

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE July 19, 1966

Operator El Paso Natural Gas Company		Lease Hughes No. 1 (OWWO)	
Location 990'S, 990'W, Section 19, T-29-N, R-8-W		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4.500	Set At: Feet 5488	Tubing: Diameter 2.375	Set At: Feet 5439
Pay Zone: From 4656	To 5440	Total Depth: 5490	Shut In 7-12-66
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 836	+ 12 = PSIA 848	Days Shut-In 7	Shut-In Pressure, Tubing PSIG 603	+ 12 = PSIA 615
Flowing Pressure: P PSIG 213	+ 12 = PSIA 225		Working Pressure: P _w PSIG 683	+ 12 = PSIA 695
Temperature: T = 73 °F F _t = .9877	n = .75		F _{pv} (From Tables) 1.024	Gravity .708 F _g = .9225

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

$$Q = (12.365) (225) (9877) (9225) (1.024) = 2596 \text{ MCF/D}$$

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

$$Aof = \left(\frac{719,104}{236,079} \right)^n = (2596) (3.0460)^{.75} = (2596) (2.3030)$$

NOTE: Water to surface in 4 minutes,
solid stream for 1 minute then
heavy fog of H₂O and distillate.

$$Aof = 5979 \text{ MCF/D}$$

TESTED BY Tom B. GrantCHECKED BY Hermon E. McAnally

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