

### 3.3 FMT pressures

Run no.	Depth mRKB MD	Chamber size	
		10 litres	4 litres
3B	2603,2	Contained: 7,0 l mud/mudfiltrate 1,8 l oil Filling time: 21 min	Contained: 0.027 m <sup>3</sup> gas 200 ml oil/water Filling time: 16 min
3C	2599,2	Contained: 2,5 l mud/mudfiltrate 0,1 l oil Filling time: 11 min	Contained: 0.156 m <sup>3</sup> gas 215 ml water/mud Filling time: 11 min
3D	2715,2	Contained: 9,6 l mudfiltrate/water 0,019 m <sup>3</sup> gas Filling time: 2,5 min	Contained: 3,9 l water 0.0112 m <sup>3</sup> gas Filling time: 3,5 min
3E	2624,5	Contained: 8,5-9 l mudfiltrate 1-1,5 l oil 0,026 m <sup>3</sup> gas Filling time: 4 min	Contained: 1,4 l water/mud 75 ml oil 0.030 m <sup>3</sup> gas Filling time: 6 min

FMT PRESSURES 6608/10-3

RUN no.	Depth m MD RKB	Hyd. pres. kPa	Form. pres. kPa	Comment
3B	2574.0	30658	26848	Very good
3B	2576.0	30673	26.851	Very good
3B	2578.0	30708	26854	Very good
3B	2580.0	30731	26858	Very good
3B	2582.0	30753	26862	Very good
3B	2585.0	30785	26868	Very good-good
3B	2586.0	30797	26871	Very good-good
3B	2587.0	30798	26877	Good-fair
3B	2588.0	30820	26.882	Poor
3B	2591.3	30855	26878	Very good
3B	2592.0	30871	26881	Very good
3B	2594.0	30890	26.890	Fair
3B	2595.0	30908	26890	Fair-good
3B	2597.4	30932	26891	Very good
3B	2599.0	30960	26896	Good
3B	2600.2	30970	26916	Fair
3B	2600.0	30958	26896	Very good
3B	2600.1	30970	0	Tight
3B	2601.3	30957	26909	Fair-good
3B	2603.0	30993	26924	Fair
3B	2604.1	30996	26922	Good
3B	2602.7	30991	26913	Very good
3B	2606.2	31037	27066	Fair, Pressure dropped
3B	2606.9	31044	27030	Poor
3B	2607.1	31042	27024	Fair-good
3B	2608.0	31062	27220	Tight
3B	2608.6	31058	0	Tight
3B	2606.9	31023	27006	Poor
3B	2607.8	31033	27041	Tight
3B	2607.2	31020	27023	Tight
3B	2606.8	31017	27007	Tight/Poor
3B	2610.2	31070	0	Tight
3B	2603.2	30980	26917	1. Segregated Sample run 3B
3B	2617.0	31140	0	Tight
3B	2618.5	31181	27002	Very good
3B	2620.0	31179	27011	Very good-good
3B	2627.0	31280	27072	Good-very good

RUN no.	Depth m MD RKB	Hyd. pres. kPa	Form. pres. kPa	Comment
3B	2629.5	31306	27081	Very good
3B	2632.0	31328	27096	Very good-good
3B	2636.0	31376	27120	Very good
3B	2639.0	31415	27141	Very good
3B	2643.0	31461	27169	Very good
3B	2647.0	31509	27198	Very good-good
3B	2650.0	31547	27222	Good-very good
3B	2653.0	31581	27245	Good-very good
3B	2657.0	31631	27272	Very good
3B	2660.0	31676	27291	Very good
3B	2665.0	31738	27328	Good-very good
3B	2675.0	31860	27397	Very good
3B	2680.0	31919	27435	Very good
3B	2685.0	31980	27473	Very good
3B	2692.8	32076	27523	Verygood-excellent
3B	2699.1	32153	27566	Very good
3B	2705.0	32222	27612	Good
3B	2708.1	32313	27633	Good
3B	2710.5	32332	27680	Tight
3B	2712.0	32397	27665	Very good
3B	2717.0	32397	27708	Very good
3B	2720.5	32439	27741	Very good
3B	2724.8	32483	27783	Excellent
3B	2728.7	32533	27823	Very good
3B	2734.5	32609	0	Tight
3B	2743.1	32703	27965	Good-very good
3B	2766.1	32988	28188	Very good-excellent
3B	2776.1	33116	28288	Very good
3B	2784.0	33220	28366	Very good-excellent
3B	2809.6	33536	28624	Good
3B	2839.0	33877	28918	Fair
3B	2851.5	34046	29036	Very good
3B	2599.0	30918	26905	
3C	2599.2	30925	26838	2. Segregated sample, run 3C
3B	2715.0	32335	27677	
3D	2715.2	32350	27682	3. Segregated sample, run 3D
3E	2624.5	31234	27031	4. Segregated sample, run 3E

## **10. DRILLING FLUID SUMMARY**

## TOTAL MATERIAL COST AND CONSUMPTION

OPERATOR: STATOIL

WELL: 6608/10-3

Product	Unit size	Unit price NOK	36" sect.	Cost NOK	26" sect.	Cost NOK	17 1/2" sect.	Cost NOK	12 1/4" sect.	Cost NOK	8 1/2" sect.	Cost NOK	TEST P & A	Cost NOK	Total consumed	Total cost NOK
Barite	M.T	825,00	21	17 325,00	116	95 700,00	148	122 100,00	521	429 825,00	74	61 050,00	172	141 900,00	1052	867 900,00
Bentonite	M.T.	2 240,00	52	116 480,00									23	51 520,00	75	168 000,00
Sod. Chloride	kg	1,45											50000	72 500,00	50000	72 500,00
Sod. Sulphite	kg	8,28											125	1 035,00	125	1 035,00
Soda Ash	kg	2,31	225	519,75									125	288,75	350	808,50
Calpol LV	kg	28,00					8750	245 000,00	7525	210 700,00	7125	199 500,00	475	13 300,00	23875	668 500,00
Calpol Reg	kg	28,00					550	15 400,00	375	10 500,00	875	24 500,00	200	5 600,00	2000	56 000,00
CMC EHV	kg	14,56			9550	139 048,00							825	12 012,00	10375	151 060,00
Lime	kg	2,30					120	276,00	300	690,00	240	552,00	120	276,00	780	1 794,00
Caustic Soda		5,50											275	1 512,50	275	1 512,50
Ancocide	ltr	16,22	25	405,50			850	13 787,00	700	11 354,00	1350	21 897,00	200	3 244,00	3125	50 687,50
Ironite Sponge	kg	24,81					204	5 061,24					206	5 110,86	410	10 172,10
Sod. Bicarbonate	kg	2,31							250	577,50	1300	3 003,00	575	1 328,25	2125	4 908,75
Gypsum	kg	1,62					11100	17 982,00	8700	14 094,00	7150	11 583,00	450	729,00	27400	44 388,00
Bentonite	kg	2,45									700	1 715,00			700	1 715,00
<b>Total cost</b>	<b>NOK</b>			<b>134 730,25</b>		<b>234 748,00</b>		<b>419 606,24</b>		<b>677 740,50</b>		<b>323 800,00</b>		<b>310 356,36</b>		<b>2 100 981,35</b>
Hole drilled	m			63		405		721		960		366				2515
Cost per metre	NOK			2 138,58		579,62		581,98		705,98		884,70				835,38
Total days				4		8		5		18		14		13		62
Cost per day	NOK			33 682,56		29 343,50		83 921,25		37 652,25		23 128,57		23 873,57		33 886,80
Mud mixed	m3			428		702		735		579		432		754		3 630,00
Cost per m3	NOK			314,79		334,40		570,89		1 170,54		749,54		411,61		578,78

## Mud volume distribution summary

WELL: 6608/10-3

AREA: NORDLAND II

RIG: ROSS RIG

Hole size	Hole From-to	Hole Length	Mud/brine Built	Dumped	Lost to Formation	Lost on surface equipment	Mud left between csg/csg plus left in hole	cuttings volume drilled	Mud transf. to next section	Mud type used for interval
inch	m	m	m3	m3	m3	m3	m3	m3	m3	
36	406 - 469	63	428	195				41,37	233	SEAW./BENTONITE SPUD MUD
26	469 - 874	405	702	935				138,71	0	SEAW./CMC EHV SPUD MUD
17 1/2	874 - 1595	721	735	196		95	35	111,90	409	GYP/PAC - POLYMER
12 1/4	1595 - 2555	960	579	317	83	205	35	72,96	348	GYP/PAC - POLYMER
8 1/2	2555 - 2921	366	432	388	3	139		13,40	250	GYP/PAC - POLYMER
P& A			754	571		33	76		324	NaCl BRINE/BENT. P & A MUD

