

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

DATE May 2, 1975

|   |                       |                               |                     |
|---|-----------------------|-------------------------------|---------------------|
| Operator<br>El Paso Natural Gas Company       |                       | Lease<br>Grambling #9         |                     |
| Location<br>1710/S, 805/E, Sec. 28, T29N, R9W |                       | County<br>San Juan            | State<br>New Mexico |
| Formation<br>Pictured Cliffs                  |                       | Pool<br>Blanco                |                     |
| Casing: Diameter<br>2.875                     | Set At: Feet<br>2260' | Tubing: Diameter<br>No Tubing | Set At: Feet        |
| Pay Zone: From<br>2110                        | To<br>2152            | Total Depth: PBT<br>2260'     | Shut In<br>4-23-75  |
| Stimulation Method<br>Sandwater Frac          |                       | Flow Through Casing<br>XX     | Flow Through Tubing |

|                                       |                    |   |  |                         |  |
|---------------------------------------|--------------------|---|--|-------------------------|--|
| Choke Size, Inches<br>0.750           |                    | Choke Constant: C<br>12.365                         |  | Tubingless Completion   |  |
| Shut-In Pressure, Casing, PSIG<br>839 | + 12 = PSIA<br>851 | Days Shut-In<br>9                                   | Shut-In Pressure, Tubing PSIG<br>No Tubing | + 12 = PSIA             |  |
| Flowing Pressure: P PSIG<br>96        | + 12 = PSIA<br>108 | Working Pressure: P <sub>w</sub> PSIG<br>Calculated | + 12 = PSIA<br>129                         |                         |  |
| Temperature:<br>T = 57 °F             | n =<br>0.85        | F <sub>pv</sub> (From Tables)<br>1.011              | Gravity<br>.710                            | F <sub>g</sub> = 0.9193 |  |

$$\text{CHOKE VOLUME} = Q = C \times P_i \times F_i \times F_g \times F_{pv}$$

$$Q = 12.365(108)(1.0029)(0.9193)(1.011) = \underline{1245} \text{ MCF/D}$$

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

$$Aof = Q \left( \frac{724201}{707560} \right)^n = 1245(1.0235)^{.85} = 1245(1.0200)$$

$$Aof = \underline{1270} \text{ MCF/D}$$

Note: The well produced dry gas throughout the test. Vented 98 MCF of gas during the test.

TESTED BY R. Hardy

WITNESSED BY \_\_\_\_\_

Jerry W. Bink  
Well Test Engineer

