

**DUAL COMPLETION**

EL PASO NATURAL GAS COMPANY  
**OPEN FLOW TEST DATA**

DATE June 4, 1957

|                                                |                             |                                       |                             |
|------------------------------------------------|-----------------------------|---------------------------------------|-----------------------------|
| Operator<br><b>EL PASO NATURAL GAS COMPANY</b> |                             | Lease<br><b>CALLOWAY POOL UNIT #2</b> |                             |
| Location<br><b>1840 N, 800 E; NE 34-31-11</b>  |                             | County<br><b>SAN JUAN</b>             | State<br><b>NEW MEXICO</b>  |
| Formation<br><b>MESAVERDE</b>                  |                             | Pool<br><b>BLANCO</b>                 |                             |
| Casing: Diameter<br><b>7"</b>                  | Set At: Feet<br><b>4375</b> | Tubing: Diameter<br><b>2"</b>         | Set At: Feet<br><b>4557</b> |
| Pay Zone: From<br><b>4485</b>                  | To<br><b>4590</b>           | Total Depth<br><b>4707 c/o 460</b>    |                             |
| Stimulant or Method<br><b>Sand-Water Frac.</b> |                             | Flow Through Tubing<br><b>X</b>       |                             |

|                                             |                                |                                                    |                                             |                                 |  |
|---------------------------------------------|--------------------------------|----------------------------------------------------|---------------------------------------------|---------------------------------|--|
| Choke Size, Inches<br><b>0.750</b>          |                                | Choke Constant: C<br><b>12.365</b>                 |                                             | <b>5 1/2" Liner 4320 - 4702</b> |  |
| Shut-In Pressure, Casing<br><b>722 (PC)</b> | PSIG - 12 - PSIA<br><b>734</b> | Days Shut-In<br><b>30</b>                          | Shut-In Pressure, Tubing<br><b>949 (MV)</b> | PSIG - 12 - PSIA<br><b>961</b>  |  |
| Flowing Pressure: P<br><b>349</b>           | PSIG - 12 - PSIA<br><b>361</b> | Working Pressure: P <sub>w</sub><br><b>(Calc.)</b> | PSIG - 12 - PSIA<br><b>(Calc.) 674</b>      |                                 |  |
| Temperature: T<br><b>77</b>                 |                                | F <sub>pv</sub> (From Tables)<br><b>1.034</b>      | Gravity<br><b>.678</b>                      |                                 |  |

CHOKE VOLUME  $Q = C \times P \times F_c \times F_g \times F_{pv}$

$$Q = (12.365)(361)(.9840)(.9427)(1.034) = 4,281 \text{ MCF/D}$$

$$\text{OPEN FLOW } A_{cf} = Q \left( \frac{923,521}{P_c^2 - P_a^2} \right)^n = (1.968)^{.75} = 1.6605$$

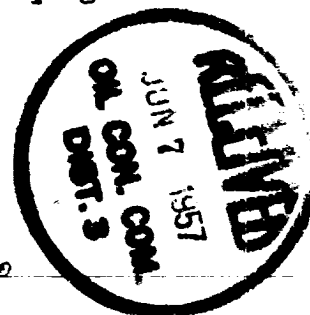
$$A_{cf} \left( \frac{923,521}{469,245} \right)^n (1.968)^{.75} = (1.6605)(4,281) = 7,109$$

$A_{cf} = 7,109$  MCF/D Ending Pictured Cliffs shut-in 728 psig

TESTED BY S. V. Roberts

WITNESSED BY E. C. Arnold (NMOCC)

*L. D. Galloway*  
L. D. Galloway



cc: E. J. Coel (6)

**OIL CONSERVATION COMMISSION**  
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