

NORSK HYDRO Research Centre, Bergen _____ **Petroleum Geochemistry Group**

STERANE ratios			SATURATE BIOMARKERS
100 * 29aaS (217) (29aa(S+R) (217))	%29aaS	47	File name (sample): 3079_4.D
100 * 29bb(S+R) (218) (29bb(S+R) (218) + 29aa(S+R) (217))	%29bb	67	File path: C:\HPCHEM\1\DATA\SATVA_STD_S
100 * 27bb(S+R) (218) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%27STER	34	Misc information:
100 * 28bb(S+R) (218) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%28STER	26	Sample name:
100 * 29bb(S+R) (218) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%29STER	31	Operator: JORUNN
100 * 30bb(S+R) (218) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%30STER	9	Method: MSD_S_B
			Date analyzed: 08/31/93

TERPANE-STERANE GROUP ratios		
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	Ho/St2	235
100*(21+22)bb (21+22)bb+27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%Preg	14
100*(20/3+21/3+23/3+24/3+25/3+26/3(R+S)) (191) (20/3+21/3+23/3+24/3+25/3+26/3(R+S)+27(Ts+Tm)+28ab+ SUM 29-30(ab+ba)+SUM 31-35ab(S+R)) (191)	%Tri	16

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COMP.#	RT(min)	ION(m/z)	COMPOUND	HEIGHT	SATURATE BIOMARKERS
INT. STANDARD (if added)					
1	40.13	221.00	4D21aa	5	File name (sample): 3079_6.D File path: C:\HPCHEM\1\DATA\SATA_STD_S\ Misc information: Sample name: Operator: JORUNN Method: MSD_S_B Date analyzed: 08/31/93
2	56.41	193.00	2D29ba	0	
3	52.14	221.00	4D27aaR	5	
4	46.18	217.00	24baa	4	
DITERPANES					
5	34.00	191.00	19/3	30	
6	35.96	191.00	20/3	58	
7	37.97	191.00	21/3	109	
11	41.93	191.00	23/3	366	
13	43.05	191.00	24/3	198	
14	45.35	191.00	25/3	105	
16	46.93	191.00	26/3R	62	
17	47.07	191.00	26/3S	52	
20	50.59	191.00	28/3R	37	
21	50.76	191.00	28/3S	46	
23	51.54	191.00	29/3R	43	
25	51.81	191.00	29/3S	41	
15	46.81	191.00	24/4	246	
TRITERPANES:					
26	52.66	191.00	27Ts	191	
28	53.07	177.00	25nor28ab	4	
29	53.33	191.00	27Tm	76	
33	53.80	191.00	27b	48	
32	53.62	177.00	25nor29ab	3	
34	54.86	191.00	28ab	19	
36	55.20	177.00	25nor30ab	4	
39	55.56	191.00	29ab	302	
40	55.66	191.00	29Ts	74	
43	56.32	191.00	29ba	29	
42	55.88	191.00	30D	15	
46	56.90	191.00	30ab	232	
47	57.22	191.00	30D13	12	
48	57.51	191.00	30ba	22	
51	58.98	191.00	30G	16	
49	58.47	191.00	31abS	114	
50	58.65	191.00	31abR	86	
52	59.18	191.00	31ba	18	
53	59.67	191.00	32abS	64	
54	59.93	191.00	32abR	43	
55	61.09	191.00	33abS	36	
56	61.46	191.00	33abR	26	
57	62.57	191.00	34abS	23	
58	63.06	191.00	34abR	14	
59	64.25	191.00	35abS	16	
60	64.91	191.00	35abR	11	

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COMP.#	RT	ION	COMPOUND	HEIGHT	SATURATE BIOMARKERS
STERANES					
8	38.48	217.00	21aa	87	File name (sample):
9	40.13	217.00	21bb	129	3079_6.D
10	40.24	217.00	22aa	68	File path:
12	42.47	217.00	22bb	74	C:\HPCHEM\1\DATA\SATVA_STD_S\
18	48.73	217.00	27dbS	270	Misc information:
19	49.36	217.00	27dbR	171	
22	51.66	218.00	27bbR	135	Sample name:
24	51.81	218.00	27bbS	95	
27	52.21	217.00	27aaR	48	Operator:
30	53.38	218.00	28bbR	49	JORUNN
31	53.52	218.00	28bbS	60	Method:
35	54.47	217.00	29aaS	29	MSD_S_B
37	54.77	218.00	29bbR	66	Date analyzed:
38	54.88	218.00	29bbS	54	08/31/93
41	55.47	217.00	29aaR	30	
44	55.93	218.00	30bbR	11	
45	55.95	218.00	30bbS	11	

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TERPANE ratios			SATURATE BIOMARKERS
100*23/3 (191)	%23/3	55	File name (sample):
23/3+24/3+25/3 (191)			3079_6.D
100*24/4 (191)	%24/4	45	File path:
24/4+24/3+25/3 (191)			C:\HPCHEM\1\DATA\SATA_STD_S
100*20/3 (191)	%20/3	6	Misc information:
20/3+21/3+23/3+24/3+25/3+26/3(R+S) (191)			
100*27Ts (191)	%27Ts	72	Sample name:
27Ts+27Tm (191)			
100*28ab (191)	%28ab	8	Operator:
28ab+30ab (191)			JORUNN
100*29Ts (191)	%29Ts	20	Method:
29Ts+29ab (191)			MSD_S_B
100*25nor30ab (191)	%25nor30ab	2	Date analyzed:
25nor30ab+30ab (191)			08/31/93
100*29ab (191)	%29ab	57	
29ab+30ab (191)			
100*30ba (191)	%30ba	9	
30ba+30ab (191)			
100*30D (191)	%30D	6	
30D+30ab (191)			
100*30G (191)	%30G	6	
30G+30ab (191)			
100*32abS (191)	%32abS	60	
32abS+32abR (191)			
100*35ab(S+R) (191)	%35ab	42	
SUM 34-35ab(S+R) (191)			
100*(27Ts+27Tm) (191)	%27HOP	20	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*28ab (191)	%28HOP	1	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(29ab+29ba) (191)	%29HOP	25	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(30ab+30ba) (191)	%30HOP	19	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(31ab(S+R)) (191)	%31HOP	15	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(32ab(S+R)) (191)	%32HOP	8	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(33ab(S+R)) (191)	%33HOP	5	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(34ab(S+R)) (191)	%34HOP	3	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(35ab(S+R)) (191)	%35HOP	2	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			

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STERANE ratios			SATURATE BIOMARKERS
100 * 29aaS (217) (29aa(S+R) (217))	%29aaS	49	File name (sample): 3079_6.D
100 * 29bb(S+R) (218) (29bb(S+R) (218) + 29aa(S+R) (217))	%29bb	67	File path: C:\HPCHEM\1\DATA\SATA_STD_S
100 * 27bb(S+R) (218) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%27STER	48	Misc information:
100 * 28bb(S+R) (218) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%28STER	23	Sample name:
100 * 29bb(S+R) (218) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%29STER	25	Operator: JORUNN
100 * 30bb(S+R) (218) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%30STER	5	Method: MSD_S_B
			Date analyzed: 08/31/93

TERPANE-STERANE GROUP ratios		
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	Ho/St2	275
100*(21+22)bb (21+22)bb+27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%Preg	30
100*(20/3+21/3+23/3+24/3+25/3+26/3(R+S)) (191) (20/3+21/3+23/3+24/3+25/3+26/3(R+S))+27(Ts+Tm)+28ab+ SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)	%Tri	42

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COMP.#	RT(min)	ION(m/z)	COMPOUND	HEIGHT	SATURATE BIOMARKERS
INT. STANDARD (if added)					
1	40.18	221.00	4D21aa	2	File name (sample):
2	56.39	193.00	2D29ba	1	3080_5.D
3	52.21	221.00	4D27aaR	1	File path:
4	46.22	217.00	24baa	7	C:\HPCHEM\1\DATA\SATVA_STD_S\
DITERPANES					Misc information:
5	33.98	191.00	19/3	17	Sample name:
6	35.94	191.00	20/3	29	Operator:
7	37.95	191.00	21/3	47	JORUNN
11	41.90	191.00	23/3	159	Method:
13	43.02	191.00	24/3	70	MSD_S_B
14	45.25	191.00	25/3	34	Date analyzed:
16	46.88	191.00	26/3R	18	08/31/93
17	47.00	191.00	26/3S	17	
20	50.54	191.00	28/3R	17	
21	50.79	191.00	28/3S	3	
23	51.78	191.00	29/3R	14	
25	51.78	191.00	29/3S	12	
15	46.76	191.00	24/4	93	
TRITERPANES:					
26	52.63	191.00	27Ts	61	
28	52.97	177.00	25nor28ab	3	
29	53.29	191.00	27Tm	63	
33	53.77	191.00	27b	14	
32	53.72	177.00	25nor29ab	1	
34	54.96	191.00	28ab	5	
36	55.22	177.00	25nor30ab	1	
39	55.52	191.00	29ab	161	
40	55.63	191.00	29Ts	28	
43	56.31	191.00	29ba	26	
42	55.86	191.00	30D	13	
46	56.88	191.00	30ab	180	
47	57.22	191.00	30D13	9	
48	57.50	191.00	30ba	39	
51	58.96	191.00	30G	8	
49	58.45	191.00	31abS	105	
50	58.64	191.00	31abR	75	
52	59.15	191.00	31ba	25	
53	59.67	191.00	32abS	54	
54	59.93	191.00	32abR	40	
55	61.09	191.00	33abS	35	
56	61.44	191.00	33abR	26	
57	62.58	191.00	34abS	19	
58	63.04	191.00	34abR	15	
59	64.23	191.00	35abS	10	
60	64.91	191.00	35abR	7	

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COMP.#	RT	ION	COMPOUND	HEIGHT	SATURATE BIOMARKERS
STERANES					
8	38.46	217.00	21aa	29	File name (sample):
9	40.11	217.00	21bb	46	3080_5.D
10	40.23	217.00	22aa	25	File path:
12	42.42	217.00	22bb	27	C:\HPCHEM\1\DATA\SATVA_STD_S\
18	48.68	217.00	27dbS	79	Misc information:
19	49.31	217.00	27dbR	51	
22	51.63	218.00	27bbR	44	Sample name:
24	51.76	218.00	27bbS	31	
27	52.17	217.00	27aaR	17	Operator:
30	53.35	218.00	28bbR	15	JORUNN
31	53.48	218.00	28bbS	19	Method:
35	54.43	217.00	29aaS	11	MSD_S_B
37	54.76	218.00	29bbR	19	Date analyzed:
38	54.84	218.00	29bbS	18	08/31/93
41	55.44	217.00	29aaR	10	
44	55.90	218.00	30bbR	4	
45	55.95	218.00	30bbS	3	

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TERPANE ratios			SATURATE BIOMARKERS
100*23/3 (191)	%23/3	60	File name (sample):
23/3+24/3+25/3 (191)			3080_5.D
100*24/4 (191)	%24/4	47	File path:
24/4+24/3+25/3 (191)			C:\HPCHEM\1\DATA\SATVA_STD_S
100*20/3 (191)	%20/3	8	Misc information:
20/3+21/3+23/3+24/3+25/3+26/3(R+S) (191)			
100*27Ts (191)	%27Ts	49	Sample name:
27Ts+27Tm (191)			
100*28ab (191)	%28ab	3	Operator:
28ab+30ab (191)			JORUNN
100*29Ts (191)	%29Ts	15	Method:
29Ts+29ab (191)			MSD_S_B
100*25nor30ab (191)	%25nor30ab	1	Date analyzed:
25nor30ab+30ab (191)			08/31/93
100*29ab (191)	%29ab	47	
29ab+30ab (191)			
100*30ba (191)	%30ba	18	
30ba+30ab (191)			
100*30D (191)	%30D	7	
30D+30ab (191)			
100*30G (191)	%30G	4	
30G+30ab (191)			
100*32abS (191)	%32abS	57	
32abS+32abR (191)			
100*35ab(S+R) (191)	%35ab	33	
SUM 34-35ab(S+R) (191)			
100*(27Ts+27Tm) (191)	%27HOP	13	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*28ab (191)	%28HOP	1	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(29ab+29ba) (191)	%29HOP	20	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(30ab+30ba) (191)	%30HOP	23	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(31ab(S+R)) (191)	%31HOP	19	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(32ab(S+R)) (191)	%32HOP	10	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(33ab(S+R)) (191)	%33HOP	6	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(34ab(S+R)) (191)	%34HOP	4	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(35ab(S+R)) (191)	%35HOP	2	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			

