

# OPEN FLOW TEST DATA

DATE 9-17-70

|                                             |                      |                               |                     |
|---------------------------------------------|----------------------|-------------------------------|---------------------|
| Operator<br>El Paso Natural Gas Co.         |                      | Lease<br>Nye No. 4            |                     |
| Location<br>1750 N, 1820 E, S 8, T29N, R10W |                      | County<br>San Juan            | State<br>New Mexico |
| Formation<br>Pictured Cliffs                |                      | Pool<br>Aztec                 |                     |
| Casing: Diameter<br>2.375                   | Set At: Feet<br>2262 | Tubing: Diameter<br>no tubing | Set At: Feet        |
| Pay Zone: From<br>2150                      | To<br>2188           | Total Depth:<br>2262          | Shut In<br>9-10-70  |
| Stimulation Method<br>S J F                 |                      | Flow Through Casing<br>XX     | Flow Through Tubing |

|                                       |                    |                                    |                                            |                       |            |
|---------------------------------------|--------------------|------------------------------------|--------------------------------------------|-----------------------|------------|
| Choke Size, Inches<br>.750            |                    | Choke Constant: C<br>12.365        |                                            | tubingless completion |            |
| Shut-In Pressure, Casing, PSIG<br>604 | + 12 = PSIA<br>616 | Days Shut-In<br>7                  | Shut-In Pressure, Tubing PSIG<br>no tubing | + 12 = PSIA           |            |
| Flowing Pressure: P PSIG<br>143       | + 12 = PSIA<br>160 | Working Pressure: Pw PSIG<br>Calc. | + 12 = PSIA<br>191                         |                       |            |
| Temperature:<br>T = 70 °F             | Ft = .9905         | n =<br>.85                         | Fpv (From Tables)<br>1.013                 | Gravity<br>.650       | Fg = .9608 |

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

$$Q = 12.365 \times 160 \times .9905 \times 1.013 = 1907 \text{ MCF/D}$$

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

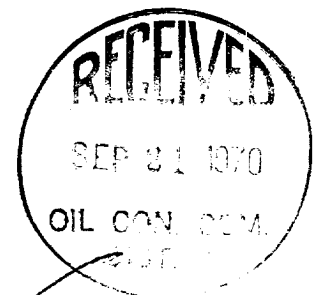
Note: blew light fog of water throughout test.

$$Aof = \left( \frac{379456}{342975} \right)^n = (1.1063)^{.85} (1907) = 1.0897 \times 1907$$

$$Aof = 2078 \text{ MCF/D}$$

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WITNESSED BY



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