

# NORSK PETROLEUM SERVICES A/S.

OPERATING AREA 34/10-17 Statoil

Deep Sea Bergen  
North Sea, Norway

## MATERIALS USED PER CASING INTERVAL

.36" HOLE AND 30" CASING SET AT 222 M

ESTIMATED REQUIREMENTS			ACTUAL REQUIREMENTS		
MATERIAL	QUANTITY	COST	MATERIAL	QUANTITY	COST
AQUAGEL	17 MT	\$4,505.00	AQUAGEL	17 MT	\$5,300.00
CAUSTIC	11 sx	127.05	CAUSTIC	22 sx	254.10
SODA ASH	6 sx	87.12	SODA ASH	9 sx	130.68
Q-BROXIN	0		Q-BROXIN	5 sx	81.75
LIME	0		LIME	2 sx	16.32
TOTAL COST		\$4,719.17			\$5,782.85
COST PER M <sup>3</sup>	190.8M <sup>3</sup>	\$ 24.73		164.9M <sup>3</sup>	\$ 35.07
COST PER M	60 M	\$ 78.65		62 M	\$ 93.27
COST PER M <sup>3</sup> /DAY -		-		1 DAY	\$ 93.27

# NORSK PETROLEUM SERVICES A/S.

OPERATING AREA 34/10-17 STATOIL

DEEP SEA BERGEN  
NORTH SEA NORWAY

## MATERIALS USED PER CASING INTERVAL

12 1/4" PILOT HOLE, 26" HOLE AT 20" CASING SET AT 652 M

ESTIMATED REQUIREMENTS			ACTUAL REQUIREMENTS		
MATERIAL	QUANTITY	COST	MATERIAL	QUANTITY	COST
AQUAGEL	40 MT	\$10,600.00	AQUAGEL	48 MT	\$12,720.00
CAUSITC SODA	39 sx	450.45	CAUSTIC SODA	95 sx	1,097.25
SODA ASH	19 sx	275.88	SODA ASH	52 sx	755.04
			BARITE	167 MT	19,951.49
			LIME	1 sx	8.16
			MICA	20 sx	262.00
			WALLNUT	5 sx	65.50
			AQUAGEL	54 sx	799.20
			CALIU(CHL.	18 sx	358.56
TOTAL		11,326.33			36,017.20
COST PER M <sup>3</sup>	678	16.70		2106	17.10
COST PER M	444	25.51		430	83.76
COST/M <sup>3</sup>				12	6.98

# NORSK PETROLEUM SERVICES A/S.

STATOIL

OPERATING AREA

Deep Sea Bergen, North Sea Norway

34/10-17

## MATERIALS USED PER CASING INTERVAL

17 1/2" Hole and 13 3/8" Casing set at 1901 m

ESTIMATED REQUIREMENTS			ACTUAL REQUIREMENTS		
Material	Quantity	Cost \$	Material	Quantity	Cost \$
AQUAGEL	35 MT	9,275.00	AQUAGEL	71 MT	18,815.00
BAROID	360 MT	43,009.20	BAROID	264 MT	31,540.08
CAUSTIC SODA	180 SK	2,079.00	CAUSTIC SODA	61 SK	704.55
CMC LV	105 SK	4,189.50	CMC LV	112 SK	4,468.80
Q-BROXIN	330 SK	5,395.50	Q-BROXIN	117 SK	2,893.95
SODA ASH	25 SK	363.00	SODA ASH	73 SK	1,059.96
SODIUM BICAR- BONATE	25 SK	417.25	SODIUM BICAR- BONATE	48 SK	801.12
TOTAL COST		64,728.45			60,939.64
COST PER M <sup>3</sup>	875.4	73.94		1012.7	60.18
COST PER M	1250	51.78		1247	48.87
COST/M <sup>3</sup> /DAY				10	6.02

# NORSK PETROLEUM SERVICES A/S.

OPERATING AREA      STATOIL  
 North Sea Norway  
 34/10-17

## MATERIALS USED PER CASING INTERVAL

12 1/4" Hole and 9 5/8" Casing set at 2580 m

ESTIMATED REQUIREMENTS			ACTUAL REQUIREMENTS		
Material	Quantity	Cost \$	Material	Quantity	Cost \$
AQUAGEL	17 MT	4,505.00		62 MT	16,430.00
AQUAGEL				30 SK	444.00
BAROID	460 MT	54,956.20		559 MT	66,783.73
CAUSTIC	72 SK	831.60		247 SK	2,852.85
CC 16	282 SK	4,794.00		683 SK	11,611.00
CMC LV	66 SK	2,633.40		97 SK	3,870.30
Q-BROXIN	332 SK	5,428.20		688 SK	11,248.80
SODA ASH	18 SK	261.36		12 SK	174.24
BICARBONATE	25 SK	417.25		119 SK	1,986.11
CMC HV				103 SK	4,827.61
LIME				13 SK	106.08
BLOWN ASPHALT				20 SK	809.20
TORQ TRIM				12 DR	7,080.00
MICA				135 SK	1,768.50
WALLNUT				145 SK	1,899.50
XC POLYMER				9 SK	2,325.60
<b>TOTAL COST</b>		<b>73,827.01</b>			<b>134,217.52</b>
<b>COST PER M<sup>3</sup></b>	<b>483</b>	<b>152.85</b>		<b>1015.8</b>	<b>132.13</b>
<b>COST PER M</b>	<b>1435</b>	<b>51.45</b>		<b>679</b>	<b>197.7</b>
<b>COST/M<sup>3</sup> /DAY</b>				<b>24</b>	<b>5.51</b>

# NORSK PETROLEUM SERVICES A/S.

OPERATING AREA      STATOIL  
                                  North Sea Norway  
                                  34/10-17

## MATERIALS USED PER CASING INTERVAL

8 1/2" Hole and 7" Liner set at 3015 m

ESTIMATED REQUIREMENTS			ACTUAL REQUIREMENTS		
Material	Quantity	Cost	Material	Quantity	Cost \$
NONE			BARITE	118 MT	14,097.46
			BENTONITE	16 MT	4,240.00
			CAUSTIC SODA	38 SK	438.90
			SODIUM BICAR- BONATE	21 SK	350.49
			Q-BROXIN	289 SK	4,725.15
			CMC LV	40 SK	1,596.00
			BLOWN AS- PHALT	20 sx	809.20
			CC 16	208 sx	3,536.00
			XC POLYMER	9 sx	2,325.60
TOTAL COST					32,118.80
COST PER M <sup>3</sup>				108.9	294.94
COST PER M				435	73.84
COST/M <sup>3</sup> /DAY				28.5	10.35

# NORSK PETROLEUM SERVICES A/S.

OPERATING AREA      STATOIL  
                                  North Sea Norway  
                                  34/10-17

## MATERIALS USED PER CASING INTERVAL

6" Hole to 3466 m

ESTIMATED REQUIREMENTS			ACTUAL REQUIREMENTS		
Material	Quantity	Cost	Material	Quantity	Cost \$
NONE			BARITE	48	5,734.56
			WYO. BENTO- NITE	28	7,420.00
			CAUSTIC	14	161.70
			SODIUM BI- CARBONATE	29	484.01
			Q-BROXIN	220	3,597.00
			CC-16	163	2,771.00
			XC POLYMER	5	1,292.00
			BLOWN ASPHALT	61	2,468.06
			WALLNUT (F)	20	262.00
			TORQ TRIM II	4	2,360.00
			CMC LV	15	598.50
TOTAL COST					27,148.83
COST PER M <sup>3</sup>				96.9	280.17
COST PER M				449	60.46
COST PER M <sup>3</sup> /DAY				15	4.03

# NORSK PETROLEUM SERVICES A/S.

OPERATING AREA      STATOIL  
 North Sea Norway  
 34/10-17

## MATERIALS USED PER CASING INTERVAL TESTING PROGRAM

ESTIMATED REQUIREMENTS			ACTUAL REQUIREMENTS		
Material	Quantity	Cost \$	Material	Quantity	Cost \$
NONE			BARITE	218 MT	26,044.46
			AQUAGEL	10 MT	2,650.00
			CAUSTIC	11 SK	127.05
			SODA ASH	9 SK	130.68
			S.BICARBO- NATE	37 SK	617.53
			CMC HV	41 SK	1,921.67
			XC POLYMER	9 SK	2,325.60
			Q-BROXIN	24 SK	392.40
			CC 16	4 SK	68.00
TOTAL COST					34,277.39
COST P/M <sup>3</sup>				102.3	335.07
COST P/M				0	
COST P/M <sup>3</sup> /DAY				40	8.38

# NORSK PETROLEUM SERVICES A/S.

OPERATING AREA      Statoil  
                            Deep Sea Bergen  
                            34/10-17

## TOTAL MATERIAL CONSUMPTION

MATERIAL	PACKAGING	QUANTITY
Barite	MT	1374
Aquagel	MT	256
Caustic	25 kg	488
Soda Ash	50 kg	155
CMC LV	25 kg	264
Q-Broxin	25 kg	1343
Sodium Bicarbonate	50 kg	254
CC-16	50 lb	1058
CMC HV	25 kg	144
Lime	25 kg	16
Blown Asphalt	25 kg	101
Torg Trim	55 gal	16
Mica	25 kg	155
Wallnut	25 kg	170
XC Polymer	25 kg	32
Calcium Chloride	50 kg	18

