: ^A3109::D4 Injected at: 940526 17:43
Data File: >A3109::E7 Dilution Factor: 1.00000
Name: C156877 Rep. Φ
Misc: 5ML SAMPLE HRE/BM

ID File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 940526 16:28

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.27	128.0	45091	50.00	UG/L	100
7)	Methylene Chloride	5.76	84.0	9454	8.37	UG/L	100
8)	Acetone	6.57	43.0	97142	471.40	UG/L	92
10)	Carbon Disulfide	7.38	76.0	14632	6.55	UG/L	94
14)	1,1-Dichloroethane	10.02	63.0	23902	10.44	UG/L	95
15)	Tetrahydrofuran	10.13	42.0	25494	256.68	UG/L	97
17)	Chloroform	11.48	83.0	18306	6.60	UG/L	98
18)	1,2-DICHLOROETHANE-d4	12.13	65.0	70700	47.78	UG/L	99
20)	2-Butanone	12.18	43.0	145508	640.01	UG/L	83
2	*1,4-DIFLUOROBENZENE	19.64	114.0	189323	50.00	UG/L	86
2	1,1,1-Trichloroethane	13.37	97.0	58500	23.39	UG/L	96
35)	*CHLOROBENZENE-d5	24.44	117.0	163870	50.00	UG/L	87
36)	4-Methyl-2-Pentanone	20.28	43.0	11555	18.86	UG/L	97
38)	Tetrachloroethene	22.17	164.0	4764	3.55	UG/L	94
40)	TOLUENE-d8	23.25	98.0	171922	49.94	UG/L	97
41)	Toluene	23.42	92.0	22298	9.20	UG/L	96
43)	Ethyl Benzene	26.33	106.0	11070	7.32	UG/L	92
	4-BROMOFLUOROBENZENE	28.28	95.0	131418	53.56	UG/L	100
	Total Xylenes	30.28	106.0	36999	21.77	UG/L	96

* Compound is ISTD

TOTAL ION CHROMATOGRAM

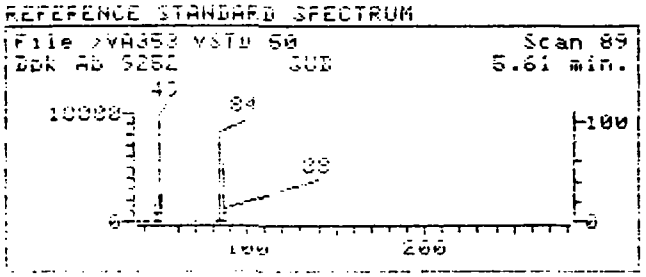


Data File: >A3109::E7 Quant Output File: ^A3109::SS
Name: C156877 Rep. Ø
Misc: 5ML SAMPLE - HRE/HM

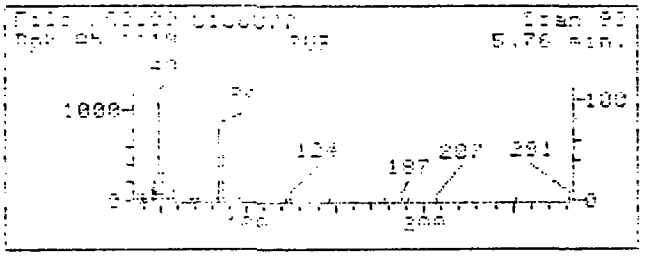
Id File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 940526 16:28

Operator ID: USER8
Quant Time: 940526 18:22
Injected at: 940526 17:43

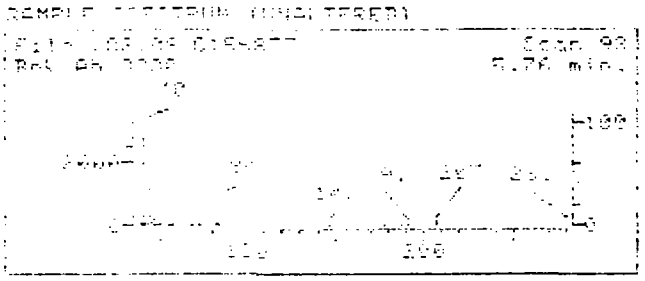
REFERENCE STANDARD SPECTRUM

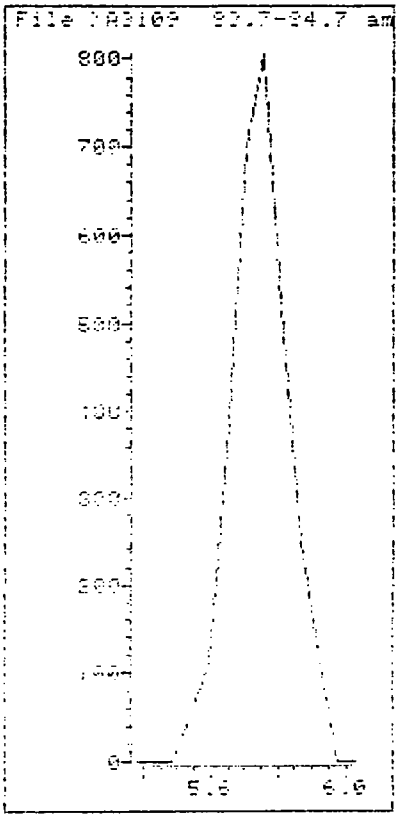


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





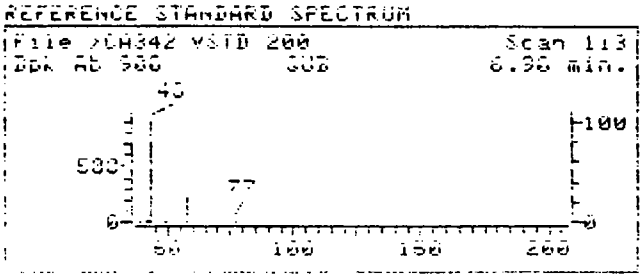
Data File: >A3109::F7
Name: [illegible] Rep.Φ
Misc: 5ML SAMPLE - HPE/RM
Quant Time: 940526 18:22
Injected at: 940526 17:43

Quant Output File: ^A3109::SS
Quant ID File: IDWVOC::D5
Last Calibration: 940526 16:28

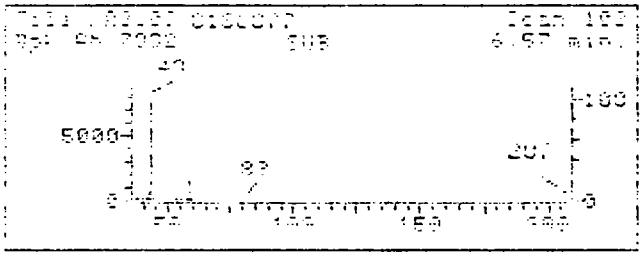
Compound No: 7
Compound Name: Methylene Chloride
Scan Number: 93
Retention Time: 5.76 min.
Quant Ion: 84.0
Area: 9454
Concentration: 8.37 UG/L
n-value: 100

SS

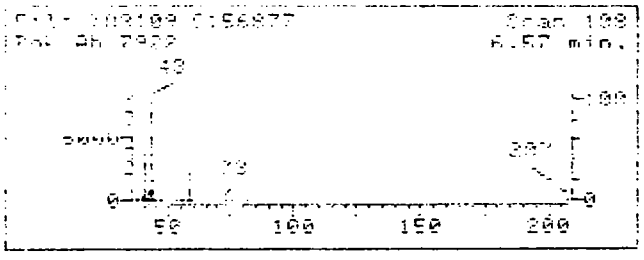
REFERENCE STANDARD SPECTRUM

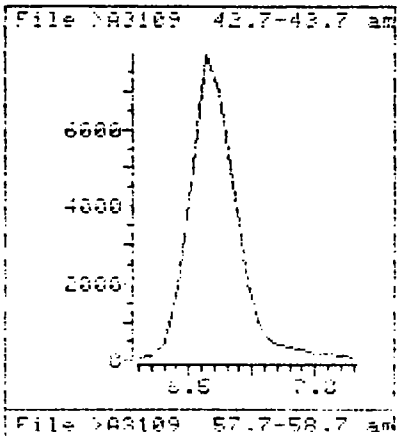


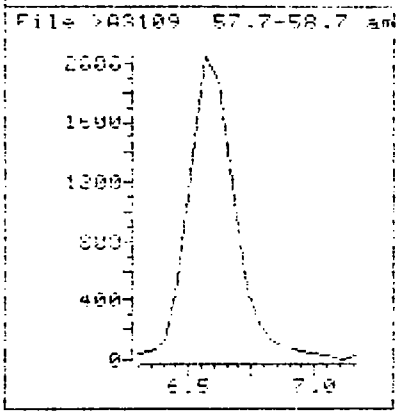
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >A3109::E7
Name: C156877 Rep. Φ
Misc: 5ML SAMPLE - HRE/RM
Quant Time: 940526 18:22
Injected at: 940526 17:43

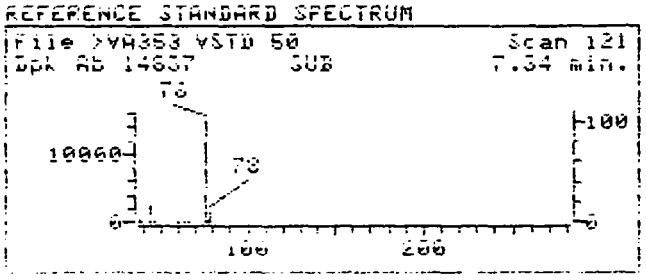
Quant Output File: ^A3109::SS

Quant ID File: IDWVOC::D5
Last Calibration: 940526 16:28

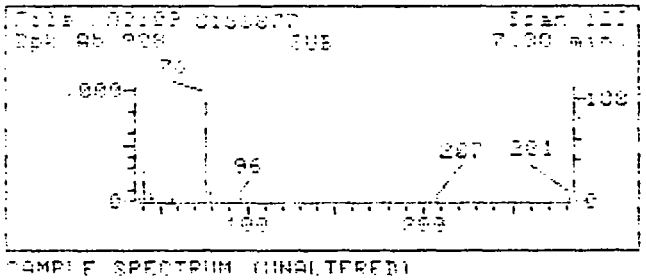
Compound No: 8
Compound Name: Acetone
Scan Number: 108
Retention Time: 6.57 min.
Quant Ion: 43.0
Area: 97142
Concentration: 471.40 UG/L ✓ Redo
q-value: 92

SKS

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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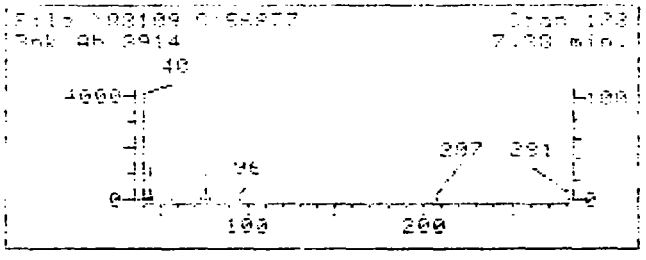
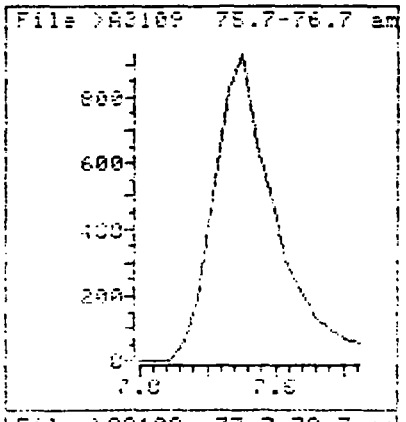
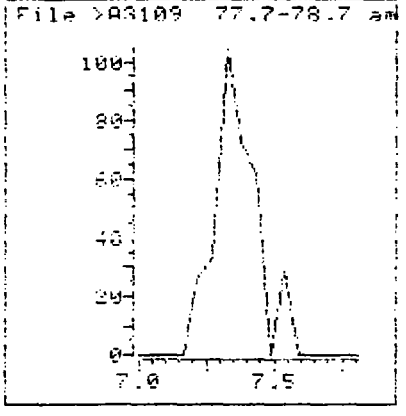






Data File: >A3109::E7
Name: U156877 Rep. Φ
Misc: 5ML SAMPLE - HRE/HM
Quant Time: 940526 18:22
Injected at: 940526 17:43

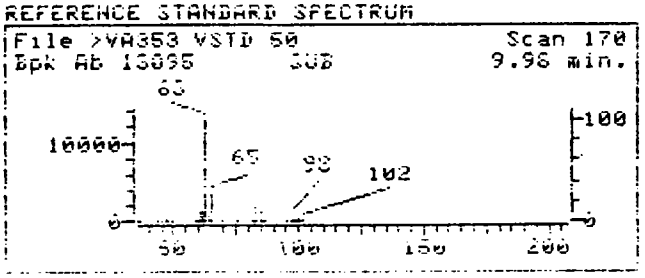
Quant Output File: ^A3109::SS

Quant ID File: [illegible]::05
Last Calibration: 940526 16:08

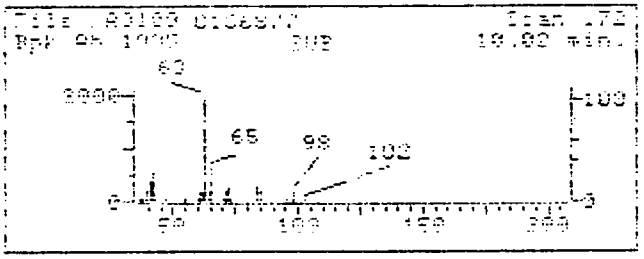
Compound No: 10
Compound Name: Carbon Disulfide
Scan Number: 123
Retention Time: 7.38 min.
Quant Ion: 76.0
Area: 14632
Concentration: 6.55 UG/L
q-value: 94

SS

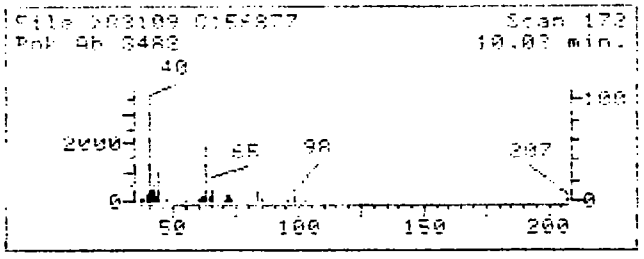
REFERENCE STANDARD SPECTRUM

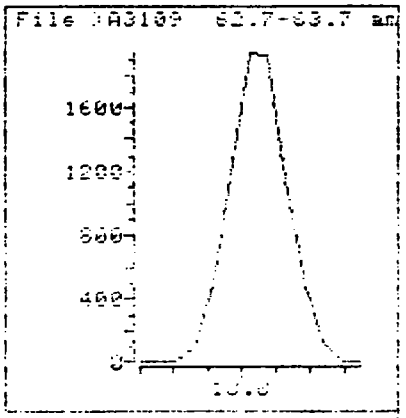


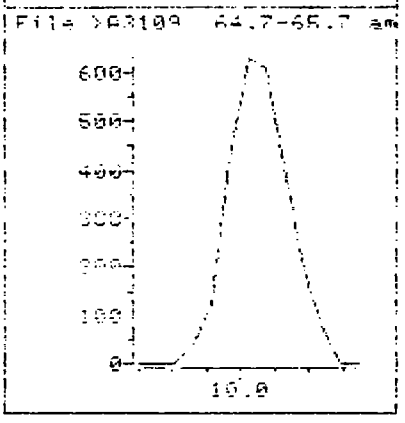
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





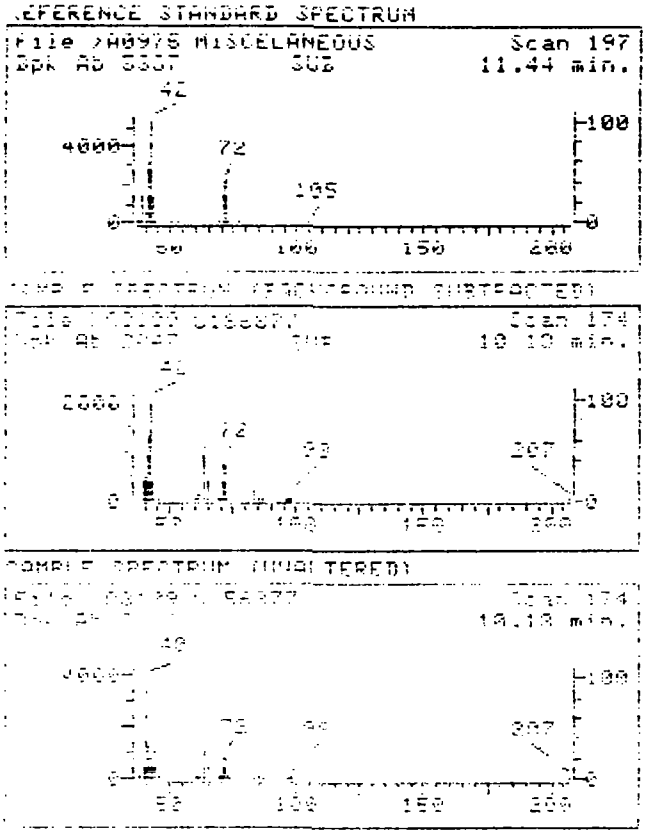


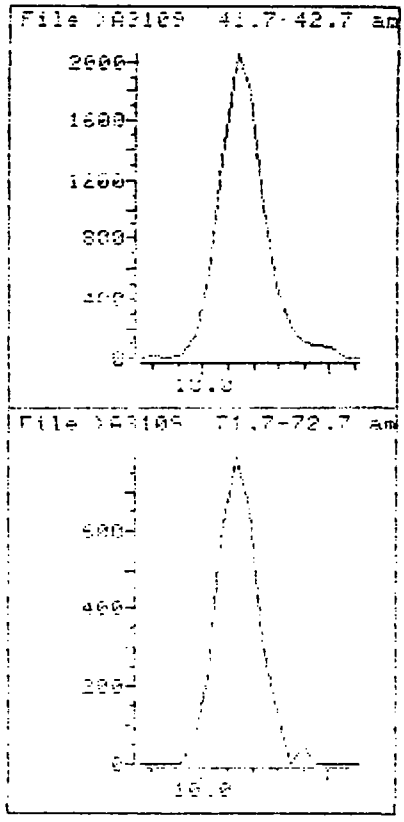
Data File: >A3109::57
Name: C156877 Rep. Φ
Misc: 5ML SAMPLE - HRE/HM
Quant Time: 940526 18:22
Injected at: 940526 17:43

Quant Output File: >A3109::SS
Quant ID File: 10WVOC::05
Last Calibration: 940526 16:28

Compound No: 14
Compound Name: 1,1-Dichloroethane
Scan Number: 172
Retention Time: 10.02 min.
Quant Ion: 63.0
Area: [illegible]
Concentration: 10.44 UG/L
q-value: 95

✓
SLS





Data File: >A3109::E7
Name: [illegible] Rep. 0
Misc: [illegible] SAMPLE - HRE/RM
Quant Time: 940526 18:22
Injected at: 940526 17:43

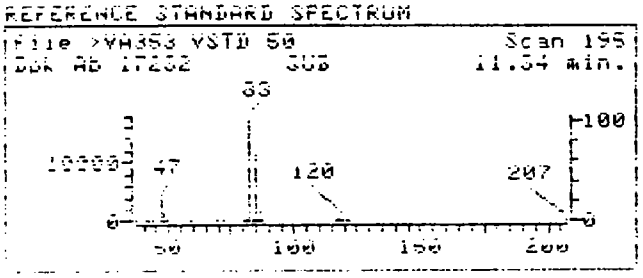
Quant Output File: ^A3109::SS

Quant ID File: IDWVOC::D5
Last Calibration: 940526 16:28

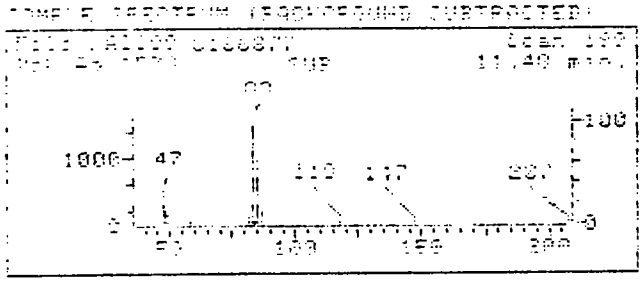
Compound No: 15
Compound Name: Tetrahydrofuran
Scan Number: 174
Retention Time: 10.13 min.
Quant Ion: 42.0
Area: 25494
Concentration: 256.68 UG/L
n-value: 97

✓ Rdo
SKS

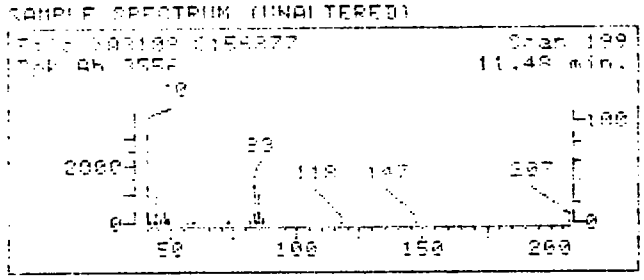
REFERENCE STANDARD SPECTRUM

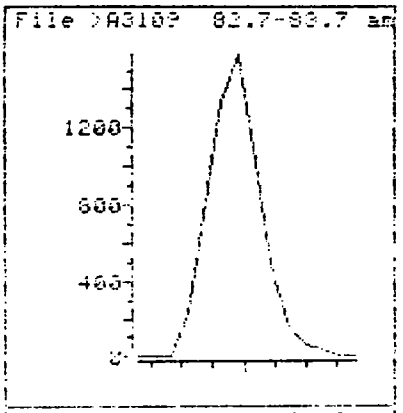


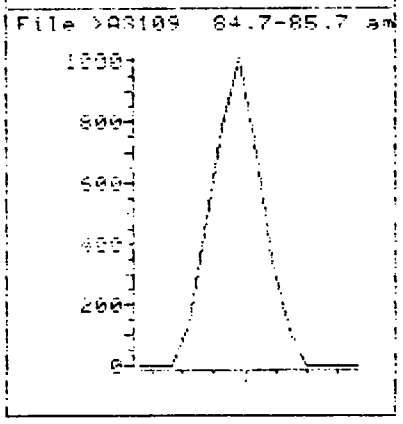
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >A3109::E7
Name: C156877 Rep. Φ
Misc: 5ML SAMPLE - HRE/HM
Quant Time: 940526 18:22
Injected at: 940526 17:43

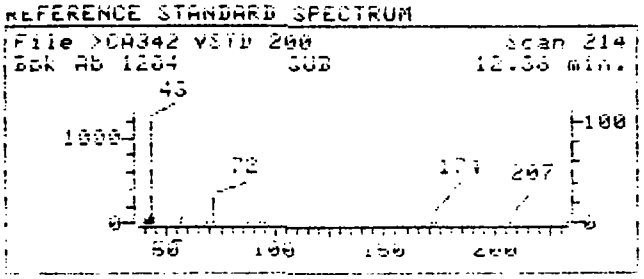
Quant Output File: ^A3109::SS

Quant ID File: 1DWVOC::D5
Last Calibration: 940526 16:28

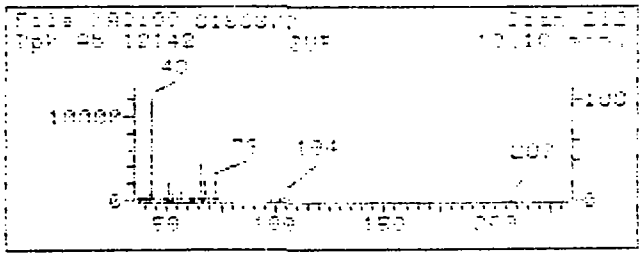
Compound No: 17
Compound Name: Chloroform
Scan Number: 199
Retention Time: 11.48 min.
Quant Ion: 83.0
Area: 18306
Concentration: 6.60 UG/L
q-value: 98

SS

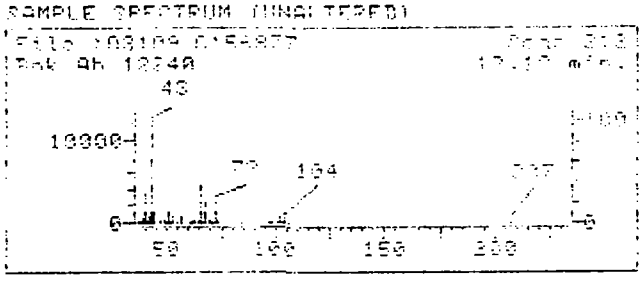
REFERENCE STANDARD SPECTRUM

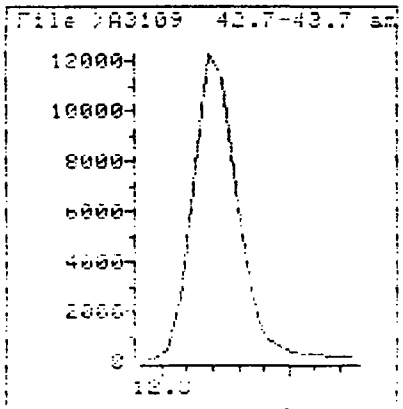


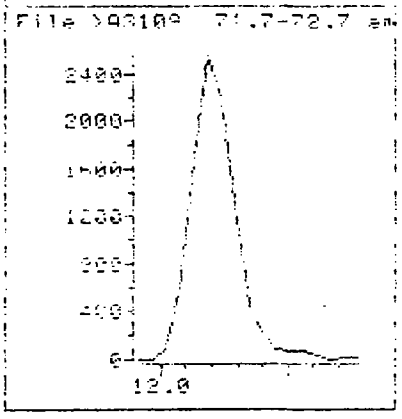
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: [illegible]
Name: C156872 Rep. ϕ
Misc: 5ML SAMPLE - [illegible]
Quant Time: 940526 [illegible]
Injected at: 940526 [illegible]

Quant Output File: [illegible]

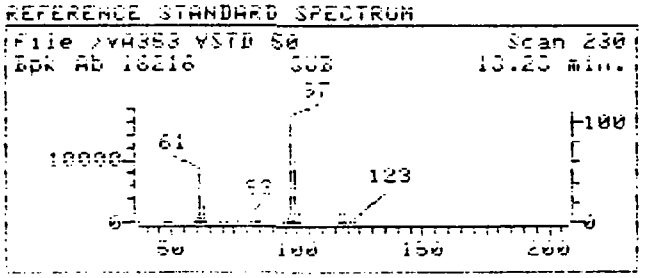
Quant ID File: [illegible]
Last Calibration: 940526 16:28

Compound No: [illegible]
Compound Name: 2-Butanone
Scan Number: 212
Retention Time: 12.[illegible]8 min.
Quant Ion: 43.0
Area: 14[illegible]
Concentration: 640.0[illegible] UG/L
q-value: 83

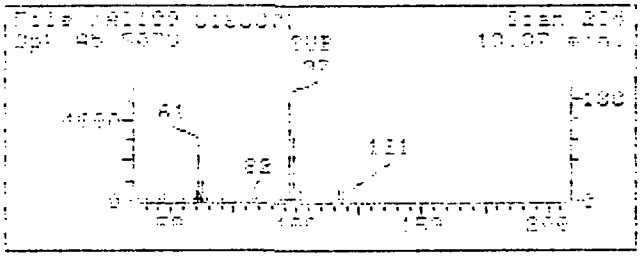
SKS Redo

000742

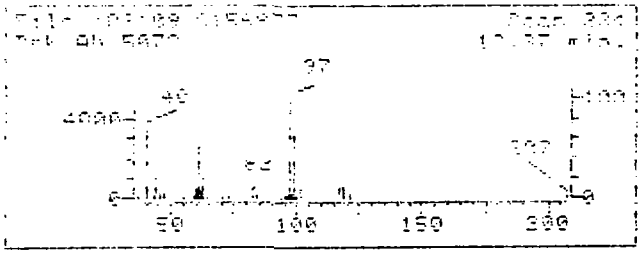
REFERENCE STANDARD SPECTRUM

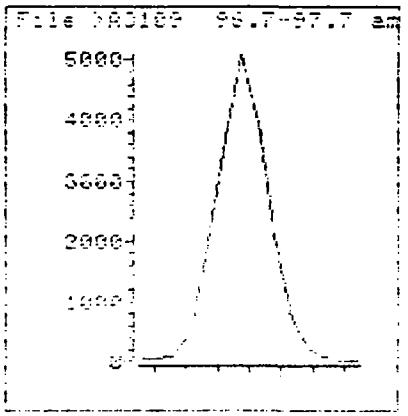


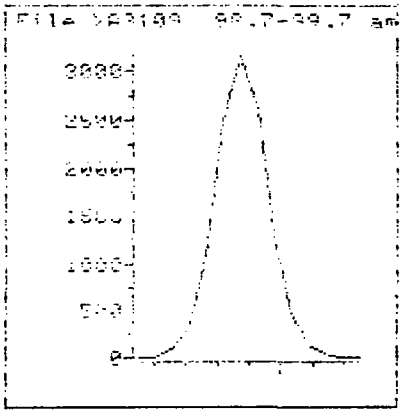
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







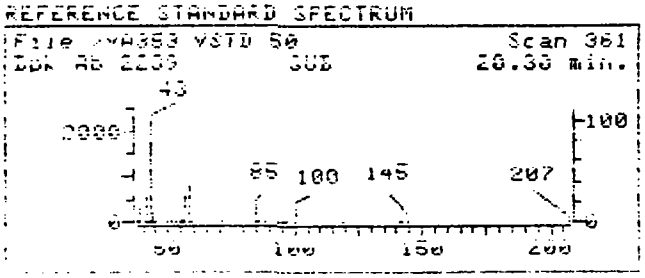
Data File: >A3109::57
Name: C156877 Rep. 0
Misc: 5ML SAMPLE - HPE/HM
Quant Time: 940526 18:22
Injected at: 940526 17:43

Quant Output File: ^A3109::SS
Quant ID File: IDWVOC::05
Last Calibration: 940526 16:28

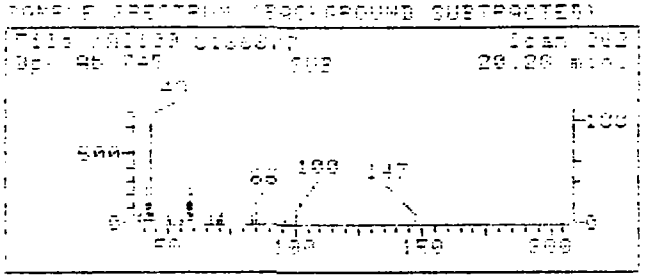
Compound No: 22
Compound Name: 1,1,1-Trichloroethane
Scan Number: 234
Retention Time: 13.37 min.
Quant Ion: 97.0
Area: 58500
Concentration: 23.39 UG/L
q-value: 96

SKS

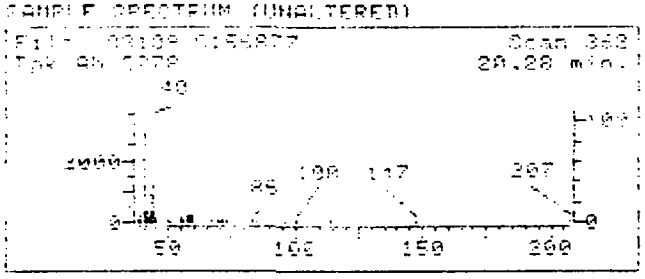
REFERENCE STANDARD SPECTRUM

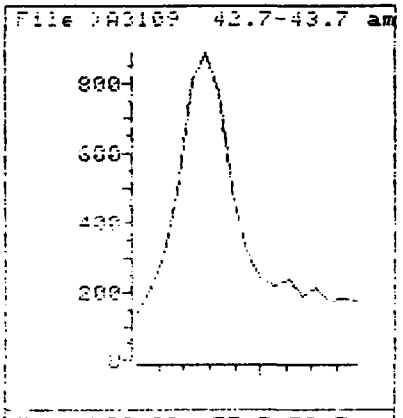


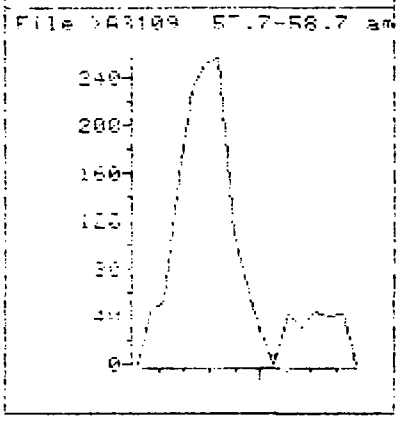
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





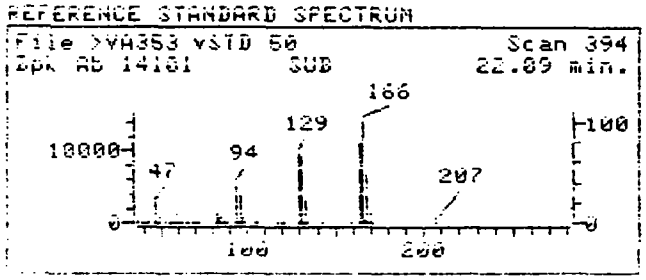


Data File: >A3109::E7 Quant Output File: ^A3109::SS
Name: C156877 Rep. 6
Misc: 5ML SAMPLE - HPE/BM
Quant Time: 940526 18:22 Quant ID File: IDWVOC::05
Injected at: 940526 17:43 Last Calibration: 940526 16:08

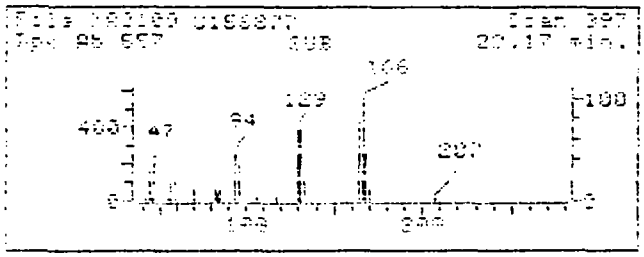
Compound No: 36
Compound Name: 4-Methyl-2-Pentanone
Scan Number: 362
Retention Time: 20.28 min.
Quant Ion: 43.0
Area: 11555
Concentration: 18.86 UG/L
q-value: 97

SKS

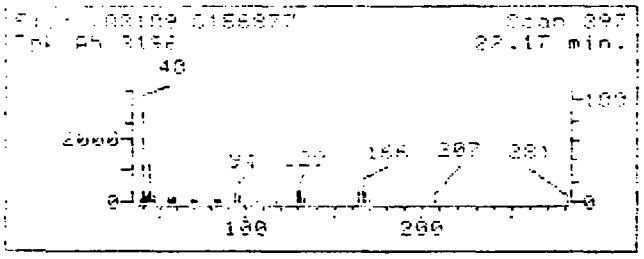
REFERENCE STANDARD SPECTRUM

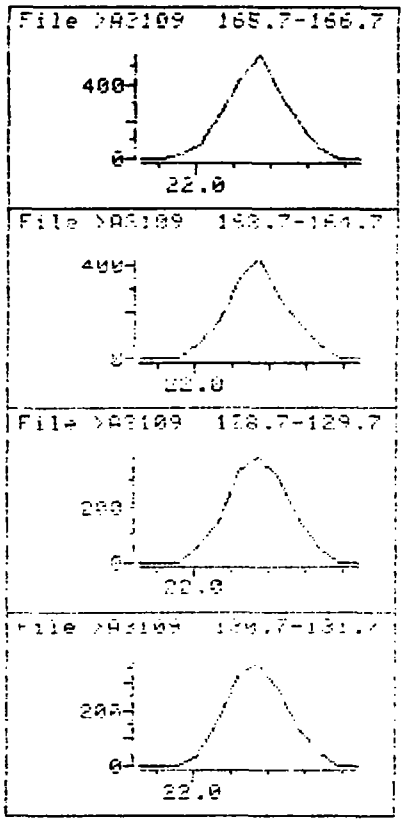


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





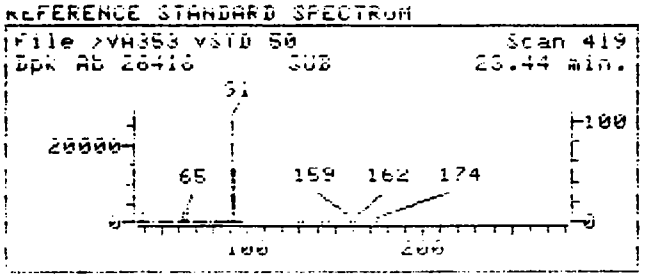
Data File: ^A3109::E7
Name: C156877 Rep.Φ
Misc: 5ML SAMPLE - HRE/BM
Quant Time: 940526 18:22
Injected at: 940526 17:43

Quant Output File: ^A3109::SS
Quant ID File: 10WVUC::D5
Last Calibration: 940526 16:28

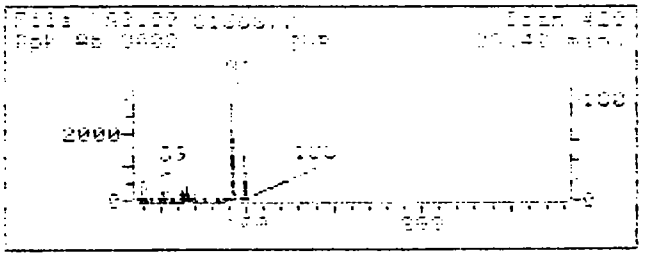
Compound No: 38
Compound Name: Tetrachloroethene
Scan Number: 397
Retention Time: 22.17 min.
Quant Ion: 164.0
Area: 4764
Concentration: 3.55 UG/L
q-value: 94

SKS

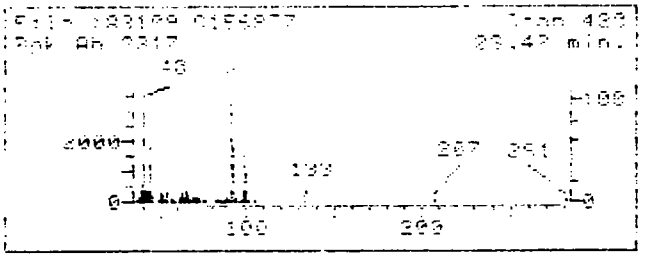
REFERENCE STANDARD SPECTRUM

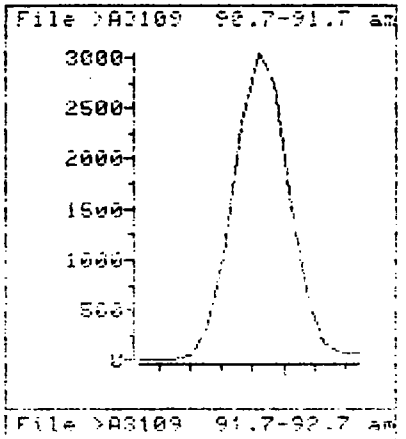


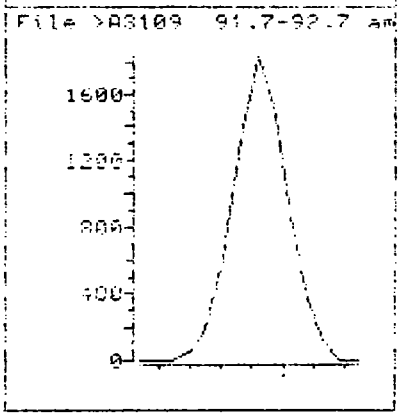
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >A3109::E7
Name: C196877 Rep 0
Misc: 5ML SAMPLE - HHE/BM
Quant Time: 940926 18:22
Injected at: 940526 17:43

Quant Output File: ^A3109::SS

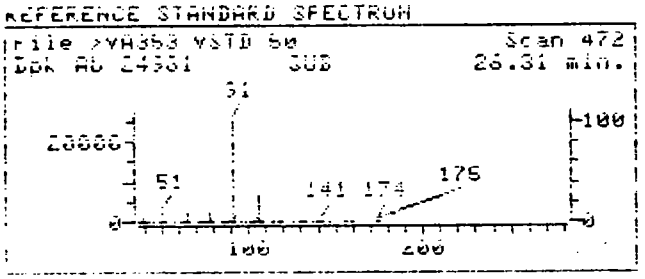
Quant ID File: IDWVOC::D5
Last Calibration: 940526 16:28

Compound No: 41
Compound Name: Toluene
Scan Number: 420
Retention Time: 23.42 min.
Quant Ion: 91.0
Area: 22298
Concentration: 9.20 UG/L
q-value: 96

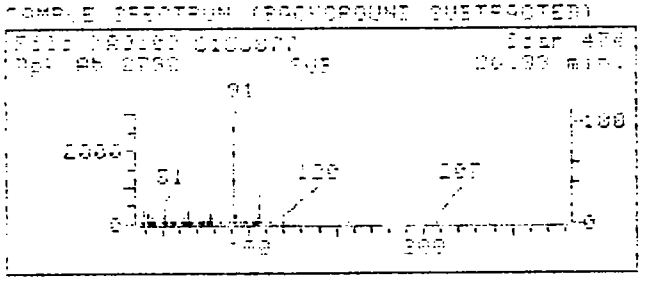
SS

000746

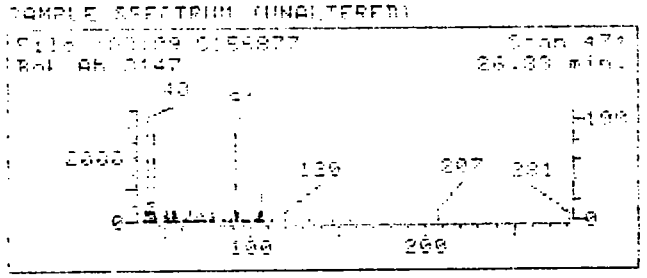
REFERENCE STANDARD SPECTRUM

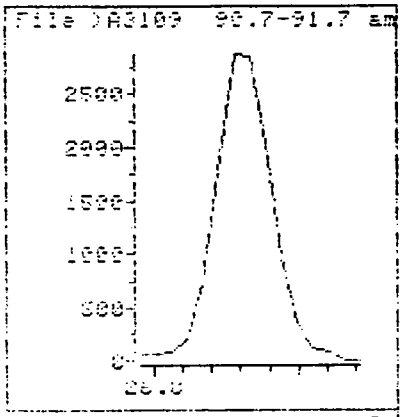


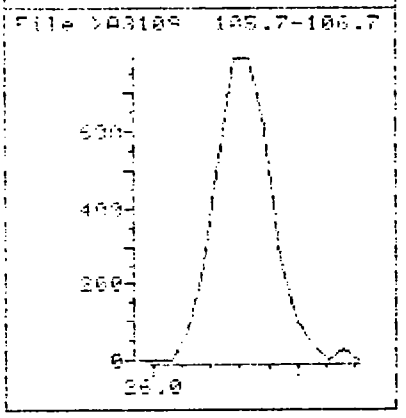
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >A3109::E7
Name: C156877 Rep. 0
Misc: 5ML SAMPLE - HRE/BM
Quant Time: 940526 18:22
Injected at: 940526 17:43

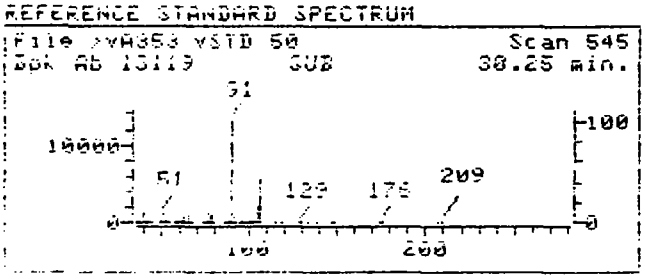
Quant Output File: ^A3109::SS

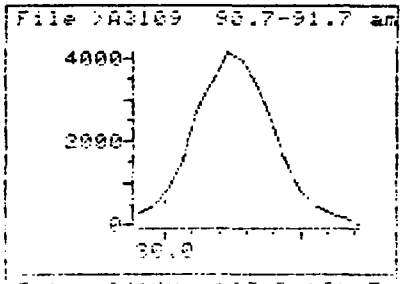
Quant ID File: IDWVOC::D5
Last Calibration: 940526 16:28

Compound No: 43
Compound Name: Ethyl Benzene
Scan Number: 474
Retention Time: 26.33 min.
Quant Ion: 106.0
Area: 11070
Concentration: 7.32 UG/L
q-value: 92

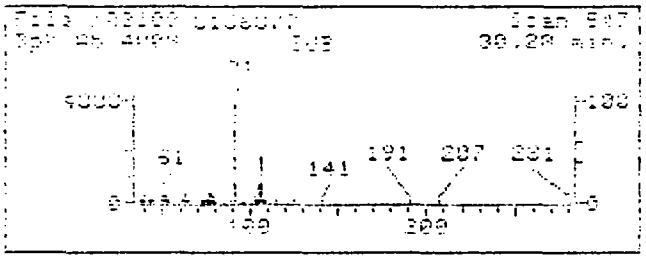
SKS

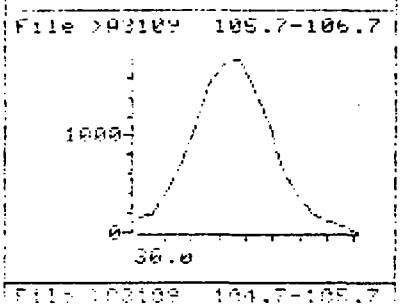
REFERENCE STANDARD SPECTRUM



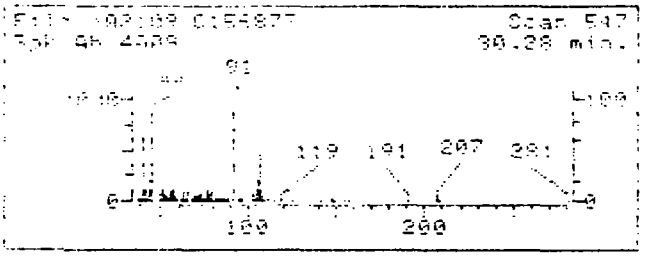


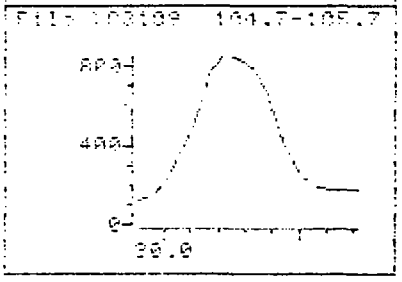
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)





SAMPLE SPECTRUM (UNALTERED)





Data File: >A3109::E7
Name: L156877 Rep. Ø
Misc: 5ML SAMPLE - HPE/RM
Quant Time: 940526 18:22
Injected at: 940526 17:43

Quant Output File: ^A3109::HS

Quant ID File: IDWVOC::D5
Last Calibration: 940526 16:28

Compound No: 46
Compound Name: Total Xylenes
Scan Number: 547
Retention Time: 30.28 min.
Quant Ion: 106.0
Area: 36999
Concentration: ~~21.77~~ UG/L
43.02
a-value: 96

SKS

QUANT REPORT

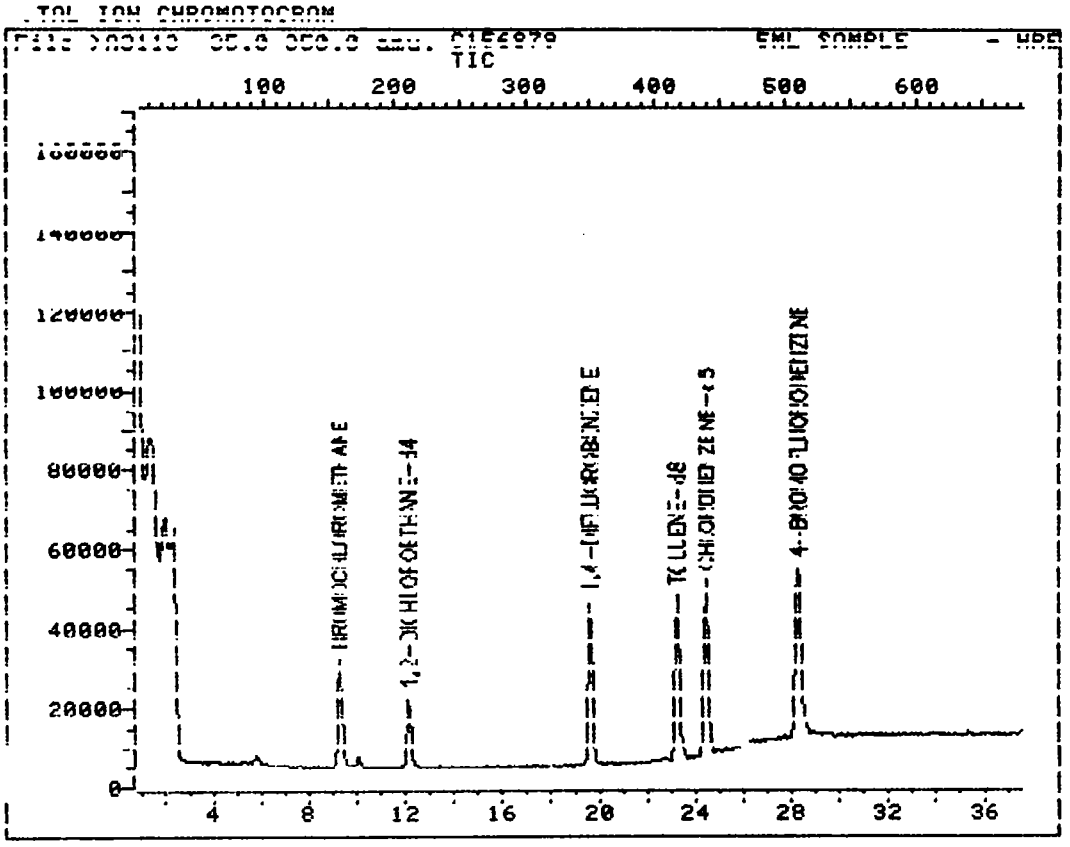
Operator ID: USER8 Quant Rev: 6 Quant Time: 940526 21:22
Output File: ^A3113::D3 Injected at: 940526 20:43
Data File: >A3113::E7 Dilution Factor: 1.00000
Name: C156879
Misc: 5ML SAMPLE - HRE/BM

OK 5/27/94

ID File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 940526 16:28

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.26	128.0	47215	50.00	UG/L	100
14)	1,1-Dichloroethane	10.07	63.0	15926	6.65	UG/L	86
18)	1,2-DICHLOROETHANE-d4	12.13	65.0	73148	47.21	UG/L	98
21)	*1,4-DIFLUOROBENZENE	19.63	114.0	192167	50.00	UG/L	86
35)	*CHLOROBENZENE-d5	24.44	117.0	168383	50.00	UG/L	83
40)	TOLUENE-d8	23.25	98.0	176423	49.88	UG/L	94
44)	4-BROMOFLUOROBENZENE	28.27	95.0	133494	52.95	UG/L	100

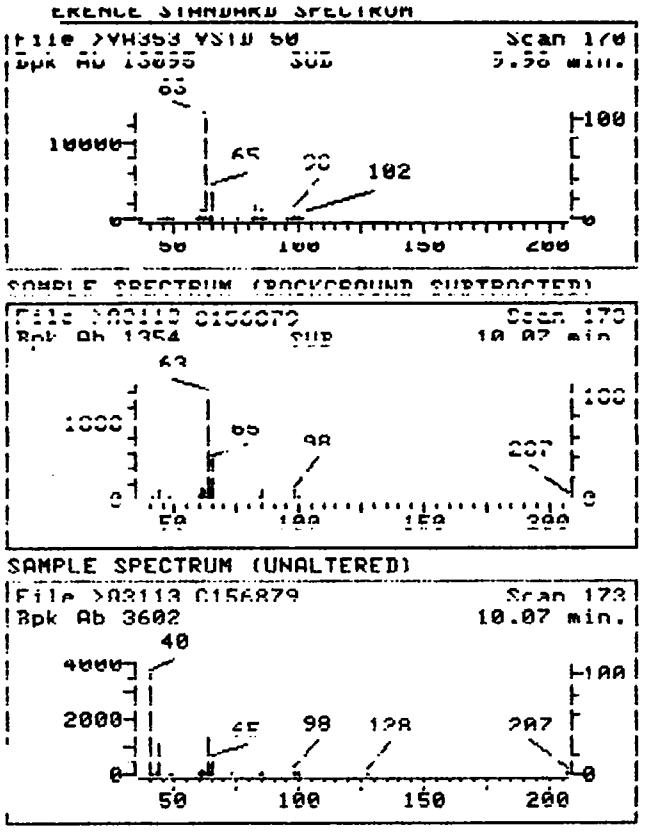
* Compound is ISTD

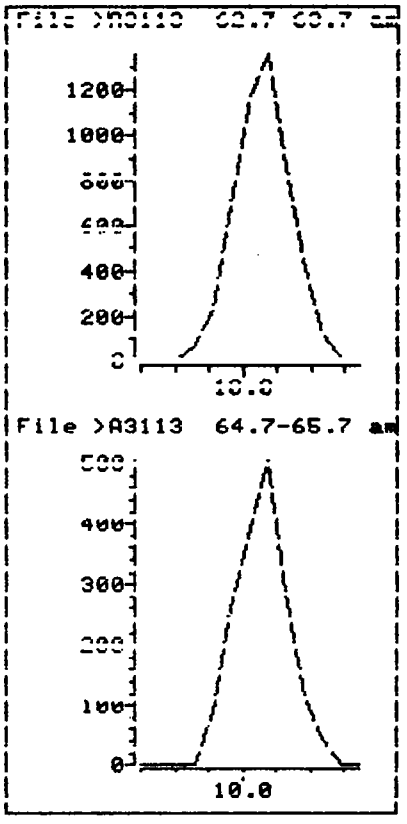


Data File: >A3113 Quant Output File: ^A3113::D3
Name: C156879
Misc: 5ML SAMPLE - HRE/BM

Id File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 940526 16:28

Operator ID: USER8
Quant Time: 940526 21:22
Injected at: 940526 20:43





Data File: >A3113
Name: C156879
Misc: 5ML SAMPLE - HRE/BM
Quant Time: 940526 21:22
Injected at: 940526 20:43

Quant Output File: ^A3113::D3
Quant ID File: IDWVOC::D5
Last Calibration: 940526 16:28

Compound No: 14
Compound Name: 1,1-Dichloroethane
Scan Number: 173
Retention Time: 10.07 min.
Quant Ion: 63.0
Area: 15926
Concentration: 6.65 UG/L
q-value: 86

SB

QUANT REPORT

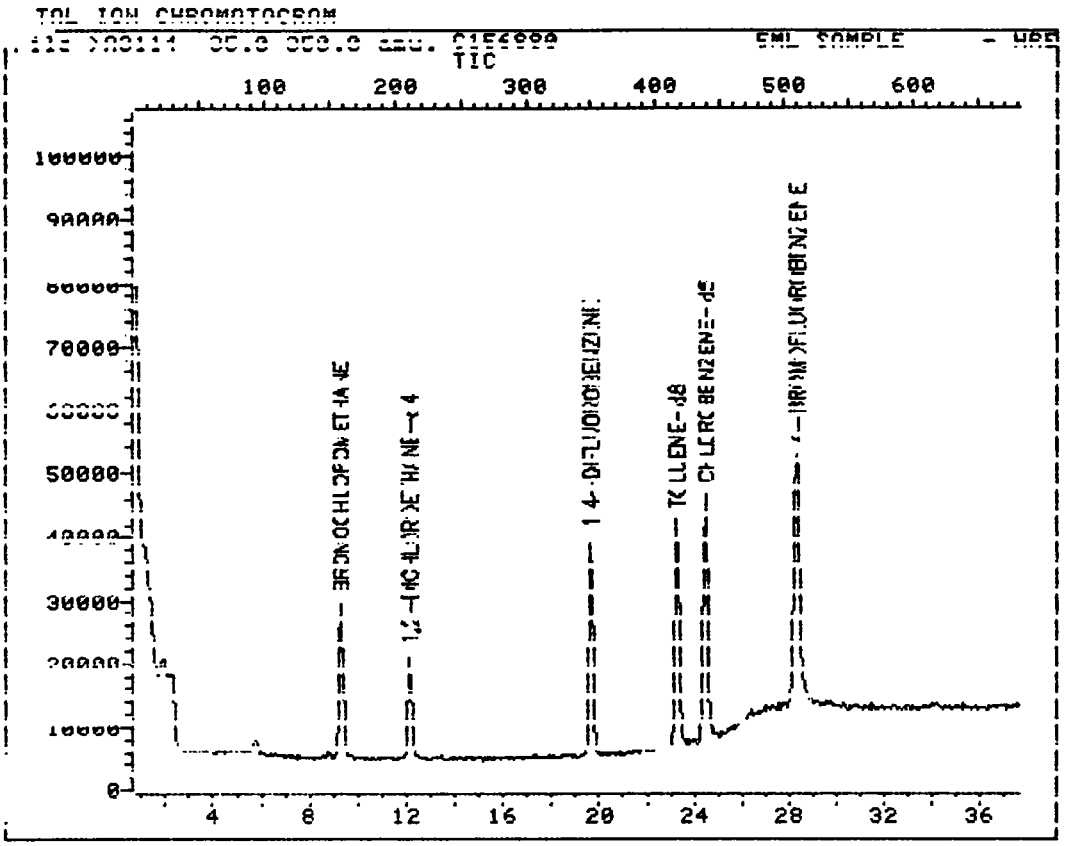
Operator ID: USER8 Quant Rev: 6 Quant Time: 940526 22:07
Output File: ^A3114::D3 Injected at: 940526 21:28
Data File: >A3114::E2 Dilution Factor: 1.00000
Name: C156880
Misc: 5ML SAMPLE - HRE/BM

ID File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 940526 16:28

OK/ DS 5/27/94

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.28	128.0	41403	50.00	UG/L	100
18)	1,2-DICHLOROETHANE-d4	12.14	65.0	65950	48.54	UG/L	93
21)	*1,4-DIFLUOROBENZENE	19.65	114.0	159735	50.00	UG/L	84
35)	*CHLOROBENZENE-d5	24.45	117.0	146843	50.00	UG/L	87
40)	TOLUENE-d8	23.26	98.0	148847	48.25	UG/L	99
44)	4-BROMOFLUOROBENZENE	28.29	95.0	123683	56.25	UG/L	100

* Compound is ISTD



Data File: >A3114 Quant Output File: ^A3114::D3
Name: C156880
Misc: 5ML SAMPLE - HRE/BM

Id File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 940526 16:28

Operator ID: USER8
Quant Time: 940526 22:07
Injected at: 940526 21:28

QUANT REPORT

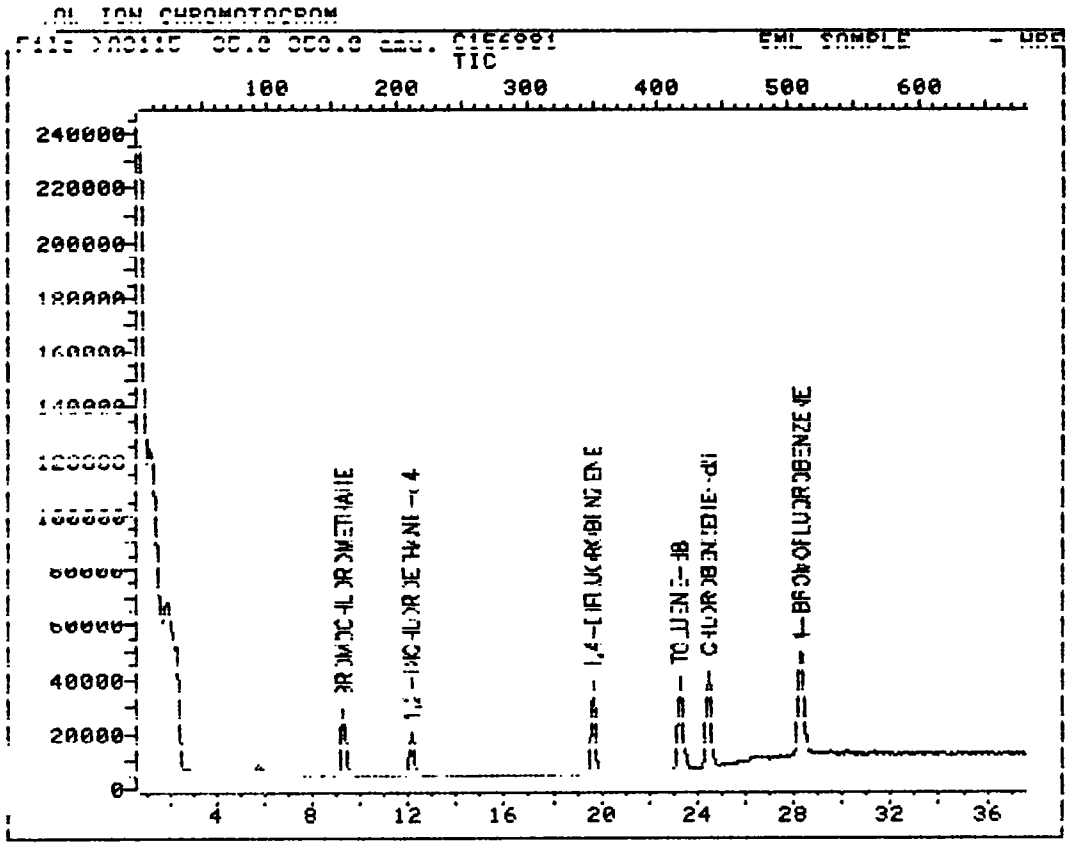
Operator ID: USER8 Quant Rev: 6 Quant Time: 940526 22:52
Output File: ^A3115::D3 Injected at: 940526 22:13
Data File: >A3115::E2 Dilution Factor: 1.00000
Name: C156881
Misc: 5ML SAMPLE - HRE/BM

ID File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 940526 16:28

6/1/94

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.32	128.0	41532	50.00	UG/L	100
7)	Methylene Chloride	5.75	84.0	6237	6.00	UG/L	100
18)	1,2-DICHLOROETHANE-d4	12.12	65.0	65363	47.96	UG/L	98
20)	2-Butanone	12.23	43.0	12817	61.21	UG/L	80
21)	*1,4-DIFLUOROBENZENE	19.63	114.0	160293	50.00	UG/L	87
22)	1,1,1-Trichloroethane	13.42	97.0	5630	2.66	UG/L	95
35)	*CHLOROBENZENE-d5	24.44	117.0	143495	50.00	UG/L	88
40)	TOLUENE-d8	23.25	98.0	147505	48.93	UG/L	96
4[illegible]	Toluene	23.46	92.0	10859	5.12	UG/L	95
4	4-BROMOFLUOROBENZENE	28.27	95.0	118870	55.33	UG/L	100

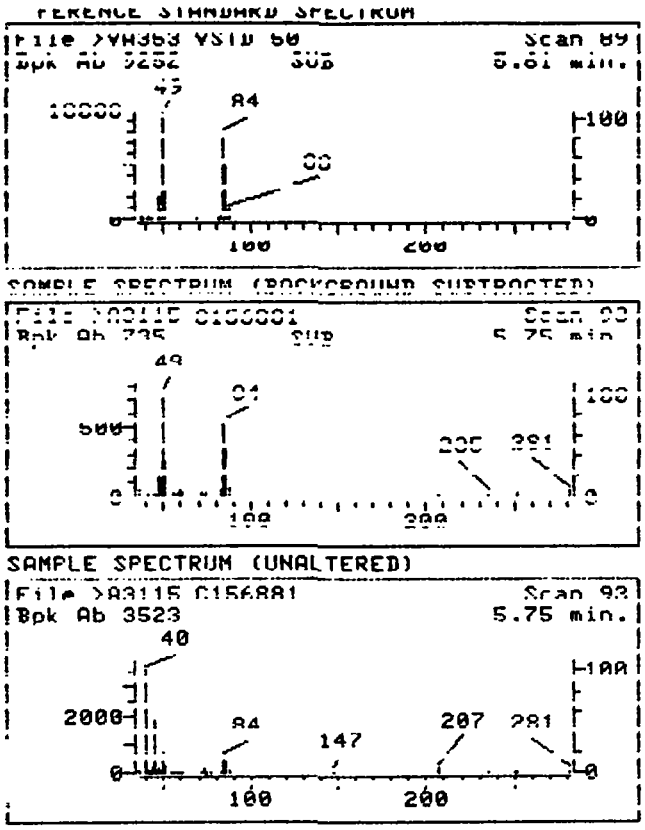
* Compound is ISTD

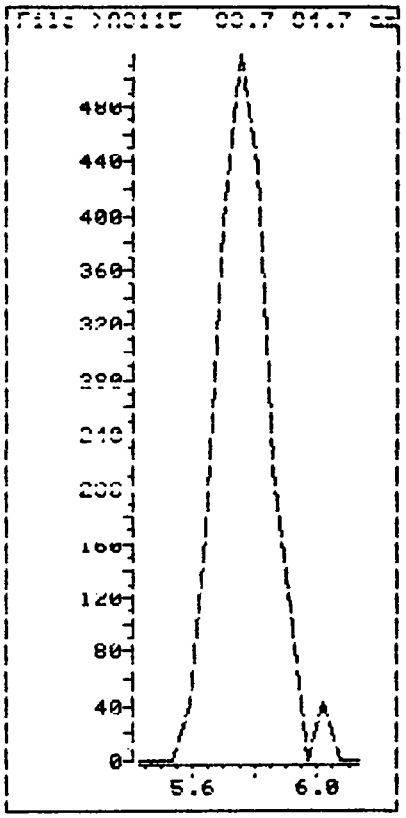


Data File: >A3115 Quant Output File: ^A3115::D3
Name: C156881
Misc: 5ML SAMPLE - HRE/BM

Id File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 940526 16:28

Operator ID: USER8
Quant. Time: 940526 22:52
Injected at: 940526 22:13

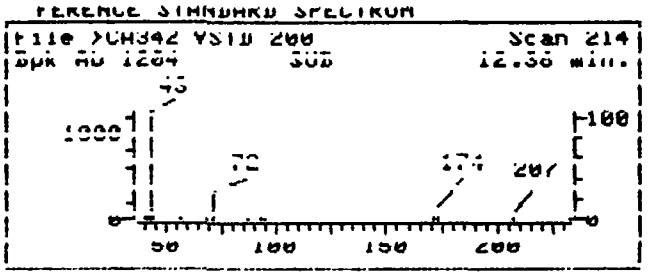




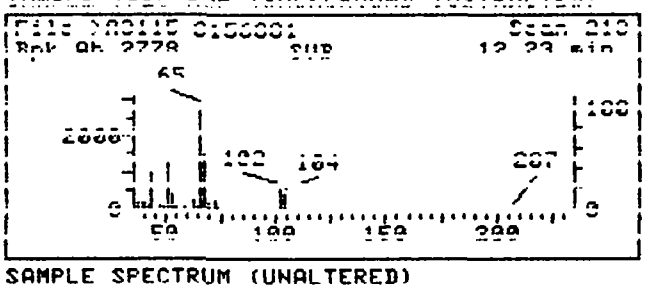
Data File: >A3115 Quant Output File: ^A3115::D3
Name: C156881
Misc: 5ML SAMPLE - HRE/BM
Quant Time: 940526 22:52 Quant ID File: 1DWVOC::D5
Injected at: 940526 22:13 Last Calibration: 940526 16:28

Compound No: 7
Compound Name: Methylene Chloride
Scan Number: 93
Retention Time: 5.75 min.
Quant Ion: 84.0
Area: 6237
Concentration: 6.00 UG/L
q-value: 100

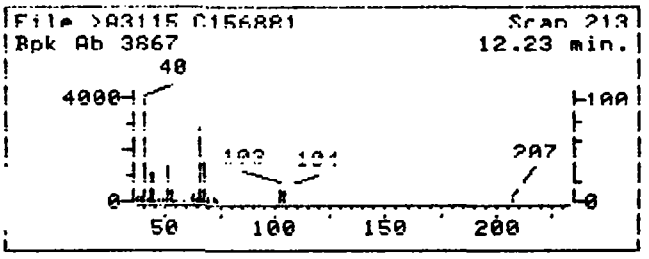
✓
SKS

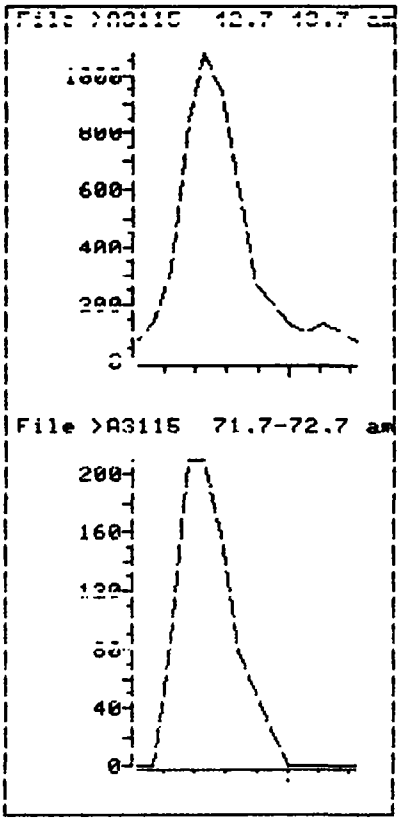


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





Data File: >A3115
Name: C156881
Misc: 5ML SAMPLE - HRE/BM
Quant Time: 940526 22:52
Injected at: 940526 22:13

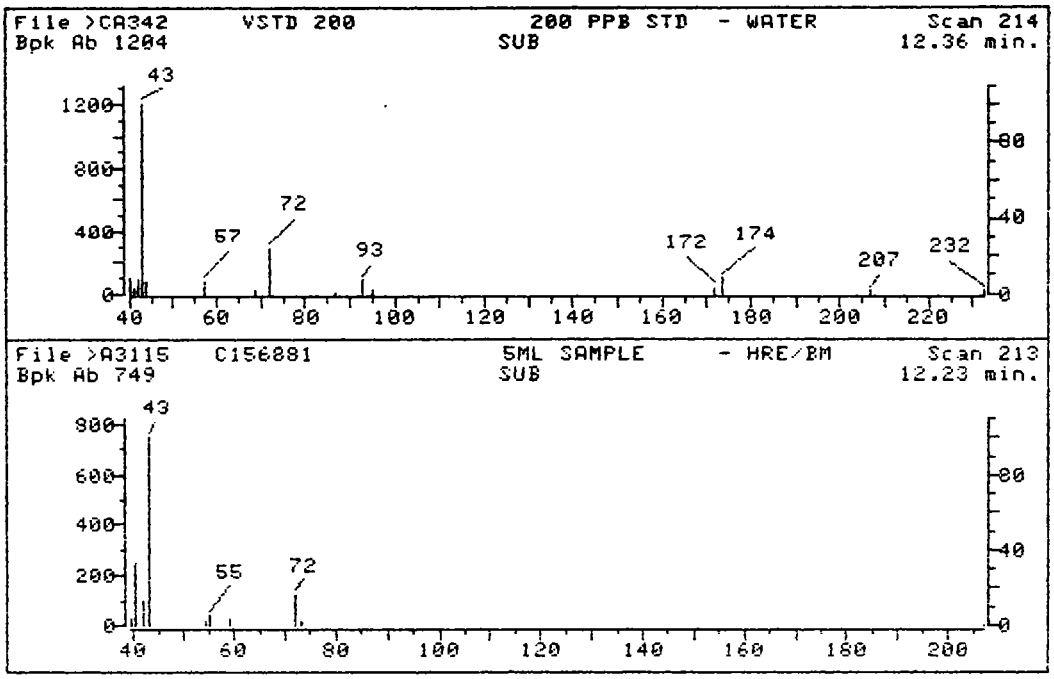
Quant Output File: ^A3115::D3

Quant ID File: IDWVOC::D5
Last Calibration: 940526 16:28

Compound No: 20
Compound Name: 2-Butanone
Scan Number: 213
Retention Time: 12.23 min.
Quant Ion: 43.0
Area: 12817
Concentration: 61.21 UG/L
q-value: 80

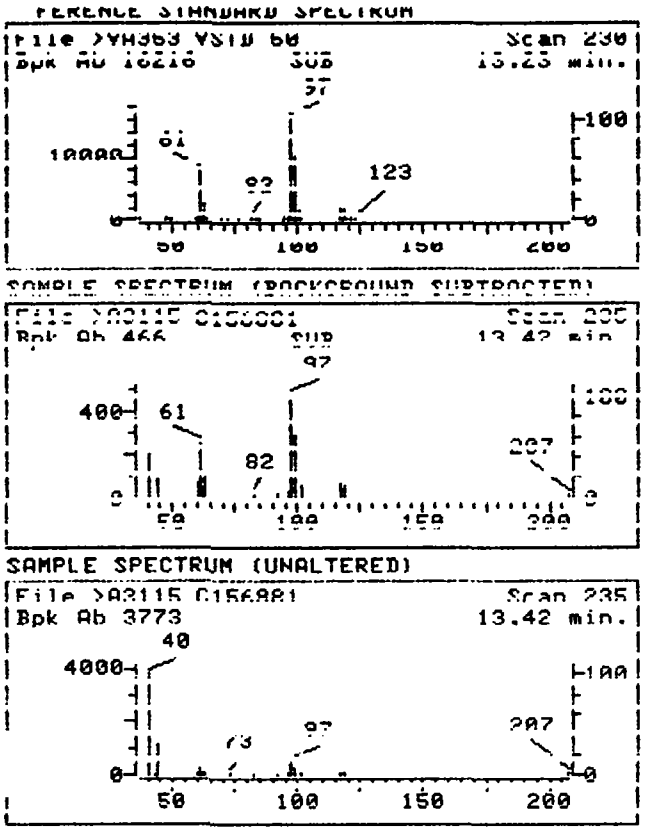
see next page

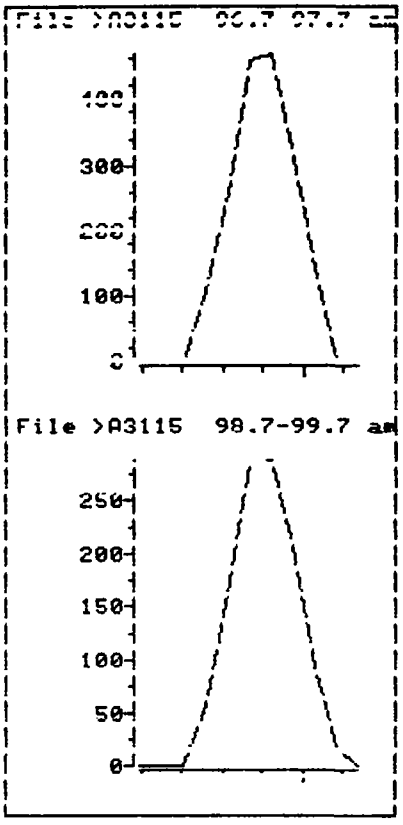
✓
SS



20) 2-Butanone RT:12.23 Area: 12817 61.21 UG/L

SB

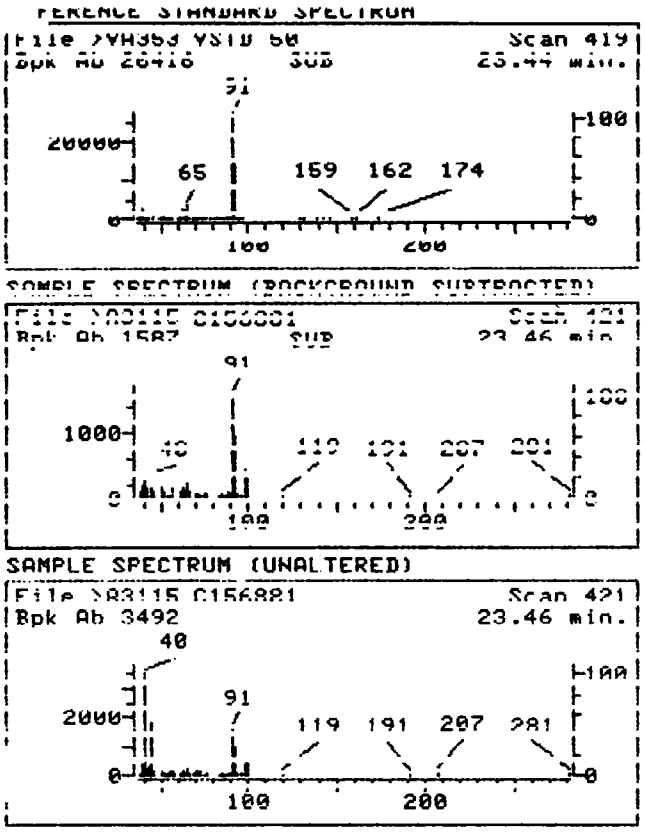


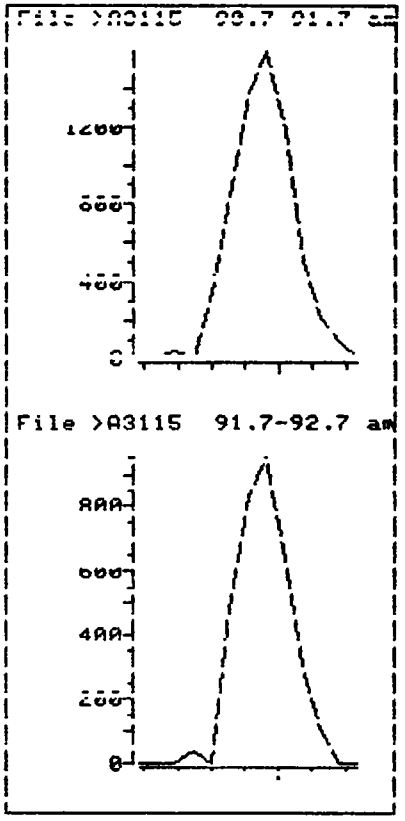


Data File: >A3115 Quant Output File: ^A3115::D3
Name: C156881
Misc: 5ML SAMPLE - HRE/BM
Quant Time: 940526 22:52 Quant ID File: IDWVOC::D5
Injected at: 940526 22:13 Last Calibration: 940526 16:28

Compound No: 22
Compound Name: 1,1,1-Trichloroethane
Scan Number: 235
Retention Time: 13.42 min.
Quant Ion: 97.0
Area: 5630
Concentration: 2.66 UG/L
q-value: 95

JKS





Data File: >A3115
Name: C156881
Misc: 5ML SAMPLE - HRE/BM
Quant Time: 940526 22:52
Injected at: 940526 22:13

Quant Output File: ^A3115::D3

Quant ID File: IDWVOC::D5
Last Calibration: 940526 16:28

Compound No: 41
Compound Name: Toluene
Scan Number: 421
Retention Time: 23.46 min.
Quant Ion: 92.0
Area: 10859
Concentration: 5.12 UG/L
q-value: 95

✓
SLS

QUANT REPORT

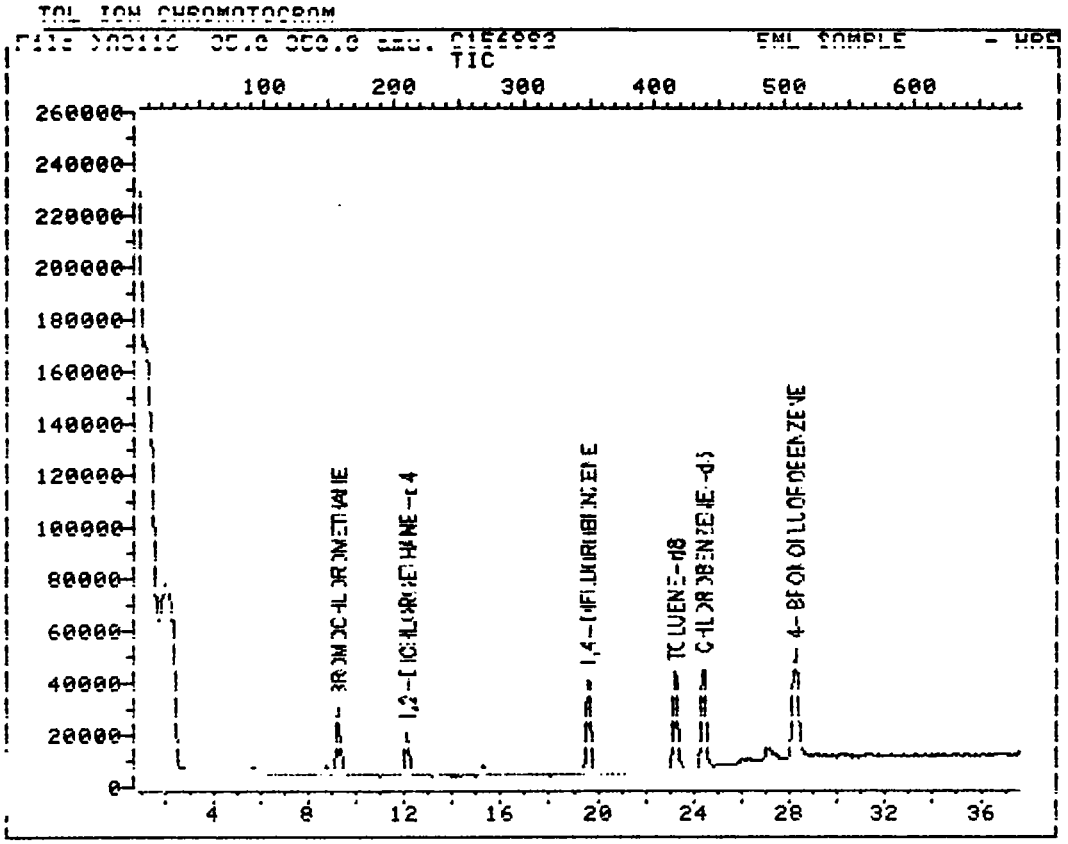
Operator ID: USER8 Quant Rev: 6 Quant Time: 940526 23:37
Output File: ^A3116::D3 Injected at: 940526 22:59
Data File: >A3116::E2 Dilution Factor: 1.00000
Name: C156882
Misc: 5ML SAMPLE - HRE/BM

ok SJS 5/31/94

ID File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 940526 16:28

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.27	128.0	42150	50.00	UG/L	100
7)	Methylene Chloride	5.76	84.0	4841	4.59	UG/L	100
18)	1,2-DICHLOROETHANE-d4	12.13	65.0	66789	48.28	UG/L	97
21)	*1,4-DIFLUOROBENZENE	19.58	114.0	177532	50.00	UG/L	85
35)	*CHLOROBENZENE-d5	24.38	117.0	154503	50.00	UG/L	88
40)	TOLUENE-d8	23.20	98.0	161179	49.66	UG/L	96
44)	4-BROMOFLUOROBENZENE	28.22	95.0	125617	54.30	UG/L	100

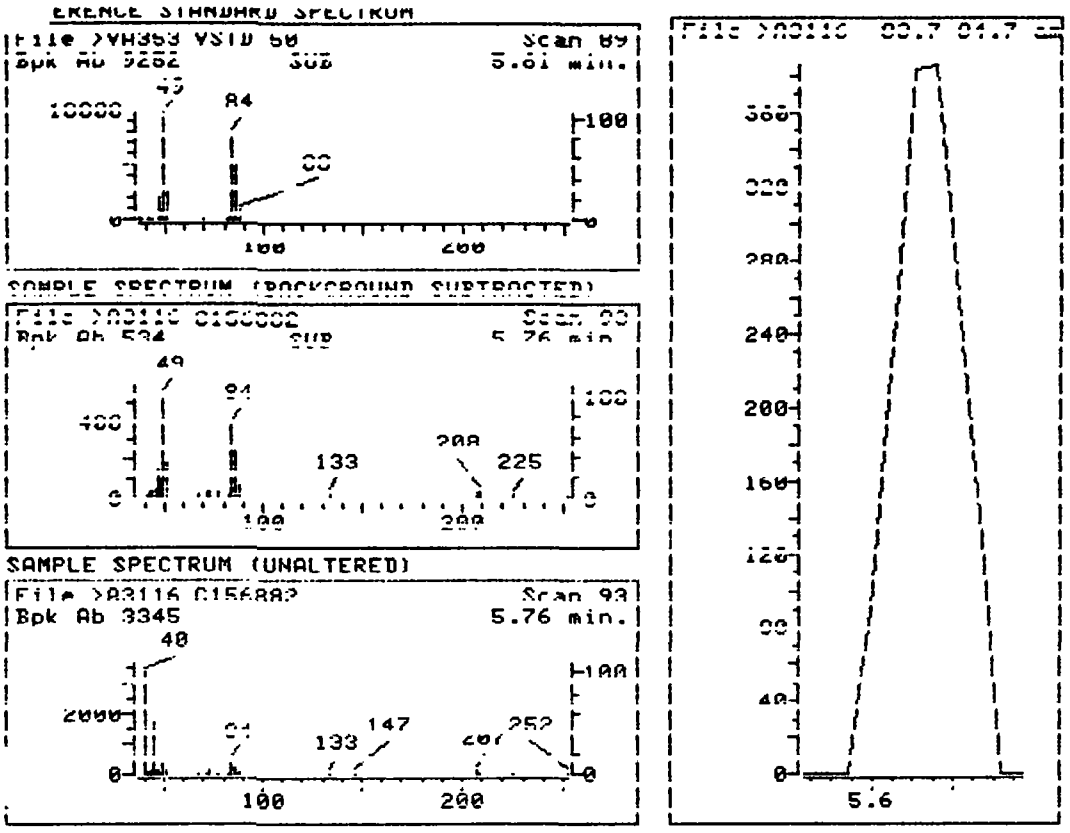
* Compound is ISTD



Data File: >A3116 Quant Output File: ^A3116::D3
Name: C156882
Misc: 5ML SAMPLE - HRE/BM

Id File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 940526 16:28

Operator ID: USER8
Quant Time: 940526 23:37
Injected at: 940526 22:59

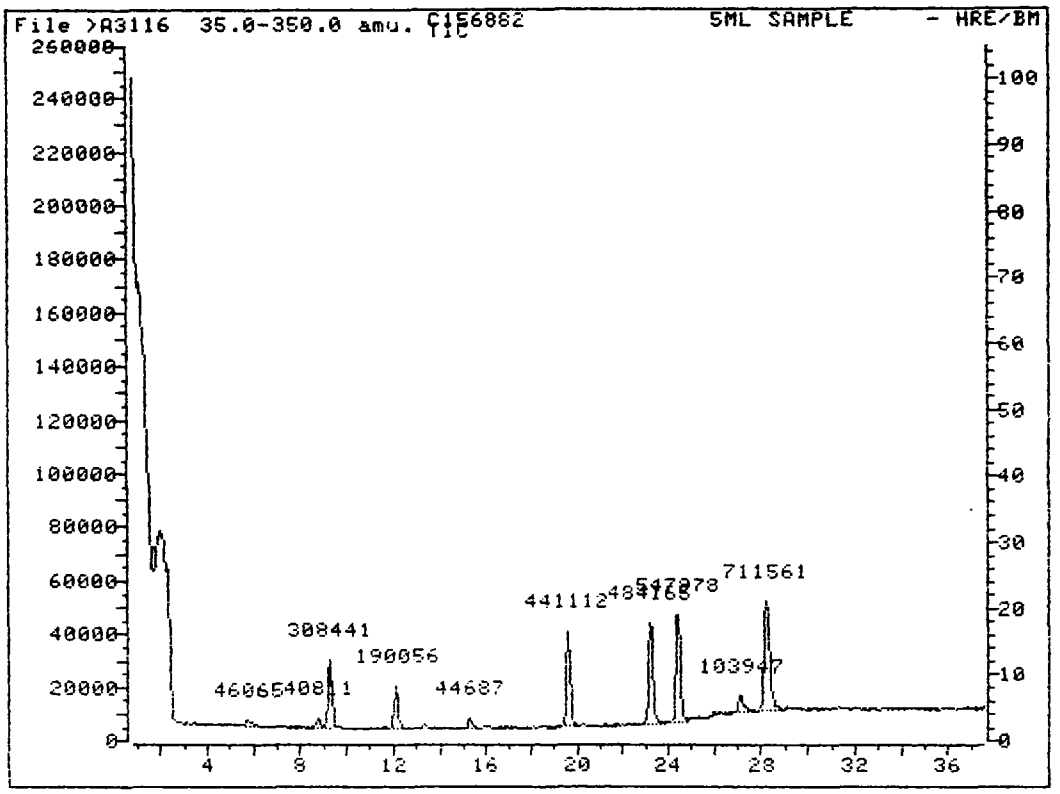


Data File: >A3116
Name: C156882
Misc: 5ML SAMPLE - HRE/BM
Quant Time: 940526 23:37
Injected at: 940526 22:59

Quant Output File: ^A3116::D3
Quant ID File: IDWVOC::D5
Last Calibration: 940526 16:28

Compound No: 7
Compound Name: Methylene Chloride
Scan Number: 93
Retention Time: 5.76 min.
Quant Ion: 84.0
Area: 4841
Concentration: 4.59 UG/L
q-value: 100

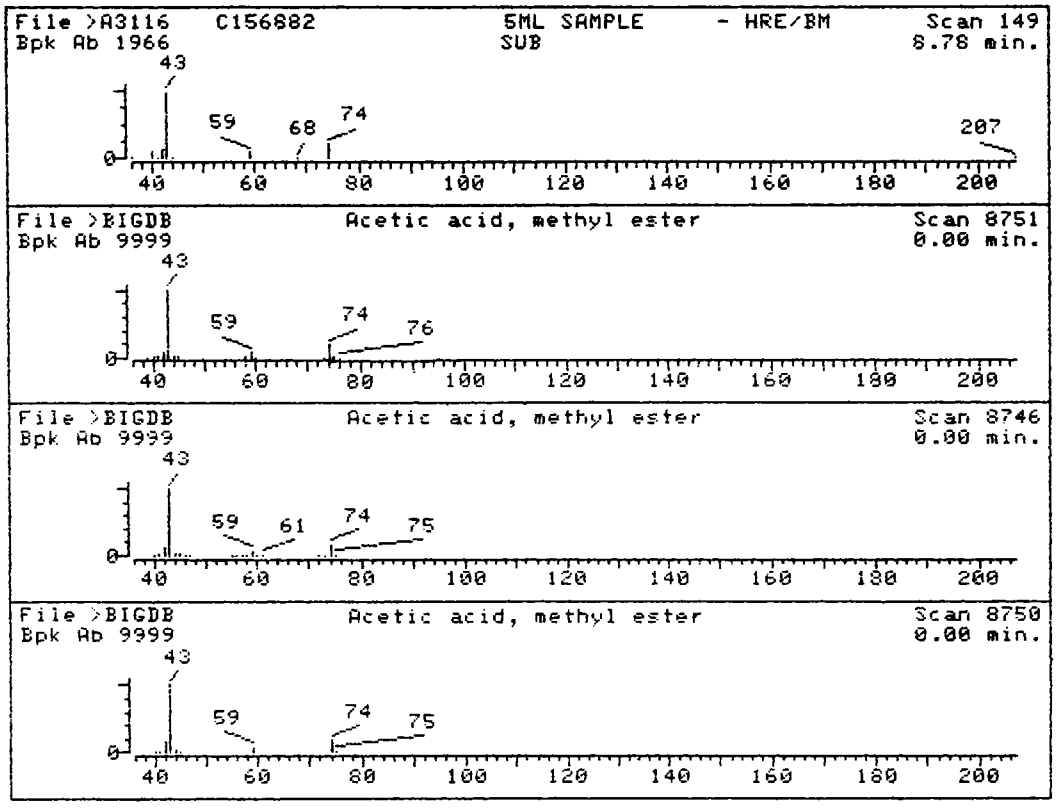
J
SS



>A3116 C156882 5ML SAMPLE - HRE/BM
35.0: 350.0 TIC
Upslope: .20 Area Reject: 5.00 % Max Peaks: 10 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	5.76	90	93	103	2415	273608	~~46065~~	6.47	1.578
2	8.78	145	149	153	3330	167375	40811	5.74	1.398
3	9.27	153	158	165	25678	504008	308441	43.35	10.567
4	12.13	205	211	218	15697	392649	~~190056~~	26.71	6.511
5	15.26	265	269	275	3444	197717	44687	6.28	1.531
6	19.58	344	349	355	35825	622082	441112	61.99	15.113
7	23.20	411	416	427	37524	820011	~~484165~~	68.04	16.588
8	24.38	432	438	446	40204	853600	547978	77.01	18.774
9	27.14	484	489	497	6182	548249	103947	14.61	3.561
10	28.22	503	509	520	41120	1325181	~~711561~~	100.00	24.378

Sum of corrected areas: 2918823.

