



WELL SUMMARY

B.P., 2/1-4

SECTION 6

M A T E R I A L C O N S U M P T I O N

A N D

C O S T S B Y I N T E R V A L



MATERIAL CONSUMPTION BY INTERVAL

B.P., 2/1-4

Depth: 154 - 171 meters.

36" Hole - 30" CSG, "A" spud

<u>PRODUCT</u>	<u>UNIT SIZE</u>	<u>UNIT COST</u>	<u>COST</u>
Barite	19 M.T.	\$ 118.00	\$ 2,242.00
Bentonite	34 M.T.	\$ 290.00	\$ 9,860.00
Caustic Soda	33 25 kg/sx	\$ 16.30	\$ 537.90
Soda Ash	23 50 kg/sx	\$ 18.04	\$ 414.92
Lime	7 50 kg/sx	\$ 7.38	\$ 51.66
			<u>\$ 13,106.48</u>

Total Cost: \$ 13,106.48

Per meter: \$ 770.97

Meters drilled: 17m



MATERIAL CONSUMPTION BY INTERVAL

B.P., 2/1-4

Depth: 91.25 - 171 meters

36" Hole - 30" CSG, "B" spud

<u>PRODUCT</u>	<u>UNIT SIZE</u>	<u>UNIT COST</u>	<u>COST</u>
Barite	11 M.T.	\$ 118.00	\$ 1,298.00
Bentonite	8 M.T.	\$ 290.00	\$ 2,320.00
Caustic Soda	7 25 kg/sx	\$ 16.30	\$ 114.10
Soda Ash	3 50 kg/sx	\$ 18.04	\$ 54.12
Lime	12 50 kg/sx	\$ 7.38	\$ 88.56
			<hr/>
			\$ 3,874.78
			<hr/>

Total cost: \$ 3,874.78

Per meter: \$ 48.59

Meters drilled: 79.75m



MATERIAL CONSUMPTION BY INTERVAL

B.P., 2/1-4

Depth: 91.00 - 171 meters

36" Hole - 30" CSG, "C" spud

<u>PRODUCT</u>	<u>UNIT SIZE</u>	<u>UNIT COST</u>	<u>COST</u>
Bentonite	8 M.T.	\$ 290.00	\$ 2,320.00
Caustic Soda	6 25 kg/sx	\$ 16.30	\$ 97.80
			<u>\$ 2,417.80</u>

Materials used for cementation:

Barite	4 M.T.	\$ 118.00	<u>\$ 472.00</u>
--------	--------	-----------	------------------

Total cost: \$ 2,417.80

Per meter: \$ 30.22

Meters drilled: 80.00m



MATERIAL CONSUMPTION BY INTERVAL

B.P., 2/1-4

Depth: 171 to 633 meters

24" Hole - 18-5/8" CSG

<u>PRODUCT</u>	<u>UNIT SIZE</u>	<u>UNIT COST</u>	<u>COST</u>
Barite	45 M.T.	\$ 118.00	\$ 5,310.00
Bentonite	27 M.T.	\$ 290.00	\$ 7,830.00
Caustic Soda	14 25 kg/sx	\$ 16.30	\$ 228.20
Soda Ash	6 50 kg/sx	\$ 18.04	\$ 108.24
Lime	8 50 kg/sx	\$ 7.38	\$ 59.04
Mica Fine	2 25 kg/SX	\$ 17.44	\$ 34.88
Drispac	1 25 kg/sx	\$ 172.71	\$ 172.71
			<u>\$ 13,743.07</u>

Total cost: \$ 13,743.07

Per meter: \$ 29.75

Meters drilled: 462m



MATERIAL CONSUMPTION BY INTERVAL

B.P., 2/1-4

Depth: 626m - 2006m

17½" Hole, 13-3/8" Csg.

<u>PRODUCT</u>	<u>UNIT SIZE</u>	<u>UNIT COST</u>	<u>COST</u>
Barite	745 M/T	\$ 118.00	\$ 88,972.00
Bentonite	39 M/T	\$ 290.00	\$ 11,310.00
Caustic Soda	147 25 kg/sx	\$ 16.30	\$ 2,396.10
Soda Ash	13 50 kg/sx	\$ 18.04	\$ 234.52
Gypsum	973 40 kg/sx	\$ 7.50	\$ 7,297.50
Spersene	143 25 kg/sx	\$ 16.10	\$ 2,302.30
CMC L.V.	352 25 kg/sx	\$ 48.50	\$ 17,072.00
CMC H.V.	170 25 kg/sx	\$ 53.30	\$ 9,061.00
Drilling Detergent	7 25 kg/sx	\$ 652.00	\$ 4,564.00
Drispac	5 25 kg/sx	\$ 172.71	\$ 863.55
			<u>\$ 144,072.97</u>

Total Cost: \$ 144,072.97

Per Meter: \$ 104.33

Meters Drilled 1381m



MATERIAL CONSUMPTION BY INTERVAL

B.P., 2/1-4

Depth: 1997m - 3793m

12-1/4" Hole, 9-5/8" Csg.

<u>PRODUCT</u>	<u>UNIT SIZE</u>	<u>UNIT COST</u>	<u>COST</u>
Barite	840 M/T	\$ 118.00	\$ 99,120.00
Bentonite	30 M/T	\$ 290.00	\$ 8,700.00
Caustic	529 50 kg/sx	\$ 16.30	\$ 8,622.70
Gypsum	580 40 kg/sx	\$ 7.50	\$ 4,350.00
Spersene	1095 25 kg/sx	\$ 16.10	\$ 17,629.50
CMC H.V.	36 25 kg/sx	\$ 53.30	\$ 1,918.80
CMC L.V.	187 25 kg/sx	\$ 48.50	\$ 9,069.50
Drilling Detergent	7 55 gal/dr	\$ 652.00	\$ 4,564.00
XP-20	327 25 kg/sx	\$ 25.84	\$ 8,449.68
Resinex	90 25 kg/sx	\$ 61.32	\$ 5,518.80
Nut Plug	45 30 kg/sx	\$ 19.17	\$ 862.65
Coarse Mica	32 30 kg/sx	\$ 17.44	\$ 558.08
			<u>\$ 169,363.71</u>

Total Cost: \$ 169,363.71

Per Meter: \$ 94.30

Meters Drilled: 1796m



MATERIAL CONSUMPTION BY INTERVAL

B.P., 2/1-4

Depth: 3785m - 4525m

8½" Hole, 7" Liner

<u>PRODUCT</u>	<u>UNIT SIZE</u>	<u>UNIT COST</u>	<u>COST</u>
Barite	661 M/T	\$ 118.00	\$ 77,998.00
Bentonite	44.5 M/T	\$ 290.00	\$ 12,905.00
Caustic Soda	414 50 kg/sx	\$ 16.30	\$ 6,748.20
Gypsum	61 40 kg/sx	\$ 7.50	\$ 457.50
Spersene	642 25 kg/sx	\$ 16.10	\$ 10,336.20
Soda Ash	2 50 kg/sx	\$ 18.04	\$ 36.08
Lime	12 50 kg/sx	\$ 7.38	\$ 88.56
Magcolube	11 55 gal/dr	\$ 924.10	\$ 10,165.10
Magconol	4 55 gal/dr	\$ 900.00	\$ 3,600.00
Drispac	30 25 kg/sx	\$ 172.71	\$ 5,181.30
XP-20	273 25 kg/sx	\$ 25.84	\$ 7,054.32
Resinex	368 25 kg/sx	\$ 61.32	\$ 22,565.76
Oilfaze	84 50 kg/sx	\$ 62.82	\$ 5,276.88
Pipelax	3 55 gal/dr	\$ 1089.00	\$ 3,267.00
			<u>\$ 165,679.90</u>

Total Cost: \$ 165,679.90

Per Meter: \$ 223.89

Meters Drilled: 740m



MATERIAL CONSUMPTION BY INTERVAL

B.P., 2/1-4

Testing

<u>PRODUCT</u>	<u>UNIT SIZE</u>	<u>UNIT COST</u>	<u>COST</u>
Barite	45 M/T	\$ 118.00	\$ 5,310.00
Bentonite	6 M/T	\$ 290.00	\$ 1,740.00
Caustic Soda	23 50 kg/sx	\$ 16.30	\$ 374.90
Spersene	12 25 kg/sx	\$ 16.10	\$ 193.20
Drispac	18 25 kg/sx	\$ 172.71	\$ 3,108.78
XP-20	28 25 kg/sx	\$ 25.84	\$ 723.52
			<u>\$ 11,450.40</u>



