

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 3-19-84	
Company Southland Royalty Company				Connection El Paso Natural Gas Company			
Pool East Blanco				Formation Pictured Cliffs			
Completion Date 2-18-84		Total Depth 4480'		Plug Back TD 4456'		Elevation 7442' GL	
Csg. Size 4.500		Wt. 10.50#		Set At 4476'		Perforations: From To	
Tbg. Size 2.375		Wt. 4.70#		Set At 4354'		Perforations: From 4144' To 4410	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At ---	
Producing Thru Tubing		Reservoir Temp. °F #		Mean Annual Temp. °F		Baro. Press. - P _a 12.2	
L		H		G _g		Prover	
				.700			
FLOW DATA				TUBING DATA		CASING DATA	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Duration of Flow
SI							
1.	2"	X	3/4"				1 hr
2.							2 hrs
3.							3 hrs
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	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	12.365		62.2	1.0000	.9258	1.0000	712
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		
$P_c = 1003.2$ $P_w^2 = 1006410.2$							
NO.	P _i ²	P _w	P _r ²	P _r ² - P _w ²	$(1) \frac{P_c^2}{P_r^2 - P_w^2} = 1.017$ $(2) \left[\frac{P_c^2}{P_r^2 - P_w^2} \right]^n = 1.014$		
1		128.2	16435.2	989975.0			
2							
3							
4							
5							
$AOF = Q \left[\frac{P_c^2}{P_r^2 - P_w^2} \right]^n = 722$							
Absolute Open Flow 722 Mcfd @ 15.025					Angle of Slope θ		Slope, n .85
Remarks:							
Approved By Division		Conducted By: Mike Neiss		Calculated By: James W. Smith		Checked By: R. E. Fielder	