

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

DATE December 8, 1973

Operator El Paso Natural Gas Company		Lease San Juan 29-5 Unit #63	
Location 1180/S, 1180/W, Sec. 17, T29N, R5W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 8038'	Tubing: Diameter 1 1/2"	Set At: Feet 7973'
Pay Zone: From 7850	To 7988	Total Depth: 8038	Shut In 12-1-73
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 2689	+ 12 = PSIA 2701	Days Shut-In 7	Shut-In Pressure, Tubing PSIG 2103	+ 12 = PSIA 2115	
Flowing Pressure: P PSIG 303	+ 12 = PSIA 315		Working Pressure: P <sub>w</sub> PSIG 558	+ 12 = PSIA 570	
Temperature: T = 68 °F	n = Ft = .9924		F <sub>pv</sub> (From Tables) 1.023	Gravity .595	F <sub>g</sub> = 1.0041

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

$$Q :: (12.365)(315)(.9924)(1.0041)(1.023) = \underline{3971} \text{ MCF/D}$$

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

$$Aof = Q \left( \frac{7295401}{6970591} \right)^n = 3971(1.0466)^{.75} = 3971(1.0348)$$

$$Aof = \underline{4109} \text{ MCF/D}$$

Note: Well produced a light to medium fog of water.

TESTED BY B. Broughton

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

William D. Welch  
William D. Welch  
Well Test Engineer