RFT RESULTS

31/4-5

RUN 1				
	DEPTH M (K.B.)	H.P. (PSI)	FP (PSI)	PERM.
1/1	2071.0	3693	2993	GOOD
2/1	2072.5	3697	2996	GOOD
3/1	2073.5	3699	2998	FAIR
4/1	2074.5	3701	3000	FAIR
5/1	2076.5	3706	3003	FAIR
6/4	2105.5	3757	3074	GOOD
7/1	2108.5	3761	3078	FAIR
8/1	2110.5	3767	3083	FAIR
9/1	2116.5	3777	3091	FAIR
10/1	2122.0	3787	3095	FAIR
11/1	2128.0	3798	3099	FAIR
12/1	2131.5	3804	3103	GOOD
13/1	2136.5	3812	3106	FAIR
14/1	2139.0	3817	3111	FAIR
15-1	2144.0	3826	3177	POOR

RUN 1				
	DEPTH M (K.B.)	H.P. (PSI)	FP (PSI)	PERM.
16/1	2152.5	3840	3142	POOR
17/1	2156.0	3846	3160	POOR
18/1	2156.0	3846	–	TIGHT
19/1	2166.0	3866	–	TIGHT
20/1	2185.5	3896	–	TIGHT
21/1	2196.0	3914	–	TIGHT
22/1	2280.5	4061	3301	GOOD
23/1	2294.0	4087	3321	GOOD
24/1	2317.5	4128	3356	GOOD
25/1	2349.0	4182	3400	GOOD
26/1	2484.5	4420	–	TIGHT
27/1	2484.5	4420	3638	GOOD
28/1	2501.5	4450	3663	FAIR
29/1	2514.5	4472	3744	SEAL FAILURE
30/1	2514.5	4472	3691	POOR

RUN 1				
31/1	2131.5	3806	3100	GOOD

Took Segregated sample at 2131.5 m. Recovered 1 litre of hydrocabons, 34.9° API oil at 60° f. GOR: 578 SCF/SCB and approx. 14.4. cu ft of gas.

RUN 2				
1/2	2072.5	3694	2993	GOOD

Took segregated sample at 2072.5 m. Recovered trace hydrocabons and 18 litres of formation water/filtrate.

DST RESULTS

DST 1

Perforated interval: 2152 - 2158 m (K.B.) Dry test.

DST 2

Perforated interval: 2130 - 2133, 2134.5 - 2140 m (K.B.)
Flow rate: 2500 STB/DAY, 1.18 MM, SCF/D
Oil Gravity: 36.2° API
Gor: 472 SCF/SCB
Gas gravity: 0.73

D ST 3A

Perforated interval 2107 - 2013, 2130 - 2133, 2134.5 - 2140 m (K.B.)
Flow rate 2100 STB/DAY, 970 SCF/D
Oil Gravity: 36.2° API
GOR: 464 SCF/SCB
Gas gravity 0.724

Checked: A. D.
Date: 13.11. 81.

TABLE B-5
WELL 31/4-5

DAILY MUD PROPERTIES

DATE	DEPTH	SP.GR. WT.	VIS SEC.	PV	M YP	GELS PASCALS 0	GELS PASCALS 10	PH BLACK STRIP	FLUID LOSS 100PSI API	FLUID LOSS 500PSI 248°F HT HP	CL CACL NACL MG/L	ALKALINITY PF	ALKALINITY MF	CA PPM	MS PPM	KCL LB/BBL	REPORT % OIL	REPORT % SOL	BBL CEC
27	PITS	1.05	120	9	18	-	-	10.3											
28	370	1.06	34	7	12	-	-	10.2											
29	925	1.06	35	6	10	-	-	10.2											
30	511	1.06	37	8	10	-	-	10.0											
31	925	1.09	45	7	21	-	-	9.8	N/C										
1	925	1.05	50	7	15	-	-	-	N/C									-	
2	925	1.05	50	7	15	-	-	10	N/C									-	
3	925	1.05	55	7	15	-	-	10	N/C									-	
4	925	1.05	54	7	15	-	-	9.5	N/C									-	
5	925	1.07	55	8	12	-	-	9.8	N/C									-	
6	925	1.40	53	17	10.5	1	3	10.2	13.0		68 000	0.3	0.6	300	200	42	-	14	
7	957	1.40	57	19	12.5	2	3	10.7	7.0		65 000	0.4	0.7	250	150	42	-	-	1
8	1348	1.41	54	24	15.5	4	7	10.0	7.1		60 000	0.2	0.6	150	90	41		16	8
9	1613	1.41	54	26	10	3	10	10	8.0		62 000	0.3	0.6	150	50	40		16	15
10	1830	1.41	50	25	10	3	12	10	8.0		62 000	0.2	0.6	300	160	42		17	18.5
11	1966	1.41	54	22	1.5	3	14	10.2	8.5		58 000	0.2	0.75	340	100	42		17	21.5
12	1965	1.45	58	22	10.5	3	15	9.8	9.5		58 000	0.3	0.8	350	100	40		17	23
13	1965	1.45	60	26	10	4	15	10.2	9.0		58 000	0.2	0.7	300	100	40		17	17
14	1965	1.46	59	22	10.5	4	15	11.5	9.5		58 000	0.4	1.0	350	50	40		19	23
15	1998	1.35	47	22	7.5	2	8	11.5	8.6	20.5	50 000	0.4	1.0	200	50	36		17	18
16	PITS	1.34	47	19	8.5	1	6	10.7	7.0	19.4	40 000	0.15	0.5	350	TR	20		13	19
17	PITS	1.32	52	18	8.5	1	5	11	5.8	16.8	34 000	0.20	0.65	200	TR	14		13	18.5
18	2066	1.30	54	17	9.0	1	3	10.6	4.9	14.6	33 000	0.25	0.63	340	TR	12		12	18
19	2100	1.27	52	18	8.5	2	5	10.1	4.8	14.5	31 000	0.35	1.3	240	TR	-		11	16
20	2120	1.24	51	17	8.5	1	4	10.4	4.7	14.2	28 000	0.4	1.38	200	TR	-		10	16.5
21	PITS 2137	1.24	47	16	7.0	1	3	10.2	4.8	14.2	29 000	0.32	1.30	200	TR	-		10	15
22	2175	1.24	46	13	6.5	0.5	1.5	10.7	4.4	13.8	28 000	0.45	1.50	200	TR	-		10	13.5
23	2191	1.24	47	13	6.5	1	2	10.9	4.6	14.0	28 000	0.55	1.55	200	TR	-		10	13.5

