

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 1-2-81	
Company Southland Royalty Company			Connection Southern Union Gathering		
Pool Basin			Formation Dakota		Unit
Completion Date 11-16-80		Total Depth 6340'	Plug Back TD 6295'		Elevation 5581' GR
Farm or Lease Name Aztec					
Csq. Size 5.500	Wt. 15.5#	d 4.950	Set At 6340'	Perforations: From To	
Tbg. Size 2.375	Wt. 4.7#	d 1.995	Set At 6141'	Perforations: From 6070' To 6183'	
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Single - G				Packer Set At	
Producing Thru Tbg		Reservoir Temp. °F #	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							636		629	
1.	2" x 1/2"						219		459	15 min
2.							124		383	30 min
3.							43		360	45 min
4.							4		372	60 min
5.							0		449	120 min
RATE OF FLOW Cal. 0							492		180 min	

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{sc}	Rate of Flow P _m Mcd
1	5.4315		12.2	1.0000	.9258	1.0000	61
2.							
3.							
4.							
5.							

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

NO.	P _c	P _w	P _w ²	P _c ² - P _w ²
1	648.2	504.2	254217.6	165945.6
2				
3				
4				
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 2.5319$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 122$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.0072$$

Absolute Open Flow	122	Mcd @ 15.025	Angle of Slope @	Slope, n .75
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Remarks:

Approved By Division	Conducted By Tom Wagner	Calculated By James Smith	Checked By L.O. Van Ryan
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