

Table 4.3 MDT PRESSURE MEASUREMENTS

FORMATION PRESSURE -MDT WELL: 6406/2-6 A				RUN: 1A , TLC			DATE: 27.06.00 - 30.06.00					
TEST #	DEPTH mMD RT	DEPTH m TVD MSL	RES. PRESS (BAR) HP- gauge	PORE PRESS (g/cm3) ref .RT	HYD. PRESS BEFORE (BAR)	HYD. PRESS AFTER (BAR)	PRESS. GAUGE Schlum. file no.	MOB. mD/CP	Good seal	Temp °C	COMMENTS	
1	4830.50	4496.10	864.67	1.95	894.99	895.24	1	0.6	Y	157.9	Poor.	
2	4831.00	4496.50	861.97	1.94	894.49	894.85	1	1.9	Y	157.5	Poor.	
3	5037.00	4659.06			941.49	940.88	1				Lost seal	
4	5037.00	4659.06			942.36	942.41	1				Lost seal	
5	5042.96	4663.57			943.61	943.64	1				Lost seal	
6	5105.00	4709.78	885.86	1.91	956.23		2	414.3	Y	167.7	Good. HC sample	
7	5111.04	4714.25	885.73	1.91	958.7		2	20	Y	167.5	Good.	
8	5111.00	4714.25	885.65	1.91	959.97	959.43	2	62.3	Y	169.1	Good. Attempted to sample, high drawdown,flowline plugged?	
9	5118.00	4719.43	886.24	1.90	961.31	960.30	2	167	Y	168.7	Good.	
10	5124.00	4723.90	886.33	1.90	962.81	962.30	2	94.6	Y	169.0	Good.	
11	5124.04	4723.92	886.40	1.90	962.81	962.30	2	96.8	Y	169.2	Good. Attempted to sample, high drawdown,flowline plugged?	
12	5137.00	4733.5	888.41	1.90	966.19	965.91	2	8.2	Y	169.3	Moderate.	
13	5137.04	4733.54			966.51	966.00					Lost seal	
14	5137.49	4733.99			966.52	966.21					Lost seal	
15	5159.06	4749.95	888.91	1.90	971.77	971.79	2	33.9	Y	169.5	Good.	
Number of pretests: 7 + 3 pretests prior to sampling				Good pretests: 10				Number of sample chambers filled: 5 x 450cc				
Hydrostatic gradient in logging interval: 2.02 - 2.07 g/cc. Min / Max. pore pressure gradient in interval ref. RT: 1.90 / 1.95 g/cc												
Comments: No offshore analysis was performed												

Table 4.4 SAMPLING OVERVIEW

Depth m MD RT	Sample Size	Chamber Code & Serial No.	Shut-in pressure Bar	Opening pressure Bar	Shut-in temp °C	Pump Vol. Litres	Avg. Pump Draw down bar	Mobility mD/cP	Sampling			Transferr- ed to bottles	Comments
									Date	Start	Stop		
5105m HC sample	450 cc	MPSR-# 756 bottle 3	880 +260	360,0	167,2	35.0	5-9	414,0	29/06.00	21:45	21:51	5061-EA	MRMS #92, bottle #3
	450cc	MPSR-# 782 bottle 4	881+250	260,0	167,4	+ 5.0	4-9	2,0	29/06.00	22:10	22:24	5166-EA	MRMS #92, bottle #4 Pump stopped working, had to switch to back-up pump
	450 cc	MPSR-# 970 bottle 5	880 +250	220,0	167,4	+ 4.6	5-10	"	29/06.00	22:47	22:50	6136-MA	MRMS #92, bottle #5
	450 cc	MPSR-# 802 bottle 6	879 +240	260,0	167,4	+ 3.5	5-8	"	29/06.00	22:55	22:58	4812-EA	MRMS #92, bottle #6
	450 cc	MPSR-# 796 bottle 1	880 +214	0,0	167,5	+ 10.0	5-8	"	29/06.00	23:03	23:08		MRMS #63, bottle #1 No pressure at surface

Well: 6406/2-6A
 Field: Ragnfrid
 Rig: Transocean Arctic

DRILLING FLUIDS PROGRAM

HOLE		CASING		MUD TYPE	MW [SG]	LGS [Kg/m³]	10 sec. Gel [Pa]	10 min. Gel [Pa]	Fann 3 rpm	O / W ratio	PV [mPa]	API FL [ml]	HTHP FL [ml]	MBT [Kg/m³]	pH	KCl [Kg/m³]	Glycol [Vol%]	ES [Volt]	Funnel Visc. [sec]	Usage Volume [m³]	
SIZE	TVD MD	SIZE	TVD MD																		
9 7/8"	601 601																				
				<i>Comments: Section finished in original well.</i>																	
36"	416.5 416.5	30"	413.5 413.5																		
				<i>Comments: Section finished in original well.</i>																	
24"	1413.9 1414	18 5/8"	1408.9 1409																		
				<i>Comments: Section finished in original well.</i>																	
17 1/2"	2760.6 2761	13 3/8"	2748.6 2749																		
				<i>Comments: Section finished in original well.</i>																	
12 1/4"	4390.5 4673	9 7/8"	4382.9 4664	<i>Spec. no. 48</i>	1.7 - 1.86	84 - 163	5.5 - 6.5	8.5 - 11	9 - 10	73/27 - 85/15	36 - 46		1.6 - 2.8						615 - 1120		485
				<i>Comments: Started with a MW of 1.70 sg. Increased MW as hole dictated to a maximum MW 1.85 sg. Oil water ratio was increased from 73/27 to a maximum of 85/15 to reduce the rheology profile and the ECD values.</i>																	
8 1/2"	4842.2 5251	7"	N/A N/A	<i>Spec. no. 48</i>	2.03 - 2.05	86 - 162	4.5 - 5	7.5 - 8.5	8	84/16 - 86/14	39 - 50		1.2 - 1.8						951 - 1277		175
				<i>Comments: Started the section with a mudweight of 2.05 sg and reduced it to 2.03 sg at 4959 to reduce ECD and downhole losses. Maintained a high oil/water ratio for the same purpose. During wireline logging some variations in the mudweight was observed. The reason for these variations could be dynamic sagging or a too low concentration of clay to suspend the barite. The focus was kept on maintaining a low PV.</i>																	

REGISTRERT

09 JAN. 2001

OLJEDIREKTORATET

BA 01-73-1

Geochemical evaluation of well 6406/2-6A

TEK-F&T1110

1 INTRODUCTION

This report presents the results of a geochemical evaluation of the 6406/2-6A well, Ragnfrid Field, Norwegian Sea (Figure 1).

The 6406/2-6A well was sidetracked from 6406/2-6, which was drilled in 1999, just below the 13³/₈" casing, which had been set at 2748m MDRT. The well is deviated such that there is a 409m difference between MD and TVD at TD. Versapro oil-based mud was used to drill the entire well section.

The total numbers of analyses carried out during the course of the study are as follows:

Analysis	Cuttings	Cores	MDT Fluids	Muds	Total
Sample preparation	52	12			64
TOC content	43				43
Rock-Eval	43	12			55
Vitrinite reflectance	8	1			9
Visual kerogen	9				9
Pyrolysis-GC	6				6
Thermal extract GC	4				4
Solvent extraction	3	2		3	8
Asphaltene precipitation	3	2	1	1	7
Iatroscan			1		1
MPLC separation	3	2	1	1	7
Topping			1		1
Whole oil/extract GC			1	3	4
Saturate GC	3	2	1	1	7
Aromatic GC			1		1
Saturate GC-MS		2	1	1	4
Aromatic GC-MS			1		1
Carbon isotopes			1		1
Gas composition			1		1
Gas isotopes			1		1

Full details of the analytical programme on a sample-by-sample basis are presented in Table 1. The analyses were carried out by Geolab Nor a.s., with the exceptions of vitrinite reflectance and gas analyses, which were carried out by IFE. All analytical work was carried out in accordance with the guidelines given in "The Norwegian Industry Guide to Organic Geochemical Analyses, 3rd edition (1993). The analytical data are presented in Appendix 1.

