

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 9-24-80			
Company Southland Royalty Company				Connection Southern Union Gathering					
Pool Basin				Formation Dakota				Unit	
Completion Date 9-24-80		Total Depth 7566'		Plug Back TD 7536'		Elevation 6269' GR		Farm or Lease Name Patterson "A" <i>Com</i>	
Cg. Size 7.000 4.500		Wt. 23# 10.5 # 1.6#		d 6.366 4.052		Set At 5000' 4692'-7563'		Perforations: From To	
Tg. Size 2.375		Wt. 4.7#		d 1.995		7479'		Perforations: From 7281' To 7506'	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At -----		Well No. #1E	
Producing Thru Tubing		Reservoir Temp. °F #		Mean Annual Temp. °F		Baro. Press. - P _a 12.2		Unit Sec. Twp. Rge. G 2 31N 12W	
L		H		Gg .700		% CO ₂		% N ₂	
						% H ₂ S		Prover	
								Meter Run	
								Taps	
FLOW DATA						TUBING DATA		CASING DATA	
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.
1.	2" X 1.995						1422		1381
2.							1 1/2 Oz.		160
3.							-----P I T O T-----		
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.							190		
2.									
3.									
4.									
5.									
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/dbl.				
1.					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.				
2.					Specific Gravity Separator Gas _____				
3.					Specific Gravity Flowing Fluid _____ X X X X X				
4.					Critical Pressure _____ P.S.I.A.				
5.					Critical Temperature _____ R				
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$ _____				
1.					(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$ _____				
2.					AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$ _____				
3.									
4.									
5.									
Absolute Open Flow _____ Mcfd @ 15.025					Angle of Slope @ _____		Slope, n _____		
Remarks: _____									
Approved By Division		Conducted By: Dick Irvin			Calculated By: James Smith			Checked By: L. O. Van Ryan	