

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE November 11, 1964

Operator El Paso Natural Gas Company		Lease Huerfano Unit No. 142	
Location 1843'N, 1520'E, Sec. 7, T-25-N, R-9-W		County San Juan	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 6925	Tubing: Diameter 2.375	Set At: Feet 6729
Pay Zone: From 6732	To 6824	Total Depth: 6931	Shut In 10-22-64
Stimulation Method Sand Water Frac.		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches 0.75		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG 1959	+ 12 = PSIA 1971	Days Shut-In 20	Shut-In Pressure, Tubing PSIG 1957	+ 12 = PSIA 1969	
Flowing Pressure: P PSIG 348	+ 12 = PSIA 360		Working Pressure: P _w PSIG 797	+ 12 = PSIA 809	
Temperature: T = 87 °F	n = 0.75		F _{pv} (From Tables) 1.042	Gravity .750	F _g = .8944

$$\text{CHOKE VOLUME} = Q = C \times P_1 \times F_1 \times F_g \times F_{pv}$$

$$Q = (12.365)(360)(.9750)(.8944)(1.042) = \underline{4045} \text{ MCF/D}$$

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

$$Aof = \left(\frac{3,884,841}{3,230,360} \right)^n = (1.2026)^{.75} (4045) = (1.1483)(4045) =$$

$$Aof = \underline{4645} \text{ MCF/D}$$

NOTE: Medium fog of very light hydrocarbon and a small amount of water throughout test. Small amount of sand abrasion damage was apparent in choke flow bean.

TESTED BY R.F. Headrick, D.R. Roberts, Tom B. Grant
CHECKED
WITNESSED BY W. D. Dawson



Lewis D. Galloway
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