**TOTALS**

Start volume: 0 m3  
 Mud/Brine built: 3630 m3  
 Mud/Brine dumped: 2602 m3  
 Mud/Brine lost to formation: 86 m3  
 Mud/Brine lost over solids control equipment: 472 m3  
 Mud/Brine left between csg/csg plus left in hole: 146 m3  
 Final volume: 324 m3

Total mud/Brine left/lost downhole: 232 m3  
 Total mud/Brine to sea: 3074 m3  
 Total cuttings volume drilled: 378,34 m3

**COMMENTS:** 36" SECTION: Returns to seabed.  
 26" SECTION: Returns to seabed.  
 17 1/2" SECTION: 35 m3 left behind casing.  
 12 1/4" SECTION: 83 m3 lost to formation, 35 m3 left behind casing.  
 8 1/2" SECTION: 3 m3 lost to formation.  
 TEST, P & A: 76 m3 left in hole.

DRILLING MUD PROPERTIES RECORD

WELL NO: 6608/10-3

AREA: NORDLAND II

Table with 33 columns: DAY no., DATE 1993, DEPTH mtrs, HOLE SIZE Inch, MW S.G., F.VIS g/qt., VG-METER READINGS (600, 300, 200, 100, 6, 3 rpm), AV, PV, YP, GEL, True GEL, pH, API, HTHP, Cl-, Pl-, MI, TOT. H, Ca++, SOLIDS, OIL, SAND, MBT, Excess Gyp, HGS, LGS, Bacteria Test. Rows 1-47.

Anchor Drilling Fluids A/S

DRILLING MUD PROPERTIES RECORD

Anchor Drilling Fluids A/S

WELL NO: 6608/10-3

AREA: NORDLAND II

DAY no.	DATE 1993	DEPTH mire	HOLE SIZE Inch	MW S.G.	F.VIS e/qt.	VG-METER READINGS						AV cps	PV cps	YP Pa	GEL 10sec Pa	GEL 10min Pa	True GEL 10sec Pa	pH	API ml	HTHP ml	Cl- mg/l	PI ml	MI ml	TOT. H mg/l	Ca++ mg/l	SOLIDS vol%	OIL vol%	SAND vol%	MBT kg/m3	Excess Gyp kg/m3	HGS kg/m3	LGS kg/m3	Bacteria Test org./ml
						600 rpm	300 rpm	200 rpm	100 rpm	6 rpm	3 rpm																						
48	23-feb	2015	TEST	1,20	98	57	33	23	13	2	1	28,5	24	4,5	1	1,5	0,5	8,2	2,2	12	21500	0,00	0,80	4800	3120	7,5	0	0,4	7	7	170	43	10 <sup>4</sup>
49	24-feb	2015	TEST	1,20	95	55	32	22	13	2	1	27,5	23	4,5	1	1	0,5	8,9	2,2	11,5	21500	0,00	0,50	4200	3120	7,5	0	0,4	4	7,5	170	43	10 <sup>4</sup>
50	25-feb	2015	TEST	1,20	97	57	33	22	13	2	1	28,5	24	4,5	1	1	0,5	8,8	2,2	12	21000	0,00	0,80	4320	3200	7,5	0	0,4	4	7,5	171	44	-



### 3.4 Well Testing

One drillstem test was performed. The well produced 1250 Sm<sup>3</sup>/D of oil with a density of 860 kg/m<sup>3</sup> at standard conditions and 102500 Sm<sup>3</sup>/D of gas with a relative density of 0.65 (air=1.0) through a 60/64" (23.44 mm) choke from the perforated interval: 2617 - 2648 mRKB.

U-753

3



Report no.	GEOKJEMI 93.12
Copy no.	
No. of copies	8

**PETEK/GEOTEK**  
**Geochemistry Department**

Grading
---------

<b>Title</b> STANDARD GEOCHEMICAL STUDY OF WELL 6608/10-3		
<b>Requested by</b> RUN NORD	<b>Project</b>	
<b>Date</b> 8/10/93	<b>No. of pages</b>	<b>No. of enclosures</b>

<b>Keywords</b>  Norne, organic geochemistry, well 6608/10-3, source rocks, petroleum, thermal maturity
---

<b>Prepared by</b>  Kristin Skadsem Eikermann PROLAB IFE
<b>Text operator</b> R. Patience/K. Eikermann

**Approved by**  
 11/10-93 *Trygve Meyer*  
 Trygve Meyer / Dept. Manager

BA-93-2299-1  
 29 OKT. 1993  
 REGISTRERT  
 OLJESKILFORATET

## 1 Introduction

This report presents the results of a standard geochemical evaluation of well 6608/10-3 in the Norne Field in the Nordland II area, offshore mid-Norway.

A total of 46 sediment samples, 5 gas samples and 2 oil samples were analysed according to the following analytical programme :

Analyses	NUMBER OF SAMPLES				
	swc	core	fluid	gas	total
TOC	34	3			37
THA pyrolysis	31	10			41
Vitrinite reflectance	21	3			24
Kerogen description	9	2			11
Pyrolysis GC	11	3			14
Solvent extraction	11	9			20
Iatroscan separation	11	9	2		22
MPLC separation	11	9	2		22
GC whole oil			2		2
GC saturates	11	9	2		22
GC aromatics	11	9	2		22
GC-MS saturates	11	9	2		22
GC-MS aromatics	11	9	2		22
$\delta^{13}\text{C}$ of whole oil/fractions	5	8	2		15
$\delta^{13}\text{C}$ of kerogen	9	2			11
$\delta^{13}\text{C}$ of gas and gas composition				5	5
Fluid density, ( $^{\circ}\text{API}$ )			2		2

The analytical work was performed in accordance with the guidelines given in "The Norwegian Industry Guide to Organic Geochemical Analyses (1992)". The project was carried out at Statoil's Department of Geochemistry (all analyses except where specified) and Production Laboratory (fluid density and whole oil GC) with subcontracts to Geolab Nor (MPLC separation) and IFE (vitrinite reflectance measurements, visual kerogen description, isotopes of oils and extracts and gas analyses).

**TABLE 1. LITHOLOGY, WELL 6608/10-3.**

Depth m RKB	S.no	Type	Lithology
940.00	S6812	swc	cl : olvgry, v sft, calc, sl sndy-slty, vf-f clr qtz grns, micro mic, rk frag
1,090.00	S6813	swc	a/a
1,290.00	S6814	swc	cl/clst : olvgry, sft, calc, sl sndy-slty, micro mic rk frag
1,409.00	S6815	swc	cl/clst : w/thn sd len, olvgry, sft, calc, sl sndy-slty, micro mic, rk frag
1,500.00	S6816	swc	clst/cl : drkyelsh brn, olvgry, sft, sl calc, sd-slty f clr qtz grns, micro mic, rk frag
1,597.50	S6817	swc	clst : dsky yel brn, frm, blk, micromic, slily slty, non calc
1,654.00	S6818	swc	clst : olv gry, frm, blk, v sdy, mic, v glauc, non calc
1,690.00	S6819	swc	clst : dk gn gry, frm, blk, wxy tex, slily micromic, non calc
1,823.00	S6820	swc	clst : med dk gry-olv gry, frm, blk, micromic-slily mic, non calc
1,890.00	S6821	swc	clst : med dk gry-olv gry, frm, blk, micromic-mic, micropyr, non calc
1,895.00	S6822	swc	clst : olv gry, frm, blk, slily slty, slily micromic, non calc
1,950.00	S6823	swc	clst : med dk gry-olv gry, frm-mod hd, blk, micropyr, non calc
1,956.00	S6824	swc	clst : med dk gry-olv gry, frm,blk, occ glauc nod, slily micropyr, slily micromic, non calc
1,960.00	S6825	swc	clst : frm-mod hd, micropyr- v micropyr, else a/a
2,015.00	S6826	swc	a/a
2,141.00	S6827	swc	clst : med dk gry-olv gry, frm, blk, slily micropyr, micromic-slily mic, slily slty, non calc
2,230.00	S6828	swc	clst : med dk gry-olv gry, frm, blk, micromic, non calc
2,362.00	S6829	swc	clst : med dk gry-olv gry, frm, blk, micromic, slily micropyr, non calc
2,402.00	S6830	swc	clst : lt brn gry, frm, blk, v sndy, v mic, slily glauc, v calc
2,406.50	S6831	swc	clst : olv blk-dsky yel brn, frm, blk, micromic, micropyr, non calc

