

OPEN FLOW TEST DATA

Date: JUNE 5, 1961

Operator: WESTERN NATURAL GAS CO. Lease: ONNARD # 1 (F C)

Location: M - 14 - 27N - 8 W County: SAN JUAN State: NEW MEX.

Formation: PICTURED CLIFFS Pool: O. BLANCO # C

Casing: 5 1/2 " Set @ 4373 ' Tubing: " Set @

Pay Zone: 2216 ' To: 2234 ' Total Depth: 4775

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

Stimulation Method: SIF Flow Through: Casing X Tubing

Shut-in Pressure Casing: 850 psig / 12 = 862 psia (Shut-in 7 days)

Shut-in Pressure Tubing: psig / 12 = psia

Flowing Pressure: P : 63 psig / 12 = 75 psia

Working Pressure: P_w : psig / 12 = CALCULATED psia

Temperature: T : 61 °F / 460 = 521 °Absolute

F_{pv} (from tables) : 1.009 Gravity .650 (E) n .850

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

$$12.365 \times 75 \times .9980 \times .9608 \times 1.009 = 897 \text{ MCF/D}$$

Open Flow - Aof = Q

$$Aof = \left[\frac{P_c^2 - P_w^2}{743,044} \right]^n = 1.0079 = 1.0066 \times 897$$

$$Aof = \frac{743,044 - 5657}{743,044} = 903 \text{ MCF/D}$$

Tested By: W. B. SMITH

Witnessed By: PAUL VARNER

