DAILY MUD PROPERTIES:RHEOLOGY PARAMETERS FOR WELL 6403/10-1 PO: 1

Hole section : 36" **WATER BASED SYSTEM**

Date	Depth [m] MD	Depth [m] TVD	Mud Type	Funnel Visc [sec]	Dens [sg]	Mudtmp Out [DegC]	Fann Readings 600	300	200	100	60	30	6	3	Rheo Test [DegC]	PV [mPas]	YP [Pa]	Gel0 [Pa]	Gel10 [Pa]
2002-10-22		0	SPUD MUD				0	0	0	0	0	0	0	0					
2002-10-23		0	SPUD MUD	120.0	1.05		0	0	0	0	0	0	0	0					
2002-10-26	1852	1852	SPUD MUD	83.0	1.30		0	0	0	0	0	0	0	0					
2002-10-27	1852	1852	SPUD MUD	118.0	1.05		0	0	0	0	0	0	0	0					
2002-10-28	1852	1852	SPUD MUD	121.0	1.05		0	0	0	0	0	0	0	0					

Hole section : 26" **WATER BASED SYSTEM**

Date	Depth [m] MD	Depth [m] TVD	Mud Type	Funnel Visc [sec]	Dens [sg]	Mudtmp Out [DegC]	Fann Readings 600	300	200	100	60	30	6	3	Rheo Test [DegC]	PV [mPas]	YP [Pa]	Gel0 [Pa]	Gel10 [Pa]
2002-10-31	1852	1852	SPUD MUD	120.0	1.05		0	0	0	0	0	0	0	0					
2002-11-01	2214	2214	SPUD MUD	120.0	1.05		0	0	0	0	0	0	0	0					
2002-11-02	2214	2214	SPUD MUD	120.0	1.05		0	0	0	0	0	0	0	0					
2002-11-03	2214	2214	SPUD MUD	0.0	1.05		0	0	0	0	0	0	0	0					
2002-11-04	2214	2214	SPUD MUD	120.0	1.05		0	0	0	0	0	0	0	0					
2002-11-05	2214	2214	SPUD MUD	120.0	1.05		0	0	0	0	0	0	0	0					
2002-11-06	2214	2214	SPUD MUD	120.0	1.05		0	0	0	0	0	0	0	0					
2002-11-07	2214	2214	SPUD MUD	0.0	1.05		0	0	0	0	0	0	0	0					
2002-11-08	2214	2214	SPUD MUD	0.0	1.05		0	0	0	0	0	0	0	0					
2002-11-09	2214	2214	SPUD MUD	0.0	1.05		0	0	0	0	0	0	0	0					
2002-11-10	2214	2214	SPUD MUD	0.0	1.05		0	0	0	0	0	0	0	0					
2002-11-11	2214	2214	SPUD MUD		1.03						0	0							
2002-11-12	2214	2214	SPUD MUD		1.03						0	0							
2002-11-13	2214	2214	SPUD MUD		1.03						0	0							
2002-11-14	2214	2214	SPUD MUD		1.03						0	0							
2002-11-16	2214	2214	SPUD MUD		1.03						0	0							
2002-11-17	2214	2214	SPUD MUD	0.0	1.05		0	0	0	0	0	0	0	0					
2002-11-18	2214	2214	SPUD MUD	0.0	1.05		0	0	0	0	0	0	0	0					
2002-11-19	2217	2217	SPUD MUD	136.0	1.05		0	0	0	0	0	0	0	0					
2002-11-20	2252	2252	GLYDRIL	47.0	1.10		31	24	20	17	0	0	8	6	50.0	7.0	8.5	4.0	4.0

DAILY MUD PROPERTIES:RHEOLOGY PARAMETERS FOR WELL 6403/10-1 PO: 1

Hole section : 17" **WATER BASED SYSTEM**

Date	Depth [m]		Mud Type	Funnel Visc	Dens	Mudtmp Out	Fann Readings								Rheo Test	PV	YP	Gel0	Gel10
	MD	TVD		[sec]	[sg]	[DegC]	600	300	200	100	60	30	6	3	[DegC]	[mPas]	[Pa]	[Pa]	[Pa]
2002-11-21	2447	2446	GLYDRIL	74.0	1.10		47	35	30	23	0	0	10	9	50.0	12.0	11.5	5.0	7.0
2002-11-22	2518	2517	GLYDRIL	72.0	1.11		45	34	29	22	0	0	9	8	50.0	11.0	11.5	8.0	10.0
2002-11-23	2518	2517	GLYDRIL	72.0	1.11		46	35	30	23	0	0	10	8	50.0	11.0	12.0	8.0	9.0
2002-11-24	2518	2517	GLYDRIL	72.0	1.11		46	35	30	23	0	0	10	8	50.0	11.0	12.0	8.0	9.0

Hole section : 12 1/4" **WATER BASED SYSTEM**

Date	Depth [m]		Mud Type	Funnel Visc	Dens	Mudtmp Out	Fann Readings								Rheo Test	PV	YP	Gel0	Gel10
	MD	TVD		[sec]	[sg]	[DegC]	600	300	200	100	60	30	6	3	[DegC]	[mPas]	[Pa]	[Pa]	[Pa]
2002-11-25	2522	2521	GLYDRIL	72.0	1.12		46	35	30	23	0	0	10	8	50.0	11.0	12.0	8.0	9.0
2002-11-26	2522	2521	GLYDRIL	113.0	1.17		51	35	28	20	0	0	8	7	50.0	16.0	9.5	4.0	8.0
2002-11-27	2661	2660	GLYDRIL	145.0	1.17		62	44	36	27	0	0	10	9	50.0	18.0	13.0	6.0	16.0
2002-11-28	2759	2758	GLYDRIL	160.0	1.17		69	49	41	30	0	0	11	9	50.0	20.0	14.5	5.5	17.0
2002-11-29	2844	2843	GLYDRIL	170.0	1.18		77	56	46	33	0	0	13	11	50.0	21.0	17.5	7.0	18.0
2002-11-30	2844	2843	GLYDRIL	182.0	1.18		78	57	46	33	0	0	13	11	50.0	21.0	18.0	7.5	18.0
2002-12-01	2844	2843	GLYDRIL	183.0	1.18		76	54	44	33	0	0	12	9	50.0	22.0	16.0	5.0	15.0
2002-12-02	2843	2842	GLYDRIL	178.0	1.18		77	55	44	32	0	0	12	10	50.0	22.0	16.5	6.0	16.0
2002-12-03	2669	2668	GLYDRIL	180.0	1.18		77	54	45	34	0	0	12	9	50.0	23.0	15.5	6.0	16.0
2002-12-04	2842	2841	GLYDRIL	179.0	1.19		70	49	40	30	0	0	11	9	50.0	21.0	14.0	6.0	16.0
2002-12-05	2842	2841	GLYDRIL	160.0	1.19		69	49	40	29	0	0	10	8	50.0	20.0	14.5	5.0	12.0
2002-12-06	2842	2841	GLYDRIL	165.0	1.19		71	50	40	30	0	0	11	8	50.0	21.0	14.5	5.0	12.0
2002-12-07	2842	2841	GLYDRIL	165.0	1.19		71	50	40	30	0	0	11	8	50.0	21.0	14.5	5.0	12.0
2002-12-08	2836	2835	GLYDRIL	160.0	1.20		70	48	40	30	0	0	11	8	50.0	22.0	13.0	5.0	13.0

Hole section : 8 1/2" **WATER BASED SYSTEM**

Date	Depth [m]		Mud Type	Funnel Visc	Dens	Mudtmp Out	Fann Readings								Rheo Test	PV	YP	Gel0	Gel10
	MD	TVD		[sec]	[sg]	[DegC]	600	300	200	100	60	30	6	3	[DegC]	[mPas]	[Pa]	[Pa]	[Pa]
2002-12-09	2922	2921	GLYDRIL	165.0	1.20		70	49	40	30	0	0	10	8	50.0	21.0	14.0	4.5	12.0
2002-12-10	2990	2989	GLYDRIL	136.0	1.20		68	49	39	28	0	0	10	8	50.0	19.0	15.0	4.5	10.0
2002-12-11	2990	2989	GLYDRIL	141.0	1.20		68	49	39	28	0	0	10	8	50.0	19.0	15.0	5.0	10.0
2002-12-12	3041	3040	GLYDRIL	145.0	1.20		68	47	39	28	0	0	10	8	50.0	21.0	13.0	4.5	14.0
2002-12-13	3102	3101	GLYDRIL	148.0	1.20		67	47	38	28	0	0	10	8	50.0	20.0	13.5	4.0	13.0
2002-12-14	3305	3304	GLYDRIL	157.0	1.21		71	50	41	30	0	0	10	9	50.0	21.0	14.5	4.5	14.0

DAILY MUD PROPERTIES:RHEOLOGY PARAMETERS FOR WELL 6403/10-1 PO: 1

Hole section : 8 1/2" **WATER BASED SYSTEM**

Date	Depth [m]		Mud Type	Funnel Visc	Dens	Mudtmp Out	Fann Readings								Rheo Test	PV	YP	Gel0	Gel10
	MD	TVD		[sec]	[sg]	[DegC]	600	300	200	100	60	30	6	3	[DegC]	[mPas]	[Pa]	[Pa]	[Pa]
2002-12-15	3400	3399	GLYDRIL	148.0	1.21		69	48	39	28	0	0	9	8	50.0	21.0	13.5	4.5	14.0
2002-12-16	3400	3399	GLYDRIL	148.0	1.21		69	48	39	28	0	0	9	8	50.0	21.0	13.5	4.5	14.0
2002-12-17	3400	3399	GLYDRIL	152.0	1.21		70	49	40	28	0	0	10	8	50.0	21.0	14.0	5.0	14.0
2002-12-18	3400	3399	GLYDRIL	152.0	1.21		70	49	40	28	0	0	10	8	50.0	21.0	14.0	5.0	14.0

Hole section : P&A **WATER BASED SYSTEM**

Date	Depth [m]		Mud Type	Funnel Visc	Dens	Mudtmp Out	Fann Readings								Rheo Test	PV	YP	Gel0	Gel10
	MD	TVD		[sec]	[sg]	[DegC]	600	300	200	100	60	30	6	3	[DegC]	[mPas]	[Pa]	[Pa]	[Pa]
2002-12-19	2750	2749	GLYDRIL	147.0	1.22		66	45	36	26	0	0	8	7	50.0	21.0	12.0	4.0	14.0
2002-12-20	2670	2669	GLYDRIL	145.0	1.22		66	45	36	26	0	0	8	7	50.0	21.0	12.0	4.0	14.0
2002-12-21	2070	2070	GLYDRIL	148.0	1.22		65	45	36	26	0	0	8	7	50.0	20.0	12.5	4.0	14.0
2002-12-22	2035	2035	GLYDRIL	148.0	1.22		65	45	36	26	0	0	8	7	50.0	20.0	12.5	4.0	14.0
2002-12-23	2035	2035	GLYDRIL	148.0	1.23		65	45	36	26	0	0	8	7	50.0	20.0	12.5	4.0	14.0
2002-12-24	1775	1775	GLYDRIL	150.0	1.23		65	45	36	26	0	0	8	7	50.0	20.0	12.5	4.0	14.0
2002-12-25	1775	1775	GLYDRIL	150.0	1.23		65	45	36	26	0	0	8	7	50.0	20.0	12.5	4.0	14.0
2002-12-26	1775	1775	GLYDRIL	150.0	1.23		65	45	36	26	0	0	8	7	50.0	20.0	12.5	4.0	14.0

Hole section : 0.0 **WATER BASED SYSTEM**

Date	Depth [m]		Mud Type	Funnel Visc	Dens	Mudtmp Out	Fann Readings								Rheo Test	PV	YP	Gel0	Gel10
	MD	TVD		[sec]	[sg]	[DegC]	600	300	200	100	60	30	6	3	[DegC]	[mPas]	[Pa]	[Pa]	[Pa]
2003-03-03		0					0	0	0	0	0	0	0	0					

DAILY MUD PROPERTIES : OTHER PARAMETERS FOR WELL 6403/10-1 PO: 1

Hole section : 36"

WATER BASED SYSTEM

Date	Depth [m] MD	Depth [m] TVD	Mud Type	Dens [sg]	Filtrate API [ml]	Filtrate HPHT [ml]	Filtcake API [mm]	Filtcake HPHT [mm]	HPHT Press/Temp [bar/DegC]	pH	Alcalinity Pm [ml]	Alcalinity Pf [ml]	Alcalinity Mf [ml]	Inhib Chem [Kg/m3]	K+ [mg/l]	CL- [mg/l]	Ca++ [mg/l]	Mg++ [mg/l]	Tot hard [mg/l]	Percentage Solid [%]	Percentage Oil [%]	Percentage Sand [%]	CEC [Kg/m3]	ASG [sg]	LGS [Kg/m3]
2002-10-22	0	0	SPUD MUD						/																
2002-10-23	0	0	SPUD MUD	1.05					/																
2002-10-26	1852	1852	SPUD MUD	1.30					/																
2002-10-27	1852	1852	SPUD MUD	1.05					/																
2002-10-28	1852	1852	SPUD MUD	1.05					/																

Hole section : 26"

WATER BASED SYSTEM

Date	Depth [m] MD	Depth [m] TVD	Mud Type	Dens [sg]	Filtrate API [ml]	Filtrate HPHT [ml]	Filtcake API [mm]	Filtcake HPHT [mm]	HPHT Press/Temp [bar/DegC]	pH	Alcalinity Pm [ml]	Alcalinity Pf [ml]	Alcalinity Mf [ml]	Inhib Chem [Kg/m3]	K+ [mg/l]	CL- [mg/l]	Ca++ [mg/l]	Mg++ [mg/l]	Tot hard [mg/l]	Percentage Solid [%]	Percentage Oil [%]	Percentage Sand [%]	CEC [Kg/m3]	ASG [sg]	LGS [Kg/m3]
2002-10-31	1852	1852	SPUD MUD	1.05					/																
2002-11-01	2214	2214	SPUD MUD	1.05					/																
2002-11-02	2214	2214	SPUD MUD	1.05					/																
2002-11-03	2214	2214	SPUD MUD	1.05					/																
2002-11-04	2214	2214	SPUD MUD	1.05					/																
2002-11-05	2214	2214	SPUD MUD	1.05					/																
2002-11-06	2214	2214	SPUD MUD	1.05					/																
2002-11-07	2214	2214	SPUD MUD	1.05					/																
2002-11-08	2214	2214	SPUD MUD	1.05					/																
2002-11-09	2214	2214	SPUD MUD	1.05					/						74000										
2002-11-10	2214	2214	SPUD MUD	1.05					/																
2002-11-11	2214	2214	SPUD MUD	1.03					/																
2002-11-12	2214	2214	SPUD MUD	1.03					/																
2002-11-13	2214	2214	SPUD MUD	1.03					/						74000										
2002-11-14	2214	2214	SPUD MUD	1.03					/						74000										
2002-11-16	2214	2214	SPUD MUD	1.03					/						74000										
2002-11-17	2214	2214	SPUD MUD	1.05					/																
2002-11-18	2214	2214	SPUD MUD	1.05					/																
2002-11-19	2217	2217	SPUD MUD	1.05					/																
2002-11-20	2252	2252	GLYDRIL	1.10	5.0		1		/	8.4	0.2	0.0	0.6		61000	55400	640		640	5.5	3.2			4.0	5

DAILY MUD PROPERTIES : OTHER PARAMETERS FOR WELL 6403/10-1 PO: 1

Hole section : 17" **WATER BASED SYSTEM**

Date	Depth [m] MD	TVD	Mud Type	Dens [sg]	Filtrate API [ml]	Filtrate HPHT [ml]	Filtcake API [mm]	Filtcake HPHT [mm]	HPHT Press/Temp [bar/DegC]	pH	Alcalinity Pm [ml]	Alcalinity Pf [ml]	Alcalinity Mf [ml]	Inhib Chem [Kg/m3]	K+ [mg/l]	CL- [mg/l]	Ca++ [mg/l]	Mg++ [mg/l]	Tot hard [mg/l]	Percentage Solid [%]	Percentage Oil [%]	Percentage Sand [%]	CEC [Kg/m3]	ASG [sg]	LGS [Kg/m3]
2002-11-21	2447	2446	GLYDRIL	1.10	3.2		1		/	8.9	0.1	0.0	0.6		61000	59000	640		640	6.0	3.2	0.3	10	3.0	29
2002-11-22	2518	2517	GLYDRIL	1.11	3.4		1		/	8.8	0.1	0.0	0.5		61000	58500	640		640	6.0	3.2	0.2	10	3.0	29
2002-11-23	2518	2517	GLYDRIL	1.11	3.6		1		/	8.8	0.1	0.0	0.6		61000	59000	560		560	6.0	3.2	0.2	10	3.7	13
2002-11-24	2518	2517	GLYDRIL	1.11	3.6		1		/	8.8	0.1	0.0	0.6		61000	59000	560		560	6.0	3.2	0.2	10	3.7	13

Hole section : 12 1/4" **WATER BASED SYSTEM**

Date	Depth [m] MD	TVD	Mud Type	Dens [sg]	Filtrate API [ml]	Filtrate HPHT [ml]	Filtcake API [mm]	Filtcake HPHT [mm]	HPHT Press/Temp [bar/DegC]	pH	Alcalinity Pm [ml]	Alcalinity Pf [ml]	Alcalinity Mf [ml]	Inhib Chem [Kg/m3]	K+ [mg/l]	CL- [mg/l]	Ca++ [mg/l]	Mg++ [mg/l]	Tot hard [mg/l]	Percentage Solid [%]	Percentage Oil [%]	Percentage Sand [%]	CEC [Kg/m3]	ASG [sg]	LGS [Kg/m3]
2002-11-25	2522	2521	GLYDRIL	1.12	3.7		1		/	9.0	0.1	0.0	0.6		61000	58000	560		560	7.0	3.2	0.3	10	2.6	67
2002-11-26	2522	2521	GLYDRIL	1.17	2.4		1		/	9.0	0.1	0.4	1.1		61000	176800	136		136	7.6	23.4	0.0		2.6	3
2002-11-27	2661	2660	GLYDRIL	1.17	1.7		1		/	8.7		0.2	1.8			171000	135		135	7.4	23.2			2.6	17
2002-11-28	2759	2758	GLYDRIL	1.17	1.8		1		/	9.0		0.2	0.7			171000	120		120	13.0	22.6	0.1	8	2.6	16
2002-11-29	2844	2843	GLYDRIL	1.18	1.6		1		/	9.1		0.1	0.7			171000	120		120	11.0	23.8	0.1	10	2.6	37
2002-11-30	2844	2843	GLYDRIL	1.18	1.7		1		/	9.2		0.1	0.7			169000	120		120	11.0	23.5	0.1	14	2.6	39
2002-12-01	2844	2843	GLYDRIL	1.18	1.5	4.5	1		/ 120	9.2		0.1	0.7			169000	120		120	11.0	23.0	0.1	14	2.6	38
2002-12-02	2843	2842	GLYDRIL	1.18	1.6	9.0	1	1	/	9.1		0.1	0.7			170000	120		120	11.0	23.0	0.1	14	2.6	37
2002-12-03	2669	2668	GLYDRIL	1.18	1.6	9.1	1	1	/	9.2		0.1	0.7			167000	120		120	12.0	23.0	0.1	14	2.6	41
2002-12-04	2842	2841	GLYDRIL	1.19	1.3	9.0	1	1	/ 120	9.0		0.1	0.6			168000	120		120	11.5	25.3	0.1	14	2.6	61
2002-12-05	2842	2841	GLYDRIL	1.19	1.2	9.2	1	1	/ 120	9.0		0.1	0.7			164500	160		160	12.0	24.0	0.1	14	2.6	64
2002-12-06	2842	2841	GLYDRIL	1.19	1.2	9.6	1	1	/ 120	9.2	0.8	0.2	0.8			163185	400		400	12.0	23.4	0.2	14	2.6	65
2002-12-07	2842	2841	GLYDRIL	1.19	1.2	9.6	1	1	/	9.2		0.2	0.8			163185	400		400	12.0	23.0	0.2	14	2.6	64
2002-12-08	2836	2835	GLYDRIL	1.20	1.0	9.4	1	1	/ 120	8.5		0.1	0.7			168700	400		400		24.0	0.3	14	2.6	77

Hole section : 8 1/2" **WATER BASED SYSTEM**

Date	Depth [m] MD	TVD	Mud Type	Dens [sg]	Filtrate API [ml]	Filtrate HPHT [ml]	Filtcake API [mm]	Filtcake HPHT [mm]	HPHT Press/Temp [bar/DegC]	pH	Alcalinity Pm [ml]	Alcalinity Pf [ml]	Alcalinity Mf [ml]	Inhib Chem [Kg/m3]	K+ [mg/l]	CL- [mg/l]	Ca++ [mg/l]	Mg++ [mg/l]	Tot hard [mg/l]	Percentage Solid [%]	Percentage Oil [%]	Percentage Sand [%]	CEC [Kg/m3]	ASG [sg]	LGS [Kg/m3]
2002-12-09	2922	2921	GLYDRIL	1.20	1.2	9.2	1	1	/ 120	8.5		0.1	0.7			173000	400		400	13.0	23.0	0.2	14	2.6	69
2002-12-10	2990	2989	GLYDRIL	1.20	9.2	1.0	1	1	/ 120	9.0		0.1	0.7			172000	400		400	12.0	25.0	0.2	14	2.6	74
2002-12-11	2990	2989	GLYDRIL	1.20	1.0	9.2	1	1	/	9.0		0.1	0.7			167000	400		400	11.0	25.0	0.2	14	2.6	80
2002-12-12	3041	3040	GLYDRIL	1.20	1.0	9.2	1	1	/ 120	8.8		0.1	0.7			167000	380		380	11.0	25.0	0.2	14	2.6	80
2002-12-13	3102	3101	GLYDRIL	1.20	1.0	9.2	1	1	/ 120	8.6		0.1	0.6			166000	360		360	11.5	24.0	0.2	12	2.6	80
2002-12-14	3305	3304	GLYDRIL	1.21	0.8	8.6	1	1	/ 120	8.6		0.1	0.7			169000	320		320	11.5	24.0	0.2	16	2.6	94
2002-12-15	3400	3399	GLYDRIL	1.21	1.0	9.2	1	1	/ 120	8.6		0.0	0.6			169000	280		280	11.5	24.0	0.2	14	2.6	94

DAILY MUD PROPERTIES : OTHER PARAMETERS FOR WELL 6403/10-1 PO: 1

Hole section : 8 1/2" **WATER BASED SYSTEM**

Date	Depth [m] MD	Depth [m] TVD	Mud Type	Dens [sg]	Filtrate API [ml]	Filtrate HPHT [ml]	Filtcake API [mm]	Filtcake HPHT [mm]	HPHT Press/Temp [bar/DegC]	pH	Alcalinity Pm [ml]	Alcalinity Pf [ml]	Alcalinity Mf [ml]	Inhib Chem [Kg/m3]	K+ [mg/l]	CL- [mg/l]	Ca++ [mg/l]	Mg++ [mg/l]	Tot hard [mg/l]	Percentage Solid [%]	Percentage Oil [%]	Percentage Sand [%]	CEC [Kg/m3]	ASG [sg]	LGS [Kg/m3]
2002-12-16	3400	3399	GLYDRIL	1.21	1.0	9.2	1	1	/ 120	8.6		0.0	0.6			169000	280		280	11.5	24.0	0.2	14	2.6	94
2002-12-17	3400	3399	GLYDRIL	1.21	1.0	9.2	1	1	/ 120	8.6		0.0	0.6			169000	280		280	11.5	24.0	0.2	14	2.6	94
2002-12-18	3400	3399	GLYDRIL	1.21	1.0	9.2	1	1	/ 120	8.6		0.0	0.6			169000	280		280	11.5	24.0	0.2	14	2.6	94

Hole section : P&A **WATER BASED SYSTEM**

Date	Depth [m] MD	Depth [m] TVD	Mud Type	Dens [sg]	Filtrate API [ml]	Filtrate HPHT [ml]	Filtcake API [mm]	Filtcake HPHT [mm]	HPHT Press/Temp [bar/DegC]	pH	Alcalinity Pm [ml]	Alcalinity Pf [ml]	Alcalinity Mf [ml]	Inhib Chem [Kg/m3]	K+ [mg/l]	CL- [mg/l]	Ca++ [mg/l]	Mg++ [mg/l]	Tot hard [mg/l]	Percentage Solid [%]	Percentage Oil [%]	Percentage Sand [%]	CEC [Kg/m3]	ASG [sg]	LGS [Kg/m3]
2002-12-19	2750	2749	GLYDRIL	1.22	0.8	8.8	1	1	/ 120	9.6	0.8	0.0	0.0			167000	360		360	11.5	24.0	0.0	14	2.6	106
2002-12-20	2670	2669	GLYDRIL	1.22	0.8	8.8	1	1	/ 120	9.6	0.8	0.2	0.7			167000	360		360	11.5	24.0	0.2	14	2.6	106
2002-12-21	2070	2070	GLYDRIL	1.22	0.6	8.8	1	1	/ 120	9.6	0.8	0.2	0.7			166000	420		420	11.5	24.0	0.2	14	2.6	108
2002-12-22	2035	2035	GLYDRIL	1.22	0.6	8.8	1	1	/ 120	9.6	0.8	0.2	0.7			166000	420		420	11.5	24.0	0.2	14	2.6	108
2002-12-23	2035	2035	GLYDRIL	1.23	0.6	8.8	1	1	/ 120	9.7	0.8	0.1	0.7			166000	420		420	11.5	24.0	0.2	14	2.6	108
2002-12-24	1775	1775	GLYDRIL	1.23	0.5	8.8	1	1	/ 120	9.7	0.8	0.1	0.7			166000	420		420	11.5	24.0	0.2	14	2.6	108
2002-12-25	1775	1775	GLYDRIL	1.23	0.5	8.8	1	1	/ 120	9.7	0.8	0.1	0.7			166000	420		420	11.5	24.0	0.2	14	2.6	108
2002-12-26	1775	1775	GLYDRIL	1.23	0.5	8.8	1	1	/ 120	9.7	0.8	0.1	0.7			166000	420		420	11.5	24.0	0.2	14	2.6	108

Hole section : 0.0 **WATER BASED SYSTEM**

Date	Depth [m] MD	Depth [m] TVD	Mud Type	Dens [sg]	Filtrate API [ml]	Filtrate HPHT [ml]	Filtcake API [mm]	Filtcake HPHT [mm]	HPHT Press/Temp [bar/DegC]	pH	Alcalinity Pm [ml]	Alcalinity Pf [ml]	Alcalinity Mf [ml]	Inhib Chem [Kg/m3]	K+ [mg/l]	CL- [mg/l]	Ca++ [mg/l]	Mg++ [mg/l]	Tot hard [mg/l]	Percentage Solid [%]	Percentage Oil [%]	Percentage Sand [%]	CEC [Kg/m3]	ASG [sg]	LGS [Kg/m3]
2003-03-03		0							/																

TOTAL CONSUMPTION OF MUD ADDITIVES ON WELL 6403/10-1 PO: 1

Section	Product/ Additive	Unit	Total Amount Used
36"	BARITE	kg	38000.00
	BENTONITE	kg	14000.00
	SODA ASH	kg	150.00
26"	BARITE	kg	24000.00
	BENTONITE	kg	22000.00
	CMC EHV	kg	425.00
	SODA ASH	kg	325.00
17"	BARITE	kg	37000.00
	CELPOL ESL	kg	6900.00
	CITRIC ACID	kg	100.00
	CMC EHV	kg	50.00
	FLO-TROL	kg	3475.00
	GLYDRIL MC	l	23100.00
	KCL BRINE	l	477501.00
	RHODOPOL 23F	kg	4550.00
	SODA ASH	kg	575.00
12 1/4"	BARITE	kg	37000.00
	CELPOL ESL	kg	6575.00
	FLO-TROL	kg	3150.00
	GLYCOL	l	157500.00
	GLYDRIL MC	l	51800.00
	KCL POWDER	kg	28000.00
	NACL BRINE	l	534001.00
	NACL PREMIX	l	2500.00
	RHODOPOL 23P	kg	4300.00
	SODA ASH	kg	575.00
	SODIUM BICARBONATE	kg	500.00
8 1/2"	BARITE	kg	77000.00
	BENTONITE	kg	31000.00
	CELPOL ESL	kg	3000.00
	CITRIC ACID	kg	550.00
	DEFOAM S	kg	25.00
	FLO-TROL	kg	1375.00
	G-SEAL	kg	500.00
	GLYCOL	l	65300.00
	GLYDRIL MC	l	34050.00
	KCL POWDER	kg	14000.00
	NACL BRINE	l	189000.00
	NACL PREMIX	l	11250.00
	RHODOPOL 23P	kg	1400.00
	SODA ASH	kg	275.00
	SODIUM BICARBONATE	kg	150.00
0.0	BARITE	kg	24000.00
	CITRIC ACID	kg	550.00

TOTAL CONSUMPTION OF MUD ADDITIVES ON WELL 6403/10-1 PO: 1

Section	Product/ Additive	Unit	Total Amount Used
0.0	SODIUM BICARBONATE	kg	125.00

Norsk Hydro
O&E
Research Centre, Bergen

Access	Downgrading	Retention
Internal	Unlimited	Experience doc

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Keywords
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Geochemical Analysis

2.1 Analytical Program

The geochemical work on well 6403/10-1 was carried out according to the following list of studies:

- C1- C5 headspace HCs, gas bags	Hydro Research Center, Bg
- C1- C5 headspace HCs, canned cuttings	APT/IFE, Kjeller
- Vitrinite reflectance, canned cuttings	APT/IFE, Kjeller
- C1- C9 headspace and occluded HCs, canned cuttings	IKU/Sintef, Trondheim
- C5- C20 HCs, frozen SWCs	Hydro Research Center, Bg
- C15+ HCs, frozen SWC and canned cuttings	Hydro Research Center, Bg
- Rock Eval Pyrolysis, selected samples	Hydro Research Center, Bg

In the sections 3- 9 of the report the data will be evaluated in more detail. **Table 2-1** shows the complete analytical program of well 6403/10-1.