2,410.00 S6832	swc	clst : dsky yel brn-brn blk, frm, blk, micromic-slily mic, slily micropyr, carb, non calc
2,411.50 S6833	swc	clst : dsky yel brn-brn blk, frm, blk, micromic-mic, carb, non calc
2,413.00 S6834	swc	clst : med dk gry-olv gry, frm, blk, micromic, non calc
2,424.50 S6835	swc	micropyr incl else a/a
2,427.50 S6836	swc	clst : brn gry, frm, blk-subfiss, mic, slily carb, non calc
2,435.00 S6837	swc	clst : dsky yel brn, frm, blk-subfiss, mic, slily carb, slily slty, non calc
2,446.00 S6838	swc	clst : dsky yel brn, frm, blk-subfiss, mic, slily carb, slty, non calc
2,472.00 S6839	swc	clst : brn gry-dsky yel brn, frm, blk-subfiss, micromic-slily mic, slily carb, non calc
2,498.00 S6840	swc	sst w/clst incl and lams, sst: yel brn, clr-trnsp qtz, v fn, wl srt, subang-subrnd, fri, v arg, mic, carb, pr vis por
2,510.00 S6842	swc	clst : brn blk, frm, blk, micromic-mic, micropyr, slily carb, slily slty, non calc
2,516.00 S6843	swc	clst : brn blk, frm, blk, sndy strks, mic, carb, non calc
2,528.00 S6844	swc	clst : dsky yel brn, frm, blk, mic, slily carb, non calc
2,537.00 S6845	swc	clst : brn blk, frm, blk, sndy strks, mic, carb, non calc
2,560.00 S6846	core	shale
2,575.40 S6847	core	sst.
2,578.50 S6848	swc	sst : yelsh gry, f-vf, wl srt, sbrnd-sbang, fri, mic, gd vis por
2,616.50 S6851	core	shale
2,634.45 S6854	core	sst.
2,653.50 S6855	core	sst.
2,677.70 S6856	core	sst.
2,698.30 S6857	core	sst.
2,714.00 S6858	core	sst.
2,727.70 S6859	core	sst.

2,733.70 S6860	core	sst.
2,791.50 S6861	swc	c plt rem : blk, brit fragile
2,870.30 S6862	swc	org rich sdy slst : dk gry mod hd fis fr vis por

---

TABLE 2. TOC AND THA DATA FOR WELL 6608/10-3.

Depth m RKB	S. no	S1 < mg HC/g rock >	S2	TOC wt %	HI mg HC/g TOC	PP mg HC/g rock	PI	Tmax °C	Lithology
940.00	S6812			0.3					cl.
1,090.00	S6813			0.3					cl.
1,290.00	S6814			0.3					cl./clst.
1,409.00	S6815			0.7					cl./clst.
1,500.00	S6816			1.5					clst./cl.
1,597.50	S6817	0.33	2.5	2.5	100	2.83	0.12	420	clst.
1,654.00	S6818	0.22	0.74	1.1	69	0.96	0.23	(395)	clst.
1,690.00	S6819	0.06	0.33	0.2	138	0.39	0.15	n.d.	clst.
1,823.00	S6820	0.04	0.4	0.8	52	0.44	0.09	418	clst.
1,890.00	S6821	0.08	0.86	1.1	77	0.94	0.09	416	clst.
1,895.00	S6822	0.05	0.26	0.6	41	0.31	0.16	412	clst.
1,950.00	S6823	0.03	0.29	0.7	39	0.32	0.09	(415)	clst.
1,956.00	S6824	0.04	0.22	0.5	45	0.26	0.15	(410)	clst.
1,960.00	S6825	0.03	0.22	0.4	63	0.25	0.12	n.d.	clst.
2,015.00	S6826	0.01	0.15	0.3	58	0.16	0.06	n.d.	clst.
2,141.00	S6827	4.4	0.59	1.0	60	4.99	0.88	429	clst.
2,230.00	S6828	0.04	0.46	0.7	69	0.50	0.08	(430)	clst.
2,362.00	S6829	0.15	0.6	0.9	65	0.75	0.20	427	clst.
2,402.00	S6830	0.03	0.03	0.2	19	0.06	0.50	n.d.	clst.
2,406.50	S6831	0.13	0.74	0.7	101	0.87	0.15	422	clst.
2,410.00	S6832	6.2	63.6	11.0	578	69.80	0.09	414	clst.
2,411.50	S6833	2.8	15.5	8.1	191	18.30	0.15	417	clst.
2,413.00	S6834	0.13	0.71	0.8	85	0.84	0.15	419	clst.
2,424.50	S6835	0.11	0.58	0.7	88	0.69	0.16	419	clst.
2,427.50	S6836	0.97	3.2	2.3	138	4.17	0.23	424	clst.
2,435.00	S6837	0.31	0.27	1.1	25	0.58	0.53	425	clst.
2,446.00	S6838	1.4	2.3	2.7	86	3.70	0.38	425	clst.
2,472.00	S6839	3.5	2.1	1.7	121	5.60	0.63	427	clst.
2,510.00	S6842	2.8	2	1.9	106	4.80	0.58	429	clst.
2,516.00	S6843	4.4	2.1	2.4	88	6.50	0.68	427	clst.
2,528.00	S6844	0.45	1.2	1.3	95	1.65	0.27	430	clst.
2,537.00	S6845	1.9	1.2	1.4	88	3.10	0.61	424	clst.
2,560.00	S6846	0.26	0.52	1.2	44	0.78	0.33	425	sh.
2,616.50	S6851	1.3	7.3	3.0	244	8.60	0.15	437	sh.
2,733.70	S6860	1.1	6.8	2.6	267	7.90	0.14	439	sh.
2,791.50	S6861	18.8	264.1	55.9	472	282.90	0.07	432	coaly
2,870.30	S6862	18	178.5	68.4	261	196.50	0.09	429	coaly
2,498.00	S6840	1.9	0.41			2.31	0.82	419	sst.
2,575.40	S6847	0.12	0.03			0.15	0.80	n.d.	sst.
2,578.50	S6848	0.35	0.11			0.46	0.76	n.d.	sst.
2,630.45	S6854	29.3	0.25			29.55	0.99	n.d.	sst.
2,653.50	S6855	40.6	0.84			41.44	0.98	n.d.	sst.
2,677.70	S6856	40.4	1.3			41.70	0.97	n.d.	sst.
2,698.30	S6857	43.8	1.5			45.30	0.97	n.d.	sst.
2,714.00	S6858	45.4	0.82			46.22	0.98	n.d.	sst.
2,727.70	S6859	21.8	0.47			22.27	0.98	n.d.	sst.

