

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATADATE April 17, 1970

|                                         |                      |                                  |                      |
|-----------------------------------------|----------------------|----------------------------------|----------------------|
| Operator<br>El Paso Natural Gas Company |                      | Lease<br>S. J. 28-6 Unit No. 149 |                      |
| Location<br>800N, 800 E, S27, T28N, R6W |                      | County<br>Rio Arriba             | State<br>New Mexico  |
| Formation<br>Dakota                     |                      | Pool<br>Basin                    |                      |
| Casing: Diameter<br>4.500               | Set At: Feet<br>7368 | Tubing: Diameter<br>1.900        | Set At: Feet<br>7790 |
| Pay Zone: From<br>7612                  | To<br>7812           | Total Depth:<br>7868             | Shut In<br>4-9-70    |
| Stimulation Method<br>SWP               |                      | Flow Through Casing<br>XX        | Flow Through Tubing  |

|                                        |                     |                             |                                              |                     |                        |
|----------------------------------------|---------------------|-----------------------------|----------------------------------------------|---------------------|------------------------|
| Choke Size, Inches<br>.750             |                     | Choke Constant: C<br>12.365 |                                              |                     |                        |
| Shut-In Pressure, Casing, PSIG<br>2680 | + 12 = PSIA<br>2692 | Days Shut-In<br>8           | Shut-In Pressure, Tubing PSIG<br>2680        | + 12 = PSIA<br>2701 |                        |
| Flowing Pressure: P PSIG<br>462        | + 12 = PSIA<br>474  |                             | Working Pressure: P <sub>w</sub> PSIG<br>712 | + 12 = PSIA<br>724  |                        |
| Temperature:<br>T = 75 °F              | n =<br>Ft = .9859   |                             | F <sub>pv</sub> (From Tables)<br>1.044       | Gravity<br>.650     | F <sub>g</sub> = .9608 |

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

$$Q = (12.365)(474)(.9859)(.9608)(1.044) = 5796 \text{ MCF/D}$$

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

Note: Unloaded heavy fog of water and distillate for 9 min. Light to medium fog throughout test.

$$Aof = \left( \frac{7295401}{6771225} \right)^n = (5796)(1.0774)^{.75} = (1.0575)(5796)$$

$$Aof = 6129 \text{ MCF/D}$$

TESTED BY T. D. Norton

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



*H. L. Kendrick*  
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