

N Baroid

OPERATING AREA

Statoil 34/10-4

MATERIALS USED PER CASING INTERVAL

30" CASING INTERVAL

MATERIAL	UNIT	ESTIMATED		ACTUAL	
		QUANTITY	COST \$	QUANTITY	COST \$
WYO. BENTONITE	50 kg	300 sx	4,266.00	20 MT	5,973.60
SODA ASH	50 kg	10 sx	186.70	7 sx	98.00
CAUSTIC SODA	25 kg	10 sx	148.30	6 sx	66.72
LIME	25 kg	10 sx	44.50		
INTERVAL COST			4,645.50		6,138.32
COST PER DAY			4,645.50		6,138.32
COST PER METER		52	89.33	52	118.04
COST PER BARREL		600	7.74	1350	4.54

N. Baroid

OPERATING AREA Statoil 34/10-4

MATERIALS USED PER CASING INTERVAL

26" HOLE

MATERIALS	UNIT	ESTIMATED		ACTUAL	
		QUANTITY	COST \$	QUANTITY	COST \$
BARITE IN BULK	MT	10	1,188.00	56	5,880.00
WYO. BENTONITE	MT			10	2,986.80
W. BENTONITE	50 kg.	800 sx	11,376.00	366	3,905.22
AQUAGEL	100 lb			444	4,306.80
CMC HV	25 kg			26	1,218.36
CAUSTIC SODA	25 kg	30 sx	494.90	70	778.40
SODA ASH	50 kg	15 sx	280.05	12	168.00
Q-BROXIN	25 kg			10	118.80
MICA F	25 kg			18	249.30
WALLNUT F	25 kg			7	205.63
LIME	40 kg	20 sx	84.00	2	6.68
TOTAL COST			13,377.95		19,821.99
COST PER DAY			4,459.32		3,303.66
COST PER BARREL		3000	4.46	6970	2.84
COST PER METER			39.23		54.01
COST PER BBL/DAY			1.49		0.47

NL Baroid

OPERATING AREA Statoil 34/10-4

MATERIALS USED PER CASING INTERVAL

17½" HOLE

MATERIALS	UNIT	ESTIMATED		ACTUAL	
		QUANTITY	COST \$	QUANTITY	COST \$
BARITE IN BULK	MT	150 MT	17,820.00	133 MT	13,465.00
W. BENTONITE	50 kg	500 sx	7,110.00	30 sx	320.10
AQUAGEL	100 lb			150 sx	1,455.00
HPD POLYMER	25 kg	50 sx	3,124.00		
CAUSTIC SODA	25 kg	50 sx	741.50	112 sx	1,245.44
SODA ASH	50 kg	25 sx	466.75	2 sx	28.00
Q-BROXIN	25 kg	200 sx	3,168.00	224 sx	2,661.12
SOD. BICARB.	50 kg			18 sx	236.16
CMC LV	25 kg			60 sx	2,427.60
DRISPAC SL.	50 lb			10 sx	1,118.40
TOTAL COST			32,430.25		23,456.82
COST PER DAY		5	6,486.05	6	3,909.42
COST PER METER		805	40.29	809	28.99
COST PER BARREL		5000	6.49	4400	5.33
COST PER BBL/DAY			1.30		0.89

N. Baroid

OPERATING AREA Statoil 34/10-4

MATERIALS USED PER CASING INTERVAL

12 1/4" HOLE

MATERIALS	UNIT	ESTIMATED		ACTUAL	
		QUANTITY	COST \$	QUANTITY	COST \$
BARITE IN BULK	MT	350 MT	41,580.00	352 MT	36,960.00
WYO. BENTONITE	50 kg	300 sx	4,266.00	67 sx	714.89
Q-BROXIN	25 kg	200 sx	3,168.00	140 sx	1,663.20
CAUSTIC SODA	25 kg	40 sx	593.20	55 sx	611.60
HPD POLYMER	25 kg	50 sx	3,124.00		
CMC LV	25 kg	50 sx	2,697.00		
SOD. BICARB.	50 kg			28 sx	367.36
MICA F	25 kg			95 sx	1,315.75
WALLNUT F & C	25 kg			99 sx	1,199.88
ALUM. STEARATE	25 kg			1 sx	41.35
TOTAL COST			55,428.40		44,168.75
COST PER DAY		3	18,476.07	6	7,361.46
COST PER METER		310	178.80	253	174.58
COST PER BARREL			18.48		16.36
COST PER BBL/DAY		3000	6.16	2700	2.73