2.2 Analytical Procedures

The Norsk Hydro in- house analyses were carried out according to the guidelines in the Norwegian Industry Guide to Organic Geochemical Analyses (NIGOGA[1]). Gas chromatographic analysis include the use of internal standards.

Deviations from the NIGOGA guide are:

- Extract and asphaltene workup by centrifugation.
- GC analysis of ARO- fractions by 5% phenyl methyl-silicone stationary phase.
- GC-MSD detection of the aromatic hydrocarbons (not FID).
- Report of a restricted number of compounds relative to the NIGOGA guide, due to known co-elutions or disputable identities.
- Internal standard mixture added for quality control and quantitative measurements.

The data quality control is in accordance with defined laboratory procedures which are available from Norsk Hydro Research Center (Bergen) on request.

Analysis of samples labelled "NSO1" are on the NOCS oil- standard, i.e. the oil from well 30/9-B18 (Oseberg).

Analytical procedures used by IFE/APT (C1- C5 headspace gas and vitrinite reflectance) are presented in Appendix A. The procedures of the C1- C9 headspace and occluded gas analysis (IKU/Sintef) is presented in Appendix B.

[1]The Norwegian Industry Guide to Organic Geochemical Analyses, edition 4.0, 2000

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Table 1. Number of analyses performed

AnAnalysis	DCG
Headspace and occluded gas	15
Stable isotopes of gas	15
Vitrinite reflectance	25

Table 2. Gas Composition (volume-%)

Well	Sample type	Lower Depth	APT ID	C1%	C2%	C3%	iC4%	nC4%	iC5%	nC5%	CO2%	Sum C1-C5	Wetness	iC4/nC4	ppm
6403/10-1	DCG	2220	15645	83.8	0.00	0.00	0.00	0.00	0.00	0.00	16.2	83.8	0.00		830
6403/10-1	DCG	2250	15646	81.3	0.00	0.00	0.00	0.00	0.00	0.00	18.7	81.3	0.00		853
6403/10-1	DCG	2300	15647	83.7	0.40	0.00	0.00	0.00	0.00	0.00	15.9	84.1	0.48		1170
6403/10-1	DCG	2400	15649	71.1	0.27	0.00	0.00	0.00	0.00	0.00	28.7	71.3	0.38		3415
6403/10-1	DCG	2500	15651	24.8	0.06	0.03	0.00	0.00	0.00	0.00	75.1	24.9	0.38		9350
6403/10-1	DCG	2600	15653	42.0	1.8	4.8	3.0	6.5	6.6	8.7	26.6	73.4	27.7	0.46	841
6403/10-1	DCG	2700	15655	50.3	5.2	12.4	4.9	9.7	5.3	5.4	6.7	93.3	39.1	0.50	3645
6403/10-1	DCG	2800	15657	24.7	8.4	20.6	7.3	14.5	7.0	8.4	9.1	90.9	67.3	0.50	4833
6403/10-1	DCG	2850	15658	84.5	5.2	4.2	0.49	2.2	1.3	2.2	0.00	100.0	12.5	0.22	849
6403/10-1	DCG	2900	15659	56.4	7.5	11.2	3.3	8.8	5.1	7.6	0.00	100.0	35.4	0.38	1000
6403/10-1	DCG	3000	15661	52.7	7.7	12.2	3.1	8.1	4.6	6.3	5.2	94.8	37.1	0.38	2068
6403/10-1	DCG	3100	15663	49.8	12.4	15.7	3.7	7.8	3.4	4.1	3.0	97.0	44.3	0.48	7016
6403/10-1	DCG	3200	15665	52.7	13.1	14.6	3.0	6.4	2.8	3.4	3.9	96.1	41.3	0.46	8582
6403/10-1	DCG	3300	15667	47.2	13.1	16.7	3.5	7.7	3.5	4.4	3.9	96.1	46.5	0.46	3722
6403/10-1	DCG	3400	15669	34.6	13.7	20.7	5.2	10.3	5.1	5.3	5.1	94.9	59.1	0.51	3480

Table 3. Gas Isotopes

Well	Sample type	Lower Depth	APT ID	C1 δ13C	C2 δ13C	C3 δ13C	iC4 δ13C	nC4 δ13C	iC5 δ13C	nC5 δ13C	CO2 δ13C
6403/10-1	DCG	2220	15645	-55.5							
6403/10-1	DCG	2250	15646	-53.5							
6403/10-1	DCG	2300	15647	-51.6							
6403/10-1	DCG	2400	15649	-46.6							-0.6
6403/10-1	DCG	2500	15651	-44.7							0.6
6403/10-1	DCG	2600	15653	-43.8	-31.5	-31.1	-30.0	-29.8			
6403/10-1	DCG	2700	15655	-42.0	-31.4	-30.9	-30.6	-29.6			
6403/10-1	DCG	2800	15657	-40.0	-31.4	-30.9	-29.8	-29.9			-32.9
6403/10-1	DCG	2850	15658	-39.3	-29.9	-30.8	-27.9	-29.2			
6403/10-1	DCG	2900	15659	-38.8	-30.0	-31.0	-29.4	-29.8			
6403/10-1	DCG	3000	15661	-38.5	-29.7	-29.8	-30.3	-30.2			
6403/10-1	DCG	3100	15663	-36.2	-30.1	-31.1	-31.3	-30.7			-21.1
6403/10-1	DCG	3200	15665	-36.0	-30.1	-31.0	-31.5	-29.5			
6403/10-1	DCG	3300	15667	-36.4	-30.1	-30.9	-30.3	-30.0			
6403/10-1	DCG	3400	15669	-36.3	-30.2	-30.9	-30.9	-30.4			

Table 4. VR

Well	Sample type	Lower Depth	APT ID	Sample prep.	%Lithology	%Ro	Std. dev.	No. of measurements	Quality rating	Overall quality	Comment
6403/10-1	DCG	2220	15645	HF	sst/clyst	barren					
6403/10-1	DCG	2250	15646	HF	sst/clyst	0.19	0.02	4	-oo--o	P	See data sheet
6403/10-1	DCG	2300	15647	HF	sst/clyst	0.20	0.03	7	-oo-oo	P/M	
6403/10-1	DCG	2350	15648	HF	clyst	0.22	0.03	13	-oo-oo	M/P	
6403/10-1	DCG	2400	15649	HF	clyst	barren					See data sheet
6403/10-1	DCG	2450	15650	HF	clyst/sst	0.27	0.04	10	-oo--+	M/P	Staining
6403/10-1	DCG	2500	15651	HF	clyst	0.21	0.01	5	-oo--+	P	Staining
6403/10-1	DCG	2550	15652	HF	clyst	0.23	0.03	4	-oo-o+	P	
6403/10-1	DCG	2600	15653	HF	clyst	0.20	0.00	1	-oo-o+	P	See data sheet
6403/10-1	DCG	2650	15654	HF	clyst	barren					Staining
6403/10-1	DCG	2700	15655	HF	clyst	0.24	0.04	13	-oo-oo	M	Staining
6403/10-1	DCG	2750	15656	HF	clyst	0.25	0.05	15	-oo-oo	M	Staining
6403/10-1	DCG	2800	15657	HF	clyst	0.25	0.03	13	-oo-oo	M	
6403/10-1	DCG	2850	15658	HF	sst/clyst	0.26	0.04	11	-oo-oo	M/P	
6403/10-1	DCG	2900	15659	HF	sst/clyst	0.30	0.05	14	-oo--o	M	Staining
6403/10-1	DCG	2950	15660	HF	clyst	0.29	0.04	14	-oo-oo	M	Staining
6403/10-1	DCG	3000	15661	HF	clyst	0.31	0.05	17	-oo-oo	M	Staining
6403/10-1	DCG	3050	15662	HF	clyst	0.34	0.04	24	oooo-o	M/G	
6403/10-1	DCG	3100	15663	HF	clyst	0.32	0.04	16	-oo-oo	M	
6403/10-1	DCG	3150	15664	HF	clyst	0.35	0.05	25	ooo-oo	M	See data sheet
6403/10-1	DCG	3200	15665	HF	clyst	0.39	0.06	21	ooo--o	M	Staining
6403/10-1	DCG	3250	15666	HF	clyst	0.36	0.05	23	ooo-oo	M/G	
6403/10-1	DCG	3300	15667	HF	clyst	0.40	0.06	21	ooo--o	M	Staining
6403/10-1	DCG	3350	15668	HF	clyst	0.44	0.07	23	ooo-oo	M/G	
6403/10-1	DCG	3400	15669	HF	clyst	0.46	0.06	24	ooo--o	M	Staining

Experimental Procedures

All procedures follow NIGOGA, 4th Edition. Below are brief descriptions of procedures/analytical conditions.

Sample preparation
Cuttings samples are washed in water to remove mud. When oil based mud is used, soap (Zalo) is added to the sample and the sample is washed thoroughly in warm water to remove mud and soap.

Stable isotope analysis of gas compounds
Due to low hydrocarbon gas concentration in the gas samples the carbon isotopic composition of the higher hydrocarbon gas components were determined by a GC-C-IRMS system. Aliquots were sampled with a syringe and analysed on a Trace GC2000, equipped with a Poraplot Q column, connected to a Delta plus XP IRMS. The components were burnt to CO_2 and water in a 1000 °C furnace over Cu/Ni/Pt. The water was removed by membrane separation. Repeated analyses of standards indicate that the reproducibility of $\delta^{13}C$ values is better than 1 ‰ PDB (2 sigma).

Vitrinite reflectance analysis
The samples are prepared either as "whole rock" or are treated with hydrochloric and hydrofluoric acid prior to further preparation. The aim of the acid treatment is to avoid soft and expanding mineral phases in order to ensure good polishing quality. The whole rock or the kerogen resulting from the acid treatment is embedded in an epoxy resin to make briquettes, ground flat and polished using 0.25 micron diamond paste and magnesium oxide as the two final steps.

The analytical equipment used is a Zeiss MPM 03 photometer microscope equipped with an Epiplan-Neofluar 40/0.90 oil objective. The sensitive measuring spot is kept constant for all measurements at about 2.5 micron in diameter. The measurements are made through a green band pass filter (546 nm) and in oil immersion (refractive index 1.515 at 18 °C). The readings are made without a polarizer and using a stationary stage. This procedure is called measurement of random reflectance (%Rm). The photometer is calibrated daily against a standard of known reflectance (%Rm = 0.588) and routinely (daily) checked against two other standards of significant different reflectances (%Rm = 0.879 and 1.696). A deviation from these values of less than ± 0.01 and ± 0.02 respectively is considered acceptable. The calibration is routinely checked during the course of measurements at least every hour, and a deviation of less than ± 0.005 is considered acceptable.

For each sample at least 20 points are measured if possible, and quality ratings are given to various important aspects, which may affect the measurements. These aspects are abundance of vitrinite, uncertainties in the identification of indigenous vitrinite, type of vitrinite, particle size, particle surface quality and abundance of pyrite.

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REPORT

TITLE

Analysis of headspace and occluded gas (C1-C9) from well 6403/10-1

AUTHOR(S)

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SUMMARY

This report contains tables and figures with data from gas chromatographic analysis of headspace and occluded gas from 25 canned cuttings samples from well 6403/10-1. The yields (in µl/kg dry rock) and relative proportions (in volume %) of 77 hydrocarbon compounds ranging from C1 to C9 are tabulated. Some geochemically relevant peak ratios are also listed and plotted.

KEYWORDS ENGLISH	KEYWORDS NORWEGIAN
Well 6403/10-1	Brønn 6403/10-1
Organic geochemistry	Organisk geokjemi
Gas analysis	Gassanalyse

1. Introduction

Twenty-five canned cutting samples from the well 6403/10-1 were received from Norsk Hydro, Oil & Energy (Contract No.: 5194606) for gas chromatographic analysis of the C1 to C9 hydrocarbons contained in the headspace and occluded gas.

This report contains the results of the analyses. The hydrocarbon concentrations are expressed as µl gas per kg of dried cuttings (> 0.125 mm). The hydrocarbon composition is expressed in volume percent of all recorded hydrocarbons.

2. Experimental

2.1 Headspace gas

A septum was attached to the can and a sample of headspace gas was taken and injected into a gas chromatograph for analysis of C1 to C9 hydrocarbons.

The can was opened and the volume of the headspace was determined. The cuttings were washed with water (ca. 30°C) on 4.0, 1.0 and 0.125 mm sieves in order to remove the drilling mud, and were then weighed and dried.

2.2 Occluded gas

Prior to drying, an aliquot of the 1-4 mm fraction was crushed in water for 10 minutes using a gas-tight ball mill. An aliquot of the evolved gas was injected into a gas chromatograph for analysis of C1 to C9 hydrocarbons.

2.3 Gas chromatographic analysis

The gas was analysed on a gas chromatograph fitted with an gas injector. The GC temperature program started at 35°C, since separation of alkenes from alkanes was of no interest in this project. The instrument was fitted with a capillary column connected to an FID for hydrocarbon detection. Details of the instrumentation are listed in Table 2.1.

Table 2.1 Analytical equipment

Gas chromatograph	Agilent 6890
Injector	Gas injector connected to a 1.0 ml loop
Columns	HP-PONA column: 50 m x 0.20 mm i.d, 0.5 µm film thickness.
Carrier gas	Helium
Detector	FID (250 °C)
Temperature program	35 °C (5 min.) - 8 °C/min. - 180 °C (10 min.)
Chromatographic data system	HP ChemStation Rev. A.08.03

2.4 Identification

Peaks are identified based on three Supelco Reference Standards, guidelines in "The Norwegian Industry Guide to Organic Geochemical Analyses" (Edition 4.0) and internal procedures. Figure 2.1 shows a gas chromatogram with the annotation used in this project. Identified compounds, retention indices and comments are listed in Table 2.2.

Table 2.2 Identified compounds with retention indices (RI) and comments. For peak labels see explanation below the table.

Peak label	RI (Kováts)	Comments
C1	100	
C2	158 + 200	Includes ethane and ethene
C3	300	Includes propane and propene
iC4	354	
C4ene	385	
nC4	400	
2,2-DMC3	410	
RI=417	417	Unknown
iC5	467	
RI=484 (C5ene)	484	
RI=494 (C5ene)	494	
nC5	500	
RI=529	529	Unknown
2,2-DMC4	531	
CyC5 + 2,3-DMC4	561	Separated in some analyses, but summed up in the tables
2-MC5	565	
RI=569	569	Unknown
3-MC5	581	
nC6	600	
2,2-DMC5	624	
MCyC5	627	
2,4-DMC5	630	
2,2,3-TMC4	637	
Benzene	651	
3,3-DMC5	656	
CyC6	661	
2-MC6	668	
2,3-DMC5	670	
1,1-DMCyC5	674	
3-MC6	676	
c-1,3-DMCyC5	684	
t-1,3-DMCyC5	687	
t-1,2-DMCyC5 + 3-EC5 + 2,2,4-TMC5	690	
nC7	700	
MCyC6 + c-1,2-DMCyC5	725	
2,2-DMC6 + 1,1,3-TMCyC5	727	
2,5-DMC6 + 2,2,3-TMC5	734	May include E-CyC5
2,4-DMC6	736	
3,3-DMC6 + t-1,c-2,4-TMCyC5	744	May include c-1,t-2,4-TMCyC5
t-1,c-2,3-TMCyC5	751	
2,3,4-TMC5	754	
Toluene + 2,3,3-TMC5	759	
2,3-DMC6	763	May include 1,1,2-TMCyC5
2-M,3-EC6	765	
2-MC7	768	
4-MC7 + 3-M,3-EC5	769	May also include an isomer of 3,4-DMC6
3,4-DMC6	773	Isomer
3-MC7 + c-1,t-2,3-TMCyC5	775	May also include c-1,3-DMCyC6
RI=781 (DMCyC6)	781	
RI=783 (DMCyC6)	783	
2,2,5-TMC6	786	

Table 1 Continued

Peak label	RI (Kováts)	Comments
RI=790	790	Possibly a DMCyC6 isomer
RI=794	794	Possibly a DMCyC6 isomer
RI=796	797	Possibly CyC7 or DMCyC6
nC8	800	
RI=805	805	Unknown
RI=807	807	Unknown
RI=815	815	Unknown
2,3,5-TMC6 + c-1,2-EMCyC5	819	
RI=821	821	Possibly 2,2-DMC7
RI=825	825	Possibly 2,2-DMC7 or 2,4-DMC7
RI=831	831	Possibly 2,4-DMC7 or ECyC6
RI=834	834	Unknown
RI=838	838	Possibly ECyC6
RI=843	843	Unknown
RI=847	847	Unknown
E-Benzene	855	
RI=859	860	Unknown, minimum 2 compounds
m+p-Xylene	863	
RI=867	867	Unknown
4-MC8 + 2-MC8	874	
RI=883	883	Possibly 3-MC8
o-Xylene	886	
RI=890	890	Unknown
RI=893	893	Unknown
RI=896	896	Unknown
n-C9	900	

Explanations:

Structural groups	Parent structures	Numbers of functional groups	Names of functional groups	Steric configurations
n = normal	C1 = methane	D = di	M = methyl	c = cis
i = iso	C2 = ethane	T = tri	E = ethyl	t = trans
Cy = cyclo	etc.		P = propyl	o = ortho
				m = meta
				p = para

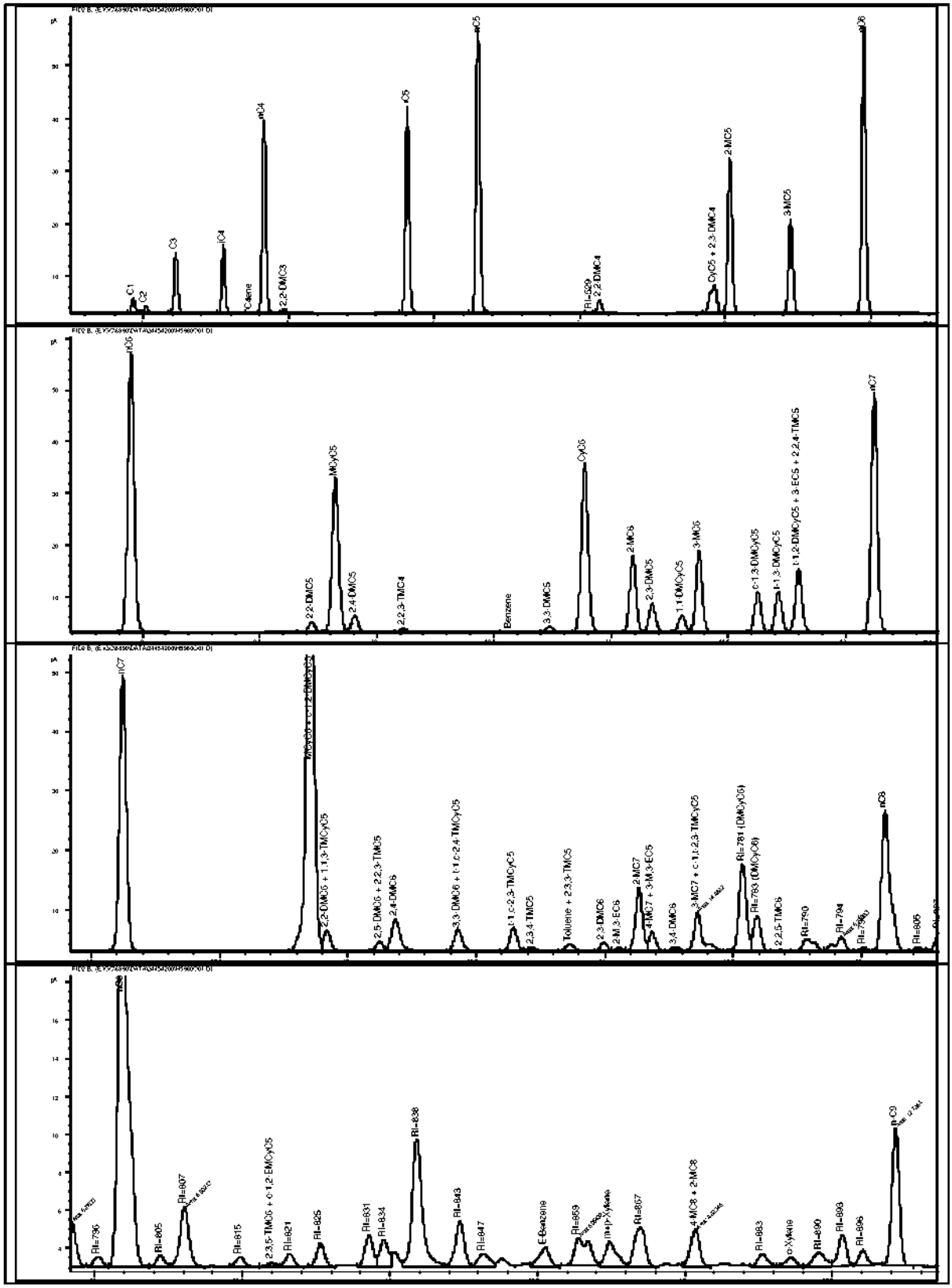

Figure 2.1 Gas chromatogram with annotation. Expanded views of C1 to n-C6, n-C6 to n-C7, n-C7 to n-C8 and n-C8 to n-C9 ranges.

2.5 Quantification

A 1000 ppm (µl/l) standard gas sample containing methane, ethane, propane, i-butane, n-butane, n-pentane and n-hexane was used for quantification. The variation between all standard analyses was small (Table 2.3), and the average response factors were used for quantification of all samples. The response factor for n-C5 was used for all compounds eluting between n-C4 and n-C5 and so on. For the C6-C7, C7-C8 and C8-C9 component groups the response factors were extrapolated based on molecular mass.

A 100 ppm (µl/l) standard gas sample containing methane, ethane, propane, n-butane, n-pentane and n-hexane was used for control of linearity.

Rock-related concentrations (in µl/kg) for compounds having a concentration of less than 0.2 ppm (µl/l) in the analysed gas are not reported, as this corresponds to an area of about 0.08, which is the lowest reliable area in the gas chromatograms.

Table 2.3 Results from analyses of 1000 ppm standard (based on peak area)

	C1	C2	C3	iC4	nC4	nC5	nC6
Average peak area	69.3	135.2	195.8	273.7	277.6	314.9	357.2
Stdev.	0.8	1.3	1.9	2.7	2.8	4.6	8.8
Stdev. (% of average)	1.1	1.0	1.0	1.0	1.0	1.5	2.5
n	26	26	26	26	26	26	26

2.6 Concentrations and ratios

The yields of hydrocarbons (µl/kg dry rock) in headspace (H) and occluded (O) gas and the sum of H + O are given in Table 4.3 and the hydrocarbon composition (volume %) is given in Table 4.4. Selected summary data and peak ratios are calculated and reported in Table 4.5. Abbreviations used in Table 4.5 are explained in Table 2.4.

As coelution of 3-EC5 and 2,2,4-TMC5 with t-1,2-DMCyC5 and of c-1,2-DMCyC5 with MCyC6 cannot be avoided at the chosen experimental conditions, only some of the Mango ratios can be calculated (see tables).

Table 2.4 Explanations of the variables listed in Table 4.5.

