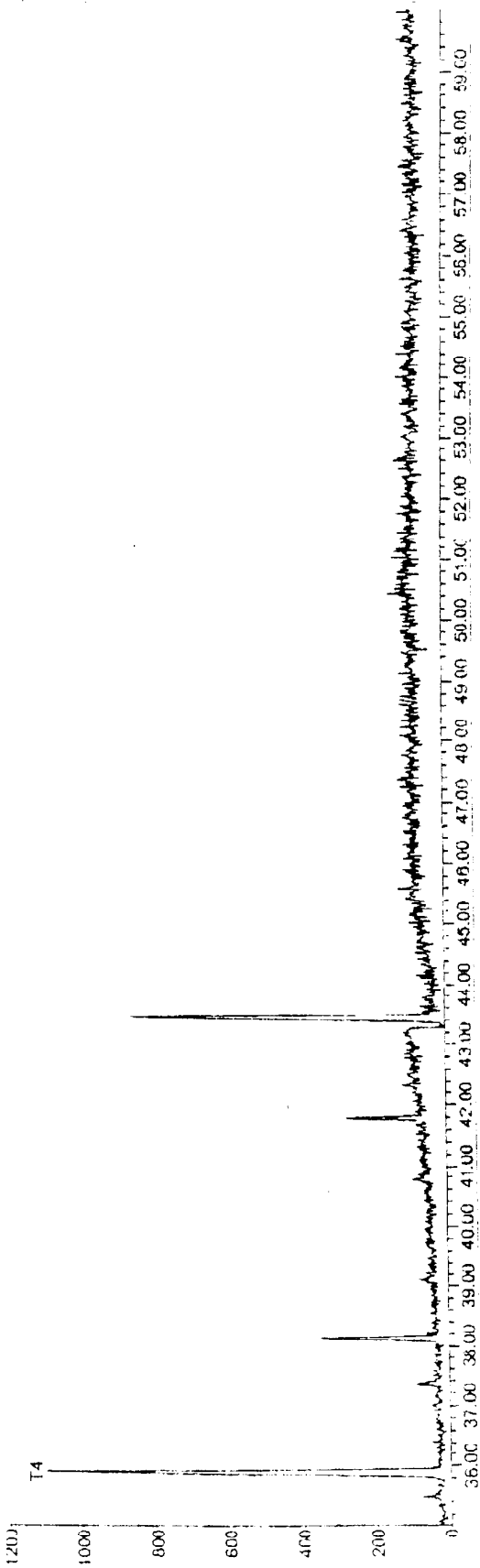
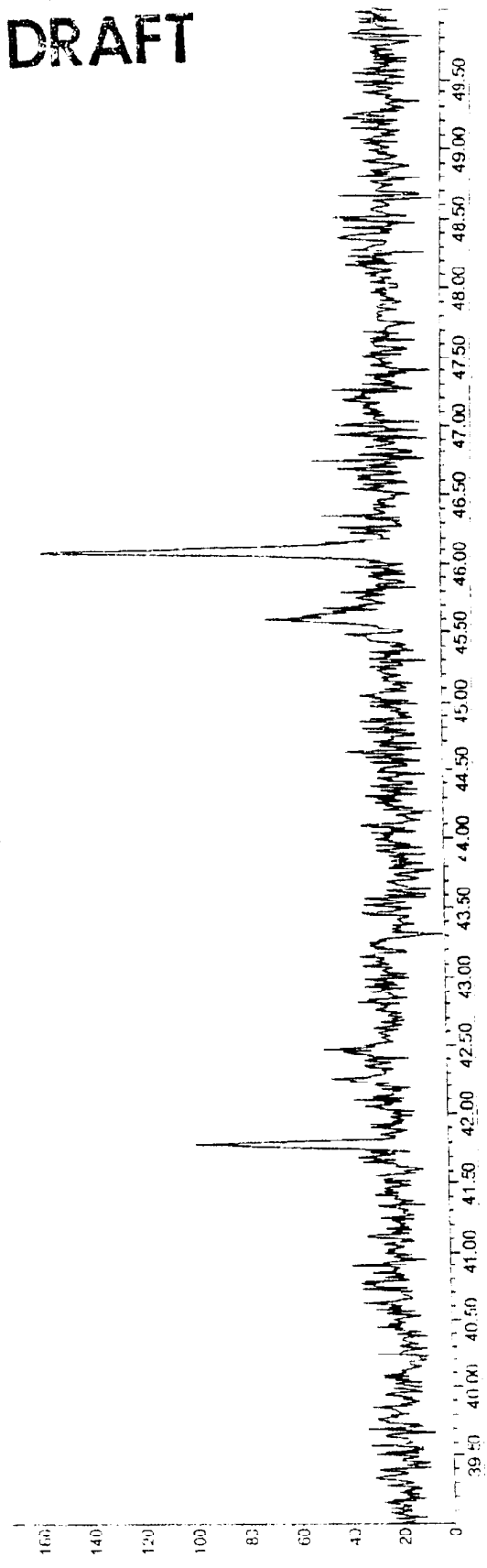


File : C:\HPCHEM\1\SQZ531\DZ5826.D  
Operator : SLK  
Acquired : 4 Jan 1999 2:18 pm using AcqMethod RTE meth . SIER3  
Instrument : MS #3  
Sample Name: 96D4903  
Misc Info : Item 4  
Vial Number: 4294934548

Ion 191.00 (180.70 to 191.70): DZ5826.D



Ion 217.00 (210.70 to 217.70): DZ5826.D



DRAFT

File : C:\HPCHEM\1\SQZ531\DZ5827.D

Operator : slt

Acquired : 4 Jan 1999 3:34 pm using AcqMethod RTE meth...: STER3

Instrument : MS #3

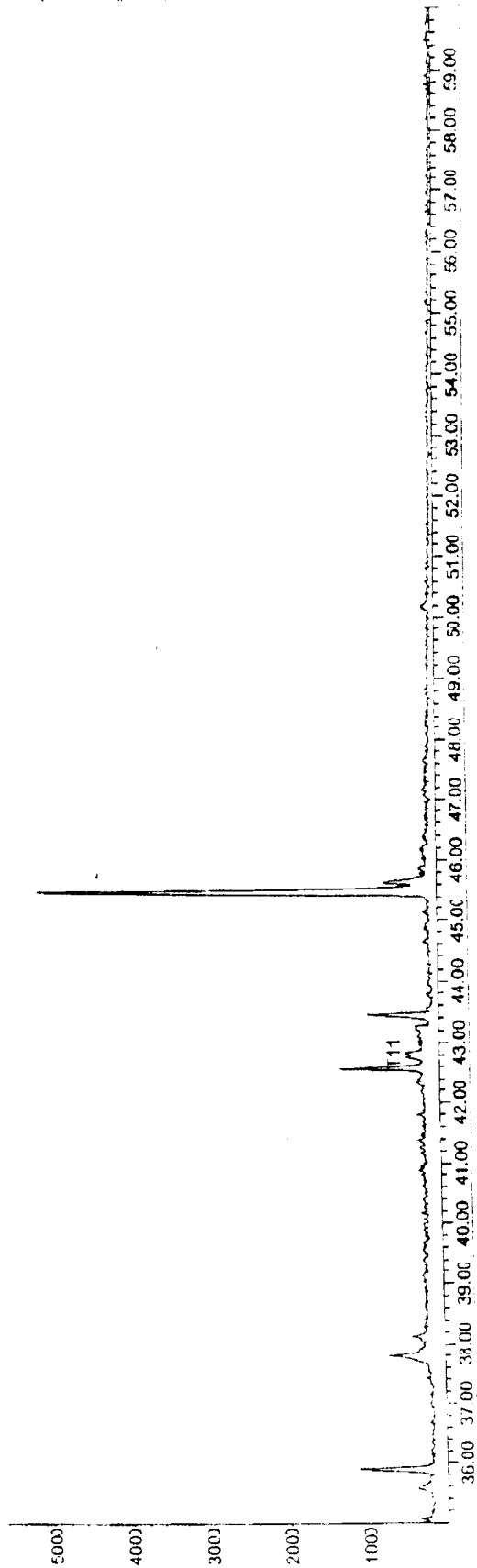
Sample Name : 98D3503

Misc Info :