N. Baroid

OPERATING AREA Statoil 34/10-4

MATERIALS USED PER CASING INTERVAL

8½" HOLE

MATERIALS	UNIT	ESTIMATED		ACTUAL	
		QUANTITY	COST \$	QUANTITY	COST \$
BARITE	MT	150 sx	17,820.00	231 sx	24,255.00
AGGREGEL	50 kg	100 sx	1,422.00	88 sx	853.60
Q-BROXIN	25 kg	90 sx	1,425.60	200 sx	2,376.00
CAUSTIC SODA	25 kg	20 sx	296.60	57 sx	633.84
HPD POLYMER	25 kg	20 sx	1,246.60		
DRISPAC S	50 lb			18 sx	2,013.12
CMC LV	25 kg	20 sx	1,078.80		
LIGNITE	50 lb			325 sx	4,959.50
SOLTEX	50 lb			135 sx	5,358.15
BICARB	50 kg			5 sx	65.60
SODA ASH	50 kg			2 sx	28.00
MICA	25 kg			105 sx	1,454.25
WALLNUT	25 kg			105 sx	1,272.60
TOTAL COST PER DAY			23,292.60		43,269.66
COST PER DAY		9	2,588.06	10	4,326.90
COST PER BARREL		1000	23.29	2020	21.42
COST PER METER		470	49.56	281	153.98

N. Baroid

OPERATING AREA Statoil 34/10-4

MATERIALS USED PER CASING INTERVAL

6" HOLE

MATERIALS	UNIT	ESTIMATED		ACTUAL	
		QUANTITY	COST \$	QUANTITY	COST \$
BARITE	MT	120 sx	14,256.00	128 sx	13,440.00
AQUAGEL	50 kg	100 sx	1,422.00	80 sx	853.60
AQUAGEL	100 lb	325 sx		325 sx	3,152.50
CAUSTIC SODA	25 kg	20 sx	296.00	88 sx	978.56
Q-BROXIN	25 kg	90 sx	1,425.60	210 sx	2,494.80
HPD POLYMER	25 kg	20 sx	1,249.60		
CC-16	50 lb			213 sx	3,250.38
CMC LV	25 kg	20 sx	1,078.80	17 sx	687.82
SODA ASH	50 kg	14 sx			196.00
BICARB	50 kg			3 sx	39.36
MICA F	25 kg			15 sx	207.75
WALLNUT	25 kg			90 sx	1,090.80
TOTAL COST			19,728.60		26,391.57
COST PER DAY		8	2,466.07	12	2,199.30
COST PER BARREL		100	19.73	1200	21.99
COST PER METER		400	49.32	655	40.29

N Baroid

OPERATING AREA Statoil 34/10-4

MATERIALS USED PER CASING INTERVAL

WELL TESTING

MATERIAL	UNITS	QUANTITY	COST \$
BARITE	MT	135 sx	14,175.00
WYOMING BENTONITE	100 lb	138 sx	1,338.60
WYOMING BENTONITE	50 kg	22 sx	234.74
LIGNOSULFONATE	25 kg	90 sx	1,099.20
LIGNITE	50 lb	7 sx	106.82
CMC LV	25 kg	4 sx	161.84
CAUSTIC SODA	25 kg	8 sx	88.96
SOD. BICARBONATE	50 kg	4 sx	52.48
SODA ASH	50 kg	3 sx	42.00
CMC HV	25 kg	1 sx	46.86
TOTAL COST			17,316.50
BARRELS OF MUD BUILT			407
DAYS TESTING			14
COST PER BARREL/ DAY			3.04

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OPERATING AREA Statoil 34/10-4