	Sample Depth	Sample Type	Extraction Cleaning	Lithology Description	Vitrinite Reflectance	Kerogen Description	TOC Content	Rock-Eval	Thermal Extract GC	Pyrolysis-GC	Whole Oil/Extract GC	Solvent Extraction	Bulk Composition	Saturate GC	Aromatic GC	Saturate GC-MS	Aromatic GC-MS	Carbon Isotopes	Gas Composition	Gas Isotopes
Rock Samples																				
	2800	Cuttings	x	x	x	x														
	3200	Cuttings	x	x	x	x														
	3600	Cuttings	x	x	x	x														
	4000	Cuttings	x	x	x	x														
	4400	Cuttings	x	x	x	x														
	4620	Cuttings		x																
	4671	Cuttings		x																
	4673	Cuttings		x																
	4740	Cuttings	x	x			x	x						x	x	x				
	4749	Cuttings	x	x			x	x				x								
	4752	Cuttings	x	x			x	x												
	4755	Cuttings	x	x	x	x	x	x												
	4758	Cuttings	x	x			x	x												
	4761	Cuttings	x	x			x	x												
	4764	Cuttings	x	x			x	x												
	4767	Cuttings	x	x			x	x												
	4770	Cuttings	x	x			x	x												
	4773	Cuttings	x	x			x	x												
	4776	Cuttings	x	x			x	x												
	4779	Cuttings	x	x			x	x												
	4782	Cuttings	x	x			x	x												
	4785	Cuttings	x	x			x	x												
	4788	Cuttings	x	x			x	x												
	4791	Cuttings	x	x			x	x												
	4794	Cuttings	x	x			x	x												
	4797	Cuttings	x	x			x	x												
	4800	Cuttings	x	x			x	x												
	4803	Cuttings	x	x			x	x												
	4806	Cuttings	x	x			x	x												
	4809	Cuttings	x	x			x	x												
	4812	Cuttings	x	x			x	x												
	4815	Cuttings	x	x			x	x												
	4818	Cuttings	x	x			x	x												
	4821	Cuttings	x	x			x	x												
	4824	Cuttings	x	x			x	x												
	4827	Cuttings	x	x			x	x												
	4842	Cuttings		x																
	4935	Cuttings	x	x	x	x	x	x												
	4950	Cuttings	x	x			x	x												
	4953	Cuttings	x	x			x	x												
	4956	Cuttings	x	x			x	x												
	4959	Cuttings	x	x			x	x												
	4962	Cuttings	x	x			x	x												
	4971	Cuttings	x	x			x	x												
	4977	Cuttings	x	x			x	x												
	4980	Cuttings	x	x			x	x												
	4983	Cuttings	x	x			x	x												
	4986	Cuttings	x	x			x	x												
	4989	Cuttings	x	x			x	x												
	5016	Cuttings	x	x			x	x												
	5061	Cuttings	x	x			x	x												
	5103	Cuttings	x	x	x	x	x	x												
	5123,82	Core		x				x						x	x	x				
	5124,38	Core		x				x						x	x	x				
	5127,15	Core		x				x												
	5130,96	Core		x				x												

Table 1 Geochemical analytical programme

Formation	Sample Depth	Sample Type	Extraction Cleaning	Lithology Description	Vitrinite Reflectance	Kerogen Description	TOC Content	Rock-Eval	Thermal Extract GC	Pyrolysis-GC	Whole Oil/Extract GC	Solvent Extraction	Bulk Composition	Saturate GC	Aromatic GC	Saturate GC-MS	Aromatic GC-MS	Carbon Isotopes	Gas Composition	Gas Isotopes
	5133,17	Core		x				x												
	5134,88	Core		x	x			x												
	5135,58	Core		x				x												
	5139,25	Core		x				x												
	5139,55	Core		x				x												
	5142,87	Core		x				x												
	5144,91	Core		x				x												
	5148,61	Core		x				x												
Wireline samples																				
	5105	Gas/cond									x		x	x	x	x	x	x	x	x
Mud samples																				
	4602	Mud									x	x								
	4857	Mud									x	x	x	x		x				
	5200	Mud									x	x								
			48	64	9	9	43	55	4	6	4	8	7	7	1	4	1	1	1	1

Table 1 Geochemical analytical programme

Terpanes

Depth	Sample Type	22S	TSTM	TTX	30D	30AB-HOP	28AB	TRICY	TETRACY	35H_34H	29H_30H	DEMET	GAMMA
5105	Cond.	0.43	-	-	0.63	0.79	-	-	-	-	0.53	-	0.27
5123.82	Core	0.59	0.04	-	-	0.82	0.00	0.12	0.07	0.61	0.72	0.01	0.00
5124.38	Core	0.60	0.05	-	-	0.82	0.00	0.14	0.08	0.47	0.75	0.01	0.00
4857	Mud	0.57	0.04	-	-	0.80	-	0.18	0.09	0.98	0.72	-	0.00

Steranes

Depth	Sample Type	20S	BB	C27BB	C28BB	C29BB	C30BB	DIAST
5105	Cond.	0.36	0.61	23	29	48	0.01	0.50
5123.82	Core	0.26	0.26	26	43	32	0.02	0.20
5124.38	Core	0.27	0.26	26	44	30	0.01	0.28
4857	Mud	0.29	0.30	26	43	31	-	0.51

Table 2 Saturated hydrocarbon biomarker ratios

GEOCHEMICAL DATA REPORT

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TITLE

WELL 6406/2-6A, Standard Geochemical Study

AUTHOR(S)

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GEOLAB PROJECT NO.

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REPORT NO./FILE

PAGE

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Comments

This data report has been sub-divided into three sections:

1. Rocks: cores and cuttings (all cuttings were washed, uncrushed source rocks cuttings were also Soxtec-extracted for a short period before analysis).
2. Condensate and Gas
3. Muds

The following points should be noted:

- a. The well was drilled with a Versapro oil-based mud. Consequently a large number of samples for source rock analysis were solvent extracted before screening analyses. This involved taking aliquots of washed shale cuttings and performing Soxtec extraction on them using DCM/MeOH (93:7). The normal Soxtec extraction program is shortened to ½ hour boiling and 1½ hour rinsing (normally 1 hour boiling and 2 hours rinsing). Both sandstones and cuttings which were analysed were also specially cleaned using Deconex involving washing twice with a strong deconex solution and drying.
- b. The central part of the core samples from the Tofte (i.e. 5123.82 m and 5124.38 m) were selected for extraction, de-asphalteneing, MPLC, GC and GC-MS.
- c. The GC-MS analysis of the saturated fraction of the condensate was repeated. This was requested owing to the interference of n-alkanes (due to the very low amounts of the biomarkers relative to n-alkanes). The rerun was performed using higher resolution than the standard method for normal black oils.

