

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

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C-122*

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Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special				Test Date April 20, 1976		MAY 14 1976					
Company Marathon Oil Company			Connection Transwestern Pipeline Company			O. C. C. ARTERIA, OFFICE					
Pool South Newmill-Strawn Gas			Formation Strawn			Unit					
Completion Date 9-27-75		Total Depth 6561'		Plug Back TD 6345'		Elevation 3942' GL					
Farm or Lease Name State "27"		Well No. 1		Perforations: From 6218' To 6268'		Csg. Size 5 1/2"					
Unit M		Sec. 27		Twp. 4S		Rge. 27E					
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single		Packer Set At 6095'		County Chaves		State New Mexico					
Producing Thru Tubing		Reservoir Temp. °F 112 @ 6243'		Mean Annual Temp. °F 60		Baro. Press. - P _g 15.025					
L 6200		H 6200		G _g 0.666		% CO ₂ 3.5					
				% N ₂ 2.4		% H ₂ S 0.0					
Prover		Meter Run 2"		Taps Flange							
FLOW DATA				TUBING DATA				CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI							1363		Packer		112
1.	2"		1.25"	583	3.0	65	1266	65			4
2.	2"		1.25"	651	7.2	75	1126	75			4
3.	2"		1.25"	658	9.0	75	972	75			4
4.	2"		1.25"	658	12.0	70	812	70			4
5.	2"		1.25"	640	4.0	70	640	70			168
RATE OF FLOW CALCULATIONS											
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd				
1.	8.12	42.36	598	0.9952	1.225	1.056	443				
2.	8.12	69.25	666	0.9859	1.225	1.058	719				
3.	8.12	77.83	673	0.9859	1.225	1.058	808				
4.	8.12	89.87	673	0.9905	1.225	1.061	939				
5.	8.12	51.19	655	0.9905	1.225	1.059	534				
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.		A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.				
1.	0.88	525	1.43	0.896	243		58°				
2.	0.98	535	1.46	0.894	0.666		XXXXXXXXXX				
3.	0.99	535	1.46	0.893	XXXXX		0.678				
4.	0.99	530	1.44	0.888	680		680 P.S.I.A.				
5.	0.96	530	1.44	0.891	367		371 R				
P _c 1378 P _c ² 1898.9					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.294$						
					(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.145$						
NO.	P _r ²	P _w	P _w ²	P _r ² - P _w ²	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 611$						
1	1641.0	1281.5	1642.3	256.6							
2	1301.9	1142.6	1305.6	593.3							
3	974.2	989.4	978.9	920.0							
4	683.9	830.7	690.1	1208.8							
5	429.0	656.7	431.2	1467.7							
Absolute Open Flow _____ 611 _____ Mcfd @ 15.025					Angle of Slope @ _____			Slope, n 0.526			
Remarks: Flowing wellhead pressure of first rate is less than 95% of shut-in pressure since lower flow rates may not have kept well clear of liquids (additional remarks attached).											
Approved By Commission:			Conducted By: R. J. Duenckel			Checked By: R. J. Duenckel					