

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE January 8, 1968

Operator El Paso Natural Gas Company		Lease San Juan 27-4 Unit No. 30 (DK) (OWWO)	
Location 800'S, 1450'W, Sec. 32, T-27-N, R-4-W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 8494	Tubing: Diameter 2.0625	Set At: Feet 640
Pay Zone: From 8158	To 8462	Total Depth: 8494	Shut In 12-9-67
Stimulation Method Sand Water Frac		Flow Through Casing X	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365		Baker Model D Packer Set at 8100 Baker Model FA Packer set at 7461 2 1/16" Crossover sub	
Shut-In Pressure, Casing, PSIG 1126 (DK)	+ 12 = PSIA 1138 (DK)	Days Shut-In 30	Shut-In Pressure, Tubing PSIG 1287 (GL)	+ 12 = PSIA 1299 (GL)	
Flowing Pressure: P PSIG 79	+ 12 = PSIA 91		Working Pressure: P _w PSIG (Friction Negligible)	+ 12 = PSIA 91	
Temperature: T = 54 °F Ft = 1.0058	n = .750		F _{pv} (From Tables) 1.009	Gravity .695 F _g = .9292	

ISIPT (GL) = 1287 psig

FSIPT (GL) = 1296 psig

$$\text{CHOKE VOLUME} = Q = C \times P_i \times F_i \times F_g \times F_{pv}$$

$$Q = (12.365)(91)(1.0058)(.9292)(1.009) = 106 \text{ MCF/D}$$

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

$$Aof = \left(\frac{1295044}{1286763} \right)^n = (106)(1.0064)^{.75} = (117)(1.0048)$$

NOTE: The well produced clear gas for the first hour and a half, then it produced a light spray of distillate for the remainder of the test.

$$Aof = 107 \text{ MCF/D}$$

TESTED BY R. F. Headrick

CALCULATED
WITNESSED BY T. B. Grant

R. F. Headrick
H. L. Kendrick

