

Norsk Hydro

DAILY MUD PROPERTIES : RHEOLOGY PARAMETERS FOR WELL 31/2-19S

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]	[Pa]
08-may-1996 20:00	428	428	BENTONITE	100.0	1.20	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]	[Pa]
09-may-1996 22:00	428	428	BENTONITE	100.0	1.06	0.0									0.0	0.0	0.0	0.0	0.0
11-may-1996 17:00	1316	1316	BENTONITE	100.0	1.06	0.0									0.0	0.0	0.0	0.0	0.0
12-may-1996 23:00	1316	1316	BENTONITE	100.0	1.06	0.0									0.0	0.0	0.0	0.0	0.0
13-may-1996 23:00	1316	1316	BENTONITE	100.0	1.06	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]	[Pa]
14-may-1996 21:39	1504	1504	BENTONITE	58.0	1.25	0.0	48	35	26	18			8	6	50.0	13.0	11.0	3.0	4.0
15-may-1996 15:00	1745	1724	KCL/POLYME	62.0	1.25	0.0	51	37	30	22			7	5	50.0	14.0	11.5	4.0	5.0
16-may-1996 15:00	1748	1727	KCL/POLYME	74.0	1.25	0.0	71	51	42	31			10	8	50.0	20.0	15.5	3.0	8.0
17-may-1996 22:00	1841	1800	KCL/POLYME	72.0	1.26	0.0	69	49	40	30			9	7	50.0	20.0	14.5	3.5	8.0
18-may-1996 19:00	1930	1869	KCL/POLYME	74.0	1.26	0.0	77	56	46	33			9	7	50.0	21.0	17.5	4.5	8.5
19-may-1996 22:30	2164	2057	KCL/POLYME	75.0	1.26	0.0	78	58	48	35			12	9	50.0	20.0	19.0	5.5	10.5
20-may-1996 14:15	2312	2175	KCL/POLYME	60.0	1.25	0.0	74	53	43	32			10	8	50.0	21.0	16.0	4.5	10.5
21-may-1996 19:00	2516	2335	KCL/POLYME	70.0	1.26	0.0	70	49	40	29			9	8	50.0	21.0	14.0	4.0	11.0
22-may-1996 14:00	2518	2337	KCL/POLYME	80.0	1.26	0.0	75	54	45	33			10	8	50.0	21.0	16.5	4.5	12.0
23-may-1996 21:30	2620	2417	KCL/POLYME	71.0	1.25	0.0	86	65	54	40			14	10	50.0	21.0	22.0	6.5	17.5

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

Norsk Hydro

DAILY MUD PROPERTIES : RHEOLOGY PARAMETERS FOR WELL 31/2-19S

Hole section: 12 1/4" WATER BASED SYSTEM

Date	Depth		Mud Type	Funnel	Dens	Mudtmp	Fann Readings						Rheo	PV	YP	Gel0	Gel10		
	[m]			Visc		Out	600	300	200	100	60	30	6	3	Test				
	MD	TVD		[sec]	[sg]	[DegC]								[DegC]	[mPas]	[Pa]	[Pa]	[Pa]	
24-may-1996 21:30	2917	2652	KCL/POLYME	61.0	1.25	0.0	89	65	53	39			13	11	50.0	24.0	21.0	6.5	19.0
25-may-1996 15:00	3098	2797	KCL/POLYME	58.0	1.25	0.0									50.0	23.0	16.5	6.5	18.5
26-may-1996 22:00	3118	2814	KCL/POLYME	65.0	1.25	0.0	76	54	44	33			11	9	50.0	22.0	16.0	6.5	18.5
28-may-1996 21:00	3118	2814	KCL/POLYME	63.0	1.27	0.0	72	49	40	29			9	7	50.0	23.0	13.0	5.0	18.0
30-may-1996 21:00	3118	2814	KCL/POLYME	63.0	1.27	0.0	72	49	40	29			9	7	50.0	23.0	13.0	5.0	18.0
31-may-1996 06:00	3118	2814	KCL/POLYME	64.0	1.30	0.0	73	49	41	30			9	6	50.0	24.0	12.5	5.0	19.0
01-jun-1996 18:00	3118	2814	KCL/POLYME	62.0	1.30	0.0	71	49	40	28			9	7	50.0	22.0	13.5	4.7	17.0

Hole section: 8 1/2" WATER BASED SYSTEM

Date	Depth		Mud Type	Funnel	Dens	Mudtmp	Fann Readings						Rheo	PV	YP	Gel0	Gel10		
	[m]			Visc		Out	600	300	200	100	60	30	6	3	Test				
	MD	TVD		[sec]	[sg]	[DegC]								[DegC]	[mPas]	[Pa]	[Pa]	[Pa]	
25-jun-1996 15:00	0		KCL/POLYME	50.0	1.30	0.0	37	24	19	13			3	2	50.0	13.0	5.5	2.0	3.0
26-jun-1996 19:30	3154	2843	KCL/POLYME	70.0	1.30	0.0	62	43	35	24			6	4	50.0	19.0	12.0	3.0	8.5
27-jun-1996 16:30	3196	2877	KCL/POLYME	75.0	1.30	0.0	64	44	35	25			8	6	50.0	20.0	12.0	3.0	7.5
28-jun-1996 14:30	3203	2882	KCL/POLYME	72.0	1.30	0.0	58	39	31	22			6	5	50.0	19.0	10.0	3.0	6.5
29-jun-1996 21:00	3453	3081	KCL/POLYME	50.0	1.30	0.0	56	38	31	21			6	5	50.0	18.0	10.0	3.0	8.5
30-jun-1996 21:15	3579	3180	KCL/POLYME	52.0	1.31	0.0	60	41	33	24			7	5	50.0	19.0	11.0	3.5	11.0
01-jul-1996 20:30	3709	3288	KCL/POLYME	50.0	1.30	0.0	56	38	32	21			6	5	50.0	18.0	10.0	2.5	9.0
02-jul-1996 21:15	3972	3532	KCL/POLYME	50.0	1.30	0.0	56	38	31	23			6	5	50.0	18.0	10.0	2.5	10.0
03-jul-1996 16:00	4042	3599	KCL/POLYME	51.0	1.30	0.0	55	39	32	22			7	5	50.0	16.0	11.5	2.0	9.0
04-jul-1996 16:00	4094	3649	KCL/POLYME	51.0	1.30	0.0	55	37	30	21			6	5	50.0	18.0	9.5	3.0	9.5
05-jul-1996 19:30	4114	3669	KCL/POLYME	50.0	1.30	0.0	52	35	30	20			6	5	50.0	17.0	9.0	3.0	9.0
06-jul-1996 19:39	4114	3669	KCL/POLYME	50.0	1.30	0.0	52	35	30	20			6	5	50.0	17.0	9.0	3.0	9.0
07-jul-1996 19:30	4114	3669	KCL/POLYME	55.0	1.30	0.0							6	5	50.0	17.0	9.0	3.0	9.0
08-jul-1996 21:00	4114	3669	KCL/POLYME	58.0	1.30	0.0	52	35	30	20			6	5	50.0	17.0	9.0	3.0	9.0
09-jul-1996 20:00	4114	3669	KCL/POLYME	58.0	1.30	0.0									50.0	17.0	9.0	3.0	9.0

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

Norsk Hydro

DAILY MUD PROPERTIES : RHEOLOGY PARAMETERS FOR WELL 31/2-19S

Hole section: 8 1/2"

WATER BASED SYSTEM

Date	Depth		Mud Type	Funnel	Dens	Mudtmp	Fann Readings						Rheo	PV	YP	Ge10	Ge110		
	[m]			Visc	Out								Test						
	MD	TVD		[sec]	[sg]	[DegC]	600	300	200	100	60	30	6	3	[DegC]	[mPas]	[Pa]	[Pa]	[Pa]
10-jul-1996 22:00	2920	2654	KCL/POLYME	45.0	1.25	0.0									0.0	0.0	0.0	0.0	0.0

