

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 12-24-83				
Company Southland Royalty Company				Connection Southern Union Gathering					
Pool Glades				Formation Fruitland				Unit	
Completion Date 9-20-83		Total Depth 3125'		Plug Back TD 3090'		Elevation 6455' GL		Farm or Lease Name Moore	
Csq. Size 2.875	Wt. 6.5#	d 2.441	Set At 3101'	Perforations: From 2601' To 2613'		Well No. 5			
Thq. Size ----	Wt. ----	d ----	Set At ----	Perforations: From ---- To ----		Unit Sec. Twp. Rge. H 35 32N 12W			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At ----		County San Juan		
Producing Thru Casing		Reservoir Temp. °F #		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									952		
1.	2"	X	1 1/2"						21		1 hr
2.									18		2 hrs
3.									16		3 hrs
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super. Comp. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	5.4315		28.2	1.0000	.9258	1.0000	142
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
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

$P_c = 964.2$ $P_c^2 = 929681.6$					$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.0009$ $(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0007$	
NO	P _t ²	P _w	P _w ²	P _c ² - P _w ²		
1		28.2	795.2	928886.4		
2						
3						
4						
5						

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 142$				
Absolute Open Flow _____ 142 _____ Mcfd @ 15.025		Angle of Slope θ _____		Slope, n _____ .85
Remarks: _____				

Approved By Division	Conducted By: Steve McCament	Calculated By: James W. Smith	Checked By: C. E. Fielder
----------------------	---------------------------------	----------------------------------	------------------------------