

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE 8/20/69

Operator El Paso Natural Gas Company		Lease San Juan 27-5 Unit No. 112	
Location 1840S-960W- S8 -T27N-R5W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 7830	Tubing: Diameter 1.900	Set At: Feet 7755
Pay Zone: From 7572	To 7790	Total Depth: 7830	Shut In 8-8-69
Stimulation Method Sand Water Frac		Flow Through Casing XX	Flow Through Tubing

Choke Size, Inches 0.750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG 2637	+ 12 = PSIA 2649	Days Shut-In 12	Shut-In Pressure, Tubing PSIG 2469	+ 12 = PSIA 2481	
Flowing Pressure: P PSIG 334	+ 12 = PSIA 346		Working Pressure: P _w PSIG 688	+ 12 = PSIA 700	
Temperature: T = 86 °F F _t = .9759	n = .75		F _{pv} (From Tables) 1.031	Gravity .670	F _g = .9463

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

$$Q = (12.365)(346)(.9759)(.9463)(1.031) = \underline{4073} \text{ MCF/D}$$

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

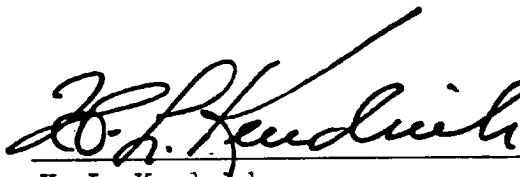
$$Aof = \left(\frac{7017201}{6527201} \right)^n = (4073)(1.0750)^{.75} = (4073)(1.0556)$$

$$Aof = \underline{4299} \text{ MCF/D}$$

Note: The well produced a light mist and distillate throughout the test.

TESTED BY Bobby J. Broughton

WITNESSED BY _____


H. L. Kendrick