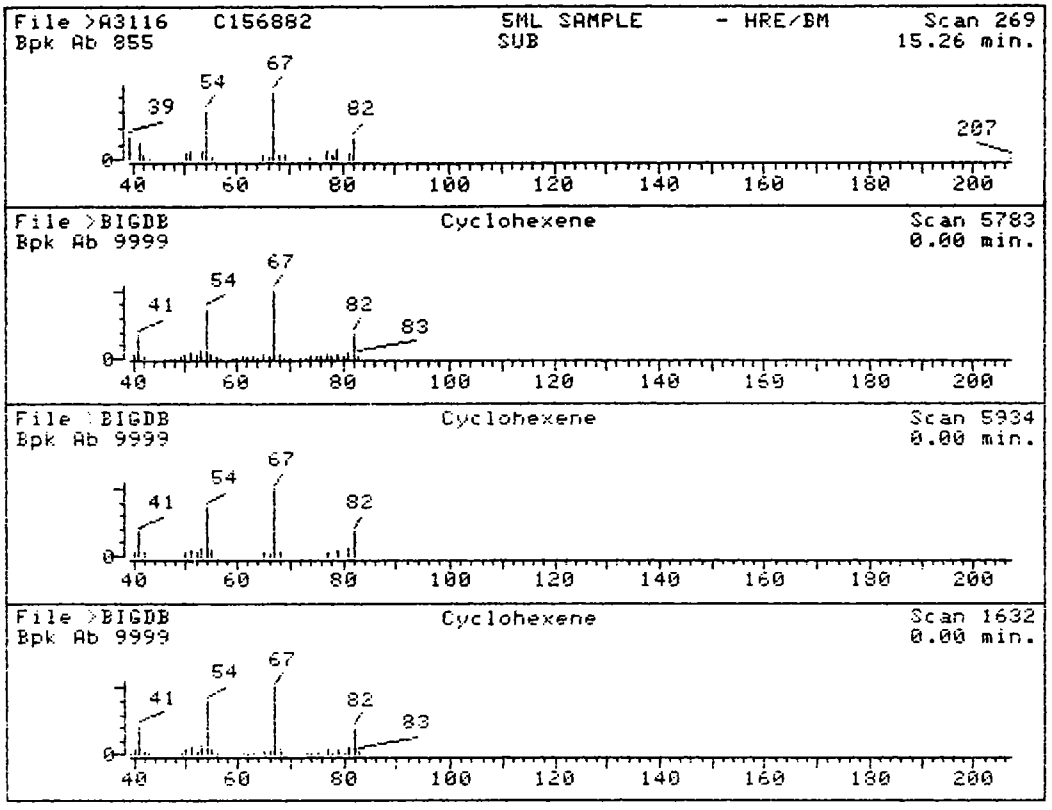


1. Acetic acid, methyl ester	74	C3H6O2
2. Acetic acid, methyl ester	74	C3H6O2
3. Acetic acid, methyl ester	74	C3H6O2
4. Acetic acid, methyl ester	74	C3H6O2
5. Acetic acid, methyl ester	74	C3H6O2

Sample file: >A3116 Spectrum #: 149
Search speed: 1 Tilting option: N No. of ion ranges searched: 40

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	70*	79209	8751	"BIGDB	26	33	2	0	100	10	42	14
2.	60*	79209	8746	"BIGDB	27	29	2	0	100	12	30	14
3.	60*	79209	8750	"BIGDB	27	31	2	0	89	14	30	14
4.	60*	79209	8749	"BIGDB	26	30	2	0	100	12	30	14
5.	60*	79209	8747	"BIGDB	27	34	2	0	100	12	30	14

$$\text{conc.} = \frac{40811}{308441} \times \frac{250}{(5)(1)} = 6.6\ \text{ug/kg}$$

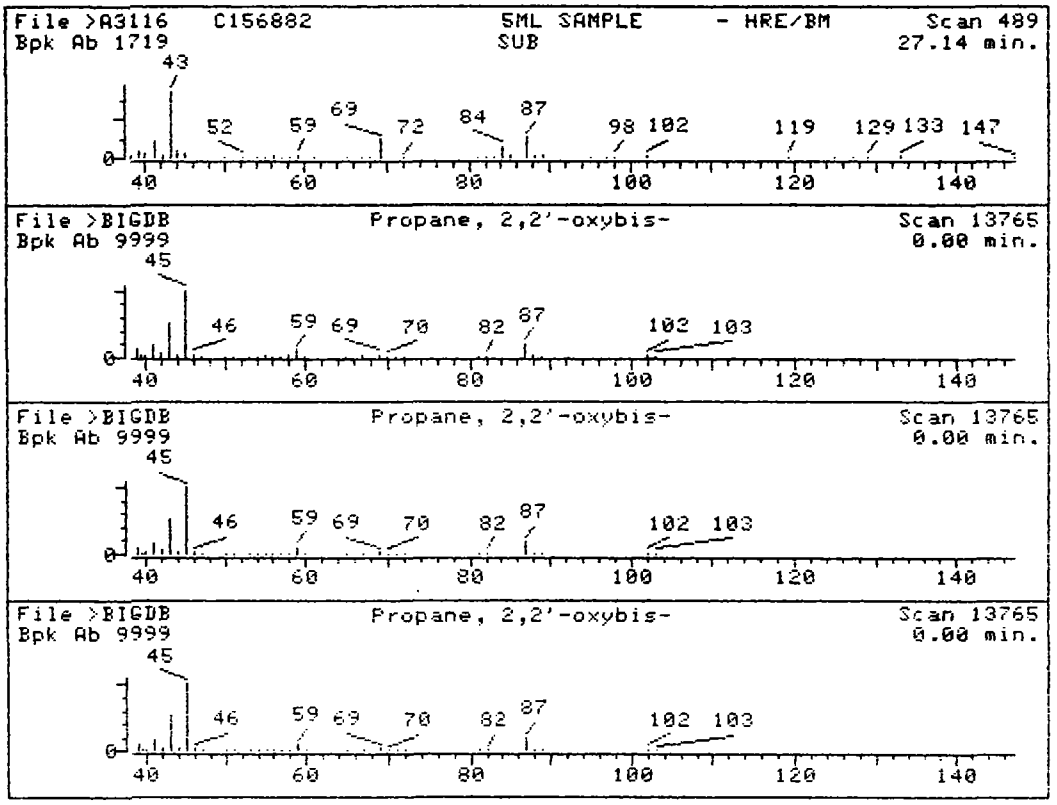


1. Cyclohexene	82	C6H10
2. Cyclohexene	82	C6H10
3. Cyclohexene	82	C6H10
4. Cyclobutane, ethenyl-	82	C6H10
5. Bicyclo[3.1.0]hexane	82	C6H10

Sample file: >A3116 Spectrum #: 269
Search speed: 1 Tilting option: N No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	79*	110838	5783	"BIGDB	52	38	2	0	87	8	48	35
2.	79*	110838	5934	"BIGDB	52	40	2	0	77	6	48	35
3.	74*	110838	1632	"BIGDB	65	36	2	0	83	12	39	44
4.	70*	2597491	1398	"BIGDB	39	54	2	0	87	10	42	19
5.	60*	285585	5782	"BIGDB	33	55	2	0	86	12	30	16

$$\text{conc.} = \frac{44687}{441112} \times \frac{250}{(65)(1)} = 5.06\ \mu g/kg$$



1. Propane, 2,2'-oxybis- 102 C6H14O

Sample file: >A3116 Spectrum #: 489
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.	25*	108203	13765	"BIGDB	24	60	2	0	172	50	7	14

$$\text{conc.} = \frac{103947}{547978} \times \frac{250}{(5)(1)} = 9.48 \text{ ug/kg}$$

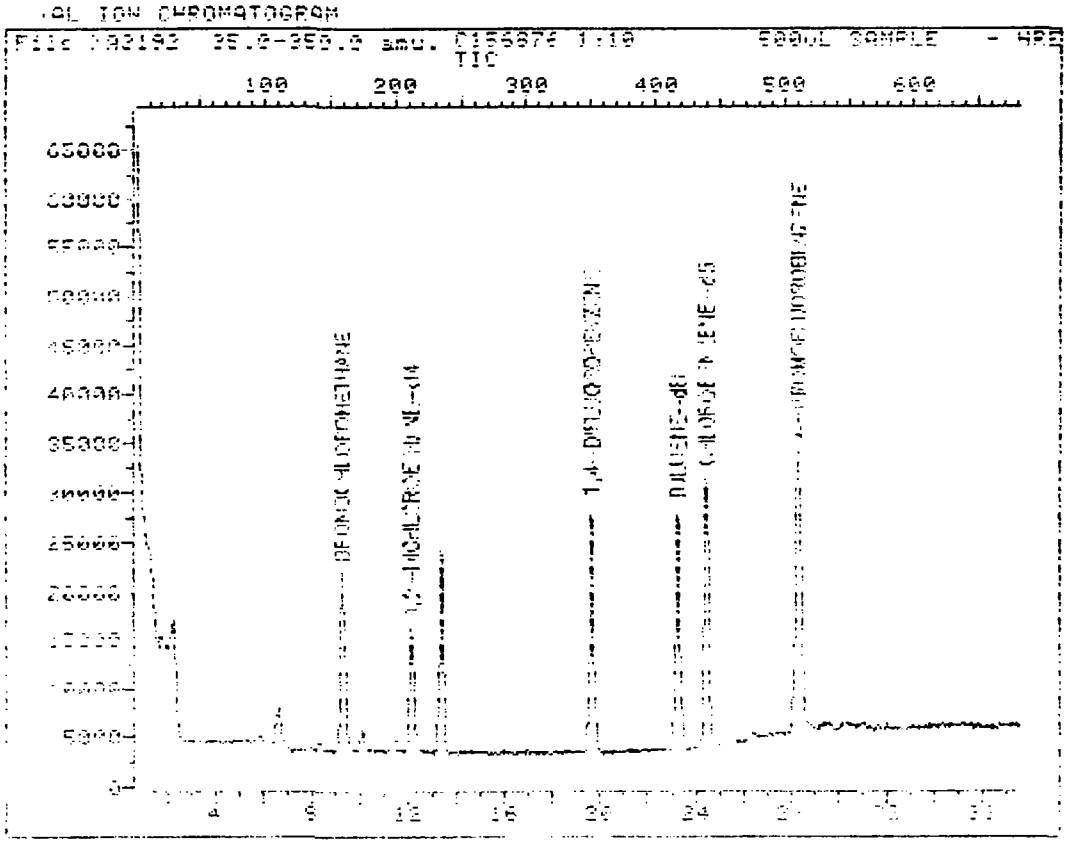
QUANT REPORT

Operator ID: USER8 Quant Rev: 6 Quant Time: 940602 22:37
Output File: ^A3192::SS Injected at: 940602 21:57
Data File: >A3192::E4 Dilution Factor: 1.00000
Name: C156876 1:10 Rep-1
Misc: 500uL SAMPLE - HRE/BM

ID File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A Rep 1:50
Last Calibration: 940602 13:00

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.26	128.0	31888	50.00	UG/L	100
8)	Acetone	6.62	43.0	37193	424.56	UG/L	82
14)	1,1-Dichloroethane	10.07	63.0	7175	4.83	UG/L	97
15)	Tetrahydrofuran	10.13	42.0	4845	63.68	UG/L	92
17)	Chloroform	11.48	83.0	5399	2.82	UG/L	90
18)	1,2-DICHLOROETHANE-d4	12.12	65.0	56032	58.11	UG/L	94
20)	2-Butanone	12.23	43.0	6210	45.57	UG/L	76
21)	*1,4-DIFLUOROBENZENE	19.63	114.0	115568	50.00	UG/L	83
22)	1,1,1-Trichloroethane	13.37	97.0	76993	42.16	UG/L	99
3	*CHLOROBENZENE-d5	24.43	117.0	104147	50.00	UG/L	84
✓	TOLUENE-d8	23.24	98.0	102620	51.85	UG/L	98
44)	4-BROMOFLUOROBENZENE	28.27	95.0	78326	54.67	UG/L	100

* Compound is ISTD

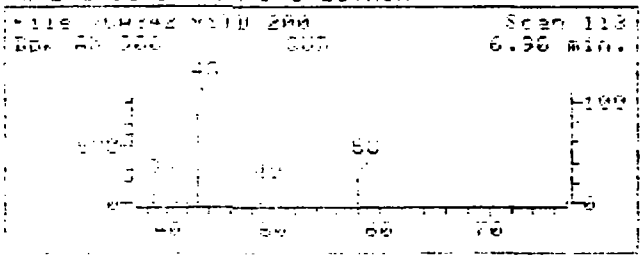


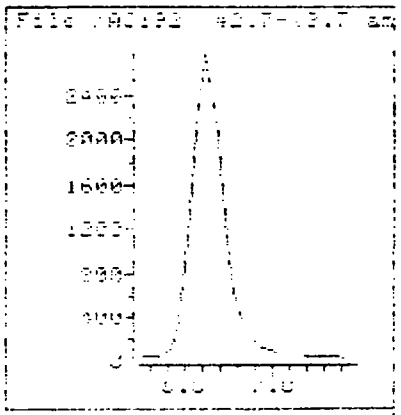
Data File: CA3192::E4 Quant Output File: CA3192::R5
Name: [illegible] 1:10 Rep.1
Mode: 500uL SAMPLE - HRE/HM

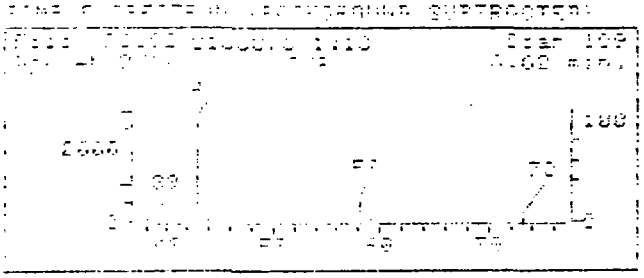
Method File: [illegible]::DF
Title: QUANTITATION FILE FOR VOLATILE WATERS [illegible]
Last Calibration: 940602 13:00

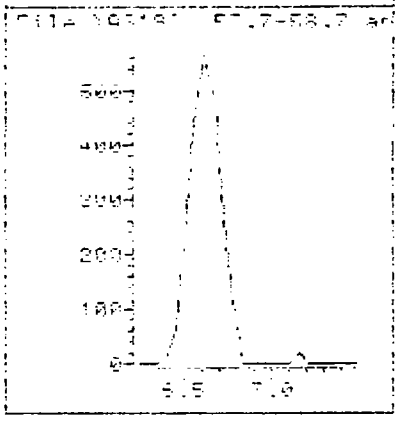
Operator ID: USERR
Quant Time: 940602 [illegible]:37
Injected at: 940602 [illegible]:57

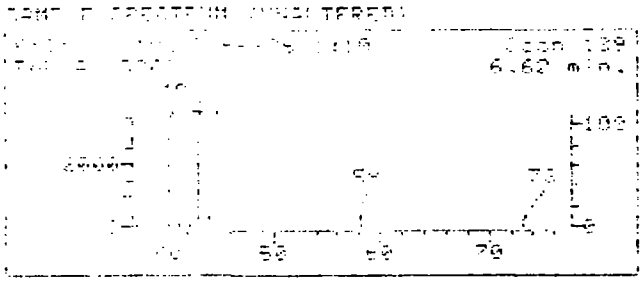
REFERENCE STANDARD SPECTRUM











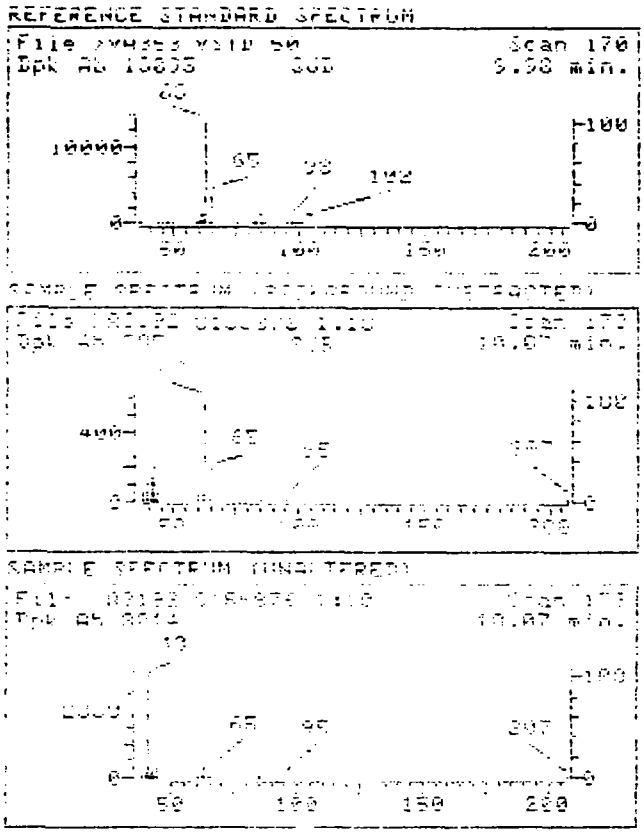
Data File: [illegible]
Name: [illegible] 1:10 Rep.1
Mode: [illegible] SAMPLE - PRE/BM
Quant Time: 940602 22:32
Injected at: 940602 21:57

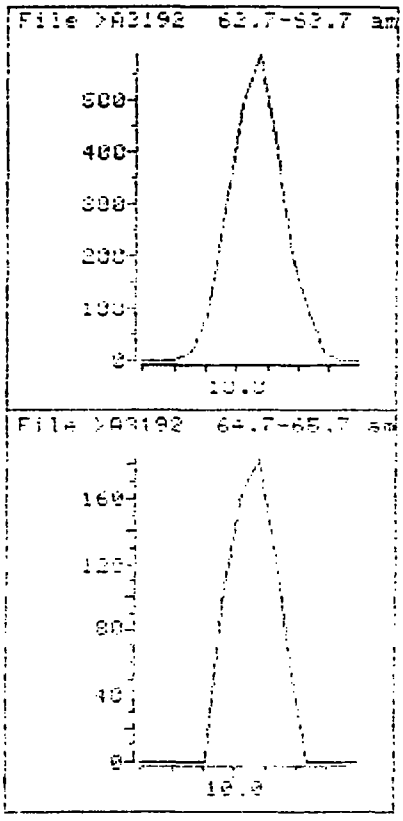
Quant Output File: [illegible]

Quant IO File: [illegible]
Last Calibration: 940602 13:00

Compound No: 8
Compound Name: Acetone
Scan Number: 109
Retention Time: 6.62 min.
Quant Ion: 43.0
Area: 37193
Concentration: 424.56 UG/L
c-value: 82

SKS
Redo 1150





Data File: >A3192::64
Name: [illegible] 1:10 Rep 1
Misc: [illegible] SAMPLE - [illegible]
Quant Time: 940602 [illegible]
Injected at: 940602 21:57

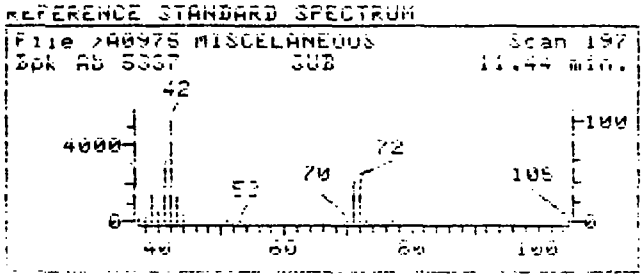
Quant Output File: >A3192::SS

Quant ID File: [illegible]::05
Last Calibration: 940602 13:00

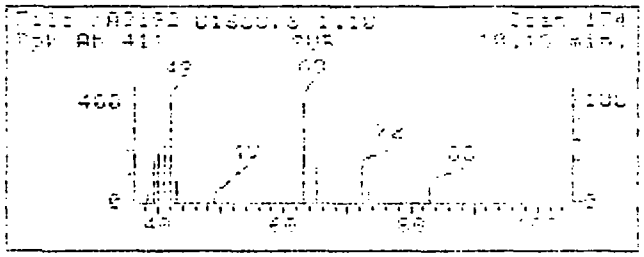
Compound No: 14
Compound Name: 1,1-Dichloroethane
Scan Number: 173
Retention Time: 10.07 min.
Quant Ion: 63.0
Area: 7175
Concentration: 4.8[illegible] UG/L
q-value: 97

SRS

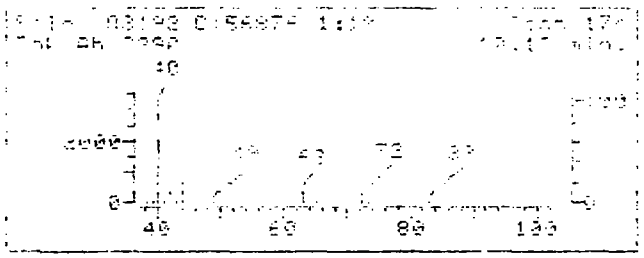
REFERENCE STANDARD SPECTRUM

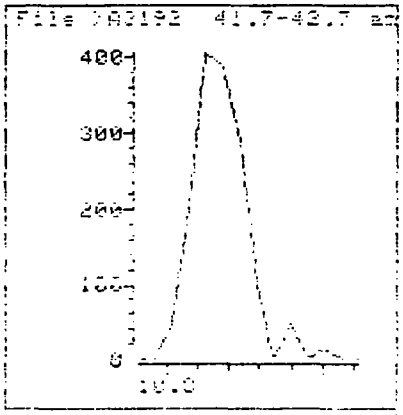


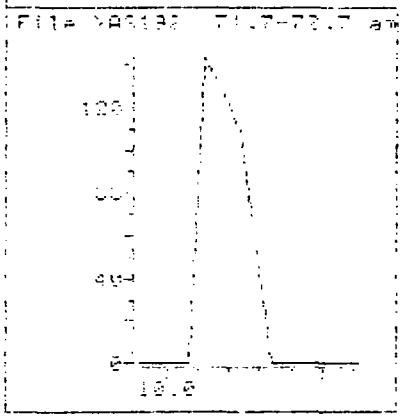
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >A3192::F4
Name: C156876 1:10 Rep-1
Misc: 500uL SAMPLE - PYE/HM
Quant Time: 940602 21:37
Injected at: 940602 21:57

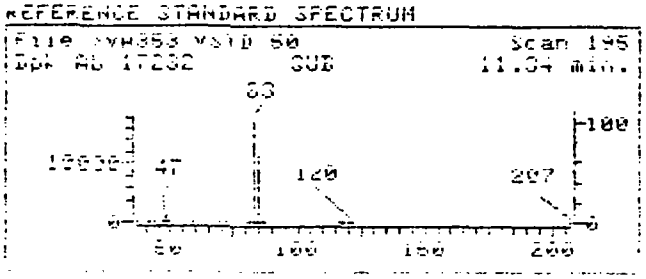
Quant Output File: >A3192::RS

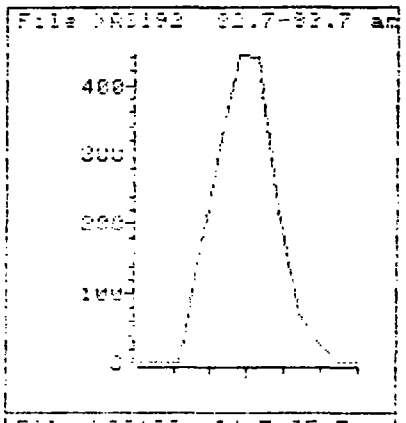
Quant CD File: [illegible]
Last Calibration: 940602 13:00

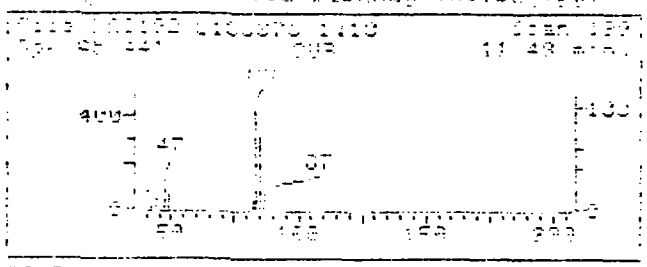
Compound No: 15
Compound Name: Tetrahydrofuran
Scan Number: 174
Retention Time: 10.13 min.
Quant Ion: 42.0
Area: 4845
Concentration: 63.68 ug/L
q-value: 92

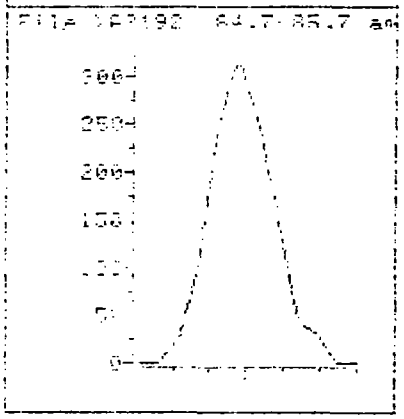
✓
SKS

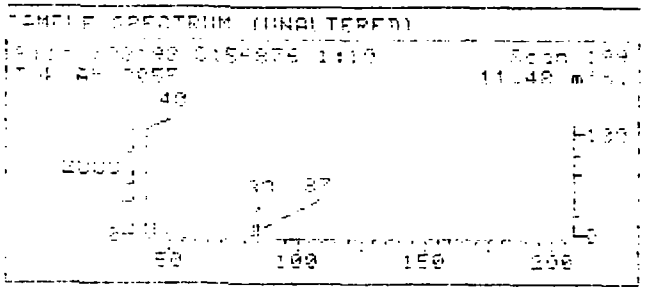
REFERENCE STANDARD SPECTRUM











Data File: [illegible] Quant Output File: [illegible]

Name: [illegible] Rep 1

Mode: [illegible] SAMPLE - [illegible]

Quant Time: [illegible] Quant ID File: [illegible]

Injected at: 940602 21:[illegible] Last Calibration: 940602 13:00

Compound No: 17

Compound Name: Chloroform

Scan Number: 199

Retention Time: 11.48 min.

Quant Ion: 83.0

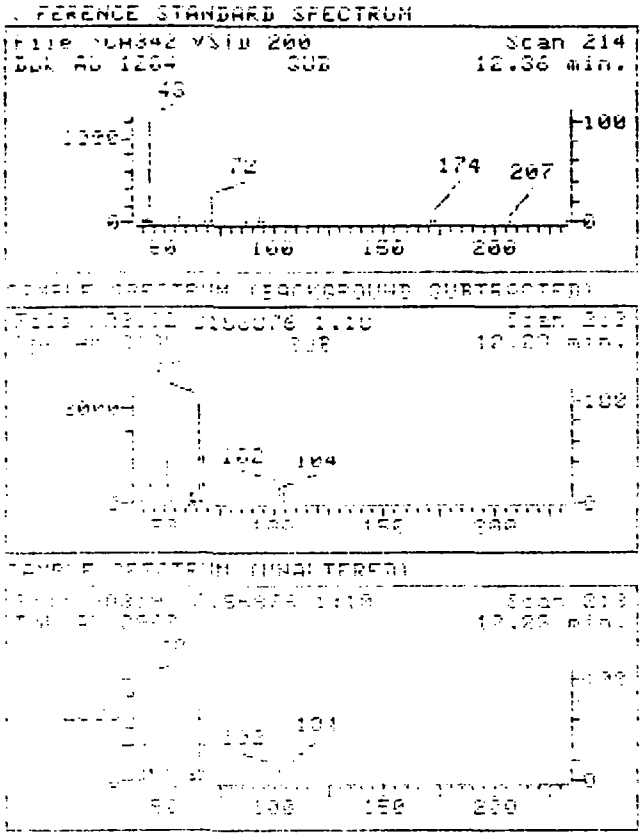
Area: 5399

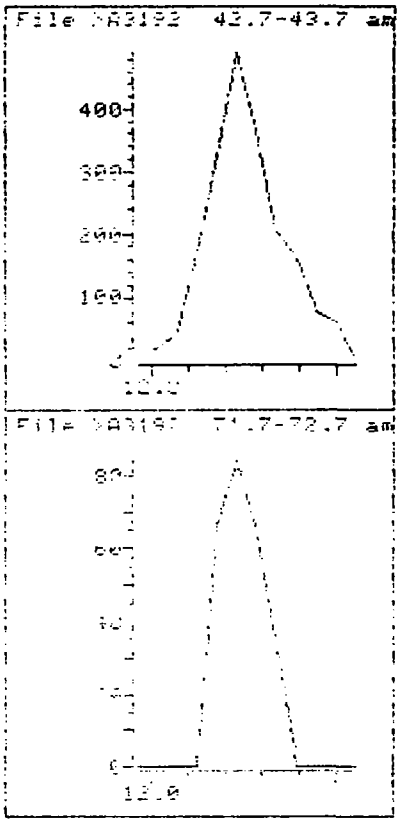
Concentration: 2.87 UG/L

Q-value: 90

✓

SAS





Data File: >A3192::54
Name: [illegible] 1:10 Rep.1
Misc: FINAL SAMPLE - [illegible]
Quant Time: 940602 22:32
Injected at: 940602 21:52

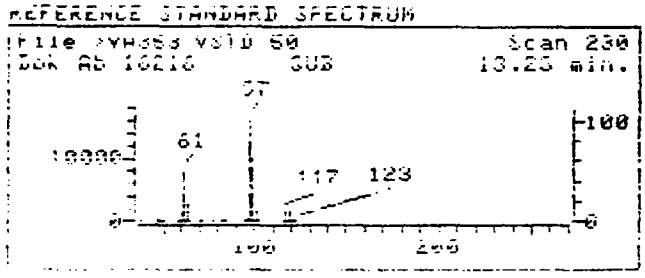
Quant Output File: ^A3192::[illegible]

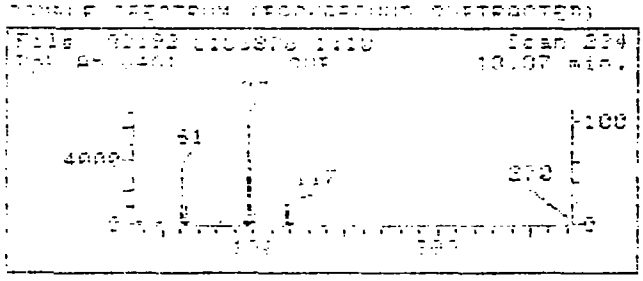
Quant ID File: IOWVOC::[illegible]
Last Calibration: 940602 13:00

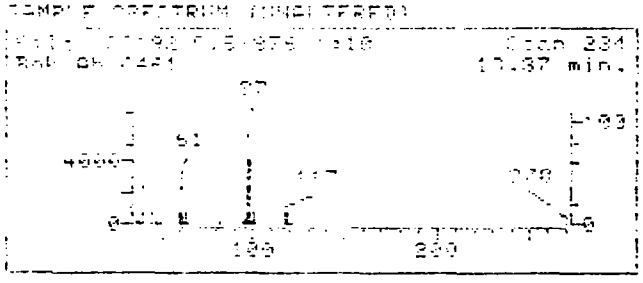
Compound No: 20
Compound Name: 2-Butanone
Scan Number: 213
Retention Time: 12.23 min.
Quant Ion: 43.0
Area: 6219
Concentration: 45.57 UG/L
q-value: 26

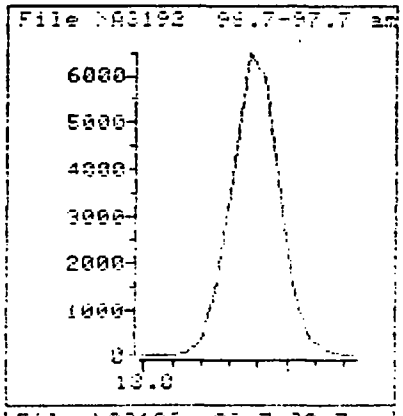
✓
505

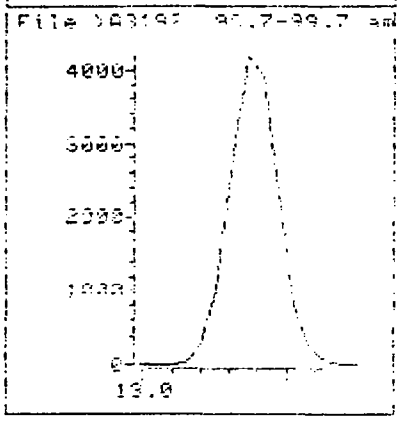
REFERENCE STANDARD SPECTRUM











Data File: [illegible] Quant Output File: [illegible]
Name: [illegible] Kp.1
Misc: [illegible] SAMPLE - HWE/BM
Quant Time: 940602 [illegible] Quant [illegible] File: [illegible]
Injected at: 940602 [illegible] Last Calibration: 940602 13:00

Compound No: 29
Compound Name: 1,1,1-Trichloroethane
Scan Number: 234
Retention Time: 13.37 min.
Quant Ion: 97.0
Area: [illegible]
Concentration: 42.16 UG/L
Q-value: 99

✓
JKS

QUANT REPORT

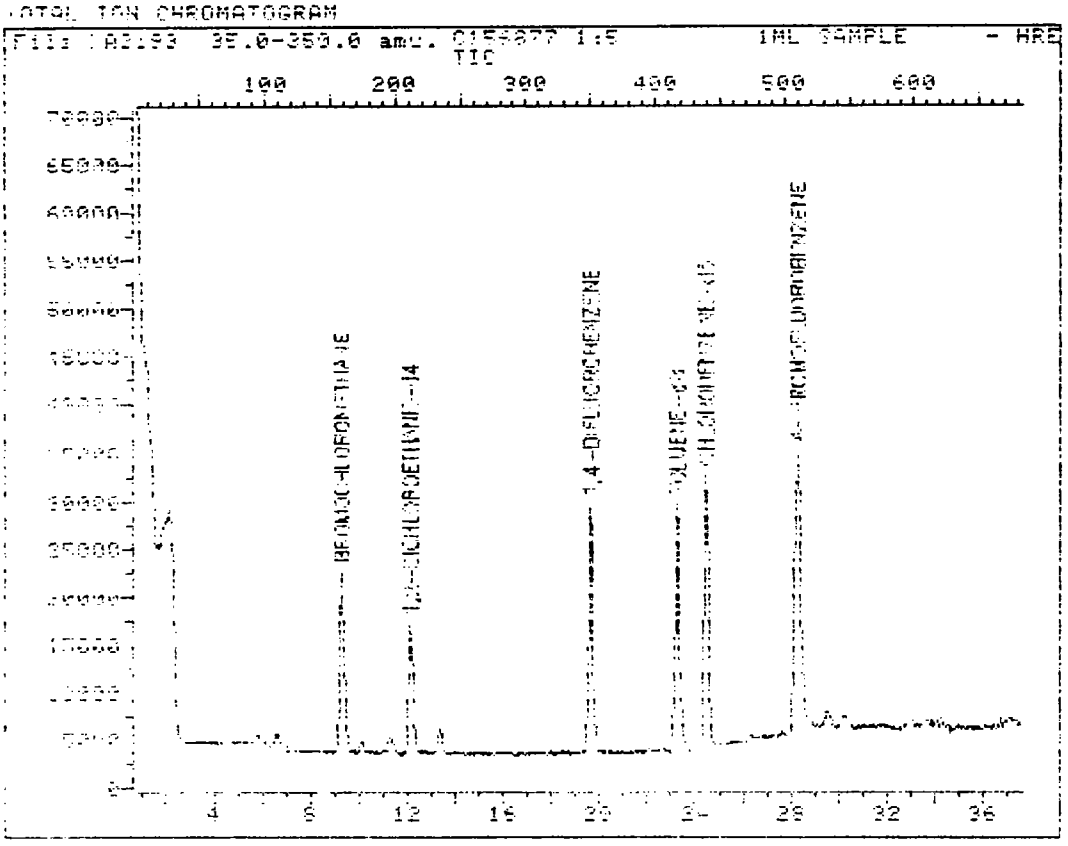
Operator ID: USER8 Quant Rev: 6 Quant Time: 940602 23:22
Output File: ^A3193::SS Injected at: 940602 22:43
Data File: >A3193::E4 Dilution Factor: 1.00000
Name: C156877 1:5 Rep-1
Misc: 1ML SAMPLE HRE/BM

ID File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 940602 13:00

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.27	128.0	33146	50.00	UG/L	100
8)	Acetone	6.62	43.0	17328	190.29	UG/L	88
15)	Tetrahydrofuran	10.13	42.0	2559	32.36	UG/L	81
18)	1,2-DICHLOROETHANE-d4	12.13	65.0	55661	55.54	UG/L	97
20)	2-Butanone	12.24	43.0	18936	133.69	UG/L	74
21)	*1,4-DIFLUOROBENZENE	19.64	114.0	119024	50.00	UG/L	88
35)	*CHLOROBENZENE-d5	24.44	117.0	107118	50.00	UG/L	86
40)	TOLUENE-d8	23.25	98.0	105307	51.73	UG/L	95
4.	4-BROMOFLUOROBENZENE	28.28	95.0	80548	54.66	UG/L	100

* Compound is ISTD

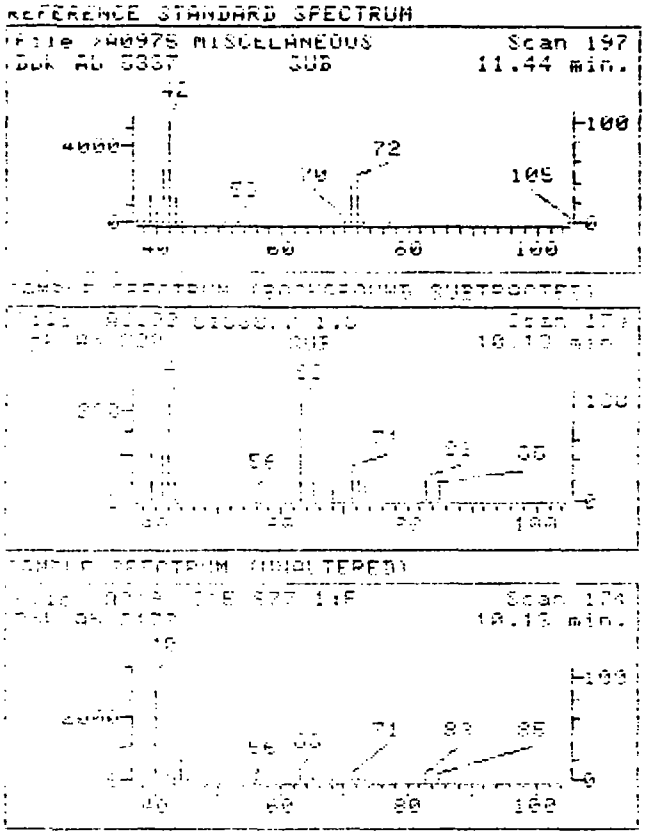
TOTAL ION CHROMATOGRAM

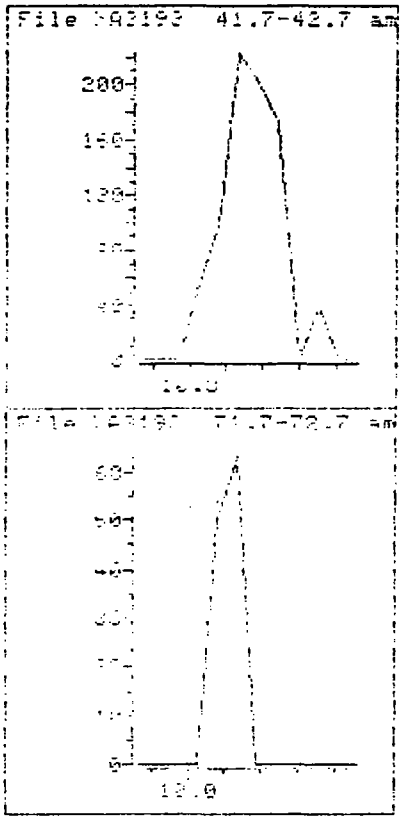


Data File: >A3193::F4 Quant Output File: ^A3193::SS
Name: C156877 1:5 Rep-1
Misc: 1ML SAMPLE - HRE/HM

Id File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 940602 13:00

Operator ID: USER8
Quant Time: 940602 23:22
Injected at: 940602 22:43





Data File: >A3193::E4
Name: [illegible] 1:5 Rep.1
Misc: 1ML SAMPLE - HRE/BM
Quant Time: 940602 23:20
Injected at: 940602 22:43

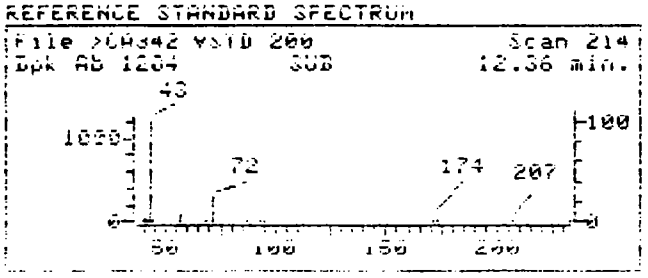
Quant Output File: >A3193::[illegible]

Quant ID File: [illegible]::[illegible]
Last Calibration: 940602 13:00

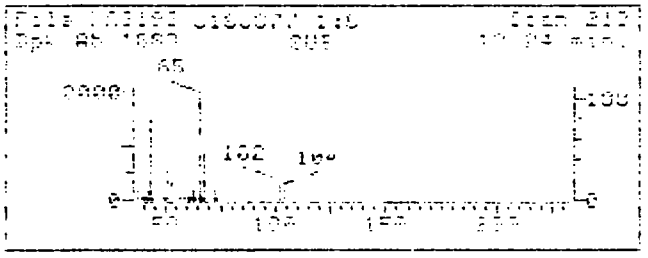
Compound No: 15
Compound Name: Tetrahydrofuran
Scan Number: 174
Retention Time: 10.13 min.
Quant Ion: 42.0
Area: 2559
Concentration: 32.36 UG/L
q-value: 81

JS

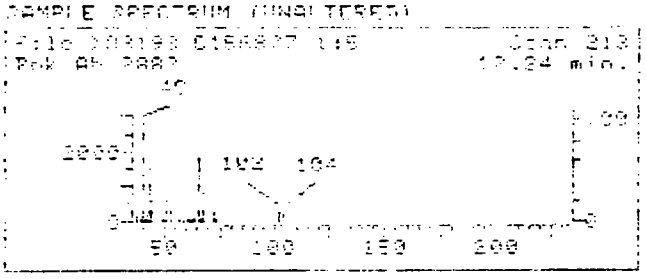
REFERENCE STANDARD SPECTRUM

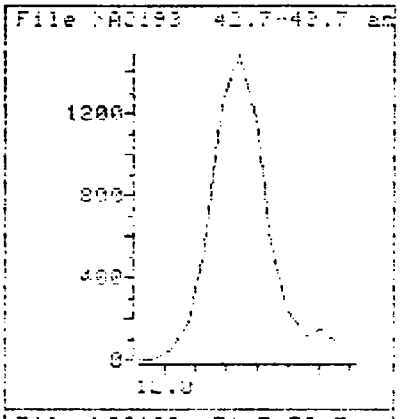


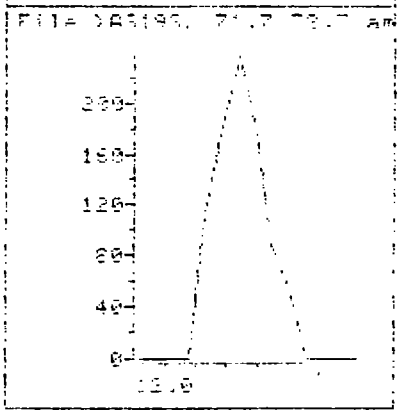
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







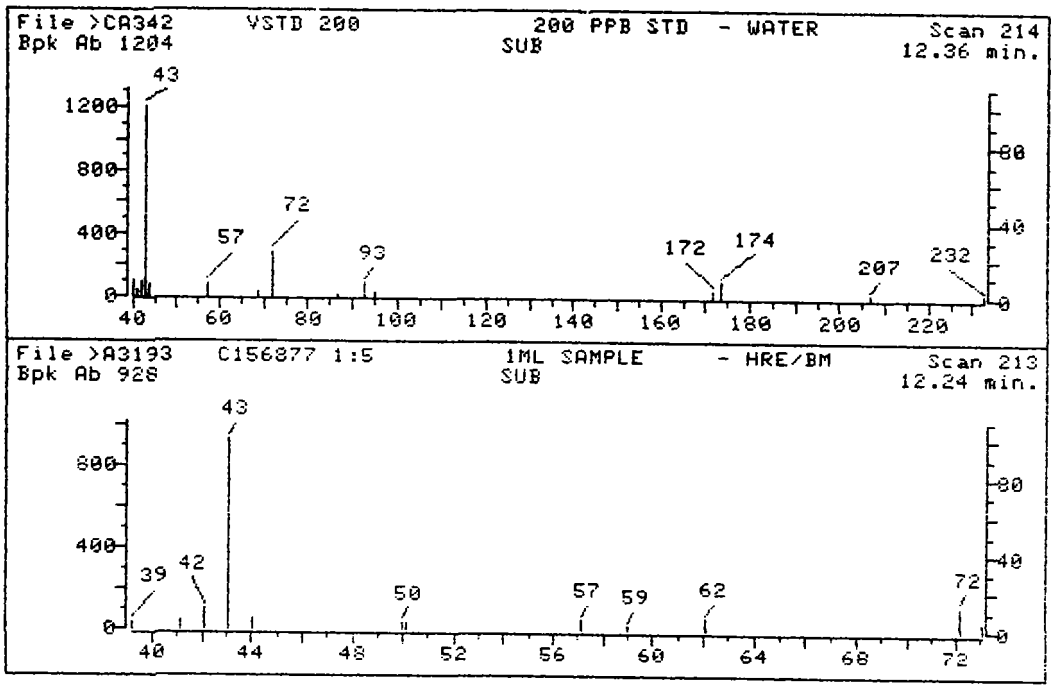
Data File: >A3193::F4
Name: C1568[illegible] 1:5 Rep 1
Misc: 1ML SAMPLE - HRE/HM
Quant Time: 940602 [illegible]
Injected at: 940602 [illegible]

Quant Output File: >A3193::SS
Quant ID File: [illegible]
Last Calibration: 940602 13:00

Compound No: 70
Compound Name: 2-Butanone
Scan Number: 213
Retention Time: 12.24 min.
Quant Ion: 43.0
Area: 18936
Concentration: 133.69 UG/L
q-value: 24

see next page

SB



20) 2-Butanone RT:12.24 Area: 18936 133.69 UG/L

QUANT REPORT

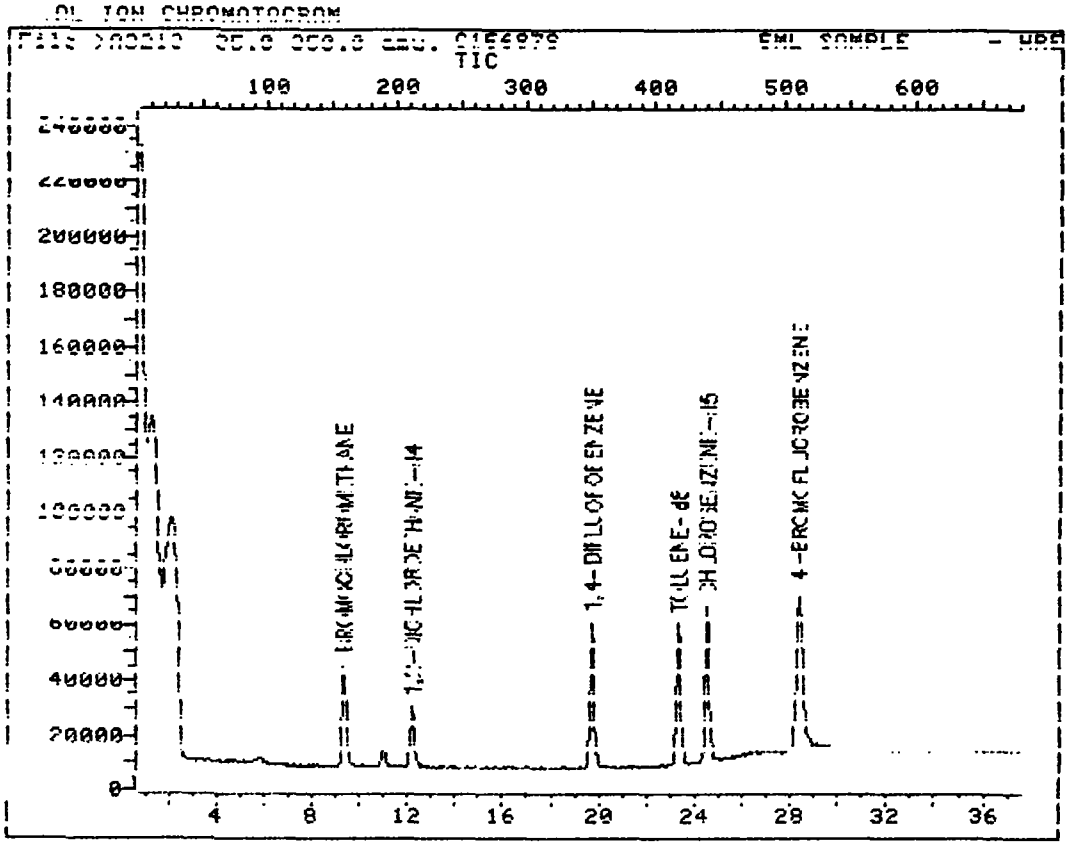
Operator ID: USER8 Quant Rev: 6 Quant Time: 940606 13:48
Output File: ^A3213::D1 Injected at: 940606 13:10
Data File: >A3213::E6 Dilution Factor: 1.00000
Name: C156878
Misc: 5ML SAMPLE - HRE/BM

ID File: 10WVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 940606 12:11

OK
6/6/94

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.32	128.0	65903	50.00	UG/L	100
4)	Vinyl Chloride	2.57	62.0	8135	9.52	UG/L	88
7)	Methylene Chloride	5.81	84.0	4013	2.57	UG/L	100
16)	1,2-Dichloroethene	10.94	96.0	19139	10.36	UG/L	84
18)	1,2-DICHLOROETHANE-d4	12.18	65.0	98254	45.40	UG/L	98
21)	*1,4-DIFLUOROBENZENE	19.68	114.0	243403	50.00	UG/L	87
35)	*CHLOROBENZENE-d5	24.49	117.0	214238	50.00	UG/L	87
40)	TOLUENE-d8	23.30	98.0	213956	49.35	UG/L	97
44)	4-BROMOFLUOROBENZENE	28.33	95.0	162578	50.18	UG/L	100

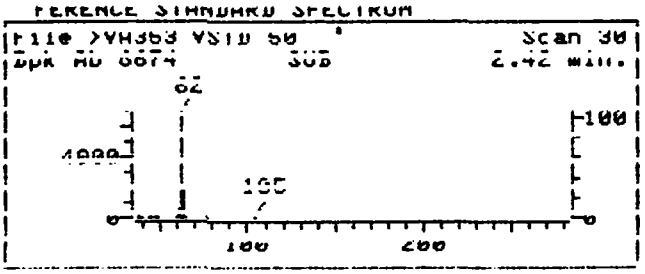
ompound is ISTD



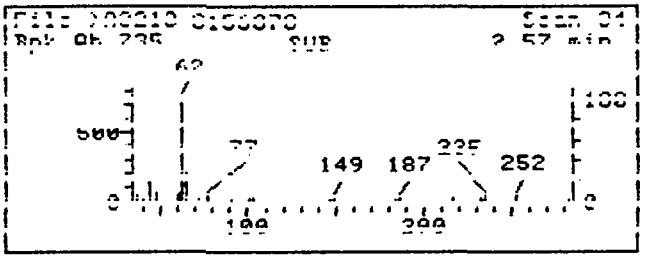
Data File: >A3213 Quant Output File: ^A3213::D1
Name: C156878
Misc: 5ML SAMPLE - HRE/BM

Id File: IDWVOC::D5
Title: QUANTITATIUN FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 940606 12:11

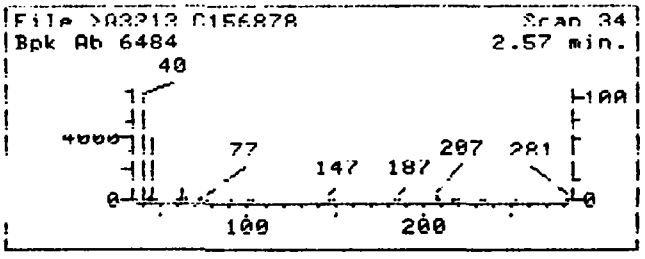
Operator ID: USER8
Quant Time: 940606 13:48
Injected at: 940606 13:10

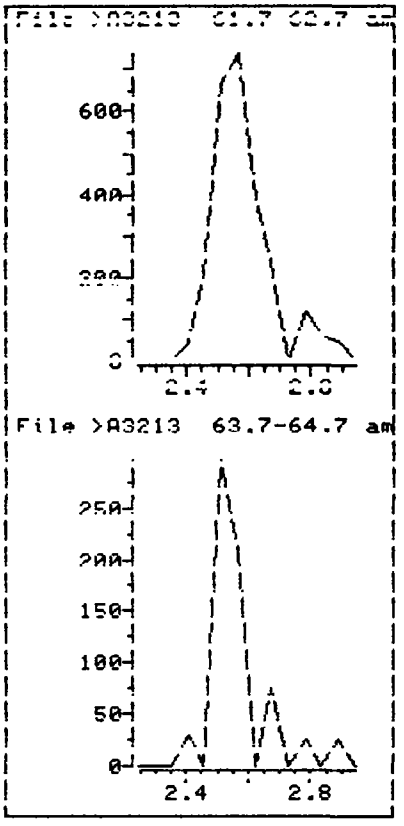


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





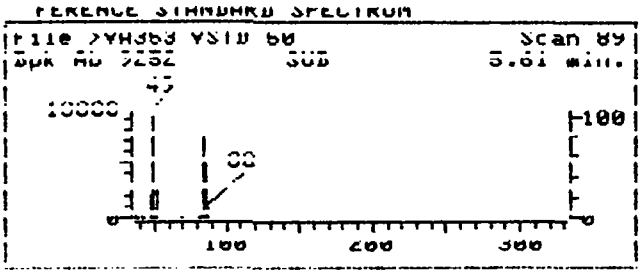
Data File: >A3213
Name: C156878
Misc: 5ML SAMPLE - HRE/BM
Quant Time: 940606 13:48
Injected at: 940606 13:10

Quant Output File: ^A3213::D1

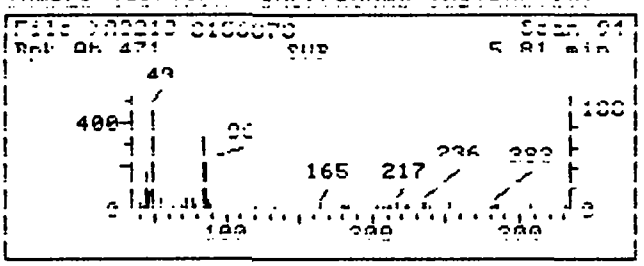
Quant ID File: IDWVOC::D5
Last Calibration: 940606 12:11

Compound No: 4
Compound Name: Vinyl Chloride
Scan Number: 34
Retention Time: 2.57 min.
Quant Ion: 62.0
Area: 8135
Concentration: 9.52 UG/L
q-value: 88

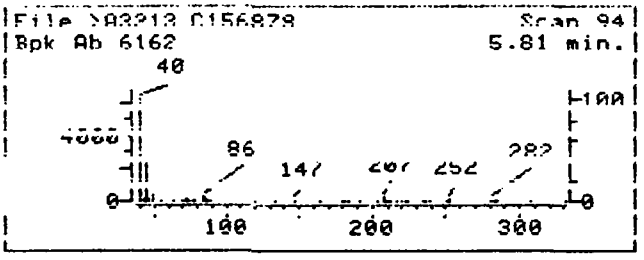
SLS

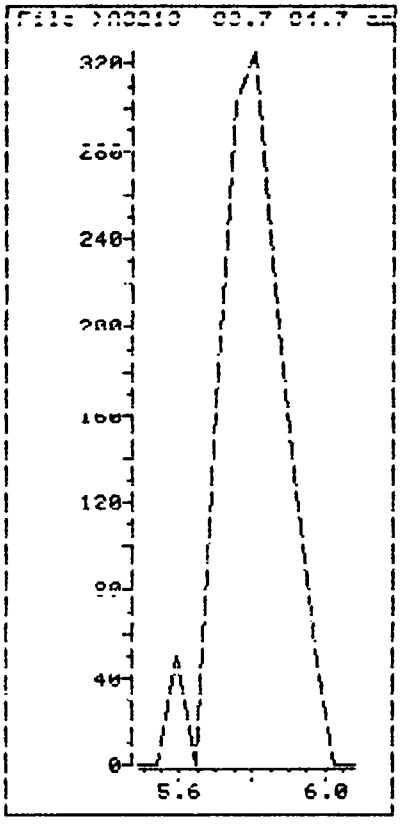


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

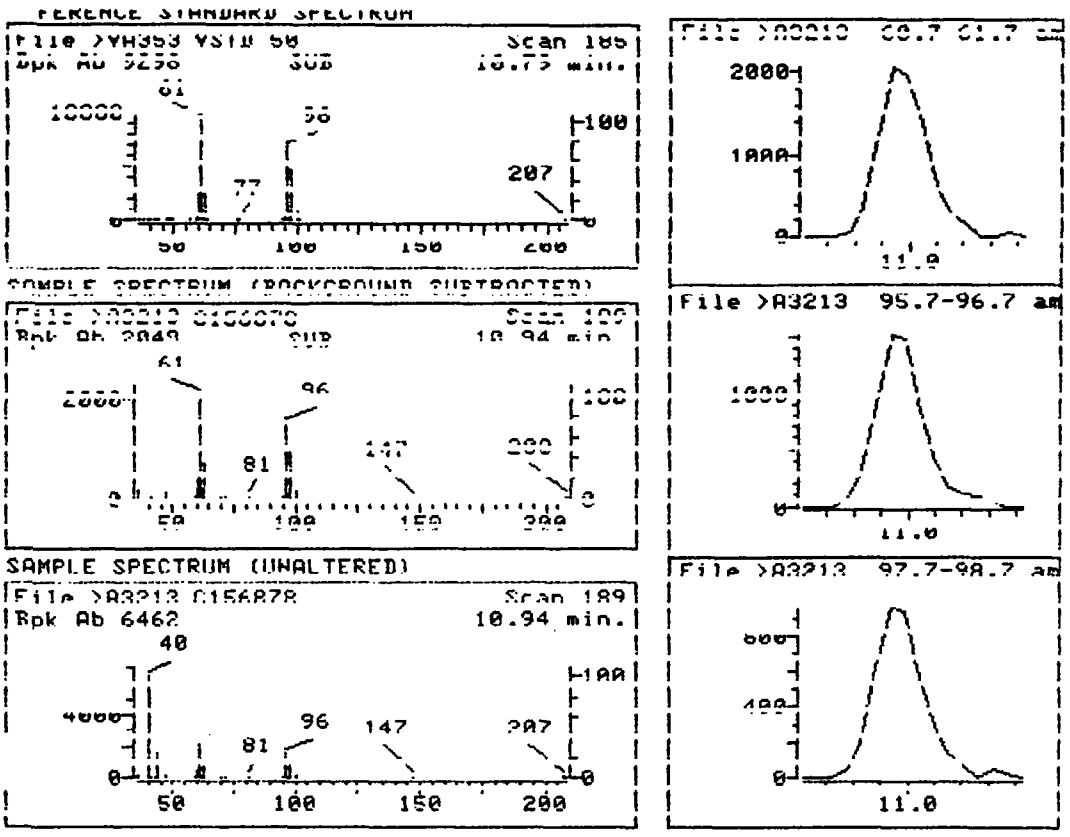




Data File: >A3213 Quant Output File: ^A3213::D1
Name: C156878
Misc: 5ML SAMPLE - HRE/BM
Quant Time: 940606 13:48 Quant ID File: IDWVOC::D5
Injected at: 940606 13:10 Last Calibration: 940606 12:11

Compound No: 7
Compound Name: Methylene Chloride
Scan Number: 94
Retention Time: 5.81 min.
Quant Ion: 84.0
Area: 4013
Concentration: 2.57 UG/L
q-value: 100

✓
JS



Data File: >A3213
Name: C156878
Misc: 5ML SAMPLE - HRE/BM
Quant Time: 940606 13:48
Injected at: 940606 13:10

Quant Output File: ^A3213::D1
Quant ID File: IDWVOC::D5
Last Calibration: 940606 12:11

Compound No: 16
Compound Name: 1,2-Dichloroethene
Scan Number: 189
Retention Time: 10.94 min.
Quant Ion: 96.0
Area: 19139
Concentration: 10.36 UG/L
q-value: 84

✓
SJS

QUANT REPORT

Operator ID: USER8 Quant Rev: 6 Quant Time: 940606 18:21
Output File: ^A3219::D1 Injected at: 940606 17:42
Data File: >A3219::E6 Dilution Factor: 1.00000
Name: ~~C157~~ C156876 (1:50)
Misc: ~~5ML~~ SAMPLE - HRE/BM

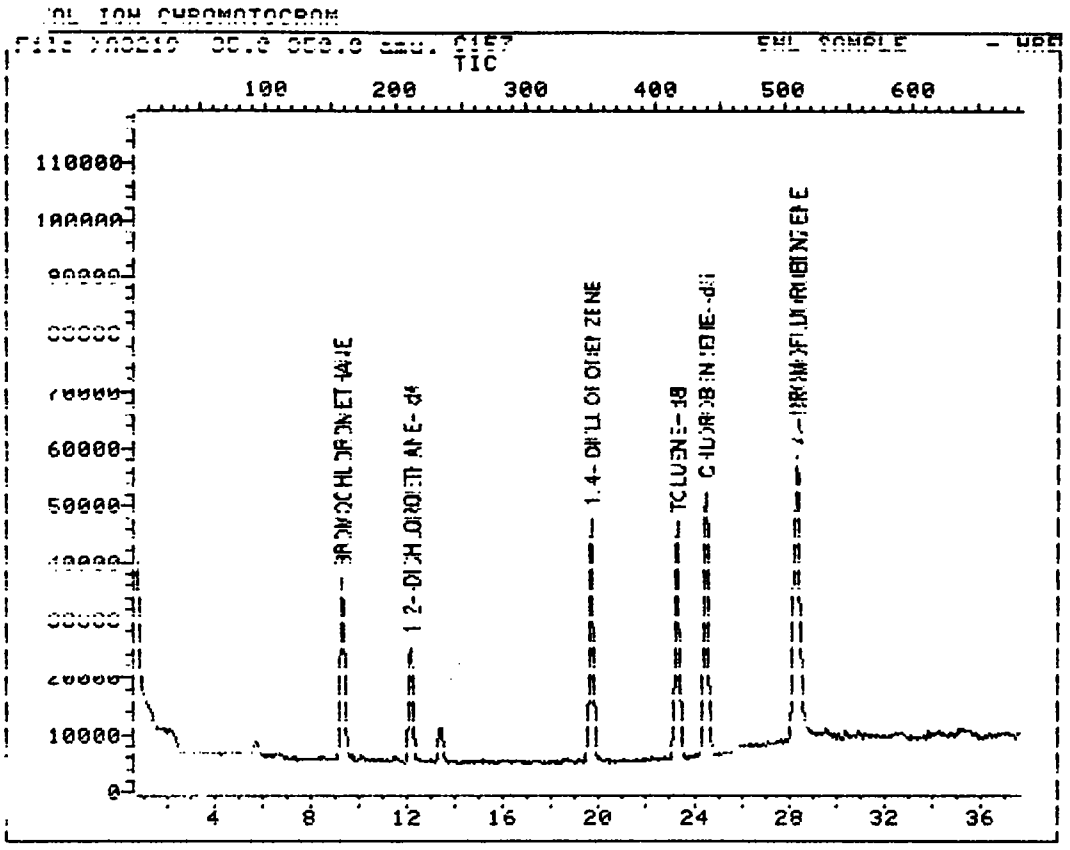
OK
GBS
6/6/94

Rep. Ø

ID File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 940606 12:11

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.32	128.0	52785	50.00	UG/L	100
8)	Acetone	6.67	43.0	11776	70.19	UG/L	78
18)	1,2-DICHLOROETHANE-d4	12.18	65.0	91250	52.64	UG/L	96
21)	*1,4-DIFLUOROBENZENE	19.68	114.0	195926	50.00	UG/L	89
35)	*CHLOROBENZENE-d5	24.49	117.0	169455	50.00	UG/L	88
40)	TOLUENE-d8	23.30	98.0	168408	49.11	UG/L	96
44)	4-BROMOFLUOROBENZENE	28.33	95.0	129855	50.67	UG/L	100

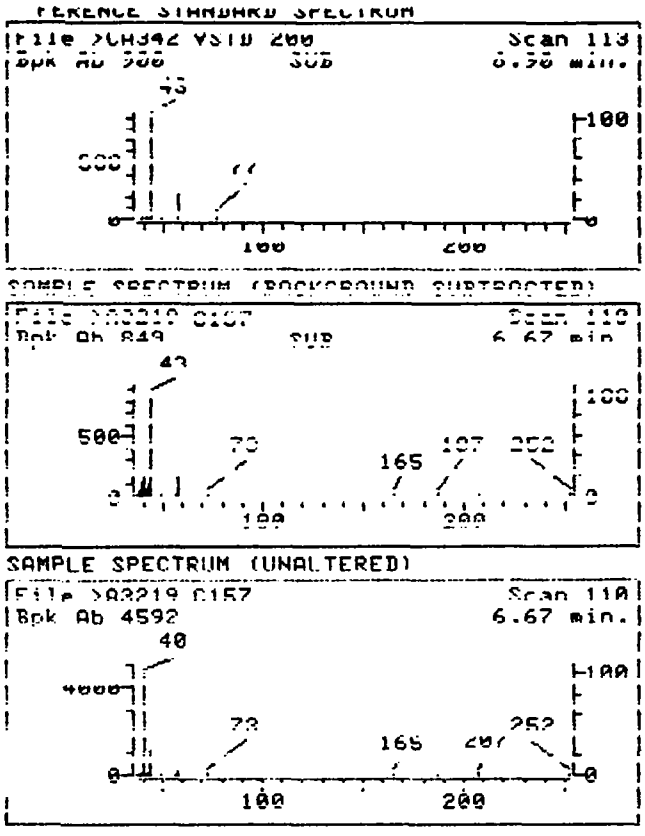
* Compound is ISTD

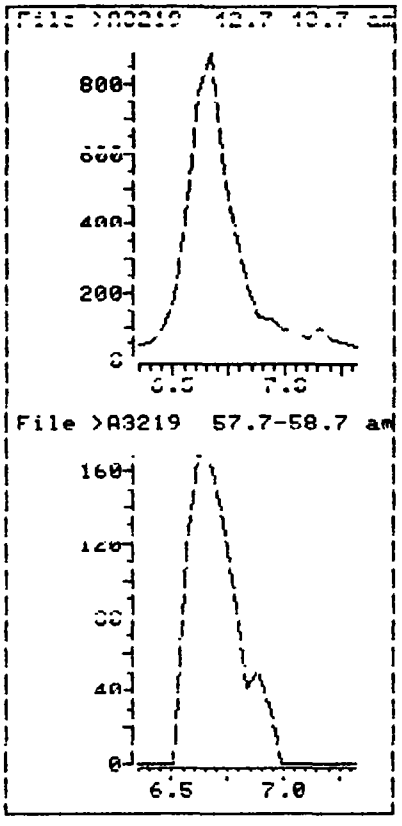


Data File: >A3219 Quant Output File: ^A3219::D1
Name: ~~C157~~ C156876 (1:50) RPD
Misc: ~~SML~~ SAMPLE - HRE/BM

Id File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 940606 12:11

Operator ID: USER8
Quant Time: 940606 18:21
Injected at: 940606 17:42





Data File: >A3219
Name: C157
Misc: 5ML SAMPLE - HRE/BM
Quant Time: 940606 18:21
Injected at: 940606 17:42

Quant Output File: ^A3219::D1

Quant ID File: IDWVOC::D5
Last Calibration: 940606 12:11

Compound No: 8
Compound Name: Acetone
Scan Number: 110
Retention Time: 6.67 min.
Quant Ion: 43.0
Area: 11776
Concentration: 70.19 UG/L
q-value: 78

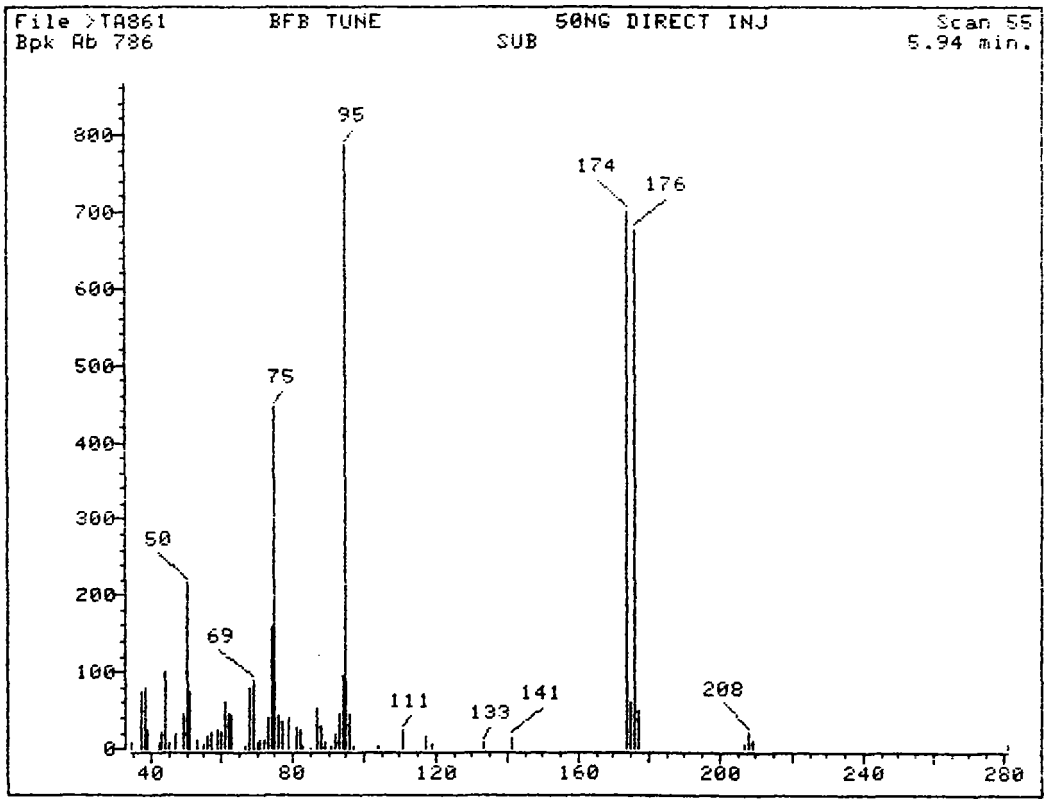
SKS

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	27.48	27.48	Ok
75	30-60% of mass 95	56.74	56.74	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	5.85	5.85	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	89.06	89.06	Ok
175	5-9% of mass 174	7.89	8.86	Ok
176	95-101% of mass 174	86.13	96.71	Ok
177	5-9% of mass 176	6.49	7.53	Ok

Injection Date: 05/26/94
Injection Time: 09:20
Data File: >TA861
Scan: 55



000789

>TA861 BFB TUNE 50NG DIRECT INJ
55 SUB NRM

File: >TA861 Scan #: 55 Retn. time: 5.94

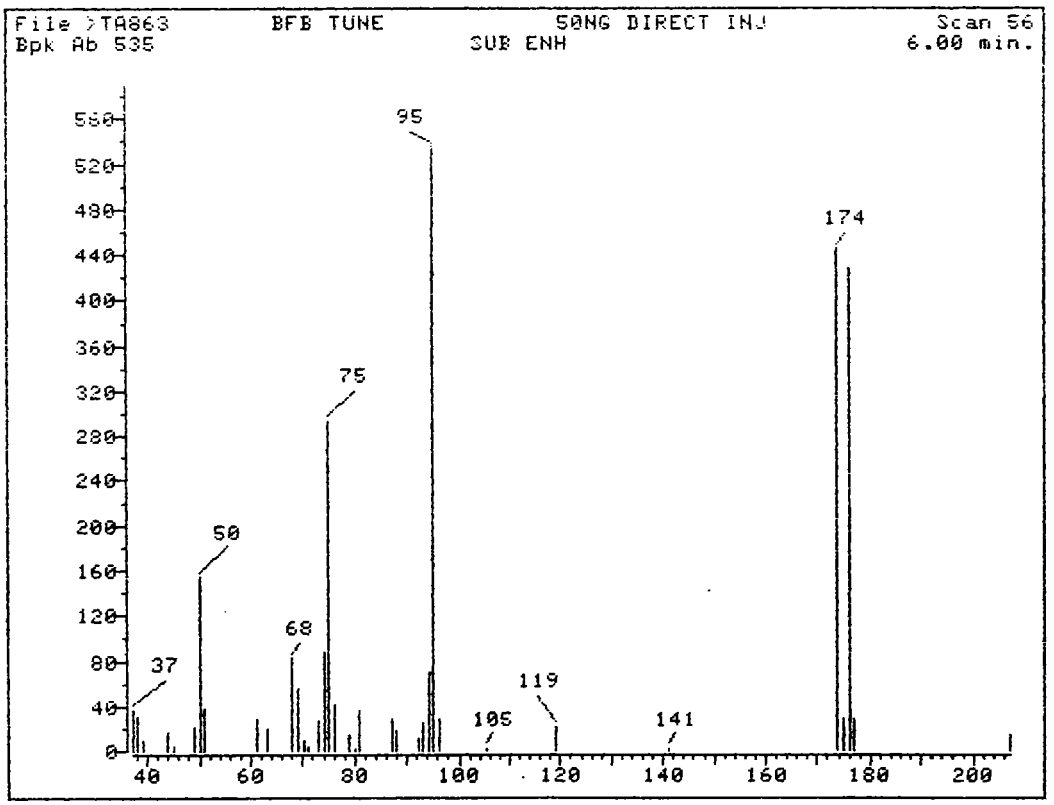
m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
34.00	.891	55.10	.636	71.05	1.399	87.10	6.616	117.00	2.036
37.00	9.542	56.10	2.163	72.05	1.272	88.00	3.562	119.10	.763
38.00	10.178	57.10	2.799	73.05	4.962	89.10	.891	133.05	.891
39.05	2.926	59.00	2.926	74.05	20.229	91.00	.254	141.05	1.781
42.05	1.018	60.00	2.799	75.05	56.743	92.00	2.545	173.95	89.059
43.05	2.672	61.00	7.634	76.05	5.471	93.00	5.852	175.10	7.888
43.95	12.723	62.00	5.598	77.05	4.453	94.00	12.214	176.00	86.132
45.05	.891	63.00	5.471	78.95	5.216	95.00	100.000	177.00	6.489
47.05	2.545	67.10	.382	80.95	3.435	96.00	5.852	207.10	.763
49.05	5.852	68.00	10.178	82.05	3.053	97.10	.254	208.20	2.672
50.05	27.481	69.05	11.323	83.05	.382	103.95	.254	209.00	1.527
51.05	9.288	70.05	1.018	85.20	.127	111.05	3.053	281.15	.763
53.05	1.272								

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	28.86	28.86	Ok
75	30-60% of mass 95	54.88	54.88	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	5.46	5.46	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	83.14	83.14	Ok
175	5-9% of mass 174	5.53	6.65	Ok
176	95-101% of mass 174	79.81	96.00	Ok
177	5-9% of mass 176	5.50	6.89	Ok

Injection Date: 05/26/94
Injection Time: 14:58
Data File: >TA863
Scan: 56



56 SUB NRM ENH

File: >TA863 Scan #: 56 Retn. time: 6.00

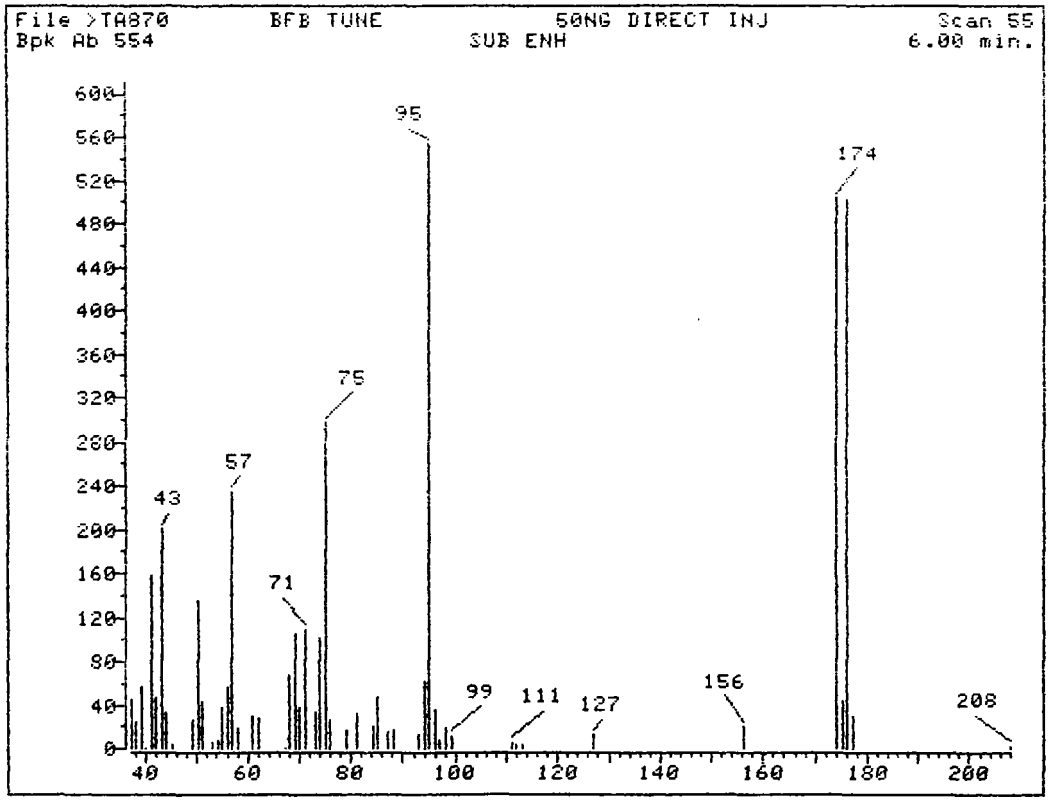
m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.00	6.879	61.00	5.495	74.05	16.374	88.00	3.551	119.10	4.112
38.00	5.869	63.00	3.589	75.05	54.878	92.10	2.168	141.05	.486
39.15	1.832	68.00	15.439	76.05	7.925	93.10	4.636	173.95	83.140
44.05	2.991	69.15	10.355	79.05	2.841	94.10	13.234	175.10	5.533
45.05	.673	70.15	1.570	79.95	.411	95.10	100.000	176.10	79.813
49.05	4.187	71.15	.598	81.05	6.841	96.10	5.458	177.10	5.495
50.05	28.860	73.05	5.234	87.10	5.346	105.15	.411	207.20	2.729
50.95	6.953								

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	24.19	24.19	Ok
75	30-60% of mass 95	53.68	53.68	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	6.43	6.43	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	90.94	90.94	Ok
175	5-9% of mass 174	7.73	8.50	Ok
176	95-101% of mass 174	90.65	99.68	Ok
177	5-9% of mass 176	5.31	5.85	Ok

Injection Date: 06/02/94
Injection Time: 07:03
Data File: >TA870
Scan: 55



55 SUB NRM ENH

File: >TA870 Scan #: 55 Retn. time: 6.00

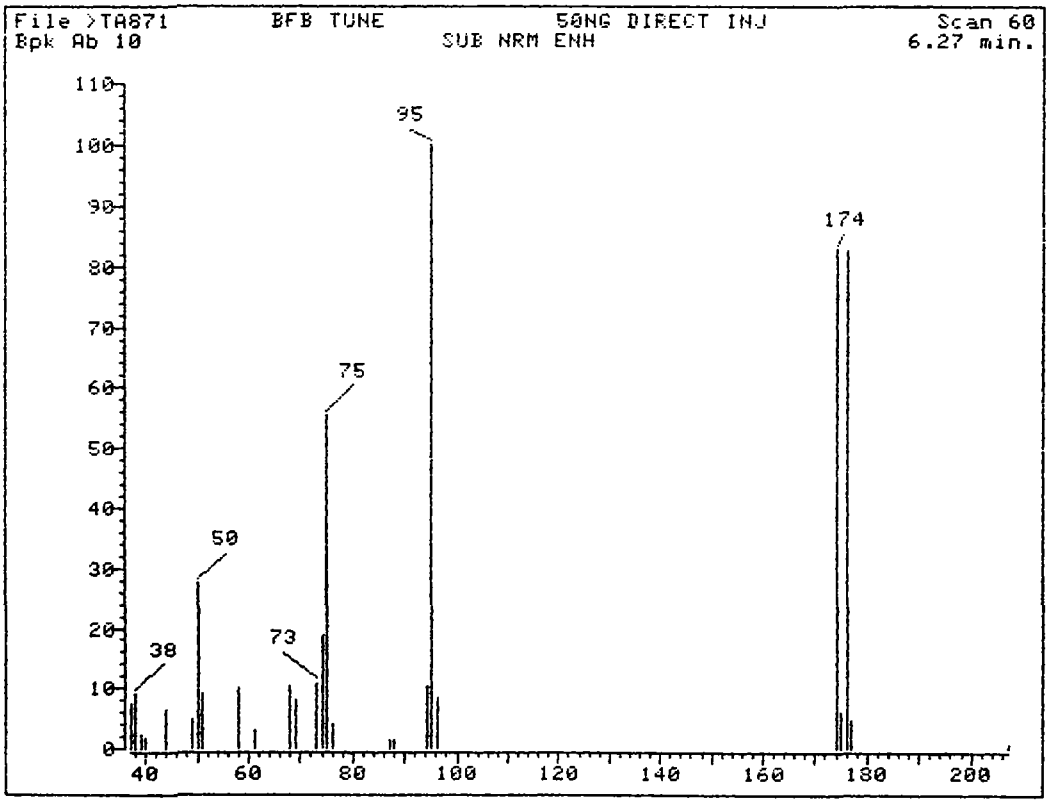
m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.00	8.231	51.05	7.870	69.15	18.917	85.20	8.448	111.15	1.191
38.00	4.404	53.05	1.047	70.15	6.895	87.10	2.563	112.15	.830
39.05	10.181	54.10	1.516	71.15	19.639	88.10	3.105	113.15	.578
40.05	.108	55.10	6.895	73.05	6.029	93.10	2.238	127.10	2.383
41.05	28.556	56.10	10.036	74.05	18.051	94.10	11.191	156.30	3.718
42.05	8.592	57.10	42.491	75.05	53.682	95.10	100.000	174.05	90.939
43.05	36.209	58.10	3.430	76.05	4.693	96.00	6.426	175.10	7.726
44.05	6.065	61.00	5.379	78.95	3.177	97.10	1.336	176.10	90.650
45.05	.866	62.00	5.090	80.95	5.848	98.10	3.321	177.10	5.307
48.95	4.693	67.10	.108	84.20	3.827	99.15	2.058	208.10	.433
50.05	24.188	68.00	12.202						

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	27.41	27.41	Ok
75	30-60% of mass 95	55.39	55.39	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	8.55	8.55	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	82.91	82.91	Ok
175	5-9% of mass 174	6.10	7.35	Ok
176	95-101% of mass 174	82.49	99.50	Ok
177	5-9% of mass 176	4.79	5.81	Ok

Injection Date: 06/02/94
Injection Time: 10:48
Data File: >TA871
Scan: 60



000795

>TA871 BFB TUNE 50NG DIRECT INJ

File: >TA871 Scan #: 60 Retn. time: 6.27

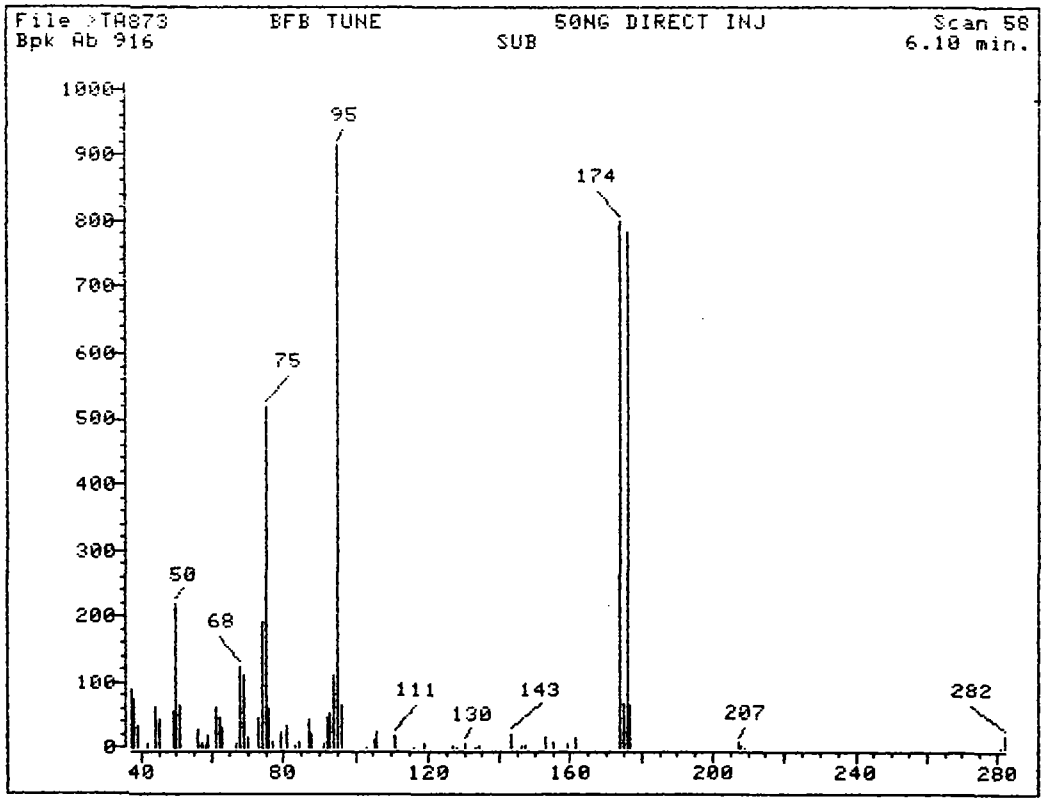
m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.00	7.556	50.05	27.410	69.15	8.181	87.10	1.511	174.05	82.908
38.00	8.963	50.95	9.224	73.05	10.891	88.10	1.407	175.10	6.097
39.15	2.345	58.10	10.005	74.05	18.760	94.10	10.578	176.10	82.491
40.05	1.824	61.00	3.127	75.05	55.393	95.10	100.000	177.10	4.794
44.05	6.253	68.00	10.422	76.05	3.908	96.10	8.546	207.20	.834
49.05	4.794								

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	23.91	23.91	Ok
75	30-60% of mass 95	56.88	56.88	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	6.99	6.99	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	87.45	87.45	Ok
175	5-9% of mass 174	7.53	8.61	Ok
176	95-101% of mass 174	85.70	98.00	Ok
177	5-9% of mass 176	7.10	8.28	Ok

Injection Date: 06/06/94
Injection Time: 08:26
Data File: >TA873
Scan: 58



58 SUB NRM

File: >TA873 Scan #: 58 Retn. time: 6.10

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.00	9.825	61.00	6.659	81.05	3.712	106.05	2.838	155.10	1.092
38.00	8.188	62.00	5.131	83.05	.218	111.05	2.183	159.10	.873
39.15	3.603	63.00	3.275	84.10	1.201	116.00	.109	161.15	1.856
42.05	.546	67.00	.873	87.10	4.694	119.10	.655	173.95	87.445
43.95	6.769	68.00	13.537	88.00	2.511	127.10	.437	175.10	7.533
45.05	4.585	69.05	12.118	91.10	.655	128.00	.109	176.00	85.699
49.05	6.004	70.15	1.856	92.00	5.022	130.05	.764	177.00	7.096
49.95	23.908	73.05	5.022	93.00	5.677	133.15	.109	207.10	.983
51.05	7.205	74.05	20.961	94.00	12.009	134.15	.437	208.10	.437
56.10	3.166	75.05	56.878	95.10	100.000	143.05	2.402	209.10	.109
57.10	.873	76.05	6.332	96.00	6.987	146.10	.437	281.15	.109
58.00	.218	77.05	.983	103.05	.109	147.10	.437	282.15	2.074
59.00	1.965	78.95	2.620	105.15	1.528	153.10	1.747		

QUANT REPORT

Operator ID: USER8 Quant Rev: 6 Quant Time: 940526 10:43
Output File: ^CA188::SS Injected at: 940526 10:01
Data File: >CA188::E6 Dilution Factor: 1.00000
Name: VSTD 20
Misc: 20 PPB STD