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

Norsk Hydro

DAILY MUD PROPERTIES : OTHER PARAMETERS FOR WELL 31/2-19S

Hole section: 36"

WATER BASED SYSTEM

Date	Depth [m]	Mud Type	Dens [sg]	Filtrate		Filt.cake		HPHT Press/Temp [psi/DegC]	pH	Alcalinity			Inhib Chem	K+	CL-	Ca++	Mg++	Tot hard	Percentage			CEC [Kg/m3]	ASG [sg]	LGS [Kg/m3]	
				[ml]	[ml]	[mm]	[mm]			Pm	Pf	Mf							Oil	Sand					
08-may-1996 20:00	428	428	BENTONITE	1.20	0.0	0.0	0	0	0/0	8.8	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		Filt.cake		HPHT Press/Temp [psi/DegC]	pH	Alcalinity			Inhib Chem	K+	CL-	Ca++	Mg++	Tot hard	Percentage			CEC [Kg/m3]	ASG [sg]	LGS [Kg/m3]	
				[ml]	[ml]	[mm]	[mm]			Pm	Pf	Mf							Oil	Sand					
09-may-1996 22:00	428	428	BENTONITE	1.06	0.0	0.0	0	0	0/0	9.5	0.0	0.0	0.0	0	0	0	0	0	0	0.0	0.0	0.0	0	0.0	0
11-may-1996 17:00	1316	1316	BENTONITE	1.06	0.0	0.0	0	0	0/0	9.0	0.0	0.0	0.0	0	0	0	0	0	0	0.0	0.0	0.0	0	0.0	0
12-may-1996 23:00	1316	1316	BENTONITE	1.06	0.0	0.0	0	0	0/0	9.0	0.0	0.0	0.0	0	0	0	0	0	0	0.0	0.0	0.0	0	0.0	0
13-may-1996 23:00	1316	1316	BENTONITE	1.06	0.0	0.0	0	0	0/0	9.0	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		Filt.cake		HPHT Press/Temp [psi/DegC]	pH	Alcalinity			Inhib Chem	K+	CL-	Ca++	Mg++	Tot hard	Percentage			CEC [Kg/m3]	ASG [sg]	LGS [Kg/m3]	
				[ml]	[ml]	[mm]	[mm]			Pm	Pf	Mf							Oil	Sand					
14-may-1996 21:39	1504	1504	BENTONITE	1.25	2.6	9.6	1	3	35/150	8.3	0.0	0.0	0.3	154	81000	73000	280	0	360	12.0	0.0	0.0	0	0.0	52
15-may-1996 15:00	1745	1724	KCL/POLYME	1.25	2.3	9.6	1	3	35/150	8.3	0.0	0.0	0.3	156	82000	74000	340	0	400	12.0	0.0	0.0	0	0.0	49
16-may-1996 15:00	1748	1727	KCL/POLYME	1.25	2.3	9.8	1	3	35/150	8.1	0.0	0.0	0.4	155	81000	74000	340	0	400	12.0	0.0	0.0	0	0.0	49
17-may-1996 22:00	1841	1800	KCL/POLYME	1.26	2.4	9.8	1	3	35/150	8.3	0.0	0.0	0.4	152	80000	72500	340	0	400	12.5	0.0	0.0	0	0.0	64
18-may-1996 19:00	1930	1869	KCL/POLYME	1.26	3.0	10.1	1	3	35/150	8.3	0.0	0.1	0.3	155	81000	74000	400	0	440	12.5	0.0	0.0	0	0.0	60
19-may-1996 22:30	2164	2057	KCL/POLYME	1.26	2.5	10.0	1	3	35/150	8.1	0.0	0.0	0.4	158	83000	79000	360	0	480	12.5	0.0	0.0	0	0.0	47
20-may-1996 14:15	2312	2175	KCL/POLYME	1.25	2.6	10.0	1	3	35/150	8.3	0.0	0.1	0.6	165	87000	83000	300	0	320	12.5	0.0	0.0	27	0.0	52
21-may-1996 19:00	2516	2335	KCL/POLYME	1.26	2.6	10.0	1	3	35/150	8.3	0.0	0.1	0.6	170	89200	86000	400	0	420	12.5	0.0	0.0	30	0.0	12
22-may-1996 14:00	2518	2337	KCL/POLYME	1.26	2.4	12.0	1	3	35/150	8.2	0.0	0.0	0.6	160	83900	80000	440	0	440	13.0	0.0	0.0	28	0.0	71
23-may-1996 21:30	2620	2417	KCL/POLYME	1.25	3.0	10.0	1	3	35/150	8.1	0.0	0.0	0.6	155	81300	77500	440	0	400	13.0	0.0	0.0	30	0.0	78
24-may-1996 21:30	2917	2652	KCL/POLYME	1.25	3.6	10.0	1	3	35/150	8.1	0.0	0.1	0.8	150	78700	75000	320	0	400	13.5	0.0	0.0	38	0.0	95
25-may-1996 15:00	3098	2797	KCL/POLYME	1.25	3.8	12.0	1	3	35/150	8.4	0.0	0.1	0.9	150	78500	75000	360	0	400	13.5	0.0	0.0	35	0.0	111
26-may-1996 22:00	3118	2814	KCL/POLYME	1.25	3.6	12.0	1	3	35/150	8.4	0.0	0.1	0.8	150	78700	75000	360	0	380	13.5	0.0	0.0	34	0.0	127
28-may-1996 21:00	3118	2814	KCL/POLYME	1.27	3.4	14.8	1	2	35/110	8.0	0.0	0.0	0.8	150	78700	75000	320	0	380	14.0	0.0	1.0	43	0.0	122
30-may-1996 21:00	3118	2814	KCL/POLYME	1.27	3.4	14.8	1	2	35/110	8.0	0.0	0.0	0.8	150	78700	75000	320	0	380	14.0	0.0	1.0	43	0.0	122
31-may-1996 06:00	3118	2814	KCL/POLYME	1.30	3.5	14.8	1	2	35/110	8.0	0.0	0.0	0.8	153	71000	73000	320	0	385	15.0	0.0	1.0	43	0.0	132
01-jun-1996 18:00	3118	2814	KCL/POLYME	1.30	3.5	14.8	1	2	35/110	8.0	0.0	0.0	0.8	153	71000	73000	320	0	385	15.0	0.0	1.0	43	0.0	132

Hole section: 8 1/2"

WATER BASED SYSTEM

Date	Depth [m]	Mud Type	Dens [sg]	Filtrate		Filt.cake		HPHT Press/Temp [psi/DegC]	pH	Alcalinity			Inhib Chem	K+	CL-	Ca++	Mg++	Tot hard	Percentage			CEC [Kg/m3]	ASG [sg]	LGS [Kg/m3]	
				[ml]	[ml]	[mm]	[mm]			Pm	Pf	Mf							Oil	Sand					
25-jun-1996 15:00	0		KCL/POLYME	1.30	4.1	15.2	1	2	35/140	7.6	0.0	0.0	0.8	153	71000	73000	360	0	400	15.0	0.0	1.0	43	0.0	132
26-jun-1996 19:30	3154	2843	KCL/POLYME	1.30	3.6	15.2	1	2	35/140	8.5	0.0	0.1	0.5	140	71000	75000	360	0	400	15.0	0.0	0.5	28	0.0	127
27-jun-1996 16:30	3196	2877	KCL/POLYME	1.30	3.4	14.9	1	2	35/140	8.4	0.0	0.0	0.7	141	73900	75000	360	0	420	15.0	0.0	0.3	18	0.0	127

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

Norsk Hydro

DAILY MUD PROPERTIES : OTHER PARAMETERS FOR WELL 31/2-19S

Hole section: 8 1/2"