Abbreviation	Explanation
Hydrocarbon yields for selected C-number ranges	
CncC1	Concentration of C1 (µl/kg dry rock)
CncC2C4	Concentration of C2 through n-C4 (µl/kg dry rock)
CncC5C9	Concentration of C5 through n-C9, i.e. all peaks eluting after n-C4 (µl/kg dry rock)
CncC1C9	Sum of these concentrations
Hydrocarbon composition for selected C-number ranges	
PctC1	Fraction of C1 (% volume of all C1 -C9 HC)
PctC2C4	Fraction of C2 through n-C4 (% volume of all C1 -C9 HC)
PctC5C9	Fraction of C5 through n-C9, i.e. all peaks eluting after n-C4 (% volume of all C1-C9 HC).
PctC1C9	Sum of these fractions (= 100 vol %)

Table 2.4 Continued

Abbreviation	Explanation
Wetness and i-C4/n-C4 ratio	
Wetness	100* (Sum C2 to n-C4) / (Sum C1 to n-C4) (volume %)
Ratic4nc4	Volume ratio i-C4 / n-C4
Composition of C7 hydrocarbons by compound class	
PctnC7	Fraction of n-alkanes in n-C7 range (volume % of all C7 compounds)
PctIsoC7	Fraction of iso -alkanes in n-C7 range (volume % of all C7 compounds)
PctCycC7	Fraction of cycloalkanes in n-C7 range (volume % of all C7 compounds)
PctAroC7	Fraction of aromatics in n-C7 range (volume % of all C7 compounds)
PctSumC7	Sum of these fractions (= 100 vol %)
Thompson ratios (mass ratios), assessed property in brackets	
Thompson_A	A = Benzene / n-Hexane [Aromaticity (fractionation)]
Thompson_B	B = Toluene / n-Heptane [Aromaticity (fractionation)]
Thompson_X	X = Xylene (m & p) / n-Octane [Aromaticity (fractionation)]
Thompson_C	C = (n-Hexane + n-Heptane) / (Cyclohexane + Methylcyclohexane) [Paraffinicity (maturity)]
Thompson_I	I = Isoheptane value = (Methylhexanes (2- & 3-)) / (Dimethylcyclopentanes (1c3-, 1t3-, & 1t2-)) [Paraffinicity (maturity)]
Thompson_F	F = n-Heptane / Methylcyclohexane [Paraffinicity (maturity)]
Thompson_H	H = Heptane Value = 100 * n-Heptane / (Sum Cyclohexane through Methylcyclohexane, excluding 1,cis-2-Dimethylcyclopentane) [Paraffinicity (maturity)]
Thompson_R	R = n-Heptane / 2-Methylhexane [Normality (branching)]
Thompson_U	U = Cyclohexane / 2-Methylhexane [Normality (branching)]
Mango ratios (mass ratios)	
Mango_P1	P1 = n-C7 (mass% of sum C7 HC) [first parents in SS kinetic scheme], Mango 1994
Mango_P2	P2 = 2-MC6 + 3-MC6 (mass% of sum C7 HC) [second parent in SS kinetic scheme], Mango 1994
Mango_P3	P3 = 3-EC5 + 3,3-DMC5 + 2,3-DMC5 + 2,4-DMC5 + 2,2-DMC5 + 2,2,3-TMC4 (mass% of sum C7 HC) [daughter isoalkane product of P2], Mango 1994 [Remark 1]
Mango_N15	N15 = ECyC5 + c-1,2-DMCyC5 + t-1,2-DMCyC5 (mass% of sum C7 HC) [Daughter cyclopentane products of P2], Mango 1994 [Remark 2]
Mango_N16	N16 = MCyC6 + TOLUENE (mass% of sum C7 HC) [Daughter cyclohexane products of P1], Mango 1994
Mango_N2	N2 = 1,1-DMCyC5 + c-1,3-DMCyC5 + t-1,3-DMCyC5 (mass% of sum C7 HC) [Daughter cyclopentane products of P2], Mango 1994 [Remark 3]
Mango_K1	K1 = (2-MC6 + 2,3-DMC5) / (3-MC6 + 2,4-DMC5), Mango 1987 in Mango 1994
Mango_K2	K2 = P3 / (P2 + N2) = (3-EC5 + 2,3-DMC5 + 2,4-DMC5 + 2,2-DMC5 + 2,2,3-TMC42) / (2-MC6 + 3-MC6 + 1,1-DMCyC5 + c-1,3-DMCyC5 + t-1,3-DMCyC5) (Mango 1990 in Mango 1994)
Mango_N15N16	N15/N16 = k15/k16 [a ratio of P1 daughters], Mango 1994
Mango_P3N2	P3/N2 = k23/k25 [a ratio of P2 daughters], Mango 1994

Remarks on Mango ratios

Remark 1 The 2,2,3-TMC4 peak is consistently called "2,3,3-TMC4" in the Mango papers, but this is probably a mistyping, as 2,3,3-TMC4 is normally not identified.

Remark 2 Actually N_1^5, where 1 means the first daughter generation and 5 stands for the parent cyclopentane.

Remark 3 Analog to N15.

Coelution of compounds

'CyC5' contains coeluting 2,3-DMC4.

't-1,2-DMCyC5' contains coeluting 3-EC5 and 2,2,4-TMC5. The Mango ratios P3 and N15 can therefore not be calculated.

'MCyC6' contains coeluting c-1,2-DMCyC5. The Mango ratios N15 and N16 can therefore not be calculated.

'Toluene' contains coeluting 2,3,3-TMC5. This is ignored in calculation of the Mango ratio N16.

References

Mango, F.D. (1987): An invariance in the isoheptanes of petroleum. Science 237, 514-517.

Mango, F.D. (1990): The origin of light hydrocarbons in petroleum: A kinetic test of the steady-state catalytic hypothesis. Geochimica et Cosmochimica Acta 54, 1315-1323.

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Thompson, K F M (1987): Fractionated aromatic petroleums and the generation of gas-condensates Organic Geochemistry 11, 573-590

2.7 Water content

The water content of the cuttings was determined by weighing the fractions before and after drying at 35 °C for at least 24 hours. The dry weight of the rock used for occluded gas analysis was determined using the wet weight of this rock and the water content of the remaining 1-4 mm fraction. Water contents for the three individual grain size fractions are listed in Table 4.2.

3. Comments on samples and analytical data

The wet cutting samples were received in pressure-lid cans of 1 l volume at ambient temperature. A secondary modification of the gas composition by microbial activity cannot be completely ruled out.

Some of the samples (the interval between 2560 m - 2960 m) contained white and light brown jelly-like lumps. All samples showed more or less strong foam development when they were washed. Sample descriptions and comments are listed in Table 4.1.

4. Results

Table 4.1
Sample description and comments

Table 4.1 *Sample description and comments. Lithologies in order of decreasing abundance.*

Sample ID	Btm depth (m)	Lithology	Sample comment	Gas volume headspace (ml)	Gas volume occluded (ml)	Rock weight total sample dry (g)	Rock weight occluded sample dry (g)
H5970	2260	slst-clyst, chk	Chalk content decreases from 2260 to 2360 m.	274	24.5	157.9	8.3
H5971	2310	slst-clyst, chk		424	24.5	149.2	10.9
H5972	2360	clyst-slst, chk		422	26	140.2	10.6
H5973	2410	clyst-slst		272	22.5	154.4	11.9
H5974	2460	clyst-slst		332	19.2	155.7	11.7
H5975	2510	clyst-slst		396	23	211.7	11.4
H5976	2560	clyst (sl silty)		402	24.2	126.1	11.3
H5977	2610	clyst (sl silty)		352	24.6	181.7	11.2
H5978	2660	clyst (sl silty)		396	20.7	172.5	13.4
H5979	2710	clyst (sl silty)		346	20.2	130.5	12.8
H5980	2760	clyst (sl silty)		332	18.7	192.7	14.4
H5981	2810	clyst (sl silty)		328	20.7	48.1	11.2
H5982	2830	clyst (sl silty)		348	17.6	67.1	12.9
H5983	2860	slst (calcareous)		574	18.7	29.9	7.9
H5984	2910	clyst (silty)	Tr asbestos in 1-4 mm; Some volcanic rock in > 4 mm.	524	17	69.1	10.6
H5985	2960	clyst (silty)		464	21.8	124.0	11.5
H5986	3010	slst-clyst		560	22.4	21.7	9.1
H5987	3060	clyst (silty)	Little material in 1-4 mm fraction. Description made on > 4 mm fraction.	410	17.3	54.1	10.0
H5988	3110	clyst (sl silty)	No 1-4 mm fraction left after analysis. Description made on >4 mm fraction.	448	31.5	106.7	5.9
H5989	3160	clyst (sl silty)	Little material in 1-4 mm fraction. Description made on > 4 mm fraction.	480	33.2	86.8	4.6
H5990	3210	clyst (sl silty)	No 1-4 mm fraction left after analysis. Description made on >4 mm fraction.	474	35.2	90.9	7.2
H5991	3260	clyst (sl silty)	No 1-4 mm fraction left after analysis. Description made on >4 mm fraction.	500	33.2	88.8	6.2
H5992	3310	clyst (sl silty)	No 1-4 mm fraction left after analysis. Description made on >4 mm fraction.	536	31	82.9	7.6
H5993	3360	clyst (sl silty)	No 1-4 mm fraction left after analysis. Description made on >4 mm fraction.	462	23.1	104.7	11.2
H5994	3390	clyst (sl silty)	No 1-4 mm fraction left after analysis. Description made on >4 mm fraction.	448	34	44.3	8.6

Table 4.2
Water contents of different grain size fractions

Table 4.2 Water contents of different grain size fractions[1]

Sample ID	Btm depth (m	Water content >4 mm fraction (wt% of wet fraction)	Water content 4-1 mm fraction (wt% of wet fraction)	Water content 1-0.125 mm fraction (wt% of wet fraction)	Water content >0.125 mm fraction (%wt of wet fraction)
H5970	226C	51.5	60.0	56.4	56.6
H5971	231C	47.3	50.3	47.8	48.3
H5972	236C	44.1	49.2	47.3	47.2
H5973	241C	36.3	45.4	45.6	40.9
H5974	246C	34.1	41.3	45.0	40.3
H5975	251C	33.5	44.6	42.2	39.8
H5976	256C	41.1	45.5	42.9	44.9
H5977	261C	28.9	45.0	50.0	33.8
H5978	266C	25.3	36.7	55.1	28.4
H5979	271C	26.7	41.6	43.4	34.5
H5980	276C	25.8	38.0	41.5	29.1
H5981	281C	27.3	43.8	44.6	35.5
H5982	283C	26.7	42.3	41.0	33.9
H5983	286C	59.3	59.4	54.1	57.4
H5984	291C	37.3	48.5	43.9	46.7
H5985	296C	24.2	46.7	49.0	28.9
H5986	301C	33.3	34.8	41.2	35.7
H5987	306C	31.0	46.7	45.1	36.2
H5988	311C	21.0	47.6	51.4	24.3
H5989	316C	27.3	45.0	51.4	29.2
H5990	321C	27.9	45.0	55.4	31.3
H5991	326C	25.0	45.0	42.6	27.5
H5992	331C	23.1	45.0	39.2	26.9
H5993	336C	25.4	45.0	41.3	28.6
H5994	339C	30.8	45.0	39.4	34.9

[1] Water content of the 4 - 1 mm fractions from 3160 m to 3390 m could not be determined due to low sample weights and was set to 45%.

Table 4.3
Yield of hydrocarbons in headspace and occluded gas
(μl/kg dry rock)

Table 4.3 Yield of hydrocarbons in headspace and occluded gas (µl/kg dry rock).

Sample ID	H5970	H5970	H5970	H5971	H5971	H5971	H5972	H5972	H5972
Gas fraction	H	O	H+O	H	O	H+O	H	O	H+O
Depth (m)	2260	2260	2260	2310	2310	2310	2360	2360	2360
Compound									
C1	7606	84	7690	9282	87	9370	20651	117	20767
C2	44	8	52	64	18	82	133	10	143
C3	8	4	13	17	12	29	21	6	27
IC4	1	1	2	0	1	1	1	0	1
C4ene	2	2	4	3	5	8	4	2	6
nC4	1	2	3	0	2	2	0	1	1
2,2-DMC3	0	0	0	0	0	0	0	0	0
RI=417	0	0	0	0	0	0	0	0	0
iC5	0	2	2	0	1	1	0	1	1
RI=484 (C5ene)	0	0	0	0	1	1	0	0	0
RI=494 (C5ene)	0	0	0	0	1	1	0	0	0
nC5	1	3	4	0	2	2	0	1	1
RI=529	0	0	0	0	1	1	0	0	0
2,2-DMC4	0	0	0	0	0	0	0	0	0
CyC5 + 2,3-DMC4	0	0	0	0	0	0	0	0	0
2-MC5	0	2	2	0	1	1	0	1	1
RI=569	0	0	0	0	1	1	0	1	1
3-MC5	0	1	1	0	0	0	0	0	0
nC6	2	5	7	0	3	3	0	3	3
2,2-DMC5	0	0	0	0	0	0	0	0	0
MCyC5	0	2	2	0	1	1	0	1	1
2,4-DMC5	0	0	0	0	0	0	0	0	0
2,2,3- TMC4	0	0	0	0	0	0	0	0	0
Benzene	0	0	0	0	0	0	0	0	0
3,3-DMC5	0	0	0	0	0	0	0	0	0
CyC6	0	3	3	0	1	1	0	1	1
2-MC6	0	1	1	0	1	1	0	1	1
2,3-DMC5	0	0	0	0	0	0	0	0	0
1,1-DMCyC5	0	0	0	0	0	0	0	0	0
3-MC6	0	1	1	0	1	1	0	1	1
c-1,3-DMCyC5	0	1	1	0	0	0	0	0	0
t-1,3-DMCyC5	0	1	1	0	0	0	0	0	0
t-1,2-DMCyC5 + 3-EC5 + 2,2,4-TMC5	0	1	1	0	1	1	0	0	0
nC7	0	4	4	0	2	2	0	2	2
MCyC6 + c-1,2-DMCyC5	0	8	9	0	4	4	0	3	3
2,2-DMC6 + 1,1,3- TMCyC5	0	0	0	0	0	0	0	0	0
2,5-DMC6 + 2,2,3- TMC5	0	0	0	0	0	0	0	0	0
2,4-DMC6	0	0	0	0	0	0	0	0	0
3,3-DMC6 + t-1,c-2,4-TMCyC5	0	0	0	0	0	0	0	0	0
t-1,c 2,3-TMCyC5	0	0	0	0	0	0	0	0	0
2,3,4- TMC5	0	0	0	0	0	0	0	0	0
Toluene + 2,3,3-TMC5	0	0	0	0	0	0	0	0	0
2,3-DMC6	0	0	0	0	0	0	0	0	0
2-M,3- EC6	0	0	0	0	0	0	0	0	0
2-MC7	0	1	1	0	0	0	0	1	1
4-MC7 + 3-M,3-EC5	0	0	0	0	0	0	0	0	0
3,4-DMC6	0	0	0	0	0	0	0	0	0
3-MC7 + c-1,t-2,3- TMCyC5	0	1	1	0	0	0	0	0	0
RI=781 (DMCyC6)	0	2	2	0	1	1	0	1	1
RI=783 (DMCyC6)	0	1	1	0	0	0	0	0	0
2,2,5- TMC6	0	0	0	0	0	0	0	0	0
RI=790	0	0	0	0	0	0	0	0	0
RI=794	0	0	0	0	0	0	0	0	0
RI=796	0	0	0	0	0	0	0	0	0
nC8	0	3	4	0	2	2	0	2	2
RI=805	0	0	0	0	0	0	0	0	0
RI=807	0	0	0	0	0	0	0	0	0
RI=815	0	0	0	0	0	0	0	0	0
2,3,5- TMC6 + o 1,2- EMCyC5	0	0	0	0	0	0	0	0	0
RI=821	0	0	0	0	0	0	0	0	0
RI=825	0	0	0	0	0	0	0	0	0
RI=831	0	0	0	0	0	0	0	0	0
RI=834	0	0	0	0	0	0	0	0	0
RI=838	0	1	1	0	1	1	0	0	0
RI=843	0	0	0	0	0	0	0	0	0
RI=847	0	0	0	0	0	0	0	0	0
E-Benzene	0	0	0	0	0	0	0	0	0
RI=859	0	0	0	0	0	0	0	0	0
m+p-Xylene	1	1	2	0	1	1	1	0	2
RI=867	0	0	0	0	0	0	0	0	0
4-MC8 + 2-MC8	0	0	0	0	0	0	0	0	0
RI=883	0	0	0	0	0	0	0	0	0
o-Xylene	1	0	1	0	0	0	0	0	0
RI=890	0	0	0	0	0	0	0	0	0
RI=893	0	0	0	0	0	0	0	0	0
RI=896	0	0	0	0	0	0	0	0	0
nC9	0	1	2	0	1	1	0	1	1
Sum FID	7671	148	7819	9370	150	9520	20817	155	20972

Table 4.3 Continued

Sample ID	H5973	H5973	H5973	H5974	H5974	H5974	H5975	H5975	H5975
Gas fraction	H	O	H+C	H	C	H+C	H	O	H+O
Depth (m)	2410	2410	2410	2460	2460	2460	2510	2510	2510
Compound									
C1	14813	91	14904	13275	68	13344	5885	94	5979
C2	129	17	146	91	12	103	50	19	68
C3	13	11	24	14	9	23	16	12	28
IC4	0	0	0	1	0	1	1	1	2
C4ene	2	4	6	3	3	5	3	4	7
nC4	1	1	2	1	1	2	2	2	3
2,2-DMC3	0	0	0	0	0	0	1	0	1
RI=417	0	0	0	0	0	0	0	0	0
IC5	0	1	1	0	1	1	1	1	2
RI=484 (C5ene)	0	1	1	0	0	0	0	1	1
RI=494 (C5ene)	0	1	1	0	1	1	0	1	1
nC5	0	1	1	1	1	2	1	1	3
RI=529	0	1	1	0	0	0	0	1	1
2,2-DMC4	0	0	0	0	0	0	0	0	0
CyC5 + 2,3-DMC4	0	0	0	0	0	0	0	0	0
2-MC5	0	1	1	0	0	0	1	1	1
RI=569	0	1	1	0	1	1	0	1	1
3-MC5	0	0	0	0	0	0	0	0	1
nC6	0	1	1	2	1	3	2	2	4
2,2-DMC5	0	0	0	0	0	0	0	0	0
MCyC5	0	1	1	0	1	1	0	0	0
2,4-DMC5	0	0	0	0	0	0	0	0	0
2,2,3-TMC4	0	0	0	0	0	0	0	0	0
Benzene	0	0	0	0	0	0	0	0	0
3,3-DMC5	0	0	0	0	0	0	0	0	0
CyC6	0	1	1	0	0	0	1	0	1
2-MC6	0	0	0	0	0	0	0	1	1
2,3-DMC5	0	0	0	0	0	0	0	0	0
1,1-DMCyC5	0	0	0	0	0	0	0	0	0
3-MC6	0	0	0	0	0	0	0	1	1
c-1,3-DMCyC5	0	0	0	0	0	0	0	0	0
t-1,3-DMCyC5	0	0	0	0	0	0	0	0	0
t-1,2-DMCyC5 + 3-EC5 + 2,2,4-TMC5	0	0	0	0	0	0	0	0	0
nC7	0	1	1	0	1	1	2	2	4
MCyC6 + c-1,2-DMCyC5	0	2	2	0	1	1	2	1	3
2,2-DMC6 + 1,1,3-TMCyC5	0	0	0	0	0	0	0	0	0
2,5-DMC6 + 2,2,3-TMC5	0	0	0	0	0	0	0	0	0
2,4-DMC6	0	0	0	0	0	0	0	0	0
3,3-DMC6 + t-1,c-2,4-TMCyC5	0	0	0	0	0	0	0	0	0
t-1,c-2,3-TMCyC5	0	0	0	0	0	0	0	0	0
2,3,4-TMC5	0	0	0	0	0	0	0	0	0
Toluene + 2,3,3-TMC5	0	0	0	0	0	0	0	0	0
2,3-DMC6	0	0	0	0	0	0	0	0	0
2-M,3-EC6	1	0	1	0	0	0	0	0	0
2-MC7	0	0	0	0	0	0	1	1	1
4-MC7 + 3-M,3-EC5	0	0	0	0	0	0	0	0	0
3,4-DMC6	0	0	0	0	0	0	0	0	0
3-MC7 + c-1,t-2,3-TMCyC5	0	0	0	0	0	0	0	0	0
RI=781 (DMCyC6)	0	0	0	0	0	0	1	1	1
RI=783 (DMCyC6)	0	0	0	0	0	0	0	0	0
2,2,5-TMC6	0	0	0	0	0	0	0	0	0
RI=790	0	0	0	0	0	0	0	0	0
RI=794	0	0	0	0	0	0	0	0	0
RI=796	0	0	0	0	0	0	0	0	0
nC8	0	1	1	1	1	2	2	2	3
RI=805	0	0	0	0	0	0	0	0	0
RI=807	0	0	0	0	0	0	0	1	1
RI=815	0	0	0	0	0	0	0	0	0
2,3,5-TMC6 + o-1,2-EMCyC5	0	0	0	0	0	0	0	0	0
RI=821	0	0	0	0	0	0	0	0	0
RI=825	0	0	0	0	0	0	0	0	0
RI=831	0	0	0	0	0	0	0	0	0
RI=834	0	0	0	0	0	0	0	0	0
RI=836	0	0	0	0	0	0	0	0	0
RI=843	0	0	0	0	0	0	0	1	1
RI=847	0	0	0	0	0	0	0	0	0
E-Benzene	0	0	0	0	0	0	0	0	1
RI=859	0	0	0	0	0	0	0	1	1
m+p-Xylene	0	0	0	0	0	0	0	0	0
RI=867	0	0	0	0	0	0	1	0	1
4-MC8 + 2-MC8	0	0	0	0	0	0	0	0	0
RI=883	0	0	0	0	0	0	0	0	0
o-Xylene	0	0	0	0	0	0	1	0	1
RI=890	0	0	0	0	0	0	0	0	0
RI=893	0	0	0	0	0	0	0	0	0
RI=896	0	0	0	0	0	0	0	0	0
nC9	1	0	1	0	0	1	1	1	2
Sum FID	14959	140	15099	13389	104	13493	5976	152	6128

Table 4.3 Continued

Sample ID	H5976	H5976	H5976	H5977	H5977	H5977	H5978	H5978	H5978
Gas fraction	H	O	H+C	H	C	H+C	H	O	H+O
Depth (m)	2560	2560	2560	2610	2610	2610	2660	2660	2660
Compound									
C1	2680	76	2756	5520	112	5631	13728	49	13777
C2	52	9	61	161	20	181	418	5	423
C3	66	5	71	278	12	290	420	4	424
IC4	42	1	44	161	2	163	171	3	175
C4ene	3	2	5	1	5	6	4	1	5
nC4	86	3	89	315	5	320	327	9	336
2,2-DMC3	6	0	6	17	1	18	14	1	14
RI=417	0	0	0	0	0	0	0	0	0
IC5	92	9	101	280	20	301	241	24	265
RI=484 (C5ene)	0	0	0	0	1	1	1	0	1
RI=494 (C5ene)	0	0	0	0	1	1	0	0	0
nC5	118	15	133	324	35	359	257	38	295
RI=529	0	0	0	0	1	1	0	0	0
2,2-DMC4	7	2	9	19	4	23	14	3	18
CyC5 + 2,3-DMC4	13	3	17	36	7	43	31	7	37
2-MC5	63	25	88	142	56	198	101	43	144
RI=569	0	0	0	0	0	0	0	0	0
3-MC5	35	13	48	85	31	115	63	25	88
nC6	115	55	170	246	125	370	164	90	254
2,2-DMC5	4	3	7	7	7	14	5	4	9
MCyC5	36	8	44	97	19	116	79	18	97
2,4-DMC5	6	5	11	11	12	23	7	8	15
2,2,3-TMC4	2	1	2	3	2	4	2	1	3
Benzene	2	0	2	0	0	0	1	0	1
3,3-DMC5	2	1	3	4	3	7	3	2	5
CyC6	40	9	48	106	21	128	89	20	109
2-MC6	24	25	49	43	57	100	26	34	60
2,3-DMC5	9	7	16	17	17	34	11	11	22
1,1-DMCyC5	6	3	8	13	6	18	9	4	13
3-MC6	25	25	50	46	58	105	29	37	66
c-1,3-DMCyC5	9	5	14	20	12	32	14	9	23
t-1,3-DMCyC5	10	7	17	22	16	38	15	11	26
t-1,2-DMCyC5 + 3-EC5 + 2,2,4-TMC5	17	10	27	37	24	60	26	17	43
nC7	76	86	163	131	208	339	73	119	192
MCyC6 + c-1,2-DMCyC5	100	55	156	226	141	367	157	101	259
2,2-DMC6 + 1,1,3-TMCyC5	5	5	9	9	11	20	6	7	13
2,5-DMC6 + 2,2,3-TMC5	2	4	6	3	10	13	2	6	7
2,4-DMC6	9	9	18	16	23	39	10	14	24
3,3-DMC6 + t-1,c-2,4-TMCyC5	5	6	10	8	14	21	5	8	13
t-1,c-2,3-TMCyC5	5	5	10	8	13	22	5	8	13
2,3,4-TMC5	1	1	2	2	3	5	1	2	3
Toluene + 2,3,3-TMC5	2	1	2	3	2	5	2	1	4
2,3-DMC6	2	3	5	3	8	12	2	5	7
2-M,3-EC6	1	1	2	1	3	4	1	2	2
2-MC7	17	27	44	25	77	102	13	41	54
4-MC7 + 3-M,3-EC5	5	7	12	7	21	28	4	12	15
3,4-DMC6	1	2	3	2	4	6	1	2	3
3-MC7 + c-1,t-2,3-TMCyC5	12	18	30	17	52	69	9	28	37
RI=781 (DMCyC6)	21	21	42	36	77	113	21	34	55
RI=783 (DMCyC6)	8	8	17	15	0	15	9	13	22
2,2,5-TMC6	0	1	1	1	2	2	0	1	1
RI=790	5	4	9	9	11	20	5	7	12
RI=794	5	5	9	8	13	21	5	8	12
RI=796	1	1	1	2	2	3	1	1	2
nC8	48	66	114	72	210	282	37	111	147
RI=805	1	1	2	1	4	5	1	2	2
RI=807	4	4	8	8	11	19	5	6	11
RI=815	1	1	1	1	2	3	1	1	2
2,3,5-TMC6 + o-1,2-EMCyC5	0	1	1	0	2	2	0	1	1
RI=821	1	2	4	2	7	9	1	4	5
RI=825	2	3	5	3	11	13	1	6	7
RI=831	4	5	9	4	21	26	2	11	13
RI=834	2	2	3	4	5	8	2	3	4
RI=838	12	12	24	19	40	59	10	22	33
RI=843	5	6	12	8	19	27	4	10	14
RI=847	2	2	3	2	6	8	1	3	4
E-Benzene	3	3	6	3	8	11	2	4	6
RI=859	5	7	12	7	25	32	3	13	16
m+p-Xylene	7	3	9	6	8	13	4	4	8
RI=867	6	8	15	8	39	47	4	19	23
4-MC8 + 2-MC8	5	5	10	6	25	31	3	13	16
RI=883	1	1	3	2	5	7	1	3	4
o-Xylene	2	1	2	1	1	3	1	1	2
RI=890	2	2	4	4	7	11	1	4	5
RI=893	3	3	7	4	11	15	2	6	8
RI=896	2	2	4	2	6	8	1	3	5
nC9	17	17	34	21	92	113	10	49	59
Sum FID	3988	753	4742	8731	1948	10679	16701	1193	17894

