

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE May 27, 1958

|                                              |                            |                                               |                             |
|----------------------------------------------|----------------------------|-----------------------------------------------|-----------------------------|
| Operator<br><b>El Paso Natural Gas</b>       |                            | Lease<br><b>San Juan 27-5 Unit No. 30 (M)</b> |                             |
| Location<br><b>1140N, 890E; 21-27-5</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>7-5/8"</b>             | Set At Feet<br><b>3549</b> | Tubing Diameter<br><b>2"</b>                  | Set At Feet<br><b>5653</b>  |
| Perforation From<br><b>5497</b>              | To<br><b>5657</b>          | Total Depth<br><b>5726</b>                    | Shut-In 4/21/58<br><b>X</b> |
| Stimulation Method<br><b>Sand Water Frac</b> |                            | Flow Through Tubing<br><b>X</b>               |                             |

|                                                    |                                   |                                                               |
|----------------------------------------------------|-----------------------------------|---------------------------------------------------------------|
| Choke Size, inches<br><b>.75</b>                   | Choke Constant C<br><b>12.365</b> | 5-1/2" liner 3522 - 5713                                      |
| Shut-In Pressure, Casing, PSIG<br><b>1047 (PC)</b> | PSIA<br><b>1059</b>               | Days Shut-In<br><b>36</b>                                     |
| Flowing Pressure, P<br><b>205</b>                  | PSIG<br><b>217</b>                | Shut-In Pressure, Tubing, PSIG<br><b>1107 (MV)</b>            |
| Temperature, T<br><b>64</b>                        | F<br><b>75</b>                    | Working Pressure, P <sub>w</sub> , PSIG<br><b>(Calc.) 435</b> |
|                                                    |                                   | Flow Through Casing<br><b>1.024</b>                           |
|                                                    |                                   | Gravity<br><b>.693</b>                                        |

Final SIPC (PC) 1054 psig

1-1/4" at 3431  
Packer at 3582

CHOKE VOLUME =  $Q = C \times P_r \times F_v \times F_g \times F_{gv}$

$$Q = (12.365)(217)(.9962)(.9325)(1.024)$$

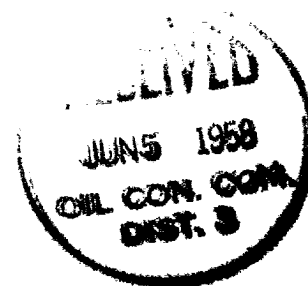
2,552 MCF/D

$$Q = \left( \frac{P_r^2}{P_c^2 - P_w^2} \right)^n$$

$$\left( \frac{1,252,161}{1,062,936} \right)^n$$

$$(1.1780)^{.75} (2552) = (1.1308)(2552)$$

Act 2,886 MCF/D



S. V. Roberts

Lewis D. Galloway  
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X