

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 5-2-78			
Company Southland Royalty Company				Connection Southern Union Gathering					
Pool Blanco				Formation Mesa Verde				Unit	
Completion Date 4-17-78		Total Depth 5790'		Plug Back TD 5790'		Elevation 6490' GR		Farm or Lease Name Lawson Federal	
Cas. Size 7.000	Wt. 20#	d 6.456	Set At 3406	Perforations: From 4716' To 5264'		Well No. #1-A			
4.500	10.5#	d 4.052	Set At 3270-5790'						
2.375	4.7#	d 1.995	Set At 5739'	Perforations: From 5298' To 5728'		Unit Soc. Twp. Rgs. A 31 32N 11W			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At		County San Juan	
Producing Thru Tubing		Reservoir Temp. *F 0		Mean Annual Temp. *F		Baro. Press. - P _a 12.2		State New Mexico	
L	H	G _q .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"						735		845		
2.							252		813		1 hr
3.							248		805		2 hrs
4.							247		798		3 hrs
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		259.2	1.0000	.9258	1.0000	2967
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 _____ 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 857.2 P _c ² 734,792				
NO.	P _f ²	P _w	P _w ²	P _c ² - P _w ²
1.		810.2	656,424	78,368
2.				
3.				
4.				
5.				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 9.3762$

$\Delta OP = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 15,898$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 5.3582$

Absolute Open Flow 15,898	Mcf @ 15.025	Angle of Slope θ	Slope, n .75
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Remarks:

Approved By: _____	Conducted By: Charles Saiz	Calculated By: James Smith	Checked By: _____
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