

OPEN FLOW TEST DATA

Date: July 7, 1967

Operator: George E. Willett

Lease: #1 Lucerne-Federal

Location: NW¹ Sec. 17 - T28N - R11W

County: San Juan State: N.M.

Formation: Fruitland ss.

Pool: Pinon-Fruitland

Casing: ~~6 3/4~~ 7 1/2 " Set @ 1347 ' Tubing: 1 1/4 " Set @ 1232 ' 1

Pay Zone: 1290 ' To: 1310-(Gamma Ray Depth) Total Depth: 1358 ' 2

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

Stimulation Method: Sand-water Frac Flow Through: Casing _____ Tubing XX

Shut-in Pressure Casing: 566 psig / 12 = 578 psia (Shut-in 7 days)
3 hr. blowdown

Shut-in Pressure Tubing: 565 psig / 12 = 577 psia

Flowing Pressure: P : 191 psig / 12 = 203 psia

Working Pressure: P_w : 505 psig / 12 = 517 psia

Temperature: T : 48° °F / 460 = 508 °Absolute

F_{pv} (from tables) : 1.019 Gravity .600 n .75

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

$$Q = 12.365 \times 203 \times 1.0117 \times 1.000 \times 1.019 = 2588 \text{ MCF/D}$$

Open Flow - Aof = Q

$$Aof = 2588 \left[\frac{P_c^2 - P_w^2}{578^2 - 517^2} \right]^n = \left[\frac{334,084}{71,940} \right]^n = 4.6439^n = 3.6884$$

$$Aof = 9546 \text{ MCF/D}$$

Tested By: Donald Burton

Witnessed By: Lee W. Kilgore



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