

OIL CONSERVATION DIVISION

P. O. BOX 2088

Form C-122
Revised 10-1-78STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

SANTA FE, NEW MEXICO 87501

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 11-23-80	
Company Southland Royalty Company				Connection Southern Union Gathering			
Pool Basin				Formation Dakota			
Completion Date 11-3-80		Total Depth 6535'		Plug Back TD 6501'		Elevation 5749' GR	
Farm or Lease Name CAIN							
Csq. Size 5.500	wt. 15.5#	d 4.950	Set At 6535'	Perforations: From To		Well No. #9E	
Trg. Size 2.375	wt. 4.70#	d 1.995	Set At 6146'	Perforations: From 6293' To 6449'		Unit Sec. Twp. Rge. D 16 28N 10W	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single - G						Packer Set At -----	
Producing Thru Tbg.		Reservoir Temp. *F #		Mean Annual Temp. *F		Baro. Press. - P _a	
State New Mexico							
L	H	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							799		799		72 hrs.
1.											
2.											
3.											
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, Mcd
1				PITOT TUBE GAUGE			615 MCF
2.							
3.							
4.							
5.							

NO.	P _t	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 X
4.					Critical Pressure	P.S.I.A. P.S.I.A.
5.					Critical Temperature	R R

NO.	P _t ²	P _w ²	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$
1						
2						
3						
4						
5						

ACF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 615 \text{ MCF}$

Absolute Open Flow	615 MCF	Mcd @ 15.025	Angle of Slope @	Slope, n
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Remarks:

Approved By Division	Conducted By: Jim Choquette	Calculated By: James Smith	Checked By: L. O. Van Ryan
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