

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special Test Date: 4-17-78					
Company: Southland Royalty Company				Connection: Southern Union Gathering	
Pool: Blanco				Formation: Mesa Verde	
Completion Date: 4-3-78		Total Depth: 5394'		Plug Back TD: 5302'	
				Elevation: 6206 GL	
Casing Size: 7.000 4.500		ID: 6.456 4.052		Set At: 3005 2845 5390	
Perforations: From 5042'				To 5278'	
Tubing Size: 2.375		WT: 4.7#		ID: 1.995	
				Set At: 5226	
Perforations: From -				To -	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: Single				Packer Set At: -	
Producing Through: Tbg		Reservoir Temp. °F: 0		Mean Annual Temp. °F: 12.2	
Baro. Press. - P _a : 12.2				State: New Mexico	
L: .		H: 0.700		Gg: .	
% 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							516		665		0
1.	2"	X	3/4"				206		554		1 Hr
2.							206		528		2 Hrs
3.							200		509		3 Hrs.
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		212.2	1.000	0.9258	1.000	2429
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.										
2.										
3.										
4.										
5.										

$P_c = 677.2$ $P_c^2 = 458,600$					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.4530$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.9601$	
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²				
1		521.2	271,649	186,951				
2								
3								
4								
5								

$AOI = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4761$

MAY 8 1978

OIL CON. COM.

DIST. 3

Absolute Open Flow: 4761	Mcfd @ 15.025	Angle of Slope: 0.15
--------------------------	---------------	----------------------

Remarks:			
Approved By Commission:	Conducted By: Charles Saiz	Calculated By: James Smith	Checked By: