

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
 Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 5-11-78	
Company Southland Royalty Co.				Connection Southern Union Gathering			
Pool Blanco				Formation Mesa Verde		Unit	
Completion Date 4-30-78		Total Depth 5258'		Plug Back TD 5156'		Elevation 6144'	
Casing Size 4.500		Wt. 20# 10.50#		d 6.456 4.052		Set At 2827 2665-5210	
Perforations: From 4672' To 5130'		Well No. #5A		Unit I		Sec. Twp. Rye. 21-T31N-R12W	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single		Packer Set At ---		County San Juan			
Producing Thru Tbg.		Reservoir Temp. °F p		Mean Annual Temp. °F		Baro. Press. - P _a 12.2	
State New Mexico		L		H		G _g	
.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
1.	2"	X	3/4"				902		1003		1 hr
2.							279		791		2 hrs
3.							246		734		3 hrs
4.							223		695		
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, Mcf/d
1.	12.365		235.2	1.0000	.9258	1.0000	2,692
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _f	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

$P_c = 1015.2$ $P_c^2 = 1,030,631$				
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1.		707.2	500,132	530,499
2.				
3.				
4.				
5.				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.9428$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.6456$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4,430$$

Absolute Open Flow	4,430	Mcf/d @ 15.025	Angle of Slope θ	Slope, n	.75
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Remarks: 1st Hour - surges of H₂O and light condensate
 2nd and 3rd Hour - Dry

Approved By Commission	Conducted By: Jim Bacon	Calculated By: James Smith	Checked By:
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