WELL SUMMARY

B.P., 2/1-4

SECTION 7

TOTAL CONSUMPTION AND COSTS



WELL SUMMARY

B.P., 2/1-4

TOTAL CONSUMPTION & COST

<u>PRODUCT</u>	<u>UNIT SIZE</u>	<u>UNIT COST</u>	<u>COST</u>
Barite	2366 M/T	\$ 118.00	\$ 279,188.00
Bentonite	196.5 M/T	\$ 290.00	\$ 56,985.00
Caustic Soda	1173 50 kg/sx	\$ 16.30	\$ 19,339.90
Gypsum	1614 40 kg/sx	\$ 7.50	\$ 12,105.00
Såersene	1892 25 kg/sx	\$ 16.10	\$ 30,461.20
Soda Ash	47 50 kg/sx	\$ 18.04	\$ 847.88
Lime	39 50 kg/sx	\$ 7.38	\$ 287.82
Magcolube	11 55 gal/dr	\$ 924.10	\$ 10,166.10
Magconol	4 55 gal/dr	\$ 900.00	\$ 3,600.00
Drispac	54 25 kg/sx	\$ 172.71	\$ 9,326.34
XP-20	628 25 kg/sx	\$ 25.84	\$ 16,227.52
Resinex	458 25 kg/sx	\$ 61.32	\$ 28,084.56
Oilfaze	84 50 kg/sx	\$ 62.82	\$ 5,276.88
Pipelax	3 55 gal/dr	\$ 1089.00	\$ 3,267.00
CMC H.V.	206 25 kg/sx	\$ 53.30	\$ 10,979.80
CMC L.V.	539 25 kg/sx	\$ 48.50	\$ 26,141.50
Drilling Detergent	14 55 gal/dr	\$ 652.00	\$ 9,128.00
Nut Plug	45 30 kg/sx	\$ 19.17	\$ 862.65
Coarse Mica	32 30 kg/sx	\$ 17.44	\$ 558.08
Fine Mica	2 30 kg/sx	\$ 17.44	\$ 34.88
		Total Cost:	<u>\$ 522,647.11</u>



WELL SUMMARY

B.P., 2/1-4

SECTION 8

RECONCILIATION OF COSTS



WELL SUMMARY

B.P., 2/1-4

TOTAL MATERIAL CONSUMPTION

PROGRAMMED CONSUMPTION VS. ACTUAL (PROGRAMMED COST)

PRODUCT	PROGRAMMED CONSUMPTION	ACTUAL CONSUMPTION	DIFFERENCE	\$ COST	TOTAL COST \$
Barite	1562	2366	804	141.96	114,135.84
Bentonite	112	196.5	84.5	353.78	29,894.41
Caustic Soda	1040	1173	133	21.41	2,847.53
Gypsum	940	1614	674	10.39	7,002.86
Spersene	2430	1892	-538	19.56	-10,523.28
Soda Ash	60	47	- 13	21.73	- 282.49
Lime	60	39	- 21	4.35	- 91.35
Magcolube	0	11	11	924.10	10,165.10
Magconol	0	4	4	900.00	3,600.00
Drispac	0	54	54	172.71	9,325.34
XP-20	570	628	58	31.85	1,847.30
Rssinex	356	458	102	75.54	7,705.08
Oilfaze	0	84	84	62.82	5,276.88
Pipe Iax	0	3	3	1089.00	3,267.00
CMC H.V.	60	206	146	66.78	9,749.88
CMC L.V.	440	539	99	64.24	6,359.76
D.Detergent	0	14	14	652.00	9,128.00
Nut Plug	0	45	45	19.17	862.65
Coarse Mica	0	32	32	17.44	558.08
Fine Mica	0	2	2	17.44	34.88
				Total \$:	210,864.47



WELL SUMMARY

B.P., 2/1-4

TOTAL CONSUMPTION AND PROGRAMMED COST

<u>PRODUCT</u>	<u>UNIT SIZE</u>	<u>UNIT COST</u>	<u>COST</u>
Barite	2366 M/T	\$ 141.96	\$ 335,877.36
Bentonite	196.5 M/T	\$ 353.78	\$ 69,517.77
Caustic Soda	1173 50 kg/sx	\$ 21.41	\$ 25,113.93
Gypsum	1614 40 kg/sx	\$ 10.39	\$ 16,769.46
Spersene	1892 25 kg/sx	\$ 19.56	\$ 37,007.52
Soda Ash	47 50 kg/sx	\$ 21.73	\$ 1,021.31
Lime	39 50 kg/sx	\$ 4.35	\$ 169.65
Magcolube	11 55 gal/dr	\$ 924.10	\$ 10,165.10
Magconol	4 55 gal/dr	\$ 900.00	\$ 3,600.00
Drispac	54 25 kg/sx	\$ 172.71	\$ 9,326.34
XP-20	628 25 kg/sx	\$ 31.85	\$ 20,001.80
Resinex	458 25 kg/sx	\$ 75.54	\$ 34,597.32
Oilfaze	84 50 kg/sx	\$ 62.82	\$ 5,276.88
Pipe Lax	3 55 gal/dr	\$ 1089.00	\$ 3,267.00
CMC H.V.	206 25 kg/sx	\$ 66.78	\$ 13,756.68
CMC L.V.	539 25 kg/sx	\$ 64.24	\$ 34,625.36
Drilling Detergent	14 55 gal/dr	\$ 652.00	\$ 9,128.00
Nut Plug	45 30 kg/sx	\$ 19.17	\$ 862.65
Coarse Mica	32 30 kg/sx	\$ 17.44	\$ 558.08
Fine Mica	2 30 kg/sx	\$ 17.44	\$ 34.88
		Actual total:	\$ 630,670.09
		Est. progr. total:	\$ 419,812.62
		Difference:	\$ 210,864.47
		% Difference:	50.22%



WELL SUMMARY

B.P., 2/1-4

In the course of drilling this hole, some unforeseen problems arose, which necessitated the use of some products which were not specified in our original tender. The products used corrected these problems and can be justified by the saving of rig time which would inevitably be a lot more expensive. These products, problems and costs are outlined below.

Group 1

Oilfaze and Pipelax, were introduced to free stuck pipe at a cost of \$ 8,543.88.

Group 2

Magcolube and Drilling Detergent were introduced to the system to help in slickening up the hole and prevent balling of the string in the 17½" hole and also in the 8½" hole. These products increased our cost by \$ 19,294.10.

Group 3

Barite, Bentonite, Caustic, XP-20, Resinex, CMC H.V., CMC L.V. and Gypsum were used in the additional volume of mud which was required to maintain a low solids system, and by excessive mud losses while drilling gumbo, and other incidental losses such as leaking valves, bell nipple and excessive losses from De-silter whenever it was utilized.

Mud volume programmed	=	17,542	BBLs
Actual Mud Volume	=	<u>22,343</u>	<u>BBLs</u>
Difference	=	<u>4,801</u>	<u>BBLs</u>

This resulted in an excess cost of \$ 179,542.66.

cont'd....



WELL SUMMARY

Note: Excess Barite was used in controlling pressure when kick was taken at 13-3/8" casing interval.

Excess Gyp was used due to the solubility of the drilled clays.

Group 4

Magconol, Drispac, Nut Plug and Mica.

Magconol being used as a de-foamer and Drispac used whenever more lifting capacity was required. L.C. Materilas were mostly breakages or used on floor. Costing \$ 14,381.95.

It should also be noted that the original program was to drill to 4265m, where as the actual TD was 4525m, 260m deeper. Also no account was made for the testing of this hole in the original mud program.

In the drilling of the final 300m of 8½" hole the mud returns tended to be continually flocculated and necessitated heavy dispersion. This was caused by stringers of Hailite and possible Carnalite which has the most contaminating effect of all salts, on this particular mud system. The only option to counteract this contamination would have been to change to a saturated salt system, which would in turn have cost more.

Other factors effecting the costs were:

1. Cement contaminated mud due to bulk failure.
2. Lower fluid loss while coring.
3. Conditioning after circulating in salt.
4. Defoamer used by Dowell.
5. Water accidentally added at Degasser.
6. Drilling 24" hole with 1.10 sg instead of 1.06 as programmed.
7. Sweco units requiring maintenance necessitating shutting down for long periods.
8. Losses while killing kick.
9. 832 bbls fine solids mud ditched prior to drilling 8½" hole.



WELL SUMMARY

B.P., 2/1-4

SECTION 9

DAILY MATERIALS CONSUMPTION

DAILY MATERIALS CONSUMPTION

WELL B.P. Norway, 2/1-4

PAGE 1

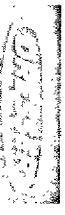
DATE 1982	DEPTH Meters	Barite	Gel	Caustic	Gyp	Soda Ash	Lime	Spersene	CMC H.V.	CMC L.V.	Mica Fine	Drispac	B.P. Detergent	Drilling Detergent	DAILY MUD COST U.S. \$	REMARKS
5/4	154	5	25	20		16									8454.64	Spud well.
6/4	171		4	8		4	7								1414.22	TD Att. to stab 36" well w/csq.
7/4	171	14													1652.00	Obstruction at 94 meters.
8/4	171		5	5		3									1585.62	Displace hole w/1.15 mud.
9/4	171														0.00	Misalighed TGB, Att. to retrieve
10/4	141	11					12								1386.56	Move rig, spud well.
11/4	171		8	7		3									2488.22	TD, Disp hole w/hivis mud 1.15 SG
12/4	108														0.00	Move rig, spud well.
13/4	171		8	6											2417.80	TD, run 30" casing.
14/4	165	4													472.00	Cond. + cement 30" casing.
15/4	188														0.00	Tag cmt at 156m, Drill 24" hole
16/4	475		9	3											2658.90	Drill w/seawater + hivis slugs.
17/4	633	20	3	6		1	6								3390.12	TD, run logs.
18/4	625	25	15	5		5	2				2	1			7694.05	Pump hivis mud + Run 18-5/8" CSG
19/4	682	16	9.5	8	93	6			75	40		4			12207.48	Drill out.
20/4	955	20	10	3	110	2			45						8568.48	Drill ahead. Wiper trip. Gumbo.
21/4	1117	31	4.5	4	166	2				80					10189.28	Drill ahead in Gumbo.
22/4	1318	27	2	31	181	1				130					11969.88	Drill ahead. Diluting.
23/4	1475	36	4	22	110	1			15	32		1			9133.85	Drill ahead POOH RIH Drill Gumbo
24/4	1656	91	2	5	160	1		10	30	35					16075.04	Drill ahead. Made wiper trip.
25/4	1840	130		27	60			80						7	22082.10	Drill ahead. Made wiper trip.
26/4	1897	124		2	15				5	5					15286.10	Drl ahead. Trip to retrieve survey
27/4	2006	57		32	33			53		5					8590.90	Drill ahead to TD at 2006m.
28/4	2006	45													5310.00	Logging. Check trip.
29/4	2006	24		7	30					15					3898.60	WOW. Check trip.
30/4	2006	3		3	15					10					1000.40	Ran 13-3/8" casing.
1/5	2006														0.00	Cemented 1st stage 13-3/8" Csg.
2/5	2006	71													8378.00	
3/5	2006	8													944.00	Shut in well. Raise wt t/1.69 open
4/5	2006														0.00	Disp riser w/1.67 mud. Rig movement
5/5	2006	71	7	3											10456.90	Loss of 220 bbls Circ, Cmt 2nd stage

