

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

DATE 7-01-69

|                                               |                      |                                     |                      |
|-----------------------------------------------|----------------------|-------------------------------------|----------------------|
| Operator<br>El Paso Natural Gas               |                      | Lease<br>San Juan 27-5 Unit No. 113 |                      |
| Location<br>1150'N; 950'E; S-10; T-27-N; R-5W |                      | County<br>Rio Arriba                | State<br>New Mexico  |
| Formation<br>Dakota                           |                      | Pool<br>Basin                       |                      |
| Casing: Diameter<br>4.500                     | Set At: Feet<br>8642 | Tubing: Diameter<br>1.660           | Set At: Feet<br>8541 |
| Pay Zone: From<br>8368                        | To<br>8585           | Total Depth:<br>8645                | Shut In<br>6-03-69   |
| Stimulation Method<br>Sand Water Frac         |                      | Flow Through Casing<br>X            | Flow Through Tubing  |

|                                        |                     |                             |                                              |                     |                        |
|----------------------------------------|---------------------|-----------------------------|----------------------------------------------|---------------------|------------------------|
| Choke Size, Inches<br>.750             |                     | Choke Constant: C<br>12.365 |                                              |                     |                        |
| Shut-In Pressure, Casing, PSIG<br>2504 | + 12 = PSIA<br>2516 | Days Shut-In<br>28          | Shut-In Pressure, Tubing PSIG<br>2507        | + 12 = PSIA<br>2519 |                        |
| Flowing Pressure: P PSIG<br>216        | + 12 = PSIA<br>228  |                             | Working Pressure: P <sub>w</sub> PSIG<br>418 | + 12 = PSIA<br>430  |                        |
| Temperature:<br>T = 72 °F              | n =<br>.75          |                             | F <sub>pv</sub> (From Tables)<br>1.020       | Gravity<br>.650     | F <sub>g</sub> = .9608 |

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

$$Q = (12.365)(228)(.9887)(.9608)(1.020) = 2732 \text{ MCF/D}$$

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

$$Aof = \left( \frac{6345361}{6160461} \right)^n = (1.030)^{.75} 2732 = (1.0223) (2732)$$

Note: Heavy fog of water and light hydrocarbons

$$Aof = 2793 \text{ MCF/D}$$

TESTED BY JBG  
Calculated  
EXAMINED BY RF & RES

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