

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE September 29, 1965

Operator El Paso Natural Gas Company		Lease Huerfanito Unit No. 90 (DK) (G-10)	
Location 990'N, 1750'E, Sec. 1, T-26-N, R-9-W		County San Juan	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 5.500	Set At: Feet 6590	Tubing: Diameter 2.375	Set At: Feet 6380
Pay Zone: From 6314	To 6452	Total Depth: 6590	Shut In 9-22-65
Stimulation Method Sand Water Frac		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches .750	Choke Constant: C 12.365		Baker Model "F" Packer Set at 4402'	
Shut-In Pressure, Casing, PSIG 1060 (MV)	+ 12 = PSIA 1072	Days Shut-In 7	Shut-In Pressure, Tubing (DK) PSIG 2025	+ 12 = PSIA 2037
Flowing Pressure: P PSIG 356	+ 12 = PSIA 368		Working Pressure: Pw Calc. PSIG	+ 12 = PSIA 769
Temperature: T = 77 °F	n = .750		Fpv (From Tables) 1.047	Gravity .750 Fg = .8944

INITIAL SIPT (MV) 1060 PSIG

FINAL SIPC (MV) 1070 PSIG

$$\text{CHOKE VOLUME} = Q = C \times P_r \times F_r \times F_g \times F_{pv}$$

$$Q = 12.365 \times 368 \times .9840 \times .8944 \times 1.047 = 4193 \text{ MCF/D}$$

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

$$Aof = \left(\frac{4,149,369}{3,558,008} \right)^n = (4193) (1.1662)^{.75} = (4193) (1.1222) =$$

NOTE: Blew very heavy fog of water and light hydrocarbons throughout entire test.

$$Aof = 4705 \text{ MCF/D}$$

TESTED BY Jesse B. Goodwin

CHECKED BY Tom B. Grant



Lewis D. Galloway
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