



FORMATION PRESSURE WORKSHEET

Well Name : 3677-2

Rig : West Vanguard

Date : 16-19.09.97

Pressure Units : bar

RKB-MSL : 22 m.

MSL-SBed: 269 m.

Witnessed by : O.Wahl

Run No./ Test No.	Depth		Initial Hydrostatic Pressure		Formation Pressure		Final Hydrostatic Pressure		Time		Formation Pressure sg EMD	Test Temp degC	Good Data? Y/N	Sample Information			Remarks
	mMD RKB	mTVD RKB	Strain	CQG	Strain	CQG	Strain	CQG	hh:mm					Fluid Type	HC Gravity g/cc	Sample Vol, cc	
									Set	Retract							
1	918,1	918,1	108,40	107,95	n/a	n/a	108,3	107,82	13:14	13:19	0,000	26,6	N				Tight
2	921,0	921,0	108,7	108,3	n/a	n/a	108,6	108,18	13:25	13:32	0,000	26,9	N				Tight
3	924,2	924,2	109,05	108,66	n/a	n/a	109,0	108,63	13:40	13:46	0,000	27,2	N				Seal failure
4	928,0	928,0	109,5	109,13	n/a	n/a	109,4	108,95	13:55	14:00	0,000	27,2	N				Tight
5	934,0	934,0	110,2	109,85	94,5	94,06	110,2	109,73	14:05	14:10	1,027	27,5	Y				838 mD/cp
6	936,0	936,0	110,4	110,03	94,7	94,33	110,4	109,97	14:17	14:35	1,027	27,7	Y				9.1 mD/cp
7	948,7	948,7	111,9	111,50	n/a	n/a	111,8	111,40	14:55	15:01	0,000	27,9	N				Tight
8	948,9	948,9	111,9	111,49	95,8	95,36	111,8	111,40	15:07	15:19	1,024	28,1	Y				117 mD/cp
9	950,0	950,0	112,0	111,60	95,9	95,45	112,0	111,51	15:27	15:40	1,024	28,2	Y				23.5 mD/cp
10	951,5	951,5	112,2	111,78	96,0	95,60	112,2	111,70	15:46	15:54	1,024	28,2	Y				405 mD/cp
11	954,5	954,5	112,5	112,11	n/a	n/a	112,5	112,11	16:03	16:05	0,000	28,3	N				Seal failure
12	954,6	954,6	112,5	112,14	96,3	95,89	112,5	112,07	16:10	16:30	1,024	28,6	Y				0.2 mD/cp
13	964,5	964,5	113,7	113,30	97,3	96,91	113,7	113,22	16:40	16:49	1,024	28,5	Y				3.6 mD/cp
14	977,0	977,0	115,2	114,84	98,4	98,02	115,2	114,70	16:56	17:04	1,023	28,5	Y				56 mD/cp
15	1000,0	1000,0	118,0	117,60	100,8	100,35	117,9	117,44	17:12	17:17	1,023	28,6	Y				178 mD/cp
16	934,1	934,1	110,1	109,64	94,4	94,01	110,1	109,63	17:56	18:03	1,026	28,3	Y				655 mD/cp, Repeat point.
17	940,0	940,0	110,8	110,40	95,1	94,62	110,8	110,31	18:08	18:16	1,026	28,4	Y				69 mD/cp
18	945,1	945,1	111,4	110,98	95,7	95,19	111,3	110,83	18:20	18:31	1,027	28,4	Y				20 mD/cp

NB: Fmtn Press sg calculated from RKB

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FORMATION PRESSURE WORKSHEET

Well Name : 36/7-2

Rig : West Vanguard

Date : 16-19.09.97

Pressure Units : bar

RKB-MSL : 22 m.

MSL-SBed: 269 m.

Witnessed by : O.Wahl

Run No./ Test No.	Depth		Initial Hydrostatic Pressure		Formation Pressure		Final Hydrostatic Pressure		Time		Formation Pressure sg EMD	Test Temp degC	Good Data? Y/N	Sample Information			Remarks
	mMD RKB	mTVD RKB	Strain	CQG	Strain	CQG	Strain	CQG	Set	Retract				Main Fluid Type	HC Gravity g/cc	Sample Vol, cc	
19	956,6	956,6	112,8	112,36	96,5	96,09	112,8	112,26	18:38	18:44	1,024	28,4	Y				308 mD/cp
20	968,6	968,6	114,1	113,78	97,6	97,17	114,1	113,65	18:55	19:02	1,023	28,5	Y				40 mD/cp
21	983,1	983,1	115,9	115,57	99,0	98,66	115,9	115,49	19:20	19:30	1,023	28,7	Y				21 mD/cp
22	935,5	935,5	110,3	109,87	94,6	94,17	110,3	109,80	19:45	19:52	1,026	28,3	Y				171 mD/cp
23	949,3	949,3	112,1	111,6	n/a	n/a	n/a	n/a	21:30		0,000		N				Instrumentation failure
24	949,3	949,3	112,0	111,7	n/a	n/a	111,9	111,6	21:40	21:43	0,000		N				Seal failure
25	950,6	950,6	112,1	111,85	95,9	95,59			21:48			26,7	Y	n/a	n/a	n/a	Attempted taking a sample
26	956,7	956,7	112,7	113,04	96,4	96,72	4,4		09:16	09:38	1,031	26,8	Y	n/a	n/a	n/a	261 mD/cp. Probe plugged
27	949,0	949,0	111,5	111,88													MDT Sampling. Aborted
28	934,5	934,5	110,2	n/a	94,45	n/a		n/a	13:47	17:07	1,030	27,6	Y				MDT Sampling, 8.8 mD/cp
29	934,6	934,6	110,0	n/a	94,47	n/a		n/a	18:32	21:25	1,030		Y				MDT sampling
30	971,1	971,1	114,5	n/a	97,82	n/a	114,4	n/a	21:50	22:00	1,027	28,5	Y				32 mD/cp
31	973,0	973,0	114,7	n/a	73,00	n/a	114,7	n/a	22:05	22:10	0,765	28,5	N				Tight
32	974,0	974,0	114,8	n/a	79,00	n/a	114,8	n/a	22:13	22:22	0,827		N				Tight
33	1000,0	1000,0	118,1	n/a	n/a	n/a	117,9	n/a	22:27	22:33	0,000		N				Seal failure
34	1000,0	1000,0	117,9	n/a	117,89	n/a	117,9	n/a	22:35	22:39	1,202		N				Seal failure
35	1001,0	1001,0	118,1	n/a	100,89	n/a	118,1	n/a	22:45	22:51	1,027	29,0	Y				34 mD/cp
36	1100,0	1100,0	129,8	n/a	110,96	n/a	129,8	n/a	23:18	23:27	1,028	30,0	Y				47 mD/cp

NB: Fmtn Press sg calculated from RKB

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Norsk Hydro

DAILY MUD PROPERTIES : RHEOLOGY PARAMETERS FOR WELL 36/7-2

Hole section: 36"

WATER BASED SYSTEM

Date	Depth		Mud Type	Funnel	Dens	Mudtmp	Fann Readings						Rheo	PV	YP	Gel10	Gel10	
	[m]			Visc	Out								Test					
	MD	TVD		[sec]	[sg]	[DegC]	600	300	200	100	60	30	6	3	[DegC]	[mPas]	[Pa]	[Pa]
02-sep-1997 23:59	337	337	SPUD MUD	0.0	1.05	0.0								0.0	0.0	0.0	0.0	0.0
03-sep-1997 23:59	337	337	SPUD MUD	0.0	1.05	0.0								0.0	0.0	0.0	0.0	0.0
04-sep-1997 23:59	337	337	SPUD MUD	0.0	1.25	0.0								0.0	0.0	0.0	0.0	0.0

Hole section: 17 1/2"

WATER BASED SYSTEM

Date	Depth		Mud Type	Funnel	Dens	Mudtmp	Fann Readings						Rheo	PV	YP	Gel10	Gel10	
	[m]			Visc	Out									Test				
	MD	TVD		[sec]	[sg]	[DegC]	600	300	200	100	60	30	6	3	[DegC]	[mPas]	[Pa]	[Pa]
05-sep-1997 23:59	340	340	SPUD MUD	0.0	1.05	0.0								0.0	0.0	0.0	0.0	0.0
06-sep-1997 23:59	592	592	SPUD MUD	0.0	1.05	0.0								0.0	0.0	0.0	0.0	0.0
07-sep-1997 23:59	592	592	SPUD MUD	0.0	1.25	0.0								0.0	0.0	0.0	0.0	0.0
08-sep-1997 23:59	592	592	SPUD MUD	0.0	1.25	0.0								0.0	0.0	0.0	0.0	0.0
09-sep-1997 12:00	592	592	SPUD MUD	0.0	1.25	0.0								0.0	0.0	0.0	0.0	0.0
10-sep-1997 12:00	592	592	SPUD MUD	0.0	1.25	0.0								0.0	0.0	0.0	0.0	0.0
11-sep-1997 12:00	592	592	SPUD MUD	0.0	1.25	0.0								0.0	0.0	0.0	0.0	0.0

Hole section: 12 1/4"

WATER BASED SYSTEM

Date	Depth		Mud Type	Funnel	Dens	Mudtmp	Fann Readings						Rheo	PV	YP	Gel10	Gel10	
	[m]			Visc	Out									Test				
	MD	TVD		[sec]	[sg]	[DegC]	600	300	200	100	60	30	6	3	[DegC]	[mPas]	[Pa]	[Pa]
12-sep-1997 20:15	884	884	ANCO 2000	78.0	1.16	0.0	68	48	39	29		10	7	50.0	20.0	14.0	5.0	10.0

See also the report 'DAILY MUD PROPERTIES : OTHER PARAMETERS'

Norsk Hydro

DAILY MUD PROPERTIES : RHEOLOGY PARAMETERS FOR WELL 36/7-2

Hole section: 8 1/2"

WATER BASED SYSTEM

Date	Depth		Mud Type	Funnel	Dens	Mudtmp	Fann Readings						Rheo	PV	YP	Gel10	Gel10		
	[m]			Visc	Out								Test						
	MD	TVD		[[sec]	[[sg]	[[DegC]	600	300	200	100	60	30	6	3	[[DegC]	[[mPas]	[[Pa]	[[Pa]	[[Pa]
13-sep-1997 20:30	1200	1200	ANCO 2000	84.0	1.17	0.0	68	48	39	29			10	8	50.0	20.0	14.0	5.0	12.0
14-sep-1997 19:45	1435	1435	ANCO 2000	82.0	1.17	0.0	62	44	36	27			8	6	50.0	18.0	13.0	5.0	11.0
15-sep-1997 21:00	1435	1435	ANCO 2000	83.0	1.17	0.0	63	45	37	28			9	7	50.0	18.0	13.5	5.0	11.0
16-sep-1997 23:00	1435	1435	ANCO 2000	83.0	1.17	0.0	63	45	37	28			9	7	50.0	18.0	13.5	5.0	11.0
17-sep-1997 23:00	1435	1435	ANCO 2000	83.0	1.17	0.0	63	45	37	28			9	7	50.0	18.0	13.5	5.0	11.0
18-sep-1997 23:00	1435	1435	ANCO 2000	86.0	1.17	0.0	65	47	38	29			9	7	50.0	18.0	14.5	5.0	12.0
19-sep-1997 23:00	1435	1435	ANCO 2000	86.0	1.17	0.0	65	47	38	29			9	7	50.0	18.0	14.5	5.0	12.0
20-sep-1997 23:00	0		ANCO 2000	0.0	1.17	0.0									50.0	0.0	0.0	0.0	0.0

See also the report 'DAILY MUD PROPERTIES : OTHER PARAMETERS'

DAILY MUD PROPERTIES : OTHER PARAMETERS FOR WELL 36.7-2

Hole section: 36"

WATER BASED SYSTEM

Date	Depth [m]	Mud Type	Dens [sg]	Filtrate				HPHT Press/Temp [psi/DegC]	pH	Alkalinity			Inhib Chem	K+	CL-	Ca++	Mg++	Tot hard [mg]	Percentage			CEC [Kg/m3]	ASG [sg]	LGS [Kg/m3]	
				API [ml]	HPHT [ml]	API [mm]	HPHT [mm]			Pm [ml]	Pf [ml]	Mf [ml]							Oil [%]	Solid [%]	Sand [%]				
02-sep-1997 23:59	337	337	SPUD MUD	1.05	0.0	0.0	0	0	0/0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0.0	0.0	0.0	0	0.0	0
03-sep-1997 23:59	337	337	SPUD MUD	1.05	0.0	0.0	0	0	0/0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0.0	0.0	0.0	0	0.0	0
04-sep-1997 23:59	337	337	SPUD MUD	1.25	0.0	0.0	0	0	0/0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0.0	0.0	0.0	0	0.0	0

Hole section: 17 1/2"

WATER BASED SYSTEM

Date	Depth [m]	Mud Type	Dens [sg]	Filtrate				HPHT Press/Temp [psi/DegC]	pH	Alkalinity			Inhib Chem	K+	CL-	Ca++	Mg++	Tot hard [mg]	Percentage			CEC [Kg/m3]	ASG [sg]	LGS [Kg/m3]	
				API [ml]	HPHT [ml]	API [mm]	HPHT [mm]			Pm [ml]	Pf [ml]	Mf [ml]							Oil [%]	Solid [%]	Sand [%]				
05-sep-1997 23:59	340	340	SPUD MUD	1.05	0.0	0.0	0	0	0/0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0.0	0.0	0.0	0	0.0	0
06-sep-1997 23:59	592	592	SPUD MUD	1.05	0.0	0.0	0	0	0/0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0.0	0.0	0.0	0	0.0	0
07-sep-1997 23:59	592	592	SPUD MUD	1.25	0.0	0.0	0	0	0/0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0.0	0.0	0.0	0	0.0	0
08-sep-1997 23:59	592	592	SPUD MUD	1.25	0.0	0.0	0	0	0/0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0.0	0.0	0.0	0	0.0	0
09-sep-1997 12:00	592	592	SPUD MUD	1.25	0.0	0.0	0	0	0/0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0.0	0.0	0.0	0	0.0	0
10-sep-1997 12:00	592	592	SPUD MUD	1.25	0.0	0.0	0	0	0/0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0.0	0.0	0.0	0	0.0	0
11-sep-1997 12:00	592	592	SPUD MUD	1.25	0.0	0.0	0	0	0/0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0.0	0.0	0.0	0	0.0	0

Hole section: 12 1/4"

WATER BASED SYSTEM

Date	Depth [m]	Mud Type	Dens [sg]	Filtrate				HPHT Press/Temp [psi/DegC]	pH	Alkalinity			Inhib Chem	K+	CL-	Ca++	Mg++	Tot hard [mg]	Percentage			CEC [Kg/m3]	ASG [sg]	LGS [Kg/m3]	
				API [ml]	HPHT [ml]	API [mm]	HPHT [mm]			Pm [ml]	Pf [ml]	Mf [ml]							Oil [%]	Solid [%]	Sand [%]				
12-sep-1997 20:15	884	884	ANCO 2000	1.16	3.1	0.0	1	0	0/0	8.2	0.0	0.0	0.6	90	47200	61000	200	0	300	9.0	0.0	0.1	8	0.0	46

Hole section: 8 1/2"

WATER BASED SYSTEM

Date	Depth [m]	Mud Type	Dens [sg]	Filtrate				HPHT Press/Temp [psi/DegC]	pH	Alkalinity			Inhib Chem	K+	CL-	Ca++	Mg++	Tot hard [mg]	Percentage			CEC [Kg/m3]	ASG [sg]	LGS [Kg/m3]	
				API [ml]	HPHT [ml]	API [mm]	HPHT [mm]			Pm [ml]	Pf [ml]	Mf [ml]							Oil [%]	Solid [%]	Sand [%]				
13-sep-1997 20:30	1200	1200	ANCO 2000	1.17	3.0	0.0	1	0	0/0	8.1	0.0	0.0	0.6	110	57700	63000	260	0	280	9.3	0.0	0.5	10	0.0	41
14-sep-1997 19:45	1435	1435	ANCO 2000	1.17	2.9	0.0	1	0	0/0	8.3	0.0	0.0	0.6	112	58700	66000	280	0	300	9.1	0.0	0.4	10	0.0	39
15-sep-1997 21:00	1435	1435	ANCO 2000	1.17	3.0	0.0	1	0	0/0	8.3	0.0	0.0	0.6	110	57700	66000	280	0	300	9.1	0.0	0.3	10	0.0	39
16-sep-1997 23:00	1435	1435	ANCO 2000	1.17	3.0	0.0	1	0	0/0	8.3	0.0	0.0	0.6	110	57700	66000	280	0	300	9.1	0.0	0.3	10	0.0	39
17-sep-1997 23:00	1435	1435	ANCO 2000	1.17	3.0	0.0	1	0	0/0	8.3	0.0	0.0	0.6	110	57700	66000	280	0	300	9.1	0.0	0.3	10	0.0	39
18-sep-1997 23:00	1435	1435	ANCO 2000	1.17	3.0	0.0	1	0	0/0	8.1	0.0	0.0	0.6	110	57700	66000	280	0	300	9.1	0.0	0.3	10	0.0	39
19-sep-1997 23:00	1435	1435	ANCO 2000	1.17	3.0	0.0	1	0	0/0	8.1	0.0	0.0	0.6	110	57700	66000	280	0	300	9.1	0.0	0.3	10	0.0	39
20-sep-1997 23:00	0	0	ANCO 2000	1.17	0.0	0.0	0	0	0/0	0.0	0.0	0.0	0.0	0	0	0	0	0	0.0	0.0	0.0	0	0.0	0	

See also the report 'DAILY MUD PROPERTIES : RHEOLOGY PARAMETERS'

TOTAL CONSUMPTION OF MUD ADDITIVES ON WELL 36/7-2

Section Size	Product/Additive	Total Amount Planned	Total Amount Used	Unit	Difference		Difference in cost	
					Amount	%	%	[kNOK]
36"	BARITE		162000.0	kg				
	BENTONITE		48000.0	kg				
	SODA ASH		175.0	kg				
17 1/2"	BENTONITE		13000.0	kg				
	MICA COARSE		150.0	kg				
12 1/4"	ANCO 208		13000.0	l				
	ANCO ZAN D		1850.0	kg				
	ANTISOL FL10		5200.0	kg				
	BARITE		29000.0	kg				
	BENTONITE		3000.0	kg				
	KCL BRINE		180000.0	l				
	KCL POWDER		2000.0	kg				
8 1/2"	ANCO 208		2000.0	l				
	ANCO ZAN D		425.0	kg				
	ANTISOL FL10		800.0	kg				
	KCL BRINE		49000.0	l				
	MICA COARSE		400.0	kg				
	MICA FINE		175.0	kg				
	SODA ASH		300.0	kg				
10.0	BICARBONATE		325.0	kg				
	CITRIC ACID		550.0	kg				
	KCL POWDER		2000.0	kg				



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Title		Reservoir Geochemistry of well 36/7-2					
Keywords		Petroleum geochemistry, reservoir geochemistry, migrated hydrocarbons, biodegradation					
Document category	Document ID	Amendment no.					
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Area code	System code	Procurement ref./Package no.					
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<div style="border: 2px solid black; padding: 10px; width: fit-content; margin: 0 auto;"> <p>BA 98-941-1</p> <p>03 JUNI 998</p> <p>REGISTRERT</p> <p>OLJEDIREKTORATET</p> </div>							
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40632 hydro n



1 INTRODUCTION

a MDT sample was taken at 934.5m. No cores were cut, but 60 SWCs were taken from 603m to 1408m with a recovery of 56 samples.

The well was drilled using Bentonite spud mud down to 587m and with Anco 2000 mud from 587m to T.D. (1435m).

The objectives of this petroleum geochemical study were:

- To characterise the oil encountered in the well
- To correlate the oil encountered in well 36/7-2 with neighbouring hydrocarbon discoveries in wells 36/7-1, 35/9-1 and 35/9-2.

A list of all analysed samples is presented in Table 1.2. The analytical and preparative methods employed in this study comprised geochemical screening, bitumen characterisation and correlation. Screening consisted of Rock-Eval pyrolysis. Bitumen characterisation included solvent extraction followed by asphaltene precipitation, preparative group type separation by MPLC² and analytical group type separation by TLC-FID³ (Iatroscan). Rock extracts and the oil samples were further analysed by gas chromatography (GC-FID) of saturated hydrocarbons, analysis of the saturated and aromatic hydrocarbon fractions by gas chromatography-mass spectrometry (GC-MSD⁴) and analysis of stable carbon isotopes. The analyses were carried out according to the guidelines in the Norwegian Industry Guide to Organic Geochemical Analyses (NIGOGA⁵).

1 All depths in this report are in mRKB unless otherwise stated. SWC and fluid samples are related to loggers depth.
2 Medium Pressure/Performance Liquid Chromatography
3 Thin Layer Chromatography with Flame Ionisation Detection
4 Mass-Selective Detector
5 The Norwegian Industry Guide to Organic Geochemical Analyses, 3rd edition, 1993



Stable carbon isotope analyses of extract fractions was performed by Geolab Nor (Trondheim, Norway). All other analytical and interpretative work was carried out at Norsk Hydro E&P Research Centre in Bergen, Norway.

Table 1.2: List of samples analysed

ANALYSIS PROGRAMME, WELL NOR : 36/7-2

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Depth (m)	Lithology	Type	RockEval	RE/EXT	Extr	MPLC	Iatr	SatHC	Pyrolyse	Isot	Sat-biom	c5-20hc	Aro-hc	Vitr
934.50		OIL			1		1	1		1	1		1	
935.00		SWC	1		1		1	1		1	1		1	
950.00		SWC	1		1		1	1		1	1		1	
955.00		SWC	1		1		1	1		1	1		1	
961.00		SWC	1		1		1	1		1	1		1	

Table 1.2: List of samples analysed

ANALYSIS PROGRAMME, WELL NOR : 35/9-1

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Depth (m)	Lithology	Type	RockEval	RE/EXT	Extr	MPLC	Iatr	SatHC	Pyrolyse	Isot	Sat-biom	c5-20hc	Aro-hc	Vitr
2291.80		OIL			1		1	1			1		1	

Table 1.2: List of samples analysed

ANALYSIS PROGRAMME, WELL NOR : 35/9-2

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Depth (m)	Lithology	Type	RockEval	RE/EXT	Extr	MPLC	Iatr	SatHC	Pyrolyse	Isot	Sat-biom	c5-20hc	Aro-hc	Vitr
2332.00		OIL			1		1	1			1			1

Table 2.1: Rock Eval data

ROCK EVAL SCREENING DATA

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Well	Depth (m)	Lithology	Type	Tmax (C)	S1(kg/t)	S2 (kg/t)	TOC (%)	HI	PI	Analysing Company
NOR : 36/7-2	935.00		SWC	350	23.7	4.6	2.6	174	0.84	NORSK HYDRO
NOR : 36/7-2	950.00		SWC	397	13.2	2.4	1.6	153	0.85	NORSK HYDRO
NOR : 36/7-2	955.00		SWC	344	44.5	9.4	4.9	192	0.83	NORSK HYDRO
NOR : 36/7-2	961.00		SWC	406	15.3	4.6	3.0	155	0.77	NORSK HYDRO

Table 3.1: Extraction and deasphalting data



EXTRACTION/DESPHALTING DATA (SEDIMENTS)

Well	Depth (m)	Lithology	Type	Rock (g)	EOM (mg)	ASP (mg)	EOM (%)	ASP (%)	EOM (ppm)	TOC (%)	EOM/TOC (%)	Analysing comp
NOR : 36/7-2	935.00		SWC	3.1	80.0	3.5	2.62	4.9	26 200	2.6	1.0	Norsk Hydro
NOR : 36/7-2	950.00		SWC	3.3	58.0	5.2	1.75	10.0	17 500	1.6	1.1	Norsk Hydro
NOR : 36/7-2	955.00		SWC	1.1	48.0	0.7	4.29	1.6	42 900	4.9	0.9	Norsk Hydro
NOR : 36/7-2	961.00		SWC	2.5	52.0	4.7	2.11	10.0	21 100	3.0	0.7	Norsk Hydro

Table 3.2: Deasphalting data, oil samples



DEASPHALTING DATA (OILS)

Well	St.Depth (m)	En.Depth (m)	Name	OIL (mg)	ASP (mg)	ASP (%)	Analysing Company
NOR / 36/7-1	2362.80	2368.80	DST1	356.00	0.5	0.1	NORSK HYDRO

IATROSCAN - Calculated Weight% / SARA

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Table 3.3: Composition of deasphalted extracts (Iatroscan)

COMPOSITION OF EXTRACTS/OILS WELL

Well	St.Depth (m)	En.Depth (m)	Type	Lithology	Name	Calculated Weight %			HC TOTA	ASPH%	Non-HC TOTAL	TOT HC /Non-HC	Analysing Company
						SAT	ARO	NSO					
NOR 36/7-2	935.00	935.00	SWC			43.3	25.5	26.4	68.8	4.9	31.2	2.2	NORSK HYDRO
NOR 36/7-2	950.00	950.00	SWC			39.8	7.8	42.4	47.6	10.0	52.4	0.9	NORSK HYDRO
NOR 36/7-2	955.00	955.00	SWC			46.8	37.8	13.8	84.6	1.6	15.4	5.5	NORSK HYDRO
NOR 36/7-2	961.00	961.00	SWC			39.5	34.4	16.0	73.9	10.0	26.1	2.8	NORSK HYDRO

IATROSCAN - Calculated Weight% / SARA

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Table 3.4: Composition of deasphalted oils

COMPOSITION OF EXTRACTS/OILS WELL

Well	St.Depth (m)	En.Depth (m)	Type	Lithology	Name	Calculated Weight %			HC TOTA	ASPH%	Non-HC TOTAL	TOT HC /Non-HC	Analysing Company
						SAT	ARO	NSO					
NOR 35/9-1	2285.80	2291.80	OIL		DST1	74.9	19.0	5.9	93.8	0.3	6.2	15.2	NORSK HYDRO
NOR 35/9-2	2332.00	2332.00	OIL		DST1	70.9	22.1	6.8	93.1	0.1	6.9	13.5	NORSK HYDRO
NOR 36/7-2	934.50	934.50	OIL		MDT	46.0	40.6	12.3	86.6	1.1	13.4	6.5	NORSK HYDRO



Table 3.4: Composition of deasphalted oils

COMPOSITION OF deasphalted EXTRACTS/OILS

Well	St.Depth (m)	En.Depth (m)	Type	Lithology	Name	SAT(%)	ARO(%)	NSO(%)	Non-HC TOTAL	TOT HC /Non-HC	Analysing Company
NOR 36/7-1	2362.80	2368.80	OIL		DST1	56.0	38.0	6.0	6.0	15.7	NORSK HYDRO

Table 3.5: Isotope analysis results, sediment samples



ISOTOPE ANALYSIS RESULTS (SEDIMENT SAMPLES)

18-Dec-1997 10:28

Well	St.Depth (m)	En.Depth (m)	Name	Lithology	Type	d13C EXTR	d13C SAT	d13C ARO	d13C POL	d13C ASP	d13C KERO	Analysing Compa
NOR 36/7-2	935.00	935.00			SWC		-28.63	-27.19				GEOLABNOR
NOR 36/7-2	950.00	950.00			SWC		-28.60	-26.77				GEOLABNOR
NOR 36/7-2	955.00	955.00			SWC		-28.59	-27.25				GEOLABNOR
NOR 36/7-2	961.00	961.00			SWC		-28.49	-27.20				GEOLABNOR

Table 3.6: Isotope analysis results, oil samples



ISOTOPE ANALYSIS RESULTS (OIL SAMPLES)

18-Dec-1997 11:09

Well	St.Depth (m)	En.Depth (m)	Name	Type	d13C OIL	d13C SAT	d13C ARO	d13C POL	d13C ASP	Analysing Compa
NOR 36/7-2	934.50	934.50	MDT	OIL	-28.58	-27.33				GEOLABNOR
NOR 36/7-1	2362.80	2368.80	DST1	OIL	-28.39	-27.16	-26.73	-27.68		GEOLABNOR

Table 3.6: Isotope analysis results, oil samples



ISOTOPE ANALYSIS RESULTS (OIL SAMPLES)

18-Dec-1997 11:09

Well	St.Depth (m)	En.Depth (m)	Name	Type	d13C OIL	d13C SAT	d13C ARO	d13C POL	d13C ASP	Analysing Compa
NOR 35/9-1	2285.80	2291.80	DST1	OIL	-27.20	-28.20	-27.00	-26.90		GEOLABNOR
NOR 35/9-2	2332.00	2332.00	DST1	OIL	-27.90	-28.90	-27.30	-26.60	-29.30	GEOLABNOR

Appendix I

Whole oil chromatograms and tabulated results of the light hydrocarbons

Data file : K:\CAP\C5_20ARK\1\KV30B\3672.D
 Sample Name: 36/7-2 fmt
 Sample info:

Started By : Signal
 Lib. Data Modified : Tue, 28. Oct. 1997, 11:21:03 am
 Multiplier : 1.000000
 Dilution(1/mg sample) : 0.003796
 Uncalibrated Peaks : not reported



#	Compound	Amount ug/mg	Area	Resp. ratio	Rt. min.
1	iC5	0.00	0	1.00	7.96
2	nC5	0.00	0	1.00	8.39
3	22dm-C4	0.01	0	1.00	9.45
4	cyC5	0.00	0	1.00	10.55
5	23dm-C4	0.00	0	1.00	10.65
6	2m-C5	0.01	0	1.00	10.80
7	3m-C5	0.00	0	1.00	11.72
8	nC6	0.01	0	1.00	13.15
9	3m-cyC5-ene	0.02	1	1.00	13.88
10	22dm-C5	0.02	1	1.00	15.07
11	m-cyC5	0.00	0	0.00	0.00
12	24dm-C5	0.01	0	1.00	15.61
13	223tm-C4	0.01	0	1.00	15.95
14	Benzene	0.00	0	1.00	17.35
15	33dm-C5	0.00	0	1.00	18.03
16	cyC6	0.00	0	1.00	18.32
17	2m-C6	0.00	0	0.00	0.00
18	23dm-C5	0.00	0	1.00	19.33
19	11dm-cyC5	0.00	0	1.00	19.76
20	3m-C6	0.01	0	1.00	20.35
21	1c.3dm-cyC5	0.01	0	1.00	20.87
22	1t.3dm-cyC5	0.00	0	1.00	21.24
23	3e-C5	0.00	0	0.00	0.00
24	1t.2dm-cyC5	0.00	0	0.00	0.00
25	iC8 (ISTD) /224tm-C5	8.75	367	1.00	21.83
26	nC7	0.01	0	1.00	23.37
27	1c.2-dm-cyC5	0.00	0	1.00	26.22
28	m-cyC6	0.01	0	1.00	26.42
29	113tm-cyC5	0.01	1	1.00	26.87
30	e-cyC5	0.00	0	1.00	28.42
31	25dm-C6	0.00	0	1.00	28.78
32	223tm-C5/24dm-C6	0.00	0	1.00	28.99
33	1c.2t.4tm-cyC5	0.00	0	0.00	0.00
34	33dm-C6	0.00	0	1.00	30.30
35	1t.2c.3tm-cyC5	0.00	0	1.00	31.40
36	234tm-C5	0.00	0	1.00	31.98
37	Toluen/233tm-C5	0.01	0	1.00	32.62
38	23dm-C6	0.00	0	1.00	34.13
39	2m-C7	0.01	0	1.00	35.34
40	4m-C7	0.01	0	1.00	35.67
41	3m-C7	0.02	1	1.00	36.75
42	1c.3dm-cyC6	0.02	1	1.00	36.98
43	1t.4dm-cyC6	0.01	1	1.00	37.49
44	11dm-cyC6	0.01	1	1.00	39.87
45	1t.2dm-cyC6	0.02	1	1.00	40.77
46	nC8	0.05	2	1.00	42.13
47	e-cyC6	0.03	1	1.00	48.01
48	iC9	0.00	0	1.00	49.25
49	e-benzene	0.01	0	1.00	52.17
50	m-xylene	0.02	1	1.00	54.43
51	p-xylene	0.01	0	1.00	54.72
52	4m-C8	0.00	0	1.00	57.38
53	2m-C8	0.01	1	1.00	57.69
54	3m-C8	0.01	0	1.00	59.59
55	o-xylene	0.01	1	1.00	60.56
56	nC9	0.04	3	1.00	66.58
57	iC10	0.01	1	1.00	73.37
58	nC10	0.10	7	1.00	83.18
59	iC11	0.07	5	1.00	86.29
60	nC11	0.17	12	1.00	94.60
61	nC12	0.48	34	1.00	103.82
62	i-C13	0.17	12	1.00	105.26
63	phC6 (ISTD)	8.75	623	1.00	107.88
64	iC14	0.15	11	1.00	110.27
65	nC13	0.40	28	1.00	111.83

Data file : K:\CAP\C5_20ARK\1\KV30B\3672.D
Sample Name: 36/7-2 fmt
Sample info:

#	Compound	Amount ug/mg	Area	Resp. ratio	Rt. min.
66	iC15	0.39	28	1.00	117.62
67	nC14	0.50	35	1.00	119.09
68	iC16	0.24	17	1.00	123.54
69	nC15	0.34	24	1.00	125.77
70	nC16	0.31	22	1.00	132.07
71	iC18	0.14	10	1.00	135.25
72	nC17	0.26	18	1.00	138.00
73	pristane	0.34	24	1.00	138.61
74	nC18	0.48	34	1.00	143.61
75	phytane	0.12	9	1.00	144.20
76	nC19	0.33	23	1.00	148.94
77	nC20	0.35	25	1.00	154.01

Internal standards for quantification:

ISTD #	Name	Amount ug
1	iC8 (ISTD)/224tm-	2305.00
2	phC6 (ISTD)	2305.00

*** End of Report ***

Molecular ratios from whole oil chromatography

**Petroleum Geochemistry Group
Research Centre Bergen**

18-Dec-1997 11:16



C5-20 hc ord. samples - Area

S-Depth (m)	E-Depth (m)	Well	Type	Lithology	Name	Orgid	Project	Seq.#	File name	File path	Instrument	Setup	Method
2362.80	2368.80	36/7-1	OIL		DST1	608314	10	5	3671_1.D	KV30D	AC/HP6890	C5_20	C520D_A.M



Ratios - area:

E-Depth (m)	Operator	Company	Aquired date	Misc.info.	Country	Status	Data Type	Heptane V	Isoheptan e V	Paraffinici t	Pr Nc7	Phy Nc18
2368.80	Linda	NORSK HYDRO	1997-11-02		NOR	OK	AR	17.5	1.2	0.5	0.6	0.3



Ratios - area:

E-Depth (m)	Aromaticity	Pr Phy
2368.80	1.14	2.13

Sample Name: 36/7-1 dst1

Sample info:

Sorted By : Signal
 Calib. Data Modified : Wed, 23. Jul. 1997,11:27:42 am
 Multiplier : 1.000000
 Dilution(1/mg sample) : 0.002377
 Uncalibrated Peaks : not reported



#	Compound	Amount ug/mg	Area	Resp. ratio	Rt. min.
1	iC5	4.23	474	1.00	7.67
2	nC5	7.11	796	1.00	8.21
3	22dm-C4	0.16	18	1.00	9.26
4	cyC5	1.28	143	1.00	10.38
5	23dm-C4	0.61	68	1.00	10.44
6	2m-C5	4.20	470	1.00	10.64
7	3m-C5	2.73	305	1.00	11.52
8	nC6	9.14	1023	1.00	12.85
9	3m-cyC5-ene	0.00	0	0.00	0.00
10	22dm-C5	0.18	21	1.00	14.82
11	m-cyC5	6.57	735	1.00	15.02
12	24dm-C5	0.44	49	1.00	15.34
13	223tm-C4	0.05	6	1.00	15.83
14	Benzene	4.01	473	1.00	17.16
15	33dm-C5	0.12	13	1.00	17.74
16	cyC6	13.36	1495	1.00	18.14
17	2m-C6	3.00	336	1.00	19.11
18	23dm-C5	0.96	108	1.00	19.31
19	11dm-cyC5	0.83	93	1.00	19.63
20	3m-C6	3.40	380	1.00	20.13
21	1c.3dm-cyC5	1.49	167	1.00	20.91
22	1t.3dm-cyC5	1.36	152	1.00	21.26
23	3e-C5	0.30	34	1.00	21.40
24	1t.2dm-cyC5	2.28	255	1.00	21.61
25	iC8 (ISTD)/224tm-C5	8.64	967	1.00	21.83
26	nC7	10.72	1199	1.00	23.38
27	1c.2-dm-cyC5	0.00	0	0.00	0.00
28	m-cyC6	22.60	2530	1.00	26.44
29	113tm-cyC5	1.00	112	1.00	26.93
30	e-cyC5	0.99	111	1.00	28.41
31	25dm-C6	0.44	49	1.00	28.68
32	223tm-C5/24dm-C6	0.57	64	1.00	29.02
33	1c.2t.4tm-cyC5	0.86	96	1.00	30.04
34	33dm-C6	0.16	18	1.00	30.31
35	1t.2c.3tm-cyC5	0.79	88	1.00	31.41
36	234tm-C5	0.10	11	1.00	31.96
37	Toluen/233tm-C5	11.60	1367	1.00	32.63
38	23dm-C6	0.77	86	1.00	34.11
39	2m-C7	3.43	384	1.00	35.34
40	4m-C7	1.09	122	1.00	35.62
41	3m-C7	2.33	260	1.00	36.81
42	1c.3dm-cyC6	4.50	504	1.00	36.99
43	1t.4dm-cyC6	1.80	202	1.00	37.34
44	11dm-cyC6	0.69	77	1.00	39.80
45	1t.2dm-cyC6	2.31	258	1.00	40.73
46	nC8	12.13	1358	1.00	42.15
47	e-cyC6	6.37	713	1.00	48.01
48	iC9	1.05	123	1.00	49.22
49	e-benzene	2.79	329	1.00	52.15
50	m-xylene	6.72	792	1.00	54.44
51	p-xylene	1.95	230	1.00	54.70
52	4m-C8	1.19	141	1.00	57.34
53	2m-C8	1.62	191	1.00	57.66
54	3m-C8	1.78	209	1.00	59.57
55	o-xylene	3.61	425	1.00	60.54
56	nC9	10.43	1229	1.00	66.62
57	iC10	1.41	166	1.00	73.34
58	nC10	9.84	1159	1.00	83.20
59	iC11	1.85	218	1.00	86.22
60	nC11	9.07	1069	1.00	94.62
61	nC12	9.25	1090	1.00	103.82
62	i-C13	1.55	183	1.00	105.13
63	phC6 (ISTD)	8.64	1018	1.00	107.86
64	iC14	3.23	381	1.00	110.15
65	nC13	8.25	972	1.00	111.83