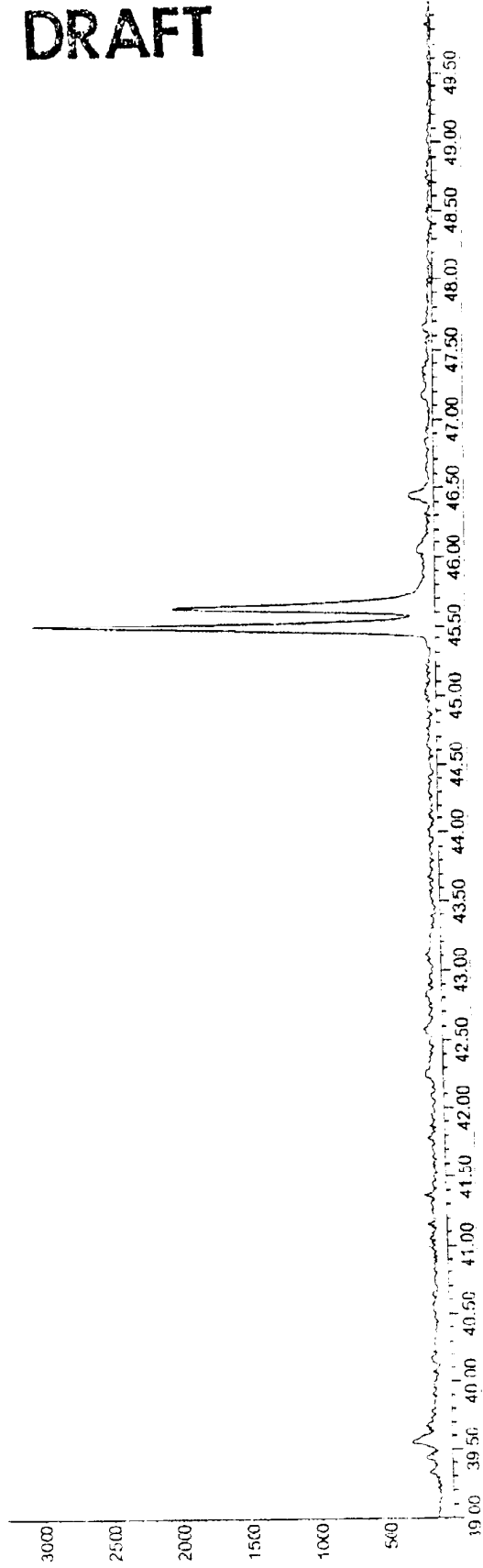
Vial Number : 4294934579

OA 1010-1

Ion 191.00 (190.70 to 191.70): DZ5827.D

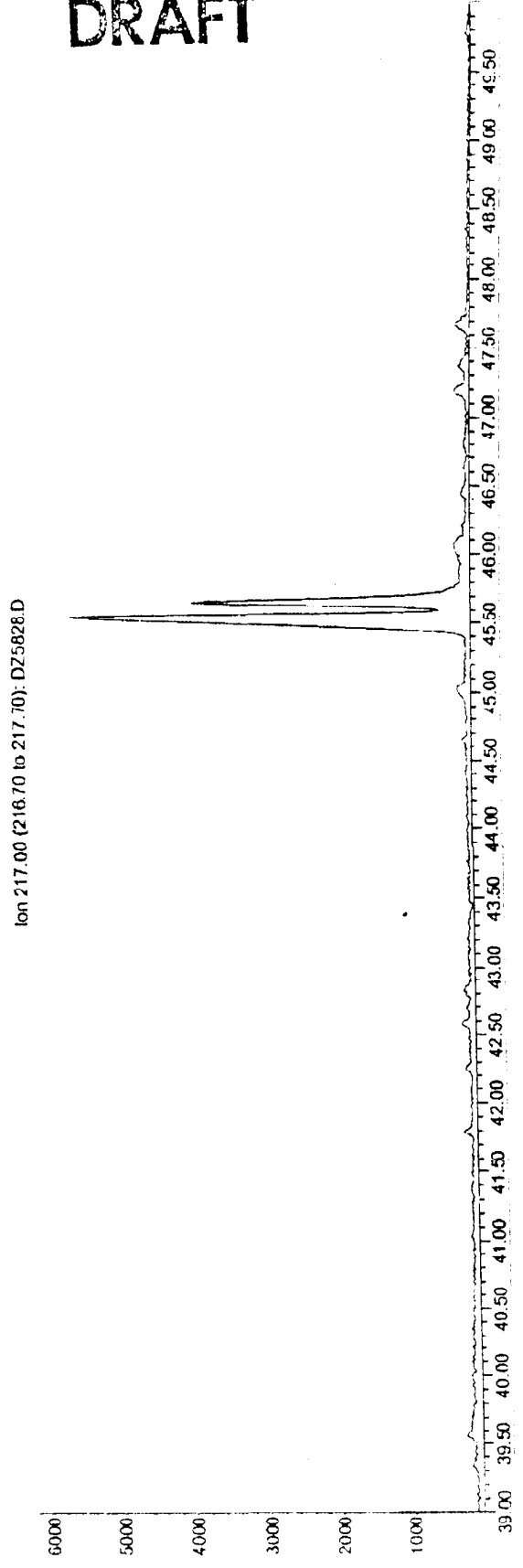
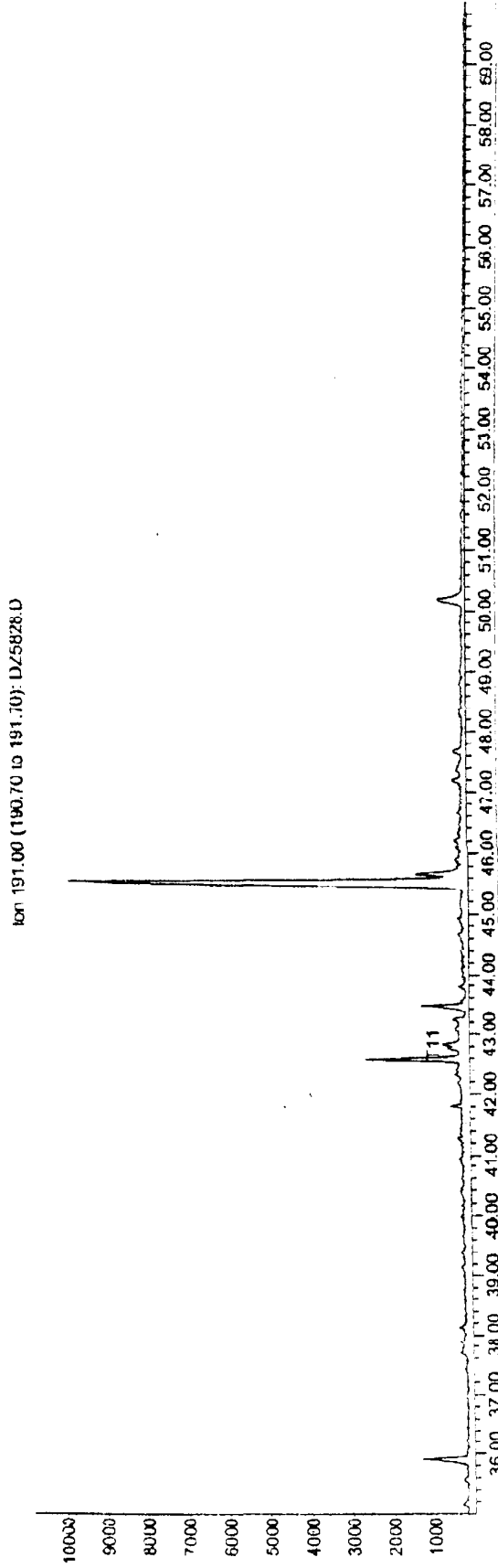


Ion 217.00 (216.70 to 217.70): DZ5827.D



DRAFT

File : C:\HPCHEM\1\SQZ531\DZ5828.D  
Operator : slr  
Acquired : 4 Jan 1999 4:49 pm using AcqMethod RTE meth...: STER3  
Instrument : MS #3  
Sample Name: 98D3504  
Misc Info : OA 1010-2  
Vial Number: 4294934580



DRAFT

File : C:\HPCHEM\1\SQZ531\DZ5824.D

Operator : slr

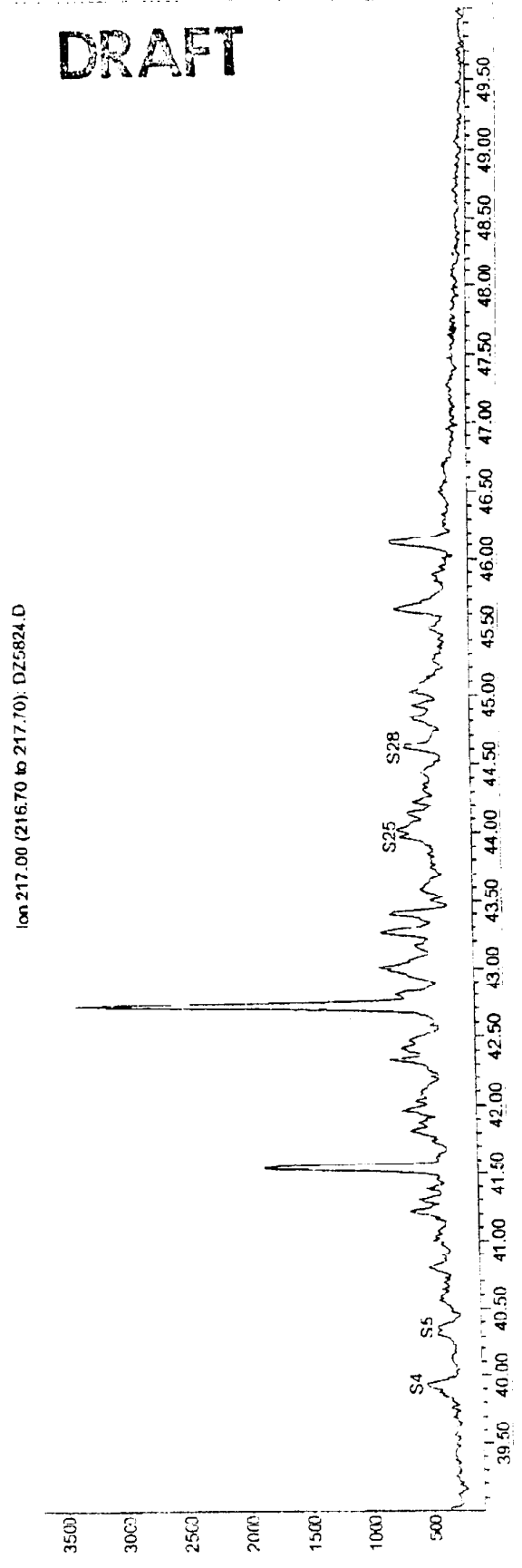
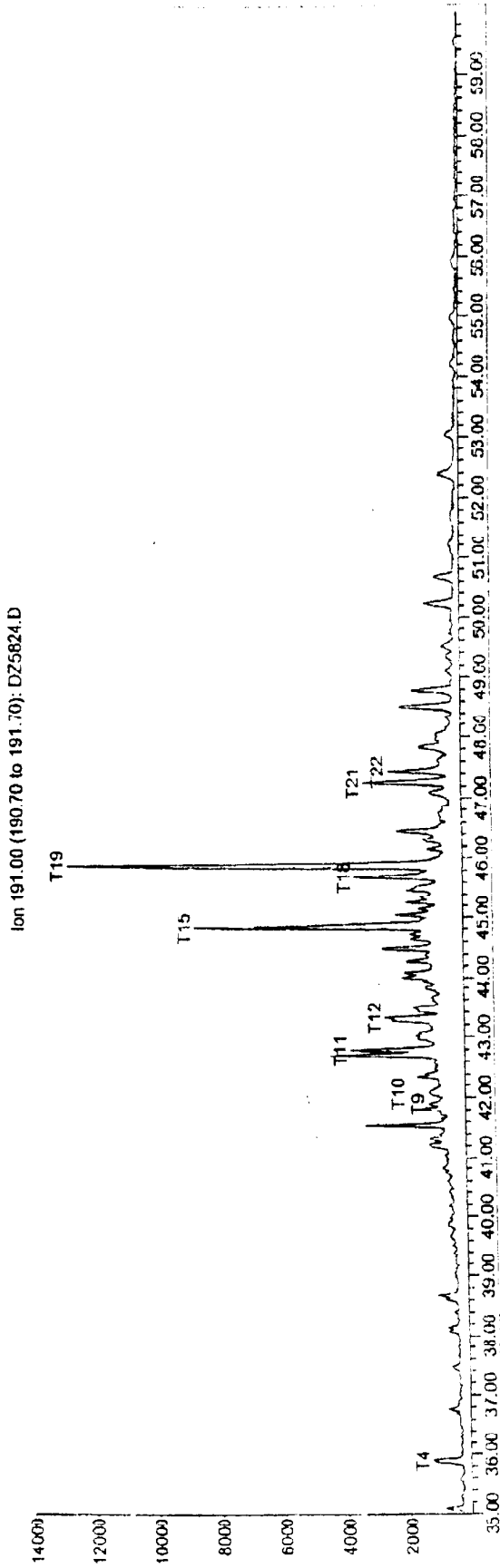
Acquired : 4 Jan 1999 11:46 am using AcqMethod RTE meth.: STER3

Instrument : MS #3

Sample Name : 98D4904

Misc Info : Item 5

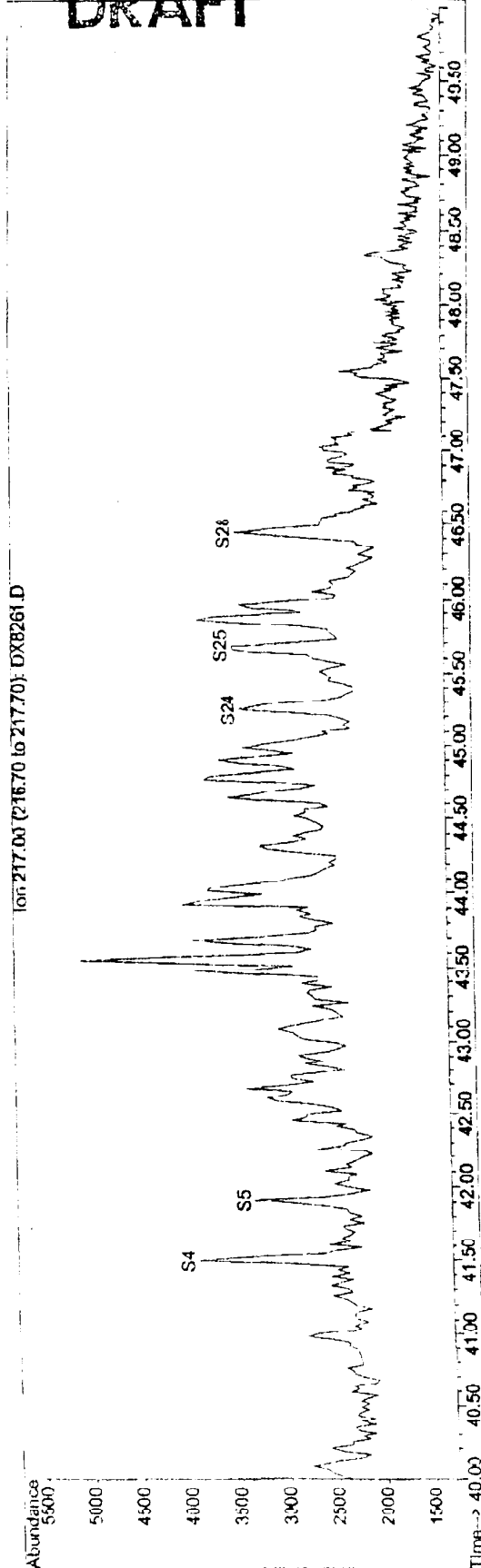
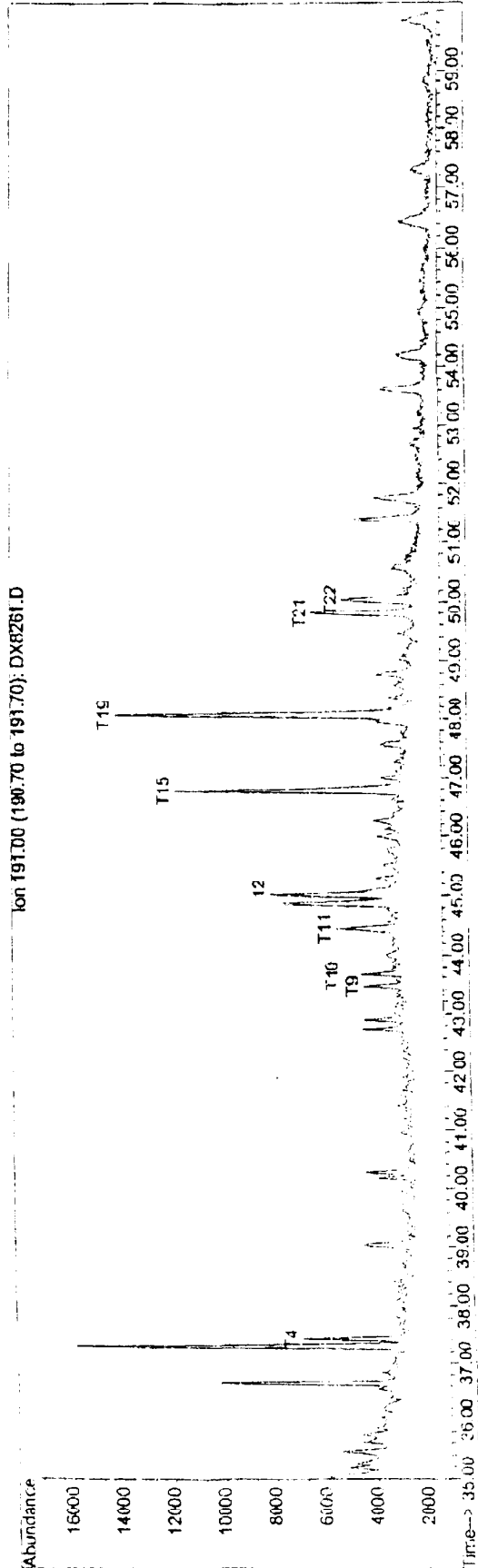
Vial Number : 4294934546



DRAFT

File : C:\HPCHEM\1\SQX658\DX8261.D

Operator :  
Acquired : 12 Sep 98 4:55 pm using AcqMethod PA4SIM  
Instrument : GC/MS#4  
Sample Name : 98D2804  
Misc Info : SPM HOSE001  
Vial Number : 1



DRAFT

Arthur D. Little  
Environmental Monitoring and Analysis Unit

Project Title : Tesoro Hawaii  
Sample Set: B0247  
Data : SHC/TPH - Main - Surrogate Corrected

**DRAFT**

	ACF PB B0247	ACF BS B0247	OA 1010-1	OA 1010-2
Field ID	ACF PB B0247	ACF BS B0247	TESORO B0247	TESORO B0247
Lab ID	BY-S-57PB	BY-S-58BS	9803503	9803504
Lab Batch	B0247	B0247	B0247	B0247
File	12069891.D	12069892.D	12069896.D	12069884.D
Sample Type	QC	QC	SAMP	SAMP
Weight Basis	DRY	DRY	Oil	Oil
Matrix	Soil	Soil	Feather	Feather
Sample Size	10 g	10 g	3.8 mg	2.96 mg
Associated Blank	NA	BY-S-57PB	BY-S-57PB	BY-S-57PB
Field Date	NA	NA	10/10/98	10/10/98
Extract Date	11/13/98	11/13/98	11/16/98	11/16/98
Analysis Date	12/09/98	12/09/98	12/09/98	12/09/98
Min Reporting Limit	0.1	0.1	0.26	0.34
Units	ug/g	ug/g	ug/mg	ug/mg
nC8	0.22	0.25	0.24 J	0.034 J
nC9	ND	ND	0.074 J	0.075 J
nC10	0.0079 J	1.1	0.15 J	0.085 J
nC11	ND	ND	0.19 J	0.24 J
nC12	ND	ND	0.013 J	ND
nC13	ND	ND	ND	ND
1380	ND	ND	0.043 J	ND
nC14	0.0079 J	0.017 J	ND	ND
1470	ND	0.077 J	ND	0.043 J
nC15	ND	1.8	ND	0.017 J
nC16	ND	ND	ND	0.022 J
1660	ND	ND	ND	0.063 J
nC17	ND	ND	0.023 J	0.03 J
pristane	ND	1.9	ND	0.0086 J
nC18	ND	0.0069 J	ND	ND
phytane	ND	0.0097 J	ND	ND
nC19	ND	ND	ND	0.022 J
nC20	ND	1.9	ND	ND
nC21	ND	ND	ND	ND
nC22	ND	ND	0.15 J	ND
nC23	ND	0.01 J	1.2	0.6
nC24	ND	ND	ND	ND
nC25	ND	1.9	1.3	0.31
nC26	ND	ND	0.076 J	0.027 J
nC27	ND	ND	0.53	0.3 J
nC28	ND	0.026 J	ND	1
nC29	ND	ND	0.59	0.33 J
nC30	ND	1.8	0.12 J	ND
nC31	ND	ND	1.6	30
nC32	ND	0.0069 J	ND	0.036 J
nC33	ND	ND	0.056 J	0.1 J
nC34	ND	1.5	0.45	1.6
nC35	ND	ND	ND	0.12 J
nC36	ND	1.3	ND	ND
nC37	ND	ND	0.039 J	ND
nC38	ND	ND	0.067 J	ND
nC39	ND	ND	ND	ND
nC40	ND	ND	ND	ND
TPH (RES)	5.9	26	110	290
TPH	5.9	26	340	340
%OTP	110	116	97	96
%5AA	108	115	216 &,I	90
%D50T	116	118	100	106

Arthur D. Little  
Environmental Monitoring and Analysis Unit

Project Title : Tesoro Hawaii  
Sample Set: B0247  
Data : SHC/TPH - Main - Surrogate Corrected

**DRAFT**

	ITEM 4 TESORO	ITEM 5 TESORO	SPM HOSE001
Field ID	B0247	B0247	98D2804
Lab ID	98D4903	98D4904	B0143
Lab Batch	B0247	B0247	09119815.D
File	12069886.D	12069894.D	QC
Sample Type	SAMP	SAMP	Oil
Weight Basis	Oil	Oil	Oil
Matrix	Feather	Feather	Oil
Sample Size	0.16 mg	4.05 mg	10.1 mg
Associated Blank	BY-S-57PB	BY-S-57PB	BY-S-87PB
Field Date	09/27/98	10/04/98	09/31/98
Extract Date	12/02/98	12/02/98	09/11/98
Analysis Date	12/09/98	12/09/98	09/12/98
Min Reporting Limit	6.2	0.25	0.4
Units	ug/mg	ug/mg	ug/mg
nC8	ND	ND	0.035 JB
nC9	ND	ND	0.15 J
nC10	ND	0.03 J	0.53
nC11	ND	ND	0.93
nC12	ND	ND	1.2
nC13	ND	ND	1.7
1390	ND	ND	0.51
nC14	ND	ND	3
1470	ND	ND	0.91
nC15	ND	ND	2.8
nC16	ND	ND	3.7
1650	ND	ND	1.8
nC17	ND	0.063 J	4.3
pristane	ND	0.023 J	2.8
nC18	ND	0.3	3.7
phytane	ND	0.064 J	1.4
nC19	ND	1.1	3.3
nC20	ND	2.1	2.8
nC21	ND	3.3	2.1
nC22	ND	3.9	1.3
nC23	ND	5	0.92
nC24	ND	5.4	0.6
nC25	ND	6.5	0.41
nC26	ND	6.3	0.31 J
nC27	ND	7	0.24 J
nC28	ND	6.5	0.19 J
nC29	ND	6.4	0.18 J
nC30	ND	4.9	0.17 J
nC31	2.7 J	5.2	0.17 J
nC32	ND	3.4	0.17 J
nC33	ND	2.9	0.16 J
nC34	ND	2	0.13 J
nC35	ND	1.9	0.14 J
nC36	ND	1.1	0.13 J
nC37	ND	0.93	0.1 J
nC38	ND	0.76	0.12 J
nC39	ND	0.88	0.1 J
nC40	ND	0.68	0.088 J
TPH (RES)	170	130	100
TPH	170	290	380
%OTP	111	80	88
%5AA	111	81	90
%D50T	108	80	94

Arthur D. Little  
Environmental Monitoring and Analysis Unit

**DRAFT**

Project Title : Tesoro Hawaii  
Sample Set: B0247  
Data : SHC/TPH - B3 - Surrogate Corrected

Field ID	ACF PB B0247	ACF BS B0247			
Lab ID	BY-S-57PB	BY-S-58BS			
Lab Batch	B0247	B0247			
File	12069891.D	12069892.D			
Sample Type	QC	QC			
Weight Basis	DRY	DRY			
Matrix	Soil	Soil			
Sample Size	10 g	10 g			
Associated Blank	NA	BY-S-57PB			
Field Date	NA	NA			
Extract Date	11/13/98	11/13/98			
Analysis Date	12/09/98	12/09/98			
Min Reporting Limit	0.1	0.1			
Units	ug/g	ug/g	T	%R	Q
nC8	0.22	0.25			
nC9	ND	ND			
nC10	0.0079 J	1.1	2.5	44	&
nC11	ND	ND			
nC12	ND	ND			
nC13	ND	ND			
1380	ND	ND			
nC14	0.0079 J	0.017 J			
1470	ND	0.077 J			
nC15	ND	1.8	2.5	72	
nC16	ND	ND			
1650	ND	ND			
nC17	ND	ND			
pristane	ND	1.9	2.5	76	
nC18	ND	0.0069 J			
phytane	ND	0.0097 J			
nC19	ND	ND			
nC20	ND	1.9	2.5	76	
nC21	ND	ND			
nC22	ND	ND			
nC23	ND	0.01 J			
nC24	ND	ND			
nC25	ND	1.9	2.5	76	
nC26	ND	ND			
nC27	ND	ND			
nC28	ND	0.026 J			
nC29	ND	ND			
nC30	ND	1.8	2.5	72	
nC31	ND	ND			
nC32	ND	0.0069 J			
nC33	ND	ND			
nC34	ND	1.5	2.5	60	
nC35	ND	ND			
nC36	ND	1.3	2.5	52	
nC37	ND	ND			
nC38	ND	ND			
nC39	ND	ND			
nC40	ND	ND			
TPH (RES)	5.9	26			
TPH	5.9	26			
%OTP	110	116			
%SAA	108	115			
%DSOT	116	118			