[illegible] File: [illegible]::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 940523 16:06

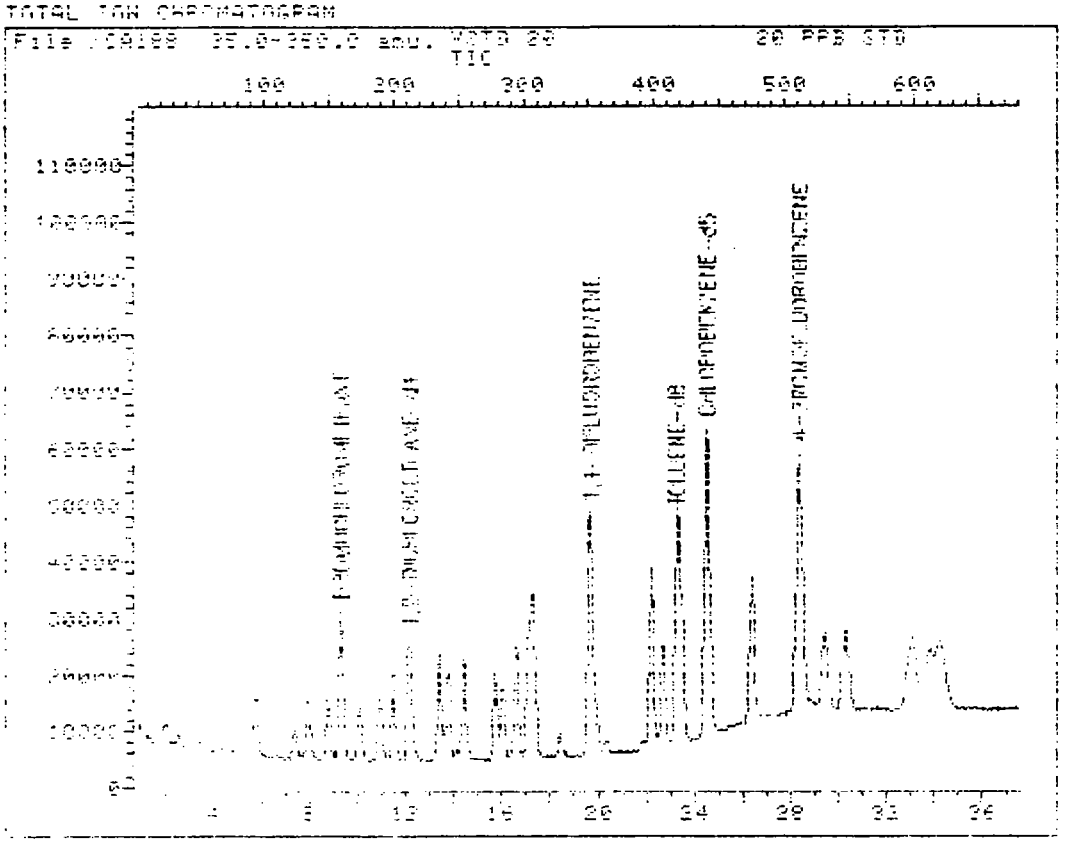
	Compound	R.T.	W ion	Area	Conc	Units	q
[illegible]	*BROMOCHLOROMETHANE	9.32	128.0	48717	50.00	UG/L	100
[illegible]	Chloromethane	1.16	50.0	8523	23.79	UG/L	96
[illegible]	Bromomethane	1.92	94.0	12877	22.34	UG/L	94
[illegible]	Vinyl Chloride	2.51	62.0	16031	21.40	UG/L	95
[illegible]	Chloroethane	3.49	64.0	12118	22.11	UG/L	94
[illegible]	Methylene Chloride	5.76	84.0	27343	22.73	UG/L	100
[illegible]	Acetone	6.67	43.0	4902	20.59	UG/L	78
[illegible]	Carbon Disulfide	7.38	76.0	54124	24.47	UG/L	97
[illegible]	Trichlorofluoromethane	7.92	101.0	61182	22.[illegible]	UG/L	[illegible]
[illegible]	1,1-Dichloroethene	8.78	96.0	25756	25.13	UG/L	94
[illegible]	1,1-Dichloroethane	10.08	63.0	57668	24.36	UG/L	96
[illegible]	Tetrahydrofuran	10.13	42.0	4057	31.68	UG/L	89
16)	1,2-Dichloroethene	10.94	96.0	33680	26.30	UG/L	93
[illegible]	Chloroform	11.48	83.0	72963	23.13	UG/L	98
[illegible]	1,2-DICHLOROETHANE-d4	12.19	65.0	29736	41.[illegible]	UG/L	[illegible]
19)	1,2-Dichloroethane	12.24	62.0	45573	20.18	UG/L	98
[illegible]	2-Butanone	12.24	43.0	4886	23.[illegible]	UG/L	76
[illegible]	*1,4-DIFLUOROBENZENE	19.69	114.0	214764	50.00	UG/L	[illegible]
[illegible]	1,1,1-Trichloroethane	13.43	97.0	70247	20.59	UG/L	99
23)	Carbon Tetrachloride	13.80	117.0	56534	20.16	UG/L	97
24)	Vinyl Acetate	14.18	43.0	16434	14.54	UG/L	[illegible]
[illegible]	Bromodichloromethane	14.45	83.0	74552	20.82	UG/L	91
[illegible]	1,2-Dichloropropane	15.75	63.0	30337	22.[illegible]	UG/L	99
[illegible]	cis-1,3-Dichloropropene	16.[illegible]	75.0	49106	25.71	UG/L	93
[illegible]	Trichloroethene	16.[illegible]	95.0	41120	23.76	UG/L	94
[illegible]	Benzene	17.10	78.0	81795	23.72	UG/L	82
[illegible]	Dibromochloromethane	17.21	129.0	50147	18.79	UG/L	91
[illegible]	1,1,2-Trichloroethane	17.31	97.0	24530	22.12	UG/L	92
[illegible]	trans-1,3-Dichloropropene	17.31	75.0	37472	13.01	UG/L	100
33)	2-Chloroethyl Vinyl Ether	18.39	63.0	10098	17.30	UG/L	100
34)	Bromoform	19.85	173.0	32211	15.87	UG/L	97
35)	*CHLOROBENZENE-d5	24.50	117.0	180889	50.00	UG/L	84
36)	4-Methyl-2-Pentanone	20.34	43.0	12270	19.12	UG/L	96
37)	2-Hexanone	21.85	43.0	7926	20.13	UG/L	79
3[illegible]	Tetrachloroethene	22.23	164.0	38905	22.53	UG/L	92
39)	1,1,2,2,-Tetrachloroethane	22.18	83.0	31472	20.20	UG/L	93
40)	TOLUENE-d8	23.26	98.0	185959	49.70	UG/L	95
41)	Toluene	23.47	92.0	60774	24.64	UG/L	96
42)	Chlorobenzene	24.61	112.0	75727	23.77	UG/L	92
43)	Ethyl Benzene	26.39	106.0	37820	23.85	UG/L	96
44)	4-BROMOFLUOROBENZENE	28.34	95.0	130750	42.37	UG/L	100
45)	Styrene	29.42	104.0	66175	21.93	UG/L	96

000799

	Compound	R.T.	Q ion	Area	Conc	Units	Q
47)	1,3-Dichlorobenzene	32.99	146.0	87909	21.61	UG/L	86
48)	1,2-Dichlorobenzene	33.88	146.0	70296M	20.76	UG/L	100
49)	1,4-Dichlorobenzene	34.18	146.0	86110M	21.37	UG/L	89

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: CA188::56 Quant Output [illegible]
Name: [illegible]
Misc: [illegible] PPB STD

Id File: [illegible]
Title: QUANTITATION FILE FOR VOLATILE WATERS [illegible]
Last Calibration: 940523 16:06

[illegible]
[illegible]: 940526 10:47
[illegible]: 940526 10:01

QUANT REPORT

Operator ID: USER8 Quant Rev: 6 Quant Time: 940526 11:41
Output File: ^CA189::S9 Injected at: 940526 10:49
Data File: >CA189::E7 Dilution Factor: 1.00000
Name: VSTD 100
Mass: 100 PPB STD

ID File: [illegible]
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 940523 16:06

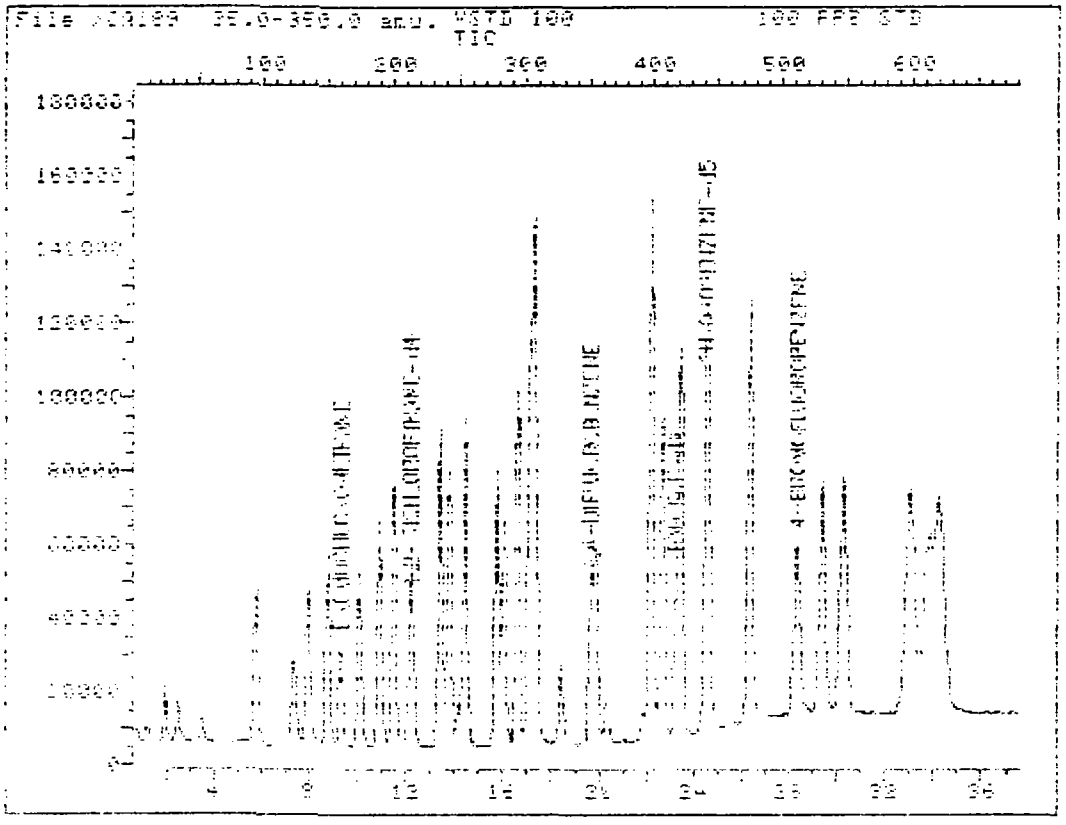
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.32	128.0	50908	50.00	UG/L	100
2)	Chloromethane	1.16	50.0	32866	87.78	UG/L	95
3)	Bromomethane	1.97	94.0	44100	77.22	UG/L	98
4)	Vinyl Chloride	2.51	62.0	67903	86.75	UG/L	97
5)	Dichlorodifluoromethane	2.46	85.0	13360	56.21	UG/L	96
6)	Chloroethane	3.49	64.0	50423	88.03	UG/L	99
7)	Methylene Chloride	5.75	84.0	118933	94.63	UG/L	100
8)	Acetone	6.67	43.0	22617M	90.93	UG/L	89
9)	Carbon Disulfide	7.32	76.0	255211	110.42	UG/L	92
10)	Trichlorofluoromethane	7.97	101.0	266271	91.63	UG/L	89
13)	1,1-Dichloroethene	8.78	96.0	123706	115.51	UG/L	94
14)	1,1-Dichloroethane	10.07	63.0	268537	108.55	UG/L	93
15)	Tetrahydrofuran	10.18	42.0	13252	99.03	UG/L	88
16)	1,2-Dichloroethene	10.94	96.0	160330	119.80	UG/L	93
17)	Chloroform	11.53	83.0	336531	102.07	UG/L	99
18)	1,2-DICHLOROETHANE-d4	12.18	65.0	86759	42.97	UG/L	96
19)	1,2-Dichloroethane	12.29	62.0	203615	86.29	UG/L	99
20)	2-Butanone	12.29	43.0	21542	100.27	UG/L	79
21)	*1,4-DIFLUOROBENZENE	19.64	114.0	232730	50.00	UG/L	81
22)	1,1,1-Trichloroethane	13.42	97.0	314300	85.03	UG/L	99
23)	Carbon Tetrachloride	13.80	117.0	259942	85.54	UG/L	98
24)	Vinyl Acetate	14.18	43.0	100904	82.37	UG/L	97
25)	Bromodichloromethane	14.45	83.0	349487	90.08	UG/L	92
26)	1,2-Dichloropropane	15.75	63.0	154870	106.23	UG/L	96
27)	cis-1,3-Dichloropropene	16.02	75.0	246152	118.92	UG/L	87
28)	Trichloroethene	16.61	95.0	191653	102.17	UG/L	98
29)	Benzene	17.10	78.0	395460	105.85	UG/L	82
30)	Dibromochloromethane	17.21	129.0	238393	82.41	UG/L	92
31)	1,1,2-Trichloroethane	17.31	97.0	118290	98.42	UG/L	95
32)	trans-1,3-Dichloropropene	17.31	75.0	188801	60.48	UG/L	100
33)	2-Chloroethyl Vinyl Ether	18.39	63.0	55894	88.35	UG/L	100
34)	Bromoform	19.85	173.0	160692	73.07	UG/L	97
35)	*CHLOROBENZENE-d5	24.50	117.0	197229	50.00	UG/L	86
36)	4-Methyl-2-Pentanone	20.29	43.0	62421	89.19	UG/L	89
37)	2-Hexanone	21.85	43.0	40419	94.14	UG/L	81
38)	Tetrachloroethene	22.23	164.0	177790	94.45	UG/L	97
39)	1,1,2,2,-Tetrachloroethane	22.18	83.0	158053	93.05	UG/L	93
40)	TOLUENE-d8	23.26	98.0	201398	49.37	UG/L	95
41)	Toluene	23.47	92.0	284218	105.68	UG/L	99
42)	Chlorobenzene	24.61	112.0	358981	103.34	UG/L	96
43)	Ethyl Benzene	26.34	106.0	184769	106.89	UG/L	95
44)	4-BROMOFLUOROBENZENE	28.34	95.0	152624	45.36	UG/L	100

000802

	Compound	R.T.	Q ion	Area	Conc	Units	q
46)	Total Xylenes	30.28	106.0	195348	98.83	UG/L	98
47)	1,3-Dichlorobenzene	33.04	146.0	416774	93.97	UG/L	88
48)	1,2-Dichlorobenzene	34.07	146.0	380083M	102.94	UG/L	100
49)	1,4-Dichlorobenzene	34.23	146.0	430938M	98.07	UG/L	90

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: ^CA189::E7 Quant Output File: ^CA189::SS
Name: VSTD 100
Mix: 100 PPB STD

Id File: 100VUC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS WC/MSD-A
Last Calibration: 940523 16:06

Operator ID: LHER8
Quant Time: 940526 11:41
Injected at: 940526 10:49

QUANT REPORT

Operator ID: USER8 Quant Rev: 6 Quant Time: 940526 12:13
Output File: ^CA190::SS Injected at: 940526 11:34
Data File: >CA190::E1 Dilution Factor: 1.00000
Name: USTD 150
Misc: 150 PPB STD

ID File: [illegible]
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 940523 16:06

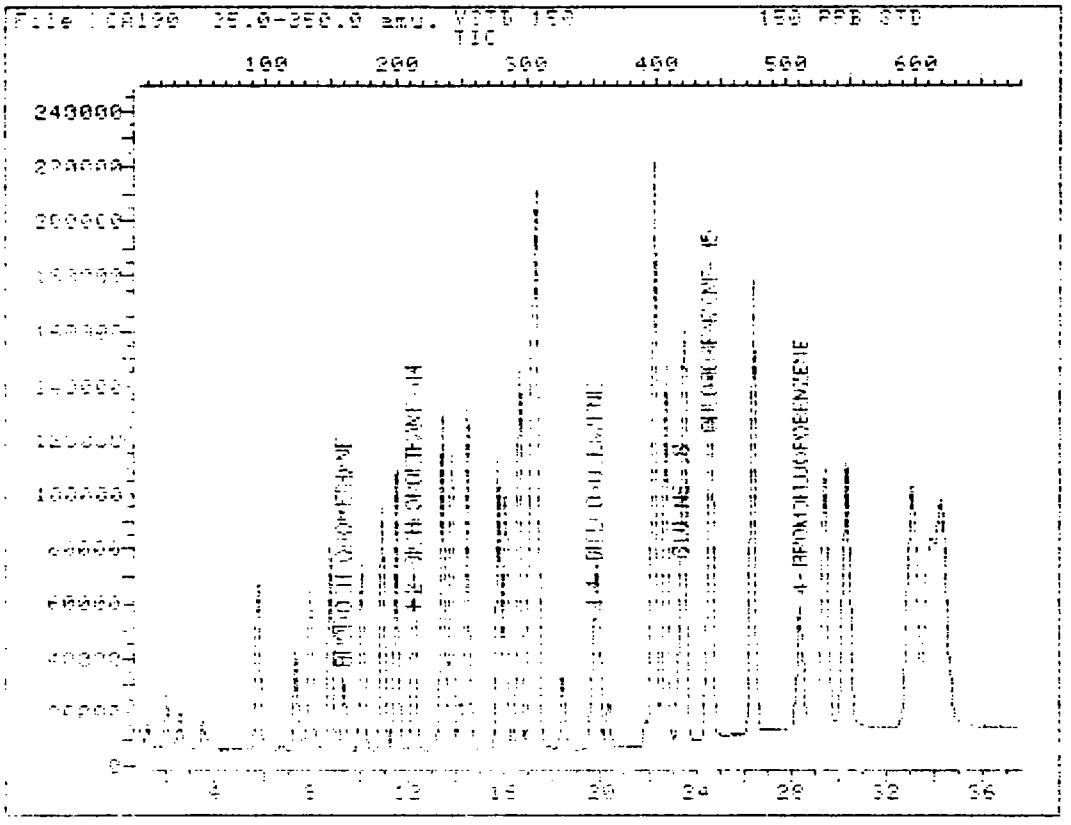
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.33	128.0	48140	50.00	UG/L	100
2)	Chloromethane	1.17	50.0	49028	138.48	UG/L	87
3)	Bromomethane	1.98	94.0	62042	108.94	UG/L	97
4)	Vinyl Chloride	2.52	62.0	100558	135.85	UG/L	98
5)	Dichlorodifluoromethane	2.47	85.0	12817	57.02	UG/L	90
6)	Chloroethane	3.50	64.0	75991	140.29	UG/L	90
7)	Methylene Chloride	5.76	84.0	179204	149.94	UG/L	100
8)	Acetone	6.74	43.0	295517	125.64	UG/L	88
10)	Carbon Disulfide	7.33	76.0	388417	177.71	UG/L	98
1[illegible])	Trichlorofluoromethane	7.98	101.0	375887	136.79	UG/L	89
13)	1,1-Dichloroethene	8.79	96.0	181475	179.19	UG/L	95
14)	1,1-Dichloroethane	10.09	63.0	398405	170.30	UG/L	93
15)	Tetrahydrofuran	10.19	42.0	18839	148.87	UG/L	93
16)	1,2-Dichloroethene	10.90	96.0	236996	187.28	UG/L	85
17)	Chloroform	11.54	83.0	481802	154.54	UG/L	98
18)	1,2-DICHLOROETHANE-d4	12.19	65.0	82131	43.02	UG/L	96
19)	1,2-Dichloroethane	12.30	62.0	282239	126.49	UG/L	98
20)	2-Butanone	12.95	43.0	31948	157.26	UG/L	80
21)	*1,4-DIFLUOROBENZENE	19.70	114.0	220815	50.00	UG/L	84
22)	1,1,1-Trichloroethane	13.43	97.0	450189	128.36	UG/L	99
23)	Carbon Tetrachloride	13.81	117.0	371141	128.72	UG/L	98
24)	Vinyl Acetate	14.19	43.0	159673	137.38	UG/L	99
25)	Bromodichloromethane	14.46	83.0	494548	134.35	UG/L	89
26)	1,2-Dichloropropane	15.76	63.0	229766	166.11	UG/L	92
27)	cis-1,3-Dichloropropene	16.08	75.0	356720	181.64	UG/L	89
28)	Trichloroethene	16.62	95.0	283558	159.33	UG/L	98
29)	Benzene	17.11	78.0	593351	167.38	UG/L	79
30)	Dibromochloromethane	17.22	129.0	335937	122.40	UG/L	90
31)	1,1,2-Trichloroethane	17.38	97.0	163815	143.66	UG/L	95
32)	trans-1,3-Dichloropropene	17.32	75.0	268482	90.64	UG/L	100
33)	2-Chloroethyl Vinyl Ether	18.40	63.0	78652	131.04	UG/L	100
34)	Bromoform	19.86	173.0	220886	105.86	UG/L	98
35)	*CHLOROBENZENE-d5	24.51	117.0	185792	50.00	UG/L	83
36)	4-Methyl-2-Pentanone	20.35	43.0	88060	133.57	UG/L	92
3[illegible]	2-Hexanone	21.92	43.0	56022	138.51	UG/L	79
3[illegible]	Tetrachloroethene	22.24	164.0	247597	139.63	UG/L	96
39)	1,1,2,2,-Tetrachloroethane	22.19	83.0	221092	138.17	UG/L	91
40)	TOLUENE-d8	23.32	98.0	193732	50.41	UG/L	96
41)	Toluene	23.48	92.0	418572	165.22	UG/L	94
42)	Chlorobenzene	24.62	112.0	524446	160.26	UG/L	95
43)	Ethyl Benzene	26.40	106.0	270582	166.16	UG/L	94
44)	4-BROMOFLUOROBENZENE	28.35	95.0	140957	44.47	UG/L	100

000505

	Compound	R.T.	Q ion	Area	Conc	Units	q
46)	Total Xylenes	30.29	106.0	291478	156.54	UG/L	98
47)	1,3-Dichlorobenzene	33.05	146.0	605784	144.99	UG/L	88
48)	1,2-Dichlorobenzene	33.81	146.0	505492M	145.33	UG/L	100
49)	1,4-Dichlorobenzene	34.24	146.0	626489M	151.35	UG/L	90

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >CA190::F1 Quant Output File: ^CA190::SS
Name: VSTD 150
Misc: 150 PPB STD

Id File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 940523 16:06

Operator ID: USER8
Quant Time: 940526 10:13
Injected at: 940526 11:34

QUANT REPORT

Operator ID: USER8 Quant Rev: 6 Quant Time: 940526 12:58
Output File: [illegible]CA191::SS Injected at: 940526 12:19
Data File: [illegible]CA191::E1 Dilution Factor: 1.00000
Name: [illegible]
Misc: [illegible]

[illegible]
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 940523 16:06

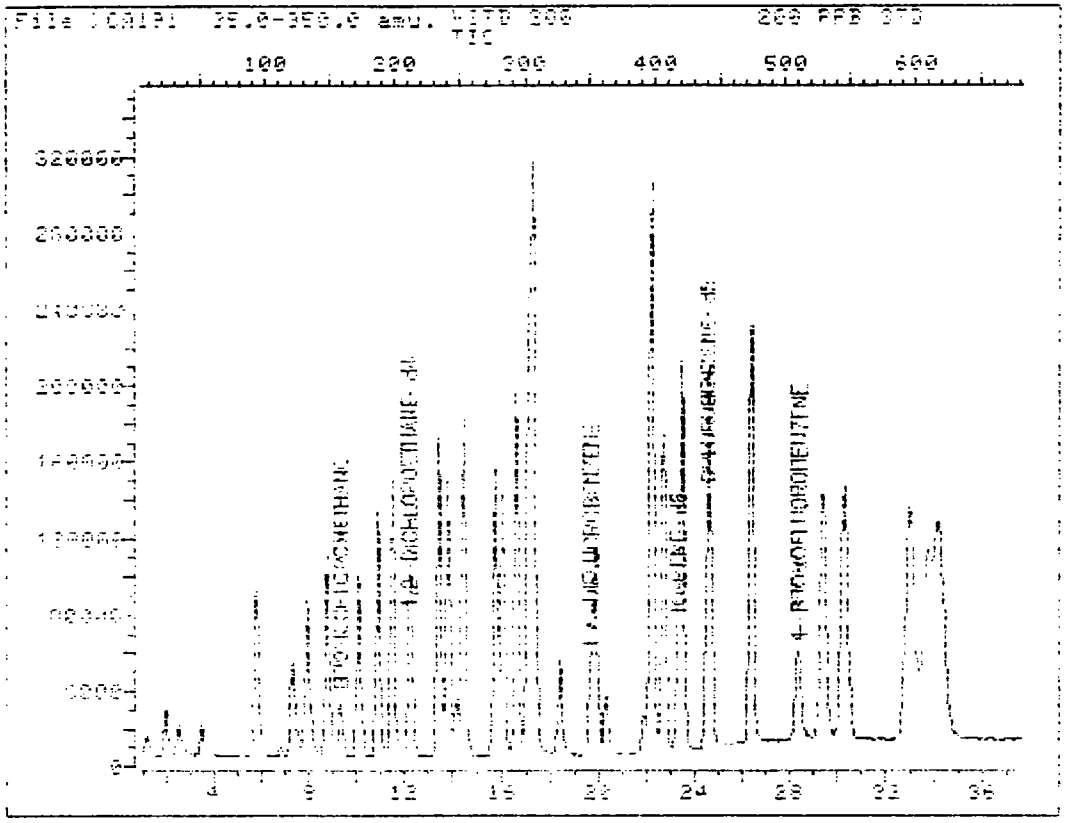
	Compound	R.T.	Q ion	Area	Conc	Units	q
[illegible]	*BROMOCHLOROMETHANE	9.33	128.0	51360	50.00	UG/L	100
[illegible]	Chloromethane	1.17	50.0	66455	175.94	UG/L	87
[illegible]	Bromomethane	1.98	94.0	78819	129.71	UG/L	99
4)	Vinyl Chloride	2.52	62.0	122439	155.04	UG/L	97
5)	Dichlorodifluoromethane	2.41	85.0	15067	62.83	UG/L	100
6)	Chloroethane	3.49	64.0	103240	178.65	UG/L	99
[illegible]	Methylene Chloride	5.89	84.0	247500	195.19	UG/L	100
[illegible]	Acetone	6.79	43.0	37823M	150.72	UG/L	96
[illegible]	Carbon Disulfide	7.33	76.0	536294	229.98	UG/L	98
[illegible]	Trichlorofluoromethane	7.92	101.0	503329	171.68	UG/L	89
13)	1,1-Dichloroethene	8.79	96.0	249061	230.51	UG/L	95
14)	1,1-Dichloroethane	10.09	63.0	538760	215.96	UG/L	94
15)	Tetrahydrofuran	10.24	42.0	32347	239.59	UG/L	98
16)	1,2-Dichloroethene	10.89	96.0	325738	241.26	UG/L	98
[illegible]	Chloroform	11.49	83.0	665002	199.93	UG/L	98
18)	1,2-DICHLOROETHANE-d4	12.19	65.0	95398	46.84	UG/L	92
[illegible]	1,2-Dichloroethane	12.24	62.0	425955	178.93	UG/L	97
[illegible]	2-Butanone	12.24	43.0	50425M	232.65	UG/L	80
21)	*1,4-DICHLOROBENZENE	19.70	114.0	214080	50.00	UG/L	86
22)	1,1,1-Trichloroethane	13.43	97.0	609116	179.14	UG/L	98
23)	Carbon Tetrachloride	13.81	117.0	495022	177.09	UG/L	98
24)	Vinyl Acetate	14.19	43.0	279062	247.65	UG/L	98
25)	Bromodichloromethane	14.46	83.0	711042	199.23	UG/L	90
26)	1,2-Dichloropropane	15.75	63.0	326218	243.26	UG/L	94
27)	cis-1,3-Dichloropropene	16.08	75.0	518554	272.35	UG/L	87
28)	Trichloroethene	16.62	95.0	384041	222.58	UG/L	99
29)	Benzene	17.11	78.0	803475	233.79	UG/L	83
30)	Dibromochloromethane	17.21	129.0	506974	190.53	UG/L	95
31)	1,1,2-Trichloroethane	17.38	97.0	254814	230.49	UG/L	97
32)	trans-1,3-Dichloropropene	17.32	75.0	408187	142.14	UG/L	100
33)	2-Chloroethyl Vinyl Ether	18.40	63.0	132936	228.44	UG/L	100
34)	Bromoform	19.86	173.0	348169	172.11	UG/L	97
35)	*CHLOROBENZENE-d5	24.51	117.0	185560	50.00	UG/L	88
[illegible]	4-Methyl-2-Pentanone	20.35	43.0	156353	237.46	UG/L	89
[illegible]	2-Hexanone	21.91	43.0	100370	248.47	UG/L	76
38)	Tetrachloroethene	22.24	164.0	331341	187.09	UG/L	98
39)	1,1,2,2,-Tetrachloroethane	22.19	83.0	351050	219.66	UG/L	91
40)	TOLUENE-d8	23.32	98.0	191887	49.99	UG/L	97
41)	Toluene	23.48	92.0	555874	219.69	UG/L	96
42)	Chlorobenzene	24.62	112.0	709112	216.96	UG/L	97
43)	Ethyl Benzene	26.35	106.0	357058	219.54	UG/L	94
44)	4-BROMOFLUOROBENZENE	28.35	95.0	140826	44.49	UG/L	100

000807

	Compound	R.T.	Q ion	Area	Conc	Units	q
46)	Total Xylenes	30.29	106.0	400368	215.29	UG/L	98
47)	1,3-Dichlorobenzene	33.00	146.0	831278	199.20	UG/L	86
48)	1,2-Dichlorobenzene	33.81	146.0	709008M	204.10	UG/L	100
49)	1,4-Dichlorobenzene	34.19	146.0	802753M	194.19	UG/L	88

* Compound = ISTD

TOTAL ION CHROMATOGRAM



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Misc: 200 PPB STD

Id File: 100000::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 940523 16:06

Operator ID: USERR
Quant Time: 940526 12:58
Injected at: 940526 12:19

QUANT REPORT

Operator ID: USER8 Quant Rev: 6 Quant Time: 940526 16:06
Output File: ^CA192::SS Injected at: 940526 15:27
Data File: >CA192::E7 Dilution Factor: 1.00000
Name: VSTD 50
Misc: 50 PPB STD

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[illegible]: QUANTITATION FILE FOR VOLATILE WATERS [illegible]
Last Calibration: 940527 14:[illegible]

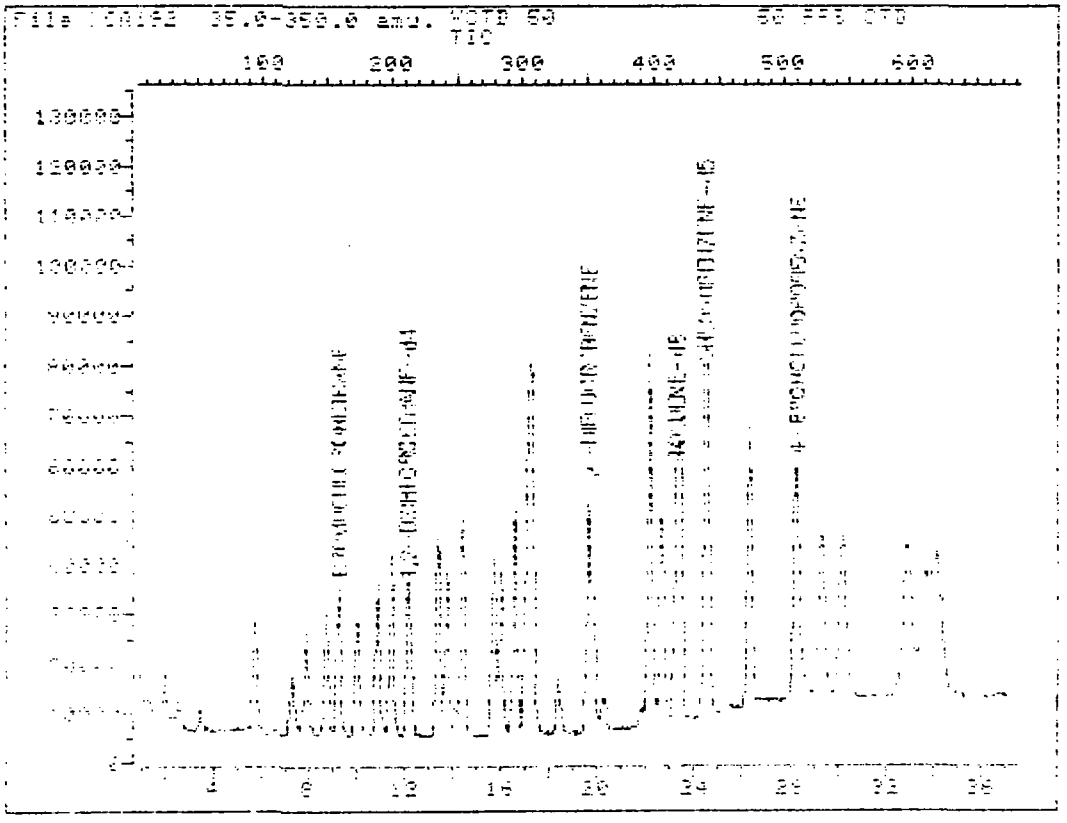
	Compound	R.T.	Q ion	Area	Conc	Units	q
[illegible]	*BROMOCHLOROMETHANE	[illegible]	128.0	[illegible]	50.00	UG/L	100
[illegible]	Chloromethane	[illegible]	50.0	[illegible]	48.73	UG/L	86
[illegible]	Bromomethane	[illegible]	94.0	[illegible]	43.43	UG/L	97
[illegible]	Vinyl Chloride	[illegible]	62.0	[illegible]	44.75	UG/L	99
[illegible]	Dichlorodifluoromethane	[illegible]	85.0	[illegible]	12.88	UG/L	84
[illegible]	Chloroethane	[illegible]	64.0	[illegible]	47.70	UG/L	87
[illegible]	Methylene Chloride	[illegible]	84.0	[illegible]	[illegible]	UG/L	100
[illegible]	Acetone	[illegible]	43.0	[illegible]	46.77	UG/L	97
[illegible]	Carbon Disulfide	[illegible]	76.0	[illegible]	54.55	UG/L	98
[illegible]	Trichlorofluoromethane	7.92	101.0	121306	40.42	UG/L	87
[illegible]	1,1-Dichloroethene	8.73	96.0	61623	55.71	UG/L	96
[illegible]	1,1-Dichloroethane	10.02	63.0	133433	52.[illegible]	UG/L	97
[illegible]	Tetrahydrofuran	10.19	42.0	5930	42.90	UG/L	98
[illegible]	1,2-Dichloroethene	10.89	96.0	[illegible]	57.99	UG/L	88
[illegible]	Chloroform	11.44	83.0	161660	47.42	UG/L	99
[illegible]	1,2-DICHLOROETHANE-d4	12.13	65.0	86280	41.38	UG/L	96
[illegible]	1,2-Dichloroethane	12.24	62.0	105942	43.47	UG/L	99
[illegible]	2-Butanone	12.24	43.0	13256	59.74	UG/L	86
21)	*1,4-DIFLUOROBENZENE	19.64	114.0	223225	50.00	UG/L	86
[illegible]	1,1,1-Trichloroethane	13.37	97.0	147421	41.58	UG/L	99
[illegible]	Carbon Tetrachloride	13.75	117.0	117170	40.20	UG/L	99
[illegible]	Vinyl Acetate	14.13	43.0	55295	47.06	UG/L	98
[illegible]	Bromodichloromethane	14.45	83.0	174295	46.84	UG/L	91
[illegible]	1,2-Dichloropropane	15.69	63.0	83037	59.38	UG/L	94
[illegible]	cis-1,3-Dichloropropene	16.02	75.0	120974	60.93	UG/L	87
28)	Trichloroethene	16.61	95.0	92877	51.62	UG/L	96
29)	Benzene	17.10	78.0	201185	56.14	UG/L	83
30)	Dibromochloromethane	17.21	129.0	121839	43.91	UG/L	90
31)	1,1,2-Trichloroethane	17.31	97.0	63428	55.02	UG/L	99
32)	trans-1,3-Dichloropropene	17.31	75.0	95476	31.89	UG/L	100
33)	2-Chloroethyl Vinyl Ether	18.34	63.0	29988	49.42	UG/L	100
34)	Bromoform	19.85	173.0	78885	37.40	UG/L	99
35)	*CHLOROBENZENE-d5	24.45	117.0	194704	50.00	UG/L	86
3[illegible])	4-Methyl-2-Pentanone	20.29	43.0	36399	52.68	UG/L	94
[illegible]	2-Hexanone	21.85	43.0	24836	58.60	UG/L	84
38)	Tetrachloroethene	22.18	164.0	79662	42.87	UG/L	96
39)	1,1,2,2,-Tetrachloroethane	22.18	83.0	86851	51.79	UG/L	88
40)	TOLUENE-d8	23.26	98.0	204507	50.78	UG/L	97
41)	Toluene	23.42	92.0	143946	54.22	UG/L	95
42)	Chlorobenzene	24.55	112.0	177923	51.88	UG/L	95
43)	Ethyl Benzene	26.34	106.0	89866	52.66	UG/L	95
44)	4-BROMOFLUOROBENZENE	28.28	95.0	145763	43.88	UG/L	100

000810

	Compound	R.T.	Q ion	Area	Conc	Units	q
46)	Total Xylenes	30.18	106.0	100967	51.74	UG/L	98
47)	1,3-Dichlorobenzene	32.93	146.0	202810	46.32	UG/L	85
48)	1,2-Dichlorobenzene	33.69	146.0	186863M	51.26	UG/L	100
49)	1,4-Dichlorobenzene	34.1[illegible]	146.0	210063M	48.4[illegible]	UG/L	99

* [illegible] 1990

TOTAL ION CHROMATOGRAM



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Name: VSTD 50
Mean: 50 PPB STD

IP File: [illegible]
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 940523 16:06

Operator ID: USER8
Quant Time: 940526 16:06
Injected at: 940526 15:27

QUANT REPORT

Operator ID: USER8 Quant Rev: 6 Quant Time: 940602 08:21
Output File: [illegible] Injected at: 940602 07:42
Data File: [illegible] Dilution Factor: 1.00000
Name: VSTD 20
Misc: 20 PPB STD

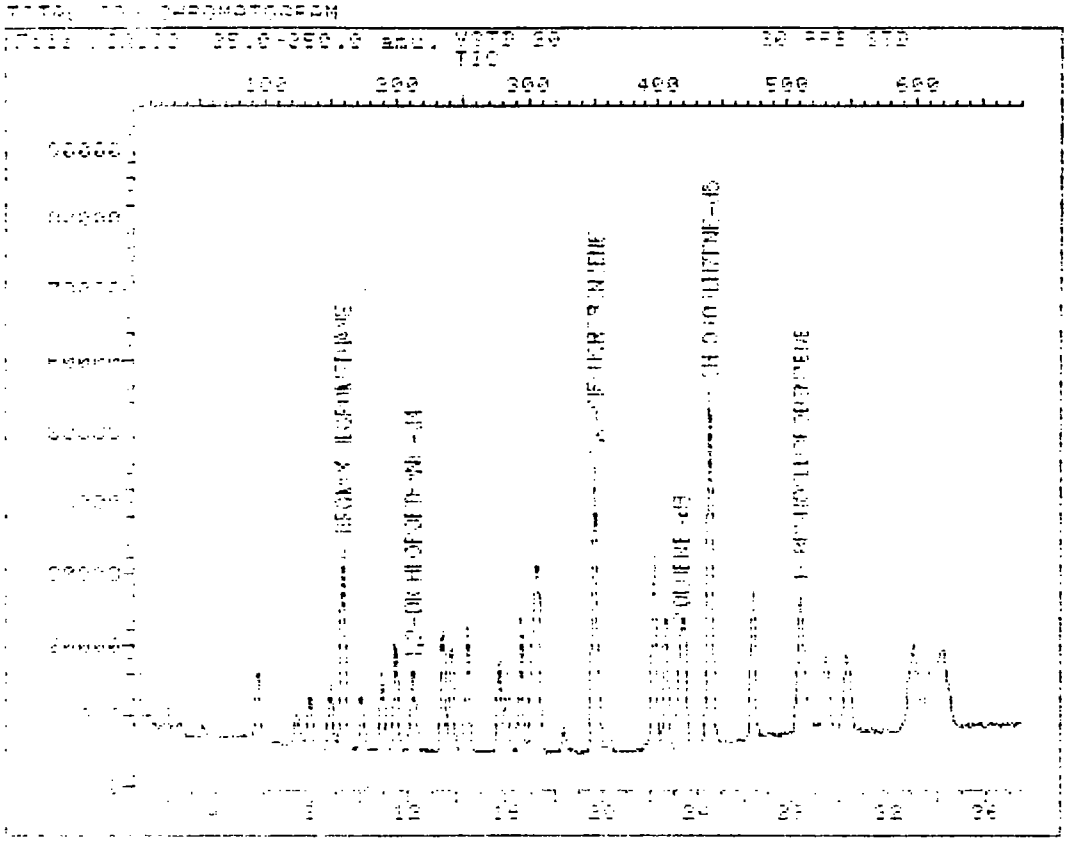
ID File: [illegible]
Title: [illegible]
Last Calibration: [illegible]

	Compound	R.T.	Q Ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.39	128.0	[illegible]	[illegible]	UG/L	100
2)	Chloromethane	1.16	50.0	[illegible]	[illegible]	UG/L	92
3)	Bromomethane	1.97	94.0	[illegible]	19.85	UG/L	94
4)	Vinyl Chloride	2.51	62.0	[illegible]	18.71	UG/L	98
5)	Dichlorodifluoromethane	2.46	85.0	[illegible]	[illegible]	UG/L	84
6)	Chloroethane	3.49	64.0	[illegible]	19.36	UG/L	92
7)	Methylene Chloride	5.91	84.0	[illegible]	[illegible]	UG/L	100
8)	Acetone	6.62	43.0	[illegible]	15.18	UG/L	97
9)	Carbon Disulfide	7.37	76.0	[illegible]	19.22	UG/L	97
10)	Trichlorofluoromethane	7.97	101.0	[illegible]	18.80	UG/L	90
11)	1,1-Dichloroethane	8.78	96.0	[illegible]	[illegible]	UG/L	97
12)	1,1-Dichloroethane	10.07	63.0	51040	19.09	UG/L	97
13)	1,2-Dichloroethane	10.94	96.0	[illegible]	18.45	UG/L	97
14)	Chloroform	11.48	83.0	67302	20.02	UG/L	96
15)	1,2-DICHLOROETHANE-D4	12.18	65.0	30031	18.51	UG/L	95
16)	1,2-Dichloroethane	12.23	62.0	39506	19.27	UG/L	97
17)	2-Butanone	12.23	43.0	4448	15.21	UG/L	78
18)	*1,4-DIFLUOROBENZENE	13.68	114.0	194394	0.00	UG/L	83
19)	1,1,1-Trichloroethane	11.42	97.0	62866	24.12	UG/L	97
20)	Carbon Tetrachloride	13.80	117.0	50759	25.06	UG/L	98
21)	Vinyl Acetate	14.18	43.0	12404M	15.14	UG/L	
22)	Bromodichloromethane	14.45	83.0	67523	23.07	UG/L	93
23)	1,2-Dichloropropane	15.24	63.0	27143	20.21	UG/L	94
24)	cis-1,3-Dichloropropene	16.01	75.0	40611	26.13	UG/L	89
25)	Trichloroethene	16.61	95.0	35549	21.88	UG/L	92
26)	Benzene	17.09	78.0	69426	20.33	UG/L	85
27)	Dibromochloromethane	17.20	129.0	42704	24.12	UG/L	92
28)	1,1,2-Trichloroethane	17.31	97.0	22756	21.78	UG/L	95
29)	trans-1,3-Dichloropropene	17.31	75.0	31988	15.44	UG/L	100
30)	2-Chloroethyl Vinyl Ether	18.39	63.0	7797	17.38	UG/L	100
31)	Bromoform	19.85	173.0	32083	23.14	UG/L	97
32)	*CHLOROBENZENE-D5	24.49	117.0	159924	50.00	UG/L	88
33)	4-Methyl-2-Pentanone	20.28	43.0	9462	17.43	UG/L	99
34)	2-Hexanone	21.84	43.0	5450	13.80	UG/L	89
35)	Tetrachloroethene	22.17	164.0	35925	23.54	UG/L	94
36)	1,1,2,2-Tetrachloroethane	22.17	83.0	26865	19.25	UG/L	93
37)	TOLUENE-D8	23.30	98.0	63139	19.31	UG/L	95
38)	Toluene	23.47	92.0	47910	20.34	UG/L	94
39)	Chlorobenzene	24.60	112.0	66643	21.60	UG/L	99
40)	Ethyl Benzene	26.38	106.0	32197	21.00	UG/L	96
41)	4-BROMOFLUOROBENZENE	28.33	95.0	47186	19.79	UG/L	100
42)	Styrene	29.41	104.0	50395	19.21	UG/L	96
43)	Total Xylenes	30.27	106.0	31421	19.01	UG/L	97

000813

	Compound	R.T.	Q ion	Area	Conc	Units	q
[illegible]	1,3-Dichlorobenzene	33.03	146.0	81540	22.78	UG/L	87
[illegible]	1,2-Dichlorobenzene	33.29	146.0	71667M	22.29	UG/L	100
[illegible]	1,4-Dichlorobenzene	34.27	146.0	84978M	23.95	UG/L	84

* Compound is [illegible]



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Mode: [illegible] STD

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Last Calibration: 940530 [illegible]

Operator ID: USER9
Quant Time: 940602 08:21
Inserted at: 940602 07:42

QUANT REPORT

Operator ID: USER8 | Quant Rev: 6 | Quant Time: 940602 09:06
Output File: ^OA199::SS | Injected at: 940602 08:28
Data File: >OA199::E4 | Dilution Factor: 1.00000
Name: [illegible]
Misc: [illegible] S10

[illegible]
[illegible]
[illegible]

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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	UG/L	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	UG/L	[illegible]
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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	UG/L	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	UG/L	100
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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	UG/L	[illegible]
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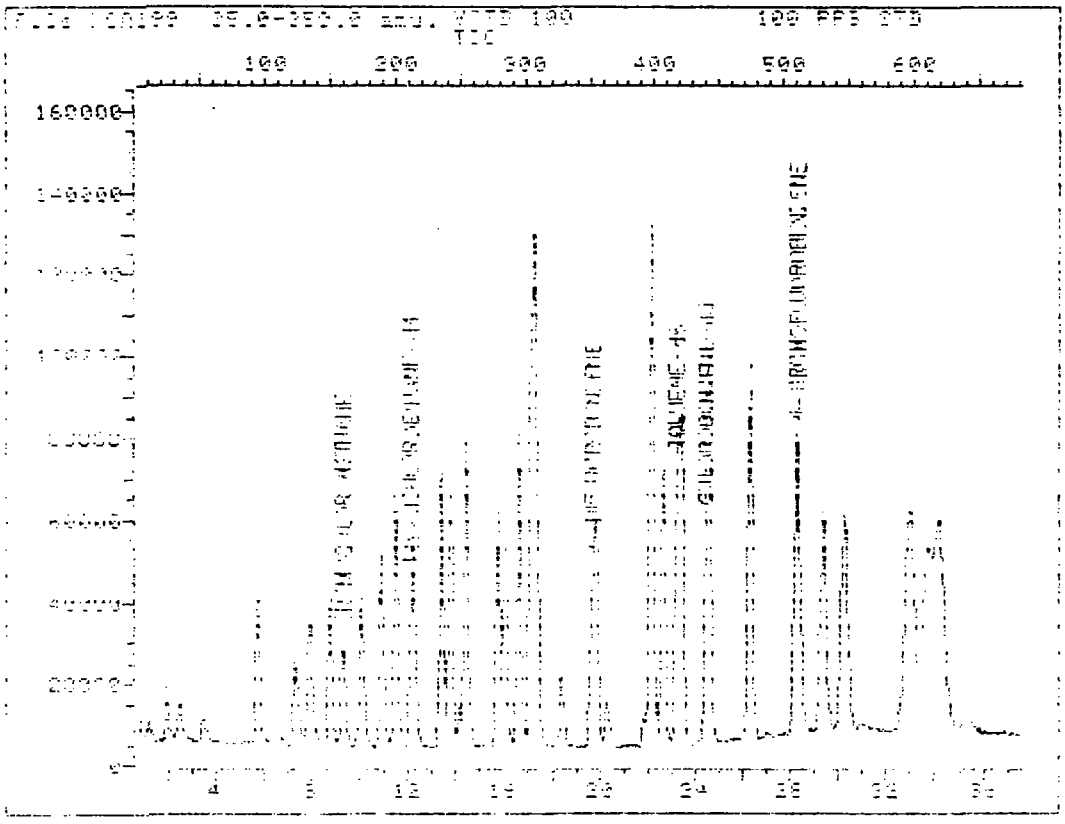
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	UG/L	84
[illegible]	[illegible]	[illegible]	227764	131.59	UG/L	93
[illegible]	[illegible]	97.0	103924	113.67	UG/L	94
[illegible]) trans-1,3-Dichloropropene	17.31	75.0	154488	85.78	UG/L	100
[illegible]) 2-Chloroethyl Vinyl Ether	18.39	63.0	47320	120.50	UG/L	100
[illegible]) Bromoform	19.8[illegible]	173.0	162616	138.75	UG/L	97
[illegible]) *CHLOROBENZENE-d5	24.44	117.0	148553	50.00	UG/L	95
[illegible]) 4-Methyl-2-Pentanone	20.33	43.0	69474	117.81	UG/L	98
[illegible] 2-Hexanone	21.85	43.0	34185	98.60	UG/L	94
3[illegible]) Tetrachloroethene	22.17	164.0	149678	105.52	UG/L	91
[illegible]) 1,1,2,2,-Tetrachloroethane	22.17	83.0	143247	110.41	UG/L	93
40) TOLUENE-d8	23.25	98.0	294128	96.29	UG/L	96
41) Toluene	23.47	92.0	203944	93.14	UG/L	93
42) Chlorobenzene	24.55	112.0	279090	97.33	UG/L	96
43) Ethyl Benzene	26.33	106.0	139943	98.20	UG/L	95
44) 4-BROMOFLUOROBENZENE	28.28	95.0	215571	97.26	UG/L	100

0003[illegible]

	Compound	R.T.	Q ion	Area	Conc	Units	q
46)	Total Xylenes	30.28	106.0	154479	100.52	UG/L	98
47)	1,4-Dichlorobenzene	30.92	146.0	375402	112.84	UG/L	84
48)	1,2-Dichlorobenzene	33.73	146.0	344952M	116.02	UG/L	100
49)	1,4-Dichlorobenzene	34.17	146.0	389416M	118.26	UG/L	85

* Compound [illegible]

TOTAL ION CHROMATOGRAM



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Id File: [illegible]
Title: QUANTITATION FILE FOR VOLATILE WATERS HCMSD-A
Last Calibration: [illegible]

Operator ID: [illegible]
Quant Time: [illegible]
Injected at: [illegible]

QUANT REPORT

Operator ID: USER8 Quant Rev: 6 Quant Time: 940602 10:02
Output File: ^CA200::SS Injected at: 940602 09:13
Data File: >CA200::E4 Dilution Factor: 1.000000
Name: VSTD 150
Misc: 150 PPB STD

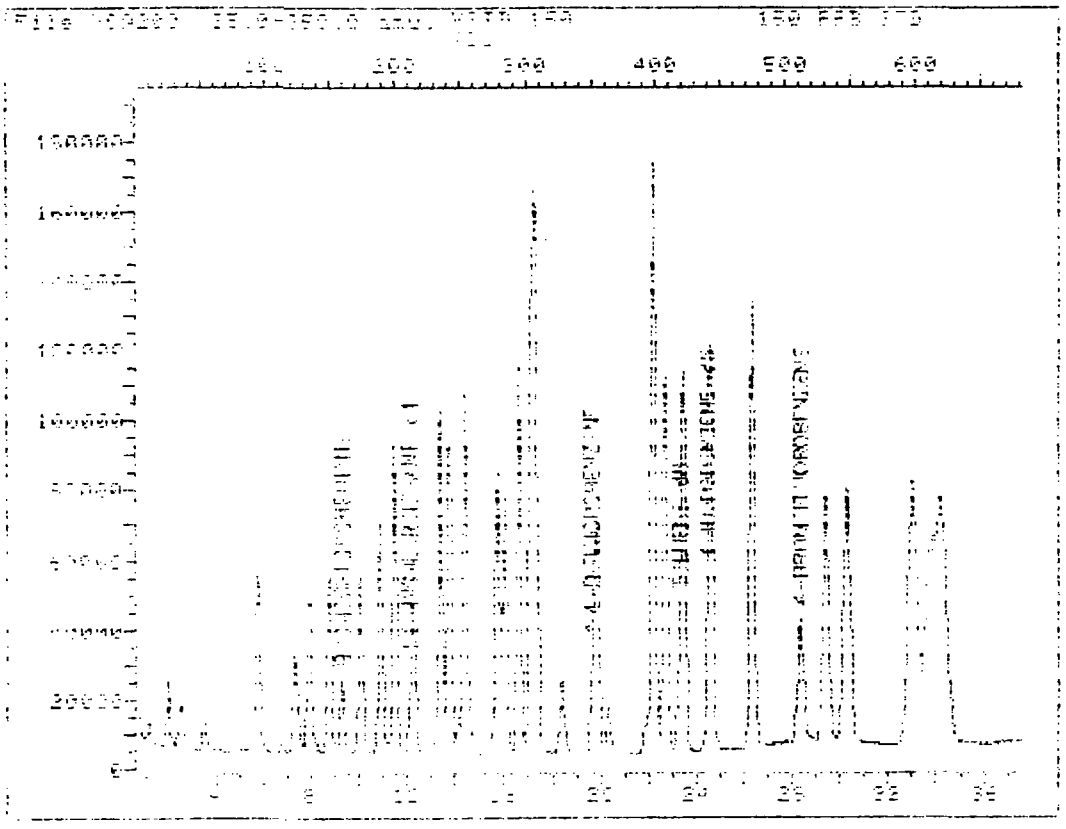
ID File: [illegible]
Title: QUANTITATION FILE FOR VOLATILE WATERS [illegible]
Last Calibration: 940530 22:11

	Compound	R.T.	R.I.	Area	Conc	Units	%
1)	*PROPANE,2-METHOXY-	9.[illegible]	[illegible]	39464	[illegible]	[illegible]	[illegible]
2)	Chloromethane	[illegible]	50.0	45988	[illegible]	[illegible]	98
3)	Bromomethane	[illegible]	94.0	52809	[illegible]	[illegible]	[illegible]
4)	Vinyl Chloride	[illegible]	62.0	81702	[illegible]	[illegible]	99
5)	Dichlorodifluoromethane	[illegible]	85.0	44586	[illegible]	[illegible]	[illegible]
6)	Chloroethane	[illegible]	64.0	42616	[illegible]	[illegible]	[illegible]
7)	Methylene Chloride	[illegible]	[illegible]	132214	[illegible]	[illegible]	[illegible]
8)	Acetone	[illegible]	43.0	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Carbon Disulfide	[illegible]	76.0	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Trichlorofluoromethane	[illegible]	101.0	[illegible]	[illegible]	[illegible]	98
13)	1,1-Dichloroethene	[illegible]	96.0	[illegible]	[illegible]	[illegible]	[illegible]
14)	1,1-Dichloroethane	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15)	Tetrahydrofuran	[illegible]	[illegible]	14869	[illegible]	[illegible]	[illegible]
[illegible]	1,2-Dichloroethene	[illegible]	96.0	[illegible]	[illegible]	[illegible]	[illegible]
17)	Chloroform	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18)	1,[illegible]-DICHLOROPROPANE-d2	[illegible]	6.0	66570	[illegible]	[illegible]	[illegible]
19)	1,2-Dichloroethane	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	2-Butanone	[illegible]	43.0	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	*1,4-DIFLUOROBENZENE	[illegible]	114.0	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1,1,1-Trichloroethane	[illegible]	97.0	368994	[illegible]	[illegible]	97
[illegible]	Carbon Tetrachloride	13.80	117.0	310149	[illegible]	[illegible]	[illegible]
[illegible]	Vinyl Acetate	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Bromodichloromethane	14.25	83.0	400308	[illegible]	[illegible]	[illegible]
[illegible]	1,2-Dichloropropane	[illegible]	63.0	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	cis-1,3-Dichloropropene	16.[illegible]	75.0	255617	[illegible]	[illegible]	[illegible]
[illegible]	Trichloroethene	16.67	95.0	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Benzene	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
40)	Dibromochloromethane	[illegible]	129.0	989980	185.56	UG/L	94
[illegible]	1,1,2-Trichloroethane	[illegible]	97.0	127248	154.16	UG/L	94
[illegible]	trans-1,3-Dichloropropene	17.31	75.0	200210	122.27	UG/L	100
[illegible]	2-Chloroethyl Vinyl Ether	18.39	63.0	55844	152.51	UG/L	100
[illegible]	Bromoform	19.85	173.0	198272	181.81	UG/L	99
[illegible]	*[illegible]-d5	19.44	117.0	130855	50.00	UG/L	[illegible]
46)	4-Methyl-2-Pentanone	20.08	43.0	64720	144.55	UG/L	96
[illegible]	2-Hexanone	21.55	43.0	44165	[illegible]	UG/L	[illegible]
[illegible]	Tetrachloroethene	22.17	164.0	219517	149.53	UG/L	91
49)	1,1,2,2,-Tetrachloroethane	[illegible]	83.0	[illegible]	[illegible]	[illegible]	98
50)	TOLUENE-d8	[illegible]	98.0	171902	49.58	UG/L	96
51)	Toluene	[illegible]	92.0	287812	149.72	[illegible]	[illegible]
52)	Chlorobenzene	24.60	112.0	387364	154.31	UG/L	96
53)	Ethylbenzene	26.33	106.0	199293	159.74	UG/L	95
54)	4-BROMOFLUOROBENZENE	28.33	95.0	96195	49.57	UG/L	100

000019

	Compound	R.T.	Q ion	Area	Conc	Units	q
[illegible]	Total Xylenes	[illegible]	[illegible]	[illegible]	[illegible]	UG/L	98
[illegible]	1,[illegible]-Dichlorobenzene	[illegible]	146.0	[illegible]	[illegible]	[illegible]	81
[illegible]	1,[illegible]-Dichlorobenzene	[illegible]	146.0	[illegible]	[illegible]	UG/L	[illegible]
[illegible]	1,[illegible]-Dichlorobenzene	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

TOTAL ION CHROMATOGRAM



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Last Calibration: 940530 [illegible]

Operator ID: [illegible]
Quant Time: 940602 [illegible]
Injected at: 940602 09:13

QUANT REPORT

Operator ID: USER8 Quant Rev: 6 Quant Time: 940602 12:42
Output File: ^CA201::SS Injected at: 940602 11:55
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Name: VSTD 200
Misc: 200 PPB STD

ID File: [illegible]
Title: QUANTITATION FILE FOR VOLATILE WATERS [illegible]
Last Calibration: 940530 [illegible]

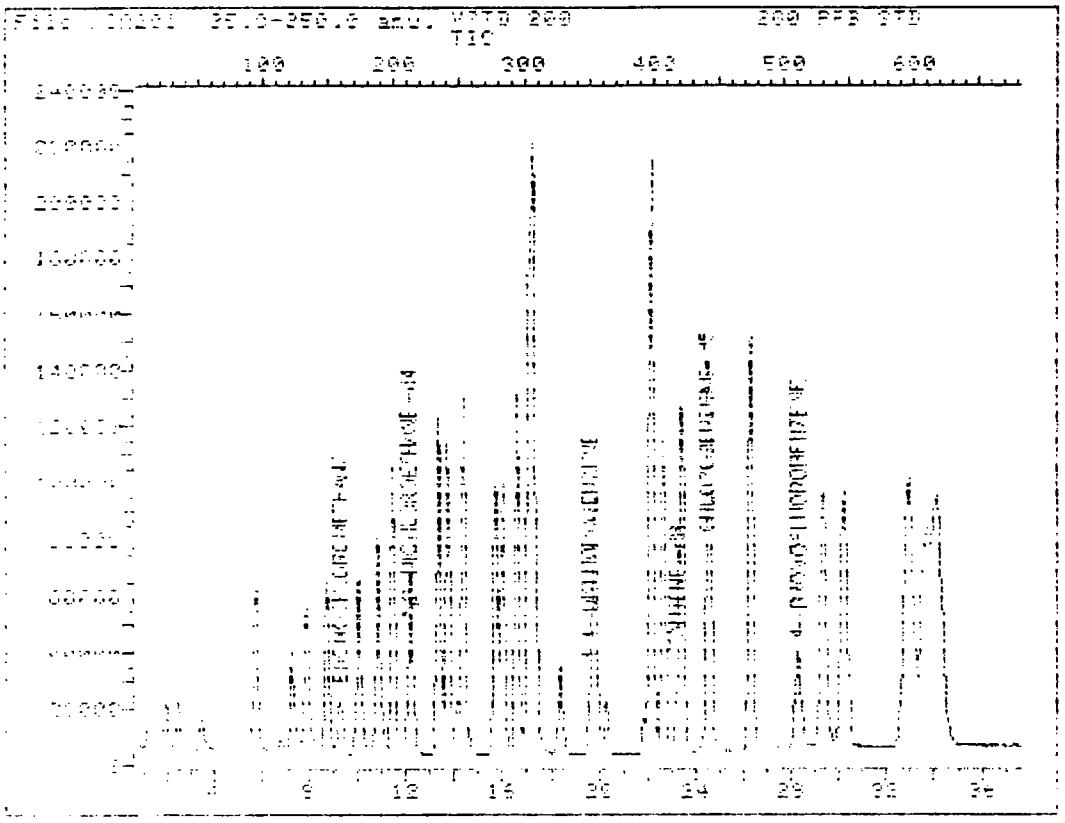
	Compound	R.T.	Q ion	Area	Conc	Units	c
1)	*BROMOCHLOROMETHANE	9.26	128.0	[illegible]	50.00	UG/L	100
2)	Chloromethane	1.16	50.0	[illegible]	208.04	UG/L	[illegible]
3)	Bromomethane	1.97	94.0	[illegible]	143.38	UG/L	94
4)	Vinyl Chloride	2.57	62.0	[illegible]	190.02	UG/L	[illegible]
5)	Dichlorodifluoromethane	2.44	85.0	[illegible]	[illegible]	UG/L	94
6)	Chloroethane	3.48	64.0	[illegible]	[illegible]	UG/L	90
7)	Methylene Chloride	5.25	84.0	[illegible]	[illegible]	UG/L	100
8)	Acetone	6.78	43.0	[illegible]	166.30	UG/L	[illegible]
10)	Carbon Disulfide	7.24	[illegible]	[illegible]	[illegible]	UG/L	[illegible]
11)	Trichlorofluoromethane	7.91	101.0	[illegible]	178.79	UG/L	87
13)	1,1-Dichloroethane	8.72	96.0	[illegible]	[illegible]	UG/L	94
14)	1,1-Dichloroethane	10.02	63.0	[illegible]	[illegible]	UG/L	[illegible]
15)	Tetrahydrofuran	10.18	42.0	[illegible]	[illegible]	UG/L	91
16)	1,2-Dichloroethane	10.84	96.0	[illegible]	145.06	UG/L	[illegible]
17)	Chloroform	11.48	83.0	[illegible]	[illegible]	UG/L	[illegible]
18)	1,2-DICHLOROETHANE-d4	12.13	65.0	[illegible]	[illegible]	UG/L	95
19)	1,2-Dichloroethane	12.24	62.0	[illegible]	215.98	UG/L	[illegible]
20)	2-Butanone	12.23	43.0	[illegible]	[illegible]	UG/L	95
21)	*1,4-DIFLUOROBENZENE	19.63	114.0	[illegible]	50.00	UG/L	83
22)	1,1,1-Trichloroethane	13.37	97.0	[illegible]	251.36	UG/L	97
23)	Carbon Tetrachloride	13.75	117.0	368235	270.81	UG/L	96
24)	Vinyl Acetate	14.12	43.0	[illegible]	290.42	UG/L	96
25)	Bromodichloromethane	14.39	83.0	501813	255.24	UG/L	95
26)	1,2-Dichloropropane	15.49	63.0	[illegible]	221.44	UG/L	92
27)	cis-1,3-Dichloropropene	16.01	75.0	[illegible]	305.94	UG/L	88
28)	Trichloroethene	16.61	95.0	[illegible]	275.73	UG/L	99
29)	Benzene	17.09	78.0	[illegible]	207.53	UG/L	89
30)	Dibromochloromethane	17.20	129.0	386410	291.04	UG/L	93
31)	1,1,2-Trichloroethane	17.31	97.0	165331	235.75	UG/L	97
32)	trans-1,3-Dichloropropene	17.31	75.0	264513	190.14	UG/L	100
33)	2-Chloroethyl Vinyl Ether	18.39	63.0	81607	270.93	UG/L	100
34)	Bromoform	19.85	173.0	281263	302.23	UG/L	97
35)	*CHLOROBENZENE-d5	24.44	117.0	116486	50.00	UG/L	84
36)	4-Methyl-2-Pentanone	20.28	43.0	[illegible]	256.57	UG/L	95
37)	2-Hexanone	21.85	43.0	61102	212.34	UG/L	78
38)	Tetrachloroethene	22.17	164.0	243825	219.22	UG/L	95
39)	1,1,2,2,-Tetrachloroethane	22.17	83.0	225754	221.91	UG/L	90
40)	TOLUENE-d8	23.25	98.0	112669	47.28	UG/L	98
41)	Toluene	23.41	92.0	327186	190.56	UG/L	93
42)	Chlorobenzene	24.55	112.0	441650	196.43	UG/L	96
43)	Ethyl Benzene	26.33	106.0	231088	206.80	UG/L	97
44)	4-BROMOFLUOROBENZENE	28.28	95.0	82030	47.20	UG/L	100

000522

	Compound	R.T.	Q ion	Area	Conc	Units	q
46)	Total Xylenes	40.22	106.0	254338	211.13	UG/L	98
47)	1,3-Dichlorobenzene	39.92	146.0	638764	244.86	UG/L	87
48)	1,2-Dichlorobenzene	43.69	146.0	490136M	249.02	UG/L	100
49)	1,4-Dichlorobenzene	44.06	146.0	582606M	245.40	UG/L	84

* Compound is ISTD

TOTAL ION CHROMATOGRAM



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Last Calibration: 940530 22:11

Operator ID: USERS
Quant Time: 940602 12:42
Injected at: 940602 11:[illegible]

QUANT REPORT

Operator ID: USER8 Quant Rev: 6 Quant Time: 940602 11:51
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ID File: [illegible]
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Last Calibration: [illegible]

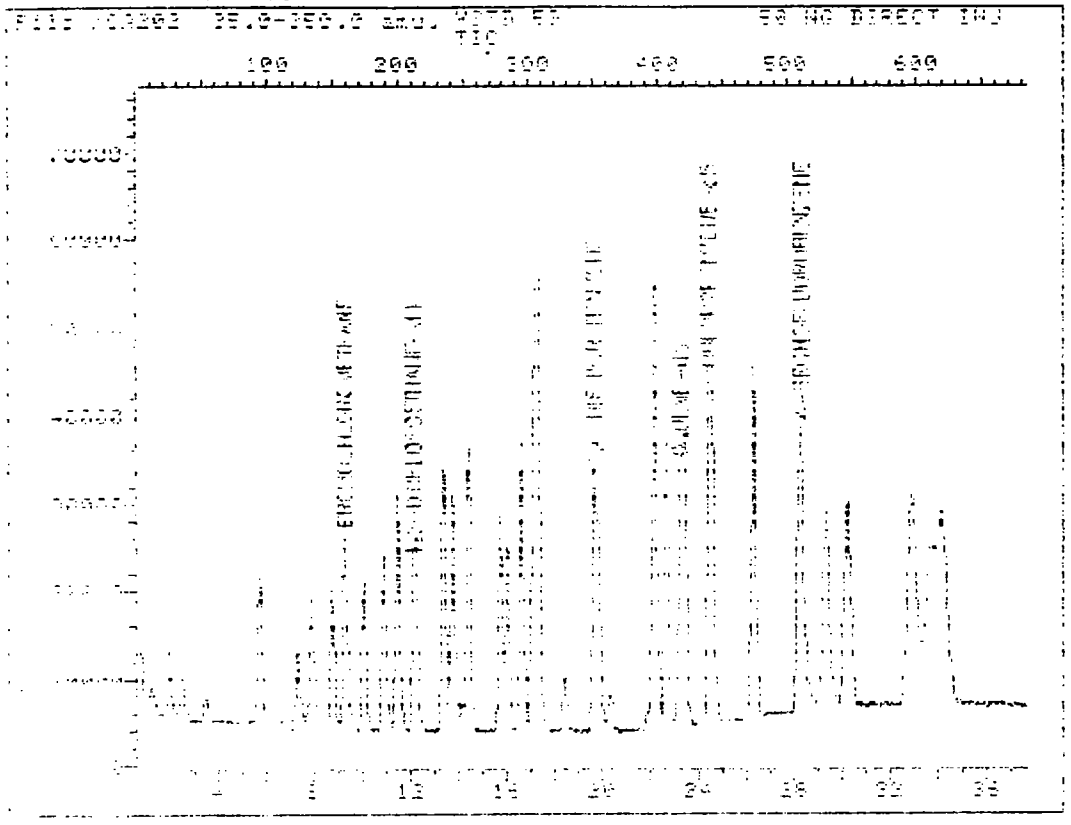
	Compound	R.T.	Vision	Area	Conc	Units	q
[illegible]	*BROMOCHLOROMETHANE	9.26	128.0	[illegible]	[illegible]	UG/L	100
[illegible]	Chloromethane	1.16	50.0	[illegible]	59.54	UG/L	90
[illegible]	Bromomethane	1.97	94.0	[illegible]	45.43	UG/L	99
[illegible]	[illegible]	2.51	62.0	[illegible]	47.24	UG/L	94
[illegible]	[illegible]	2.46	85.0	[illegible]	[illegible]	UG/L	91
[illegible]	[illegible]	3.48	64.0	[illegible]	50.78	UG/L	96
[illegible]	[illegible]	5.75	84.0	[illegible]	47.07	UG/L	100
[illegible]	Acetone	6.67	43.0	5493	32.74	UG/L	89
[illegible]	Carbon [illegible]	7.32	76.0	94113	51.69	UG/L	97
[illegible]	Trichloroethylenomethane	7.91	101.0	[illegible]	47.60	UG/L	88
[illegible]	1,1-Dichloroethene	8.78	96.0	36396	39.80	UG/L	93
[illegible]	1,1-Dichloroethane	10.02	63.0	[illegible]	46.32	UG/L	97
[illegible]	Tetrahydrofuran	10.18	42.0	4885	44.88	UG/L	95
[illegible]	1,2-Dichloroethene	10.88	96.0	[illegible]	40.73	UG/L	89
[illegible]	Chloroform	11.48	93.0	[illegible]	47.44	UG/L	99
[illegible]	1,2-DICHLOROETHANE-d4	12.12	65.0	[illegible]	49.49	UG/L	96
[illegible]	1,2-Dichloroethane	12.23	62.0	[illegible]	[illegible]	UG/L	96
20)	2-Butanone	12.23	43.0	8544	38.82	UG/L	82
21)	*1,4-DIFLUOROBENZENE	19.63	114.0	143847	50.00	UG/L	83
22)	1,1,1-Trichloroethane	13.37	97.0	113651	58.93	UG/L	98
23)	Carbon Tetrachloride	13.74	117.0	92360	61.62	UG/L	97
24)	Vinyl Acetate	14.12	43.0	99909	49.33	UG/L	94
25)	Bromodichloromethane	14.45	83.0	122892	56.72	UG/L	92
26)	1,2-Dichloropropane	15.74	63.0	[illegible]	51.98	UG/L	93
27)	cis-1,3-Dichloropropene	16.01	75.0	[illegible]	66.63	UG/L	89
28)	Trichloroethene	16.61	95.0	[illegible]	52.52	UG/L	98
29)	Benzene	17.09	78.0	[illegible]	49.32	UG/L	89
30)	Dibromochloromethane	17.20	129.0	94375	64.49	UG/L	90
31)	1,1,2-Trichloroethane	17.31	97.0	43203	55.89	UG/L	89
32)	trans-1,3-Dichloropropene	17.31	75.0	61367	40.02	UG/L	100
33)	2-Chloroethyl Vinyl Ether	18.39	63.0	16649	50.14	UG/L	100
34)	Bromoform	19.85	173.0	65631	63.98	UG/L	99
35)	*CHLOROBENZENE-d5	24.44	117.0	124758	50.00	UG/L	82
36)	4-Methyl-2-Pentanone	20.33	43.0	20168	47.57	UG/L	93
3	2-Hexanone	21.84	43.0	14198	46.07	UG/L	85
3	Tetrachloroethene	22.17	164.0	61810	51.89	UG/L	94
39)	1,1,2,2,-Tetrachloroethane	22.17	83.0	56118	51.51	UG/L	91
40)	TOLUENE-d8	23.25	98.0	118553	46.45	UG/L	96
41)	Toluene	23.46	92.0	86105	46.82	UG/L	93
42)	Chlorobenzene	24.60	112.0	117336	48.73	UG/L	97
43)	Ethyl Benzene	26.33	106.0	57576	48.11	UG/L	95
44)	4-BROMOFLUOROBENZENE	28.33	95.0	85819	46.10	UG/L	100

000825

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	Total Xylenes	30.22	106.0	64735	50.18	UG/L	98
47)	1,3-Dichlorobenzene	32.92	146.0	159543	57.10	UG/L	83
48)	1,2-Dichlorobenzene	33.94	146.0	145215M	57.82	UG/L	100
49)	1,4-Dichlorobenzene	34.11	146.0	156665M	56.99	UG/L	86

* Compound is "M"

TOTAL ION CHROMATOGRAM



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Last Calibration: 940[illegible] 22:[illegible]

Operator ID: [illegible]
Plant Time: 940602 [illegible]
Injected at: 940602 [illegible]

QUANT REPORT

[illegible] ID: USER8 Quant Rev: 6 Quant Time: 940606 10:48
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[illegible]
[illegible] FILE FOR VOLATILE WATERS [illegible]/MSD-A
[illegible]: 940607 13:00

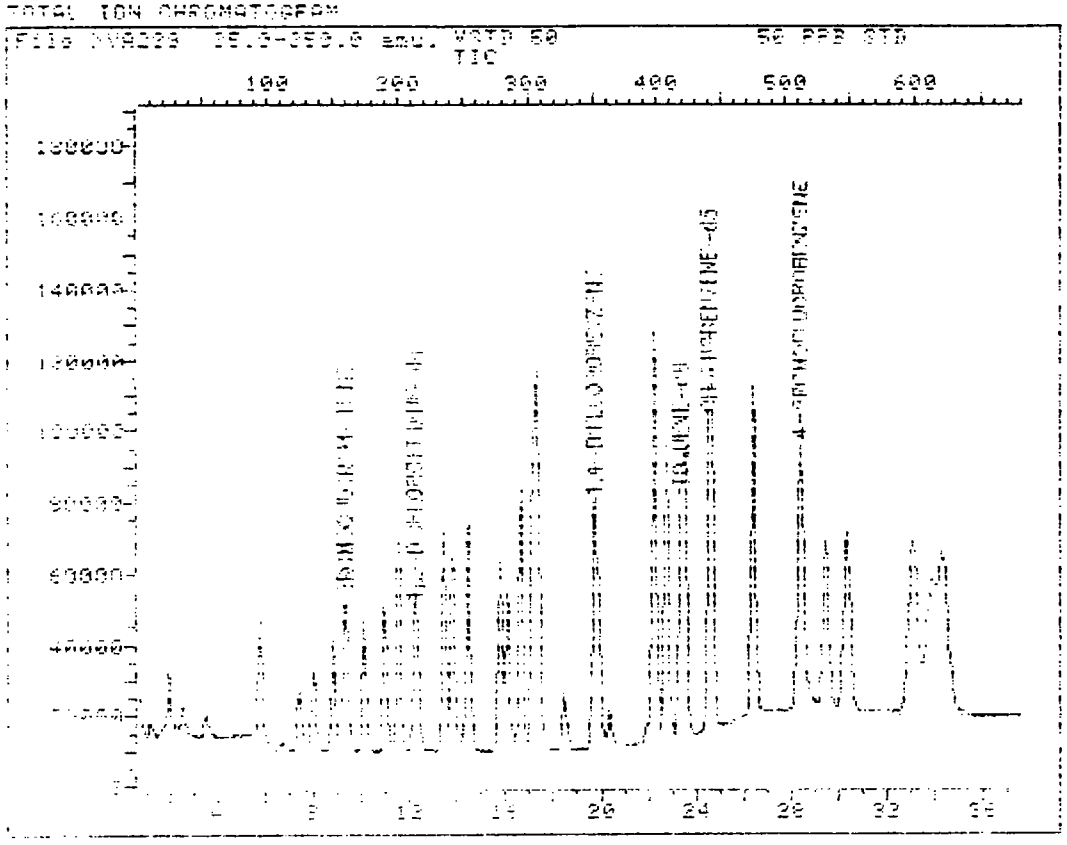
	Compound	R.T.	Q ion	Area	Conc	Units	q
[illegible]	*[illegible]	9.32	[illegible]	28389	50.00	UG/L	100
[illegible]	[illegible]ethane	1.16	50.0	25275	43.41	UG/L	92
[illegible]	[illegible]ethane	1.92	94.0	45109	56.80	UG/L	92
[illegible]	[illegible] Chloride	2.52	62.0	50800	51.22	UG/L	99
[illegible]	[illegible]difluoromethane	2.46	85.0	19021	35.16	UG/L	96
[illegible]	[illegible]ethane	3.54	64.0	43480	54.62	UG/L	90
[illegible]	Methylene Chloride	5.81	84.0	92886	[illegible]	UG/L	100
[illegible]	Acetone	6.73	43.0	12458	[illegible]	UG/L	90
[illegible]	Carbon Disulfide	7.43	76.0	187561	50.83	UG/L	99
[illegible]	[illegible]fluoromethane	[illegible]	[illegible]	133633	38.63	UG/L	86
[illegible]	[illegible]ichloroethene	8.83	96.0	20398	49.34	UG/L	93
[illegible]	1,1-Dichloroethane	10.13	63.0	196156	53.67	UG/L	94
[illegible]	[illegible]hydrofuran	10.24	42.0	12645	67.61	UG/L	96
[illegible]	1,2-Dichloroethene	10.94	96.0	109883	55.91	UG/L	93
[illegible]	Chloroform	11.54	83.0	264880	56.26	UG/L	92
[illegible]	[illegible]-DICHLOROETHANE-d4	12.18	65.0	128220	54.31	UG/L	95
[illegible]	1,2-Dichloroethane	12.29	62.0	165730	54.14	UG/L	99
[illegible]	2-Butanone	12.29	43.0	16956	50.62	UG/L	92
[illegible]	*1,4-DIFLUOROBENZENE	19.69	114.0	336249	50.00	UG/L	85
[illegible]	1,1,1-Trichloroethane	13.43	97.0	240157	45.20	UG/L	99
[illegible]	Carbon Tetrachloride	13.80	117.0	183473	42.49	UG/L	96
[illegible]	Vinyl Acetate	14.18	43.0	42117	30.12	UG/L	96
[illegible]	Bromodichloromethane	14.51	183.0	266942	46.46	UG/L	94
[illegible]	1,2-Dichloropropane	15.25	63.0	113686	47.72	UG/L	92
[illegible]	cis-1,3-Dichloropropene	16.02	75.0	174000	62.12	UG/L	88
[illegible]	Trichloroethene	16.67	95.0	146786	49.75	UG/L	95
[illegible]	Benzene	17.15	78.0	287177	49.24	UG/L	88
[illegible]	Dibromochloromethane	17.26	129.0	183640	41.62	UG/L	95
31)	1,1,2-Trichloroethane	17.37	97.0	93457	46.27	UG/L	93
32)	trans-1,3-Dichloropropene	17.37	75.0	134276	33.69	UG/L	100
33)	2-Chloroethyl Vinyl Ether	18.45	63.0	39536	50.79	UG/L	100
34)	Bromoform	19.91	173.0	136064	44.34	UG/L	99
35)	*CHLOROBENZENE-d5	24.50	117.0	282447	50.00	UG/L	83
36)	4-Methyl-2-Pentanone	20.34	43.0	46296	50.70	UG/L	94
37)	2-Hexanone	21.91	43.0	29453	45.81	UG/L	83
[illegible]	Tetrachloroethene	22.23	164.0	149206	53.31	UG/L	90
[illegible]	1,1,2,2,-Tetrachloroethane	22.23	83.0	114701	45.14	UG/L	92
40)	TOLUENE-d8	23.32	98.0	285780	53.24	UG/L	98
41)	Toluene	23.53	92.0	208394	53.45	UG/L	94
42)	Chlorobenzene	24.61	112.0	281245	52.94	UG/L	96
43)	Ethyl Benzene	26.40	106.0	146352	56.14	UG/L	95
44)	4-BROMOFLUOROBENZENE	28.34	95.0	213567	54.96	UG/L	100
45)	Styrene	29.48	104.0	241346	50.89	UG/L	98

000528

	Compound	R.T.	Q ion	Area	Conc	Units	q
46)	Total Xylenes	30.35	106.0	144292	49.91	UG/L	98
47)	1,3-Dichlorobenzene	33.05	146.0	334518	46.31	UG/L	85
48)	1,2-Dichlorobenzene	34.13	146.0	325685M	49.53	UG/L	100
49)	1,4-Dichlorobenzene	34.29	146.0	341324M	47.98	UG/L	88

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: [illegible] Quant Output File: ^VA288::SS
Name: [illegible]
Misc: [illegible]

[illegible]
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 940602 13:00

Operator ID: USER8
Quant Time: 940606 10:48
Injected at: 940606 09:21

QUANT REPORT

Operator ID: USER8 Quant Rev: 6 Quant Time: 940526 16:51
Output File: ^BA281::SS Injected at: 940526 16:13
Data File: >BA281::E7 Dilution Factor: 1.00000
Name: VBLNK
Misc: 5ML WATER

OK
SP 5/27/94

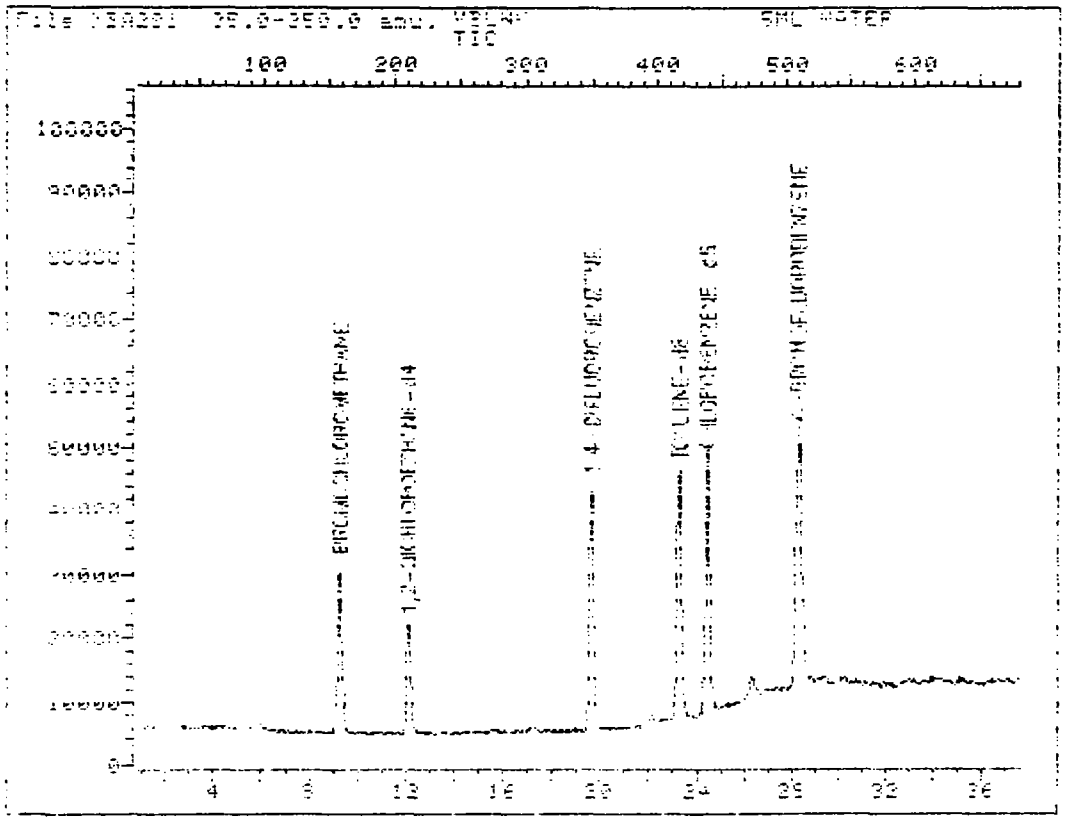
[illegible] File: [illegible]::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 940526 16:28

	Compound	R.T.	Q ion	Area	Conc	Units	q
[illegible]	*BROMOCHLOROMETHANE	9.29	128.0	46288	50.00	UG/L	100
[illegible]	1,2-DICHLOROETHANE-d4	12.[illegible]	65.0	76124	50.11	UG/L	99
[illegible]	*1,4-DIFLUOROBENZENE	19.66	114.0	193041	50.00	UG/L	86
[illegible]	*CHLOROBENZENE-d5	24.41	117.0	166762	50.00	UG/L	82
[illegible]	TOLUENE-d8	23.[illegible]	98.0	172765	49.3[illegible]	UG/L	99
[illegible]	4-BROMOFLUOROBENZENE	28.[illegible]	95.0	133699	53.55	UG/L	100

* Compound is ISTD

000531

TOTAL ION CHROMATOGRAM



Data File: >BA281::E7 Quant Output File: ^BA281::SS
Name: VBLNK
Misc: 5ML WATER

Id File: IOWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 940526 16:28

Operator ID: USER8
Quant Time: 940526 16:51
Injected at: 940526 16:13

QUANT REPORT

Operator ID: USER8 Quant Rev: 6 Quant Time: 940602 13:28
Output File: [illegible]:SS Injected at: 940602 12:49
Data File: [illegible]:E4 Dilution Factor: 1.00000
Name: [illegible]
Misc: [illegible] WATER

OK
SKS
6/6/94

[illegible]
Title: [illegible] FILE FOR VOLATILE WATERS [illegible]-A
Last Calibration: 940602 13:00

	Compound	R.T.	Q ion	Area	Conc	Units	q
[illegible]	*[illegible]	9.27	129.0	40993	50.00	UG/L	100
19)	1,2-[illegible]-d4	19.13	65.0	66237	53.44	UG/L	96
[illegible]	*[illegible]	19.63	114.0	137899	50.00	UG/L	89
35)	*[illegible]	24.44	117.0	121380	50.00	UG/L	96
[illegible]	[illegible]	[illegible]	[illegible]	122759	53.21	UG/L	94
[illegible]	[illegible]	[illegible]	[illegible]	93559	56.03	UG/L	100

* [illegible]

OK
GES
6/6/94

QUANT REPORT

Operator ID: USER8 Quant Rev: 6 Quant Time: 940606 12:12
Output File: ^BA288::SS Injected at: 940606 10:53
Data File: >BA288::E6 Dilution Factor: 1.00000
Name: VBLNK
Misc: 5ML WATER

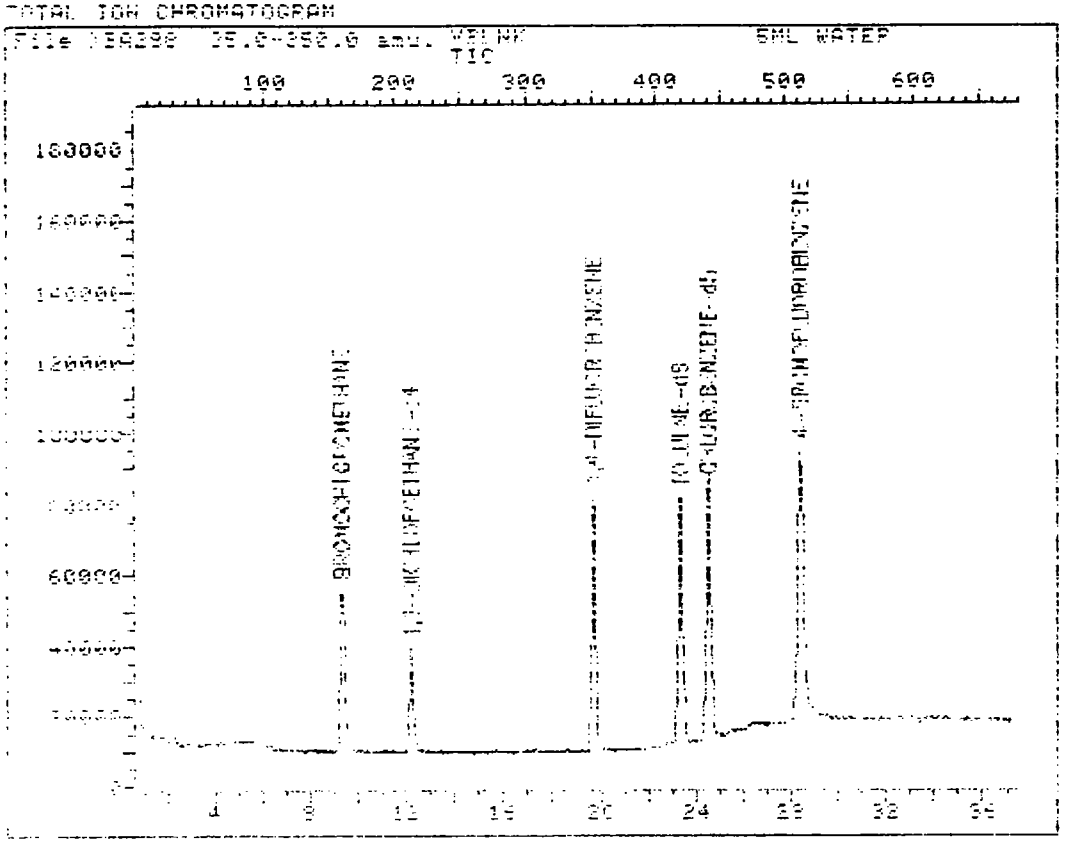
ID File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 940606 12:11

OK

	Compound	R.T.	Q ion	Area	Conc	Units	q
[illegible]	*BROMOCHLOROMETHANE	9.32	128.0	86812	50.00	UG/L	100
[illegible]	1,2-DICHLOROETHANE-d4	12.18	65.0	127742	44.81	UG/L S	96
[illegible]	*1,4-DIFLUOROBENZENE	19.69	114.0	349417	50.00	UG/L	84
[illegible]	*CHLOROBENZENE-d5	24.50	117.0	298992	50.00	UG/L	82
[illegible]	TOLUENE-d8	23.31	98.0	305621	50.51	UG/L S	98
[illegible]	4-BROMOFLUOROBENZENE	28.39	95.0	226020	50.00	UG/L S	100

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >BA298::F6 Quant Output File: ^BA298::S5
Name: VBLNK
Misc: 5ML WATER

Id File: [illegible]
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 948606 12:11

Operator ID: USERS
Quant Time: 948606 12:12
Injected at: 948606 10:53

QUANT REPORT

Operator ID: USER8 Quant Rev: 6 Quant Time: 940606 14:34
Output File: ^A3214::D1 Injected at: 940606 13:55
Data File: >A3214::E6 Dilution Factor: 1.00000
Name: C156878 MS
Misc: 5ML SAMPLE+10uL MS - HRE/BM

OK
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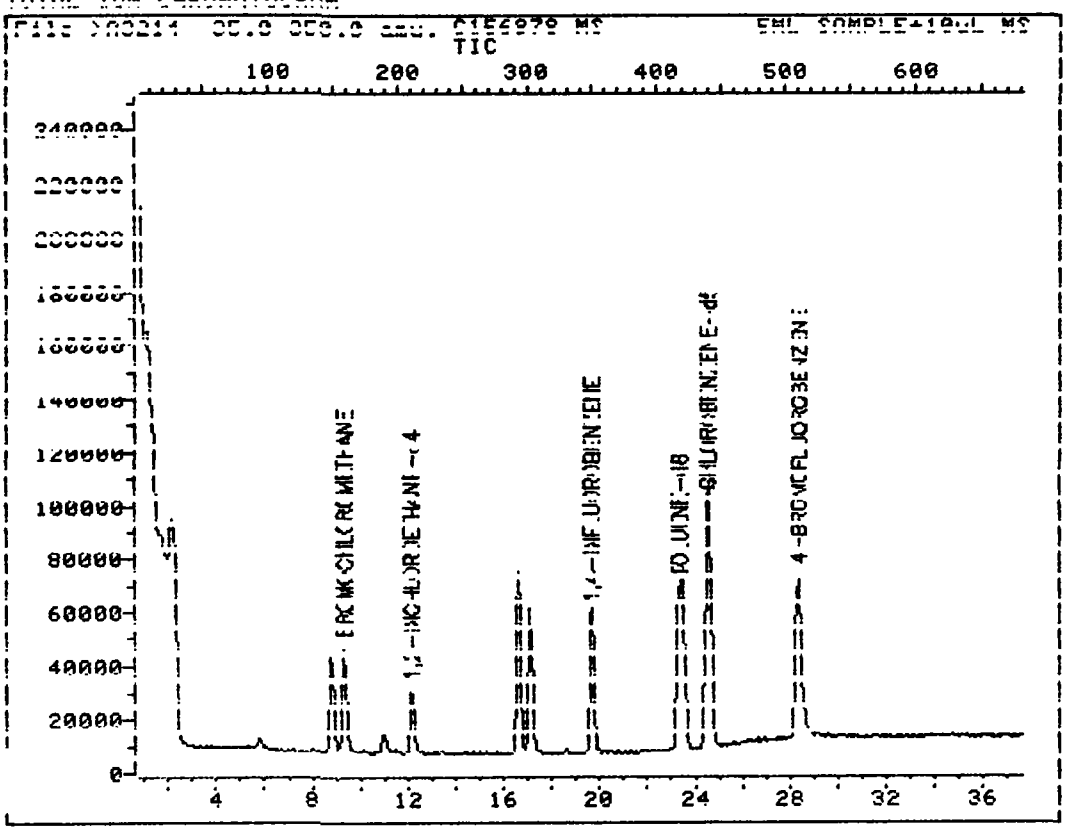
6/6/94

ID File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 940606 12:11

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.34	128.0	69202	50.00	UG/L	100
4)	Vinyl Chloride	2.54	62.0	9623	10.73	UG/L	96
7)	Methylene Chloride	5.78	84.0	5922	3.61	UG/L	100
13)	1,1-Dichloroethene	8.80	96.0	78885	63.47	UG/L	93
16)	1,2-Dichloroethene	10.96	96.0	21192	10.92	UG/L	90
18)	1,2-DICHLOROETHANE-d4	12.15	65.0	104436	45.95	UG/L	97
21)	*1,4-DIFLUOROBENZENE	19.66	114.0	262332	50.00	UG/L	86
28)	Trichloroethene	16.63	95.0	128516	56.11	UG/L	94
29)	Benzene	17.12	78.0	257590	57.49	UG/L	83
	*CHLOROBENZENE-d5	24.52	117.0	227428	50.00	UG/L	87
4[illegible]	TOLUENE-d8	23.33	98.0	230228	50.03	UG/L	98
41)	Toluene	23.49	92.0	166407	49.58	UG/L	93
42)	Chlorobenzene	24.62	112.0	248398	54.84	UG/L	94
44)	4-BROMOFLUOROBENZENE	28.35	95.0	170734	49.64	UG/L	100

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >A3214 Quant Output File: ^A3214::D1
Name: C156878 MS
Misc: 5ML SAMPLE+10uL MS - HRE/BM

Id File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 940606 12:11

Operator ID: USER8
Quant Time: 940606 14:34
Injected at: 940606 13:55

QUANT REPORT

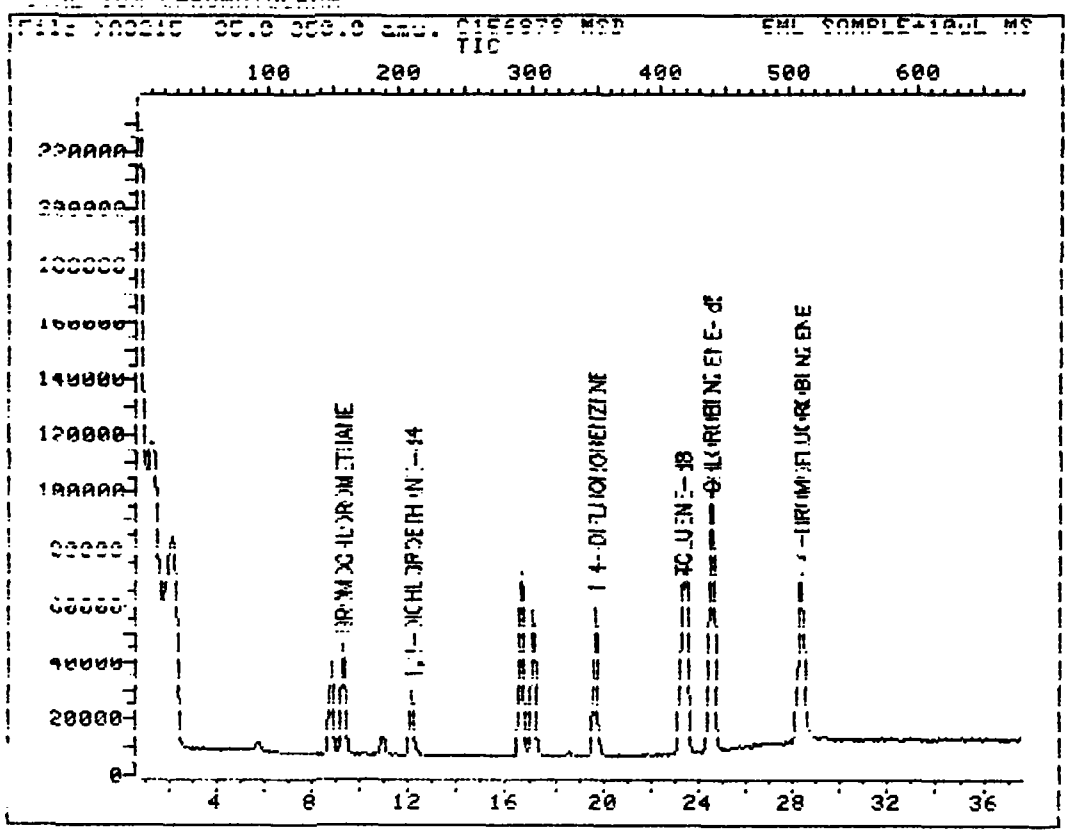
Operator ID: USER8 Quant Rev: 6 Quant Time: 940606 15:19
Output File: ^A3215::D1 Injected at: 940606 14:40
Data File: >A3215::E6 Dilution Factor: 1.00000
Name: C156878 MSD
Misc: 5ML SAMPLE+10uL MS - HRE/BM

ID File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 940606 12:11

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.32	128.0	66147	50.00	UG/L	100
4)	Vinyl Chloride	2.51	62.0	8456	9.86	UG/L	93
7)	Methylene Chloride	5.75	84.0	5588	3.56	UG/L	100
13)	1,1-Dichloroethene	8.78	96.0	77793	65.48	UG/L	94
16)	1,2-Dichloroethene	10.94	96.0	18902	10.19	UG/L	84
18)	1,2-DICHLOROETHANE-d4	12.18	65.0	107856	49.65	UG/L	97
21)	*1,4-DIFLUOROBENZENE	19.68	114.0	252274	50.00	UG/L	87
28)	Trichloroethene	16.61	95.0	124802	56.66	UG/L	98
29)	Benzene	17.09	78.0	241833	56.12	UG/L	84
[illegible]	*CHLOROBENZENE-d5	24.49	117.0	224657	50.00	UG/L	87
4[illegible]	TOLUENE-d8	23.30	98.0	225009	49.49	UG/L	94
41)	Toluene	23.47	92.0	161543	48.73	UG/L	93
42)	Chlorobenzene	24.60	112.0	242138	54.12	UG/L	95
44)	4-BROMOFLUOROBENZENE	28.33	95.0	164577	48.44	UG/L	100

* Compound is ISTD

TOTAL ION CHROMOTOGRAM



Data File: >A3215 Quant Output File: ^A3215::D1
Name: C156878 MSD
Misc: 5ML SAMPLE+10uL MS - HRE/BM

Id File: IDWVOC::D5
Title: QUANTITATION FILE FOR VOLATILE WATERS GC/MSD-A
Last Calibration: 940606 12:11

Operator ID: USER8
Quant Time: 940606 15:19
Injected at: 940606 14:40

CASE NARRATIVE

This package includes data for the soil samples numbered #C156680-689, -710 -719, -765-769, and -812-816 which were analyzed on five different days using Method SW846-8240. There were five method blanks associated with these samples and there were no target compounds detected in these blanks. The samples that were numbered #C156715 and C156814 were further analyzed as matrix spikes and matrix spike duplicates. None of the values were outside of the QC limits for these spiked samples. Some of these samples had to be reanalyzed in order to confirm poor surrogate recovery or low internal standard area due to the matrix of the samples. These samples have a comment on the final report reflecting this procedure.