DATE MUD:

DATE T.D.:

TABLE B-5
WELL 31/4-5

DAILY MUD PROPERTIES

DATE	DEPTH	SP.GR. WT.	VIS SEC.	PV	M YP	GELS PASCALS 0	GELS PASCALS 10	PH BLACK STRIP	FLUID LOSS 100PSI API	FLUID LOSS 500PSI 248°F HT HP	CL CACL NACL MG/L	ALKALINITY PF	ALKALINITY MF	CA PPM	MG PPM	KCL LB/BBL	REPORT % OIL	REPORT % SOL	BBL CEC
24	2292	1.24	47	14	7.0	1	2	10.2	4.3	14.3	29 000	0.40	1.53	200	TR			10	13.5
25	2337	1.27	45	14	7.5	1	2	10.5	4.6	14	29 000	0.5	1.65	80	60			11	12.5
26	2437	1.27	47	13	8.5	0.5	1.5	10.3	4.4	13.5	29 000	0.4	1.55	140	36			11	12.5
27	2477	1.27	46	14	7	0.5	1.5	10.0	4.8	14.2	28 000	0.3	1.40	180	122			11	12.5
28	2585	1.24	43	13	6.5	0.5	1.5	10.2	4.6	13.8	26 000	0.35	1.55	120	60			10	11.5
29	2585	1.24	44	13	7	0.5	2	10.5	4.6	13.9	26 000	0.3	1.4	140	60			10	12
30	2585	1.25	45	30	6.5	1	2	10.2	4.6	14.0	26 000	0.3	1.5	140	60			10	12
1	2585	1.25	49	17	8	2	2	9.8	4.6	14.0	26 000	0.3	1.4	140	60			10	12
2	2585	1.24	50	18	8	3	4	9.5	4.8	14.1	26 000	0.1	0.8	140	60			10	12
3	2608	1.24	47	12	7.5	2	10	11.5	5.0	14.0	30 000	0.8	1.8	400	50			10	12
4	2685	1.22	46	15	6	2	3	10.5	4.7	14.2	25 000	0.3	0.9	250	60			9.5	12.5
5	2763	1.22	53	15	7.5	2	3	10.9	4.8	14.0	25 000	0.4	1.4	250	50			10	12.5
6	2851	1.21	50	16	6	1	2	10.9	4.5	13.5	25 000	0.4	1.4	200	50			10	14
7	2930	1.22	50	17	6	2	2	10.9	4.5	13.5	25 000	0.4	1.5	200	50			10	13.5
8	2930	1.22	51	16	5	2	2	10.9	4.2	-	23 000	0.35	1.35	350	50			9.5	13.5
9	2400	1.22	52	15	5	2	2	11.5	4.5		22 000	1	2	440				9.5	12.0
10	2400	1.21	52	14	5	1	2	11.5			21 000	1	2.3	440				9.5	12.0
11	2400	1.21	53	14	5	1	2	11.5	4.8		21 000	1	2.3	440				9.5	12.0
12	2400	1.21	53	14	5	1	2	11.5	4.8		21 000	1	2.3	440				9.5	12.0
13	2400	1.21	52	14	5	1	2	11.5	4.8		21 000	1	2.3	440				9.5	12.0
14	2400	1.20	51	12	4.5	0.5	1.5	11.5	4.7		21 000	1	2.3	440				9.5	12.0
15	2400	1.20	52	12	4.5	0.5	1.5	11.5	4.6		21 000	1	2.3	400				9.5	12.0
16	2400	1.20	52	12	45	0.5	1.5	11.5	4.7		21 000	1	2.3	400				9.5	12.0
17	2400	1.20	49	14	5.5	0.5	1.5	11.5	4.9		21 000	1	2.3	520				9.5	12.0
18	2400	1.20	49	13	5.0	0.5	1.5	11.5	4.9		21 000	1	2.3	520				9.5	12.0
19	2400	1.20	48	13	5.0	0.5	1.5	11.5	4.9		21 000	1	2.3	520				9.5	12.0
20	2400	1.19	47	12	5.0	0.5	1.0	11.4	5.2		21 000	1	2.4	580			TR	9.5	12.0
21	2400	1.19	47	12	5.0	0.5	1.0	11.4	5.3		21 000	1	2.4	580			TR	9.5	12.0

