

OPEN FLOW TEST DATA

Date: Oct. 8, 1961

Operator: TIDEWATER OIL CO. Lease: MAE GALE No. 1

Location: SW/4 Sec. 24 Twp 29N Rge 11W County: SAN JUAN State: N. M.

Formation: DAKOTA Pool: BASIN DAKOTA

Casing: 4 1/8 " Set @ 6425 ' Tubing: 2 " Set @ 6232

Pay Zone: 6118 ' To: 6228 ' Total Depth: 6427

Choke Size: 3/4 TC " Choke Constant = C = 12.3650

Stimulation Method: _____ Flow Through: Casing _____ Tubing X

Shut-in Pressure Casing: 2066 psig / 12 = 2078 psia (Shut-in 8 days)

Shut-in Pressure Tubing: 2053 psig / 12 = 2065 psia

Flowing Pressure: P : 435 psig / 12 = 447 psia

Working Pressure: P_w : 971 psig / 12 = 983 psia

Temperature: T : 62 °F / 460 = 522 °Absolute

F_{pv} (from tables) : 1.047 Gravity .650 (Est.) n .75

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

$$12.3650 \times 447 \times .9981 \times .9508 \times 1.047$$

$$Q = \underline{\hspace{2cm}} = \underline{5550} \text{ MCF/D}$$

Open Flow - Aof = Q

$$Aof = \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \left[\frac{4,318,034}{3,351,795} \right]^n = 1.2883^{(75)} = 1.2092$$

$$Aof = \underline{6711} \text{ MCF/D}$$

Tested By: D. W. STILES

Witnessed By: E. H. KEYES



GEOELECTRIC INC.

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