Table 1 Analytical Program for NOCS Well 6406/2-6A (rock samples)

Sample Depth (m)	Sample Type	Sample Code	Lithology Description	Picking for screening	Prevepreparing (Kjemematriale)	Prevepreparing (Losningsmiddel-Ekstraksjon)	Leco TOC	RockEval	GHM Thermal Extraction /Pyrolysis-GC	Picking for Extraction	Topping	Iatroscan	SOXTEC Extraction	MPLC & Deasphaltene#	EOM GC	Whole Oil GC	Sat GC (Q or non-Q)	Aro GC (Non Quantitative)	Sat GCMS (Q or non-Q)	Aro GCMS (Non-Q)	Isotope of fractions §	API Gravity (Westlab)	Vitrinite Reflectance	Visual Kerogen	Gas composition and isotopes (IFE)
Table nos.			3				5	5				8	8	8	13	9	9	11	12	10	17	4	7	14	
2800	c	U07/0013-1	x			x																	x	x	
3200	c	U07/0015-1	x			x																	x	x	
3600	c	U07/0017-1	x			x																	x	x	
4000	c	U07/0019-1	x			x																	x	x	
4400	c	U07/0021-1	x			x																	x	x	
4620	c	U07/0023-2	x						x	x			x	x		x									
4671	c	U07/0024-2	x						x																
4673	c	U07/0025-2	x						x	x			x	x		x									
4740	c	U07/0026-1	x			x	x	x																	
4749	c	U07/0027-1	x			x	x	x	x																
4752	c	U07/0028-1	x			x	x	x																	
4755	p	U07/0029-1	x			x	x	x															x	x	
4758	p	U07/0030-1	x			x	x	x	x																
4761	p	U07/0031-1	x			x	x	x																	
4764	p	U07/0032-1	x			x	x	x																	
4767	p	U07/0033-1	x			x	x	x																	
4770	p	U07/0034-1	x			x	x	x	x																
4773	p	U07/0035-1	x			x	x	x																	
4776	p	U07/0036-1	x			x	x	x																	
4779	p	U07/0037-1	x			x	x	x																	
4782	p	U07/0038-1	x			x	x	x																	
4785	p	U07/0039-1	x			x	x	x																	
4788	p	U07/0040-1	x			x	x	x																	
4791	p	U07/0041-1	x			x	x	x																	
4794	p	U07/0042-1	x			x	x	x																	
4797	p	U07/0043-1	x			x	x	x																	

Table 1 Analytical Program for NOCS Well 6406/2-6A (rock samples)

Sample Depth (m)	Sample Type	Sample Code	Lithology Description	Picking for screening	Prevepreparing (Kjemenatriale)	Prevepreparing (Losningsmiddel-Ekstraksjon)	Leco TOC	RockEval	GHM Thermal Extraction /Pyrolysis-GC	Picking for Extraction	Topping	Iatroscan	SOXTEC Extraction	MPLC & Deasphaltene#	EOM GC	Whole Oil GC	Sat GC (Q or non-Q)	Aro GC (Non Quantitative)	Sat GCMS (Q or non-Q)	Aro GCMS (Non-Q)	Isotope of fractions §	API Gravity (Westlab)	Vitrinite Reflectance	Visual Kerogen	Gas composition and isotopes (IFE)
Table nos.			3				4	5				8	8	8	13	9	9	11	12	10	17	4	7	14	
4800	p	U07/0044-1	x		x		x	x																	
4803	p	U07/0045-1	x		x		x	x																	
4806	p	U07/0046-1	x		x		x	x																	
4809	p	U07/0047-1	x		x		x	x																	
4812	p	U07/0048-1	x		x		x	x																	
4815	p	U07/0049-1	x		x		x	x																	
4818	p	U07/0050-1	x		x		x	x	x																
4821	p	U07/0051-1	x		x		x	x																	
4824	p	U07/0052-1	x		x		x	x															x		
4827	c	U07/0053-1	x		x		x	x																	
4842	c	U07/0054-2	x						x	x			x	x		x									
4935	c	U07/0055-1	x		x		x	x														x	x		
4950	c	U07/0056-1	x		x		x	x																	
4953	c	U07/0057-1	x		x		x	x																	
4956	c	U07/0058-1	x		x		x	x	x																
4959	c	U07/0059-1	x		x		x	x																	
4962	c	U07/0060-1	x		x		x	x																	
4971	c	U07/0061-1	x		x		x	x																	
4977	c	U07/0062-1	x		x		x	x																	
4980	c	U07/0063-1	x		x		x	x																	
4983	c	U07/0064-1	x		x		x	x																	
4986	c	U07/0065-1	x		x		x	x	x																
4989	c	U07/0066-1	x		x		x	x																	
5016	c	U07/0067-1	x		x		x	x																	
5061	c	U07/0068-1	x		x		x	x																	
5103	c	U07/0069-1	x		x		x	x														x	x		

Table 1 Analytical Program for NOCS Well 6406/2-6A (rock samples)

Sample Depth (m)	Sample Type	Sample Code	Lithology Description	Picking for screening	Prøvepreparering (Kjernematriale)	Prøvepreparering (Losningsmiddel-Ekstraksjon)	Leco TOC	RockEval	GHM Thermal Extraction /Pyrolysis-GC	Picking for Extraction	Topping	Iatroscan	SOXTEC Extraction	MPLC & Deasphaltene#	EOM GC	Whole Oil GC	Sat GC (Q or non-Q)	Aro GC (Non Quantitative)	Sat GCMS (Q or non-Q)	Aro GCMS (Non-Q)	Isotope of fractions §	API Gravity (Westlab)	Vitrinite Reflectance	Visual Kerogen	Gas composition and isotopes (IFE)
Table nos.			3				5	5				8	8	8		13	9	9	11	12	10	17	4	7	14
5123.82	p	U07/0001-1	x					x				x	x			x		x							
5124.38	p	U07/0002-1	x					x				x	x			x		x							
5127.15	p	U07/0003-1	x					x																	
5130.96	p	U07/0004-1	x					x																	
5133.17	p	U07/0005-1	x					x																	
5134.88	p	U07/0006-1	x					x														x			
5135.58	p	U07/0007-1	x					x																	
5139.25	p	U07/0008-1	x					x																	
5139.55	p	U07/0009-1	x					x																	
5142.87	p	U07/0010-1	x					x																	
5144.91	p	U07/0011-1	x					x																	
5148.61	p	U07/0012-1	x					x																	
Total			64			48	43	55	10	3	0	0	5	5	0	0	5	0	2	0	0	0	9	9	
Sample type key c = Cuttings s = SWC p = Conv core/ plug o=oil g= gas m=mud												Q=quantitative, non-Q = not quantitative													

Table 3 : Lithology description for well NOCS 6406/2-6A

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2800.00						0013
			70	Sltst : lt gy to lt ol gy, calc, s, glauc		0013-1L
			20	Ca : lt gy to gy w, s, glauc		0013-2L
			10	S/Sst : lt gy to gy w, s, f		0013-3L
3000.00						0014
			90	Sh/Clst: lt gy to m gy, sft		0014-1L
			10	Ca : gy pi		0014-2L
3200.00						0015
			90	Sh/Clst: lt gy to m gy, sft		0015-1L
			10	Ca : gy pi		0015-2L
3400.00						0016
			90	Sh/Clst: lt gy to m gy, sft		0016-1L
			10	Ca : gy pi		0016-2L
3600.00						0017
			95	Sh/Clst: lt gy to m drk gy, sft, glauc,		0017-1L
				sft		
			5	Ca : gy pi, glauc		0017-2L
3800.00						0018
			90	Sh/Clst: lt gy to m drk gy, sft, glauc,		0018-1L
				sft		
			5	Ca : gy pi, glauc		0018-2L
			5	S/Sst : gy pi, calc, glauc		0018-3L
4000.00						0019
			100	Sh/Clst: lt gy to m drk gy, lt brn gy, sft		0019-1L
			tr	Ca : lt brn gy		0019-2L

