

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

CORRECTED COPY

DATE October 16, 1968

Operator El Paso Natural Gas Company		Lease San Juan 27-4 Unit No. 54	
Location 810'N, 910'E, Sec. 32, T-27-N, R-4-W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 8415	Tubing: Diameter 2.375	Set At: Feet 8150
Pay Zone: From 8170	To 8406	Total Depth: 8415	Shut In 9-26-68
Stimulation Method Sand Water Frac		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches 2.750" Plate; 4" M.R.	Choke Constant: C 41.9203		Tested through a 3/4" variable choke	
Shut-In Pressure, Casing, PSIG 2347	+ 12 = PSIA 2359	Days Shut-In 20	Shut-In Pressure, Tubing PSIG 2176	+ 12 = PSIA 2188
Flowing Pressure: P PSIG 98 M.R.; 410 W.H.	+ 12 = PSIA 110 M.R.; 422 W.H.		Working Pressure: P _w PSIG 927	+ 12 = PSIA 939
Temperature: T = 85 °F	n = .75		F _{pv} (From Tables) 1.010	Gravity .700 F _g = 1.1952

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

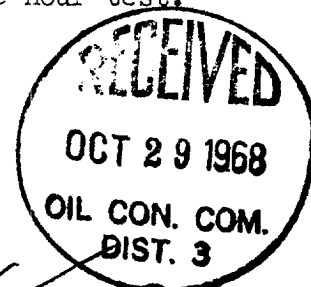
$$Q = \text{Calculated from orifice meter readings} = \underline{3202} \text{ MCF/D}$$

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

$$Aof = \left(\frac{5564881}{4683160} \right)^n = (3202)(1.1882)^{.75} = (3202)(1.1380)$$

Note: The well produced 49.23 bbls. of 51.6 API Gravity Oil and 32.82 bbls. of water into the tank during the three hour test.

$$Aof = \underline{3644} \text{ MCF/D}$$

TESTED BY D. Roberts & B. BroughtonCalculated
WITNESSED BY Herman E. McAnallyChecked by George A. Lipman

H. L. Kendrick
H. L. Kendrick