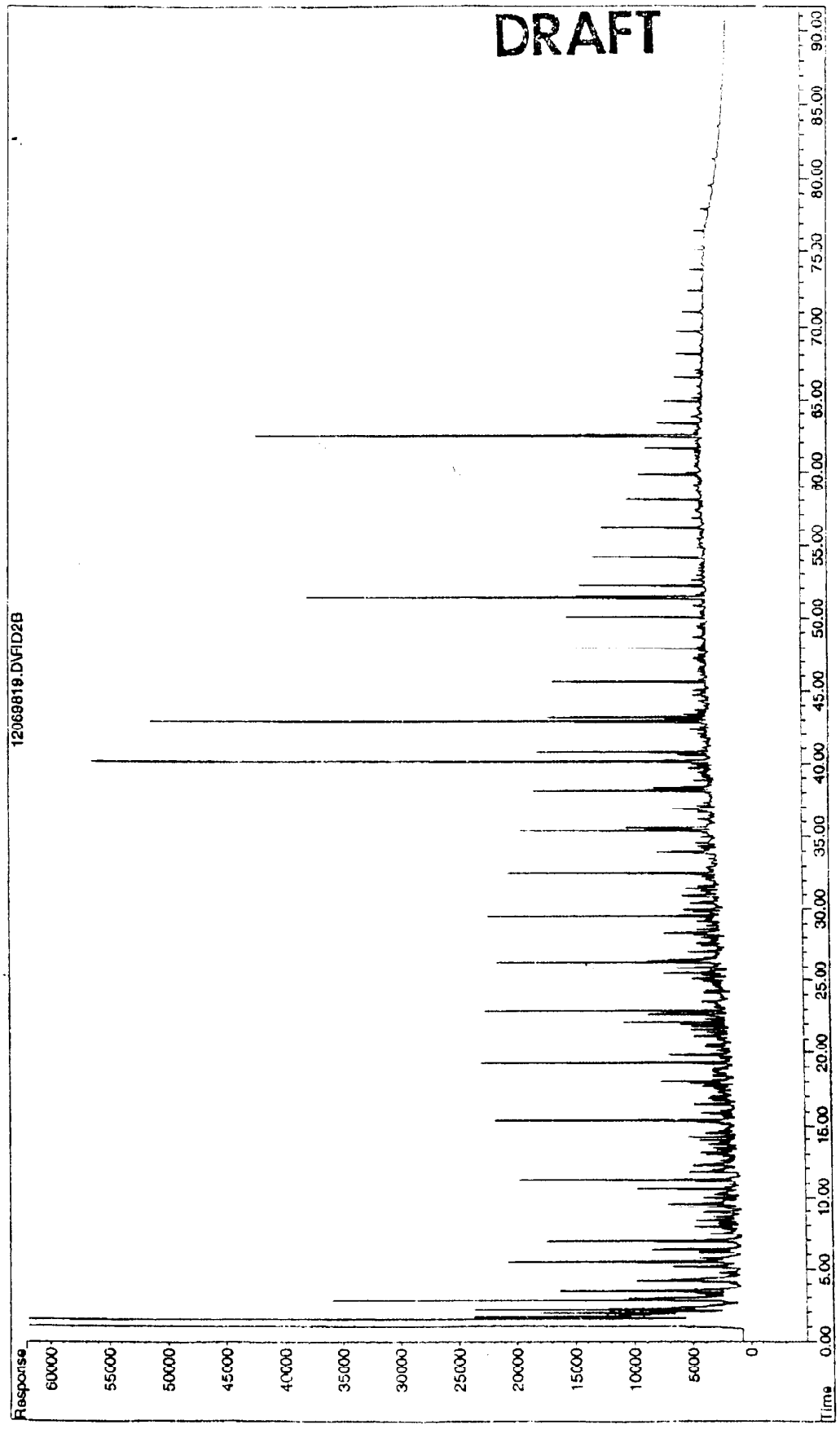
Arthur D. Little  
Environmental Monitoring and Analysis Unit

**DRAFT**

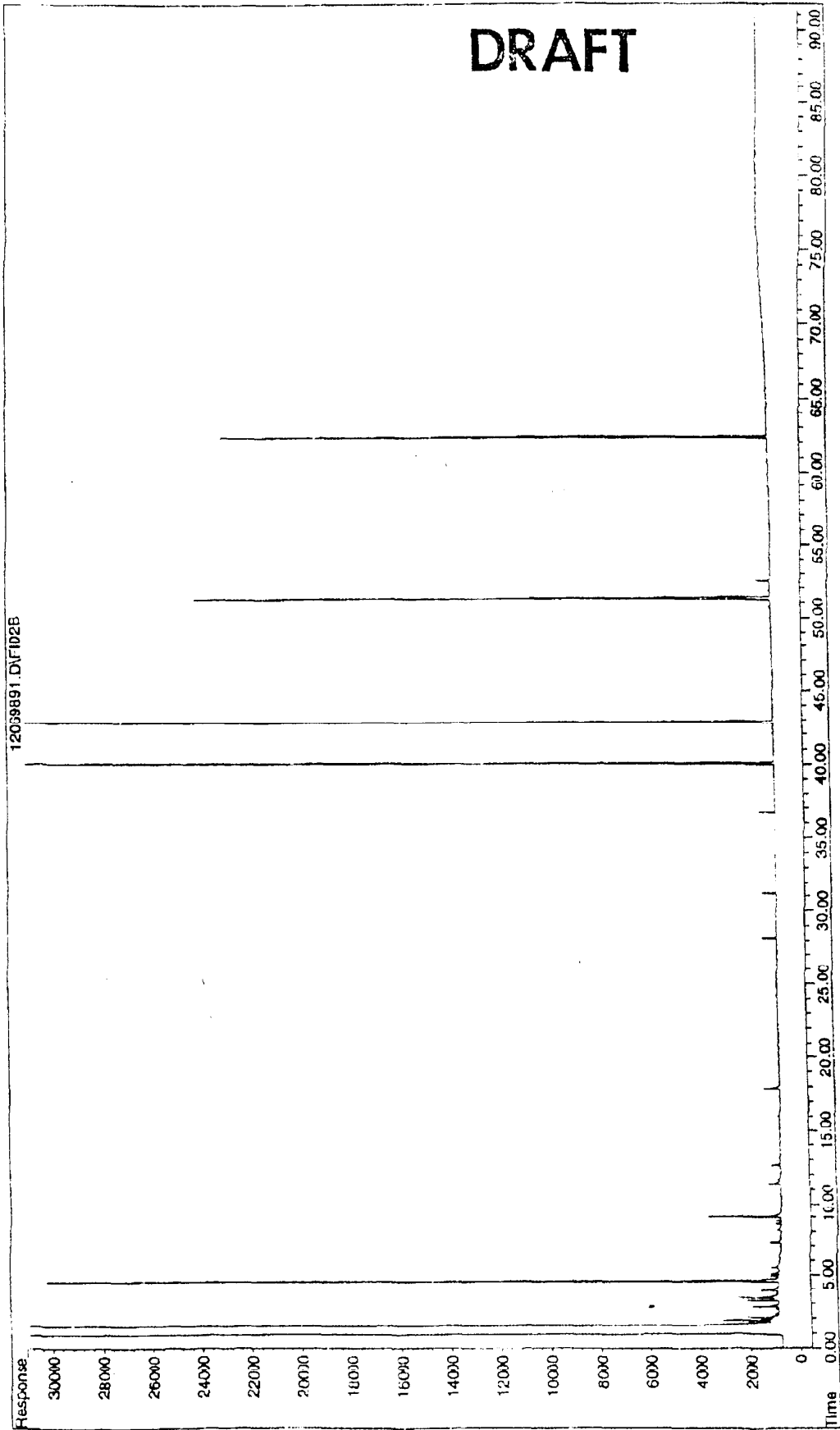
Project Title : Tesoro Hawaii  
Sample Set: B0247  
Data : SHC/TPH - ORS - Surrogate Corrected

