

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATADATE January 18, 1968

|                                                  |                      |                                     |                          |
|--------------------------------------------------|----------------------|-------------------------------------|--------------------------|
| Operator<br>El Paso Natural Gas Company          |                      | Lease<br>San Juan 22-7 Unit No. 101 |                          |
| Location<br>990'H, 1600'E, Sec. 7, T-29-N, R-7-W |                      | County<br>Rio Arriba                | State<br>New Mexico      |
| Formation<br>Dakota                              |                      | Pool<br>Basin                       |                          |
| Casing: Diameter<br>4.500                        | Set At: Feet<br>7549 | Tubing: Diameter<br>2.375           | Set At: Feet<br>7049     |
| Pay Zone: From<br>7203                           | To<br>7515           | Total Depth:<br>7550                | Shut In<br>12-24-67      |
| Stimulation Method<br>Sand Water Frac            |                      | Flow Through Casing                 | Flow Through Tubing<br>X |

|                                                 |                     |                             |                                       |                            |  |
|-------------------------------------------------|---------------------|-----------------------------|---------------------------------------|----------------------------|--|
| Choke Size, Inches<br>.750                      |                     | Choke Constant: C<br>12.365 |                                       |                            |  |
| Shut-In Pressure, Casing, PSIG<br>2664          | + 12 = PSIA<br>2676 | Days Shut-In<br>25          | Shut-In Pressure, Tubing PSIG<br>2660 | + 12 = PSIA<br>2672        |  |
| Flowing Pressure: P PSIG<br>296                 | + 12 = PSIA<br>308  |                             | Working Pressure: Pw PSIG<br>1049     | + 12 = PSIA<br>1061        |  |
| Temperature:<br>T = 75 °F F <sub>t</sub> = 9859 | n =<br>.750         |                             | Fpv (From Tables)<br>1.031            | Gravity<br>.695 Fg = .9292 |  |

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

$$Q = (12.365)(308)(.9859)(.9292)(1.031) = 3597 \text{ MCF/D}$$

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

$$Aof = \left( \frac{7160976}{6035255} \right)^n = (3597)(1.1865)^{.75} = (3597)(1.1368)$$

NOTE: The well blew a heavy fog of water and light hydrocarbons throughout the test.

$$Aof = 4089 \text{ MCF/D}$$

TESTED BY Jesse B. Goodwin  
 CHECKED  
 WITNESSED BY H. E. McAnelly

**RECEIVED**  
 JAN 24 1968  
 OIL CON. COM.  
 DIST. 3

*H. L. Kendrick*  
 H. L. Kendrick