Table 3 : Lithology description for well NOCS 6406/2-6A

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
4200.00						0020
				100 Sh/Clst: lt gy to m drk gy, lt brn gy, slt tr Ca : lt brn gy		0020-1L 0020-2L
4400.00						0021
				100 Sh/Clst: lt gy to m drk gy, lt brn gy to drk brn gy, lt gn gy tr Ca : lt brn gy		0021-1L 0021-2L
4596.00						0022
				90 Sh/Clst: lt gy to m drk gy, lt brn gy to drk brn gy, brn blk 10 S/Sst : lt ol gy to w, calc, f		0022-1L 0022-2L
4620.00						0023
				60 Sh/Clst: lt gy to m drk gy, lt brn gy to drk brn gy, brn blk 40 S/Sst : lt ol gy to w, calc, mic, glauc, f		0023-1L 0023-2L
4671.00						0024
				90 Sh/Clst: lt gy to m drk gy, lt brn gy to drk brn gy, brn blk 10 S/Sst : lt ol gy to w, calc, mic, glauc, f		0024-1L 0024-2L
4673.00						0025
				90 Sh/Clst: lt gy to m drk gy, lt brn gy to drk brn gy, brn blk 10 S/Sst : lt ol gy to w, calc, mic, glauc, f		0025-1L 0025-2L
4740.00						0026
	0.77			50 Sh/Clst: drk gy to brn blk 50 S/Sst : lt ol gy to w, calc, mic, glauc, f		0026-1L 0026-2L

Table 3 : Lithology description for well NOCS 6406/2-6A

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
4749.00						0027
	5.23	60	Sh/Clst:	drk gy to brn blk		0027-1L
		40	Ca	: lt ol gy to w		0027-2L
4752.00						0028
	4.65	70	Sh/Clst:	drk gy to brn blk		0028-1L
		30	Ca	: lt ol gy to w		0028-2L
4755.00						0029
	2.39	90	Sh/Clst:	drk gy to brn blk		0029-1L
		10	Ca	: lt ol gy to w, lt brn gy		0029-2L
4758.00						0030
	2.43	100	Sh/Clst:	drk gy to brn blk		0030-1L
		tr	Ca	: lt ol gy to w, lt brn gy		0030-2L
4761.00						0031
	2.30	100	Sh/Clst:	drk gy to gy blk		0031-1L
		tr	Ca	: lt ol gy to w, lt brn gy		0031-2L
4764.00						0032
	2.44	95	Sh/Clst:	drk gy to gy blk		0032-1L
		5	Ca	: lt ol gy to w, lt brn gy		0032-2L
4767.00						0033
	2.48	95	Sh/Clst:	drk gy to gy blk		0033-1L
		5	Ca	: lt ol gy to w, lt brn gy		0033-2L
4770.00						0034
	3.01	85	Sh/Clst:	drk gy to gy blk		0034-1L
		15	Ca	: gy w to lt brn gy		0034-2L

Table 3 : Lithology description for well NOCS 6406/2-6A

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample	
Int Cvd	TOC%	%	Lithology description				
4773.00						0035	
	3.01	90	Sh/Clst:	drk gy to gy blk, slt		0035-1L	
		10	Ca	: gy w to lt brn gy		0035-2L	
4776.00						0036	
	3.26	100	Sh/Clst:	drk gy to gy blk, slt		0036-1L	
			tr Ca	: gy w to lt brn gy		0036-2L	
4779.00						0037	
	3.13	90	Sh/Clst:	lt brn gy to drk brn gy to brn blk, carb		0037-1L	
		10	S/Sst	: gy w to lt brn gy, calc, slt		0037-2L	
4782.00						0038	
	2.56	90	Sh/Clst:	lt brn gy to drk brn gy to brn blk, carb		0038-1L	
		10	Ca	: gy w to lt brn gy, slt, s		0038-2L	
4785.00						0039	
	2.74	90	Sh/Clst:	lt brn gy to drk brn gy to brn blk, carb		0039-1L	
		10	Ca	: gy w to lt brn gy, slt, s		0039-2L	
4788.00						0040	
	2.82	95	Sh/Clst:	lt brn gy to drk brn gy to brn blk, carb		0040-1L	
		5	Ca	: gy w to lt brn gy, slt, s		0040-2L	
4791.00						0041	
	2.82	95	Sh/Clst:	lt brn gy to drk brn gy to brn blk, carb		0041-1L	
		5	Ca	: gy w to lt brn gy, slt, s		0041-2L	

Table 3 : Lithology description for well NOCS 6406/2-6A

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
4794.00						0042
		2.74	95	Sh/Clst: lt brn gy to drk brn gy to brn blk, carb		0042-1L
			5	Ca : gy w to lt brn gy, slt, s		0042-2L
4797.00						0043
		2.81	95	Sh/Clst: lt brn gy to drk brn gy to brn blk, carb		0043-1L
			5	Ca : gy w to lt brn gy, slt, s		0043-2L
4800.00						0044
		2.81	95	Sh/Clst: lt brn gy to drk brn gy to brn blk, carb		0044-1L
			5	Ca : gy w to lt brn gy, slt, s		0044-2L
4803.00						0045
		2.90	95	Sh/Clst: lt brn gy to drk brn gy to brn blk, carb		0045-1L
			5	Ca : gy w to lt brn gy, slt, s		0045-2L
4806.00						0046
		2.73	95	Sh/Clst: lt brn gy to drk brn gy to brn blk, carb		0046-1L
			5	Ca : gy w to lt brn gy, slt, s		0046-2L
4809.00						0047
		3.70	95	Sh/Clst: lt brn gy to drk brn gy to brn blk, carb		0047-1L
			5	Ca : gy w to lt brn gy, slt, s		0047-2L
4812.00						0048
		3.21	95	Sh/Clst: lt brn gy to drk brn gy to brn blk, carb		0048-1L
			5	Ca : gy w to lt brn gy, slt, s		0048-2L

Table 3 : Lithology description for well NOCS 6406/2-6A

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
4815.00						0049
	4.13	85	Sh/Clst:	lt brn gy to drk brn gy to brn blk, carb, slt		0049-1L
		15	S/Sst	: gy w to lt brn gy, calc, slt		0049-2L
4818.00						0050
	3.44	85	Sh/Clst:	lt brn gy to drk brn gy to brn blk, carb, slt		0050-1L
		15	S/Sst	: gy w to lt brn gy, calc, slt		0050-2L
4821.00						0051
	2.79	85	Sh/Clst:	lt brn gy to drk brn gy to brn blk, carb, slt		0051-1L
		15	S/Sst	: gy w to lt brn gy, calc, slt		0051-2L
4824.00						0052
	3.18	95	Sh/Clst:	lt brn gy to drk brn gy to brn blk, carb, slt		0052-1L
		5	S/Sst	: gy w to lt brn gy, calc, slt		0052-2L
4827.00						0053
	3.01	100	Sh/Clst:	lt brn gy to drk brn gy to brn blk, carb, slt		0053-1L
		tr	S/Sst	: gy w to lt brn gy, calc, slt		0053-2L
4842.00						0054
		60	S/Sst	: gy w to lt brn gy, calc, slt, mic, kln		0054-2L
		40	Sh/Clst:	lt brn gy to drk brn gy to brn blk, carb, slt		0054-1L
4935.00						0055
	2.38	95	Sh/Clst:	lt brn gy to drk brn gy to brn blk, carb, slt		0055-1L
		5	S/Sst	: gy w to lt brn gy, calc, slt, mic, kln		0055-2L