DAILY MATERIALS CONSUMPTION

WELL B.P. Norway, 2/1-4

PAGE 2

DATE 1982	DEPTH Meters	Barite	Gel	Caustic	Gyp	Spersene	CMC H.V.		Magconol	D.D.	XP-20	Resinex	Nut Plug	Mica Course	DAILY MUD COST U.S. \$	REMARKS
6/5	2007	11			37		17	20							3451.60	Run riser, pressure test BOP.
7/5	2095	68				37		30							10074.70	Leak off 1.88, Drill to 2095m.
8/5	2250	33	3	14		115		50							9268.70	Drill ahead - mudstone.
9/5	2394	80		47	35	99		20							13032.50	Heavy Gumbo. Add 380 bbls slurry
10/5	2485	104		20		60				2					14868.00	Add 524 bbls mud to active.
11/5	2539	38		15	50	20									5425.50	Clay-gumbo, dumptin straps.
12/5	2688	41	4	54	6	105		3							8759.20	Dilute w/491 bbl Spersene/Caustic
13/5	2750	33	1	2	75	10		42							6978.77	Overpull at 2311m. 200 bbls slurry to active.
14/5	2918	33		30		72					10				5800.60	Shale cavings after trip.
15/5	3001	35		60	100	3	19								6919.00	Shale cavings on trip.
16/5	3037	42		5	80	30									6120.50	Add 275 bbls new mud to active.
17/5	3087	10		5		20		20							2553.50	Drill ahead, pipe washout.
18/5	3177	23		6	36	18									3371.60	Drill ahead.
19/5	3207	16		7	30	15				5	30				6503.80	Drill ahead. POOH.
20/5	3239	21		28	20	50					50		45	32	6602.13	Charge off L.C. material.
21/5	3264	7				1					1				867.94	Drill ahead. POOH.
22/5	3299	21	6	26	40	68					39				7044.36	RIH. Drill ahead.
23/5	3358	15		27							12				2520.18	Pick up Turbine Assembly.
24/5	3480	15		6											1867.80	Turbo drilling.
25/5	3536	45		30	25	66					30				7824.30	Turbo drill. Ream 2 singles.
26/5	3610	44	2	29		10						30			8245.30	Turbo drill. Tight spots on trips
27/5	3697	17	1	39	12	130					66	60			10499.34	Turbo drill ahead.
28/5	3759	18	10	48		113		1			39				8680.79	Turbo drill. Tight spots.
29/5	3783	21		23	34	50		1			50				5253.40	Work junk basket. Drill ahead. Left part of diamond bit on btm
30/5	3793	17	1			3									2344.30	
31/5	3793	12	2												1996.00	Run logs. Start casing run.
1/6	3785	20		8											2490.40	Land + cement 9-5/8" casing.
2/6	3785		3	8		110									2771.40	Temp. log -
3/6	3785	76		20							55	40			13168.00	Test BOP M/U 600 bbls new mud.

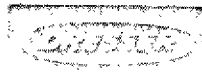


DAILY MATERIALS CONSUMPTION

WELL B.P. Norway, 2/1-4

PAGE 3

DATE 1982	DEPTH Meters	Barite	Gel	Caustic	Gyp	Spersene	Soda Ash	Lime	CMC H.V.	Magcolube	CMC L.V.	Magconol	Bicarbo.	Mica Fine	Drispac	BP Deter	D.D. XP-20	Resinex	Nut Plug	Mica C.	DAILY MUD COST U.S. \$	REMARKS
4/6	3785																				0.00	Pull riser Resume test BOP.
5/6	3814	4																			472.00	150 bbl loss. Leak off 2.11 SG. Displace new mud to active.
6/6	3850	65	5	8		20															11486.44	Drill 3814-3850. Low wt mud added in error.
7/6	3885	14																			2170.13	Survey 20
8/6	3934	9	6		20	30															4790.60	Loss of 147 bbls over shakers.
9/6	3955	22				34															5001.90	Shale cavings after trip.
10/6	3999	35																			4619.00	Cavings evident. Gas leak at 3999m
11/6	4036	17				5															5708.30	Drop in chlorides. Raise MW to 1.66 S.G.
12/6	4056	2																			2036.00	Cut core no. 1
13/6	4064	25				29															4724.30	Overpull. Pulling out, 100%
14/6	4077	10	7.5	7																	3829.28	Core recovery.
15/6	4101	3	6	10																	2257.00	Cut core no. 3.
16/6	4120	61	5	9		29	1														9279.64	Cut core no. 4.
17/6	4138	15		7																	4804.96	Cut core no. 5.
18/6	4189	13		5																	2811.25	Drill ahead.
19/6	4192	5																			1514.10	Drill ahead. Wiper trip. POOH.
20/6	4192																				0.00	Logging
21/6	4231	4	4	17		51	1														3316.72	Wash/ream to bottom. Drl ahead.
22/6	4272	7	2	28	8	38															7579.64	Drill ahead.
23/6	4300	5		39		90															6161.10	Drill ahead.
24/6	4396	48		10																	6685.48	Drill ahead.
25/6	4440	73		27	13	23															10452.14	Drill ahead. POOH.
26/6	4476	5		36	12	96															9287.24	RH. Ream 51m. Drill ahead.
27/6	4525	29		51	8	20															5823.14	Drill ahead. 15m salt. T.D.
28/6	4525	8																			944.00	Ream 4506-4157m. Run logs.
29/6	4525																				0.00	Logging. Clean pit no. 2.
30/6	4525	13		15																	1778.50	Run logs. Tight at 4080 m.



DAILY MATERIALS CONSUMPTION

WELL B.P., 2/1-4

PAGE 4

DATE 1982	DEPTH Meters	Barite	Gel	Caustic	GYP	Oilfaze	Soda Ash	Lime	Spersene	CMC H.V.	Magcolube	CMC L.V.	Magconol	Bicarb.	Mica Fine	Pipe Lax	Drispac	BP Deterg.	D.D.	XP-20	Resinex	Nut Plug	Mica C.	DAILY MUD COST U.S. \$	REMARKS	
1/7	4525	13	2																					2102.90	Run logs. Tight at 4026m.	
2/7	4137	15		7					10															2045.10	Plug back t/4172. Stuck at 4122m	
3/7	4137	27		9		84			57							3	2			21	29			15472.02	Spot Pipelax/Diesel slugs work pipe	
4/7	4137	4		5													2							898.92	Pipe free, pump out 11 singles.	
5/7	4137	4	4	10													1				63			5830.87	Reduce MW t/1.58. Pump out 6 singles	
6/7	4220	21																						2478.00	Circ havis pill, Run 7" liner.	
7/7	4220	9										2					3							3380.13	Cement 7" liner.	
8/7	4220																							0.00	Test BOPs, Tag liner at 3590m.	
9/7	4220			12																				195.60	Pressure test liner overlap.	
10/7	4220	13		6																				1631.80	Test liner overlap.	
11/7	4220																			28				723.52	Test packer, pressure drop.	
12/7	4220	3	2	2													3							1484.73	Set&test-Tie back Perf for DST 1	
13/7	4220	3															5							1217.55	Run and test test string.	
14/7	4220		1																					290.00	DST no. 1.	
15/7	4220	13	2																					2114.00	DST no. 1.	
16/7	4220																							0.00	DST no. 1.	
17/7	4220																							0.00	POOH test string. C&C mud.	
18/7	4220	5															2							953.42	Perf. for DST no. 2.	
19/7	4220								12								5							1056.75	DST no. 2.	
20/7	4220																							0.00	DST no. 2.	
21/7	4220	1																						118.00	DST no. 2.	
22/7	4220	4																						472.00	POOH test str. CMT plug CMT in DS	
23/7	4220	3	1	3													2							1038.32	Lay dn cmted DP. Dress plug to 4095	
24/7	4220																							0.00	Bridge plug at 4095m. Perforate	
25/7	4220																1							172.71	for DST no. 3.	
26/7	4220																									Perf. fish for perf. gun.