Table 4.3 Continued

Sample ID	H5979	H5979	H5979	H5980	H5980	H5980	H5981	H5981	H5981
Gas fraction	H	O	H+O	H	O	H+O	H	O	H+O
Depth (m)	2710	2710	2710	2760	2760	2760	2810	2810	2810
Compound									
C1	8505	153	8657	13472	93	13565	22686	205	22891
C2	724	18	742	2575	26	2601	4581	40	4621
C3	1441	21	1462	4429	125	4554	8590	72	8662
IC4	549	15	563	1099	98	1196	2269	48	2317
C4ene	4	2	6	4	2	6	14	5	19
nC4	1017	46	1062	1969	289	2259	4522	167	4689
2,2-DMC3	23	2	25	27	6	33	56	3	60
RI=417	0	0	0	0	0	0	0	1	1
IC5	560	66	626	699	299	999	1817	208	2025
RI=484 (C5ene)	1	0	1	0	0	0	0	1	1
RI=494 (C5ene)	0	0	0	0	0	0	0	1	1
nC5	530	92	623	692	415	1108	1977	335	2312
RI=529	0	0	0	0	0	0	0	1	1
2,2-DMC4	26	6	32	22	19	42	65	15	81
CyC5 + 2,3-DMC4	75	15	90	115	63	178	339	53	392
2-MC5	175	67	242	162	209	370	492	190	682
RI=569	0	0	0	0	0	0	0	2	2
3-MC5	118	43	161	102	129	231	317	114	431
nC6	259	122	381	239	378	618	790	368	1158
2,2-DMC5	9	5	14	6	12	18	18	11	29
MCyC5	181	46	227	226	191	417	785	175	960
2,4-DMC5	14	10	24	9	20	30	30	19	49
2,2,3-TMC4	3	2	5	2	4	6	8	3	11
Benzene	1	0	1	4	1	5	10	1	10
3,3-DMC5	5	3	8	3	7	10	11	6	18
CyC6	207	50	257	276	210	486	986	201	1187
2-MC6	47	41	88	34	88	122	116	86	202
2,3-DMC5	22	15	37	16	34	50	51	32	83
1,1-DMCyC5	17	7	24	14	20	34	50	19	70
3-MC6	56	46	103	38	94	132	128	91	219
c-1,3-DMCyC5	31	16	47	28	48	77	103	48	151
t-1,3-DMCyC5	33	18	51	28	50	78	103	50	152
t-1,2-DMCyC5 + 3-EC5 + 2,2,4-TMC5	53	28	80	46	77	122	165	77	242
nC7	135	130	265	98	270	369	354	271	625
MCyC6 + c-1,2-DMCyC5	329	170	498	301	456	757	1151	482	1632
2,2-DMC6 + 1,1,3-TMCyC5	11	9	20	7	18	25	27	18	45
2,5-DMC6 + 2,2,3-TMC5	4	6	10	2	8	10	9	8	16
2,4-DMC6	22	18	39	17	35	52	65	36	100
3,3-DMC6 + t-1,c-2,4-TMCyC5	11	11	22	8	21	29	28	21	49
t-1,c-2,3-TMCyC5	12	10	22	8	21	29	29	21	50
2,3,4-TMC5	2	2	4	2	3	5	4	3	8
Toluene + 2,3,3-TMC5	7	3	10	19	7	26	56	8	64
2,3-DMC6	4	5	9	3	7	10	9	7	16
2-M,3-EC6	2	2	3	1	3	3	3	2	6
2-MC7	30	38	67	19	56	75	70	56	126
4-MC7 + 3-M,3-EC5	9	12	20	5	16	21	19	15	34
3,4-DMC6	2	3	5	1	4	5	5	4	8
3-MC7 + c-1,t-2,3-TMCyC5	21	28	49	13	40	54	49	40	90
RI=781 (DMCyC6)	48	44	92	36	80	116	131	86	218
RI=783 (DMCyC6)	20	17	37	15	32	46	55	34	90
2,2,5-TMC6	0	1	1	0	1	1	0	1	1
RI=790	11	9	20	8	17	24	31	18	48
RI=794	10	10	20	7	17	24	25	18	43
RI=796	2	1	4	2	3	4	7	3	10
nC8	87	103	190	58	149	207	216	157	373
RI=805	1	2	3	1	3	4	3	3	6
RI=807	10	9	19	8	16	25	30	17	47
RI=815	2	2	3	1	2	3	4	2	6
2,3,5-TMC6 + o 1,2-EMCyC5	1	1	2	0	1	1	2	1	3
RI=821	2	3	5	1	3	5	5	3	8
RI=825	4	5	8	3	6	8	9	6	15
RI=831	5	8	13	3	8	11	13	9	21
RI=834	4	4	8	4	7	11	14	8	22
RI=836	26	26	51	20	39	59	75	44	119
RI=843	8	10	18	6	12	18	20	13	33
RI=847	3	3	6	2	4	6	7	5	12
E-Benzene	4	5	9	5	6	11	15	7	22
RI=859	9	11	20	6	12	18	21	14	35
m+p-Xylene	9	5	14	13	9	21	41	11	53
RI=867	10	13	23	6	13	19	24	15	39
4-MC8 + 2-MC8	8	9	18	6	10	16	22	12	34
RI=883	2	3	5	2	4	6	8	4	12
o-Xylene	2	1	3	4	3	6	11	3	15
RI=890	4	4	8	3	5	8	9	6	15
RI=893	6	7	12	4	8	12	15	10	24
RI=896	3	4	7	2	4	7	8	5	13
nC9	28	32	60	19	31	50	70	41	110
Sum FID	15616	1747	17363	27086	4476	31563	53855	4199	58054

Table 4.3 Continued

Sample ID	H5982	H5982	H5982	H5983	H5983	H5983	H5984	H5984	H5984
Gas fraction	H	O	H+O	H	O	H+O	H	O	H+O
Depth (m)	2830	2830	2830	2860	2860	2860	2910	2910	2910
Compound									
C1	34543	167	34710	21596	88	21684	10901	66	10967
C2	4627	32	4659	1333	41	1374	887	13	900
C3	7468	103	7572	1063	34	1098	860	51	911
IC4	1932	77	2009	216	11	227	176	43	220
C4ene	17	4	20	10	13	23	3	0	3
nC4	3702	234	3936	493	29	522	403	112	515
2,2-DMC3	49	4	53	6	1	8	3	2	6
RI=417	0	1	1	0	1	1	0	0	0
IC5	1466	241	1727	237	56	292	164	136	300
RI=484 (C5ene)	2	1	3	0	2	2	0	0	0
RI=494 (C5ene)	0	1	1	0	2	2	0	0	0
nC5	1639	363	2002	316	89	405	217	197	415
RI=529	0	0	0	0	2	2	0	0	0
2,2-DMC4	57	16	73	12	6	18	7	10	16
CyC5 + 2,3-DMC4	270	54	324	56	14	70	43	28	71
2-MC5	447	181	629	109	68	177	63	103	166
RI=569	0	1	1	0	0	0	0	0	0
3-MC5	275	109	384	68	39	107	42	60	101
nC6	729	346	1075	212	138	350	128	191	319
2,2-DMC5	18	10	29	6	4	10	3	5	8
MCyC5	596	171	768	154	45	199	114	86	200
2,4-DMC5	29	17	47	9	7	16	5	8	13
2,2,3-TMC4	7	3	10	0	1	1	0	2	2
Benzene	12	1	13	9	0	9	8	1	8
3,3-DMC5	10	6	16	0	2	2	2	3	5
CyC6	762	200	961	210	54	264	161	101	262
2-MC6	116	77	193	37	33	69	24	32	57
2,3-DMC5	47	28	76	15	11	26	9	12	21
1,1-DMCyC5	41	18	59	14	6	20	8	9	17
3-MC6	125	81	206	42	34	75	27	34	60
c-1,3-DMCyC5	86	43	128	28	16	44	19	20	40
t-1,3-DMCyC5	87	44	130	28	17	45	19	21	40
t-1,2-DMCyC5 + 3-EC5 + 2,2,4-TMC5	136	68	204	44	25	69	30	32	62
nC7	346	240	586	127	106	233	90	92	182
MCyC6 + c-1,2-DMCyC5	940	434	1374	353	169	523	253	207	460
2,2-DMC6 + 1,1,3-TMCyC5	24	15	39	8	6	13	6	5	11
2,5-DMC6 + 2,2,3-TMC5	8	7	15	0	2	2	2	2	4
2,4-DMC6	55	32	87	20	12	32	15	12	27
3,3-DMC6 + t-1,c-2,4-TMCyC5	26	18	44	11	7	18	7	6	13
t-1,c-2,3-TMCyC5	25	18	43	9	6	15	7	6	12
2,3,4-TMC5	4	3	7	0	1	1	0	1	1
Toluene + 2,3,3-TMC5	61	9	70	34	3	37	31	5	36
2,3-DMC6	9	6	15	0	2	2	3	2	4
2-M,3-EC6	3	2	5	0	1	1	0	0	0
2-MC7	64	49	113	27	17	44	20	11	31
4-MC7 + 3-M,3-EC5	17	13	31	9	5	14	6	3	9
3,4-DMC6	5	3	8	0	1	1	2	1	3
3-MC7 + c-1,t-2,3-TMCyC5	47	36	83	21	13	34	15	8	23
RI=781 (DMCyC6)	116	74	190	52	31	83	38	25	62
RI=783 (DMCyC6)	48	30	78	22	12	34	16	10	26
2,2,5-TMC6	0	1	1	0	0	0	0	0	0
RI=790	26	15	41	12	6	18	8	5	13
RI=794	22	15	37	10	5	16	8	4	12
RI=796	5	3	8	0	1	1	2	1	3
nC8	195	136	331	91	50	141	68	31	98
RI=805	3	2	5	0	1	1	0	0	0
RI=807	25	15	40	11	6	17	9	5	14
RI=815	3	2	5	0	1	1	0	1	1
2,3,5-TMC6 + o 1,2-EMCyC5	1	1	2	0	0	0	0	0	0
RI=821	5	3	8	0	1	1	2	0	2
RI=825	7	5	13	0	1	1	2	1	3
RI=831	10	8	18	5	2	7	3	1	4
RI=834	11	7	18	5	2	8	6	2	8
RI=836	64	39	103	33	15	49	24	11	35
RI=843	17	12	29	7	3	11	5	2	7
RI=847	9	4	13	0	1	1	2	1	3
E-Benzene	14	6	20	8	2	10	6	2	8
RI=859	18	13	31	10	4	14	6	2	8
m+p-Xylene	46	11	58	34	5	39	27	5	32
RI=867	21	14	35	12	3	15	7	1	8
4-MC8 + 2-MC8	18	11	30	10	3	13	6	2	8
RI=883	6	4	10	0	1	1	2	1	3
o-Xylene	13	3	16	10	1	11	8	1	9
RI=890	7	5	12	5	2	7	3	1	4
RI=893	12	8	21	8	3	11	6	2	7
RI=896	6	5	11	5	2	6	4	1	4
nC9	63	37	99	44	9	54	23	4	27
Sum FID	61745	4074	65819	27337	1415	28752	15075	1856	16931

Table 4.3 Continued

Sample ID	H5985	H5985	H5985	H5986	H5986	H5986	H5987	H5987	H5987
Gas fraction	H	O	H+O	H	O	H+O	H	O	H+O
Depth (m)	2960	2960	2960	3010	3010	3010	3060	3060	3060
Compound									
C1	5298	212	5510	41855	169	42024	10600	193	10793
C2	1939	36	1975	4258	23	4281	1581	29	1610
C3	2704	158	2862	5065	60	5125	2461	94	2555
IC4	526	103	631	996	31	1027	569	42	612
C4ene	3	1	4	40	2	41	11	1	13
nC4	1106	292	1398	2250	100	2350	1217	147	1364
2,2-DMC3	10	4	14	24	1	25	13	2	14
RI=417	0	0	0	0	0	0	0	0	0
IC5	383	271	653	1022	105	1128	554	129	682
RI=484 (C5ene)	0	0	0	8	0	8	0	0	0
RI=494 (C5ene)	0	0	0	0	0	0	0	0	0
nC5	442	389	831	1263	167	1429	626	202	828
RI=529	0	0	0	0	0	0	0	0	0
2,2-DMC4	12	16	28	44	7	51	21	8	29
CyC5 + 2,3-DMC4	96	65	161	262	30	292	128	34	162
2-MC5	96	178	274	393	94	486	176	102	279
RI=569	0	0	0	8	0	8	4	0	4
3-MC5	63	109	172	252	58	309	113	62	175
nC6	168	338	506	696	189	885	283	195	478
2,2-DMC5	3	9	12	14	5	20	7	6	12
MCyC5	210	214	423	685	105	790	307	110	418
2,4-DMC5	5	15	20	26	9	34	10	10	20
2,2,3-TMC4	1	3	4	6	2	8	3	2	4
Benzene	12	2	14	54	2	56	18	1	19
3,3-DMC5	2	5	7	12	3	15	4	3	8
CyC6	303	275	578	969	134	1103	419	133	552
2-MC6	20	68	87	113	43	156	41	44	85
2,3-DMC5	9	25	33	49	16	66	19	17	36
1,1-DMCyC5	11	18	29	47	11	58	18	10	29
3-MC6	22	71	93	127	46	173	45	46	92
c-1,3-DMCyC5	23	45	68	110	28	138	43	28	71
t-1,3-DMCyC5	23	45	68	110	29	139	42	28	70
t-1,2-DMCyC5 + 3-EC5 + 2,2,4-TMC5	37	70	108	177	46	223	70	44	114
nC7	64	213	276	368	145	513	126	136	262
MCyC6 + c-1,2-DMCyC5	309	497	807	1354	316	1669	484	270	754
2,2-DMC6 + 1,1,3-TMCyC5	5	13	17	27	9	36	9	9	18
2,5-DMC6 + 2,2,3-TMC5	1	5	6	9	4	13	3	4	7
2,4-DMC6	15	30	45	73	21	94	26	19	44
3,3-DMC6 + t-1,c-2,4-TMCyC5	5	16	22	34	12	46	12	12	24
t-1,c-2,3-TMCyC5	6	15	20	34	12	46	13	11	24
2,3,4-TMC5	1	2	3	0	2	2	0	1	1
Toluene + 2,3,3-TMC5	60	16	77	228	12	240	71	9	81
2,3-DMC6	2	5	6	10	4	14	3	4	7
2-M,3-EC6	0	1	1	0	1	1	0	1	1
2-MC7	11	37	49	80	30	109	24	27	51
4-MC7 + 3-M,3-EC5	3	10	13	20	8	28	6	7	13
3,4-DMC6	1	2	3	5	2	7	0	2	2
3-MC7 + c-1,t-2,3-TMCyC5	8	27	36	54	21	75	15	19	34
RI=781 (DMCyC6)	29	68	97	170	53	223	52	44	96
RI=783 (DMCyC6)	12	28	40	70	21	92	21	18	39
2,2,5-TMC6	0	0	0	0	0	0	0	0	0
RI=790	6	13	20	36	11	47	11	9	20
RI=794	5	12	17	33	10	43	11	9	20
RI=796	2	3	4	8	2	10	3	1	4
nC8	42	109	150	270	90	360	80	73	153
RI=805	1	2	2	0	2	2	2	1	3
RI=807	7	14	21	38	11	49	12	8	20
RI=815	0	2	2	0	1	1	0	1	1
2,3,5-TMC6 + o 1,2-EMCyC5	0	1	1	0	0	0	0	0	0
RI=821	0	2	2	7	2	9	2	1	4
RI=825	1	3	5	9	3	12	3	2	5
RI=831	2	4	6	13	4	17	4	3	7
RI=834	4	6	10	18	5	23	5	4	9
RI=836	18	35	53	111	29	139	29	22	51
RI=843	3	8	11	25	7	32	7	6	13
RI=847	1	3	4	10	2	13	2	2	4
E-Benzene	8	5	13	34	5	39	9	3	13
RI=859	4	8	12	28	7	35	8	6	14
m+p-Xylene	41	16	57	141	13	154	39	8	47
RI=867	4	7	11	27	8	36	9	6	15
4-MC8 + 2-MC8	5	7	12	28	7	35	8	5	13
RI=883	2	3	5	10	3	13	3	2	5
o-Xylene	12	4	16	40	4	44	12	2	14
RI=890	2	3	5	12	4	16	4	2	6
RI=893	3	6	10	23	6	29	6	4	10
RI=896	2	3	5	13	3	16	4	2	5
nC9	14	18	33	98	23	121	26	14	40
Sum FID	14250	4318	18569	64502	2449	66952	20566	2513	23079

Table 4.3 Continued

Sample ID	H5988	H5988	H5988	H5989	H5989	H5989	H5990	H5990	H5990
Gas fraction	H	O	H+C	H	C	H+C	H	O	H+O
Depth (m)	3110	3110	3110	3160	3160	3160	3210	3210	3210
Compound									
C1	20750	622	21372	33277	677	33954	25879	642	26521
C2	3986	170	4156	6132	187	6319	5315	262	5577
C3	4365	422	4787	5598	430	6029	5063	595	5658
iC4	798	148	946	892	145	1037	800	184	985
C4ene	12	12	23	18	10	28	19	31	50
nC4	1523	469	1992	1760	469	2229	1549	568	2117
2,2-DMC3	14	6	19	14	5	18	13	6	19
RI=417	0	2	2	0	0	0	0	3	3
iC5	555	346	901	615	330	945	538	392	930
RI=484 (C5ene)	3	2	5	2	0	2	3	5	8
RI=494 (C5ene)	0	2	2	0	0	0	0	5	5
nC5	576	510	1086	643	487	1130	564	559	1123
RI=529	0	1	1	0	0	0	0	5	5
2,2-DMC4	17	20	37	20	17	37	17	21	38
CyC5 + 2,3-DMC4	134	101	235	171	99	271	145	117	262
2-MC5	142	259	401	163	233	395	143	274	417
RI=569	3	0	3	5	0	5	5	5	11
3-MC5	92	160	252	108	147	254	95	172	268
nC6	221	504	725	261	450	711	233	533	766
2,2-DMC5	4	15	20	6	13	19	5	15	20
MCyC5	276	311	587	348	313	661	302	369	671
2,4-DMC5	7	26	33	9	22	31	8	28	36
2,2,3-TMC4	2	5	7	2	4	6	2	5	7
Benzene	23	7	30	39	7	46	32	11	43
3,3-DMC5	3	9	12	4	8	12	3	9	12
CyC6	382	396	778	495	402	897	423	483	906
2-MC6	28	125	153	36	106	142	30	133	163
2,3-DMC5	14	48	62	18	42	59	14	50	64
1,1-DMCyC5	15	28	43	19	26	44	16	31	47
3-MC6	32	133	165	41	115	156	35	143	178
c-1,3-DMCyC5	33	79	112	42	73	115	38	88	126
t-1,3-DMCyC5	33	81	114	42	75	117	38	90	128
t-1,2-DMCyC5 + 3-EC5 + 2,2,4-TMC5	54	126	180	68	117	184	60	139	199
nC7	85	414	498	112	360	473	96	452	548
MCyC6 + c-1,2-DMCyC5	376	827	1204	487	779	1266	424	947	1371
2,2-DMC6 + 1,1,3-TMCyC5	6	28	33	8	23	31	7	28	35
2,5-DMC6 + 2,2,3-TMC5	2	12	14	2	11	13	2	14	16
2,4-DMC6	18	58	76	24	54	78	21	67	87
3,3-DMC6 + t-1,c-2,4-TMCyC5	8	38	46	10	34	44	9	42	50
t-1,c-2,3-TMCyC5	8	37	46	11	34	44	9	41	50
2,3,4-TMC5	1	5	6	1	6	6	1	5	7
Toluene + 2,3,3-TMC5	77	42	119	132	54	187	114	79	193
2,3-DMC6	2	12	14	3	11	13	3	14	16
2-M,3-EC6	0	4	4	0	4	4	0	4	4
2-MC7	14	96	110	19	87	106	17	113	129
4-MC7 + 3-M,3-EC5	4	25	29	5	23	27	4	29	34
3,4-DMC6	1	6	7	1	6	7	2	7	8
3-MC7 + c-1,t-2,3-TMCyC5	10	68	78	14	61	74	12	80	91
RI=781 (DMCyC6)	35	155	191	47	139	187	42	171	213
RI=783 (DMCyC6)	15	62	77	20	57	77	18	69	87
2,2,5-TMC6	0	2	2	0	2	2	0	2	2
RI=790	8	30	38	11	28	38	10	34	43
RI=794	7	31	38	9	30	39	8	35	43
RI=796	2	6	8	3	5	8	2	6	8
nC8	48	285	333	67	261	328	58	337	394
RI=805	0	6	6	1	5	6	0	7	7
RI=807	8	30	37	10	26	36	9	32	42
RI=815	1	4	6	1	4	5	0	5	5
2,3,5-TMC6 + c-1,2-EMCyC5	0	2	2	0	2	2	0	2	2
RI=821	0	7	7	1	6	6	0	8	8
RI=825	2	11	12	2	10	12	2	13	15
RI=831	2	16	18	3	16	19	2	22	24
RI=834	4	14	17	5	12	17	4	15	19
RI=838	20	89	108	27	80	107	23	101	125
RI=843	4	25	29	6	23	29	5	29	34
RI=847	1	10	11	2	9	11	2	11	13
E-Benzene	7	15	22	12	16	27	11	21	32
RI=859	4	28	32	6	26	32	6	34	40
m+p-Xylene	32	30	62	60	37	97	56	60	116
RI=867	3	30	34	6	30	36	5	43	48
4-MC8 + 2-MC8	4	25	29	7	24	30	6	32	38
RI=883	2	8	10	2	8	10	2	10	12
o-Xylene	10	9	19	20	11	31	19	19	38
RI=890	2	12	14	3	11	14	3	13	16
RI=893	3	20	24	5	18	23	4	23	28
RI=896	2	10	12	3	11	13	3	13	15
n-C9	12	87	100	20	88	108	17	130	147
Sum FID	34950	7870	42820	52035	7545	59580	42424	9195	51619

Table 4.3 Continued

Sample ID	H5991	H5991	H5991	H5992	H5992	H5992	H5993	H5993	H5993
Gas fraction	H	O	H+C	H	C	H+C	H	O	H+O
Depth (m)	3260	3260	3260	3310	3310	3310	3360	3360	3360
Compound									
C1	30430	603	31033	23606	577	24183	20129	187	20316
C2	5085	217	5302	3647	184	3830	5280	88	5368
C3	4793	527	5320	3416	339	3755	5111	256	5367
IC4	779	168	947	576	101	677	900	94	994
C4ene	18	17	35	18	22	40	15	8	23
nC4	1462	545	2007	1067	313	1381	1541	262	1802
2,2-DMC3	11	5	16	9	3	13	14	3	17
RI=417	0	2	2	0	2	2	0	1	1
IC5	505	361	866	389	222	611	563	183	746
RI=484 (C5ene)	3	3	6	4	3	8	2	1	4
RI=494 (C5ene)	0	3	3	0	4	4	0	1	1
nC5	506	524	1030	396	314	709	519	231	749
RI=529	0	3	3	0	3	3	0	1	1
2,2-DMC4	15	18	33	13	12	25	16	8	25
CyC5 + 2,3-DMC4	128	108	236	100	62	162	140	45	185
2-MC5	127	227	355	108	152	260	131	103	234
RI=569	4	3	7	9	2	11	4	2	5
3-MC5	83	146	230	73	97	169	90	66	156
nC6	196	432	628	167	275	442	187	170	357
2,2-DMC5	4	11	15	4	6	12	4	5	9
MCyC5	256	341	597	218	199	418	294	136	429
2,4-DMC5	7	21	27	6	14	20	7	8	15
2,2,3-TMC4	2	4	6	2	3	5	2	2	3
Benzene	27	9	36	35	4	39	26	3	30
3,3-DMC5	3	7	9	2	5	7	2	3	5
CyC6	352	434	786	287	233	520	368	150	518
2-MC6	28	97	124	24	63	87	24	35	60
2,3-DMC5	13	38	51	12	25	37	13	15	28
1,1-DMCyC5	13	25	38	12	15	27	13	9	23
3-MC6	31	106	137	28	69	97	28	39	67
c-1,3-DMCyC5	31	72	103	30	45	75	34	28	62
t-1,3-DMCyC5	31	73	104	30	46	76	34	28	62
t-1,2-DMCyC5 + 3-EC5 + 2,2,4-TMC5	50	114	164	50	74	124	57	46	103
nC7	85	325	410	72	199	271	70	102	172
MCyC6 + c-1,2-DMCyC5	340	760	1100	318	439	758	349	247	596
2,2-DMC6 + 1,1,3-TMCyC5	6	20	26	5	13	18	6	7	13
2,5-DMC6 + 2,2,3-TMC5	2	10	12	1	6	7	1	3	4
2,4-DMC6	18	51	69	17	30	47	18	17	34
3,3-DMC6 + t-1,c-2,4-TMCyC5	8	30	38	7	18	26	7	10	17
t-1,c-2,3-TMCyC5	9	30	39	9	20	29	9	11	20
2,3,4-TMC5	0	4	4	0	2	2	0	1	1
Toluene + 2,3,3-TMC5	85	63	148	117	25	142	88	18	107
2,3-DMC6	2	9	12	2	6	7	1	3	4
2-M,3-EC6	0	3	3	0	2	2	0	1	1
2-MC7	16	77	93	14	44	57	12	21	33
4-MC7 + 3-M,3-EC5	4	20	24	3	11	15	3	5	8
3,4-DMC6	1	5	6	0	3	3	0	1	1
3-MC7 + c-1,t-2,3-TMCyC5	10	54	64	9	30	39	9	14	23
RI=781 (DMCyC6)	34	124	159	34	71	105	32	35	67
RI=783 (DMCyC6)	15	51	65	14	29	43	13	14	27
2,2,5-TMC6	0	1	1	0	0	0	0	0	0
RI=790	8	25	32	8	14	21	7	7	14
RI=794	6	26	32	8	15	23	7	8	16
RI=796	2	5	7	2	3	5	2	2	4
nC8	51	234	285	46	123	169	42	56	98
RI=805	0	5	5	0	3	3	0	1	1
RI=807	7	23	30	7	13	20	7	6	13
RI=815	0	3	3	0	2	2	1	1	2
2,3,5-TMC6 + c-1,2-EMCyC5	0	2	2	0	1	1	0	0	0
RI=821	0	6	6	0	3	3	0	1	1
RI=825	2	9	10	1	4	6	1	2	3
RI=831	2	14	17	2	7	9	2	3	5
RI=834	5	11	15	5	5	10	3	3	6
RI=838	19	72	91	19	38	57	18	18	35
RI=843	5	20	25	4	11	15	4	5	9
RI=847	2	8	9	1	4	5	2	2	3
E-Benzene	7	15	22	11	7	19	11	4	15
RI=859	4	24	28	5	12	16	5	5	10
m+p-Xylene	33	45	79	61	17	78	44	12	56
RI=867	4	28	32	4	13	17	4	5	9
4-MC8 + 2-MC8	4	22	26	5	10	15	5	5	9
RI=883	2	7	9	2	3	5	2	2	3
o-Xylene	11	14	25	20	5	25	14	4	18
RI=890	2	10	12	2	5	7	2	2	4
RI=893	3	16	20	5	8	13	4	3	7
RI=896	2	9	11	3	4	7	2	2	5
n-C9	13	85	98	14	35	49	12	15	27
Sum FID	45824	7639	53463	35196	4803	39999	36369	2902	39271

Table 4.3 Continued

Sample ID	H5094	H5094	H5094
Gas fraction	H	O	H+C
Depth (m)	3390	3390	3390
Compound			
C1	21108	599	21707
C2	4222	149	4371
C3	5838	359	6197
IC4	1190	148	1338
C4ene	39	21	60
nC4	2064	433	2498
2,2-DMC3	20	5	25
RI=417	0	2	2
IC5	835	355	1190
RI=484 (C5ene)	4	3	8
RI=494 (C5ene)	0	3	3
nC5	763	459	1222
RI=529	0	3	3
2,2-DMC4	26	18	45
CyC5 + 2,3-DMC4	188	87	275
2-MC5	214	235	449
RI=569	6	2	9
3-MC5	146	151	297
nC6	298	398	696
2,2-DMC5	7	12	20
MCyC5	419	294	713
2,4-DMC5	12	22	34
2,2,3-TMC4	3	4	7
Benzene	34	5	39
3,3-DMC5	5	7	12
CyC6	502	316	818
2-MC6	45	97	142
2,3-DMC5	24	40	64
1,1-DMCyC5	22	22	44
3-MC6	53	107	160
c-1,3-DMCyC5	55	73	128
t-1,3-DMCyC5	56	75	131
t-1,2-DMCyC5 + 3-EC5 + 2,2,4-TMC5	94	121	215
nC7	129	295	425
MCyC6 + c-1,2-DMCyC5	534	644	1178
2,2-DMC6 + 1,1,3-TMCyC5	10	21	31
2,5-DMC6 + 2,2,3-TMC5	3	9	12
2,4-DMC6	30	48	78
3,3-DMC6 + t-1,c-2,4-TMCyC5	14	30	44
t-1,c-2,3-TMCyC5	17	36	53
2,3,4-TMC5	0	4	4
Toluene + 2,3,3-TMC5	125	37	162
2,3-DMC6	3	9	12
2-M,3-EC6	0	3	3
2-MC7	25	69	93
4-MC7 + 3-M,3-EC5	6	17	23
3,4-DMC6	0	4	4
3-MC7 + c-1,t-2,3-TMCyC5	17	46	64
RI=781 (DMCyC6)	57	110	167
RI=783 (DMCyC6)	24	44	67
2,2,5-TMC6	0	1	1
RI=790	13	22	35
RI=794	14	28	42
RI=796	5	4	9
nC8	83	189	272
RI=805	2	5	7
RI=807	12	19	32
RI=815	2	3	6
2,3,5-TMC6 + c-1,2-EMCyC5	0	1	1
RI=821	0	5	5
RI=825	4	7	11
RI=831	4	12	16
RI=834	6	9	15
RI=838	32	59	91
RI=843	8	18	26
RI=847	3	7	10
E-Benzene	14	13	28
RI=859	8	19	28
m+p-Xylene	68	28	97
RI=867	8	21	28
4-MC8 + 2-MC8	8	17	25
RI=883	3	6	9
o-Xylene	23	9	32
RI=890	4	8	12
RI=893	7	13	19
RI=896	4	7	11
n-C9	27	61	88
Sum FID	39648	6645	46294

