

OPEN FLOW TEST DATA

Date: _____

Operator: William C. Russell Lease: Hammond 93

Location: 26-27N-8W County: San Juan State: NM

Formation: Chacra Pool: Largo

Casing: 4½ " Set @ 3330 ' Tubing: 1½ " Set @ 3168

Pay Zone: 3114 ' To: 3253 ' Total Depth: 3336

Choke Size: ¾ T & C " Choke Constant = C = 12.365

Stimulation Method: SWF Flow Through: Casing _____ Tubing X

Shut-in Pressure Casing: 825 psig / 12 = 837 psia (Shut-in 8 days)

Shut-in Pressure Tubing: 825 psig / 12 = 837 psia

Flowing Pressure: P : 78 psig / 12 = 90 psia

Working Pressure: P_w : 289 psig / 12 = 301 psia

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

F_{pv} (from tables) : 1.011 Gravity est. 670 n 75

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

$$12.365 \times 90 \times 1.0000 \times .9463 \times 1.011$$

$$Q = \frac{12.365 \times 90 \times 1.0000 \times .9463 \times 1.011}{1.011} = 1063 \text{ MCF/D}$$

Open Flow - Aof = Q

$$Aof = \left[\frac{P_c^2 - P_w^2}{P_c^2} \right]^n = 1.1485 - 1.1094$$

$$Aof = \frac{700.569}{609.968} = 1.1485 - 1.1094$$

$$Aof = 1179 \text{ MCF/D}$$

Tested By: _____

Witnessed By: _____

William C. Russell