WATER BASED SYSTEM

Date	Depth		Mud Type	Dens [sg]	Filtrate		Filt.cake		HPHT [psi/DegC]	pH	Alcalinity			Inhib [Kg/m3]	K+	CL-	Ca++	Mg++	Tot [mg]	Percentage			CEC [Kg/m3]	ASG [sg]	LGS [Kg/m3]	
	[m]	MD			TVD	API	HPHT	API			HPHT	Press	Temp							Pm	Pf	Mf				Chem
28-jun-1996	14:30	3203	2882	KCL/POLYME	1.30	3.1	14.2	1	2	35/140	8.2	0.0	0.0	0.5	138	172400	77000	300	0	380	14.8	0.0	0.3	16	0.0	111
29-jun-1996	21:00	3453	3081	KCL/POLYME	1.30	3.4	13.0	1	2	35/140	8.4	0.0	0.1	0.8	130	171000	72000	320	0	400	15.0	0.0	0.8	25	0.0	140
30-jun-1996	21:15	3579	3180	KCL/POLYME	1.31	4.0	13.0	1	2	35/140	8.4	0.0	0.1	0.8	135	171000	72000	400	0	440	15.0	0.0	0.5	28	0.0	135
01-jul-1996	20:30	3709	3288	KCL/POLYME	1.30	3.8	13.0	1	2	35/140	8.2	0.0	0.0	0.8	135	171000	72000	400	0	440	15.0	0.0	0.6	25	0.0	135
02-jul-1996	21:15	3972	3532	KCL/POLYME	1.30	4.0	12.5	1	2	35/140	8.2	0.0	0.0	0.8	128	171000	69000	400	0	440	14.9	0.0	0.6	25	0.0	137
03-jul-1996	16:00	4042	3599	KCL/POLYME	1.30	3.9	12.8	1	2	35/140	8.2	0.0	0.0	0.8	128	171000	69000	360	0	400	15.0	0.0	0.5	25	0.0	142
04-jul-1996	16:00	4094	3649	KCL/POLYME	1.30	4.0	12.8	1	2	35/140	8.3	0.0	0.0	0.8	123	171000	64000	280	0	300	14.8	0.0	0.1	28	0.0	143
05-jul-1996	19:30	4114	3669	KCL/POLYME	1.30	4.0	12.8	1	2	35/140	8.3	0.0	0.0	0.8	123	171000	64000	280	0	320	14.8	0.0	0.5	28	0.0	127
06-jul-1996	19:39	4114	3669	KCL/POLYME	1.30	4.0	12.8	1	2	35/140	8.3	0.0	0.0	0.8	123	171000	64000	280	0	320	14.5	0.0	0.5	28	0.0	127
07-jul-1996	19:30	4114	3669	KCL/POLYME	1.30	4.0	12.8	1	2	35/140	8.3	0.0	0.0	0.9	123	171000	64000	280	0	320	14.5	0.0	0.5	28	0.0	127
08-jul-1996	21:00	4114	3669	KCL/POLYME	1.30	4.0	12.8	1	2	35/140	8.3	0.0	0.0	0.8	123	171000	64000	280	0	320	14.5	0.0	0.5	28	0.0	127
09-jul-1996	20:00	4114	3669	KCL/POLYME	1.30	4.0	12.8	1	2	35/140	8.3	0.0	0.0	0.8	123	171000	64000	280	0	320	14.5	0.0	0.5	28	0.0	127
10-jul-1996	22:00	2920	2654	KCL/POLYME	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

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

## TOTAL CONSUMPTION OF MUD ADDITIVES ON WELL 31/2-19S

Section Size	Product/Additive	Total Amount Planned	Total Amount Used	Unit	Difference		Difference in cost	
					Amount	%	%	[kNOK]
36"	BARITE		8000.0	kg				
	BENTONITE		18000.0	kg				
	LIME		75.0	kg				
	SODA ASH		400.0	kg				
17 1/2"	BARITE		3000.0	kg				
	BENTONITE		43000.0	kg				
	LIME		5.0	kg				
	SODA ASH		300.0	kg				
12 1/4"	BARITE		181000.0	kg				
	CELPOL ESL		9675.0	kg				
	KCL BRINE		623000.0	l				
	KCL POWDER		6000.0	kg				
	PHPA		2750.0	kg				
	RHODOPOL 23		4825.0	kg				
	SODA ASH		1750.0	kg				
8 1/2"	BARITE		68000.0	kg				
	CELPOL ESL		3525.0	kg				
	CITRIC ACID		250.0	kg				
	DRISCAL D - HT viscocifier		103.0	kg				
	RHODOPOL 23		475.0	kg				
	SODA ASH		475.0	kg				
	SODIUM BICARBONATE		475.0	kg				





## 1 INTRODUCTION

This is a standard petroleum geochemical study on the source rocks and possible migrated hydrocarbons encountered in the well 31/2-19S.

The objectives of this petroleum geochemical study were:

- To establish a maturity profile through the well
- To evaluate the source rock potential
- Detect possible occurrence of migrated hydrocarbons in selected samples

A list of the samples analyzed in this study is given in Table 1.2. The analytical and preparative methods employed in this study comprised geochemical screening and bitumen characterization. Methods used are listed below:

- Vitrinite reflectance measurements
- Rock Eval screening
- Pyrolysis gas chromatography/mass spectroscopy
- Extraction
- Asphaltene precipitation
- Preparative group type separation, MPLC
- Analytical group type separation, TLC-FID
- Gas chromatography of saturated hydrocarbons
- Gas chromatography/mass spectroscopy (GC/MS) of saturated hydrocarbons
- Gas chromatography/mass spectroscopy (GC/MS) of aromatic hydrocarbons





Analytical procedures are based upon "The Norwegian Industry Guide to Organic Geochemical Analyses, 3rd edition 1993".

Vitrinite reflectance measurements were carried out by Geolab UK, Newcastle, UK. All other analytical work, together with interpretation of data, and compilation of this report was done at Norsk Hydro E&P Research Center, Bergen, Norway.

All depths in this report are in mRKB unless otherwise stated. Core and drillcuttings (DC) samples are related to drillers depth. SWC samples are related to loggers depth.

**Table 1.1 Stratigraphy of well 31/2-19S**



**STRATIGRAPHY, WELL NOR : 31/2-19S**

03-Jan-1997

14:43

	TOP (m)	BOTTOM (m)	Simple Mean							Weighted Mean				
			S1 (kg/t)	S2 (kg/t)	TOC (%)	HI	PI	Tmax	VRo	S1 (kg/t)	S2 (kg/t)	TOC (%)	HI	
	1585.00	1633.00								0.36				
	1633.00	1694.00												
	1694.00	2055.00	0.0	0.2	0.3	256	0.0	429	0.41	0.0	0.1	0.2	540	
	2055.00	2126.00							0.40					
	2126.00	2250.00							0.42					
	2250.00	2466.00	0.0	0.2	0.7	30	0.0	430	0.44					
	2466.00	2497.00												
	2497.00	2534.00	0.0	0.1	0.8	8	0.0		0.42	0.0	0.1	0.8	7	
	2534.00	2554.50	0.0	0.4	1.6	27	0.1							
	2554.50	2560.00	0.9	14.8	4.5	330	0.1	420						
	2560.00	2572.00												
	2572.00	2577.00	0.0	0.0	0.1	17	0.5							
	2577.00	2737.50	1.0	18.3	5.8	296	0.1	425	0.41	0.9	17.3	5.7	288	
	2737.50	3426.00	0.4	3.8	2.7	142	0.1	433	0.57	0.4	3.8	2.7	138	
	3426.00	3467.50	0.1	1.1	1.2	92	0.1	434						
	3467.50	3475.50												
	3475.50	3565.00	0.0	0.0	0.0	0	1.0		0.71					
	3565.50	3574.50	0.1	0.3	0.4	92	0.2	444						
	3574.50	3590.00												
	3590.00	3631.50												
	3631.50	3704.00	0.8	5.0	2.3	215	0.1	442	0.65					
	3704.00	3749.00												
	3749.00	4003.00	0.0	0.2	0.2	63	0.3	448	0.75	0.0	0.1	0.2	61	
	4003.00	4052.00												
	4052.00	4059.00												
	4059.00	4114.00							0.83					

