

Chapter 1

INTRODUCTION

1.1 General Information, Stratigraphy

The analytical program (Table 1) for the NOCS well 6403/6-1 was set up by Statoil. Geolab Nor AS performed all analyses, with vitrinite reflectance being performed by J.M. Jones of GeoOptics UK, however Statoil stipulated that IFE/APT should take care of the compositional and isotopic analyses of the gas samples, these samples being sent directly to IFE/APT from storage by Statoil.

The rock samples supplied consisted of unwashed cuttings samples, core samples and sidewall core samples over the interval 2424.2 - 4111.25 m,

In addition to these, 6 ROV samples (1946 - 2400 m) were provided to complement the data set for vitrinite reflectance analyses.

The water-based Ultradrill mud system by Mi Swaco was used in this well. In addition to the rock samples, a number of mud samples and samples of unused Ultrafree mud and the pure Ultrafree reagent were supplied in order for comparison of the GC results. Extraction cleaning was requested and performed on a number of the the rock samples, however particularly for the cuttings it is evident that this was unsuccessful in removing the Ultrafree agent. Nevertheless indications of natural hydrocarbons are shown by some of the core samples.

Table 1: Analytical Program for NOCS 6403/6-1

Statoil

Well	Sample Depth / ID	Sample Type	Sample Code	Extraction Clean-Up	Lithology Description	Picking for screening	Prøvepreparering	Leco TOC	RockEval	Thermal Extraction	Pyrolysis GC	Picking for Extraction	latroscan	Solvent Extraction	Topping	MPLC & Deasphaltene	EOM GC	Whole Oil GC	Sat GC (Quantitative)	Aro GC (Quantitative)	Sat GCMS (Quantitative)	Aro GCMS (Quantitative)	Sat GCMS MRM	Carbon isotope of EOM & Sat/Aro fractions	Vitrinite Reflectance	Visual kerogen	API Gravity	Gas composition	GC-IRMS of gas	
			Table nos.:		3			3,5	5		6		6	6		6			6	6	11	12	11	10	4			14	14	
6403/6-1	1946.00	ROV																												
	2092.00	ROV																								x				
	2151.00	ROV																							x					
	2259.00	ROV																							x					
	2350.00	ROV																							x					
	2400.00	ROV																							x					
	2413.00	Gas bag																										x	x	
	2417.00	Gas bag																									x	x	x	
	2424.20	SWC		x	x			x	x																x					
	2437.80	SWC		x	x			x	x																x					
	2440.00	Gas bag																										x	x	
	2461.00	SWC			x																				x					
	2510.10	SWC		x	x			x	x																x					
	2570.00	cutt			x																				x					
	2587.00	Gas bag																										x	x	
	2598.00	Gas bag																										x	x	
	2630.00	cutt		x	x	x		x	x																x					
	2700.00	cutt		x	x	x		x	x																x					
	2742.00	Gas bag																										x	x	
	2770.00	cutt			x																				x					
	2820.00	cutt			x																				x					
	2820.00	Gas bag																										x	x	
	2858.00	Gas bag																										x	x	
	2870.00	cutt		x	x	x		x	x																x					
	2886.00	Gas bag																										x	x	
	2907.00	Gas bag																												
	2944.00	Gas bag																										x	x	
	2950.00	cutt		x	x	x		x	x																x					
	2970.00	cutt			x																				x					
	2977.00	Gas bag																										x	x	
	2983.00	Gas bag																										x	x	
	3056.50	SWC			x									x		x	x		x	x	x	x	x	x						

Table 1: Analytical Program for NOCS 6403/6-1

Statoil

Well	Sample Depth / ID	Sample Type	Sample Code	Extraction Clean-Up	Lithology Description	Picking for screening	Prevepreparing	Leco TOC	RockEval	Thermal Extraction	Pyrolysis GC	Picking for Extraction	atoscan	Solvent Extraction	Topping	MPLC & Deasphaltene	EOM GC	Whole Oil GC	Sat GC (Quantitative)	Aro GC (Quantitative)	Sat GCMS (Quantitative)	Aro GCMS (Quantitative)	Sat GCMS MRM	Carbon isotope of EOM & Sat/Aro fractions	Vitritite Reflectance	Visual kerogen	API Gravity	Gas composition	GC-IRMS of gas
			Table nos.:		3			3,5	5		6		8	8		8			9	9	11	12	11	10	4			14	14
	3061.70	core			x									x		x	x		x	x									
	3065.60	core		x	x	x		x	x																				
	3066.75	core			x									x		x	x		x	x	x	x	x						
	3077.20	core			x																					x			
	3081.00	core			x																					x			
	3082.50	core			x									x		x	x		x	x	x	x							
	3091.00	Gas bag																										x	x
	3141.00	SWC			x																					x			
	3220.00																											x	x
	3234.70	SWC		x	x	x		x	x																	x			
	3302.00	SWC			x																					x			
	3372.00	cutt			x																					x			
	3407.50	SWC			x																					x			
	3437.00	Gas bag																										x	x
	3441.00	cutt		x	x	x		x	x																	x			
	3490.00	Gas bag																										x	x
	3494.00	SWC			x																					x			
	3496.00	Gas bag																										x	x
	3558.20	SWC			x																					x			
	3649.90	SWC		x	x	x		x	x																	x			
	3717.00	cutt			x																					x			
	3756.00	cutt			x																					x			
	3784.25	SWC		x	x	x		x	x																	x			
	3806.25	SWC			x																					x			
	3840.75	SWC		x	x	x		x	x																	x			
	3881.75	SWC		x	x	x		x	x																	x			
	3919.00	Gas bag																										x	x
	3926.75	SWC			x																					x			
	3928.00	Gas bag																										x	x
	3937.25	SWC			x									x		x	x		x	x									
	3964.05	SWC			x																					x			
	3981.45	SWC			x																					x			
	3982.00	Gas bag																										x	x
	4000.25	SWC			x									x		x	x		x	x	x	x	x						

Table 1: Analytical Program for NOCS 6403/6-1

Statoil

Well	Sample Depth / ID	Sample Type	Sample Code	Extraction Clean-Up	Lithology Description	Picking for screening	Prøvepreparing	Leco TOC	RockEval	Thermal Extraction	Pyrolysis GC	Picking for Extraction	Introscon	Solvent Extraction	Topping	MPLC & Deasphaltene	EOM GC	Whole Oil GC	Sat GC (Quantitative)	Aro GC (Quantitative)	Sat GCMS (Quantitative)	Aro GCMS (Quantitative)	Sat GCMS MRM	Carbon isotope of EOM & Sat/Aro fractions	Vitrinite Reflectance	Visual kerogen	API Gravity	Gas composition	GC-IRMS of gas
			Table nos.:		3			3,5	5		6		8	8		8			9	9	11	12	11	10	4			14	14
	4003.00	Gas bag																										x	x
	4003.05	SWC			x									x		x	x		x	x									
	4019.00	Gas bag																										x	x
	4025.25	SWC			x									x		x	x		x	x									
	4045.75	SWC			x									x		x	x		x	x	x	x							
	4059.45	SWC		x	x	x		x	x																x				
	4091.25	SWC			x									x		x	x		x	x									
	4096.25	SWC		x	x	x		x	x																x				
	4111.25	SWC			x																				x				
	0.00	Ultrafree mud oil																x											
	1.00	Unused mud												x				x											
	2403.00	mud												x				x											
	2800.00	mud												x				x											
	3056.00	mud												x		x		x		x	x	x	x						
	3200.00	mud												x				x											
	3900.00	mud												x				x											
	4000.00	mud												x				x											
	Totals			16	46	5		16	16					17		11	18		11	11	6*	6	4	1	41			23	23
	(Gas composition & isotope analyses were performed at IFE at client's request)																			*5 quant, 1 non-quant.									

Table 3: Lithology Description and TOC%, Well NOCS 6403/6-1

Sample Depth	Type / TOC	Lithology	GLN Sample no.
2424.2	swc		7
		1.05 100 Sltst : m gy, lt gy, drk gy, s, lam	0007-1L
2437.8	swc		8
		1.62 100 Sltst : drk gy, lt gy, s, glauc, lam	0008-1L
2461	swc		9
		50 Sh/Clst: brn gy, s, sft	0009-1L
		50 Cont : brn gy, dd	0009-2L
2510.1	swc		10
		1.04 100 Sh/Clst: brn gy to lt gy, slt, sft	0010-1L
		tr Cont : brn gy, dd	0010-2L
2570			35
		50 Cont : w, cem	0035-1L
		50 Sh/Clst: lt gy, slt	0035-2L
2630			36
		1.59 100 Sltst : lt gy, argill	0036-2L
		tr Cont : w, cem	0036-1L
2700			37
		1.42 75 Sltst : lt gy, s	0037-2L
		25 Cont : lt gy, dd	0037-1L
2770			77
		85 Sh/Clst: lt gy, slt	0077-1L
		15 Cont : w, cem	0077-2L
2820			78
		100 Sh/Clst: lt gy, slt	0078-1L

Table 3: Lithology Description and TOC%, Well NOCS 6403/6-1

Sample Depth	Type / TOC	Lithology	GLN Sample no.
2870			38
	1.21	90 Sltst : lt gy, argill 10 Cont : lt gy, dd	0038-2L 0038-1L
2950			39
	1.18	100 Sh/Clst: lt gy, slt tr Cont : lt gy, dd	0039-2L 0039-1L
2970			79
		100 Sltst : lt gy, argill	0079-1L
3056.5 swc			28
		100 S/Sst : w to lt gy	0028-1L
3061.7 ccp			1
		100 Sh/Clst: lt gy, slt	0001-1L
3065.6 ccp			2
	0.85	100 Sh/Clst: lt gy, slt	0002-1L
3066.8 ccp			3
		100 S/Sst : lt gy to brn gy, slt, glauc	0003-1L
3077.2 ccp			4
		100 Sh/Clst: lt gy, slt	0004-1L
3081.2 ccp			5
		100 Sh/Clst: m gy to lt gy, slt	0005-1L
3082.5 ccp			6
		100 S/Sst : lt gy, slt, glauc	0006-1L

Table 3: Lithology Description and TOC%, Well NOCS 6403/6-1

Sample Depth	Type / TOC	Lithology	GLN Sample no.
3141	swc		11
		100 Sltst : m gy, lt gy, s, lam	0011-1L
3234.7	swc		12
		0.62 100 S/Sst : w to lt gy	0012-1L
3302	swc		13
		100 Sltst : lt gy, s	0013-1L
3372			80
		100 Sltst : lt gy, s	0080-1L
3407.5	swc		14
		100 Sltst : lt gy, s	0014-1L
3441			40
		1.06 100 Sltst : lt gy, s tr Cont : lt gy, dd	0040-2L 0040-1L
3494	swc		15
		100 S/Sst : lt gy to w, slt, f	0015-1L
3558.2	swc		16
		100 Sh/Clst: drk gy to m gy	0016-1L
3649.9	swc		17
		0.74 100 Sh/Clst: m gy	0017-1L
3717			81
		100 Sltst : lt gy, argill	0081-1L

Table 3: Lithology Description and TOC%, Well NOCS 6403/6-1

Sample Depth	Type / TOC	Lithology	GLN Sample no.
3756		100 Sltst : lt gy	82 0082-1L
3784.3 swc		1.04 100 Sh/Clst: m gy	18 0018-1L
3806.3 swc		100 S/Sst : w, lt gy, slt, f, lam	19 0019-1L
3840.8 swc		0.8 100 Sh/Clst: m gy	20 0020-1L
3881.8 swc		1.02 100 Sh/Clst: m gy	21 0021-1L
3926.8 swc		100 Sltst : m gy to lt gy, s, argill	22 0022-1L
3937.3 swc		100 S/Sst : lt gy to w	29 0029-1L
3964.1 swc		100 S/Sst : w, m gy, slt, argill, lam	23 0023-1L
3981.5 swc		100 S/Sst : w, m gy, slt, argill, lam	24 0024-1L
4000.3 swc		100 S/Sst : lt gy to m gy	30 0030-1L
4003.1 swc		100 Sltst : dsk brn to drk gy	31 0031-1L

