

OPERATOR STATOIL

WELL NO. 30/3-3

MATERIAL CONSUMPTION & COST ANALYSIS

HOLE DRILLED TO Meters
Feet CASING SET AT Meters
Feet

ACTUAL AMOUNT OF HOLE DRILLED Meters
Feet DAYS ON INTERVAL

DRILLING FLUID SYSTEM

MATERIAL	UNIT SIZE	PROG.	USED	VARIANCE ±	US\$ COST
WYOMING BENTONITE	M/T	28	25	- 3	9,500.00
CAUSTIC SODA	25 KG	29	12	- 17	240.00
SODA ASH	50 KG	5	4	- 1	84.00
BARITE	M/T	0	7	+ 7	1,036.00

COST/DAY	<input type="text" value="US\$ 2,715.00"/>	TOTAL COST FOR INTERVAL	<input type="text" value="US\$ 10,860.00"/>
COST/Mt. Feet	<input type="text" value="US\$ 162.09"/>	PROG. COST FOR INTERVAL	<input type="text" value="US\$ 11,325.00"/>
ENGR. COST	<input type="text" value="US\$ 6,600.00"/>	COST VARIANCE FOR INTERVAL	<input type="text" value="US\$ - 465.00"/>

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OPERATOR STATOIL

WELL NO. 30/3-3

MATERIAL CONSUMPTION & COST ANALYSIS

26" HOLE DRILLED TO 969 Meters Feet 20" CASING SET AT 954 Meters Feet
 ACTUAL AMOUNT OF HOLE DRILLED 694 Meters Feet DAYS ON INTERVAL 8
 DRILLING FLUID SYSTEM SPUD MUD

MATERIAL	UNIT SIZE	PROG.	USED	VARIANCE ±	COST
WYOMING BENTONITE	M/T	44	132	+ 88	50,160.00
CAUSTIC SODA	25 KG	60	79	+ 19	1,580.00
SODA ASH	50 KG	10	17	+ 7	357.00
ANCO DETERGENT	200 LTR	3	0	- 3	-
CHROME LIGNOSULPH.	25 KG	20	2	- 18	39.00
BARITE	M/T	0	23	+ 23	3,404.00
MICA FINE	25 KG	0	3	+ 3	66.00
CALCIUM CHLORIDE	50 KG	0	15	+ 15	450.00

COST/DAY US\$ 7,007.00 TOTAL COST FOR INTERVAL US\$ 56,056.00
 COST/Mt. ~~XXX~~ US\$ 80.77 PROG. COST FOR INTERVAL US\$ 20,005.00
 ENGR. COST US\$ 6,600.00 COST VARIANCE FOR INTERVAL US\$+ 36,051.00

OPERATOR STATOIL

WELL NO. 30/3-3

MATERIAL CONSUMPTION & COST ANALYSIS

17 1/2" HOLE DRILLED TO 2050 Meters ~~Feet~~ 13 3/8" CASING SET AT 2038 Meters ~~Feet~~

ACTUAL AMOUNT OF HOLE DRILLED 1081 Meters ~~Feet~~ DAYS ON INTERVAL 10

DRILLING FLUID SYSTEM GYP/LIGNO/CMC

MATERIAL	UNIT SIZE	PROG.	USED	VARIANCE ±	US\$ COST
BARITE	M/T	540	670	+ 130	99,160.00
WYOMING BENTONITE	50 KG	620	0	- 620	-
CHROME LIGNOSULPH.	25 KG	680	310	- 370	6,045.00
CAUSTIC SODA	25 KG	120	246	+ 126	4,920.00
SODA ASH	50 KG	25	4	- 21	84.00
GYPSUM	50 KG	500	674	+ 174	8,896.80
CMC LOVIS	25 KG	200	185	- 15	12,025.00
CMC HIVIS	25 KG	25	136	+ 111	9,112.00
ANCO DETERGENT	200 LTR	25	17	- 8	8,415.00
WYOMING BENTONITE	M/T	0	25	+ 25	9,500.00
MICA FINE	25 KG	0	1	+ 1	22.00
DEFOAMER	25 LTR	0	34	+ 34	4,012.00
BICARBONATE	50 KG	0	6	+ 6	144.00
DESCO	25 LBS	0	16	+ 16	608.00
WALNUT FINE	25 KG	0	30	+ 30	660.00

