

OPEN FLOW TEST DATA

Date: December 30, 1975

Operator: W. P. Carr Lease: Larcher #2

Location: Sec. 13, Twnship-31N, Rge 11W County: San Juan State: N.M.

Formation: Picture Cliff Pool: Aztec

Casing: 4½ " Set @ 2705 ' Tubing: 1½ " Set @ 2577

Pay Zone: 2621 ' To: 2626 ' Total Depth: 2705

Choke Size: ¾" THG 12.365 " Choke Constant = C = 12.365

Stimulation Method: SWF Flow Through: Casing Tubing X

Shut-in Pressure Casing: 955 psig / 12 = 967 psia (Shut-in 9 days)

Shut-in Pressure Tubing: 957 psig / 12 = 969 psia

Flowing Pressure: P : 566 psig / 12 = 578 psia

Working Pressure: P_w : 88 psig / 12 = 100 psia

Temperature: T : 55 °F / 460 = 115 °Absolute

F_{pv} (from tables) : 1.072 Gravity Est. .670 n 85

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

$$12.365 \times 100 \times 1.0048 \times .9463 \times 1.072$$

$$Q = \frac{1189}{1260} \text{ MCF/D}$$

Open Flow - Aof = Q

$$Aof = \left[\frac{P_c^2 - P_w^2}{938,961} \right]^n = \frac{1.5523}{1.0108} = \frac{1.4532}{1.0091}$$

$$Aof = \frac{1,728}{1,271} \text{ MCF/D}$$

Tested By: GeoLectric, Inc.

Witnessed By: El Paso Natural Gas Co.



W. P. Carr