Susan Sharp
VOA GC/MS
8/8/94

SOIL MATRIX SPIKE/M... IX SPIKE DUPLICATE RECOVERY

Case No. _____ Laboratory Name Heritage Labs

FRACTION	COMPOUND	CONC. SPIKE ADDED (ug/Kg)	SAMPLE RESULT	CONC. MS	% REC	CONC. MSD	% REC	RPD	QC LIMITS RPD	QC LIMITS RECOVERY
VOA	1,1-Dicholorethene	50	BDL	59	118	61	122	3	22	59-172
	Trichloroethene	↓	20	66	92	71	102	10	24	62-137
SAMPLE NO.	Chlorobenzene		BDL	56	112	61	122	9	21	60-133
	Toluene		13	64	102	68	110	8	21	59-139
C156715	Benzene		BDL	53	106	58	116	9	21	66-142
B/N	1,2,4-Trichlorobenzene								23	38-107
	Acenaphthene								19	31-137
	2,4 Dinitrotoluene								47	28-89
SAMPLE NO.	Di-n-Butylphthalate								47	29-135
	Pyrene								36	35-142
	N-Nitrosodi-n-Propylamine								38	41-126
_____	1,4-Dichlorobenzene								27	28-104
ACID	Pentachlorophenol								47	17-109
	Phenol								35	26-90
	2-Chlorophenol								50	25-102
SAMPLE NO.	4-Chloro-3-Methylphenol								33	26-103
_____	4-Nitrophenol								50	11-114
PEST	Lindane								50	46-127
	Heptachlor								31	35-130
	Aldrin								43	34-132
SAMPLE NO.	Dieldrin								38	31-134
	Endrin								45	42-139
_____	4,4'-DDT								50	23-134

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

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Revision 0
Date September 1986

SOIL MATRIX SPIKE/M IX SPIKE DUPLICATE RECOVERY

Case No. _____ Laboratory Name Heritage Labs

FRACTION	COMPOUND	CONC. SPIKE ADDED (ug/Kg)	SAMPLE RESULT	CONC. MS	% REC	CONC. MSD	% REC	RPD	QC LIMITS RPD	QC LIMITS RECOVERY
VOA	1,1-Dicholorethene	50	BDL	56	112	59	118	5	22	59-172
	Trichloroethene		37	87	100	87	100	0	24	62-137
SAMPLE NO.	Chlorobenzene		BDL	55	110	55	110	0	21	60-133
	Toluene		9	67	116	66	114	2	21	59-139
C156814	Benzene		BDL	55	110	57	114	4	21	66-142
B/N	1,2,4-Trichlorobenzene								23	38-107
	Acenaphthene								19	31-137
	2,4 Dinitrotoluene								47	28-89
SAMPLE NO.	Di-n-Butylphthalate								47	29-135
	Pyrene								36	35-142
	N-Nitrosodi-n-Propylamine								38	41-126
_____	1,4-Dichlorobenzene								27	28-104
ACID	Pentachlorophenol								47	17-109
	Phenol								35	26-90
	2-Chlorophenol								50	25-102
SAMPLE NO.	4-Chloro-3-Methylphenol								33	26-103
_____	4-Nitrophenol								50	11-114
PEST	Lindane								50	46-127
	Heptachlor								31	35-130
	Aldrin								43	34-132
SAMPLE NO.	Dieldrin								38	31-134
	Endrin								45	42-139
_____	4,4'-DDT								50	23-134

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

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Soils

METHOD BLANK SUMMARY

Case No. _____ Laboratory Name Heritage Labs

FILE ID	DATE OF ANALYSIS	FRACTION	MATRIX	CONC. LEVEL	INST. ID	CAS NUMBER	COMPOUND (MSL, TIC OR UNKNOWN)	CONC.	UNITS	CRDL
BA276	5/18/94		soil	low	HP5970-49		NA		ug/kg	
BA277	5/19/94		soil	low	HP5970-49		NA		ug/kg	
BA279	5/24/94		soil	low	HP5970-49		NA		ug/kg	
BA280	5/25/94		soil	low	HP5970-49		NA		ug/kg	
BB282	5/27/94		soil	low	HP5970-49		NA		ug/kg	

Comments:

FORM IV

Revision 0
Date Sept

5A

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

Lab Name: Heritage Labs Contract: _____

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

Lab File ID: TA850 BFB Injection Date: 5/13/94

Instrument ID: HP5970-13 BFB Injection Time: 10:39

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	29.82
75	30.0 - 60.0% of mass 95	55.34
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	8.65
173	Less than 2.0% of mass 174	0.00 (0.00)
174	Greater than 50.0% of mass 95	81.02
175	5.0 - 9.0% of mass 174	5.82 (7.19)
176	Greater than 95.0%, but less than 101.0% of mass 174	80.58 (99.46)
177	5.0 - 9.0% of mass 176	5.98 (7.42)

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

HIS 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		20 PPB STD	CA178	5/13/94	12:12
02		100 PPB STD	CA179		12:58
03		150 PPB STD	CA180		13:43
04		200 PPB STD	CA181		14:29
05		50 PPB STD	CA182		15:34
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5A

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

Lab Name: Heritage Labs Contract: _____

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

Lab File ID: TA855 BFB Injection Date: 5/18/94

Instrument ID: HP5970-49 BFB Injection Time: 9:39

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	25.53
75	30.0 - 60.0% of mass 95	56.95
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	8.33
173	Less than 2.0% of mass 174	0.00 (0.00)
174	Greater than 50.0% of mass 95	75.30
175	5.0 - 9.0% of mass 174	5.77 (7.67)
176	Greater than 95.0%, but less than 101.0% of mass 174	71.75 (95.29)
177	5.0 - 9.0% of mass 176	5.73 (7.99)

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

HIS 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	VA276	5/18/94	11:13
02		Lab Blank	BA276		11:58
03		C1566680	A3034		15:41
04		C1566681	A3035		16:25
05		C1566683	A3037		17:54
06					
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FORM V VOA 1/87

5A

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

Lab Name: Heritage Labs Contract: _____

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

Lab File ID: TA856 BFB Injection Date: 5/19/94

Instrument ID: HP5970-49 BFB Injection Time: 8:42

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23.40
75	30.0 - 60.0% of mass 95	55.78
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	7.46
173	Less than 2.0% of mass 174	0.00 (0.00)
174	Greater than 50.0% of mass 95	79.75
175	5.0 - 9.0% of mass 174	6.07 (7.61)
176	Greater than 95.0%, but less than 101.0% of mass 174	80.27 (100.66)
177	5.0 - 9.0% of mass 176	5.37 (6.69)

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

HIS 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	VA277	5/19/94	9:42
02		Lab Blank	BA277		10:27
03		C1566682	A3044		11:11
04		C1566684	A3045		11:56
05		C1566685	A3046		12:40
06		C1566686	A3047		13:25
07		C1566687	A3048		14:09
08		C1567111	A3054		18:40
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FORM V VOA

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5A

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

Lab Name: Heritage Labs Contract: _____

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

Lab File ID: TA859 BFB Injection Date: 5/24/94

Instrument ID: HP5970-49 BFB Injection Time: 10:29

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	25.89
75	30.0 - 60.0% of mass 95	55.83
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.41
173	Less than 2.0% of mass 174	0.00 (0.00)1
174	Greater than 50.0% of mass 95	76.65
175	5.0 - 9.0% of mass 174	6.25 (8.15)1
176	Greater than 95.0%, but less than 101.0% of mass 174	75.02 (97.87)2
177	5.0 - 9.0% of mass 176	6.61 (8.81)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	VA279	5/24/94	10:47
02		Lab Blank	BA279		11:32
03		C1516688	A3073		12:17
04		C1516689	A3074		13:02
05		C1516712	A3076		14:14
06		C1516713	A3077		15:05
07		C1516714	A3078		15:50
08		C1516715	A3079		16:35
09		C1516715 MS	A3080		17:21
10		C1516715 MSD	A3081		18:06
11		C1516717	A3083		19:36
12		C1516718	A3084		20:20
13		C1516719	A3085		21:05
14		C1516710	A3086		21:49
15					
16					
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21					
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5A

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

ab Name: Heritage Labs Contract: _____

ode: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

ab File ID: TA860 BFB Injection Date: 5/25/94

Instrument ID: HP5970-49 BFB Injection Time: 8:10

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	25.86
75	30.0 - 60.0% of mass 95	58.31
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.07
173	Less than 2.0% of mass 174	0.00 (0.00) 1
174	Greater than 50.0% of mass 95	86.54
175	5.0 - 9.0% of mass 174	7.78 (8.99) 1
176	Greater than 95.0%, but less than 101.0% of mass 174	82.98 (95.88) 1
177	5.0 - 9.0% of mass 176	6.86 (8.27) 2

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

IS 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	VA280	5/25/94	8:38
02		Lab Blank	BA280		9:31
03		C156716	A3092		10:16
04		C156765	A3094		11:44
05		C156814	A3098		14:45
06		C156815	A3104		19:15
07					
08					
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FORM V VOA

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5A

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

Lab Name: Heritage Labs Contract: _____

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

Lab File ID: TA864 BFB Injection Date: 5/27/94

Instrument ID: HP5970-49 BFB Injection Time: 8:37

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	24.59
75	30.0 - 60.0% of mass 95	56.83
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	5.52
173	Less than 2.0% of mass 174	0.00 (0.00) 1
174	Greater than 50.0% of mass 95	86.84
175	5.0 - 9.0% of mass 174	7.24 (8.34) 1
176	Greater than 95.0%, but less than 101.0% of mass 174	84.35 (97.13) 1
177	5.0 - 9.0% of mass 176	6.25 (7.41) 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	VB282	5/27/94	8:57
02		Lab Blank	BB282		9:42
03		C1567661:5	A3124		10:27
04		C1567667	A3125		11:12
05		C1567668	A3126		11:57
06		C1567669	A3127		12:42
07		C1568814 MS	A3128		13:26
08		C1568814 MSD	A3129		14:11
09		C1568812	A3130		14:56
10		C1568813	A3131		15:41
11		C1568816	A3132		16:31
12					
13					
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15					
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17					
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20					
21					
22					

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: GC/MSD-A

Contractor: Calibration Date: 05/13/94

Contract No:

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

Laboratory ID:	>CA178	>CA182	>CA179	>CA180	>CA181				
	RF	RF	RF	RF	RF				
Compound	20.00	50.00	100.00	150.00	200.00	$\overline{RF}$	% RSD	CCC	SPCC
Chloromethane	.71111	.40704	.36817	.38777	.36574	.44796	33.048		**
Bromomethane	.52026	.60667	.47146	.52703	.49222	.52353	9.846		
Vinyl Chloride	.90938	.85000	.83118	.86447	.86568	.86414	3.342	*	
Chloroethane	.60736	.56569	.51141	.56729	.50912	.55217	7.561		
Methylene Chloride	1.45979	1.27151	1.21084	1.30223	1.22820	1.29452	7.657		
Acetone	.57080	.38041	.27649	.33360	.33264	.37879	29.958		
Carbon Disulfide	2.34920	2.40001	2.34580	2.57027	2.48016	2.42909	3.944		
Trichlorofluoromethane	2.90293	2.96652	2.73445	3.09359	2.92226	2.92395	4.424		
1,1-Dichloroethene	1.18890	1.09503	1.07013	1.17845	1.13163	1.13283	4.541	*	
1,1-Dichloroethane	2.60369	2.62465	2.52770	2.75776	2.64362	2.63148	3.161		**
1,2-Dichloroethene	1.45593	1.23388	1.17571	1.31383	1.24152	1.28417	8.395		
Chloroform	4.92122	3.95412	3.37781	3.80959	3.58117	3.92878	15.188	*	
1,2-DICHLOROETHANE-d4	2.03115	2.25547	2.14891	2.36606	2.43326	2.24697	7.216		(Conc=50.0,50.0,50.0,50.0,50.0)
1,2-Dichloroethane	2.39673	2.55411	2.31818	2.55288	2.56498	2.47738	4.563		
2-Butanone	.73680	.58691	.40572	.43239	.49235	.53083	25.343		
1,1,1-Trichloroethane	.81564	.81862	.75456	.81539	.78632	.79811	3.467		
Carbon Tetrachloride	.69543	.71824	.65571	.72982	.69693	.69923	4.052		
Vinyl Acetate	.39688	.48234	.40705	.44665	.46894	.44037	8.511		
Bromodichloromethane	.84709	.84742	.78594	.85866	.84663	.83715	3.472		
1,2-Dichloropropane	.33751	.34306	.31644	.34787	.33621	.33622	3.567	*	
cis-1,3-Dichloropropene	.44145	.44677	.40668	.44436	.43901	.43565	3.778		(Conc=25.6,64.0,128.0,192.0,256.0
Trichloroethene	.47108	.45127	.43069	.46450	.44663	.45283	3.492		
Benzene	.83978	.81688	.77556	.83700	.80158	.81416	3.269		
Dibromochloromethane	.67328	.69736	.62767	.67777	.68752	.67272	3.989		
1,1,2-Trichloroethane	.33569	.34176	.29390	.31133	.31478	.31949	6.065		
trans-1,3-Dichloropropene	.81320	.76107	.66791	.71819	.70961	.73400	7.530		(Conc=14.4,36.0,72.0,108.0,144.0)
2-Chloroethyl Vinyl Ether	.18990	.19851	.16664	.17973	.18776	.18451	6.514		
Bromoform	.61521	.64140	.57405	.61221	.63467	.61550	4.274		**
4-Methyl-2-Pentanone	.32707	.41737	.28167	.30454	.34202	.33453	15.438		
2-Hexanone	.26448	.32346	.18030	.19781	.22414	.23804	24.080		
Tetrachloroethene	.54670	.52187	.50591	.54089	.52182	.52744	3.113		
1,1,2,2,-Tetrachloroethane	.67586	.69936	.58119	.60347	.64161	.64030	7.653		**

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 (**)

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: GC/MSD-A

Contractor: Calibration Date: 05/13/94

Contract No:

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

Laboratory ID:	>CA178	>CA182	>CA179	>CA180	>CA181					
Compound	RF 20.00	RF 50.00	RF 100.00	RF 150.00	RF 200.00	$\overline{RF}$	% RSD	CCC	SPCC	
TOLUENE-d8	1.10641	1.11142	1.10922	1.09936	1.11553	1.10839	.546			(Conc=50.0,50.0,50.0,50.0,50.0)
Toluene	.74819	.68934	.65326	.71821	.68797	.69939	5.103	*		
Chlorobenzene	.96973	.94964	.89418	.96492	.94454	.94460	3.181		**	
Ethyl Benzene	.45323	.43424	.40736	.44673	.43380	.43507	4.040	*		
4-BROMOFLUOROBENZENE	.84551	.87280	.83340	.85119	.86889	.85436	1.922			(Conc=50.0,50.0,50.0,50.0,50.0)
Styrene	.90709	.92714	.80785	.88662	.89243	.88422	5.142			
Total Xylenes	.56207	.56521	.50181	.54800	.54406	.54423	4.659			
1,3-Dichlorobenzene	1.15281	1.15094	1.02606	1.08509	1.05994	1.09497	5.116			
1,2-Dichlorobenzene	1.05195	1.05768	1.05895	1.01332	1.00574	1.03753	2.490			
1,4-Dichlorobenzene	1.14219	1.15602	1.04223	1.09124	1.05140	1.09662	4.703			

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: 05/18/94

Contractor: Time: 11:13

Contract No: Laboratory ID: >VR276

Instrument ID: GC/MSD-A Initial Calibration Date: 05/13/94

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

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Chloromethane	.44796	.41630	7.07		**	
Bromomethane	.52353	.66955	27.89			
Vinyl Chloride	.86414	.79844	7.60	*		
Chloroethane	.55217	.53849	2.48			
Methylene Chloride	1.29452	1.15085	11.10			
Acetone	.37879	.29931	20.98			
Carbon Disulfide	2.42909	2.24120	7.74			
Trichlorofluoromethane	2.92395	3.42783	17.23			
1,1-Dichloroethene	1.13283	1.07682	4.94	*		
1,1-Dichloroethane	2.63148	2.52301	4.12		**	
1,2-Dichloroethene	1.28417	1.35291	5.35			
Chloroform	3.92878	3.39824	13.50	*		
1,2-DICHLOROETHANE-d4	2.24697	2.22089	1.16			
1,2-Dichloroethane	2.47738	2.80009	13.03			
2-Butanone	.53083	.36563	31.12			
1,1,1-Trichloroethane	.79811	.93570	17.24			
Carbon Tetrachloride	.69923	.74662	6.78			
Vinyl Acetate	.44037	.40718	7.54			
Bromodichloromethane	.83715	.90590	8.21			
1,2-Dichloropropane	.33622	.32648	2.90	*		
cis-1,3-Dichloropropene	.43565	.45070	3.45			(Conc=64.00)
Trichloroethene	.45283	.44336	2.09			
Benzene	.81416	.87033	6.90			
Dibromochloromethane	.67272	.66798	.71			
1,1,2-Trichloroethane	.31949	.30368	4.95			
trans-1,3-Dichloropropene	.73400	.75282	2.56			(Conc=36.00)
2-Chloroethyl Vinyl Ether	.18451	.16902	8.39			
Bromoform	.61550	.53099	13.73		**	
4-Methyl-2-Pentanone	.33453	.31488	5.87			
2-Hexanone	.23804	.19183	19.41			
Tetrachloroethene	.52744	.50947	3.41			
1,1,2,2,-Tetrachloroethane	.64030	.65369	2.09		**	

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: 05/18/94

Contractor: Time: 11:13

Contract No: Laboratory ID: >VA276

Instrument ID: GC/MSD-A Initial Calibration Date: 05/13/94

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

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
TOLUENE-d8	1.10839	1.06877	3.57		
Toluene	.69939	.72389	3.50	*	
Chlorobenzene	.94460	.90064	4.65		**
Ethyl Benzene	.43507	.45540	4.67	*	
4-BROMOFLUOROBENZENE	.85436	.87143	2.00		
Styrene	.88422	.83525	5.54		
Total Xylenes	.54423	.52287	3.92		
1,3-Dichlorobenzene	1.09497	1.18360	8.09		
1,2-Dichlorobenzene	1.03753	1.06790	2.93		
1,4-Dichlorobenzene	1.09662	1.10920	1.15		

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: 05/19/94

Contractor: Time: 09:42

Contract No: Laboratory ID: >VA277

Instrument ID: GC/MSD-A Initial Calibration Date: 05/13/94

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

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Chloromethane	.44796	.38207	14.71		**	
Bromomethane	.52353	.67231	28.42			
Vinyl Chloride	.86414	.79513	7.99	*		
Chloroethane	.55217	.53742	2.67			
Methylene Chloride	1.29452	1.11802	13.63			
Acetone	.37879	.30318	19.96			
Carbon Disulfide	2.42909	2.11789	12.81			
Trichlorofluoromethane	2.92395	3.22226	10.20			
1,1-Dichloroethene	1.13283	1.02218	9.77	*		
1,1-Dichloroethane	2.63148	2.41586	8.19		**	
1,2-Dichloroethene	1.28417	1.27548	.68			
Chloroform	3.92878	3.23719	17.60	*		
1,2-DICHLOROETHANE-d4	2.24697	2.21086	1.61			
1,2-Dichloroethane	2.47738	2.65267	7.08			
2-Butanone	.53083	.31445	40.76			
1,1,1-Trichloroethane	.79811	.88122	10.41			
Carbon Tetrachloride	.69923	.69119	1.15			
Vinyl Acetate	.44037	.36414	17.31			
Bromodichloromethane	.83715	.85939	2.66			
1,2-Dichloropropane	.33622	.31221	7.14	*		
cis-1,3-Dichloropropene	.43565	.43584	.04			(Conc=64.00)
Trichloroethene	.45283	.42214	6.78			
Benzene	.81416	.83058	2.02			
Dibromochloromethane	.67272	.64136	4.66			
1,1,2-Trichloroethane	.31949	.29811	6.69			
trans-1,3-Dichloropropene	.73400	.72580	1.12			(Conc=36.00)
2-Chloroethyl Vinyl Ether	.18451	.17183	6.87			
Bromoform	.61550	.51068	17.03		**	
4-Methyl-2-Pentanone	.33453	.28082	16.06			
2-Hexanone	.23804	.18199	23.55			
Tetrachloroethene	.52744	.49162	6.79			
1,1,2,2,-Tetrachloroethane	.64030	.62470	2.44		**	

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: 05/19/94

Contractor: Time: 09:42

Contract No: Laboratory ID: >VA277

Instrument ID: GC/MSD-A Initial Calibration Date: 05/13/94

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

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
TOLUENE-d8	1.10839	1.07474	3.04		
Toluene	.69939	.68502	2.05	*	
Chlorobenzene	.94460	.86261	8.68		**
Ethyl Benzene	.43507	.45183	3.85	*	
4-BROMOFLUOROBENZENE	.85436	.82939	2.92		
Styrene	.88422	.79037	10.61		
Total Xylenes	.54423	.49367	9.29		
1,3-Dichlorobenzene	1.09497	1.10820	1.21		
1,2-Dichlorobenzene	1.03753	.96357	7.13		
1,4-Dichlorobenzene	1.09662	1.13742	3.72		

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: 05/24/94

Contractor: Time: 10:47

Contract No: Laboratory ID: >VR279

Instrument ID: GC/MSD-A Initial Calibration Date: 05/13/94

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

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Chloromethane	.44796	.43151	3.67		**	
Bromomethane	.52353	.58504	11.75			
Vinyl Chloride	.86414	.72647	15.93	*		
Chloroethane	.55217	.54560	1.19			
Methylene Chloride	1.29452	1.19184	7.93			
Acetone	.37879	.28697	24.24			
Carbon Disulfide	2.42909	2.55651	5.25			
Trichlorofluoromethane	2.92395	2.48945	14.86			
1,1-Dichloroethene	1.13283	1.10849	2.15	*		
1,1-Dichloroethane	2.63148	2.56066	2.69		**	
1,2-Dichloroethene	1.28417	1.45323	13.16			
Chloroform	3.92878	3.02803	22.93	*		
1,2-DICHLOROETHANE-d4	2.24697	1.80595	19.63			
1,2-Dichloroethane	2.47738	2.18504	11.80			
2-Butanone	.53083	.36439	31.35			
1,1,1-Trichloroethane	.79811	.71351	10.60			
Carbon Tetrachloride	.69923	.56676	18.94			
Vinyl Acetate	.44037	.45704	3.79			
Bromodichloromethane	.83715	.81482	2.67			
1,2-Dichloropropane	.33622	.37664	12.02	*		
cis-1,3-Dichloropropene	.43565	.46324	6.33			(Conc=64.00)
Trichloroethene	.45283	.42794	5.50			
Benzene	.81416	.94695	16.31			
Dibromochloromethane	.67272	.60279	10.40			
1,1,2-Trichloroethane	.31949	.31366	1.82			
trans-1,3-Dichloropropene	.73400	.69096	5.86			(Conc=36.00)
2-Chloroethyl Vinyl Ether	.18451	.19877	7.73			
Bromoform	.61550	.47193	23.33		**	
4-Methyl-2-Pentanone	.33453	.37123	10.97			
2-Hexanone	.23804	.24940	4.77			
Tetrachloroethene	.52744	.43406	17.70			
1,1,2,2,-Tetrachloroethane	.64030	.68865	7.55		**	

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: 05/24/94

Contractor: Time: 10:47

Contract No: Laboratory ID: >VA279

Instrument ID: GC/MSD-A Initial Calibration Date: 05/13/94

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

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
TOLUENE-d8	1.10839	1.06109	4.27		
Toluene	.69939	.74565	6.61	*	
Chlorobenzene	.94460	.87790	7.06		**
Ethyl Benzene	.43507	.45275	4.06	*	
4-BROMOFLUOROBENZENE	.85436	.80864	5.35		
Styrene	.88422	.80951	8.45		
Total Xylenes	.54423	.50271	7.63		
1,3-Dichlorobenzene	1.09497	1.00568	8.15		
1,2-Dichlorobenzene	1.03753	.94354	9.06		
1,4-Dichlorobenzene	1.09662	1.06498	2.89		

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: 05/25/94

Contractor: Time: 08:38

Contract No: Laboratory ID: >VA280

Instrument ID: GC/MSD-A Initial Calibration Date: 05/13/94

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

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Chloromethane	.44796	.36018	19.60		**	
Bromomethane	.52353	.50858	2.86			
Vinyl Chloride	.86414	.65519	24.18	*		
Chloroethane	.55217	.49686	10.02			
Methylene Chloride	1.29452	1.13339	12.45			
Acetone	.37879	.29057	23.29			
Carbon Disulfide	2.42909	2.37631	2.17			
Trichlorofluoromethane	2.92395	2.40898	17.61			
1,1-Dichloroethene	1.13283	1.07355	5.23	*		
1,1-Dichloroethane	2.63148	2.36376	10.17		**	
1,2-Dichloroethene	1.28417	1.37939	7.41			
Chloroform	3.92878	3.00253	23.58	*		
1,2-DICHLOROETHANE-d4	2.24697	1.71320	23.75			
1,2-Dichloroethane	2.47738	2.03501	17.86			
2-Butanone	.53083	.36709	30.85			
1,1,1-Trichloroethane	.79811	.65960	17.35			
Carbon Tetrachloride	.69923	.53542	23.43			
Vinyl Acetate	.44037	.35709	18.91			
Bromodichloromethane	.83715	.76059	9.15			
1,2-Dichloropropane	.33622	.33391	.69	*		
cis-1,3-Dichloropropene	.43565	.42624	2.16			(Conc=64.00)
Trichloroethene	.45283	.39762	12.19			
Benzene	.81416	.85089	4.51			
Dibromochloromethane	.67272	.58164	13.54			
1,1,2-Trichloroethane	.31949	.30284	5.21			
trans-1,3-Dichloropropene	.73400	.64359	12.32			(Conc=36.00)
2-Chloroethyl Vinyl Ether	.18451	.17505	5.12			
Bromoform	.61550	.45819	25.56		**	
4-Methyl-2-Pentanone	.33453	.31040	7.21			
2-Hexanone	.23804	.19679	17.33			
Tetrachloroethene	.52744	.42604	19.22			
1,1,2,2,-Tetrachloroethane	.64030	.62402	2.54		**	

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: 05/25/94

Contractor: Time: 08:38

Contract No: Laboratory ID: >VR280

Instrument ID: GC/MSD-A Initial Calibration Date: 05/13/94

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

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
TOLUENE-d8	1.10839	1.02376	7.64		
Toluene	.69939	.69512	.61	*	
Chlorobenzene	.94460	.89040	5.74		**
Ethyl Benzene	.43507	.44917	3.24	*	
4-BROMOFLUOROBENZENE	.85436	.73091	14.45		
Styrene	.88422	.76459	13.53		
Total Xylenes	.54423	.47185	13.30		
1,3-Dichlorobenzene	1.09497	1.02999	5.93		
1,2-Dichlorobenzene	1.03753	.89125	14.10		
1,4-Dichlorobenzene	1.09662	.99523	9.25		

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

e No: Calibration Date: 05/27/94

Contractor: Time: 08:57

Contract No: Laboratory ID: >W8282

Instrument ID: GC/MSD-A Initial Calibration Date: 05/13/94

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

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Chloromethane	.44796	.32714	26.97		**	
Bromomethane	.52353	.51573	1.49			
Vinyl Chloride	.86414	.70513	18.40	*		
Chloroethane	.55217	.47362	14.23			
Methylene Chloride	1.29452	1.16840	9.74			
Acetone	.37879	.32492	14.22			
Carbon Disulfide	2.42909	2.28758	5.83			
Trichlorofluoromethane	2.92395	2.10562	27.99			
1,1-Dichloroethene	1.13283	1.02374	9.63	*		
1,1-Dichloroethane	2.63148	2.23720	14.98		**	
1,2-Dichloroethene	1.28417	1.34561	4.78			
Chloroform	3.92878	3.08445	21.49	*		
1,2-DICHLOROETHANE-d4	2.24697	1.61216	28.25			
1,2-Dichloroethane	2.47738	1.93095	22.06			
2-Butanone	.53083	.46179	13.01			
1,1,1-Trichloroethane	.79811	.68524	14.14			
Carbon Tetrachloride	.69923	.53666	23.25			
Vinyl Acetate	.44037	.41152	6.55			
Bromodichloromethane	.83715	.82196	1.81			
1,2-Dichloropropane	.33622	.34656	3.08	*		
cis-1,3-Dichloropropene	.43565	.44131	1.30			(Conc=64.00)
Trichloroethene	.45283	.41322	8.75			
Benzene	.81416	.87555	7.54			
Dibromochloromethane	.67272	.61918	7.96			
1,1,2-Trichloroethane	.31949	.34303	7.37			
trans-1,3-Dichloropropene	.73400	.66730	9.09			(Conc=36.00)
2-Chloroethyl Vinyl Ether	.18451	.18390	.33			
Bromoform	.61550	.49250	19.99		**	
4-Methyl-2-Pentanone	.33453	.38803	15.99			
2-Hexanone	.23804	.26013	9.28			
Tetrachloroethene	.52744	.42431	19.55			
1,1,2,2,-Tetrachloroethane	.64030	.80987	26.48		**	

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: 05/27/94

Contractor: Time: 08:57

Contract No: Laboratory ID: >V8282

Instrument ID: GC/MSD-A Initial Calibration Date: 05/13/94

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

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
TOLUENE-d8	1.10839	1.03878	6.28		
Toluene	.69939	.72534	3.71	*	
Chlorobenzene	.94460	.93480	1.04		**
Ethyl Benzene	.43507	.46465	6.80	*	
4-BROMOFLUOROBENZENE	.85436	.78568	8.04		
Styrene	.88422	.88605	.21		
Total Xylenes	.54423	.54246	.33		
1,3-Dichlorobenzene	1.09497	1.12456	2.70		
1,2-Dichlorobenzene	1.03753	.94359	9.05		
1,4-Dichlorobenzene	1.09662	1.15592	5.41		

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 (**)

000332

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Heritage Labs Contract: _____

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

Lab File ID (Standard): VA276 Date Analyzed: 5/18/94

Instrument ID: HP5970 Time Analyzed: 11:13

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

	IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
12 HOUR STD	39988	9.37	148402	19.74	120737	24.60
UPPER LIMIT	79976		296804		241474	
LOWER LIMIT	19994		74201		60368	
EPA SAMPLE NO.						
01 Lab Blank	39084	9.34	154576	19.71	129222	24.57
02 C1566680	34878	9.32	140764	19.69	111323	24.56
03 C1566681	37270	9.33	149807	19.70	114182	24.56
04 C1566683	27648	9.37	96750	19.74	62176	24.55
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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

page __ of __

FORM VIII VOA 1/87 R

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

ab Name: Heritage Labs Contract: _____

:ode: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

ab File ID (Standard): VA277 Date Analyzed: 5/19/94

nstrument ID: HP5970-49 Time Analyzed: 9:42

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

	IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
12 HOUR STD	46068	9.32	173975	19.74	143795	24.55
UPPER LIMIT	92136		347950		287590	
LOWER LIMIT	23034		86988		71898	
EPA SAMPLE NO.						
01 Lab Blank	35779	9.31	134571	19.73	113225	24.54
02 C1561682	35065	9.32	136437	19.69	101782	24.55
03 C1561684	27281	9.32	95215	19.69	54567*	24.55
04 C1561685	24472	9.29	86865*	19.71	50549*	24.52
05 C1561686	25173	9.29	79580*	19.71	42394*	24.52
06 C1561687	26546	9.29	82040*	19.71	51670*	24.52
07 C1561711	28494	9.31	107228	19.68	73175	24.54
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21						
22						

IS1 (BCM) = Bromochloromethane
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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

page ___ of ___

VOLATILE INTERNAL STANDARD AREA SUMMARY

b Name: Heritage Labs Contract: _____

ode: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

b File ID (Standard): VA279 Date Analyzed: 5/24/94

nstrument ID: HP5970-49 Time Analyzed: 10:47

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

	IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
12 HOUR STD	80386	9.32	313199	19.70	260771	24.51
UPPER LIMIT	160772		626398		521542	
LOWER LIMIT	40193		156600		130386	
EPA SAMPLE NO.						
01 Lab Blank	75032	9.32	287116	19.69	239545	24.50
02 C1566688	59393	9.32	210314	19.69	129439 *	24.50
03 C1566689	63570	9.29	240692	19.66	149642	24.47
04 C1566712	71593	9.26	265618	19.64	180075	24.45
05 C1566713	51297	9.28	192057	19.66	119672 *	24.47
06 C1566714	65819	9.29	255763	19.66	182224	24.47
07 C1566715	59157	9.28	225883	19.65	153475	24.46
08 C1566715 MS	56495	9.28	216230	19.65	144546	24.46
09 C1566715 MSD	37438	9.26	131352	19.63	183233	24.45
10 C1566717	54474	9.32	197062	19.69	125936	24.50
11 C1566718	56372	9.34	204125	19.71	137108	24.52
12 C1566719	65170	9.34	250371	19.71	170217	24.52
13 C1566710	46093	9.33	145794	19.70	70548 *	24.51
14						
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20						
21						
22						

IS1 (BCM) = Bromochloromethane
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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

page ___ of ___

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

b Name: Heritage Labs Contract: _____

de: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

b File ID (Standard): VA280 Date Analyzed: 5/25/94

strument ID: HP5970-49 Time Analyzed: 8:38

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

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	666033	9.43	270379	19.74	224876	24.56
	UPPER LIMIT	132066		540758		449752	
	LOWER LIMIT	33016		135190		112438	
	EPA SAMPLE NO.						
01	Lab Blank	56707	9.37	215287	19.74	184734	24.50
02	C1516716	57539	9.32	221965	19.69	168577	24.50
3	C1516765	49769	9.32	198207	19.68	144766	24.49
4	C1516814	42307	9.30	148254	19.67	92544*	24.49
05	C1516815	49869	9.33	177496	19.69	117325	24.50
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22							

IS1 (BCM) = Bromochloromethane
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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

page ___ of ___

FORM VIII VOA 000886 1/87 Rev.

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

ab Name: Heritage Labs Contract: _____

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

ab File ID (Standard): VB282 Date Analyzed: 5/27/94

nstrument ID: HP5970-49 Time Analyzed: 8:57

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

	IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
12 HOUR STD	62261	9.21	229665	19.58	187676	24.39
UPPER LIMIT	124522		459330		375352	
LOWER LIMIT	31131		114832		93838	
EPA SAMPLE NO.						
01 Lab Blank	60126	9.32	222011	19.69	184354	24.49
02 C156766 1.5	52147	9.31	190234	19.68	143136	24.55
03 C156767	53047	9.37	198036	19.75	133204	24.56
04 C156768	52518	9.37	182308	19.75	95775	24.56
05 C156769	51165	9.37	181881	19.74	111943	24.56
06 C156814 MS	43590	9.37	148287	19.74	100439	24.55
07 C156814 MSD	48645	9.37	168629	19.74	117607	24.55
08 C156812	41845	9.38	144161	19.75	92273 *	24.56
09 C156813	51737	9.42	169532	19.79	115697	24.59
10 C156816	33799	9.38	109010	19.75	64168 *	24.55
11						
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22						

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
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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

page ___ of ___

QUANT REPORT

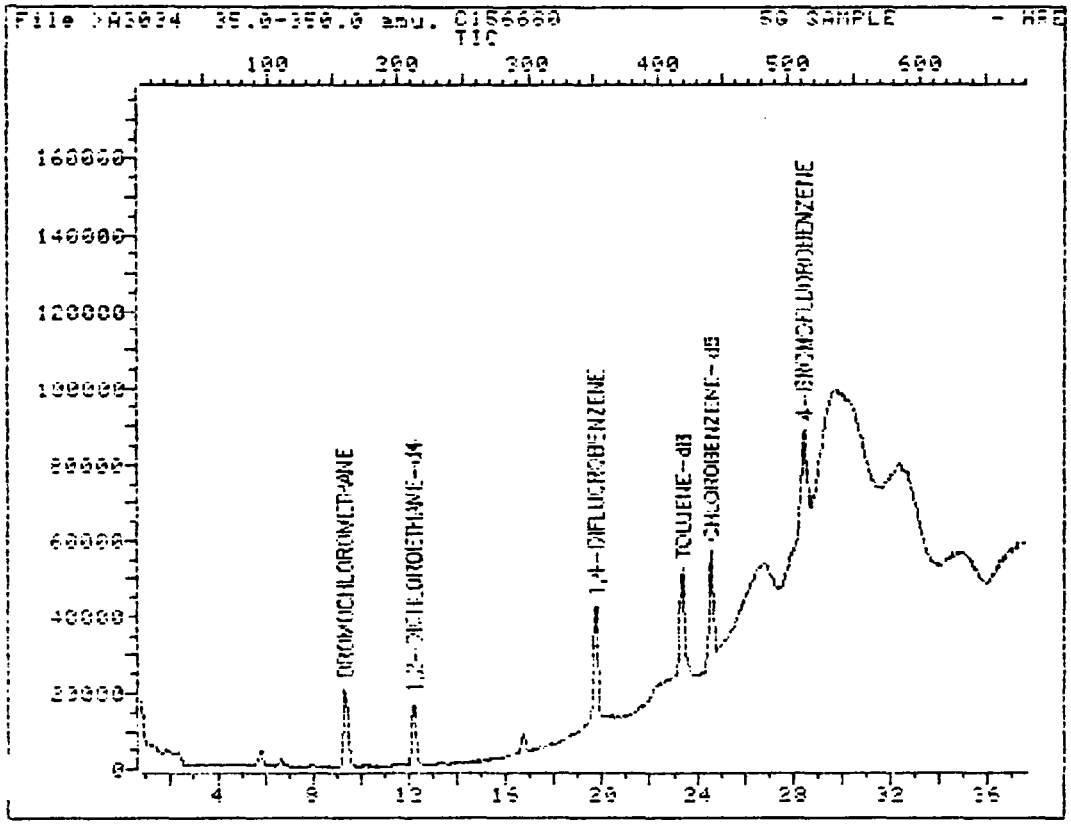
Operator ID: USER8 Quant Rev: 6 Quant Time: 940518 16:20
Output File: >A3034::D2 Injected at: 940518 15:41
Data File: >A3034::E7 Dilution Factor: 1.00000
Name: [illegible]
Misc: [illegible] SAMPLE - HRE/BM

[illegible] File: [illegible]
Title: QUANTITATION FILE FOR VOLATILE SOILS GC/MSD-A
Last Calibration: 940518 12:02

	Compound	R.T.	Q ion	Area	Conc	Units	Q
1)	*BROMOCHLOROMETHANE	9.32	128.0	34878	50.00	UG/KG	100
2)	Methylene Chloride	5.76	84.0	8673	10.80	UG/KG	100
8)	Acetone	6.62	43.0	17552	84.07	UG/KG	80
18)	1,2-DICHLOROETHANE-d4	12.78	65.0	80305	51.84	UG/KG	95
22)	*1,4-DIFLUOROBENZENE	19.69	114.0	140764	50.00	UG/KG	90
28)	Trichloroethene	16.67	95.0	11053	8.86	UG/KG	94
36)	*CHLOROBENZENE-d5	24.56	117.0	111323	50.00	UG/KG	96
40)	TOLUENE-d8	23.37	98.0	120661	50.71	UG/KG	91
41)	Toluene	23.53	92.0	11689	7.25	UG/KG	84
44)	4-BROMOFLUOROBENZENE	28.40	95.0	103949	53.58	UG/KG	100

Compound is ISTD

TOTAL ION CHROMATOGRAM

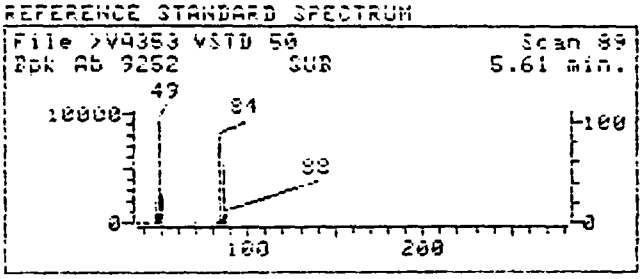


Data File: >A3034::E7 Quant Output File: ^A3034::SS
Name: C156680
Misc: SG SAMPLE - HRS/SM

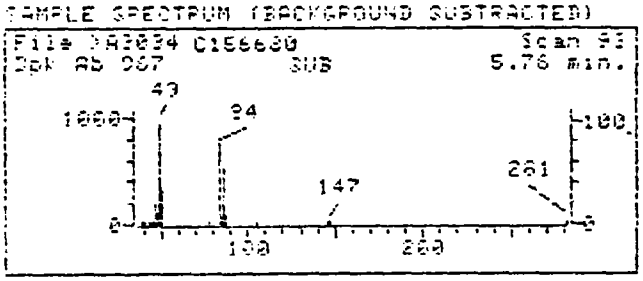
ID File: IDSVOA::D5
Title: QUANTITATION FILE FOR VOLATILE SOILS GC/MSD-A
Last Calibration: 940518 12:02

Operator ID: USER8
Quant Time: 940518 16:20
Injected at: 940518 15:41

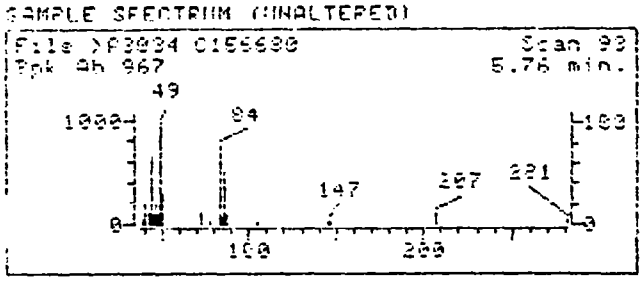
REFERENCE STANDARD SPECTRUM

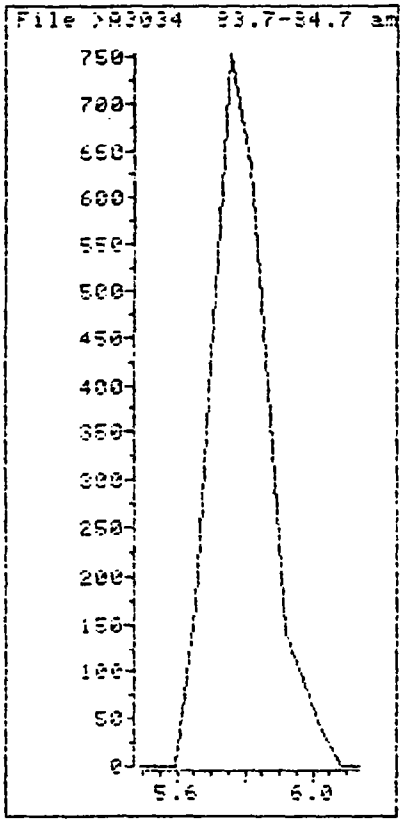


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



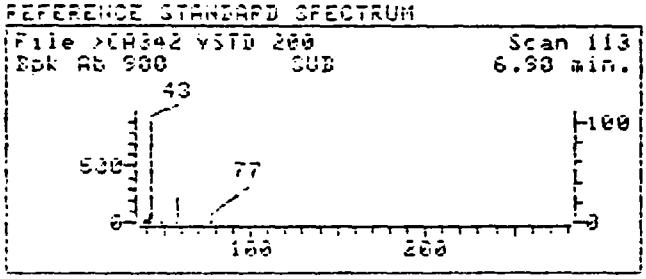


Data File: >A3034::E7 Quant Output File: ^A3034::SS
Name: C156680
Misc: 5G SAMPLE - HPE/BM
Quant Time: 940518 16:20 Quant ID File: IDSU04::D6
Injected at: 940518 15:41 Last Calibration: 940518 12:02

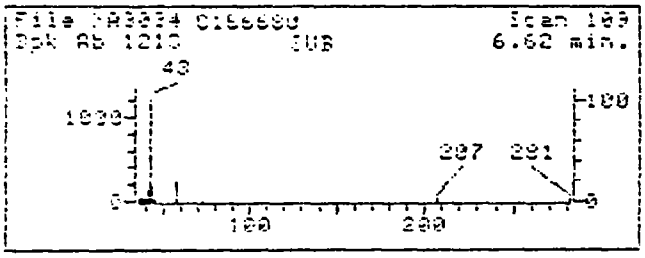
Compound No: 7
Compound Name: Methylene Chloride
Scan Number: 93
Retention Time: 5.76 min.
Quant Ion: 84.0
Area: 8673
Concentration: 10.80 UG/KG
q-value: 100

SS

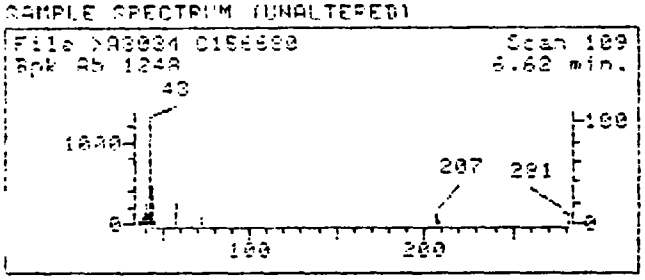
REFERENCE STANDARD SPECTRUM

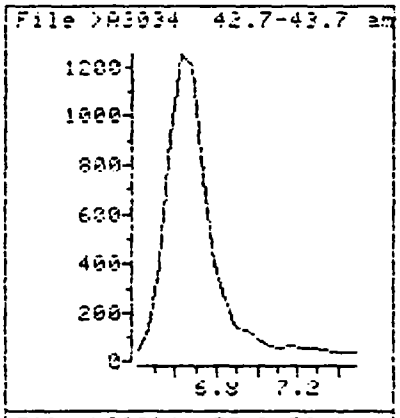


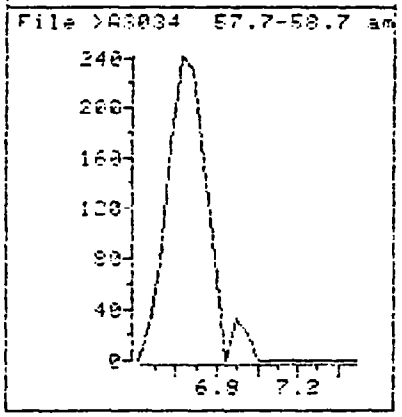
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >A3034::E7
Name: C156680
Misc: 5G SAMPLE - HPE/BM
Quant Time: 940518 16:20
Injected at: 940518 15:41

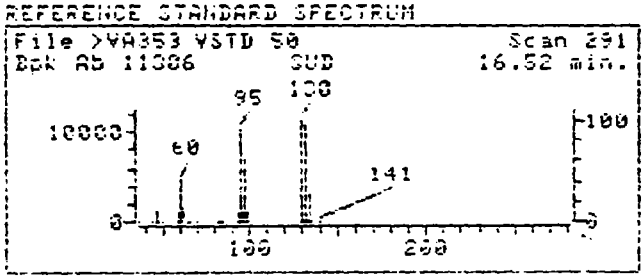
Quant Output File: ^A3034::SS

Quant ID File: IDSUDA::D5
Last Calibration: 940518 12:02

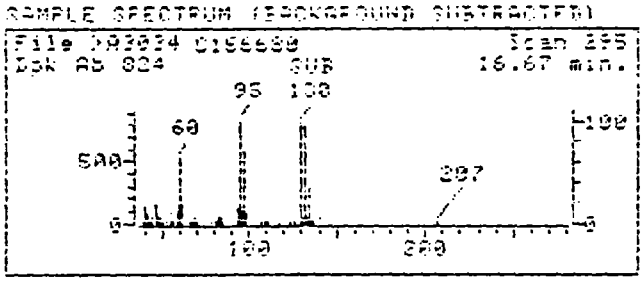
Compound No: 8
Compound Name: Acetone
Scan Number: 109
Retention Time: 6.62 min.
Quant Ion: 43.0
Area: 17552
Concentration: 84.07 UG/KG
q-value: 80

SS

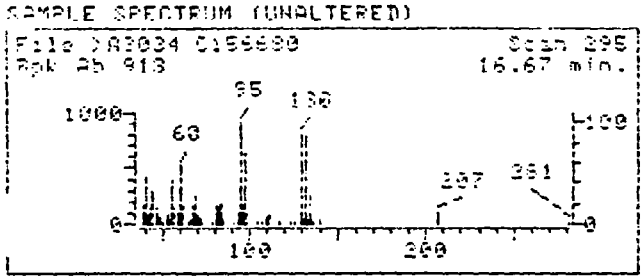
REFERENCE STANDARD SPECTRUM

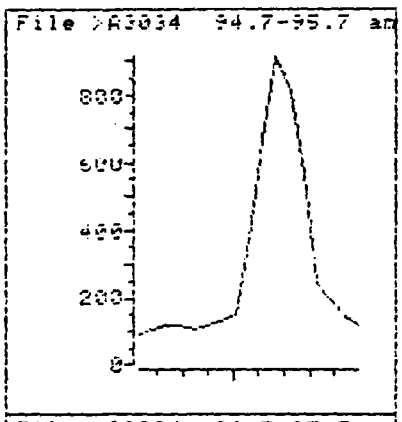


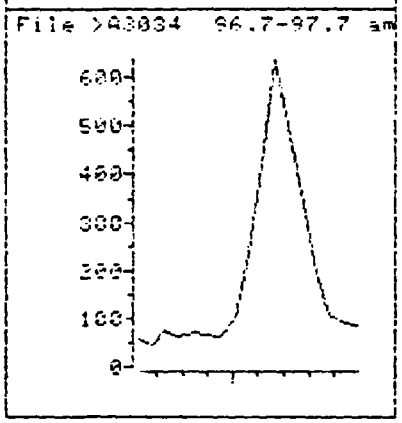
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >A3034::E7
Name: C156680
Misc: RS SAMPLE - HPE/SM
Quant Time: 940518 16:20
Injected at: 940518 15:41

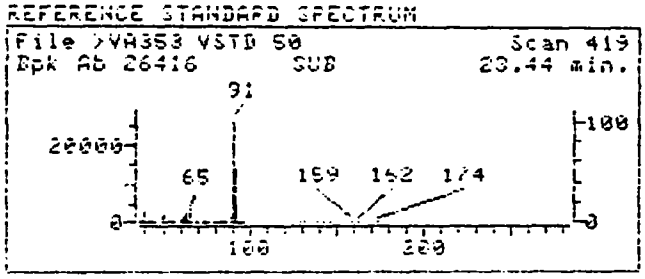
Quant Output File: ^A3034::SS

Quant ID File: IDSVOA::D5
Last Calibration: 940518 12:02

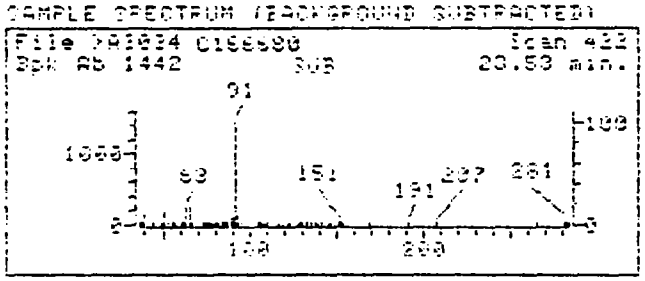
Compound No: 28
Compound Name: Trichloroethene
Scan Number: 295
Retention Time: 16.67 min.
Quant Ion: 95.0
Area: 11053
Concentration: 8.86 UG/KG
q-value: 94

✓
SS

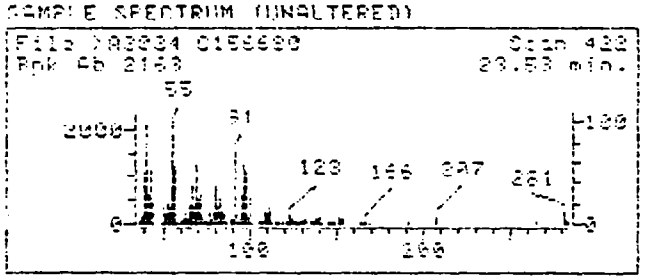
REFERENCE STANDARD SPECTRUM

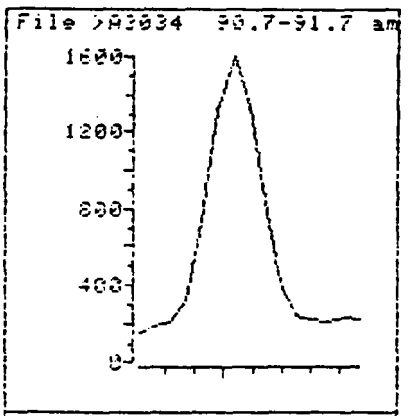


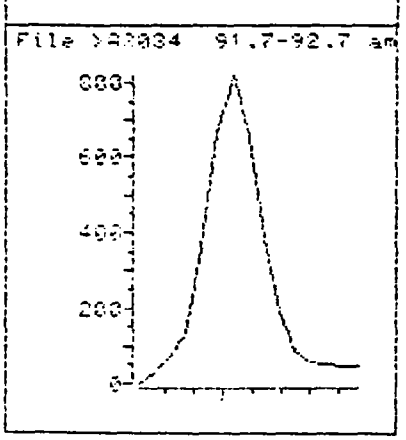
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >A3034::E7
Name: C156680
Misc: 5G SAMPLE - HHE/BM
Quant Time: 940518 16:20
Injected at: 940518 15:41

Quant Output File: ^A3034::SS

Quant ID File: IDSVOA::D5
Last Calibration: 940518 12:02

Compound No: 41
Compound Name: Toluene
Scan Number: 422
Retention Time: 23.53 min.
Quant Ion: 92.0
Area: 11689
Concentration: 7.25 UG/KG
q-value: 84

✓
SKS

QUANT REPORT

Operator ID: USER8 Quant Rev: 6 Quant Time: 940518 17:04
Output File: ^A3035::SS Injected at: 940518 16:25
Data File: >A3035::E7 Dilution Factor: 1.00000
Name: C156681
Misc: 5G SAMPLE - HPE/BM

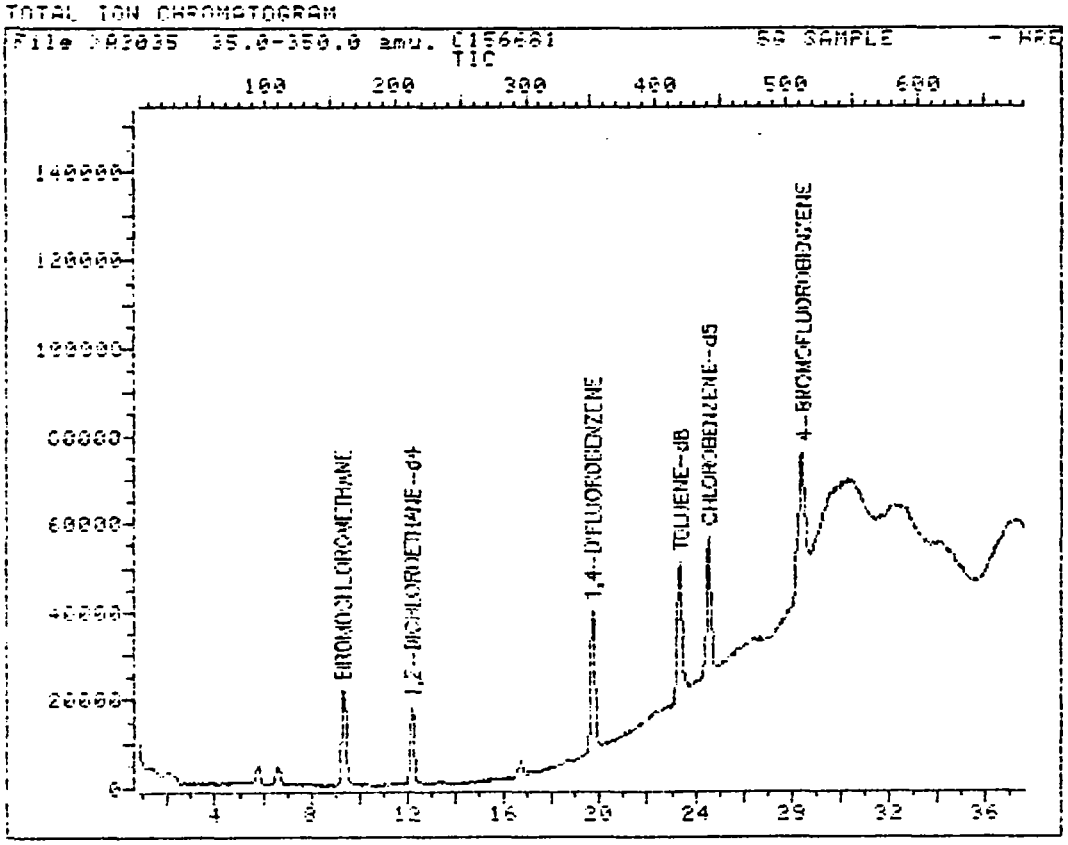
ok
SS
5/19/94

ID File: IDSVOA::D5
Title: QUANTITATION FILE FOR VOLATILE SOILS GC/MSD-A
Last Calibration: 940518 12:02

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.33	128.0	37270	50.00	UG/KG	100
7)	Methylene Chloride	5.76	84.0	9877	11.51	UG/KG	100
8)	Acetone	6.63	43.0	39328	176.27	UG/KG	81
18)	1,2-DICHLOROETHANE-d4	12.19	65.0	85006	51.35	UG/KG	96
21)	*1,4-DIFLUOROBENZENE	19.70	114.0	149807	50.00	UG/KG	90
28)	Trichloroethene	16.67	95.0	7598	5.71	UG/KG	97
35)	*CHLOROBENZENE-d5	24.56	117.0	114182	50.00	UG/KG	93
40)	TOLUENE-d8	23.37	98.0	134935	55.29	UG/KG	95
41)	Toluene	23.54	92.0	6825	4.13	UG/KG	86
)	4-BROMOFLUOROBENZENE	28.46	95.0	109310	54.93	UG/KG	100

* Compound is ISTD

TOTAL ION CHROMATOGRAM

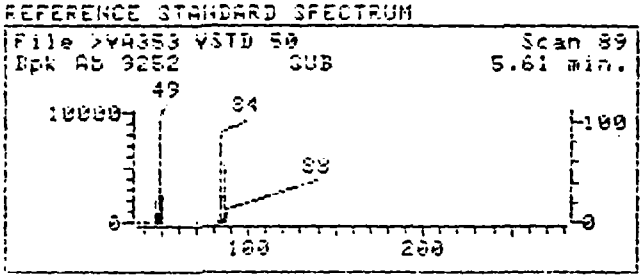


Data File: >A3035::E7 Quant Output File: ^A3035::SS
Name: C156681
Misc: SG SAMPLE - HPE/SM

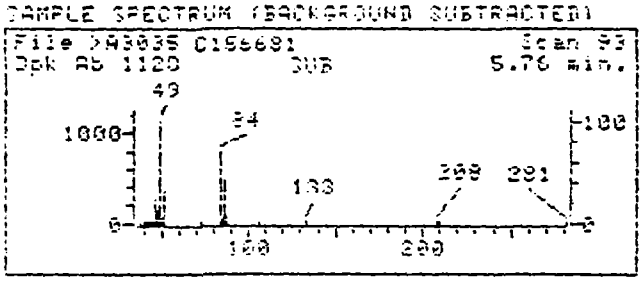
Id File: IDSVOA::D5
Title: QUANTITATION FILE FOR VOLATILE SOILS GC/MSD-A
Last Calibration: 940518 12:02

Operator ID: USER8
Quant Time: 940518 17:04
Injected at: 940518 16:25

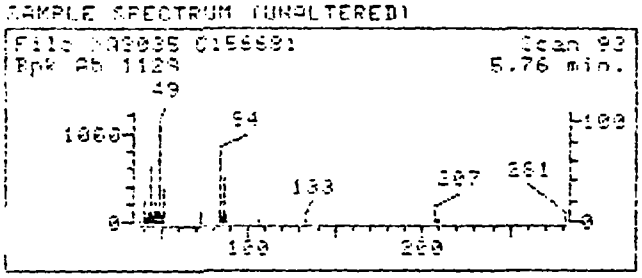
REFERENCE STANDARD SPECTRUM

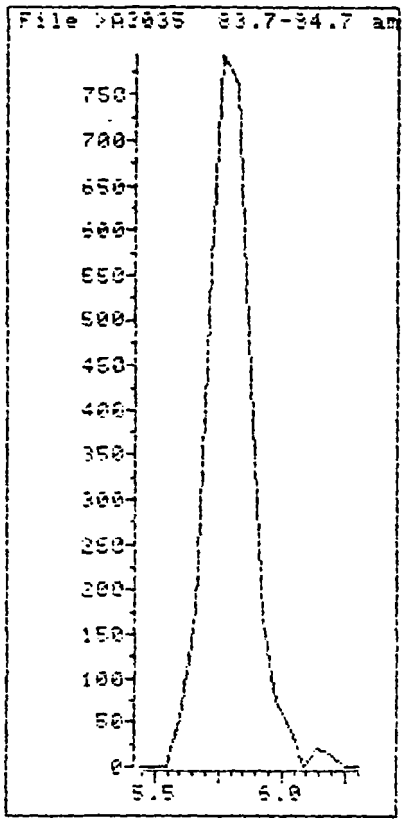


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



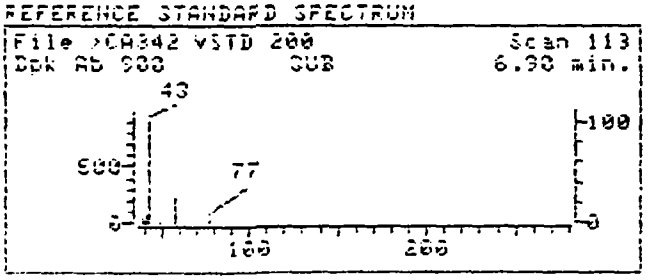


Data File: >A3035::E7 Quant Output File: ^A3035::SS
Name: C156681
Misc: SG SAMPLE - HRE/SM
Quant Time: 940518 17:04 Quant ID File: IDSVOA::05
Injected at: 940518 16:25 Last Calibration: 940518 12:02

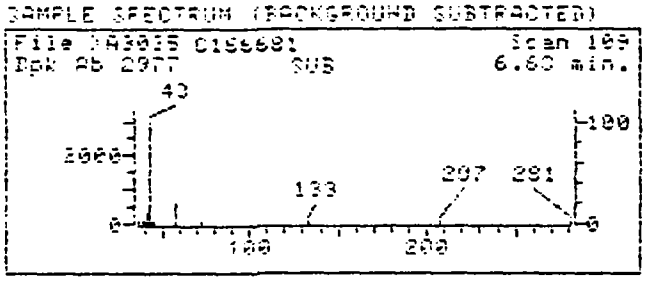
Compound No: 7
Compound Name: Methylene Chloride
Scan Number: 93
Retention Time: 5.76 min.
Quant Ion: 84.0
Area: 9877
Concentration: 11.51 UG/KG
q-value: 100

✓
85

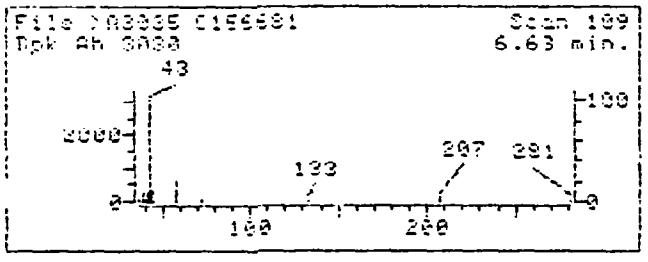
REFERENCE STANDARD SPECTRUM

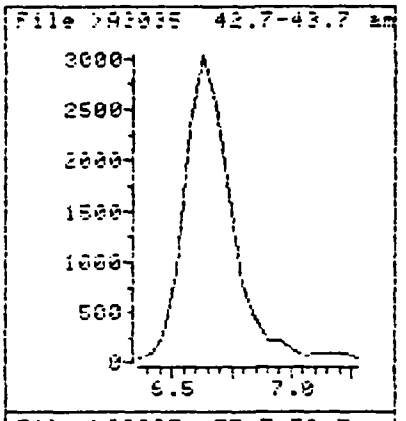


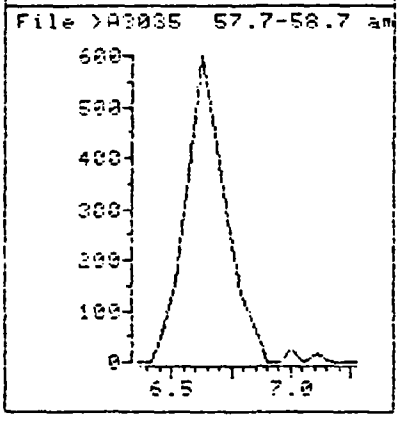
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >A3035::S7
Name: C156681
Misc: PG SAMPLE - HPE/BM
Quant Time: 940518 17:04
Injected at: 940518 16:26

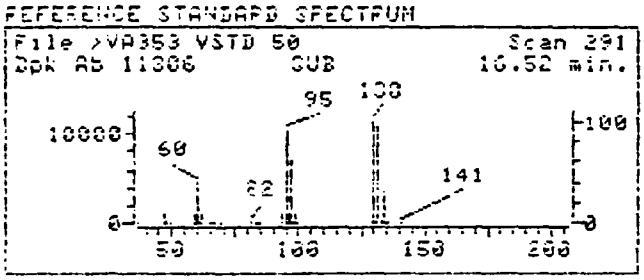
Quant Output File: ^A3035::SS

Quant ID File: IDSUOA::D5
Last Calibration: 940518 12:02

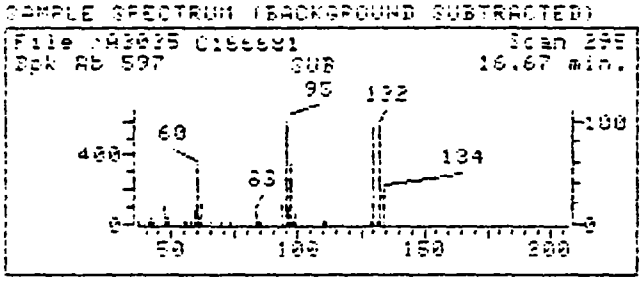
Compound No: 8
Compound Name: Acetone
Scan Number: 109
Retention Time: 6.63 min.
Quant Ion: 43.0
Area: 39328
Concentration: 176.27 UG/KG
q-value: 81

✓
SJS

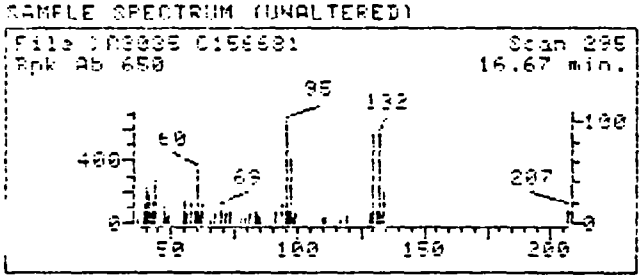
REFERENCE STANDARD SPECTRUM

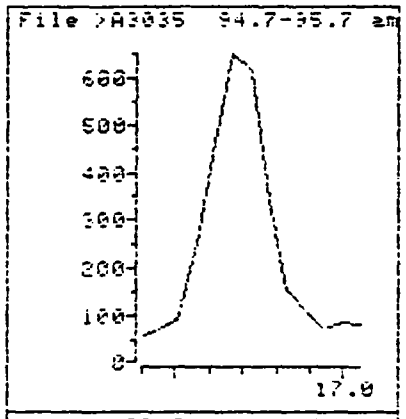


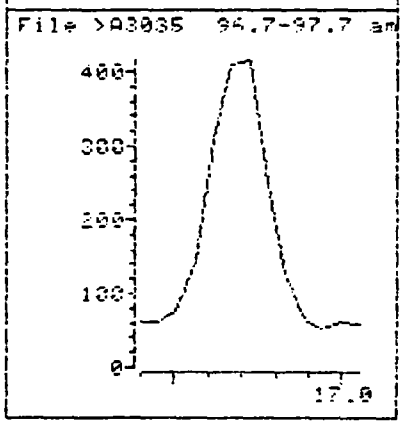
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







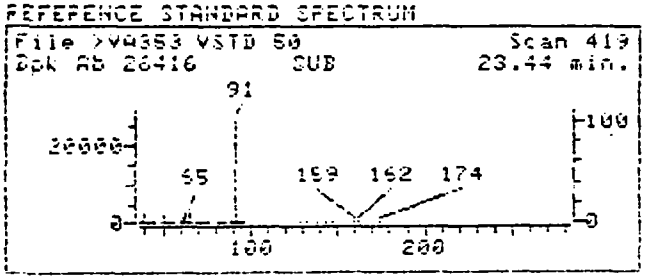
Data File: >A3035::E7
Name: C156681
Misc: SG SAMPLE - HRE/BM
Quant Time: 940518 17:04
Injected at: 940518 16:25

Quant Output File: ^A3035::S8

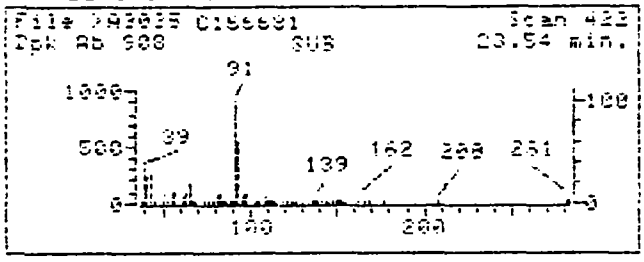
Quant ID File: IDSVOA::D5
Last Calibration: 940518 12:02

Compound No: 28
Compound Name: Trichloroethene
Scan Number: 295
Retention Time: 16.67 min.
Quant Ion: 95.0
Area: 7588
Concentration: 5.71 UG/KG
q-value: 97

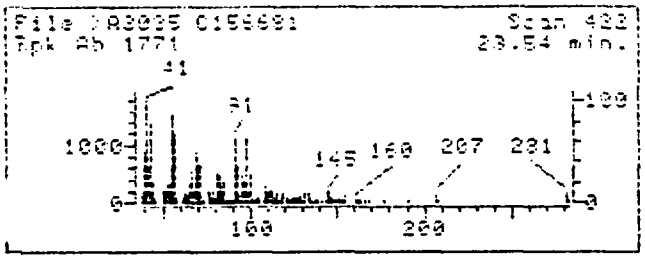
REFERENCE STANDARD SPECTRUM

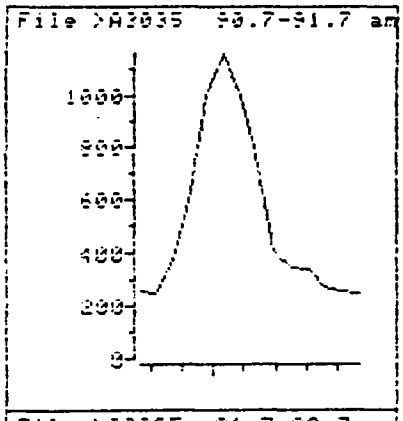


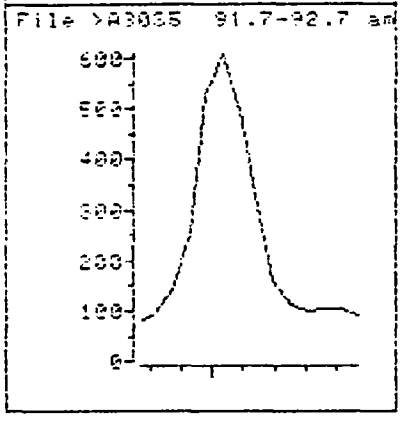
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >A3035::E7
Name: C196681
Misc: SG SAMPLE - PPE/BM
Quant Time: 940518 17:04
Injected at: 940518 16:26

Quant Output File: ^A3035::SS

Quant ID File: IDSUOA::D5
Last Calibration: 940518 12:02

Compound No: 41
Compound Name: Toluene
Scan Number: 422
Retention Time: 23.54 min.
Quant Ion: 92.0
Area: 6825
Concentration: 4.13 UG/KG
q-value: 86

QUANT REPORT

Operator ID: USER8 Quant Rev: 6 Quant Time: 940518 18:32
Output File: ^A3037::SS Injected at: 940518 17:54
Data File: >A3037::E7 Dilution Factor: 1.00000
Name: C156683
Misc: 5G SAMPLE - HPE/BM

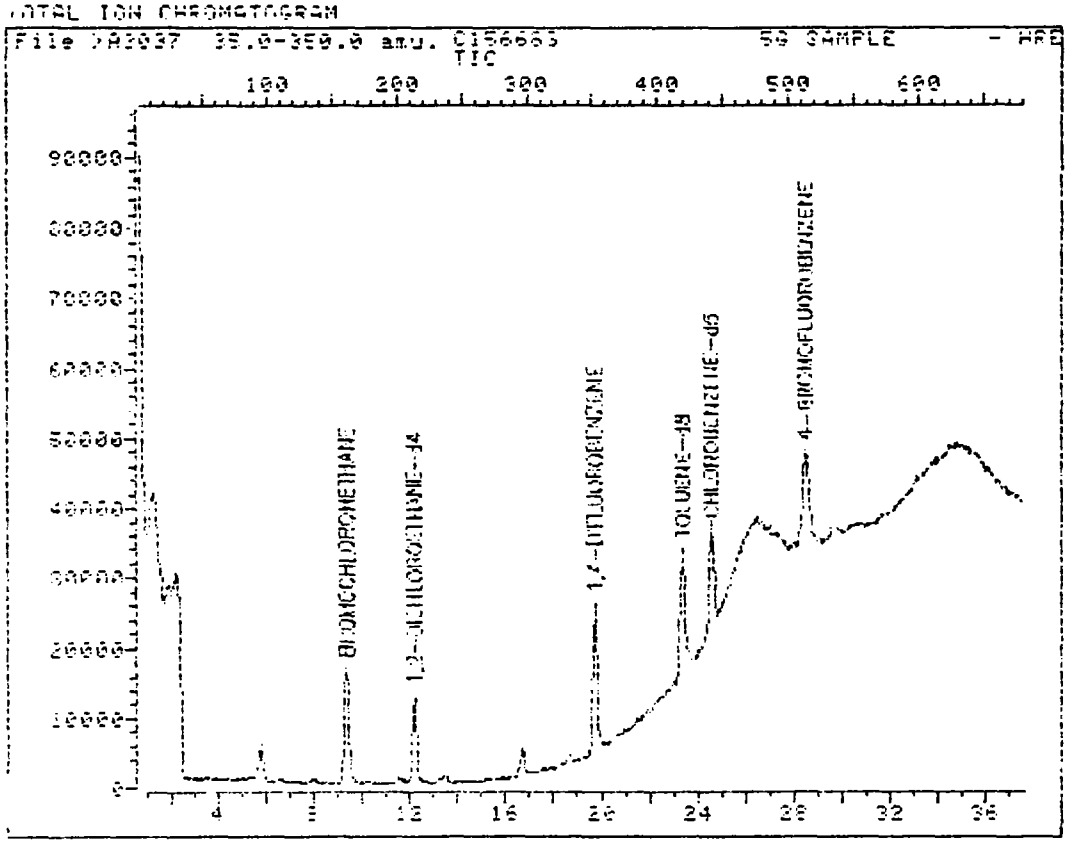
ok ✓
SS
5/19/94

ID File: IDSVOA::05
Title: QUANTITATION FILE FOR VOLATILE SOILS GC/MSD-A
Last Calibration: 940518 12:02

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.37	128.0	27648	50.00	UG/KG	100
7)	Methylene Chloride	5.80	84.0	11203	17.60	UG/KG	100
8)	Acetone	6.67	43.0	3825	23.11	UG/KG	87
18)	1,2-DICHLOROETHANE-d4	12.23	65.0	62545	50.93	UG/KG	93
21)	*1,4-DIFLUOROBENZENE	19.74	114.0	96750	50.00	UG/KG	91
28)	Trichloroethane	16.71	95.0	9156	10.67	UG/KG	90
35)	*CHLOROBENZENE-d5	24.55	117.0	62176	50.00	UG/KG	95
40)	TOLUENE-d8	23.36	98.0	78385	SL ~~53.78~~	UG/KG SS	92
41)	Toluene	23.58	92.0	7192	7.99	UG/KG	78
)	4-BROMOFLUOROBENZENE	28.45	95.0	40271	37.16	UG/KG	100

* Compound is ISTD

TOTAL ION CHROMATOGRAM

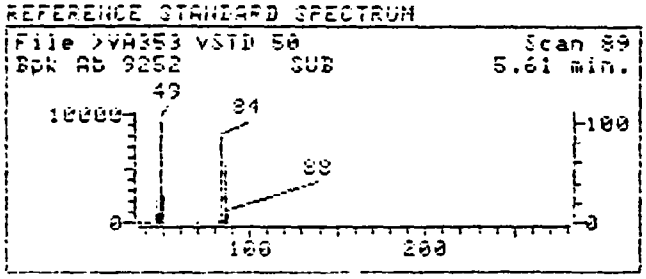


Data File: >A3037::E7 Quant Output File: ^A3037::SS
Name: C156683
Misc: SG SAMPLE - HPE/BM

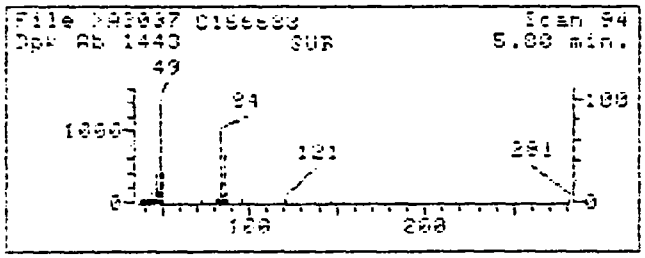
Id File: IDSVOA::D5
Title: QUANTITATION FILE FOR VOLATILE SOILS GC/MSD-A
Last Calibration: 940518 12:02

Operator ID: USER8
Quant Time: 940518 18:32
Injected at: 940518 17:54

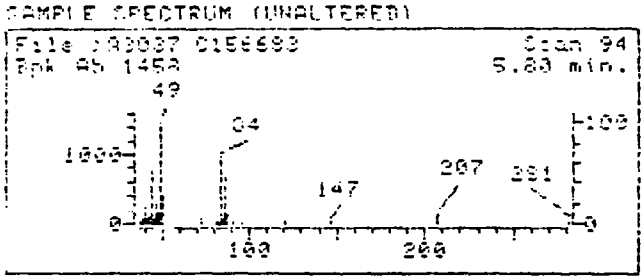
REFERENCE STANDARD SPECTRUM

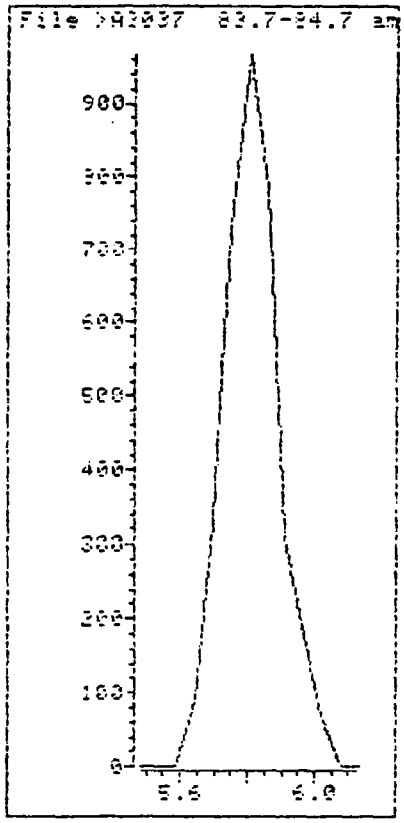


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





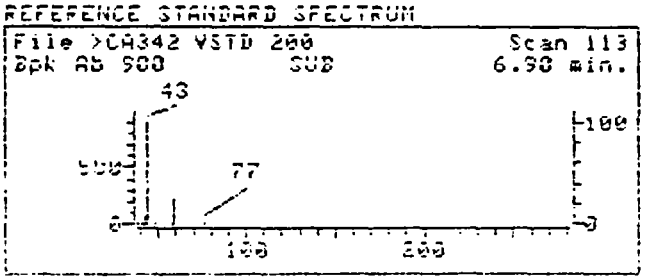
Data File: >A3037::E7
Name: C156683
Misc: 5G SAMPLE - PRE/BM
Quant Time: 940518 18:32
Injected at: 940518 17:54

