

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 2-25-81	
Company Southland Royalty Company			Connection Southern Union Gathering		
Pool Basin			Formation Dakota		Unit
Completion Date 2-14-81		Total Depth 6673'	Plug Back TD 6650'		Elevation 5668' GR
Farm or Lease Name Reid "A"		Well No.			
Csg. Size 5.500	Wt. 26.40#	d 6.969	Set At 2272'	Perforations: From To	
Thg. Size 1.900	Wt. 2.90#	d 1.610	Set At 6607'	Perforations: From 6460' To 6637'	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Multiple - GG			Packer Set At 4607'		County San Juan
Producing Thru Tbg.		Reservoir Temp. °F θ	Mean Annual Temp. °F		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							1187			
1.	2" x 3/4"						79			1 hr.
2.							60			2 hrs.
3.							51			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 F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	12.365		63.2	1.0000	.9258	1.0000	723
2.							
3.							
4.							
5.							

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

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DIST. 3

NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²
1				
2				
3				
4				
5				

P_c 1199.2 P_c² 1438080.6

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0028$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0021$

AOF = Q

$\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 724$

Absolute Open Flow	724	Mcfd @ 15.025	Angle of Slope θ	Slope, n	.75
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Remarks:

Approved By Division	Conducted By: Dean Lingo	Calculated By: James Smith	Checked By: L.O. Van Ryan
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