

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATADATE 3-15-70

|                                         |                      |                                    |                     |
|-----------------------------------------|----------------------|------------------------------------|---------------------|
| Operator<br>El Paso Natural Gas Co.     |                      | Lease<br>Canyon Largo Unit No. 158 |                     |
| Location<br>1650S, 1650E, S1, T24N, R7W |                      | County<br>Rio Arriba               | State<br>New Mexico |
| Formation<br>Pictured Cliffs            |                      | Pool<br>Ballard                    |                     |
| Casing: Diameter<br>2.375               | Set At: Feet<br>2321 | Tubing: Diameter<br>No tubing      | Set At: Feet        |
| Pay Zone: From<br>2232                  | To<br>2270           | Total Depth:<br>2321               | Shut In<br>3-5-70   |
| Stimulation Method<br>SWF               |                      | Flow Through Casing<br>XX          | Flow Through Tubing |

|                                       |                         |                             |                                                |                       |                        |
|---------------------------------------|-------------------------|-----------------------------|------------------------------------------------|-----------------------|------------------------|
| Choke Size, Inches<br>.750            |                         | Choke Constant: C<br>12.365 |                                                | Tubingless completion |                        |
| Shut-In Pressure, Casing, PSIG<br>651 | + 12 = PSIA<br>663      | Days Shut-In<br>8           | Shut-In Pressure, Tubing PSIG<br>No tubing     | + 12 = PSIA           |                        |
| Flowing Pressure: P PSIG<br>38        | + 12 = PSIA<br>50       |                             | Working Pressure: P <sub>w</sub> PSIG<br>Calc. | + 12 = PSIA<br>60     |                        |
| Temperature:<br>T = 56 °F             | F <sub>t</sub> = 1.0039 | n =<br>.85                  | F <sub>pv</sub> (From Tables)<br>1.004         | Gravity<br>.650       | F <sub>g</sub> = .9608 |

$$\text{CHOKE VOLUME} = Q = C \times P_t \times F_t \times F_g \times F_{pv}$$

$$Q = 12.365 \times 50 \times 1.0039 \times 1.004 \times .9608 = \underline{599} \text{ MCF/D}$$

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

$$Aof = \left( \frac{439569}{435969} \right)^n = 599 (1.0082)^{.85} = 599 (1.0069)$$

$$Aof = \underline{603} \text{ MCF/D}$$

TESTED BY B.J. Broughton

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



*H. L. Kendrick*  
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