

RFT RESULTS

Well:

31/4-3

RUN 1				RUN 2			
DEPTHm (k.B)	H.P (PSI)	F.P. (PSI)	PERM	DEPTHm(k.B)	H.P.(PSI)	F.P.(PSI)	PERM
① 2019.5	3798	2956	FAIR	② 2043.5	3821	2953	VERY GOOD
② 2021.5	3800	-	TIGHT	TOOK SEGREGATED SAMPLE AT 2043.5m			
③ 2023.0	3799	2941	FAIR	RECOVERY: 1700cc HYDROCARBONS,			
④ 2030.0	3810	2956	GOOD	35.3° API OIL AT 60°F, GOR: .799			
⑤ 2033.0	3817	2957	GOOD	SCF/STB			
⑥ 2043.0	3837	2963	GOOD	RUN 3			
⑦ 2045.0	3838	2965	GOOD	DEPTHm(k.B)	H.P.(PSI)	F.P.(PSI)	PERM
⑧ 2055.5	3860	2975	GOOD	① 1966.0	3424	-	TIGHT
⑨ 2063.5	3872	2988	GOOD	② 1966.5	3423	-	TIGHT
⑩ 2140.0	4011	3120	POOR	③ 1969.0	3425	-	TIGHT
⑪ 2147.0	4027	3145	POOR	④ 2165.3	3765	3149	MEDIUM-GOOD
⑫ 2153.0	4040	3140	POOR	⑤ 2547.0	4428	3745	MEDIUM-GOOD
⑬ 2156.0	4044	3139	POOR	⑥ 2556.0	4444	3761	VERY POOR
⑭ 2158.5	4048	3136	POOR	⑦ 2709.0	4705	3953	VERY POOR
⑮ 2160.0	4051	3138	POOR	⑧ 2827.5	4908	4124	GOOD
⑯ 2165.5	4061	3141	GOOD	⑨ 2871.0	4982	4189	MEDIUM-GOOD
⑰ 2169.5	4070	3146	GOOD	⑩ 2924.0	5073	4286	GOOD
⑱ 2175.5	4079	-	TIGHT	⑪ 3089.5	5353	4537	POOR
⑲ 2182.5	4091	3165	GOOD	⑫ 3192.0	5524	4684	MEDIUM-POOR
⑳ 2193.0	4110	-	TIGHT	RUN 4			
㉑ 2197.5	4118	3204	POOR	DEPTHm(k.B)	H.P.(PSI)	F.P.(PSI)	PERM
㉒ 2205.5	4131	-	TIGHT	① 2140.0	3696	3101	MEDIUM
㉓ 2210.0	4138	-	TIGHT	② 2140.8	3697	3103	POOR
㉔ 2230.0	4178	-	TIGHT	③ 2159.5	3756	3148	MEDIUM
㉕ 2236.0	4188	3249	POOR	④ 2160.5	3761	3149	POOR
㉖ 2238.5	4193	3251	POOR	⑤ 2165.8	3766	Tool failure	
㉗ 2240.0	4196	3259	POOR	RUN 5			
㉘ 2242.5	4201	3389	POOR	DEPTHm (k.B)	H.P.(PSI)	F.P.(PSI)	PERM
㉙ 2332.0	4302	3381	VERY GOOD	① 2165.3	3789	3142	GOOD
㉚ 2335.0	4372	3386	VERY GOOD	TOOK SEGREGATED SAMPLE AT 2165.3m			
㉛ 2341.5	4382	3395	VERY GOOD	RECOVERY: Minor amounts of air contaminated			
㉜ 2358.0	4411	3418	VERY GOOD	gas and mud filtrate.			
㉝ 2365.5	4425	3428	VERY GOOD				
㉞ 2395.5	4478	3470	VERY GOOD				
㉟ 2398.0	4485	3473	VERY GOOD				
㊱ 2400.5	4489	-	TIGHT				
㊲ 2403.5	4494	3481	GOOD				
㊳ 2019.5	Sample attempt, negative.						

DST RESULTS

DST 1	DST 2
PERFORATED INTERVAL: 2152 - 2167m (KB) FLOW RATE: 2140 STB/DAY 1070 STB/DAY WATER 1070 STB/DAY OIL, 34.7° API GOR: 360 SCF/STB, GAS GRAVITY: 0.74	PERFORATED INTERVAL: 2023 - 2040m(KB) FLOW RATE: 1540 STB/DAY, 40° API GOR: 3600 SCF/STB, GAS GRAVITY: 0.674
Checked: B. Tollefsen Date: 10.11.80	

DAILY MUD PROPERTIES

TABLE B-5

WELL: 31/4-3.