Total bbl used	10,019.10
Total Material Cost	\$ 330,502.23
Average Cost per bbl	\$ 32.98
Average Cost per meter	\$ 95.41
Average Cost per day	\$ 2.394.94



**NORSK PETROLEUM SERVICES A/S**

c/o Dolphin Services A/S  
4056 Tananger, Norway. Telephone 04-696524. Telex 33235

WELL NAME: 34/10-17 STATOIL Deep Sea Bergen

MUD PROPERTY RECAP

DATE	DEPTH	DENSITY	VISC. OSITY	FILTRATE				pH	RHEOLOGY				FILTRATE ANALYSIS					RETORT ANALYSIS			CEC	OTHER																			
				feet	APC/ Spct/ SG	secs	ccs		Cake		PV	YP	10'	10'	Cl	Ca	Pl	Mf	Pm	Oil		Water	Corr. Solids	PPB	S <sub>D</sub>																
									1 1/2" /min	3 1/2" /min																cp	lbs/100R'	gms/100cm <sup>3</sup>	mg/liters	ppm	%	%	%	Bent. Eq.	%						
1983	metres																																								
22/2	Pit	1.04	95																																						
23/2	Pit	1.05	110																																						
	Pit	1.06	160																																						
	Pit	1.06	110																																						
24/2	Pit	1.05	41	N.C.	N.C.	-	-	-	8	27	15	21	-	-	-	-	0	96	4	18	Nil																				
25/2	Pit	1.05	45	N.C.	N.C.	-	-	9.5	6	38	19	19	12500	120	.15	.3	-	0	97	3	12	Nil																			
26/2	255	1.06	41	N.C.	N.C.	-	-	9.6	7	33	17	17	13000	100	.12	.22	-	0	97	3	15	Tr																			
	319	1.06	42	-	-	-	-	9.2	5	37	17	17	14000	100	.15	.3	-	0	95	5	15	1/4																			
27/2	405	1.07	38	-	-	-	-	9.2	5	34	17	15	16000	140	.2	.4	-	0	94	6	20	TR																			
	492	1.08	40	-	-	-	-	9.1	4	43	17	17	16000	140	.2	.4	-	0	95	5	15	TR																			
	553	1.08	41	-	-	-	-	8.9	4	45	16	16	17000	140	.12	.3	-	0	95	5	15	1/4																			
28/2	655	1.09	38	-	-	-	-	8.8	5	37	15	17	175000	160	.15	.3	-	0	95	5	15	TR																			
	Pit	1.12	40	-	-	-	-	8.7	6	33	17	17	18000	160	.1	.3	-	0	94	6	15	TR																			
1/3	300	1.09	33	-	-	-	-	9.4	5	14	7	8	18000	200	.25	.45	-	0	96	4	12	TR																			
	242	1.09	33	-	-	-	-	9.3	4	13	7	7	18000	140	.2	.4	-	0	96	4	12	TR																			
2/3	337	1.08	33	-	-	-	-	8.9	5	16	8	7	19000	200	.43	.62	-	0	94	6	10	TR																			
	424	1.08	33	-	-	-	-	9.4	5	13	7	7	16500	160	.25	.45	-	0	97	3	15	TR																			
3/3	461	1.10	33	-	-	-	-	9.5	5	12	10	10	18000	180	.32	.60	-	0	95	5	15	TR																			
	575	1.10	34	74	5	-	-	9.4	4	16	9	0	16500	150	.23	.60	-	0	96	4	12	1/2																			

**NORSK PETROLEUM SERVICES A/S**  
 c/o Dolphin Services A/S  
 4056 Tananger, Norway. Telephone 04-696524. Telex 33235

**WELL NAME:** 34/10-17

**STATOIL** Deep Sea Bergen

**MUD PROPERTY RECAP**

DATE	DEPTH feet metres	DENSITY ppg/ SpGr/ SG	VISC- OSITY secs	FILTRATE		HY/HP IIII		pH	RHEOLOGY				FILTRATE ANALYSIS					RETORT ANALYSIS			CEC PPB Bent. Eq.	OTHER			
				ccs	Cake 1" 32/mm	°500psi ccs	1" 32/mm		PV cp	YP lbs/100ft <sup>2</sup> -gms/100 cm <sup>2</sup>	10" cm <sup>2</sup>	10" cm <sup>2</sup>	Cl mg/litre	Ca ppm	PI	MI	Pm	Oil %	Water %	Corr. Solids %		Sand %			
4/3	668	1.10	33					9.5	5	16	10	10	17000	160	.25	.62		0	96	4	12	1/4			
	668	1.19	30	92	5			8.8	5	9	5	5	18000	220	.13	.30		0	93	7	11	<1/4			
5/3	668	1.19	31					8.7	5	9	5	6	19500	240	.11	.25		0	94	6	10	TR			
	668	1.19	32					9.1	5	10	5	5	18500	180	.21	.49		0	94	6	10	TR			
6/3	668	1.19	31					9.0	5	9	5	5	18500	190	.19	.42		0	94	6	10	TR			
	668	1.19	34					9.5	8	16	10	11	13000	120	.21	.40		0	96	4	11	TR			
7/3													MIXING												
8/3	668	1.10	32	35	4			8.4	4	9	3	4	16000	160	.27	2.5		0	96	4	11	TR			
9/3	668 IN	1.10	32	19	3			8.4	4	9	4	4	16000	160	.35	2.7		0	96	4	12	TR			
	630	1.10	32	22.0	1 1/2			10.4	7	9	5	6	13000	600	.07	.32		0	96	4	12	1/2			
	Pit 672 IN	1.10	35	28.0	2			12.2	6	8	1	4	16000	480	.95	1.45		0	95	5	14	1/4			
10/3	722 IN	1.11	39	18.0	1 1/2			11.9	10	12	7	8	15500	80	.82	1.42		0	95	5	14	1/4			
	850 IN	1.10	43	23	2			11.7	12	21	18	18	16000	240	.18	.32		0	94	6	14	1/3			
	881 IN	1.10	37	26	2			10.3	6	13	6	12	17500	200	.12	.25		0	93	7	13	1/2			
11/3	999 IN	1.10	36	25	2			9.6	7	9	9	9	15500	120	.22	.53		0	93	7	13	1/3			
	1078 IN	1.10+	38	23.5	2			9.5	8	12	11	12	14000	500	.18	.50		0	93	7	17	1/2			
	1210 IN	1.10	37	24	2			9.7	7	13	14	15	14000	50	.63	1.28		0	93	7	15	1/2			
12/3	1295 IN	1.10	40	24	2			9.5	8	16	17	18	16000	60	.40	.90		0	93	7	18	1/2			
	1430 IN	1.10	44	24	2			9.3	9	20	20	20	14500	480	.33	.83		0	94	6	18	3/4			

**NORSK PETROLEUM SERVICES A/S**  
 c/o Dolphin Services A/S  
 4056 Tananger, Norway. Telephone 04-696524. Telex 33235

**WELL NAME:** 34/10-17

**STATOIL** Deep Sea Bergen

**MUD PROPERTY RECAP**

DATE	DEPTH feet metres	DENSITY PPG/ Spct/ SG	VISC- OSITY secs	FILTRATE ccs	HYHP IIII		pH	RHEOLOGY				FILTRATE ANALYSIS					RETORT ANALYSIS			C E C	OTHER			
					Cake 200° 32/mm	500psi 32/mm		PV cp	YP lbs/100ft <sup>2</sup>	10" gms/100 cm <sup>2</sup>	10' mg/litre	Cl ppm	Ca ppm	Pl ppm	MI ppm	Pm ppm	Oil %	Water %	Corr. Solids %		PPB Bent. Eq.	Sand %		
																							Sand	
12/3	1500	1.10	42	22	2		9.4	9	19	19	20	15000	80	.22	.76		0	93.5	6.5	19	1/2			
13/3	1506	1.10	37	21	2		9.3	7	15	14	14	15000	80	.20	.68		0	93.5	6.5	19	1/2			
	1540	1.10	44	19	2		9.4	11	17	17	18	15000	700	.33	.85		0	94	6	19	1/4			
	1669	1.15	40	24	2		9.1	10	14	16	20	16000	160	.30	.90		0	93	7	21	1/4			
	1708	1.15	45	23	2		9.0	11	14	18	20	16000	240	.30	1.0		0	93	7	26	1/4			
14/3	1718	1.10	52	21	2		10.1	15	15	18	27	14500	500	1.7	3.4		0	92	8	30	1/4			
	1746	1.20	47	19.5	2		9.2	12	18	20	28	15000	800	.48	1.10		0	92	8	29	1/4			
	1798	1.20	46	18	2		9.5	12	16	20	26	14000	160	.60	1.50		0	92	8	27	1/4			
	1833	1.20	42	20	2		9.1	13	13	15	17	16000	440	.15	1.00		0	92	8	30	1/4			
15/3	1900 Out	1.25	42	19	2		9.4	13	13	15	16	15000	600	.60	1.90		0	90	10	35	TR			
	1915	1.28	48	18.5	2		9.5	14	22	20	25	15000	500	.45	1.75		0	89.5	10.5	32	TR			
	IN 1915	1.28	44	22	2		9.0	12	14	16	30	17000	360	.30	1.45		0	89	11	29	1/4			
16/3	Pit 1915	1.28	47	21	2		9.2	14	15	16	28	16500	800	.35	1.50		0	89	11	29	TR			
	1915	1.28	47	21	2		9.1	14	15	15	25	16500	750	.32	1.45		0	89	11	29	TR			
	1915	1.28	47	21	2		9.5	10	10	8	15	18000	320	.50	1.40		0	89	11	28	TR			
17/3	1915	1.28	40	17	1 1/2		9.7	12	9	6	21	17200	800	.43	1.15		0	89	11	27	TR			
18/3	1901	1.29	52	20	3		8.6	13	15	16	25	16500	240	.2	1.3		0	88	12	25	1/4			
19/3	Pit	1.28	43	13.8	2		8.9	13	9	7	11	17000	280	.25	1.4		0	89	11	25	TR			
	1919	1.20	45	18.8	3	48.5	5	11.1	11	9	9	13	14500	400	.35	.8		0	91	9	30	TR		