TOTAL MATERIAL CONSUMPTION

MATERIAL	PACKAGING	QUANTITY
Baryte	metric ton	1035 MT
Wyoming Bentonite	100 lb	1145 sx
Wyoming Bentonite	50 kg	565 sx
Wyoming Bentonite	metric ton	10 MT
Lignosulfonate	25 kg	874 sx
Caustic	25 kg	396 sx
CMC LV	25 kg	113 sx
Lignite	50 lb	545 sx
Soltex	50 lb	135 sx
Soda Ash	50 kg	40 sx
Sodium Bicarbonate	50 kg	58 sx
Mica Fine	25 kg	200 sx
Mica Coarse	25 kg	15 sx
Wallnut Fine	25 kg	186 sx
Wallnut Coarse	25 kg	108 sx
CMC HV	25 kg	27 sx
Drispac Superlo	50 lb	28 sx
Aluminium Stearate	25 kg	1 sx

WELL NAME: Statoil 34/10-4

MUD PROPERTY RECAP

DATE	DEPTH	DENSITY	VISC-OSITY	FILTRATE	HT/HP filt		pH	RHEOLOGY				FILTRATE ANALYSIS					RETORT ANALYSIS			CEC	OTHER			
					Cake	°500psi		PV	YP	10"	10'	Cl	Ca	Pf	Mf	Pm	Oil	Water	Corr. Solids					PPB
1979	metres	SG	secs	ccs	1"/32mm	ccs	1"/32mm	cp	lbs/100ft ² -gms/100cm ²	mg/litre	ppm				%	%	%	Bent. Eq.						
21.8	1343	1.31	48	11.3	2			10.3	14	9	15	39	17000	180	.3	.8			86	14	30			
	1377	1.28	49	10.1	2			10.3	12	11	6	11	16000	160	.3	.8			86	14	32½			
22.8	1443	1.30	46	9.9	2			10.0	12	10	6	20	16000	180	.25	.85			86	14	32½			
	1450	1.35	52	10.0	2			10.0	14	10	8	25	16000	220	.25	.7			84	16	35			
23.8	Pit	1.35	46	10.5	2			10.2	13	11	5	18	16000	180	.3	.9			84	16	32½			
	1450	1.34	56	12.2	2			9.0	11	14	9	43	16500	320	.1	.7			84	16	35			
24.8	Pit	1.36	56	10.0	2			9.0	14	13	8	24	16500	280	.15	.9			84	16	37½			
	Pit	1.30	49	10.1	2			11.5	10	10	6	21	17000	60	1.0	1.65			85	15	32½			
25.8	1450	1.35	44	8.8	2			11.2	10	6	1	15	16000	60	1.3	3.4			84	16	32½			
	Pit	1.36	43	9.7	2			11.6	10	10	8	35	16000	80	1.2	2.0			84	16	35			
26.8	1458	1.50	47	9.8	2			11.7	15	15	21	41	16000	60	1.5	2.8			80	20	35			
	1514	1.50	45	8.8	2			11.7	16	12	15	36	15000	120	1.6	2.7			80	20	32½			
	1598	1.48	54	7.9	2			11.0	16	12	9	20	15000	80	1.4	2.3			80	20	32½			
27.8	1689	1.55	47	7.7	2			11.0	16	11	5	25	14500	120	1.0	2.0			79	21	35			
	1704	1.68	47	8.4	2	44.4	8	11.4	17	8	5	31	13500	140	.9	1.8			76	24	32½			
	1487	1.67	57	7.2	2			11.0	19	12	5	22	13500	160	.8	1.8			76	24	35			
28.8	1705	1.67	50	9.6	2			10.8	19	12	9	35	14000	180	.7	1.5			76	24	35			
	1704	1.70	48	8.2	2			10.7	18	7	1	17	14000	200	.65	1.55			74	26	32½			
29.8	Pit	1.71	47	7.7	2			10.7	17	9	5	30	13500	200	.6	1.6			74	26	32½			

