

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special			Test Date 5-4-1982								
Company Union Texas Petroleum Corp.			Connection El Paso Natural Gas Co.								
Pool Basin			Formation Dakota								
Completion Date 4-17-82		Total Depth 6630		Plug Back TD 6578							
Elevation 5645 G. L.		Farm or Lease Name New Mexico "B" Com									
Csg. Size 5.500		Well 15.5		Set At 4.950							
Perforations: From 6296 To 6417		Well No. 1E									
Thq. Size 2.063		Well 3.25		Set At 1.751							
Perforations: From To		Unit Soc. Twp. Rge. D 16 29 11									
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Gas/Gas Dual			Packer Set At 3110'								
Producing Thru Tubing			Reservoir Temp. °F Mean Annual Temp. °F Baro. Press. - P _a 12 psia (est)								
County San Juan			State New Mexico								
Prover Meter Run			Taps								
G _g .650			% CO ₂ % N ₂ % H ₂ S								
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
1	17 days						1404				3 hrs.
2	2 inch	.750	149				149	60°			
3											
4											
5											
RATE OF FLOW CALCULATIONS											
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd				
1	12.3650		161	1.000	.9608	1.015	1941				
2											
3											
4											
5											
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.						
1					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.						
2					Specific Gravity Separator Gas _____ X X X X X X X X						
3					Specific Gravity Flowing Fluid _____ X X X X X						
4					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.						
5					Critical Temperature _____ R _____ R						
P _c 1416 P _c ² 2005056					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.1081$			(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.08004$			
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2096$						
1		442	195652	1809404							
2											
3		Calculated									
4											
5											
Absolute Open Flow 2096 Mcfd @ 15.025					Angle of Slope θ _____			Slope, n .75			
Remarks: Water with a show of oil throughout test.											
Approved By Division			Conducted By: Joe Elledge			Calculated By: Joe Elledge			Checked By: Don Wells		