NORSK PETROLEUM SERVICES A/S

c/o Dolphin Services A/S  
4056 Tananger, Norway. Telephone 04-696524. Telex 33235

WELL NAME: 34/10-17 STATOIL Deep Sea Bergen

MUD PROPERTY RECAP

DATE	DEPTH feet metres	DENSITY PPG/ Spct/ SG	VISC- OSITY secs	FILTRATE ccs	HT/HP IIII		pH	RHEOLOGY				FILTRATE ANALYSIS					RETORT ANALYSIS			CEC	OTHER		
					Cake 1"/32" ccs	°500psi 1"/32" ccs		PV	YP	10"	10'	Cl	Ca	PI	MI	Pm	Oil %	Water %	Corr. Solids %	PPB Bent. Eq.	SAND %		
																						cp	lbs/100ft <sup>2</sup> -gms/cm <sup>2</sup>
1983	19/3	1924	1.25	48	15.8	2	46.0	4	11.2	15	7	12	21	15500	340	.4	.8	0	89	11	30	1/4	
	20/3	2018	1.25	44	10.5	2	30.8	4	10.5	14	7	6	22	16000	420	.25	.8	0	89	11	30	TR	
		2087	1.25	46	10.7	2	30.6	4	10.9	14	8	4	21	16000	400	.25	.75	0	89	11	30	TR	
		2135	1.25	41	9.3	2	25 <sup>0</sup>	4	9.9	12	6	2	17	16500	460	.2	.65	0	89	11	33	TR	
	21/3	2135	1.24	45	9.9	2	25 <sup>4</sup>	4	10.2	11	7	1	12	17000	480	.2	.8	0	89	11	30	TR	
		2206	1.26	50	9.3	2	23.8	4	10.1	14	8	2	17	17000	480	.2	.7	0	88	12	30	TR	
	22/3	2264	1.27	46	8.5	2	22.2	4	10.4	15	8	2	21	17000	360	.23	.8	0	88	12	29	TR	
		2234	1.27	45	8.8	2	21.4	4	10.1	14	8	2	25	17500	440	.23	.8	0	88	12	30	TR	
		2372	1.27	51	9.3	2	21.4	4	9.9	14	9	2	32	17500	480	.18	.75	0	88	12	33	TR	
	23/3	2432	1.27	45	7.8	2	19.0	4	10.1	12	10	3	25	18000	400	.18	.85	0	88	12	30	TR	
		2473	1.27	44	8.0	2	18.6	3	10.3	12	9	2	19	18500	380	.25	.95	0	88	12	30	TR	
		2537	1.27	51	8.1	2	18.2	3	10.4	15	13	4	32	18500	340	.23	1.0	0	87	13	30	TR	
	24/3	2591	1.27	45	8.1	2	19.6	3	10.4	14	10	2	27	19000	400	.25	.95	0	88	12	30	TR	
		2613	1.27	43	8.4	2	20.8	3	11.2	13	8	3	31	19000	420	.55	1.4	0	88	12	29	TR	
	25/3	Pit	1.28	46	7.7	2	20.6	3	10.7	13	7	2	21	19000	400	.32	1.0	0	88	12	29	TR	
		2500	1.27	46	7.9	2	21.8	4	10.8	12	8	1	15	19500	400	.35	1.1	0	88	12	29	TR	
		2614	1.32	48	8.5	2	22 <sup>0</sup>	4	10.3	15	8	2	20	19500	480	.2	0.9	0	86	14	29	1/4	
	26/3	2685	1.34	45	7.7	2	18.2	3	10.2	14	10	2	23	19500	440	.25	0.9	0	86	14	28	TR	
		2685	1.46	48	8.8	2	25.6	4	9.5	15	8	2	21	18500	440	.15	.8	0	84	16	28	TR	



**NORSK PETROLEUM SERVICES A/S**

c/o Dolphin Services A/S  
4056 Tananger, Norway. Telephone 04-696524. Telex 33235

**WELL NAME:** 34/10-17 STATOIL Deep Sea Bergen

**MUD PROPERTY RECAP**

DATE	DEPTH feet metres	DENSITY PPG/ Spot/ SG	VISC- OSITY secs	FILTRATE		HY/HP IIII		pH	RHEOLOGY				FILTRATE ANALYSIS					RETORT ANALYSIS			C E C	OTHER				
				Cake ccs	1" 32/min	° 500psi ccs	3" 32/min		PV cp	YP lbs/100R <sup>2</sup> -gms/100 cm <sup>2</sup>	10' 10'	10' 10'	Cl mg/litre	Ca ppm	PI	MI	Pm	Oil %	Water %	Gev. Solids %		PPB Bent. Eq.	SAND			
4/4	2687	1.57	59	5.8	1	14.0	3	10.0	26	11	3	18	13000	300	.68	1.7		0	78.5	21.5	29		1/2			
	2687	1.57	56	5.8	1	14.6	3	11.5	30	12	4	27	13000	200	1.62	3.05		0	7.8	22	28		1/2			
5/4	2687	1.57	53	5.8	1	14.8	3	11.5	26	9	2	16	13000	180	1.62	3.10		0	78	22	27		1/2			
	OUT 2687 Pit	1.57	54	6.8	1	17.6	3	11.9	31	11	4	25	13000	180	2.80	3.95		0	77.5	22.5	27		1			
6/4	2687	1.57	62	5.8	1	15.3	3	11.8	30	11	3	23	13000	180	2.50	3.73		0	78	22	27		2/3			
	Pit 2687	1.57	67	7.0	1	16.0	3	11.9	26	10	3	25	13000	320	2.70	3.90		0	78	22	27		2/3			
7/4	2687	1.57	58	7.0	1	16.2	3	11.9	26	10	3	23	13000	300	2.72	3.95		0	78	22	27		1/2			
	IN 2687	1.57	57	7.4	1	16.2	3	11.9	26	10	3	16	13000	240	2.45	3.80		0	78	22	26		1/2			
	Pit 2687	1.57	59	7.0	1	16.2	3	11.9	26	10	3	15	13200	100	2.60	3.70		0	78.5	21.5	26		1/4			
	Pit 2687	1.57	58	6.4	1	15.2	3	11.8	25	13	3	17	13200	100	2.35	3.85		0	78.5	21.5	24		1/4			
8/4	2687	1.57	58	6.4	1	15.2	3	11.8	25	13	3	16	13200	100	2.35	3.85		0	78.5	21.5	24		1/4			
	Pit (2601)	1.57	58	6.5	1	15.4	3	11.8	25	13	3	16	13200	100	2.35	3.85		0	78.5	21.5	24		1/4			
	IN (2601)	1.57	59	6.7	1	15.8	3	11.7	26	13	3	15	13200	100	2.42	3.85		0	78.5	21.5	25		1/4			
	Pit 2687 TD	1.57	58	7.0	1	15.8	3	11.7	26	13	3	16	13200	100	2.37	3.80		0	78.5	21.5	26		1/4			
	Pit 2687 TD	1.57	62	5.8	1	15.8	3	11.8	25	12	3	15	13200	100	2.37	3.80		0	78.5	21.5	26		1/4			
11/4	2687 TD	1.57	59	6.8	1	16.4	3	12.0	25	12	3	13	13200	80	2.32	3.78		0	78.5	21.5	25		1/4			
	(2552)	1.57	62	6.7	1	16.8	3	12.0	26	12	3	14	13000	80	2.30	3.75		0	78.5	21.5	25		1/4			
12/4	2601	1.57	59	7.2	1	17.2	3	12.0	26	13	3	18	13000	80	4.2	6.0		0	78.5	21.5	24		1/4			
	2619	1.57	70	6.8	1	17.8	3	11.9	28	14	4	25	13000	100	4.95	7.5		0	78.5	21.5	24		TR			
	2641	1.57	62	6.4	1	17.4	3	11.8	26	13	3	23	13500	160	5.1	8.0		0	78.5	21.5	24		TR			

