1.4.2 Drilling fluids

Section	Section TD (mMD)	Maximum mud weight [g/cm³]	Mud type
36"	459	1.03	Sea water / high visc. sweeps
17 ½"	1315	1.03	Sea water / high visc. Sweeps
8 ½"	2652	1.38	Aquadril (KCl/polymer/glycol)
8 ½" sidetrack	2660	1.38	Aquadril (KCl/polymer/glycol)

1.5 Data acquisition summary

See figures 1.2-4.

Table 4.12 6608/10-8 pressure points

Test no	Depth m MD	Depth m TVDRT	Depth mMSL	Hydr pressure Before Bar	Hydr pressure After Bar	Formation pressure Bar	Mobility mD/cp	Temp Deg C	Comments
1	2294.6	2293.2	2269.2	311.30	311.37	243.61	26.8	58.5	OK
2	2303.1	2301.7	2277.7	312.47	312.45	244.56	0.9	60.7	Not stable, but OK
3	2305.9	2304.5	2280.5	312.80	312.50	244.35	13.7	61.4	Not stable, but OK
4	2306.1	2304.7	2280.7	312.85	312.00	184.00		61.1	Tight
5	2312.1	2310.7	2286.7	313.30	313.50	245.59	0.5	62.3	Supercharged ?
6	2318.1	2316.7	2292.7	314.10	314.20	205.00	0.1	62.7	Tight
7	2320.6	2319.2	2295.2	314.50	314.50	134.00	0.8	62.7	Tight
8	2332.1	2330.7	2306.7	316.04	316.02	246.10	16		Good
9	2335.1	2333.7	2309.7	317.40	316.50	246.56			
10	2338.1	2336.7	2312.7	317.03	318.00	155.00	0.5		Tight, aborted
11	2370.6	2369.2	2345.2	321.25	321.38	237.56	1.1	64.7	Poor
12	2370.7	2369.3	2345.3	321.20	321.20	239.50		68.5	Tight, aborted
13	2373.4	2372.0	2348.0	321.55	321.52	237.15	10.9		Medium
14	2373.6	2372.2	2348.2	321.66	321.70	237.27	14.7	65.4	Good
15	2375.6	2374.2	2350.2	321.80	321.90	237.78	0.9	66	Poor
16	2375.6	2374.2	2350.2	321.85	321.80	237.28	16	70.4	Good
17	2379.6	2378.2	2354.2	322.45	322.50	238.10	41.1	66.5	Good
18	2382.6	2381.2	2357.2	322.90	322.85	238.46	51.1	67.5	Good
19	2384.6	2383.2	2359.2	326.70	323.20	239.70	0.6	68.3	Poor, double pretest, not stable
20	2390.6	2389.3	2365.3	324.00	324.00	240.32	644	68.6	Very good
21	2394.6	2393.3	2369.3	324.45	324.50	241.03	7.7	69	Medium
22	2402.6	2401.2	2377.2	325.60	325.60	239.80	93.7	69.7	Good
23	2408.7	2407.3	2383.3	326.40	326.40	240.13	281.2	70.1	Very good
24	2412.1	2410.7	2386.7	326.81	326.85	240.36	59.7	70.7	Good
25	2422.1	2420.7	2396.7	328.20	328.20	243.40	98.9	71	Good
26	2428.1	2426.7	2402.7	329.00	329.00	243.90	8.6	71.4	Medium
27	2432.2	2430.8	2406.8	329.60	329.60	244.60	305.1	71.9	Very good
28	2437.6	2436.2	2412.2	330.30	330.30	130.00	0.01	72.3	Tight, aborted
29	2445.1	2443.7	2419.7	331.30	331.30	247.77	184.2	72.7	Very good
30	2451.6	2450.1	2426.1	332.20	332.20	248.80	1.4	72.9	Very poor to tight
31	2459.6	2458.1	2434.1	333.30	333.20	249.90	6.6	73.2	Medium
32	2463.1	2461.9	2437.9	333.70	333.70	250.12	575.9	73.4	Very good
33	2469.1	2467.9	2443.9	334.50	334.60	250.85	3.4	73.8	Medium
34	2469.6	2468.4	2444.4	334.60	334.70				Lost seal
35	2472.1	2470.9	2446.9	334.90	335.00	250.89	120.3	74	Very good
36	2478.6	2477.3	2453.3	335.80	335.90	251.38	185.8	74.1	Very good
37	2481.6	2480.3	2456.3	336.30	336.25	251.63	79	74.2	Good
38	2484.6	2483.3	2459.3	336.60	336.65	252.30	52.3	74.3	Medium
39	2487.1	2485.8	2461.8	337.00	337.00			74.7	Tight
40	2491.6	2490.3	2466.3	337.65	337.60	256.10	2.5	74.8	Poor

41	2498.6	2497.2	2473.2	338.60	338.60	253.64	629.6	74.9	Very good

Test no	Depth m MD	Depth m TVDRT	Depth mMSL	Hydr pressure Before Bar	Hydr pressure After Bar	Formation pressure Bar	Mobility mD/cp	Temp Deg C	Comments
42	2501.6	2500.2	2476.2	338.90	339.00	254.40	5.3	75.3	Medium
43	2506.1	2504.7	2480.7	339.60	339.60			75.5	Tight, aborted
44	2511.6	2510.2	2486.2	340.35	340.35	254.93	211.5	75.7	Very good
45	2519.6	2518.1	2494.1	341.40	341.48	255.74	86.6	75.9	Good -> Very good
46	2526.6	2525.1	2501.1	342.35	342.40	256.42	62.8	76.3	Good -> Very good
47	2531.1	2529.6	2505.6	343.00	343.00	256.88	1404.8		Very good

Table 4.13 6608/10-8 Sampling run

Test no	Depth m MD	Depth m TVDRT	Depth mMSL	Hydr pressure Before Bar	Hydr pressure After Bar	Formation pressure Bar	Mobility mD/cp	Temp Deg C	Comments
48	2431.5	2430.1	2406.1	329.30	329.30	244.56	229	67.1	Sampling, very good point.
49	2431.5	2430.1	2406.1	329.30	329.30	244.48	240	75.8	Pre-test after pumping.
50	2463.5	2462.0	2438.0	333.90	333.90	274.00		75.8	For sampling…but tight
51	2462.3	2460.8	2436.8	333.80	333.80	250.14	5.1	75.7	Leaking seal, re-tract, poor mobility
52	2464.0	2462.5	2438.5	334.00	334.00	250.50	47.1	76.3	Too low mobility for sampling.
53	2464.5	2463.0	2439.0	334.00	334.00	250.24	68.9	76.7	Stopped sampling due to high drawdown
54	2463.7	2462.2	2438.2	333.90	333.90	250.14	65.4	76.8	Sampling dropped due to bad mobility
55	2463.5	2462.0	2438.0	333.90	333.70	250.13	302	79.7	Very good mobility. Sample point.
56	2375.5	2374.1	2350.1	321.65		237.22	13.2	73	

Table 4.14 6608/10-8 Dual packer run

Test no	Depth m MD	Depth m TVDRT	Depth mMSL	Hydr pressure Before Bar	Hydr pressure After Bar	Formation pressure Bar	Mobility mD/cp	Temp Deg C	Comments
57	2314.0	2312.8	2288.8	318.32	318.32	245.02	N/A	N/A	Very tight, Dual packer used
58	2314.0	2312.8	2288.8	318.32	318.32	244.81	N/A	N/A	Dual Packer. Move tool to better perm.
59	2295.0	2293.8	2269.8	315.62	315.62	243.54	20.6	69	Used Large Diameter Probe
60	2295.0	2293.8	2269.8	316.03	316.03	243.80	N/A	69	Used Dual Packer
61	2332.0	2330.8	2306.8	320.90	320.90	246.32	N/A	N/A	Used Dual Packer
62	2332.0	2330.8	2306.8	320.90	320.90	246.29	N/A	N/A	Used Dual Packer

Table 4.15 6608/10-8A Pretest and sampling

Test no	Depth m MD	Depth m TVDRT	Depth mMSL	Hydr pressure Before Bar	Hydr pressure After Bar	Formation pressure Bar	Mobility mD/cp	Temp Deg C	Comments
1	2438.0	2378.2	2354.2	328.57	328.56	250.15	5.2	78.8	OK, stable
2	2446.0	2384.5	2360.5	329.36	329.33	250.68	6.8	79.1	OK, stable
3	2455.5	2391.7	2367.7	330.43	330.42	251.07	17.6	79.3	OK, stable
4	2467.5	2400.8	2376.8	331.71	331.69	251.95	1.4	79.6	Tight
5	2478.0	2408.7	2384.7	332.77	332.77	260.58	0.6	80.3	Supercharged?
6	2504.5	2428.4	2404.4	335.61	335.59	253.77	4.4	81	OK, stable
7	2511.5	2433.5	2409.5	336.30	336.31	254.98	2.7	81.8	OK, stable
8	2574.0	2479.3	2455.3	342.91	342.87	247.66	1.3	88.5	Tight, not stable, had to pull 11000 lbs
9	2575.5	2480.4	2456.4	342.96	342.96	-	0.6	84.2	Tight, abort pretest
10	2577.0	2481.5	2457.5	343.08	343.11	245.72	24.9	84.5	Good permeability
11	2579.0	2482.9	2458.9	343.29	343.32	-	-	84.7	1st: tight/leaking.2nd:tight, aborted
12	2580.5	2484.0	2460.0	343.42	343.29	245.94	6.6	84.9	Good permeability, decreasing pressure
13	2588.5	2489.7	2465.7	344.21	344.28	263.50	0.6	85	Supercharged?
14	2593.5	2493.3	2469.3	344.79	344.83	247.43	1.1	85.3	Poor permeability, decreasing pressure
15	2597.0	2495.8	2471.8	345.09	345.12	248.00	0.8	85.4	OK, stable
16	2599.5	2497.5	2473.5	345.39	345.42	247.22	1.2	85.6	OK, stable
17	2601.5	2499.0	2475.0	345.56	345.58	276.33	0.6	86.8	Supercharged?
18	2614.0	2507.8	2483.8	346.83	346.88	250.19	134.6	86.8	OK, stable
19	2619.0	2511.4	2487.4	347.38	347.42	250.58	108.3	86.2	OK, stable
20	2624.0	2514.9	2490.9	347.88	347.91	250.93	68	86.4	OK, stable
21	2630.0	2519.0	2495.0	348.52	348.48	251.35	32.1	86.6	OK, stable
22	2636.0	2523.2	2499.2	349.18	349.16	251.78	193.5	86.8	OK, stable
23	2614.0	2508.0	2484.0	346.83	346.83	250.19	191.1	86.9	OK, stable

4.9 Reservoir fluid sampling

Oil samples were collected in well 6608/10-8 while a water sample was collected in well 6608/10-8A

6608/10-8

Two separate sampling runs were performed. In the first run oil samples were collected in the with the large diameter probe. In the second run oil samples were collected the dual packer.
One water sample was collected in well 6608/10-8A.

Although one of the samples had to be collected with high drawdown due to the reservoir properties, all of the samples were of good quality.

Table 4.16 Samples collected

Depth mRKB	Chamber no.	Petrotech bottle no.	Chamber volume	Dradown Bar	Sample type	Volume cc
Run 1						
2431,5m	MPSR 784	PT 1117	450 cc	7	Oil	375
2431,5m	MPSR 974	PT 1121	450 cc	7	Oil	400
2431,5m	MRSC 194	TS 47401	1 gallon	7	Oil	3590
2463,5m	MPSR 856	PT 1122	450 cc	15	Oil	350
2463,5m	MPSR 971	PT 1105	450 cc	15	Oil	410
2463,5m	MRSC 131	TS 47304	1 gallon	15	Oil	3580
2375,5m	MPSR 970	PT 1069	450 cc	44	Oil	350
2375,5m	MRSC 165	PT 4019	1 gallon	44	Oil/mudfiltrate	3250
Run 2						
2295m	MPSR 930	TS 4702	450 cc	54.8	Oil	410
2295m	MPSR 786	TS 2901	450 cc	54.8	Oil	415
2295m	MPSR 785	PT 1094	450 cc	54.8	Oil	395
2295m	MPSR 649	C 23404	450 cc	54.8	Oil	420
2295m	MPSR 931	TS 46504	450 cc	54.8	Oil	160
2295m	MPSR 787	PT 2024	450 cc	54.8	Oil	410
2295m	MRSC 232	PT 4008	450 cc	54.8	Oil	3260

6608/10-8A

Water samples were collected at 2614 m RKB in connection with MDT run 1A.

Table 4.17 Samples collected

Depth mRKB	Chamber no.	Petrotech bottle no.	Chamber volume	Dradown Bar	Sample type	Volume cc
Run 1						
2614m	MPSR 926	PT 3118	450 cc	6.6	Water	375
2614m	MPSR 1041	PT 3102	450 cc	5.8	Water	410
2614m	MPRS 804	PT 3165	450 cc	5.9	Water	400
2614m	MRSC 194	-	1 gallon	5.6	Water	-
2614m	MPSR 790	PT 3111	450 cc	7	Water	380

1 gallon chamber emptied offshore and transferred to bottles. Mud contamination varies from 7.7 to 15%. The quality of the water sample is acceptable.

For analysis performed see Appendix G.

DRILLING FLUIDS PROGRAMME

Well: 6608/10-8 and 8A
Field: Stær
Rig: Stena Don

HOLE SIZE	HOLE TVD MD	CASING SIZE	CASING TVD MD	MUD TYPE	MW [SG]	FV (Sec.)	10 sec. [Pa]	10 min. [Pa]	Fann 100 rpm	Fann 3 rpm	O / W ratio	YP / PV [Pa/cP]	API FL [ml]	HTHP FL [ml]	MBT [kg/m³]	pH	LGS [kg/m³]	TH	Glycol [%]	KCl [kg/m³]	Total Volume Old Volume New Volume Usage [m³]
36"	459 459	**30"**	459 459	SW / High visc. pills	1.03-1.35	> 100										8.5 - 9.1					422 0 422 247
				Comments:	*70 m³ of 1.60 g/cm³ kill mud was prepared prior to spud.*																
17 1/2"	1303 1303	**13 3/8"**	1290 1290	SW / High visc. pills	1.03 - 1.30	> 100										8.4 - 9.1					790 137 578 790
				Comments:	*1.30 sg mud left in hole at TD*																
8 1/2"	2650 2652			Aquadrill WBM	1.33 - 1.38			1.5 - 6		5 - 10				5 - 10		7.9 - 9.9	56 - 71	< 1200	4 - 5 - 2 - 4	140 - 100 - 100 - 50	1277 360 917 767
				Comments:																	
8 1/2" sidetrack	2540 2660			Aquadrill WBM	1.38 - 1.42			4 - 8		5 - 7				8.2 - 9.4		8.3-11.2	67 - 7 1	< 1200	4 - 5 - 2 - 4	140 - 100 - 100 - 50	585 510 75 183
				Comments:																	

STATOIL

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1. Introduction

This report is the result of a geochemical base study of the well 6608/10-8 (Stær prospect). The well is an oil discovery well drilled offshore mid-Norway (Figure 1). The well has a main section, which is vertical (6608/10-8) and a deviated sidetrack (6608/10-8a). The study was done on the main section. The well was drilled with water based glycol mud all through the section.

The objectives of the study were:

1. To identify potential source rocks.
2. To determine the thermal maturity.
3. To characterise fluids
   in terms of source type and maturity.
4. To study the post-emplacement alterations.

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

Analysis	Cuttings	Core	Oil	Gas	Mud	Total
Sample preparation	33	23				56
TOC Content	22	15				37
Rock-Eval	29	23				52
Vitrinite reflectance	17					17
Pyrolysis-GC	5					5
Solvent extraction	4	14			3	21
Asphaltene precipitation	4	14	4		3	25
Iatroscan	4	14	4		3	25
MPLC separation	4	14	4		3	25
Whole oil/extract GC			4			4
Saturates GC	4	14	4		3	25
Aromatic GC	4	14	4		3	25
Saturates GC-MS	1	8	4		3	16
Carbon isotopes	1	8	4			13
Gas composition				3		3
Gas isotopes				3		3

Full details of the analytical programme on a sample-by-sample basis are presented in table 1. The analyses was carried out by Geolab Nor a. s., with the exceptions of gas analyses, which were carried out by Institutt for Energiteknikk (IFE). All the analytical work was performed in accordance with guidelines given in "The Norwegian Industry Guide to Organic Geochemical Analysis, 4th edition (2000)". The analytical data are presented in Appendix 1.

2.4 Mud

The well was drilled using water based glycol mud. Three samples were taken one above the reservoir (2200 m RKB), one in the middle of the reservoir zone (2388 m RKB), and one below the reservoir (2514 m RKB). The Iatroscan analysis showed that two of the samples contained saturated hydrocarbons. Because these samples were taken in and below the reservoir this is probably due to contamination from the hydrocarbons in the reservoir. However, gas chromatograms show that also the sample taken above the reservoir contains hydrocarbon, which most be contamination from elsewhere. This has probably not contaminated the oils and extracts, as they show similar geochemical signature.

Sample depth	Smple type	Preparation	Lithology description	Vitrinite reflectance	TOC content	Rock-Eval	Pyrolysis-GC	Whole oil/ extract GC	Solvent extraction	Bulk composition	Saturate GC	Aromatic GC	Saturate GC-MS	Carbon Isotopes	Gas composition	Gas isotopes
1350	Cuttings	x	x	x	x	x										
1450	Cuttings	x	x	x	x	x										
1550	Cuttings	x	x	x												
1630	Cuttings	x	x	x	x	x										
1690	Cuttings	x	x	x												
1800	Cuttings	x	x	x												
1840	Cuttings	x	x		x	x										
1890	Cuttings	x	x	x	x	x										
2000	Cuttings	x	x	x												
2100	Cuttings	x	x	x	x	x										
2202	Cuttings	x	x	x	x	x										
2226	Cuttings	x	x	x	x	x										
2229	Cuttings	x	x	x	x	x										
2235	Cuttings	x	x		x	x	x		x	x	x	x	x	x		
2262	Cuttings	x	x		x	x										
2280	Cuttings	x	x	x	x	x			x	x	x	x				
2292	Cuttings	x	x		x	x										
2295.8	Core	x	x			x			x	x	x	x	x	x		
2311.70	Core	x	x			x										
2315.95	Core	x	x			x			x	x	x	x	x	x		
2318.7	Core	x	x			x			x	x	x	x				
2328	Cuttings	x	x		x	x										
2361	Cuttings	x	x	x	x	x										
2371.5	Core	x	x			x			x	x	x	x	x	x		
2378.05	Core	x	x			x			x	x	x	x	x	x		
2386.5	Core	x	x			x										
2391.5	Core	x	x			x			x	x	x	x				
2396.9	Core	x	x			x										
2401	Core	x	x			x			x	x	x	x	x	x		
2403.4	Core	x	x			x										
2407.10	Core	x	x			x			x	x	x	x				
2411.10	Core	x	x			x										
2424.30	Core	x	x			x			x	x	x	x	x	x		
2427.95	Core	x	x			x										
2433.25	Core	x	x			x			x	x	x	x				

Table 1. Geochemical analytical programme.