WELL NAME: Statoil 34/10-4

MUD PROPERTY RECAP

DATE	DEPTH	DENSITY	VISC-O-SITY	FILTRATE	HT/HP filt			pH	RHEOLOGY				FILTRATE ANALYSIS					RETORT ANALYSIS			CEC	OTHER						
					Cake	°500psi			PV	YP	10'	10'	Cl	Ca	Pf	Mf	Pm	Oil	Water	Corr. Solids		PPB						
						1" / 32"	ccs																1" / 32"	cp	lbs/100ft ² - gms/100cm ²	mg/litre	ppm	%
1979	metres	SG	secs	ccs																								
29.8	Pit	1.71	57	8.0	2	48	8	10.8	19	9	5	36	14000	220	.6	1.5		74	26	32½								
30.8	Pit	1.71	57	7.8	2			10.8	19	9	6	33	14000	230	.6	1.5		74	26	32½								
31.8	1697	1.70	55	8.5	2	54	8	11.2	22	16	12	26	17500	336	.67	1.72		75	25	32½								
1:9	1750	1.75	56	7.8	2	36	8	11.2	21	15	9	28	15700	400	.5	1.70		74	26	32	1/4							
	1821	1.75	54	5.2	1	20	4	10.2	20	11	4	17	16500	400	.45	1.90		74	26	32	1/8							
2.9	1826	1.83	56	4.4	1	14.6	3	11.2	21	15	6	22	15900	400	.6	1.6	TR	73	27	32	1/8							
3.9	1844	1.83	56	4.4	1	14.2	3	10.8	22	12	6	28	15900	520	.6	1.9	TR	73	27	32	1/4							
	1857	1.83	57	4.0	1	13.8	3	11.0	21	10	4	15	15900	340	.8	2.6	TR	73	27	30	1/4							
4.9	1893	1.83	53	3.4	1	13.2	3	11.0	21	11	3	12	15200	320	.8	2.4	TR	72	28	<30	1/8							
5.9	1910	1.83	56	3.2	1	13.6	3	11.0	23	13	4	17	16200	240	.9	2.4	TR	73	27	28	1/8							
	1940	1.83	55	3.2	1	13.2	3	11.0	23	10	4	13	16800	260	.85	2.6	TR	73	27	28	<1/4							
6.9	1983	1.83	54	3.0	1	13.2	3	11.0	22	11	3	11	16400	280	.9	2.7	TR	73	27	28	<1/4							
	1983	1.83	55	3.0	1	13.2	3	11.0	24	12	4	12	16500	280	.86	3.6	TR	73	27	28	1/2							
7.9	1985	1.83	54	2.8	1	13.2	3	9.8	21	13	4	16	16400	280	.4	1.9	TR	73	27	28	1/2							
8.9	1985	1.83	53	2.8	1	13.2	3	10.8	21	20	4	11	16600	300	.76	2.1	TR	73	27	28	1/2							
	1985	1.83	54	2.8	1	13.2	3	11.0	21	9	3	9	16600	280	.8	1.96	TR	73	27	28	1/2							
9.9	1985	1.83	52	3.0	1	13.8	3	10.6	18	9	3	9	16200	320	.6	2.4	TR	73	27	28	1/2							
10.9	Pit	1.83	47	3.2	1	13.8	3	9.8	17	8	2	7	16800	280	.5	2.2	TR	73	27	26	1/2							
11.9	Pit	1.83	49	3.3	1	13.8	3	11.0	19	11	4	12	16800	320	.7	1.8	TR	73	27	28	1/2							

