

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 7-15-80			
Company Southland Royalty Company				Connection Southern Union Gathering					
Pool Basin				Formation Dakota				Unit	
Completion Date 7-8-80		Total Depth 7365'		Plug Back TD 7326'		Elevation 6167' GR		Farm or Lease Name Richardson	
Csg. Size 7.0000 4.5000	Wt. 23# 10.5#	d 6.366 4.052	Set At 4864' 4709'-7362'	Perforations: From To				Well No. #9E	
Thq. Size 2.375	Wt. 4.7#	d 1.995	Set At 7266'	Perforations: From 7115' To 7316'				Unit Sec. Twp. Rge. L 15 - 31N - 12W	
Type Well - Single - Bradenhead - G.C. or G.O. Multiple GG-Multiple						Packer Set At 4761'		County San Juan	
Producing Thru Tubing		Reservoir Temp. °F #		Mean Annual Temp. °F		Baro. Press. - P _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.	
SI							960			
1.	2" X 3/4"						21			1 Hour
2.							11			2 Hours
3.							4			3 Hours
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		16.2	1.0000	.9258	1.0000	185
2.							
3.							
4.							
5.							

NO.	P _r	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	Mcf/bbl.	Deg.
1												
2.												
3.												
4.												
5.												

NO.	P _c	P _w	P _r	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	972.2	945172.8	16.2	262.4	1.0003	1.0002
2						
3						
4						
5						

NO.	P _c	P _w	P _r	P _c ² - P _w ²	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$
1					185
2					
3					
4					
5					

Absolute Open Flow 185 Mcfd @ 15.025		Angle of Slope @		Slope, n .75	
Remarks:					
Approved By Division					
Conducted By: Tom Wagner		Calculated By: James Smith		Checked By: L. O. Van Ryan	