

OPEN FLOW TEST DATA

Date: October 18, 1962

Operator: Tidewater Oil Co. Lease: Fed. Dakota Unit 2-W

Location: 2-27-12 County: San Juan State: N. Mex.

Formation: Dakota Pool: Basin Dakota

Casing: 4½ " Set @ 6354 ' Tubing: 2-3/8 " Set @ 6178

Pay Zone: 6186 ' To: _____ ' Total Depth: 6354 PB 6318

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

Stimulation Method: _____ Flow Through: Casing _____ Tubing x

Shut-in Pressure Casing: 1970 psig / 12 = 1982 psia (Shut-in 8 days)

Shut-in Pressure Tubing: 1970 psig / 12 = 1982 psia

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

Working Pressure: P_w : 650 psig / 12 = 662 psia

Temperature: T : 75 °F / 460 = 535 °Absolute

F_{pv} (from tables) : 1.013 Gravity Est 700 n .75

Choke Volume = Q = C x P_t x F_t x F_g x F_{pv}

$$12.365 \times 117 \times .9859 \times .9258 \times 1.013 = 1338 \text{ MCF/D}$$

Open Flow - Aof = Q

$$\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n$$

$$Aof = \frac{3,928,324}{3,490,080} = 1.1256 = 1.0927$$

Aof = 1462 MCF/D

Tested By: D. W. Stiles

Witnessed By: _____

GeoElectric, Inc.

B. H. Keyes

