

OPEN FLOW TEST DATA

Date: 9-7-62

Operator: Tidewater Oil Co. Lease: Carter Fed. DK Unit # 1

Location: 10-27N-12W County: San Juan State: N. M.

Formation: Dakota Pool: Basin Dakota

Casing: 4 1/2" Set @ 6180 Tubing: " Set @

Pay Zone: 6014 To: 6042 Total Depth:

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

Stimulation Method: S W F Flow Through: Casing Tubing x

Shut-in Pressure Casing: 3120 psig / 12 = 3132 psia (Shut-in 1 days)

Shut-in Pressure Tubing: 2120 psig / 12 = 2132 psia

Flowing Pressure: P : 260 psig / 12 = 272 psia

Working Pressure: P_w : 820 psig / 12 = 832 psia

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

F_{pv} (from tables) : 1.036 Gravity .700 Est. n 75

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

$$Q = 12.365 \times 272 \times 1.0117 \times .9258 \times 1.036 = 3264 \text{ MCF/D}$$

$$\text{Open Flow} - A_{cf} = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n$$

$$A_{cf} = \left[\frac{9,809,424}{9,117,200} \right]^n = 1.0759 = 1.0564$$

$$A_{cf} = 3448 \text{ MCF/D}$$

Tested By: D. W. Stiles

Witnessed By:

Geolectric, Inc.



B. H. Keyes