

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 9-10-80			
Company Southland Royalty Company				Connection Southern Union Gathering					
Pool Blanco				Formation Mesa Verde				Unit	
Completion Date 3-25-80		Total Depth 7063'		Plug Back TD 7019'		Elevation 5976' GR		Farm or Lease Name Thompson	
Gas. Size 7.625	Wt. 26.40#	d 6.969	Set At 4580'	Perforations: From To		Well No. #5M			
Trg. Size 3.500	Wt. 15.50#	d 4.950	Set At 4426'-7063'	Perforations: From To		Unit Sec. Twp. Rye. I 33 - 31N - 12W			
1.900	2.76#	1.610	4918'	4652' To 4904'					
Type Well - Single - Bradenhead - G.C. or G.O. Multiple (G-Multiple)						Packer Set At 5025'		County San Juan	
Producing Thru 'Tubing		Reservoir Temp. °F 8		Mean Annual Temp. °F		Baro. Press. - P _a 12.2		State New Mexico	
L	H	Gg .700	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run	Taps	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
NC.	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.	
S							1032		1054	
1	2" X 3/4"						259		934	1 Hour
2							241		898	2 Hours
3							236		881	3 Hours
4										
5										

RATE OF FLOW CALCULATIONS							
NC.	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	12.365		248.2	1.0000	.9258	1.0000	2841
2							
3							
4							
5							

NC.	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										

P _r 1066.2 P _c ² 1136782.4		(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.3536$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.4782$	
NC.	P _r ²	P _w	P _w ²	P _c ² - P _w ²	
1		893.2	797806.2	338976.2	
2					
3					
4					
5					

Absolute Open Flow 7040 Mcfd @ 15.025		Angle of Slope 0		Slope, n .75	
Remarks:					

Approved By Division	Conducted By: Tom Wagner	Calculated By: James Smith	Checked By: L. O. Van Ryan
----------------------	-----------------------------	-------------------------------	-------------------------------