

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE December 4, 1973

Operator El Paso Natural Gas Company		Lease San Juan 29-5 Unit #64	
Location 1180/S, 1460/W, Sec. 21, T29N, R5W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 8149'	Tubing: Diameter 1 1/2"	Set At: Feet 8064'
Pay Zone: From 7978	To 8076	Total Depth: 8149	Shut In 11-27-73
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 2588	+ 12 = PSIA 2600	Days Shut-In 7	Shut-In Pressure, Tubing PSIG 2580	+ 12 = PSIA 2592	
Flowing Pressure: P PSIG 237	+ 12 = PSIA 249		Working Pressure: P _w PSIG 397	+ 12 = PSIA 409	
Temperature: T = 60 °F	F _t = 1.000	n = .75	F _{pv} (From Tables) 1.024	Gravity .655	F _g = .9571

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

$$Q = (12.365) (249) (1.000) (.9571) (1.024) = \underline{\quad 3018 \quad} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{6760000}{6592719} \right)^n = (3018) (1.0254)^{.75} = (1.0190) (3018)$$

$$Aof = \underline{\quad 3075 \quad} \text{ MCF/D}$$

Note: Blew heavy fog of water for entire test.

TESTED BY Jesse Goodwin

WITNESSED BY _____



William D. Welch
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Well Test Engineer