

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE September 10, 1968

Operator El Paso Natural Gas Company		Lease San Juan 27-4 Unit No. 42	
Location 1500'S, 155'W, Sec. 8, T-27-N, R-4-W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 8000	Tubing: Diameter 2.375	Set At: Feet 7755
Pay Zone: From 7794	To 7996	Total Depth: 8000	Shut In 8-28-68
Stimulation Method Sand Water Frac		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches .750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, 2551	PSIG	+ 12 = PSIA 2563	Days Shut-In 13	Shut-In Pressure, Tubing 2596	PSIG
Flowing Pressure: P 246	PSIG	+ 12 = PSIA 258		Working Pressure: P _w 916	PSIG
Temperature: T = 78 °F		n = .75		F _{pv} (From Tables) 1.023	Gravity .660 F _g = .9535

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

$$Q = (12.365)(258)(.9831)(.9535)(1.023) = \underline{3059} \text{ MCF/D}$$

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

$$Aof = \left(\frac{6801664}{5940480} \right)^n = (3059)(1.1449)^{.75} = (3059)(1.1068)$$

$$Aof = \underline{3386} \text{ MCF/D}$$

TESTED BY Bobby J. BroughtonChecked
WITNESSED BY Tom B. Grant

H. L. Kendrick
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