Table 4.4
Composition of hydrocarbons in headspace and occluded gas
(volume %)

Table 4.4 *Composition of hydrocarbons in headspace and occluded gas (volume %).*

Sample ID	H5970	H5970	H5970	H5971	H5971	H5971	H5972	H5972	H5972
Gas fraction	H	O	H+O	H	C	H+C	H	O	H+O
Depth (m)	2260.0	2260.0	2260.0	2310.0	2310.0	2310.0	2360.0	2360.0	2360.0
Compound									
C1	99.1	56.5	98.3	99.1	58.2	98.4	99.2	75.0	99.0
C2	0 6	5 4	0 7	0 7	12 0	0 9	0 6	6.4	0.7
C3	0 1	2 9	0 2	0 2	8.0	0 3	0 1	4.0	0.1
IC4	0 0	0 7	0 0	0 0	0.6	0 0	0 0	0.0	0.0
C4ene	0 0	1 0	0 0	0 0	3.3	0 1	0 0	1.3	0.0
nC4	0.0	1.3	0.0	0.0	1.1	0.0	0.0	0.7	0.0
2,2-DMC3	0 0	0 0	0 0	0 0	0.0	0 0	0 0	0.0	0.0
RI=417	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
iC5	0.0	1.6	0.0	0.0	0.8	0.0	0.0	0.6	0.0
RI=484 (C5ene)	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0
RI=494 (C5ene)	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0
nC5	0 0	2 3	0 1	0 0	1.1	0 0	0 0	0.7	0.0
RI=529	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
2,2-DMC4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CyC5 + 2,3-DMC4	0 0	0 0	0 0	0 0	0.0	0 0	0 0	0.0	0.0
2-MC5	0 0	1 2	0 0	0 0	0.4	0 0	0 0	0.5	0.0
RI=569	0 0	0 0	0 0	0 0	0.4	0 0	0 0	0.8	0.0
3-MC5	0 0	1 0	0 0	0 0	0.0	0 0	0 0	0.0	0.0
nC6	0 0	3 2	0 1	0 0	1.9	0 0	0 0	1.6	0.0
2,2-DMC5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MCyC5	0.0	1.4	0.0	0.0	0.5	0.0	0.0	0.6	0.0
2,4-DMC5	0 0	0 0	0 0	0 0	0.0	0 0	0 0	0.0	0.0
2,2,3-TMC4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Benzene	0 0	0 0	0 0	0 0	0.0	0 0	0 0	0.0	0.0
3,3-DMC5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CyC6	0.0	1.8	0.0	0.0	0.7	0.0	0.0	0.7	0.0
2-MC6	0 0	0 8	0 0	0 0	0.4	0 0	0 0	0.5	0.0
2,3-DMC5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1,1-DMCyC5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3-MC6	0 0	0 9	0 0	0 0	0.4	0 0	0 0	0.4	0.0
c-1,3-DMCyC5	0 0	0 5	0 0	0 0	0.0	0 0	0 0	0.0	0.0
t-1,3-DMCyC5	0 0	0 7	0 0	0 0	0.0	0 0	0 0	0.0	0.0
t-1,2-DMCyC5 + 3-EC5 + 2,2,4-TMC5	0 0	0 9	0 0	0 0	0.4	0.0	0 0	0.0	0.0
nC7	0 0	2 9	0 1	0 0	1.9	0 0	0 0	1.3	0.0
MCyC6 + c-1,2-DMCyC5	0.0	5.7	0.1	0.0	2.4	0.0	0.0	2.1	0.0
2,2-DMC6 + 1,1,3-TMCyC5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2,5-DMC6 + 2,2,3-TMC5	0 0	0 0	0 0	0 0	0.0	0 0	0 0	0.0	0.0
2,4-DMC6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3,3-DMC6 + t-1,c-2,4-TMCyC5	0 0	0 0	0 0	0 0	0.0	0 0	0 0	0.0	0.0
t-1,c 2,3-TMCyC5	0 0	0 0	0 0	0 0	0.0	0 0	0 0	0.0	0.0
2,3,4-TMC5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Toluene + 2,3,3-TMC5	0 0	0 0	0 0	0 0	0.0	0 0	0 0	0.0	0.0
2,3-DMC6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-M,3-EC6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-MC7	0 0	0 6	0 0	0 0	0.3	0 0	0 0	0.4	0.0
4-MC7 + 3-M,3-EC5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3,4-DMC6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3-MC7 + c-1,t-2,3-TMCyC5	0 0	0 6	0 0	0 0	0.0	0 0	0 0	0.0	0.0
RI=781 (DMCyC6)	0.0	1.1	0.0	0.0	0.5	0.0	0.0	0.5	0.0
RI=783 (DMCyC6)	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2,2,5-TMC6	0 0	0 0	0 0	0 0	0.0	0 0	0 0	0.0	0.0
RI=790	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=794	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=796	0 0	0 0	0 0	0 0	0.0	0 0	0 0	0.0	0.0
nC8	0 0	2 4	0 1	0 0	1.9	0 0	0 0	1.1	0.0
RI=805	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=807	0 0	0 0	0 0	0 0	0.0	0 0	0 0	0.0	0.0
RI=815	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2,3,5-TMC6 + o 1,2-EMCyC5	0 0	0 0	0 0	0 0	0.0	0 0	0 0	0.0	0.0
RI=821	0 0	0 0	0 0	0 0	0.0	0 0	0 0	0.0	0.0
RI=825	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=831	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=834	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=838	0.0	0.8	0.0	0.0	0.5	0.0	0.0	0.0	0.0
RI=843	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=847	0 0	0 0	0 0	0 0	0.0	0 0	0 0	0.0	0.0
E-Benzene	0 0	0 0	0 0	0 0	0.0	0 0	0 0	0.0	0.0
RI=859	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
m+p-Xylene	0 0	0 6	0 0	0 0	0.3	0 0	0 0	0.3	0.0
RI=867	0 0	0 0	0 0	0 0	0.0	0 0	0 0	0.0	0.0
4-MC8 + 2-MC8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=883	0 0	0 0	0 0	0 0	0.0	0 0	0 0	0.0	0.0
o-Xylene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=890	0 0	0 0	0 0	0 0	0.0	0 0	0 0	0.0	0.0
RI=893	0 0	0 0	0 0	0 0	0.0	0 0	0 0	0.0	0.0
RI=896	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
nC9	0.0	0.9	0.0	0.0	0.6	0.0	0.0	0.5	0.0
Sum FID	100.0	100 0	100 0	100 0	100.0	100.0	100 0	100 0	100.0

Table 4.4 Continued

Sample ID	H5973	H5973	H5973	H5974	H5974	H5974	H5975	H5975	H5975
Gas fraction	H	O	H+C	H	O	H+O	H	O	H+C
Depth (m)	2410.0	2410.0	2410.0	2460.0	2460.0	2460.0	2510.0	2510.0	2510.0
Compound									
C1	99.0	65.0	98.7	99.2	65.5	98.9	98.5	61.8	97.6
C2	0.9	12.5	1.0	0.7	11.8	0.8	0.8	12.3	1.1
C3	0.1	7.9	0.2	0.1	8.5	0.2	0.3	7.9	0.5
iC4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0
C4ene	0.0	3.0	0.0	0.0	2.5	0.0	0.0	2.9	0.1
nC4	0.0	0.9	0.0	0.0	0.9	0.0	0.0	1.0	0.1
2,2-DMC3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=417	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
iC5	0.0	0.8	0.0	0.0	0.8	0.0	0.0	0.8	0.0
RI=484 (C5ene)	0.0	0.5	0.0	0.0	0.4	0.0	0.0	0.5	0.0
RI=494 (C5ene)	0.0	0.6	0.0	0.0	0.5	0.0	0.0	0.5	0.0
nC5	0.0	0.9	0.0	0.0	0.8	0.0	0.0	0.8	0.0
RI=529	0.0	0.6	0.0	0.0	0.5	0.0	0.0	0.7	0.0
2,2-DMC4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CyC5 + 2,3-DMC4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-MC5	0.0	0.5	0.0	0.0	0.4	0.0	0.0	0.4	0.0
RI=569	0.0	0.9	0.0	0.0	1.4	0.0	0.0	0.8	0.0
3-MC5	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0
nC6	0.0	1.0	0.0	0.0	1.1	0.0	0.0	1.3	0.1
2,2-DMC5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MCyC5	0.0	0.4	0.0	0.0	0.5	0.0	0.0	0.0	0.0
2,4-DMC5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2,2,3-TMC4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Benzene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3,3-DMC5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CyC6	0.0	0.6	0.0	0.0	0.5	0.0	0.0	0.0	0.0
2-MC6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0
2,3-DMC5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1,1-DMCyC5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3-MC6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0
c-1,3-DMCyC5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
t-1,3-DMCyC5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
t-1,2-DMCyC5 + 3-EC5 + 2,2,4-TMC5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
nC7	0.0	0.9	0.0	0.0	0.9	0.0	0.0	1.3	0.1
MCyC6 + c-1,2-DMCyC5	0.0	1.4	0.0	0.0	1.4	0.0	0.0	0.9	0.0
2,2-DMC6 + 1,1,3-TMCyC5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2,5-DMC6 + 2,2,3-TMC5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2,4-DMC6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3,3-DMC6 + t-1,c-2,4-TMCyC5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
t-1,c 2,3-TMCyC5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2,3,4-TMC5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Toluene + 2,3,3-TMC5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2,3-DMC6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-M,3-EC6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-MC7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0
4-MC7 + 3-M,3-EC5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3,4-DMC6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3-MC7 + c-1,t-2,3-TMCyC5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
RI=781 (DMCyC6)	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.4	0.0
RI=783 (DMCyC6)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2,2,5-TMC6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=790	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=794	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=796	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
nC8	0.0	0.7	0.0	0.0	1.0	0.0	0.0	1.2	0.1
RI=805	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=807	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0
RI=815	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2,3,5-TMC6 + c 1,2-EMCyC5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=821	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=825	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=831	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=834	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=838	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=843	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.4	0.0
RI=847	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E-Benzene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
RI=859	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0
m+p-Xylene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=867	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
4-MC8 + 2-MC8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=883	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
o-Xylene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=890	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=893	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=896	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
nC9	0.0	0.3	0.0	0.0	0.4	0.0	0.0	0.6	0.0
Sum FID	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 4.4 Continued

Sample ID	H5976	H5976	H5976	H5977	H5977	H5977	H5978	H5978	H5978
Gas fraction	H	O	H+C	H	C	H+C	H	O	H+O
Depth (m)	2560.0	2560.0	2560.0	2610.0	2610.0	2610.0	2660.0	2660.0	2660.0
Compound									
C1	67.2	10.1	58.1	63.2	5.7	52.7	82.2	4.1	77.0
C2	1.3	1.2	1.3	1.8	1.0	1.7	2.5	0.4	2.4
C3	1.7	0.6	1.5	3.2	0.6	2.7	2.5	0.3	2.4
iC4	1.1	0.2	0.9	1.8	0.1	1.5	1.0	0.3	1.0
C4ene	0.1	0.2	0.1	0.0	0.2	0.1	0.0	0.1	0.0
nC4	2.2	0.3	1.9	3.6	0.3	3.0	2.0	0.8	1.9
2,2-DMC3	0.2	0.0	0.1	0.2	0.0	0.2	0.1	0.1	0.1
RI=417	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
iC5	2.3	1.2	2.1	3.2	1.0	2.6	1.4	2.0	1.5
RI=484 (C5ene)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=494 (C5ene)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
nC5	3.0	2.0	2.8	3.7	1.8	3.4	1.5	3.2	1.7
RI=529	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2,2-DMC4	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.3	0.1
CyC5 + 2,3-DMC4	0.3	0.4	0.3	0.4	0.4	0.4	0.2	0.5	0.2
2-MC5	1.6	3.3	1.9	1.6	2.9	1.9	0.6	3.6	0.8
RI=569	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3-MC5	0.9	1.7	1.0	1.0	1.6	1.1	0.4	2.1	0.5
nC6	2.9	7.3	3.6	2.8	6.4	3.5	1.0	7.5	1.4
2,2-DMC5	0.1	0.4	0.1	0.1	0.3	0.1	0.0	0.4	0.1
MCyC5	0.9	1.1	0.9	1.1	1.0	1.1	0.5	1.5	0.5
2,4-DMC5	0.1	0.7	0.2	0.1	0.6	0.2	0.0	0.6	0.1
2,2,3-TMC4	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
Benzene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3,3-DMC5	0.0	0.2	0.1	0.0	0.2	0.1	0.0	0.2	0.0
CyC6	1.0	1.1	1.0	1.2	1.1	1.2	0.5	1.7	0.6
2-MC6	0.6	3.3	1.0	0.5	2.9	0.9	0.2	2.9	0.3
2,3-DMC5	0.2	1.0	0.3	0.2	0.9	0.3	0.1	0.9	0.1
1,1-DMCyC5	0.1	0.3	0.2	0.1	0.3	0.2	0.1	0.4	0.1
3-MC6	0.6	3.3	1.1	0.5	3.0	1.0	0.2	3.1	0.4
c-1,3-DMCyC5	0.2	0.7	0.3	0.2	0.6	0.3	0.1	0.8	0.1
t-1,3-DMCyC5	0.3	0.9	0.4	0.3	0.8	0.4	0.1	0.9	0.1
t-1,2-DMCyC5 + 3-EC5 + 2,2,4-TMC5	0.4	1.3	0.6	0.4	1.2	0.6	0.2	1.4	0.2
nC7	1.9	11.5	3.4	1.5	10.7	3.2	0.4	9.9	1.1
MCyC6 + c-1,2-DMCyC5	2.5	7.4	3.3	2.6	7.2	3.4	0.9	8.5	1.4
2,2-DMC6 + 1,1,3-TMCyC5	0.1	0.6	0.2	0.1	0.6	0.2	0.0	0.6	0.1
2,5-DMC6 + 2,2,3-TMC5	0.1	0.5	0.1	0.0	0.5	0.1	0.0	0.5	0.0
2,4-DMC6	0.2	1.2	0.4	0.2	1.2	0.4	0.1	1.2	0.1
3,3-DMC6 + t-1,c-2,4-TMCyC5	0.1	0.7	0.2	0.1	0.7	0.2	0.0	0.7	0.1
t-1,c 2,3-TMCyC5	0.1	0.7	0.2	0.1	0.7	0.2	0.0	0.7	0.1
2,3,4-TMC5	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.2	0.0
Toluene + 2,3,3-TMC5	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.0
2,3-DMC6	0.1	0.4	0.1	0.0	0.4	0.1	0.0	0.4	0.0
2-M,3-EC6	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.1	0.0
2-MC7	0.4	3.5	0.9	0.3	4.0	1.0	0.1	3.4	0.3
4-MC7 + 3-M,3-EC5	0.1	1.0	0.3	0.1	1.1	0.3	0.0	1.0	0.1
3,4-DMC6	0.0	0.2	0.1	0.0	0.2	0.1	0.0	0.2	0.0
3-MC7 + c-1,t-2,3-TMCyC5	0.3	2.4	0.6	0.2	2.7	0.6	0.1	2.3	0.2
RI=781 (DMCyC6)	0.5	2.8	0.9	0.4	4.0	1.1	0.1	2.8	0.3
RI=783 (DMCyC6)	0.2	1.1	0.4	0.2	0.0	0.1	0.1	1.1	0.1
2,2,5-TMC6	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
RI=790	0.1	0.6	0.2	0.1	0.6	0.2	0.0	0.6	0.1
RI=794	0.1	0.6	0.2	0.1	0.7	0.2	0.0	0.6	0.1
RI=796	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
nC8	1.2	8.7	2.4	0.8	10.6	2.6	0.2	9.3	0.8
RI=805	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.1	0.0
RI=807	0.1	0.5	0.2	0.1	0.6	0.2	0.0	0.5	0.1
RI=815	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
2,3,5-TMC6 + c 1,2-EMCyC5	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
RI=821	0.0	0.3	0.1	0.0	0.4	0.1	0.0	0.3	0.0
RI=825	0.0	0.4	0.1	0.0	0.5	0.1	0.0	0.5	0.0
RI=831	0.1	0.7	0.2	0.1	1.1	0.2	0.0	0.9	0.1
RI=834	0.0	0.2	0.1	0.0	0.2	0.1	0.0	0.2	0.0
RI=838	0.3	1.6	0.5	0.2	2.1	0.6	0.1	1.9	0.2
RI=843	0.1	0.8	0.2	0.1	1.0	0.3	0.0	0.8	0.1
RI=847	0.0	0.2	0.1	0.0	0.3	0.1	0.0	0.3	0.0
E-Benzene	0.1	0.3	0.1	0.0	0.4	0.1	0.0	0.3	0.0
RI=859	0.1	0.9	0.2	0.1	1.3	0.3	0.0	1.1	0.1
m+p-Xylene	0.2	0.4	0.2	0.1	0.4	0.1	0.0	0.3	0.0
RI=867	0.2	1.1	0.3	0.1	2.0	0.4	0.0	1.6	0.1
4-MC8 + 2-MC8	0.1	0.7	0.2	0.1	1.3	0.3	0.0	1.1	0.1
RI=883	0.0	0.2	0.1	0.0	0.2	0.1	0.0	0.2	0.0
o-Xylene	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.0
RI=890	0.1	0.3	0.1	0.0	0.4	0.1	0.0	0.3	0.0
RI=893	0.1	0.5	0.1	0.0	0.6	0.1	0.0	0.5	0.0
RI=896	0.0	0.3	0.1	0.0	0.3	0.1	0.0	0.3	0.0
nC9	0.4	2.3	0.7	0.2	4.7	1.1	0.1	4.1	0.3
Sum FID	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 4.4 Continued

Sample ID	H5979	H5979	H5979	H5980	H5980	H5980	H5981	H5981	H5981
Gas fraction	H	O	H+C	H	C	H+C	H	O	H+O
Depth (m)	2710.0	2710.0	2710.0	2760.0	2760.0	2760.0	2810.0	2810.0	2810.0
Compound									
C1	54.5	8.7	49.9	49.7	2.1	43.0	42.1	4.9	39.4
C2	4.6	1.0	4.3	9.5	0.6	8.2	8.5	1.0	8.0
C3	9.2	1.2	8.4	16.4	2.8	14.4	16.0	1.7	14.9
iC4	3.5	0.8	3.2	4.1	2.2	3.8	4.2	1.1	4.0
C4ene	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0
nC4	6.5	2.6	6.1	7.3	6.8	7.2	8.4	4.0	8.1
2,2-DMC3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
RI=417	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
iC5	3.6	3.8	3.6	2.6	6.7	3.2	3.4	4.9	3.5
RI=484 (C5ene)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=494 (C5ene)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
nC5	3.4	5.3	3.6	2.6	9.3	3.5	3.7	8.0	4.0
RI=529	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2,2-DMC4	0.2	0.3	0.2	0.1	0.4	0.1	0.1	0.4	0.1
CyC5 + 2,3-DMC4	0.5	0.9	0.5	0.4	1.4	0.6	0.6	1.3	0.7
2-MC5	1.1	3.8	1.4	0.6	4.7	1.2	0.9	4.5	1.2
RI=569	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3-MC5	0.8	2.5	0.9	0.4	2.9	0.7	0.6	2.7	0.7
nC6	1.7	7.0	2.2	0.9	8.5	2.0	1.5	8.8	2.0
2,2-DMC5	0.1	0.3	0.1	0.0	0.3	0.1	0.0	0.3	0.1
MCyC5	1.2	2.6	1.3	0.8	4.3	1.3	1.5	4.2	1.7
2,4-DMC5	0.1	0.6	0.1	0.0	0.5	0.1	0.1	0.4	0.1
2,2,3-TMC4	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
Benzene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3,3-DMC5	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.1	0.0
CyC6	1.3	2.9	1.5	1.0	4.7	1.5	1.8	4.8	2.0
2-MC6	0.3	2.3	0.5	0.1	2.0	0.4	0.2	2.0	0.3
2,3-DMC5	0.1	0.9	0.2	0.1	0.8	0.2	0.1	0.8	0.1
1,1-DMCyC5	0.1	0.4	0.1	0.1	0.5	0.1	0.1	0.5	0.1
3-MC6	0.4	2.7	0.6	0.1	2.1	0.4	0.2	2.2	0.4
c-1,3-DMCyC5	0.2	0.9	0.3	0.1	1.1	0.2	0.2	1.1	0.3
t-1,3-DMCyC5	0.2	1.0	0.3	0.1	1.1	0.2	0.2	1.2	0.3
t-1,2-DMCyC5 + 3-EC5 + 2,2,4-TMC5	0.3	1.6	0.5	0.2	1.7	0.4	0.3	1.8	0.4
nC7	0.9	7.4	1.5	0.4	6.0	1.2	0.7	6.5	1.1
MCyC6 + c-1,2-DMCyC5	2.1	9.7	2.9	1.1	10.2	2.4	2.1	11.5	2.8
2,2-DMC6 + 1,1,3-TMCyC5	0.1	0.5	0.1	0.0	0.4	0.1	0.0	0.4	0.1
2,5-DMC6 + 2,2,3-TMC5	0.0	0.3	0.1	0.0	0.2	0.0	0.0	0.2	0.0
2,4-DMC6	0.1	1.0	0.2	0.1	0.8	0.2	0.1	0.9	0.2
3,3-DMC6 + t-1,c-2,4-TMCyC5	0.1	0.6	0.1	0.0	0.5	0.1	0.1	0.5	0.1
t-1,c 2,3-TMCyC5	0.1	0.6	0.1	0.0	0.5	0.1	0.1	0.5	0.1
2,3,4-TMC5	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
Toluene + 2,3,3-TMC5	0.0	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1
2,3-DMC6	0.0	0.3	0.1	0.0	0.2	0.0	0.0	0.2	0.0
2-M,3-EC6	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
2-MC7	0.2	2.2	0.4	0.1	1.3	0.2	0.1	1.3	0.2
4-MC7 + 3-M,3-EC5	0.1	0.7	0.1	0.0	0.3	0.1	0.0	0.4	0.1
3,4-DMC6	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.1	0.0
3-MC7 + c-1,t-2,3-TMCyC5	0.1	1.6	0.3	0.0	0.9	0.2	0.1	1.0	0.2
RI=781 (DMCyC6)	0.3	2.5	0.5	0.1	1.8	0.4	0.2	2.1	0.4
RI=783 (DMCyC6)	0.1	1.0	0.2	0.1	0.7	0.1	0.1	0.8	0.2
2,2,5-TMC6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=790	0.1	0.5	0.1	0.0	0.4	0.1	0.1	0.4	0.1
RI=794	0.1	0.6	0.1	0.0	0.4	0.1	0.0	0.4	0.1
RI=796	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
nC8	0.6	5.9	1.1	0.2	3.3	0.7	0.4	3.7	0.6
RI=805	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
RI=807	0.1	0.5	0.1	0.0	0.4	0.1	0.1	0.4	0.1
RI=815	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
2,3,5-TMC6 + c 1,2-EMCyC5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=821	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.1	0.0
RI=825	0.0	0.3	0.0	0.0	0.1	0.0	0.0	0.1	0.0
RI=831	0.0	0.5	0.1	0.0	0.2	0.0	0.0	0.2	0.0
RI=834	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.2	0.0
RI=838	0.2	1.5	0.3	0.1	0.9	0.2	0.1	1.1	0.2
RI=843	0.1	0.6	0.1	0.0	0.3	0.1	0.0	0.3	0.1
RI=847	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.1	0.0
E-Benzene	0.0	0.3	0.1	0.0	0.1	0.0	0.0	0.2	0.0
RI=859	0.1	0.6	0.1	0.0	0.3	0.1	0.0	0.3	0.1
m+p-Xylene	0.1	0.3	0.1	0.0	0.2	0.1	0.1	0.3	0.1
RI=867	0.1	0.7	0.1	0.0	0.3	0.1	0.0	0.4	0.1
4-MC8 + 2-MC8	0.1	0.5	0.1	0.0	0.2	0.1	0.0	0.3	0.1
RI=883	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.1	0.0
o-Xylene	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
RI=890	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.1	0.0
RI=893	0.0	0.4	0.1	0.0	0.2	0.0	0.0	0.2	0.0
RI=896	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.1	0.0
nC9	0.2	1.8	0.3	0.1	0.7	0.2	0.1	1.0	0.2
Sum FID	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 4.4 Continued

