

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE July 2, 1969

Operator El Paso Natural Gas		Lease San Juan 27-5 Unit No. 111	
Location 1830S, 1090W S2-T27N-R5W		County Rio Arriba	State New Mexico
Formation Basin		Pool Dakota	
Casing: Diameter 4.500	Set At: Feet 7952	Tubing: Diameter 2.375	Set At: Feet 7699
Pay Zone: From 7730	To 7926	Total Depth: 7952	Shut In 6-25-69
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 2589	+ 12 = PSIA 2601	Days Shut-In 7	Shut-In Pressure, Tubing PSIG 2622	+ 12 = PSIA 2634	
Flowing Pressure: P PSIG 289	+ 12 = PSIA 301		Working Pressure: P _w PSIG 1059	+ 12 = PSIA 1071	
Temperature: T = 86 °F	n = Ft = .9759		F _{pv} (From Tables) 1.024	Gravity .650	F _g = .9608

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

$$Q = (12.365)(301)(.9759)(.9608)(1.024) = \underline{3574} \text{ MCF/D}$$

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

$$A_{of} = \left(\frac{6937956}{5790915} \right)^{.75} = (1.1980)^{.75} 3574 = 1.1450 (3574)$$

Note: Blew medium to heavy fog of water and distillate for 5 mins. Blew light through rest of test.

$$A_{of} = \underline{4092} \text{ MCF/D}$$

TESTED BY Norton
Calculated
~~WITNESSED~~ BY RES

H. L. Kendrick
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