

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE 8-17-73

| | | | |
|------------------------------------------------|----------------------|----------------------------------|----------------------|
| Operator El Paso Natural Gas Company | | Lease San Juan 28-7 Unit #186 | |
| Location 1600/S, 1500/W, Sec. 13, T28N, R7W | | County Rio Arriba | State New Mexico |
| Formation DAKOTA | | Pool BASIN | |
| Casing: Diameter 4.500 | Set At: Feet 7937 | Tubing: Diameter 1 1/2 " | Set At: Feet 7893 |
| Pay Zone: From 7680 ' | To 7917 ' | Total Depth: 7937' | Shut In 8-6-73 |
| Stimulation Method Sand Water Frac | | Flow Through Casing X | Flow Through Tubing |

| | | | | | |
|-------------------------------------------------|---------------------|-----------------------------|----------------------------------------------|----------------------------------------|--|
| Choke Size, Inches .750 | | Choke Constant: C 12.365 | | | |
| Shut-In Pressure, Casing, PSIG 2787 | + 12 = PSIA 2799 | Days Shut-In 11 | Shut-In Pressure, Tubing PSIG 2744 | + 12 = PSIA 2756 | |
| Flowing Pressure: P PSIG 406 | + 12 = PSIA 418 | | Working Pressure: P _w PSIG 718 | + 12 = PSIA 730 | |
| Temperature: T = 75 °F F _t = 9859 | n = .75 | | F _{pv} (From Tables) 1.037 | Gravity .650 F _g = .9608 | |

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

$$Q = (12.365) (418) (.9859) (.9608) (1.037) = 5077 \text{ MCF/D}$$

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


$$A_{of} = Q \left(\frac{7834401}{7301501} \right)^n = 5077 (1.0730)^{.75} = 5077 (1.0543)$$

$$A_{of} = 5353 \text{ MCF/D}$$

Note: Well blew a Light spray of water throughout Test.

TESTED BY R. Hardey

WITNESSED BY



William D. Welch
Well Test Engineer