

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 5-21-81			
Company Southland Royalty Company				Connection Southern Union Gathering					
Pool Blanco				Formation Mesa Verde				Unit	
Completion Date 5-18-81		Total Depth 6772'		Plug Back TD 6729'		Elevation 5741' GR		Farm or Lease Name Hare	
Csq. Size 5.500	Wt. 15.5#	d 4.950	Set At 6772'	Perforations: Menefee From 4093' To 4304'			Well No. 17-E		
Tbg. Size 1.900	Wt. 2.76#	d 1.610	Set At 4527'	Perforations: Point Lookout From 4374' To 4553'			Unit Sec. Twp. Rye. F 15 29N 10W		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple G. G. - Multiple						Packer Set At 4658'		County San Juan	
Producing Thru Tubing		Reservoir Temp. °F θ		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							922		1100		
1.	2"	X	3/4"				152		797		1 hr
2.							128		726		2 hrs
3.							118		692		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		130.2	1.0000	.9258	1.0000	1490
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	Mcft/bbl.	Deg.
1.												
2.												
3.												
4.												
5.												

P _c 1112.2 P _c ² 1236988.8					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.6691$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.4685$	
NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²		
1		704.2	495897.6	741091.2	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2188$	
2						
3						
4						
5						

Absolute Open Flow 2188 Mcfd @ 15.025		Angle of Slope θ Slope, n .75	
Remarks:			

Approved By Division	Conducted By: Dean Lingo	Calculated By: James Smith	Checked By: L. O. Van Ryan
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