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

MAR 13 1985

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 3-09-84
Company: Southland Royalty Company		Connection: El Paso Natural Gas Company		
Pool: Basin		Formation: Dakota		Unit
Completion Date: 2-25-84	Total Depth: 5950'	Plug Back TD: 5903'	Elevation: 5438' GL	Farm or Lease Name: Locke
Csg. Size: 4.500 / Wt.: 11.6# / d: 4.000 / Set At: 5949'		Perforations: From To		Well No.: 2
Tbg. Size: 2.375 / Wt.: 4.7# / d: 1.995 / Set At: 5735'		Perforations: From 5607' To 5760'		Unit: G / Sec.: 10 / Twp.: 29N / Rge.: 14W
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: ---		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	% 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						1915		1915		
1.	2"	X 3/4"				300		645		1 hour
2.						225		495		2 hours
3.						210		458		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		222.2	1.0000	.7258	1.0000	2544
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 _____ XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX _____
Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
Critical Temperature _____ R _____ R

P_c 1927.2 P_c^2 3714099.8

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		470.2	221088.0	3493011.8
2				
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.063$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.047$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2663$

Absolute Open Flow 2663 Mcfd @ 15.025 | Angle of Slope θ _____ | Slope, n .75

Remarks: _____

Approved By Division	Conducted By:	Calculated By:	Checked By:
	John Hammer	James W. Smith	R. E. Fielder