Table 3: Lithology Description and TOC%, Well NOCS 6403/6-1

Sample Depth	Type / TOC	Lithology	GLN Sample no.
4025.3	swc	100 S/Sst : gy brn, f, glauc	32 0032-1L
4045.8	swc	100 S/Sst : w to lt gy	33 0033-1L
4059.5	swc	1.19 100 Sh/Clst: m gy, slt	25 0025-1L
4091.3	swc	100 S/Sst : w to lt gy	34 0034-1L
4096.3	swc	1.08 100 Sh/Clst: m gy to drk gy	26 0026-1L
4111.3	swc	100 Sh/Clst: m gy, slt	27 0027-1L

Table 4a: Vitrinite Reflectance Maturity Data, NOCS 6403/6-1

Statoil

Sample ID	Vitrinite Reflectance			UV Fluorescence			Comments
	R.o.Ave.	No.	Conf.	Form	Content	Colour	
1946	0.30	2	E	Algal frags.	Trace	Y	100%Lst., marly. Trs. Sst.& shale. Iron oxide staining Glauconite. Planktonic debris
2092	N.D.P.	-	-	Algal frags.	Trace	Y	Limestone. Planktonic debris
2151	0.27	2	E	Spores	Trace	Y-Y/O	70%Lst., fine grained, forams & planktonic debris. 30%marly shale
				Algae	Trace	Y	
2259	0.35	3	E	Spores	Trace	Y-Y/O	Marly Lst. Calc.shale/shaly Lst. Iron oxide traces
				Algae	Trace	Y	
2350	0.37	3	D	Spores	Trace	Y-Y/O	Marl. Iron oxide traces
2400	0.39	2	E	Spores	Trace	Y-Y/O	
2424.2	0.41	11	D	Spores	Trace	Y/O	Shale. Phytoclasts small
				Algae	Trace	Y	
2437.8	0.39	12	D	Spores	Trace	Y/O	Shale, silty. Glauconite
				Algae	Trace	Y	
2461	0.40	7	D	Spores	Trace	Y/O	Shale
				Algae	Trace	Y	
2510.1	0.41	7	D	Spores	Trace	Y/O	Shale. Forams. Iron oxide traces. Phytoclasts small
2570	0.41	13	D	Algae	Trace	Y	
2630	0.40	16	D	Algae	Trace	Y	Shale. Glauconite
				Spores	Trace	Y/O	
2700	0.42	14	D	Algae	Trace	Y	Shale. Glauconite
				Spores	Trace	Y/O	
2770	0.40	4	E	Algae	Trace	Y-Y/O	100%shale, tr.cement. Phytoclasts as specks
2820	0.43	1	E	Spores	Trace	Y/O	
2870	0.42	6	E	Spores	Trace	Y/O	Shale
2950	0.47	10	D	Algae	Trace	Y/O	
				Spores	Trace	Y/O	
2970	0.48	3	E	Algae	Trace	Y-Y/O	Shale
3077.2	0.45	5	E	Algae	Trace	Y/O	
				Spores	Trace	LO	
3081.22	0.43	2	E	Spores	Trace	Y/O+LO	Shale
				Algae	Trace	Y/O	
3141	0.48	7	D	Algae	Trace	Y/O	Shale

Table 4a: Vitrinite Reflectance Maturity Data, NOCS 6403/6-1

Statoil

Sample ID	Vitrinite Reflectance			UV Fluorescence			Comments
	R.o.Ave.	No.	Conf.	Form	Content	Colour	
3234.7	0.48	3	D	Spores	Trace	LO	Siltstone. Glauconite
				Algae	Trace	Y+Y/O	
3302	0.53	5	D	Spores	Trace	Y/O	Shale
3372	0.52	5	D	Algae	Trace	Y/O	
3407.5	0.51	4	D	Spores	Trace	LO	Shale
				Algal frags.	Trace	Y/O	
3441	0.51	16	D	Spores	Trace	Y/O-LO	Shale. Variable r.o.
				Algae	Trace	Y/O	
3494	0.50	7	D	Algae	Low	Y/O	Shale, silty. Variable r.o.
				Spores	Trace	LO	
3558.2	0.57	4	E	Algae	Trace	Y/O	Shale
3649.9	0.58	3	E	Algal frags.	Trace	Y/O-LO	Shale. Phytoclasts as specks
3717	0.55	8	E	Algal frags.	Trace	LO	Shale. Phytoclasts as specks
3756	0.63	15	D	Algal frags.	Trace	LO	Shale
3784.25	0.60	5	E	Algae	Trace	Y/O-LO	Shale
3806.25	0.66	13	D	Algae	Trace	Y/O-LO	Silty shale
3840.75	0.65	1	E	Spores	Trace	L-MO	Shale. Phytoclasts small
3881.75	0.65	6	D	-	-	-	Shale
3926.75	0.69	5	E	Algae	Trace	L-MO	Shale
3964.05	0.73	14	D	Carbonate	Low	MO	Silty shale
3981.45	0.75	10	D	Spores	Trace	MO	Shaly Lst.
4059.45	0.73	13	D	-	-	-	Shale
4096.25	0.79	7	E	-	-	-	Shale. Phytoclasts small

Table 4b: Vitrinite Reflectance Petrography Data, NOCS 6403/6-1

Statoil

Sample I.D.	Amorphinite	Bitumen	Phytoclasts							Comments
			Content	Composition (%)				Vitr.	Inert./ Reworked	
				Algae	Spores	Cuticle	Resin			
1946	Var.- Nil-Mod.	-	Trace	Trace	-	-	-	Two	Trace	Plankton debris
2092	-	-	-	Trace	Trace	-	-	-	-	Plankton debris
2151	Trace	-	Vrt.Barren	Trace	Trace	-	-	Two	-	Forams.& plankton debris
2259	Most Nil Tr. Mod	-	Vrt.Barren	Trace	-	-	-	Three	One	-
2350	Most Low Tr. Mod.	-	Vrt.Barren	-	Trace	-	-	Trace	Trace	-
2400	Most Nil Tr. Mod.	-	Vrt.Barren	-	Trace	-	-	Two	Trace	-
2424.2	Low-Mod.	-	Low-Mod.	Trace	Trace	-	-	Trace	100	-
2437.8	Low-Mod.	-	Low-Mod.	Trace	Trace	-	-	Trace	100	-
2461	Low	-	Low-Mod.	Trace	Trace	-	-	Trace	100	-
2510.1	Low	-	Low	-	Trace	-	-	Trace	100	Forams.
2570	Low	-	Low	Trace	-	-	-	Trace	100	Forams.
2630	Trace	-	Low	Trace	Trace	-	-	Trace	100	-
2700	Low	-	Low	Trace	Trace	-	-	Trace	100	-
2770	Trace	-	Very Low	Trace	-	-	-	Trace	100	-
2820	Low	-	Very Low	-	Trace	-	-	One	100	-
2870	Low	-	Low-Mod.	-	Trace	-	-	Trace	100	-
2950	Low	-	Low-Mod.	Trace	Trace	-	-	Trace	100	-
2970	Low	-	Low	Trace	-	-	-	Trace	100	-
3077.2	Low	-	Low-Mod.	Trace	Trace	-	-	Trace	100	-
3081.22	Low-Mod.	-	Low-Mod.	Trace	Trace	-	-	Two	100	-
3141	Low	-	Low-Mod.	Trace	Trace	-	-	Trace	100	-
3234.7	Low	-	Low	Trace	Trace	-	-	Three	100	-
3302	Low	-	Moderate	Trace	-	-	-	Trace	100	-
3372	Low-Mod.	-	Low-Mod.	Trace	Trace	-	-	Trace	100	-
3407.5	Low	-	Low-Mod.	Trace	Trace	-	-	Trace	100	-
3441	Very Low	-	Low-Mod.	Trace	Trace	-	-	Trace	100	-

Table 4b: Vitrinite Reflectance Petrography Data, NOCS 6403/6-1

Statoil

Sample I.D.	Amorphinite	Bitumen	Phytoclasts							Comments
			Content	Composition (%)				Vitr.	Inert./ Reworked	
				Liptinite						
				Algae	Spores	Cuticle	Resin			
3494	Low	-	Low-Mod.	20	Trace	-	-	Trace	80	-
3558.2	Trace	-	Low-Mod.	Trace	-	-	-	Trace	100	-
3649.9	Low	-	Low-Mod.	Trace	-	-	-	Trace	100	-
3717	Low-Mod.	-	Low-Mod.	Trace	-	-	-	Trace	100	-
3756	Low-Mod.	-	Low-Mod.	Trace	-	-	-	Trace	100	-
3784.25	Low-Mod.	-	Low-Mod.	Trace	-	-	-	Trace	100	-
3806.25	Low-Mod.	-	Low-Mod.	Trace	-	-	-	Trace	100	-
3840.75	Low	-	Low-Mod.	-	Trace	-	-	Trace	100	-
3881.75	Low-Mod.	-	Moderate	-	-	-	-	Trace	100	-
3926.75	Low-Mod.	-	Low-Mod.	Trace	-	-	-	Trace	100	-
3964.05	Low-Mod.	-	Moderate	-	-	-	-	Trace	100	MO fluorescence from carbonate
3981.45	Low	-	Low	-	Trace	-	-	Trace	100	-
4059.45	Moderate	-	Low-Mod.	-	-	-	-	Trace	100	-

Table 5: TOC and Rock Eval Data, NOCS 6403/6-1

Statoil

Well name	Sample	Type	Lithology	S1	S2	S3	TOC	Tmax	S2/S3	HI	OI	PP	PI	Sample number
NOCS 6403/6-1	2424.2	swc	siltstone	0.21	0.97	0.88	1.05	409	1.10	92	84	1.20	0.18	192/0007-1
NOCS 6403/6-1	2437.8	swc	siltstone	0.42	1.56	1.16	1.62	408	1.34	96	72	2.00	0.21	192/0008-1
NOCS 6403/6-1	2510.1	swc	shale/claystone	0.48	1.86	2.18	1.04	420	0.85	179	210	2.30	0.21	192/0010-1
NOCS 6403/6-1	2630	cut	siltstone	3.63	7.22	2.42	1.59	401	2.98	454	152	10.90	0.33	192/0036-2
NOCS 6403/6-1	2700	cut	siltstone	3.33	6.84	1.61	1.42	406	4.25	482	113	10.20	0.33	192/0037-2
NOCS 6403/6-1	2870	cut	siltstone	3.03	5.11	1.75	1.21	327	2.92	422	145	8.10	0.37	192/0038-2
NOCS 6403/6-1	2950	cut	shale/claystone	2.51	4.55	1.22	1.18	321	3.73	386	103	7.10	0.36	192/0039-2
NOCS 6403/6-1	3065.6	ccp	shale/claystone	0.24	0.92	0.92	0.85	419	1.00	108	108	1.20	0.21	192/0002-1
NOCS 6403/6-1	3234.7	swc	sandstone/sand	0.59	1.58	0.86	0.62	427	1.84	255	139	2.20	0.27	192/0012-1
NOCS 6403/6-1	3441	cut	siltstone	2.05	3.83	0.83	1.06	325	4.61	361	78	5.90	0.35	192/0040-2
NOCS 6403/6-1	3649.9	swc	shale/claystone	0.23	0.74	0.62	0.74	331	1.19	100	84	1.00	0.24	192/0017-1
NOCS 6403/6-1	3784.25	swc	shale/claystone	0.13	0.74	0.53	1.04	437	1.40	71	51	0.90	0.15	192/0018-1
NOCS 6403/6-1	3840.75	swc	shale/claystone	0.15	0.57	0.35	0.80	438	1.63	71	44	0.70	0.21	192/0020-1
NOCS 6403/6-1	3881.75	swc	shale/claystone	0.16	0.79	0.44	1.02	438	1.80	77	43	1.00	0.17	192/0021-1
NOCS 6403/6-1	4059.45	swc	shale/claystone	0.17	0.93	0.27	1.19	446	3.44	78	23	1.10	0.15	192/0025-1
NOCS 6403/6-1	4096.25	swc	shale/claystone	0.13	0.67	0.28	1.08	446	2.39	62	26	0.80	0.16	192/0026-1

