

OPEN FLOW TEST DATA

Date: October 12, 1961

Operator: Geo E. Willett

Lease: S. D. Willett No. 1

Location: Sec. 22 Twp 30N Rng 12W

County: San Juan State: N. M.

Formation: Pictured Cliffs

Pool: _____

Casing: 4 " Set @ _____

Tubing: 1 1/2 " Set @ 1030

Pay Zone: 1009 To: 1031

Total Depth: 2199

Choke Size: T H C 3/4

Choke Constant = C = 12.3850

Stimulation Method: SOF

Flow Through: Casing _____ Tubing X

Shut-in Pressure Casing: 909 psig / 12 = 601 psia (Shut-in 0 days)

Shut-in Pressure Tubing: 960 psig / 12 = 972 psia

Flowing Pressure: P : 66 psig / 12 = 78 psia

Working Pressure: P_w : 254 psig / 12 = 296 psia

Temperature: T : 98 °F / 460 = 518 °Absolute

F_{pv} (from tables) : 1.010 Gravity .670 Est. n .85

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

$$12.3850 \times 78 \times 1.0019 \times .9463 \times 1.010$$

$$Q = \underline{\underline{924}} \text{ MCF/D}$$

Open Flow - Aof = Q

$$Aof = \frac{\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n}{\frac{361,201}{290,445}} = \frac{1.2436^{(85)}}{1.2036}$$

$$Aof = \underline{\underline{1,112}} \text{ MCF/D}$$

Tested By: D. W. Stiles

Witnessed By: B H Keyes

GEOELECTRIC INC.

B H Keyes