

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE August 16, 1967

Operator El Paso Natural Gas Company		Lease Pierce No. 4	
Location 1650'N, 1650'E, Sec. 8, T-30-N, R-9-W		County San Juan	State New Mexico
Formation Pictured Cliffs		Pool Blanco	
Casing Diameter 2.875	Set At: Feet 3115	Tubing Diameter no tubing	Set At: Feet
Pay Zone: From 2984	To 3014	Total Depth: 3115	Shut In 8-4-67
Stimulation Method Sand Water Frac		Flow Through Casing X	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365		Tubingless Completion	
Shut-In Pressure, Casing, PSIG 906	+ 12 = PSIA 918	Days Shut-In 12	Shut-In Pressure, Tubing PSIG no tubing	+ 12 = PSIA	
Flowing Pressure: P PSIG 135	+ 12 = PSIA 147	Working Pressure: P _w PSIG 0.18	+ 12 = PSIA	185	
Temperature: T = 67 °F	n = .85	F _{pv} (From Tables) 1.018	Gravity .750	F _g = .8944	

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

$$Q = (12.365)(147)(.9933)(.8944)(1.018) = 1644 \text{ MCF/D}$$

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

$$Aof = \left(\frac{842,724}{806,499} \right)^n = (1644)(1.0423)^{.85} = (1644)(1.0358)$$

NOTE: The well produced clear gas and a large amount of Frac. sand throughout the test period.

$$Aof = 1703 \text{ MCF/D}$$

TESTED BY J. B. GoodwinChecked
WITNESSED BY T. B. Grant

H. L. Hendrick
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