

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

Operator El Paso Natural Gas Company		Lease San Juan 27-4 Unit No. 45	
Location 1035'N, 900'E, Sec. 19, T-27-N, R-4-W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 8155	Tubing: Diameter 2.375	Set At: Feet 7859
Pay Zone: From 7834	To 8090	Total Depth: 8155	Shut In 7-27-68
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 2617	+ 12 = PSIA 2629	Days Shut-In 18	Shut-In Pressure, Tubing PSIG 2674	+ 12 = PSIA 2686	
Flowing Pressure: P PSIG 272	+ 12 = PSIA 284		Working Pressure: P _w PSIG 1064	+ 12 = PSIA 1076	
Temperature: T = 91 °F	n = .75		F _{pv} (From Tables) 1.025	Gravity .680 F _g = .9393	

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

$$Q = (12.365)(284)(.9715)(.9393)(1.025) = \underline{3285} \text{ MCF/D}$$

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

$$Aof = \left(\frac{7214596}{6056320} \right)^n = (3285)(1.1911)^{.75} = (3285)(1.1402)$$

Note: The well blew a light to medium fog of water and distillate throughout the test.

$$Aof = \underline{3746} \text{ MCF/D}$$

TESTED BY Jesse R. GoodwinChecked
WITNESSED BY Tom B. Grant

J. H. Kendrick
H. L. Kendrick