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STERANE ratios			SATURATE BIOMARKERS
100 * 29aaS (217) (29aa(S+R) (217))	%29aaS	52	File name (sample): 3080_5.D
100 * 29bb(S+R) (218) (29bb(S+R) (218) + 29aa(S+R) (217))	%29bb	64	File path: C:\HPCHEM\1\DATA\SATVA STD_S
100 * 27bb(S+R) (218) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%27STER	49	Misc information:
100 * 28bb(S+R) (218) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%28STER	22	Sample name:
100 * 29bb(S+R) (218) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%29STER	24	Operator: JORUNN
100 * 30bb(S+R) (218) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%30STER	5	Method: MSD_S_B
			Date analyzed: 08/31/93

TERPANE-STERANE GROUP ratios		
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	Ho/St2	618
100*(21+22)bb (21+22)bb+27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%Preg	32
100*(20/3+21/3+23/3+24/3+25/3+26/3(R+S)) (191) (20/3+21/3+23/3+24/3+25/3+26/3(R+S)+27(Ts+Tm)+28ab+ SUM 29-30(ab+ba)+SUM 31-35ab(S+R)) (191)	%Tri	28

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COMP.#	RT(min)	ION(m/z)	COMPOUND	HEIGHT	SATURATE BIOMARKERS
INT. STANDARD (if added)					
1	40.19	221.00	4D21aa	5	File name (sample):
2	56.42	193.00	2D29ba	3	3082_55.D
3	52.19	221.00	4D27aaR	3	File path:
4	46.18	217.00	24baa	1	C:\HPCHEM\1\DATA\SATVA_STD_S\
DITERPANES					Misc information:
5	33.98	191.00	19/3	26	Sample name:
6	35.96	191.00	20/3	56	
7	37.97	191.00	21/3	103	Operator:
11	41.93	191.00	23/3	390	JORUNN
13	43.05	191.00	24/3	168	Method:
14	45.33	191.00	25/3	88	MSD_S_B
16	46.93	191.00	26/3R	48	Date analyzed:
17	47.05	191.00	26/3S	44	08/31/93
20	50.59	191.00	28/3R	41	
21	50.76	191.00	28/3S	51	
23	51.54	191.00	29/3R	46	
25	51.83	191.00	29/3S	31	
15	46.81	191.00	24/4	246	
TRITERPANES:					
26	52.68	191.00	27Ts	201	
28	53.02	177.00	25nor28ab	8	
29	53.33	191.00	27Tm	72	
33	53.80	191.00	27b	47	
32	53.74	177.00	25nor29ab	10	
34	54.86	191.00	28ab	10	
36	55.15	177.00	25nor30ab	5	
39	55.56	191.00	29ab	300	
40	55.66	191.00	29Ts	85	
43	56.34	191.00	29ba	29	
42	55.90	191.00	30D	12	
46	56.90	191.00	30ab	201	
47	57.22	191.00	30D13	6	
48	57.51	191.00	30ba	14	
51	58.99	191.00	30G	15	
49	58.47	191.00	31abS	98	
50	58.65	191.00	31abR	83	
52	59.32	191.00	31ba	7	
53	59.67	191.00	32abS	48	
54	59.93	191.00	32abR	33	
55	61.09	191.00	33abS	26	
56	61.44	191.00	33abR	19	
57	62.57	191.00	34abS	15	
58	63.04	191.00	34abR	9	
59	64.25	191.00	35abS	11	
60	64.91	191.00	35abR	8	

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COMP.#	RT	ION	COMPOUND	HEIGHT	SATURATE BIOMARKERS
STERANES					
8	38.48	217.00	21aa	72	File name (sample):
9	40.13	217.00	21bb	108	3082_55.D
10	40.25	217.00	22aa	69	File path:
12	42.47	217.00	22bb	59	C:\HPCHEM\1\DATA\SATVA STD_S\
18	48.74	217.00	27dbS	219	Misc information:
19	49.35	217.00	27dbR	126	
22	51.66	218.00	27bbR	116	Sample name:
24	51.81	218.00	27bbS	89	
27	52.21	217.00	27aaR	42	Operator:
30	53.38	218.00	28bbR	42	JORUNN
31	53.52	218.00	28bbS	46	Method:
35	54.47	217.00	29aaS	27	MSD_S_B
37	54.77	218.00	29bbR	53	Date analyzed:
38	54.88	218.00	29bbS	49	08/31/93
41	55.46	217.00	29aaR	24	
44	55.93	218.00	30bbR	10	
45	55.95	218.00	30bbS	9	

