

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 3-25-83	
Company Southland Royalty Company		Connection Northwest Pipeline Corporation	
Pool Basin		Formation Dakota	
Completion Date 3-16-83	Total Depth 6000'	Plug Back TD 5956'	Elevation 5846' GL
Farm or Lease Name Trading Post		Well No. 1	
Csq. Size 4.500	Wt. 10.5#	d 4.052	Set At 5999'
Thq. Size 2.375	Wt. 4.7#	d 1.995	Set At 5868'
Perforations: From To		Perforations: From 5855' To 5880'	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single		Packer Set At ----	
Producing Thru Tubing	Reservoir Temp. °F #	Mean Annual Temp. °F	Baro. Press. - P _a 12.2
L	H	Gg	% CO ₂ % N ₂ % H ₂ S
.700		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							2014		2014		
1.	2"	X	3/4"				201		480		1 hour
2.							142		351		2 hours
3.							129		297		3 hours
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	12.365		141.2	1.0000	.9258	1.0000	1616
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 _____ 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

$P_c = 2026.2$ $P_c^2 = 4105486.4$				
NO.	P ₁ ²	P _w	P _w ²	P _c ² - P _w ²
1		309.2	956046	4009881.8
2				
3				
4				
5				

$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.0238$

$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0178$

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1645$

Absolute Open Flow	1645	Mcfd @ 15.025	Angle of Slope @	Slope, n .75
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Remarks: _____

Approved By Division	Conducted By: Odell Farley	Calculated By: James Smith	Checked By: C. C. Parsons
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