COST/DAY US\$ 16,360.00 TOTAL COST FOR INTERVAL US\$ 163,603.80
 COST/Mt. or Ft. ~~xxxx~~ US\$ 151.35 PROG. COST FOR INTERVAL US\$ 140,915.00
 ENGR. COST US\$ 8,250.00 COST VARIANCE FOR INTERVAL US\$ +22,688.80

OPERATOR STATOIL

WELL NO. 30/3-3

MATERIAL CONSUMPTION & COST ANALYSIS

12 1/4" HOLE DRILLED TO 2861 Meters ~~FEET~~ 9 5/8" CASING SET AT 2849 Meters ~~FEET~~
 ACTUAL AMOUNT OF HOLE DRILLED 811 Meters ~~FEET~~ DAYS ON INTERVAL 16
 DRILLING FLUID SYSTEM GYP/LIGNO/CMC

MATERIAL	UNIT SIZE	PROG.	USED	VARIANCE ±	US\$ COST
BARITE	M/T	240	340	+ 100	50,320.00
WYOMING BENTONITE	M/T	0	29	+ 29	11,020.00
WYOMING BENTONITE	50 KG	300	296	- 4	5,328.00
CHROME LIGNOSULPH.	25 KG	300	257	- 43	5,011.50
CAUSTIC SODA	25 KG	90	197	+ 107	3,940.00
CMC LOVIS	25 KG	320	157	- 163	10,205.00
CMC LOVIS	25 KG	20	152	+ 132	10,184.00
SODA ASH	50 KG	20	0	- 20	-
BICARBONATE	50 KG	22	5	- 17	120.00
GYPSUM	50 KG	140	435	+ 295	5,742.00
DEFOAMER	25 LTR	0	8	+ 8	944.00
DESCO	25 LBS	0	29	+ 29	1,102.00
ANCO DRLG. DTRG.	200 LTR	0	7	+ 7	3,465.00

COST/DAY US\$ 6,711.34 TOTAL COST FOR INTERVAL US\$ 107,381.50
 COST/Mt. of Ft. ~~XXX~~ US\$ 132.41 PROG. COST FOR INTERVAL US\$ 73,440.00
 ENGR. COST US\$ 13,200.00 COST VARIANCE FOR INTERVAL US\$ 33,941.50

OPERATOR STATOIL

WELL NO. 30/3-3

MATERIAL CONSUMPTION & COST ANALYSIS

NO CASING SET
 CASING SET AT Meters ~~Feet~~

8 1/2" HOLE DRILLED TO Meters ~~Feet~~

ACTUAL AMOUNT OF HOLE DRILLED Meters ~~Feet~~ DAYS ON INTERVAL

DRILLING FLUID SYSTEM

MATERIAL	UNIT SIZE	PROG.	USED	VARIANCE ±	US\$ COST
BARITE	M/T	80	180	+ 100	26,640.00
WYOMING BENTONITE	M/T	0	43	+ 43	16,340.00
SXS WYOMING BENTONITE	50 KG	216	118	- 98	2,124.00
CHROME LIGNOSULPH.	25 KG	180	257	+ 77	5,001.50
CAUSTIC SODA	25 KG	70	117	+ 47	2,340.00
SODA ASH	50 KG	20	7	+ 13	147.00
BICARBONATE	50 KG	0	57	+ 57	1,368.00
DEFOAMER R	25 LTR	0	4	+ 4	472.00
MICA COARSE	25 KG	0	40	+ 40	880.00
WALNUT COARSE	25 KG	0	40	+ 40	880.00
CMC LOVIS	25 KG	200	35	- 165	2,275.00
CMC HIVIS	25 KG	0	33	+ 33	2,211.00
* Made up approx. 1300 bbls new fresh mud at 1.27 SG as a stand by mud for H ₂ S safety reasons. That is why very high cost for this interval.					