**NORSK PETROLEUM SERVICES A/S**

c/o Dolphin Services A/S  
4056 Tananger, Norway. Telephone 04-696524. Telex 33239

**WELL NAME:** 34/10-17 STATOIL Deep Sea Bergen

**MUD PROPERTY RECAP**

DATE	DEPTH feet metres	DENSITY PPG/ Spcf/ SG	VISC- OSITY secs	FILTRATE ccs	HT/HP IIII		pH	RHEOLOGY				FILTRATE ANALYSIS					RETORT ANALYSIS			C E C	OTHER			
					Cake 200 <sup>o</sup> 500psi	14" 32/mm		PV	YP	10' 10'	10'	CI	Ca	PI	MI	Pm	Oil	Water	Gern. Solids		PPB	SAND		
																						14" 32/mm	cp	lbs/100ft <sup>3</sup> - gms/100 cm <sup>3</sup>
13/4	2652	1.60	63	6.4	1	16.4	3	11.7	26	13	4	25	13500	80	5.1	8.6	0	78	22	25	TR			
	2662	1.60	57	6.0	1	16.0	3	11.7	29	13	3.5	25	13500	80	4.8	7.7	0	77	23	24	1/2			
	2683	1.60	65	5.8	1	15.2	3	11.8	27	13	3	21	13500	100	4.4	7.4	0	77	23	24	1/2			
14/4	2683	1.60	67	6.0	1	15.4	3	11.8	28	13	3	20	13500	100	4.3	7.3	0	77	23	24	1/4			
	2694	1.62	65	5.5	2	18.2	3	11.8	26	10	3	28	14000	200	3.5	4.9	0	77	23	27	TR			
15/4	2714	1.62	55	5.5	2	17.4	3	11.7	20	10	1	15	15000	160	2.7	5.4	0	78	22	27	TR			
	2718	1.60	63	5.2	2	16.8	3	11.6	22	10	2	14	15500	160	2.3	2.9	0	78	22	27	TR			
16/4	2736	1.60	59	5.2	2	16.0	3	11.4	21	9	2	12	16500	160	2.0	2.6	0	78	22	27	TR			
	2754	1.60	64	5.2	2	16.0	3	11.4	22	11	2	14	16500	160	1.8	2.4	0	78	22	27	TR			
17/4	2772	1.60	60	5.2	2	16.4	3	11.3	23	11	2	13	16500	120	1.5	2.2	0	78	22	27	TR			
	2777	1.60	58	5.0	2	15.8	3	11.3	21	9	1	8	16500	120	1.4	2.0	0	79	21	28	TR			
18/4	2790	1.60	60	5.0	2	16.4	3	11.4	22	11	2	13	16500	120	1.5	2.2	0	78	22	27	TR			
	2808	1.60	60	5.2	2	17.0	3	11.3	21	9	2	12	16500	120	1.4	2.0	0	78	22	28	TR			
19/4	Pit	1.60	61	5.2	2	17.2	3	11.3	22	10	2	13	16500	120	1.4	2.1	0	78	22	28	TR			
	2826	1.60	56	4.8	2	16.6	3	11.3	21	9	2	9	16500	160	1.3	1.9	0	78	22	27	TR			
20/4	2833	1.60	55	5.2	2	15.8	3	11.3	19	9	1	9	16500	200	1.3	1.9	0	78	22	27	TR			
	2840	1.60	55	5.2	2	16.4	3	11.2	21	9	1	12	16500	180	1.3	1.8	0	78	22	27	TR			
21/4	Pit	1.60	58	5.2	2	16.6	3	11.2	19	8	1	9	16500	200	1.2	1.8	0	78	22	27	TR			
	Pit	1.60	56	5.8	2	18.0	3	11.1	20	8	1	9	16000	200	1.1	1.7	0	78	22	27	TR			

**NORSK PETROLEUM SERVICES A/S**

c/o Dophin Services A/S  
4056 Tananger, Norway. Telephone 04-696524. Telex 33235

**WELL NAME:** 34/10-17

**STATOIL** Deep Sea Bergen

**MUD PROPERTY RECAP**

DATE	DEPTH feet metres	DENSITY PPG/ Spet/ SG	VISC- OSITY secs	FILTRATE		HY/HP IIII		pH	RHEOLOGY				FILTRATE ANALYSIS					RETORT ANALYSIS			CEC PPB	OTHER			
				ccs	Cake 32/mm	200° ccs	500psi 32/mm		PV cp	YP lbs/100ft <sup>2</sup>	10' gms/cm <sup>2</sup>	10' mg/ftre	Cl	Ca	PI	MI	Pm	Oil %	Water %	Gorr. Solids %		Bent. Eq.	SD %	Garrett Gas train	
																								rpm	
22/4	Pit	1.60	58	5.3	2	16.8	3	11.2	20	7	1	10	16000	140	1.4	2.0		0	78	22	27	TR			
	Pit	1.60	63	4.8	2	17.2	3	11.2	21	8	2	17	16000	160	1.3	1.7		0	78	22	27	TR			
23/4	Pit	1.60	56	5.4	2	16.4	3	11.0	20	8	1	9	16500	200	1.0	1.6		0	78	22	27	TR			
	2844	1.60	58	4.6	2	15.6	3	10.9	22	9	1	10	16500	160	1.0	1.8		0	78	22	27	TR			
24/4	Pit	1.60	57	5.0	2	15.6	3	11.0	21	8	1	8	16500	180	0.9	1.7		0	78	22	27	TR			
	Pit	1.60	61	5.0	2	15.8	3	11.0	20	7	1	10	16500	200	0.9	1.4		0	78	22	24	TR			
25/4	2860	1.60	57	5.1	2	16.0	3	11.1	21	8	1	10	16500	200	1.0	1.8		0	78	22	24	TR			
	2875	1.60	57	5.3	2	16.6	3	11.1	21	9	3	12	16500	180	1.0	1.9		0	78	22	24	TR			
26/4	2879	1.60	58	5.2	2	16.4	3	11.1	21	9	2	12	16500	200	0.9	2.8		0	78	22	24	TR			
	2894	1.60	55	5.6	2	16.2	3	10.9	19	9	2	11	16500	220	0.8	2.5		0	78	22	24	TR			
27/4	2912	1.60	61	5.2	2	15.6	3	11.1	22	10	2	13	17000	180	0.9	2.6		0	78	22	24	TR			
	2922	1.60	59	5.6	2	17.0	3	11.1	23	10	4	13	16000	200	1.0	2.8		0	77	23	24	TR	0		
28/4	2937	1.60	62	5.0	2	16.4	3	10.9	22	11	3	14	16500	180	1.0	2.9		0	78	22	24	TR			
	2948	1.60	60	5.2	1	15.6	3	11.0	23	12	3	12	16000	160	1.1	2.9		0	78	22	24	TR			
	2966	1.60	60	5.4	1	16.0	3	10.9	23	12	3	13	16000	160	1.15	2.9		0	78	22	24	TR			
29/4	2969	1.60	60	5.3	1	16.8	3	11.0	23	12	3	12	16000	160	1.15	2.9		0	78	22	23	TR			
	3007	1.60	59	5.3	1	17.0	3	11.1	24	13	3	14	16000	160	1.1	3.0		0	78	22	23	TR	0		
	3015	1.60	58	4.8	1	15.8	3	11.0	24	13	3	15	16500	160	1.2	2.95		0	78	22	23	TR			
30/4	3015	1.60	59	4.7	1	14.5	3	11.0	24	11	3	16	16500	200	1.3	3.1		0	78.5	21.5	22.5	TR			



**NORSK PETROLEUM SERVICES A/S**

c/o Dolphin Services A/S  
4056 Tananger, Norway. Telephone 04-696324. Telex 33235

