

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE November 1, 1977

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|---|-----------------------|----------------------------|---------------------------|
| Operator El Paso Natural Gas Company | | Lease Gartner #3-A | |
| Location NW 33-30-08 | | County San Juan | State New Mexico |
| Formation Mesa Verde | | Pool Blanco | |
| Casing: Diameter 4 1/2 | Set At: Feet 5704' | Tubing: Diameter 2 3/8" | Set At: Feet 5635' |
| Pay Zone: From 4701 | To 5641 | Total Depth: 5704 | Shut In 10-23-77 |
| 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 9 | Shut-In Pressure, Tubing 590 | PSIG + 12 = PSIA 602 |
| Flowing Pressure: P 263 | PSIG | + 12 = PSIA 275 | | Working Pressure: P _w Calc. | PSIG + 12 = PSIA 554 |
| Temperature: T = 64 °F | | n = .75 | | F _{pv} (From Tables) 1.029 | Gravity .670 F _g = .9463 |

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

$$Q = 12.365(275)(.9962)(.9463)(1.029) = \underline{3299} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{362404}{55488} \right)^n = 3299 (6.5312)^{.75} = 3299(4.0855)$$

$$Aof = \underline{13478} \text{ MCF/D}$$

Note: Well unloaded a slug of water after first 4 minutes. Then blew very light mist rest of test. Well vented 293 MCF to the atmosphere during the test.

TESTED BY R. Headrick

WITNESSED BY _____

C. R. [Signature]
Well Test Engineer