Quant Output File: ^A3037::SS
Quant ID File: 105UOA::D5
Last Calibration: 940518 12:02

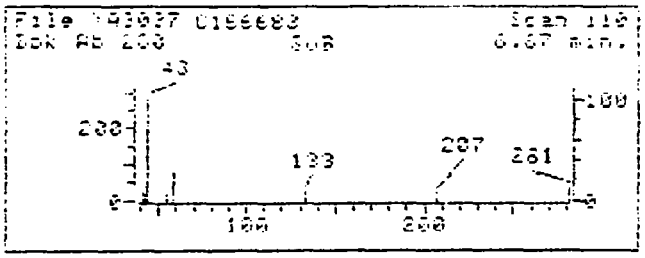
Compound No: 7
Compound Name: Methylene Chloride
Scan Number: 94
Retention Time: 5.80 min.
Quant Ion: 84.0
Area: 11203
Concentration: 17.60 UG/KG
q-value: 100

SKS

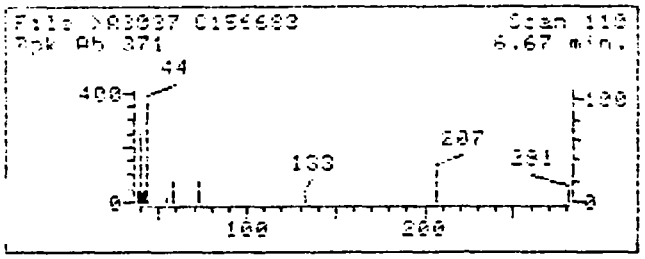
REFERENCE STANDARD SPECTRUM

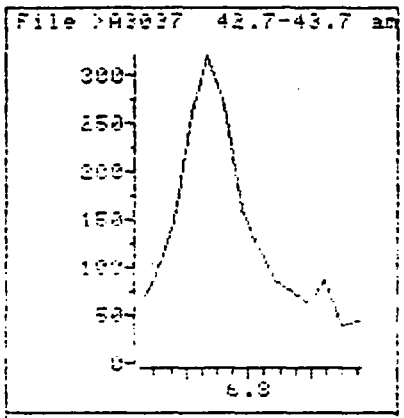


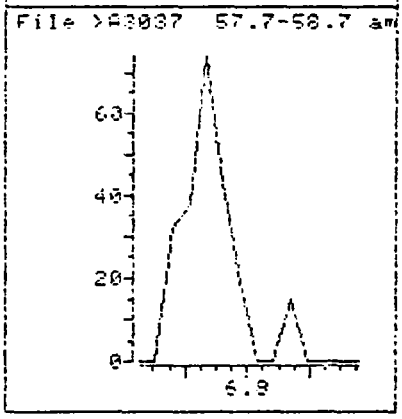
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >A3037::E7
Name: C156683
Misc: 5G SAMPLE - HPE/PM
Quant Time: 940518 18:32
Injected at: 940518 17:54

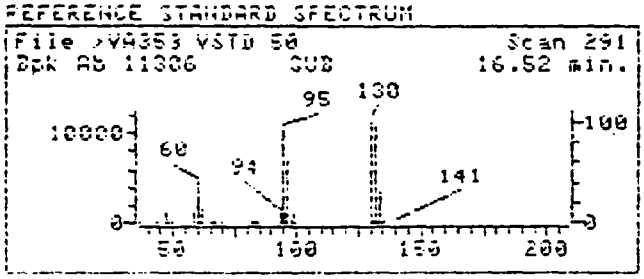
Quant Output File: ^A3037::S5

Quant ID File: IDSU0A::D5
Last Calibration: 940518 12:02

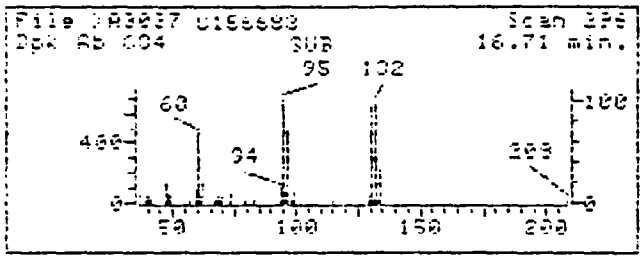
Compound No: 8
Compound Name: Acetone
Scan Number: 110
Retention Time: 6.67 min.
Quant Ion: 43.0
Area: 3825
Concentration: 23.11 UG/KG
q-value: 87

SS

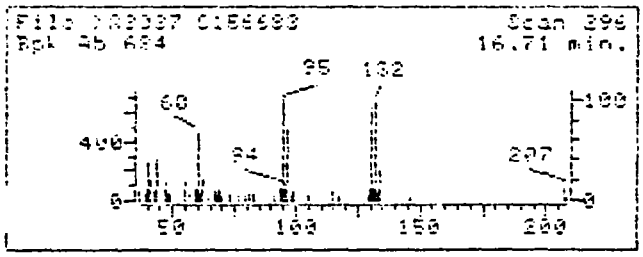
REFERENCE STANDARD SPECTRUM

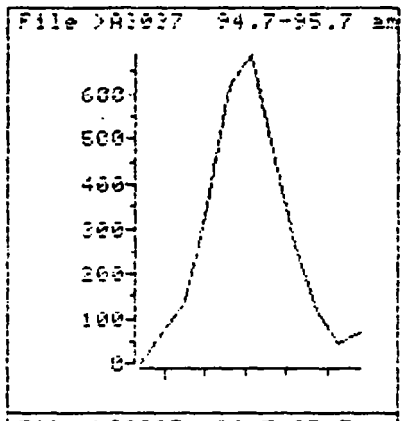


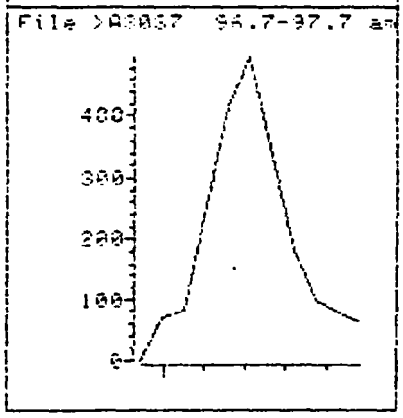
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >A3037::57
Name: C156683
Misc: SG SAMPLE - HPE/YM
Quant Time: 940518 18:72
Injected at: 940518 17:54

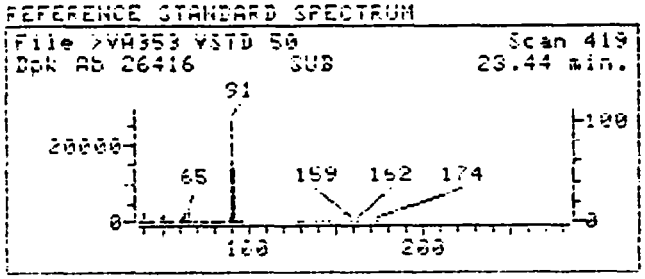
Quant Output File: ^A3037::SS

Quant ID File: IDSUCA::C5
Last Calibration: 940518 12:02

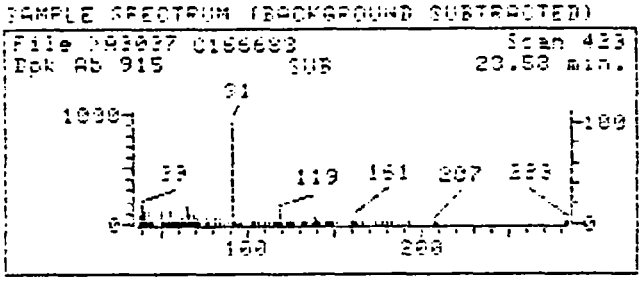
Compound No: 28
Compound Name: Trichloroethene
Scan Number: 296
Retention Time: 16.71 min.
Quant Ion: 95.0
Area: 9156
Concentration: 10.67 UG/KG
q-value: 90

SKS

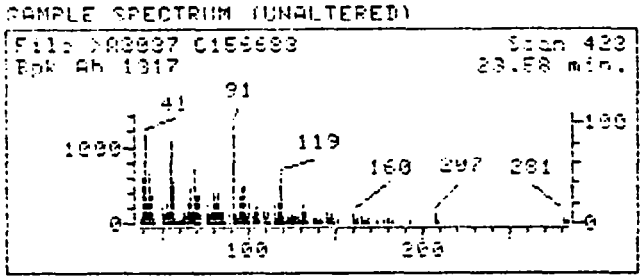
REFERENCE STANDARD SPECTRUM

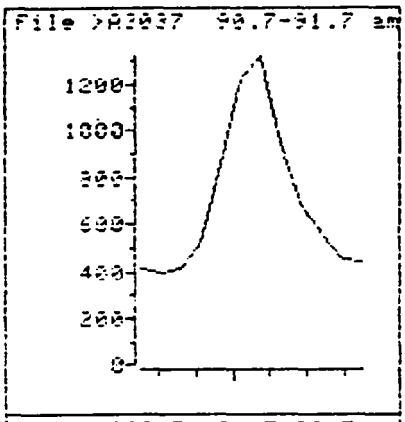


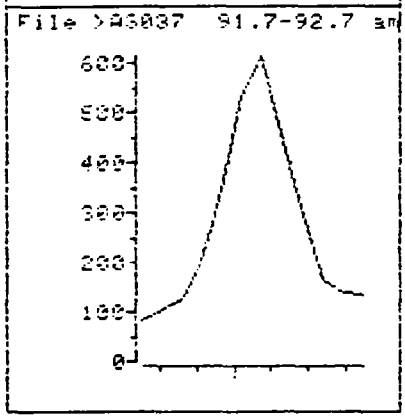
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >A3037::E7
Name: C156683
Misc: 5G SAMPLE - HPE/BM
Quant Time: 940518 18:32
Injected at: 940518 17:54

Quant Output File: ^A3037::S5

Quant ID File: IDSVOA::D5
Last Calibration: 940518 12:02

Compound No: 41
Compound Name: Toluene
Scan Number: 423
Retention Time: 23.58 min.
Quant Ion: 92.0
Area: 7192
Concentration: 7.99 UG/KG
q-value: 78

SKS

QUANT REPORT

Operator ID: USER8 Quant Rev: 6 Quant Time: 940519 11:50
Output File: [illegible]A[illegible]044::D2 Injected at: 940519 11:11
Data File: [illegible]A[illegible]044::E7 Dilution Factor: 1.00000
Name: [illegible]
Misc: [illegible]G SAMPLE - PRE/BM

OK
JS
5/19/94

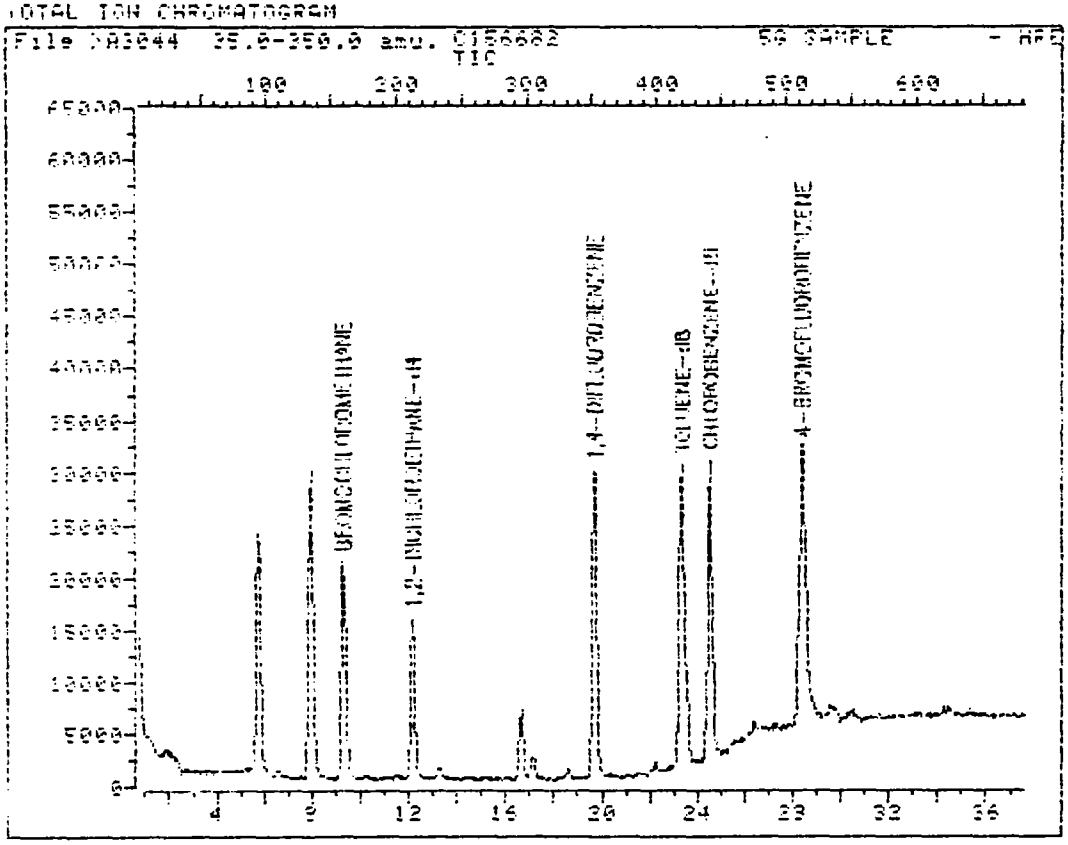
[illegible] File: [illegible]::D5
Title: QUANTITATION FILE FOR VOLATILE SOILS GC/MSD-A
Last Calibration: 940519 10:41

	Compound	R.T.	Q ion	Area	Conc	Units	q
[illegible]	*BROMOCHLOROMETHANE	9.32	128.0	35065	50.00	UG/KG	100
[illegible]	Methylene Chloride	5.76	84.0	63640	81.17	UG/KG	100
[illegible]	Acetone	6.62	43.0	6466	30.41	UG/KG	83
[illegible]	Trichlorofluoromethane	7.97	101.0	174130	77.06	UG/KG	86
[illegible]	1,2-DICHLOROETHANE-d4	12.18	65.0	76014	49.03	UG/KG	96
[illegible]	*1,4-DIFLUOROBENZENE	19.69	114.0	136437	50.00	UG/KG	88
[illegible]	Trichloroethene	16.66	95.0	12989	11.28	UG/KG	99
[illegible]	Benzene	17.15	78.0	9275	4.09	UG/KG	94
[illegible]	*CHLOROBENZENE-d5	24.55	117.0	101782	50.00	UG/KG	98
[illegible]	TOLUENE-d8	23.36	98.0	118689	54.25	UG/KG	94
[illegible]	Toluene	23.52	92.0	21042	15.09	UG/KG	88
44)	4-BROMOFLUOROBENZENE	28.39	95.0	83015	49.17	UG/KG	100
[illegible]	Total Xylenes	30.44	106.0	3126	~~[illegible]~~ 6.19	UG/KG JS	86

* Compound is ISTD

000586

TOTAL ION CHROMATOGRAM

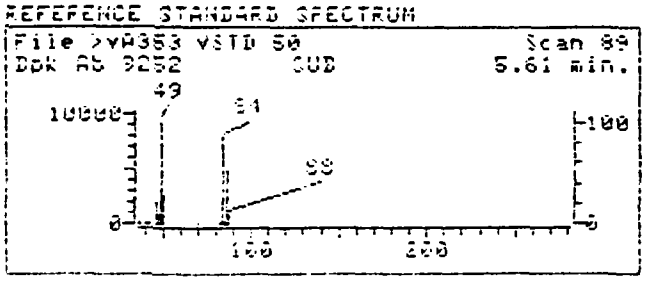


Data File: >A3044::E7 Quant Output File: ^A3044::SS
Name: C196682
Misc: 5G SAMPLE - HRE/8M

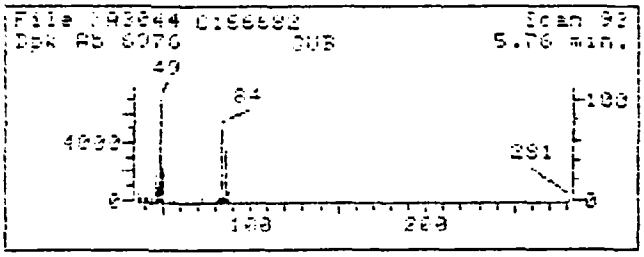
Id File: IDSUOA::D6
Title: QUANTITATION FILE FOR VOLATILE SOILS GC/MSD-A
Last Calibration: 940519 10:41

Operator ID: USER8
Quant Time: 940519 11:50
Injected at: 940519 11:11

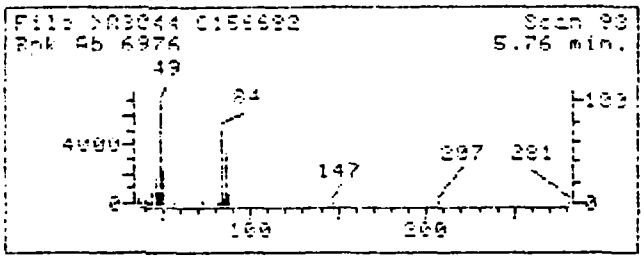
REFERENCE STANDARD SPECTRUM

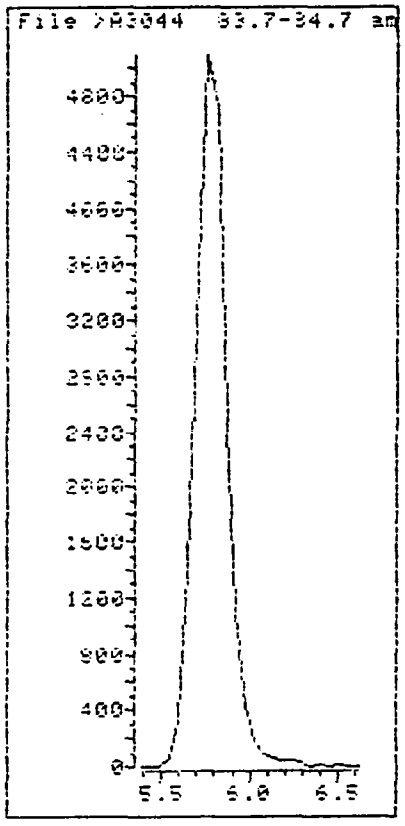


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



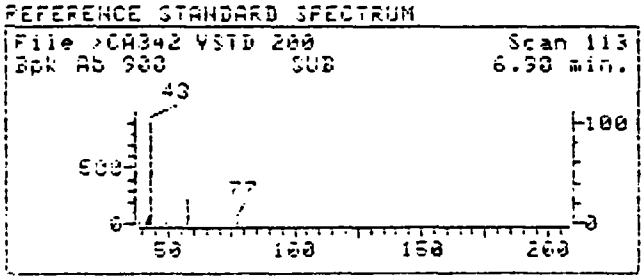


Data File: >A3044::57 Quant Output File: ^A3044::SS
Name: C156692
Misc: SG SAMPLE - HRE/SM
Quant Time: 940519 11:50 Quant ID File: IDSVOA::D5
Injected at: 940519 11:11 Last Calibration: 940519 10:41

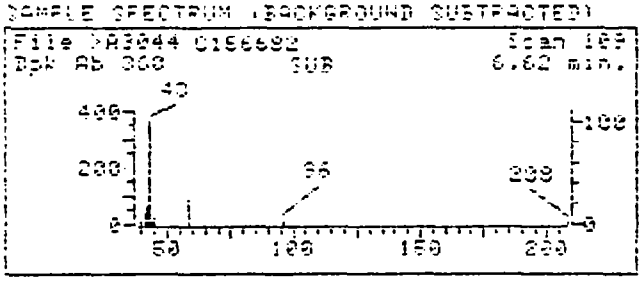
Compound No: 7
Compound Name: Methylene Chloride
Scan Number: 93
Retention Time: 5.76 min.
Quant Ion: 84.0
Area: 63640
Concentration: 81.17 UG/KG
q-value: 100

SS

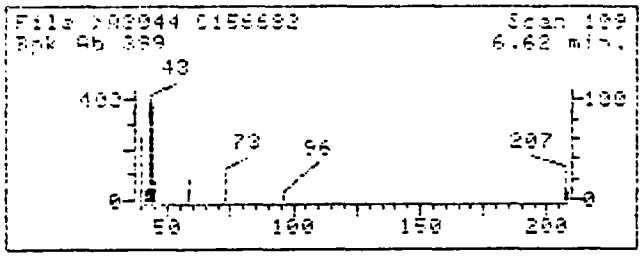
REFERENCE STANDARD SPECTRUM

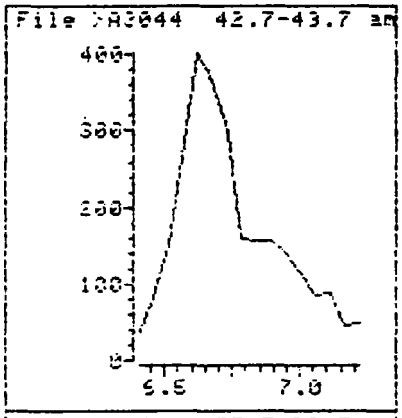


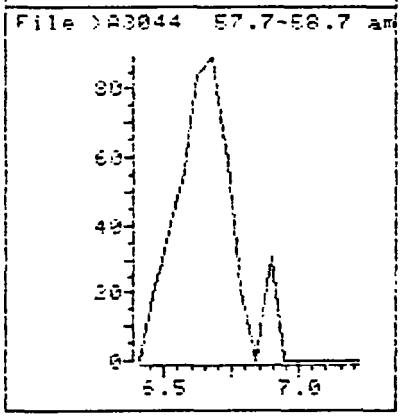
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >A3044::E7
Name: C156682
Misc: SG SAMPLE - HPE/EM
Quant Time: 940519 11:50
Injected at: 940519 11:11

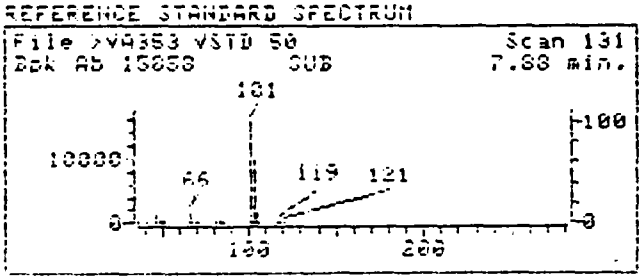
Quant Output File: ^A3044::SS

Quant ID File: IDSVOA::D5
Last Calibration: 940519 10:41

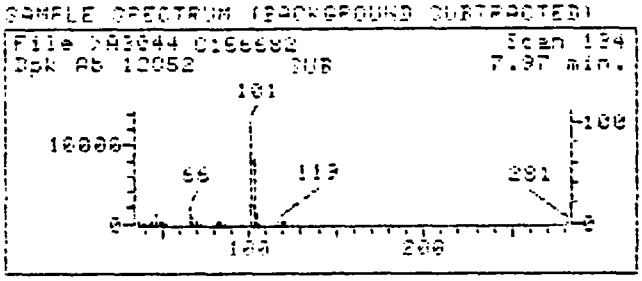
Compound No: 8
Compound Name: Acetone
Scan Number: 109
Retention Time: 6.62 min.
Quant Ion: 43.0
Area: 6466
Concentration: 30.41 UG/KG
q-value: 83

SKS

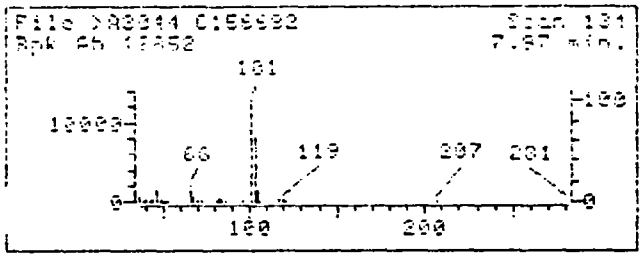
REFERENCE STANDARD SPECTRUM

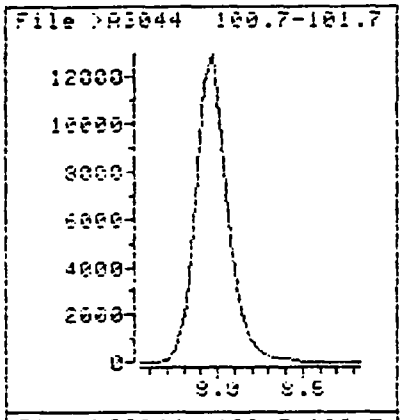


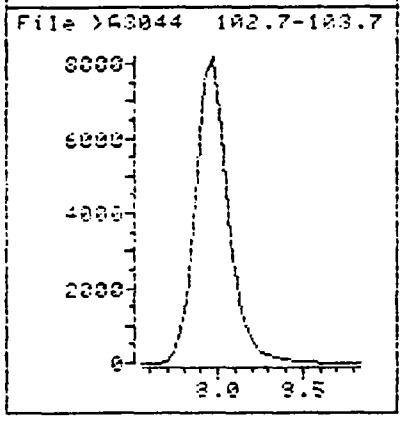
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







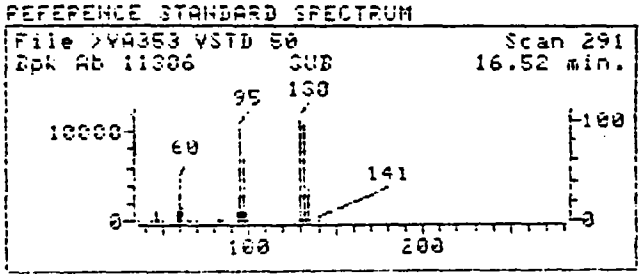
Data File: >A3044::E7
Name: C156682
Misc: SG SAMPLE - HPE/BM
Quant Time: 940519 11:50
Injected at: 940519 11:11

Quant Output File: ^A3044::SS
Quant ID File: IDSVOA::06
Last Calibration: 940519 10:41

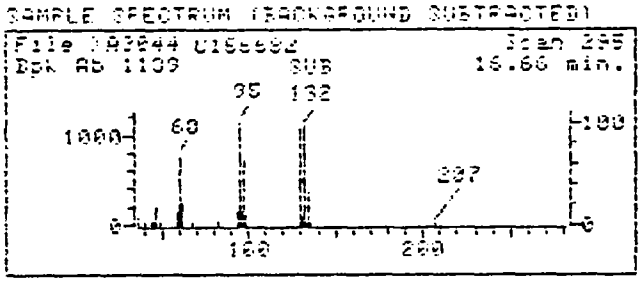
Compound No: 12
Compound Name: Trichlorofluoromethane
Scan Number: 134
Retention Time: 7.97 min.
Quant Ion: 101.0
Area: 174130
Concentration: 77.06 UG/KG
q-value: 86

SS

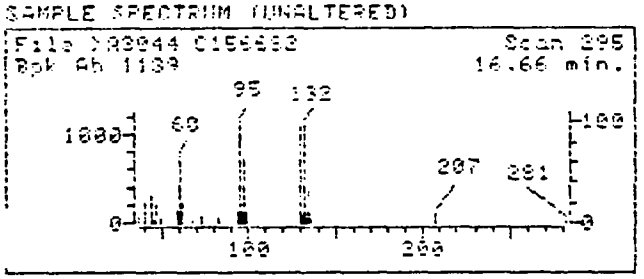
REFERENCE STANDARD SPECTRUM

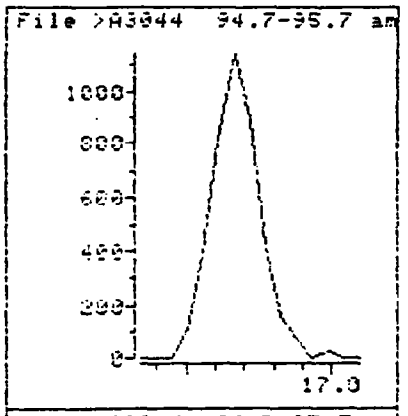


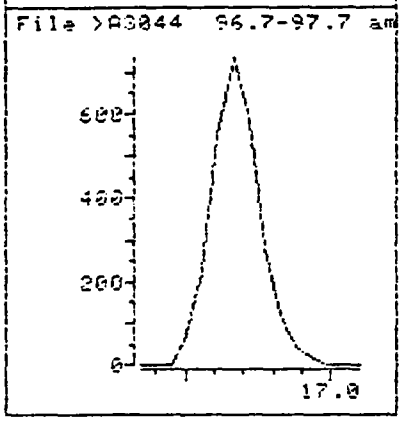
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >A3044::E7
Name: C156682
Misc: 5G SAMPLE - HRE/SM
Quant Time: 940519 11:50
Injected at: 940519 11:11

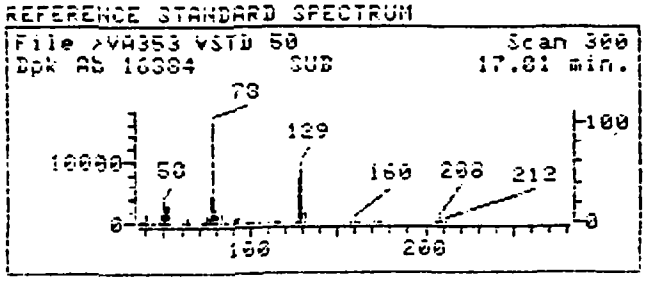
Quant Output File: ^A3044::S5

Quant ID File: IDSVOA::D5
Last Calibration: 940519 10:41

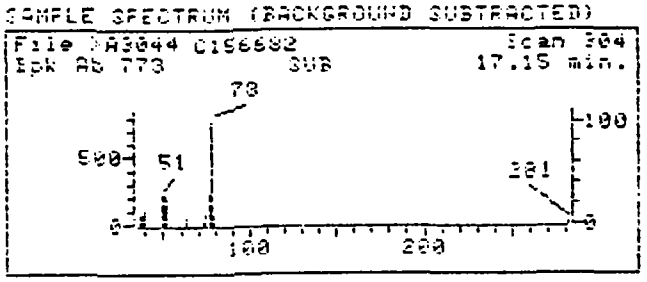
Compound No: 28
Compound Name: Trichloroethene
Scan Number: 295
Retention Time: 16.66 min.
Quant Ion: 95.0
Area: 12989
Concentration: 11.28 UG/KG
q-value: 99

SKS

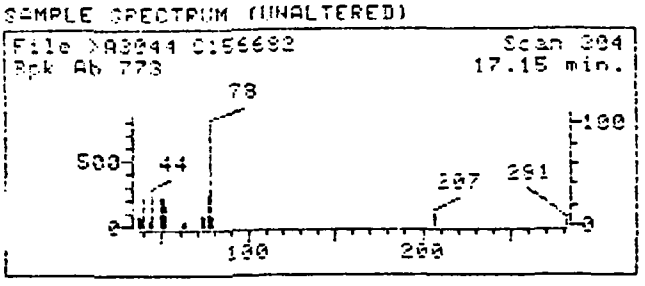
REFERENCE STANDARD SPECTRUM

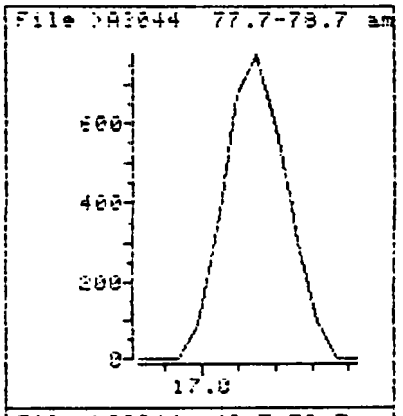


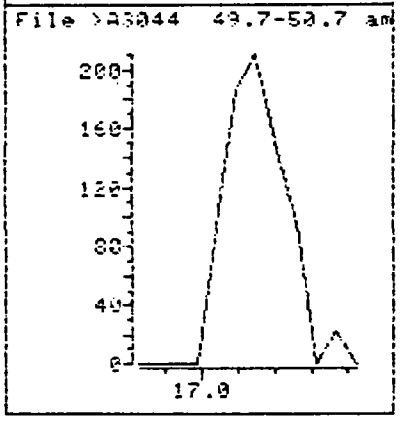
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >A3044::E7
Name: C156682
Misc: 5G SAMPLE - HPE/BM
Quant Time: 940519 11:50
Injected at: 940519 11:11

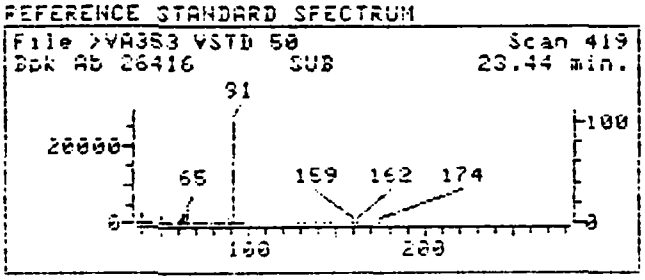
Quant Output File: ^A3044::SS

Quant ID File: IDSUDA::D5
Last Calibration: 940519 10:41

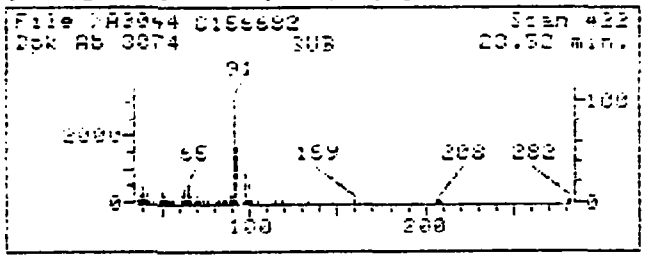
Compound No: 29
Compound Name: Benzene
Scan Number: 304
Retention Time: 17.15 min.
Quant Ion: 78.0
Area: 9275
Concentration: 4.09 UG/KG
q-value: 94

SS

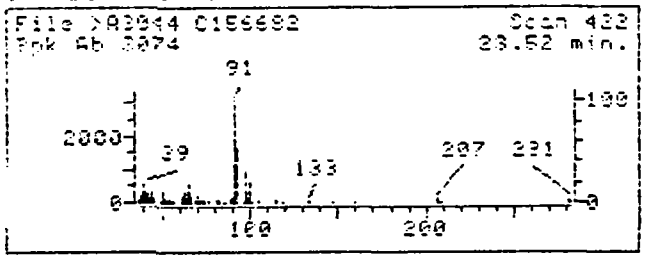
REFERENCE STANDARD SPECTRUM

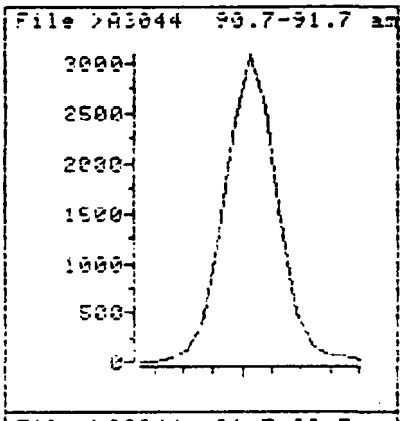


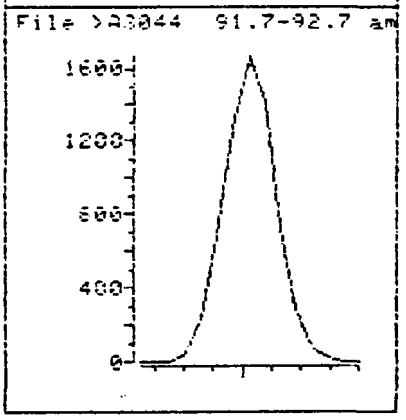
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >A3044::E7
Name: C156682
Misc: 5G SAMPLE - HRE/BM
Quant Time: 940519 11:50
Injected at: 940519 11:11

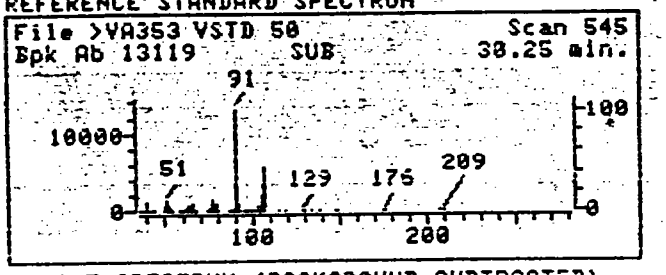
Quant Output File: ^A3044::SS

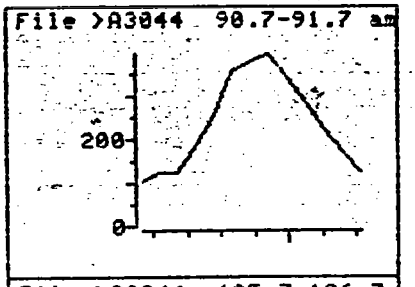
Quant ID File: IDSVOA::D5
Last Calibration: 940519 10:41

Compound No: 41
Compound Name: Toluene
Scan Number: 422
Retention Time: 23.52 min.
Quant Ion: 92.0
Area: 21042
Concentration: 15.09 UG/KG
q-value: 88

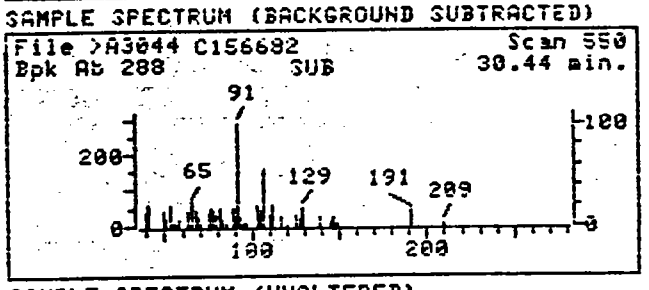
SS

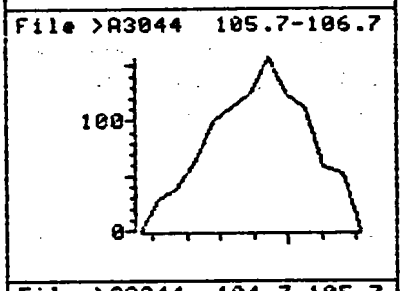
REFERENCE STANDARD SPECTRUM



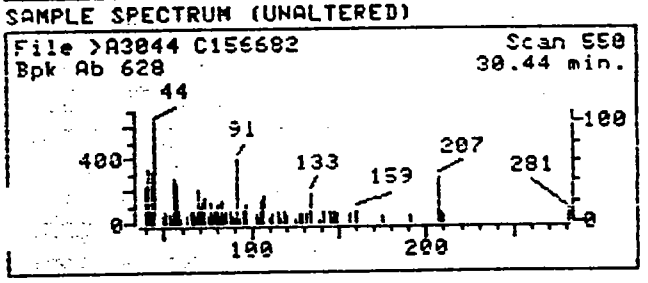


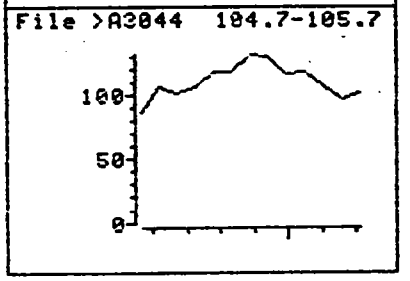
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)





SAMPLE SPECTRUM (UNALTERED)





Data File: >A3044::E7
Name: C156682
Misc: 5G SAMPLE - HRE/BM
Quant Time: 940519 11:50
Injected at: 940519 11:11

Quant Output File: ^A3044::SS

Quant ID File: IDSVOA::D5
Last Calibration: 940519 10:41

Compound No: 46
Compound Name: Total Xylenes
Scan Number: 550
Retention Time: 30.44 min.
Quant Ion: 106.0
Area: 3126
Concentration: ~~3.11~~ UG/KG
q-value: 86

6.19

QUANT REPORT

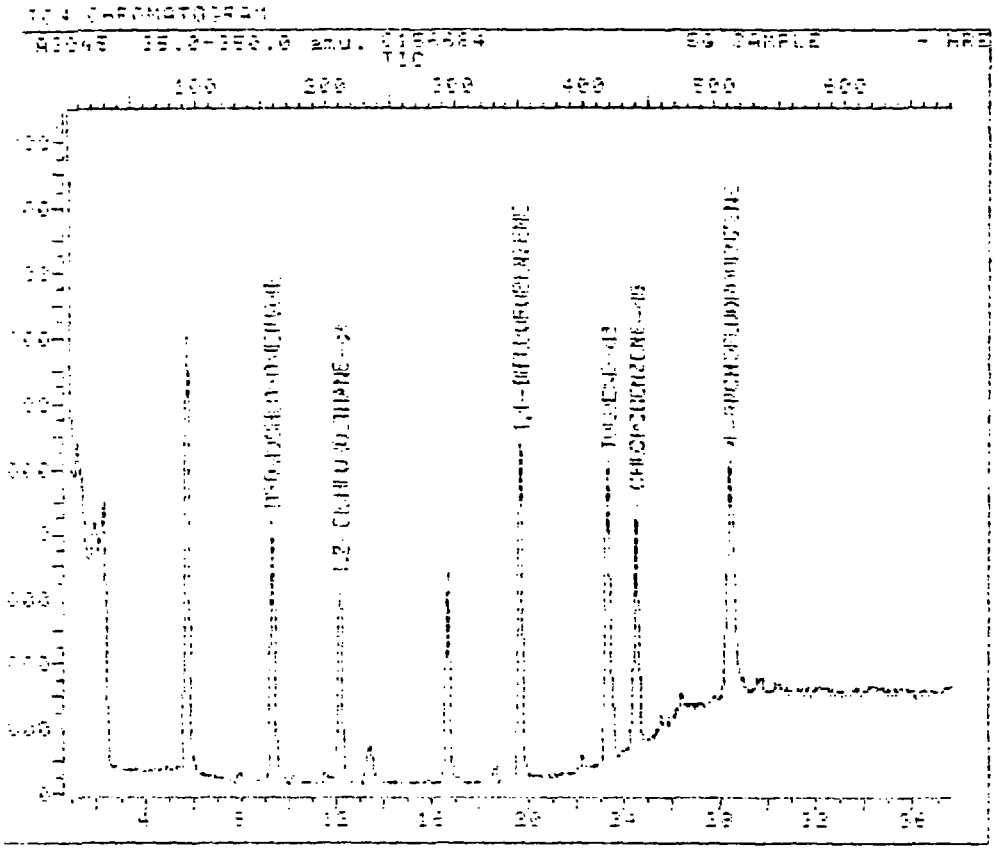
Operator ID: USER8 Quant Rev: 6 Quant Time: 940519 12:34
Output File: ^A3045::SS Injected at: 940519 11:56
Data File: >A3045::E7 Dilution Factor: 1.00000
Name: C156684
Misc: 5G SAMPLE - HRE/BM

MX OK
Proven SS 5/19/94

ID File: IDSVOA::D5
Title: QUANTITATION FILE FOR VOLATILE SOILS GC/MSD-A
Last Calibration: 940519 10:41

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.32	128.0	27281	50.00	UG/KG	100
7)	Methylene Chloride	5.76	84.0	72570	118.96	UG/KG	100
18)	1,2-DICHLOROETHANE-d4	12.18	65.0	60096	49.82	UG/KG	90
21)	*1,4-DIFLUOROBENZENE	19.69	114.0	95215	50.00	UG/KG	90
22)	1,1,1-Trichloroethane	13.48	97.0	7434	4.43	UG/KG	92
28)	Trichloroethene	16.66	95.0	25729	32.01	UG/KG	92
35)	*CHLOROBENZENE-d5	24.55	117.0	54567	50.00	UG/KG	98
40)	TOLUENE-d8	23.36	98.0	77152	65.78	UG/KG	93
41)	Toluene	23.52	92.0	11975	16.02	UG/KG	97
)	4-BROMOFLUOROBENZENE	28.44	95.0	39326	43.45	UG/KG	100
)	Total Xylenes	29.68	106.0	2659	~~4.94~~ 8.22	UG/KG SS	83

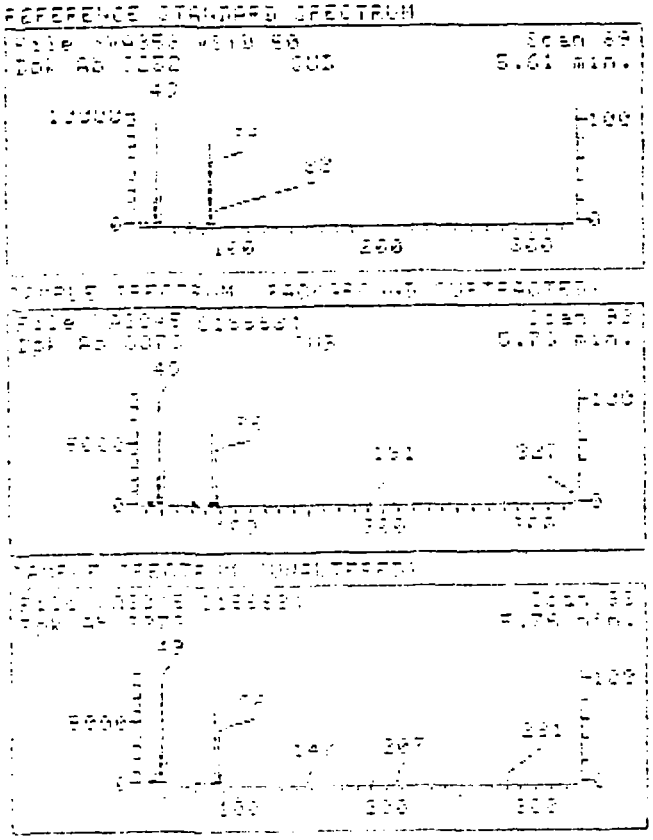
* Compound is ISTD

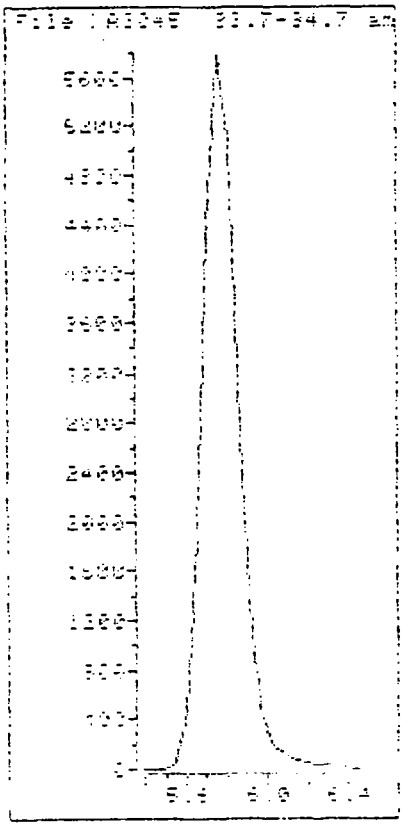


Data File: [illegible] Quant Output File: [illegible]
Save: [illegible]
Misc: 5G SAMPLE - PRE/BM

Id File: 10SVOA::05
Title: QUANTITATION FILE FOR VOLATILE SOILS GC/MSD-A
Last Calibration: 940519 10:41

Operator ID: USER8
Quant Time: 940519 12:34
Injected at: 940519 11:56



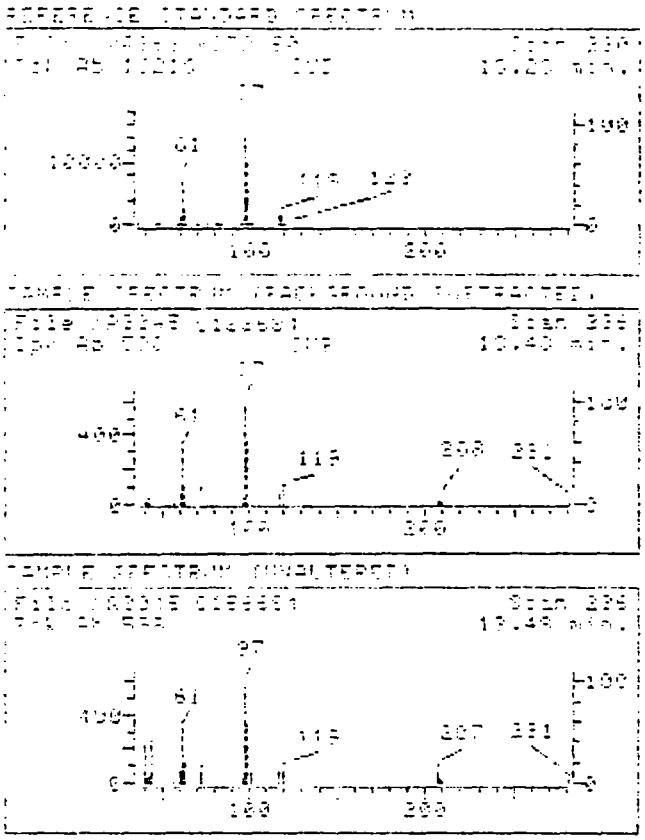


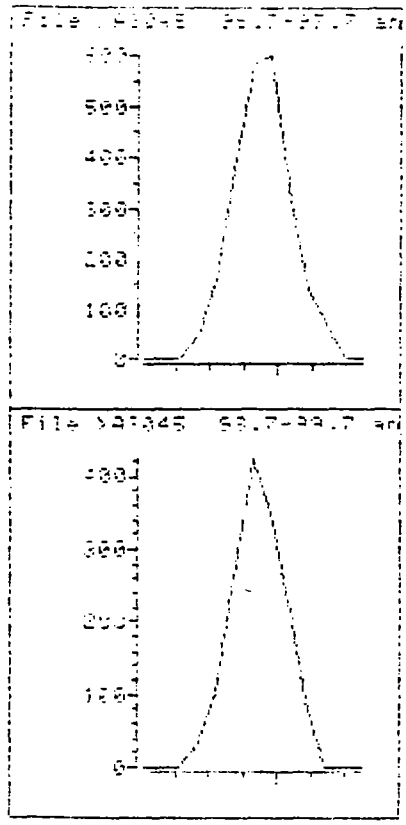
Data File: [illegible]
Name: [illegible]
Mixer: [illegible]
Quant Time: 940519 12:34
Injected at: 940519 11:56

Quant Output File: [illegible]
Quant ID File: [illegible]
Last Calibration: 940519 10:41

Compound No: [illegible]
Compound Name: Methylene Chloride
Scan Number: 93
Retention Time: 5.76 min.
Quant Ion: 84.0
Area: [illegible]
Concentration: 118.96 [illegible]
q-value: 100

000897



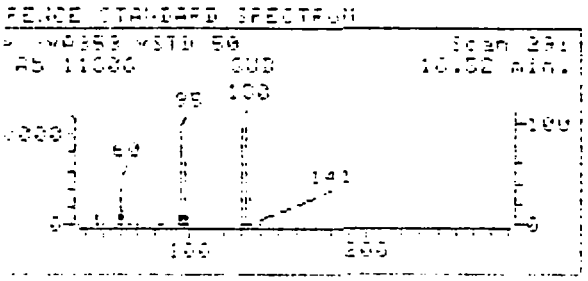


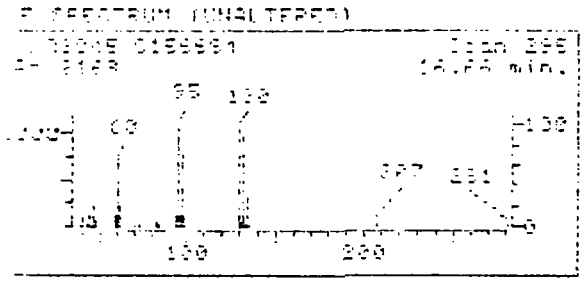
Data File: ^A3045::E2
Name: C156684
Misc: 5G SAMPLE - 5RE/8M
Quant Time: 940519 12:34
Injected at: 940519 11:56

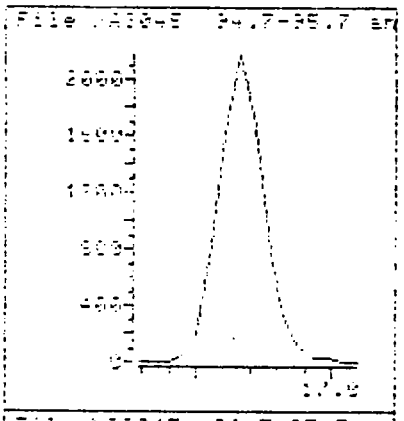
Quant Output File: ^A3045::SS
Quant IS File: IDEVCA::DF
Last Calibration: 940519 10:41

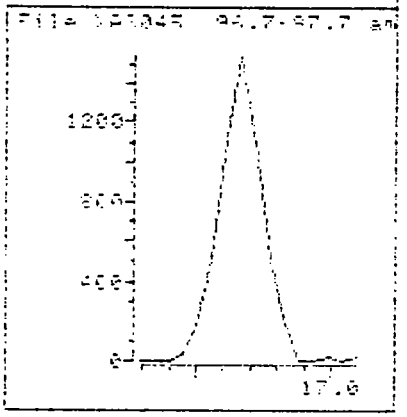
Compound No: 22
Compound Name: 1,1,1-Trichloroethane
Scan Number: 236
Retention Time: 13.48 min.
Quant Ion: 97.0
Area: 2434
Concentration: 4.43 UG/KG
q-value: 92

SKS









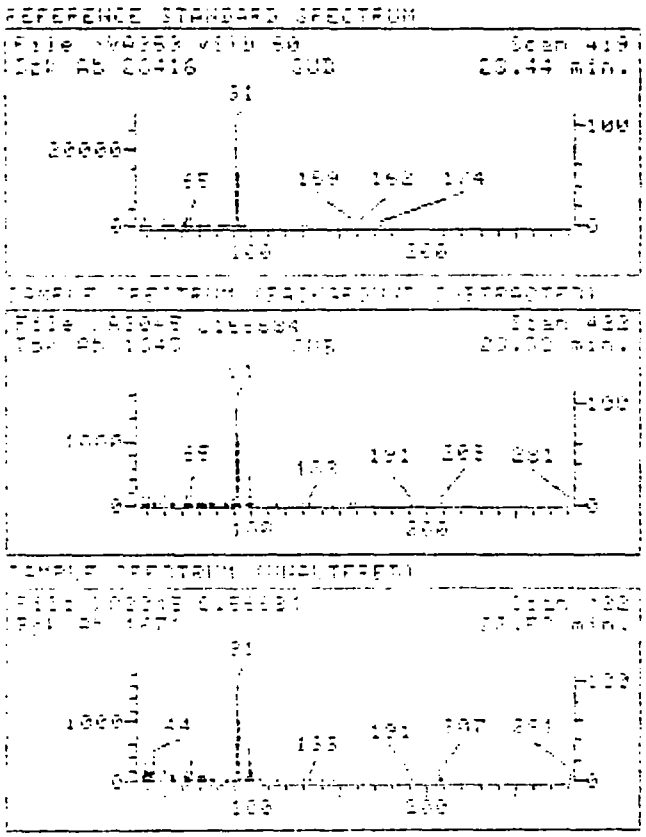
ata File: 1A3045::E7
ame: 0156494
ac: [illegible]
uant Time: 940519 17:34
njected at: 940519 17:56

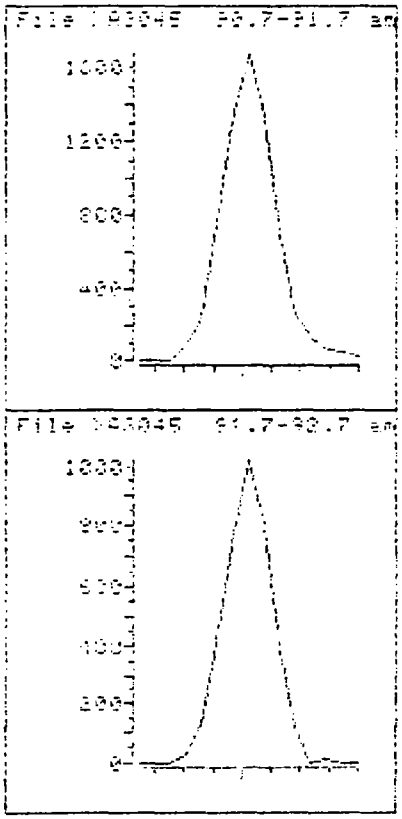
Quant Output File: 1A3045::SS

Quant ID File: 1A5UDA::D5
Last Calibration: 940519 19:41

ompound No: 28
ompound Name: Trichloroethene
can Number: 295
etention Time: 16.66 min.
uant Ion: 95.0
rea: 25729
oncentration: 32.01 UG/KG
-value: 92

SS



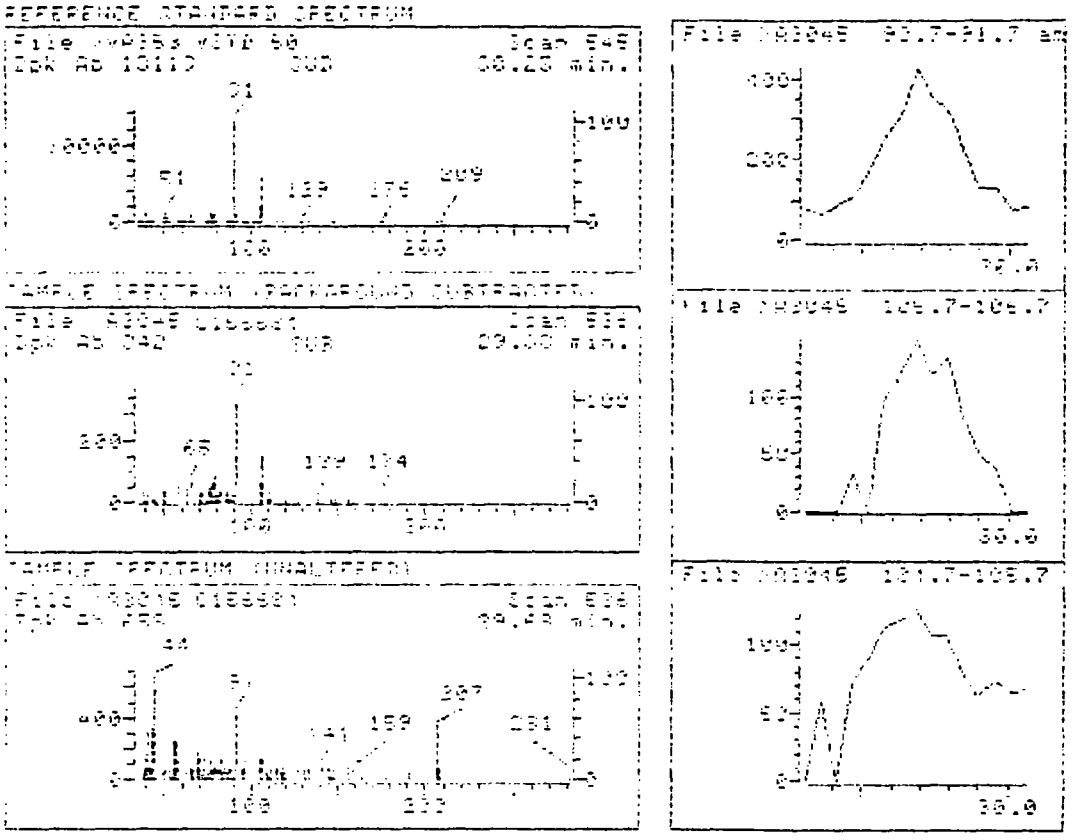


Data File: [illegible]
Name: [illegible]
Misc: [illegible] SAMPLE - [illegible]
Quant Time: 940619 10:34
Injected at: 940619 11:56

Quant Output File: [illegible]
Quant ID File: [illegible]
Last Calibration: 940619 [illegible]

Compound No: 41
Compound Name: Toluene
Scan Number: 432
Retention Time: 23.92 min.
Quant Ion: 92.0
Area: 11979
Concentration: 16.02 UG/KG
q-value: 97

000900



Data File: [illegible]::E7
Name: [illegible]
Misc: [illegible] - [illegible]
Quant Time: [illegible] 12:34
Injected at: [illegible] 11:54

Quant Output File: [illegible]::[illegible]

Quant ID File: [illegible]::[illegible]
Last Calibration: 940519 10:41

Compound No: 46
Compound Name: Total Xylenes
Scan Number: 536
Retention Time: 29.68 min.
Quant Ion: 106.0
Area: 2659
Concentration: ~~[illegible]~~ 8.22 UG/KG
q-value: 83

SKS

[illegible] REPORT

[illegible] Quant Time: [illegible]
[illegible] Injected at: [illegible]
[illegible] Dilution Factor: 1.00000

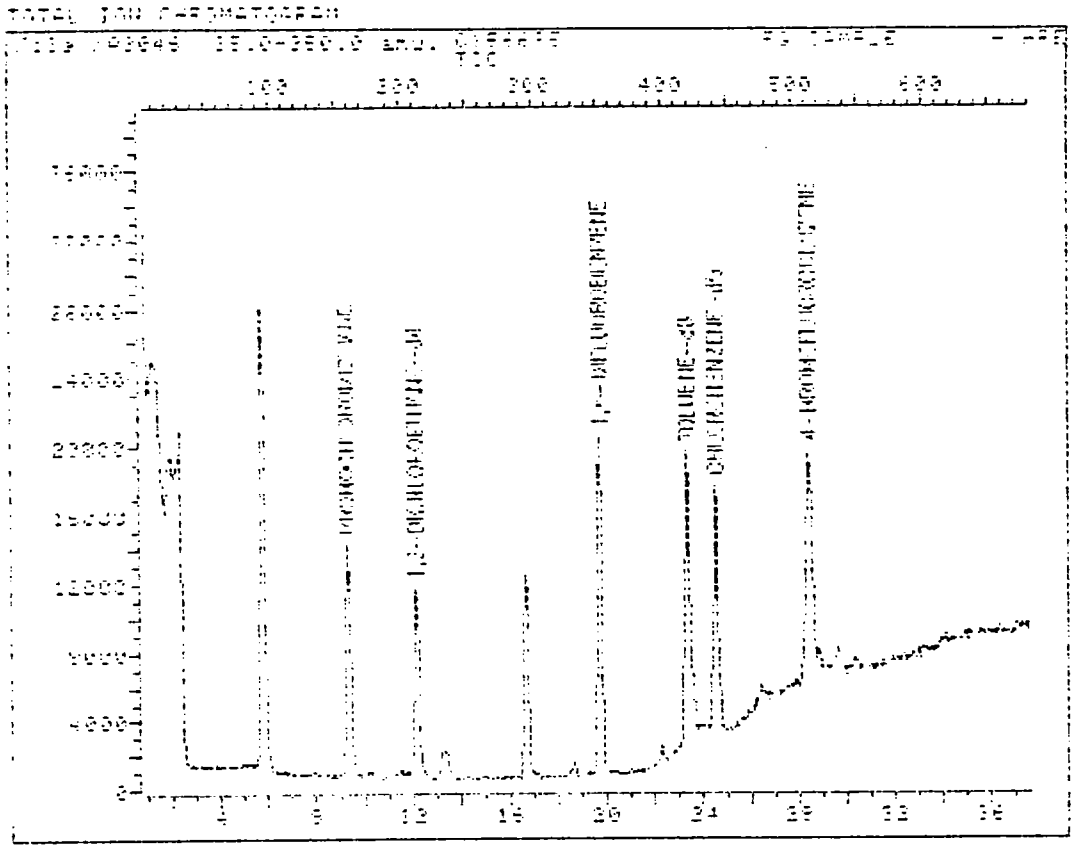
Mx Prover
OK ✓
SKS
5/19/94

[illegible]

Compound	R.T.	QIon	Area	Conc	Units	q
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	9.54	[illegible] SKS	[illegible]

[illegible]

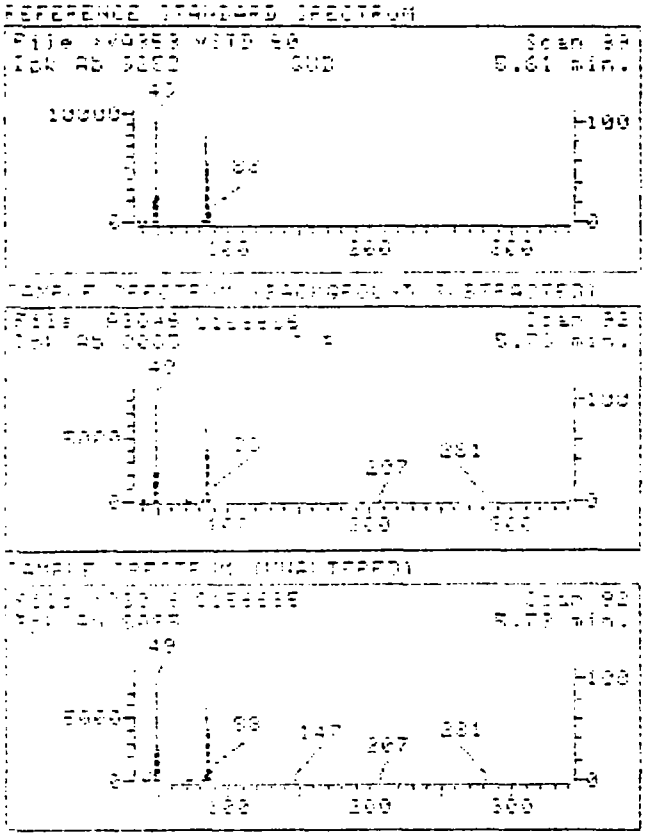
TOTAL ION CHROMATOGRAM

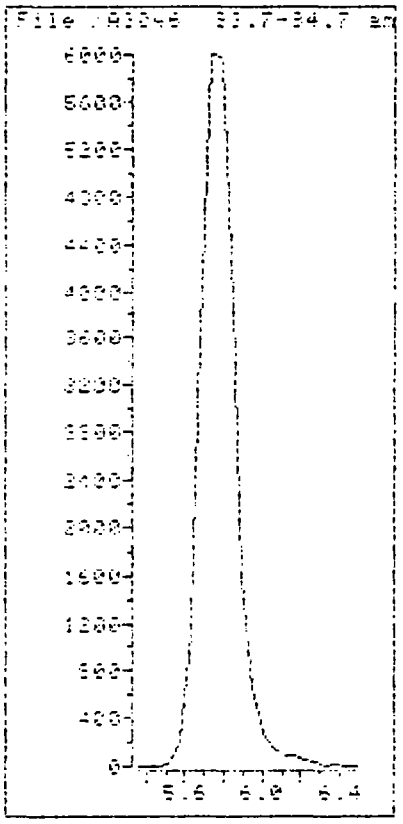


Data File: ^A3046::E7 Quant Output File: ^A3046::SS
Name: [illegible]
Misc: [illegible] - [illegible]

Id File: [illegible]
Title: QUANTITATION FILE FOR VOLATILE SOILS GC/MSD-A
Last Calibration: 940519 10:41

Operator ID: USER8
Quant Time: 940519 13:19
Injected at: 940519 12:40





Data File: ^A3046::E7
Name: [illegible]
Mean: 5g SAMPLE - HPE/BM
Quant Time: 940519 13:19
Injected at: 940519 10:40

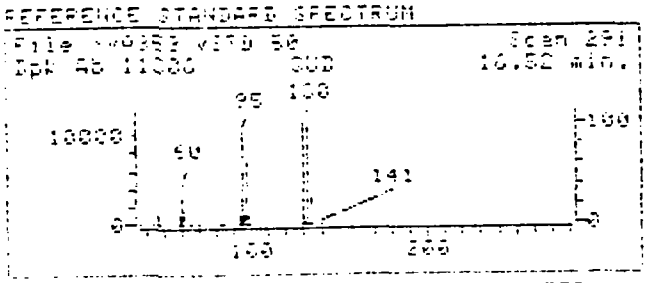
Quant Output File: ^A3046::S5

Quant ID File: 10SVOA::D5
Last Calibration: 940519 10:41

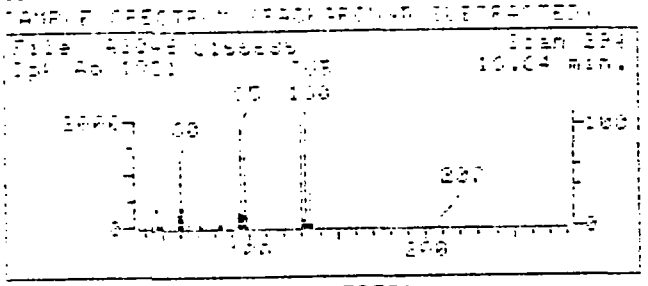
Compound No: 7
Compound Name: Methylene Chloride
Scan Number: 92
Retention Time: 5.73 min.
Quant Ion: 84.0
Area: 77217
Concentration: 141.11 UG/KG
q-value: 100

SS

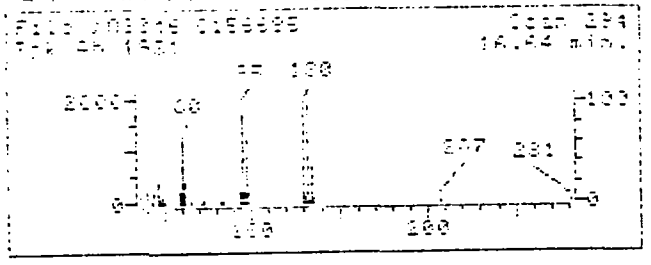
REFERENCE STANDARD SPECTRUM

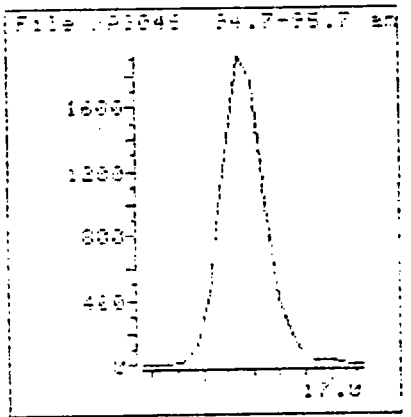


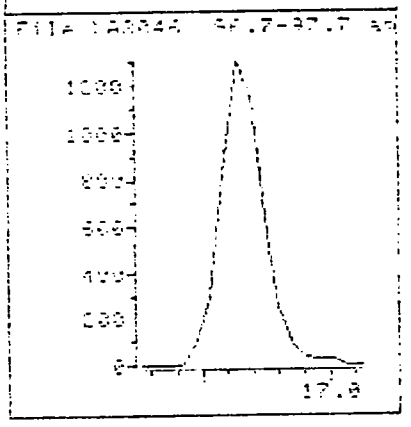
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNSUBTRACTED)







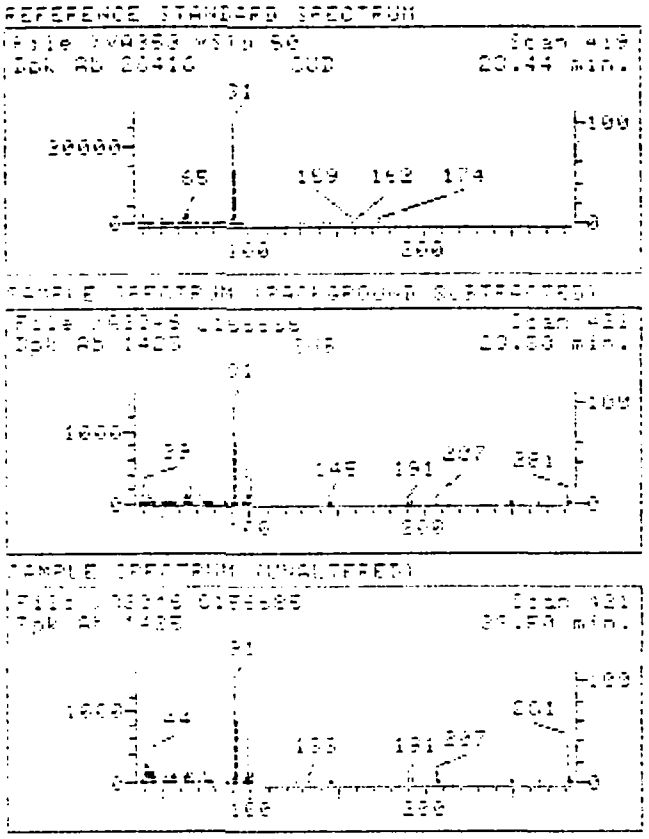
Data File: [illegible]
Name: [illegible]
Operator: [illegible]
Quant Time: [illegible]
Injected at: 940619 12:40

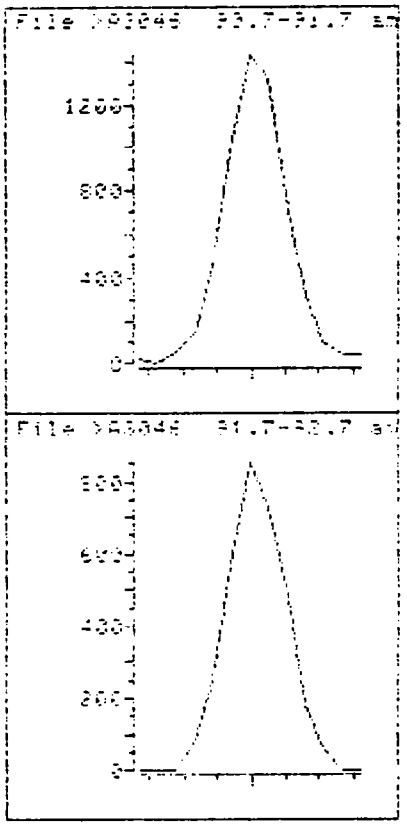
Quant Output File: [illegible]

Quant IS File: [illegible]
Last Calibration: 940619 19:41

Compound No: 28
Compound Name: Trichloroethene
Scan Number: 294
Retention Time: 16.64 min.
Quant Ion: 95.0
Area: 23192
Concentration: 31.57 UG/KG
q-value: 95

85





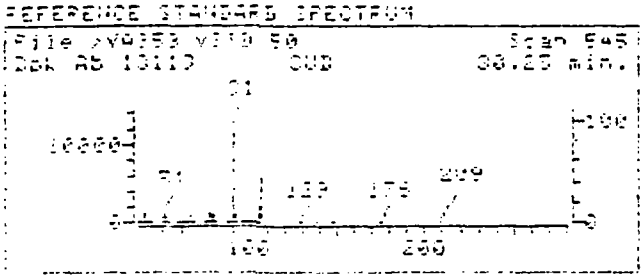
Data File: 'A3046::E7
Name: [illegible]
Mixer: [illegible] SAMPLE - [illegible]
Quant Time: 940519 12:19
Injected at: 940519 12:40

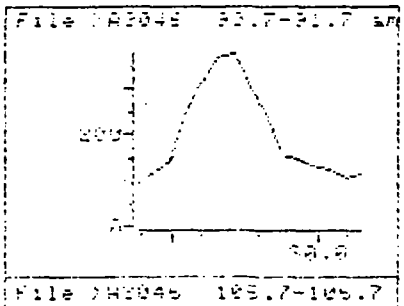
Quant Output File: 'A3046::SS

Quant ID File: [illegible]
Last Calibration: 940519 10:41

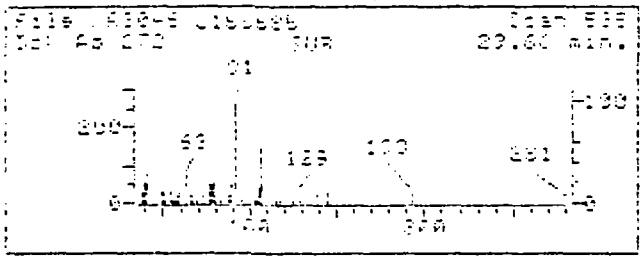
Compound No: 41
Compound Name: Toluene
Scan Number: 421
Retention Time: 23.50 min.
Quant Ion: 92.0
Area: 10411
Concentration: 15.03 UG/UG
q-value: 95

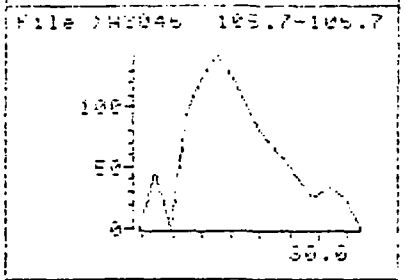
REFERENCE STANDARD SPECTRUM



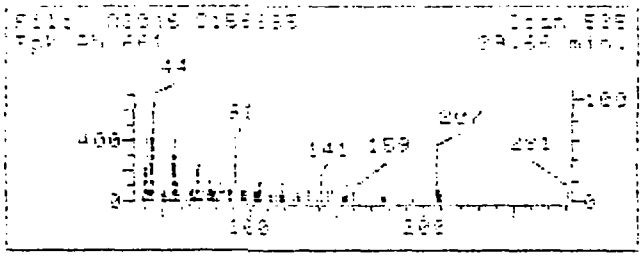


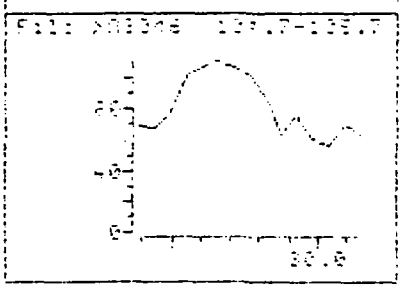
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)





SAMPLE SPECTRUM (UNALTERED)





Data File: [illegible]
Name: [illegible]
Misc: [illegible]
Quant Time: [illegible]
Injected at: [illegible]

Quant Output File: [illegible]

Quant ID File: [illegible]
Last Calibration: [illegible]

Compound No: 46
Compound Name: Total Xylenes
Scan Number: 535
Retention Time: 29.66 min.
Quant Ion: 106.0
Area: [illegible]
Concentration: ~~[illegible]~~ 9.54 UG/~~KG~~
q-value: 86

SKS

QUANT REPORT

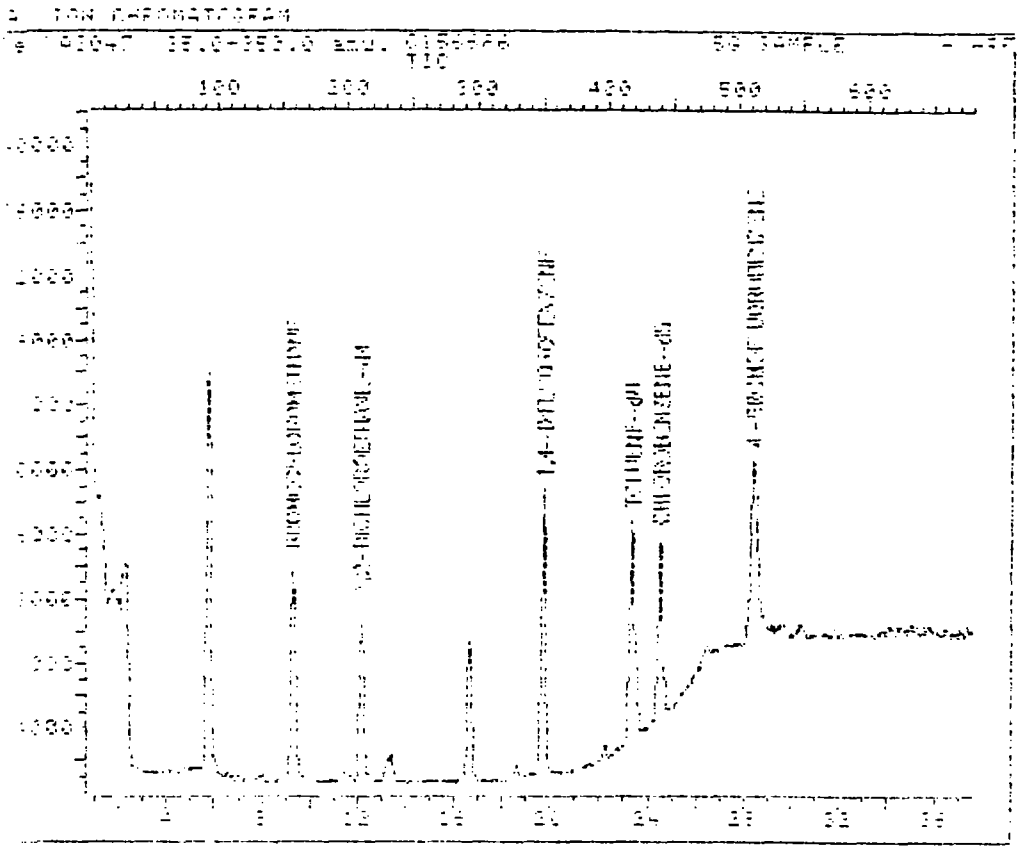
Operator ID: USER8 Quant Rev: 6 Quant Time: 940519 14:03
Output File: [illegible] Injected at: 940519 13:25
Data File: [illegible] Dilution Factor: 1.00000
Name: [illegible]
Misc: [illegible] SAMPLE - [illegible]

MX Proven OK ✓
SKS 5/20/94

ID File: [illegible]
Title: QUANTITATION FILE FOR VOLATILE SOILS GC/MSD-A
Last Calibration: 940519 [illegible]

	Compound	R.T.	Q ion	Area	Conc	Units	q
[illegible]	*[illegible]METHANE	9.29	128.0	25173	50.00	UG/KG	100
20	Methylene Chloride	5.78	84.0	69096	122.75	UG/KG	100
[illegible]	1,2-DICHLOROETHANE-d4	12.15	65.0	54938	51.15	UG/KG	92
[illegible]	*1,4-DIFLUOROBENZENE	19.71	114.0	79580	50.00	UG/KG	93
[illegible]	1,1,1-Trichloroethane	13.45	97.0	5257	3.75	UG/KG	94
[illegible]	Trichloroethene	16.63	95.0	17787	26.47	UG/KG	93
[illegible]	*CHLOROBENZENE-d5	24.52	117.0	42394	50.00	UG/KG	97
[illegible]	TOLUENE-d8	23.34	98.0	57083	62.64	UG/KG	95
[illegible]	Toluene	23.49	92.0	9344	16.09	UG/KG	91
44)	4-BROMOFLUOROBENZENE	28.41	95.0	26815	38.13	UG/KG	100
46)	Total Xylenes	29.65	106.0	2579	~~[illegible]~~ 11.49	UG/KG SKS	81

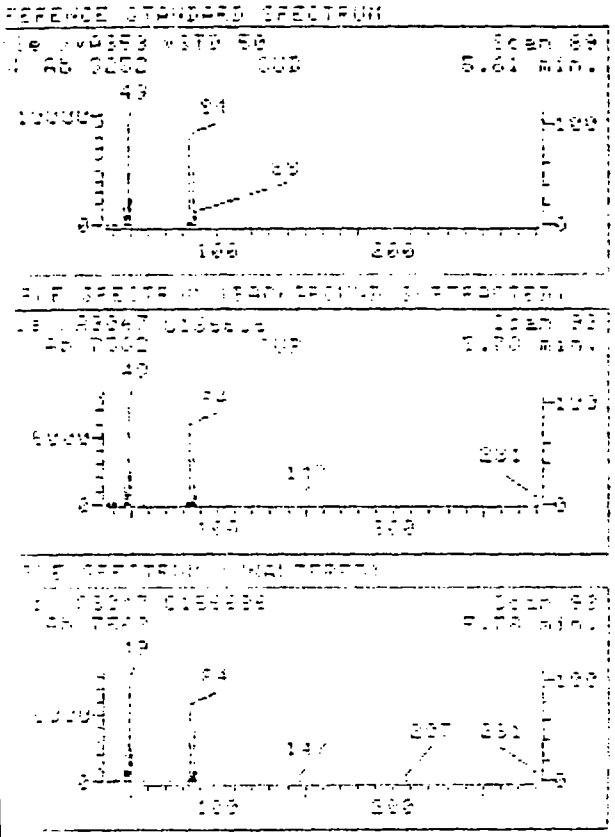
* Compound is [illegible]

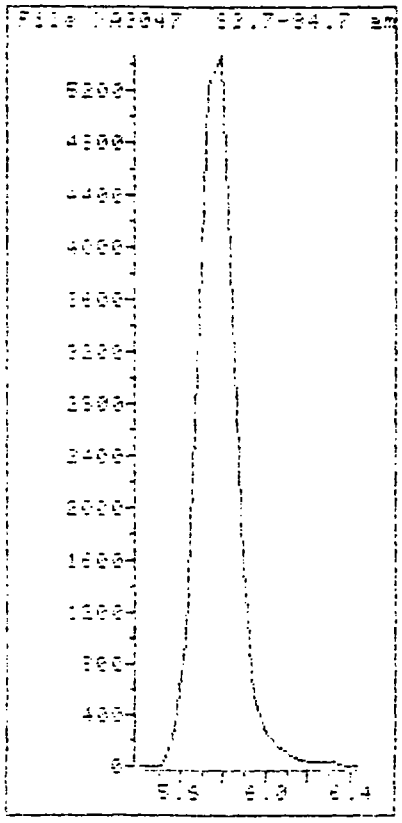


ata File: [illegible] Quant Output File: [illegible]
me: [illegible]
ar: [illegible] - PPE/KM

File: [illegible]
itle: QUANTITATION FILE FOR VOLATILE SOILS GC/MSD-A
ast Calibration: 940519 10:41

erator ID: USER8
ant Time: 940519 14:03
njected at: 940519 13:25





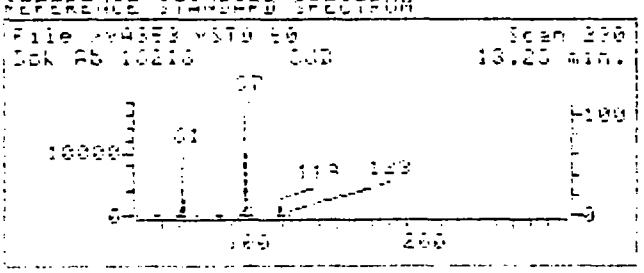
Data File: [illegible]
Name: [illegible]
Mass: [illegible]
Quant Time: [illegible]
Injected at: [illegible]

Quant Output File: [illegible]
Quant ID File: [illegible]
Last Calibration: 940519 10:41

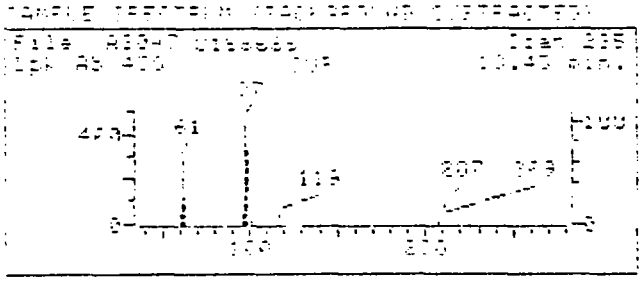
Compound No: 7
Compound Name: Methylene Chloride
Scan Number: 93
Retention Time: 5.78 min.
Quant Ion: 84.0
Area: 69096
Concentration: 192.75 UG/KG
n-value: 100

SS

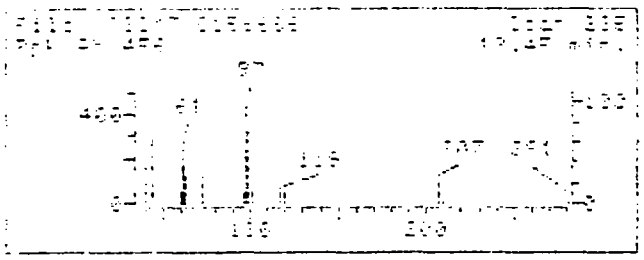
REFERENCE STANDARD SPECTRUM

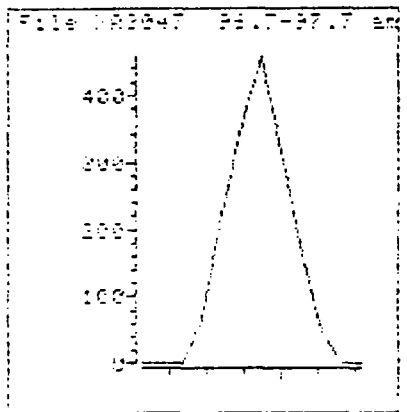


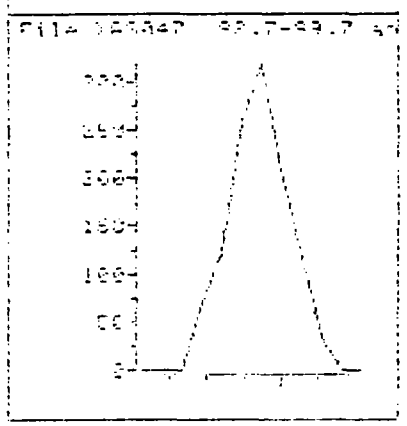
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



