

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE July 17, 1968

Operator El Paso Natural Gas Company		Lease Huerfano Unit No. 177	
Location 1650'S, 800'E, Sec. 22, T-26-N, R-10-W		County San Juan	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 6851	Tubing: Diameter 2.375	Set At: Feet 6582
Pay Zone: From 6602	To 6738	Total Depth: 6851	Shut In 7-3-68
Stimulation Method Sand Water Frac		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches 2 1/2" plate, 4" M. R.		Choke Constant: C 33.2928		Tested through 3/4" variable choke	
Shut-In Pressure, Casing, PSIG 1630	+ 12 = PSIA 1642	Days Shut-In 14	Shut-In Pressure, Tubing PSIG 1632	+ 12 = PSIA 1644	
Flowing Pressure: P PSIG 378 WH; 127 MR	+ 12 = PSIA 390 WH; 139 MR		Working Pressure: Pw PSIG 1033	+ 12 = PSIA 1045	
Temperature: T = 74 °F	n = .75		Fpv (From Tables) 1.014	Gravity .700	Fg = 1.1952

$$\text{CHOKE VOLUME} = Q = C \times P_f \times F_f \times F_g \times F_{pv}$$

$$Q = \text{Calculated from orifice meter reading} = \underline{3752} \text{ MCF/D}$$

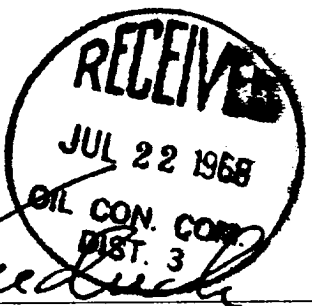
$$\text{OPEN FLOW} = Aof = Q \left(\frac{P_c^2}{P_c^2 - P_w^2} \right)^n$$

$$Aof = \left(\frac{2702736}{1610711} \right)^n = (3752)(1.6779)^{.75} = (3752)(1.4743)$$

NOTE: The well produced 61.16 bbls. of 31.2° API gravity oil into the tank during the three hour test.

$$Aof = \underline{5532} \text{ MCF/D}$$

TESTED BY C. R. Wagner and D. NortonCALCULATED
WITNESSED BY H. E. McAnally


H. L. Kendrick
 H. L. Kendrick