

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE December 22, 1965

Operator El Paso Natural Gas Company		Lease Riddle C No. 1 (OWHO)	
Location T-31-N, R-9-W, Section 30, T-31-N, R-9-W		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Tubing Diameter 4.500	Set At: Feet 5936	Tubing Diameter 2.375	Set At: Feet 5065
Flow Line From 5276	To 5858	Total Depth: 5936	Shut In 12-18-65
Simulation 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 891	+ 12 = PSIA 903	Days Shut-In 11	Shut-In Pressure, Tubing, PSIG 746	+ 12 = PSIA 758
Working Pressure: P, PSIG 261	+ 12 = PSIA 273		Working Pressure: Pw, PSIG 761	+ 12 = PSIA 773
Temperature: T = 74 °F	n = .75		Fpv (From Tables) 1.028	Gravity .634 Fg = .9393

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

$$Q = (12.365) (273) (.9868) (.9393) (1.028) = 3,216 \text{ MCF/D}$$

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

$$Aof = \left(\frac{815,409}{217,880} \right)^n = (3,216) (3.7424)^{.75} = (2.6907) (3,216)$$

NOTE: Made light fog of H₂O and Hydrocarbons throughout test.

$$Aof = 8,653 \text{ MCF/D}$$

TESTED BY Clarence R. Wagner
 CHECKED BY Ron Headrick
 CALCULATED BY Hermon E. McAnally



Lewis D. Galloway
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