

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 8-30-80			
Company Southland Royalty Company				Connection Southern Union Gathering					
Pool Undesignated				Formation Fruitland				Unit	
Completion Date 9-13-80		Total Depth 7450'		Plug Back TD 7405'		Elevation 6231' GR		Farm or Lease Name Richardson	
Gas Size 7.000 4.500		Wt. 23# 10.5#		d 6.366 4.052		Set At 4988' 4707'-7450'		Perforations: From To	
Tub. Size 1.900		Wt. 2.76#		d 1.610		Set At 2508'		Perforations: From 2461' To 2492'	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple GG- Multiple						Packer Set At 2682'		County San Juan	
Producing Thru Tubing		Reservoir Temp. °F 8		Mean Annual Temp. °F		Baro. Press. - P _a 12.2		State NM	
L		H		Gg .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	
1	2" X 3/4"						883		884		1 Hour
2							144		401		2 Hours
3							115		335		3 Hours
4							101		307		
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		113.2	1.0000	.9258	1.0000	1296
2							
3							
4							
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/tbl.
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

NO.	P _r ²	P _w	P _w ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 1.1453$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.1222$
1	319.2	101888.6	701285.8			
2						
3						
4						
5						

Absolute Open Flow 1454 Mcfd @ 15.025				Angle of Slope 85	
Remarks:					
Approved By Division		Conducted By: Tom Wagner		Checked By: L. O. Van Ryan	