

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE **December 16, 1959**

|                                               |                            |                                                        |                            |
|-----------------------------------------------|----------------------------|--------------------------------------------------------|----------------------------|
| Operator<br><b>El Paso Natural Gas</b>        |                            | Lease<br><b>Rincon Unit No. 128 (M)</b>                |                            |
| Location<br><b>16008, 990W; 28-27-6</b>       |                            | County<br><b>Rio Arriba</b> State<br><b>New Mexico</b> |                            |
| Formation<br><b>Mesa Verde</b>                |                            | Pool<br><b>Blanco</b>                                  |                            |
| Casing Diameter<br><b>7</b>                   | Set At Feet<br><b>7378</b> | Tubing Diameter<br><b>2</b>                            | Set At Feet<br><b>5498</b> |
| Pay Zones From<br><b>5347</b>                 | To<br><b>5544</b>          | Total Depth<br><b>7789 c/o 7710</b>                    | Shut In<br><b>11/30/59</b> |
| Stimulation Method<br><b>Sand Water Frac.</b> |                            | Flow Through Casing<br><b>X</b>                        |                            |

|                                            |                               |                                    |                                                     |
|--------------------------------------------|-------------------------------|------------------------------------|-----------------------------------------------------|
| Choke Size, Inches<br><b>.75</b>           |                               | Choke Constant: C<br><b>12.365</b> |                                                     |
| Shut-In Pressure, PSIG<br><b>1590 (MV)</b> | PSIG - 12 PSIA<br><b>1602</b> | Days Shut-In<br><b>16</b>          | Shut-In Pressure, Tubing PSIG<br><b>1464 (MV)</b>   |
| Flowing Pressure<br><b>263 (MV)</b>        | PSIG - 12 PSIA<br><b>275</b>  |                                    | Working Pressure: P <sub>w</sub> PSIG<br><b>338</b> |
| Temperature<br><b>57 F</b>                 | <b>1.0029</b>                 |                                    | Flow From Tubing Gravity<br><b>.709</b>             |
|                                            | <b>.75</b>                    |                                    | <b>.9225</b>                                        |

Initial SIPT (D) = 1970 psig

Final SIPT (D) = 1980 psig

Guib. "A.G." packer at 5606

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

$$Q = 12.365 \times 275 \times 1.0029 \times .9225 \times 1.033$$

3250

MCF/D

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

$$Aof = \left( \frac{2566404}{2443904} \right)^n \quad 1.0501^{.75} \times 3250 = 1.0374 \times 3250$$

$$Aof = 3372 \quad \text{MCF/D}$$

TESTED BY **Jesse B. Goodwin**

WITNESSED BY

Checked By **T. B. Grant**

*Lewis D. Galloway*  
L. D. Galloway

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE June 1, 1960

|                                                           |                                                                         |
|-----------------------------------------------------------|-------------------------------------------------------------------------|
| Operator<br><b>El Paso Natural Gas Company</b>            | Lease<br><b>Rincon Unit No. 128 (M)</b>                                 |
| Location<br><b>16008, 990W; 28-27-6</b>                   | County<br><b>Rio Arriba</b> State<br><b>New Mexico</b>                  |
| Formation<br><b>Mesa Verde</b>                            | Pool<br><b>Blanco</b>                                                   |
| Casing: Diameter<br><b>7"</b> Set At: Feet<br><b>7378</b> | Tubing: Diameter<br><b>2" Hardy-Griffin</b> Set At: Feet<br><b>5500</b> |
| Pay Zone: From<br><b>5308</b> To<br><b>5640</b>           | Total Depth<br><b>7789 c/o 7650</b> Shut In<br><b>5/8/60</b>            |
| Stimulation Method<br><b>Sand Water Frac.</b>             | Flow Through Casing<br><b>X</b> Flow Through Tubing                     |

|                                                                                                        |                                                                                      |
|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Choke Size, Inches<br><b>.75</b>                                                                       | Choke Constant, C<br><b>12.365</b>                                                   |
| Shut-In Pressure, Casing<br>(MV) <b>1306</b> PSIG - 12 - PSIA<br><b>1318</b> Days on line<br><b>14</b> | Shut-In Pressure, Tubing<br><b>1303 (MV)</b> PSIG - 12 - PSIA<br><b>1315</b>         |
| Flowing Pressure, P<br>(Cag.) <b>59</b> PSIG - 12 - PSIA<br><b>71</b>                                  | Working Pressure, P <sub>w</sub><br>(Tbg.) <b>117</b> PSIG - 12 - PSIA<br><b>129</b> |
| Temperature, T<br><b>54</b> F Fr <b>1.0058</b> .75                                                     | Spgr (From Tables)<br><b>1.011</b> Gravity<br><b>.709</b> .9225                      |

Initial SIPT (Dak) = 2270 psig

Baker Model "D" Packer at 6210

Final SIPT (Dak) = 2275 psig

CHOKE VOLUME  $C \times P_1 \times F_1 \times F_2 \times F_3$

$$12.365 \times 71 \times 1.0058 \times .9225 \times 1.011$$

824

MCF/D

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

$$Aof = \left( \frac{1737124}{1720483} \right)^n$$

$$1.0096^{.75} \times 824 = 1.0072 \times 824$$

Aof 830

MCF/D

TESTED BY W. D. Dawson

WITNESSED BY



Lewis D. Galloway  
L. D. Galloway