

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE November 30, 1967

Operator El Paso Natural Gas Company		Lease Hughes No. 3 (OWMO)	
Location 970'N, 1780'E, Sec. 20, T-29-N, R-8-W		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4.500	Set At: Feet 5525	Tubing: Diameter 2.375	Set At: Feet 5433
Pay Zone: From 4678	To 5484	Total Depth: 5525	Shut In 11-21-67
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 808	+ 12 = PSIA 820	Days Shut-In 9	Shut-In Pressure, Tubing PSIG 586	+ 12 = PSIA 598	
Flowing Pressure: P PSIG 216	+ 12 = PSIA 228		Working Pressure: P _w PSIG 753	+ 12 = PSIA 765	
Temperature: T = 66 °F	n = .75		F _{pv} (From Tables) 1.021	Gravity .650	F _g = .9608

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

$$Q = (12.365)(228)(.9943)(.9608)(1.021) = \underline{2750} \text{ MCF/D}$$

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

$$Aof = \left(\frac{672,400}{87,175} \right)^n = (2750)(7.7132)^{.75} = (2750)(4.6283)$$

NOTE: The well made heavy slug of frac water and some oil app. 5 min. after opening valve, then made light spray of hydrocarbons throughout test.

$$Aof = \underline{12,728} \text{ MCF/D}$$

TESTED BY R. F. HeadrickCALCULATED
WITNESSED BY R. F. Headrick

H. L. Kendrick
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