Field ID	ORS				ORS			
Lab ID	BN14				BN14			
Lab Batch	B0247				B0247			
File	12069819.D				12069820.D			
Sample Type	CC				QC			
Weight Basis	Oil				Oil			
Matrix	Oil				Oil			
Sample Size	5 mg				5 mg			
Associated Blank	NA				NA			
Field Date	NA				NA			
Extract Date	NA				NA			
Analysis Date	12/7/98				12/07/98			
Min Reporting Limit	0.2				0.2			
Units	ug/mg	T	%D	Q	ug/mg	T	%D	Q
nC8	4.5 J	4.7	-4.2		4 J	4.7	-15	
nC9	5 J	4.8	4.2		4.8 J	4.8	0	
nC10	3.9 J	4.2	-7.1		4.1 J	4.2	-2.4	
nC11	4 J	4.3	-7		4.4 J	4.3	2.3	
nC12	3.9 J	4	-2.5		4.2 J	4	5	
nC13	3.6 J	4	-10		3.8 J	4	-5	
1360	1.2 J	1	20		1.3 J	1	30	
nC14	3.2 J	4.2	-24		4.5 J	4.2	9.5	
1470	1.4 J	1.4	0		1.5 J	1.4	7.1	
nC15	3.6 J	3.7	-2.7		3.7 J	3.7	0	
nC16	3.3 J	3.2	3.1		3.4 J	3.2	6.2	
1850	1.5 J	1.5	0		1.8 J	1.5	20	
nC17	3.2 J	3.2	0		3.4 J	3.2	6.2	
pristane	2 J	2.2	-9.1		2.2 J	2.2	0	
nC18	2.8 J	2.9	-3.4		3 J	2.9	3.4	
phytane	1.6 J	1.6	0		1.4 J	1.6	-12	
nC19	2.7 J	2.6	3.8		2.5 J	2.6	-3.8	
nC20	2.4 J	2.7	-11		2.3 J	2.7	-15	
nC21	2.3 J	2.4	-4.2		2.4 J	2.4	0	
nC22	2.2 J	2.2	0		2.2 J	2.2	0	
nC23	2.1 J	2	5		2.1 J	2	5	
nC24	1.9 J	2	-5		1.9 J	2	-5	
nC25	1.8 J	1.7	5.9		1.8 J	1.7	5.9	
nC26	1.5 J	1.5	0		1.5 J	1.5	0	
nC27	1.1 J	1.2	-8.3		1.1 J	1.2	-8.3	
nC28	0.89 J	0.88	1.1		0.89 J	0.88	1.1	
nC29	0.85 J	0.81	4.9		0.78 J	0.81	-3.7	
nC30	0.63 J	0.65	-3.1		0.65 J	0.65	-3.1	
nC31	0.58 J	0.58	0		0.75 J	0.58	31	
nC32	0.42 J	0.44	-4.5		0.41 J	0.44	-6.8	
nC33	0.43 J	0.4	7.5		0.37 J	0.4	-7.5	
nC34	0.42 J	0.36	20		0.39 J	0.35	8.6	
nC35	0.36 J	0.35	2.8		0.44 J	0.35	26	
nC36	0.25 J	0.23	8.7		0.29 J	0.23	26	
nC37	0.25 J	0.23	8.7		0.24 J	0.23	4.3	
nC38	0.22 J	0.22	0		0.23 J	0.22	4.5	
nC39	0.18 J	0.18	0		0.19 J	0.18	5.6	
nC40	0.2 J	0.19	5.3		0.19 J	0.19	0	
TPH (RES)	200	220	-9.1		190	220	-14	
TPH	610	660	-7.5		640	660	-3	
%OTP	91				94			
%5AA	96				97			
%D50T	84				94			

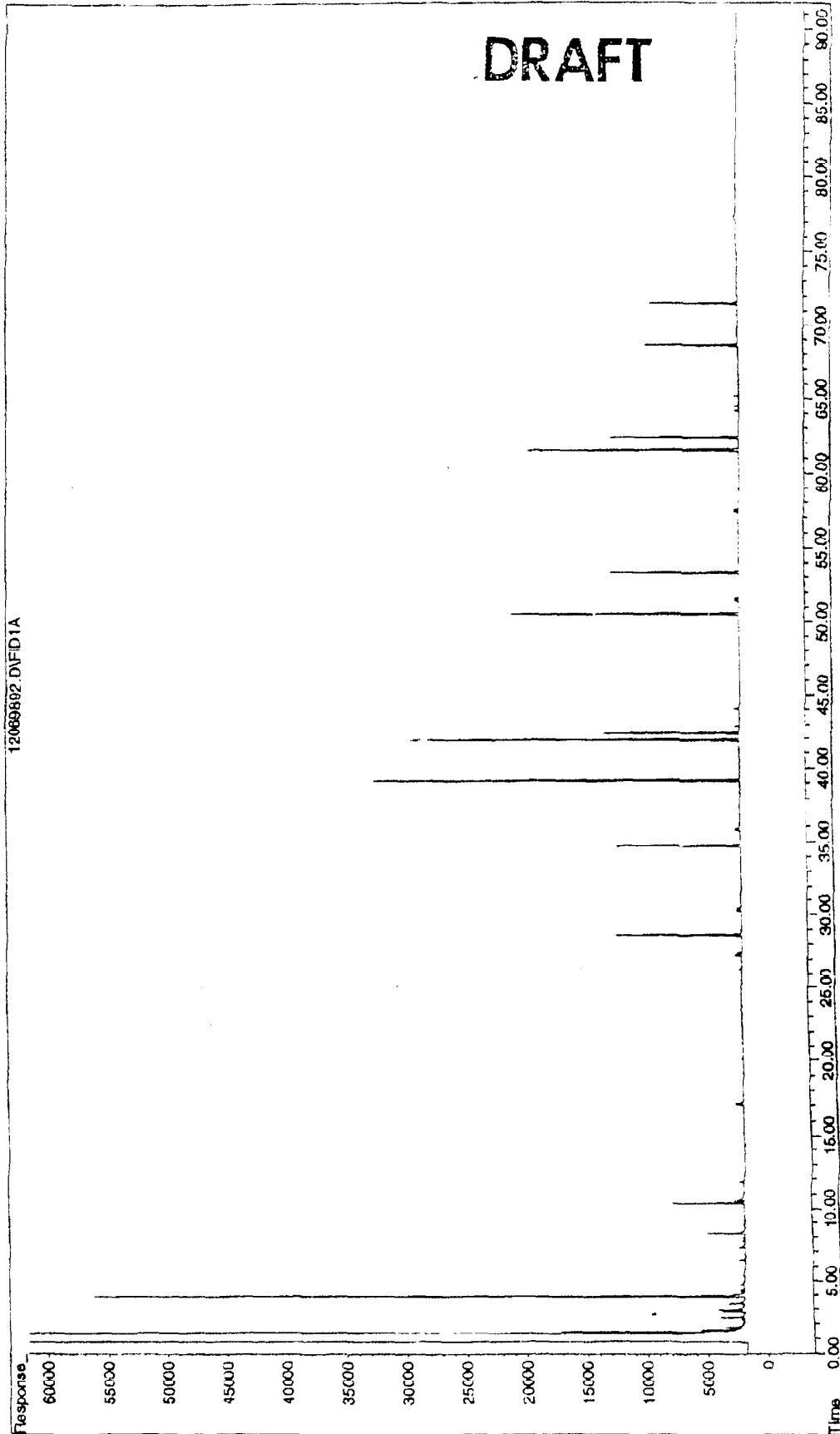
Arthur D. Little - Environmental Monitoring and Analysis  
File : C:\HPCHEM\1\DATA\1206981B\12069819.D  
Operator : FQ  
Acquired : 7 Dec 98 12:13 am using AcqMethod SHCDUAL.M  
Instrument : GC FID #1  
Sample Name: BN14  
Misc Info : ORS  
Vial Number: 55