Table 8a Extraction and Fractionation (MPLC) Data (weights) for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	Rock Extd g	EOM/Top.oil mg	Sat. mg	Aro. mg	NSO mg	Asph. mg	TOC(e) %	HC mg	Non-HC mg	Sample number
3056	mud	bulk sample	n.a.	24.70	8.92	1.36	8.92	5.50	n.a.	10.28	14.42	192/0045-0
3056.5	swc	sandstone/sand	12.00	30.10	1.32	0.88	1.46	26.44	0.43	2.19	27.91	192/0028-1
3061.7	ccp	shale/claystone	11.70	40.00	0.86	0.43	1.00	37.70	0.32	1.29	38.71	192/0001-1
3066.75	ccp	sandstone/sand	11.50	64.80	1.31	0.58	0.88	62.02	0.53	1.90	62.90	192/0003-1
3082.5	ccp	sandstone/sand	11.90	59.20	0.80	0.53	0.93	56.94	0.34	1.33	57.87	192/0006-1
3937.25	swc	sandstone/sand	9.70	9.50	0.89	0.38	1.02	7.20	0.51	1.28	8.22	192/0029-1
4000.25	swc	sandstone/sand	9.10	6.40	0.77	0.51	1.02	4.10	0.84	1.28	5.12	192/0030-1
4003.05	swc	siltstone	9.20	10.20	0.89	0.59	1.19	7.53	0.55	1.48	8.72	192/0031-1
4025.25	swc	sandstone/sand	7.00	3.70	0.86	0.49	0.74	1.60	0.32	1.36	2.34	192/0032-1
4045.75	swc	sandstone/sand	9.90	7.90	0.74	0.62	0.74	5.80	0.33	1.36	6.54	192/0033-1
4091.25	swc	sandstone/sand	10.70	10.30	1.04	0.89	1.04	7.34	0.57	1.92	8.38	192/0034-1

Table 8d Fractionation Data from MPLC (fractions as a percentage of topped oil) for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	Sat/EOM	Aro/EOM	Asph/EOM	NSO/EOM	HC/EOM	Non-HC/EOM	Sat/Aro	HC/Non-HC	Sample number
3056	mud	bulk sample	36.11	5.51	22.27	36.11	41.62	58.38	6.56	0.71	192/0045-0
3056.5	swc	sandstone/sand	4.37	2.91	87.85	4.86	7.29	92.71	1.50	0.08	192/0028-1
3061.7	ccp	shale/claystone	2.15	1.08	94.26	2.51	3.23	96.77	2.00	0.03	192/0001-1
3066.75	ccp	sandstone/sand	2.03	0.90	95.72	1.35	2.93	97.07	2.25	0.03	192/0003-1
3082.5	ccp	sandstone/sand	1.35	0.90	96.17	1.58	2.25	97.75	1.50	0.02	192/0006-1
3937.25	swc	sandstone/sand	9.42	4.04	75.79	10.76	13.45	86.55	2.33	0.16	192/0029-1
4000.25	swc	sandstone/sand	11.98	7.99	64.06	15.97	19.97	80.03	1.50	0.25	192/0030-1
4003.05	swc	siltstone	8.73	5.82	73.81	11.64	14.55	85.45	1.50	0.17	192/0031-1
4025.25	swc	sandstone/sand	23.37	13.35	43.24	20.03	36.72	63.28	1.75	0.58	192/0032-1
4045.75	swc	sandstone/sand	9.38	7.82	73.42	9.38	17.20	82.80	1.20	0.21	192/0033-1
4091.25	swc	sandstone/sand	10.06	8.62	71.26	10.06	18.68	81.32	1.17	0.23	192/0034-1

Table 9Aa Saturated Hydrocarbon GC data (Peak Areas) for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	nC15	nC16	Norpristane	nC17	Pristane	nC18	Phytane
3056	mud	bulk sample							
3056.5	swc	sandstone/sand	513422	884599	263531	1075295	674418	1118223	308300
3061.7	ccp	shale/claystone	2074681	1879445	446398	883481	423261	605917	228190
3066.75	ccp	sandstone/sand	1330999	1319495	307575	870174	552772	766912	195668
3082.5	ccp	sandstone/sand	1123437	1429080	336875	996782	530915	916492	230215
3937.25	swc	sandstone/sand	2254035	2526349	856062	2465629	1994857	2326325	605101
4000.25	swc	sandstone/sand	944217	1318881	419319	1360994	1025288	1392523	320684
4003.05	swc	siltstone	672669	1015489	351078	1078428	832986	1160676	301274
4025.25	swc	sandstone/sand	382633	541192	209956	611297	488732	713933	248855
4045.75	swc	sandstone/sand	1091150	1581576	413903	1648734	739253	1637830	354546
4091.25	swc	sandstone/sand	1348563	2244439	676238	2514877	1376043	2508190	519393

Sample ID	Spl type	Description	nC19	nC20	nC21	nC22	nC23	nC24	nC25
3056	mud	bulk sample							
3056.5	swc	sandstone/sand	1227703	1217951	1218343	1168298	1211049	1191034	1194637
3061.7	ccp	shale/claystone	428143	396152	272540	218735	193343	154272	102064
3066.75	ccp	sandstone/sand	753748	741054	744640	756846	678652	444667	329357
3082.5	ccp	sandstone/sand	806998	821556	732973	666880	636304	551509	492850
3937.25	swc	sandstone/sand	2149169	1869981	1469075	1103045	862948	715257	585587
4000.25	swc	sandstone/sand	1308119	1258622	1010197	843320	711799	640753	540005
4003.05	swc	siltstone	1097753	1064849	790778	640166	519575	477590	310333
4025.25	swc	sandstone/sand	713579	678976	538707	418707	340489	247085	180187
4045.75	swc	sandstone/sand	1530944	1450123	1101387	892847	753154	676355	590513
4091.25	swc	sandstone/sand	2405761	2148356	1747257	1430985	1230602	1085611	887026

Table 9Aa Saturated Hydrocarbon GC data (Peak Areas) for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	nC26	nC27	nC28	nC29	nC30	nC31	nC32
3056	mud	bulk sample							
3056.5	swc	sandstone/sand	1045839	964226	796907	705124	486388	416096	216972
3061.7	ccp	shale/claystone	105566	103818	44592	44839	22908	33633	12175
3066.75	ccp	sandstone/sand	196748	159848	85124	89139	30169	79768	25397
3082.5	ccp	sandstone/sand	334466	238163	131392	104087	53662	66646	29933
3937.25	swc	sandstone/sand	359577	270528	149736	120496	71908	66234	67447
4000.25	swc	sandstone/sand	335791	249876	146547	108181	73244	59437	43590
4003.05	swc	siltstone	267268	207982	109631	89682	59900	47728	34797
4025.25	swc	sandstone/sand	148122	119123	47792	44107	44479	24518	14159
4045.75	swc	sandstone/sand	361760	286207	152942	120001	84415	70154	35768
4091.25	swc	sandstone/sand	552010	412792	255461	192254	141335	105172	73136

Sample ID	Spl type	Description	nC33	nC34	Sample number
3056	mud	bulk sample			192/0045-0
3056.5	swc	sandstone/sand	188734	115742	192/0028-1
3061.7	ccp	shale/claystone	10246	4348	192/0001-1
3066.75	ccp	sandstone/sand	20608	8562	192/0003-1
3082.5	ccp	sandstone/sand	33758	7496	192/0006-1
3937.25	swc	sandstone/sand	61202	27061	192/0029-1
4000.25	swc	sandstone/sand	56928	34763	192/0030-1
4003.05	swc	siltstone	66150	27172	192/0031-1
4025.25	swc	sandstone/sand	18076	12157	192/0032-1
4045.75	swc	sandstone/sand	45146	49027	192/0033-1
4091.25	swc	sandstone/sand	81730	65315	192/0034-1

Table 9Ac Quantitative Analysis data of the Saturated Fraction (mg/g sat) for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	nC15	nC16	iC18	nC17	Pr	nC18
3056	mud	bulk sample	0.0	0.0	0.0	0.0	0.0	0.0
3056.5	swc	sandstone/sand	6.6	11.4	3.4	13.8	8.7	14.4
3061.7	ccp	shale/claystone	29.4	26.6	6.3	12.5	6.0	8.6
3066.75	ccp	sandstone/sand	17.1	17.0	4.0	11.2	7.1	9.9
3082.5	ccp	sandstone/sand	13.7	17.5	4.1	12.2	6.5	11.2
3937.25	swc	sandstone/sand	27.0	30.2	10.2	29.5	23.9	27.8
4000.25	swc	sandstone/sand	12.9	18.0	5.7	18.5	14.0	19.0
4003.05	swc	siltstone	7.4	11.2	3.9	11.9	9.2	12.8
4025.25	swc	sandstone/sand	4.4	6.2	2.4	7.0	5.6	8.2
4045.75	swc	sandstone/sand	10.0	14.5	3.8	15.1	6.8	15.0
4091.25	swc	sandstone/sand	13.1	21.8	6.6	24.4	13.3	24.3

Sample ID	Spl type	Description	Ph	nC19	nC20	nC21	nC22	nC23
3056	mud	bulk sample	0.0	0.0	0.0	0.0	0.0	0.0
3056.5	swc	sandstone/sand	4.0	15.8	15.6	15.7	15.0	15.6
3061.7	ccp	shale/claystone	3.2	6.1	5.6	3.9	3.1	2.7
3066.75	ccp	sandstone/sand	2.5	9.7	9.5	9.6	9.7	8.7
3082.5	ccp	sandstone/sand	2.8	9.9	10.0	9.0	8.2	7.8
3937.25	swc	sandstone/sand	7.2	25.7	22.4	17.6	13.2	10.3
4000.25	swc	sandstone/sand	4.4	17.8	17.2	13.8	11.5	9.7
4003.05	swc	siltstone	3.3	12.1	11.7	8.7	7.1	5.7
4025.25	swc	sandstone/sand	2.9	8.2	7.8	6.2	4.8	3.9
4045.75	swc	sandstone/sand	3.2	14.0	13.3	10.1	8.2	6.9
4091.25	swc	sandstone/sand	5.0	23.3	20.8	16.9	13.9	11.9

Table 9Ac Quantitative Analysis data of the Saturated Fraction (mg/g sat) for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	nC24	nC25	nC26	nC27	nC28	nC29
3056	mud	bulk sample	0.0	0.0	0.0	0.0	0.0	0.0
3056.5	swc	sandstone/sand	15.3	15.3	13.4	12.4	10.2	9.1
3061.7	ccp	shale/claystone	2.2	1.4	1.5	1.5	0.6	0.6
3066.75	ccp	sandstone/sand	5.7	4.2	2.5	2.1	1.1	1.1
3082.5	ccp	sandstone/sand	6.7	6.0	4.1	2.9	1.6	1.3
3937.25	swc	sandstone/sand	8.6	7.0	4.3	3.2	1.8	1.4
4000.25	swc	sandstone/sand	8.7	7.4	4.6	3.4	2.0	1.5
4003.05	swc	siltstone	5.3	3.4	2.9	2.3	1.2	1.0
4025.25	swc	sandstone/sand	2.8	2.1	1.7	1.4	0.6	0.5
4045.75	swc	sandstone/sand	6.2	5.4	3.3	2.6	1.4	1.1
4091.25	swc	sandstone/sand	10.5	8.6	5.4	4.0	2.5	1.9

Sample ID	Spl type	Description	nC30	nC31	nC32	nC33	nC34	Sample number
3056	mud	bulk sample	0.0	0.0	0.0	0.0	0.0	192/0045-0
3056.5	swc	sandstone/sand	6.2	5.3	2.8	2.4	1.5	192/0028-1
3061.7	ccp	shale/claystone	0.3	0.5	0.2	0.1	0.1	192/0001-1
3066.75	ccp	sandstone/sand	0.4	1.0	0.3	0.3	0.1	192/0003-1
3082.5	ccp	sandstone/sand	0.7	0.8	0.4	0.4	0.1	192/0006-1
3937.25	swc	sandstone/sand	0.9	0.8	0.8	0.7	0.3	192/0029-1
4000.25	swc	sandstone/sand	1.0	0.8	0.6	0.8	0.5	192/0030-1
4003.05	swc	siltstone	0.7	0.5	0.4	0.7	0.3	192/0031-1
4025.25	swc	sandstone/sand	0.5	0.3	0.2	0.2	0.1	192/0032-1
4045.75	swc	sandstone/sand	0.8	0.6	0.3	0.4	0.4	192/0033-1
4091.25	swc	sandstone/sand	1.4	1.0	0.7	0.8	0.6	192/0034-1

