

Casing Interval		Total	30"	20"	13 3/8"	9 5/8"	7"	Testing
Material	Unit/Weight	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity
Mil Bar	M Ton	2906,6		52,6	628	1449	513	261
Mil Gel	50 Kg	2663	275	843	382	683	330	150
Drispac Reg.	50 Lbs	252			49	120	42	41
Drispac Su.Lo.	50 Lbs	294			74	141	62	17
CMC Hv	25 Kg	180	10		160		10	
CMC Lv	25 Kg	123			7	116		
Unical	25 Kg	754			227	327	113	42
Lubrisal	55 Gal	59			4	42	13	
MD Detergent	55 Gal	30	2			26	2	
Drilling Detergent	25 Kg	27					27	
Alvar Detergent	25 Kg	50			26	24		
Caustic Soda	50 Kg	278		18	154	28	63	15
Caustic Soda	25 Kg	75				75		
Gypsum	50 Kg	339			339			
Bicarbonate	50 Kg	104				82	6	16
Soda Ash	50 Kg	100	12	2	5	73	8	
Nut Plug F	25 Kg	46				20	26	
Mica M	25 Kg	70				50	20	
W.O. Defoamer	5 Gal	9			7		1	1
Flosal	50 Lbs	383	231	121	15	16		
Sodium Nitrate	50 Kg	28				5	10	13
Mil Spot	50 Lbs	25				25		
Mil Free	55 Gal	1						1
CaCl ₂	50 Kg	16						16
Lime	25 Kg	2	2					
Fiber Tex	40 Lbs	2				2		
Detergent Soap	40 Kg	25			25			
Salt Water Gel.	25 Kg	336	170	84	82			

Table 2.3.

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Detergent Soap	40 Kg	25			25			
Salt Water Gel:	25 Kg	336	170	84	82			

Table 2.3. Cont.

3.2.1. DST

The attached report (Attachment 5) is describing operational aspects as well as interpretation of the two tests that were performed in this well. The first test (2608 to 2613m RKB) produced a small amount of water, while at the second test (2510 to 2536m) the well flowed at a rate of 1500 STB/D with a separator GoR of 670 scf/STB. No water, and no appreciable solid matter was observed. Stabilized flow was maintained for more than 4 hours on a 16/64 inch choke with a flowing WHP of 2600 psig.

Interpretation of test data resulted in the following parameters:

Reservoir pressure:	5548 psig at 2499m RKB
Flow capacity:	3.966 mDft
Oil permeability:	47.6 mD (h = 26m)
Skin factor:	5.2
Productivity index:	3.2

The attached report gives more detailed information.

With the observed skin damage, a production well at this location could probably produce about 5000 BOPD into a 1500 psi surface system or about 9000 BOPD if the first stage separator was operated at about 500 psi. If the skin damage could be avoided, and replaced by a small skin improvement by means of some kind of stimulation, then an initial rate of about 12.000 BOPD would be achievable into a 1500 psi system or about 18000 BOPD into a 500 psi system.

1.1.6. Testing

A. Drill Stem Tests

Two production tests were performed in this well.

DST_1 (2608 - 2613 m RKB):

The flow rate was approximately 11 m³/day (79 bbls/day). A total of 1.65 m³ (10.4 bbls) was recovered. The produced fluid was salt water (Cl-content 20000 ppm).

Flowing pressure : 27600 KPa (4000 psi)
Final close in pressure : 37900 KPa (5500 psi)
Estimated res. pressure : 38300 KPa (5550 psi)

DST_2 (2510 - 2536 m RKB)

Average final flow of 238 m³/day of oil (1500 BOPD) through a 1/4" choke at a well head pressure of 17930 KPa (2600 psi).

Average GOR: 120 m³/m³ (735 scf/STB). Oil Gravity 0.82 g/cm³ (41.7° API)

BHT: 94.4° C (202° F)

Flowing pressure : 35030 KPa (5079 psi)
Final close in pressure : 38270 KPa (5540 psi)
Estimated res. pressure : 38260 KPa (5548 psi)

Operator DST report distributed under separate cover. <

B. RFT

See table 1.3.

3.2.2. RFT

A great number of attempts resulted in 7 pressure readings:

<u>Depth</u> (m)	<u>Uncorrected Pressures</u> (psi)	<u>Corrected Pressures</u> (psi)
2512	5522	5546
2516	5564	5586
2516	5522	5546
2541 1)	5561	5573
2567	5608	5620
2628	5664	5676
2639.5 2)	5680	5692

The corrected pressures have been plotted vs depth in fig. 3.4.

- 1) A segregated sample was taken. Recovered oil, gas and mudfiltrate.
- 2) A segregated sample was taken. Recovered formation water and mudfiltrate.