Table 1.2 List of samples analyzed



ANALYSIS PROGRAMME, WELL NOR : 31/2-19S

Depth (m)	Lithology	Type	R-Ev	REEX	Extr	MPLC	Iatr	SatGC	PyGC	Isot	Biom	Vitr
1320.00	SH	DC										1
1400.00	SH	DC										1
1500.00	SH	DC										1
1600.00	SH	DC										1
1700.00	SH	DC										1
1748.25	SST	COCH	1									
1748.80	SST	COCH	1									
1753.00	SST	COCH	1									
1800.00	SST/SH	DC										1
1805.00	SST	DC	1									
1810.00	SST	DC	1									
1815.00	SST	DC	1									
1860.00	SST/SH	DC										1
1955.00	SST	DC										1
2000.00	SH	DC										1
2100.00	SH/SST	DC										1
2200.00	SH	DC										1
2300.00	SH	DC										1
2400.00	SH	DC										1
2462.50	CLYST	SWC	1									
2500.00	SH/SST	DC										1
2508.00	CLYST	SWC	1									
2522.00	CLYST	SWC	1									
2545.00	CLYST	SWC	1									
2560.00	CLYST	SWC	1		1		1				1	
2575.00	MRL	SWC	1									
2580.00	CLYST	SWC	1		1		1				1	
2580.00	SLST	DC	1									
2585.00	SLST	DC	1									
2590.00	CLYST	DC	1									

Table 1.2 List of samples analyzed



ANALYSIS PROGRAMME, WELL NOR : 31/2-19S

Depth (m)	Lithology	Type	R-Ev	REEX	Extr	MPLC	Iatr	SatGC	PyGC	Isot	Biom	Vitr
2595.00	SLST	DC	1									
2600.00	SH	DC										1
2600.00	SLST	DC	1									
2605.00	CLYST	DC	1									
2610.00	CLYST	SWC	1									
2610.00	CLYST	DC	1									
2615.00	CLYST	DC	1									
2620.00	CLYST	DC	1									
2625.00	CLYST	DC	1									
2630.00	CLYST	DC	1		1		1				1	
2635.00	CLYST	DC	1									
2640.00	CLYST	DC	1									
2645.00	CLYST	DC	1									
2650.00	CLYST	DC	1									
2655.00	CLYST	DC	1									
2658.00	CLYST	SWC	1									
2660.00	CLYST	DC	1									
2665.00	CLYST	DC	1									
2670.00	CLYST	DC	1									
2675.00	CLYST	SWC	1									
2675.00	CLYST	DC	1									
2680.00	CLYST	DC	1									
2685.00	SLST	DC	1									
2695.00	CLYST	DC	1									
2700.00	CLYST	DC	1									
2700.00	SH	DC										1
2705.00	CLYST	DC	1									
2710.00	SLST	DC	1									
2710.00	CLYST	SWC	1									
2715.00	CLYST	DC	1									

Table 1.2 List of samples analyzed



ANALYSIS PROGRAMME, WELL NOR : 31/2-19S

03-Jan-1997 15:53

Depth (m)	Lithology	Type	R-Ev	REEX	Extr	MPLC	Iatr	SatGC	PyGC	Isot	Biom	Vitr
2720.00	CLYST	DC	1									
2725.00	CLYST	DC	1									
2730.00	CLYST	DC	1									
2733.00	CLYST	SWC	1		1		1				1	
2735.00	CLYST	DC	1									
2740.00	SLST	SWC	1									
2740.00	SLST	DC	1									
2750.00	SLST	DC	1									
2750.00	SLST	SWC	1		1		1				1	
2760.00	SLST	DC	1									
2770.00	SLST	DC	1									
2772.00	SLST	SWC	1									
2780.00	SLST	DC	1									
2790.00	SLST	DC	1									
2800.00	SLST	DC	1									
2800.00	SH	DC										1
2810.00	SLST	DC	1									
2814.00	SLST	SWC	1									
2820.00	SLST	DC	1									
2830.00	SLST	DC	1									
2840.00	SLST	DC	1									
2850.00	SLST	DC	1									
2860.00	SLST	DC	1									
2860.00	SLST	SWC	1									
2870.00	SLST	DC	1									
2880.00	SLST	DC	1									
2900.00	SH	DC										1
2900.00	SLST	DC	1									
2910.00	SLST	DC	1									
2920.00	SLST	DC	1									

Table 1.2 List of samples analyzed



ANALYSIS PROGRAMME, WELL NOR : 31/2-19S

Depth (m)	Lithology	Type	R-Ev	REEX	Extr	MPLC	Iatr	SatGC	PyGC	Isot	Biom	Vitr
2920.00	SLST	SWC	1									
2930.00	SLST	DC	1									
2940.00	SLST	DC	1									
2950.00	SLST	DC	1									
2960.00	SLST	DC	1									
2970.00	SLST	DC	1									
2972.00	SLST	SWC	1									
2980.00	SLST	DC	1									
2990.00	SLST	DC	1									
3000.00	SLST	DC	1									
3000.00	SH	DC										1
3005.00	SLST	SWC	1		1		1				1	
3010.00	SLST	DC	1									
3020.00	SLST	DC	1		1		1				1	
3030.00	SLST	DC	1									
3040.00	SLST	DC	1									
3050.00	SLST	DC	1									
3060.00	SLST	DC	1									
3070.00	SLST	SWC	1									
3070.00	SLST	DC	1									
3080.00	SLST	DC	1									
3090.00	SLST	DC	1									
3100.00	SLST	DC	1									
3100.00	SH	DC										1
3110.00	SLST	DC	1									
3120.00	SLST	DC	1									
3130.00	SLST	DC	1									
3140.00	SLST	DC	1									
3140.00	SLST	SWC	1									
3150.00	SLST	DC	1									

Table 1.2 List of samples analyzed



ANALYSIS PROGRAMME, WELL NOR : 31/2-19S

03-Jan-1997 15:53

Depth (m)	Lithology	Type	R-Ev	REEX	Extr	MPLC	Iatr	SatGC	PyGC	Isot	Biom	Vitr
3159.50	SLST	SWC	1									
3160.00	SLST	DC	1									
3172.00	SLST	DC	1									
3182.00	SLST	DC	1									
3190.00	SLST	DC	1									
3200.00	SLST	DC	1									
3200.00	SLST	COCH	1									
3210.00	SLST	COCH	1		1		1				1	
3214.00	SLST	COCH	1									
3215.00	SLST	SWC									1	
3215.00	SLST	SWC	1		1		1					
3217.00	SH	DC										1
3220.00	SLST	DC	1									
3230.00	SLST	DC	1									
3234.00	SLST	SWC									1	
3234.00	SLST	SWC	1		1		1					
3240.00	SLST	DC	1									
3250.00	SLST	DC	1									
3260.00	SLST	DC	1									
3266.00	SLST	SWC	1									
3270.00	SLST	DC	1									
3280.00	SLST	DC	1		1		1				1	
3290.00	SLST	DC	1									
3300.00	SLST	DC	1									
3300.00	SH	DC										1
3310.00	SLST	DC	1		1		1				1	
3311.00	SLST	SWC	1									
3320.00	SLST	DC	1									
3330.00	SLST	DC	1									
3340.00	SLST	DC	1									

