

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE November 29, 1974

Operator El Paso Natural Gas Company		Lease Huerfano Unit No. 258	
Location 990/S, 990/E - Sec 36, T-27-N, R-10-W		County San Juan	State New Mexico
Formation Gallup		Pool Angel Peak	
Casing: Diameter 4.500	Set At: Feet 6153'	Tubing: Diameter 2.375	Set At: Feet 6096'
Pay Zone: From 5734'	To 6090'	Total Depth: PBD 6150' 6137'	Shut In 07-18-74
Stimulation Method Sand Water Frac		Flow Through Casing	Flow Through Tubing XX

Choke Size, Inches Meter 4" MR	Orifice 2.500	Choke Constant: C Orifice 32.64	Well Tested Thru a 3/4" Variable Choke	
Shut-In Pressure, Casing, PSIG 752	+ 12 = PSIA 764	Days Shut-In 167	Shut-In Pressure, Tubing PSIG 245	+ 12 = PSIA 257
Flowing Pressure: P PSIG WH 38 MR 31	+ 12 = PSIA WH 50 MR 43		Working Pressure: P _w PSIG 163	+ 12 = PSIA 175
Temperature: T = 56 °F Ft = 1.004	n = .75		Fpv (From Tables) 1.004	Gravity .720 Fg = 1.179

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

$$Q = \text{Calculated from Orifice Meter Readings} = \underline{411} \text{ MCF/D}$$

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

$$Aof = \left(\frac{583696}{553071} \right)^n = 411(1.0554)^{.75} = 411(1.0412)$$

$$Aof = \underline{428} \text{ MCF/D}$$

Note: The well produced 17.16 bbls of 29 API gravity during the test.

TESTED BY Johnson and Goodwin

WITNESSED BY _____

Loren W. Fothergill
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Well Test Engineer