

OPEN FLOW TEST DATA

Date: January 23, 1973

Operator: Wynn Oil Company Lease: Federal Largo #2 - I

Location: Sec. 13, Twnship 27N, Rge, 8W County: Rio Arriba State: N.M.

Formation: Mesa Verde Pool: Bianco MV

Casing: " Set @ ' Tubing: 1½ " Set @ 4727

Pay Zone: 4490 ' To: 4684 ' Total Depth:

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

Stimulation Method: Flow Through: Casing Tubing X

Shut-in Pressure Casing: 1082 psig / 12 = 1094 psia (Shut-in 8 days)

Shut-in Pressure Tubing: 1112 psig / 12 = 1124 psia

Flowing Pressure: P : 98 psig / 12 = 110 psia

Working Pressure: P_w : Calculated psig / 12 = 119 psia

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

F_{pv} (from tables) : 1.013 Gravity Est. .670 n 75

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

$$12.365 \times 110 \times 1.0198 \times .9463 \times 1.013$$

$$Q = \underline{\hspace{2cm}} = \underline{1330} \text{ MCF/D}$$

Open Flow - Aof = Q

$$Aof = \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n \times \frac{1094}{119}$$

$$Aof = \left[\frac{1,196,836}{1,182,675} \right]^n = 1.0120 = 1.0089$$

Aof = 1342 MCF/D

Tested By: R. C. Dintelman

Witnessed By:

Calculated by

GeoElectric, Inc.

B. J. Keyes