Table 1.2 List of samples analyzed



ANALYSIS PROGRAMME, WELL NOR : 31/2-19S

Depth (m)	Lithology	Type	R-Ev	REEX	Extr	MPLC	Iatr	SatGC	PyGC	Isot	Biom	Vitr
3350.00	SLST	SWC	1		1		1					
3350.00	SLST	SWC									1	
3360.00	SLST	DC	1		1		1				1	
3370.00	SLST	SWC	1									
3370.00	SLST	DC	1		1		1				1	
3380.00	SLST	DC	1									
3390.00	SLST	DC	1									
3400.00	SH	DC										1
3402.00	SLST	DC	1									
3410.00	SLST	DC	1		1		1				1	
3420.00	SLST	DC	1									
3421.50	SLST	SWC	1									
3430.00	SLST	DC	1									
3478.00	SST	SWC	1									
3520.00	SH/SST/COA	DC										1
3567.00	SST/SLST	SWC	1		1		1				1	
3646.00	CLYST	SWC	1		1		1				1	
3650.00	SST	DC										1
3700.00	SH/SST	DC										1
3800.00	SH	DC										1
3812.50	SLST	SWC	1									
3892.00	SST	SWC	1									
3900.00	SH	DC										1
3990.00	SLST	SWC	1									
4000.00	SH	DC										1
4080.00	SST/SLT	DC										1



**Table 1.2 List of samples analyzed**



**ANALYSIS PROGRAMME, WELL NOR : 31/2-19S**

Depth (m)	Group/Fm.	Lithology	Type	R-Ev	REEX	Extr	MPLC	Iatr	SatGC	PyGC	Isot	Biom	Vitr
--------------	-----------	-----------	------	------	------	------	------	------	-------	------	------	------	------

R-Ev = Rock Eval

MPLC = Separation

SatGC = Saturated GC

Isot = Isotope data

Vitr = VR0 (ave) %

Extr = Extraction

Iatr = Iatrosan

PyGC = Pyrolysis GC

Biom = Biomarker data

REEX = Rock Eval on extracted Secime

Table 2.1 Vitrinite reflectance data



VITRINITE REFLECTANCE Ro (average values), WELL NOR :31/2-19S

03-Jan-1997

16:12

Depth (m)	Lithology	Type	Population I		Population II		Analysing Company
			%Ro	n	%Ro	n	
1320.00	SH	DC	0.38	( 20)	0.00	( 0)	GEOLABUK
1400.00	SH	DC	0.39	( 20)	0.00	( 0)	GEOLABUK
1500.00	SH	DC	0.47	( 20)	0.00	( 0)	GEOLABUK
1600.00	SH	DC	0.36	( 20)	0.00	( 0)	GEOLABUK
1700.00	SH	DC	0.38	( 20)	0.00	( 0)	GEOLABUK
1800.00	SST/SH	DC	0.44	( 11)	0.00	( 0)	GEOLABUK
1860.00	SST/SH	DC	0.40	( 20)	0.00	( 0)	GEOLABUK
1955.00	SST	DC	0.38	( 5)	0.00	( 0)	GEOLABUK
2000.00	SH	DC	0.43	( 5)	0.00	( 0)	GEOLABUK
2100.00	SH/SST	DC	0.40	( 5)	0.00	( 0)	GEOLABUK
2200.00	SH	DC	0.42	( 9)	0.00	( 0)	GEOLABUK
2300.00	SH	DC	0.42	( 5)	0.00	( 0)	GEOLABUK
2400.00	SH	DC	0.45	( 9)	0.00	( 0)	GEOLABUK
2500.00	SH/SST	DC	0.42	( 3)	0.00	( 0)	GEOLABUK
2600.00	SH	DC	0.41	( 10)	0.00	( 0)	GEOLABUK
2700.00	SH	DC	0.42	( 20)	0.00	( 0)	GEOLABUK
2800.00	SH	DC	0.47	( 20)	0.00	( 0)	GEOLABUK
2900.00	SH	DC	0.87	( 20)	0.00	( 0)	GEOLABUK
3000.00	SH	DC	0.48	( 20)	0.00	( 0)	GEOLABUK
3100.00	SH	DC	0.52	( 20)	0.00	( 0)	GEOLABUK
3217.00	SH	DC	0.59	( 20)	0.00	( 0)	GEOLABUK
3300.00	SH	DC	0.52	( 20)	0.00	( 0)	GEOLABUK
3400.00	SH	DC	0.55	( 20)	0.00	( 0)	GEOLABUK
3520.00	SH/SST/CO	DC	0.71	( 20)	0.00	( 0)	GEOLABUK
3650.00	SST	DC	0.62	( 14)	0.00	( 0)	GEOLABUK
3700.00	SH/SST	DC	0.69	( 20)	0.00	( 0)	GEOLABUK
3800.00	SH	DC	0.67	( 20)	0.00	( 0)	GEOLABUK
3900.00	SH	DC	0.74	( 20)	0.00	( 0)	GEOLABUK
4000.00	SH	DC	0.84	( 20)	0.00	( 0)	GEOLABUK
4080.00	SST/SLT	DC	0.83	( 30)	0.00	( 0)	GEOLABUK

**Table 3.1 Rock Eval screening data**



**ROCK EVAL SCREENING DATA , WELL NOR : 31/2-19S**

Depth (m)	Lithology	Type	Tmax (C)	S1(kg/t)	S2 (kg/t)	TOC (%)	HI	PI	Analysing Company
1748.25	SST	COCH		0.0	0.1		900	0.00	NORSK HYDRO
1748.80	SST	COCH		0.0	0.1			0.00	NORSK HYDRO
1753.00	SST	COCH		0.0	0.0				NORSK HYDRO
1805.00	SST	DC	429	0.0	0.2	0.4	42	0.00	NORSK HYDRO
1810.00	SST	DC	430	0.0	0.2	0.5	49	0.04	NORSK HYDRO
1815.00	SST	DC	428	0.0	0.2	0.4	35	0.00	NORSK HYDRO
2462.50	CLYST	SWC	430	0.0	0.2	0.7	30	0.04	NORSK HYDRO
2508.00	CLYST	SWC		0.0	0.0	0.7	4	0.00	NORSK HYDRO
2522.00	CLYST	SWC		0.0	0.1	1.0	11	0.08	NORSK HYDRO
2545.00	CLYST	SWC		0.0	0.4	1.6	27	0.06	NORSK HYDRO
2560.00	CLYST	SWC	420	0.9	14.8	4.5	330	0.05	NORSK HYDRO
2575.00	MRL	SWC		0.0	0.0	0.1	17	0.50	NORSK HYDRO
2580.00	CLYST	SWC	423	2.2	36.3	7.4	489	0.06	NORSK HYDRO
2580.00	SLST	DC	421	0.1	0.8	1.6	48	0.08	NORSK HYDRO
2585.00	SLST	DC	426	0.3	2.2	5.1	43	0.14	NORSK HYDRO
2590.00	CLYST	DC	424	1.5	26.9	6.2	433	0.05	NORSK HYDRO
2595.00	SLST	DC	425	0.2	1.4	5.3	27	0.15	NORSK HYDRO
2600.00	SLST	DC	427	0.4	1.0	5.5	18	0.26	NORSK HYDRO
2605.00	CLYST	DC	425	0.3	5.6	5.3	107	0.05	NORSK HYDRO
2610.00	CLYST	SWC	426	1.5	21.9	5.6	393	0.07	NORSK HYDRO
2610.00	CLYST	DC	425	1.4	20.7	5.8	356	0.06	NORSK HYDRO
2615.00	CLYST	DC	424	1.1	22.8	5.9	385	0.05	NORSK HYDRO
2620.00	CLYST	DC	423	0.8	19.2	5.4	355	0.04	NORSK HYDRO
2625.00	CLYST	DC	422	1.8	20.7	5.8	359	0.08	NORSK HYDRO
2630.00	CLYST	DC	425	1.1	19.8	5.5	363	0.05	NORSK HYDRO
2635.00	CLYST	DC	424	0.7	16.0	5.1	311	0.04	NORSK HYDRO
2640.00	CLYST	DC	423	0.9	20.7	6.0	348	0.04	NORSK HYDRO
2645.00	CLYST	DC	424	0.6	16.0	6.0	267	0.04	NORSK HYDRO
2650.00	CLYST	DC	424	0.4	6.2	5.8	108	0.06	NORSK HYDRO
2655.00	CLYST	DC	423	2.1	32.8	7.3	452	0.06	NORSK HYDRO