WELL NAME: Statoil 34/10-4

MUD PROPERTY RECAP

DATE	DEPTH	DENSITY	VISC. OSITY	FILTRATE		HT/HP filt		pH	RHEOLOGY				FILTRATE ANALYSIS					RETORT ANALYSIS			CEC	OTHER			
				ccs	Cake 1"/mm	°500psi ccs	3"/mm		PV cp	YP lbs/100ft ² -gms/100 cm ²	10" 10'	10' 100	Cl mg/litre	Ca ppm	Pl	Mf	Pm	Oil %	Water %	Corr. Solids %		PPB Bent. Eq.	SAND		
1979	metres	SG	secs	ccs	1"/mm	°500psi ccs	3"/mm		cp	lbs/100ft ² -gms/100 cm ²	10" 10'	10' 100	mg/litre	ppm				%	%	%	Bent. Eq.	SAND			
20.9	Pit	1.75	50	3.0	1	18.8	4	12.0	19	7	2	19	12500	160	1.8	3.3		0	74	26	25	1/4			
	2107	1.75	58	3.2	1	19.6	4	11.4	20	7	2	19	12500	160	1.8	3.4		0	75	25	25	1/4			
21.9	2235	1.75	51	3.1	1	19.0	4	11.8	19	7	2	19	12000	160	1.3	3.0		0	74	26	25	1/4			
	2266	1.75	53	2.7	1	20.0	4	11.6	20	7	2	15	12500	160	1.4	3.0		0	75	25	25	TR			
22.9	Pit	1.75	54	2.8	1	19.2	4	11.6	20	8	2	17	12500	180	1.1	2.7		0	74	26	25	1/8			
	2293	1.75	54	3.3	1	18.6	3	11.5	20	8	3	19	13000	200	1.0	2.6		0	74	26	25	1/8			
	2344	1.75	60	2.8	1	18.8	3	11.8	21	8	2	13	13000	140	1.2	2.8		0	74	26	25	1/4			
23.9	Pit	1.75	51	2.4	1	18.2	3	11.6	20	8	2	14	13000	140	1.1	2.7		0	74	26	25	1/4			
	2354	1.75	52	2.4	1	18.0	3	11.6	20	6	2	11	13500	140	1.3	2.9		0	74	26	25	1/4			
24.9	2365	1.75	49	2.7	1	18.2	3	11.9	18	6	2	8	13000	120	1.7	3.3		0	74	26	25	1/4			
	2376	1.75	50	2.5	1	20.8	4	11.9	18	7	1	7	13500	140	1.3	3.0		0	74	26	25	1/4			
25.9	2398	1.75	50	2.4	1	18.8	3	11.5	18	5	1	5	14500	160	1.1	2.7		0	74	26	25	1/4			
	2414	1.73	48	2.4	1	20.4	4	11.4	17	5	1	4	13000	160	.9	2.3		0	74	25	25	1/4			
26.9	2438	1.72	49	2.3	1	19.2	4	11.3	16	6	0	3	13000	160	.9	2.7		0	75	25	25	1/4			
	2452	1.72	48	2.4	1	18.0	3	11.5	16	5	0	6	13000	120	1.2	2.8		0	75	25	25	1/4			
	2473	1.71	53	2.2	1	17.6	3	11.5	17	5	1	7	13000	120	1.1	2.6		0	75	25	25	1/4			
27.9	Pit 2473	1.72	49	2.3	1	18.0	3	11.6	16	5	1	10	13000	140	1.1	2.8		0	75	25	25	1/4			
	2481	1.72	52	2.0	1	16.8	3	11.6	17	6	3	10	14000	140	1.1	2.9		0	75	25	25	<1/4			
28.9	2500	1.72	53	2.4	1	11.6	3	11.8	18	6	2	6	13500	180	1.4	3.1		0	75	25	25	<1/4			

V TESTING OPERATIONS AND RESULTS

Summary

Two drill-stem tests were run in well 34/10-4, both in the Rannoch formation.

The first test was in the bottom of the formation (1880-1885 m RKB) while the second was in the top part (1824-1826 m RKB). By making two tests of the Rannoch formation, two zones with different productivity were evaluated, and fluid-samples could be collected from different depths in the reservoir.

Both tests were run without major problems, and gave satisfactory results.

DST NO 1

Perforated interval: 1880-1885 m RKB

Objectives

To test the lower part of the Rannoch-formation for productivity, pressure and temperature. Obtain representative samples of the reservoir fluid.

Test operation

Two misrun with the teststring were made before it was successfully set.

