

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE 9-22-70

Operator El Paso Natural Gas Company		Lease Hartman No. 3	
Location 1460 S, 990 W, S 23, T30N, R11W		County San Juan	State New Mexico
Formation Pictured Cliffs		Pool Aztec	
Casing: Diameter 2.875	Set At: Feet 2438	Tubing: Diameter no tubing	Set At: Feet
Pay Zone: From 2310	To 2330	Total Depth: 2438	Shut In 9-11-70
Stimulation Method S W F		Flow Through Casing XX	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365		tubingless completion	
Shut-In Pressure, Casing, PSIG 415	+ 12 = PSIA 427	Days Shut-In 11	Shut-In Pressure, Tubing PSIG no tubing	+ 12 = PSIA	
Flowing Pressure: P PSIG 52	+ 12 = PSIA 64	Working Pressure: Pw PSIG Calc.	+ 12 = PSIA 77		
Temperature: T = 63 °F	Ft = .9971	n = .85	Fpv (From Tables) 1.009	Gravity .650	Fg = .9608

$$\text{CHOKE VOLUME} = Q = C \times P_1 \times F_1 \times F_g \times F_{pv}$$

$$Q = 12.365 \times 64 \times .9971 \times .9608 \times 1.009 = 765 \text{ MCF/D}$$

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

Note: well blew light fog of water and distillate throughout the test.

$$Aof = \left(\frac{182329}{176400} \right)^n = 765(1.0336)^{.85} = 765(1.0285)$$

$$Aof = 787 \text{ MCF/D}$$



TESTED BY R. E. Fielder

WITNESSED BY

H. L. Kendrick