	Sample depth	Smple type	Preparation	Lithology description	Vitrinite reflectance	TOC content	Rock-Eval	Pyrolysis-GC	Whole oil/extract GC	Solvent extraction	Bulk composition	Saturate GC	Aromatic GC	Saturate GC-MS	Carbon Isotopes	Gas composition	Gas isotopes
	2438.10	Core	x	x			x										
	2438.85	Core	x	x			x			x	x	x	x				
	2441.20	Core	x	x			x			x	x	x	x	x	x		
	2446.40	Core	x	x			x										
	2450.4	Core	x	x			x			x	x	x	x				
	2453.5	Core	x	x			x										
	2454.20	Core	x	x			x			x	x	x	x	x	x		
	2463	Cuttings	x	x			x										
	2469	Cuttings	x	x			x			x	x	x	x				
	2475	Cuttings	x	x		x	x										
	2478	Cuttings	x	x		x	x	x		x	x	x	x				
	2481	Cuttings	x	x		x	x	x									
	2490	Cuttings	x	x		x	x	x									
	2511	Cuttings	x	x			x										
	2520	Cuttings	x	x			x										
	2562	Cuttings	x	x			x										
	2565	Cuttings	x	x	x	x	x	x									
	2568	Cuttings	x	x	x	x	x										
	2619	Cuttings	x	x			x										
	2628	Cuttings	x	x	x	x	x										
	2646	Cuttings	x	x			x										
Wireline fluids																	
	2285	Oil							x		x	x	x	x	x		
	2375.5	Oil & gas							x		x	x	x	x	x	x	x
	2431.5	Oil & gas							x		x	x	x	x	x	x	x
	2463.5	Oil & gas							x		x	x	x	x	x	x	x
Mud samples																	
	2200	Mud								x	x	x	x	x			
	2388	Mud								x	x	x	x	x			
	2514	Mud								x	x	x	x	x			
Total			56	56	17	24	52	5	4	21	25	25	25	16	13	3	3

Table 1. Continued.

	Lower depth	20S	ββ	C27ββ	C28ββ	C29ββ	C30ββ	DIAST
Oil samples								
	2285	0.49	0.66	32	28	40	0.10	2.26
	2375.5	0.51	0.66	32	29	39	0.11	2.24
	2431.5	0.52	0.65	32	28	39	0.11	2.31
	2463.5	0.50	0.65	32	29	39	0.11	2.41
Rock samples								
	2235	0.14	0.43	30	28	42	0.13	0.76
	2295.8	0.49	0.65	32	28	39	0.10	2.27
	2315.95	0.50	0.66	40	26	33	0.07	3.45
	2371.5	0.52	0.66	33	28	39	0.11	2.44
	2378.05	0.50	0.66	33	28	38	0.10	2.26
	2401	0.50	0.66	35	28	37	0.09	2.62
	2424.3	0.51	0.64	33	29	38	0.10	2.53
	2441.2	0.50	0.66	32	28	40	0.11	2.45
	2454.2	0.50	0.65	32	29	39	0.10	2.52
Mud samples								
	2200	0.46	0.64	34	29	37	0.08	1.64
	2388	0.47	0.63	33	28	38	0.10	1.97
	2514	0.48	0.64	34	28	38	0.09	2.16

Table 2. Saturated hydrocarbon biomarker ratios (steranes)

	Lower depth	22S	TSTM	TTX	30D	30AB-HOP	C28AB	TRICY	TETRACY	35H_34H	29H_30H	DEMET	GAMMA
Oil samples													
	2285	0.61	0.92	1.10	0.08	0.83	0.10	0.08	0.09	0.59	0.46	0.07	0.03
	2375.5	0.62	0.90	1.09	0.08	0.84	0.09	0.08	0.08	0.62	0.46	0.06	0.03
	2431.5	0.62	0.96	1.15	0.08	0.83	0.09	0.07	0.08	0.61	0.46	0.06	0.02
	2463.5	0.62	0.92	1.20	0.08	0.84	0.09	0.09	0.09	0.63	0.48	0.07	0.02
Rock samples													
	2235	0.34	0.39	0.25	0.05	0.61	1.32	0.06	0.05	1.23	0.44	0.03	0.06
	2295.8	0.61	0.88	1.09	0.07	0.83	0.09	0.08	0.08	0.62	0.46	0.06	0.02
	2315.95	0.60	1.58	0.99	0.08	0.87	0.10	0.71	0.41	0.63	0.65	0.07	0.03
	2371.5	0.62	0.92	1.14	0.08	0.84	0.09	0.10	0.10	0.62	0.48	0.07	0.02
	2378.05	0.62	0.89	1.15	0.08	0.84	0.10	0.09	0.10	0.60	0.48	0.07	0.02
	2401	0.61	1.05	1.09	0.08	0.84	0.09	0.36	0.18	0.65	0.49	0.07	0.03
	2424.3	0.61	0.93	1.13	0.08	0.84	0.09	0.09	0.10	0.62	0.47	0.06	0.03
	2441.2	0.61	0.93	1.07	0.07	0.83	0.09	0.09	0.09	0.63	0.46	0.06	0.03
	2454.2	0.62	0.98	1.23	0.08	0.84	0.09	0.11	0.11	0.63	0.49	0.07	0.02
Mud samples													
	2200	0.59	0.93	0.88	0.08	0.84	0.10	0.14	0.11	0.71	0.58	0.09	0.03
	2388	0.61	0.96	0.90	0.08	0.84	0.10	0.12	0.11	0.67	0.55	0.08	0.04
	2514	0.61	0.96	0.91	0.08	0.85	0.09	0.16	0.13	0.70	0.56	0.09	0.04

Table 3. Saturated hydrocarbon biomarker ratios (terpanes)

Ratio	Derivation	m/z
Triterpanes		
22S	32αβS/(32αβS+32αβR)	191
TSTM	27Ts/27Tm	191
TTX	30d/29βα	191
30D	30d/30αβ	191
29H_30H	29αβ/30αβ	191
30AB–HOP	30αβ/(30αβ+30βα)	191
C28AB	28αβ/30αβ	191
TRICY	(23/3)/30αβ	191
TETRACY	(24/4)/30αβ	191
35H_34H	(35αβR+35αβS)/(34αβR+34αβS)	191
DEMET	25nor30αβ/30αβ	191
OLEANAN	30O/30αβ	191
GAMMA	30G/30αβ	191
PPMH*	ppm 27Ts+27Tm+29αβ+29βα+30αβ+30βα+31αβS+31αβR+32αβS+32αβR+33αβS+33αβR +34αβS+34αβR+35αβS+35αβR	191
Steranes		
20S	29ααS/(29ααR+29ααS)	217
BB	(29ββR+29ββS)/(29ββR+29ββS+29ααR+29ααS)	217
C27BB	100*(27ββR+27ββS)/(27ββR+27ββS+28ββR+28ββS+29ββR+29ββS)	218
C28BB	100*(28ββR+28ββS)/(27ββR+27ββS+28ββR+28ββS+29ββR+29ββS)	218
C29BB	100*(29ββR+29ββS)/(27ββR+27ββS+28ββR+28ββS+29ββR+29ββS)	218
C30BB	(30ββR+30ββS)/(27ββR+27ββS+28ββR+28ββS+29ββR+29ββS)	218
DIAST	(27dβR+27dβS)/(27ααR+27ααS)	217
PPMS*	ppm 27ββR+27ββS+28ββR+28ββS+29ββR+29ββS	218
HOPST	Intensities(27Ts+27Tm+29αβ+29βα+30αβ+30βα+31αβS+31αβR+32αβS+32αβR+33αβS+33αβR+34αβS+34αβR +35αβS+35αβR)/Intensities(27ββR+27ββS+28ββR+28ββS+29ββR+29ββS)	

* ppm calculated from comparison with m/z 219 intensity for D2-cholestane

Table 4. Biomarkers and their derivation.

Table 1: Analytical Program for NOCS 6608/10-8.

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Sample Depth (m)	Sample Type	Sample Code	Extraction Clean-Up	Lithology Description	Picking for screening	Prøvepreparering	Leco TOC	RockEval	Thermal Extraction	Pyrolysis GC	Picking for Extraction	Iatroscan	Solvent Extraction	MPLC & Deasphaltene	EOM GC	Whole Oil GC	Sat GC (Quantitative)	Aro GC (Non Quantitative	Sat GCMS (Quantitative)	Aro GCMS (Quantitative)	Isotope of EOM/fractions	Vitrinite Reflectance	Visual kerogen	API Gravity	Gas composition	Gas isotopes
Table nos.:				3			5	5		6		8g	8a-c	8a-c		13	9	9	11	12	10	4			14	14
Rocks																										
1350	cut	W75/0001-1		x	x		x	x														x				
1450	cut	W75/0002-1		x	x		x	x														x				
1550	cut																					x				
1630	cut	W75/0004-1		x	x		x	x														x				
1690	cut																					x				
1800	cut																					x				
1840	cut	W75/0007-4		x	x		x	x																		
1890	cut	W75/0008-2		x	x		x	x														x				
2000	cut																					x				
2100	cut	W75/0010-1		x	x		x	x														x				
2202	cut	W75/0011-1		x	x		x	x														x				
2226	cut	W75/0012-4		x	x		x	x														x				
2229	cut	W75/0013-4		x	x		x	x														x				
2235	cut	W75/0014-3		x	x		x	x	x	x	x	x	x	x			x	x	x		x					
2262	cut	W75/0015-3		x	x		x	x																		
2280	cut	W75/0016-2		x	x		x	x			x	x	x	x			x	x				x				
2292	cut	W75/0017-1		x	x		x	x																		
2295.8	ccp	W75/0033-1		x				x				x	x	x			x	x	x		x					
2311.7	ccp	W75/0034-1		x				x																		
2315.95	ccp	W75/0035-1		x				x				x	x	x			x	x	x		x					
2318.7	ccp	W75/0036-1		x				x																		
2328	cut	W75/0018-1		x	x		x	x			x	x	x	x			x	x								
2361	cut	W75/0019-1		x	x		x	x														x				
2371.5	ccp	W75/0037-1		x				x				x	x	x			x	x	x		x					
2378.05	ccp	W75/0038-1		x				x				x	x	x			x	x	x		x					
2386.5	ccp	W75/0039-1		x				x																		
2391.5	ccp	W75/0040-1		x				x				x	x	x			x	x								
2396.9	ccp	W75/0041-1		x				x																		
2401	ccp	W75/0042-1		x				x				x	x	x			x	x	x		x					
2403.4	ccp	W75/0043-1		x				x																		
2407.1	ccp	W75/0044-1		x				x				x	x	x			x	x								
2411.1	ccp	W75/0045-1		x				x																		
2424.3	ccp	W75/0046-1		x				x				x	x	x			x	x	x		x					
2427.95	ccp	W75/0047-1		x				x																		
2433.25	ccp	W75/0048-1		x				x				x	x	x			x	x								
2438.1	ccp	W75/0049-1		x			x	x																		
2438.85	ccp	W75/0050-1		x				x				x	x	x			x	x								
2441.2	ccp	W75/0051-1		x				x				x	x	x			x	x	x		x					
2446.4	ccp	W75/0052-1		x				x																		
2450.4	ccp	W75/0053-1		x				x				x	x	x			x	x								
2453.5	ccp	W75/0054-1		x			x	x																		
2454.2	ccp	W75/0055-0		x				x				x	x	x			x	x	x		x					
2463	cut	W75/0020-2		x	x			x																		
2469	cut	W75/0021-2		x	x			x			x	x	x	x			x	x								
2475	cut	W75/0022-4		x	x		x	x																		
2478	cut	W75/0056-2		x	x		x	x	x	x	x	x	x	x			x	x								
2481	com	W75/0057-0		x	x		x	x	x	x																
2490	com	W75/0058-0		x	x		x	x	x	x																
2511	cut	W75/0025-2		x	x			x																		
2520	cut	W75/0026-2		x	x			x																		
2562	cut	W75/0027-2		x	x			x																		
2565	cut	W75/0028-3		x	x		x	x	x	x												x				
2568	cut	W75/0029-3		x	x		x	x														x				
2619	cut	W75/0030-2		x	x			x																		
2628	cut	W75/0031-3		x	x		x	x														x				
2646	cut	W75/0032-2		x	x			x																		
Oils																										
2285.00	Oil											x		x		x	x	x	x		x					
2375.50	Oil											x		x		x	x	x	x		x					
2431.50	Oil											x		x		x	x	x	x		x					
2463.50	Oil											x		x		x	x	x	x		x					
Muds																										
2200	Mud											x	x	x			x	x	x							
2388	Mud											x	x	x			x	x	x							
2514	Mud											x	x	x			x	x	x							
Gases																										
1.01																								x	x	
1.02																								x	x	
4.00																								x	x	
Totals				52	29		24	52	5	5	5	25	21	25		4	25	25	25		13	17			3	3

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Table 3 : Lithology description for well NOCS 6608/10-8

Depth unit of measure: m

Depth		Type			Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
1350.00						0001
			60	S/Sst : lt gy, w, drk gy, crs, l		0001-2L
		0.44	40	Sltst : gn gy		0001-1L
1450.00						0002
		0.54	85	Sltst : gn gy to lt gy, s		0002-1L
			15	S/Sst : lt gy, w, drk gy, crs, l		0002-2L
1550.00						0003
			100	S/Sst : brn gy to gy brn to gn gy, cem, slt, glauc		0003-1L
			tr	S/Sst : lt gy, w, drk gy, crs, l		0003-2L
1630.00						0004
		2.06	100	Sltst : brn gy to gy brn to gn gy, s, glauc		0004-1L
1690.00						0005
			100	Tuff : w to lt gy to gn w		0005-2L
			tr	Sltst : brn gy to gy brn to gn gy, s, glauc		0005-1L
1800.00						0006
			100	Sh/Clst: m gy to brn gy, gy gn, gy red		0006-3L
			tr	Sltst : brn gy to gy brn to gn gy, s, glauc		0006-1L
			tr	Tuff : w to lt gy to gn w		0006-2L
1840.00						0007
		0.82	85	Sltst : drk gy to m gy		0007-4L
			15	Sh/Clst: m gy to brn gy, gy gn, gy red		0007-3L
			tr	Sltst : brn gy to gy brn to gn gy, s, glauc		0007-1L
			tr	Tuff : w to lt gy to gn w		0007-2L

Table 3 : Lithology description for well NOCS 6608/10-8

Depth unit of measure: m

Depth		Type				Trb	Sample
Int	Cvd	TOC%	%	Lithology description			
2262.00							0015
	cvd		75	Sh/Clst	lt gy, m gy, brn gy, gy red, gy gn		0015-1L
			15	Ca	w, lt gy, gy brn, s		0015-2L
		8.76	10	Sh/Clst	dsk y brn		0015-3L
			tr	Ca	dsk y brn		0015-4L
2280.00							0016
		1.02	65	Ca	w, lt gy, gy brn, y brn, s		0016-2L
	cvd		25	Sh/Clst	lt gy, m gy, brn gy, gy red, gy gn		0016-1L
			5	Sh/Clst	dsk y brn		0016-3L
			5	Ca	dsk y brn		0016-4L
2292.00							0017
			60	S/Sst	lt gy to m gy to brn gy to gy brn, calc		0017-2L
	cvd	2.30	40	Sh/Clst	lt gy, m gy, brn gy, gy red, gy gn		0017-1L
			tr	Sh/Clst	dsk y brn		0017-3L
			tr	Ca	dsk y brn		0017-4L
			tr	Cont	prp, dd		0017-5L
2295.80	ccp						0033
		2.13	100	S/Sst	gy brn to y brn, st		0033-1L
2311.70	ccp						0034
			100	S/Sst	gy brn to y brn, slt, st		0034-1L
2315.95	ccp						0035
		1.67	100	S/Sst	gy brn to y brn to dsk y brn, slt, st		0035-1L

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Table 3 : Lithology description for well NOCS 6608/10-8

Depth unit of measure: m

Depth Int	Depth Cvd	Type TOC%	%	Lithology description	Trb	Sample
1890.00						0008
		0.88	100	Sh/Clst: m gy to brn gy, gy gn, gy red		0008-1L
			tr	Sltst : drk gy to m gy		0008-2L
2000.00						0009
			100	Sh/Clst: m gy		0009-1L
			tr	Sltst : drk gy to m gy		0009-2L
			tr	Ca : y brn		0009-3L
2100.00						0010
		1.22	100	Sh/Clst: m gy		0010-1L
			tr	Sh/Clst: gy red, gy gn		0010-2L
			tr	S/Sst : w		0010-3L
2202.00						0011
		2.11	50	Sh/Clst: m gy		0011-1L
			30	S/Sst : w, lt gy, gy brn, calc		0011-3L
			10	Ca : gy brn, y brn, s		0011-2L
			10	Cont : dd		0011-4L
2226.00						0012
		5.75	50	Sh/Clst: dsk y brn to brn blk		0012-4L
			40	Sh/Clst: m gy		0012-1L
			10	S/Sst : w, lt gy, gy brn, calc		0012-2L
			tr	Cont : dd		0012-3L
2229.00						0013
		8.16	40	Sh/Clst: dsk y brn to brn blk		0013-4L
			35	Sh/Clst: m gy		0013-1L
			15	S/Sst : w, lt gy, gy brn, calc		0013-2L
			10	Cont : dd		0013-3L
2235.00						0014
	cvd		90	Sh/Clst: lt gy, m gy, brn gy, gy red, gy gn		0014-1L
			5	S/Sst : w, lt gy, gy brn, calc		0014-2L
		9.78	5	Sh/Clst: dsk y brn to brn blk		0014-3L

Table 3 : Lithology description for well NOCS 6608/10-8

Depth unit of measure: m

Depth Int	Depth Cvd	Type TOC%	%	Lithology description	Trb	Sample
2396.90	ccp					0041
			100	S/Sst : gy brn, st		0041-1L
2401.00	ccp					0042
		1.56	100	S/Sst : gy brn to y brn, st		0042-1L
2403.40	ccp					0043
			100	S/Sst : gy brn		0043-1L
2407.10	ccp					0044
		1.43	100	S/Sst : gy brn to brn gy, l		0044-1L
2411.10	ccp					0045
			100	S/Sst : gy brn to brn gy, l		0045-1L
2424.30	ccp					0046
		2.15	100	S/Sst : gy brn to y brn, l, st		0046-1L
2427.95	ccp					0047
			100	S/Sst : gy brn to y brn		0047-1L
2433.25	ccp					0048
		1.69	100	S/Sst : y brn to dsk brn, st		0048-1L
2438.10	ccp					0049
		3.10	100	Sltst : m gy to brn gy, s		0049-1L

