

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE May 12, 1965

Operator El Paso Natural Gas Company		Lease Huerfanito Unit No. 88 (DK)	
Location 800'N, 1500'E, Section 23, T-27-N, R-9-W		County San Juan	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 2.875	Set At: Feet 6772	Tubing: Diameter No Tubing	Set At: Feet
Pay Zone: From 6454	To 6650	Total Depth: 6772	Shut in 5-4-65
Stimulation Method Sand Water Frac		Flow Through Casing X	Flow Through Tubing

Choke Size, Inches .750	Choke Constant: C 12.365		Tubingless Completion	
Shut-In Pressure, Casing, PSIG 2205	+ 12 = PSIA 2217	Days Shut-In 8	Shut-In Pressure, Tubing PSIG No Tubing	+ 12 = PSIA
Flowing Pressure: P PSIG 207	+ 12 = PSIA 219		Working Pressure: P _w Calc. PSIG	+ 12 = PSIA 322
Temperature: T = 70 °F	F _r = .9905	n = .75	F _{pv} (From Tables) 1.022	Gravity .695 F _g = .9292

ISIPC (MV) = 1081 psig

FSIPC (MV) = 1085 psig

CHOKE VOLUME = Q = C × P_i × F_r × F_g × F_{pv}

$$Q = (12.365) (219) (.9905) (.9292) (1.022) = 2,547 \text{ MCF/D}$$

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

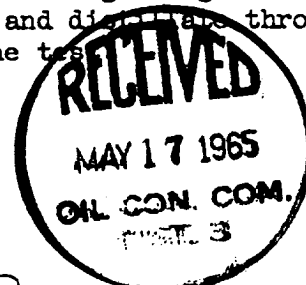
$$Aof = \left(\frac{4,915,089}{4,811,405} \right)^n = (2547) (1.0215)^{.75} = (2547) (1.0161)$$

$$Aof = 2588 \text{ MCF/D}$$

NOTE: Well blew light fog of water and dirt through-out the test.

TESTED BY J. B. Goodwin

CALCULATED BY H. E. McAnally

~~W. H. H. H. H. H.~~

Lewis D. Galloway
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