Table 9Ba Saturated Hydrocarbon GC data (Ratios from peak areas) for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	Prist./ nC17	Prist./ Phyt.	(Prist./nC17)/ (Phyt./nC18)	CPI 1	Phytane/ nC18	nC17 /(nC17+nC27)	(Pristane+Phytane)/ (nC17+nC18)	Sample number
3056	mud	bulk sample								192/0045-0
3056.5	swc	sandstone/sand	0.63	2.19	2.27	1.11	0.28	0.53	0.45	192/0028-1
3061.7	ccp	shale/claystone	0.48	1.85	1.27	1.20	0.38	0.89	0.44	192/0001-1
3066.75	ccp	sandstone/sand	0.64	2.83	2.49	1.41	0.26	0.84	0.46	192/0003-1
3082.5	ccp	sandstone/sand	0.53	2.31	2.12	1.24	0.25	0.81	0.40	192/0006-1
3937.25	swc	sandstone/sand	0.81	3.30	3.11	1.21	0.26	0.90	0.54	192/0029-1
4000.25	swc	sandstone/sand	0.75	3.20	3.27	1.20	0.23	0.84	0.49	192/0030-1
4003.05	swc	siltstone	0.77	2.76	2.98	1.05	0.26	0.84	0.51	192/0031-1
4025.25	swc	sandstone/sand	0.80	1.96	2.29	1.10	0.35	0.84	0.56	192/0032-1
4045.75	swc	sandstone/sand	0.45	2.09	2.07	1.26	0.22	0.85	0.33	192/0033-1
4091.25	swc	sandstone/sand	0.55	2.65	2.64	1.17	0.21	0.86	0.38	192/0034-1

Table 9Ca Aromatic Hydrocarbon GC data (Peak Areas) for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	2.6+2.7											
			2MN	1MN	BPh	2EN	1EN	DMN	1.6DMN	1.5DMN	1.3.7TMN	1.3.6TMN	1.3.5TMN	
3056	mud	bulk sample												
3056.5	swc	sandstone/sand												
3061.7	ccp	shale/claystone												
3066.75	ccp	sandstone/sand												
3082.5	ccp	sandstone/sand												
3937.25	swc	sandstone/sand	34708	42426	27946				95324	131410	41077	63791	68643	51832
4000.25	swc	sandstone/sand	21918	30579	35877				84824	129557	47385	67239	72050	59587
4003.05	swc	siltstone	9613	14026	25646				64284	103063	39111	65549	71086	59344
4025.25	swc	sandstone/sand	7656	10793	13659				62030	83579	31005	62929	70552	57694
4045.75	swc	sandstone/sand	5214	7607	10627				40826	63821	25452	49298	52799	42323
4091.25	swc	sandstone/sand			11063				52355	87119	37852	90784	106627	86649

Sample ID	Spl type	Description	1.4.6+2.3.6								Sample number		
			TMN	P	3MP	2MP	9MP	1MP	DBT	4MDBT		2+3 MDBT	1MDBT
3056	mud	bulk sample											192/0045-0
3056.5	swc	sandstone/sand											192/0028-1
3061.7	ccp	shale/claystone											192/0001-1
3066.75	ccp	sandstone/sand											192/0003-1
3082.5	ccp	sandstone/sand											192/0006-1
3937.25	swc	sandstone/sand	56073	301985	101178	120432	152423	147538					192/0029-1
4000.25	swc	sandstone/sand	56077	453603	140927	161259	236656	202263					192/0030-1
4003.05	swc	siltstone	53747	417818	127804	146757	213727	181883					192/0031-1
4025.25	swc	sandstone/sand	52172	292226	104119	112243	150587	144655					192/0032-1
4045.75	swc	sandstone/sand	38954	182830	64595	75369	95182	87902					192/0033-1
4091.25	swc	sandstone/sand	91593	675029	256118	298415	356366	333419					192/0034-1

Table 9Cc Quantitative Analysis data of the Aromatic Fraction (mg/g aro) for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	P	3MP	2MP	9MP	1MP	Sample number
3056	mud	bulk sample	0.00	0.00	0.00	0.00	0.00	192/0045-0
3056.5	swc	sandstone/sand	0.00	0.00	0.00	0.00	0.00	192/0028-1
3061.7	ccp	shale/claystone	0.00	0.00	0.00	0.00	0.00	192/0001-1
3066.75	ccp	sandstone/sand	0.00	0.00	0.00	0.00	0.00	192/0003-1
3082.5	ccp	sandstone/sand	0.00	0.00	0.00	0.00	0.00	192/0006-1
3937.25	swc	sandstone/sand	14.26	4.78	5.69	7.20	6.96	192/0029-1
4000.25	swc	sandstone/sand	15.84	4.92	5.63	8.26	7.06	192/0030-1
4003.05	swc	siltstone	10.22	3.13	3.59	5.23	4.45	192/0031-1
4025.25	swc	sandstone/sand	5.05	1.80	1.94	2.60	2.50	192/0032-1
4045.75	swc	sandstone/sand	6.47	2.29	2.67	3.37	3.11	192/0033-1
4091.25	swc	sandstone/sand	9.00	3.42	3.98	4.75	4.45	192/0034-1

Table 9Da Aromatic Hydrocarbon GC data (Ratios from peak areas) for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	MNR	DMNR	BPhR	2/1MP	MPI1	MPI2	Rc
3056	mud	bulk sample							
3056.5	swc	sandstone/sand							
3061.7	ccp	shale/claystone							
3066.75	ccp	sandstone/sand							
3082.5	ccp	sandstone/sand							
3937.25	swc	sandstone/sand	0.82	2.32	0.21	0.82	0.55	0.60	0.73
4000.25	swc	sandstone/sand	0.72	1.79	0.28	0.80	0.51	0.54	0.70
4003.05	swc	siltstone	0.69	1.64	0.25	0.81	0.51	0.54	0.70
4025.25	swc	sandstone/sand	0.71	2.00	0.16	0.78	0.55	0.57	0.73
4045.75	swc	sandstone/sand	0.69	1.60	0.17	0.86	0.57	0.62	0.74
4091.25	swc	sandstone/sand		1.38	0.13	0.90	0.61	0.66	0.77

Sample ID	Spl type	Description	DBT/ Ph	4/1 MDBT	(3+2)/ 1MDBT	F1	F2	Sample number
3056	mud	bulk sample						192/0045-0
3056.5	swc	sandstone/sand						192/0028-1
3061.7	ccp	shale/claystone						192/0001-1
3066.75	ccp	sandstone/sand						192/0003-1
3082.5	ccp	sandstone/sand						192/0006-1
3937.25	swc	sandstone/sand				0.42	0.23	192/0029-1
4000.25	swc	sandstone/sand				0.41	0.22	192/0030-1
4003.05	swc	siltstone				0.41	0.22	192/0031-1
4025.25	swc	sandstone/sand				0.42	0.22	192/0032-1
4045.75	swc	sandstone/sand				0.43	0.23	192/0033-1
4091.25	swc	sandstone/sand				0.45	0.24	192/0034-1

Table 10 Stable Carbon Isotope Composition of EOM and Fractions for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	EOM	Sat	Aro	NSO	Asph	CV	Sample Ref. number
3056.5	swc	sandstone/sand	-25.95	-27.54	-28.41	-	-	-5.04	192/0028-1

Table 11a Triterpane data from m/z 191 fragmentograms
 (Saturated Hydrocarbon Fraction GC-MS SIR analysis)
 Triterpane Peak Heights for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	19/3	20/3	21/3 (N)	22/3 (O)	23/3 (P)	24/3 (Q)	25/3 (R)
3056	mud	bulk sample	406.4	255.8	347.1	149.3	512.9	380.5	172.7
3056.5	swc	sandstone/sand	24074.8	14254.4	14777.9	3337.1	14688.4	7121.8	2321.8
3066.75	ccp	sandstone/sand	19395.7	11307.2	10632.0	2709.6	9301.5	4664.5	1277.6
3082.5	ccp	sandstone/sand	10217.6	6578.8	6547.2	1469.4	5209.8	2773.2	857.7
4000.25	swc	sandstone/sand	12528.4	11730.7	7295.1	1868.8	5596.2	2937.3	878.7
4045.75	swc	sandstone/sand	5198.3	5607.1	5036.0	1437.8	4935.3	2471.7	849.9

Sample ID	24/4 (S)	26/3 (T)	26/3S	28/3R	28/3S	29/3R	29/3S	27Ts (A)
3056	267.3	107.0	104.7	55.1	75.0	108.2	106.8	289.4
3056.5	20465.9	2001.0	2004.9	1790.9	1890.4	4210.2	2824.2	22859.3
3066.75	13704.6	939.5	1143.7	611.9	643.1	2927.9	1343.1	12338.9
3082.5	5538.3	637.4	765.7	450.7	617.5	1627.1	961.7	5168.3
4000.25	8474.8	524.5	635.3	436.5	328.1	1216.8	753.0	5673.5
4045.75	2445.5	410.2	465.7	308.3	364.4	382.7	443.5	3897.1

Sample ID	27Tm (B)	28ab (Z)	25nor30ab (Z1)	29ab (C)	29Ts (C1)	30d (X)	29ba (D)	30O
3056	216.9	102.4	84.4	475.8	146.8	48.0	60.3	
3056.5	35821.0	17290.4	5762.6	102192.6	27342.2	10926.4	17791.2	
3066.75	24606.9	7312.6	1446.8	56492.9	13827.8	4002.6	11478.6	
3082.5	15333.1	3249.2	712.4	29266.4	5905.6	1615.3	7263.0	
4000.25	5662.7	817.8	1201.3	14251.3	4035.9	4158.1	1197.7	
4045.75	1602.5	315.0	410.8	4313.1	2176.1	1361.4	384.2	

Table 11a Triterpane data from m/z 191 fragmentograms
(Saturated Hydrocarbon Fraction GC-MS SIR analysis)
Triterpane Peak Heights for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	19/3	20/3	21/3 (N)	22/3 (O)	23/3 (P)	24/3 (Q)	25/3 (R)
3056	mud	bulk sample	406.4	255.8	347.1	149.3	512.9	380.5	172.7
3056.5	swc	sandstone/sand	24074.8	14254.4	14777.9	3337.1	14688.4	7121.8	2321.8
3066.75	ccp	sandstone/sand	19395.7	11307.2	10632.0	2709.6	9301.5	4664.5	1277.6
3082.5	ccp	sandstone/sand	10217.6	6578.8	6547.2	1469.4	5209.8	2773.2	857.7
4000.25	swc	sandstone/sand	12528.4	11730.7	7295.1	1868.8	5596.2	2937.3	878.7
4045.75	swc	sandstone/sand	5198.3	5607.1	5036.0	1437.8	4935.3	2471.7	849.9

Sample ID	24/4 (S)	26/3 (T)	26/3S	28/3R	28/3S	29/3R	29/3S	27Ts (A)
3056	267.3	107.0	104.7	55.1	75.0	108.2	106.8	289.4
3056.5	20465.9	2001.0	2004.9	1790.9	1890.4	4210.2	2824.2	22859.3
3066.75	13704.6	939.5	1143.7	611.9	643.1	2927.9	1343.1	12338.9
3082.5	5538.3	637.4	765.7	450.7	617.5	1627.1	961.7	5168.3
4000.25	8474.8	524.5	635.3	436.5	328.1	1216.8	753.0	5673.5
4045.75	2445.5	410.2	465.7	308.3	364.4	382.7	443.5	3897.1

Sample ID	27Tm (B)	28ab (Z)	25nor30ab (Z1)	29ab (C)	29Ts (C1)	30d (X)	29ba (D)	30O
3056	216.9	102.4	84.4	475.8	146.8	48.0	60.3	
3056.5	35821.0	17290.4	5762.6	102192.6	27342.2	10926.4	17791.2	
3066.75	24606.9	7312.6	1446.8	56492.9	13827.8	4002.6	11478.6	
3082.5	15333.1	3249.2	712.4	29266.4	5905.6	1615.3	7263.0	
4000.25	5662.7	817.8	1201.3	14251.3	4035.9	4158.1	1197.7	
4045.75	1602.5	315.0	410.8	4313.1	2176.1	1361.4	384.2	

Table 11a Triterpane data from m/z 191 fragmentograms
 (Saturated Hydrocarbon Fraction GC-MS SIR analysis)
 Triterpane Peak Heights for NOCS 6403/6-1