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Table 3 : Lithology description for well NOCS 6608/10-8

Depth unit of measure: m

Depth		Type			Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2318.70	ccp					0036
		1.94	100	S/Sst : gy brn to y brn		0036-1L
2328.00						0018
		0.98	100	Sh/Clst: lt gy, m gy, brn gy, gy red, gy gn		0018-1L
			tr	S/Sst : lt gy to m gy to brn gy to gy brn, calc		0018-2L
			tr	Sh/Clst: dsk y brn		0018-3L
			tr	Ca : dsk y brn		0018-4L
			tr	Cont : prp, dd		0018-5L
2361.00						0019
		1.06	70	Sh/Clst: lt gy, m gy, brn gy, gy red, gy gn		0019-1L
			30	S/Sst : lt gy to m gy to brn gy to gy brn, calc		0019-2L
			tr	Sh/Clst: dsk y brn		0019-3L
			tr	Ca : dsk y brn		0019-4L
			tr	Cont : dd		0019-5L
2371.50	ccp					0037
		1.49	100	S/Sst : gy brn		0037-1L
2378.05	ccp					0038
		1.15	100	S/Sst : gy brn		0038-1L
2386.50	ccp					0039
			100	S/Sst : gy brn		0039-1L
2391.50	ccp					0040
		1.61	100	S/Sst : gy brn to y brn, st		0040-1L

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Table 3 : Lithology description for well NOCS 6608/10-8

Depth unit of measure: m

Depth		Type			Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2475.00						0022
			80	S/Sst : lt gy, l		0022-2L
			10	Sh/Clst: lt gy, m gy, brn gy, gy red, gy gn		0022-1L
			10	Sh/Clst: dsk y brn, carb		0022-3L
		60.60	tr	Coal : blk, dd		0022-4L
2478.00						0056
			85	S/Sst : lt gy, l		0056-1L
			10	Sh/Clst: lt gy to m gy, gy red, gy gn		0056-3L
		58.80	5	Sh/Clst: dsk y brn		0056-2L
2481.00						0023
			80	S/Sst : lt gy, l		0023-2L
			10	Sh/Clst: lt gy, m gy, brn gy, gy red, gy gn		0023-1L
			10	Sh/Clst: dsk y brn, carb		0023-3L
			tr	Coal : blk, dd		0023-4L
2490.00						0024
			75	S/Sst : lt gy, l		0024-2L
			15	Sh/Clst: dsk y brn, carb		0024-3L
			10	Sh/Clst: lt gy, m gy, brn gy, gy red, gy gn		0024-1L
			tr	Coal : blk, dd		0024-4L
2511.00						0025
			85	S/Sst : lt gy, l		0025-2L
			10	Sltst : gy brn		0025-4L
			5	Sh/Clst: lt gy, m gy, brn gy, gy red, gy gn		0025-1L
			tr	Sh/Clst: dsk y brn, carb		0025-3L
2520.00						0026
			90	S/Sst : lt gy, l		0026-2L
			5	Sh/Clst: lt gy, m gy, brn gy, gy red, gy gn		0026-1L
			5	Sltst : gy brn		0026-4L
			tr	Sh/Clst: dsk y brn, carb		0026-3L

Table 3 : Lithology description for well NOCS 6608/10-8

Depth unit of measure: m

Depth		Type			Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2438.85		ccp				0050
		6.56	100	S/Sst : brn gy to m gy to gy brn, slt, carb		0050-1L
2441.20		ccp				0051
		1.95	100	S/Sst : gy brn		0051-1L
2446.40		ccp				0052
			100	S/Sst : gy brn		0052-1L
2450.40		ccp				0053
		1.88	100	S/Sst : gy brn		0053-1L
2453.50		ccp				0054
		4.71	100	Sltst : dsk brn to gy brn, s		0054-1L
2454.20		ccp				0055
		2.45	95	S/Sst : gy brn to y brn		0055-1L
			5	Sltst : dsk y brn to brn blk, carb		0055-2L
2463.00						0020
			50	S/Sst : lt gy, l		0020-2L
			35	Sh/Clst: lt gy, m gy, brn gy, gy red, gy gn		0020-1L
			15	Sh/Clst: dsk y brn, carb		0020-3L
			tr	Coal : blk, dd		0020-4L
2469.00						0021
		1.42	75	S/Sst : lt gy, l		0021-2L
			15	Sh/Clst: lt gy, m gy, brn gy, gy red, gy gn		0021-1L
			10	Sh/Clst: dsk y brn, carb		0021-3L
			tr	Coal : blk, dd		0021-4L

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Table 3 : Lithology description for well NOCS 6608/10-8

Depth unit of measure: m

Depth		Type			Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2646.00						0032
			80	S/Sst : lt gy to w, l		0032-2L
			20	Sh/Clst: dsk y brn, carb		0032-3L
			tr	Sh/Clst: lt gy, m gy, brn gy, gy red, gy gn		0032-1L
			tr	Sltst : gy brn		0032-4L
			tr	Coal : blk		0032-5L

Table 3 : Lithology description for well NOCS 6608/10-8

Depth unit of measure: m

Depth		Type			Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2562.00						0027
			80	S/Sst : lt gy, l		0027-2L
			20	Sh/Clst: dsk y brn, carb		0027-3L
			tr	Sh/Clst: lt gy, m gy, brn gy, gy red, gy gn		0027-1L
			tr	Sltst : gy brn		0027-4L
			tr	Coal : blk		0027-5L
2565.00						0028
			55	S/Sst : lt gy, l		0028-2L
		58.30	35	Sh/Clst: dsk y brn, carb		0028-3L
			10	Sltst : gy brn		0028-4L
			tr	Sh/Clst: lt gy, m gy, brn gy, gy red, gy gn		0028-1L
			tr	Coal : blk		0028-5L
2568.00						0029
			55	S/Sst : lt gy, cem, l		0029-2L
		68.70	40	Sh/Clst: dsk y brn, carb		0029-3L
			5	Sltst : gy brn		0029-4L
			tr	Sh/Clst: lt gy, m gy, brn gy, gy red, gy gn		0029-1L
			tr	Coal : blk		0029-5L
2619.00						0030
			80	S/Sst : lt gy, cem, l		0030-2L
			10	Sh/Clst: dsk y brn, carb		0030-3L
			10	Sltst : gy brn		0030-4L
			tr	Sh/Clst: lt gy, m gy, brn gy, gy red, gy gn		0030-1L
			tr	Coal : blk		0030-5L
2628.00						0031
			90	S/Sst : lt gy to w, l		0031-2L
		54.00	5	Sh/Clst: dsk y brn, carb		0031-3L
			5	Sltst : gy brn		0031-4L
			tr	Sh/Clst: lt gy, m gy, brn gy, gy red, gy gn		0031-1L
			tr	Coal : blk		0031-5L

Table 4B: Organic Petrography of Well 6608/10-8

Sample I.D.	Amorph-inite	Bitumen	Phytoclasts							Comments
			Content	Composition (%)						
				Liptinite				Vitr.	Inert./ Reworked	
				Algae	Spores	Cuticle	Resin			
1350m.	Low-Mod.	-	Trace	-	Trace	-	-	80	20	Phytoclasts as specks
1450m.	Moderate	-	Very Low	-	Trace	-	-	40	60	-
1550m.	Mod.-Rich	-	Low	-	Trace	-	-	50	50	Shell + Foram. debris
1630m.	Mod.-Rich	-	Very Low	Trace	Trace	-	-	70	30	Shell + Foram. debris
1690m.	Trace	-	Vrt.Barren	Trace	Trace	-	-	Trace	Trace	Rich in shell + Foram. debris
1800m.	Low+Mod.	-	Very Low	-	Trace	-	-	50	50	-
1890m.	Low	-	Very Low	-	Trace	-	-	Trace	100	-
2000m.	Low-Mod.	-	Low	Trace	Trace	-	-	Trace	100	-
2100m.	Low-Mod.	-	Low-Mod.	-	Trace	-	-	Trace	100	-
2202m.	Low+Mod.	-	Moderate	-	Trace	-	-	Trace	100	Y/O fluorescence from carbonate
2226m.	Var.-Low+Rich	Trace	Mod.-Rich	Trace	Trace	-	-	10	90	Bitumen as specks. MO fluorescence from carbonate
2229m.	Most V. Rich Few Low	Trace	Moderate	-	10	-	-	Trace	90	Bitumen as specks. Y/O fluorescence from carbonate
2280m.	Moderate	Trace	Moderate	Trace	Trace	-	-	Trace	100	Bitumen as specks. MO fluorescence from carbonate
2361m.	Moderate	-	Moderate	Trace	Trace	-	-	Trace	100	M+DO fluor. From carbonate
2565m.	Low in shale	-	Abundant	-	10	-	Trace	70	20	100%coal, tr.shale
2568m.	Var.-Low-Rich in shale	-	Abundant	Trace	10	-	-	60	30	80%coal, 20%shale
2628m.	Var.-Mod.-Rich	-	Abundant	-	Low		-	70	30	50%coal, 50%shale

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Table 4A: Maturity of Well 6608/10-8

Sample I.D.	Vitrinite Reflectance			UV Fluorescence			Comments
	R.o.Ave.	No.	Conf.	Form	Content	Colour	
135m.	0.23	20	C	Spores	Trace	Y	80%silty shale, marly, 20%igneopus
1450m.	0.26	20	C	Spores	Trace	Y	90%shale, marly, 10%igneous
1550m.	0.27	20	C	Spores	Trace	Y	Shale, silty. Shell & Foram. Debris. Glauconite
1630m.	0.27	20	B	Spores	Trace	Y	Shale, calcareous. Shell debris + Forams. Glauconite
				Algae	Trace	G	
1690m.	0.33	2	D	Spores	Trace	Y	Marl. Rich in shell & Foram. debris
				Algae	Trace	G/Y	
1800m.	0.32	20	C	Spores	Trace	Y+Y-Y/O	Shale, marly. Occasional haematitic cuttings
1890m.	0.33	6	D	Spores	Trace	Y-Y/O	Shale. Readings possibly on cavings
2000m.	0.34	20	D	Algae	Trace	Y	Shale
				Spores	Trace	Y-Y/O	
2100m.	0.37	20	D	Spores	Trace	Y/O	Shale. Variable r.o.
2202m.	0.37	20	C	Spores	Trace	Y/O	Calcareous shale
				Carbonate	Low	Y/O	
2226m.	0.35	20	D	H/C specks	Trace	Y	90%shale, 10%carbonate. R.o. possibly lowered by
				Carbonate	Low	MO	H/C impregnation
				Spores	Trace	Y/O	
				Algae	Trace	Y	
2229m.	0.35	20	C	Spores	Low	Y/O	100%shale, tr.carbonate
				Carbonate	Low	Y/O	
				H/C specks	Trace	Y	
2280m.	0.35	20	C	Carbonate	Moderate	MO	40%shale, 60%carbonate
				H/C specks	Trace	Y	
				Algae	Trace	Y	
				Spores	Trace	Y/O	
2361m.	0.37	20	C	Spores	Trace	Y/O	30%shale, 70%marl
				Carbonate	Low	M+DO	
				Algae	Trace	Y	
2565m.	0.39	20	B	Spores	Moderate	Y/O	100%coal, tr.shale
				Resin	Trace	Y	
2568m.	0.38	20	B	Spores	Mod.-Rich	Y/O	80%coal, 20%shale
				Algae	Trace	Y	
2628m.	0.39	20	B	Spores	Low	Y/O	50%coal, 50%shale

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Table 5: Rock-Eval table for well NOCS 6608/10-8

Depth unit of measure: m

Depth	Typ	Form	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
2315.95	ccp	S/Sst	: gy brn to y brn to dsk y brn	17.57	2.18	0.38	5.74	1.67	131	23	19.7	0.89	417	0035-1L
2318.70	ccp	S/Sst	: gy brn to y brn	15.39	4.32	0.49	8.82	1.94	223	25	19.7	0.78	413	0036-1L
2328.00	cut	Sh/Clst	: lt gy, m gy, brn gy, gy red, gy gn	1.62	1.27	0.57	2.23	0.98	130	58	2.9	0.56	333	0018-1L
2361.00	cut	Sh/Clst	: lt gy, m gy, brn gy, gy red, gy gn	0.53	0.75	1.30	0.58	1.06	71	123	1.3	0.41	335	0019-1L
2371.50	ccp	S/Sst	: gy brn	13.04	3.17	0.18	17.61	1.49	213	12	16.2	0.80	413	0037-1L
2378.05	ccp	S/Sst	: gy brn	12.52	2.51	0.10	25.10	1.15	218	9	15.0	0.83	321	0038-1L
2386.50	ccp	S/Sst	: gy brn	6.77	2.35	0.10	23.50	-	-	-	9.1	0.74	421	0039-1L
2391.50	ccp	S/Sst	: gy brn to y brn	24.16	4.00	0.58	6.90	1.61	248	36	28.2	0.86	317	0040-1L
2396.90	ccp	S/Sst	: gy brn	24.21	4.73	0.05	94.60	-	-	-	28.9	0.84	317	0041-1L
2401.00	ccp	S/Sst	: gy brn to y brn	23.18	2.97	0.20	14.85	1.56	190	13	26.1	0.89	317	0042-1L
2403.40	ccp	S/Sst	: gy brn	19.63	5.75	0.95	6.05	-	-	-	25.4	0.77	417	0043-1L
2407.10	ccp	S/Sst	: gy brn to brn gy	15.68	3.87	0.35	11.06	1.43	271	24	19.6	0.80	323	0044-1L
2411.10	ccp	S/Sst	: gy brn to brn gy	23.03	4.75	0.28	16.96	-	-	-	27.8	0.83	324	0045-1L
2424.30	ccp	S/Sst	: gy brn to y brn	25.47	4.13	0.08	51.63	2.15	192	4	29.6	0.86	317	0046-1L

Table 5: Rock-Eval table for well NOCS 6608/10-8

Depth unit of measure: m

Depth	Typ	Form	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
1350.00	cut		Sltst : gn gy	0.14	0.29	0.17	1.71	0.44	66	39	0.4	0.33	410	0001-1L
1450.00	cut		Sltst : gn gy to lt gy	0.13	0.40	0.49	0.82	0.54	74	91	0.5	0.25	416	0002-1L
1630.00	cut		Sltst : brn gy to gy brn to gn gy	1.10	1.63	1.90	0.86	2.06	79	92	2.7	0.40	409	0004-1L
1840.00	cut		Sltst : drk gy to m gy	0.25	0.47	0.56	0.84	0.82	57	68	0.7	0.35	361	0007-4L
1890.00	cut		Sltst : drk gy to m gy	0.83	0.50	0.09	5.56	-	-	-	1.3	0.62	335	0008-2L
2100.00	cut		Sh/Clst: m gy	0.47	0.61	0.21	2.90	1.22	50	17	1.1	0.44	419	0010-1L
2202.00	cut		Sh/Clst: m gy	0.81	0.73	0.18	4.06	2.11	35	9	1.5	0.53	421	0011-1L
2226.00	cut		Sh/Clst: dsk y brn to brn blk	1.77	7.58	0.76	9.97	5.75	132	13	9.4	0.19	420	0012-4L
2229.00	cut		Sh/Clst: dsk y brn to brn blk	1.27	14.43	1.77	8.15	8.16	177	22	15.7	0.08	418	0013-4L
2235.00	cut		Sh/Clst: dsk y brn to brn blk	1.39	22.91	1.61	14.23	9.78	234	16	24.3	0.06	415	0014-3L
2262.00	cut		Sh/Clst: dsk y brn	1.94	16.27	0.62	26.24	8.76	186	7	18.2	0.11	414	0015-3L
2280.00	cut		Ca : w, lt gy, gy brn, y brn	1.07	2.10	0.29	7.24	1.02	206	28	3.2	0.34	414	0016-2L
2292.00	cut		Sh/Clst: lt gy, m gy, brn gy, gy red, gy gn	1.43	2.33	0.41	5.68	2.30	101	18	3.8	0.38	422	0017-1L
2295.80	ccp		S/Sst : gy brn to y brn	5.40	5.40	0.04	135.00	2.13	254	2	10.8	0.50	416	0033-1L
2311.70	ccp		S/Sst : gy brn to y brn	9.83	5.37	1.19	4.51	-	-	-	15.2	0.65	420	0034-1L

Table 5: Rock-Eval table for well NOCS 6608/10-8

Depth unit of measure: m

Depth	Typ	Form	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
2520.00	cut		S/Sst : lt gy	2.99	11.22	1.41	7.96	-	-	-	14.2	0.21	342	0026-2L
2562.00	cut		S/Sst : lt gy	2.71	90.80	1.38	65.80	-	-	-	93.5	0.03	347	0027-2L
2565.00	cut		Sh/Clst: dsk y brn	3.55	102.39	5.49	18.65	58.30	176	9	105.9	0.03	426	0028-3L
2568.00	cut		Sh/Clst: dsk y brn	1.19	69.21	1.80	38.45	68.70	101	3	70.4	0.02	434	0029-3L
2619.00	cut		S/Sst : lt gy	2.05	7.32	0.81	9.04	-	-	-	9.4	0.22	340	0030-2L
2628.00	cut		Sh/Clst: dsk y brn	1.24	57.14	1.60	35.71	54.00	106	3	58.4	0.02	433	0031-3L
2646.00	cut		S/Sst : lt gy to w	2.47	6.33	0.78	8.12	-	-	-	8.8	0.28	317	0032-2L

