

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE May 3, 1965

|                                                      |                      |                                      |                          |
|------------------------------------------------------|----------------------|--------------------------------------|--------------------------|
| Operator<br>El Paso Natural Gas Company              |                      | Lease<br>Huerfanito Unit No. 87 (DK) |                          |
| Location<br>1550'S, 1750'W, Section 1, T-26-N, R-9-W |                      | County<br>San Juan                   | State<br>New Mexico      |
| Formation<br>Dakota                                  |                      | Pool<br>Basin                        |                          |
| Casing: Diameter<br>5.500                            | Set At: Feet<br>6580 | Tubing: Diameter<br>2.375            | Set At: Feet<br>6439     |
| Pay Zone: From<br>6288                               | To<br>6478           | Total Depth:<br>6580                 | Shut In<br>4-24-65       |
| Stimulation Method<br>Sand Water Frac                |                      | Flow Through Casing                  | Flow Through Tubing<br>X |

|                                                  |                             |                   |                                                |                                        |
|--------------------------------------------------|-----------------------------|-------------------|------------------------------------------------|----------------------------------------|
| Choke Size, Inches<br>.750                       | Choke Constant: C<br>12.365 |                   | Baker Model "F" Packer set at 4400             |                                        |
| Shut-In Pressure, Casing, (MV)<br>1123 PSIG      | + 12 = PSIA<br>1135         | Days Shut-In<br>9 | Shut-In Pressure, Tubing (DK)<br>2005 PSIG     | + 12 = PSIA<br>2017                    |
| Flowing Pressure: P<br>512 PSIG                  | + 12 = PSIA<br>524          |                   | Working Pressure: P <sub>w</sub><br>Calc. PSIG | + 12 = PSIA<br>1107                    |
| Temperature:<br>T = 84 °F F <sub>t</sub> = .9777 | n =<br>.75                  |                   | F <sub>pv</sub> (From Tables)<br>1.062         | Gravity<br>.720 F <sub>g</sub> = .9129 |

ISIPT (MV) = 1123 psig

FSIPC (MV) = 1135 psig

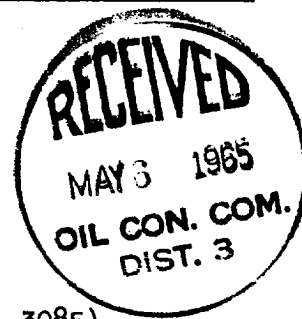
CHOKE VOLUME = Q = C × P<sub>i</sub> × F<sub>t</sub> × F<sub>g</sub> × F<sub>pv</sub>

$$Q = (12.365) (524) (.9777) (.9129) (1.062) = 6142 \text{ MCF/D}$$

$$\text{OPEN FLOW} = A_{of} = Q \left( \frac{P_c^2}{P_c^2 - P_w^2} \right)^n$$

$$A_{of} = \left( \frac{4,068,289}{2,842,840} \right)^n = (6142) (1.4310)^{.75} = (6142) (1.3085)$$

$$A_{of} = 8037 \text{ MCF/D}$$



NOTE: After three minutes well unloaded small slug of oil, then made light fog of water and distillate throughout test.

TESTED BY H. L. Kendrick

CHECKED BY T. B. Grant

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