COST/DAY TOTAL COST FOR INTERVAL

COST/Mt. ~~or Ft.~~ PROG. COST FOR INTERVAL

ENGR. COST COST VARIANCE FOR INTERVAL

OPERATOR STATOIL

WELL NO. 30/3-3

TOTAL CONSUMPTION & COST ANALYSIS

TOTAL DEPTH Meters
~~Feet~~

TOTAL HOLE DRILLED Meters
~~Feet~~

TOTAL DAYS

MATERIAL	UNIT SIZE	PROG.	USED	VARIANCE ±	US\$ COST
BARITE	M/T	860	1220	+ 360	180,650.00
WYOMING BENTONITE	M/T	72	254	182	96,520.00
WYOMING BENTONITE	50 KG	1136	414	- 722	7,452.00
CAUSTIC SODA	25 KG	369	651	+ 282	13,020.00
SODA ASH	50 KG	80	32	- 48	672.00
CHROME LIGNOSULPH.	25 KG	1180	826	- 354	16,107.00
CMC LOVIS	25 KG	720	377	- 343	24,505.00
CMC HIVIS	25 KG	45	321	+ 276	21,507.00
GYPSUM	25 KG	640	1109	+ 469	14,638.80
BICARBONATE	50 KG	22	68	+ 46	1,632.00
ANCO DETERGENT	200 LTR	28	24	- 4	11,880.00
DESCO	25 LBS	0	45	+ 45	1,710.00
DEFOAMER	25 LTR	0	46	+ 46	5,428.00
MICA FINE	25 KG	0	4	+ 4	88.00
MICA COURSE	25 KG	0	40	+ 40	880.00
WALNUT COARSE	25 KG	0	40	+ 40	880.00
WALNUT FINE	25 KG	0	30	+ 30	660.00
CALCIUM CHLORIDE	50 KG	0	15	+ 15	450.00

COST/DAY

TOTAL COST FOR INTERVAL

COST/Mt. ~~XXX~~

PROG. COST FOR INTERVAL

ENGR. COST

COST VARIANCE FOR INTERVAL

Drilling Fluid & Material Consumption Report

MUD SYSTEM SPUD-GYP

WELL NAME 30/3-3 AREA NORTH SEA
 OPERATOR STATOIL RIG ROSS ISLE
 ENGINEERS CHAVEZ/STRAND/LAURITZEN/WIIK

Day No.	DATE	ESTIMATED DAILY MUD VOLUMES			BULK MATERIALS				SACK MATERIALS		MATERIALS ADDED TO CONTROL PROPERTIES																			
		LOSSES SUB SURFACE	LOSSES SURFACE	VOLUME MUD BUILT	BARITE M/T	BENTONITE M/T	BENTONITE SXS	LIGNO	DESCO	THINNERS	CMC	LOVIS	CMC	HIVIS	POLYMERS	XC-POLYMER	CAUSTIC SODA	SODA	ASH	GYP	ANCO (ltr)	DEFOAMER	DRILL ENG (ltr)	DETERGENT	SODIUM BICARB.	MICA F/C	WALNUT F/C	CaCl ₂		
1	131.3			1100	21																									
2	1.4			0																										
3	2.4	600		525	7	4																								
4	3.4			389		5																								
5	4.4	270	480	600	6	12																								
6	5.4	180	800	900	2	22			2																					
7	6.4	154	200	887	5	19																								
8	7.4	800	242	900	10	9																								
9	8.4	466		300		4																								
10	9.4	1415		1586		12																								
11	10.4	4100		3764		49																							15	
12	11.4	276																												
13	12.4			459					66					66																
14	13.4		80	1018	25	7			5					9	24															
FORWARD		8261	1802	12408	55	164			73					75	24															
ESTIMATED TOTALS																														15
REMARKS:		17 1/2" HOLE																												