Statoil

Sample ID	30ab (E)	30ba (F)	30G	31abS (G)	31abR (H)	31ba (I)	32abS (J1)	32abR (J2)
3056	604.7	87.5	51.8	182.0	126.6	36.8	116.4	90.1
3056.5	162342.4	23989.6	2634.3	46771.9	33498.1	8964.1	18713.2	11204.6
3066.75	96074.7	14998.4	1415.3	26318.6	19156.7	6282.4	7384.4	5814.7
3082.5	42513.6	8670.7	803.8	13326.1	9984.6	3500.8	4060.5	3056.1
4000.25	16643.8	1703.0	548.1	5924.3	4490.6	700.7	3109.9	1974.5
4045.75	3927.3	455.0	221.8	1601.5	1133.0	158.0	831.1	538.8

Sample ID	33abS (K1)	33abR (K2)	34abS (L1)	34abR (L2)	35abS (M1)	35abR (M2)	Sample number
3056	87.8	61.2	53.3	47.1	61.8		192/0045-0
3056.5	6852.2	4010.4	2734.9	1737.9	1083.9	725.9	192/0028-1
3066.75	2334.7	1847.3	1086.6	898.4	487.3	393.7	192/0003-1
3082.5	1605.2	1169.3	782.3	529.3	341.8	240.2	192/0006-1
4000.25	1312.1	762.9	606.8	358.7	317.2	189.9	192/0030-1
4045.75	509.2	299.8	273.1	162.7	205.7	136.5	192/0033-1

Table 11b Triterpane data from m/z 177 fragmentograms
 (Saturated Hydrocarbon Fraction GC-MS SIR analysis)
 Triterpane Peak Heights for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	25nor28ab	25nor30ab	Sample number
3056	mud	bulk sample	81.7	43.4	192/0045-0
3056.5	swc	sandstone/sand	11411.7	2844.8	192/0028-1
3066.75	ccp	sandstone/sand	4916.1	464.3	192/0003-1
3082.5	ccp	sandstone/sand	2693.2	266.1	192/0006-1
4000.25	swc	sandstone/sand	264.9	299.0	192/0030-1
4045.75	swc	sandstone/sand	240.1	213.1	192/0033-1

Table 11c Sterane data from m/z 217 fragmentograms
 (Saturated Hydrocarbon Fraction GC-MS SIR analysis)
 Sterane peak heights for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	21a (u)	22a (v)	27dbS (a)	27dbR (b)	27daR (c)	27daS (d)	28dbS (e)	28dbR (f)
3056	mud	bulk sample	582.3	305.3	770.4	849.8	188.5	180.3	315.3	165.6
3056.5	swc	sandstone/sand	34401.5	10643.8	45603.8	35683.4	14068.3	12734.1	32069.2	21488.2
3066.75	ccp	sandstone/sand	22624.4	6674.9	19940.3	22733.5	6123.0	4834.0	11710.3	6916.3
3082.5	ccp	sandstone/sand	9384.3	2914.8	8963.4	10744.4	2781.7	2074.2	4992.1	3147.3
4000.25	swc	sandstone/sand	4778.7	2204.3	2508.4	3620.6	944.2	646.3	1058.0	631.6
4045.75	swc	sandstone/sand	3603.6	1584.4	1748.4	2635.8	614.4	425.7	626.5	383.4

Sample ID	28daR+27aaS (g)	29dbS+27bbR (h)	27bbS+28daS (i)	27aaR (j)	29dbR (k)	29daR (l)	28aaS (m)	28bbR+29daS (n)
3056	584.7	442.6	246.8	1324.7	179.0	81.0	87.8	127.6
3056.5	20357.2	41028.0	15274.8	40447.7	21190.8	6747.5	5272.2	12935.5
3066.75	9316.5	10575.6	3732.3	23328.3	5594.2	1600.1	1629.3	3870.6
3082.5	8736.7	5806.4	2021.4	15450.2	2789.6	911.4	904.8	1984.4
4000.25	6747.2	2108.0	905.5	17656.7	834.4	299.7	302.2	768.1
4045.75	6206.3	1322.3	467.1	15962.7	543.4	185.6	199.0	533.9

Sample ID	28bbS (o)	28aaR (p)	29aaS (q)	29bbR (r)	29bbS (s)	29aaR (t)	Sample number
3056	163.9	77.3	92.4	153.0	114.3	119.5	192/0045-0
3056.5	9814.4	10906.2	9036.3	12032.1	6962.2	17147.3	192/0028-1
3066.75	2398.7	5167.8	3041.5	4347.7	1895.7	10300.7	192/0003-1
3082.5	1314.0	2174.1	1376.9	2073.0	1030.7	4020.7	192/0006-1
4000.25	539.6	603.3	609.9	727.3	613.4	1425.0	192/0030-1
4045.75	395.6	473.4	311.8	567.1	353.4	895.6	192/0033-1

Table 11d Sterane data from m/z 218 fragmentograms
 (Saturated Hydrocarbon Fraction GC-MS SIR analysis)
 Sterane peak heights for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	27bbR (h)	27bbS (i)	28bbR (n)	28bbS (o)	29bbR (r)	29bbS (s)	30bbR (x)	30bbS (y)	Sample number
3056	mud	bulk sample	471.6	337.8	207.1	202.7	220.3	172.2	55.5	53.3	192/0045-0
3056.5	swc	sandstone/sand	26668.7	13745.4	16374.0	13716.5	13201.6	10946.1	1741.5	1481.1	192/0028-1
3066.75	ccp	sandstone/sand	7159.7	3752.2	4545.6	3606.6	3931.7	2989.6	490.1	497.1	192/0003-1
3082.5	ccp	sandstone/sand	4205.1	2096.1	2273.9	1805.3	2040.3	1762.3	279.3	182.6	192/0006-1
4000.25	swc	sandstone/sand	1994.3	1147.3	933.5	818.5	1014.0	947.8	149.9	123.8	192/0030-1
4045.75	swc	sandstone/sand	1353.1	767.8	680.4	596.8	671.4	635.6	113.3	115.5	192/0033-1

Table 11e Triterpane data from m/z 191 fragmentograms
 (Saturated Hydrocarbon Fraction GC-MS SIR analysis)
 Amount of Triterpanes in ng/g oil (ppb) for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	19/3	20/3	21/3 (N)	22/3 (O)	23/3 (P)	24/3 (Q)	25/3 (R)
3056	mud	bulk sample	1111.9	699.9	949.6	408.5	1403.4	1041.2	472.6
3056.5	swc	sandstone/sand	3722.6	2204.1	2285.1	516.0	2271.2	1101.2	359.0
3066.75	ccp	sandstone/sand	1716.8	1000.8	941.1	239.8	823.3	412.9	113.1
3082.5	ccp	sandstone/sand	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4000.25	swc	sandstone/sand	7417.2	6944.9	4318.9	1106.4	3313.1	1739.0	520.2
4045.75	swc	sandstone/sand	2607.4	2812.5	2526.1	721.2	2475.6	1239.8	426.3

Sample ID	24/4 (S)	26/3 (T)	26/3S	28/3R	28/3S	29/3R	29/3S	27Ts (A)
3056	731.3	292.7	286.5	150.6	205.3	296.0	292.1	791.9
3056.5	3164.6	309.4	310.0	276.9	292.3	651.0	436.7	3534.7
3066.75	1213.0	83.2	101.2	54.2	56.9	259.2	118.9	1092.1
3082.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4000.25	5017.3	310.5	376.1	258.4	194.3	720.4	445.8	3358.9
4045.75	1226.7	205.7	233.6	154.6	182.8	192.0	222.5	1954.8

Sample ID	27Tm (B)	28ab (Z)	25nor30ab (Z1)	29ab (C)	29Ts (C1)	30d (X)	29ba (D)	30O
3056	593.4	280.2	230.9	1301.8	401.8	131.3	164.9	
3056.5	5538.9	2673.6	891.1	15801.8	4227.9	1689.5	2751.0	
3066.75	2178.0	647.3	128.1	5000.3	1223.9	354.3	1016.0	
3082.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4000.25	3352.5	484.2	711.2	8437.2	2389.4	2461.7	709.1	
4045.75	803.8	158.0	206.1	2163.4	1091.5	682.9	192.7	

Table 11e Triterpane data from m/z 191 fragmentograms
 (Saturated Hydrocarbon Fraction GC-MS SIR analysis)
 Amount of Triterpanes in ng/g oil (ppb) for NOCS 6403/6-1

Statoil

Sample ID	30ab (E)	30ba (F)	30G	31abS (G)	31abR (H)	31ba (I)	32abS (J1)	32abR (J2)
3056	1654.5	239.3	141.7	497.8	346.3	100.7	318.6	246.4
3056.5	25102.6	3709.5	407.3	7232.2	5179.7	1386.1	2893.6	1732.5
3066.75	8503.8	1327.5	125.3	2329.5	1695.6	556.1	653.6	514.7
3082.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4000.25	9853.6	1008.2	324.5	3507.4	2658.6	414.8	1841.1	1168.9
4045.75	1969.9	228.2	111.3	803.3	568.3	79.3	416.9	270.3

Sample ID	33abS (K1)	33abR (K2)	34abS (L1)	34abR (L2)	35abS (M1)	35abR (M2)	Sample number
3056	240.2	167.5	145.9	128.9	169.1		192/0045-0
3056.5	1059.5	620.1	422.9	268.7	167.6	112.2	192/0028-1
3066.75	206.6	163.5	96.2	79.5	43.1	34.8	192/0003-1
3082.5	0.0	0.0	0.0	0.0	0.0	0.0	192/0006-1
4000.25	776.8	451.7	359.3	212.4	187.8	112.4	192/0030-1
4045.75	255.4	150.4	137.0	81.6	103.2	68.5	192/0033-1

Table 11f Triterpane data from m/z 177 fragmentograms
 (Saturated Hydrocarbon Fraction GC-MS SIR analysis)
 Amount of Triterpanes in ng/g oil (ppb) for NOCS 6403/6-1

Sample ID	Spl type	Description	25nor28ab	25nor30ab	Sample number
3056	mud	bulk sample	223.6	118.9	192/0045-0
3056.5	swc	sandstone/sand	1764.6	439.9	192/0028-1
3066.75	ccp	sandstone/sand	435.1	41.1	192/0003-1
3082.5	ccp	sandstone/sand	0.0	0.0	192/0006-1
4000.25	swc	sandstone/sand	156.8	177.0	192/0030-1
4045.75	swc	sandstone/sand	120.5	106.9	192/0033-1

Table 11g Sterane data from m/z 217 fragmentograms
 (Saturated Hydrocarbon Fraction GC-MS SIR analysis)
 Amount of steranes in ng/g oil (ppb) for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	21a (u)	22a (v)	27dbS (a)	27dbR (b)	27daR (c)	27daS (d)	28dbS (e)
3056	mud	bulk sample	1593.1	835.3	2107.8	2325.1	515.7	493.2	862.6
3056.5	swc	sandstone/sand	5319.4	1645.8	7051.6	5517.6	2175.3	1969.0	4958.8
3066.75	ccp	sandstone/sand	2002.5	590.8	1765.0	2012.2	542.0	427.9	1036.5
3082.5	ccp	sandstone/sand	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4000.25	swc	sandstone/sand	2829.1	1305.0	1485.0	2143.5	559.0	382.6	626.4
4045.75	swc	sandstone/sand	1807.6	794.7	877.0	1322.1	308.2	213.5	314.2

Sample ID	28dbR (f)	28daR+27aaS (g)	29dbS+27bbR (h)	27bbS+28daS (i)	27aaR (j)	29dbR (k)	29daR (l)	28aaS (m)
3056	453.2	1599.6	1210.9	675.2	3624.4	489.7	221.7	240.1
3056.5	3322.7	3147.8	6344.1	2361.9	6254.3	3276.7	1043.4	815.2
3066.75	612.2	824.6	936.1	330.4	2064.8	495.2	141.6	144.2
3082.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4000.25	373.9	3994.5	1248.0	536.1	10453.3	494.0	177.5	178.9
4045.75	192.3	3113.1	663.3	234.3	8006.9	272.6	93.1	99.8

