

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE December 27, 1973

Operator El Paso Natural Gas Company		Lease San Juan 29-5 Unit #62	
Location 1180/S, 1180/W, Sec. 7 T29N, R5W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 7898'	Tubing: Diameter 1 1/2"	Set At: Feet 7839'
Pay Zone: From 7726	To 7856	Total Depth: 7898	Shut In 12-14-73
Stimulation Method Sandwater Frac		Flow Through Casing X	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG 2760	+ 12 = PSIA 2772	Days Shut-In 13	Shut-In Pressure, Tubing PSIG 2354	+ 12 = PSIA 2366	
Flowing Pressure: P PSIG 300	+ 12 = PSIA 312		Working Pressure: P _w PSIG 527	+ 12 = PSIA 539	
Temperature: T = 60 °F	F _t = 1.000	n = .75	F _p v (From Tables) 1.024	Gravity .595	F _g = 1.0041

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

$$Q = (12.365)(312)(1.000)(1.0041)(1.024) = \underline{\quad 3966 \quad} \text{ MCF/D}$$

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

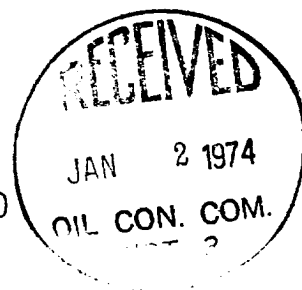
$$Aof = Q \left(\frac{7683984}{7393463} \right)^n = 3966(1.0393)^{.75} = 3966(1.02933)$$

$$Aof = \underline{\quad 4083 \quad} \text{ MCF/D}$$

Note: Medium mist of liquid.

TESTED BY Rhames

WITNESSED BY _____



William D. Welch

William D. Welch
Well Test Engineer