Sample Name: 36/7-1 dst1

Sample info:

#	Compound	Amount ug/mg	Area	Resp. ratio	Rt. min.
66	iC15	2.01	237	1.00	117.63
67	nC14	7.95	937	1.00	119.08
68	iC16	2.78	328	1.00	123.47
69	nC15	7.90	930	1.00	125.78
70	nC16	6.99	823	1.00	132.06
71	iC18	1.81	213	1.00	135.19
72	nC17	6.66	785	1.00	137.98
73	pristane	3.89	458	1.00	138.58
74	nC18	5.80	683	1.00	143.59
75	phytane	1.83	215	1.00	144.36
76	nC19	5.87	692	1.00	148.92
77	nC20	4.95	583	1.00	154.00

Internal standards for quantification:

ISTD #	Name	Amount ug
1	ic8 (ISTD)/224tm-	3635.00
2	phC6 (ISTD)	3635.00

*** End of Report ***

Molecular ratios from whole oil chromatography

**Petroleum Geochemistry Group
Research Centre Bergen**

18-Dec-1997 11:17



C5-20 hc ord. samples - Area

S-Depth (m)	E-Depth (m)	Well	Type	Lithology	Name	Orgid	Project	Seq.#	File name	File path	Instrument	Setup	Method
2285.80	2291.80	35/9-1	OIL		DST1	979994052	10	4	3591_1.D	KV30D	AC/HP6890	C5_20	C520D_A.M



Ratios - area:

E-Depth (m)	Operator	Company	Aquired date	Misc.info.	Country	Status	Data Type	Heptane V	Isoheptane V	Paraffinict	Pr Nc7	Phy Nc18
2291.80	Linda	NORSK HYDRO	1997-11-02		NOR	OK	AR	17.7	1.3	0.5	0.6	0.3



Ratios - area:

E-Depth (m)	Aromaticity	Pr Phy
2291.80	1.11	2.20

Sample Name: 35/9-1 dst1

Sample info:

Sorted By : Signal
 Date Modified : Tue, 28. Oct. 1997, 09:46:58 am
 Multiplier : 1.000000
 Dilution (1/mg sample) : 0.002405
 Uncalibrated Peaks : not reported



#	Compound	Amount ug/mg	Area	Resp. ratio	Rt. min.
1	iC5	7.78	914	1.00	7.67
2	nC5	12.62	1483	1.00	8.22
3	22dm-C4	0.26	30	1.00	9.26
4	cyC5	1.83	215	1.00	10.38
5	23dm-C4	0.90	106	1.00	10.44
6	2m-C5	6.31	742	1.00	10.64
7	3m-C5	3.92	461	1.00	11.52
8	nC6	13.01	1528	1.00	12.86
9	3m-cyC5-ene	0.00	1	1.00	13.70
10	22dm-C5	0.25	29	1.00	14.82
11	m-cyC5	8.31	977	1.00	15.03
12	24dm-C5	0.58	68	1.00	15.34
13	223tm-C4	0.06	7	1.00	15.83
14	Benzene	5.90	715	1.00	17.16
15	33dm-C5	0.15	17	1.00	17.74
16	cyC6	16.73	1966	1.00	18.15
17	2m-C6	3.77	444	1.00	19.12
18	23dm-C5	1.17	137	1.00	19.31
19	11dm-cyC5	1.00	118	1.00	19.63
20	3m-C6	4.16	488	1.00	20.13
21	1c.3dm-cyC5	1.73	204	1.00	20.91
22	1t.3dm-cyC5	1.58	186	1.00	21.26
23	3e-C5	0.35	42	1.00	21.41
24	1t.2dm-cyC5	2.63	309	1.00	21.61
25	iC8 (ISTD) / 224tm-C5	8.28	973	1.00	21.84
26	nC7	12.84	1509	1.00	23.39
27	1c.2-dm-cyC5	0.00	0	0.00	0.00
28	m-cyC6	25.56	3003	1.00	26.45
29	113tm-cyC5	1.12	131	1.00	26.93
30	e-cyC5	1.03	121	1.00	28.40
31	25dm-C6	0.50	59	1.00	28.68
32	223tm-C5/24dm-C6	0.65	77	1.00	29.03
33	1c.2t.4tm-cyC5	0.94	110	1.00	30.05
34	33dm-C6	0.18	21	1.00	30.31
35	1t.2c.3tm-cyC5	0.85	100	1.00	31.41
36	234tm-C5	0.11	13	1.00	31.95
37	Toluen/233tm-C5	13.78	1669	1.00	32.65
38	23dm-C6	0.83	98	1.00	34.12
39	2m-C7	3.79	445	1.00	35.34
40	4m-C7	1.19	140	1.00	35.62
41	3m-C7	2.58	304	1.00	36.82
42	1c.3dm-cyC6	4.76	559	1.00	36.99
43	1t.4dm-cyC6	1.91	224	1.00	37.34
44	11dm-cyC6	0.67	78	1.00	39.80
45	1t.2dm-cyC6	2.41	284	1.00	40.73
46	nC8	13.03	1531	1.00	42.16
47	e-cyC6	6.50	764	1.00	48.01
48	iC9	1.07	129	1.00	49.21
49	e-benzene	2.94	356	1.00	52.16
50	m-xylene	7.11	861	1.00	54.44
51	p-xylene	2.08	252	1.00	54.71
52	4m-C8	1.25	152	1.00	57.35
53	2m-C8	1.71	207	1.00	57.67
54	3m-C8	1.84	223	1.00	59.58
55	o-xylene	3.77	457	1.00	60.55
56	nC9	10.77	1305	1.00	66.63
57	iC10	1.43	173	1.00	73.34
58	nC10	9.75	1182	1.00	83.20
59	iC11	1.79	216	1.00	86.23
60	nC11	8.77	1062	1.00	94.62
61	nC12	8.75	1060	1.00	103.82
62	i-C13	1.47	178	1.00	105.13
63	phC6 (ISTD)	8.28	1004	1.00	107.86
64	iC14	2.95	357	1.00	110.15
65	nC13	7.69	932	1.00	111.83

Sample Name: 35/9-1 dst1

Sample info:

#	Compound	Amount ug/mg	Area	Resp. ratio	Rt. min.
66	iC15	1.84	223	1.00	117.63
67	nC14	7.32	887	1.00	119.08
68	iC16	2.53	307	1.00	123.47
69	nC15	7.19	871	1.00	125.78
70	nC16	6.33	767	1.00	132.06
71	iC18	1.61	195	1.00	135.19
72	nC17	5.98	725	1.00	137.98
73	pristane	3.48	422	1.00	138.58
74	nC18	5.17	627	1.00	143.59
75	phytane	1.59	192	1.00	144.36
76	nC19	5.21	632	1.00	148.92
77	nC20	4.22	512	1.00	154.00

Internal standards for quantification:

ISTD #	Name	Amount ug
1	iC8(ISTD)/224tm-	3445.00
2	phC6(ISTD)	3445.00

*** End of Report ***

Molecular ratios from whole oil chromatography

**Petroleum Geochemistry Group
Research Centre Bergen**

18-Dec-1997 11:18



C5-20 hc ord. samples - Area

S-Depth (m)	E-Depth (m)	Well	Type	Lithology	Name	Orgid	Project	Seq.#	File name	File path	Instrument	Setup	Method
2332.00	2332.00	35/9-2	OIL		DST1	979994053	10	6	3592_1.D	KV30D	AC/HP6890	C5_20	C520D_A.M



Ratios - area:

E-Depth (m)	Operator	Company	Aquired date	Misc.info.	Country	Status	Data Type	Heptane V	Isoheptan e V	Paraffinici t	Pr Nc7	Phy Nc18
2332.00	Linda	NORSK HYDRO	1997-11-02		NOR	OK	AR	17.1	1.2	0.5	1.0	0.7



Ratios - area:

E-Depth (m)	Aromaticity	Pr Phy
2332.00	1.02	1.88

Sample Name: 35/9-2 test1

Sample info:

Sorted By : Signal
 (lib. Data Modified : Wed, 23. Jul. 1997, 11:27:42 am
 Multiplier : 1.000000
 Dilution(1/mg sample) : 0.002417
 Uncalibrated Peaks : not reported



#	Compound	Amount ug/mg	Area	Resp. ratio	Rt. min.
1	iC5	6.36	736	1.00	7.67
2	nC5	9.54	1103	1.00	8.22
3	22dm-C4	0.30	34	1.00	9.26
4	cyC5	1.78	206	1.00	10.38
5	23dm-C4	0.84	97	1.00	10.44
6	2m-C5	5.42	627	1.00	10.64
7	3m-C5	3.51	406	1.00	11.52
8	nC6	10.68	1235	1.00	12.86
9	3m-cyC5-ene	0.00	0	0.00	0.00
10	22dm-C5	0.25	29	1.00	14.82
11	m-cyC5	8.73	1010	1.00	15.03
12	24dm-C5	0.53	61	1.00	15.34
13	223tm-C4	0.07	8	1.00	15.83
14	Benzene	3.26	391	1.00	17.16
15	33dm-C5	0.16	19	1.00	17.75
16	cyC6	13.48	1559	1.00	18.14
17	2m-C6	3.53	408	1.00	19.12
18	23dm-C5	1.13	131	1.00	19.31
19	11dm-cyC5	0.92	106	1.00	19.63
20	3m-C6	3.96	458	1.00	20.13
21	1c.3dm-cyC5	1.80	208	1.00	20.91
22	1t.3dm-cyC5	1.61	187	1.00	21.26
23	3e-C5	0.35	41	1.00	21.41
24	1t.2dm-cyC5	2.76	319	1.00	21.61
25	iC8 (ISTD) / 224tm-C5	8.58	992	1.00	21.83
26	nC7	11.20	1295	1.00	23.39
27	1c.2-dm-cyC5	0.00	0	0.00	0.00
28	m-cyC6	23.47	2714	1.00	26.44
29	113tm-cyC5	1.02	118	1.00	26.92
30	e-cyC5	1.34	154	1.00	28.40
31	25dm-C6	0.50	58	1.00	28.67
32	223tm-C5/24dm-C6	0.63	73	1.00	29.02
33	1c.2t.4tm-cyC5	0.92	106	1.00	30.04
34	33dm-C6	0.18	21	1.00	30.31
35	1t.2c.3tm-cyC5	0.85	99	1.00	31.41
36	234tm-C5	0.12	14	1.00	31.95
37	Toluen/233tm-C5	11.05	1327	1.00	32.63
38	23dm-C6	0.83	96	1.00	34.11
39	2m-C7	3.64	421	1.00	35.34
40	4m-C7	1.30	150	1.00	35.61
41	3m-C7	2.55	295	1.00	36.81
42	1c.3dm-cyC6	4.66	539	1.00	36.98
43	1t.4dm-cyC6	1.86	215	1.00	37.34
44	11dm-cyC6	0.91	105	1.00	39.79
45	1t.2dm-cyC6	2.32	268	1.00	40.73
46	nC8	11.92	1379	1.00	42.15
47	e-cyC6	6.39	739	1.00	48.01
48	iC9	1.11	133	1.00	49.21
49	e-benzene	3.03	364	1.00	52.16
50	m-xylene	7.20	864	1.00	54.44
51	p-xylene	2.12	254	1.00	54.70
52	4m-C8	1.28	154	1.00	57.34
53	2m-C8	1.70	203	1.00	57.65
54	3m-C8	1.89	227	1.00	59.57
55	o-xylene	3.68	441	1.00	60.54
56	nC9	10.06	1208	1.00	66.62
57	iC10	1.47	176	1.00	73.34
58	nC10	9.28	1114	1.00	83.20
59	iC11	1.93	231	1.00	86.22
60	nC11	7.97	957	1.00	94.61
61	nC12	7.75	931	1.00	103.81
62	i-C13	1.61	193	1.00	105.12
63	phC6 (ISTD)	8.58	1030	1.00	107.86
64	iC14	3.74	448	1.00	110.15
65	nC13	6.45	774	1.00	111.82

Sample Name: 35/9-2 test1

Sample info:

#	Compound	Amount ug/mg	Area	Resp. ratio	Rt. min.
66	iC15	2.16	259	1.00	117.63
67	nC14	5.86	703	1.00	119.06
68	iC16	2.86	343	1.00	123.47
69	nC15	5.51	662	1.00	125.77
70	nC16	4.40	528	1.00	132.05
71	iC18	1.95	234	1.00	135.19
72	nC17	3.96	475	1.00	137.97
73	pristane	4.05	487	1.00	138.58
74	nC18	3.20	384	1.00	143.58
75	phytane	2.16	259	1.00	144.36
76	nC19	3.38	406	1.00	148.91
77	nC20	2.30	276	1.00	153.98

Internal standards for quantification:

ISTD #	Name	Amount ug
1	iC8 (ISTD)/224tm-	3550.00
2	phC6 (ISTD)	3550.00

*** End of Report ***

Appendix II

Gas chromatograms and tabulated results of saturated hydrocarbons

#	Rt.min.	Signal FID	Compound	Area	Amount ug/mg
Internal standards (if added):					
1)	13.38	GC1	C12D26	4515917	3.8
6)	25.72	GC1	C16D34	8397100	3.8
11)	35.99	GC1	C20D24	8575378	3.7
19)	44.61	GC1	C24D42	8880469	3.8
28)	55.30	GC1	C30D62	4028972	1.7
2)	0.00	GC1	nC11	0	
3)	13.87	GC1	nC12	1994	
4)	17.15	GC1	nC13	1668	
5)	20.37	GC1	nC14	3983	
7)	0.00	GC1	iC16	0	0.0
8)	0.00	GC1	nC15	0	0.0
9)	0.00	GC1	nC16	0	0.0
10)	0.00	GC1	iC18	0	0.0
12)	0.00	GC1	nC17	0	0.0
13)	0.00	GC1	pristane	0	0.0
14)	0.00	GC1	nC18	0	0.0
15)	0.00	GC1	phytane	0	0.0
16)	0.00	GC1	nC19	0	0.0
17)	0.00	GC1	nC20	0	0.0
18)	0.00	GC1	nC21	0	0.0
20)	0.00	GC1	nC22	0	0.0
21)	0.00	GC1	nC23	0	0.0
22)	0.00	GC1	nC24	0	0.0
23)	0.00	GC1	nC25	0	0.0
24)	0.00	GC1	nC26	0	0.0
25)	50.86	GC1	nC27	3707	0.0
26)	0.00	GC1	nC28	0	0.0
27)	54.45	GC1	nC29	7960	0.0
29)	59.65	GC1	nC30	481262	0.2
30)	0.00	GC1	nC31	0	0.0
31)	0.00	GC1	nC32	0	0.0
32)	0.00	GC1	nC33	0	0.0
33)	0.00	GC1	nC34	0	0.0
34)	0.00	GC1	nC35	0	0.0

Saturated hydrocarbons

GC/FID detection HP-6890

Compound data and ratios



Norsk Hydro E&P Research Centre, Bergen, Norway
Petroleum Geochemistry Laboratories

Data file name: **S935.D**
Sample name: **3677-2 935m sat**
Data File Path: C:\HPCHEM\1\DATA\SA315H3D\
Misc. info.:

Vial no.: 11
Method: MSD_S_D
Operator:
Date: Fri Nov 14 07:25:49 1997

Response curve $y = ax$
Response factor equally 1.0

Ratios:	Area	Amount
Pr/nC17	#DIV/0!	#DIV/0!
Ph/nC18	#DIV/0!	#DIV/0!
(Pr/nC17)/(Ph/nC18)	#DIV/0!	#DIV/0!
Pr/Ph	#DIV/0!	#DIV/0!
nC17/(nC17+nC27)	0.00	0.00
CPI-1	0.02	0.02
CPI-2 (2*nC27/(nC26+nC27))	2.00	2.00

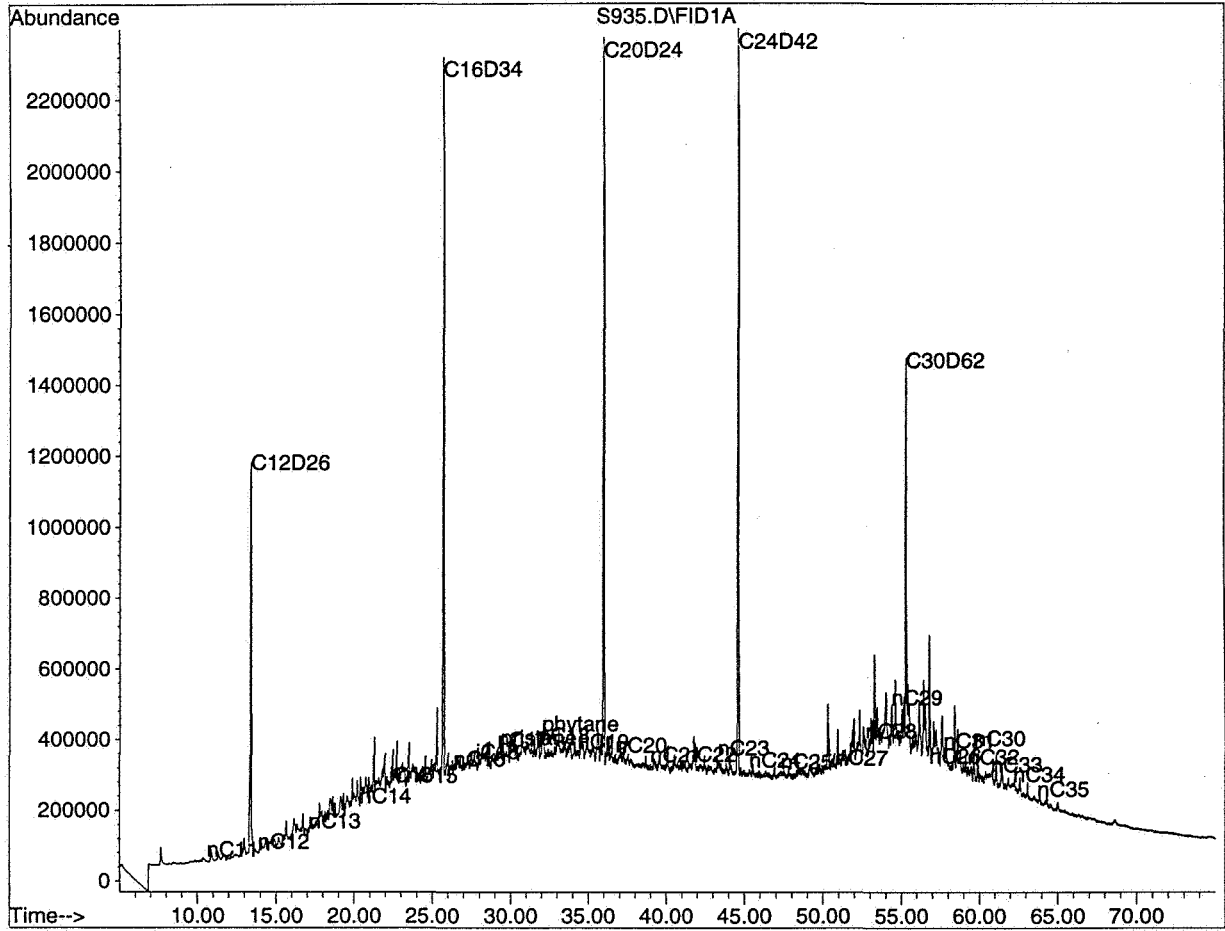
Title: Saturated HC (FID) and Biomarkers (MSD)

Data File: C:\HPCHEM\1\DATA\SA315H3D\S935.D Name: 36/7-2 935m sat

Misc:

Method: MSD_S_DOperator:

Date Reported: Wed Nov 19 14:43:07 1997



#	Rt.min.	Signal	Compound	Area	Amount
FID				ug/mg	
Internal standards (if added):					
1)	13.38	GC1	C12D26	4340368	3.4
6)	25.72	GC1	C16D34	8875285	3.4
11)	36.00	GC1	C20D24	9150665	3.4
19)	44.62	GC1	C24D42	9588721	3.5
28)	55.31	GC1	C30D62	4296834	1.6
2)	0.00	GC1	nC11	0	
3)	0.00	GC1	nC12	0	
4)	0.00	GC1	nC13	0	
5)	20.43	GC1	nC14	20660	
7)	0.00	GC1	iC16	0	0.0
8)	0.00	GC1	nC15	0	0.0
9)	0.00	GC1	nC16	0	0.0
10)	0.00	GC1	iC18	0	0.0
12)	0.00	GC1	nC17	0	0.0
13)	0.00	GC1	pristane	0	0.0
14)	0.00	GC1	nC18	0	0.0
15)	0.00	GC1	phytane	0	0.0
16)	34.46	GC1	nC19	26537	0.0
17)	0.00	GC1	nC20	0	0.0
18)	0.00	GC1	nC21	0	0.0
20)	0.00	GC1	nC22	0	0.0
21)	0.00	GC1	nC23	0	0.0
22)	0.00	GC1	nC24	0	0.0
23)	0.00	GC1	nC25	0	0.0
24)	0.00	GC1	nC26	0	0.0
25)	0.00	GC1	nC27	0	0.0
26)	0.00	GC1	nC28	0	0.0
27)	54.50	GC1	nC29	1442	0.0
29)	0.00	GC1	nC30	0	0.0
30)	0.00	GC1	nC31	0	0.0
31)	0.00	GC1	nC32	0	0.0
32)	0.00	GC1	nC33	0	0.0
33)	0.00	GC1	nC34	0	0.0
34)	0.00	GC1	nC35	0	0.0

Saturated hydrocarbons

GC/FID detection HP-6890

Compound data and ratios



Norsk Hydro E&P Research Centre, Bergen, Norway
Petroleum Geochemistry Laboratories

Data file name: S950.D
Sample name: 36/7-2 950m sat
Data File Path: C:\HPCHEM\1\DATA\SA315H3D\
Misc. info.:

Vial no.: 12
Method: MSD_S_D
Operator:
Date: Fri Nov 14 08:54:31 1997

Response curve $y = ax$
Response factor equally 1.0

Ratios:	Area	Amount
Pr/nC17	#DIV/0!	#DIV/0!
Ph/nC18	#DIV/0!	#DIV/0!
(Pr/nC17)/(Ph/nC18)	#DIV/0!	#DIV/0!
Pr/Ph	#DIV/0!	#DIV/0!
nC17/(nC17+nC27)	#DIV/0!	#DIV/0!
CPI-1	#DIV/0!	#DIV/0!
CPI-2 (2*nC27/(nC26+nC27))	#DIV/0!	#DIV/0!

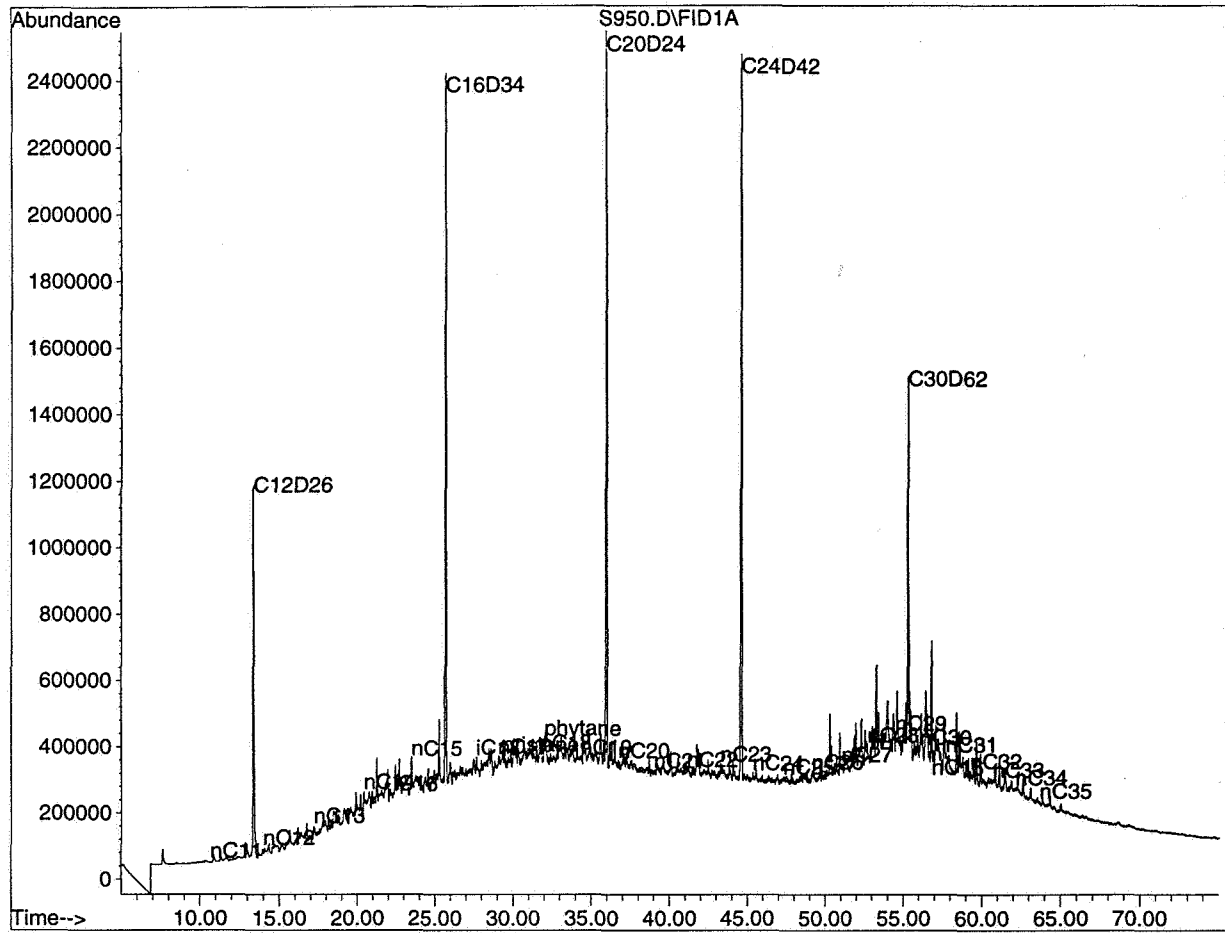
Title: Saturated HC (FID) and Biomarkers (MSD)

Data File: C:\HPCHEM\1\DATA\SA315H3D\S950.D Name: 36/7-2 950m sat

Misc:

Method: MSD_S_DOperator:

Date Reported: Wed Nov 19 14:45:45 1997



#	Rt.min.	Signal	Compound	Area	Amount
			FID	ug/mg	
Internal standards (if added):					
1)	13.38	GC1	C12D26	3552661	4.2
6)	25.71	GC1	C16D34	7225763	4.2
11)	35.99	GC1	C20D24	7578188	4.1
19)	44.60	GC1	C24D42	7840083	4.2
28)	55.30	GC1	C30D62	3516046	1.9
2)	0.00	GC1	nC11	0	
3)	0.00	GC1	nC12	0	
4)	0.00	GC1	nC13	0	
5)	0.00	GC1	nC14	0	
7)	0.00	GC1	iC16	0	0.0
8)	0.00	GC1	nC15	0	0.0
9)	0.00	GC1	nC16	0	0.0
10)	0.00	GC1	iC18	0	0.0
12)	0.00	GC1	nC17	0	0.0
13)	0.00	GC1	pristane	0	0.0
14)	0.00	GC1	nC18	0	0.0
15)	0.00	GC1	phytane	0	0.0
16)	0.00	GC1	nC19	0	0.0
17)	0.00	GC1	nC20	0	0.0
18)	0.00	GC1	nC21	0	0.0
20)	0.00	GC1	nC22	0	0.0
21)	0.00	GC1	nC23	0	0.0
22)	0.00	GC1	nC24	0	0.0
23)	0.00	GC1	nC25	0	0.0
24)	0.00	GC1	nC26	0	0.0
25)	0.00	GC1	nC27	0	0.0
26)	0.00	GC1	nC28	0	0.0
27)	54.59	GC1	nC29	4138	0.0
29)	0.00	GC1	nC30	0	0.0
30)	0.00	GC1	nC31	0	0.0
31)	0.00	GC1	nC32	0	0.0
32)	0.00	GC1	nC33	0	0.0
33)	0.00	GC1	nC34	0	0.0
34)	0.00	GC1	nC35	0	0.0

Saturated hydrocarbons

GC/FID detection HP-6890

Compound data and ratios



Norsk Hydro E&P Research Centre, Bergen, Norway
Petroleum Geochemistry Laboratories

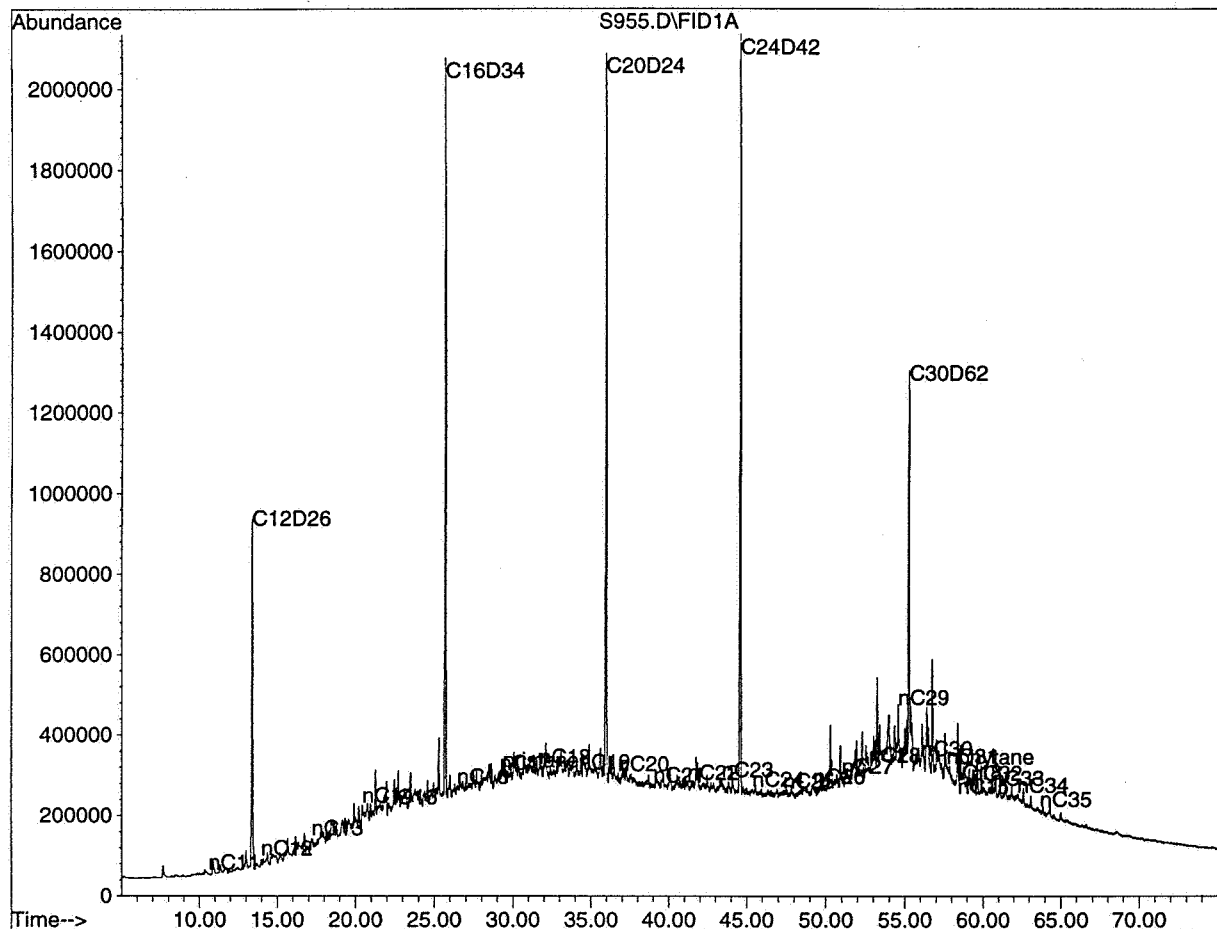
Data file name: S955.D
Sample name: 36/7-2 955m sat
Data File Path: C:\HPCHEM\1\DATA\SA315H3D\
Misc. info.:

Vial no.: 13
Method: MSD_S_D
Operator:
Date: Fri Nov 14 10:23:13 1997

Response curve $y = ax$
Response factor equally 1.0

Ratios:	Area	Amount
Pr/nC17	#DIV/0!	#DIV/0!
Ph/nC18	#DIV/0!	#DIV/0!
(Pr/nC17)/(Ph/nC18)	#DIV/0!	#DIV/0!
Pr/Ph	#DIV/0!	#DIV/0!
nC17/(nC17+nC27)	#DIV/0!	#DIV/0!
CPI-1	#DIV/0!	#DIV/0!
CPI-2 (2*nC27/(nC26+nC27))	#DIV/0!	#DIV/0!

Title: Saturated HC (FID) and Biomarkers (MSD)
Data File: C:\HPCHEM\1\DATA\SA315H3D\S955.D Name: 36/7-2 955m sat
Misc:
Method: MSD_S_DOperator:
Date Reported: Wed Nov 19 14:48:16 1997



#	Rt.min.	Signal	Compound	Area	Amount
			FID	ug/mg	
Internal standards (if added):					
1)	13.38	GC1	C12D26	3798967	3.8
6)	25.71	GC1	C16D34	7734114	3.8
11)	35.99	GC1	C20D24	8246182	3.8
19)	44.60	GC1	C24D42	8628512	3.9
28)	55.30	GC1	C30D62	4007655	1.8
2)	0.00	GC1	nC11	0	
3)	0.00	GC1	nC12	0	
4)	0.00	GC1	nC13	0	
5)	0.00	GC1	nC14	0	
7)	0.00	GC1	iC16	0	0.0
8)	0.00	GC1	nC15	0	0.0
9)	0.00	GC1	nC16	0	0.0
10)	0.00	GC1	iC18	0	0.0
12)	0.00	GC1	nC17	0	0.0
13)	0.00	GC1	pristane	0	0.0
14)	0.00	GC1	nC18	0	0.0
15)	0.00	GC1	phytane	0	0.0
16)	0.00	GC1	nC19	0	0.0
17)	0.00	GC1	nC20	0	0.0
18)	0.00	GC1	nC21	0	0.0
20)	0.00	GC1	nC22	0	0.0
21)	0.00	GC1	nC23	0	0.0
22)	0.00	GC1	nC24	0	0.0
23)	0.00	GC1	nC25	0	0.0
24)	0.00	GC1	nC26	0	0.0
25)	0.00	GC1	nC27	0	0.0
26)	0.00	GC1	nC28	0	0.0
27)	0.00	GC1	nC29	0	0.0
29)	0.00	GC1	nC30	0	0.0
30)	57.58	GC1	nC31	4255	0.0
31)	0.00	GC1	nC32	0	0.0
32)	0.00	GC1	nC33	0	0.0
33)	0.00	GC1	nC34	0	0.0
34)	0.00	GC1	nC35	0	0.0

Saturated hydrocarbons

GC/FID detection HP-6890

Compound data and ratios



Norsk Hydro E&P Research Centre, Bergen, Norway
Petroleum Geochemistry Laboratories

Data file name: S961.D
Sample name: 36/7-2 961m sat
Data File Path: C:\HPCHEM\1\DATA\ISA315H3D\
Misc. info.:

Vial no.: 14
Method: MSD_S_D
Operator:
Date: Fri Nov 14 11:51:54 1997

Response curve y = ax
Response factor equally 1.0

Ratios:	Area	Amount
Pr/nC17	#DIV/0!	#DIV/0!
Ph/nC18	#DIV/0!	#DIV/0!
(Pr/nC17)/(Ph/nC18)	#DIV/0!	#DIV/0!
Pr/Ph	#DIV/0!	#DIV/0!
nC17/(nC17+nC27)	#DIV/0!	#DIV/0!
CPI-1	#DIV/0!	#DIV/0!
CPI-2 (2*nC27/(nC26+nC27))	#DIV/0!	#DIV/0!