Sample ID	H5982	H5982	H5982	H5983	H5983	H5983	H5984	H5984	H5984
Gas fraction	H	C	H+O	H	C	H+C	H	C	H+C
Depth (m)	2830.0	2830.0	2830.0	2860.0	2860.0	2860.0	2910.0	2910.0	2910.0
Compound									
C1	55.9	4.1	52.7	79.0	6.2	75.4	72.3	3.6	64.8
C2	7.5	0.6	7.1	4.9	2.9	4.6	5.9	0.7	5.3
C3	12.1	2.5	11.5	3.9	2.4	3.8	5.7	2.6	5.4
iC4	3.1	1.9	3.1	0.8	0.8	0.8	1.2	2.3	1.3
C4ene	0.0	0.1	0.0	0.0	0.9	0.1	0.0	0.0	0.0
nC4	6.0	5.7	6.0	1.8	2.0	1.8	2.7	6.0	3.0
2,2-DMC3	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.0
RI=417	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
iC5	2.4	5.9	2.6	0.9	3.9	1.0	1.1	7.3	1.8
RI=484 (C5ene)	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
RI=494 (C5ene)	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
nC5	2.7	8.9	3.0	1.2	6.3	1.4	1.4	10.6	2.4
RI=529	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
2,2-DMC4	0.1	0.4	0.1	0.0	0.4	0.1	0.0	0.5	0.1
CyC5 + 2,3-DMC4	0.4	1.3	0.5	0.2	1.0	0.2	0.3	1.5	0.4
2-MC5	0.7	4.5	1.0	0.4	4.8	0.6	0.4	5.6	1.0
RI=569	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3-MC5	0.4	2.7	0.6	0.2	2.7	0.4	0.3	3.2	0.6
nC6	1.2	8.5	1.6	0.8	9.6	1.2	0.9	10.3	1.9
2,2-DMC5	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.3	0.0
MCyC5	1.0	4.2	1.2	0.6	3.2	0.7	0.8	4.6	1.2
2,4-DMC5	0.0	0.4	0.1	0.0	0.5	0.1	0.0	0.4	0.1
2,2,3-TMC4	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
Benzene	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
3,3-DMC5	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.1	0.0
CyC6	1.2	4.9	1.5	0.6	3.6	0.9	1.1	5.4	1.5
2-MC6	0.2	1.9	0.3	0.1	2.3	0.2	0.2	1.7	0.3
2,3-DMC5	0.1	0.7	0.1	0.1	0.6	0.1	0.1	0.6	0.1
1,1-DMCyC5	0.1	0.4	0.1	0.1	0.4	0.1	0.1	0.5	0.1
3-MC6	0.2	2.0	0.3	0.2	2.4	0.3	0.2	1.8	0.4
c-1,3-DMCyC5	0.1	1.0	0.2	0.1	1.1	0.2	0.1	1.1	0.2
t-1,3-DMCyC5	0.1	1.1	0.2	0.1	1.2	0.2	0.1	1.1	0.2
t-1,2-DMCyC5 + 3-EC5 + 2,2,4-TMC5	0.2	1.7	0.3	0.2	1.8	0.2	0.2	1.7	0.4
nC7	0.6	5.9	0.9	0.5	7.5	0.8	0.6	4.9	1.1
MCyC6 + c-1,2-DMCyC5	1.5	10.6	2.1	1.3	12.0	1.8	1.7	11.1	2.7
2,2-DMC6 + 1,1,3-TMCyC5	0.0	0.4	0.1	0.0	0.4	0.0	0.0	0.3	0.1
2,5-DMC6 + 2,2,3-TMC5	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.1	0.0
2,4-DMC6	0.1	0.8	0.1	0.1	0.9	0.1	0.1	0.6	0.2
3,3-DMC6 + t-1,c-2,4-TMCyC5	0.0	0.4	0.1	0.0	0.5	0.1	0.0	0.3	0.1
t-1,c 2,3-TMCyC5	0.0	0.4	0.1	0.0	0.4	0.1	0.0	0.3	0.1
2,3,4-TMC5	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Toluene + 2,3,3-TMC5	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.3	0.2
2,3-DMC6	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.1	0.0
2-M,3-EC6	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
2-MC7	0.1	1.2	0.2	0.1	1.2	0.2	0.1	0.6	0.2
4-MC7 + 3-M,3-EC5	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.2	0.1
3,4-DMC6	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
3-MC7 + c-1,t-2,3-TMCyC5	0.1	0.9	0.1	0.1	0.9	0.1	0.1	0.4	0.1
RI=781 (DMCyC6)	0.2	1.8	0.3	0.2	2.2	0.3	0.2	1.3	0.4
RI=783 (DMCyC6)	0.1	0.7	0.1	0.1	0.9	0.1	0.1	0.5	0.2
2,2,5-TMC6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=790	0.0	0.4	0.1	0.0	0.4	0.1	0.1	0.3	0.1
RI=794	0.0	0.4	0.1	0.0	0.4	0.1	0.1	0.2	0.1
RI=796	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
nC8	0.3	3.3	0.5	0.3	3.5	0.5	0.4	1.6	0.6
RI=805	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
RI=807	0.0	0.4	0.1	0.0	0.4	0.1	0.1	0.3	0.1
RI=815	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
2,3,5-TMC6 + c 1,2-EMCyC5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=821	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=825	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
RI=831	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0
RI=834	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.1	0.0
RI=838	0.1	1.0	0.2	0.1	1.1	0.2	0.2	0.6	0.2
RI=843	0.0	0.3	0.0	0.0	0.2	0.0	0.0	0.1	0.0
RI=847	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
E-Benzene	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.1	0.0
RI=859	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.1	0.0
m+p-Xylene	0.1	0.3	0.1	0.1	0.4	0.1	0.2	0.3	0.2
RI=867	0.0	0.3	0.1	0.0	0.2	0.1	0.0	0.1	0.0
4-MC8 + 2-MC8	0.0	0.3	0.0	0.0	0.2	0.0	0.0	0.1	0.0
RI=883	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
o-Xylene	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.1
RI=890	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
RI=893	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.1	0.0
RI=896	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
nC9	0.1	0.9	0.2	0.2	0.6	0.2	0.2	0.2	0.2
Sum FID	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 4.4 Continued

Sample ID	H5985	H5985	H5985	H5986	H5986	H5986	H5987	H5987	H5987
Gas fraction	H	C	H+O	H	C	H+C	H	C	H+C
Depth (m)	2960.0	2960.0	2960.0	3010.0	3010.0	3010.0	3060.0	3060.0	3060.0
Compound									
C1	37.2	4.9	29.7	64.9	6.9	62.8	51.5	7.7	46.8
C2	13.6	0.8	10.6	6.6	0.9	6.4	7.7	1.7	7.0
C3	19.0	3.7	15.4	7.9	2.5	7.7	12.0	3.7	11.1
iC4	3.7	2.4	3.4	1.5	1.3	1.5	2.8	1.7	2.6
C4ene	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
nC4	7.8	6.8	7.5	3.5	4.1	3.5	5.9	5.8	5.9
2,2-DMC3	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1
RI=417	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
iC5	2.7	6.3	3.5	1.6	4.3	1.7	2.7	5.1	3.0
RI=484 (C5ene)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=494 (C5ene)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
nC5	3.1	9.0	4.5	2.0	6.8	2.1	3.0	8.0	3.6
RI=529	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2,2-DMC4	0.1	0.4	0.1	0.1	0.3	0.1	0.1	0.3	0.1
CyC5 + 2,3-DMC4	0.7	1.5	0.9	0.4	1.2	0.4	0.6	1.4	0.7
2-MC5	0.7	4.1	1.5	0.6	3.8	0.7	0.9	4.1	1.2
RI=569	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3-MC5	0.4	2.5	0.9	0.4	2.3	0.5	0.5	2.5	0.8
nC6	1.2	7.8	2.7	1.1	7.7	1.3	1.4	7.8	2.1
2,2-DMC5	0.0	0.2	0.1	0.0	0.2	0.0	0.0	0.2	0.1
MCyC5	1.5	5.0	2.3	1.1	4.3	1.2	1.5	4.4	1.8
2,4-DMC5	0.0	0.3	0.1	0.0	0.4	0.1	0.0	0.4	0.1
2,2,3-TMC4	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
Benzene	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1
3,3-DMC5	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
CyC6	2.1	6.4	3.1	1.5	5.9	1.6	2.0	5.3	2.4
2-MC6	0.1	1.6	0.5	0.2	1.6	0.2	0.2	1.6	0.4
2,3-DMC5	0.1	0.6	0.2	0.1	0.7	0.1	0.1	0.7	0.2
1,1-DMCyC5	0.1	0.4	0.2	0.1	0.4	0.1	0.1	0.4	0.1
3-MC6	0.2	1.6	0.5	0.2	1.9	0.3	0.2	1.6	0.4
c-1,3-DMCyC5	0.2	1.0	0.4	0.2	1.2	0.2	0.2	1.1	0.3
t-1,3-DMCyC5	0.2	1.0	0.4	0.2	1.2	0.2	0.2	1.1	0.3
t-1,2-DMCyC5 + 3-EC5 + 2,2,4-TMC5	0.3	1.6	0.6	0.3	1.9	0.3	0.3	1.6	0.5
nC7	0.4	4.9	1.5	0.6	5.9	0.8	0.6	5.4	1.1
MCyC6 + c-1,2-DMCyC5	2.2	11.5	4.3	2.1	12.9	2.5	2.4	10.8	3.3
2,2-DMC6 + 1,1,3-TMCyC5	0.0	0.3	0.1	0.0	0.4	0.1	0.0	0.3	0.1
2,5-DMC6 + 2,2,3-TMC5	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.1	0.0
2,4-DMC6	0.1	0.7	0.2	0.1	0.8	0.1	0.1	0.7	0.2
3,3-DMC6 + t-1,c-2,4-TMCyC5	0.0	0.4	0.1	0.1	0.5	0.1	0.1	0.5	0.1
t-1,c 2,3-TMCyC5	0.0	0.3	0.1	0.1	0.5	0.1	0.1	0.5	0.1
2,3,4-TMC5	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0
Toluene + 2,3,3-TMC5	0.4	0.4	0.4	0.4	0.5	0.4	0.3	0.4	0.3
2,3-DMC6	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.1	0.0
2-M,3-EC6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-MC7	0.1	0.9	0.3	0.1	1.2	0.2	0.1	1.1	0.2
4-MC7 + 3-M,3-EC5	0.0	0.2	0.1	0.0	0.3	0.0	0.0	0.3	0.1
3,4-DMC6	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
3-MC7 + c-1,t-2,3-TMCyC5	0.1	0.6	0.2	0.1	0.9	0.1	0.1	0.7	0.1
RI=781 (DMCyC6)	0.2	1.6	0.5	0.3	2.2	0.3	0.3	1.7	0.4
RI=783 (DMCyC6)	0.1	0.6	0.2	0.1	0.9	0.1	0.1	0.7	0.2
2,2,5-TMC6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=790	0.0	0.3	0.1	0.1	0.4	0.1	0.1	0.3	0.1
RI=794	0.0	0.3	0.1	0.1	0.4	0.1	0.1	0.3	0.1
RI=796	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
nC8	0.3	2.5	0.8	0.4	3.7	0.5	0.4	2.8	0.7
RI=805	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0
RI=807	0.1	0.3	0.1	0.1	0.4	0.1	0.1	0.3	0.1
RI=815	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
2,3,5-TMC6 + c 1,2-EMCyC5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=821	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0
RI=825	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
RI=831	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.1	0.0
RI=834	0.0	0.1	0.1	0.0	0.2	0.0	0.0	0.1	0.0
RI=838	0.1	0.8	0.3	0.2	1.2	0.2	0.1	0.9	0.2
RI=843	0.0	0.2	0.1	0.0	0.3	0.0	0.0	0.2	0.1
RI=847	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
E-Benzene	0.1	0.1	0.1	0.1	0.2	0.1	0.0	0.1	0.1
RI=859	0.0	0.2	0.1	0.0	0.3	0.1	0.0	0.2	0.1
m+p-Xylene	0.3	0.4	0.3	0.2	0.5	0.2	0.2	0.3	0.2
RI=867	0.0	0.2	0.1	0.0	0.3	0.1	0.0	0.2	0.1
4-MC8 + 2-MC8	0.0	0.2	0.1	0.0	0.3	0.1	0.0	0.2	0.1
RI=883	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
o-Xylene	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1
RI=890	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
RI=893	0.0	0.1	0.1	0.0	0.3	0.0	0.0	0.2	0.0
RI=896	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
nC9	0.1	0.4	0.2	0.2	0.9	0.2	0.1	0.6	0.2
Sum FID	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 4.4 Continued

Sample ID	H5988	H5988	H5988	H5989	H5989	H5989	H5990	H5990	H5990
Gas fraction	H	O	H+C	H	C	H+C	H	O	H+O
Depth (m)	3110.0	3110.0	3110.0	3160.0	3160.0	3160.0	3210.0	3210.0	3210.0
Compound									
C1	59.4	7.9	49.9	64.0	9.0	57.0	61.0	7.0	51.4
C2	11.4	2.2	9.7	11.8	2.8	10.6	12.5	2.8	10.8
C3	12.5	5.4	11.2	10.8	5.7	10.1	11.9	6.5	11.0
iC4	2.3	1.9	2.2	1.7	1.9	1.7	1.9	2.0	1.9
C4ene	0.0	0.1	0 1	0.0	0 1	0.0	0.0	0.3	0 1
nC4	4.4	6.0	4 7	3.4	6 2	3.7	3.7	6.2	4 1
2,2-DMC3	0.0	0.1	0 0	0.0	0 1	0.0	0.0	0.1	0 0
RI=417	0.0	0.0	0 0	0.0	0 0	0.0	0.0	0.0	0 0
iC5	1.6	4.4	2.1	1.2	4.4	1.6	1.3	4.3	1.8
RI=484 (C5ene)	0.0	0.0	0 0	0.0	0 0	0.0	0.0	0.1	0 0
RI=494 (C5ene)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
nC5	1.6	6.5	2 5	1.2	6 5	1.9	1.3	6.1	2 2
RI=529	0.0	0.0	0 0	0.0	0 0	0.0	0.0	0.1	0 0
2,2-DMC4	0.0	0.2	0.1	0.0	0.2	0.1	0.0	0.2	0.1
CyC5 + 2,3-DMC4	0.4	1.3	0 5	0.3	1 3	0.5	0.3	1.3	0 5
2-MC5	0.4	3.3	0 9	0.3	3 1	0.7	0.3	3.0	0 8
RI=569	0.0	0.0	0 0	0.0	0 0	0.0	0.0	0.1	0 0
3-MC5	0.3	2.0	0 6	0.2	1 9	0.4	0.2	1.9	0 5
nC6	0.6	6.4	1 7	0.5	6 0	1.2	0.5	5.8	1 5
2,2-DMC5	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.2	0.0
MCyC5	0.8	3.9	1.4	0.7	4.2	1.1	0.7	4.0	1.3
2,4-DMC5	0.0	0.3	0.1	0.0	0.3	0.1	0.0	0.3	0.1
2,2,3-TMC4	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
Benzene	0.1	0.1	0 1	0.1	0 1	0 1	0.1	0.1	0 1
3,3-DMC5	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
CyC6	1.1	5.0	1 8	1.0	5 3	1.5	1.0	5.3	1 8
2-MC6	0.1	1.6	0.4	0.1	1.4	0.2	0.1	1.4	0.3
2,3-DMC5	0.0	0.6	0.1	0.0	0.6	0.1	0.0	0.5	0.1
1,1-DMCyC5	0.0	0.4	0 1	0.0	0 3	0.1	0.0	0.3	0 1
3-MC6	0.1	1.7	0.4	0.1	1.5	0.3	0.1	1.6	0.3
c-1,3-DMCyC5	0.1	1.0	0.3	0.1	1.0	0.2	0.1	1.0	0.2
t-1,3-DMCyC5	0.1	1.0	0.3	0.1	1.0	0.2	0.1	1.0	0.2
t-1,2-DMCyC5 + 3-EC5 + 2,2,4-TMC5	0.2	1.6	0.4	0.1	1.5	0.3	0.1	1.5	0.4
nC7	0.2	5.3	1.2	0.2	4.8	0.8	0.2	4.9	1.1
MCyC6 + c-1,2-DMCyC5	1.1	10.5	2 8	0.9	10.3	2.1	1.0	10.3	2 7
2,2-DMC6 + 1,1,3-TMCyC5	0.0	0.3	0 1	0.0	0 3	0.1	0.0	0.3	0 1
2,5-DMC6 + 2,2,3-TMC5	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.2	0.0
2,4-DMC6	0.1	0.7	0 2	0.0	0 7	0.1	0.0	0.7	0 2
3,3-DMC6 + t-1,c-2,4-TMCyC5	0.0	0.5	0.1	0.0	0.4	0.1	0.0	0.5	0.1
t-1,c-2,3-TMCyC5	0.0	0.5	0.1	0.0	0.4	0.1	0.0	0.4	0.1
2,3,4-TMC5	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
Toluene + 2,3,3-TMC5	0.2	0.5	0 3	0.3	0 7	0.3	0.3	0.9	0 4
2,3-DMC6	0.0	0.2	0 0	0.0	0 1	0.0	0.0	0.1	0 0
2-M,3-EC6	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
2-MC7	0.0	1.2	0 3	0.0	1 1	0.2	0.0	1.2	0 3
4-MC7 + 3-M,3-EC5	0.0	0.3	0.1	0.0	0.3	0.0	0.0	0.3	0.1
3,4-DMC6	0.0	0.1	0 0	0.0	0 1	0.0	0.0	0.1	0 0
3-MC7 + c-1,t-2,3-TMCyC5	0.0	0.9	0 2	0.0	0 8	0.1	0.0	0.9	0 2
RI=781 (DMCyC6)	0.1	2.0	0.4	0.1	1.8	0.3	0.1	1.9	0.4
RI=783 (DMCyC6)	0.0	0.8	0.2	0.0	0.8	0.1	0.0	0.8	0.2
2,2,5-TMC6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=790	0.0	0.4	0 1	0.0	0 4	0.1	0.0	0.4	0 1
RI=794	0.0	0.4	0.1	0.0	0.4	0.1	0.0	0.4	0.1
RI=796	0.0	0.1	0 0	0.0	0 1	0.0	0.0	0.1	0 0
nC8	0.1	3.6	0 8	0.1	3 5	0.6	0.1	3.7	0 8
RI=805	0.0	0.1	0 0	0.0	0 1	0.0	0.0	0.1	0 0
RI=807	0.0	0.4	0.1	0.0	0.3	0.1	0.0	0.4	0.1
RI=815	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
2,3,5-TMC6 + o-1,2-EMCyC5	0.0	0.0	0 0	0.0	0 0	0.0	0.0	0.0	0 0
RI=821	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
RI=825	0.0	0.1	0 0	0.0	0 1	0.0	0.0	0.1	0 0
RI=831	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.2	0.0
RI=834	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.2	0.0
RI=838	0.1	1.1	0 3	0.1	1 1	0.2	0.1	1.1	0 2
RI=843	0.0	0.3	0 1	0.0	0 3	0.0	0.0	0.3	0 1
RI=847	0.0	0.1	0 0	0.0	0 1	0.0	0.0	0.1	0 0
E-Benzene	0.0	0.2	0.1	0.0	0.2	0.0	0.0	0.2	0.1
RI=859	0.0	0.4	0 1	0.0	0 3	0.1	0.0	0.4	0 1
m+p-Xylene	0.1	0.4	0.1	0.1	0.5	0.2	0.1	0.6	0.2
RI=867	0.0	0.4	0.1	0.0	0.4	0.1	0.0	0.5	0.1
4-MC8 + 2-MC8	0.0	0.3	0.1	0.0	0.3	0.1	0.0	0.3	0.1
RI=883	0.0	0.1	0 0	0.0	0 1	0.0	0.0	0.1	0 0
o-Xylene	0.0	0.1	0 0	0.0	0 1	0.1	0.0	0.2	0 1
RI=890	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
RI=893	0.0	0.3	0 1	0.0	0 2	0.0	0.0	0.3	0 1
RI=896	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
n-C9	0.0	1.1	0.2	0.0	1.2	0.2	0.0	1.4	0.3
Sum FID	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 4.4 Continued

Sample ID	H5991	H5991	H5991	H5992	H5992	H5992	H5993	H5993	H5993
Gas fraction	H	O	H+O	H	O	H+O	H	O	H+O
Depth (m)	3260.0	3260.0	3260.0	3310.0	3310.0	3310.0	3360.0	3360.0	3360.0
Compound									
C1	66.4	7.9	58.0	67.1	12.0	60.5	55.3	6.4	51.7
C2	11.1	2.8	9.9	10.4	3.8	9.6	14.5	3.0	13.7
C3	10.5	6.9	10.0	9.7	7.1	9.4	14.1	8.8	13.7
iC4	1.7	2.2	1.8	1.6	2.1	1.7	2.5	3.2	2.5
C4ene	0.0	0.2	0.1	0.1	0.5	0.1	0.0	0.3	0.1
nC4	3.2	7.1	3.8	3.0	6.5	3.5	4.2	9.0	4.6
2,2-DMC3	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
RI=417	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
iC5	1.1	4.7	1.6	1.1	4.6	1.5	1.5	6.3	1.9
RI=484 (C5ene)	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
RI=494 (C5ene)	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
nC5	1.1	6.9	1.9	1.1	6.5	1.8	1.4	7.9	1.9
RI=529	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
2,2-DMC4	0.0	0.2	0.1	0.0	0.2	0.1	0.0	0.3	0.1
CyC5 + 2,3-DMC4	0.3	1.4	0.4	0.3	1.3	0.4	0.4	1.5	0.5
2-MC5	0.3	3.0	0.7	0.3	3.2	0.7	0.4	3.6	0.6
RI=569	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
3-MC5	0.2	1.9	0.4	0.2	2.0	0.4	0.2	2.3	0.4
nC6	0.4	5.7	1.2	0.5	5.7	1.1	0.5	5.9	0.9
2,2-DMC5	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.2	0.0
MCyC5	0.6	4.5	1.1	0.6	4.2	1.0	0.8	4.7	1.1
2,4-DMC5	0.0	0.3	0.1	0.0	0.3	0.1	0.0	0.3	0.0
2,2,3-TMC4	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
Benzene	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
3,3-DMC5	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
CyC6	0.8	5.7	1.5	0.8	4.9	1.3	1.0	5.2	1.3
2-MC6	0.1	1.3	0.2	0.1	1.3	0.2	0.1	1.2	0.2
2,3-DMC5	0.0	0.5	0.1	0.0	0.5	0.1	0.0	0.5	0.1
1,1-DMCyC5	0.0	0.3	0.1	0.0	0.3	0.1	0.0	0.3	0.1
3-MC6	0.1	1.4	0.3	0.1	1.4	0.2	0.1	1.3	0.2
c-1,3-DMCyC5	0.1	0.9	0.2	0.1	0.9	0.2	0.1	1.0	0.2
t-1,3-DMCyC5	0.1	1.0	0.2	0.1	1.0	0.2	0.1	1.0	0.2
t-1,2-DMCyC5 + 3-EC5 + 2,2,4-TMC5	0.1	1.5	0.3	0.1	1.5	0.3	0.2	1.6	0.3
nC7	0.2	4.3	0.8	0.2	4.1	0.7	0.2	3.5	0.4
MCyC6 + c-1,2-DMCyC5	0.7	9.9	2.1	0.9	9.1	1.9	1.0	8.5	1.5
2,2-DMC6 + 1,1,3-TMCyC5	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.2	0.0
2,5-DMC6 + 2,2,3-TMC5	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
2,4-DMC6	0.0	0.7	0.1	0.0	0.6	0.1	0.0	0.6	0.1
3,3-DMC6 + t-1,c-2,4-TMCyC5	0.0	0.4	0.1	0.0	0.4	0.1	0.0	0.3	0.0
t-1,c 2,3-TMCyC5	0.0	0.4	0.1	0.0	0.4	0.1	0.0	0.4	0.1
2,3,4-TMC5	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Toluene + 2,3,3-TMC5	0.2	0.8	0.3	0.3	0.5	0.4	0.2	0.6	0.3
2,3-DMC6	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
2-M,3-EC6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-MC7	0.0	1.0	0.2	0.0	0.9	0.1	0.0	0.7	0.1
4-MC7 + 3-M,3-EC5	0.0	0.3	0.0	0.0	0.2	0.0	0.0	0.2	0.0
3,4-DMC6	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
3-MC7 + c-1,t-2,3-TMCyC5	0.0	0.7	0.1	0.0	0.6	0.1	0.0	0.5	0.1
RI=781 (DMCyC6)	0.1	1.6	0.3	0.1	1.5	0.3	0.1	1.2	0.2
RI=783 (DMCyC6)	0.0	0.7	0.1	0.0	0.6	0.1	0.0	0.5	0.1
2,2,5-TMC6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=790	0.0	0.3	0.1	0.0	0.3	0.1	0.0	0.2	0.0
RI=794	0.0	0.3	0.1	0.0	0.3	0.1	0.0	0.3	0.0
RI=796	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
nC8	0.1	3.1	0.5	0.1	2.6	0.4	0.1	1.9	0.2
RI=805	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
RI=807	0.0	0.3	0.1	0.0	0.3	0.0	0.0	0.2	0.0
RI=815	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2,3,5-TMC6 + c-1,2-EMCyC5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RI=821	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
RI=825	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
RI=831	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.1	0.0
RI=834	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
RI=838	0.0	0.9	0.2	0.1	0.8	0.1	0.0	0.6	0.1
RI=843	0.0	0.3	0.0	0.0	0.2	0.0	0.0	0.2	0.0
RI=847	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
E-Benzene	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.1	0.0
RI=859	0.0	0.3	0.1	0.0	0.2	0.0	0.0	0.2	0.0
m+p-Xylene	0.1	0.6	0.1	0.2	0.4	0.2	0.1	0.4	0.1
RI=867	0.0	0.4	0.1	0.0	0.3	0.0	0.0	0.2	0.0
4-MC8 + 2-MC8	0.0	0.3	0.0	0.0	0.2	0.0	0.0	0.2	0.0
RI=883	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
o-Xylene	0.0	0.2	0.0	0.1	0.1	0.1	0.0	0.1	0.0
RI=890	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
RI=893	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.1	0.0
RI=896	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
n-C9	0.0	1.1	0.2	0.0	0.7	0.1	0.0	0.5	0.1
Sum FID	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 4.4 Continued

Sample ID	H5994	H5994	H5994
Gas fraction	H	O	H+O
Depth (m)	3390.0	3390.0	3390.0
Compound			
C1	53.2	9.0	46.9
C2	10.6	2.2	9.4
C3	14.7	5.4	13.4
iC4	3.0	2.2	2.9
C4ene	0 1	0 3	0 1
nC4	5 2	6 5	5 4
2,2-DMC3	0.0	0.1	0.1
RI=417	0 0	0 0	0 0
iC5	2.1	5.3	2.6
RI=484 (C5ene)	0.0	0.0	0.0
RI=494 (C5ene)	0 0	0 0	0 0
nC5	1.9	6.9	2.6
RI=529	0 0	0 1	0 0
2,2-DMC4	0 1	0 3	0 1
CyC5 + 2,3-DMC4	0.5	1.3	0.6
2-MC5	0.5	3.5	1.0
RI=569	0.0	0.0	0.0
3-MC5	0.4	2.3	0.6
nC6	0.8	6.0	1.5
2,2-DMC5	0 0	0 2	0 0
MCyC5	1 1	4 4	1 5
2,4-DMC5	0.0	0.3	0.1
2,2,3-TMC4	0 0	0 1	0 0
Benzene	0.1	0.1	0.1
3,3-DMC5	0.0	0.1	0.0
CyC6	1 3	4 8	1 8
2-MC6	0.1	1.5	0.3
2,3-DMC5	0.1	0.6	0.1
1,1-DMCyC5	0 1	0 3	0 1
3-MC6	0.1	1.6	0.3
c-1,3-DMCyC5	0.1	1.1	0.3
t-1,3-DMCyC5	0 1	1 1	0 3
t-1,2-DMCyC5 + 3-EC5 + 2,2,4-TMC5	0.2	1.8	0.5
nC7	0.3	4.4	0.9
MCyC6 + c-1,2-DMCyC5	1 3	9 7	2 5
2,2-DMC6 + 1,1,3-TMCyC5	0 0	0 3	0 1
2,5-DMC6 + 2,2,3-TMC5	0.0	0.1	0.0
2,4-DMC6	0 1	0 7	0 2
3,3-DMC6 + t-1,c-2,4-TMCyC5	0.0	0.5	0.1
t-1,c 2,3-TMCyC5	0 0	0 5	0 1
2,3,4-TMC5	0 0	0 1	0 0
Toluene + 2,3,3-TMC5	0.3	0.6	0.3
2,3-DMC6	0.0	0.1	0.0
2-M,3-EC6	0.0	0.0	0.0
2-MC7	0.1	1.0	0.2
4-MC7 + 3-M,3-EC5	0.0	0.3	0.1
3,4-DMC6	0 0	0 1	0 0
3-MC7 + c-1,t-2,3-TMCyC5	0 0	0 7	0 1
RI=781 (DMCyC6)	0.1	1.7	0.4
RI=783 (DMCyC6)	0 1	0 7	0 1
2,2,5-TMC6	0 0	0 0	0 0
RI=790	0.0	0.3	0.1
RI=794	0 0	0 4	0 1
RI=796	0.0	0.1	0.0
nC8	0 2	2 8	0 6
RI=805	0 0	0 1	0 0
RI=807	0.0	0.3	0.1
RI=815	0.0	0.0	0.0
2,3,5-TMC6 + c 1,2-EMCyC5	0.0	0.0	0.0
RI=821	0.0	0.1	0.0
RI=825	0.0	0.1	0.0
RI=831	0 0	0 2	0 0
RI=834	0 0	0 1	0 0
RI=838	0.1	0.9	0.2
RI=843	0 0	0 3	0 1
RI=847	0 0	0 1	0 0
E-Benzene	0 0	0 2	0 1
RI=859	0 0	0 3	0 1
m+p-Xylene	0.2	0.4	0.2
RI=867	0 0	0 3	0 1
4-MC8 + 2-MC8	0.0	0.3	0.1
RI=883	0.0	0.1	0.0
o-Xylene	0 1	0 1	0 1
RI=890	0.0	0.1	0.0
RI=893	0 0	0 2	0 0
RI=896	0 0	0 1	0 0
n-C9	0 1	0 9	0 2
Sum FID	100.0	100.0	100.0

Table 4.5
Ratios and summary data

(See Table 2.4 for explanations and comments;
-1 = ratio cannot be calculated)

Table 4.5 Ratios and summary data. (See Table 2.4 for explanations and comments; -1 = ratio cannot be calculated).