Standards

BVM				4.0					
BVM				3.9					
BVM	0.49	18.26						418	
BVM	0.49	18.43						419	
BVM	0.42	17.50						421	
BVM	0.43	19.26						421	
BVM	0.49	19.30						421	
BVM	0.46	18.07						418	
BVM	0.51	19.26						421	
BVM	0.50	19.33						424	

**TABLE 3. VITRINITE REFLECTANCE DATA FOR WELL 6608/10-3.**

Depth m RKB	S-no.	Sample type	Lithology	% Rm	N	STD	Quality
940.00	S6812	swc	cl.	0.26	24	0.05	LLLLL
1,090.00	S6813	swc	cl.	0.26	11	0.05	LLLLL
1,290.00	S6814	swc	cl./clst.	0.29	23	0.05	LLLLL
1,409.00	S6815	swc	cl./clst.	0.28	8	0.03	LLLLL
1,500.00	S6816	swc	clst./cl.	0.24	30	0.10	LLLLL
1,597.50	S6817	swc	clst.	0.27	18	0.06	LLLLL
1,823.00	S6820	swc	clst.	0.33	20	0.08	LLLLL
1,890.00	S6821	swc	clst.	0.30	17	0.05	LLLLL
1,895.00	S6822	swc	clst.	barren			
1,950.00	S6823	swc	clst.	0.37	5	0.04	LILLLL
1,956.00	S6824	swc	clst.	0.39	14	0.09	LLLLL
1,960.00	S6825	swc	clst.	0.40	17	0.09	LLLLL
2,141.00	S6827	swc	clst.	0.37	9	0.03	LHLLL
2,230.00	S6828	swc	clst.	0.41	15	0.05	LILLL
2,362.00	S6829	swc	clst.	0.39	21	0.04	LILLL
2,410.00	S6832	swc	clst.	0.33	30	0.06	LLLLL
2,411.50	S6833	swc	clst.	0.37	45	0.06	IILLL
2,413.00	S6834	swc	clst.	0.34	20	0.05	LILLL
2,472.00	S6839	swc	clst.	0.39	43	0.06	LILLL
2,560.00	S6846	core	sh.	barren			
2,616.50	S6851	core	sh.	0.48	30	0.08	IILLL
2,733.70	S6860	core	sh.	0.47	32	0.10	IILLL
2,791.50	S6861	swc	coal	0.51	30	0.03	IILII
2,870.30	S6862	swc	coal	0.55	44	0.05	IILII

Rm : mean random reflectance

Std : standard deviation

N : number of readings

Sample quality is characterized by five items as follows :

- |   |                               |                                   |
|---|-------------------------------|-----------------------------------|
| 1 | : abundance of vitrinite      | H : may give to high Rm value     |
| 2 | : identification of vitrinite | I : has no effect on the Rm value |
| 3 | : type of vitrinite           | L : may give too low Rm value     |
| 4 | : particle size               |                                   |
| 5 | : particle surface quality    |                                   |



**TABLE 4. VISUAL KEROGEN DESCRIPTION (%), WELL 6608/10-3.**

Depth m RKB	S-no.	FA (%)	HA (%)	AL (%)	HE (%)	WO (%)	CO (%)	SCI
2141,0	S6827	5	65	5	5	0	20	3
2410,0	S6832	5	10	5	5	5	70	3
2411,5	S6833	0	20	5	5	0	70	3
2413,0	S6834	0	15	20	40	10	15	4
2446,0	S6838	5	10	15	25	10	35	4
2516,0	S6843	5	50	10	10	10	15	5/6
2537,0	S6845	5	25	15	15	10	30	5/6
2616,5	S6851	5	10	25	25	10	20	5/6
2733,7	S6860	5	5	25	20	35	10	6
2791,5	S6861	0	5	0	0	5	90	coal
2870,3	S6862	0	10	0	0	5	85	7

FA : Fluoramorphinite  
HA : Hebamorphinite  
AL : Algal organic matter  
HE : Herbaceous organic matter  
WO : Woody organic matter  
CO : Coaly organic matter  
SCI : Spore colour index

**TABLE 5a. NORMALISED COMPONENT GROUP COMPOSITION (wt%) OF EXTRACTED ORGANIC MATTER (C15+).  
WELL 6608/10-3.**

DEPTH m RKB	TYPE	Rock (g)	EOM (mg)	EOM (ppm)	Sat (%)	Aro (%)	Pol (%)	Asph (%)	HC (%)	nonHC (%)
2141.00	swc	19.88	68.3	3436	80	2	12	6	82	18
2410.00	swc	9.09	80.9	8900	4	6	51	39	10	90
2411.50	swc	18.00	173.4	9633	4	11	27	58	15	85
2413.00	swc	17.16	63.5	3700	14	5	47	34	19	81
2446.00	swc	4.50	16.1	3578	17	12	29	42	29	71
2516.00	swc	8.19	51.1	6239	39	22	10	29	61	39
2537.00	swc	7.38	18.2	2466	45	17	14	24	63	37
2616.50	core	45.52	45.7	1004	3	38	19	40	41	59
2733.70	core	11.98	29.5	2462	24	25	17	34	50	50
2791.50	swc	2.38	61.5	25840	5	10	17	67	16	84
2870.30	swc	5.70	192.7	33807	2	17	12	68	19	81
2498.00	swc	3.47	16.2	4669	56	12	13	19	68	32
2575.40	core	36.64	16.8	459	63	11	17	10	74	26
2578.50	swc	4.14	9.7	2343	41	8	17	34	49	51
2630.45	core	27.69	599.3	21643	72	24	3	1	96	4
2653.50	core	37.08	1078.3	29080	69	26	4	1	95	5
2677.70	core	46.64	1422.5	30500	70	26	3	1	96	4
2698.30	core	53.78	1261.9	23464	67	23	9	1	90	10
2714.00	core	68.44	2426.2	35450	71	25	4	1	96	4
2727.70	core	41.07	548.4	13353	69	26	3	2	95	5

**TABLE 5b. NORMALISED GROUP COMPOSITION (wt%) OF OILS, WELL 6608/10-3.**

DEPTH m RKB	TYPE	S-no.	API	C15+	Sat (%)	Aro (%)	Pol (%)	Asph (%)	HC (%)	nonHC (%)
<b>Fluids</b>										
2603.20	RFT	S6850	32.5		69	24	6	1	93	7
2648.00	DST 1	S6852	32.5		72	26	2	1	98	2

**TABLE 6. COMPONENT GROUP COMPOSITION (CONCENTRATIONS) OF EXTRACTED ORGANIC MATTER  
WELL 6608/10-3.**

DEPTH m RKB	TYPE	TOC (%)	EOM <-----	Sat	mg/g TOC			Asph	<u>Sat x 100</u> Aro	<u>HC x 100</u> non HC
					Aro	Pol	----->			
2141.00	swc	1	343.6	273.4	8.4	39.9	22.0	3269	455	
2410.00	swc	11	80.9	3.3	5.1	40.9	31.6	64	12	
2411.50	swc	8.1	118.9	4.9	13.4	32.0	68.6	37	18	
2413.00	swc	0.8	462.6	63.9	23.0	219.7	155.9	278	23	
2446.00	swc	2.7	132.5	22.7	15.8	38.8	55.1	143	41	
2516.00	swc	2.4	260.0	102.3	56.1	25.3	76.3	182	156	
2537.00	swc	1.4	176.2	79.9	30.6	24.1	41.6	261	168	
2616.50	core	3	33.5	0.9	12.8	6.4	13.3	7	69	
2733.70	core	2.6	94.7	23.0	24.0	15.9	31.8	96	98	
2791.50	swc	55.9	46.2	2.5	4.9	8.0	30.9	52	19	
2870.30	swc	68.4	49.4	1.2	8.3	6.2	33.8	15	24	

**TABLE 7. CARBON ISOTOPE RATIOS OF WHOLE OILS, COMPOUND CLASSES AND KEROGENS, WELL, 6608/10-3.**

Depth m RKB	S-no.	Whole oil $\delta^{13}\text{C} \text{ ‰}$	Sat $\delta^{13}\text{C} \text{ ‰}$	Aro $\delta^{13}\text{C} \text{ ‰}$	Pol $\delta^{13}\text{C} \text{ ‰}$	Asph $\delta^{13}\text{C} \text{ ‰}$	Kerogen $\delta^{13}\text{C} \text{ ‰}$
2,141.00	S6827		-29.2	-28.5	-28.9	-28.3	-25.2
2,410.00	S6832		-31.7	-30.9	-31.6	-29.5	-29.5
2,411.50	S6833		-29.9	-28.4	-28.5	-26.7	-26.5
2,413.00	S6834						-25.2
2,446.00	S6838						-23.7
2,516.00	S6843		-28.5	-27.1	-27.5	-25.7	-24.5
2,537.00	S6845						-24.0
2,603.20	S6850	-27.9	-28.8	-27.4	-28.6	-28.3	
2,616.50	S6851		-28.7	-26.0	-26.9	-25.6	-24.9
2,648.00	S6852	-27.7	-28.5	-27.3	-27.7	-28.2	
2,630.45	S6854		-28.6	-27.5	-28.3	-27.6	
2,653.50	S6855		-28.6	-27.6	-27.9	-28.1	
2,677.70	S6856		-28.5	-27.2	-27.9	-27.9	
2,698.30	S6857		-28.8	-27.2	-27.9	-28.2	
2,714.00	S6858		-28.5	-27.6	-27.8	-28.2	
2,727.70	S6859		-28.7	-27.5	-27.7	-27.4	
2,733.70	S6860		-28.6	-26.8	-27.3	-26.5	-26.4
2,791.50	S6861						-26.8
2,870.30	S6862		-29.0	-26.4	-26.6	-25.5	-24.5

TABLE 8. GAS CHROMATOGRAPHIC DATA, WELL 6608/10-3.