Title: Saturated HC (FID) and Biomarkers (MSD)

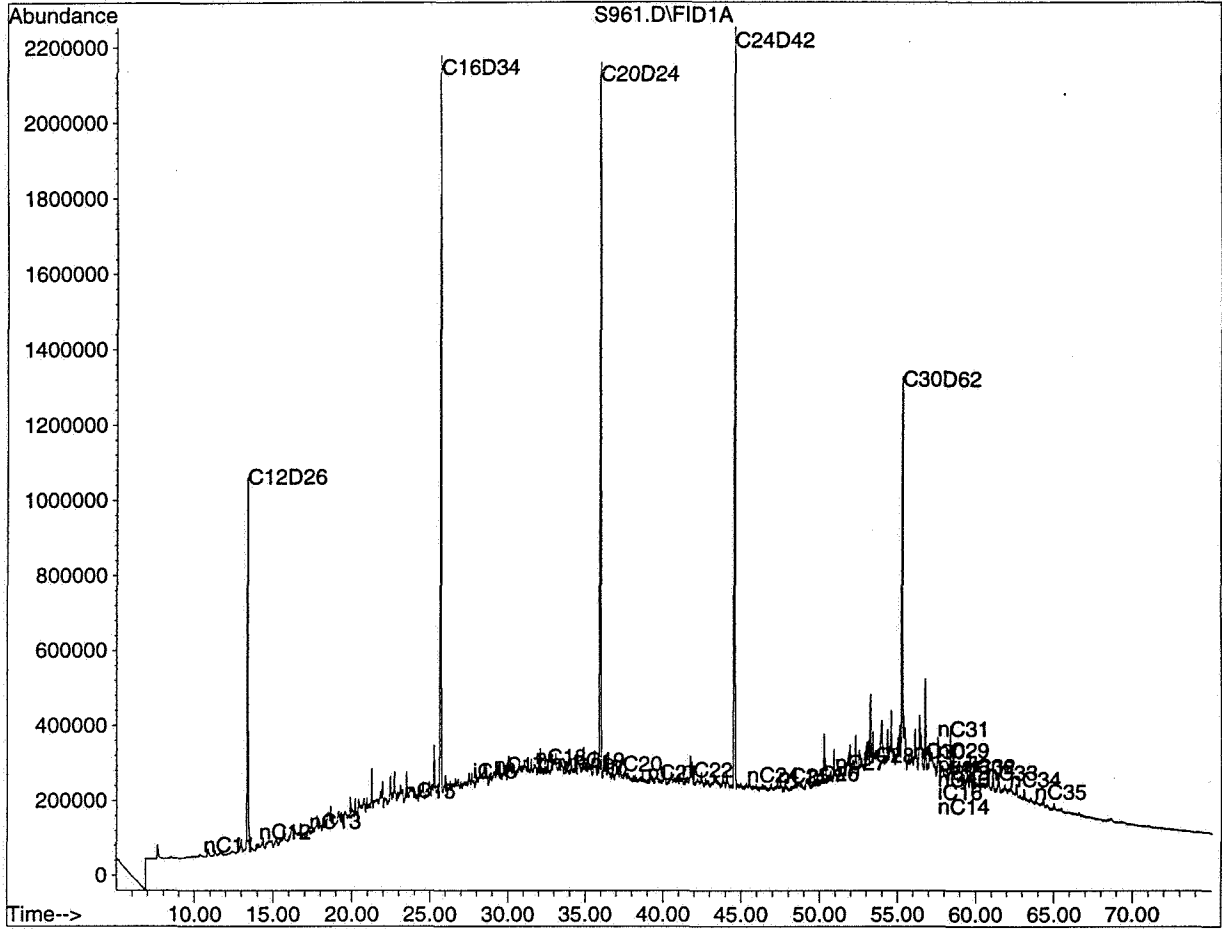
Data File: C:\HPCHEM\1\DATA\SA315H3D\S961.D Name: 36/7-2 961m sat

Misc:

Method: MSD_S_D

.....Operator:

Date Reported: Wed Nov 19 14:40:04 1997



#	Rt.min.	Signal	Compound	Area	Amount
		FID			ug/mg
Internal standards (if added):					
1)	13.38	GC1	C12D26	4415952	3.7
6)	25.70	GC1	C16D34	6322657	3.7
11)	35.97	GC1	C20D24	6574421	3.6
19)	44.58	GC1	C24D42	6831702	3.7
28)	55.27	GC1	C30D62	3197798	1.7
2)	10.69	GC1	nC11	134000	
3)	13.95	GC1	nC12	430365	
4)	17.23	GC1	nC13	589057	
5)	20.42	GC1	nC14	495386	
7)	22.35	GC1	iC16	136765	0.1
8)	23.47	GC1	nC15	611363	0.4
9)	26.37	GC1	nC16	220136	0.1
10)	27.66	GC1	iC18	115409	0.1
12)	29.13	GC1	nC17	294329	0.2
13)	29.30	GC1	pristane	295946	0.2
14)	31.76	GC1	nC18	352621	0.2
15)	32.02	GC1	phytane	270782	0.1
16)	34.29	GC1	nC19	265760	0.1
17)	36.69	GC1	nC20	239452	0.1
18)	38.99	GC1	nC21	189129	0.1
20)	41.19	GC1	nC22	269409	0.1
21)	43.30	GC1	nC23	251679	0.1
22)	45.34	GC1	nC24	222418	0.1
23)	47.29	GC1	nC25	215120	0.1
24)	49.18	GC1	nC26	206584	0.1
25)	50.91	GC1	nC27	344567	0.2
26)	52.76	GC1	nC28	140291	0.1
27)	54.57	GC1	nC29	545206	0.3
29)	56.10	GC1	nC30	577673	0.3
30)	57.70	GC1	nC31	254610	0.1
31)	59.23	GC1	nC32	165414	0.1
32)	60.73	GC1	nC33	94478	0.1
33)	62.18	GC1	nC34	100713	0.1
34)	63.76	GC1	nC35	60208	0.0

Saturated hydrocarbons

GC/FID detection HP-6890

Compound data and ratios



Norsk Hydro E&P Research Centre, Bergen, Norway
Petroleum Geochemistry Laboratories

Data file name: S934_5.D
 Sample name: 3677-2 934.5m sat
 Data File Path: K:\CAM\GEOKJEM\HPCHEM\W95\DATA\SA351110\
 Misc. info.:
 Vial no.: 11
 Method: MSD_S_D
 Operator:
 Date: Thu Oct 30 10:36:06 1997

Response curve $y = ax$
 Response factor equally 1.0

Ratios:	Area	Amount
Pr/nC17	1.01	1.01
Ph/nC18	0.77	0.77
(Pr/nC17)/(Ph/nC18)	1.31	1.31
Pr/Ph	1.09	1.09
nC17/(nC17+nC27)	0.46	0.46
CPI-1	1.22	1.22
CPI-2 (2*nC27/(nC26+nC27))	1.25	1.25

Title: Saturated HC (FID) and Biomarkers (MSD)

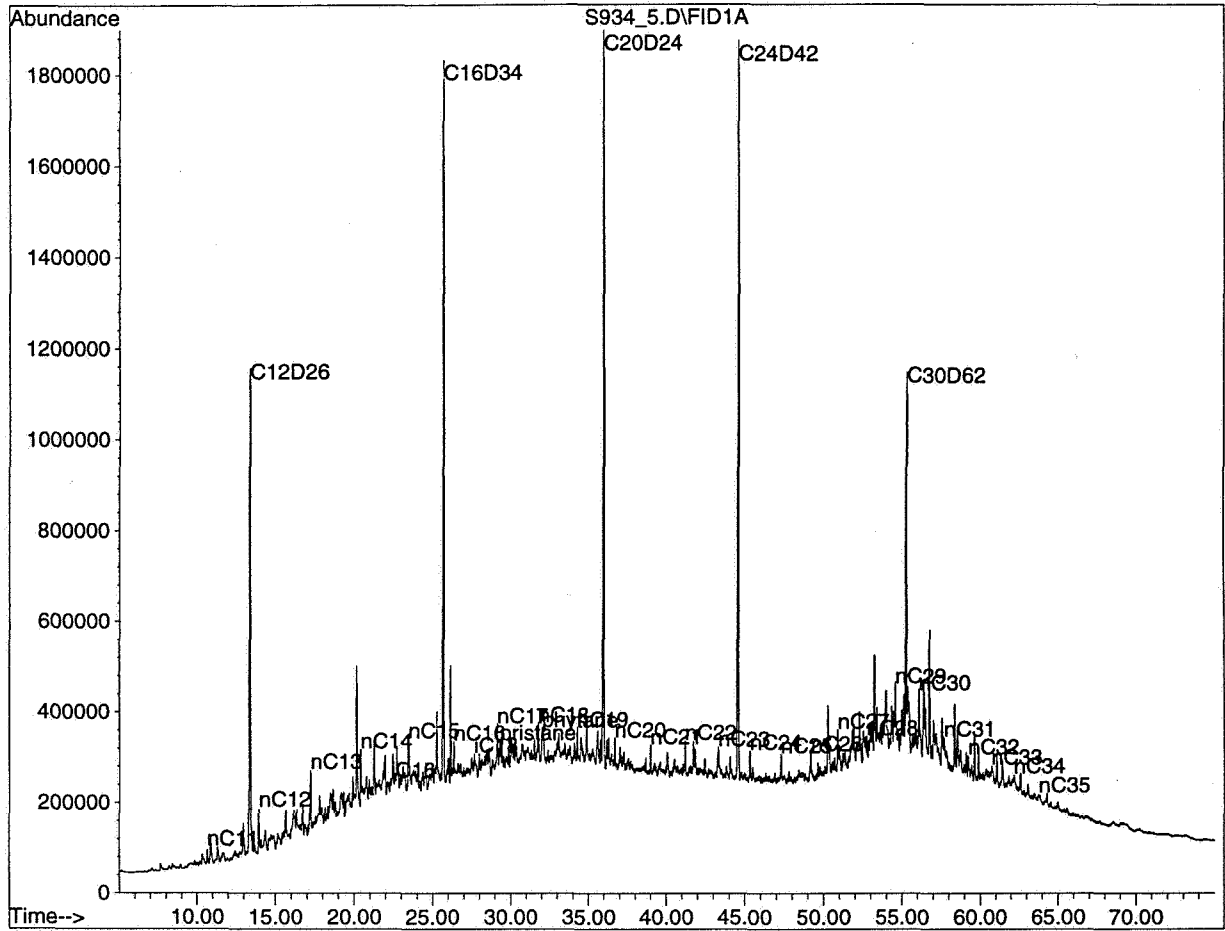
Data File: K:\CAM\GEOKJEMI\HPCHEM\W95\DATA\SA351110\S934_5.D Name: 36/7-2 934.5m sat

Misc:

Method: MSD_S_D

.....Operator:

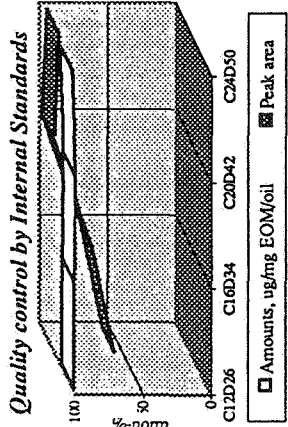
Date Reported: Thu Nov 06 13:56:55 1997





Petroleum
Geochemistry,
Research Centre,
Bergen, Norway.

Well (name): W3671-1
Depth, m, s/e: 2363.00
Type/Lithology: OIL
Quality/Operator: OK
Remarks: 0
NH-Proj./Date: 36071 01.aug.96
Method/Version: GC-FID-SAT fid_sat3
File/Seq.#: S3671sal 13

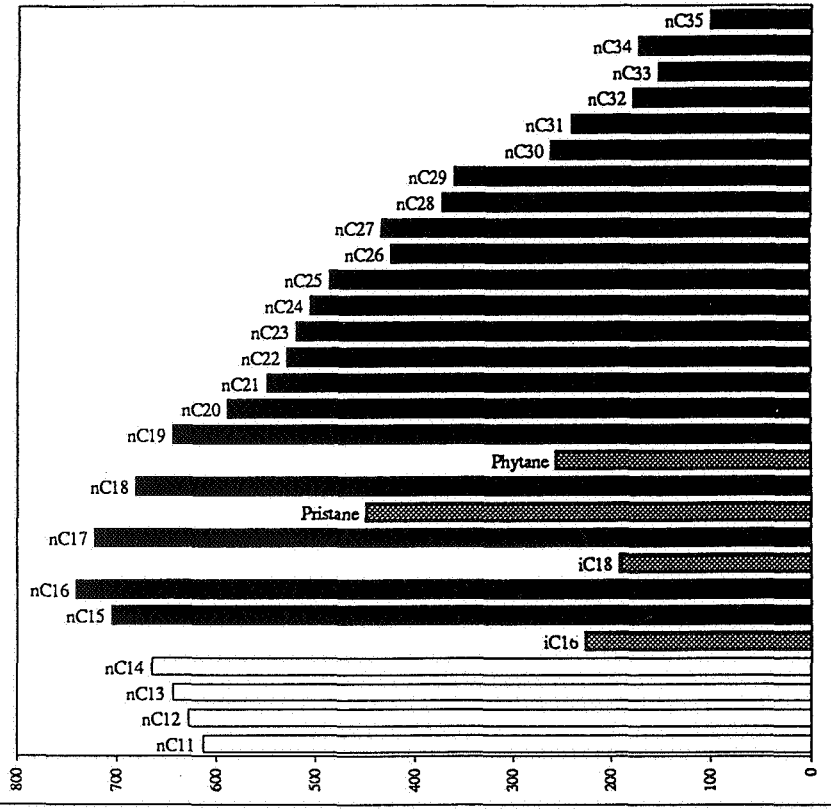


Peak ratios:

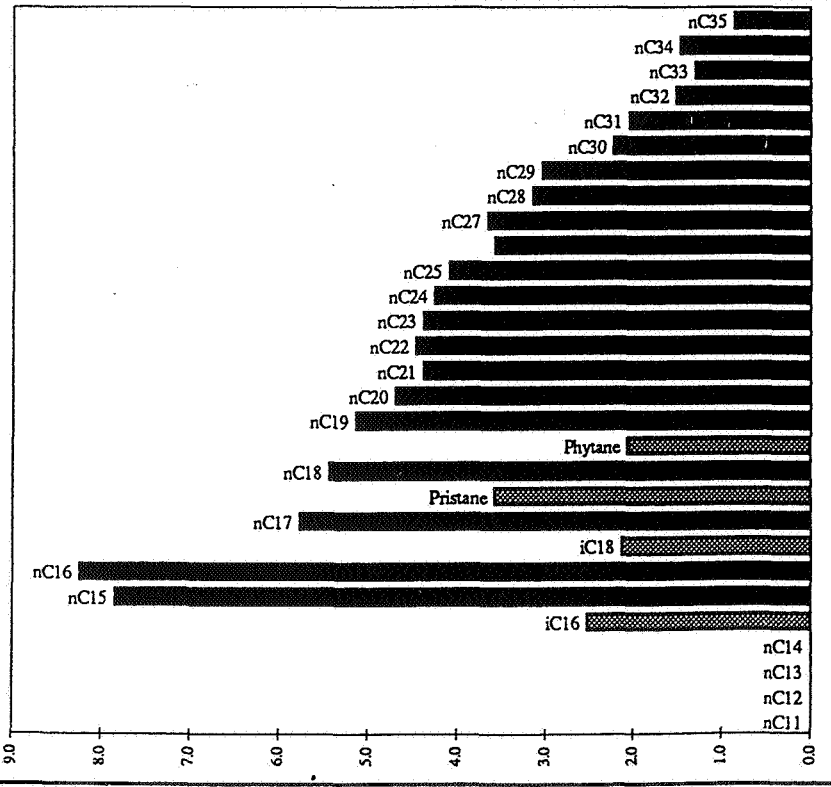
Pr/nC17	0.62
Ph/nC18	0.38
(Pr/nC17)/(Ph/nC18)	1.64
Pr/Ph	1.74
nC17/(nC17+nC27)	0.61
CPI-1	1.10
CPI-2 (nC26:nC27)	1.01

Name	µg/mg	Area
C12D26	3.62	251.78
C16D34	3.62	324.82
C20D42	3.58	448.39
C24D50	3.66	433.40
nC11	0.00	612.73
nC12	0.00	627.74
nC13	0.00	643.36
nC14	0.00	664.37
iC16	2.52	225.86
nC15	7.84	703.93
nC16	8.25	739.97
iC18	2.12	190.65
nC17	5.77	721.41
Pristane	3.57	447.24
nC18	5.43	680.00
Phytane	2.05	256.27
nC19	5.13	642.45
nC20	4.69	587.40
nC21	4.37	547.29
nC22	4.46	528.19
nC23	4.37	518.46
nC24	4.25	503.98
nC25	4.09	484.54
nC26	3.57	423.19
nC27	3.65	432.30
nC28	3.14	371.69
nC29	3.03	359.36
nC30	2.21	262.35
nC31	2.03	240.68
nC32	1.50	177.36
nC33	1.28	152.07
nC34	1.45	172.08
nC35	0.84	99.92

Peak areas of saturated hydrocarbons,
GC/FID detection



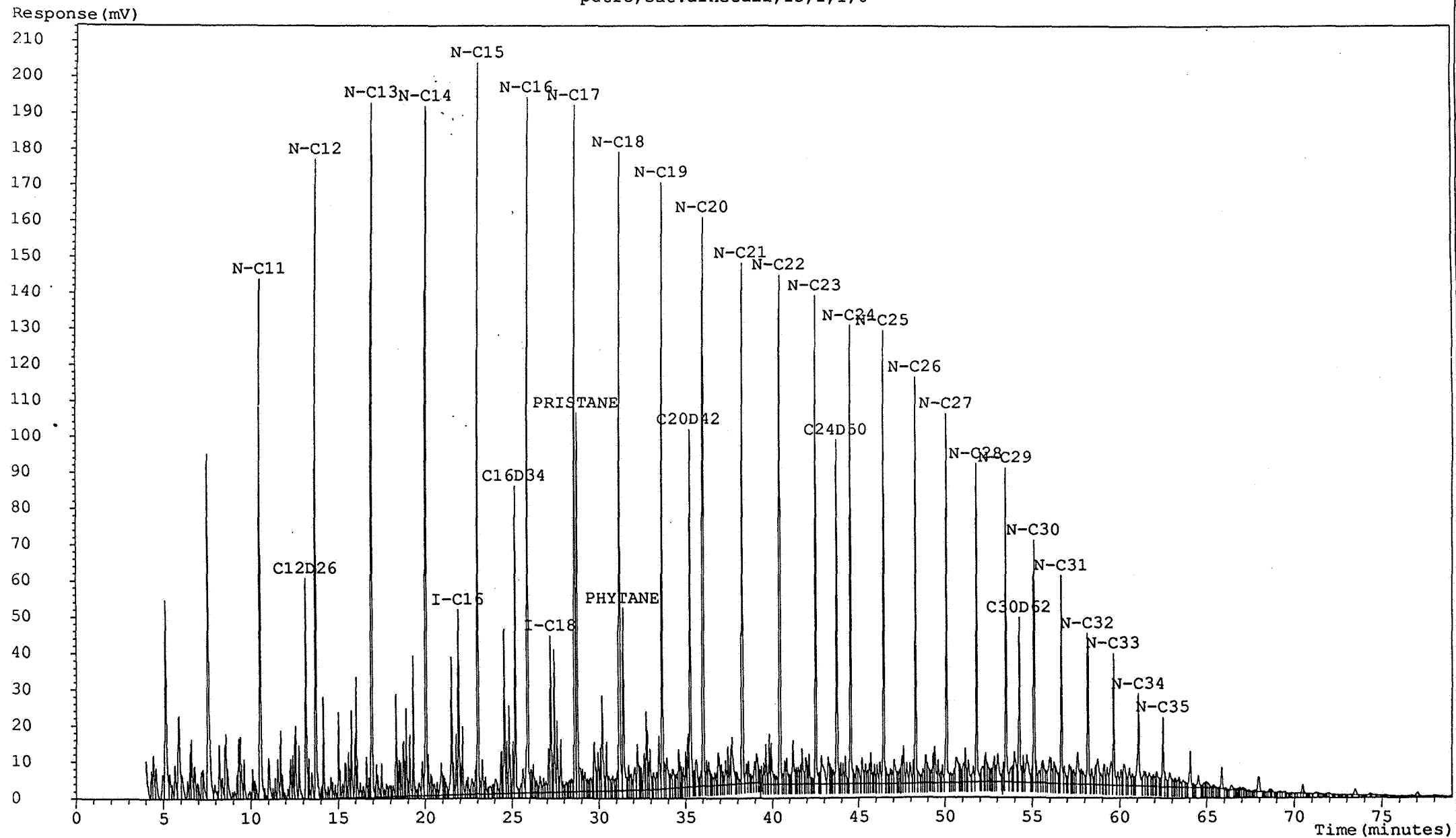
Amounts of saturated hydrocarbons,
µg/mg EOM/oil, by peak areas, GC/FID detection



Printed at 12:11pm on 09 August 1996
Project: petro .Instrument: sat
Sample: 36/7-1 DST#1 2363m Sat

Page 13
Analysis: arnetull
Injection: 1

petro, sat. arnetull, 13, 1, 1; 0



#	Rt.min.	Signal FID	Compound	Area	Amount ug/mg
Internal standards (if added):					
1)	13.39	GC1	C12D26	4700096	4.0
6)	25.70	GC1	C16D34	6300915	4.0
11)	35.97	GC1	C20D24	6902224	3.9
19)	44.58	GC1	C24D42	6934172	4.0
28)	55.27	GC1	C30D62	2856735	1.6
2)	10.71	GC1	nC11	8596001	
3)	13.99	GC1	nC12	10146675	
4)	17.28	GC1	nC13	11095150	
5)	20.47	GC1	nC14	11845603	
7)	22.34	GC1	iC16	4077548	2.6
8)	23.52	GC1	nC15	12453787	7.8
9)	26.43	GC1	nC16	12135905	7.6
10)	27.76	GC1	iC18	3318189	2.1
12)	29.20	GC1	nC17	11709957	6.7
13)	29.35	GC1	pristane	6546286	3.7
14)	31.83	GC1	nC18	9974148	5.7
15)	32.05	GC1	phytane	3195166	1.8
16)	34.35	GC1	nC19	9427513	5.4
17)	36.75	GC1	nC20	8482192	4.8
18)	39.04	GC1	nC21	8123217	4.6
20)	41.25	GC1	nC22	7609206	4.4
21)	43.36	GC1	nC23	7257202	4.2
22)	45.40	GC1	nC24	7225500	4.2
23)	47.35	GC1	nC25	6643827	3.8
24)	49.23	GC1	nC26	5823677	3.4
25)	51.05	GC1	nC27	5507974	3.2
26)	52.80	GC1	nC28	4931060	2.8
27)	54.50	GC1	nC29	4650471	2.7
29)	56.13	GC1	nC30	3330512	1.9
30)	57.72	GC1	nC31	3028701	1.7
31)	59.25	GC1	nC32	2183175	1.3
32)	60.75	GC1	nC33	1873703	1.1
33)	62.21	GC1	nC34	1856521	1.1
34)	63.78	GC1	nC35	1074071	0.6

Saturated hydrocarbons

GC/FID detection HP-6890

Compound data and ratios



Norsk Hydro E&P Research Centre, Bergen, Norway
Petroleum Geochemistry Laboratories

Data file name: **S2291_80.D**
Sample name: **35/9-1 DST #1 2291_80m sat**
Data File Path: **C:\HPCHEM\1\DATA\SA315H3D**
Misc. info.:

Vial no.: **15**
Method: **MSD_S_D**
Operator:
Date: **Fri Nov 14 13:20:39 1997**

Response curve $y = ax$
Response factor equally 1.0

Ratios:	Area	Amount
Pr/nC17	0.56	0.56
Ph/nC18	0.32	0.32
(Pr/nC17)/(Ph/nC18)	1.75	1.75
Pr/Ph	2.05	2.05
nC17/(nC17+nC27)	0.68	0.68
CPI-1	1.07	1.07
CPI-2 (2*nC27)/(nC26+nC27)	0.97	0.97

Title: Saturated HC (FID) and Biomarkers (MSD)

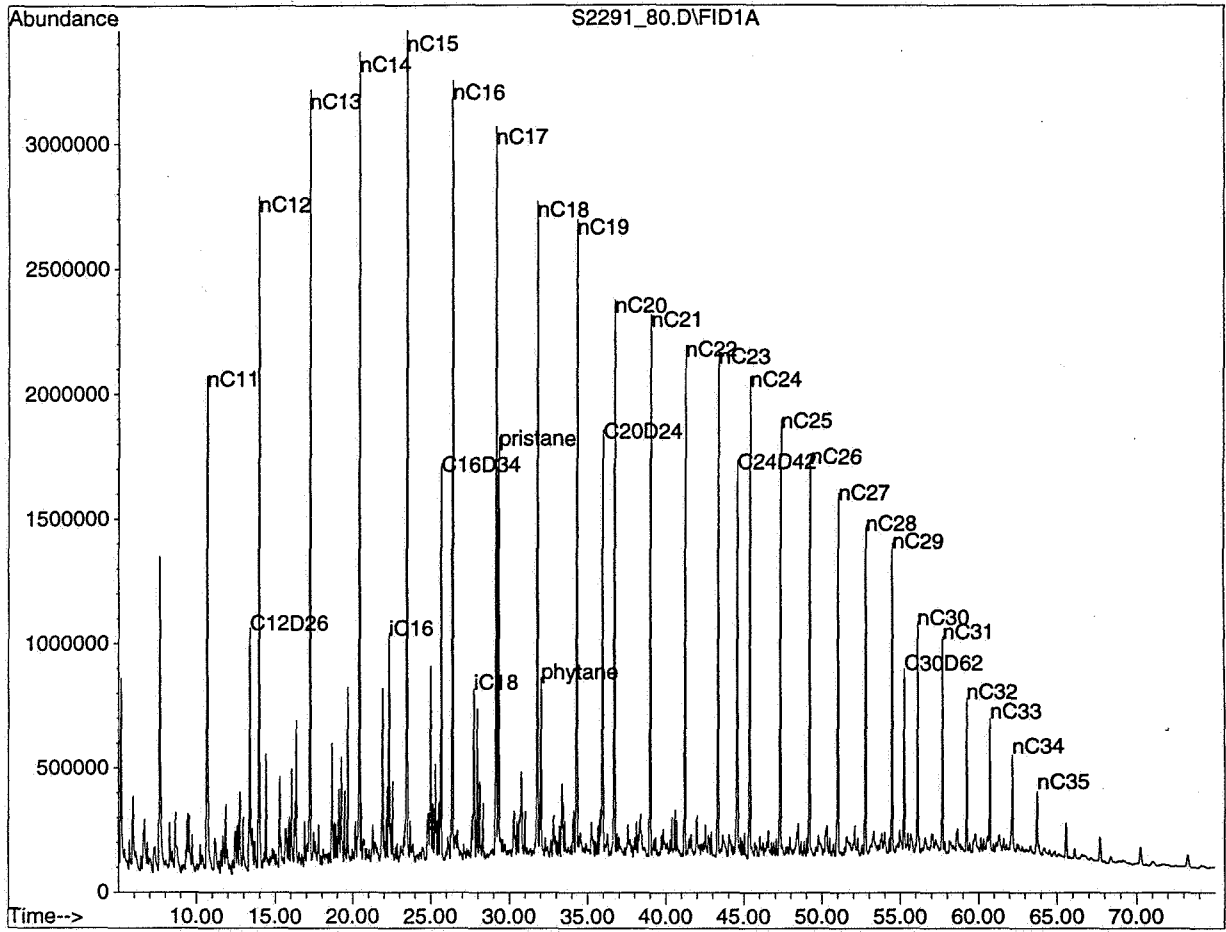
Data File: C:\HPCHEM\1\DATA\SA315H3D\S2291_80.D Name: 35/9-1 DST #1 2291_80m sat

Misc:

Method: MSD_S_D

.....Operator:

Date Reported: Wed Nov 19 11:19:55 1997



#	Rt.min.	Signal FID	Compound	Area	Amount ug/mg
Internal standards (if added):					
1)	13.38	GC1	C12D26	3325779	3.5
6)	25.69	GC1	C16D34	4085582	3.5
11)	35.96	GC1	C20D24	4870440	3.4
19)	44.57	GC1	C24D42	4409857	3.5
28)	55.26	GC1	C30D62	1950180	1.6
2)	10.70	GC1	nC11	6292413	
3)	13.97	GC1	nC12	6592381	
4)	17.26	GC1	nC13	6728000	
5)	20.44	GC1	nC14	6667490	
7)	22.34	GC1	iC16	3098309	2.6
8)	23.49	GC1	nC15	6837673	5.8
9)	26.40	GC1	nC16	5690542	4.8
10)	27.75	GC1	iC18	2781484	2.4
12)	29.16	GC1	nC17	5376244	3.8
13)	29.33	GC1	pristane	5605147	4.0
14)	31.79	GC1	nC18	4165427	2.9
15)	32.04	GC1	phytane	3154886	2.2
16)	34.31	GC1	nC19	3688367	2.6
17)	36.71	GC1	nC20	3105483	2.2
18)	39.01	GC1	nC21	2681134	1.9
20)	41.21	GC1	nC22	2364671	1.9
21)	43.32	GC1	nC23	2235446	1.8
22)	45.36	GC1	nC24	2250313	1.8
23)	47.31	GC1	nC25	2024923	1.6
24)	49.20	GC1	nC26	1542102	1.2
25)	51.02	GC1	nC27	1359976	1.1
26)	52.77	GC1	nC28	1223431	1.0
27)	54.46	GC1	nC29	1225738	1.0
29)	56.11	GC1	nC30	936367	0.7
30)	57.69	GC1	nC31	835088	0.7
31)	59.24	GC1	nC32	643653	0.5
32)	60.74	GC1	nC33	579530	0.5
33)	62.19	GC1	nC34	773105	0.6
34)	63.78	GC1	nC35	660506	0.5

Saturated hydrocarbons

GC/FID detection HP-6890

Compound data and ratios



Norsk Hydro E&P Research Centre, Bergen, Norway
Petroleum Geochemistry Laboratories

Data file name: S2332_00.D
Sample name: 35/9-2 DST #1 2332.00m sat
Data File Path: C:\HPCHEM\1\DATA\SA315H3D\
Misc. info.:

Vial no.: 16
Method: MSD_S_D
Operator:
Date: Fri Nov 14 14:49:22 1997

Response curve $y = ax$
Response factor equally 1.0

Ratios:	Area	Amount
Pr/nC17	1.04	1.04
Ph/nC18	0.76	0.76
(Pr/nC17)/(Ph/nC18)	1.38	1.38
Pr/Ph	1.78	1.78
nC17/(nC17+nC27)	0.80	0.78
CPI-1	1.08	1.08
CPI-2 (2*nC27/(nC26+nC27))	0.94	0.94

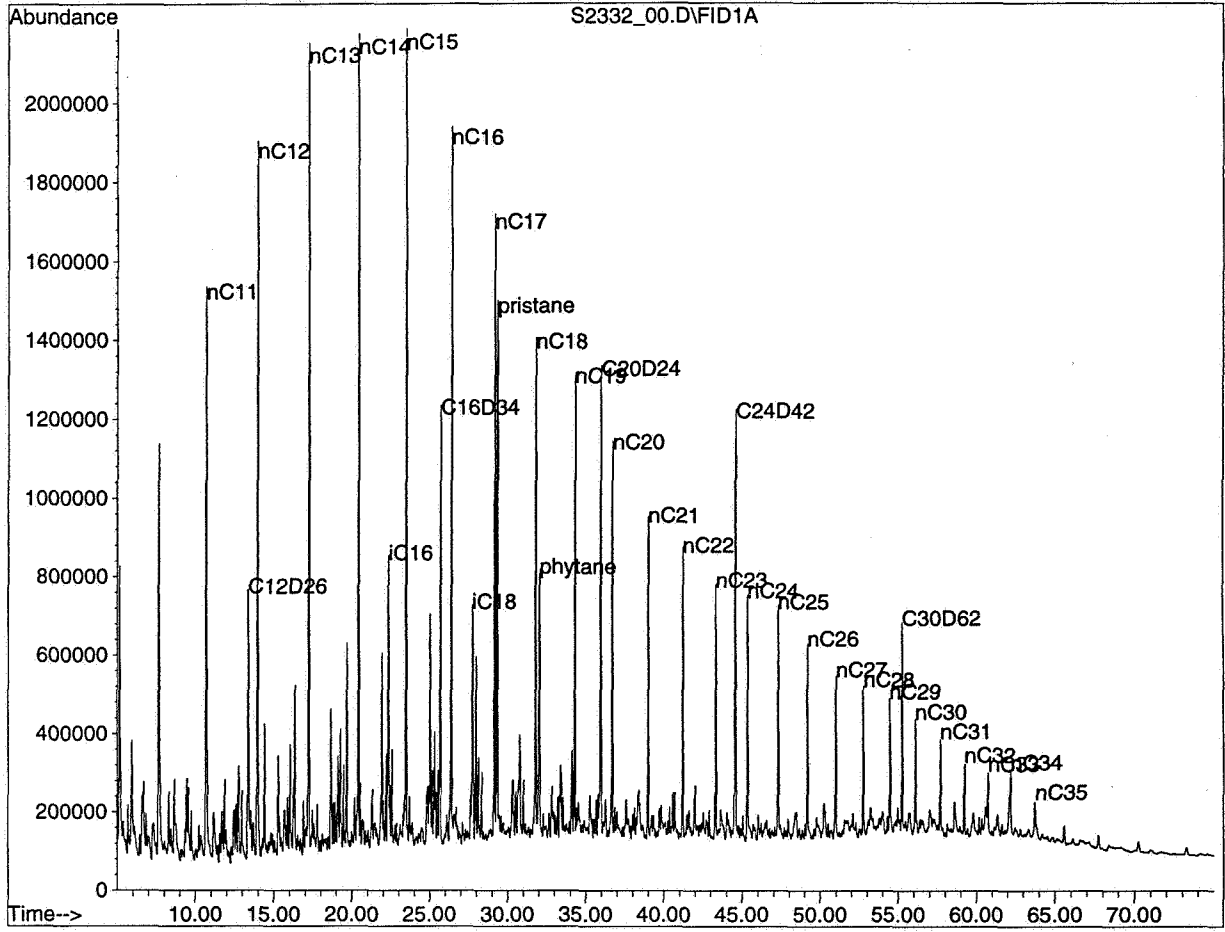
Title: Saturated HC (FID) and Biomarkers (MSD)

Data File: C:\HPCHEM\1\DATA\SA315H3D\S2332_00.D Name: 35/9-2 DST #1 2332.00m sat

Misc:

Method: MSD_S_DOperator:

Date Reported: Wed Nov 19 11:26:45 1997



#	Rt.min.	Signal FID	Compound	Area	Amount ug/mg
Internal standards (if added):					
1)	13.39	GC1	C12D26	5492284	4.0
6)	25.70	GC1	C16D34	6350475	4.0
11)	35.97	GC1	C20D24	7060404	4.0
19)	44.59	GC1	C24D42	6809013	4.0
28)	55.28	GC1	C30D62	2873103	1.7
2)	10.71	GC1	nC11	9500623	
3)	13.99	GC1	nC12	9863439	
4)	17.27	GC1	nC13	9523429	
5)	20.46	GC1	nC14	9381463	
7)	22.34	GC1	iC16	3398603	2.1
8)	23.51	GC1	nC15	9811181	6.2
9)	26.42	GC1	nC16	8989603	5.7
10)	27.76	GC1	iC18	3019181	1.9
12)	29.19	GC1	nC17	8417156	4.8
13)	29.34	GC1	pristane	4752940	2.7
14)	31.82	GC1	nC18	7069168	4.0
15)	32.05	GC1	phytane	3441024	1.9
16)	34.34	GC1	nC19	6371716	3.6
17)	36.74	GC1	nC20	5685831	3.2
18)	39.03	GC1	nC21	5067847	2.9
20)	41.23	GC1	nC22	4599636	2.7
21)	43.35	GC1	nC23	4203591	2.5
22)	45.38	GC1	nC24	4074061	2.4
23)	47.33	GC1	nC25	3428451	2.0
24)	49.21	GC1	nC26	2901686	1.7
25)	51.03	GC1	nC27	2415457	1.4
26)	52.78	GC1	nC28	2043169	1.2
27)	54.48	GC1	nC29	1922442	1.1
29)	56.12	GC1	nC30	1545082	0.9
30)	57.71	GC1	nC31	1448444	0.9
31)	59.26	GC1	nC32	1189692	0.7
32)	60.75	GC1	nC33	965059	0.6
33)	62.20	GC1	nC34	1191182	0.7
34)	63.78	GC1	nC35	788280	0.5

Saturated hydrocarbons

GC/FID detection HP-6890

Compound data and ratios



Norsk Hydro E&P Research Centre, Bergen, Norway
Petroleum Geochemistry Laboratories

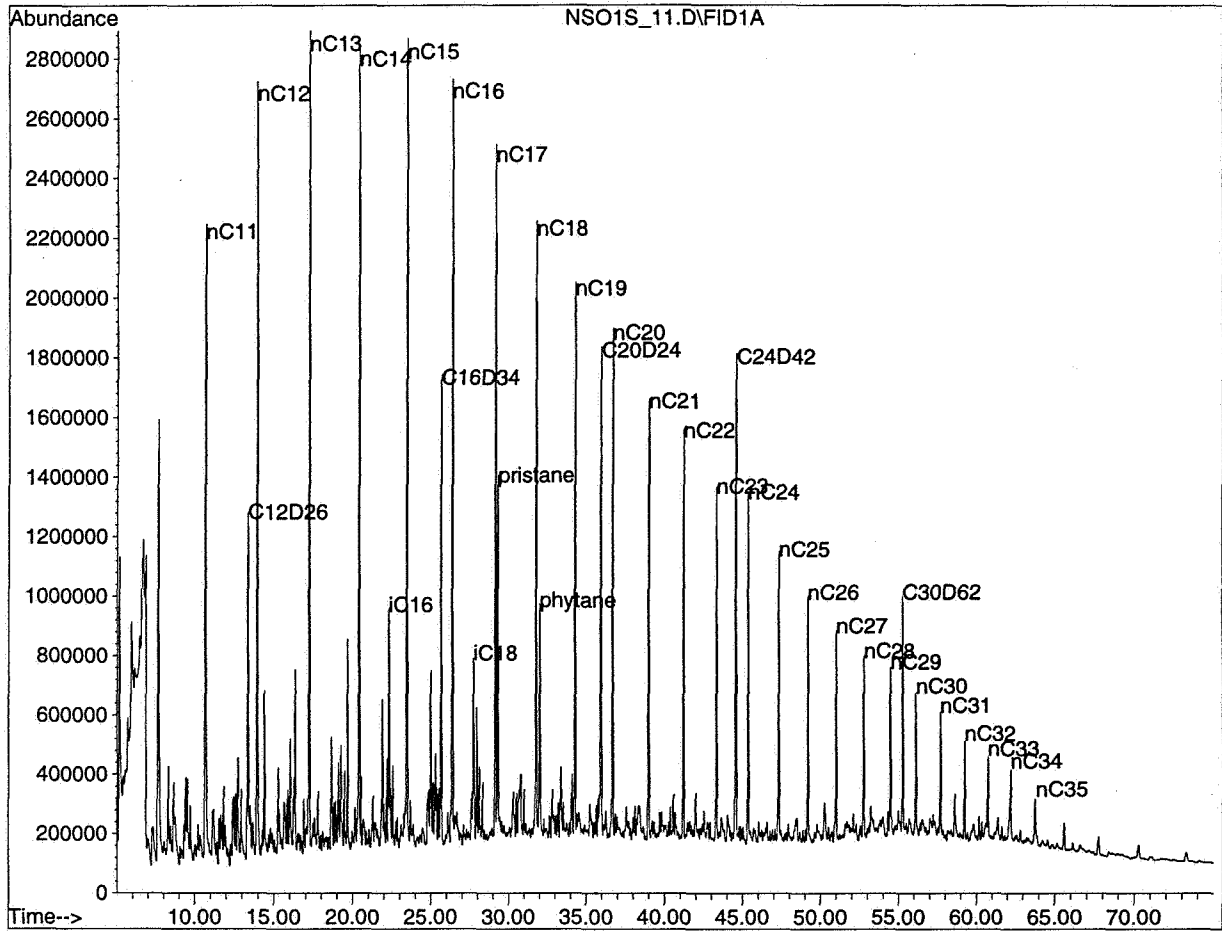
Data file name: NSO1S_11.D
Sample name: nso1 ref. sat
Data File Path: C:\HPCHEM\1\DATA\ISA315H3D\
Misc. info.:

Vial no.: 2
Method: MSD_S_D
Operator:
Date: Fri Nov 14 05:57:11 1997

Response curve $y = ax$
Response factor equally 1.0

Ratios:	Area	Amount
Pr/nC17	0.56	0.56
Ph/nC18	0.49	0.49
(Pr/nC17)/(Ph/nC18)	1.16	1.16
Pr/Ph	1.38	1.38
nC17/(nC17+nC27)	0.78	0.77
CPI-1	1.04	1.04
CPI-2 (2*nC27/(nC26+nC27))	0.91	0.91

Title: Saturated HC (FID) and Biomarkers (MSD)
Data File: C:\HPCHEM\1\DATA\SA315H3D\NSO1S_11.D Name: nsol ref. sat
Misc:
Method: MSD_S_DOperator:
Date Reported: Wed Nov 19 09:35:53 1997



#	Rt.min.	Signal	Compound	Area	Amount
			FID	ug/mg	
Internal standards (if added):					
1)	13.41	GC1	C12D26	9492709	4.0
6)	25.74	GC1	C16D34	11506178	4.0
11)	36.02	GC1	C20D24	12684555	4.0
19)	44.63	GC1	C24D42	12189687	4.0
28)	55.31	GC1	C30D62	5264353	1.7
2)	10.73	GC1	nC11	17531396	
3)	14.02	GC1	nC12	17105047	
4)	17.31	GC1	nC13	16616079	
5)	20.50	GC1	nC14	16897425	
7)	22.37	GC1	iC16	6157117	2.1
8)	23.55	GC1	nC15	17350596	6.0
9)	26.46	GC1	nC16	16357053	5.7
10)	27.79	GC1	iC18	5460088	1.9
12)	29.22	GC1	nC17	15457996	4.9
13)	29.38	GC1	pristane	8571860	2.7
14)	31.86	GC1	nC18	12825735	4.0
15)	32.08	GC1	phytane	6217070	2.0
16)	34.37	GC1	nC19	11553575	3.6
17)	36.78	GC1	nC20	10195216	3.2
18)	39.07	GC1	nC21	9210941	2.9
20)	41.27	GC1	nC22	8365133	2.7
21)	43.38	GC1	nC23	7577160	2.5
22)	45.41	GC1	nC24	7493924	2.5
23)	47.36	GC1	nC25	6134899	2.0
24)	49.25	GC1	nC26	5264713	1.7
25)	51.06	GC1	nC27	4345650	1.4
26)	52.81	GC1	nC28	3710370	1.2
27)	54.51	GC1	nC29	3622198	1.2
29)	56.15	GC1	nC30	2785359	0.9
30)	57.74	GC1	nC31	2612708	0.9
31)	59.27	GC1	nC32	2078665	0.7
32)	60.76	GC1	nC33	1685339	0.6
33)	62.22	GC1	nC34	1569346	0.5
34)	63.80	GC1	nC35	1053953	0.3

Saturated hydrocarbons

GC/FID detection HP-6890

Compound data and ratios



Norsk Hydro E&P Research Centre, Bergen, Norway
Petroleum Geochemistry Laboratories

Data file name: NSO1S_18.D
Sample name: nso1 ref. sat
Data File Path: C:\HPCHEM\1\DATA\ISA315H3D\

Misc. info.:

Vial no.: 2
Method: MSD_S_D
Operator:
Date: Fri Nov 14 16:18:07 1997

Response curve $y = ax$
Response factor equally 1.0

Ratios:	Area	Amount
Pr/nC17	0.55	0.55
Ph/nC18	0.48	0.48
(Pr/nC17)/(Ph/nC18)	1.14	1.14
Pr/Ph	1.38	1.38
nC17/(nC17+nC27)	0.78	0.77
CPI-1	1.04	1.04
CPI-2 (2*nC27/(nC26+nC27))	0.90	0.90

Title: Saturated HC (FID) and Biomarkers (MSD)

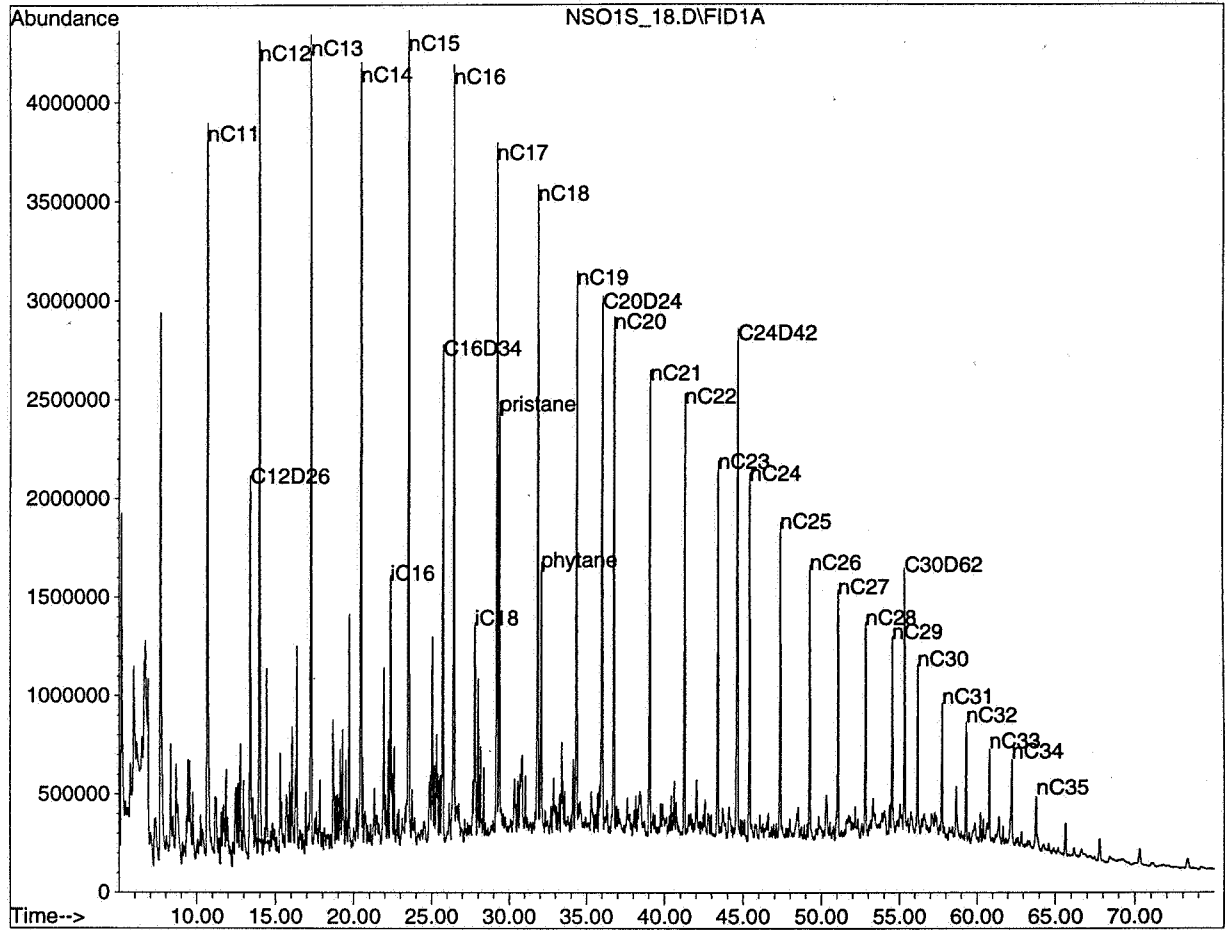
Data File: C:\HPCHEM\1\DATA\SA315H3D\NSO1S_18.D Name: nsol ref. sat

Misc:

Method: MSD_S_D

.....Operator:

Date Reported: Wed Nov 19 09:46:35 1997



#	Rt.min.	Signal FID	Compound	Area	Amount ug/mg
Internal standards (if added):					
1)	13.39	GC1	C12D26	5443919	4.0
6)	25.70	GC1	C16D34	6249644	4.0
11)	35.96	GC1	C20D24	6163947	4.0
19)	44.57	GC1	C24D42	6676962	4.0
28)	55.25	GC1	C30D62	2909077	1.7
2)	10.71	GC1	nC11	9584933	
3)	13.99	GC1	nC12	9813506	
4)	17.27	GC1	nC13	9387919	
5)	20.46	GC1	nC14	9277167	
7)	22.34	GC1	iC16	3405416	2.2
8)	23.51	GC1	nC15	9510683	6.1
9)	26.41	GC1	nC16	8777757	5.6
10)	27.75	GC1	iC18	2973869	1.9
12)	29.18	GC1	nC17	8325978	5.4
13)	29.33	GC1	pristane	4725988	3.1
14)	31.81	GC1	nC18	6930552	4.5
15)	32.04	GC1	phytane	3355043	2.2
16)	34.33	GC1	nC19	6242022	4.1
17)	36.72	GC1	nC20	5590893	3.6
18)	39.02	GC1	nC21	5037447	3.3
20)	41.22	GC1	nC22	4575475	2.7
21)	43.33	GC1	nC23	4064565	2.4
22)	45.36	GC1	nC24	4054070	2.4
23)	47.31	GC1	nC25	3459996	2.1
24)	49.19	GC1	nC26	2836409	1.7
25)	51.01	GC1	nC27	2393526	1.4
26)	52.76	GC1	nC28	2037620	1.2
27)	54.46	GC1	nC29	1977256	1.2
29)	56.10	GC1	nC30	1530826	0.9
30)	57.69	GC1	nC31	1355760	0.8
31)	59.23	GC1	nC32	1159448	0.7
32)	60.72	GC1	nC33	968095	0.6
33)	62.17	GC1	nC34	1157755	0.7
34)	63.75	GC1	nC35	1006116	0.6

Saturated hydrocarbons

GC/FID detection HP-6890

Compound data and ratios



Norsk Hydro E&P Research Centre, Bergen, Norway
Petroleum Geochemistry Laboratories

Data file name: NSO1_10S.D
Sample name: nso1 ref.sample sat
Data File Path: K:\CAM\GEOKJEM\HPCHEM\W95\DATA\SA351110V
Misc. info:

Vial no.: 1
Method: MSD_S_D
Operator:
Date: Thu Oct 30 09:07:36 1997

Response curve $y = ax$
Response factor equally 1.0

Ratios:	Area	Amount
Pr/nC17	0.57	0.57
Ph/nC18	0.48	0.48
(Pr/nC17)/(Ph/nC18)	1.17	1.17
Pr/Ph	1.41	1.41
nC17/(nC17+nC27)	0.78	0.79
CPI-1	1.05	1.05
CPI-2 (2*nC27/(nC26+nC27))	0.92	0.92

Title: Saturated HC (FID) and Biomarkers (MSD)

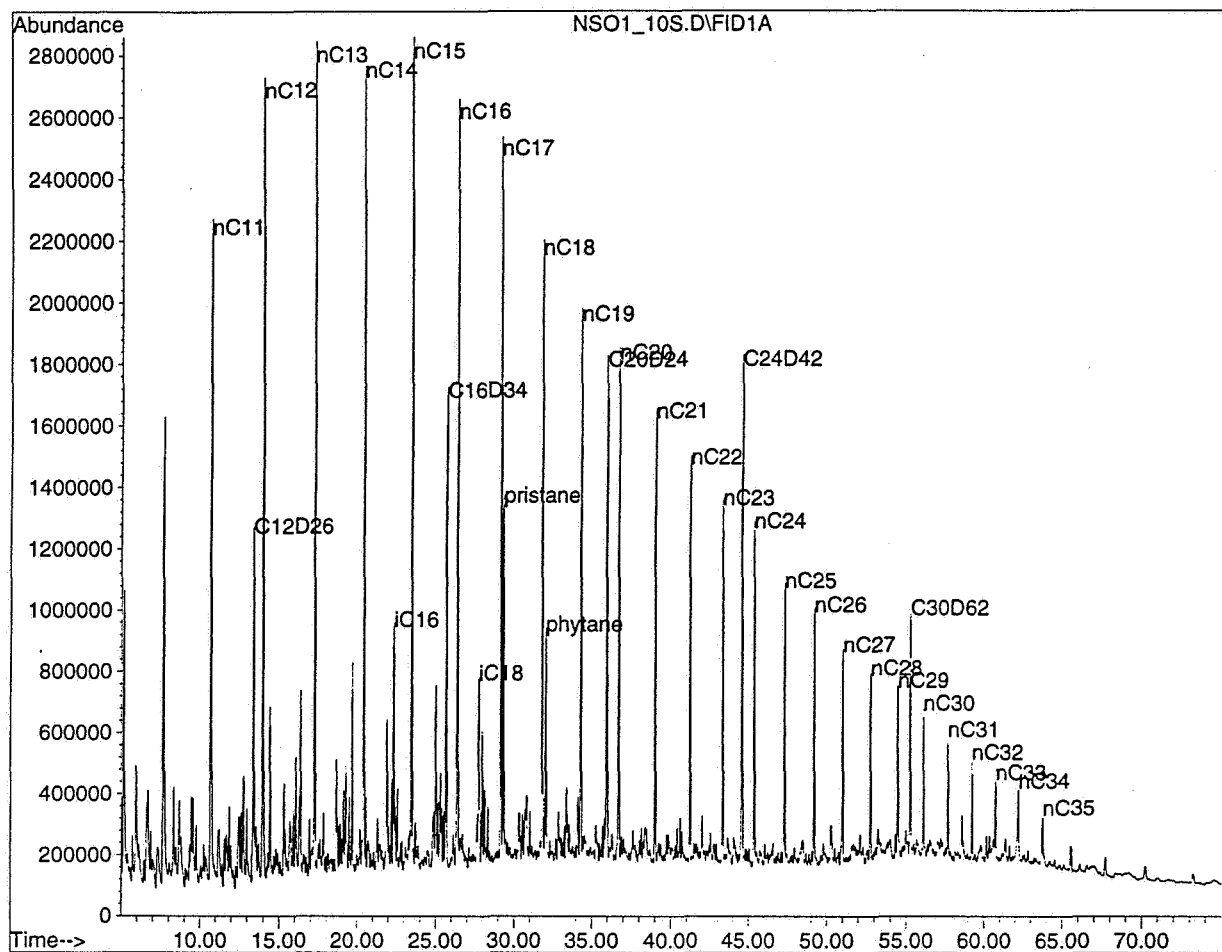
Data File: K:\CAM\GEOKJEMI\HPCHEM\W95\DATA\SA351110\NSO1_10S.D Name: ns01 ref.sample

Misc:

Method: MSD_S_D

.....Operator:

Date Reported: Tue Nov 04 17:07:05 1997



Saturated biomarkers

GC/MS detection HP-6890/5973

Compound data



Norsk Hydro E&P Research Centre, Bergen, Norway
Petroleum Geochemistry Laboratories

Data file name: **S935.D**
Sample name: **36/7-2 935m sat**
Data File Path: C:\HPCHEM\1\DATA\SA315H3D\
Misc. info.:

Vial no.: 11
Method: MSD_S_D
Operator:
Date: Fri Nov 14 07:25:49 1997

Response curve $y = ax$
Response factor groups: s1...s3, responses as defined in method

#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng/mg	

Internal standard (if added):

1)	46.19	217.2		24baa	2068	27
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Diterpanes:

2)	33.84	191.2	s1	19/3	3671	36
3)	35.82	191.2	s1	20/3	1438	14
4)	37.86	191.2	s1	21/3	1555	15
5)	41.84	191.2	s1	23/3	2261	22
6)	42.97	191.2	s1	24/3	1640	16
7)	45.25	191.2	s1	25/3	787	8
8)	46.78	191.2	s1	24/4	2248	22
9)	46.88	191.2	s1	26/3R	645	6
10)	47.02	191.2	s1	26/3S	736	7
11)	50.56	191.2	s1	28/3R	782	8
12)	50.80	191.2	s1	28/3S	796	8
13)	51.60	191.2	s1	29/3R	1235	12
14)	51.80	191.2	s1	29/3S	1101	11

Triterpanes:

15)	52.74	191.2	s1	27Ts	2410	24
16)	53.00	177.2	s1	25nor28ab	6938	69
17)	53.42	191.2	s1	27Tm	2288	23
18)	53.81	177.2	s1	25nor29ab	15285	151
19)	53.89	191.2	s1	27b	2143	21
20)	55.00	191.2	s1	28ab	1764	17
21)	55.22	177.2	s1	25nor30ab	15522	154
22)	55.69	191.2	s1	29ab	1421	14
23)	55.85	191.2	s1	29Ts	3209	32
24)	56.05	191.2	s1	30D	6851	68
25)	56.59	191.2	s1	29ba	888	9
26)	57.06	191.2	s2	30ab	1742	11
27)	57.41	191.2	s1	30D13	1115	11
28)	57.75	191.2	s2	30ba	1274	8
29)	58.64	191.2	s1	31abS	680	7
30)	58.85	191.2	s1	31abR	591	6
31)	59.14	191.2	s1	30G	1342	13
32)	59.27	191.2	s1	31ba	716	7
33)	59.88	191.2	s1	32abS	527	5
34)	60.13	191.2	s1	32abR	425	4
35)	61.30	191.2	s1	33abS	707	7
36)	61.67	191.2	s1	33abR	220	2
37)	62.83	191.2	s1	34abS	900	9
38)	63.30	191.2	s1	34abR	245	2
39)	64.55	191.2	s1	35abS	536	5
40)	65.26	191.2	s1	35abR	152	2

#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng/mg	

Steranes:

41)	38.38	217.2	s3	21aa	3007	43
42)	40.03	217.2	s3	21bb	4208	60
43)	40.16	217.2	s3	22aa	3014	43
44)	42.39	217.2	s3	22bb	2268	32
45)	48.73	217.2	s3	27dbS	8239	118
46)	49.37	217.2	s3	27dbR	5119	73
47)	51.72	218.2	s3	27bbR	10225	146
48)	51.87	218.2	s3	27bbS	7162	102
49)	52.28	217.2	s3	27aaR	1766	25
50)	53.47	218.2	s3	28bbR	6473	93
51)	53.61	218.2	s3	28bbS	7669	110
52)	54.59	217.2	s3	29aaS	3651	52
53)	54.91	218.2	s3	29bbR	11023	158
54)	55.01	218.2	s3	29bbS	10345	148
55)	55.60	217.2	s3	29aaR	2332	33
56)	56.07	218.2	s3	30bbR	3111	45
57)	56.13	218.2	s3	30bbS	2515	36

Saturated biomarkers

GC/MS detection HP-6890/5973

Ratios, from heights and amounts



Norsk Hydro E&P Research Centre, Bergen, Norway
 Petroleum Geochemistry Laboratories

Data file name: S935.D
 Sample name: 36/7-2 935m sat
 Data File Path: C:\HPCHEM\1\DATA\SA315H3D\
 Misc. info.:

Vial no.: 11
 Method: MSD_S_D
 Operator:
 Date: Fri Nov 14 07:25:49 1997

Terpane ratios, heights and amounts

	Height	Amount
$100 \cdot ((\text{sum}20-25)/3 + 26/3(R+S)) / ((\text{sum}20-25)/3 + 26/3(R+S) + 27(Ts+Tm) + 28ab + \text{sum}29-30(ab+ba) + \text{sum}31-35ab(R+S))$	%Tri	35 37
$100 \cdot 20/3 / ((\text{sum}20-25)/3 + 26/3(R+S))$	%20/3	16 16
$100 \cdot 23/3 / (23/3 + 24/3 + 25/3)$	%23/3	48 48
$100 \cdot 24/4 / (24/4 + 24/3 + 25/3)$	%24/4	48 48
$100 \cdot Ts / (Ts + Tm)$	%27Ts	51 51
$100 \cdot 28ab / (28ab + 30ab)$	%28ab	50 61
$100 \cdot 29Ts / (29Ts + 29ab)$	%29Ts	69 69
$100 \cdot 25nor30ab / (25nor30ab + 30ab)$	%25nor30ab	90 93
$100 \cdot 29ab / (29ab + 30ab)$	%29ab	45 56
$100 \cdot 30ba / (30ba + 30ab)$	%30ba	42 42
$100 \cdot 30D / (30D + 30ab)$	%30D	80 86
$100 \cdot 30G / (30G + 30ab)$	%30G	44 54
$100 \cdot 32abS / (32ab(S+R))$	%32abS	55 55
$100 \cdot 35ab(S+R) / (34-35ab(S+R))$	%35ab	38 38
$100 \cdot (27Ts + 27Tm) / (27Ts + 27Tn + 28ab + \text{sum}29-30(ab+ba) + \text{sum}31-35ab(R+S))$	%27HOP	28 30
$100 \cdot (28ab) / (27Ts + 27Tn + 28ab + \text{sum}29-30(ab+ba) + \text{sum}31-35ab(R+S))$	%28HOP	11 11
$100 \cdot (29ab + ba) / (27Ts + 27Tn + 28ab + \text{sum}29-30(ab+ba) + \text{sum}31-35ab(R+S))$	%29HOP	14 15
$100 \cdot (30ab + ba) / (27Ts + 27Tn + 28ab + \text{sum}29-30(ab+ba) + \text{sum}31-35ab(R+S))$	%30HOP	18 12
$100 \cdot 31ab(S+R) / (27Ts + 27Tn + 28ab + \text{sum}29-30(ab+ba) + \text{sum}31-35ab(R+S))$	%31HOP	8 8
$100 \cdot 32ab(S+R) / (27Ts + 27Tn + 28ab + \text{sum}29-30(ab+ba) + \text{sum}31-35ab(R+S))$	%32HOP	6 6
$100 \cdot 33ab(S+R) / (27Ts + 27Tn + 28ab + \text{sum}29-30(ab+ba) + \text{sum}31-35ab(R+S))$	%33HOP	6 6
$100 \cdot 34ab(S+R) / (27Ts + 27Tn + 28ab + \text{sum}29-30(ab+ba) + \text{sum}31-35ab(R+S))$	%34HOP	7 7
$100 \cdot 35ab(S+R) / (27Ts + 27Tn + 28ab + \text{sum}29-30(ab+ba) + \text{sum}31-35ab(R+S))$	%35HOP	4 4

Sterane ratios

$100 \cdot (21+22)bb / ((21+22)bb + (27+28+29+30)bb(R+S))$	%Preg	10 10
$100 \cdot 29aaS / 29aa(R+S)$	%29aaS	61 61
$100 \cdot 29bb(R+S) / (29bb(R+S) + 29aa(S+R))$	%29bb	78 78
$100 \cdot 27db(S+R) / ((27db(S+R)) + 27bb(R+S))$	%27dia	43 43
$100 \cdot 27bb(R+S) / (27+28+29+30)bb(R+S)$	%27STER	30 30
$100 \cdot 28bb(R+S) / (27+28+29+30)bb(R+S)$	%28STER	24 24
$100 \cdot 29bb(R+S) / (27+28+29+30)bb(R+S)$	%29STER	37 37
$100 \cdot 30bb(R+S) / (27+28+29+30)bb(R+S)$	%30STER	10 10

Saturated biomarkers

GC/MS detection HP-6890/5973

Compound data



Norsk Hydro E&P Research Centre, Bergen, Norway
Petroleum Geochemistry Laboratories

Data file name: **S950.D**
 Sample name: **36/7-2 950m sat**
 Data File Path: C:\HPCHEM\1\DATA\SA315H3D\
 Misc. info.:

 Vial no.: 12
 Method: MSD_S_D
 Operator:
 Date: Fri Nov 14 08:54:31 1997

Response curve $y = ax$
 Response factor groups: s1...s3, responses as defined in method

#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng/mg	

Internal standard (if added):

1)	46.19	217.2		24baa	2179	25
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Diterpanes:

2)	33.84	191.2	s1	19/3	3735	32
3)	35.83	191.2	s1	20/3	1492	13
4)	37.87	191.2	s1	21/3	1735	15
5)	41.84	191.2	s1	23/3	2280	20
6)	42.97	191.2	s1	24/3	1661	14
7)	45.23	191.2	s1	25/3	761	7
8)	46.78	191.2	s1	24/4	2380	21
9)	46.88	191.2	s1	26/3R	671	6
10)	47.02	191.2	s1	26/3S	673	6
11)	50.56	191.2	s1	28/3R	869	8
12)	50.80	191.2	s1	28/3S	840	7
13)	51.72	191.2	s1	29/3R	2470	21
14)	51.89	191.2	s1	29/3S	1136	10

Triterpanes:

15)	52.74	191.2	s1	27Ts	2541	22
16)	52.99	177.2	s1	25nor28ab	7080	61
17)	53.42	191.2	s1	27Tm	2293	20
18)	53.80	177.2	s1	25nor29ab	15003	130
19)	53.90	191.2	s1	27b	2094	18
20)	54.99	191.2	s1	28ab	1606	14
21)	55.21	177.2	s1	25nor30ab	16198	140
22)	55.69	191.2	s1	29ab	733	6
23)	55.84	191.2	s1	29Ts	3456	30
24)	56.04	191.2	s1	30D	6994	60
25)	56.58	191.2	s1	29ba	802	7
26)	57.03	191.2	s2	30ab	1361	8
27)	57.41	191.2	s1	30D13	1132	10
28)	57.75	191.2	s2	30ba	1183	7
29)	58.65	191.2	s1	31abS	495	4
30)	58.85	191.2	s1	31abR	441	4
31)	59.15	191.2	s1	30G	1288	11
32)	59.26	191.2	s1	31ba	956	8
33)	59.88	191.2	s1	32abS	413	4
34)	60.13	191.2	s1	32abR	339	3
35)	61.30	191.2	s1	33abS	613	5
36)	61.65	191.2	s1	33abR	174	2
37)	62.82	191.2	s1	34abS	893	8
38)	63.33	191.2	s1	34abR	208	2
39)	64.54	191.2	s1	35abS	550	5
40)	65.24	191.2	s1	35abR	150	1

#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng/mg	

Steranes:

41)	38.37	217.2	s3	21aa	3142	39
42)	40.04	217.2	s3	21bb	4128	51
43)	40.15	217.2	s3	22aa	3134	39
44)	42.38	217.2	s3	22bb	2191	27
45)	48.73	217.2	s3	27dbS	9010	112
46)	49.36	217.2	s3	27dbR	5326	66
47)	51.72	218.2	s3	27bbR	10319	129
48)	51.87	218.2	s3	27bbS	6877	86
49)	52.27	217.2	s3	27aaR	1595	20
50)	53.47	218.2	s3	28bbR	5946	74
51)	53.61	218.2	s3	28bbS	7883	98
52)	54.60	217.2	s3	29aaS	3520	44
53)	54.91	218.2	s3	29bbR	10543	131
54)	55.01	218.2	s3	29bbS	10381	129
55)	55.59	217.2	s3	29aaR	2253	28
56)	56.07	218.2	s3	30bbR	3254	41
57)	56.11	218.2	s3	30bbS	2564	32

Saturated biomarkers

GC/MS detection HP-6890/5973

Ratios, from heights and amounts



Norsk Hydro E&P Research Centre, Bergen, Norway
 Petroleum Geochemistry Laboratories

Data file name: **S950.D**
 Sample name: **367-2 950m sat**
 Data File Path: C:\HPCHEM\1\DATA\ISA315H3D\
 Misc. info.:

Vial no.: 12
 Method: MSD_S_D
 Operator:
 Date: Fri Nov 14 08:54:31 1997

Terpane ratios, heights and amounts

		Height	Amount
$100 * ((\text{sum}20-25)/3 + 26/3(R+S)) /$			
$((\text{sum}20-25)/3 + 26/3(R+S) + 27(Ts+Tm) + 28ab + \text{sum}29-30(ab+ba) + \text{sum}31-35ab(R+S))$	%Tri	39	40
$100 * 20/3 / ((\text{sum}20-25)/3 + 26/3(R+S))$	%20/3	16	16
$100 * 23/3 / (23/3 + 24/3 + 25/3)$	%23/3	48	48
$100 * 24/4 / (24/4 + 24/3 + 25/3)$	%24/4	50	50
$100 * Ts / (Ts + Tm)$	%27Ts	53	53
$100 * 28ab / (28ab + 30ab)$	%28ab	54	65
$100 * 29Ts / (29Ts + 29ab)$	%29Ts	83	83
$100 * 25nor30ab / (25nor30ab + 30ab)$	%25nor30ab	92	95
$100 * 29ab / (29ab + 30ab)$	%29ab	35	46
$100 * 30ba / (30ba + 30ab)$	%30ba	47	47
$100 * 30D / (30D + 30ab)$	%30D	84	89
$100 * 30G / (30G + 30ab)$	%30G	49	60
$100 * 32abS / (32ab(S+R))$	%32abS	55	55
$100 * 35ab(S+R) / (34-35ab(S+R))$	%35ab	39	39
$100 * (27Ts + 27Tm) / (27Ts + 27Tn + 28ab + \text{sum}29-30(ab+ba) + \text{sum}31-35ab(R+S))$	%27HOP	33	35
$100 * (28ab) / (27Ts + 27Tn + 28ab + \text{sum}29-30(ab+ba) + \text{sum}31-35ab(R+S))$	%28HOP	11	12
$100 * (29ab+ba) / (27Ts + 27Tn + 28ab + \text{sum}29-30(ab+ba) + \text{sum}31-35ab(R+S))$	%29HOP	10	11
$100 * (30ab+ba) / (27Ts + 27Tn + 28ab + \text{sum}29-30(ab+ba) + \text{sum}31-35ab(R+S))$	%30HOP	17	12
$100 * 31ab(S+R) / (27Ts + 27Tn + 28ab + \text{sum}29-30(ab+ba) + \text{sum}31-35ab(R+S))$	%31HOP	6	7
$100 * 32ab(S+R) / (27Ts + 27Tn + 28ab + \text{sum}29-30(ab+ba) + \text{sum}31-35ab(R+S))$	%32HOP	5	5
$100 * 33ab(S+R) / (27Ts + 27Tn + 28ab + \text{sum}29-30(ab+ba) + \text{sum}31-35ab(R+S))$	%33HOP	5	6
$100 * 34ab(S+R) / (27Ts + 27Tn + 28ab + \text{sum}29-30(ab+ba) + \text{sum}31-35ab(R+S))$	%34HOP	7	8
$100 * 35ab(S+R) / (27Ts + 27Tn + 28ab + \text{sum}29-30(ab+ba) + \text{sum}31-35ab(R+S))$	%35HOP	5	5

Sterane ratios

$100 * (21+22)bb / ((21+22)bb + (27+28+29+30)bb(R+S))$	%Preg	10	10
$100 * 29aaS / 29aa(R+S)$	%29aaS	61	61
$100 * 29bb(R+S) / (29bb(R+S) + 29aa(S+R))$	%29bb	78	78
$100 * 27db(S+R) / ((27db(S+R) + 27bb(R+S))$	%27dia	45	45
$100 * 27bb(R+S) / (27+28+29+30)bb(R+S)$	%27STER	30	30
$100 * 28bb(R+S) / (27+28+29+30)bb(R+S)$	%28STER	24	24
$100 * 29bb(R+S) / (27+28+29+30)bb(R+S)$	%29STER	36	36
$100 * 30bb(R+S) / (27+28+29+30)bb(R+S)$	%30STER	10	10

Saturated biomarkers

GC/MS detection HP-6890/5973

Compound data



#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng/mg	

Internal standard (if added):

1)	46.19	217.2		24baa	1722	30
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Diterpanes:

2)	33.83	191.2	s1	19/3	2908	38
3)	35.82	191.2	s1	20/3	1174	16
4)	37.86	191.2	s1	21/3	1344	18
5)	41.83	191.2	s1	23/3	1705	23
6)	42.96	191.2	s1	24/3	1353	18
7)	45.25	191.2	s1	25/3	575	8
8)	46.77	191.2	s1	24/4	1850	24
9)	46.88	191.2	s1	26/3R	516	7
10)	47.01	191.2	s1	26/3S	620	8
11)	50.55	191.2	s1	28/3R	658	9
12)	50.79	191.2	s1	28/3S	688	9
13)	51.71	191.2	s1	29/3R	1907	25
14)	51.87	191.2	s1	29/3S	933	12

Triterpanes:

15)	52.73	191.2	s1	27Ts	1902	25
16)	52.99	177.2	s1	25nor28ab	5370	71
17)	53.41	191.2	s1	27Tm	1853	25
18)	53.79	177.2	s1	25nor29ab	12523	166
19)	53.87	191.2	s1	27b	1744	23
20)	54.98	191.2	s1	28ab	1336	18
21)	55.20	177.2	s1	25nor30ab	13161	174
22)	55.68	191.2	s1	29ab	776	10
23)	55.83	191.2	s1	29Ts	2787	37
24)	56.03	191.2	s1	30D	5366	71
25)	56.59	191.2	s1	29ba	708	9
26)	57.02	191.2	s2	30ab	1013	9
27)	57.40	191.2	s1	30D13	847	11
28)	57.73	191.2	s2	30ba	966	8
29)	58.64	191.2	s1	31abS	404	5
30)	58.85	191.2	s1	31abR	351	5
31)	59.13	191.2	s1	30G	975	13
32)	59.26	191.2	s1	31ba	666	9
33)	59.87	191.2	s1	32abS	288	4
34)	60.13	191.2	s1	32abR	283	4
35)	61.30	191.2	s1	33abS	487	6
36)	61.66	191.2	s1	33abR	158	2
37)	62.81	191.2	s1	34abS	688	9
38)	63.30	191.2	s1	34abR	167	2
39)	64.54	191.2	s1	35abS	452	6
40)	65.25	191.2	s1	35abR	108	1

Norsk Hydro E&P Research Centre, Bergen, Norway
Petroleum Geochemistry Laboratories

Data file name: **S955.D**
 Sample name: **36/7-2 955m sat**
 Data File Path: **C:\HPCHEM\1\DATA\SA315H3D**
 Misc. info.:

 Vial no.: **13**
 Method: **MSD_S_D**
 Operator:
 Date: **Fri Nov 14 10:23:13 1997**

Response curve $y = ax$
 Response factor groups: s1...s3, responses as defined in method

#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng/mg	

Steranes:

41)	38.36	217.2	s3	21aa	2394	46
42)	40.03	217.2	s3	21bb	3366	64
43)	40.15	217.2	s3	22aa	2595	50
44)	42.38	217.2	s3	22bb	1865	36
45)	48.71	217.2	s3	27dbS	6830	130
46)	49.35	217.2	s3	27dbR	4158	79
47)	51.71	218.2	s3	27bbR	8188	156
48)	51.86	218.2	s3	27bbS	5157	98
49)	52.26	217.2	s3	27aaR	1224	23
50)	53.46	218.2	s3	28bbR	4721	90
51)	53.60	218.2	s3	28bbS	6181	118
52)	54.60	217.2	s3	29aaS	2757	53
53)	54.89	218.2	s3	29bbR	8597	164
54)	55.00	218.2	s3	29bbS	7794	149
55)	55.58	217.2	s3	29aaR	1657	32
56)	56.06	218.2	s3	30bbR	2552	49
57)	56.12	218.2	s3	30bbS	2278	43

Saturated biomarkers

GC/MS detection HP-6890/5973

Ratios, from heights and amounts



Norsk Hydro E&P Research Centre, Bergen, Norway
 Petroleum Geochemistry Laboratories

Data file name: **S955.D**
 Sample name: **36/7-2 955m sat**
 Data File Path: C:\HPCHEM\1\DATA\ISA315H3D\
 Misc. info.:

Vial no.: 13
 Method: MSD_S_D
 Operator:
 Date: Fri Nov 14 10:23:13 1997

Terpane ratios, heights and amounts

	Height	Amount
100*((sum20-25)/3+26/3(R+S)) /		
((sum20-25)/3+26/3(R+S)+27(Ts+Tm)+28ab+sum29-30(ab+ba)+sum31-35ab(R+S))	%Tri	38 39
100*20/3/((sum20-25)/3+26/3(R+S))	%20/3	16 16
100*23/3/(23/3+24/3+25/3)	%23/3	47 47
100*24/4/(24/4+24/3+25/3)	%24/4	49 49
100*Ts/(Ts+Tm)	%27Ts	51 51
100*28ab/(28ab+30ab)	%28ab	57 67
100*29Ts/(29Ts+29ab)	%29Ts	78 78
100*25nor30ab/(25nor30ab+30ab)	%25nor30ab	93 95
100*29ab/(29ab+30ab)	%29ab	43 54
100*30ba/(30ba+30ab)	%30ba	49 49
100*30D/(30D+30ab)	%30D	84 89
100*30G/(30G+30ab)	%30G	49 60
100*32abS/(32ab(S+R))	%32abS	50 50
100*35ab(S+R)/(34-35ab(S+R))	%35ab	40 40
100*(27Ts+27Tm)/(27Ts+27Tn+28ab+sum29-30(ab+ba)+sum31-35ab(R+S))	%27HOP	31 33
100*(28ab)/(27Ts+27Tn+28ab+sum29-30(ab+ba)+sum31-35ab(R+S))	%28HOP	11 12
100*(29ab+ba)/(27Ts+27Tn+28ab+sum29-30(ab+ba)+sum31-35ab(R+S))	%29HOP	12 13
100*(30ab+ba)/(27Ts+27Tn+28ab+sum29-30(ab+ba)+sum31-35ab(R+S))	%30HOP	17 11
100*31ab(S+R)/(27Ts+27Tn+28ab+sum29-30(ab+ba)+sum31-35ab(R+S))	%31HOP	6 7
100*32ab(S+R)/(27Ts+27Tn+28ab+sum29-30(ab+ba)+sum31-35ab(R+S))	%32HOP	5 5
100*33ab(S+R)/(27Ts+27Tn+28ab+sum29-30(ab+ba)+sum31-35ab(R+S))	%33HOP	5 6
100*34ab(S+R)/(27Ts+27Tn+28ab+sum29-30(ab+ba)+sum31-35ab(R+S))	%34HOP	7 8
100*35ab(S+R)/(27Ts+27Tn+28ab+sum29-30(ab+ba)+sum31-35ab(R+S))	%35HOP	5 5

