

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE June 28, 1967

Operator El Paso Natural Gas Company		Lease Howell E No. 1 (OWWO)	
Location 70013, 70014, Sec. 29, T-30-N, R-8-W		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4.500	Set At: Feet 4836	Tubing: Diameter 2.375	Set At: Feet 4760
Pay Zone: From 4000	To 4792	Total Depth: 4836	Shut In 6-9-67
Stimulation Method Sand Water Free		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches .750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG 886	+ 12 = PSIA 898	Days Shut-In 19	Shut-In Pressure, Tubing PSIG 881	+ 12 = PSIA 893	
Flowing Pressure: P PSIG 340	+ 12 = PSIA 352		Working Pressure: P _w PSIG 739	+ 12 = PSIA 751	
Temperature: T = 81 °F	F _t = .9804	n = .75	F _{pv} (From Tables) 1.032	Gravity .665	F _g = .9498

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

$$Q = (12.365)(352)(.9804)(.9498)(1.032) = \underline{4183} \text{ MCF/D}$$

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

$$Aof = \left(\frac{806404}{242403} \right)^{.75} = (3.3267)^{.75} (4183) = (2.4633)(4183)$$

NOTE: Blew light fog of distillate and water entire test.

$$Aof = \underline{10304} \text{ MCF/D}$$

TESTED BY Jesse B. GoodwinCHECKED BY A. J. Loleit

H. L. Kendrick
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