

OPEN FLOW TEST DATA

Date: 4/19/72

Operator: Wynn & Brooks Lease: Federal E #2

Location: G Sec., 23, T-27N, Rge. 8W County: San Juan State: N.M.

Formation: Chacra Pool: Undesignated Chacra

Casing: 4.5 " Set @ 4800 ' Tubing: 1.25 " Set @ 4537

Pay Zone: 3873 ' To: 4679 ' Total Depth: 4800 FTD 4752

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

Stimulation Method: _____ Flow Through: Casing _____ Tubing X

Shut-in Pressure Casing: 1017 psig / 12 = 1029 psia (Shut-in 8 days)

Shut-in Pressure Tubing: 1017 psig / 12 = 1029 psia

Flowing Pressure: P : 127 psig / 12 = 139 psia

Working Pressure: P_w : 690 psig / 12 = 702 psia

Temperature: T : 49 °F / 460 = 509 °Absolute

F_{pv} (from tables) : 1.011 Gravity Est. .620 n 75

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

$$12.365 \times 139 \times 1.0107 \times .9837 \times 1.011 = \underline{1728} \text{ MCF/D}$$

Open Flow - Aof = Q

$$Aof = \frac{\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n}{\frac{1,058,841}{366,037}} = \frac{(75)}{.8706} = 1.5994$$

Aof = 2764 MCF/D

Tested By: Robert C. Dintelman

Witnessed By: _____

Calculated By
Geoelectric, Inc.

B.H. Hayes

