

OPEN FLOW TEST DATA

Date: 4/19/72

Operator: Wynn & Brooks Lease: Federal E #3

Location: D Sec. 13, T-27N Rge. 8W County: San Juan State: N.M.

Formation: Chacra Pool: Undesignated Chacra

Casing: 4.5 " Set @ 5500 ' Tubing: 1.25 " Set @ 3950

Pay Zone: 3947 ' To: 3949 ' Total Depth: 5500 FETD 5452

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

Stimulation Method: _____ Flow Through: Casing _____ Tubing X

Shut-in Pressure Casing: 993 psig / 12 = 1005 psia (Shut-in 8 days)

Shut-in Pressure Tubing: 991 psig / 12 = 1003 psia

Flowing Pressure: P : 100 psig / 12 = 112 psia

Working Pressure: P_w : 712 psig / 12 = 724 psia

Temperature: T : 47 °F / 460 = 507 °Absolute

F_{pv} (from tables) : 1.010 Gravity Est. .620 n 75

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

$$12.365 \times 112 \times 1.0127 \times .9837 \times 1.010$$

$$Q = \underline{1394} \text{ MCF/D}$$

Open Flow - Aof = Q

$$Aof = \left[\frac{P_c^2 - P_w^2}{1.006,009} \right]^{(75)} = 2.0879 = 1.7369$$

$$Aof = \underline{2421} \text{ MCF/D}$$

Tested By: Robert C. Dintelman

Witnessed By: _____

Calculated By
GeoElectric, Inc.

B. H. Kays

