

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 5-6-78	
Company Southland Royalty				Connection Southern Union Gathering			
Pool Blanco				Formation Mesa Verde		Unit	
Completion Date 4-20-78		Total Depth 5197'		Plug Back TD 5095'		Elevation 6081' GR	
Casing Size 7" 000 4.500		WT. 20# 105#		d 6.456 4.052		Set At 2761' 2611'-5196'	
Perforations: From 4838' To 5058'		Perforations: From To		Well No. 1A		Farm or Lease Name Sadie West	
Trg. Size 2.375		WT. 4.7#		d 1.995 5075'		Unit Sec. Twp. Rge. C-21-T31N-R12W	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At	
Producing Thru Tbg		Reservoir Temp. °F		Mean Annual Temp. °F		Baro. Press. - P _a 12.2	
State New Mexico		County San Juan		Meter Run		Taps	
L H Gg .700		% CO ₂		% N ₂		% H ₂ S	
Provor		Meter Run		Taps		Provor	

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
1.	2" x 3/4"						641		906		1 Hr
2.							315		676		2 Hrs
3.							283		606		3 Hrs
4.							262		568		
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		274.2	1.0000	.9258	1.0000	3139
2.							
3.							
4.							
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.										
2.										
3.										
4.										
5.										

NO.	P _r	P _w	P _c	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.6647$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.4655$
1.		580.2	336.632	506.459		
2.						
3.						
4.						
5.						

Absolute Open Flow 4600 Mcfd @ 15.025 Angle of Slope 75			
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4600$			

Approved By: _____ Conducted By: Leroy Castleman				Calculated By: James Smith		Checked By: _____	
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