**WELL NAME:** 34/10-17 STATOIL Deep Sea Bergen

**MUD PROPERTY RECAP**

DATE	DEPTH -feet metres	DENSITY -PPG/ -Spet/ SG	VISC- OSITY secs	FILTRATE		HY/HP IIII		pH	RHEOLOGY				FILTRATE ANALYSIS					RETORT ANALYSIS			CEC PPB	OTHER			
				Cake 1 1/2"/hr	200° 500psi ccs	1 1/2"/hr	PV cp		YP lbs/100ft <sup>2</sup> -gms/100cm <sup>2</sup>	10" 10'	10' 100	Cl mg/litre	Ca ppm	Pl	MI	Pm	Oil %	Water %	Gerr. Solids %	Bent. Eq.		SAND %	Garrett Gas Train		
																							ppm	ppm	
30/4	3015	1.60	59	4.7	1	15.2	3	11.0	24	12	3	15	16500	180	1.3	3.0		0	78	22	23	TR			
1.5	3015	1.60	61	4.8	1	15.2	3	11.0	24	13	3	15	16500	180	1.3	3.0		0	78	22	23	TR			
	3015	1.60	60	5.2	1	16.2	3	10.9	24	11	3	13	17000	200	1.0	2.8		0	78	22	23	TR			
2.5	Pit 3015	1.60	60	5.2	1	16.0	3	10.9	23	11	3	14	17000	200	1.05	2.8		0	78	22	23	TR			
	IN 3015	1.60	64	4.8	1	14.8	3	11.0	24	10	2	13	16500	200	1.2	3.0		0	78	22	23	TR			
	Pit 3015	1.60	64	5.1	1	15.0	3	10.8	24	10	2	13	16800	200	1.0	2.9		0	78	22	23	TR			
3/5	Pit 3015	1.60	64	5.2	1	14.8	3	10.8	24	10	3	13	16800	200	1.0	2.9		0	78	22	23	TR			
	IN 3015	1.60	62	4.1	1	14.4	3	10.6	22	10	2	13	17000	200	.95	2.8		0	78	22	23	TR			
	Pit 3015	1.60	59	5.2	1	14.4	3	10.9	23	10	2	12	17000	200	1.0	2.9		0	78	22	23	TR			
4/5	Pit 3015	1.60	60	5.3	1	14.8	3	11.6	24	10	4	18	17000	240	1.45	3.2		0	78	22	23	TR			
	IN (2280)	1.60	63	6.0	1	16.4	3	11.9	26	12	6	35	16800	300	2.25	4.2		0	78	22	23	1/4			
5/5	IN (2400)	1.60	59	6.5	1 1/2	21.2	5	12.0	24	10	3 1/2	32	16800	380	2.85	4.65		0	78	22	22	1/3			
	3015	1.60	67	6.0	1 1/2	18.2	4	12.05	26	11	4	32	16800	320	3.8	5.4		0	78	22	22	1/3			
6/5	Pit 3015	1.60	69	5.3	1	16.8	4	12.0	26	12	3	28	16800	280	2.8	4.8		0	78	22	22	1/3			
	IN 3015	1.60	67	5.5	1	17.0	4	12.0	25	11	3	28	17000	320	2.9	4.9		0	78	22	22	1/3			
	Pit 3015	1.60	64	5.3	1	16.8	4	12.0	25	11	3	27	17000	300	2.9	4.8		0	78	22	22	1/3			
7/5	Pit 3015	1.60	68	5.4	1	17.2	4	12.0	27	12	3	29	14200	300	2.05	3.85		0	78	22	23	TR			
	Pit 3015	1.60	65	4.9	1	15.9	3	12.0	26	12	3	25	14200	280	2.00	3.8		0	78	22	23	TR			
8/5	3015	1.60	68	5.0	1	16.0	3	12.0	27	12	2.5	25	14500	250	1.95	3.7		0	78	22	22	1/3			

**NORSK PETROLEUM SERVICES A/S**

c/o Dolphin Services A/S  
4056 Tananger, Norway. Telephone 04-696524. Telex 33235

WELL NAME: 34/10-17 STATOIL Deep Sea Bergen

**MUD PROPERTY RECAP**

DATE	DEPTH feet- metres	DENSITY PPG/ SpGr SG	VISC- OSITY secs	FILTRATE ccs	HY/HP IIII		pH	RHEOLOGY				FILTRATE ANALYSIS					RETORT ANALYSIS			CEC PPB Bent. Eq.	OTHER		
					Coke 1 1/2 32/min	200 <sup>o</sup> 500psi 32/min		PV cp	YP lbs/100ft <sup>2</sup> -gms/100 <sup>cm</sup> <sup>2</sup>	10' 10'	10' 10'	Cl mg/litre	Ca ppm	Pl	Ml	Pm	Oil %	Water %	Corr. Solids %		SAND %	Garratt G.T. ppm H <sub>2</sub> S	
																							200 <sup>o</sup> 500psi 32/min
8/5	3015	1.60	61	4.8	1	15.6	3	12.0	25	11	2	23	14500	280	1.3	2.0	0	78	22	22	1/3		
9/5	3015	1.60	59	5.2	1	16.2	3	12.0	24	10	2	24	16000	280	2.35	4.85	0	78	22	21	1/3		
	3015	1.60	60	5.8	1	17.2	3	12.2	24	10	2	26	15500	320	3.2	4.9	0	78.5	21.5	21	2/3		
10/5	3015	1.60	69	5.1	1	15.8	3	12.1	27	11	2	25	15300	300	3.2	4.9	0	78	22	21	1/2		
	3015	1.60	58	5.3	1	16.0	3	12.1	25	11	2	21	15500	280	3.2	4.9	0	78.5	21.5	21	1/3		
11/5	3019	1.60	61	5.1	1	15.6	3	12.1	25	11	2	27	15000	200	3.3	4.8	0	78.5	21.5	22	1/3		
	3023	1.45	59	5.4	1	17.2	3	11.9	23	10	1	20	13500	300	2.25	3.5	0	85	15	24	1/4		
	3037	1.45	61	5.8	1	16.0	3	12.0	24	10	2	20	13500	300	2.8	4.3	0	85	15	24	1/4		
12/5	3041	1.45	59	5.8	1	15.6	3	12.1	22	9	2	12	13500	280	2.3	3.8	0	85	15	23	1/4		
	3086	1.45	56	6.4	2	17.4	3	11.7	23	10	2	18	14000	340	1.4	2.7	0	84	16	27	TR		
13/5	3115	1.45	57	6.4	2	16.8	3	11.7	21	9	1	16	14500	300	1.2	2.6	0	84	16	27	TR		
	Pit	1.45	60	6.4	2	17.0	3	11.7	22	10	2	8	14500	320	1.3	2.7	0	84	16	27	TR		
14/5	Pit	1.45	58	6.0	2	16.8	3	11.7	23	9	2	10	14500	280	1.2	2.5	0	84	16	27	TR		
	3145	1.45	57	5.5	2	16.0	3	11.8	20	9	2	8	15000	220	1.5	2.9	0	84	16	27	TR		
15/5	3205	1.45	58	5.6	2	16.0	3	11.6	21	9	1	5	15000	240	1.2	2.5	0	84	16	27	TR		
	3235	1.45	58	5.5	2	16.0	3	11.4	21	8	1	8	15000	280	1.1	2.3	0	83	17	27	TR		
16/5	3287	1.45	55	5.6	2	15.6	3	11.2	20	9	1	9	15000	200	1.1	2.0	0	83	17	27	TR		
	3325	1.45	56	5.9	2	16.8	3	11.2	20	10	1	15	15000	280	1.1	3.5	0	83	17	27	TR		
17/5	3377	1.45	59	5.6	2	17.2	3	11.3	23	10	2	12	15000	240	1.2	2.7	0	82	18	27	TR		

**NORSK PETROLEUM SERVICES A/S**

c/o Dolphin Services A/S  
4056 Tananger, Norway. Telephone 04-696524. Telex 33235

WELL NAME: 34/10-17 STATOIL Deep Sea Bergen

**MUD PROPERTY RECAP**

DATE	DEPTH -feet metres	DENSITY PPG/ Spcl/ SG	VISC- OSITY secs	FILTRATE		HY/HP IIII		pH	RHEOLOGY				FILTRATE ANALYSIS					RETORT ANALYSIS			CEC PPB Bent. Eq.	OTHER		
				Cake 1 1/2"/ 32/min	200° 500psi ccs	10" 10'	10" 10'		PV cp	YP lbs/100ft <sup>3</sup> - gms/100 cm <sup>3</sup>	10" 10'	10" 10'	CI mg/litre	Ca ppm	PI	MI	Pm	Oil %	Water %	Gorr- Solids %		SD %	Garrett Gas Train	
																							ppm H <sub>2</sub> S	
17/5	3416	1.45	56	6.0	2	17.4	3	11.4	21	10	2	13	15500	280	1.0	2.4	0	82	18	27	TR			
18/5	3432	1.46	58	5.8	2	16.8	3	11.3	23	10	3	13	15500	300	1.0	2.4	0	82	18	27	TR			
	Pit	1.45	57	6.0	2	16.2	3	11.1	21	9	2	12	15500	300	0.8	2.0	0	82	18	27	TR			
19/5	3454	1.45	60	5.5	2	16.2	3	11.1	22	10	2	13	16000	320	0.8	1.9	0	82	18	27	TR			
	3466	1.45	57	5.5	2	16.6	3	11.0	21	9	3	12	16000	360	0.7	1.7	0	82	18	27	TR			
20/5	Pit	1.45	60	5.6	2	16.8	3	11.0	22	10	2	13	16000	360	0.7	1.8	0	82	18	27	TR			
	Pit	1.45+	60	5.7	2	16.8	3	11.1	22	9	3	14	16500	400	0.8	2.0	0	82	18	27	TR			
21/5	Pit	1.45	60	5.4	2	16.2	3	10.9	21	9	2	11	16500	280	0.7	1.8	0	82	18	27	TR			
	3464	1.45	60	5.7	2	16.0	3	10.9	19	8	2	10	16500	320	0.65	1.7	0	82	18	27	TR			
22/5	Pit	1.45	58	5.8	2	16.8	3	10.9	19	8	1	11	16500	300	0.6	1.7	0	81	19	27	TR			
	Pit	1.45	57	5.0	2	16.0	3	10.9	19	8	2	11	17000	340	0.6	1.8	0	82	18	27	TR			
23/5	3233	1.45	61	4.9	2	16.6	3	10.9	20	8	1	11	17000	320	0.7	1.8	0	82	18	27	TR			
	3464	1.50	60	5.3	2	16.2	3	10.9	21	10	2	12	16500	380	0.65	1.7	0	80	20	24	TR			
24/5	3464	1.50	63	5.0	2	15.4	3	10.8	23	10	3	14	16000	400	0.6	1.7	0	80	20	27	TR			
	Pit	1.51	65	4.5	2	15.6	3	10.8	24	9	2	13	16000	400	0.6	1.6	0	80	20	27	TR			
25/5	Pit	1.50	66	5.0	2	16.4	3	11.4	24	10	3	17	16500	560	1.0	2.5	0	80	20	27	TR			
	2998	1.60	68	5.2	2	19.0	3	11.0	27	11	3	20	16500	400	1.2	2.8	0	77	23	24	TR			
26/5	Pit	1.60	63	5.4	2	-	-	11.7	26	10	3	22	16500	400	1.4	3.0	0	77	23	24	TR			