Drilling Fluid & Material Consumption Report

MUD SYSTEM GYP/LIGNO

WELL NAME 30/3-3 AREA NORTH SEA
 OPERATOR STATOIL RIG. ROSS ISLE
 ENGINEERS WIJK/LAURITZEN/STRAND/FOLKVORD/CHAVEZ

Day No.	DATE	ESTIMATED DAILY MUD VOLUMES			BULK MATERIALS			SACK MATERIALS			MATERIALS ADDED TO CONTROL PROPERTIES																							
		LOSSES SUB SURFACE	LOSSES SURFACE	VOLUME MUD BUILT	BARITE M/T	BENTONITE M/T	BENTONITE SXS	LIGNO	DESCO	THINNERS	CMC LOVIS	CMC HAVIS	POLYMERS	XC-POLYMERS	CAUSTIC SODA	SODA ASH	GYP	ANCO (lit)	DEFOAMER	DRILLING (lit)	DETERGENT	SODIUM BICARB.	MICA F/C	WALNUT F/C	CaCl ₂									
15	14.4		415	582	32	18		58						31	5					19	1	32	90			3								
16	15.4		450	794	74			4						9	8					46		59	25	800										
17	16.4		570	1375	188			1						13	3					29		104												
18	17.4		677	777	74			61						29						27		52		800										
19	18.4		1107	910	129			71						12	49					75		115	395	1000										
20	19.4		312	250	63			24						4	21					15		49	90								20	0		
21	20.4		377	366	22			13	8					8	14					7		35	130	400						10	0			
22	21.4		420	224	63			7	8					4	12					13		42	30	400										
23	22.4	450	1237					7	2						22					0		6	50											
24	23.4	0	180	860	75	14		82						17	15							107			2									
25	24.4		200	0	39	15		11	9					22						10				200	3									
26	25.4		105	550	30			28	14					36	16					23		90	50	600										
27	26.4		107	0	17			16	4					10	7					6														
28	27.4		106	0	12			10												15		8												
FORWARD		8261	1802	12408	55	164		73	0					75	24					106	24	186	90	0	3	4	30	0	0	0	15			
ESTIMATED TOTALS		8711	8065	19066	873	211		466	45					270	196					391	25	885	950	4200	11	4	30	0	0	0	15			

REMARKS:

Drilling Fluid & Material Consumption Report

MUD SYSTEM GYP/LIGNO BROKE OVER TO GEL/LIGNO

WELL NAME 30/3-3 AREA NORTH SEA
 OPERATOR STATOIL RIG ROSS ISLE
 ENGINEERS CHAVEZ/LAURITZEN/SKADBERG/WIIK

Day No.	DATE	ESTIMATED DAILY MUD VOLUMES			BULK MATERIALS			SACK MATERIALS		MATERIALS ADDED TO CONTROL PROPERTIES																			
		LOSSES SUB SURFACE	LOSSES SURFACE	VOLUME MUD BUILT	BARITE M/T	BENTONITE M/T	BENTONITE SXS	LIGNO	DESCO	THINNERS	CMC	LOVIS	CMC	HIVIS	POLYMERS	XC-POLYMERS	CAUSTIC SODA	SODA	ASH	GYP	ANCO (litr)	DEFOAMER	DRILL ENG (litr)	DETERGENT	SODIUM BICARB.	MICA F/C	WALNUT F/C	CaCl ₂	
29	28.4		91		44			12			2	1				20			27										
30	29.4		324	400	34	40	22				19	19				42			70										
31	30.4		180	75	36		10				8	29				8			36										
32	1.5		314	150	6	90	30				15	22				34			47	100	200								
33	2.5		166	400	41	106	19				28	21				18			35		200								
34	3.5		200	120	6	60	10				0	0				21			2		200								
35	4.5		133	120	5	80	10									6			7										
36	5.5		92	110	3.5	18	5									3													
37	6.5		60	596	3	1	7																						
38	7.5		1005	610	1	6.5	10	79			5	1				16	2							1					
39	8.5		654	480	6	11	29				12	5				10	1		100				8						
40	9.5		215	480	22	7	42				9	9											5						
41	10.5		5	174	17	4	10					3				4													
42	11.5		45		1		8				3	5				8													
FORWARD		8711	8065	19066	873	211	0	466	45		270	196			0	391	25		885	950	4200	25	4	0	30	0	15		
ESTIMATED TOTALS		8711	11549	22781	1095	244	414	749	45		371	311			0	581	28		1109	1150	4800	28	4	0	30	0	15		

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REMARKS:

Drilling Fluid & Material Consumption Report
GEL/LIGNO

MUD SYSTEM _____

WELL NAME 30/3-3 AREA NORTH SEA
 OPERATOR STATOIL RIG ROSS ISLE
 ENGINEERS SKADBERG/WIIK/LAURITZEN

Day No.	DATE	ESTIMATED DAILY MUD VOLUMES			BULK MATERIALS			SACK MATERIALS			MATERIALS ADDED TO CONTROL PROPERTIES																										
		LOSSES SUB SURFACE	LOSSES SURFACE	VOLUME MUD BUILT	BARITE M/T	BENTONITE M/T	BENTONITE SXS	LIGNO	DESCO	THINNERS	POLYMERS			XC-POLYMER			CAUSTIC SODA			GYP	ANCO (lit)		DEFOAMER		DRILLING (lit)		DETERGENT		SODIUM BICARB.	MICA F/C	WALNUT F/C	CaCl ₂					
											CMC	LOVIS	CMC	HIVIS																							
43	12.5		11	40	1													2											2								
44	13.5		47					6										5											7								
45	14.5		48	45	1	2		2										5																			
46	15.5		150	30				1										2											4								
47	16.5		95		2													3											4								
48	17.5		233	25		2		32									5	3																			
49	18.5		44			2		3									1	7																			
50	19.5		163					2																													
51	20.5		104																																		
52	21.5																																				
53	22.5		100		16			15										3											13								
54	23.5		248*		100			13																					9								
55	24.5		12		5			3												4																	
56	25.5																																				
FORWARD		8711	11549	22781	1095	244	414		749	45							371	311		0	581	28	1109	1150	4800	29	4	0	30	0	0	15					
ESTIMATED TOTALS		8711	12804	22921	1220	250	414		826	45							377	321		0	646	32	1109	1150	4800	68	4	0	30	0	0	15					

1.53

REMARKS: * Started convert to heavier mud : 1.53 SG

Drilling Fluid & Material Consumption Report

MUD SYSTEM GEL/LIGNO

WELL NAME 30/3-3 AREA NORTH SEA
 OPERATOR STATOIL RIG ROSS ISLE
 ENGINEERS SKADBERG/WIIK/CHAVEZ/LAURITZEN

Day No.	DATE	ESTIMATED DAILY MUD VOLUMES			BULK MATERIALS			SACK MATERIALS		MATERIALS ADDED TO CONTROL PROPERTIES																
		LOSSES SUB SURFACE	LOSSES SURFACE	VOLUME MUD BUILT	BARITE M/T	BENTONITE M/T	BENTONITE SXS	LIGNO	DESCO	THINNERS	CMC LOVIS	CMC HIVIS	POLYMERS	XC-POLYMER	CAUSTIC SODA	SODA ASH	GYP	ANCO (LIT)	DEFOAMER	DRILL LING (LIT)	DETERGENTS	SODIUM BICARB.	MICA F/C	WALNUT F/C	CaCl ₂	
1983																										
57	26.5	nil																								
58	27.5		42																							
59	28.5	160*		160		4																		40	40	
60	29.5	nil																								
61	30.5	nil																								
154																										
FORWARD		8711	12804	22921	1220	250	414	826		45	377	321	0	646	32	68	1109	1150	4800	4	30				15	
ESTIMATED TOTALS		8871	12846	23081	1220	254	414	826		45	377	321	0	651	32	68	1109	1150	4800	4	30				15	

REMARKS:

* 160 bbls lost circulated pill with high viscosity Bentonite in hole.

