

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

Dual Completion

DATE 11-23-66

Operator EL PASO NATURAL GAS COMPANY		Lease Newberry No. 12 (MV)	
Location 1040'N, 800'E, Sec. 4, T-31-N, R-12-W		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4.500	Set At: Feet 7178	Tubing: Diameter 1.660	Set At: Feet 5105
Pay Zone: From 4846	To 5064	Total Depth: 7178	Shut In 11-3-66
Stimulation Method Sand Water Frac		Flow Through Casing X	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365		Baker Model F Packer set at 5160	
Shut-In Pressure, Casing, PSIG 1004 (MV)	+ 12 = PSIA 1016	Days Shut-In 20	Shut-In Pressure, Tubing PSIG 442 (MV)	+ 12 = PSIA 454	
Flowing Pressure: P PSIG 193	+ 12 = PSIA 205		Working Pressure: P _w PSIG Calc.	+ 12 = PSIA 250	
Temperature: T = 72 °F	n = 75		Fpv (From Tables) 1.022	Gravity .700	F _g = .9258

ISIPT (DK) = 1940 psig

FSIPT (DK) = 1959 psig

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

$$Q = 12.365(205)(.9887)(.9258)(1.022) = 2371 \text{ MCF/D}$$

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

$$Aof = \left(\frac{1032256}{969756} \right)^n = (2371)(1.0644)^{75} = (2371)(1.0479)$$

NOTE: The well produced a heavy spray of oil and paraffin throughout the test.

$$Aof = 2485 \text{ MCF/D}$$

TESTED BY D. R. Roberts

CHECKED BY H. L. Kendrick

CALCULATED BY T. B. Grant



H. L. Kendrick