**NORSK PETROLEUM SERVICES A/S**

c/o Dolphin Services A/S  
4056 Tanaiger, Norway. Telephone 04-696524. Telex 33235

WELL NAME: 34/10-17

STATOIL Deep Sea Bergen

MUD PROPERTY RECAP

DATE	DEPTH feet metres	DENSITY PPG/- Spct/- SG	VISC- OSITY secs	FILTRATE			HYHP IIII		pH	RHEOLOGY				FILTRATE ANALYSIS					RETORT ANALYSIS			C E C			OTHER				
				Cake 1"/mm	200° ccs	500psi 32"/mm	PV cp	YP lbs/100ft <sup>2</sup> -gms/cm <sup>2</sup>		10" 10'	10' 100	Cl mg/litre	Ca ppm	PI	MI	Pm	Oil %	Water %	Carr. Solids %	PPB Bent. Eq.	Sand %	Garrett Gas train iron H <sub>2</sub> S							
26/5	Pit 2998	1.60	68	4.8	1	15.0	3	11.8	26	10	2	15	16000	320	1.6	3.4						0	77.5	22.5	26	TR			
	Pit 2998	1.60	68	5.2	1	17.8	3	11.9	26	10	3	16	16000	350	1.6	3.3						0	77.5	22.5	26	TR			
27/5	Pit 2998	1.60	67	4.8	1	16.8	4	11.9	25	10	2	14	16000	320	1.6	3.4						0	78	22	25	TR			
	In 2895	1.60	63	5.2	1			11.8	24	10	2	14	16000																
	In 2907	1.60	63	5.0	1	16.6	4	11.9	24	10	2	13	16000	320	1.6	3.5						0	78	22	25	TR			
28/5	In 2933	1.60	57	5.1	1			11.8	24	9	2	10	16000	120	1.9	3.7						0	78	22	25	1/4			
	In 2998	1.60	58	5.1	1	17.6	3	11.9	24	9	2	10	16000	200	1.95	3.75						0	78	22	25	1/3			
	Pit 2998	1.60	61	4.8	1	16.6	3	11.9	24	9	2	11	16000	200	2.1	4.1						0	78	22	25	1/4			
29/5	Pit 2998	1.60	60	4.9	1			11.9	24	9	2	11	16000	200	2.1	4.1						0	78	22	25	1/4			
	Pit 2998	1.60	59	4.8	1	16.4	4	11.9	24	9	2	13	16000	180	2.0	4.0						0	78	22	25	1/4			
30/5	Pit 2998	1.60	59	4.9	1			11.9	24	9	2	12	16000	200	1.9	3.9						0	78	22	25	1/4			
31/5	Pit 2998	1.60	64	5.0	1	16.8	3	11.8	26	10	2	14	16000	300	1.55	3.4						0	78	22	24	1/4			
	In 2998	1.60	65	5.0	1			11.8	26	10	2	15	16000																
	In 2998	1.60	67	5.1	1			11.9	26	10	2	13	16000	280	1.7	3.7						0	78	22	24	1/4			
	Pit 2998	1.60	66	5.5	1	17.6	3	11.8	25	10	2	11	16000	240	1.75	3.9						0	78	22	24	1/4			
1/6	Pit 2998	1.60	65	5.6	1			11.8	24	10	2	10	16200	240	1.7	3.6						0	78	22	24	1/4			
	Nb 4 2998	1.60	65	5.1	1	16.8	3	11.8	24	9	2	9	17000	280	1.55	3.2						0	78	22	23	1/4			
2/6	Pit 2998	1.60	63	5.5	1			11.7	26	9	2	13	16000	200	1.45	3.0						0	78	22	23	1/4			
3/6	In 2998	1.60	66	5.0	1	16.6	3	11.8	26	10	2	13	17000	180	1.4	3.1						0	78	22	23	1/4			

**NORSK PETROLEUM SERVICES A/S**

c/o Dolphin Services A/S  
4056 Tananger, Norway. Telephone 04-696524. Telex 33235

WELL NAME: 34/10-17

STATOIL Deep Sea Bergen

MUD PROPERTY RECAP

DATE	DEPTH feet metres	DENSITY PPG/ Spcl/ SG	VISC- OSITY secs	FILTRATE		HY/HP IIII		pH	RHEOLOGY				FILTRATE ANALYSIS					RETORT ANALYSIS			CEC PPB Bent. Eq.	OTHER			
				ccs	Cake 1" 32/mm	200° 500psi ccs	14" 32/mm		PV cp	YP lbs/100ft <sup>2</sup> - gms/cm <sup>2</sup>	10" mg/litre	10' mg/litre	Cl	Ca	PI	MI	Pm	Oil %	Water %	Corr- Solids %		Sand %	G.G.T ppm H <sub>2</sub> S		
																								ccs	ccs
3/6	2998	1.60	67	5.1	1			11.8	26	10	2	13	17000	180	1.4	3.1		0	78	22	23	1/4			
4/6	2924	1.60	66	5.2	1	18.2	4	11.8	25	10	2	12	17000	200	1.35	2.95		0	78	22	23	1/4			
	2924	1.60	66	5.0	1			11.7	25	10	2	12													
5/6	2878	1.60	66	5.0	1	18.0	4	11.8	25	10	2	13	17000	200	1.3	2.9		0	78	22	23	1/4			
	2878	1.60	68	5.5	1			11.7	24	10	2	13	17000	200	1.3	2.6		0	78	22	24	1/4			
6/6	2924	1.60	68	5.4	1	18.8	4	11.8	27	11	2	15	17000	160	1.4	2.9		0	78	22	23	1/4			
	2924	1.60	67	5.5	1			11.8	26	10	2	13													
	2924	1.60	68	5.7	1	19.0	4	11.8	27	10	3	16	17000	180	1.4	2.9		0	78	22	23	1/4			
7/6	2924	1.60	70	5.7	1			11.8	27	10	3	14													
	2924	1.60	71	5.7	1	19.2	4	11.8	27	10	3	14	17000	200	1.4	2.9		0	78	22	23	1/4			
8/6	2924	1.60	71	5.7	1			11.7	26	10	3	14	17000	200	1.4	2.9		0	78	22	23	1/4			
	2924	1.60	64	5.7	1	19.2	4	11.6	27	10	3	13	17000	200	1.3	2.6		0	78	22	24	1/3			
9/6	2924	1.60	68	6.3	2			11.5	26	11	3	17	17000	280	1.5	2.6		0	78	22	24	TR			
10/6	2870	1.60	67	6.1	2			11.4	26	10	2	14	16500	320	1.4	2.7		0	78	22	24	TR			
	Pit	1.60	68	6.1	2			11.6	27	11	3	18	17000	300	1.0	2.3		0	78	22	24	TR			
11/6	Pit	1.60	63	6.3	2			11.5	25	9	2	14	17500	320	1.3	2.6		0	78	22	24	TR			
	Pit	1.55	49	6.3	2			11.4	19	6	1	6	16000	280	.8	1.7		0	79	21	21	TR			
12/6	Pit	1.60	64	6.5	2			11.2	20	9	2	8	16500	300	.7	1.4		0	78	22	21	TR			
	Pit	1.60	61	6.2	2			11.2	23	12	3	16	16000	300	.7	1.6		0	78	22	21	TR			

