

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATADATE August 18, 1958

|                                               |                             |                                     |                                                   |
|-----------------------------------------------|-----------------------------|-------------------------------------|---------------------------------------------------|
| Operator<br><b>El Paso Natural Gas</b>        |                             | Lease<br><b>Abraham 2-B</b>         |                                                   |
| Location<br><b>790N, 800E; Sec. 14-30-6</b>   |                             | County<br><b>Rio Arriba</b>         | State<br><b>New Mexico</b>                        |
| Formation<br><b>Mesa Verde</b>                |                             | Pool<br><b>Blanco MV</b>            |                                                   |
| Casing: Diameter<br><b>7-5/8</b>              | Set At: Feet<br><b>3462</b> | Tubing: Diameter<br><b>2"</b>       | Set At: Feet<br><b>5679</b>                       |
| Pay Zone: From<br><b>5246</b>                 | To<br><b>5706</b>           | Total Depth<br><b>5759 c/o 5711</b> | Shut-in 8/9/58<br>Flow Through Tubing<br><b>X</b> |
| Stimulation Method<br><b>Sand Water Frac.</b> |                             | Flow Through Casing                 |                                                   |

|                                               |                            |                                    |                                                     |                            |  |
|-----------------------------------------------|----------------------------|------------------------------------|-----------------------------------------------------|----------------------------|--|
| Choke Size, Inches<br><b>.75</b>              |                            | Choke Constant: C<br><b>12.365</b> |                                                     | 5-1/2 liner 3392 - 5756    |  |
| Shut-in Pressure, Casing, PSIG<br><b>1051</b> | - 12 = PSIA<br><b>1063</b> | Days Shut-in<br><b>9</b>           | Shut-in Pressure, Tubing PSIG<br><b>1058</b>        | - 12 = PSIA<br><b>1070</b> |  |
| Flowing Pressure: P PSIG<br><b>266</b>        | - 12 = PSIA<br><b>278</b>  |                                    | Working Pressure: P <sub>w</sub> PSIG<br><b>682</b> | - 12 = PSIA<br><b>694</b>  |  |
| Temperature: T °F<br><b>76</b>                | n =<br><b>.75</b>          |                                    | Fpv (From Tables)<br><b>1.017</b>                   | Gravity<br><b>.579</b>     |  |

$$\text{CHOKE VOLUME} = Q = C \times P_r \times F_r \times F_g \times F_{pv}$$

$$Q = 12.365 \times 278 \times .9850 \times 1.021 \times 1.017 = 3516 \text{ MCF/D}$$

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

$$Aof = \left( \frac{1144900}{663264} \right)^n (1.7261)^{.75} (3516) = (1.5060)(3516)$$

$$Aof = 5295 \text{ MCF/D}$$

TESTED BY S. V. RobertsWITNESSED BY D. K. Bryant

*Lewis D. Galloway*  
L. D. Galloway

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