

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE August 24, 1973

Operator El Paso Natural Gas Company		Lease San Juan 27-5 Unit #81	
Location 1000/N, 1650/W Sec. 27, T-27-N, R5W		County Rio Arriba	State New Mexico
Formation Pictured Cliffs		Pool Tapacito	
Casing: Diameter 2 7/8"	Set At: Feet 3376'	Tubing: Diameter No Tubing	Set At: Feet
Pay Zone: From 3222'	To 3320'	Total Depth: 3376'	Shut In 8-7-73
Stimulation Method Sand Water Frac		Flow Through Casing X	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365		Tubingless Completion	
Shut-In Pressure, Casing, PSIG 994	+ 12 = PSIA 1006	Days Shut-In 16	Shut-In Pressure, Tubing PSIG No Tubing	+ 12 = PSIA	
Flowing Pressure: P PSIG 48	+ 12 = PSIA 60		Working Pressure: P _w PSIG CALCULATED	+ 12 = PSIA 76	
Temperature: T = 58 °F	n = F _t = 1.002		F _{pv} (From Tables) 1.004	Gravity .655	F _g = .9571

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

$$Q = (12.365) (60) (1.002) (.9571) (1.004) = 714 \text{ MCF/D}$$

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

$$A_{of} = Q \left(\frac{1012036}{1006260} \right)^n = 714 (1.0057)^{.85} = 714 (1.0049)$$

$$A_{of} = 718 \text{ MCF/D}$$

Note: Well Produced a light mist of water throughout test.

TESTED BY BJ B

WITNESSED BY

William D. Welch
Well Test Engineer