Sample-ID	H5970	H5970	H5970	H5971	H5971	H5971	H5972	H5972	H5972
Gas fraction	H	O	H+O	H	O	H+O	H	O	H+O
Depth (m)	2260	2260	2260	2310	2310	2310	2360	2360	2360
CncC1	7606	84	7690	9282	87	9370	20651	117	20767
CncC2C4	56	17	73	84	37	122	159	19	178
CncC5C9	7	48	55	0	25	25	1	20	21
CncC1C9	7669	148	7817	9367	150	9517	20811	155	20966
PctC1	99.2	56.5	98.4	99.1	58.2	98.5	99.2	75.0	99.1
PctC2C4	0.7	11.3	0.9	0.9	24.9	1.3	0.8	12.4	0.9
PctC5C9	0.1	32.2	0.7	0.0	16.9	0.3	0.0	12.6	0.1
PctC1C9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Wetness	0.7	16.7	0.9	0.9	30.0	1.3	0.8	14.2	0.9
RatiC4nC4	1.1	0.5	0.7	-1	0.5	0.5	-1	0.0	1.2
PctnC7	0.0	23.7	23.1	-1	29.9	29.9	-1	30.4	30.4
PctIsoC7	0.0	13.7	13.4	-1	14.7	14.7	-1	19.3	19.3
PctCycC7	100.0	62.6	63.4	-1	55.4	55.4	-1	50.3	50.3
PctAroC7	0.0	0.0	0.0	-1	0.0	0.0	-1	0.0	0.0
PctSumC7	100.0	100.0	100.0	-1	100.0	100.0	-1	100.0	100.0
Thompson_A	0.0	0.0	0.0	-1	0.0	0.0	-1	0.0	0.0
Thompson_B	-1	0.0	0.0	-1	0.0	0.0	-1	0.0	0.0
Thompson_X	2.4	0.3	0.5	-1	0.4	0.4	-1	0.3	1.0
Thompson_C	5.1	0.7	0.9	-1	1.0	1.0	-1	0.9	0.9
Thompson_I	-1	0.8	0.8	-1	2.0	2.0	-1	-1	-1
Thompson_F	0.0	0.4	0.4	-1	0.5	0.5	-1	0.5	0.5
Thompson_H	0.0	19.5	19.1	-1	24.7	24.7	-1	24.6	24.6
Thompson_R	-1	3.5	3.5	-1	4.1	4.1	-1	2.8	2.8
Thompson_U	-1	2.2	2.2	-1	2.0	2.0	-1	1.5	1.5
Mango_P1	0.00	23.68	23.14	-1	29.91	29.91	-1	30.38	30.38
Mango_P2	0.00	13.74	13.43	-1	14.71	14.71	-1	19.35	19.35
Mango_N2	0.00	9.31	9.10	-1	0.00	0.00	-1	0.00	0.00
Mango_K1	-1	0.98	0.98	-1	0.99	0.99	-1	1.25	1.25

Sample-ID	H5973	H5973	H5973	H5974	H5974	H5974	H5975	H5975	H5975
Gas fraction	H	O	H+O	H	O	H+O	H	O	H+O
Depth (m)	2410	2410	2410	2460	2460	2460	2510	2510	2510
CncC1	14813	91	14904	13275	68	13344	5885	94	5979
CncC2C4	144	34	178	109	25	134	71	37	108
CncC5C9	2	15	17	5	11	16	20	21	41
CncC1C9	14959	140	15099	13389	104	13493	5976	152	6128
PctC1	99.0	65.0	98.7	99.2	65.5	98.9	98.5	61.8	97.6
PctC2C4	1.0	24.3	1.2	0.8	23.7	1.0	1.2	24.5	1.8
PctC5C9	0.0	10.7	0.1	0.0	10.8	0.1	0.3	13.8	0.7
PctC1C9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Wetness	1.0	27.2	1.2	0.8	26.6	1.0	1.2	28.4	1.8
RatiC4nC4	0.0	0.0	0.0	0.8	0.0	0.4	0.6	0.5	0.5
PctnC7	-1	37.9	37.9	-1	38.8	38.8	40.1	43.4	41.7
PctIsoC7	-1	0.0	0.0	-1	0.0	0.0	18.4	27.5	22.7
PctCycC7	-1	62.1	62.1	-1	61.2	61.2	41.5	29.1	35.6
PctAroC7	-1	0.0	0.0	-1	0.0	0.0	0.0	0.0	0.0
PctSumC7	-1	100.0	100.0	-1	100.0	100.0	100.0	100.0	100.0
Thompson_A	-1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Thompson_B	-1	0.0	0.0	-1	0.0	0.0	0.0	0.0	0.0
Thompson_X	0.0	0.0	0.0	1.0	0.0	0.3	0.3	0.0	0.1
Thompson_C	-1	0.9	0.9	-1	1.0	1.9	1.5	2.6	1.9
Thompson_I	-1	-1	-1	-1	-1	-1	2.4	-1	5.5
Thompson_F	-1	0.5	0.5	-1	0.6	0.6	1.0	1.3	1.2
Thompson_H	-1	28.5	28.5	-1	30.2	30.2	34.6	41.7	37.8
Thompson_R	-1	-1	-1	-1	-1	-1	4.6	3.0	3.7
Thompson_U	-1	-1	-1	-1	-1	-1	1.3	0.0	0.5
Mango_P1	-1	37.88	37.88	-1	38.78	38.78	40.12	43.41	41.66
Mango_P2	-1	0.00	0.00	-1	0.00	0.00	18.40	27.53	22.69
Mango_N2	-1	0.00	0.00	-1	0.00	0.00	0.00	0.00	0.00
Mango_K1	-1	-1	-1	-1	-1	-1	0.90	1.09	1.00

Table 4.5 Continued

Sample-ID	H5976	H5976	H5976	H5977	H5977	H5977	H5978	H5978	H5978
Gas fraction	H	O	H+O	H	O	H+O	H	O	H+O
Depth (m)	2560	2560	2560	2610	2610	2610	2660	2660	2660
CncC1	2680	76	2756	5520	112	5631	13728	49	13777
CncC2C4	250	19	269	916	44	960	1340	22	1363
CncC5C9	1058	658	1716	2295	1793	4088	1632	1122	2754
CncC1C9	3988	753	4742	8731	1948	10679	16701	1193	17894
PctC1	67.2	10.1	58.1	63.2	5.7	52.7	82.2	4.1	77.0
PctC2C4	6.3	2.6	5.7	10.5	2.2	9.0	8.0	1.9	7.6
PctC5C9	26.5	87.4	36.2	26.3	92.0	38.3	9.8	94.1	15.4
PctC1C9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Wetness	8.5	20.4	8.9	14.2	28.1	14.6	8.9	31.4	9.0
RatiC4nC4	0.5	0.4	0.5	0.5	0.4	0.5	0.5	0.3	0.5
PctnC7	26.4	36.9	31.1	22.6	36.9	29.7	19.4	33.0	26.1
PctIsoC7	24.1	28.7	26.2	22.1	27.4	24.7	21.3	26.9	24.1
PctCycC7	48.9	34.0	42.2	54.9	35.3	45.2	58.6	39.7	49.4
PctAroC7	0.5	0.4	0.5	0.5	0.4	0.4	0.6	0.3	0.5
PctSumC7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Thompson_A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Thompson_B	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Thompson_X	0.2	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.1
Thompson_C	1.2	2.0	1.5	1.0	1.8	1.3	0.9	1.5	1.1
Thompson_I	1.4	2.3	1.7	1.1	2.2	1.6	1.0	1.9	1.4
Thompson_F	0.7	1.4	0.9	0.5	1.3	0.8	0.4	1.0	0.7
Thompson_H	23.2	36.0	28.6	18.9	35.8	26.6	15.5	31.4	22.6
Thompson_R	3.2	3.5	3.3	3.1	3.6	3.4	2.9	3.5	3.2
Thompson_U	1.6	0.3	1.0	2.5	0.4	1.3	3.5	0.6	1.8
Mango_P1	26.43	36.90	31.11	22.58	36.94	29.66	19.41	33.04	26.06
Mango_P2	17.09	21.41	19.02	15.35	20.57	17.93	14.47	19.83	17.08
Mango_N2	8.43	6.13	7.40	9.47	6.07	7.79	10.08	6.81	8.48
Mango_K1	1.06	1.08	1.07	1.04	1.06	1.05	1.02	1.03	1.02

Sample-ID	H5979	H5979	H5979	H5980	H5980	H5980	H5981	H5981	H5981
Gas fraction	H	O	H+O	H	O	H+O	H	O	H+O
Depth (m)	2710	2710	2710	2760	2760	2760	2810	2810	2810
CncC1	8505	153	8657	13472	93	13565	22686	205	22891
CncC2C4	3735	101	3835	10076	541	10617	19976	333	20309
CncC5C9	3376	1494	4871	3538	3843	7381	11185	3661	14846
CncC1C9	15616	1747	17363	27086	4476	31563	53848	4199	58046
PctC1	54.5	8.7	49.9	49.7	2.1	43.0	42.1	4.9	39.4
PctC2C4	23.9	5.8	22.1	37.2	12.1	33.6	37.1	7.9	35.0
PctC5C9	21.6	85.5	28.1	13.1	85.8	23.4	20.8	87.2	25.6
PctC1C9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Wetness	30.5	39.8	30.7	42.8	85.4	43.9	46.8	61.9	47.0
RatiC4nC4	0.5	0.3	0.5	0.6	0.3	0.5	0.5	0.3	0.5
PctnC7	17.8	26.4	21.2	15.4	22.9	20.2	15.1	22.6	17.7
PctIsoC7	20.2	24.5	21.9	16.5	21.6	19.8	15.2	20.4	17.0
PctCycC7	61.0	48.6	56.1	65.1	55.0	58.6	67.3	56.3	63.5
PctAroC7	0.9	0.5	0.8	3.0	0.6	1.4	2.4	0.7	1.8
PctSumC7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Thompson_A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Thompson_B	0.1	0.0	0.0	0.2	0.0	0.1	0.2	0.0	0.1
Thompson_X	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.2
Thompson_C	0.7	1.0	0.8	0.5	0.9	0.7	0.5	0.9	0.6
Thompson_I	0.9	1.4	1.1	0.7	1.0	0.9	0.7	1.0	0.8
Thompson_F	0.4	0.7	0.5	0.3	0.5	0.4	0.3	0.5	0.3
Thompson_H	13.8	23.8	17.4	10.7	19.2	15.8	10.5	19.0	13.0
Thompson_R	2.9	3.2	3.0	2.9	3.1	3.0	3.0	3.2	3.1
Thompson_U	4.4	1.2	2.9	8.2	2.4	4.0	8.5	2.3	5.9
Mango_P1	17.84	26.41	21.21	15.36	22.87	20.23	15.14	22.59	17.67
Mango_P2	13.66	17.73	15.26	11.17	15.38	13.90	10.48	14.72	11.92
Mango_N2	10.64	8.41	9.76	11.07	9.96	10.35	10.96	9.73	10.54
Mango_K1	0.99	1.00	0.99	1.05	1.07	1.06	1.05	1.07	1.06

Table 4.5 Continued

Sample-ID	H5982	H5982	H5982	H5983	H5983	H5983	H5984	H5984	H5984
Gas fraction	H	O	H+O	H	O	H+O	H	O	H+O
Depth (m)	2830	2830	2830	2860	2860	2860	2910	2910	2910
CncC1	34543	167	34710	21596	88	21684	10901	66	10967
CncC2C4	17746	450	18195	3116	128	3244	2328	219	2547
CncC5C9	9456	3457	12913	2625	1198	3823	1845	1571	3416
CncC1C9	61745	4074	65819	27337	1413	28750	15075	1856	16931
PctC1	55.9	4.1	52.7	79.0	6.2	75.4	72.3	3.6	64.8
PctC2C4	28.7	11.0	27.6	11.4	9.1	11.3	15.4	11.8	15.0
PctC5C9	15.3	84.9	19.6	9.6	84.7	13.3	12.2	84.6	20.2
PctC1C9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Wetness	33.9	72.9	34.4	12.6	59.4	13.0	17.6	76.9	18.9
RatiC4nC4	0.5	0.3	0.5	0.4	0.4	0.4	0.4	0.4	0.4
PctnC7	16.9	22.4	18.8	17.3	24.4	19.9	17.3	19.2	18.2
PctIsoC7	17.0	20.4	18.1	14.6	20.9	17.0	13.5	19.5	16.4
PctCycC7	63.1	56.4	60.8	63.5	54.0	60.0	63.2	60.3	61.8
PctAroC7	3.0	0.8	2.2	4.6	0.7	3.2	6.0	1.0	3.6
PctSumC7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Thompson_A	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Thompson_B	0.2	0.0	0.1	0.3	0.0	0.2	0.4	0.1	0.2
Thompson_X	0.3	0.1	0.2	0.4	0.1	0.3	0.5	0.2	0.4
Thompson_C	0.6	0.8	0.7	0.6	1.0	0.7	0.5	0.8	0.6
Thompson_I	0.8	1.0	0.9	0.8	1.1	0.9	0.7	0.9	0.8
Thompson_F	0.3	0.5	0.4	0.3	0.5	0.4	0.3	0.4	0.3
Thompson_H	12.3	18.6	14.3	13.4	21.4	16.2	13.3	15.6	14.4
Thompson_R	3.0	3.1	3.0	3.5	3.2	3.4	3.7	2.8	3.2
Thompson_U	6.5	2.6	5.0	5.7	1.7	3.8	6.6	3.1	4.6
Mango_P1	16.93	22.37	18.80	17.29	24.39	19.92	17.32	19.19	18.21
Mango_P2	11.79	14.67	12.79	10.67	15.30	12.38	9.78	13.79	11.70
Mango_N2	10.47	9.69	10.20	9.55	9.04	9.36	8.86	10.42	9.61
Mango_K1	1.06	1.07	1.07	1.03	1.07	1.05	1.07	1.07	1.07

Sample-ID	H5985	H5985	H5985	H5986	H5986	H5986	H5987	H5987	H5987
Gas fraction	H	O	H+O	H	O	H+O	H	O	H+O
Depth (m)	2960	2960	2960	3010	3010	3010	3060	3060	3060
CncC1	5298	212	5510	41855	169	42024	10600	193	10793
CncC2C4	6279	591	6870	12608	217	12825	5840	313	6153
CncC5C9	2673	3516	6189	10039	2064	12103	4126	2007	6133
CncC1C9	14250	4318	18569	64502	2449	66952	20566	2513	23079
PctC1	37.2	4.9	29.7	64.9	6.9	62.8	51.5	7.7	46.8
PctC2C4	44.1	13.7	37.0	19.5	8.9	19.2	28.4	12.5	26.7
PctC5C9	18.8	81.4	33.3	15.6	84.2	18.1	20.1	79.9	26.6
PctC1C9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Wetness	54.2	73.6	55.5	23.1	56.2	23.4	35.5	61.9	36.3
RatiC4nC4	0.5	0.4	0.5	0.4	0.3	0.4	0.5	0.3	0.4
PctnC7	10.8	19.4	16.4	13.5	20.4	14.9	12.8	20.9	16.1
PctIsoC7	10.3	17.5	15.0	12.5	17.3	13.5	12.9	19.4	15.5
PctCycC7	68.7	61.6	64.1	65.7	60.5	64.6	67.0	58.3	63.5
PctAroC7	10.3	1.5	4.6	8.3	1.8	7.0	7.3	1.4	4.9
PctSumC7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Thompson_A	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0
Thompson_B	1.1	0.1	0.3	0.7	0.1	0.5	0.6	0.1	0.4
Thompson_X	1.1	0.2	0.4	0.6	0.2	0.5	0.5	0.1	0.3
Thompson_C	0.4	0.7	0.5	0.4	0.7	0.5	0.4	0.8	0.5
Thompson_I	0.5	0.9	0.7	0.6	0.9	0.7	0.6	0.9	0.7
Thompson_F	0.2	0.4	0.3	0.2	0.4	0.3	0.2	0.4	0.3
Thompson_H	7.4	15.2	12.2	10.2	16.9	11.5	9.1	17.2	12.1
Thompson_R	3.2	3.2	3.2	3.3	3.4	3.3	3.1	3.1	3.1
Thompson_U	15.4	4.1	6.6	8.6	3.1	7.1	10.3	3.0	6.5
Mango_P1	10.81	19.40	16.40	13.47	20.44	14.91	12.81	20.93	16.05
Mango_P2	7.10	12.61	10.69	8.76	12.59	9.55	8.76	13.86	10.80
Mango_N2	9.75	9.87	9.83	9.73	9.64	9.71	10.57	10.07	10.37
Mango_K1	1.05	1.08	1.07	1.07	1.08	1.07	1.07	1.09	1.08

Table 4.5 Continued

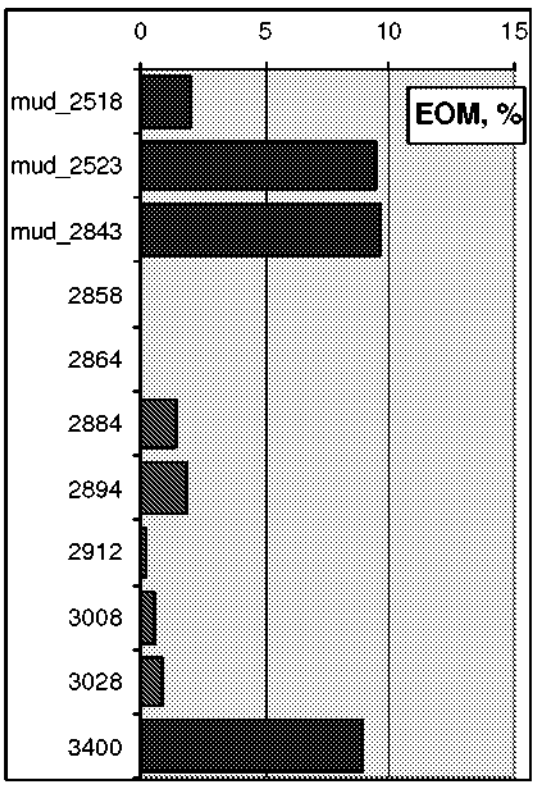
Sample-ID	H5988	H5988	H5988	H5989	H5989	H5989	H5990	H5990	H5990
Gas fraction	H	O	H+O	H	O	H+O	H	O	H+O
Depth (m)	3110	3110	3110	3160	3160	3160	3210	3210	3210
CncC1	20750	622	21372	33277	677	33954	25879	642	26521
CncC2C4	10684	1220	11905	14401	1241	15642	12747	1640	14387
CncC5C9	3515	6028	9543	4357	5627	9984	3798	6913	10711
CncC1C9	34950	7870	42820	52035	7545	59580	42424	9195	51619
PctC1	59.4	7.9	49.9	64.0	9.0	57.0	61.0	7.0	51.4
PctC2C4	30.6	15.5	27.8	27.7	16.5	26.3	30.0	17.8	27.9
PctC5C9	10.1	76.6	22.3	8.4	74.6	16.8	9.0	75.2	20.7
PctC1C9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Wetness	34.0	66.2	35.8	30.2	64.7	31.5	33.0	71.9	35.2
RatiC4nC4	0.5	0.3	0.5	0.5	0.3	0.5	0.5	0.3	0.5
PctnC7	11.1	21.2	18.4	11.1	20.1	16.8	10.9	20.5	17.8
PctIsoC7	11.7	18.2	16.4	11.2	17.1	14.9	10.9	17.1	15.4
PctCycC7	67.1	58.5	60.9	64.7	59.8	61.6	65.3	58.8	60.6
PctAroC7	10.1	2.1	4.4	13.0	3.0	6.7	12.9	3.6	6.3
PctSumC7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Thompson_A	0.1	0.0	0.0	0.2	0.0	0.1	0.2	0.0	0.1
Thompson_B	1.0	0.1	0.3	1.3	0.2	0.5	1.4	0.2	0.4
Thompson_X	0.7	0.1	0.2	1.0	0.2	0.3	1.1	0.2	0.3
Thompson_C	0.4	0.7	0.6	0.4	0.6	0.5	0.4	0.6	0.5
Thompson_I	0.5	0.9	0.8	0.5	0.8	0.7	0.5	0.9	0.8
Thompson_F	0.2	0.4	0.4	0.2	0.4	0.3	0.2	0.4	0.4
Thompson_H	7.7	17.4	14.3	7.9	16.3	13.0	7.8	16.8	14.0
Thompson_R	3.0	3.3	3.3	3.1	3.4	3.3	3.2	3.4	3.4
Thompson_U	13.5	3.2	5.1	13.7	3.8	6.3	14.0	3.6	5.5
Mango_P1	11.11	21.18	18.35	11.06	20.13	16.85	10.89	20.50	17.76
Mango_P2	7.91	13.19	11.71	7.58	12.35	10.62	7.43	12.50	11.06
Mango_N2	10.62	9.66	9.93	10.08	9.74	9.86	10.39	9.51	9.76
Mango_K1	1.08	1.08	1.08	1.08	1.08	1.08	1.03	1.07	1.06

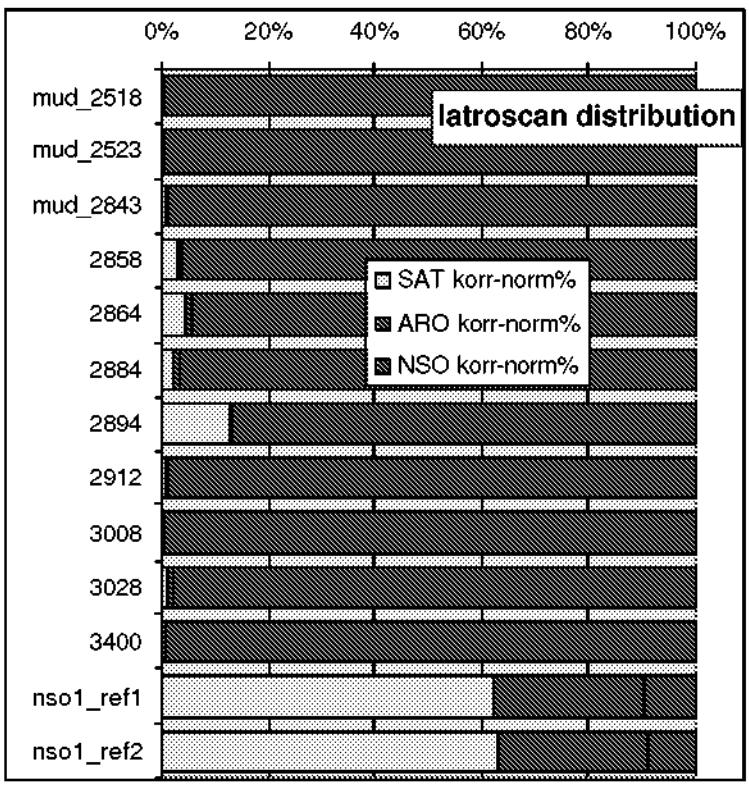
Sample-ID	H5991	H5991	H5991	H5992	H5992	H5992	H5993	H5993	H5993
Gas fraction	H	O	H+O	H	O	H+O	H	O	H+O
Depth (m)	3260	3260	3260	3310	3310	3310	3360	3360	3360
CncC1	30430	603	31033	23606	577	24183	20129	187	20316
CncC2C4	12136	1475	13611	8724	959	9683	12848	707	13554
CncC5C9	3258	5562	8820	2867	3267	6134	3392	2008	5401
CncC1C9	45824	7639	53463	35196	4803	39999	36369	2902	39271
PctC1	66.4	7.9	58.0	67.1	12.0	60.5	55.3	6.4	51.7
PctC2C4	26.5	19.3	25.5	24.8	20.0	24.2	35.3	24.4	34.5
PctC5C9	7.1	72.8	16.5	8.1	68.0	15.3	9.3	69.2	13.8
PctC1C9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Wetness	28.5	71.0	30.5	27.0	62.4	28.6	39.0	79.1	40.0
RatiC4nC4	0.5	0.3	0.5	0.5	0.3	0.5	0.6	0.4	0.6
PctnC7	11.8	19.0	16.9	10.2	19.3	15.6	9.7	17.5	13.2
PctIsoC7	11.9	16.3	15.0	10.8	17.9	15.0	10.8	18.0	14.0
PctCycC7	64.5	61.1	62.1	62.4	60.4	61.2	67.3	61.3	64.6
PctAroC7	11.8	3.7	6.1	16.6	2.4	8.2	12.2	3.2	8.2
PctSumC7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Thompson_A	0.2	0.0	0.1	0.2	0.0	0.1	0.2	0.0	0.1
Thompson_B	1.1	0.2	0.4	1.8	0.1	0.6	1.4	0.2	0.7
Thompson_X	0.7	0.2	0.3	1.5	0.2	0.5	1.2	0.2	0.6
Thompson_C	0.4	0.6	0.5	0.4	0.6	0.5	0.3	0.6	0.4
Thompson_I	0.5	0.8	0.7	0.5	0.8	0.7	0.4	0.7	0.6
Thompson_F	0.2	0.4	0.3	0.2	0.4	0.3	0.2	0.4	0.3
Thompson_H	8.3	15.1	12.9	8.0	15.6	12.4	6.7	13.9	9.7
Thompson_R	3.1	3.4	3.3	3.0	3.1	3.1	2.9	2.9	2.9
Thompson_U	12.7	4.5	6.3	12.0	3.7	6.0	15.2	4.2	8.7
Mango_P1	11.78	18.99	16.85	10.25	19.35	15.64	9.69	17.52	13.19
Mango_P2	8.17	11.82	10.74	7.38	12.83	10.62	7.25	12.70	9.68
Mango_N2	10.33	9.98	10.09	10.11	10.42	10.29	11.19	11.24	11.21
Mango_K1	1.07	1.07	1.07	1.06	1.07	1.07	1.06	1.06	1.06

Table 4.5 Continued

Sample-ID Gas fraction Depth (m)	H5994 H 3390	H5994 O 3390	H5994 H+O 3390
CncC1	21108	599	21707
CncC2C4	13354	1110	14464
CncC5C9	5186	4937	10123
CncC1C9	39648	6645	46294
PctC1	53.2	9.0	46.9
PctC2C4	33.7	16.7	31.2
PctC5C9	13.1	74.3	21.9
PctC1C9	100.0	100.0	100.0
Wetness	38.8	65.0	40.0
RatiC4nC4	0.6	0.3	0.5
PctnC7	11.1	19.0	15.6
PctIsoC7	12.6	18.3	15.9
PctCycC7	65.5	60.3	62.5
PctAroC7	10.8	2.4	6.0
PctSumC7	100.0	100.0	100.0
Thompson_A	0.1	0.0	0.1
Thompson_B	1.1	0.1	0.4
Thompson_X	0.9	0.2	0.4
Thompson_C	0.4	0.7	0.5
Thompson_I	0.5	0.8	0.6
Thompson_F	0.2	0.4	0.3
Thompson_H	8.1	15.7	12.2
Thompson_R	2.9	3.0	3.0
Thompson_U	11.2	3.3	5.8
Mango_P1	11.12	19.04	15.65
Mango_P2	8.46	13.12	11.13
Mango_N2	11.44	10.95	11.16
Mango_K1	1.04	1.07	1.06