Table 5: Rock-Eval table for well NOCS 6608/10-8

Depth unit of measure: m

Depth	Typ	Form	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
2427.95	ccp	S/Sst	: gy brn to y brn	29.34	5.22	0.23	22.70	-	-	-	34.6	0.85	318	0047-1L
2433.25	ccp	S/Sst	: y brn to dsk brn	22.50	3.17	0.18	17.61	1.69	188	11	25.7	0.88	315	0048-1L
2438.10	ccp	Sltst	: m gy to brn gy	0.37	3.32	0.56	5.93	3.10	107	18	3.7	0.10	429	0049-1L
2438.85	ccp	S/Sst	: brn gy to m gy to gy brn	8.83	10.11	1.98	5.11	6.56	154	30	18.9	0.47	425	0050-1L
2441.20	ccp	S/Sst	: gy brn	23.71	5.10	0.35	14.57	1.95	262	18	28.8	0.82	319	0051-1L
2446.40	ccp	S/Sst	: gy brn	14.80	5.09	1.69	3.01	-	-	-	19.9	0.74	417	0052-1L
2450.40	ccp	S/Sst	: gy brn	17.01	3.50	0.37	9.46	1.88	186	20	20.5	0.83	325	0053-1L
2453.50	ccp	Sltst	: dsk brn to gy brn	0.25	4.93	0.66	7.47	4.71	105	14	5.2	0.05	430	0054-1L
2454.20	ccp	bulk		20.42	4.27	0.27	15.81	-	-	-	24.7	0.83	410	0055-0B
2463.00	cut	S/Sst	: lt gy	2.77	12.03	1.77	6.80	-	-	-	14.8	0.19	349	0020-2L
2469.00	cut	S/Sst	: lt gy	3.10	11.37	1.46	7.79	1.42	801	103	14.5	0.21	347	0021-2L
2475.00	cut	Coal	: blk	5.90	82.74	1.26	65.67	60.60	137	2	88.6	0.07	422	0022-4L
2478.00	cut	Sh/Clst	: dsk y brn	10.86	197.75	4.08	48.47	58.80	336	7	208.6	0.05	421	0056-2L
2481.00	com	bulk		7.70	135.11	4.50	30.02	47.00	287	10	142.8	0.05	429	0057-0B
2490.00	com	bulk		6.91	189.26	5.34	35.44	52.90	358	10	196.2	0.04	421	0058-0B
2511.00	cut	S/Sst	: lt gy	3.01	12.14	1.37	8.86	-	-	-	15.2	0.20	349	0025-2L

Table 8a: MPLC Bulk Composition: Weight of EOM and Fraction for well NOCS 6608/10-8

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
2200.00	mud	bulk	-	203.9	4.1	3.8	53.2	142.8	7.9	196.0	-	0063-0B
2235.00	cut	Sh/Clst: dsk y brn to brn blk	2.0	10.0	1.4	2.2	1.5	4.8	3.6	6.4	11.10	0014-3L
2280.00	cut	Ca : w, lt gy, gy brn, y brn	7.8	16.1	7.9	2.8	1.3	4.1	10.7	5.4	1.02	0016-2L
2285.00	oil	bulk	56.3	50.1	33.6	13.2	0.3	2.9	46.9	3.2	-	0059-0B
2295.80	ccp	S/Sst : gy brn to y brn	10.9	392.5	255.3	102.1	5.0	30.1	357.4	35.1	2.13	0033-1L
2315.95	ccp	S/Sst : gy brn to y brn to dsk y brn	10.7	272.5	215.9	36.6	3.2	16.8	252.5	20.0	1.67	0035-1L
2318.70	ccp	S/Sst : gy brn to y brn	10.4	280.3	175.5	75.6	4.8	24.4	251.1	29.2	1.94	0036-1L
2371.50	ccp	S/Sst : gy brn	10.1	219.3	138.7	58.9	3.1	18.5	197.7	21.6	1.49	0037-1L
2375.50	oil	bulk	63.0	57.5	37.9	15.5	0.6	3.4	53.5	4.0	-	0060-0B
2378.05	ccp	S/Sst : gy brn	10.2	283.1	176.8	77.2	4.6	24.6	254.0	29.1	1.15	0038-1L
2388.00	mud	bulk	-	240.9	6.9	5.6	77.6	150.9	12.4	228.5	-	0064-0B
2391.50	ccp	S/Sst : gy brn to y brn	10.2	460.2	295.4	114.5	3.6	46.6	410.0	50.2	1.61	0040-1L
2401.00	ccp	S/Sst : gy brn to y brn	10.1	394.8	282.9	81.1	2.6	28.2	364.1	30.7	1.51	0042-1L
2407.10	ccp	S/Sst : gy brn to brn gy	10.1	255.0	126.7	54.1	6.4	67.8	180.8	74.2	1.43	0044-1L
2424.30	ccp	S/Sst : gy brn to y brn	10.7	355.6	223.6	81.3	5.7	45.0	304.9	50.7	2.15	0046-1L

(Oil weight extracted in mg.)

Table 6 : Pyrolysis GC Data (S2 peak) as Percentage of Total Area for Well NOCS 6608/10-8

Depth unit of measure: m

Depth	Typ	Lithology	C1	C2-C5	C6-C14	C15+	S2 from Rock-Eval	Sample
2235.00	cut	Sh/Clst: dsk y brn to brn blk	2.79	22.99	41.53	32.70	22.91	0014-3L
2478.00	cut	Sh/Clst: dsk y brn	4.53	14.50	28.26	52.71	197.75	0056-2L
2481.00	cut	Sh/Clst: dsk y brn	5.21	15.97	31.09	47.72	-	0023-3L
2490.00	cut	Sh/Clst: dsk y brn	5.87	12.40	30.04	51.70	-	0024-3L
2565.00	cut	Sh/Clst: dsk y brn	5.84	14.06	30.45	49.65	102.39	0028-3L

Table 8b: MPLC Bulk Composition: Concentration of EOM and Fraction (wt ppm rock) for well NOCS 6608/10-8

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Sat	Aro	Asph	NSO	HC	Non-HC	Sample
2200.00	mud	bulk	-	-	-	-	-	-	-	0063-0B
2235.00	cut	Sh/Clst: dsk y brn to brn blk	4975	700	1101	769	2403	1802	3172	0014-3L
2280.00	cut	Ca : w, lt gy, gy brn, y brn	2069	1017	361	165	525	1378	690	0016-2L
2285.00	oil	bulk	889	597	234	5	52	831	57	0059-0B
2295.80	ccp	S/Sst : gy brn to y brn	36042	23441	9376	457	2766	32818	3223	0033-1L
2315.95	ccp	S/Sst : gy brn to y brn to dsk y brn	25372	20102	3404	301	1564	23506	1865	0035-1L
2318.70	ccp	S/Sst : gy brn to y brn	27055	16941	7292	465	2356	24234	2821	0036-1L
2371.50	ccp	S/Sst : gy brn	21627	13683	5809	309	1824	19492	2134	0037-1L
2375.50	oil	bulk	912	602	246	9	54	849	63	0060-0B
2378.05	ccp	S/Sst : gy brn	27782	17350	7573	448	2409	24923	2858	0038-1L
2388.00	mud	bulk	-	-	-	-	-	-	-	0064-0B
2391.50	ccp	S/Sst : gy brn to y brn	45117	28963	11229	356	4569	40192	4925	0040-1L
2401.00	ccp	S/Sst : gy brn to y brn	39050	27985	8024	256	2785	36009	3041	0042-1L
2407.10	ccp	S/Sst : gy brn to brn gy	25172	12506	5340	632	6692	17847	7325	0044-1L
2424.30	ccp	S/Sst : gy brn to y brn	33264	20915	7605	532	4210	28521	4743	0046-1L

Table 8a: MPLC Bulk Composition: Weight of EOM and Fraction for well NOCS 6608/10-8

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
2431.50	oil	bulk	71.1	65.1	43.7	16.5	0.6	4.3	60.2	4.9	-	0061-0B
2433.25	ccp	S/Sst : y brn to dsk brn	10.9	338.9	211.2	80.7	6.3	40.7	291.9	47.0	1.69	0048-1L
2438.85	ccp	S/Sst : brn gy to m gy to gy brn	10.6	129.5	74.5	33.2	4.3	17.5	107.7	21.8	6.56	0050-1L
2441.20	ccp	S/Sst : gy brn	10.1	307.5	196.1	72.4	4.3	34.7	268.5	39.0	1.95	0051-1L
2450.40	ccp	S/Sst : gy brn	10.2	312.2	196.6	77.0	4.6	34.0	273.6	38.6	1.88	0053-1L
2454.20	ccp	S/Sst : gy brn to y brn	10.1	344.4	217.7	88.0	5.1	33.6	305.7	38.7	2.45	0055-1L
2463.50	oil	bulk	62.2	53.7	34.9	15.2	0.5	3.1	50.1	3.6	-	0062-0B
2469.00	cut	S/Sst : lt gy	1.8	29.3	12.2	6.8	1.4	8.9	19.0	10.3	1.41	0021-2L
2478.00	cut	Sh/Clst: dsk y brn	1.7	110.3	6.6	15.0	8.0	80.7	21.6	88.7	62.10	0056-2L
2514.00	mud	bulk	-	240.4	7.3	4.7	81.5	146.8	12.1	228.3	-	0065-0B

Table 8c: MPLC Bulk Composition: Concentration of EOM and Fraction (mg/g TOC(e)) for well NOCS 6608/10-8

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Sat	Aro	Asph	NSO	HC	Non-HC	Sample
2200.00	mud	bulk	-	-	-	-	-	-	-	0063-0B
2235.00	cut	Sh/Clst: dsk y brn to brn blk	44.82	6.31	9.92	6.93	21.65	16.24	28.58	0014-3L
2280.00	cut	Ca : w, lt gy, gy brn, y brn	202.88	99.76	35.40	16.23	51.49	135.16	67.72	0016-2L
2285.00	oil	bulk	-	-	-	-	-	-	-	0059-0B
2295.80	ccp	S/Sst : gy brn to y brn	1692.12	1100.54	440.22	21.46	129.90	1540.76	151.36	0033-1L
2315.95	ccp	S/Sst : gy brn to y brn to dsk y brn	1519.31	1203.74	203.84	18.07	93.66	1407.58	111.73	0035-1L
2318.70	ccp	S/Sst : gy brn to y brn	1394.64	873.27	375.91	24.01	121.45	1249.18	145.46	0036-1L
2371.50	ccp	S/Sst : gy brn	1451.49	918.35	389.90	20.80	122.45	1308.25	143.25	0037-1L
2375.50	oil	bulk	-	-	-	-	-	-	-	0060-0B
2378.05	ccp	S/Sst : gy brn	2415.84	1508.72	658.57	39.01	209.54	2167.28	248.56	0038-1L
2388.00	mud	bulk	-	-	-	-	-	-	-	0064-0B
2391.50	ccp	S/Sst : gy brn to y brn	2802.34	1798.96	697.46	22.12	283.79	2496.42	305.92	0040-1L
2401.00	ccp	S/Sst : gy brn to y brn	2586.12	1853.31	531.40	16.96	184.45	2384.71	201.41	0042-1L
2407.10	ccp	S/Sst : gy brn to brn gy	1760.33	874.60	373.48	44.23	468.03	1248.07	512.26	0044-1L
2424.30	ccp	S/Sst : gy brn to y brn	1547.20	972.83	353.76	24.78	195.83	1326.59	220.61	0046-1L

Table 8b: MPLC Bulk Composition: Concentration of EOM and Fraction (wt ppm rock) for well NOCS 6608/10-8

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Sat	Aro	Asph	NSO	HC	Non-HC	Sample
2431.50	oil	bulk	915	614	232	8	59	847	68	0061-0B
2433.25	ccp	S/Sst : y brn to dsk brn	31235	19464	7436	583	3750	26900	4334	0048-1L
2438.85	ccp	S/Sst : brn gy to m gy to gy brn	12193	7014	3129	403	1645	10144	2049	0050-1L
2441.20	ccp	S/Sst : gy brn	30355	19357	7150	425	3422	26508	3847	0051-1L
2450.40	ccp	S/Sst : gy brn	30728	19345	7583	455	3343	26928	3799	0053-1L
2454.20	ccp	S/Sst : gy brn to y brn	33931	21444	8670	506	3309	30115	3815	0055-1L
2463.50	oil	bulk	863	561	244	8	49	806	57	0062-0B
2469.00	cut	S/Sst : lt gy	16010	6646	3728	771	4863	10375	5635	0021-2L
2478.00	cut	Sh/Clst: dsk y brn	63757	3816	8673	4602	46664	12490	51267	0056-2L
2514.00	mud	bulk	-	-	-	-	-	-	-	0065-0B

Table 8d: MPLC Bulk Composition: Material extracted from the rock (%) for well NOCS 6608/10-8

Depth unit of measure: m

Depth	Typ	Lithology	Sat	Aro	Asph	NSO	Total	HC	Non-HC	Recov. MPLC	Recov. Asph	Sample
2200.00	mud	bulk	2.03	1.85	26.09	70.03	100.00	3.88	96.12	2.56	0.98	0063-0B
2235.00	cut	Sh/Clst: dsk y brn to brn blk	14.09	22.14	15.46	48.31	100.00	36.23	63.77	2.47	1.00	0014-3L
2280.00	cut	Ca : w, lt gy, gy brn, y brn	49.17	17.45	8.00	25.38	100.00	66.62	33.38	1.91	1.00	0016-2L
2285.00	oil	bulk	67.14	26.40	0.60	5.87	100.00	93.53	6.47	1.33	0.93	0059-0B
2295.80	ccp	S/Sst : gy brn to y brn	65.04	26.02	1.27	7.68	100.00	91.05	8.95	1.79	1.00	0033-1L
2315.95	ccp	S/Sst : gy brn to y brn to dsk y brn	79.23	13.42	1.19	6.16	100.00	92.65	7.35	1.82	1.00	0035-1L
2318.70	ccp	S/Sst : gy brn to y brn	62.62	26.95	1.72	8.71	100.00	89.57	10.43	1.36	1.00	0036-1L
2371.50	ccp	S/Sst : gy brn	63.27	26.86	1.43	8.44	100.00	90.13	9.87	1.80	1.00	0037-1L
2375.50	oil	bulk	65.97	27.04	1.04	5.94	100.00	93.01	6.99	1.35	0.92	0060-0B
2378.05	ccp	S/Sst : gy brn	62.45	27.26	1.61	8.67	100.00	89.71	10.29	1.89	1.00	0038-1L
2388.00	mud	bulk	2.85	2.31	32.21	62.63	100.00	5.16	94.84	3.32	0.98	0064-0B
2391.50	ccp	S/Sst : gy brn to y brn	64.20	24.89	0.79	10.13	100.00	89.08	10.92	2.73	0.99	0040-1L
2401.00	ccp	S/Sst : gy brn to y brn	71.66	20.55	0.66	7.13	100.00	92.21	7.79	1.86	1.00	0042-1L
2407.10	ccp	S/Sst : gy brn to brn gy	49.68	21.22	2.51	26.59	100.00	70.90	29.10	1.90	1.00	0044-1L
2424.30	ccp	S/Sst : gy brn to y brn	62.88	22.86	1.60	12.66	100.00	85.74	14.26	1.89	1.00	0046-1L

Table 8c: MPLC Bulk Composition: Concentration of EOM and Fraction (mg/g TOC(e)) for well NOCS 6608/10-8

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Sat	Aro	Asph	NSO	HC	Non-HC	Sample
2431.50	oil	bulk	-	-	-	-	-	-	-	0061-0B
2433.25	ccp	S/Sst : y brn to dsk brn	1848.23	1151.72	440.03	34.55	221.93	1591.75	256.47	0048-1L
2438.85	ccp	S/Sst : brn gy to m gy to gy brn	185.88	106.94	47.71	6.15	25.09	154.65	31.24	0050-1L
2441.20	ccp	S/Sst : gy brn	1556.69	992.70	366.70	21.80	175.49	1359.40	197.29	0051-1L
2450.40	ccp	S/Sst : gy brn	1634.49	1029.03	403.35	24.25	177.86	1432.38	202.11	0053-1L
2454.20	ccp	S/Sst : gy brn to y brn	1384.94	875.29	353.90	20.67	135.08	1229.19	155.75	0055-1L
2463.50	oil	bulk	-	-	-	-	-	-	-	0062-0B
2469.00	cut	S/Sst : lt gy	1135.53	471.41	264.45	54.72	344.94	735.87	399.66	0021-2L
2478.00	cut	Sh/Clst: dsk y brn	102.67	6.15	13.97	7.41	75.14	20.11	82.56	0056-2L
2514.00	mud	bulk	-	-	-	-	-	-	-	0065-0B

Table 8e: MPLC Bulk Composition: Ratios for well NOCS 6608/10-8

Depth unit of measure: m

Depth	Typ	Lithology	Sat / Aro	HC / Non-HC	Asp / NSO	Sample
2200.00	mud	bulk	1.10	0.04	0.37	0063-0B
2235.00	cut	Sh/Clst: dsk y brn to brn blk	0.64	0.57	0.32	0014-3L
2280.00	cut	Ca : w, lt gy, gy brn, y brn	2.82	2.00	0.32	0016-2L
2285.00	oil	bulk	2.54	14.47	0.10	0059-0B
2295.80	ccp	S/Sst : gy brn to y brn	2.50	10.18	0.17	0033-1L
2315.95	ccp	S/Sst : gy brn to y brn to dsk y brn	5.91	12.60	0.19	0035-1L
2318.70	ccp	S/Sst : gy brn to y brn	2.32	8.59	0.20	0036-1L
2371.50	ccp	S/Sst : gy brn	2.36	9.13	0.17	0037-1L
2375.50	oil	bulk	2.44	13.31	0.18	0060-0B
2378.05	ccp	S/Sst : gy brn	2.29	8.72	0.19	0038-1L
2388.00	mud	bulk	1.23	0.05	0.51	0064-0B
2391.50	ccp	S/Sst : gy brn to y brn	2.58	8.16	0.08	0040-1L
2401.00	ccp	S/Sst : gy brn to y brn	3.49	11.84	0.09	0042-1L
2407.10	ccp	S/Sst : gy brn to brn gy	2.34	2.44	0.09	0044-1L
2424.30	ccp	S/Sst : gy brn to y brn	2.75	6.01	0.13	0046-1L

Table 8d: MPLC Bulk Composition: Material extracted from the rock (%) for well NOCS 6608/10-8

Depth unit of measure: m

Depth	Typ	Lithology	Sat	Aro	Asph	NSO	Total	HC	Non-HC	Recov. MPLC	Recov. Asph	Sample
2431.50	oil	bulk	67.14	25.40	0.92	6.54	100.00	92.54	7.46	1.32	0.94	0061-0B
2433.25	ccp	S/Sst : y brn to dsk brn	62.32	23.81	1.87	12.01	100.00	86.12	13.88	1.95	1.00	0048-1L
2438.85	ccp	S/Sst : brn gy to m gy to gy brn	57.53	25.67	3.31	13.50	100.00	83.19	16.81	1.44	1.00	0050-1L
2441.20	ccp	S/Sst : gy brn	63.77	23.56	1.40	11.27	100.00	87.33	12.67	1.93	1.00	0051-1L
2450.40	ccp	S/Sst : gy brn	62.96	24.68	1.48	10.88	100.00	87.63	12.37	1.91	1.00	0053-1L
2454.20	ccp	S/Sst : gy brn to y brn	63.20	25.55	1.49	9.75	100.00	88.75	11.25	2.00	1.00	0055-1L
2463.50	oil	bulk	65.04	28.31	0.93	5.72	100.00	93.35	6.65	1.36	0.93	0062-0B
2469.00	cut	S/Sst : lt gy	41.51	23.29	4.82	30.38	100.00	64.80	35.20	1.72	1.00	0021-2L
2478.00	cut	Sh/Clst: dsk y brn	5.99	13.60	7.22	73.19	100.00	19.59	80.41	1.38	1.00	0056-2L
2514.00	mud	bulk	3.05	1.97	33.90	61.08	100.00	5.02	94.98	3.10	0.99	0065-0B

