

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE August 14, 1968

Operator El Paso Natural Gas Company		Lease San Juan 28-5 Unit No. 77	
Location 1820'N, 1070'E, Sec. 27, T-28-N, R-5-W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 8365	Tubing: Diameter 2.375	Set At: Feet 8099
Pay Zone: From 8124	To 8335	Total Depth: 8570	Shut In 7-30-68
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 2585	+ 12 = PSIA 2597	Days Shut-In 15	Shut-In Pressure, Tubing PSIG 2587	+ 12 = PSIA 2599	
Flowing Pressure: P PSIG 231	+ 12 = PSIA 243		Working Pressure: Pw PSIG 926	+ 12 = PSIA 938	
Temperature: T = 74 °F	Ft = .9869	n = .75	Fpv (From Tables) 1.024	Gravity .675	Fg = .9427

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

$$Q = (12.365)(243)(.9869)(.9427)(1.024) = \underline{2862} \text{ MCF/D}$$

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

$$Aof = \left(\frac{6754801}{5874957} \right)^n = (2862)(1.1497)^{.75} = (2862)(1.1103)$$

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

$$Aof = \underline{3178} \text{ MCF/D}$$

TESTED BY Dannie RobertsChecked
WITNESSED BY Tom B. Grant

H. L. Kendrick
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