

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE 10-14-68

Operator El Paso Natural Gas Company		Lease Hughes A No. 5 (OMNO)	
Location 1650'N, 790'E, Sec. 28, T-29-N, R-8-W		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4.500	Set At: Feet 5433	Tubing: Diameter 2.375	Set At: Feet 5182
Pay Zone: From 4537	To 5378	Total Depth: 5433	Shut In 10-6-68
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 767	+ 12 = PSIA 779	Days Shut-In 8	Shut-In Pressure, Tubing PSIG 767	+ 12 = PSIA 779	
Flowing Pressure: P PSIG 245	+ 12 = PSIA 255		Working Pressure: P _w PSIG 638	+ 12 = PSIA 650	
Temperature: T = 76 °F	n = .75		F _{pv} (From Tables) 1.022	Gravity .655	F _g = .9571

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

$$Q = (12.365)(255)(.9850)(.9571)(1.022) = 3038 \text{ MCF/D}$$

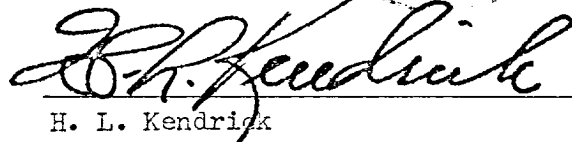
$$\text{OPEN FLOW} = Aof = Q \left(\frac{P_c^2}{P_c^2 - P_w^2} \right)^n$$

$$Aof = \left(\frac{606841}{184341} \right)^n = (3038)(3.2919)^{.75} = (3038)(2.4439)$$

NOTE: The well produced a light fog of water and distillate throughout the test.

$$Aof = 7425 \text{ MCF/D}$$

TESTED BY Jesse B. Goodwin

Checked
WITNESSED BY Tom B. Grant


H. L. Kendrick