

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☐ Initial ☐ Annual ☒ Special						Test Date 10-8-80						
Company Southland Royalty Company				Connection								
Pool Fulcher Kutz				Formation Pictured Cliffs				Unit				
Completion Date 3-7-80		Total Depth 1904		Plug Back TD		Elevation		Farm or Lease Name Reid PRI				
Csg. Size 8.625	Wt. 24	d 8.071	Set At 133	Perforations: From To		Well No. 2						
Thq. Size 2.895	Wt. 6.5	d 2.441	Set At 1891	Perforations: From To		Unit K		Sec. 13	Twp. 29N			
Type Well - Single - Brdenhead - G.G. or G.O. Multiple Single						Packer Set At		County San Juan				
Producing Thru Casing		Reservoir Temp. °F #		Mean Annual Temp. °F		Baro. Press. - P _a 12.2		State New Mexico				
L	H	G _g .700	% 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									187			
1.	2" x 3/8								78		15 m.	
2.									51		30 m.	
3.									38		45 m.	
4.									29		60 m.	
5.									13		120 m.	
RATE OF FLOW CALCULATIONS										6	180 m.	
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	3.0300		18.2	1.0000	.9258	1.0000	51					
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.			
5.					Critical Temperature				R			
P _c 190.2 P _c ² 36176.0												
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0092$							
1		18.2	331.2	35844.8	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0078$							
2												
3												
4												
5												
Absolute Open Flow					Mcf @ 15.025				Angle of Slope @		Slope, n .85	
Remarks:												
Approved By Division				Conducted By: Kelly Maxwell				Calculated By: James Smith				Checked By: