

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE Sept. 17, 1979

Operator <u>El Paso Natural Gas Company</u>		Lease <u>Case 4A</u>	
Location <u>NE 18-31-11</u>		County <u>San Juan</u>	State <u>New Mexico</u>
Formation <u>Pictured Cliff</u>		Pool <u>Blanco Ext.</u>	
Casing: Diameter <u>4.500</u>	Set At: Feet <u>5438</u>	Tubing: Diameter <u>1 1/4</u>	Set At: Feet <u>2903</u>
Pay Zone: From <u>2826</u>	To <u>2914</u>	Total Depth: <u>5438</u>	Shut In <u>9-2-79</u>
Stimulation Method <u>Sand Water Frac</u>		Flow Through Casing <u>XXX</u>	Flow Through Tubing

Choke Size, Inches <u>.750</u>		Choke Constant: C <u>12.365</u>			
Shut-In Pressure, Casing, <u>761</u> PSIG	+ 12 = PSIA <u>773</u>	Days Shut-In <u>15</u>	Shut-In Pressure, Tubing <u>761</u> PSIG	+ 12 = PSIA <u>773</u>	
Flowing Pressure: P <u>74</u> PSIG	+ 12 = PSIA <u>86</u>		Working Pressure: P _w <u>87</u> PSIG	+ 12 = PSIA <u>99</u>	
Temperature: T = <u>50</u> °F	F _t = <u>1.010</u>	n = <u>.85</u>	F _{pv} (From Tables) <u>1.010</u>	Gravity <u>.670</u>	F _g = <u>.9463</u>

$$\text{CHOKE VOLUME} = Q = C \times P_t \times F_t \times F_g \times F_{pv}$$

$$Q = 12.365 \times 86 \times 1.010 \times .9463 \times 1.010 = \underline{1027} \text{ MCF/D}$$

$$\text{OPEN FLOW} = Aof = Q \left(\frac{P_c^2}{P_c^2 - P_w^2} \right)^n$$

$$Aof = \left(\frac{597529}{587728} \right)^n = (1.0167)^{.85} (1027) = (1.0142) (1027)$$

NOTE: Well Blew Dry Gas Throughout Test and Vented 120 MCF TO The Atmosphere.

$$Aof = \underline{1042} \text{ MCF/D}$$

TESTED BY C. Rhames

WITNESSED BY _____

C. R. Rhames
Well Test Engineer

