

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE December 20, 1977

| | | | |
|--|------------------------------|---|----------------------------------|
| Operator El Paso Natural Gas Company | | Lease S.J. 28-5 Unit #33 (OWWO) | |
| Location SW 17-28-05 | | County Rio Arriba | State New Mexico |
| Formation Dakota | | Pool Basin | |
| Casing: Diameter 5.00 | Set At: Feet 8174' | Tubing: Diameter 2 3/8 | Set At: Feet 8001' |
| Pay Zone: From 7895 | To 8041 | Total Depth: PBTD 8100 | Shut In 12-12-77 |
| 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 7 | Shut-In Pressure, Tubing PSIG 419 | + 12 = PSIA 431 | |
| Flowing Pressure: P PSIG 93 | + 12 = PSIA 105 | | Working Pressure: P _w PSIG Calc. | + 12 = PSIA 234 | |
| Temperature: T = 62 °F | F _t = .9981 | n = .75 | F _{pv} (From Tables) 1.009 | Gravity .670 | F _g = .9463 |

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

$$Q = 12.365(105)(.9981)(.9463)(1.009) = \underline{1237} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{185761}{131005} \right)^n = 1237(1.418)^{.75} = 1237(1.299)$$

$$Aof = \underline{1607} \text{ MCF/D}$$

Note: 170 MCF gas vented during test.

TESTED BY John Easley

WITNESSED BY _____

[Signature]
 Well Test Engineer