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TERPANE ratios			SATURATE BIOMARKERS
100*23/3 (191)	%23/3	60	File name (sample): 3082_55.D
23/3+24/3+25/3 (191)			File path: C:\HPCHEM\1\DATA\SATVA_STD_S
100*24/4 (191)	%24/4	49	Misc information:
24/4+24/3+25/3 (191)			Sample name:
100*20/3 (191)	%20/3	6	Operator: JORUNN
20/3+21/3+23/3+24/3+25/3+26/3(R+S) (191)			Method: MSD_S_B
100*27Ts (191)	%27Ts	74	Date analyzed: 08/31/93
27Ts+27Tm (191)			
100*28ab (191)	%28ab	5	
28ab+30ab (191)			
100*29Ts (191)	%29Ts	22	
29Ts+29ab (191)			
100*25nor30ab (191)	%25nor30ab	2	
25nor30ab+30ab (191)			
100*29ab (191)	%29ab	60	
29ab+30ab (191)			
100*30ba (191)	%30ba	7	
30ba+30ab (191)			
100*30D (191)	%30D	6	
30D+30ab (191)			
100*30G (191)	%30G	7	
30G+30ab (191)			
100*32abS (191)	%32abS	59	
32abS+32abR (191)			
100*35ab(S+R) (191)	%35ab	44	
SUM 34-35ab(S+R) (191)			
100*(27Ts+27Tm) (191)	%27HOP	23	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*28ab (191)	%28HOP	1	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(29ab+29ba) (191)	%29HOP	28	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(30ab+30ba) (191)	%30HOP	18	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(31ab(S+R)) (191)	%31HOP	15	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(32ab(S+R)) (191)	%32HOP	7	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(33ab(S+R)) (191)	%33HOP	4	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(34ab(S+R)) (191)	%34HOP	2	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(35ab(S+R)) (191)	%35HOP	2	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			

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STERANE ratios			SATURATE BIOMARKERS
100 * 29aaS (217) (29aa(S+R) (217)	%29aaS	53	File name (sample): 3082_55.D
100 * 29bb(S+R) (218) (29bb(S+R) (218) + 29aa(S+R) (217))	%29bb	67	File path: C:\HPCHEM\1\DATA\SATVA_STD_S
100 * 27bb(S+R) (218) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%27STER	50	Misc information:
100 * 28bb(S+R) (218) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%28STER	21	Sample name:
100 * 29bb(S+R) (218) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%29STER	25	Operator: JORUNN
100 * 30bb(S+R) (218) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%30STER	5	Method: MSD_S_B
			Date analyzed: 08/31/93

TERPANE-STERANE GROUP ratios		
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	Ho/St2	286
100*(21+22)bb (21+22)bb+27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%Preg	29
100*(20/3+21/3+23/3+24/3+25/3+26/3(R+S)) (191) (20/3+21/3+23/3+24/3+25/3+26/3(R+S)+27(Ts+Tm)+28ab+ SUM 29-30(ab+ba)+SUM 31-35ab(S+R)) (191)	%Tri	43

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COMP.#	RT(min)	ION(m/z)	COMPOUND	HEIGHT	SATURATE BIOMARKERS
INT. STANDARD (if added)					
1	40.16	221.00	4D21aa	5	File name (sample):
2	56.44	193.00	2D29ba	3	3082_65.D
3	52.17	221.00	4D27aaR	3	File path:
4	46.13	217.00	24baa	5	C:\HPCHEM\1\DATA\SATVA_STD_S\
DITERPANES					Misc information:
5	34.00	191.00	19/3	39	
6	35.96	191.00	20/3	54	Sample name:
7	37.97	191.00	21/3	79	
11	41.91	191.00	23/3	230	Operator:
13	43.04	191.00	24/3	122	JORUNN
14	45.30	191.00	25/3	76	Method:
16	46.92	191.00	26/3R	42	MSD_S_B
17	47.03	191.00	26/3S	48	Date analyzed:
20	50.57	191.00	28/3R	31	08/31/93
21	50.76	191.00	28/3S	37	
23	51.53	191.00	29/3R	50	
25	51.81	191.00	29/3S	34	
15	46.80	191.00	24/4	167	
TRITERPANES:					
26	52.67	191.00	27Ts	186	
28	53.11	177.00	25nor28ab	6	
29	53.33	191.00	27Tm	97	
33	53.81	191.00	27b	49	
32	53.75	177.00	25nor29ab	6	
34	54.86	191.00	28ab	63	
36	55.25	177.00	25nor30ab	7	
39	55.56	191.00	29ab	332	
40	55.66	191.00	29Ts	87	
43	56.34	191.00	29ba	39	
42	55.90	191.00	30D	49	
46	56.90	191.00	30ab	441	
47	57.24	191.00	30D13	23	
48	57.51	191.00	30ba	48	
51	58.98	191.00	30G	26	
49	58.47	191.00	31abS	204	
50	58.65	191.00	31abR	147	
52	59.16	191.00	31ba	23	
53	59.67	191.00	32abS	131	
54	59.95	191.00	32abR	82	
55	61.09	191.00	33abS	92	
56	61.46	191.00	33abR	60	
57	62.58	191.00	34abS	49	
58	63.06	191.00	34abR	34	
59	64.25	191.00	35abS	39	
60	64.93	191.00	35abR	24	

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COMP.#	RT	ION	COMPOUND	HEIGHT	SATURATE BIOMARKERS
STERANES					
8	38.48	217.00	21aa	79	File name (sample):
9	40.13	217.00	21bb	109	3082_65.D
10	40.25	217.00	22aa	68	File path:
12	42.46	217.00	22bb	65	C:\HPCHEM\1\DATA\SATA_STD_S\
18	48.72	217.00	27dbS	238	Misc information:
19	49.35	217.00	27dbR	152	
22	51.66	218.00	27bbR	183	Sample name:
24	51.80	218.00	27bbS	129	
27	52.21	217.00	27aaR	60	Operator:
30	53.38	218.00	28bbR	97	JORUNN
31	53.52	218.00	28bbS	108	Method:
35	54.47	217.00	29aaS	64	MSD_S_B
37	54.78	218.00	29bbR	130	Date analyzed:
38	54.88	218.00	29bbS	124	08/31/93
41	55.47	217.00	29aaR	64	
44	55.93	218.00	30bbR	41	
45	55.98	218.00	30bbS	31	

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TERPANE ratios			SATURATE BIOMARKERS
100*23/3 (191)	%23/3	54	File name (sample): 3082_65.D
23/3+24/3+25/3 (191)			
100*24/4 (191)	%24/4	46	File path: C:\HPCHEM\1\DATA\SATA_STD_S
24/4+24/3+25/3 (191)			
100*20/3 (191)	%20/3	8	Misc information:
20/3+21/3+23/3+24/3+25/3+26/3(R+S) (191)			
100*27Ts (191)	%27Ts	66	Sample name:
27Ts+27Tm (191)			
100*28ab (191)	%28ab	13	Operator: JORUNN
28ab+30ab (191)			
100*29Ts (191)	%29Ts	21	Method: MSD_S_B
29Ts+29ab (191)			
100*25nor30ab (191)	%25nor30ab	2	Date analyzed: 08/31/93
25nor30ab+30ab (191)			
100*29ab (191)	%29ab	43	
29ab+30ab (191)			
100*30ba (191)	%30ba	10	
30ba+30ab (191)			
100*30D (191)	%30D	10	
30D+30ab (191)			
100*30G (191)	%30G	6	
30G+30ab (191)			
100*32abS (191)	%32abS	62	
32abS+32abR (191)			
100*35ab(S+R) (191)	%35ab	43	
SUM 34-35ab(S+R) (191)			
100*(27Ts+27Tm) (191)	%27HOP	14	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*28ab (191)	%28HOP	3	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(29ab+29ba) (191)	%29HOP	18	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(30ab+30ba) (191)	%30HOP	23	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(31ab(S+R)) (191)	%31HOP	17	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(32ab(S+R)) (191)	%32HOP	10	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(33ab(S+R)) (191)	%33HOP	7	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(34ab(S+R)) (191)	%34HOP	4	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(35ab(S+R)) (191)	%35HOP	3	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			

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STERANE ratios			SATURATE BIOMARKERS
100 * 29aaS (217) (29aa(S+R) (217))	%29aaS	50	File name (sample): 3082_65.D
100 * 29bb(S+R) (218) (29bb(S+R) (218) + 29aa(S+R) (217))	%29bb	66	File path: C:\HPCHEM\1\DATA\SATA_STD_S
100 * 27bb(S+R) (218) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%27STER	37	Misc information:
100 * 28bb(S+R) (218) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%28STER	24	Sample name:
100 * 29bb(S+R) (218) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%29STER	30	Operator: JORUNN
100 * 30bb(S+R) (218) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%30STER	9	Method: MSD_S_B
			Date analyzed: 08/31/93

TERPANE-STERANE GROUP ratios		
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	Ho/St2	248
100*(21+22)bb (21+22)bb+27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%Preg	17
100*(20/3+21/3+23/3+24/3+25/3+26/3(R+S)) (191) (20/3+21/3+23/3+24/3+25/3+26/3(R+S))+27(Ts+Tm)+28ab+ SUM 29-30(ab+ba)+SUM 31-35ab(S+R)) (191)	%Tri	24

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COMP.#	RT(min)	ION(m/z)	COMPOUND	HEIGHT	SATURATE BIOMARKERS
INT. STANDARD (if added)					
1	38.56	221.00	4D21aa	6	File name (sample):
2	50.01	193.00	2D29ba	12	3083_5.D
3	52.11	221.00	4D27aaR	5	File path:
4	43.97	217.00	24baa	4	F:\HPCHEM\1\DATA\SATVA_3009_S\
DITERPANES					Misc information:
5	33.73	191.00	19/3	11	Sample name:
6	36.08	191.00	20/3	79	Operator:
7	38.10	191.00	21/3	138	JORUNN K
11	42.05	191.00	23/3	322	Method:
13	43.16	191.00	24/3	205	MSD_S_B
14	45.40	191.00	25/3	123	Date analyzed:
16	47.04	191.00	26/3R	303	07/07/93
17	47.17	191.00	26/3S	296	
20	50.64	191.00	28/3R	298	
21	50.88	191.00	28/3S	304	
23	51.66	191.00	29/3R	78	
25	51.94	191.00	29/3S	78	
15	46.93	191.00	24/4	271	
TRITERPANES:					
26	52.80	191.00	27Ts	624	
28	53.02	177.00	25nor28ab	47	
29	53.47	191.00	27Tm	234	
33	53.93	191.00	27b	84	
32	53.76	177.00	25nor29ab	13	
34	55.00	191.00	28ab	211	
36	55.20	177.00	25nor30ab	10	
39	55.70	191.00	29ab	838	
40	55.80	191.00	29Ts	286	
43	56.48	191.00	29ba	290	
42	56.04	191.00	30D	178	
46	57.04	191.00	30ab	1308	
47	57.38	191.00	30D13	65	
48	57.65	191.00	30ba	132	
51	59.11	191.00	30G	48	
49	58.60	191.00	31abS	619	
50	58.79	191.00	31abR	573	
52	59.32	191.00	31ba	258	
53	59.81	191.00	32abS	395	
54	60.08	191.00	32abR	256	
55	61.22	191.00	33abS	430	
56	61.58	191.00	33abR	176	
57	62.72	191.00	34abS	173	
58	63.22	191.00	34abR	105	
59	64.41	191.00	35abS	123	
60	65.10	191.00	35abR	74	

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COMP.#	RT	ION	COMPOUND	HEIGHT	SATURATE BIOMARKERS
STERANES					
8	38.60	217.00	21aa	255	File name (sample):
9	40.25	217.00	21bb	172	3083_5.D
10	40.37	217.00	22aa	124	File path:
12	42.59	217.00	22bb	108	F:\HPCHEM\1\DATA\SAT\A_3009_S\
18	48.86	217.00	27dbS	580	Misc information:
19	49.47	217.00	27dbR	420	
22	51.80	218.00	27bbR	530	Sample name:
24	51.94	218.00	27bbS	433	
27	52.33	217.00	27aaR	330	Operator:
30	53.52	218.00	28bbR	358	JORUNN K
31	53.65	218.00	28bbS	264	Method:
35	54.61	217.00	29aaS	308	MSD_S_B
37	54.91	218.00	29bbR	365	Date analyzed:
38	55.01	218.00	29bbS	466	07/07/93
41	55.61	217.00	29aaR	308	
44	56.05	218.00	30bbR	105	
45	56.10	218.00	30bbS	76	

