STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

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 WELLS

NOV 05 1984
OIL CON. DIV.

Type Test: [XX] Initial [ ] Annual [ ] Special				Test Date: 10-25-84	
Company: Southland Royalty Company		Connection: El Paso Natural Gas Company			
Pool: Basin		Formation: Dakota		Unit	
Completion Date: 10-19-84	Total Depth: 6710'	Plug Back TD: 6663'	Elevation: 6195' GL	Farm or Lease Name: Frontier "B"	
Csg. Size: 4.500 / Wt.: 11.6# / d: 4.000 / Set At: 6709'		Perforations: From To		Well No.: 2-E	
Tbg. Size: 2.375 / Wt.: 4.7# / d: 1.995 / Set At: 6524'		Perforations: From 6501' To 6529'		Unit: M / Sec.: 9 / Twp.: 27N / Rge.: 11W	
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: .700	% CO_2	% N_2	% H_2S / Prover / Meter Run / Taps

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						1284		1285		
1.	2"	X 3/4"				112		426		1 Hr
2.						80		373		2 Hrs
3.						70		347		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		82.2	1.0000	.9258	1.0000	941
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 1297.2 P_c^2 1682727.8

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		359.2	129024.6	1553703.2
2				
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0830$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.0617$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 999$

Absolute Open Flow 999 Mcfd @ 15.025 Angle of Slope θ _____ Slope, n .75

Remarks: Light mist of water with small amount of oil.

Approved By Division	Conducted By:	Calculated By:	Checked By:
	Leroy Castleman	James W. Smith	C. Terry Hobbs