

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 2-2-83				
Company Southland Royalty Company				Connection Southern Union Gathering					
Pool Undesignated				Formation Fruitland				Unit	
Completion Date 1-8-83		Total Depth 2600'		Plug Back TD 2600'		Elevation 6119' GR		Farm or Lease Name Thompson	
Coq. Size 4.500	Wt. 9.5#	d 4.090	Set At 2600'	Perforations: From To		Well No. 13			
Tbg. Size 2.375	Wt. 4.7#	d 1.995	Set At 2281'	Perforations: From 2273' To 2281'		Unit Sec. Twp. Rge. F 28 31N 12W			
Type Well - Single - Brdrenhead - G.G. or G.O. Multiple Multiple - G.G.				Packer Set At -----		County San Juan			
Producing Thru Tubing		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.	Temp. °F	
SI							761		763		
1.	2"	X	3/4"				65		150		1 hr
2.							52		129		2 hrs
3.							45		115		3 hrs
4.											
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		57.2	1.0000	.9258	1.0000	655
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 775.2 P _c ² 600935.0				
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²
1		127.2	16179.8	584755.2
2				
3				
4				
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.0277$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 670$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0235$$

Absolute Open Flow 670 Mcfd @ 15.025		Angle of Slope @ _____	Slope, n _____
Remarks: _____			

Approved by Division	Conducted By: Leroy Castleman	Calculated By: James Smith	Checked By: C. C. Parsons
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