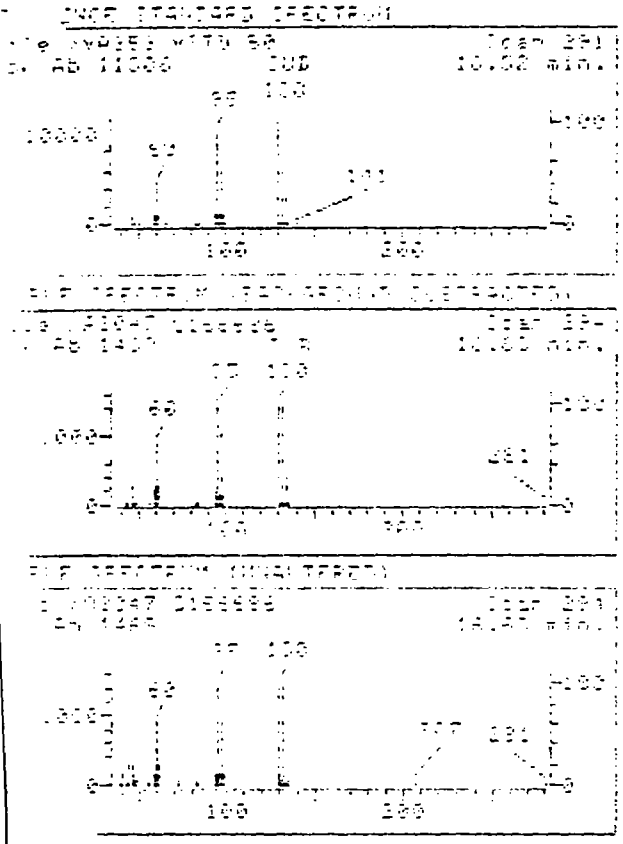


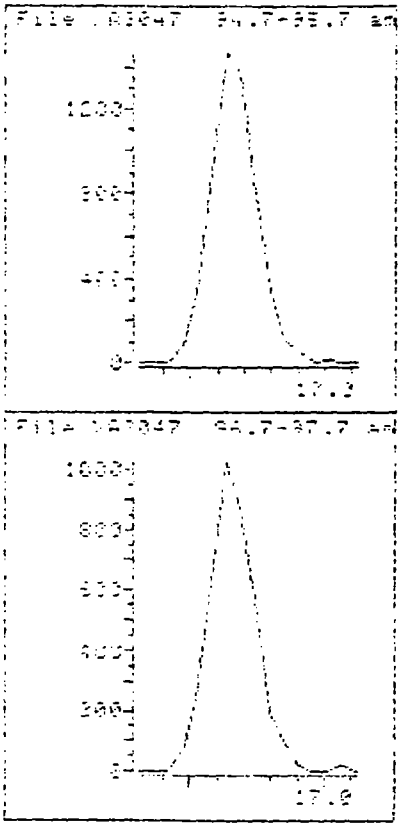


Data File: [illegible]
Name: [illegible]
Mixer: [illegible]
Mount Time: [illegible]
Injection Time: [illegible]

Compound No: [illegible]
Compound Name: [illegible]
Scan Number: [illegible]
Retention Time: 17.45 min.
Scan Ion: [illegible]
Area: [illegible]
Concentration: [illegible]
Q-value: [illegible]

SKS





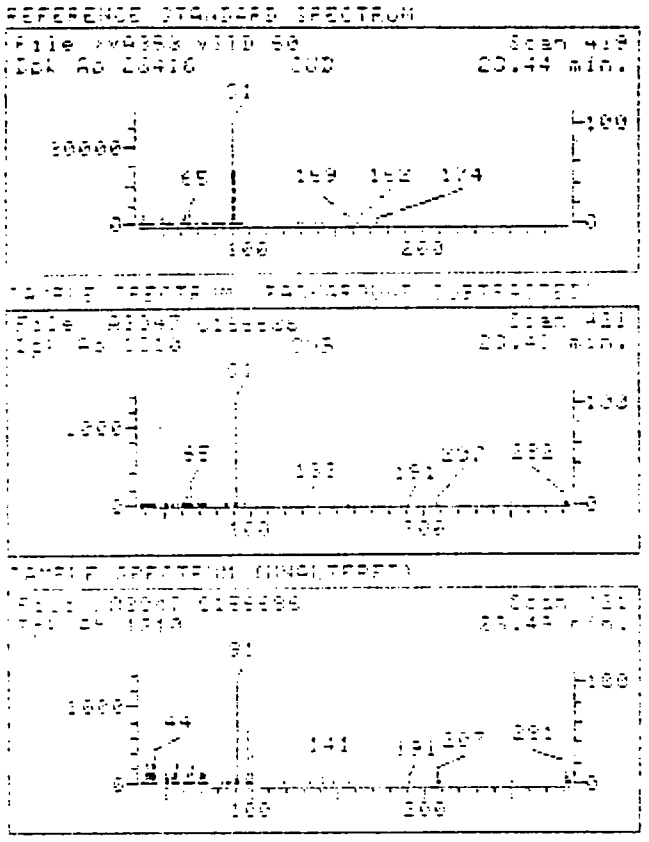
Data File: >A3047::E7
Name: C1H4696
Mass: FG SAMPLE - H-E/VM
Quant Time: 940519 14:03
Injected At: 940519 14:05

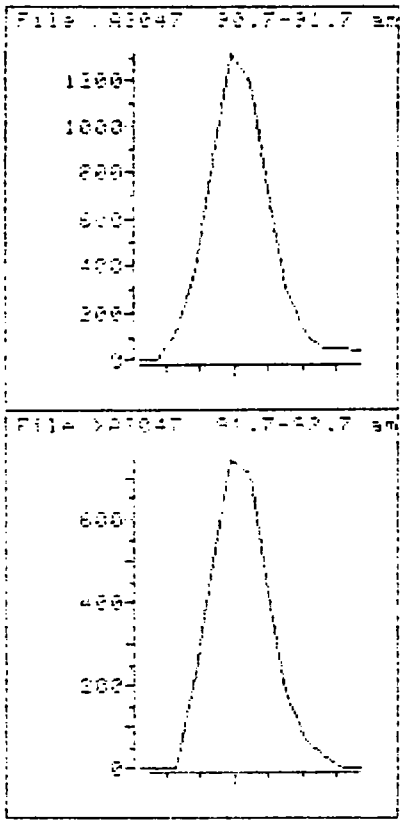
Quant Output File: ^A3047::SS

Quant IN File: IOSUOA::D5
Last Calibration: 940519 10:41

Compound No: 29
Compound Name: Trichloroethene
Mean Number: 294
Retention Time: 16.63 min.
Quant Ion: 95.0
Area: 17787
Concentration: 26.47 UG/KG
R-value: 93

SS



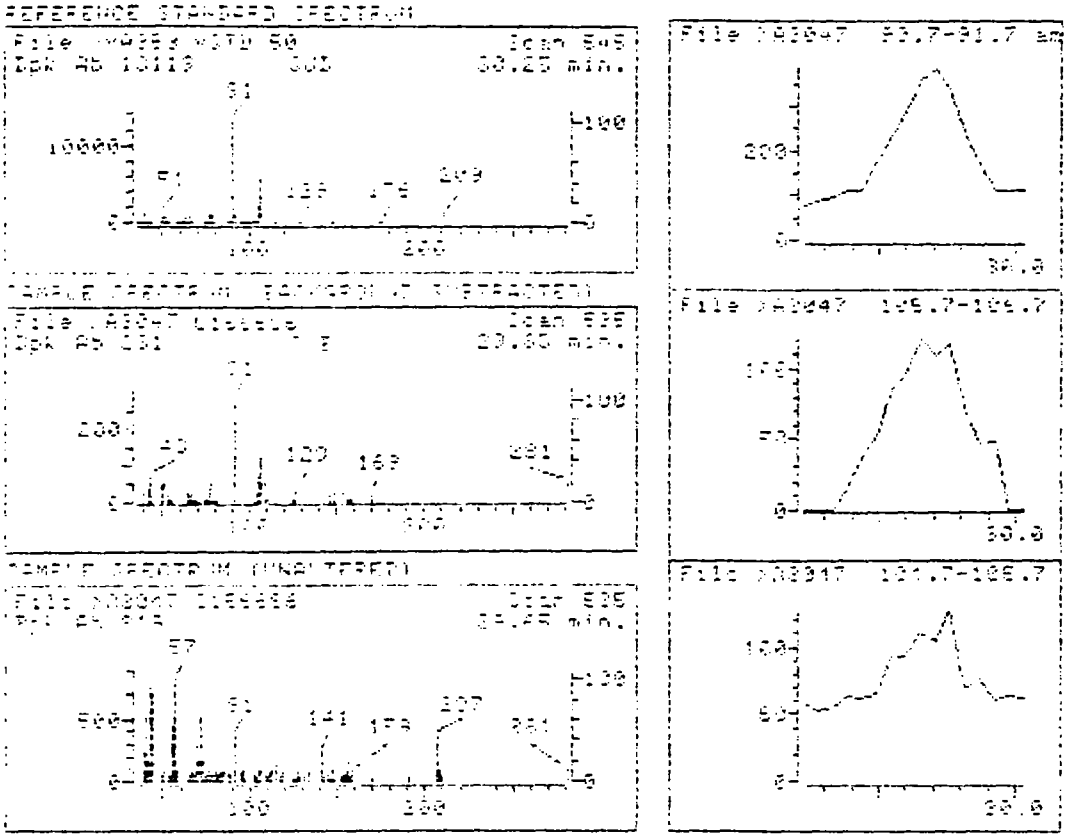


Data File: A3047::E7
Name: [illegible]
Misc: [illegible] SAMPLE - [illegible]
Quant Time: 940519 14:[illegible]
Injected at: 940519 13:2[illegible]

Quant Output File: A3047::SS
Quant ID File: [illegible]
Last Calibration: 940519 10:41

Compound No: 41
Compound Name: Toluene
Scan Number: 421
Retention Time: 23.49 min.
Quant Ion: 92.0
Area: 9344
Concentration: 16.09 UG/KG
q-value: 91

SDS



Data File: >A3047::E7
Name: C156684
Misc: KG SAMPLE - HHE/RM
Quant Time: 940519 14:03
Injected at: 940519 13:25

Quant Output File: ^A3047::SS

Quant ID File: IOSVCA::D5
Last Calibration: 940519 10:41

Compound No: 46
Compound Name: Total Xylenes
Scan Number: 535
Retention Time: 29.65 min.
Quant Ion: 106.0
Area: 2578
Concentration: ~~6.16~~ UG/KG
q-value: 81

11.49

SS

QUANT REPORT

ator ID: [illegible]
t File: [illegible]
File: [illegible]
: [illegible]
: [illegible]

Quant Rev: 6 Quant Time: 940519 14:48
Injected at: 940519 14:[illegible]
Dilution Factor: 1.00000

MX
Proven OK
SJ

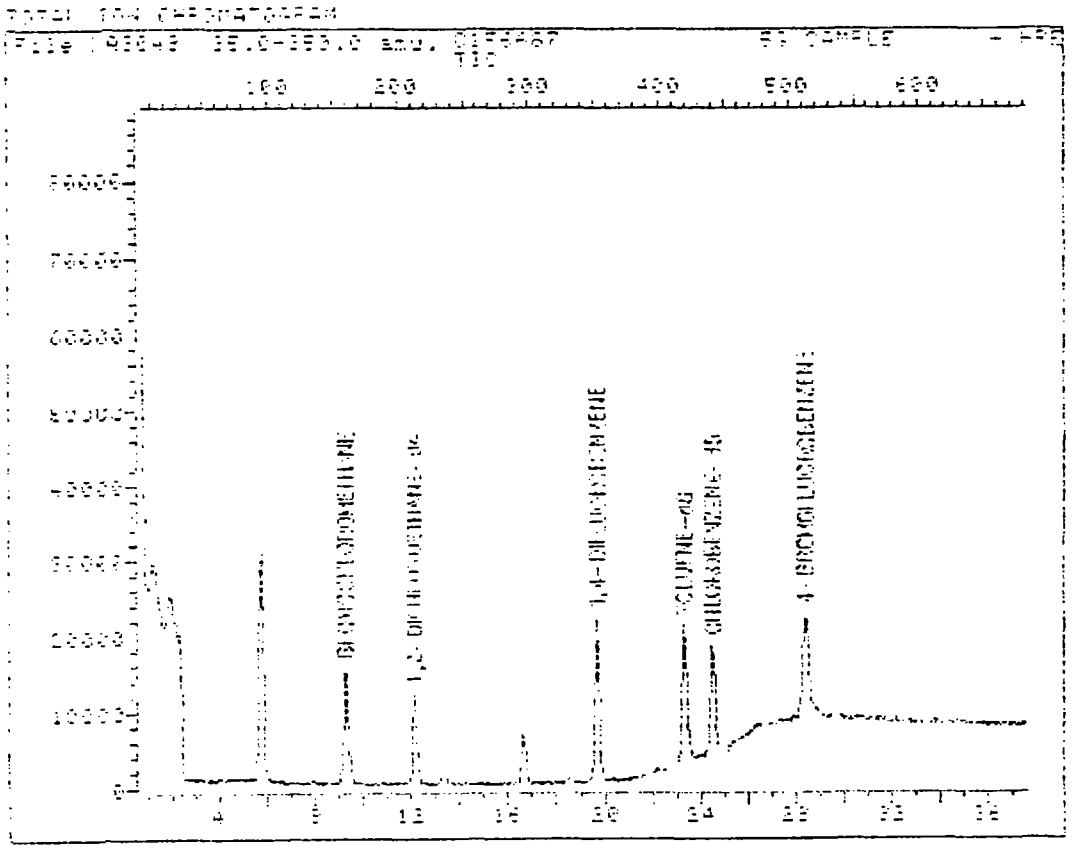
[illegible]
: [illegible] FILE FOR [illegible] SOILS [illegible]
[illegible]: 940519 [illegible]

Compound	R.T.	D inc	Area	Conc	Units	Q
[illegible]	9.29	108.0	26546	50.00	UG/KG	100
Methylene Chloride	5.73	84.0	82960	149.76	UG/KG	100
1,2-DICHLOROETHANE-d4	12.15	65.0	59915	51.04	UG/KG	92
1,4-DIFLUOROBENZENE	19.71	114.0	82040M	50.00	UG/KG	92
1,1,1-Trichloroethane	13.45	97.0	4599M	3.18	UG/KG	
Trichloroethene	16.63	95.0	13004	18.77	UG/KG	98
CHLOROBENZENE-d5	24.52	117.0	51670	50.00	UG/KG	99
[illegible]-d8	23.33	98.0	72415	65.20	UG/KG	94
[illegible]uene	23.49	92.0	6277	8.87	UG/KG	91
BROMOFLUOROBENZENE	28.41	95.0	32808	38.28	UG/KG	100
Total Xylenes	29.71	106.0	1096M	~~[illegible]~~ 7.64	UG/KG	

[illegible] is ISTD

SKS

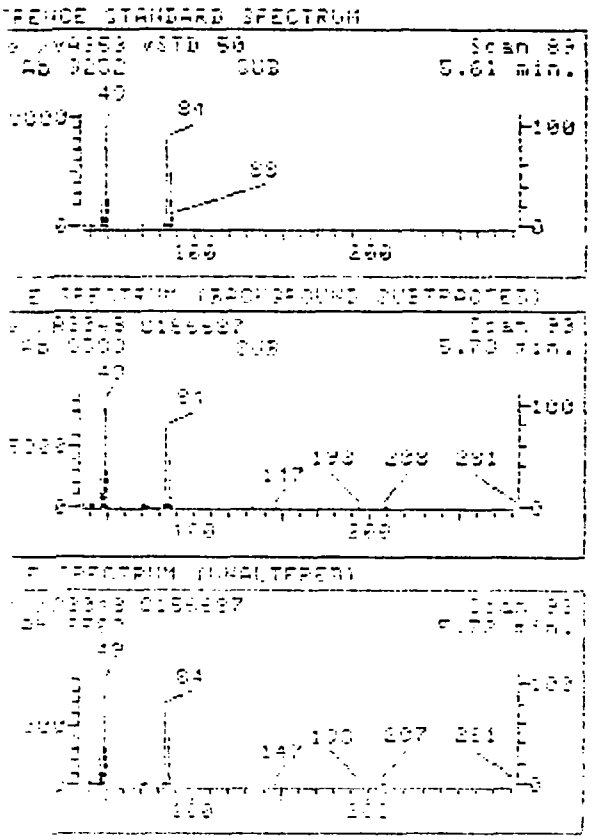
000915

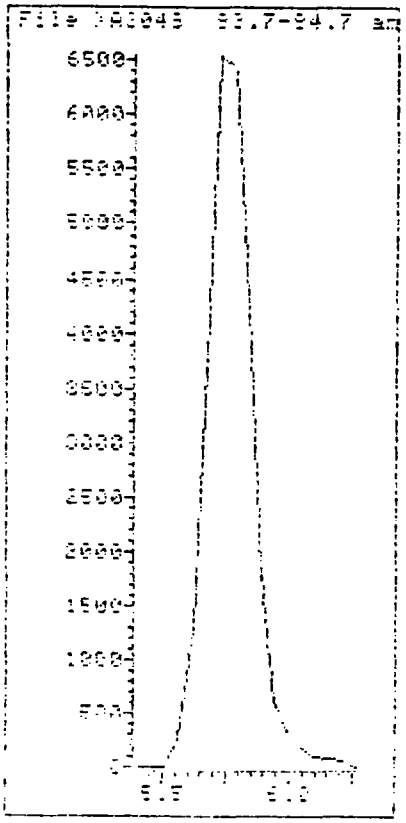


Data File: [illegible] Quant Output File: [illegible]
Name: [illegible]
Misc: [illegible] SAMPLE - [illegible]

Id File: [illegible]
Title: QUANTITATION FILE FOR VOLATILE SOILS RC/MSD-A
Last Calibration: 940519 10:41

Operator ID: USER8
Quant Time: 940519 14:48
Injected at: 940519 14:09





Data File: [illegible]

Quant Output File: [illegible]

[illegible]

Quant ID File: [illegible]

Quant Time: [illegible] 14:42

Last Calibration: 940519 10:41

Injected at: 940519 14:09

Compound No: 7

Compound Name: Methylene Chloride

Scan Number: 93

Retention Time: 5.73 min.

Quant Ion: 84.0

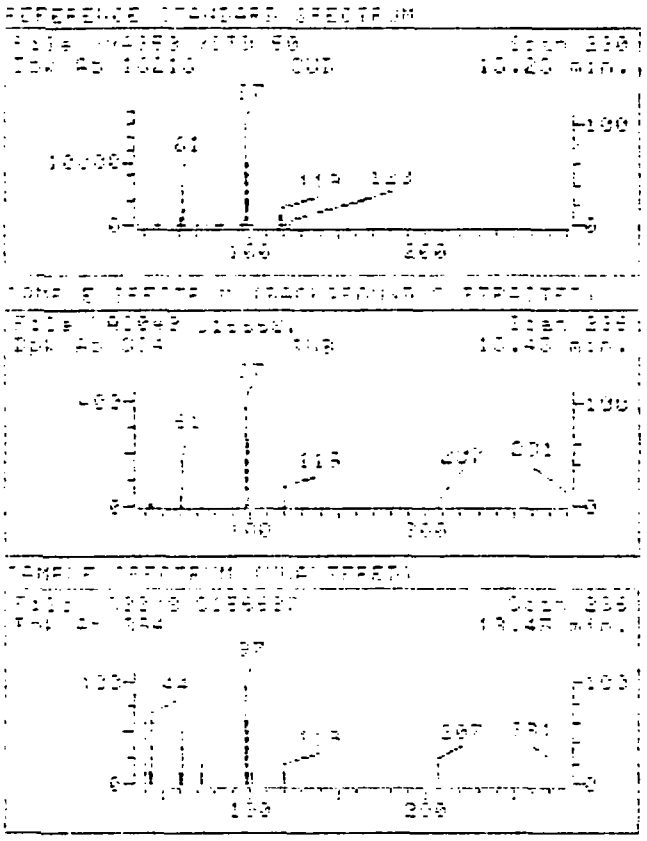
Area: 82960

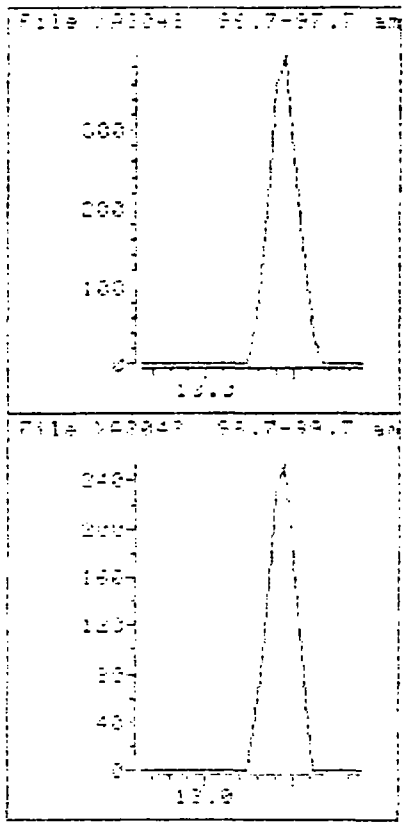
Concentration: 139.76 UG/KG

Q-value: 100

✓

SKS



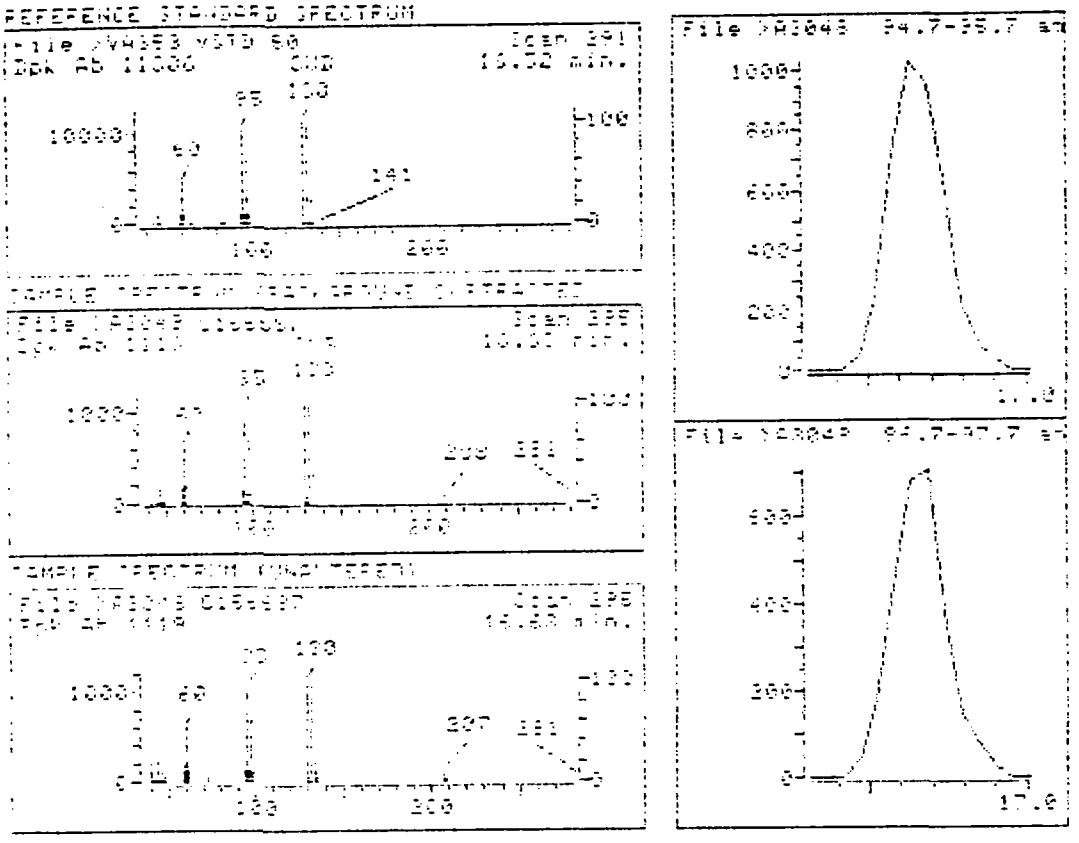


Data File: [illegible]
Name: [illegible]
Mixer: [illegible]
Quant Time: [illegible]
Injected at: [illegible]

Quant Output File: [illegible]
Quant ID File: [illegible]
Last Calibration: [illegible] 10:41

Compound No: 22
Compound Name: 1,1,1-Trichloroethane
Scan Number: 236
Retention Time: 13.45 min.
Quant Ion: 97.0
Area: 4599M
Concentration: 3.18 UG/KG

SKS

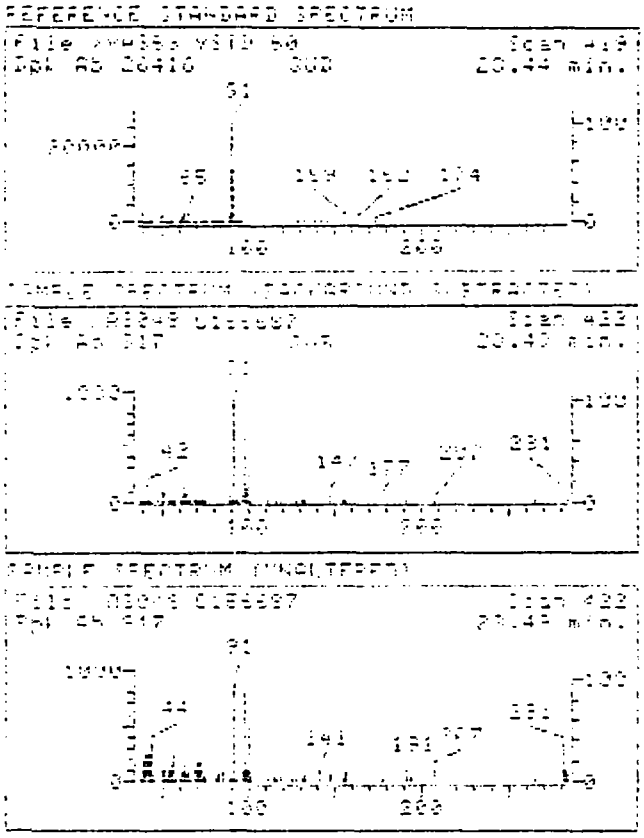


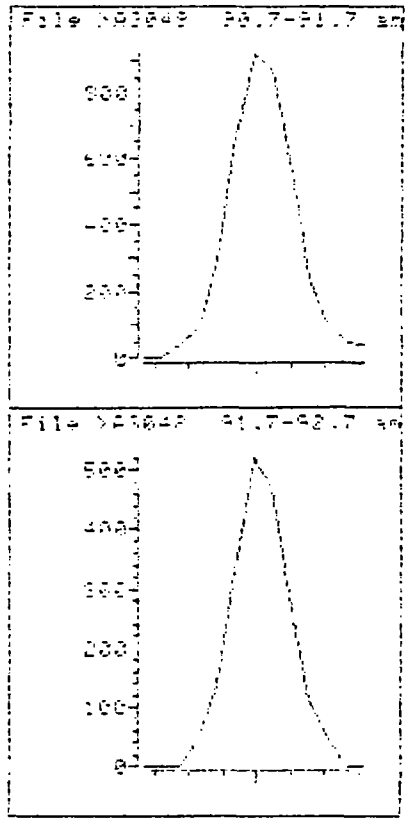
Data File: [illegible]
Name: [illegible]
Plot: [illegible]
Quant Time: 940619 14:48
Injected at: 940619 14:[illegible]

Quant Output File: [illegible]
Quant ID File: [illegible]
Last Calibration: 940619 10:41

Compound No: 29
Compound Name: Trichloroethene
Scan Number: 395
Retention Time: 16.63 min.
Quant Ion: 95.0
Area: 13004
Concentration: 18.77 UG/KG
q-value: 98

35





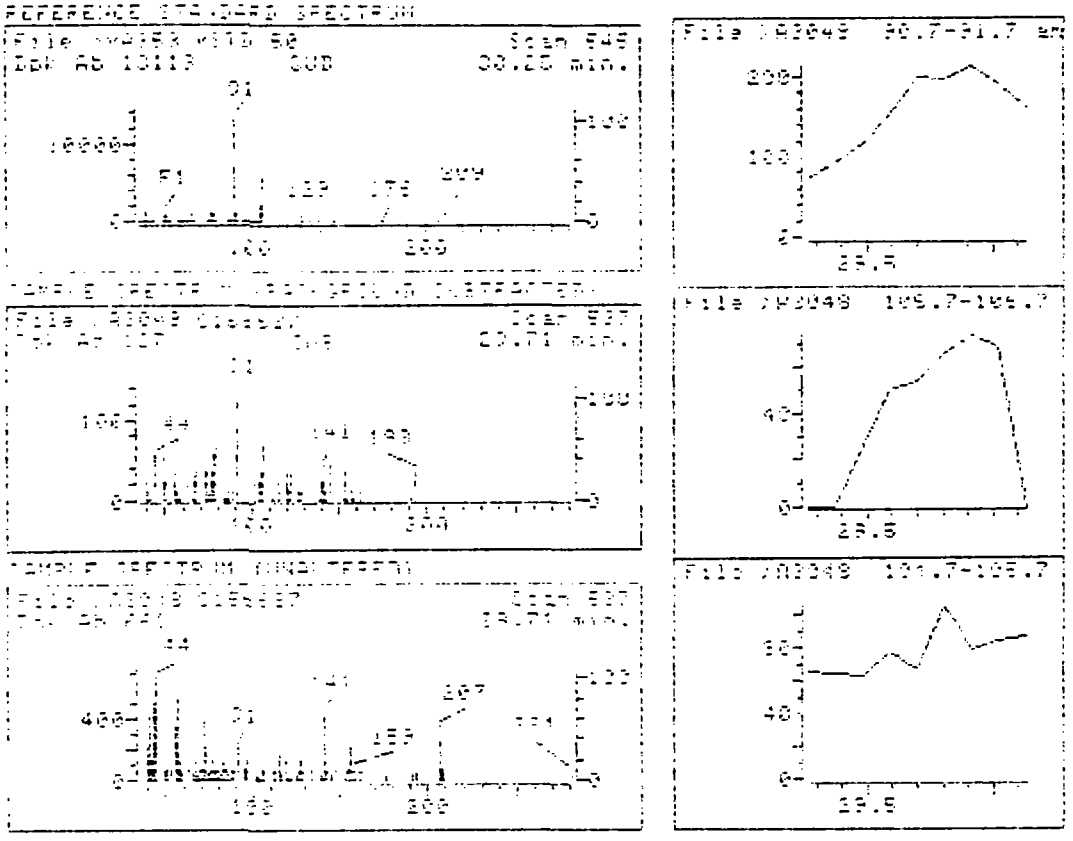
Data File: >A3048::E7
Name: C156-87
Misc: 5G SAMPLE - HRE/HM
Quant Time: 940519 14:48
Injected at: 940519 14:09

Quant Output File: ^A3048::RS

Quant ID File: IDSUDA::D6
Last Calibration: 940519 10:41

Compound No: 41
Compound Name: Toluene
Scan Number: 422
Retention Time: 23.49 min.
Quant Ion: 92.0
Area: 6277
Concentration: 8.87 UG/KG
q-value: 91

✓
SS



Data File: >A3048::F7
Name: [illegible]
Misc: [illegible] SAMPLE - [illegible]
Quant Time: 940519 14:[illegible]
Injected at: 940519 14:09

Quant Output File: [illegible]

Quant ID File: [illegible]
Last Calibration: 940519 10:41

Compound No: 46
Compound Name: Total Xylenes
Scan Number: 537
Retention Time: 99.71 min.
Quant Ion: 106.0
Area: 1096M
Concentration: ~~[illegible]~~ 7.64 UG/KG

✓
SS

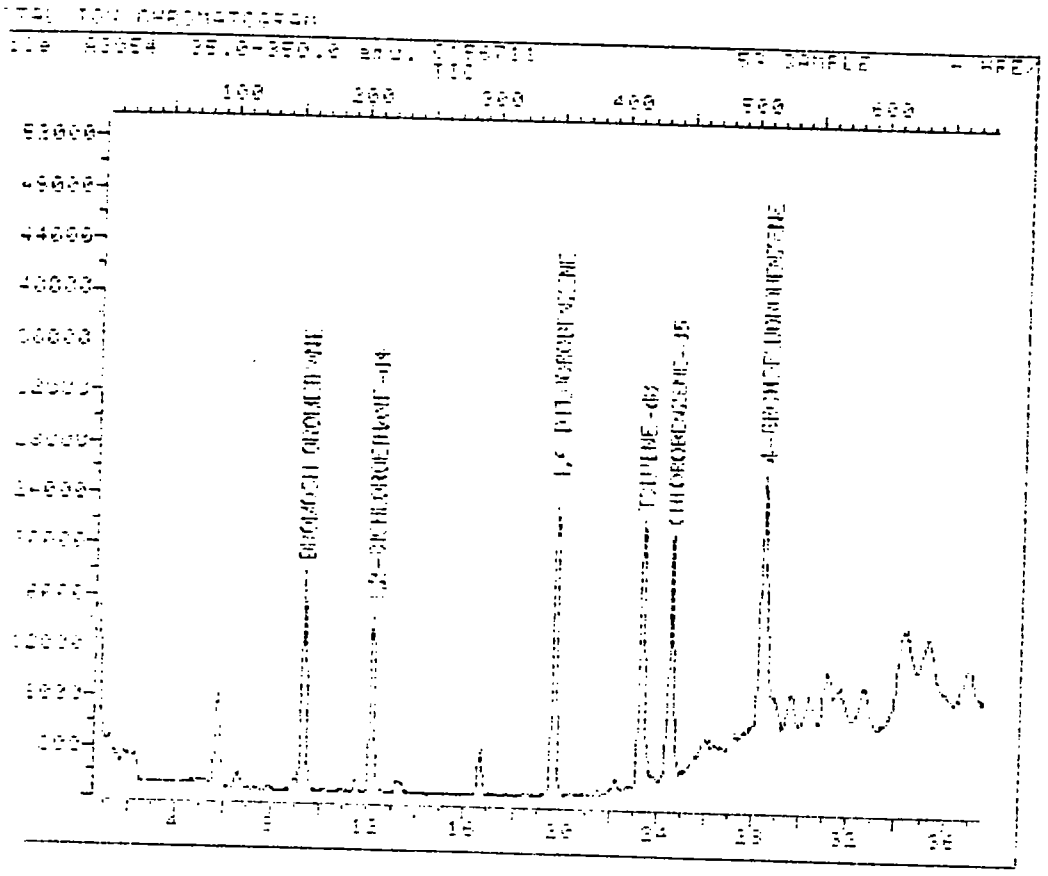
[illegible]

[illegible]

ok ✓
SKS
5/30/24

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]



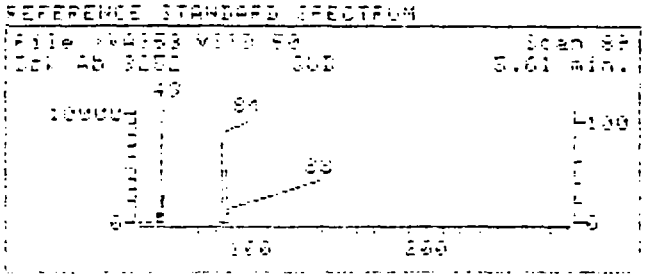
Data File: [illegible]
Name: [illegible]
Misc: [illegible]

Quant Output File: [illegible]

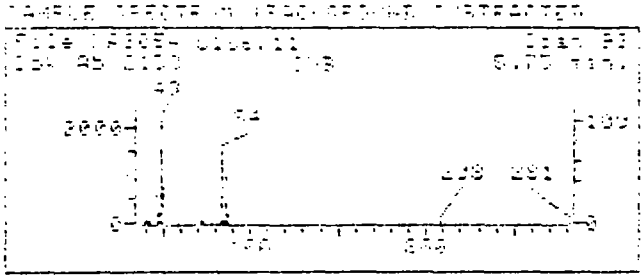
ID File: [illegible]
Title: QUANTITATION FILE FOR VOLATILE SOILS GC/MSD-A
Last Calibration: 940519 10:41

Operator ID: [illegible]
Quant Time: 940519 19:18
Injected at: 940519 18:40

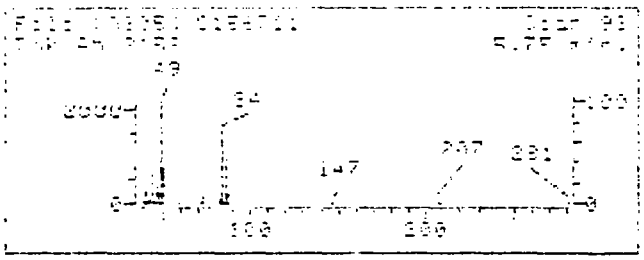
REFERENCE STANDARD SPECTRUM

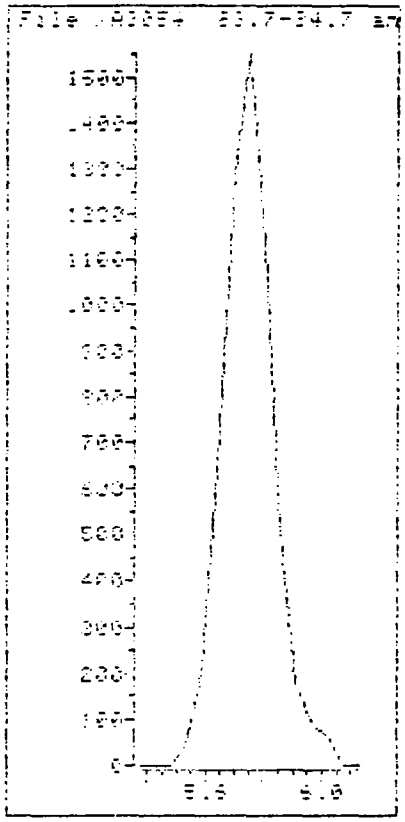


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

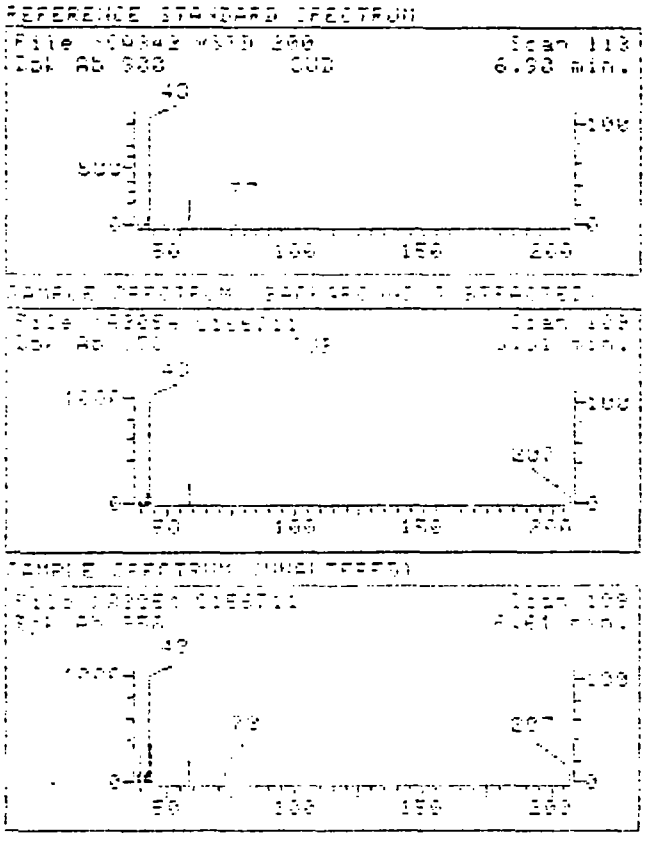


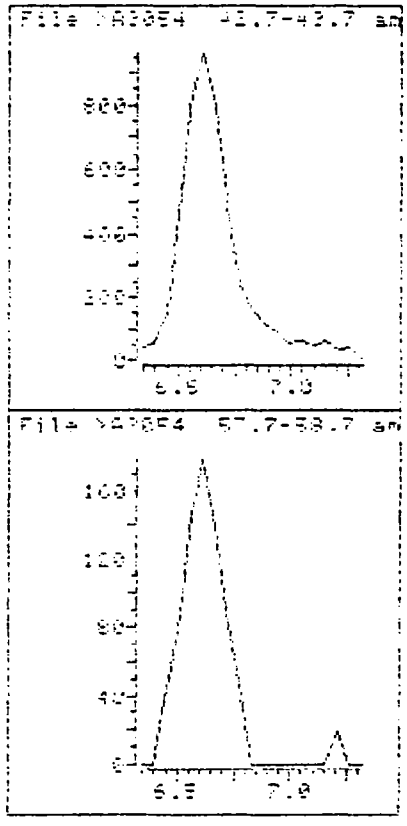


Data File: [illegible]:52 Quant Output File: [illegible]:58
Name: [illegible]
Misc: 5G SAMPLE - [illegible]
Quant Time: 940519 19:18 Quant ID File: [illegible]
Injected at: 940519 18:40 Last Calibration: 940519 10:41

Compound No: 2
Compound Name: Methylene Chloride
Scan Number: 93
Retention Time: 5.75 min.
Quant Ion: 84.0
Area: 18493
Concentration: 29.03 UG/UG
q-value: 100

85





Data File: >A3054::S2
Name: [illegible]
Misc: [illegible]
Quant Time: 940519 19:[illegible]
Injected at: 940519 18:40

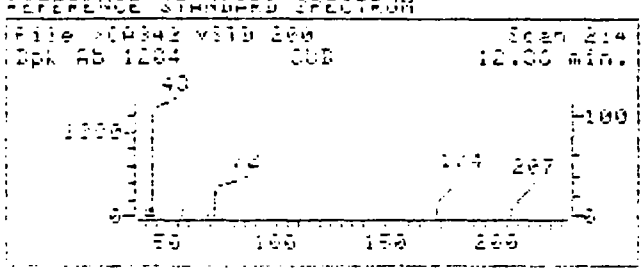
Quant Output File: >A3054::S8

Quant ID File: 1DSVOA::D5
Last Calibration: 940519 10:41

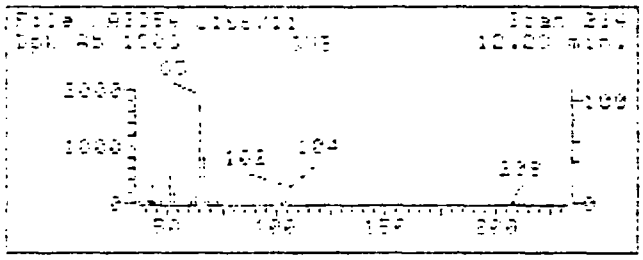
Compound No: 8
Compound Name: Acetone
Scan Number: 109
Retention Time: 6.61 min.
Quant Ion: 43.0
Area: 14945
Concentration: 86.50 UG/KG
q-value: 79

SS

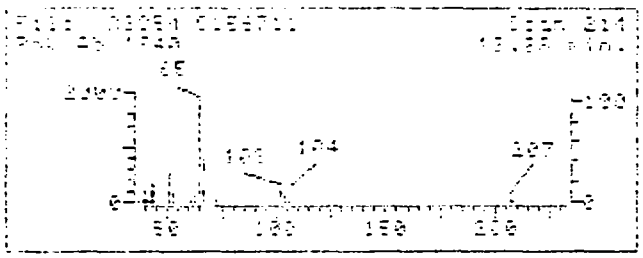
REFERENCE STANDARD SPECTRUM

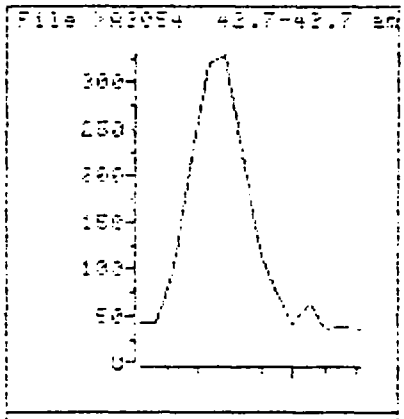


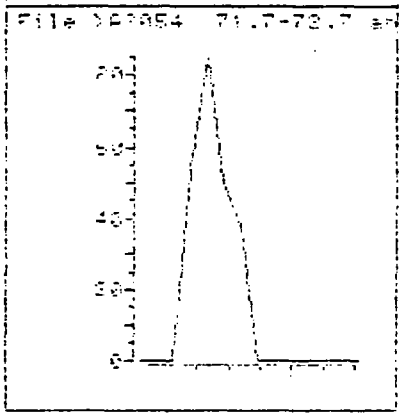
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >A3054::E2
Name: [illegible]
Misc: [illegible]
Quant Time: 940519 19:18
Injected at: 940519 18:40

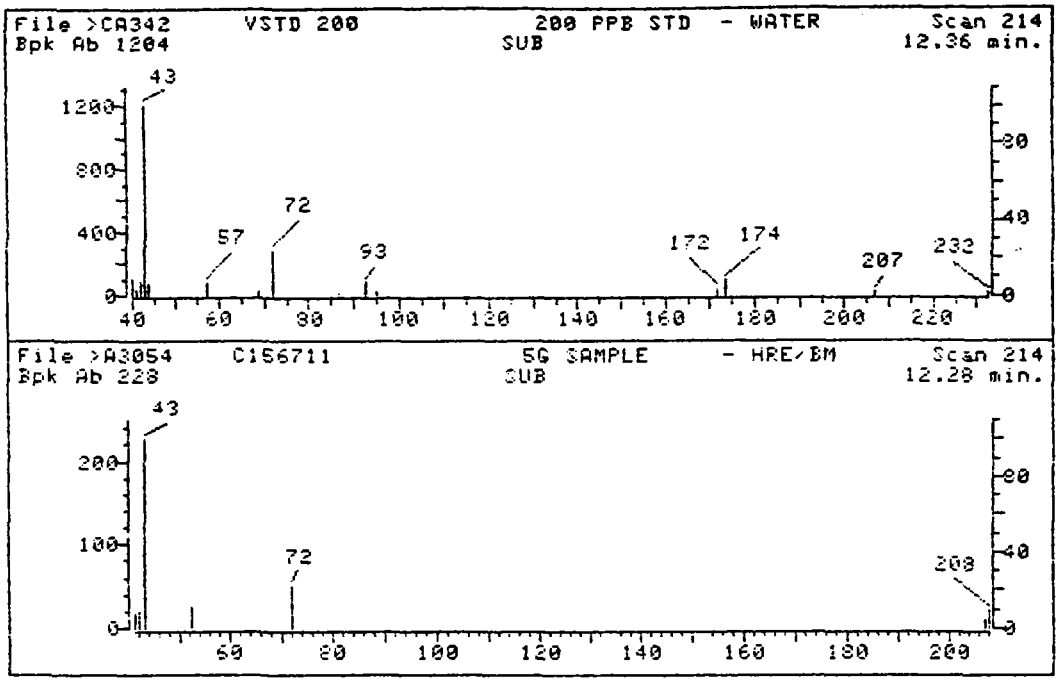
Quant Output File: >A3054::[illegible]

Quant ID File: [illegible]
Last Calibration: 940519 10:41

Compound No: 20
Compound Name: 2-Butanone
Scan Number: 214
Retention Time: 12.28 min.
Quant Ion: 43.0
Area: 4163
Concentration: 23.23 UG/KG
q-value: 72

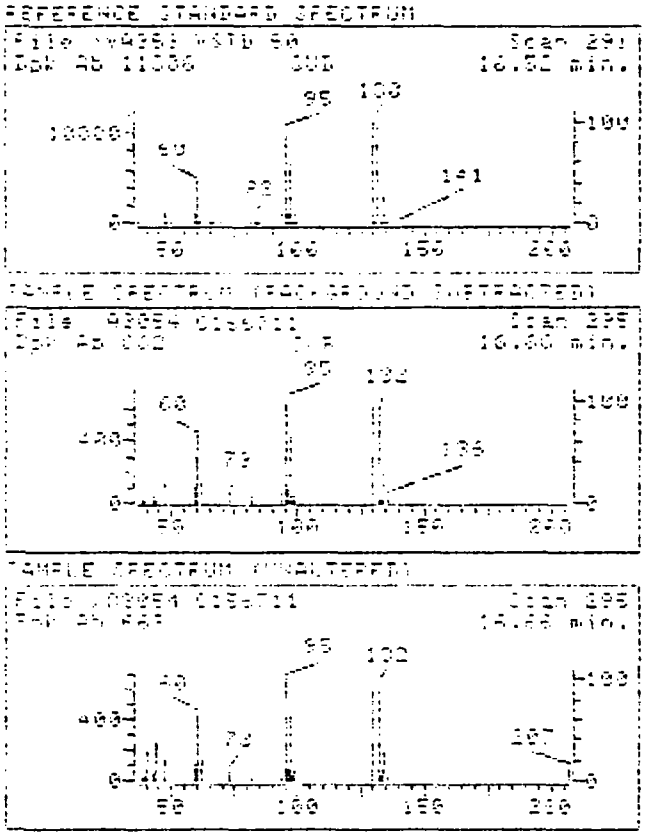
SKS

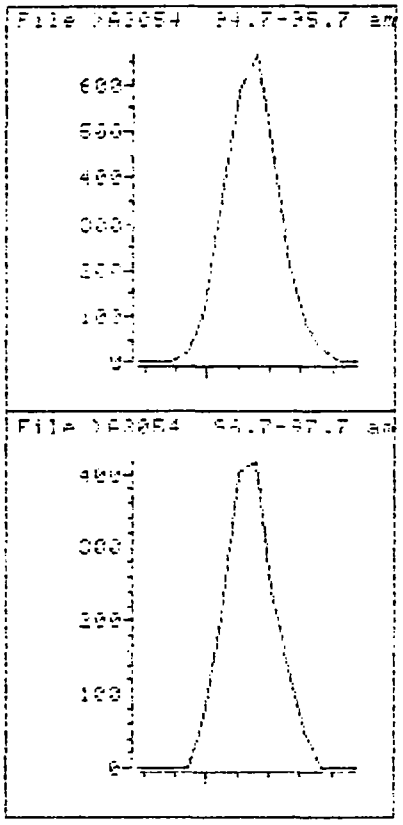
See next page



20) 2-Butanone RT:12.28 Area: 4163 23.23 UG/KG

SS





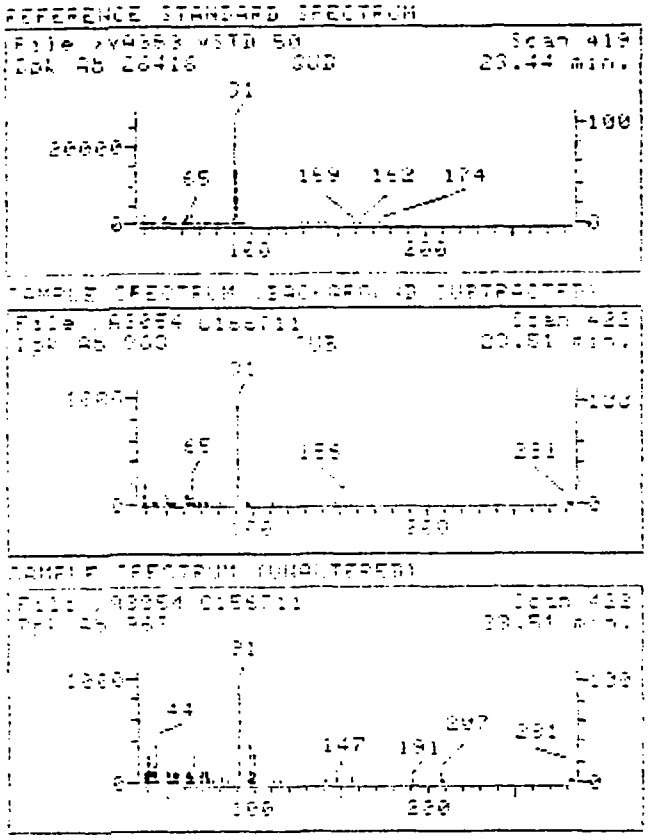
Data File: >A3054::E2
Name: C156711
Misc: FG SAMPLE - HPE/EM
Quant Time: 940519 19:18
Injected at: 940519 18:40

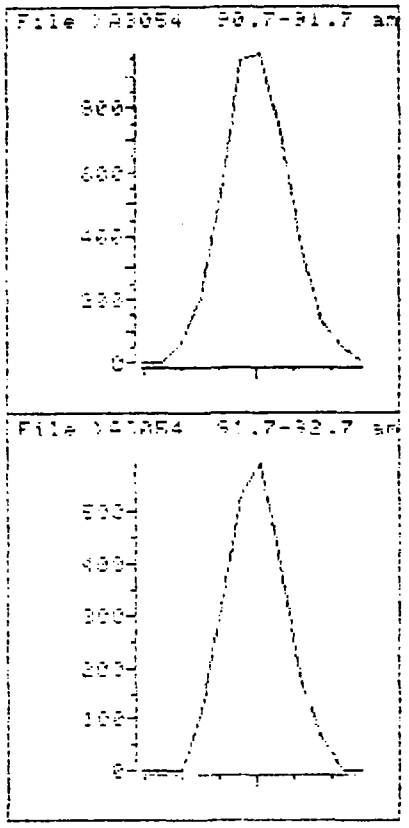
Quant Output File: ^A3054::SS

Quant ID File: IDSVOA::D5
Last Calibration: 940519 10:41

Compound No: 28
Compound Name: Trichloroethene
Scan Number: 295
Retention Time: 16.66 min.
Quant Ion: 95.0
Area: 8166
Concentration: 9.02 UG/KG
q-value: 97

✓
SS





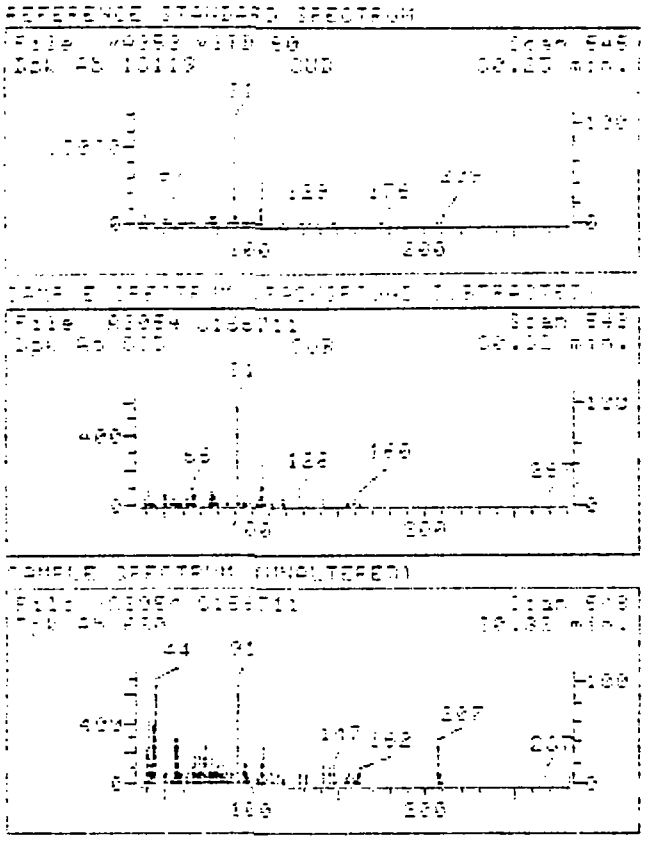
Data File: >A3054::E2
Name: [illegible]
Misc: [illegible]
Quant Time: [illegible]
[illegible]

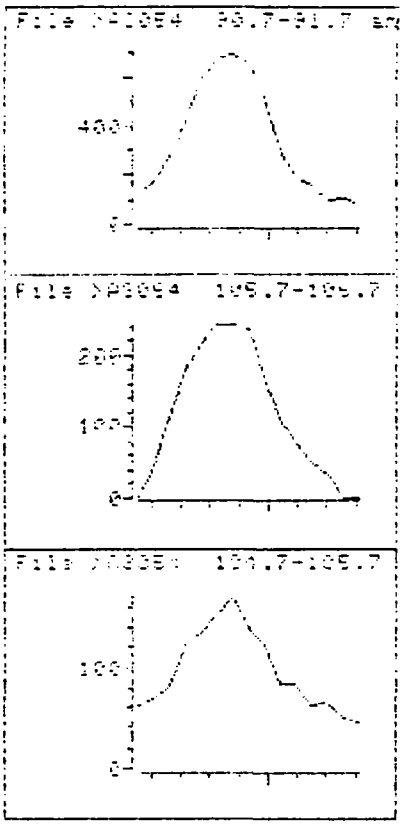
Quant Output File: [illegible]

Quant ID File: [illegible]
Last Calibration: [illegible]

Compound No: 41
Compound Name: Toluene
Scan Number: 422
Retention Time: 23.51 min.
Quant Ion: 92.0
Area: 7083
Concentration: 7.33 [illegible]
q-value: 98

✓
SD





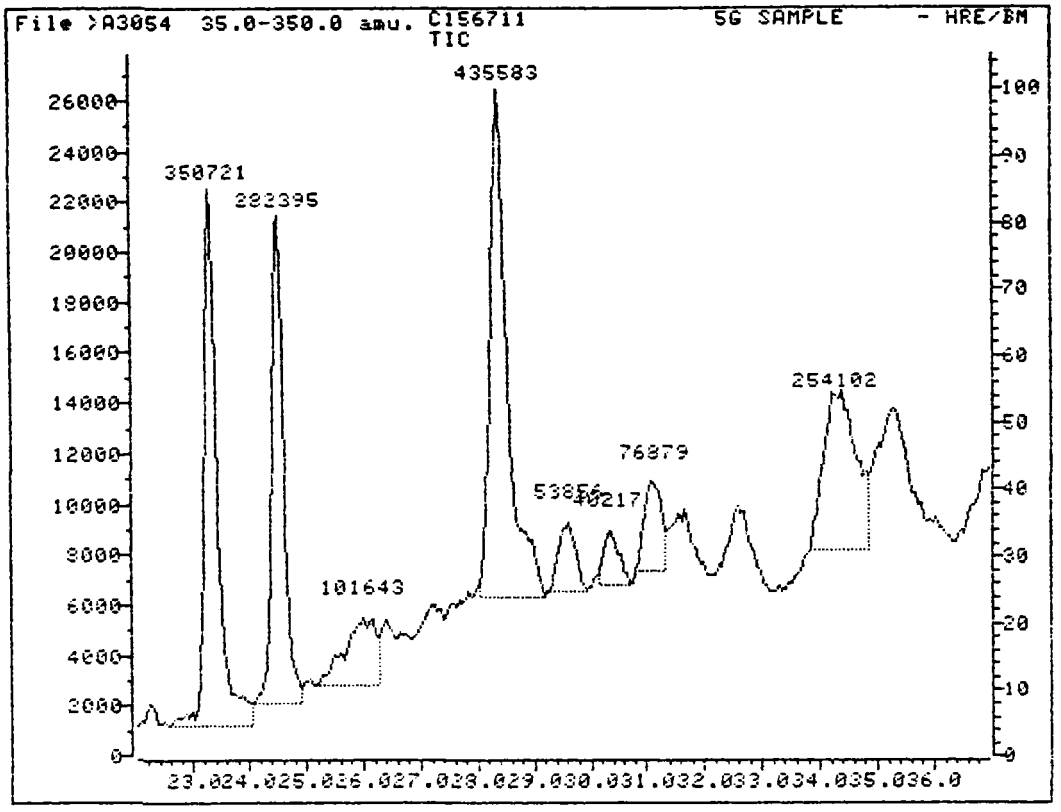
Data File: >A3054::E2
Name: [illegible]
Misc: 5G SAMPLE - PPE/HM
Quant Time: 940519 19:18
Injected at: 940519 18:40

Quant Output File: ^A3054::SS

Quant ID File: IDSUOA::D5
Last Calibration: 940519 10:41

Compound No: 46
Compound Name: Total Xylenes
Scan Number: 548
Retention Time: 30.32 min.
Quant Ion: 106.0
Area: 5579
Concentration: ~~[illegible]~~ 12.62 UG/KG
q-value: 89

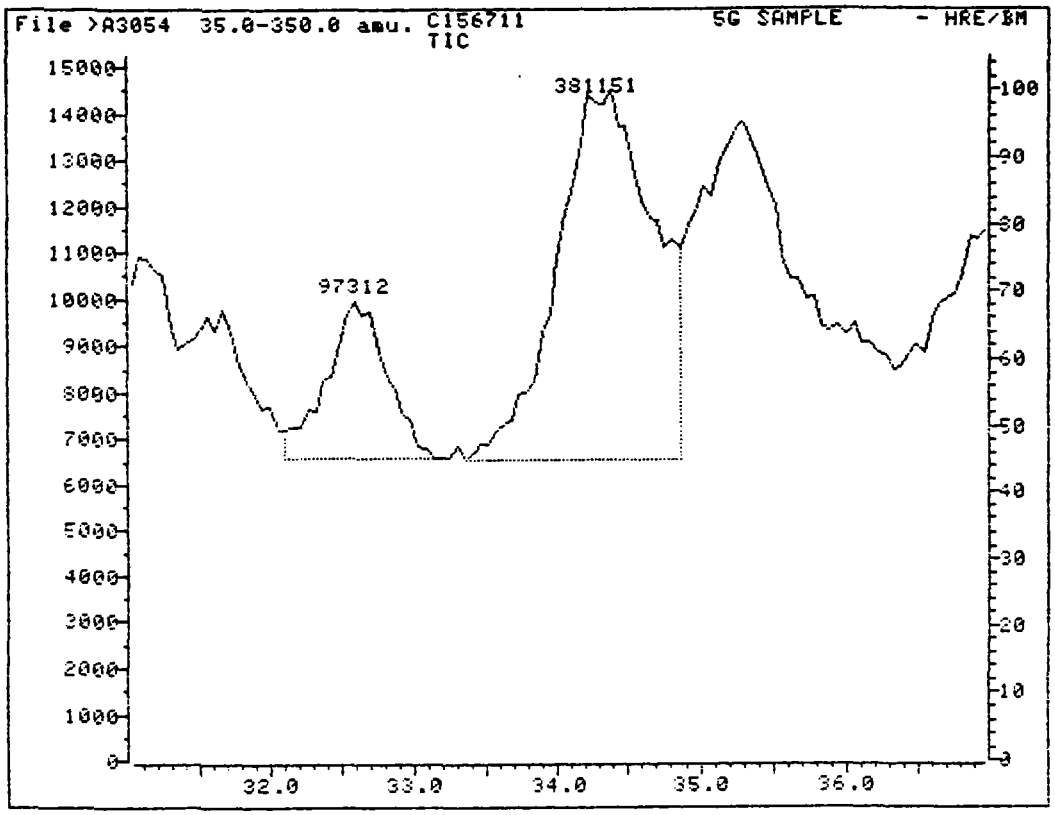
000330



>A3054 C156711 5G SAMPLE - HRE/BM
35.0: 350.0 TIC
Upslope: .20 Area Reject: 5.00 % Max Peaks: 8 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	23.30	405	418	432	21323	460372	350721	80.52	21.983
2	24.54	433	441	448	19341	385497	282395	64.83	17.701
3	26.00	453	458	473	2701	286053	101643	23.33	6.371
4	28.38	506	512	527	20161	865087	~~435583~~	100.00	27.302
5	29.62	529	535	541	2737	310742	~~53856~~	12.36	3.376
6	30.32	545	548	555	2233	260802	~~40217~~	9.23	2.521
7	31.13	557	563	567	3457	317161	76879	17.65	4.819
8	34.27	613	621	632	6059	759819	~~254102~~	58.34	15.927

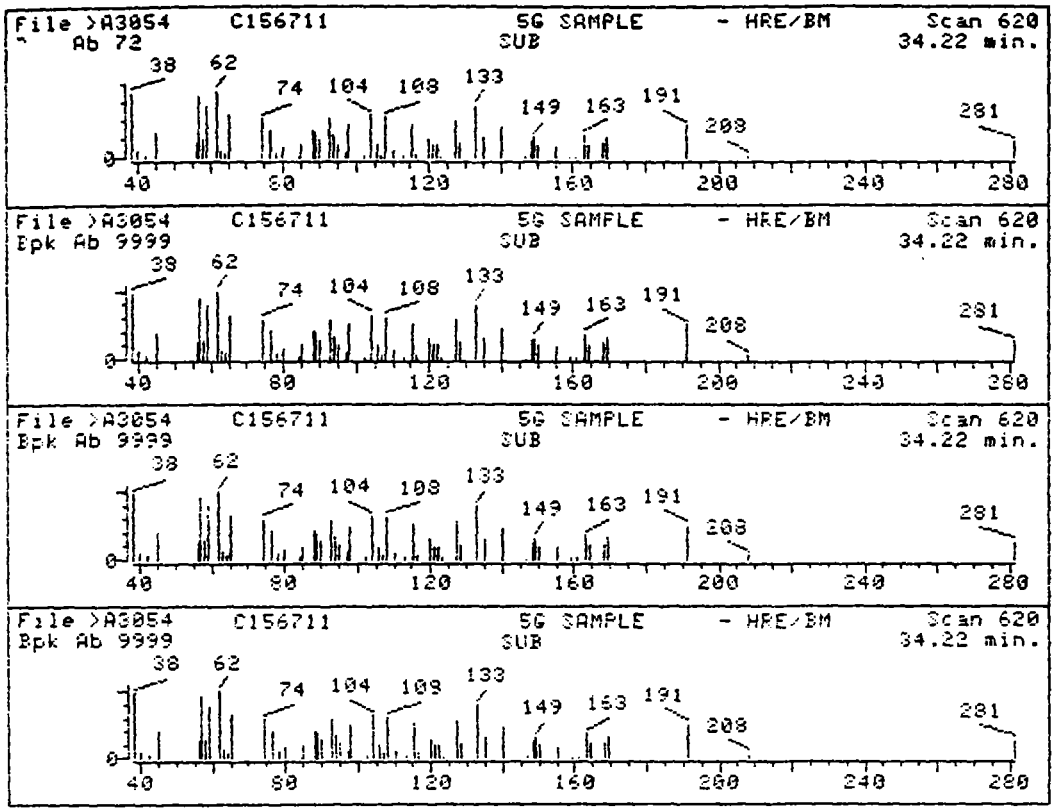
Sum of corrected areas: 1595396.



>A3054 C156711 5G SAMPLE - HRE/BM
35.0: 350.0 TIC
DR Upslope: .20 Area Reject: 5.00 % Max Peaks: 2 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	32.59	581	590	601	3392	523153	97312	25.53	20.338
2	34.27	604	621	632	7724	975078	381151	100.00	79.662

Sum of corrected areas: 478463.



Sample file: >A3054 Spectrum #: 620

No data base entries were retrieved.

$$\text{OVC} = \frac{381151}{282395} \times \frac{250}{(5)(1)} = 67.5 \text{ ug/kg}$$

QUANT REPORT

Operator ID: USERB Quant Rev: 6 Quant Time: 940524 12:56
Output File: 0A4073::D2 Injected at: 940524 12:12
Data File: 0A4073::E4 Dilution Factor: 1.00000
Name: [illegible]
Misc: 5G SAMPLE - [illegible]

OK
MX
Proven

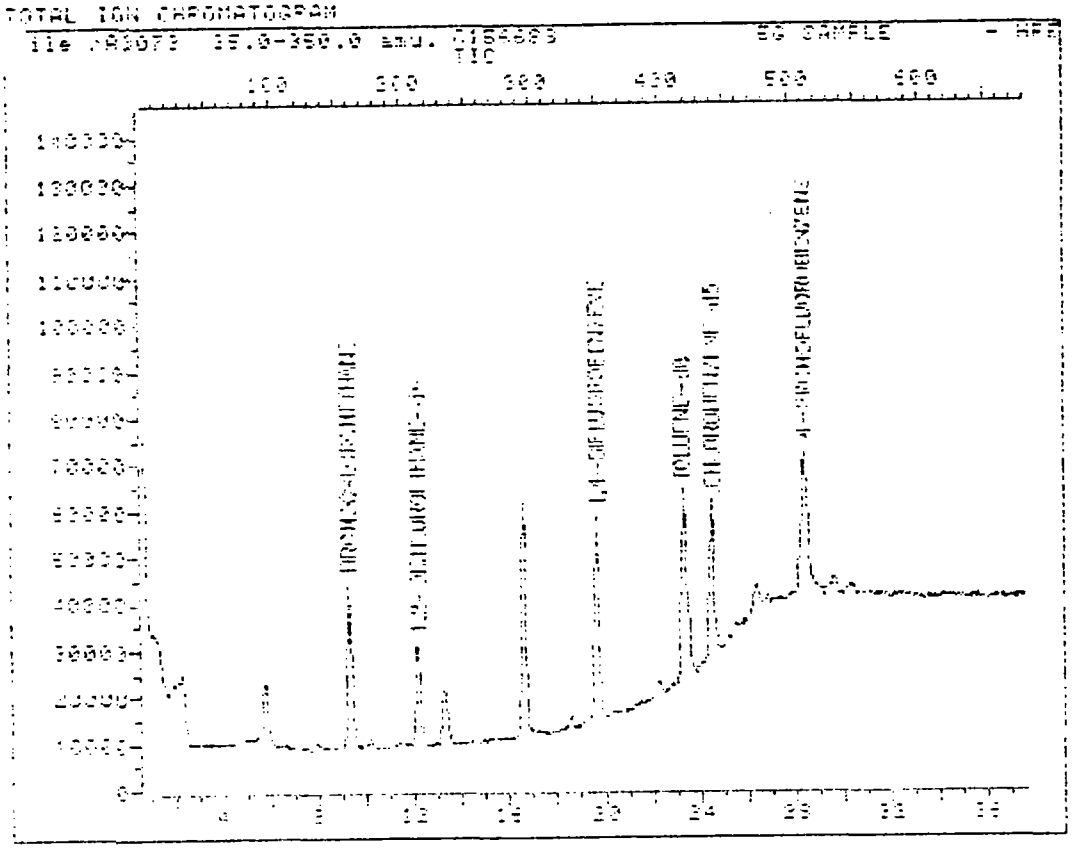
HPO 5/25/94

ID File: [illegible]
Title: QUANTITATION FILE FOR VOLATILE SOILS GC/MSD-A
Last Calibration: 940524 11:50

	Compound	R.T.	Q ion	Area	Conc	Units	q
[illegible]	*[illegible]	9.32	128.0	59393	50.00	UG/KG	100
[illegible]	Methylene Chloride	5.75	84.0	32874	24.72	UG/KG	100
[illegible]	Acetone	6.67	43.0	8723	25.59	UG/KG	[illegible]
[illegible]	Tetrahydrofuran	10.18	42.0	6760	17.37	UG/KG	93
[illegible]	1,2-DICHLOROETHANE-d4	12.18	65.0	99378	45.86	UG/KG	99
[illegible]	*1,4-DIFLUOROBENZENE	19.69	114.0	210314	50.00	UG/KG	93
[illegible]	1,1,1-Trichloroethane	13.42	97.0	18064	6.02	UG/KG	98
[illegible]	Trichloroethene	16.61	95.0	105974	58.87	UG/KG	97
[illegible]	*CHLOROBENZENE-d5	24.50	117.0	129439	50.00	UG/KG	92
	Tetrachloroethene	22.73	164.0	6231	5.55	UG/KG	90
[illegible]	TOLUENE-d8	23.26	98.0	177968	64.79	UG/KG	98
[illegible]	Toluene	23.48	92.0	35980	18.64	UG/KG	98
[illegible]	Ethyl Benzene	26.34	106.0	5099	4.34	UG/KG	99
[illegible]	4-BROMOFLUOROBENZENE	28.34	95.0	86695	41.41	UG/KG	100
[illegible]	Total Xylenes	29.59	106.0	11394M	8.75	UG/KG	[illegible]

* Compound is [illegible]

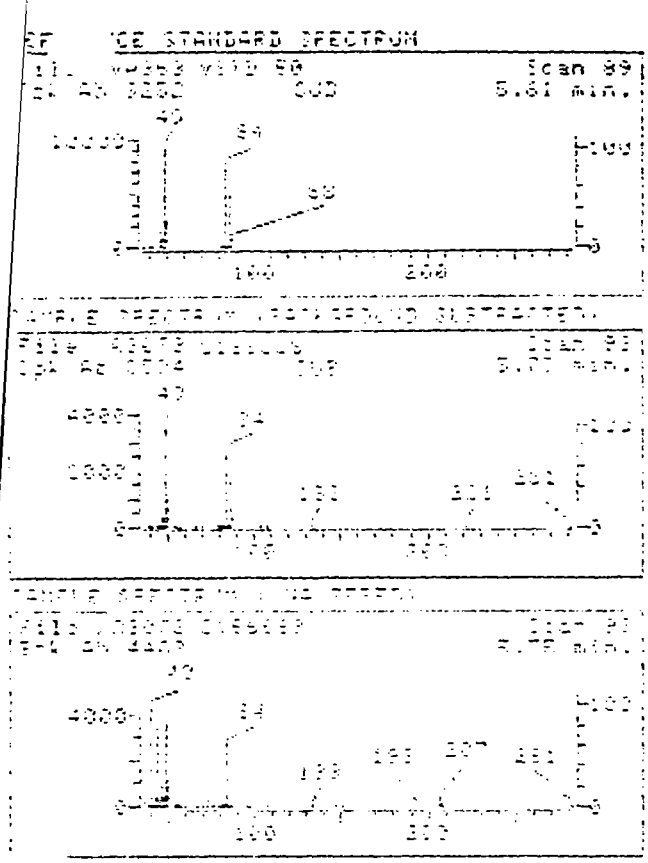
TOTAL ION CHROMATOGRAM

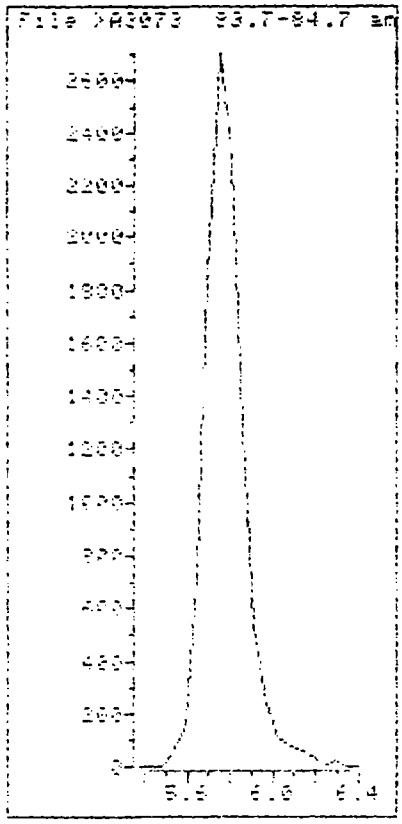


Data File: >A3073::S4 Quant Output File: ^A3073::SS
Name: C156689
Misc: EG SAMPLE - HPE/BM

ID File: [illegible]
Title: QUANTITATION FILE FOR VOLATILE SOILS [illegible]
Last Calibration: 940524 11:50

Operator ID: USER8
Quant Time: 940524 12:56
Injected at: 940524 12:17





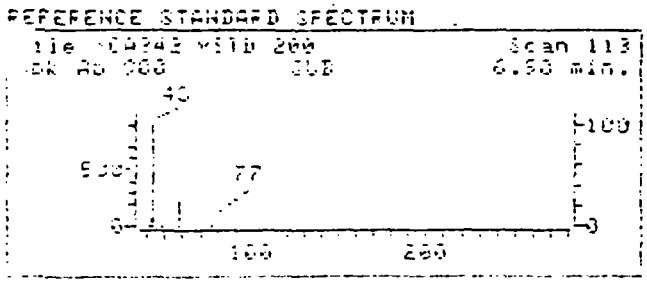
Data File: >A3073::S4 Quant Output File: ^A3073::S5
Name: C154-93
Mixer: 5% SAMPLE - HYE/AM
Quant Time: 940524 10:54 Quant ID File: 10SUMA::D5
Injected at: 940524 10:10 Last Calibration: 940524 11:50

Compound No: 7
Compound Name: Methylene Chloride
Scan Number: 93
Retention Time: 5.75 min.
Quant Ion: 84.0
Area: 32874
Concentration: 23.20 UG/KG
q-value: 100

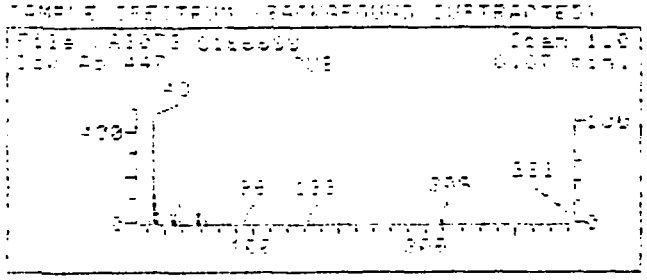
✓

HC 5/25/94.

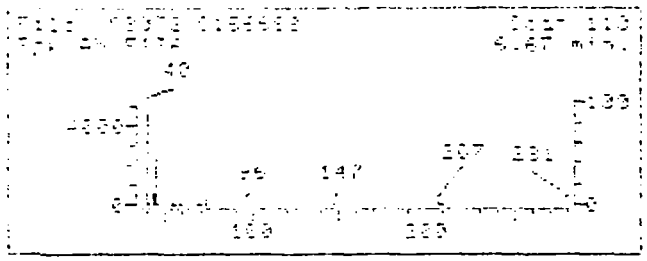
REFERENCE STANDARD SPECTRUM

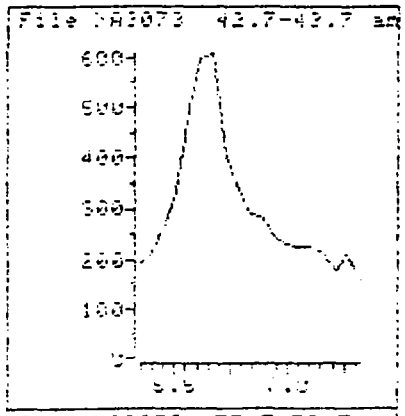


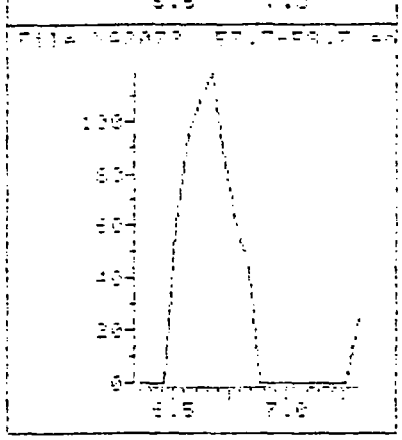
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







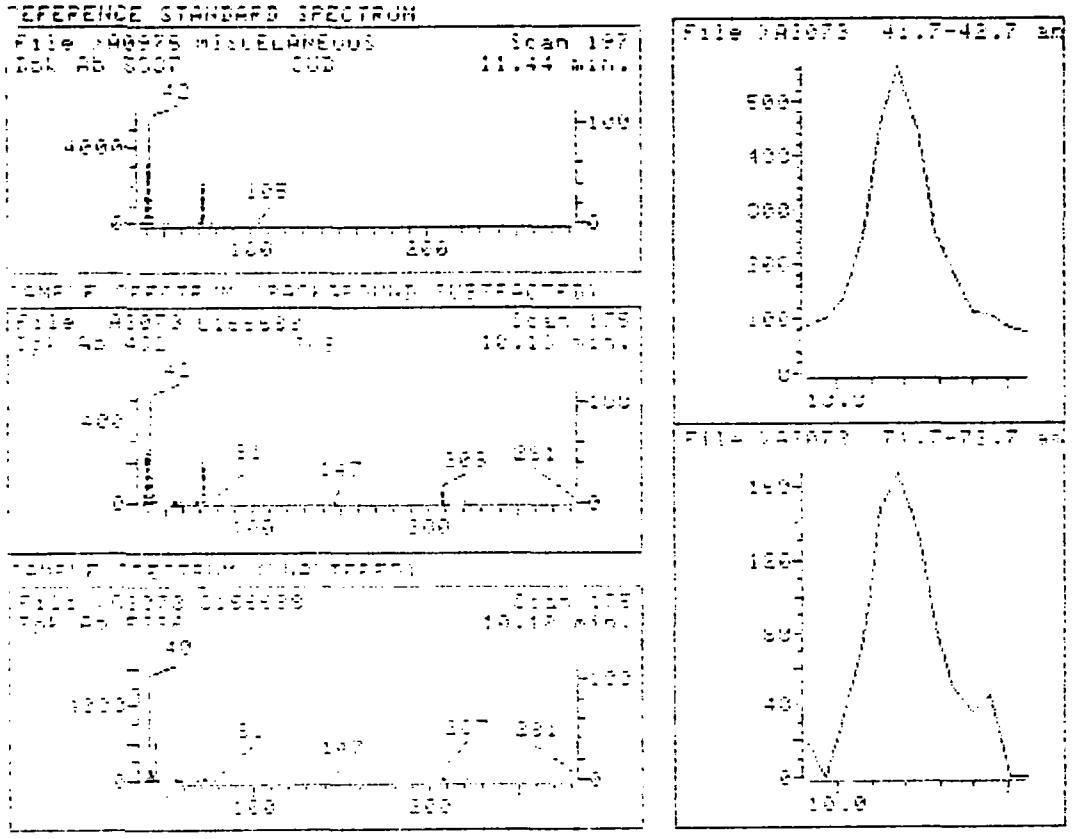
Data File: >A3073::E4
Name: [illegible]
Misc: FG SAMPLE - HRE/RM
Quant Time: 940524 12:46
Injected at: 940524 12:17

Quant Output File: ^A3073::SS

Quant IU File: [illegible]
Last Calibration: 940524 11:50

Compound No: 9
Compound Name: Acetone
Scan Number: 110
Retention Time: 6.67 min.
Quant Ion: 43.0
Area: 8723
Concentration: 25.59 UG/KG
q-value: 80

fcc 5/25/94



Data File: [illegible]
Name: [illegible]
Misc: [illegible]
Quant Time: [illegible]
Injection at: [illegible]

Quant Output File: [illegible]

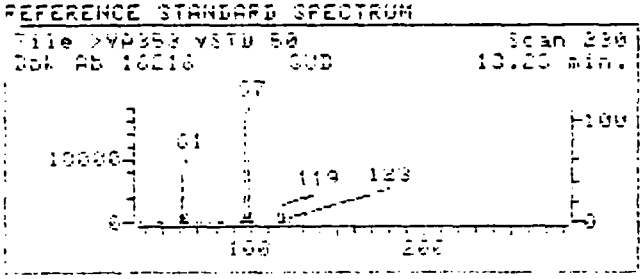
Quant ID File: [illegible]
Last Calibration: [illegible]

Compound No: 19
Compound Name: Tetrahydrofuran
Scan Number: 1/8
Retention Time: 10.18 min.
Quant Ion: 42.0
Area: 6760
Concentration: 17.37 UG/KG
q-value: 83

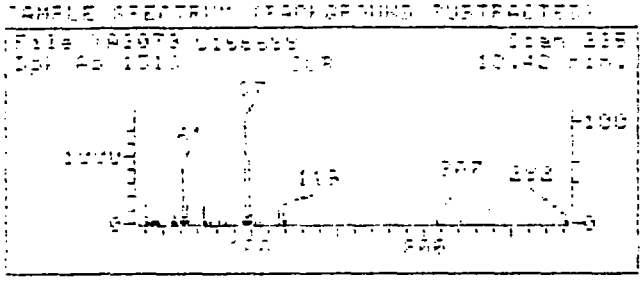
[illegible] 5/25/94.

000038

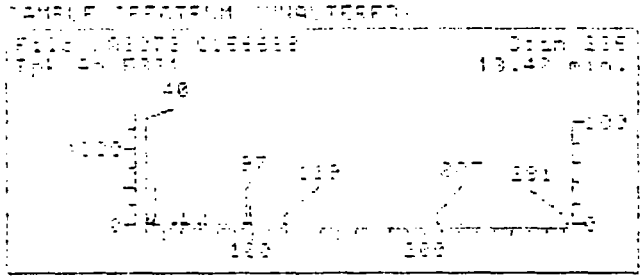
REFERENCE STANDARD SPECTRUM

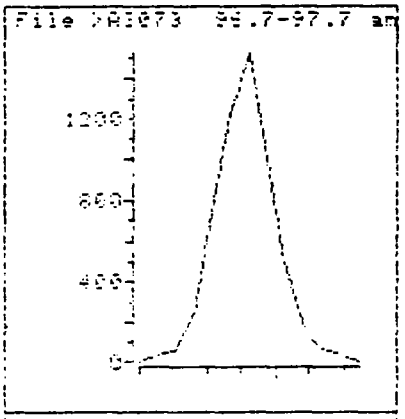


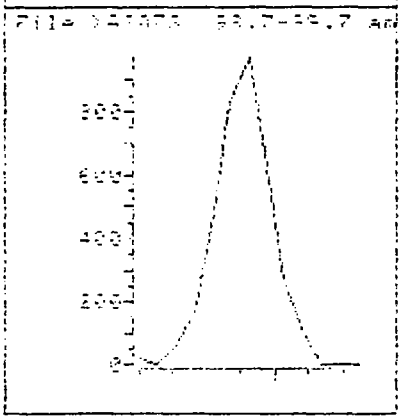
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





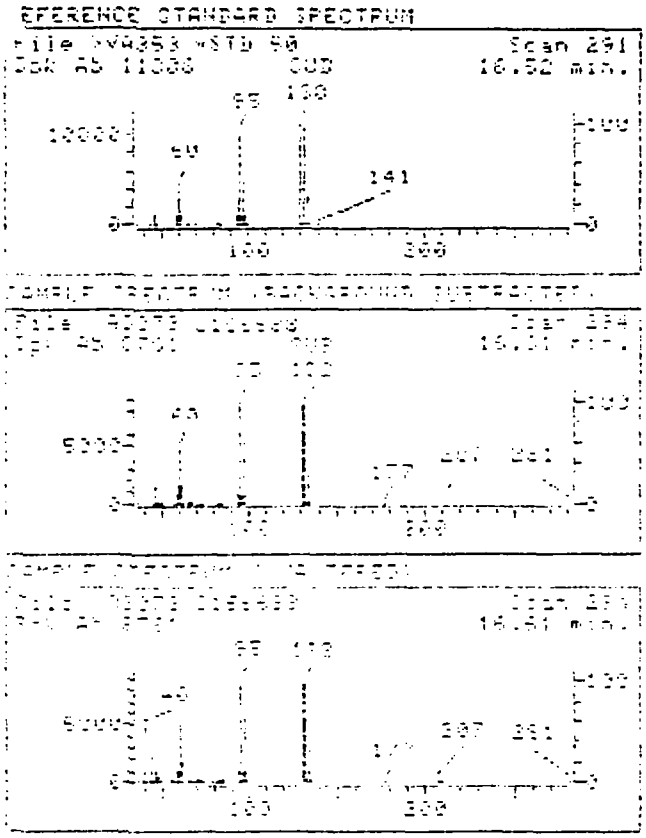


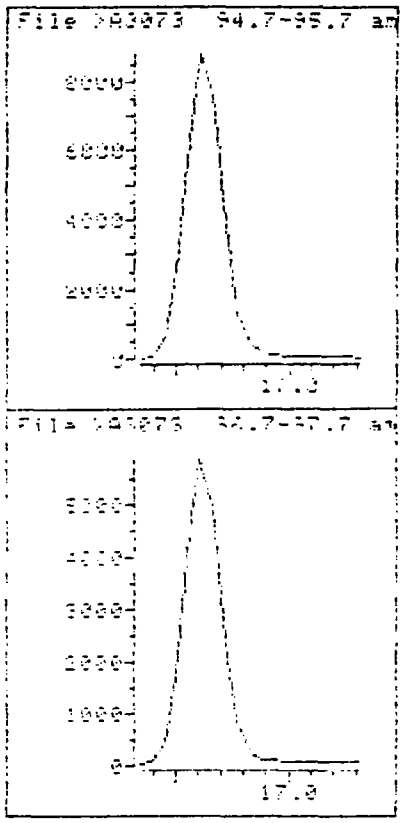
Data File: >A3073::F4 Quant Output File: ^A3073::SS
Name: C156688
Misc: 5G SAMPLE - PHE/BM
Quant Time: 940524 12:56 Quant ID File: IURUUA::05
Injected at: 940524 12:17 Last Calibration: 940524 11:50

Compound No: 22
Compound Name: 1,1,1-Trichloroethane
Scan Number: 235
Retention Time: 13.42 min.
Quant Ion: 97.0
Area: 18064
Concentration: 6.02 UG/KG
q-value: 98

HQ 5/25/94.

000333





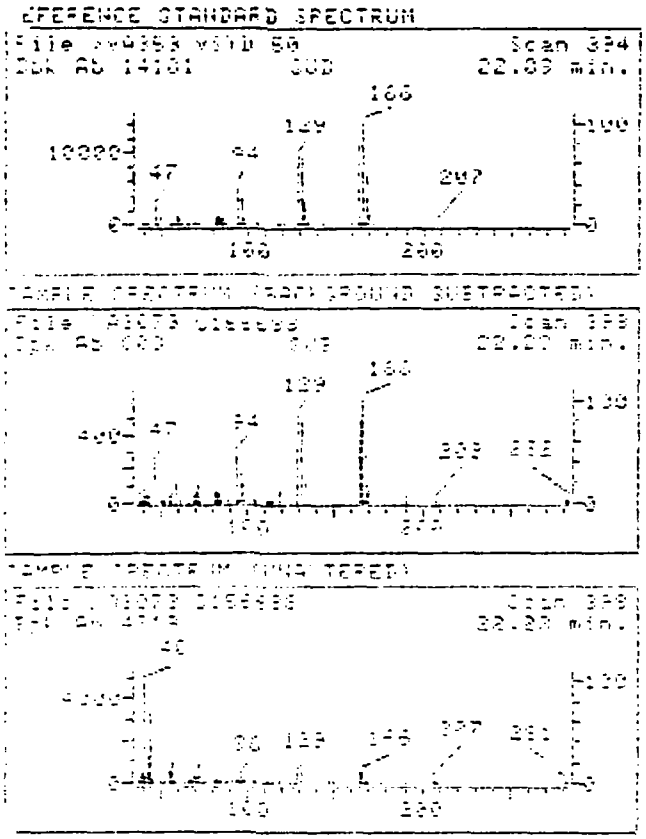
Data File: >A3073::E4
Name: C156489
Misc: 5G SAMPLE - HHE.BM
Quant Time: 940524 12:56
Injected at: 940524 12:17

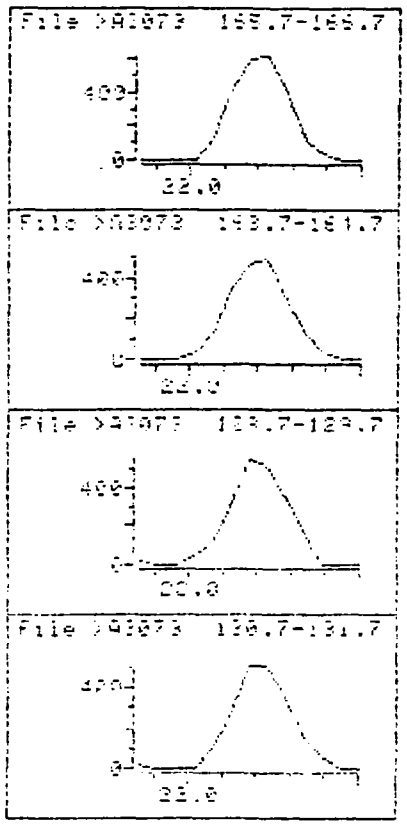
Quant Output File: ^A3073::SS

Quant IO File: 1OSVOA::U5
Last Calibration: 940524 11:50

Compound No: 49
Compound Name: Trichloroethene
Scan Number: 294
Retention Time: 16.61 min.
Quant Ion: 95.0
Area: 105974
Concentration: 59.87 UG/KG
q-value: 97

HK 5/25/94.