DATE	DEPTH	SP.GR. WT.	VIS SEC.	CORR. 115°F		GELS		PH BLACK STRIP	FLUID LOSS		CL CACL NACL MG/1	ALKALINITY			CA PPM	RETORT			BBL CEC
				PV	YP	0	10		100PSI API	500PSI 300°F HP HP		PF	PM	MF		% OIL	% SOL	% WATER	
25	248	1.01	150	20	26	20	42	9.5	NC	-	16000	0.7	5.5	2.2	300	-	-	-	-
26	282	1.01	150	16	32	-	-	9.5	N/C	-	16000	0.9	7.0	3.0	300	-	-	-	-
27	281.3	1.01	150	20	37	48	94	9.5	N/C	-	16000	0.7	5.5	2.8	300	-	-	-	-
28	281.3	1.01	150	20	37	48	94	9.5	N/C	-	16000	0.7	5.5	2.8	300	-	-	-	-
29	647	1.01	150	20	37	48	94	9.5	N/C	-	16000	0.7	5.5	2.8	300	-	-	-	-
30	906	1.01	150	17	36	46	92	9.5	N/C	-	16000	0.6	5.5	3.2	300	-	-	-	-
31	906	1.02	80																
1	906	1.02	90																
2	906	SEA WATER																	
3	890	1.30	50	18	7	2	6	10.8	16	-	18000	0.8	1.9	1.2	250	-	9	91	4
4	890	1.30	50	18	7	2	6	10.8	16	-	18000	0.8	1.9	1.2	250	-	9	91	4
5	875	1.30	50	18	7	2	6	10.8	16	-	18000	0.8	1.9	1.2	280	-	9	91	4
6	875	1.30	50	18	7	2	6	10.8	16	-	18000	0.8	1.9	1.2	280	-	9	91	4
7	875	1.30	48	16	6	2	6	10.5	18	-	18000	0.7	1.6	1.0	320	-	8	92	4
8	945	1.30	52	22	7	2	4	10.0	12	-	17000	0.6	1.2	1.0	400	-	10	90	4
9	1260	1.33	53	24	7	2	6	10.5	14	-	16000	0.7	1.1	1.3	400	-	10	90	6
10	1483	1.40	75	10	13	4	12	10.0	6.5	-	17000	0.4	0.6	1.0	400	-	13	87	13
11	1656	1.40	75	24	16	5	16	9.5	6	-	18000	0.2	0.5	0.6	500	-	14	86	12
12	1872	1.42	68	20	8	4	6	9.3	5	-	17000	0.2	0.4	0.4	580	-	14	86	14
13	1940	1.40	90	25	20	6	20	9.3	5.5	-	17000	0.1	0.2	0.3	600	-	14	86	14
14	1940	1.46	78	28	14			8.8	6	-	17000	0	0	0	600	-	16	84	14
15	1940	1.46	72	25	12	7	8	8.5	6	-	17000	0	0	0.2	600	-	16	84	14
16	1940	1.46	98	30	21	17	-	8.5	6	-	17000	0	0	0.1	600	-	18	82	14
17	1940	1.46	76	25	15	10	-	9.0	5.6	-	17000	0.1	0.2	0.4	600	-	17	84	12
18	1940	1.62	86	24	18	14	36	8.8	5.4	-	17000	0.1	0.1	0.2	600	-	21	79	12
19	1940	1.62	95	30	20	16	40	8.6	5.8	-	17000	0	0	0.1	600	-	22	78	12
20	1940	1.32	38	12	4	2	6	9.0	8.4	-	15000	0.4	0.6	0.9	300	-	13	87	16
21	1940	1.30	40	11	5	3	8	10.5	8.2	-	15000	0.8	1.2	2.8	400	-	12	88	17

DATE SPUD:

DATE T.D.:

DAILY MUD PROPERTIES

TABLE B-5

WELL: 31/4-3.