DEPTH m RKB	TYPE	SAMPLE no.	A	B	A B	Pri Phy	nC17 nC17+nC27	CPI 1	F 1	F 2	MPI 1
			Pristane n-C17	Phytane n-C18							
2141.00	swc	S6827	8.50	2.57	3.31	2.14			0.42	0.26	0.61
2410.00	swc	S6832	1.72	2.73	0.63	0.77	0.71	1.21	0.49	0.18	0.82
2411.50	swc	S6833	1.93	2.09	0.92	1.01	0.62	1.47	0.48	0.18	0.73
2413.00	swc	S6834	0.73	0.51	1.43	0.72	0.24	1.66	0.49	0.22	0.81
2446.00	swc	S6838	0.61	0.37	1.64	1.11	0.69	1.09	0.46	0.24	0.81
2516.00	swc	S6843	0.63	0.35	1.80	1.89	0.71	1.09	0.47	0.24	0.78
2537.00	swc	S6845	0.82	0.48	1.73	1.62	0.68	1.11	0.47	0.24	0.76
2616.50	core	S6851	1.11	0.35	3.15	2.94	0.46	1.70	0.51	0.23	0.76
2733.70	core	S6860	0.67	0.34	1.97	1.89	0.51	1.28	0.49	0.23	0.73
2791.50	swc	S6861	0.95	0.41	2.30	1.93	0.60	1.13	0.44	0.21	0.55
2870.30	swc	S6862	3.42	0.57	5.99	5.29	0.40	1.23	0.40	0.21	0.54
2498.00	swc	S6840	0.65	0.36	1.81	1.54	0.59	1.09	0.46	0.25	0.81
2575.40	core	S6847	0.69	0.38	1.81	1.55	0.74	1.11	0.48	0.27	0.90
2578.50	swc	S6848	0.63	0.38	1.69	1.00	0.50	1.10	0.40	0.25	0.74
2630.45	core	S6854	0.65	0.35	1.86	2.03	0.72	1.15	0.44	0.24	0.66
2653.50	core	S6855	0.65	0.35	1.86	1.94	0.73	1.15	0.47	0.25	0.76
2677.70	core	S6856	0.65	0.35	1.86	2.00	0.73	1.15	0.47	0.25	0.75
2698.30	core	S6857	0.65	0.35	1.85	1.99	0.74	1.15	0.46	0.24	0.77
2714.00	core	S6858	0.65	0.35	1.86	2.01	0.70	1.15	0.46	0.24	0.74
2727.70	core	S6859	0.65	0.35	1.87	2.00	0.72	1.13	0.46	0.24	0.77
<b>Fluids</b>											
2603.20	RFT	S6850	0.65	0.36	1.83	1.99	0.69	1.08	0.47	0.25	0.71
2648.00	DST 1	S6852	0.65	0.35	1.85	1.99	0.69	1.10	0.46	0.24	0.76

**TABLE 9. PYROLYSIS - GC DATA, WELL 6608/10-3.**

Depth m RKB	S-no.	C1 (%)	C2-C5 (%)	C6-C14 (%)	C15+ (%)
2141.00	S6827	10	13	52	25
2410.00	S6832A	3	6	26	65
2411.50	S6833A	4	8	35	54
2413.00	S6834A	7	25	56	12
2446.00	S6838	10	18	44	29
2498.00	S6840	5	13	45	37
2516.00	S6843	6	13	35	46
2537.00	S6845A	7	12	42	40
2575.40	S6847B	11	25	53	11
2578.50	S6848A	9	19	56	17
2616.50	S6851	5	11	39	44
2733.70	S6860	5	9	32	54
2791.50	S6861A	7	8	27	58
2870.30	S6862A	8	10	22	61

**TABLE 10a. BIOMARKER PARAMETERS FROM GC-MS ANALYSES OF EXTRACTED SATURATED HYDROCARBON FRACTIONS WELL 6608/10-3.**

Depth m RKB	Sample no.	20S	$\beta\beta$	22S	Ts/Tm	TtX	30D/H	C30 $\alpha\beta$	% C27	%C28	%C29
2,141.00	S6827	0.21	0.32	0.46	0.55	0.40	0.14	0.80	28	38	34
2,410.00	S6832	0.15	0.22	0.36	0.53	0.33	0.06	0.83	30	41	29
2,411.50	S6833	0.12	0.31	0.33	0.82	0.26	0.06	0.82	27	38	34
2,413.00	S6834	0.14	0.31	0.36	0.35	0.16	0.05	0.80	31	29	39
2,446.00	S6838	0.46	0.50	0.56	0.77	0.67	0.08	0.86	33	30	37
2,498.00	S6840	0.53	0.56	0.60	0.88	1.10	0.11	0.89	31	29	40
2,516.00	S6843	0.52	0.55	0.59	0.86	1.09	0.12	0.87	32	29	39
2,537.00	S6845	0.47	0.53	0.58	0.83	0.77	0.10	0.87	32	29	38
2,575.40	S6847	0.51	0.56	0.60	0.95	1.11	0.10	0.89	32	30	38
2,578.50	S6848	0.53	0.56	0.60	0.81	1.00	0.10	0.88	32	30	38
2,616.50	S6851	0.18	0.39	0.35	0.13	0.26	0.06	0.73	30	25	45
2,630.45	S6854	0.52	0.56	0.60	0.90	1.20	0.12	0.87	32	31	37
2,653.50	S6855	0.57	0.58	0.60	0.83	1.25	0.10	0.89	28	30	42
2,677.70	S6856	0.56	0.58	0.60	0.89	1.11	0.10	0.89	28	30	42
2,698.30	S6857	0.57	0.59	0.61	0.78	1.00	0.09	0.89	30	28	42
2,714.00	S6858	0.56	0.59	0.59	0.83	1.11	0.10	0.88	30	29	41
2,727.00	S6859	0.58	0.57	0.61	0.94	1.25	0.10	0.88	30	29	41
2,733.70	S6860	0.32	0.39	0.48	0.44	0.37	0.07	0.79	29	29	42
2,791.50	S6861	0.41	0.40	0.55	0.07	0.44	0.10	0.70	27	28	45
2,870.30	S6862	0.44	0.38	0.54	0.02	0.28	0.09	0.71	28	23	49



