

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

DATE December 19, 1974

Operator El Paso Natural Gas Company		Lease San Juan 27-4 Unit #76	
Location 1680/N, 930/E, Sec. 21, T27N, R4W		County Rio Arriba	State New Mexico
Formation Pictured Cliffs		Pool Tapacito	
Casing: Diameter 2.875	Set At: Feet 4147'	Tubing: Diameter No Tubing	Set At: Feet --
Pay Zone: From 3964'	To 4038'	Total Depth: PBT 4147' 4136'	Shut In 12-11-74
Stimulation Method Sandwater Frac		Flow Through Casing XX	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365		Tubingless Completion	
Shut-In Pressure, Casing, PSIG 1076	+ 12 = PSIA 1088	Days Shut-In 8	Shut-In Pressure, Tubing PSIG No Tubing	+ 12 = PSIA --	
Flowing Pressure: P PSIG 241	+ 12 = PSIA 253		Working Pressure: Pw PSIG Calculated	+ 12 = PSIA 339	
Temperature: T = 55 °F F <sub>t</sub> = 1.005	n = .85		Fpv (From Tables) 1.029	Gravity .680 F <sub>g</sub> = 0.9393	

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

$$Q = 12.365(253)(1.005)(0.9393)(1.029)$$

$$= \underline{3039} \text{ MCF/D}$$

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

$$Aof = Q \left( \frac{1183744}{1068823} \right)^n = 3039(1.1075)^{.85} = 3039(1.0907)$$

$$Aof = \underline{3314} \text{ MCF/D}$$

Note: The well produced a light mist of water.

TESTED BY F. Johnson

WITNESSED BY \_\_\_\_\_

*Loren W. Fathen*  
Well Test Engineer