DATE	DEPTH	SP. GR. WT.	VIS SEC.	CORR. 115°F		GELS		PH BLACK STRIP	FLUID LOSS		CL CACL NACL MG/L	ALKALINITY			CA PPM	RETORT			BBL CEC
				PV	YP	0	10		100PSI API	500PSI 300°F HP HP		PF	PM	MF		% OIL	% SOL	% WATER	
22	1960	1.30	38	14	4	2	5	11.5	10	NC	17000	1.4	2	3.2	600	0	12	88	15
23	2109	1.30	40	14	4	2	4	11.3	14	45	15000	1.3	3	1.9	400	0	10	90	20
24	2171	1.30	42	14	5	2	5	11.3	12	40	18000	1.5	3	1.9	450	0	10	90	20
25	2275	1.31	44	16	5	2	6	11.8	7.5	36	17000	1.2	2.7	1.9	400	0	10	90	22
26	2357	1.31	43	17	4	2	4	10.8	7	34	18000	0.8	2.4	1.0	650	0	10	90	25
27	2393	1.31	43	16	4	2	6	11.5	6.5	28	18000	1.2	2.0	1.9	400	0	11	89	25
28	2440	1.31	43	18	5	2	5	11.3	5.8	25	18000	1.3	3.0	1.9	400	0	11	89	25
29	2507	1.31	44	20	4	3	6	10.8	6.2	25	18000	0.9	2.7	1.9	500	0	12	88	25
30	2536	1.31	44	19	4	2	5	9.7	6.4	24	18000	0.6	1.8	1.4	400	0	11	89	-
31	2544	1.31	46	16	5	2.5	18	10.4	6.8	23	18000	0.8	2.4	1.2	400	0	12	88	-
1	2616	1.27	44	17	4	2	10	10.6	7.4	25	17500	0.6	2.4	1.5	450	0	10	90	16
2	2689	1.20	44	14	4	2.5	13	10.0	6.4	26	18000	0.6	1.8	1.4	450	0	9	91	18
3	2705	1.20	42	16	5	2.5	-	9.8	6.6	24	18000	0.5	1.6	1.3	450	0	9	91	16
4	2736	1.20	45	18	5	4	14	10.5	7.8	27	18000	0.7	2.4	1.8	420	0	11	89	16
5	2810	1.20	42	18	4	3	8	11.2	6.8	24	18000	1.3	3.2	2.4	500	0	10	90	20
6	2816	1.20	40	16	5	2	7	11.4	6.5	24	18000	1.3	3.2	2.4	460	0	10	90	20
7	2816	1.20	40	16	5	2	7	11.4	6.5	25	18000	1.3	3.2	2.4	460	0	10	90	20
8	2816	1.20	40	16	5	2	7	11.4	6.5	25	18000	1.3	3.2	2.4	460	0	10	90	20
9	2816	1.20	40	16	4	2	4	11.5	6	22	15000	1.6	2.9	2.4	300	0	10	90	21
10	2816	1.19	60	15	7	3	7	10.6	7	20	18000	1.1	2.8	2.0	500	0	9	91	30
11	2840	1.19	46	16	6	3	10	10.8	4.8	18	18000	0.9	1.9	2.0	390	0	10	90	30
12	2881	1.20	45	16	5	3	8	10.2	7.6	17	18000	0.7	2.8	1.3	400	0	11	89	28
13	2933	1.21	44	17	6	3	10	10.0	6.8	17	18000	0.6	2.4	1.4	400	0	11	89	31
14	3000	1.20	46	17	6	4	28	10.6	7.2	17	18000	0.9	3.2	1.6	400	0	11	89	27
15	3061	1.24	49	18	6	4	30	10.4	7.8	18	18000	0.6	2.8	1.4	430	0	12	88	30
16	3167	1.21	53	15	5	3	27	10.0	8.4	19	18000	0.5	2.2	1.2	440	0	11	89	29
17	3234	1.21	60	18	6	3.5	26	10.1	8.8	18.4	18000	0.6	2.4	1.5	420	0	10	90	26
18	3256	1.21	57	18	7	1.5	24	10.2	8.4	19.0	18000	0.6	2.4	1.4	460	0	10	90	30

DATE SPLD:

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DAILY MUD PROPERTIES

TABLE B-5

WELL: 31/4-3.

