

## OPEN FLOW TEST DATA

COMPANY DISTRIBUTION ONLY

DATE May 15, 1978

|                                             |                              |                                  |                                   |
|---------------------------------------------|------------------------------|----------------------------------|-----------------------------------|
| Operator<br><b>Mesa Petroleum Co.</b>       |                              | Lease<br><b>State Com #41</b>    |                                   |
| Location<br><b>SW 32-31-09</b>              |                              | County<br><b>San Juan</b>        | State<br><b>New Mexico</b>        |
| Formation<br><b>Pictured Cliffs</b>         |                              | Pool<br><b>Blanco</b>            |                                   |
| Casing: Diameter<br><b>3.500</b>            | Set At: Feet<br><b>3350'</b> | Tubing: Diameter<br><b>1 1/4</b> | Set At: Feet<br><b>3111'</b>      |
| Pay Zone: From<br><b>3101</b>               | To<br><b>3136'</b>           | Total Depth:<br><b>3305 PBD</b>  | Shut In<br><b>5-8-78</b>          |
| Stimulation Method<br><b>Sandwater Frac</b> |                              | Flow Through Casing              | Flow Through Tubing<br><b>XXX</b> |

|                                              |                           |                                    |                                                     |                           |                               |
|----------------------------------------------|---------------------------|------------------------------------|-----------------------------------------------------|---------------------------|-------------------------------|
| Choke Size, Inches<br><b>.750</b>            |                           | Choke Constant: C<br><b>12.365</b> |                                                     |                           |                               |
| Shut-In Pressure, Casing, PSIG<br><b>807</b> | + 12 = PSIA<br><b>819</b> | Days Shut-In<br><b>7</b>           | Shut-In Pressure, Tubing PSIG<br><b>802</b>         | + 12 = PSIA<br><b>814</b> |                               |
| Flowing Pressure: P PSIG<br><b>117</b>       | + 12 = PSIA<br><b>129</b> |                                    | Working Pressure: P <sub>w</sub> PSIG<br><b>495</b> | + 12 = PSIA<br><b>507</b> |                               |
| Temperature:<br>T = <b>60 °F</b>             | n =<br><b>.85</b>         |                                    | F <sub>pv</sub> (From Tables)<br><b>1.012</b>       | Gravity<br><b>.670</b>    | F <sub>g</sub> = <b>.9463</b> |

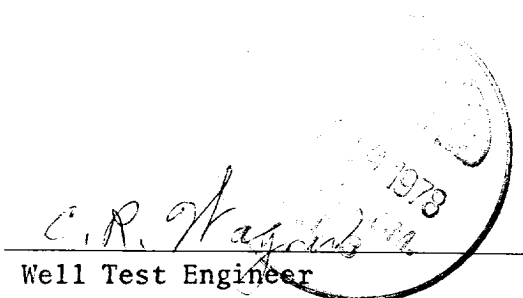
$$\text{CHOKE VOLUME} = Q = C \times P_t \times F_t \times F_g \times F_{pv}$$

$$Q = 12.3650(129)(1.000)(.9463)(1.012) = \underline{1528} \text{ MCF/D}$$

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

$$Aof = Q \left( \frac{670761}{413712} \right)^n = (1.6213)^{.85} = (1528) = (1.5080)(1528)$$

$$Aof = \underline{2304} \text{ MCF/D}$$

TESTED BY Dave Green- Mesa Pet. Co.WITNESSED BY C. R. Wagner-EPNG Co.

  
Well Test Engineer