

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 2-23-82			
Company Southland Royalty Company				Connection Southern Union Gathering			
Pool Blanco				Formation Mesa Verde		Unit	
Completion Date 2-2-82		Total Depth 6670'		Plug Back TD 6625'		Elevation 5711' GL	
Farm or Lease Name Cain							
Csq. Size 5.500	Wt. 15.5#	d 4.950	Set At 6670'	Perforations: Menefee From 3968' To 4091'		Well No. 22	
Tsq. Size 1.900	Wt. 2.76#	d 1.610	Set At 4372'	Perforations: Point Lookout From 4300 To 4435		Unit Sec. Twp. Rge. C 31 29N 9W	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple G. G. - Multiple				Packer Set At 4471'		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
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.	
SI							895		893	
1.	2"	X	3/4"				63		719	
2.							54		702	1 hr
3.							52		687	2 hrs
4.										3 hrs
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		64.2	1.0000	.9258	1.0000	735
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _t	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/lbl.
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 907.2 P _c ² 823011.8				
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1		699.2	488880.6	334131.2
2				
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{2.4631}{1} = 2.4631$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1445$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{1.9662}{1} = 1.9662$

Absolute Open Flow	1445	Mcf/d @ 15.025	Angle of Slope @	Slope, n	.75
--------------------	------	----------------	------------------	----------	-----

Remarks: _____

Approved by Division	Conducted By: Richard Ramos	Calculated By: Jane Smith	Checked By: C.C. Parsons
----------------------	--------------------------------	------------------------------	-----------------------------