

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 3-24-81			
Company Southland Royalty Company				Connection Northwest Pipeline Corporation					
Pool South Los Pino Fruitland				Formation Pictured Cliffs				Unit	
Completion Date 3-17-81		Total Depth 3932'		Plug Back TD 3879'		Elevation 6757' GR		Farm or Lease Name Burnt Mesa	
Csg. Size 4.500	Wt. 10.5#	d 4.052	Set At 3922'	Perforations: From 3529' To 3853'		Well No. 3			
Tbg. Size 1.900	Wt. 2.90#	d 1.610	Set At 3830'	Perforations: From To		Unit M		Sec. 26	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.	Temp. °F	
SI							1476		1480		
1.	2"		3/4"				514		1290		1 hr
2.							505		1240		2 hrs
3.							502		1227		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		514.2	1.0000	.9258	1.0000	5886
2.							
3.							
4.							
5.							

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

P _c 1492.2 P _c ² 2226660.8				
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²
1		1239.2	1535616.6	691044.2
2				
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.2222$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 15913$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.7035$

Absolute Open Flow	15,913	Mcf @ 15.025	Angle of Slope θ	Slope, n .85
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Remarks:

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