

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 5-14-82	
Company Southland Royalty Company				Connection Southern Union Gathering	
Pool Blanco				Formation Mesa Verde	
Completion Date 4-17-82		Total Depth 6725'		Plug Back TD 6680'	
Elevation 5783' GL		Farm or Lease Name Cain			
Csg. Size 5.500	Wt. 15.5#	d 4.950	Set At 6724'	Perforations: From To	
Thq. Size 1.900	Wt. 2.76#	d 1.610	Set At 4542'	Perforations: From 3958' To 4590'	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple G. G. - Multiple				Packer Set At 4703'	
Producing Thru Tubing		Reservoir Temp. °F a		Baro. Press. - P _a 12.2	
L		H		G _g .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							1011		1015		
1.	2" X 3/4"						114		958		1 hr
2.							105		934		2 hrs
3.							98		922		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 F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	12.365		110.2	1.0000	.9258	1.0000	1262
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 1027.2 P _c ² 1055139.8			
NO	P _r ²	P _w	P _w ²
1		934.2	872729.6
2			
3			
4			
5			

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 5.7844$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.7299$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4707$$

Absolute Open Flow	4707	Mcfd @ 15.025	Angle of Slope @	Slope, n .75
Remarks:				

Approved By Division	Conducted By: Odell Farley	Calculated By: James Smith	Checked By: C. C. Parsons
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