

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

JCC

Company Distribution Only

DATE 2/4/73

|                                |                      |                           |                      |
|--------------------------------|----------------------|---------------------------|----------------------|
| Operator Lively Exploration    |                      | Lease Lively #2           |                      |
| Location E, Sec. 21, T28N, R8W |                      | County San Juan           | State NM             |
| Formation Dakota               |                      | Pool Basin                |                      |
| Casing: Diameter<br>4.500      | Set At: Feet<br>6732 | Tubing: Diameter<br>1.660 | Set At: Feet<br>6601 |
| Pay Zone: From<br>6448         | To<br>6608           | Total Depth:<br>6740      | Shut In<br>1/26/73   |
| Stimulation Method<br>SWF      |                      | 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>2182 | + 12 = PSIA<br>2194 | Days Shut-In<br>9           | Shut-In Pressure, Tubing PSIG<br>2150 | + 12 = PSIA<br>2162 |            |
| Flowing Pressure: P PSIG<br>314        | + 12 = PSIA<br>326  |                             | Working Pressure: Pw PSIG<br>434      | + 12 = PSIA<br>446  |            |
| Temperature:<br>T = 60 °F              | n =<br>Ft = 1.0000  |                             | Fpv (From Tables)<br>1.033            | Gravity<br>.650     | Fg = .9608 |

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

$$Q = (12.365) (326) (1.0000) (.9608) (1.033) = 4001 \text{ MCF/D}$$

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

$$A_{of} = Q \left( \frac{4813636}{4614720} \right)^n = (400) (1.0431)^{.75} = (4001) (1.0321)$$

$$A_{of} = 4129 \text{ MCF/D}$$

TESTED BY Jim Jacobs (Dugan Prod.)

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



William D. Welch  
Well Test Engineer