DATE	DEPTH	SP. GR. WT.	VIS SEC.	CORR. 115°F		GELS		PH BLACK STRIP	FLUID LOSS		CL CACL NAACL MG/1	ALKALINITY			CA PPM	RETORT			BBL CEC
				PV	YP	0	10		100PSI API	500PSI 300°F HP HP		PF	PM	MF		% OIL	% SOL	% WATER	
19	3256	1.20	57	18	7	5	24	10.2	8.4	19	18000	0.6	2.4	1.4	460	0	10	90	30
20	3325	1.20	43	15	4	2	5	11.5	7	17	18000	0.9	2.2	1.5	300	1	11	88	28
21	3337	1.20	48	16	5	3	6	11.0	6.4	17	18000	0.9	2.4	1.6	300	1	10	89	30
22	3337	1.20	52	16	5	3	6	11.0	6.4	17	18000	0.9	2.4	1.6	300	1	10	89	30
23	3339	1.21	42	16	5	3	6	9.8	6	16	18000	0.4	1.0	0.9	560	1	10	89	30
24	3413	1.21	52	16	5	2	6	11.5	6	15	18000	1.2	2.3	1.9	250	1	11	88	30
	3417	1.22	48	19	5	2	5	11.0	6	16	18000	1.3	2.3	1.9	240	1	11	88	30
26	3450	1.22	48	13	4	2	5	10.0	7	16	18000	0.4	1.0	1.2	320	1	9	90	30
27	3482	1.22	58	15	5	2	5	11.0	5	16	18000	0.5	1.4	1.3	280	1	8	91	30
28	3515	1.22	55	16	5	2	8	10.6	5.2	12	18000	0.3	1	1	240	1	8	91	30
29	3545	1.22	48	11	4	2	6	10.4	6	15	18000	0.3	1.4	1.4	260	1	9	90	30
1	3605	1.22	55	10	4	2	6	10.6	6.2	14	18000	0.6	1.5	1.4	2000	1	9	90	27.5
2	3632	1.22	55	15	4	2	8	10.3	5.6	14	17000	0.3	1.2	1.1	200	½	9.5	90	25
3	3653	1.24	55	17	4	2	12	10.3	6	14	17000	0.3	1	1.3	240	½	10	89.5	30
4	3691	1.21	55	16	4	3	9	10.2	6	17	16000	0.3	0.45	0.5	240	1	9	90	27.5
5	3710	1.21	60	19	4	3	12	11.2	6.8	18	15000	0.3	0.9	0.6	240	½	9	90	25
6	3710	1.21	48	16	4	4		11.2	6		15000	0.3	0.8	0.6	240	½	9	90.5	25
7	3710	1.21	53	15	4	3	8	10.5	6.4	14	14000	0.2	0.5	0.6	240	½	8	91.5	25
8	3711	1.21	50	17	4	3	9	10.3	7.3	17	14000	0.3	1	0.7	240	½	8	91.5	25
9	3711	1.24	49	17	4	3	10	9.7	6.3		14000	0.15	0.7	0.9	280	½	9.5	90	25
10	3711	1.24	47	17	4	3	10	9.9	6.2		14000	0.2	0.5	0.6	320	½	9	90.5	25
10	3726	1.19	47	15	4	3	7	10.3	6.8	18	15000	0.6	1	0.9	480	0	9	91	28
11	3726	1.19	50	15	4	3	7	10.3	6.8	18	15000	0.6	1	0.9	480	0	9	91	28
12	3726	1.20	50	16	5	3	7	9.8	8	20	15000	0.3	0.8	0.9	500	0	9	91	30
13	3726	1.20	45	16	5	3	7	9.8	8	20	15000	0.3	0.8	0.9	500	0	9	91	30
14	3729	1.20	42	18	4	2	5	10.3	6.5	22	16000	0.4	1	0.8	480	TR	9	91	30
15	3748	1.20	40	16	5	2	5	11.5	6	18	16000	1.1	2	0.9	480	TR	9	91	30
16	3781	1.20	42	16	4	2	4	11.3	5.8	17	17000	1	2	0.9	400	TR	9	91	30

DATE SPUD:

DATE T.D.:

DAILY MUD PROPERTIES

TABLE B-5

WELL: 31/4-3.

