

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE October 25, 1973

Operator <u>El Paso Natural Gas Company</u>		Lease <u>Canyon Largo Unit #209</u>	
Location <u>940/S, 1020/W, Sec. 29, T25N, R6W</u>		County <u>Rio Arriba</u>	State <u>New Mexico</u>
Formation <u>Pictured Cliffs</u>		Pool <u>Ballard</u>	
Casing: Diameter <u>2.875</u>	Set At: Feet <u>2721'</u>	Tubing: Diameter <u>No Tubing</u>	Set At: Feet
Pay Zone: From <u>2602</u>	To <u>2680</u>	Total Depth: <u>2721</u>	Shut In <u>10-17-73</u>
Stimulation Method <u>Sandwater Frac</u>		Flow Through Casing <u>X</u>	Flow Through Tubing

Choke Size, Inches <u>.750</u>		Choke Constant: C <u>12.365</u>		Tubingless Completion	
Shut-In Pressure, Casing, PSIG <u>520</u>	+ 12 = PSIA	Days Shut-In <u>7</u>	Shut-In Pressure, Tubing PSIG <u>No Tubing</u>	+ 12 = PSIA	
Flowing Pressure: P PSIG <u>44</u>	+ 12 = PSIA		Working Pressure: Pw PSIG <u>Calculated</u>	+ 12 = PSIA	
Temperature: T = <u>56 °F</u>	n =		Fpv (From Tables) <u>1.004</u>	Gravity <u>.700</u>	Fg = <u>.9258</u>
Ft = <u>1.004</u>	<u>.85</u>				

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

$$Q = (12.365) (56) (1.004) (.9258) (1.004) = \underline{\hspace{2cm}} 646 \underline{\hspace{2cm}} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{283024}{278263} \right)^n = 646 (1.0171)^{.85} = 646 (1.0145)$$

$$Aof = \underline{\hspace{2cm}} 656 \underline{\hspace{2cm}} \text{ MCF/D}$$

Note: Light fog of water throughout test.

TESTED BY Norton

WITNESSED BY _____

William D. Welch
William D. Welch
Well Test Engineer

