

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE October 17, 1973

Operator <u>El Paso Natural Gas Company</u>		Lease <u>Canyon Largo Unit #220</u>	
Location <u>1740/S, 1080/E, Sec. 2, T24N, R7W</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>2367'</u>	Tubing: Diameter <u>No Tubing</u>	Set At: Feet
Pay Zone: From <u>2306</u>	To <u>2330</u>	Total Depth: <u>2375</u>	Shut In <u>10-9-73</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>634</u>	+ 12 = PSIA <u>646</u>	Days Shut-In <u>7</u>	Shut-In Pressure, Tubing PSIG <u>No Tubing</u>	+ 12 = PSIA	
Flowing Pressure: P PSIG <u>91</u>	+ 12 = PSIA <u>103</u>		Working Pressure: P _w PSIG <u>Calculated</u>	+ 12 = PSIA <u>124</u>	
Temperature: T = <u>60 °F</u>	n = <u>.85</u>		F _{pv} (From Tables) <u>1.011</u>	Gravity <u>.700</u>	F _g = <u>.9258</u>

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

$$Q = (12.365) (103) (1.000) (.9258) (1.011) = \underline{1192} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{417316}{401940} \right)^n = 1192 (1.0383)^{.85} = 1192 (1.0324)$$

$$Aof = \underline{1231} \text{ MCF/D}$$

Note: Dry gas.

TESTED BY R. Hardy

WITNESSED BY _____

William D. Welch
William D. Welch
Well Test Engineer