

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATADATE October 21, 1964

|                                                      |                      |                                    |                          |
|------------------------------------------------------|----------------------|------------------------------------|--------------------------|
| Operator<br>El Paso Natural Gas Company              |                      | Lease<br>Atlantic "B" No. 1 (OWWO) |                          |
| Location<br>990'N, 990'E, Section 33, T-31-N, R-10-W |                      | County<br>San Juan                 | State<br>New Mexico      |
| Formation<br>Mesa Verde                              |                      | Pool<br>Blanco                     |                          |
| Casing: Diameter<br>4.500                            | Set At: Feet<br>5259 | Tubing: Diameter<br>2.375          | Set At: Feet<br>5176     |
| Pay Zone: From<br>4580                               | To<br>5190           | Total Depth:<br>5260               | Shut In<br>10-13-64      |
| Stimulation Method<br>Sand Water Frac                |                      | Flow Through Casing                | Flow Through Tubing<br>X |

|                                       |                    |                                              |                                      |
|---------------------------------------|--------------------|----------------------------------------------|--------------------------------------|
| Choke Size, Inches<br>.75             |                    | Choke Constant: C<br>12.365                  |                                      |
| Shut-In Pressure, Casing, PSIG<br>821 | + 12 = PSIA<br>833 | Days Shut-In<br>8                            | Shut-In Pressure, Tubing PSIG<br>813 |
| Flowing Pressure: P<br>327            | + 12 = PSIA<br>339 | Working Pressure: P <sub>w</sub> PSIG<br>724 | + 12 = PSIA<br>736                   |
| Temperature:<br>T = 77 °F             | n = .75            | F <sub>pv</sub> (From Tables)<br>1.032       | Gravity<br>.670                      |
| F <sub>t</sub> = .9840                |                    |                                              | F <sub>g</sub> = .9463               |

$$\text{CHOKE VOLUME} = Q = C \times P_t \times F_t \times F_g \times F_{pv}$$

$$Q = (12.365) (339) (.9840) (.9463) (1.032) = 4,028 \text{ MCF/D}$$

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

$$Aof = \left( \frac{683,889}{152,193} \right)^n = (4028) (4.5592)^{.75} = (4028) (3.122)$$

$$Aof = 12,575 \text{ MCF/D}$$

NOTE: The well produced a heavy spray of distillate and water throughout the test.

TESTED BY Hermion E. McAnallyREVIEWED BY W. D. Dawson

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