Drilling Mud Properties Record

 MUD SYSTEM SPUD MUD

 WELL NAME 30/3-3 AREA NORTH SEA
 OPERATOR STATOIL RIG ROSS ISLE
 ENGINEERS M. CHAVEZ/O. STRAND/E. LAURITZEN/H. WIIK

Day No.	DATE	DEPTH FEET <input type="checkbox"/> METERS <input type="checkbox"/> 1983 METER	MUD PROPERTIES																		OPERATION REMARKS					
			SG DENSITY PPG <input type="checkbox"/> SG <input type="checkbox"/>		VISCOSITY				GELS	FLUID LOSS 30 Min cc's	CAKE 32 hrs	H.T.H.P. cc's	pH	Filtrate Analysis				RETORT		BENTONITE #/BBL		POTASH #/BBL	POLYMER #/BBL	"N"	"K"	
			sec/qt	A.V. cps	P.V. cps	Y.P. #/100 sq.ft.	0	10	Cl ⁻ ppm					Ca ++ ppm	PT	% OIL	% SOLIDS	% SAND	CORR.							
1	31/ 3																									
2	1/ 4		1.05	300							10.5															
3	2/ 4		1.05	180							10.8															
4	3/ 4		1.05	150							11.0															
5	4/ 4	455	1.04	41	27.0	8.0	37.0				10.3													.24	11.72	
6	5/ 4	953	1.05	38	20.0	5.0	21.0	2			10.1	14	1200	.15		5.00	.25	17.00					.25	6.12		
7	6/ 4	969	1.07	41	19.0	8.0	21.0	3	45.0	6	10.8	0	600	.12		5.00		17.00					.35	3.91		
8	7/ 4	969	1.04	200							11.2															
9	8/ 4	969	1.04	120							10.5															
10	9/ 4		1.05	80							10.5															
11	10/ 4		1.05	70							10.0															
12	11/ 4		1.04	65							10.0															
13	12/ 4		10.50	47							10.0															
14	13/ 4	971	1.05	43	15.0	6.0	18.0	13	35.0	3	13.0	10	2500	1.20		2.00		13.00					.32	3.83		
REMARKS																										

Drilling Mud Properties Record

 MUD SYSTEM GYP/LIGNO

 WELL NAME 30/3-3 AREA NORTH SEA
 OPERATOR STATOIL RIG ROSS ISLE
 ENGINEERS M. CHAVEZ/O. STRAND/E. LAURITZEN/H. WILK/R. FOLKVORD

Day No.	DATE	DEPTH FEET □ METERS □ 1983 METER	MUD PROPERTIES																			OPERATION REMARKS		
			SG	DENSITY PPG □ SG □	VISCOSITY				GELS 0	FLUID LOSS 30 Min cc's	CAKE 32 nds	H.T.H.P. cc's	pH	Filtrate Analysis			RETORT		BENTONITE #/BBL	POTASH #/BBL	POLYMER #/BBL		"I"	"K"
					sec/qt	A.V. cps	P.V. cps	Y.P. #/100 sq.ft.						CORR.	% OIL	% SOLIDS	% SAND							
					10	5	28	15.0										2						
15	14/ 4	1358	1.10	43	18.0	12.0	11.0	5	28	15.0	2	10.0	10	1500	.15	2.00	19.00			.61	.73			
16	15/ 4	1566	1.55	53	11.0	11.0	20.0	22	55	20.0	2	9.8	16	2300	.20	8.00	23.00			.44	2.55			
17	16/ 4	1647	1.47	52	20.5	13.0	15.0	12	45	20.0	2	9.0	17	2400	.30	15.00	26.00			.55	1.22			
18	17/ 4	1854	1.47	50	24.5	17.0	14.0	12	48	15.0	2	8.9	0	2120	.15	15.00	29.00			.63	.85			
19	18/ 4	2050	1.47	55	23.0	17.0	13.0	10	38	14.0	2	9.9	20	2280	.25	17.00	.25 29.00			.65	.75			
20	19/ 4	2050	1.47	58	22.5	16.0	13.0	7	37	14.0	2	9.3	20	2080	.20	16.00	.25 28.00			.63	.78			
21	20/ 4	2050	1.50	52	36.5	29.0		7	34	6.0	1	9.8	20	3040	.25	16.00	.25 18.00							
22	21/ 4		1.50	53	23.0	16.0	14.0	6	30	12.0	2	9.6	20	2240	.15	16.00	.25 24.00			.62	.89			
23	22/ 4	2053	1.50	54	22.5	19.0	7.0	5	30	2.0		9.2	19	2400	.08	17.00	2.50			.79	.29			
24	23/ 4	2068	1.50	55	27.0	20.0	15.0	11	42	15.0	2	9.8	18	1980	.20	17.00	1.00 22.50			.65	.85			
25	24/ 4	2219	1.50	55	25.0	18.0	13.0	3	45	9.0	2	10.1	18	1650	.18	16.00	.25 22.50			.66	.72			
26	25/ 4	2356	1.50	52	24.0	18.0	12.0	6	35	9.0	2	9.0	17	1600	.10	16.00	22.00			.68	.63			
27	26/ 4	2443	1.50	53	24.0	17.0	14.0	3	30	9.5	1	9.9	15	1520	.20	15.00	17.50			.63	.85			
28	27/ 4	2505	1.50	50	25.0	16.0	15.0	5	35	12.0	2	9.7	16	1500	.10	16.00	19.00			.60	1.01			
REMARKS																								