**TABLE 10a. CONT.**

Depth m RKB	Sample no.	C30/ST	Dia	C28 $\alpha\beta$	H/S	ppmH	ppmS	3R/H	4R/H	35/34H	29/30H	Dem/H	O/H	G/H
2,141.00	S6827	0.10	0.44	0,62	3.48	407	117	0.28	0.15	0.96	0.47	0.90	0.00	0.12
2,410.00	S6832	0.13	0.50	0,00	6.05	730	121	0.05	0.03	1.82	0.20	0.00	0.00	0.00
2,411.50	S6833	0.09	0.48	0,03	9.04	543	60	0.04	0.03	1.63	0.39	0.00	0.00	
2,413.00	S6834	0.08	0.81	0,03	13.22	210	16	0.08	0.05	1.00	0.54	0.00	0.00	0.05
2,446.00	S6838	0.09	1.36	0,17	8.13	581	71	0.14	0.15	0.73	0.53	0.13	0.00	0.03
2,498.00	S6840	0.12	1.67	0,13	3.93	938	239	0.11	0.08	0.77	0.49	0.13	0.00	0.01
2,516.00	S6843	0.11	1.79	0,13	4.66	1021	219	0.12	0.11	0.78	0.52	0.20	0.00	0.01
2,537.00	S6845	0.10	1.72	0,14	5.44	1296	239	0.20	0.11	0.82	0.55	0.21	0.00	0.02
2,575.40	S6847	0.10	1.88	0,13	5.48	651	119	0.08	0.07	0.75	0.53	0.14	0.00	0.02
2,578.50	S6848	0.10	1.61	0,13	5.91	857	145	0.14	0.10	0.84	0.54	0.11	0.00	0.00
2,616.50	S6851	0.04	1.54	0,00	21.08	1064	50	0.02	0.05	0.67	0.48	0.07	0.00	
2,630.45	S6854	0.12	1.73	0,12	4.82	1896	394	0.09	0.08	0.74	0.51	0.09	0.00	0.03
2,653.50	S6855	0.12	1.76	0,11	5.82	2096	360	0.07	0.07	0.75	0.49	0.09	0.00	0.02
2,677.70	S6856	0.12	1.67	0,12	5.68	2090	368	0.07	0.07	0.71	0.51	0.09	0.00	0.00
2,698.30	S6857	0.13	1.62	0,11	5.33	2078	390	0.05	0.06	0.71	0.51	0.08	0.00	0.03
2,714.00	S6858	0.13	1.65	0,12	5.18	1850	357	0.07	0.06	0.65	0.49	0.09	0.00	0.02
2,727.70	S6859	0.12	1.78	0,12	5.05	1913	379	0.08	0.07	0.83	0.52	0.09	0.00	0.02
2,733.70	S6860	0.09	1.51	0,13	16.43	357	22	0.03	0.06	0.65	0.49	0.07	0.00	
2,791.50	S6861	0.04	0.73	0,28	17.68	1444	82	0.05	0.05	0.56	0.54	0.07	0.00	
2,870.30	S6862	0.04	0.42	0,75	18.30	1421	78	0.01	0.09	0.60	0.59	0.07	0.00	

The derivation of parameters is described in Appendix 5.

**TABLE 10b. BIOMARKER PARAMETERS FROM GC-MS ANALYSES OF OILS, SATURATED FRACTIONS, WELL 6608/10-3.**

Depth m RKB	Sample no.	20S	$\beta\beta$	22S	Ts/Tm	TtX	30D/H	C30 $\alpha\beta$	% C27	%C28	%C29
2,603.20	S6850	0.54	0.58	0.62	0.89	1.11	0.10	0.88	31	30	39
2,648.00	S6852	0.51	0.56	0.61	0.86	1.20	0.12	0.87	33	31	36

**TABLE 10b. BIOMARKER PARAMETERS FROM GC-MS ANALYSES OF OILS, SATURATED FRACTIONS, WELL 6608/10-3,  
CONT.**

Depth m RKB	Sample no.	C30/ST	Dia	C28 $\alpha\beta$	H/S	ppmH	ppmS	3R/H	4R/H	35/34H	29/30H	Dem/H	O/H	G/H
2,603.20	S6850	0.11	1.77	0.11	5.59	1861	333	0.09	0.09	0.71	0.50	0.10	0.00	0.03
2648.00	S6852	0.11	1.75	0.12	4.65	1381	297	0.05	0.07	0.70	0.53	0.09	0.00	0.04

The derivation of parameters is described in Appendix 5.

**TABLE 11a. BIOMARKER PARAMETERS FROM GC-MS ANALYSES OF EXTRACTS, AROMATIC FRACTIONS, WELL 6608/10-3.**

Depth m RKB	Sample no.	Arom 1	Arom 2	Crack 1	Crack 2
2,141.00	S6827	0.34	0.12	0.13	0.05
2,410.00	S6832	0.33	0.10	0.25	0.08
2,411.50	S6833	0.52	0.14	0.32	0.12
2,413.00	S6834	0.41	0.19	0.43	0.20
2,446.00	S6838	0.79	0.49	0.58	0.33
2,498.00	S6840	0.76	0.58	0.44	0.24
2,516.00	S6843	0.85	0.71	0.44	0.25
2,537.00	S6845	0.79	0.58	0.42	0.23
2,575.40	S6847	0.81	0.60	0.53	0.30
2,578.50	S6848	0.69	0.54	0.47	0.26
2,616.50	S6851	0.40	0.34	0.72	0.42
2,630.45	S6854	0.84	0.67	0.44	0.26
2,653.50	S6855	0.86	0.67	0.46	0.25
2,677.70	S6856	0.85	0.67	0.44	0.25
2,698.30	S6857	0.85	0.68	0.45	0.25
2,714.00	S6858	0.87	0.69	0.43	0.24
2,727.70	S6859	0.85	0.68	0.43	0.25
2,733.70	S6860	0.61	0.48	0.68	0.44
2,791.50	S6861	0.42	0.39	0.34	0.19
2,870.30	S6862	0.41	0.40	0.48	0.27

**TABLE 11b. BIOMARKER PARAMETERS FROM GC-MS ANALYSES OF OILS, AROMATIC FRACTIONS, WELL 6608/10-3.**

Depth m RKB	Sample no.	Arom 1	Arom 2	Crack 1	Crack 2
2,603.20	S6850	0.74	0.57	0.43	0.22
2,648.00	S6852	0.85	0.65	0.46	0.26

The derivation of parameters is described in Appendix 5.

**TABLE 12. THOMPSON INDICES, WELL 6608/10-3.**

Depth : m RKB	TYPE :	S-no.	A	B	X	W	C	I	F	H	U	R
2648,00	DST 1	S6852 *	1,28	3,74	2,34	0,76	0,44	0,56	0,37	15,5	1,77	3,06
2603,20	RFT 3B	S6850 *	1,24	3,52	2,2	0,72	0,44	1,28	0,38	15,6	1,82	2,53
2624,50	RFT 3E	S6853 *	1,28	3,76	2,35	0,75	0,44	1,14	0,37	15,2	1,79	3,07

\* These analyses have been performed by Statoils Production Laboratory,  
the letter codes are explained in Appenix 6.

**TABLE 13. GAS COMPOSITION, WELL 6608/10-3.**

Depth m RKB	Type	C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	iC <sub>4</sub>	nC <sub>4</sub>	iC <sub>5</sub>	nC <sub>5</sub>	CO <sub>2</sub>	ΣC <sub>1-5</sub>	Wetness	iC <sub>4</sub> /nC <sub>4</sub>
2,498.5	RFT	92.5	4.4	1.5	0.26	0.44	0.14	0.14	0.7	99.3	0.07	0.60
2,599.2	RFT	92.4	3.9	1.6	0.25	0.42	0.15	0.15	1.2	98.8	0.07	0.61
2,603.2	RFT	83.7	7.8	4.0	0.81	1.45	0.47	0.47	1.3	98.7	0.15	0.56
2,624.5	RFT	85.0	8.0	3.8	0.63	1.18	0.24	0.23	0.9	99.1	0.14	0.54
2,648.0	DST 1	88.9	6.4	1.8	0.30	0.46	0.12	0.10	1.9	98.1	0.09	0.64

**TABLE 14. GAS ISOTOPIC COMPOSITION, WELL 6608/10-3.**

Depth m RKB	Type	C <sub>1</sub>	C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	iC <sub>4</sub>	nC <sub>4</sub>	CO <sub>2</sub>	CO <sub>2</sub>
		δ <sup>13</sup> C ‰ PDB	δ D ‰ SMOW	δ <sup>13</sup> C ‰ PDB	δ <sup>13</sup> C ‰ PDB	δ <sup>13</sup> C ‰ PDB	δ <sup>13</sup> C ‰ PDB	δ <sup>13</sup> C ‰ PDB	δ <sup>18</sup> O ‰ PDB
2,498.5	RFT	-36.6	-165	-27.8	-26.6	-26.0	-27.0	-16.9	-7.7
2,599.2	RFT	-36.6	-163	-27.9	-27.0	-26.0	-27.2	-11.7	-9.4
2,603.2	RFT	-36.4	-172	-28.4	-27.5	-25.8	-27.6	-13.5	-8.5
2,624.5	RFT	-36.5	-172	-28.2	-27.1	-25.6	-27.7	-15.6	-3.0
2,648.0	DST 1	-36.6	-165	-28.2	-27.3	-25.3	-27.1	-13.2	-15.1

Derivation of biomarker ratios reported in TABLE 10a, 10b, 11a AND 11b.

