

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE October 26, 1973

Operator <u>El Paso Natural Gas Company</u>		Lease <u>Klein #21 (PC)</u>	
Location <u>1470/N, 1600/W, Sec. 34, T26N, R6W</u>		County <u>Rio Arriba</u>	State <u>New Mexico</u>
Formation <u>Pictured Cliffs</u>		Pool <u>So. Blanco</u>	
Casing: Diameter <u>2.875</u>	Set At: Feet <u>2715'</u>	Tubing: Diameter <u>No Tubing</u>	Set At: Feet
Pay Zone: From <u>2550</u>	To <u>2646</u>	Total Depth: <u>3605</u>	Shut In <u>10-3-73</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>896</u>	+ 12 = PSIA <u>908</u>	Days Shut-In <u>29</u>	Shut-In Pressure, Tubing PSIG <u>No Tubing</u>	+ 12 = PSIA	
Flowing Pressure: P PSIG <u>95</u>	+ 12 = PSIA <u>107</u>		Working Pressure: Pw PSIG <u>Calculated</u>	+ 12 = PSIA <u>131</u>	
Temperature: T = <u>58 °F</u>	n = <u>.85</u>		Fpv (From Tables) <u>1.009</u>	Gravity <u>.650</u>	Fg = <u>.9608</u>

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

$$Q = (12.365)(107)(1.002)(.9608)(1.009) = \underline{1285} \text{ MCF/D}$$

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

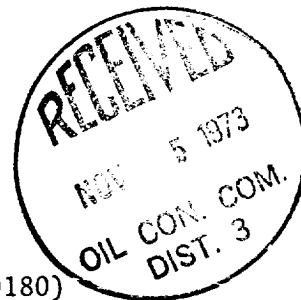
$$Aof = Q \left(\frac{824464}{807303} \right)^n = 1285 (1.0213)^{.85} = 1285 (1.0180)$$

$$Aof = \underline{1308} \text{ MCF/D}$$

Note: Blew clear gas entire test
with heavy rain of frac. sand.

TESTED BY Rhames

WITNESSED BY _____



William D. Welch
William D. Welch
Well Test Engineer