

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE December 31, 1968

Operator El Paso Natural Gas Company		Lease Lodewick No. 11	
Location 1180'N, 1772'E, Sec. 30, T-27-N, R-9-W		County San Juan	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 6840	Tubing: Diameter 2.375	Set At: Feet 6768
Pay Zone: From 6578	To 6803	Total Depth: 6840	Shut In 12-24-68
Stimulation Method Sand Water Frac		Flow Through Casing	Flow Through Tubing XX

Choke Size, Inches 2.750" Plate; 4" M.R.		Meter Choke Constant: C 41.9208		Tested Through a 3/4" Variable choke	
Shut-In Pressure, Casing, PSIG 1884	+ 12 = PSIA 1896	Days Shut-In 7	Shut-In Pressure, Tubing PSIG 1569	+ 12 = PSIA 1581	
Flowing Pressure: P PSIG 57 M.R.; 192 W.H.	+ 12 = PSIA 69 M.R.; 204 W.H.		Working Pressure: P _w PSIG 592	+ 12 = PSIA 604	
Temperature: T = 86 °F Ft = .9759	n = .75		F _{pv} (From Tables) 1.008	Gravity .670	F _g = 1.2217

$$\text{CHOKE VOLUME} = Q = C \times P_r \times F_r \times F_g \times F_{pv}$$

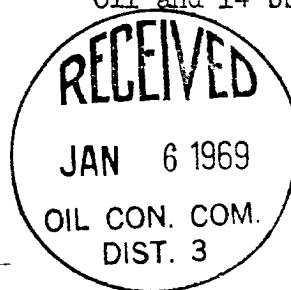
$$Q = \text{Calculated from orifice Meter Readings} = \underline{2031} \text{ MCF/D}$$

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

$$Aof = \left(\frac{3594816}{3230000} \right)^n = (2031)(1.1129)^{.75} = (2031)(1.0835)$$

Note: The well produced 50 bbls. of 41.9 API Gravity Oil and 14 bbls. of water during the test.

$$Aof = \underline{2201} \text{ MCF/D}$$

TESTED BY CRWagner & BJBroughtonCalculated
WITNESSED BY H.E. McNally

H. L. Kendrick
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