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TERPANE ratios			SATURATE BIOMARKERS
100*23/3 (191)	%23/3	50	File name (sample): 3083_5.D
23/3+24/3+25/3 (191)			
100*24/4 (191)	%24/4	45	File path: F:\HPCHEM\1\DATA\SATA_3009_S
24/4+24/3+25/3 (191)			
100*20/3 (191)	%20/3	5	Misc information:
20/3+21/3+23/3+24/3+25/3+26/3(R+S) (191)			
100*27Ts (191)	%27Ts	73	Sample name:
27Ts+27Tm (191)			
100*28ab (191)	%28ab	14	Operator: JORUNN K
28ab+30ab (191)			
100*29Ts (191)	%29Ts	25	Method: MSD_S_B
29Ts+29ab (191)			
100*25nor30ab (191)	%25nor30ab	1	Date analyzed: 07/07/93
25nor30ab+30ab (191)			
100*29ab (191)	%29ab	39	
29ab+30ab (191)			
100*30ba (191)	%30ba	9	
30ba+30ab (191)			
100*30D (191)	%30D	12	
30D+30ab (191)			
100*30G (191)	%30G	4	
30G+30ab (191)			
100*32abS (191)	%32abS	61	
32abS+32abR (191)			
100*35ab(S+R) (191)	%35ab	41	
SUM 34-35ab(S+R) (191)			
100*(27Ts+27Tm) (191)	%27HOP	13	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*28ab (191)	%28HOP	3	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(29ab+29ba) (191)	%29HOP	17	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(30ab+30ba) (191)	%30HOP	21	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(31ab(S+R)) (191)	%31HOP	17	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(32ab(S+R)) (191)	%32HOP	10	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(33ab(S+R)) (191)	%33HOP	9	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(34ab(S+R)) (191)	%34HOP	4	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(35ab(S+R)) (191)	%35HOP	3	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			

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STERANE ratios			SATURATE BIOMARKERS
100 * 29aaS (217) (29aa(S+R) (217))	%29aaS	50	File name (sample): 3083_5.D
100 * 29bb(S+R) (218) (29bb(S+R) (218) + 29aa(S+R) (217))	%29bb	57	File path: F:\HPCHEM\1\DATA\SATA_3009_S
100 * 27bb(S+R) (218) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%27STER	37	Misc information:
100 * 28bb(S+R) (218) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%28STER	24	Sample name:
100 * 29bb(S+R) (218) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%29STER	32	Operator: JORUNN K
100 * 30bb(S+R) (218) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%30STER	7	Method: MSD_S_B
			Date analyzed: 07/07/93

TERPANE-STERANE GROUP ratios		
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	Ho/St2	263
100*(21+22)bb (21+22)bb+27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%Preg	10
100*(20/3+21/3+23/3+24/3+25/3+26/3(R+S)) (191) (20/3+21/3+23/3+24/3+25/3+26/3(R+S)+27(Ts+Tm)+28ab+ SUM 29-30(ab+ba)+SUM 31-35ab(S+R)) (191)	%Tri	18

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COMP.#	RT(min)	ION(m/z)	COMPOUND	HEIGHT	SATURATE BIOMARKERS
INT. STANDARD (if added)					
1	38.61	221.00	4D21aa	3	File name (sample):
2	49.98	193.00	2D29ba	20	3091_75.D
3	52.04	221.00	4D27aaR	3	File path:
4	43.96	217.00	24baa	3	F:\HPCHEM\1\DATA\SATVA_3009_S\
DITERPANES					Misc information:
5	33.71	191.00	19/3	12	Sample name:
6	36.08	191.00	20/3	67	Operator:
7	38.09	191.00	21/3	106	JORUNN K
11	42.03	191.00	23/3	252	Method:
13	43.14	191.00	24/3	164	MSD_S_B
14	45.40	191.00	25/3	267	Date analyzed:
16	47.02	191.00	26/3R	258	07/07/93
17	47.14	191.00	26/3S	54	
20	50.63	191.00	28/3R	58	
21	50.86	191.00	28/3S	53	
23	51.65	191.00	29/3R	78	
25	51.94	191.00	29/3S	79	
15	46.92	191.00	24/4	223	
TRITERPANES:					
26	52.79	191.00	27Ts	363	
28	53.02	177.00	25nor28ab	49	
29	53.45	191.00	27Tm	210	
33	53.91	191.00	27b	71	
32	53.79	177.00	25nor29ab	13	
34	54.98	191.00	28ab	197	
36	55.18	177.00	25nor30ab	14	
39	55.68	191.00	29ab	805	
40	55.78	191.00	29Ts	255	
43	56.46	191.00	29ba	98	
42	56.02	191.00	30D	165	
46	57.04	191.00	30ab	1266	
47	57.36	191.00	30D13	61	
48	57.63	191.00	30ba	125	
51	59.11	191.00	30G	45	
49	58.59	191.00	31abS	612	
50	58.77	191.00	31abR	383	
52	59.32	191.00	31ba	75	
53	59.81	191.00	32abS	362	
54	60.08	191.00	32abR	250	
55	61.22	191.00	33abS	276	
56	61.58	191.00	33abR	184	
57	62.72	191.00	34abS	163	
58	63.20	191.00	34abR	102	
59	64.39	191.00	35abS	111	
60	65.09	191.00	35abR	72	

NORSK HYDRO Research Centre, Bergen _____ Petroleum Geochemistry Group

COMP.#	RT	ION	COMPOUND	HEIGHT	SATURATE BIOMARKERS
STERANES					
8	38.60	217.00	21aa	110	File name (sample):
9	40.25	217.00	21bb	141	3091_75.D
10	40.37	217.00	22aa	96	File path:
12	42.58	217.00	22bb	85	F:\HPCHEM\1\DATA\SAT\A_3009_S\
18	48.84	217.00	27dbS	507	Misc information:
19	49.45	217.00	27dbR	374	
22	51.78	218.00	27bbR	353	Sample name:
24	51.92	218.00	27bbS	253	
27	52.31	217.00	27aaR	124	Operator:
30	53.50	218.00	28bbR	225	JORUNN K
31	53.64	218.00	28bbS	251	Method:
35	54.59	217.00	29aaS	288	MSD_S_B
37	54.90	218.00	29bbR	341	Date analyzed:
38	55.00	218.00	29bbS	429	07/07/93
41	55.59	217.00	29aaR	294	
44	56.05	218.00	30bbR	103	
45	56.10	218.00	30bbS	186	