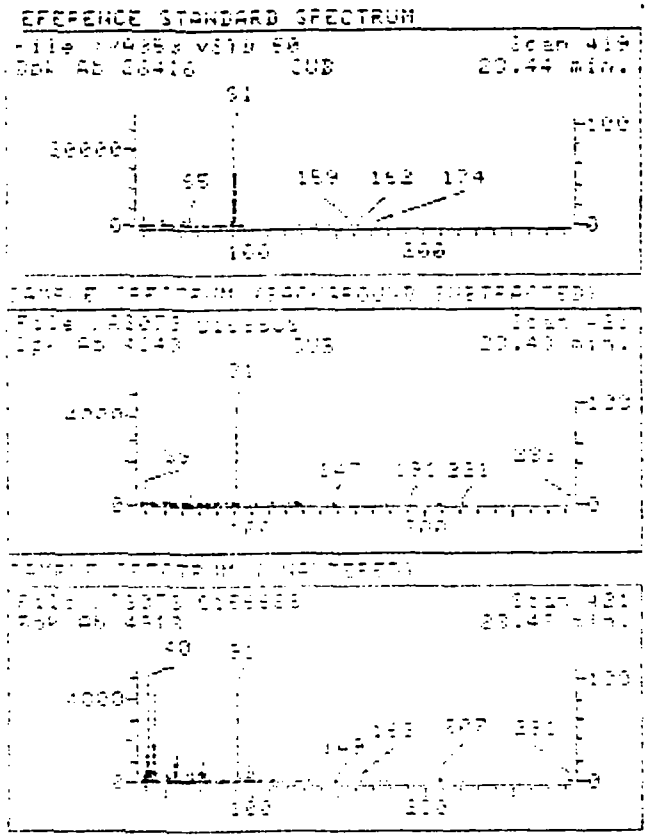


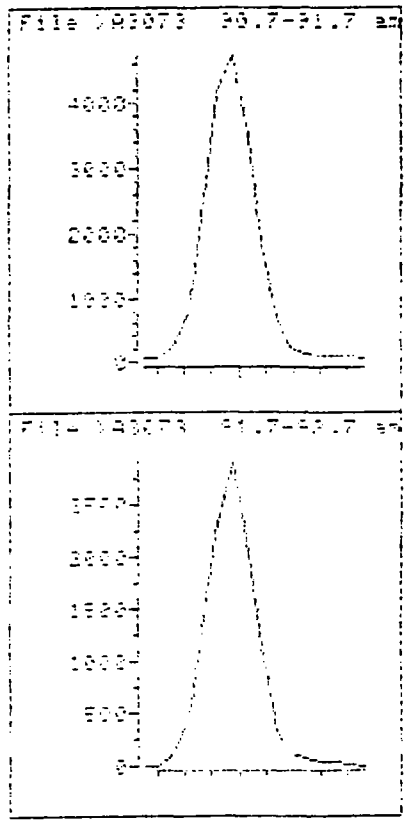
Data File: >A3073::54
Name: C156689
Misc: FG SAMPLE - HPE/BM
Quant Time: 940524 11:54
Injected at: 940524 11:17

Quant Output File: ^A3073::55
Quant IS File: 105UDA::05
Last Calibration: 940524 11:50

Compound No: 39
Compound Name: Tetrachloroethene
Scan Number: 398
Retention Time: 22.23 min.
Quant Ion: 164.0
Area: 6231
Concentration: 5.55 UG/KG
q-value: 90

HE 5/25/94.





Data File: 1A3073::E4
Name: C1F6698
Misc: 5G SAMPLE - PPE/PM
Quant Time: 940594 12:56
Injected at: 940594 12:17

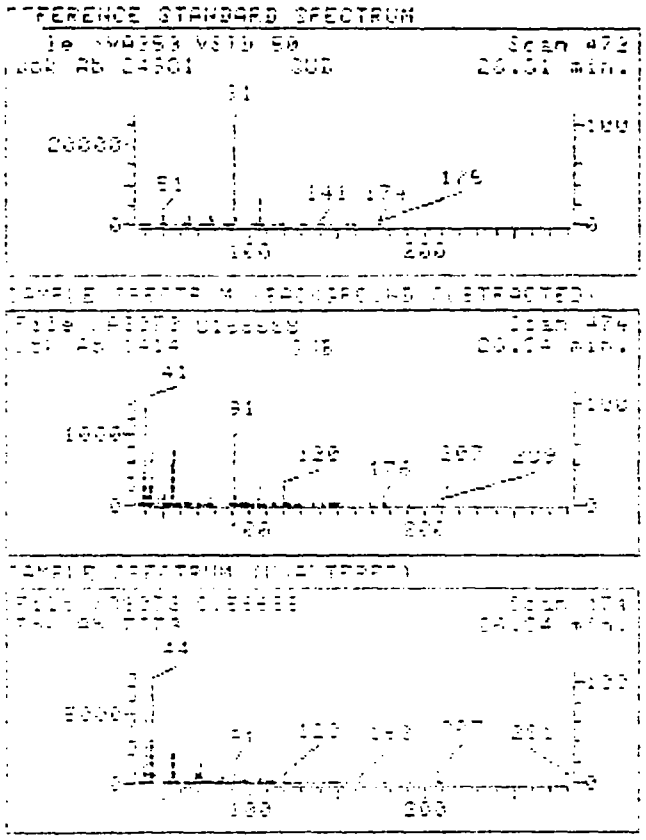
Quant Output File: 1A3073::HS

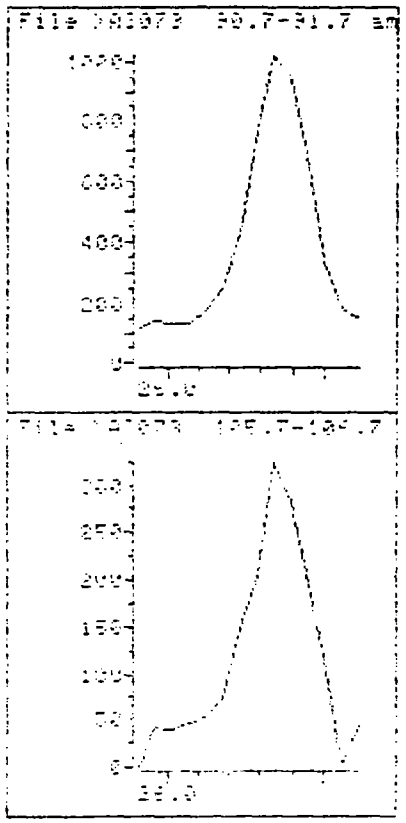
Quant ID File: 1MSMCA::LA
Last Calibration: 940594 11:50

Compound No: 41
Compound Name: Toluene
Scan Number: 421
Retention Time: 23.48 min.
Quant Ion: 92.0
Area: 35980
Concentration: 18.64 UG/KG
q-value: 98

File 5/25/94.

~~See attached.~~





Data File: XA3073::E4
Name: [illegible]
Mean: 5G SAMPLE - [illegible]
Quant Time: [illegible]
Injected at: [illegible]

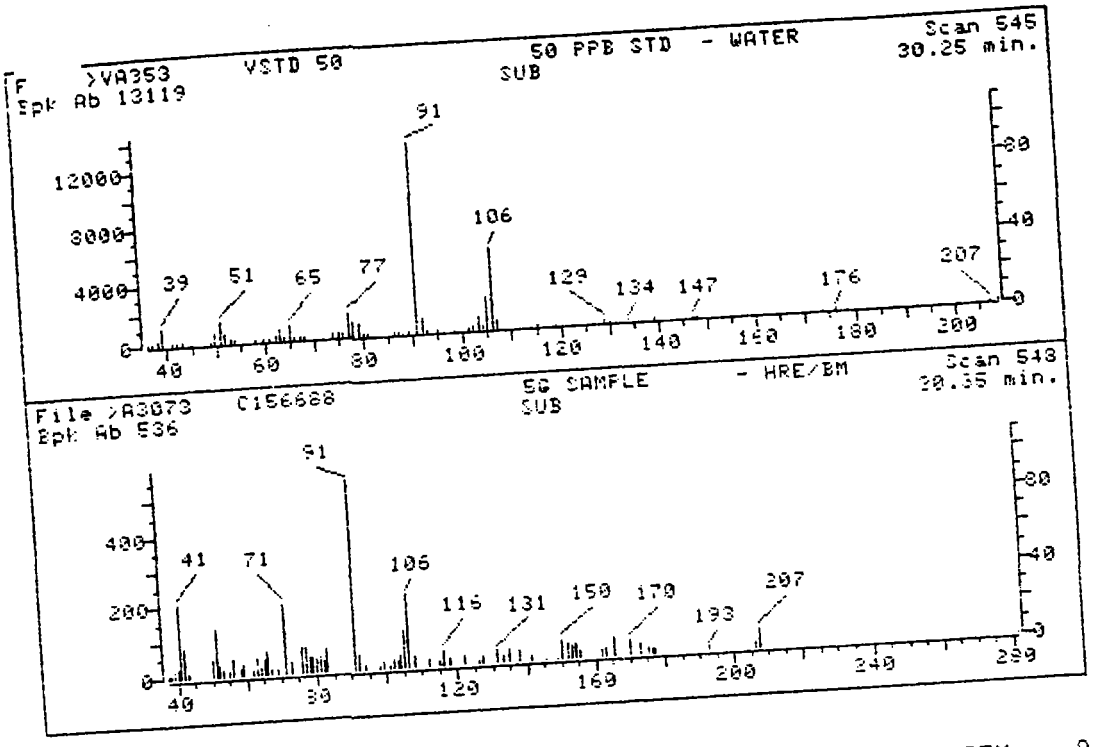
Quant Output File: XA3073::SS

Quant ID File: [illegible]
Last Calibration: [illegible]

Compound No: [illegible]
Compound Name: Ethyl Benzene
Spin Number: 474
Retention Time: 26.34 min.
Quant Ion: 106.0
Area: 5092
Concentration: 4.34 UG/KG
q-value: 99

HQ 5/25/94.

000343



46) Total Xylenes RT:29.59 Area: 11383M 8.75 UG/KG

JKS

QUANT REPORT

[illegible]

Misc: HI SAMPLE

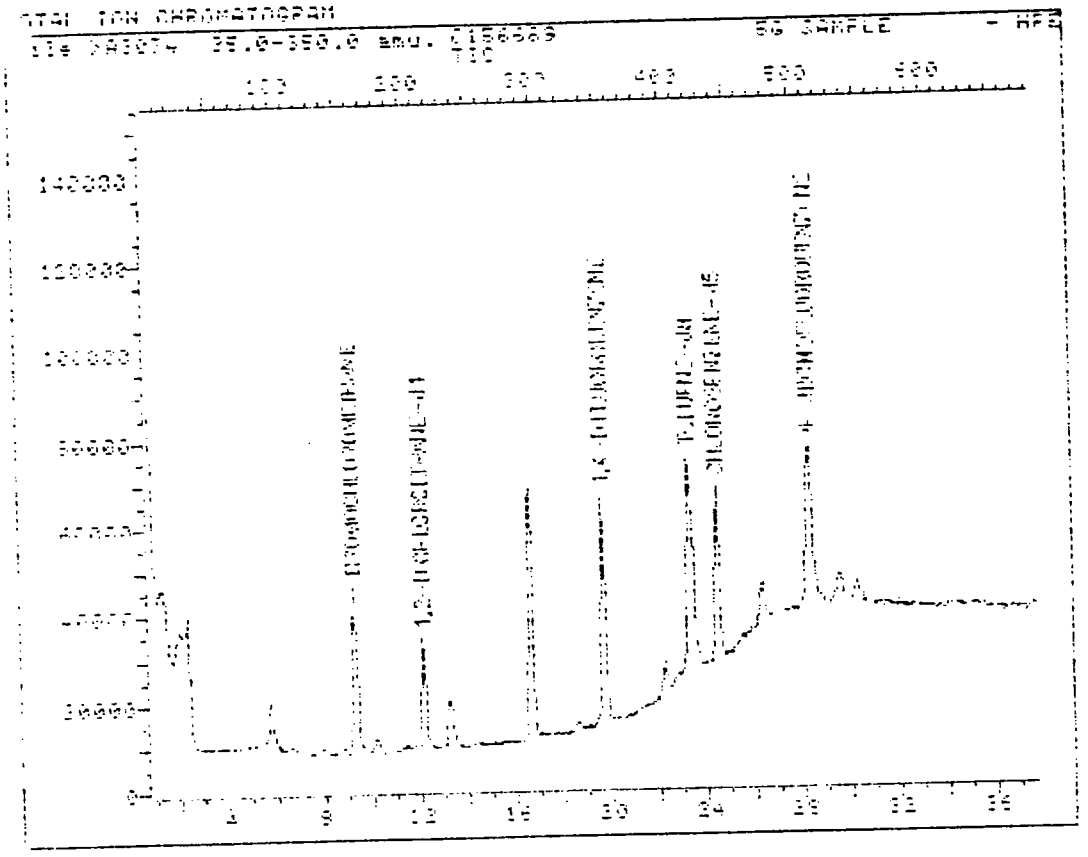
HO 5/?/94

MX Proven OK

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

24.78

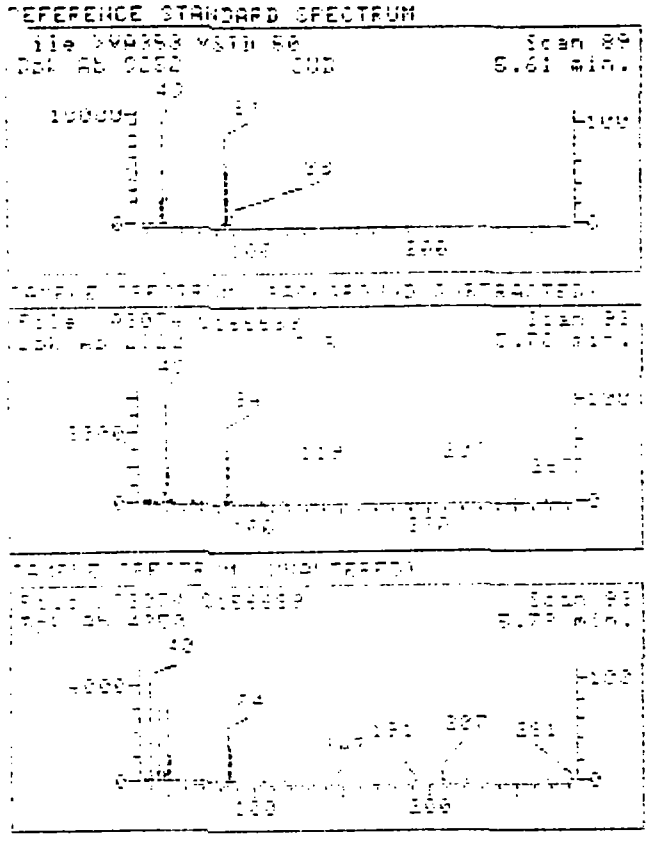
[illegible]

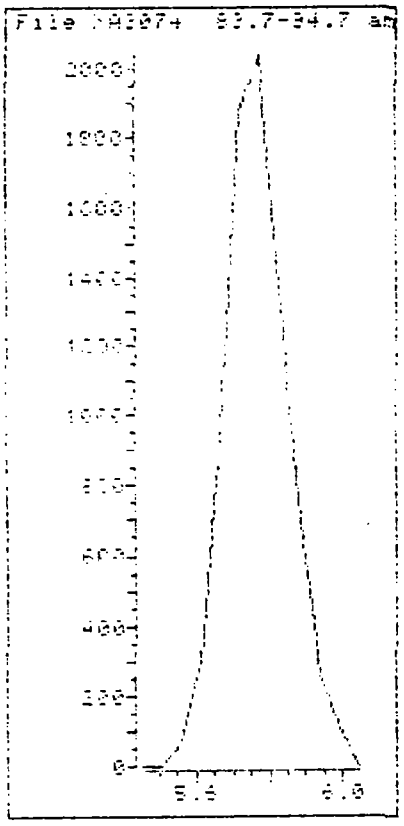


Data File: [illegible]A3074::E4 Quant Output File: [illegible]A3074::SS
Name: [illegible]
Misc: 5G SAMPLE - PRE/RM

Id File: [illegible]
Title: QUANTITATION FILE FOR VOLATILE SOILS [illegible]
Last Calibration: 940524 [illegible]

Operator ID: USER8
Quant Time: 940524 13:41
Injected at: 940524 13:02

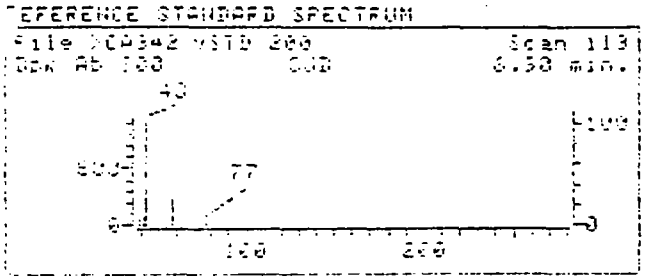


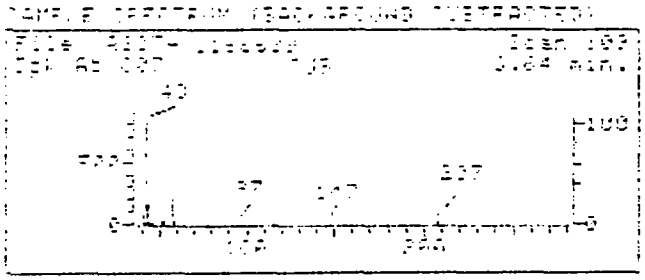


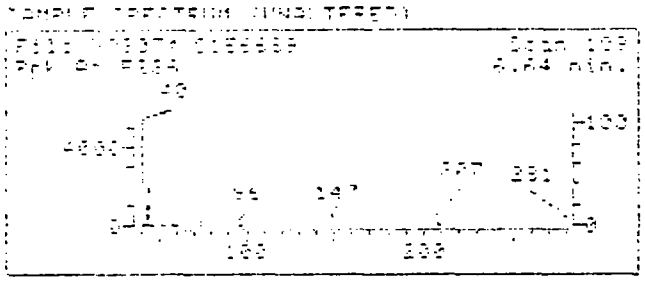
Data File: >A3074::E4 Quant Output File: ^A3074::SS
Name: C156489
Misc: 5G SAMPLE - HPE/BM
Quant Time: 9-[illegible]-94 13:41 Quant ID File: [illegible]::[illegible]
Injected at: [illegible] 13:[illegible] Last Calibration: 9[illegible] [illegible]

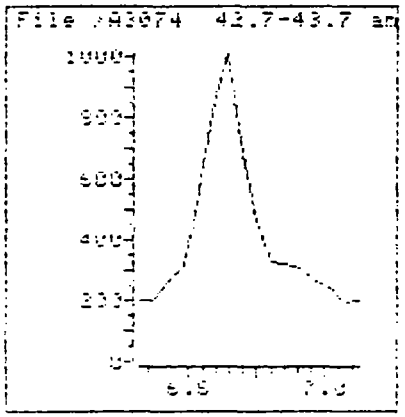
Compound No: [illegible]
Compound Name: Methylene Chloride
Scan Number: 93
Retention Time: 5.78 min.
Quant Ion: 84.0
Area: 24881
Concentration: 16.42 UG/KG
q-value: 100

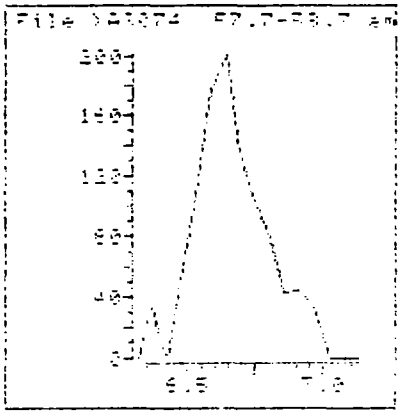
HR 5/25/94.











Data File: [illegible]::E4
Name: [illegible]
[illegible]: [illegible]
Quant Time: [illegible]
Injected at: [illegible]

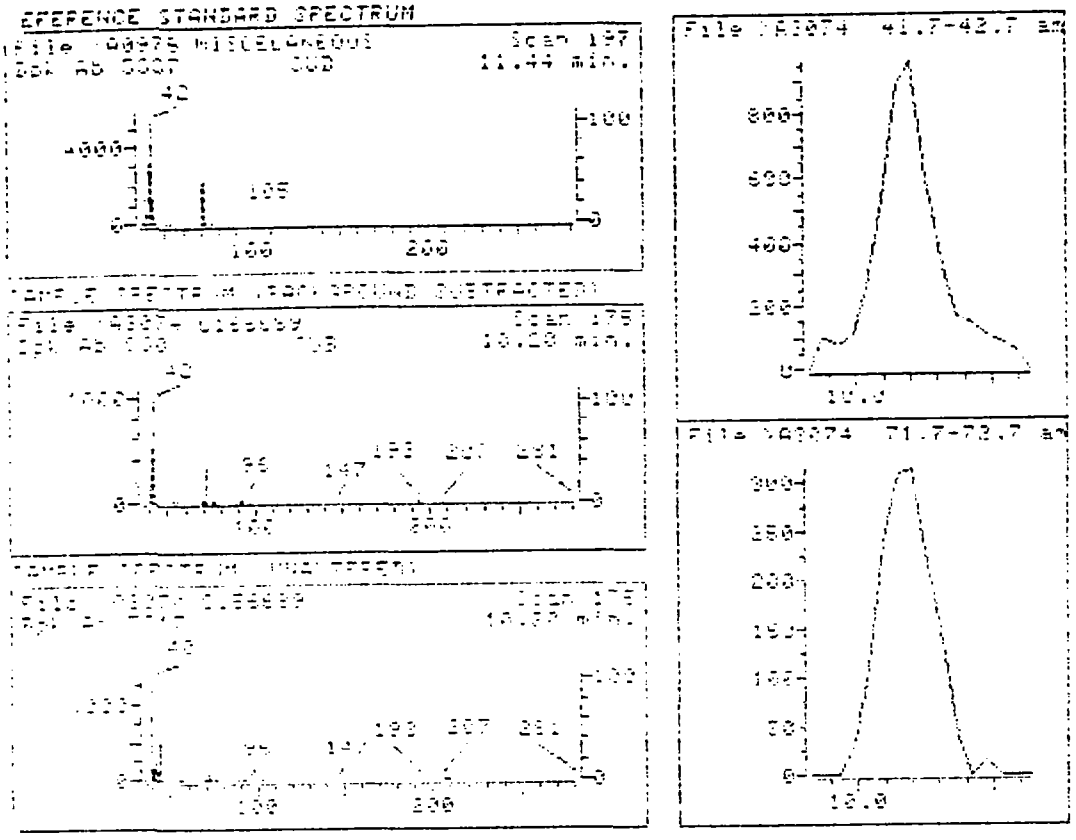
Quant Output File: [illegible]::SS

Quant ID File: [illegible]
Last Calibration: [illegible]

Compound No: 8
Compound Name: Acetone
Scan Number: 109
Retention Time: 6.64 min.
Quant Ion: 43.0
Area: 10178
Concentration: 22.90 UG/KG
q-value: 81

HK 5/25/94.

000348



Data File: A3074::E4
Name: C156689
Misc: [illegible] SAMPLE - HRE/YM
Quant Time: 940524 14:41
Injected at: 940524 14:00

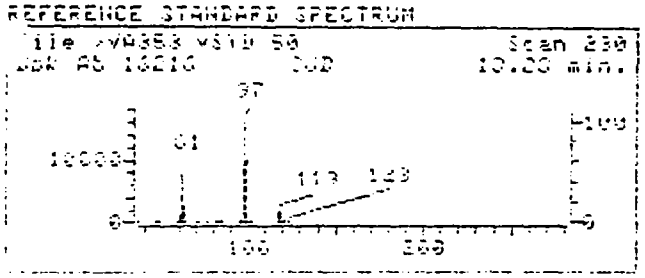
Quant Output File: A3074::SS

Quant [illegible] File: [illegible]
Last Calibration: 940524 11:[illegible]

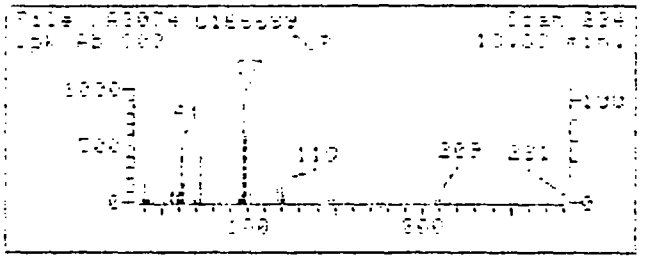
Compound No: 15
Compound Name: Tetrahydrofuran
Scan Number: 175
Retention Time: 10.20 min.
Quant Ion: 42.0
Area: 14554
Concentration: 34.94 UG/KG
q-value: 88

HE 5/25/94

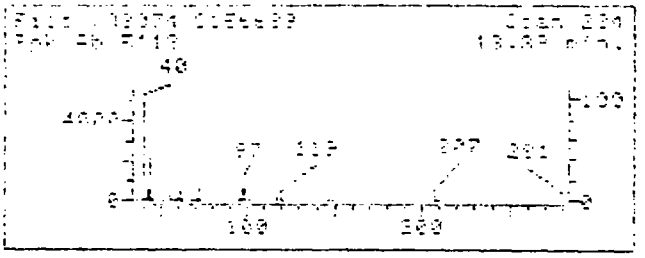
REFERENCE STANDARD SPECTRUM

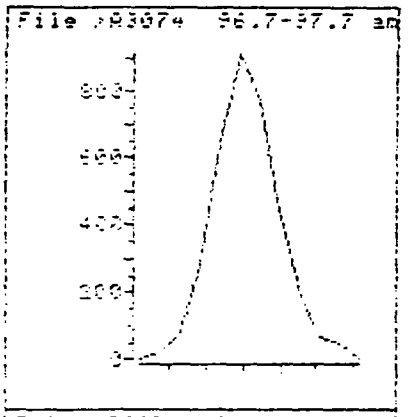


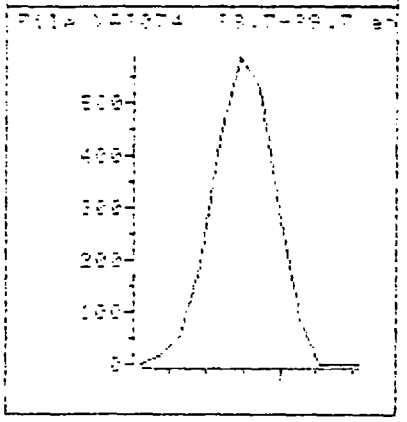
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (NON TERED)





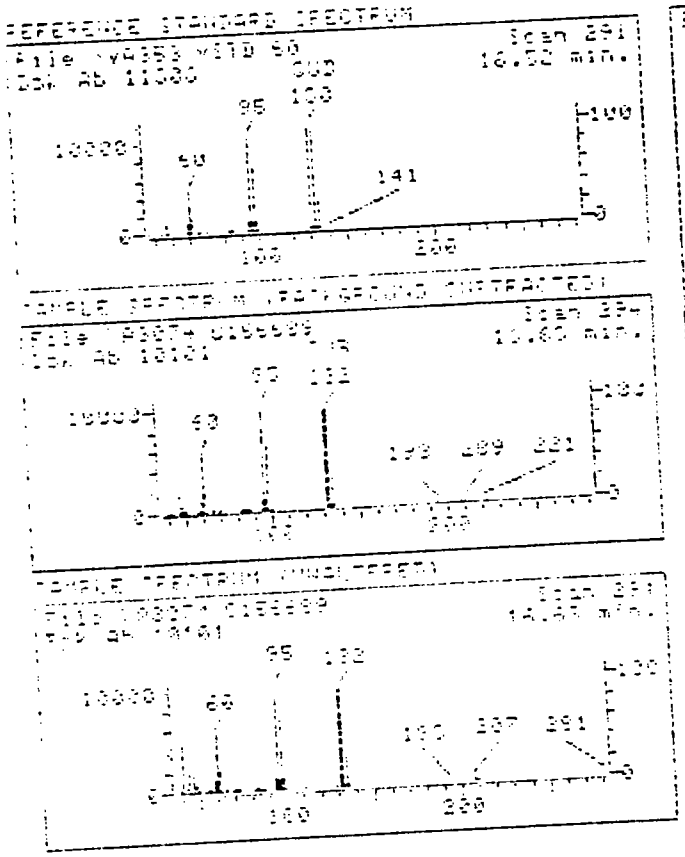


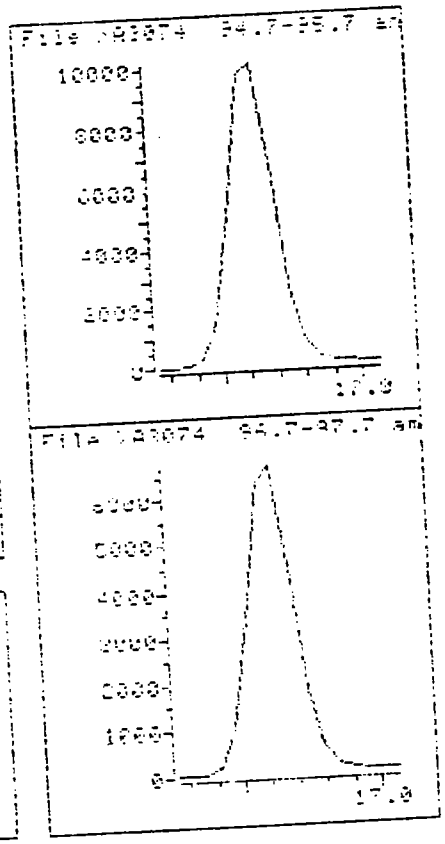
Data File: >A3074::E4
Name: U156689
Misc: 5G SAMPLE - HRE/HM
Quant Time: 940524 13:47
Injected at: 940524 13:[illegible]

Quant Output File: ^A3074::SS
Quant IS File: [illegible]
Last Calibration: 940524 11:[illegible]

Compound No: 22
Compound Name: 1,1,1-Trichloroethane
Scan Number: 234
Retention Time: 13.39 min.
Quant Ion: 97.0
Area: 11183
Concentration: 3.26 UG/KG
q-value: 99

HG 5/25/94.





Data File: A3074::E4
Name: [illegible]
Misc: [illegible] SAMPLE - [illegible]
Quant Time: 940524 13:41
Injected at: 940524 13:32

Quant Output File: ^A3074::SS

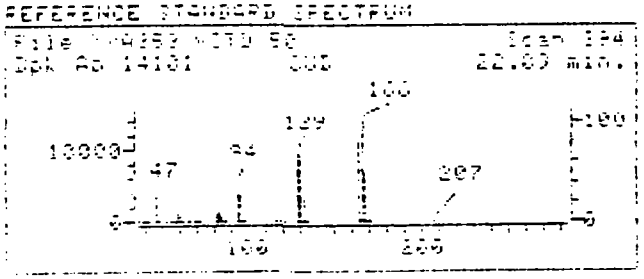
Quant [illegible] File: [illegible]
Last Calibration: 940524 11:50

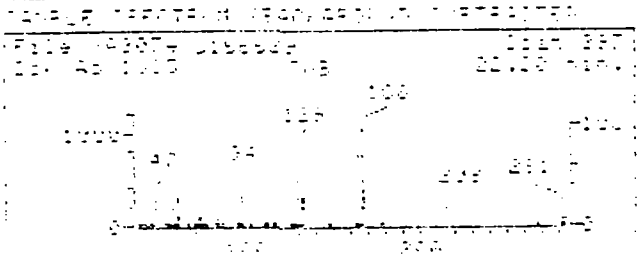
Compound No: 28
Compound Name: Trichloroethene
Scan Number: 294
Retention Time: 16.63 min.
Quant Ion: 95.0
Area: 124198
Concentration: 60.29 UG/KG
q-value: 98

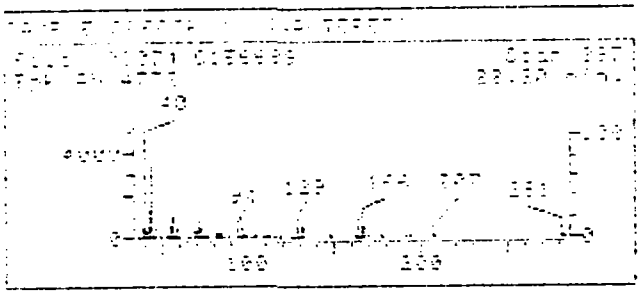
✓

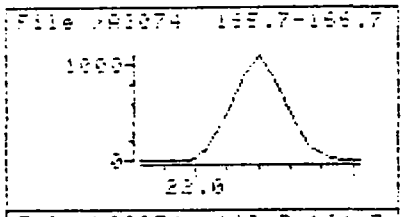
HG 5/25/94.

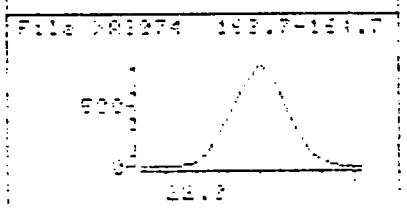
REFERENCE STANDARD SPECTRUM

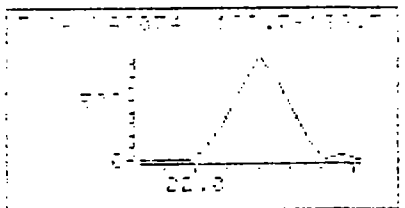


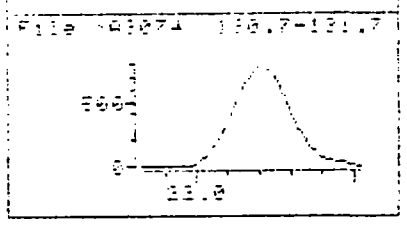












Data File: XA3074::E4
Name: C156699
Misc: 5% SAMPLE - PRELIM
Quant Time: 940524 17:41
Injected at: 940524 [illegible]

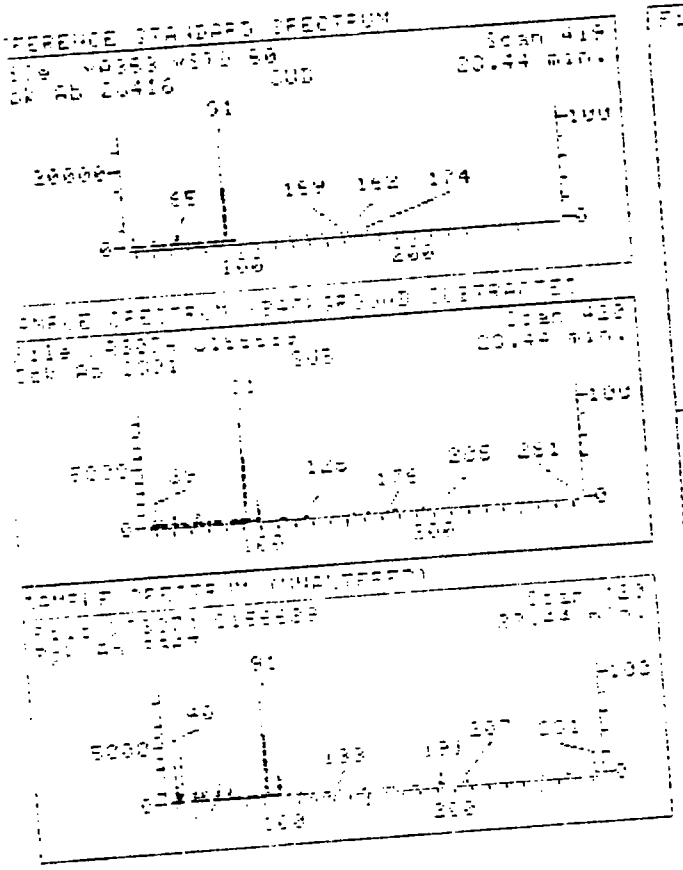
Quant Output File: XA3074::H5
Quant IO File: IUSMOA::C5
Last Calibration: 940524 11:40

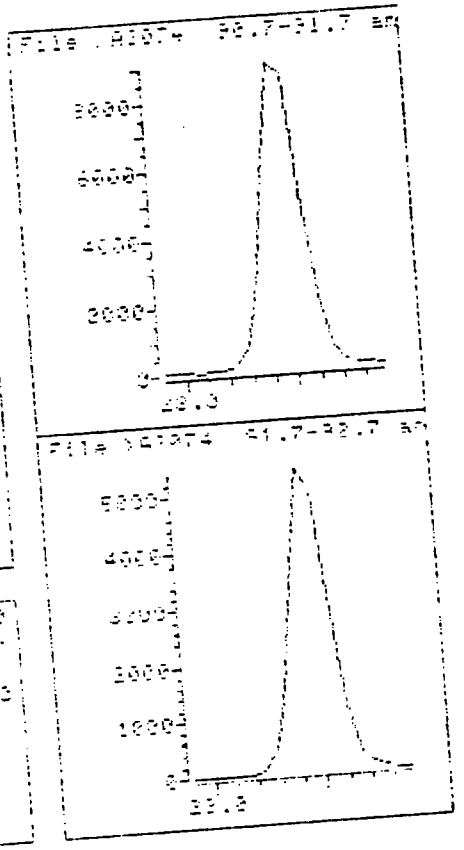
Compound No: 38
Compound Name: Tetrachloroethene
Scan Number: 397
Retention Time: 22.20 min.
Quant Ion: 164.0
Area: 10139
Concentration: 7.80 UG/KG
q-value: 98

✓

[illegible] 5/25/94.

000352





Quant Output File: ^A3074::SS

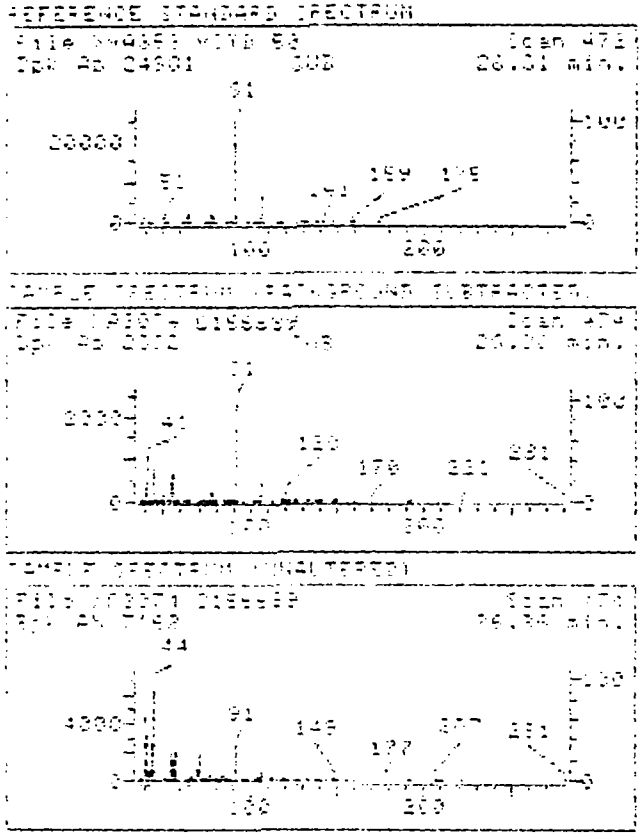
Data File: ^A3074::E4
Name: [illegible]
Misc: [illegible] SAMPLE - PRE HM
Quant Time: 940524 13:41
Injected at: 940524 [illegible]:02

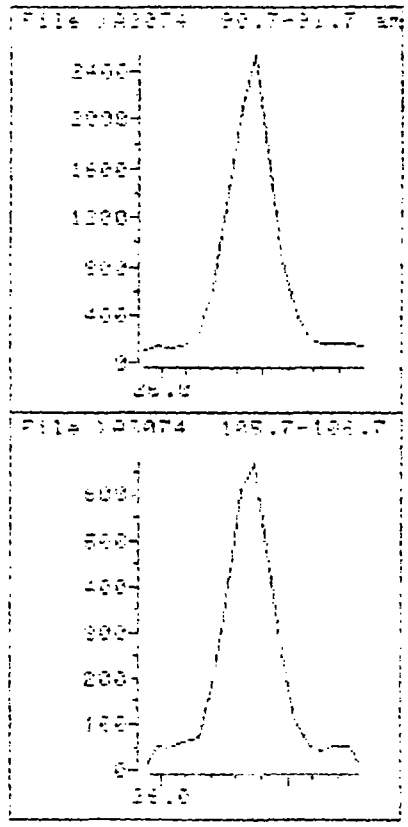
Quant ID File: [illegible]
Last Calibration: 940524 11:50

Compound No: 41
Compound Name: Toluene
Scan Number: 420
Retention Time: 23.44 min.
Quant Ion: 92.0
Area: 68288
Concentration: 30.60 UG/KG
q-value: 96

HQ 5/25/94.

000353





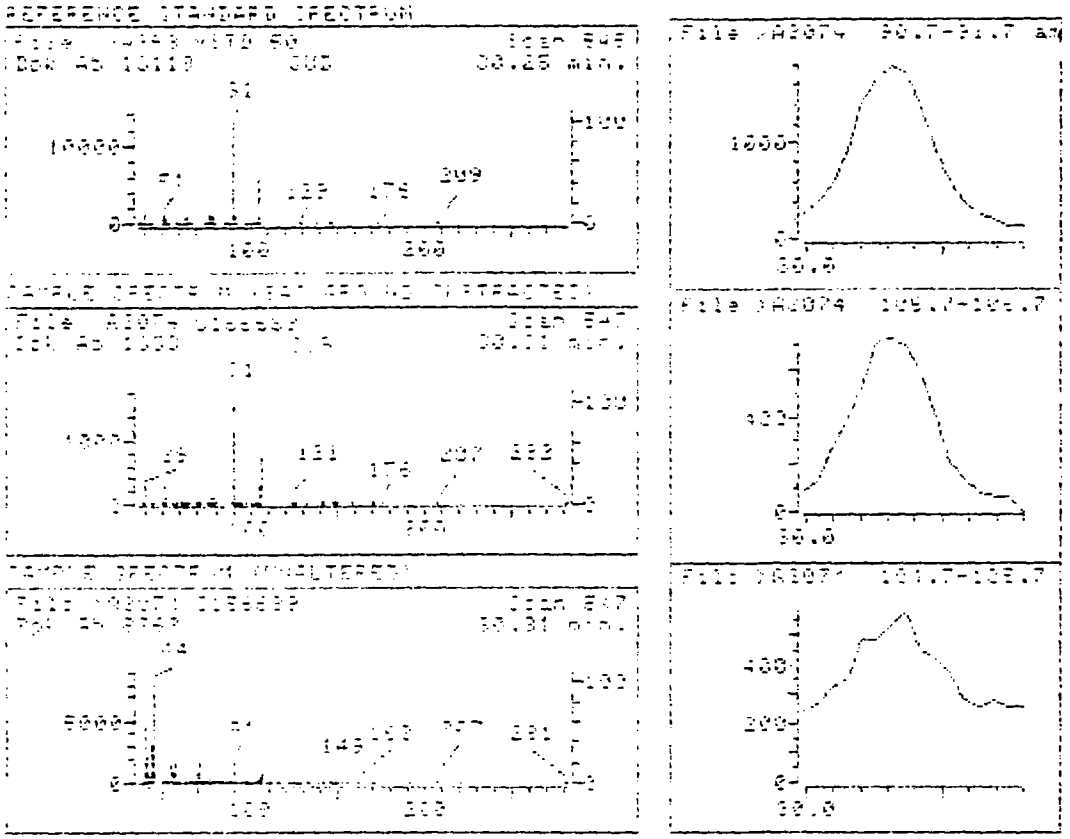
Data File: [illegible]
Name: [illegible]
Mode: [illegible]
Quant Time: [illegible]
Injected at: 940524 13:02

Quant Output File: [illegible]

Quant ID File: [illegible]
Last Calibration: 940524 11:50

Compound No: 43
Compound Name: Ethyl Benzene
Scan Number: 474
Retention Time: 26.36 min.
Quant Ion: 106.0
Area: 10181
Concentration: 7.51 UG/KG
q-value: 90

HQ 5/25/94.



Data File: [illegible]
Name: [illegible]
Misc: [illegible] SAMPLE [illegible]
Quant Time: [illegible]
Injected at: [illegible]

Quant Output File: [illegible]

Quant IU File: [illegible]
Last Calibration: [illegible]

Compound No: 46
Compound Name: Total Xylenes
Scan Number: 547
Retention Time: 30.31 min.
Quant Ion: 106.0
Area: ~~[illegible]~~ 37284
Concentration: ~~[illegible]~~ UG/KG
q-value: 89

24.78

[illegible] 5/25/94

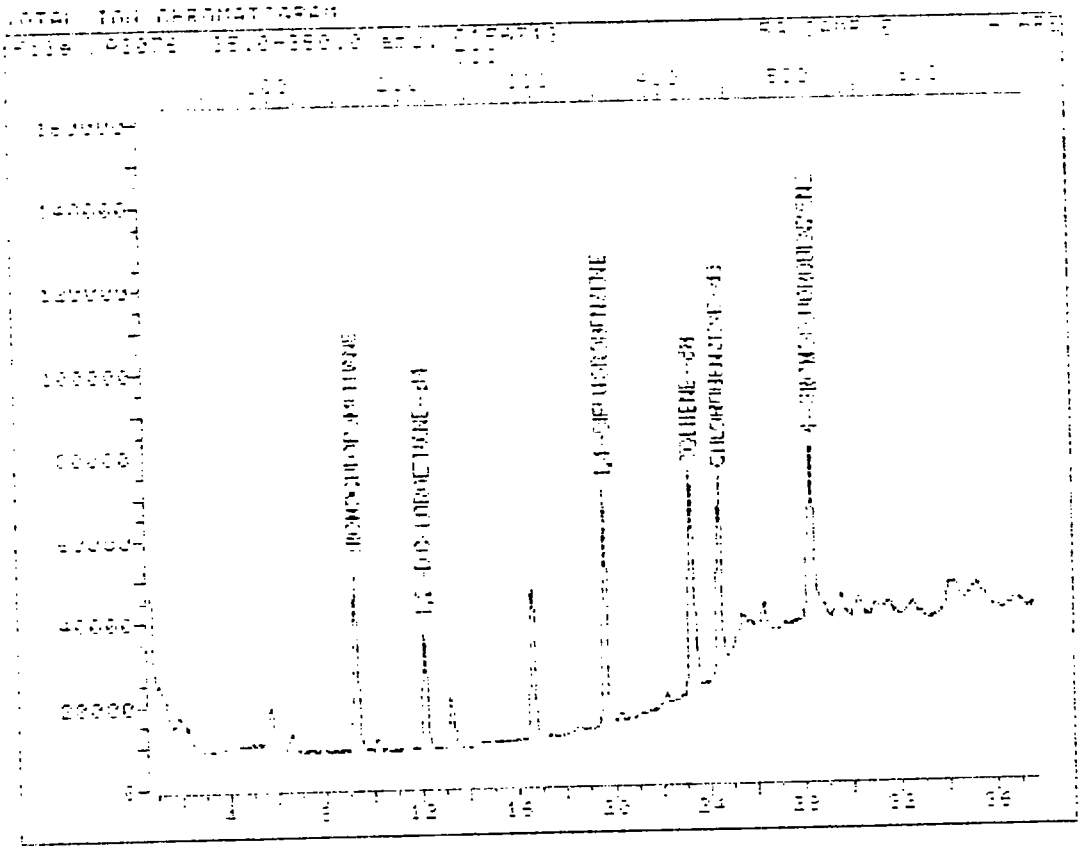
[illegible]

Injected at: [illegible]
Dilution Factor: [illegible]

ok
NR 5/25/94

[illegible]

14.10

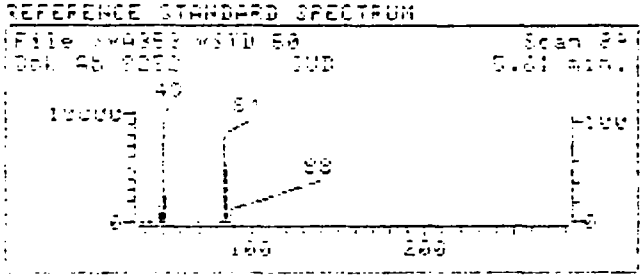


Data File: [illegible] Quant Output File: [illegible]
Name: [illegible]
Misc: [illegible]

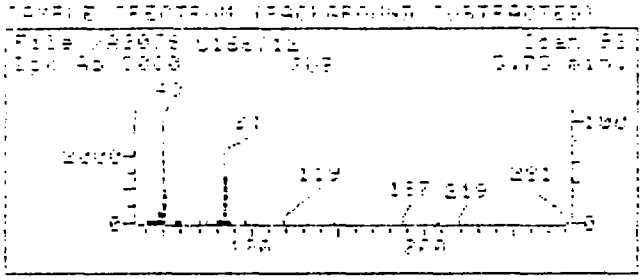
[illegible]
Title: [illegible]
Last Calibration: 940524 11:50

Operator ID: [illegible]
Quant Time: 940524 14:49
Injected at: 940524 14:14

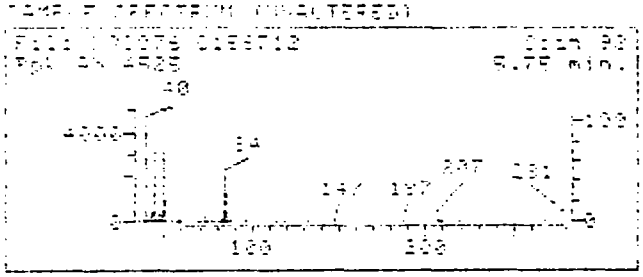
REFERENCE STANDARD SPECTRUM

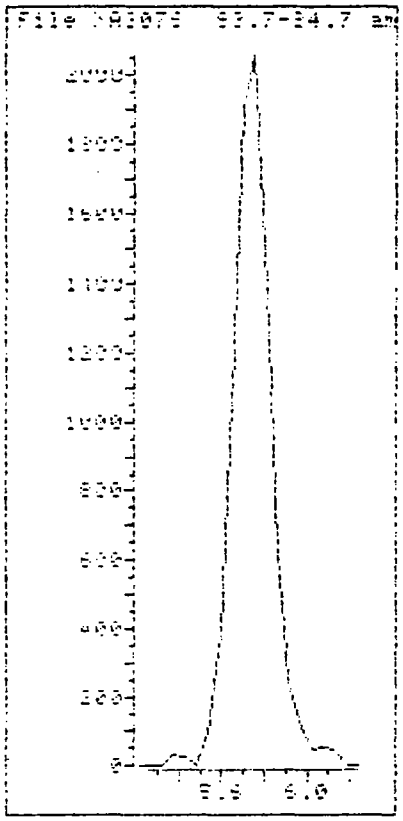


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



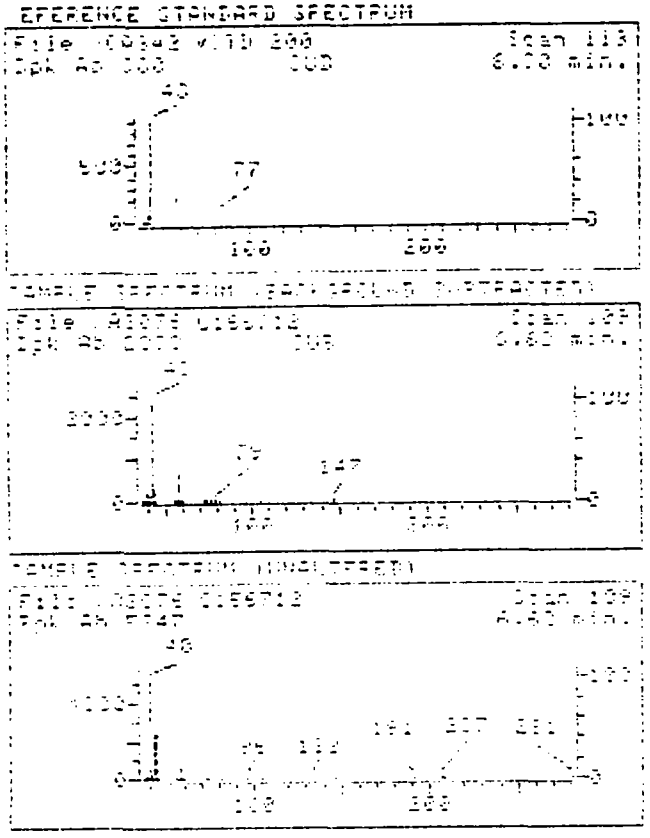


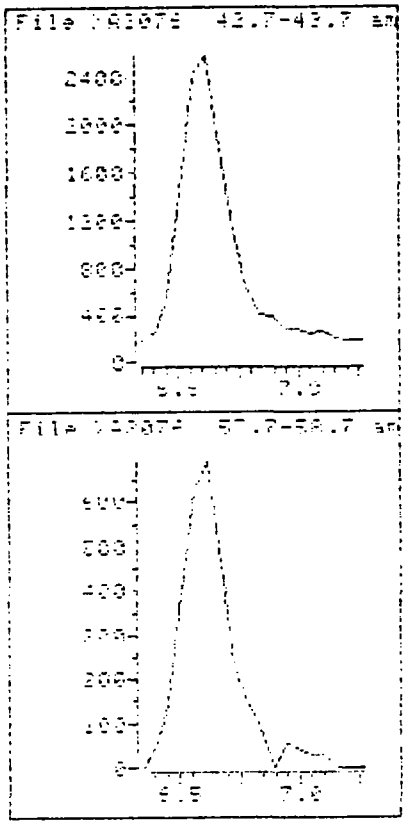
Data File: [illegible]
Name: [illegible]
Mish: [illegible] - [illegible]
Quant Time: [illegible] 14:59
Injected at: [illegible] 14:14

Quant Output File: [illegible]
Quant ID File: [illegible]
Last Calibration: [illegible]

Compound No: [illegible]
Compound Name: Methylene Chloride
Hoan Number: 93
Retention Time: 5.75 min.
Quant Ion: 84.0
Area: 26187
Concentration: 15.35 UG/KG
q-value: 100

HA 5/25/94





Data File: [illegible]
Name: [illegible]
Misc: [illegible]
Quant Time: [illegible]
Injected at: [illegible]

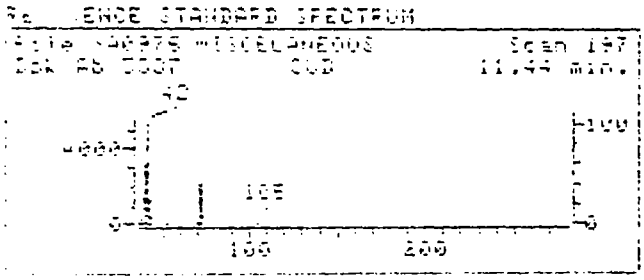
Quant Output File: [illegible]

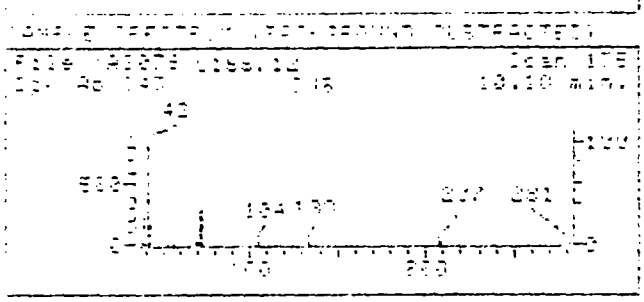
Quant ID File: [illegible]
Last Calibration: [illegible]

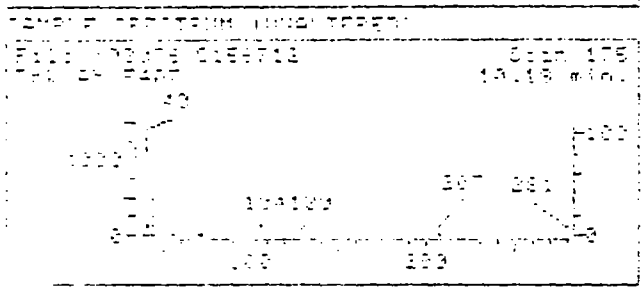
Compound No: [illegible]
Compound Name: Acetone
Scan Number: 109
Retention Time: 6.60 min.
Quant Ion: 43.0
Area: 32685
Concentration: 29.55 UG/KG
q-value: 93

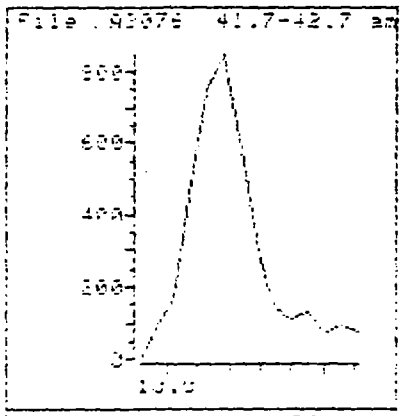
✓

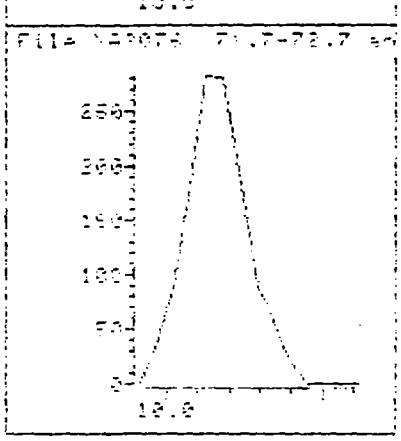
HG 5/25/94.











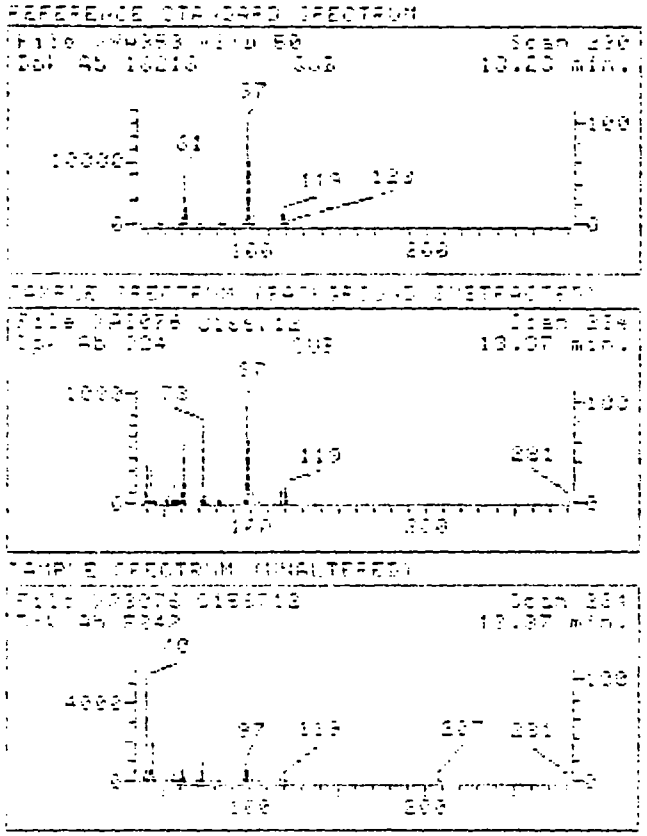
Data File: [illegible]
Name: [illegible]
Mass: [illegible] - [illegible]
Quant Time: [illegible]
Injected at: [illegible]

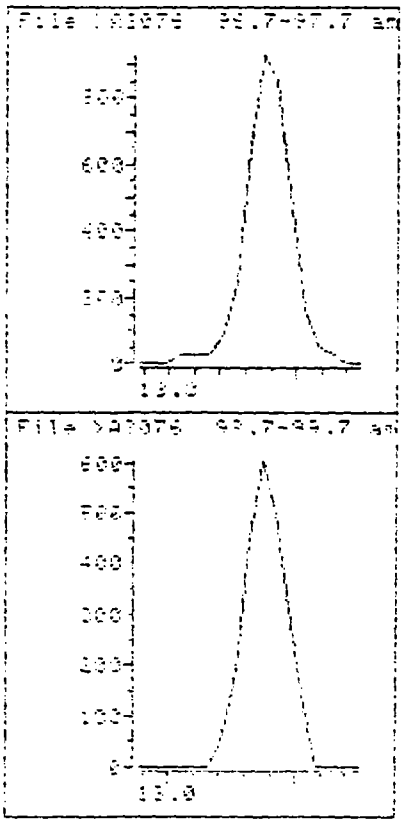
Quant Output File: [illegible]
Quant ID File: [illegible]
Last Calibration: [illegible]

Compound No: 15
Compound Name: Tetrahydrofuran
Scan Number: 175
Retention Time: 10.18 min.
Quant Ion: 42.0
Area: 17404
Concentration: 26.44 UG/KG
q-value: .88

~~See attached.~~

HK 5/25/94.



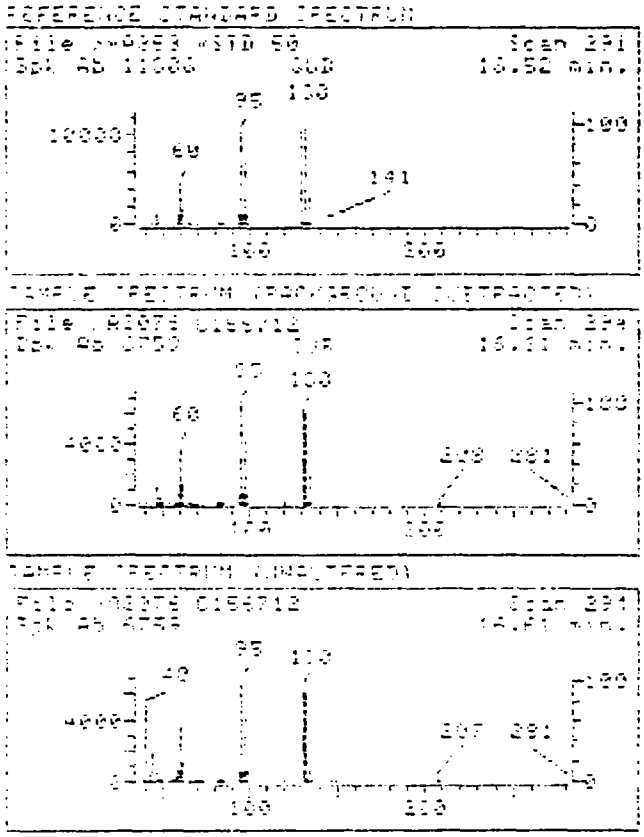


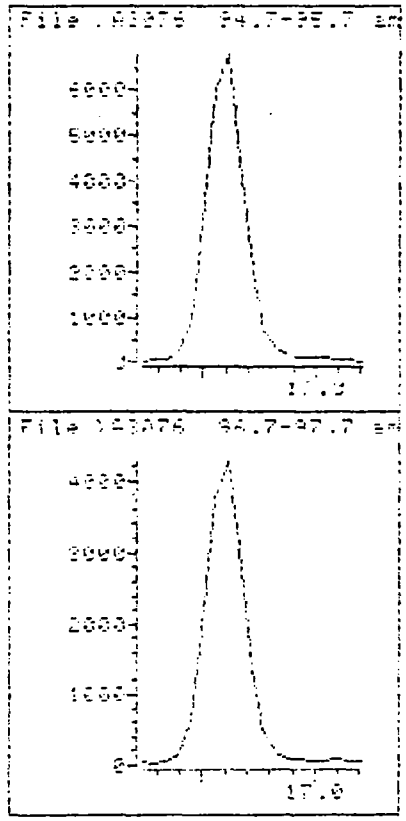
Data File: [illegible]
Name: [illegible]
Mean: [illegible]
Quant Time: [illegible] 14:59
Injected at: [illegible] 14:14

Quant Output File: [illegible]
Quant IN File: [illegible]
Last Calibration: [illegible] 11:50

Compound No: 22
Compound Name: 1,1,1-Trichloroethane
Scan Number: 234
Retention Time: 13.37 min.
Quant Ion: 97.0
Area: 11495
Concentration: 3.03 UG/KG
q-value: 99

HG 5/25/94





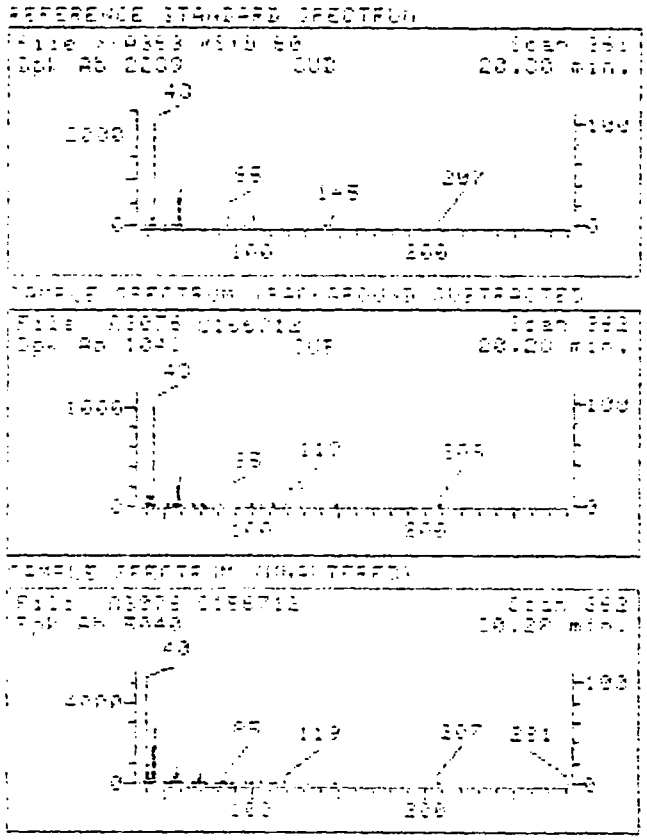
Data File: A3076::E1
Name: [illegible]
Misc: [illegible] SAMPLE - [illegible]
Quant Time: 940524 14:49
Injected at: 940524 14:14

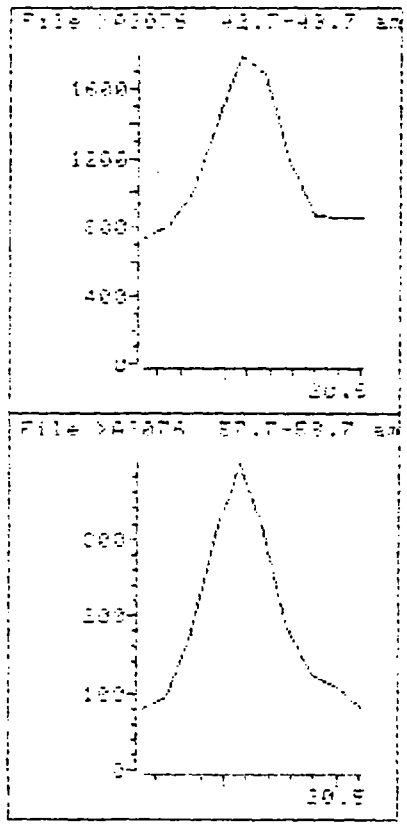
Quant Output File: ^A3076::SS

Quant ID File: [illegible]
Last Calibration: 940524 11:50

Compound No: 28
Compound Name: Trichloroethene
Scan Number: 294
Retention Time: 16.61 min.
Quant Ion: 95.0
Area: 81885
Concentration: 36.02 UG/KG
q-value: 97

HQ 5/25/94.



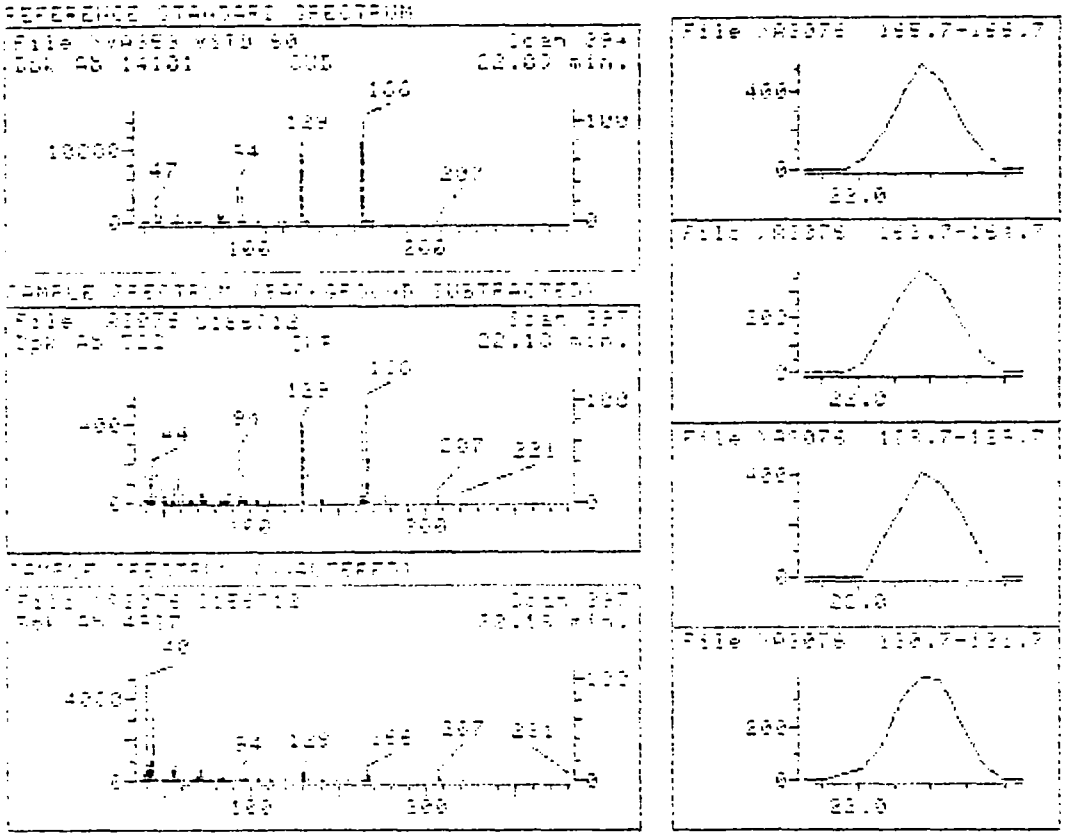


Data File: [illegible]
Name: [illegible]
Misc: [illegible] SAMPLE - [illegible]
Quant Time: 940524 14:59
Injected at: 940524 14:14

Quant Output File: [illegible]
Quant ID File: [illegible]
Last Calibration: 940524 11:30

Compound No: 36
Compound Name: 4-Methyl-2-Pentanone
Scan Number: 362
Retention Time: 20.28 min.
Quant Ion: 43.0
Area: 12444
Concentration: 9.31 UG/KG
q-value: 85

HR 5/25/94

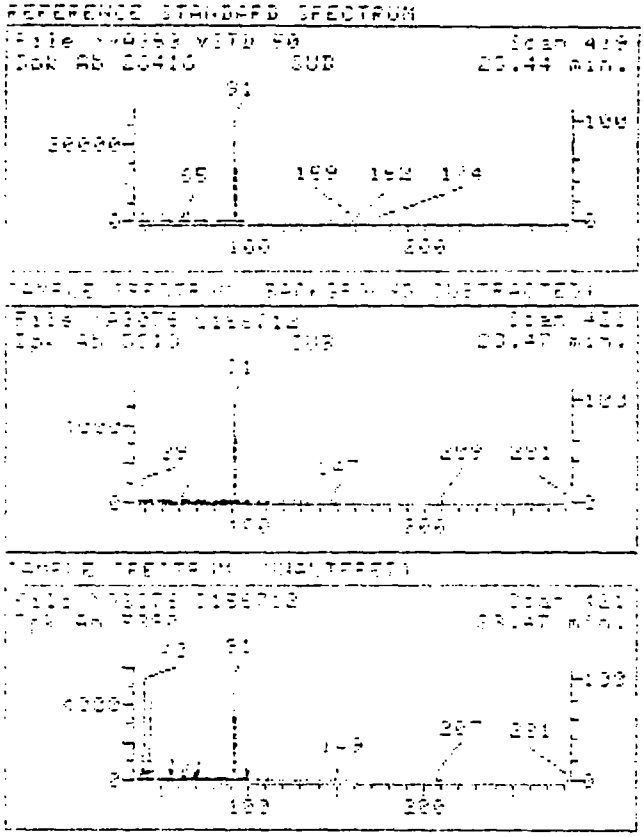


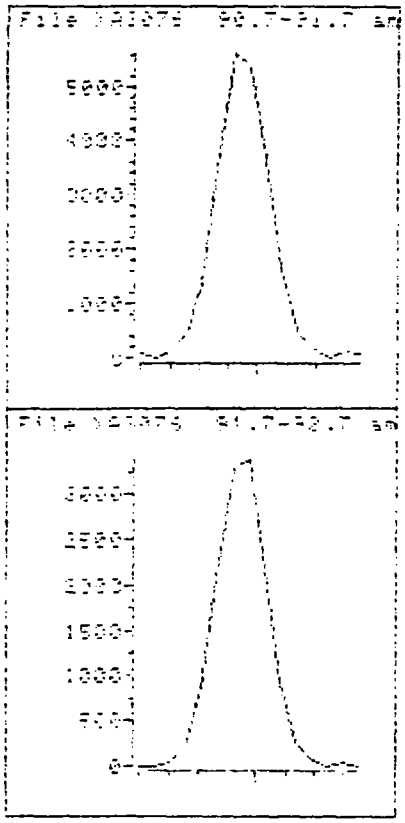
Data File: [illegible]
Name: [illegible]
Misc: [illegible] - [illegible]
Quant Time: 940524 14:[illegible]
Injected at: 940524 14:14

Quant Output File: [illegible]
Quant ID File: [illegible]
Last Calibration: 940524 11:50

Compound No: 38
Compound Name: Tetrachloroethene
Scan Number: 397
Retention Time: 22.18 min.
Quant Ion: 164.0
Area: 4576
Concentration: 2.93 UG/KG
q-value: 97

HG 5/25/94.





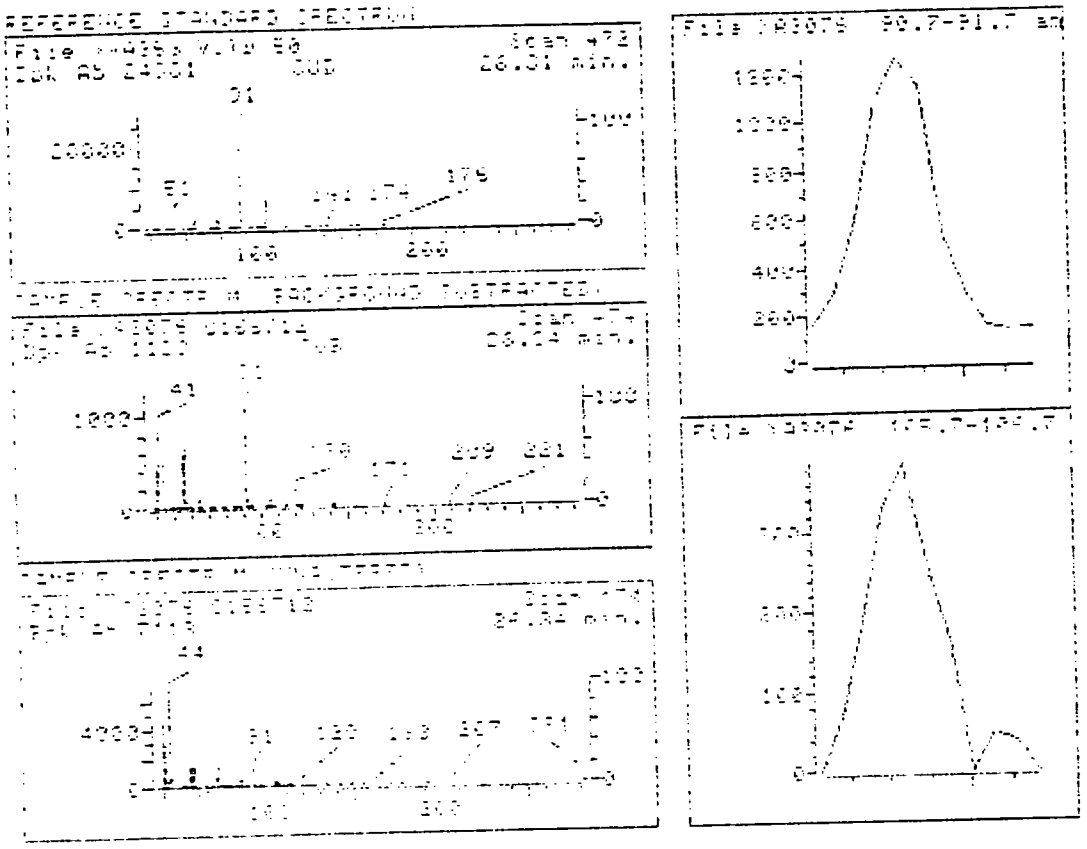
Data File: [illegible]
Name: [illegible]
Mode: [illegible]
Quant Time: 940524 14:59
Injected at: 940524 14:14

Quant Output File: [illegible]

Quant IM File: [illegible]
Last Calibration: 940524 11:50

Compound No: 41
Compound Name: Toluene
Scan Number: 421
Retention Time: 23.47 min.
Quant Ion: 92.0
Area: 43415
Concentration: 16.17 UG/KG
q-value: 99

5/25/94.



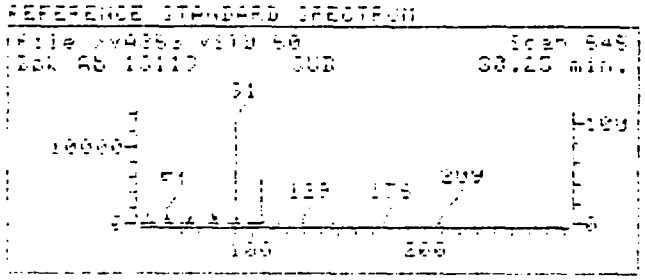
Data File: [illegible]
Name: [illegible]
Type: [illegible] - [illegible]
Quant Time: 94[illegible]24 14:[illegible]
Injected at: 94[illegible]524 14:14

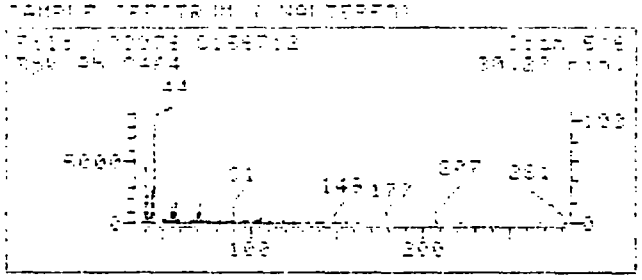
Quant Output File: [illegible]

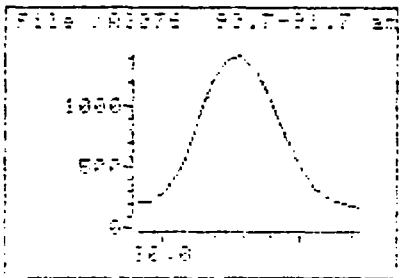
Quant IN File: [illegible]
Last Calibration: 94[illegible]524 11:50

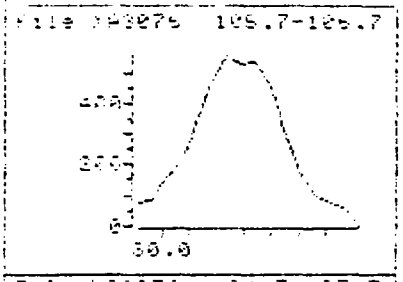
Compound No: 43
Compound Name: Ethyl Benzene
Scan Number: 474
Retention Time: 26.74 min.
Quant Ion: 106.0
Area: 4839
Concentration: 2.97 UG/KG
q-value: 97

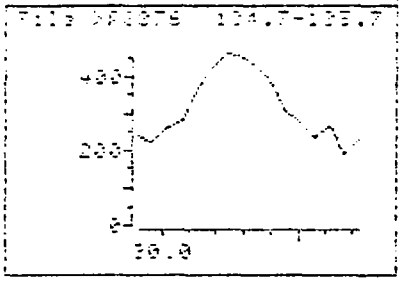
HQ 5/25/94.











Data File: XA3076::E1
Name: C156[illegible]
Misc: [illegible] SAMPLE - [illegible]
Quant Time: 940524 14:59
Injected at: 940524 14:14

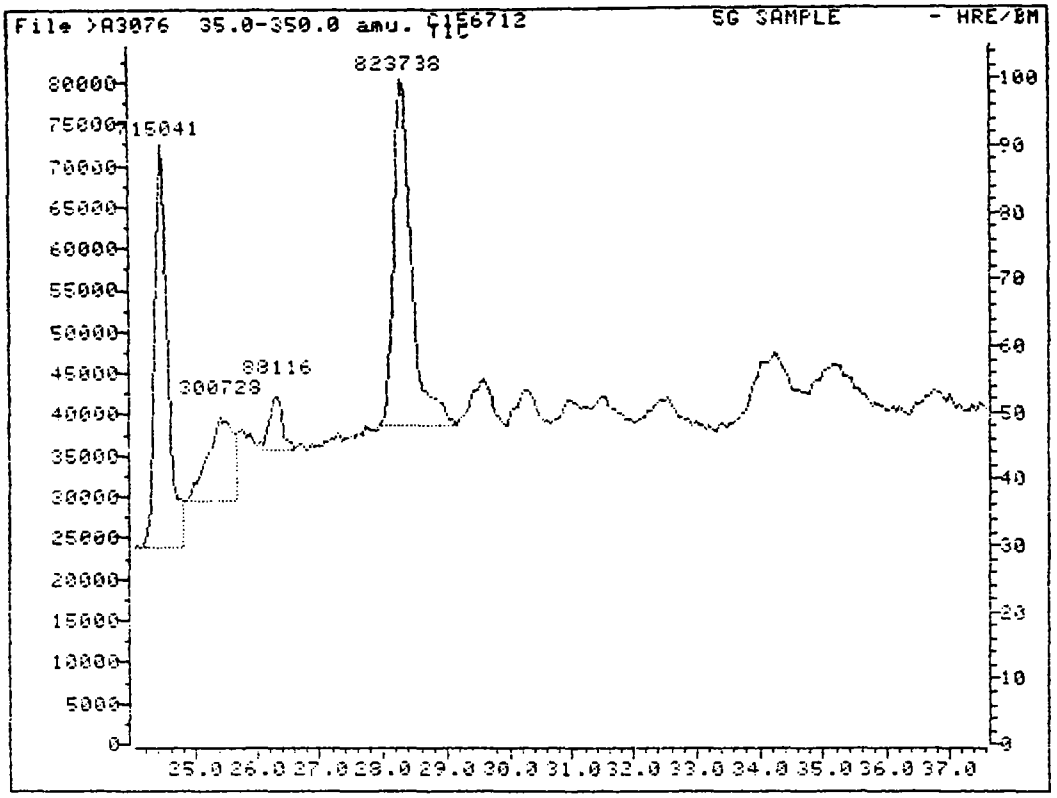
Quant Output File: XA3076::S5

Quant IO File: IOSUOA::D5
Last Calibration: 940524 11:50

Compound No: 46
Compound Name: Total Xylenes
Scan Number: 546
Retention Time: 30.23 min.
Quant Ion: 106.0
Area: ~~[illegible]~~ 25533
Concentration: ~~[illegible]~~ KG
q-value: 96

14.10

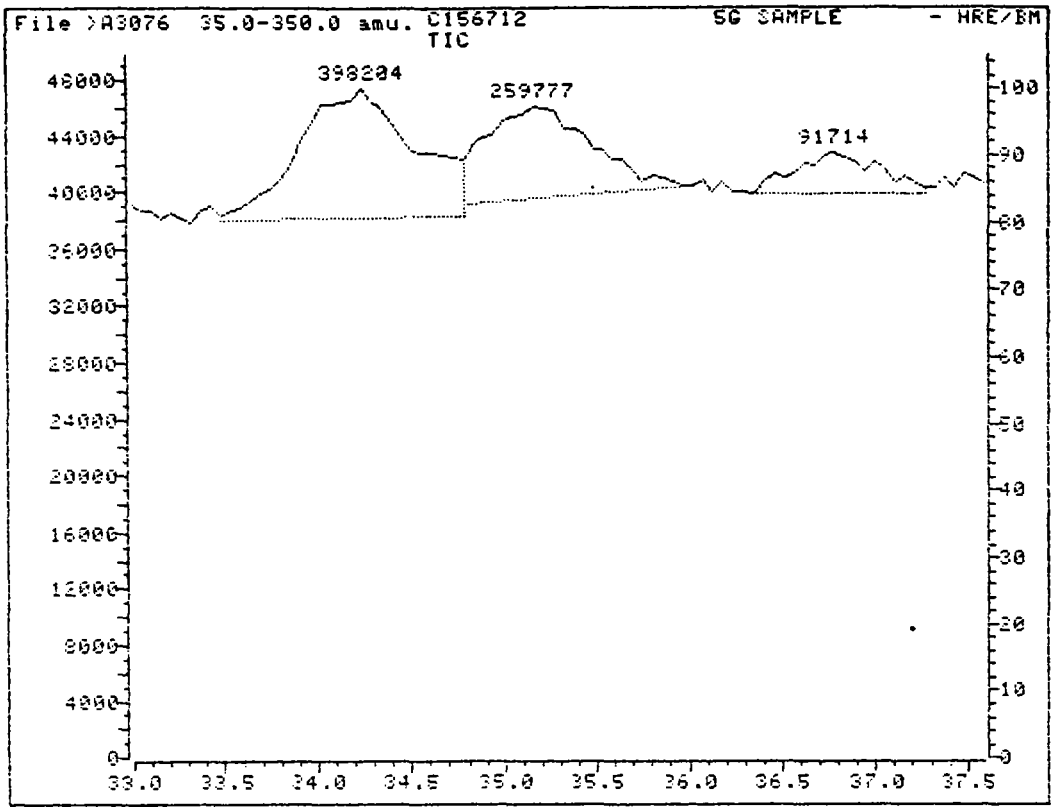
HG 5/25/94.



>A3076 C156712 SG SAMPLE - HRE/BM
35.0: 350.0 TIC
Upslope: .20 Area Reject: 5.00 % Max Peaks: 4 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	24.45	433	439	446	48702	1727776	715041	86.80	37.094
2	25.42	447	457	462	9895	1743392	~~300728~~	36.51	15.601
3	26.34	470	474	479	6261	1133685	~~88116~~	10.70	4.571
4	28.29	504	510	526	41854	3576831	~~823738~~	100.00	42.733

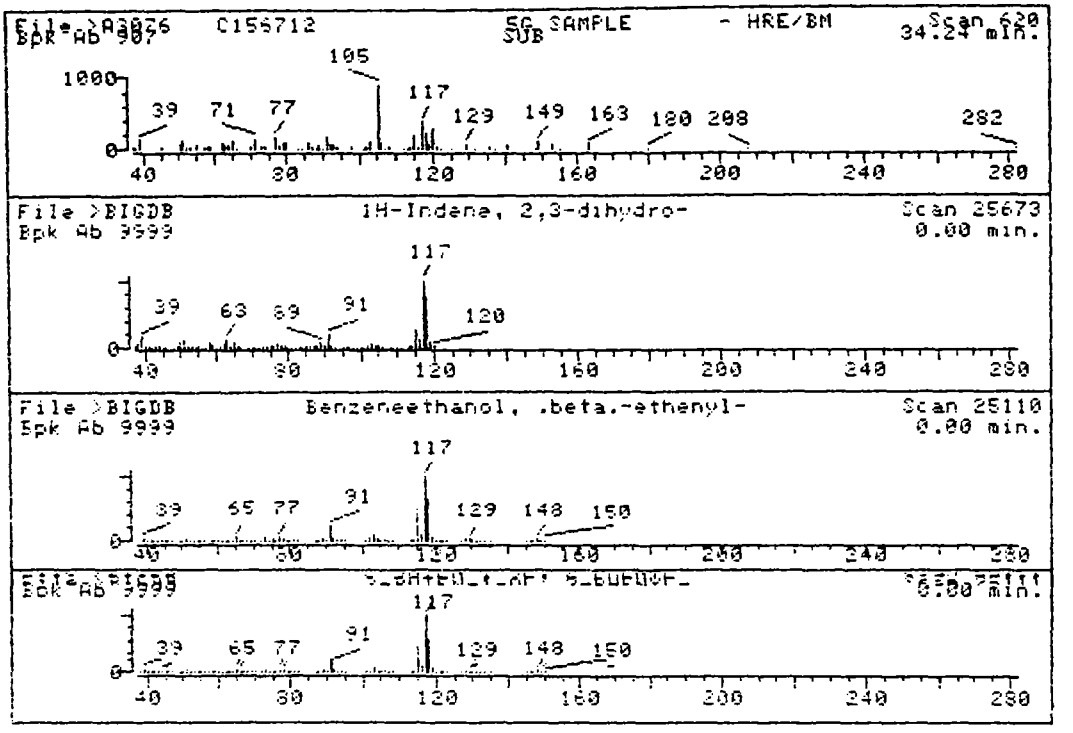
Sum of corrected areas: 1927623.



>A3076 C156712 SG SAMPLE - HRE/BM
35.0: 350.0 TIC
Upslope: .20 Area Reject: 5.00 % Max Peaks: 3 Bunching: -1
Dnslope: 0.00 Results File DIR80 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	34.24	606	620	630	9414	3372772	398204	100.00	53.115
2	35.16	630	637	653	6895	3233668	259777	65.24	34.651
3	36.78	659	667	676	2928	2294931	~~91714~~	23.03	12.234

Sum of corrected areas: 749695.



