

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE December 3, 1964

Operator El Paso Natural Gas Company		Lease Johnston State No. 12	
Location 800'S, 890'W, Sec. 36, T-27-N, R-6-W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 7811	Tubing: Diameter 2.375	Set At: Feet 7516
Pay Zone: From 7528	To 7736	Total Depth: 7811	Shut In 11-24-64
Stimulation Method Sand Water Frac.		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches .75		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG 2659	+ 12 = PSIA 2671	Days Shut-In 9	Shut-In Pressure, Tubing PSIG 2664	+ 12 = PSIA 2676	
Flowing Pressure: P PSIG 274	+ 12 = PSIA 286		Working Pressure: P _w PSIG 986	+ 12 = PSIA 998	
Temperature: T = 66 °F	F _t = .9943	n = .75	F _{pv} (From Tables) 1.032	Gravity .700 F _g = .9258	

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

$$Q = (12.365)(286)(.9943)(.9258)(1.032) = \underline{\quad 3359 \quad} \text{ MCF/D}$$

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

$$A_{of} = \left(\frac{7,160,976}{6,164,972} \right)^n = (1.1615)^{.75}(3359) = (1.1189)(3359)$$

NOTE: Blew relatively dry gas.

Re-Potential

$$A_{of} = \underline{\quad 3758 \quad} \text{ MCF/D}$$

TESTED BY R. F. Headrick
 CALCULATED
 WITNESSED BY C. R. Wagner
 CHECKED BY T. B. Grant



Lewis D. Galloway
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