

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE August 14, 1968

Operator El Paso Natural Gas Company		Lease San Juan 27-5 Unit No. 110	
Location 655'N, 2105'E, Sec. 2, T-27-N, R-5-W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 8004	Tubing: Diameter 2.375	Set At: Feet 7749
Pay Zone: From 7704	To 7984	Total Depth: 8004	Shut In 6-29-68
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, PSIG 2673	+ 12 = PSIA 2625	Days Shut-In 46	Shut-In Pressure, Tubing PSIG 2660	+ 12 = PSIA 2672	
Flowing Pressure: P PSIG 305	+ 12 = PSIA 317		Working Pressure: P _w PSIG 1112	+ 12 = PSIA 1124	
Temperature: T = 79 °F	n = .75		F _{pv} (From Tables) 1.029	Gravity .665	F _g = .9493

$$\text{CHOKE VOLUME} = Q = C \times P_i \times F_i \times F_g \times F_{pv}$$

$$Q = (12.365)(317)(.9822)(.9493)(1.029) = \underline{\quad 3763 \quad} \text{ MCF/D}$$

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

$$Aof = \left(\frac{7209225}{5877509} \right)^n = (3763)(1.2265)^{.75} = (3763)(1.1656)$$

Note: The well produced a heavy spray of distillate and water throughout the test.

$$Aof = \underline{\quad 4386 \quad} \text{ MCF/D}$$

TESTED BY Dannie RobertsChecked
WITNESSED BY Tom B. Grant

H. L. Kendrick
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