

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE 10-27-60

Operator El Paso Natural Gas Company		Lease San Juan 27-4 Unit No. 27	
Location 1090'S, 1990'W, 33-27N-4W		County Rio Arriba	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 7-5/8"	Set At: Feet 4186	Tubing: Diameter 2"	Set At: Feet 6307
Pay Zone: From 6176	To 6304	Total Depth: 6370 C/O 6338	Shut In 9-15-60
Stimulation Method Sand/Water Frac.		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches .75		Choke Constant: C 12.365		5-1/2" Liner from 4117 to 6370	
Shut-In Pressure, Casing, PSIG 1184	12 = PSIA 1196	Days Shut-In 42	Shut-In Pressure, Tubing, PSIG 1194	12 = PSIA 1206	
Flowing Pressure: P (Tbg) PSIG 273	12 = PSIA 285		Working Pressure: P _w (Cag) PSIG 696	12 = PSIA 708	
Temperature: T = 60 °F	F _t = 1.0000		F _{pv} (From Tables) 1.030	Gravity .670	F _g = .9463
	.75				

CHOKE VOLUME : $Q = C \times P_i \times F_t \times F_g \times F_{pv}$

$$Q = (12.365)(285)(1.0000)(.9463)(1.030) = 3435 \text{ MCF/D}$$

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

$$Aof = \left(\frac{1454436}{953172} \right)^n = (1.5258)^{.75} (3435) = (1.3728) (3435)$$

$$Aof = 4716 \text{ MCF/D}$$

TESTED BY W. D. Dawson

WITNESSED BY _____

Checked by T. B. Grant

Lewis D. Galloway
Lewis D. Galloway