Table 8f: Iatroscan TLC Bulk Composition: Absolute yields in mg/g rock for well NOCS 6608/10-8

Depth unit of measure: m

Depth	Typ	Lithology	Sat HC	Aro HC	NSO	Asp	HC	Non-HC	EOM	Sample
2200.00	mud	bulk	-	-	150.70	53.20	-	203.90	203.90	0063-0B
2235.00	cut	Sh/Clst	1.36	0.51	2.34	0.77	1.87	3.11	4.98	0014-3L
2280.00	cut	Ca	1.57	0.25	0.08	0.17	1.82	0.25	2.07	0016-2L
2285.00	oil	bulk	34.24	14.64	0.92	0.30	48.88	1.22	50.10	0059-0B
2295.80	ccp	S/Sst	24.61	10.26	0.71	0.46	34.87	1.17	36.04	0033-1L
2315.95	ccp	S/Sst	23.21	1.64	0.22	0.30	24.85	0.52	25.37	0035-1L
2318.70	ccp	S/Sst	17.83	8.31	0.44	0.47	26.15	0.91	27.06	0036-1L
2371.50	ccp	S/Sst	14.47	6.46	0.39	0.31	20.93	0.70	21.63	0037-1L
2375.50	oil	bulk	40.72	14.91	1.27	0.60	55.63	1.87	57.50	0060-0B
2378.05	ccp	S/Sst	19.47	7.22	0.65	0.45	26.68	1.10	27.78	0038-1L
2388.00	mud	bulk	19.13	-	144.17	77.60	19.13	221.77	240.90	0064-0B
2391.50	ccp	S/Sst	31.50	12.00	1.26	0.36	43.50	1.62	45.12	0040-1L
2401.00	ccp	S/Sst	30.41	7.54	0.85	0.26	37.95	1.10	39.05	0042-1L
2407.10	ccp	S/Sst	17.63	5.04	1.86	0.63	22.68	2.49	25.17	0044-1L
2424.30	ccp	S/Sst	23.60	7.89	1.25	0.53	31.49	1.78	33.26	0046-1L
2431.50	oil	bulk	43.08	20.23	1.19	0.60	63.31	1.79	65.10	0061-0B

Table 8e: MPLC Bulk Composition: Ratios for well NOCS 6608/10-8

Depth unit of measure: m

Depth	Typ	Lithology	Sat / Aro	HC / Non-HC	Asp / NSO	Sample
2431.50	oil	bulk	2.64	12.41	0.14	0061-0B
2433.25	ccp	S/Sst : y brn to dsk brn	2.62	6.21	0.16	0048-1L
2438.85	ccp	S/Sst : brn gy to m gy to gy brn	2.24	4.95	0.25	0050-1L
2441.20	ccp	S/Sst : gy brn	2.71	6.89	0.12	0051-1L
2450.40	ccp	S/Sst : gy brn	2.55	7.09	0.14	0053-1L
2454.20	ccp	S/Sst : gy brn to y brn	2.47	7.89	0.15	0055-1L
2463.50	oil	bulk	2.30	14.03	0.16	0062-0B
2469.00	cut	S/Sst : lt gy	1.78	1.84	0.16	0021-2L
2478.00	cut	Sh/Clst: dsk y brn	0.44	0.24	0.10	0056-2L
2514.00	mud	bulk	1.55	0.05	0.56	0065-0B

Table 8G: Iatroscan TLC Bulk Composition: Rel. percentages of sep. fractions for well NOCS 6608/10-8

Depth unit of measure: m

Depth	Typ	Lithology	Sat HC	Aro HC	NSO	Asp	Total	HC	Non-HC	Recov. Iatr.	Recov. Asp	Sample
2200.00	mud	bulk	-	-	73.91	26.09	100.00	-	100.00	0.00	0.98	0063-0B
2235.00	cut	Sh/Clst	27.38	10.17	46.99	15.46	100.00	37.55	62.45	0.13	1.00	0014-3L
2280.00	cut	Ca	75.89	12.03	4.08	8.00	100.00	87.92	12.08	0.64	1.00	0016-2L
2285.00	oil	bulk	68.34	29.22	1.84	0.60	100.00	97.56	2.44	0.87	0.93	0059-0B
2295.80	ccp	S/Sst	68.29	28.47	1.97	1.27	100.00	96.76	3.24	0.88	1.00	0033-1L
2315.95	ccp	S/Sst	91.49	6.45	0.87	1.19	100.00	97.94	2.06	0.95	1.00	0035-1L
2318.70	ccp	S/Sst	65.92	30.73	1.63	1.72	100.00	96.65	3.35	0.86	1.00	0036-1L
2371.50	ccp	S/Sst	66.92	29.85	1.80	1.43	100.00	96.77	3.23	1.08	1.00	0037-1L
2375.50	oil	bulk	70.82	25.92	2.21	1.04	100.00	96.74	3.26	0.99	0.92	0060-0B
2378.05	ccp	S/Sst	70.06	25.97	2.35	1.61	100.00	96.04	3.96	0.86	1.00	0038-1L
2388.00	mud	bulk	7.94	-	59.85	32.21	100.00	7.94	92.06	0.08	0.98	0064-0B
2391.50	ccp	S/Sst	69.81	26.61	2.80	0.79	100.00	96.41	3.59	0.75	0.99	0040-1L
2401.00	ccp	S/Sst	77.87	19.30	2.17	0.66	100.00	97.17	2.83	0.73	1.00	0042-1L
2407.10	ccp	S/Sst	70.05	20.04	7.39	2.51	100.00	90.09	9.91	0.36	1.00	0044-1L
2424.30	ccp	S/Sst	70.94	23.72	3.75	1.60	100.00	94.65	5.35	0.63	1.00	0046-1L
2431.50	oil	bulk	66.17	31.07	1.84	0.92	100.00	97.24	2.76	0.87	0.94	0061-0B

Table 8f: Iatroscan TLC Bulk Composition: Absolute yields in mg/g rock for well NOCS 6608/10-8

Depth unit of measure: m

Depth	Typ	Lithology	Sat HC	Aro HC	NSO	Asp	HC	Non-HC	EOM	Sample
2433.25	ccp	S/Sst	21.11	8.77	0.77	0.58	29.88	1.35	31.24	0048-1L
2438.85	ccp	S/Sst	8.13	3.19	0.47	0.40	11.32	0.87	12.19	0050-1L
2441.20	ccp	S/Sst	20.25	8.79	0.89	0.43	29.04	1.32	30.36	0051-1L
2450.40	ccp	S/Sst	20.80	8.60	0.88	0.46	29.40	1.33	30.73	0053-1L
2454.20	ccp	S/Sst	23.60	9.07	0.76	0.51	32.67	1.26	33.93	0055-1L
2463.50	oil	bulk	35.63	16.81	0.76	0.50	52.44	1.26	53.70	0062-0B
2469.00	cut	S/Sst	10.92	3.29	1.03	0.77	14.21	1.80	16.01	0021-2L
2478.00	cut	Sh/Clst	6.33	23.64	29.18	4.60	29.97	33.79	63.76	0056-2L
2514.00	mud	bulk	17.13	-	141.77	81.50	17.13	223.27	240.40	0065-0B

Table 9a: Quantitative Analysis of Saturated Fraction for well NOCS 6608/10-8

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
2200.00 m mud	9.99	11.89	3.73	9.73	7.10	7.46	2.79	7.37	5.55	4.33	3.76	3.41	3.21	3.01	2.07	1.96	1.36	1.24	0.90	0.68	0.47	0.54	0.45
2235.00 m	1.60	4.24	1.81	6.39	5.18	7.62	3.88	7.87	6.72	5.56	5.17	4.90	4.65	4.00	3.38	2.94	2.11	1.99	1.55	1.28	0.78	1.17	0.84
2280.00 m	6.89	9.85	3.67	11.72	8.30	12.00	4.94	13.05	12.11	10.18	9.67	8.92	8.81	8.38	5.76	5.22	3.66	3.26	2.62	1.72	1.14	1.40	1.17
2285.00 m oil	19.76	20.00	6.45	20.50	14.29	19.82	7.12	20.59	17.58	15.36	14.10	12.87	12.40	10.90	8.21	7.10	5.13	4.39	3.18	2.37	1.44	1.86	1.65
2295.80 m	16.64	18.55	6.25	20.96	14.02	19.89	7.16	20.83	18.50	16.19	15.21	14.21	13.88	12.07	8.81	7.49	5.27	4.31	3.43	2.29	1.47	1.96	1.61
2315.95 m	7.17	8.10	2.86	8.91	6.00	8.91	3.55	9.74	8.56	7.43	6.69	6.04	5.69	5.53	3.70	3.47	2.45	2.47	2.01	1.36	1.07	1.11	0.91
2318.70 m	18.58	19.64	6.53	20.71	13.65	20.42	7.31	21.48	18.83	16.60	15.57	14.50	14.23	12.60	10.07	8.41	6.35	5.60	4.33	3.00	1.97	2.31	1.80
2371.50 m	18.01	20.09	6.51	21.31	14.00	20.88	7.33	22.09	19.11	16.54	15.44	14.30	13.81	11.90	9.06	7.16	5.10	4.21	3.35	2.26	1.46	1.97	1.58
2375.50 m oil	21.29	21.87	6.72	21.15	13.90	20.84	7.41	21.19	18.44	15.14	13.78	12.51	12.08	10.45	8.17	6.78	5.15	4.33	3.36	2.34	1.49	1.95	1.59
2378.05 m	19.02	20.69	6.90	22.29	15.55	21.89	7.89	22.80	19.51	16.95	15.68	14.32	13.28	11.25	8.78	7.46	5.53	4.76	3.34	2.47	1.87	2.06	1.71
2388.00 m mud	11.26	12.55	4.55	10.61	7.64	9.93	3.93	9.83	8.19	6.75	6.02	5.58	5.21	4.53	3.53	3.02	2.25	1.99	1.58	1.08	0.67	0.87	0.74
2391.50 m	17.48	18.67	5.80	19.04	12.51	19.12	6.80	19.83	17.44	14.62	13.17	12.12	11.19	10.08	7.77	5.96	4.66	3.76	2.94	1.91	1.15	1.57	1.35
2401.00 m	12.69	13.42	4.19	13.66	9.21	13.88	4.95	14.89	13.34	12.19	10.78	9.77	8.88	7.94	6.37	5.79	4.40	3.98	2.92	2.16	1.33	1.57	1.27
2407.10 m	17.30	18.94	6.26	20.42	14.26	20.23	7.28	21.38	19.35	16.35	15.13	13.91	12.98	11.59	8.58	7.49	5.58	4.64	3.56	2.39	1.84	2.12	1.71
2424.30 m	19.00	20.85	6.68	21.42	14.72	21.42	7.68	22.03	19.45	16.14	14.97	13.79	13.01	11.74	9.23	7.70	5.78	4.98	3.96	2.76	1.78	2.17	1.72
2431.50 m oil	18.33	18.46	5.84	18.58	12.69	18.66	6.68	19.56	17.49	14.57	13.37	12.25	11.35	10.31	7.72	6.67	4.76	4.09	3.29	2.28	1.40	1.84	1.49
2433.25 m	19.45	21.37	7.02	22.67	15.75	21.67	7.76	22.19	19.43	16.15	14.87	13.67	12.63	11.51	9.01	7.66	5.86	5.07	3.80	2.64	1.71	2.11	1.70
2438.85 m	17.31	19.74	6.54	21.66	14.91	21.34	7.56	22.20	19.28	16.65	15.41	13.90	13.19	11.21	8.04	6.55	4.61	3.86	3.04	2.00	1.37	1.81	1.46
2441.20 m	16.35	18.25	6.03	20.13	14.01	20.15	7.21	21.25	18.67	16.14	15.02	13.62	13.11	11.07	8.35	6.54	4.55	3.83	3.11	2.01	1.35	1.75	1.46
2450.40 m	18.05	20.00	6.57	21.35	14.03	20.86	7.37	22.10	18.26	16.04	15.10	13.93	13.04	11.55	8.58	7.13	5.37	4.33	3.10	2.25	1.50	1.88	1.58
2454.20 m	17.48	19.43	6.46	21.19	14.77	20.95	7.62	21.83	18.74	16.23	14.98	13.87	12.73	11.46	8.66	7.10	4.92	4.01	2.92	2.08	1.28	1.87	1.51
2463.50 m oil	19.73	20.07	6.45	20.90	14.49	20.18	7.22	21.09	17.54	15.58	14.35	13.18	12.24	10.89	8.33	6.67	4.75	3.99	2.82	1.99	1.22	1.76	1.45
2469.00 m	1.47	1.88	0.67	2.28	1.37	2.43	0.87	3.25	6.44	12.43	18.20	21.51	23.35	21.14	16.34	13.41	9.65	8.10	6.46	4.55	3.37	4.12	3.78
2478.00 m	12.79	11.98	3.37	13.32	7.59	15.01	5.05	16.35	13.99	11.59	9.78	8.60	7.52	6.69	4.89	4.07	2.78	2.45	2.25	1.41	0.76	1.12	0.90
2514.00 m mud	10.00	10.84	4.31	10.34	7.68	8.98	3.46	9.07	7.44	6.26	5.62	5.24	4.89	4.24	3.26	2.91	2.10	1.86	1.41	1.07	0.71	0.92	0.74

Table 8G: Iatroscan TLC Bulk Composition: Rel. percentages of sep. fractions for well NOCS 6608/10-8

Depth unit of measure: m

Depth	Typ	Lithology	Sat HC	Aro HC	NSO	Asp	Total	HC	Non-HC	Recov. Iatr.	Recov. Asp	Sample
2433.25	ccp	S/Sst	67.58	28.09	2.46	1.87	100.00	95.67	4.33	0.99	1.00	0048-1L
2438.85	ccp	S/Sst	66.65	26.18	3.86	3.31	100.00	92.83	7.17	0.60	1.00	0050-1L
2441.20	ccp	S/Sst	66.72	28.94	2.94	1.40	100.00	95.66	4.34	1.31	1.00	0051-1L
2450.40	ccp	S/Sst	67.69	27.98	2.85	1.48	100.00	95.67	4.33	0.84	1.00	0053-1L
2454.20	ccp	S/Sst	69.55	26.73	2.23	1.49	100.00	96.28	3.72	0.75	1.00	0055-1L
2463.50	oil	bulk	66.34	31.31	1.41	0.93	100.00	97.65	2.35	0.82	0.93	0062-0B
2469.00	cut	S/Sst	68.20	20.57	6.42	4.82	100.00	88.77	11.23	0.59	1.00	0021-2L
2478.00	cut	Sh/Clst	9.92	37.09	45.78	7.22	100.00	47.01	52.99	0.21	1.00	0056-2L
2514.00	mud	bulk	7.12	-	58.97	33.90	100.00	7.12	92.88	0.12	0.99	0065-0B

Table 9B: Saturated Hydrocarbon Ratios (peak area) for well NOCS 6608/10-8

Depth unit of measure: m

Depth	Typ	Lithology	Pristane / nC17	Pristane / Phytane	Pristane/nC17 / Phytane/nC18	Phytane / nC18	CPI1	nC17 / nC17+nC27	Sample
2431.50	oil	bulk	0.68	1.90	1.91	0.36	1.11	0.74	0061-0B
2433.25	ccp	S/Sst : y brn to dsk brn	0.69	2.03	1.94	0.36	1.09	0.75	0048-1L
2438.85	ccp	S/Sst : brn gy to m gy to gy brn	0.69	1.97	1.94	0.35	1.10	0.77	0050-1L
2441.20	ccp	S/Sst : gy brn	0.70	1.94	1.95	0.36	1.08	0.75	0051-1L
2450.40	ccp	S/Sst : gy brn	0.66	1.90	1.86	0.35	1.10	0.75	0053-1L
2454.20	ccp	S/Sst : gy brn to y brn	0.70	1.94	1.92	0.36	1.12	0.75	0055-1L
2463.50	oil	bulk	0.69	2.01	1.94	0.36	1.11	0.76	0062-0B
2469.00	cut	S/Sst : lt gy	0.60	1.57	1.67	0.36	1.08	0.15	0021-2L
2478.00	cut	Sh/Clst: dsk y brn	0.57	1.50	1.69	0.34	1.10	0.77	0056-2L
2514.00	mud	bulk	0.74	2.22	1.93	0.39	1.11	0.78	0065-0B

Table 9B: Saturated Hydrocarbon Ratios (peak area) for well NOCS 6608/10-8

Depth unit of measure: m

Depth	Typ	Lithology	Pristane / nC17	Pristane / Phytane	Pristane/nC17 / Phytane/nC18	Phytane / nC18	CPI1	nC17 / nC17+nC27	Sample
2200.00	mud	bulk	0.73	2.54	1.95	0.37	1.18	0.83	0063-0B
2235.00	cut	Sh/Clst: dsk y brn to brn blk	0.81	1.34	1.59	0.51	1.09	0.68	0014-3L
2280.00	cut	Ca : w, lt gy, gy brn, y brn	0.71	1.68	1.72	0.41	1.15	0.69	0016-2L
2285.00	oil	bulk	0.70	2.01	1.94	0.36	1.12	0.74	0059-0B
2295.80	ccp	S/Sst : gy brn to y brn	0.67	1.96	1.86	0.36	1.11	0.74	0033-1L
2315.95	ccp	S/Sst : gy brn to y brn to dsk y brn	0.67	1.69	1.69	0.40	1.16	0.72	0035-1L
2318.70	ccp	S/Sst : gy brn to y brn	0.66	1.87	1.84	0.36	1.07	0.71	0036-1L
2371.50	ccp	S/Sst : gy brn	0.66	1.91	1.87	0.35	1.08	0.75	0037-1L
2375.50	oil	bulk	0.66	1.88	1.85	0.36	1.07	0.76	0060-0B
2378.05	ccp	S/Sst : gy brn	0.70	1.97	1.94	0.36	1.08	0.75	0038-1L
2388.00	mud	bulk	0.72	1.94	1.82	0.40	1.08	0.78	0064-0B
2391.50	ccp	S/Sst : gy brn to y brn	0.66	1.84	1.85	0.36	1.07	0.76	0040-1L
2401.00	ccp	S/Sst : gy brn to y brn	0.67	1.86	1.89	0.36	1.10	0.70	0042-1L
2407.10	ccp	S/Sst : gy brn to brn gy	0.70	1.96	1.94	0.36	1.09	0.73	0044-1L
2424.30	ccp	S/Sst : gy brn to y brn	0.69	1.92	1.92	0.36	1.08	0.74	0046-1L

