

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

WELL IDENTIFICATION

DATE August 6, 1964

Operator El Paso Natural Gas Company		Lease San Juan 27-4 Unit No. 21 (NW) (OWHO)	
Location S50W, T200N, Sec. 30, T-27-N, R-4-W		County Rio Arriba	State New Mexico
Formation Pasa Verde		Pool Blanco	
Casing Diameter 5.000	Set At Feet 61.7	Tubing Diameter 2.375	Set At Feet 6035
Pay Zone: From 3340	To 6122	Total Depth: 6180	Shut in 7-30-64
Stimulation Method Sand Water Place		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches 0.750		Choke Constant: C 12.365		Model "W" Baker Packer set at 3913 ft.	
Shut-In Pressure, Casing, (PC) 550	PSIG	+ 12 = PSIA 562	Days Shut-In 7	Shut-In Pressure, Tubing (TW) 498	PSIG
		+ 12 = PSIA 510			
Flowing Pressure: P _f 58	PSIG	+ 12 = PSIA 70	Working Pressure: P _w (Calc)	PSIG	+ 12 = PSIA 143
Temperature: T = 60 °F	F _T = 1.0000	n = .75	F _{pv} (From Tables) 1.009	Gravity .699	F _g = .9292

ISIP (PC) = 550 psig

TSIP (PC) = 551 psig

CHOKE VOLUME = Q = C × P_f × F_T × F_g × F_{pv}

$$Q = (12.365) (70) (1.0000) (.9292) (1.009) = 812 \text{ MCF/D}$$

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

$$Aof = \left(\frac{260,100}{239,651} \right)^{.75} = (812) (1.0853)^{.75} = (812) (1.0633)$$

$$Aof = 865 \text{ MCF/D}$$

TESTED BY J. B. Goodwin
CALCULATED WITNESSED BY W. D. Dawson

Lewis D. Calloway
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