Table 3.1 Rock Eval screening data



ROCK EVAL SCREENING DATA , WELL NOR : 31/2-19S

03-Jan-1997

16:09

Depth (m)	Lithology	Type	Tmax (C)	S1(kg/t)	S2 (kg/t)	TOC (%)	HI	PI	Analysing Company
2658.00	CLYST	SWC	425	2.9	38.4	7.7	499	0.07	NORSK HYDRO
2660.00	CLYST	DC	422	1.1	27.0	6.3	428	0.04	NORSK HYDRO
2665.00	CLYST	DC	425	2.0	29.8	6.8	442	0.06	NORSK HYDRO
2670.00	CLYST	DC	423	0.7	19.7	5.3	373	0.03	NORSK HYDRO
2675.00	CLYST	SWC	427	1.8	26.1	5.7	457	0.06	NORSK HYDRO
2675.00	CLYST	DC	425	0.7	19.1	5.7	337	0.03	NORSK HYDRO
2680.00	CLYST	DC	425	0.6	17.8	6.3	283	0.03	NORSK HYDRO
2685.00	SLST	DC	426	0.1	0.9	5.6	16	0.11	NORSK HYDRO
2695.00	CLYST	DC	425	1.0	25.7	6.4	400	0.04	NORSK HYDRO
2700.00	CLYST	DC	426	0.5	19.1	5.9	322	0.03	NORSK HYDRO
2705.00	CLYST	DC	427	0.3	5.6	5.2	107	0.05	NORSK HYDRO
2710.00	CLYST	SWC	428	1.3	17.2	4.7	370	0.07	NORSK HYDRO
2710.00	SLST	DC	427	0.2	4.3	4.8	89	0.05	NORSK HYDRO
2715.00	CLYST	DC	430	0.5	14.3	5.1	282	0.03	NORSK HYDRO
2720.00	CLYST	DC	429	0.7	18.9	5.1	368	0.04	NORSK HYDRO
2725.00	CLYST	DC	428	0.6	18.0	5.3	338	0.03	NORSK HYDRO
2730.00	CLYST	DC	426	0.8	18.4	5.9	313	0.04	NORSK HYDRO
2733.00	CLYST	SWC	427	3.9	53.2	10.8	492	0.07	NORSK HYDRO
2735.00	CLYST	DC	425	0.4	10.9	5.7	192	0.04	NORSK HYDRO
2740.00	SLST	SWC	423	0.5	2.6	2.2	118	0.15	NORSK HYDRO
2740.00	SLST	DC	428	0.8	17.4	4.7	374	0.05	NORSK HYDRO
2750.00	SLST	SWC	430	0.2	0.5	0.9	52	0.24	NORSK HYDRO
2750.00	SLST	DC	426	0.8	12.2	4.0	305	0.06	NORSK HYDRO
2760.00	SLST	DC	426	0.9	12.1	3.8	322	0.07	NORSK HYDRO
2770.00	SLST	DC	427	0.9	10.6	3.7	286	0.08	NORSK HYDRO
2772.00	SLST	SWC	433	0.5	3.3	2.6	126	0.13	NORSK HYDRO
2780.00	SLST	DC	430	0.5	9.7	3.8	253	0.05	NORSK HYDRO
2790.00	SLST	DC	427	0.9	8.7	3.7	238	0.10	NORSK HYDRO
2800.00	SLST	DC	431	0.3	3.7	3.2	116	0.08	NORSK HYDRO
2810.00	SLST	DC	424	0.1	0.5	3.0	15	0.13	NORSK HYDRO

**Table 3.1 Rock Eval screening data**



**ROCK EVAL SCREENING DATA , WELL NOR : 31/2-19S**

Depth (m)	Lithology	Type	Tmax (C)	S1(kg/t)	S2 (kg/t)	TOC (%)	HI	PI	Analysing Company
2814.00	SLST	SWC	432	0.4	3.4	2.8	124	0.11	NORSK HYDRO
2820.00	SLST	DC	432	0.4	6.0	3.6	166	0.06	NORSK HYDRO
2830.00	SLST	DC	431	0.2	4.2	4.3	99	0.05	NORSK HYDRO
2840.00	SLST	DC	433	0.5	4.4	4.1	109	0.10	NORSK HYDRO
2850.00	SLST	DC	429	0.1	0.4	3.4	11	0.20	NORSK HYDRO
2860.00	SLST	SWC	433	0.4	3.4	3.5	97	0.10	NORSK HYDRO
2860.00	SLST	DC	431	0.1	0.5	3.0	17	0.09	NORSK HYDRO
2870.00	SLST	DC		0.1	0.1	3.1	2	0.42	NORSK HYDRO
2880.00	SLST	DC	423	0.1	0.7	3.8	19	0.11	NORSK HYDRO
2900.00	SLST	DC		0.0	0.1	2.3	2	0.17	NORSK HYDRO
2910.00	SLST	DC	434	0.3	3.7	3.1	120	0.07	NORSK HYDRO
2920.00	SLST	SWC	432	0.7	4.7	4.1	115	0.13	NORSK HYDRO
2920.00	SLST	DC	434	0.7	6.0	4.7	127	0.10	NORSK HYDRO
2930.00	SLST	DC	434	0.2	3.2	4.3	75	0.06	NORSK HYDRO
2940.00	SLST	DC	427	0.1	0.8	4.4	17	0.06	NORSK HYDRO
2950.00	SLST	DC	428	0.1	1.0	4.3	23	0.09	NORSK HYDRO
2960.00	SLST	DC	434	0.2	3.1	4.4	72	0.07	NORSK HYDRO
2970.00	SLST	DC	434	0.5	4.3	4.4	96	0.10	NORSK HYDRO
2972.00	SLST	SWC	432	1.0	6.9	4.4	156	0.12	NORSK HYDRO
2980.00	SLST	DC	434	0.0	0.2	2.9	7	0.05	NORSK HYDRO
2990.00	SLST	DC	425	0.1	1.1	4.4	25	0.09	NORSK HYDRO
3000.00	SLST	DC	434	0.6	6.2	4.4	141	0.09	NORSK HYDRO
3005.00	SLST	SWC	435	0.6	2.6	2.6	99	0.18	NORSK HYDRO
3010.00	SLST	DC	434	1.0	6.9	4.4	159	0.13	NORSK HYDRO
3020.00	SLST	DC	435	0.9	7.8	4.7	168	0.10	NORSK HYDRO
3030.00	SLST	DC	434	0.3	4.9	4.2	117	0.06	NORSK HYDRO
3040.00	SLST	DC	432	0.8	7.1	4.4	162	0.10	NORSK HYDRO
3050.00	SLST	DC	433	0.3	3.6	4.1	88	0.08	NORSK HYDRO
3060.00	SLST	DC	434	0.5	3.8	3.6	105	0.13	NORSK HYDRO
3070.00	SLST	SWC	436	0.3	2.5	3.9	64	0.12	NORSK HYDRO

