

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 11-20-80			
Company Southland Royalty Company						Connection Southern Union Gathering			
Pool Undesignated						Formation Chacra			
Completion Date 11-10-80		Total Depth 6710'		Plug Back TD 6669'		Elevation 5990' GR		Farm or Lease Name Cain Com	
Csq. Size 5.500	Wt. 15.5#	d 4.950	Set At 6709'	Perforations: From To		Well No. #12E			
Thg. Size 1.900	Wt. 2.70#	d 1.610	Set At 3120'	Perforations: From 3048' To 3156'		Unit Sec. Twp. Rge. 0 16 28N 10W			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple GG-Multiple						Packer Set At 3291'		County San Juan	
Producing Thru Tubing		Reservoir Temp. °F β		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							972		972		
1.	2" X 1/2"						103		312		1 Hour
2.							83		290		2 Hours
3.							70		277		3 Hours
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							
2.	5.4315		82.2	1.0000	.9258	1.0000	413
3.							
4.							
5.							

NO.	P _f	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.	Specific Gravity Separator Gas _____	Specific Gravity Flowing Fluid _____	Critical Pressure _____ P.S.I.A.	Critical Temperature _____ R
1.							X X X X X X X X			
2.							X X X X X			
3.										
4.										
5.										

P _c 984.2 P _c ² 968649.5					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0945$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0798$	
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²				
1								
2								
3								
4								
5								

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 446$					Absolute Open Flow <u>446</u> Mcfd @ 15.025		Angle of Slope θ _____ Slope, n <u>.85</u>		
Remarks: _____									
Approved By Division			Conducted By: Jim Choquette			Calculated By: James Smith		Checked By: L. O. Van Ryan	