Sterane ratios

100*(21+22)bb/((21+22)bb+(27+28+29+30)bb(R+S))	%Preg	10 10
100*29aaS/29aa(R+S)	%29aaS	62 62
100*29bb(R+S)/(29bb(R+S)+29aa(S+R))	%29bb	79 79
100*27db(S+R)/((27db(S+R)+27bb(R+S))	%27dia	45 45
100*27bb(R+S)/(27+28+29+30)bb(R+S)	%27STER	29 29
100*28bb(R+S)/(27+28+29+30)bb(R+S)	%28STER	24 24
100*29bb(R+S)/(27+28+29+30)bb(R+S)	%29STER	36 36
100*30bb(R+S)/(27+28+29+30)bb(R+S)	%30STER	11 11

#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng/mg	
Internal standard (if added):						
1)	46.18	217.2		24baa	1809	28
Diterpanes:						
2)	33.82	191.2	s1	19/3	2659	31
3)	35.81	191.2	s1	20/3	1031	12
4)	37.85	191.2	s1	21/3	1184	14
5)	41.83	191.2	s1	23/3	1555	18
6)	42.95	191.2	s1	24/3	1253	15
7)	45.22	191.2	s1	25/3	534	6
8)	46.76	191.2	s1	24/4	1591	18
9)	46.86	191.2	s1	26/3R	469	5
10)	46.99	191.2	s1	26/3S	532	6
11)	50.53	191.2	s1	28/3R	623	7
12)	50.78	191.2	s1	28/3S	564	7
13)	51.57	191.2	s1	29/3R	903	10
14)	51.86	191.2	s1	29/3S	722	8
Triterpanes:						
15)	52.74	191.2	s1	27Ts	1460	17
16)	52.98	177.2	s1	25nor28ab	4846	56
17)	53.40	191.2	s1	27Tm	1503	17
18)	53.77	177.2	s1	25nor29ab	11014	128
19)	53.87	191.2	s1	27b	1463	17
20)	54.98	191.2	s1	28ab	1225	14
21)	55.19	177.2	s1	25nor30ab	11692	136
22)	55.69	191.2	s1	29ab	386	4
23)	55.82	191.2	s1	29Ts	2391	28
24)	56.03	191.2	s1	30D	5017	58
25)	56.33	191.2	s1	29ba	444	5
26)	57.02	191.2	s2	30ab	864	6
27)	57.38	191.2	s1	30D13	778	9
28)	57.72	191.2	s2	30ba	967	7
29)	58.63	191.2	s1	31abS	314	4
30)	58.83	191.2	s1	31abR	272	3
31)	59.13	191.2	s1	30G	924	11
32)	59.25	191.2	s1	31ba	600	7
33)	59.87	191.2	s1	32abS	283	3
34)	60.12	191.2	s1	32abR	238	3
35)	61.29	191.2	s1	33abS	497	6
36)	61.66	191.2	s1	33abR	144	2
37)	62.81	191.2	s1	34abS	711	8
38)	63.31	191.2	s1	34abR	177	2
39)	64.53	191.2	s1	35abS	432	5
40)	65.24	191.2	s1	35abR	146	2

Saturated biomarkers

GC/MS detection HP-6890/5973

Compound data



Norsk Hydro E&P Research Centre, Bergen, Norway
Petroleum Geochemistry Laboratories

Data file name: **S961.D**
 Sample name: **36/7-2 961m sat**
 Data File Path: C:\HPCHEM\1\DATA\ISA315H3D\
 Misc. info.:
 Vial no.: 14
 Method: MSD_S_D
 Operator:
 Date: Fri Nov 14 11:51:54 1997

Response curve $y = ax$
 Response factor groups: s1...s3, responses as defined in method

#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng/mg	
Steranes:						
41)	38.35	217.2	s3	21aa	2197	37
42)	40.02	217.2	s3	21bb	2875	48
43)	40.14	217.2	s3	22aa	2211	37
44)	42.37	217.2	s3	22bb	1750	29
45)	48.71	217.2	s3	27dbS	6101	102
46)	49.34	217.2	s3	27dbR	3625	61
47)	51.70	218.2	s3	27bbR	7230	121
48)	51.86	218.2	s3	27bbS	4682	79
49)	52.26	217.2	s3	27aaR	1329	22
50)	53.45	218.2	s3	28bbR	4156	70
51)	53.59	218.2	s3	28bbS	5934	100
52)	54.58	217.2	s3	29aaS	2692	45
53)	54.88	218.2	s3	29bbR	7772	130
54)	54.98	218.2	s3	29bbS	7064	119
55)	55.58	217.2	s3	29aaR	1944	33
56)	56.06	218.2	s3	30bbR	2195	37
57)	56.09	218.2	s3	30bbS	1958	33

Saturated biomarkers

GC/MS detection HP-6890/5973

Ratios, from heights and amounts



Norsk Hydro E&P Research Centre, Bergen, Norway
 Petroleum Geochemistry Laboratories

Data file name: **S961.D**
 Sample name: **367-2 961m sat**
 Data File Path: **C:\HPCHEM\1\DATA\ISA315H3D**
 Misc. info.:

Vial no.: **14**
 Method: **MSD_S_D**
 Operator:
 Date: **Fri Nov 14 11:51:54 1997**

Terpane ratios, heights and amounts

	Height	Amount
$100 \cdot ((\text{sum}20-25)/3+26/3(R+S)) / ((\text{sum}20-25)/3+26/3(R+S)+27(Ts+Tm)+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%Tri	39 41
$100 \cdot 20/3 / ((\text{sum}20-25)/3+26/3(R+S))$	%20/3	16 16
$100 \cdot 23/3 / (23/3+24/3+25/3)$	%23/3	47 47
$100 \cdot 24/4 / (24/4+24/3+25/3)$	%24/4	47 47
$100 \cdot Ts / (Ts+Tm)$	%27Ts	49 49
$100 \cdot 28ab / (28ab+30ab)$	%28ab	59 69
$100 \cdot 29Ts / (29Ts+29ab)$	%29Ts	86 86
$100 \cdot 25nor30ab / (25nor30ab+30ab)$	%25nor30ab	93 95
$100 \cdot 29ab / (29ab+30ab)$	%29ab	31 41
$100 \cdot 30ba / (30ba+30ab)$	%30ba	53 53
$100 \cdot 30D / (30D+30ab)$	%30D	85 90
$100 \cdot 30G / (30G+30ab)$	%30G	52 62
$100 \cdot 32abS / (32ab(S+R))$	%32abS	54 54
$100 \cdot 35ab(S+R) / (34-35ab(S+R))$	%35ab	39 39
$100 \cdot (27Ts+27Tm) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%27HOP	29 31
$100 \cdot (28ab) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%28HOP	12 13
$100 \cdot (29ab+ba) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%29HOP	8 9
$100 \cdot (30ab+ba) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%30HOP	18 13
$100 \cdot 31ab(S+R) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%31HOP	6 6
$100 \cdot 32ab(S+R) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%32HOP	5 6
$100 \cdot 33ab(S+R) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%33HOP	6 7
$100 \cdot 34ab(S+R) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%34HOP	9 9
$100 \cdot 35ab(S+R) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%35HOP	6 6

Sterane ratios

$100 \cdot (21+22)bb / ((21+22)bb+(27+28+29+30)bb(R+S))$	%Preg	10 10
$100 \cdot 29aaS / 29aa(R+S)$	%29aaS	58 58
$100 \cdot 29bb(R+S) / (29bb(R+S)+29aa(S+R))$	%29bb	76 76
$100 \cdot 27db(S+R) / ((27db(S+R)+27bb(R+S))$	%27dia	45 45
$100 \cdot 27bb(R+S) / (27+28+29+30)bb(R+S)$	%27STER	29 29
$100 \cdot 28bb(R+S) / (27+28+29+30)bb(R+S)$	%28STER	25 25
$100 \cdot 29bb(R+S) / (27+28+29+30)bb(R+S)$	%29STER	36 36
$100 \cdot 30bb(R+S) / (27+28+29+30)bb(R+S)$	%30STER	10 10

Saturated biomarkers

GC/MS detection HP-6890/5973

Compound data



Norsk Hydro E&P Research Centre, Bergen, Norway
Petroleum Geochemistry Laboratories

Data file name: **S934_5.D**
Sample name: **36/7-2 934.5m sat**
Data File Path: K:\CAMGEO\KJEM\HPCHEM\W95\DATA\SA351110\
Misc. info.:

Vial no.: 11
Method: MSD_S_D
Operator:
Date: Thu Oct 30 10:36:06 1997

Response curve y = ax
Response factor groups: s1....s3, responses as defined in method

#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng/mg	

Internal standard (if added):

1)	46.11	217.2		24baa	1875	27
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Diterpanes:

2)	33.77	191.2	s1	19/3	3311	36
3)	35.76	191.2	s1	20/3	1298	14
4)	37.78	191.2	s1	21/3	1478	16
5)	41.77	191.2	s1	23/3	2014	22
6)	42.89	191.2	s1	24/3	1500	16
7)	45.22	191.2	s1	25/3	742	8
8)	46.70	191.2	s1	24/4	2041	22
9)	46.80	191.2	s1	26/3R	570	6
10)	46.94	191.2	s1	26/3S	749	8
11)	50.47	191.2	s1	28/3R	656	7
12)	50.71	191.2	s1	28/3S	733	8
13)	51.52	191.2	s1	29/3R	1123	12
14)	51.81	191.2	s1	29/3S	1053	11

Triterpanes:

15)	52.66	191.2	s1	27Ts	2167	23
16)	52.91	177.2	s1	25nor28ab	6006	65
17)	53.34	191.2	s1	27Tm	1968	21
18)	53.72	177.2	s1	25nor29ab	14112	152
19)	53.78	191.2	s1	27b	757	8
20)	54.90	191.2	s1	28ab	1544	17
21)	55.13	177.2	s1	25nor30ab	14507	156
22)	55.61	191.2	s1	29ab	635	7
23)	55.76	191.2	s1	29Ts	3000	32
24)	55.96	191.2	s1	30D	6098	66
25)	56.28	191.2	s1	29ba	526	6
26)	56.97	191.2	s2	30ab	1523	11
27)	57.32	191.2	s1	30D13	1132	12
28)	57.66	191.2	s2	30ba	1200	8
29)	58.56	191.2	s1	31abS	526	6
30)	58.76	191.2	s1	31abR	478	5
31)	59.06	191.2	s1	30G	1199	13
32)	59.18	191.2	s1	31ba	842	9
33)	59.79	191.2	s1	32abS	475	5
34)	60.05	191.2	s1	32abR	362	4
35)	61.23	191.2	s1	33abS	622	7
36)	61.57	191.2	s1	33abR	210	2
37)	62.74	191.2	s1	34abS	827	9
38)	63.23	191.2	s1	34abR	213	2
39)	64.45	191.2	s1	35abS	515	6
40)	65.15	191.2	s1	35abR	163	2

#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng/mg	

Steranes:

41)	38.30	217.2	s3	21aa	2807	44
42)	39.95	217.2	s3	21bb	3856	60
43)	40.08	217.2	s3	22aa	2797	43
44)	42.30	217.2	s3	22bb	2205	34
45)	48.65	217.2	s3	27dbS	7686	119
46)	49.28	217.2	s3	27dbR	4701	73
47)	51.64	218.2	s3	27bbR	9190	143
48)	51.79	218.2	s3	27bbS	6602	103
49)	52.19	217.2	s3	27aaR	1632	25
50)	53.39	218.2	s3	28bbR	5842	91
51)	53.54	218.2	s3	28bbS	7306	114
52)	54.53	217.2	s3	29aaS	3070	48
53)	54.82	218.2	s3	29bbR	10673	166
54)	54.92	218.2	s3	29bbS	9517	148
55)	55.52	217.2	s3	29aaR	2125	33
56)	55.98	218.2	s3	30bbR	2957	46
57)	56.05	218.2	s3	30bbS	2462	38

Saturated biomarkers

GC/MS detection HP-6890/5973

Ratios, from heights and amounts



Norsk Hydro E&P Research Centre, Bergen, Norway
 Petroleum Geochemistry Laboratories

Data file name: S934_5.D
 Sample name: 36/7-2 934.5m sat
 Data File Path: K:\CAM\GEOK\JEM\HPCHEM\W95\DATA\SA351110\
 Misc. info.:

Vial no.: 11
 Method: MSD_S_D
 Operator:
 Date: Thu Oct 30 10:36:06 1997

Terpane ratios, heights and amounts

		Height	Amount
100*((sum20-25)/3+26/3(R+S)) /			
((sum20-25)/3+26/3(R+S)+27(Ts+Tm)+28ab+sum29-30(ab+ba)+sum31-35ab(R+S))	%Tri	37	39
100*20/3/((sum20-25)/3+26/3(R+S))	%20/3	16	16
100*23/3/(23/3+24/3+25/3)	%23/3	47	47
100*24/4/(24/4+24/3+25/3)	%24/4	48	48
100*Ts/(Ts+Tm)	%27Ts	52	52
100*28ab/(28ab+30ab)	%28ab	50	61
100*29Ts/(29Ts+29ab)	%29Ts	83	83
100*25nor30ab/(25nor30ab+30ab)	%25nor30ab	90	94
100*29ab/(29ab+30ab)	%29ab	29	39
100*30ba/(30ba+30ab)	%30ba	44	44
100*30D/(30D+30ab)	%30D	80	86
100*30G/(30G+30ab)	%30G	44	55
100*32abS/(32ab(S+R))	%32abS	57	57
100*35ab(S+R)/(34-35ab(S+R))	%35ab	39	39
100*(27Ts+27Tm)/(27Ts+27Tm+28ab+sum29-30(ab+ba)+sum31-35ab(R+S))	%27HOP	30	32
100*(28ab)/(27Ts+27Tm+28ab+sum29-30(ab+ba)+sum31-35ab(R+S))	%28HOP	11	12
100*(29ab+ba)/(27Ts+27Tm+28ab+sum29-30(ab+ba)+sum31-35ab(R+S))	%29HOP	8	9
100*(30ab+ba)/(27Ts+27Tm+28ab+sum29-30(ab+ba)+sum31-35ab(R+S))	%30HOP	20	13
100*31ab(S+R)/(27Ts+27Tm+28ab+sum29-30(ab+ba)+sum31-35ab(R+S))	%31HOP	7	8
100*32ab(S+R)/(27Ts+27Tm+28ab+sum29-30(ab+ba)+sum31-35ab(R+S))	%32HOP	6	6
100*33ab(S+R)/(27Ts+27Tm+28ab+sum29-30(ab+ba)+sum31-35ab(R+S))	%33HOP	6	6
100*34ab(S+R)/(27Ts+27Tm+28ab+sum29-30(ab+ba)+sum31-35ab(R+S))	%34HOP	7	8
100*35ab(S+R)/(27Ts+27Tm+28ab+sum29-30(ab+ba)+sum31-35ab(R+S))	%35HOP	5	5

Sterane ratios

100*(21+22)bb/((21+22)bb+(27+28+29+30)bb(R+S))	%Preq	10	10
100*29aaS/29aa(R+S)	%29aaS	59	59
100*29bb(R+S)/(29bb(R+S)+29aa(S+R))	%29bb	80	80
100*27db(S+R)/((27db(S+R)+27bb(R+S))	%27dia	44	44
100*27bb(R+S)/(27+28+29+30)bb(R+S)	%27STER	29	29
100*28bb(R+S)/(27+28+29+30)bb(R+S)	%28STER	24	24
100*29bb(R+S)/(27+28+29+30)bb(R+S)	%29STER	37	37
100*30bb(R+S)/(27+28+29+30)bb(R+S)	%30STER	10	10

Peak#	Rt min.	Ion m/z	Compound	Height	Amount ng/mg
Int.Std.(if added):					
4	45.72	217	24baa	1312	26
DITERPANES:					
5	33.57	191	19/3	559	9
6	35.52	191	20/3	249	4
7	37.53	191	21/3	270	4
11	41.44	191	23/3	359	6
13	42.55	191	24/3	270	4
14	44.85	191	25/3	140	2
16	46.42	191	26/3R	103	2
17	46.56	191	26/3S	109	2
20	50.06	191	28/3R	146	2
21	50.28	191	28/3S	131	2
23	51.09	191	29/3R	284	5
25	51.16	191	29/3S	282	5
15	46.29	191	24/4	386	6
TRITERPANES:					
26	52.16	191	27Ts	1492	24
28	52.40	177	25nor28ab	357	6
29	52.82	191	27Tm	612	10
33	53.31	191	27b	93	2
32	53.20	177	25nor29ab	58	1
34	54.36	191	28ab	471	8
36	54.31	177	25nor30ab	84	1
39	55.05	191	29ab	1781	29
40	55.16	191	29Ts	1388	22
43	55.93	191	29ba	131	2
42	55.41	191	30D	1712	28
46	56.40	191	30ab	5315	60
47	56.75	191	30D13	419	7
48	57.03	191	30ba	547	6
51	58.49	191	30G	398	6
49	57.97	191	31abS	2044	33
50	58.16	191	31abR	1487	24
52	58.68	191	31ba	253	4
53	59.20	191	32abS	1532	25
54	59.46	191	32abR	1061	17
55	60.61	191	33abS	1084	18
56	60.97	191	33abR	717	12
57	62.08	191	34abS	692	11
58	62.52	191	34abR	407	7
59	63.65	191	35abS	395	6
60	64.30	191	35abR	229	4

SATURATE BIOMARKERS

File name (sample):

3671DST.D

File path:

K:\CAP\MSDARKIVHC_SA\3671_ISA\

Misc information:

Sample name:

36/7-1 DST#1 2363m Sat

Operator:

Lotte 1/8-96

Method:

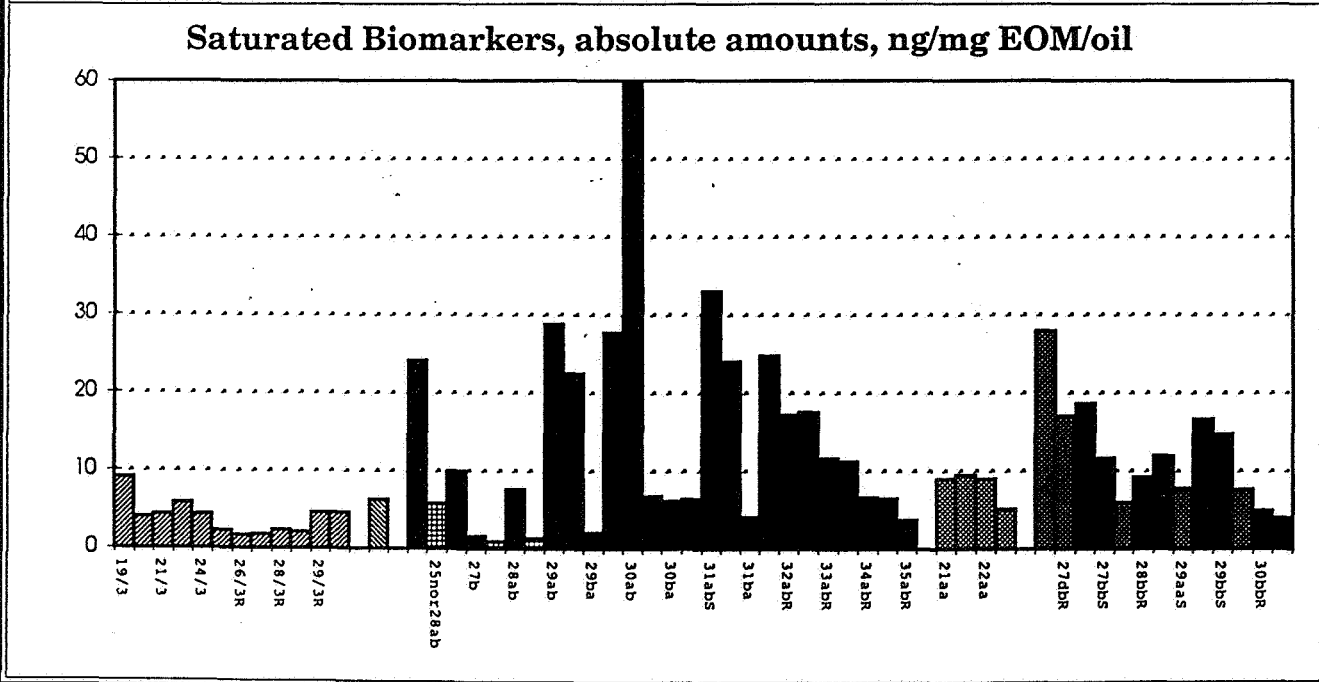
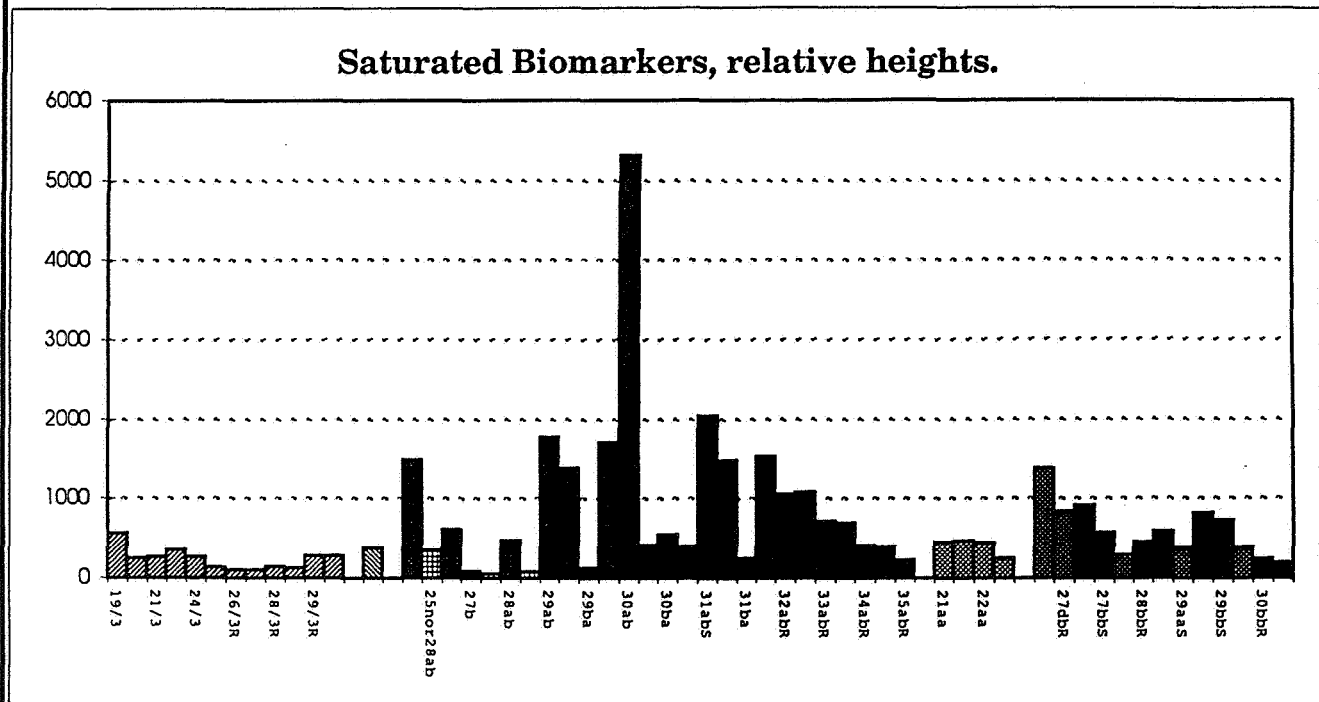
MSD_S_C

Date analyzed:

02.08.1996

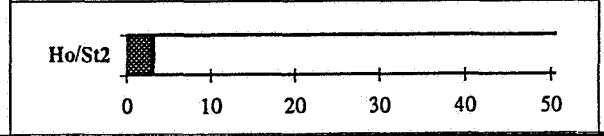
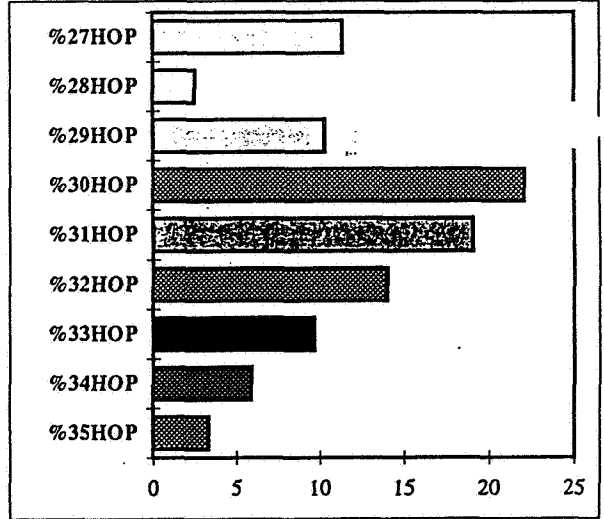
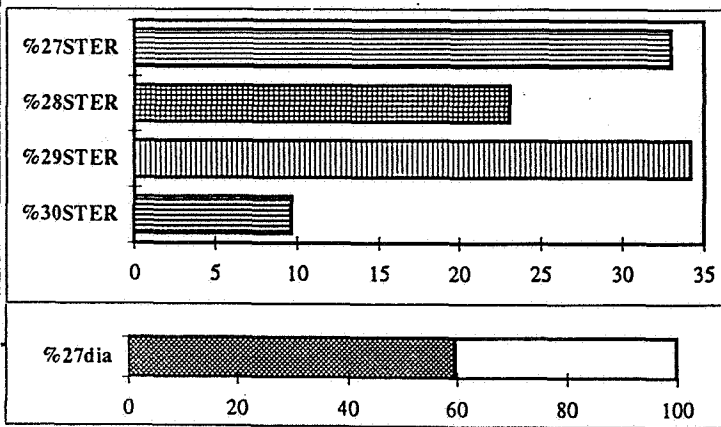
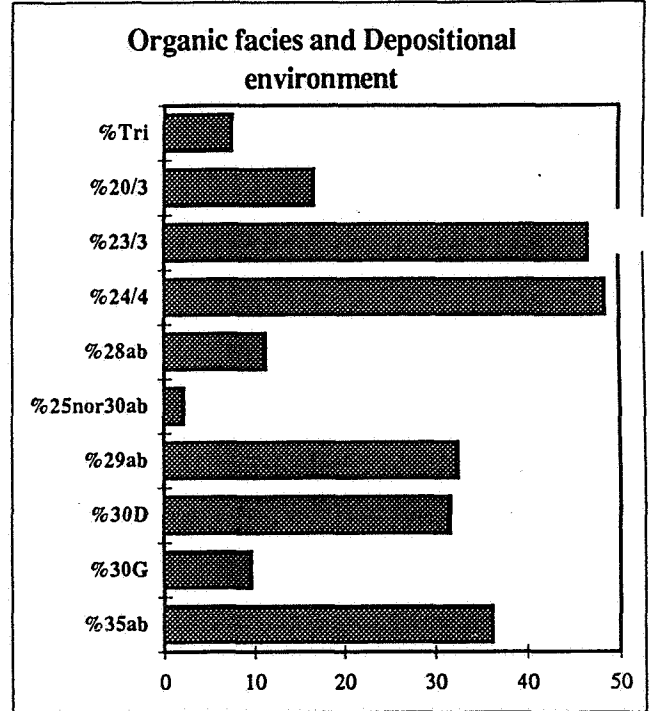
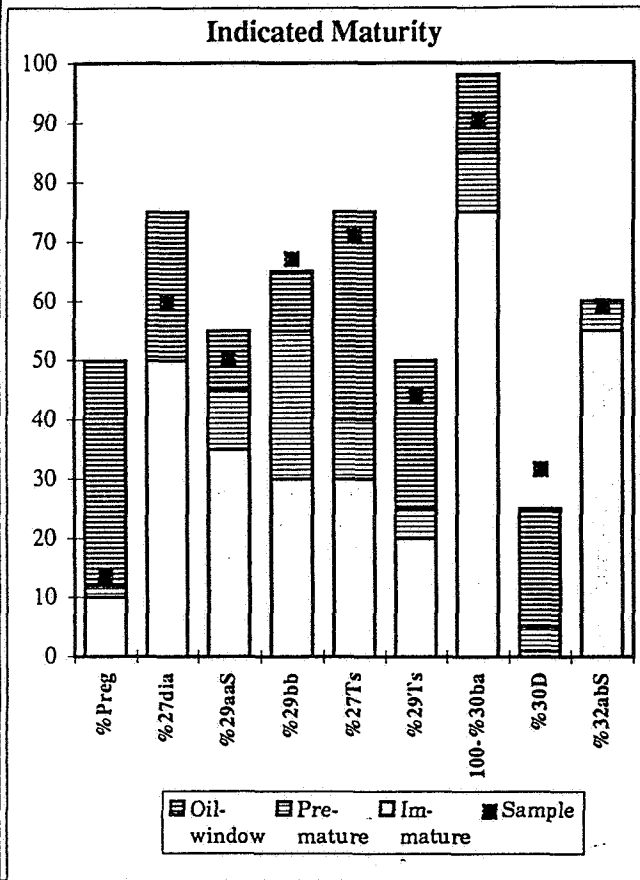
Peak#	Rt min.	Ion m/z	Compound	Height	Amount ng/mg
STERANES:					
8	38.03	217	21aa	452	9
9	39.66	217	21bb	465	9
10	39.79	217	22aa	440	9
12	41.99	217	22bb	252	5
18	48.22	217	27dbS	1378	28
19	48.85	217	27dbR	841	17
22	51.17	218	27bbR	917	19
24	51.31	218	27bbS	574	12
27	51.71	217	27aaR	291	6
30	52.88	218	28bbR	452	9
31	53.03	218	28bbS	590	12
35	54.00	217	29aaS	382	8
37	54.30	218	29bbR	819	17
38	54.39	218	29bbS	725	15
41	54.99	217	29aaR	382	8
44	55.46	218	30bbR	242	5
45	55.51	218	30bbS	196	4

File name (sample): 3671DST.D		SATURATE BIOMARKERS				
File path: K:\CAP\MSDARKIVHC_SA\3671_1SA\		Operator: Lotte 1/8-96				
Misc information:		Method: MSD_S_C				
Sample name: 36/7-1 DST#1 2363m Sat		Date analyzed: 02.aug.96				
		<table border="1"> <tr> <td>Int.std. 24abb</td> </tr> <tr> <td>Height Amount</td> </tr> <tr> <td>1312 26</td> </tr> </table>		Int.std. 24abb	Height Amount	1312 26
Int.std. 24abb						
Height Amount						
1312 26						



Terpane ratios			SATURATE BIOMARKERS		
		Amount Height			
100*(20/3+21/3+23/3+24/3+25/3+26/3(R+S)) (191)	%Tri	8 7	File name (sample): 3671DST.D		
((20+21+23+24+25)/3+26/3(R+S)+27(Ts+Tm)+ 28ab+SUM 29-30(ab+ba)+SUM 31-35ab(S+R)) (191)			File path: K:\CAP\MSDARKIV\HC_SA3671_ISA\		
100*20/3 (191)	%20/3	17 17	Misc information:		
20/3+21/3+23/3+24/3+25/3+26/3(R+S) (191)			Sample name: 367-1 DST#1 2363m Sat		
100*23/3 (191)	%23/3	47 47	Operator: Lotte 1/8-96		
23/3+24/3+25/3 (191)			Method: MSD_S_C		
100*24/4 (191)	%24/4	48 48	Date analyzed: 02.aug.96		
24/4+24/3+25/3 (191)					
100*27Ts (191)	%27Ts	71 71			
27Ts+27Tm (191)					
100*28ab (191)	%28ab	11 8			
28ab+30ab (191)					
100*29Ts (191)	%29Ts	44 44			
29Ts+29ab (191)					
100*25nor30ab (191)	%25nor30ab	2 2			
25nor30ab+30ab (191)					
100*29ab (191)	%29ab	32 25			
29ab+30ab (191)					
100*30ba (191)	%30ba	9 9			
30ba+30ab (191)					
100*30D (191)	%30D	32 24			
30D+30ab (191)					
100*30G (191)	%30G	10 7			
30G+30ab (191)					
100*32abS (191)	%32abS	59 59			
32abS+32abR (191)					
100*35ab(S+R) (191)	%35ab	36 36			
SUM 34-35ab(S+R) (191)					
100*(27Ts+27Tm) (191)	%27HOP	11 10			
27(Ts+Tm)+28ab+SUM29-30(ab+ba)+SUM31-35ab(S+R)(191)					
100*28ab (191)	%28HOP	3 2			
27(Ts+Tm)+28ab+SUM29-30(ab+ba)+SUM31-35ab(S+R)(191)					
100*(29ab+29ba) (191)	%29HOP	10 9			
27(Ts+Tm)+28ab+SUM29-30(ab+ba)+SUM31-35ab(S+R)(191)					
100*(30ab+30ba) (191)	%30HOP	22 29			
27(Ts+Tm)+28ab+SUM29-30(ab+ba)+SUM31-35ab(S+R)(191)					
100*(31ab(S+R)) (191)	%31HOP	19 17			
27(Ts+Tm)+28ab+SUM29-30(ab+ba)+SUM31-35ab(S+R)(191)					
100*(32ab(S+R)) (191)	%32HOP	14 13			
27(Ts+Tm)+28ab+SUM29-30(ab+ba)+SUM31-35ab(S+R)(191)					
100*(33ab(S+R)) (191)	%33HOP	10 9			
27(Ts+Tm)+28ab+SUM29-30(ab+ba)+SUM31-35ab(S+R)(191)					
100*(34ab(S+R)) (191)	%34HOP	6 5			
27(Ts+Tm)+28ab+SUM29-30(ab+ba)+SUM31-35ab(S+R)(191)					
100*(35ab(S+R)) (191)	%35HOP	3 3			
27(Ts+Tm)+28ab+SUM29-30(ab+ba)+SUM31-35ab(S+R)(191)					
			Sterane ratios		
				Amount Height	
			100*(21+22)bb (217)	%Preg	14 1
			(21+22)bb (217) + (27+28+29+30)bb(S+R) (218)		
			100*29aaS (217)	%29aaS	50 5
			(29aa(S+R)) (217)		
			100*29bb(S+R) (218)	%29bb	67 6
			(29bb(S+R) (218) + 29aa(S+R) (217))		
			100*27dia(S+R) (217)	%27dia	60 6
			27ds(S+R) (217) + 27bb(R+S) (218)		
			100*27bb(S+R) (218)	%27STER	33 3
			(27+28+29+30)bb(S+R) (218)		
			100*28bb(S+R) (218)	%28STER	23 2
			(27+28+29+30)bb(S+R) (218)		
			100*29bb(S+R) (218)	%29STER	34 3
			(27+28+29+30)bb(S+R) (218)		
			100*30bb(S+R) (218)	%30STER	10 1
			(27+28+29+30)bb(S+R) (218)		
			Terpane-Sterane ratio		
			27(Ts+Tm)+28ab+SUM29-30(ab+ba)+SUM31-35ab(S+R)	Ho/St2	3.3 4
			(27+28+29+30)bb(S+R) (218)		

File name (sample): 3671DST.D	SATURATE BIOMARKERS
File path: K:\CAP\MSDARKIVHC_SA\3671_ISA\	Operator: Lotte 1/8-96
Misc information:	Method: MSD_S_C
Sample name: 36/7-1 DST#1 2363m Sat	Date analyzed: 02.aug.96



Saturated biomarkers

GC/MS detection HP-6890/5973

Compound data



Norsk Hydro E&P Research Centre, Bergen, Norway
Petroleum Geochemistry Laboratories

Data file name: **S2291_80.D**
Sample name: **35/9-1 DST #1 2291_80m sat**
Data File Path: **C:\HPCHEM\1\DATA\ISA315H3D**
Misc. info.:

Vial no.: **15**
Method: **MSD_S_D**
Operator:
Date: **Fri Nov 14 13:20:39 1997**

Response curve $y = ax$
Response factor groups: s1...s3, responses as defined in method

#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng/mg	
Internal standard (if added):						
1)	46.18	217.2		24baa	1185	29
Diterpanes:						
2)	33.83	191.2	s1	19/3	364	7
3)	35.81	191.2	s1	20/3	162	3
4)	37.84	191.2	s1	21/3	171	3
5)	41.83	191.2	s1	23/3	345	6
6)	42.94	191.2	s1	24/3	166	3
7)	45.22	191.2	s1	25/3	91	2
8)	46.76	191.2	s1	24/4	284	5
9)	46.86	191.2	s1	26/3R	68	1
10)	47.00	191.2	s1	26/3S	77	1
11)	50.54	191.2	s1	28/3R	100	2
12)	50.77	191.2	s1	28/3S	79	1
13)	51.56	191.2	s1	29/3R	145	3
14)	51.85	191.2	s1	29/3S	99	2
Triterpanes:						
15)	52.71	191.2	s1	27Ts	1145	21
16)	52.95	177.2	s1	25nor28ab	255	5
17)	53.38	191.2	s1	27Tm	416	8
18)	53.73	177.2	s1	25nor29ab	86	2
19)	53.89	191.2	s1	27b	393	7
20)	54.95	191.2	s1	28ab	301	5
21)	55.26	177.2	s1	25nor30ab	36	1
22)	55.65	191.2	s1	29ab	1211	22
23)	55.75	191.2	s1	29Ts	1004	18
24)	56.01	191.2	s1	30D	1307	24
25)	56.54	191.2	s1	29ba	117	2
26)	57.03	191.2	s2	30ab	4050	48
27)	57.37	191.2	s1	30D13	312	6
28)	57.65	191.2	s2	30ba	386	5
29)	58.62	191.2	s1	31abS	1581	29
30)	58.81	191.2	s1	31abR	1168	21
31)	59.15	191.2	s1	30G	179	3
32)	59.35	191.2	s1	31ba	201	4
33)	59.84	191.2	s1	32abS	1216	22
34)	60.11	191.2	s1	32abR	836	15
35)	61.28	191.2	s1	33abS	899	16
36)	61.65	191.2	s1	33abR	605	11
37)	62.80	191.2	s1	34abS	600	11
38)	63.29	191.2	s1	34abR	346	6
39)	64.53	191.2	s1	35abS	346	6
40)	65.23	191.2	s1	35abR	212	4