Table 3.1 Rock Eval screening data



ROCK EVAL SCREENING DATA , WELL NOR : 31/2-19S

Depth (m)	Lithology	Type	Tmax (C)	S1(kg/t)	S2 (kg/t)	TOC (%)	HI	PI	Analysing Company
3070.00	SLST	DC	432	0.2	1.7	3.4	49	0.12	NORSK HYDRO
3080.00	SLST	DC	434	0.2	1.3	2.4	55	0.11	NORSK HYDRO
3090.00	SLST	DC	426	0.2	1.4	2.5	57	0.11	NORSK HYDRO
3100.00	SLST	DC	428	0.2	1.4	2.3	60	0.10	NORSK HYDRO
3110.00	SLST	DC	423	0.1	0.7	2.1	34	0.09	NORSK HYDRO
3120.00	SLST	DC	428	0.1	1.1	1.2	87	0.09	NORSK HYDRO
3130.00	SLST	DC		0.0	0.1	0.8	9	0.13	NORSK HYDRO
3140.00	SLST	SWC	437	0.4	2.3	1.5	160	0.15	NORSK HYDRO
3140.00	SLST	DC	430	0.1	0.9	1.1	77	0.06	NORSK HYDRO
3150.00	SLST	DC	437	0.2	2.4	1.4	166	0.07	NORSK HYDRO
3159.50	SLST	SWC	433	0.7	3.9	1.7	226	0.15	NORSK HYDRO
3160.00	SLST	DC	436	0.1	1.6	1.4	113	0.08	NORSK HYDRO
3172.00	SLST	DC	433	0.1	1.0	1.1	93	0.07	NORSK HYDRO
3182.00	SLST	DC	436	0.4	2.1	1.1	183	0.16	NORSK HYDRO
3190.00	SLST	DC	437	0.3	2.2	1.2	176	0.11	NORSK HYDRO
3200.00	SLST	COCH	437	0.4	2.8	1.2	239	0.13	NORSK HYDRO
3200.00	SLST	DC		0.1	0.7	1.5	45	0.07	NORSK HYDRO
3210.00	SLST	COCH	439	0.4	1.7	0.9	198	0.18	NORSK HYDRO
3214.00	SLST	COCH	439	0.5	2.9	1.6	179	0.15	NORSK HYDRO
3215.00	SLST	SWC	434	0.9	4.5	2.5	182	0.17	NORSK HYDRO
3220.00	SLST	DC		0.1	0.5	1.4	36	0.09	NORSK HYDRO
3230.00	SLST	DC	437	0.8	5.0	2.5	196	0.14	NORSK HYDRO
3234.00	SLST	SWC	436	1.1	5.4	2.5	214	0.17	NORSK HYDRO
3240.00	SLST	DC	437	0.4	5.0	2.7	188	0.07	NORSK HYDRO
3250.00	SLST	DC	437	0.4	5.2	2.5	210	0.06	NORSK HYDRO
3260.00	SLST	DC	433	0.1	1.4	1.7	83	0.05	NORSK HYDRO
3266.00	SLST	SWC	440	0.2	1.2	0.8	159	0.15	NORSK HYDRO
3270.00	SLST	DC	435	1.0	5.2	2.5	212	0.16	NORSK HYDRO
3280.00	SLST	DC	435	1.1	8.1	3.1	257	0.12	NORSK HYDRO
3290.00	SLST	DC	434	0.4	3.9	2.1	189	0.10	NORSK HYDRO

Table 3.1 Rock Eval screening data



ROCK EVAL SCREENING DATA , WELL NOR : 31/2-19S

03-Jan-1997

16:10

Depth (m)	Lithology	Type	Tmax (C)	S1(kg/t)	S2 (kg/t)	TOC (%)	HI	PI	Analysing Company
3300.00	SLST	DC	439	0.6	3.4	1.8	185	0.15	NORSK HYDRO
3310.00	SLST	DC	441	0.5	4.4	2.0	215	0.10	NORSK HYDRO
3311.00	SLST	SWC	438	0.5	2.7	1.5	178	0.15	NORSK HYDRO
3320.00	SLST	DC	437	0.7	6.1	2.2	279	0.10	NORSK HYDRO
3330.00	SLST	DC	439	0.2	3.2	1.8	183	0.06	NORSK HYDRO
3340.00	SLST	DC	435	0.6	8.4	2.5	338	0.07	NORSK HYDRO
3350.00	SLST	SWC	435	1.7	14.8	3.3	443	0.10	NORSK HYDRO
3360.00	SLST	DC	436	1.4	5.6	2.3	247	0.20	NORSK HYDRO
3370.00	SLST	SWC	439	0.5	3.5	1.6	224	0.12	NORSK HYDRO
3370.00	SLST	DC	436	0.7	5.4	2.2	244	0.11	NORSK HYDRO
3380.00	SLST	DC	437	0.7	6.4	2.1	312	0.10	NORSK HYDRO
3390.00	SLST	DC	439	0.4	2.1	1.2	171	0.14	NORSK HYDRO
3402.00	SLST	DC	437	0.4	1.7	1.2	135	0.17	NORSK HYDRO
3410.00	SLST	DC	439	0.3	0.9	0.8	114	0.25	NORSK HYDRO
3420.00	SLST	DC	438	0.3	1.0	0.7	131	0.24	NORSK HYDRO
3421.50	SLST	SWC	439	0.0	0.1	0.2	55	0.08	NORSK HYDRO
3430.00	SLST	DC	434	0.1	1.1	1.2	92	0.06	NORSK HYDRO
3478.00	SST	SWC		0.0	0.0		0	1.00	NORSK HYDRO
3567.00	SST/SLST	SWC	444	0.1	0.3	0.4	92	0.23	NORSK HYDRO
3646.00	CLYST	SWC	442	0.8	5.0	2.3	215	0.14	NORSK HYDRO
3812.50	SLST	SWC	448	0.1	0.4	0.5	75	0.19	NORSK HYDRO
3892.00	SST	SWC		0.0	0.1	0.1	63	0.38	NORSK HYDRO
3990.00	SLST	SWC		0.0	0.0	0.1	50	0.25	NORSK HYDRO

S-Depth, m	E-Depth, m	Well	Type	Lith.	Org.ID#	Proj.#	Seq.#	File name	Method:	Operator:	Misc.info.	Amounts:	Cal.amount (P)	Cal.response (P)
2560m	2560m	31/2-19S	SWC	clyst		2003647	0	2560.D	PY_SIM_A	Reidun	32.1	ng/mg	1002	2189942
2580m	2580m	31/2-19S	DC	clyst		2003647	0	2580.D	PY_SIM_A	Reidun	11.8	ng/mg	1002	2493952
2627m	2630m	31/2-19S	DC	clyst		2003647	0	2630.D	PY_SIM_A	Reidun	23.1	ng/mg	1002	2493952
2733m	2733m	31/2-19S	SWC	clyst		2003647	0	2733.D	PY_SIM_A	Reidun	8.2	ng/mg	1002	2493952
2733m	2733m	31/2-19S	SWC	clyst		2003647	0	2733_B.D	PY_SIM_A	Reidun	11.1	ng/mg	1002	2493952
3017m	3020m	31/2-19S	DC	slst		2003647	0	3020.D	PY_SIM_A	Reidun	87.3	ng/mg	1002	2189942
3277m	3280m	31/2-19S	DC	slst		2003647	0	3280.D	PY_SIM_A	Reidun	78.5	ng/mg	1002	2493952
3307m	3310m	31/2-19S	DC	slst		2003647	0	3310.D	PY_SIM_A	Reidun	89.9	ng/mg	1002	2189942
3350m	3350m	31/2-19S	SWC	slst		2003647	0	3350.D	PY_SIM_A	Reidun	34.2	ng/mg	1002	2493952
3357m	3360m	31/2-19S	DC	slst		2003647	0	3360.D	PY_SIM_A	Reidun	87.3	ng/mg	1002	2189942
3367m	3370m	31/2-19S	DC	slst		2003647	0	3370.D	PY_SIM_A	Reidun	82.0	ng/mg	1002	2493952
3646m	3646m	31/2-19S	SWC	clyst		2003647	0	3646.D	PY_SIM_A	Reidun	88.4	ng/mg	1002	2189942