<u>Ratio</u>	<u>Derivation</u>	<u>m/z</u>
<b>Triterpanes</b>		
22S	$32\alpha\beta S / (32\alpha\beta S + 32\alpha\beta R)$	191
Ts/Tm	$27Ts / 27Tm$	191
T1X	$30D / 29\beta\alpha$	191
30D/H	$30D / 30\alpha\beta$	191
29/30H	$29\alpha\beta / 30\alpha\beta$	191
30 $\alpha\beta$	$30\alpha\beta / (30\alpha\beta + 30\beta\alpha)$	191
C28 $\alpha\beta$ /H	$28\alpha\beta / 30\alpha\beta$	191
3R/H	$(23/3) / 30\alpha\beta$	191
4R/H	$(24/4) / 30\alpha\beta$	191
35/34H	$(35\alpha\beta R + 35\alpha\beta S) / (34\alpha\beta R + 34\alpha\beta S)$	191
Dem/H	$25nor30\alpha\beta / 30\alpha\beta$	191
O/H	$30O / 30\alpha\beta$	191
G/H	$30G / 30\alpha\beta$	191
ppmH <sup>*</sup>	$\Sigma \text{ ppm } 27Ts + 27Tm + 29\alpha\beta + 29\beta\alpha + 30\alpha\beta + 30\beta\alpha + 31\alpha\beta S + 31\alpha\beta R + 32\alpha\beta S + 32\alpha\beta R + 33\alpha\beta S + 33\alpha\beta R + 34\alpha\beta S + 34\alpha\beta R + 35\alpha\beta S + 35\alpha\beta R$	191
<b>Steranes</b>		
20S	$29\alpha\alpha S / (29\alpha\alpha R + 29\alpha\alpha S)$	217
$\beta\beta$	$(29\beta\beta R + 29\beta\beta S) / (29\beta\beta R + 29\beta\beta S + 29\alpha\alpha R + 29\alpha\alpha S)$	217
%C27	$100 * (27\beta\beta R + 27\beta\beta S) / (27\beta\beta R + 27\beta\beta S + 28\beta\beta R + 28\beta\beta S + 29\beta\beta R + 29\beta\beta S)$	218
%C28	$100 * (28\beta\beta R + 28\beta\beta S) / (27\beta\beta R + 27\beta\beta S + 28\beta\beta R + 28\beta\beta S + 29\beta\beta R + 29\beta\beta S)$	218
%C29	$100 * (29\beta\beta R + 29\beta\beta S) / (27\beta\beta R + 27\beta\beta S + 28\beta\beta R + 28\beta\beta S + 29\beta\beta R + 29\beta\beta S)$	218
C30/st	$100 * (30\beta\beta R + 30\beta\beta S) / (27\beta\beta R + 27\beta\beta S + 28\beta\beta R + 28\beta\beta S + 29\beta\beta R + 29\beta\beta S)$	218
Dia/reg	$(27d\beta R + 27d\beta S) / (27\alpha\alpha R + 27\alpha\alpha S)$	217
ppmS <sup>*</sup>	$\Sigma \text{ ppm } 27\beta\beta R + 27\beta\beta S + 28\beta\beta R + 28\beta\beta S + 29\beta\beta R + 29\beta\beta S$	218
H/S	ppmH/ppmS	218

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

Steranes

13 $\beta$ (H), 17 $\alpha$ (H), 20(S)-cholestane (diasterane)	27a	27d $\beta$ S
13 $\beta$ (H), 17 $\alpha$ (H), 20(R)-cholestane (diasterane)	27b	27d $\beta$ R
13 $\alpha$ (H), 17 $\beta$ (H), 20(R)-cholestane (diasterane)	27c	27d $\alpha$ R
13 $\alpha$ (H), 17 $\beta$ (H), 20(S)-cholestane (diasterane)	27d	27d $\alpha$ S
5 $\alpha$ (H), 14 $\alpha$ (H), 17 $\alpha$ (H), 20(S)-cholestane	27e	27 $\alpha\alpha$ S
5 $\alpha$ (H), 14 $\beta$ (H), 17 $\beta$ (H), 20(R)-cholestane	27f	27 $\beta\beta$ R
5 $\alpha$ (H), 14 $\beta$ (H), 17 $\beta$ (H), 20(S)-cholestane	27g	27 $\beta\beta$ S
5 $\alpha$ (H), 14 $\alpha$ (H), 17 $\alpha$ (H), 20(R)-cholestane	27h	27 $\alpha\alpha$ R
24-methyl-13 $\beta$ (H), 17 $\alpha$ (H), 20(S)-cholestane (diasterane)	28a	28d $\beta$ S
24-methyl-13 $\beta$ (H), 17 $\alpha$ (H), 20(R)-cholestane (diasterane)	28b	28d $\beta$ R
24-methyl-13 $\alpha$ (H), 17 $\beta$ (H), 20(R)-cholestane (diasterane)	28c	28d $\alpha$ R
24-methyl-13 $\alpha$ (H), 17 $\beta$ (H), 20(S)-cholestane (diasterane)	28d	28d $\alpha$ S
24-methyl-5 $\alpha$ (H), 14 $\alpha$ (H), 17 $\alpha$ (H), 20(S)-cholestane	28e	28 $\alpha\alpha$ S
24-methyl-5 $\alpha$ (H), 14 $\beta$ (H), 17 $\beta$ (H), 20(R)-cholestane	28f	28 $\beta\beta$ R
24-methyl-5 $\alpha$ (H), 14 $\beta$ (H), 17 $\beta$ (H), 20(S)-cholestane	28g	28 $\beta\beta$ S
24-methyl-5 $\alpha$ (H), 14 $\alpha$ (H), 17 $\alpha$ (H), 20(R)-cholestane	28h	28 $\alpha\alpha$ R
24-ethyl-13 $\beta$ (H), 17 $\alpha$ (H), 20(S)-cholestane (diasterane)	29a	29d $\beta$ S
24-ethyl-13 $\beta$ (H), 17 $\alpha$ (H), 20(R)-cholestane (diasterane)	29b	29d $\beta$ R
24-ethyl-13 $\alpha$ (H), 17 $\beta$ (H), 20(R)-cholestane (diasterane)	29c	29d $\alpha$ R
24-ethyl-13 $\alpha$ (H), 17 $\beta$ (H), 20(S)-cholestane (diasterane)	29d	29d $\alpha$ S
24-ethyl-5 $\alpha$ (H), 14 $\alpha$ (H), 17 $\alpha$ (H), 20(S)-cholestane	29e	29 $\alpha\alpha$ S
24-ethyl-5 $\alpha$ (H), 14 $\beta$ (H), 17 $\beta$ (H), 20(R)-cholestane	29f	29 $\beta\beta$ R
24-ethyl-5 $\alpha$ (H), 14 $\beta$ (H), 17 $\beta$ (H), 20(S)-cholestane	29g	29 $\beta\beta$ S
24-ethyl-5 $\alpha$ (H), 14 $\alpha$ (H), 17 $\alpha$ (H), 20(R)-cholestane	29h	29 $\alpha\alpha$ R
24-propyl-5 $\alpha$ (H), 14 $\alpha$ (H), 17 $\alpha$ (H), 20(S)-cholestane	30e	30 $\alpha\alpha$ S
24-propyl-5 $\alpha$ (H), 14 $\beta$ (H), 17 $\beta$ (H), 20(R)-cholestane	30f	30 $\beta\beta$ R
24-propyl-5 $\alpha$ (H), 14 $\beta$ (H), 17 $\beta$ (H), 20(S)-cholestane	30g	30 $\beta\beta$ S
24-propyl-5 $\alpha$ (H), 14 $\alpha$ (H), 17 $\alpha$ (H), 20(R)-cholestane	30h	30 $\alpha\alpha$ R
4-methyl-14 $\alpha$ (H), 17 $\alpha$ (H)-cholestanes		M28 $\alpha\alpha$
4,24-dimethyl-14 $\alpha$ (H), 17 $\alpha$ (H)-cholestanes		M29 $\alpha\alpha$
4-methyl-24-ethyl-14 $\alpha$ (H), 17 $\alpha$ (H)-cholestanes		M30 $\alpha\alpha$
4,23,24-trimethyl-14 $\alpha$ (H), 17 $\alpha$ (H)-cholestanes (dinosteranes)		M30D