Table 9Ca: Aromatic Hydrocarbon Ratios (peak area) for well NOCS 6608/10-8

Depth unit of measure: m

Depth	Typ	Lithology	MNR	DMNR	BPhR	2/1MP	MPI1	MPI2	Rc	DBT/P	4/1MDBT	(3+2) /1MDBT	Sample
2431.50	oil	bulk	1.83	5.86	0.52	2.18	1.19	1.44	1.12	0.17	-	-	0061-0B
2433.25	ccp	S/Sst : y brn to dsk brn	1.52	4.50	0.36	2.08	1.11	1.26	1.07	0.16	-	-	0048-1L
2438.85	ccp	S/Sst : brn gy to m gy to gy brn	1.60	5.28	0.55	1.79	0.94	1.08	0.96	0.14	13.33	4.02	0050-1L
2441.20	ccp	S/Sst : gy brn	1.48	4.34	0.35	1.78	1.05	1.12	1.03	0.15	-	-	0051-1L
2450.40	ccp	S/Sst : gy brn	1.60	4.92	0.46	1.89	1.04	1.14	1.02	0.16	18.82	10.43	0053-1L
2454.20	ccp	S/Sst : gy brn to y brn	1.64	4.70	0.49	1.93	1.05	1.15	1.03	0.15	-	-	0055-1L
2463.50	oil	bulk	1.78	5.28	0.48	1.85	1.08	1.12	1.05	0.17	-	-	0062-0B
2469.00	cut	S/Sst : lt gy	1.67	3.42	0.36	1.97	0.97	1.15	0.98	-	-	-	0021-2L
2478.00	cut	Sh/Clst: dsk y brn	1.64	5.25	0.67	1.41	0.84	0.95	0.90	0.20	17.15	4.76	0056-2L
2514.00	mud	bulk	1.56	3.39	0.23	2.08	1.01	1.20	1.01	-	-	-	0065-0B

Table 9Ca: Aromatic Hydrocarbon Ratios (peak area) for well NOCS 6608/10-8

Depth unit of measure: m

Depth	Typ	Lithology	MNR	DMNR	BPhR	2/1MP	MPI1	MPI2	Rc	DBT/P	4/1MDBT	(3+2) /1MDBT	Sample
2200.00	mud	bulk	-	-	-	2.03	0.95	1.07	0.97	-	-	-	0063-0B
2235.00	cut	Sh/Clst: dsk y brn to brn blk	0.92	1.79	0.48	2.03	0.82	0.99	0.89	-	-	-	0014-3L
2280.00	cut	Ca : w, lt gy, gy brn, y brn	0.91	2.29	0.18	2.17	1.07	1.13	1.04	-	-	-	0016-2L
2285.00	oil	bulk	1.85	5.93	0.47	2.08	1.23	1.36	1.14	0.16	-	-	0059-0B
2295.80	ccp	S/Sst : gy brn to y brn	1.66	4.08	0.42	2.01	1.16	1.22	1.10	0.14	-	-	0033-1L
2315.95	ccp	S/Sst : gy brn to y brn to dsk y brn	1.54	3.87	0.33	2.25	1.19	1.33	1.11	0.14	-	-	0035-1L
2318.70	ccp	S/Sst : gy brn to y brn	1.67	4.45	0.47	2.21	1.13	1.25	1.08	0.14	-	-	0036-1L
2371.50	ccp	S/Sst : gy brn	1.64	4.96	0.45	2.02	1.08	1.21	1.05	0.16	-	-	0037-1L
2375.50	oil	bulk	1.84	6.23	0.53	1.62	1.00	1.07	1.00	0.17	-	-	0060-0B
2378.05	ccp	S/Sst : gy brn	1.52	4.61	0.37	1.85	1.08	1.14	1.05	0.16	3.71	1.03	0038-1L
2388.00	mud	bulk	1.80	3.28	0.21	2.58	1.18	1.59	1.11	-	-	-	0064-0B
2391.50	ccp	S/Sst : gy brn to y brn	1.64	4.80	0.46	2.12	1.14	1.28	1.08	0.21	8.70	-	0040-1L
2401.00	ccp	S/Sst : gy brn to y brn	1.65	4.94	0.45	2.05	1.13	1.24	1.08	0.20	-	-	0042-1L
2407.10	ccp	S/Sst : gy brn to brn gy	1.50	4.64	0.46	1.70	0.98	1.05	0.99	0.27	-	-	0044-1L
2424.30	ccp	S/Sst : gy brn to y brn	1.16	4.78	0.38	1.77	1.05	1.16	1.03	0.16	10.77	4.60	0046-1L

Table 9Cb: Aromatic Hydrocarbon Ratios (peak area) for well NOCS 6608/10-8

Depth unit of measure: m

Depth	Typ	Lithology	F1	F2	Sample
2431.50	oil	bulk	0.62	0.37	0061-0B
2433.25	ccp	S/Sst : y brn to dsk brn	0.61	0.34	0048-1L
2438.85	ccp	S/Sst : brn gy to m gy to gy brn	0.58	0.33	0050-1L
2441.20	ccp	S/Sst : gy brn	0.59	0.31	0051-1L
2450.40	ccp	S/Sst : gy brn	0.60	0.33	0053-1L
2454.20	ccp	S/Sst : gy brn to y brn	0.61	0.33	0055-1L
2463.50	oil	bulk	0.62	0.32	0062-0B
2469.00	cut	S/Sst : lt gy	0.60	0.35	0021-2L
2478.00	cut	Sh/Clst: dsk y brn	0.54	0.31	0056-2L
2514.00	mud	bulk	0.62	0.37	0065-0B

Table 9Cb: Aromatic Hydrocarbon Ratios (peak area) for well NOCS 6608/10-8

Depth unit of measure: m

Depth	Typ	Lithology	F1	F2	Sample
2200.00	mud	bulk	0.61	0.35	0063-0B
2235.00	cut	Sh/Clst: dsk y brn to brn blk	0.61	0.36	0014-3L
2280.00	cut	Ca : w, lt gy, gy brn, y brn	0.64	0.34	0016-2L
2285.00	oil	bulk	0.62	0.34	0059-0B
2295.80	ccp	S/Sst : gy brn to y brn	0.63	0.33	0033-1L
2315.95	ccp	S/Sst : gy brn to y brn to dsk y brn	0.64	0.36	0035-1L
2318.70	ccp	S/Sst : gy brn to y brn	0.64	0.35	0036-1L
2371.50	ccp	S/Sst : gy brn	0.61	0.34	0037-1L
2375.50	oil	bulk	0.58	0.31	0060-0B
2378.05	ccp	S/Sst : gy brn	0.61	0.32	0038-1L
2388.00	mud	bulk	0.66	0.44	0064-0B
2391.50	ccp	S/Sst : gy brn to y brn	0.63	0.35	0040-1L
2401.00	ccp	S/Sst : gy brn to y brn	0.63	0.35	0042-1L
2407.10	ccp	S/Sst : gy brn to brn gy	0.59	0.31	0044-1L
2424.30	ccp	S/Sst : gy brn to y brn	0.59	0.32	0046-1L

Table 10b: Tabulation of cv values from carbon isotope data for well NOCS 6608/10-8

Depth unit of measure: m

Depth	Typ	Lithology	Saturated	Aromatic	cv value	Sample
2235.00	cut	Sh/Clst	-28.05	-28.47	-3.89	0014-3
2285.00	oil	bulk	-28.19	-27.39	-1.14	0059-0
2295.80	ccp	S/Sst	-28.09	-27.29	-1.17	0033-1
2315.95	ccp	S/Sst	-27.84	-27.32	-1.87	0035-1
2371.50	ccp	S/Sst	-28.24	-27.38	-0.99	0037-1
2375.50	oil	bulk	-28.26	-27.32	-0.80	0060-0
2378.05	ccp	S/Sst	-28.11	-27.40	-1.36	0038-1
2401.00	ccp	S/Sst	-28.08	-27.54	-1.75	0042-1
2424.30	ccp	S/Sst	-28.16	-27.44	-1.32	0046-1
2431.50	oil	bulk	-28.34	-27.63	-1.29	0061-0
2441.20	ccp	S/Sst	-28.32	-27.48	-1.01	0051-1
2454.20	ccp	S/Sst	-28.30	-27.53	-1.17	0055-1
2463.50	oil	bulk	-28.41	-27.62	-1.09	0062-0

Table 10a: Tabulation of carbon isotope data for EOM/EOM - fractions for well NOCS 6608/10-8

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Saturated	Aromatic	NSO	Asphaltenes	Kerogen	Sample
2235.00	cut	Sh/Clst	-28.01	-28.05	-28.47	-27.94	-26.71	-	0014-3
2285.00	oil	bulk	-27.91	-28.19	-27.39	-27.97	-28.13	-	0059-0
2295.80	ccp	S/Sst	-27.88	-28.09	-27.29	-28.04	-28.03	-	0033-1
2315.95	ccp	S/Sst	-27.80	-27.84	-27.32	-27.74	-27.72	-	0035-1
2371.50	ccp	S/Sst	-27.68	-28.24	-27.38	-28.09	-27.76	-	0037-1
2375.50	oil	bulk	-27.63	-28.26	-27.32	-27.96	-26.75	-	0060-0
2378.05	ccp	S/Sst	-27.90	-28.11	-27.40	-28.16	-27.85	-	0038-1
2401.00	ccp	S/Sst	-27.72	-28.08	-27.54	-28.00	-27.97	-	0042-1
2424.30	ccp	S/Sst	-27.94	-28.16	-27.44	-27.99	-27.80	-	0046-1
2431.50	oil	bulk	-27.79	-28.34	-27.63	-27.91	-27.95	-	0061-0
2441.20	ccp	S/Sst	-28.03	-28.32	-27.48	-28.11	-27.71	-	0051-1
2454.20	ccp	S/Sst	-27.84	-28.30	-27.53	-27.98	-27.73	-	0055-1
2463.50	oil	bulk	-27.72	-28.41	-27.62	-28.07	-27.73	-	0062-0

Table 11a: Variation in Triterpane Distribution (peak height) SIR for Well NOCS 6608/10-8

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
2200.00	bulk	1.07	0.52	0.16	0.58	0.37	0.08	0.10	0.17	0.09	0.11	0.90	0.37	0.12	59.05	0063-0
2235.00	Sh/Clst	2.58	0.72	0.14	0.44	0.30	0.05	1.32	3.01	0.57	0.04	0.78	0.34	0.35	34.01	0014-3
2285.00	bulk	1.09	0.52	0.13	0.46	0.31	0.08	0.10	0.21	0.09	0.08	0.91	0.33	0.11	60.97	0059-0
2295.80	S/Sst	1.14	0.53	0.13	0.46	0.31	0.07	0.09	0.20	0.08	0.07	0.92	0.32	0.11	61.43	0033-1
2315.95	S/Sst	0.63	0.39	0.16	0.65	0.39	0.08	0.10	0.15	0.09	0.39	0.92	0.40	0.10	59.78	0035-1
2371.50	S/Sst	1.09	0.52	0.13	0.48	0.32	0.08	0.09	0.19	0.08	0.10	0.91	0.33	0.11	61.55	0037-1
2375.50	bulk	1.11	0.53	0.13	0.46	0.32	0.08	0.09	0.19	0.08	0.07	0.92	0.33	0.11	62.39	0060-0
2378.05	S/Sst	1.12	0.53	0.14	0.48	0.33	0.08	0.10	0.20	0.09	0.08	0.92	0.34	0.11	61.53	0038-1
2388.00	bulk	1.04	0.51	0.14	0.55	0.35	0.08	0.10	0.18	0.09	0.10	0.91	0.36	0.12	60.77	0064-0
2401.00	S/Sst	0.96	0.49	0.14	0.49	0.33	0.08	0.09	0.19	0.08	0.21	0.92	0.34	0.11	61.21	0042-1
2424.30	S/Sst	1.08	0.52	0.13	0.47	0.32	0.08	0.09	0.18	0.08	0.09	0.92	0.33	0.11	60.90	0046-1
2431.50	bulk	1.04	0.51	0.12	0.46	0.32	0.08	0.09	0.19	0.08	0.07	0.91	0.33	0.11	62.21	0061-0
2441.20	S/Sst	1.07	0.52	0.13	0.46	0.31	0.07	0.09	0.19	0.08	0.08	0.92	0.33	0.11	60.65	0051-1
2454.20	S/Sst	1.02	0.51	0.13	0.49	0.33	0.08	0.09	0.19	0.09	0.10	0.91	0.34	0.11	62.10	0055-1
2463.50	bulk	1.08	0.52	0.13	0.48	0.33	0.08	0.09	0.18	0.08	0.09	0.92	0.34	0.11	62.43	0062-0

Table 10a: Tabulation of carbon isotope data on oils for NOCS 6608/10-8

Well	Descript.	Whole oil	Topped oil	Saturated	Aromatic	NSO	Asphaltenes	Sample
6608/10-8		-	-27.63	-28.26	-27.32	-27.96	-26.75	W75/0060
6608/10-8		-	-27.91	-28.19	-27.39	-27.97	-28.13	W75/0059
6608/10-8		-	-27.79	-28.34	-27.63	-27.91	-27.95	W75/0061
6608/10-8		-	-27.72	-28.41	-27.62	-28.07	-27.73	W75/0062

Table 10b: Tabulation of cv values from carbon isotope data for NOCS 6608/10-8

Well	Descript.	Saturated	Aromatic	cv value	Sample
6608/10-8		-28.26	-27.32	-0.80	W75/0060
6608/10-8		-28.19	-27.39	-1.14	W75/0059
6608/10-8		-28.34	-27.63	-1.29	W75/0061
6608/10-8		-28.41	-27.62	-1.09	W75/0062

Table 11b: Variation in Sterane Distribution (peak height) SIR for Well NOCS 6608/10-8

Depth unit of measure: m

Depth	Lithology	Ratio1	Ratio2	Ratio3	Ratio4	Ratio5	Ratio6	Ratio7	Ratio8	Ratio9	Ratio10	Sample
2200.00	bulk	0.59	46.49	78.04	1.10	0.79	0.42	0.30	0.64	0.87	3.32	0063-0
2235.00	Sh/Clst	0.36	13.73	59.86	0.87	0.84	0.24	0.19	0.43	0.16	0.86	0014-3
2285.00	bulk	0.73	48.71	79.84	0.91	0.80	0.45	0.33	0.66	0.95	3.86	0059-0
2295.80	S/Sst	0.74	48.60	78.98	0.97	0.79	0.40	0.29	0.65	0.95	3.66	0033-1
2315.95	S/Sst	0.82	49.99	79.57	1.70	0.80	0.62	0.47	0.66	1.00	3.89	0035-1
2371.50	S/Sst	0.75	51.77	79.29	1.01	0.79	0.46	0.34	0.66	1.07	3.97	0037-1
2375.50	bulk	0.73	50.86	79.41	0.95	0.79	0.41	0.30	0.66	1.03	3.92	0060-0
2378.05	S/Sst	0.74	50.44	79.59	0.99	0.79	0.40	0.29	0.66	1.02	3.93	0038-1
2388.00	bulk	0.67	47.22	77.52	1.05	0.78	0.40	0.29	0.63	0.89	3.27	0064-0
2401.00	S/Sst	0.76	50.46	79.65	1.17	0.80	0.57	0.44	0.66	1.02	3.95	0042-1
2424.30	S/Sst	0.75	51.10	78.18	1.06	0.78	0.45	0.33	0.64	1.05	3.66	0046-1
2431.50	bulk	0.74	51.80	78.80	0.96	0.78	0.39	0.28	0.65	1.07	3.86	0061-0
2441.20	S/Sst	0.75	50.07	79.37	1.04	0.79	0.39	0.28	0.66	1.00	3.85	0051-1
2454.20	S/Sst	0.75	50.25	78.56	1.07	0.78	0.45	0.34	0.65	1.01	3.68	0055-1
2463.50	bulk	0.75	50.42	79.14	0.99	0.79	0.45	0.34	0.65	1.02	3.83	0062-0

Table 11a: Variation in Triterpane Distribution (peak height) SIR for Well NOCS 6608/10-8

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
2514.00	bulk	1.04	0.51	0.15	0.56	0.36	0.08	0.09	0.17	0.09	0.12	0.91	0.37	0.11	60.98	0065-0

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 (%)

Table 11c: Raw triterpane data (peak height) m/z 191 SIR for Well NOCS 6608/10-8

Depth unit of measure: m

Depth	Lithology	23/3	24/3	25/3	24/4	26/3	27Ts	27Tm	28aß	25nor30aß	Sample
		29aß	29Ts	30d	29ßa	30O	30aß	30ßa	30G	31aßS	
		31aßR	32aßS	32aßR	33aßS	33aßR	34aßS	34aßR	35aßS	35aßR	
2200.00	bulk	11277.6	8477.5	3701.4	8658.8	3337.0	15716.7	16827.3	7871.0	7350.7	0063-0
		46324.8	13706.2	6213.1	7024.0	0.0	80374.7	8619.1	2580.9	24250.1	
		19310.3	13553.4	9398.3	8507.3	5384.5	4629.3	2902.7	3244.9	2125.6	
2235.00	Sh/Clst	12044.0	9060.2	3741.1	10577.2	3249.9	17296.8	44556.4	277236.3	6749.5	0014-3
		92006.5	20311.5	11279.0	45597.9	0.0	210429.6	59613.2	12039.7	39794.9	
		98837.6	18901.3	36671.1	11888.8	19965.4	6504.8	8893.9	5024.8	13871.9	
2285.00	bulk	9495.2	9453.9	3461.7	10214.3	3232.5	17029.0	18541.6	11133.8	7568.3	0059-0
		53111.0	16139.9	8867.3	8080.0	0.0	115966.5	10842.8	3611.0	31233.5	
		20314.9	19396.2	12414.8	12512.6	7564.9	7493.9	4596.5	4320.6	2772.3	
2295.80	S/Sst	20240.5	19373.3	6984.5	21936.7	6574.6	37436.9	42507.9	23615.5	16079.2	0033-1
		119595.1	34984.3	19149.9	17550.2	0.0	261495.4	24013.5	5681.9	71529.0	
		43882.2	45688.1	28684.2	29534.1	18022.7	16855.6	10579.3	10297.1	6769.4	
2315.95	S/Sst	72667.4	39623.4	16230.5	42388.5	10748.6	32992.1	20817.7	9808.4	7457.6	0035-1
		66355.9	19259.6	8131.0	8247.2	0.0	102821.7	9513.6	3173.2	29930.0	
		19810.5	16593.4	11164.2	10376.1	6508.0	6092.4	3706.5	3701.0	2508.2	
2371.50	S/Sst	24175.2	23481.9	7892.5	24291.6	6457.3	36658.5	40054.5	21484.5	15989.1	0037-1
		112748.1	33259.2	18501.0	16229.5	0.0	236364.3	22043.5	5157.1	64551.7	
		38788.7	40253.3	25145.5	27808.4	15559.3	16220.5	9168.8	9855.0	5928.1	
2375.50	bulk	17352.9	16106.3	5593.2	17994.1	4980.5	31275.5	34705.9	19101.9	14007.3	0060-0
		100430.4	29416.2	16272.0	14903.9	0.0	216383.8	19432.3	5724.8	60724.6	
		37663.7	38218.8	23038.8	25698.5	14224.4	15291.8	8436.4	9053.3	5685.9	

