

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

Form C-122  
Revised 9-1-65

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special				Test Date 4-1-78							
Company Southland Royalty Company			Connection Southern Union Gathering								
Pool Blanco			Formation Mesa Verde		Unit						
Completion Date 3-18-78		Total Depth 5203'		Plug Back TD 5057'	Elevation 6017'						
Casing Size 7.000 4.500	Wt. 20# 10.50#	d 6.456 4.052	Set At 2633-2781 5190	Perforations: From 4609' To 4735'							
Tub. Size 2.375	Wt. 4.7#	d 1.995	Set At 5023	Perforations: From 4772' To 5038'							
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Single				Facker Set At -----							
Producing Thru Tbg.		Reservoir Temp. °F p		Mean Annual Temp. °F							
L		H		Baro. Press. - P <sub>a</sub> 12.2							
G <sub>g</sub> .700		% CO <sub>2</sub>		% N <sub>2</sub>							
% H <sub>2</sub> S		Provor		Meter Run							
Taps		County San Juan		State New Mexico							
FLOW DATA			TUBING DATA		CASING DATA						
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h <sub>w</sub>	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
1.	2"	X	3/4"				769		894		
2.							229		664		1 hr
3.							204		615		2 hrs
4.							192		592		3 hrs
5.											
RATE OF FLOW CALCULATIONS											
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P <sub>m</sub>	Flow Temp. Factor Ft.	Gravity Factor F <sub>g</sub>	Super Compress. Factor, F <sub>pv</sub>	Rate of Flow Q, Mcfd				
1.	12.365		204.2	1.0000	.9258	1.0000	2,338				
2.											
3.											
4.											
5.											
NO.	P <sub>r</sub>	Temp. °R	T <sub>r</sub>	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 <sub>r</sub> 906.2	P <sub>c</sub> <sup>2</sup> 821,198										
NO.	P <sub>r</sub> <sup>2</sup>	P <sub>w</sub>	P <sub>w</sub> <sup>2</sup>	P <sub>r</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup>	(1) $\frac{P_c^2}{P_r^2 - P_w^2} = 1.8003$		(2) $\left[ \frac{P_c^2}{P_r^2 - P_w^2} \right]^n = 1.5542$				
1.		604.2	365,058	456,140							
2.											
3.											
4.											
5.											
Absolute Open Flow	3,634	Mcf/d @ 15.025	Angle of Slope θ	.75							
Remarks:											
Approved By Commission:			Conducted By: Jim Bacon			Calculated By: James Smith			Checked By:		