

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 8-26-81				
Company Southland Royalty Company				Connection Southern Union Gathering					
Pool Basin				Formation Dakota				Unit	
Completion Date 7-19-81		Total Depth 7237'		Plug Back TD 4692'		Elevation 6018' GR		Farm or Lease Name Nye	
Csg. Size 7.625 4.500		Wt. 26.40# 11.6&10.5		Set At 6.969 4780' 4.052 4663-7237'		Perforations: From To		Well No. 10-E	
2.375		4.7#		1.995 7169'		Perforations: From 6948' To 7195'		Unit Sec. Twp. Rge. G 12 30N 11W	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single - G.G.					Packer Set At -----		County San Juan		
Producing Thru Tubing		Reservoir Temp. °F θ		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							1331		1331	
1.	2"	X	1/2"				259		546	1 hr
2.							132		313	2 hrs
3.							77		233	3 hrs
4.										
5.										

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, F _{py}	Rate of Flow Q, Mcfd
1	5.4315		89.2	1.0000	.9258	1.0000	449
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 X X X
4.					Critical Pressure	P.S.I.A. P.S.I.A.
5.					Critical Temperature	R R

P _c 1343.2 P _c ² 1804186.2		(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0345$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0257$	
NO	P _t ²	P _w	P _w ²	P _c ² - P _w ²	
1		245.2	60123.0	1744063.2	
2					
3					
4					
5					

Absolute Open Flow 460 Mcfd @ 15.025		Angle of Slope θ		Slope, n .75	
Remarks:					

Approved By Division	Conducted By: Mike Cattaneo	Calculated By: James Smith	Checked By: L.O. Van Rya ¹¹
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