Table 11b: Variation in Sterane Distribution (peak height) SIR for Well NOCS 6608/10-8

Depth unit of measure: m

Depth	Lithology	Ratio1	Ratio2	Ratio3	Ratio4	Ratio5	Ratio6	Ratio7	Ratio8	Ratio9	Ratio10	Sample
2514.00	bulk	0.70	47.85	78.01	1.17	0.79	0.45	0.33	0.64	0.92	3.40	0065-0

List of Sterane Distribution Ratios

Ratio 1: 27dßS / 27dßS+27aaR

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

Ratio 3: 2*(29ßßR+29ßßS) / (29aaS+29aaR + 2*(29ßßR+29ßßS)) (%)

Ratio 4: 27dßS+27dßR+27daR+27daS / 29dßS+29dßR+29daR+29daS

Ratio 5: 29ßßR+29ßßS / 29ßßR+29ßßS+29aaS

Ratio 6: 21a+22a / 21a+22a+29aaS+29ßßR+29ßßS+29aaR

Ratio 7: 21a+22a / 21a+22a+28daS+28aaS+29daR+29aaS+29ßßR+29ßßS+29aaR

Ratio 8: 29ßßR+29ßßS / 29aaS+29ßßR+29ßßS+29aaR

Ratio 9: 29aaS / 29aaR

Ratio 10: 29ßßR+29ßßS / 29aaR

Table 11c: Raw triterpane data (peak height) m/z 191 SIR for Well NOCS 6608/10-8

Depth unit of measure: m

Depth	Lithology	23/3	24/3	25/3	24/4	26/3	27Ts	27Tm	28aß	25nor30aß	Sample
		29aß	29Ts	30d	29ßa	30O	30aß	30ßa	30G	31aßS	
		31aßR	32aßS	32aßR	33aßS	33aßR	34aßS	34aßR	35aßS	35aßR	
2463.50	bulk	19453.1	17924.9	6314.6	19335.1	5307.4	32177.1	34819.9	18205.8	13612.5	0062-0
		100377.8	29315.8	16723.3	13980.0	0.0	207096.4	19117.4	4822.5	56072.1	
		34336.1	35482.3	21353.1	23739.8	13704.0	14351.7	8186.2	8800.8	5450.7	
2514.00	bulk	55254.5	41979.6	17203.9	43277.4	14327.0	63748.0	66497.2	32006.6	30056.5	0065-0
		190046.9	57467.4	25543.4	28003.2	0.0	338888.0	32770.5	12204.6	99765.6	
		70684.6	55805.4	35712.7	37028.6	21833.8	19286.7	11747.2	13014.6	8721.0	

217 SIR for Well NOCS 6608/1(

27dßS	27dßR	27daF
3* 27aaR	29dßR	
29ßßR	29ßßS	29aaF
19514.6	15446.4	4762
7.3 13835.8	12790.1	
12949.7	11287.6	729
27688.0	26143.7	9866
0.7 49713.1	23838.0	
34894.3	21363.5	65085
20694.6	14029.3	5199
4.3 7636.5	15171.7	
15879.8	14245.7	7803
48507.1	33161.5	11889
5.8 17410.0	34121.4	
35596.4	31814.5	18441
52257.8	32124.1	12666
4.8 11716.2	19382.2	
15952.6	14269.7	7762
49234.8	33490.9	11870
9.0 16092.3	33835.4	
33254.4	29121.6	15715

27ßßR, 28daS coel with 27ßßS

Table 11c: Raw triterpane data (peak height) m/z 191 SIR for Well NOCS 6608/10-8

Depth unit of measure: m

Depth	Lithology	23/3	24/3	25/3	24/4	26/3	27Ts	27Tm	28aß	25nor30aß	Sample
		29aß	29Ts	30d	29ßa	30O	30aß	30ßa	30G	31aßS	
		31aßR	32aßS	32aßR	33aßS	33aßR	34aßS	34aßR	35aßS	35aßR	
2378.05	S/Sst	26410.8	23928.4	9080.1	29511.0	7586.4	45100.9	50694.5	27860.0	20625.2	0038-1
		140845.5	41541.8	22734.1	19702.8	0.0	291504.4	26762.1	6249.3	78294.2	
		47608.9	49022.6	30655.2	31256.4	17931.0	18206.3	10327.0	10463.1	6653.5	
2388.00	bulk	38286.6	29997.8	12214.1	34034.4	11398.8	55950.5	58339.7	30153.0	25237.3	0064-0
		172091.6	51587.0	24160.3	26828.7	0.0	315762.7	31615.2	11508.7	90499.6	
		66643.2	51805.4	33448.9	34239.3	19587.6	18884.0	10649.2	12287.6	7489.0	
2401.00	S/Sst	36438.9	20855.9	7104.3	18637.0	4448.6	18699.5	17879.7	9280.8	6612.6	0042-1
		49172.9	14971.4	7844.6	7169.9	0.0	101029.3	9282.2	2730.0	28672.7	
		17970.6	17687.4	11210.0	11319.2	6724.6	6622.7	4022.1	4172.6	2786.9	
2424.30	S/Sst	37539.5	35128.8	12220.5	38150.3	10314.7	58619.5	63177.6	34045.6	25564.0	0046-1
		187841.2	55119.1	29965.7	26407.0	0.0	397885.9	35160.8	10903.6	105584.2	
		68251.0	60321.0	38731.3	38768.8	22567.3	22343.4	12666.5	13533.9	8132.1	
2431.50	bulk	17464.3	17026.2	5841.4	19505.8	5235.6	35802.9	37259.7	21736.0	14660.9	0061-0
		112847.6	32990.4	18479.2	16100.4	0.0	244714.8	23085.7	5726.9	67075.8	
		40720.4	42620.4	25886.0	28483.6	16048.4	17460.4	9699.8	10404.4	6241.7	
2441.20	S/Sst	55430.3	50300.4	17370.0	58912.5	15930.6	93910.7	100690.4	53175.0	38450.6	0051-1
		287048.4	82067.8	45942.5	42976.0	0.0	625098.6	57775.3	16602.8	167485.0	
		109047.4	106188.4	68908.9	69298.4	39231.4	37865.0	22765.1	22981.1	15209.0	
2454.20	S/Sst	36180.5	35728.1	11932.1	36152.1	9138.5	55778.6	57168.7	32146.3	23158.1	0055-1
		167736.0	50061.7	28779.4	23372.9	0.0	340662.5	33012.6	8210.9	92030.7	
		55559.0	57267.5	34956.6	36096.4	20598.2	20439.9	12387.3	12707.9	8114.1	

Table 11d: Raw sterane data (peak height) m/z 217 SIR for Well NOCS 6608/10-8

Depth unit of measure: m

Depth	Lithology	21a	22a	27dßS	27dßR	27daR	27daS	28dßS	28dßR	28daR*	Sample
		29dßS*	28daS*	27aaR	29dßR	29daR	28aaS	29daS*	28ßßS		
		28aaR	29aaS	29ßßR	29ßßS	29aaR					
2375.50	bulk	43267.7	14555.5	38965.0	27102.0	9593.1	10223.4	18850.6	12116.6	14972.8	0060-0
		35205.5	27544.6	14504.6	28035.6	10263.6	9178.8	17244.3	25922.5		
		6030.5	14402.9	28872.4	25749.4	13917.9					
2378.05	S/Sst	59790.8	22257.6	61098.0	40095.8	14949.6	16274.5	30293.7	17945.2	23037.1	0038-1
		53134.6	41702.7	21681.5	41691.0	14074.7	12235.2	24314.7	38491.9		
		7801.2	20870.1	42586.4	38085.1	20503.4					
2388.00	bulk	70689.7	25709.9	71650.1	51380.4	18909.5	19989.4	34244.2	21839.3	27792.9	0064-0
		58882.3	48093.5	34630.4	47528.5	17548.6	16250.5	29714.0	42361.8		
		12455.0	24634.9	47645.0	42299.3	27532.0					
2401.00	S/Sst	38954.5	13785.4	26340.1	17339.8	6198.7	6754.8	11429.3	6953.5	8492.7	0042-1
		19649.3	15431.9	8183.6	15032.8	5132.0	4663.3	8533.8	13115.5		
		2967.5	6735.2	13984.6	12140.6	6611.4					
2424.30	S/Sst	95551.9	34346.2	82976.6	57970.3	20865.8	22456.8	40108.8	24904.4	28019.2	0046-1
		67776.0	55424.0	27627.5	56302.1	19105.1	16241.7	30532.5	50950.3		
		11196.9	28922.3	54096.2	47274.5	27674.6					
2431.50	bulk	44048.5	15751.0	43187.6	30541.7	10975.6	11600.8	21125.6	14206.0	16558.1	0061-0
		39418.1	30203.2	15378.8	31834.4	10912.3	9314.2	17923.5	28552.0		
		6371.1	16849.1	31724.0	28745.7	15679.5					

* 28daR coel with 27aaS, 29dßS coel with 27ßßR, 28daS coel with 27ßßS, 29daS coel with 28ßßR

Table 11d: Raw sterane data (peak height) m/z 217 SIR for Well NOCS 6608/10-8

Depth unit of measure: m

Depth	Lithology	21a	22a	27dßS	27dßR	27daR	27daS	28dßS	28dßR	28daR*	Sample
		29dßS*	28daS*	27aaR	29dßR	29daR	28aaS	29daS*	28ßßS		
		28aaR	29aaS	29ßßR	29ßßS	29aaR					
2441.20	S/Sst	118891.4	46272.8	131313.7	88225.3	32772.1	36292.1	61488.5	39110.1	46637.4	0051-1
		111555.4	83724.2	42829.2	87688.8	29918.9	26279.9	49366.0	77671.9		
		16598.7	44893.6	90448.8	82064.4	44771.2					
2454.20	S/Sst	91430.8	34243.6	77187.6	54892.8	19537.2	21165.7	37911.7	22486.8	26427.3	0055-1
		62921.7	48626.2	26014.9	52296.7	18056.0	15492.8	28563.2	45466.6		
		10238.3	27066.3	52165.9	46550.9	26801.4					
2463.50	bulk	49473.1	16909.9	40282.3	26642.1	9688.5	10063.3	16476.1	12334.2	14238.6	0062-0
		34537.0	26376.0	13505.3	28244.3	9509.5	7947.3	15463.1	23888.7		
		5418.6	13914.8	27871.9	24465.7	13680.9					
2514.00	bulk	94419.8	33976.8	88573.6	62397.4	22422.9	23818.6	40992.1	25886.5	31452.7	0065-0
		66056.0	54412.7	38508.9	52564.7	18716.7	16093.3	31265.0	44513.3		
		12219.0	26835.2	52336.7	47152.5	29245.5					

* 28daR coel with 27aaS, 29dßS coel with 27ßßR, 28daS coel with 27ßßS, 29daS coel with 28ßßR

Table 11e: Raw sterane data (peak height) m/z 218 SIR for Well NOCS 6608/10-8

Depth unit of measure: m

Depth	Lithology	27ßßR	27ßßS	28ßßR	28ßßS	29ßßR	29ßßS	30ßßR	30ßßS	Sample
2200.00	bulk	17077.5	17003.2	12398.3	16165.4	18885.3	17972.4	4268.4	4134.1	0063-0
2235.00	Sh/Clst	27347.5	25439.6	23285.3	24701.8	40045.2	32613.6	7060.9	15822.4	0014-3
2285.00	bulk	17792.9	18585.7	14110.6	18101.9	23120.2	21760.3	5964.4	5861.9	0059-0
2295.80	S/Sst	42267.9	42030.8	31621.8	42802.3	53186.6	50234.9	13749.7	13757.8	0033-1
2315.95	S/Sst	28538.3	25992.6	15959.3	19525.8	22983.8	21842.2	5120.0	4970.3	0035-1
2371.50	S/Sst	39928.8	39795.8	29023.6	39683.5	49517.7	46342.9	13010.5	12743.9	0037-1
2375.50	bulk	33930.2	33889.8	26092.4	35237.3	43331.3	40710.3	11600.1	10886.5	0060-0
2378.05	S/Sst	51419.1	52492.6	37999.2	50933.7	62213.5	58301.9	15805.1	15344.2	0038-1
2388.00	bulk	60354.6	57243.3	42792.1	57051.8	69950.7	65799.6	17685.4	17200.0	0064-0
2401.00	S/Sst	18723.9	18978.3	12910.9	17041.2	20665.2	19243.3	5094.8	4978.7	0042-1
2424.30	S/Sst	64447.4	66737.0	48319.4	69158.4	81003.3	73788.4	20463.0	20826.7	0046-1
2431.50	bulk	37839.7	38311.1	28187.6	38673.7	47504.2	45326.5	12961.8	12371.3	0061-0
2441.20	S/Sst	105896.1	103312.3	76899.8	104286.0	131807.2	126736.4	35822.4	34818.9	0051-1
2454.20	S/Sst	58899.1	60665.4	45150.6	61293.8	75068.7	71476.1	19786.7	19128.5	0055-1
2463.50	bulk	33194.3	33000.9	24686.1	33683.6	41986.9	38058.9	10986.3	10704.1	0062-0
2514.00	bulk	69358.6	67336.1	48645.9	63379.1	76954.6	74526.2	18865.3	18478.3	0065-0

Table 11f: Raw triterpane data (peak height) m/z 177 SIR for Well NOCS 6608/10-8

Depth unit of measure: m

Depth	Lithology	25nor28aß	25nor30aß	Sample
2200.00	bulk	7870.8	4668.2	0063-0
2235.00	Sh/Clst	8798.8	3559.0	0014-3
2285.00	bulk	10117.6	5275.6	0059-0
2295.80	S/Sst	22229.6	12847.9	0033-1
2315.95	S/Sst	10711.4	5207.7	0035-1
2371.50	S/Sst	22705.2	11604.7	0037-1
2375.50	bulk	19032.7	10249.8	0060-0
2378.05	S/Sst	26684.7	14996.5	0038-1
2388.00	bulk	27955.3	17398.7	0064-0
2401.00	S/Sst	9348.9	4485.3	0042-1
2424.30	S/Sst	31875.7	17598.9	0046-1
2431.50	bulk	21447.8	11448.7	0061-0
2441.20	S/Sst	48267.6	28625.8	0051-1
2454.20	S/Sst	30465.2	15609.5	0055-1
2463.50	bulk	19017.8	10011.5	0062-0
2514.00	bulk	32334.6	20709.5	0065-0

Table 11g: Amount of triterpanes (ppb) m/z 191 SIR for Well NOCS 6608/10-8

Depth unit of measure: m

Depth	Lithology	23/3	24/3	25/3	24/4	26/3	27Ts	27Tm	28aß	25nor30aß	Sample
		29aß	29Ts	30d	29ßa	30O	30aß	30ßa	30G	31aßS	
		31aßR	32aßS	32aßR	33aßS	33aßR	34aßS	34aßR	35aßS	35aßR	
2200.00	bulk	8121.0	6104.6	2665.4	6235.1	2403.0	11317.5	12117.2	5667.9	5293.2	0063-0
		33358.2	9869.8	4474.0	5057.9	0.0	57877.4	6206.6	1858.5	17462.3	
		13905.3	9759.7	6767.7	6126.1	3877.4	3333.5	2090.2	2336.6	1530.6	
2235.00	Sh/Clst	17694.2	13310.7	5496.1	15539.4	4774.6	25411.3	65459.3	407297.2	9916.0	0014-3
		135169.9	29840.3	16570.4	66989.4	0.0	309149.2	87579.7	17687.9	58464.0	
		145205.7	27768.5	53874.7	17466.2	29331.9	9556.4	13066.3	7382.1	20379.6	
2285.00	bulk	47419.3	47213.0	17287.9	51010.6	16143.3	85043.3	92597.5	55602.5	37796.3	0059-0
		265238.1	80603.3	44283.7	40351.9	0.0	579140.8	54149.3	18033.3	155981.3	
		101453.3	96865.5	61999.7	62488.6	37779.5	37424.6	22955.0	21577.2	13845.1	
2295.80	S/Sst	49483.8	47363.5	17075.7	53630.6	16073.5	91525.2	103922.6	57734.8	39310.3	0033-1
		292384.5	85529.1	46817.4	42906.5	0.0	639300.4	58707.8	13891.1	174873.0	
		107282.7	111697.7	70126.8	72204.6	44061.6	41208.4	25864.1	25174.2	16549.6	
2315.95	S/Sst	185074.6	100915.7	41337.2	107958.1	27375.3	84026.8	53020.1	24980.7	18993.5	0035-1
		169000.0	49051.9	20708.7	21004.7	0.0	261873.9	24230.0	8081.8	76227.9	
		50454.8	42261.3	28433.7	26426.5	16575.1	15516.6	9440.1	9426.1	6388.2	
2371.50	S/Sst	67086.4	65162.5	21901.7	67409.4	17919.2	101727.7	111151.5	59619.7	44369.8	0037-1
		312877.0	92294.5	51340.4	45037.1	0.0	655913.0	61171.0	14311.1	179131.5	
		107639.0	111703.2	69779.0	77168.6	43177.3	45012.0	25443.4	27347.8	16450.6	
2375.50	bulk	47092.2	43709.0	15178.7	48832.0	13516.0	84875.1	94184.5	51838.6	38012.9	0060-0
		272546.7	79829.2	44158.6	40446.1	0.0	587219.6	52735.2	15535.9	164793.6	
		102211.4	103717.6	62522.5	69740.3	38602.0	41498.8	22894.6	24568.8	15430.4	

