

NEW MEXICO OIL CONSERVATION COMMISSION

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JUN

5 1963 Form C-122

Revised 12-1-55
ARTS. OFFICE

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Atoka Penn Formation Bend County EddyInitial X Annual Special Date of Test 5-22 & 23-63Company Marathon Oil Company Lease G. W. Nickson "A" Well No. 1Unit A Sec. 30 Twp. 18S Rge. 26E Purchaser -Casing 5 1/2 Wt. 17 I.D. 4.892 Set at 9178 Perf. 8912 To 9076Tubing 2 3/8 Wt. 4.7 I.D. 1.995 Set at 8897 Perf. 8993 To 8996Gas Pay: From 8912 To 9076 L 8996 xG 0.620 -GL - Bar.Press. 13.2Producing Thru: Casing Tubing X Type Well Single

Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: 5-8-63 Packer 8880 Reservoir Temp. 156

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter) Type Taps Flange

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						2770		Pkr.	-	84 Hr. SI
1.	3"	1"	610	34	81	2240	72			3
2.	3"	1.50	610	17	86	1992	70			3
3.	3"	1.50	600	30	86	1630	72			2
4.	3"	1.50	600	41	87	1389	74			2
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	6.182	145.6	623.2	0.9804	0.9837	1.052	913
2.	14.36	103.0	623.2	0.9759	0.9837	1.052/0.8	1494/1472
3.	14.36	135.6	613.2	0.9759	0.9837	1.052/0.8	1967/1965
4.	14.36	158.6	613.2	0.9750	0.9837	1.052/0.8	2298/2296
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio 131,107 cf/bbl.Gravity of Liquid Hydrocarbons 54.5 deg.c (1-e^{-s})Specific Gravity Separator Gas 0.62Specific Gravity Flowing Fluid P_c P_c

No.	P _w P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ^{-s})	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w /P _c
1.									
2.									
3.									
4.									
5.									

Absolute Potential: 3196* MCFPD; n 1.24481COMPANY Marathon Oil CompanyADDRESS P. O. Box 2107 - Hobbs, N.M.AGENT and TITLE Petr. Engr.

WITNESSED

COMPANY

Rate	Bottom Hole Pressures		2 P _f - P _s	REMARKS
	P _f & P _s	P _f ² & P _s ²		
1	3552.2	12618	-	
	2883.2	8313	4305	
	2584.2	6678	5940	
	2160.2	4666	7952	
	1884.2	3550	9068	

*Absolute potential based on slope of 1.0 thru Flow Rate No. 4.