

OPEN FLOW TEST DATA

Date: 6-8-64

Operator: J. R. Abraham

Lease: Little Angel # 1

Location: NE/4 8-251-3W

County: R A State: N. M.

Formation: F C

Pool: F C

Casing: 4 1/2 " Set @ 3800 ' Tubing: " Set @

Pay Zone: 3730 ' To: 3770 ' Total Depth: 3804

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

Stimulation Method: Flow Through: Casing X Tubing

Shut-in Pressure Casing: 270 psig / 12 = 782 psia (Shut-in 2 days)

Shut-in Pressure Tubing: psig / 12 = psia

Flowing Pressure: P : 342 psig / 12 = 361 psia

Working Pressure: P_w : 746 psig / 12 = 758 psia

Temperature: T : 60 °F / 460 = 520 °Absolute

F_{pv} (from tables) : 1.087 Gravity .650 n 85

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

$$12.365 \times .361 \times 1.000 \times .9608 \times 1.087$$

$$Q = \underline{\underline{4662}} \text{ MCF/D}$$

Open Flow - Aof = Q

$$Aof = \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 16.5456 = 1.5420 = 81,156$$

$$Aof = \underline{\underline{81,156}} \text{ MCF/D}$$

Tested By: John Shipley

Witnessed By:

GeoElectric, Inc.