Drilling Mud Properties Record
 MUD SYSTEM GYP/LIGNO

 WELL NAME 30/3-3 AREA NORTH SEA
 OPERATOR STATOIL RIG ROSS ISLE
 ENGINEERS M. CHAVEZ/E. LAURITZEN/P. SKADBERG/H. WIIK

Day No.	DATE	DEPTH	MUD PROPERTIES																				OPERATION REMARKS
			DENSITY PPG □ SG □	VISCOSITY				GELS °	FLUID LOSS 30 Min cc's	CAKE 32 hrs	H.T.H.P. cc's	pH	Filtrate Analysis			RETORT		BENTONITE #/BBL	POTASH #/BBL	POLYMER #/BBL	"N"	"K"	
sec/qt	A.V. cps	P.V. cps		Y.P. #/100 sq.ft.	X 1000	Cl ppm	Ca ++ ppm						PI	% OIL	% SOLIDS	% SAND	CORR.						
1983	METER						10						T.H.										
29	28/ 4	2539	1.50	49	20.0	12.0	16.0	8/48	15.0	2		10.4	15	1400	.20		15.00		17.50			.51	1.49
30	29/ 4	2644	1.53	48	17.0	11.0	10.0	6/31	16.0	2		10.5	15	1300	.30		17.00		17.00			.61	.66
31	30/ 4	2693	1.53	47	22.5	15.0	15.0	8/50	11.0	2		9.4	14	1680	.10		18.00		17.50			.58	1.07
32	1/ 5	2748	1.53	48	23.0	17.0	12.0	3/50	9.5	2	40.0	10.6	15	1240	.30		18.00		18.75			.67	.65
33	2/ 5	2810	1.53	48	28.0	21.0	14.0	3/32	8.8	2	38.0	10.3	15	1240	.25	0.0	19.00		16.50			.68	.73
34	3/ 5	2848	1.53	49	20.0	20.0	14.0	3/44	9.3	2	38.0	10.8	15	1080	.75	0.0	18.50		17.75			.67	.76
35	4/ 5	2861	1.53	45	19.0	14.0	10.0	2/31	8.8	2	38.0	10.0	14	1100	.20	0.0	18.50		17.50			.66	.55
36	5/ 5	2861	1.53	47	23.5	16.0	15.0	7/55	8.9	2	40.0	9.5	15	1320	.10		18.50		17.50			.60	1.01
37	6/ 5	2861	1.53	44	23.0	17.0	12.0	2/31	8.0	2			15	1160	.15		18.50		2.00			.67	.65
38	7/ 5	2849	1.27	44	15.0	10.0	10.0	3/43	9.8	2		11.4	7	840	.40		13.00		20.00			.58	.71
39	8/ 5	2882	1.27	44	16.5	12.0	9.0	2/20	9.6	1		11.8	12	1080	.75		13.50		19.00			.65	.51
40	9/ 5	2956	1.27	52	22.5	17.0	11.0	4/44	8.4	1		11.3	12	800	.25		12.00		22.00			.68	.57
41	10/ 5	2979	1.27	52	21.5	16.0	11.0	3/43	1.0			8.2	12	1000	.15		12.00		22.00			.67	.59
42	11/ 5	2992	1.27	51	20.5	15.0	11.0	4/42	8.2	1	28.0	10.8	12	880	.20		12.00		21.00			.66	.61
REMARKS																							