Table 3 : Lithology description for well NOCS 6406/2-6A

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
4950.00						0056
	2.80	55	Sh/Clst:	lt brn gy to drk brn gy to brn blk, carb, slt		0056-1L
		45	S/Sst	: gy w to lt brn gy, calc, slt, mic, kln		0056-2L
4953.00						0057
	2.63	85	Sh/Clst:	lt brn gy to drk brn gy to brn blk, carb, slt		0057-1L
		15	S/Sst	: gy w to lt brn gy, calc, slt, mic, kln		0057-2L
4956.00						0058
	1.95	95	Sh/Clst:	lt brn gy to drk brn gy to brn blk, carb, slt		0058-1L
		5	S/Sst	: gy w to lt brn gy, calc, slt, mic, kln		0058-2L
4959.00						0059
	1.89	95	Sh/Clst:	lt brn gy to drk brn gy to brn blk, carb, slt		0059-1L
		5	S/Sst	: gy w to lt brn gy, calc, slt, mic, kln		0059-2L
4962.00						0060
	1.22	90	Sh/Clst:	drk gy, drk brn gy to brn blk, carb, slt		0060-1L
		5	S/Sst	: gy w to lt brn gy, calc, slt, mic, kln		0060-2L
		5	Cont	: prp		0060-3L
4971.00						0061
	1.39	90	Sh/Clst:	drk gy to blk, drk brn gy to brn blk, carb, slt		0061-1L
		5	S/Sst	: gy w to lt brn gy, calc, slt, mic, kln		0061-2L
		5	Cont	: prp		0061-3L

Table 3 : Lithology description for well NOCS 6406/2-6A

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
4977.00						0062
	1.65	90	Sh/Clst:	drk gy to blk, drk brn gy to brn blk, carb, slt		0062-1L
		5	S/Sst	: gy w to lt brn gy, calc, slt, mic, kln		0062-2L
		5	Cont	: prp		0062-3L
4980.00						0063
	1.67	100	Sh/Clst:	drk gy to blk, m gy to m drk gy, carb, slt		0063-1L
			tr S/Sst	: gy w to lt brn gy, calc, slt, mic, kln		0063-2L
4983.00						0064
	1.69	100	Sh/Clst:	drk gy to blk, m gy to m drk gy, carb, slt		0064-1L
			tr S/Sst	: gy w to lt brn gy, calc, slt, mic, kln		0064-2L
4986.00						0065
	1.88	85	Sh/Clst:	drk gy to blk, m gy to m drk gy, carb, slt		0065-1L
		15	S/Sst	: gy w to lt brn gy, calc, slt, mic, kln		0065-2L
			tr Cont	: prp		0065-3L
4989.00						0066
	3.94	85	Sh/Clst:	drk gy to blk, m gy to m drk gy, carb, slt		0066-1L
		15	S/Sst	: gy w to lt brn gy, calc, slt, mic, kln		0066-2L
			tr Coal	: blk		0066-3L
5016.00						0067
	1.39	55	Sh/Clst:	drk gy to blk, m gy to m drk gy, carb, slt		0067-1L
		45	S/Sst	: gy w to lt brn gy, calc, slt, mic, kln		0067-2L
			tr Coal	: blk		0067-3L

Table 3 : Lithology description for well NOCS 6406/2-6A

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
5061.00						0068
	1.26	55	Sh/Clst:	drk gy to blk, m gy to m drk gy,		0068-1L
			carb, slt			
		45	S/Sst	: gy w to lt brn gy, calc, slt,		0068-2L
			mic, kln			
		tr	Coal	: blk		0068-3L
5103.00						0069
	0.61	55	Sh/Clst:	drk gy to blk; m gy to m drk gy,		0069-1L
			carb, slt			
		45	S/Sst	: gy w to lt brn gy, calc, slt,		0069-2L
			mic, kln			
		tr	Coal	: blk		0069-3L
5123.82	ccp					0001
		100	S/Sst	: w, crs, cem		0001-1L
5124.38	ccp					0002
		100	S/Sst	: w, crs, cem		0002-1L
5127.15	ccp					0003
		100	S/Sst	: w, crs, cem		0003-1L
5130.96	ccp					0004
		100	S/Sst	: w, crs, cem		0004-1L
5133.17	ccp					0005
		100	S/Sst	: w, crs, cem		0005-1L
5134.88	ccp					0006
		100	Sh/Clst:	brn blk, carb, Mica-ad		0006-1L

Table 3 : Lithology description for well NOCS 6406/2-6A

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample	
Int Cvd	TOC%	%	Lithology description				
5135.58	ccp					0007	
		100	S/Sst	:	w, f, cem	0007-1L	
5139.25	ccp					0008	
		100	S/Sst	:	w, f, cem	0008-1L	
5139.55	ccp					0009	
		100	S/Sst	:	w, carb, mic, f, cem	0009-1L	
		tr	Coal	:	blk	0009-2L	
5142.87	ccp					0010	
		100	S/Sst	:	w, cem	0010-1L	
5144.91	ccp					0011	
		100	S/Sst	:	w, f, cem	0011-1L	
5148.61	ccp					0012	
		100	S/Sst	:	w, f, cem	0012-1L	

Table 4 : Thermal Maturity Data for well NOCS 6406/2-6A

Depth unit of measure: m

Depth	Typ Lithology	Vitrinite Reflectance (%)	Number of Readings	Standard Deviation (%)	Spore Fluorescence Colour	SCI	Tmax (°C)	Sample
2800.00	cut bulk	0.33	8	0.04	-	5.0-5.5(?)	-	0013-0B
3200.00	cut bulk	0.51	4	0.07	-	5.5-6.0	-	0015-0B
3600.00	cut bulk	0.75	4	0.04	-	6.0	-	0017-0B
4000.00	cut bulk	0.83	5	0.07	-	NDP/6.5(??)	-	0019-0B
4400.00	cut bulk	1.12	8	0.08	-	6.5-7.0(?)	-	0021-0B
4755.00	cut bulk	1.34	17	0.12	-	7.5-8.0(?)	436	0029-0B
4824.00	cut bulk		-	-	-	8.0(??)	428	0052-0B
4935.00	cut bulk	1.29	22	0.15	-	NDP	436	0055-0B
5103.00	cut bulk	1.49	18	0.14	-	NDP/8.0(??)	437	0069-0B
5134.88	ccp Sh/Clst: brn blk	1.48	22	0.10	-	-	468	0006-1L

Table 5A: Rock-Eval table for well NOCS 6406/2-6A

Depth unit of measure: m

Depth Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
4740.00 cut	Sh/Clst: drk gy to brn blk	0.36	3.33	-	-	0.77	432	-	3.7	0.10	427	0026-1L
4749.00 cut	Sh/Clst: drk gy to brn blk	1.42	6.33	-	-	5.23	121	-	7.8	0.18	450	0027-1L
4752.00 cut	Sh/Clst: drk gy to brn blk	0.52	5.23	-	-	4.65	112	-	5.8	0.09	448	0028-1L
4755.00 cut	Sh/Clst: drk gy to brn blk	1.11	4.58	-	-	2.39	192	-	5.7	0.20	436	0029-1L
4758.00 cut	Sh/Clst: drk gy to brn blk	0.91	4.84	-	-	2.43	199	-	5.8	0.16	428	0030-1L
4761.00 cut	Sh/Clst: drk gy to gy blk	0.82	4.25	-	-	2.30	185	-	5.1	0.16	432	0031-1L
4764.00 cut	Sh/Clst: drk gy to gy blk	3.18	4.83	-	-	2.44	198	-	8.0	0.40	438	0032-1L
4767.00 cut	Sh/Clst: drk gy to gy blk	0.32	4.32	-	-	2.48	174	-	4.6	0.07	433	0033-1L
4770.00 cut	Sh/Clst: drk gy to gy blk	0.53	4.16	-	-	3.01	138	-	4.7	0.11	438	0034-1L
4773.00 cut	Sh/Clst: drk gy to gy blk	0.91	4.12	-	-	3.01	137	-	5.0	0.18	429	0035-1L
4776.00 cut	Sh/Clst: drk gy to gy blk	0.23	3.47	-	-	3.26	106	-	3.7	0.06	431	0036-1L
4779.00 cut	Sh/Clst: lt brn gy to drk brn gy to brn blk	0.49	3.83	-	-	3.13	122	-	4.3	0.11	437	0037-1L
4782.00 cut	Sh/Clst: lt brn gy to drk brn gy to brn blk	0.31	3.54	-	-	2.56	138	-	3.8	0.08	426	0038-1L
4785.00 cut	Sh/Clst: lt brn gy to drk brn gy to brn blk	0.70	4.26	-	-	2.74	155	-	5.0	0.14	437	0039-1L

