

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE August 22, 1973

Operator El Paso Natural Gas Company		Lease San Juan 29-7 Unit #106	
Location 1650/S, 1840/W, Sec. 36, T-29-N, R-7W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 8115'	Tubing: Diameter 1 1/2"	Set At: Feet 8054'
Pay Zone: From 7862'	To 8072'	Total Depth: 8115'	Shut In 8-12-73
Stimulation Method Sand Water Frac.		Flow Through Casing X	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG 2673	+ 12 = PSIA 2685	Days Shut-In 10	Shut-In Pressure, Tubing PSIG 1689	+ 12 = PSIA 1701	
Flowing Pressure: P PSIG 359	+ 12 = PSIA 371		Working Pressure: P _w PSIG 571	+ 12 = PSIA 583	
Temperature: T = 72 °F	F _t = .9887	n = .75	F _{pv} (From Tables) 1.026	Gravity .595	F _g = 1.0041

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

$$Q = (12.365) (371) (.9887) (1.0041) (1.026) = \underline{\quad 4673 \quad} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{7209225}{6869336} \right)^n = 4673 (1.0495)^{.75} = 4673 (1.0369)$$

$$Aof = \underline{\quad 4845 \quad} \text{ MCF/D}$$

Note: The well produced a medium mist of water throughout the test.

TESTED BY W.D. Welch

WITNESSED BY _____

William D. Welch
Well Test Engineer

