

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATADATE June 9, 1971

|                                                   |                      |                                     |                      |
|---------------------------------------------------|----------------------|-------------------------------------|----------------------|
| Operator<br>EL PASO NATURAL GAS COMPANY           |                      | Lease<br>San Juan 28-6 Unit No. 160 |                      |
| Location<br>800'S, 1450'W, Sec. 19, T-28-N, R-6-W |                      | County<br>Rio Arriba                | State<br>New Mexico  |
| Formation<br>Dakota                               |                      | Pool<br>Basin                       |                      |
| Casing: Diameter<br>4.500                         | Set At: Feet<br>7882 | Tubing: Diameter<br>1.990           | Set At: Feet<br>7841 |
| Pay Zone: From<br>7590                            | To<br>7868           | Total Depth:<br>7882                | Shut In<br>5-29-71   |
| Stimulation Method<br>Sand Water Frac             |                      | Flow Through Casing<br>XXX          | Flow Through Tubing  |

|                                        |                     |                             |                                              |                                         |  |
|----------------------------------------|---------------------|-----------------------------|----------------------------------------------|-----------------------------------------|--|
| Choke Size, Inches<br>0.750            |                     | Choke Constant: C<br>12.365 |                                              |                                         |  |
| Shut-In Pressure, Casing, PSIG<br>2655 | + 12 = PSIA<br>2667 | Days Shut-In<br>12          | Shut-In Pressure, Tubing PSIG<br>2311        | + 12 = PSIA<br>2323                     |  |
| Flowing Pressure: P PSIG<br>376        | + 12 = PSIA<br>388  |                             | Working Pressure: P <sub>w</sub> PSIG<br>595 | + 12 = PSIA<br>607                      |  |
| Temperature:<br>T = 74°F               | n =<br>0.75         |                             | F <sub>pv</sub> (From Tables)<br>1.032       | Gravity<br>0.620 F <sub>g</sub> = .9837 |  |

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

$$Q = (12.365)(388)(.9868)(.9837)(1.032) = \underline{4806} \text{ MCF/D}$$

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

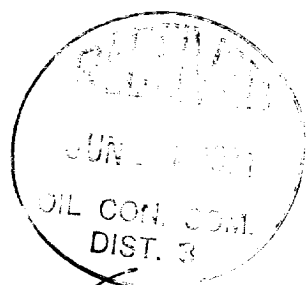
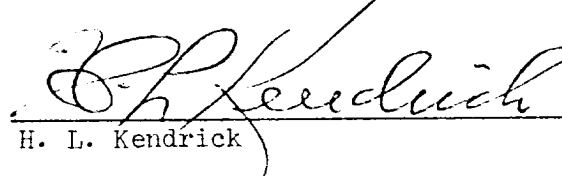
Note: Well blew light spray of water throughout test.

$$Aof = \left( \frac{7,112,889}{6,744,440} \right)^n = (4806)(1.0546)^{.75} = (4806)(1.0406)$$

$$Aof = \underline{5002} \text{ MCF/D}$$

TESTED BY R. E. Fielder

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

  
  
 H. L. Kendrick