

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATADATE May 5, 1972

Operator El Paso Natural Gas Company		Lease San Juan 27-5 Unit No. 143	
Location 1460'E, 1460'N, Section 34, T27N, R5W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 7722	Tubing: Diameter 1.900	Set At: Feet 7666
Pay Zone: From 7514	To 7702	Total Depth: 7722	Shut In 4-27-72
Stimulation Method SWF		Flow Through Casing XX	Flow Through Tubing

Choke Size, Inches 0.750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG 2575	+ 12 = PSIA 2587	Days Shut-In 9	Shut-In Pressure, Tubing PSIG 1720	+ 12 = PSIA 1732	
Flowing Pressure: P PSIG 167	+ 12 = PSIA 179		Working Pressure: P <sub>w</sub> PSIG 461	+ 12 = PSIA 473	
Temperature: T = 70 °F	F <sub>t</sub> = .9905	n = .75	F <sub>pv</sub> (From Tables) 1.015	Gravity .655	F <sub>g</sub> = .9571

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

$$Q = 12.365 \times 179 \times .9905 \times .9571 \times 1.015 = 2130 \text{ MCF/D}$$

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

NOTE: Blew heavy fog of water for entire test.

$$Aof = \left( \frac{6692569}{6468840} \right)^n = (2130)(1.0346)^{.75} = (2130)(1.0258) =$$

$$Aof = 2185 \text{ MCF/D}$$

TESTED BY Jesse Goodwin

WITNESSED BY \_\_\_\_\_



*L. E. Mabe, Jr.*  
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