#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng/mg	
Steranes:						
41)	38.35	217.2	s3	21aa	333	9
42)	40.01	217.2	s3	21bb	342	9
43)	40.13	217.2	s3	22aa	326	9
44)	42.38	217.2	s3	22bb	189	5
45)	48.70	217.2	s3	27dbS	1140	30
46)	49.34	217.2	s3	27dbR	573	15
47)	51.69	218.2	s3	27bbR	759	20
48)	51.83	218.2	s3	27bbS	384	10
49)	52.24	217.2	s3	27aaR	200	5
50)	53.43	218.2	s3	28bbR	318	8
51)	53.57	218.2	s3	28bbS	466	12
52)	54.56	217.2	s3	29aaS	243	6
53)	54.85	218.2	s3	29bbR	683	18
54)	54.96	218.2	s3	29bbS	594	16
55)	55.56	217.2	s3	29aaR	256	7
56)	56.03	218.2	s3	30bbR	188	5
57)	56.08	218.2	s3	30bbS	138	4

Saturated biomarkers

GC/MS detection HP-6890/5973

Compound data



Norsk Hydro E&P Research Centre, Bergen, Norway
Petroleum Geochemistry Laboratories

Data file name: S2332_00.D
Sample name: 35/9-2 DST #1 2332.00m sat
Data File Path: C:\HPCHEM\1\DATA\ISA315H3D\
Misc. info.:

Vial no.: 16
Method: MSD_S_D
Operator:
Date: Fri Nov 14 14:49:22 1997

Response curve $y = ax$
Response factor groups: s1...s3, responses as defined in method

#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng/mg	

Internal standard (if added):

1)	46.16	217.2		24baa	787	25
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Diterpanes:

2)	33.81	191.2	s1	19/3	627	15
3)	35.80	191.2	s1	20/3	190	5
4)	37.84	191.2	s1	21/3	248	6
5)	41.81	191.2	s1	23/3	361	9
6)	42.93	191.2	s1	24/3	228	6
7)	45.21	191.2	s1	25/3	99	2
8)	46.74	191.2	s1	24/4	332	8
9)	46.85	191.2	s1	26/3R	83	2
10)	46.98	191.2	s1	26/3S	94	2
11)	50.51	191.2	s1	28/3R	93	2
12)	50.77	191.2	s1	28/3S	100	2
13)	51.55	191.2	s1	29/3R	170	4
14)	51.84	191.2	s1	29/3S	153	4

Triterpanes:

15)	52.70	191.2	s1	27Ts	1156	28
16)	52.95	177.2	s1	25nor28ab	1084	26
17)	53.37	191.2	s1	27Tm	845	20
18)	53.73	177.2	s1	25nor29ab	166	4
19)	53.87	191.2	s1	27b	327	8
20)	54.92	191.2	s1	28ab	1100	27
21)	55.16	177.2	s1	25nor30ab	83	2
22)	55.64	191.2	s1	29ab	2428	59
23)	55.75	191.2	s1	29Ts	1281	31
24)	56.00	191.2	s1	30D	918	22
25)	56.43	191.2	s1	29ba	436	11
26)	57.01	191.2	s2	30ab	6684	104
27)	57.36	191.2	s1	30D13	547	13
28)	57.64	191.2	s2	30ba	823	13
29)	58.60	191.2	s1	31abS	2144	52
30)	58.80	191.2	s1	31abR	1730	42
31)	59.14	191.2	s1	30G	267	6
32)	59.33	191.2	s1	31ba	358	9
33)	59.84	191.2	s1	32abS	1478	36
34)	60.11	191.2	s1	32abR	1156	28
35)	61.27	191.2	s1	33abS	1262	31
36)	61.64	191.2	s1	33abR	891	22
37)	62.80	191.2	s1	34abS	736	18
38)	63.29	191.2	s1	34abR	491	12
39)	64.52	191.2	s1	35abS	438	11
40)	65.22	191.2	s1	35abR	282	7

#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng/mg	

Steranes:

41)	38.35	217.2	s3	21aa	457	16
42)	40.00	217.2	s3	21bb	613	21
43)	40.13	217.2	s3	22aa	449	16
44)	42.36	217.2	s3	22bb	372	13
45)	48.69	217.2	s3	27dbS	1278	45
46)	49.33	217.2	s3	27dbR	764	27
47)	51.68	218.2	s3	27bbR	1633	57
48)	51.82	218.2	s3	27bbS	1190	42
49)	52.22	217.2	s3	27aaR	607	21
50)	53.43	218.2	s3	28bbR	1096	38
51)	53.56	218.2	s3	28bbS	1395	49
52)	54.54	217.2	s3	29aaS	715	25
53)	54.85	218.2	s3	29bbR	1859	65
54)	54.95	218.2	s3	29bbS	1656	58
55)	55.55	217.2	s3	29aaR	1115	39
56)	56.03	218.2	s3	30bbR	523	18
57)	56.08	218.2	s3	30bbS	455	16

Saturated biomarkers

GC/MS detection HP-6890/5973

Ratios, from heights and amounts



Norsk Hydro E&P Research Centre, Bergen, Norway
 Petroleum Geochemistry Laboratories

Data file name: S2332_00.D
 Sample name: 35/9-2 DST #1 2332.00m sat
 Data File Path: C:\HPCHEM\1\DATA\SA315H3D\
 Misc. info.:

Vial no.: 16
 Method: MSD_S_D
 Operator:
 Date: Fri Nov 14 14:49:22 1997

Terpane ratios, heights and amounts

	Height	Amount
$100 \cdot ((\text{sum}20-25)/3+26/3(\text{R+S})) / ((\text{sum}20-25)/3+26/3(\text{R+S})+27(\text{Ts+Tm})+28\text{ab}+\text{sum}29-30(\text{ab+ba})+\text{sum}31-35\text{ab}(\text{R+S}))$	%Tri	5 6
$100 \cdot 20/3 / ((\text{sum}20-25)/3+26/3(\text{R+S}))$	%20/3	15 15
$100 \cdot 23/3 / (23/3+24/3+25/3)$	%23/3	52 52
$100 \cdot 24/4 / (24/4+24/3+25/3)$	%24/4	50 50
$100 \cdot \text{Ts} / (\text{Ts}+\text{Tm})$	%27Ts	58 58
$100 \cdot 28\text{ab} / (28\text{ab}+30\text{ab})$	%28ab	14 20
$100 \cdot 29\text{Ts} / (29\text{Ts}+29\text{ab})$	%29Ts	35 35
$100 \cdot 25\text{nor}30\text{ab} / (25\text{nor}30\text{ab}+30\text{ab})$	%25nor30ab	1 2
$100 \cdot 29\text{ab} / (29\text{ab}+30\text{ab})$	%29ab	27 36
$100 \cdot 30\text{ba} / (30\text{ba}+30\text{ab})$	%30ba	11 11
$100 \cdot 30\text{D} / (30\text{D}+30\text{ab})$	%30D	12 18
$100 \cdot 30\text{G} / (30\text{G}+30\text{ab})$	%30G	4 6
$100 \cdot 32\text{abS} / (32\text{ab}(\text{S+R}))$	%32abS	56 56
$100 \cdot 35\text{ab}(\text{S+R}) / (34-35\text{ab}(\text{S+R}))$	%35ab	37 37
$100 \cdot (27\text{Ts}+27\text{Tm}) / (27\text{Ts}+27\text{Tn}+28\text{ab}+\text{sum}29-30(\text{ab+ba})+\text{sum}31-35\text{ab}(\text{R+S}))$	%27HOP	8 9
$100 \cdot (28\text{ab}) / (27\text{Ts}+27\text{Tn}+28\text{ab}+\text{sum}29-30(\text{ab+ba})+\text{sum}31-35\text{ab}(\text{R+S}))$	%28HOP	5 5
$100 \cdot (29\text{ab+ba}) / (27\text{Ts}+27\text{Tn}+28\text{ab}+\text{sum}29-30(\text{ab+ba})+\text{sum}31-35\text{ab}(\text{R+S}))$	%29HOP	12 13
$100 \cdot (30\text{ab+ba}) / (27\text{Ts}+27\text{Tn}+28\text{ab}+\text{sum}29-30(\text{ab+ba})+\text{sum}31-35\text{ab}(\text{R+S}))$	%30HOP	31 23
$100 \cdot 31\text{ab}(\text{S+R}) / (27\text{Ts}+27\text{Tn}+28\text{ab}+\text{sum}29-30(\text{ab+ba})+\text{sum}31-35\text{ab}(\text{R+S}))$	%31HOP	16 18
$100 \cdot 32\text{ab}(\text{S+R}) / (27\text{Ts}+27\text{Tn}+28\text{ab}+\text{sum}29-30(\text{ab+ba})+\text{sum}31-35\text{ab}(\text{R+S}))$	%32HOP	11 12
$100 \cdot 33\text{ab}(\text{S+R}) / (27\text{Ts}+27\text{Tn}+28\text{ab}+\text{sum}29-30(\text{ab+ba})+\text{sum}31-35\text{ab}(\text{R+S}))$	%33HOP	9 10
$100 \cdot 34\text{ab}(\text{S+R}) / (27\text{Ts}+27\text{Tn}+28\text{ab}+\text{sum}29-30(\text{ab+ba})+\text{sum}31-35\text{ab}(\text{R+S}))$	%34HOP	5 6
$100 \cdot 35\text{ab}(\text{S+R}) / (27\text{Ts}+27\text{Tn}+28\text{ab}+\text{sum}29-30(\text{ab+ba})+\text{sum}31-35\text{ab}(\text{R+S}))$	%35HOP	3 3

Sterane ratios

$100 \cdot (21+22)\text{bb} / ((21+22)\text{bb}+(27+28+29+30)\text{bb}(\text{R+S}))$	%Preg	9 9
$100 \cdot 29\text{aaS} / 29\text{aa}(\text{R+S})$	%29aaS	39 39
$100 \cdot 29\text{bb}(\text{R+S}) / (29\text{bb}(\text{R+S})+29\text{aa}(\text{S+R}))$	%29bb	66 66
$100 \cdot 27\text{db}(\text{S+R}) / ((27\text{db}(\text{S+R})+27\text{bb}(\text{R+S}))$	%27dia	42 42
$100 \cdot 27\text{bb}(\text{R+S}) / (27+28+29+30)\text{bb}(\text{R+S})$	%27STER	29 29
$100 \cdot 28\text{bb}(\text{R+S}) / (27+28+29+30)\text{bb}(\text{R+S})$	%28STER	25 25
$100 \cdot 29\text{bb}(\text{R+S}) / (27+28+29+30)\text{bb}(\text{R+S})$	%29STER	36 36
$100 \cdot 30\text{bb}(\text{R+S}) / (27+28+29+30)\text{bb}(\text{R+S})$	%30STER	10 10

Saturated biomarkers

GC/MS detection HP-6890/5973

Compound data



Norsk Hydro E&P Research Centre, Bergen, Norway
Petroleum Geochemistry Laboratories

Data file name: NSO1S_11.D
Sample name: nso1 ref. sat
Data File Path: C:\HPCHEM1\DATA\ISA315H3D\
Misc. info.:

Vial no.: 2
Method: MSD_S_D
Operator:
Date: Fri Nov 14 05:57:11 1997

Response curve y = ax
Response factor groups: s1...s3, responses as defined in method

#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng/mg	

Internal standard (if added):

1)	46.18	217.2		24baa	1302	29
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Diterpanes:

2)	33.83	191.2	s1	19/3	563	9
3)	35.81	191.2	s1	20/3	381	6
4)	37.86	191.2	s1	21/3	557	9
5)	41.83	191.2	s1	23/3	1159	19
6)	42.95	191.2	s1	24/3	736	12
7)	45.23	191.2	s1	25/3	410	7
8)	46.76	191.2	s1	24/4	734	12
9)	46.88	191.2	s1	26/3R	252	4
10)	47.00	191.2	s1	26/3S	296	5
11)	50.53	191.2	s1	28/3R	332	6
12)	50.77	191.2	s1	28/3S	338	6
13)	51.57	191.2	s1	29/3R	448	8
14)	51.86	191.2	s1	29/3S	422	7

Triterpanes:

15)	52.72	191.2	s1	27Ts	2200	37
16)	52.96	177.2	s1	25nor28ab	1999	34
17)	53.39	191.2	s1	27Tm	2120	36
18)	53.76	177.2	s1	25nor29ab	1039	17
19)	53.89	191.2	s1	27b	728	12
20)	54.95	191.2	s1	28ab	2937	49
21)	55.17	177.2	s1	25nor30ab	961	16
22)	55.67	191.2	s1	29ab	5570	94
23)	55.77	191.2	s1	29Ts	2333	39
24)	56.01	191.2	s1	30D	1347	23
25)	56.45	191.2	s1	29ba	1161	19
26)	57.04	191.2	s2	30ab	14267	154
27)	57.38	191.2	s1	30D13	887	15
28)	57.66	191.2	s2	30ba	1466	16
29)	58.62	191.2	s1	31abS	5363	90
30)	58.82	191.2	s1	31abR	3729	63
31)	59.15	191.2	s1	30G	645	11
32)	59.35	191.2	s1	31ba	646	11
33)	59.86	191.2	s1	32abS	3864	65
34)	60.13	191.2	s1	32abR	2729	46
35)	61.29	191.2	s1	33abS	3087	52
36)	61.66	191.2	s1	33abR	2201	37
37)	62.82	191.2	s1	34abS	1891	32
38)	63.30	191.2	s1	34abR	1231	21
39)	64.54	191.2	s1	35abS	1485	25
40)	65.24	191.2	s1	35abR	964	16

#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng/mg	

Steranes:

41)	38.36	217.2	s3	21aa	1197	29
42)	40.02	217.2	s3	21bb	1555	38
43)	40.14	217.2	s3	22aa	1015	25
44)	42.16	217.2	s3	22bb	339	9
45)	48.71	217.2	s3	27dbS	2920	71
46)	49.35	217.2	s3	27dbR	1705	41
47)	51.69	218.2	s3	27bbR	2457	60
48)	51.84	218.2	s3	27bbS	1585	38
49)	52.25	217.2	s3	27aaR	811	20
50)	53.44	218.2	s3	28bbR	1314	32
51)	53.58	218.2	s3	28bbS	1829	44
52)	54.56	217.2	s3	29aaS	972	24
53)	54.87	218.2	s3	29bbR	2065	50
54)	54.97	218.2	s3	29bbS	1810	44
55)	55.58	217.2	s3	29aaR	962	23
56)	56.05	218.2	s3	30bbR	845	20
57)	56.08	218.2	s3	30bbS	640	16

Saturated biomarkers

GC/MS detection HP-6890/5973

Ratios, from heights and amounts



Norsk Hydro E&P Research Centre, Bergen, Norway
Petroleum Geochemistry Laboratories

Data file name: NSO1S_11.D
Sample name: nso1 ref. sat
Data File Path: C:\HPCHEM\1\DATA\ISA315H3D\
Misc. info.:

Vial no.: 2
Method: MSD_S_D
Operator:
Date: Fri Nov 14 05:57:11 1997

Terpane ratios, heights and amounts

	Height	Amount
$100 \cdot ((\text{sum}20-25)/3+26/3(R+S)) / ((\text{sum}20-25)/3+26/3(R+S)+27(Ts+Tm)+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%Tri	6 7
$100 \cdot 20/3 / ((\text{sum}20-25)/3+26/3(R+S))$	%20/3	10 10
$100 \cdot 23/3 / (23/3+24/3+25/3)$	%23/3	50 50
$100 \cdot 24/4 / (24/4+24/3+25/3)$	%24/4	39 39
$100 \cdot Ts / (Ts+Tm)$	%27Ts	51 51
$100 \cdot 28ab / (28ab+30ab)$	%28ab	17 24
$100 \cdot 29Ts / (29Ts+29ab)$	%29Ts	30 30
$100 \cdot 25nor30ab / (25nor30ab+30ab)$	%25nor30ab	6 9
$100 \cdot 29ab / (29ab+30ab)$	%29ab	28 38
$100 \cdot 30ba / (30ba+30ab)$	%30ba	9 9
$100 \cdot 30D / (30D+30ab)$	%30D	9 13
$100 \cdot 30G / (30G+30ab)$	%30G	4 7
$100 \cdot 32abS / (32ab(S+R))$	%32abS	59 59
$100 \cdot 35ab(S+R) / (34-35ab(S+R))$	%35ab	44 44
$100 \cdot (27Ts+27Tm) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%27HOP	8 9
$100 \cdot (28ab) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%28HOP	5 6
$100 \cdot (29ab+ba) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%29HOP	12 13
$100 \cdot (30ab+ba) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%30HOP	28 20
$100 \cdot 31ab(S+R) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%31HOP	16 18
$100 \cdot 32ab(S+R) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%32HOP	12 13
$100 \cdot 33ab(S+R) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%33HOP	9 10
$100 \cdot 34ab(S+R) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%34HOP	6 6
$100 \cdot 35ab(S+R) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%35HOP	4 5

Sterane ratios

$100 \cdot (21+22)bb / ((21+22)bb+(27+28+29+30)bb(R+S))$	%Preg	13 13
$100 \cdot 29aaS / 29aa(R+S)$	%29aaS	50 50
$100 \cdot 29bb(R+S) / (29bb(R+S)+29aa(S+R))$	%29bb	67 67
$100 \cdot 27db(S+R) / ((27db(S+R)+27bb(R+S))$	%27dia	53 53
$100 \cdot 27bb(R+S) / (27+28+29+30)bb(R+S)$	%27STER	32 32
$100 \cdot 28bb(R+S) / (27+28+29+30)bb(R+S)$	%28STER	25 25
$100 \cdot 29bb(R+S) / (27+28+29+30)bb(R+S)$	%29STER	31 31
$100 \cdot 30bb(R+S) / (27+28+29+30)bb(R+S)$	%30STER	12 12

Saturated biomarkers

GC/MS detection HP-6890/5973

Compound data



Norsk Hydro E&P Research Centre, Bergen, Norway
Petroleum Geochemistry Laboratories

Data file name: **NSO1S_18.D**
Sample name: **nso1 ref. sat**
Data File Path: C:\HPCHEM\1\DATA\SA315H3D\
Misc. info.:

Vial no.: 2
Method: MSD_S_D
Operator:
Date: Fri Nov 14 16:18:07 1997

Response curve $y = ax$
Response factor groups: s1...s3, responses as defined in method

#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng/mg	

Internal standard (if added):

1)	46.20	217.2		24baa	2557	29
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Diterpanes:

2)	33.85	191.2	s1	19/3	937	8
3)	35.83	191.2	s1	20/3	680	6
4)	37.88	191.2	s1	21/3	1015	9
5)	41.85	191.2	s1	23/3	2060	18
6)	42.96	191.2	s1	24/3	1292	11
7)	45.25	191.2	s1	25/3	730	6
8)	46.78	191.2	s1	24/4	1315	11
9)	46.89	191.2	s1	26/3R	484	4
10)	47.02	191.2	s1	26/3S	520	4
11)	50.55	191.2	s1	28/3R	653	6
12)	50.60	191.2	s1	28/3S	325	3
13)	51.59	191.2	s1	29/3R	857	7
14)	51.59	191.2	s1	29/3S	713	6

Triterpanes:

15)	52.73	191.2	s1	27Ts	4282	37
16)	52.98	177.2	s1	25nor28ab	3591	31
17)	53.42	191.2	s1	27Tm	3688	32
18)	53.78	177.2	s1	25nor29ab	2020	17
19)	53.90	191.2	s1	27b	1218	10
20)	54.97	191.2	s1	28ab	5508	47
21)	55.19	177.2	s1	25nor30ab	1677	14
22)	55.68	191.2	s1	29ab	11177	96
23)	55.79	191.2	s1	29Ts	4918	42
24)	56.03	191.2	s1	30D	2483	21
25)	56.47	191.2	s1	29ba	2527	22
26)	57.06	191.2	s2	30ab	27212	150
27)	57.39	191.2	s1	30D13	1634	14
28)	57.54	191.2	s2	30ba	1342	7
29)	58.64	191.2	s1	31abS	9851	84
30)	58.83	191.2	s1	31abR	7038	60
31)	59.16	191.2	s1	30G	1587	14
32)	59.36	191.2	s1	31ba	1557	13
33)	59.86	191.2	s1	32abS	6503	56
34)	60.14	191.2	s1	32abR	4947	42
35)	61.30	191.2	s1	33abS	5907	50
36)	61.66	191.2	s1	33abR	4019	34
37)	62.82	191.2	s1	34abS	3448	29
38)	63.32	191.2	s1	34abR	2270	19
39)	64.56	191.2	s1	35abS	2860	24
40)	65.26	191.2	s1	35abR	1809	15

#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng/mg	

Steranes:

41)	38.37	217.2	s3	21aa	2320	29
42)	40.04	217.2	s3	21bb	2804	35
43)	40.16	217.2	s3	22aa	1822	22
44)	42.40	217.2	s3	22bb	1856	23
45)	48.72	217.2	s3	27dbS	5468	67
46)	49.36	217.2	s3	27dbR	3372	42
47)	51.71	218.2	s3	27bbR	4646	57
48)	51.86	218.2	s3	27bbS	2768	34
49)	52.26	217.2	s3	27aaR	2078	26
50)	53.46	218.2	s3	28bbR	2316	29
51)	53.60	218.2	s3	28bbS	3535	44
52)	54.58	217.2	s3	29aaS	2211	27
53)	54.89	218.2	s3	29bbR	3524	43
54)	54.99	218.2	s3	29bbS	3546	44
55)	55.59	217.2	s3	29aaR	2189	27
56)	56.06	218.2	s3	30bbR	1532	19
57)	56.12	218.2	s3	30bbS	1362	17

Saturated biomarkers

GC/MS detection HP-6890/5973

Ratios, from heights and amounts



Norsk Hydro E&P Research Centre, Bergen, Norway
 Petroleum Geochemistry Laboratories

Data file name: NSO1S_18.D
 Sample name: nso1 ref. sat
 Data File Path: C:\HPCHEM\1\DATA\ISA315H3D\
 Misc. info.:

Vial no.: 2
 Method: MSD_S_D
 Operator:
 Date: Fri Nov 14 16:18:07 1997

Terpane ratios, heights and amounts

	Height	Amount
$100 \cdot ((\text{sum}20-25)/3+26/3(R+S)) / ((\text{sum}20-25)/3+26/3(R+S)+27(Ts+Tm)+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%Tri	6 7
$100 \cdot 20/3 / ((\text{sum}20-25)/3+26/3(R+S))$	%20/3	10 10
$100 \cdot 23/3 / ((23/3+24/3+25/3))$	%23/3	50 50
$100 \cdot 24/4 / ((24/4+24/3+25/3))$	%24/4	39 39
$100 \cdot Ts / (Ts+Tm)$	%27Ts	54 54
$100 \cdot 28ab / (28ab+30ab)$	%28ab	17 24
$100 \cdot 29Ts / (29Ts+29ab)$	%29Ts	31 31
$100 \cdot 25nor30ab / (25nor30ab+30ab)$	%25nor30ab	6 9
$100 \cdot 29ab / (29ab+30ab)$	%29ab	29 39
$100 \cdot 30ba / (30ba+30ab)$	%30ba	5 5
$100 \cdot 30D / (30D+30ab)$	%30D	8 12
$100 \cdot 30G / (30G+30ab)$	%30G	6 8
$100 \cdot 32abS / (32ab(S+R))$	%32abS	57 57
$100 \cdot 35ab(S+R) / (34-35ab(S+R))$	%35ab	45 45
$100 \cdot (27Ts+27Tm) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%27HOP	8 8
$100 \cdot (28ab) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%28HOP	5 6
$100 \cdot (29ab+ba) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%29HOP	13 15
$100 \cdot (30ab+ba) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%30HOP	27 19
$100 \cdot 31ab(S+R) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%31HOP	16 18
$100 \cdot 32ab(S+R) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%32HOP	11 12
$100 \cdot 33ab(S+R) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%33HOP	10 11
$100 \cdot 34ab(S+R) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%34HOP	5 6
$100 \cdot 35ab(S+R) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%35HOP	4 5

Sterane ratios

$100 \cdot (21+22)bb / ((21+22)bb+(27+28+29+30)bb(R+S))$	%Preg	17 17
$100 \cdot 29aaS / 29aa(R+S)$	%29aaS	50 50
$100 \cdot 29bb(R+S) / (29bb(R+S)+29aa(S+R))$	%29bb	62 62
$100 \cdot 27db(S+R) / ((27db(S+R)+27bb(R+S))$	%27dia	54 54
$100 \cdot 27bb(R+S) / (27+28+29+30)bb(R+S)$	%27STER	32 32
$100 \cdot 28bb(R+S) / (27+28+29+30)bb(R+S)$	%28STER	25 25
$100 \cdot 29bb(R+S) / (27+28+29+30)bb(R+S)$	%29STER	30 30
$100 \cdot 30bb(R+S) / (27+28+29+30)bb(R+S)$	%30STER	12 12

Saturated biomarkers

GC/MS detection HP-6890/5973

Compound data



Norsk Hydro E&P Research Centre, Bergen, Norway
Petroleum Geochemistry Laboratories

Data file name: **NSO1_10S.D**
Sample name: **nso1 ref.sample sat**
Data File Path: K:\CAM\GEOKJEM\HPCHEM\W95\DATA\SA351110\
Misc. info.:

Vial no.: 1
Method: MSD_S_D
Operator:
Date: Thu Oct 30 09:07:36 1997

Response curve $y = ax$
Response factor groups: s1...s3, responses as defined in method

#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng/mg	

Internal standard (if added):

1)	46.11	217.2		24baa	1597	29
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Diterpanes:

2)	33.77	191.2	s1	19/3	634	9
3)	35.74	191.2	s1	20/3	426	6
4)	37.78	191.2	s1	21/3	668	9
5)	41.77	191.2	s1	23/3	1296	18
6)	42.88	191.2	s1	24/3	853	12
7)	45.21	191.2	s1	25/3	491	7
8)	46.69	191.2	s1	24/4	866	12
9)	46.80	191.2	s1	26/3R	341	5
10)	46.92	191.2	s1	26/3S	321	4
11)	50.45	191.2	s1	28/3R	373	5
12)	50.71	191.2	s1	28/3S	380	5
13)	51.49	191.2	s1	29/3R	542	7
14)	51.79	191.2	s1	29/3S	494	7

Triterpanes:

15)	52.65	191.2	s1	27Ts	2669	37
16)	52.88	177.2	s1	25nor28ab	2140	29
17)	53.32	191.2	s1	27Tm	2382	33
18)	53.69	177.2	s1	25nor29ab	1183	16
19)	53.77	191.2	s1	27b	406	6
20)	54.88	191.2	s1	28ab	3673	50
21)	55.10	177.2	s1	25nor30ab	1151	16
22)	55.58	191.2	s1	29ab	6676	91
23)	55.69	191.2	s1	29Ts	2729	37
24)	55.93	191.2	s1	30D	1484	20
25)	56.38	191.2	s1	29ba	1418	19
26)	56.96	191.2	s2	30ab	16679	147
27)	57.30	191.2	s1	30D13	1057	14
28)	57.58	191.2	s2	30ba	1614	14
29)	58.54	191.2	s1	31abS	6554	90
30)	58.74	191.2	s1	31abR	4373	60
31)	59.08	191.2	s1	30G	725	10
32)	59.27	191.2	s1	31ba	750	10
33)	59.77	191.2	s1	32abS	4534	62
34)	60.05	191.2	s1	32abR	3161	43
35)	61.21	191.2	s1	33abS	3645	50
36)	61.58	191.2	s1	33abR	2389	33
37)	62.72	191.2	s1	34abS	2253	31
38)	63.22	191.2	s1	34abR	1421	19
39)	64.44	191.2	s1	35abS	1784	24
40)	65.13	191.2	s1	35abR	1173	16

#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng/mg	

Steranes:

41)	38.29	217.2	s3	21aa	1508	30
42)	39.95	217.2	s3	21bb	1823	36
43)	40.07	217.2	s3	22aa	1168	23
44)	42.30	217.2	s3	22bb	1115	22
45)	48.63	217.2	s3	27dbS	3358	66
46)	49.28	217.2	s3	27dbR	1890	37
47)	51.62	218.2	s3	27bbR	2958	58
48)	51.76	218.2	s3	27bbS	1869	37
49)	52.17	217.2	s3	27aaR	1002	20
50)	53.37	218.2	s3	28bbR	1557	31
51)	53.50	218.2	s3	28bbS	2170	43
52)	54.50	217.2	s3	29aaS	1109	22
53)	54.79	218.2	s3	29bbR	2434	48
54)	54.90	218.2	s3	29bbS	2311	46
55)	55.50	217.2	s3	29aaR	1201	24
56)	55.96	218.2	s3	30bbR	914	18
57)	56.02	218.2	s3	30bbS	743	15

Saturated biomarkers

GC/MS detection HP-6890/5973

Ratios, from heights and amounts



Norsk Hydro E&P Research Centre, Bergen, Norway
 Petroleum Geochemistry Laboratories

Data file name: **NSO1_10S.D**
 Sample name: **nso1 ref.sample sat**
 Data File Path: **K:\CAM\GEOKJEM\HPCHEM\W95\DATA\SA351110**
 Misc. info.:

Vial no.: **1**
 Method: **MSD_S_D**
 Operator:
 Date: **Thu Oct 30 09:07:36 1997**

Terpane ratios, heights and amounts

	Height	Amount
$100 \cdot ((\text{sum}20-25)/3+26/3(R+S)) /$ $((\text{sum}20-25)/3+26/3(R+S)+27(Ts+Tm)+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%Tri	6 7
$100 \cdot 20/3 / ((\text{sum}20-25)/3+26/3(R+S))$	%20/3	10 10
$100 \cdot 23/3 / (23/3+24/3+25/3)$	%23/3	49 49
$100 \cdot 24/4 / (24/4+24/3+25/3)$	%24/4	39 39
$100 \cdot Ts / (Ts+Tm)$	%27Ts	53 53
$100 \cdot 28ab / (28ab+30ab)$	%28ab	18 26
$100 \cdot 29Ts / (29Ts+29ab)$	%29Ts	29 29
$100 \cdot 25nor30ab / (25nor30ab+30ab)$	%25nor30ab	6 10
$100 \cdot 29ab / (29ab+30ab)$	%29ab	29 38
$100 \cdot 30ba / (30ba+30ab)$	%30ba	9 9
$100 \cdot 30D / (30D+30ab)$	%30D	8 12
$100 \cdot 30G / (30G+30ab)$	%30G	4 6
$100 \cdot 32abS / (32ab(S+R))$	%32abS	59 59
$100 \cdot 35ab(S+R) / (34-35ab(S+R))$	%35ab	45 45
$100 \cdot (27Ts+27Tm) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%27HOP	8 8
$100 \cdot (28ab) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%28HOP	6 6
$100 \cdot (29ab+ba) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%29HOP	12 14
$100 \cdot (30ab+ba) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%30HOP	28 20
$100 \cdot 31ab(S+R) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%31HOP	16 18
$100 \cdot 32ab(S+R) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%32HOP	12 13
$100 \cdot 33ab(S+R) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%33HOP	9 10
$100 \cdot 34ab(S+R) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%34HOP	6 6
$100 \cdot 35ab(S+R) / (27Ts+27Tn+28ab+\text{sum}29-30(ab+ba)+\text{sum}31-35ab(R+S))$	%35HOP	4 5

Sterane ratios

$100 \cdot (21+22)bb / ((21+22)bb+(27+28+29+30)bb(R+S))$	%Preg	16 16
$100 \cdot 29aaS / 29aa(R+S)$	%29aaS	48 48
$100 \cdot 29bb(R+S) / (29bb(R+S)+29aa(S+R))$	%29bb	67 67
$100 \cdot 27db(S+R) / ((27db(S+R)+27bb(R+S))$	%27dia	52 52
$100 \cdot 27bb(R+S) / (27+28+29+30)bb(R+S)$	%27STER	32 32
$100 \cdot 28bb(R+S) / (27+28+29+30)bb(R+S)$	%28STER	25 25
$100 \cdot 29bb(R+S) / (27+28+29+30)bb(R+S)$	%29STER	32 32
$100 \cdot 30bb(R+S) / (27+28+29+30)bb(R+S)$	%30STER	11 11

#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng/mg	
Internal standard (if added):						
14)	11.60	136		d8N	7771	49
16)	21.04	164		d10BP	8660	47
59)	29.42	188		d10P	19930	49
79)	44.93	240		d12C	12786	49
Aryl isoprenoids:						
1)	20.53	133	0	C13AI	100	
2)	22.42	133	0	C14AI	504	
3)	26.65	133	0	C15AI	244	
4)	28.92	133	0	C16AI	953	
5)	31.00	133	0	C17AI	275	
6)	34.01	133	0	C18AI	177	
7)	34.98	133	0	C19AI	339	
8)	38.02	133	0	C20AI	314	
9)	39.95	133	0	C21AI	221	
10)	42.98	133	0	C22AI	146	
11)	45.00	133	0	C23AI	76	
12)	55.96	133	0	C30AI	113	
13)	57.00	133	0	C31AI	121	
Naphthalenes:						
15)	11.68	128	a1	N	715	4
17)	15.25	142	a2	2-MN	887	5
18)	15.79	142	a2	1-MN	608	3
19)	18.43	156	a3	2-EN	99	0
20)	18.54	156	a3	1-EN	74	0
21)	18.77	156	a3	2.6+2.7-DMN	330	2
22)	19.23	156	a3	1.3+1.7-DMN	462	2
23)	19.33	156	a3	1.6-DMN	368	2
24)	19.83	156	a3	2.3+1.4-DMN	271	1
25)	19.93	156	a3	1.5-DMN	150	1
26)	20.37	156	a3	1.2-DMN	199	1
27)	22.18	170	a4	C3-N-1	38	0
28)	22.38	170	a4	C3-N-2	116	1
29)	22.47	170	a4	1.3.7-TMN	487	2
30)	22.61	170	a4	1.3.6-TMN	258	1
31)	23.08	170	a4	1.3.5+1.4.6-TMN	238	1
32)	23.25	170	a4	2.3.6-TMN	598	3
33)	23.64	170	a4	1.6.7+1.2.7-TMN	357	2
34)	23.80	170	a4	1.2.6-TMN	366	2
35)	24.05	170	a4	1.2.4-TMN	267	1
36)	24.27	170	a4	1.2.5-TMN	328	2
Biphenyls:						
37)	17.97	154	a5	BP	270	1
38)	21.26	168	a5	3-MBP	277	1
39)	21.48	168	a5	4-MBP	132	0
40)	21.48	182	a4	2.3'-DMBP	304	1
41)	21.76	182	a4	2.5'-DMBP	14	0
42)	21.89	182	a4	2.4·2.4'-DMBP	84	0
43)	22.55	182	a4	2.3'-DMBP	44	0
44)	23.96	182	a4	3-EBP	30	0
45)	24.29	182	a4	3.5'-DMBP	46	0
46)	24.39	182	a4	3.3'-DMBP	261	1
47)	24.50	182	a4	4-EBP	18	0
48)	24.69	182	a4	3.4'-DMBP	102	1
49)	24.90	182	a4	4.4'-DMBP	337	2
50)	25.50	182	a4	3.4'-DMBP	75	0

Aromatic hydrocarbons

GC/MS detection HP-6890/5973

Compound data



Norsk Hydro E&P Research Centre, Bergen, Norway
Petroleum Geochemistry Laboratories

Data file name: A935.D
Sample name: 36/7-2 935m aro
Data File Path: C:\HPCHEM\1\DATA\SA315H3D\
Misc. info.:

Vial no.: 22
Method: MSD_A_D
Operator:
Date: Sat Nov 15 02:38:54 1997

Response curve: y = ax+b
Response factor groups: a1...a11, responses as defined in method

#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng/mg	
Dibenzofuranes:						
51)	22.14	168	a5	DBF	75	0
52)	25.23	182	a4	MDBF-1	87	0
53)	25.58	182	a4	MDBF-2	118	1
54)	25.88	182	a4	MDBF-3	276	1
Fluorenes:						
55)	24.13	166	a6	F	235	1
56)	27.36	180	a6	C1-F-1	186	1
57)	27.59	180	a6	C1-F-2	144	1
58)	27.87	180	a6	1-MF	458	2
Dibenzothiophenes:						
60)	28.77	184	a7	DBT	463	0
61)	31.27	198	a7	4-MDBT	96	0
62)	31.93	198	a7	3+2-MDBT	267	0
63)	32.57	198	a7	1-MDBT	119	0
Phenanthrenes:						
64)	29.56	178	a8	P	954	2
65)	32.50	192	a9	3-MP	361	1
66)	32.63	192	a9	2-MP	548	1
67)	33.11	192	a9	9-MP	2643	6
68)	33.22	192	a9	1-MP	494	1
69)	35.21	206	a10	2EP+9EP+3.6-DMP	1996	5
70)	35.38	206	a10	1EP	553	1
71)	35.55	206	a10	2.6+2.7+3.5-DMP	286	1
72)	35.89	206	a10	1.3+2.10+3.9+3.10-DMP	5499	13
73)	36.03	206	a10	1.6+2.5+2.9-DMP	1224	3
74)	36.17	206	a10	1.7-DMP	205	0
75)	36.44	206	a10	2.3-DMP	1680	4
76)	36.54	206	a10	1.9+4.9+4.10-DMP	829	2
77)	36.69	206	a10	1.8-DMP	211	0
Retene:						
78)	40.08	219	a8	Retene	395	1
Triaromatic steroids:						
80)	44.50	231	a11	20TA	432	0
81)	46.41	231	a11	21TA	3087	3
82)	53.37	231	a11	S26TA	3737	3
83)	54.57	231	a11	R26TA/S27TA	11604	10
84)	55.56	231	a11	S28TA	7431	6
85)	56.07	231	a11	R27TA	5256	4
86)	57.28	231	a11	R28TA	7413	6

Aromatic hydrocarbons

GC/MS detection HP-6890/5973

Ratios, from heights and amounts



Norsk Hydro E&P Research Centre, Bergen, Norway
Petroleum Geochemistry Laboratories

Data file name: A935.D
Sample name: 3677-2 935m aro
Data File Path: C:\HPCHEM\1\DATA\SA315H3D\
Misc. info.:

Vial no.: 22
Method: MSD_A_D
Operator:
Date: Sat Nov 15 02:38:54 1997

Aromatic HC ratios, heights and amounts

		Height	Amount
Naphthalene	Naphthalene	715	4
C1 Naphthanes	Sum C1 Naphthanes	1495	8
C2 Naphthanes	Sum C2 Naphthanes	1953	9
C3 Naphthanes	Sum C3 Naphthanes	3053	15
Phenanthrene	Phenanthrene	954	2
C1 Phenanthrenes	Sum C1 Phenanthrenes	4046	10
C2 Phenanthrenes	Sum C2 Phenanthrenes	12483	29
$3/2 \cdot (3MP+2MP)/(P+9MP+1MP)$	MPI1	0.3	0.3
$(3MP+2MP)/(3MP+2MP+9MP+1MP)$	F1	0.2	0.2
$2MP/(3MP+2MP+9MP+1MP)$	F2	0.1	0.1
$(2.6+2.7)DMN/1.5DMN$	DNR	2.2	2.2
$100 \cdot 20TA/(20TA+S28TA+R28TA)$	%-TAS'n	2.8	2.8
DBT/P	DBT/P	0.5	0.2
F/P	F/P	0.2	0.5
BP/1.6DMN	BP/1.6DMN	0.7	0.5
2MN/1MN	2MN/1MN	1.5	1.5
2EN/1EN	2EN/1EN	1.3	1.3
4MDBT/1MDBT	4MDBT/1MDBT	0.8	0.8

#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng/mg	
Internal standard (if added):						
14)	11.59	136		d8N	25384	45
16)	21.05	164		d10BP	28234	43
59)	29.44	188		d10P	66618	45
79)	44.99	240		d12C	41612	45
Aryl isoprenoids:						
1)	20.55	133	0	C13AI	204	
2)	22.43	133	0	C14AI	1050	
3)	26.68	133	0	C15AI	811	
4)	28.92	133	0	C16AI	1679	
5)	31.01	133	0	C17AI	542	
6)	33.99	133	0	C18AI	427	
7)	35.00	133	0	C19AI	767	
8)	38.07	133	0	C20AI	496	
9)	39.99	133	0	C21AI	546	
10)	43.02	133	0	C22AI	245	
11)	44.98	133	0	C23AI	493	
12)	55.97	133	0	C30AI	123	
13)	57.02	133	0	C31AI	251	
Naphthalenes:						
15)	11.68	128	a1	N	3557	6
17)	15.26	142	a2	2-MN	2688	4
18)	15.80	142	a2	1-MN	1957	3
19)	18.42	156	a3	2-EN	279	0
20)	18.54	156	a3	1-EN	202	0
21)	18.77	156	a3	2.6+2.7-DMN	740	1
22)	19.23	156	a3	1.3+1.7-DMN	1206	2
23)	19.33	156	a3	1.6-DMN	932	1
24)	19.82	156	a3	2.3+1.4-DMN	660	1
25)	19.94	156	a3	1.5-DMN	370	1
26)	20.40	156	a3	1.2-DMN	451	1
27)	22.19	170	a4	C3-N-1	98	0
28)	22.38	170	a4	C3-N-2	266	0
29)	22.47	170	a4	1.3.7-TMN	1303	2
30)	22.62	170	a4	1.3.6-TMN	620	1
31)	23.11	170	a4	1.3.5+1.4.6-TMN	561	1
32)	23.26	170	a4	2.3.6-TMN	1400	2
33)	23.65	170	a4	1.6.7+1.2.7-TMN	708	1
34)	23.79	170	a4	1.2.6-TMN	860	1
35)	24.15	170	a4	1.2.4-TMN	1009	1
36)	24.28	170	a4	1.2.5-TMN	673	1
Biphenyls:						
37)	17.98	154	a5	BP	843	1
38)	21.27	168	a5	3-MBP	635	1
39)	21.48	168	a5	4-MBP	303	0
40)	21.48	182	a4	2.3'-DMBP	696	1
41)	21.77	182	a4	2.5'-DMBP	36	0
42)	21.88	182	a4	2.4+2.4'-DMBP	189	0
43)	22.56	182	a4	2.3'-DMBP	120	0
44)	23.97	182	a4	3-EBP	83	0
45)	24.30	182	a4	3.5'-DMBP	97	0
46)	24.40	182	a4	3.3'-DMBP	311	0
47)	24.51	182	a4	4-EBP	47	0
48)	24.70	182	a4	3.4'-DMBP	170	0
49)	24.91	182	a4	4.4'-DMBP	576	1
50)	25.50	182	a4	3.4'-DMBP	111	0

Aromatic hydrocarbons

GC/MS detection HP-6890/5973

Compound data



Norsk Hydro E&P Research Centre, Bergen, Norway
Petroleum Geochemistry Laboratories

Data file name: A950.D
Sample name: 36/7-2 950m aro
Data File Path: C:\HPCHEM\1\DATA\SA315H3D\
Misc. info.:

Vial no.: 23
Method: MSD_A_D
Operator:
Date: Sat Nov 15 04:07:33 1997

Response curve: $y = ax + b$
Response factor groups: a1...a11, responses as defined in method

#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng/mg	
Dibenzofuranes:						
51)	22.15	168	a5	DBF	243	0
52)	25.24	182	a4	MDBF-1	178	0
53)	25.61	182	a4	MDBF-2	194	0
54)	25.89	182	a4	MDBF-3	369	1
Fluorenes:						
55)	24.16	166	a6	F	586	1
56)	27.38	180	a6	C1-F-1	238	0
57)	27.60	180	a6	C1-F-2	128	0
58)	27.88	180	a6	1-MF	465	1
Dibenzothiophenes:						
60)	28.89	184	a7	DBT	503	0
61)	31.30	198	a7	4-MDBT	203	0
62)	31.95	198	a7	3+2-MDBT	356	0
63)	32.57	198	a7	1-MDBT	273	0
Phenanthrenes:						
64)	29.57	178	a8	P	2612	1
65)	32.51	192	a9	3-MP	795	1
66)	32.65	192	a9	2-MP	1227	1
67)	33.15	192	a9	9-MP	7047	5
68)	33.24	192	a9	1-MP	1323	1
69)	35.24	206	a10	2EP+9EP+3.6-DMP	4316	3
70)	35.41	206	a10	1EP	1320	1
71)	35.58	206	a10	2.6+2.7+3.5-DMP	657	0
72)	35.92	206	a10	1.3+2.10+3.9+3.10-DMP	15235	10
73)	36.06	206	a10	1.6+2.5+2.9-DMP	3714	2
74)	36.21	206	a10	1.7-DMP	521	0
75)	36.33	206	a10	2.3-DMP	528	0
76)	36.46	206	a10	1.9+4.9+4.10-DMP	4749	3
77)	36.75	206	a10	1.8-DMP	53	0
Retene:						
78)	39.98	219	a8	Retene	747	0
Triaromatic steroids:						
80)	44.75	231	a11	20TA	1926	0
81)	46.45	231	a11	21TA	4076	1
82)	53.41	231	a11	S26TA	4993	1
83)	54.60	231	a11	R26TA/S27TA	14514	3
84)	55.59	231	a11	S28TA	9685	2
85)	56.10	231	a11	R27TA	7277	2
86)	57.31	231	a11	R28TA	10100	2

Aromatic hydrocarbons

GC/MS detection HP-6890/5973

Ratios, from heights and amounts

Norsk Hydro E&P Research Centre, Bergen, Norway
 Petroleum Geochemistry Laboratories

Data file name: **A950.D**
 Sample name: **36/7-2 950m aro**
 Data File Path: **C:\HPCHEM\1\DATA\ISA315H3D**
 Misc. info.:

Vial no.: **23**
 Method: **MSD_A_D**
 Operator:
 Date: **Sat Nov 15 04:07:33 1997**

Aromatic HC ratios, heights and amounts

		Height	Amount
Naphthalene	Naphthalene	3557	6
C1 Naphthanes	Sum C1 Naphthanes	4645	7
C2 Naphthanes	Sum C2 Naphthanes	4840	7
C3 Naphthanes	Sum C3 Naphthanes	7498	10
Phenanthrene	Phenanthrene	2612	1
C1 Phenanthrenes	Sum C1 Phenanthrenes	10392	7
C2 Phenanthrenes	Sum C2 Phenanthrenes	31093	20
3/2*(3MP+2MP)/(P+9MP+1MP)	MPI1	0.3	0.3
(3MP+2MP)/(3MP+2MP+9MP+1MP)	F1	0.2	0.2
2MP/(3MP+2MP+9MP+1MP)	F2	0.1	0.1
(2.6+2.7)DMN/1.5DMN	DNR	2.0	2.0
100*20TA/(20TA+S28TA+R28TA)	%-TAS'n	8.9	8.9
DBT/P	DBT/P	0.2	0.1
F/P	F/P	0.2	0.5
BP/1.6DMN	BP/1.6DMN	0.9	0.6
2MN/1MN	2MN/1MN	1.4	1.4
2EN/1EN	2EN/1EN	1.4	1.4
4MDBT/1MDBT	4MDBT/1MDBT	0.7	0.7

#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng/mg	
Internal standard (if added):						
14)	11.59	136		d8N	3357	54
16)	21.03	164		d10BP	4767	52
59)	29.40	188		d10P	10130	54
79)	44.90	240		d12C	7072	54
Aryl isoprenoids:						
1)	20.54	133	0	C13AI	44	
2)	22.41	133	0	C14AI	237	
3)	26.66	133	0	C15AI	150	
4)	28.91	133	0	C16AI	378	
5)	30.98	133	0	C17AI	137	
6)	34.00	133	0	C18AI	141	
7)	34.97	133	0	C19AI	132	
8)	38.00	133	0	C20AI	126	
9)	39.99	133	0	C21AI	54	
10)	42.96	133	0	C22AI	41	
11)	44.97	133	0	C23AI	50	
12)	55.96	133	0	C30AI	61	
13)	56.96	133	0	C31AI	77	
Naphthalenes:						
15)	11.68	128	a1	N	70	1
17)	15.25	142	a2	2-MN	68	1
18)	15.80	142	a2	1-MN	45	0
19)	18.43	156	a3	2-EN	11	0
20)	18.54	156	a3	1-EN	23	0
21)	18.78	156	a3	2.6+2.7-DMN	46	0
22)	19.21	156	a3	1.3+1.7-DMN	31	0
23)	19.33	156	a3	1.6-DMN	32	0
24)	19.81	156	a3	2.3+1.4-DMN	72	1
25)	19.93	156	a3	1.5-DMN	50	0
26)	20.38	156	a3	1.2-DMN	106	1
27)	22.18	170	a4	C3-N-1	8	0
28)	22.27	170	a4	C3-N-2	18	0
29)	22.46	170	a4	1.3.7-TMN	198	2
30)	22.61	170	a4	1.3.6-TMN	77	1
31)	23.09	170	a4	1.3.5+1.4.6-TMN	63	1
32)	23.25	170	a4	2.3.6-TMN	299	3
33)	23.64	170	a4	1.6.7+1.2.7-TMN	193	2
34)	23.78	170	a4	1.2.6-TMN	200	2
35)	24.12	170	a4	1.2.4-TMN	281	3
36)	24.26	170	a4	1.2.5-TMN	157	2
Biphenyls:						
37)	17.97	154	a5	BP	25	0
38)	21.26	168	a5	3-MBP	21	0
39)	21.47	168	a5	4-MBP	75	1
40)	21.48	182	a4	2.3'-DMBP	173	2
41)	21.75	182	a4	2.5'-DMBP	6	0
42)	21.87	182	a4	2.4+2.4'-DMBP	48	0
43)	22.53	182	a4	2.3'-DMBP	21	0
44)	23.95	182	a4	3-EBP	7	0
45)	24.15	182	a4	3.5'-DMBP	26	0
46)	24.26	182	a4	3.3'-DMBP	18	0
47)	24.39	182	a4	4-EBP	156	2
48)	24.68	182	a4	3.4'-DMBP	37	0
49)	24.90	182	a4	4.4'-DMBP	217	2
50)	25.49	182	a4	3.4'-DMBP	69	1

Aromatic hydrocarbons

GC/MS detection HP-6890/5973

Compound data



Norsk Hydro E&P Research Centre, Bergen, Norway
Petroleum Geochemistry Laboratories

Data file name: A955.D
Sample name: 36/7-2 955m aro
Data File Path: C:\HPCHEM\1\DATA\ISA315H3D\
Misc. info.:
Vial no.: 24
Method: MSD_A_D
Operator:
Date: Sat Nov 15 05:36:16 1997
Response curve: y = ax+b
Response factor groups: a1...a11, responses as defined in method

#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng/mg	
Dibenzofuranes:						
51)	22.13	168	a5	DBF	13	0
52)	25.28	182	a4	MDBF-1	61	1
53)	25.63	182	a4	MDBF-2	43	0
54)	25.87	182	a4	MDBF-3	168	2
Fluorenes:						
55)	24.14	166	a6	F	98	1
56)	27.34	180	a6	C1-F-1	115	1
57)	27.61	180	a6	C1-F-2	44	0
58)	27.85	180	a6	1-MF	298	2
Dibenzothiophenes:						
60)	28.86	184	a7	DBT	70	0
61)	31.28	198	a7	4-MDBT	42	0
62)	31.91	198	a7	3+2-MDBT	133	0
63)	32.57	198	a7	1-MDBT	61	0
Phenanthrenes:						
64)	29.65	178	a8	P	670	3
65)	32.49	192	a9	3-MP	133	1
66)	32.62	192	a9	2-MP	187	1
67)	33.09	192	a9	9-MP	1370	7
68)	33.18	192	a9	1-MP	286	2
69)	35.19	206	a10	2EP+9EP+3.6-DMP	837	4
70)	35.36	206	a10	1EP	299	2
71)	35.54	206	a10	2.6+2.7+3.5-DMP	125	1
72)	35.87	206	a10	1.3+2.10+3.9+3.10-DMP	2676	13
73)	36.00	206	a10	1.6+2.5+2.9-DMP	719	4
74)	36.12	206	a10	1.7-DMP	150	1
75)	36.41	206	a10	2.3-DMP	913	5
76)	36.52	206	a10	1.9+4.9+4.10-DMP	473	2
77)	36.67	206	a10	1.8-DMP	125	1
Retene:						
78)	40.04	219	a8	Retene	147	1
Triaromatic steroids:						
80)	44.50	231	a11	20TA	698	1
81)	46.38	231	a11	21TA	1861	3
82)	53.34	231	a11	S26TA	2225	4
83)	54.54	231	a11	R26TA/S27TA	7033	12
84)	55.54	231	a11	S28TA	4309	7
85)	56.03	231	a11	R27TA	3214	5
86)	57.25	231	a11	R28TA	4587	8

Aromatic hydrocarbons

GC/MS detection HP-6890/5973

Ratios, from heights and amountsNorsk Hydro E&P Research Centre, Bergen, Norway
Petroleum Geochemistry LaboratoriesData file name: **A955.D**
Sample name: **36/7-2 955m aro**
Data File Path: C:\HPCHEM\1\DATA\SA315H3D\
Misc. info.:Vial no.: 24
Method: MSD_A_D
Operator:
Date: Sat Nov 15 05:36:16 1997**Aromatic HC ratios, heights and amounts**

		Height	Amount
Naphthalene	Naphthalene	70	1
C1 Naphthanes	Sum C1 Naphthanes	113	1
C2 Naphthanes	Sum C2 Naphthanes	371	4
C3 Naphthanes	Sum C3 Naphthanes	1494	15
Phenanthrene	Phenanthrene	670	3
C1 Phenanthrenes	Sum C1 Phenanthrenes	1976	10
C2 Phenanthrenes	Sum C2 Phenanthrenes	6317	32
$3/2 \cdot (3MP+2MP)/(P+9MP+1MP)$	MPI1	0.2	0.2
$(3MP+2MP)/(3MP+2MP+9MP+1MP)$	F1	0.2	0.2
$2MP/(3MP+2MP+9MP+1MP)$	F2	0.1	0.1
$(2.6+2.7)DMN/1.5DMN$	DNR	0.9	0.9
$100 \cdot 20TA/(20TA+S28TA+R28TA)$	%-TAS'n	7.3	7.3
DBT/P	DBT/P	0.1	0.0
F/P	F/P	0.1	0.3
BP/1.6DMN	BP/1.6DMN	0.8	0.5
2MN/1MN	2MN/1MN	1.5	1.5
2EN/1EN	2EN/1EN	0.5	0.5
4MDBT/1MDBT	4MDBT/1MDBT	0.7	0.7

Aromatic hydrocarbons
 GC/MS detection HP-6890/5973
Compound data



Norsk Hydro E&P Research Centre, Bergen, Norway
 Petroleum Geochemistry Laboratories

Data file name: **A961.D**
 Sample name: **367-2 961m aro**
 Data File Path: **C:\HPCHEM\1\DATA\SA315H3D**
 Misc. info.:
 Vial no.: **25**
 Method: **MSD_A_D**
 Operator:
 Date: **Sat Nov 15 07:04:58 1997**
 Response curve: **y = ax+b**
 Response factor groups: **a1...a11, responses as defined in method**

#	Rt.min.	m/z	Rf.	Name	Height	Amount
						ng/mg
Internal standard (if added):						
14)	11.59	136		d8N	6783	50
16)	21.03	164		d10BP	7635	48
59)	29.40	188		d10P	15689	50
79)	44.92	240		d12C	10045	50
Aryl isoprenoids:						
1)	20.53	133	0	C13AI	68	
2)	22.41	133	0	C14AI	346	
3)	26.66	133	0	C15AI	295	
4)	28.90	133	0	C16AI	490	
5)	30.99	133	0	C17AI	160	
6)	34.00	133	0	C18AI	136	
7)	34.98	133	0	C19AI	156	
8)	38.01	133	0	C20AI	181	
9)	39.99	133	0	C21AI	74	
10)	43.01	133	0	C22AI	70	
11)	45.02	133	0	C23AI	66	
12)	55.99	133	0	C30AI	80	
13)	57.02	133	0	C31AI	56	
Naphthalenes:						
15)	11.68	128	a1	N	285	2
17)	15.25	142	a2	2-MN	233	1
18)	15.79	142	a2	1-MN	165	1
19)	18.41	156	a3	2-EN	27	0
20)	18.54	156	a3	1-EN	30	0
21)	18.77	156	a3	2.6+2.7-DMN	90	1
22)	19.21	156	a3	1.3+1.7-DMN	95	1
23)	19.32	156	a3	1.6-DMN	75	0
24)	19.83	156	a3	2.3+1.4-DMN	116	1
25)	19.91	156	a3	1.5-DMN	95	1
26)	20.40	156	a3	1.2-DMN	137	1
27)	22.18	170	a4	C3-N-1	14	0
28)	22.38	170	a4	C3-N-2	73	0
29)	22.46	170	a4	1.3.7-TMN	290	2
30)	22.61	170	a4	1.3.6-TMN	118	1
31)	23.08	170	a4	1.3.5+1.4.6-TMN	116	1
32)	23.25	170	a4	2.3.6-TMN	381	2
33)	23.65	170	a4	1.6.7+1.2.7-TMN	256	1
34)	23.78	170	a4	1.2.6-TMN	250	1
35)	24.14	170	a4	1.2.4-TMN	439	3
36)	24.25	170	a4	1.2.5-TMN	216	1
Biphenyls:						
37)	17.97	154	a5	BP	59	0
38)	21.26	168	a5	3-MBP	38	0
39)	21.47	168	a5	4-MBP	122	0
40)	21.48	182	a4	2.3'-DMBP	287	2
41)	21.87	182	a4	2.5'-DMBP	317	2
42)	21.87	182	a4	2.4+2.4'-DMBP	316	2
43)	22.54	182	a4	2.3'-DMBP	26	0
44)	23.95	182	a4	3-EBP	12	0
45)	24.27	182	a4	3.5'-DMBP	14	0
46)	24.39	182	a4	3.3'-DMBP	200	1
47)	24.49	182	a4	4-EBP	6	0
48)	24.67	182	a4	3.4'-DMBP	65	0
49)	24.90	182	a4	4.4'-DMBP	281	2
50)	25.49	182	a4	3.4'-DMBP	196	1

#	Rt.min.	m/z	Rf.	Name	Height	Amount
						ng/mg
Dibenzofuranes:						
51)	22.14	168	a5	DBF	45	0
52)	25.28	182	a4	MDBF-1	86	0
53)	25.64	182	a4	MDBF-2	88	1
54)	25.87	182	a4	MDBF-3	276	2
Fluorenes:						
55)	24.14	166	a6	F	160	1
56)	27.36	180	a6	C1-F-1	176	1
57)	27.60	180	a6	C1-F-2	91	0
58)	27.87	180	a6	1-MF	430	2
Dibenzothiophenes:						
60)	28.78	184	a7	DBT	320	0
61)	31.26	198	a7	4-MDBT	53	0
62)	31.91	198	a7	3+2-MDBT	200	0
63)	32.54	198	a7	1-MDBT	116	0
Phenanthrenes:						
64)	29.66	178	a8	P	913	2
65)	32.49	192	a9	3-MP	209	1
66)	32.63	192	a9	2-MP	310	1
67)	33.10	192	a9	9-MP	2337	7
68)	33.20	192	a9	1-MP	359	1
69)	35.22	206	a10	2EP+9EP+3.6-DMP	3377	10
70)	35.39	206	a10	1EP	510	2
71)	35.55	206	a10	2.6+2.7+3.5-DMP	285	1
72)	35.88	206	a10	1.3+2.10+3.9+3.10-DMP	7639	23
73)	36.01	206	a10	1.6+2.5+2.9-DMP	1136	3
74)	36.13	206	a10	1.7-DMP	183	1
75)	36.29	206	a10	2.3-DMP	181	1
76)	36.42	206	a10	1.9+4.9+4.10-DMP	1184	4
77)	36.67	206	a10	1.8-DMP	182	1
Retene:						
78)	40.02	219	a8	Retene	256	1
Triaromatic steroids:						
80)	44.52	231	a11	20TA	2431	3
81)	46.40	231	a11	21TA	3812	4
82)	53.35	231	a11	S26TA	2832	3
83)	54.55	231	a11	R26TA/S27TA	8889	10
84)	55.54	231	a11	S28TA	5506	6
85)	56.04	231	a11	R27TA	4050	4
86)	57.25	231	a11	R28TA	5296	6

Aromatic hydrocarbons

GC/MS detection HP-6890/5973

Ratios, from heights and amounts

Norsk Hydro E&P Research Centre, Bergen, Norway
 Petroleum Geochemistry Laboratories

Data file name: **A961.D**
 Sample name: **367-2 961m aro**
 Data File Path: **C:\HPCHEM\1\DATA\SA315H3D**
 Misc. info.:


Vial no.: **25**
 Method: **MSD_A_D**
 Operator:
 Date: **Sat Nov 15 07:04:58 1997**

Aromatic HC ratios, heights and amounts

		Height	Amount
Naphthalene	Naphthalene	285	2
C1 Naphthanes	Sum C1 Naphthanes	398	2
C2 Naphthanes	Sum C2 Naphthanes	665	4
C3 Naphthanes	Sum C3 Naphthanes	2153	12
Phenanthrene	Phenanthrene	913	2
C1 Phenanthrenes	Sum C1 Phenanthrenes	3215	10
C2 Phenanthrenes	Sum C2 Phenanthrenes	14677	44
$3/2 \cdot (3MP+2MP)/(P+9MP+1MP)$	MPI1	0.2	0.2
$(3MP+2MP)/(3MP+2MP+9MP+1MP)$	F1	0.2	0.2
$2MP/(3MP+2MP+9MP+1MP)$	F2	0.1	0.1
$(2.6+2.7)DMN/1.5DMN$	DNR	0.9	0.9
$100 \cdot 20TA/(20TA+S28TA+R28TA)$	%-TAS'n	18.4	18.4
DBT/P	DBT/P	0.4	0.1
F/P	F/P	0.2	0.3
BP/1.6DMN	BP/1.6DMN	0.8	0.6
2MN/1MN	2MN/1MN	1.4	1.4
2EN/1EN	2EN/1EN	0.9	0.9
4MDBT/1MDBT	4MDBT/1MDBT	0.5	0.5

#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng/mg	
Internal standard (if added):						
14)	11.55	136		d8N	6874	48
16)	20.99	164		d10BP	7260	46
59)	29.37	188		d10P	15081	48
79)	44.87	240		d12C	9536	48
Aryl isoprenoids:						
1)	20.50	133	0	C13AI	107	
2)	22.37	133	0	C14AI	494	
3)	26.61	133	0	C15AI	314	
4)	29.11	133	0	C16AI	677	
5)	31.03	133	0	C17AI	446	
6)	33.98	133	0	C18AI	281	
7)	35.02	133	0	C19AI	456	
8)	37.99	133	0	C20AI	289	
9)	39.98	133	0	C21AI	63	
10)	43.04	133	0	C22AI	183	
11)	44.99	133	0	C23AI	104	
12)	56.02	133	0	C30AI	984	
13)	57.03	133	0	C31AI	60	
Naphthalenes:						
15)	11.63	128	a1	N	2842	18
17)	15.20	142	a2	2-MN	4008	24
18)	15.74	142	a2	1-MN	2685	16
19)	18.38	156	a3	2-EN	388	2
20)	18.49	156	a3	1-EN	158	1
21)	18.71	156	a3	2.6+2.7-DMN	1911	11
22)	19.17	156	a3	1.3+1.7-DMN	2780	16
23)	19.27	156	a3	1.6-DMN	1990	11
24)	19.78	156	a3	2.3+1.4-DMN	992	6
25)	19.88	156	a3	1.5-DMN	538	3
26)	20.25	156	a3	1.2-DMN	363	2
27)	22.13	170	a4	C3-N-1	160	1
28)	22.31	170	a4	C3-N-2	284	2
29)	22.42	170	a4	1.3.7-TMN	1306	8
30)	22.56	170	a4	1.3.6-TMN	1398	8
31)	23.03	170	a4	1.3.5+1.4.6-TMN	1077	6
32)	23.11	170	a4	2.3.6-TMN	879	5
33)	23.53	170	a4	1.6.7+1.2.7-TMN	745	4
34)	23.59	170	a4	1.2.6-TMN	702	4
35)	24.09	170	a4	1.2.4-TMN	610	4
36)	24.22	170	a4	1.2.5-TMN	644	4
Biphenyls:						
37)	17.92	154	a5	BP	2130	8
38)	21.21	168	a5	3-MBP	2115	8
39)	21.47	168	a5	4-MBP	783	3
40)	21.53	182	a4	2.3'-DMBP	36	0
41)	21.74	182	a4	2.5-DMBP	21	0
42)	21.90	182	a4	2.4+2.4'-DMBP	39	0
43)	22.52	182	a4	2.3-DMBP	136	1
44)	23.91	182	a4	3-EBP	177	1
45)	24.24	182	a4	3.5-DMBP	336	2
46)	24.34	182	a4	3.3'-DMBP	1095	6
47)	24.45	182	a4	4-EBP	71	0
48)	24.64	182	a4	3.4'-DMBP	685	4
49)	24.85	182	a4	4.4'-DMBP	462	3
50)	25.40	182	a4	3.4-DMBP	288	2

Aromatic hydrocarbons
GC/MS detection HP-6890/5973
Compound data



Norsk Hydro E&P Research Centre, Bergen, Norway
Petroleum Geochemistry Laboratories

Data file name: **A934_5.D**
Sample name: **36/7-2 934.5m aro**
Data File Path: **K:\CAM\GEOKJEM\HPCHEM\W95\DATA\SA351110**
Misc. info.:
Vial no.: **21**
Method: **MSD_A_D**
Operator:
Date: **Fri Oct 31 02:50:07 1997**
Response curve: **y = ax+b**
Response factor groups: **a1...a11, responses as defined in method**

#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng/mg	
Dibenzofuranes:						
51)	22.09	168	a5	DBF	494	2
52)	25.18	182	a4	MDBF-1	473	3
53)	25.54	182	a4	MDBF-2	325	2
54)	25.83	182	a4	MDBF-3	540	3
Fluorenes:						
55)	24.06	166	a6	F	473	2
56)	27.30	180	a6	C1-F-1	328	2
57)	27.51	180	a6	C1-F-2	761	4
58)	27.82	180	a6	1-MF	605	3
Dibenzothiophenes:						
60)	28.75	184	a7	DBT	746	1
61)	31.30	198	a7	4-MDBT	405	0
62)	31.88	198	a7	3+2-MDBT	337	0
63)	32.50	198	a7	1-MDBT	157	0
Phenanthrenes:						
64)	29.48	178	a8	P	2918	8
65)	32.44	192	a9	3-MP	980	3
66)	32.58	192	a9	2-MP	1301	4
67)	33.06	192	a9	9-MP	3581	11
68)	33.17	192	a9	1-MP	1303	4
69)	35.16	206	a10	2EP+9EP+3.6-DMP	1817	5
70)	35.39	206	a10	1EP	480	1
71)	35.50	206	a10	2.6+2.7+3.5-DMP	397	1
72)	35.83	206	a10	1.3+2.10+3.9+3.10-DMP	5544	17
73)	35.98	206	a10	1.6+2.5+2.9-DMP	1661	5
74)	36.11	206	a10	1.7-DMP	667	2
75)	36.27	206	a10	2.3-DMP	384	1
76)	36.38	206	a10	1.9+4.9+4.10-DMP	1461	4
77)	36.70	206	a10	1.8-DMP	300	1
Retene:						
78)	40.01	219	a8	Retene	348	1
Triaromatic steroids:						
80)	44.65	231	a11	20TA	1594	2
81)	46.35	231	a11	21TA	3102	3
82)	53.32	231	a11	S26TA	3718	4
83)	54.51	231	a11	R26TA/S27TA	11910	13
84)	55.50	231	a11	S28TA	8135	9
85)	56.00	231	a11	R27TA	5336	6
86)	57.22	231	a11	R28TA	7443	8

Aromatic hydrocarbons

GC/MS detection HP-6890/5973

Ratios, from heights and amounts

Norsk Hydro E&P Research Centre, Bergen, Norway
Petroleum Geochemistry LaboratoriesData file name: A934_5.D
Sample name: 36/7-2 934.5m aro
Data File Path: K:\CAM\GEOKJEM\HPCHEM\W95\DATA\SA351110\
Misc. info.:Vial no.: 21
Method: MSD_A_D
Operator:
Date: Fri Oct 31 02:50:07 1997**Aromatic HC ratios, heights and amounts**

		Height	Amount
Naphthalene	Naphthalene	2842	18
C1 Naphthanes	Sum C1 Naphthanes	6693	40
C2 Naphthanes	Sum C2 Naphthanes	9120	52
C3 Naphthanes	Sum C3 Naphthanes	7805	45
Phenanthrene	Phenanthrene	2918	8
C1 Phenanthrenes	Sum C1 Phenanthrenes	7165	22
C2 Phenanthrenes	Sum C2 Phenanthrenes	12711	38
$3/2 \cdot (3MP+2MP)/(P+9MP+1MP)$	MPI1	0.4	0.5
$(3MP+2MP)/(3MP+2MP+9MP+1MP)$	F1	0.3	0.3
$2MP/(3MP+2MP+9MP+1MP)$	F2	0.2	0.2
$(2.6+2.7)DMN/1.5DMN$	DNR	3.6	3.6
$100 \cdot 20TA/(20TA+S28TA+R28TA)$	%-TAS'n	9.3	9.3
DBT/P	DBT/P	0.3	0.1
F/P	F/P	0.2	0.3
BP/1.6DMN	BP/1.6DMN	1.1	0.7
2MN/1MN	2MN/1MN	1.5	1.5
2EN/1EN	2EN/1EN	2.5	2.5
4MDBT/1MDBT	4MDBT/1MDBT	2.6	2.6

AROMATIC HYDROCARBONS

P#	Rt	Ion m/z	Compound	Height	Amount
Int.Std.(if added):					ng/mg
14	11.68	136	d8 N	3957	31
16	17.87	164	d10BP	7816	32
59	29.23	188	d10 P	11511	31
79	44.45	240	d12 C	9823	31
ARYL ISOPRENOIDS					
1	18.63	133	C13 AI	4148	
2	20.54	133	C14 AI	1803	
3	23.78	133	C15 AI	1240	
4	26.20	133	C16 AI	775	
5	28.85	133	C17 AI	667	
6	31.47	133	C18 AI	513	
7	32.93	133	C19 AI	428	
8	34.28	133	C20 AI	542	
9	35.58	133	C21 AI	501	
10	37.52	133	C22 AI	206	
11	39.18	133	C23 AI	603	
12	52.84	133	C30 AI	76	
13	54.66	133	C31 AI	164	
NAPHTHALENES					
15	11.77	128	N	184000	1403
17	15.32	142	2-MN	368908	2038
18	15.86	142	1-MN	268352	1482
19	18.44	156	2-EN	45122	220
20	18.54	156	1-EN	22758	111
21	18.79	156	2,6+ 2,7-DMN	166184	811
22	19.24	156	1,3+1,7-DMN	223156	1089
23	19.34	156	1,6-DMN	219122	1070
24	19.83	156	2,3+1,4-DMN	91480	447
25	19.91	156	1,5-DMN	47216	230
26	20.28	156	1,2-DMN	38527	188
31	22.11	170	C3- N	15377	75
32	22.30	170	C3-N	21859	107
33	22.43	170	1,3,7-TMN	73248	359
34	22.56	170	1,3,6-TMN	106654	523
35	23.03	170	1,3,5+1,4,6-TMN	81647	400
36	23.10	170	2,3,6-TMN	70467	345
37	23.52	170	1,6,7+1,2,7-TMN	54184	265
38	23.57	170	1,2,6-TMN	35952	176
39	24.00	170	1,2,4-TMN	8147	40
40	24.19	170	1,2,5-TMN	38725	190
BIPHENYLS					
27	17.99	154	BP	144127	497
28	21.23	168	3-MBP	152634	526
29	21.49	168	4-MBP	50668	175
41	21.54	182	2,3-DMBP	3826	19
42	21.73	182	2,5-DMBP	2031	10
43	21.91	182	2,4 & 2,4'-DMBP	3805	19
44	22.51	182	2,3-DMBP	9615	47
45	23.88	182	3-EBP	15819	78
46	24.21	182	3,5-DMBP	17345	85
47	24.30	182	3,3'-DMBP	49553	243
48	24.42	182	4-EBP	5104	25
49	24.59	182	3,4'-DMBP	36354	178
50	24.80	182	4,4'-DMBP	7588	37
52	25.35	182	3,4-DMBP	18872	92

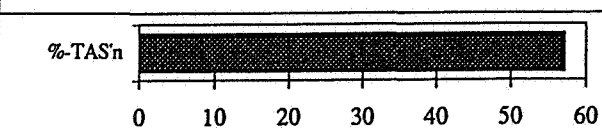
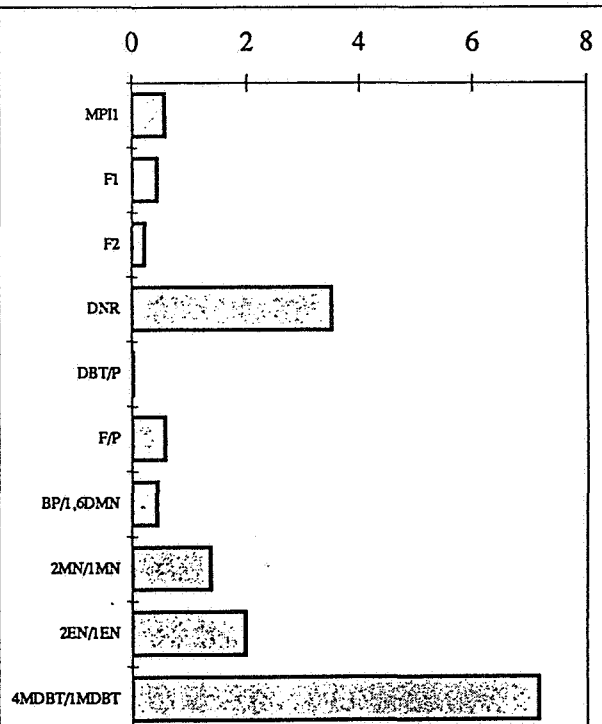
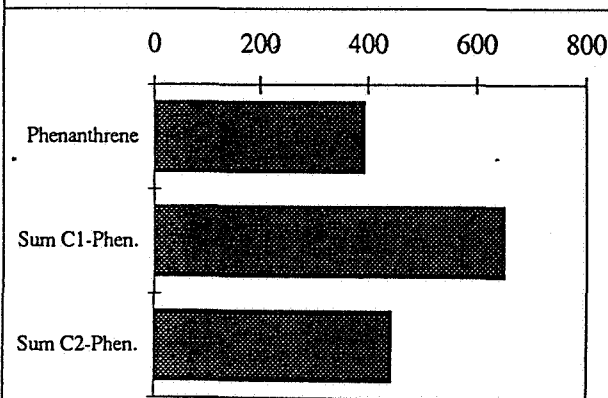
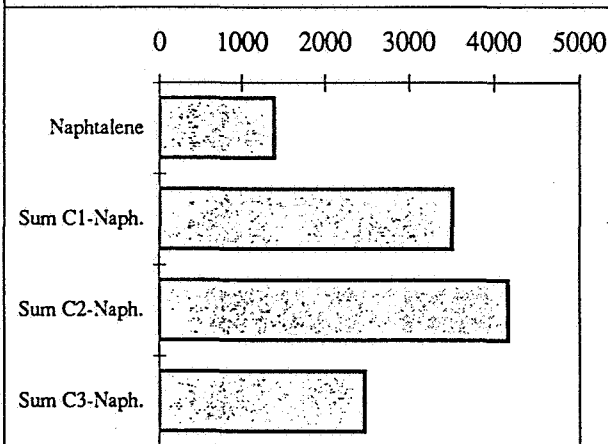
File name (sample):	2363_0A.D
File path:	K:\CAPMSDARKIVHC_SA351108SZ
Misc information:	
Sample name:	36/7-1 DST#1 2363m ARO
Operator:	JKB
Method:	MSD_A_C
Date:	23-jul-96