Extraction and group type distribution



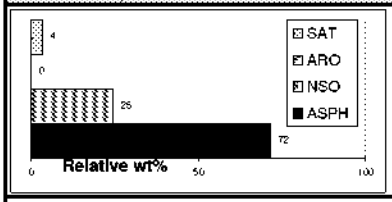


Country, well/location: NOR 6403/10-1
Sample type, depth (m): SWC, 2894-2894m

Sediment sample

Remarks:

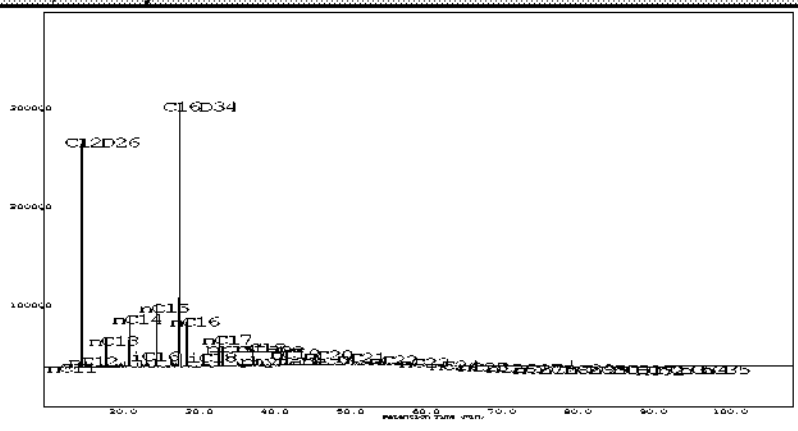
OrgID: 2177447, PlantID: 484290

Bulk data, Iatroscan and EOM			Rock Eval			δ13C isotope		
	EOM, mg	110.0	S1, kg/t	f23	Sat.	F28
	EOM, %	1.9	S2, kg/t	f24	Aro.	F29
	EOM/TOC	####	PI	#####	NSO	F30
	HC/nonHC	0.0	TOC, %	f27	Asph.	F31
			HI	#####	Total	F32
			Tmax	f26	Kerogen	F33

ISTD-mix.(ng/mg EOM):		
C12D26		3640
C16D34		3640
24αββ		22
d8N		44
d10BP		44
d10P		44
d12C		44

PyGC:

GC/FID, C15+ hydrocarbons:



GC/FID	Area	Amount
Pr/nC_{17}	0.7	0.8
Ph/nC_{18}	0.4	0.3
Pr/Ph	3.2	3.4
$nC_{17}/(C_{17}+C_{27})$	1.0	1.0
nC_{17}		360
Pristane		270
ΣC_{15-35}		3090

Country, well/location: NOR 6403/10-1
Sample type, depth (m): SWC, 2894-2894m

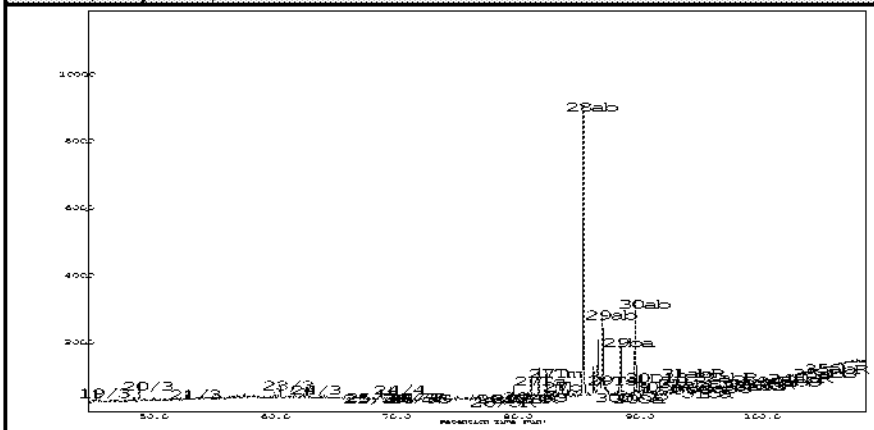
Sediment sample

E&T Research Centre,
Bergen, Norway

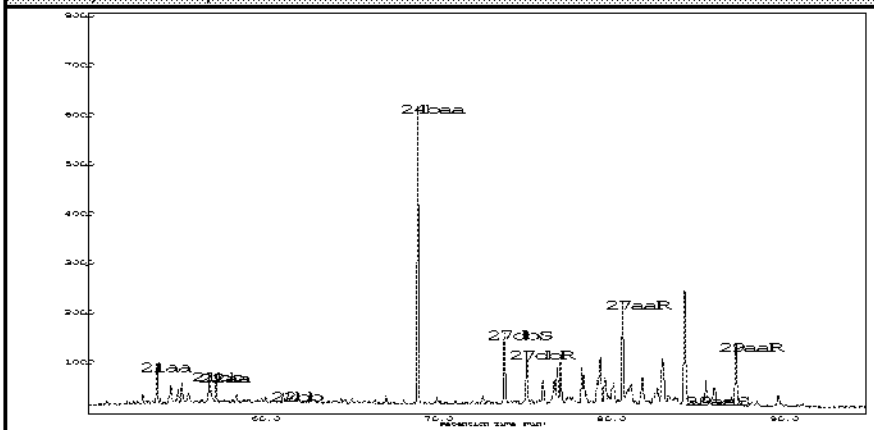
Remarks:

OrgID: 2177447, PlantID: 484290

GC/MS, Terpanes, m/z 191:



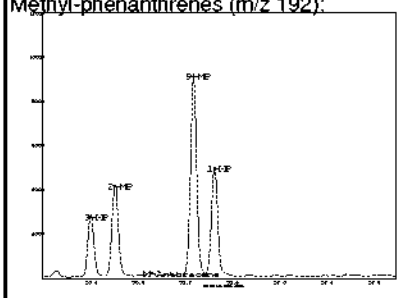
GC/MS, Steranes, m/z 217:



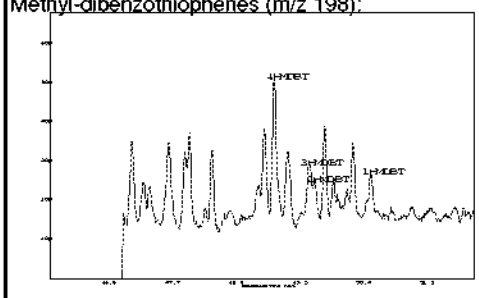
GC/MS	Height	Amount
%Tri	9	10
%20/3	29	29
%23/3	57	57
%24/4	32	32
C26/C25	1.5	1.5
%27Ts	40	40
%28αβ	76	83
%29Ts	17	17
%25nor30αβ	22.3	30.9
%29αβ	45	56
%30βα	10	10
%30D	2	3
%30G	5	7
%32αβS	25	25
%35αβ	57	57
30αβ		5
25nor30αβ		2
Σterpanes		67
%29ααS	12	12
%29ββ	22	22
%27dia	82	82
%27ster.	32	32
%28ster.	42	42
%29ster.	23	23
%30ster.	3	3
29ααS		1
29ααR		5
Σsteranes		38

Aromatic hydrocarbons, GC/MS:

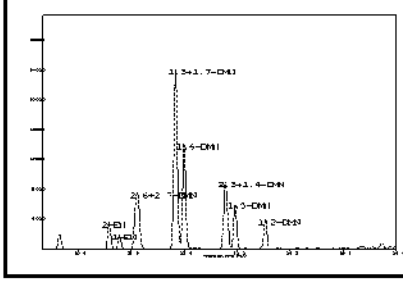
Methyl-phenanthrenes (m/z 192):



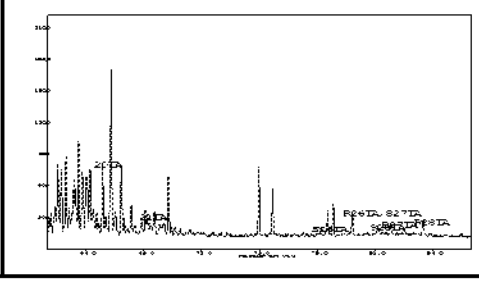
Methyl-dibenzothiophenes (m/z 198):



Dimethyl-naphthalenes (m/z 156):



Triaromatic steroids (m/z 231):



GC/MS	Height	Amount
Naphth	12093	4
C1-naph.	50433	13
C2-naph.	64664	15
C3-naph.	52065	12
DNR	1.2	1.2
2/1MN	0.9	0.9
2/1EN	1.9	1.9
Phen.	16355	3
C1phen.	21177	5
C2-phen.	9264	2
MPI1	0.34	0.37
F1	0.33	0.33
F2	0.20	0.20
%TAS'n	72.9	71.4
DBT/P	0.03	0.01
F/P	0.59	0.63
BP/1.6DMN	0.31	0.22
4/1MDBT	3.29	2.00
3MP/R	0.0	0.0

Country, well/location: NOR 6403/10-1
Sample type, depth (m): SWC, 2894-2894m

Remarks:

OrgID: , Prel-ID.

Sediment sample

E&P Research Centre,
Bergen, Norway

Saturated HC's, GC/FID		
	Area	ng/mg
nC11	28037	0
nC12	54191	0
nC13	101189	0
nC14	174584	0
iC16	70297	170
nC15	232934	550
nC16	200014	470
iC18	76330	180
nC17	151234	360
Prinstane	113379	270
nC18	99194	230
Phytane	35089	80
nC19	69177	160
nC20	69405	160
nC21	59308	140
nC22	45499	110
nC23	36670	90
nC24	21935	50
nC25	13340	30
nC26	4775	10
nC27	5181	10
nC28	4721	10
nC29	4470	10
nC30	536	0
nC31	943	0
nC32	684	0
nC33	908	0
nC34	718	0
nC35	1197	0

Saturated HC biomarkers, GC/MS		
	Height	ng/mg
19/3	374	1
20/3	562	2
21/3	272	1
23/3	464	1
24/3	343	1
25/3	0	0
25/3R	71	0
25/3S	127	0
26/3R	155	0
26/3S	143	0
28/3R	44	0
28/3S	121	0
29/3R	90	0
29/3S	153	0
24/4	384	1
27Ts	581	2
27Tm	870	2

cont...	Height	ng/mg
27b	376	1
25nor28ab	166	0
28ab	8659	24
25nor29ab	597	2
29ab	2253	6
29ba	1555	4
29Ts	453	1
25nor30ab	802	2
30ab	2792	5
30ba	296	1
30D	48	0
30G	135	0
30O	0	0
30D13	550	2
31abS	396	1
31abR	675	2
31ba	47	0
32abS	150	0
32abR	457	1
33abS	89	0
33abR	101	0
34abS	89	0
34abR	91	0
35abS	114	0
35abR	126	0
21aa	793	3
21bb	539	2
22aa	549	2
22bb	177	1
27dbS	1425	6
27dbR	1030	4
27bbR	381	2
27bbS	141	1
27aaR	2017	8
28bbR	491	2
28bbS	197	1
29aaS	156	1
29bbR	155	1
29bbS	216	1
29aaR	1176	5
30bbR	20	0
30bbS	22	0

Aromatic HC's, GC/MS		
	Height	ng/mg
N	12093	4
2MN	21409	5
1MN	23511	6
2EN	3592	1
1EN	1921	0
2627DMN	7522	2
1317DMN	24097	6
16DMN	14007	3
2314DMN	8947	2
15DMN	6155	1
12DMN	3936	1
C3N1	1367	0
C3N2	1804	0
137TMN	6190	1
136TMN	12510	3
135146TMN	9609	2
236TMN	5928	1
167127TMN	7439	2
126TMN	2477	1
124TMN	1279	0
125TMN	3462	1
BP	4326	1
3MBP	3834	1
4MBP	603	0
23XDMBP	538	0
25DMBP	235	0
2424XDMBP	289	0
23DMBP	527	0
3EBP	418	0
35DMBP	910	0
33XDMBP	2144	1
4EBP	132	0
34XDMBP	950	0
44XDMBP	137	0
34DMBP	482	0
DBF	4266	1
DBF1	7223	2
MDBF2	2135	1
MDBF3	2342	1
F	9690	2
C1F1	2273	0
C1F2	7872	2
1MF	1821	0
DBT	422	0
4MDBT	372	0
3MDBT	0	0
1MDBT	113	0
P	16355	3
3MP	2811	1

Country, well/location: NOR 6403/10-1
Sample type, depth (m): SWC, 2894-2894m

Remarks:

OrgID: , PlantID:

Sediment sample

E&P Research Centre,
Bergen, Norway

Aromatic HC's, GC/MS cont...	Height	ng/mg
2MP	4183	1
9MP	9178	2
1MP	5005	1
2EP9EP36DMP	1101	0
1EP	816	0
262735DMP	625	0
13210393DMP	1967	0
162529DMP	1222	0
17DMP	1910	0
23DMP	564	0
194941DMP	571	0
18DMP	488	0
RETENE	71031	13
20TA	674	0
21TA	157	0
S26TA	84	0
R26TAS27TA	233	0
S28TA	93	0
R27TA	111	0
R28TA	158	0

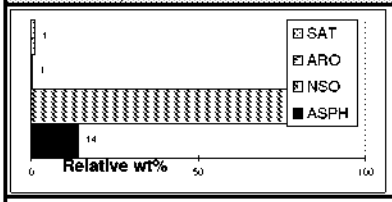
Country, well/location: NOR 6403/10-1
Sample type, depth (m): SWC, 3028-3028m

Remarks:

OrgID: 2177460, PlantID: 484293

Sediment sample

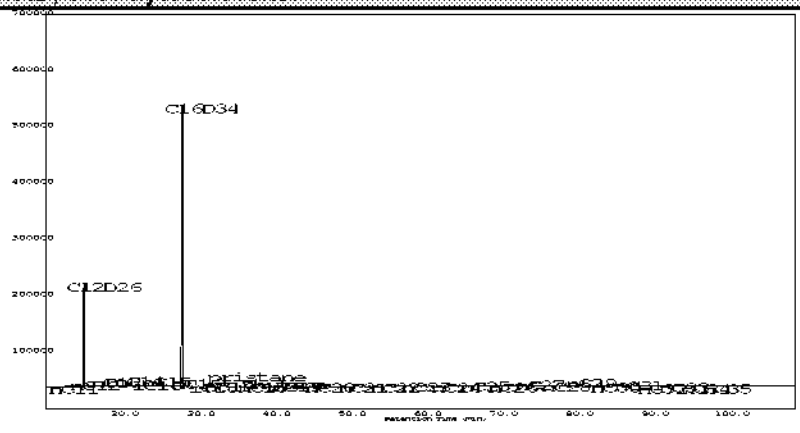
E&P Research Center,
Bergen, Norway

Bulk data, Iatroscan and EOM			Rock Eval			δ13C isotope		
	EOM, mg	49.0	S1, kg/t	f23	Sat.	F28
	EOM, %	0.9	S2, kg/t	f24	Aro.	F29
	EOM/TOC	####	PI	#####	NSO	F30
	HC/nonHC	0.0	TOC, %	f27	Asph.	F31
			HI	#####	Total	F32
			Tmax	f26	Kerogen	F33

ISTD-mix.(ng/mg EOM):		
C12D26		3670
C16D34		3670
24αββ		22
d8N		44
d10BP		44
d10P		44
d12C		44

PyGC:

GC/FID, C15+ hydrocarbons:



GC/FID	Area	Amount
Pr/nC_{17}	3.2	3.3
Ph/nC_{18}	1.1	1.0
Pr/Ph	3.5	3.3
$nC_{17}/(C_{17}+C_{27})$	0.4	0.4
nC_{17}		30
Pristane		100
ΣC_{15-35}		790

Country, well/location: NOR 6403/10-1
Sample type, depth (m): SWC, 3028-3028m

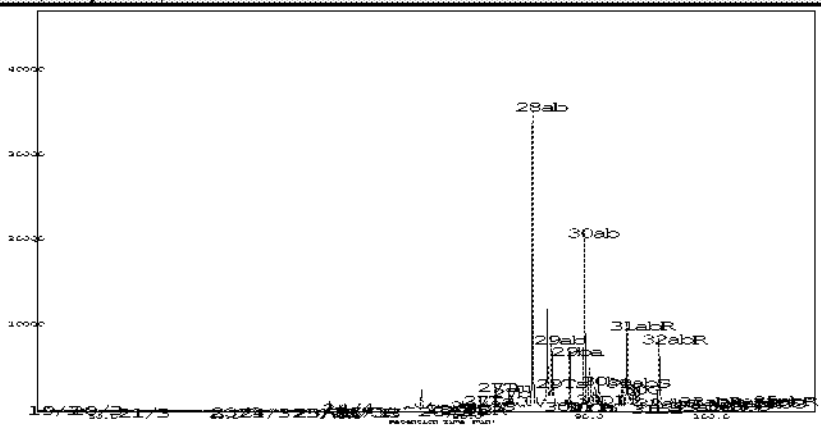
Remarks:

OrgID: 2177460, PlantID: 484293

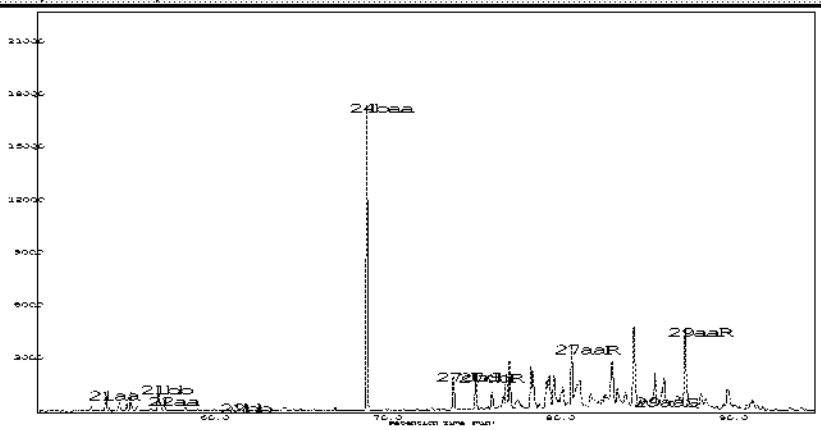
Sediment sample

E&P Research Centre,
Bergen, Norway

GC/MS, Terpanes, m/z 191:



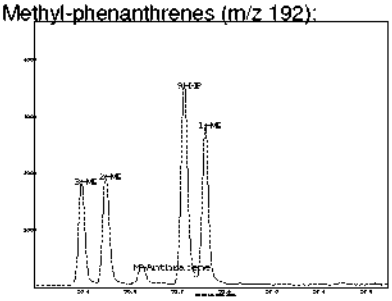
GC/MS, Steranes, m/z 217:



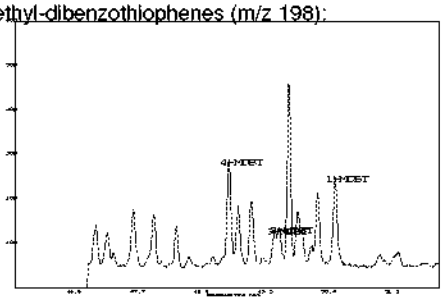
GC/MS	Height	Amount
%Tri	1	1
%20/3	44	44
%23/3	70	71
%24/4	66	66
C26/C25	2.4	2.5
%27Ts	31	31
%28αβ	63	73
%29Ts	28	28
%25nor30αβ	1.1	1.7
%29αβ	26	35
%30βα	13	13
%30D	2	2
%30G	9	14
%32αβS	8	8
%35αβ	50	50
30αβ		13
25nor30αβ		0
Σterpanes		100
%29ααS	9	9
%29ββ	31	31
%27dia	71	71
%27ster.	21	21
%28ster.	40	40
%29ster.	27	27
%30ster.	13	13
29ααS		1
29ααR		6
Σsteranes		33

Aromatic hydrocarbons, GC/MS:

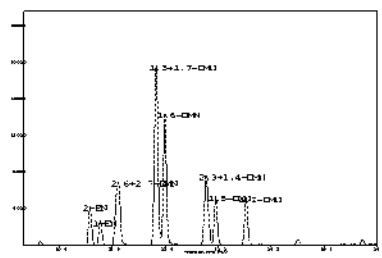
Methyl-phenanthrenes (m/z 192):



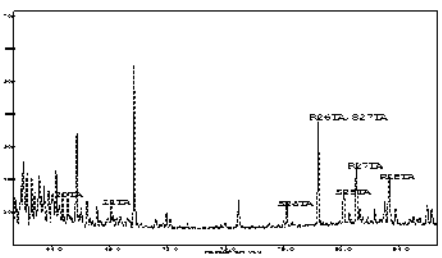
Methyl-dibenzothiophenes (m/z 198):



Dimethyl-naphthalenes (m/z 156):



Triaromatic steroids (m/z 231):



GC/MS	Height	Amount
Naphth	24736	37
C1-naph.	78551	98
C2-naph.	59508	70
C3-naph.	33674	40
DNR	1.3	1.3
2/1MN	0.9	0.9
2/1EN	1.6	1.6
Phen.	13106	12
C1phen.	10181	11
C2-phen.	4255	4
MPI1	0.29	0.32
F1	0.37	0.37
F2	0.19	0.19
%TAS'n	26.4	25.0
DBT/P	0.05	0.02
F/P	0.55	0.59
BP/1.6DMN	0.12	0.08
4/1MDBT	1.20	1.33
3MP/R	0.0	0.1

Country, well/location: NOR 6403/10-1
Sample type, depth (m): SWC, 3028-3028m

Remarks:

OrgID: , Par-ID.

Sediment sample

E&P Research Centre,
Bergen, Norway

Saturated HC's, GC/FID		
	Area	ng/mg
nC11	8437	0
nC12	29508	0
nC13	43348	0
nC14	50519	0
iC16	36365	40
nC15	58320	60
nC16	44324	40
iC18	25411	20
nC17	33284	30
Prinstane	105657	100
nC18	27244	30
Phytane	29907	30
nC19	22334	20
nC20	20738	20
nC21	26305	30
nC22	24404	20
nC23	25535	30
nC24	25525	30
nC25	36480	40
nC26	23502	20
nC27	49080	50
nC28	19258	20
nC29	56238	60
nC30	17217	20
nC31	36677	40
nC32	8064	10
nC33	19959	20
nC34	3493	0
nC35	10040	10

Saturated HC biomarkers, GC/MS		
	Height	ng/mg
19/3	445	0
20/3	457	0
21/3	138	0
23/3	205	0
24/3	87	0
25/3	0	0
25/3R	23	0
25/3S	41	0
26/3R	70	0
26/3S	86	0
28/3R	24	0
28/3S	294	0
29/3R	66	0
29/3S	552	1
24/4	574	1
27Ts	1191	1
27Tm	2699	3

cont...	Height	ng/mg
27b	1890	2
25nor28ab	180	0
28ab	35428	34
25nor29ab	367	0
29ab	7116	7
29ba	6308	6
29Ts	2796	3
25nor30ab	228	0
30ab	20590	13
30ba	2960	2
30D	318	0
30G	2095	2
30O	0	0
30D13	1079	1
31abS	3117	3
31abR	9816	9
31ba	59	0
32abS	747	1
32abR	8261	8
33abS	236	0
33abR	611	1
34abS	178	0
34abR	475	0
35abS	201	0
35abR	459	0
21aa	1088	2
21bb	1382	2
22aa	732	1
22bb	295	0
27dbS	2041	3
27dbR	2021	3
27bbR	1167	2
27bbS	455	1
27aaR	3332	5
28bbR	1860	3
28bbS	1257	2
29aaS	416	1
29bbR	1058	1
29bbS	1036	1
29aaR	4347	6
30bbR	557	1
30bbS	472	1

Aromatic HC's, GC/MS		
	Height	ng/mg
N	24736	37
2MN	34143	43
1MN	37395	47
2EN	4330	5
1EN	2683	3
2627DMN	6996	8
1317DMN	19704	23
16DMN	14524	17
2314DMN	7716	9
15DMN	5324	6
12DMN	5244	6
C3N1	1016	1
C3N2	1253	2
137TMN	3080	4
136TMN	7130	9
135146TMN	5244	6
236TMN	3086	4
167127TMN	3610	4
126TMN	2477	3
124TMN	1141	1
125TMN	5637	7
BP	1678	1
3MBP	2159	2
4MBP	450	0
23XDMBP	229	0
25DMBP	90	0
2424XDMBP	134	0
23DMBP	362	0
3EBP	161	0
35DMBP	416	1
33XDMBP	918	1
4EBP	52	0
34XDMBP	457	1
44XDMBP	73	0
34DMBP	260	0
DBF	2481	2
DBF1	3460	4
MDBF2	1180	1
MDBF3	1667	2
F	7146	7
C1F1	1284	1
C1F2	3760	4
1MF	1117	1
DBT	595	0
4MDBT	240	0
3MDBT	0	0
1MDBT	200	0
P	13106	12
3MP	1868	2

Country, well/location: NOR 6403/10-1
Sample type, depth (m): SWC, 3028-3028m

Remarks:

OrgID: , PlantID:

Sediment sample

E&P Research Centre,
Bergen, Norway

Aromatic HC's, GC/MS cont...	Height	ng/mg
2MP	1929	2
9MP	3554	4
1MP	2830	3
2EP9EP36DMP	504	1
1EP	276	0
262735DMP	149	0
13210393DMP	918	1
162529DMP	612	1
17DMP	1068	1
23DMP	211	0
194941DMP	278	0
18DMP	239	0
RETENE	38814	36
20TA	91	0
21TA	72	0
S26TA	81	0
R26TAS27TA	340	0
S28TA	106	0
R27TA	186	0
R28TA	148	0

Un-extracted sediment samples

Well	Type	End-depth	Lith	Tmax	S1	S2	TOC	HI	PI	Name	orgid	Notes
'6403/10-1	DC	2253		353	0.68	13.2	2.4	559	0.1		2180147	Dark lith.
'6403/10-1	DC	2262		353	1.27	13.0	2.1	634	0.1		2180150	Dark lith.
'6403/10-1	MUD	2523			0.03	0.0	0.4				2177548	
'6403/10-1	DC	2658		345	0.19	2.5	0.7	345	0.1		2179776	
'6403/10-1	DC	2661		346	0.37	3.9	1.0	381	0.1		2179777	
'6403/10-1	DC	2664		348	0.21	3.2	0.9	356	0.1		2179778	
'6403/10-1	DC	2667		349	0.40	4.3	1.1	377	0.1		2179779	
'6403/10-1	DC	2670		352	0.29	3.8	1.0	379	0.1		2179780	
'6403/10-1	DC	2673		349	0.22	3.2	0.9	339	0.1		2179781	
'6403/10-1	SWC	3008		430	0.16	1.1	1.1	93	0.1	20	2177458	
'6403/10-1	DC	3009		370	9.50	10.5	2.8	371	0.5		2181058	
'6403/10-1	SWC	3360	SLST/CLYST	426	0.12	0.5	0.9	60	0.2	3	2177426	
'6403/10-1	DC	3360		366	14.75	8.9	3.0	300	0.6		2181059	
'SR1	OC	310/33		439	1.06	5.7	2.3	248	0.2	REP BATCH 53	2180406	

Extracted sediment samples

Well	Type	End-depth	Lith	Tmax	S1	S2	TOC	HI	PI	name	orgid	
'6403/10-1	DC	2658		350	0.08	0.8	0.5	169	0.1		2179776	
'6403/10-1	DC	2661		353	0.06	0.7	0.6	116	0.1		2179777	
'6403/10-1	DC	2664		353	0.05	0.8	0.6	133	0.1		2179778	
'6403/10-1	DC	2667		353	0.05	0.9	0.6	139	0.1		2179779	
'6403/10-1	DC	2670		358	0.05	0.9	0.7	131	0.1		2179780	
'6403/10-1	DC	2673		353	0.09	0.8	0.7	106	0.1		2179781	