

OPEN FLOW TEST DATA

Date: January 17, 1973

Operator: Wynn Oil Company Lease: Federal Largo #3 A

Location: Sec. 14, Township 27N, Rge. 8W County: Rio Arriba State: N.M.

Formation: Mesa Verde Pool: Blanco Mesa Verde

Casing: " Set @ ' Tubing: 1 1/4 " Set @ 5272

Pay Zone: 4610 ' To: 5413 ' Total Depth:

Choke Size: THC 3/4 " Choke Constant = C = 12.365

Stimulation Method: Flow Through: Casing Tubing X

Shut-in Pressure Casing: 869 psig / 12 = 881 psia (Shut-in 8 days)

Shut-in Pressure Tubing: 1107 psig / 12 = 1119 psia

Flowing Pressure: P : 121 psig / 12 = 133 psia

Working Pressure: P_w : Calculated psig / 12 = 144 psia

Temperature: T : 40 °F / 460 = 500 °Absolute

F_{pv} (from tables) : 1.016 Gravity Est. 670 n 75

$$\text{Choke Volume} = Q = C \times P_t \times F_t \times F_g \times F_{pv}$$

$$12.365 \times 133 \times 1.0198 \times .9463 \times 1.016$$

$$Q = \underline{\hspace{2cm}} = \underline{1613} \text{ MCF/D}$$

Open Flow - Aof = Q

$$Aof = \left[\frac{P_c^2 - P_w^2}{P_c^2} \right]^n = \left[\frac{881^2 - 144^2}{881^2} \right]^n$$

$$= \frac{776,161}{755,425} = 1.2075 = 1.1518$$

Aof = 1858 MCF/D

Tested By: R. C. Dintelman

Witnessed By:

Calculated by

GeoElectric, Inc.

