

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE 8-29-66

Operator El Paso Natural Gas Company		Lease Huerfanito Unit No. 102 (DK)	
Location 800'S, 1180'W, Sec. 34, T-27-N, R-9-W		County San Juan	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 5.500	Set At: Feet 6970	Tubing: Diameter 2.375	Set At: Feet 6809
Pay Zone: From 6660	To 6820	Total Depth: 6981	Shut In 8-21-66
Stimulation Method Sand Water Frac		Flow Through Casing	Flow Through Tubing X

Choke Size, inches .750	Choke Constant: C 12.365		Backer Model "F" Packer set at 4715		
Shut-In Pressure, Casing, PSIG 866 (MV)	+ 12 = PSIA 878	Days Shut-In 8	Shut-In Pressure, Tubing PSIG 1917 (DK)	+ 12 = PSIA 1929	
Flowing Pressure: P PSIG 393	+ 12 = PSIA 405		Working Pressure: P <sub>w</sub> PSIG Calc.	+ 12 = PSIA 863	
Temperature: T = 83 °F	n = F <sub>t</sub> = .9786		F <sub>pv</sub> (From Tables) 1.043	Gravity .700	F <sub>g</sub> = .9253

ISIPT (MV) = 843 psig  
FSIPC (MV) = 880 psig

CHOKE VOLUME = Q = C x P<sub>i</sub> x F<sub>t</sub> x F<sub>g</sub> x F<sub>pv</sub>

$$Q = (12.365)(405)(.9786)(.9258)(1.043) = \underline{4,732} \text{ MCF/D}$$

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

$$Aof = \left( \frac{3,721,041}{2,976,272} \right)^n = (4732)(1.2502)^{.75} = (4732)(1.1823)$$

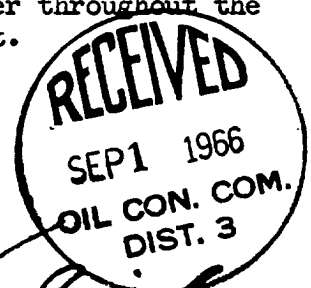
$$Aof = \underline{5,595} \text{ MCF/D}$$

NOTE: Unloaded oil and light hydrocarbons for 5 minutes, then blew a heavy fog of light hydrocarbons and water throughout the remainder of the test.

TESTED BY J. B. Goodwin

CHECKED BY T. B. Grant

CALCULATED BY H. E. McAnally



*H. L. Kendrick*  
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