

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 10/15/87																															
Company Union Texas Petroleum				Connection El Paso Natural Gas Co.																															
Pool Blanco				Formation Mesaverde																															
Completion Date 8/7/87		Total Depth 6860		Plug back TD 6817																															
				Elevation 6342 GL																															
Casing Size 7.625 5.500				Well No. 3M																															
WT. 26.4		d 6.969		Perforations: From 4445 To 4762																															
WT. 26.0		d 4.548		Perforations: From 4445 To 4762																															
Tub. Size 1.660		WT. 2.3		Tub. Size 1.380																															
				From 4664 To 4670																															
Type Well - Single - Brindhead - G.C. or G.O. Multiple Multiple - Gas				Packer Set At 5028																															
Producing Thru Tubing		Reservoir Temp. °F 9		Mean Annual Temp. °F 12																															
				Bare. Press. - P _g 12																															
L		H		Prover																															
		G _g 0.700		Meter Run																															
				Taps																															
FLOW DATA				TUBING DATA																															
Casing Data				Duration of Flow																															
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Temp. °F																														
1	2"		3/4"	640	59°																														
2				50	59°																														
3																																			
4																																			
5																																			
RATE OF FLOW CALCULATIONS																																			
NO.	Coefficient (24 Hour)	$\sqrt{h_p P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g																														
1	12.3650		62	1.0010	0.9258																														
2																																			
3																																			
4																																			
5																																			
NO.	P ₁	Temp. °R	T ₁	Z	Gas Liquid Hydrocarbon Ratio																														
1																																			
2																																			
3																																			
4																																			
5																																			
P_c 812 P_c² 659,344 <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>NO.</th> <th>P₁²</th> <th>P_w</th> <th>P_w²</th> <th>P_c² - P_w²</th> </tr> <tr> <td>1</td> <td></td> <td>532</td> <td>283,024</td> <td>376,320</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) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.7521$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.5228$ AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1089$						NO.	P ₁ ²	P _w	P _w ²	P _c ² - P _w ²	1		532	283,024	376,320	2					3					4					5				
NO.	P ₁ ²	P _w	P _w ²	P _c ² - P _w ²																															
1		532	283,024	376,320																															
2																																			
3																																			
4																																			
5																																			
Absolute Open Flow 1089				Mcf @ 15.025																															
Angle of Slope				Slope, n 0.75																															
Remarks:																																			
Approved By Division		Conducted By: Connie Clevenger		Checked By: John C. Rector																															