

DC-374

OPEN FLOW TEST DATA

OCC
H. H. H.

Date: July 18, 1956

Handwritten initials

Operator: El Paso Natural Gas Company

Lease: Heaton # 6

Location: 840 N, 1630 E, Sec. 33-31-11

County: San Juan State: N.M.

Formation: Mesa Verde

Pool: Blanco Mesa Verde

Casing: 5 1/2" liner " Set 4434 - 4944
4532

Tubing: 2 " Set 4755

Pay Zone: 4695 To: 4744

Total Depth: 4944 - c/o - 4800

Choke Size: .750

Choke Constant = C = 14.1605

Stimulation Method: Sand Water Frac. Flow Through: Casing Tubing X

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

Shut-In Pressure Tubing: 989 psig / 12 = 1001 psia

Flowing Pressure: P : 342 psig / 12 = 354 psia

Working Pressure: P_w : Calculated psig / 12 = 736 psia

Temperature: T : 86 °F / 460 = 546 ° absolute

F_{pv} (from tables) : 1.032 Gravity .678 n .75

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

$$= 14.1605 \times 354 \times .9759 \times .9427 \times \frac{1}{1.032} = \underline{4,759} \text{ MCF/D}$$

$$\text{Open Flow} = \text{Aof} = \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n$$

$$\text{Aof} = 4,759 \left[\frac{1,002,001}{460,305} \right]^n = (2.1768)^{.75} \times 4759 = 1.792 \times 4759$$

$$\text{Aof} = \underline{8,528} \text{ MCF/D}$$

Tested By: K. C. McBride

Witnessed By: A. R. Kendrick, New Mexico Oil Conservation Commission

L. D. Galloway