**MUD PROPERTY RECAP**

DATE	DEPTH feet metres	DENSITY PPG/ Spcl/ SG	VISC- OSITY secs	FILTRATE ccs	HY/HP IIII		pH	RHEOLOGY				FILTRATE ANALYSIS					RETORT ANALYSIS			CEC		OTHER															
					Cake 32/min	°500psi		PV cp	YP lbs/100ft <sup>2</sup> -gms/cm <sup>2</sup>	10" 186	10' cm <sup>2</sup>	Cl mg/litre	Ca ppm	Pl	Ml	Pm	Oil %	Water %	Corr. Solids %	PPB Bent. Eq.	SD %																
						ccs																1"/min															
13/6	Pit	1.60	62	6.3	2			11.2	23	13	3	18	16000	300	.7	1.6	0	78	22	21	TR																
	Pit	1.60	63	6.1	2			10.9	24	13	3	20	17000	320	.7	1.7	0	78	22	21	TR																
14/6	Pit	1.60	64	6.3	2			10.9	25	12	3	22	17000	320	.7	1.7	0	78	22	21	TR																
15/6	Pit	1.60	65	6.0	2			10.8	25	12	4	18	17000	320	.65	1.6	0	78	22	N.C.	TR																
16/6	Pit	1.60	68	6.0	2			11.0	25	13	3	18	17000	340	.75	1.8	0	78	22	N.C.	TR																
17/6			NO	CHECK																																	
18/6	360	1.60	65	6.1	2			10.9	24	12	3	17	17000	340	.8	1.7	0	78	22	N.C.	TR																
	2386	1.60	57	6.6	2			11.3	21	11	2	17	17500	340	.8	1.7	0	79	21	21	TR																
19/6	Pit	1.60	51	8.7	2			11.7	21	9	2	28	16500	500	1.6	2.6	0	79	21		TR																
	2870	1.60	50	7.2	2			11.8	22	12	3	30	17000	400	1.6	2.6	0	78	22	21	TR																
20/6	2845	1.60	60	6.8	2			11.8	28	11	3	26	17500	280	1.5	2.6	0	78	22		TR																
	2845	1.60	57	6.5	2			11.8	24	10	3	24	17000	260	1.5	2.6	0	78	22	21	TR																
21/6	Pit	1.60	64	6.4	2			12.0	26	12	4	30	17000	300	1.9	3.3	0	78	22		TR																
	Pit	1.60	65	6.3	2			11.9	30	12	4	35	17000	280	1.7	2.8	0	78	22	21	TR																
22/6	Pit	1.60	75	6.5	2			12.0	31	13	3	32	17000	300	1.8	3.0	0	78	22	20	TR																
	Pit	1.60	68	6.8	2			11.7	27	12	3	35	15500	240	1.5	2.5	0	79	21	18	TR																
23/6	Pit	1.60	66	6.9	2			11.8	27	11	3	30	15500	240	1.45	2.5	0	79	21	18	TR																
	Pit	1.60	61	7.3	2			11.7	26	15	3	30	15500	240	1.5	3.0	0	79	21	18	TR																
24/6	Pit	1.60	57	7.7	2			11.8	24	11	3	24	15500	280	1.5	3.1	0	79	21	18	TR																

**MUD PROPERTY RECAP**

DATE	DEPTH feet metres	DENSITY PPG/ Spcl/ SG	VISC. OSITY secs	FILTRATE		HY/HP IIII		pH	RHEOLOGY				FILTRATE ANALYSIS					RETORT ANALYSIS			CEC PPB Bent. Eq.	OTHER		
				ccs	Cake 1" / 32" /min	200° ccs	500psi 1" / 32" /min		PV cp	YP lbs/100ft <sup>2</sup>	10" -gms/100 cm <sup>2</sup>	10' mg/100cc	CI ppm	Ca	PI	MI	Pm	Oil %	Water %	Corr. Solids %		SD %		
																							SD	
	Pit	1.60	59	7.1	2			11.8	25	11	3	25	15500	260	1.3	2.5		0	79	21	18	TR		
25/6	Pit	1.60	58	7.2	2			11.8	24	10	3	24	15500	260	1.3	2.5		0	79	21	18	TR		
	Pit	1.60	61	7.4	2			11.8	24	11	3	24	15500	260	1.3	2.5		0	79	21	18	TR		
26/6	Pit	1.60	62	7.1	2			11.8	25	12	3	26	15500	280	1.3	2.6		0	79	21	18	TR		
	Pit	1.60	62	7.0	2			11.8	29	11	3	26	16000	280	1.7	3.6		0	79	21	17.5	TR		
27/6	Pit	1.60	62	6.9	2			11.8	26	14	4	31	16500	280	1.5	3.3		0	79.5	20.5	17.5	TR		
	Pit	1.60	62	7.0	2			11.8	26	13	4	32	16500	280	1.5	3.3		0	79	21	17.5	TR		
28/6	Pit	1.60	62	7.0	2			11.8	26	13	4	34	16500	280	1.5	3.4		0	79	21	17.5	TR		
	Pit	1.60	62	7.0	2			11.8	27	12	3	30	16000	280	1.5	3.2		0	79	21	17.5	TR		
29/6	Pit	1.60	65	7.0	2			11.8	26	13	4	32	16500	280	1.5	3.2		0	79	21	17.5	TR		
	Pit	1.60	59	6.9	2			11.8	24	12	4	30	16500	260	1.5	3.0		0	79	21	17.5	TR		
30/6	Pit	1.60	69	6.8	2			11.8	27	14	5	32	17000	240	1.4	2.8		0	79	21	17.5	TR		
	Pit	1.60	65	6.8	2			11.8	26	13	3	30	17000	240	1.4	2.7		0	79	21	17.5	TR		
1/7	Pit	1.60	66	6.9	2			11.8	26	12	3	30	17000	240	1.4	2.6		0	79	21	17.5	TR		
	Pit	1.60	63	6.8	2			11.8	26	13	4	34	17000	320	1.35	2.4		0	79	21	17.5	TR		
2/7	Pit	1.60	59	7.2	2			11.8	25	13	5	36	17000	360	1.1	2.2		0	78.5	20.5	15	TR		
	Pit	1.60	63	7.3	2			11.8	25	13	3	30	17000	380	1.4	3.0		0	79	21	15	TR		
3/7	Pit	1.60	63	6.8	2			11.8	25	13	3	32	17000	380	1.35	3.0		0	79	21	15	TR		
	Pit	1.60	63	6.9	2			11.8	26	13	3	32	17000	360	1.35	3.0		0	79	21	15	TR		

**WELL NAME:** 34/10-17 **STATOIL** Deep Sea Bergen.

**MUD PROPERTY RECAP**

DATE	DEPTH feet metres	DENSITY EPG/ Spct/ SG	VISC- OSITY secs	FILTRATE		HY/HP IIII		pH	RHEOLOGY				FILTRATE ANALYSIS					RETORT ANALYSIS			CEC		OTHER														
				Cake 1"/32" ccs	2"/32" ccs	500psi ccs	1"/32" ccs		PV cp	YP lbs/100R <sup>2</sup> -gms/cm <sup>2</sup>	10" 3	10' 30	Cl mg/litre	Ca ppm	PI	MI	Pm	Oil %	Water %	Corr. Solids %	PPB Bent. Eq.	SD %															
4/7	Pit	1.60	58	6.9	2			11.8	24	11	3	30	17000	360	1.35	3.0					0	79	21	15	TR												
	Pit	1.60	58	6.8	2			11.8	24	11	3	30	17000	360	1.35	3.0					0	79	21	15	TR												
5/7	Pit	1.60	55	6.7	2			11.8	23	13	3	28	17000	340	1.35	3.0					0	79	21	15	TR												





## VI TESTING OPERATIONS AND RESULTS

### 1. FMT (Formation Multi Tester)

Two FMT runs were completed in well 34/10-17:

Run no. 1: 34 pressure tests including 2 sets of segregated samples, all in the Brent formation.

Run no. 2: 2 pressure tests in the Cook formation and 3 tests in the Statfjord formation.

A table showing all the test results and a plot of reservoir pressure vs depth are enclosed.