The well was first opened on 32/64" choke for initial flow followed by a shut-in period. Opened up, first on 16/64" choke and thereafter on 20/64" choke for clean up and second flow period. After second flow the well was choked back for rate measuring before bottom hole sampling. Due to bad weather bottom hole sampling was postponed and a 3rd flow period on 20/64" choke with shut in period was run. Thereafter 4 bottom hole samples were successfully taken.

Initial flow : 2 mins
Initial build up: 60 mins
Second flow : 357 mins
Third flow : 133 mins
Shut in (WOW) : 20 hrs.

Flowdata

The well produced 29^o API oil at stable conditions (WHP and BHP)

Flowrate (20/64" choke): 1760 STB/D
GOR: 490 SCF/STB

Test analysis

Reservoir pressure (p*) 4478 psi
Kh 330000 md ft
K (h=formation thickness) 1120 md

Skin: partial penetration	49
damage	187
Productivity index (actual)	5,7 B/D/psi
(ideal)	170 B/D/psi

DST NO 2

Perforated interval: 1824-1826 m RKB

Objectives

As for DST no 1.

In addition to test the formation strength. By perforating a short interval (2 m) high rates pr. perforation would be obtained at fairly low rates.

Test operation

Opened the well on 32/64" choke for initial flow followed by a shut-in period. Clean up and second flow period on a 16/64" choke. Took 4 bottom hole samples when flowing well on 8/64" choke. The rate was then increased in steps to obtain critical rate/drawdown for sand production. Choke size was increased in steps (flowed well approx. 2 hrs. at each step) up to 32/64" choke producing approx. 4000 B/D. At this rate the well was shut in due to a leak at surface. After a build up period the rate was increased in steps up to 5200 B/D. No sand was produced.

Initial flow	:	1,5 mins
Initial build up	:	57 mins
Second flow	:	435 mins
Third flow	:	510 mins
Build up	:	304 mins
Fourth flow	:	505 mins

Flowdata

The well produced 29^o API oil with a GOR approx. 460 SCF/STB. At each rate the well performed very stable, both bottom hole

and at surface, indicating high productivity.

Flow rates 16/64"	1250 B/D
32/64"	4000 B/D
20/64" + 32/64"	5200 B/D

Test analysis

Reservoir pressure (p*)	4419 psi
Kh	485600 md ft
K (h=formation thickness)	1645 md
Skin: part. penetration	65
damage	33
Productivity index: actual	19 B/D/psi
ideal	250 B/D/psi

SUMMARY OF RFT 34/104

Date: 6.9.79

Run: 1

Purpose: Check of pore pressures and sampling of Brent Fm.

Interval: 1794 - 1881.5 m MSL (1819 - 1906.5 m RKB)

Sample at: 1827.5 (RKB)

Ten successful pressure tests were made, test No. 11 (at 1819 m RKB) was aborted due to seal failure. Corrected hydrostatic and formation pressure build-up are tabulated below.

Sampling:

On the basis of the pretests, 1827 m (RKB) was selected for sampling. The seal failed in the attempt to fill the 11 gl. chamber. The tool was retracted and reset with no success. The tool was then dropped to 1827,5 m (RKB). Attempted to fill 1 gl. chamber then probably filled with mud. Opened 2 3/4 gl. chamber, which filled in 15 minutes.

RFT RESULTS AND ANALYSIS

Pressure corrections, P:

$$P_{\text{TRUE}} = P_{\text{LOG}} + P$$

From mastercalibration $P = 28$ psi for pressure and temperature range in question. (142°F , 4400 - 5000 psi).

Test No.	Depth(MSL)	Hydrost.	Form. Hydrost.	Form.	Time(sec)	
1	1881,5	4975	4485	4947	4457	43
2	1874.5	4455	4480	4927	4452	104
3	1861,0	4921	4465	4893	4437	38
4	1852.5	4900	4456	4872	4428	93
5	1840.0	4871	4445	4843	4417	60
6	1832.0	4849	4435	4821	4407	110
7	1818,5	4813	4420	4785	4392	96
8	1809.0	4789	4412	4761	4384	32
9	1802.0	4771	4404	4743	4376	56
10	1796.5	4756	4397	4728	4369	54
11	1794.0	Seal failure				

The RFT hydrostatic pressure was greater than what is predicted from 1.83 g/cc mud. However, there was a 25 bbl slug of 1.93 g/cc mud in the casing.

