

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE 8-29-66

Operator El Paso Natural Gas Company		Lease Huerfanito Unit No.100	
Location 1850'N, 890'E, Sec. 34, T-27-N, R-9-W		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4.500	Set At: Feet 4762	Tubing: Diameter 2.375	Set At: Feet 4637
Pay Zone: From 4550	To 4635	Total Depth: 4770	Shut In 8-18-66
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, 1047	PSIG	+ 12 = PSIA 1059	Days Shut-In 11	Shut-In Pressure, Tubing 875	PSIG
Flowing Pressure: P 195	PSIG	+ 12 = PSIA 207		Working Pressure: P _w 645	PSIG
Temperature: T = 92 °F		n = .75		F _{pv} (From Tables) 1.019	Gravity .705 F _g = .9225

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

$$Q = (12.365)(207)(.9706)(.9225)(1.019) = \underline{2,335} \text{ MCF/D}$$

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

$$Aof = \left(\frac{1,121,481}{689,832} \right)^n = (2335)(1.6257)^{.75} = (2335)(1.4402)$$

$$Aof = \underline{3,363} \text{ MCF/D}$$

NOTE: Unloaded oil and dist. after 5 minutes then a very heavy fog offsame for the remainder of the test.

TESTED BY J. B. GoodwinCHECKED BY T. B. GrantCALCULATED BY H. E. McAnally

H. L. Kendrick
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