Table 5A: Rock-Eval table for well NOCS 6406/2-6A

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
4788.00	cut	Sh/Clst: lt brn gy to drk brn gy to brn blk	0.81	3.52	-	-	2.82	125	-	4.3	0.19	438	0040-1L
4791.00	cut	Sh/Clst: lt brn gy to drk brn gy to brn blk	2.54	5.12	-	-	2.82	182	-	7.7	0.33	438	0041-1L
4794.00	cut	Sh/Clst: lt brn gy to drk brn gy to brn blk	0.21	3.08	-	-	2.74	112	-	3.3	0.06	485	0042-1L
4797.00	cut	Sh/Clst: lt brn gy to drk brn gy to brn blk	0.44	3.73	-	-	2.81	133	-	4.2	0.11	438	0043-1L
4800.00	cut	Sh/Clst: lt brn gy to drk brn gy to brn blk	0.26	3.81	-	-	2.81	136	-	4.1	0.06	469	0044-1L
4803.00	cut	Sh/Clst: lt brn gy to drk brn gy to brn blk	0.54	3.49	-	-	2.90	120	-	4.0	0.13	428	0045-1L
4806.00	cut	Sh/Clst: lt brn gy to drk brn gy to brn blk	0.15	2.33	-	-	2.73	85	-	2.5	0.06	442	0046-1L
4809.00	cut	Sh/Clst: lt brn gy to drk brn gy to brn blk	0.23	4.21	-	-	3.70	114	-	4.4	0.05	438	0047-1L
4812.00	cut	Sh/Clst: lt brn gy to drk brn gy to brn blk	0.23	3.82	-	-	3.21	119	-	4.0	0.06	436	0048-1L
4815.00	cut	Sh/Clst: lt brn gy to drk brn gy to brn blk	0.67	5.80	-	-	4.13	140	-	6.5	0.10	431	0049-1L
4818.00	cut	Sh/Clst: lt brn gy to drk brn gy to brn blk	0.58	6.75	-	-	3.44	196	-	7.3	0.08	427	0050-1L

Table 5A: Rock-Eval table for well NOCS 6406/2-6A

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
4821.00	cut	Sh/Clst: lt brn gy to drk brn gy to brn blk	0.73	3.04	-	-	2.79	109	-	3.8	0.19	432	0051-1L
4824.00	cut	Sh/Clst: lt brn gy to drk brn gy to brn blk	4.41	5.06	-	-	3.18	159	-	9.5	0.47	428	0052-1L
4827.00	cut	Sh/Clst: lt brn gy to drk brn gy to brn blk	0.56	4.36	-	-	3.01	145	-	4.9	0.11	436	0053-1L
4935.00	cut	Sh/Clst: lt brn gy to drk brn gy to brn blk	0.28	2.94	-	-	2.38	124	-	3.2	0.09	436	0055-1L
4950.00	cut	Sh/Clst: lt brn gy to drk brn gy to brn blk	0.23	2.80	-	-	2.80	100	-	3.0	0.08	440	0056-1L
4953.00	cut	Sh/Clst: lt brn gy to drk brn gy to brn blk	1.35	8.51	-	-	2.63	324	-	9.9	0.14	433	0057-1L
4956.00	cut	Sh/Clst: lt brn gy to drk brn gy to brn blk	0.49	8.07	-	-	1.95	414	-	8.6	0.06	433	0058-1L
4959.00	cut	Sh/Clst: lt brn gy to drk brn gy to brn blk	6.51	6.35	-	-	1.89	336	-	12.9	0.51	432	0059-1L
4962.00	cut	Sh/Clst: drk gy, drk brn gy to brn blk	2.68	1.81	-	-	1.22	148	-	4.5	0.60	446	0060-1L
4971.00	cut	Sh/Clst: drk gy to blk, drk brn gy to brn blk	0.65	3.13	-	-	1.39	225	-	3.8	0.17	431	0061-1L
4977.00	cut	Sh/Clst: drk gy to blk, drk brn gy to brn blk	0.51	3.10	-	-	1.65	188	-	3.6	0.14	432	0062-1L

Table 3A: Rock-Eval table for well NOCS 6406/2-6A

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
4980.00	cut	Sh/Clst: drk gy to blk, m gy to m drk gy	0.64	4.07	-	-	1.67	244	-	4.7	0.14	430	0063-1L
4983.00	cut	Sh/Clst: drk gy to blk, m gy to m drk gy	1.29	4.40	-	-	1.69	260	-	5.7	0.23	428	0064-1L
4986.00	cut	Sh/Clst: drk gy to blk, m gy to m drk gy	2.00	5.16	-	-	1.88	274	-	7.2	0.28	429	0065-1L
4989.00	cut	Sh/Clst: drk gy to blk, m gy to m drk gy	0.59	1.90	-	-	3.94	48	-	2.5	0.24	422	0066-1L
5016.00	cut	Sh/Clst: drk gy to blk, m gy to m drk gy	2.57	2.41	-	-	1.39	173	-	5.0	0.52	441	0067-1L
5061.00	cut	Sh/Clst: drk gy to blk, m gy to m drk gy	4.53	1.44	-	-	1.26	114	-	6.0	0.76	425	0068-1L
5103.00	cut	Sh/Clst: drk gy to blk, m gy to m drk gy	2.39	2.25	-	-	0.61	369	-	4.6	0.52	437	0069-1L
5123.82	ccp	S/Sst : w	8.88	0.23	-	-	-	-	-	9.1	0.97	416	0001-1L
5124.38	ccp	S/Sst : w	3.32	0.08	-	-	-	-	-	3.4	0.98	603	0002-1L
5127.15	ccp	S/Sst : w	0.13	0.09	-	-	-	-	-	0.2	0.59	603	0003-1L
5130.96	ccp	S/Sst : w	0.60	0.25	-	-	-	-	-	0.9	0.71	603	0004-1L
5133.17	ccp	S/Sst : w	0.61	0.23	-	-	-	-	-	0.8	0.73	604	0005-1L

Table 5A: Rock-Eval table for well NOCS 6406/2-6A

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
5134.88	ccp	Sh/Clst: brn blk	3.29	6.28	-	-	-	-	-	9.6	0.34	468	0006-1L
5135.58	ccp	S/Sst : w	0.09	0.09	-	-	-	-	-	0.2	0.50	480	0007-1L
5139.25	ccp	S/Sst : w	0.32	0.08	-	-	-	-	-	0.4	0.80	444	0008-1L
5139.55	ccp	S/Sst : w	0.24	0.06	-	-	-	-	-	0.3	0.80	603	0009-1L
5142.87	ccp	S/Sst : w	0.42	0.09	-	-	-	-	-	0.5	0.82	601	0010-1L
5144.91	ccp	S/Sst : w	0.18	0.14	-	-	-	-	-	0.3	0.56	390	0011-1L
5148.61	ccp	S/Sst : w	0.05	0.07	-	-	-	-	-	0.1	0.42	601	0012-1L