WELL SUMMARY

B.P., 2/1-4

SECTION 10

DAILY MUD PROPERTIES



DAILY MUD PROPERTIES

Well: BP Norway, 2/1-4

1982	M	SG	VIS	CORR.		GELS	pH	FLUID LOSS			CL <input type="checkbox"/>	ALKALINITY				RETORT			V.G. METER READING @ 115°						Bbl PPB Equiv.	\$ TOTAL MUD COST																	
				115°F	YP			0	10	100 PSI API		500 PSI 300 °F HT-HP	CACL <input type="checkbox"/>	NACL <input type="checkbox"/>	PF	PM	MF	CA ppm	%	%	%	600 R.P.M.	300 R.P.M.	200 R.P.M.			100 R.P.M.	6 R.P.M.	3 R.P.M.														
																														BECK <input checked="" type="checkbox"/>	STRIP <input type="checkbox"/>	SPOT	HI-VIS	SLUGS	ON CONNECTIONS								
5/4	154	1.04	100+					SEAWATER	-		SPOT																																8454.64
6/4	171	1.04	100+					"			"																																9868.85
7/4	171	1.04	100+					"			"																																11520.86
8/4	171	1.04	100+					"			"																																13106.48
9/4	171	1.04	100+					"			"																																13106.48
10/4	141	1.04	100+					"			"																																14493.04
11/4	171	1.04	100+					"			"																																16981.26
12/4	108	1.04	100+					"			"																																16981.26
13/4	171	1.04	100+					"			"																																19399.06
14/4	165	1.04	100+					"			"																																19871.06
15/4	188	1.04	100+					"			"																																19871.06
16/4	475	1.04	100+					"			"																																22529.90
17/4	633	1.04	100+					"			"																																25920.08
18/4	625	1.11	100+					10.0																																			33614.13
19/4	682	1.10	42	8	2	1	2	10.5	11.0	N/A	15000	0.5	N/A	1.0	1400	0	5	95	18	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	6.0	45821.61				
20/4	955	1.18	43	11	11	3	23	9.5	11.5	N/A	16000	0.1	0.5	0.4	1400	0	11	89	33	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	5.8	54390.09					
21/4	1117	1.18	41	10	10	4	24	9.0	11.8	N/A	14000	0.1	0.4	0.3	1900	0	10	90	30	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	5.2	64579.37					
22/4	1318	1.21	44	13	9	3	22	9.0	10.0	N/A	17000	0.1	0.2	0.3	1500	0	10	90	35	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	4.5	76531.21					
23/4	1475	1.27	43	13	7	4	13	9.5	9.5	N/A	19500	0.3	0.5	0.9	1800	0	11	89	33	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18	3.0	85665.06					
24/4	1656	1.40	55	17	18	10	32	9.0	10.1	N/A	20000	TR	0.2	0.2	1800	0	16	84	52	35	-	-	-	-	-	-	-	-	-	-	-	-	-	28.75	3.1	101740.18							
25/4	1840	1.50	55	15	20	19	42	9.5	14.2	N/A	23000	0.1	0.1	0.3	1400	0	20	80	50	35	-	-	-	-	-	-	-	-	-	-	-	-	-	31.25	3.75	123822.20							
26/4	1897	1.53	43	13	16	6	32	9.5	13.0	N/A	20000	0.2	0.5	0.5	1400	0	21	79	42	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	3.5	139108.30						
27/4	2006	1.55	52	13	28	17	38	9.5	17.0	N/A	19000	0.2	0.4	0.5	1400	0	22	78	54	41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31	2.5	147699.29					
28/4	2006	1.57	54	12	26	16	35	9.5	16.3	N/A	19000	0.3	0.5	0.5	1400	0	22	78	50	38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	2.1	153009.20				
29/4	2006	1.57	54	13	26	16	32	9.7	16.0	N/A	19000	0.3	0.6	0.5	1400	0	22	78	52	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29	3.0	156907.80				
30/4	2006	1.57	58	15	26	20	40	9.2	16.5	N/A	29000	0.2	0.4	0.4	1400	0	22	78	56	41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	2.5	157908.20				
1/5	2006	1.57	60	15	28	20	35	9.5	18.0	N/A	21000	0.6	0.6	0.8	1200	0	22	78	58	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	3.25	157907.80				
2/5	2006	1.69	49	15	35	20	33	10.5	18.0	N/A	21000	0.5	0.8	0.8	1000	0	22	78	65	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	3.15	166286.20				
DATE SPUD:																						DATE T.D.:				COST:																	



DAILY MUD PROPERTIES

Well: BP Norway, 2/1-4

PAGE 2

1982 DATE	M DEPTH	SG WT.	VIS SEC.	CORR. 115°F		GELS		pH	FLUID LOSS		CL CA	ALKALINITY			RETORT			V.G. METER READING @ 115°						Rbl PPB Equiv	Excess PPB Gyp	\$ TOTAL MUD COST	
				PV	YP	0	10		100 PSI API	500 PSI 300 °F HT HP		CA NACL	PF	PM	MF	CA ppm	% OIL	% SOL	% WATER	600 R.P.M.	300 R.P.M.	200 R.P.M.	100 R.P.M.				6 R.P.M.
3/5	2006	1.69	43	15	22	12	29	10.5	18.0	-	21000	0.5	0.8	0.8	1000	0	22	78	-	-	-	-	-	-	30	3.15	167230.20
4/5	2006	1.69	41	12	22	14	28	10.0	15.0	-	21000	0.4	1.65	1.7	1000	0	22	78	-	-	-	-	-	-	30	3.15	167230.20
5/5	2006	1.69	45	12	30	16	30	10.0	16.0	-	21000	0.4	1.6	1.6	1000	0	22	78	-	-	-	-	-	-	30	3.15	177687.10
6/5	2006	1.57	41	12	12	9	28	10.0	10.0	-	21000	0.3	1.1	1.7	1200	0	19	81	-	-	-	-	-	-	25	3.0	181138.70
7/5	2095	1.57	46	13	12	4	18	10.0	10.5	-	21000	0.3	3.0	2.0	1200	0	23	77	-	-	-	-	-	-	25	3.0	191213.48
8/5	2250	1.57	46	16	10	4	22	9.0	12.0	-	18000	0.2	1.5	1.2	1200	0	21	79	-	-	-	-	-	-	25	3.0	200482.10
9/5	2394	1.60	52	15	13	4	26	10.0	11.0	-	18000	0.4	2.1	1.6	1000	0	21	79	-	-	-	-	-	-	25	3.0	213514.60
10/5	2485	1.60	50	14	13	3	24	10.5	10.5	-	19000	0.4	2.3	1.7	1000	0	23	77	-	-	-	-	-	-	22.5	4.0	228382.60
11/5	2539	1.61	50	13	13	3	21	9.5	10.0	-	18000	0.3	2.0	1.3	1000	0	22	78	-	-	-	-	-	-	22.5	4.5	233808.10
12/5	2688	1.61	46	17	11	4	23	10.5	10.0	-	18000	0.3	2.2	1.7	1200	0	22	78	-	-	-	-	-	-	22.5	4.0	242567.38
13/5	2750	1.61	46	15	13	3	21	9.5	9.5	-	18000	0.25	1.8	1.2	950	0	22	78	-	-	-	-	-	-	25	4.0	249546.07
14/5	2918	1.61	56	17	14	4	28	10.0	9.0	-	18000	0.3	2.0	1.4	900	0	23	77	-	-	-	-	-	-	25	3.85	255346.67
15/5	3001	1.62	46	17	11	4	29	11.0	9.5	-	19000	0.45	2.3	1.8	720	0	23	77	-	-	-	-	-	-	25	3.0	262265.67
16/5	3037	1.62	47	19	13	3	27	11.0	9.5	-	19000	0.4	2.1	1.6	800	0	23	77	-	-	-	-	-	-	25	3.0	268386.17
17/5	3087	1.62	54	20	14	4	28	11.0	9.5	-	19000	0.5	2.0	1.5	800	0	23	77	-	-	-	-	-	-	25	3.0	270939.67
18/5	3177	1.62	56	21	15	3	29	10.5	10.3	-	18000	0.2	1.4	1.3	700	0	23	77	-	-	-	-	-	-	32	2.0	274311.27
19/5	3207	1.62	53	21	16	3	26	10.5	9.5	-	17000	0.2	1.1	1.1	800	0	23	77	-	-	-	-	-	-	32	2.0	280815.07
20/5	3239	1.62	47	18	10	2	20	11.0	9.5	-	16000	0.2	2.0	1.6	600	0	22	78	-	-	-	-	-	-	32	2.2	287417.20
21/5	3264	1.62	45	17	10	2	17	10.6	9.3	-	15000	0.3	2.0	1.7	700	0	22	78	-	-	-	-	-	-	31	2.0	288285.14
22/5	3299	1.62	47	20	11	2	19	10.5	10.4	-	15000	0.2	1.5	1.6	600	0	22	78	-	-	-	-	-	-	32	2.4	295329.50
23/5	3358	1.62	45	20	10	2	14	10.7	10.8	-	15000	0.3	2.1	1.8	600	0	22	78	-	-	-	-	-	-	32	2.25	297849.60
24/5	3480	1.62	46	20	12	2	16	10.2	12.0	-	15000	0.2	2.0	2.0	600	0	23	77	-	-	-	-	-	-	30	2.1	299717.48
25/5	3536	1.64	48	21	11	3	17	10.5	9.4	-	15000	0.3	2.0	2.1	600	v	23	77	-	-	-	-	-	-	30	2.4	307541.70
26/5	3610	1.64	46	20	11	2	17	11.0	9.8	-	15000	0.5	3.0	2.6	600	0	23	77	-	-	-	-	-	-	31	2.5	315787.00
27/5	3697	1.64	42	18	9	2	11	10.5	8.1	-	15000	0.2	1.6	2.3	600	0	24	76	-	-	-	-	-	-	29	2.5	326286.42
28/5	3759	1.64	50	26	14	3	16	10.3	8.2	14.0	14000	0.2	1.6	2.4	600	0	26	74	-	-	-	-	-	-	32.5	2.5	334967.21
29/5	3783	1.64	50	25	14	3	17	10.3	8.8	14.4	15000	0.2	1.5	2.1	600	0	27	73	-	-	-	-	-	-	32.5	2.0	340220.61
30/5	3793	1.64	54	26	16	3	15	10.0	8.8	14.0	14000	0.1	1.0	2.0	600	0	27	73	-	-	-	-	-	-	35.0	2.0	342564.91