DATE SPUD:

DATE T.D.:

TABLE B-5
WELL 31/4-5

DAILY MUD PROPERTIES

DATE	DEPTH	SP.GR. WT.	VIS SEC.	PV	M YP	GELS PASCALS 0	GELS PASCALS 10	PH BLACK STRIP	FLUID LOSS 100PSI API	FLUID LOSS 500PSI 248°F HT HP	CL CACL NACL MG/L	ALKALINITY PF	ALKALINITY MF	CA PPM	MG PPM	KCL LB/BBL	REPORT % OIL	REPORT % SOL	BBL CEC
22	2400	1.19	53	12	6	0.5	1.5	11.3	5.5		21 000	0.55	1.8	540			TR	9.5	12.0
23	2400	1.19	51	12	5.5	0.5	1.5	11.3	5.6		21 000	0.5	1.8	540			TR	9.5	12.0
24	2400	1.19	50	12	5.5	1	2	11.3	5.8		21 000	0.5	1.7	540			TR	10	12.0
25	2400	1.19	50	15	5	1	2	11.5	6.0		21 000	0.6	1.8	550			TR	10	12.0
26	2400	1.20	49	15	5	1	1	11.5	6.0		21 000	0.6	1.8	550			TR	10	12.0

DATE SPUD:

DATE T.D.:

6.3 Mud Report

36" hole, 30" casing

The 36" hole was drilled to 259.5 m using seawater and spotting high viscosity pills on each connection. The 30" casing was run and cemented with no problems. Materials used in this section were bentonite, caustic soda, soda ash and lime.

26" hole section, 20" casing

The riser was run before the 17 1/2" pilot hole was drilled. The 17 1/2" pilot hole was drilled to 925 m using seawater and high viscosity pills. The hole was underreamed to 26". Prior to running the 20" casing, the hole was reamed at the following depths: 569 m to 579 m, 588 m to 608 m and 843 m to 926 m. The 20" casing was run and cemented without any problems. The mud volume used could not be recovered because KCL/Polymer mud was to be used for the next section. Materials used were barite, bentonite, caustic soda and soda ash.

17 1/2" hole, 13 3/8" casing

The 17 1/2" hole section was drilled to 1966 m using a 40 ppb KCL-mud.

The mud weight was raised to 1.40 r.d. before drilling out of the 20" casing and increased to 1.45 r.d. after the logging period.

Drilled the 17 1/2" hole in steps to 1347 m, 1556 m, 1746 m and to 1966m. Made short-trips to ream for every step and reamed back in. After reaming through these sections once, the hole was free.

After logging a wipertrip was made and the hole had to be reamed from 1937 m to 1966 m. A high viscosity pill was set at bottom before the 13 3/8" casing was run and cemented with no problem.

Materials used was barite, KCL, caustic soda, soda ash, LF-5, XC-polymer, Ancopol, Drispac Reg, Drispac S.L., CMC lo-vis. Drilling Detergent and Walnut C.

12 1/4" hole, 9 5/8" casing

The 12 1/4 hole section was drilled to 2585 m. The mud properties were, except for the PV, kept as close to the programmed values as possible.

The API fluid loss was kept around 5cc and the HTHP fluid loss was kept around 14 cc. Mud weight was decreased from 1.45 r.d to 1.25 r.d gradually as the drilling of this section continued.

A lot of fill was experienced in this section and therefore, the hole had to be washed and reamed after changing bits or when running in the hole with core barrel

Materials used in this section was barite, bentonite, caustic soda, chrome lignosulfonate,CMC lo-vis, XC-polymer, soda ash, Drispac Reg., LF-5 and Drilling Detergent

8 3/8" hole

The 8 3/8" hole section was drilled to 2930 m. The mud properties were kept as for the 12 1/4" section and by adding more bentonite, the hole cleaning was improved. Materials used in this section was barite, bentonite, caustic soda, chrome lignosulfonate, CMC lo-vis, soda ash, sodium bicarbonate, Drispac Reg. and XC-polymer.