

OPEN FLOW TEST DATA

Date: 7/31

Operator: William C. Russell Lease: Graham #51

Location: Sec. 10, 27N, 8W County: San Juan State: N.M.

Formation: Mesa Verde Pool: Blanco M.V.

Casing: _____ " Set @ _____ ' Tubing: 2.375 " Set @ 4500

Pay Zone: 4414 ' To: 4500 ' Total Depth: _____

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

Stimulation Method: _____ Flow Through: Casing _____ Tubing X

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

Shut-in Pressure Tubing: 1009 psig / 12 = 1021 psia

Flowing Pressure: P : 128 psig / 12 = 140 psia

Working Pressure: P_w : _____ psig / 12 = 264 psia

Temperature: T : 40 °F / 460 = 500 °Absolute

F_{pv} (from tables) : 1.015 Gravity .670 Est. n 75

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

$$12.365 \times 140 \times 1.0198 \times .9463 \times 1.015$$

$$Q = \underline{\underline{1695}} \text{ MCF/D}$$

Open Flow - Aof = Q

$$Aof = \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \left[\frac{1,042,441}{972,745} \right]^n = 1.0716 = 1.0532$$

Aof = 1785 MCF/D

Tested By: R. C. Dintelman

Witnessed By: _____



Calculated By
GeoElectric, Inc. *W. H. Kent*