DATE SPUD:

DATE T.D.:

COST:



DAILY MUD PROPERTIES

Well: BP Norway, 2/1-4

PAGE 3

1982	M	SG	VIS		CORR.		GELS		pH	FLUID LOSS			CL	X	ALKALINITY				RETORT			V.G. METER READING @ 115°						Bl	Excess	\$
			DATE	DEPTH	WT.	SEC.	PV	YP		0	10	100 PSI			500 PSI	CA	PF	PM	MF	CA	%	%	%	600	300	200	100			
										API	HT-HP	NAACL				ppm	OIL	SOL	WATER	R.P.M.	R.P.M.	R.P.M.	R.P.M.	R.P.M.	R.P.M.	Equip		MUD COST		
31/5	3793	1.64	58	27	17	4	20	10.0	9.0	14.0	14000	0.1	1.0	2.0	550	0	27	73	70	44	-	-	-	-	35	2.0	344560.91			
1/6	3785	1.64	62	27	19	4	26	9.5	9.5	14.5	14000	0.1	0.8	1.6	500	0	27	73	73	46	-	-	-	-	35	1.8	347051.32			
2/6	3785	1.64	55	26	17	4	22	9.5	9.5	14.5	14000	0.1	0.8	1.6	500	0	27	73	73	43	-	-	-	-	35	1.5	349822.71			
3/6	3785	1.64	48	25	15	3	21	9.5	9.5	14.5	14000	0.1	0.8	1.6	500	0	27	73	65	40	-	-	-	-	35	1.0	362990.73			
4/6	3785	1.64	48	25	15	3	21	9.5	9.5	14.5	14000	0.1	0.8	1.6	500	0	27	73	65	40	-	-	-	-	35	0.5	362990.71			
5/6	3814	1.64	43	22	8	2	17	11.5	7.5	10.5	14000	0.35	2.4	2.1	360	0	24	76	52	30	-	-	-	-	30	0	363462.72			
6/6	3850	1.64	45	20	8	2	16	10.0	8.0	11.5	14000	0.3	2.1	1.8	320	0	24	76	48	28	-	-	-	-	30	0	374949.17			
7/6	3885	1.64	47	20	9	2	17	9.5	8.0	13.0	14000	0.25	1.5	1.2	280	0	24	76	49	29	-	-	-	-	30	0	377119.28			
8/6	3934	1.64	48	21	11	2	19	10.0	8.0	13.5	15000	0.35	1.8	1.1	320	0	25	75	53	32	-	-	-	-	25	0	381909.88			
9/6	3955	1.64	50	20	10	2	16	10.5	8.0	13.5	16000	0.45	2.1	1.3	440	0	25	75	50	30	-	-	-	-	30	0	386911.78			
10/6	3999	1.65	47	18	9	2	14	10.0	8.0	14.0	16000	0.3	1.8	1.1	480	0	24	76	45	27	-	-	-	-	30	0	391530.78			
11/6	4036	1.66	48	20	10	2	16	9.5	7.2	13.5	12000	0.25	1.5	1.0	320	0	25	75	50	30	-	-	-	-	30	0	397239.08			
12/6	4056	1.66	53	21	11	2	17	10.5	7.0	13.0	10000	0.35	2.2	1.7	280	0	25	75	53	32	-	-	-	-	30	0	399275.08			
13/6	4064	1.68	50	19	9	2	15	11.0	7.5	14.0	10000	0.6	2.5	1.8	320	0	24	76	47	28	-	-	-	-	27.5	0	403999.38			
14/6	4077	1.68	53	17	7	1	10	10.0	7.8	14.5	10000	0.4	2.1	1.8	160	0	24	76	41	24	-	-	-	-	35	0	407828.66			
15/6	4101	1.68	61	23	12	2	14	10.5	6.7	11.5	10000	0.5	2.2	2.4	180	0	25	75	58	35	-	-	-	-	38	0	410085.66			
16/6	4120	1.68	56	21	11	2	13	10.5	6.8	11.5	10000	0.5	2.4	2.0	180	0	25	75	53	32	-	-	-	-	38	0	419365.30			
17/6	4138	1.68	55	21	11	2	13	10.5	6.8	11.7	10000	0.5	2.5	2.3	160	0	25	75	53	32	-	-	-	-	38	0	424170.26			
18/6	4189	1.68	55	25	12	2	15	11.0	6.3	11.0	8000	0.6	2.5	2.5	280	0	24	76	62	37	-	-	-	-	37	0	426981.51			
19/6	4192	1.68	52	26	13	2	15	11.0	6.5	11.4	8000	0.5	1.8	2.3	240	0	24	76	65	39	-	-	-	-	37	0	428495.61			
20/6	4192	1.68	50	24	11	2	12	11.0	6.5	11.5	8000	0.5	1.9	2.2	240	0	24	76	59	35	-	-	-	-	37	0	428495.61			
21/6	4231	1.68	54	31	11	2	9	10.5	6.0	10.8	9000	0.5	1.7	2.4	200	0	25	75	73	42	-	-	-	-	40	0	431812.39			
22/6	4272	1.66	56	30	8	2	8	10.5	6.0	8.5	8000	0.5	1.8	2.4	200	0	24	76	68	38	-	-	-	-	37.5	0	439391.97			
23/6	4300	1.66	54	31	9	2	8	10.6	6.2	8.0	10000	0.6	2.0	2.6	120	0	25	75	71	40	-	-	-	-	35	0	445553.07			
24/6	4396	1.66	66	34	14	2	14	10.5	5.0	7.0	14000	0.6	2.0	3.4	120	0	25	75	82	48	-	-	-	-	30	0	452238.55			
25/6	4440	1.66	50	30	12	2	14	10.5	5.4	7.5	14000	0.6	2.0	3.4	180	0	24	76	72	42	-	-	-	-	27.5	0	462690.69			
26/6	4476	1.66	67	28	24	2	17	10.5	4.5	6.0	15000	0.5	1.8	3.0	240	0	24	76	80	52	-	-	-	-	25	0	471977.92			
27/6	4525	1.66	55	30	17	2	14	11.0	5.5	6.7	27000	1.0	2.5	3.0	280	0	25	76	77	47	-	-	-	-	25	0	477801.07			

DATE SPUD:

DATE T.D.:

COST:



DAILY MUD PROPERTIES

Well: B.P. Norway, 2/1-4

PAGE 4

1982 DATE	Meters DEPTH	S.G. WT.	VIS SEC.	CORR. 115°F		GELS		pH	FLUID LOSS			CL 25000	ALKALINITY				RETORT			V.G. METER READING @ 115°						BH CEC	\$ TOTAL MUD COST
				PV	YP	0	10		100 PSI API	500 PSI 300 °F HT-HP	CA ppm		PF	PM	MF	% OIL	% SOL	% WATER	600 R.P.M.	300 R.P.M.	200 R.P.M.	100 R.P.M.	6 R.P.M.	3 R.P.M.			
28/6	4525	1.66	60	22	10	2	13	10.0	7.0	8.8	25000	.65	2.2	2.0	200	0	25	75	54	32	-	-	-	-	22.5	478745.07	
29/6	4525	1.66	61	22	11	2	15	9.8	7.0	9.2	25000	.5	1.8	1.6	200	0	25	75	55	33	-	-	-	-	22.5	478745.07	
30/6	4525	1.66	53	25	9	2	14	9.5	7.0	10.0	22000	.3	1.4	1.3	240	0	25	75	59	34	-	-	-	-	22.5	480523.57	
1/7	4525	1.66	63	25	12	2	17	10.0	7.0	9.6	22000	.45	1.6	1.5	240	0	25	75	62	37	-	-	-	-	22.5	482626.47	
2/7	4137	1.66	57	27	14	3	20	8.8	11.0	18.0	21000	.1	1.0	.5	800	0	26	74	68	41	-	-	-	-	22.5	484671.57	
3/7	4137	1.61	59	26	10	2	14	10.0	6.2	13.6	21000	.5	1.7	1.3	360	0	24	76	62	36	-	-	-	-	20.0	500143.59	
4/7	4137	1.62	58	24	11	2	13	10.5	5.1	12.6	21000	.6	2.4	2.3	280	0	22	78	59	35	-	-	-	-	20.0	501042.57	
5/7	4137	1.58	58	25	9	3	16	10.5	5.8	14.6	18500	.65	2.2	1.9	240	1	22	77	59	34	-	-	-	-	20.0	506873.37	
6/7	4220	1.59	57	24	10	3	17	10.0	5.8	14.1	17000	.5	2.1	1.9	200	1	22	77	58	34	-	-	-	-	20.0	509351.37	
7/7	4220	1.59	50	22	10	2	14	10.0	6.0	15.8	17000	.45	1.9	1.7	400	1	21	78	58	32	-	-	-	-	20.0	512731.57	
8/7	4220	1.59	55	21	12	3	19	10.0	8.0	16.3	17000	.45	1.8	1.6	400	1	21	78	54	33	-	-	-	-	20.0	512731.57	
9/7	4220	1.58	61	21	13	3	22	11.5	8.2	N/A	16500	.85	2.9	2.4	320	1	20	79	55	34	-	-	-	-	20.0	512927.17	
10/7	4220	1.59	58	17	11	3	15	12.5	9.4	N/A	16000	.9	3.6	2.8	320	1	21	78	47	28	-	-	-	-	20.0	514558.97	
11/7	4220	1.59	58	20	11	3	18	12.5	9.6	N/A	16000	.9	3.5	2.7	320	1	21	78	51	31	-	-	-	-	15.0	515282.47	
12/7	4220	1.58	51	19	11	2	9	11.0	9.2	N/A	17500	.7	2.6	2.0	440	1	20	79	49	30	-	-	-	-	15.0	516767.17	
13/7	4220	1.58	67	24	17	4	15	11.0	8.8	N/A	17500	.7	2.9	1.9	420	1	20	79	65	41	-	-	-	-	15.0	517984.77	
14/7	4220	1.58	54	21	13	3	12	11.0	8.7	N/A	17500	.6	2.9	1.9	440	1	20	79	55	34	-	-	-	-	15.0	518274.77	
15/7	4220	1.58	55	20	15	3	14	11.0	8.7	N/A	17500	.6	3.0	1.8	440	1	20	79	55	35	-	-	-	-	17.5	520388.77	
16/7	4220	1.58	56	24	14	3	16	10.5	8.8	N/A	17000	.6	3.0	1.7	380	1	20	79	62	38	-	-	-	-	17.5	520388.77	
17/7	4220	1.59	52	26	12	3	14	10.5	9.8	N/A	16500	.7	3.5	2.0	360	1	21	78	64	38	-	-	-	-	15.0	520388.77	
18/7	4220	1.59	53	27	13	3	15	10.5	10.1	N/A	16500	.7	3.6	2.1	400	1	21	78	67	40	-	-	-	-	15.0	521324.17	
19/7	4220	1.58	78	35	24	5	21	10.5	7.8	N/A	16500	.7	3.4	1.8	380	1	20	79	94	59	-	-	-	-	15.0	522380.87	
20/7	4220	1.58	71	34	19	4	17	10.5	7.8	N/A	17000	.7	3.3	1.9	360	1	20	79	87	53	-	-	-	-	15.0	522380.87	
21/7	4220	1.58	65	28	12	4	15	10.5	9.8	N/A	16500	.8	3.3	1.7	420	1	20	79	68	40	-	-	-	-	15.0	522498.87	
22/7	4220	1.58	54	25	12	3	14	10.0	10.2	N/A	15500	.5	3.2	1.2	420	1	20	79	62	37	-	-	-	-	15.0	522970.87	
23/7	4220	1.55	51	25	11	2	12	11.0	10.6	N/A	14000	.7	3.5	2.0	400	1	19	80	61	36	-	-	-	-	15.0	524009.27	
24/7	4220	1.55	50	24	11	2	12	11.0	10.5	N/A	14000	.7	3.5	2.0	400	1	19	80	59	35	-	-	-	-	15.0	524009.27	
25/7	4220	1.55	52	26	10	2	13	10.5	10.2	N/A	14000	.7	3.4	1.9	440	1	19	80	62	36	-	-	-	-	15.0	524181.17	

DATE SPUD:

DATE T.D.:

COST:



WELL SUMMARY

B.P., 2/1-4

SECTION 11

D A I L Y M U D V O L U M E S



SSER NORWAY A.S.

MUD VOLUME DATA

COMPANY: B.P. Norway

PAGE: 1

WELL: Aladdin

WELL: 2/1-4

WELL DEPTH INCHES	DEPTH METERS	MUD WT.	VISC.	BBL'S OF HOLE DRILL	1. HOLE VOLUME	2. ACTIVE PIT VOL.	1+2=3. TOTAL CIRC.	5. VOLUME ADDED	6. MUD LOSSES			7. CUM. LOSS	8. MUD IN STORAGE	3+8. TOTAL VOL.	DAILY COST US \$	TOTAL COST US \$
									DUMP	HOLE	TOTAL LOSS					
6	154	1.04	100+	260	260	-	-	570	-	570	570	570	1030	-	8454.64	8454.64
6	171	1.04	100+	71	331	-	-	60	-	60	60	630	1010	1371	1414.22	9868.85
6	171	1.04	100+	-	331	-	-	560	-	560	560	1190	450	781	1652.00	11520.86
6	171	1.04	100+	-	331	-	-	-	-	-	-	1190	1010	1341	1585.62	13106.48
6	171	1.04	100+	-	331	-	-	-	-	-	-	1190	1010	1341	0.00	13106.48
6	141	1.04	100+	206	206	-	-	390	-	390	390	1580	960	1166	1386.56	14493.04
6	171	1.04	100+	125	331	-	-	860	-	860	860	2440	1100	1497	2488.22	16981.26
6	108	1.04	100+	70	70	-	-	60	-	60	60	2500	1040	1110	0.00	16981.26
6	171	1.04	100+	261	331	-	-	1000	-	1000	1000	3500	1100	1431	2417.80	19399.06
0	165	1.04	100+	-	195	-	-	-	-	-	-	3500	1100	1295	472.00	19871.06
4	188	1.04	100+	42	347	300	647	-	-	-	-	3500	1100	1647	0.00	19871.06
4	475	1.04	100+	527	874	350	1224	600	600	-	600	4100	1000	2224	2658.90	22529.96
4	633	-	-	290	1164	320	1484	460	460	-	460	4560	1000	2484	3390.12	25920.08
4	625	1.11	100+	-	654	100	754	1400	2400	-	2400	6960	-	754	7694.05	33614.13
7½	682	1.10	42	52	706	539	1245	2010	153	-	153	7013	612	1857	12207.48	45821.61
7½	955	1.18	43	281	987	767	1754	1100	591	-	591	7604	-	1754	8568.48	54390.09
7½	1117	1.18	41	139	1126	582	1708	900	446	-	446	8050	500	2208	10189.28	64579.37
7½	1318	1.21	44	189	1315	475	1790	900	1218	-	1218	9268	100	1890	11951.84	76531.21
7½	1475	1.27	43	166	1481	302	1783	1202	507	-	507	9775	802	2585	9133.85	85665.06
7½	1656	1.40	55	170	1651	422	2093	601	492	-	492	10267	601	2694	16075.04	101740.18
7½	1840	1.50	55	194	1845	376	2221	340	446	-	446	10713	367	2588	22082.10	123822.20
7½	1897	1.53	43	25	1870	300	2170	220	230	-	230	10943	408	2578	15286.10	139108.30
7½	2006	1.55	52	104	1974	490	2464	300	311	-	311	11254	103	2567	8590.90	147699.20
7½	2006	1.57	54	-	1974	304	2278	-	289	-	289	11543	-	2278	5310.00	153009.20
7½	2006	1.57	54	-	1974	318	2292	200	186	-	186	11729	-	2292	3898.60	156907.80
7½	2006	1.57	58	-	1974	250	2224	225	68	-	68	11797	225	2449	1000.40	157908.20



SSER NORWAY A.S.

MUD VOLUME DATA

WELL DEPTH METERS	MUD WT.	VISC.	BBL'S OF HOLE DRILD	1. HOLE VOLUME	2. ACTIVE PIT VOL VOL.	1+2=3. TOTAL CIRC.	5. VOLUME ADDED	6. MUD LOSSES			7. CUM. LOSS	8. MUD IN STORAGE	3+8. TOTAL VOL.	DAILY COST US \$	TOTAL COST US \$	
								DUMP	HOLE	TOTAL LOSS						
1/2	2006	1.57	60	-	1265	604	1869	-	-	-	11797	580	2449	0.00	157907.80	
1/2	2006	1.69	49	-	1320	270	1590	105	126	60	186	11983	940	2530	8378.00	166286.20
1/2	2006	1.69	52	-	1220	475	1695	110	15	-	15	11998	840	2535	944.00	167230.20
1/2	2006	1.69	41	-	1220	175	1395	-	300	-	300	12298	700	2075	0.00	167230.20
1/2	2006	1.69	45	-	1220	485	1705	310	-	-	-	12298	600	2305	10456.90	177687.10
1/2	2006	1.57	41	-	1220	375	1595	-	110	-	110	12408	850	2425	3451.60	181138.70
1/4	2095	1.57	46	50	961	317	1278	-	317	-	317	12725	700	1978	10074.70	191213.40
1/4	2250	1.57	46	156	1017	425	1542	264	511	-	511	13236	525	2067	9268.70	200482.10
1/4	2394	1.60	52	78	1095	311	1406	-	136	-	136	13372	740	2146	13032.50	213514.60
1/4	2485	1.60	50	45	1140	565	1705	299	211	-	211	13583	230	1935	14868.00	228382.60
1/4	2539	1.61	50	20	1160	530	1690	-	350	-	350	13933	-	1690	5425.50	233808.10
1/4	2688	1.61	46	68	1226	687	1915	225	102	-	102	14035	164	2079	8759.20	242567.38
1/4	2750	1.61	46	28	1256	667	1923	7	200	-	200	14235	421	2344	6978.77	249546.07
1/4	2918	1.61	56	77	1333	656	1989	66	167	-	167	14402	421	2403	5800.60	255346.67
1/4	3001	1.62	46	37	1370	475	1845	-	174	-	174	14576	421	2229	6919.00	262265.67
1/4	3037	1.62	47	16	1386	524	1910	65	192	-	192	14768	258	2168	6120.50	268386.17
1/4	3087	1.62	54	24	1410	694	2104	121	-	-	-	14768	185	2289	2553.50	270939.67
1/4	3177	1.62	56	37	1447	576	2023	-	81	-	81	14849	185	2208	3371.60	274311.27
1/4	3207	1.62	53	13	1460	688	2151	50	10	-	10	14859	100	2248	6503.80	280815.07
1/4	3239	1.62	47	14	1474	530	2004	-	114	-	114	14973	130	2134	6602.13	287417.20
1/4	3264	1.62	45	12	1486	558	2044	12	12	-	12	14985	90	2134	867.94	288285.14
1/4	3299	1.62	47	28	1504	501	2005	500	26	-	26	15011	604	2609	7044.36	295329.50
1/4	3358	1.62	45	23	1527	561	2088	7	20	-	20	15031	508	2596	2520.18	297849.68
1/4	3480	1.62	46	66	1593	665	2258	22	8	-	8	15039	352	2610	1867.80	299717.48
1/4	3536	1.64	48	16	1609	348	1957	50	326	-	326	15365	377	2334	7824.30	307541.78
1/4	3610	1.64	46	37	1646	140	2308	140	13	-	13	15378	153	2461	8245.30	315787.08



DRESSER NORWAY A.S.

• MUD VOLUME DATA •

WELL: Aladdin

WELL: 2/1-4

DEPTH METERS	MUD WT.	VISC.	BBL'S OF HOLE DRLD	1. HOLE VOLUME	2. ACTIVE PIT VOL	1+2=3. TOTAL CIRC.	5. VOLUME ADDED	6. MUD LOSSES			7. CUM. LOSS	8. MUD IN STORAGE	3+8. TOTAL VOL.	DAILY COST US \$	TOTAL COST US \$	
								DUMP	HOLE	TOTAL LOSS						
1/4	3697	1.64	42	35	1681	774	2455	100	86	-	86	15464	20	2475	10499.34	326286.42
1/4	3759	1.64	50	31	1712	442	2154	557	308	-	308	15772	570	2724	8680.79	334967.21
1/4	3783	1.64	50	12	1862	392	2254	0	20	-	20	15792	450	2704	5253.40	340220.61
1/4	3793	1.64	54	2	1855	335	2190	25	350	-	350	16142	189	2379	2344.30	342564.91
1/4	3793	1.64	58	0	1733	457	2190	0	0	-	0	16142	189	2379	1996.00	344560.91
1/2	3785	1.64	62	0	950	934	1924	211	266	-	266	16408	400	2284	2490.40	347051.31
1/2	3785	1.64	55	0	950	934	1924	0	0	-	0	16408	400	2284	2771.40	349822.71
1/2	3785	1.64	48	0	950	934	1924	200	0	-	0	16408	600	2484	13168.00	362990.71
1/2	3785	1.64	48	0	950	784	1774	0	150	-	150	16558	600	2334	0.00	362990.71
1/2	3814	1.64	43	1.5	952	565	1517	0	832	-	832	17390	0	1515	472.00	363462.71
1/2	3850	1.64	45	8	845	689	1534	250	19	-	19	17409	250	1784	11486.44	374949.15
1/2	3885	1.64	47	9	853	649	1502	0	32	-	32	17441	250	1752	2170.13	377119.28
1/2	3934	1.64	48	9	862	524	1386	310	386	-	386	17827	290	1676	4790.60	381909.88
1/2	3955	1.64	50	5	867	560	1417	41	0	-	0	17827	290	1717	5001.90	386911.78
1/2	3999	1.65	47	9	876	596	1472	45	0	-	0	17827	290	1762	4619.00	391530.78
1/2	4036	1.66	48	7	883	647	1530	58	0	-	0	17827	290	1820	5708.30	397239.08
1/2	4056	1.66	53	3	886	567	1453	0	157	-	157	17984	210	1663	2036.00	399275.08
1/2	4064	1.68	50	9	895	630	1525	35	73	-	73	18057	200	1625	4724.30	403999.38
1/2	4077	1.68	53	3	898	349	1247	400	278	-	278	18335	500	1747	3829.28	407828.66
1/2	4101	1.68	61	4	902	321	1226	0	21	-	21	18356	500	1726	2257.00	410085.66
1/2	4120	1.68	56	1	903	341	1254	400	433	-	433	18789	439	1693	9279.64	419365.30
1/2	4138	1.68	55	1	904	290	1194	6	32	-	32	18821	473	1667	4804.96	424170.26
1/2	4189	1.68	55	13	917	670	1587	0	35	-	35	18856	45	1587	2811.25	426981.51
1/2	4192	1.68	52	0	1042	481	1523	0	82	-	82	18938	27	1550	1514.10	428495.61
1/2	4192	1.68	50	0	1042	481	1523	0	0	-	0	18938	27	1550	0.00	428495.61
1/2	4231	1.68	54	5	929	520	1449	0	83	-	83	19021	18	1467	3316.72	431812.33



RESSER NORWAY A.S.

MUD VOLUME DATA

COMPANY: B.P. Norway PAGE: 4
 LOG: Aladdin WELL: 2/1-4

WELL DEPTH METERS	MUD WT.	VISC.	BBL'S OF HOLE DRILD	1. HOLE VOLUME	2. ACTIVE PIT VOL. VOL.	1+2=3. TOTAL CIRC.	5. VOLUME ADDED	6. MUD LOSSES			7. CUM. LOSS	8. MUD IN STORAGE	3+8. TOTAL VOL.	DAILY COST US \$	TOTAL COST US \$	
								DUMP	HOLE	TOTAL LOSS						
1/2	4272	1.66	56	1	938	583	1521	459	5	-	5	19026	400	1921	7579.64	439391.97
1/2	4300	1.66	54	5	943	641	1584	-	87	-	87	19113	250	1834	6161.10	445553.07
1/2	4396	1.66	66	22	965	517	1482	60	150	-	150	19263	262	1744	6685.48	452238.55
1/2	4440	1.66	50	3	1100	390	1490	230	60	-	60	19323	432	1922	10452.14	462690.69
1/2	4476	1.66	67	4	980	589	1569	20	47	-	47	19370	326	1895	9287.24	471977.93
1/2	4525	1.66	55	10	990	720	1710	120	39	-	39	19409	266	1976	5823.14	477801.07
1/2	4525	1.66	60	-	1118	195	1313	-	97	-	97	19506	566	1879	944.00	478745.07
1/2	4525	1.66	61	-	1118	188	1306	-	97	-	97	19603	476	1782	0.00	478745.07
1/2	4525	1.66	53	-	1118	240	1358	-	34	-	34	19637	390	1748	1778.50	480523.57
1/2	4525	1.66	63	-	1007	280	1287	150	171	-	171	19808	440	1727	2102.90	482626.47
1/2	4137	1.66	57	-	905	393	1298	11	-	-	-	19808	440	1738	2045.10	484671.57
1/2	4137	1.61	59	-	905	547	1451	-	236	-	236	20044	50	1502	15472.02	500143.59
1/2	4137	1.62	58	-	1025	329	1447	112	-	-	-	20044	250	1614	898.92	501042.51
1/2	4137	1.58	58	-	932	432	1353	-	111	-	111	20155	150	1503	5830.87	506873.39
	4220	1.59	57	-	932	440	1372	119	-	-	-	20155	250	1622	2478.00	509351.38
	4220	1.59	50	-	956	495	1451	298	100	-	100	20255	250	1701	3380.13	512731.51
	4220	1.59	55	-	916	535	1451	-	-	-	-	20255	250	1701	0.00	512731.51
	4220	1.58	61	-	916	495	1411	10	-	-	-	20255	300	1711	195.60	512927.11
	4220	1.59	58	-	937	375	1312	-	99	-	99	20354	300	1612	1631.80	514558.91
	4220	1.59	58	-	978	250	1228	-	104	-	104	20458	280	1508	723.52	515282.43
	4220	1.58	51	-	978	320	1298	-	-	-	-	20458	360	1658	1484.73	516767.16
	4220	1.58	67	-	655	643	1298	-	-	-	-	20458	360	1658	1217.55	517984.71
	4220	1.58	54	-	655	660	1315	17	-	-	-	20458	360	1675	290.00	518274.71
	4220	1.58	55	-	655	660	1315	-	-	-	-	20458	360	1675	2114.00	520388.71
	4220	1.58	56	-	978	330	1308	-	7	-	7	20465	360	1668	0.00	520388.71
	4220	1.59	52	-	978	330	1308	-	-	-	-	20465	360	1668	0.00	520388.71

DST-1 Summary of Results

1. Tested Interval

The following interval in the Upper Jurassic formation was perforated for DST-1: (Ref field LDT/CNL log Run No. 7B)

4120.5 - 4129.7 mBRT

2. Sequence of Events

The main events during this test were as follows;

Initial flow period	5 min
Initial pressure build-up	91 min
Main flow period (1)	216 min
Main p.b.u. (1)	133 min
Main flow period (2)	2024 min
Main p.b.u. (2)	889 min

3. Flow and Shut-in Periods

The downhole test tool (PCT) was opened for a 5 minute initial flow period. The well was not flowed at surface, but indications were that the tool had opened correctly. The well was then closed in for an initial p.b.u. of 91 minutes.

