

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 7-09-82	
Company Southland Royalty Company				Connection Southern Union Gathering			
Pool Kutz				Formation Fruitland		Unit	
Completion Date 6-24-82		Total Depth 2950'		Plug Back TD 2939'		Elevation 5767' GL	
Csg. Size 2.875		Wt. 6.5#		Set At 2.441		Well No. 3	
Tbg. Size ---		Wt. ---		Set At ---		Perforations: From 1490' To 1558'	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple G. G. - Multiple				Packer Set At -----		County San Juan	
Producing Thru Casing		Reservoir Temp. °F #		Mean Annual Temp. °F		Baro. Press. - P _a 12.2	
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									309		
1.	2"	X	3/4"						91		1 hr
2.									74		2 hrs
3.									64		3 hrs
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	12.365		76.2	1.0000	.9258	1.0000	872
2.							
3.							
4.							
5.							

NO.	P _t	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
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

$P_c = 321.2$ $P_c^2 = 103169.4$					$(1) \frac{P_c^2}{P_e^2 - P_w^2} = 1.0596$		$(2) \left[\frac{P_c^2}{P_e^2 - P_w^2} \right]^n = 1.0505$	
NO.	P _t ²	P _w	P _w ²	P _e ² - P _w ²				
1		76.2	5806.4	97363.0				
2								
3								
4								
5								

$AOF = Q \left[\frac{P_e^2}{P_c^2 - P_w^2} \right]^n = 916$				Absolute Open Flow _____ 916 _____ Mcfd @ 15.025		Angle of Slope @ _____ Slope, n .85	
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Remarks:			

Approved By Division	Conducted By: Tom Wagner	Calculated By: James Smith	Checked By: R. E. Fielder
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