DATE	DEPTH	SP.GR. WT.	VIS SEC.	CORR. 115°F		GELS		PH BLACK STRIP	FLUID LOSS		CL CACL NACL MG/1	ALKALINITY			CA PPM	RETORT			BBL CEC
						PV	YP		100PSI API	500PSI 300°F HP HP		PF	PM	MF		% OIL	% SOL	% WATER	
17	3818	1.20	43	17	3	2	4	11.5	5.4	18	15000	1.4	2.4	2.4	440	1	9	90	30
18	3892	1.20	42	19	4	3	4	10.8	5.2	17	16000	1.0	1.8	2.0	450	1	10	89	30
19	3933	1.20	45	18	4	2	4	9.9	5.4	18	17000	0.9	1.6	1.3	500	2	9	89	30
20	3979	1.20	45	19	4	2	5	10.2	5.0	17	17000	0.9	1.8	1.6	400	2	9	89	28
21	4020	1.20	45	18	5	3	4	10	5.2	18	17000	0.9	1.4	1.4	480	2	9	89	30
22	4080	1.20	43	16	6	3	5	11.5	5.4	16	15000	1.5	2.6	2.9	350	1	9	90	30
23	4116	1.20	48	16	5	3	4	11.5	5.2	17	16000	1.3	2.5	2.6	300	1	9	90	35
24	4116	1.20	50	13	4	2	5	10.4	5.6	16	15000	0.2	0.5	1.0	300	1	9	90	30
25	4116	1.20	54	14	4	2		10.5	5.8	16	15000	0.3	1.2	1.8	300	1	9	90	30
26	4116	1.20	72	17	5	2	12	11.6	6		15000	0.6	2.9	1.8	560	1	9	90	30
27	4116	1.20	80	17	5	2	12	11.6	6		15000	0.6	2.8	1.8	560	1	9	90	30
28	4116	1.20	53	13	5	3	11	11.6	6.4	17	15000	0.45	2.8	1.65	560	1	9	90	25
29	4133	1.20	47	15	5	3	12	11.6	7.4	16.6	15000	0.4	4.8	1.5	480	1	9	90	25
30	4170	1.20	43	12	5	3	12	11.5	6	16.4	13000	0.4	3	0.9	320	1	7	92	22.5
31	4195	1.20	41	13	5	3	11	11.4	6	14.4	12000	0.5	1.8	1.5	240	2	8	90	25
1	4216	1.20	41	13	5	3	8	11.4	5.2	13.6	12000	0.4	1.0	1.4	320	2	7	91	22.5
2	4270	1.20	41	13	5	3	9	11.1	6	12	10000	0.4	0.8	1.4	360	3	7	90	25
3	4350	1.20	45	13	5	3	11	10.6	5.8	11.8	10000	0.3	0.8	1.4	240	3	7	90	22.5
4	4365	1.20	45	13	5	3	8	10.6	5.6	12.4	10000	0.3	0.8	1.4	240	3	7	90	22.5
5	4423	1.20	43	14	5	3	11	10.2	6	12.6	9000	0.2	0.8	1.1	400	3	8	89	22.5
6	4467	1.20	45	12	5	4	11	10.6	6.2	16	8000	0.3	1.0	1.2	200	3	9	88	22.5
7	4547	1.20	52	16	6	3	5	10.3	6.8	16	10000	0.6	1.0	1.3	200	3	9	88	25
8	4585	1.20	52	18	5	3	6	9.8	5.4	15	11000	0.3	0.9	0.6	300	3	9	88	25
9	4625	1.20	46	16	5	3	4	9.5	5.8	16	11000	0.3	0.6	0.5	250	3	9	88	25
10	4684	1.20	44	16	5	3	4	10.8	5.2	15	12000	0.8	1.2	1.0	250	3	9	88	25
11	4696	1.20	44	15	4	2	5	10.5	5.5	16	12000	0.6	1.1	0.9	200	3	9	88	23
12	4782	1.20	42	15	5	2	4	10.2	5.6	16	13000	0.4	0.9	0.9	380	2	9	88	22

DATE SPLD:

DATE T.D.:

DAILY MUD PROPERTIES

TABLE B-5

WELL: 31/4-3.

