

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 3-31-81			
Company Southland Royalty Company				Connection Northwest Pipeline Company					
Pool South Los Pinos Fruitland				Formation Pictured Cliffs				Unit	
Completion Date 3-06-81		Total Depth 3822'		Plug Back TD 3761'		Elevation 6637' GR		Farm or Lease Name Burnt Mesa	
Csg. Size 4.500	Wt. 10.5#	d 4.052	Set At 3794'	Perforations: From To		Well No. 4			
Thg. Size 1.900	Wt. 2.90#	d 1.610	Set At 3727'	Perforations: From 3450' To 3760'		Unit M		Sec. 25	Twp. 32N
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single - G						Packer Set At -----		County San Juan	
Producing Thru Tubing		Reservoir Temp. °F P		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							721		1465	
1.	2"	X	3/4"				78		1252	1 hr
2.							22		1155	2 hrs
3.							12		1105	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		24.2	1.0000	.9258	1.0000	277
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 _____
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

$P_c 1477.2$ $P_c^2 2182119.8$					$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 2.3364$		$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.0571$	
NO	P _t ²	P _w	P _w ²	P _c ² - P _w ²				
1		1117.2	1248135.8	933984.0				
2								
3								
4								
5								

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 570$			
Absolute Open Flow 570		Mcf/d @ 15.025	
Angle of Slope θ		Slope, n .85	

Remarks:			

Approved By Division	Conducted By: Donnie Thompson	Calculated By: James Smith	Checked By: L. O. Van Ryan
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