Drilling Mud Properties Record

 MUD SYSTEM GEL/LIGNO

 WELL NAME 30/3-3 AREA NORTH SEA
 OPERATOR STATOIL RIG ROSS ISLE
 ENGINEERS P. SKADBERG/H. WIIK/E. LAURITZEN/M. CHAVEZ

Day No.	DATE	DEPTH	MUD PROPERTIES																				OPERATION REMARKS			
			SG	DENSITY PPG □	SG □	VISCOSITY				GELS	FLUID LOSS 30 Min cc's	CAKE 32 nds	H.T.H.P. cc's	pH	Filtrate Analysis			RETORT		BENTONITE #/BBL	POTASH #/BBL	POLYMER #/BBL		"N"	"K"	
						sec/qt	A.V. cps	P.V. cps	Y.P. #/100 sq.ft.						0	10	X	Cl ⁻ ppm	Ca. ++ ppm							PI
	1983	METER																								
43	12/ 5	3033	1.27	51	23.5	17.0	13.0	4/49	8.2	1	28.0	10.5	12	680	.15		12.00	22.00			.65	.75				
44	13/ 5	3077	1.27	50	24.0	17.0	13.0	4/28	7.5	1	25.0	10.5	12	400	.15		10.00	22.00			.65	.75				
45	14/ 5	3099	1.27	53	23.0	18.0	4.0		7.9	1	20.0	10.9	12	320	.20		10.00	22.50			.86	.16				
46	15/ 5	3129	1.27	57	23.0	17.0	11.0	4/35	7.9	1		10.7	13	280	.16		10.00	20.00			.68	.57				
47	16/ 5	3257	1.27	52	24.0	18.0	12.0	6/45	8.5	1		10.8	12	120	.22		12.00	23.00			.68	.63				
48	17/ 5	3347		1	59.0	25.0	13.0	4/36	8.5	1	24.0	10.5	12	80	.20		14.00	23.00			.73	.59				
49	18/ 5	3418	1.27	56	26.0	18.0	16.0	6/36	8.4	1		10.9	12	80	.25		13.00	23.00			.61	1.03				
50	19/ 5	3419	1.27	54	22.0	16.0	12.0	6/34	8.4	1	24.0	10.5	12	100	.15		13.00	23.00			.65	.68				
51	20/ 5	3419	1.28	56	20.0	14.0	12.0	2/19	8.0	1		9.6	10	120	.10		13.00				.62	.75				
52	21/ 5	3419	1.27	53	16.0	13.0	7.0	0/0	8.0	1		9.5	10	120	.10		12.00	24.00			.72	.33				
53	22/ 5	3419	1.53	59	28.0	19.0	18.0	7/36	8.4	1		10.9	10	280	.30		13.00	20.00			.60	1.22				
54	23/ 5	3419	1.53	52	22.0	16.0	11.0	3/19	8.9	1		10.9	10	180	.70		13.00	20.00			.67	.59				
55	24/ 5	3419	1.53	49	21.0	14.0	12.0	3/28	8.9	1		10.9	10	180	.60		13.00	20.00			.62	.75				
56	25/ 5	3419	1.53	49	21.0	16.0	10.0	2/25	9.0			10.9	10	200	.70		13.00	18.00			.69	.50				
REMARKS																										

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Drilling Mud Properties Record

 MUD SYSTEM GEL/LIGNO

 WELL NAME 30/3-3 AREA NORTH SEA
 OPERATOR STATOIL RIG ROSS ISLE
 ENGINEERS P. SKADBERG/H. WIIK/E. LAURITZEN/M. CHAVEZ

Day No.	DATE	DEPTH FEET <input type="checkbox"/> METERS <input type="checkbox"/>	MUD PROPERTIES																				OPERATION REMARKS		
			SG	PPG	SG	VISCOSITY				GELS 0	FLUID LOSS 30 Min cc's	CAKE 32 nds	H.T.H.P. cc's	pH	Filtrate Analysis			RETORT		BENTONITE #/BBL	POTASH #/BBL	POLYMER #/BBL		"N"	"K"
						sec/qt	A.V. cps	P.V. cps	Y.P. #/100 sq.ft.						T.H.	Ca. ++ ppm	Pf	% OIL	% SOLIDS						
1983	METER								10				X 1000												
57	26/ 5	3419	1.34	43	17.0	11.0	12.0	1	1	4	11.4	13	550	.60	9.00	12.00			.56	.92					
58	27/ 5	3419	1.34	40	14.0	10.0	8.0	10	18	20.0	4	11.4	135	560	1.05	9.00	.25	12.00			.64	.48			
59	28/ 5	3419	1.34	39	13.5	10.0	7.0	10	16	20.0	4	11.4	135	520	1.00	9.00	.25	11.50			.67	.38			
60	29/ 5	3419	1.34	38	13.5	10.0	7.0	10	15	20.0	4	11.4	135	540	.95	9.00	.25	11.50			.67	.38			
61	30/ 5	3419	1.34	38	13.0	9.0	8.0	10	15	20.0	4	11.4		530	1.00	9.00		11.50			.61	.52			
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REMARKS