The well was then re-opened downhole, again good indications were observed at surface that the tool had opened. The choke manifold was then opened up on a 14/64" adjustable choke; numerous choke size changes were necessary as the wellhead flowing pressure began to fall. The string was ultimately bled down, and after 216 minutes of flow the well was shut-in at the surface choke manifold. After a period of 133 minutes, the wellhead closed-in pressure had risen to 1190 psig, indicating the formation still to be active.

The well was then re-opened on an 8/64" adjustable choke; water cushion continued to flow back and was measured using two 45 gallon oil drums until oil was observed at surface after 1716 minutes of the second main flow.

Due to the low volume of fluid produced, the well did not adequately stabilise. The small amount of oil plus the water cushion, was sampled throughout the test. After 2024 minutes of the second main flow, the well was closed in downhole and at surface for the main p.b.u., which lasted 889 minutes.

4. Fluid Production

The flowrate of water cushion returns was measured by flowing the well to a 45 gallon oil drum. The oil produced was in very small quantity, and was collected at the wellhead and in the measuring drums.

During the flow periods approximately 1 barrel of oil was recovered at surface and a further 1.5 to 2 barrels recovered during reversing out. A total of 18.6 barrels of water cushion was produced at surface with no trace of any formation water during the flow periods, on reversing out or on recovery of the downhole tools.

The backflow of the water cushion at surface was probably due to a combination of inflow of reservoir fluids and mud filtrate and a degree of gas lift from the gas associated with the produced oil.

The flowrates quoted below assume the surface flow to be a direct result of reservoir fluid inflow only. This assumption requires the production of approximately 16 barrels of mud filtrate to the string before any oil is produced and thus assumes a deeply invaded zone.

At the end of the main flow period the well was returning a mixture of oil and water cushion at surface on a 20/64" adjustable choke. The average flowrate for the whole test was estimated to be 11.8 STBD; the final flowrate (the last oil drum completely filled) was estimated at 12.8 STBD. The final wellhead flowing pressure was 10 psig, the final wellhead flowing temperature was 59°F. H₂S and CO₂ levels were zero throughout the test. The produced oil gravity was measured at 0.81 sg at 60°F (43°API).

5. Fluid Sampling

A comprehensive set of atmospheric samples was taken from the wellhead and flowline during both main flow periods. Samples were also taken on recovery of the downhole test tools and on reversing out after the test to determine whether formation water was present.

DST-2 Summary of Results

1. Tested Interval

The following intervals in the Upper Jurassic formation were perforated for DST-2 (ref field LDT/CNL log run no. 7B)

4101 - 4110 mBRT
4112 - 4117 mBRT
4120.5 - 4129.7 mBRT

2. Sequence of Events

The main events during the test were as follows;

Initial flow period	5 min
Initial p.b.u.	72 min
Main flow period	2050 min
Main p.b.u.	1738 min

3. Flow and Shut-in Periods

The well was opened at the downhole test tool (PCT) and at surface for a five minute initial flow period. This was followed by a 72 minute initial pressure build-up. The well was opened for the main flow period on an 8/64" adjustable choke. The choke size was gradually increased to 16/64" (adjustable). After 516 minutes flow ceased due to plugging at the choke manifold. The well was then closed in for 18 minutes at surface while both the fixed and variable chokes were cleaned. Flow resumed through a 12/64" adjustable choke. After 596 minutes of total flow the choke was changed to a 16/64" fixed. The well was considered sufficiently stable after 748 minutes total flow to allow flow through the separator. The well was closed in downhole and at the choke manifold after 2016 minutes total flowing time and the string contents reversed out immediately in case of any sand production. A main pressure build-up of 1738 minutes was observed.

4. Fluid Production

The water cushion flowrate was measured by dipping of the gauge tank until muddy water with traces of oil and gas reached surface; the well

was then diverted to the burner. Due to the low flowrates a further 2 hours of flow was required before most of the water cushion had been unloaded.

After 748 minutes the well was diverted to the separator.

Examination of the well fluids at the separator showed that the well was still producing a considerable amount of water cushion (30%) as indicated by chlorides measurements, and that this was forming an emulsion with the oil. A demulsifying agent was therefore injected at low flowrates on the upstream side of the choke manifold.

At the end of the main flow period, water production had dropped to approximately 2%; chlorides measurements still verified this as being seawater cushion. The final oil rate was 1142 STBD through a 16/64" fixed choke with gas at a rate of 715.6 MSCF/D.

The final wellhead flowing pressure was 1777 psig and the final wellhead flowing temperature 86°F. The fluid properties measured at surface are summarised as follows;

Oil gravity	0.816 sg (41.9°API)
Final gas/oil ratio	627 SCF/STB
Gas gravity	0.758 sg (Air = 1)
H ₂ S content	12 ppm (by Exlog chromatograph) 30 ppm (by detector tubes)
CO ₂ content	2.8% (by detector tubes)
Water chlorides	24,000 (maximum value recorded)

The produced water was either water cushion or invasion fluid as the measured water salinity did not match the calculated formation water salinity from the wireline logs. The estimated total volumes of oil and gas produced are 1164.5 STB and 767.5 MMSCF. Some uncertainty in those values exists as the well was flowed directly overboard for a time.

5. Fluid Sampling

Comprehensive samples of atmospheric oil were collected at the heater inlet and data header on the choke manifold. Samples of the emulsion

accumulated in the separator were taken from the separator water outlet line. No pressurised samples were taken at the wellhead or separator. On recovery of the downhole test tools the PCT sample chamber contained a pressurised sample which was retained for PVT transfer ashore.

Estimates of the gas composition were made using the Exlog chromatograph.

DST-3 Summary of Results

1. Tested Intervals

The following interval in the Jurassic formation was perforated for DST-3 (ref field LDT/CNL log run 7B);

4061.5 - 4087 mBRT

2. Sequence of Events

The main events during the test were as follows;

Initial flow period	7 mins
Initial pressure build-up	61 mins
Main flow period	1860 mins
Main pressure build-up	1425 mins

3. Flow and Shut-in Periods

The well was opened downhole and at surface for a seven minute initial flow period. This was followed by a 61 minute initial pressure build-up. The well was opened on a 20/64" fixed choke for the main flow period, changing to a 16/64" fixed choke after 29 minutes and then to a 14/64" choke after a further 16 minutes. After 246 minutes flowing time the choke was changed back to 16/64" fixed.

After 582 minutes the well was considered sufficiently stable to allow flow through the separator. After 1047 minutes the choke size was decreased to 8/64" fixed to allow single phase wellhead samples to be taken. Sampling began after 1391 minutes flowing time and a total of 6 single phase samples were taken at the wellhead. After 1860 minutes of flowing time, the well was closed in downhole and at surface for the main pressure build-up.

4. Fluid Production

The water cushion flowrate was measured by dipping of the gauge tank. When sump mud reached surface the well was diverted to the burner.

After approximately 582 minutes the well was diverted to the separator. At this point BS&W measurements showed that the well was still producing small amounts of water cushion (0.5%), as determined by chlorides analysis.

At the end of the main flow period the well was producing dry oil at a rate of 624 STBD and gas at 403 MSCFD through an 8/64" fixed choke. Average oil and gas rates for the test are estimated to be 894 STBOPD and 570 MSCFD respectively. The final wellhead flowing pressure was 2757 psig and the final wellhead flowing temperature 67°F. The fluid properties measured at surface are summarised as follows:

Bubble point pressure	1630 psig at 68°F
Oil gravity	0.816 sg (41.9°API)
Gas gravity	0.750 sg (Air = 1)
Final gas/oil ratio	646 SCF/STB
H ₂ S content	8 ppm (detector tubes and Exlog chromatograph)
CO ₂ content	2.6%

The estimated total volume of produced oil is 1116.5 STB and total volume of produced gas 721 MSCF. No formation water was produced.

5. Fluid Sampling

Comprehensive samples of atmospheric oil were collected at the heater inlet and data header on the choke manifold. A total of six single phase wellhead samples were taken with the well flowing through an 8/64" choke at a wellhead pressure of approximately 2760 psig. Estimates of the reservoir fluid bubble point were made from those samples; a value of approximately 1630 psig was obtained at 68°F. Separator gas compositions were estimated using the Exlog gas chromatograph.

Table 7: RFT Pressure Measurements - Run 7B

Pt	Depth (mBRT)	Hydrostatic Pressure (psi)	Formation Pressure (psi)	Comments
1	4043.1	9406	8580	Good
2	4067.0	9460	8598	"
3	4078.0	9488	8619	"
4	4077.9	9490	8616	"
5	4102.9	9550	8637	"
6	4109.0	9564	8644	"
7	4113.9	9575	8656	"
8	4122.0	9594	8795	Tight
9	4122.2	9593	8805	"
10	4123.5	9596	8774	"
11	4128.0	9606	9011	"
12	4132.1	9614	9005	"
13	4118.6	9582	8705	"
14	4118.6	9581	8700	"
15	4116.0	9574	8667	Good
16	4122.0	9583	8811	Tight
17	4132.1	9613	8990	"
18	4078.0	9482	8619	"
19	4089.9	9511	8634	Good
20	4089.9	9507	8632	"
21	4094.5	9518	8661	Tight
22	4094.5	9517	8655	"

Table 10: Maximum Temperatures (gauges)

Gauge type	Gauge no.	Maximum Temperature (°F)		
		DST-1	DST-2	DST-3
J200	J369	303	316	-
"	J756	303	316	315
"	J841	304	317	315
"	J859	306	318	316
"	J256	-	-	314
Kuster K2	18582		Stopped	Stopped
"	18371		"	"
RT-7	41680	308	323	317
"	48489	307	311	315