

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 9-24-81			
Company Southland Royalty Company				Connection Southern Union Gathering					
Pool Undesignated				Formation Fruitland				Unit	
Completion Date 9-03-81		Total Depth 3000'		Plug Back TD 2943'		Elevation 6333' GR		Farm or Lease Name Hillstrom	
Csq. Size 4.500	Wt. 10.5#	d 4.052	Set At 2999'	Perforations: From 2430' To 2602'		Well No. 3			
Tbg. Size -----	Wt. -----	d -----	Set At -----	Perforations: From To		Unit Sec. Twp. Rye. D 35 32N 12W			
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Multiple - G.C.						Packer Set At 2637'		County San Juan	
Producing Thru Casing		Reservoir Temp. °F 8		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
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	of Flow
SI									806		
1.	2"	X	3/4"						112		1 hr
2.									96		2 hrs
3.									74		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		86.2	1.0000	.9258	1.0000	987
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	Mcf/bbl.	Deg.
1.												
2.												
3.												
4.												
5.												

NO.	P _t ²	P _w	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		86.2	74304	662020.8	1.0112	1.0095
2						
3						
4						
5						

Absolute Open Flow <u>996</u> Mcfd @ 15.025				Angle of Slope θ _____		Slope, n <u>.85</u>	
Remarks: _____							
Approved By Division _____ Conducted By: <u>Dick Irvin</u> Calculated By: <u>James Smith</u> Checked By: <u>L. O. Van Ryan</u>							