Table JB: Rock-Eval table for well SVALBARD ROCK-1 (SR-1)

Depth unit of measure: m

Depth	Typ	Form	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
1.00	n/a		bulk	1.50	5.37	-	-	-	-	-	6.9	0.22	438	0230-0B
2.00	n/a		bulk	1.47	5.33	-	-	-	-	-	6.8	0.22	437	0231-0B

Table 6 : Pyrolysis GC Data (S2 peak) as Percentage of Total Area for Well NOCS 6406/2-6A

Depth unit of measure: m

Depth	Typ	Lithology	C1	C2-C5	C6-C14	C15+	S2 from Rock-Eval	Sample
4749.00	cut	Sh/Clst: drk gy to brn blk	5.66	25.99	40.83	27.51	6.33	0027-1L
4758.00	cut	Sh/Clst: drk gy to brn blk	3.46	17.80	44.81	33.93	4.84	0030-1L
4770.00	cut	Sh/Clst: drk gy to gy blk	4.67	19.50	44.50	31.33	4.16	0034-1L
4818.00	cut	Sh/Clst: lt brn gy to drk brn gy to brn blk	3.11	16.44	42.43	38.03	6.75	0050-1L
4956.00	cut	Sh/Clst: lt brn gy to drk brn gy to brn blk	2.91	20.08	44.06	32.96	8.07	0058-1L
4986.00	cut	Sh/Clst: drk gy to blk, m gy to m drk gy	2.22	17.25	44.07	36.46	5.16	0065-1L

Table 1: Visual Kerogen Composition Data for well NOCS 6406/2-6A

Depth unit of measure: m

Depth	Typ	Lithology	Amorphous			Algal/Phytoplankton					Herbaceous				Woody				Coaly			SCI	Sample
			AM%	FA	HA	AP%	Cy	Ta	Bo	Di	De	HE%	SP	Cu	De	WO%	FL	NE	De	CO%	FS		
2800.00	cut	Sltst	50	*	**	TR	*		?		15	*	**	**	25		*	**	10	*	**	5.0-5.5(?)	0013-1L
3200.00	cut	Sh/Clst	55	*	**	TR	*		?		15	*	*	**	20		*	**	10	*	**	5.5-6.0	0015-1L
3600.00	cut	Sh/Clst	45	*	**	TR	*		?		15	*	*	**	30		*	**	10	*	**	6.0	0017-1L
4000.00	cut	Sh/Clst	NDP	*	**	NDP	?				NDP	*	*	**	NDP		*		NDP	*		NDP/6.5(??)	0019-1L
4400.00	cut	Sh/Clst	70		*	TR	?				5	*	*	**	15		*	**	10	*	**	6.5-7.0(?)	0021-1L
4755.00	cut	Sh/Clst	75		*	TR	?				10	*	*	**	10		*	**	5	*		7.5-8.0(?)	0029-1L
4824.00	cut	Sh/Clst	55		*	TR	?				15	*	*	**	20		*	**	10	*		8.0(??)	0052-1L
4935.00	cut	Sh/Clst	NDP		*	NDP	?				NDP	?			NDP		*		NDP	*		NDP	0055-1L
5103.00	cut	Sh/Clst	NDP		*	NDP	?				NDP	?			NDP		*		NDP	*		NDP/8.0(??)	0069-1L

Table 8a: MPLC Bulk Composition: Weight of EOM and Fraction for well NOCS 6406/2-6A

Depth unit of measure: m

Depth	Typ	Lithology	Rock Extracted (g)	EOM (mg)	Sat (mg)	Aro (mg)	Asph (mg)	NSO (mg)	HC (mg)	Non-HC (mg)	TOC(e) (%)	Sample
4620.00	cut	S/Sst : lt ol gy to w	2.5	57.2	45.7	0.9	1.4	9.1	46.7	10.5	1.21	0023-2L
4673.00	cut	S/Sst : lt ol gy to w	1.5	51.6	43.3	0.3	1.2	6.9	43.6	8.0	1.68	0025-2L
4842.00	cut	S/Sst : gy w to lt brn gy	3.1	105.7	81.5	0.7	12.9	10.6	82.2	23.5	1.30	0054-2L
5123.82	ccp	bulk	12.4	124.0	116.9	1.0	4.5	1.6	117.8	6.2	0.21	0001-0B
5124.38	ccp	bulk	12.1	82.2	69.3	0.7	10.7	1.5	70.1	12.1	0.17	0002-0B

Table 8b: MPLC Bulk Composition: Concentration of EOM and Fraction (wt ppm rock) for well NOCS 6406/2-6A

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Sat	Aro	Asph	NSO	HC	Non-HC	Sample
4620.00	cut	S/Sst : lt ol gy to w	23064	18443	378	553	3688	18821	4242	0023-2L
4673.00	cut	S/Sst : lt ol gy to w	34864	29260	172	784	4647	29433	5431	0025-2L
4842.00	cut	S/Sst : gy w to lt brn gy	34542	26645	215	4228	3452	26861	7680	0054-2L
5123.82	ccp	bulk	10000	9424	78	364	131	9503	496	0001-0B
5124.38	ccp	bulk	6804	5739	61	881	122	5800	1003	0002-0B

Table 8c: MPLC Bulk Composition: Concentration of EOM and Fraction (mg/g TOC(e)) for well NOCS 6406/2-6A

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Sat	Aro	Asph	NSO	HC	Non-HC	Sample
4620.00	cut	S/Sst : lt ol gy to w	1906.16	1524.26	31.27	45.78	304.85	1555.53	350.63	0023-2L
4673.00	cut	S/Sst : lt ol gy to w	2075.29	1741.72	10.25	46.69	276.63	1751.97	323.32	0025-2L
4842.00	cut	S/Sst : gy w to lt brn gy	2657.11	2049.69	16.60	325.29	265.55	2066.28	590.83	0054-2L
5123.82	ccp	bulk	4761.90	4487.83	37.61	173.79	62.68	4525.43	236.47	0001-0B
5124.38	ccp	bulk	4002.73	3376.22	35.92	518.75	71.83	3412.14	590.59	0002-0B

Table 8d: MPLC Bulk Composition: Material extracted from the rock (%) for well NOCS 6406/2-6A

Depth unit of measure: m

Depth	Typ	Lithology	Sat	Aro	Asph	NSO	Total	HC	Non-HC	Recov. MPLC	Recov. Asph	Sample
4620.00	cut	S/Sst : lt ol gy to w	79.96	1.64	2.40	15.99	100.00	81.61	18.39	1.17	0.92	0023-2L
4673.00	cut	S/Sst : lt ol gy to w	83.93	0.49	2.25	13.33	100.00	84.42	15.58	1.10	0.94	0025-2L
4842.00	cut	S/Sst : gy w to lt brn gy	77.14	0.62	12.24	9.99	100.00	77.76	22.24	1.09	0.85	0054-2L
5123.82	ccp	bulk	94.24	0.79	3.65	1.32	100.00	95.03	4.97	1.17	0.81	0001-0B
5124.38	ccp	bulk	84.35	0.90	12.96	1.79	100.00	85.25	14.75	0.93	0.82	0002-0B

Table 8e: MPLC Bulk Composition: Ratios for well NOCS 6406/2-6A

Depth unit of measure: m

Depth	Typ	Lithology	Sat	HC	Asp	Sample
			Aro	Non-HC	NSO	
4620.00	cut	S/Sst : lt ol gy to w	48.75	4.44	0.15	0023-2L
4673.00	cut	S/Sst : lt ol gy to w	170.00	5.42	0.17	0025-2L
4842.00	cut	S/Sst : gy w to lt brn gy	123.50	3.50	1.22	0054-2L
5123.82	ccp	bulk	119.33	19.14	2.77	0001-0B
5124.38	ccp	bulk	94.00	5.78	7.22	0002-0B