Reservoir pressure (RFT) was plotted vs depth. The gradient corresponds to a sp.gr. equal to 0,732 (0,317 psi/ft).

8. The maximum temperature recorded during DST no. 1 was 72.4°C or 162.3°F and 71.5°C or 160.7°F during DST no. 2.

9. No water was produced.

FLOWRATES FROM WELL 34/10-4 DST No. 1A.
(main flow periods)

<u>Date</u>	<u>Time</u>	<u>Choke</u> <u>(1/64")</u>	<u>Qo</u> <u>(STB/D)</u>	<u>Qy</u> <u>(MMSCF/D)</u>	<u>GOR</u> <u>(SCF/STB)</u>
5/10	18.01-23.34	20	1750	.860	490
6/10	09.52-12.05	20	1800	.920	510

DATA USED IN THE DELIVERABILITY ANALYSIS.

34/10-4 DST 2

 $P_i = 4419.7$ psia

<u>TIME</u>	<u>CHOKE 1/64"</u>	<u>Qo STBPD</u>	<u>Pwf psia</u>	<u>ΔP psi</u>	<u>$\Delta P/Qo$ psi/STBPD</u>
23.48-03.00	8	350	4404.5	15.2	43.4 x 10 ⁻³
04.07- 5.15	10+16	1800	4336.1	83.6	46.4 x 10 ⁻³
05.20-06.45	14+16	2280	4312.2	107.2	47.1 x 10 ⁻³
07.00-08.00	12+20	2850	4284.7	135.0	47.4 x 10 ⁻³
08.20-09.30	16+20	3280	4260.0	159.7	48.7 x 10 ⁻³
09.45-10.00	14+24	3530	4247.9	171.8	48.7 x 10 ⁻³
10.15-10.45	16+24	3710	4235.7	184.0	49.6 x 10 ⁻³
11.00-11.45	20+24	4020	4205.0	214.7	53.4 x 10 ⁻³
12.05-12.15	32	4050	4204.6	215.1	53.1 x 10 ⁻³
18.15-18.45	20	2100	4319.7	100.0	47.6 x 10 ⁻³
19.00-19.15	24	2750	4287.2	132.5	48.2 x 10 ⁻³
19.30-21.00	32	4150	4212.2	207.5	50.0 x 10 ⁻³
21.15-23.30	12+32	4300	4199.7	220.0	51.2 x 10 ⁻³
24.00-00.30	16+32	4610	4177.2	242.5	52.6 x 10 ⁻³
00.45-01.45	20+32	5100	4164.7	255.0	50.0 x 10 ⁻³

23.48-12.15 : Gauge no. 1054

18.15-01.45 : Gauge no. 1092 + 19.73 psi

<u>Date</u>	<u>Time</u>	<u>Choke (1/64")</u>	<u>Qo (STB/D)</u>	<u>Qg (MMSCF/D)</u>	<u>GOR (SCF/STB)</u>
11/10	12.24-18.01	16	1250	.585	470
	19.21-22.15	8	365		
11-12/10	23.48-03.00	8	350		
12/10	04.07-05.15	10+16	1800	.775	430
	05.20-06.45	14+16	2280	.975	430
	07.00-08.00	12+20	2850	1.225	430
	08.20-09.30	16+20	3280	1.48	450
	09.45-10.00	14+24	3530	1.61	460
	10.15-10.45	16+24	3710	1.71	460
	11.00-11.45	20+24	4020	1.90	470
	12.05-12.15	32	4050	1.99	490
	18.15-18.45	20	2100	.975	460
	19.00-19.15	24	2750	1.26	460
	19.30-21.00	32	4150	1.85	450
	21.15-23.30	12+32	4300	2.04	470
13/10	24.00-00.30	16+32	4610	2.12	460
	00.45-01.45	20+32	5100	2.38	470