P#	Rt	Ion m/z	Compound	Height	Amount
DIBENZOFURANES					
30	22.10	168	DBF	31261	108
51	25.13	182	MDBF	32293	158
53	25.49	182	MDBF	28493	140
54	25.79	182	MDBF	18975	93
FLUORENES					
55	24.04	166	F	57341	234
56	27.26	180	C1-F	21160	86
57	27.43	180	C1-F	61748	252
58	27.73	180	1-MF	10938	45
DIBENZOTHIOPHENES					
60	28.64	184	DBT	17156	11
61	31.23	198	4-MDBT	21216	14
62	31.73	198	3+2-MDBT	7283	5
63	32.32	198	1-MDBT	2956	2
PHENANTHRENES					
64	29.37	178	P	191441	393
65	32.27	192	3-MP	60208	132
66	32.41	192	2-MP	73782	162
67	32.87	192	9-MP	92023	202
68	32.99	192	1-MP	69299	152
70	34.94	206	2EP+9EP+3,6-DMP	13961	30
71	35.16	206	1EP	16858	36
72	35.25	206	2,6+2,7+3,5-DMP	8901	19
73	35.59	206	1,3+2,10+3,9+3,10-DMP	63164	135
74	35.73	206	1,6+2,5+2,9-DMP	34464	74
75	35.87	206	1,7-DMP	34746	74
76	36.01	206	2,3-DMP	9999	21
77	36.13	206	1,9+4,9+4,10-DMP	19426	41
78	36.43	206	1,8-DMP	6940	15
RETENE					
69	39.68	219	Retene	20556	42
TRIAROMATIC STEROIDS					
80	44.07	231	20TA	2023	1
81	45.90	231	21TA	1593	1
82	52.77	231	S26TA	326	C
83	53.95	231	R26TA/S27TA	1069	C
84	54.93	231	S28TA	787	C
85	55.42	231	R27TA	463	C
86	56.63	231	R28TA	728	C

File name (sample): 2363_0A.D	Sample name: 36/7-1 DST#1 2363m ARO
File path: K:\CAP\MSDARKIVHC_SA\351108SZ	Operator: JKB
Misc information:	Method: MSD_A_C
	Date analyzed: 23-jul-96

Ratios based on heights or amounts (ng/mg)	Name	Heights:	Amounts (ng/mg):
Naphthalene	Naphthalene	184000	1403
C1 Naphthalenes	Sum C1-Naph.	637260	3520
C2 Naphthalenes	Sum C2-Naph.	853565	4167
C3 Naphthalenes	Sum C3-Naph.	506260	2481
Phenanthrene	Phenanthrene	191441	393
C1 Phenanthrenes	Sum C1-Phen.	295312	649
C2 Phenanthrenes	Sum C2-Phen.	208459	445
$3/2 * (3MP+2MP)/(P+9MP+1MP)$	MPI1	0.6	0.6
$(3MP+2MP)/(3MP+2MP+9MP+1MP)$	F1	0.5	0.5
$2MP/(3MP+2MP+9MP+1MP)$	F2	0.2	0.2
(2,6+2,7)DMN/1,5DMN	DNR	3.5	3.5
$100 * 20TA/(20TA+S28TA+R28TA)$	%-TAS'n	57	57
DBT/P	DBT/P	0.1	0.0
F/P	F/P	0.3	0.6
BP/1,6DMN	BP/1,6DMN	0.7	0.5
2MN/1MN	2MN/1MN	1.4	1.4
2EN/1EN	2EN/1EN	2.0	2.0
4MDBT/1MDBT	4MDBT/1MDBT	7.2	7.2

Aromatic hydrocarbon parameters, calculated from amounts, ng/mg EOM/oil



Aromatic hydrocarbons

GC/MS detection HP-6890/5973

Compound data



Norsk Hydro E&P Research Centre, Bergen, Norway
Petroleum Geochemistry Laboratories

Data file name: **A2291_80.D**
 Sample name: **35/9-1 DST #1 2291_80m aro**
 Data File Path: **C:\HPCHEM\1\DATA\SA315H3D**
 Misc. info.:
 Vial no.: **26**
 Method: **MSD_A_D**
 Operator:
 Date: **Sat Nov 15 10:02:16 1997**
 Response curve: $y = ax + b$
 Response factor groups: a1...a11, responses as defined in method

#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng/mg	
Internal standard (if added):						
14)	11.59	136		d8N	11787	51
16)	21.04	164		d10BP	12176	49
59)	29.43	188		d10P	23862	51
79)	44.89	240		d12C	18048	51
Aryl isoprenoids:						
1)	20.57	133	0	C13AI	2540	
2)	22.36	133	0	C14AI	1590	
3)	26.66	133	0	C15AI	1105	
4)	29.02	133	0	C16AI	1437	
5)	31.05	133	0	C17AI	347	
6)	34.00	133	0	C18AI	920	
7)	35.05	133	0	C19AI	201	
8)	38.01	133	0	C20AI	664	
9)	40.00	133	0	C21AI	46	
10)	43.05	133	0	C22AI	452	
11)	45.02	133	0	C23AI	531	
12)	56.02	133	0	C30AI	283	
13)	57.03	133	0	C31AI	100	
Naphthalenes:						
15)	11.69	128	a1	N	377420	1504
17)	15.32	142	a2	2-MN	615647	2372
18)	15.85	142	a2	1-MN	436075	1680
19)	18.45	156	a3	2-EN	54799	198
20)	18.56	156	a3	1-EN	22737	82
21)	18.82	156	a3	2.6+2.7-DMN	234961	849
22)	19.29	156	a3	1.3+1.7-DMN	279890	1011
23)	19.40	156	a3	1.6-DMN	300023	1084
24)	19.86	156	a3	2.3+1.4-DMN	123184	445
25)	19.96	156	a3	1.5-DMN	72870	263
26)	20.32	156	a3	1.2-DMN	48546	175
27)	22.19	170	a4	C3-N-1	19805	73
28)	22.37	170	a4	C3-N-2	25413	93
29)	22.50	170	a4	1.3.7-TMN	90819	334
30)	22.65	170	a4	1.3.6-TMN	144600	531
31)	23.12	170	a4	1.3.5+1.4.6-TMN	102785	378
32)	23.19	170	a4	2.3.6-TMN	100050	368
33)	23.61	170	a4	1.6.7+1.2.7-TMN	68786	253
34)	23.67	170	a4	1.2.6-TMN	49437	182
35)	24.10	170	a4	1.2.4-TMN	9268	34
36)	24.30	170	a4	1.2.5-TMN	47470	174
Biphenyls:						
37)	17.99	154	a5	BP	187293	474
38)	21.30	168	a5	3-MBP	195510	495
39)	21.54	168	a5	4-MBP	65923	167
40)	21.59	182	a4	2.3'-DMBP	4321	16
41)	21.81	182	a4	2.5-DMBP	2433	9
42)	21.96	182	a4	2.4+2.4'-DMBP	4137	15
43)	22.60	182	a4	2.3-DMBP	11651	43
44)	23.97	182	a4	3-EBP	16107	59
45)	24.30	182	a4	3.5-DMBP	21121	78
46)	24.40	182	a4	3.3'-DMBP	59570	219
47)	24.52	182	a4	4-EBP	5907	22
48)	24.70	182	a4	3.4'-DMBP	44355	163
49)	24.91	182	a4	4.4'-DMBP	8589	32
50)	25.47	182	a4	3.4-DMBP	23640	87

#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng/mg	
Dibenzofuranes:						
51)	22.16	168	a5	DBF	35360	90
52)	25.24	182	a4	MDBF-1	34315	126
53)	25.61	182	a4	MDBF-2	30511	112
54)	25.90	182	a4	MDBF-3	21199	78
Fluorenes:						
55)	24.14	166	a6	F	95364	293
56)	27.42	180	a6	C1-F-1	31001	95
57)	27.61	180	a6	C1-F-2	79276	243
58)	27.89	180	a6	1-MF	14661	45
Dibenzothiophenes:						
60)	28.82	184	a7	DBT	13566	8
61)	31.43	198	a7	4-MDBT	17179	11
62)	31.96	198	a7	3+2-MDBT	4895	3
63)	32.54	198	a7	1-MDBT	2003	1
Phenanthrenes:						
64)	29.57	178	a8	P	232336	419
65)	32.49	192	a9	3-MP	72602	154
66)	32.63	192	a9	2-MP	94374	200
67)	33.13	192	a9	9-MP	106365	225
68)	33.25	192	a9	1-MP	92268	195
69)	35.21	206	a10	2EP+9EP+3.6-DMP	15706	32
70)	35.44	206	a10	1EP	19867	40
71)	35.53	206	a10	2.6+2.7+3.5-DMP	12309	25
72)	35.89	206	a10	1.3+2.10+3.9+3.10-DMP	77514	157
73)	36.03	206	a10	1.6+2.5+2.9-DMP	44441	90
74)	36.17	206	a10	1.7-DMP	45668	92
75)	36.31	206	a10	2.3-DMP	12877	26
76)	36.43	206	a10	1.9+4.9+4.10-DMP	24798	50
77)	36.72	206	a10	1.8-DMP	8174	17
Retene:						
78)	40.04	219	a8	Retene	19623	35
Triaromatic steroids:						
80)	44.49	231	a11	20TA	2401	1
81)	46.36	231	a11	21TA	2225	1
82)	53.31	231	a11	S26TA	444	0
83)	54.52	231	a11	R26TA/S27TA	1400	1
84)	55.51	231	a11	S28TA	1148	1
85)	56.00	231	a11	R27TA	622	0
86)	57.24	231	a11	R28TA	1115	1

Aromatic hydrocarbons
 GC/MS detection HP-6890/5973
Ratios, from heights and amounts



Norsk Hydro E&P Research Centre, Bergen, Norway
 Petroleum Geochemistry Laboratories

Data file name: A2291_80.D
 Sample name: 35/9-1 DST #1 2291_80m aro
 Data File Path: C:\HPCHEM\1\DATA\ISA315H3D\
 Misc. info.:

Vial no.: 26
 Method: MSD_A_D
 Operator:
 Date: Sat Nov 15 10:02:16 1997

Aromatic HC ratios, heights and amounts

		Height	Amount
Naphthalene	Naphthalene	377420	1504
C1 Naphthanes	Sum C1 Naphthanes	1051722	4052
C2 Naphthanes	Sum C2 Naphthanes	1137010	4108
C3 Naphthanes	Sum C3 Naphthanes	658433	2419
Phenanthrene	Phenanthrene	232336	419
C1 Phenanthrenes	Sum C1 Phenanthrenes	365609	774
C2 Phenanthrenes	Sum C2 Phenanthrenes	261354	529
3/2*(3MP+2MP)/(P+9MP+1MP)	MPI1	0.6	0.6
(3MP+2MP)/(3MP+2MP+9MP+1MP)	F1	0.5	0.5
2MP/(3MP+2MP+9MP+1MP)	F2	0.3	0.3
(2.6+2.7)DMN/1.5DMN	DNR	3.2	3.2
100*20TA/(20TA+S28TA+R28TA)	%-TAS'n	51.5	51.5
DBT/P	DBT/P	0.1	0.0
F/P	F/P	0.4	0.7
BP/1.6DMN	BP/1.6DMN	0.6	0.4
2MN/1MN	2MN/1MN	1.4	1.4
2EN/1EN	2EN/1EN	2.4	2.4
4MDBT/1MDBT	4MDBT/1MDBT	8.6	8.6

Aromatic hydrocarbons

GC/MS detection HP-6890/5973

Compound data



Norsk Hydro E&P Research Centre, Bergen, Norway
Petroleum Geochemistry Laboratories

Data file name: **A2332_00.D**
 Sample name: **35/9-2 DST #1 2332.00m aro**
 Data File Path: **C:\HPCHEM\1\DATA\ISA315H3D**
 Misc. info.:
 Vial no.: **27**
 Method: **MSD_A_D**
 Operator:
 Date: **Sat Nov 15 11:30:55 1997**
 Response curve: **y = ax+b**
 Response factor groups: **a1...a11, responses as defined in method**

#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng/mg	

Internal standard (if added):

14)	11.59	136		d8N	5888	45
16)	21.03	164		d10BP	6547	44
59)	29.42	188		d10P	15606	45
79)	44.87	240		d12C	10899	45

Aryl isoprenoids:

1)	20.56	133	0	C13AI	3379	
2)	22.34	133	0	C14AI	1579	
3)	26.64	133	0	C15AI	1374	
4)	29.01	133	0	C16AI	1367	
5)	31.06	133	0	C17AI	315	
6)	34.00	133	0	C18AI	1172	
7)	35.04	133	0	C19AI	284	
8)	38.01	133	0	C20AI	729	
9)	40.02	133	0	C21AI	79	
10)	42.95	133	0	C22AI	877	
11)	45.01	133	0	C23AI	465	
12)	56.03	133	0	C30AI	253	
13)	57.03	133	0	C31AI	86	

Naphthalenes:

15)	11.68	128	a1	N	251642	1769
17)	15.30	142	a2	2-MN	451971	2858
18)	15.83	142	a2	1-MN	320721	2028
19)	18.44	156	a3	2-EN	44962	267
20)	18.55	156	a3	1-EN	23498	139
21)	18.79	156	a3	2.6+2.7-DMN	171024	1014
22)	19.27	156	a3	1.3+1.7-DMN	225903	1340
23)	19.38	156	a3	1.6-DMN	241980	1435
24)	19.85	156	a3	2.3+1.4-DMN	99559	590
25)	19.95	156	a3	1.5-DMN	53149	315
26)	20.32	156	a3	1.2-DMN	44514	264
27)	22.18	170	a4	C3-N-1	16609	100
28)	22.37	170	a4	C3-N-2	21185	128
29)	22.50	170	a4	1.3.7-TMN	75833	457
30)	22.64	170	a4	1.3.6-TMN	112997	681
31)	23.11	170	a4	1.3.5+1.4.6-TMN	85492	516
32)	23.18	170	a4	2.3.6-TMN	73357	442
33)	23.60	170	a4	1.6.7+1.2.7-TMN	56263	339
34)	23.65	170	a4	1.2.6-TMN	41375	250
35)	24.09	170	a4	1.2.4-TMN	10959	66
36)	24.30	170	a4	1.2.5-TMN	67865	409

Biphenyls:

37)	17.98	154	a5	BP	119067	495
38)	21.29	168	a5	3-MBP	170053	707
39)	21.53	168	a5	4-MBP	52361	218
40)	21.59	182	a4	2.3'-DMBP	2761	17
41)	21.80	182	a4	2.5'-DMBP	1703	10
42)	21.96	182	a4	2.4+2.4'-DMBP	2865	17
43)	22.59	182	a4	2.3'-DMBP	8144	49
44)	23.97	182	a4	3-EBP	17739	107
45)	24.30	182	a4	3.5'-DMBP	21824	132
46)	24.40	182	a4	3.3'-DMBP	60881	367
47)	24.51	182	a4	4-EBP	4774	29
48)	24.70	182	a4	3.4'-DMBP	44852	271
49)	24.90	182	a4	4.4'-DMBP	8995	54
50)	25.46	182	a4	3.4'-DMBP	19769	119

#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng/mg	

Dibenzofuranes:

51)	22.15	168	a5	DBF	29713	123
52)	25.24	182	a4	MDBF-1	33678	203
53)	25.61	182	a4	MDBF-2	29201	176
54)	25.91	182	a4	MDBF-3	14841	90

Fluorenes:

55)	24.12	166	a6	F	32747	165
56)	27.41	180	a6	C1-F-1	12111	61
57)	27.59	180	a6	C1-F-2	47558	240
58)	27.88	180	a6	1-MF	6063	31

Dibenzothiophenes:

60)	28.82	184	a7	DBT	10928	9
61)	31.44	198	a7	4-MDBT	9515	8
62)	31.94	198	a7	3+2-MDBT	3678	3
63)	32.53	198	a7	1-MDBT	1441	1

Phenanthrenes:

64)	29.56	178	a8	P	143215	348
65)	32.48	192	a9	3-MP	41296	118
66)	32.63	192	a9	2-MP	52966	151
67)	33.11	192	a9	9-MP	63720	182
68)	33.23	192	a9	1-MP	45877	131
69)	35.19	206	a10	2EP+9EP+3.6-DMP	1184	32
70)	35.43	206	a10	1EP	12176	33
71)	35.53	206	a10	2.6+2.7+3.5-DMP	6431	18
72)	35.87	206	a10	1.3+2.10+3.9+3.10-DMP	40112	109
73)	36.01	206	a10	1.6+2.5+2.9-DMP	22489	61
74)	36.16	206	a10	1.7-DMP	24019	65
75)	36.30	206	a10	2.3-DMP	6486	18
76)	36.41	206	a10	1.9+4.9+4.10-DMP	13021	36
77)	36.71	206	a10	1.8-DMP	4285	12

Retene:

78)	40.04	219	a8	Retene	48498	118
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Triaromatic steroids:

80)	44.48	231	a11	20TA	1741	2
81)	46.35	231	a11	21TA	1743	2
82)	53.31	231	a11	S26TA	1243	1
83)	54.51	231	a11	R26TA/S27TA	3840	3
84)	55.51	231	a11	S28TA	2407	2
85)	55.99	231	a11	R27TA	1778	2
86)	57.23	231	a11	R28TA	2326	2

Aromatic hydrocarbons

GC/MS detection HP-6890/5973

Ratios, from heights and amounts



Norsk Hydro E&P Research Centre, Bergen, Norway
 Petroleum Geochemistry Laboratories

Data file name: A2332_00.D
 Sample name: 35/9-2 DST #1 2332.00m aro
 Data File Path: C:\HPCHEM\1\DATA\SA315H3D\
 Misc. info.:

Vial no.: 27
 Method: MSD_A_D
 Operator:
 Date: Sat Nov 15 11:30:55 1997

Aromatic HC ratios, heights and amounts

		Height	Amount
Naphthalene	Naphthalene	251642	1769
C1 Naphthanes	Sum C1 Naphthanes	772692	4886
C2 Naphthanes	Sum C2 Naphthanes	904589	5365
C3 Naphthanes	Sum C3 Naphthanes	561935	3389
Phenanthrene	Phenanthrene	143215	348
C1 Phenanthrenes	Sum C1 Phenanthrenes	203859	581
C2 Phenanthrenes	Sum C2 Phenanthrenes	140859	384
$3/2 \cdot (3MP+2MP)/(P+9MP+1MP)$	MP11	0.6	0.6
$(3MP+2MP)/(3MP+2MP+9MP+1MP)$	F1	0.5	0.5
$2MP/(3MP+2MP+9MP+1MP)$	F2	0.3	0.3
$(2.6+2.7)DMN/1.5DMN$	DNR	3.2	3.2
$100 \cdot 20TA/(20TA+S28TA+R28TA)$	%-TAS'n	26.9	26.9
DBT/P	DBT/P	0.1	0.0
F/P	F/P	0.2	0.5
BP/1.6DMN	BP/1.6DMN	0.5	0.3
2MN/1MN	2MN/1MN	1.4	1.4
2EN/1EN	2EN/1EN	1.9	1.9
4MDBT/1MDBT	4MDBT/1MDBT	6.6	6.6

Aromatic hydrocarbons

GC/MS detection HP-6890/5973

Compound data



Norsk Hydro E&P Research Centre, Bergen, Norway
Petroleum Geochemistry Laboratories

Data file name: NSO1A_31.D
 Sample name: nso1 ref. aro
 Data File Path: C:\HPCHEM\1\DATA\SA315H3D\
 Misc. info.:

 Vial no.: 10
 Method: MSD_A_D
 Operator:
 Date: Sat Nov 15 08:33:36 1997

 Response curve: $y = ax + b$
 Response factor groups: a1...a11, responses as defined in method

#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng/mg	
Internal standard (if added):						
14)	11.60	136		d8N	2621	34
16)	21.04	164		d10BP	2658	35
59)	29.41	188		d10P	5001	34
79)	44.85	240		d12C	4109	34
Aryl isoprenoids:						
1)	20.57	133	0	C13AI	2608	
2)	22.32	133	0	C14AI	690	
3)	26.63	133	0	C15AI	822	
4)	29.00	133	0	C16AI	826	
5)	30.92	133	0	C17AI	644	
6)	33.99	133	0	C18AI	546	
7)	35.03	133	0	C19AI	187	
8)	38.00	133	0	C20AI	225	
9)	39.98	133	0	C21AI	63	
10)	43.04	133	0	C22AI	253	
11)	45.00	133	0	C23AI	236	
12)	56.02	133	0	C30AI	167	
13)	57.00	133	0	C31AI	70	
Naphthalenes:						
15)	11.69	128	a1	N	83200	986
17)	15.26	142	a2	2-MN	121676	1521
18)	15.81	142	a2	1-MN	92337	1155
19)	18.43	156	a3	2-EN	12247	144
20)	18.54	156	a3	1-EN	5908	69
21)	18.77	156	a3	2.6+2.7-DMN	57514	674
22)	19.23	156	a3	1.3+1.7-DMN	86082	1009
23)	19.33	156	a3	1.6-DMN	69967	820
24)	19.83	156	a3	2.3+1.4-DMN	31567	370
25)	19.94	156	a3	1.5-DMN	19025	223
26)	20.31	156	a3	1.2-DMN	12222	143
27)	22.17	170	a4	C3-N-1	5745	69
28)	22.36	170	a4	C3-N-2	6668	80
29)	22.47	170	a4	1.3.7-TMN	28594	341
30)	22.61	170	a4	1.3.6-TMN	44113	526
31)	23.10	170	a4	1.3.5+1.4.6-TMN	37724	450
32)	23.17	170	a4	2.3.6-TMN	25980	310
33)	23.58	170	a4	1.6.7+1.2.7-TMN	21013	251
34)	23.64	170	a4	1.2.6-TMN	13782	164
35)	24.08	170	a4	1.2.4-TMN	4464	53
36)	24.28	170	a4	1.2.5-TMN	15520	185
Biphenyls:						
37)	17.97	154	a5	BP	35099	288
38)	21.27	168	a5	3-MBP	34422	283
39)	21.52	168	a5	4-MBP	12177	100
40)	21.58	182	a4	2.3'-DMBP	1395	17
41)	21.79	182	a4	2.5-DMBP	664	8
42)	21.95	182	a4	2.4+2.4'-DMBP	1310	16
43)	22.58	182	a4	2.3-DMBP	2645	32
44)	23.96	182	a4	3-EBP	3407	41
45)	24.28	182	a4	3.5-DMBP	4968	59
46)	24.38	182	a4	3.3'-DMBP	13061	156
47)	24.50	182	a4	4-EBP	1201	14
48)	24.67	182	a4	3.4'-DMBP	10191	122
49)	24.89	182	a4	4.4'-DMBP	2024	24
50)	25.45	182	a4	3.4-DMBP	4852	58

#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng/mg	
Dibenzofuranes:						
51)	22.14	168	a5	DBF	8318	68
52)	25.22	182	a4	MDBF-1	10621	127
53)	25.59	182	a4	MDBF-2	7641	91
54)	25.88	182	a4	MDBF-3	5858	70
Fluorenes:						
55)	24.10	166	a6	F	13069	130
56)	27.38	180	a6	C1-F-1	6012	60
57)	27.56	180	a6	C1-F-2	20440	204
58)	27.87	180	a6	1-MF	3681	37
Dibenzothiophenes:						
60)	28.81	184	a7	DBT	10607	21
61)	31.42	198	a7	4-MDBT	12864	25
62)	31.94	198	a7	3+2-MDBT	4316	9
63)	32.52	198	a7	1-MDBT	4302	8
Phenanthrenes:						
64)	29.52	178	a8	P	50961	290
65)	32.46	192	a9	3-MP	19725	132
66)	32.61	192	a9	2-MP	23104	154
67)	33.08	192	a9	9-MP	30912	206
68)	33.21	192	a9	1-MP	26258	175
69)	35.18	206	a10	2EP+9EP+3.6-DMP	4590	29
70)	35.41	206	a10	1EP	5804	37
71)	35.51	206	a10	2.6+2.7+3.5-DMP	3433	22
72)	35.85	206	a10	1.3+2.10+3.9+3.10-DMP	24887	159
73)	36.00	206	a10	1.6+2.5+2.9-DMP	14428	92
74)	36.14	206	a10	1.7-DMP	13222	84
75)	36.28	206	a10	2.3-DMP	3885	25
76)	36.39	206	a10	1.9+4.9+4.10-DMP	7994	51
77)	36.70	206	a10	1.8-DMP	3488	22
Retene:						
78)	40.01	219	a8	Retene	13158	75
Triaromatic steroids:						
80)	44.48	231	a11	20TA	2270	4
81)	46.34	231	a11	21TA	2623	5
82)	53.30	231	a11	S26TA	2594	5
83)	54.51	231	a11	R26TA/S27TA	7610	14
84)	55.50	231	a11	S28TA	3725	7
85)	56.01	231	a11	R27TA	3391	6
86)	57.22	231	a11	R28TA	3971	7

Aromatic hydrocarbons

GC/MS detection HP-6890/5973

Ratios, from heights and amounts



Norsk Hydro E&P Research Centre, Bergen, Norway
 Petroleum Geochemistry Laboratories

Data file name: NSO1A_31.D
 Sample name: nso1 ref. aro
 Data File Path: C:\HPCHEM\1\DATA\ISA315H3D\
 Misc. info.:

Vial no.: 10
 Method: MSD_A_D
 Operator:
 Date: Sat Nov 15 08:33:36 1997

Aromatic HC ratios, heights and amounts

		Height	Amount
Naphthalene	Naphthalene	83200	986
C1 Naphthanes	Sum C1 Naphthanes	214013	2676
C2 Naphthanes	Sum C2 Naphthanes	294532	3454
C3 Naphthanes	Sum C3 Naphthanes	203603	2428
Phenanthrene	Phenanthrene	50961	290
C1 Phenanthrenes	Sum C1 Phenanthrenes	99999	668
C2 Phenanthrenes	Sum C2 Phenanthrenes	81731	522
$3/2 \cdot (3MP+2MP)/(P+9MP+1MP)$	MPI1	0.6	0.6
$(3MP+2MP)/(3MP+2MP+9MP+1MP)$	F1	0.4	0.4
$2MP/(3MP+2MP+9MP+1MP)$	F2	0.2	0.2
$(2.6+2.7)DMN/1.5DMN$	DNR	3.0	3.0
$100 \cdot 20TA/(20TA+S28TA+R28TA)$	%-TAS'n	22.8	22.8
DBT/P	DBT/P	0.2	0.1
F/P	F/P	0.3	0.4
BP/1.6DMN	BP/1.6DMN	0.5	0.4
2MN/1MN	2MN/1MN	1.3	1.3
2EN/1EN	2EN/1EN	2.1	2.1
4MDBT/1MDBT	4MDBT/1MDBT	3.0	3.0

Aromatic hydrocarbons

GC/MS detection HP-6890/5973

Compound data



Norsk Hydro E&P Research Centre, Bergen, Norway
Petroleum Geochemistry Laboratories

Data file name: NSO1_23A.D
 Sample name: nso1 ref. sample aro
 Data File Path: K:\CAM\GEOKJEM\HPCHEM\W95\DATA\SA351110\
 Misc. info.:

 Vial no.: 2
 Method: MSD_A_D
 Operator:
 Date: Fri Oct 31 01:21:34 1997

 Response curve: $y = ax + b$
 Response factor groups: a1...a11, responses as defined in method

#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng	mg
Internal standard (if added):						
14)	11.56	136		d8N	5335	34
16)	21.00	164		d10BP	5169	35
59)	29.37	188		d10P	9997	34
79)	44.82	240		d12C	8608	34

Aryl isoprenoids:						
1)	20.52	133	0	C13AI	4572	
2)	22.36	133	0	C14AI	2390	
3)	26.73	133	0	C15AI	1174	
4)	28.97	133	0	C16AI	1580	
5)	31.01	133	0	C17AI	361	
6)	34.00	133	0	C18AI	1043	
7)	35.00	133	0	C19AI	308	
8)	37.97	133	0	C20AI	463	
9)	39.95	133	0	C21AI	140	
10)	43.01	133	0	C22AI	447	
11)	45.02	133	0	C23AI	309	
12)	55.97	133	0	C30AI	262	
13)	56.98	133	0	C31AI	127	

Naphthalenes:						
15)	11.65	128	a1	N	176332	1027
17)	15.23	142	a2	2-MN	245987	1582
18)	15.77	142	a2	1-MN	191878	1234
19)	18.39	156	a3	2-EN	24107	145
20)	18.50	156	a3	1-EN	11542	70
21)	18.73	156	a3	2.6+2.7-DMN	113143	682
22)	19.20	156	a3	1.3+1.7-DMN	167264	1009
23)	19.30	156	a3	1.6-DMN	145482	877
24)	19.80	156	a3	2.3+1.4-DMN	62338	376
25)	19.90	156	a3	1.5-DMN	38299	231
26)	20.27	156	a3	1.2-DMN	24324	147
27)	22.13	170	a4	C3-N-1	11192	69
28)	22.32	170	a4	C3-N-2	13051	80
29)	22.43	170	a4	1.3.7-TMN	53185	326
30)	22.59	170	a4	1.3.6-TMN	81429	499
31)	23.06	170	a4	1.3.5+1.4.6-TMN	69978	429
32)	23.13	170	a4	2.3.6-TMN	56319	345
33)	23.55	170	a4	1.6.7+1.2.7-TMN	41441	254
34)	23.60	170	a4	1.2.6-TMN	28537	175
35)	24.04	170	a4	1.2.4-TMN	8593	53
36)	24.24	170	a4	1.2.5-TMN	30621	188

Biphenyls:						
37)	17.93	154	a5	BP	71052	300
38)	21.22	168	a5	3-MBP	68009	287
39)	21.48	168	a5	4-MBP	23584	100
40)	21.54	182	a4	2.3'-DMBP	2683	16
41)	21.75	182	a4	2.5-DMBP	1287	8
42)	21.91	182	a4	2.4+2.4'-DMBP	2436	15
43)	22.53	182	a4	2.3-DMBP	5056	31
44)	23.92	182	a4	3-EBP	6740	41
45)	24.25	182	a4	3.5-DMBP	9953	61
46)	24.35	182	a4	3.3'-DMBP	24366	149
47)	24.46	182	a4	4-EBP	2443	15
48)	24.65	182	a4	3.4'-DMBP	18881	116
49)	24.85	182	a4	4.4'-DMBP	3944	24
50)	25.41	182	a4	3.4-DMBP	9858	60

#	Rt.min.	m/z	Rf.	Name	Height	Amount
					ng	mg

Dibenzofuranes:						
51)	22.10	168	a5	DBF	16851	71
52)	25.19	182	a4	MDBF-1	21575	132
53)	25.55	182	a4	MDBF-2	14777	91
54)	25.84	182	a4	MDBF-3	11844	73

Fluorenes:						
55)	24.06	166	a6	F	25411	130
56)	27.36	180	a6	C1-F-1	12070	62
57)	27.53	180	a6	C1-F-2	40790	209
58)	27.84	180	a6	1-MF	7161	37

Dibenzothiophenes:						
60)	28.77	184	a7	DBT	21854	22
61)	31.38	198	a7	4-MDBT	26231	26
62)	31.90	198	a7	3+2-MDBT	8617	9
63)	32.48	198	a7	1-MDBT	8690	9

Phenanthrenes:						
64)	29.49	178	a8	P	104121	296
65)	32.43	192	a9	3-MP	40491	135
66)	32.57	192	a9	2-MP	45199	151
67)	33.06	192	a9	9-MP	60777	203
68)	33.18	192	a9	1-MP	52788	176
69)	35.15	206	a10	2EP+9EP+3.6-DMP	9765	31
70)	35.37	206	a10	1EP	12056	39
71)	35.47	206	a10	2.6+2.7+3.5-DMP	6915	22
72)	35.82	206	a10	1.3+2.10+3.9+3.10-DMP	49888	159
73)	35.97	206	a10	1.6+2.5+2.9-DMP	29569	94
74)	36.10	206	a10	1.7-DMP	27502	88
75)	36.25	206	a10	2.3-DMP	8123	26
76)	36.36	206	a10	1.9+4.9+4.10-DMP	16425	52
77)	36.66	206	a10	1.8-DMP	7007	22

Retene:						
78)	39.98	219	a8	Retene	26437	75

Triaromatic steroids:						
80)	44.44	231	a11	20TA	4739	4
81)	46.30	231	a11	21TA	5309	5
82)	53.26	231	a11	S26TA	5499	5
83)	54.46	231	a11	R26TA/S27TA	15764	13
84)	55.46	231	a11	S28TA	8078	7
85)	55.96	231	a11	R27TA	6995	6
86)	57.18	231	a11	R28TA	8657	7

Aromatic hydrocarbons

GC/MS detection HP-6890/5973

Ratios, from heights and amounts



Norsk Hydro E&P Research Centre, Bergen, Norway
 Petroleum Geochemistry Laboratories

Data file name: NSO1_23A.D
 Sample name: nso1 ref. sample aro
 Data File Path: K:\CAM\GEOKJEM\HPCHEM\W95\DATA\SA351110\
 Misc. info.:

Vial no.: 2
 Method: MSD_A_D
 Operator:
 Date: Fri Oct 31 01:21:34 1997

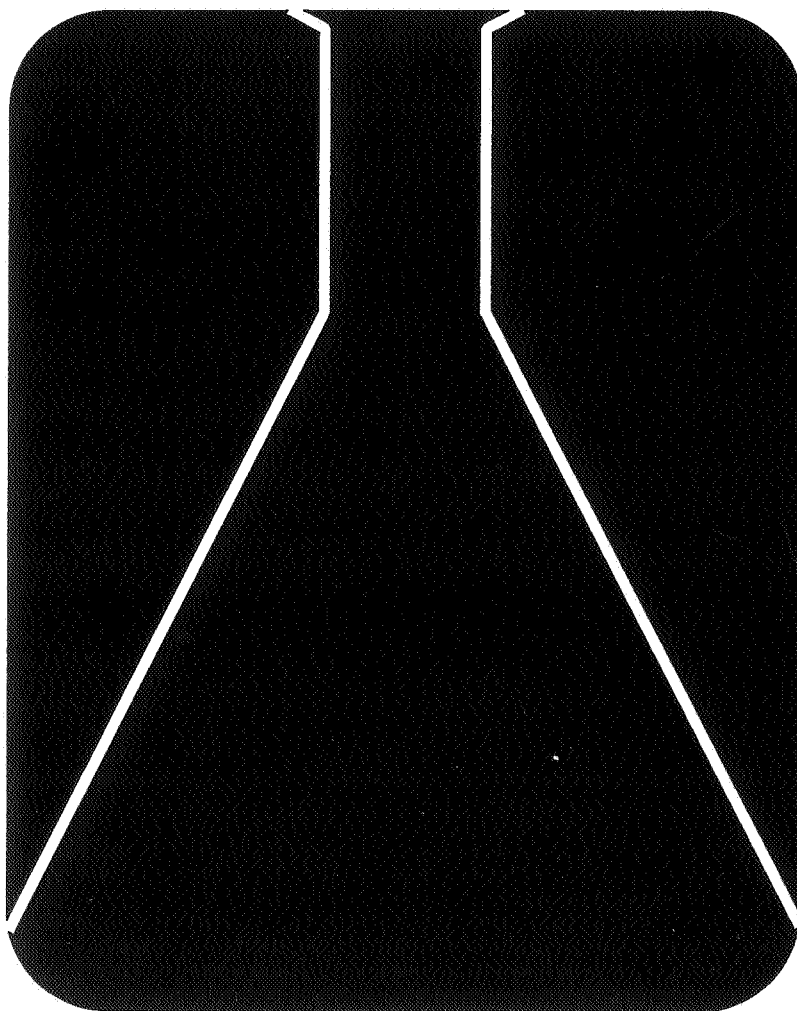
Aromatic HC ratios, heights and amounts

		Height	Amount
Naphthalene	Naphthalene	176332	1027
C1 Naphthanes	Sum C1 Naphthanes	437865	2815
C2 Naphthanes	Sum C2 Naphthanes	586499	3537
C3 Naphthanes	Sum C3 Naphthanes	394346	2418
Phenanthrene	Phenanthrene	104121	296
C1 Phenanthrenes	Sum C1 Phenanthrenes	199255	666
C2 Phenanthrenes	Sum C2 Phenanthrenes	167250	534
$3/2 \cdot (3MP+2MP)/(P+9MP+1MP)$	MPI1	0.6	0.6
$(3MP+2MP)/(3MP+2MP+9MP+1MP)$	F1	0.4	0.4
$2MP/(3MP+2MP+9MP+1MP)$	F2	0.2	0.2
$(2.6+2.7)DMN/1.5DMN$	DNR	3.0	3.0
$100 \cdot 20TA/(20TA+S28TA+R28TA)$	%-TAS'n	22.1	22.1
DBT/P	DBT/P	0.2	0.1
F/P	F/P	0.2	0.4
BP/1.6DMN	BP/1.6DMN	0.5	0.3
2MN/1MN	2MN/1MN	1.3	1.3
2EN/1EN	2EN/1EN	2.1	2.1
4MDBT/1MDBT	4MDBT/1MDBT	3.0	3.0

Appendix V

Data report, isotope analysis (Geolab Nor)

Data Report
Isotop Analyser 36/7-2



GEOLAB NOR
P.O. Box 5740 Fossegrenda
7002 TRONDHEIM
NORWAY

Table 1A: Tabulation of carbon isotope data for EOM/EOM - fractions for well 36/7-2

Depth unit of measure: m

<u>Depth</u>	<u>Typ</u>	<u>Lithology</u>	<u>EOM</u>	<u>Saturated</u>	<u>Aromatic</u>	<u>NSO</u>	<u>Asphaltenes</u>	<u>Kerogen</u>	<u>Sample</u>
934.50	oil	bulk	-	-28.58	-27.33	-	-	-	0001-0
935.00	swc	bulk	-	-28.63	-27.19	-	-	-	0002-0
950.00	swc	bulk	-	-28.60	-26.77	-	-	-	0003-0
955.00	swc	bulk	-	-28.59	-27.25	-	-	-	0004-0
961.00	swc	bulk	-	-28.49	-27.20	-	-	-	0005-0

Table 1B: Tabulation of cv values from carbon isotope data for well 36/7-2

Depth unit of measure: m

<u>Depth</u>	<u>Typ</u>	<u>Lithology</u>	<u>Saturated</u>	<u>Aromatic</u>	<u>cv value</u>	<u>Sample</u>
934.50	oil	bulk	-28.58	-27.33	-0.02	0001-0
935.00	swc	bulk	-28.63	-27.19	0.42	0002-0
950.00	swc	bulk	-28.60	-26.77	1.28	0003-0
955.00	swc	bulk	-28.59	-27.25	0.19	0004-0
961.00	swc	bulk	-28.49	-27.20	0.05	0005-0