

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE October 22, 1973

Operator El Paso Natural Gas Company		Lease Klein #23 (CH)	
Location 1700/N, 1840/W, Sec. 30, T-26N, R6W		County Rio Arriba	State New Mexico
Formation Chacra		Pool Otero	
Casing: Diameter 2.875	Set At: Feet 3405'	Tubing: Diameter No Tubing	Set At: Feet
Pay Zone: From 3208	To 3308	Total Depth: 3405	Shut In 10-9-73
Stimulation Method Sandwater Frac		Flow Through Casing X	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365		Tubingless Completion	
Shut-In Pressure, Casing, PSIG 830	+ 12 = PSIA 842	Days Shut-In 13	Shut-In Pressure, Tubing PSIG No Tubing	+ 12 = PSIA	
Flowing Pressure: P PSIG 29	+ 12 = PSIA 41		Working Pressure: P _w PSIG Calculated	+ 12 = PSIA 52	
Temperature: T = 64°F	F _t = .9962	n = .75	F _p v (From Tables) 1.004	Gravity 655	F _g = .9571

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

$$Q = (12.365)(41)(.9962)(.9571)(1.004) = \underline{\quad 485 \quad} \text{ MCF/D}$$

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

$$A_{of} = Q \left(\frac{708964}{706260} \right)^n = 485 (1.0038)^{.75} = 485 (1.0029)$$

$$A_{of} = \underline{\quad 487 \quad} \text{ MCF/D}$$

Note: Medium fog of water throughout the test.

TESTED BY Norton

WITNESSED BY _____

William D. Welch
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Well Test Engineer