Sample ID	28bbR+29daS (n)	28bbS (o)	28aaR (p)	29aaS (q)	29bbR (r)	29bbS (s)	29aaR (t)	Sample number
3056	349.0	448.3	211.5	252.8	418.7	312.7	326.9	192/0045-0
3056.5	2000.2	1517.6	1686.4	1397.3	1860.5	1076.5	2651.4	192/0028-1
3066.75	342.6	212.3	457.4	269.2	384.8	167.8	911.7	192/0003-1
3082.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	192/0006-1
4000.25	454.8	319.5	357.1	361.1	430.6	363.1	843.7	192/0030-1
4045.75	267.8	198.4	237.4	156.4	284.5	177.3	449.2	192/0033-1

Table 11h Sterane data from m/z 218 fragmentograms
 (Saturated Hydrocarbon Fraction GC-MS SIR analysis)
 Sterane Quantified in ng/g oil (ppb) for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	27bbR (h)	27bbS (i)	28bbR (n)	28bbS (o)	29bbR (r)	29bbS (s)	30bbR (x)	30bbS (y)	Sample number
3056	mud	bulk sample	1290.4	924.3	566.7	554.7	602.7	471.1	151.8	145.9	192/0045-0
3056.5	swc	sandstone/sand	4123.7	2125.4	2531.9	2120.9	2041.3	1692.6	269.3	229.0	192/0028-1
3066.75	ccp	sandstone/sand	633.7	332.1	402.3	319.2	348.0	264.6	43.4	44.0	192/0003-1
3082.5	ccp	sandstone/sand	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	192/0006-1
4000.25	swc	sandstone/sand	1180.7	679.2	552.7	484.6	600.3	561.1	88.8	73.3	192/0030-1
4045.75	swc	sandstone/sand	678.7	385.1	341.3	299.3	336.8	318.8	56.8	57.9	192/0033-1

Table 11i Triterpane data from m/z 191 fragmentograms
 (Saturated Hydrocarbon Fraction GC-MS SIR analysis)
 Ratios from peak heights for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	Ratio 1	Ratio 2	Ratio 3	Ratio 4	Ratio 5	Ratio 6	Ratio 7
3056	mud	bulk sample	0.75	0.43	0.24	0.79	0.44	0.08	0.17
3056.5	swc	sandstone/sand	1.57	0.61	0.16	0.63	0.39	0.07	0.11
3066.75	ccp	sandstone/sand	1.99	0.67	0.18	0.59	0.37	0.04	0.08
3082.5	ccp	sandstone/sand	2.97	0.75	0.23	0.69	0.41	0.04	0.08
4000.25	swc	sandstone/sand	1.00	0.50	0.24	0.86	0.46	0.25	0.05
4045.75	swc	sandstone/sand	0.41	0.29	0.27	1.10	0.52	0.35	0.08

Sample ID	Ratio 8	Ratio 9	Ratio 10	Ratio 11	Ratio 12	Ratio 13	Ratio 14	Sample number
3056	0.22	0.14	0.63	0.87	0.44	0.14	56.39	192/0045-0
3056.5	0.17	0.10	0.04	0.87	0.39	0.16	62.55	192/0028-1
3066.75	0.13	0.07	0.05	0.86	0.38	0.17	55.95	192/0003-1
3082.5	0.11	0.07	0.07	0.83	0.42	0.22	57.06	192/0006-1
4000.25	0.06	0.05	0.18	0.91	0.46	0.09	61.17	192/0030-1
4045.75	0.07	0.07	0.63	0.90	0.52	0.10	60.67	192/0033-1

Table 11j Sterane data from m/z 217 fragmentograms
 (Saturated Hydrocarbon Fraction GC-MS SIR analysis)
 Ratios from peak heights for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	Ratio 1	Ratio 2	Ratio 3	Ratio 4	Ratio 5	Ratio 6	Ratio 7
3056	mud	bulk sample	0.37	43.60	71.61	2.40	0.74	0.65	0.49
3056.5	swc	sandstone/sand	0.53	34.51	59.20	1.32	0.68	0.50	0.36
3066.75	ccp	sandstone/sand	0.46	22.80	48.34	2.48	0.67	0.60	0.50
3082.5	ccp	sandstone/sand	0.37	25.51	53.49	2.14	0.69	0.59	0.48
4000.25	swc	sandstone/sand	0.12	29.97	56.85	1.92	0.69	0.67	0.57
4045.75	swc	sandstone/sand	0.10	25.82	60.40	2.10	0.75	0.71	0.61

Sample ID	Ratio 8	Ratio 9	Ratio 10	Sample number
3056	0.56	0.77	2.24	192/0045-0
3056.5	0.42	0.53	1.11	192/0028-1
3066.75	0.32	0.30	0.61	192/0003-1
3082.5	0.37	0.34	0.77	192/0006-1
4000.25	0.40	0.43	0.94	192/0030-1
4045.75	0.43	0.35	1.03	192/0033-1

Saturated Fraction GCMS Ratio definitions (SIM)

In Tables	Triterpanes	Steranes
Ratio 1	27Tm/27Ts	27dβS/(27dβS+27ααR)
Ratio 2	27Tm/(27Tm+27Ts)	29ααS/(29ααS+29ααR)
Ratio 3	27Tm/(27Tm+30αβ+30βα)	2*(29ββR+29ββS)/(29ααS+29ααR+2*[29ββR+29ββS])
Ratio 4	29αβ/30αβ	(27dβS+27dβR+27dαR+27dαS)/(29dβS+29dβR+29dαR+29dαS)
Ratio 5	29αβ/(29αβ+30αβ)	(29ββR+29ββS)/(29ααS+29ββR+29ββS)
Ratio 6	30d/30αβ	21α+22α/(21α+22α+29ααS+29ββR+29ββS+29ααR)
Ratio 7	28αβ/30αβ	21α+22α/(21α+22α+28dαS+28ααS+29dαR+29ααS+29ββR+29ββS+29ααR)
Ratio 8	28αβ/29αβ	(29ββR+29ββS)/(29ααS+29ββR+29ββS+29ααR)
Ratio 9	28αβ/(28αβ+30αβ)	29ααS/29ααR
Ratio 10	24/3/30αβ	(29ββR+29ββS)/29ααR
Ratio 11	30αβ/(30βα+30αβ)	
Ratio 12	(29αβ+29βα)/(29αβ+29βα+30αβ+30βα)	
Ratio 13	(29βα+30βα)/(29αβ+30αβ)	
Ratio 14	32αβS/(32αβS+32αβR) %	

Table 11k GC-MS-MRM Triterpane peak heights for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	27Ts (A)	27Tm (B)	28ab (Z)	29ab (C)	30d (X)	29ba (D)	30ab (E)	30ba (F)	31abS (G)	31abR (H)
3056	mud	bulk sample	15.6	20.2	8.4	35.2	4.3	7.6	60.1	10.9	37.3	19.2
3056.5	swc	sandstone/sand	3293.1	4376.3	2282.1	18909.7	1838.8	2555.2	30937.6	2693.3	10576.6	7196.3
3066.75	ccp	sandstone/sand	9109	13991.1	3370.8	37266.1	1949.7	4371.3	64853.7	4638.7	11722.5	9076.1
4000.25	swc	sandstone/sand	1767.9	1175.5	55.1	3473.6	949.6	191.3	3945.3	278.4	1360	1157.4

Sample ID	31ba (I)	32abS (J1)	32abR (J2)	33abS (K1)	33abR (K2)	34abS (L1)	34abR (L2)	35abS (M1)	35abR (M2)	Sample number
3056	10.8									192/0045-0
3056.5	1351.3									192/0028-1
3066.75	2189.6									192/0003-1
4000.25	141.3									192/0030-1

Table 11l GC-MS-MRM Triterpane Ratios for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	Ratio 1	Ratio 2	Ratio 3	Ratio 4	Ratio 5	Ratio 6	Ratio 7	Ratio 8	Ratio 9
3056	mud	bulk sample	1.30	0.56	0.22	0.59	0.37	0.07	0.14	0.24	0.12
3056.5	swc	sandstone/sand	1.33	0.57	0.12	0.61	0.38	0.06	0.07	0.12	0.07
3066.75	ccp	sandstone/sand	1.54	0.61	0.17	0.57	0.36	0.03	0.05	0.09	0.05
4000.25	swc	sandstone/sand	0.66	0.40	0.22	0.88	0.47	0.24	0.04	0.02	0.01

Sample ID	Ratio 10	Ratio 11	Ratio 12	Sample number
3056	0.85	0.38	0.19	192/0045-0
3056.5	0.92	0.39	0.11	192/0028-1
3066.75	0.93	0.37	0.09	192/0003-1
4000.25	0.93	0.46	0.06	192/0030-1

Table 11m GC-MS-MRM Sterane peak heights for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	27dbS (a)	27dbR (b)	27daR (c)	27daS (d)	28dbS (e)	28dbR (f)	28daR (g)	27aaS (g')	29dbS (h)
3056	mud	bulk sample	101.4	334.7	27.4	25.9	56.5	12.6	7.4	73.3	28.2
3056.5	swc	sandstone/sand	4647.7	9086.4	1447.4	1820.1	4884.7	4025.5	1578.8	2623.6	6982.9
3066.75	ccp	sandstone/sand	30066.6	37213.0	4324.7	3453.1	8697.8	6833.7	2271.6	8295.3	9062.5
4000.25	swc	sandstone/sand	1774.3	3085.3	334.6	250.3	375.8	256.0	102.5	2172.9	575.5

Sample ID	27bbR (h')	27bbS (i)	28daS (i')	27aaR (j)	29dbR (k)	29daR (l)	28aaS (m)	28bbR (n)	29daS (n')	28bbS (o)	28aaR (p)
3056	37.8	24.1	5.9	176.4	17.7	7.3	5.0	16.0	11.9	14.3	14.5
3056.5	2374.2	1176.1	1610.9	8476.3	3042.3	966.2	705.6	2440.5	1500.6	1173.2	1901.1
3066.75	3276.6	1768.4	2173.9	28106.3	4260.7	955.1	1009.2	4051.8	1964.1	1719.1	4178.8
4000.25	524.1	213.6	92.2	12332.7	263.3	89.2	80.6	302.2	130.3	161.1	189.4

Sample ID	29aaS (q)	29bbR (r)	29bbS (s)	29aaR (t)	Sample number
3056	13.9	16.5	7.1	9.2	192/0045-0
3056.5	947.8	1252.1	851.5	2444.1	192/0028-1
3066.75	1212.5	1555.7	751.1	6131.6	192/0003-1
4000.25	93.9	157.8	87.1	260.6	192/0030-1

Table 11n GC-MS-MRM Sterane Ratios for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	Ratio 1	Ratio 2	Ratio 3	Ratio 4	Ratio 5	Ratio 6	Ratio 7	Ratio 8	Sample number
3056	mud	bulk sample	0.37	60.16	67.17	7.07	0.63	0.51	1.51	2.57	192/0045-0
3056.5	swc	sandstone/sand	0.35	27.94	55.37	1.27	0.69	0.38	0.39	0.86	192/0028-1
3066.75	ccp	sandstone/sand	0.52	16.51	38.58	4.09	0.66	0.24	0.20	0.38	192/0003-1
4000.25	swc	sandstone/sand	0.13	26.48	58.02	4.43	0.72	0.41	0.36	0.94	192/0030-1

Table 11o GC-MS-MRM C26 Sterane Peak Heights from m/z 358-217, for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	24nordbS	24nordbR	27nordbS	27nordbR	24noraas	24norbbR	24norbbS	24noraar	21nor
3056	mud	bulk sample	2.6	4.0	11.3	6.0	4.2	5.7	4.6	3.5	6.0
3056.5	swc	sandstone/sand	62.0	55.1	99.0	145.5	168.4	78.8	97.7	205.5	102.3
3066.75	ccp	sandstone/sand	923.9	621.1	819.2	775.1	789.3	386.8	305.1	454.6	259.1
4000.25	swc	sandstone/sand	40.5	46.0	71.5	110.0	130.2	90.4	59.3	65.2	49.1

Sample ID	27noraas	27norbbR	27norbbS	27noraar	Sample number
3056	4.4	4.7	5.5	3.5	192/0045-0
3056.5	153.5	67.0	58.8	94.7	192/0028-1
3066.75	268.7	118.3	113.4	192.3	192/0003-1
4000.25	47.5	44.6	29.5	29.6	192/0030-1

