

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE 12/11/72

| | | | |
|---|----------------------|-------------------------------|---------------------|
| Operator EL PASO NATURAL GAS COMPANY | | Lease Hughes #18 | |
| Location 1770 1600/N, 1730/W, Sec. 20. T29N, R8W | | County San Juan | State NM |
| Formation Pictured Cliffs | | Pool Blanco | |
| Casing: Diameter 2.875 | Set At: Feet 3238 | Tubing: Diameter No tubing | Set At: Feet |
| Pay Zone: From 3138 | To 3172 | Total Depth: 3238 | Shut In 12/4/72 |
| Stimulation Method SWF | | Flow Through Casing X | Flow Through Tubing |

| | | | | | |
|--|--------------------------------|---|--|------------------------|--|
| Choke Size, Inches .750 | | Choke Constant: C 12.365 | | Tubingless Completion | |
| Shut-In Pressure, Casing, PSIG 1007 | + 12 = PSIA 1019 | Days Shut-In 7 | Shut-In Pressure, Tubing PSIG No tubing | + 12 = PSIA | |
| Flowing Pressure: P PSIG 114 | + 12 = PSIA 126 | Working Pressure: P _w PSIG Calculated | + 12 = PSIA 160 | | |
| Temperature: T = 56 °F | n = F _t = 1.0039 | F _{pv} (From Tables) 1.011 | Gravity .645 | F _g = .9645 | |

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

$$Q = (12.365)(126)(1.0039)(0.9645)(1.011) = 1525 \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{1038361}{1012761} \right)^{.85} = (1525)(1.0253)^{.85} = (1525)(1.0214)$$

$$Aof = 1558 \text{ MCF/D}$$

NOTE: The well produced a light spray of water throughout the test.

TESTED BY R. Hardy

WITNESSED BY

William D Welch
William D. Welch
Well Test Engineer

