

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				Unit 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									
Csq. Size 5.500	Wt. 15.5	d 4.950	Set At 6628	Perforations: From 6296 To 6417							
Well No. 1E											
Thq. Size 2.063	Wt. 3.25	d 1.751	Set At 6402	Perforations: From To							
Unit D		Sec. 16	Twp. 29	Rge. 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)		State New Mexico									
L	H	G _g .650	% 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	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI	17 days						1404				
1.	2 inch	.750	149				149	60°			3 hrs.
2.											
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 _f	Temp. °R	T _f	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 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											
NO.	P _f ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.1081$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.08004$						
1		442	195652	1809404							
2											
3		Calculated			AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2096$						
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 _____											