Table 11p GC-MS-MRM C26 Sterane Ratios, m/z 358-217 for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	Ratio D	Ratio N	Ratio A	Sample number
3056	mud	bulk sample	0.28	0.50	0.41	192/0045-0
3056.5	swc	sandstone/sand	0.32	0.60	0.52	192/0028-1
3066.75	ccp	sandstone/sand	0.49	0.74	0.60	192/0003-1
4000.25	swc	sandstone/sand	0.32	0.70	0.56	192/0030-1

Ratio D: $(24nord\beta S+24nord\beta R) / (24nord\beta S+24nord\beta bR+27nord\beta S+27nord\beta R)$ Ratio N: $(24noraas+24nor\beta\beta R+24nor\beta\beta S+24noraar) / (24noraas+24nor\beta\beta R+24nor\beta\beta S+24noraar+27noraas+27nor\beta\beta R+27nor\beta\beta S+27noraar)$ Ratio A: $(24nord\beta S+24nord\beta R+24noraas+24nor\beta\beta R+24nor\beta\beta S+24noraar) /$ $(24nord\beta S+24nord\beta R+27nord\beta S+27nord\beta R+24noraas+24nor\beta\beta R+24nor\beta\beta S+24noraar+27noraas+27nor\beta\beta R+27nor\beta\beta S+27noraar)$

Saturated Fraction GCMS Ratio definitions (MRM)

In Tables	Triterpanes	Steranes
Ratio 1	$27Tm/27Ts$	$27d\beta S/(27d\beta S+27\alpha\alpha R)$
Ratio 2	$27Tm/(27Tm+27Ts)$	$29\alpha\alpha S/(29\alpha\alpha S+29\alpha\alpha R)$
Ratio 3	$27Tm/(27Tm+30\alpha\beta+30\beta\alpha)$	$2*(29\beta\beta R+29\beta\beta S)/(29\alpha\alpha S+29\alpha\alpha R+2*[29\beta\beta R+29\beta\beta S])$
Ratio 4	$29\alpha\beta/30\alpha\beta$	$(27d\beta S+27d\beta R+27d\alpha R+27d\alpha S)/(29d\beta S+29d\beta R+29d\alpha R+28\beta\beta R)$
Ratio 5	$29\alpha\beta/(29\alpha\beta+30\alpha\beta)$	$(29\beta\beta R+29\beta\beta S)/(29\beta\beta R+29\beta\beta S+29\alpha\alpha S)$
Ratio 6	$30d/30\alpha\beta$	$(29\beta\beta R+29\beta\beta S)/(29\alpha\alpha S+29\beta\beta R+29\beta\beta S+29\alpha\alpha R)$
Ratio 7	$28\alpha\beta/30\alpha\beta$	$29\alpha\alpha S/29\alpha\alpha R$
Ratio 8	$28\alpha\beta/29\alpha\beta$	$29\beta\beta R+29\beta\beta S/29\alpha\alpha R$
Ratio 9	$28\alpha\beta/(28\alpha\beta+30\alpha\beta)$	
Ratio 10	$30\alpha\beta/(30\beta\alpha+30\alpha\beta)$	
Ratio 11	$(29\alpha\beta+29\beta\alpha)/(29\alpha\beta+29\beta\alpha+30\alpha\beta+30\beta\alpha)$	
Ratio 12	$(29\beta\alpha+30\beta\alpha)/(29\alpha\beta+30\alpha\beta)$	

Table 12a: Aromatic Peak Height data from m/z 142/156 fragmentograms
 (Aromatic Hydrocarbon Fraction GC-MS SIR analysis)
 C1 and C2 Naphthalenes peak heights for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	2MN	1MN	2EN	1EN	2.6+2.7-DMN	1.3+1.7-DMN	1.6-DMN	2.3+1.4-DMN
3056	mud	bulk sample	945.6	3045	9552.3	4676.1	22915.5	40324.2	27337.5	11306
3056.5	swc	sandstone/sand	252.5	1632.5	2246.1		7296.2	34787.2	24806.3	16367.6
3066.75	ccp	sandstone/sand	26.8	210.2	1135.2		4436.9	23876.9	16235.5	10818.3
3082.5	ccp	sandstone/sand	8.8	17.3	12.5		39.9	742.8	569.6	667.1
4000.25	swc	sandstone/sand	15608.1	54287.8	18266.6	18488.3	263758.2	819209.2	690889.8	348234.6
4045.75	swc	sandstone/sand	1296.5	7143.1	5493.5	5973.3	104662.8	313645.1	240972.9	110555.2

Sample ID	Spl type	Description	2MN	1MN	2EN	1.5-DMN	1.2-DMN	Sample
3056	mud	bulk sample	945.6	3045	9552.3	9114.8	6285.6	192/0045-0
3056.5	swc	sandstone/sand	252.5	1632.5	2246.1	13139.4	14129.3	192/0028-1
3066.75	ccp	sandstone/sand	26.8	210.2	1135.2	9696.8	10905.2	192/0003-1
3082.5	ccp	sandstone/sand	8.8	17.3	12.5		485.6	192/0006-1
4000.25	swc	sandstone/sand	15608.1	54287.8	18266.6	190218.8	204912.8	192/0030-1
4045.75	swc	sandstone/sand	1296.5	7143.1	5493.5	76508.3	69411.6	192/0033-1

Table 12b: Aromatic Peak Height data from m/z 170 fragmentograms
 (Aromatic Hydrocarbon Fraction GC-MS SIR analysis)
 C3 Naphthalenes peak heights for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	1.3.7-TMN	1.3.6-TMN	1.3.5+1.4.6	2.3.6-TMN	1.6.7+1.2.7	1.2.6-TMN	1.2.4-TMN	1.2.5-TMN	Sample
3056	mud	bulk sample	17739.8	21009.7	19372.6	7721.4	9971.3	7057.2	3971.4	13634.8	192/0045-0
3056.5	swc	sandstone/sand	22817.6	45860.0	47163.6	23379.8	38932.5	36378.8	11919.9	188938.5	192/0028-1
3066.75	ccp	sandstone/sand	16122.9	26836.3	27950.5	14584.2	25860.0	25001.4	8648.8	166256.4	192/0003-1
3082.5	ccp	sandstone/sand	3966.8	7440.3	8816.5	4093.0	8556.7	7514.6	2833.9	56857.1	192/0006-1
4000.25	swc	sandstone/sand	191721.0	361104.6	332092.3	279317.8	305778.9	332553.3	43982.0	409099.9	192/0030-1
4045.75	swc	sandstone/sand	162463.2	250479.4	230630.9	162346.0	176292.9	146102.0	28565.0	180352.5	192/0033-1

Table 12c Aromatic Peak Height data from m/z 178/192 fragmentograms
 (Aromatic Hydrocarbon Fraction GC-MS SIR analysis)
 Phenanthrene and methyl phenanthrene peak heights for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	P	3MP	2MP	9MP	1MP	Sample
3056	mud	bulk sample	8505.7	167.0	190.8	355.8	350.6	192/0045-0
3056.5	swc	sandstone/sand	366128.1	65646.0	80442.0	92840.1	84287.6	192/0028-1
3066.75	ccp	sandstone/sand	228369.4	37927.7	40884.9	55871.6	50044.6	192/0003-1
3082.5	ccp	sandstone/sand	131249.5	20752.4	22275.4	35238.6	30635.5	192/0006-1
4000.25	swc	sandstone/sand	4018243.0	601186.9	704233.8	851578.1	898591.6	192/0030-1
4045.75	swc	sandstone/sand	1536040.0	289655.8	310689.9	400732.8	385729.2	192/0033-1

Table 12d: Aromatic Peak Height data from m/z 184/198 fragmentograms
 (Aromatic Hydrocarbon Fraction GC-MS SIR analysis)
 Dibenzothiophene and Methyl Dibenzothiophene peak heights for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	DBT	4 MDBT	2+3 MDBT	1 MDBT	Sample
3056	mud	bulk sample	28.5	17.2	9.5	7.2	192/0045-0
3056.5	swc	sandstone/sand	7114.4	3026.5	2007.6	3683.2	192/0028-1
3066.75	ccp	sandstone/sand	3950.9	1274.5	839.2	1873.2	192/0003-1
3082.5	ccp	sandstone/sand	1534.1	619.4	373.9	846.1	192/0006-1
4000.25	swc	sandstone/sand	162436.9	40355.8	17366.3	13407.8	192/0030-1
4045.75	swc	sandstone/sand	48482.9	17456.9	6515.5	5287.5	192/0033-1

Table 12e Triaromatic Sterane data from m/z 231 fragmentograms
 (Aromatic Hydrocarbon Fraction GC-MS SIR analysis)
 Triaromatic Sterane peak heights for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	a1	b1	c1	d1	e1	f1	g1	Sample number
3056	mud	bulk sample	18.5	9.2	7.5	21.2	16.7	14.5	16.5	192/0045-0
3056.5	swc	sandstone/sand	5142.6	2571.8	3698.5	15737.4	4567.0	8230.2	3986.0	192/0028-1
3066.75	ccp	sandstone/sand	1729.2	907.2	1246.8	6158.0	1497.1	3562.9	1759.3	192/0003-1
3082.5	ccp	sandstone/sand	1122.6	606.3	915.0	4441.8	1085.6	2599.2	1052.5	192/0006-1
4000.25	swc	sandstone/sand	5982.6	2813.7	149.0	356.0	151.2	127.9	192.1	192/0030-1
4045.75	swc	sandstone/sand	2517.6	936.2	44.1	104.0	58.3	41.9	70.3	192/0033-1

Table 12f Monoaromatic Sterane data from m/z 253 fragmentograms
 (Aromatic Hydrocarbon Fraction GC-MS SIR analysis)
 Monoaromatic Sterane peak heights for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	A1	B1	C1	D1	E1	F1	G1	H1	I1	Sample number
3056	mud	bulk sample	30.4	19.1	51.3	53.5	144.4	20.8	92.4	48.7	13.9	192/0045-0
3056.5	swc	sandstone/sand	7848.2	4383.6	7480.3	6034.7	24735.2	6452.8	16818.8	6750.5	1156.7	192/0028-1
3066.75	ccp	sandstone/sand	3820.4	1594.8	1773.8	1374.3	6581.8	1630.5	4358.7	1414.7	221.6	192/0003-1
3082.5	ccp	sandstone/sand	1387.0	632.4	742.4	612.7	3188.1	799.9	2331.1	799.8	176.1	192/0006-1
4000.25	swc	sandstone/sand	340.8	146.3	60.5	50.2	159.8	66.9	184.1	94.8	44.1	192/0030-1
4045.75	swc	sandstone/sand	159.9	69.8	20.2	20.7	68.8	27.6	70.1	33.6	23.2	192/0033-1

Table 12g: Amount of C1-C2-naphthalenes in ng/g oil (ppb) from m/z 142/156 of Aro fraction for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	2MN	1MN	2EN	1EN	2.6+2.7-DMN	1.3+1.7-DMN	1.6-DMN
3056	mud	bulk sample	612.40	1972.00	6186.20	3028.30	14840.50	26114.60	17704.20
3056.5	swc	sandstone/sand	47.90	309.90	426.40		1385.10	6603.90	4709.20
3066.75	ccp	sandstone/sand	2.90	22.40	120.90		472.60	2543.20	1729.30
3082.5	ccp	sandstone/sand	0.80	1.60	1.10		3.60	67.40	51.70
4000.25	swc	sandstone/sand	12390.40	43096.10	14500.90	14676.90	209383.00	650324.90	548459.20
4045.75	swc	sandstone/sand	755.50	4162.70	3201.40	3481.00	60993.10	182779.40	140429.00

Sample ID	Spl type	Description	2MN	1MN	2EN	2.3+1.4-DMN	1.5-DMN	1.2-DMN	Sample number
3056	mud	bulk sample	612.40	1972.00	6186.20	7322.00	5902.90	4070.70	192/0045-0
3056.5	swc	sandstone/sand	47.90	309.90	426.40	3107.20	2494.30	2682.30	192/0028-1
3066.75	ccp	sandstone/sand	2.90	22.40	120.90	1152.30	1032.80	1161.50	192/0003-1
3082.5	ccp	sandstone/sand	0.80	1.60	1.10	60.50		44.10	192/0006-1
4000.25	swc	sandstone/sand	12390.40	43096.10	14500.90	276444.20	151004.20	162668.90	192/0030-1
4045.75	swc	sandstone/sand	755.50	4162.70	3201.40	64427.00	44585.90	40450.20	192/0033-1

