

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 10-16-81	
Company Southland Royalty Company				Connection Southern Union Gathering	
Pool Blanco				Formation Pictured Cliffs Ext.	
Completion Date 8-18-81		Total Depth 2950'		Plug Back TD 2880'	
				Elevation 6300' GR	
Farm or Lease Name Chamberlain					
Csq. Size 4.500	Wt. 10.5#	d 4.052	Set At 2935'	Perforations: From To	
Tbg. Size 1.900	Wt. 2.9#	d 1.610	Set At 2817'	Perforations: From 2789' To 2854'	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Multiple - G.G.				Packer Set At 2675'	
Producing Thru Tubing		Reservoir Temp. *F #		Mean Annual Temp. *F	
				Baro. Press. - F_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							988				
1.	2"	X	3/4"				88				1 hr
2.							86				2 hrs
3.							76				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		88.2	1.0000	.9258	1.0000	1010
2.							
3.							
4.							
5.							

NO.	P_t	Temp. *R	T_t	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.					Specific Gravity Separator Gas _____
3.					Specific Gravity Flowing Fluid _____
4.					Critical Pressure _____ P.S.I.A.
5.					Critical Temperature _____ R

P_c 1000.2 P_c^2 1000400.				
NO.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		88.2	7779.2	992620.8
2				
3				
4				
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = \frac{1.0078}{1.0067}$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0067$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1017$$

Absolute Open Flow	1017	Mcf @ 15.025	Angle of Slope θ	Slope, n .85
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Remarks:			

Approved By Division	Conducted By: Dick Irvin	Calculated By: James Smith	Checked By: L.O. Van Ryan
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