

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE May 30, 1978

| | | | |
|---|-----------------------|---------------------------|---------------------------|
| Operator El Paso Natural Gas Company | | Lease Barnes #4-A | |
| Location NW 26-32-11 | | County San Juan | State New Mexico |
| Formation Mesa Verde | | Pool Blanco | |
| Casing: Diameter 4.500 | Set At: Feet 5950' | Tubing: Diameter 2 3/8 | Set At: Feet 5899' |
| Pay Zone: From 4769 | To 5896 | Total Depth: 5950' | Shut In 5-20-78 |
| Stimulation Method Sandwater Frac | | Flow Through Casing | Flow Through Tubing XX |

| | | | | | |
|--------------------------------------|-------------------------------|-----------------------------|--|--------------------|------------------------|
| Choke Size, Inches .750 | | Choke Constant: C 12.365 | | | |
| Shut-In Pressure, Casing, PSIG -- | + 12 = PSIA -- | Days Shut-In 10 | Shut-In Pressure, Tubing PSIG 485 | + 12 = PSIA 497 | |
| Flowing Pressure: P PSIG 160 | + 12 = PSIA 172 | | Working Pressure: P _w PSIG Calc. | + 12 = PSIA 349 | |
| Temperature: T = 63 °F | n = F _t = .9971 | | F _p v (From Tables) 1.016 | Gravity .650 | F _g = .9608 |

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

$$Q = 12.365(172)(.9971)(.9608)(1.016) = \underline{2070} \text{ MCF/D}$$

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

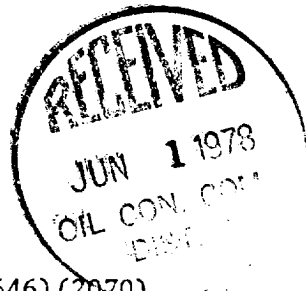
$$Aof = Q \left(\frac{247009}{125208} \right)^n = (1.9728)^{.75} = (2070) = (1.6646)(2070)$$

$$Aof = \underline{3446} \text{ MCF/D}$$

Note: Well blew heavy fog of water throughout test. Well vented 203 MCF to the atmosphere during test.

TESTED BY D. Wright

WITNESSED BY _____



C.R. Wagner

Well Test Engineer