Tab' 1a¹ Peak areas Saturated Hydrocarbon G data

Depth	Sample type	Desc	%Lithology	nC15	nC16	Norpristane	nC17	Pristane	nC18	Phytane	nC19	nC20	nC21	nC22
4620	cut	sandstone/sand	40	3063055	1452370	706692	1232960	520628	865462	420441	555426	349043	206516	141718
4673	cut	sandstone/sand	10	3227455	1504764	759988	1278637	569837	980853	414942	542475	297604	169660	105393
4842	cut	sandstone/sand	60	3255421	1495120	731645	1381066	600099	1072976	447171	611076	374569	201034	133880
5123.82	ccp	bulk fraction		3539292	1340615	611903	1037252	432636	686961	292742	368432	225927	113249	76025
5124.38	ccp	bulk fraction		2945630	1097760	464174	792583	342761	575703	232902	287994	177139	87463	54115

Depth	Sample type	Desc	%Lithology	nC23	nC24	nC25	nC26	nC27	nC28	nC29	nC30	nC31	nC32	nC33	nC34	Sample number
4620	cut	sandstone/sand	40	67680	37578	18998	7343	5073	0	0	0	0	0	0	0	U07/0023-2
4673	cut	sandstone/sand	10	54857	30573	12739	6108	0	0	0	0	0	0	0	0	U07/0025-2
4842	cut	sandstone/sand	60	69607	38230	16928	13576	8350	0	0	0	0	0	0	0	U07/0054-2
5123.82	ccp	bulk fraction		31894	29734	11161	28254	0	0	0	0	0	0	0	0	U07/0001-0
5124.38	ccp	bulk fraction		23455	25314	0	0	0	0	0	0	0	0	0	0	U07/0002-0

Table 9a: Quantitative Analysis of Saturated Fraction for well NOCS 6406/2-6A

sample	nC15 mg/g sat	nC16 mg/g sat	iC18 mg/g sat	nC17 mg/g sat	Pr mg/g sat	nC18 mg/g sat	Ph mg/g sat	nC19 mg/g sat	nC20 mg/g sat	nC21 mg/g sat	nC22 mg/g sat	nC23 mg/g sat	nC24 mg/g sat	nC25 mg/g sat	nC26 mg/g sat	nC27 mg/g sat	nC28 mg/g sat	nC29 mg/g sat	nC30 mg/g sat	nC31 mg/g sat	nC32 mg/g sat	nC33 mg/g sat	nC34 mg/g sat	
4620.00m cut	26.70	12.66	6.16	10.75	4.54	7.54	3.66	4.84	3.04	1.80	1.24	0.59	0.33	0.17	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4673.00m cut	30.01	13.99	7.07	11.89	5.30	9.12	3.86	5.04	2.77	1.58	0.98	0.51	0.28	0.12	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4842.00m cut	31.26	14.36	7.03	13.26	5.76	10.30	4.29	5.87	3.60	1.93	1.29	0.67	0.37	0.16	0.13	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5123.82 ccp	19.36	7.33	3.35	5.67	2.37	3.76	1.60	2.02	1.24	0.62	0.42	0.17	0.16	0.06	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5124.38 ccp	20.22	7.53	3.19	5.44	2.35	3.95	1.60	1.98	1.22	0.60	0.37	0.16	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 9B: Saturated Hydrocarbon Ratios (peak area) for well NOCS 6406/2-6A

Depth unit of measure: m

Depth	Typ	Lithology	Pristane	Pristane	Pristane/nC17	Phytane	CPI1	nC17	Sample
			nC17	Phytane	Phytane/nC18	nC18		nC17+nC27	
4620.00	cut	S/Sst : lt ol gy to w	0.42	1.24	0.87	0.49	1.91	1.00	0023-2L
4673.00	cut	S/Sst : lt ol gy to w	0.45	1.37	1.05	0.42	1.22	1.00	0025-2L
4842.00	cut	S/Sst : gy w to lt brn gy	0.43	1.34	1.04	0.42	1.17	0.99	0054-2L
5123.82	ccp	bulk	0.42	1.48	0.98	0.43	0.29	1.00	0001-0B
5124.38	ccp	bulk	0.43	1.47	1.07	0.40	-	1.00	0002-0B

Depth unit of measure: m

Depth	Lithology	Ratio1	Ratio2	Ratio3	Ratio4	Ratio5	Ratio6	Ratio7	Ratio8	Ratio9	Rat.10	Rat.11	Rat.12	Rat.13	Rat.14	Sample
5123.82	S/Sst	22.75	0.96	0.17	0.72	0.42	-	0.01	0.01	0.01	0.05	0.82	0.39	0.17	58.87	0001-1
5124.38	S/Sst	21.33	0.96	0.19	0.75	0.43	-	0.01	0.01	0.01	0.06	0.82	0.40	0.17	59.52	0002-1

List of Triterpane Distribution Ratios

Ratio 1: 27Tm / 27Ts

Ratio 2: 27Tm / 27Tm+27Ts

Ratio 3: 27Tm / 27Tm+30aß+30ßa

Ratio 4: 29aß / 30aß

Ratio 5: 29aß / 29aß+30aß

Ratio 6: 30d / 30aß

Ratio 7: 28aß / 30aß

Ratio 8: 28aß / 29aß

Ratio 9: 28aß / 28aß+30aß

Ratio 10: 24/3 / 30aß

Ratio 11: 30aß / 30aß+30ßa

Ratio 12: 29aß+29ßa / 29aß+29ßa+30aß+30ßa

Ratio 13: 29ßa+30ßa / 29aß+30aß

Ratio 14: 32aßS / 32aßS+32aßR (%)

Depth unit of measure: m

Depth	Lithology	Ratio1	Ratio2	Ratio3	Ratio4	Ratio5	Ratio6	Ratio7	Ratio8	Ratio9	Ratio10	Sample
5123.82	S/Sst	0.13	26.39	40.83	0.67	0.57	0.19	0.14	0.26	0.36	0.47	0001-1
5124.38	S/Sst	0.13	26.87	40.71	0.81	0.56	0.22	0.16	0.26	0.37	0.47	0002-1

List of Sterane Distribution Ratios

Ratio 1: $27d\beta S / 27d\beta S + 27aaR$

Ratio 2: $29aaS / 29aaS + 29aaR$ (%)

Ratio 3: $2 * (29\beta\beta R + 29\beta\beta S) / (29aaS + 29aaR + 2 * (29\beta\beta R + 29\beta\beta S))$ (%)

Ratio 4: $27d\beta S + 27d\beta R + 27daR + 27daS / 29d\beta S + 29d\beta R + 29daR + 29daS$

Ratio 5: $29\beta\beta R + 29\beta\beta S / 29\beta\beta R + 29\beta\beta S + 29aaS$

Ratio 6: $21a + 22a / 21a + 22a + 29aaS + 29\beta\beta R + 29\beta\beta S + 29aaR$

Ratio 7: $21a + 22a / 21a + 22a + 28daS + 28aaS + 29daR + 29aaS + 29\beta\beta R + 29\beta\beta S + 29aaR$

Ratio 8: $29\beta\beta R + 29\beta\beta S / 29aaS + 29\beta\beta R + 29\beta\beta S + 29aaR$

Ratio 9: $29aaS / 29aaR$

Ratio 10: $29\beta\beta R + 29\beta\beta S / 29aaR$