

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE November 6, 1962

|                                                        |                                                                     |
|--------------------------------------------------------|---------------------------------------------------------------------|
| Operator<br><b>El Paso Natural Gas Company</b>         | Lease<br><b>San Juan 27-5 No. 8 (MV) (OWWO)</b>                     |
| Location<br><b>1650'S, 1090'W, Sec. 32-27-5</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 <b>7.000</b> Set At: Feet <b>4800</b> | Tubing: Diameter <b>2.375</b> Set At: Feet <b>5439</b>              |
| <b>4.500 liner at 4587 - 5525</b>                      | Total Depth: <b>5525</b> Shut In <b>10-24-62</b>                    |
| Pay Zone: From <b>4930</b> To <b>5468</b>              | Flow Through Casing <b>5525</b> Flow Through Tubing <b>10-24-62</b> |
| Stimulation Method<br><b>Sand Water Frac.</b>          | <b>X</b>                                                            |

|                                                     |                                    |                                                                                                  |
|-----------------------------------------------------|------------------------------------|--------------------------------------------------------------------------------------------------|
| Choke Size, Inches<br><b>.75</b>                    | Choke Constant: C<br><b>12.365</b> | Otis Type "F" removable pack-off Anchor from<br>2380 to 2390 ft. Guiberson Type "A" Pkr. at 4435 |
| Shut-In Pressure, Casing, PSIG<br><b>(PC) 853</b>   | PSIA<br><b>865</b>                 | Days Shut-In<br><b>13</b>                                                                        |
| Flowing Pressure: P <sub>w</sub> PSIG<br><b>233</b> | PSIA<br><b>245</b>                 | Working Pressure: P <sub>w</sub> PSIG<br><b>(Calc.) 487</b>                                      |
| Temperature: T<br><b>61</b>                         | Fr<br><b>.9990</b>                 | F <sub>g</sub><br><b>.75</b>                                                                     |
|                                                     |                                    | Gravity<br><b>.680</b>                                                                           |
|                                                     |                                    | F <sub>g</sub><br><b>.9393</b>                                                                   |

Initial SIPT (PC) = 852 psig

Final SIPT (PC) = 852 psig

CHOKE VOLUME Q C x P<sub>w</sub> x F<sub>g</sub> x F<sub>g</sub>

$$Q = (12.365)(245)(.9990)(.9393)(1.026)$$

2917

MCF/D

$$\text{OPEN FLOW } Q = \left( \frac{P_1^2 - P_2^2}{P_1^2 - P_2^2} \right)^n$$

$$Q = \left( \frac{887,364}{650,195} \right)^n (2917)(1.3647)^{.75} = (2917)(1.2625)$$

NOTE: This test run after workover to eliminate communication between the producing zones.

$$Q = 3683 \text{ MCF/D}$$

Calculated by R. F. Headrick

Witnessed by

Calculated by W. D. Dawson

Checked by Tom B. Grant

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