

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 4-30-81	
Company Southland Royalty Company				Connection Southern Union Gathering	
Pool Blanco				Formation Mesa Verde	
Completion Date 4-7-81		Total Depth 7239'		Plug Back TD 7073'	
				Elevation 6091' GR	
Farm or Lease Name Nye				Well No. 14-E	
Csg 7.625 Size 5.500 Ibg. Size 4.000		Wt. 26.40# 15.50# 10.34#		d 6.969 4.950 3.476	
		Set At 4835' 4422-6937' 6805-7216'		Perforations: From 4902' To 5128'	
1.900		2.90#		1.610	
		5110'		To	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Multiple - G.G.				Packer Set At 5198'	
Producing Thru Tubing		Reservoir Temp. °F 8		Mean Annual Temp. °F 12.2	
Baro. Press. - P _g 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.	
SI							948		953	
1.	2"	X	3/4"				243		887	1 hr
2.							236		871	2 hrs
3.							229		854	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 Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	12.365		241.2	1.0000	.9258	1.0000	2761
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _t	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

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1	965.2	866.2	750302.4	181308.6
2				
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 5.1383$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 9423$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.4128$

Absolute Open Flow	9423	Mcf/d @ 15.025	Angle of Slope θ	Slope, n .75
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Remarks: _____

Approved by Division	Conducted By: Mike Catteno	Calculated By: James Smith	Checked By: L.O. Van Ryan
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