Table 11g: Amount of triterpanes (ppb) m/z 191 SIR for Well NOCS 6608/10-8

Depth unit of measure: m

Depth	Lithology	23/3	24/3	25/3	24/4	26/3	27Ts	27Tm	28aß	25nor30aß	Sample
		29aß	29Ts	30d	29ßa	30O	30aß	30ßa	30G	31aßS	
		31aßR	32aßS	32aßR	33aßS	33aßR	34aßS	34aßR	35aßS	35aßR	
2378.05	S/Sst	52963.5	47985.3	18209.1	59180.4	15213.6	90444.0	101661.2	55869.5	41361.1	0038-1
		282447.3	83306.6	45590.4	39511.3	0.0	584574.1	53668.0	12532.2	157008.9	
		95473.4	98308.5	61475.1	62680.7	35958.2	36510.3	20709.5	20982.4	13342.8	
2388.00	bulk	20886.4	16364.7	6663.2	18566.7	6218.4	30522.6	31826.0	16449.3	13767.7	0064-0
		93880.8	28142.2	13180.1	14635.8	0.0	172257.5	17247.0	6278.3	49370.1	
		36355.7	28261.3	18247.3	18678.5	10685.6	10301.8	5809.5	6703.2	4085.5	
2401.00	S/Sst	151514.1	86719.6	29539.8	77493.4	18497.6	77753.3	74344.5	38589.9	27495.4	0042-1
		204462.9	62251.6	32618.0	29812.6	0.0	420083.7	38595.6	11351.5	119222.3	
		74722.3	73545.0	46611.8	47065.6	27961.3	27537.6	16724.0	17349.9	11588.0	
2424.30	S/Sst	53672.2	50225.6	17472.3	54545.6	14747.6	83811.5	90328.5	48676.8	36550.3	0046-1
		268566.8	78806.7	42843.6	37755.6	0.0	568879.2	50271.3	15589.5	150959.5	
		97582.1	86244.2	55376.2	55429.9	32265.8	31945.5	18110.1	19350.2	11626.9	
2431.50	bulk	41092.7	40061.8	13744.6	45896.2	12319.1	84242.5	87670.4	51143.7	34496.5	0061-0
		265525.3	77625.0	43480.7	37883.6	0.0	575802.9	54319.5	13475.0	157826.3	
		95813.4	100283.8	60908.5	67020.5	37761.2	41083.6	22823.2	24481.1	14686.5	
2441.20	S/Sst	50285.2	45631.4	15757.6	53444.1	14451.9	85193.7	91344.1	48239.1	34881.5	0051-1
		260403.8	74450.0	41678.0	38986.8	0.0	567075.3	52412.5	15061.6	151938.6	
		98925.3	96331.7	62512.6	62865.9	35589.8	34350.3	20652.0	20847.9	13797.3	
2454.20	S/Sst	58390.6	57660.5	19256.9	58344.8	14748.4	90019.4	92262.9	51879.9	37374.2	0055-1
		270704.0	80793.1	46446.3	37720.9	0.0	549784.8	53278.0	13251.4	148525.5	
		89665.0	92422.2	56415.3	58254.8	33242.8	32987.4	19991.4	20508.9	13095.2	

Table 11g: Amount of triterpanes (ppb) m/z 191 SIR for Well NOCS 6608/10-8

Depth unit of measure: m

Depth	Lithology	23/3	24/3	25/3	24/4	26/3	27Ts	27Tm	28aß	25nor30aß	Sample
		29aß	29Ts	30d	29ßa	30O	30aß	30ßa	30G	31aßS	
		31aßR	32aßS	32aßR	33aßS	33aßR	34aßS	34aßR	35aßS	35aßR	
2463.50	bulk	55489.1	51130.1	18012.1	55152.6	15139.1	91784.0	99322.4	51931.4	38829.2	0062-0
		286323.6	83622.1	47702.4	39877.5	0.0	590734.1	54531.7	13756.1	159943.3	
		97942.4	101211.7	60908.8	67717.0	39090.0	40937.7	23350.7	25103.9	15547.8	
2514.00	bulk	26589.5	20201.4	8278.8	20825.9	6894.4	30676.7	31999.7	15402.2	14463.8	0065-0
		91454.2	27654.4	12292.0	13475.6	0.0	163079.3	15769.8	5873.1	48009.1	
		34014.8	26854.6	17185.6	17818.9	10506.8	9281.1	5653.0	6262.9	4196.7	

Table 11h: Amount of steranes (ppb) m/z 217 SIR for Well NOCS 6608/10-8

Depth unit of measure: m

Depth	Lithology	21a	22a	27dßS	27dßR	27daR	27daS	28dßS	28dßR	28daR*	Sample
		29dßS*	28daS*	27aaR	29dßR	29daR	28aaS	29daS*	28ßßS		
		28aaR	29aaS	29ßßR	29ßßS	29aaR					
2200.00	bulk	15127.1	4411.0	14052.4	11122.9	3429.6	3835.4	6844.0	4277.8	5379.5	0063-0
		11673.3	9409.7	9963.1	9210.1	3097.3	2899.0	5636.9	8354.6		
		2192.4	4566.9	9325.0	8128.1	5256.6					
2235.00	Sh/Clst	49558.6	12347.6	40677.4	38408.6	14495.7	11931.8	17555.7	15100.7	30663.8	0014-3
		42538.2	29413.1	73035.1	35021.2	13477.9	10774.3	29841.0	26230.7		
		33256.8	15219.3	51264.4	31385.8	95619.5					
2285.00	bulk	141678.0	43489.7	103349.7	70062.6	25966.5	26346.7	51783.4	32962.5	38728.7	0059-0
		100117.1	74882.1	38137.0	75768.2	25202.5	23499.6	46966.0	69681.6		
		16539.9	37017.3	79304.2	71143.4	38971.7					
2295.80	S/Sst	121787.4	43734.8	118589.4	81072.9	29067.0	30982.1	58445.1	38160.6	45464.4	0033-1
		104998.7	82430.3	42563.7	83419.6	28463.2	25714.8	49569.7	75715.0		
		17117.1	42630.2	87025.5	77779.7	45085.5					
2315.95	S/Sst	133424.3	54896.6	133094.0	81816.1	32259.7	33276.0	48524.7	30436.9	32402.7	0035-1
		71320.3	51815.7	29839.7	49364.0	17865.7	14324.5	26254.3	36473.6		
		7872.6	19765.3	40629.3	36343.2	19770.3					
2371.50	S/Sst	161756.5	59431.6	136627.1	92937.5	32939.2	34988.8	66035.2	40857.6	49270.4	0037-1
		115592.2	89852.0	44656.4	93893.5	32927.8	28821.8	53410.4	81713.4		
		18574.4	46819.6	92281.2	80812.6	43611.8					

* 28daR coel with 27aaS, 29dßS coel with 27ßßR, 28daS coel with 27ßßS, 29daS coel with 28ßßR

Table 11h: Amount of steranes (ppb) m/z 217 SIR for Well NOCS 6608/10-8

Depth unit of measure: m

Depth	Lithology	21a	22a	27dßS	27dßR	27daR	27daS	28dßS	28dßR	28daR*	Sample
		29dßS*	28daS*	27aaR	29dßR	29daR	28aaS	29daS*	28ßßS		
		28aaR	29aaS	29ßßR	29ßßS	29aaR					
2375.50	bulk	117419.3	39500.6	105742.7	73549.0	26033.6	27744.1	51156.5	32881.8	40633.0	0060-0
		95540.1	74750.2	39362.4	76082.7	27853.2	24909.3	46797.4	70348.1		
		16365.6	39086.4	78353.6	69878.4	37770.1					
2378.05	S/Sst	119902.7	44634.8	122524.0	80406.9	29979.5	32636.4	60750.1	35986.8	46197.9	0038-1
		106554.5	83629.3	43479.5	83605.8	28224.9	24536.1	48760.0	77190.5		
		15644.3	41852.2	85401.5	76374.7	41116.9					
2388.00	bulk	38563.2	14025.5	39087.1	28029.5	10315.7	10904.8	18681.2	11913.9	15161.8	0064-0
		32121.9	26236.4	18891.8	25928.1	9573.2	8865.1	16209.8	23109.6		
		6794.5	13439.0	25991.7	23075.5	15019.5					
2401.00	S/Sst	161974.1	57320.4	109523.3	72099.6	25774.6	28086.9	47523.5	28913.1	35312.9	0042-1
		81702.4	64166.4	34027.7	62507.0	21338.9	19390.1	35483.7	54534.8		
		12339.0	28005.1	58148.4	50480.9	27490.4					
2424.30	S/Sst	136615.7	49106.6	118636.2	82883.2	29833.0	32107.7	57345.7	35607.2	40060.6	0046-1
		96903.0	79242.7	39500.6	80498.1	27315.6	23221.7	43654.0	72846.4		
		16008.8	41351.8	77344.3	67590.9	39567.8					
2431.50	bulk	103644.2	37061.5	101618.4	71863.3	25825.1	27296.1	49707.5	33426.0	38960.5	0061-0
		92749.0	71066.7	36185.6	74905.0	25676.2	21916.0	42173.2	67181.6		
		14990.8	39645.1	74645.1	67637.3	36893.1					

* 28daR coel with 27aaS, 29dßS coel with 27ßßR, 28daS coel with 27ßßS, 29daS coel with 28ßßR

Table 11h: Amount of steranes (ppb) m/z 217 SIR for Well NOCS 6608/10-8

Depth unit of measure: m

Depth	Lithology	21a	22a	27dßS	27dßR	27daR	27daS	28dßS	28dßR	28daR*	Sample
		29dßS*	28daS*	27aaR	29dßR	29daR	28aaS	29daS*	28ßßS		
		28aaR	29aaS	29ßßR	29ßßS	29aaR					
2441.20	S/Sst	107855.6	41977.6	119124.8	80036.0	29730.1	32923.4	55781.0	35479.8	42308.4	0051-1
		101200.5	75952.7	38853.7	79549.3	27141.8	23840.5	44783.7	70462.1		
		15058.0	40726.5	82053.1	74447.0	40615.4					
2454.20	S/Sst	147557.4	55264.6	124570.7	88589.8	31530.4	34158.7	61184.5	36290.7	42650.2	0055-1
		101547.4	78476.4	41984.7	84400.0	29140.0	25003.4	46097.3	73377.1		
		16523.3	43681.5	84189.0	75127.1	43254.0					
2463.50	bulk	141120.0	48234.8	114903.6	75995.4	27636.1	28705.2	46997.4	35182.8	40614.9	0062-0
		98515.3	75236.5	38523.3	80565.8	27125.4	22669.5	44107.8	68141.5		
		15456.5	39691.3	79503.6	69787.3	39024.2					
2514.00	bulk	45436.6	16350.3	42623.3	30026.8	10790.3	11461.9	19726.2	12457.1	15135.6	0065-0
		31787.4	26184.4	18531.2	25295.1	9006.8	7744.4	15045.3	21420.6		
		5880.0	12913.6	25185.4	22690.7	14073.5					

* 28daR coel with 27aaS, 29dßS coel with 27ßßR, 28daS coel with 27ßßS, 29daS coel with 28ßßR

Table 11i: Amount of standard and weight of sample for Well NOCS 6608/10-8

Depth unit of measure: m

Depth	Lithology	Standard	Amount	Weight	Sample
2200.00	bulk	757476.9	0.600	1.1	0063-0
2235.00	Sh/Clst	291717.1	0.600	1.4	0014-3
2285.00	bulk	11664.4	1.200	20.6	0059-0
2295.80	S/Sst	16093.1	1.200	30.5	0033-1
2315.95	S/Sst	16172.7	1.800	43.7	0035-1
2371.50	S/Sst	15173.0	1.200	28.5	0037-1
2375.50	bulk	19918.3	1.200	22.2	0060-0
2378.05	S/Sst	23745.8	1.200	25.2	0038-1
2388.00	bulk	687407.0	0.600	1.6	0064-0
2401.00	S/Sst	10258.2	1.800	42.2	0042-1
2424.30	S/Sst	27250.2	1.200	30.8	0046-1
2431.50	bulk	19101.0	1.200	26.7	0061-0
2441.20	S/Sst	52352.9	1.800	37.9	0051-1
2454.20	S/Sst	22949.2	1.200	32.4	0055-1
2463.50	bulk	19476.4	1.200	21.6	0062-0
2514.00	bulk	733431.5	0.600	1.7	0065-0

Table 13A: Light Hydrocarbons from Whole Oil GC for NOCS 6608/10-8

Well	Description	2,2DMC4	2,3DMC4	nC6	MCyC5	Benz	Sample
6608/10-8		0.12	0.34	2.18	2.23	2.50	W75/0060
6608/10-8		0.13	0.42	3.27	2.70	1.60	W75/0059
6608/10-8		0.07	0.25	1.83	1.96	2.40	W75/0061
6608/10-8		0.11	0.40	2.43	2.35	2.69	W75/0062

Table 13B: Light Hydrocarbons from Whole Oil GC for NOCS 6608/10-8

Well	Description	CyC6	2MC6	3MC6	1,3ci-DMCyC5	1,3tr-DMCyC5	1,2tr-DMCyC5	nC7	MCyC6	Tol	nC8	p/m-Xylene	Sample
6608/10-8		4.17	1.21	1.00	0.49	0.46	0.86	3.10	9.12	11.88	4.24	10.44	W75/0060
6608/10-8		4.40	1.56	1.26	0.58	0.54	1.02	3.78	9.21	7.65	4.60	7.45	W75/0059
6608/10-8		3.93	1.13	0.95	0.47	0.45	0.85	3.03	9.05	12.69	4.51	11.49	W75/0061
6608/10-8		4.17	1.23	0.99	0.48	0.45	0.84	3.07	8.72	11.47	4.05	9.74	W75/0062

Table 13C: Thompson's indices for NOCS 6608/10-8

Well	Description	A	B	X	W	C	I	F	H	U	R	S	Sample
6608/10-8		1.15	3.83	2.46	6.00	0.40	1.22	0.34	14.94	1.87	2.56	18.17	W75/0060
6608/10-8		0.49	2.02	1.62	3.64	0.52	1.32	0.41	16.60	1.63	2.42	25.15	W75/0059
6608/10-8		1.31	4.19	2.55	6.11	0.37	1.18	0.33	15.07	2.01	2.68	26.14	W75/0061
6608/10-8		1.11	3.74	2.40	6.45	0.43	1.25	0.35	15.09	1.77	2.50	22.09	W75/0062

THOMPSON'S INDICES

$$A = \frac{\text{Benzene}}{\text{nC6}} \qquad B = \frac{\text{Toluene}}{\text{nC7}} \qquad X = \frac{\text{p/m-xylene}}{\text{nC8}} \qquad W = \frac{\text{Benzene} * 10}{\text{CyC6}}$$

$$C = \frac{\text{nC6} + \text{nC7}}{\text{CyC6} + \text{MCyC6}} \qquad I = \frac{\text{2MC6} + \text{3MC6}}{\text{1,3ciDMCyC5} + \text{1,3trDMCyC5} + \text{1,2trDMCyC5}} \qquad F = \frac{\text{nC7}}{\text{MCyC6}}$$

$$H = \frac{\text{nC7} * 100}{\text{CyC6} + \text{2MC6} + \text{2,3DMC4} + \text{3MC6} + \text{1,3ciDMCyC5} + \text{1,3trDMCyC5} + \text{1,2trDMCyC5} + \text{nC7} + \text{MCyC6}}$$

$$U = \frac{\text{CyC6}}{\text{MCyC5}} \qquad R = \frac{\text{nC7}}{\text{2MC6}} \qquad S = \frac{\text{nC6}}{\text{2,2DMC4}}$$

GEOLAB NOR

Data report on molecular and stable isotopic composition of gas samples from well 6608/10-8

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Introduction

The molecular and isotopic composition of three gas samples from well 6608/10-8 have been analysed. The contents of C_1-C_5 and inorganic gases have been quantified and the $\delta^{13}C$ composition of C_1-C_4 and CO_2, the δD composition of methane and the $\delta^{18}O$ composition of CO_2 have been determined.

Experimental Procedures

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

GC analysis of gas components

Aliquots of 0.1 ml were sampled with a syringe for analysis on a Porabond Q column on a Carlo Erba HRGC 5300 equipped with a flame ionisation (FID) and a thermal conductivity (TCD/HWD) detector. The detection limit for the hydrocarbon gas components is 0.001 µl/ml, for CO_2 0.05 µl/ml.

Stable isotope analysis of gas compounds

5-10 ml of the gas was sampled with a syringe and then separated into the different gas components by a Carlo Erba 4200 gas chromatograph. The hydrocarbon gas components were oxidised in separate CuO-ovens in order to prevent cross contamination. The combustion products CO_2 and H_2O were frozen into collection vessels and separated. The combustion water was reduced with zinc metal in sealed quartz tubes to prepare hydrogen for isotopic analysis. The isotopic measurements were performed on a Finnigan MAT 251 and a Finnigan Delta mass spectrometer. The analytical procedures are tested with a laboratory gas standard mixture. Based on repeated analysis of the gas standard, the reproducibility in the $\delta^{13}C$ value is better than 0.5 ‰ PDB for all components. The reproducibility in the δD value is likewise better than 10 ‰.

Results

The normalised volume composition and the stable isotope composition of the gas samples are shown in Table 1 and Table 2 respectively.

Table 1. Gas Composition (volume-%)

Well	Sample type	Sample name Depth (m)	APT ID	C1%	C2%	C3%	iC4%	nC4%	iC5%	nC5%	CO2%	Sum C1-C5	Wetness (%)	iC4/nC4
6608/10-8	Gas	1.01x463.5	15163	92.9	4.5	1.2	0.13	0.18	0.04	0.03	1.0	99.0	6.1	0.73
6608/10-8	Gas	1.02x431.5	15164	84.1	9.2	3.9	0.56	0.89	0.25	0.23	0.90	99.1	14.8	0.62
6608/10-8	Gas	4.00x378.5	15165	92.1	5.2	1.5	0.16	0.24	0.06	0.06	0.71	99.3	7.1	0.68

Table 2. Gas Isotopes

Well	Sample type	Sample name Depth (m)	APT ID	C1 δ13C	C2 δ13C	C3 δ13C	iC4 δ13C	nC4 δ13C	iC5 δ13C	nC5 δ13C	CO2 δ13C	C1 δD	CO2 δ18O
6608/10-8	Gas	1.01x463.5	15163	-37.8	-28.1	-27.7	-25.6	-28.2			-16.4	-194	-15.0
6608/10-8	Gas	1.02x431.5	15164	-37.3	-26.3	-25.7	-25.2	-27.2			-16.4	-171	-14.6
6608/10-8	Gas	4.00x378.5	15165	-37.4	-28.1	-28.5	-25.5	-27.6			-20.8	-189	-12.1