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TERPANE ratios			SATURATE BIOMARKERS
100*23/3 (191)	%23/3	37	File name (sample): 3091_75.D
23/3+24/3+25/3 (191)			
100*24/4 (191)	%24/4	34	File path: F:\HPCHEM\1\DATA\SATA_3009_S
24/4+24/3+25/3 (191)			
100*20/3 (191)	%20/3	6	Misc information:
20/3+21/3+23/3+24/3+25/3+26/3(R+S) (191)			
100*27Ts (191)	%27Ts	63	Sample name:
27Ts+27Tm (191)			
100*28ab (191)	%28ab	13	Operator: JORUNN K
28ab+30ab (191)			
100*29Ts (191)	%29Ts	24	Method: MSD_S_B
29Ts+29ab (191)			
100*25nor30ab (191)	%25nor30ab	1	Date analyzed: 07/07/93
25nor30ab+30ab (191)			
100*29ab (191)	%29ab	39	
29ab+30ab (191)			
100*30ba (191)	%30ba	9	
30ba+30ab (191)			
100*30D (191)	%30D	12	
30D+30ab (191)			
100*30G (191)	%30G	3	
30G+30ab (191)			
100*32abS (191)	%32abS	59	
32abS+32abR (191)			
100*35ab(S+R) (191)	%35ab	41	
SUM 34-35ab(S+R) (191)			
100*(27Ts+27Tm) (191)	%27HOP	10	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*28ab (191)	%28HOP	3	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(29ab+29ba) (191)	%29HOP	16	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(30ab+30ba) (191)	%30HOP	25	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(31ab(S+R)) (191)	%31HOP	18	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(32ab(S+R)) (191)	%32HOP	11	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(33ab(S+R)) (191)	%33HOP	8	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(34ab(S+R)) (191)	%34HOP	5	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(35ab(S+R)) (191)	%35HOP	3	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			

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STERANE ratios			SATURATE BIOMARKERS
100 * 29aaS (217) (29aa(S+R) (217))	%29aaS	49	File name (sample): 3091_75.D
100 * 29bb(S+R) (218) (29bb(S+R) (218) + 29aa(S+R) (217))	%29bb	57	File path: F:\HPCHEM\1\DATA\SAT\A_3009_S
100 * 27bb(S+R) (218) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%27STER	28	Misc information:
100 * 28bb(S+R) (218) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%28STER	22	Sample name:
100 * 29bb(S+R) (218) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%29STER	36	Operator: JORUNN K
100 * 30bb(S+R) (218) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%30STER	13	Method: MSD_S_B
			Date analyzed: 07/07/93

TERPANE-STERANE GROUP ratios		
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	Ho/St2	264
100*(21+22)bb (21+22)bb+27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%Preg	10
100*(20/3+21/3+23/3+24/3+25/3+26/3(R+S)) (191) (20/3+21/3+23/3+24/3+25/3+26/3(R+S)+27(Ts+Tm)+28ab+ SUM 29-30(ab+ba)+SUM 31-35ab(S+R)) (191)	%Tri	17

COMP.#	RT(min)	ION(m/z)	COMPOUND	HEIGHT	SATURATE BIOMARKERS
INT. STANDARD (if added)					
1	40.16	221.00	4D21aa	3	File name (sample): 3095_25.D
2	56.40	193.00	2D29ba	5	File path: C:\HPCHEM\1\DATA\SAT\B300914S\
3	52.21	221.00	4D27aaR	5	Misc information:
4	46.16	217.00	24baa	2	Sample name: 30/9-14
DITERPANES					Operator: JORUNN
5	34.11	191.00	19/3	38	Method: MSD_S_B
6	36.07	191.00	20/3	39	Date analyzed: 08/12/93
7	38.08	191.00	21/3	61	
11	42.02	191.00	23/3	140	
13	43.13	191.00	24/3	88	
14	45.38	191.00	25/3	45	
16	47.01	191.00	26/3R	31	
17	47.20	191.00	26/3S	6	
20	50.62	191.00	28/3R	32	
21	50.86	191.00	28/3S	29	
23	51.63	191.00	29/3R	41	
25	51.92	191.00	29/3S	35	
15	46.91	191.00	24/4	105	
TRITERPANES:					
26	52.79	191.00	27Ts	149	
28	53.01	177.00	25nor28ab	31	
29	53.44	191.00	27Tm	93	
33	53.91	191.00	27b	33	
32	53.79	177.00	25nor29ab	13	
34	54.99	191.00	28ab	87	
36	55.19	177.00	25nor30ab	6	
39	55.69	191.00	29ab	307	
40	55.77	191.00	29Ts	105	
43	56.45	191.00	29ba	41	
42	56.03	191.00	30D	70	
46	57.03	191.00	30ab	541	
47	57.36	191.00	30D13	25	
48	57.64	191.00	30ba	55	
51	59.11	191.00	30G	26	
49	58.60	191.00	31abS	238	
50	58.79	191.00	31abR	177	
52	59.31	191.00	31ba	30	
53	59.81	191.00	32abS	142	
54	60.08	191.00	32abR	103	
55	61.24	191.00	33abS	106	
56	61.58	191.00	33abR	63	
57	62.72	191.00	34abS	61	
58	63.22	191.00	34abR	36	
59	64.41	191.00	35abS	39	
60	65.11	191.00	35abR	24	

