

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 Southern Union					
Pool Fulcher Kutz				Formation Pictured Cliffs				Unit	
Completion Date 3-7-80		Total Depth 1904		Plug Back TD 1891		Elevation 5640' GR		Farm or Lease Name Reid PRI	
Csg. Size 8.625	Wt. 24#	d 8.071	Set At 133	Perforations: From 1723 To 1747		Well No. #2			
Tub. Size 2.895	Wt. 6.5#	d 2.441	Set At 1891	Perforations: From To		Unit Sec. Twp. Rye. K 13 29N 12W			
Type Well - Single - Brodenhead - G.G. or G.O. Multiple S					Packer Set At		County San Juan		
Producing Thru Csg.		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	
SI									187		
1.	2"x3/8								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 F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd		
1	3.0300		18.2	1.0000	.9258	1.0000			
2.									
3.									
4.									
5.									

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcft/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

$P_c = 190.2$ $P_c^2 = 36176^0$					$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.0092$	$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0078$
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²		
1		18.2	331.2	35844.8		
2						
3						
4						
5						

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 51$				
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Absolute Open Flow _____ Mcfd @ 15.025		Angle of Slope θ _____	Slope, n .85
Remarks: _____			

Approved By Division	Conducted By: Kelly Maxwell	Calculated By: James Smith	Checked By:
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