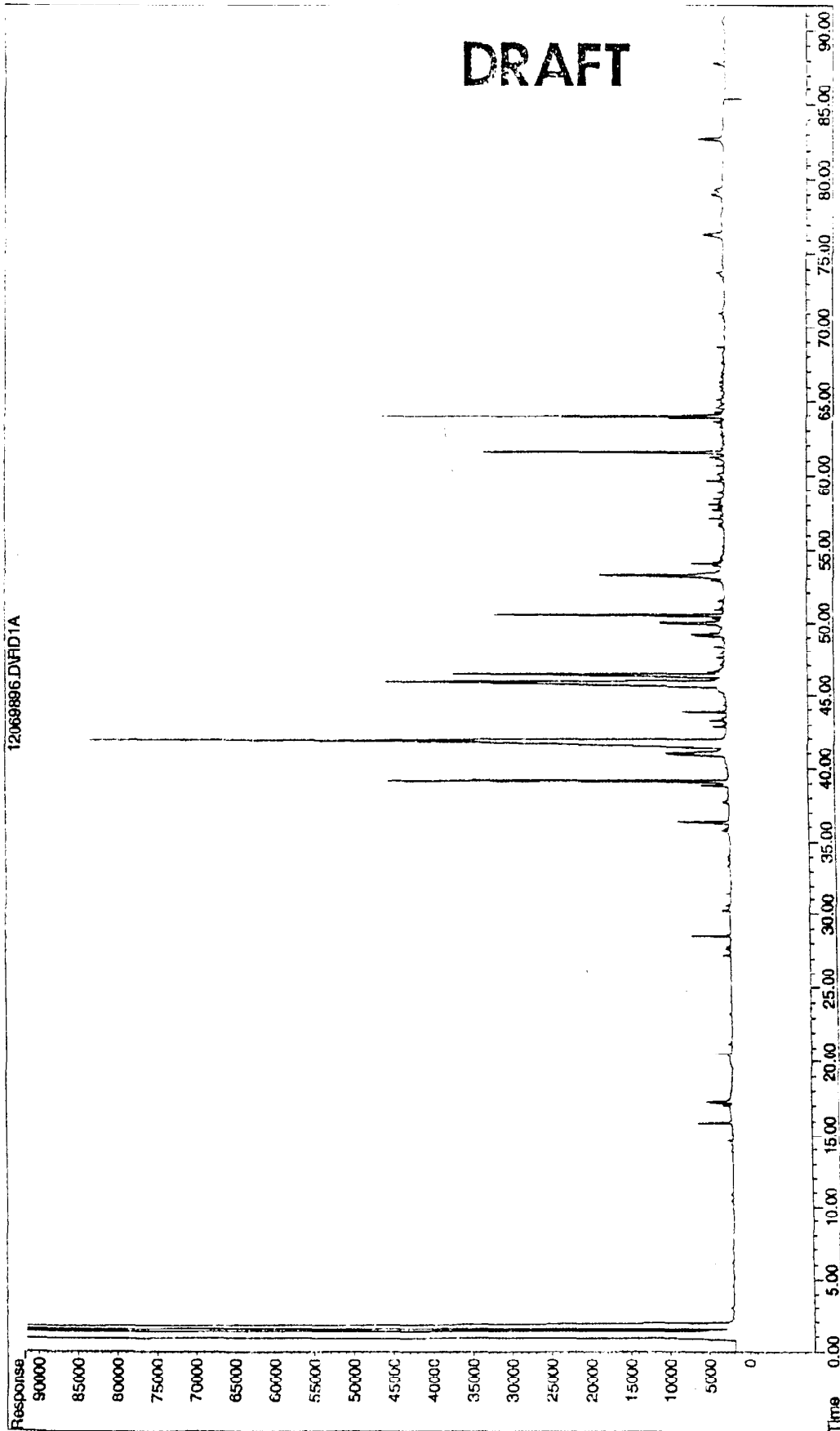
Arthur D. Little - Environmental Monitoring and Analysis  
File : C:\HPCHEM\1\DATA\1206981B\12069891.D  
Operator : FQ  
Acquired : 9 Dec 98 2:43 pm using AcqMethod SHCDUAL.M  
Instrument : GC FID #1  
Sample Name: BY-S-57PB  
Misc Info : ACF PB B0247  
Vial Number: 91



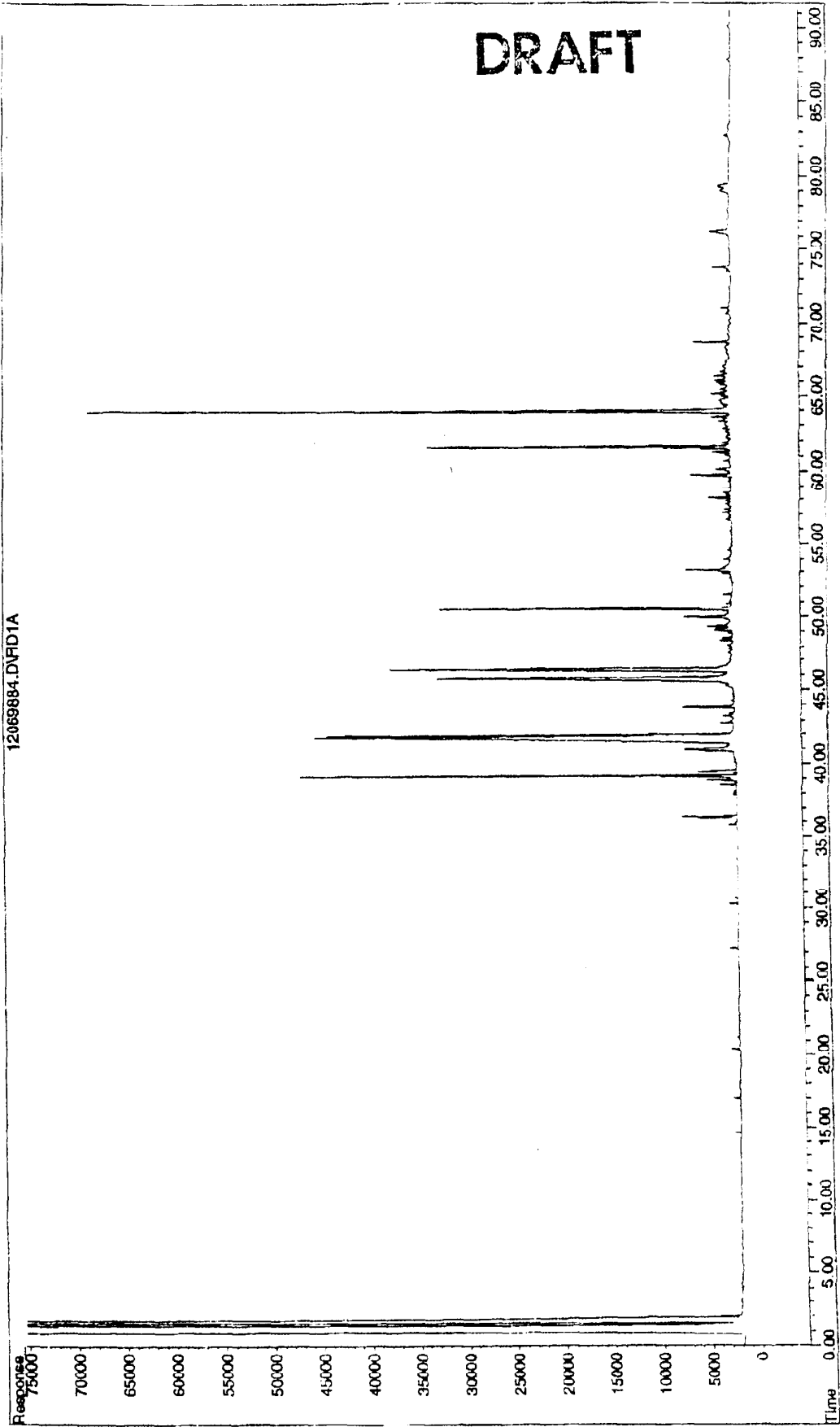
Arthur D. Little - Environmental Monitoring and Analysis  
File : C:\HPCHEM\1\DATA\1206981A\12069892.D  
Operator : FQ  
Acquired : 9 Dec 98 2:43 pm using AcqMethod SHCDUAL.M  
Instrument : GC FID #1  
Sample Name: BY-S-58BS  
Misc Info : ACF BS B0247  
Vial Number: 41



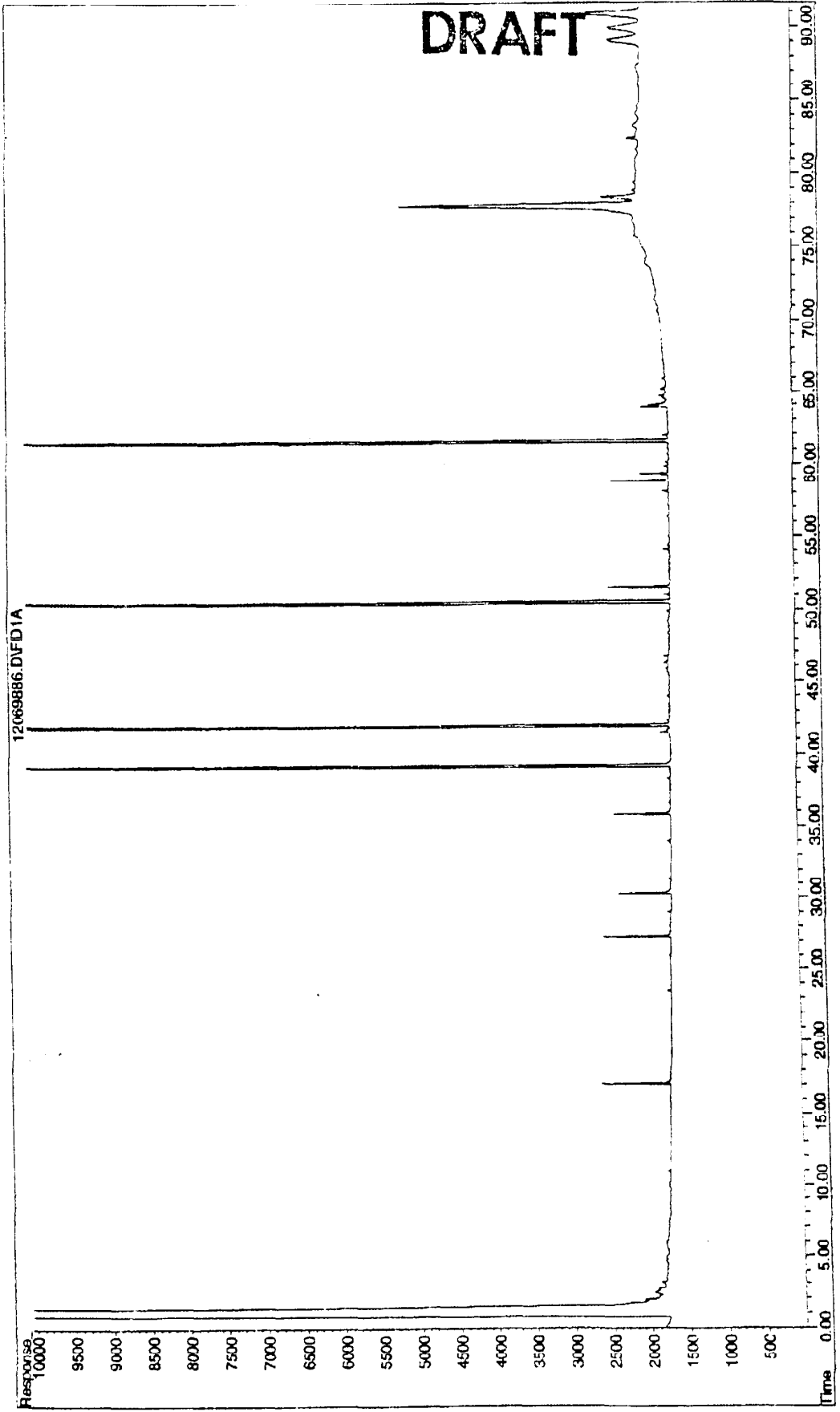
Arthur D. Little - Environmental Monitoring and Analysis  
File : C:\HPCHEM\1\DATA\1206981A\12069896.D  
Operator : FQ  
Acquired : 9 Dec 98 6:07 pm using AcqMethod SHCDUAL.M  
Instrument : GC FID #1  
Sample Name: 98D3503  
Misc Info : OA 1010-1 TESORO B0247  
Vial Number: 43



Arthur D. Little - Environmental Monitoring and Analysis  
File : C:\HPCHEM\1\DATA\12069884\12069884.D  
Operator : FQ  
Acquired : 9 Dec 98 7:54 am using AcqMethod 84CDUAL.M  
Instrument : GC FID #1  
Sample Name: 98D3504  
Misc Info : OA 1010-2 TESORO B0247  
Vial Number: 37



Arthur D. Little - Environmental Monitoring and Analysis  
File : C:\HPCHEM\1\DATA\1206981A\12069886.D  
Operator : FQ  
Acquired : 9 Dec 98 9:35 am using AcqMethod SHCDUAL.M  
Instrument : GC FID #1  
Sample Name : 98D4903  
Misc Info : ITEM 4 TESORO B0247  
Vial Number: 38



Arthur D. Little - Environmental Monitoring and Analysis

File : C:\HPCHEM\1\DATA\1206981A\12069894.D

Operator : FQ

Acquired : 9 Dec 98 4:25 pm using AcqMethod SHCDUAL.M

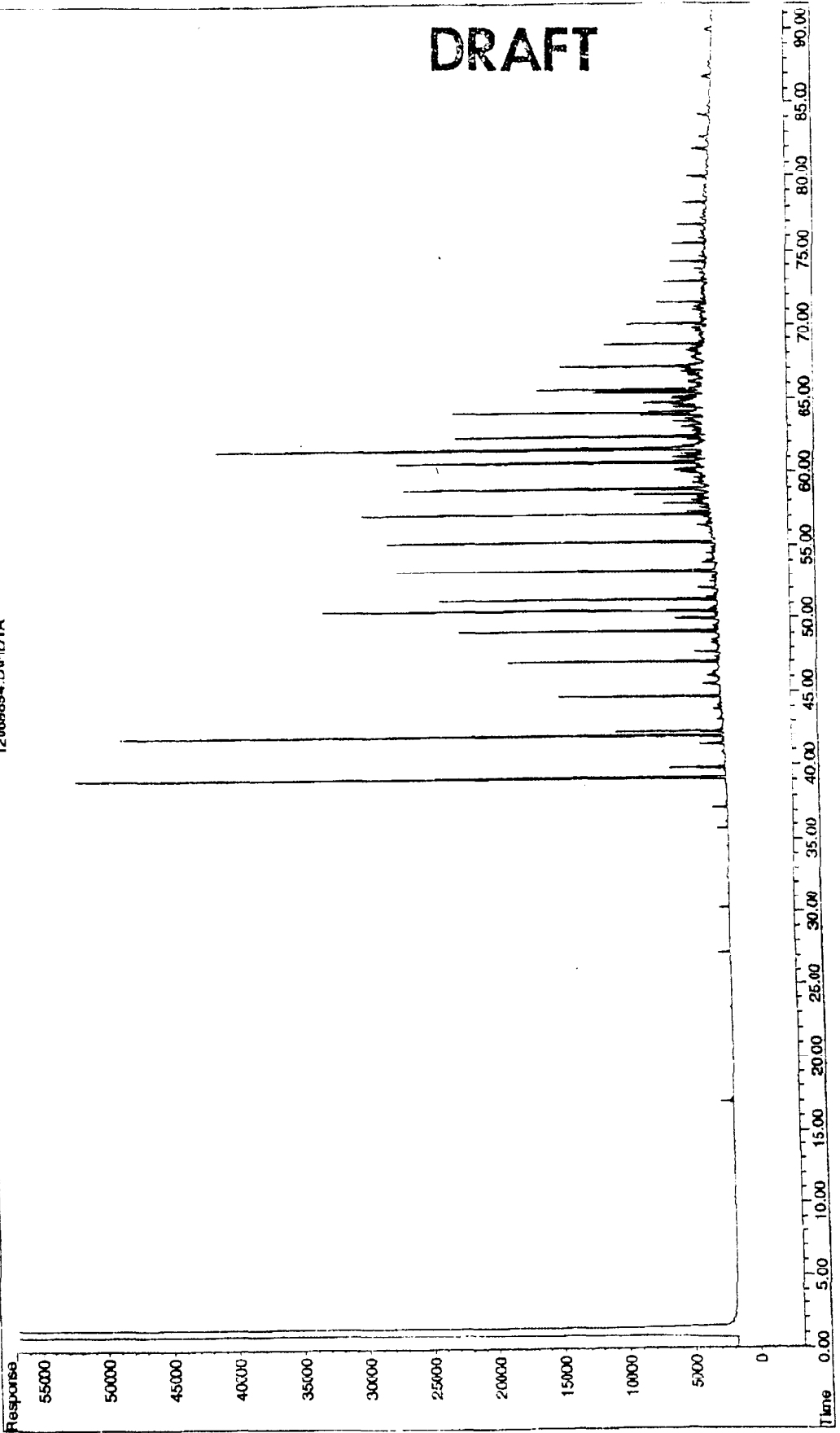
Instrument : GC FID #1

Sample Name: 98D4904

Misc Info : ITEM 5 TESSRO B0247

Vial Number: 42

12069894.D\FID1A





Arthur L. Little - Environmental Monitoring and Analysis  
File : C:\HPCHEM\1\DATA\0911981\09119815.D  
Operator : FQ  
Acquired : 12 Sep 98 7:54 am using AcqMethod SHCTPHC.M  
Instrument : GC FID #1  
Sample Name: 98D2804  
Misc Info : SPM HOSE001  
Vial Number: 12