Well 34/10-17

FMT DATA

Run no. 1

Formation BRENT

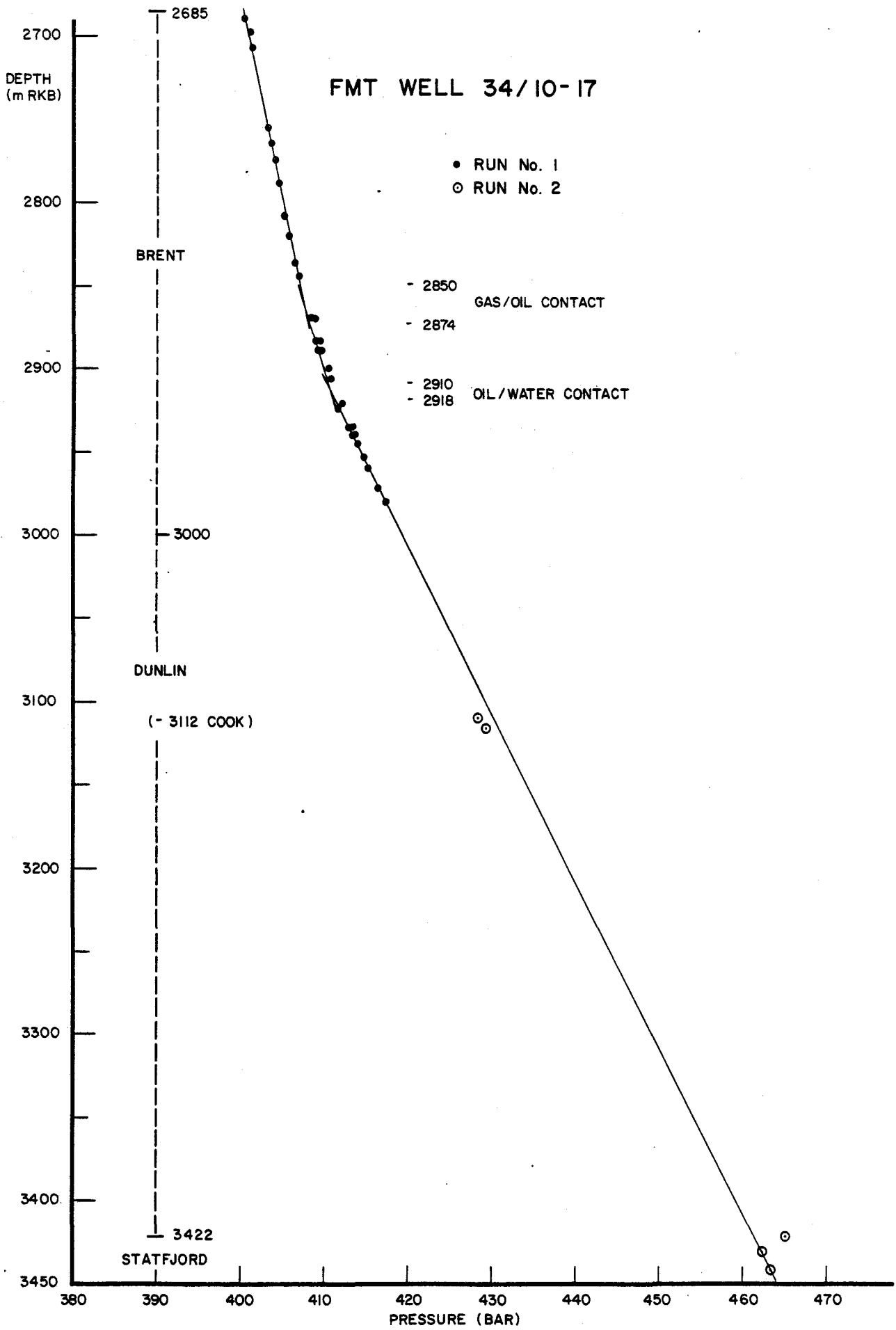
Test no	Depth mRKB	Cor hydr.pr. before test bar	Cor.hydr.pr. before test (g/cc)	Cor.formation pres. bar	Cor.formation pres. (g/cc)	Cor.hydr.pr. after test bar	Cor.hydr.pr. after test (g/cc)	Remarks
1	2688	426.08	1.614	400.56	1.518	426.01	1.614	
2	2697	427.59	1.615	400.98	1.514	427.45	1.614	
3	2707	429.25	1.615	401.32	1.510	428.97	1.614	
4	2755.5	436.69	1.614	403.39	1.491	436.56	1.614	
5	2764	438.00	1.614	403.67	1.487	437.87	1.614	
6	2775	439.66	1.614	404.01	1.483	439.59	1.614	
7	2789	442.14	1.615	404.63	1.478	441.86	1.614	
8	2808	444.90	1.614	405.46	1.471	444.90	1.614	
9	2820	447.10	1.615	405.94	1.466	446.83	1.614	
10	2836	449.31	1.614	406.63	1.460	449.31	1.614	
11	2844	450.69	1.614	407.05	1.458	450.76	1.615	
12	2869	454.83	1.615	408.49	1.450	454.83	1.615	
13	2883	456.96	1.615	408.98	1.445	456.55	1.613	
14	2889	457.31	1.613	409.11	1.442	457.31	1.613	
15	2924	462.76	1.612	411.73	1.434	462.82	0.612	
16	2935	464.55	1.612	412.84	1.433	464.62	1.613	
17	2940	465.38	1.613	413.87	1.434	465.51	1.613	
18	2945	466.20	1.613	414.08	1.432	466.69	1.614	
19	2945	466.20	1.613	414.01	1.432	466.55	1.614	Repeat of test no. 18
20	2940	465.51	1.613	413.46	1.432	465.51	1.613	Repeat of test no. 17

Well 34/10-17	FMT DATA	Run no. 1
Formation BRENT.		

Test no	Depth mRKB	Cor hydr. pr. before test bar	Cor. hydr. pr. before test (g/cc)	Cor. formation pres. bar	Cor. formation pres. (g/cc)	Cor. hydr. pr. after test bar	Cor. hydr. pr. after test (g/cc)	Remarks	
21	2953	467.79	1.614	414.77	1.430	467.58	1.613		
22	2959	468.55	1.613	415.32	1.430	468.48	1.613		
23	2971	470.62	1.614	416.49	1.428	470.41	1.613		
24	2980	471.93	1.613	417.39	1.427	471.86	1.613		
25	2869	455.65	1.618	409.04	1.452	455.52	1.617	New series through oil zone.	
26	2883	457.65	1.617	409.73	1.447	457.72	1.617		
27	2889	458.27	1.616	409.94	1.445	458.20	1.616		
28	2900	460.07	1.616	410.49	1.442	459.86	1.615		
29	2906	460.82	1.615	410.84	1.440	460.76	1.615		
30	2921.5	463.44	1.616	412.15	1.437	463.10	1.615		
31	2921.5	463.10	1.615	412.15	1.437	463.10	1.615		Repeat of test no.30.
32	2935	465.65	1.616	413.46	1.435	465.31	1.615		
33	2889	458.27	1.616	409.94	1.445	458.89	1.618		Sample no.1.
34	2697	427.94	1.616	401.32	1.515	428.21	1.617		Sample no.2.

Well 34/10-17	FMT DATA	Run no. 2
Formation COOK/ STATEJ.		

Test no	Depth mRKB	Cor hydr. pr. before test bar	Cor. hydr. pr. before test (g/cc)	Cor. formation pres. bar	Cor. formation pres. (g/cc)	Cor. hydr. pr. after test bar	Cor. hydr. pr. after test (g/cc)	Remarks
1	3110	444.55	1.456	428.49	1.403	444.62	1.456	
2	3116	445.45	1.456	429.45	1.404	445.45	1.456	
3	3422.5	487.16	1.450	465.24	1.385	487.92	1.452	Tight, tool unstable
4	3431	488.96	1.452	462.55	1.373	488.96	1.452	
5	3442	490.33	1.451	463.58	1.372	490.27	1.451	Tool drifting



34/10-17 SUMMARY OF TEST PERFORMANCE

DST no.	FORM.	PERFS. mRKB	OPER.	DURATION mins	CHOKE 1/64"	BHP bar	OIL RATE Sm <sup>3</sup> /D	GAS RATE 10 <sup>3</sup> Sm <sup>3</sup> /D	GOR Sm <sup>3</sup> /Sm <sup>3</sup>	WATER RATE Sm <sup>3</sup> /D	OIL GRAV. g/cc	GAS GRAV Air=1
1	Etive/ Rannoch	2934- 2944	INITIAL FLOW	2.5	48	352						
			INITIAL SHUT IN	65		409						
			SECOND FLOW	511	40	363	0	0		1024		
			SECOND SHUT IN	652		409						
2	Ness	2880- 2890	INITIAL FLOW	5	32	398						
			INITIAL SHUT IN	66		407						
			SECOND FLOW	352	48	400	782	192	245	0	0.85	0.74
			SECOND SHUT IN	370		407						
			THIRD FLOW	478	28	403	545	134	246	0	0.85	0.74
			THIRD SHUT IN	475		407						
			BTM HOLE SAMPLING		8	406						

DST no.	FORM.	PERFS. mRKB	OPER.	DURATION mins	CHOKE 1/64"	BHP bar	OIL RATE Sm <sup>3</sup> /D	GAS RATE 10 <sup>3</sup> Sm <sup>3</sup> /D	GOR Sm <sup>3</sup> /Sm <sup>3</sup>	WATER RATE Sm <sup>3</sup> /D	OIL GRAV g/cc	GAS GRAV Air=1
3	Ness	2835- 2845	INITIAL FLOW	4	32	399						
			INITIAL SHUT IN	68		404						
			SECOND FLOW	495	48	399	734	530	722	0	0.80	0.72
			SECOND SHUT IN	473		404						
			THIRD FLOW	427	32	401	452	364	805	0	0.78	0.72
			THIRD SHUT IN	409		404						
4	Ness	2754 -57 + 2763 -65 + 2767.5 -71.5 + 2773 -77 + 2784.5 -90.5	INITIAL FLOW	2	32	391						
			INITIAL SHUT IN	61		400						
			SECOND FLOW	546	48	395	501	653	1303	0	0.76	0.71
			SECOND SHUT IN	533		401						
			THIRD FLOW	453	32	398	320	428	1338	0	0.76	0.71
			THIRD SHUT IN	442		401						