DATE	DEPTH	SP.GR. WT.	VIS SEC.	CORR. 115°F		GELS		PH BLACK STRIP	FLUID LOSS		CL CACL NACL MG/L	ALKALINITY			CA PPM	RETORT			BBL CEC
				PV	YP	0	10		100PSI API	500PSI 300°F HP HP		PF	PM	MF		% OIL	% SOL	% WATER	
13	4829	1.20	42	15	4	2	4	11	5	15	1300	0.9	1.7	1.2	200	2	9	89	26
14	4875	1.19	42	14	3	2	3	10.8	5.6	14	1300	0.7	1.6	1.9	280	2	9	89	25
15	4936	1.19	42	14	3	2	3	11	5.2	14	1300	1.0	1.6	1.9	200	2	9	80	26
16	4972	1.19	45	14	4	3	4	10.8	5	14	1400	1.0	2	1.9	250	2	9	89	25
17	4974	1.19	50	14	5	3	4	22	5.2	14	1400	1.0	2	1.9	250	2	9	89	25
18	4977	1.19	60	14	7	4	6	11	5	14	1400	1.0	1.9	1.5	200	2	9	89	24
19	4981	1.19	68	14	8	4	6	11	5	14	1400	1.0	2	1.8	200	2	9	89	24
20	4981	1.19	50	14	4	2	4	10.5	5	14	1400	0.9	1.9	1.4	280	2	9	89	24
21	4981	1.19	50	14	4	2	4	10.5	5	14	1400	0.9	1.9	1.4	280	2	9	89	24
22	4981	1.20	45	13	4	2	4	8.7	4	14	1300	0.9	4	1.6	320	2	9	89	23
23	4981	1.20	45	13	4	2	4	11.5	4.8	14	1300	0.9	4	1.6	320	2	9	89	23
24	4981	1.20	47	12	3	2	4	11.5	4.8	19	1300	0.8	4	1.6	320	2	8	90	23
25	4981	1.20	50	14	4	2	4	10	4	NA	12500	0.5	1.4	1.8	240	2	8	90	23
26	4981	1.20	50	14	4	2	4	10	4	NA	12500	0.5	1.4	1.8	240	2	8	90	23
27	4981	1.20	49	14	4	2	4	10	4	NA	12500	0.5	1.4	1.8	240	2	8	90	23
				WELL LOGGED AND TESTED,		MUD NOT CIRC. A/A		PROPERTY		ES REMAINED STATIC									
				TILL THE WELL WAS P/A.															
		P/A																	

DATE SPUD:

DATE T.D.:

6.3 Mud Report

36" hole, 30" casing:

The 36" hole was drilled to 282 m using seawater and occasional sweeps of high viscous gel pills. The 30" casing was run and cemented with no problems. Materials used in this section were bentonite, caustic soda and soda ash.

26" hole, 20" casing:

The riser was run before the 17-1/2" pilot hole was drilled. 17-1/2" pilot hole was drilled using seawater and high viscous pills. Underreamed to 26" hole. Circulated 15 m³ gel around the hole, followed by seawater followed by 15 m³ gel. Then pumped 160 m³ of gel into hole. The 20" casing was run and landed without any problems. The mud volume used could not be recovered. Materials used were bentonite, caustic soda, soda ash and lime.

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

This hole section was drilled to 1940 m using a Drispac system. The weight was increased from 1.3 rd to 1.62 rd at the casing point. At 1260 m the hole became very tight and the bit was changed. The new bit had to be washed and reamed to bottom. Prehydrated gel plus premixed mud was added to the system and drilling continued. After raising the mud weight to 1.4 rd the rheology increased and massive amount of cuttings came over the shakers. Premixed mud was then pumped into the system to help stabilize the rheology and the centrifuge was run to lower the active mud weight and retain the baryte. At 1872 m the hole became tight and finally packed off. Circulation was regained and several very high viscous pills were pumped around to clean the hole. The viscosity was raised for the remainder of the hole section. The 13-3/8" was run but had to be hung off due to bad weather. When resuming operations, the casing was pulled out of the hole and laid down. After running in the hole with drill pipe for a wiper trip, the mud density was raised and high viscous pills pumped around to clean the hole. After the wiper trip the casing was run and set with no problems. A total of 35 m³ mud were lost while cementing. The materials used were baryte, Drispac reg., Drispac superlo, bentonite, Spercene, caustic and soda ash.

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

The mud properties were kept as close to programmed values as economically possible. The yield point was run around 5 Pa to insure hole cleaning without impeding the solids removal equipment performance. The API Fluid Loss was around 6 cc and the HTHP Fluid Loss was kept at below 15 cc for the bottom section. Mud weight used was from 1.31 to 1.2 rd. Materials used in this section were, barite, bentonite, caustic soda, soda ash, bicarbonate, lime, XP-20, Spersene, Drispac, Resinex, CMC LV, CMC HV, aluminium stearate.

8-3/8" hole:

The mud weight for this interval was maintained at 1.2 rd without any sign of gas or lost circulation. The yield point was around 5 Pa to ensure good hole cleaning. The API Fluid Loss was maintained between 4 - 6 cc and the HTHP Fluid Loss was kept between 12 - 15 cc. Throughout this interval the solids were maintained at the optimum level of 8-9%. Materials used for this interval were barite, bentonite, Spersene, XP-20, caustic, Resinex, Drispac, CMC HV, CMC LU, soda ash, Magconol, aluminium stearate.