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COMP.#	RT	ION	COMPOUND	HEIGHT	SATURATE BIOMARKERS
STERANES					
8	38.58	217.00	21aa	59	File name (sample):
9	40.23	217.00	21bb	87	3095_25.D
10	40.35	217.00	22aa	63	File path:
12	42.56	217.00	22bb	51	C:\HPCHEM\1\DATA\SAT\B300914S\
18	48.82	217.00	27dbS	193	Misc information:
19	49.45	217.00	27dbR	111	
22	51.77	218.00	27bbR	194	Sample name:
24	51.92	218.00	27bbS	131	30/9-14
27	52.31	217.00	27aaR	72	Operator:
30	53.50	218.00	28bbR	100	JORUNN
31	53.64	218.00	28bbS	114	Method:
35	54.59	217.00	29aaS	63	MSD_S_B
37	54.88	218.00	29bbR	157	Date analyzed:
38	54.99	218.00	29bbS	136	08/12/93
41	55.58	217.00	29aaR	71	
44	56.06	218.00	30bbR	49	
45	56.09	218.00	30bbS	29	

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TERPANE ratios			SATURATE BIOMARKERS
100*23/3 (191)	%23/3	51	File name (sample):
23/3+24/3+25/3 (191)			3095_25.D
100*24/4 (191)	%24/4	44	File path:
24/4+24/3+25/3 (191)			C:\HPCHEM\1\DATA\SAT\B3009149
100*20/3 (191)	%20/3	10	Misc information:
20/3+21/3+23/3+24/3+25/3+26/3(R+S) (191)			
100*27Ts (191)	%27Ts	62	Sample name:
27Ts+27Tm (191)			30/9-14
100*28ab (191)	%28ab	14	Operator:
28ab+30ab (191)			JORUNN
100*29Ts (191)	%29Ts	25	Method:
29Ts+29ab (191)			MSD_S_B
100*25nor30ab (191)	%25nor30ab	1	Date analyzed:
25nor30ab+30ab (191)			08/12/93
100*29ab (191)	%29ab	36	
29ab+30ab (191)			
100*30ba (191)	%30ba	9	
30ba+30ab (191)			
100*30D (191)	%30D	11	
30D+30ab (191)			
100*30G (191)	%30G	5	
30G+30ab (191)			
100*32abS (191)	%32abS	58	
32abS+32abR (191)			
100*35ab(S+R) (191)	%35ab	39	
SUM 34-35ab(S+R) (191)			
100*(27Ts+27Tm) (191)	%27HOP	11	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*28ab (191)	%28HOP	4	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(29ab+29ba) (191)	%29HOP	15	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(30ab+30ba) (191)	%30HOP	26	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(31ab(S+R)) (191)	%31HOP	18	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(32ab(S+R)) (191)	%32HOP	11	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(33ab(S+R)) (191)	%33HOP	7	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(34ab(S+R)) (191)	%34HOP	4	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			
100*(35ab(S+R)) (191)	%35HOP	3	
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191)			

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STERANE ratios			SATURATE BIOMARKERS
100 * 29aaS (217) (29aa(S+R) (217))	%29aaS	47	File name (sample): 3095_25.D
100 * 29bb(S+R) (218) (29bb(S+R) (218) + 29aa(S+R) (217))	%29bb	69	File path: C:\HPCHEM\1\DATA\SAT\B300914S
100 * 27bb(S+R) (218) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%27STER	36	Misc information:
100 * 28bb(S+R) (218) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%28STER	24	Sample name: 30/9-14
100 * 29bb(S+R) (218) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%29STER	32	Operator: JORUNN
100 * 30bb(S+R) (218) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%30STER	9	Method: MSD_S_B
			Date analyzed: 08/12/93

TERPANE-STERANE GROUP ratios		
27(Ts+Tm)+28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R) (191) 27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	Ho/St2	252
100*(21+22)bb (21+22)bb+27bb(S+R)+28bb(S+R)+29bb(S+R)+30bb(S+R) (218)	%Preg	13
100*(20/3+21/3+23/3+24/3+25/3+26/3(R+S)) (191) (20/3+21/3+23/3+24/3+25/3+26/3(R+S)+27(Ts+Tm)+28ab+ SUM 29-30(ab+ba)+SUM 31-35ab(S+R)) (191)	%Tri	15

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COMP.#	RT(min)	ION(m/z)	COMPOUND	HEIGHT	SATURATE BIOMARKERS
INT. STANDARD (if added)					
1	40.14	221.00	4D21aa	8	File name (sample):
2	56.38	193.00	2D29ba	5	3101_25.D
3	52.21	221.00	4D27aaR	5	File path:
4	46.28	217.00	24baa	6	C:\HPCHEM\1\DATA\SAT\B300914S\
DITERPANES					Misc information:
5	34.11	191.00	19/3	56	Sample name:
6	36.07	191.00	20/3	64	30/9-14
7	38.10	191.00	21/3	108	Operator:
11	42.05	191.00	23/3	281	JORUNN
13	43.18	191.00	24/3	174	Method:
14	45.43	191.00	25/3	94	MSD_S_B
16	47.06	191.00	26/3R	65	Date analyzed:
17	47.18	191.00	26/3S	60	08/12/93
20	50.66	191.00	28/3R	57	
21	50.91	191.00	28/3S	55	
23	51.68	191.00	29/3R	59	
25	51.97	191.00	29/3S	59	
15	46.96	191.00	24/4	255	
TRITERPANES:					
26	52.82	191.00	27Ts	295	
28	53.04	177.00	25nor28ab	33	
29	53.49	191.00	27Tm	135	
33	53.83	191.00	27b	7	
32	53.83	177.00	25nor29ab	17	
34	55.00	191.00	28ab	73	
36	55.19	177.00	25nor30ab	4	
39	55.70	191.00	29ab	507	
40	55.80	191.00	29Ts	162	
43	56.49	191.00	29ba	52	
42	56.04	191.00	30D	62	
46	57.05	191.00	30ab	625	
47	57.39	191.00	30D13	26	
48	57.66	191.00	30ba	61	
51	59.13	191.00	30G	31	
49	58.62	191.00	31abS	245	
50	58.79	191.00	31abR	183	
52	59.33	191.00	31ba	34	
53	59.81	191.00	32abS	150	
54	60.08	191.00	32abR	113	
55	61.24	191.00	33abS	98	
56	61.60	191.00	33abR	72	
57	62.72	191.00	34abS	62	
58	63.22	191.00	34abR	35	
59	64.41	191.00	35abS	36	
60	65.09	191.00	35abR	25	