

OPEN FLOW TEST DATA

Date: 10-25-62

Operator: SHAR-ALAN OIL Co. Lease: McDANIEL UNIT # 1

Location: NW/4 Sec 22 24N 2W County: RIO ARriba State: N M

Formation: PISTONED CLIFF Pool: SOUTH BLANCO

Casing: 5 1/2 " Set @ 3070 ' Tubing: 2 3/8 " Set @ 2978

Pay Zone: 2984 ' To: 2996 ' Total Depth: 3070

Choke Size: 3/4 T H C " Choke Constant = C = 12.365

Stimulation Method: _____ Flow Through: Casing _____ Tubing X

Shut-in Pressure Casing: 865 psig / 12 = 877 psia (Shut-in 8 days)

Shut-in Pressure Tubing: 865 psig / 12 = 877 psia

Flowing Pressure: P : 105 psig / 12 = 117 psia

Working Pressure: P_w : 179 psig / 12 = 191 psia

Temperature: T : 42 °F / 460 = 504 °Absolute

F_{pv} (from tables) : 1.011 Gravity .620 Est n 85

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

$$12.365 \times 117 \times 1.0178 \times .9837 \times 1.011 = \underline{1465} \text{ MCF/D}$$

$$\text{Open Flow} - A_{of} = Q$$

$$A_{of} = \frac{\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n}{\left[\frac{769,129}{732,648} \right]^n} = \underline{1.0498 \approx 1.0423}$$

$$A_{of} = \underline{1527} \text{ MCF/D}$$

Tested By: Don Burton

Witnessed By: _____

SHAR-ALAN

Donald Burton