

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATADATE September 24, 1968

Operator El Paso Natural Gas Company		Lease San Juan 27-4 Unit No. 47	
Location 1190'N, 1450'E, Sec. 20, T-27-N, R-4-W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 8154	Tubing: Diameter 2.375	Set At: Feet 7834
Pay Zone: From 7872	To 8125	Total Depth: 8154	Shut In 9-15-68
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 2476	+ 12 = PSIA 2488	Days Shut-In 9	Shut-In Pressure, Tubing PSIG 2477	+ 12 = PSIA 2489	
Flowing Pressure: P PSIG 245	+ 12 = PSIA 257		Working Pressure: P <sub>w</sub> PSIG 1013	+ 12 = PSIA 1025	
Temperature: T = 84 °F      Ft = .9777	n = .75		F <sub>p</sub> v (From Tables) 1.022	Gravity .650      F <sub>g</sub> = .9608	

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

$$Q = (12.365)(257)(.9777)(.9608)(1.022) = \underline{3051} \text{ MCF/D}$$

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

$$Aof = \left( \frac{6195121}{5144496} \right)^n = (3051)(1.2042)^{.75} = (3051)(1.148) = \underline{3507} \text{ MCF/D}$$

NOTE: This well produced a light to heavy fog of water and oil throughout the 3 hr. test.

$$Aof = \underline{3507} \text{ MCF/D}$$

TESTED BY Bobby J. Broughton  
 CALCULATED BY \_\_\_\_\_  
 WITNESSED BY George A. Lipman  
 CHECKED BY: Hermon E. McAnally

*H. L. Kendrick*  
 H. L. Kendrick

