

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 3/29/88																															
Company Robert L. Bayless				Connection none																															
Pool Wildcat				Formation Pictured Cliffs																															
Completion Date 3/21/88		Total Depth 4075' RKB		Plug back TD 4019' RKB																															
				Elevation 7014' GL																															
Csg. Size 4 1/2		Wt. 11.6		d 4.000																															
Set At 4064		Perforations: From 3926 To 3952		Well No. 4																															
Tng. Size 1 1/2		Wt. 2.9		d 1.610																															
Set At 3940		Perforations: From To		Unit Sec. Twp. Rye. J 31 30N 3W																															
Type Well - Single - Hardhead - G.G. or G.O. Multiple gas - single				Packer Set At none																															
Producing Thru tubing		Reservoir Temp. °F 8		Mean Annual Temp. °F																															
				Baro. Press. - P _a 12.0 (est)																															
L		H		Cg																															
				% CO ₂																															
				% N ₂																															
				% H ₂ S																															
				Prover																															
				Meter Run																															
				Taps																															
FLOW DATA				TUBING DATA																															
CASING DATA				Duration of Flow																															
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w																														
SI	8 days																																		
1.	2 inch x .750																																		
2.																																			
3.																																			
4.																																			
5.																																			
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																														
1	12.365		65	.9952	1.240																														
2.																																			
3.																																			
4.																																			
5.																																			
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio																														
1	.10		1.40	.973	A.P.I. Gravity of Liquid Hydrocarbon																														
2.					Specific Gravity Separable Gas																														
3.					Specific Gravity Flowing Fluid																														
4.					Critical Pressure																														
5.					Critical Temperature																														
P_c 997 P_c² 994,009 <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>NO.</td> <td>P_i²</td> <td>P_w</td> <td>P_w²</td> <td>P_c² - P_w²</td> </tr> <tr> <td>1</td> <td></td> <td>378</td> <td>142,884</td> <td>851,125</td> </tr> <tr> <td>2</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>4</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5</td> <td></td> <td></td> <td></td> <td></td> </tr> </table> (1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.1679$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.1410$ AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1148$						NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²	1		378	142,884	851,125	2					3					4					5				
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²																															
1		378	142,884	851,125																															
2																																			
3																																			
4																																			
5																																			
Absolute Open Flow 1148 Mcld @ 15.025 Angle of Slope @ Slope, n .85																																			
Remarks:																																			
Approved By Division		Conducted By: David Ball		Calculated By: Kevin H. McCord																															
				Checked By:																															