

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATADATE August 16, 1967

Operator El Paso Natural Gas Company		Lease San Juan 27-5 Unit No. 104	
Location 996'N, 1160'E, Sec. 12, T-27-N, R-5-W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.000	Set At: Feet 7767 to 8129	Tubing: Diameter 2.375	Set At: Feet 7857
Pay Zone: From 7890	To 8094	Total Depth: 8130	Shut In 8-2-67
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 2565	+ 12 = PSIA 2577	Days Shut-In 14	Shut-In Pressure, Tubing PSIG 2589	+ 12 = PSIA 2601	
Flowing Pressure: P PSIG 329	+ 12 = PSIA 341		Working Pressure: P <sub>w</sub> PSIG 1187	+ 12 = PSIA 1199	
Temperature: T = 69 °F	F <sub>t</sub> = .9915	n = .75	F <sub>pv</sub> (From Tables) 1.031	Gravity .640	F <sub>g</sub> = .9682

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

$$Q = (12.365)(341)(.9915)(.9682)(1.031) = 4173 \text{ MCF/D}$$

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

$$Aof = \left( \frac{6765201}{5327600} \right)^n = (4173)(1.2698)^{.75} = (4173)(1.1960)$$

NOTE: The well produced a medium to heavy fog for 15 minutes which diminished to a light fog of distillate and water for the remainder of the test period.

$$Aof = 4991 \text{ MCF/D}$$

TESTED BY Dor NortonCALCULATED  
WITNESSED BY H. E. McAnallyCHECKED BY T. B. Grant

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

