

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE July 17, 1973

Operator El Paso Natural Gas Company		Lease San Juan 27-5 Unit 156	
Location 1840/N, 1600/E Sec 22, T-27-N, R-5-W		County Rio Arriba	State New Mexico
Formation Pictured Cliffs		Pool Tapacito	
Casing: Diameter 2 7/8	Set At: Feet 3481	Tubing: Diameter No tubing	Set At: Feet
Pay Zone: From 3360	To 3386	Total Depth: 3481	Shut In 7-9-73
Stimulation Method SWF		Flow Through Casing	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365		Tubingless Completion	
Shut-In Pressure, Casing, PSIG 865	+ 12 = PSIA 879	Days Shut-In 16	Shut-In Pressure, Tubing PSIG No tubing	+ 12 = PSIA	
Flowing Pressure: P PSIG 187	+ 12 = PSIA 199		Working Pressure: P _w PSIG Calculated	+ 12 = PSIA 257	
Temperature: T = 60 °F	n = .85		F _{pv} (From Tables) 1.019	Gravity .655	F _g = .9571

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

$$Q = (12.365)(199)(1.000)(.9571)(1.019) = \underline{2400} \text{ MCF/D}$$

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

NOTE: The well produced dry gas.

$$Aof = Q \left(\frac{772641}{706592} \right)^n = 2400(1.0935)^{.85} = 2400(1.0789)$$

$$Aof = \underline{2589} \text{ MCF/D}$$

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William D. Welch
William D. Welch, Well Test Engineer