Prøve nr.	Dybde (m)	Intens.	m/z191											m/z191												
			23/3	24/4	27Ts	27Tm	28ab	nor30	29ab	30d	29ba	30O	30ab	30ba	31abS	31abR	32abS	32abR	33abS	33abR	34abS	34abR	35abS	35abR		
S6827	2141,00	5527552	27	15	21	38	60	87	46	14	35	0	97	24	18	33	12	14	15	9	16	8	14	9		
S6832	2410,00	53542912	5	3	9	17	0	0	22	6	18	0	108	22	23	37	9	16	11	22	6	11	10	21		
S6833	2411,50	48332800	4	3	18	22	3	0	42	6	23	0	108	23	34	55	11	22	8	15	6	10	9	17		
S6834	2413,00	7869440	8	5	8	23	3	0	57	5	32	0	105	26	37	71	14	25	9	12	7	8	7	8		
S6838	2446,00	1244672	13	14	20	26	16	12	50	8	12	0	95	15	27	24	15	12	9	8	6	5	4	4		
S6840	2498,00	18522112	11	8	15	17	13	13	50	11	10	0	103	13	35	25	25	17	18	12	13	9	10	7		
S6843	2516,00	7801856	12	11	19	22	13	20	53	12	11	0	102	15	34	25	23	16	16	11	11	7	8	6		
S6845	2537,00	10665984	21	11	20	24	14	22	57	10	13	0	103	15	35	28	22	16	14	10	10	7	8	6		
S6847	2575,40	2388992	8	7	19	20	13	14	53	10	9	0	100	12	29	21	18	12	11	8	7	5	5	4		
S6848	2587,00	10260480	15	10	17	21	13	11	56	10	10	0	104	14	39	27	25	17	17	12	11	8	9	7		
S6850	2603,20	32280576	9	9	17	19	12	10	52	10	9	0	105	14	35	25	24	15	15	10	10	7	7	5		
S6851	2616,50	63340544	2	5	5	38	0	8	52	7	27	0	108	39	68	79	13	24	6	9	4	5	3	3		
S6852	2617 - 48	52658176	5	7	19	22	12	9	55	12	10	0	104	15	39	29	31	20	20	13	14	9	10	6		
S6854	2630,45	49479680	9	8	18	20	12	9	53	12	10	0	104	16	41	30	30	20	20	13	14	9	10	7		
S6855	2653,50	57442304	7	7	15	18	11	9	51	10	8	0	104	13	35	25	26	17	17	12	12	8	9	6		
S6856	2677,70	64978944	7	7	16	18	12	9	53	10	9	0	104	13	40	27	27	18	19	13	14	10	10	7		
S6857	2698,30	31739904	5	6	14	18	11	8	53	9	9	0	103	13	37	27	28	18	19	13	14	10	10	7		
S6858	2714,00	30744576	7	6	15	18	12	9	51	10	9	0	104	14	37	28	27	19	19	13	14	9	9	6		
S6859	2727,70	20889600	8	7	17	18	12	9	54	10	8	0	104	14	37	26	25	16	16	11	11	7	9	6		
S6860	2733,70	41697280	3	6	8	18	14	7	52	7	19	0	107	28	48	44	20	22	11	12	8	9	5	6		
S6861	2791,50	55984128	5	5	4	55	30	8	58	11	25	0	107	46	61	46	29	24	13	10	9	7	5	4		
S6862	2870,30	18677760	1	10	2	87	80	8	63	10	36	0	107	44	68	49	27	23	13	12	8	7	4	5		
JANUS 32		38092800	13	11	17	13	0	0	39	13	6	0	106	17	51	35	37	25	25	17	16	11	8	6		
BULGARIA																										
BUL1108		133464064	8	10	21	16	23	0	54	12	12	32	105	20	54	42	47	32	30	23	21	14	21	16		
66STDM30		133988352	9	10	24	17	23	0	53	10	11	31	105	18	48	36	38	27	23	17	14	10	14	11		
66STDM56		29294592	9	8	21	15	22	0	50	11	10	29	106	17	44	32	37	26	24	18	16	12	17	13		



Prøve nr.	Dybde (m)	-----m/z217----->								
		Intens	27DbS	27DbR	27aaS	27aaR	29aaS	29bbR	29bbS	29aaR
S6827	2141,00	9166848	19	12	17	54	11	11	14	42
S6832	2410,00	39600128	38	36	41	106	15	13	15	87
S6833	2411,50	24698880	30	27	31	88	15	25	29	108
S6834	2413,00	1876992	39	31	23	63	17	23	32	103
S6838	2446,00	165160	94	64	45	71	53	61	56	63
S6840	2498,00	4388864	81	61	42	43	53	63	63	47
S6843	2516,00	1657088	91	59	40	44	52	61	59	48
S6845	2537,00	2429952	98	65	41	54	47	56	58	53
S6847	2575,40	703232	63	44	27	30	30	40	36	29
S6848	2587,00	1971712	92	64	45	52	53	64	62	47
S6850	2603,20	6296576	80	58	41	37	50	63	63	43
S6851	2616,50	8245248	67	53	23	55	19	33	36	89
S6852	2617 - 48	12832768	55	55	37	26	43	54	53	41
S6854	2630,45	11550720	52	55	36	26	45	55	53	41
S6855	2653,50	9474048	70	55	40	31	54	66	63	41
S6856	2677,70	12374016	60	52	39	28	50	62	62	39
S6857	2698,30	6729728	52	47	38	23	49	62	60	37
S6858	2714,00	6849536	52	47	37	23	45	57	56	35
S6859	2727,70	3901440	73	55	40	32	56	67	64	41
S6860	2733,70	4395008	59	54	34	41	44	43	46	94
S6861	2791,50	9310208	18	14	23	21	39	33	32	57
S6862	2870,30	4507648	9	7	19	19	37	27	24	48
JANUS 32		7506944	92	68	66	63	69	77	79	62
BULGARIA										
BUL1108		24940544	52	36	70	82	92	68	66	96
66STDM30		22978560	59	39	71	91	88	70	67	84
66STDM56		4633600	52	38	73	94	86	68	69	90

Dybde (m)	←-----m/z218-----→										m/z219		
	Intens	27bbR	27bbS	28bbR	28bbS	29bbR	29bbS	30bbR	30bbS	Intens	27D2	ppm	
2141,00	4270080	25	18	36	22	23	28	7	8	2119680	97	37	
2410,00	16179200	36	23	46	35	27	31	9	16	7843840	105	31	
2411,50	11603968	32	21	43	32	31	36	7	10	5072896	104	14	
2413,00	890624	53	41	46	42	58	60	12	12	6012928	109	39	
2446,00	101680	90	74	74	75	96	91	23	21	1031168	107	155	
2498,00	3593216	85	69	68	77	96	102	30	28	10977280	105	154	
2516,00	1249024	92	69	72	76	100	99	28	27	1462528	97	49	
2537,00	1492992	91	74	71	79	95	100	25	24	4205568	104	137	
2575,40	469632	55	43	45	48	60	58	15	15	1701888	107	149	
2587,00	1310464	93	73	75	81	99	101	25	25	11272192	108	258	
2603,20	4310016	85	68	69	77	93	102	28	26	8986624	104	146	
2616,50	3358720	86	45	58	49	97	97	9	8	14512128	109	55	
2617 - 48	9158656	92	78	68	90	87	99	31	28	15069184	100	95	
2630,45	8199168	92	75	71	91	91	100	32	29	5830656	91	49	
2653,50	7858176	74	59	67	74	96	102	29	26	5096448	93	46	
2677,70	9777152	76	56	67	73	94	100	29	28	6389760	91	47	
2698,30	5177344	76	59	59	68	93	97	30	31	3311616	87	48	
2714,00	5091328	78	61	61	70	90	97	30	29	3587072	89	49	
2727,70	3254272	81	62	68	72	98	101	29	28	2180096	93	49	
2733,70	2280448	84	51	67	69	95	98	22	21	41011120	101	85	
2791,50	3562496	88	34	69	55	102	99	10	10	7616512	105	41	
2870,30	1455872	95	15	56	34	102	87	8	8	1459456	80	16	
	7489536	91	82	68	73	94	104	22	22	5508096	103	42	
	23277568	76	70	98	97	94	86	17	21				
	21741568	84	74	96	99	91	84	15	18				
	4391936	80	67	97	100	92	91	15	19				