

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE May 28, 1965

Operator El Paso Natural Gas Company		Lease Kernaghan No. 4 (OWWO)	
Location 1650'N, 790'E, Section 30, T-31-N, R-8-W		County San Juan	State New Mexico
Formation Mesa Verde		Pool Elanco	
Casing: Diameter 4.500	Set At: Feet 5858	Tubing: Diameter 2.375	Set At: Feet 5794
Pay Zone: From 5300	To 5808	Total Depth: 5859	Shut In 5-18-65
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 833		+ 12 = PSIA 845	Days Shut-In 10	Shut-In Pressure, Tubing PSIG 833	
Flowing Pressure: P PSIG 142		+ 12 = PSIA 154		Working Pressure: P _w PSIG 421	
Temperature: T = 75 °F		n = .75		F _{pv} (From Tables) 1.016	
F _t = .9859				Gravity .700 F _g = .9258	

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

$$Q = (12.365) (154) (.9859) (.9258) (1.016) = \underline{\underline{1766}} \text{ MCF/D}$$

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

$$\text{Aof} = \left(\frac{714,025}{526,536} \right)^n = (1766) (1.3560)^{.75} = (1766) (1.2566)$$

Aof = 2219 MCF/D

NOTE: Light fog of water and distillate throughout test.

TESTED BY C. R. Wagner
 CHECKED BY T. B. Grant
 WITNESSED BY

Lewis D. Galloway
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