Table 12h: Amount of C3-naphthalenes in ng/g oil (ppb) from m/z 170 of Aro fraction for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	1.3.7-TMN	1.3.6-TMN	1.3.5+1.4.6	2.3.6-TMN	1.6.7+1.2.7	1.2.6-TMN	1.2.4-TMN	1.2.5-TMN
3056	mud	bulk sample	11488.6	13606.2	12546.0	5000.5	6457.6	4570.3	2571.9	8830.1
3056.5	swc	sandstone/sand	4331.6	8705.9	8953.4	4438.3	7390.8	6906.0	2262.8	35867.5
3066.75	ccp	sandstone/sand	1717.3	2858.4	2977.1	1553.4	2754.4	2663.0	921.2	17708.3
3082.5	ccp	sandstone/sand	359.9	675.0	799.9	371.3	776.3	681.8	257.1	5158.6
4000.25	swc	sandstone/sand	152196.7	286661.0	263629.7	221735.0	242741.0	263995.7	34914.9	324761.8
4045.75	swc	sandstone/sand	94676.8	145969.0	134402.1	94608.5	102736.2	85142.2	16646.5	105102.0

Sample ID	Spl type	Description	1.3.7-TMN	1.3.6-TMN	1.3.5+1.4.6	Sample number
3056	mud	bulk sample	11488.6	13606.2	12546.0	192/0045-0
3056.5	swc	sandstone/sand	4331.6	8705.9	8953.4	192/0028-1
3066.75	ccp	sandstone/sand	1717.3	2858.4	2977.1	192/0003-1
3082.5	ccp	sandstone/sand	359.9	675.0	799.9	192/0006-1
4000.25	swc	sandstone/sand	152196.7	286661.0	263629.7	192/0030-1
4045.75	swc	sandstone/sand	94676.8	145969.0	134402.1	192/0033-1

Table 12i: Amount of phenanthrene and methyl phenanthrenes in ng/g oil (ppb) from m/z 178/192 of Aro fraction for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	P	3MP	2MP	9MP	1MP	Sample number
3056	mud	bulk sample	5508.4	108.1	123.6	230.5	227.0	192/0045-0
3056.5	swc	sandstone/sand	69504.7	12462.0	15270.9	17624.5	16000.9	192/0028-1
3066.75	ccp	sandstone/sand	24324.1	4039.8	4354.7	5951.0	5330.4	192/0003-1
3082.5	ccp	sandstone/sand	11908.1	1882.8	2021.0	3197.2	2779.5	192/0006-1
4000.25	swc	sandstone/sand	3189861.0	477249.0	559052.3	676020.8	713342.2	192/0030-1
4045.75	swc	sandstone/sand	895140.5	168799.4	181057.2	233530.5	224787.0	192/0033-1

Table 12j: Amount of dibenzothiophene and methyl dibenzothiophenes in ng/g oil (ppb) from m/z 184/198 of Aro fraction for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	DBT	4 MDBT	2+3 MDBT	1 MDBT	Sample number
3056	mud	bulk sample	18.4	11.1	6.1	4.7	192/0045-0
3056.5	swc	sandstone/sand	1350.6	574.5	381.1	699.2	192/0028-1
3066.75	ccp	sandstone/sand	420.8	135.8	89.4	199.5	192/0003-1
3082.5	ccp	sandstone/sand	139.2	56.2	33.9	76.8	192/0006-1
4000.25	swc	sandstone/sand	128949.7	32036.3	13786.2	10643.7	192/0030-1
4045.75	swc	sandstone/sand	28253.8	10173.2	3797.0	3081.3	192/0033-1

Table 12k: Amount of triaromatic steranes in ng/g oil (ppb) from m/z 231 of Aro fraction for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	a1	b1	c1	d1	e1	f1	g1	Sample number
3056	mud	bulk sample	12.0	5.9	4.9	13.7	10.8	9.4	10.7	192/0045-0
3056.5	swc	sandstone/sand	976.3	488.2	702.1	2987.5	867.0	1562.4	756.7	192/0028-1
3066.75	ccp	sandstone/sand	184.2	96.6	132.8	655.9	159.5	379.5	187.4	192/0003-1
3082.5	ccp	sandstone/sand	101.9	55.0	83.0	403.0	98.5	235.8	95.5	192/0006-1
4000.25	swc	sandstone/sand	4749.2	2233.7	118.3	282.6	120.0	101.6	152.5	192/0030-1
4045.75	swc	sandstone/sand	1467.1	545.6	25.7	60.6	34.0	24.4	41.0	192/0033-1

Table 12l: Amount of monoaromatic steranes in ng/g oil (ppb) from m/z 253 of Aro fraction for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	A1	B1	C1	D1	E1	F1
3056	mud	bulk sample	19.7	12.4	33.2	34.6	93.5	13.5
3056.5	swc	sandstone/sand	1489.9	832.2	1420.0	1145.6	4695.7	1225.0
3066.75	ccp	sandstone/sand	406.9	169.9	188.9	146.4	701.0	173.7
3082.5	ccp	sandstone/sand	125.8	57.4	67.4	55.6	289.3	72.6
4000.25	swc	sandstone/sand	270.6	116.1	48.0	39.8	126.8	53.1
4045.75	swc	sandstone/sand	93.2	40.7	11.8	12.1	40.1	16.1

Sample ID	Spl type	Description	G1	H1	I1	Sample number
3056	mud	bulk sample	59.8	31.6	9.0	192/0045-0
3056.5	swc	sandstone/sand	3192.8	1281.5	219.6	192/0028-1
3066.75	ccp	sandstone/sand	464.3	150.7	23.6	192/0003-1
3082.5	ccp	sandstone/sand	211.5	72.6	16.0	192/0006-1
4000.25	swc	sandstone/sand	146.2	75.2	35.0	192/0030-1
4045.75	swc	sandstone/sand	40.9	19.6	13.5	192/0033-1

Table 12m Triaromatic Sterane data from m/z 231 fragmentograms (Aromatic Hydrocarbon Fraction GC-MS SIR analysis) Ratios from peak heights for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	a1/(a1+g1)	b1/(b1+g1)	(a1+b1)/(a1+b1+c1+d1+e1+f1+g1)	a1/(a1+e1+f1+g1)	a1/(a1+d1)	Sample number	
3056	mud	bulk sample	0.53	0.36		0.27	0.28	0.47	192/0045-0
3056.5	swc	sandstone/sand	0.56	0.39		0.18	0.23	0.25	192/0028-1
3066.75	ccp	sandstone/sand	0.50	0.34		0.16	0.20	0.22	192/0003-1
3082.5	ccp	sandstone/sand	0.52	0.37		0.15	0.19	0.20	192/0006-1
4000.25	swc	sandstone/sand	0.97	0.94		0.90	0.93	0.94	192/0030-1
4045.75	swc	sandstone/sand	0.97	0.93		0.92	0.94	0.96	192/0033-1

Table 12n Monoaromatic Sterane data from m/z 253 fragmentograms
 (Aromatic Hydrocarbon Fraction GC-MS SIR analysis)
 Ratios from peak heights for NOCS 6403/6-1

Statoil

Sample ID	Spl type	Description	A1/(A1+E1)	B1/(B1+E1)	A1/(A1+E1+G1)	(A1+B1)/(A1+B1+C1+D1+E1+F1+G1+H1+I1)	Sample number
3056	mud	bulk sample	0.17	0.12	0.11	0.10	192/0045-0
3056.5	swc	sandstone/sand	0.24	0.15	0.16	0.15	192/0028-1
3066.75	ccp	sandstone/sand	0.37	0.20	0.26	0.24	192/0003-1
3082.5	ccp	sandstone/sand	0.30	0.17	0.20	0.19	192/0006-1
4000.25	swc	sandstone/sand	0.68	0.48	0.50	0.42	192/0030-1
4045.75	swc	sandstone/sand	0.70	0.50	0.54	0.46	192/0033-1

Table 14a Gas Composition Data for NOCS 6403/6-1

Statoil

Sample ID (L.Depth,m)	Spl type	C1%	C2%	C3%	iC4%	nC4%	iC5%	nC5%	CO2%	Sum C1-C5	Wetness	iC4/nC4	ppm
2413	Gas	82.00	0.63	0.14	0.03	0.02	0.00	0.00	17.20	82.80	1.00	1.10	19983
2417	Gas	95.70	0.83	0.22	0.04	0.05	0.00	0.00	3.10	96.90	1.20	0.94	7503
2440	Gas	93.60	0.92	0.27	0.06	0.07	0.00	0.00	5.10	94.90	1.40	0.81	4360
2587	Gas	93.70	1.40	0.38	0.06	0.06	0.01	0.01	4.30	95.70	2.00	0.91	10076
2598	Gas	96.30	1.50	0.38	0.06	0.06	0.01	0.01	1.70	98.30	2.00	1.00	19862
2742	Gas	93.70	2.20	0.78	0.17	0.17	0.05	0.03	3.00	97.00	3.40	0.97	10757
2820	Gas	93.80	2.00	0.48	0.07	0.07	0.01	0.02	3.60	96.40	2.70	1.00	8061
2858	Gas	96.30	1.80	0.46	0.07	0.07	0.01	0.01	1.30	98.70	2.40	0.98	14355
2886	Gas	94.60	2.10	0.59	0.08	0.08	0.01	0.01	2.50	97.50	2.90	1.00	10832
2944	Gas	93.70	2.30	0.67	0.09	0.10	0.01	0.01	3.20	96.80	3.20	0.92	7536
2977	Gas	96.50	1.80	0.44	0.05	0.06	0.01	0.01	1.10	98.90	2.40	0.99	18807
2983	Gas	97.10	1.80	0.39	0.04	0.04	0.01	0.00	0.64	99.40	2.30	1.00	39334
2983	Gas	98.10	1.40	0.26	0.03	0.03	0.00	0.00	0.26	99.70	1.70	0.96	64937
3091	Gas	93.00	1.90	0.49	0.06	0.06	0.00	0.01	4.50	95.50	2.60	1.10	5379
3220	Gas	86.30	1.80	0.50	0.11	0.14	0.04	0.05	11.00	89.00	2.90	0.78	2623
3437	Gas	91.90	2.00	0.07	0.13	0.14	0.03	0.03	5.70	94.30	2.50	0.95	5076
3490	Gas	93.60	2.00	0.75	0.15	0.16	0.05	0.06	3.20	96.80	3.10	0.95	6952
3496	Gas	93.00	1.90	0.77	0.14	0.15	0.04	0.04	3.90	96.10	3.10	0.99	5755
3919	Gas	88.50	2.60	1.70	0.17	0.23	0.03	0.48	6.40	93.60	5.00	0.73	2528
3928	Gas	90.60	2.50	1.60	0.16	0.22	0.03	0.04	4.80	95.20	4.80	0.73	3089
3982	Gas	88.40	2.60	1.60	0.16	0.23	0.03	0.05	7.00	93.00	4.90	0.67	2265
4003	Gas	89.20	2.40	1.30	0.12	0.19	0.02	0.03	6.60	93.40	4.40	0.62	3297
4019	Gas	91.70	2.20	0.98	0.08	0.12	0.01	0.02	4.90	95.10	3.50	0.68	6222

Table 14b Gas Isotope Data for NOCS 6403/6-1

Statoil

Sample ID (L.Depth,m)	Spl type	C1 d13C	C2 d13C	C3 d13C	i-C4 d13C	n-C4 d13C	CO2 d13C	C1 dD
2413	Gas	-41.3						-160
2417	Gas	-41.3						
2440	Gas	-41.1						
2587	Gas	-39.3						-152
2598	Gas	-39.4						-151
2742	Gas	-38.2						-149
2820	Gas	-37.5						-149
2858	Gas	-37.9						-148
2886	Gas	-37.8						-150
2944	Gas	-37.4						-155
2977	Gas	-38.3						-150
2983	Gas	-38.5	-30.5					-145
2983	Gas	-38.8	-30.5					-146
3091	Gas	-37.1						
3220	Gas	-36.4						
3437	Gas	-35.5						
3490	Gas	-35.0						
3496	Gas	-35.3						
3919	Gas	-34.9						
3928	Gas	-34.9						
3982	Gas	-35.2						
4003	Gas	-35.2						
4019	Gas	-35.5						