

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE December 17, 1964

Operator El Paso Natural Gas Company		Lease San Juan 27-5 Unit No. 69 (DK) (OWWO)	
Location 1090'N, 990'E, Section 7, T-27-N, R-5-W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 7900	Tubing: Diameter 1.900	Set At: Feet 7783
Pay Zone: From 7604	To 7824	Total Depth: 7900	Shut In 12-6-64
Stimulation Method Sand Water Frac		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches 0.75	Choke Constant: C 12.365		Baker Model "D" Packer set at 5810 ft.	
Shut-In Pressure, Casing, PSIG 818 (MV)	+ 12 = PSIA 830	Days Shut-In 11	Shut-In Pressure, Tubing PSIG 1764 (DK)	+ 12 = PSIA 1776
Flowing Pressure: P PSIG 196	+ 12 = PSIA 208		Working Pressure: P _w Calc PSIG	+ 12 = PSIA 759
Temperature: T = 58 °F F _r = 1.0019	n = .75		F _{pv} (From Tables) 1.021	Gravity .658 F _g = .9571

ISIPT (MV) = 810 psig

FSIPC (MV) = 821 psig

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

$$Q = (12.365) (208) (1.0019) (.9571) (1.021) = 2518 \text{ MCF/D}$$

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

$$A_{of} = \left(\frac{3,154,176}{2,578,095} \right)^n = (2518) (1.2234)^{.75} = (2518) (1.1631)$$

$$A_{of} = 2929 \text{ MCF/D}$$

TESTED BY D. E. Mortensen

CALCULATED BY H. E. McAnally

CHECKED BY T. B. Grant



Lewis D. Galloway
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