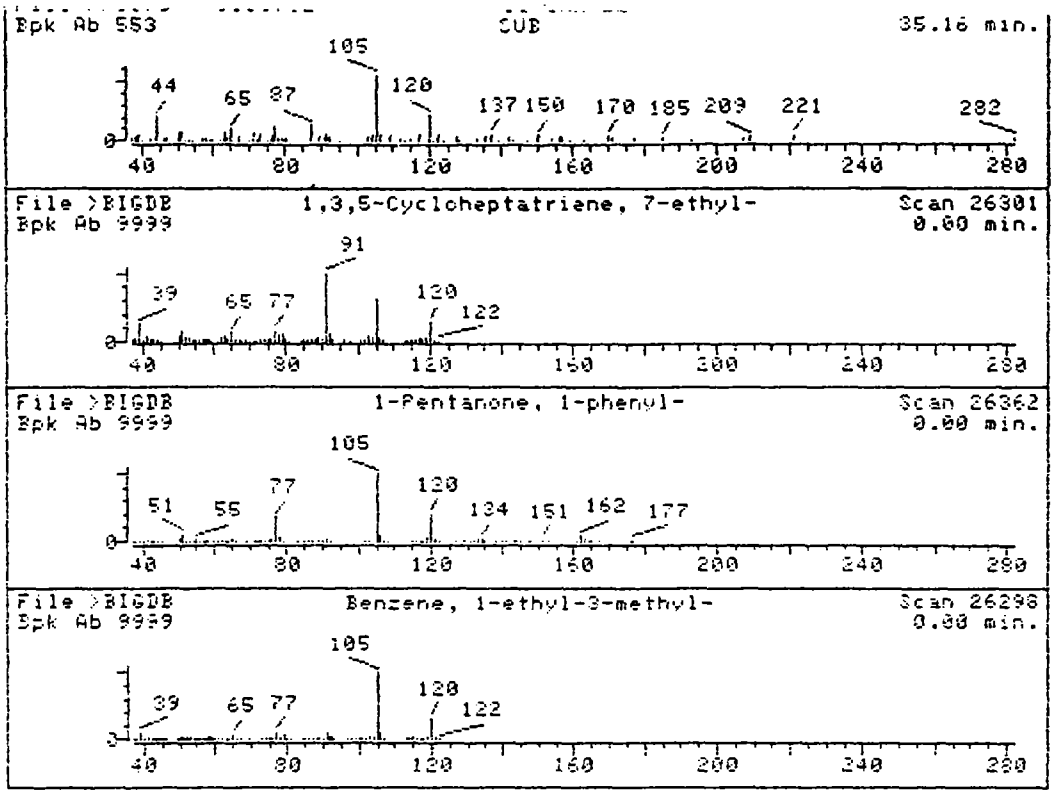
Unknown Hydrocarbon

1. 1H-Indene, 2,3-dihydro- 118 C9H10
2. Benzeneethanol, .beta.-ethenyl- 148 C10H12O
3. 3-BUTEN-1-OL, 2-PHENYL- 148 C10H12O
4. 1H-Indene, 2,3-dihydro- 118 C9H10
5. 1H-Indene, 2,3-dihydro- 118 C9H10

Sample file: >A3076 Spectrum #: 620
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.	28*	496117	25673	"BIGDB	33	54	0	0	32	52	8	30
2.	26*	6052637	25110	"BIGDB	29	50	2	0	38	43	8	14
3.	26*	0	25111	"BIGDB	29	50	2	0	38	43	8	14
4.	20*	496117	25373	"BIGDB	25	30	0	0	41	54	5	18
5.	20*	496117	25372	"BIGDB	25	51	0	0	34	54	5	18

$$\text{Conc.} = \frac{398204}{715041} \times \frac{250}{(5)(1)} = 27.8 \text{ ug/kg}$$



Unknown Hydrocarbon

1. 1,3,5-Cycloheptatriene, 7-ethyl- 120 C9H12
2. 1-Pentanone, 1-phenyl- 162 C11H14O
3. Benzene, 1-ethyl-3-methyl- 120 C9H12
4. Benzene, (1-methylethyl)- 120 C9H12
5. Benzene, 1,2,3-trimethyl- 120 C9H12

Sample file: >A3076 Spectrum #: 637
Search speed: 1 Tilting option: N No. of ion ranges searched: 47

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	12*	17634514	26301	"BIGDB	51	50	2	0	135	63	2	25
2.	11	1009149	26362	"BIGDB	39	47	2	0	67	63	2	13
3.	11*	620144	26298	"BIGDB	39	48	2	0	87	63	2	19
4.	11*	98828	26592	"BIGDB	40	53	2	0	100	63	2	19
5.	11*	526738	26294	"BIGDB	38	54	2	0	74	63	2	19

$$\text{conc.} = \frac{259777}{715041} \times \frac{250}{(5)(1)} = 18.2 \text{ ug/kg}$$

QUANT REPORT

Operator ID: [illegible] [illegible] Quant Time: [illegible]
[illegible] Injected at: [illegible]
Data File: [illegible] Dilution Factor: 1.00000
Name: [illegible]
Misc: MS SAMPLE [illegible]

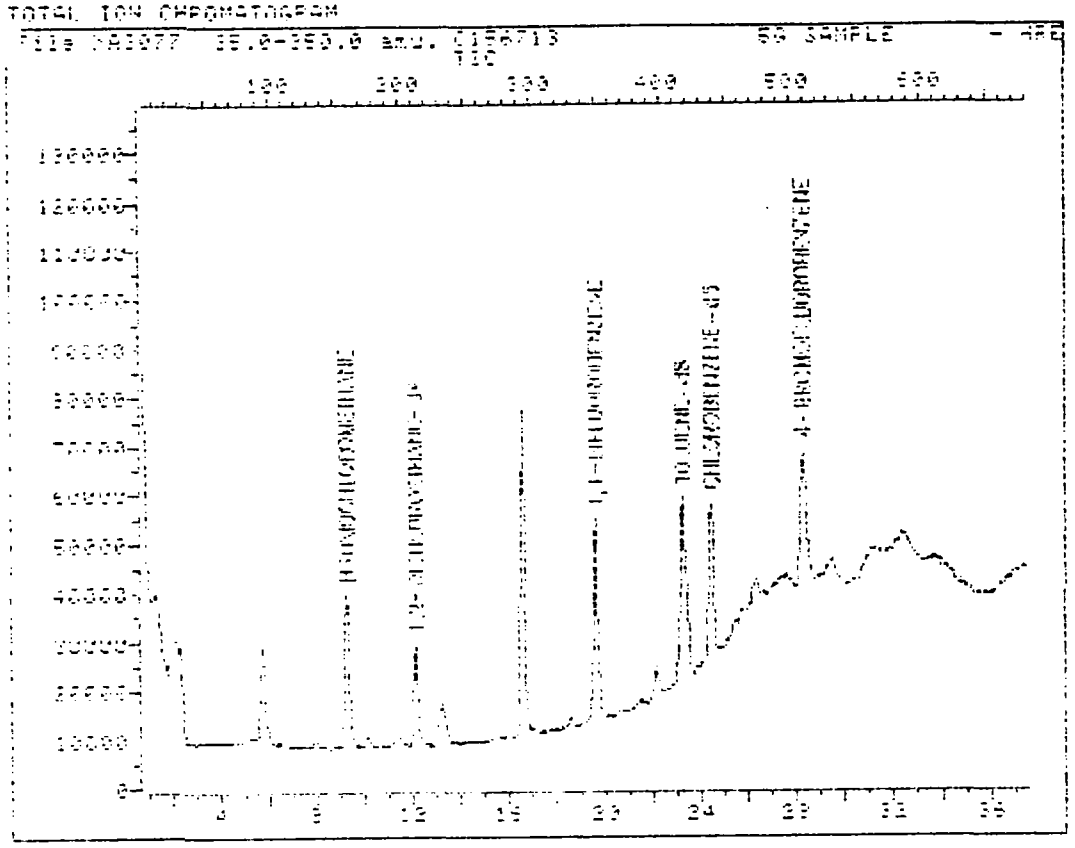
MS Proven
[illegible] 5/2[illegible]

[illegible]
[illegible]
[illegible]

Compound	R.T.	Q Ion	Area	Conc	Units	q
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible] Methylene Chloride	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	100
[illegible] Acetone	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	93
[illegible] Trichlorofluoromethane	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	91
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible] 1,2-DICHLOROETHANE-D4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible] 1,1,1-Trichloroethane	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible] TOLUENE-D8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	3.64	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible] 3C5	

[illegible]

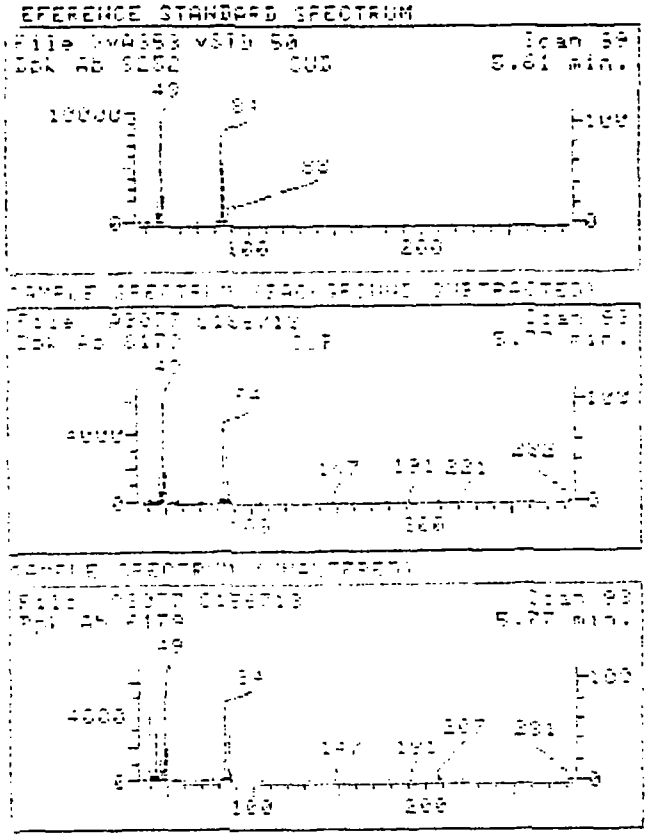
TOTAL ION CHROMATOGRAM

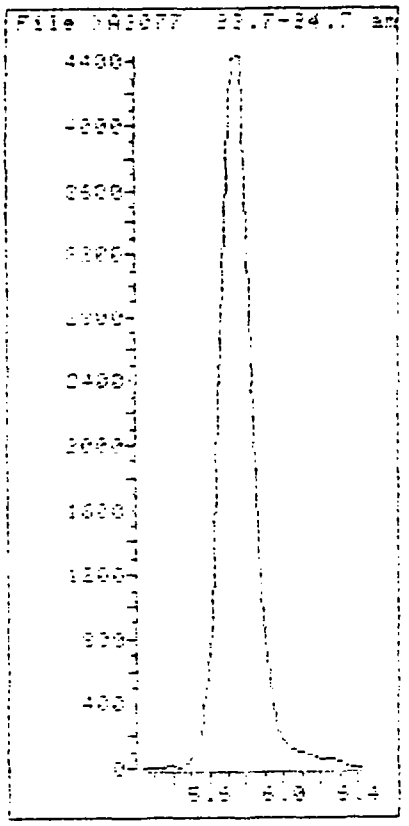


Data File: >A3077::E1 Quant Output File: ^A3077::SS
Name: C156713
Misc: 5G SAMPLE - PRE/HM

Id File: [illegible]
Title: QUANTITATION FILE FOR VOLATILE SOILS GC/MSD-A
Last Calibration: 940524 11:[illegible]

Operator ID: USEP8
Quant Time: 940524 15:44
Injected at: 940524 15:05





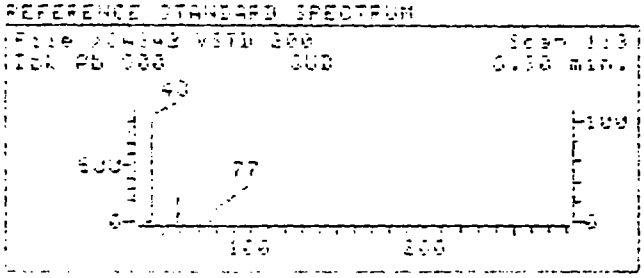
Data File: >A3077::E3
Name: C156713
Misc: 5G SAMPLE - HHE/BM
Quant Time: 940594 15:44
Injected at: 940594 15:05

Quant Output File: >A3077::SS
Quant ID File: [illegible]
Last Calibration: 940594 11:[illegible]

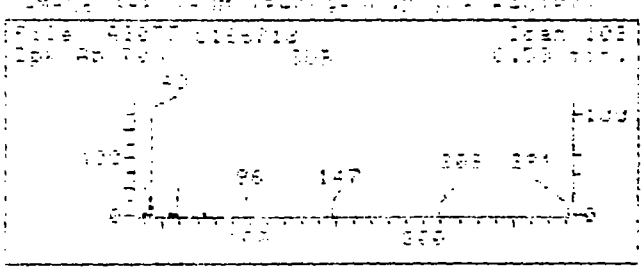
Compound No: 7
Compound Name: Methylene Chloride
Scan Number: 93
Retention Time: 5.77 min.
Quant Ion: 94.0
Area: 56155
Concentration: 45.93 UG/KG
q-value: 100

[illegible] 5/25/94.

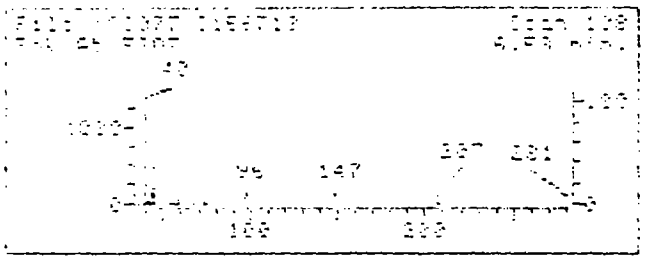
REFERENCE STANDARD SPECTRUM

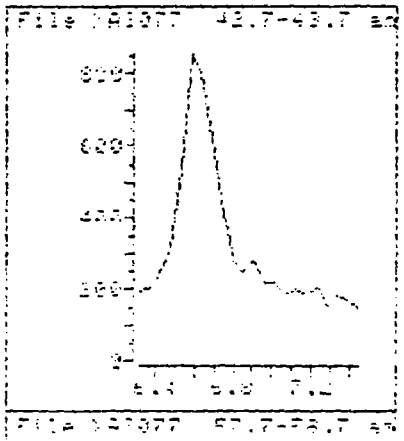


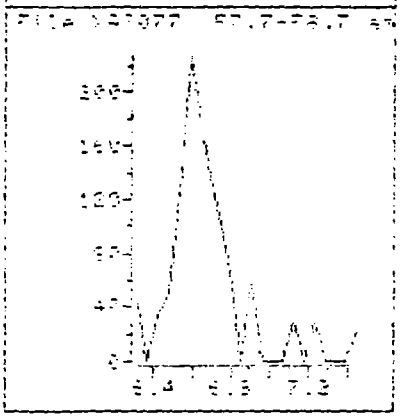
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNAUTHORIZED)







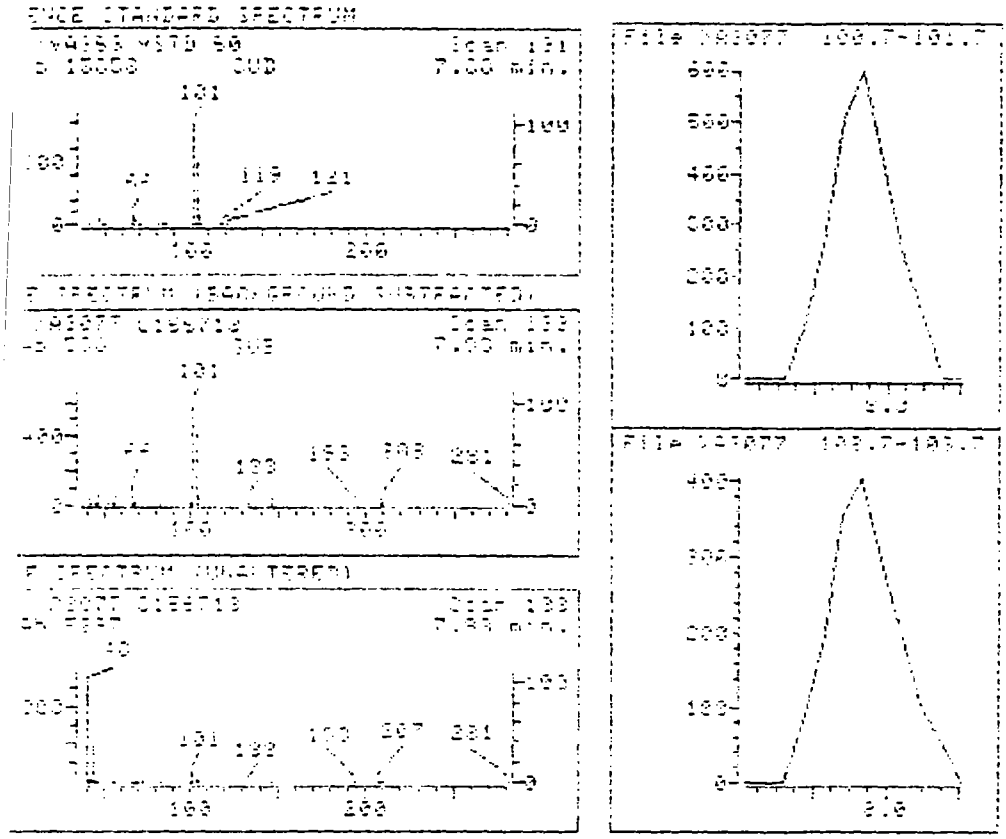
Data File: >A3077::E1
Name: C156713
Misc: KG SAMPLE - BRE/PM
Quant Time: 940504 15:44
Injected at: 940504 15:05

Quant Output File: ^A3077::SS

Quant ID File: 1050DA::05
Last Calibration: 940504 11:50

Compound No: 8
Compound Name: Acetone
Scan Number: 108
Retention Time: 6.58 min.
Quant Ion: 43.0
Area: 11739
Concentration: 39.82 UG/KG
q-value: 93

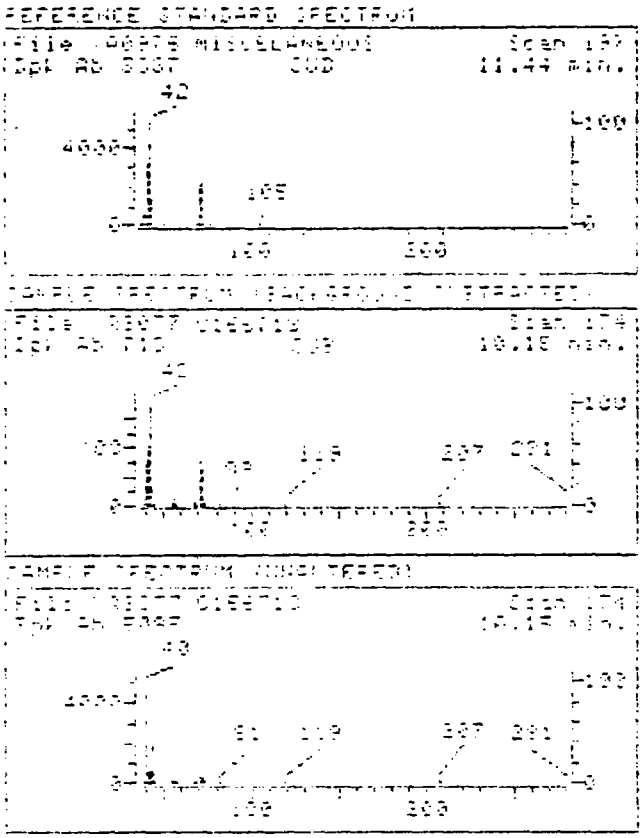
✓
KO 5/25/94.

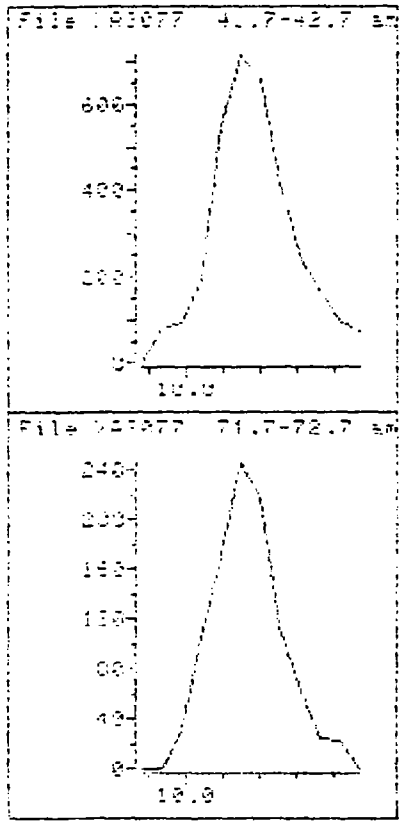


Data File: 1A3077::E1 Quant Output File: 1A3077::SS
Name: C156713
Mixer: 5G SAMPLE - HRE/SM
Quant Time: 940524 16:44 Quant IO File: 1OEVOA::DF
Injected at: 940524 15:05 Last Calibration: 940524 11:50

Compound No: 12
Compound Name: Trichlorofluoromethane
Scan Number: 133
Retention Time: 7.93 min.
Quant Ion: 101.0
Area: 7245
Concentration: 2.84 UG/KG
q-value: 91

HR 5/25/94.





Data File: A3077::E1
Name: [illegible]
Misc: [illegible]
Quant Time: 940524 15:44
Injected at: 940524 15:06

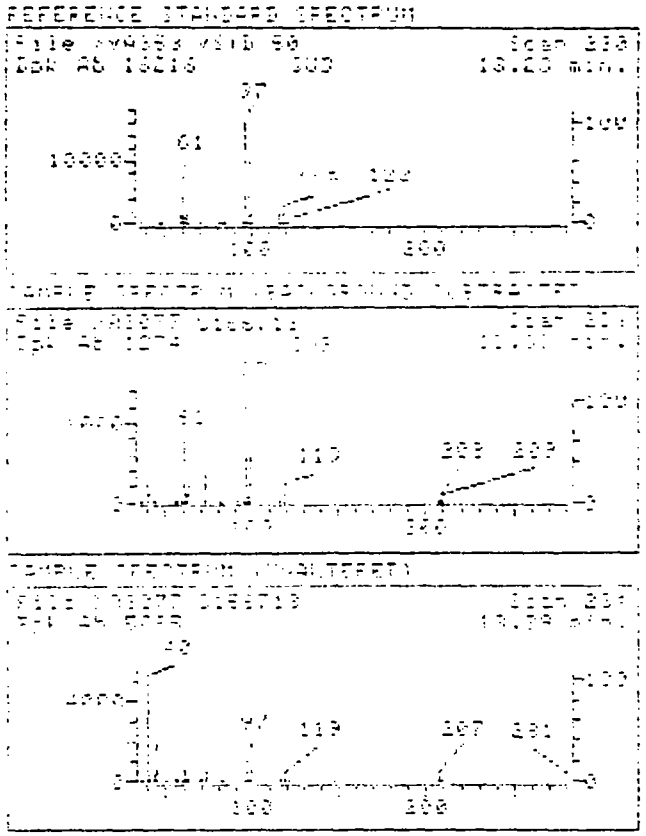
Quant Output File: A3077::SS

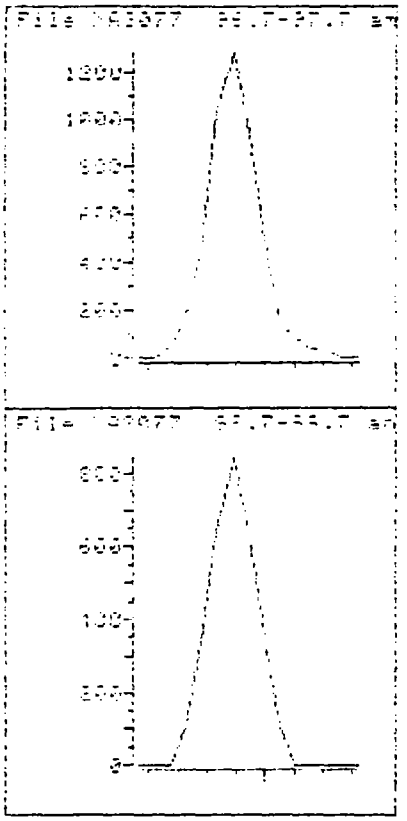
Quant ID File: IDSVOA::D5
Last Calibration: 940524 11:5[illegible]

Compound No: 15
Compound Name: Tetrahydrofuran
Scan Number: 174
Retention Time: 10.15 min.
Quant Ion: 42.0
Area: 10589
Concentration: 31.50 UG/KG
q-value: 90

✓

HG 5/25/94



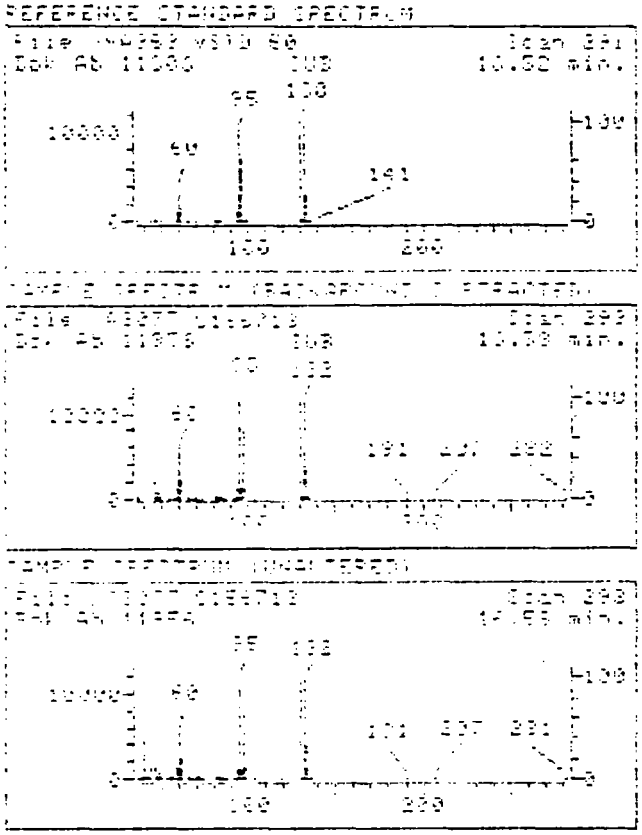


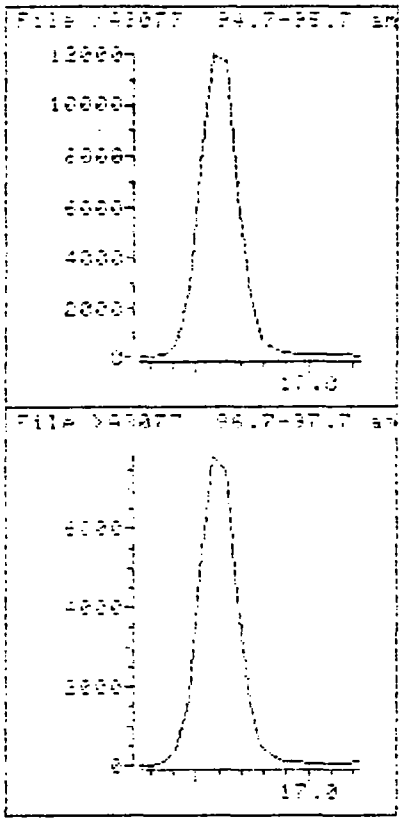
Data File: [illegible]A3077::E1 Quant Output File: [illegible]A3077::SS
Name: [illegible]
Mean: [illegible]
Quant Time: 940524 15:44 Quant [illegible] File: [illegible]
Injected at: 940524 15:[illegible] Last Calibration: 940524 11:50

Compound No: 22
Compound Name: 1,1,1-Trichloroethane
Scan Number: 234
Retention Time: 13.39 min.
Quant Ion: 97.0
Area: 15165
Concentration: 5.53 UG/KG
q-value: 98

HQ 5/25/94

REFERENCE STANDARD SPECTRUM





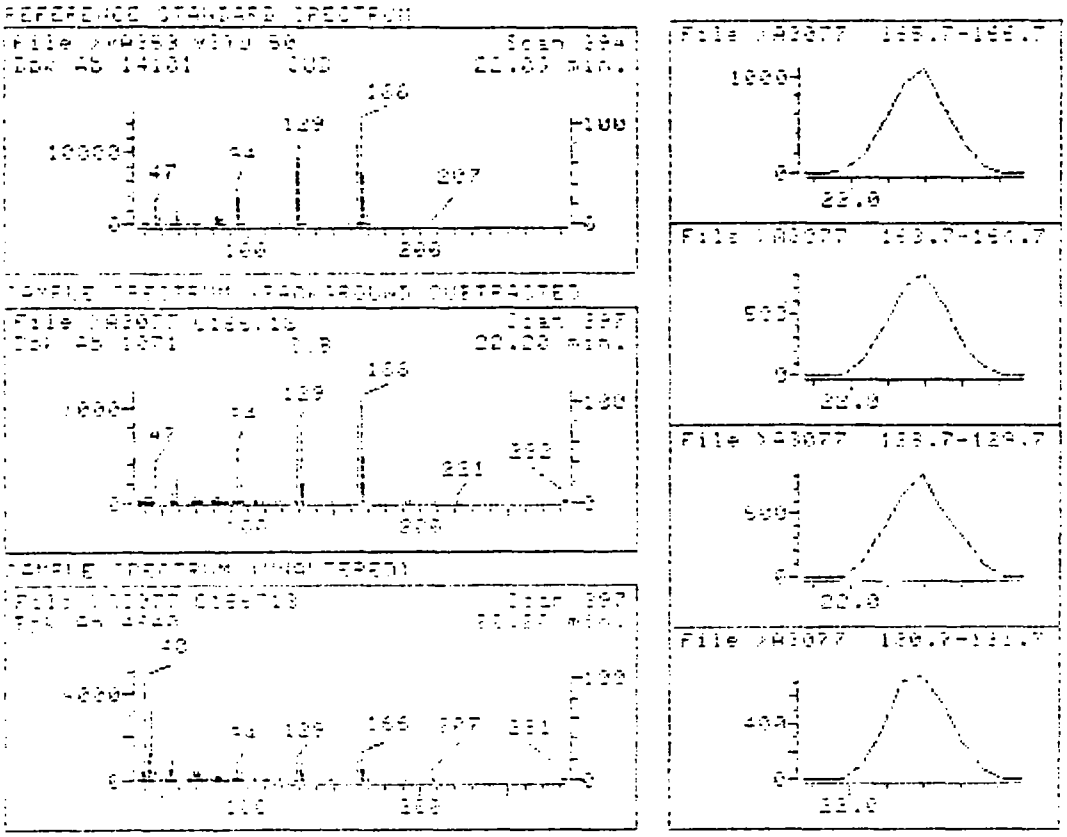
Data File: [illegible]
Name: [illegible]
[illegible]: [illegible]
Quant Time: [illegible]
Injected at: [illegible]

Quant Output File: [illegible]

Quant ID File: [illegible]
Last Calibration: [illegible]

Compound No: 28
Compound Name: Trichloroethene
Scan Number: 293
Retention Time: 16.58 min.
Quant Ion: 95.0
Area: 147109
Concentration: 89.50 UG/KG
q-value: 99

HR 5/25/94.

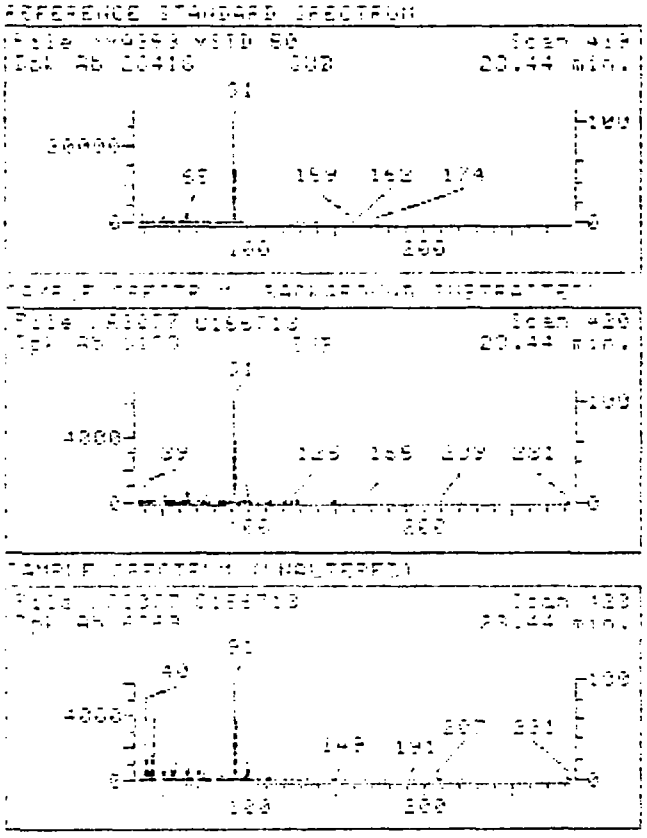


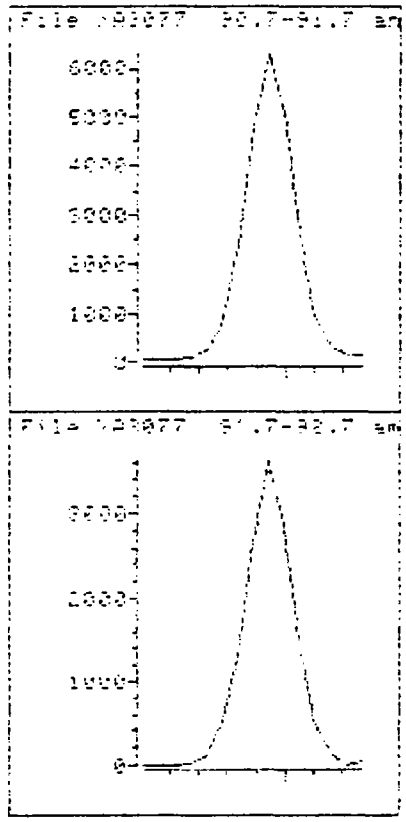
Data File: [illegible]
Name: [illegible]
Misc: [illegible]
Quant Time: [illegible]
Injected At: [illegible]

Quant Output File: [illegible]
Quant ID File: [illegible]
Last Calibration: 940504 11:50

Compound No: 38
Compound Name: Tetrachloroethene
Scan Number: 397
Retention Time: 22.20 min.
Quant Ion: 164.0
Area: 9611
Concentration: 9.25 UG/KG
q-value: 98

HR 5/25/94.





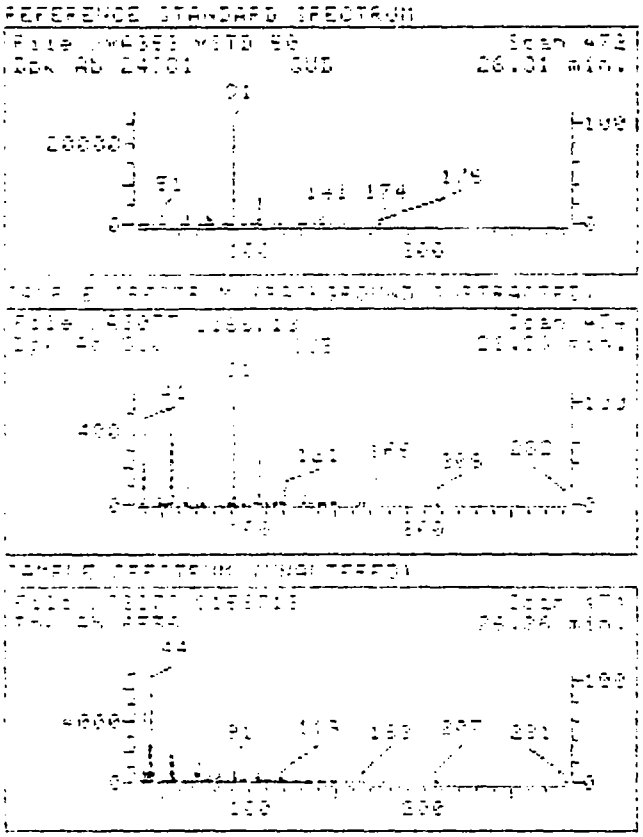
Data File: >A3077::E1
Name: [illegible]
Mean: [illegible]
Quant Time: [illegible] 16:44
Injected at: [illegible] 15:05

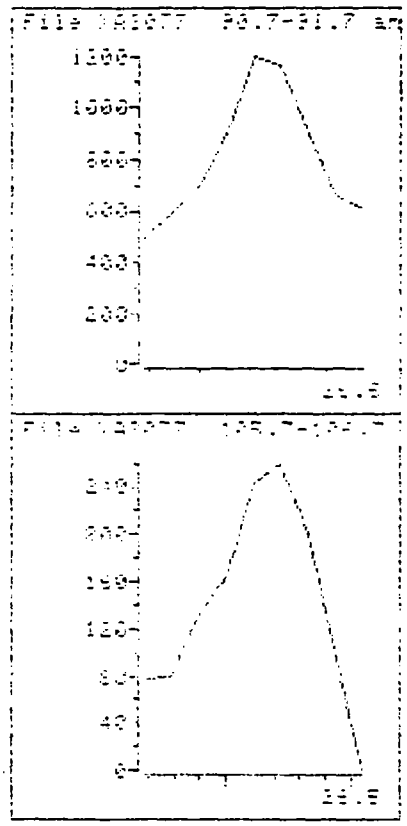
Quant Output File: >A3077::SS

Quant IN File: [illegible]
Last Calibration: [illegible] 11:50

Compound No: 41
Compound Name: Toluene
Scan Number: 420
Retention Time: 23.44 min.
Quant Ion: 92.0
Area: 43036
Concentration: 24.11 UG/KG
q-value: 92

HQ 5/25/94.





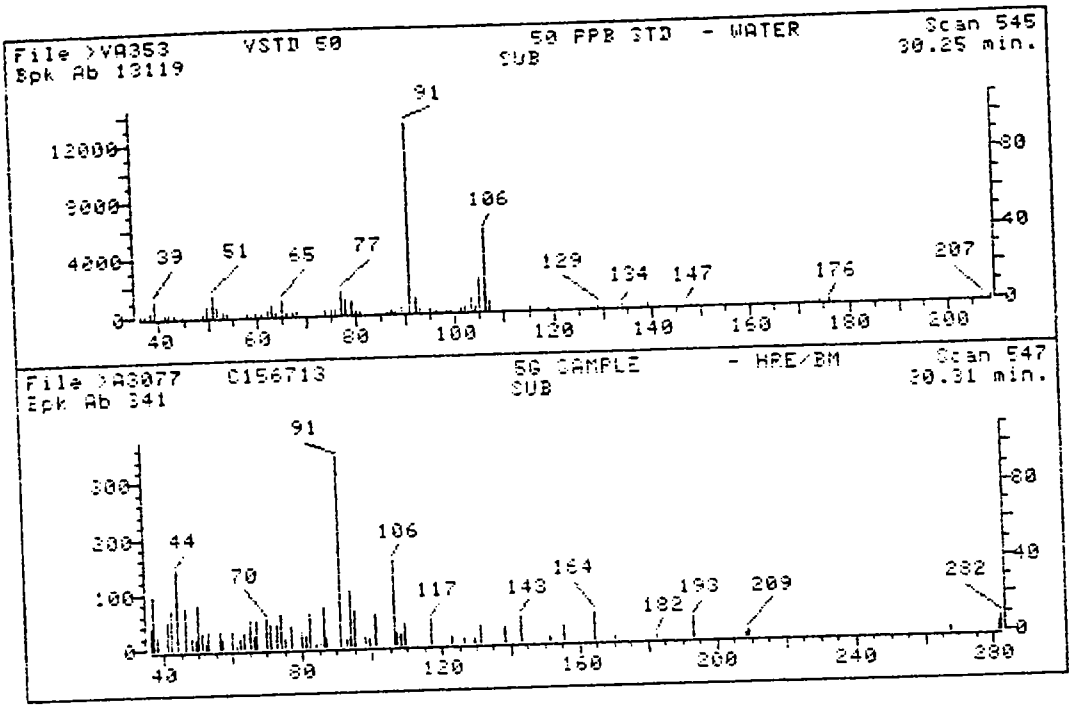
Data File: [illegible]
Name: [illegible]
Mass: [illegible]
Quant Time: [illegible]
Injected at: [illegible]

Quant Output File: [illegible]

Quant ID File: [illegible]
Last Calibration: [illegible]

Compound No: 43
Compound Name: Ethyl Benzene
Scan Number: 474
Retention Time: 26.36 min.
Quant Ion: 106.0
Area: 3836
Concentration: 3.54 UG/KG
q-value: 82

HC 5/25/94



45) Total Xylenes RT:30.31 Area: 8148M 6.77 UG/KG

85

[illegible]

[illegible] Quant Method : 6 Quant Time: [illegible] 16:09
[illegible] Injected at: [illegible] 14:50
[illegible] Dilution Factor: 1.00000

[illegible]

OK ✓ [illegible]

[illegible]

Compound	Cal. Lev	Conc	Area	Time	Date	-
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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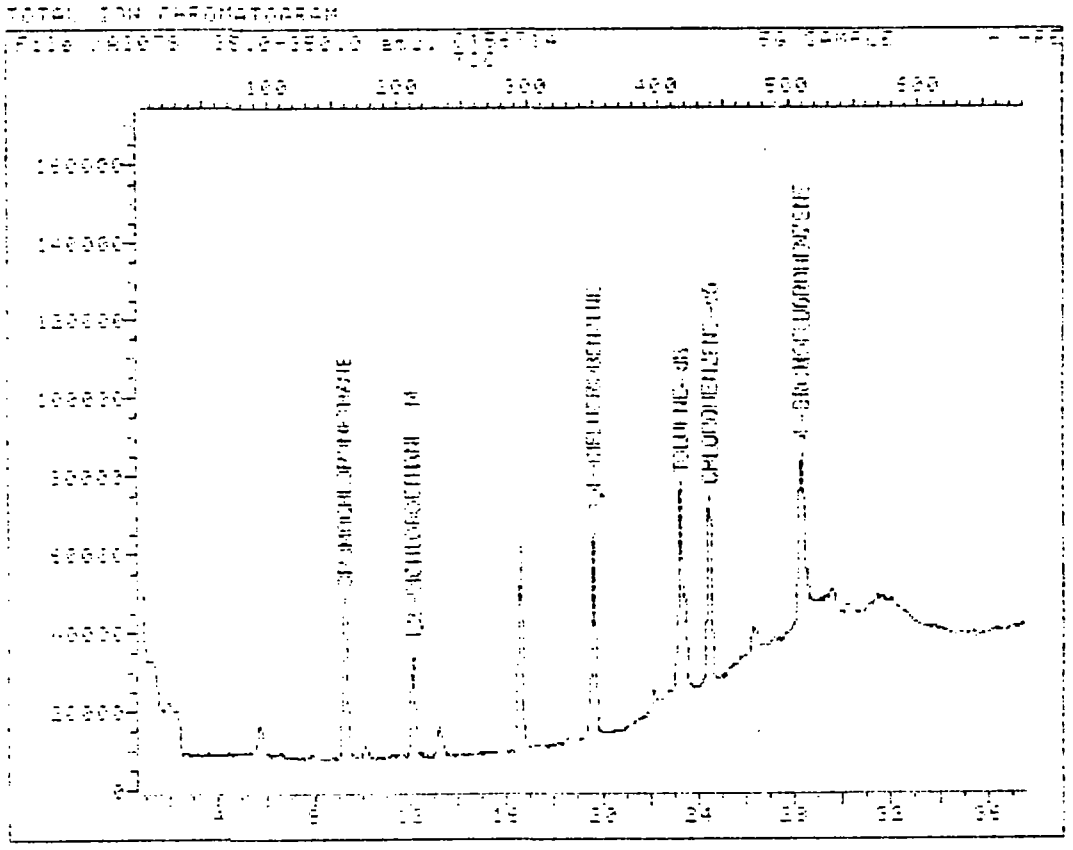
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

SKS

[illegible]

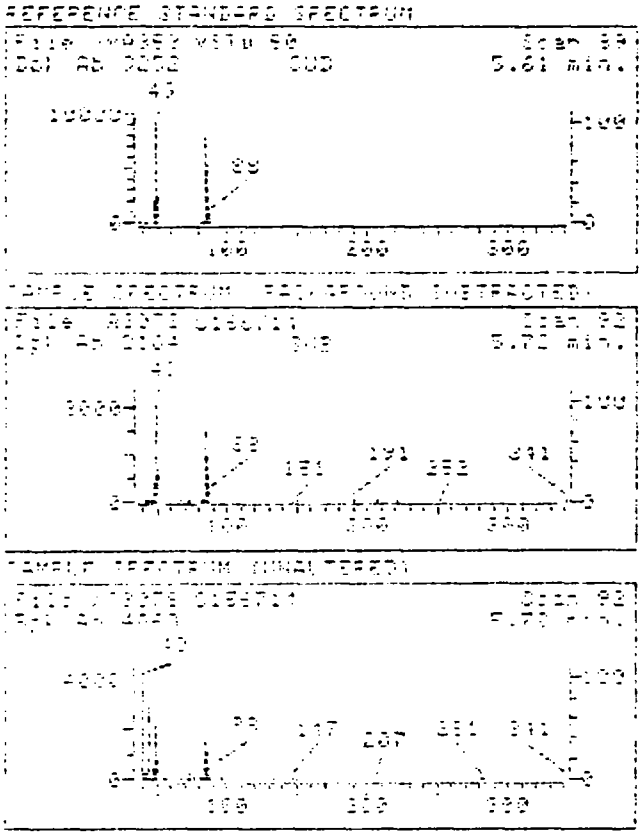
TOTAL ION CHROMATOGRAM

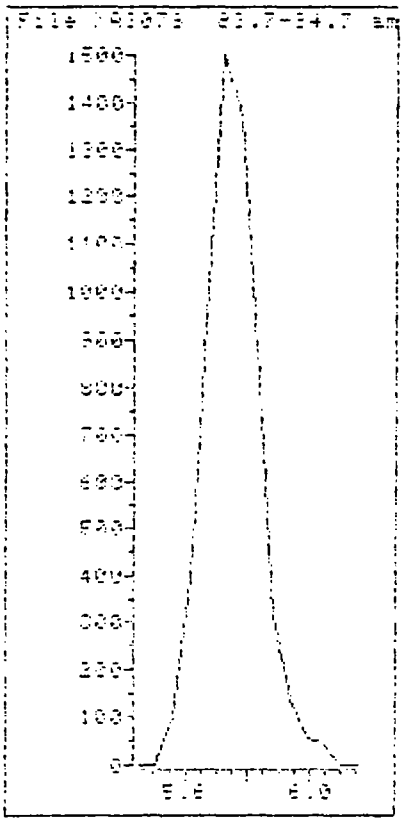


Data File: [illegible] Quant Output File: [illegible]
Name: [illegible]
Misc: [illegible]

Id File: [illegible]
Title: QUANTITATION FILE FOR VOLATILE SOILS [illegible]
Last Calibration: 940524 11:50

Operator ID: USER8
Quant Time: 940524 16:29
Injected at: 940524 15:50





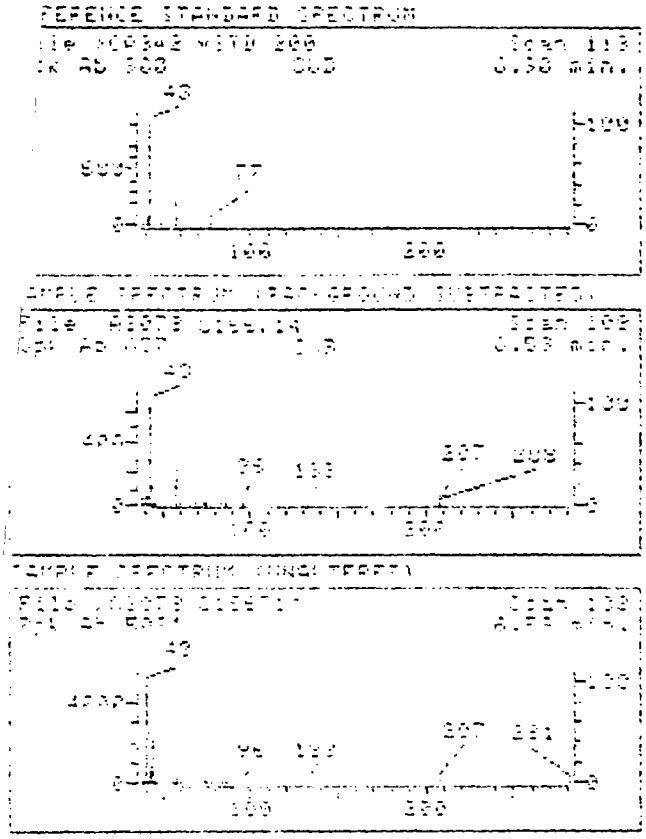
Data File: [illegible]::E1
Name: [illegible]
Misc: [illegible] - [illegible]
Quant Time: [illegible] 16:[illegible]
Injected at: [illegible] 16:[illegible]

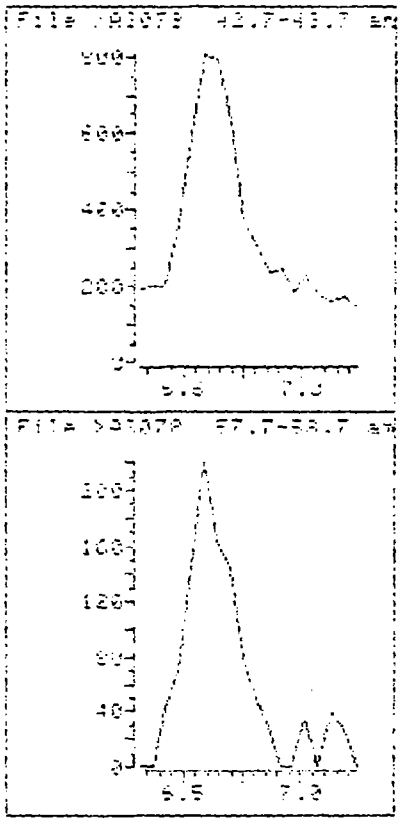
Quant Output File: [illegible]::[illegible]
Quant [illegible] File: [illegible]::[illegible]
Last Calibration: [illegible] 11:[illegible]

Compound No: 7
Compound Name: Methylene Chloride
Scan Number: 92
Retention Time: 5.72 min.
Quant Ion: 84.0
Area: 19383
Concentration: 11.72 UG/KG
q-value: 100

✓

KQ 5/25/94





Data File: [illegible]
Name: [illegible]
Misc: [illegible]
Quant Time: 940524 14:29
Injected at: 940524 15:50

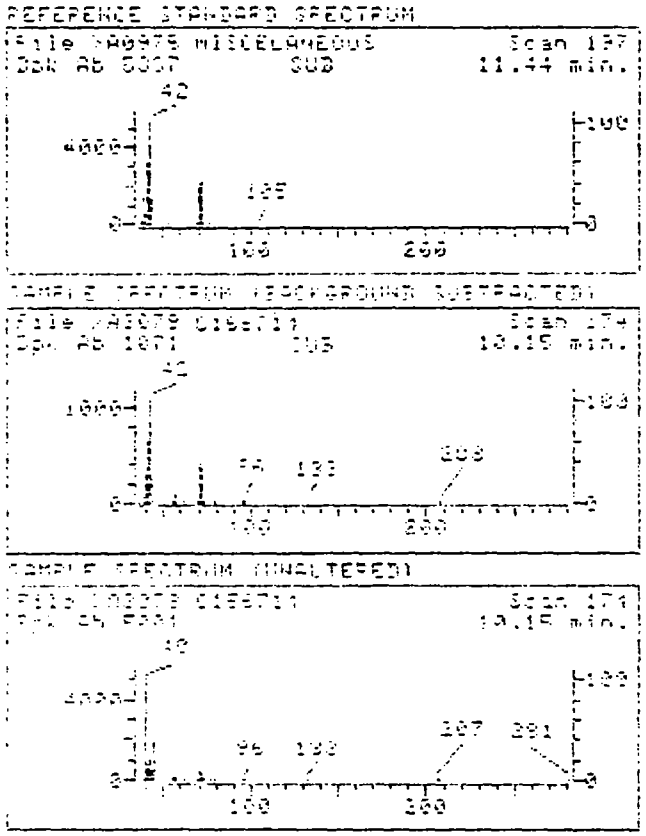
Quant Output File: ^A3078::SS

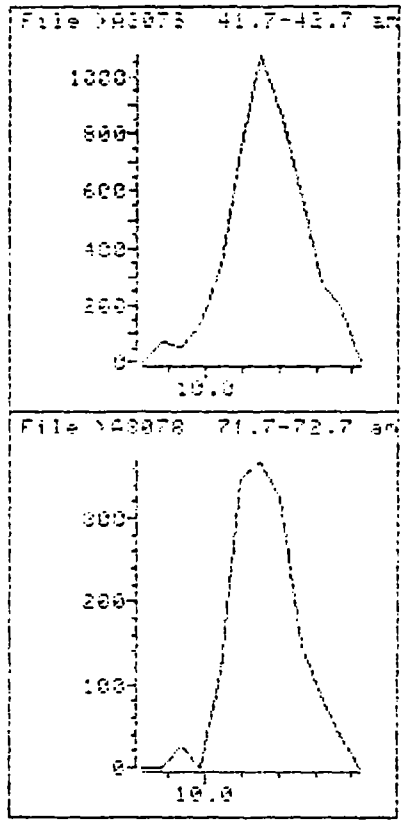
Quant ID File: [illegible]
Last Calibration: 940524 11:50

Compound No: 8
Compound Name: Acetone
Scan Number: 108
Retention Time: 6.59 min.
Quant Ion: 43.0
Area: 10783
Concentration: 28.54 UG/KG
q-value: 95

✓

HR 5/25/94.





Data File: >A3078::E1
Name: C156714
Misc: FG SAMPLE - PPE/MM
Quant Time: 940524 16:09
Injected at: 940524 15:50

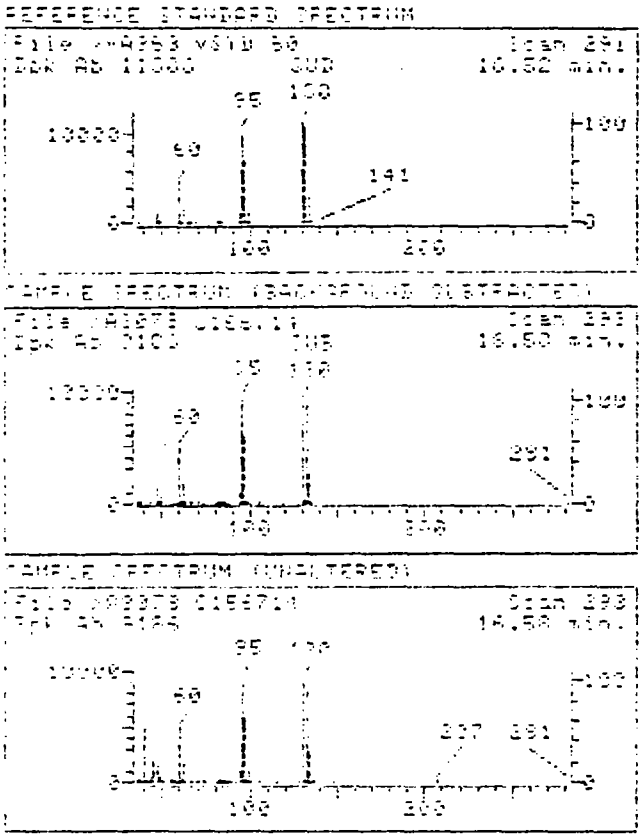
Quant Output File: ^A3078::SS

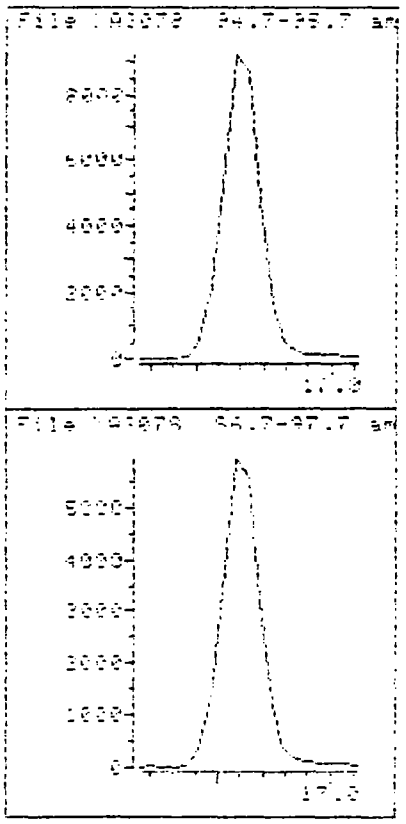
Quant ID File: IDSVOA::D5
Last Calibration: 940524 11:50

Compound No: 15
Compound Name: Tetrahydrofuran
Scan Number: 174
Retention Time: 10.15 min.
Quant Ion: 42.0
Area: 14121
Concentration: 32.74 UG/KG
q-value: 90

✓

HG 5/25/94.





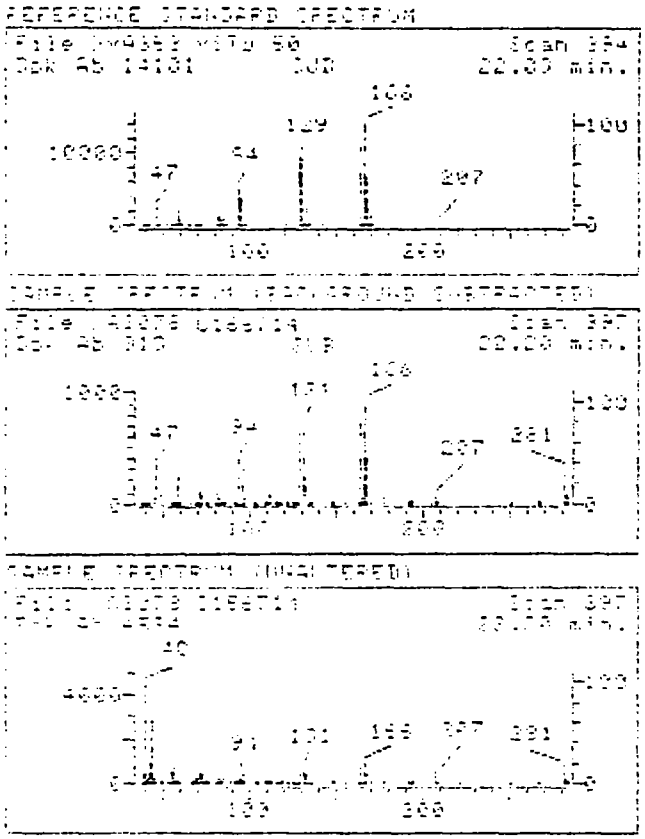
Data File: [illegible]
Name: [illegible]
Mass: 5G SAMPLE - PRE/RM
Quant Time: 940524 16:09
Injected at: 940524 15:50

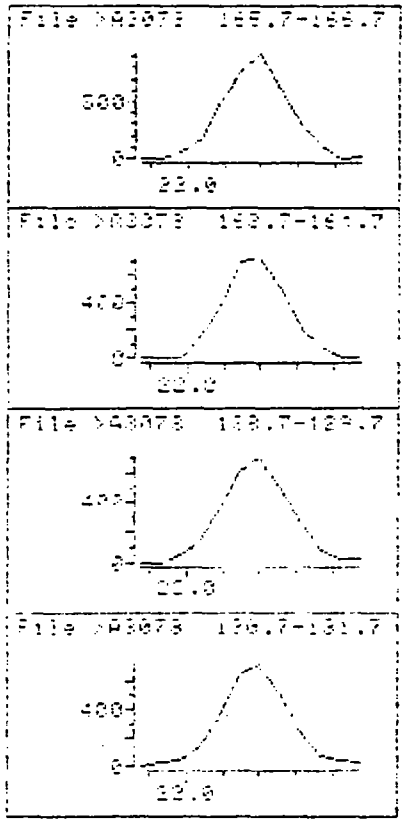
Quant Output File: [illegible]

Quant IS File: [illegible]
Last Calibration: 940524 11:50

Compound No: 28
Compound Name: Trichloroethene
Scan Number: 293
Retention Time: 16.58 min.
Quant Ion: 95.0
Area: 111249
Concentration: 50.82 UG/KG
q-value: 99

HQ 5/25/94.



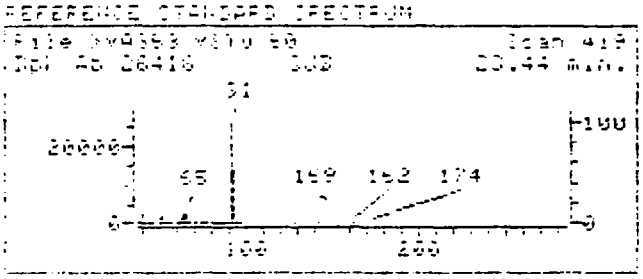


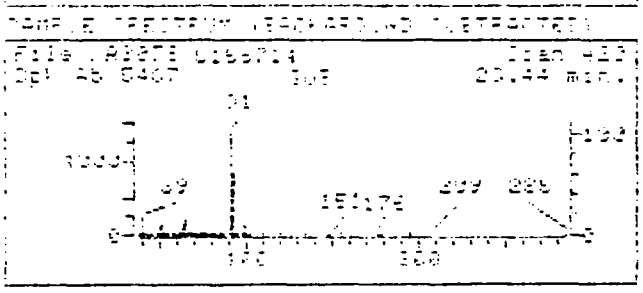
Data File: >A3078::E1 Quant Output File: ^A3078::SS
Name: 1156714
Misc: FG SAMPLE - HPE/BM
Quant Time: 940524 14:29 Quant ID File: 1OSUDA::L5
Injected at: 940524 15:50 Last Calibration: 940524 11:50

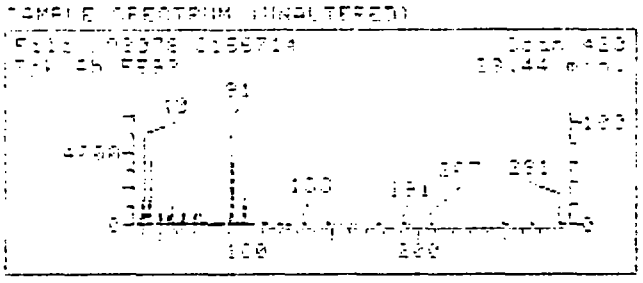
Compound No: 38
Compound Name: Tetrachloroethene
Scan Number: 397
Retention Time: 22.20 min.
Quant Ion: 164.0
Area: 8916
Concentration: 5.64 UG/KG
q-value: 96

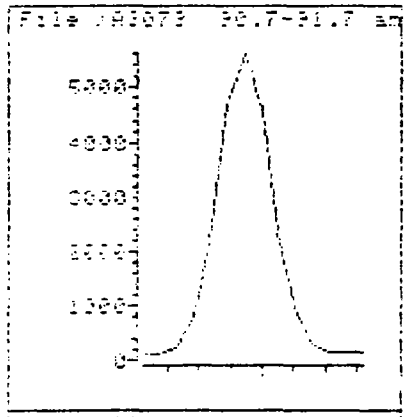
✓

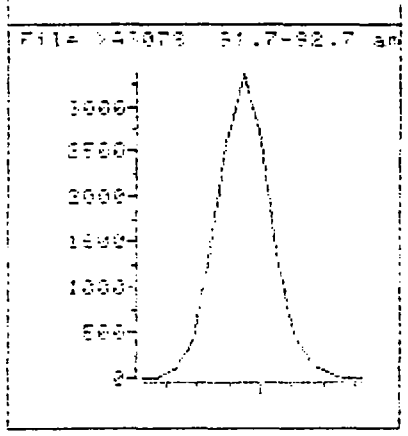
HQ 5/25/94.











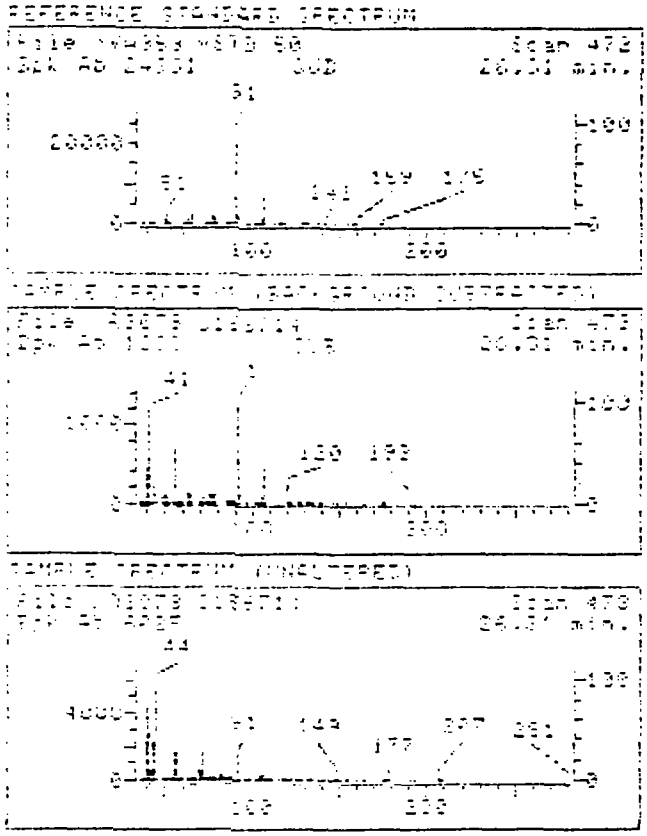
Data File: [illegible]
Name: [illegible]
Misc: [illegible]
Quant Time: [illegible]
Inserted at: [illegible]

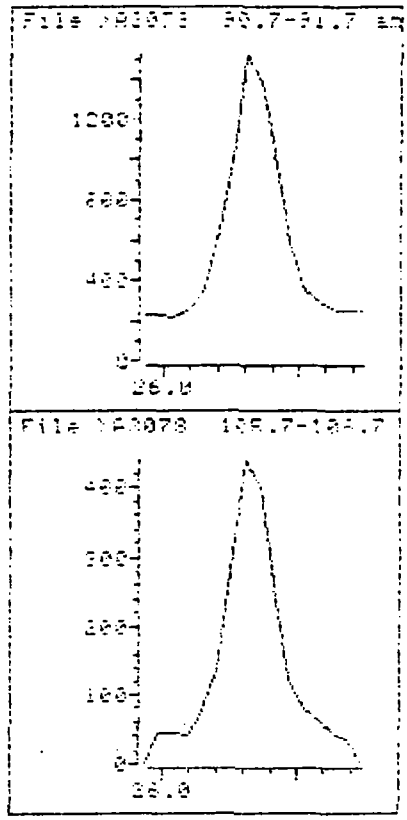
Quant Output File: [illegible]

Quant ID File: [illegible]
Last Calibration: 940524 11:50

Compound No: 41
Compound Name: Toluene
Scan Number: 420
Retention Time: 23.44 min.
Quant Ion: 92.0
Area: 40364
Concentration: 14.85 UG/KG
q-value: 96

HK 5/25/94.





Data File: >A3078::E1
Name: [illegible]
Mixed: [illegible] SAMPLE [illegible]
Quant Time: 940524 [illegible]
Injected at: 940524 15:50

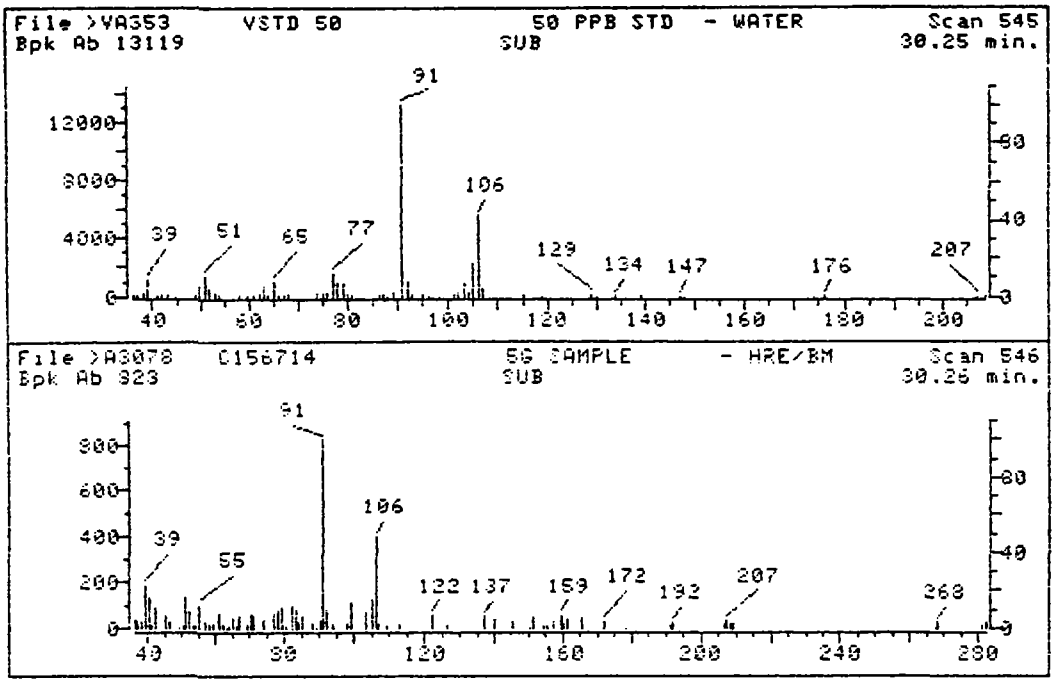
Quant Output File: ^A3078::SS

Quant ID File: [illegible]
Last Calibration: 940524 11:50

Compound No: 43
Compound Name: Ethyl Benzene
Scan Number: 473
Retention Time: 26.31 min.
Quant Ion: 106.0
Area: 6732
Concentration: 4.08 UG/KG
q-value: 94

✓

HK 5/25/94.



45) Total Xylenes RT:29.56 Area: 15824M 8.64 UG/KG

SS

QUANT REPORT

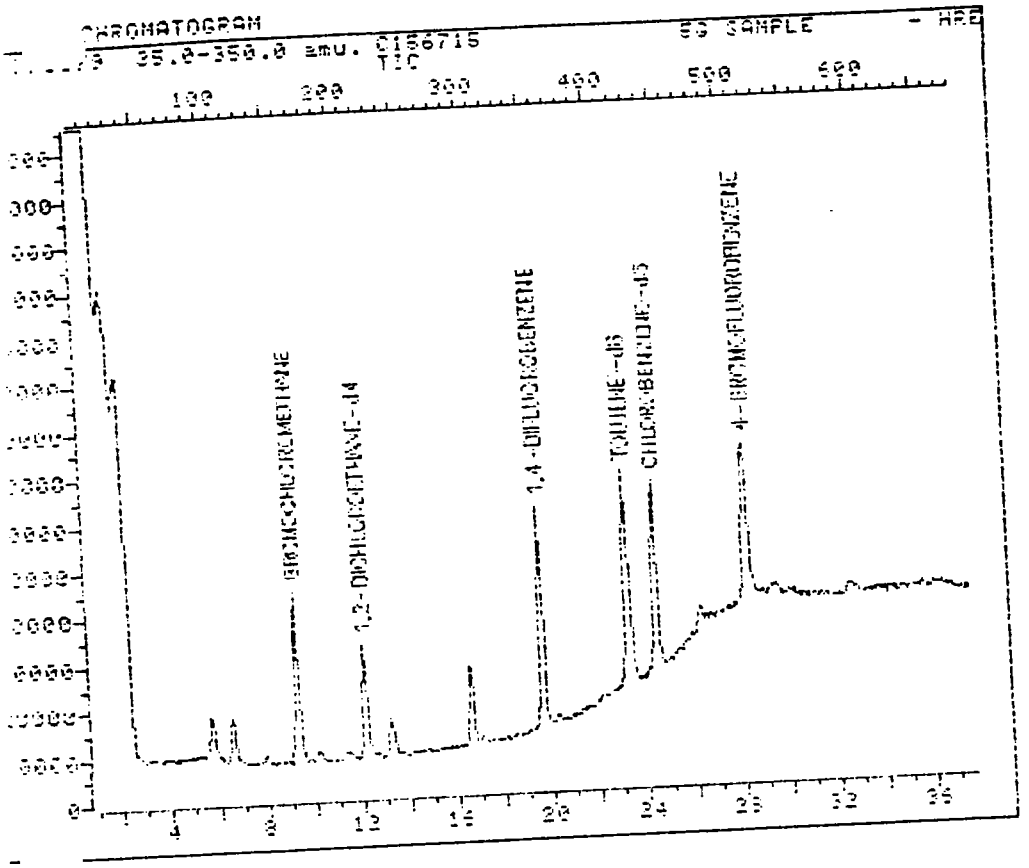
Operator ID: USER8 Quant Rev: 6 Quant Time: 940524 17:14
Output File: ^A3079::D3 Injected at: 940524 16:35
Data File: >A3079::E1 Dilution Factor: 1.00000
Name: C154715
Misc: 5G SAMPLE - HRE/BM

OK ✓ HR 5/25/94

ID File: IDSVOA::D5
Title: QUANTITATION FILE FOR VOLATILE SOILS GC/MSD-A
Last Calibration: 940524 11:50

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.28	128.0	59157	50.00	UG/KG	100
7)	Methylene Chloride	5.72	84.0	23583	16.72	UG/KG	100
8)	Acetone	6.58	43.0	78104	230.04	UG/KG	90
15)	Tetrahydrofuran	10.15	42.0	11214	28.93	UG/KG	97
18)	1,2-DICHLOROETHANE-d4	12.14	65.0	101401	47.46	UG/KG	99
21)	*1,4-DIFLUOROBENZENE	19.65	114.0	225883	50.00	UG/KG	88
28)	Trichloroethene	16.57	95.0	38700	20.02	UG/KG	97
35)	*CHLOROBENZENE-d5	24.46	117.0	153475	50.00	UG/KG	92
36)	4-Methyl-2-Pentanone	20.30	43.0	6035	5.30	UG/KG	75
39)	TOLUENE-d8	23.28	98.0	190075	58.36	UG/KG	97
[illegible]	Toluene	23.44	92.0	29339	12.82	UG/KG	97
44)	4-BROMOFLUOROBENZENE	28.41	95.0	106436	42.88	UG/KG	100
45)	Styrene	29.39	104.0	7365	2.96	UG/KG	97

* Compound is ISTD



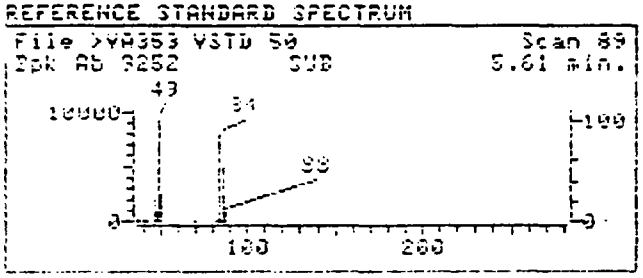
Quant Output File: ^A3079::SS

Data File: >A3079::S1
Name: C156715
Misc: SG SAMPLE - HPE/BM

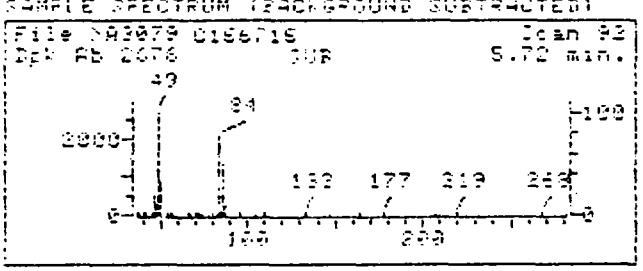
Id File: 105004::U4
Title: QUANTITATION FILE FOR VOLATILE SOILS HC/MSD-A
Last Calibration: 940524 11:50

Operator ID: USER8
Quant Time: 940524 17:14
Injected at: 940524 16:35

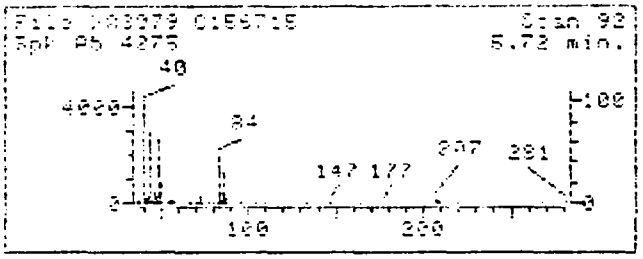
REFERENCE STANDARD SPECTRUM

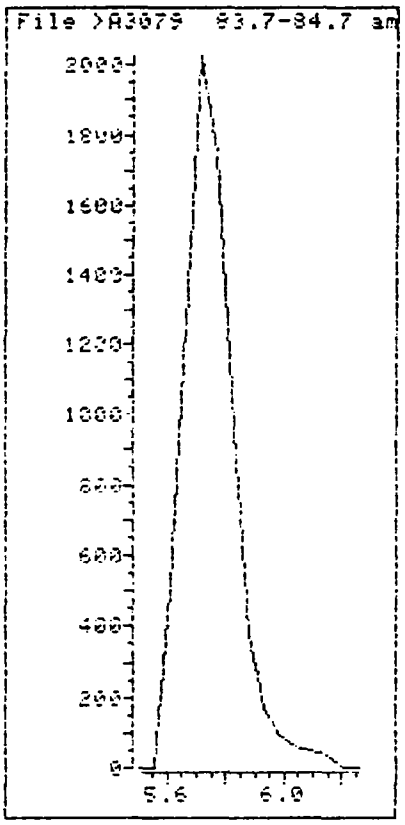


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



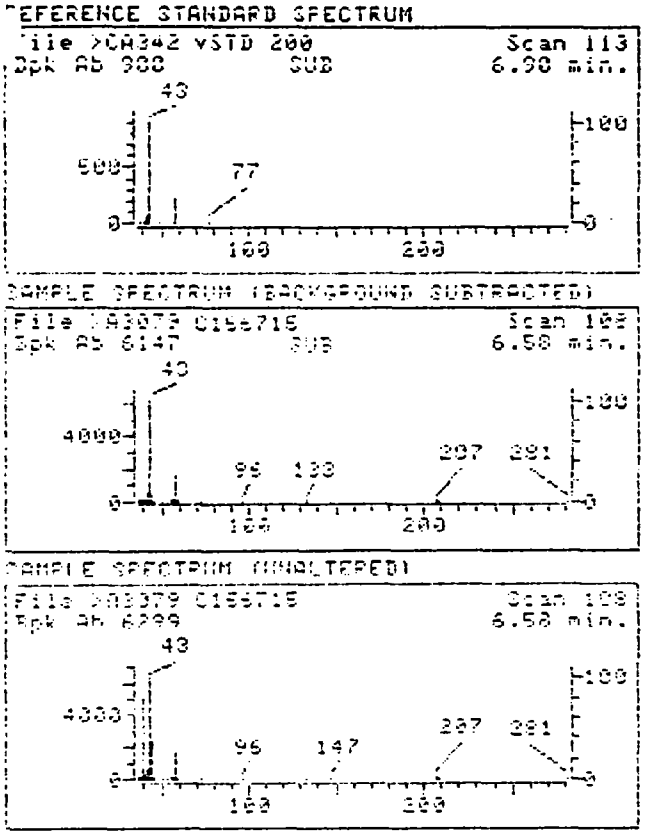


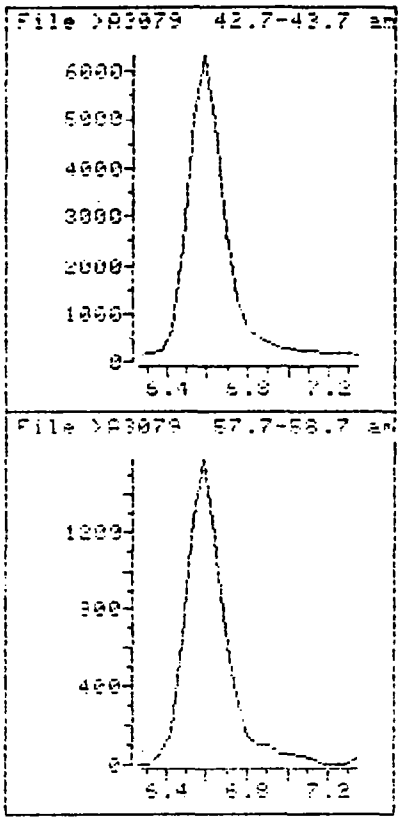
Data File: >A3079::E1
Name: C156715
Misc: 5G SAMPLE - PPE/BM
Quant Time: 940524 17:14
Injected at: 940524 16:36

Quant Output File: ^A3079::SS
Quant ID File: 105V09::05
Last Calibration: 940524 11:50

Compound No: 7
Compound Name: Methylene Chloride
Scan Number: 92
Retention Time: 5.72 min.
Quant Ion: 84.0
Area: 23583
Concentration: 16.72 UG/KG
q-value: 100

KR 5/25/94





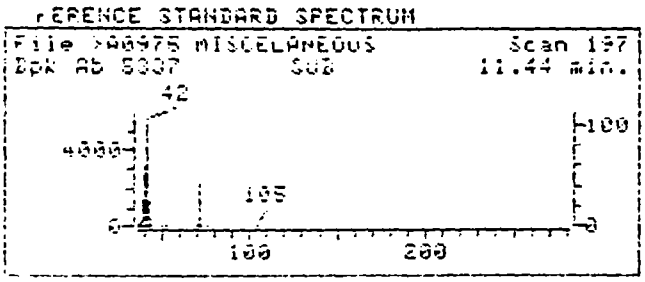
Data File: >A3079::E1
Name: C156715
Misc: 5G SAMPLE - HRE/BM
Quant Time: 940524 17:14
Injected at: 940524 16:35

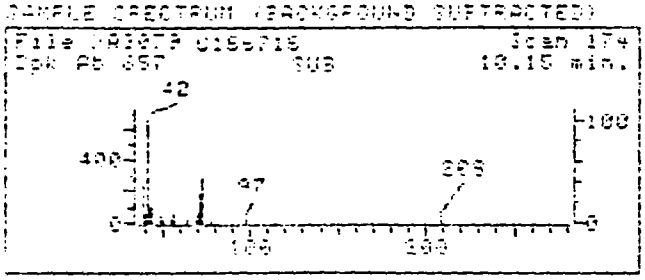
Quant Output File: ^A3079::SS

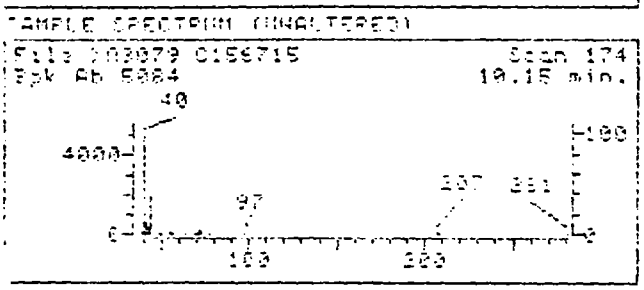
Quant ID File: IDSVOA::D5
Last Calibration: 940524 11:50

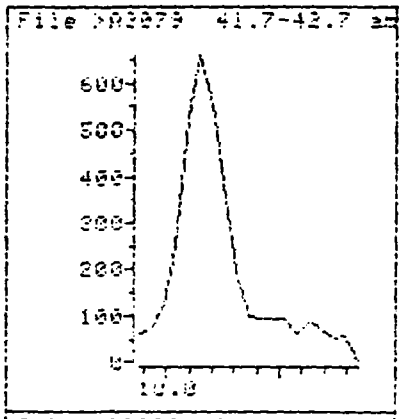
Compound No: 8
Compound Name: Acetone
Scan Number: 108
Retention Time: 6.58 min.
Quant Ion: 43.0
Area: 79104
Concentration: 230.84 UG/KG
q-value: 90

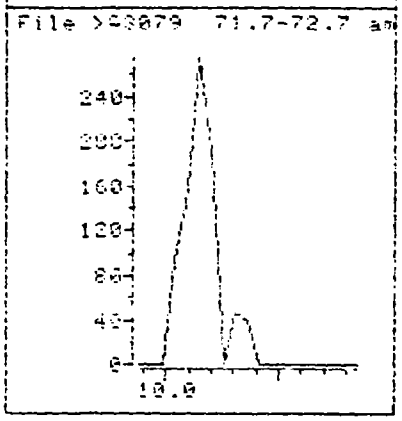
HA 5/25/94.











Data File: >A3079::E1
Name: C156715
Misc: SG SAMPLE - HPE/BM
Quant Time: 940524 17:14
Injected at: 940524 16:35

Quant Output File: ^A3079::SS

Quant ID File: IDSVOA::D5
Last Calibration: 940524 11:50

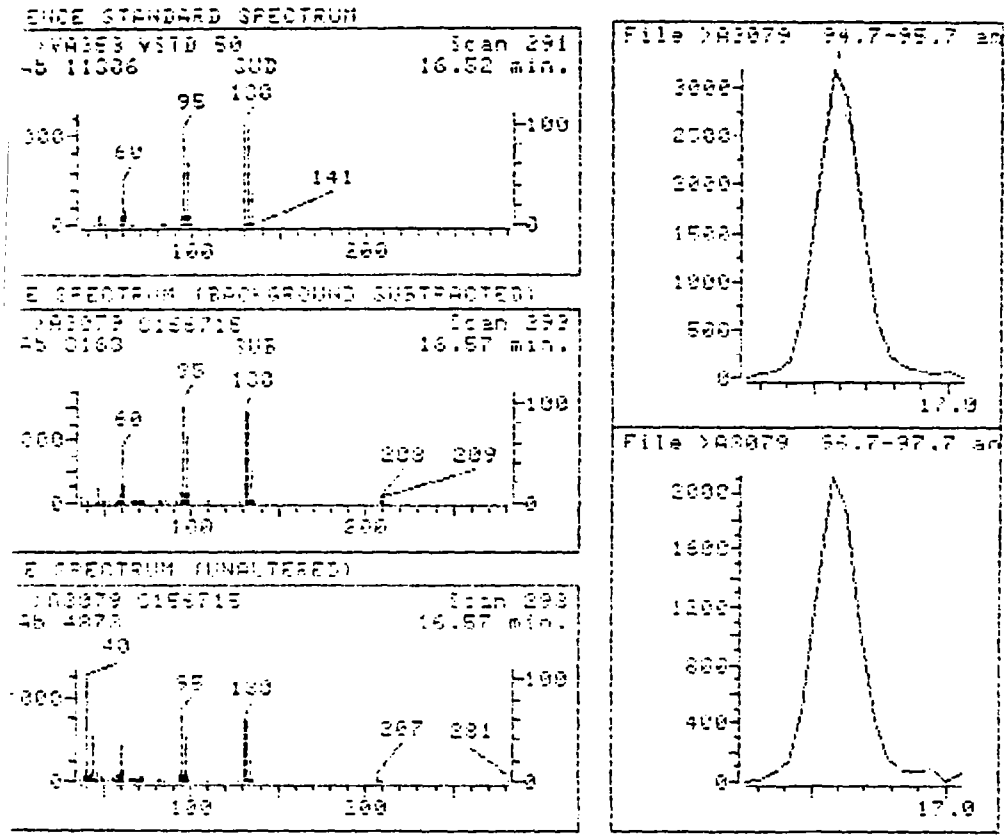
Compound No: 15
Compound Name: Tetrahydrofuran
Scan Number: 174
Retention Time: 10.15 min.
Quant Ion: 42.0
Area: 11214
Concentration: 28.93 UG/KG
q-value: 97

✓

~~See attached.~~

HQ 5/25/94

000938



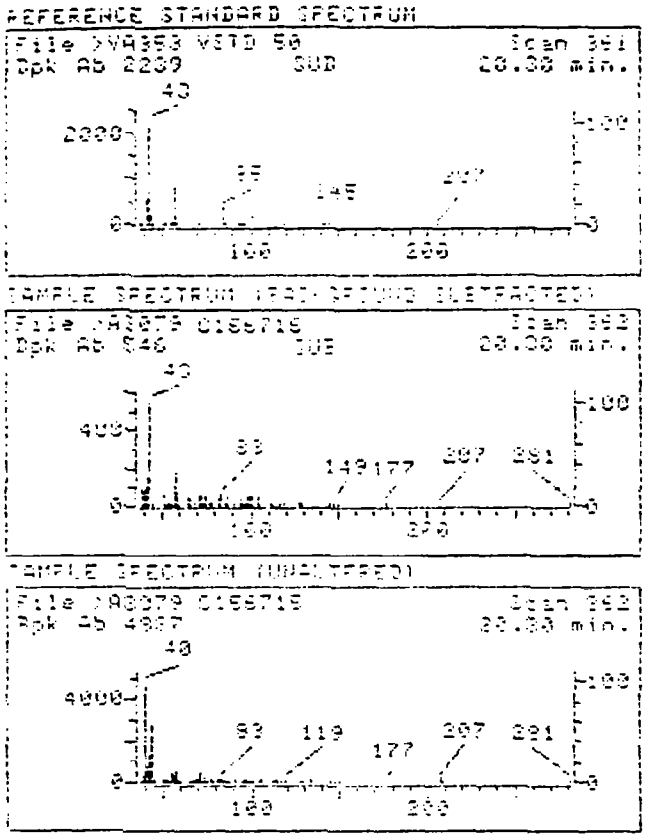
Data File: >A3079::E1
Name: C154715
Misc: SS SAMPLE - HXE/BM
Quant Time: 940524 17:14
Injected at: 940524 16:35

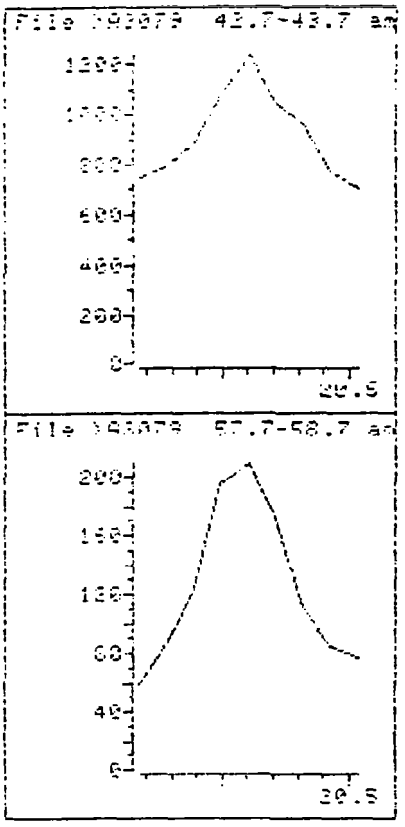
Quant Output File: ^A3079::SS

Quant ID File: IDSVOA::06
Last Calibration: 940524 11:58

Compound No: 28
Compound Name: Trichloroethene
Scan Number: 293
Retention Time: 16.57 min.
Quant Ion: 95.0
Area: 38700
Concentration: 20.02 UG/KG
q-value: 97

HA 5/25/94.





Data File: >A3079::E1
Name: C156715
Misc: FG SAMPLE - HPE/BM
Quant Time: 940524 17:14
Injected at: 940524 16:35

Quant Output File: ^A3079::SS
Quant IO File: IDSVOA::D5
Last Calibration: 940524 11:50

Compound No: 36
Compound Name: 4-Methyl-2-Pentanone
Scan Number: 362
Retention Time: 20.30 min.
Quant Ion: 43.0
Area: 6035
Concentration: 5.30 UG/KG
q-value: 75

HQ 5/25/94.