

## OPEN FLOW TEST DATA

DATE 10-6-78

|  |                       |                               |                       |
|--|-----------------------|-------------------------------|-----------------------|
| Operator<br>Northwest Production Corp. |                       | Lease<br>Jicarilla 152 W #2-A |                       |
| Location<br>SE 5-26-05                 |                       | County<br>Rio Arriba          | State<br>New Mexico   |
| Formation<br>Pictured Cliffs           |                       | Pool<br>So. Blanco            |                       |
| Casing: Diameter<br>4.500              | Set At: Feet<br>5855' | Tubing: Diameter<br>1 1/4     | Set At: Feet<br>3310' |
| Pay Zone: From<br>3184'                | To<br>3252'           | Total Depth:<br>5855'         | Shut In<br>8-10-78    |
| Stimulation Method<br>Sandwater Frac   |                       | Flow Through Casing<br>XX     | Flow Through Tubing   |

|                                       |                        |                             |  |                    |                        |
|---------------------------------------|------------------------|-----------------------------|--|--------------------|------------------------|
| Choke Size, Inches<br>.750            |                        | Choke Constant: C<br>12.365 |  |                    |                        |
| Shut-In Pressure, Casing, PSIG<br>763 | + 12 = PSIA<br>775     | Days Shut-In<br>57          | Shut-In Pressure, Tubing PSIG<br>765         | + 12 = PSIA<br>777 |                        |
| Flowing Pressure: P PSIG<br>173       | + 12 = PSIA<br>185     |                             | Working Pressure: P <sub>w</sub> PSIG<br>180 | + 12 = PSIA<br>192 |                        |
| Temperature:<br>T = 60 °F             | F <sub>t</sub> = 1.000 | n =<br>.85                  | F <sub>pv</sub> (From Tables)<br>1.019       | Gravity<br>.670    | F <sub>g</sub> = .9463 |

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

$$Q = 12.365 (185) (1.000) (.9463) (1.019) = \underline{\quad 2206 \quad} \text{MCF/D}$$

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

$$Aof = Q \left( \frac{603729}{566865} \right)^n = (1.0650)^{.85} = (2206) = (1.0550) (2206)$$

$$Aof = \underline{\quad 2327 \quad} \text{MCF/D}$$

Note: Well blew dry gas throughout test and vented 242 MCF.

TESTED BY R. Hardy

WITNESSED BY

*C. R. Wagner*  
Well Test Engineer

