

EL PASO NATURAL GAS COMPANY

OPEN FLOW TEST DATA

DATE OCTOBER 27, 1961

Operator El Paso Natural Gas Company		Lease Howell 1-D (OWHO)	
Location 990'S, 990'W, Sec. 28-31N-8W		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4-1/2" O.D.	Set At: Feet 5760	Tubing: Diameter 2-3/8" O.D.	Set At: Feet 5644
Pay Zone: From 5200	To 5720	Total Depth: 5760 c/o 5731	Shut-in 10-10-61
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 885	- 12 = PSIA	Days Shut-In 17	Shut-In Pressure, Tubing PSIG 883	- 12 = PSIA	895
Flowing Pressure: P PSIG 289	- 12 = PSIA		Working Pressure: Pw PSIG 708	- 12 = PSIA	720
Temperature: T 72 °F	n =		Fpv (From Tables) 1.028	Gravity .660	Fg = .9535
Ft = .9887		.75			

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

$$Q = (12.365)(301)(.9887)(.9535)(1.028)$$

$$= \underline{3607} \text{ MCF/D}$$

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

$$Aof = \left(\frac{804,609}{286,209} \right)^n = (3607)(2.8112)^{.75} = (3607)(2.1710)$$

$$Aof = \underline{7831} \text{ MCF/D}$$

TESTED BY D. E. Mortensen

WITNESSED BY _____

Checked by: W. D. Dawson

Lewis D. Galloway
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