

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATADATE August 8, 1969

|                                         |                      |                                    |                           |
|-----------------------------------------|----------------------|------------------------------------|---------------------------|
| Operator<br>El Paso Natural Gas Company |                      | Lease<br>San Juan 28-5 Unit No. 82 |                           |
| Location<br>1031S, 1150W S22, T28N, R5W |                      | County<br>Rio Arriba               | State<br>New Mexico       |
| Formation<br>Dakota                     |                      | Pool<br>Basin                      |                           |
| Casing: Diameter<br>4.500               | Set At: Feet<br>8105 | Tubing: Diameter<br>2.375          | Set At: Feet<br>8056      |
| Pay Zone: From<br>700                   | To<br>8078           | Total Depth:<br>8105               | Shut In<br>7-23-69        |
| Stimulation Method<br>Sand Water Frac   |                      | Flow Through Casing                | Flow Through Tubing<br>XX |

|                                        |                     |                             |                                       |                     |            |
|----------------------------------------|---------------------|-----------------------------|---------------------------------------|---------------------|------------|
| Choke Size, Inches<br>0.750            |                     | Choke Constant: C<br>12.365 |                                       |                     |            |
| Shut-In Pressure, Casing, PSIG<br>2661 | + 12 = PSIA<br>2673 | Days Shut-In<br>15          | Shut-In Pressure, Tubing PSIG<br>2670 | + 12 = PSIA<br>2682 |            |
| Flowing Pressure: P PSIG<br>298        | + 12 = PSIA<br>310  |                             | Working Pressure: Pw PSIG<br>1122     | + 12 = PSIA<br>1134 |            |
| Temperature:<br>T = 83 °F              | n = .750            |                             | Fpv (From Tables)<br>1.022            | Gravity<br>.600     | Fg = 1.000 |

$$\text{CHOKE VOLUME} = Q = C \times P_f \times F_f \times F_g \times F_{pv}$$

$$Q = 12.365 \times 310 \times .9786 \times 1.022 \times 1.000 = 3834 \text{ MCF/D}$$

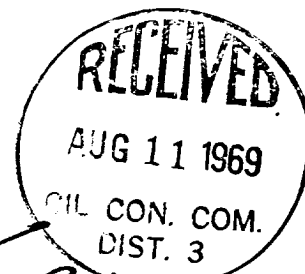
$$\text{OPEN FLOW} = Aof = Q \left( \frac{P_c^2}{P_c^2 - P_w^2} \right)^n$$

$$Aof = \left( \frac{7198489}{5939605} \right)^n = (1.2119)^{.75} 3834 = 1.1550 \times 3834$$

Note: Well blew light spray of water and distillate throughout test.

$$Aof = 4428 \text{ MCF/D}$$

TESTED BY DRR  
Calculated RES  
WITNESSED BY RES



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