Table 3.2 Pyrolysis GC-MS data



E-Depth, m	n-C6	n-C7	n-C8	n-C9	n-C10	n-C11	n-C12	n-C13	n-C14	n-C15	n-C16	n-C17	n-C18	n-C19	n-C20	n-C21	n-C22	n-C23	n-C24	n-C25	n-C26	n-C27
2560m	104	84	333	313	278	285	267	277	245	231	223	212	192	182	171	152	133	125	111	94	80	65
2580m	147	172	315	296	257	248	242	205	198	176	157	147	142	127	107	101	102	86	76	60	48	38
2630m	17	65	292	304	272	271	275	251	241	219	216	198	170	152	143	139	119	113	105	81	68	52
2733m	141	107	270	284	252	230	246	212	224	217	194	181	169	159	137	134	119	110	99	78	76	57
2733m	234	242	370	309	295	283	271	271	261	246	242	221	200	196	172	163	146	137	123	99	80	70
3020m	471	328	229	324	271	310	273	275	233	224	210	205	192	194	186	179	171	172	152	119	81	45
3280m	437	352	406	349	294	272	291	259	243	217	212	203	167	178	154	157	147	117	74	38	16	7
3310m	457	309	390	373	339	305	303	299	254	267	231	229	205	204	191	175	141	126	73	41	21	8
3350m	87	97	369	332	296	273	276	271	249	233	226	216	176	158	153	141	129	121	123	108	96	81
3360m	647	404	510	449	501	499	486	472	409	411	370	343	307	291	277	268	247	240	193	140	76	47
3370m	292	85	445	368	367	334	360	331	309	298	280	264	237	204	185	159	139	98	69	59	73	87
3646m	2990	641	538	578	529	565	532	522	465	451	407	394	389	395	354	327	325	302	266	212	141	102

Table 3.2 Pyrolysis GC-MS data

E-Depth, m	n-C28	n-C29	n-C30	n-C6:1	n-C7:1	n-C8:1	n-C9:1	n-C10:1	n-C11:1	n-C12:1	n-C13:1	n-C14:1	n-C15:1	n-C16:1	n-C17:1	Prist-1-ene	n-C18:1	n-C19:1
2560m	49	41	33	241	52	220	207	207	188	178	175	161	150	125	116	90	99	91
2580m	30	27	22	406	220	180	187	180	162	156	140	115	105	94	78	43	68	58
2630m	44	36	29	529	119	192	194	224	201	176	172	167	146	127	116	53	89	85
2733m	53	45	35	321	79	188	178	173	163	147	134	142	129	108	107	63	87	78
2733m	62	59	47	437	256	213	204	218	190	185	174	172	160	138	130	80	106	92
3020m	39	42	42	130	336	157	215	211	205	199	167	154	134	131	111	42	104	105
3280m	19	46	47	2040	314	263	236	217	196	183	170	177	145	130	111	16	102	98
3310m	11	32	29	156	335	249	232	225	199	195	184	184	157	140	125	14	107	96
3350m	67	59	41	244	96	194	215	220	195	183	181	166	151	137	124	21	104	97
3360m	46	63	70	983	394	226	297	369	340	328	289	275	248	213	186	22	156	155
3370m	85	77	64	520	96	277	237	272	239	229	205	195	184	157	146	24	115	111
3646m	48	38	39	1042	632	322	345	352	341	347	337	290	281	236	215	16	198	170

E-Depth, m	n-C20:1	n-C21:1	n-C22:1	n-C23:1	n-C24:1	n-C25:1	n-C26:1	n-C27:1	n-C28:1	n-C29:1	n-C30:1	Benzene	Toluene	Ethylbenzene	m+p-Xylene	o-Xylene
2560m	76	68	58	48	42	31	22	20	14	12	10	145	473	256	375	378
2580m	48	42	36	33	27	21	16	12	9	7	7	235	182	183	286	289
2630m	70	63	55	45	37	28	19	17	13	11	8	328	464	210	332	348
2733m	65	56	50	42	32	28	22	19	15	17	10	59	388	145	289	202
2733m	84	71	60	49	41	32	26	21	18	16	16	241	282	178	330	285
3020m	78	77	75	66	50	39	23	14	11	13	15	453	719	408	580	503
3280m	76	75	58	45	26	10	3	2	7	17	13	77	688	259	51	363
3310m	81	72	56	39	22	10	5	5	7	8	9	104	448	231	405	385
3350m	71	66	63	52	46	37	30	26	21	16	15	91	428	190	371	339
3360m	123	117	98	80	60	38	19	12	14	17	25	616	795	286	554	457
3370m	88	71	54	33	23	19	23	27	27	22	16	212	464	244	405	362
3646m	156	136	127	104	85	65	40	23	12	14	14	823	1020	441	772	564

E-Depth, m	Prophylbenzene	1e,3m+1e,4-mB	1,3,5-tmB	1e,2-mB	1,2,4-tmB	1,2,3-tmB	BP	3-mBP	4-mBP	DBF	Phenol	2-mPhenol	3+4-mPhenol	2,6-dmPhenol
2560m	124	198	90	153	296	183	30	13	7	16	96	78	120	37
2580m	90	168	66	146	236	147	9	8	3	7	102	66	92	23
2630m	130	190	74	175	268	194	18	11	5	9	69	69	86	32
2733m	64	133	52	111	185	118	10	8	3	21	113	80	115	25
2733m	90	173	65	141	265	152	13	10	4	29	79	64	117	29
3020m	170	372	151	234	393	220	56	52	19	107	472	315	455	116
3280m	122	240	91	149	304	144	16	18	7	20	384	254	408	87
3310m	129	242	78	202	299	149	15	16	6	17	281	203	245	72
3350m	94	212	77	154	285	125	17	13	6	16	137	104	170	44
3360m	171	351	113	241	414	205	43	34	14	39	497	304	433	122
3370m	126	230	81	208	336	154	16	14	7	17	209	172	223	62
3646m	149	301	114	181	358	163	46	45	18	68	403	229	460	111

E-Depth, m	2-ePhenol	2,4+2,5-dmPhenol	4e+3e+3,5-dmPhenol	2,3-dmPhenol	3,4-dmPhenol	N	2-mN	1-mN	2-eN	1-eN	2,6+2,7-dmN	1,3+1,7-dmN	1,6-dmN
2560m	35	82	81	48	22	268	173	151	16	19	54	84	77
2580m	31	61	46	45	10	159	130	125	15	14	46	70	56
2630m	41	80	72	55	23	215	162	167	21	21	55	79	73
2733m	43	89	69	37	18	238	167	111	15	11	45	64	56
2733m	46	102	75	63	20	279	218	136	19	16	60	85	82
3020m	231	349	360	114	98	627	478	341	51	33	154	206	223
3280m	192	292	298	97	88	225	313	206	31	19	113	175	149
3310m	154	218	231	67	74	225	266	195	28	19	80	139	115
3350m	88	140	140	49	37	225	232	161	22	17	80	121	93
3360m	234	343	326	120	103	461	474	367	47	36	136	216	176
3370m	123	180	180	67	62	232	252	191	28	26	91	141	117
3646m	240	370	355	134	103	583	587	391	60	30	181	253	192

Table 3.2 Pyrolysis GC-MS data

E-Depth, m	2,3+1,4-dmN	1,5-dmN	1,2-dmN	1,3,7-tmN	1,3,6-tmN	1,3,5+1,4,6-tmN	2,3,6-tmN	1,6,7+1,2,7-tmN	1,2,6-tmN	1,2,4-tmN	1,2,5-tmN	Phenanthrene
2560m	43	32	36	8	20	34	26	2	21	6	20	57
2580m	34	23	23	15	27	30	20	20	20	7	12	41
2630m	44	32	36	19	33	35	23	22	23	10	18	57
2733m	36	19	22	13	25	25	18	17	17	5	11	59
2733m	47	25	27	18	32	34	24	22	22	7	14	83
3020m	127	62	74	26	52	8	84	56	46	15	61	242
3280m	82	34	46	40	58	68	53	48	38	14	39	63
3310m	69	34	46	12	28	46	35	35	30	13	34	56
3350m	55	30	35	26	37	46	33	29	26	11	19	72
3360m	105	54	68	18	48	77	59	54	42	18	43	152
3370m	70	37	47	32	47	52	40	39	33	13	27	71
3646m	120	71	68	24	66	84	73	64	53	16	37	233

Table 3.2 Pyrolysis GC-MS data