

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE 12-2-69

Operator El Paso Natural Gas Co.		Lease Vaughn No. 10	
Location 1827S , 800E , S28 , T26N, R6W		County Rio Arriba	State New Mexico
Formation Chacra		Pool Otero	
Casing: Diameter 2.375	Set At: Feet 3561	Tubing: Diameter No tubing	Set At: Feet
Pay Zone: From 3404	To 3508	Total Depth: 3561	Shut In 11-17-69
Stimulation Method SWF		Flow Through Casing XX	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365		Tubingless Completion	
Shut-In Pressure, Casing, PSIG 930	+ 12 = PSIA 942	Days Shut-In 15	Shut-In Pressure, Tubing PSIG No tubing.	+ 12 = PSIA	
Flowing Pressure: P PSIG 98	+ 12 = PSIA 110	Working Pressure: P _w PSIG Calc.	+ 12 = PSIA 142		
Temperature: T = 53 °F	n = Fr = 1.0019	Fpv (From Tables) 1.009	Gravity .660	Fg = .9535	

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

$$Q = 12.365 \times 110 \times 1.0019 \times .9535 \times 1.009 = \underline{1311} \text{ MCF/D}$$

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

Note: Unloaded light fog of distillate in approx. 3 minutes. Some paraffin choke. Dry gas rest of time.

$$A_{of} = \left(\frac{887364}{867200} \right)^n = (1.0232)^{.75} \times 1311 = 1.0173 (1311)$$

$$A_{of} = \underline{1334} \text{ MCF/D}$$

TESTED BY T. D. Norton

WITNESSED BY _____

EL PASO
OIL CON. COM.
DIST. 3

R. E. Stauffer