

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 1-20-81	
Company Southland Royalty Company				Connection Southern Union Gathering	
Pool Basin				Formation Dakota	
Completion Date 1-5-81		Total Depth 8243'		Plug Back TD 8240'	
				Elevation 7062' GR	
Farm or Lease Name Jic 101				Well No. #3 E	
Csg. Size 7.625		Wt. 26.40#		Perforations: From To	
5.500		15.5#17.0#			
Trg. Size 2.0625		Wt. 3.25#		Perforations: From 8029' To 8202'	
		1.750			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Multiple - GG				Packer Set At 7652'	
Producing Thru Tbg		Reservoir Temp. °F 8		Baro. Press. - P _g 12.2	
L		H		New Mexico	
		Gg .700		County Rio Arriba	
		% CO ₂		State New Mexico	
		% N ₂		Prover	
		% H ₂ S		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							1580				
1.	2" x 3/4"						30				1 hr.
2.							27				2 hrs.
3.							25				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		37.2	1.0000	.9258	1.0000	426
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 _____
3.					Specific Gravity Flowing Fluid _____
4.					Critical Pressure _____ P.S.I.A.
5.					Critical Temperature _____ °R

P _c 1592.2 P _c ² 2535100.8				
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²
1		37.2	1383.8	25337170
2				
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0005$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 426$

(2) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0004$

Absolute Open Flow _____ 426 _____ Mcfd @ 15.025	Angle of Slope θ _____	Slope, n _____ .75 _____
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Remarks: Unloading H₂O & Trace of Oil

Approved By Division	Conducted By: Dwayne Horton	Calculated By: James Smith	Checked By: L.O. Van Ryan
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