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: [X] Initial [ ] Annual [ ] Special				Test Date: 2-13-81	
Company: Southland Royalty Company		Connection: Southern Union Gathering			
Pool: Basin		Formation: Dakota			Unit
Completion Date: 1-27-81	Total Depth: 7192'	Plug Back TD: 7170'		Elevation: 6089' GR	Farm or Lease Name: Grenier "A"
Csg. Size: 7.625 / 5.500	Wt.: 26.40# / 15.5#	d: 6.969 / 4.950	Set At: 4565' / 4422'-7170'	Perforations: From / To	Well No.: 8M
Tbg. Size: 1.900	Wt.: 2.90#	d: 1.610	Set At: 7140'	Perforations: From 6941' To 7166'	Unit: M; Sec.: 35; Twp.: 30; Rge.: 10
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Dual - GG			Packer Set At: 4983'		County: San Juan
Producing Thru: tbg	Reservoir Temp. °F: @	Mean Annual Temp. °F	Baro. Press. – P_a: 12.2		State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
		.700						

	FLOW DATA				TUBING DATA		CASING DATA		
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	Duration of Flow
SI					1209				
1.	2" x 3/4"				86				1 hr.
2.					37				2 hrs.
3.					18				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 Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	12.365		30.2	1.0000	.9258	1.0000	346
2.							
3.							
4.							
5.							

NO.	P_r	Temp. °R	T_r	Z
1.				
2.				
3.				
4.				
5.				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas _____ XXXXXXXXXX
Specific Gravity Flowing Fluid XXXXXX _____
Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
Critical Temperature _____ R _____ R

P_c 1221.2 P_c^2 1491329.4

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		30.2	912.0	1490417.4
2				
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0006$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.0005$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 346$

Absolute Open Flow 346 Mcfd @ 15.025 | Angle of Slope θ _____ | Slope, n .75

Remarks: Making Water Throughout Test

Approved By Division	Conducted By:	Calculated By:	Checked By:
	Dean Lingo	James Smith	L.O. Van Ryan